

Appendix 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	23.54	0.34	21.73	<=38.45	Pass
			2	23.38	0.34	21.57	<=38.45	Pass
			5	23.33	0.34	21.52	<=38.45	Pass
		3	0	23.85	0.34	22.04	<=38.45	Pass
			2	23.85	0.34	22.04	<=38.45	Pass
			3	23.84	0.34	22.03	<=38.45	Pass
		6	0	22.96	0.34	21.15	<=38.45	Pass
			0	24.00	0.34	22.19	<=38.45	Pass
			2	23.91	0.34	22.10	<=38.45	Pass
	836.5	1	5	23.66	0.34	21.85	<=38.45	Pass
			0	24.01	0.34	22.20	<=38.45	Pass
			2	23.99	0.34	22.18	<=38.45	Pass
		3	3	23.97	0.34	22.16	<=38.45	Pass
			0	23.02	0.34	21.21	<=38.45	Pass
			0	23.36	0.34	21.55	<=38.45	Pass
		6	2	23.32	0.34	21.51	<=38.45	Pass
			5	23.34	0.34	21.53	<=38.45	Pass
			0	23.93	0.34	22.12	<=38.45	Pass
16QAM	824.7	1	2	23.96	0.34	22.15	<=38.45	Pass
			3	23.98	0.34	22.17	<=38.45	Pass
			0	22.92	0.34	21.11	<=38.45	Pass
		3	0	22.26	0.34	20.45	<=38.45	Pass
			2	22.32	0.34	20.51	<=38.45	Pass
			5	22.25	0.34	20.44	<=38.45	Pass
		6	0	22.85	0.34	21.04	<=38.45	Pass
			2	22.84	0.34	21.03	<=38.45	Pass
			3	22.83	0.34	21.02	<=38.45	Pass
	836.5	1	0	21.95	0.34	20.14	<=38.45	Pass
			0	22.71	0.34	20.90	<=38.45	Pass
			2	22.74	0.34	20.93	<=38.45	Pass
		3	5	22.69	0.34	20.88	<=38.45	Pass
			0	22.95	0.34	21.14	<=38.45	Pass
			2	22.91	0.34	21.10	<=38.45	Pass
			3	22.90	0.34	21.09	<=38.45	Pass
		6	0	22.06	0.34	20.25	<=38.45	Pass
			0	22.53	0.34	20.72	<=38.45	Pass
			2	22.58	0.34	20.77	<=38.45	Pass
16QAM	848.3	1	5	22.59	0.34	20.78	<=38.45	Pass
			0	22.80	0.34	20.99	<=38.45	Pass
			2	22.85	0.34	21.04	<=38.45	Pass
		3	3	22.84	0.34	21.03	<=38.45	Pass
			0	21.86	0.34	20.05	<=38.45	Pass
		6	0					
		6	0					

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	23.36	0.34	21.55	<=38.45	Pass
			7	23.38	0.34	21.57	<=38.45	Pass
			14	23.38	0.34	21.57	<=38.45	Pass
		8	0	22.93	0.34	21.12	<=38.45	Pass
			4	22.88	0.34	21.07	<=38.45	Pass
			7	22.92	0.34	21.11	<=38.45	Pass
		15	0	22.91	0.34	21.10	<=38.45	Pass
	836.5	1	0	23.52	0.34	21.71	<=38.45	Pass
			7	23.53	0.34	21.72	<=38.45	Pass
			14	23.46	0.34	21.65	<=38.45	Pass
		8	0	22.99	0.34	21.18	<=38.45	Pass
			4	23.00	0.34	21.19	<=38.45	Pass
			7	23.00	0.34	21.19	<=38.45	Pass
		15	0	23.00	0.34	21.19	<=38.45	Pass
	847.5	1	0	23.40	0.34	21.59	<=38.45	Pass
			7	23.44	0.34	21.63	<=38.45	Pass
			14	23.42	0.34	21.61	<=38.45	Pass
		8	0	22.89	0.34	21.08	<=38.45	Pass
			4	22.90	0.34	21.09	<=38.45	Pass
			7	22.89	0.34	21.08	<=38.45	Pass
		15	0	22.93	0.34	21.12	<=38.45	Pass
16QAM	825.5	1	0	22.62	0.34	20.81	<=38.45	Pass
			7	22.56	0.34	20.75	<=38.45	Pass
			14	22.58	0.34	20.77	<=38.45	Pass
		8	0	21.95	0.34	20.14	<=38.45	Pass
			4	21.90	0.34	20.09	<=38.45	Pass
			7	21.97	0.34	20.16	<=38.45	Pass
		15	0	21.85	0.34	20.04	<=38.45	Pass
	836.5	1	0	22.41	0.34	20.60	<=38.45	Pass
			7	22.42	0.34	20.61	<=38.45	Pass
			14	22.41	0.34	20.60	<=38.45	Pass
		8	0	22.00	0.34	20.19	<=38.45	Pass
			4	22.04	0.34	20.23	<=38.45	Pass
			7	22.04	0.34	20.23	<=38.45	Pass
		15	0	21.93	0.34	20.12	<=38.45	Pass
	847.5	1	0	22.55	0.34	20.74	<=38.45	Pass
			7	22.60	0.34	20.79	<=38.45	Pass
			14	22.56	0.34	20.75	<=38.45	Pass
		8	0	21.97	0.34	20.16	<=38.45	Pass
			4	21.95	0.34	20.14	<=38.45	Pass
			7	21.93	0.34	20.12	<=38.45	Pass
		15	0	21.95	0.34	20.14	<=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	23.51	0.34	21.70	<=38.45	Pass
			13	23.52	0.34	21.71	<=38.45	Pass
			24	23.54	0.34	21.73	<=38.45	Pass
		12	0	22.95	0.34	21.14	<=38.45	Pass
			6	22.94	0.34	21.13	<=38.45	Pass

			13	22.89	0.34	21.08	<=38.45	Pass	
		25	0	22.94	0.34	21.13	<=38.45	Pass	
	836.5	1	0	23.61	0.34	21.80	<=38.45	Pass	
			13	23.61	0.34	21.80	<=38.45	Pass	
			24	23.63	0.34	21.82	<=38.45	Pass	
		12	0	23.03	0.34	21.22	<=38.45	Pass	
			6	23.02	0.34	21.21	<=38.45	Pass	
			13	22.98	0.34	21.17	<=38.45	Pass	
		25	0	23.03	0.34	21.22	<=38.45	Pass	
		846.5	1	0	23.56	0.34	21.75	<=38.45	Pass
	13			23.47	0.34	21.66	<=38.45	Pass	
	24			23.55	0.34	21.74	<=38.45	Pass	
	12		0	22.97	0.34	21.16	<=38.45	Pass	
			6	22.90	0.34	21.09	<=38.45	Pass	
			13	22.91	0.34	21.10	<=38.45	Pass	
	25		0	22.97	0.34	21.16	<=38.45	Pass	
	16QAM		826.5	1	0	22.60	0.34	20.79	<=38.45
		13			22.63	0.34	20.82	<=38.45	Pass
		24			22.69	0.34	20.88	<=38.45	Pass
		12		0	21.97	0.34	20.16	<=38.45	Pass
				6	21.98	0.34	20.17	<=38.45	Pass
				13	21.91	0.34	20.10	<=38.45	Pass
		25		0	21.92	0.34	20.11	<=38.45	Pass
		836.5		1	0	22.69	0.34	20.88	<=38.45
13			22.67		0.34	20.86	<=38.45	Pass	
24			22.69		0.34	20.88	<=38.45	Pass	
12			0	22.06	0.34	20.25	<=38.45	Pass	
			6	22.04	0.34	20.23	<=38.45	Pass	
			13	22.03	0.34	20.22	<=38.45	Pass	
25		0	22.08	0.34	20.27	<=38.45	Pass		
846.5		1	0	22.46	0.34	20.65	<=38.45	Pass	
			13	22.41	0.34	20.60	<=38.45	Pass	
			24	22.43	0.34	20.62	<=38.45	Pass	
		12	0	22.01	0.34	20.20	<=38.45	Pass	
			6	21.91	0.34	20.10	<=38.45	Pass	
			13	21.91	0.34	20.10	<=38.45	Pass	
		25	0	21.98	0.34	20.17	<=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	23.32	0.34	21.51	<=38.45	Pass
			25	23.45	0.34	21.64	<=38.45	Pass
			49	23.46	0.34	21.65	<=38.45	Pass
		25	0	22.97	0.34	21.16	<=38.45	Pass
			13	23.01	0.34	21.20	<=38.45	Pass
			25	22.94	0.34	21.13	<=38.45	Pass
		50	0	23.03	0.34	21.22	<=38.45	Pass
	836.5	1	0	23.50	0.34	21.69	<=38.45	Pass
			25	23.55	0.34	21.74	<=38.45	Pass
			49	23.47	0.34	21.66	<=38.45	Pass
		25	0	23.03	0.34	21.22	<=38.45	Pass
			13	23.01	0.34	21.20	<=38.45	Pass
			25	23.04	0.34	21.23	<=38.45	Pass
		50	0	23.08	0.34	21.27	<=38.45	Pass

16QAM	844	1	0	23.52	0.34	21.71	<=38.45	Pass
			25	23.43	0.34	21.62	<=38.45	Pass
			49	23.37	0.34	21.56	<=38.45	Pass
		25	0	23.03	0.34	21.22	<=38.45	Pass
			13	22.92	0.34	21.11	<=38.45	Pass
			25	22.84	0.34	21.03	<=38.45	Pass
		50	0	23.01	0.34	21.20	<=38.45	Pass
	829	1	0	22.57	0.34	20.76	<=38.45	Pass
			25	22.67	0.34	20.86	<=38.45	Pass
			49	22.69	0.34	20.88	<=38.45	Pass
		25	0	22.01	0.34	20.20	<=38.45	Pass
			13	22.04	0.34	20.23	<=38.45	Pass
			25	21.96	0.34	20.15	<=38.45	Pass
		50	0	21.97	0.34	20.16	<=38.45	Pass
	836.5	1	0	22.41	0.34	20.60	<=38.45	Pass
			25	22.42	0.34	20.61	<=38.45	Pass
			49	22.36	0.34	20.55	<=38.45	Pass
		25	0	22.08	0.34	20.27	<=38.45	Pass
			13	22.06	0.34	20.25	<=38.45	Pass
			25	22.10	0.34	20.29	<=38.45	Pass
		50	0	22.09	0.34	20.28	<=38.45	Pass
	844	1	0	22.64	0.34	20.83	<=38.45	Pass
			25	22.59	0.34	20.78	<=38.45	Pass
			49	22.52	0.34	20.71	<=38.45	Pass
		25	0	22.03	0.34	20.22	<=38.45	Pass
			13	21.91	0.34	20.10	<=38.45	Pass
			25	21.86	0.34	20.05	<=38.45	Pass
		50	0	21.97	0.34	20.16	<=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	-4.020	-0.0049	-2.5 to 2.5	Pass
					3.85	10.614	0.0129	-2.5 to 2.5	Pass
					4.43	3.347	0.0041	-2.5 to 2.5	Pass
				-30	3.85	-5.050	-0.0061	-2.5 to 2.5	Pass
				-20	3.85	0.029	0.0000	-2.5 to 2.5	Pass
				-10	3.85	-2.160	-0.0026	-2.5 to 2.5	Pass
				0	3.85	0.358	0.0004	-2.5 to 2.5	Pass
				10	3.85	0.300	0.0004	-2.5 to 2.5	Pass
				30	3.85	-0.143	-0.0002	-2.5 to 2.5	Pass
				40	3.85	-2.503	-0.0030	-2.5 to 2.5	Pass
				50	3.85	-3.319	-0.0040	-2.5 to 2.5	Pass
	836.5	6	0	20	3.27	-4.306	-0.0051	-2.5 to 2.5	Pass
					3.85	-0.687	-0.0008	-2.5 to 2.5	Pass
					4.43	-0.072	-0.0001	-2.5 to 2.5	Pass
				-30	3.85	-2.017	-0.0024	-2.5 to 2.5	Pass
				-20	3.85	2.475	0.0030	-2.5 to 2.5	Pass
				-10	3.85	-7.410	-0.0089	-2.5 to 2.5	Pass

				0	3.85	-6.180	-0.0074	-2.5 to 2.5	Pass
				10	3.85	-1.631	-0.0019	-2.5 to 2.5	Pass
				30	3.85	-4.663	-0.0056	-2.5 to 2.5	Pass
				40	3.85	-2.832	-0.0034	-2.5 to 2.5	Pass
				50	3.85	-4.921	-0.0059	-2.5 to 2.5	Pass
	848.3	6	0	20	3.27	-0.257	-0.0003	-2.5 to 2.5	Pass
					3.85	-3.505	-0.0041	-2.5 to 2.5	Pass
					4.43	-0.415	-0.0005	-2.5 to 2.5	Pass
				-30	3.85	0.372	0.0004	-2.5 to 2.5	Pass
				-20	3.85	0.443	0.0005	-2.5 to 2.5	Pass
				-10	3.85	-2.346	-0.0028	-2.5 to 2.5	Pass
				0	3.85	3.390	0.0040	-2.5 to 2.5	Pass
				10	3.85	1.359	0.0016	-2.5 to 2.5	Pass
				30	3.85	-0.844	-0.0010	-2.5 to 2.5	Pass
				40	3.85	-0.544	-0.0006	-2.5 to 2.5	Pass
				50	3.85	4.635	0.0055	-2.5 to 2.5	Pass
16QAM	824.7	6	0	20	3.27	-6.609	-0.0080	-2.5 to 2.5	Pass
					3.85	2.518	0.0031	-2.5 to 2.5	Pass
					4.43	0.114	0.0001	-2.5 to 2.5	Pass
				-30	3.85	-3.848	-0.0047	-2.5 to 2.5	Pass
				-20	3.85	-4.306	-0.0052	-2.5 to 2.5	Pass
				-10	3.85	-4.148	-0.0050	-2.5 to 2.5	Pass
				0	3.85	0.315	0.0004	-2.5 to 2.5	Pass
				10	3.85	-0.200	-0.0002	-2.5 to 2.5	Pass
				30	3.85	-0.916	-0.0011	-2.5 to 2.5	Pass
				40	3.85	-2.847	-0.0035	-2.5 to 2.5	Pass
				50	3.85	-2.632	-0.0032	-2.5 to 2.5	Pass
	836.5	6	0	20	3.27	2.031	0.0024	-2.5 to 2.5	Pass
					3.85	-0.758	-0.0009	-2.5 to 2.5	Pass
					4.43	2.031	0.0024	-2.5 to 2.5	Pass
				-30	3.85	4.163	0.0050	-2.5 to 2.5	Pass
				-20	3.85	-2.017	-0.0024	-2.5 to 2.5	Pass
				-10	3.85	-2.103	-0.0025	-2.5 to 2.5	Pass
				0	3.85	-0.815	-0.0010	-2.5 to 2.5	Pass
				10	3.85	-3.333	-0.0040	-2.5 to 2.5	Pass
				30	3.85	0.172	0.0002	-2.5 to 2.5	Pass
				40	3.85	-1.574	-0.0019	-2.5 to 2.5	Pass
				50	3.85	-0.930	-0.0011	-2.5 to 2.5	Pass
	848.3	6	0	20	3.27	1.187	0.0014	-2.5 to 2.5	Pass
					3.85	2.561	0.0030	-2.5 to 2.5	Pass
					4.43	1.616	0.0019	-2.5 to 2.5	Pass
				-30	3.85	3.276	0.0039	-2.5 to 2.5	Pass
				-20	3.85	-1.760	-0.0021	-2.5 to 2.5	Pass
				-10	3.85	-0.257	-0.0003	-2.5 to 2.5	Pass
				0	3.85	-2.003	-0.0024	-2.5 to 2.5	Pass
				10	3.85	-0.243	-0.0003	-2.5 to 2.5	Pass
				30	3.85	2.103	0.0025	-2.5 to 2.5	Pass
				40	3.85	-1.445	-0.0017	-2.5 to 2.5	Pass
				50	3.85	3.619	0.0043	-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	-2.732	-0.0033	-2.5 to 2.5	Pass
					3.85	-1.645	-0.0020	-2.5 to 2.5	Pass
					4.43	2.847	0.0034	-2.5 to 2.5	Pass

				-30	3.85	3.676	0.0045	-2.5 to 2.5	Pass	
				-20	3.85	-1.559	-0.0019	-2.5 to 2.5	Pass	
				-10	3.85	1.373	0.0017	-2.5 to 2.5	Pass	
				0	3.85	1.774	0.0021	-2.5 to 2.5	Pass	
				10	3.85	2.933	0.0036	-2.5 to 2.5	Pass	
				30	3.85	1.388	0.0017	-2.5 to 2.5	Pass	
				40	3.85	1.760	0.0021	-2.5 to 2.5	Pass	
				50	3.85	5.078	0.0062	-2.5 to 2.5	Pass	
	836.5	15	0	20	3.27	1.945	0.0023	-2.5 to 2.5	Pass	
					3.85	-0.200	-0.0002	-2.5 to 2.5	Pass	
					4.43	-2.804	-0.0034	-2.5 to 2.5	Pass	
				-30	3.85	-1.001	-0.0012	-2.5 to 2.5	Pass	
				-20	3.85	3.390	0.0041	-2.5 to 2.5	Pass	
				-10	3.85	-0.615	-0.0007	-2.5 to 2.5	Pass	
				0	3.85	0.000	0.0000	-2.5 to 2.5	Pass	
				10	3.85	-0.215	-0.0003	-2.5 to 2.5	Pass	
				30	3.85	3.576	0.0043	-2.5 to 2.5	Pass	
				40	3.85	-0.515	-0.0006	-2.5 to 2.5	Pass	
	50	3.85	0.815	0.0010	-2.5 to 2.5	Pass				
	847.5	15	0	20	3.27	-1.659	-0.0020	-2.5 to 2.5	Pass	
					3.85	-1.774	-0.0021	-2.5 to 2.5	Pass	
					4.43	-8.855	-0.0104	-2.5 to 2.5	Pass	
				-30	3.85	0.415	0.0005	-2.5 to 2.5	Pass	
				-20	3.85	0.029	0.0000	-2.5 to 2.5	Pass	
				-10	3.85	-3.448	-0.0041	-2.5 to 2.5	Pass	
				0	3.85	1.130	0.0013	-2.5 to 2.5	Pass	
				10	3.85	1.087	0.0013	-2.5 to 2.5	Pass	
				30	3.85	0.329	0.0004	-2.5 to 2.5	Pass	
				40	3.85	-2.131	-0.0025	-2.5 to 2.5	Pass	
	50	3.85	-0.486	-0.0006	-2.5 to 2.5	Pass				
	16QAM	825.5	15	0	20	3.27	3.991	0.0048	-2.5 to 2.5	Pass
						3.85	-1.888	-0.0023	-2.5 to 2.5	Pass
						4.43	0.372	0.0005	-2.5 to 2.5	Pass
					-30	3.85	-1.044	-0.0013	-2.5 to 2.5	Pass
					-20	3.85	-2.775	-0.0034	-2.5 to 2.5	Pass
					-10	3.85	-1.287	-0.0016	-2.5 to 2.5	Pass
0					3.85	5.121	0.0062	-2.5 to 2.5	Pass	
10					3.85	-1.473	-0.0018	-2.5 to 2.5	Pass	
30					3.85	0.958	0.0012	-2.5 to 2.5	Pass	
40					3.85	-5.450	-0.0066	-2.5 to 2.5	Pass	
50		3.85	4.363	0.0053	-2.5 to 2.5	Pass				
836.5		15	0	20	3.27	1.574	0.0019	-2.5 to 2.5	Pass	
					3.85	0.916	0.0011	-2.5 to 2.5	Pass	
					4.43	4.592	0.0055	-2.5 to 2.5	Pass	
				-30	3.85	-0.772	-0.0009	-2.5 to 2.5	Pass	
				-20	3.85	-0.286	-0.0003	-2.5 to 2.5	Pass	
				-10	3.85	-7.052	-0.0084	-2.5 to 2.5	Pass	
				0	3.85	1.631	0.0019	-2.5 to 2.5	Pass	
				10	3.85	1.087	0.0013	-2.5 to 2.5	Pass	
				30	3.85	-2.074	-0.0025	-2.5 to 2.5	Pass	
				40	3.85	0.329	0.0004	-2.5 to 2.5	Pass	
50		3.85	-1.230	-0.0015	-2.5 to 2.5	Pass				
847.5		15	0	20	3.27	-1.388	-0.0016	-2.5 to 2.5	Pass	
					3.85	-0.529	-0.0006	-2.5 to 2.5	Pass	
					4.43	-0.772	-0.0009	-2.5 to 2.5	Pass	
				-30	3.85	-2.074	-0.0024	-2.5 to 2.5	Pass	
				-20	3.85	-5.636	-0.0067	-2.5 to 2.5	Pass	
				-10	3.85	0.143	0.0002	-2.5 to 2.5	Pass	
	0			3.85	1.101	0.0013	-2.5 to 2.5	Pass		

				10	3.85	-2.604	-0.0031	-2.5 to 2.5	Pass
				30	3.85	3.190	0.0038	-2.5 to 2.5	Pass
				40	3.85	0.544	0.0006	-2.5 to 2.5	Pass
				50	3.85	-3.633	-0.0043	-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	-3.362	-0.0041	-2.5 to 2.5	Pass
					3.85	-0.229	-0.0003	-2.5 to 2.5	Pass
					4.43	2.503	0.0030	-2.5 to 2.5	Pass
				-30	3.85	-0.944	-0.0011	-2.5 to 2.5	Pass
				-20	3.85	-0.973	-0.0012	-2.5 to 2.5	Pass
				-10	3.85	1.845	0.0022	-2.5 to 2.5	Pass
				0	3.85	-1.330	-0.0016	-2.5 to 2.5	Pass
				10	3.85	-2.861	-0.0035	-2.5 to 2.5	Pass
				30	3.85	-2.589	-0.0031	-2.5 to 2.5	Pass
				40	3.85	-3.905	-0.0047	-2.5 to 2.5	Pass
				50	3.85	0.515	0.0006	-2.5 to 2.5	Pass
	836.5	25	0	20	3.27	1.431	0.0017	-2.5 to 2.5	Pass
					3.85	-3.247	-0.0039	-2.5 to 2.5	Pass
					4.43	-0.944	-0.0011	-2.5 to 2.5	Pass
				-30	3.85	2.074	0.0025	-2.5 to 2.5	Pass
				-20	3.85	0.887	0.0011	-2.5 to 2.5	Pass
				-10	3.85	-3.977	-0.0048	-2.5 to 2.5	Pass
				0	3.85	-1.774	-0.0021	-2.5 to 2.5	Pass
				10	3.85	1.044	0.0012	-2.5 to 2.5	Pass
				30	3.85	1.073	0.0013	-2.5 to 2.5	Pass
				40	3.85	-0.072	-0.0001	-2.5 to 2.5	Pass
				50	3.85	-3.633	-0.0043	-2.5 to 2.5	Pass
	846.5	25	0	20	3.27	-2.217	-0.0026	-2.5 to 2.5	Pass
					3.85	-0.229	-0.0003	-2.5 to 2.5	Pass
					4.43	1.230	0.0015	-2.5 to 2.5	Pass
				-30	3.85	0.944	0.0011	-2.5 to 2.5	Pass
				-20	3.85	0.644	0.0008	-2.5 to 2.5	Pass
				-10	3.85	0.930	0.0011	-2.5 to 2.5	Pass
				0	3.85	0.830	0.0010	-2.5 to 2.5	Pass
				10	3.85	-0.715	-0.0008	-2.5 to 2.5	Pass
				30	3.85	0.858	0.0010	-2.5 to 2.5	Pass
				40	3.85	-1.616	-0.0019	-2.5 to 2.5	Pass
16QAM	826.5	25	0	20	3.27	-1.531	-0.0019	-2.5 to 2.5	Pass
					3.85	3.161	0.0038	-2.5 to 2.5	Pass
					4.43	-2.432	-0.0029	-2.5 to 2.5	Pass
				-30	3.85	-1.402	-0.0017	-2.5 to 2.5	Pass
				-20	3.85	-0.658	-0.0008	-2.5 to 2.5	Pass
				-10	3.85	5.207	0.0063	-2.5 to 2.5	Pass
				0	3.85	0.086	0.0001	-2.5 to 2.5	Pass
				10	3.85	-2.074	-0.0025	-2.5 to 2.5	Pass
				30	3.85	-2.303	-0.0028	-2.5 to 2.5	Pass
				40	3.85	-1.130	-0.0014	-2.5 to 2.5	Pass
				50	3.85	0.386	0.0005	-2.5 to 2.5	Pass
	836.5	25	0	20	3.27	1.030	0.0012	-2.5 to 2.5	Pass
					3.85	2.604	0.0031	-2.5 to 2.5	Pass
					4.43	-4.606	-0.0055	-2.5 to 2.5	Pass
				-30	3.85	0.787	0.0009	-2.5 to 2.5	Pass
					3.85	0.787	0.0009	-2.5 to 2.5	Pass

				-20	3.85	-0.901	-0.0011	-2.5 to 2.5	Pass
				-10	3.85	1.416	0.0017	-2.5 to 2.5	Pass
				0	3.85	-2.718	-0.0032	-2.5 to 2.5	Pass
				10	3.85	-0.830	-0.0010	-2.5 to 2.5	Pass
				30	3.85	-4.835	-0.0058	-2.5 to 2.5	Pass
				40	3.85	0.944	0.0011	-2.5 to 2.5	Pass
	846.5	25	0	50	3.85	-0.043	-0.0001	-2.5 to 2.5	Pass
				20	3.27	0.572	0.0007	-2.5 to 2.5	Pass
					3.85	2.418	0.0029	-2.5 to 2.5	Pass
					4.43	-2.375	-0.0028	-2.5 to 2.5	Pass
				-30	3.85	-3.104	-0.0037	-2.5 to 2.5	Pass
				-20	3.85	-1.874	-0.0022	-2.5 to 2.5	Pass
				-10	3.85	-0.229	-0.0003	-2.5 to 2.5	Pass
				0	3.85	-0.443	-0.0005	-2.5 to 2.5	Pass
				10	3.85	0.229	0.0003	-2.5 to 2.5	Pass
				30	3.85	-2.160	-0.0026	-2.5 to 2.5	Pass
				40	3.85	-2.317	-0.0027	-2.5 to 2.5	Pass
				50	3.85	-0.715	-0.0008	-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	-0.458	-0.0006	-2.5 to 2.5	Pass
					3.85	-2.360	-0.0028	-2.5 to 2.5	Pass
					4.43	-1.631	-0.0020	-2.5 to 2.5	Pass
				-30	3.85	-1.531	-0.0018	-2.5 to 2.5	Pass
				-20	3.85	0.844	0.0010	-2.5 to 2.5	Pass
				-10	3.85	-2.117	-0.0026	-2.5 to 2.5	Pass
				0	3.85	0.930	0.0011	-2.5 to 2.5	Pass
				10	3.85	-1.888	-0.0023	-2.5 to 2.5	Pass
				30	3.85	-0.558	-0.0007	-2.5 to 2.5	Pass
				40	3.85	-0.730	-0.0009	-2.5 to 2.5	Pass
				50	3.85	-1.931	-0.0023	-2.5 to 2.5	Pass
	836.5	50	0	20	3.27	-3.519	-0.0042	-2.5 to 2.5	Pass
					3.85	-3.018	-0.0036	-2.5 to 2.5	Pass
					4.43	-0.200	-0.0002	-2.5 to 2.5	Pass
				-30	3.85	-0.644	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	0.658	0.0008	-2.5 to 2.5	Pass
				-10	3.85	-1.373	-0.0016	-2.5 to 2.5	Pass
				0	3.85	-1.488	-0.0018	-2.5 to 2.5	Pass
				10	3.85	-0.629	-0.0008	-2.5 to 2.5	Pass
				30	3.85	-2.561	-0.0031	-2.5 to 2.5	Pass
				40	3.85	-2.718	-0.0032	-2.5 to 2.5	Pass
				50	3.85	-3.147	-0.0038	-2.5 to 2.5	Pass
	844	50	0	20	3.27	0.701	0.0008	-2.5 to 2.5	Pass
					3.85	-0.072	-0.0001	-2.5 to 2.5	Pass
					4.43	2.804	0.0033	-2.5 to 2.5	Pass
				-30	3.85	-1.516	-0.0018	-2.5 to 2.5	Pass
				-20	3.85	-2.403	-0.0028	-2.5 to 2.5	Pass
				-10	3.85	2.074	0.0025	-2.5 to 2.5	Pass
				0	3.85	-2.661	-0.0032	-2.5 to 2.5	Pass
				10	3.85	0.501	0.0006	-2.5 to 2.5	Pass
				30	3.85	-0.358	-0.0004	-2.5 to 2.5	Pass
				40	3.85	0.215	0.0003	-2.5 to 2.5	Pass
				50	3.85	0.186	0.0002	-2.5 to 2.5	Pass
16QAM	829	50	0	20	3.27	-2.561	-0.0031	-2.5 to 2.5	Pass

					3.85	-0.329	-0.0004	-2.5 to 2.5	Pass
					4.43	-0.973	-0.0012	-2.5 to 2.5	Pass
				-30	3.85	-1.388	-0.0017	-2.5 to 2.5	Pass
				-20	3.85	-0.458	-0.0006	-2.5 to 2.5	Pass
				-10	3.85	-1.101	-0.0013	-2.5 to 2.5	Pass
				0	3.85	-0.973	-0.0012	-2.5 to 2.5	Pass
				10	3.85	-1.888	-0.0023	-2.5 to 2.5	Pass
				30	3.85	-2.146	-0.0026	-2.5 to 2.5	Pass
				40	3.85	-1.488	-0.0018	-2.5 to 2.5	Pass
				50	3.85	1.044	0.0013	-2.5 to 2.5	Pass
	836.5	50	0	20	3.27	-2.575	-0.0031	-2.5 to 2.5	Pass
					3.85	-2.604	-0.0031	-2.5 to 2.5	Pass
					4.43	-0.086	-0.0001	-2.5 to 2.5	Pass
				-30	3.85	2.275	0.0027	-2.5 to 2.5	Pass
				-20	3.85	-0.787	-0.0009	-2.5 to 2.5	Pass
				-10	3.85	-2.732	-0.0033	-2.5 to 2.5	Pass
				0	3.85	-2.589	-0.0031	-2.5 to 2.5	Pass
				10	3.85	-2.060	-0.0025	-2.5 to 2.5	Pass
				30	3.85	-3.405	-0.0041	-2.5 to 2.5	Pass
				40	3.85	-1.402	-0.0017	-2.5 to 2.5	Pass
				50	3.85	0.916	0.0011	-2.5 to 2.5	Pass
	844	50	0	20	3.27	0.472	0.0006	-2.5 to 2.5	Pass
					3.85	1.488	0.0018	-2.5 to 2.5	Pass
					4.43	-0.029	0.0000	-2.5 to 2.5	Pass
				-30	3.85	-0.529	-0.0006	-2.5 to 2.5	Pass
				-20	3.85	-0.072	-0.0001	-2.5 to 2.5	Pass
				-10	3.85	-0.958	-0.0011	-2.5 to 2.5	Pass
				0	3.85	1.087	0.0013	-2.5 to 2.5	Pass
				10	3.85	0.229	0.0003	-2.5 to 2.5	Pass
				30	3.85	2.775	0.0033	-2.5 to 2.5	Pass
				40	3.85	-2.704	-0.0032	-2.5 to 2.5	Pass
				50	3.85	0.687	0.0008	-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

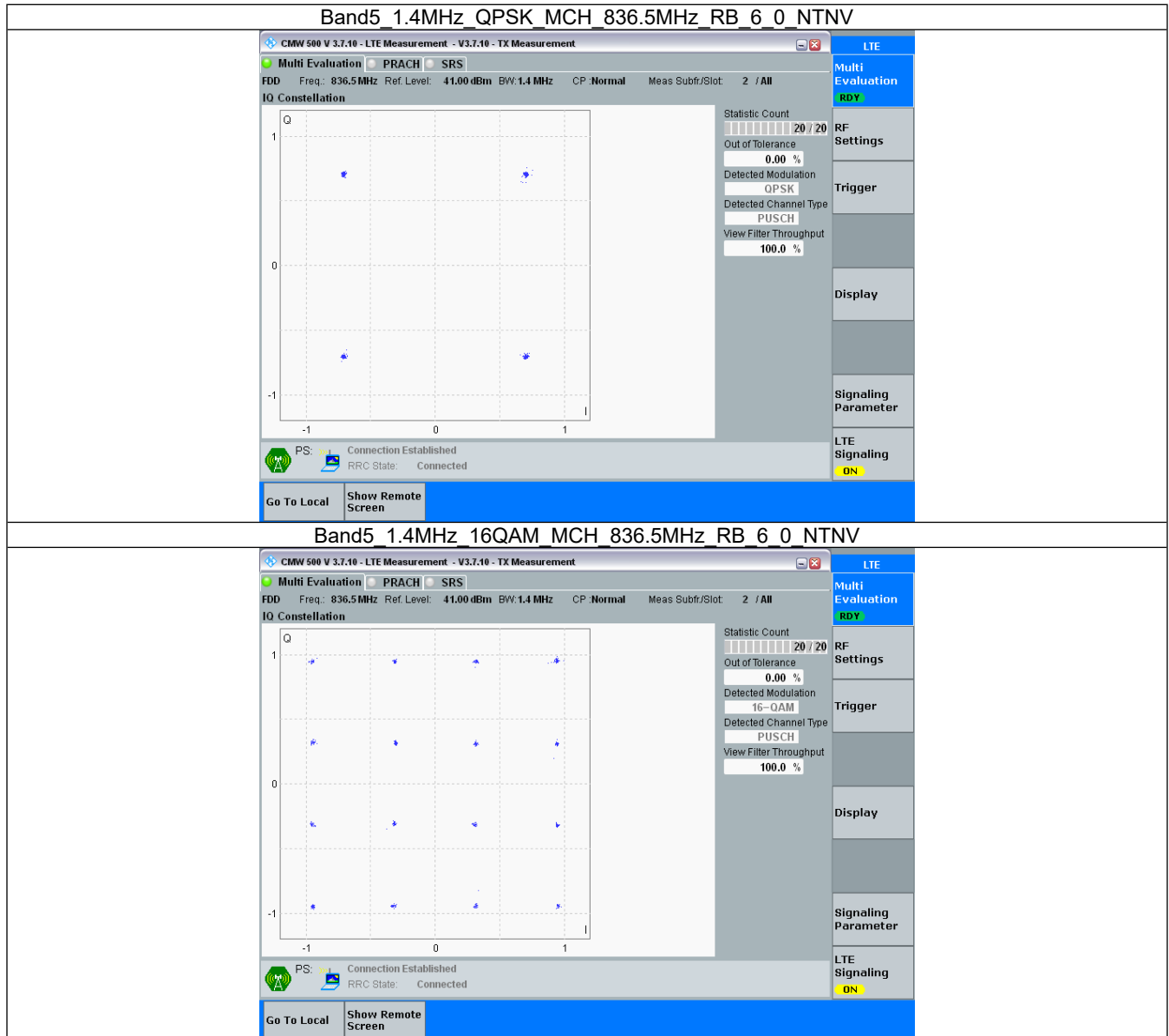
Band: 5 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	25	0	Refer To Test Graph		Pass
16QAM	836.5	25	0	Refer To Test Graph		Pass

3.1.4 B5_10MHz

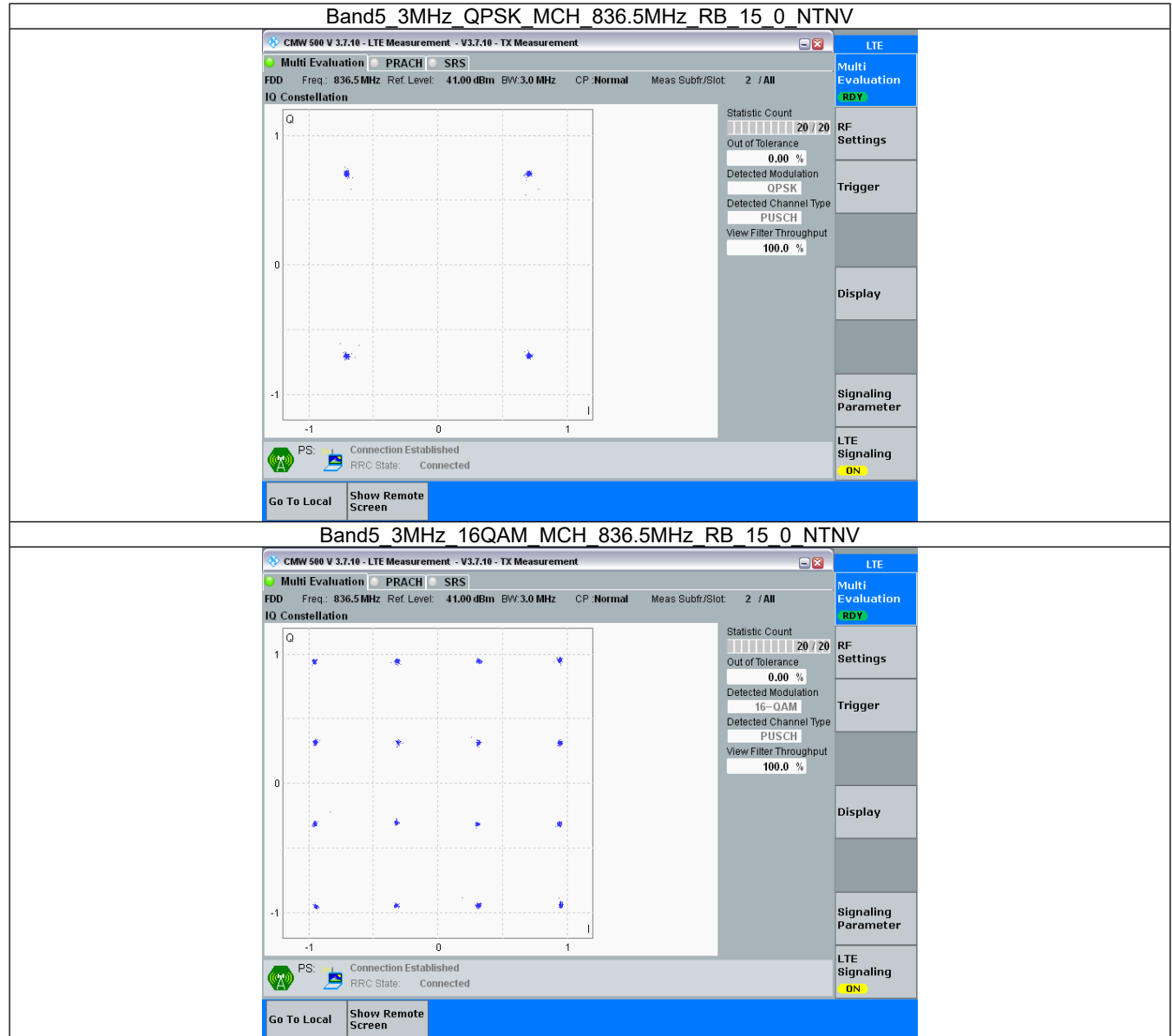
Band: 5 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	50	0	Refer To Test Graph		Pass
16QAM	836.5	50	0	Refer To Test Graph		Pass

3.2 Test Graph

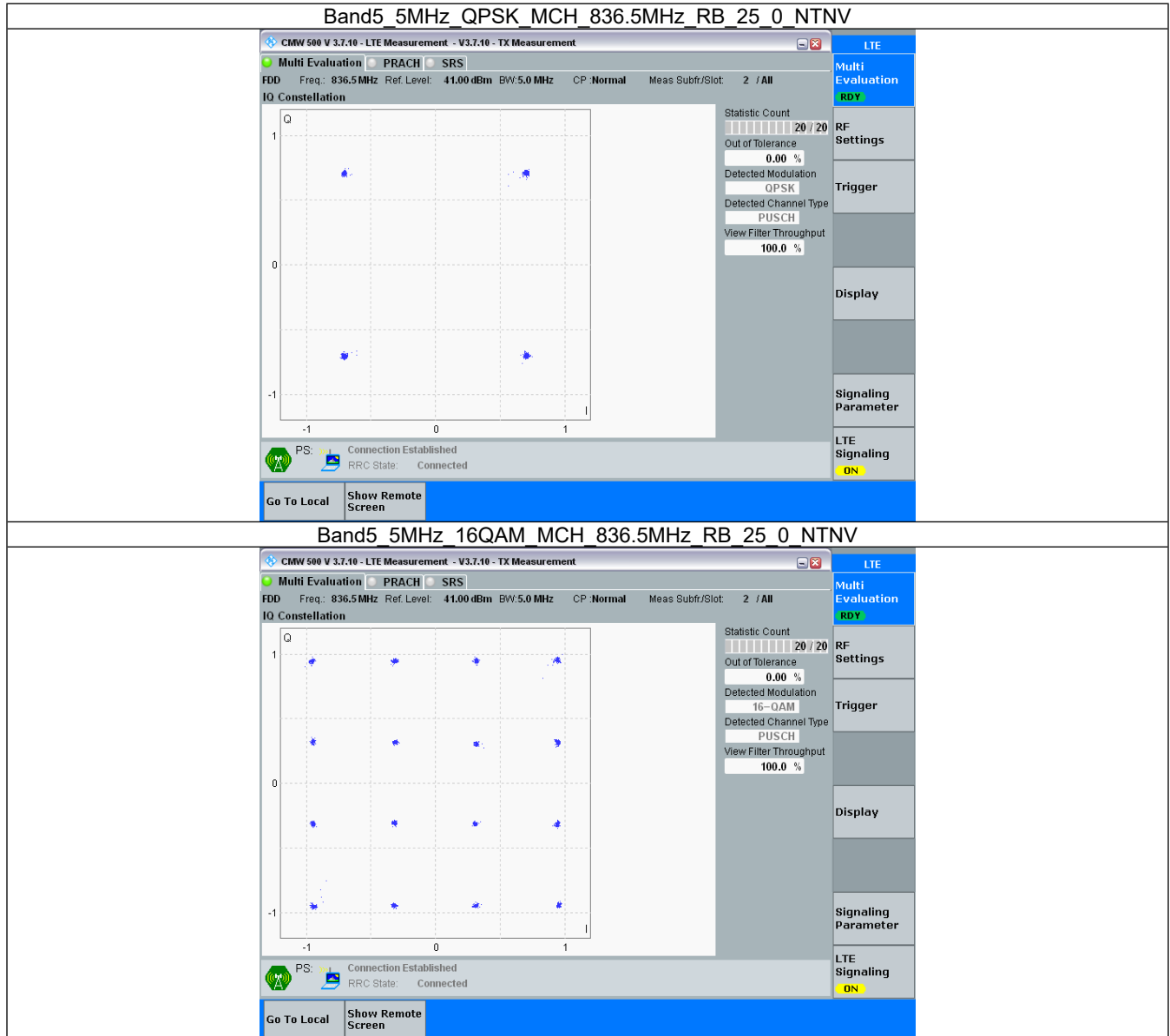
3.2.1 B5_1.4MHz



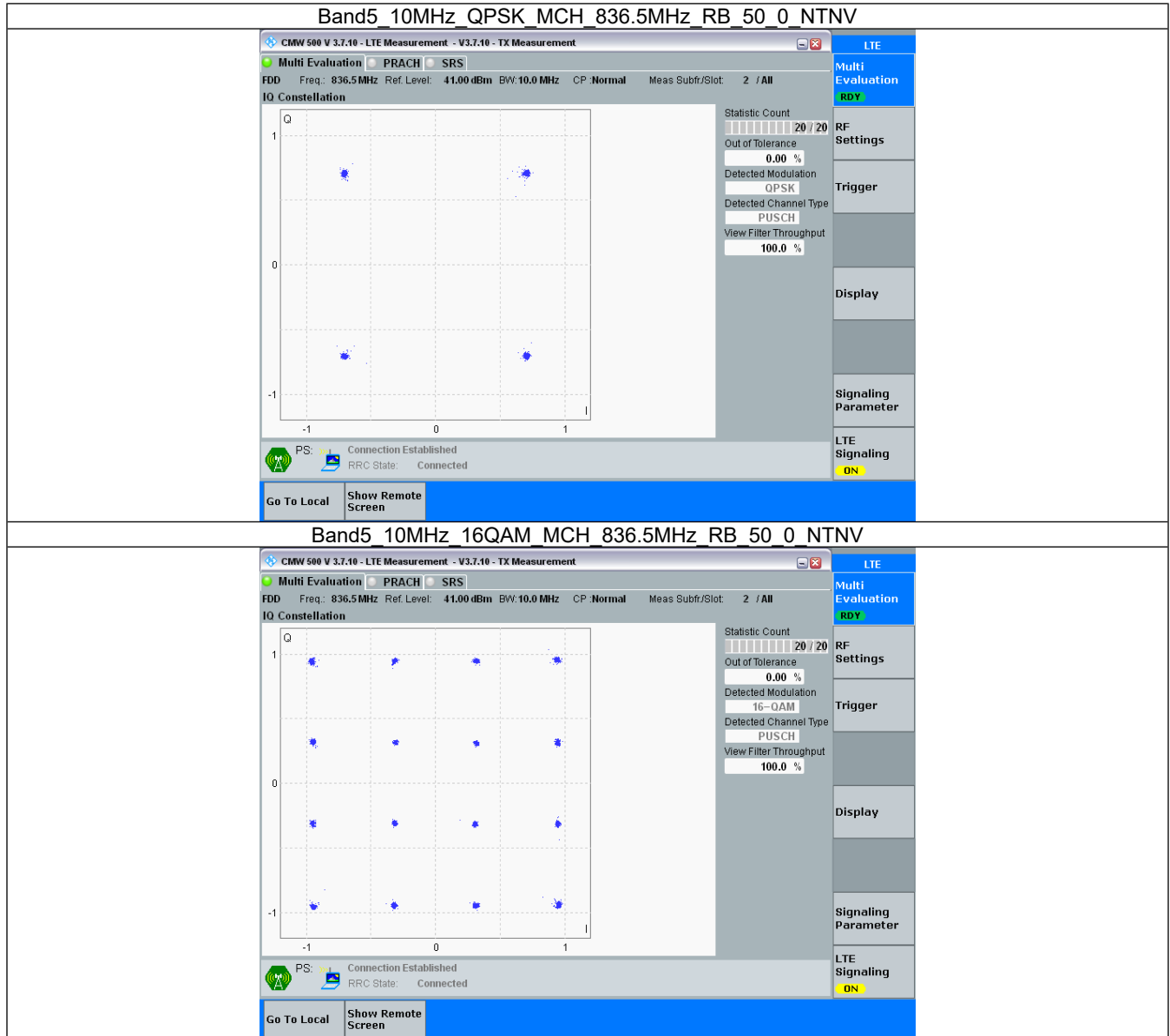
3.2.2 B5_3MHz



3.2.3 B5_5MHz



3.2.4 B5_10MHz



4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band5_OBV

Band: 5 / NTN							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	824.7	6	0	1.121	/	Pass
		836.5	6	0	1.109	/	Pass
		848.3	6	0	1.117	/	Pass
	16QAM	824.7	6	0	1.109	/	Pass
		836.5	6	0	1.120	/	Pass
		848.3	6	0	1.113	/	Pass
3	QPSK	825.5	15	0	2.736	/	Pass
		836.5	15	0	2.726	/	Pass
		847.5	15	0	2.737	/	Pass
	16QAM	825.5	15	0	2.725	/	Pass
		836.5	15	0	2.727	/	Pass
		847.5	15	0	2.728	/	Pass
5	QPSK	826.5	25	0	4.549	/	Pass
		836.5	25	0	4.550	/	Pass
		846.5	25	0	4.564	/	Pass
	16QAM	826.5	25	0	4.549	/	Pass
		836.5	25	0	4.534	/	Pass
		846.5	25	0	4.542	/	Pass
10	QPSK	829	50	0	9.054	/	Pass
		836.5	50	0	9.069	/	Pass
		844	50	0	9.067	/	Pass
	16QAM	829	50	0	9.041	/	Pass
		836.5	50	0	9.066	/	Pass
		844	50	0	9.065	/	Pass

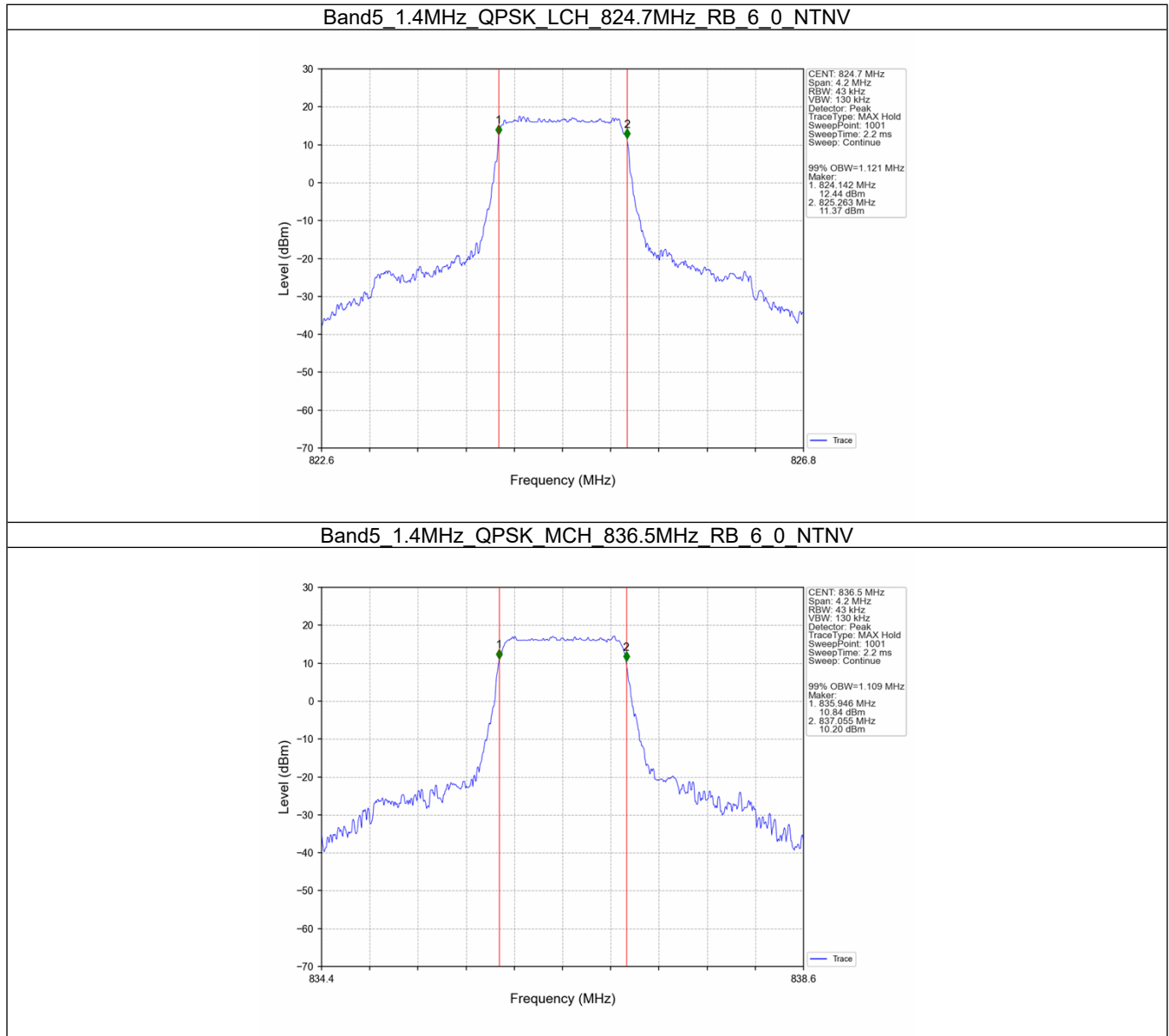
4.1.2 Band5_XDB

Band: 5 / NTN							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	824.7	6	0	1.326	/	Pass
		836.5	6	0	1.323	/	Pass
		848.3	6	0	1.311	/	Pass
	16QAM	824.7	6	0	1.343	/	Pass
		836.5	6	0	1.338	/	Pass
		848.3	6	0	1.344	/	Pass
3	QPSK	825.5	15	0	3.022	/	Pass
		836.5	15	0	3.009	/	Pass
		847.5	15	0	3.012	/	Pass
	16QAM	825.5	15	0	3.030	/	Pass
		836.5	15	0	3.013	/	Pass
		847.5	15	0	2.988	/	Pass
5	QPSK	826.5	25	0	5.050	/	Pass
		836.5	25	0	5.026	/	Pass
		846.5	25	0	5.057	/	Pass

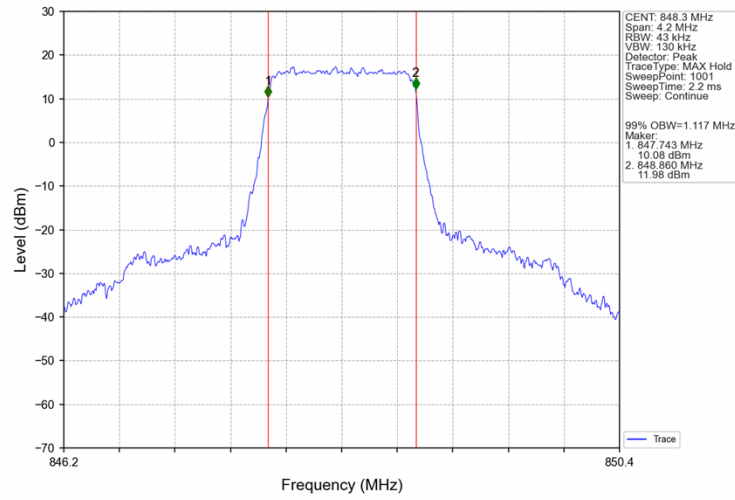
10	16QAM	826.5	25	0	5.079	/	Pass
		836.5	25	0	5.046	/	Pass
		846.5	25	0	5.048	/	Pass
	QPSK	829	50	0	9.978	/	Pass
		836.5	50	0	9.980	/	Pass
		844	50	0	10.000	/	Pass
	16QAM	829	50	0	10.013	/	Pass
		836.5	50	0	10.047	/	Pass
		844	50	0	9.905	/	Pass

4.2 Test Graph

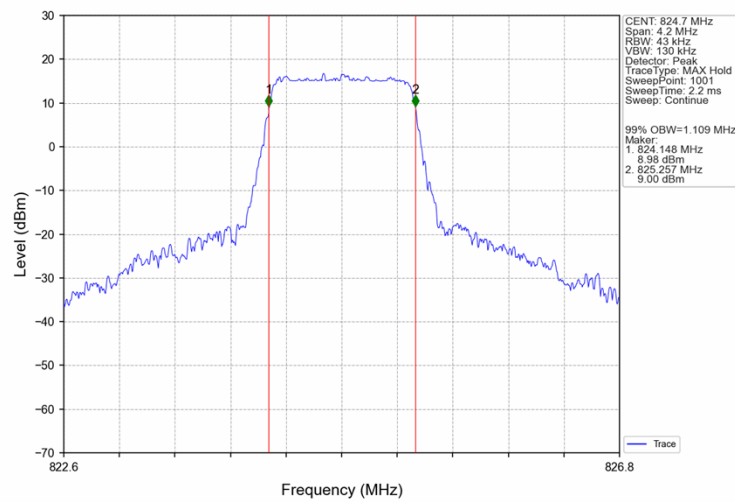
4.2.1 Band5_OBW



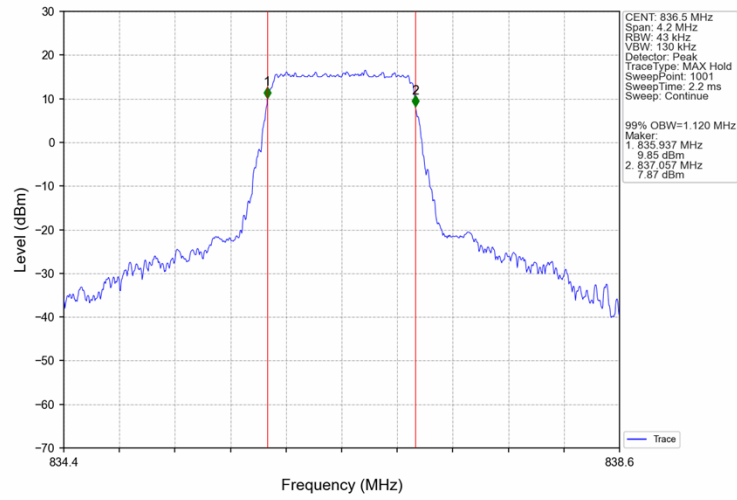
Band5 1.4MHz QPSK HCH 848.3MHz RB 6 0 NTNV



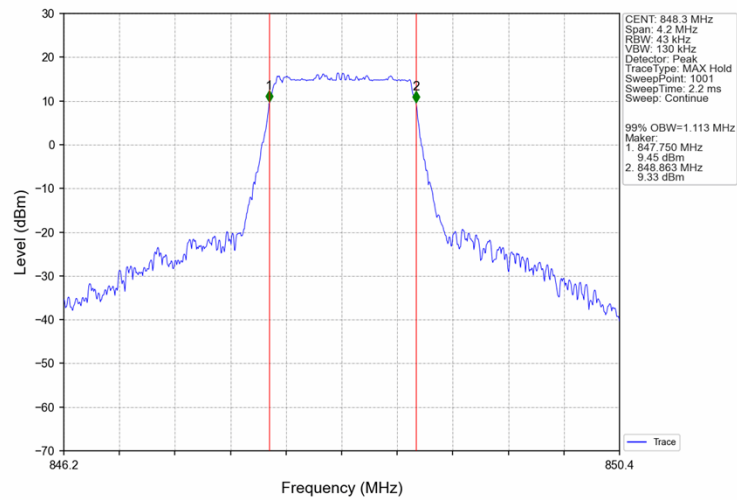
Band5 1.4MHz 16QAM LCH 824.7MHz RB 6 0 NTNV



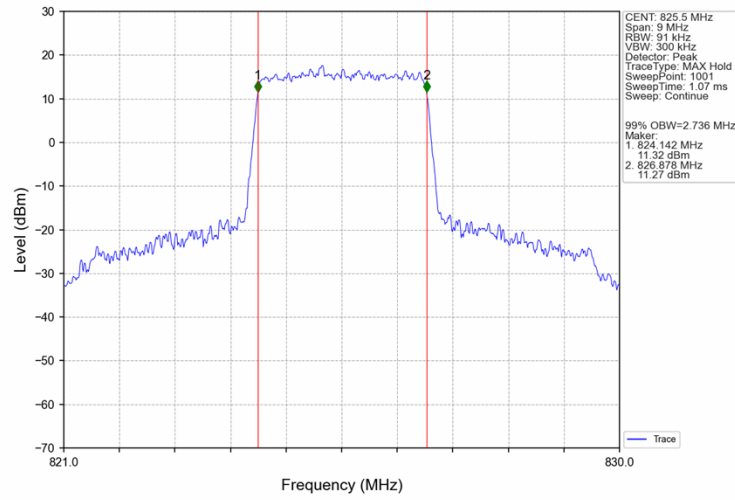
Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV



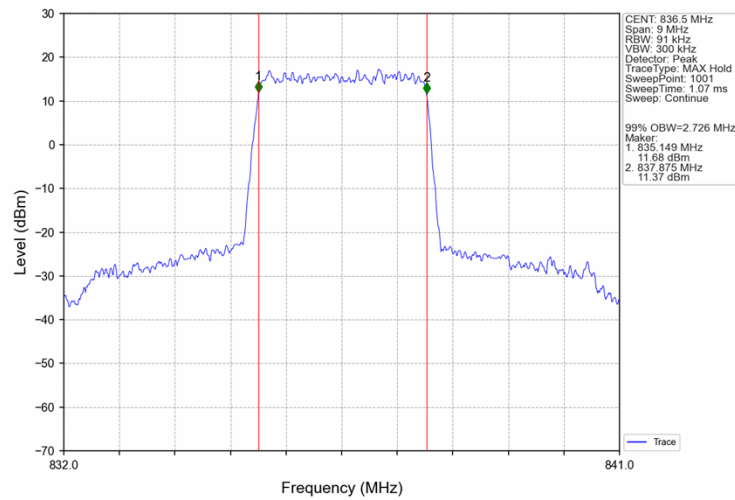
Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV



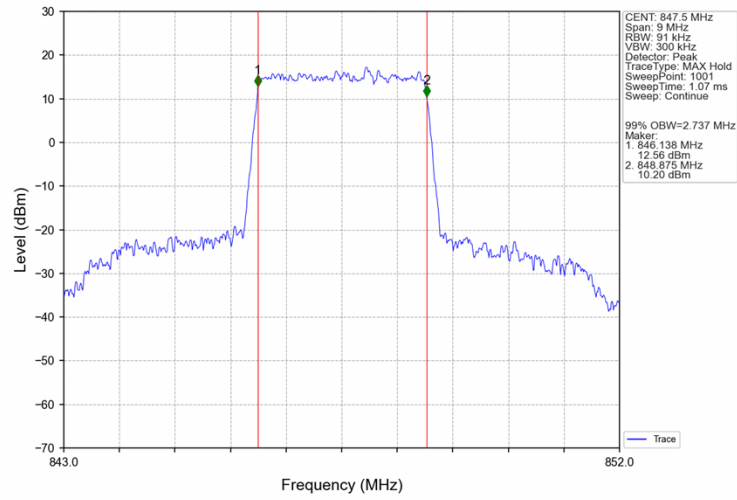
Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV



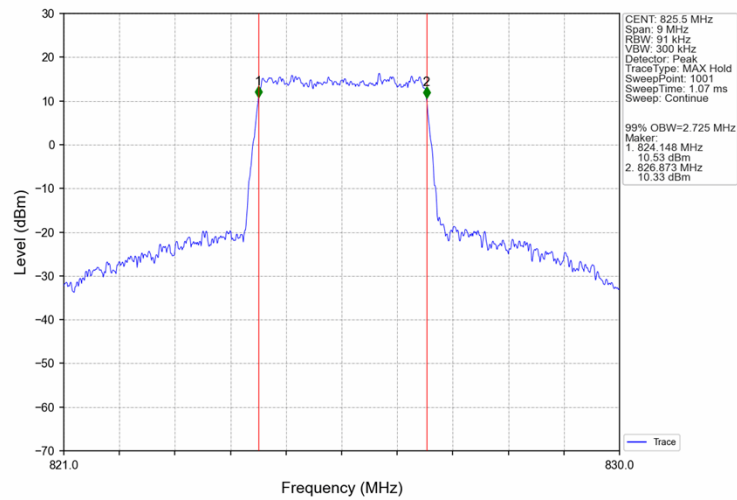
Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV



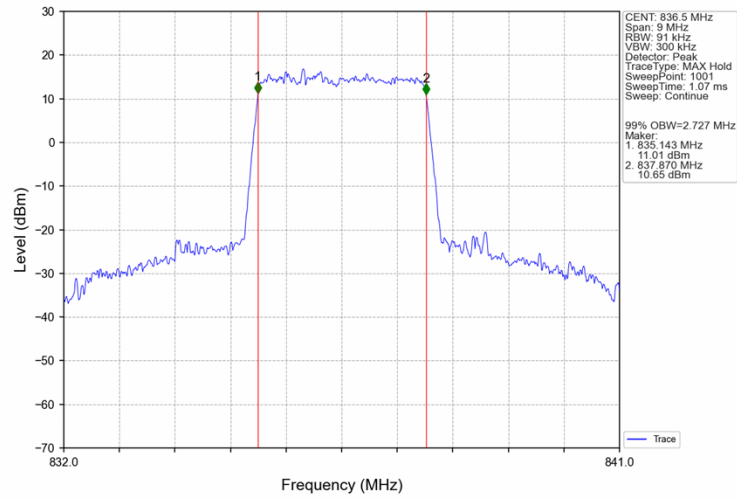
Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV



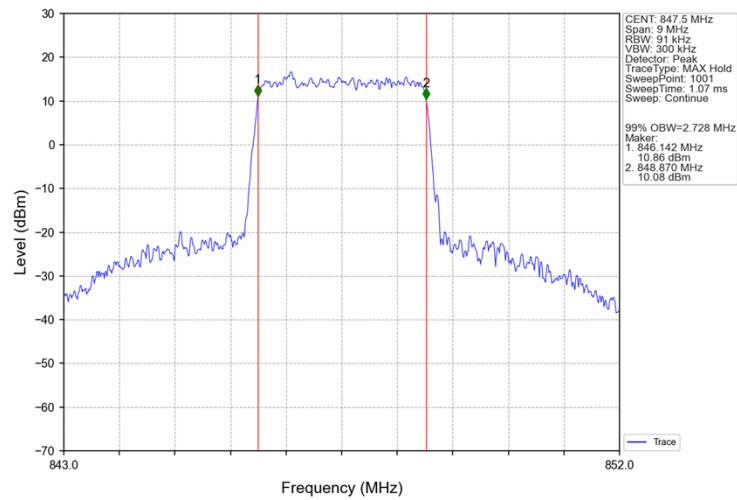
Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV



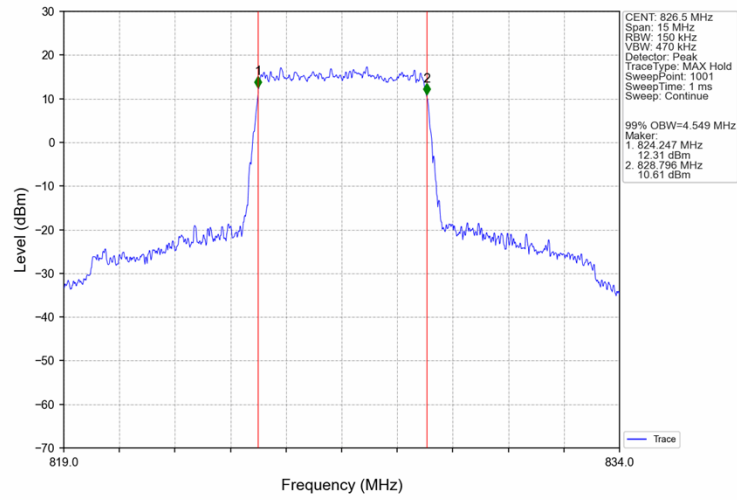
Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV



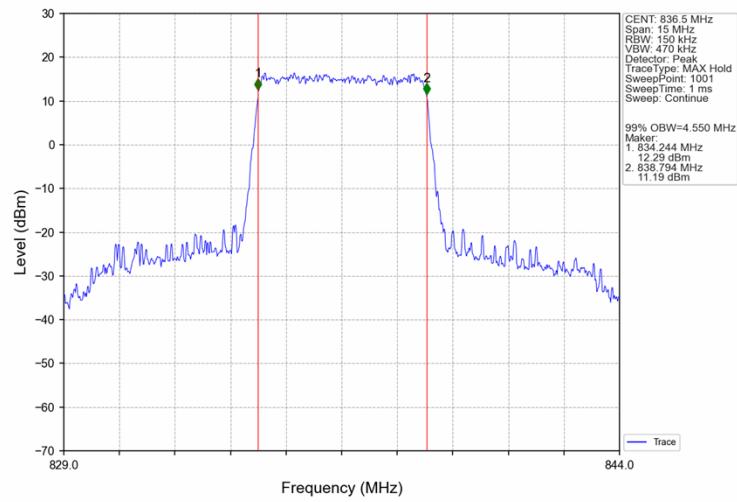
Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV



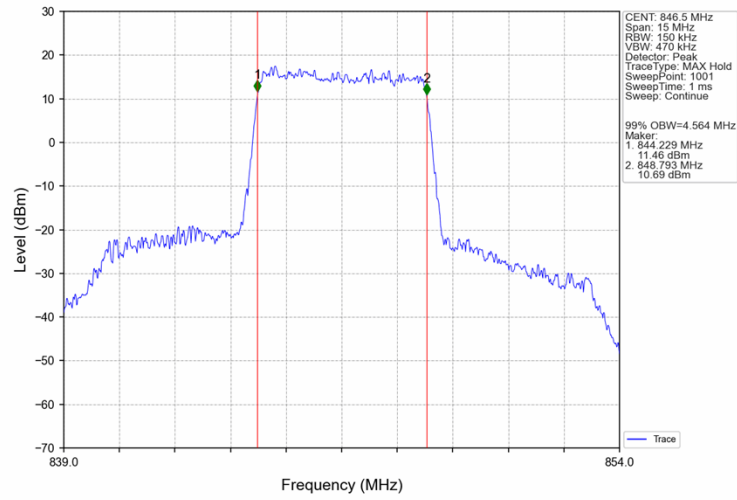
Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV



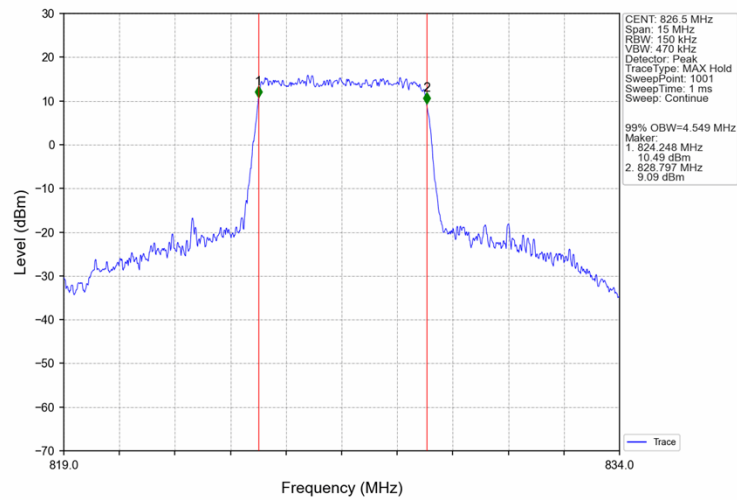
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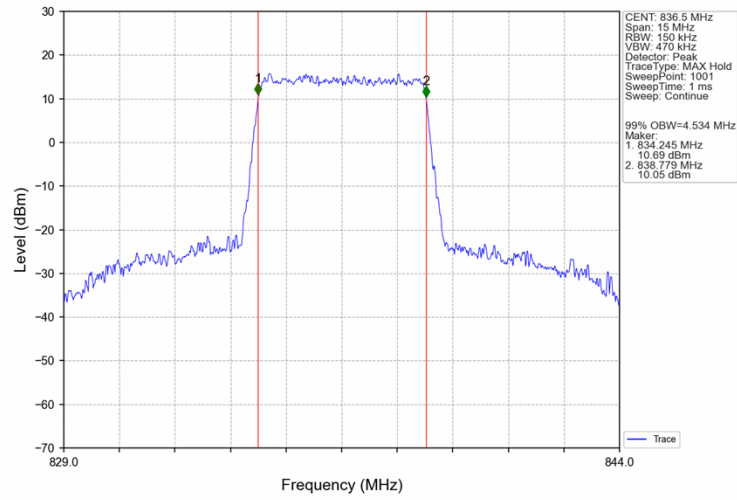
Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV



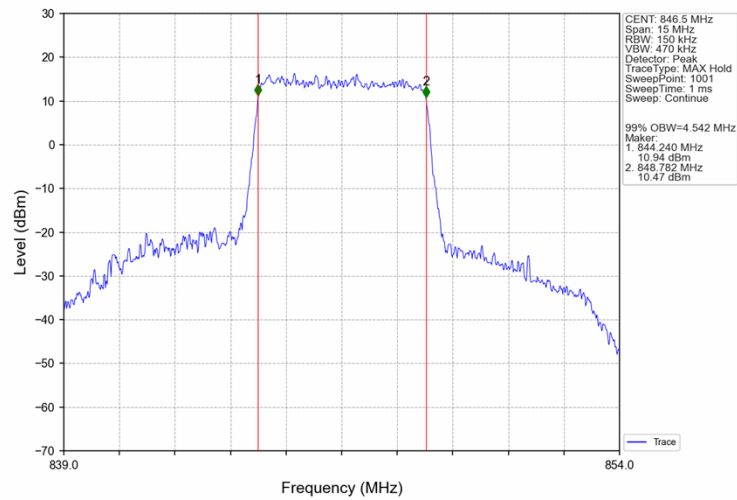
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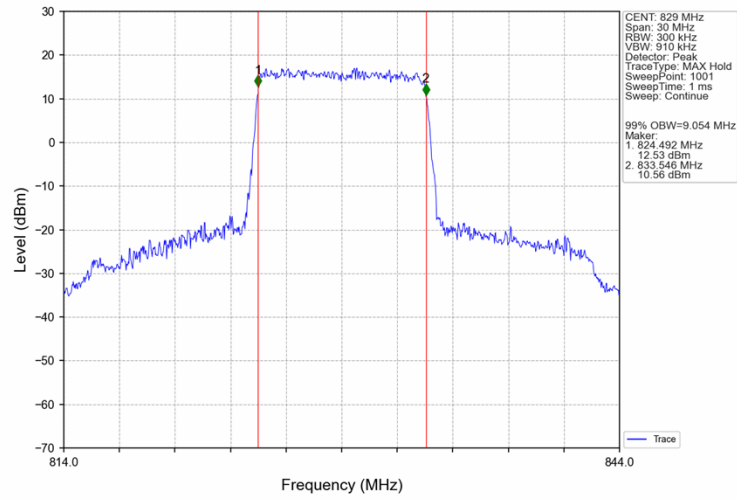
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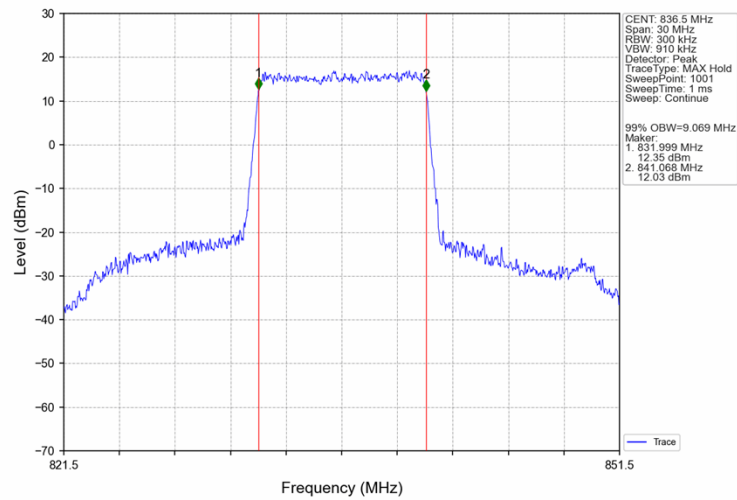
Band5_5MHz_16QAM_HCH_846.5MHz_RB_25_0_NTNV



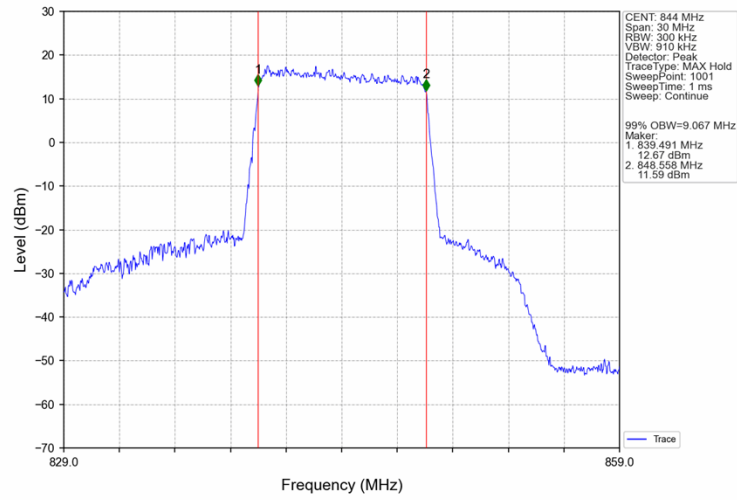
Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV



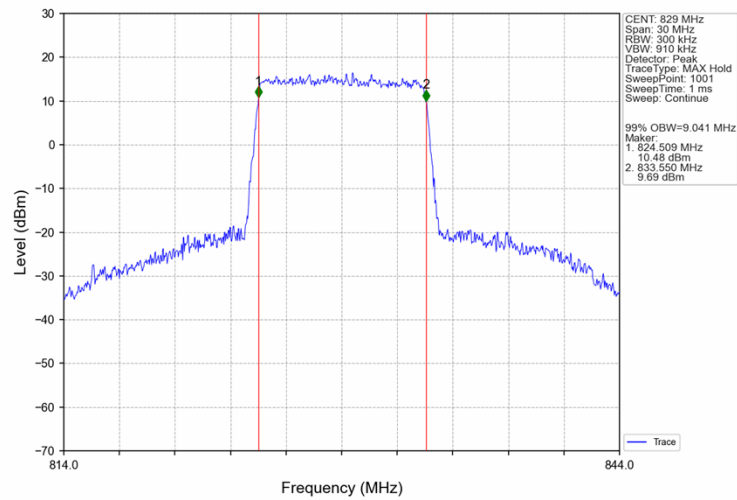
Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV



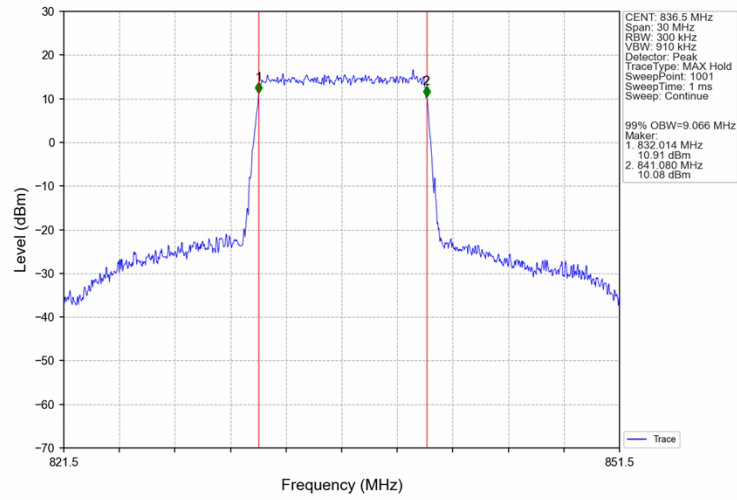
Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV



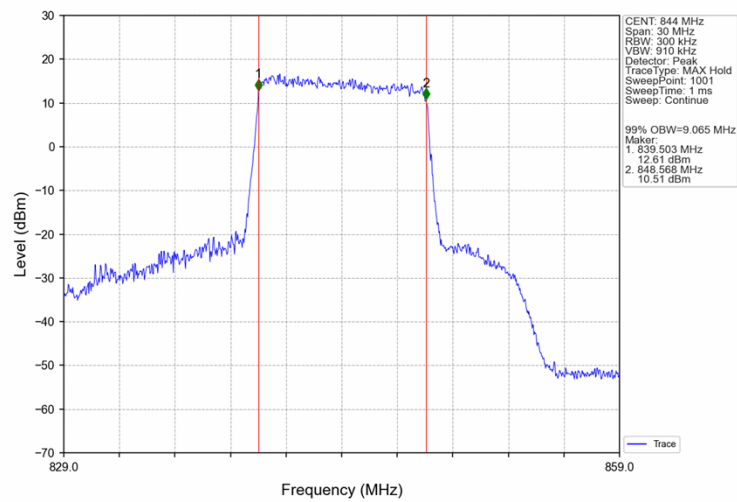
Band5_10MHz_16QAM_LCH_829MHz_RB_50_0_NTNV



Band5_10MHz_16QAM_MCH_836.5MHz_RB_50_0_NTNV

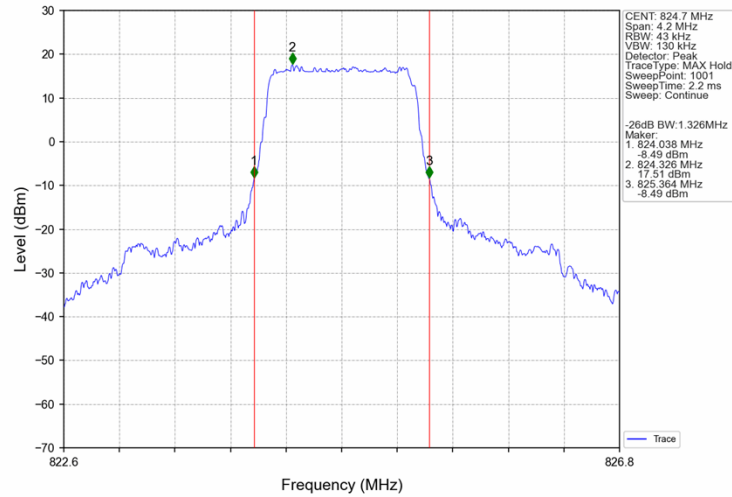


Band5_10MHz_16QAM_HCH_844MHz_RB_50_0_NTNV

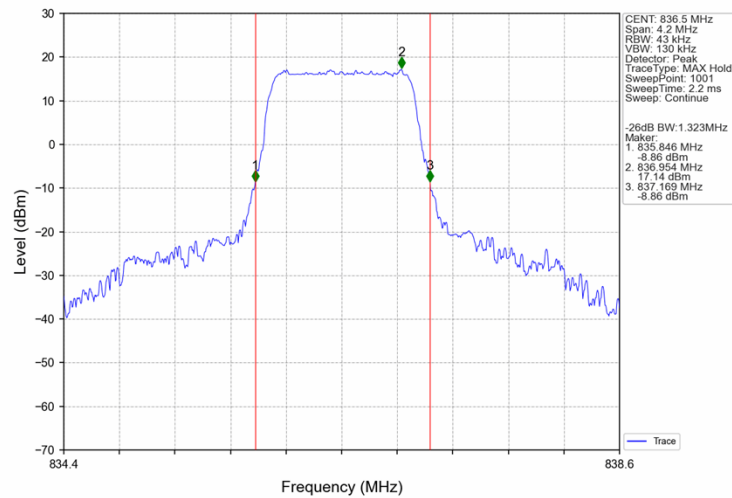


4.2.2 Band5_XDB

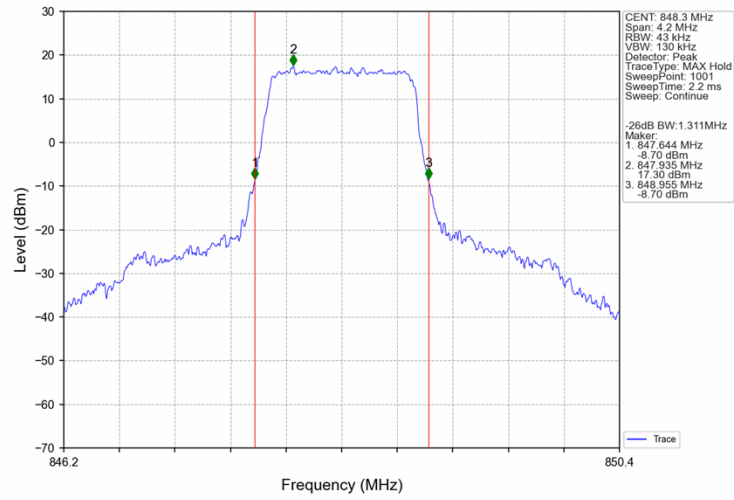
Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_6_0_NTNV



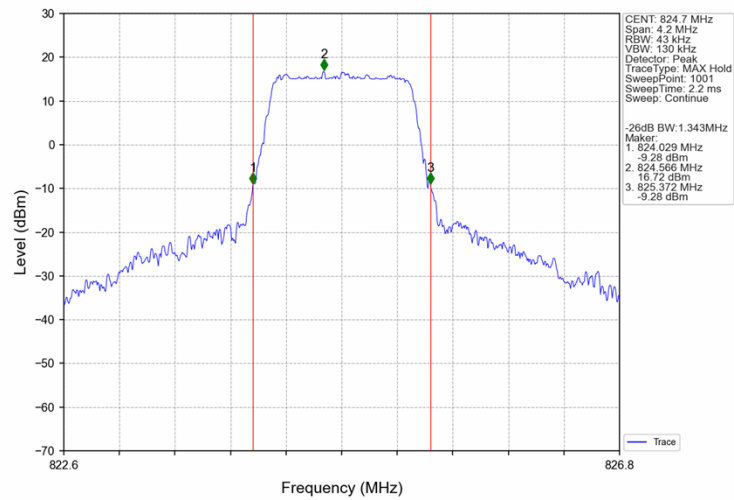
Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_6_0_NTNV



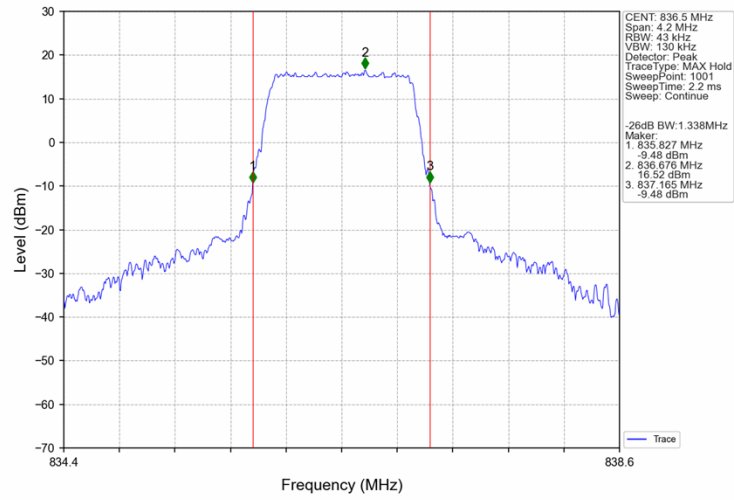
Band5 1.4MHz QPSK HCH 848.3MHz RB 6 0 NTNV



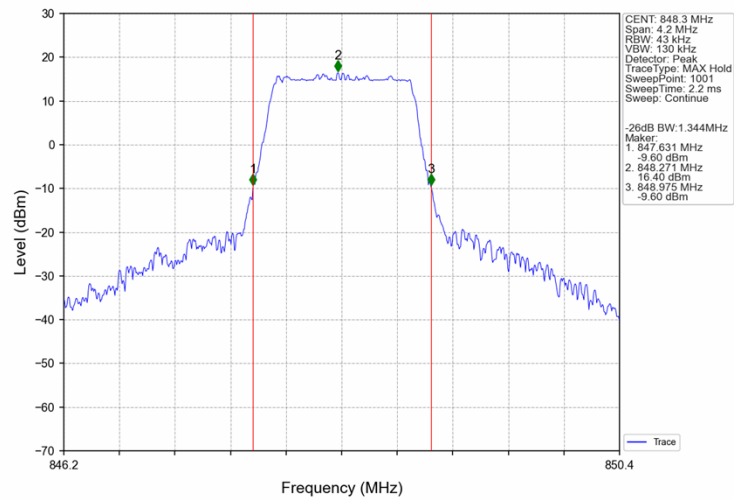
Band5 1.4MHz 16QAM LCH 824.7MHz RB 6 0 NTNV



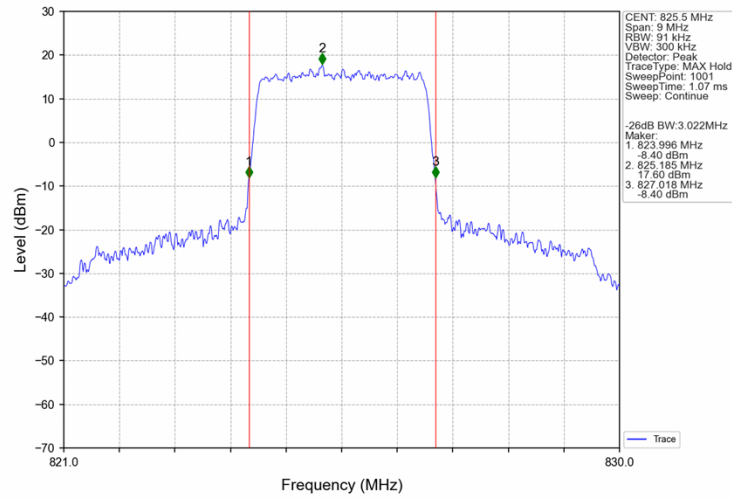
Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV



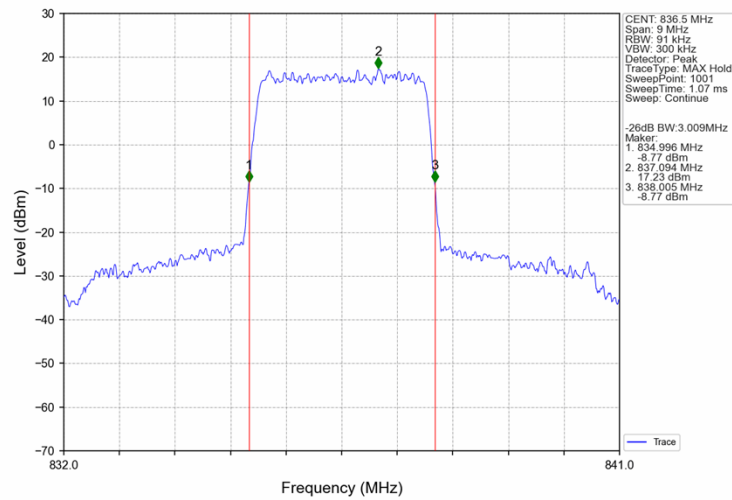
Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV



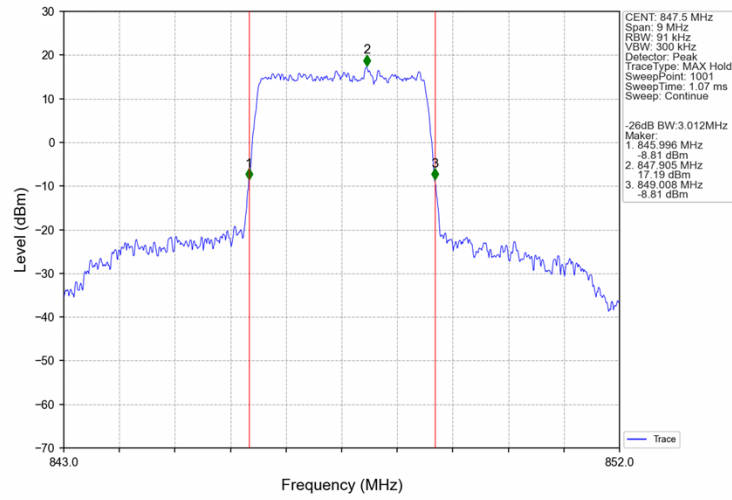
Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV



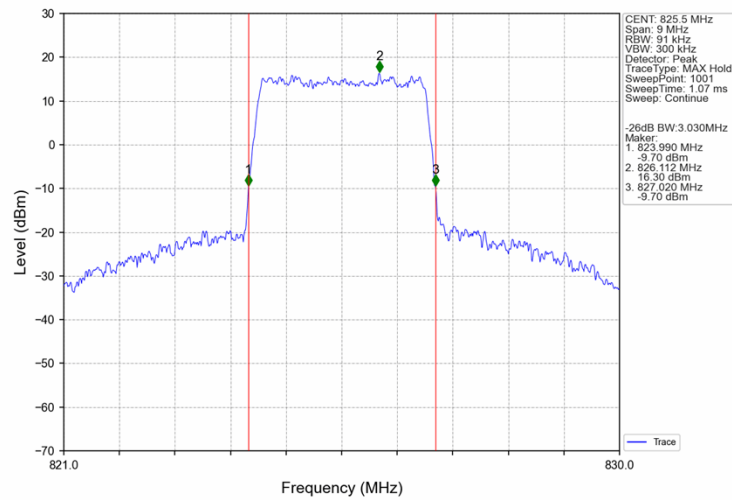
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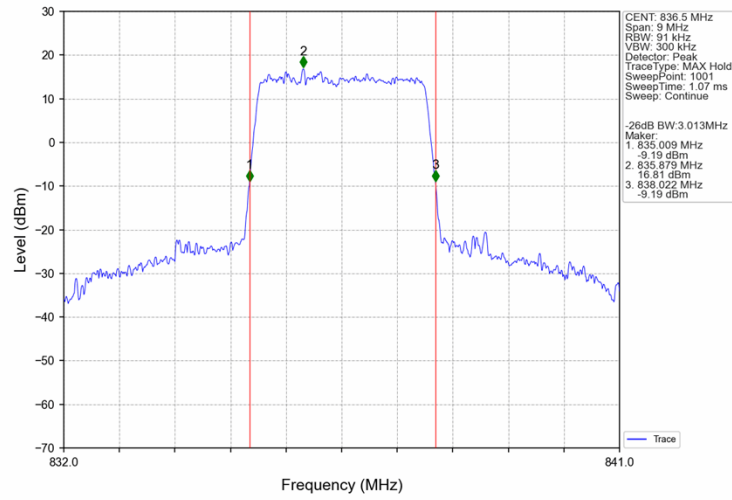
Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV



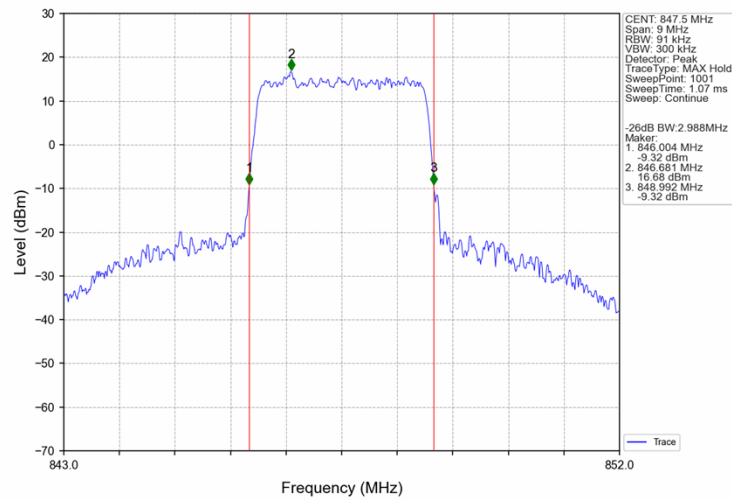
Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV



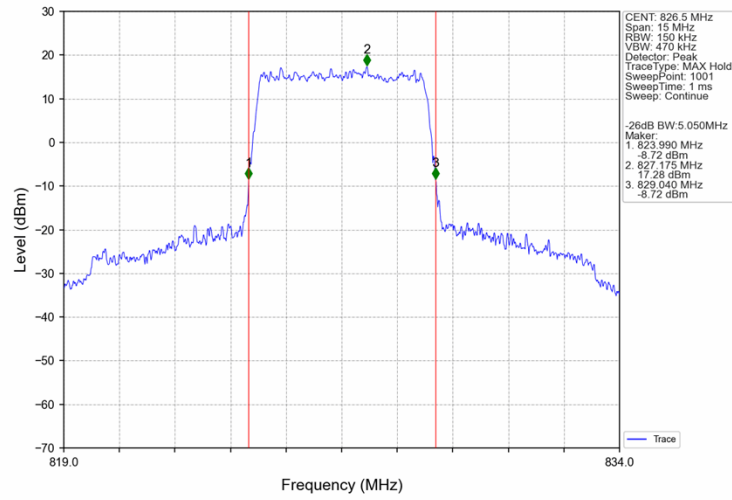
Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV



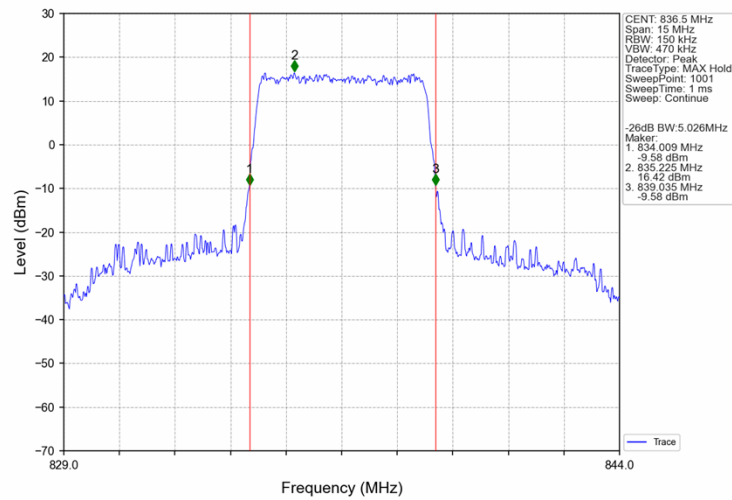
Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV



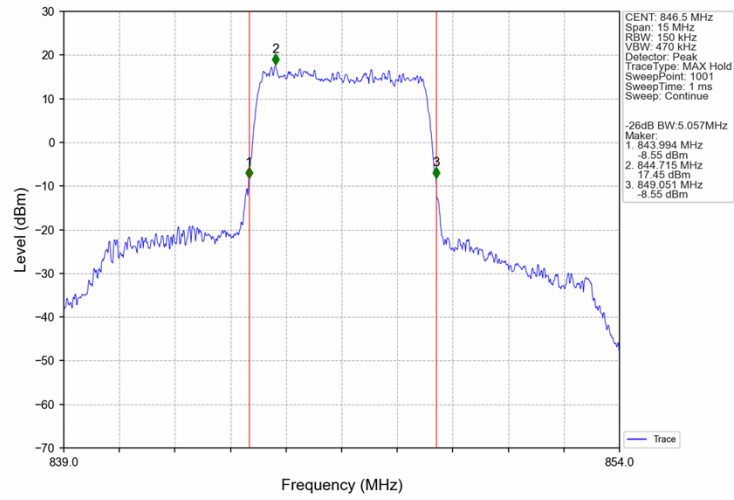
Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV



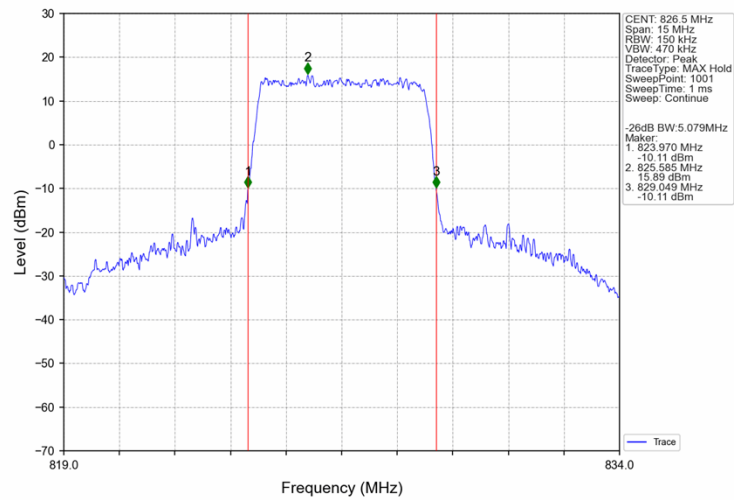
Band5_5MHz_QPSK_MCH_836.5MHz_RB_25_0_NTNV



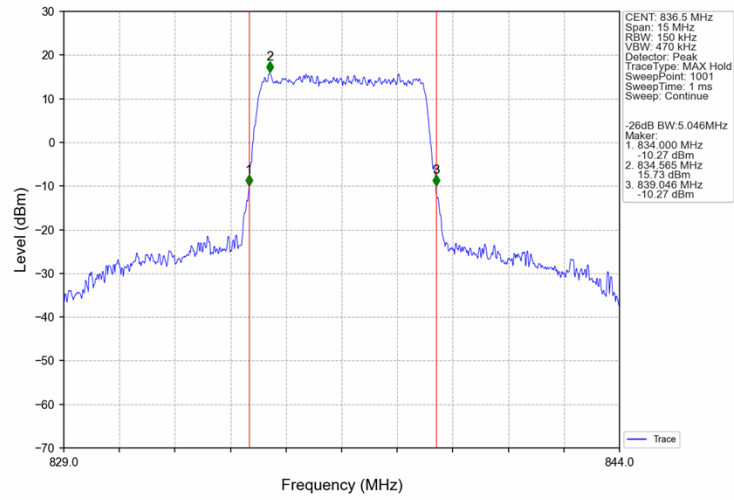
Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV



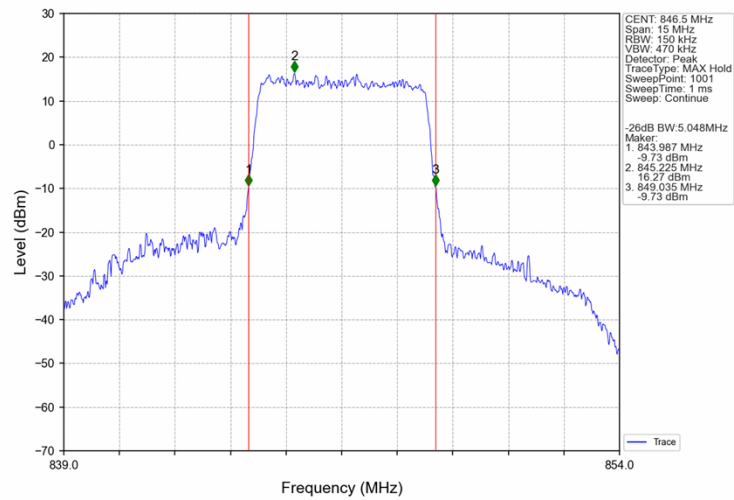
Band5_5MHz_16QAM_LCH_826.5MHz_RB_25_0_NTNV



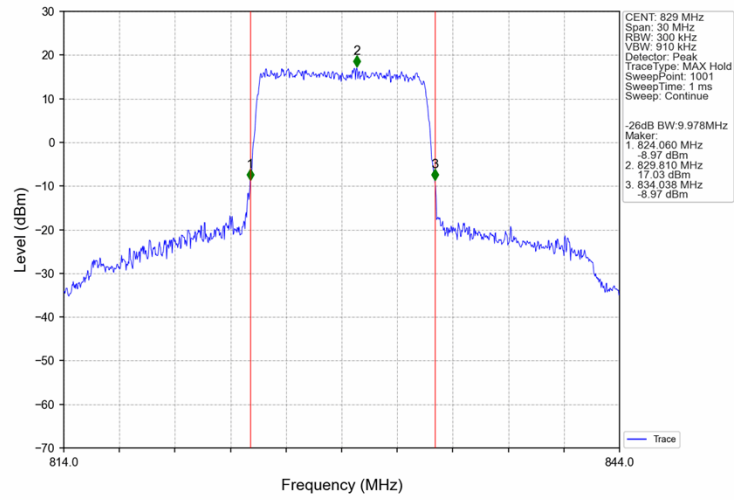
Band5_5MHz_16QAM_MCH_836.5MHz_RB_25_0_NTNV



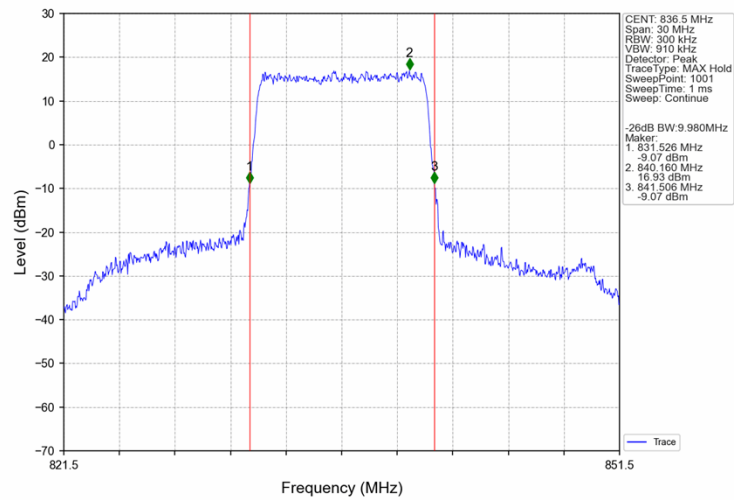
Band5_5MHz_16QAM_HCH_846.5MHz_RB_25_0_NTNV



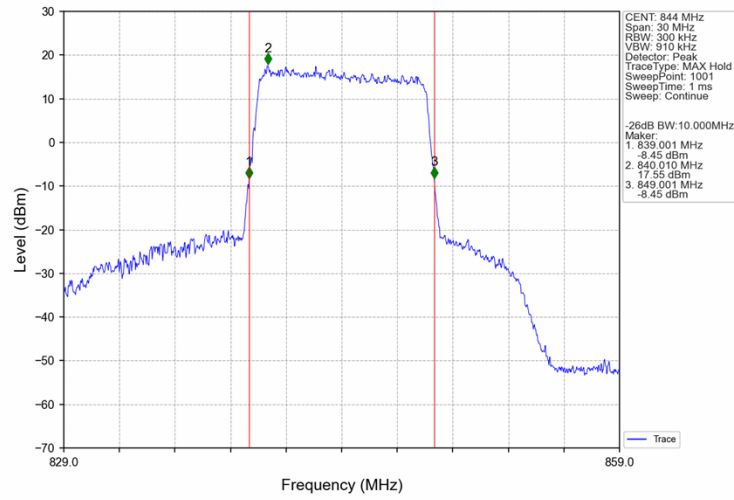
Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV



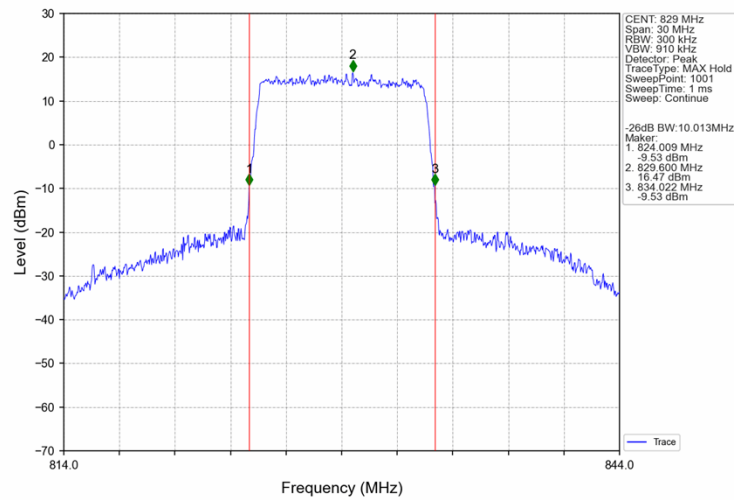
Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV



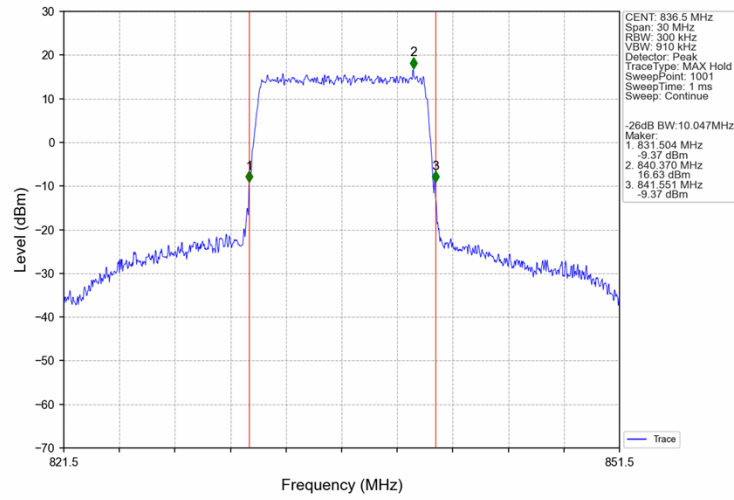
Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV



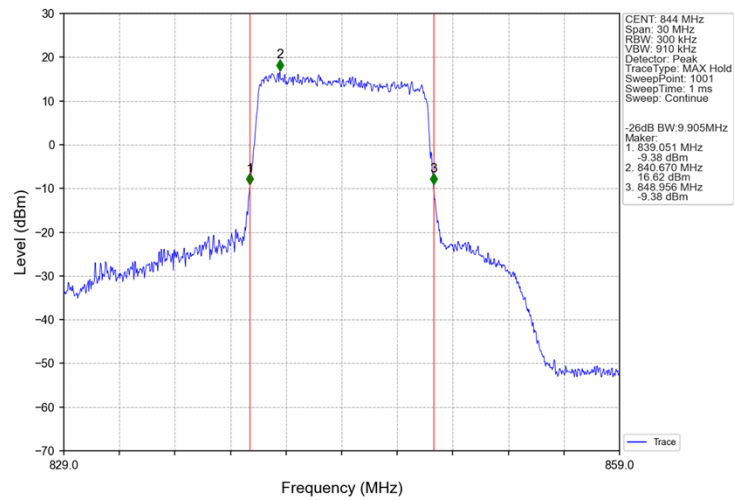
Band5_10MHz_16QAM_LCH_829MHz_RB_50_0_NTNV



Band5_10MHz_16QAM_MCH_836.5MHz_RB_50_0_NTNV



Band5_10MHz_16QAM_HCH_844MHz_RB_50_0_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	4.75	<=13	Pass
	836.5	6	0	5.29	<=13	Pass
	848.3	6	0	4.99	<=13	Pass
16QAM	824.7	6	0	5.56	<=13	Pass
	836.5	6	0	6.15	<=13	Pass
	848.3	6	0	5.74	<=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	4.92	<=13	Pass
	836.5	15	0	5.41	<=13	Pass
	847.5	15	0	5.29	<=13	Pass
16QAM	825.5	15	0	5.72	<=13	Pass
	836.5	15	0	6.25	<=13	Pass
	847.5	15	0	6.09	<=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	5.25	<=13	Pass
	836.5	25	0	5.59	<=13	Pass
	846.5	25	0	5.50	<=13	Pass
16QAM	826.5	25	0	6.00	<=13	Pass
	836.5	25	0	6.29	<=13	Pass
	846.5	25	0	6.16	<=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	5.31	<=13	Pass
	836.5	50	0	5.50	<=13	Pass
	844	50	0	5.45	<=13	Pass
16QAM	829	50	0	6.10	<=13	Pass
	836.5	50	0	6.27	<=13	Pass
	844	50	0	6.17	<=13	Pass

5.2 Test Graph

5.2.1 B5_1.4MHz

