

Annex for FCC LTE Band 5

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B5_1.4MHz_ERP

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	22.74	-1.78	18.81	<=38.45	Pass
			2	22.76	-1.78	18.83	<=38.45	Pass
			5	22.77	-1.78	18.84	<=38.45	Pass
		3	0	22.78	-1.78	18.85	<=38.45	Pass
			2	22.77	-1.78	18.84	<=38.45	Pass
			3	22.75	-1.78	18.82	<=38.45	Pass
		6	0	22.83	-1.78	18.90	<=38.45	Pass
	836.5	1	0	22.64	-1.78	18.71	<=38.45	Pass
			2	22.64	-1.78	18.71	<=38.45	Pass
			5	22.64	-1.78	18.71	<=38.45	Pass
		3	0	22.64	-1.78	18.71	<=38.45	Pass
			2	22.64	-1.78	18.71	<=38.45	Pass
			3	22.64	-1.78	18.71	<=38.45	Pass
		6	0	22.55	-1.78	18.62	<=38.45	Pass
	848.3	1	0	21.59	-1.78	17.66	<=38.45	Pass
			2	21.58	-1.78	17.65	<=38.45	Pass
			5	21.57	-1.78	17.64	<=38.45	Pass
		3	0	21.57	-1.78	17.64	<=38.45	Pass
			2	21.61	-1.78	17.68	<=38.45	Pass
			3	21.61	-1.78	17.68	<=38.45	Pass
		6	0	21.60	-1.78	17.67	<=38.45	Pass
16QAM	824.7	1	0	22.82	-1.78	18.89	<=38.45	Pass
			2	22.81	-1.78	18.88	<=38.45	Pass
			5	22.81	-1.78	18.88	<=38.45	Pass
		3	0	22.80	-1.78	18.87	<=38.45	Pass
			2	22.84	-1.78	18.91	<=38.45	Pass
			3	22.84	-1.78	18.91	<=38.45	Pass
		6	0	22.83	-1.78	18.90	<=38.45	Pass
	836.5	1	0	22.55	-1.78	18.62	<=38.45	Pass
			2	22.55	-1.78	18.62	<=38.45	Pass
			5	22.56	-1.78	18.63	<=38.45	Pass
		3	0	22.56	-1.78	18.63	<=38.45	Pass
			2	22.56	-1.78	18.63	<=38.45	Pass
			3	22.56	-1.78	18.63	<=38.45	Pass
		6	0	22.56	-1.78	18.63	<=38.45	Pass
	848.3	1	0	21.60	-1.78	17.67	<=38.45	Pass
			2	21.60	-1.78	17.67	<=38.45	Pass
			5	21.60	-1.78	17.67	<=38.45	Pass
		3	0	21.60	-1.78	17.67	<=38.45	Pass
			2	21.60	-1.78	17.67	<=38.45	Pass
			3	21.60	-1.78	17.67	<=38.45	Pass
		6	0	21.53	-1.78	17.60	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.2 B5_3MHz_ERP

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	23.82	-1.78	19.89	<=38.45	Pass
			7	23.51	-1.78	19.58	<=38.45	Pass
			14	23.25	-1.78	19.32	<=38.45	Pass
		8	0	22.69	-1.78	18.76	<=38.45	Pass
			4	22.55	-1.78	18.62	<=38.45	Pass
			7	22.47	-1.78	18.54	<=38.45	Pass
		15	0	22.57	-1.78	18.64	<=38.45	Pass
	836.5	1	0	23.17	-1.78	19.24	<=38.45	Pass
			7	23.47	-1.78	19.54	<=38.45	Pass
			14	23.61	-1.78	19.68	<=38.45	Pass
		8	0	22.52	-1.78	18.59	<=38.45	Pass
			4	22.66	-1.78	18.73	<=38.45	Pass
			7	22.73	-1.78	18.80	<=38.45	Pass
		15	0	22.61	-1.78	18.68	<=38.45	Pass
	847.5	1	0	22.51	-1.78	18.58	<=38.45	Pass
			7	22.47	-1.78	18.54	<=38.45	Pass
			14	22.50	-1.78	18.57	<=38.45	Pass
		8	0	21.58	-1.78	17.65	<=38.45	Pass
			4	21.64	-1.78	17.71	<=38.45	Pass
			7	21.63	-1.78	17.70	<=38.45	Pass
		15	0	21.56	-1.78	17.63	<=38.45	Pass
16QAM	825.5	1	0	23.31	-1.78	19.38	<=38.45	Pass
			7	23.11	-1.78	19.18	<=38.45	Pass
			14	22.74	-1.78	18.81	<=38.45	Pass
		8	0	21.94	-1.78	18.01	<=38.45	Pass
			4	21.77	-1.78	17.84	<=38.45	Pass
			7	21.66	-1.78	17.73	<=38.45	Pass
		15	0	21.66	-1.78	17.73	<=38.45	Pass
	836.5	1	0	22.31	-1.78	18.38	<=38.45	Pass
			7	22.63	-1.78	18.70	<=38.45	Pass
			14	22.62	-1.78	18.69	<=38.45	Pass
		8	0	21.51	-1.78	17.58	<=38.45	Pass
			4	21.68	-1.78	17.75	<=38.45	Pass
			7	21.73	-1.78	17.80	<=38.45	Pass
		15	0	21.61	-1.78	17.68	<=38.45	Pass
	847.5	1	0	21.73	-1.78	17.80	<=38.45	Pass
			7	21.72	-1.78	17.79	<=38.45	Pass
			14	21.64	-1.78	17.71	<=38.45	Pass
		8	0	20.58	-1.78	16.65	<=38.45	Pass
			4	20.57	-1.78	16.64	<=38.45	Pass
			7	20.59	-1.78	16.66	<=38.45	Pass
		15	0	20.53	-1.78	16.60	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.3 B5_5MHz_ERP

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	24.02	-1.78	20.09	<=38.45	Pass
			13	23.51	-1.78	19.58	<=38.45	Pass
			24	23.08	-1.78	19.15	<=38.45	Pass
		12	0	22.54	-1.78	18.61	<=38.45	Pass
			6	22.52	-1.78	18.59	<=38.45	Pass

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		25	13	22.22	-1.78	18.29	<=38.45	Pass
			0	22.43	-1.78	18.50	<=38.45	Pass
			0	23.12	-1.78	19.19	<=38.45	Pass
	836.5	1	13	23.63	-1.78	19.70	<=38.45	Pass
			24	23.82	-1.78	19.89	<=38.45	Pass
			0	22.41	-1.78	18.48	<=38.45	Pass
		12	6	22.67	-1.78	18.74	<=38.45	Pass
			13	22.73	-1.78	18.80	<=38.45	Pass
			0	22.59	-1.78	18.66	<=38.45	Pass
	846.5	1	0	23.06	-1.78	19.13	<=38.45	Pass
			13	22.55	-1.78	18.62	<=38.45	Pass
			24	21.60	-1.78	17.67	<=38.45	Pass
		12	0	21.61	-1.78	17.68	<=38.45	Pass
			6	21.57	-1.78	17.64	<=38.45	Pass
			13	21.59	-1.78	17.66	<=38.45	Pass
16QAM	826.5	1	0	22.76	-1.78	18.83	<=38.45	Pass
			13	22.32	-1.78	18.39	<=38.45	Pass
			24	22.00	-1.78	18.07	<=38.45	Pass
		12	0	21.67	-1.78	17.74	<=38.45	Pass
			6	21.56	-1.78	17.63	<=38.45	Pass
			13	21.31	-1.78	17.38	<=38.45	Pass
	836.5	1	0	22.33	-1.78	18.40	<=38.45	Pass
			13	22.86	-1.78	18.93	<=38.45	Pass
			24	22.96	-1.78	19.03	<=38.45	Pass
		12	0	21.33	-1.78	17.40	<=38.45	Pass
			6	21.60	-1.78	17.67	<=38.45	Pass
			13	21.66	-1.78	17.73	<=38.45	Pass
	846.5	1	0	21.55	-1.78	17.62	<=38.45	Pass
			0	21.59	-1.78	17.66	<=38.45	Pass
			13	21.58	-1.78	17.65	<=38.45	Pass
		12	24	21.67	-1.78	17.74	<=38.45	Pass
			0	21.65	-1.78	17.72	<=38.45	Pass
			6	21.65	-1.78	17.72	<=38.45	Pass
	846.5	1	13	21.64	-1.78	17.71	<=38.45	Pass
			0	21.64	-1.78	17.71	<=38.45	Pass
			0	21.64	-1.78	17.71	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.4 B5_10MHz_ERP

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	23.90	-1.78	19.97	<=38.45	Pass
			25	23.01	-1.78	19.08	<=38.45	Pass
			49	22.92	-1.78	18.99	<=38.45	Pass
		25	0	22.21	-1.78	18.28	<=38.45	Pass
			13	22.07	-1.78	18.14	<=38.45	Pass
			25	21.80	-1.78	17.87	<=38.45	Pass
		50	0	22.03	-1.78	18.10	<=38.45	Pass
			0	23.04	-1.78	19.11	<=38.45	Pass
			25	23.60	-1.78	19.67	<=38.45	Pass
836.5	836.5	1	49	23.85	-1.78	19.92	<=38.45	Pass
			0	22.09	-1.78	18.16	<=38.45	Pass
			13	22.60	-1.78	18.67	<=38.45	Pass
		25	25	22.68	-1.78	18.75	<=38.45	Pass
			0	22.37	-1.78	18.44	<=38.45	Pass

16QAM	844	1	0	23.95	-1.78	20.02	<=38.45	Pass
			25	23.06	-1.78	19.13	<=38.45	Pass
			49	22.60	-1.78	18.67	<=38.45	Pass
		25	0	22.43	-1.78	18.50	<=38.45	Pass
			13	22.13	-1.78	18.20	<=38.45	Pass
			25	21.52	-1.78	17.59	<=38.45	Pass
		50	0	22.00	-1.78	18.07	<=38.45	Pass
			0	23.35	-1.78	19.42	<=38.45	Pass
			25	22.62	-1.78	18.69	<=38.45	Pass
16QAM	829	1	49	22.46	-1.78	18.53	<=38.45	Pass
			0	21.90	-1.78	17.97	<=38.45	Pass
			13	21.96	-1.78	18.03	<=38.45	Pass
		25	25	21.86	-1.78	17.93	<=38.45	Pass
			0	21.87	-1.78	17.94	<=38.45	Pass
			0	21.96	-1.78	18.03	<=38.45	Pass
		1	25	22.72	-1.78	18.79	<=38.45	Pass
			49	22.75	-1.78	18.82	<=38.45	Pass
			0	21.86	-1.78	17.93	<=38.45	Pass
	836.5	25	13	21.80	-1.78	17.87	<=38.45	Pass
			25	21.77	-1.78	17.84	<=38.45	Pass
			0	21.75	-1.78	17.82	<=38.45	Pass
		50	0	22.99	-1.78	19.06	<=38.45	Pass
			25	22.34	-1.78	18.41	<=38.45	Pass
			49	21.64	-1.78	17.71	<=38.45	Pass
		1	0	21.75	-1.78	17.82	<=38.45	Pass
			13	21.81	-1.78	17.88	<=38.45	Pass
			25	21.70	-1.78	17.77	<=38.45	Pass
	844	25	0	21.68	-1.78	17.75	<=38.45	Pass
			0	23.35	-1.78	19.42	<=38.45	Pass
			25	22.62	-1.78	18.69	<=38.45	Pass
		1	49	22.46	-1.78	18.53	<=38.45	Pass
			0	21.90	-1.78	17.97	<=38.45	Pass
			13	21.96	-1.78	18.03	<=38.45	Pass
		25	25	21.86	-1.78	17.93	<=38.45	Pass
			0	21.87	-1.78	17.94	<=38.45	Pass
			0	21.96	-1.78	18.03	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 Test Result

2.1.1 B5_1.4MHz

Band: 5 / Bandwidth: 1.4MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	824.7	6	0	20	3.15	-18.725	-0.0227	-2.5 to 2.5	Pass
					3.70	-19.197	-0.0233	-2.5 to 2.5	Pass
					4.26	-18.497	-0.0224	-2.5 to 2.5	Pass
				-30	3.70	-17.824	-0.0216	-2.5 to 2.5	Pass
				-20	3.70	-8.769	-0.0106	-2.5 to 2.5	Pass
				-10	3.70	-7.925	-0.0096	-2.5 to 2.5	Pass
				0	3.70	-12.703	-0.0154	-2.5 to 2.5	Pass
				10	3.70	-18.954	-0.0230	-2.5 to 2.5	Pass
				30	3.70	-8.740	-0.0106	-2.5 to 2.5	Pass
				40	3.70	-5.779	-0.0070	-2.5 to 2.5	Pass
				50	3.70	-16.408	-0.0199	-2.5 to 2.5	Pass
	836.5	6	0	20	3.15	-8.683	-0.0104	-2.5 to 2.5	Pass
					3.70	-15.020	-0.0180	-2.5 to 2.5	Pass
					4.26	-17.037	-0.0204	-2.5 to 2.5	Pass
				-30	3.70	-14.963	-0.0179	-2.5 to 2.5	Pass
				-20	3.70	-10.028	-0.0120	-2.5 to 2.5	Pass
				-10	3.70	-8.454	-0.0101	-2.5 to 2.5	Pass

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				0	3.70	-5.608	-0.0067	-2.5 to 2.5	Pass
				10	3.70	-2.046	-0.0024	-2.5 to 2.5	Pass
				30	3.70	-3.891	-0.0047	-2.5 to 2.5	Pass
				40	3.70	-7.639	-0.0091	-2.5 to 2.5	Pass
				50	3.70	-10.242	-0.0122	-2.5 to 2.5	Pass
	848.3	6	0	20	3.15	-17.238	-0.0203	-2.5 to 2.5	Pass
					3.70	-11.601	-0.0137	-2.5 to 2.5	Pass
					4.26	-25.978	-0.0306	-2.5 to 2.5	Pass
				-30	3.70	-14.992	-0.0177	-2.5 to 2.5	Pass
				-20	3.70	-20.714	-0.0244	-2.5 to 2.5	Pass
				-10	3.70	-16.007	-0.0189	-2.5 to 2.5	Pass
				0	3.70	-17.738	-0.0209	-2.5 to 2.5	Pass
				10	3.70	-9.527	-0.0112	-2.5 to 2.5	Pass
				30	3.70	-16.694	-0.0197	-2.5 to 2.5	Pass
				40	3.70	-20.556	-0.0242	-2.5 to 2.5	Pass
				50	3.70	-20.499	-0.0242	-2.5 to 2.5	Pass
16QAM	824.7	6	0	20	3.15	-5.293	-0.0064	-2.5 to 2.5	Pass
					3.70	6.924	0.0084	-2.5 to 2.5	Pass
					4.26	5.622	0.0068	-2.5 to 2.5	Pass
				-30	3.70	0.615	0.0007	-2.5 to 2.5	Pass
				-20	3.70	-4.148	-0.0050	-2.5 to 2.5	Pass
				-10	3.70	-6.037	-0.0073	-2.5 to 2.5	Pass
				0	3.70	-10.643	-0.0129	-2.5 to 2.5	Pass
				10	3.70	-9.627	-0.0117	-2.5 to 2.5	Pass
				30	3.70	-12.231	-0.0148	-2.5 to 2.5	Pass
				40	3.70	-11.802	-0.0143	-2.5 to 2.5	Pass
	836.5	6	0	20	3.15	-2.131	-0.0025	-2.5 to 2.5	Pass
					3.70	12.288	0.0147	-2.5 to 2.5	Pass
					4.26	19.684	0.0235	-2.5 to 2.5	Pass
				-30	3.70	4.277	0.0051	-2.5 to 2.5	Pass
				-20	3.70	22.473	0.0269	-2.5 to 2.5	Pass
				-10	3.70	12.288	0.0147	-2.5 to 2.5	Pass
				0	3.70	25.449	0.0304	-2.5 to 2.5	Pass
				10	3.70	16.580	0.0198	-2.5 to 2.5	Pass
				30	3.70	0.315	0.0004	-2.5 to 2.5	Pass
				40	3.70	2.632	0.0031	-2.5 to 2.5	Pass
	848.3	6	0	20	3.15	-2.403	-0.0028	-2.5 to 2.5	Pass
					3.70	7.911	0.0093	-2.5 to 2.5	Pass
					4.26	6.437	0.0076	-2.5 to 2.5	Pass
				-30	3.70	3.648	0.0043	-2.5 to 2.5	Pass
				-20	3.70	-4.621	-0.0054	-2.5 to 2.5	Pass
				-10	3.70	-5.622	-0.0066	-2.5 to 2.5	Pass
				0	3.70	-8.440	-0.0099	-2.5 to 2.5	Pass
				10	3.70	-11.501	-0.0136	-2.5 to 2.5	Pass
				30	3.70	-16.937	-0.0200	-2.5 to 2.5	Pass
				40	3.70	-19.541	-0.0230	-2.5 to 2.5	Pass
				50	3.70	-4.377	-0.0052	-2.5 to 2.5	Pass

2.1.2 B5_3MHz

Band: 5 / Bandwidth: 3MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	825.5	15	0	20	3.15	-16.136	-0.0195	-2.5 to 2.5	Pass
					3.70	-24.061	-0.0291	-2.5 to 2.5	Pass
					4.26	-16.809	-0.0204	-2.5 to 2.5	Pass

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				-30	3.70	-20.642	-0.0250	-2.5 to 2.5	Pass
				-20	3.70	-22.860	-0.0277	-2.5 to 2.5	Pass
				-10	3.70	-14.420	-0.0175	-2.5 to 2.5	Pass
				0	3.70	-16.894	-0.0205	-2.5 to 2.5	Pass
				10	3.70	-24.719	-0.0299	-2.5 to 2.5	Pass
				30	3.70	-5.021	-0.0061	-2.5 to 2.5	Pass
				40	3.70	-9.384	-0.0114	-2.5 to 2.5	Pass
				50	3.70	-11.802	-0.0143	-2.5 to 2.5	Pass
	836.5	15	0	20	3.15	-4.420	-0.0053	-2.5 to 2.5	Pass
					3.70	-14.191	-0.0170	-2.5 to 2.5	Pass
					4.26	-18.010	-0.0215	-2.5 to 2.5	Pass
				-30	3.70	-17.309	-0.0207	-2.5 to 2.5	Pass
				-20	3.70	-14.663	-0.0175	-2.5 to 2.5	Pass
				-10	3.70	-11.773	-0.0141	-2.5 to 2.5	Pass
				0	3.70	-6.294	-0.0075	-2.5 to 2.5	Pass
				10	3.70	-3.333	-0.0040	-2.5 to 2.5	Pass
				30	3.70	-3.619	-0.0043	-2.5 to 2.5	Pass
				40	3.70	-9.813	-0.0117	-2.5 to 2.5	Pass
				50	3.70	-13.361	-0.0160	-2.5 to 2.5	Pass
	847.5	15	0	20	3.15	-22.159	-0.0261	-2.5 to 2.5	Pass
					3.70	-11.258	-0.0133	-2.5 to 2.5	Pass
					4.26	-12.360	-0.0146	-2.5 to 2.5	Pass
				-30	3.70	-4.821	-0.0057	-2.5 to 2.5	Pass
				-20	3.70	-18.811	-0.0222	-2.5 to 2.5	Pass
				-10	3.70	-24.648	-0.0291	-2.5 to 2.5	Pass
				0	3.70	-19.612	-0.0231	-2.5 to 2.5	Pass
				10	3.70	-10.886	-0.0128	-2.5 to 2.5	Pass
				30	3.70	-4.463	-0.0053	-2.5 to 2.5	Pass
				40	3.70	-18.897	-0.0223	-2.5 to 2.5	Pass
				50	3.70	-4.492	-0.0053	-2.5 to 2.5	Pass
16QAM	825.5	15	0	20	3.15	-6.309	-0.0076	-2.5 to 2.5	Pass
					3.70	15.936	0.0193	-2.5 to 2.5	Pass
					4.26	2.961	0.0036	-2.5 to 2.5	Pass
				-30	3.70	9.212	0.0112	-2.5 to 2.5	Pass
				-20	3.70	15.893	0.0193	-2.5 to 2.5	Pass
				-10	3.70	19.827	0.0240	-2.5 to 2.5	Pass
				0	3.70	5.636	0.0068	-2.5 to 2.5	Pass
				10	3.70	10.500	0.0127	-2.5 to 2.5	Pass
				30	3.70	15.607	0.0189	-2.5 to 2.5	Pass
				40	3.70	16.322	0.0198	-2.5 to 2.5	Pass
				50	3.70	18.182	0.0220	-2.5 to 2.5	Pass
	836.5	15	0	20	3.15	-3.362	-0.0040	-2.5 to 2.5	Pass
					3.70	5.794	0.0069	-2.5 to 2.5	Pass
					4.26	4.506	0.0054	-2.5 to 2.5	Pass
				-30	3.70	22.073	0.0264	-2.5 to 2.5	Pass
				-20	3.70	6.380	0.0076	-2.5 to 2.5	Pass
				-10	3.70	25.792	0.0308	-2.5 to 2.5	Pass
				0	3.70	9.298	0.0111	-2.5 to 2.5	Pass
				10	3.70	17.996	0.0215	-2.5 to 2.5	Pass
				30	3.70	23.117	0.0276	-2.5 to 2.5	Pass
				40	3.70	9.527	0.0114	-2.5 to 2.5	Pass
				50	3.70	23.203	0.0277	-2.5 to 2.5	Pass
	847.5	15	0	20	3.15	-5.622	-0.0066	-2.5 to 2.5	Pass
					3.70	19.269	0.0227	-2.5 to 2.5	Pass
					4.26	10.014	0.0118	-2.5 to 2.5	Pass
				-30	3.70	25.449	0.0300	-2.5 to 2.5	Pass
				-20	3.70	14.606	0.0172	-2.5 to 2.5	Pass
				-10	3.70	-19.197	-0.0227	-2.5 to 2.5	Pass
				0	3.70	-14.420	-0.0170	-2.5 to 2.5	Pass

				10	3.70	-13.890	-0.0164	-2.5 to 2.5	Pass
				30	3.70	-23.003	-0.0271	-2.5 to 2.5	Pass
				40	3.70	-8.082	-0.0095	-2.5 to 2.5	Pass
				50	3.70	-18.067	-0.0213	-2.5 to 2.5	Pass

2.1.3 B5_5MHz

Band: 5 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	826.5	25	0	20	3.15	-15.078	-0.0182	-2.5 to 2.5	Pass
					3.70	-15.020	-0.0182	-2.5 to 2.5	Pass
					4.26	-13.218	-0.0160	-2.5 to 2.5	Pass
				-30	3.70	-17.281	-0.0209	-2.5 to 2.5	Pass
				-20	3.70	-10.114	-0.0122	-2.5 to 2.5	Pass
				-10	3.70	-16.079	-0.0195	-2.5 to 2.5	Pass
				0	3.70	-11.473	-0.0139	-2.5 to 2.5	Pass
				10	3.70	-23.217	-0.0281	-2.5 to 2.5	Pass
				30	3.70	-12.946	-0.0157	-2.5 to 2.5	Pass
				40	3.70	-14.791	-0.0179	-2.5 to 2.5	Pass
				50	3.70	-21.214	-0.0257	-2.5 to 2.5	Pass
	836.5	25	0	20	3.15	0.873	0.0010	-2.5 to 2.5	Pass
					3.70	-18.454	-0.0221	-2.5 to 2.5	Pass
					4.26	-11.601	-0.0139	-2.5 to 2.5	Pass
				-30	3.70	-17.495	-0.0209	-2.5 to 2.5	Pass
				-20	3.70	-18.682	-0.0223	-2.5 to 2.5	Pass
				-10	3.70	-23.904	-0.0286	-2.5 to 2.5	Pass
				0	3.70	-3.734	-0.0045	-2.5 to 2.5	Pass
				10	3.70	-0.701	-0.0008	-2.5 to 2.5	Pass
				30	3.70	0.973	0.0012	-2.5 to 2.5	Pass
				40	3.70	-0.629	-0.0008	-2.5 to 2.5	Pass
				50	3.70	-1.473	-0.0018	-2.5 to 2.5	Pass
	846.5	25	0	20	3.15	-13.418	-0.0159	-2.5 to 2.5	Pass
					3.70	-24.018	-0.0284	-2.5 to 2.5	Pass
					4.26	-12.531	-0.0148	-2.5 to 2.5	Pass
				-30	3.70	-9.069	-0.0107	-2.5 to 2.5	Pass
				-20	3.70	-22.516	-0.0266	-2.5 to 2.5	Pass
				-10	3.70	-9.069	-0.0107	-2.5 to 2.5	Pass
				0	3.70	-10.057	-0.0119	-2.5 to 2.5	Pass
				10	3.70	-4.849	-0.0057	-2.5 to 2.5	Pass
				30	3.70	-19.398	-0.0229	-2.5 to 2.5	Pass
				40	3.70	-13.447	-0.0159	-2.5 to 2.5	Pass
				50	3.70	-4.120	-0.0049	-2.5 to 2.5	Pass
16QAM	826.5	25	0	20	3.15	-15.693	-0.0190	-2.5 to 2.5	Pass
					3.70	9.112	0.0110	-2.5 to 2.5	Pass
					4.26	2.775	0.0034	-2.5 to 2.5	Pass
				-30	3.70	11.458	0.0139	-2.5 to 2.5	Pass
				-20	3.70	12.403	0.0150	-2.5 to 2.5	Pass
				-10	3.70	8.554	0.0103	-2.5 to 2.5	Pass
				0	3.70	3.247	0.0039	-2.5 to 2.5	Pass
				10	3.70	2.432	0.0029	-2.5 to 2.5	Pass
				30	3.70	1.545	0.0019	-2.5 to 2.5	Pass
				40	3.70	2.418	0.0029	-2.5 to 2.5	Pass
				50	3.70	7.510	0.0091	-2.5 to 2.5	Pass
	836.5	25	0	20	3.15	3.419	0.0041	-2.5 to 2.5	Pass
					3.70	9.899	0.0118	-2.5 to 2.5	Pass
					4.26	8.383	0.0100	-2.5 to 2.5	Pass
				-30	3.70	12.231	0.0146	-2.5 to 2.5	Pass

				-20	3.70	7.024	0.0084	-2.5 to 2.5	Pass
				-10	3.70	21.186	0.0253	-2.5 to 2.5	Pass
				0	3.70	21.300	0.0255	-2.5 to 2.5	Pass
				10	3.70	3.176	0.0038	-2.5 to 2.5	Pass
				30	3.70	13.318	0.0159	-2.5 to 2.5	Pass
				40	3.70	23.088	0.0276	-2.5 to 2.5	Pass
				50	3.70	8.025	0.0096	-2.5 to 2.5	Pass
	846.5	25	0	20	3.15	-5.565	-0.0066	-2.5 to 2.5	Pass
					3.70	19.913	0.0235	-2.5 to 2.5	Pass
					4.26	22.101	0.0261	-2.5 to 2.5	Pass
				-30	3.70	16.980	0.0201	-2.5 to 2.5	Pass
				-20	3.70	4.821	0.0057	-2.5 to 2.5	Pass
				-10	3.70	15.950	0.0188	-2.5 to 2.5	Pass
				0	3.70	2.432	0.0029	-2.5 to 2.5	Pass
				10	3.70	9.413	0.0111	-2.5 to 2.5	Pass
				30	3.70	10.171	0.0120	-2.5 to 2.5	Pass
				40	3.70	7.668	0.0091	-2.5 to 2.5	Pass
				50	3.70	6.452	0.0076	-2.5 to 2.5	Pass

2.1.4 B5_10MHz

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	3.15	-14.148	-0.0171	-2.5 to 2.5	Pass
					3.70	-23.575	-0.0284	-2.5 to 2.5	Pass
					4.26	-10.014	-0.0121	-2.5 to 2.5	Pass
				-30	3.70	-24.462	-0.0295	-2.5 to 2.5	Pass
				-20	3.70	-19.369	-0.0234	-2.5 to 2.5	Pass
				-10	3.70	-24.476	-0.0295	-2.5 to 2.5	Pass
				0	3.70	-18.296	-0.0221	-2.5 to 2.5	Pass
				10	3.70	-13.347	-0.0161	-2.5 to 2.5	Pass
				30	3.70	-14.062	-0.0170	-2.5 to 2.5	Pass
				40	3.70	-17.438	-0.0210	-2.5 to 2.5	Pass
	836.5	50	0	50	3.70	-17.381	-0.0210	-2.5 to 2.5	Pass
				20	3.15	-18.425	-0.0220	-2.5 to 2.5	Pass
					3.70	-3.204	-0.0038	-2.5 to 2.5	Pass
					4.26	-5.722	-0.0068	-2.5 to 2.5	Pass
				-30	3.70	-8.283	-0.0099	-2.5 to 2.5	Pass
				-20	3.70	-12.374	-0.0148	-2.5 to 2.5	Pass
				-10	3.70	-16.809	-0.0201	-2.5 to 2.5	Pass
				0	3.70	-19.040	-0.0228	-2.5 to 2.5	Pass
				10	3.70	-20.199	-0.0241	-2.5 to 2.5	Pass
				30	3.70	-18.153	-0.0217	-2.5 to 2.5	Pass
	844	50	0	40	3.70	-17.824	-0.0213	-2.5 to 2.5	Pass
				50	3.70	-20.099	-0.0240	-2.5 to 2.5	Pass
				20	3.15	-16.236	-0.0192	-2.5 to 2.5	Pass
					3.70	-7.281	-0.0086	-2.5 to 2.5	Pass
					4.26	-11.501	-0.0136	-2.5 to 2.5	Pass
				-30	3.70	-24.691	-0.0293	-2.5 to 2.5	Pass
				-20	3.70	-16.308	-0.0193	-2.5 to 2.5	Pass
				-10	3.70	-25.020	-0.0296	-2.5 to 2.5	Pass
				0	3.70	-24.705	-0.0293	-2.5 to 2.5	Pass
				10	3.70	-3.777	-0.0045	-2.5 to 2.5	Pass
16QAM	829	50	0	20	3.15	-1.845	-0.0022	-2.5 to 2.5	Pass
					3.70	-1.845	-0.0022	-2.5 to 2.5	Pass

					3.70	-2.761	-0.0033	-2.5 to 2.5	Pass
					4.26	-2.446	-0.0030	-2.5 to 2.5	Pass
				-30	3.70	2.317	0.0028	-2.5 to 2.5	Pass
				-20	3.70	-0.501	-0.0006	-2.5 to 2.5	Pass
				-10	3.70	-4.921	-0.0059	-2.5 to 2.5	Pass
				0	3.70	-5.636	-0.0068	-2.5 to 2.5	Pass
				10	3.70	-0.272	-0.0003	-2.5 to 2.5	Pass
				30	3.70	-2.246	-0.0027	-2.5 to 2.5	Pass
				40	3.70	-4.177	-0.0050	-2.5 to 2.5	Pass
				50	3.70	-6.151	-0.0074	-2.5 to 2.5	Pass
	836.5	50	0	20	3.15	-0.944	-0.0011	-2.5 to 2.5	Pass
					3.70	-4.134	-0.0049	-2.5 to 2.5	Pass
					4.26	-5.064	-0.0061	-2.5 to 2.5	Pass
				-30	3.70	-3.905	-0.0047	-2.5 to 2.5	Pass
				-20	3.70	-3.619	-0.0043	-2.5 to 2.5	Pass
				-10	3.70	-2.761	-0.0033	-2.5 to 2.5	Pass
				0	3.70	-1.845	-0.0022	-2.5 to 2.5	Pass
				10	3.70	-2.460	-0.0029	-2.5 to 2.5	Pass
				30	3.70	-0.944	-0.0011	-2.5 to 2.5	Pass
				40	3.70	-0.343	-0.0004	-2.5 to 2.5	Pass
				50	3.70	-0.014	0.0000	-2.5 to 2.5	Pass
	844	50	0	20	3.15	-1.760	-0.0021	-2.5 to 2.5	Pass
					3.70	-7.224	-0.0086	-2.5 to 2.5	Pass
					4.26	-3.133	-0.0037	-2.5 to 2.5	Pass
				-30	3.70	-0.672	-0.0008	-2.5 to 2.5	Pass
				-20	3.70	-2.017	-0.0024	-2.5 to 2.5	Pass
				-10	3.70	-2.689	-0.0032	-2.5 to 2.5	Pass
				0	3.70	-3.462	-0.0041	-2.5 to 2.5	Pass
				10	3.70	-4.492	-0.0053	-2.5 to 2.5	Pass
				30	3.70	-4.878	-0.0058	-2.5 to 2.5	Pass
				40	3.70	-4.263	-0.0051	-2.5 to 2.5	Pass
				50	3.70	-4.992	-0.0059	-2.5 to 2.5	Pass

3. Modulation Characteristics

3.1 Test Result

3.1.1 B5_1.4MHz

Band: 5 / Bandwidth: 1.4MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	6	0	Refer To Test Graph		Pass
16QAM	836.5	6	0	Refer To Test Graph		Pass

3.1.2 B5_3MHz

Band: 5 / Bandwidth: 3MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	15	0	Refer To Test Graph		Pass
16QAM	836.5	15	0	Refer To Test Graph		Pass

3.1.3 B5_5MHz

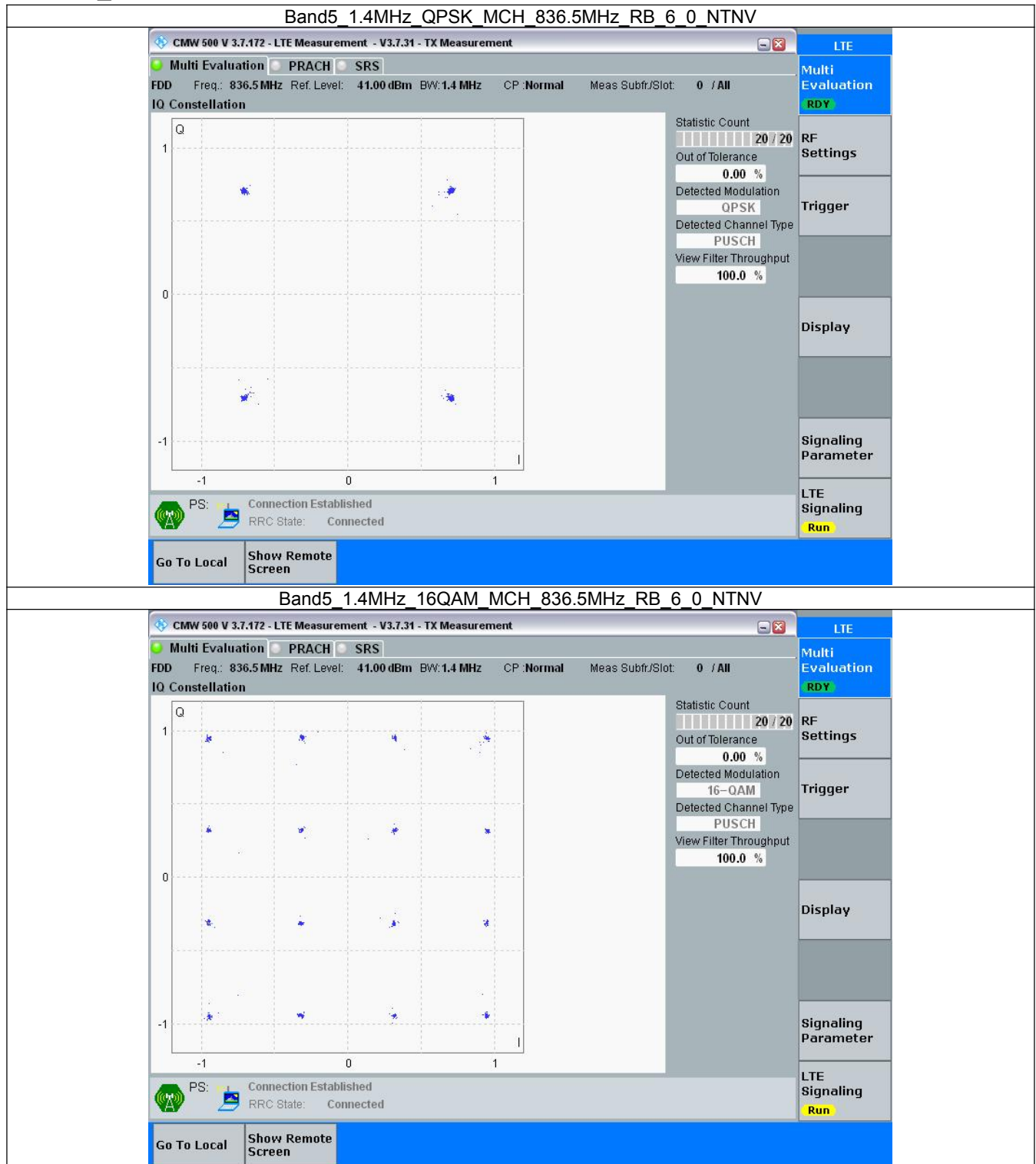
Band: 5 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	25	0	Refer To Test Graph		Pass
16QAM	836.5	25	0	Refer To Test Graph		Pass

3.1.4 B5_10MHz

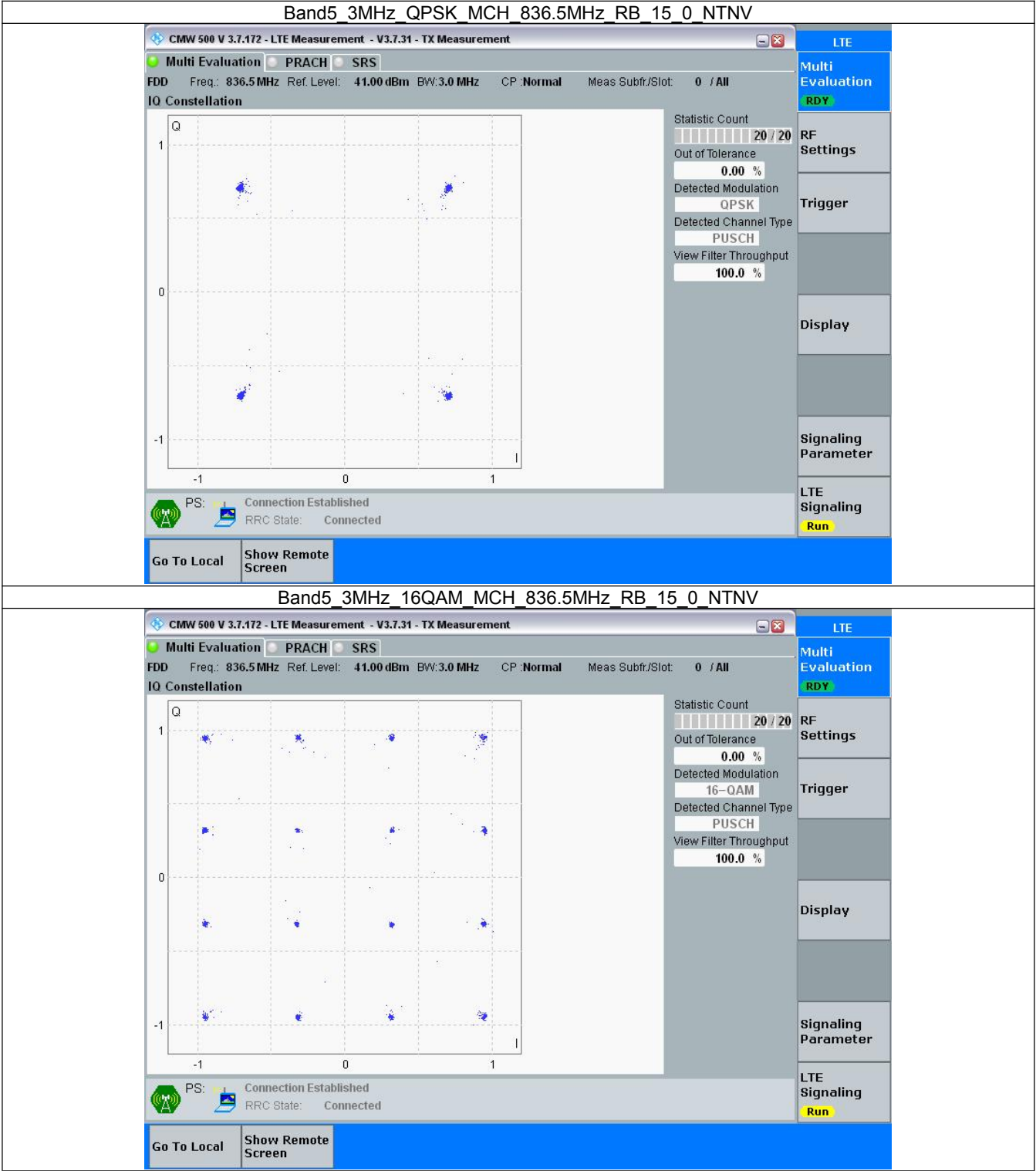
Band: 5 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	50	0	Refer To Test Graph		Pass
16QAM	836.5	50	0	Refer To Test Graph		Pass

3.2 Test Graph

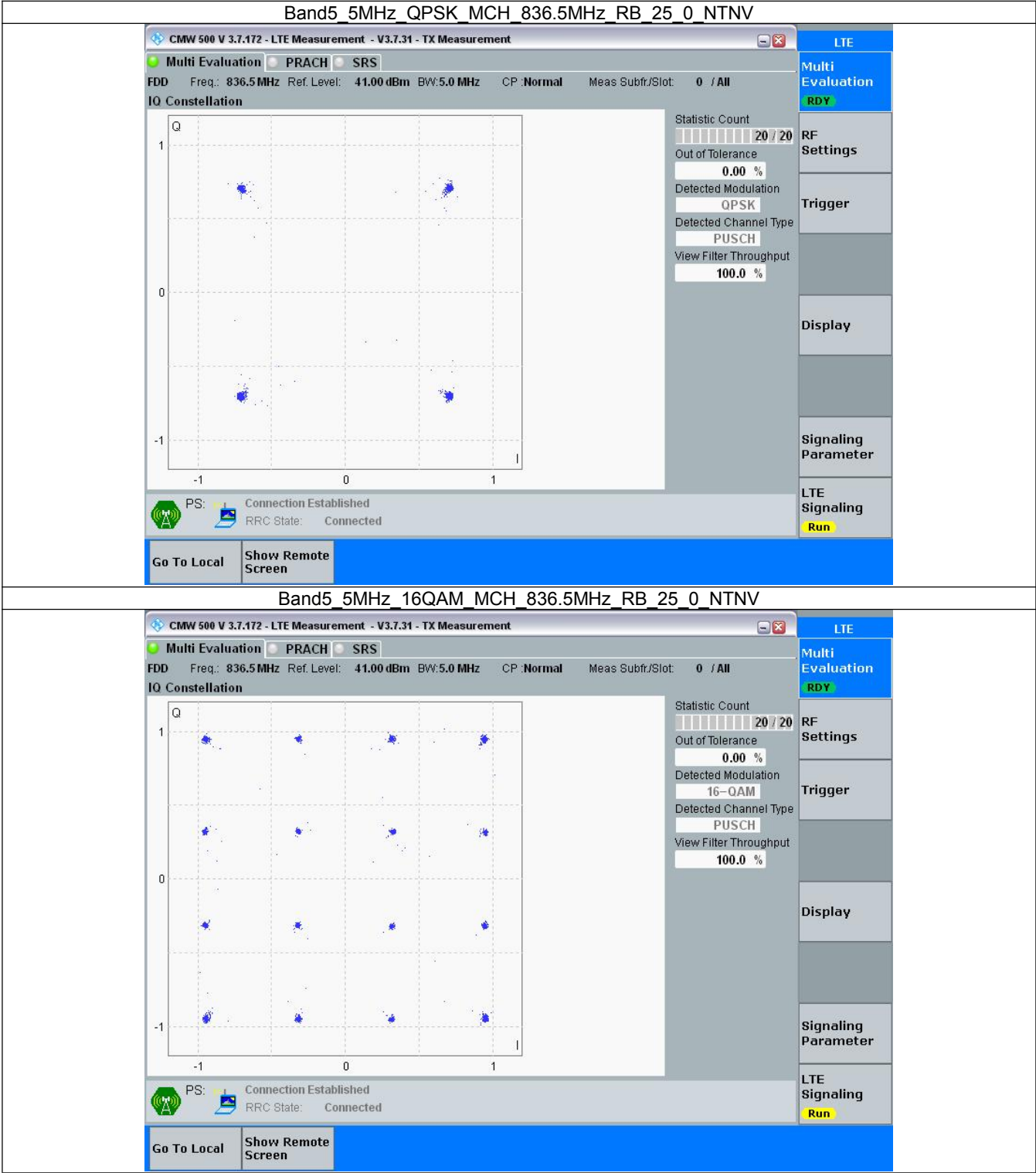
3.2.1 B5_1.4MHz



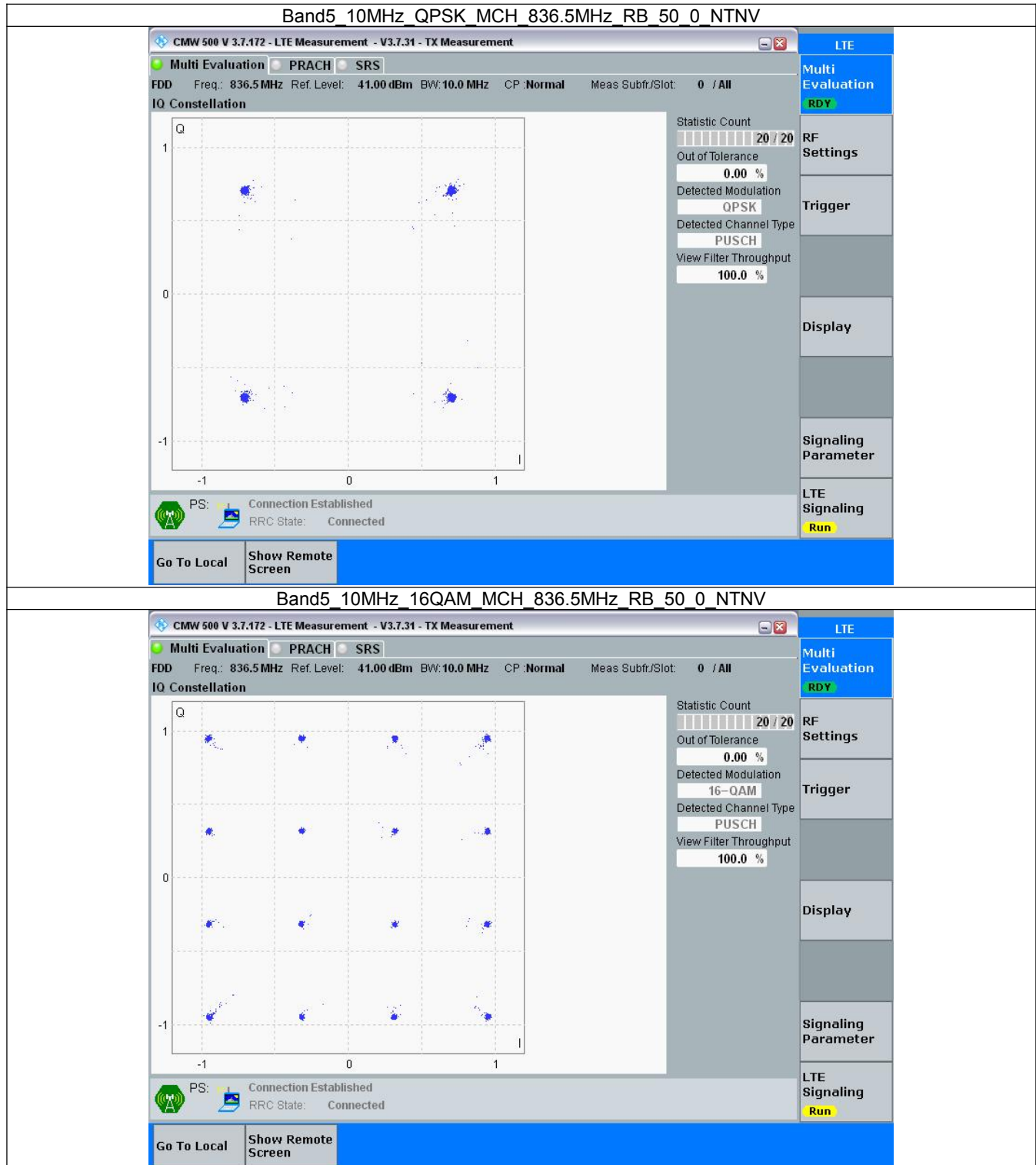
3.2.2 B5_3MHz



3.2.3 B5_5MHz



3.2.4 B5_10MHz



4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band5_OBW

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	1.101	/	Pass
		836.5	6	0	1.121	/	Pass
		848.3	6	0	1.105	/	Pass
	16QAM	824.7	6	0	1.100	/	Pass
		836.5	6	0	1.126	/	Pass
		848.3	6	0	1.107	/	Pass
3	QPSK	825.5	15	0	2.738	/	Pass
		836.5	15	0	2.735	/	Pass
		847.5	15	0	2.736	/	Pass
	16QAM	825.5	15	0	2.737	/	Pass
		836.5	15	0	2.718	/	Pass
		847.5	15	0	2.730	/	Pass
5	QPSK	826.5	25	0	4.565	/	Pass
		836.5	25	0	4.534	/	Pass
		846.5	25	0	4.533	/	Pass
	16QAM	826.5	25	0	4.539	/	Pass
		836.5	25	0	4.544	/	Pass
		846.5	25	0	4.561	/	Pass
10	QPSK	829	50	0	9.049	/	Pass
		836.5	50	0	9.044	/	Pass
		844	50	0	9.037	/	Pass
	16QAM	829	50	0	9.076	/	Pass
		836.5	50	0	9.040	/	Pass
		844	50	0	9.009	/	Pass

4.1.2 Band5_XDB

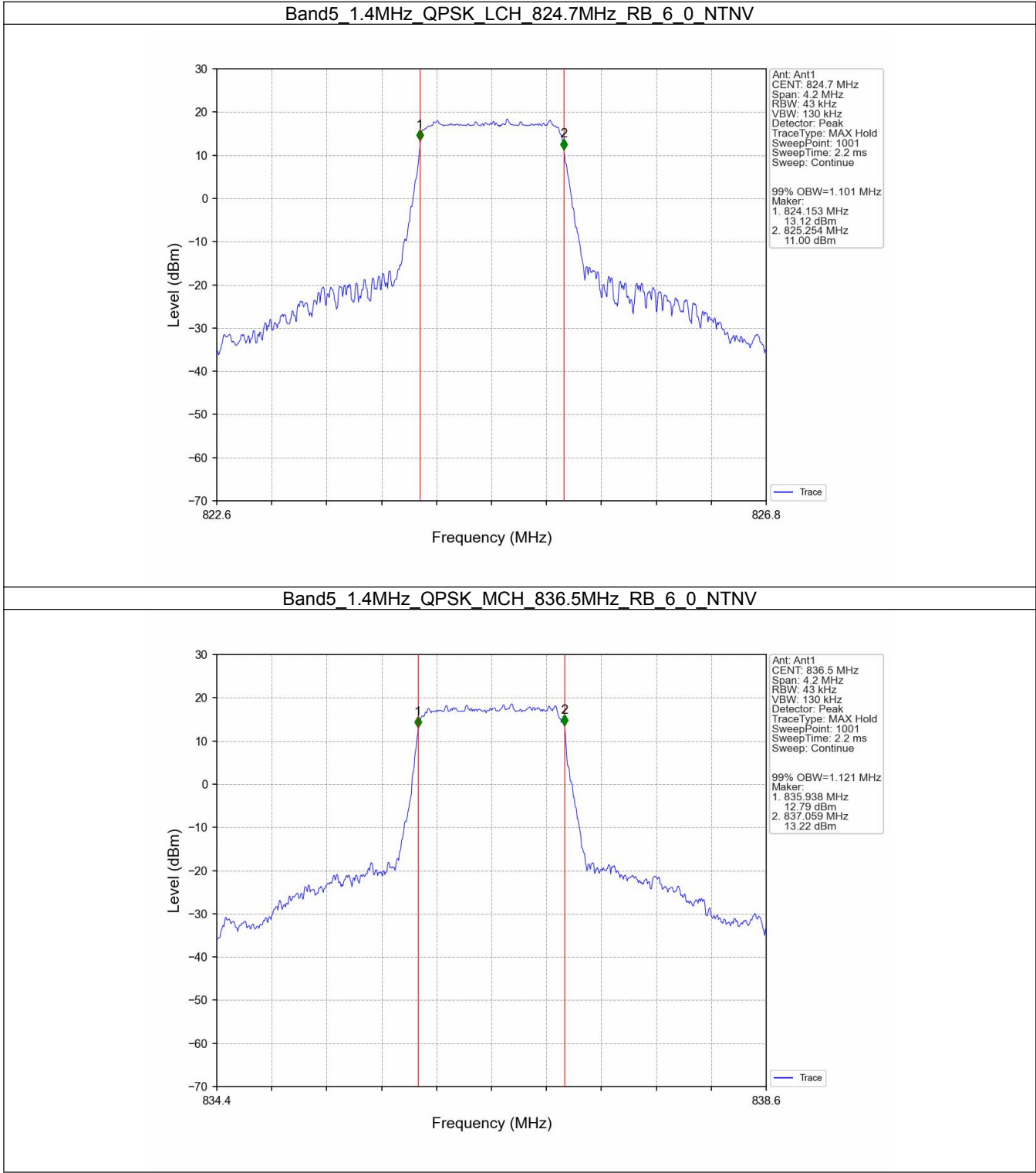
Band: 5 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	824.7	6	0	1.294	/	Pass
		836.5	6	0	1.297	/	Pass
		848.3	6	0	1.287	/	Pass
	16QAM	824.7	6	0	1.304	/	Pass
		836.5	6	0	1.305	/	Pass
		848.3	6	0	1.321	/	Pass
3	QPSK	825.5	15	0	3.025	/	Pass
		836.5	15	0	3.022	/	Pass
		847.5	15	0	2.999	/	Pass
	16QAM	825.5	15	0	3.009	/	Pass
		836.5	15	0	3.010	/	Pass
		847.5	15	0	3.004	/	Pass
5	QPSK	826.5	25	0	5.020	/	Pass
		836.5	25	0	5.020	/	Pass
		846.5	25	0	5.050	/	Pass

Model: MDPT3301LE

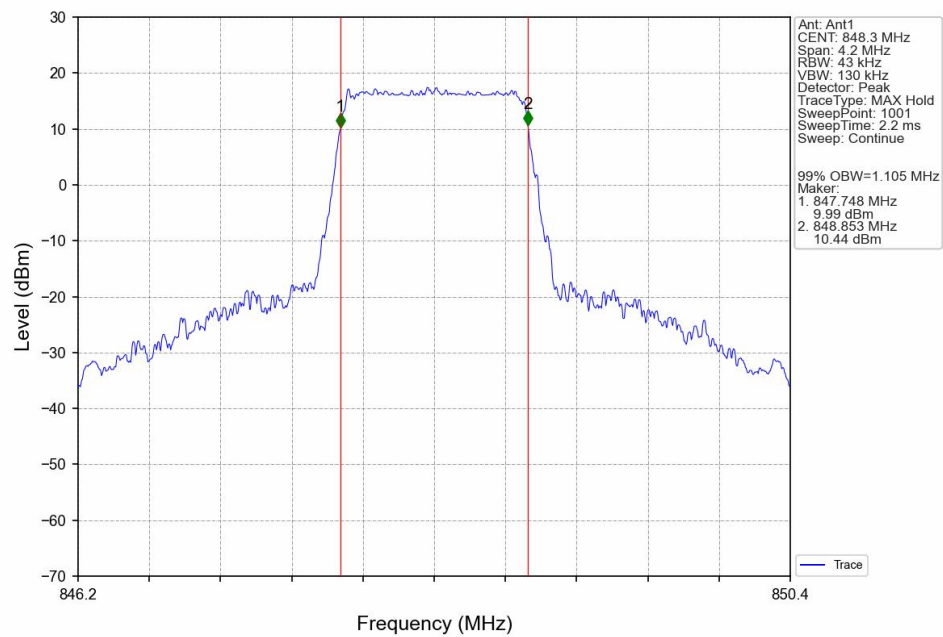
10	16QAM	826.5	25	0	5.017	/	Pass
		836.5	25	0	5.061	/	Pass
		846.5	25	0	5.027	/	Pass
	QPSK	829	50	0	9.922	/	Pass
		836.5	50	0	9.887	/	Pass
		844	50	0	9.890	/	Pass
	16QAM	829	50	0	10.016	/	Pass
		836.5	50	0	9.965	/	Pass
		844	50	0	9.969	/	Pass

4.2 Test Graph

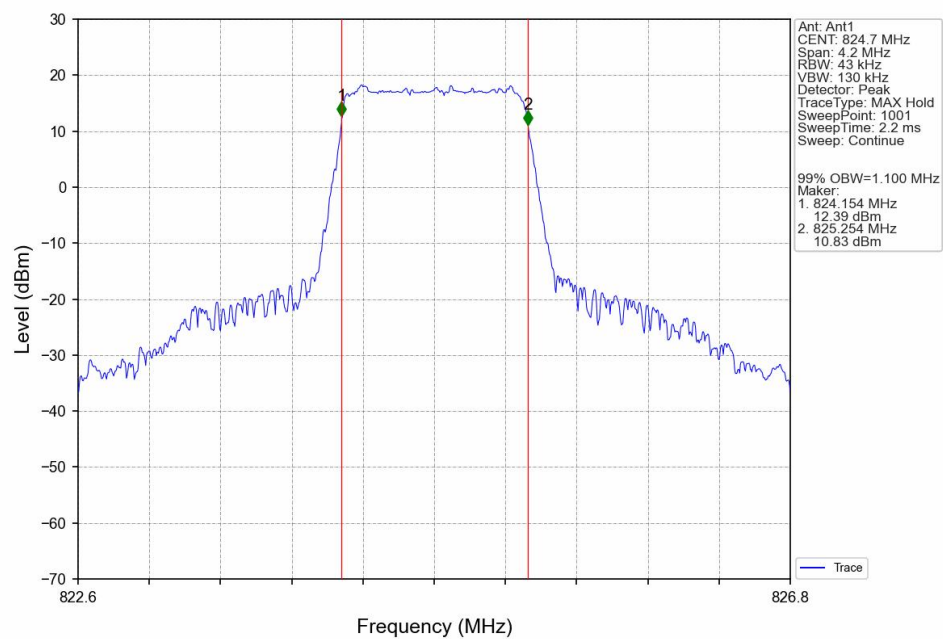
4.2.1 Band5_OBW



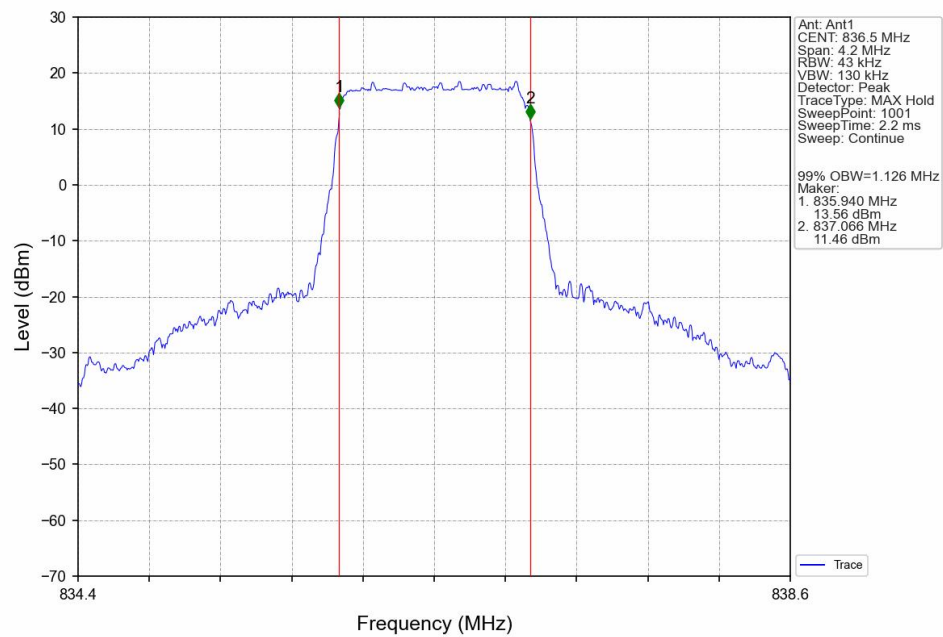
Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV



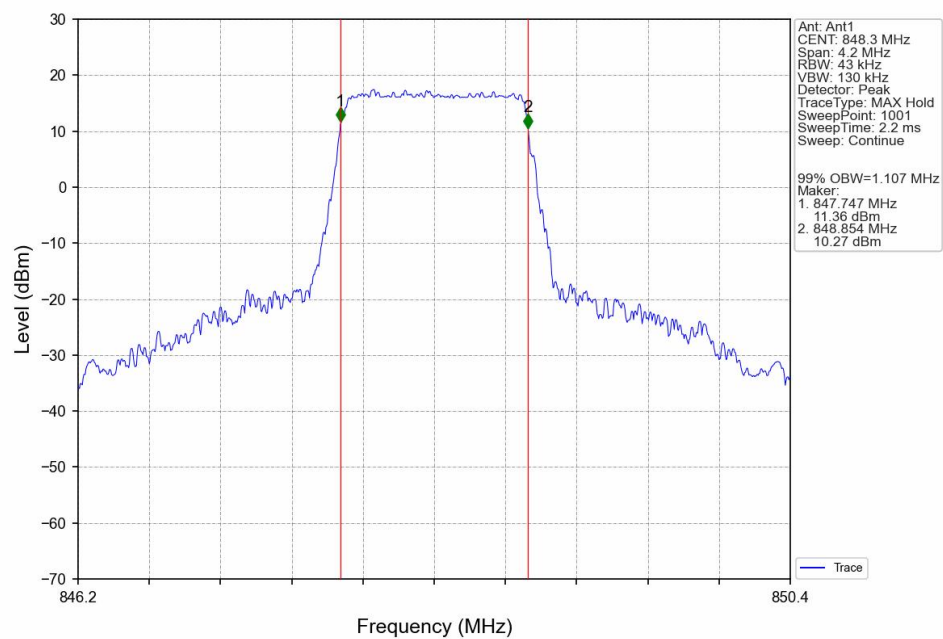
Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV



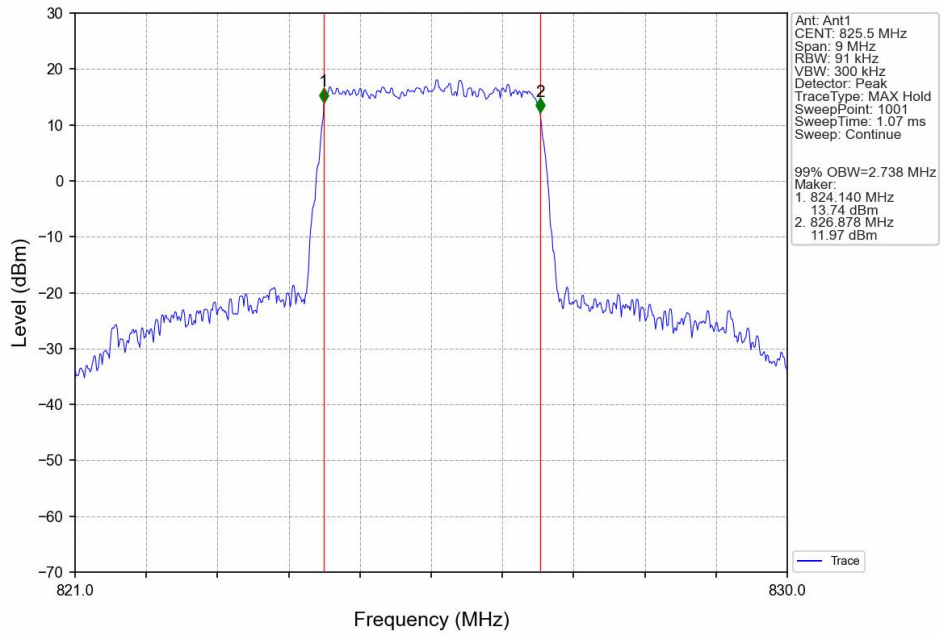
Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV



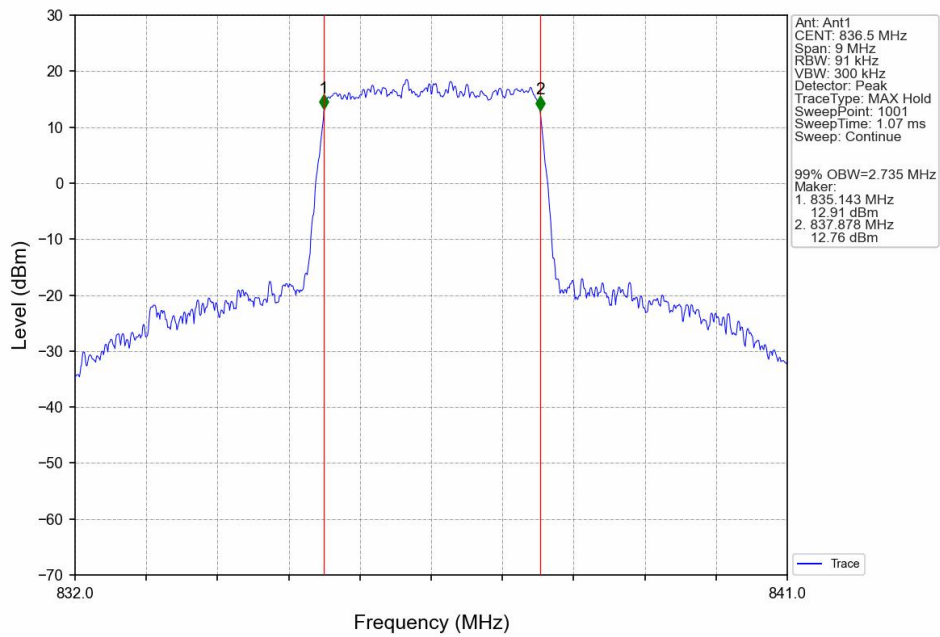
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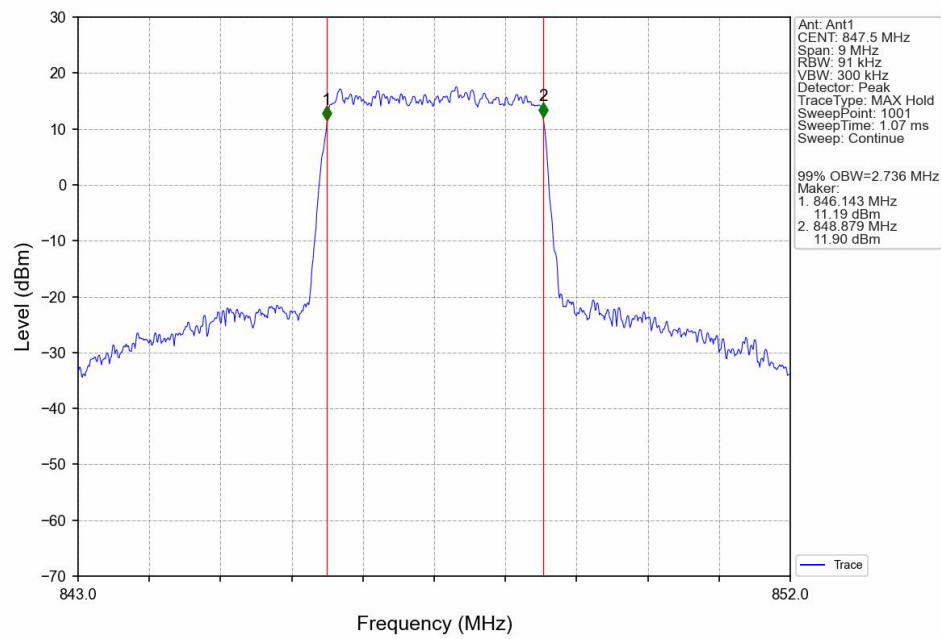
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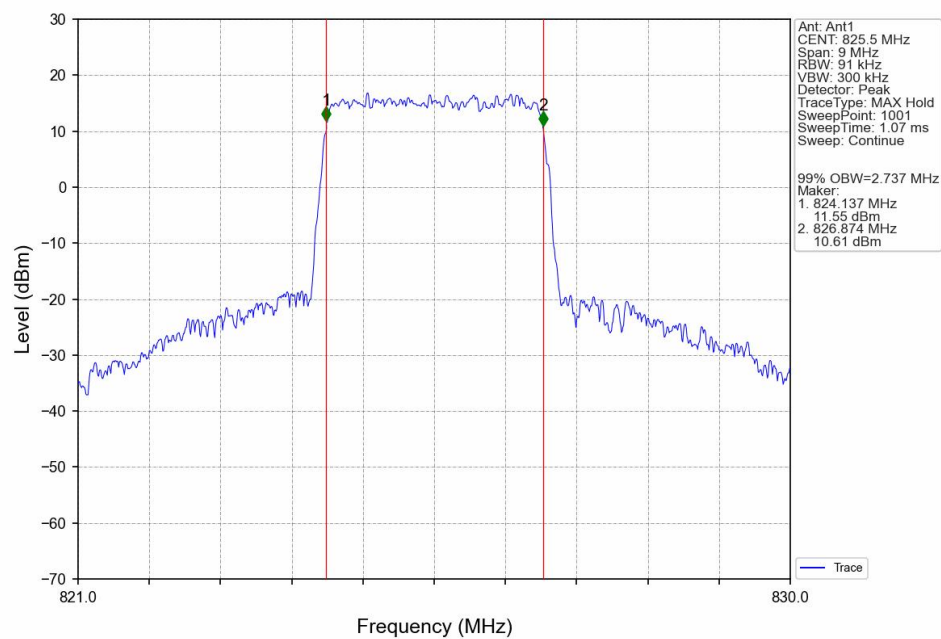
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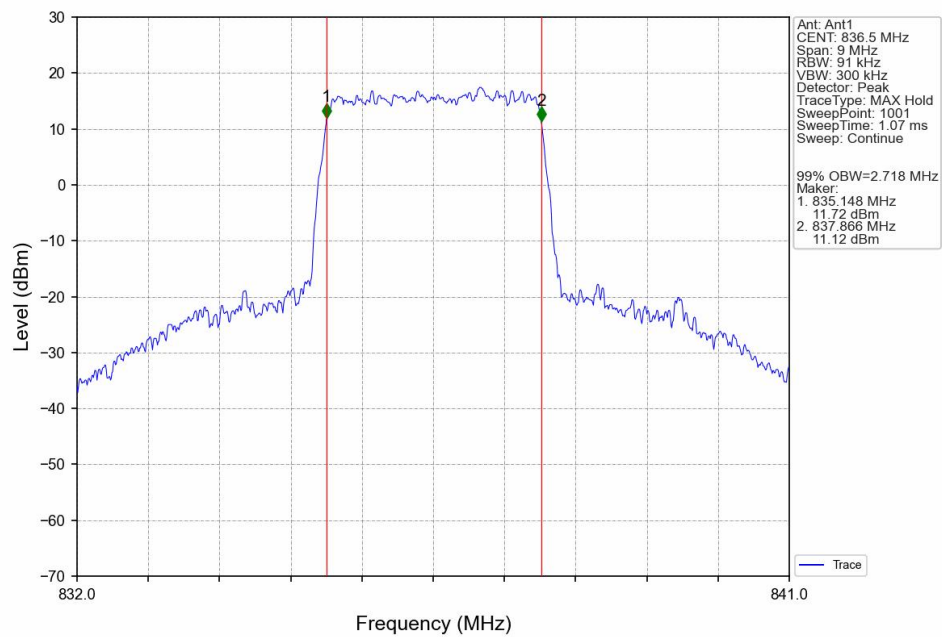
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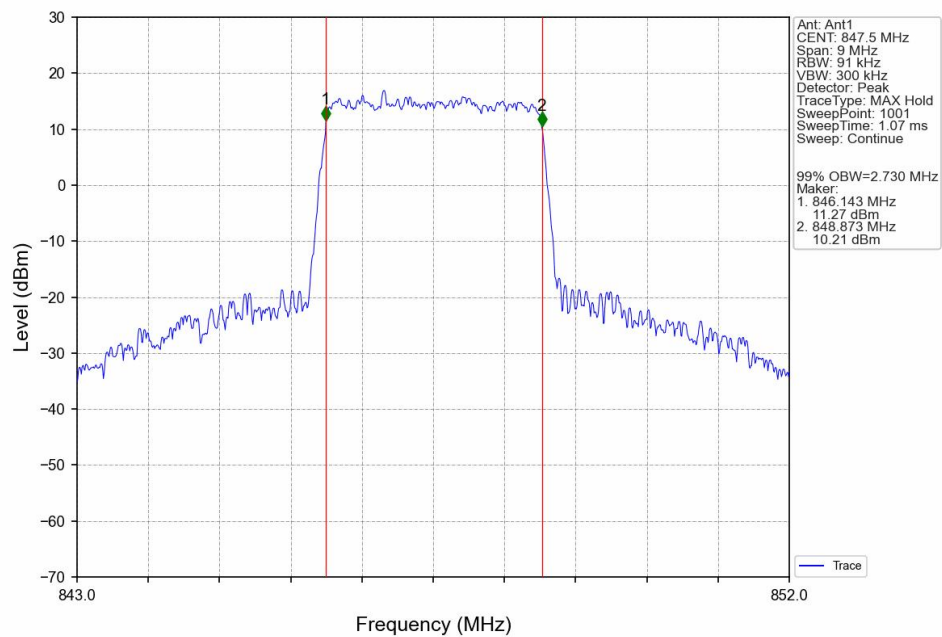
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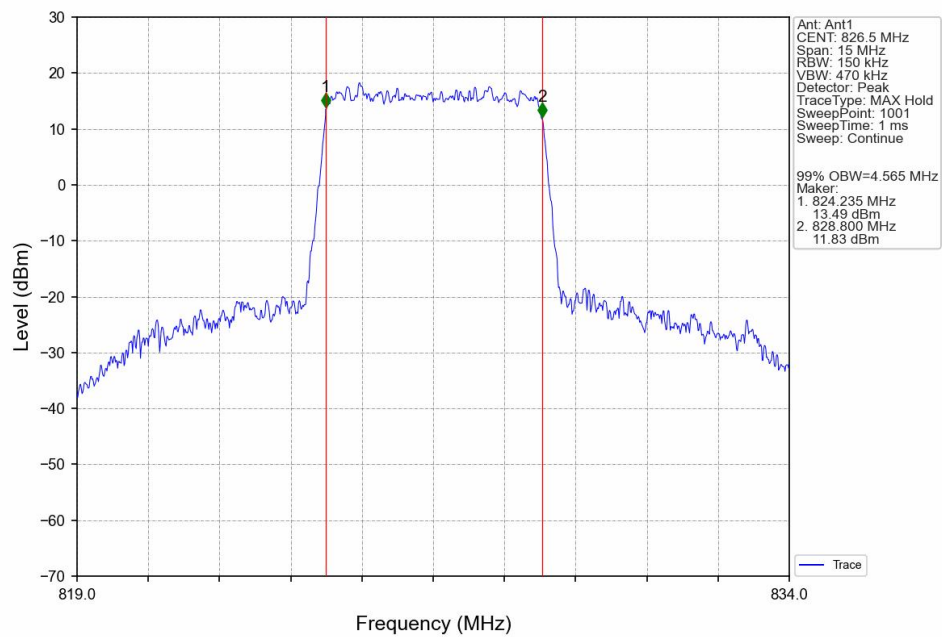
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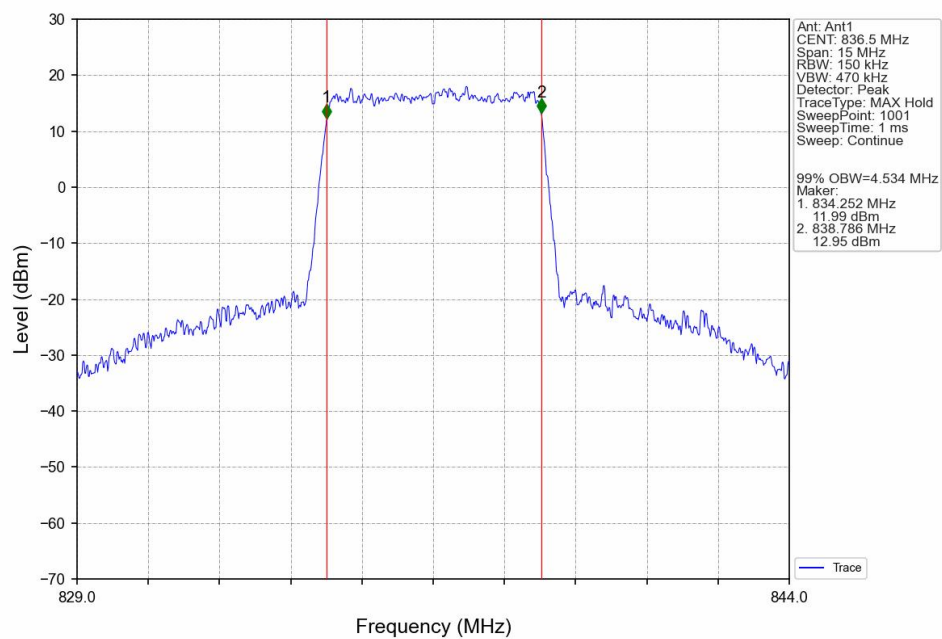
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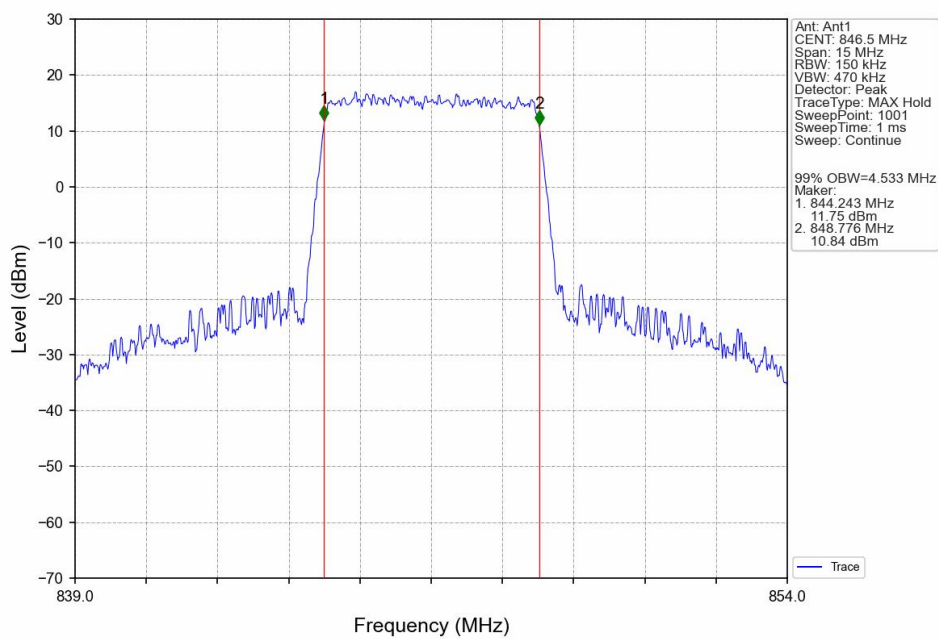
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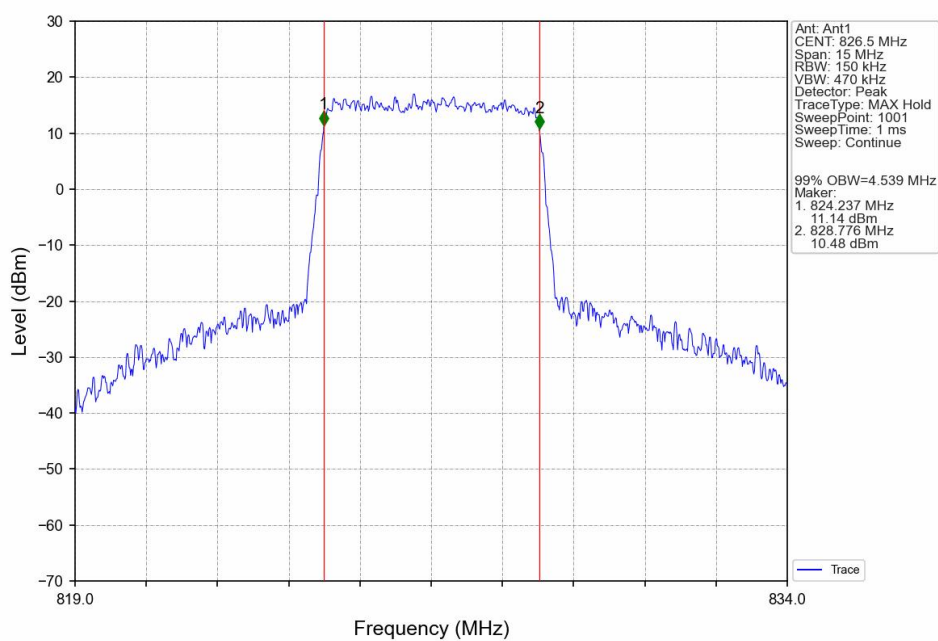
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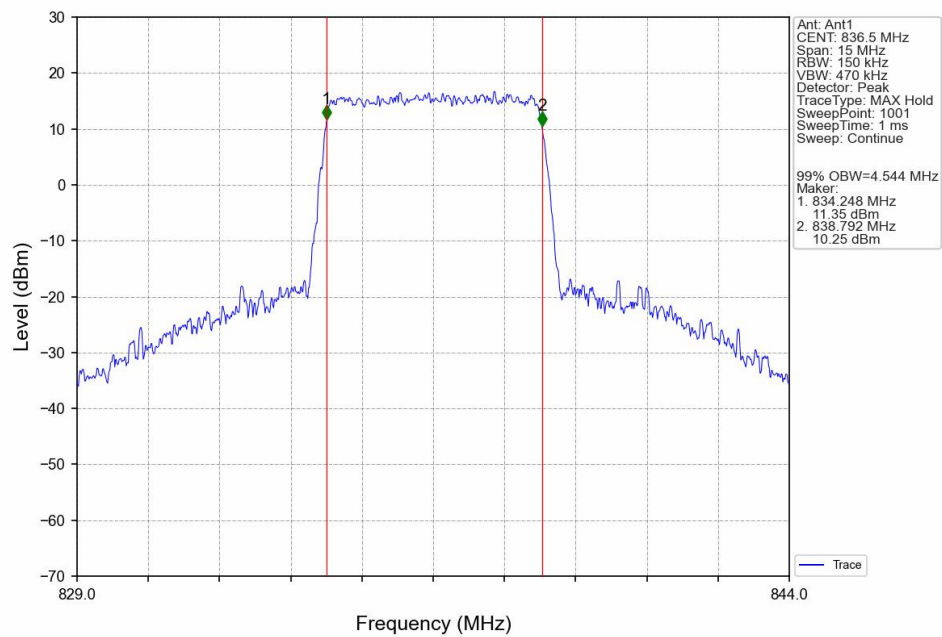
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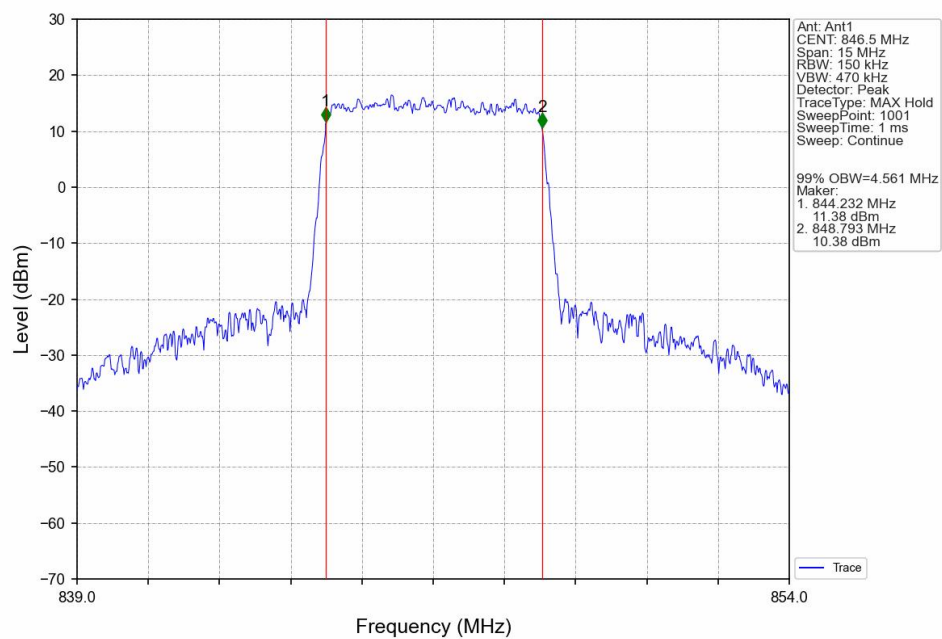
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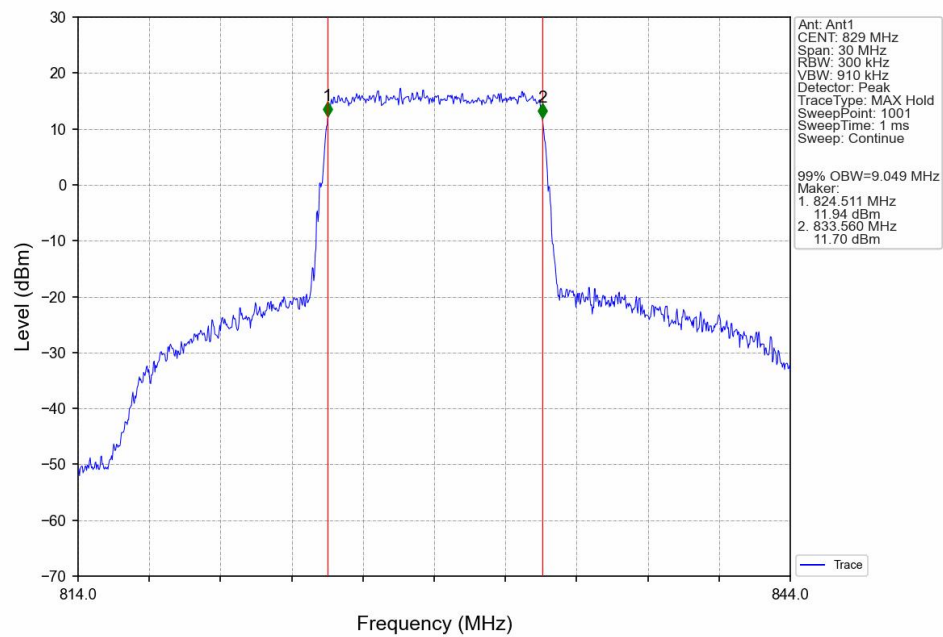
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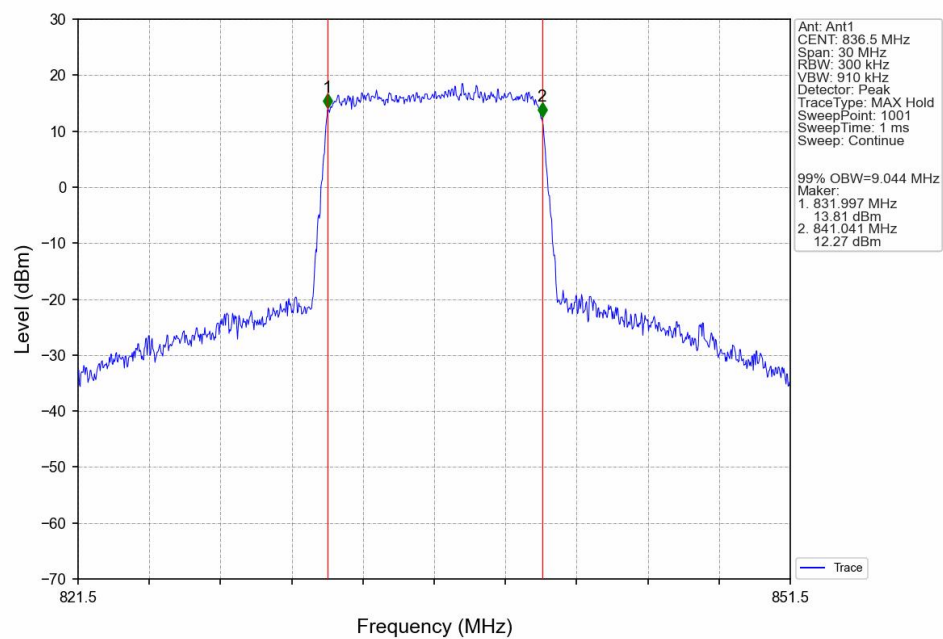
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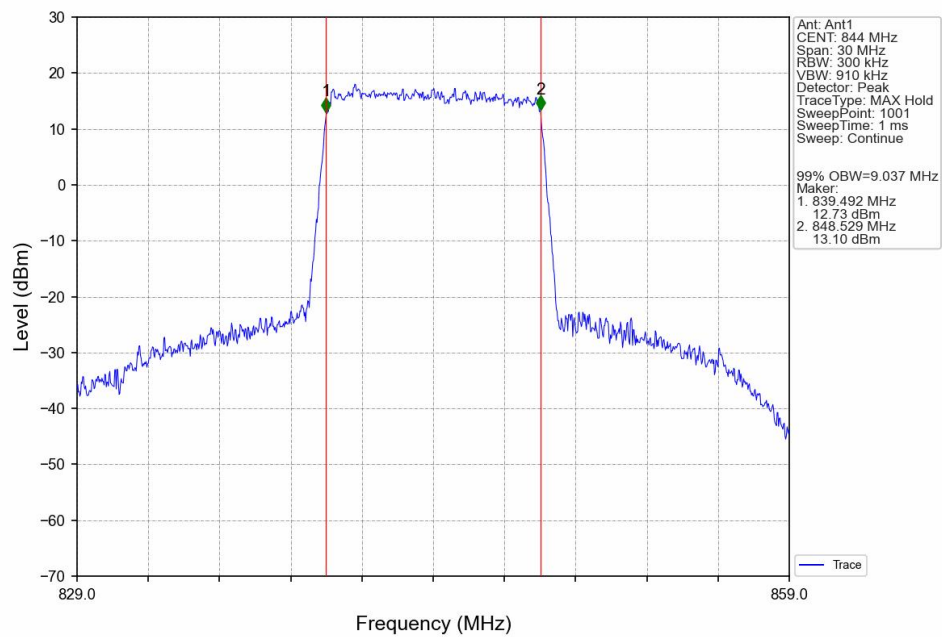
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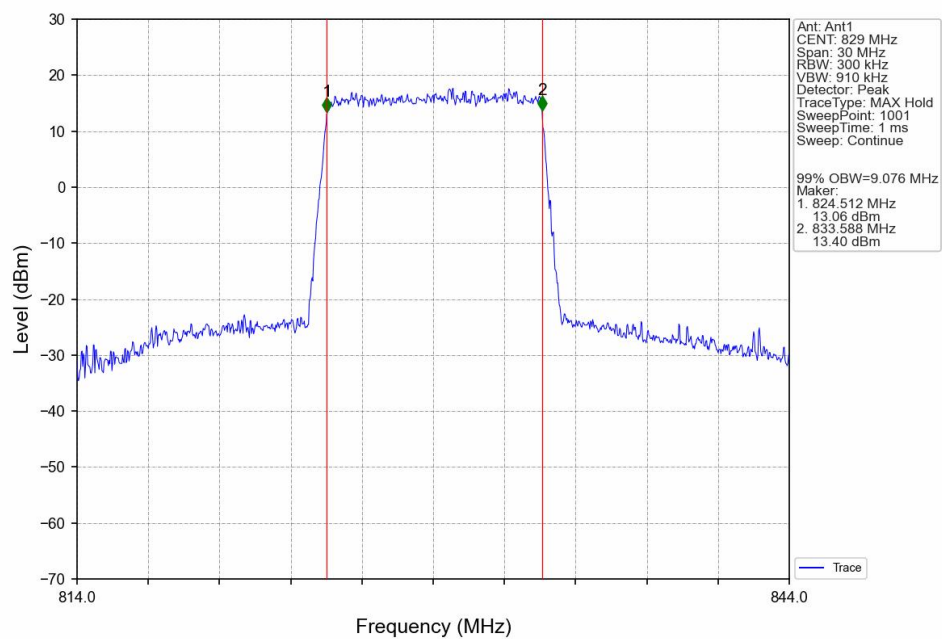
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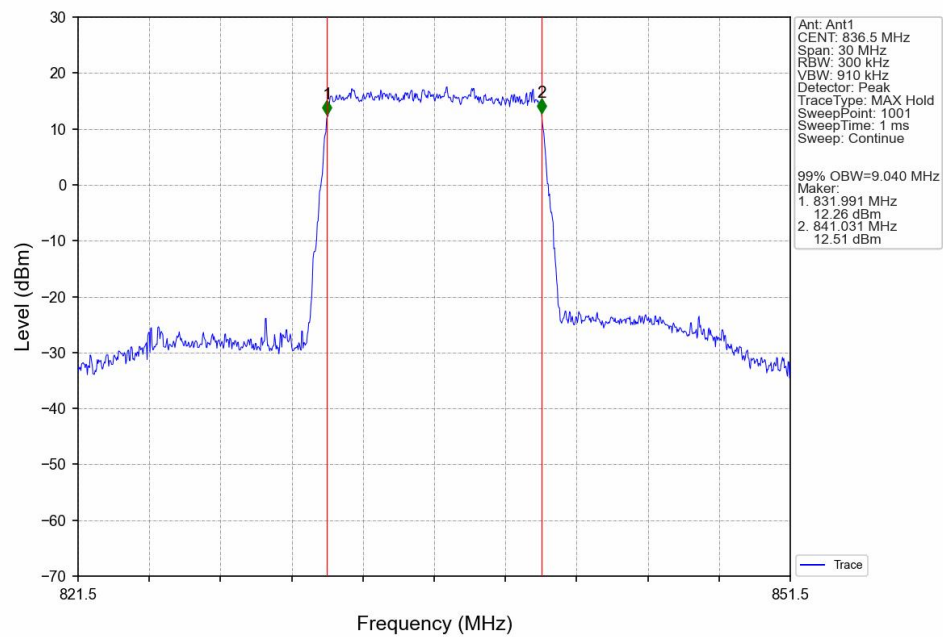
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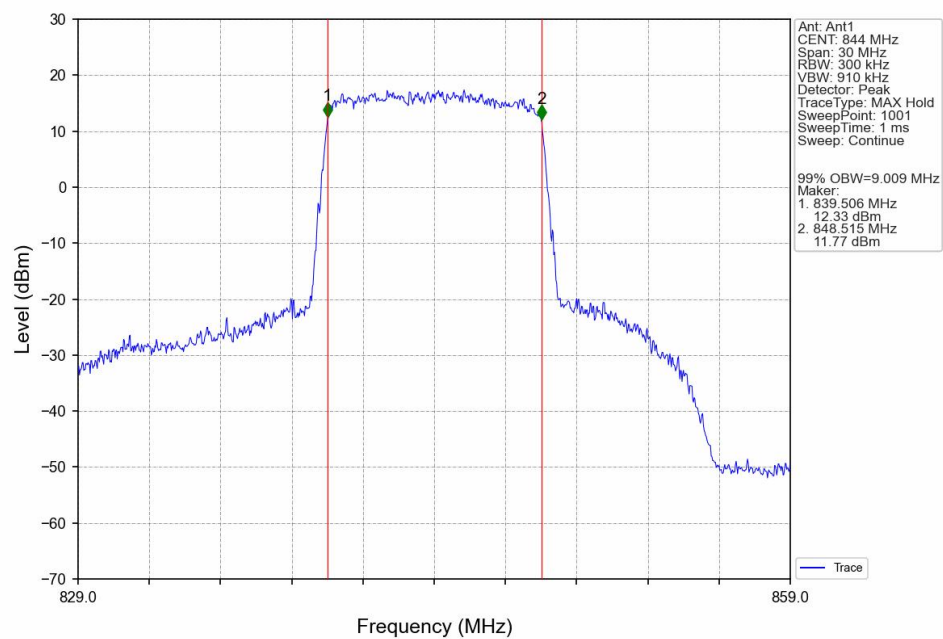
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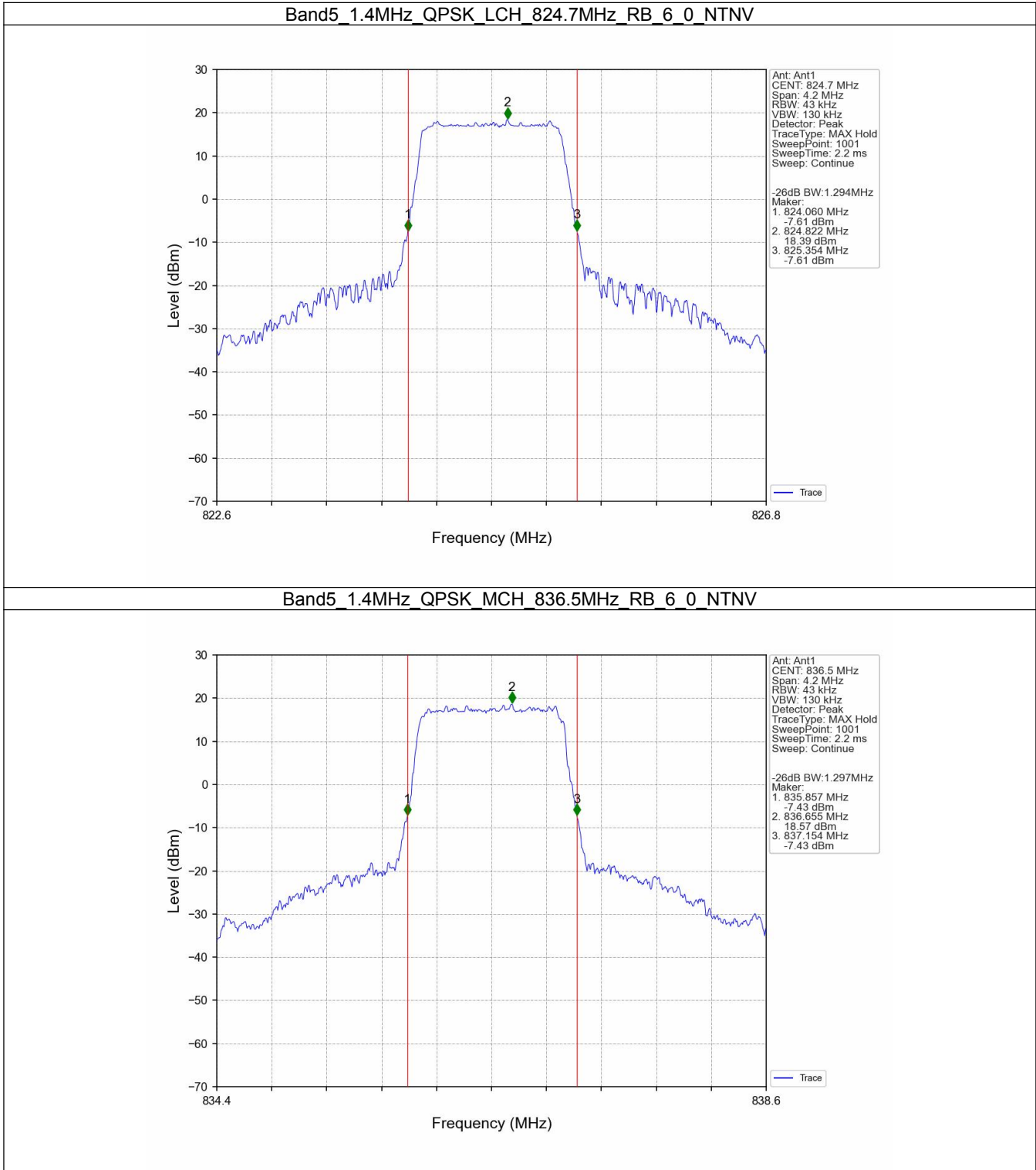
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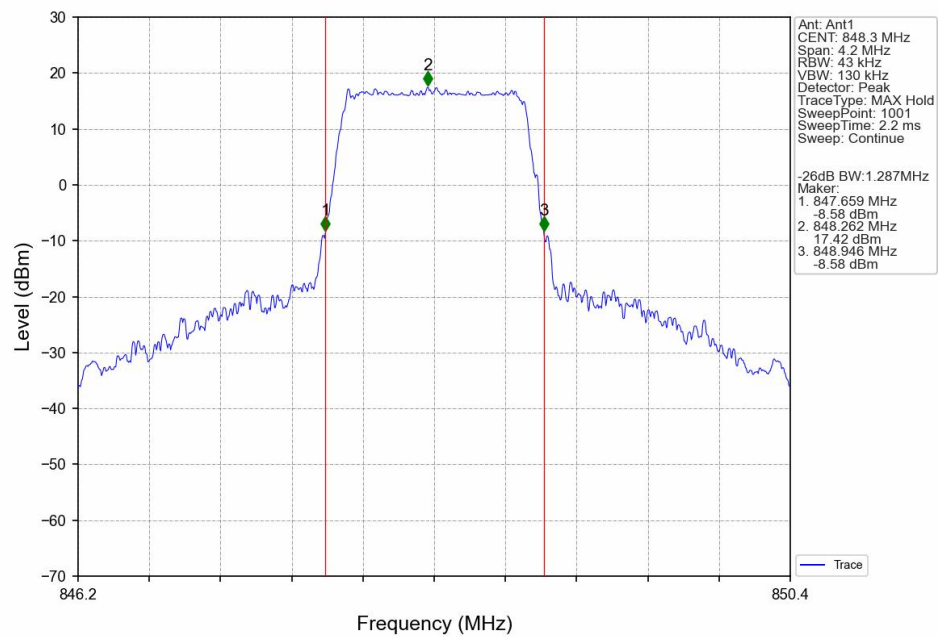
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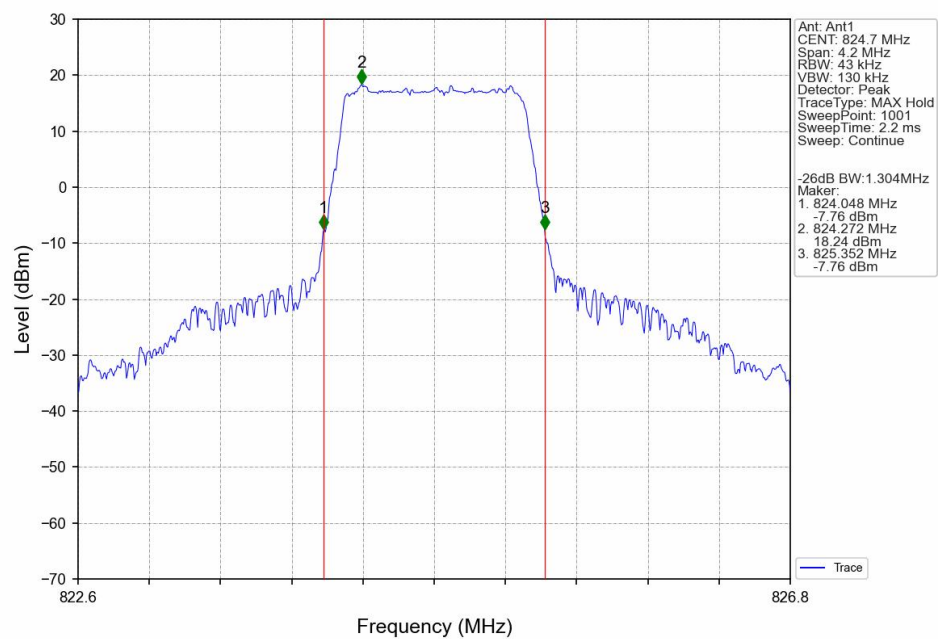
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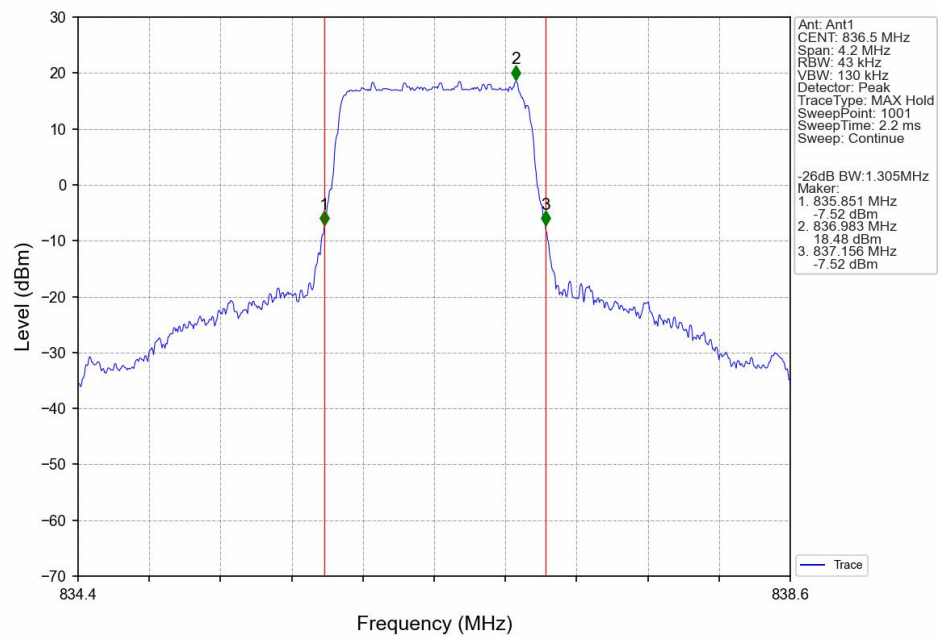
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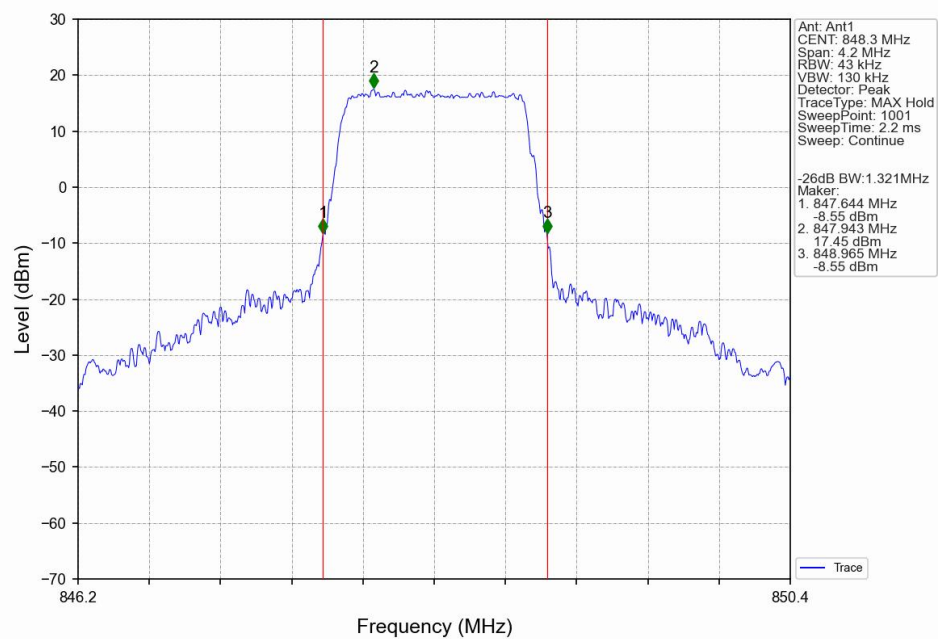
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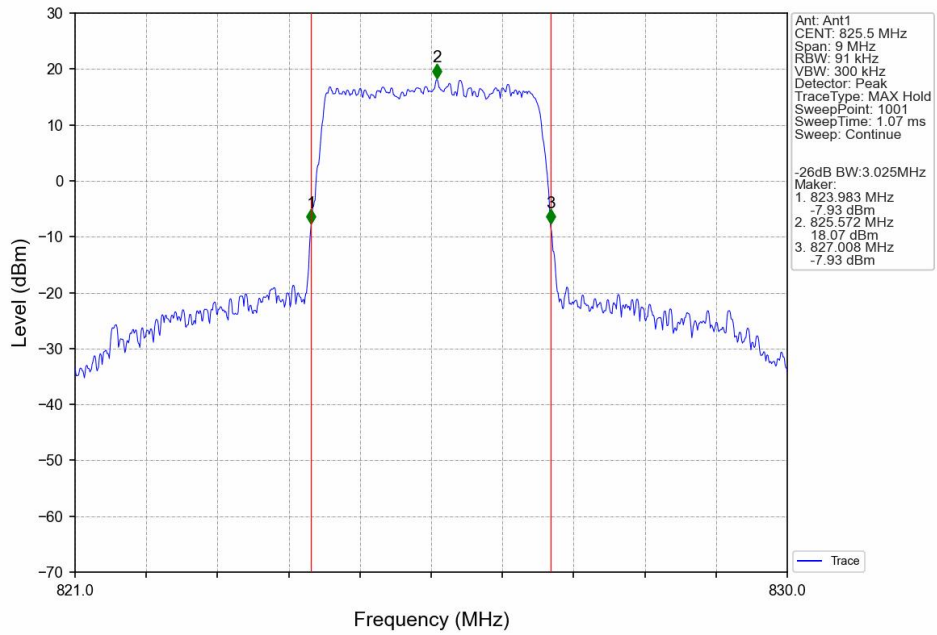
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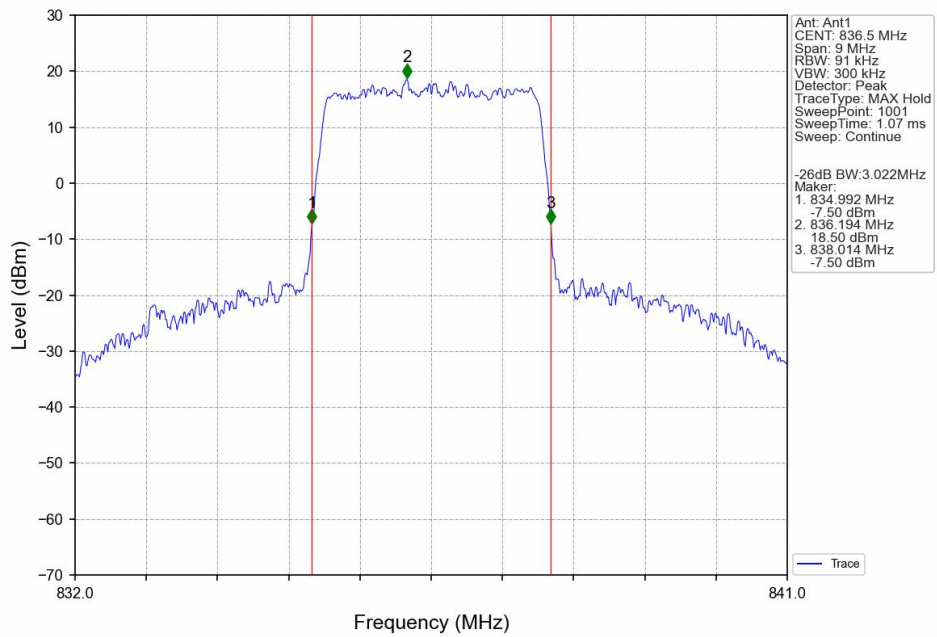
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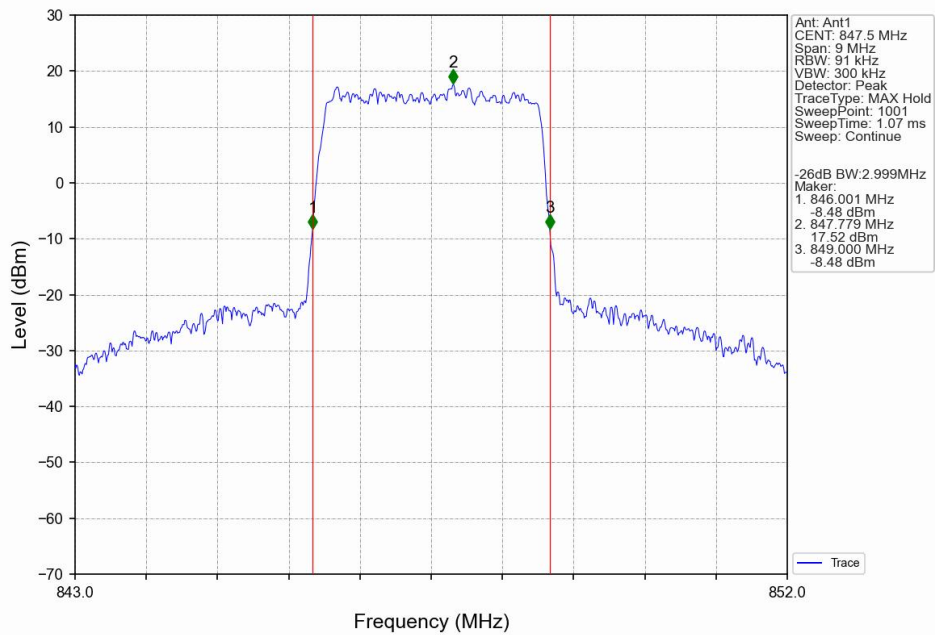
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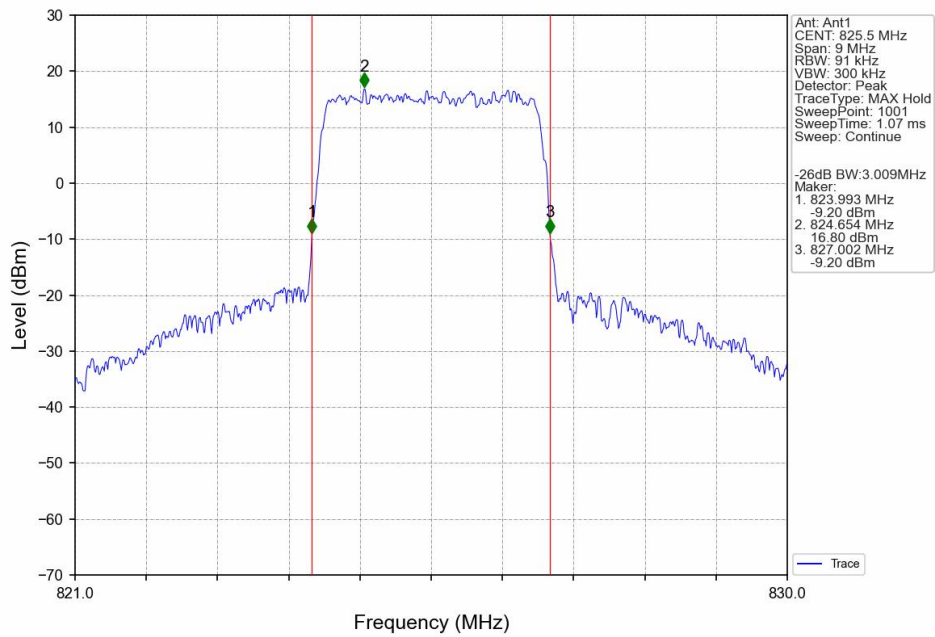
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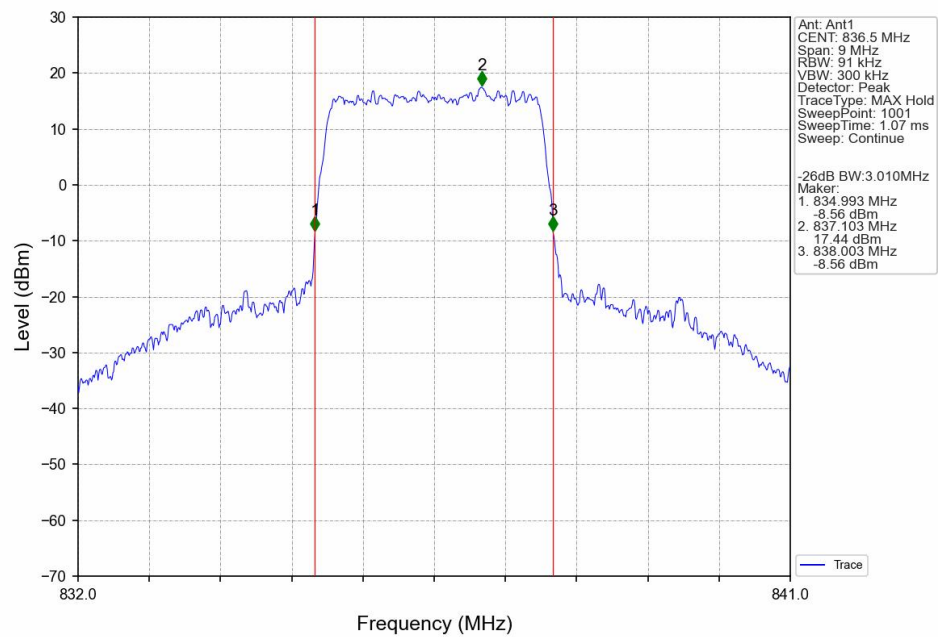
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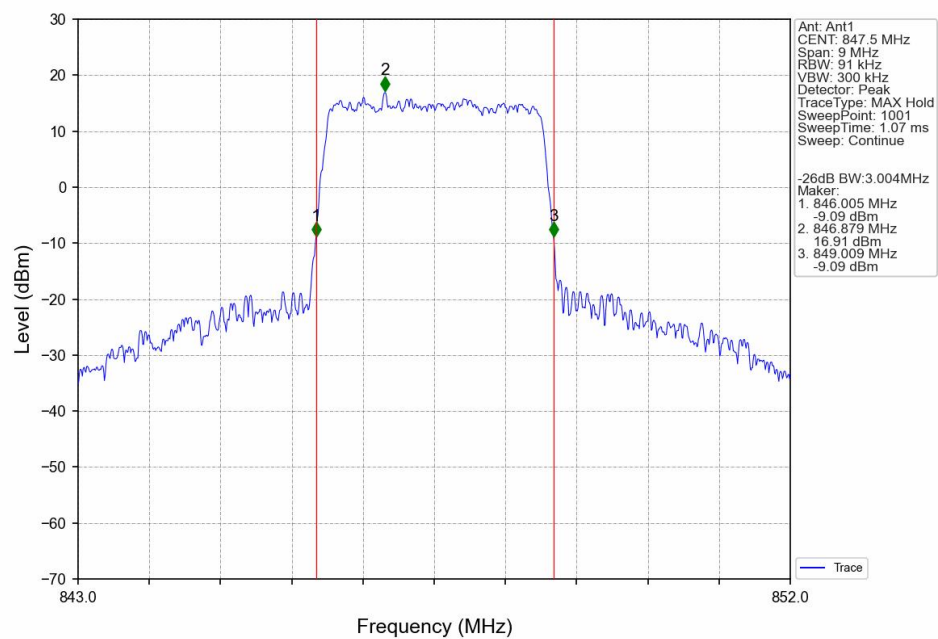
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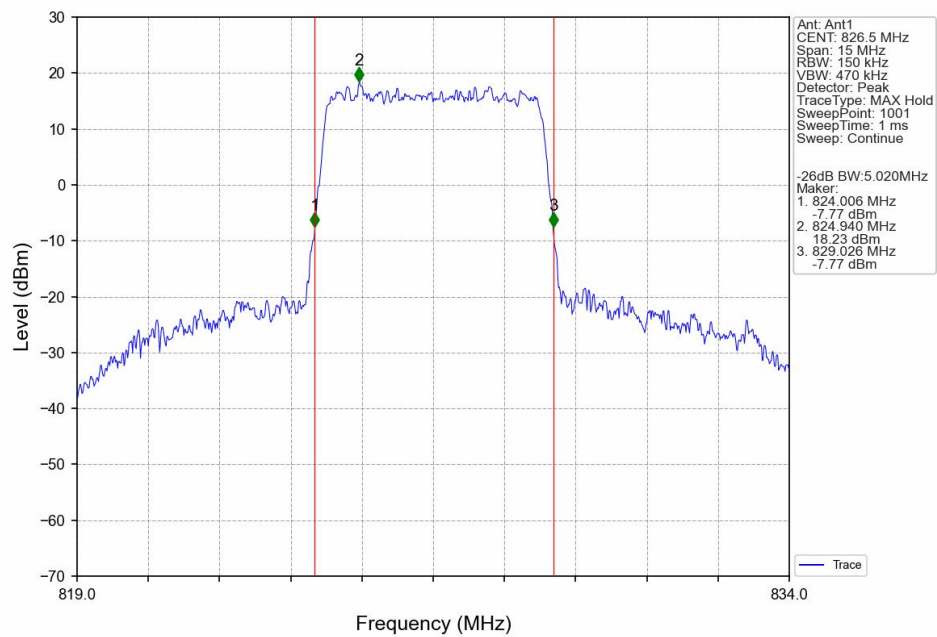
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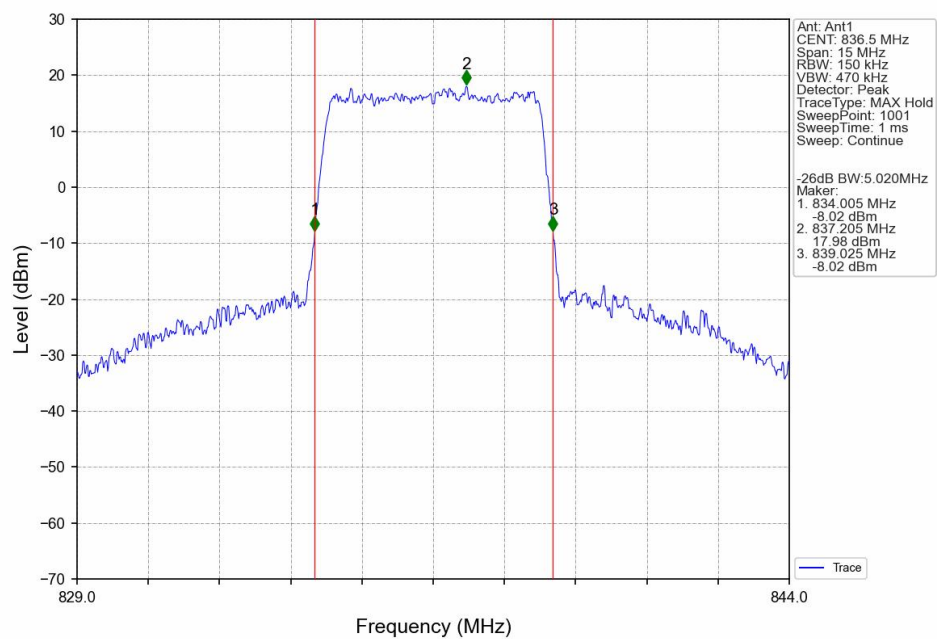
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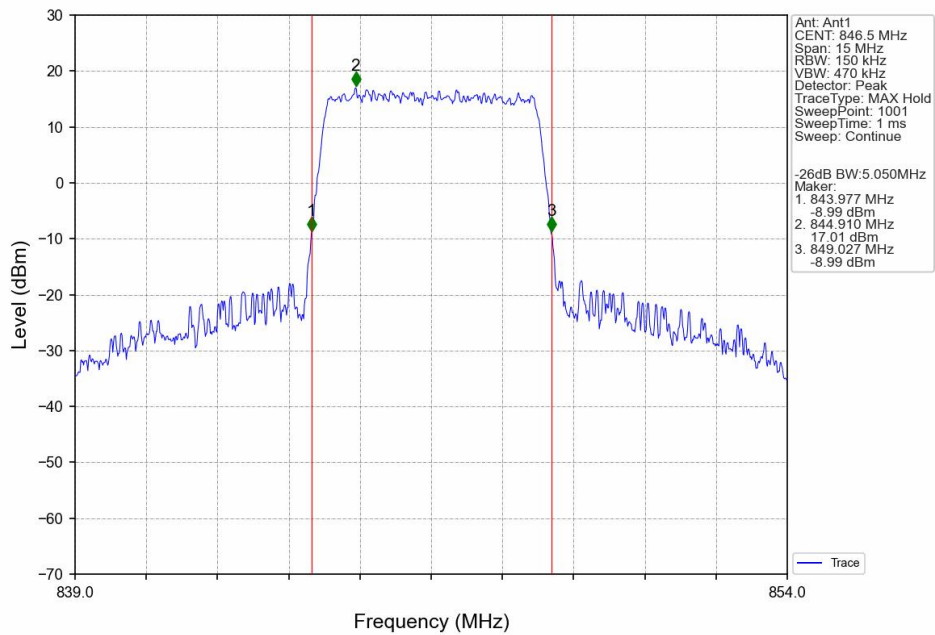
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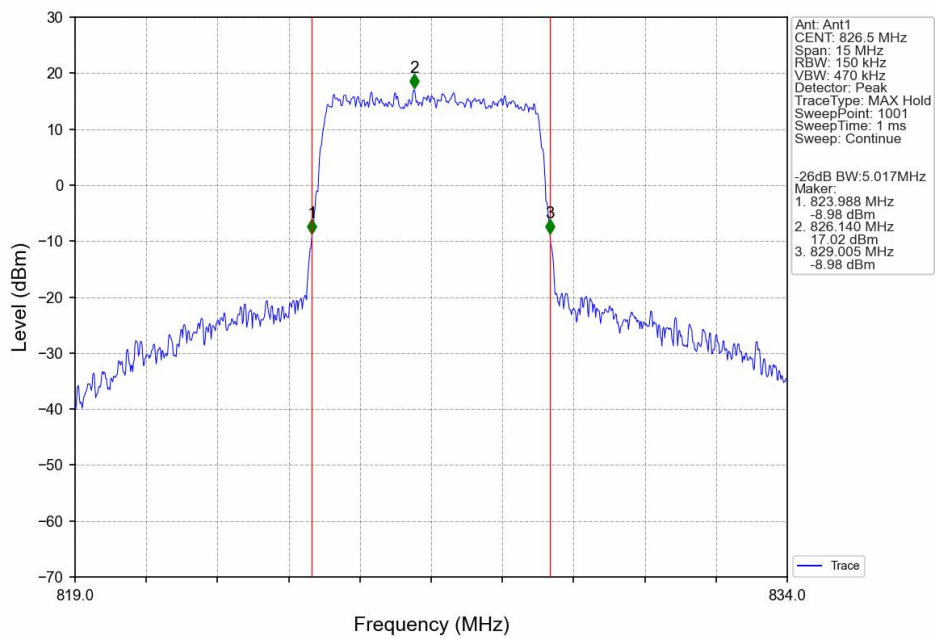
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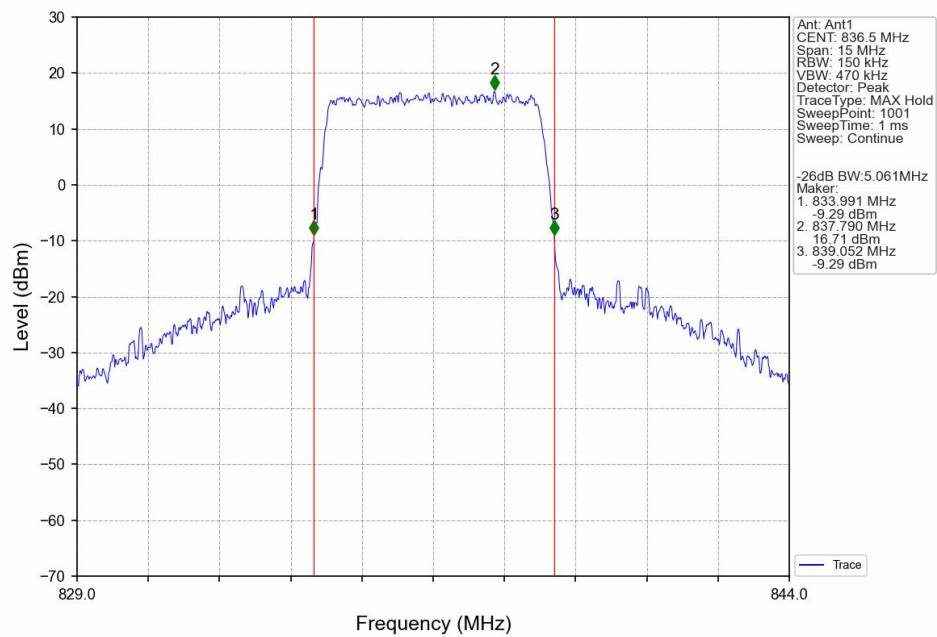
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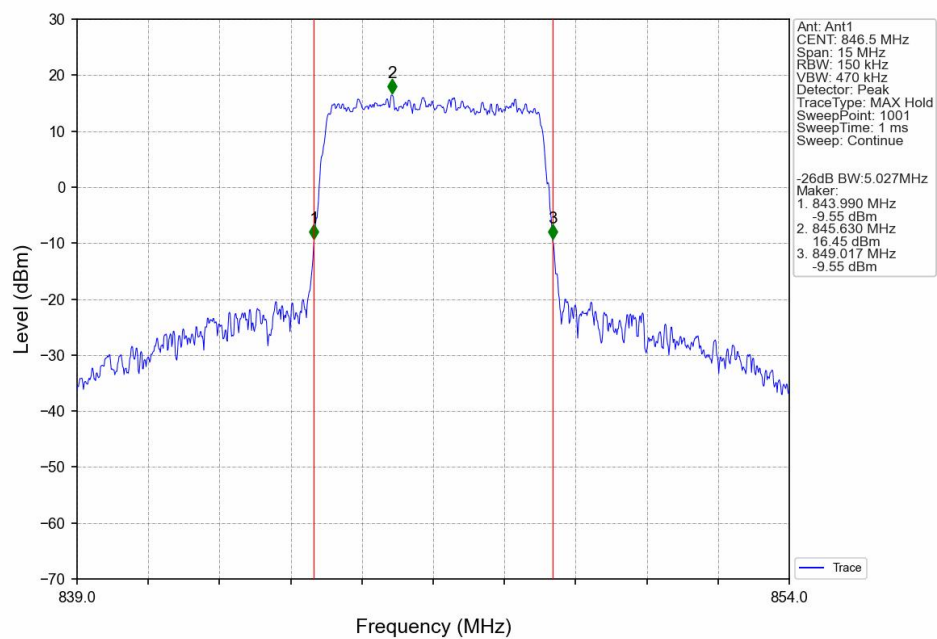
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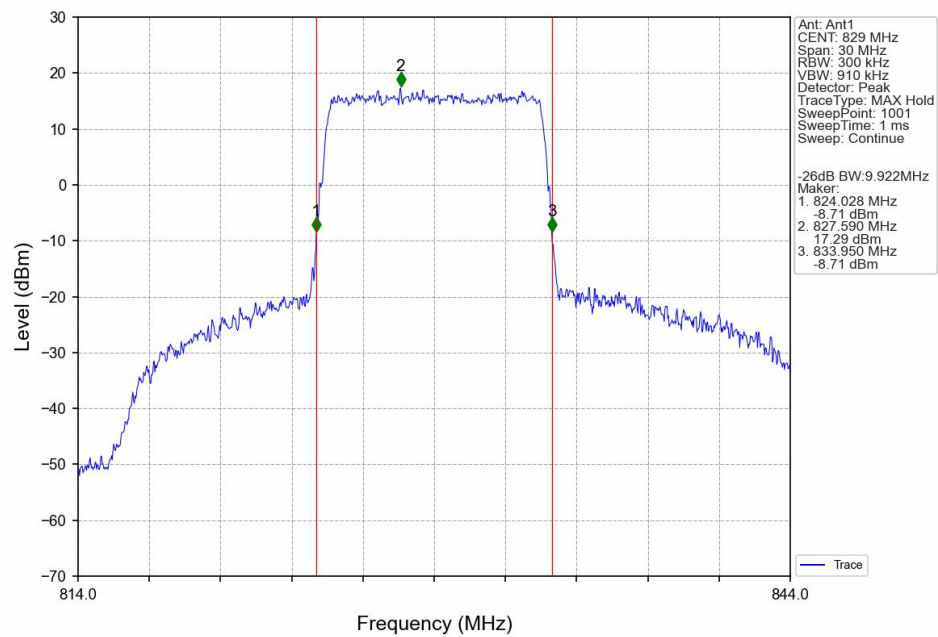
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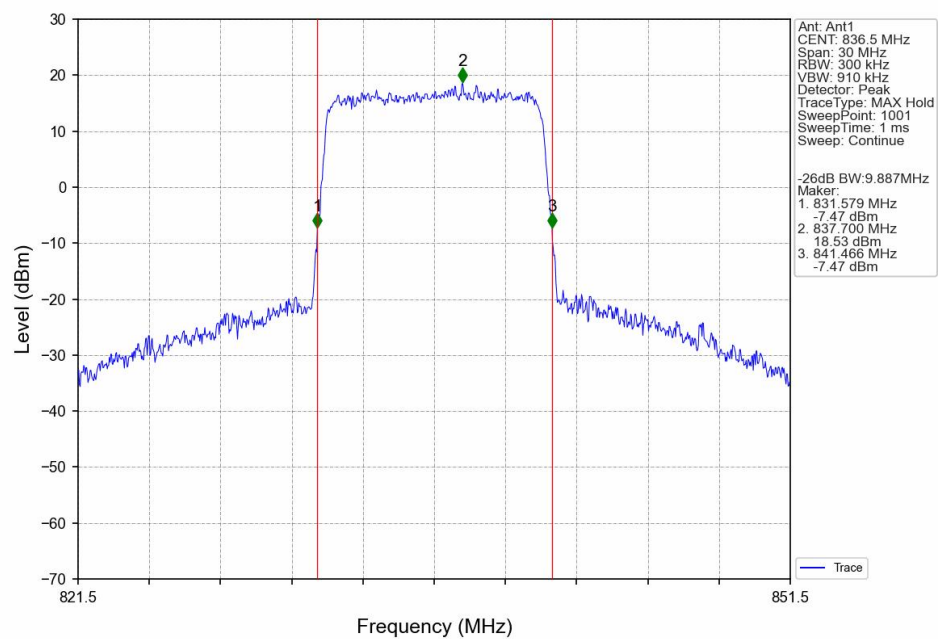
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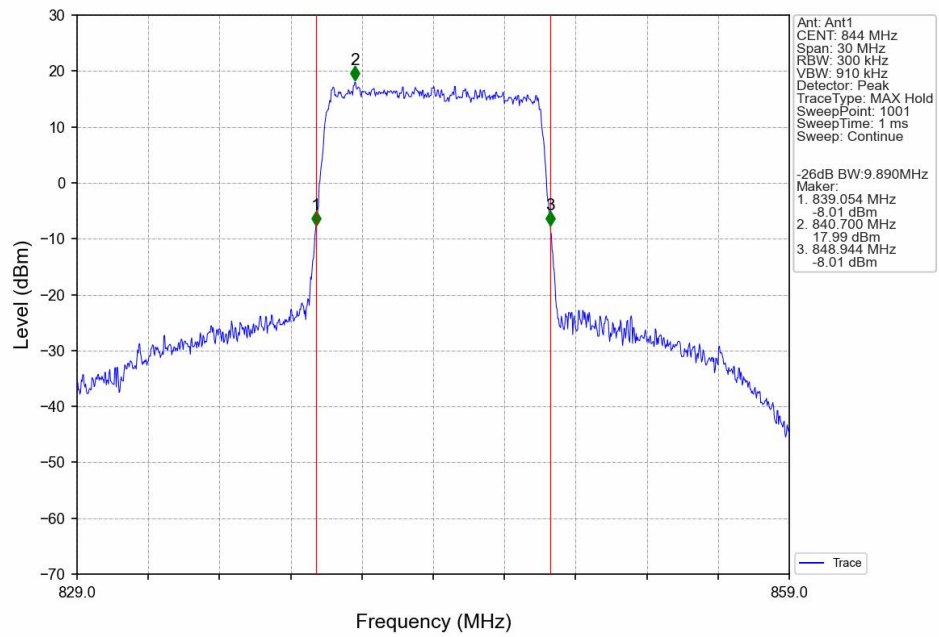
Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV



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

