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	24.47	-1.95	20.37	<=34.77	Pass
			2	24.55	-1.95	20.45	<=34.77	Pass
			5	24.50	-1.95	20.40	<=34.77	Pass
		3	0	24.48	-1.95	20.38	<=34.77	Pass
			2	24.54	-1.95	20.44	<=34.77	Pass
			3	24.48	-1.95	20.38	<=34.77	Pass
		6	0	23.57	-1.95	19.47	<=34.77	Pass
	836.5	1	0	24.46	-1.95	20.36	<=34.77	Pass
			2	24.55	-1.95	20.45	<=34.77	Pass
			5	24.47	-1.95	20.37	<=34.77	Pass
		3	0	24.50	-1.95	20.40	<=34.77	Pass
			2	24.52	-1.95	20.42	<=34.77	Pass
			3	24.49	-1.95	20.39	<=34.77	Pass
		6	0	23.60	-1.95	19.50	<=34.77	Pass
	848.3	1	0	24.47	-1.95	20.37	<=34.77	Pass
			2	24.60	-1.95	20.50	<=34.77	Pass
			5	24.48	-1.95	20.38	<=34.77	Pass
		3	0	24.49	-1.95	20.39	<=34.77	Pass
			2	24.52	-1.95	20.42	<=34.77	Pass
			3	24.50	-1.95	20.40	<=34.77	Pass
		6	0	23.56	-1.95	19.46	<=34.77	Pass
16QAM	824.7	1	0	23.62	-1.95	19.52	<=34.77	Pass
			2	23.71	-1.95	19.61	<=34.77	Pass
			5	23.65	-1.95	19.55	<=34.77	Pass
		3	0	23.47	-1.95	19.37	<=34.77	Pass
			2	23.47	-1.95	19.37	<=34.77	Pass
			3	23.48	-1.95	19.38	<=34.77	Pass
		6	0	22.55	-1.95	18.45	<=34.77	Pass
	836.5	1	0	23.43	-1.95	19.33	<=34.77	Pass
			2	23.50	-1.95	19.40	<=34.77	Pass
			5	23.43	-1.95	19.33	<=34.77	Pass
		3	0	23.65	-1.95	19.55	<=34.77	Pass
			2	23.70	-1.95	19.60	<=34.77	Pass
			3	23.66	-1.95	19.56	<=34.77	Pass
		6	0	22.54	-1.95	18.44	<=34.77	Pass
	848.3	1	0	23.43	-1.95	19.33	<=34.77	Pass
			2	23.58	-1.95	19.48	<=34.77	Pass
			5	23.52	-1.95	19.42	<=34.77	Pass
		3	0	23.55	-1.95	19.45	<=34.77	Pass
			2	23.56	-1.95	19.46	<=34.77	Pass
			3	23.51	-1.95	19.41	<=34.77	Pass
		6	0	22.46	-1.95	18.36	<=34.77	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	24.54	-1.95	20.44	<=34.77	Pass
			7	24.71	-1.95	20.61	<=34.77	Pass
			14	24.53	-1.95	20.43	<=34.77	Pass
		8	0	23.62	-1.95	19.52	<=34.77	Pass
			4	23.64	-1.95	19.54	<=34.77	Pass
			7	23.59	-1.95	19.49	<=34.77	Pass
		15	0	23.53	-1.95	19.43	<=34.77	Pass
	836.5	1	0	24.48	-1.95	20.38	<=34.77	Pass
			7	24.66	-1.95	20.56	<=34.77	Pass
			14	24.49	-1.95	20.39	<=34.77	Pass
		8	0	23.57	-1.95	19.47	<=34.77	Pass
			4	23.63	-1.95	19.53	<=34.77	Pass
			7	23.57	-1.95	19.47	<=34.77	Pass
		15	0	23.56	-1.95	19.46	<=34.77	Pass
	847.5	1	0	24.52	-1.95	20.42	<=34.77	Pass
			7	24.63	-1.95	20.53	<=34.77	Pass
			14	24.49	-1.95	20.39	<=34.77	Pass
		8	0	23.54	-1.95	19.44	<=34.77	Pass
			4	23.63	-1.95	19.53	<=34.77	Pass
			7	23.57	-1.95	19.47	<=34.77	Pass
		15	0	23.54	-1.95	19.44	<=34.77	Pass
16QAM	825.5	1	0	23.56	-1.95	19.46	<=34.77	Pass
			7	23.72	-1.95	19.62	<=34.77	Pass
			14	23.54	-1.95	19.44	<=34.77	Pass
		8	0	22.62	-1.95	18.52	<=34.77	Pass
			4	22.67	-1.95	18.57	<=34.77	Pass
			7	22.62	-1.95	18.52	<=34.77	Pass
		15	0	22.56	-1.95	18.46	<=34.77	Pass
	836.5	1	0	23.67	-1.95	19.57	<=34.77	Pass
			7	23.82	-1.95	19.72	<=34.77	Pass
			14	23.66	-1.95	19.56	<=34.77	Pass
		8	0	22.53	-1.95	18.43	<=34.77	Pass
			4	22.56	-1.95	18.46	<=34.77	Pass
			7	22.51	-1.95	18.41	<=34.77	Pass
		15	0	22.51	-1.95	18.41	<=34.77	Pass
	847.5	1	0	24.04	-1.95	19.94	<=34.77	Pass
			7	24.14	-1.95	20.04	<=34.77	Pass
			14	23.97	-1.95	19.87	<=34.77	Pass
		8	0	22.68	-1.95	18.58	<=34.77	Pass
			4	22.74	-1.95	18.64	<=34.77	Pass
			7	22.70	-1.95	18.60	<=34.77	Pass
		15	0	22.59	-1.95	18.49	<=34.77	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	24.40	-1.95	20.30	<=34.77	Pass
			13	24.54	-1.95	20.44	<=34.77	Pass
			24	24.39	-1.95	20.29	<=34.77	Pass
		12	0	23.50	-1.95	19.40	<=34.77	Pass
			6	23.59	-1.95	19.49	<=34.77	Pass
			13	23.59	-1.95	19.49	<=34.77	Pass
		25	0	23.56	-1.95	19.46	<=34.77	Pass
	836.5	1	0	24.34	-1.95	20.24	<=34.77	Pass
			13	24.50	-1.95	20.40	<=34.77	Pass
			24	24.37	-1.95	20.27	<=34.77	Pass
		12	0	23.49	-1.95	19.39	<=34.77	Pass
			6	23.54	-1.95	19.44	<=34.77	Pass
			13	23.44	-1.95	19.34	<=34.77	Pass
		25	0	23.47	-1.95	19.37	<=34.77	Pass
	846.5	1	0	24.38	-1.95	20.28	<=34.77	Pass
			13	24.49	-1.95	20.39	<=34.77	Pass
			24	24.38	-1.95	20.28	<=34.77	Pass
		12	0	23.43	-1.95	19.33	<=34.77	Pass
			6	23.55	-1.95	19.45	<=34.77	Pass
			13	23.51	-1.95	19.41	<=34.77	Pass
		25	0	23.45	-1.95	19.35	<=34.77	Pass
16QAM	826.5	1	0	23.48	-1.95	19.38	<=34.77	Pass
			13	23.65	-1.95	19.55	<=34.77	Pass
			24	23.51	-1.95	19.41	<=34.77	Pass
		12	0	22.43	-1.95	18.33	<=34.77	Pass
			6	22.53	-1.95	18.43	<=34.77	Pass
			13	22.58	-1.95	18.48	<=34.77	Pass
		25	0	22.51	-1.95	18.41	<=34.77	Pass
	836.5	1	0	23.20	-1.95	19.10	<=34.77	Pass
			13	23.34	-1.95	19.24	<=34.77	Pass
			24	23.25	-1.95	19.15	<=34.77	Pass
		12	0	22.45	-1.95	18.35	<=34.77	Pass
			6	22.46	-1.95	18.36	<=34.77	Pass
			13	22.37	-1.95	18.27	<=34.77	Pass
		25	0	22.48	-1.95	18.38	<=34.77	Pass
	846.5	1	0	23.51	-1.95	19.41	<=34.77	Pass
			13	23.61	-1.95	19.51	<=34.77	Pass
			24	23.46	-1.95	19.36	<=34.77	Pass
		12	0	22.38	-1.95	18.28	<=34.77	Pass
			6	22.48	-1.95	18.38	<=34.77	Pass
			13	22.44	-1.95	18.34	<=34.77	Pass
		25	0	22.45	-1.95	18.35	<=34.77	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	24.44	-1.95	20.34	<=34.77	Pass
			25	24.59	-1.95	20.49	<=34.77	Pass
			49	24.47	-1.95	20.37	<=34.77	Pass
		25	0	23.32	-1.95	19.22	<=34.77	Pass
			13	23.45	-1.95	19.35	<=34.77	Pass
			25	23.47	-1.95	19.37	<=34.77	Pass
		50	0	23.36	-1.95	19.26	<=34.77	Pass
	836.5	1	0	24.42	-1.95	20.32	<=34.77	Pass
			25	24.59	-1.95	20.49	<=34.77	Pass
			49	24.42	-1.95	20.32	<=34.77	Pass
		25	0	23.58	-1.95	19.48	<=34.77	Pass
			13	23.51	-1.95	19.41	<=34.77	Pass
			25	23.39	-1.95	19.29	<=34.77	Pass
		50	0	23.51	-1.95	19.41	<=34.77	Pass
	844	1	0	24.45	-1.95	20.35	<=34.77	Pass
			25	24.57	-1.95	20.47	<=34.77	Pass
			49	24.44	-1.95	20.34	<=34.77	Pass
		25	0	23.50	-1.95	19.40	<=34.77	Pass
			13	23.54	-1.95	19.44	<=34.77	Pass
			25	23.59	-1.95	19.49	<=34.77	Pass
		50	0	23.54	-1.95	19.44	<=34.77	Pass
16QAM	829	1	0	23.45	-1.95	19.35	<=34.77	Pass
			25	23.56	-1.95	19.46	<=34.77	Pass
			49	23.42	-1.95	19.32	<=34.77	Pass
		25	0	22.39	-1.95	18.29	<=34.77	Pass
			13	22.52	-1.95	18.42	<=34.77	Pass
			25	22.52	-1.95	18.42	<=34.77	Pass
		50	0	22.40	-1.95	18.30	<=34.77	Pass
	836.5	1	0	23.60	-1.95	19.50	<=34.77	Pass
			25	23.78	-1.95	19.68	<=34.77	Pass
			49	23.62	-1.95	19.52	<=34.77	Pass
		25	0	22.55	-1.95	18.45	<=34.77	Pass
			13	22.51	-1.95	18.41	<=34.77	Pass
			25	22.42	-1.95	18.32	<=34.77	Pass
		50	0	22.49	-1.95	18.39	<=34.77	Pass
	844	1	0	23.92	-1.95	19.82	<=34.77	Pass
			25	24.09	-1.95	19.99	<=34.77	Pass
			49	23.90	-1.95	19.80	<=34.77	Pass
		25	0	22.51	-1.95	18.41	<=34.77	Pass
			13	22.53	-1.95	18.43	<=34.77	Pass
			25	22.63	-1.95	18.53	<=34.77	Pass
		50	0	22.55	-1.95	18.45	<=34.77	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	3.31	-15.364	-0.0186	-2.5 to 2.5	Pass
					3.89	2.675	0.0032	-2.5 to 2.5	Pass
					4.47	3.920	0.0048	-2.5 to 2.5	Pass
				-30	3.89	-0.229	-0.0003	-2.5 to 2.5	Pass
				-20	3.89	-4.549	-0.0055	-2.5 to 2.5	Pass
				-10	3.89	-4.191	-0.0051	-2.5 to 2.5	Pass
				0	3.89	-7.467	-0.0091	-2.5 to 2.5	Pass
				10	3.89	-9.170	-0.0111	-2.5 to 2.5	Pass
				30	3.89	-8.554	-0.0104	-2.5 to 2.5	Pass
				40	3.89	-5.379	-0.0065	-2.5 to 2.5	Pass
				50	3.89	-6.824	-0.0083	-2.5 to 2.5	Pass
	836.5	6	0	20	3.31	-6.866	-0.0082	-2.5 to 2.5	Pass
					3.89	-8.583	-0.0103	-2.5 to 2.5	Pass
					4.47	-4.520	-0.0054	-2.5 to 2.5	Pass
				-30	3.89	-5.479	-0.0065	-2.5 to 2.5	Pass
				-20	3.89	-5.264	-0.0063	-2.5 to 2.5	Pass
				-10	3.89	-6.223	-0.0074	-2.5 to 2.5	Pass
				0	3.89	-5.350	-0.0064	-2.5 to 2.5	Pass
				10	3.89	-5.422	-0.0065	-2.5 to 2.5	Pass
				30	3.89	-6.022	-0.0072	-2.5 to 2.5	Pass
				40	3.89	-6.380	-0.0076	-2.5 to 2.5	Pass
				50	3.89	-5.407	-0.0065	-2.5 to 2.5	Pass
	848.3	6	0	20	3.31	-9.027	-0.0106	-2.5 to 2.5	Pass
					3.89	-8.841	-0.0104	-2.5 to 2.5	Pass
					4.47	-5.393	-0.0064	-2.5 to 2.5	Pass
				-30	3.89	-6.738	-0.0079	-2.5 to 2.5	Pass
				-20	3.89	-4.463	-0.0053	-2.5 to 2.5	Pass
				-10	3.89	-6.523	-0.0077	-2.5 to 2.5	Pass
				0	3.89	-4.306	-0.0051	-2.5 to 2.5	Pass
				10	3.89	-9.513	-0.0112	-2.5 to 2.5	Pass
				30	3.89	-3.905	-0.0046	-2.5 to 2.5	Pass
				40	3.89	-5.651	-0.0067	-2.5 to 2.5	Pass
				50	3.89	-5.479	-0.0065	-2.5 to 2.5	Pass
16QAM	824.7	6	0	20	3.31	-7.997	-0.0097	-2.5 to 2.5	Pass
					3.89	-1.259	-0.0015	-2.5 to 2.5	Pass
					4.47	-6.680	-0.0081	-2.5 to 2.5	Pass
				-30	3.89	-4.406	-0.0053	-2.5 to 2.5	Pass
				-20	3.89	-4.792	-0.0058	-2.5 to 2.5	Pass
				-10	3.89	-7.610	-0.0092	-2.5 to 2.5	Pass
				0	3.89	-5.207	-0.0063	-2.5 to 2.5	Pass
				10	3.89	-7.095	-0.0086	-2.5 to 2.5	Pass
				30	3.89	-6.065	-0.0074	-2.5 to 2.5	Pass
				40	3.89	-7.553	-0.0092	-2.5 to 2.5	Pass
				50	3.89	-7.582	-0.0092	-2.5 to 2.5	Pass
	836.5	6	0	20	3.31	-8.039	-0.0096	-2.5 to 2.5	Pass
					3.89	-7.195	-0.0086	-2.5 to 2.5	Pass
					4.47	-6.509	-0.0078	-2.5 to 2.5	Pass
				-30	3.89	-6.523	-0.0078	-2.5 to 2.5	Pass
				-20	3.89	-7.324	-0.0088	-2.5 to 2.5	Pass
				-10	3.89	-6.208	-0.0074	-2.5 to 2.5	Pass

				0	3.89	-7.238	-0.0087	-2.5 to 2.5	Pass
				10	3.89	-0.215	-0.0003	-2.5 to 2.5	Pass
				30	3.89	-8.483	-0.0101	-2.5 to 2.5	Pass
				40	3.89	-2.704	-0.0032	-2.5 to 2.5	Pass
				50	3.89	-6.452	-0.0077	-2.5 to 2.5	Pass
	848.3	6	0	20	3.31	-4.120	-0.0049	-2.5 to 2.5	Pass
					3.89	-10.328	-0.0122	-2.5 to 2.5	Pass
					4.47	-5.007	-0.0059	-2.5 to 2.5	Pass
				-30	3.89	-3.419	-0.0040	-2.5 to 2.5	Pass
				-20	3.89	-3.390	-0.0040	-2.5 to 2.5	Pass
				-10	3.89	-4.420	-0.0052	-2.5 to 2.5	Pass
				0	3.89	-2.489	-0.0029	-2.5 to 2.5	Pass
				10	3.89	-1.802	-0.0021	-2.5 to 2.5	Pass
				30	3.89	-9.584	-0.0113	-2.5 to 2.5	Pass
				40	3.89	-6.595	-0.0078	-2.5 to 2.5	Pass
				50	3.89	-7.267	-0.0086	-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	3.31	-5.007	-0.0061	-2.5 to 2.5	Pass
					3.89	-3.991	-0.0048	-2.5 to 2.5	Pass
					4.47	-4.292	-0.0052	-2.5 to 2.5	Pass
				-30	3.89	-6.952	-0.0084	-2.5 to 2.5	Pass
				-20	3.89	-4.034	-0.0049	-2.5 to 2.5	Pass
				-10	3.89	-6.094	-0.0074	-2.5 to 2.5	Pass
				0	3.89	-5.136	-0.0062	-2.5 to 2.5	Pass
				10	3.89	-7.839	-0.0095	-2.5 to 2.5	Pass
				30	3.89	-5.322	-0.0064	-2.5 to 2.5	Pass
				40	3.89	-6.580	-0.0080	-2.5 to 2.5	Pass
				50	3.89	-5.093	-0.0062	-2.5 to 2.5	Pass
	836.5	15	0	20	3.31	-8.297	-0.0099	-2.5 to 2.5	Pass
					3.89	-11.101	-0.0133	-2.5 to 2.5	Pass
					4.47	-8.740	-0.0104	-2.5 to 2.5	Pass
				-30	3.89	-8.998	-0.0108	-2.5 to 2.5	Pass
				-20	3.89	-6.967	-0.0083	-2.5 to 2.5	Pass
				-10	3.89	-4.106	-0.0049	-2.5 to 2.5	Pass
				0	3.89	-4.764	-0.0057	-2.5 to 2.5	Pass
				10	3.89	-6.409	-0.0077	-2.5 to 2.5	Pass
				30	3.89	-6.409	-0.0077	-2.5 to 2.5	Pass
				40	3.89	-3.633	-0.0043	-2.5 to 2.5	Pass
				50	3.89	-3.862	-0.0046	-2.5 to 2.5	Pass
	847.5	15	0	20	3.31	-8.898	-0.0105	-2.5 to 2.5	Pass
					3.89	-10.371	-0.0122	-2.5 to 2.5	Pass
					4.47	-7.954	-0.0094	-2.5 to 2.5	Pass
				-30	3.89	-5.193	-0.0061	-2.5 to 2.5	Pass
				-20	3.89	-2.789	-0.0033	-2.5 to 2.5	Pass
				-10	3.89	-7.095	-0.0084	-2.5 to 2.5	Pass
				0	3.89	-7.467	-0.0088	-2.5 to 2.5	Pass
				10	3.89	-5.035	-0.0059	-2.5 to 2.5	Pass
				30	3.89	-9.470	-0.0112	-2.5 to 2.5	Pass
				40	3.89	-7.253	-0.0086	-2.5 to 2.5	Pass
				50	3.89	-2.546	-0.0030	-2.5 to 2.5	Pass
16QAM	825.5	15	0	20	3.31	-5.894	-0.0071	-2.5 to 2.5	Pass
					3.89	-4.835	-0.0059	-2.5 to 2.5	Pass
					4.47	-6.595	-0.0080	-2.5 to 2.5	Pass

				-30	3.89	-9.813	-0.0119	-2.5 to 2.5	Pass
				-20	3.89	-1.774	-0.0021	-2.5 to 2.5	Pass
				-10	3.89	-4.263	-0.0052	-2.5 to 2.5	Pass
				0	3.89	-5.908	-0.0072	-2.5 to 2.5	Pass
				10	3.89	-6.123	-0.0074	-2.5 to 2.5	Pass
				30	3.89	-3.676	-0.0045	-2.5 to 2.5	Pass
				40	3.89	-8.526	-0.0103	-2.5 to 2.5	Pass
				50	3.89	-6.824	-0.0083	-2.5 to 2.5	Pass
	836.5	15	0	20	3.31	-7.496	-0.0090	-2.5 to 2.5	Pass
					3.89	-7.210	-0.0086	-2.5 to 2.5	Pass
					4.47	-5.593	-0.0067	-2.5 to 2.5	Pass
				-30	3.89	-4.034	-0.0048	-2.5 to 2.5	Pass
				-20	3.89	-5.407	-0.0065	-2.5 to 2.5	Pass
				-10	3.89	-8.383	-0.0100	-2.5 to 2.5	Pass
				0	3.89	-6.123	-0.0073	-2.5 to 2.5	Pass
				10	3.89	-5.093	-0.0061	-2.5 to 2.5	Pass
				30	3.89	-8.097	-0.0097	-2.5 to 2.5	Pass
				40	3.89	-4.520	-0.0054	-2.5 to 2.5	Pass
				50	3.89	-4.563	-0.0055	-2.5 to 2.5	Pass
	847.5	15	0	20	3.31	-6.623	-0.0078	-2.5 to 2.5	Pass
					3.89	-5.336	-0.0063	-2.5 to 2.5	Pass
					4.47	-2.818	-0.0033	-2.5 to 2.5	Pass
				-30	3.89	-6.537	-0.0077	-2.5 to 2.5	Pass
				-20	3.89	-8.569	-0.0101	-2.5 to 2.5	Pass
				-10	3.89	-6.752	-0.0080	-2.5 to 2.5	Pass
				0	3.89	-2.389	-0.0028	-2.5 to 2.5	Pass
				10	3.89	-4.778	-0.0056	-2.5 to 2.5	Pass
				30	3.89	-2.589	-0.0031	-2.5 to 2.5	Pass
				40	3.89	-4.506	-0.0053	-2.5 to 2.5	Pass
				50	3.89	-9.613	-0.0113	-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	3.31	-9.155	-0.0111	-2.5 to 2.5	Pass
					3.89	-6.437	-0.0078	-2.5 to 2.5	Pass
					4.47	-5.636	-0.0068	-2.5 to 2.5	Pass
				-30	3.89	-7.081	-0.0086	-2.5 to 2.5	Pass
				-20	3.89	-5.579	-0.0068	-2.5 to 2.5	Pass
				-10	3.89	-8.855	-0.0107	-2.5 to 2.5	Pass
				0	3.89	-4.535	-0.0055	-2.5 to 2.5	Pass
				10	3.89	-7.696	-0.0093	-2.5 to 2.5	Pass
				30	3.89	-8.011	-0.0097	-2.5 to 2.5	Pass
				40	3.89	-4.964	-0.0060	-2.5 to 2.5	Pass
				50	3.89	-5.836	-0.0071	-2.5 to 2.5	Pass
	836.5	25	0	20	3.31	-11.973	-0.0143	-2.5 to 2.5	Pass
					3.89	-9.255	-0.0111	-2.5 to 2.5	Pass
					4.47	-5.164	-0.0062	-2.5 to 2.5	Pass
				-30	3.89	-6.409	-0.0077	-2.5 to 2.5	Pass
				-20	3.89	-7.281	-0.0087	-2.5 to 2.5	Pass
				-10	3.89	-7.238	-0.0087	-2.5 to 2.5	Pass
				0	3.89	-4.635	-0.0055	-2.5 to 2.5	Pass
				10	3.89	-7.653	-0.0091	-2.5 to 2.5	Pass
				30	3.89	-9.398	-0.0112	-2.5 to 2.5	Pass
				40	3.89	-6.237	-0.0075	-2.5 to 2.5	Pass
				50	3.89	-5.894	-0.0070	-2.5 to 2.5	Pass

	846.5	25	0	20	3.31	-14.105	-0.0167	-2.5 to 2.5	Pass
					3.89	-8.912	-0.0105	-2.5 to 2.5	Pass
					4.47	-5.622	-0.0066	-2.5 to 2.5	Pass
				-30	3.89	-1.402	-0.0017	-2.5 to 2.5	Pass
				-20	3.89	-6.752	-0.0080	-2.5 to 2.5	Pass
				-10	3.89	-3.934	-0.0046	-2.5 to 2.5	Pass
				0	3.89	-6.452	-0.0076	-2.5 to 2.5	Pass
				10	3.89	-7.482	-0.0088	-2.5 to 2.5	Pass
				30	3.89	-5.865	-0.0069	-2.5 to 2.5	Pass
				40	3.89	-6.981	-0.0082	-2.5 to 2.5	Pass
				50	3.89	-9.813	-0.0116	-2.5 to 2.5	Pass
16QAM	826.5	25	0	20	3.31	-5.465	-0.0066	-2.5 to 2.5	Pass
					3.89	-4.148	-0.0050	-2.5 to 2.5	Pass
					4.47	-9.098	-0.0110	-2.5 to 2.5	Pass
				-30	3.89	-5.465	-0.0066	-2.5 to 2.5	Pass
				-20	3.89	-8.326	-0.0101	-2.5 to 2.5	Pass
				-10	3.89	-5.107	-0.0062	-2.5 to 2.5	Pass
				0	3.89	-4.892	-0.0059	-2.5 to 2.5	Pass
				10	3.89	-9.098	-0.0110	-2.5 to 2.5	Pass
				30	3.89	-5.136	-0.0062	-2.5 to 2.5	Pass
				40	3.89	-5.865	-0.0071	-2.5 to 2.5	Pass
				50	3.89	-6.537	-0.0079	-2.5 to 2.5	Pass
	836.5	25	0	20	3.31	-7.067	-0.0084	-2.5 to 2.5	Pass
					3.89	-5.293	-0.0063	-2.5 to 2.5	Pass
					4.47	-4.435	-0.0053	-2.5 to 2.5	Pass
				-30	3.89	-4.292	-0.0051	-2.5 to 2.5	Pass
				-20	3.89	-6.552	-0.0078	-2.5 to 2.5	Pass
				-10	3.89	-7.868	-0.0094	-2.5 to 2.5	Pass
				0	3.89	-6.480	-0.0077	-2.5 to 2.5	Pass
				10	3.89	-1.559	-0.0019	-2.5 to 2.5	Pass
				30	3.89	-6.080	-0.0073	-2.5 to 2.5	Pass
				40	3.89	-6.266	-0.0075	-2.5 to 2.5	Pass
				50	3.89	-5.350	-0.0064	-2.5 to 2.5	Pass
	846.5	25	0	20	3.31	-4.549	-0.0054	-2.5 to 2.5	Pass
					3.89	-6.323	-0.0075	-2.5 to 2.5	Pass
					4.47	-5.035	-0.0059	-2.5 to 2.5	Pass
				-30	3.89	-4.349	-0.0051	-2.5 to 2.5	Pass
				-20	3.89	-5.465	-0.0065	-2.5 to 2.5	Pass
				-10	3.89	-5.879	-0.0069	-2.5 to 2.5	Pass
				0	3.89	-9.370	-0.0111	-2.5 to 2.5	Pass
				10	3.89	-6.709	-0.0079	-2.5 to 2.5	Pass
				30	3.89	-4.148	-0.0049	-2.5 to 2.5	Pass
				40	3.89	-2.918	-0.0034	-2.5 to 2.5	Pass
				50	3.89	-2.360	-0.0028	-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	3.31	-6.566	-0.0079	-2.5 to 2.5	Pass
					3.89	-6.237	-0.0075	-2.5 to 2.5	Pass
					4.47	-7.052	-0.0085	-2.5 to 2.5	Pass
				-30	3.89	-5.722	-0.0069	-2.5 to 2.5	Pass
				-20	3.89	-6.552	-0.0079	-2.5 to 2.5	Pass
				-10	3.89	-5.636	-0.0068	-2.5 to 2.5	Pass
				0	3.89	-6.809	-0.0082	-2.5 to 2.5	Pass
				10	3.89	-7.510	-0.0091	-2.5 to 2.5	Pass

				30	3.89	-6.437	-0.0078	-2.5 to 2.5	Pass
				40	3.89	-7.281	-0.0088	-2.5 to 2.5	Pass
				50	3.89	-6.752	-0.0081	-2.5 to 2.5	Pass
	836.5	50	0	20	3.31	-8.726	-0.0104	-2.5 to 2.5	Pass
					3.89	-6.452	-0.0077	-2.5 to 2.5	Pass
					4.47	-6.552	-0.0078	-2.5 to 2.5	Pass
				-30	3.89	-5.093	-0.0061	-2.5 to 2.5	Pass
				-20	3.89	-5.150	-0.0062	-2.5 to 2.5	Pass
				-10	3.89	-8.240	-0.0099	-2.5 to 2.5	Pass
				0	3.89	-5.279	-0.0063	-2.5 to 2.5	Pass
				10	3.89	-11.473	-0.0137	-2.5 to 2.5	Pass
				30	3.89	-6.580	-0.0079	-2.5 to 2.5	Pass
				40	3.89	-7.067	-0.0084	-2.5 to 2.5	Pass
				50	3.89	-5.493	-0.0066	-2.5 to 2.5	Pass
	844	50	0	20	3.31	-8.998	-0.0107	-2.5 to 2.5	Pass
					3.89	-7.310	-0.0087	-2.5 to 2.5	Pass
					4.47	-7.868	-0.0093	-2.5 to 2.5	Pass
				-30	3.89	-5.722	-0.0068	-2.5 to 2.5	Pass
				-20	3.89	-5.436	-0.0064	-2.5 to 2.5	Pass
				-10	3.89	-3.090	-0.0037	-2.5 to 2.5	Pass
				0	3.89	-7.024	-0.0083	-2.5 to 2.5	Pass
				10	3.89	-6.280	-0.0074	-2.5 to 2.5	Pass
				30	3.89	-4.549	-0.0054	-2.5 to 2.5	Pass
				40	3.89	-9.699	-0.0115	-2.5 to 2.5	Pass
				50	3.89	-6.380	-0.0076	-2.5 to 2.5	Pass
16QAM	829	50	0	20	3.31	-8.869	-0.0107	-2.5 to 2.5	Pass
					3.89	-8.612	-0.0104	-2.5 to 2.5	Pass
					4.47	-4.392	-0.0053	-2.5 to 2.5	Pass
				-30	3.89	-5.093	-0.0061	-2.5 to 2.5	Pass
				-20	3.89	-6.137	-0.0074	-2.5 to 2.5	Pass
				-10	3.89	-5.007	-0.0060	-2.5 to 2.5	Pass
				0	3.89	-7.153	-0.0086	-2.5 to 2.5	Pass
				10	3.89	-1.345	-0.0016	-2.5 to 2.5	Pass
				30	3.89	-2.174	-0.0026	-2.5 to 2.5	Pass
				40	3.89	-5.836	-0.0070	-2.5 to 2.5	Pass
				50	3.89	-4.578	-0.0055	-2.5 to 2.5	Pass
	836.5	50	0	20	3.31	-6.065	-0.0073	-2.5 to 2.5	Pass
					3.89	-4.807	-0.0057	-2.5 to 2.5	Pass
					4.47	-8.340	-0.0100	-2.5 to 2.5	Pass
				-30	3.89	-8.826	-0.0106	-2.5 to 2.5	Pass
				-20	3.89	-3.548	-0.0042	-2.5 to 2.5	Pass
				-10	3.89	-5.193	-0.0062	-2.5 to 2.5	Pass
				0	3.89	-4.792	-0.0057	-2.5 to 2.5	Pass
				10	3.89	-7.925	-0.0095	-2.5 to 2.5	Pass
				30	3.89	-5.507	-0.0066	-2.5 to 2.5	Pass
				40	3.89	-6.938	-0.0083	-2.5 to 2.5	Pass
				50	3.89	-5.221	-0.0062	-2.5 to 2.5	Pass
	844	50	0	20	3.31	-4.435	-0.0053	-2.5 to 2.5	Pass
					3.89	-5.851	-0.0069	-2.5 to 2.5	Pass
					4.47	-5.050	-0.0060	-2.5 to 2.5	Pass
				-30	3.89	-9.413	-0.0112	-2.5 to 2.5	Pass
				-20	3.89	-8.683	-0.0103	-2.5 to 2.5	Pass
				-10	3.89	-5.279	-0.0063	-2.5 to 2.5	Pass
				0	3.89	-3.934	-0.0047	-2.5 to 2.5	Pass
				10	3.89	-8.183	-0.0097	-2.5 to 2.5	Pass
				30	3.89	-8.583	-0.0102	-2.5 to 2.5	Pass
				40	3.89	-8.740	-0.0104	-2.5 to 2.5	Pass
				50	3.89	-5.836	-0.0069	-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

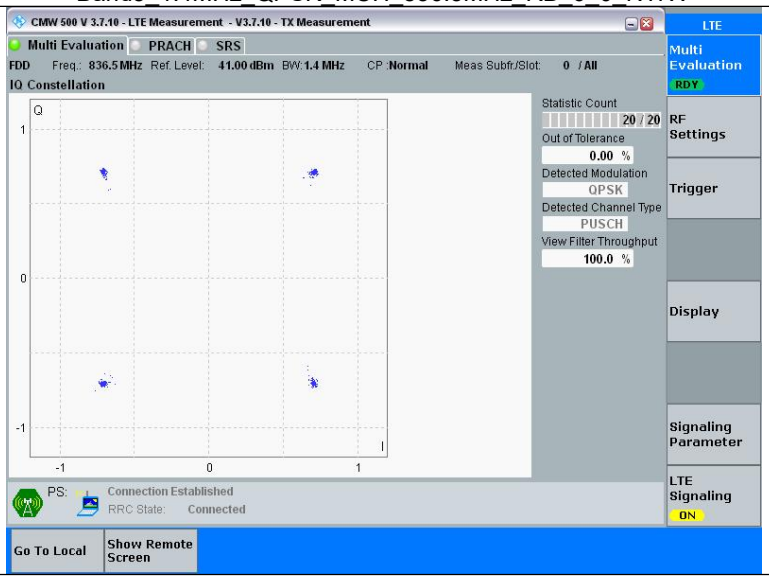
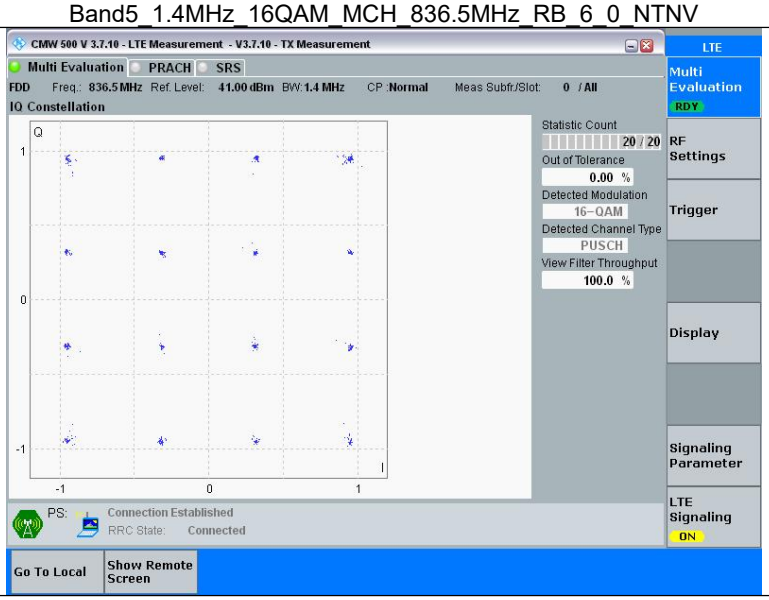
Band: 5 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	25	0	Refer To Test Graph		Pass
16QAM	836.5	25	0	Refer To Test Graph		Pass

3.1.4 B5_10MHz

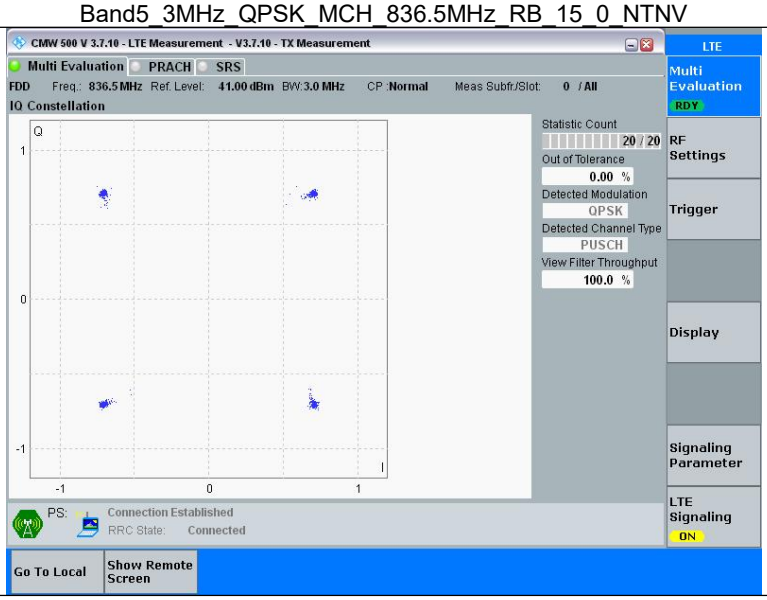
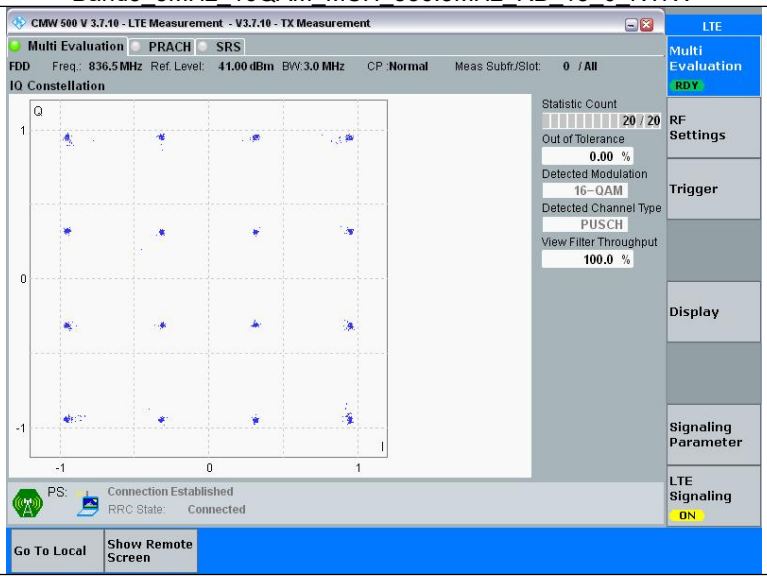
Band: 5 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	50	0	Refer To Test Graph		Pass
16QAM	836.5	50	0	Refer To Test Graph		Pass

3.2 Test Graph

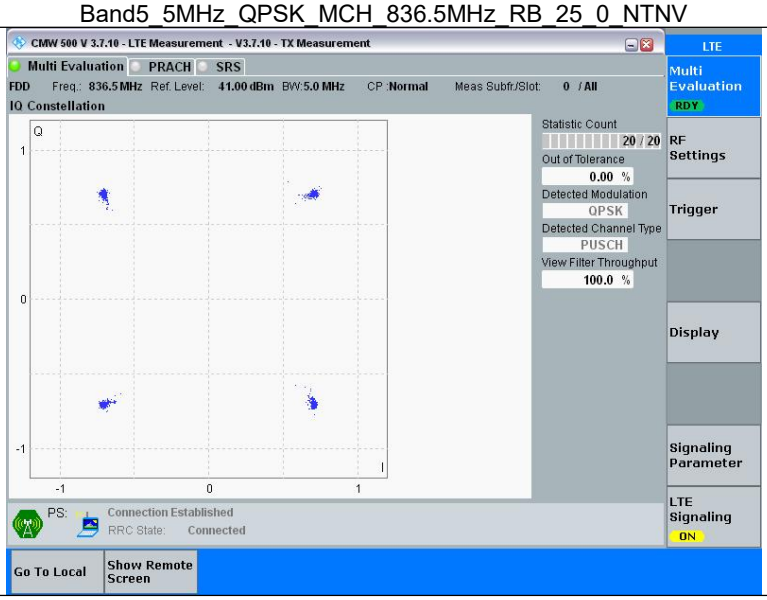
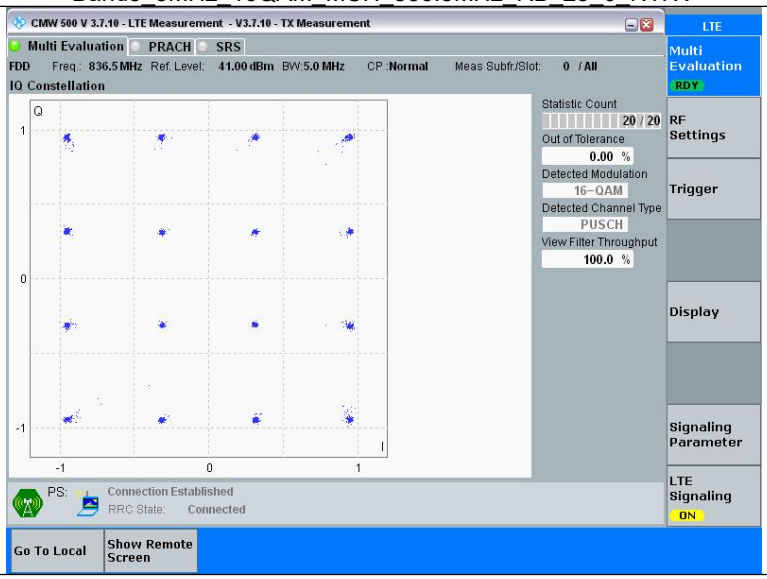
3.2.1 B5_1.4MHz

Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_6_0_NTNV

Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV


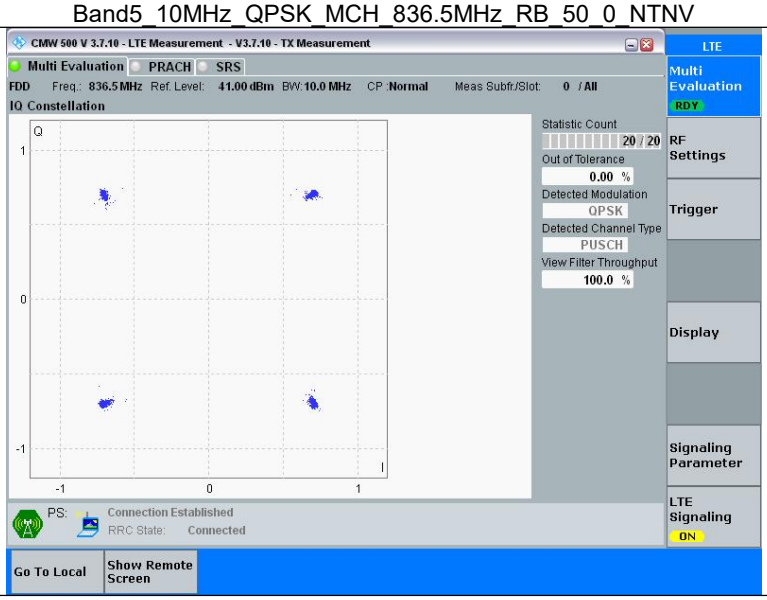
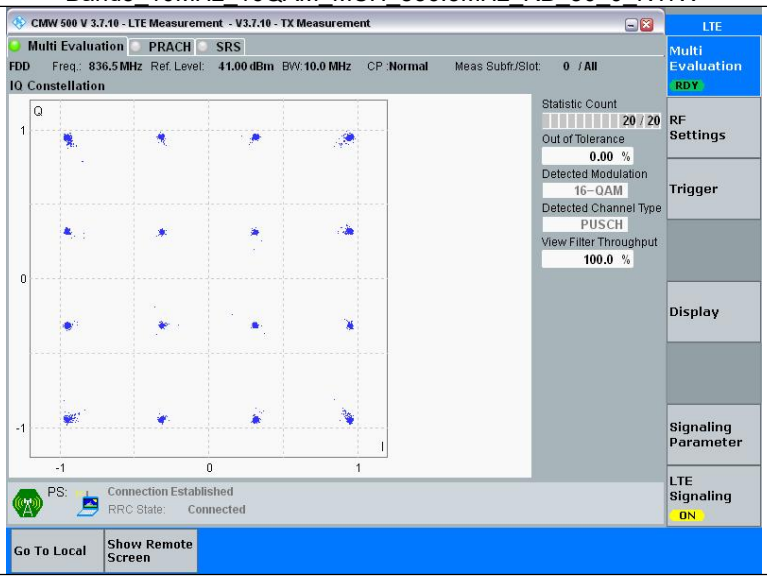
3.2.2 B5_3MHz

Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV

Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV


3.2.3 B5_5MHz

Band5_5MHz_QPSK_MCH_836.5MHz_RB_25_0_NTNV

Band5_5MHz_16QAM_MCH_836.5MHz_RB_25_0_NTNV


3.2.4 B5_10MHz

Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV

Band5_10MHz_16QAM_MCH_836.5MHz_RB_50_0_NTNV


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	1.111	/	Pass
		836.5	6	0	1.110	/	Pass
		848.3	6	0	1.112	/	Pass
	16QAM	824.7	6	0	1.113	/	Pass
		836.5	6	0	1.105	/	Pass
		848.3	6	0	1.116	/	Pass
3	QPSK	825.5	15	0	2.729	/	Pass
		836.5	15	0	2.722	/	Pass
		847.5	15	0	2.718	/	Pass
	16QAM	825.5	15	0	2.715	/	Pass
		836.5	15	0	2.731	/	Pass
		847.5	15	0	2.716	/	Pass
5	QPSK	826.5	25	0	4.536	/	Pass
		836.5	25	0	4.539	/	Pass
		846.5	25	0	4.551	/	Pass
	16QAM	826.5	25	0	4.534	/	Pass
		836.5	25	0	4.556	/	Pass
		846.5	25	0	4.529	/	Pass
10	QPSK	829	50	0	9.043	/	Pass
		836.5	50	0	9.065	/	Pass
		844	50	0	9.077	/	Pass
	16QAM	829	50	0	9.047	/	Pass
		836.5	50	0	9.038	/	Pass
		844	50	0	9.063	/	Pass

4.1.2 Band5_XDB

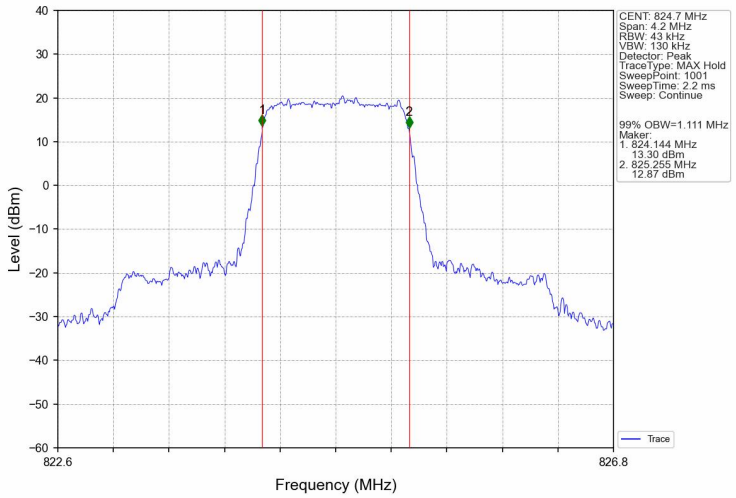
Band: 5 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	824.7	6	0	1.310	/	Pass
		836.5	6	0	1.321	/	Pass
		848.3	6	0	1.319	/	Pass
	16QAM	824.7	6	0	1.326	/	Pass
		836.5	6	0	1.295	/	Pass
		848.3	6	0	1.327	/	Pass
3	QPSK	825.5	15	0	3.009	/	Pass
		836.5	15	0	2.994	/	Pass
		847.5	15	0	2.975	/	Pass
	16QAM	825.5	15	0	2.983	/	Pass
		836.5	15	0	2.974	/	Pass
		847.5	15	0	3.004	/	Pass
5	QPSK	826.5	25	0	4.988	/	Pass
		836.5	25	0	5.018	/	Pass
		846.5	25	0	5.027	/	Pass
	16QAM	826.5	25	0	5.034	/	Pass
		836.5	25	0	5.009	/	Pass
		846.5	25	0	4.966	/	Pass
10	QPSK	829	50	0	9.915	/	Pass

		836.5	50	0	9.908	/	Pass
		844	50	0	9.929	/	Pass
	16QAM	829	50	0	9.895	/	Pass
		836.5	50	0	9.876	/	Pass
		844	50	0	9.931	/	Pass

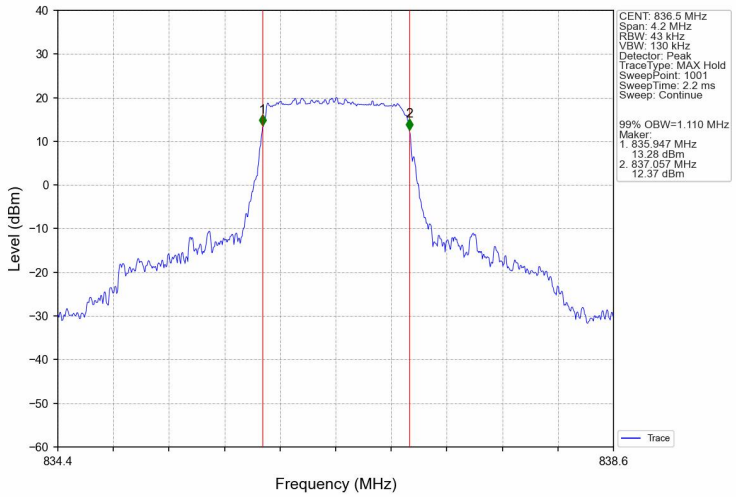
4.2 Test Graph

4.2.1 Band5_OBW

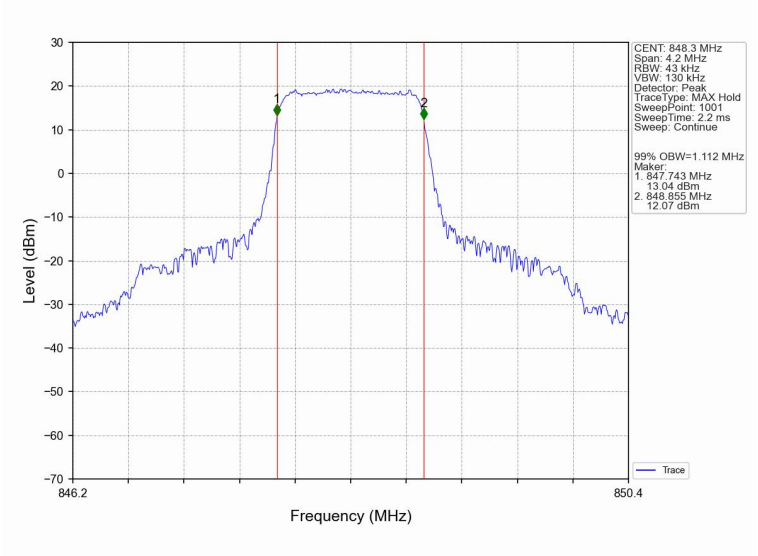
Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_6_0_NTNV



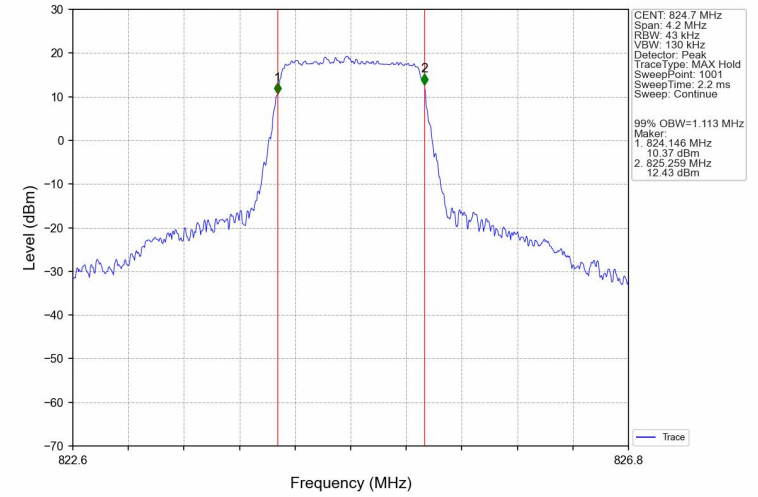
Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_6_0_NTNV



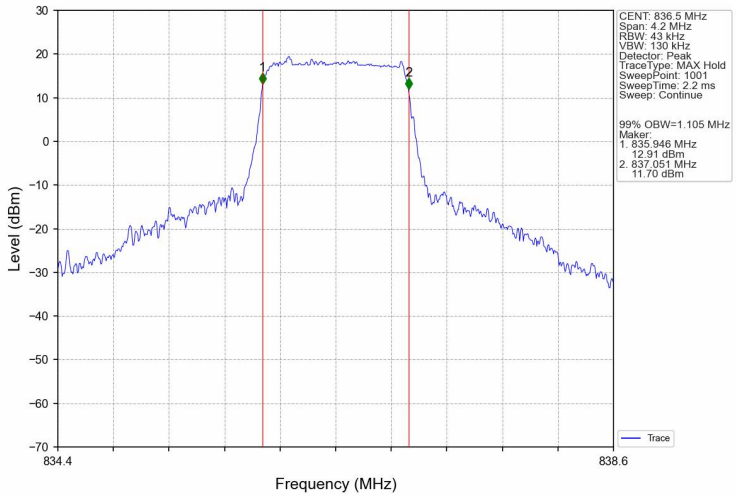
Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV



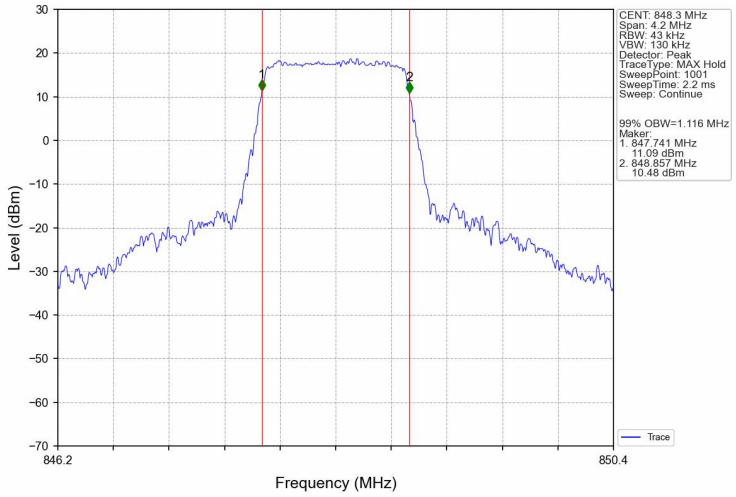
Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV



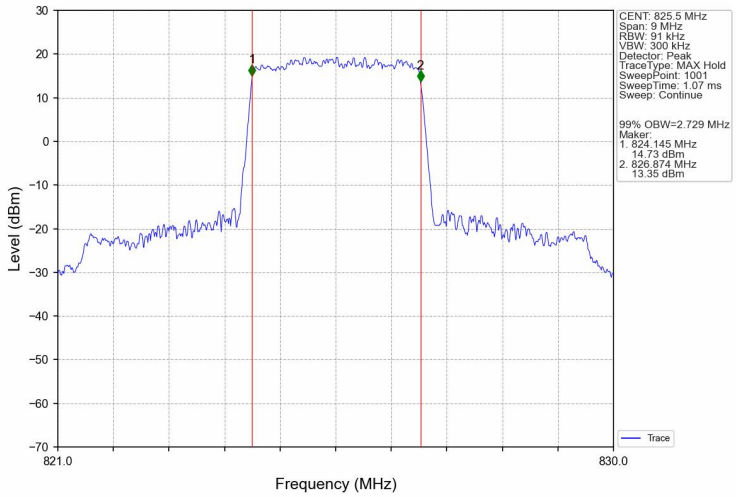
Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV



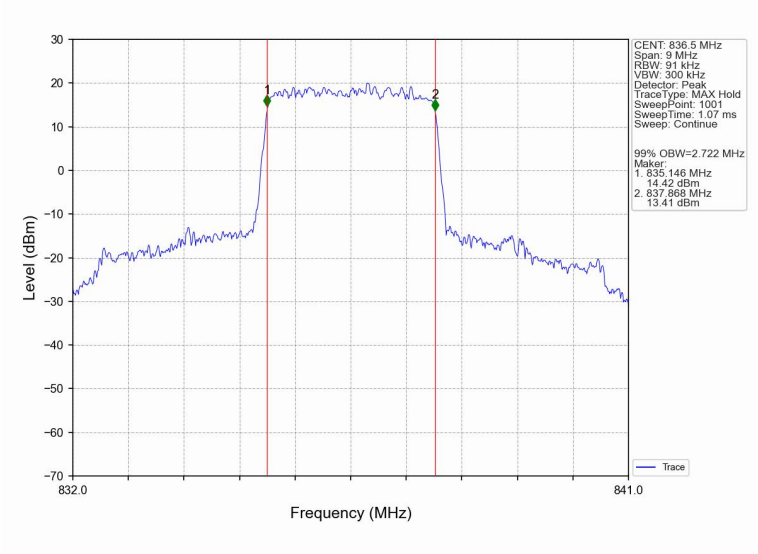
Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV



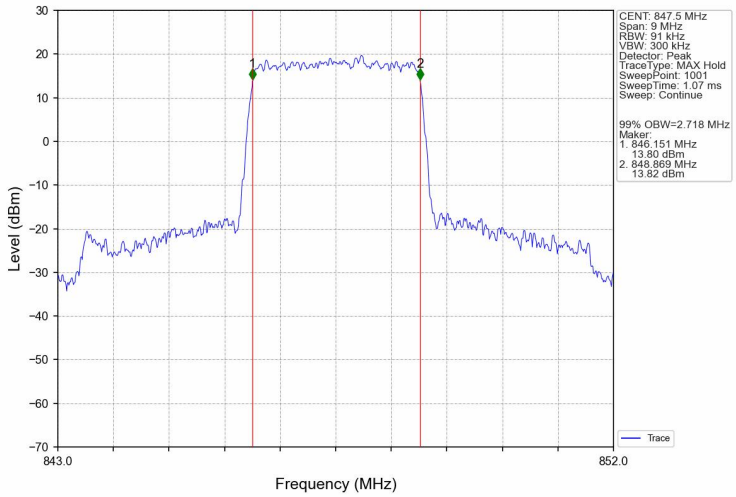
Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV



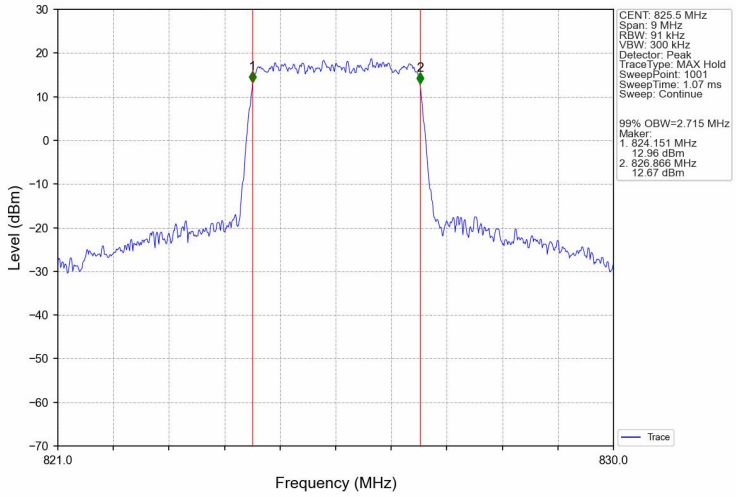
Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV



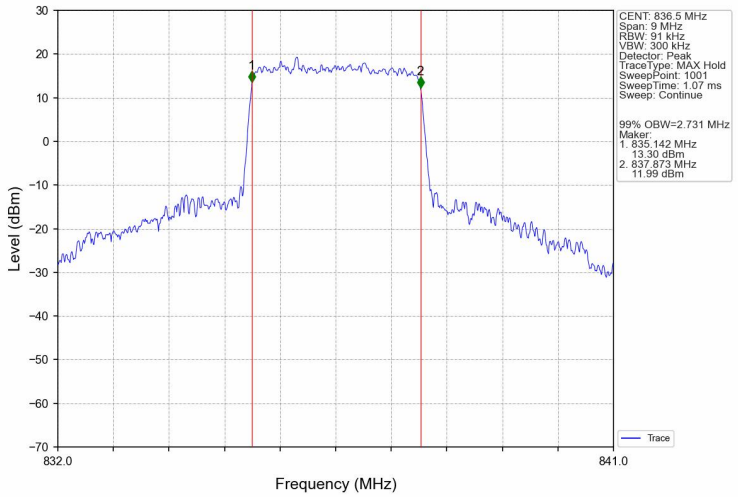
Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV



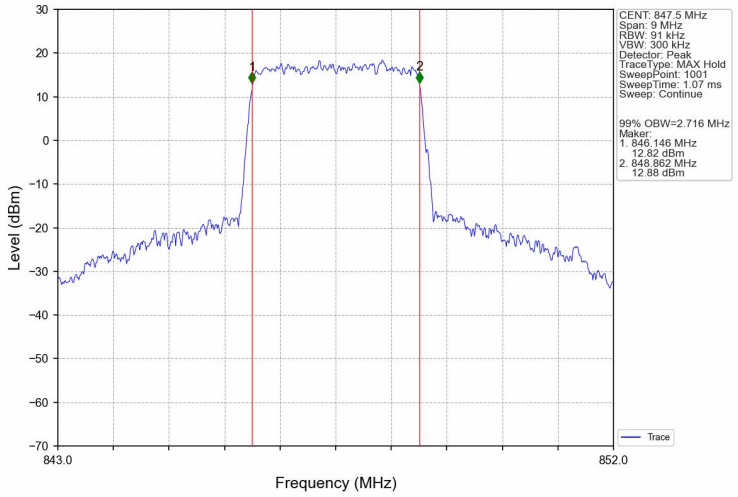
Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV



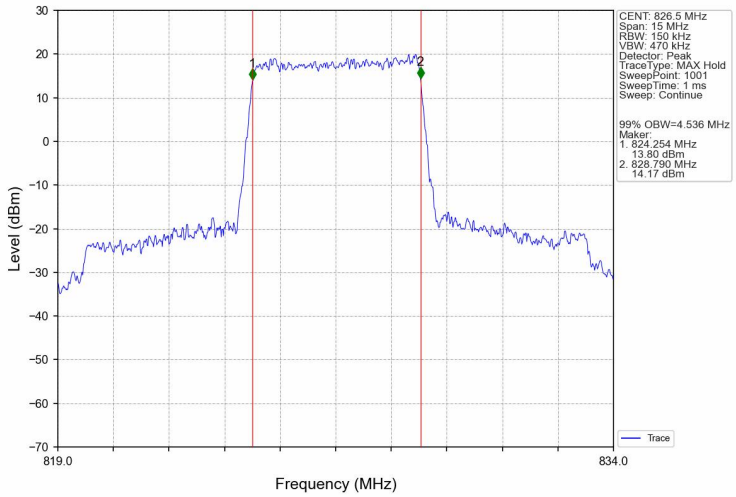
Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV



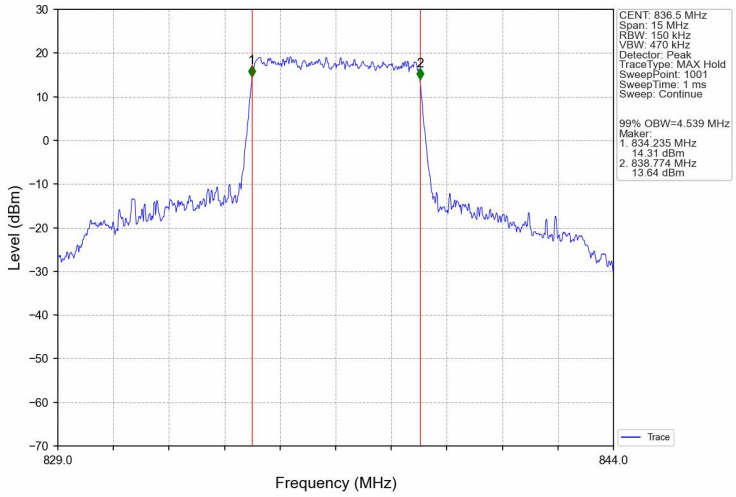
Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV



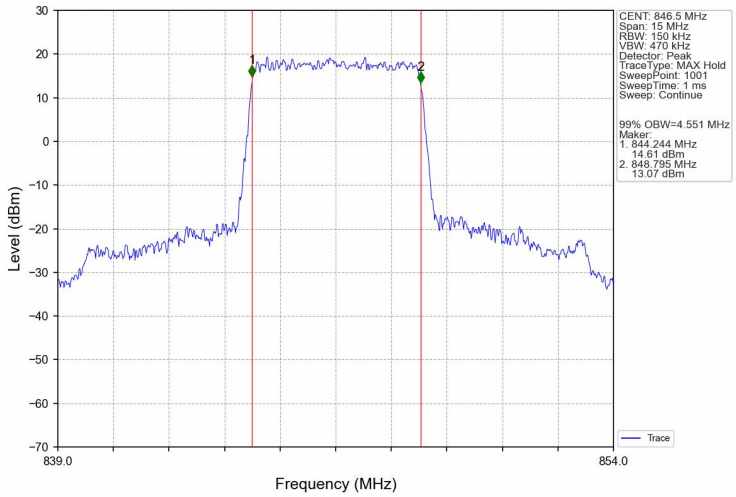
Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV



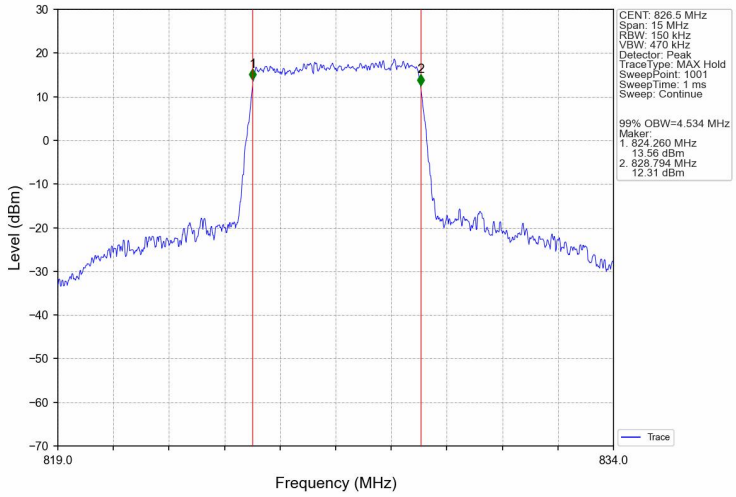
Band5_5MHz_QPSK_MCH_836.5MHz_RB_25_0_NTNV



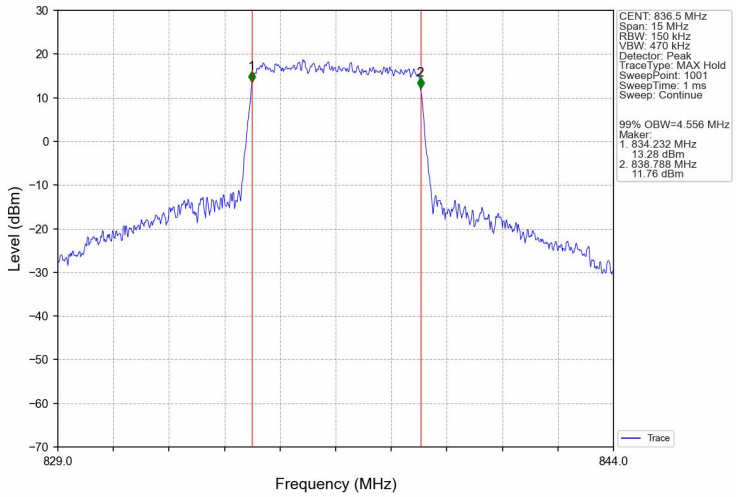
Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV



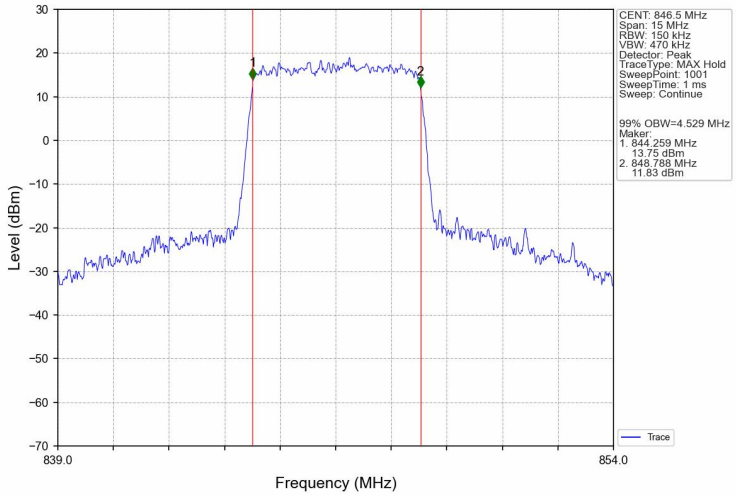
Band5_5MHz_16QAM_LCH_826.5MHz_RB_25_0_NTNV



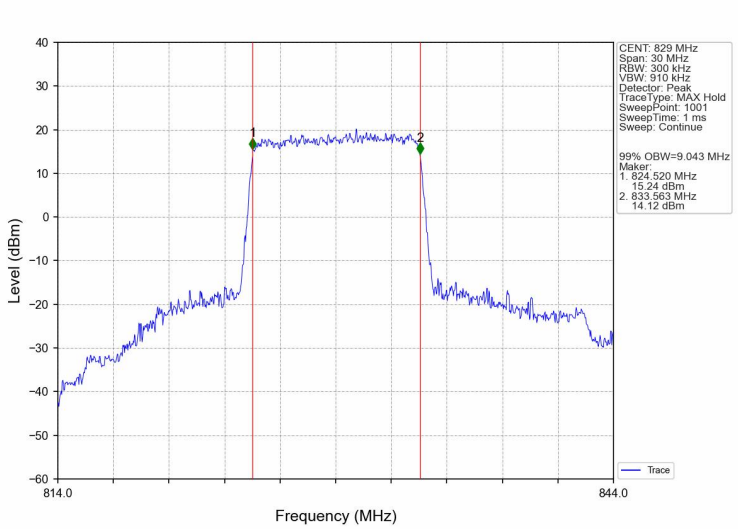
Band5_5MHz_16QAM_MCH_836.5MHz_RB_25_0_NTNV



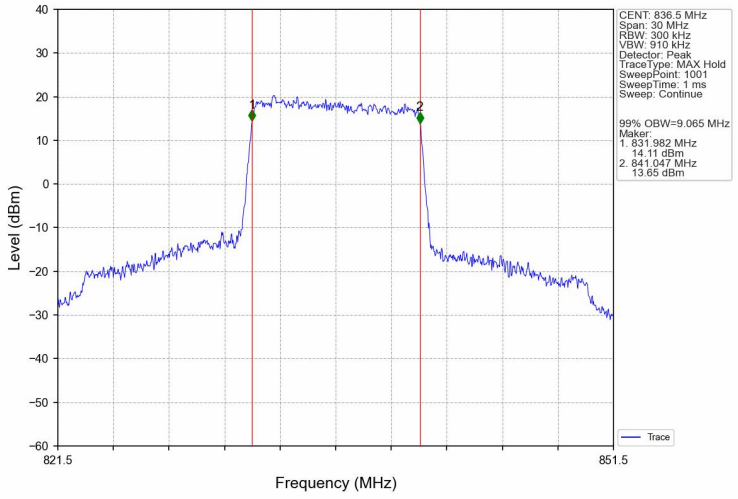
Band5_5MHz_16QAM_HCH_846.5MHz_RB_25_0_NTNV



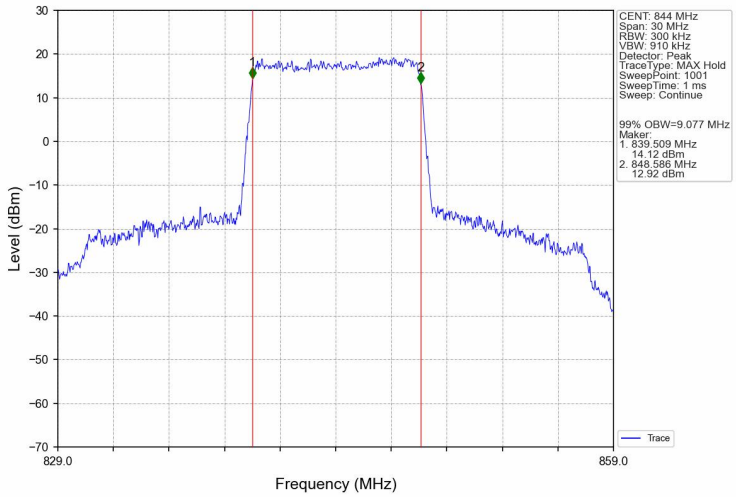
Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV



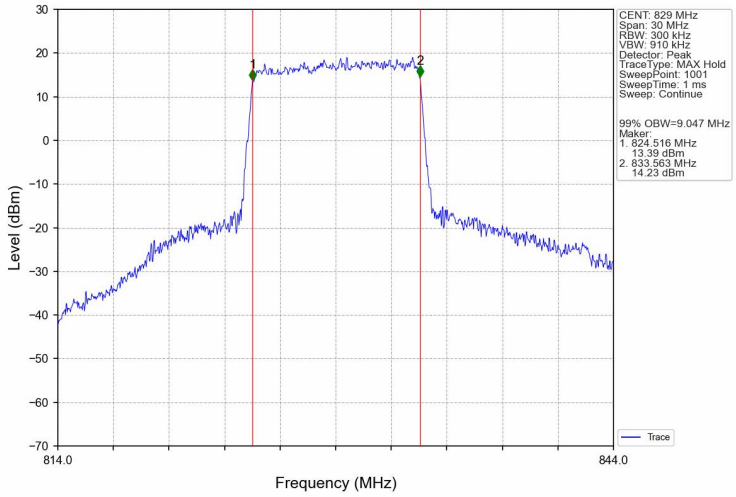
Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV



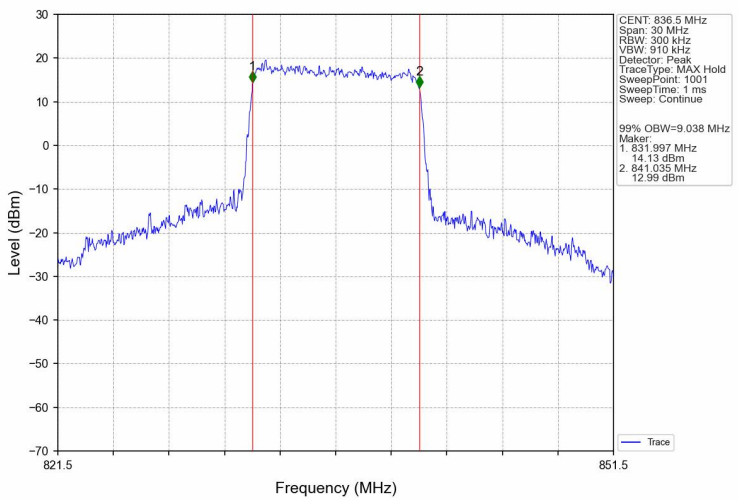
Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV



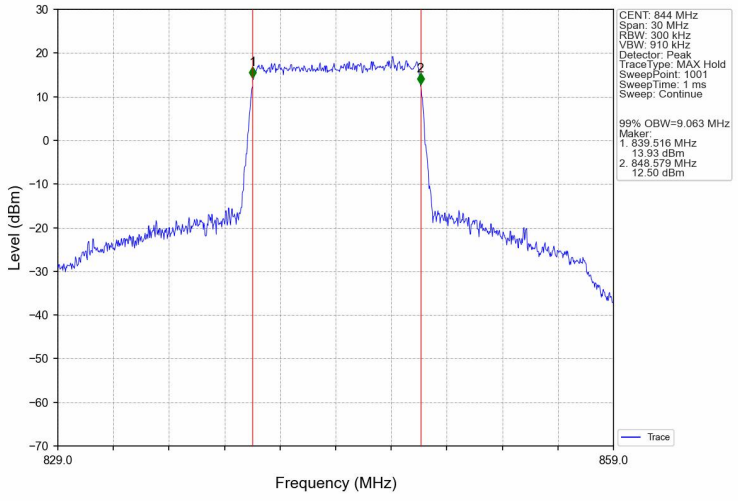
Band5_10MHz_16QAM_LCH_829MHz_RB_50_0_NTNV



Band5_10MHz_16QAM_MCH_836.5MHz_RB_50_0_NTNV

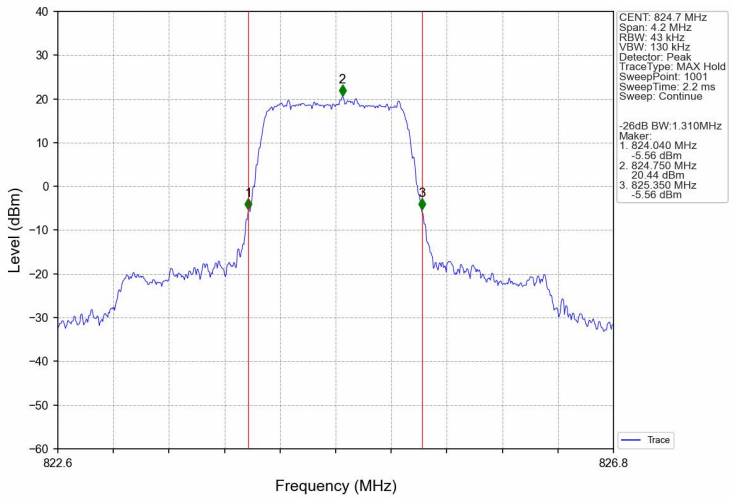


Band5_10MHz_16QAM_HCH_844MHz_RB_50_0_NTNV

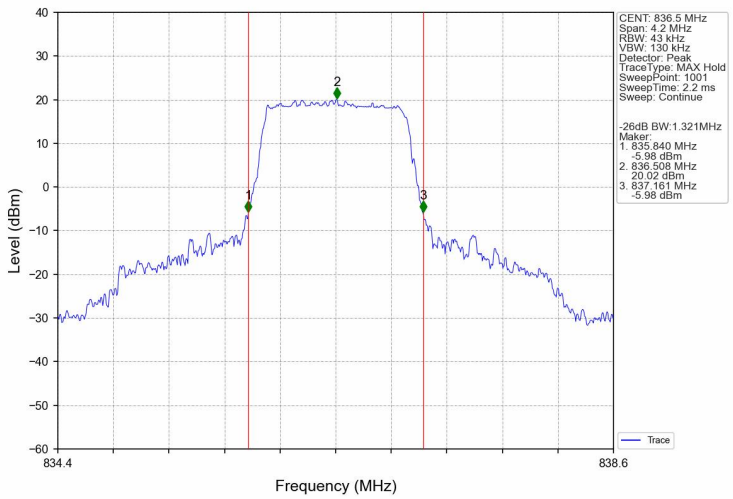


4.2.2 Band5_XDB

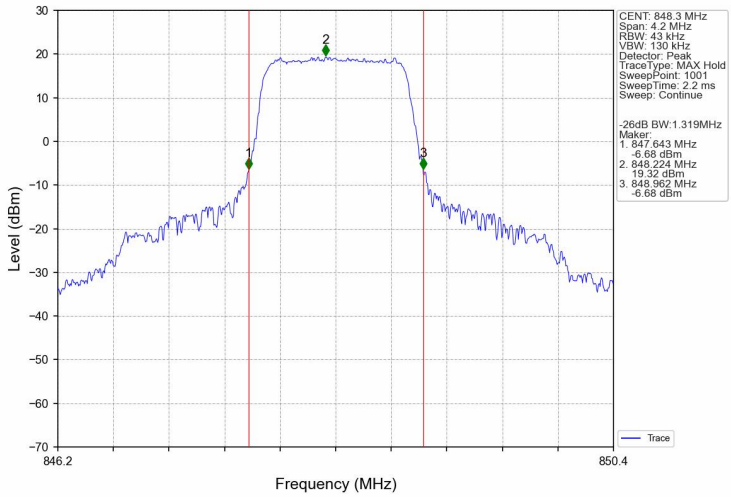
Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_6_0_NTNV



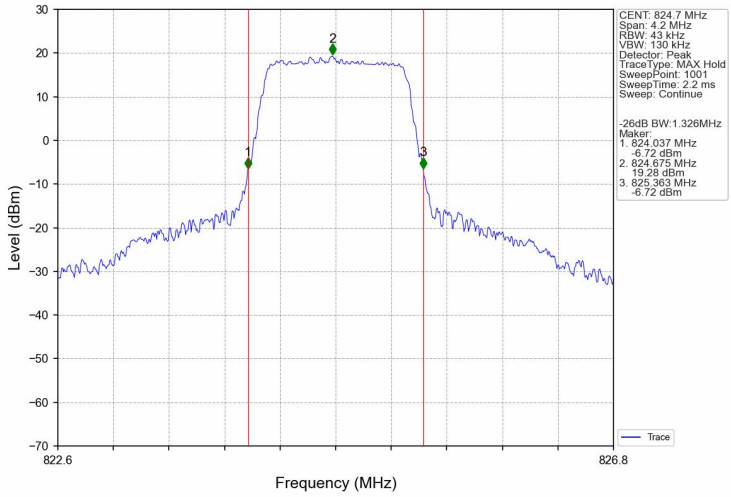
Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_6_0_NTNV



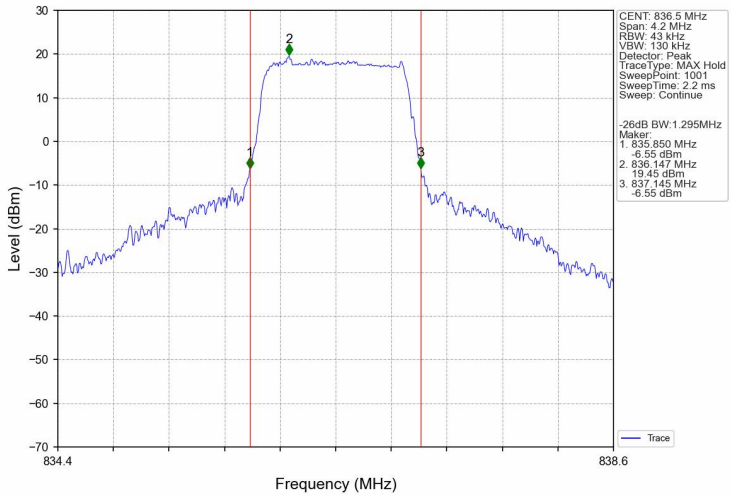
Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV



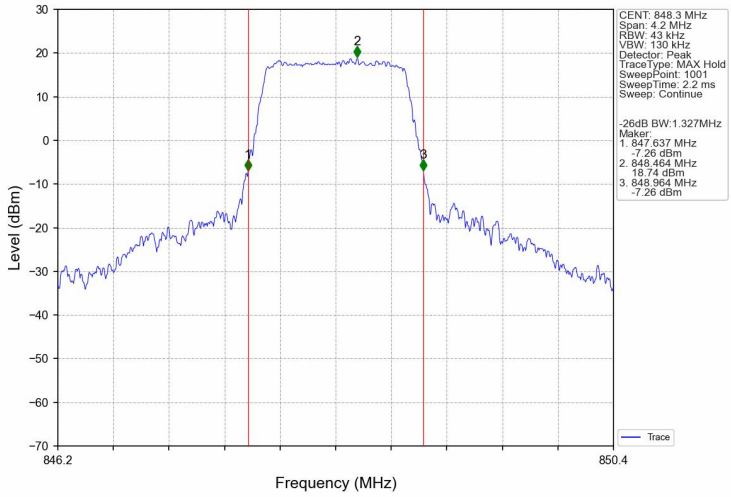
Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV



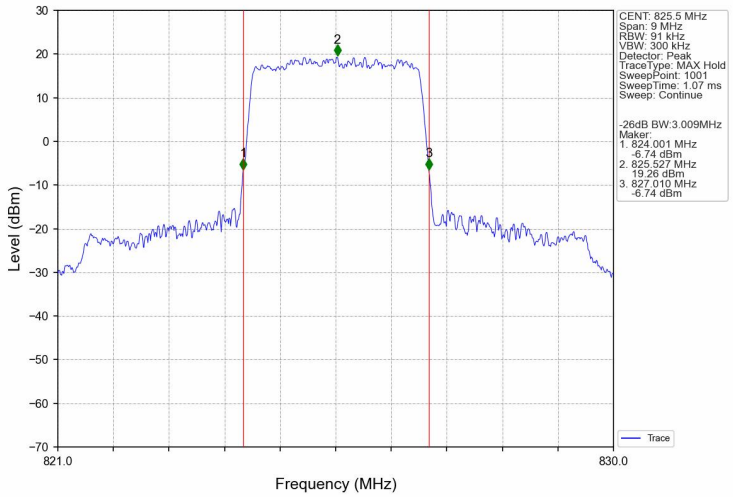
Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV



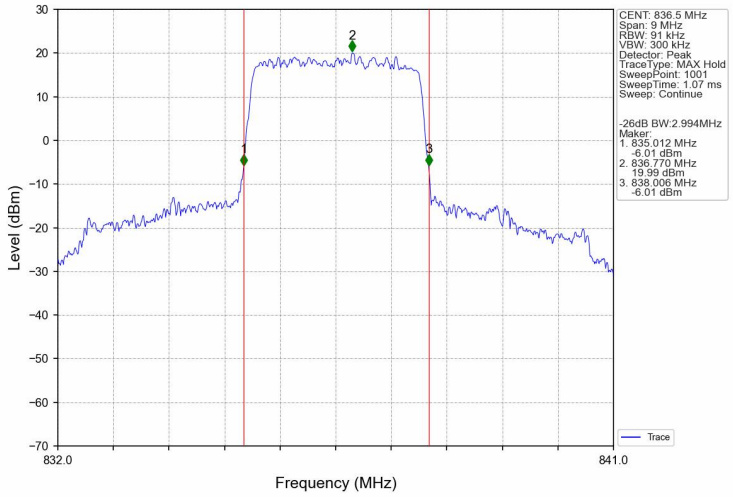
Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV



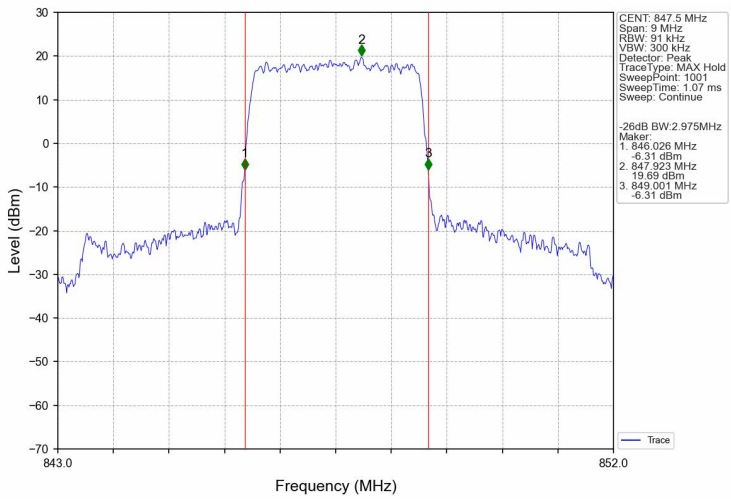
Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV



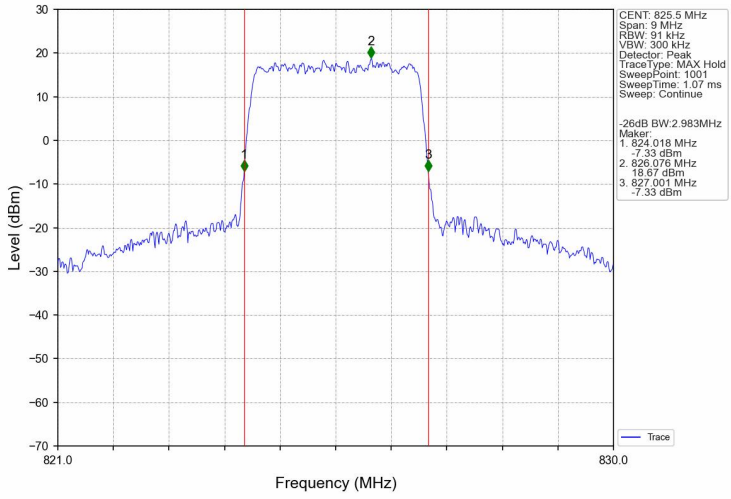
Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV



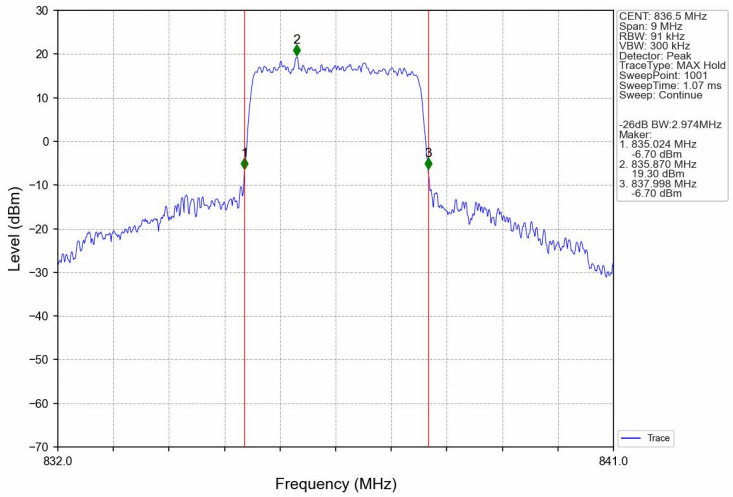
Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV



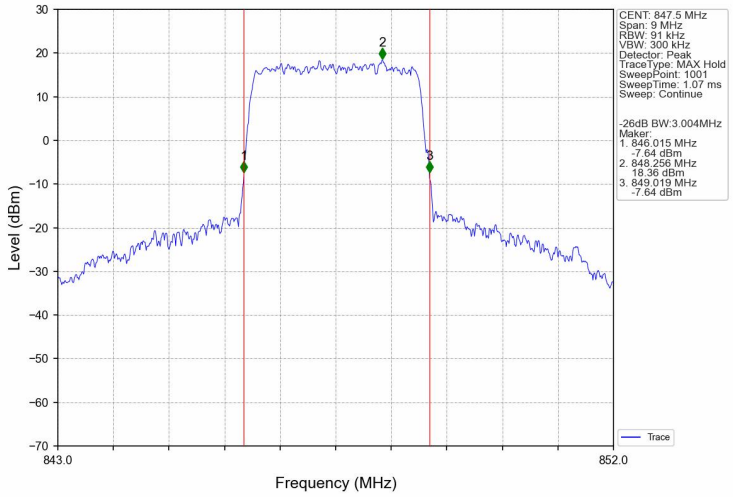
Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV



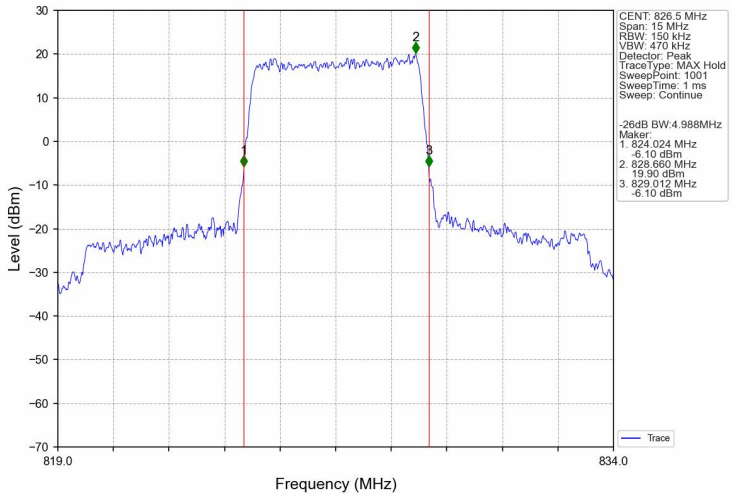
Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV



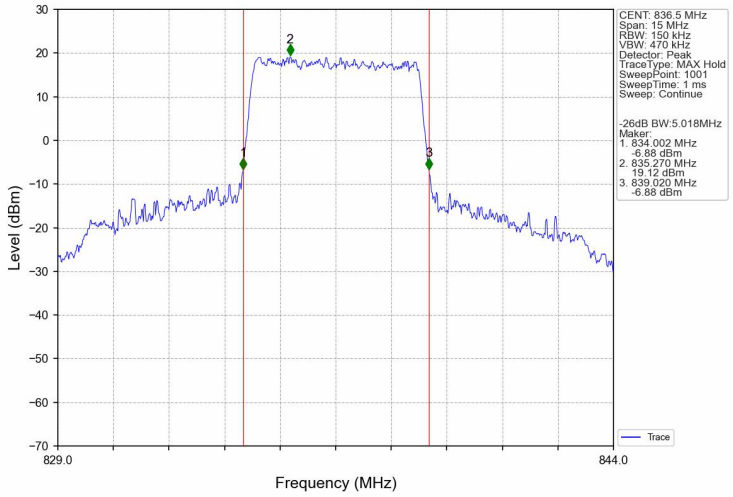
Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV



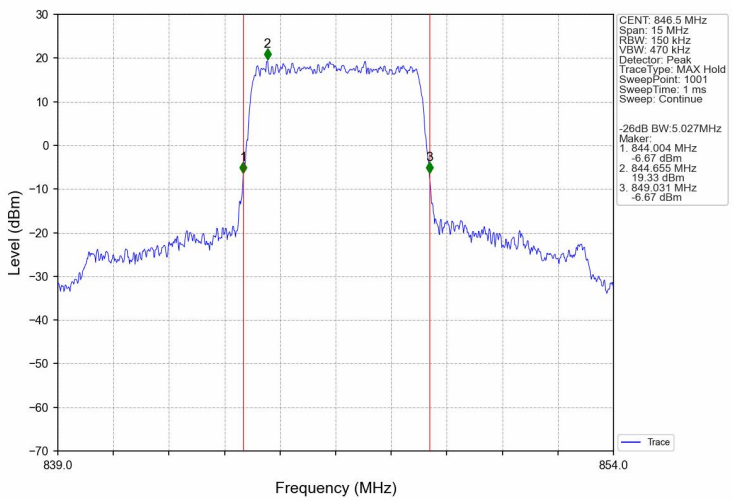
Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV



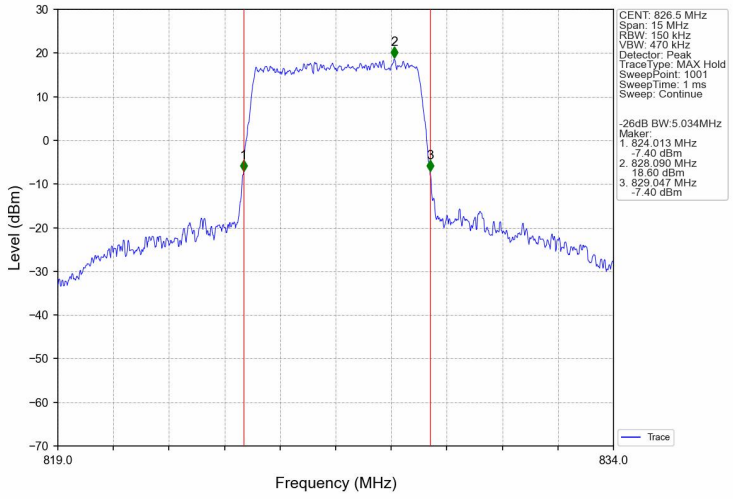
Band5_5MHz_QPSK_MCH_836.5MHz_RB_25_0_NTNV



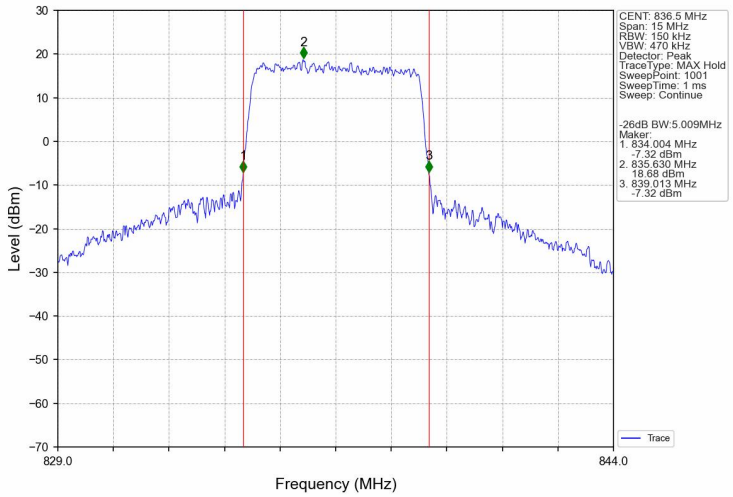
Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV



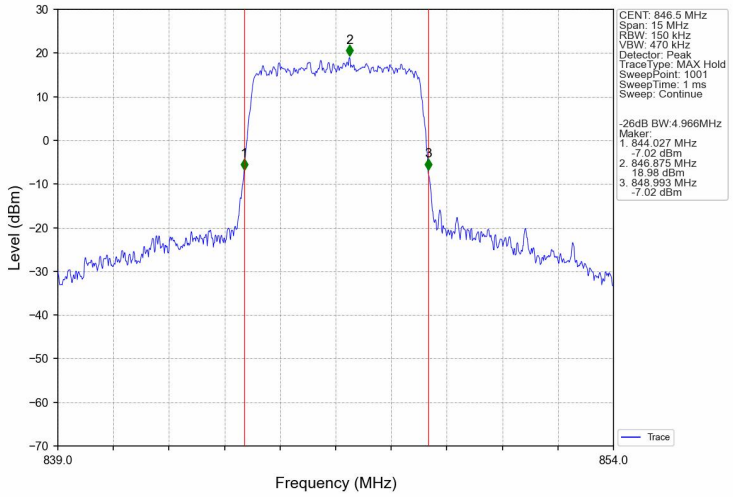
Band5_5MHz_16QAM_LCH_826.5MHz_RB_25_0_NTNV



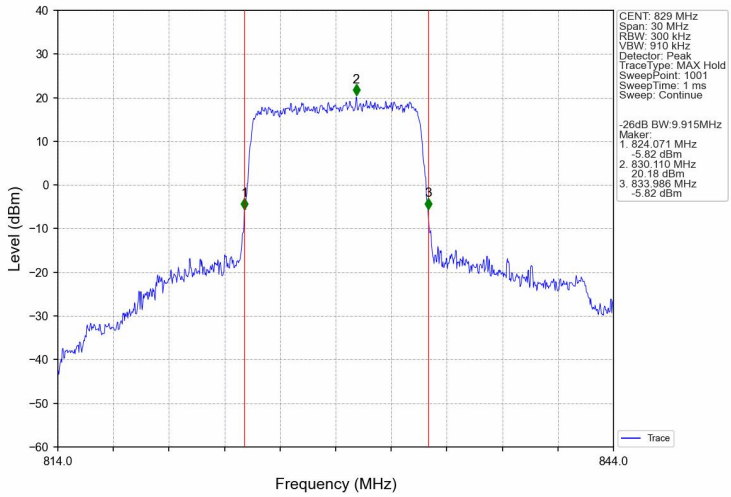
Band5_5MHz_16QAM_MCH_836.5MHz_RB_25_0_NTNV



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