

Appendix RF test data for 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	23.82	1.90	23.57	<=38.45	Pass
			2	23.88	1.90	23.63	<=38.45	Pass
			5	23.83	1.90	23.58	<=38.45	Pass
		3	0	23.91	1.90	23.66	<=38.45	Pass
			2	23.90	1.90	23.65	<=38.45	Pass
			3	23.89	1.90	23.64	<=38.45	Pass
		6	0	22.85	1.90	22.60	<=38.45	Pass
	836.5	1	0	23.80	1.90	23.55	<=38.45	Pass
			2	23.86	1.90	23.61	<=38.45	Pass
			5	23.77	1.90	23.52	<=38.45	Pass
		3	0	23.82	1.90	23.57	<=38.45	Pass
			2	23.91	1.90	23.66	<=38.45	Pass
			3	23.86	1.90	23.61	<=38.45	Pass
		6	0	22.86	1.90	22.61	<=38.45	Pass
	848.3	1	0	23.67	1.90	23.42	<=38.45	Pass
			2	23.66	1.90	23.41	<=38.45	Pass
			5	23.71	1.90	23.46	<=38.45	Pass
		3	0	23.79	1.90	23.54	<=38.45	Pass
			2	23.78	1.90	23.53	<=38.45	Pass
			3	23.78	1.90	23.53	<=38.45	Pass
		6	0	22.75	1.90	22.50	<=38.45	Pass
16QAM	824.7	1	0	22.88	1.90	22.63	<=38.45	Pass
			2	22.91	1.90	22.66	<=38.45	Pass
			5	22.90	1.90	22.65	<=38.45	Pass
		3	0	22.90	1.90	22.65	<=38.45	Pass
			2	22.86	1.90	22.61	<=38.45	Pass
			3	22.87	1.90	22.62	<=38.45	Pass
		6	0	21.75	1.90	21.50	<=38.45	Pass
	836.5	1	0	23.00	1.90	22.75	<=38.45	Pass
			2	23.04	1.90	22.79	<=38.45	Pass
			5	23.01	1.90	22.76	<=38.45	Pass
		3	0	22.81	1.90	22.56	<=38.45	Pass
			2	22.86	1.90	22.61	<=38.45	Pass
			3	22.85	1.90	22.60	<=38.45	Pass
		6	0	21.89	1.90	21.64	<=38.45	Pass
	848.3	1	0	22.75	1.90	22.50	<=38.45	Pass
			2	22.74	1.90	22.49	<=38.45	Pass
			5	22.79	1.90	22.54	<=38.45	Pass
		3	0	22.94	1.90	22.69	<=38.45	Pass
			2	22.97	1.90	22.72	<=38.45	Pass
			3	23.00	1.90	22.75	<=38.45	Pass
		6	0	21.71	1.90	21.46	<=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	23.92	1.90	23.67	<=38.45	Pass
			7	23.93	1.90	23.68	<=38.45	Pass
			14	23.93	1.90	23.68	<=38.45	Pass
		8	0	22.81	1.90	22.56	<=38.45	Pass
			4	22.83	1.90	22.58	<=38.45	Pass
			7	22.83	1.90	22.58	<=38.45	Pass
		15	0	22.82	1.90	22.57	<=38.45	Pass
	836.5	1	0	23.83	1.90	23.58	<=38.45	Pass
			7	23.89	1.90	23.64	<=38.45	Pass
			14	23.87	1.90	23.62	<=38.45	Pass
		8	0	22.85	1.90	22.60	<=38.45	Pass
			4	22.83	1.90	22.58	<=38.45	Pass
			7	22.89	1.90	22.64	<=38.45	Pass
		15	0	22.88	1.90	22.63	<=38.45	Pass
	847.5	1	0	23.67	1.90	23.42	<=38.45	Pass
			7	23.72	1.90	23.47	<=38.45	Pass
			14	23.71	1.90	23.46	<=38.45	Pass
		8	0	22.76	1.90	22.51	<=38.45	Pass
			4	22.76	1.90	22.51	<=38.45	Pass
			7	22.75	1.90	22.50	<=38.45	Pass
		15	0	22.77	1.90	22.52	<=38.45	Pass
16QAM	825.5	1	0	23.37	1.90	23.12	<=38.45	Pass
			7	23.36	1.90	23.11	<=38.45	Pass
			14	23.38	1.90	23.13	<=38.45	Pass
		8	0	22.02	1.90	21.77	<=38.45	Pass
			4	22.04	1.90	21.79	<=38.45	Pass
			7	22.03	1.90	21.78	<=38.45	Pass
		15	0	21.91	1.90	21.66	<=38.45	Pass
	836.5	1	0	22.88	1.90	22.63	<=38.45	Pass
			7	22.97	1.90	22.72	<=38.45	Pass
			14	22.91	1.90	22.66	<=38.45	Pass
		8	0	21.91	1.90	21.66	<=38.45	Pass
			4	21.90	1.90	21.65	<=38.45	Pass
			7	21.92	1.90	21.67	<=38.45	Pass
		15	0	21.91	1.90	21.66	<=38.45	Pass
	847.5	1	0	22.92	1.90	22.67	<=38.45	Pass
			7	22.93	1.90	22.68	<=38.45	Pass
			14	22.92	1.90	22.67	<=38.45	Pass
		8	0	21.73	1.90	21.48	<=38.45	Pass
			4	21.73	1.90	21.48	<=38.45	Pass
			7	21.73	1.90	21.48	<=38.45	Pass
		15	0	21.73	1.90	21.48	<=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	23.92	1.90	23.67	<=38.45	Pass
			13	23.90	1.90	23.65	<=38.45	Pass
			24	23.92	1.90	23.67	<=38.45	Pass



		12	0	22.82	1.90	22.57	<=38.45	Pass			
			6	22.85	1.90	22.60	<=38.45	Pass			
			13	22.83	1.90	22.58	<=38.45	Pass			
		25	0	22.86	1.90	22.61	<=38.45	Pass			
			836.5	1	0	23.82	1.90	23.57	<=38.45	Pass	
					13	23.81	1.90	23.56	<=38.45	Pass	
		24			23.86	1.90	23.61	<=38.45	Pass		
		12		0	22.80	1.90	22.55	<=38.45	Pass		
				6	22.83	1.90	22.58	<=38.45	Pass		
				13	22.83	1.90	22.58	<=38.45	Pass		
		25	0	22.81	1.90	22.56	<=38.45	Pass			
		846.5	1	0	24.03	1.90	23.78	<=38.45	Pass		
	13			23.91	1.90	23.66	<=38.45	Pass			
	24			24.00	1.90	23.75	<=38.45	Pass			
	12		0	22.78	1.90	22.53	<=38.45	Pass			
			6	22.77	1.90	22.52	<=38.45	Pass			
			13	22.73	1.90	22.48	<=38.45	Pass			
	25		0	22.75	1.90	22.50	<=38.45	Pass			
			16QAM	826.5	1	0	22.96	1.90	22.71	<=38.45	Pass
						13	22.94	1.90	22.69	<=38.45	Pass
	24	22.94				1.90	22.69	<=38.45	Pass		
	12	0			21.84	1.90	21.59	<=38.45	Pass		
		6			21.84	1.90	21.59	<=38.45	Pass		
		13			21.81	1.90	21.56	<=38.45	Pass		
25	0	21.88			1.90	21.63	<=38.45	Pass			
836.5	1	0			23.09	1.90	22.84	<=38.45	Pass		
		13			23.08	1.90	22.83	<=38.45	Pass		
		24		23.08	1.90	22.83	<=38.45	Pass			
	12	0		21.83	1.90	21.58	<=38.45	Pass			
		6		21.83	1.90	21.58	<=38.45	Pass			
		13		21.89	1.90	21.64	<=38.45	Pass			
	25	0		21.83	1.90	21.58	<=38.45	Pass			
846.5	1	0		22.64	1.90	22.39	<=38.45	Pass			
		13		22.61	1.90	22.36	<=38.45	Pass			
		24		22.70	1.90	22.45	<=38.45	Pass			
	12	0		21.79	1.90	21.54	<=38.45	Pass			
		6		21.75	1.90	21.50	<=38.45	Pass			
		13		21.71	1.90	21.46	<=38.45	Pass			
	25	0		21.79	1.90	21.54	<=38.45	Pass			
	Note1: ERP=Conducted Power+Antenna Gain-2.15										

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	23.84	1.90	23.59	<=38.45	Pass
			25	23.83	1.90	23.58	<=38.45	Pass
			49	23.84	1.90	23.59	<=38.45	Pass
		25	0	22.82	1.90	22.57	<=38.45	Pass
			13	22.83	1.90	22.58	<=38.45	Pass
			25	22.88	1.90	22.63	<=38.45	Pass
		50	0	22.89	1.90	22.64	<=38.45	Pass
			0	23.80	1.90	23.55	<=38.45	Pass
			25	23.83	1.90	23.58	<=38.45	Pass
	836.5	1	49	23.78	1.90	23.53	<=38.45	Pass
			0	22.75	1.90	22.50	<=38.45	Pass
			13	22.80	1.90	22.55	<=38.45	Pass
		25	0	22.75	1.90	22.50	<=38.45	Pass
			13	22.80	1.90	22.55	<=38.45	Pass



			25	22.84	1.90	22.59	<=38.45	Pass
		50	0	22.88	1.90	22.63	<=38.45	Pass
	844	1	0	23.83	1.90	23.58	<=38.45	Pass
			25	23.79	1.90	23.54	<=38.45	Pass
			49	23.81	1.90	23.56	<=38.45	Pass
			0	22.79	1.90	22.54	<=38.45	Pass
		25	13	22.77	1.90	22.52	<=38.45	Pass
			25	22.73	1.90	22.48	<=38.45	Pass
		50	0	22.82	1.90	22.57	<=38.45	Pass
16QAM	829	1	0	22.86	1.90	22.61	<=38.45	Pass
			25	22.84	1.90	22.59	<=38.45	Pass
			49	22.83	1.90	22.58	<=38.45	Pass
		12	0	22.89	1.90	22.64	<=38.45	Pass
			19	22.87	1.90	22.62	<=38.45	Pass
			38	22.90	1.90	22.65	<=38.45	Pass
			27	0	21.83	1.90	21.58	<=38.45
	836.5	1	0	22.98	1.90	22.73	<=38.45	Pass
			25	23.01	1.90	22.76	<=38.45	Pass
			49	22.96	1.90	22.71	<=38.45	Pass
		12	0	22.84	1.90	22.59	<=38.45	Pass
			19	22.86	1.90	22.61	<=38.45	Pass
			38	22.82	1.90	22.57	<=38.45	Pass
	27	0	21.80	1.90	21.55	<=38.45	Pass	
	844	1	0	23.30	1.90	23.05	<=38.45	Pass
			25	23.24	1.90	22.99	<=38.45	Pass
			49	23.28	1.90	23.03	<=38.45	Pass
		12	0	22.88	1.90	22.63	<=38.45	Pass
			19	22.84	1.90	22.59	<=38.45	Pass
			38	22.79	1.90	22.54	<=38.45	Pass
		27	23	21.67	1.90	21.42	<=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	3.27	0.372	0.0005	-2.5 to 2.5	Pass
					3.85	-1.259	-0.0015	-2.5 to 2.5	Pass
					4.43	0.172	0.0002	-2.5 to 2.5	Pass
				-30	3.85	-0.644	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	0.200	0.0002	-2.5 to 2.5	Pass
				-10	3.85	2.003	0.0024	-2.5 to 2.5	Pass
				0	3.85	1.745	0.0021	-2.5 to 2.5	Pass
				10	3.85	-3.691	-0.0045	-2.5 to 2.5	Pass
				30	3.85	-1.831	-0.0022	-2.5 to 2.5	Pass
				40	3.85	-0.272	-0.0003	-2.5 to 2.5	Pass
	50	3.85	-1.917	-0.0023	-2.5 to 2.5	Pass			
	836.5	6	0	20	3.27	1.760	0.0021	-2.5 to 2.5	Pass
					3.85	1.860	0.0022	-2.5 to 2.5	Pass
					4.43	0.029	0.0000	-2.5 to 2.5	Pass
				-30	3.85	2.060	0.0025	-2.5 to 2.5	Pass



				-20	3.85	-0.057	-0.0001	-2.5 to 2.5	Pass
				-10	3.85	0.172	0.0002	-2.5 to 2.5	Pass
				0	3.85	-0.601	-0.0007	-2.5 to 2.5	Pass
				10	3.85	-0.658	-0.0008	-2.5 to 2.5	Pass
				30	3.85	-0.114	-0.0001	-2.5 to 2.5	Pass
				40	3.85	-2.961	-0.0035	-2.5 to 2.5	Pass
				50	3.85	-3.262	-0.0039	-2.5 to 2.5	Pass
	848.3	6	0	20	3.27	-3.405	-0.0040	-2.5 to 2.5	Pass
					3.85	-4.492	-0.0053	-2.5 to 2.5	Pass
					4.43	0.129	0.0002	-2.5 to 2.5	Pass
				-30	3.85	-2.260	-0.0027	-2.5 to 2.5	Pass
				-20	3.85	-0.672	-0.0008	-2.5 to 2.5	Pass
				-10	3.85	-1.831	-0.0022	-2.5 to 2.5	Pass
				0	3.85	-2.518	-0.0030	-2.5 to 2.5	Pass
				10	3.85	-3.304	-0.0039	-2.5 to 2.5	Pass
				30	3.85	-3.133	-0.0037	-2.5 to 2.5	Pass
				40	3.85	-2.704	-0.0032	-2.5 to 2.5	Pass
				50	3.85	0.358	0.0004	-2.5 to 2.5	Pass
16QAM	824.7	6	0	20	3.27	0.129	0.0002	-2.5 to 2.5	Pass
					3.85	-2.904	-0.0035	-2.5 to 2.5	Pass
					4.43	-0.329	-0.0004	-2.5 to 2.5	Pass
				-30	3.85	-4.263	-0.0052	-2.5 to 2.5	Pass
				-20	3.85	-1.802	-0.0022	-2.5 to 2.5	Pass
				-10	3.85	0.443	0.0005	-2.5 to 2.5	Pass
				0	3.85	2.174	0.0026	-2.5 to 2.5	Pass
				10	3.85	-0.329	-0.0004	-2.5 to 2.5	Pass
				30	3.85	-0.858	-0.0010	-2.5 to 2.5	Pass
				40	3.85	0.186	0.0002	-2.5 to 2.5	Pass
	836.5	6	0	20	3.27	2.260	0.0027	-2.5 to 2.5	Pass
					3.85	-2.961	-0.0035	-2.5 to 2.5	Pass
					4.43	-2.303	-0.0028	-2.5 to 2.5	Pass
				-30	3.85	-4.234	-0.0051	-2.5 to 2.5	Pass
				-20	3.85	-2.389	-0.0029	-2.5 to 2.5	Pass
				-10	3.85	-4.349	-0.0052	-2.5 to 2.5	Pass
				0	3.85	-2.003	-0.0024	-2.5 to 2.5	Pass
				10	3.85	-0.200	-0.0002	-2.5 to 2.5	Pass
				30	3.85	0.014	0.0000	-2.5 to 2.5	Pass
				40	3.85	0.215	0.0003	-2.5 to 2.5	Pass
	848.3	6	0	20	3.27	2.975	0.0035	-2.5 to 2.5	Pass
					3.85	-0.215	-0.0003	-2.5 to 2.5	Pass
					4.43	-0.129	-0.0002	-2.5 to 2.5	Pass
				-30	3.85	0.944	0.0011	-2.5 to 2.5	Pass
				-20	3.85	0.558	0.0007	-2.5 to 2.5	Pass
				-10	3.85	0.758	0.0009	-2.5 to 2.5	Pass
				0	3.85	1.631	0.0019	-2.5 to 2.5	Pass
				10	3.85	-4.134	-0.0049	-2.5 to 2.5	Pass
				30	3.85	-1.731	-0.0020	-2.5 to 2.5	Pass
				40	3.85	-0.372	-0.0004	-2.5 to 2.5	Pass
				50	3.85	-1.559	-0.0018	-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	3.27	-3.691	-0.0045	-2.5 to 2.5	Pass



					3.85	-2.890	-0.0035	-2.5 to 2.5	Pass
					4.43	-1.860	-0.0023	-2.5 to 2.5	Pass
				-30	3.85	-0.515	-0.0006	-2.5 to 2.5	Pass
				-20	3.85	-2.289	-0.0028	-2.5 to 2.5	Pass
				-10	3.85	-2.260	-0.0027	-2.5 to 2.5	Pass
				0	3.85	2.904	0.0035	-2.5 to 2.5	Pass
				10	3.85	-0.601	-0.0007	-2.5 to 2.5	Pass
				30	3.85	-0.672	-0.0008	-2.5 to 2.5	Pass
				40	3.85	-0.300	-0.0004	-2.5 to 2.5	Pass
				50	3.85	0.300	0.0004	-2.5 to 2.5	Pass
	836.5	15	0	20	3.27	0.772	0.0009	-2.5 to 2.5	Pass
					3.85	-0.801	-0.0010	-2.5 to 2.5	Pass
					4.43	-0.701	-0.0008	-2.5 to 2.5	Pass
				-30	3.85	-0.601	-0.0007	-2.5 to 2.5	Pass
				-20	3.85	-3.777	-0.0045	-2.5 to 2.5	Pass
				-10	3.85	-0.601	-0.0007	-2.5 to 2.5	Pass
				0	3.85	0.658	0.0008	-2.5 to 2.5	Pass
				10	3.85	-1.402	-0.0017	-2.5 to 2.5	Pass
				30	3.85	-1.602	-0.0019	-2.5 to 2.5	Pass
				40	3.85	-2.732	-0.0033	-2.5 to 2.5	Pass
				50	3.85	0.486	0.0006	-2.5 to 2.5	Pass
	847.5	15	0	20	3.27	0.844	0.0010	-2.5 to 2.5	Pass
					3.85	-2.646	-0.0031	-2.5 to 2.5	Pass
					4.43	-0.157	-0.0002	-2.5 to 2.5	Pass
				-30	3.85	-0.143	-0.0002	-2.5 to 2.5	Pass
				-20	3.85	-2.046	-0.0024	-2.5 to 2.5	Pass
				-10	3.85	-1.116	-0.0013	-2.5 to 2.5	Pass
				0	3.85	0.558	0.0007	-2.5 to 2.5	Pass
				10	3.85	-1.874	-0.0022	-2.5 to 2.5	Pass
				30	3.85	-2.060	-0.0024	-2.5 to 2.5	Pass
				40	3.85	-1.531	-0.0018	-2.5 to 2.5	Pass
16QAM	825.5	15	0	20	3.27	-0.157	-0.0002	-2.5 to 2.5	Pass
					3.85	-2.747	-0.0033	-2.5 to 2.5	Pass
					4.43	-0.916	-0.0011	-2.5 to 2.5	Pass
				-30	3.85	-2.246	-0.0027	-2.5 to 2.5	Pass
				-20	3.85	-2.446	-0.0030	-2.5 to 2.5	Pass
				-10	3.85	-1.087	-0.0013	-2.5 to 2.5	Pass
				0	3.85	-1.874	-0.0023	-2.5 to 2.5	Pass
				10	3.85	-0.544	-0.0007	-2.5 to 2.5	Pass
				30	3.85	-1.073	-0.0013	-2.5 to 2.5	Pass
				40	3.85	0.257	0.0003	-2.5 to 2.5	Pass
	836.5	15	0	20	3.27	-2.875	-0.0034	-2.5 to 2.5	Pass
					3.85	-1.388	-0.0017	-2.5 to 2.5	Pass
					4.43	-1.616	-0.0019	-2.5 to 2.5	Pass
				-30	3.85	0.458	0.0005	-2.5 to 2.5	Pass
				-20	3.85	-4.334	-0.0052	-2.5 to 2.5	Pass
				-10	3.85	1.073	0.0013	-2.5 to 2.5	Pass
				0	3.85	-0.014	0.0000	-2.5 to 2.5	Pass
				10	3.85	-2.818	-0.0034	-2.5 to 2.5	Pass
				30	3.85	-2.103	-0.0025	-2.5 to 2.5	Pass
				40	3.85	-0.701	-0.0008	-2.5 to 2.5	Pass
	847.5	15	0	20	3.27	-0.029	0.0000	-2.5 to 2.5	Pass
					3.85	-2.747	-0.0032	-2.5 to 2.5	Pass
					4.43	-2.074	-0.0024	-2.5 to 2.5	Pass
				-30	3.85	-0.615	-0.0007	-2.5 to 2.5	Pass
				-20	3.85	-1.602	-0.0019	-2.5 to 2.5	Pass



				-10	3.85	3.119	0.0037	-2.5 to 2.5	Pass
				0	3.85	-1.945	-0.0023	-2.5 to 2.5	Pass
				10	3.85	-2.775	-0.0033	-2.5 to 2.5	Pass
				30	3.85	0.486	0.0006	-2.5 to 2.5	Pass
				40	3.85	2.675	0.0032	-2.5 to 2.5	Pass
				50	3.85	-3.233	-0.0038	-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	3.27	-1.931	-0.0023	-2.5 to 2.5	Pass
					3.85	0.629	0.0008	-2.5 to 2.5	Pass
					4.43	-1.502	-0.0018	-2.5 to 2.5	Pass
				-30	3.85	0.572	0.0007	-2.5 to 2.5	Pass
				-20	3.85	-2.775	-0.0034	-2.5 to 2.5	Pass
				-10	3.85	-1.602	-0.0019	-2.5 to 2.5	Pass
				0	3.85	-0.744	-0.0009	-2.5 to 2.5	Pass
				10	3.85	-1.760	-0.0021	-2.5 to 2.5	Pass
				30	3.85	0.358	0.0004	-2.5 to 2.5	Pass
				40	3.85	-0.229	-0.0003	-2.5 to 2.5	Pass
				50	3.85	-1.302	-0.0016	-2.5 to 2.5	Pass
	836.5	25	0	20	3.27	-3.991	-0.0048	-2.5 to 2.5	Pass
					3.85	-1.044	-0.0012	-2.5 to 2.5	Pass
					4.43	-1.173	-0.0014	-2.5 to 2.5	Pass
				-30	3.85	-1.245	-0.0015	-2.5 to 2.5	Pass
				-20	3.85	-0.844	-0.0010	-2.5 to 2.5	Pass
				-10	3.85	-1.531	-0.0018	-2.5 to 2.5	Pass
				0	3.85	-1.116	-0.0013	-2.5 to 2.5	Pass
				10	3.85	-1.559	-0.0019	-2.5 to 2.5	Pass
				30	3.85	-2.360	-0.0028	-2.5 to 2.5	Pass
				40	3.85	-1.602	-0.0019	-2.5 to 2.5	Pass
				50	3.85	-2.074	-0.0025	-2.5 to 2.5	Pass
	846.5	25	0	20	3.27	1.745	0.0021	-2.5 to 2.5	Pass
					3.85	1.359	0.0016	-2.5 to 2.5	Pass
					4.43	0.787	0.0009	-2.5 to 2.5	Pass
				-30	3.85	2.832	0.0033	-2.5 to 2.5	Pass
				-20	3.85	0.200	0.0002	-2.5 to 2.5	Pass
				-10	3.85	1.245	0.0015	-2.5 to 2.5	Pass
				0	3.85	0.229	0.0003	-2.5 to 2.5	Pass
				10	3.85	1.502	0.0018	-2.5 to 2.5	Pass
				30	3.85	1.101	0.0013	-2.5 to 2.5	Pass
				40	3.85	0.772	0.0009	-2.5 to 2.5	Pass
				50	3.85	1.402	0.0017	-2.5 to 2.5	Pass
16QAM	826.5	25	0	20	3.27	-4.349	-0.0053	-2.5 to 2.5	Pass
					3.85	0.458	0.0006	-2.5 to 2.5	Pass
					4.43	2.718	0.0033	-2.5 to 2.5	Pass
				-30	3.85	-2.232	-0.0027	-2.5 to 2.5	Pass
				-20	3.85	0.458	0.0006	-2.5 to 2.5	Pass
				-10	3.85	-0.858	-0.0010	-2.5 to 2.5	Pass
				0	3.85	-2.246	-0.0027	-2.5 to 2.5	Pass
				10	3.85	-2.718	-0.0033	-2.5 to 2.5	Pass
				30	3.85	-0.730	-0.0009	-2.5 to 2.5	Pass
				40	3.85	-0.358	-0.0004	-2.5 to 2.5	Pass
				50	3.85	-0.815	-0.0010	-2.5 to 2.5	Pass
	836.5	25	0	20	3.27	0.587	0.0007	-2.5 to 2.5	Pass
					3.85	-1.531	-0.0018	-2.5 to 2.5	Pass



					4.43	-1.488	-0.0018	-2.5 to 2.5	Pass
				-30	3.85	-0.629	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	-2.418	-0.0029	-2.5 to 2.5	Pass
				-10	3.85	1.101	0.0013	-2.5 to 2.5	Pass
				0	3.85	-1.588	-0.0019	-2.5 to 2.5	Pass
				10	3.85	-1.245	-0.0015	-2.5 to 2.5	Pass
				30	3.85	-0.701	-0.0008	-2.5 to 2.5	Pass
				40	3.85	-1.245	-0.0015	-2.5 to 2.5	Pass
				50	3.85	-3.147	-0.0038	-2.5 to 2.5	Pass
	846.5	25	0	20	3.27	2.160	0.0026	-2.5 to 2.5	Pass
					3.85	-2.475	-0.0029	-2.5 to 2.5	Pass
					4.43	-0.687	-0.0008	-2.5 to 2.5	Pass
				-30	3.85	-1.101	-0.0013	-2.5 to 2.5	Pass
				-20	3.85	0.300	0.0004	-2.5 to 2.5	Pass
				-10	3.85	-0.329	-0.0004	-2.5 to 2.5	Pass
				0	3.85	-3.018	-0.0036	-2.5 to 2.5	Pass
				10	3.85	-2.446	-0.0029	-2.5 to 2.5	Pass
				30	3.85	-2.074	-0.0025	-2.5 to 2.5	Pass
				40	3.85	-3.376	-0.0040	-2.5 to 2.5	Pass
				50	3.85	-0.372	-0.0004	-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	3.27	-1.087	-0.0013	-2.5 to 2.5	Pass
					3.85	-0.386	-0.0005	-2.5 to 2.5	Pass
					4.43	-0.257	-0.0003	-2.5 to 2.5	Pass
				-30	3.85	0.114	0.0001	-2.5 to 2.5	Pass
				-20	3.85	0.672	0.0008	-2.5 to 2.5	Pass
				-10	3.85	-0.272	-0.0003	-2.5 to 2.5	Pass
				0	3.85	-0.072	-0.0001	-2.5 to 2.5	Pass
				10	3.85	0.930	0.0011	-2.5 to 2.5	Pass
				30	3.85	0.930	0.0011	-2.5 to 2.5	Pass
				40	3.85	-0.114	-0.0001	-2.5 to 2.5	Pass
				50	3.85	0.701	0.0008	-2.5 to 2.5	Pass
	836.5	50	0	20	3.27	-3.791	-0.0045	-2.5 to 2.5	Pass
					3.85	-3.219	-0.0038	-2.5 to 2.5	Pass
					4.43	-3.891	-0.0047	-2.5 to 2.5	Pass
				-30	3.85	-2.089	-0.0025	-2.5 to 2.5	Pass
				-20	3.85	-2.761	-0.0033	-2.5 to 2.5	Pass
				-10	3.85	-0.701	-0.0008	-2.5 to 2.5	Pass
				0	3.85	0.057	0.0001	-2.5 to 2.5	Pass
				10	3.85	-2.961	-0.0035	-2.5 to 2.5	Pass
				30	3.85	-2.174	-0.0026	-2.5 to 2.5	Pass
				40	3.85	-3.548	-0.0042	-2.5 to 2.5	Pass
				50	3.85	-2.689	-0.0032	-2.5 to 2.5	Pass
	844	50	0	20	3.27	0.615	0.0007	-2.5 to 2.5	Pass
					3.85	0.415	0.0005	-2.5 to 2.5	Pass
					4.43	0.114	0.0001	-2.5 to 2.5	Pass
				-30	3.85	0.415	0.0005	-2.5 to 2.5	Pass
				-20	3.85	2.689	0.0032	-2.5 to 2.5	Pass
				-10	3.85	1.230	0.0015	-2.5 to 2.5	Pass
				0	3.85	2.103	0.0025	-2.5 to 2.5	Pass
				10	3.85	-0.758	-0.0009	-2.5 to 2.5	Pass
				30	3.85	-1.130	-0.0013	-2.5 to 2.5	Pass
				40	3.85	0.243	0.0003	-2.5 to 2.5	Pass

				50	3.85	1.216	0.0014	-2.5 to 2.5	Pass
16QAM	829	27	0	20	3.27	-2.089	-0.0025	-2.5 to 2.5	Pass
					3.85	1.874	0.0023	-2.5 to 2.5	Pass
					4.43	-0.215	-0.0003	-2.5 to 2.5	Pass
					-30	3.85	-0.286	-0.0003	-2.5 to 2.5
				-20	3.85	1.431	0.0017	-2.5 to 2.5	Pass
				-10	3.85	0.887	0.0011	-2.5 to 2.5	Pass
				0	3.85	-0.086	-0.0001	-2.5 to 2.5	Pass
				10	3.85	-0.916	-0.0011	-2.5 to 2.5	Pass
				30	3.85	-1.173	-0.0014	-2.5 to 2.5	Pass
				40	3.85	0.300	0.0004	-2.5 to 2.5	Pass
	50	3.85	-2.432	-0.0029	-2.5 to 2.5	Pass			
	836.5	27	0	20	3.27	-2.775	-0.0033	-2.5 to 2.5	Pass
					3.85	-4.020	-0.0048	-2.5 to 2.5	Pass
					4.43	-2.704	-0.0032	-2.5 to 2.5	Pass
				-30	3.85	-1.116	-0.0013	-2.5 to 2.5	Pass
				-20	3.85	-1.860	-0.0022	-2.5 to 2.5	Pass
				-10	3.85	-3.963	-0.0047	-2.5 to 2.5	Pass
				0	3.85	-2.718	-0.0032	-2.5 to 2.5	Pass
				10	3.85	-0.443	-0.0005	-2.5 to 2.5	Pass
				30	3.85	-2.904	-0.0035	-2.5 to 2.5	Pass
				40	3.85	-1.760	-0.0021	-2.5 to 2.5	Pass
	50	3.85	-3.276	-0.0039	-2.5 to 2.5	Pass			
	844	27	23	20	3.27	-1.616	-0.0019	-2.5 to 2.5	Pass
					3.85	0.587	0.0007	-2.5 to 2.5	Pass
					4.43	3.061	0.0036	-2.5 to 2.5	Pass
				-30	3.85	-1.688	-0.0020	-2.5 to 2.5	Pass
				-20	3.85	1.445	0.0017	-2.5 to 2.5	Pass
				-10	3.85	-1.659	-0.0020	-2.5 to 2.5	Pass
				0	3.85	0.544	0.0006	-2.5 to 2.5	Pass
				10	3.85	-0.114	-0.0001	-2.5 to 2.5	Pass
				30	3.85	-3.247	-0.0038	-2.5 to 2.5	Pass
				40	3.85	-0.200	-0.0002	-2.5 to 2.5	Pass
				50	3.85	-0.958	-0.0011	-2.5 to 2.5	Pass

3. Modulation Characteristics

3.1 Test Result

3.1.1 B5_1.4MHz

Band: 5 / Bandwidth: 1.4MHz / NTNV						
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 / NTNV						
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**

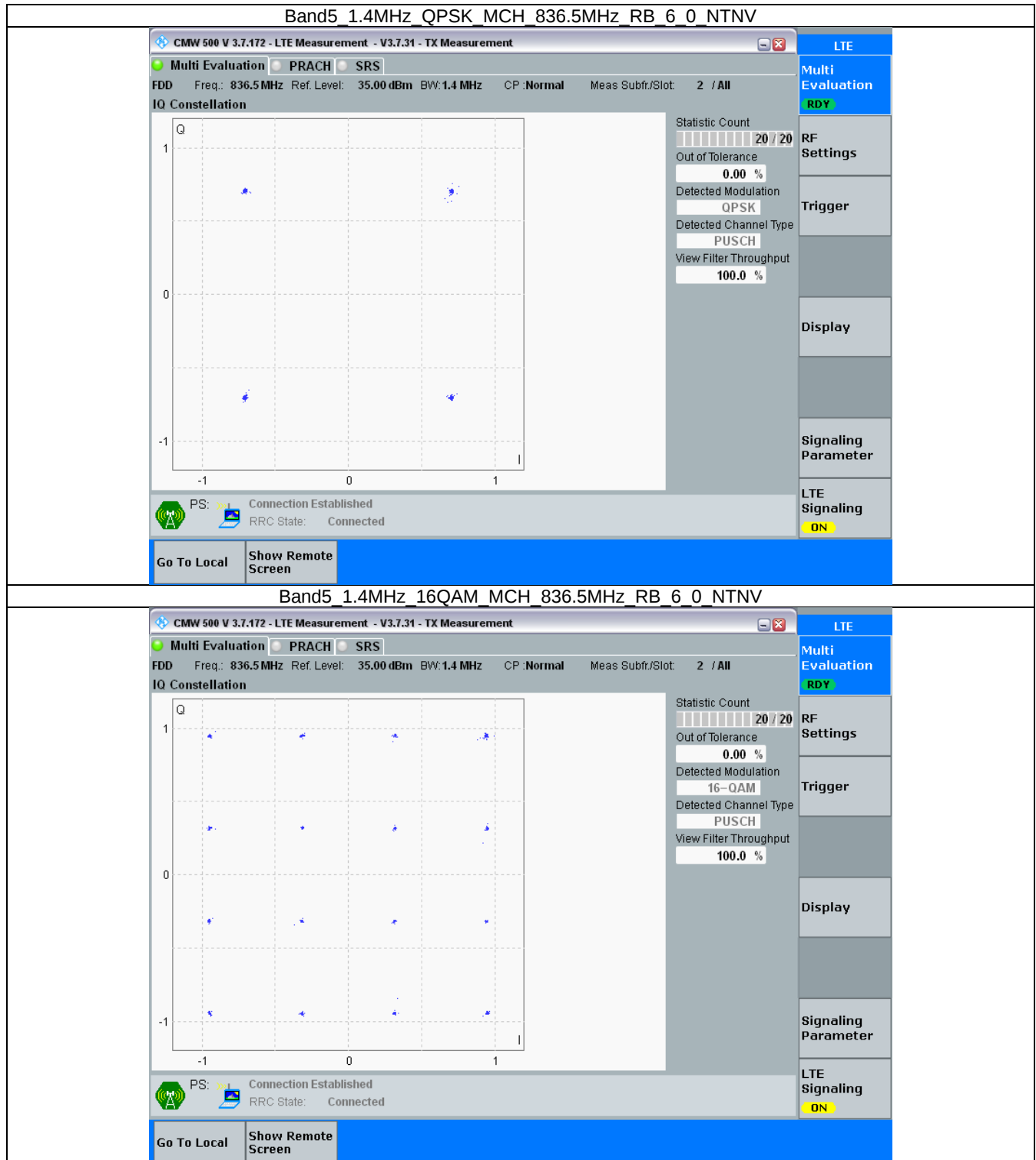
Band: 5 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	25	0	Refer To Test Graph		Pass
16QAM	836.5	25	0	Refer To Test Graph		Pass

3.1.4 B5_10MHz

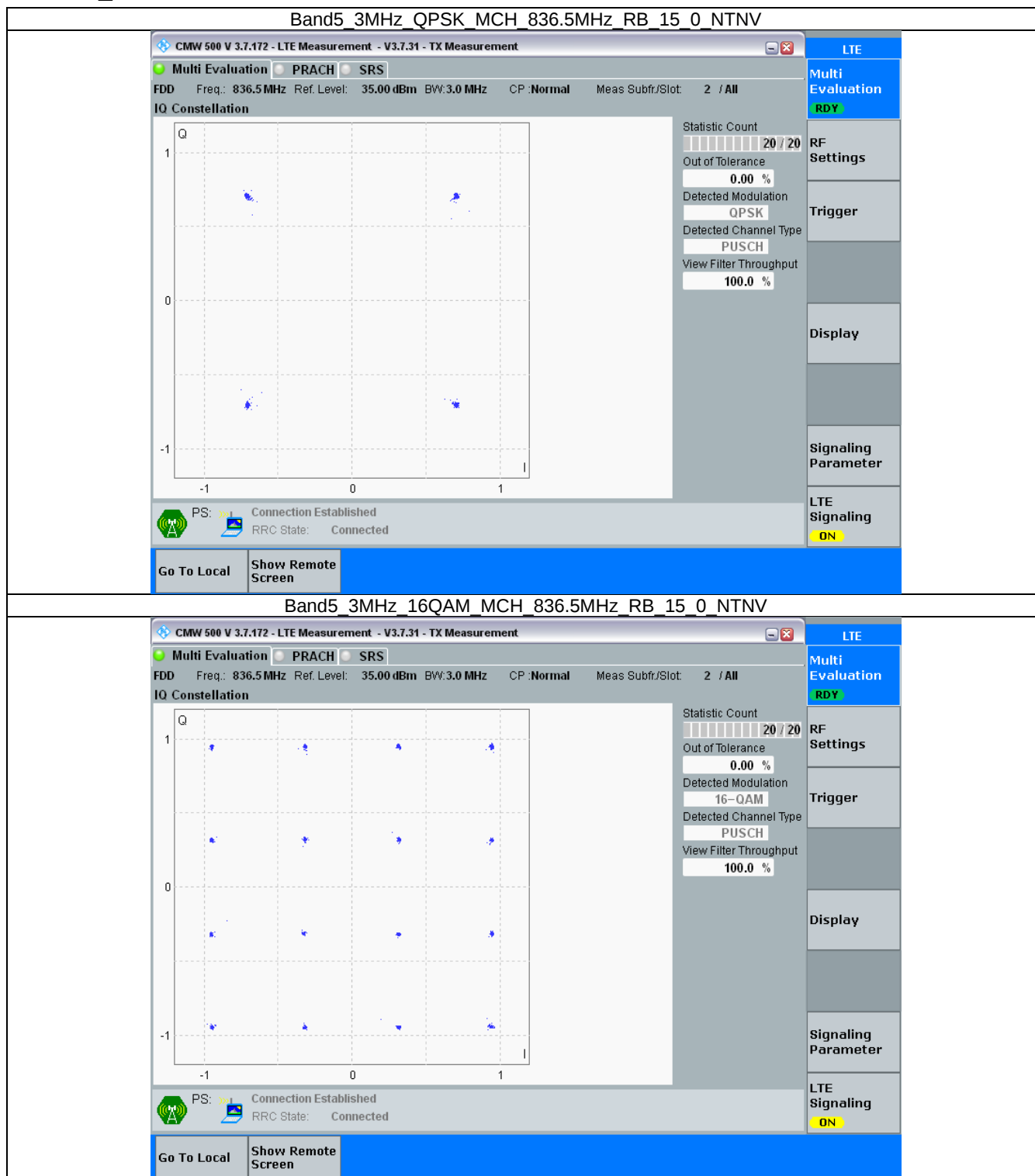
Band: 5 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	50	0	Refer To Test Graph		Pass
16QAM	836.5	27	0	Refer To Test Graph		Pass

3.2 Test Graph

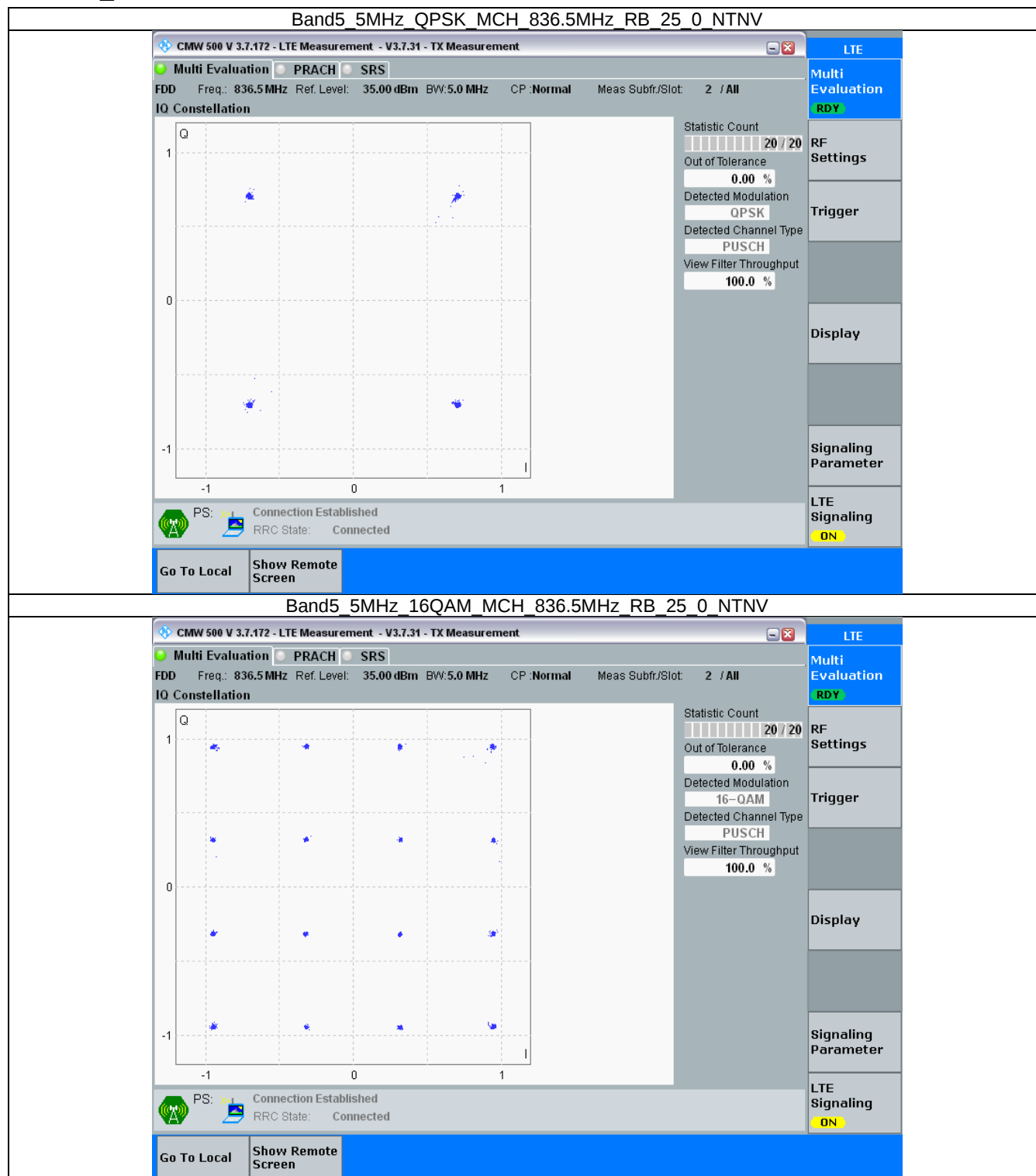
3.2.1 B5_1.4MHz



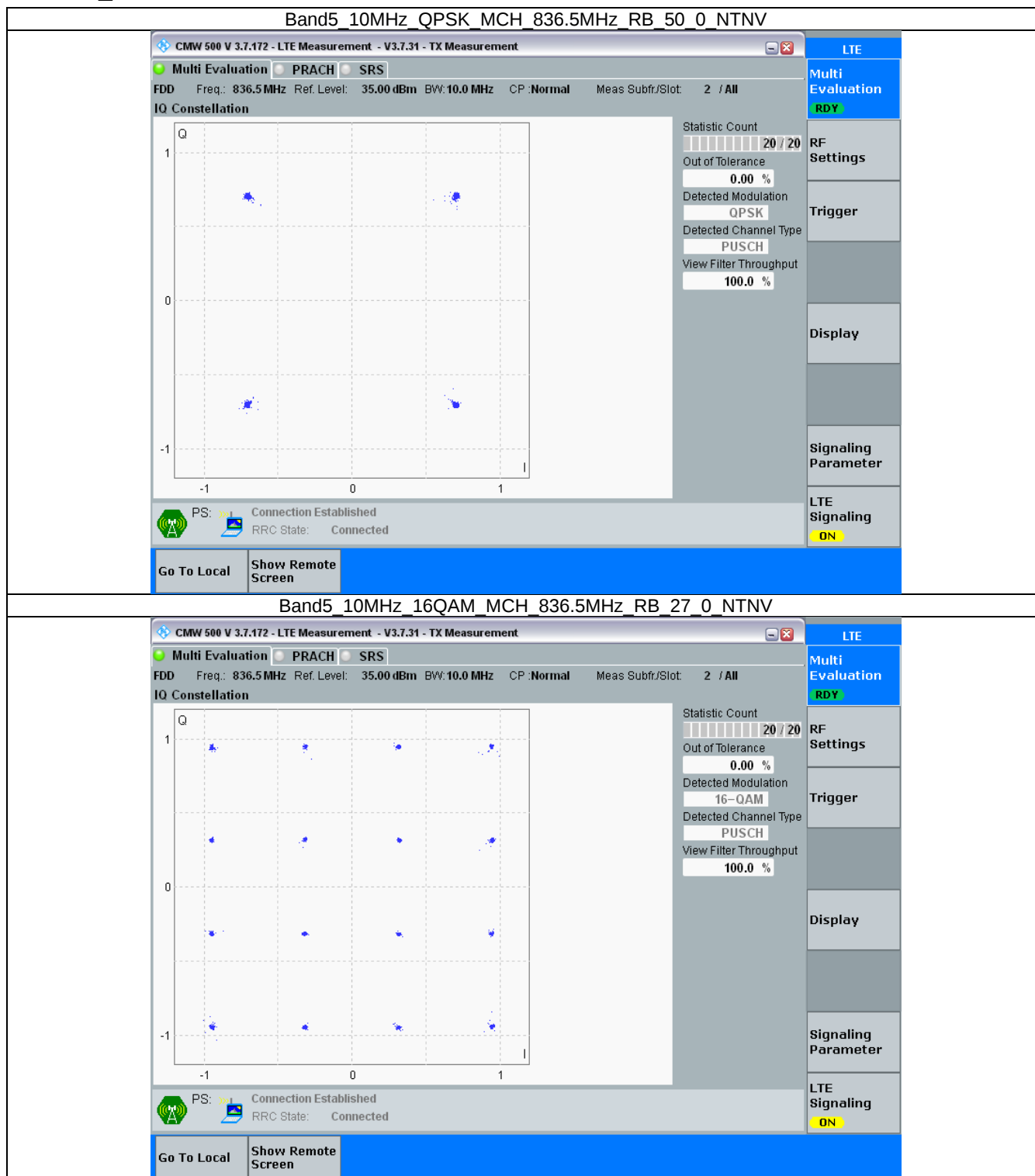
3.2.2 B5_3MHz



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	1.114	/	Pass
		836.5	6	0	1.110	/	Pass
		848.3	6	0	1.113	/	Pass
	16QAM	824.7	6	0	1.111	/	Pass
		836.5	6	0	1.102	/	Pass
		848.3	6	0	1.116	/	Pass
3	QPSK	825.5	15	0	2.738	/	Pass
		836.5	15	0	2.743	/	Pass
		847.5	15	0	2.734	/	Pass
	16QAM	825.5	15	0	2.726	/	Pass
		836.5	15	0	2.731	/	Pass
		847.5	15	0	2.729	/	Pass
5	QPSK	826.5	25	0	4.556	/	Pass
		836.5	25	0	4.534	/	Pass
		846.5	25	0	4.540	/	Pass
	16QAM	826.5	25	0	4.533	/	Pass
		836.5	25	0	4.529	/	Pass
		846.5	25	0	4.552	/	Pass
10	QPSK	829	50	0	9.060	/	Pass
		836.5	50	0	9.059	/	Pass
		844	50	0	9.077	/	Pass
	16QAM	829	27	0	5.107	/	Pass
		836.5	27	0	5.071	/	Pass
		844	27	23	5.078	/	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	1.324	/	Pass
		836.5	6	0	1.319	/	Pass
		848.3	6	0	1.315	/	Pass
	16QAM	824.7	6	0	1.310	/	Pass
		836.5	6	0	1.308	/	Pass
		848.3	6	0	1.322	/	Pass
3	QPSK	825.5	15	0	3.022	/	Pass
		836.5	15	0	2.997	/	Pass
		847.5	15	0	2.998	/	Pass
	16QAM	825.5	15	0	3.028	/	Pass
		836.5	15	0	3.008	/	Pass
		847.5	15	0	3.034	/	Pass
5	QPSK	826.5	25	0	5.064	/	Pass
		836.5	25	0	5.050	/	Pass
		846.5	25	0	5.074	/	Pass



4

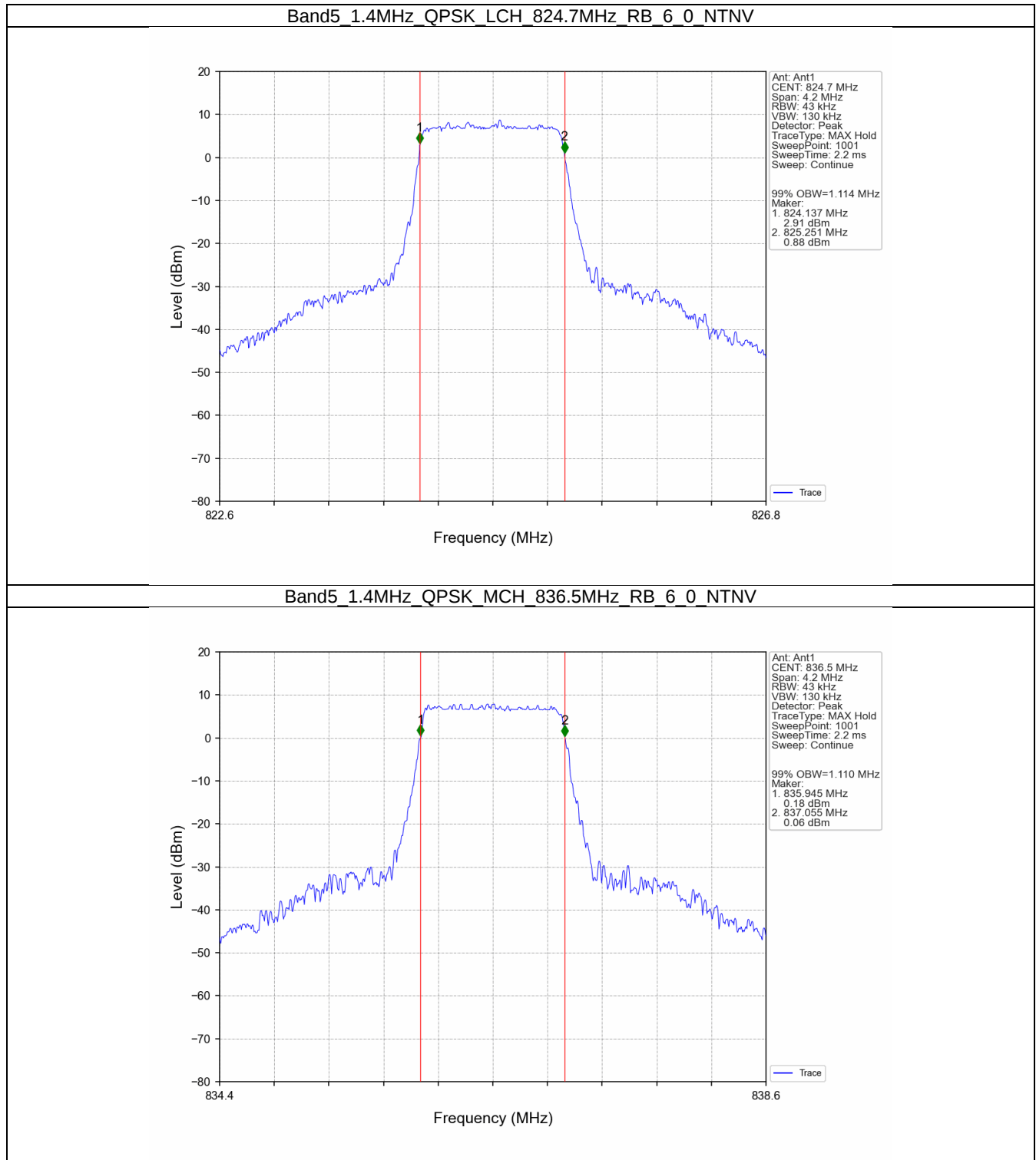
	16QAM	826.5	25	0	5.058	/	Pass
		836.5	25	0	5.063	/	Pass
		846.5	25	0	5.021	/	Pass
10	QPSK	829	50	0	9.995	/	Pass
		836.5	50	0	10.053	/	Pass
		844	50	0	9.963	/	Pass
	16QAM	829	27	0	6.072	/	Pass
		836.5	27	0	6.185	/	Pass
		844	27	23	6.106	/	Pass



4

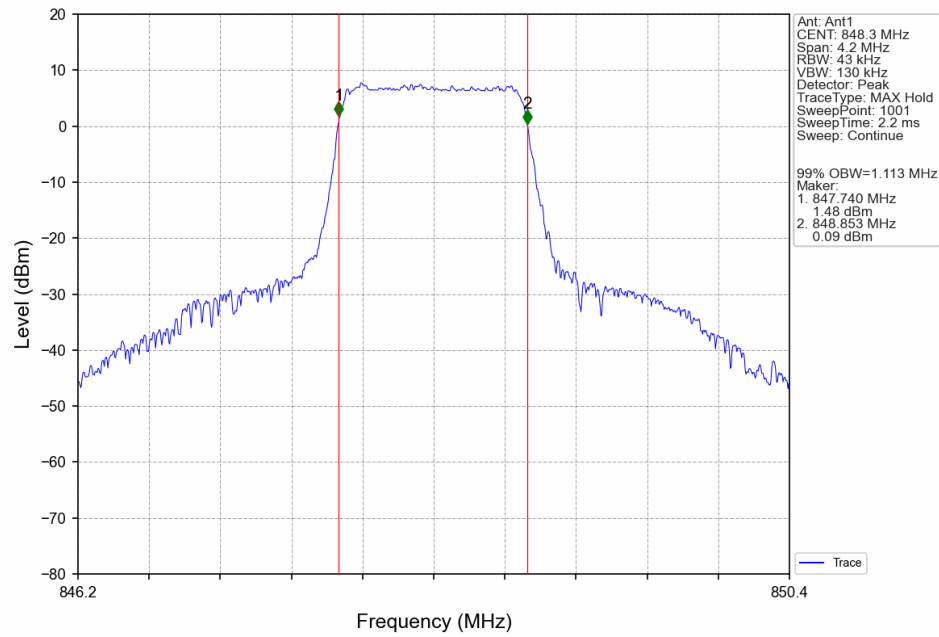
4.2 Test Graph

4.2.1 Band5_OBW

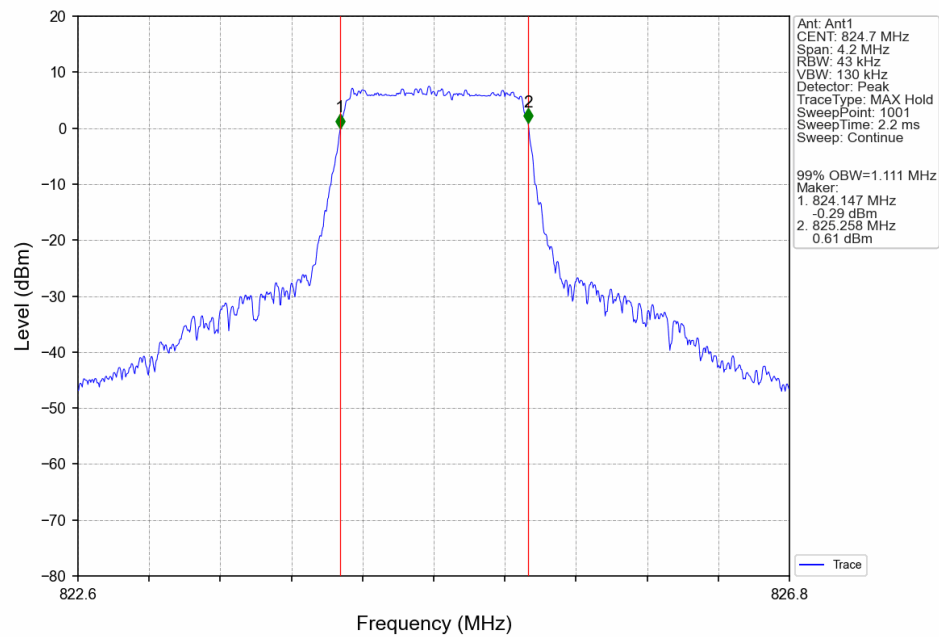




Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV

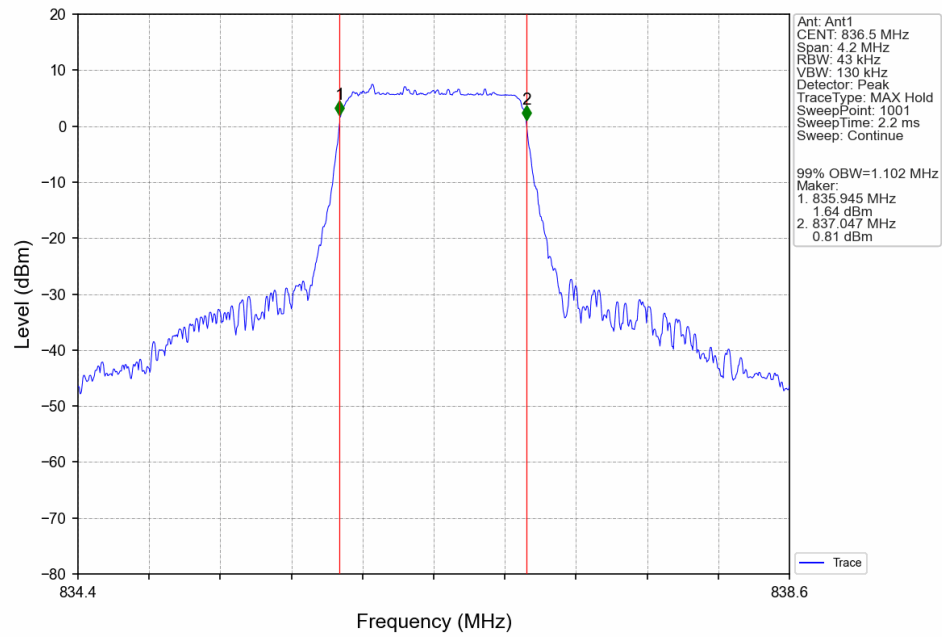


Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV

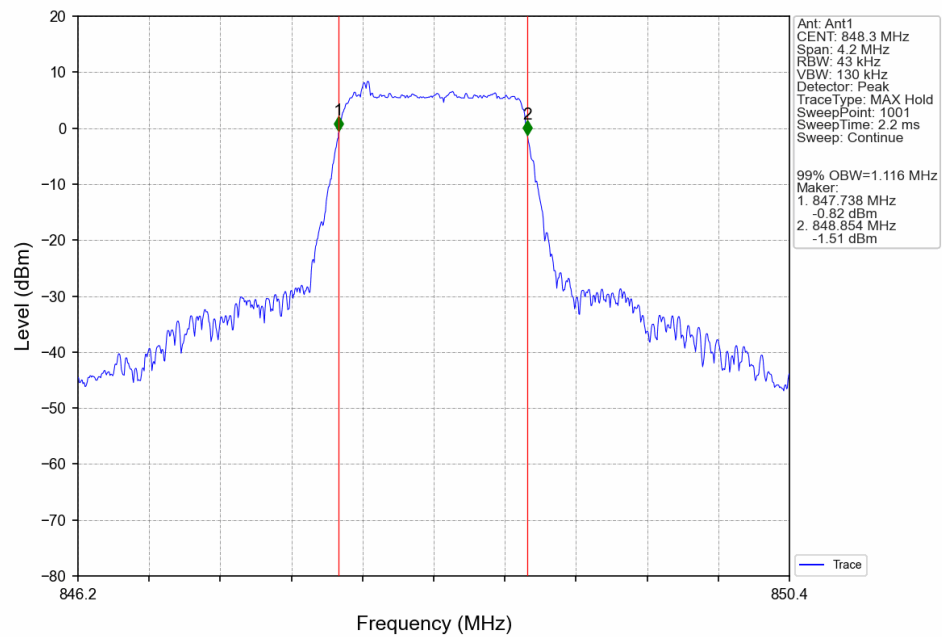




Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV

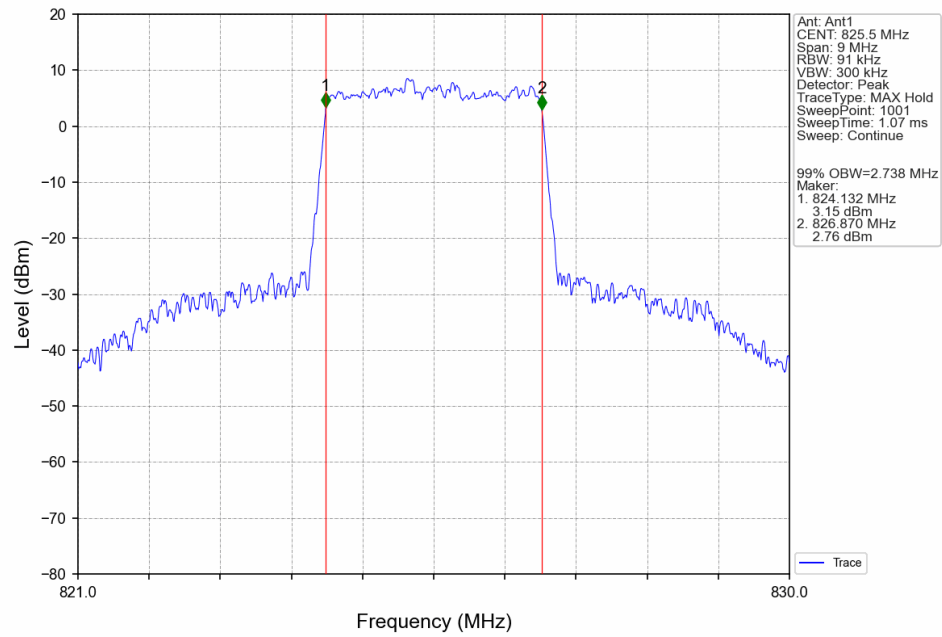


Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV

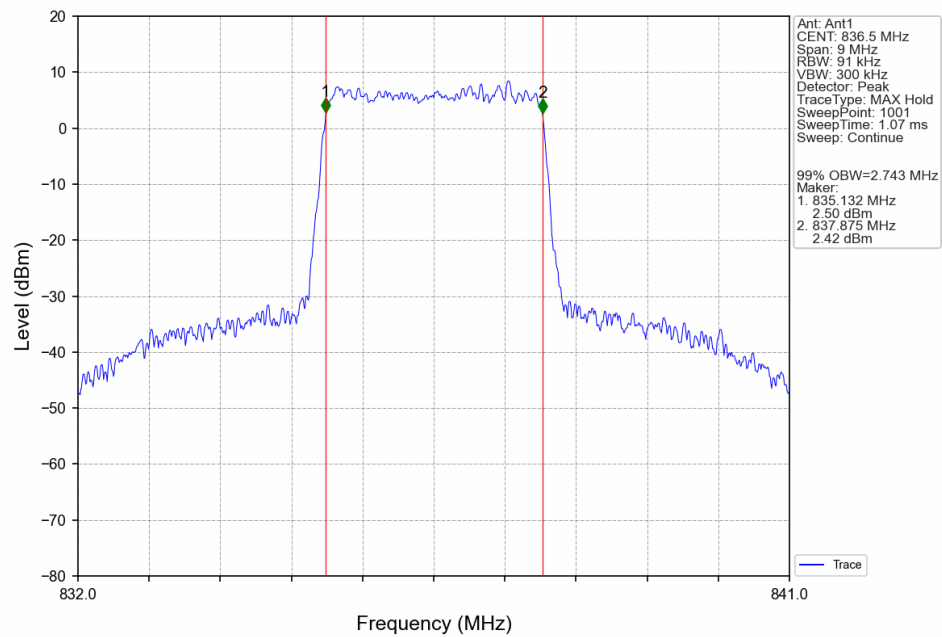




Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV

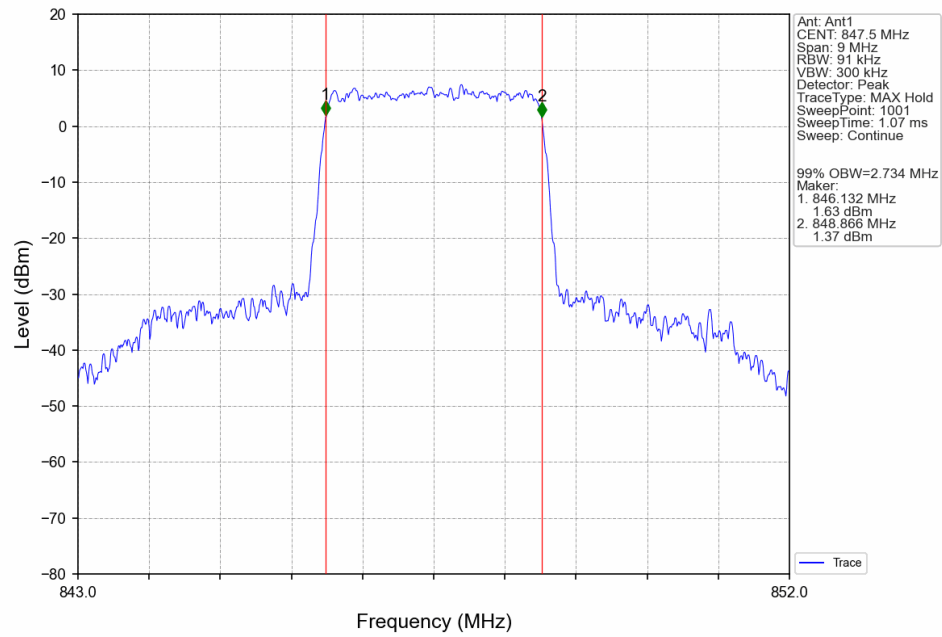


Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV

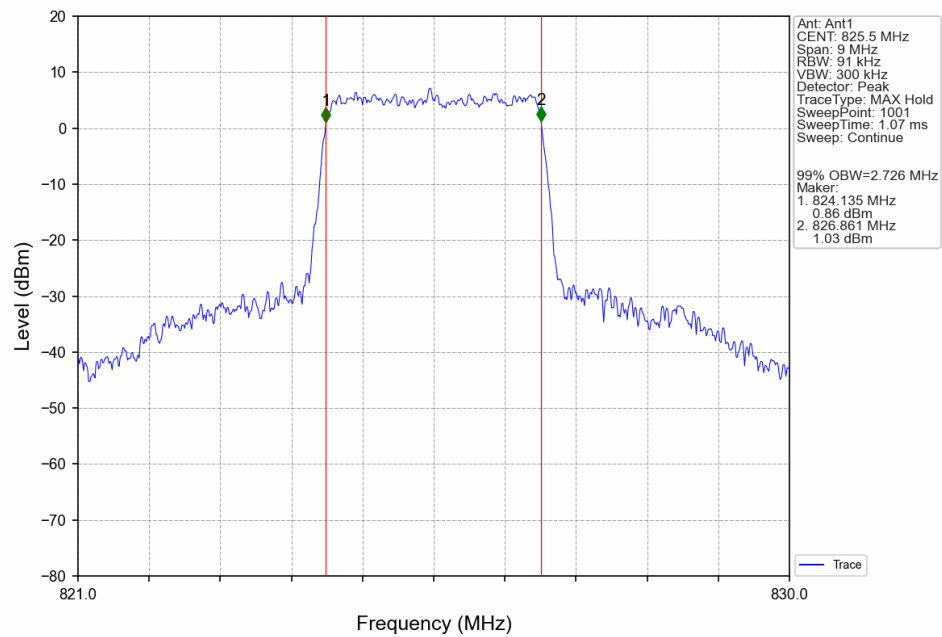




Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV

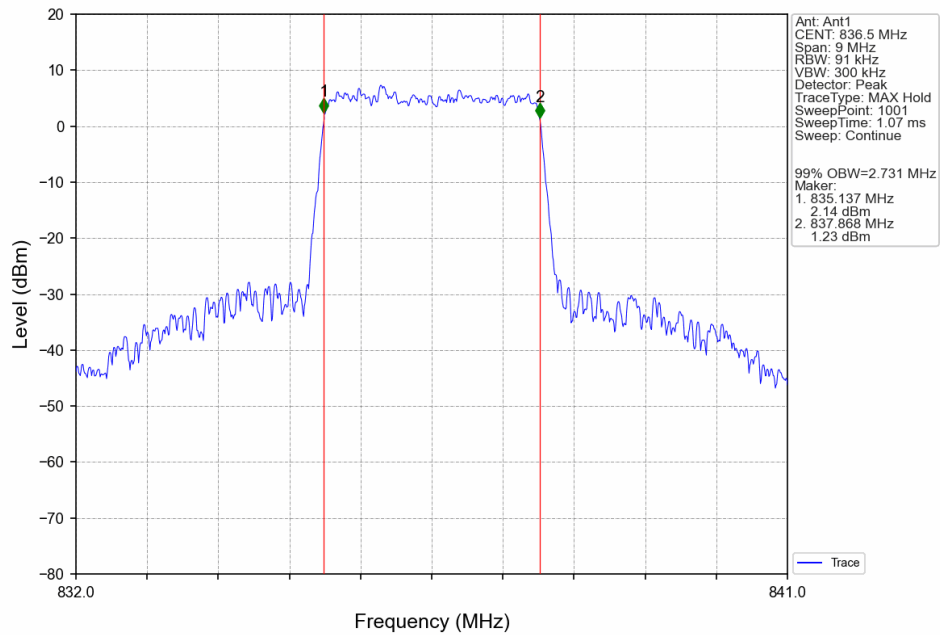


Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV

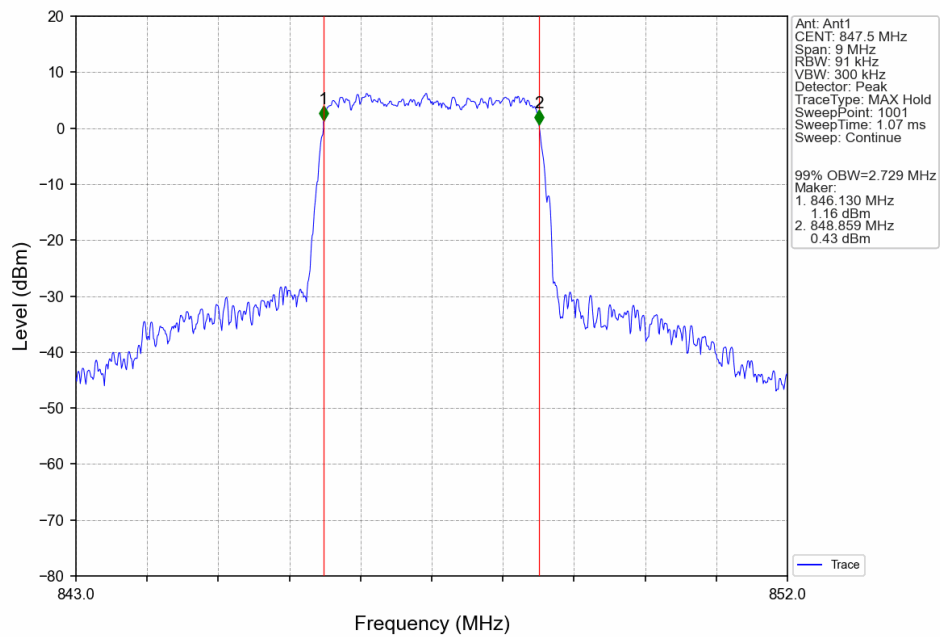




Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV

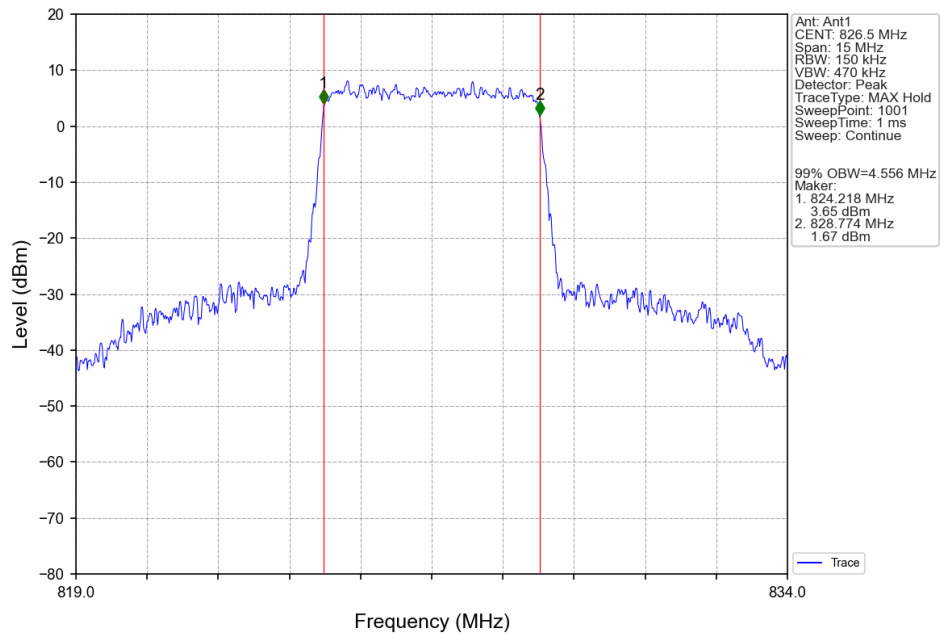


Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV

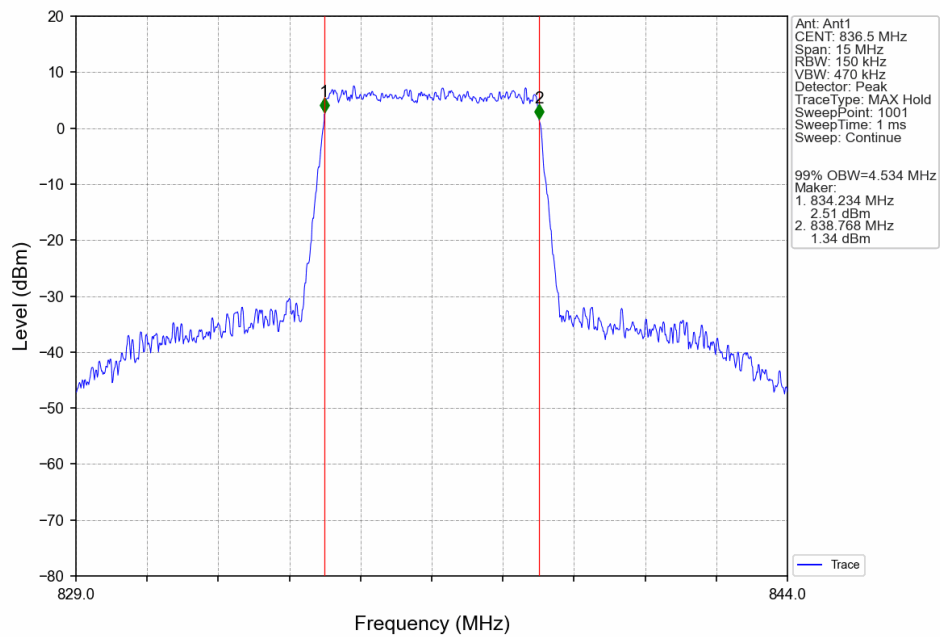




Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV

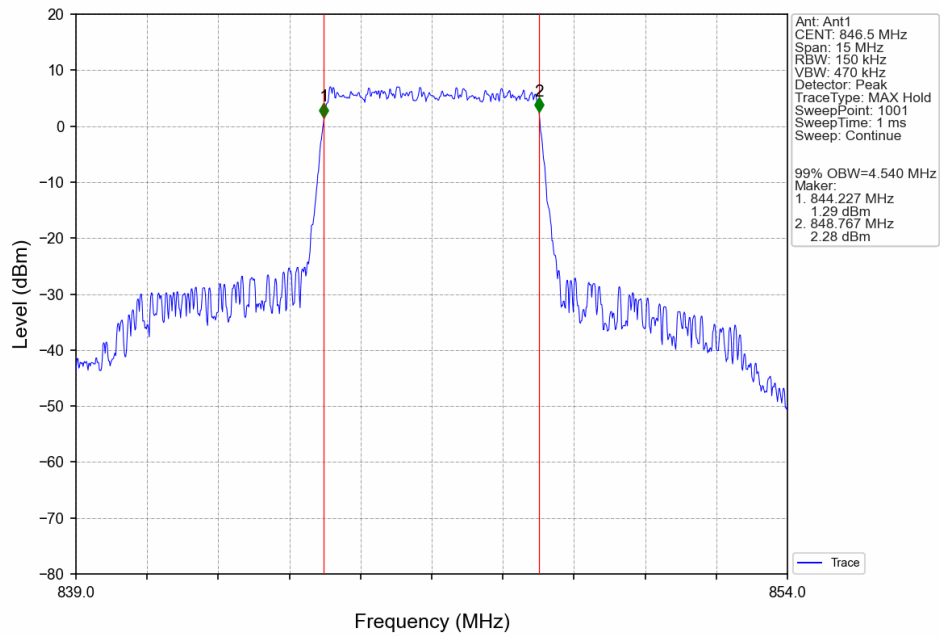


Band5_5MHz_QPSK_MCH_836.5MHz_RB_25_0_NTNV

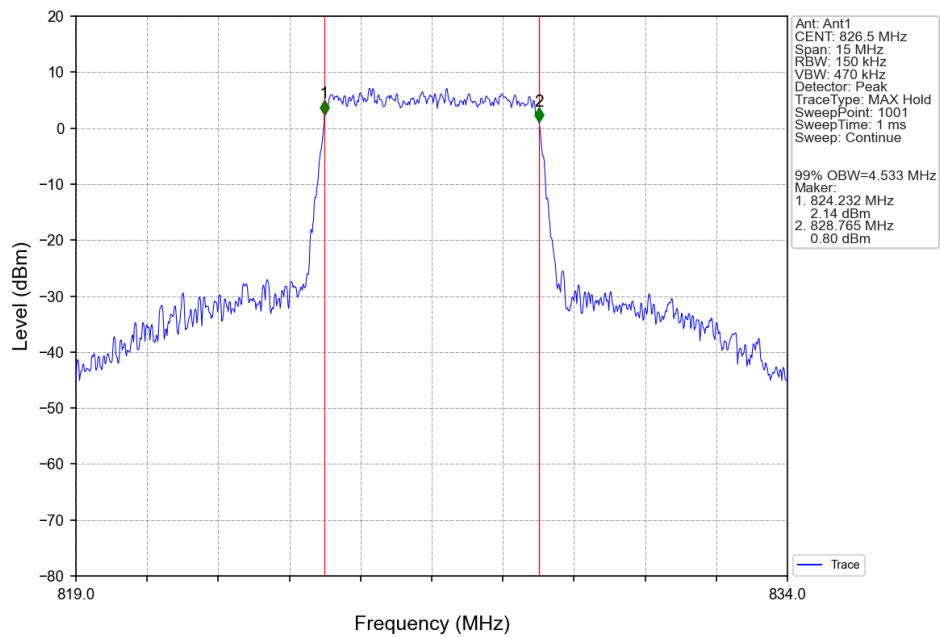




Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV

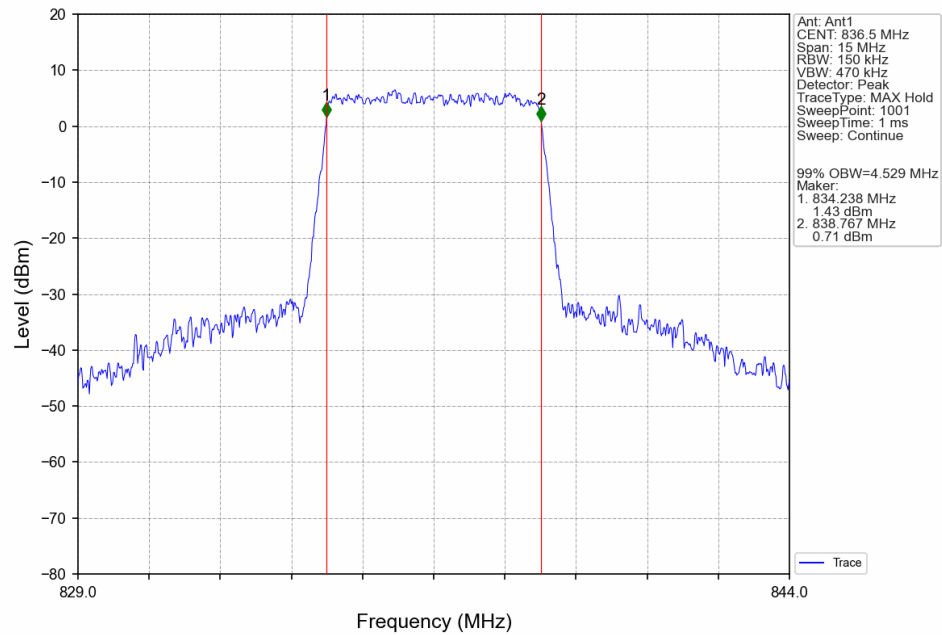


Band5_5MHz_16QAM_LCH_826.5MHz_RB_25_0_NTNV

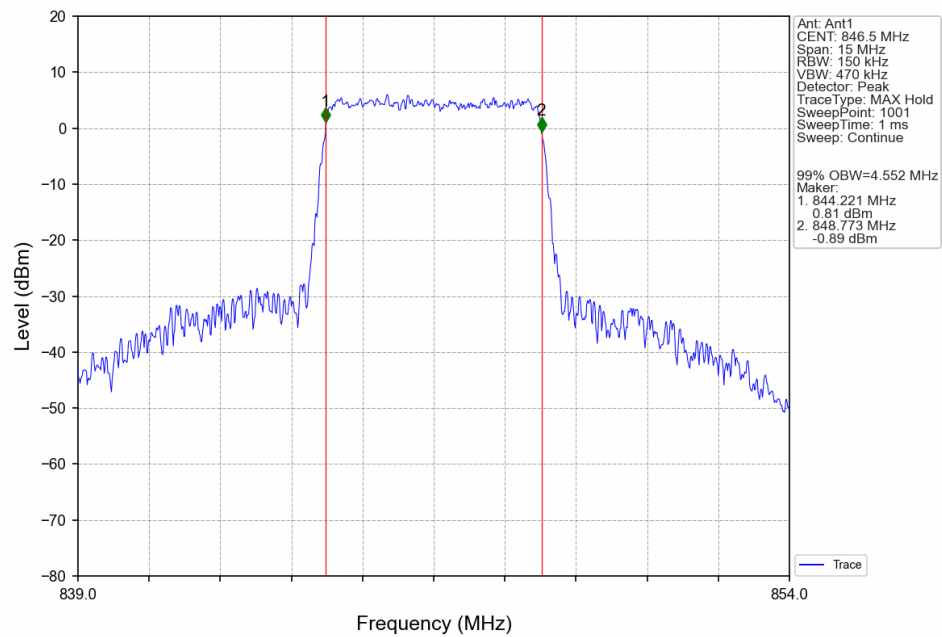




Band5_5MHz_16QAM_MCH_836.5MHz_RB_25_0_NTNV

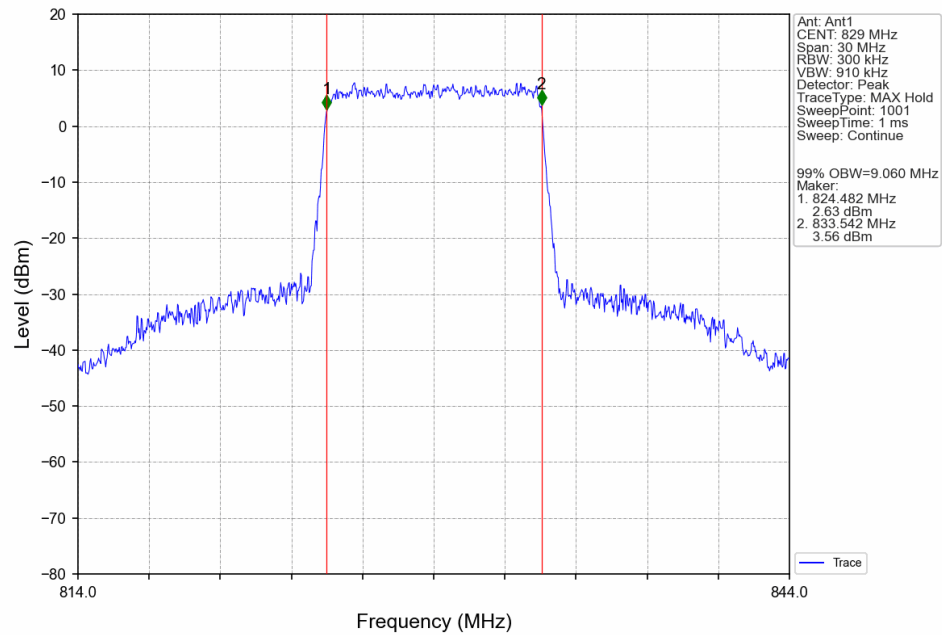


Band5_5MHz_16QAM_HCH_846.5MHz_RB_25_0_NTNV

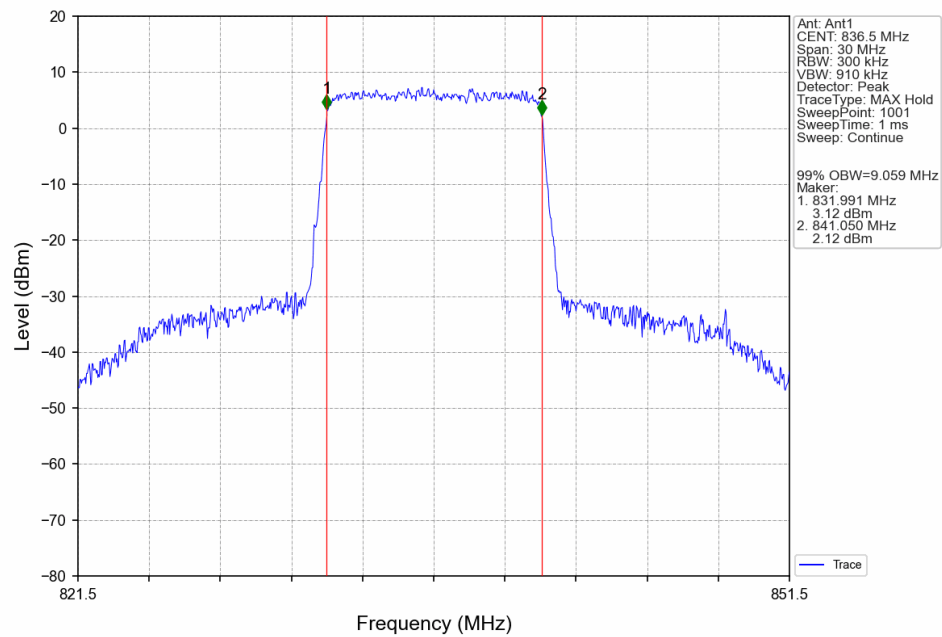




Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV

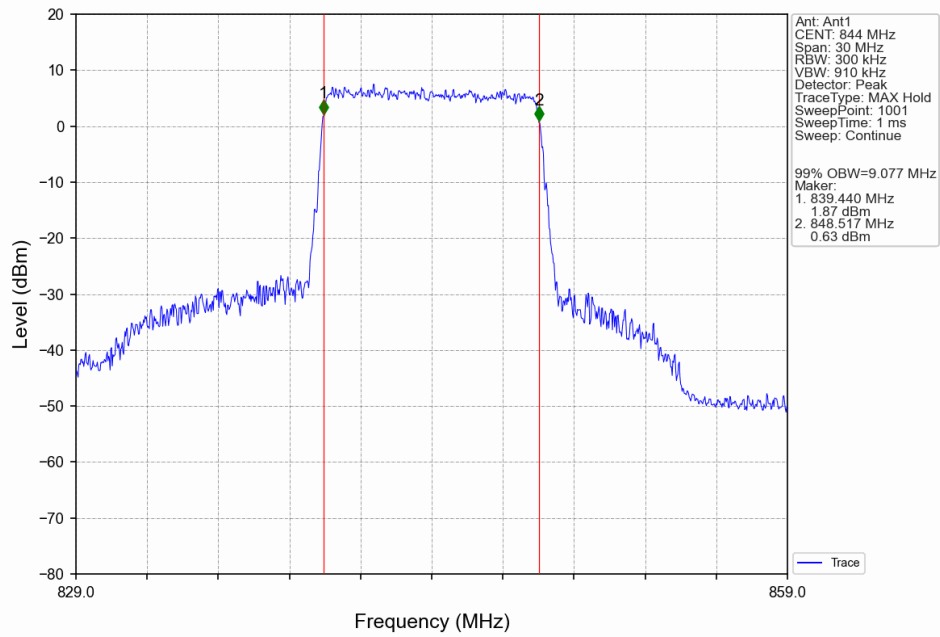


Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV

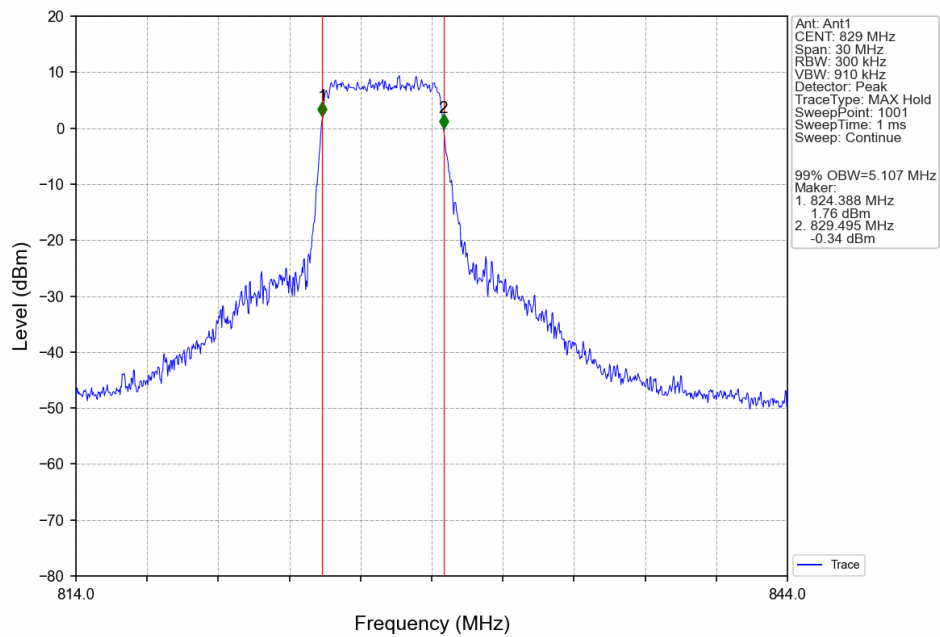




Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV

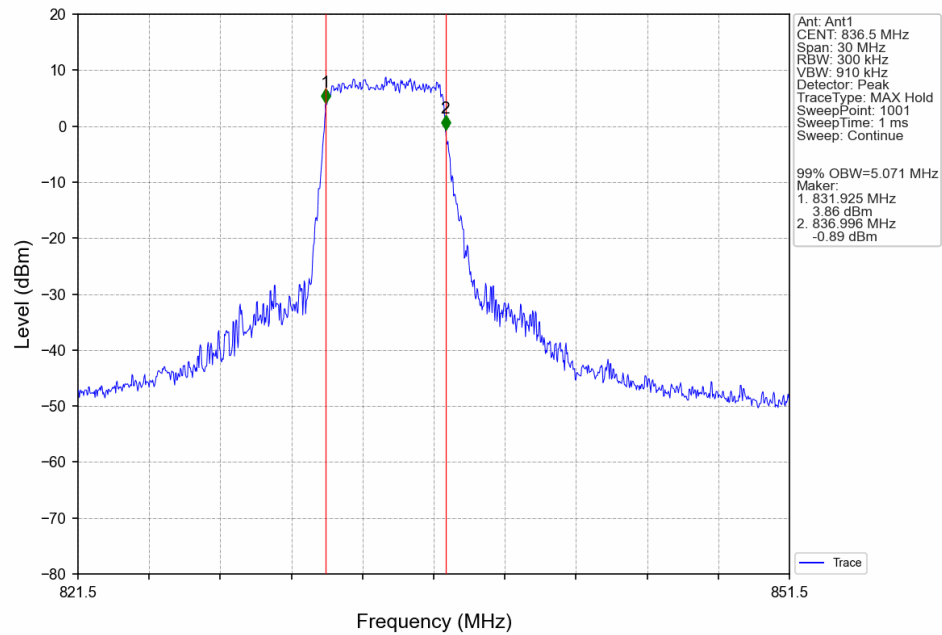


Band5_10MHz_16QAM_LCH_829MHz_RB_27_0_NTNV

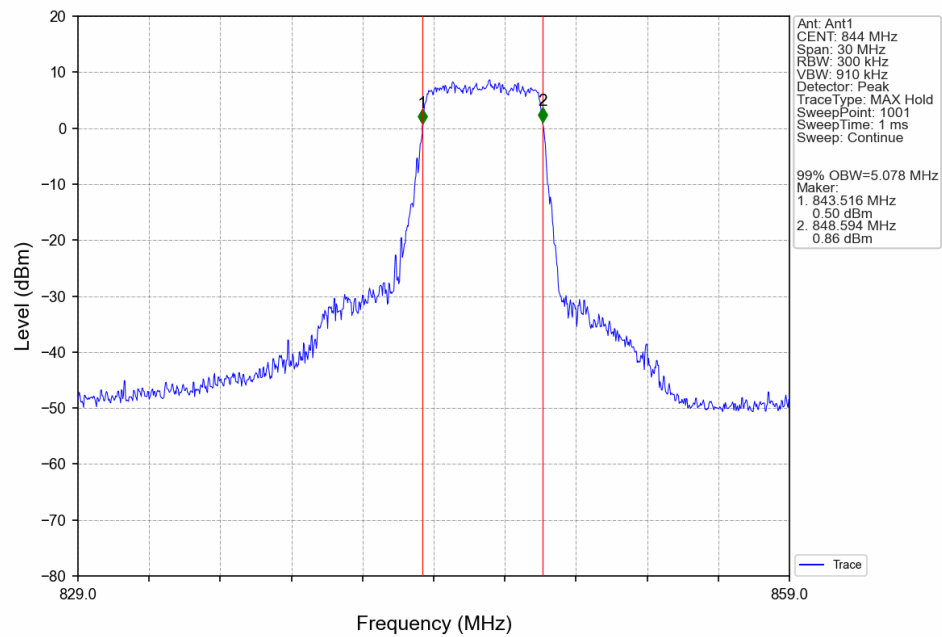




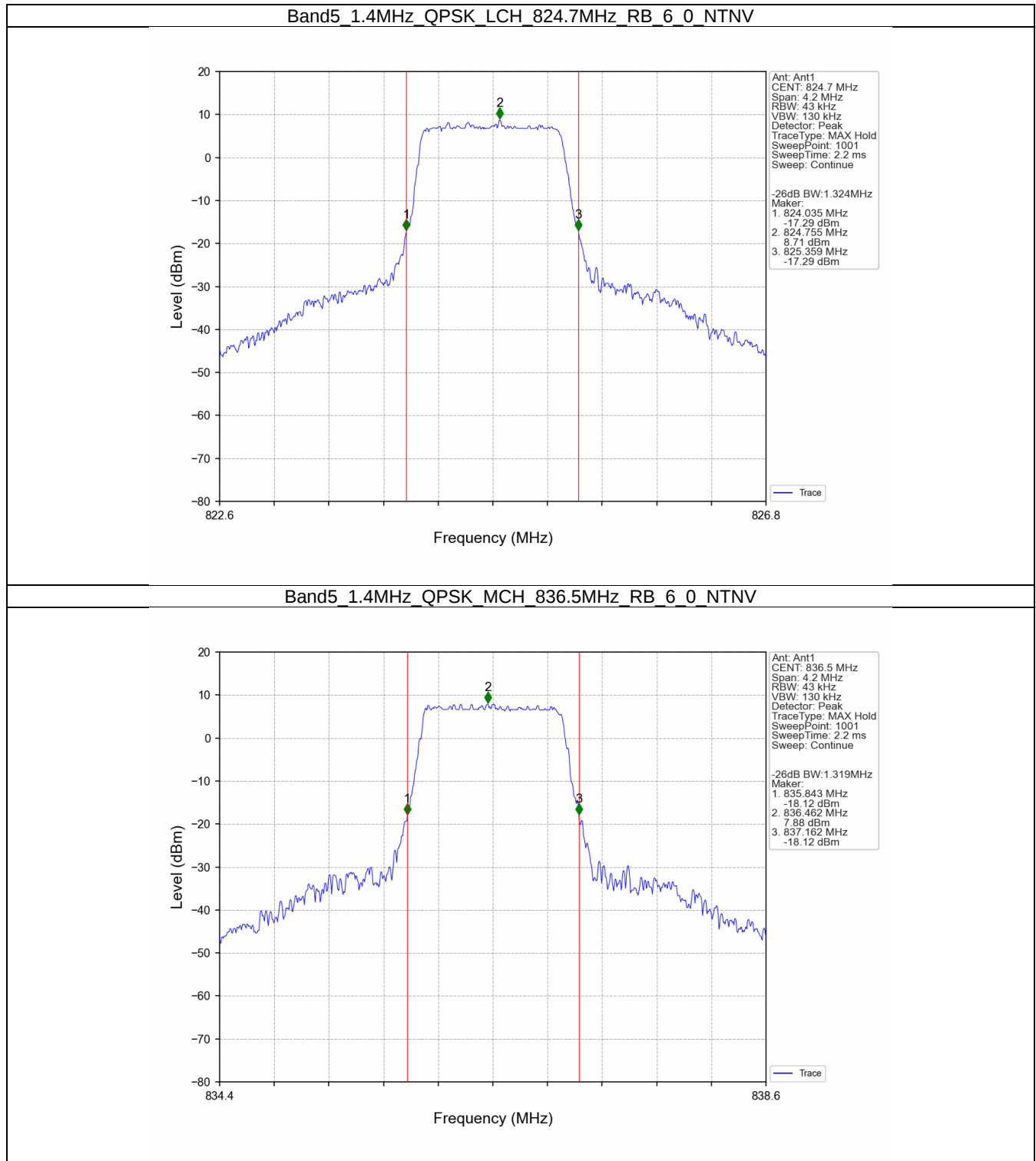
Band5_10MHz_16QAM_MCH_836.5MHz_RB_27_0_NTNV



Band5_10MHz_16QAM_HCH_844MHz_RB_27_23_NTNV

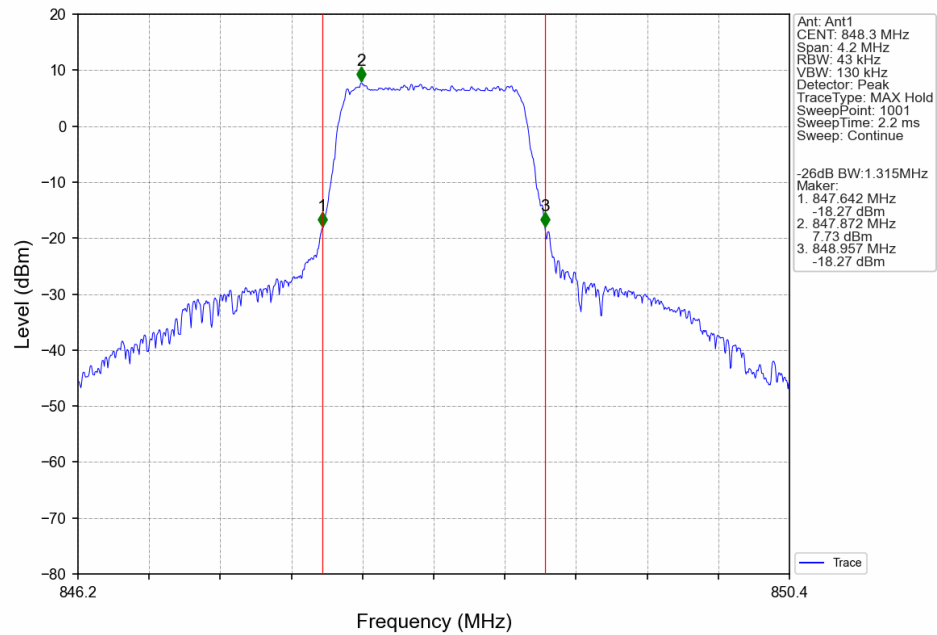


4.2.2 Band5_XDB

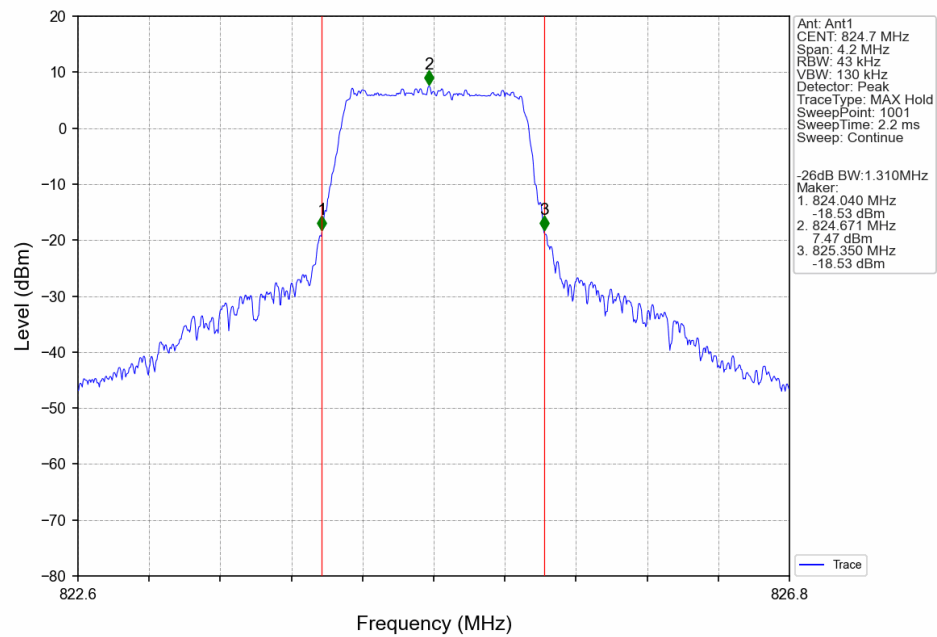




Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV

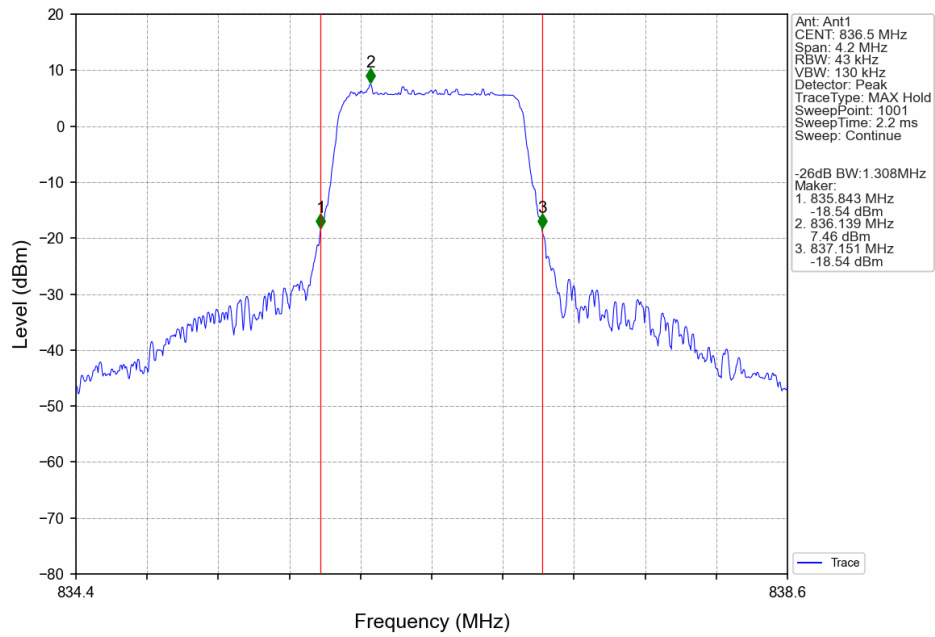


Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV

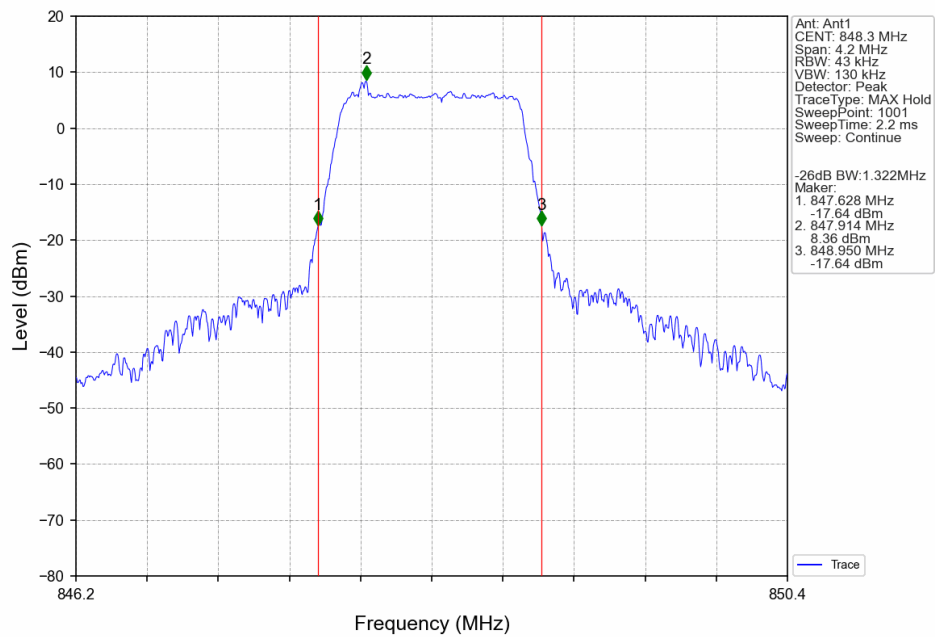




Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV

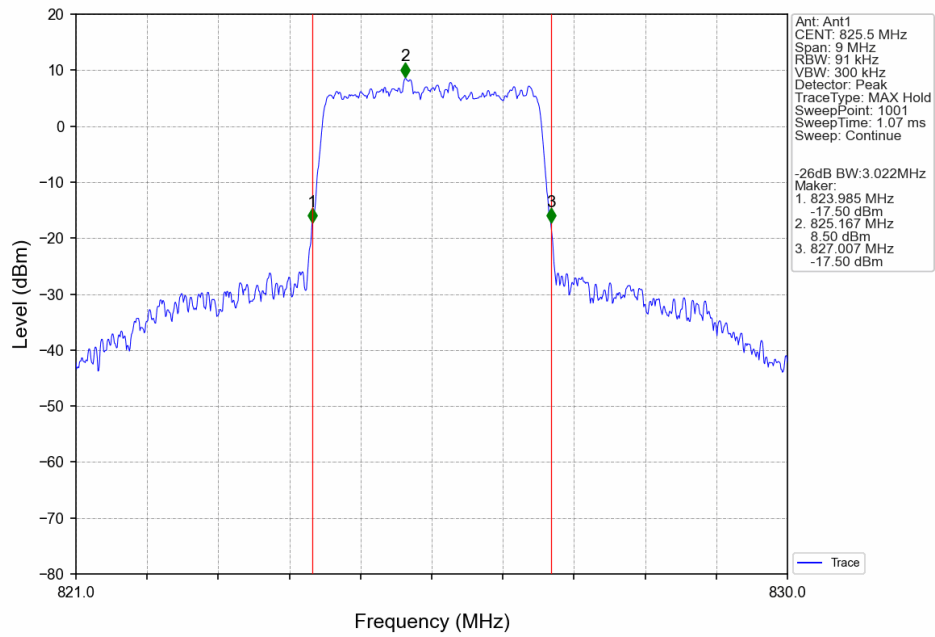


Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV

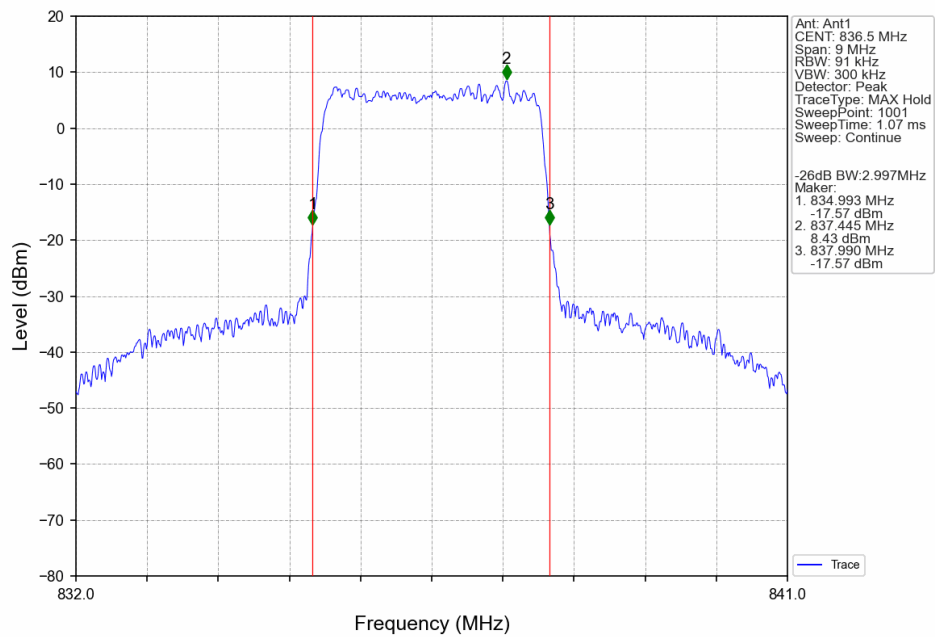




Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV

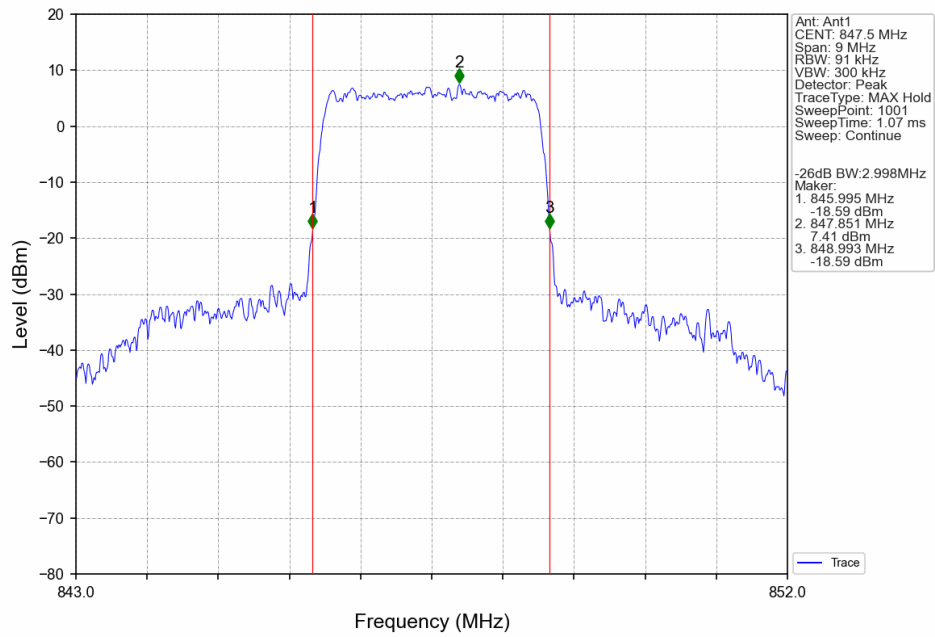


Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV

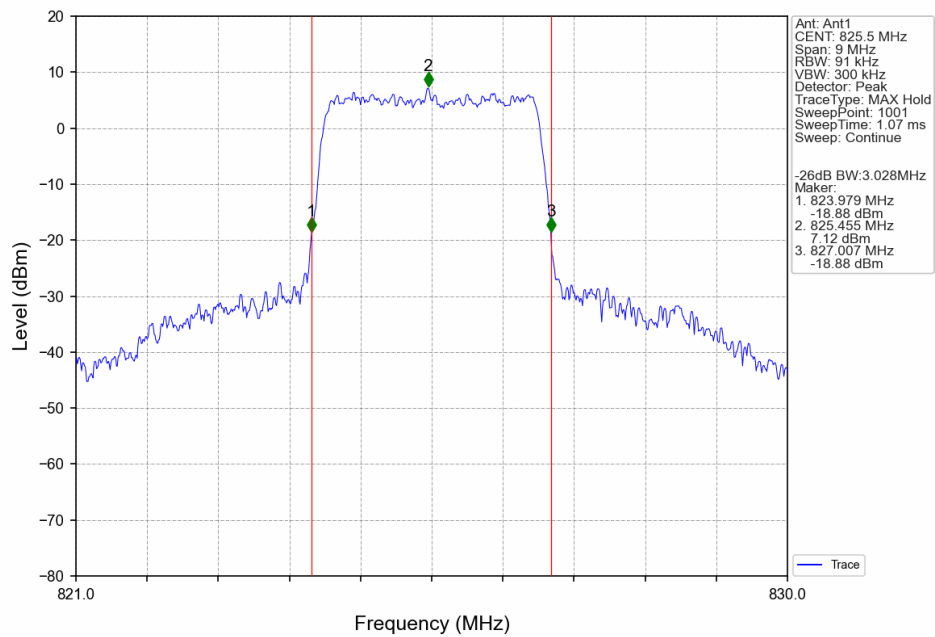




Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV

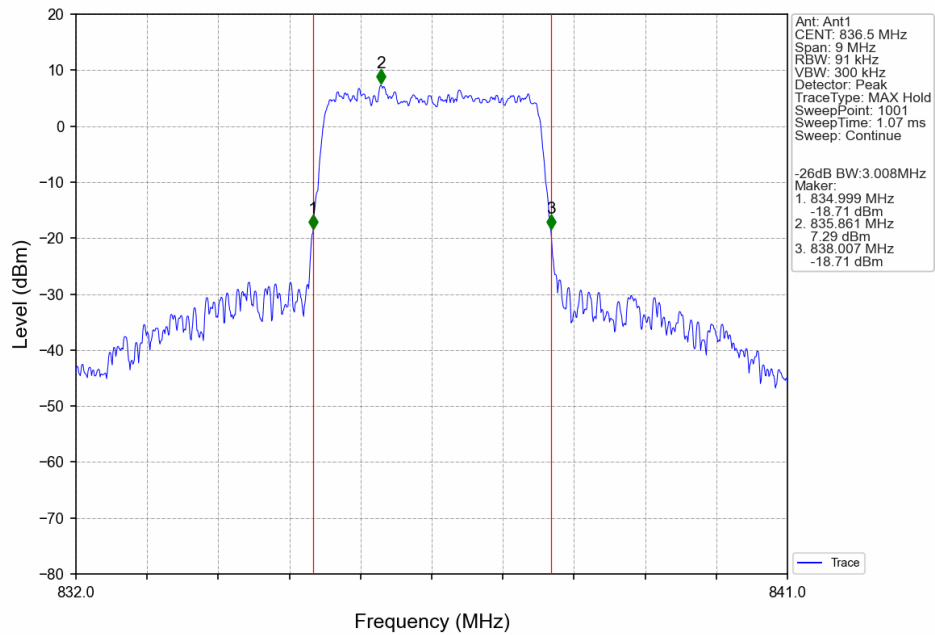


Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV

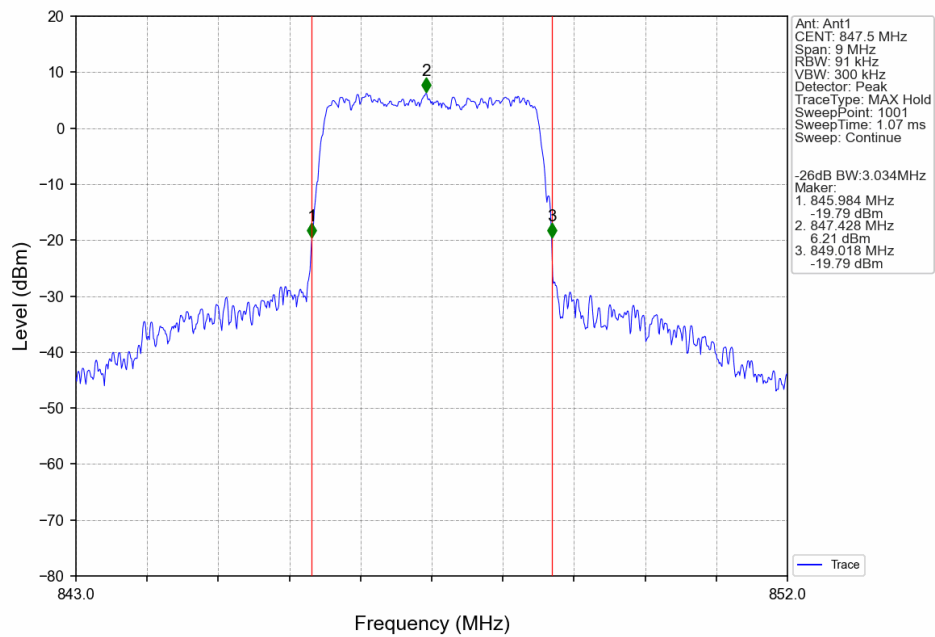




Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV

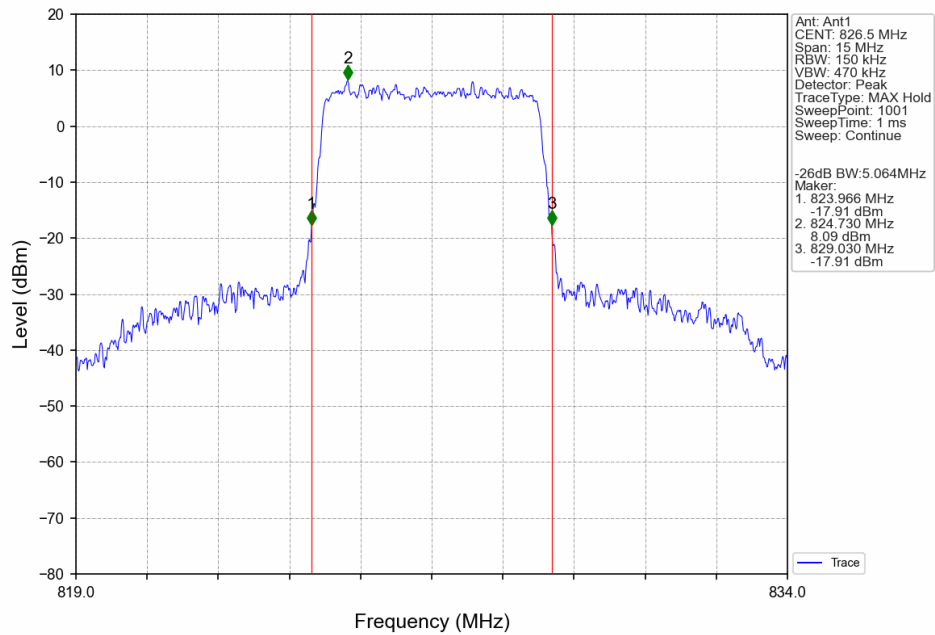


Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV

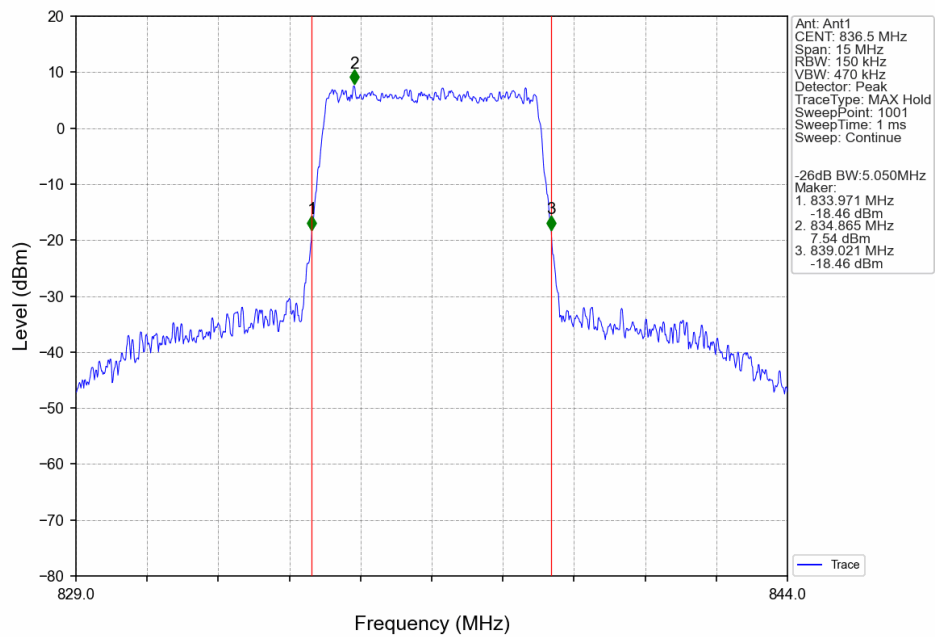




Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV

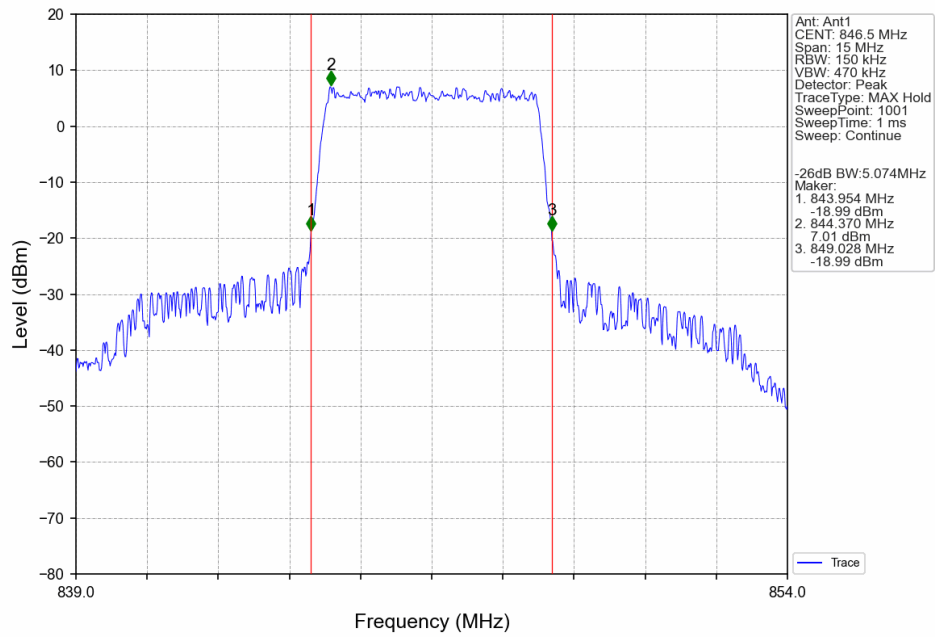


Band5_5MHz_QPSK_MCH_836.5MHz_RB_25_0_NTNV

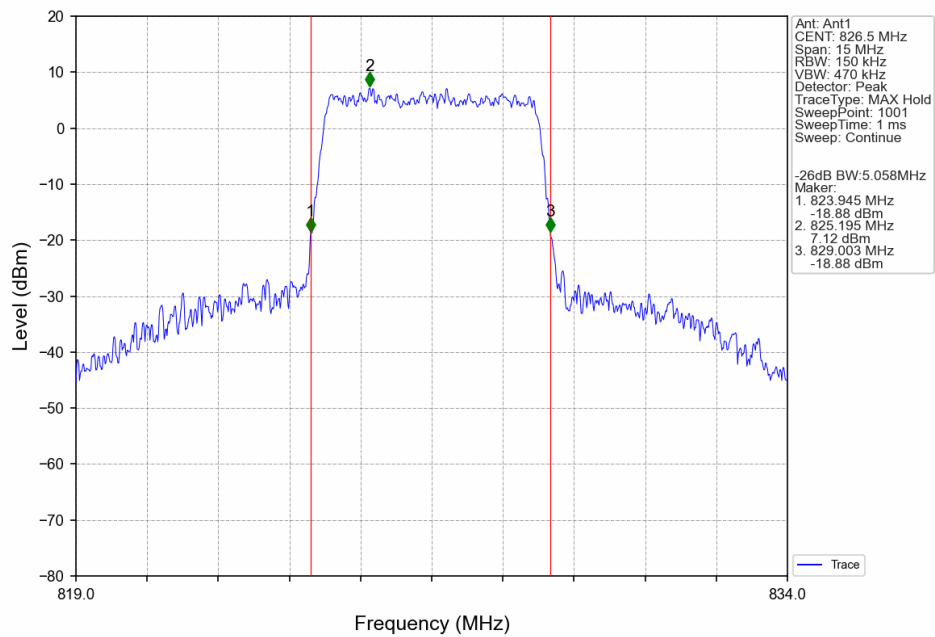




Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV

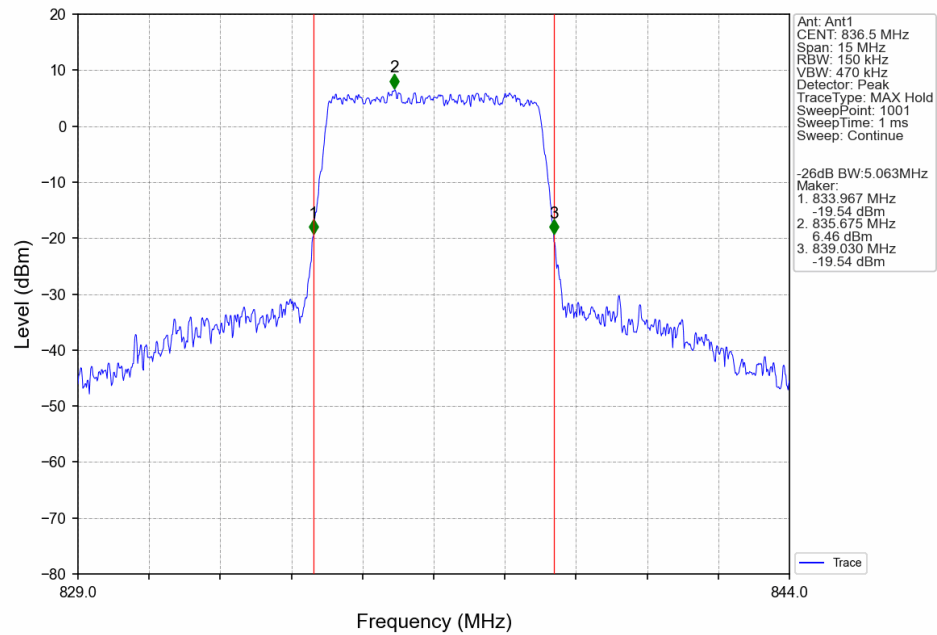


Band5_5MHz_16QAM_LCH_826.5MHz_RB_25_0_NTNV

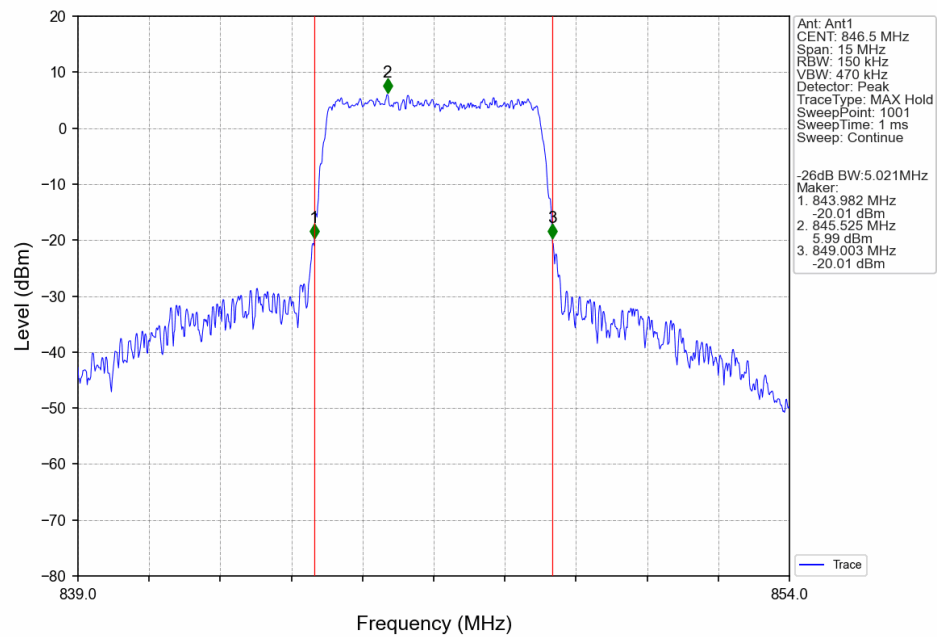




Band5_5MHz_16QAM_MCH_836.5MHz_RB_25_0_NTNV

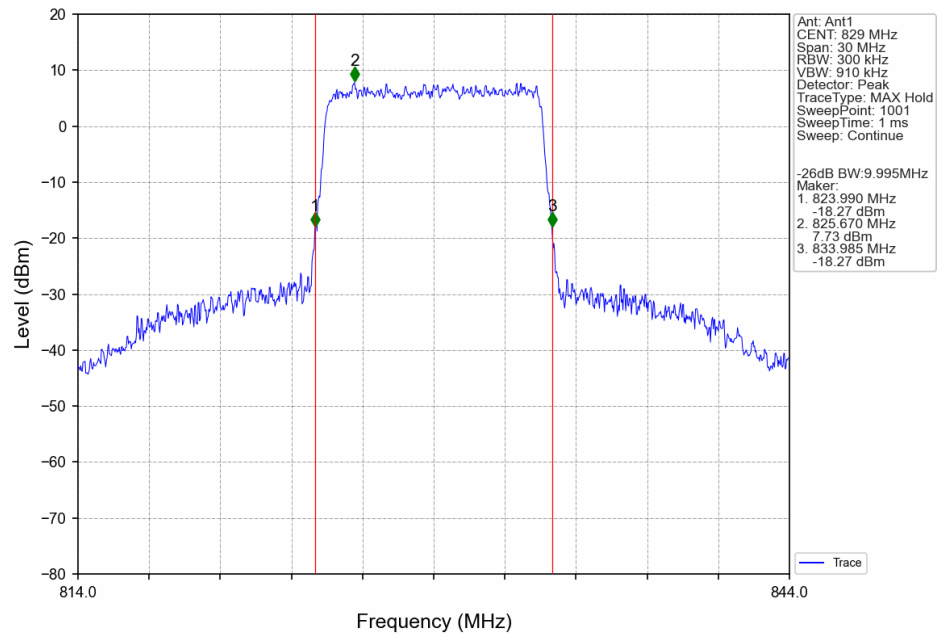


Band5_5MHz_16QAM_HCH_846.5MHz_RB_25_0_NTNV

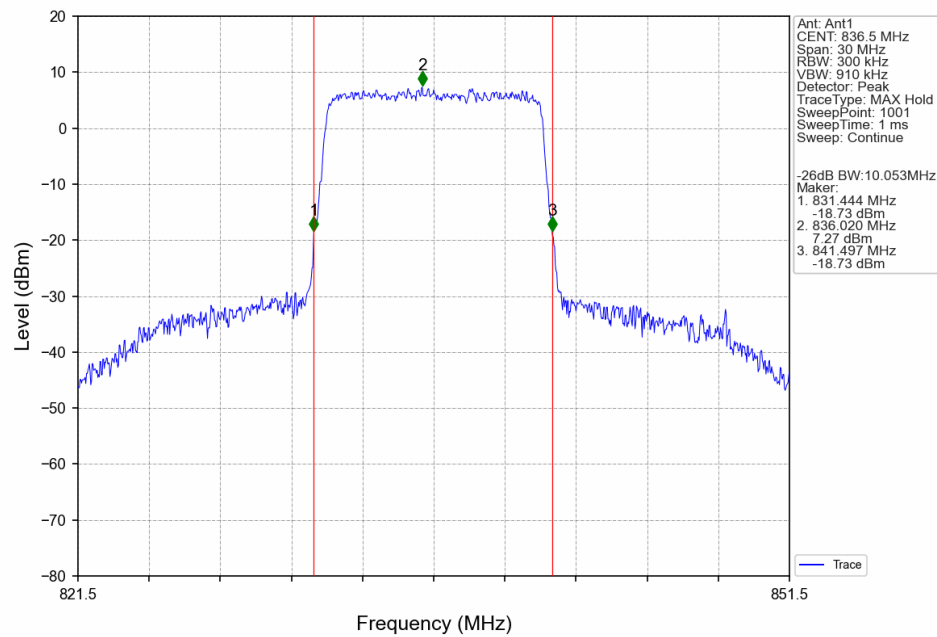




Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV

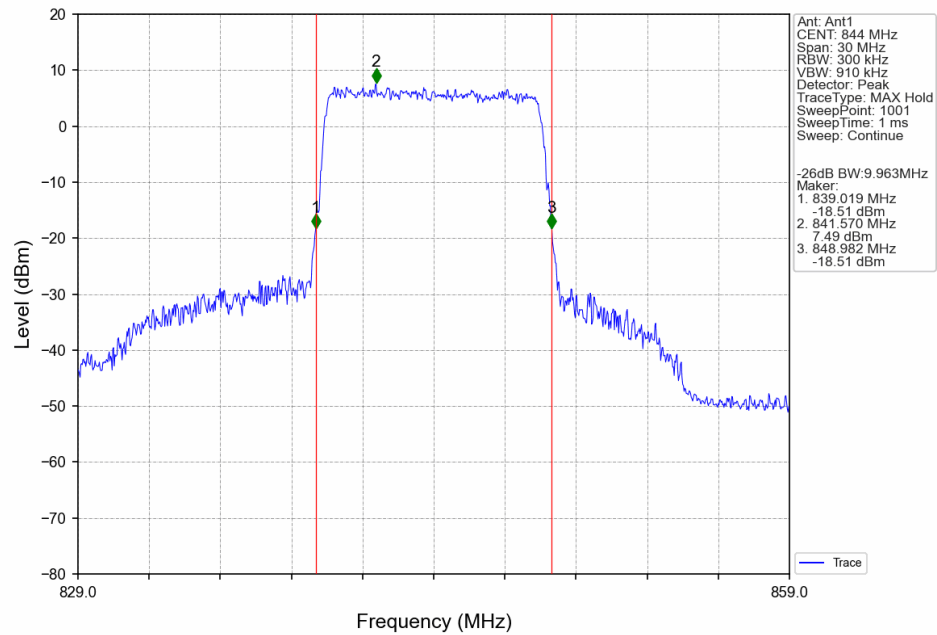


Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV

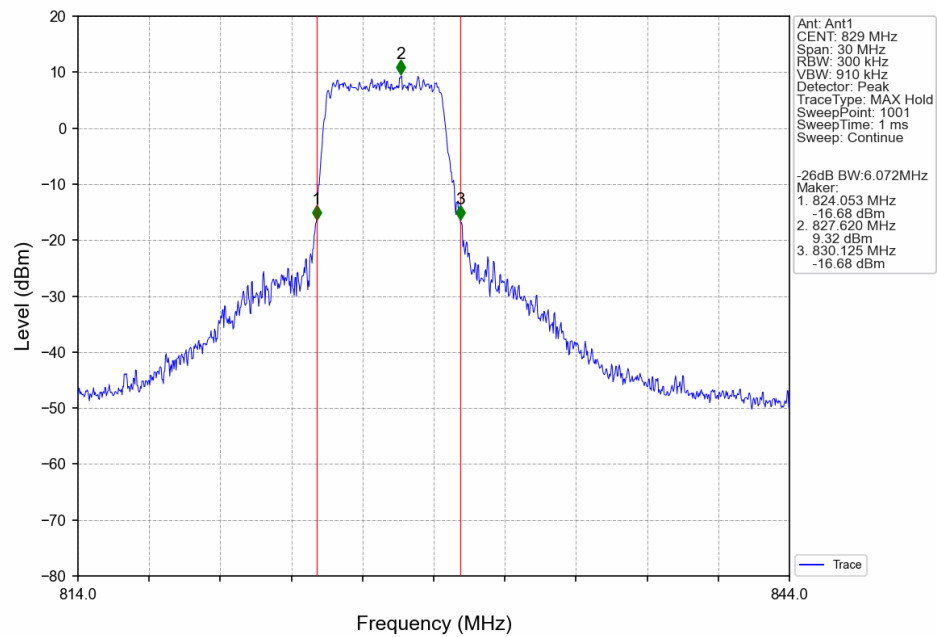




Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV

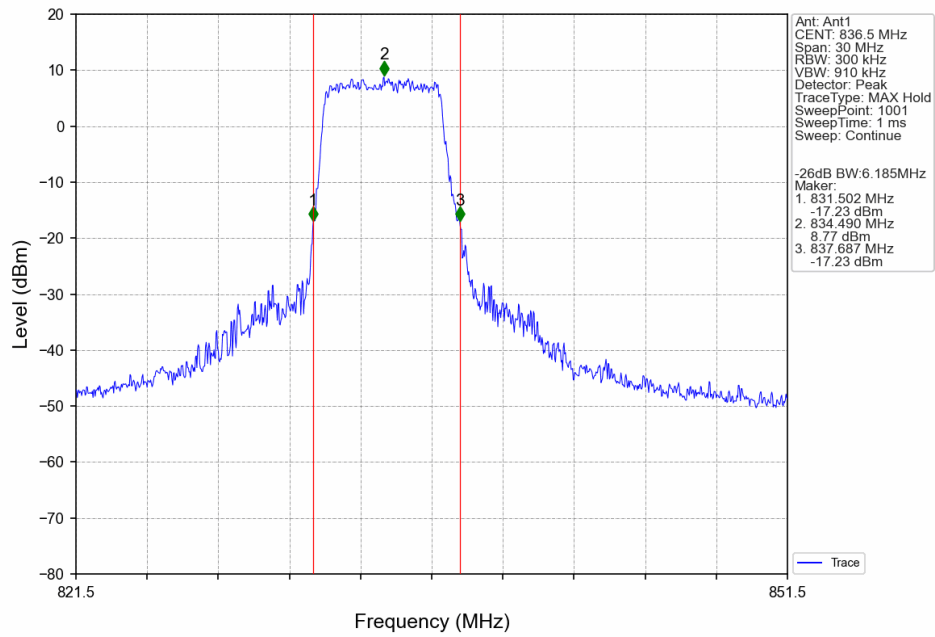


Band5_10MHz_16QAM_LCH_829MHz_RB_27_0_NTNV

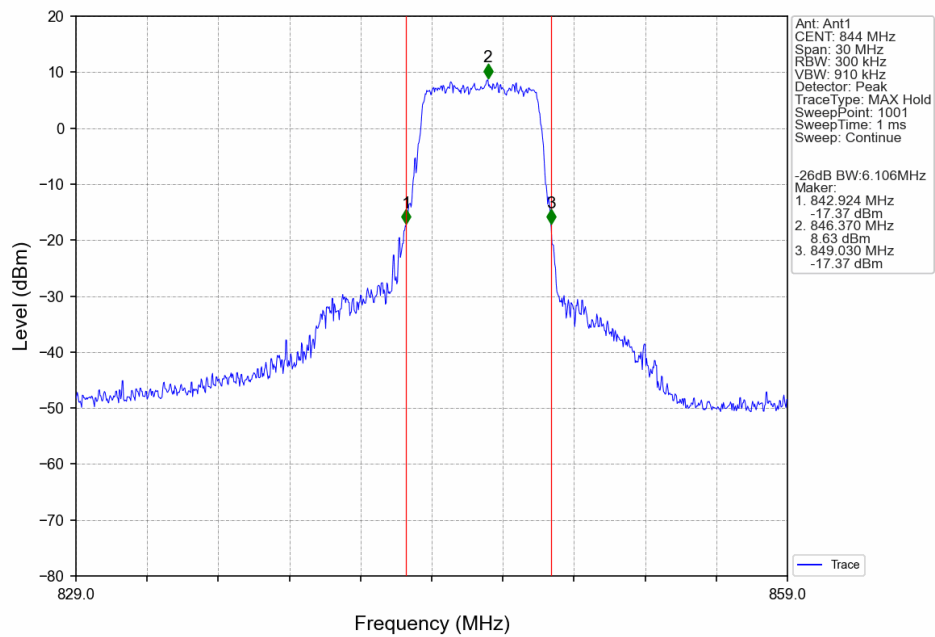




Band5_10MHz_16QAM_MCH_836.5MHz_RB_27_0_NTNV



Band5_10MHz_16QAM_HCH_844MHz_RB_27_23_NTNV



5. Peak-Average Ratio

5.1 Test Result

5.1.1 B5_1.4MHz

Band: 5 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	824.7	6	0	4.84	<=13	Pass
	836.5	6	0	5.17	<=13	Pass
	848.3	6	0	5.20	<=13	Pass
16QAM	824.7	6	0	5.67	<=13	Pass
	836.5	6	0	6.00	<=13	Pass
	848.3	6	0	5.94	<=13	Pass

5.1.2 B5_3MHz

Band: 5 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	825.5	15	0	5.05	<=13	Pass
	836.5	15	0	5.29	<=13	Pass
	847.5	15	0	5.27	<=13	Pass
16QAM	825.5	15	0	5.87	<=13	Pass
	836.5	15	0	6.09	<=13	Pass
	847.5	15	0	6.08	<=13	Pass

5.1.3 B5_5MHz

Band: 5 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	826.5	25	0	5.26	<=13	Pass
	836.5	25	0	5.46	<=13	Pass
	846.5	25	0	5.42	<=13	Pass
16QAM	826.5	25	0	5.96	<=13	Pass
	836.5	25	0	6.12	<=13	Pass
	846.5	25	0	6.13	<=13	Pass

5.1.4 B5_10MHz

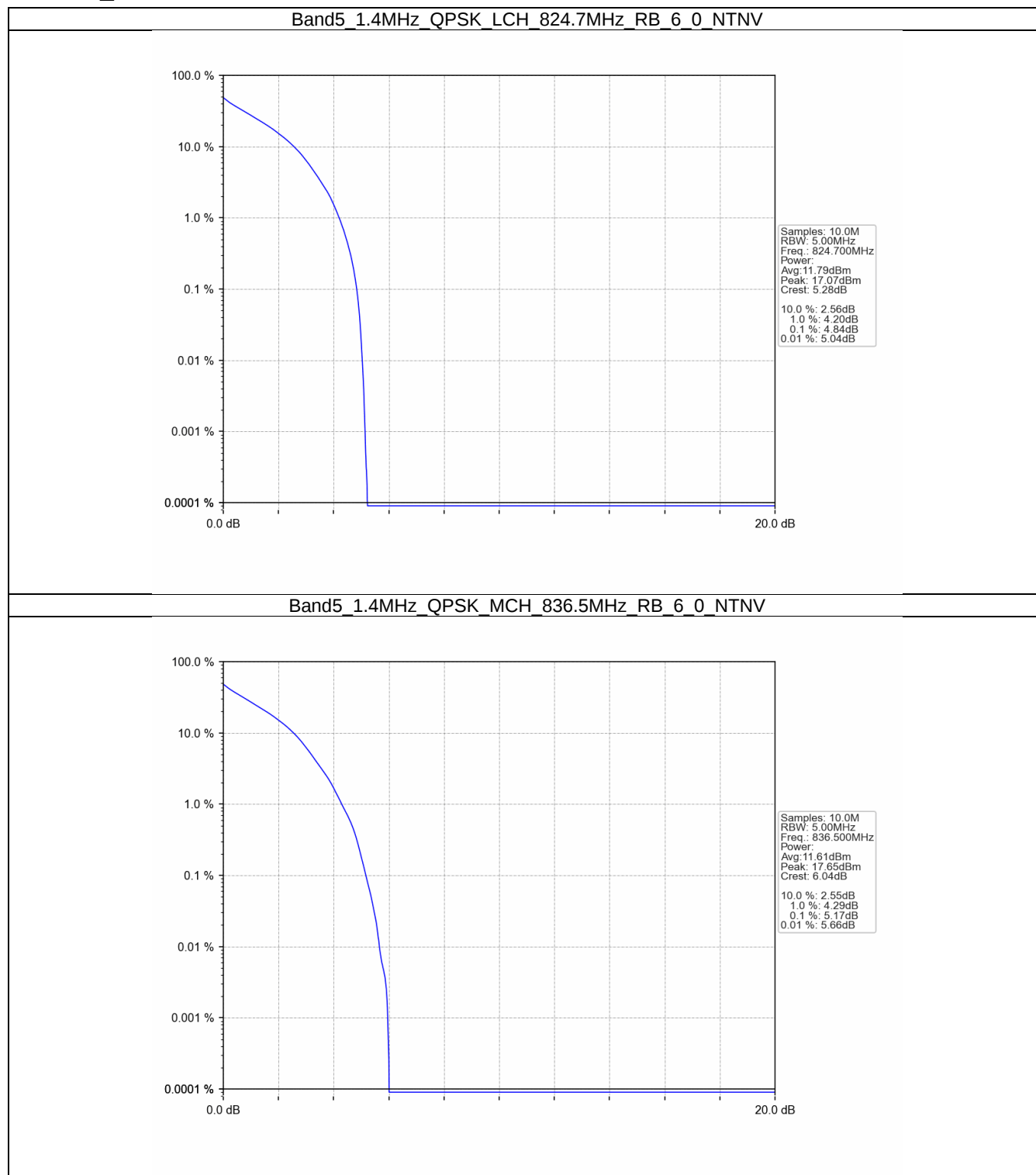
Band: 5 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	829	50	0	5.29	<=13	Pass
	836.5	50	0	5.36	<=13	Pass
	844	50	0	5.35	<=13	Pass
16QAM	829	27	0	5.87	<=13	Pass
	836.5	27	0	6.04	<=13	Pass
	844	27	23	6.00	<=13	Pass



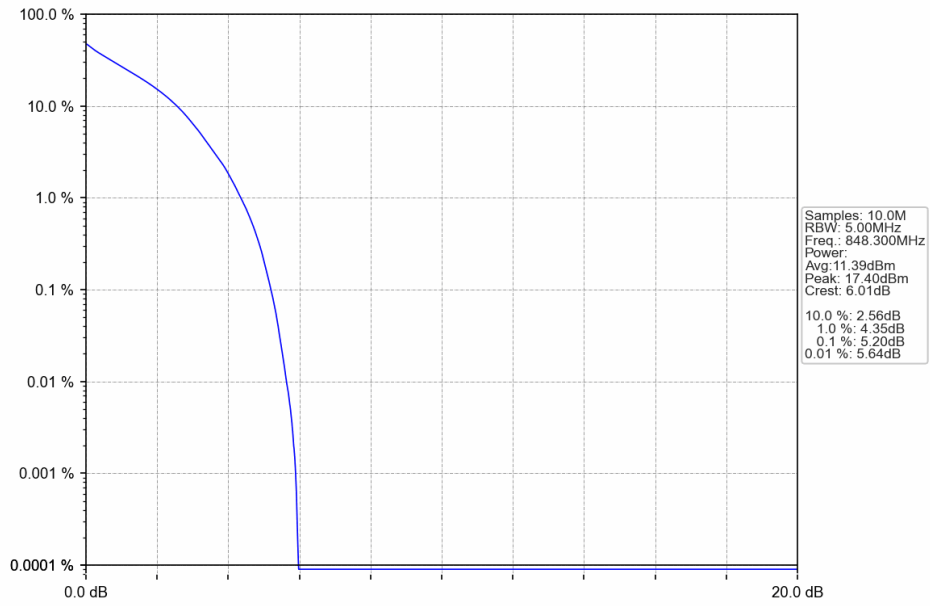


5.2 Test Graph

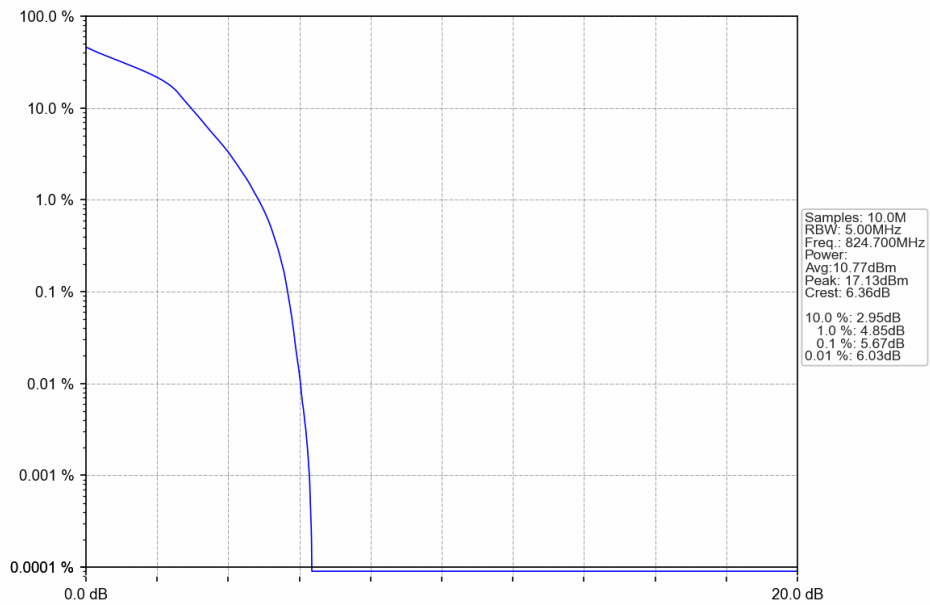
5.2.1 B5_1.4MHz



Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV

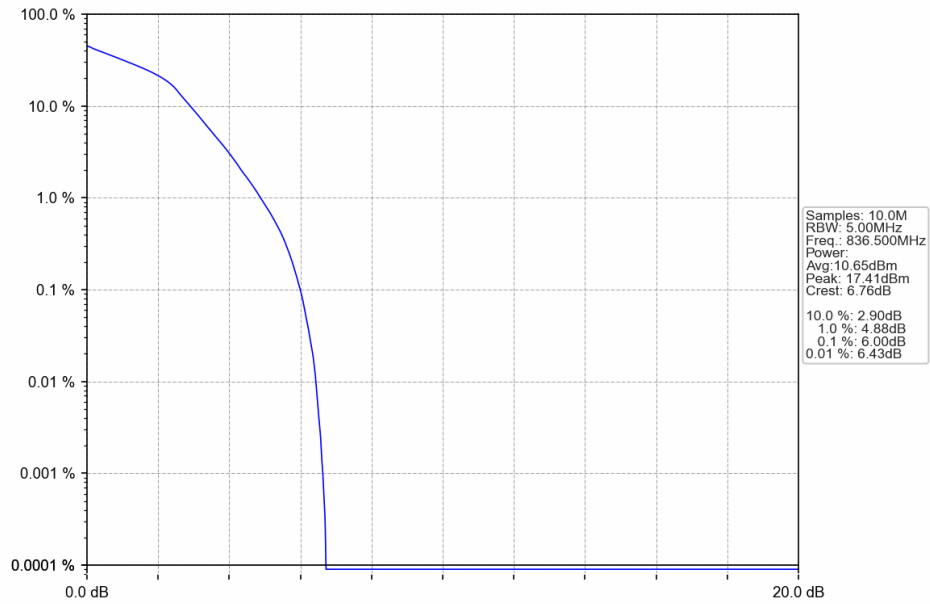


Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV

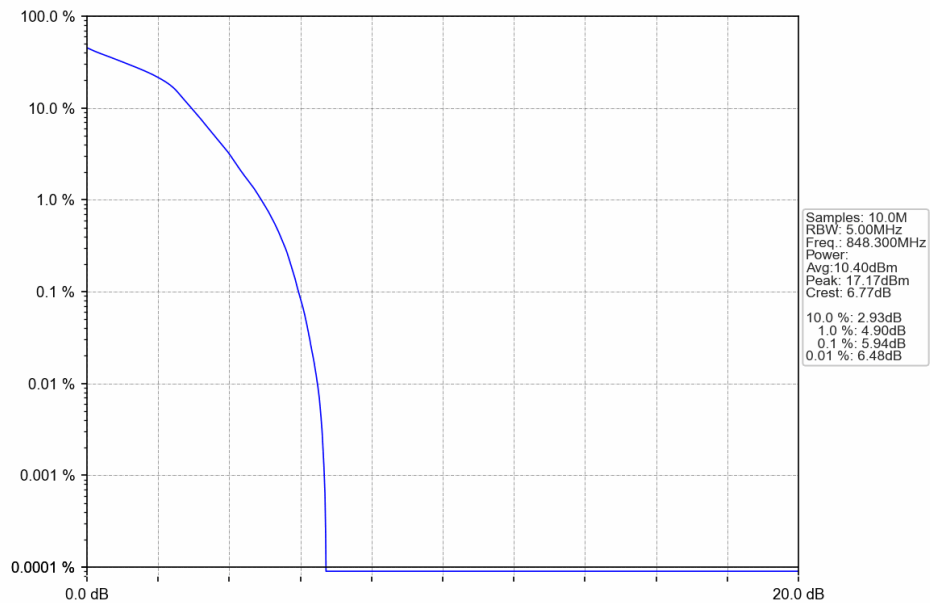




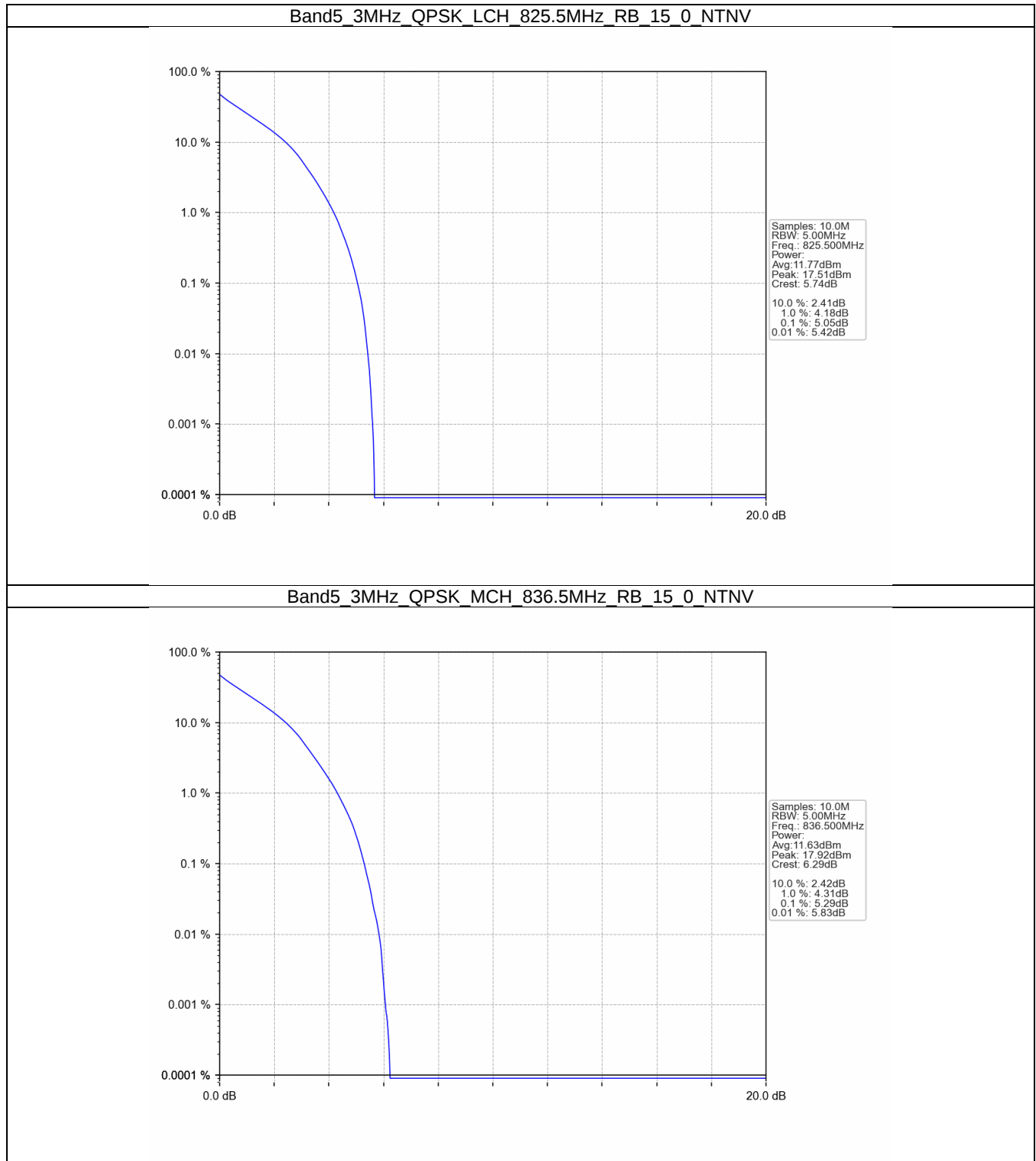
Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV



Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV

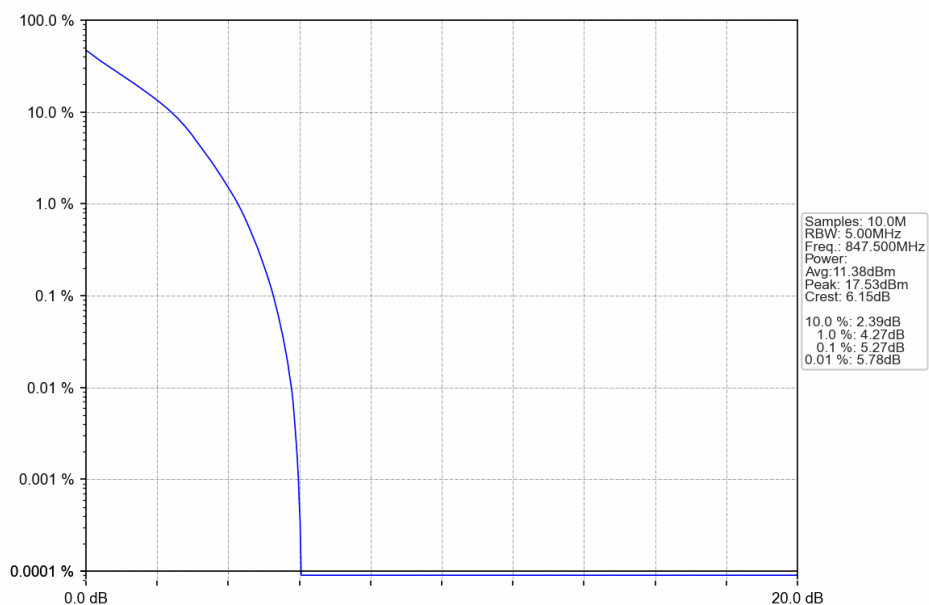


5.2.2 B5_3MHz

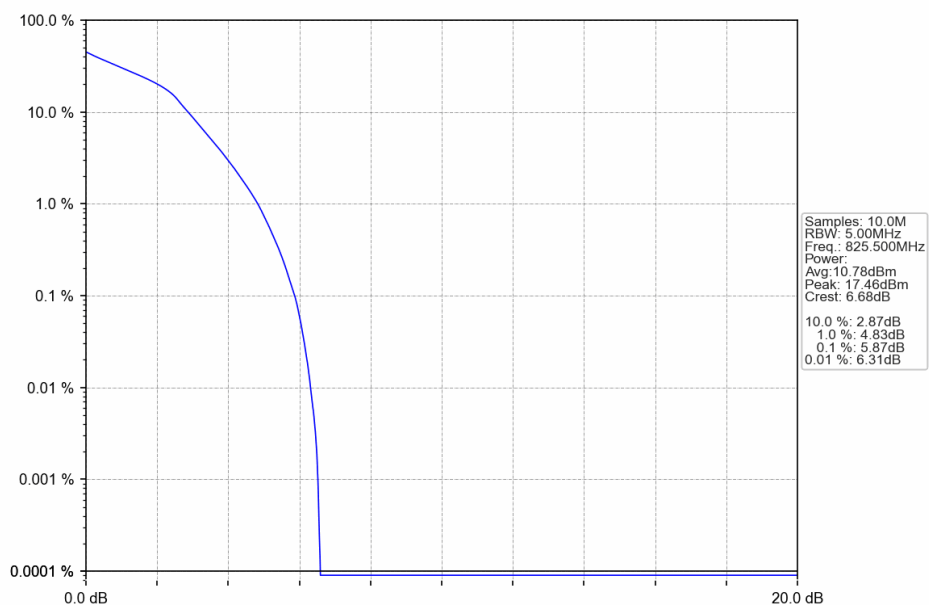




Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV

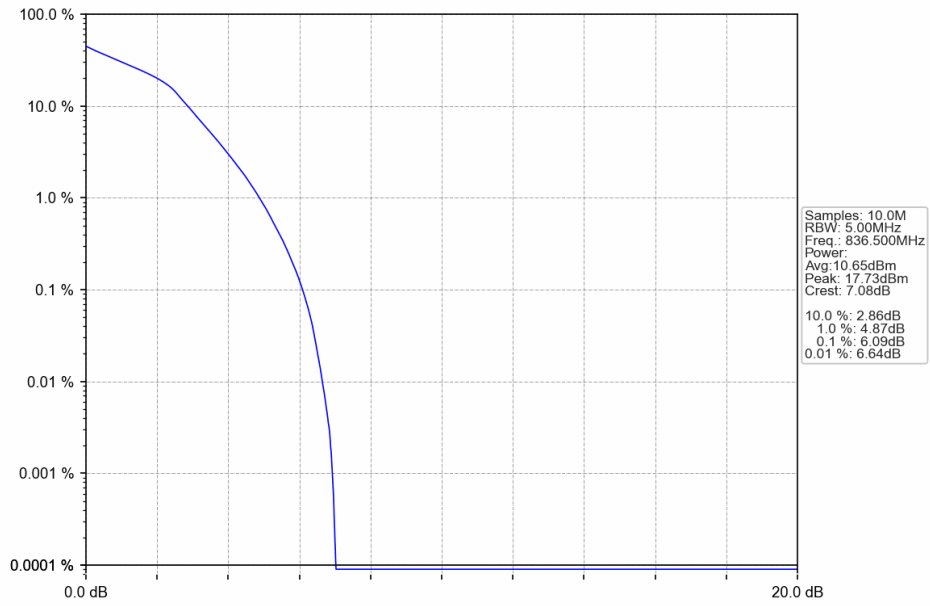


Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV

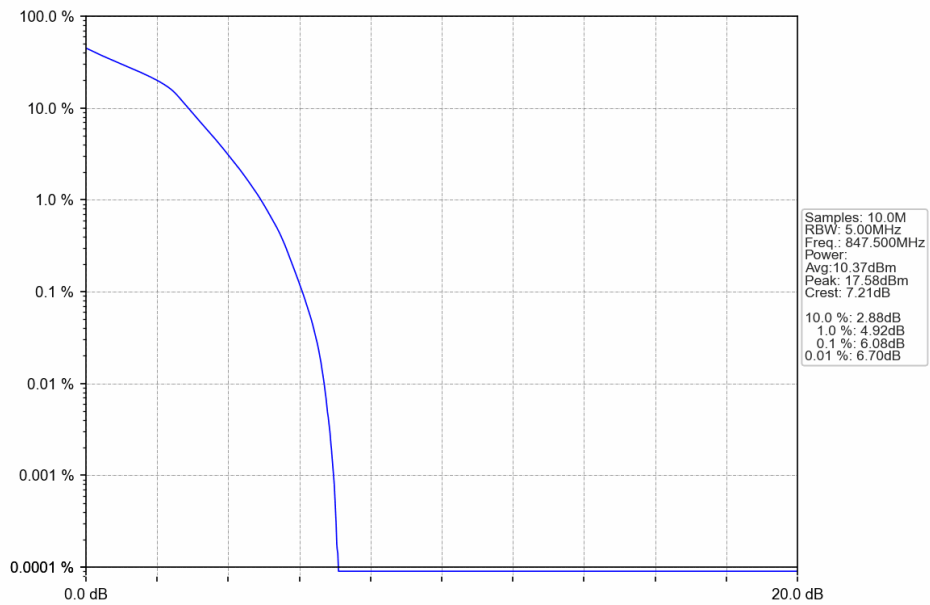




Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV



Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV



5.2.3 B5_5MHz

