1. Effective (Isotropic) Radiated Power Output Data

1.1 B5_1.4MHz_ERP(ANT13)

1.1.1 Test Result

Band: 5 / Bandwidth: 1.4MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	824.7	1	0	23.90	-4.40	17.35	<=38.45	Pass
			2	23.84	-4.40	17.29	<=38.45	Pass
			5	23.80	-4.40	17.25	<=38.45	Pass
		3	0	23.87	-4.40	17.32	<=38.45	Pass
			2	23.82	-4.40	17.27	<=38.45	Pass
			3	23.81	-4.40	17.26	<=38.45	Pass
		6	0	22.82	-4.40	16.27	<=38.45	Pass
	836.5	1	0	23.79	-4.40	17.24	<=38.45	Pass
			2	23.75	-4.40	17.20	<=38.45	Pass
			5	23.80	-4.40	17.25	<=38.45	Pass
		3	0	23.83	-4.40	17.28	<=38.45	Pass
			2	23.80	-4.40	17.25	<=38.45	Pass
			3	23.80	-4.40	17.25	<=38.45	Pass
		6	0	22.82	-4.40	16.27	<=38.45	Pass
	848.3	1	0	23.74	-4.40	17.19	<=38.45	Pass
			2	23.68	-4.40	17.13	<=38.45	Pass
			5	23.69	-4.40	17.14	<=38.45	Pass
		3	0	23.75	-4.40	17.20	<=38.45	Pass
			2	23.73	-4.40	17.18	<=38.45	Pass
			3	23.72	-4.40	17.17	<=38.45	Pass
		6	0	22.72	-4.40	16.17	<=38.45	Pass
16QAM	824.7	1	0	22.98	-4.40	16.43	<=38.45	Pass
			2	22.95	-4.40	16.40	<=38.45	Pass
			5	22.92	-4.40	16.37	<=38.45	Pass
		3	0	22.76	-4.40	16.21	<=38.45	Pass
			2	22.78	-4.40	16.23	<=38.45	Pass
			3	22.81	-4.40	16.26	<=38.45	Pass
		6	0	21.79	-4.40	15.24	<=38.45	Pass
	836.5	1	0	22.85	-4.40	16.30	<=38.45	Pass
			2	22.81	-4.40	16.26	<=38.45	Pass
			5	22.84	-4.40	16.29	<=38.45	Pass
		3	0	23.02	-4.40	16.47	<=38.45	Pass
			2	23.00	-4.40	16.45	<=38.45	Pass
			3	23.01	-4.40	16.46	<=38.45	Pass
		6	0	21.81	-4.40	15.26	<=38.45	Pass
	848.3	1	0	22.89	-4.40	16.34	<=38.45	Pass
			2	22.87	-4.40	16.32	<=38.45	Pass
			5	22.87	-4.40	16.32	<=38.45	Pass
		3	0	22.73	-4.40	16.18	<=38.45	Pass
			2	22.73	-4.40	16.18	<=38.45	Pass
			3	22.72	-4.40	16.17	<=38.45	Pass
		6	0	21.73	-4.40	15.18	<=38.45	Pass
64QAM	824.7	1	0	21.63	-4.40	15.08	<=38.45	Pass
			2	21.59	-4.40	15.04	<=38.45	Pass
			5	21.63	-4.40	15.08	<=38.45	Pass
		3	0	21.69	-4.40	15.14	<=38.45	Pass
			2	21.68	-4.40	15.13	<=38.45	Pass
			3	21.69	-4.40	15.14	<=38.45	Pass
		6	0	20.81	-4.40	14.26	<=38.45	Pass

	836.5	1	0	22.23	-4.40	15.68	<=38.45	Pass
			2	22.26	-4.40	15.71	<=38.45	Pass
			5	22.22	-4.40	15.67	<=38.45	Pass
		3	0	22.03	-4.40	15.48	<=38.45	Pass
			2	22.04	-4.40	15.49	<=38.45	Pass
			3	22.04	-4.40	15.49	<=38.45	Pass
		6	0	20.84	-4.40	14.29	<=38.45	Pass
	848.3	1	0	21.80	-4.40	15.25	<=38.45	Pass
			2	21.78	-4.40	15.23	<=38.45	Pass
			5	21.75	-4.40	15.20	<=38.45	Pass
		3	0	21.94	-4.40	15.39	<=38.45	Pass
			2	21.90	-4.40	15.35	<=38.45	Pass
			3	21.92	-4.40	15.37	<=38.45	Pass
		6	0	20.91	-4.40	14.36	<=38.45	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

1.2 B5_3MHz_ERP

1.2.1 Test Result

Band: 5 / Bandwidth: 3MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	825.5	1	0	23.80	-4.40	17.25	<=38.45	Pass
			7	23.75	-4.40	17.20	<=38.45	Pass
			14	23.75	-4.40	17.20	<=38.45	Pass
		8	0	22.79	-4.40	16.24	<=38.45	Pass
			4	22.72	-4.40	16.17	<=38.45	Pass
			7	22.74	-4.40	16.19	<=38.45	Pass
		15	0	22.73	-4.40	16.18	<=38.45	Pass
	836.5	1	0	23.91	-4.40	17.36	<=38.45	Pass
			7	23.85	-4.40	17.30	<=38.45	Pass
			14	23.81	-4.40	17.26	<=38.45	Pass
		8	0	22.79	-4.40	16.24	<=38.45	Pass
			4	22.76	-4.40	16.21	<=38.45	Pass
			7	22.78	-4.40	16.23	<=38.45	Pass
		15	0	22.77	-4.40	16.22	<=38.45	Pass
	847.5	1	0	23.71	-4.40	17.16	<=38.45	Pass
			7	23.70	-4.40	17.15	<=38.45	Pass
			14	23.65	-4.40	17.10	<=38.45	Pass
		8	0	22.79	-4.40	16.24	<=38.45	Pass
			4	22.75	-4.40	16.20	<=38.45	Pass
			7	22.81	-4.40	16.26	<=38.45	Pass
		15	0	22.82	-4.40	16.27	<=38.45	Pass
16QAM	825.5	1	0	22.77	-4.40	16.22	<=38.45	Pass
			7	22.77	-4.40	16.22	<=38.45	Pass
			14	22.76	-4.40	16.21	<=38.45	Pass
		8	0	21.82	-4.40	15.27	<=38.45	Pass
			4	21.78	-4.40	15.23	<=38.45	Pass
			7	21.78	-4.40	15.23	<=38.45	Pass
		15	0	21.77	-4.40	15.22	<=38.45	Pass
	836.5	1	0	23.30	-4.40	16.75	<=38.45	Pass
			7	23.33	-4.40	16.78	<=38.45	Pass
			14	23.28	-4.40	16.73	<=38.45	Pass
		8	0	21.96	-4.40	15.41	<=38.45	Pass
			4	21.91	-4.40	15.36	<=38.45	Pass
			7	21.92	-4.40	15.37	<=38.45	Pass

		15	0	21.86	-4.40	15.31	<=38.45	Pass
	847.5	1	0	23.00	-4.40	16.45	<=38.45	Pass
			7	22.99	-4.40	16.44	<=38.45	Pass
			14	22.93	-4.40	16.38	<=38.45	Pass
		8	0	21.83	-4.40	15.28	<=38.45	Pass
			4	21.79	-4.40	15.24	<=38.45	Pass
			7	21.78	-4.40	15.23	<=38.45	Pass
		15	0	21.78	-4.40	15.23	<=38.45	Pass
64QAM	825.5	1	0	21.61	-4.40	15.06	<=38.45	Pass
			7	21.58	-4.40	15.03	<=38.45	Pass
			14	21.53	-4.40	14.98	<=38.45	Pass
		8	0	20.77	-4.40	14.22	<=38.45	Pass
			4	20.70	-4.40	14.15	<=38.45	Pass
			7	20.70	-4.40	14.15	<=38.45	Pass
		15	0	20.76	-4.40	14.21	<=38.45	Pass
	836.5	1	0	22.05	-4.40	15.50	<=38.45	Pass
			7	22.06	-4.40	15.51	<=38.45	Pass
			14	22.02	-4.40	15.47	<=38.45	Pass
		8	0	20.97	-4.40	14.42	<=38.45	Pass
			4	20.95	-4.40	14.40	<=38.45	Pass
			7	20.94	-4.40	14.39	<=38.45	Pass
		15	0	20.79	-4.40	14.24	<=38.45	Pass
	847.5	1	0	21.86	-4.40	15.31	<=38.45	Pass
			7	21.89	-4.40	15.34	<=38.45	Pass
			14	21.84	-4.40	15.29	<=38.45	Pass
		8	0	20.77	-4.40	14.22	<=38.45	Pass
			4	20.71	-4.40	14.16	<=38.45	Pass
			7	20.71	-4.40	14.16	<=38.45	Pass
		15	0	20.95	-4.40	14.40	<=38.45	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

1.3 B5_5MHz_ERP

1.3.1 Test Result

Band: 5 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	826.5	1	0	23.84	-4.40	17.29	<=38.45	Pass
			13	23.93	-4.40	17.38	<=38.45	Pass
			24	23.91	-4.40	17.36	<=38.45	Pass
		12	0	22.84	-4.40	16.29	<=38.45	Pass
			6	22.81	-4.40	16.26	<=38.45	Pass
			13	22.83	-4.40	16.28	<=38.45	Pass
		25	0	22.88	-4.40	16.33	<=38.45	Pass
	836.5	1	0	23.90	-4.40	17.35	<=38.45	Pass
			13	23.93	-4.40	17.38	<=38.45	Pass
			24	23.96	-4.40	17.41	<=38.45	Pass
		12	0	22.90	-4.40	16.35	<=38.45	Pass
			6	22.92	-4.40	16.37	<=38.45	Pass
			13	22.91	-4.40	16.36	<=38.45	Pass
		25	0	22.95	-4.40	16.40	<=38.45	Pass
	846.5	1	0	23.89	-4.40	17.34	<=38.45	Pass
			13	23.85	-4.40	17.30	<=38.45	Pass
			24	23.89	-4.40	17.34	<=38.45	Pass
		12	0	22.91	-4.40	16.36	<=38.45	Pass
			6	22.86	-4.40	16.31	<=38.45	Pass

			13	22.83	-4.40	16.28	<=38.45	Pass
		25	0	22.91	-4.40	16.36	<=38.45	Pass
16QAM	826.5	1	0	22.72	-4.40	16.17	<=38.45	Pass
			13	22.69	-4.40	16.14	<=38.45	Pass
			24	22.68	-4.40	16.13	<=38.45	Pass
		12	0	21.88	-4.40	15.33	<=38.45	Pass
			6	21.85	-4.40	15.30	<=38.45	Pass
			13	21.88	-4.40	15.33	<=38.45	Pass
		25	0	21.92	-4.40	15.37	<=38.45	Pass
	836.5	1	0	23.12	-4.40	16.57	<=38.45	Pass
			13	23.15	-4.40	16.60	<=38.45	Pass
			24	23.14	-4.40	16.59	<=38.45	Pass
		12	0	21.94	-4.40	15.39	<=38.45	Pass
			6	21.96	-4.40	15.41	<=38.45	Pass
			13	21.94	-4.40	15.39	<=38.45	Pass
		25	0	21.93	-4.40	15.38	<=38.45	Pass
	846.5	1	0	22.98	-4.40	16.43	<=38.45	Pass
			13	22.92	-4.40	16.37	<=38.45	Pass
			24	22.92	-4.40	16.37	<=38.45	Pass
		12	0	21.94	-4.40	15.39	<=38.45	Pass
			6	21.91	-4.40	15.36	<=38.45	Pass
			13	21.87	-4.40	15.32	<=38.45	Pass
		25	0	21.93	-4.40	15.38	<=38.45	Pass
64QAM	826.5	1	0	21.83	-4.40	15.28	<=38.45	Pass
			13	21.80	-4.40	15.25	<=38.45	Pass
			24	21.78	-4.40	15.23	<=38.45	Pass
		12	0	20.82	-4.40	14.27	<=38.45	Pass
			6	20.78	-4.40	14.23	<=38.45	Pass
			13	20.82	-4.40	14.27	<=38.45	Pass
		25	0	20.88	-4.40	14.33	<=38.45	Pass
	836.5	1	0	22.01	-4.40	15.46	<=38.45	Pass
			13	22.03	-4.40	15.48	<=38.45	Pass
			24	22.02	-4.40	15.47	<=38.45	Pass
		12	0	20.90	-4.40	14.35	<=38.45	Pass
			6	20.90	-4.40	14.35	<=38.45	Pass
			13	20.85	-4.40	14.30	<=38.45	Pass
		25	0	20.87	-4.40	14.32	<=38.45	Pass
	846.5	1	0	22.10	-4.40	15.55	<=38.45	Pass
			13	22.07	-4.40	15.52	<=38.45	Pass
			24	22.04	-4.40	15.49	<=38.45	Pass
		12	0	21.05	-4.40	14.50	<=38.45	Pass
			6	21.00	-4.40	14.45	<=38.45	Pass
			13	20.97	-4.40	14.42	<=38.45	Pass
		25	0	20.89	-4.40	14.34	<=38.45	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

1.4 B5_10MHz_ERP

1.4.1 Test Result

Band: 5 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	829	1	0	23.84	-4.40	17.29	<=38.45	Pass
			25	23.91	-4.40	17.36	<=38.45	Pass
			49	23.92	-4.40	17.37	<=38.45	Pass
		25	0	22.89	-4.40	16.34	<=38.45	Pass

			13	22.89	-4.40	16.34	<=38.45	Pass
			25	22.90	-4.40	16.35	<=38.45	Pass
		50	0	22.89	-4.40	16.34	<=38.45	Pass
	836.5	1	0	23.84	-4.40	17.29	<=38.45	Pass
			25	23.86	-4.40	17.31	<=38.45	Pass
			49	23.84	-4.40	17.29	<=38.45	Pass
		25	0	22.89	-4.40	16.34	<=38.45	Pass
			13	22.94	-4.40	16.39	<=38.45	Pass
			25	22.93	-4.40	16.38	<=38.45	Pass
		50	0	22.91	-4.40	16.36	<=38.45	Pass
	844	1	0	23.87	-4.40	17.32	<=38.45	Pass
			25	23.79	-4.40	17.24	<=38.45	Pass
			49	23.80	-4.40	17.25	<=38.45	Pass
		25	0	22.93	-4.40	16.38	<=38.45	Pass
			13	22.93	-4.40	16.38	<=38.45	Pass
			25	22.88	-4.40	16.33	<=38.45	Pass
		50	0	22.89	-4.40	16.34	<=38.45	Pass
16QAM	829	1	0	23.40	-4.40	16.85	<=38.45	Pass
			25	23.39	-4.40	16.84	<=38.45	Pass
			49	23.35	-4.40	16.80	<=38.45	Pass
		25	0	21.93	-4.40	15.38	<=38.45	Pass
			13	21.92	-4.40	15.37	<=38.45	Pass
			25	21.94	-4.40	15.39	<=38.45	Pass
		50	0	21.89	-4.40	15.34	<=38.45	Pass
	836.5	1	0	23.10	-4.40	16.55	<=38.45	Pass
			25	23.10	-4.40	16.55	<=38.45	Pass
			49	23.04	-4.40	16.49	<=38.45	Pass
		25	0	21.91	-4.40	15.36	<=38.45	Pass
			13	21.90	-4.40	15.35	<=38.45	Pass
			25	21.91	-4.40	15.36	<=38.45	Pass
		50	0	21.90	-4.40	15.35	<=38.45	Pass
	844	1	0	22.96	-4.40	16.41	<=38.45	Pass
			25	22.91	-4.40	16.36	<=38.45	Pass
			49	22.84	-4.40	16.29	<=38.45	Pass
		25	0	22.01	-4.40	15.46	<=38.45	Pass
			13	22.00	-4.40	15.45	<=38.45	Pass
			25	21.95	-4.40	15.40	<=38.45	Pass
		50	0	21.90	-4.40	15.35	<=38.45	Pass
64QAM	829	1	0	22.10	-4.40	15.55	<=38.45	Pass
			25	22.14	-4.40	15.59	<=38.45	Pass
			49	22.10	-4.40	15.55	<=38.45	Pass
		25	0	20.90	-4.40	14.35	<=38.45	Pass
			13	20.88	-4.40	14.33	<=38.45	Pass
			25	20.89	-4.40	14.34	<=38.45	Pass
		50	0	20.83	-4.40	14.28	<=38.45	Pass
	836.5	1	0	21.94	-4.40	15.39	<=38.45	Pass
			25	21.99	-4.40	15.44	<=38.45	Pass
			49	21.90	-4.40	15.35	<=38.45	Pass
		25	0	20.94	-4.40	14.39	<=38.45	Pass
			13	20.93	-4.40	14.38	<=38.45	Pass
			25	20.92	-4.40	14.37	<=38.45	Pass
		50	0	20.85	-4.40	14.30	<=38.45	Pass
	844	1	0	21.81	-4.40	15.26	<=38.45	Pass
			25	21.76	-4.40	15.21	<=38.45	Pass
			49	21.68	-4.40	15.13	<=38.45	Pass
		25	0	20.96	-4.40	14.41	<=38.45	Pass
			13	20.95	-4.40	14.40	<=38.45	Pass
			25	20.92	-4.40	14.37	<=38.45	Pass
		50	0	20.87	-4.40	14.32	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 B5_10MHz

2.1.1 Test Result

Band: 5 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	829	50	0	20	3.7	-3.200	-0.0039	-2.5 to 2.5	Pass
					3.91	-5.900	-0.0071	-2.5 to 2.5	Pass
					4.4	-3.500	-0.0042	-2.5 to 2.5	Pass
				-30	3.91	-5.500	-0.0066	-2.5 to 2.5	Pass
				-20	3.91	-4.500	-0.0054	-2.5 to 2.5	Pass
				-10	3.91	-4.700	-0.0057	-2.5 to 2.5	Pass
				0	3.91	-5.200	-0.0063	-2.5 to 2.5	Pass
				10	3.91	0.600	0.0007	-2.5 to 2.5	Pass
				30	3.91	-3.900	-0.0047	-2.5 to 2.5	Pass
				40	3.91	-4.500	-0.0054	-2.5 to 2.5	Pass
				50	3.91	-6.000	-0.0072	-2.5 to 2.5	Pass
	836.5	50	0	20	3.7	-5.600	-0.0067	-2.5 to 2.5	Pass
					3.91	-5.600	-0.0067	-2.5 to 2.5	Pass
					4.4	-0.400	-0.0005	-2.5 to 2.5	Pass
				-30	3.91	-1.600	-0.0019	-2.5 to 2.5	Pass
				-20	3.91	-1.700	-0.0020	-2.5 to 2.5	Pass
				-10	3.91	-6.500	-0.0078	-2.5 to 2.5	Pass
				0	3.91	-3.300	-0.0039	-2.5 to 2.5	Pass
				10	3.91	-3.000	-0.0036	-2.5 to 2.5	Pass
				30	3.91	-5.700	-0.0068	-2.5 to 2.5	Pass
				40	3.91	-1.100	-0.0013	-2.5 to 2.5	Pass
				50	3.91	-6.400	-0.0077	-2.5 to 2.5	Pass
	844	50	0	20	3.7	-0.400	-0.0005	-2.5 to 2.5	Pass
					3.91	-2.100	-0.0025	-2.5 to 2.5	Pass
					4.4	-2.400	-0.0028	-2.5 to 2.5	Pass
				-30	3.91	-4.000	-0.0047	-2.5 to 2.5	Pass
				-20	3.91	-7.700	-0.0091	-2.5 to 2.5	Pass
				-10	3.91	-0.300	-0.0004	-2.5 to 2.5	Pass
				0	3.91	-4.900	-0.0058	-2.5 to 2.5	Pass
				10	3.91	-4.300	-0.0051	-2.5 to 2.5	Pass
				30	3.91	-2.600	-0.0031	-2.5 to 2.5	Pass
				40	3.91	-2.000	-0.0024	-2.5 to 2.5	Pass
				50	3.91	-0.700	-0.0008	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

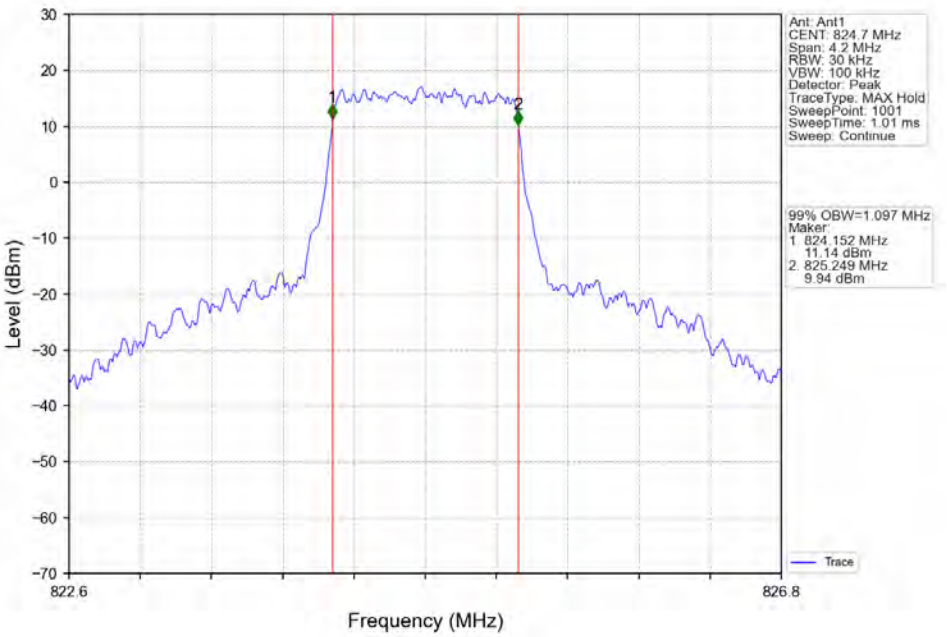
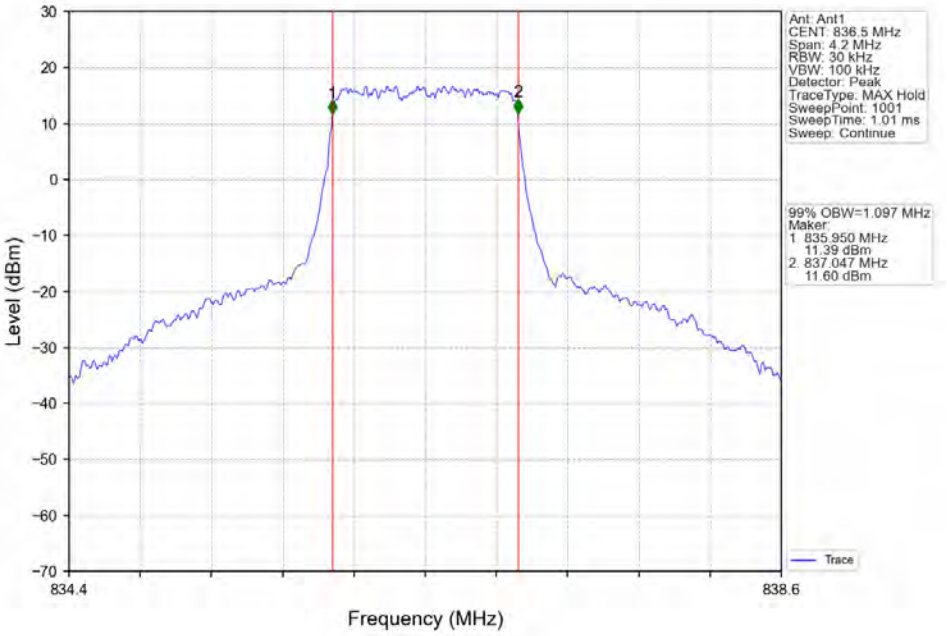
3.1 Band5_OBW

3.1.1 Test Result

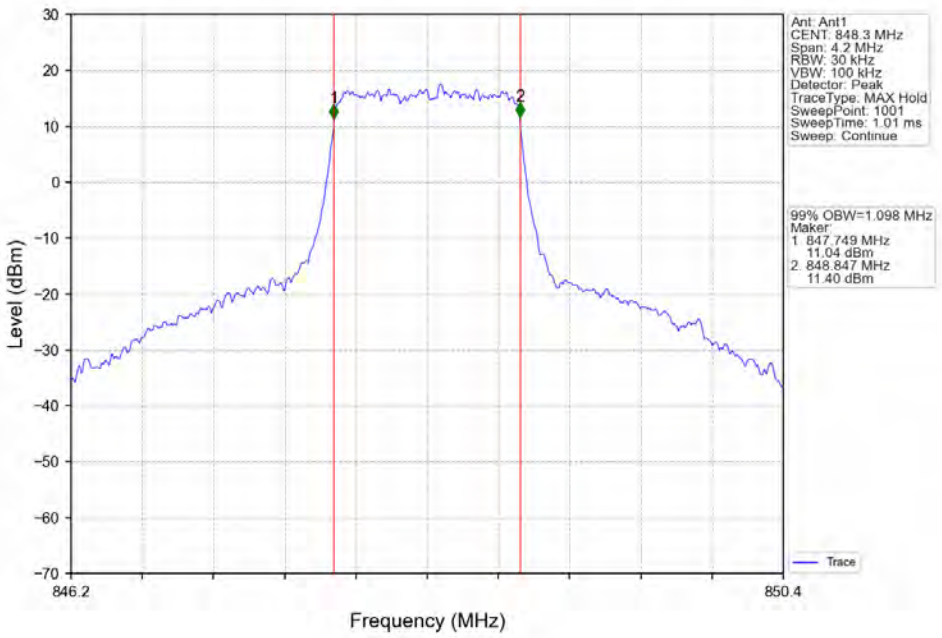
Band: 5 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	824.7	6	0	1.097	/	Pass

		836.5	6	0	1.097	/	Pass
		848.3	6	0	1.098	/	Pass
	16QAM	824.7	6	0	1.100	/	Pass
		836.5	6	0	1.095	/	Pass
		848.3	6	0	1.098	/	Pass
	64QAM	824.7	6	0	1.100	/	Pass
		836.5	6	0	1.100	/	Pass
		848.3	6	0	1.100	/	Pass
3	QPSK	825.5	15	0	2.728	/	Pass
		836.5	15	0	2.721	/	Pass
		847.5	15	0	2.726	/	Pass
	16QAM	825.5	15	0	2.733	/	Pass
		836.5	15	0	2.721	/	Pass
		847.5	15	0	2.730	/	Pass
	64QAM	825.5	15	0	2.731	/	Pass
		836.5	15	0	2.725	/	Pass
		847.5	15	0	2.728	/	Pass
5	QPSK	826.5	25	0	4.519	/	Pass
		836.5	25	0	4.498	/	Pass
		846.5	25	0	4.492	/	Pass
	16QAM	826.5	25	0	4.503	/	Pass
		836.5	25	0	4.506	/	Pass
		846.5	25	0	4.500	/	Pass
	64QAM	826.5	25	0	4.501	/	Pass
		836.5	25	0	4.497	/	Pass
		846.5	25	0	4.511	/	Pass
10	QPSK	829	50	0	8.979	/	Pass
		836.5	50	0	9.017	/	Pass
		844	50	0	8.948	/	Pass
	16QAM	829	50	0	9.007	/	Pass
		836.5	50	0	8.994	/	Pass
		844	50	0	8.980	/	Pass
	64QAM	829	50	0	9.005	/	Pass
		836.5	50	0	8.981	/	Pass
		844	50	0	9.001	/	Pass

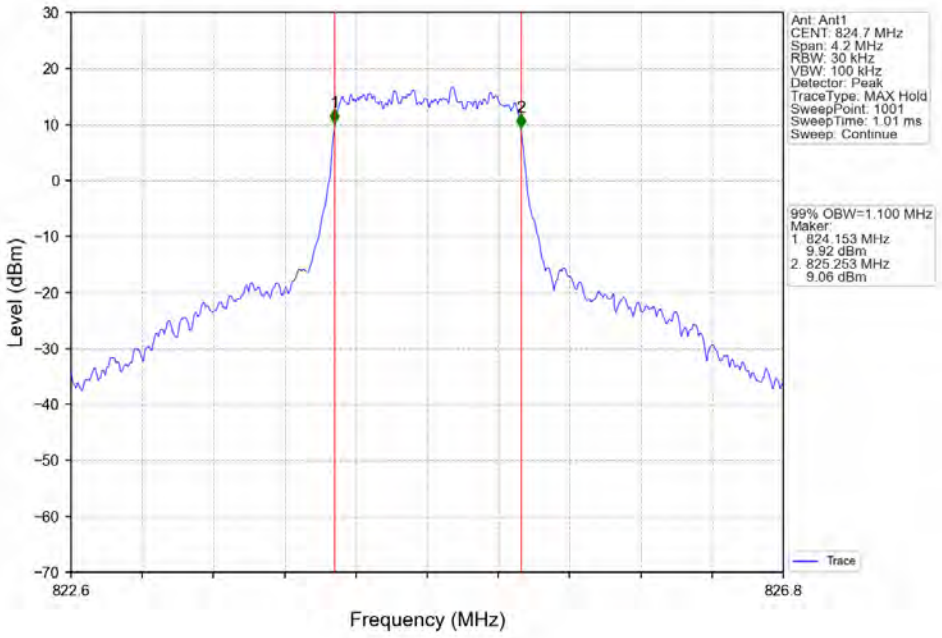
3.1.2 Test Graph

Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_6_0_NTNV

Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_6_0_NTNV


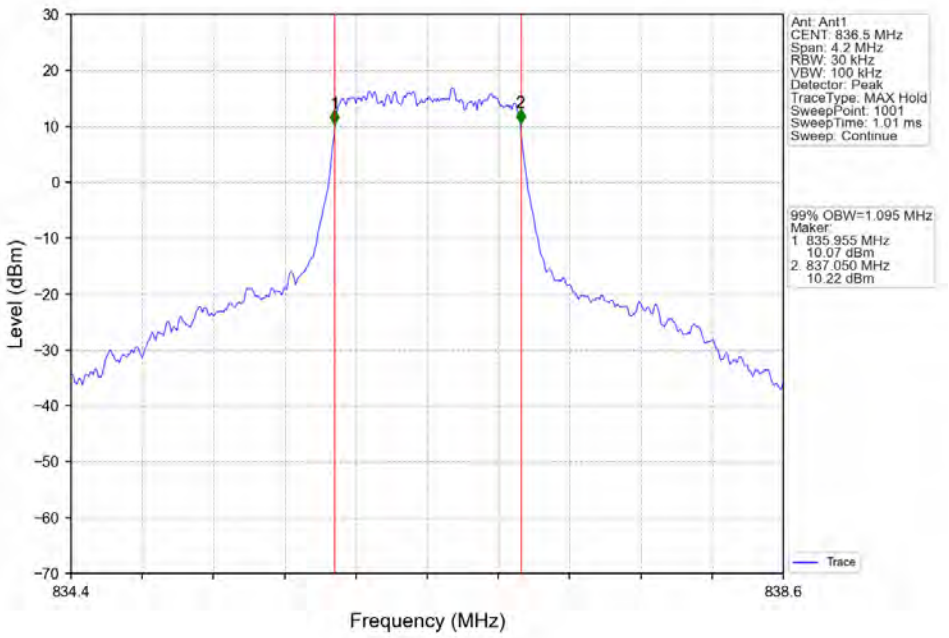
Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV



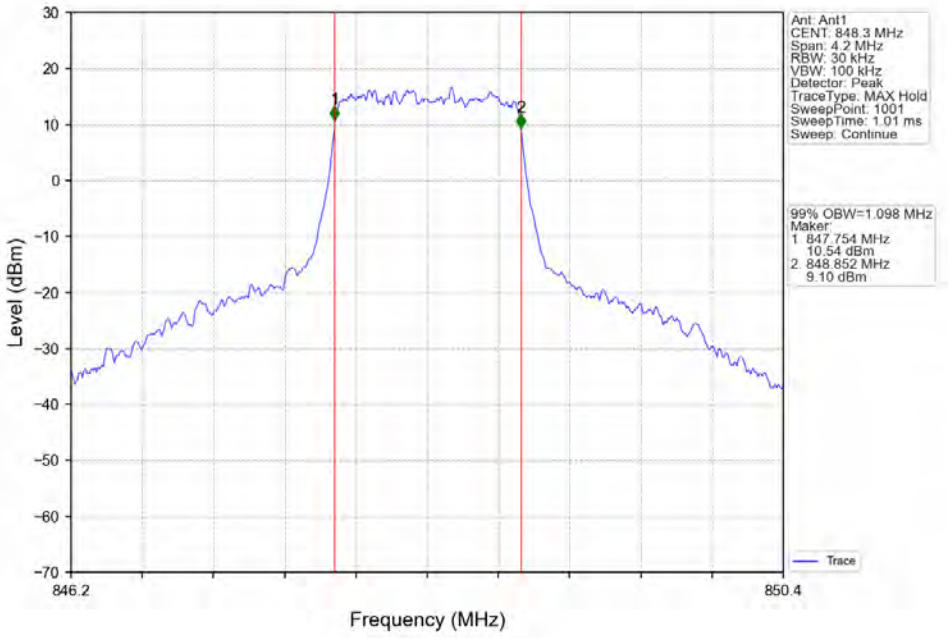
Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV



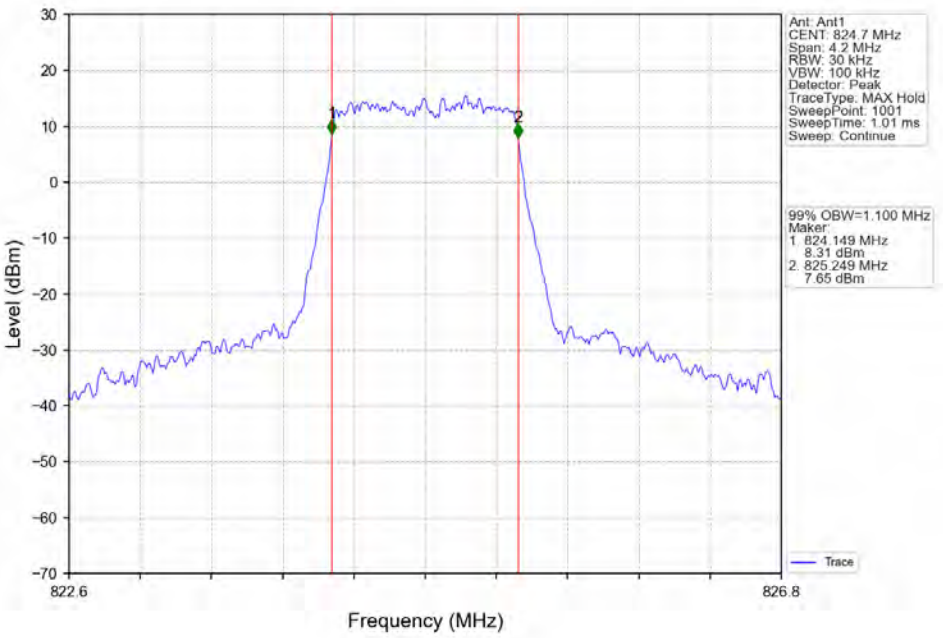
Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV



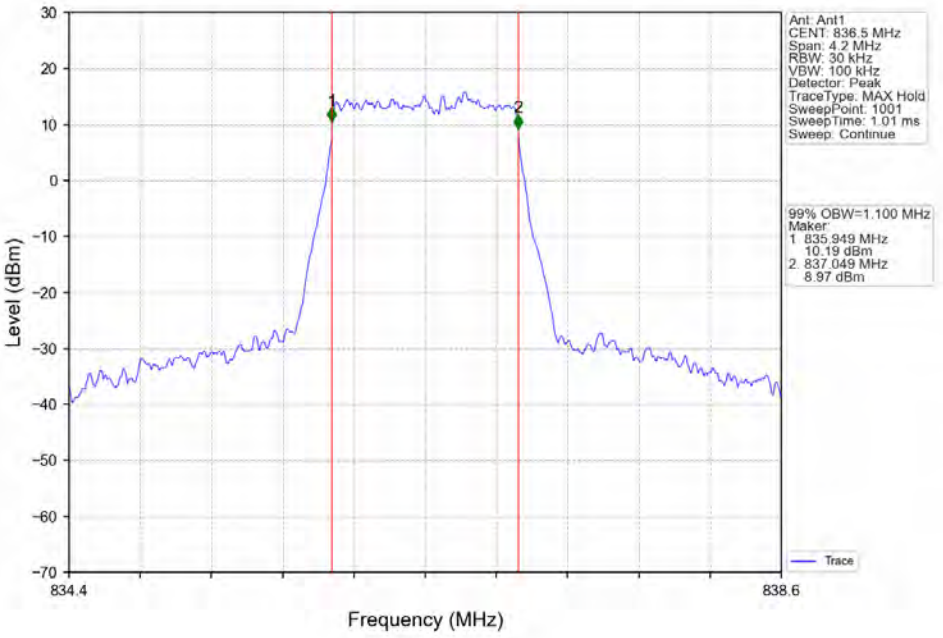
Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV



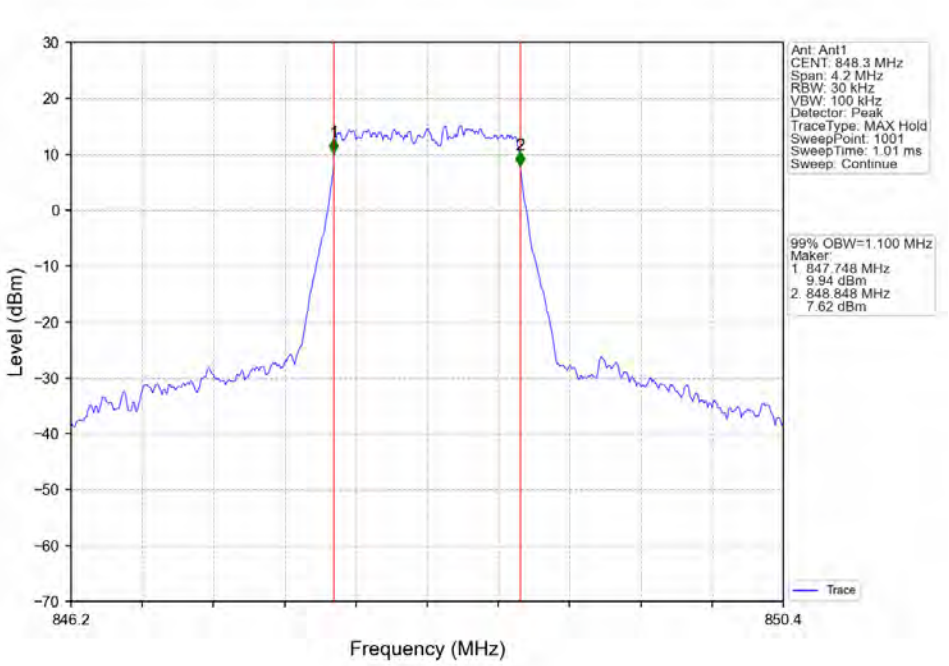
Band5_1.4MHz_64QAM_LCH_824.7MHz_RB_6_0_NTNV



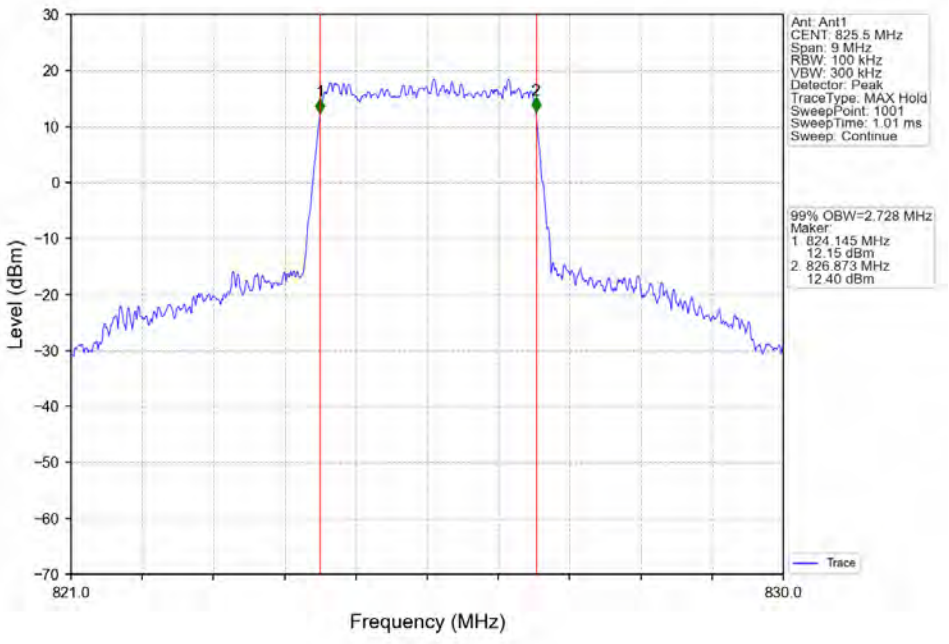
Band5_1.4MHz_64QAM_MCH_836.5MHz_RB_6_0_NTNV



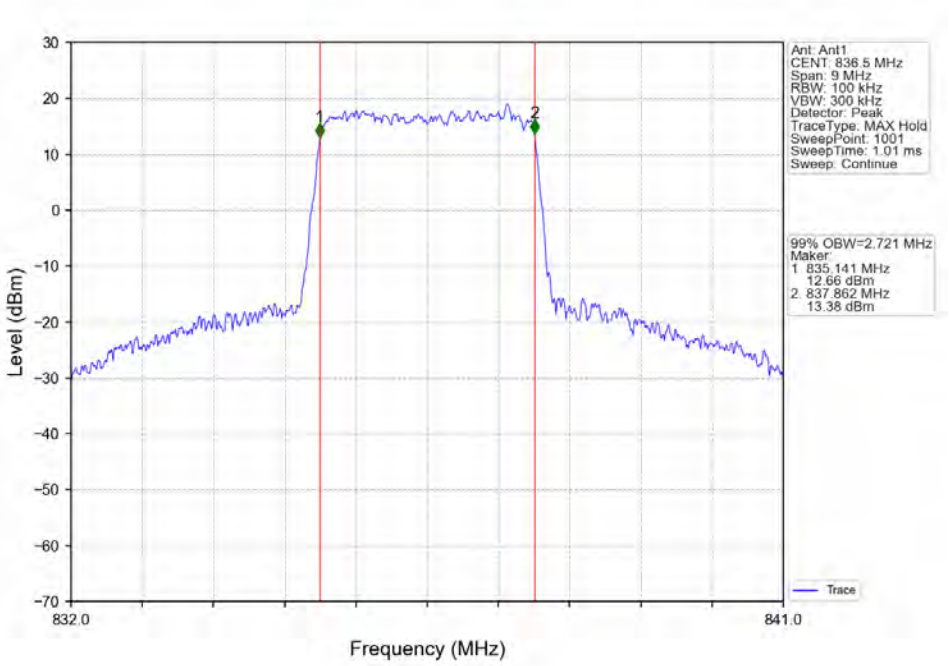
Band5_1.4MHz_64QAM_HCH_848.3MHz_RB_6_0_NTNV



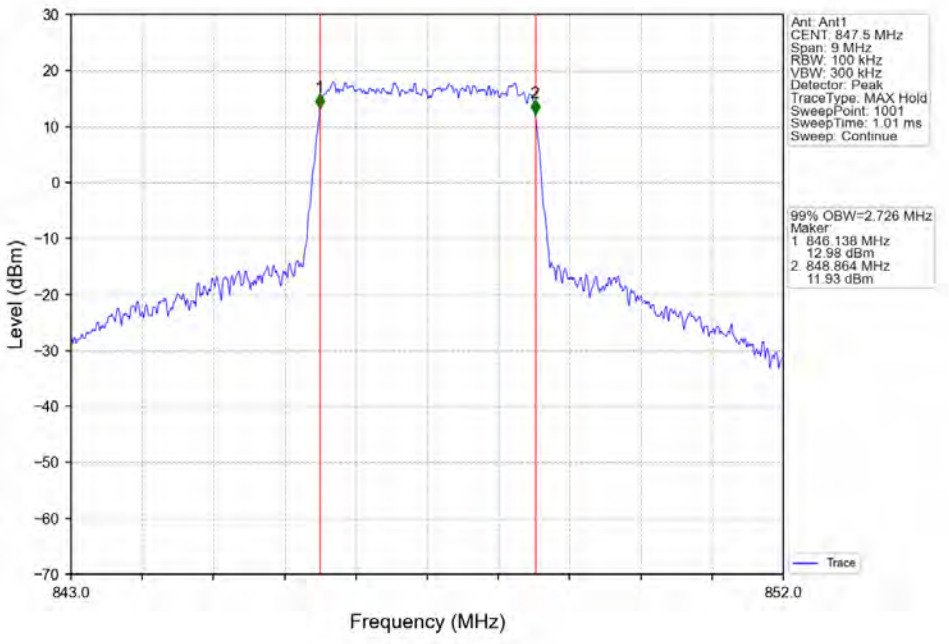
Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV



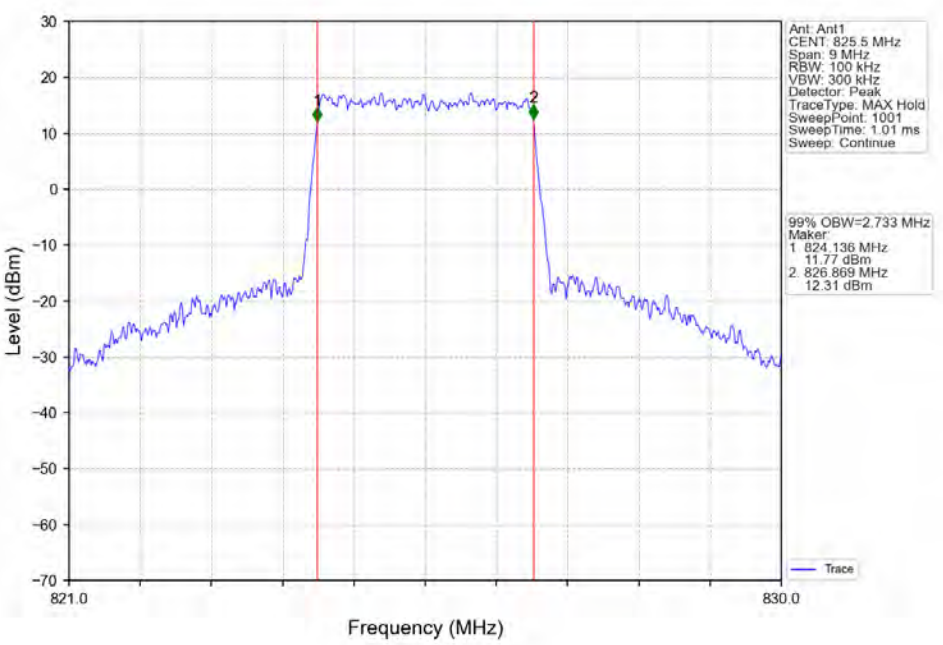
Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV



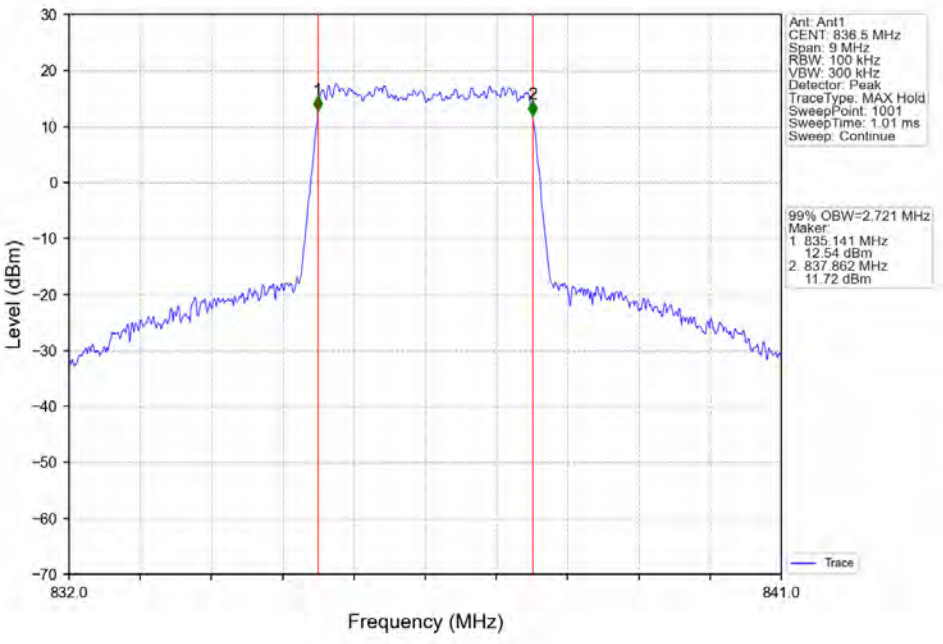
Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV



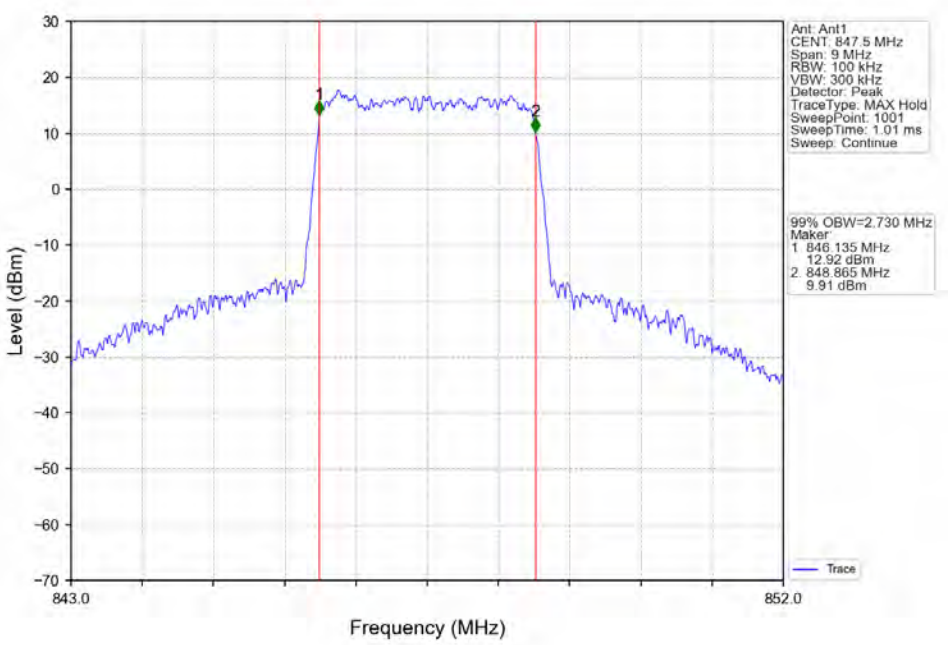
Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV



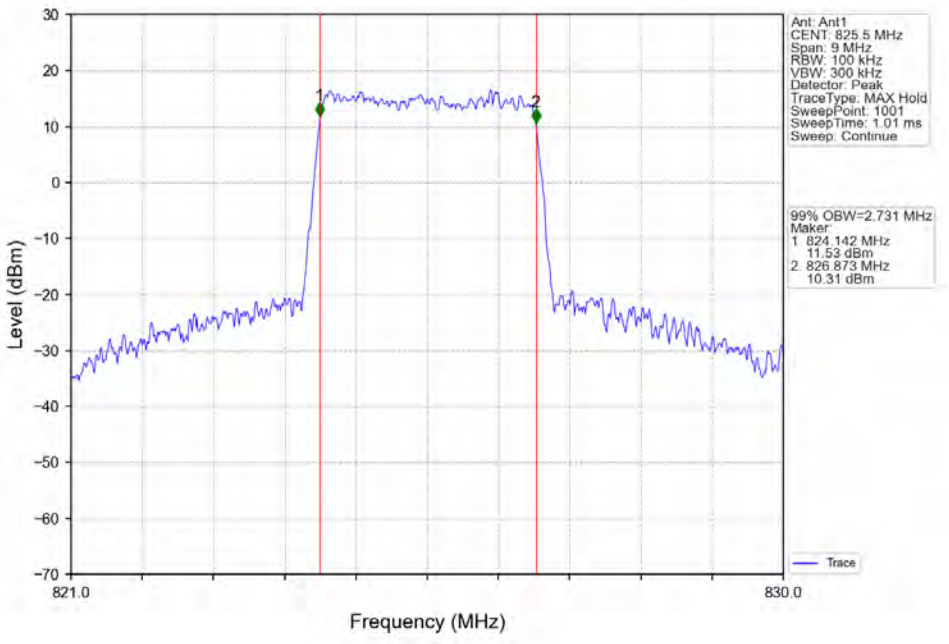
Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV



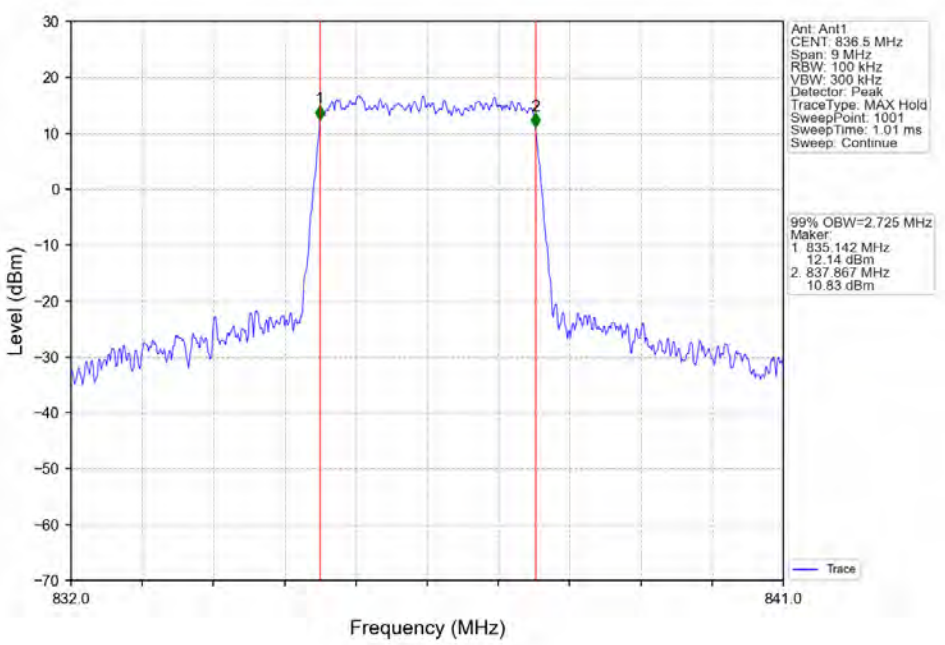
Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV



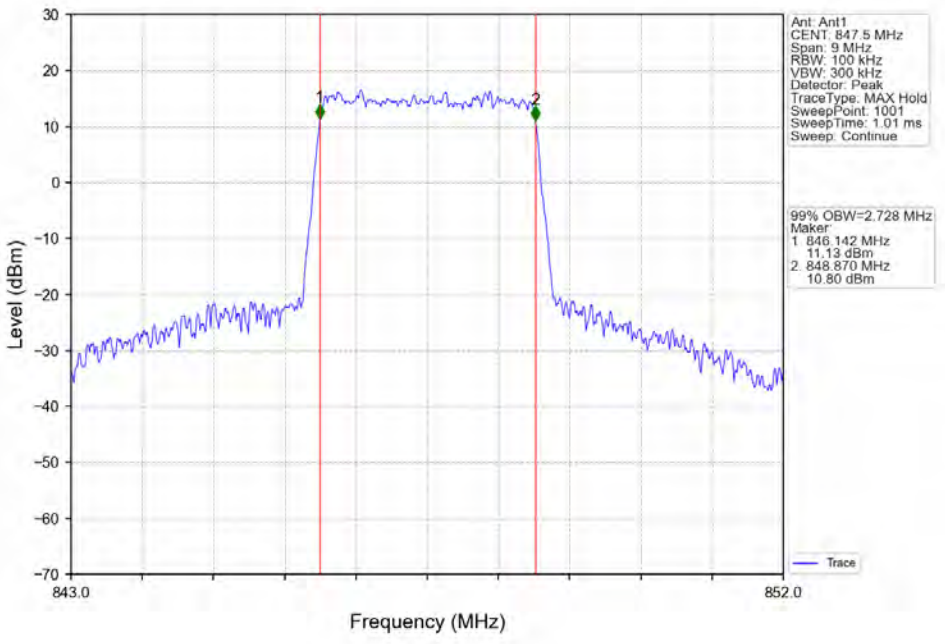
Band5_3MHz_64QAM_LCH_825.5MHz_RB_15_0_NTNV



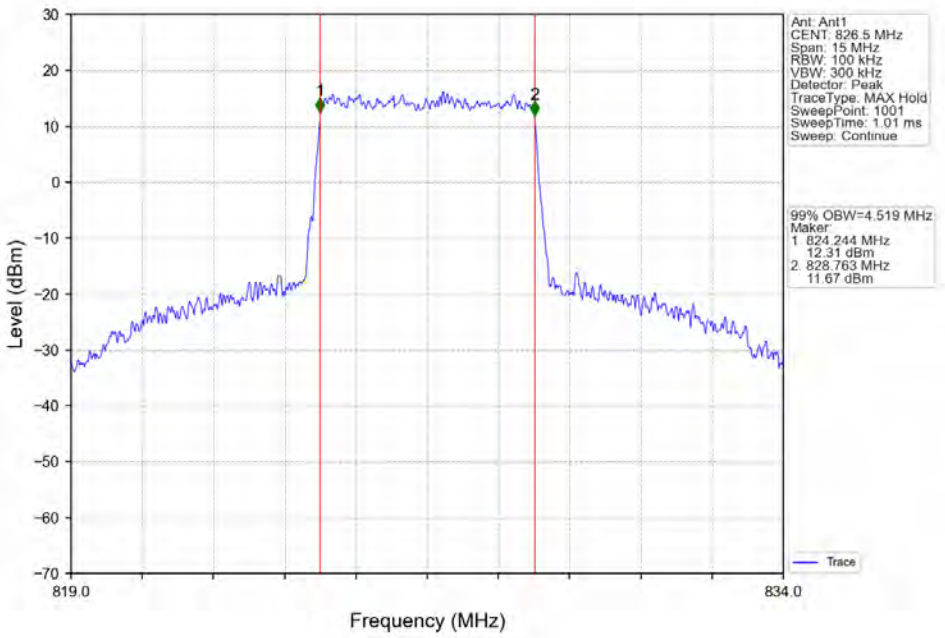
Band5_3MHz_64QAM_MCH_836.5MHz_RB_15_0_NTNV



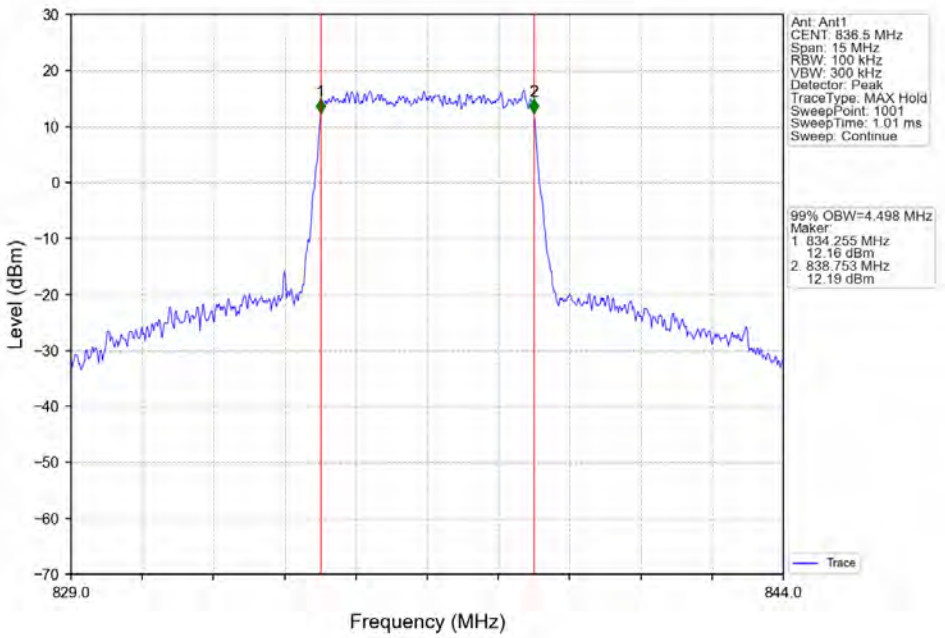
Band5_3MHz_64QAM_HCH_847.5MHz_RB_15_0_NTNV



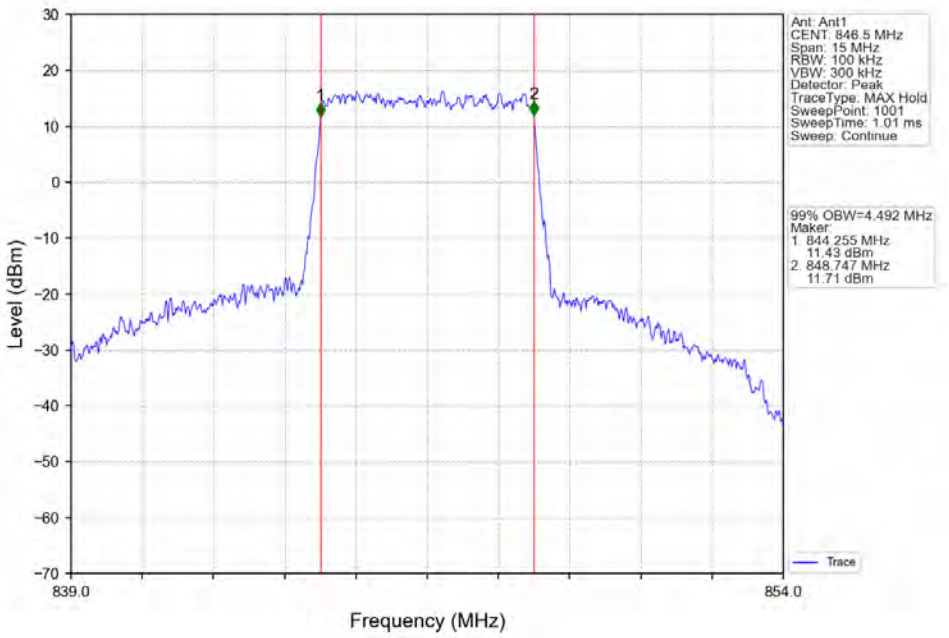
Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV



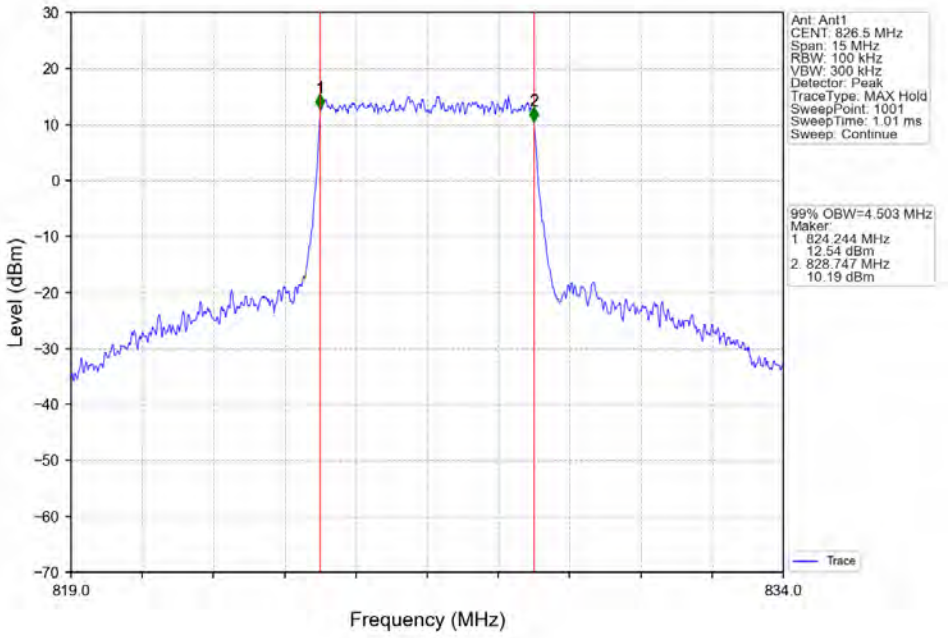
Band5_5MHz_QPSK_MCH_836.5MHz_RB_25_0_NTNV



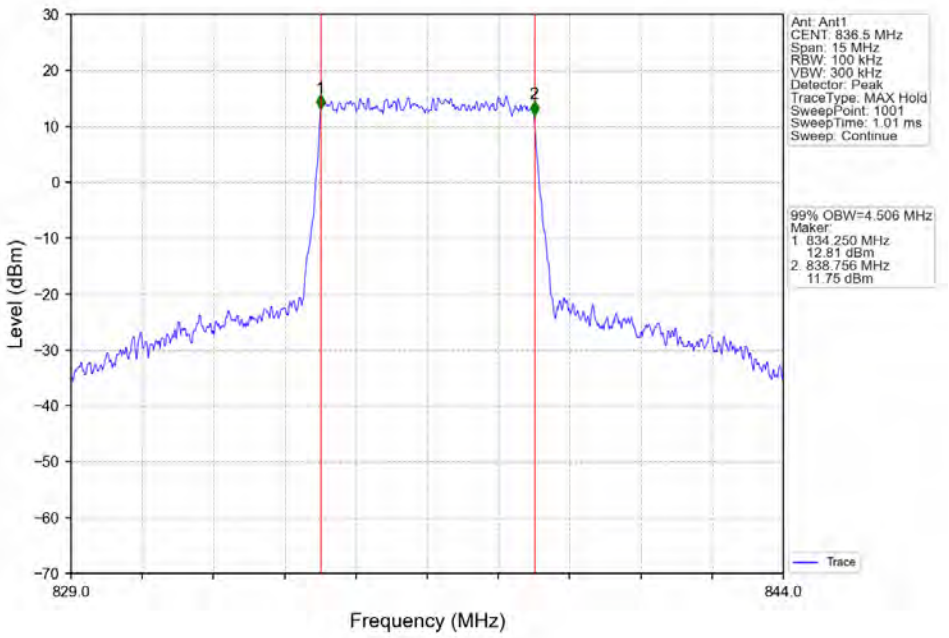
Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV



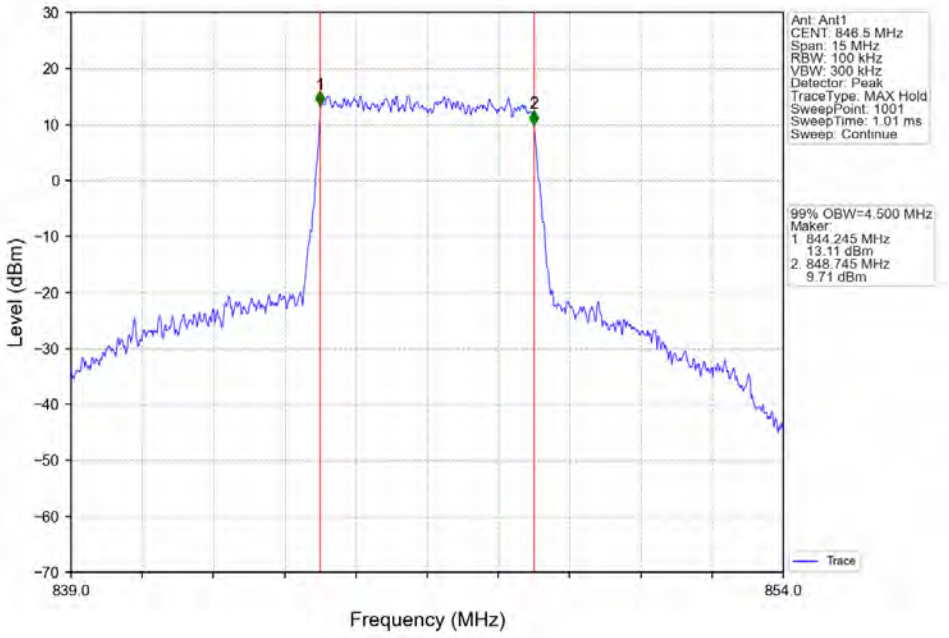
Band5_5MHz_16QAM_LCH_826.5MHz_RB_25_0_NTNV



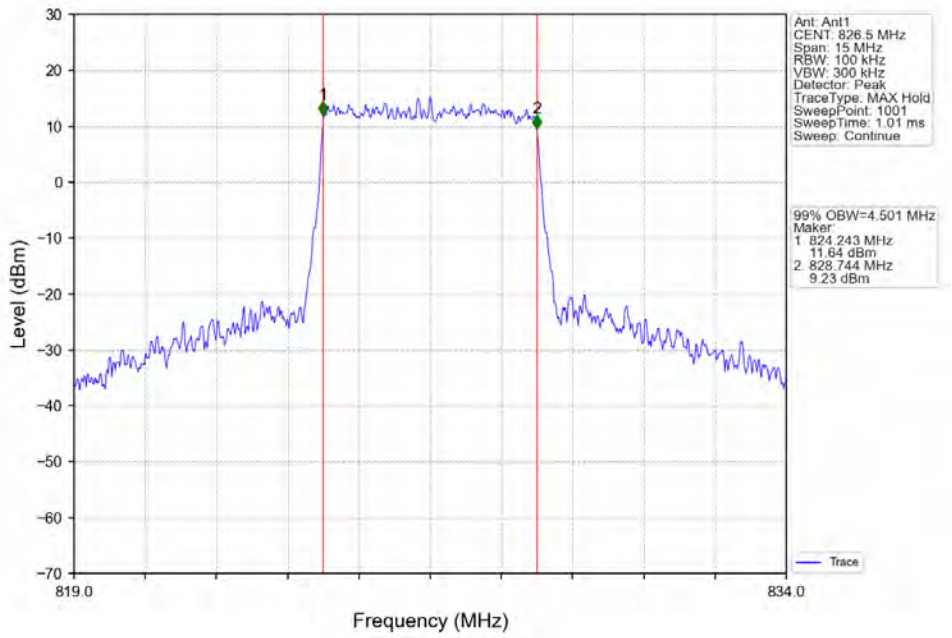
Band5_5MHz_16QAM_MCH_836.5MHz_RB_25_0_NTNV



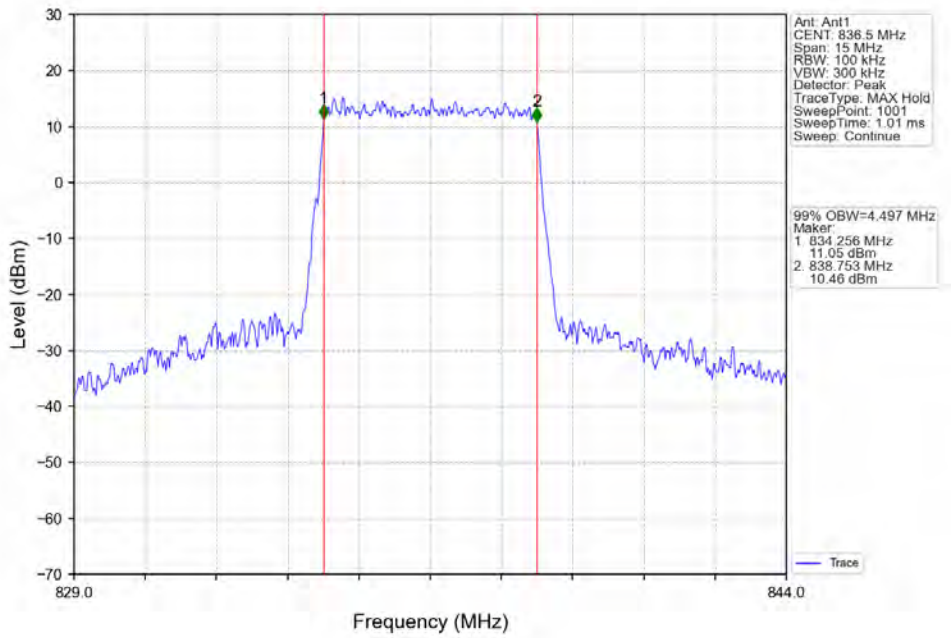
Band5_5MHz_16QAM_HCH_846.5MHz_RB_25_0_NTNV



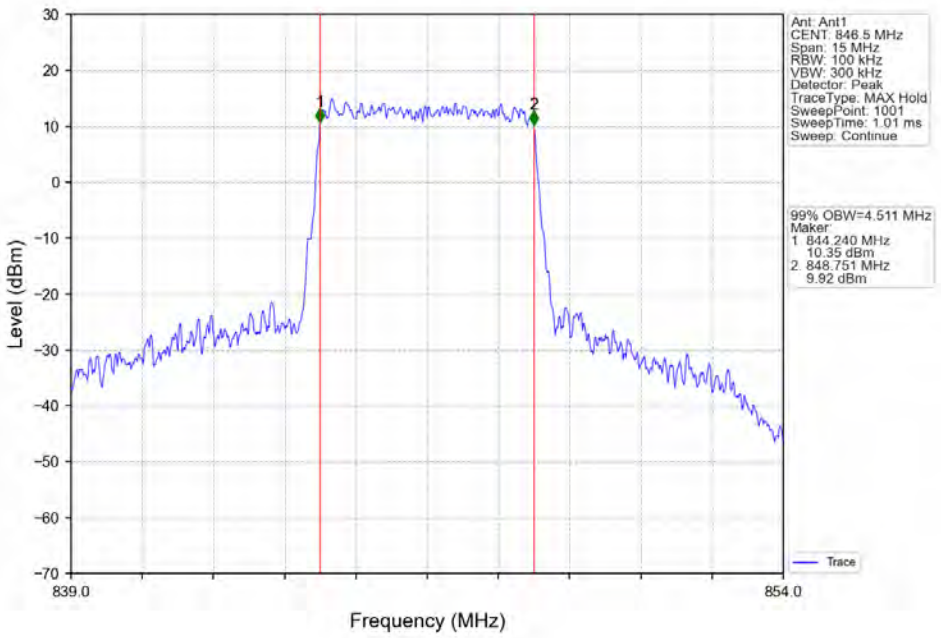
Band5_5MHz_64QAM_LCH_826.5MHz_RB_25_0_NTNV



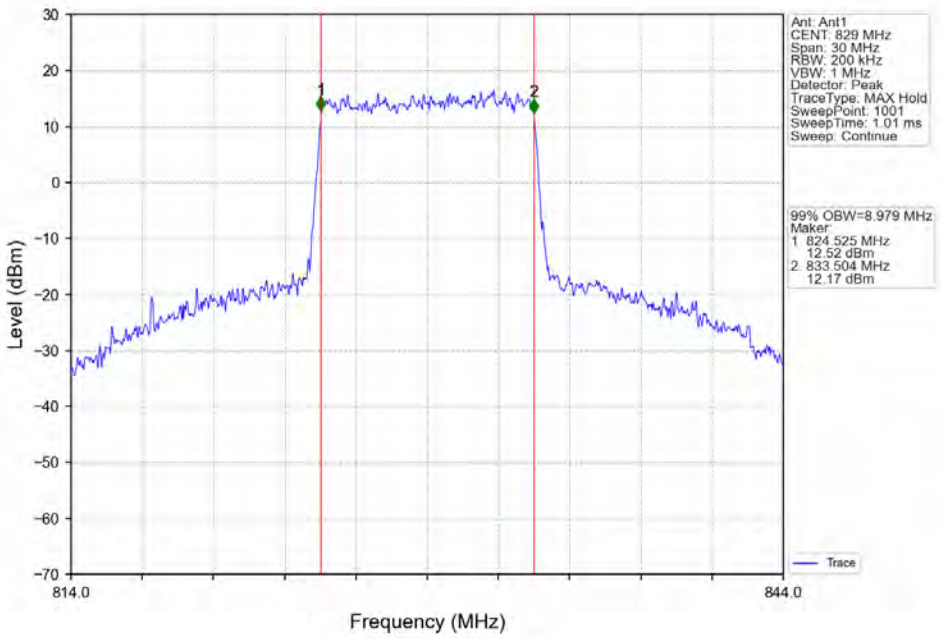
Band5_5MHz_64QAM_MCH_836.5MHz_RB_25_0_NTNV



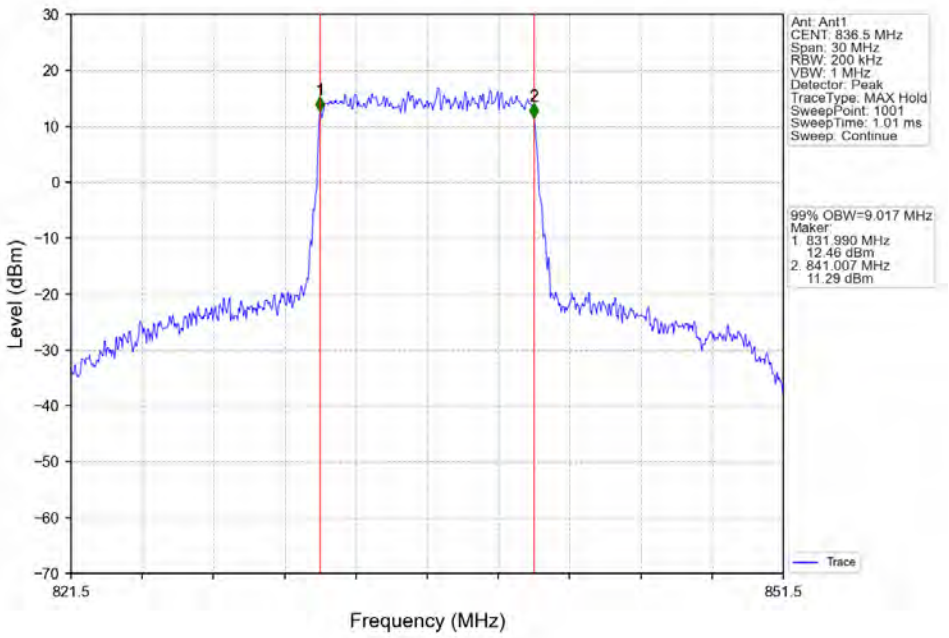
Band5_5MHz_64QAM_HCH_846.5MHz_RB_25_0_NTNV



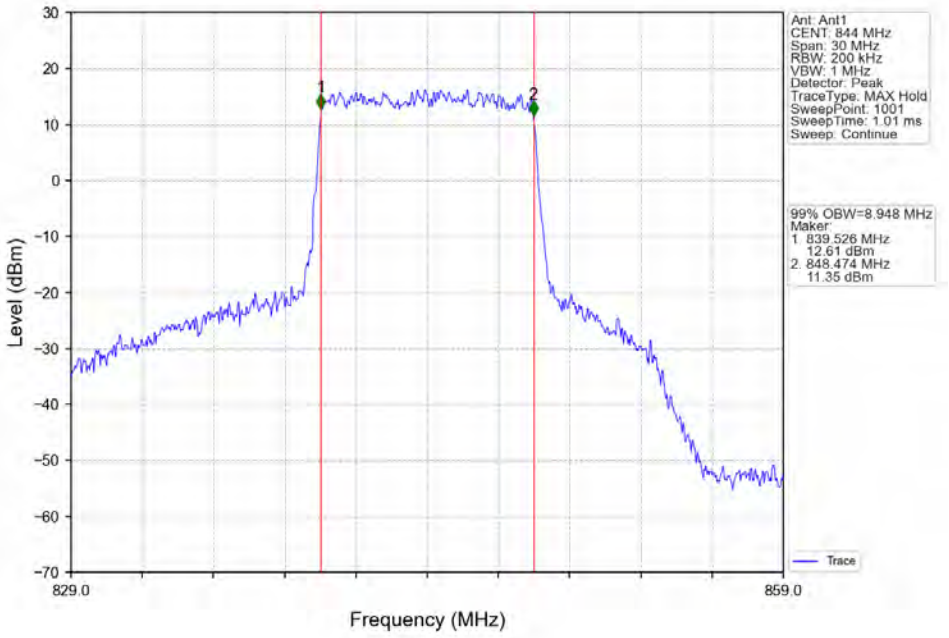
Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV



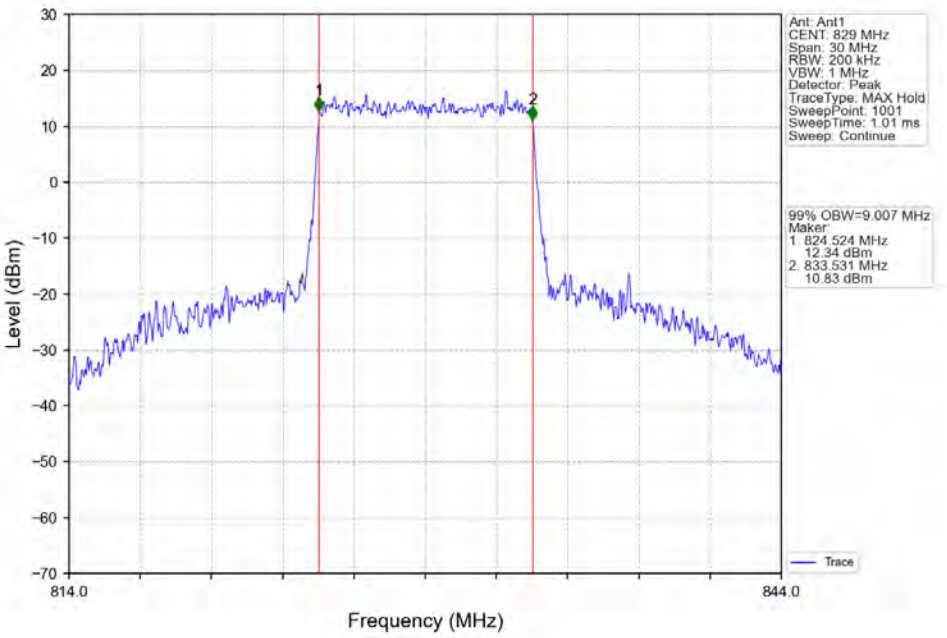
Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV



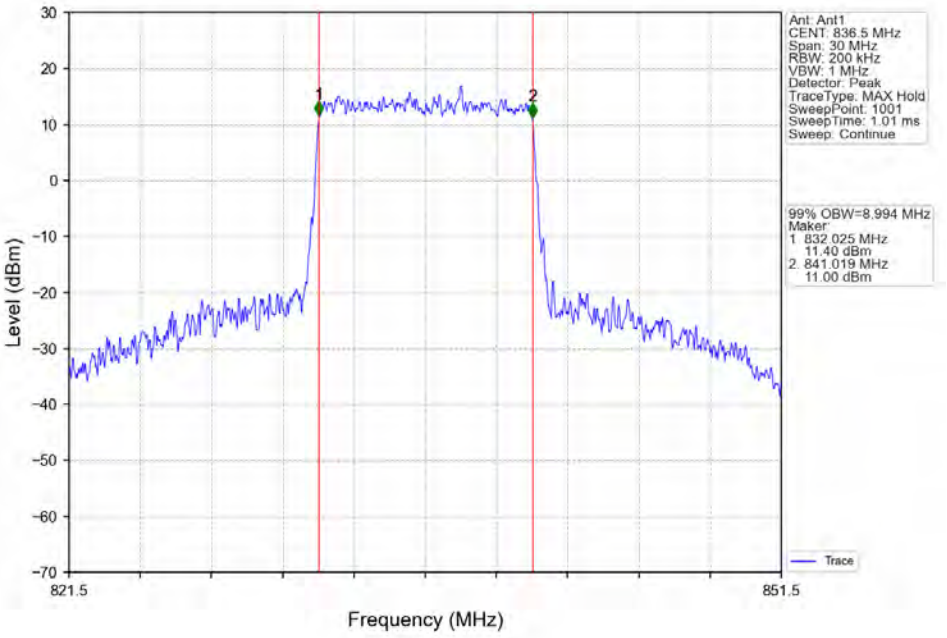
Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV



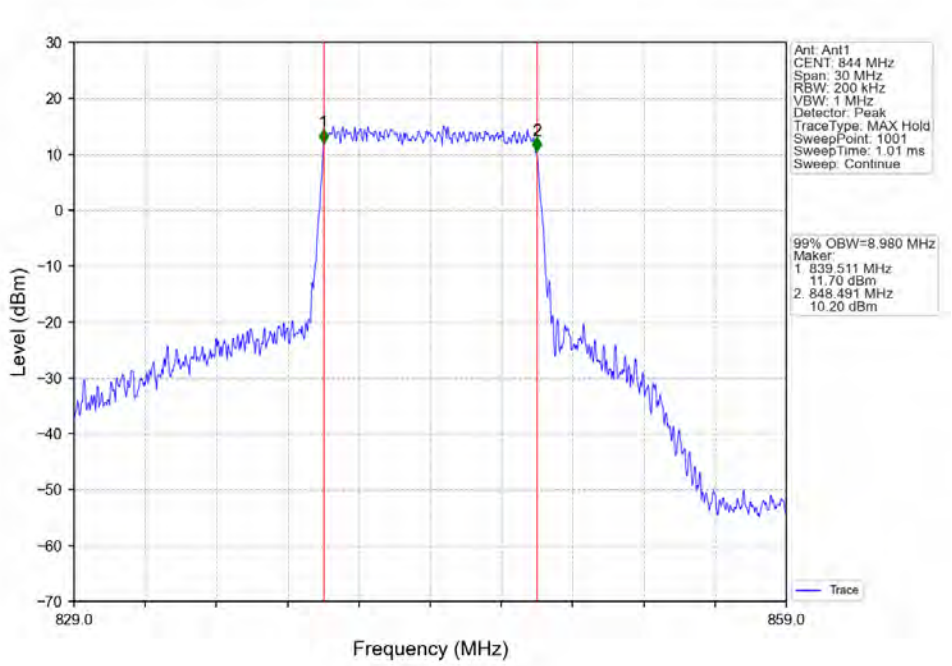
Band5_10MHz_16QAM_LCH_829MHz_RB_50_0_NTNV



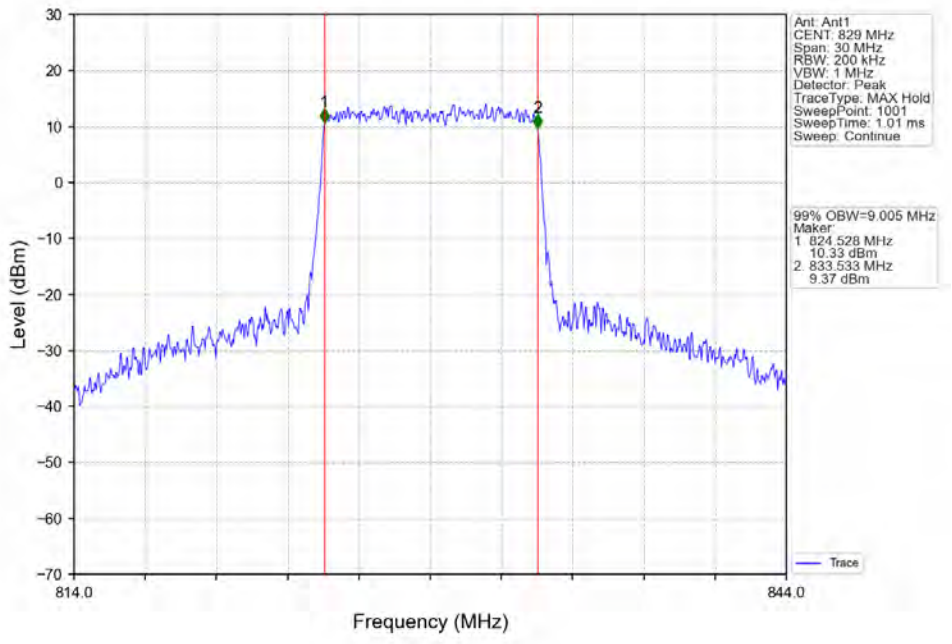
Band5_10MHz_16QAM_MCH_836.5MHz_RB_50_0_NTNV



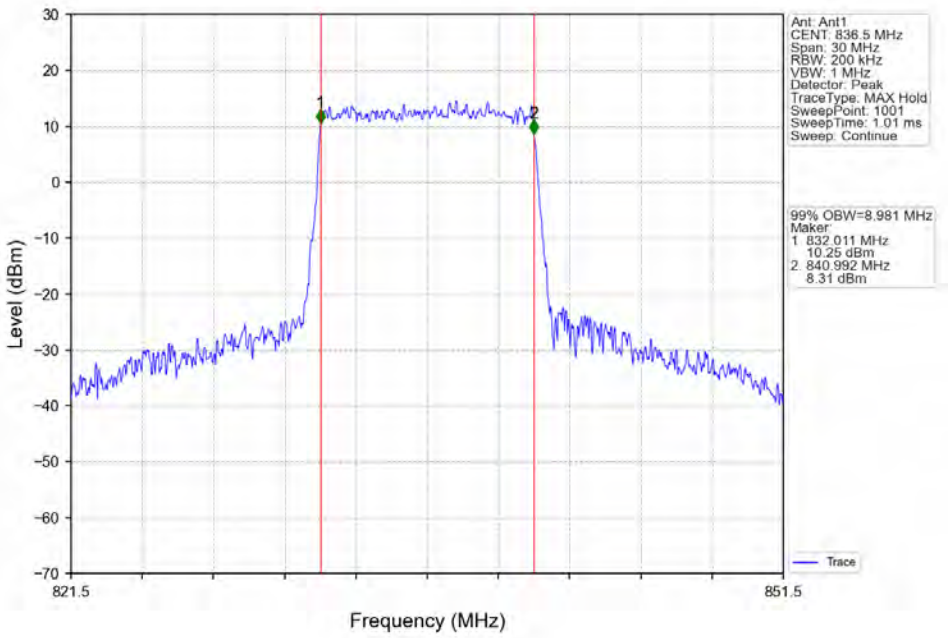
Band5_10MHz_16QAM_HCH_844MHz_RB_50_0_NTNV



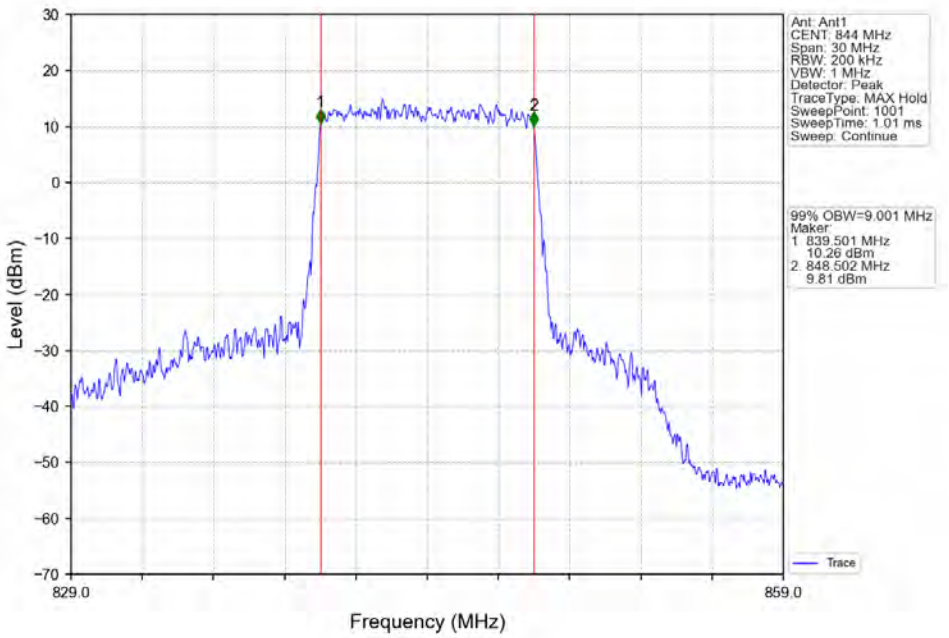
Band5_10MHz_64QAM_LCH_829MHz_RB_50_0_NTNV



Band5_10MHz_64QAM_MCH_836.5MHz_RB_50_0_NTNV



Band5_10MHz_64QAM_HCH_844MHz_RB_50_0_NTNV



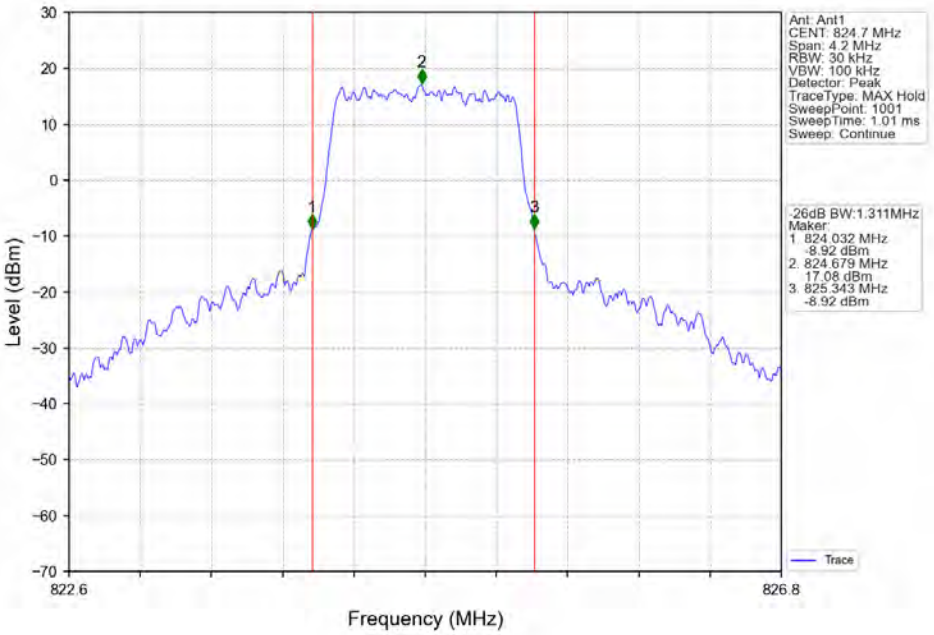
3.2 Band5_XDB

3.2.1 Test Result

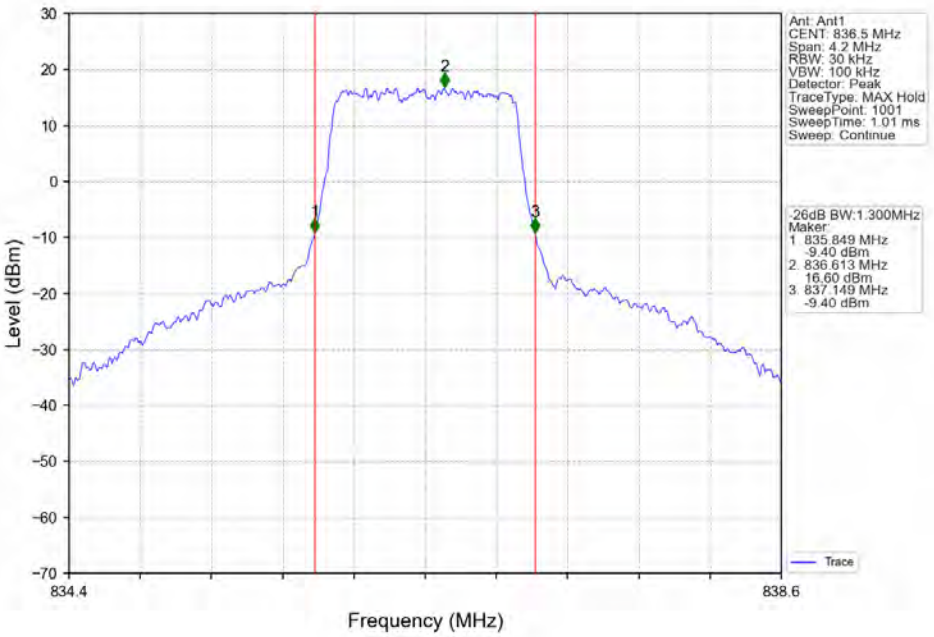
Band: 5 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	824.7	6	0	1.311	/	Pass
		836.5	6	0	1.300	/	Pass
		848.3	6	0	1.286	/	Pass
	16QAM	824.7	6	0	1.280	/	Pass
		836.5	6	0	1.287	/	Pass
		848.3	6	0	1.294	/	Pass
	64QAM	824.7	6	0	1.294	/	Pass
		836.5	6	0	1.294	/	Pass
		848.3	6	0	1.312	/	Pass
3	QPSK	825.5	15	0	3.019	/	Pass
		836.5	15	0	3.002	/	Pass
		847.5	15	0	3.019	/	Pass
	16QAM	825.5	15	0	3.004	/	Pass
		836.5	15	0	3.018	/	Pass
		847.5	15	0	3.014	/	Pass
	64QAM	825.5	15	0	3.008	/	Pass
		836.5	15	0	2.994	/	Pass
		847.5	15	0	3.020	/	Pass
5	QPSK	826.5	25	0	4.986	/	Pass
		836.5	25	0	4.962	/	Pass
		846.5	25	0	5.005	/	Pass
	16QAM	826.5	25	0	4.952	/	Pass
		836.5	25	0	4.963	/	Pass
		846.5	25	0	4.962	/	Pass
	64QAM	826.5	25	0	4.955	/	Pass
		836.5	25	0	4.982	/	Pass
		846.5	25	0	5.003	/	Pass
10	QPSK	829	50	0	9.789	/	Pass
		836.5	50	0	9.720	/	Pass
		844	50	0	9.731	/	Pass
	16QAM	829	50	0	9.741	/	Pass
		836.5	50	0	9.643	/	Pass
		844	50	0	9.723	/	Pass
	64QAM	829	50	0	9.747	/	Pass
		836.5	50	0	9.827	/	Pass
		844	50	0	9.805	/	Pass

3.2.2 Test Graph

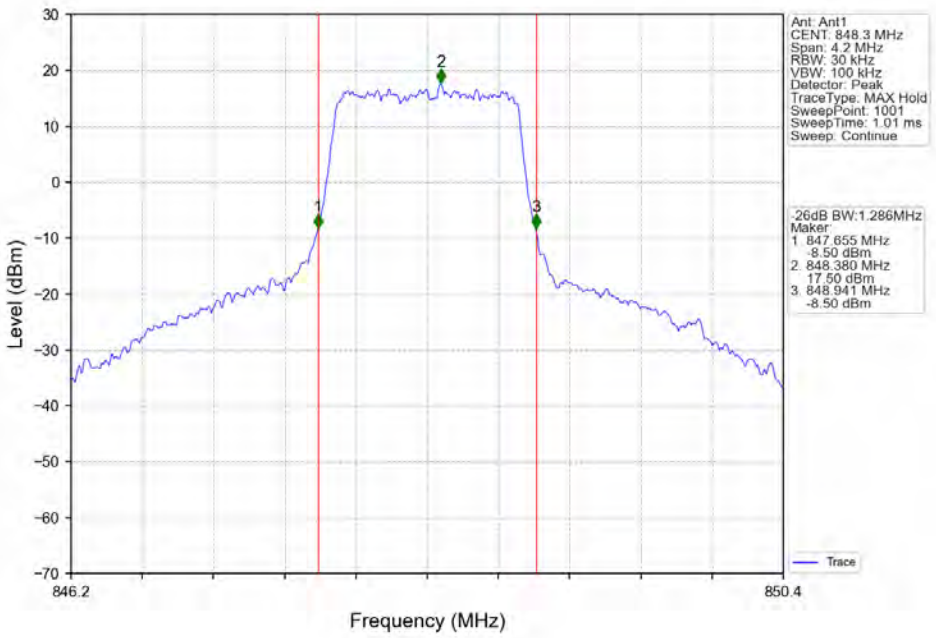
Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_6_0_NTNV



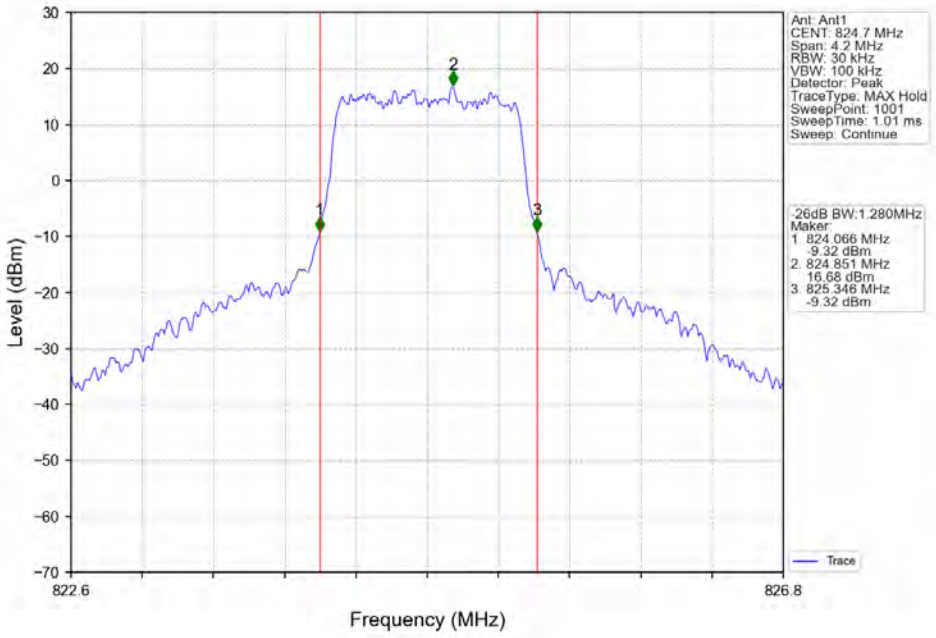
Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_6_0_NTNV



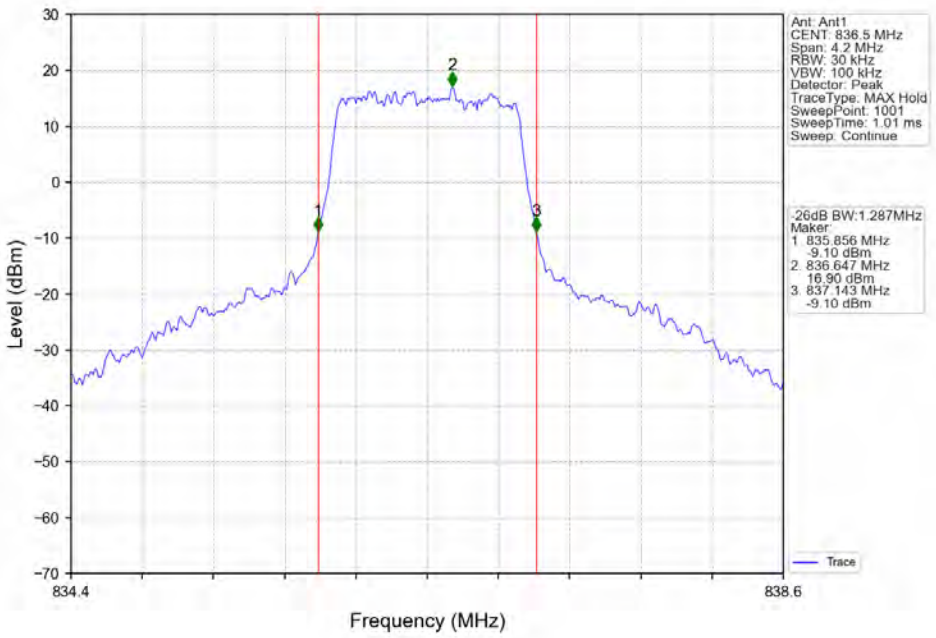
Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV



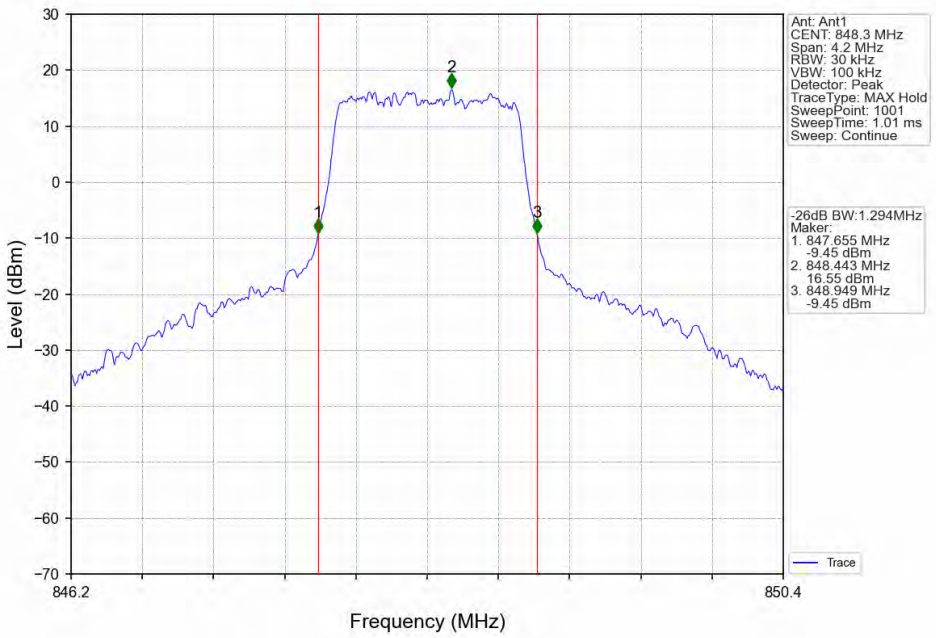
Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV



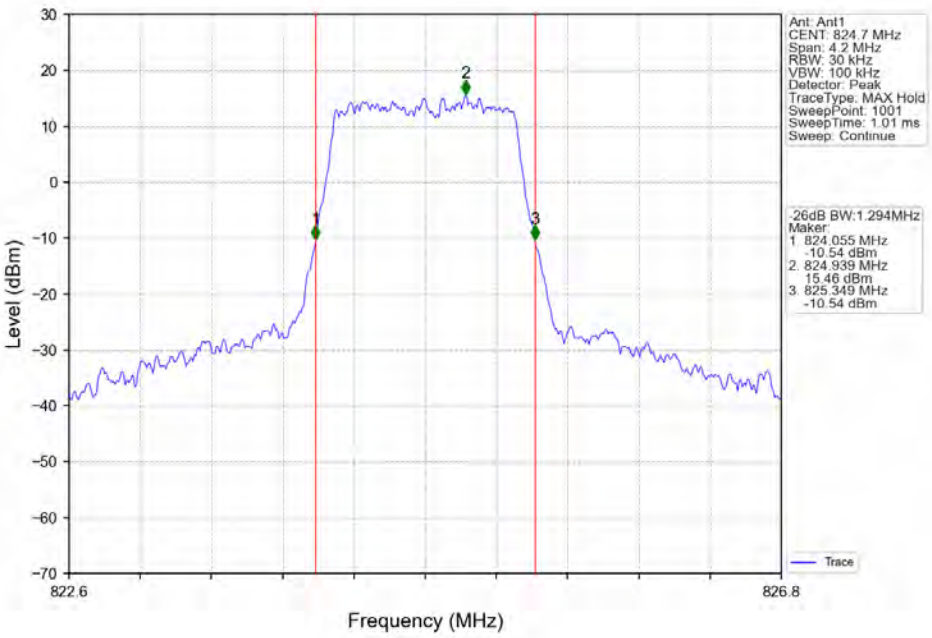
Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV



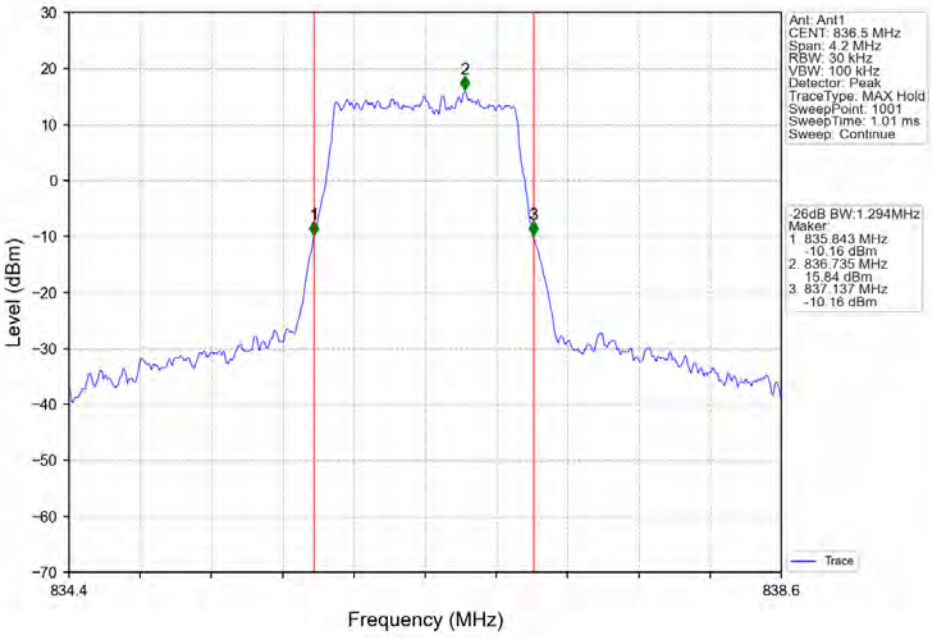
Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV



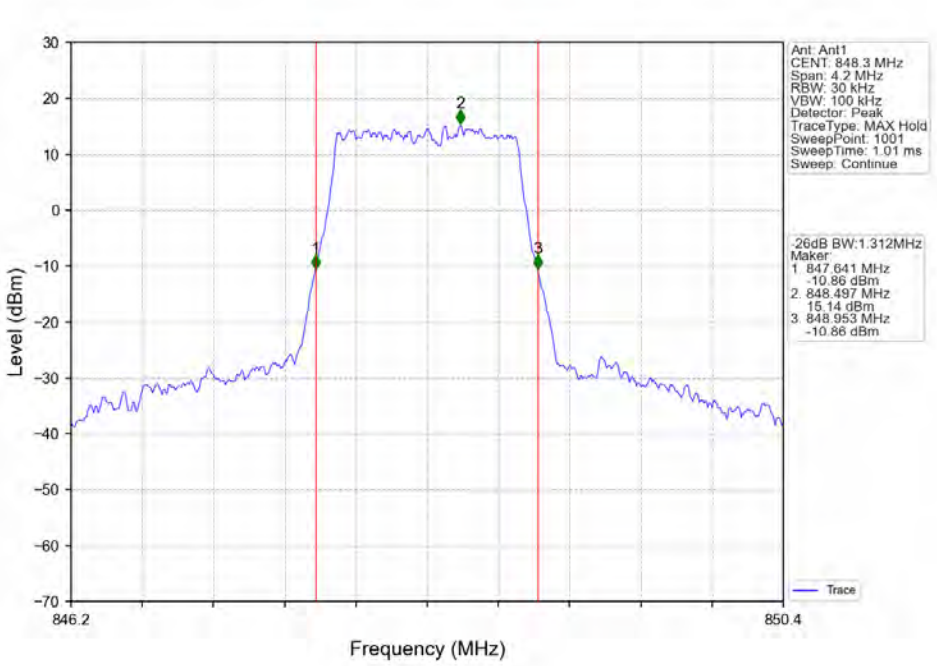
Band5_1.4MHz_64QAM_LCH_824.7MHz_RB_6_0_NTNV



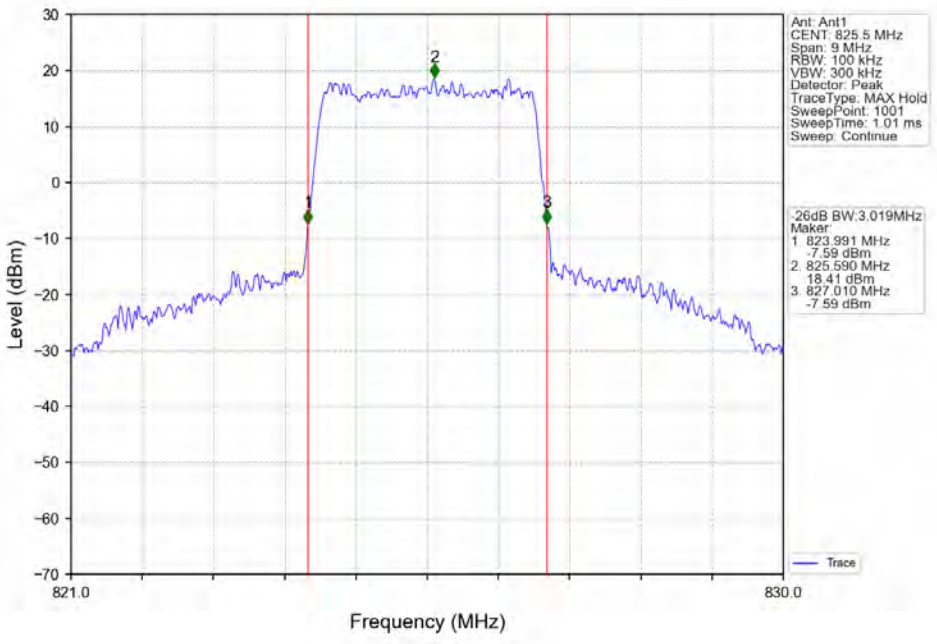
Band5_1.4MHz_64QAM_MCH_836.5MHz_RB_6_0_NTNV



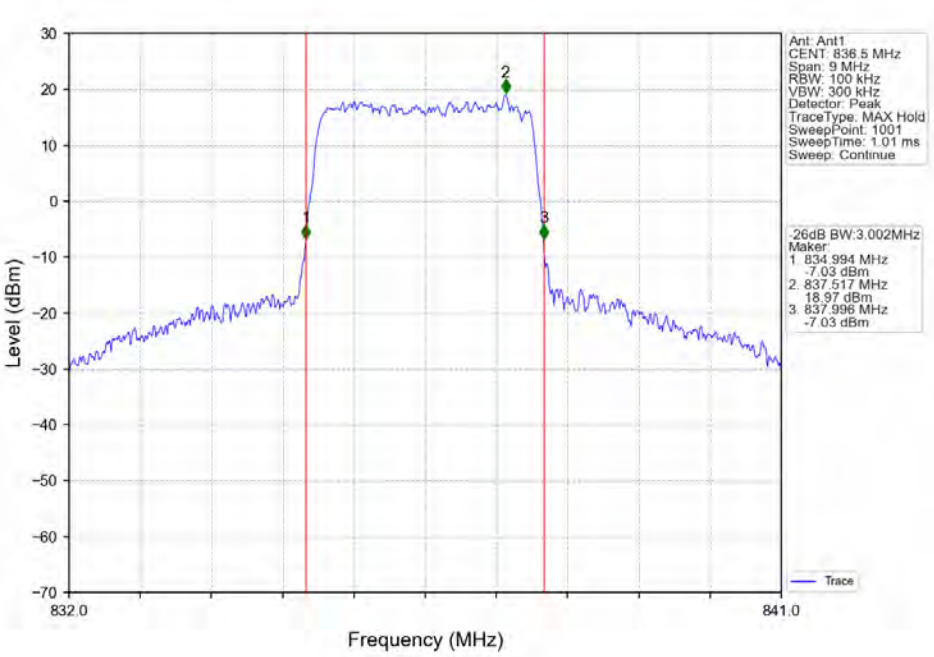
Band5_1.4MHz_64QAM_HCH_848.3MHz_RB_6_0_NTNV



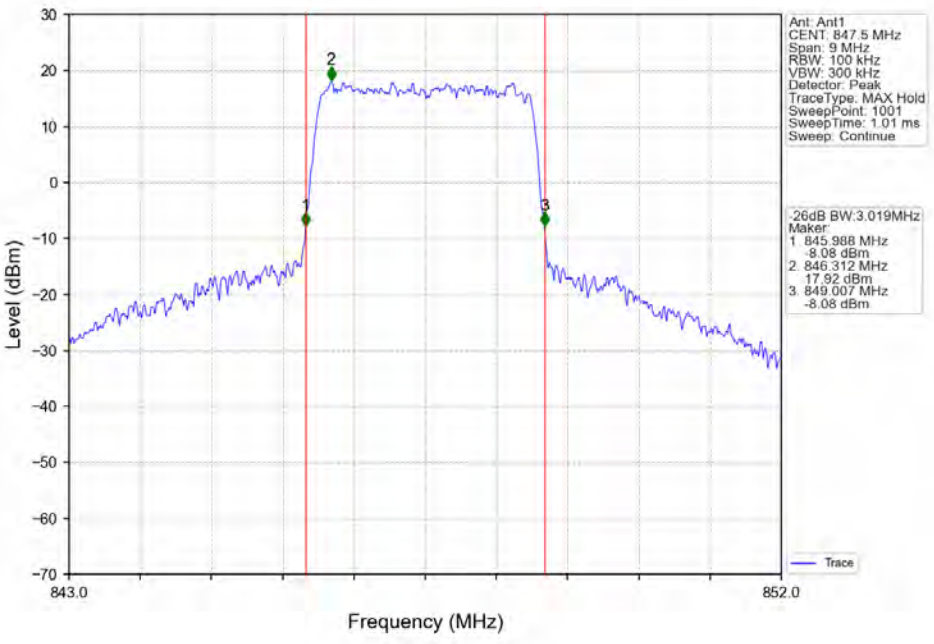
Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV



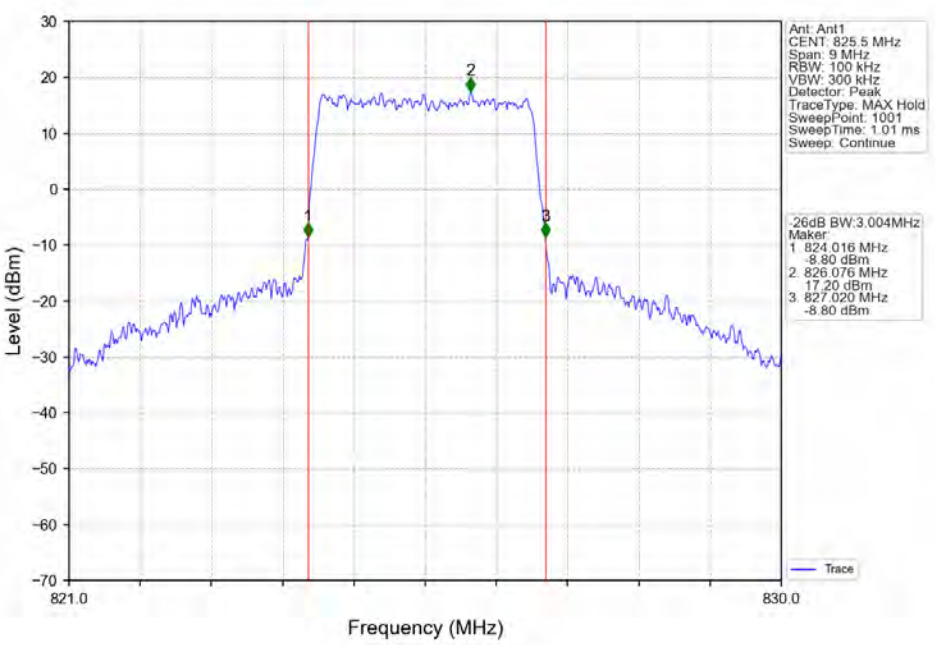
Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV



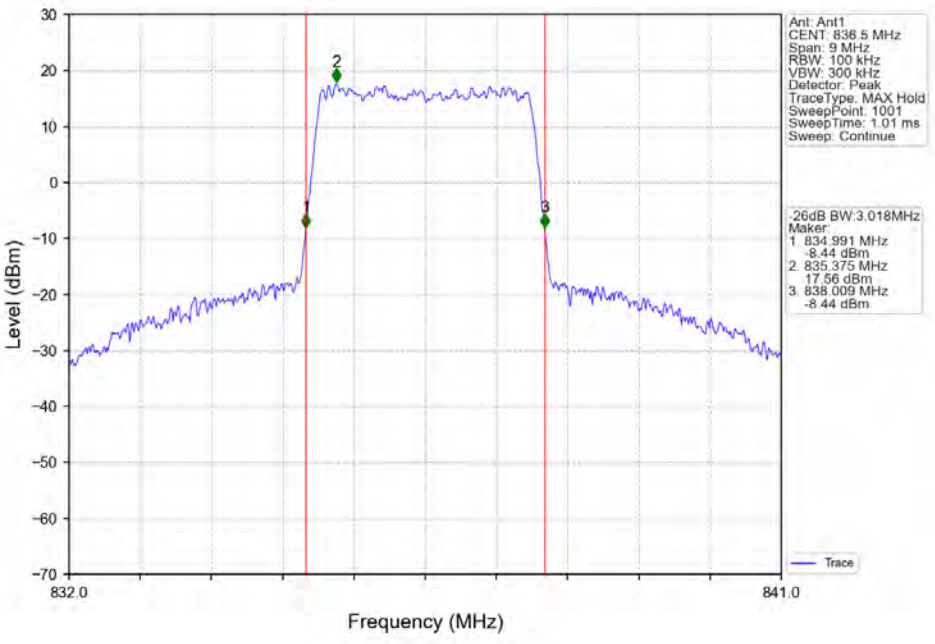
Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV



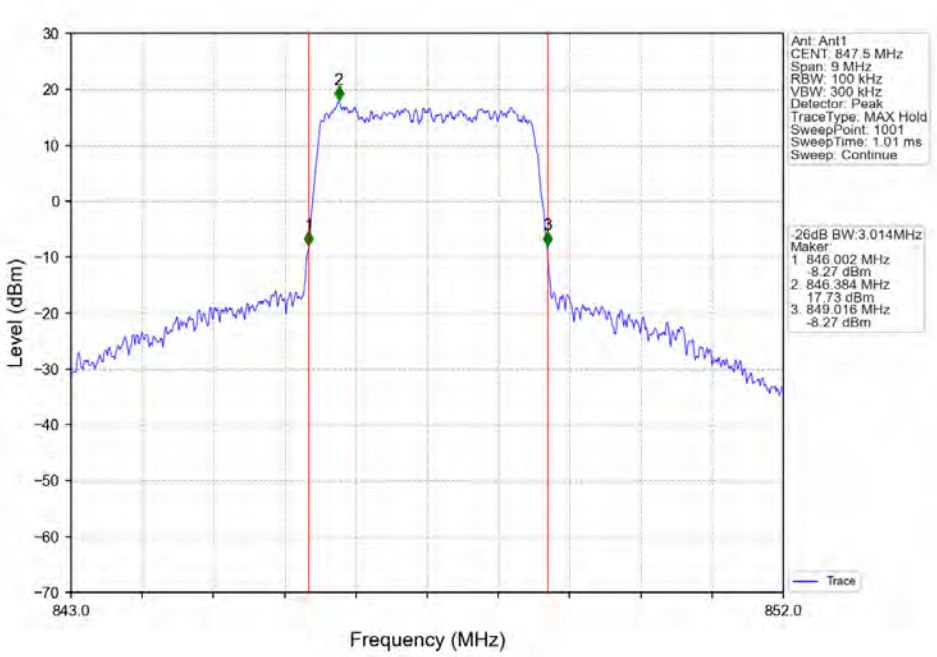
Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV



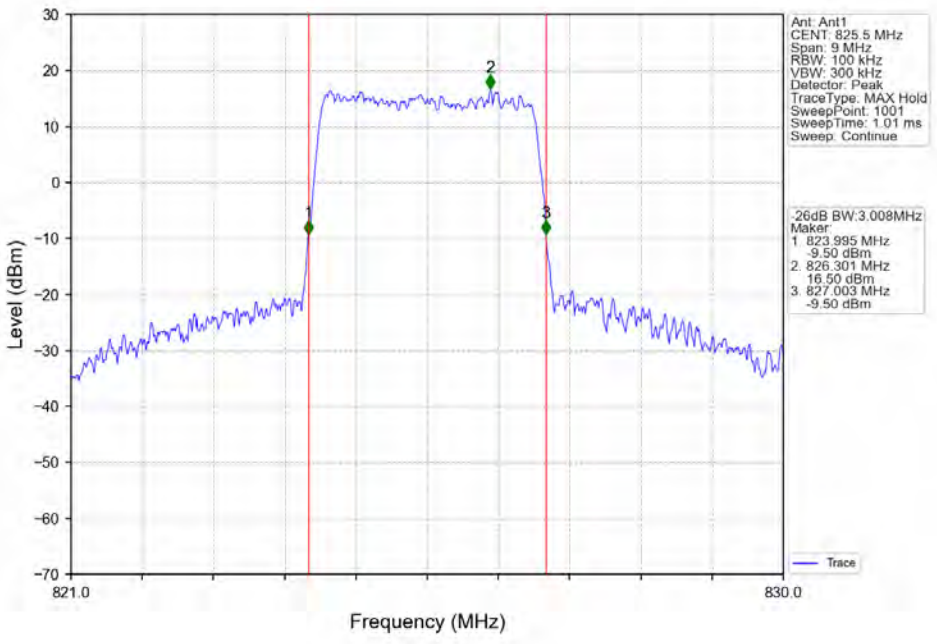
Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV



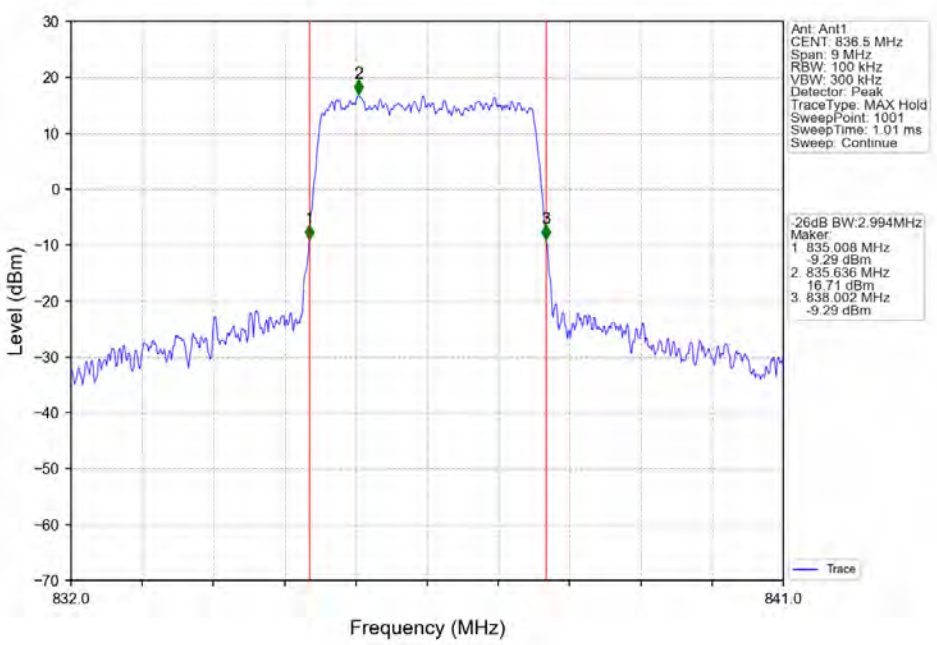
Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV



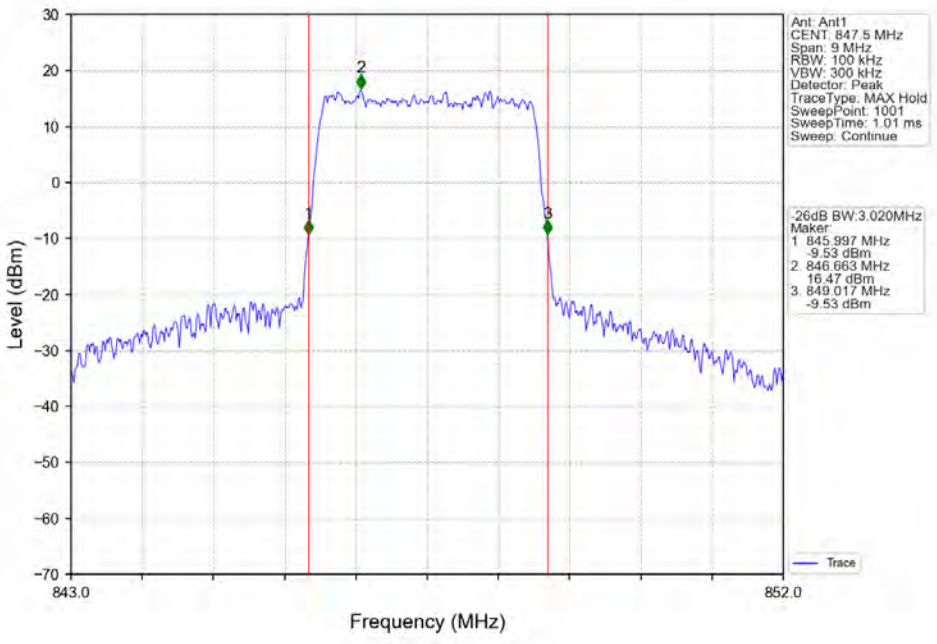
Band5_3MHz_64QAM_LCH_825.5MHz_RB_15_0_NTNV



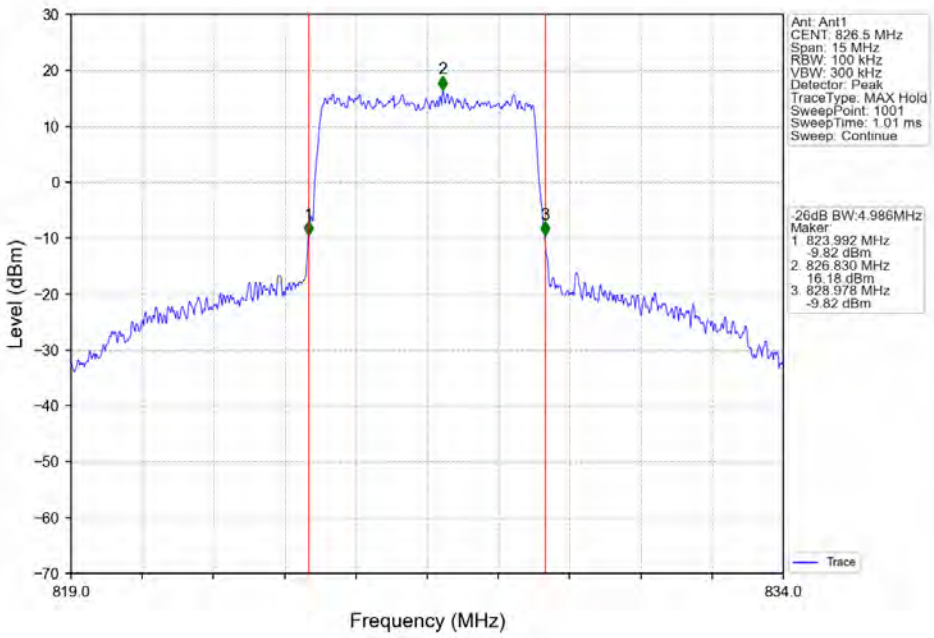
Band5_3MHz_64QAM_MCH_836.5MHz_RB_15_0_NTNV



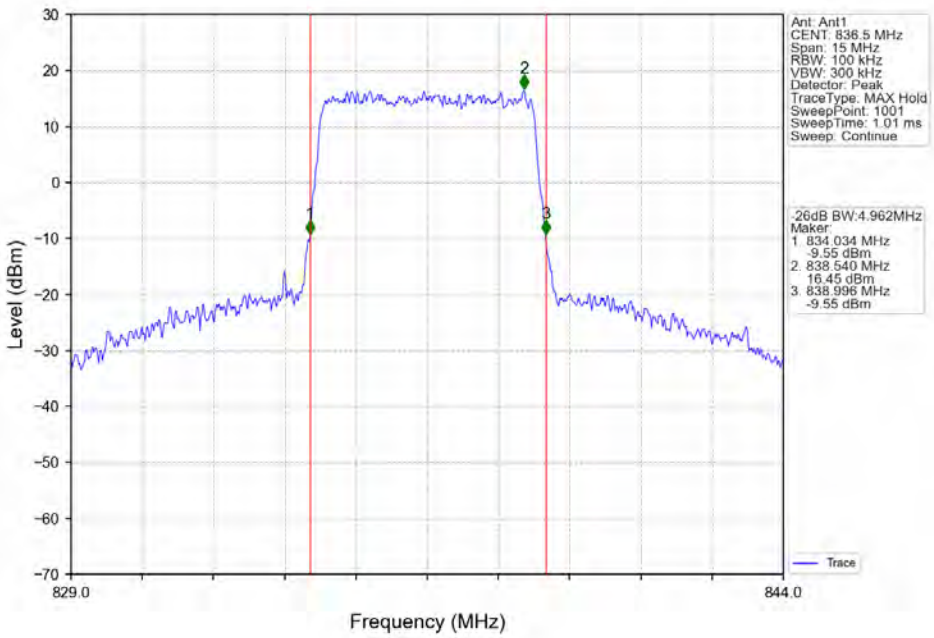
Band5_3MHz_64QAM_HCH_847.5MHz_RB_15_0_NTNV



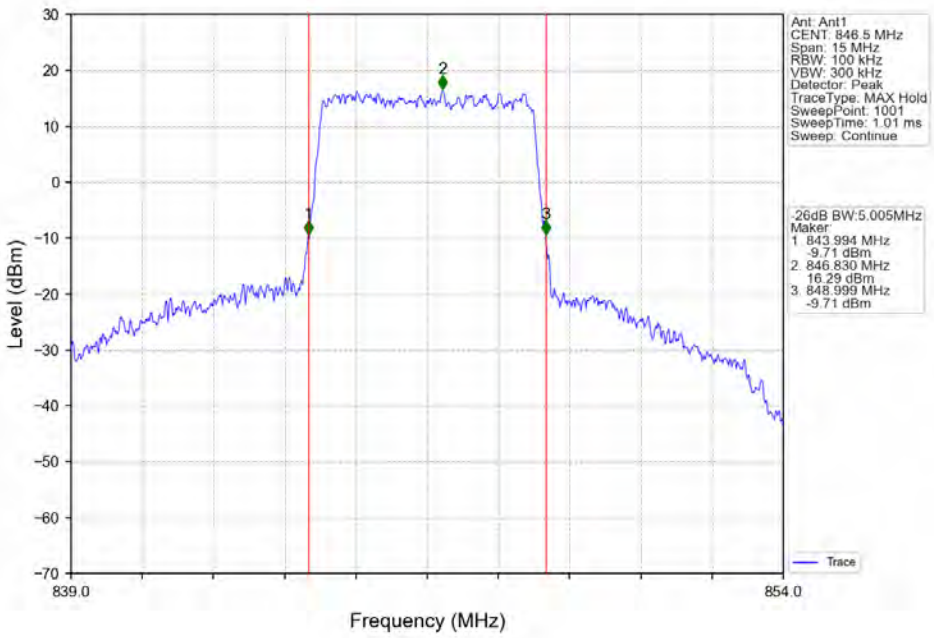
Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV



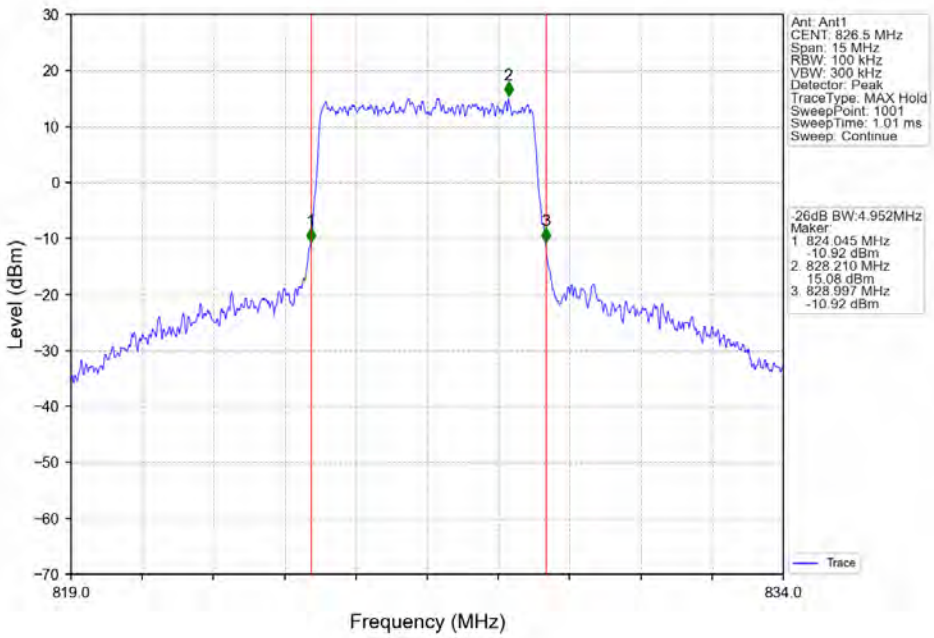
Band5_5MHz_QPSK_MCH_836.5MHz_RB_25_0_NTNV



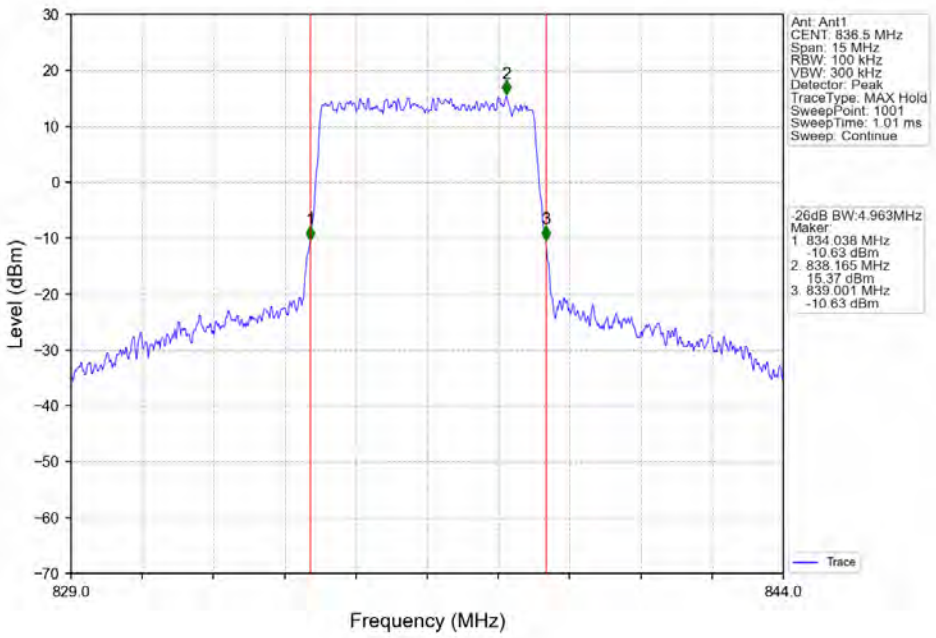
Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV



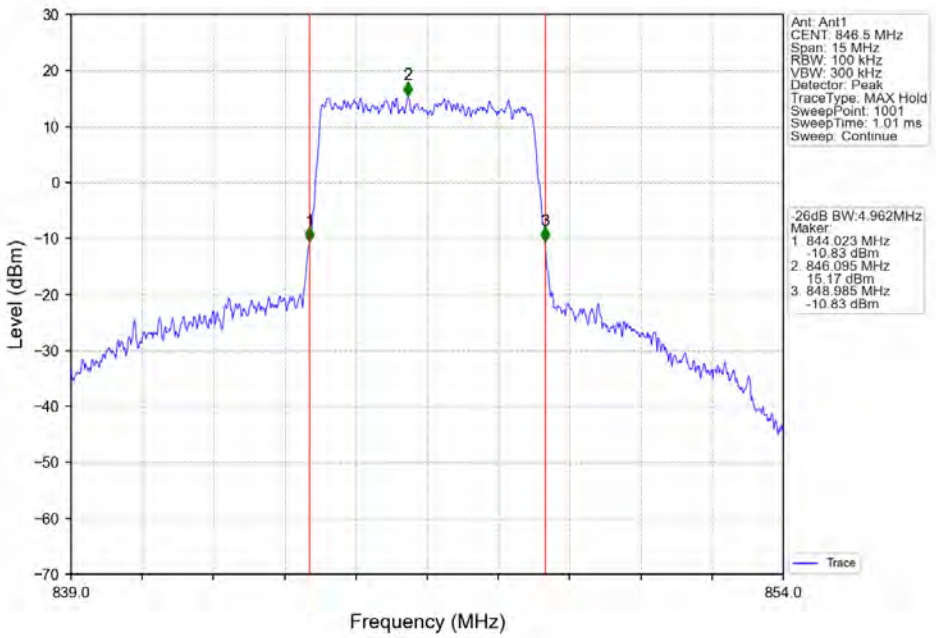
Band5_5MHz_16QAM_LCH_826.5MHz_RB_25_0_NTNV



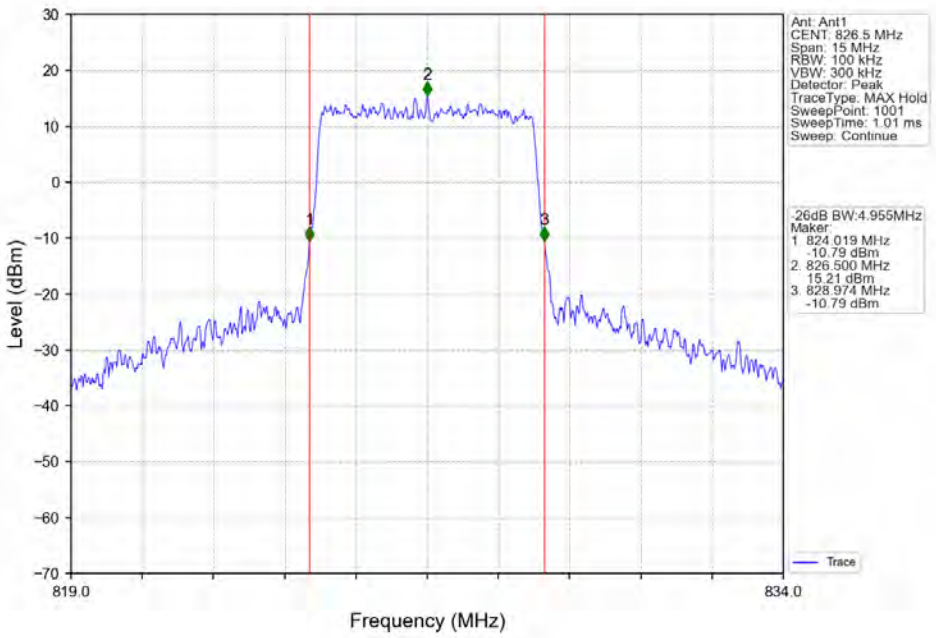
Band5_5MHz_16QAM_MCH_836.5MHz_RB_25_0_NTNV



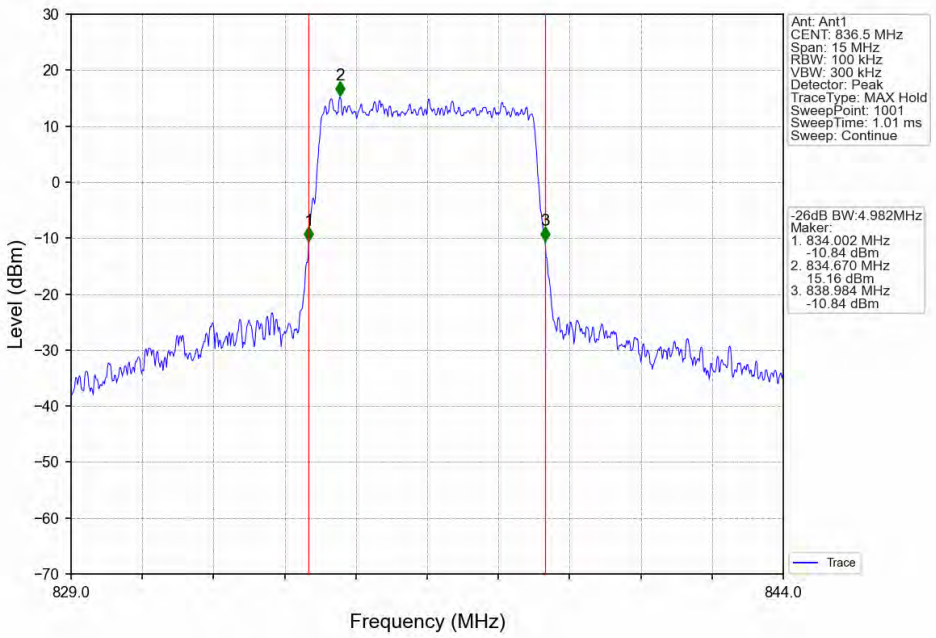
Band5_5MHz_16QAM_HCH_846.5MHz_RB_25_0_NTNV



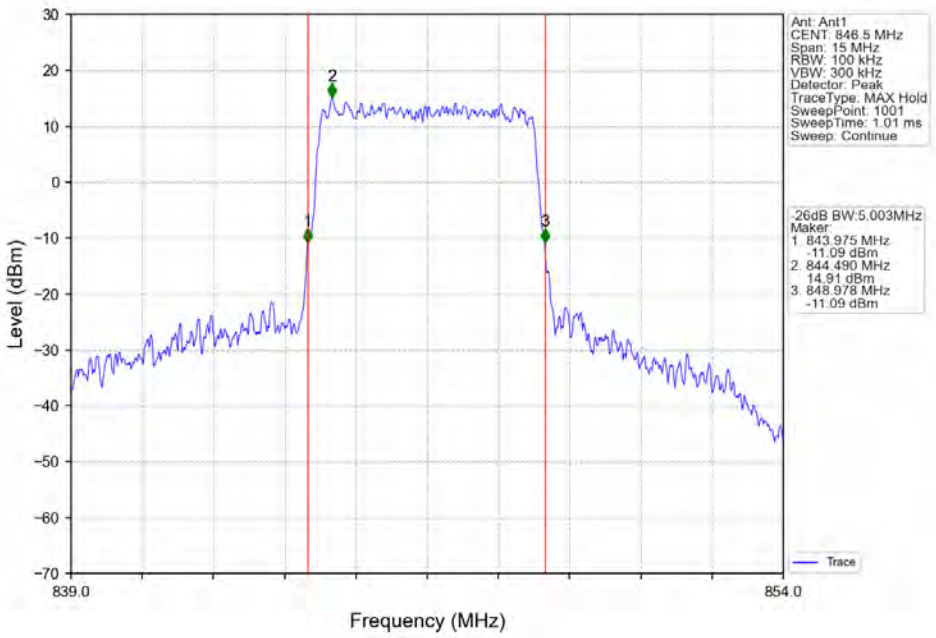
Band5_5MHz_64QAM_LCH_826.5MHz_RB_25_0_NTNV



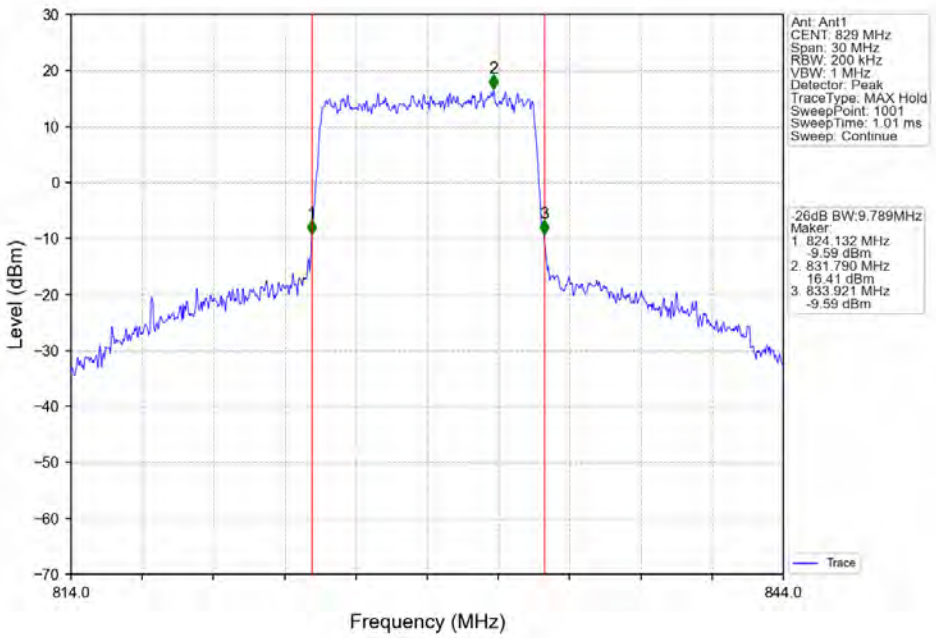
Band5_5MHz_64QAM_MCH_836.5MHz_RB_25_0_NTNV



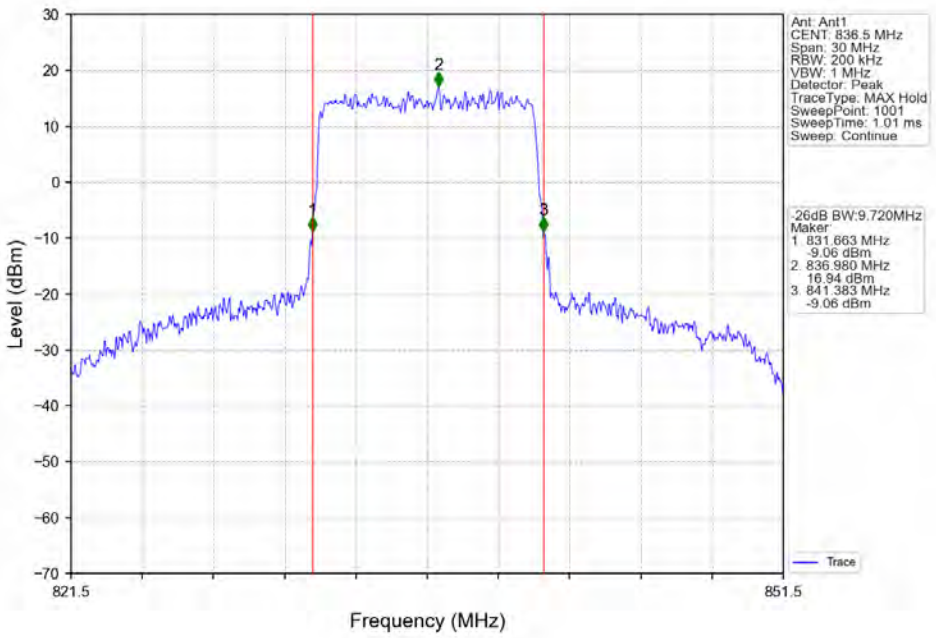
Band5_5MHz_64QAM_HCH_846.5MHz_RB_25_0_NTNV



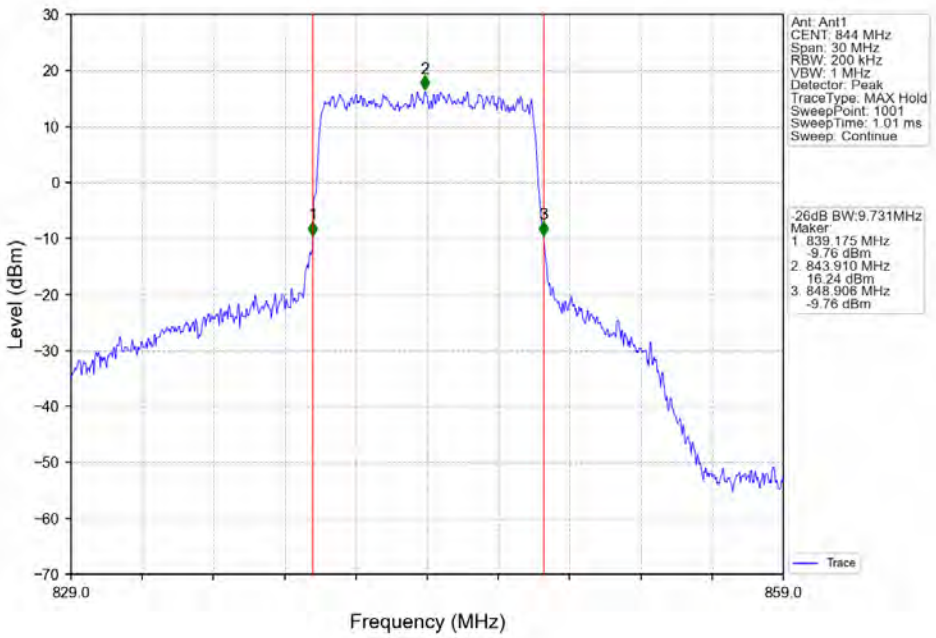
Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV



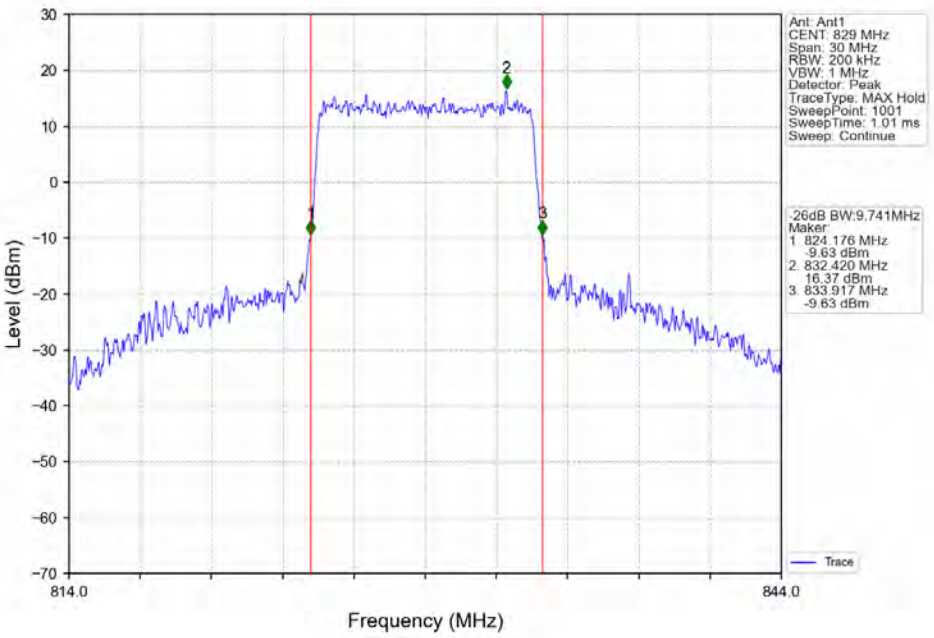
Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV



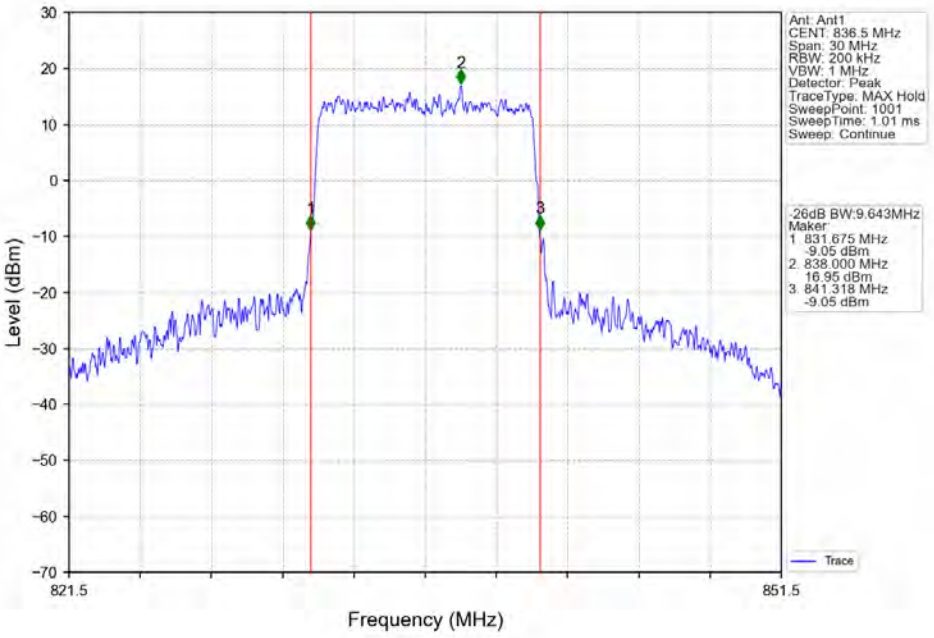
Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV



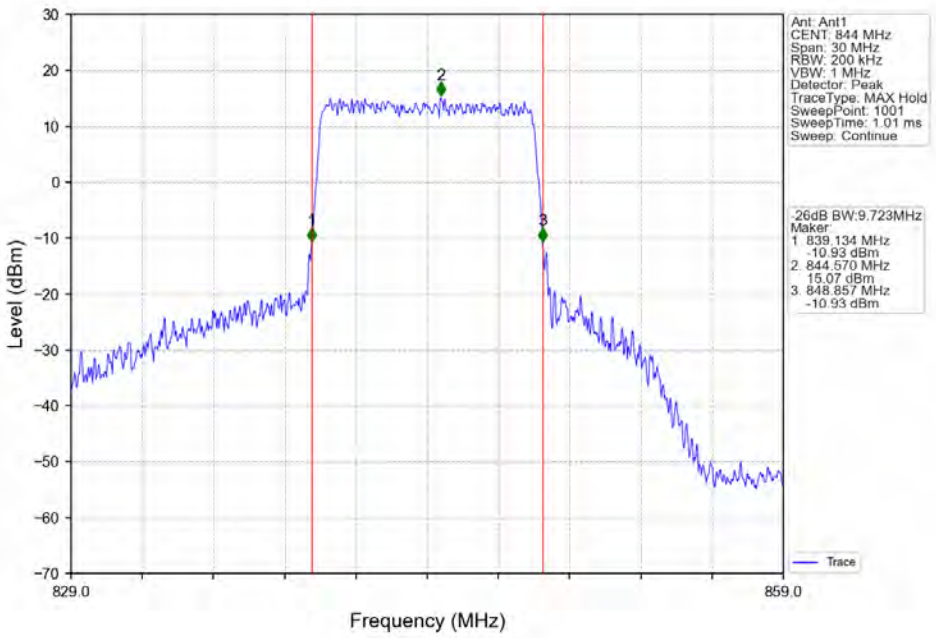
Band5_10MHz_16QAM_LCH_829MHz_RB_50_0_NTNV



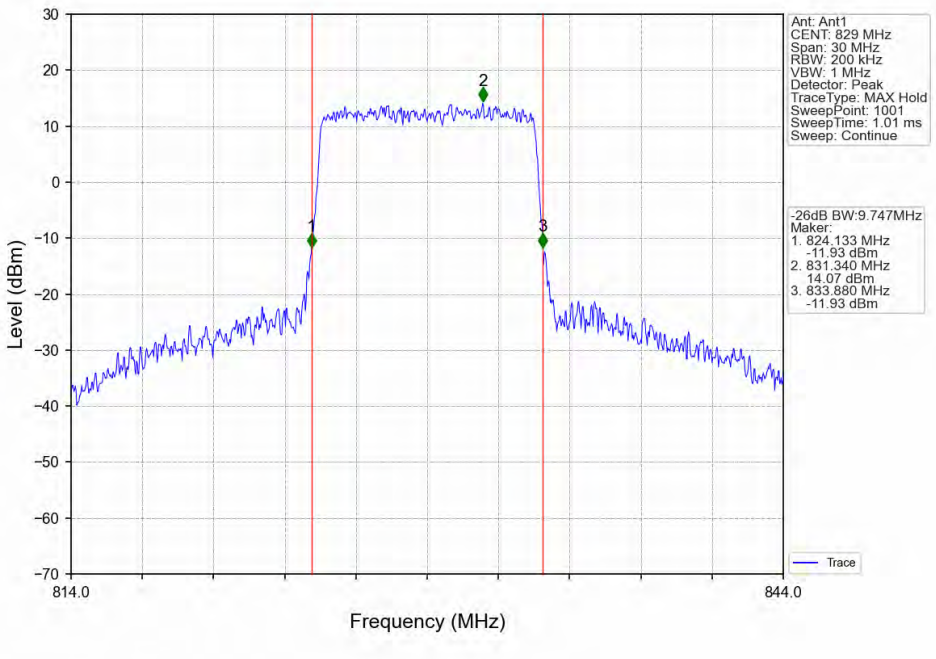
Band5_10MHz_16QAM_MCH_836.5MHz_RB_50_0_NTNV



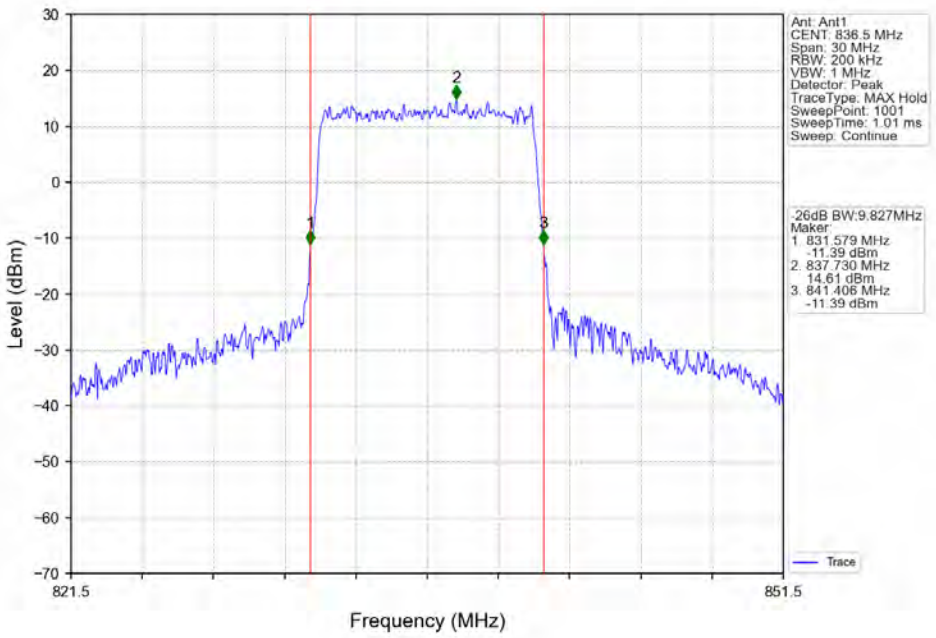
Band5_10MHz_16QAM_HCH_844MHz_RB_50_0_NTNV



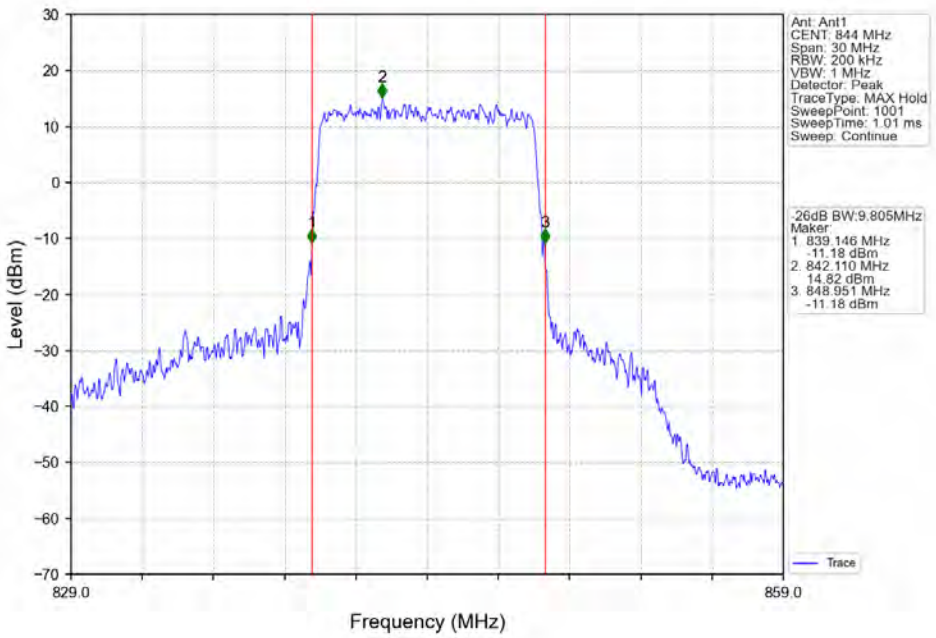
Band5_10MHz_64QAM_LCH_829MHz_RB_50_0_NTNV



Band5_10MHz_64QAM_MCH_836.5MHz_RB_50_0_NTNV



Band5_10MHz_64QAM_HCH_844MHz_RB_50_0_NTNV



4. Peak-Average Ratio

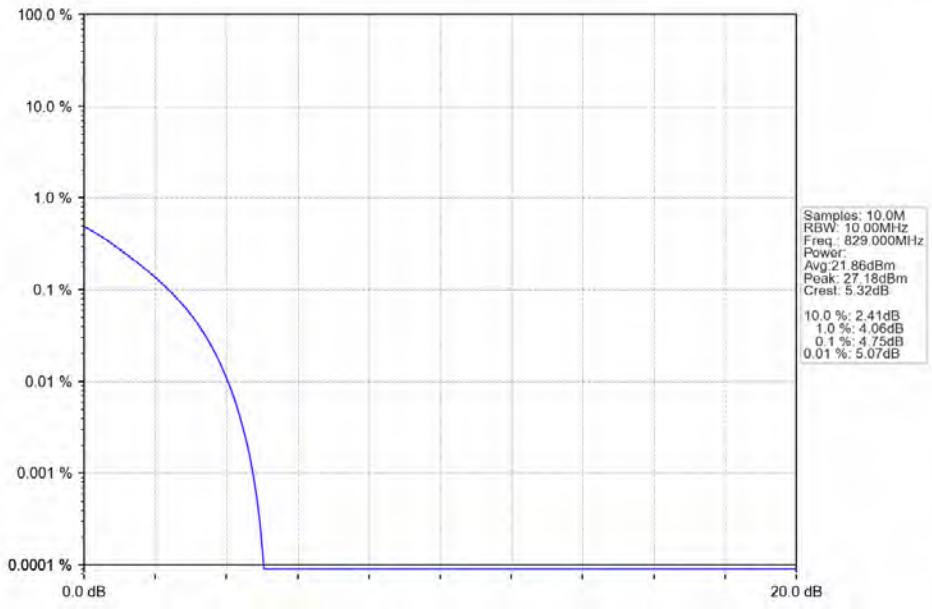
4.1 B5_10MHz

4.1.1 Test Result

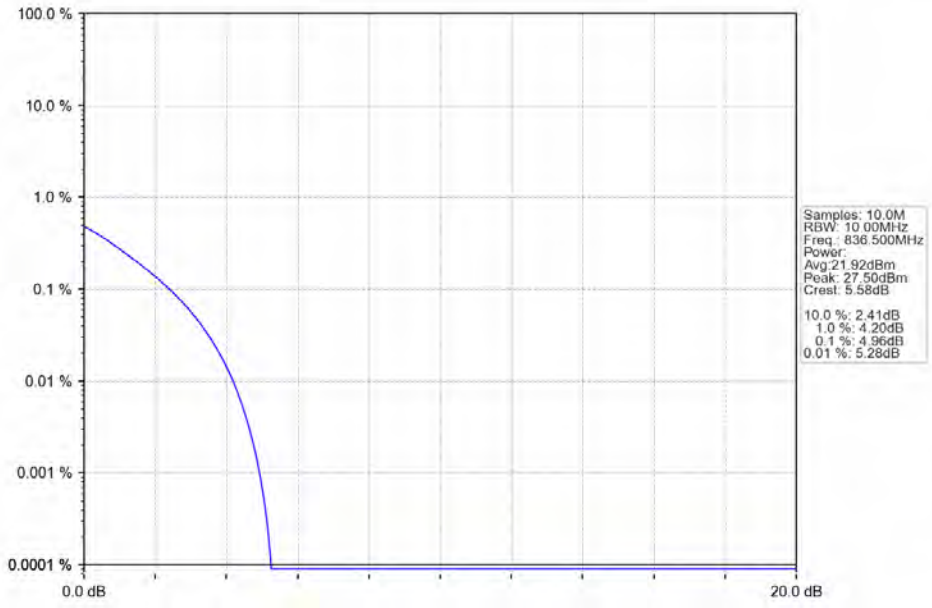
Band: 5 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	829	50	0	4.75	<=13	Pass
	836.5	50	0	4.96	<=13	Pass
	844	50	0	5.01	<=13	Pass
16QAM	829	50	0	5.62	<=13	Pass
	836.5	50	0	5.83	<=13	Pass
	844	50	0	5.88	<=13	Pass
64QAM	829	50	0	6.09	<=13	Pass
	836.5	50	0	6.26	<=13	Pass
	844	50	0	6.29	<=13	Pass

4.1.2 Test Graph

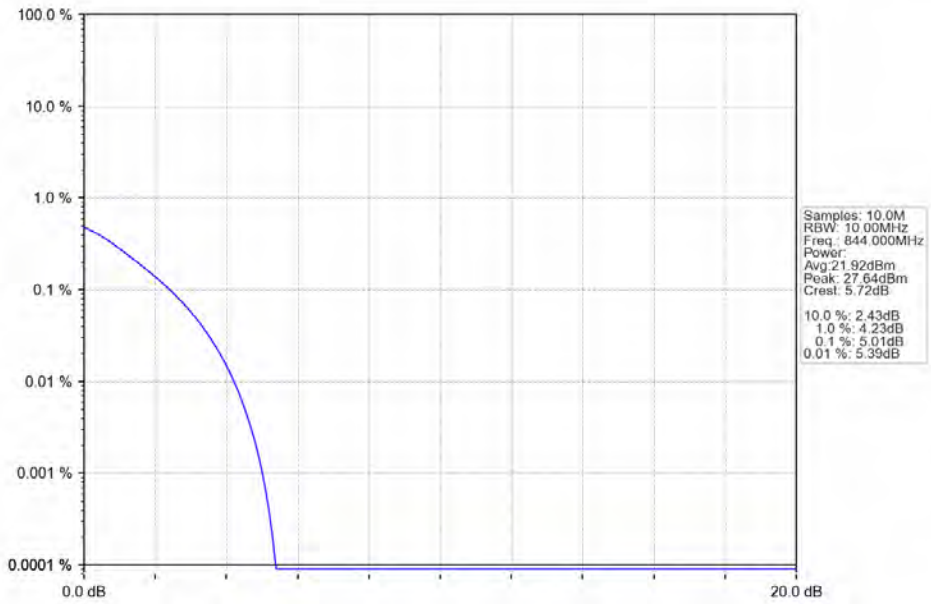
Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV



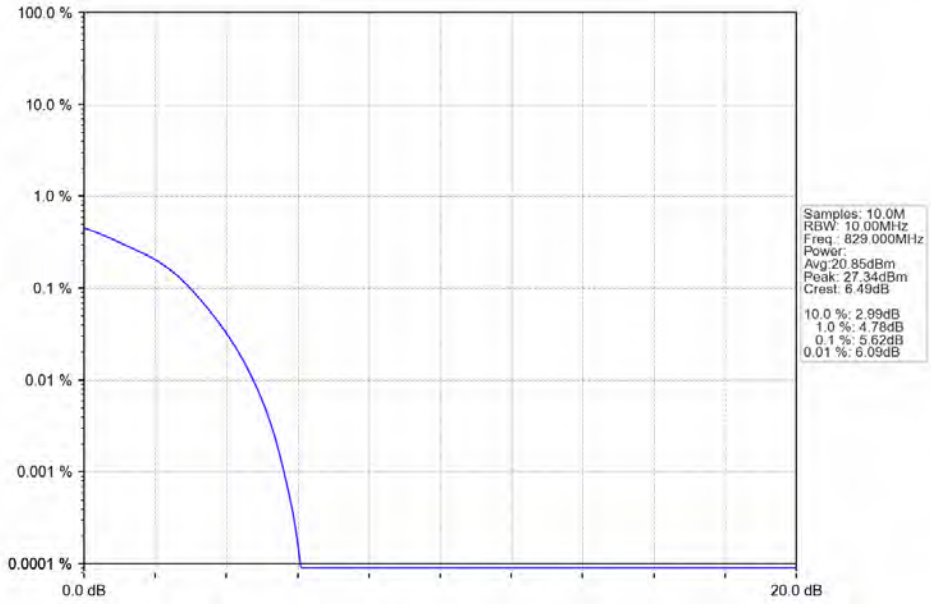
Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV



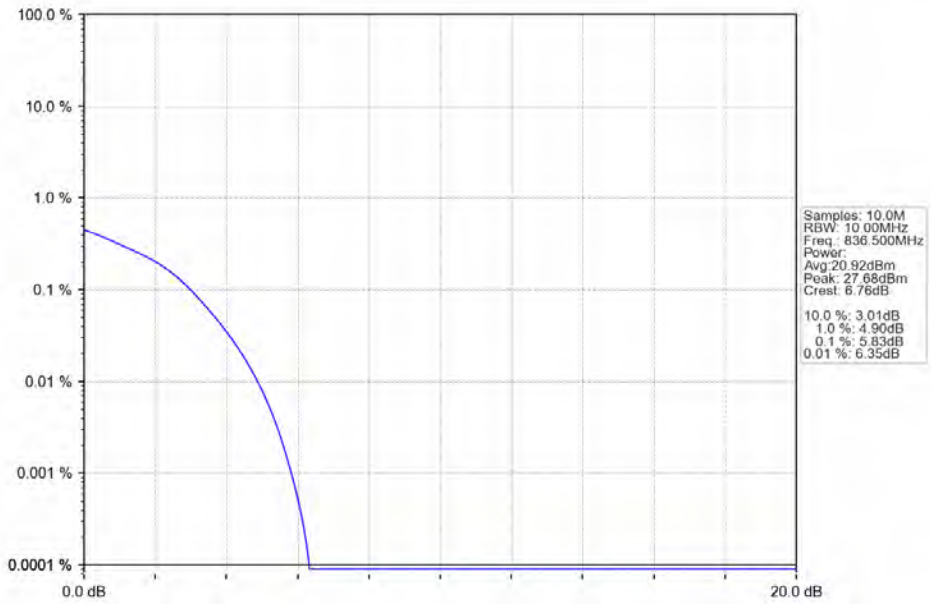
Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV



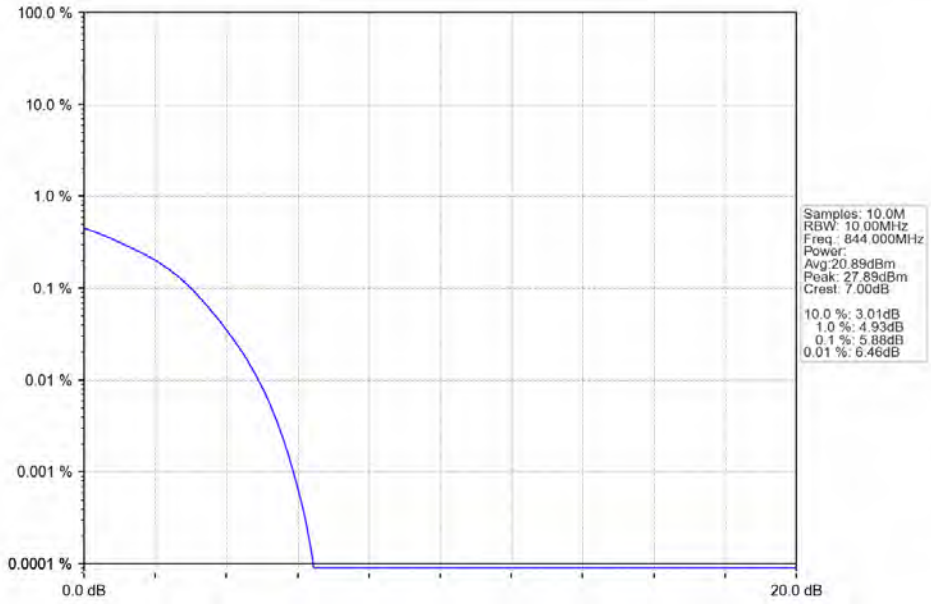
Band5_10MHz_16QAM_LCH_829MHz_RB_50_0_NTNV



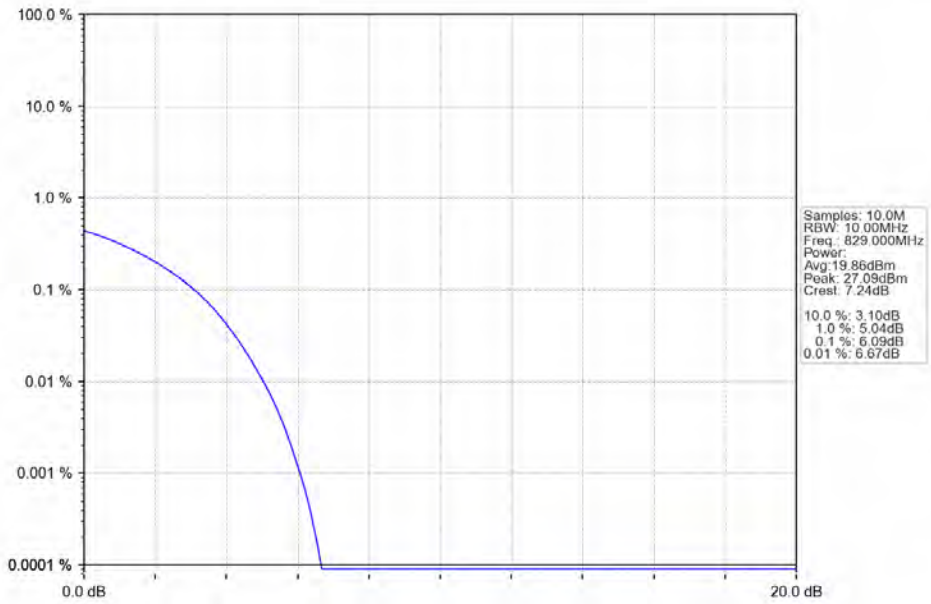
Band5_10MHz_16QAM_MCH_836.5MHz_RB_50_0_NTNV



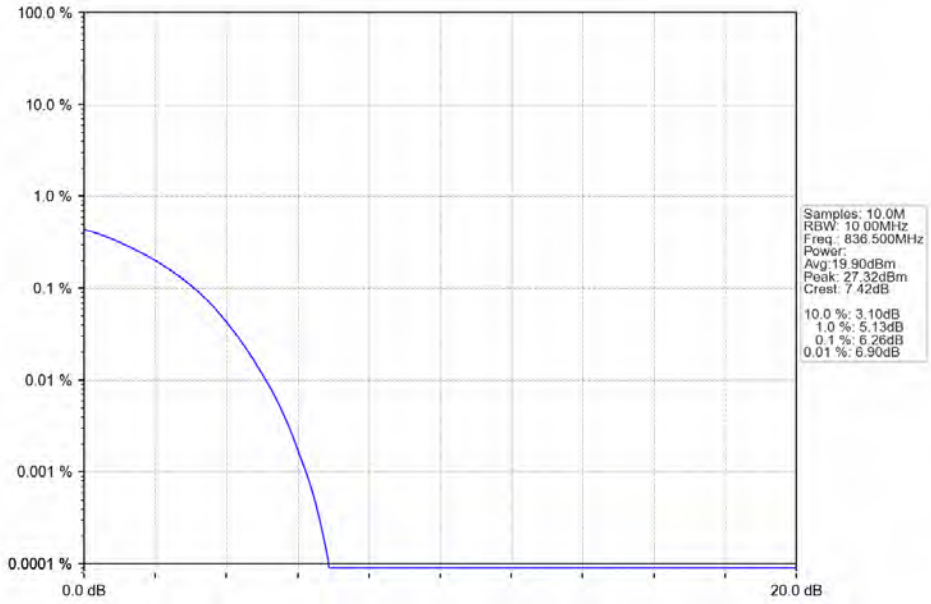
Band5_10MHz_16QAM_HCH_844MHz_RB_50_0_NTNV



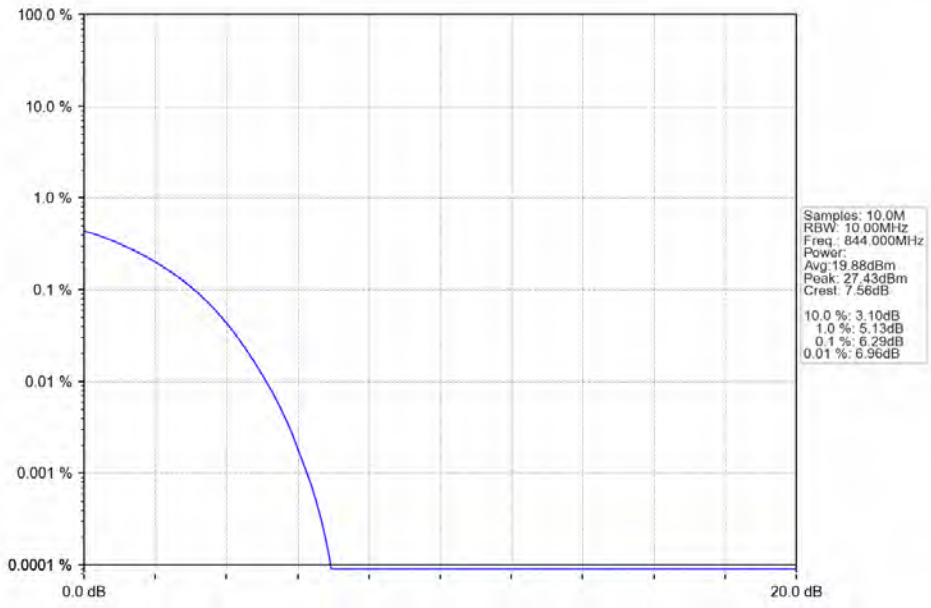
Band5_10MHz_64QAM_LCH_829MHz_RB_50_0_NTNV



Band5_10MHz_64QAM_MCH_836.5MHz_RB_50_0_NTNV



Band5_10MHz_64QAM_HCH_844MHz_RB_50_0_NTNV



5. Spurious Emission & Band Edges

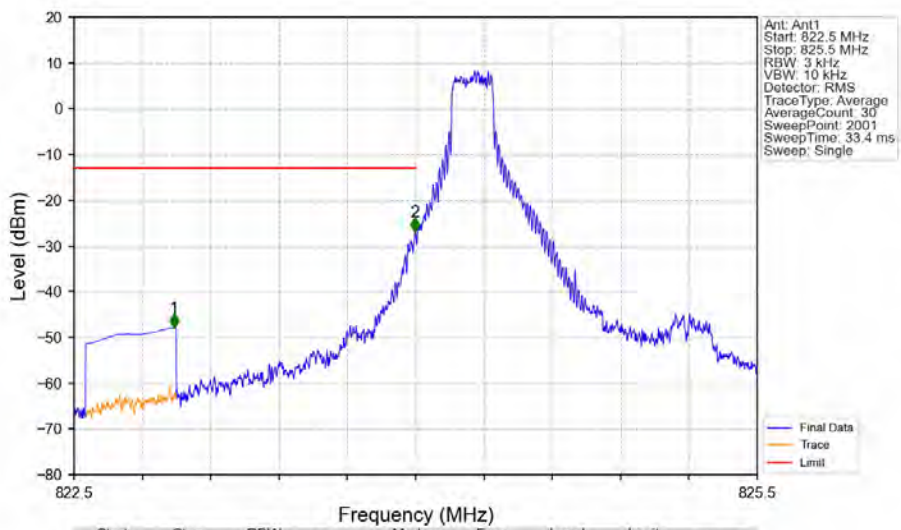
5.1 B5_1.4MHz

5.1.1 Test Result

Band: 5 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	824.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	848.3	1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

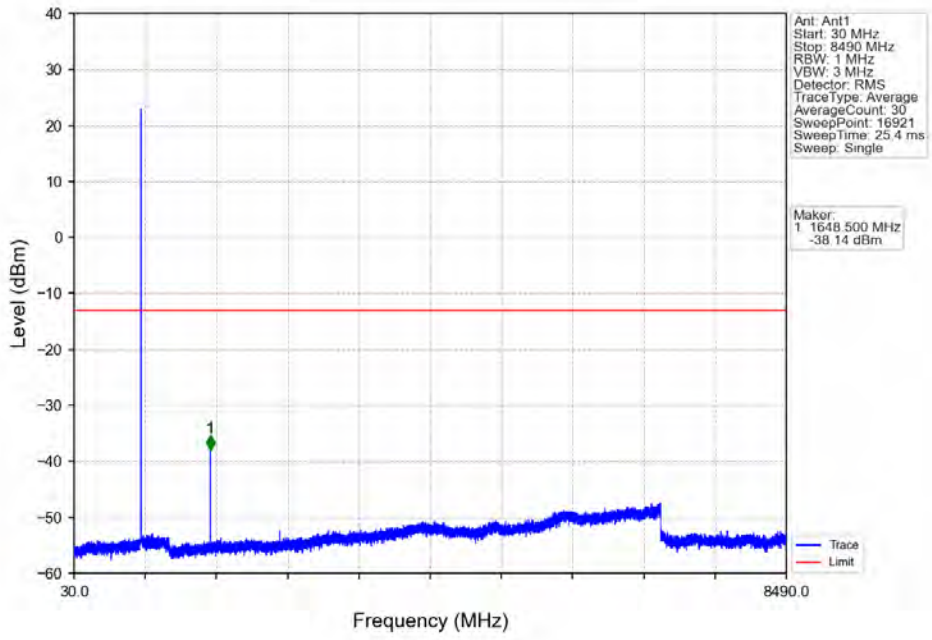
5.1.2 Test Graph

Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_1_0_NTNV

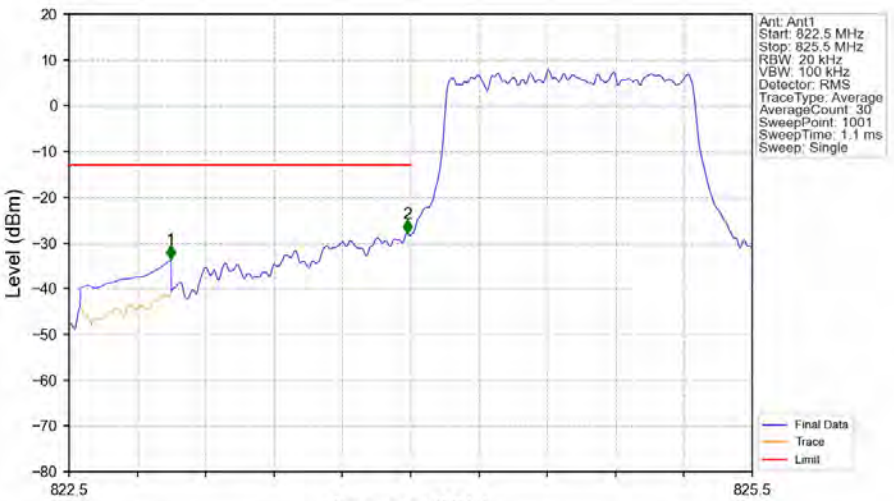


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
822.5	823	0.1	CHP	1	822.939	-47.94	-13	Pass
823	824	0.003	/	2	823.997	-26.88	-13	Pass
824	825.5	0.003	/	/	/	/	/	/

Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_1_0_NTNV

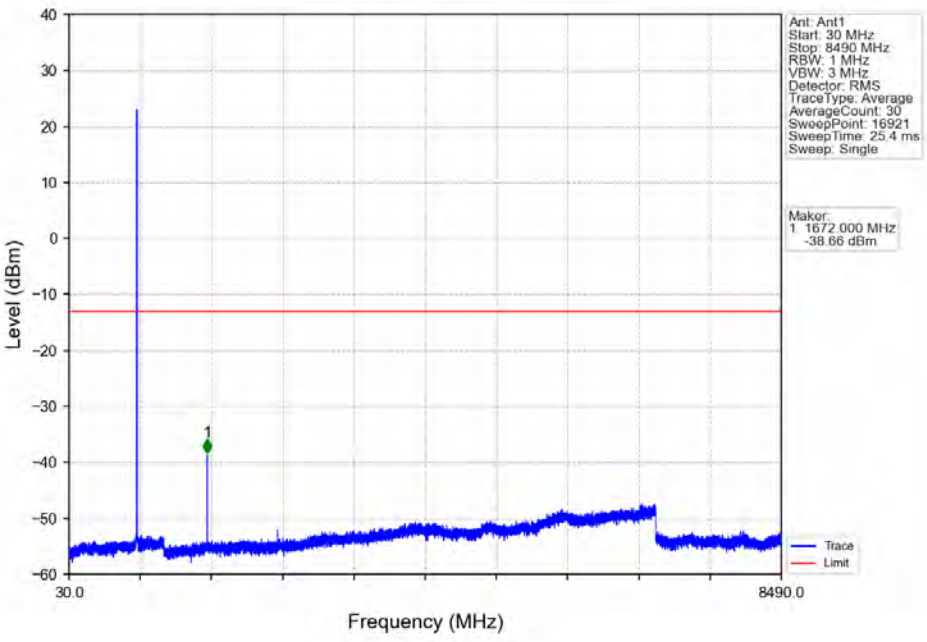


Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_6_0_NTNV

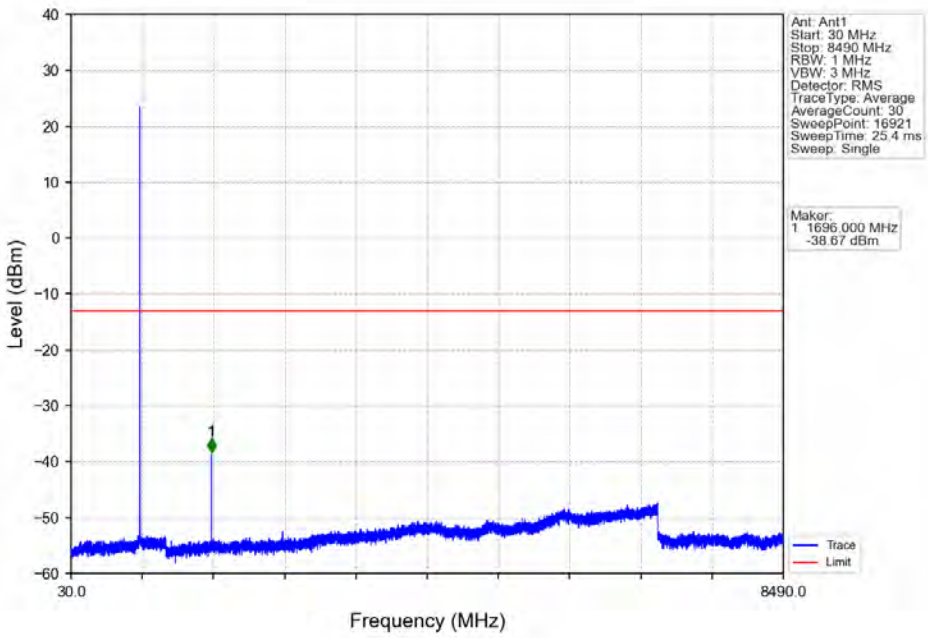


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
822.5	823	0.1	CHP	1	822.947	-33.69	-13	Pass
823	824	0.02	/	2	823.985	-27.91	-13	Pass
824	825.5	0.02	/	/	/	/	/	/

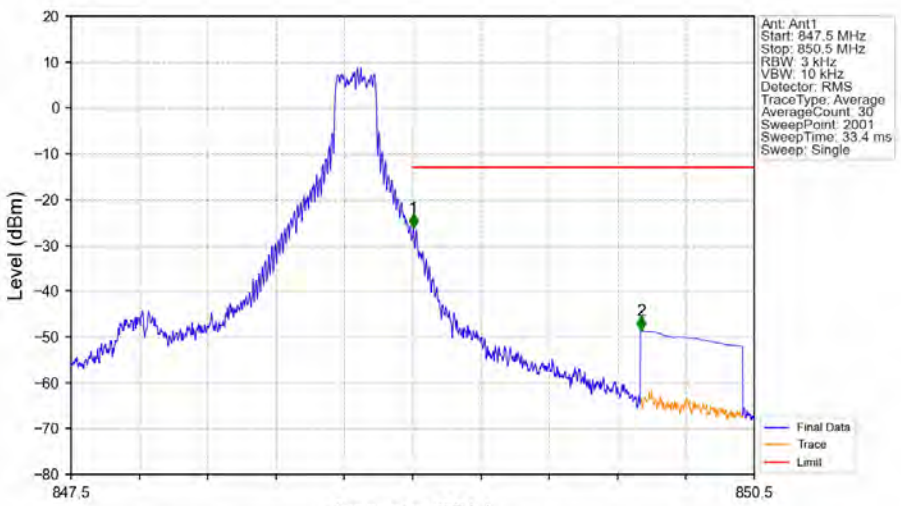
Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_1_0_NTNV



Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_1_0_NTNV

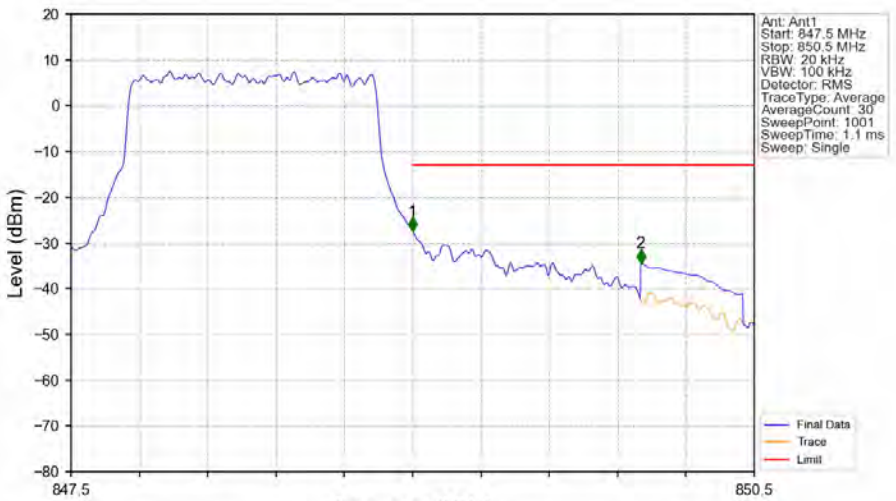


Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_1_5_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
847.5	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.003	-26.26	-13	Pass
850	850.5	0.1	CHP	2	850.004	-48.62	-13	Pass

Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
847.5	849	0.02	/	/	/	/	/	/
849	850	0.02	/	1	849.000	-27.43	-13	Pass
850	850.5	0.1	CHP	2	850.002	-34.41	-13	Pass

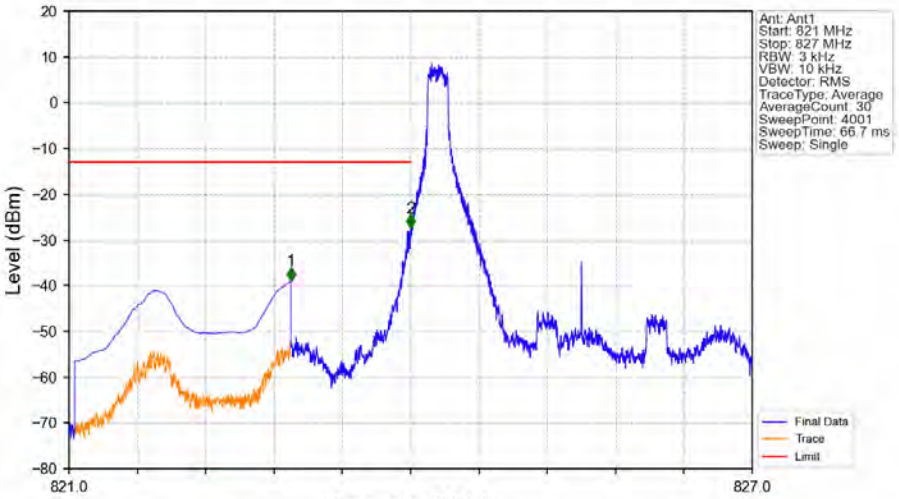
5.2 B5_3MHz

5.2.1 Test Result

Band: 5 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	825.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	847.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

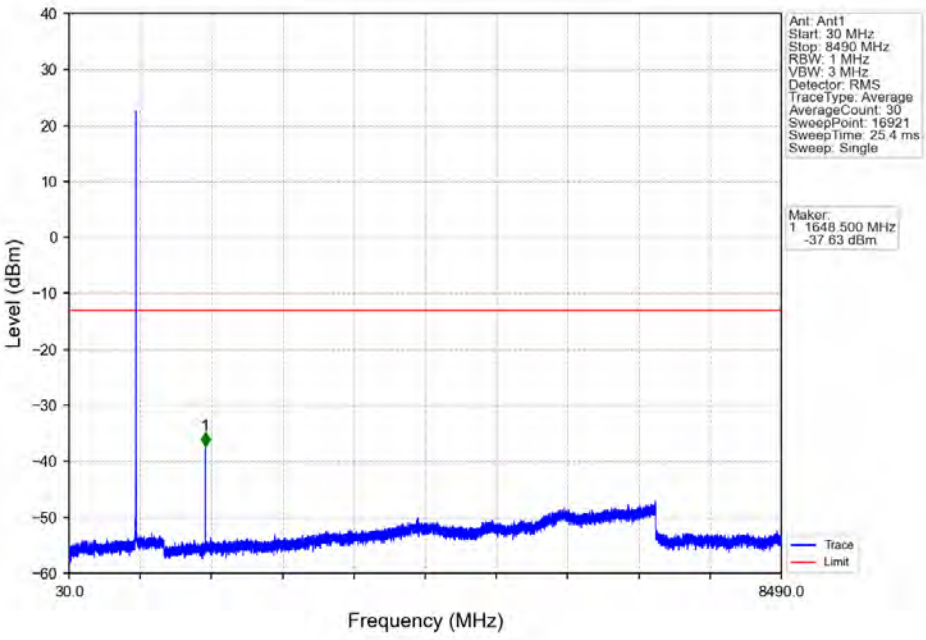
5.2.2 Test Graph

Band5_3MHz_QPSK_LCH_825.5MHz_RB_1_0_NTNV

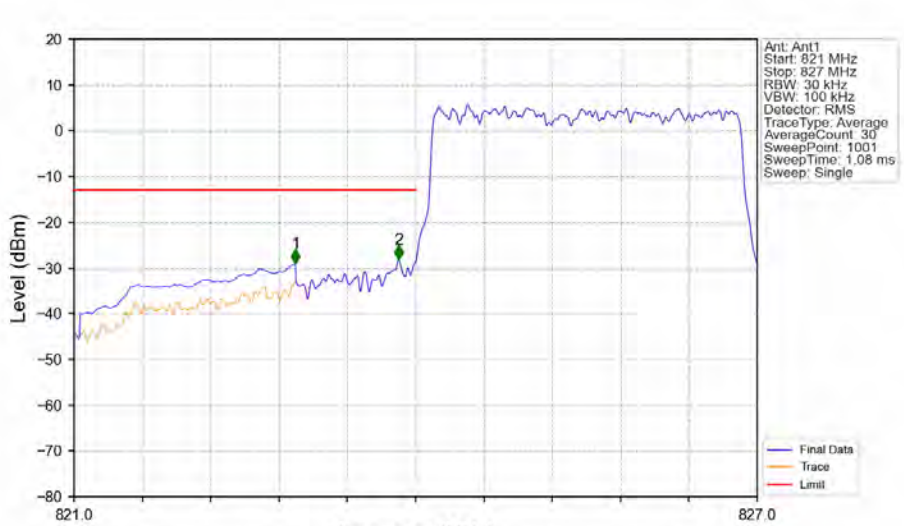


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	823	0.1	CHP	1	822.948	-39.00	-13	Pass
823	824	0.003	/	2	824.000	-27.47	-13	Pass
824	827	0.003	/	/	/	/	/	/

Band5_3MHz_QPSK_LCH_825.5MHz_RB_1_0_NTNV

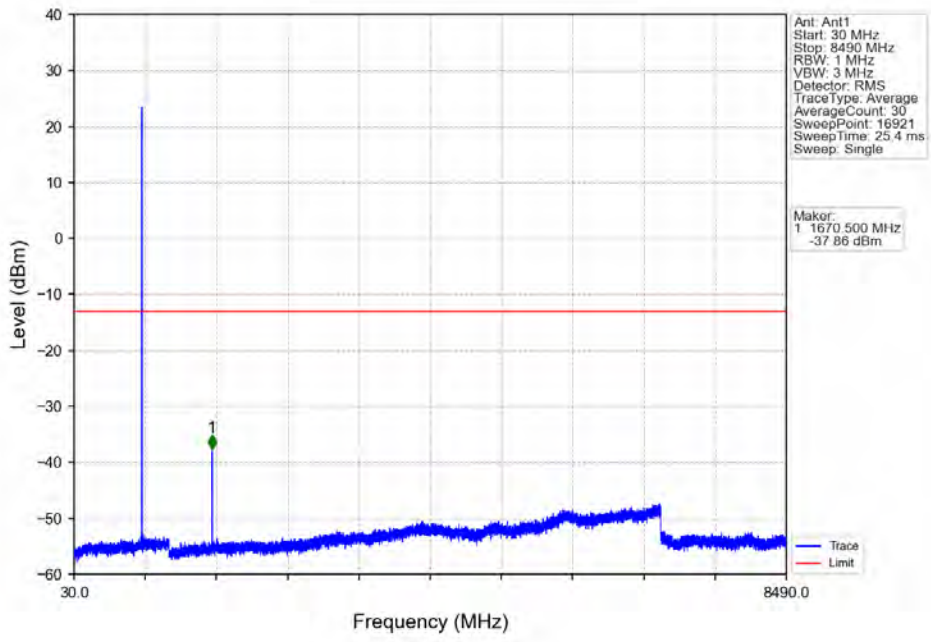


Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV

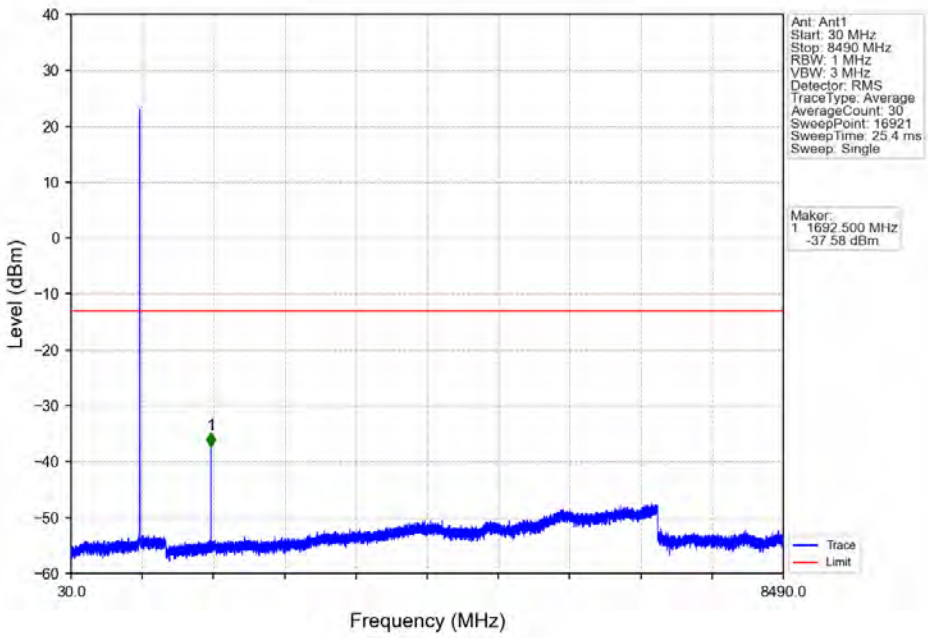


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	823	0.1	CHP	1	822.944	-28.99	-13	Pass
823	824	0.03	/	2	823.850	-28.09	-13	Pass
824	827	0.03	/	/	/	/	/	/

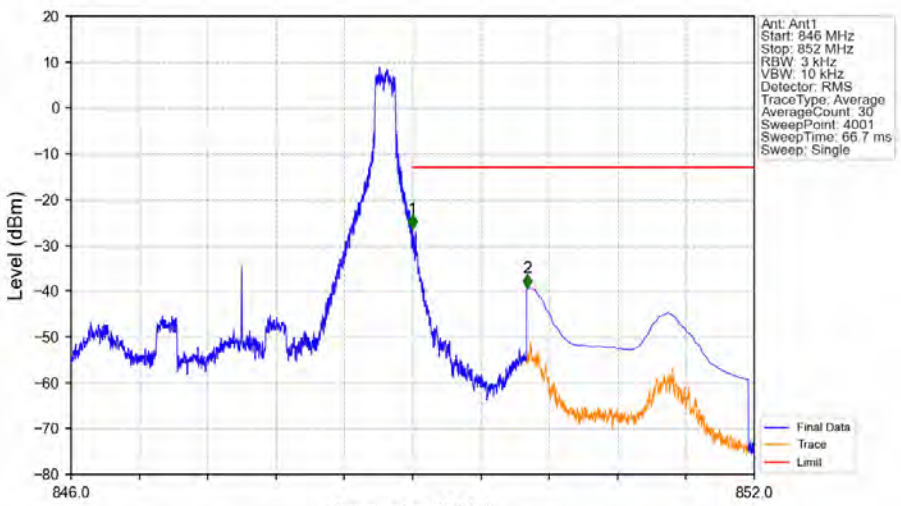
Band5_3MHz_QPSK_MCH_836.5MHz_RB_1_0_NTNV



Band5_3MHz_QPSK_HCH_847.5MHz_RB_1_0_NTNV

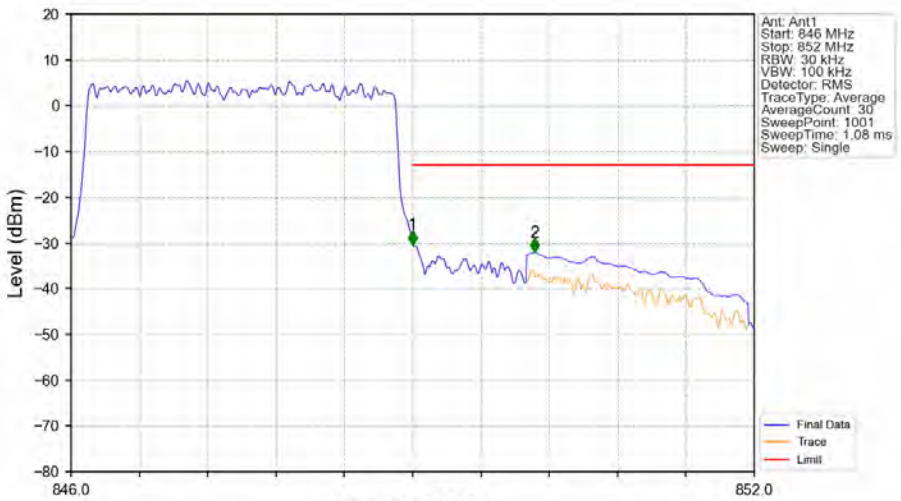


Band5_3MHz_QPSK_HCH_847.5MHz_RB_1_14_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.000	-26.33	-13	Pass
850	852	0.1	CHP	2	850.008	-39.37	-13	Pass

Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.03	/	/	/	/	/	/
849	850	0.03	/	1	849.000	-30.35	-13	Pass
850	852	0.1	CHP	2	850.074	-31.98	-13	Pass

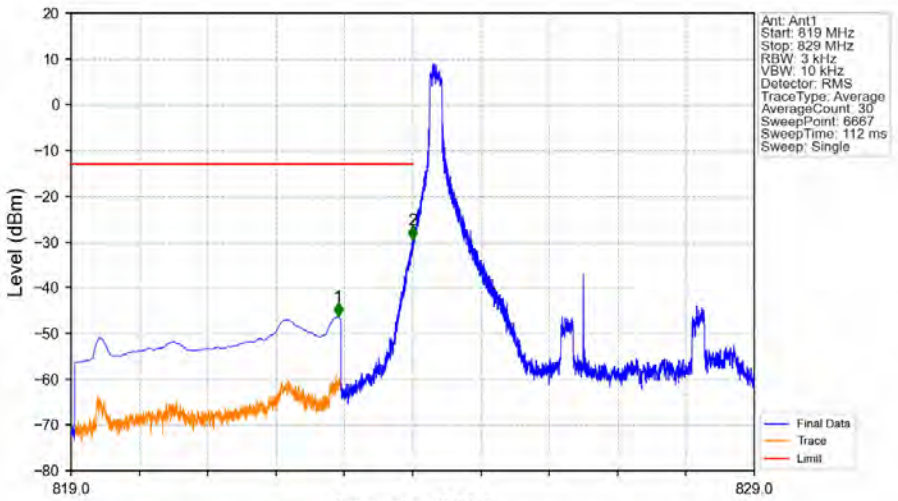
5.3 B5_5MHz

5.3.1 Test Result

Band: 5 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	826.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	846.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

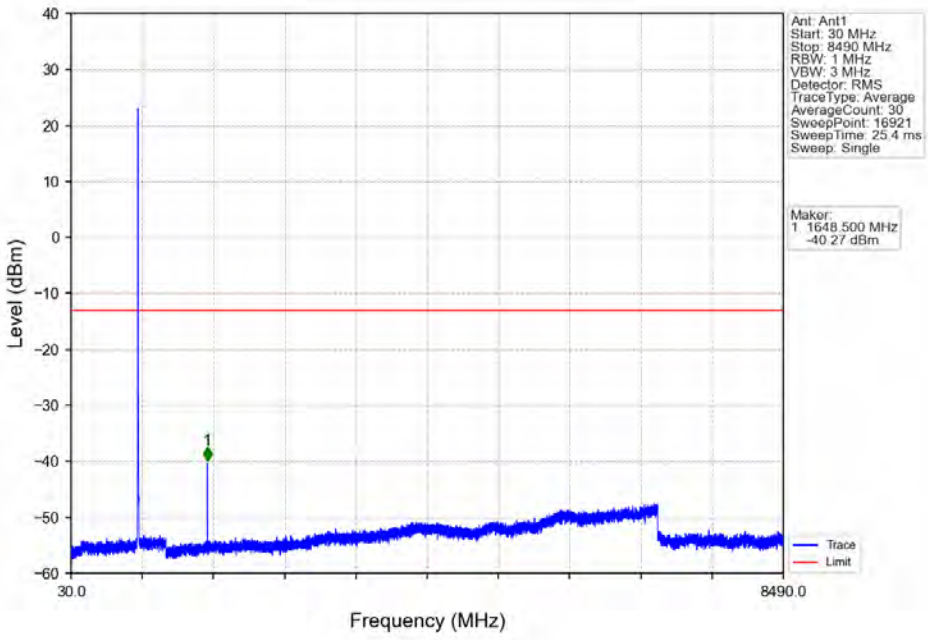
5.3.2 Test Graph

Band5_5MHz_QPSK_LCH_826.5MHz_RB_1_0_NTNV

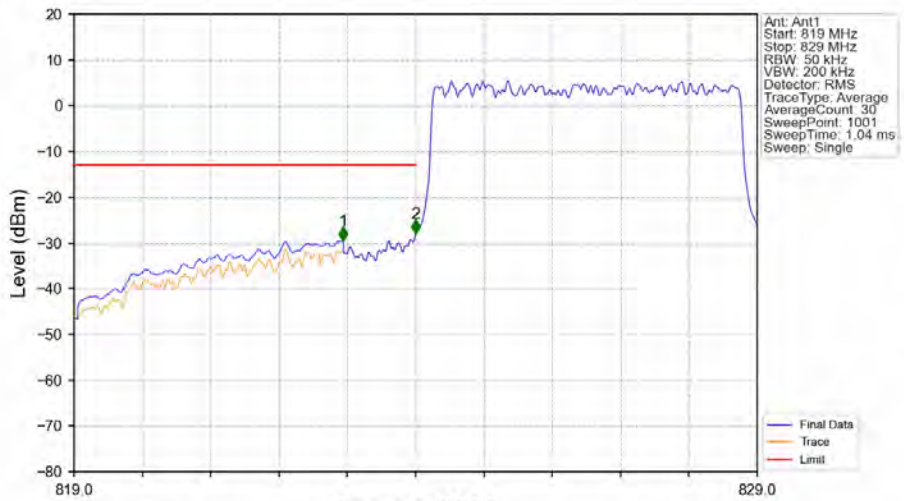


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	823	0.1	CHP	1	822.908	-46.38	-13	Pass
823	824	0.003	/	2	823.999	-29.50	-13	Pass
824	829	0.003	/	/	/	/	/	/

Band5_5MHz_QPSK_LCH_826.5MHz_RB_1_0_NTNV

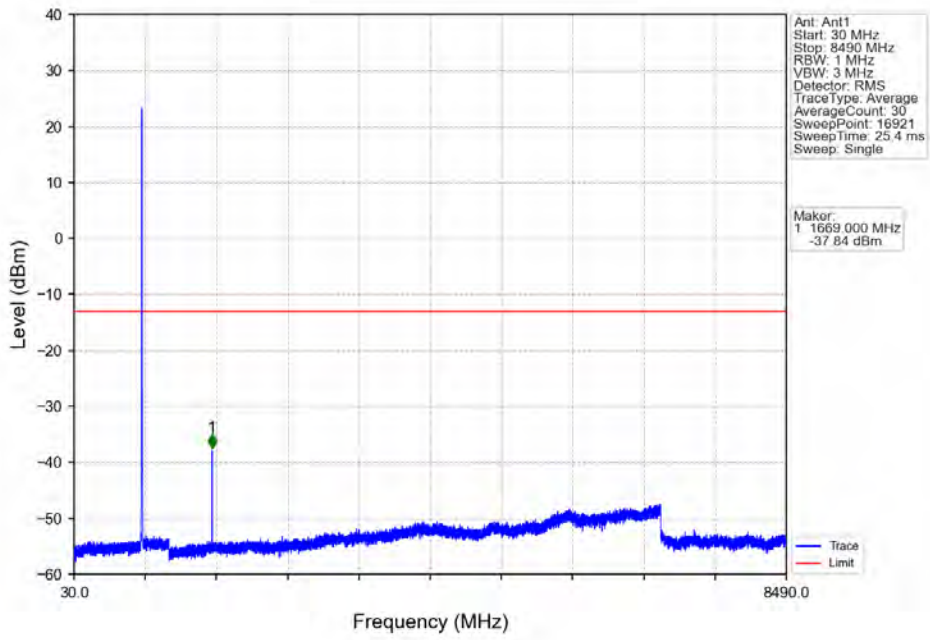


Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV

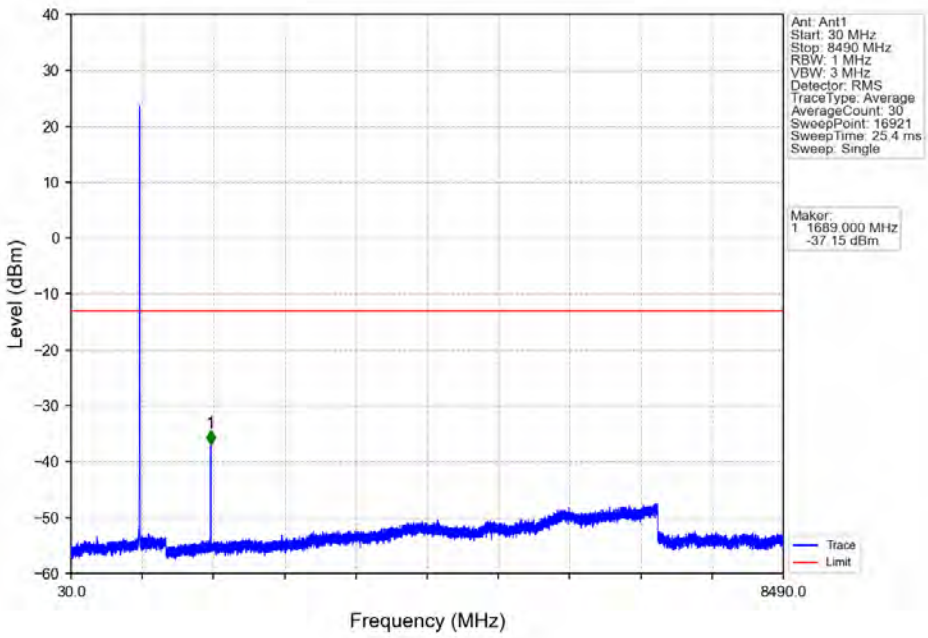


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	823	0.1	CHP	1	822.940	-29.51	-13	Pass
823	824	0.05	/	2	824.000	-27.92	-13	Pass
824	829	0.05	/	/	/	/	/	/

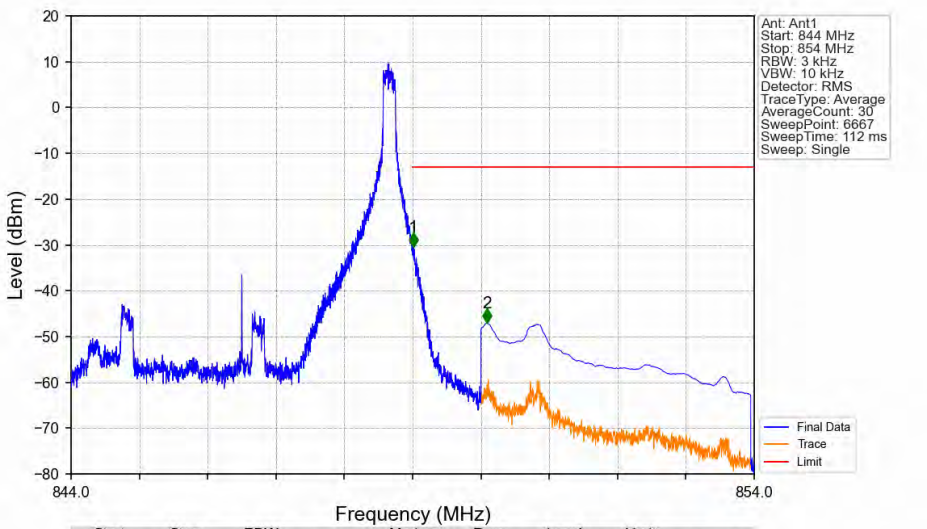
Band5_5MHz_QPSK_MCH_836.5MHz_RB_1_0_NTNV



Band5_5MHz_QPSK_HCH_846.5MHz_RB_1_0_NTNV

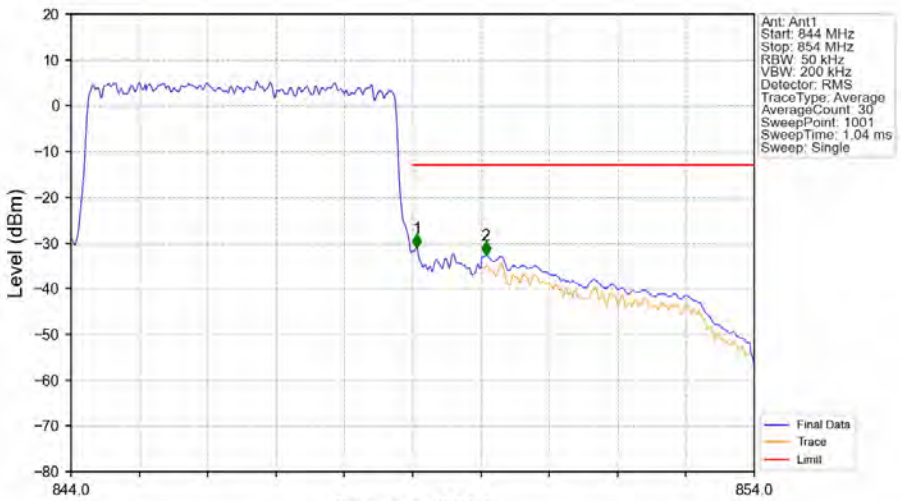


Band5_5MHz_QPSK_HCH_846.5MHz_RB_1_24_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
844	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.009	-30.39	-13	Pass
850	854	0.1	CHP	2	850.086	-47.06	-13	Pass

Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
844	849	0.05	/	/	/	/	/	/
849	850	0.05	/	1	849.060	-31.14	-13	Pass
850	854	0.1	CHP	2	850.070	-32.80	-13	Pass

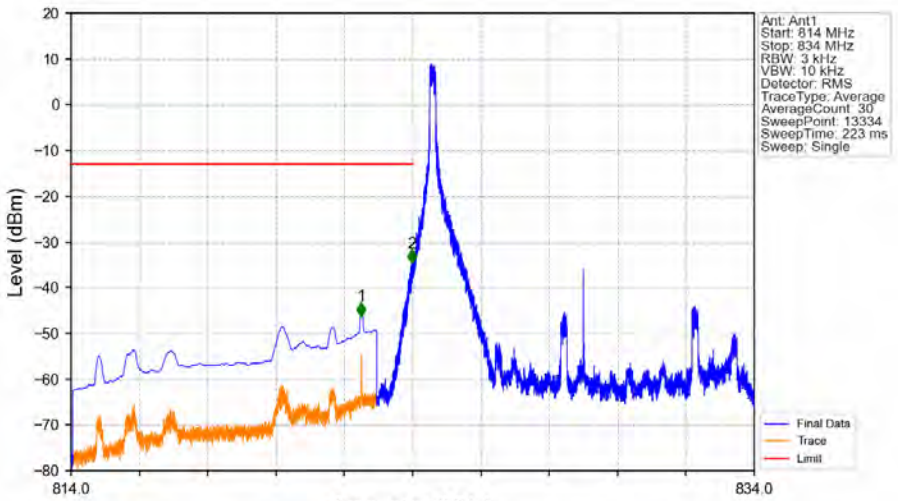
5.4 B5_10MHz

5.4.1 Test Result

Band: 5 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	829	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	844	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

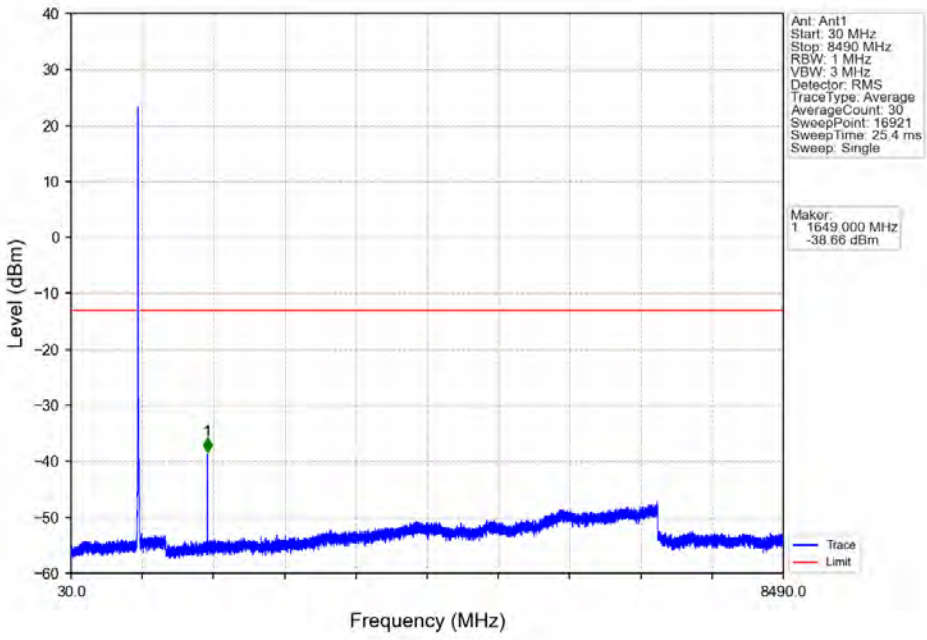
5.4.2 Test Graph

Band5_10MHz_QPSK_LCH_829MHz_RB_1_0_NTNV

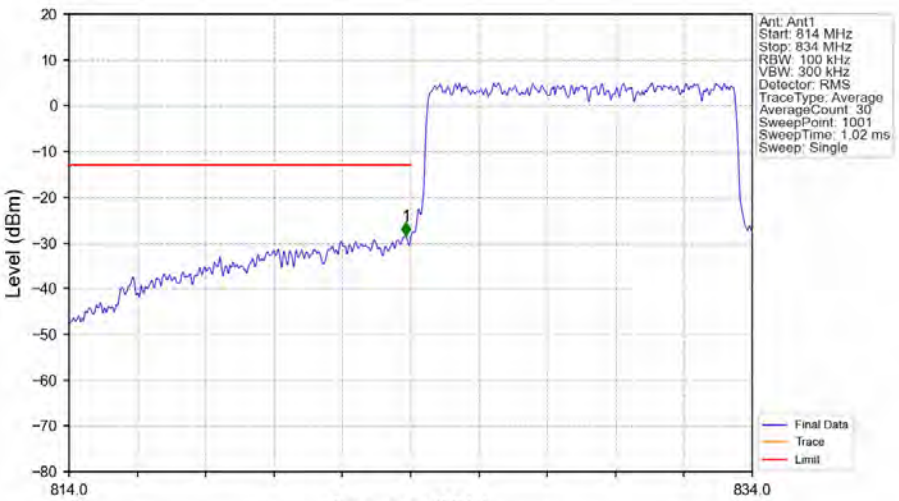


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
814	823	0.1	CHP	1	822.498	-46.22	-13	Pass
823	824	0.003	/	2	823.972	-34.72	-13	Pass
824	834	0.003	/	/	/	/	/	/

Band5_10MHz_QPSK_LCH_829MHz_RB_1_0_NTNV

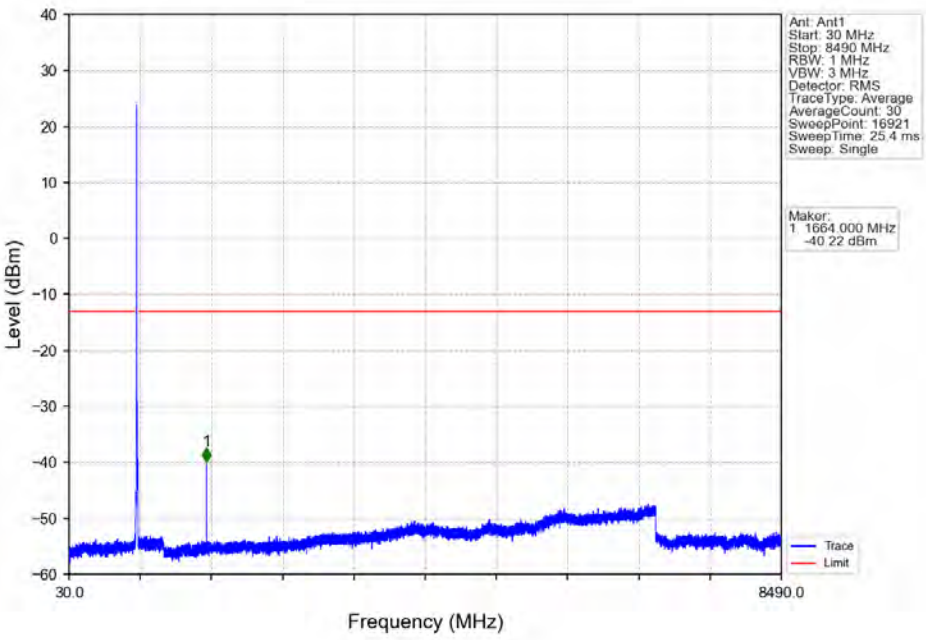


Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV

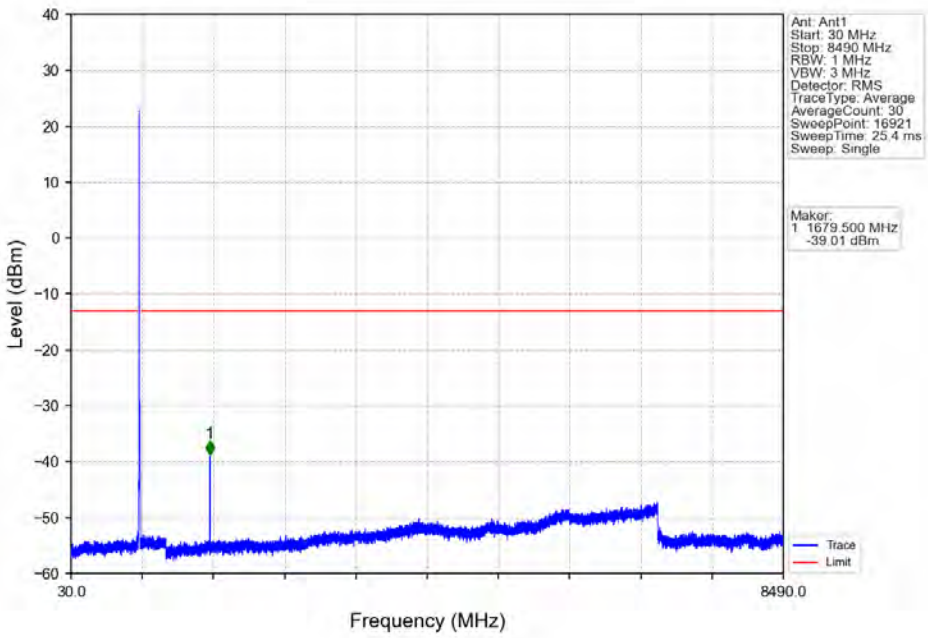


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
814	824	0.1	/	1	823.860	-28.53	-13	Pass
824	834	0.1	/	/	/	/	/	/

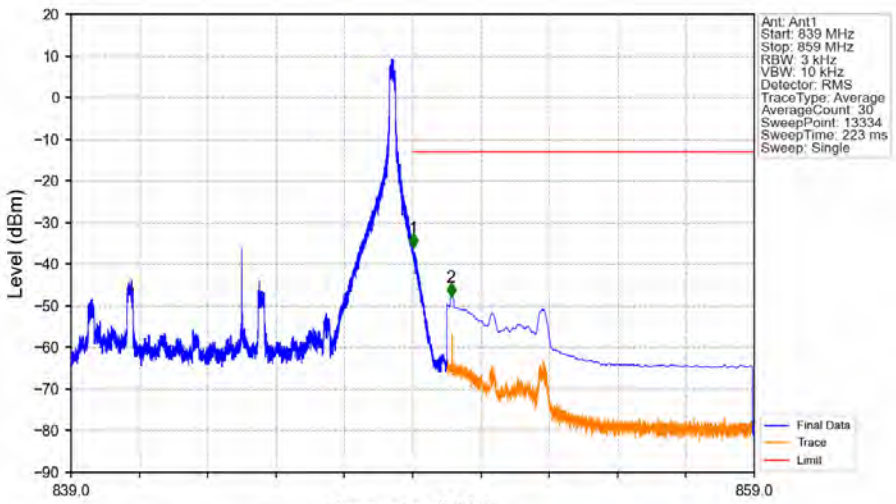
Band5_10MHz_QPSK_MCH_836.5MHz_RB_1_0_NTNV



Band5_10MHz_QPSK_HCH_844MHz_RB_1_0_NTNV

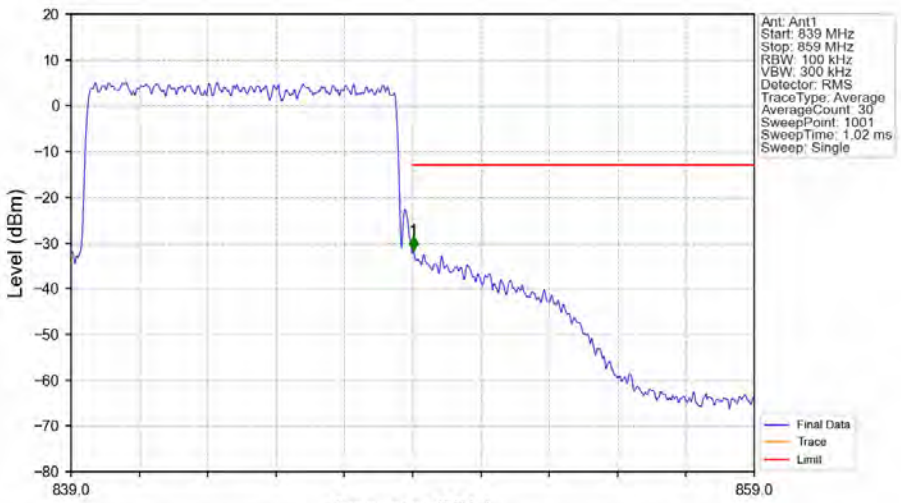


Band5_10MHz_QPSK_HCH_844MHz_RB_1_49_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
839	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.013	-36.08	-13	Pass
850	859	0.1	CHP	2	850.127	-47.86	-13	Pass

Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
839	849	0.1	/	/	/	/	/	/
849	859	0.1	/	1	849.020	-31.74	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 5 ANT13-Low channel								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
1649.0	-71.09	-13	-58.09	-73.97	2.62	5.5	Horizontal	Pass
2473.5	-64.39	-13	-51.39	-67.09	3.06	5.76	Horizontal	Pass
3298.0	-67.38	-13	-54.38	-71.74	3.3	7.66	Horizontal	Pass
1649.0	-69.93	-13	-56.93	-72.81	2.62	5.5	Vertical	Pass
2473.5	-61.26	-13	-48.26	-63.96	3.06	5.76	Vertical	Pass
3298.0	-67.23	-13	-54.23	-71.59	3.3	7.66	Vertical	Pass

LTE Band 5 ANT13-Middle channel								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
1664.0	-70.56	-13	-57.56	-73.4	2.63	5.47	Horizontal	Pass
2496.0	-63.67	-13	-50.67	-66.4	3.08	5.81	Horizontal	Pass
3328.0	-67.56	-13	-54.56	-71.99	3.31	7.74	Horizontal	Pass
1664.0	-71.36	-13	-58.36	-74.2	2.63	5.47	Vertical	Pass
2496.0	-59.88	-13	-46.88	-62.61	3.08	5.81	Vertical	Pass
3328.0	-67.21	-13	-54.21	-71.64	3.31	7.74	Vertical	Pass

LTE Band 5 ANT13-High channel								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
1679.0	-70.14	-13	-57.14	-72.94	2.63	5.43	Horizontal	Pass
2518.5	-63.87	-13	-50.87	-66.65	3.08	5.86	Horizontal	Pass
3358.0	-67.11	-13	-54.11	-71.6	3.33	7.82	Horizontal	Pass
1679.0	-70.61	-13	-57.61	-73.41	2.63	5.43	Vertical	Pass
2518.5	-62.29	-13	-49.29	-65.07	3.08	5.86	Vertical	Pass
3358.0	-66.78	-13	-53.78	-71.27	3.33	7.82	Vertical	Pass

CA 5A-7A -Low channel								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
5002.0	-62.7	-25	-37.7	-68.27	4.57	10.14	Horizontal	Pass
10004.0	-51.43	-25	-26.43	-59.0	5.46	13.03	Horizontal	Pass
15006.0	-49.42	-25	-24.42	-56.86	7.08	14.52	Horizontal	Pass
5002.0	-61.1	-25	-36.1	-66.67	4.57	10.14	Vertical	Pass
10004.0	-55.21	-25	-30.21	-62.78	5.46	13.03	Vertical	Pass
15006.0	-46.4	-25	-21.4	-53.84	7.08	14.52	Vertical	Pass

CA 5A-7A -Middle channel								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
5052.0	-62.97	-25	-37.97	-68.55	4.59	10.17	Horizontal	Pass
7578.0	-60.44	-25	-35.44	-67.32	4.95	11.83	Horizontal	Pass
10104.0	-51.23	-25	-26.23	-58.8	5.48	13.05	Horizontal	Pass
5052.0	-61.09	-25	-36.09	-66.67	4.59	10.17	Vertical	Pass
7578.0	-60.48	-25	-35.48	-67.36	4.95	11.83	Vertical	Pass
10104.0	-54.91	-25	-29.91	-62.48	5.48	13.05	Vertical	Pass

CA 5A-7A -High channel								
Frequency (MHz)	**EIRP (dBm)**	**Limit (dBm)**	**Over Limit (dB)**	**S.G. Power (dBm)**	**Cable Loss (dB)**	**Antenna Gain (dBi)**	**Polarization (H/V)**	**Result**
5102.0	-63.46	-25	-38.46	-69.06	4.6	10.2	Horizontal	Pass
7653.0	-59.79	-25	-34.79	-66.76	4.95	11.92	Horizontal	Pass
10204.0	-50.96	-25	-25.96	-58.54	5.49	13.07	Horizontal	Pass
5102.0	-61.44	-25	-36.44	-67.04	4.6	10.2	Vertical	Pass
10204.0	-56.62	-25	-31.62	-64.2	5.49	13.07	Vertical	Pass
15306.0	-48.0	-25	-23.0	-55.26	7.09	14.35	Vertical	Pass

1) All antennas of RSE are tested, and only the worst data is presented.

---End of Attachment---