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	23.90	0.20	21.95	<=38.45	Pass
			2	23.87	0.20	21.92	<=38.45	Pass
			5	23.78	0.20	21.83	<=38.45	Pass
		3	0	23.98	0.20	22.03	<=38.45	Pass
			2	24.00	0.20	22.05	<=38.45	Pass
			3	23.99	0.20	22.04	<=38.45	Pass
		6	0	22.93	0.20	20.98	<=38.45	Pass
	836.5	1	0	24.15	0.20	22.20	<=38.45	Pass
			2	24.16	0.20	22.21	<=38.45	Pass
			5	24.13	0.20	22.18	<=38.45	Pass
		3	0	24.11	0.20	22.16	<=38.45	Pass
			2	24.07	0.20	22.12	<=38.45	Pass
			3	24.07	0.20	22.12	<=38.45	Pass
		6	0	23.08	0.20	21.13	<=38.45	Pass
	848.3	1	0	23.86	0.20	21.91	<=38.45	Pass
			2	23.85	0.20	21.90	<=38.45	Pass
			5	23.86	0.20	21.91	<=38.45	Pass
		3	0	23.92	0.20	21.97	<=38.45	Pass
			2	23.91	0.20	21.96	<=38.45	Pass
			3	23.94	0.20	21.99	<=38.45	Pass
		6	0	22.95	0.20	21.00	<=38.45	Pass
16QAM	824.7	1	0	22.46	0.20	20.51	<=38.45	Pass
			2	22.49	0.20	20.54	<=38.45	Pass
			5	22.48	0.20	20.53	<=38.45	Pass
		3	0	22.96	0.20	21.01	<=38.45	Pass
			2	22.95	0.20	21.00	<=38.45	Pass
			3	22.96	0.20	21.01	<=38.45	Pass
		6	0	21.83	0.20	19.88	<=38.45	Pass
	836.5	1	0	23.05	0.20	21.10	<=38.45	Pass
			2	23.08	0.20	21.13	<=38.45	Pass
			5	23.05	0.20	21.10	<=38.45	Pass
		3	0	22.90	0.20	20.95	<=38.45	Pass
			2	22.88	0.20	20.93	<=38.45	Pass
			3	22.88	0.20	20.93	<=38.45	Pass
		6	0	22.09	0.20	20.14	<=38.45	Pass
	848.3	1	0	22.98	0.20	21.03	<=38.45	Pass
			2	22.86	0.20	20.91	<=38.45	Pass
			5	22.92	0.20	20.97	<=38.45	Pass
		3	0	23.10	0.20	21.15	<=38.45	Pass
			2	23.12	0.20	21.17	<=38.45	Pass
			3	23.14	0.20	21.19	<=38.45	Pass
		6	0	21.94	0.20	19.99	<=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	23.90	0.20	21.95	<=38.45	Pass
			7	23.88	0.20	21.93	<=38.45	Pass
			14	23.92	0.20	21.97	<=38.45	Pass
		8	0	22.92	0.20	20.97	<=38.45	Pass
			4	22.87	0.20	20.92	<=38.45	Pass
			7	22.91	0.20	20.96	<=38.45	Pass
		15	0	22.92	0.20	20.97	<=38.45	Pass
	836.5	1	0	23.98	0.20	22.03	<=38.45	Pass
			7	23.99	0.20	22.04	<=38.45	Pass
			14	23.96	0.20	22.01	<=38.45	Pass
		8	0	22.97	0.20	21.02	<=38.45	Pass
			4	23.03	0.20	21.08	<=38.45	Pass
			7	23.02	0.20	21.07	<=38.45	Pass
		15	0	23.00	0.20	21.05	<=38.45	Pass
	847.5	1	0	23.99	0.20	22.04	<=38.45	Pass
			7	23.96	0.20	22.01	<=38.45	Pass
			14	23.93	0.20	21.98	<=38.45	Pass
		8	0	22.90	0.20	20.95	<=38.45	Pass
			4	22.88	0.20	20.93	<=38.45	Pass
			7	22.87	0.20	20.92	<=38.45	Pass
		15	0	22.94	0.20	20.99	<=38.45	Pass
16QAM	825.5	1	0	23.02	0.20	21.07	<=38.45	Pass
			7	22.96	0.20	21.01	<=38.45	Pass
			14	23.02	0.20	21.07	<=38.45	Pass
		8	0	21.99	0.20	20.04	<=38.45	Pass
			4	21.95	0.20	20.00	<=38.45	Pass
			7	22.00	0.20	20.05	<=38.45	Pass
		15	0	21.96	0.20	20.01	<=38.45	Pass
	836.5	1	0	23.22	0.20	21.27	<=38.45	Pass
			7	23.24	0.20	21.29	<=38.45	Pass
			14	23.17	0.20	21.22	<=38.45	Pass
		8	0	21.96	0.20	20.01	<=38.45	Pass
			4	22.00	0.20	20.05	<=38.45	Pass
			7	21.99	0.20	20.04	<=38.45	Pass
		15	0	21.99	0.20	20.04	<=38.45	Pass
	847.5	1	0	23.46	0.20	21.51	<=38.45	Pass
			7	23.47	0.20	21.52	<=38.45	Pass
			14	23.39	0.20	21.44	<=38.45	Pass
		8	0	22.14	0.20	20.19	<=38.45	Pass
			4	22.08	0.20	20.13	<=38.45	Pass
			7	22.06	0.20	20.11	<=38.45	Pass
		15	0	21.99	0.20	20.04	<=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	23.98	0.20	22.03	<=38.45	Pass
			13	23.98	0.20	22.03	<=38.45	Pass
			24	24.04	0.20	22.09	<=38.45	Pass
		12	0	22.91	0.20	20.96	<=38.45	Pass
			6	22.93	0.20	20.98	<=38.45	Pass
			13	22.85	0.20	20.90	<=38.45	Pass
		25	0	22.90	0.20	20.95	<=38.45	Pass
	836.5	1	0	23.98	0.20	22.03	<=38.45	Pass
			13	23.97	0.20	22.02	<=38.45	Pass

			24	24.01	0.20	22.06	<=38.45	Pass
		12	0	23.04	0.20	21.09	<=38.45	Pass
			6	23.02	0.20	21.07	<=38.45	Pass
			13	22.99	0.20	21.04	<=38.45	Pass
		25	0	23.05	0.20	21.10	<=38.45	Pass
	846.5	1	0	24.11	0.20	22.16	<=38.45	Pass
			13	24.03	0.20	22.08	<=38.45	Pass
			24	24.13	0.20	22.18	<=38.45	Pass
		12	0	23.03	0.20	21.08	<=38.45	Pass
			6	22.92	0.20	20.97	<=38.45	Pass
			13	22.92	0.20	20.97	<=38.45	Pass
		25	0	22.96	0.20	21.01	<=38.45	Pass
16QAM	826.5	1	0	23.04	0.20	21.09	<=38.45	Pass
			13	23.02	0.20	21.07	<=38.45	Pass
			24	23.07	0.20	21.12	<=38.45	Pass
		12	0	21.93	0.20	19.98	<=38.45	Pass
			6	21.92	0.20	19.97	<=38.45	Pass
			13	21.90	0.20	19.95	<=38.45	Pass
		25	0	21.96	0.20	20.01	<=38.45	Pass
	836.5	1	0	23.29	0.20	21.34	<=38.45	Pass
			13	23.27	0.20	21.32	<=38.45	Pass
			24	23.28	0.20	21.33	<=38.45	Pass
		12	0	22.04	0.20	20.09	<=38.45	Pass
			6	22.03	0.20	20.08	<=38.45	Pass
			13	22.02	0.20	20.07	<=38.45	Pass
		25	0	22.04	0.20	20.09	<=38.45	Pass
	846.5	1	0	22.83	0.20	20.88	<=38.45	Pass
			13	22.71	0.20	20.76	<=38.45	Pass
			24	22.73	0.20	20.78	<=38.45	Pass
		12	0	22.05	0.20	20.10	<=38.45	Pass
			6	21.93	0.20	19.98	<=38.45	Pass
			13	21.90	0.20	19.95	<=38.45	Pass
		25	0	22.02	0.20	20.07	<=38.45	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

1.1.4 B5_10MHz_ERP

Band: 5 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	829	1	0	23.88	0.20	21.93	<=38.45	Pass
			25	23.99	0.20	22.04	<=38.45	Pass
			49	24.03	0.20	22.08	<=38.45	Pass
		25	0	22.97	0.20	21.02	<=38.45	Pass
			13	22.99	0.20	21.04	<=38.45	Pass
			25	22.93	0.20	20.98	<=38.45	Pass
		50	0	22.98	0.20	21.03	<=38.45	Pass
	836.5	1	0	23.99	0.20	22.04	<=38.45	Pass
			25	24.01	0.20	22.06	<=38.45	Pass
			49	23.94	0.20	21.99	<=38.45	Pass
		25	0	23.04	0.20	21.09	<=38.45	Pass
			13	23.04	0.20	21.09	<=38.45	Pass
			25	23.05	0.20	21.10	<=38.45	Pass
		50	0	23.10	0.20	21.15	<=38.45	Pass
	844	1	0	23.87	0.20	21.92	<=38.45	Pass
			25	23.81	0.20	21.86	<=38.45	Pass
			49	23.56	0.20	21.61	<=38.45	Pass
		25	0	23.06	0.20	21.11	<=38.45	Pass

			13	22.95	0.20	21.00	<=38.45	Pass
			25	22.87	0.20	20.92	<=38.45	Pass
		50	0	23.00	0.20	21.05	<=38.45	Pass
16QAM	829	1	0	22.93	0.20	20.98	<=38.45	Pass
			25	23.02	0.20	21.07	<=38.45	Pass
			49	23.04	0.20	21.09	<=38.45	Pass
		25	0	22.05	0.20	20.10	<=38.45	Pass
			13	22.08	0.20	20.13	<=38.45	Pass
			25	22.02	0.20	20.07	<=38.45	Pass
		50	0	21.97	0.20	20.02	<=38.45	Pass
	836.5	1	0	23.18	0.20	21.23	<=38.45	Pass
			25	23.12	0.20	21.17	<=38.45	Pass
			49	23.10	0.20	21.15	<=38.45	Pass
		25	0	22.10	0.20	20.15	<=38.45	Pass
			13	22.09	0.20	20.14	<=38.45	Pass
			25	22.11	0.20	20.16	<=38.45	Pass
		50	0	22.09	0.20	20.14	<=38.45	Pass
	844	1	0	23.01	0.20	21.06	<=38.45	Pass
			25	22.93	0.20	20.98	<=38.45	Pass
			49	22.94	0.20	20.99	<=38.45	Pass
		25	0	22.09	0.20	20.14	<=38.45	Pass
			13	22.00	0.20	20.05	<=38.45	Pass
			25	21.91	0.20	19.96	<=38.45	Pass
		50	0	21.99	0.20	20.04	<=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	-5.078	-0.0062	-2.5 to 2.5	Pass
					3.85	-2.661	-0.0032	-2.5 to 2.5	Pass
					4.43	-2.503	-0.0030	-2.5 to 2.5	Pass
				-30	3.85	-1.674	-0.0020	-2.5 to 2.5	Pass
				-20	3.85	-0.672	-0.0008	-2.5 to 2.5	Pass
				-10	3.85	0.286	0.0003	-2.5 to 2.5	Pass
				0	3.85	3.605	0.0044	-2.5 to 2.5	Pass
				10	3.85	13.862	0.0168	-2.5 to 2.5	Pass
				30	3.85	-5.236	-0.0063	-2.5 to 2.5	Pass
				40	3.85	-4.334	-0.0053	-2.5 to 2.5	Pass
				50	3.85	1.559	0.0019	-2.5 to 2.5	Pass
	836.5	6	0	20	3.27	2.103	0.0025	-2.5 to 2.5	Pass
					3.85	-1.416	-0.0017	-2.5 to 2.5	Pass
					4.43	-1.302	-0.0016	-2.5 to 2.5	Pass
				-30	3.85	2.446	0.0029	-2.5 to 2.5	Pass
				-20	3.85	-3.505	-0.0042	-2.5 to 2.5	Pass
				-10	3.85	3.605	0.0043	-2.5 to 2.5	Pass
				0	3.85	-0.858	-0.0010	-2.5 to 2.5	Pass
				10	3.85	1.631	0.0019	-2.5 to 2.5	Pass
				30	3.85	-0.529	-0.0006	-2.5 to 2.5	Pass
				40	3.85	-0.043	-0.0001	-2.5 to 2.5	Pass

				50	3.85	-2.618	-0.0031	-2.5 to 2.5	Pass
	848.3	6	0	20	3.27	-4.134	-0.0049	-2.5 to 2.5	Pass
					3.85	-3.104	-0.0037	-2.5 to 2.5	Pass
					4.43	-2.046	-0.0024	-2.5 to 2.5	Pass
				-30	3.85	-4.349	-0.0051	-2.5 to 2.5	Pass
				-20	3.85	3.033	0.0036	-2.5 to 2.5	Pass
				-10	3.85	-1.531	-0.0018	-2.5 to 2.5	Pass
				0	3.85	0.358	0.0004	-2.5 to 2.5	Pass
				10	3.85	3.891	0.0046	-2.5 to 2.5	Pass
				30	3.85	5.879	0.0069	-2.5 to 2.5	Pass
				40	3.85	5.150	0.0061	-2.5 to 2.5	Pass
				50	3.85	5.665	0.0067	-2.5 to 2.5	Pass
16QAM	824.7	6	0	20	3.27	-1.531	-0.0019	-2.5 to 2.5	Pass
					3.85	0.129	0.0002	-2.5 to 2.5	Pass
					4.43	-5.393	-0.0065	-2.5 to 2.5	Pass
				-30	3.85	-1.330	-0.0016	-2.5 to 2.5	Pass
				-20	3.85	-0.300	-0.0004	-2.5 to 2.5	Pass
				-10	3.85	-0.672	-0.0008	-2.5 to 2.5	Pass
				0	3.85	0.186	0.0002	-2.5 to 2.5	Pass
				10	3.85	-8.025	-0.0097	-2.5 to 2.5	Pass
				30	3.85	-2.604	-0.0032	-2.5 to 2.5	Pass
				40	3.85	-0.701	-0.0009	-2.5 to 2.5	Pass
				50	3.85	-2.146	-0.0026	-2.5 to 2.5	Pass
	836.5	6	0	20	3.27	-1.945	-0.0023	-2.5 to 2.5	Pass
					3.85	1.016	0.0012	-2.5 to 2.5	Pass
					4.43	2.146	0.0026	-2.5 to 2.5	Pass
				-30	3.85	2.418	0.0029	-2.5 to 2.5	Pass
				-20	3.85	-7.195	-0.0086	-2.5 to 2.5	Pass
				-10	3.85	-6.895	-0.0082	-2.5 to 2.5	Pass
				0	3.85	-0.772	-0.0009	-2.5 to 2.5	Pass
				10	3.85	-7.010	-0.0084	-2.5 to 2.5	Pass
				30	3.85	-2.646	-0.0032	-2.5 to 2.5	Pass
				40	3.85	2.589	0.0031	-2.5 to 2.5	Pass
				50	3.85	1.616	0.0019	-2.5 to 2.5	Pass
	848.3	6	0	20	3.27	0.858	0.0010	-2.5 to 2.5	Pass
					3.85	2.689	0.0032	-2.5 to 2.5	Pass
					4.43	-1.373	-0.0016	-2.5 to 2.5	Pass
				-30	3.85	3.548	0.0042	-2.5 to 2.5	Pass
				-20	3.85	-1.287	-0.0015	-2.5 to 2.5	Pass
				-10	3.85	4.377	0.0052	-2.5 to 2.5	Pass
				0	3.85	3.319	0.0039	-2.5 to 2.5	Pass
				10	3.85	-0.715	-0.0008	-2.5 to 2.5	Pass
				30	3.85	-2.375	-0.0028	-2.5 to 2.5	Pass
				40	3.85	2.632	0.0031	-2.5 to 2.5	Pass
				50	3.85	0.658	0.0008	-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	2.260	0.0027	-2.5 to 2.5	Pass
					3.85	-3.576	-0.0043	-2.5 to 2.5	Pass
					4.43	-5.336	-0.0065	-2.5 to 2.5	Pass
				-30	3.85	-5.608	-0.0068	-2.5 to 2.5	Pass
				-20	3.85	1.202	0.0015	-2.5 to 2.5	Pass
				-10	3.85	0.944	0.0011	-2.5 to 2.5	Pass
				0	3.85	-1.688	-0.0020	-2.5 to 2.5	Pass

				10	3.85	0.243	0.0003	-2.5 to 2.5	Pass
				30	3.85	0.515	0.0006	-2.5 to 2.5	Pass
				40	3.85	-2.933	-0.0036	-2.5 to 2.5	Pass
				50	3.85	-1.416	-0.0017	-2.5 to 2.5	Pass
	836.5	15	0	20	3.27	0.401	0.0005	-2.5 to 2.5	Pass
					3.85	-4.735	-0.0057	-2.5 to 2.5	Pass
					4.43	0.372	0.0004	-2.5 to 2.5	Pass
				-30	3.85	-0.815	-0.0010	-2.5 to 2.5	Pass
				-20	3.85	-7.610	-0.0091	-2.5 to 2.5	Pass
				-10	3.85	-0.029	0.0000	-2.5 to 2.5	Pass
				0	3.85	-4.220	-0.0050	-2.5 to 2.5	Pass
				10	3.85	-1.774	-0.0021	-2.5 to 2.5	Pass
				30	3.85	1.001	0.0012	-2.5 to 2.5	Pass
				40	3.85	-4.520	-0.0054	-2.5 to 2.5	Pass
				50	3.85	-3.262	-0.0039	-2.5 to 2.5	Pass
	847.5	15	0	20	3.27	-2.990	-0.0035	-2.5 to 2.5	Pass
					3.85	-3.033	-0.0036	-2.5 to 2.5	Pass
					4.43	2.804	0.0033	-2.5 to 2.5	Pass
				-30	3.85	-2.189	-0.0026	-2.5 to 2.5	Pass
				-20	3.85	0.887	0.0010	-2.5 to 2.5	Pass
				-10	3.85	0.300	0.0004	-2.5 to 2.5	Pass
				0	3.85	-2.174	-0.0026	-2.5 to 2.5	Pass
				10	3.85	-5.064	-0.0060	-2.5 to 2.5	Pass
				30	3.85	-0.329	-0.0004	-2.5 to 2.5	Pass
				40	3.85	-0.930	-0.0011	-2.5 to 2.5	Pass
				50	3.85	-3.033	-0.0036	-2.5 to 2.5	Pass
16QAM	825.5	15	0	20	3.27	-0.086	-0.0001	-2.5 to 2.5	Pass
					3.85	-0.572	-0.0007	-2.5 to 2.5	Pass
					4.43	1.845	0.0022	-2.5 to 2.5	Pass
				-30	3.85	-2.847	-0.0034	-2.5 to 2.5	Pass
				-20	3.85	-2.818	-0.0034	-2.5 to 2.5	Pass
				-10	3.85	2.275	0.0028	-2.5 to 2.5	Pass
				0	3.85	0.086	0.0001	-2.5 to 2.5	Pass
				10	3.85	4.220	0.0051	-2.5 to 2.5	Pass
				30	3.85	-1.945	-0.0024	-2.5 to 2.5	Pass
				40	3.85	-5.178	-0.0063	-2.5 to 2.5	Pass
				50	3.85	-6.280	-0.0076	-2.5 to 2.5	Pass
	836.5	15	0	20	3.27	1.760	0.0021	-2.5 to 2.5	Pass
					3.85	-3.576	-0.0043	-2.5 to 2.5	Pass
					4.43	-4.263	-0.0051	-2.5 to 2.5	Pass
				-30	3.85	-1.359	-0.0016	-2.5 to 2.5	Pass
				-20	3.85	-2.174	-0.0026	-2.5 to 2.5	Pass
				-10	3.85	-4.778	-0.0057	-2.5 to 2.5	Pass
				0	3.85	0.701	0.0008	-2.5 to 2.5	Pass
				10	3.85	0.830	0.0010	-2.5 to 2.5	Pass
				30	3.85	-2.775	-0.0033	-2.5 to 2.5	Pass
				40	3.85	-8.554	-0.0102	-2.5 to 2.5	Pass
				50	3.85	-2.317	-0.0028	-2.5 to 2.5	Pass
	847.5	15	0	20	3.27	-3.161	-0.0037	-2.5 to 2.5	Pass
					3.85	-2.732	-0.0032	-2.5 to 2.5	Pass
					4.43	-2.217	-0.0026	-2.5 to 2.5	Pass
				-30	3.85	-0.772	-0.0009	-2.5 to 2.5	Pass
				-20	3.85	-4.892	-0.0058	-2.5 to 2.5	Pass
				-10	3.85	-0.229	-0.0003	-2.5 to 2.5	Pass
				0	3.85	-0.415	-0.0005	-2.5 to 2.5	Pass
				10	3.85	-3.090	-0.0036	-2.5 to 2.5	Pass
				30	3.85	3.219	0.0038	-2.5 to 2.5	Pass
				40	3.85	-5.164	-0.0061	-2.5 to 2.5	Pass
				50	3.85	0.014	0.0000	-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	-3.805	-0.0046	-2.5 to 2.5	Pass
					3.85	-1.359	-0.0016	-2.5 to 2.5	Pass
					4.43	0.000	0.0000	-2.5 to 2.5	Pass
				-30	3.85	0.029	0.0000	-2.5 to 2.5	Pass
				-20	3.85	-3.233	-0.0039	-2.5 to 2.5	Pass
				-10	3.85	-3.548	-0.0043	-2.5 to 2.5	Pass
				0	3.85	-0.887	-0.0011	-2.5 to 2.5	Pass
				10	3.85	-0.887	-0.0011	-2.5 to 2.5	Pass
				30	3.85	-2.217	-0.0027	-2.5 to 2.5	Pass
				40	3.85	-0.529	-0.0006	-2.5 to 2.5	Pass
				50	3.85	3.977	0.0048	-2.5 to 2.5	Pass
	836.5	25	0	20	3.27	2.260	0.0027	-2.5 to 2.5	Pass
					3.85	1.888	0.0023	-2.5 to 2.5	Pass
					4.43	-3.676	-0.0044	-2.5 to 2.5	Pass
				-30	3.85	-3.705	-0.0044	-2.5 to 2.5	Pass
				-20	3.85	-1.388	-0.0017	-2.5 to 2.5	Pass
				-10	3.85	0.272	0.0003	-2.5 to 2.5	Pass
				0	3.85	1.388	0.0017	-2.5 to 2.5	Pass
				10	3.85	-0.029	0.0000	-2.5 to 2.5	Pass
				30	3.85	-3.047	-0.0036	-2.5 to 2.5	Pass
				40	3.85	0.830	0.0010	-2.5 to 2.5	Pass
				50	3.85	-1.845	-0.0022	-2.5 to 2.5	Pass
	846.5	25	0	20	3.27	1.516	0.0018	-2.5 to 2.5	Pass
					3.85	0.386	0.0005	-2.5 to 2.5	Pass
					4.43	-1.645	-0.0019	-2.5 to 2.5	Pass
				-30	3.85	-2.975	-0.0035	-2.5 to 2.5	Pass
				-20	3.85	0.644	0.0008	-2.5 to 2.5	Pass
				-10	3.85	-0.486	-0.0006	-2.5 to 2.5	Pass
				0	3.85	2.589	0.0031	-2.5 to 2.5	Pass
				10	3.85	3.891	0.0046	-2.5 to 2.5	Pass
				30	3.85	-3.018	-0.0036	-2.5 to 2.5	Pass
				40	3.85	-0.300	-0.0004	-2.5 to 2.5	Pass
				50	3.85	-1.473	-0.0017	-2.5 to 2.5	Pass
16QAM	826.5	25	0	20	3.27	-2.589	-0.0031	-2.5 to 2.5	Pass
					3.85	-3.119	-0.0038	-2.5 to 2.5	Pass
					4.43	0.873	0.0011	-2.5 to 2.5	Pass
				-30	3.85	-2.503	-0.0030	-2.5 to 2.5	Pass
				-20	3.85	0.987	0.0012	-2.5 to 2.5	Pass
				-10	3.85	3.076	0.0037	-2.5 to 2.5	Pass
				0	3.85	-3.018	-0.0037	-2.5 to 2.5	Pass
				10	3.85	0.143	0.0002	-2.5 to 2.5	Pass
				30	3.85	-0.772	-0.0009	-2.5 to 2.5	Pass
				40	3.85	3.362	0.0041	-2.5 to 2.5	Pass
				50	3.85	-0.615	-0.0007	-2.5 to 2.5	Pass
	836.5	25	0	20	3.27	-3.848	-0.0046	-2.5 to 2.5	Pass
					3.85	-0.787	-0.0009	-2.5 to 2.5	Pass
					4.43	-3.076	-0.0037	-2.5 to 2.5	Pass
				-30	3.85	-1.302	-0.0016	-2.5 to 2.5	Pass
				-20	3.85	-0.243	-0.0003	-2.5 to 2.5	Pass
				-10	3.85	-2.646	-0.0032	-2.5 to 2.5	Pass
				0	3.85	-0.873	-0.0010	-2.5 to 2.5	Pass
				10	3.85	0.572	0.0007	-2.5 to 2.5	Pass

				30	3.85	-2.975	-0.0036	-2.5 to 2.5	Pass
				40	3.85	-1.373	-0.0016	-2.5 to 2.5	Pass
				50	3.85	-1.960	-0.0023	-2.5 to 2.5	Pass
	846.5	25	0	20	3.27	-0.329	-0.0004	-2.5 to 2.5	Pass
					3.85	-1.330	-0.0016	-2.5 to 2.5	Pass
					4.43	-2.761	-0.0033	-2.5 to 2.5	Pass
				-30	3.85	3.719	0.0044	-2.5 to 2.5	Pass
				-20	3.85	0.243	0.0003	-2.5 to 2.5	Pass
				-10	3.85	0.343	0.0004	-2.5 to 2.5	Pass
				0	3.85	-1.688	-0.0020	-2.5 to 2.5	Pass
				10	3.85	-0.930	-0.0011	-2.5 to 2.5	Pass
				30	3.85	2.189	0.0026	-2.5 to 2.5	Pass
				40	3.85	0.415	0.0005	-2.5 to 2.5	Pass
				50	3.85	3.104	0.0037	-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	-1.073	-0.0013	-2.5 to 2.5	Pass
					3.85	0.329	0.0004	-2.5 to 2.5	Pass
					4.43	-1.001	-0.0012	-2.5 to 2.5	Pass
				-30	3.85	-2.346	-0.0028	-2.5 to 2.5	Pass
				-20	3.85	-3.462	-0.0042	-2.5 to 2.5	Pass
				-10	3.85	-1.745	-0.0021	-2.5 to 2.5	Pass
				0	3.85	-1.631	-0.0020	-2.5 to 2.5	Pass
				10	3.85	-0.801	-0.0010	-2.5 to 2.5	Pass
				30	3.85	-2.990	-0.0036	-2.5 to 2.5	Pass
				40	3.85	-1.431	-0.0017	-2.5 to 2.5	Pass
				50	3.85	-3.605	-0.0043	-2.5 to 2.5	Pass
	836.5	50	0	20	3.27	0.587	0.0007	-2.5 to 2.5	Pass
					3.85	0.873	0.0010	-2.5 to 2.5	Pass
					4.43	-1.831	-0.0022	-2.5 to 2.5	Pass
				-30	3.85	-3.390	-0.0041	-2.5 to 2.5	Pass
				-20	3.85	-0.401	-0.0005	-2.5 to 2.5	Pass
				-10	3.85	-2.131	-0.0025	-2.5 to 2.5	Pass
				0	3.85	-3.304	-0.0039	-2.5 to 2.5	Pass
				10	3.85	-0.172	-0.0002	-2.5 to 2.5	Pass
				30	3.85	-3.562	-0.0043	-2.5 to 2.5	Pass
				40	3.85	-2.232	-0.0027	-2.5 to 2.5	Pass
				50	3.85	-1.159	-0.0014	-2.5 to 2.5	Pass
	844	50	0	20	3.27	-3.204	-0.0038	-2.5 to 2.5	Pass
					3.85	-3.161	-0.0037	-2.5 to 2.5	Pass
					4.43	1.888	0.0022	-2.5 to 2.5	Pass
				-30	3.85	-2.046	-0.0024	-2.5 to 2.5	Pass
				-20	3.85	-1.845	-0.0022	-2.5 to 2.5	Pass
				-10	3.85	1.760	0.0021	-2.5 to 2.5	Pass
				0	3.85	1.016	0.0012	-2.5 to 2.5	Pass
				10	3.85	1.402	0.0017	-2.5 to 2.5	Pass
				30	3.85	-1.559	-0.0018	-2.5 to 2.5	Pass
				40	3.85	2.017	0.0024	-2.5 to 2.5	Pass
				50	3.85	1.059	0.0013	-2.5 to 2.5	Pass
16QAM	829	50	0	20	3.27	-3.276	-0.0040	-2.5 to 2.5	Pass
					3.85	-0.529	-0.0006	-2.5 to 2.5	Pass
					4.43	1.745	0.0021	-2.5 to 2.5	Pass
				-30	3.85	0.687	0.0008	-2.5 to 2.5	Pass
				-20	3.85	-2.289	-0.0028	-2.5 to 2.5	Pass

				-10	3.85	-1.287	-0.0016	-2.5 to 2.5	Pass
				0	3.85	0.687	0.0008	-2.5 to 2.5	Pass
				10	3.85	-1.445	-0.0017	-2.5 to 2.5	Pass
				30	3.85	-0.458	-0.0006	-2.5 to 2.5	Pass
				40	3.85	-3.490	-0.0042	-2.5 to 2.5	Pass
				50	3.85	-1.216	-0.0015	-2.5 to 2.5	Pass
	836.5	50	0	20	3.27	0.601	0.0007	-2.5 to 2.5	Pass
					3.85	-4.206	-0.0050	-2.5 to 2.5	Pass
					4.43	-1.445	-0.0017	-2.5 to 2.5	Pass
				-30	3.85	-3.633	-0.0043	-2.5 to 2.5	Pass
				-20	3.85	-1.373	-0.0016	-2.5 to 2.5	Pass
				-10	3.85	-3.791	-0.0045	-2.5 to 2.5	Pass
				0	3.85	-4.907	-0.0059	-2.5 to 2.5	Pass
				10	3.85	0.501	0.0006	-2.5 to 2.5	Pass
				30	3.85	-2.561	-0.0031	-2.5 to 2.5	Pass
				40	3.85	-5.064	-0.0061	-2.5 to 2.5	Pass
				50	3.85	-3.290	-0.0039	-2.5 to 2.5	Pass
	844	50	0	20	3.27	0.343	0.0004	-2.5 to 2.5	Pass
					3.85	0.272	0.0003	-2.5 to 2.5	Pass
					4.43	0.143	0.0002	-2.5 to 2.5	Pass
				-30	3.85	-0.215	-0.0003	-2.5 to 2.5	Pass
				-20	3.85	-0.544	-0.0006	-2.5 to 2.5	Pass
				-10	3.85	-0.744	-0.0009	-2.5 to 2.5	Pass
				0	3.85	-0.958	-0.0011	-2.5 to 2.5	Pass
				10	3.85	0.987	0.0012	-2.5 to 2.5	Pass
				30	3.85	-1.259	-0.0015	-2.5 to 2.5	Pass
				40	3.85	-0.186	-0.0002	-2.5 to 2.5	Pass
				50	3.85	-2.217	-0.0026	-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

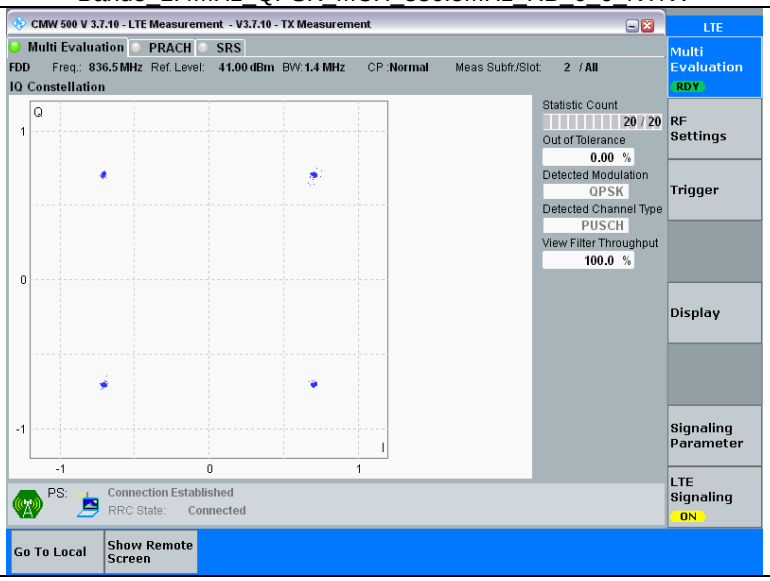
3.1.4 B5_10MHz

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

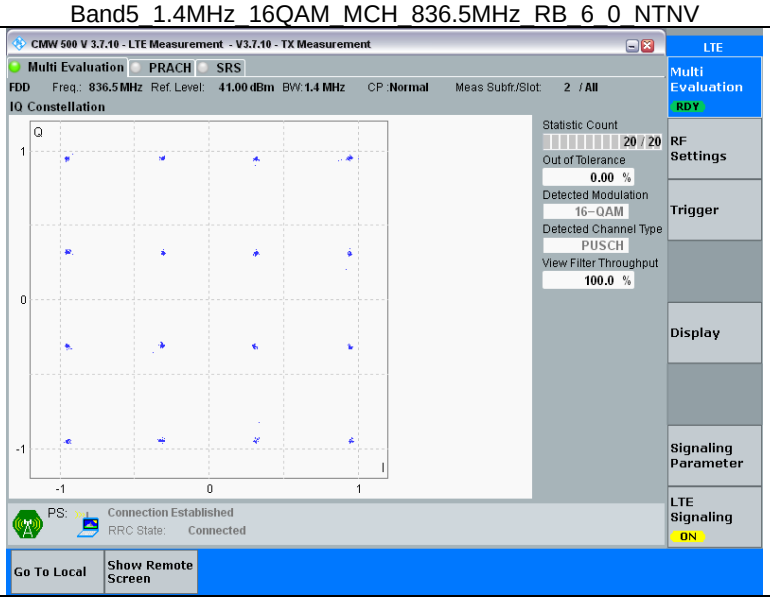
3.2 Test Graph

3.2.1 B5_1.4MHz

Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_6_0_NTNV

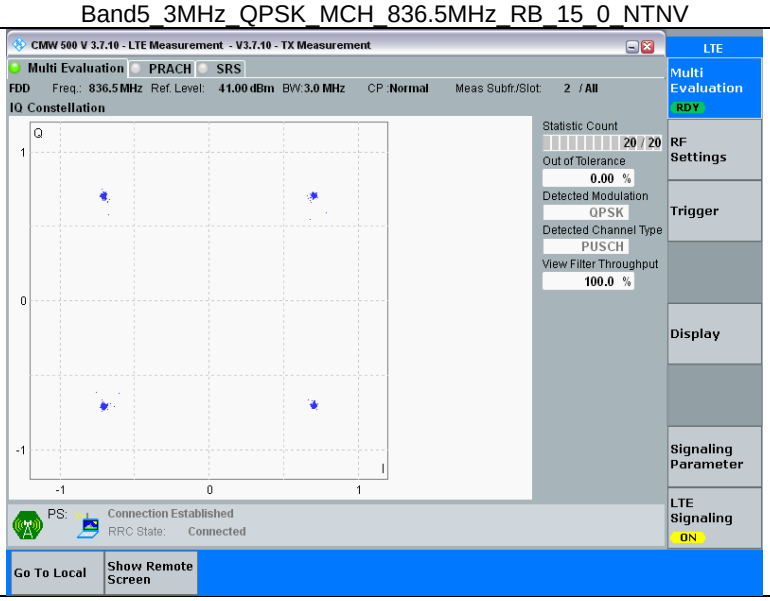


Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV

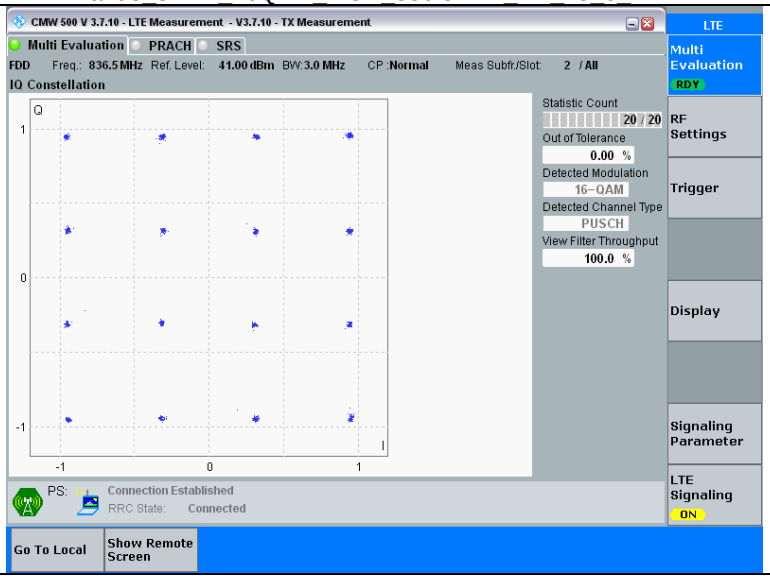


3.2.2 B5_3MHz

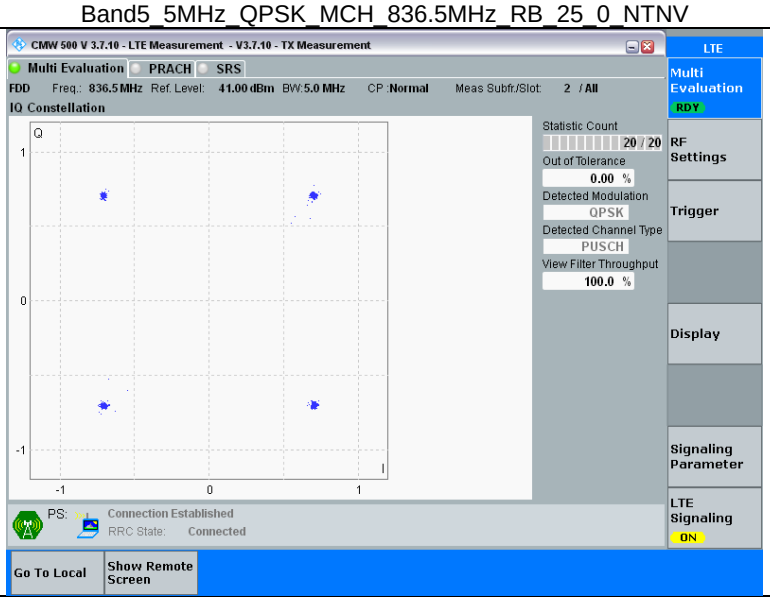
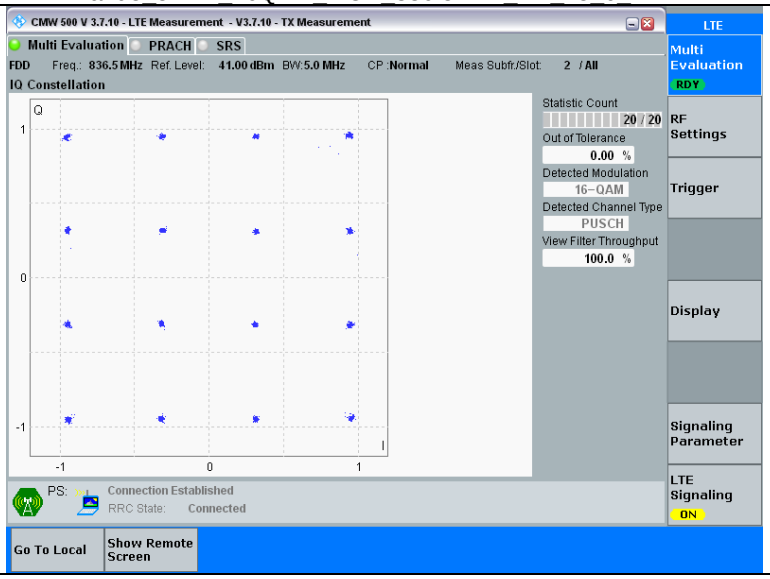
Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV



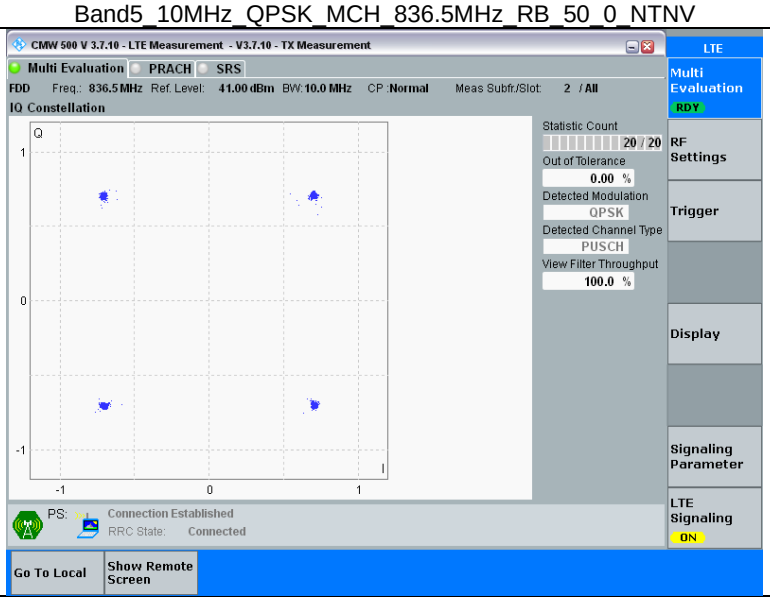
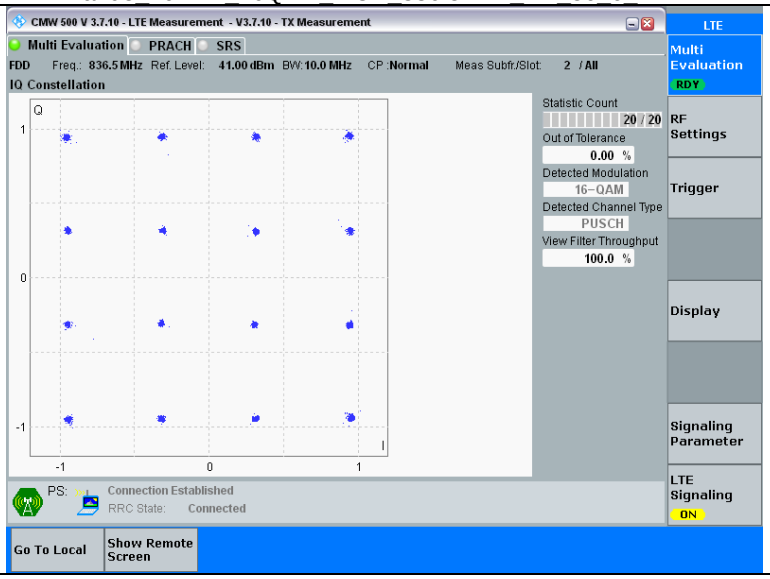
Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV



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	1.108	/	Pass
		836.5	6	0	1.112	/	Pass
		848.3	6	0	1.106	/	Pass
	16QAM	824.7	6	0	1.102	/	Pass
		836.5	6	0	1.106	/	Pass
		848.3	6	0	1.109	/	Pass
3	QPSK	825.5	15	0	2.737	/	Pass
		836.5	15	0	2.733	/	Pass
		847.5	15	0	2.735	/	Pass
	16QAM	825.5	15	0	2.721	/	Pass
		836.5	15	0	2.730	/	Pass
		847.5	15	0	2.724	/	Pass
5	QPSK	826.5	25	0	4.537	/	Pass
		836.5	25	0	4.545	/	Pass
		846.5	25	0	4.556	/	Pass
	16QAM	826.5	25	0	4.542	/	Pass
		836.5	25	0	4.562	/	Pass
		846.5	25	0	4.544	/	Pass
10	QPSK	829	50	0	9.017	/	Pass
		836.5	50	0	9.055	/	Pass
		844	50	0	9.056	/	Pass
	16QAM	829	50	0	9.050	/	Pass
		836.5	50	0	9.070	/	Pass
		844	50	0	9.020	/	Pass

4.1.2 Band5_XDB

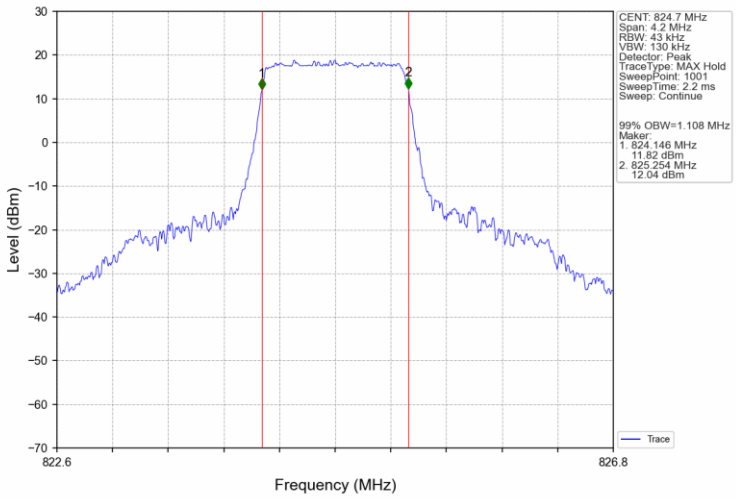
Band: 5 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	824.7	6	0	1.314	/	Pass
		836.5	6	0	1.308	/	Pass
		848.3	6	0	1.337	/	Pass
	16QAM	824.7	6	0	1.312	/	Pass
		836.5	6	0	1.338	/	Pass
		848.3	6	0	1.309	/	Pass
3	QPSK	825.5	15	0	3.010	/	Pass
		836.5	15	0	3.028	/	Pass
		847.5	15	0	3.024	/	Pass
	16QAM	825.5	15	0	3.020	/	Pass
		836.5	15	0	3.031	/	Pass
		847.5	15	0	3.015	/	Pass
5	QPSK	826.5	25	0	5.083	/	Pass
		836.5	25	0	5.063	/	Pass
		846.5	25	0	5.067	/	Pass

	16QAM	826.5	25	0	5.085	/	Pass
		836.5	25	0	5.082	/	Pass
		846.5	25	0	5.007	/	Pass
10	QPSK	829	50	0	10.016	/	Pass
		836.5	50	0	9.949	/	Pass
		844	50	0	10.009	/	Pass
	16QAM	829	50	0	9.921	/	Pass
		836.5	50	0	9.958	/	Pass
		844	50	0	9.929	/	Pass

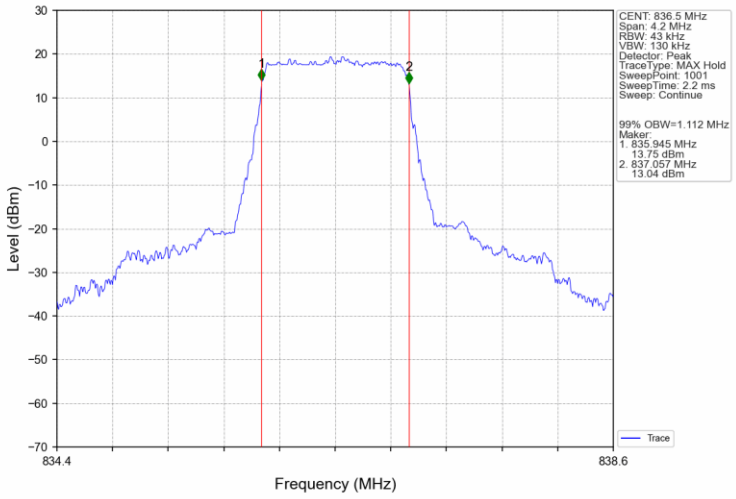
4.2 Test Graph

4.2.1 Band5_OBW

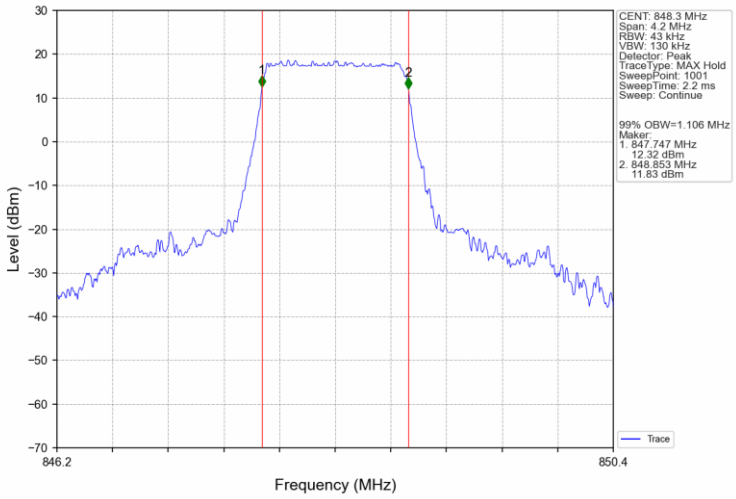
Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_6_0_NTNV



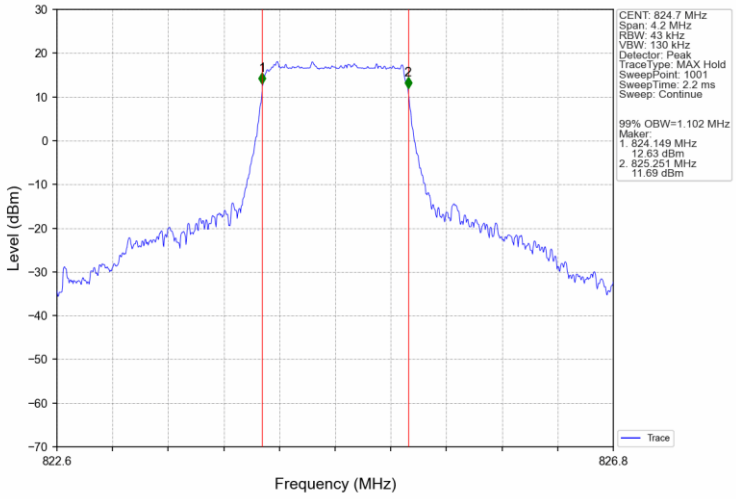
Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_6_0_NTNV



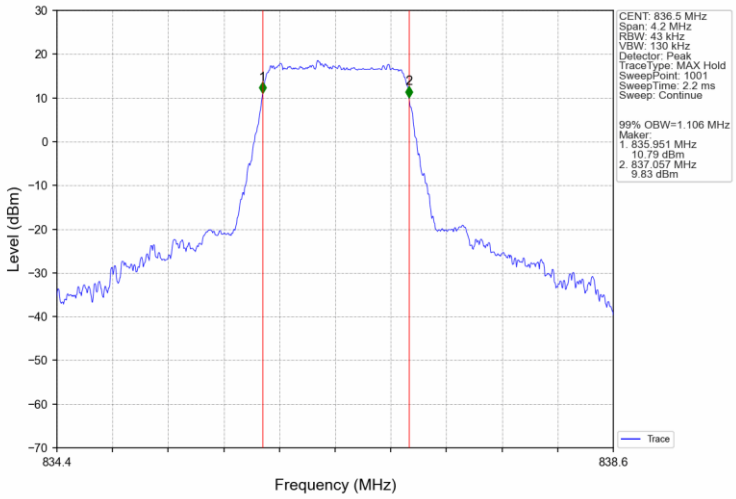
Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV



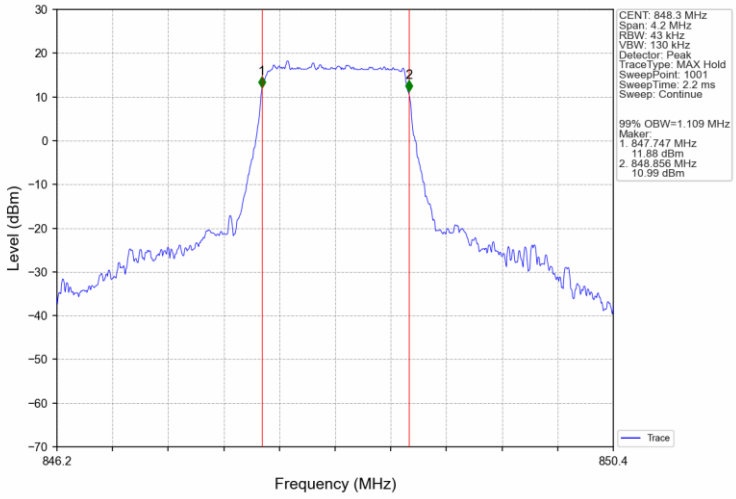
Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV



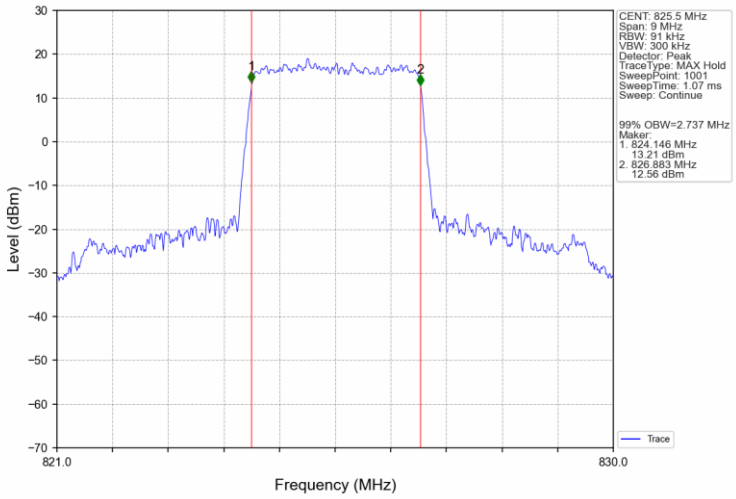
Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV



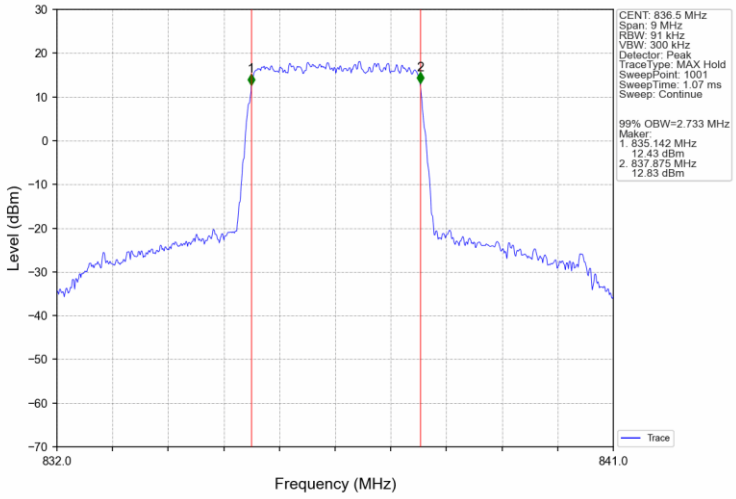
Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV



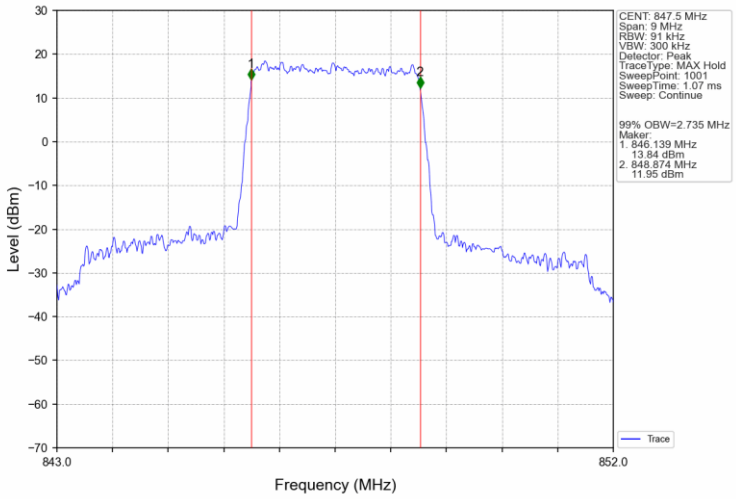
Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV



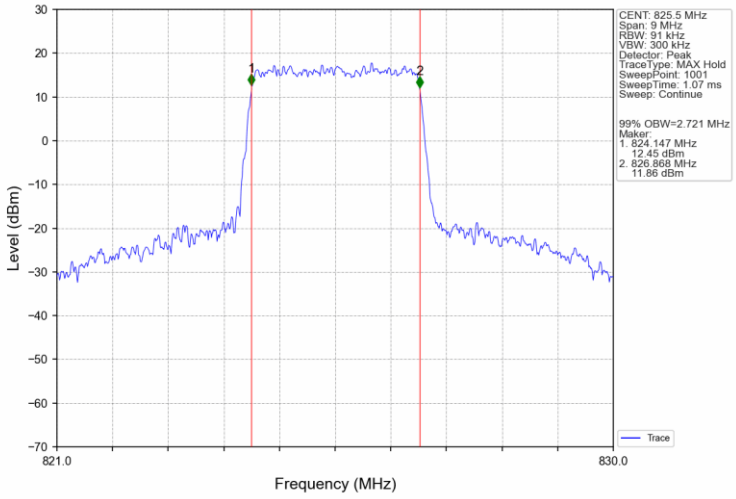
Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV



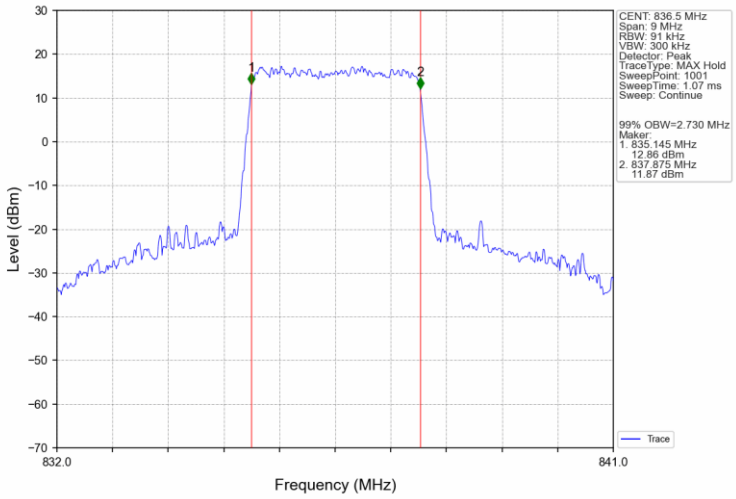
Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV



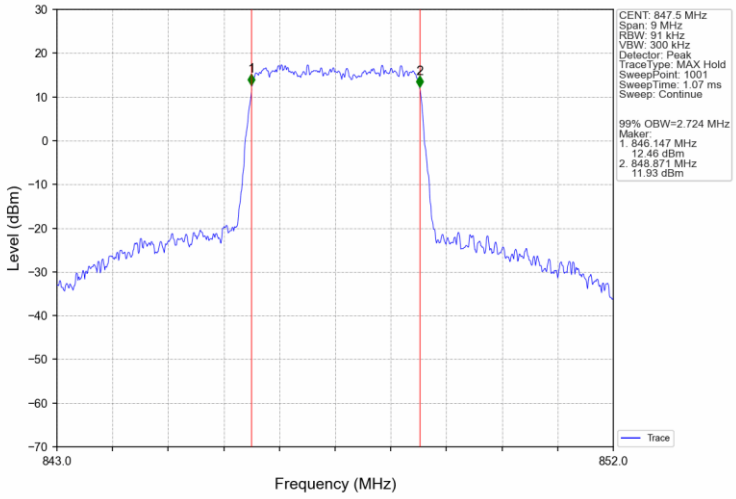
Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV



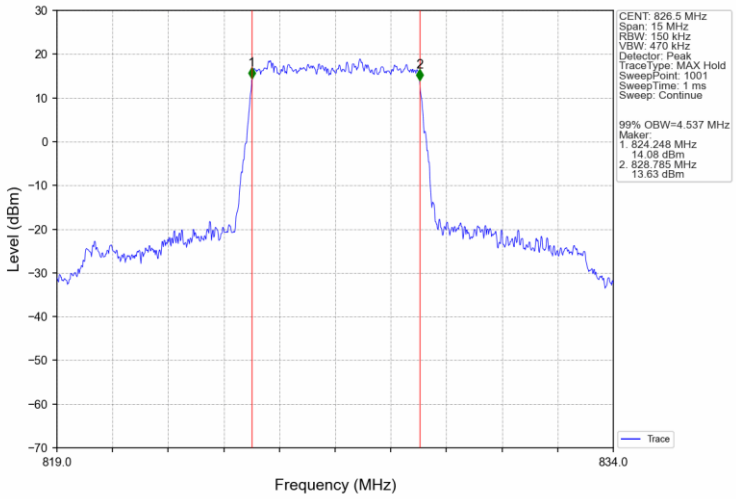
Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV



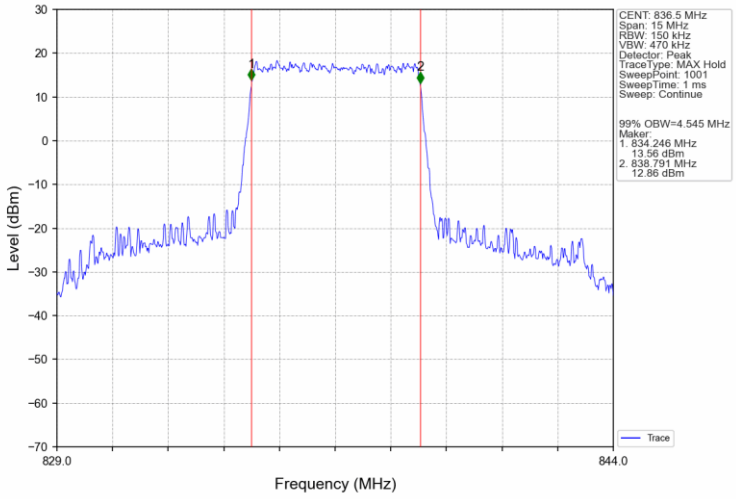
Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV



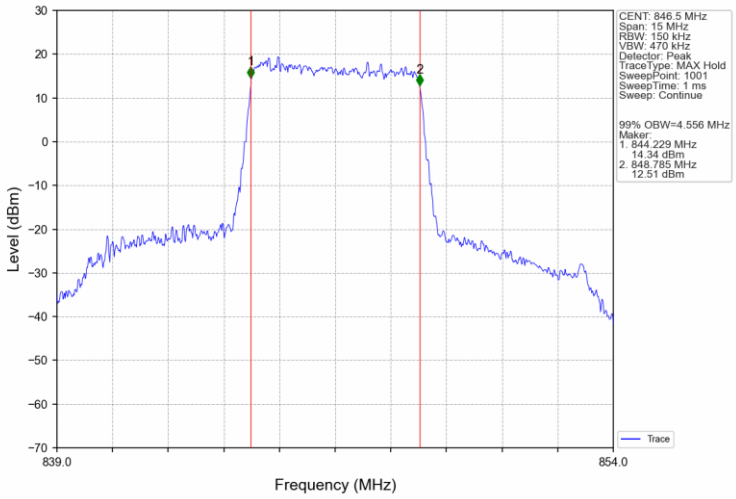
Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV



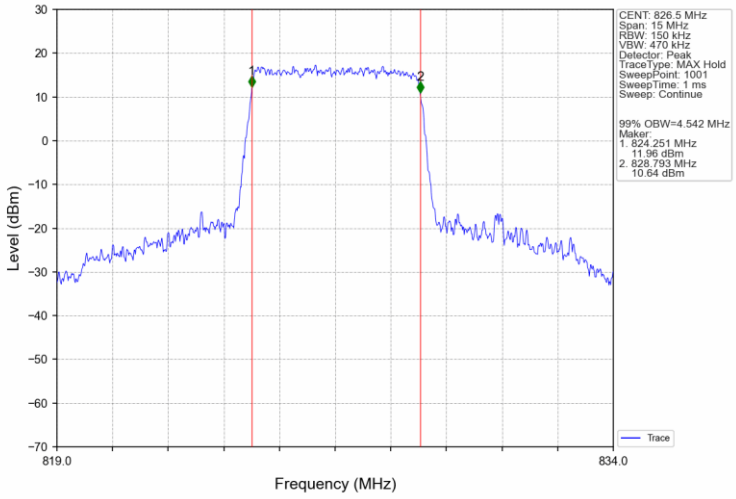
Band5_5MHz_QPSK_MCH_836.5MHz_RB_25_0_NTNV



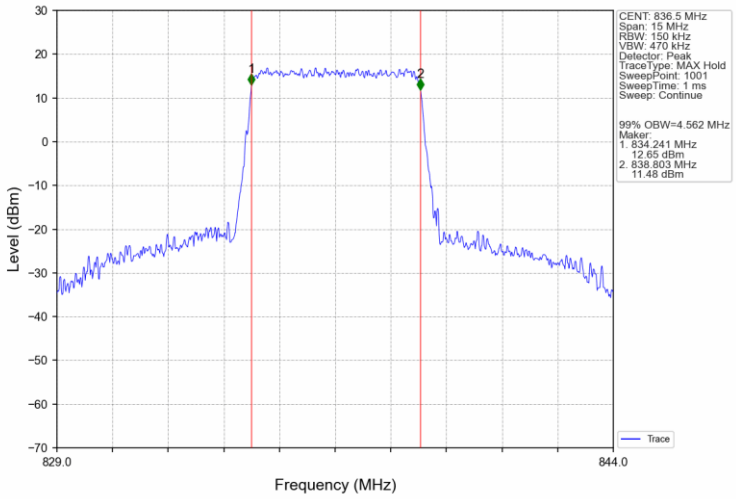
Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV



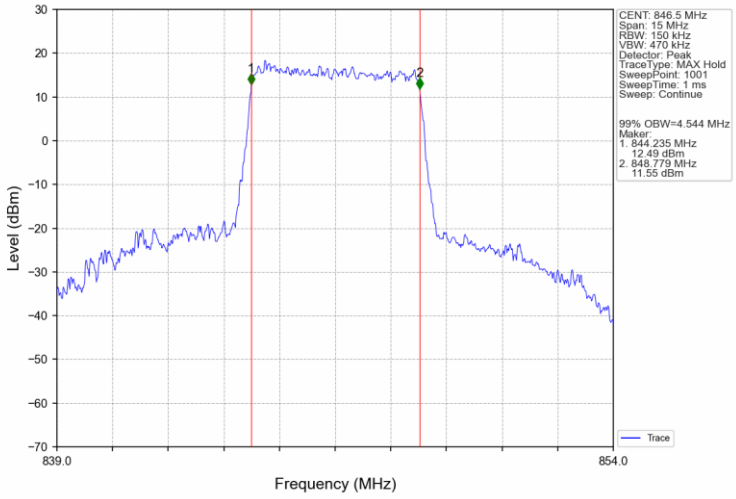
Band5_5MHz_16QAM_LCH_826.5MHz_RB_25_0_NTNV



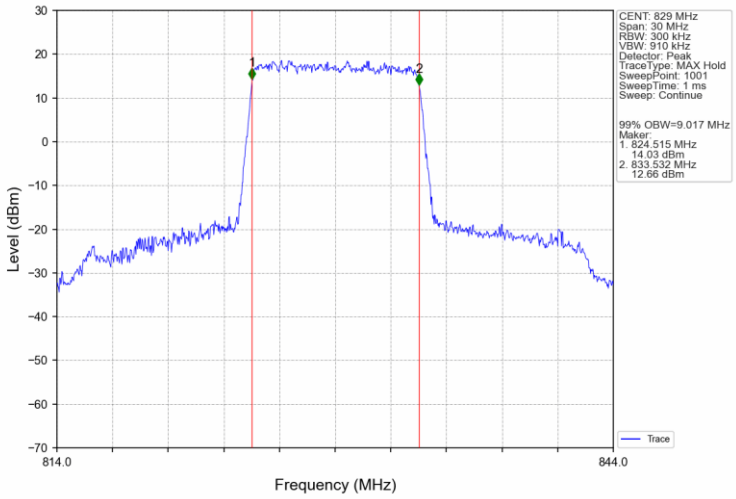
Band5_5MHz_16QAM_MCH_836.5MHz_RB_25_0_NTNV



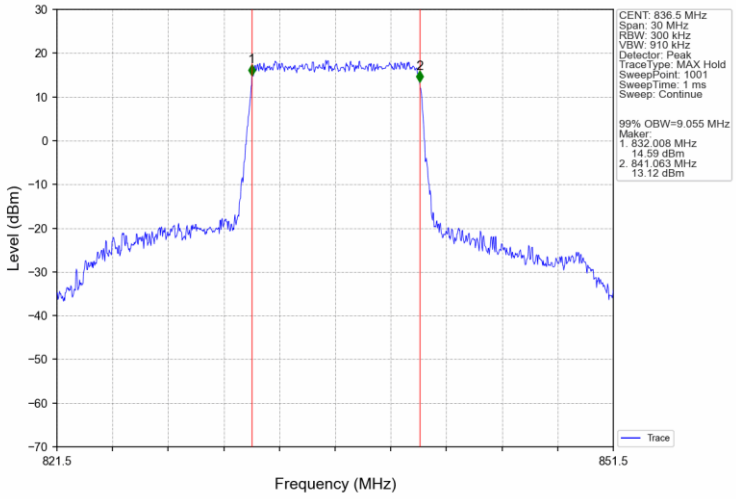
Band5_5MHz_16QAM_HCH_846.5MHz_RB_25_0_NTNV



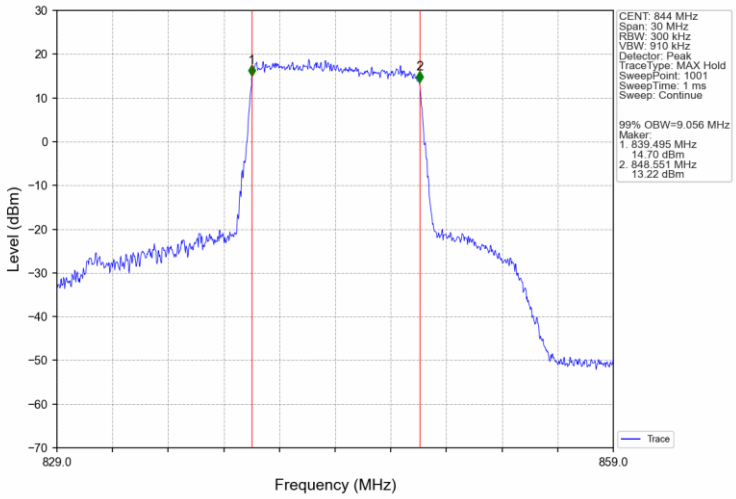
Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV



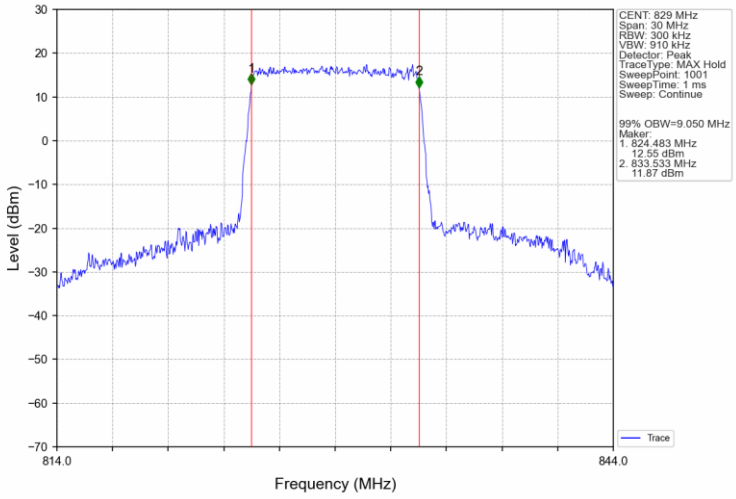
Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV



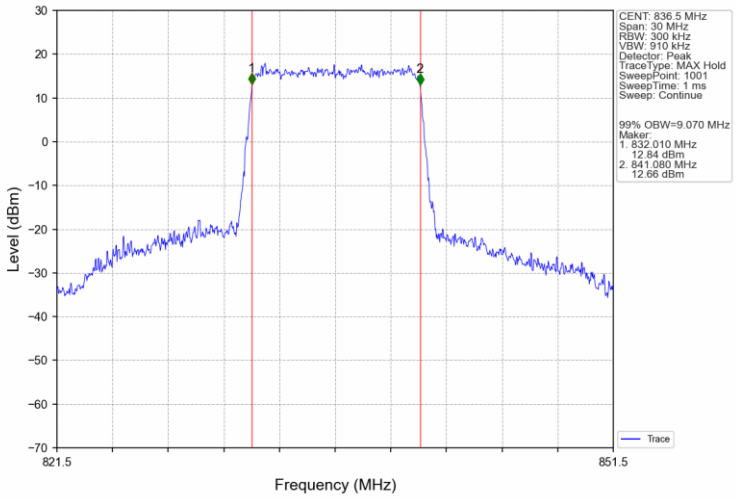
Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV



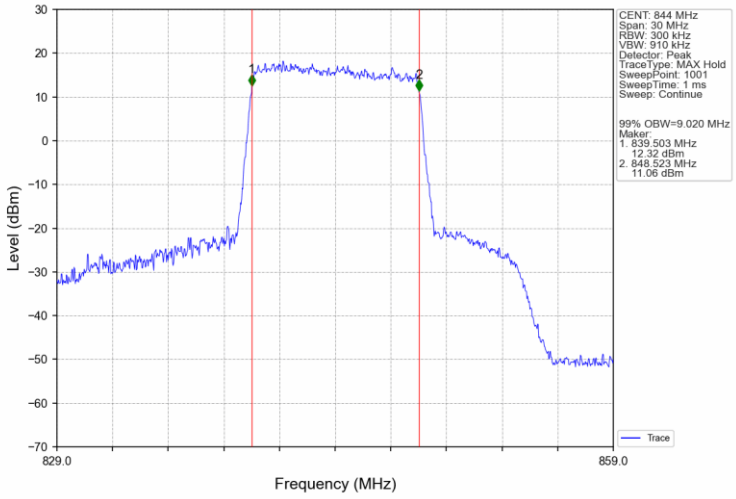
Band5_10MHz_16QAM_LCH_829MHz_RB_50_0_NTNV



Band5_10MHz_16QAM_MCH_836.5MHz_RB_50_0_NTNV

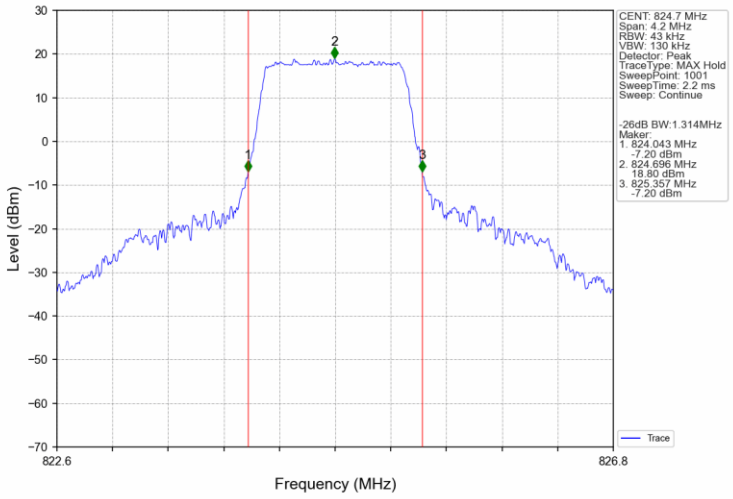


Band5_10MHz_16QAM_HCH_844MHz_RB_50_0_NTNV

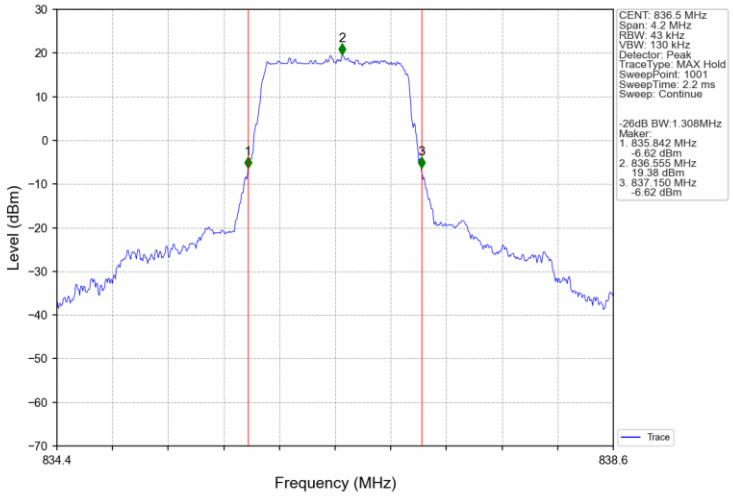


4.2.2 Band5_XDB

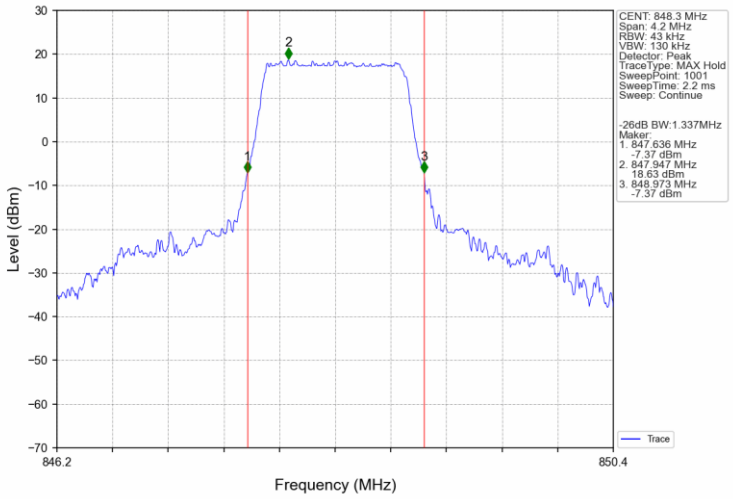
Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_6_0_NTNV



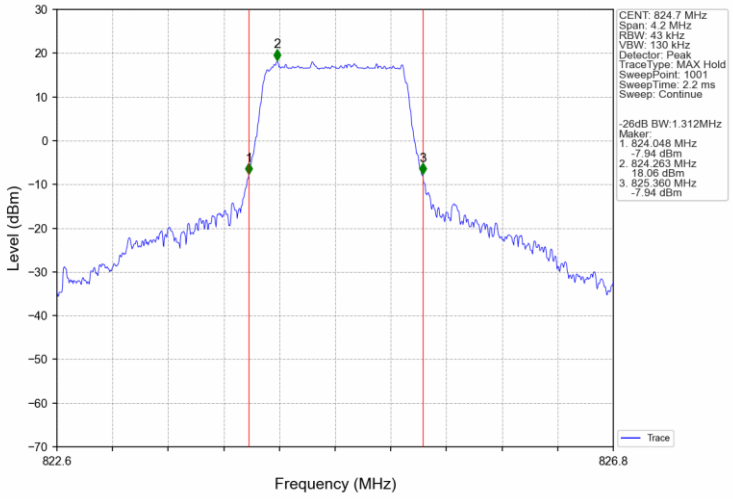
Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_6_0_NTNV



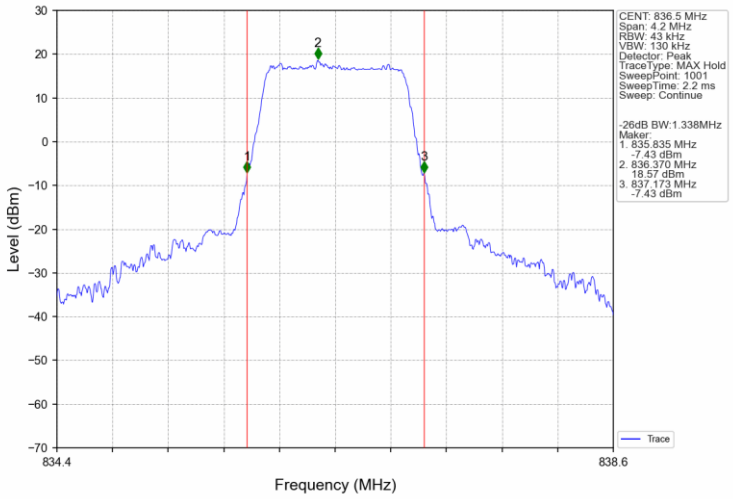
Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV



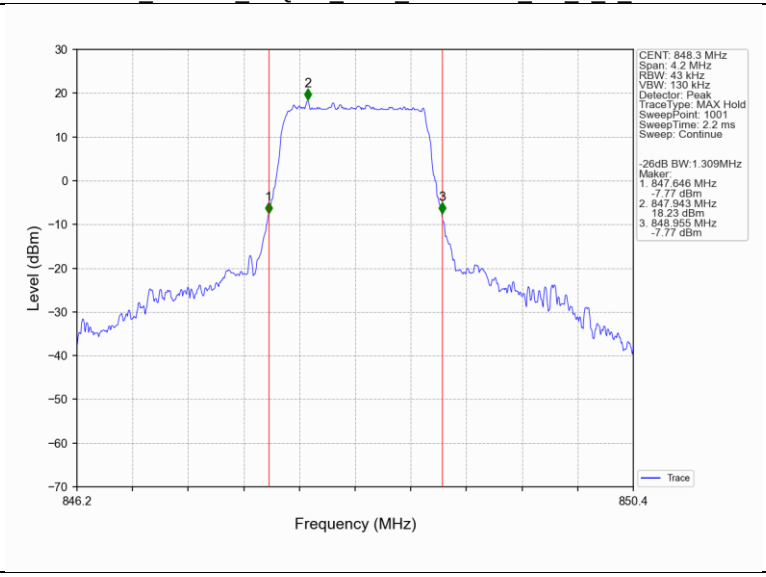
Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV



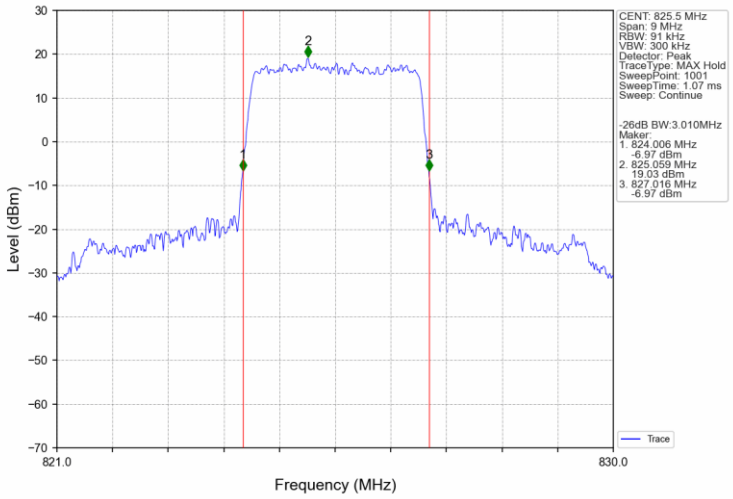
Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV



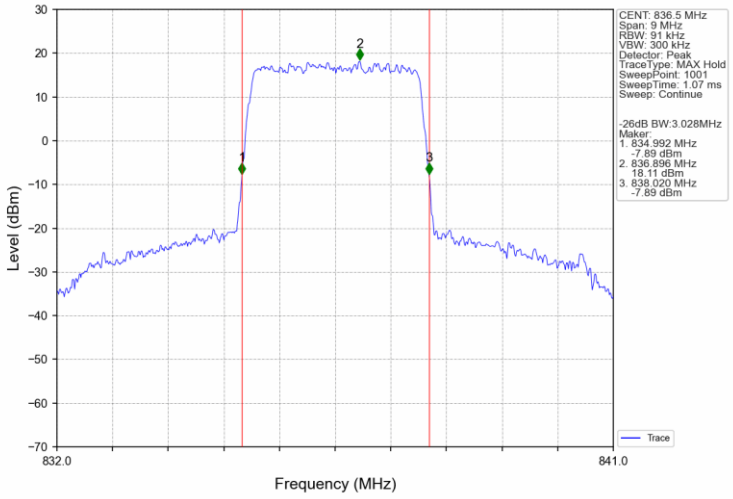
Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV



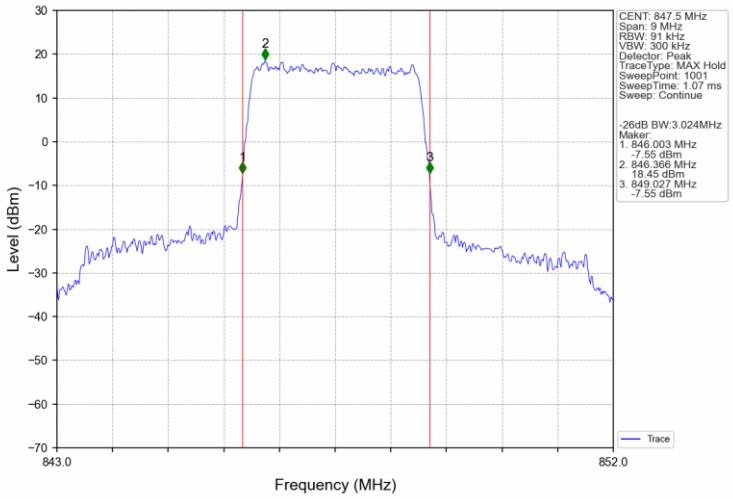
Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV



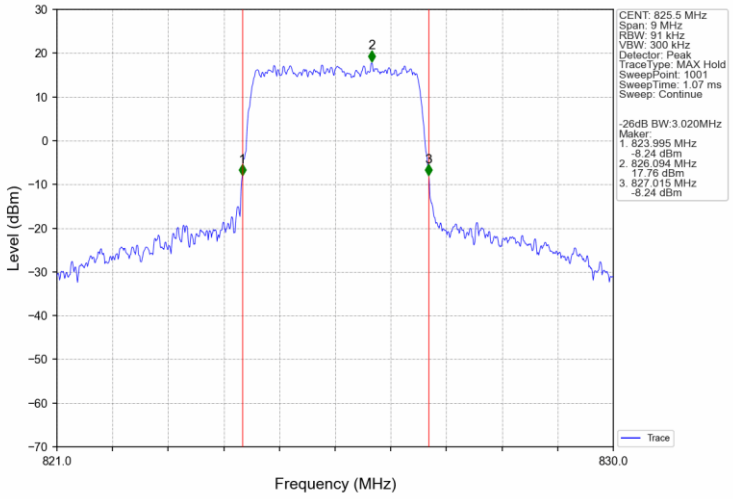
Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV



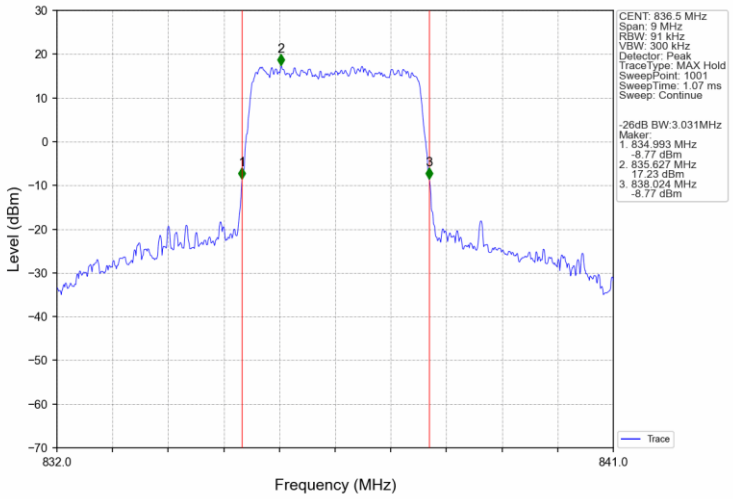
Band5_3MHz_QPSK_HCH_847.5MHz_RB_15_0_NTNV



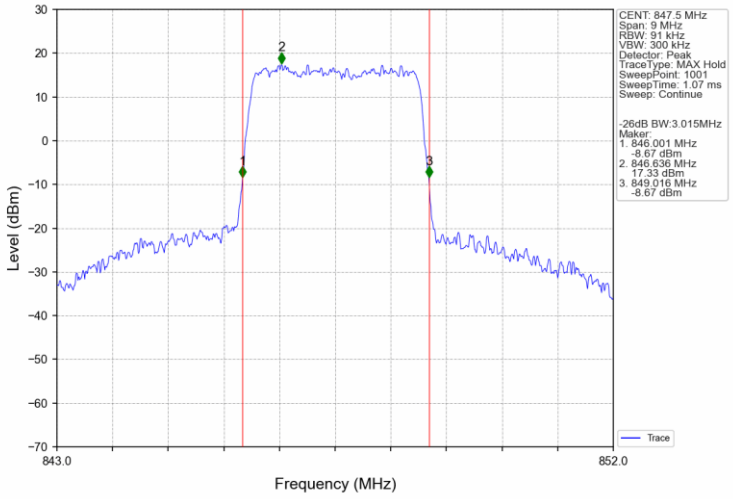
Band5_3MHz_16QAM_LCH_825.5MHz_RB_15_0_NTNV



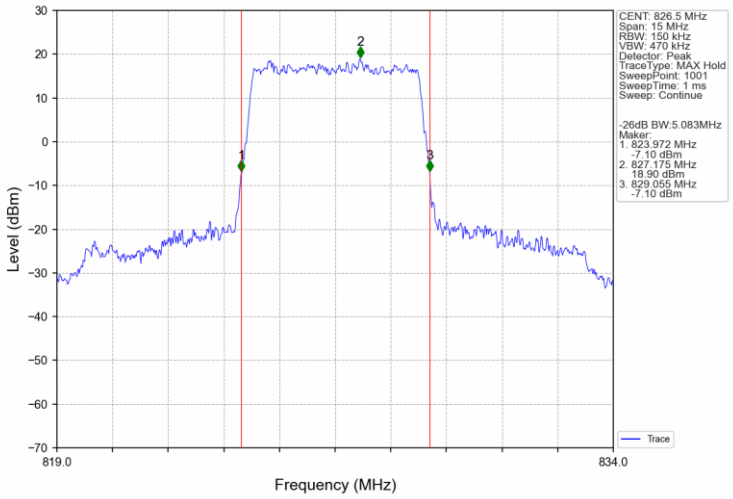
Band5_3MHz_16QAM_MCH_836.5MHz_RB_15_0_NTNV



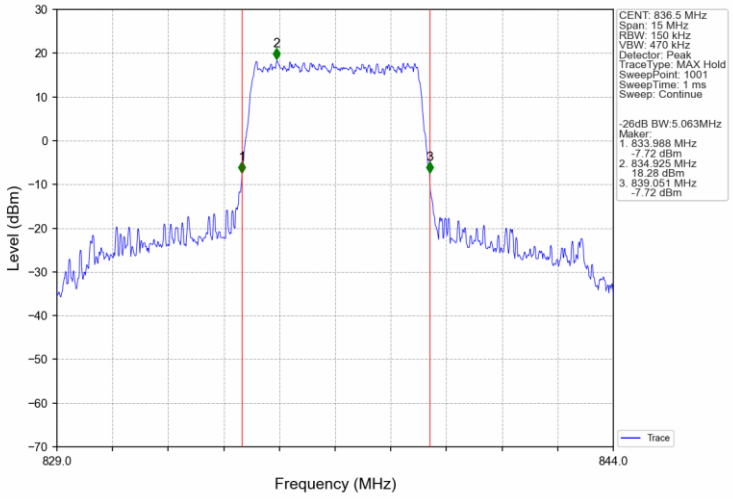
Band5_3MHz_16QAM_HCH_847.5MHz_RB_15_0_NTNV



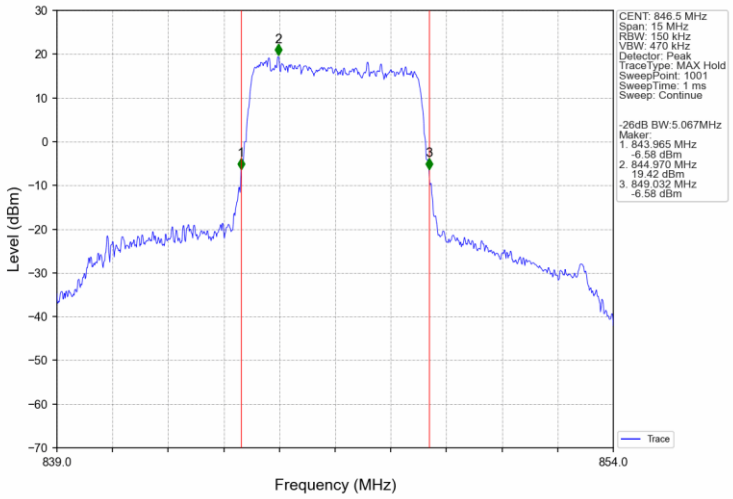
Band5_5MHz_QPSK_LCH_826.5MHz_RB_25_0_NTNV



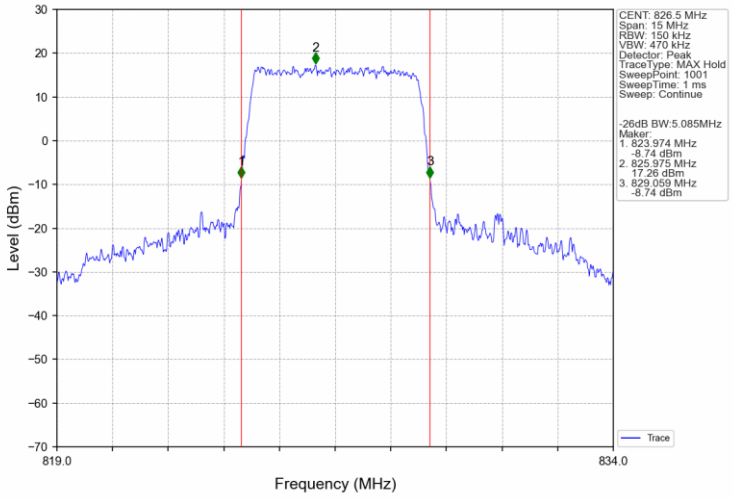
Band5_5MHz_QPSK_MCH_836.5MHz_RB_25_0_NTNV



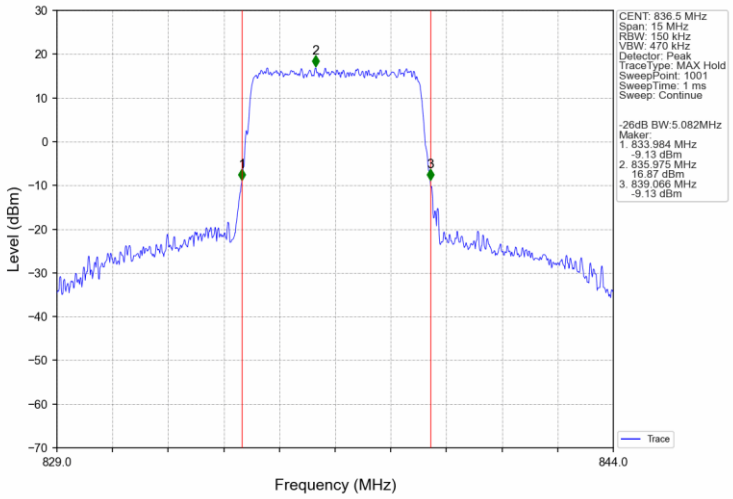
Band5_5MHz_QPSK_HCH_846.5MHz_RB_25_0_NTNV



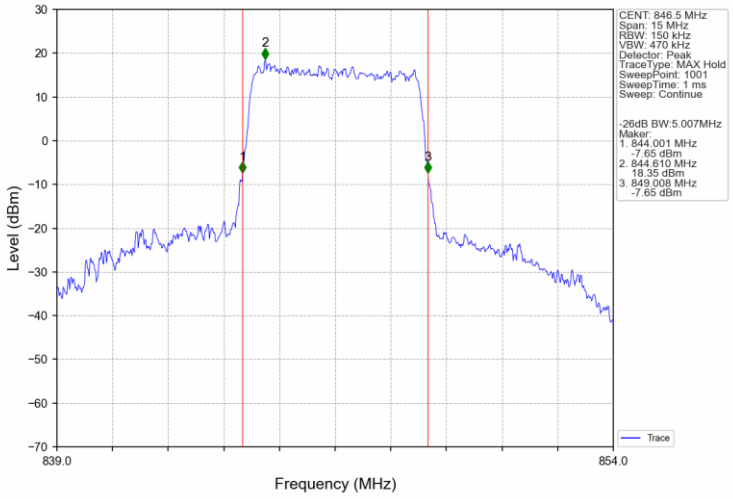
Band5_5MHz_16QAM_LCH_826.5MHz_RB_25_0_NTNV



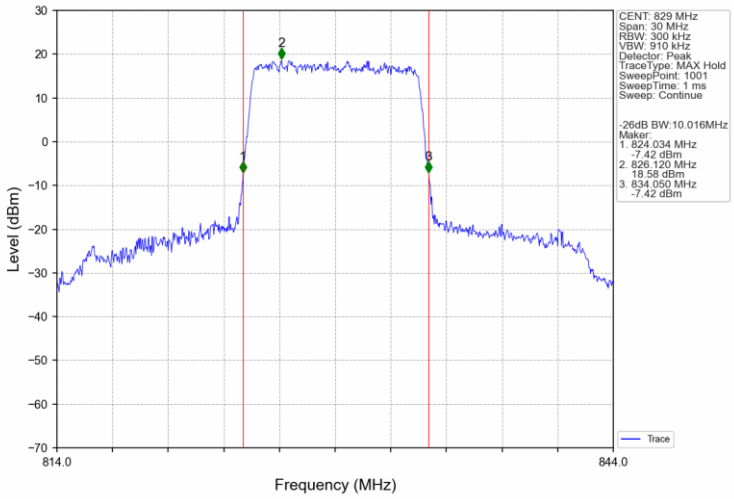
Band5_5MHz_16QAM_MCH_836.5MHz_RB_25_0_NTNV



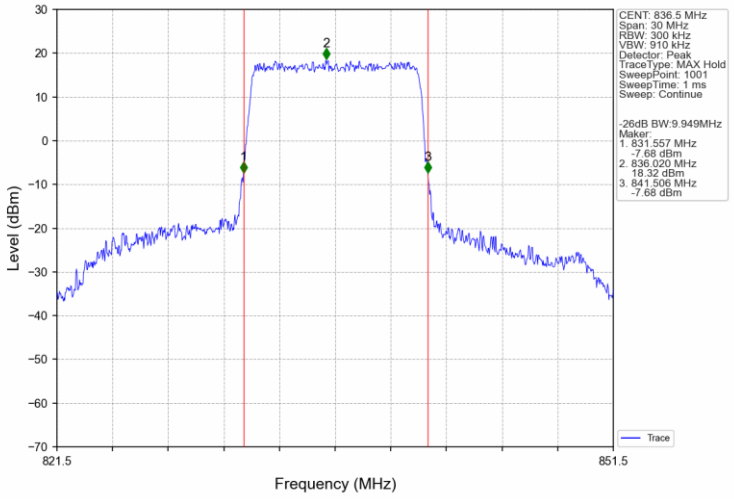
Band5_5MHz_16QAM_HCH_846.5MHz_RB_25_0_NTNV



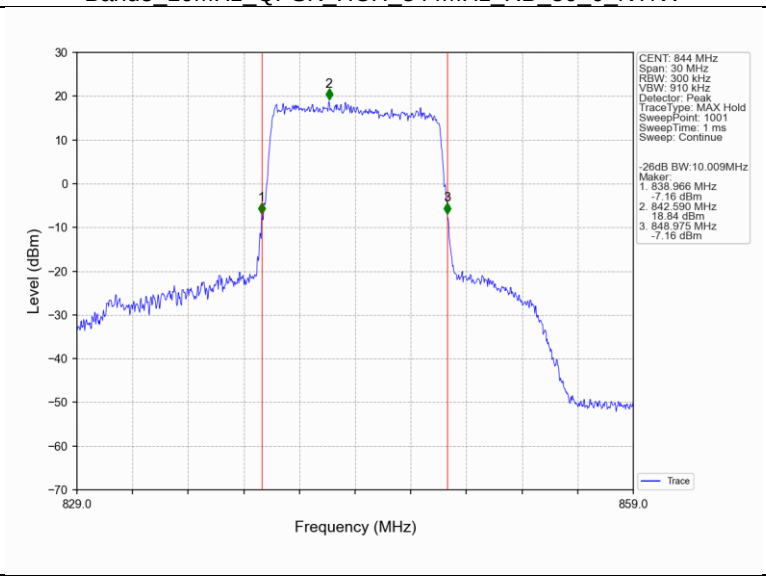
Band5_10MHz_QPSK_LCH_829MHz_RB_50_0_NTNV



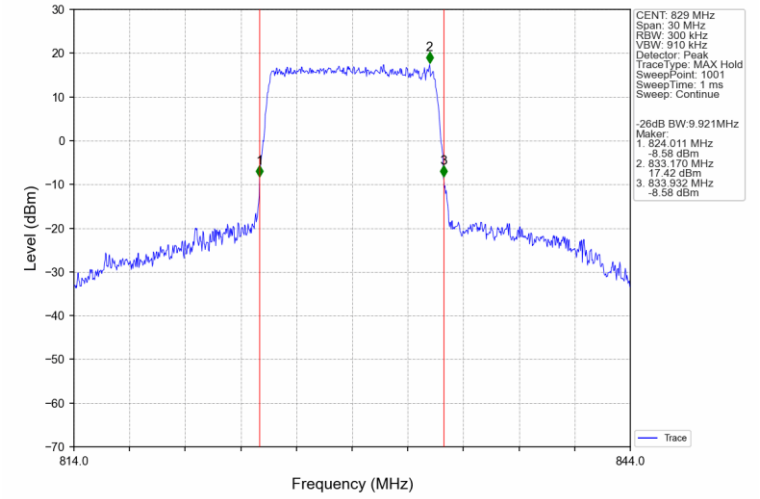
Band5_10MHz_QPSK_MCH_836.5MHz_RB_50_0_NTNV



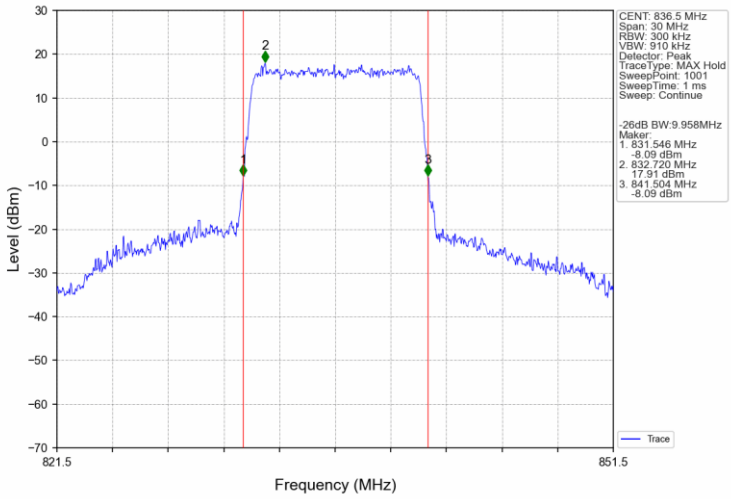
Band5_10MHz_QPSK_HCH_844MHz_RB_50_0_NTNV



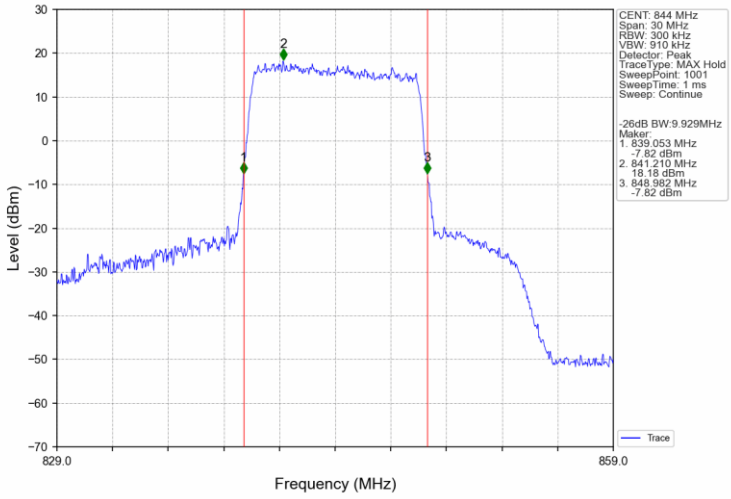
Band5_10MHz_16QAM_LCH_829MHz_RB_50_0_NTNV



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	4.78	<=13	Pass
	836.5	6	0	5.34	<=13	Pass
	848.3	6	0	5.05	<=13	Pass
16QAM	824.7	6	0	5.58	<=13	Pass
	836.5	6	0	6.17	<=13	Pass
	848.3	6	0	5.79	<=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	4.95	<=13	Pass
	836.5	15	0	5.44	<=13	Pass
	847.5	15	0	5.32	<=13	Pass
16QAM	825.5	15	0	5.75	<=13	Pass
	836.5	15	0	6.29	<=13	Pass
	847.5	15	0	6.13	<=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	5.22	<=13	Pass
	836.5	25	0	5.59	<=13	Pass
	846.5	25	0	5.51	<=13	Pass
16QAM	826.5	25	0	5.99	<=13	Pass
	836.5	25	0	6.31	<=13	Pass
	846.5	25	0	6.17	<=13	Pass

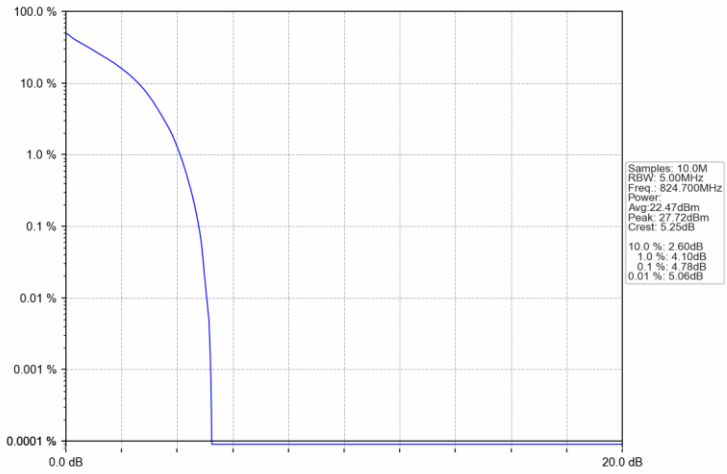
5.1.4 B5_10MHz

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	5.50	<=13	Pass
	844	50	0	5.44	<=13	Pass
16QAM	829	50	0	6.10	<=13	Pass
	836.5	50	0	6.30	<=13	Pass
	844	50	0	6.17	<=13	Pass

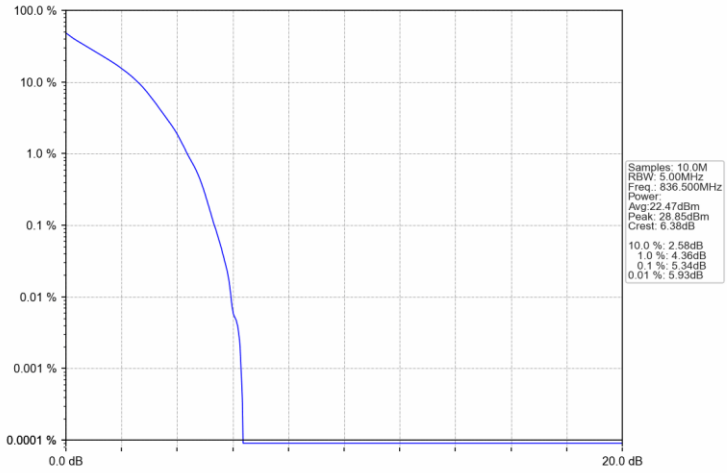
5.2 Test Graph

5.2.1 B5_1.4MHz

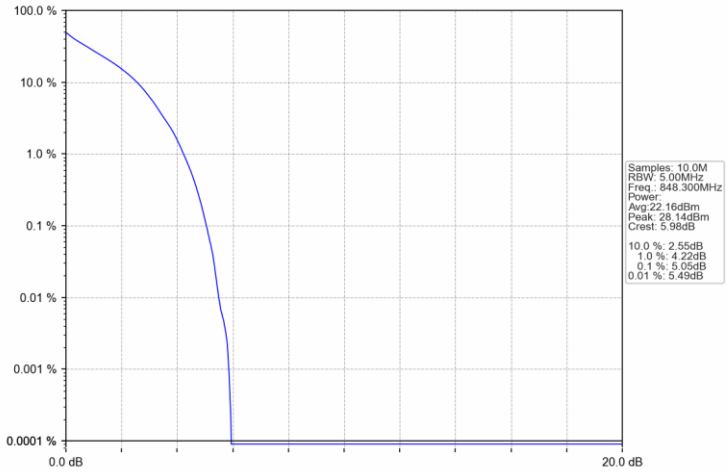
Band5_1.4MHz_QPSK_LCH_824.7MHz_RB_6_0_NTNV



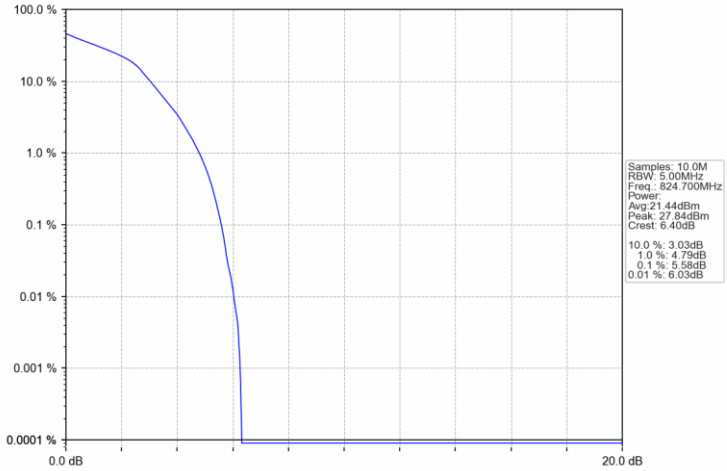
Band5_1.4MHz_QPSK_MCH_836.5MHz_RB_6_0_NTNV



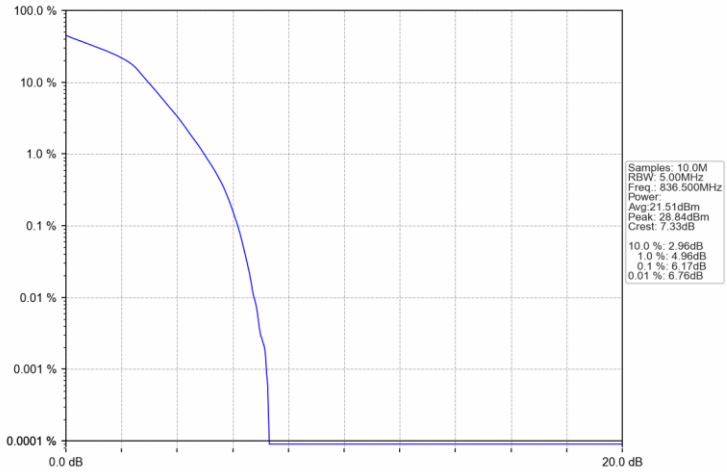
Band5_1.4MHz_QPSK_HCH_848.3MHz_RB_6_0_NTNV



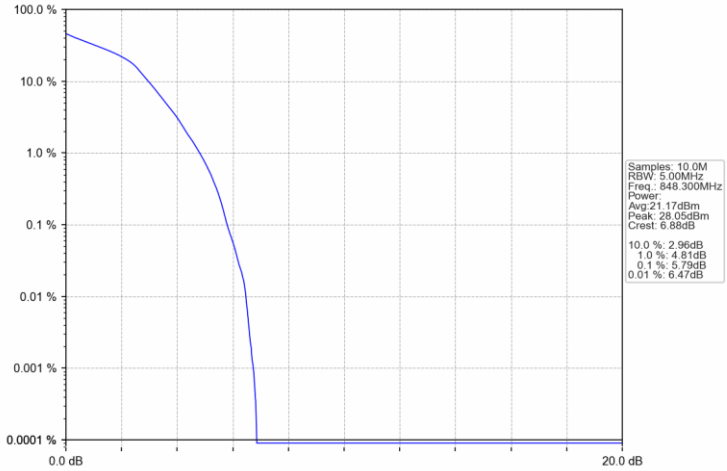
Band5_1.4MHz_16QAM_LCH_824.7MHz_RB_6_0_NTNV



Band5_1.4MHz_16QAM_MCH_836.5MHz_RB_6_0_NTNV

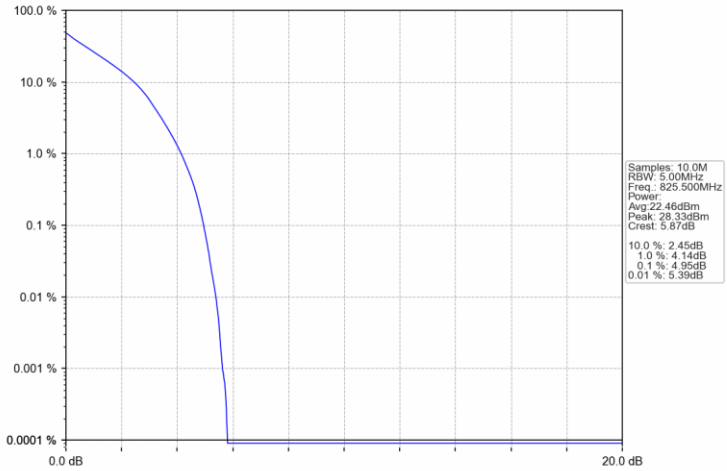
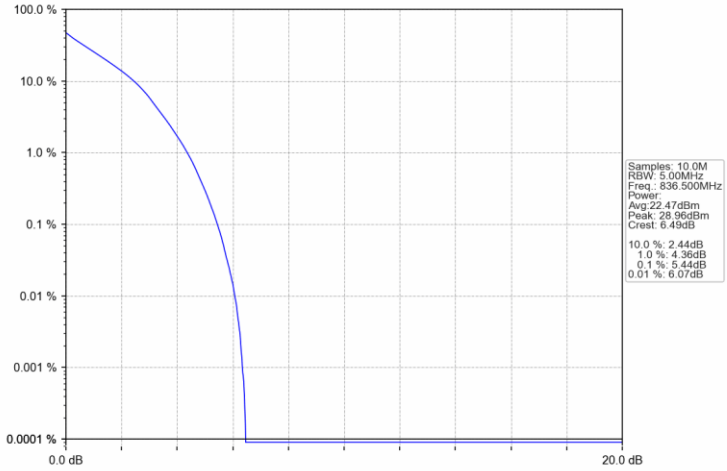


Band5_1.4MHz_16QAM_HCH_848.3MHz_RB_6_0_NTNV



5.2.2 B5_3MHz

Band5_3MHz_QPSK_LCH_825.5MHz_RB_15_0_NTNV



Band5_3MHz_QPSK_MCH_836.5MHz_RB_15_0_NTNV