

Appendix test data for LTE Band 12

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B12_1.4MHz_ERP

Band: 12 / Bandwidth: 1.4MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	699.7	1	0	23.32	-2.60	18.57	<=34.77	Pass
			2	23.33	-2.60	18.58	<=34.77	Pass
			5	23.28	-2.60	18.53	<=34.77	Pass
		3	0	23.72	-2.60	18.97	<=34.77	Pass
			2	23.75	-2.60	19.00	<=34.77	Pass
			3	23.73	-2.60	18.98	<=34.77	Pass
		6	0	22.84	-2.60	18.09	<=34.77	Pass
	707.5	1	0	23.82	-2.60	19.07	<=34.77	Pass
			2	23.40	-2.60	18.65	<=34.77	Pass
			5	23.38	-2.60	18.63	<=34.77	Pass
		3	0	23.91	-2.60	19.16	<=34.77	Pass
			2	23.86	-2.60	19.11	<=34.77	Pass
			3	23.88	-2.60	19.13	<=34.77	Pass
		6	0	22.92	-2.60	18.17	<=34.77	Pass
	715.3	1	0	23.40	-2.60	18.65	<=34.77	Pass
			2	23.39	-2.60	18.64	<=34.77	Pass
			5	23.39	-2.60	18.64	<=34.77	Pass
		3	0	24.04	-2.60	19.29	<=34.77	Pass
			2	24.10	-2.60	19.35	<=34.77	Pass
			3	24.06	-2.60	19.31	<=34.77	Pass
		6	0	23.01	-2.60	18.26	<=34.77	Pass
16QAM	699.7	1	0	22.19	-2.60	17.44	<=34.77	Pass
			2	22.22	-2.60	17.47	<=34.77	Pass
			5	22.21	-2.60	17.46	<=34.77	Pass
		3	0	22.71	-2.60	17.96	<=34.77	Pass
			2	22.73	-2.60	17.98	<=34.77	Pass
			3	22.70	-2.60	17.95	<=34.77	Pass
		6	0	21.82	-2.60	17.07	<=34.77	Pass
	707.5	1	0	22.59	-2.60	17.84	<=34.77	Pass
			2	22.63	-2.60	17.88	<=34.77	Pass
			5	22.57	-2.60	17.82	<=34.77	Pass
		3	0	22.84	-2.60	18.09	<=34.77	Pass
			2	22.80	-2.60	18.05	<=34.77	Pass
			3	22.81	-2.60	18.06	<=34.77	Pass
		6	0	21.96	-2.60	17.21	<=34.77	Pass
	715.3	1	0	22.67	-2.60	17.92	<=34.77	Pass
			2	22.68	-2.60	17.93	<=34.77	Pass
			5	22.65	-2.60	17.90	<=34.77	Pass
		3	0	22.94	-2.60	18.19	<=34.77	Pass
			2	22.99	-2.60	18.24	<=34.77	Pass
			3	22.94	-2.60	18.19	<=34.77	Pass
		6	0	21.89	-2.60	17.14	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.2 B12_3MHz_ERP

Band: 12 / Bandwidth: 3MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	700.5	1	0	23.26	-2.60	18.51	<=34.77	Pass
			7	23.31	-2.60	18.56	<=34.77	Pass
			14	23.26	-2.60	18.51	<=34.77	Pass
		8	0	22.82	-2.60	18.07	<=34.77	Pass
			4	22.81	-2.60	18.06	<=34.77	Pass
			7	22.79	-2.60	18.04	<=34.77	Pass
		15	0	22.82	-2.60	18.07	<=34.77	Pass
	707.5	1	0	23.36	-2.60	18.61	<=34.77	Pass
			7	23.40	-2.60	18.65	<=34.77	Pass
			14	23.39	-2.60	18.64	<=34.77	Pass
		8	0	22.86	-2.60	18.11	<=34.77	Pass
			4	22.88	-2.60	18.13	<=34.77	Pass
			7	22.86	-2.60	18.11	<=34.77	Pass
		15	0	22.86	-2.60	18.11	<=34.77	Pass
	714.5	1	0	23.56	-2.60	18.81	<=34.77	Pass
			7	23.57	-2.60	18.82	<=34.77	Pass
			14	23.51	-2.60	18.76	<=34.77	Pass
		8	0	22.96	-2.60	18.21	<=34.77	Pass
			4	22.97	-2.60	18.22	<=34.77	Pass
			7	22.94	-2.60	18.19	<=34.77	Pass
		15	0	22.97	-2.60	18.22	<=34.77	Pass
16QAM	700.5	1	0	22.53	-2.60	17.78	<=34.77	Pass
			7	22.49	-2.60	17.74	<=34.77	Pass
			14	22.46	-2.60	17.71	<=34.77	Pass
		8	0	21.82	-2.60	17.07	<=34.77	Pass
			4	21.83	-2.60	17.08	<=34.77	Pass
			7	21.82	-2.60	17.07	<=34.77	Pass
		15	0	21.75	-2.60	17.00	<=34.77	Pass
	707.5	1	0	22.27	-2.60	17.52	<=34.77	Pass
			7	22.29	-2.60	17.54	<=34.77	Pass
			14	22.30	-2.60	17.55	<=34.77	Pass
		8	0	21.89	-2.60	17.14	<=34.77	Pass
			4	21.95	-2.60	17.20	<=34.77	Pass
			7	21.90	-2.60	17.15	<=34.77	Pass
		15	0	21.78	-2.60	17.03	<=34.77	Pass
	714.5	1	0	22.75	-2.60	18.00	<=34.77	Pass
			7	22.73	-2.60	17.98	<=34.77	Pass
			14	22.62	-2.60	17.87	<=34.77	Pass
		8	0	22.05	-2.60	17.30	<=34.77	Pass
			4	22.06	-2.60	17.31	<=34.77	Pass
			7	22.05	-2.60	17.30	<=34.77	Pass
		15	0	22.01	-2.60	17.26	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.3 B12_5MHz_ERP

Band: 12 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	701.5	1	0	23.39	-2.60	18.64	<=34.77	Pass
			13	23.37	-2.60	18.62	<=34.77	Pass
			24	23.46	-2.60	18.71	<=34.77	Pass
		12	0	22.87	-2.60	18.12	<=34.77	Pass
			6	22.82	-2.60	18.07	<=34.77	Pass

			13	22.86	-2.60	18.11	<=34.77	Pass
		25	0	22.89	-2.60	18.14	<=34.77	Pass
	707.5	1	0	23.49	-2.60	18.74	<=34.77	Pass
			13	23.53	-2.60	18.78	<=34.77	Pass
			24	23.61	-2.60	18.86	<=34.77	Pass
		12	0	22.92	-2.60	18.17	<=34.77	Pass
			6	22.94	-2.60	18.19	<=34.77	Pass
			13	22.90	-2.60	18.15	<=34.77	Pass
		25	0	22.92	-2.60	18.17	<=34.77	Pass
	713.5	1	0	23.64	-2.60	18.89	<=34.77	Pass
			13	23.64	-2.60	18.89	<=34.77	Pass
			24	23.62	-2.60	18.87	<=34.77	Pass
		12	0	23.03	-2.60	18.28	<=34.77	Pass
			6	22.96	-2.60	18.21	<=34.77	Pass
			13	23.01	-2.60	18.26	<=34.77	Pass
		25	0	23.04	-2.60	18.29	<=34.77	Pass
16QAM	701.5	1	0	22.54	-2.60	17.79	<=34.77	Pass
			13	22.50	-2.60	17.75	<=34.77	Pass
			24	22.61	-2.60	17.86	<=34.77	Pass
		12	0	21.88	-2.60	17.13	<=34.77	Pass
			6	21.86	-2.60	17.11	<=34.77	Pass
			13	21.89	-2.60	17.14	<=34.77	Pass
		25	0	21.84	-2.60	17.09	<=34.77	Pass
	707.5	1	0	22.55	-2.60	17.80	<=34.77	Pass
			13	22.57	-2.60	17.82	<=34.77	Pass
			24	22.65	-2.60	17.90	<=34.77	Pass
		12	0	21.94	-2.60	17.19	<=34.77	Pass
			6	21.93	-2.60	17.18	<=34.77	Pass
			13	21.91	-2.60	17.16	<=34.77	Pass
		25	0	21.95	-2.60	17.20	<=34.77	Pass
	713.5	1	0	22.55	-2.60	17.80	<=34.77	Pass
			13	22.51	-2.60	17.76	<=34.77	Pass
			24	22.50	-2.60	17.75	<=34.77	Pass
		12	0	22.05	-2.60	17.30	<=34.77	Pass
			6	21.98	-2.60	17.23	<=34.77	Pass
			13	22.07	-2.60	17.32	<=34.77	Pass
		25	0	22.06	-2.60	17.31	<=34.77	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

1.1.4 B12_10MHz_ERP

Band: 12 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	704	1	0	23.26	-2.60	18.51	<=34.77	Pass
			25	23.35	-2.60	18.60	<=34.77	Pass
			49	23.42	-2.60	18.67	<=34.77	Pass
		25	0	22.77	-2.60	18.02	<=34.77	Pass
			13	22.89	-2.60	18.14	<=34.77	Pass
			25	22.93	-2.60	18.18	<=34.77	Pass
	707.5	50	0	22.87	-2.60	18.12	<=34.77	Pass
		1	0	23.30	-2.60	18.55	<=34.77	Pass
			25	23.43	-2.60	18.68	<=34.77	Pass
			49	23.46	-2.60	18.71	<=34.77	Pass
		25	0	22.88	-2.60	18.13	<=34.77	Pass
			13	22.92	-2.60	18.17	<=34.77	Pass
			25	22.84	-2.60	18.09	<=34.77	Pass
		50	0	22.88	-2.60	18.13	<=34.77	Pass

16QAM	711	1	0	23.41	-2.60	18.66	<=34.77	Pass	
			25	23.55	-2.60	18.80	<=34.77	Pass	
			49	23.57	-2.60	18.82	<=34.77	Pass	
		25	0	23.02	-2.60	18.27	<=34.77	Pass	
			13	22.98	-2.60	18.23	<=34.77	Pass	
			25	23.03	-2.60	18.28	<=34.77	Pass	
		50	0	23.05	-2.60	18.30	<=34.77	Pass	
	704	1	0	22.51	-2.60	17.76	<=34.77	Pass	
			25	22.57	-2.60	17.82	<=34.77	Pass	
			49	22.63	-2.60	17.88	<=34.77	Pass	
		25	0	21.75	-2.60	17.00	<=34.77	Pass	
			13	21.91	-2.60	17.16	<=34.77	Pass	
			25	21.94	-2.60	17.19	<=34.77	Pass	
		50	0	21.84	-2.60	17.09	<=34.77	Pass	
		707.5	1	0	22.17	-2.60	17.42	<=34.77	Pass
				25	22.33	-2.60	17.58	<=34.77	Pass
				49	22.38	-2.60	17.63	<=34.77	Pass
			25	0	21.90	-2.60	17.15	<=34.77	Pass
				13	21.94	-2.60	17.19	<=34.77	Pass
				25	21.85	-2.60	17.10	<=34.77	Pass
	50		0	21.84	-2.60	17.09	<=34.77	Pass	
	711	1	0	22.54	-2.60	17.79	<=34.77	Pass	
			25	22.69	-2.60	17.94	<=34.77	Pass	
			49	22.70	-2.60	17.95	<=34.77	Pass	
		25	0	22.00	-2.60	17.25	<=34.77	Pass	
			13	21.95	-2.60	17.20	<=34.77	Pass	
			25	22.00	-2.60	17.25	<=34.77	Pass	
50		0	22.01	-2.60	17.26	<=34.77	Pass		
Note1: ERP=Conducted Power+Antenna Gain-2.15									

2. Frequency Stability

2.1 Test Result

2.1.1 B12_1.4MHz

Band: 12 / 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	699.7	6	0	20	3.27	0.286	0.0004	-2.5 to 2.5	Pass
					3.85	-3.018	-0.0043	-2.5 to 2.5	Pass
					4.43	3.905	0.0056	-2.5 to 2.5	Pass
				-30	3.85	3.390	0.0048	-2.5 to 2.5	Pass
				-20	3.85	1.516	0.0022	-2.5 to 2.5	Pass
				-10	3.85	-5.794	-0.0083	-2.5 to 2.5	Pass
				0	3.85	-0.243	-0.0003	-2.5 to 2.5	Pass
				10	3.85	2.489	0.0036	-2.5 to 2.5	Pass
				30	3.85	-1.388	-0.0020	-2.5 to 2.5	Pass
				40	3.85	-4.063	-0.0058	-2.5 to 2.5	Pass
				50	3.85	-1.616	-0.0023	-2.5 to 2.5	Pass
	707.5	6	0	20	3.27	-0.358	-0.0005	-2.5 to 2.5	Pass
					3.85	-1.760	-0.0025	-2.5 to 2.5	Pass
					4.43	1.388	0.0020	-2.5 to 2.5	Pass
				-30	3.85	3.519	0.0050	-2.5 to 2.5	Pass
				-20	3.85	4.134	0.0058	-2.5 to 2.5	Pass
				-10	3.85	2.589	0.0037	-2.5 to 2.5	Pass

				0	3.85	1.488	0.0021	-2.5 to 2.5	Pass
				10	3.85	-3.419	-0.0048	-2.5 to 2.5	Pass
				30	3.85	0.172	0.0002	-2.5 to 2.5	Pass
				40	3.85	-1.516	-0.0021	-2.5 to 2.5	Pass
				50	3.85	6.151	0.0087	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	-1.488	-0.0021	-2.5 to 2.5	Pass
					3.85	0.129	0.0002	-2.5 to 2.5	Pass
					4.43	5.865	0.0082	-2.5 to 2.5	Pass
				-30	3.85	-2.503	-0.0035	-2.5 to 2.5	Pass
				-20	3.85	0.143	0.0002	-2.5 to 2.5	Pass
				-10	3.85	-2.303	-0.0032	-2.5 to 2.5	Pass
				0	3.85	0.472	0.0007	-2.5 to 2.5	Pass
				10	3.85	4.821	0.0067	-2.5 to 2.5	Pass
				30	3.85	4.120	0.0058	-2.5 to 2.5	Pass
				40	3.85	1.988	0.0028	-2.5 to 2.5	Pass
				50	3.85	-4.234	-0.0059	-2.5 to 2.5	Pass
16QAM	699.7	6	0	20	3.27	1.173	0.0017	-2.5 to 2.5	Pass
					3.85	0.858	0.0012	-2.5 to 2.5	Pass
					4.43	-4.592	-0.0066	-2.5 to 2.5	Pass
				-30	3.85	-1.416	-0.0020	-2.5 to 2.5	Pass
				-20	3.85	-1.745	-0.0025	-2.5 to 2.5	Pass
				-10	3.85	-6.795	-0.0097	-2.5 to 2.5	Pass
				0	3.85	-1.345	-0.0019	-2.5 to 2.5	Pass
				10	3.85	0.143	0.0002	-2.5 to 2.5	Pass
				30	3.85	0.815	0.0012	-2.5 to 2.5	Pass
				40	3.85	-1.931	-0.0028	-2.5 to 2.5	Pass
				50	3.85	2.275	0.0033	-2.5 to 2.5	Pass
	707.5	6	0	20	3.27	-2.747	-0.0039	-2.5 to 2.5	Pass
					3.85	-2.632	-0.0037	-2.5 to 2.5	Pass
					4.43	-1.588	-0.0022	-2.5 to 2.5	Pass
				-30	3.85	-0.501	-0.0007	-2.5 to 2.5	Pass
				-20	3.85	-2.918	-0.0041	-2.5 to 2.5	Pass
				-10	3.85	3.104	0.0044	-2.5 to 2.5	Pass
				0	3.85	2.403	0.0034	-2.5 to 2.5	Pass
				10	3.85	3.490	0.0049	-2.5 to 2.5	Pass
				30	3.85	-0.887	-0.0013	-2.5 to 2.5	Pass
				40	3.85	4.206	0.0059	-2.5 to 2.5	Pass
				50	3.85	3.991	0.0056	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	4.749	0.0066	-2.5 to 2.5	Pass
					3.85	1.173	0.0016	-2.5 to 2.5	Pass
					4.43	4.878	0.0068	-2.5 to 2.5	Pass
				-30	3.85	1.860	0.0026	-2.5 to 2.5	Pass
				-20	3.85	-0.844	-0.0012	-2.5 to 2.5	Pass
				-10	3.85	0.830	0.0012	-2.5 to 2.5	Pass
				0	3.85	-5.651	-0.0079	-2.5 to 2.5	Pass
				10	3.85	2.303	0.0032	-2.5 to 2.5	Pass
				30	3.85	1.502	0.0021	-2.5 to 2.5	Pass
				40	3.85	0.973	0.0014	-2.5 to 2.5	Pass
				50	3.85	3.362	0.0047	-2.5 to 2.5	Pass

2.1.2 B12_3MHz

Band: 12 / Bandwidth: 3MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	700.5	15	0	20	3.27	0.873	0.0012	-2.5 to 2.5	Pass
					3.85	-4.621	-0.0066	-2.5 to 2.5	Pass
					4.43	-0.143	-0.0002	-2.5 to 2.5	Pass

16QAM	707.5	15	0	-30	3.85	-1.473	-0.0021	-2.5 to 2.5	Pass
				-20	3.85	0.830	0.0012	-2.5 to 2.5	Pass
				-10	3.85	-2.017	-0.0029	-2.5 to 2.5	Pass
				0	3.85	1.760	0.0025	-2.5 to 2.5	Pass
				10	3.85	-0.987	-0.0014	-2.5 to 2.5	Pass
				30	3.85	2.775	0.0040	-2.5 to 2.5	Pass
				40	3.85	-2.217	-0.0032	-2.5 to 2.5	Pass
				50	3.85	1.187	0.0017	-2.5 to 2.5	Pass
	714.5	15	0	20	3.27	-0.544	-0.0008	-2.5 to 2.5	Pass
					3.85	4.849	0.0069	-2.5 to 2.5	Pass
					4.43	-0.315	-0.0004	-2.5 to 2.5	Pass
				-30	3.85	-4.420	-0.0062	-2.5 to 2.5	Pass
				-20	3.85	0.744	0.0011	-2.5 to 2.5	Pass
				-10	3.85	1.974	0.0028	-2.5 to 2.5	Pass
				0	3.85	-1.974	-0.0028	-2.5 to 2.5	Pass
				10	3.85	-0.401	-0.0006	-2.5 to 2.5	Pass
	700.5	15	0	20	3.27	0.186	0.0003	-2.5 to 2.5	Pass
					3.85	-4.749	-0.0066	-2.5 to 2.5	Pass
					4.43	4.721	0.0066	-2.5 to 2.5	Pass
				-30	3.85	-3.190	-0.0045	-2.5 to 2.5	Pass
				-20	3.85	-0.472	-0.0007	-2.5 to 2.5	Pass
				-10	3.85	-0.372	-0.0005	-2.5 to 2.5	Pass
				0	3.85	-4.048	-0.0057	-2.5 to 2.5	Pass
				10	3.85	-1.702	-0.0024	-2.5 to 2.5	Pass
	707.5	15	0	20	3.27	0.143	0.0002	-2.5 to 2.5	Pass
					3.85	-0.587	-0.0008	-2.5 to 2.5	Pass
					4.43	1.831	0.0026	-2.5 to 2.5	Pass
				-30	3.85	-0.744	-0.0011	-2.5 to 2.5	Pass
				-20	3.85	-0.672	-0.0010	-2.5 to 2.5	Pass
				-10	3.85	-3.319	-0.0047	-2.5 to 2.5	Pass
				0	3.85	-2.561	-0.0037	-2.5 to 2.5	Pass
				10	3.85	-2.575	-0.0037	-2.5 to 2.5	Pass
	714.5	15	0	20	3.27	0.672	0.0009	-2.5 to 2.5	Pass
					3.85	-2.089	-0.0030	-2.5 to 2.5	Pass
					4.43	-3.934	-0.0056	-2.5 to 2.5	Pass
				-30	3.85	-0.443	-0.0006	-2.5 to 2.5	Pass
				-20	3.85	-0.372	-0.0005	-2.5 to 2.5	Pass
				-10	3.85	-3.347	-0.0047	-2.5 to 2.5	Pass
				0	3.85	-0.730	-0.0010	-2.5 to 2.5	Pass
				10	3.85	-0.129	-0.0002	-2.5 to 2.5	Pass
	707.5	15	0	20	3.27	0.343	0.0005	-2.5 to 2.5	Pass
					3.85	3.505	0.0049	-2.5 to 2.5	Pass
					4.43	-1.688	-0.0024	-2.5 to 2.5	Pass
				-30	3.85	-0.443	-0.0006	-2.5 to 2.5	Pass
				-20	3.85	1.845	0.0026	-2.5 to 2.5	Pass
				-10	3.85	-2.117	-0.0030	-2.5 to 2.5	Pass
				0	3.85	1.230	0.0017	-2.5 to 2.5	Pass

				10	3.85	-5.393	-0.0075	-2.5 to 2.5	Pass
				30	3.85	-2.232	-0.0031	-2.5 to 2.5	Pass
				40	3.85	-1.388	-0.0019	-2.5 to 2.5	Pass
				50	3.85	3.920	0.0055	-2.5 to 2.5	Pass

2.1.3 B12_5MHz

Band: 12 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	701.5	25	0	20	3.27	-2.847	-0.0041	-2.5 to 2.5	Pass
					3.85	-1.516	-0.0022	-2.5 to 2.5	Pass
					4.43	-0.443	-0.0006	-2.5 to 2.5	Pass
				-30	3.85	-3.805	-0.0054	-2.5 to 2.5	Pass
				-20	3.85	-0.100	-0.0001	-2.5 to 2.5	Pass
				-10	3.85	-1.259	-0.0018	-2.5 to 2.5	Pass
				0	3.85	0.758	0.0011	-2.5 to 2.5	Pass
				10	3.85	-0.072	-0.0001	-2.5 to 2.5	Pass
				30	3.85	2.317	0.0033	-2.5 to 2.5	Pass
				40	3.85	1.488	0.0021	-2.5 to 2.5	Pass
				50	3.85	0.086	0.0001	-2.5 to 2.5	Pass
	707.5	25	0	20	3.27	3.548	0.0050	-2.5 to 2.5	Pass
					3.85	0.558	0.0008	-2.5 to 2.5	Pass
					4.43	-3.762	-0.0053	-2.5 to 2.5	Pass
				-30	3.85	4.892	0.0069	-2.5 to 2.5	Pass
				-20	3.85	-0.401	-0.0006	-2.5 to 2.5	Pass
				-10	3.85	-0.930	-0.0013	-2.5 to 2.5	Pass
				0	3.85	1.631	0.0023	-2.5 to 2.5	Pass
				10	3.85	-1.159	-0.0016	-2.5 to 2.5	Pass
				30	3.85	1.945	0.0027	-2.5 to 2.5	Pass
				40	3.85	-3.104	-0.0044	-2.5 to 2.5	Pass
				50	3.85	0.672	0.0009	-2.5 to 2.5	Pass
	713.5	25	0	20	3.27	-1.087	-0.0015	-2.5 to 2.5	Pass
					3.85	-1.388	-0.0019	-2.5 to 2.5	Pass
					4.43	-1.545	-0.0022	-2.5 to 2.5	Pass
				-30	3.85	-1.831	-0.0026	-2.5 to 2.5	Pass
				-20	3.85	-2.403	-0.0034	-2.5 to 2.5	Pass
				-10	3.85	-2.060	-0.0029	-2.5 to 2.5	Pass
				0	3.85	2.031	0.0028	-2.5 to 2.5	Pass
				10	3.85	1.559	0.0022	-2.5 to 2.5	Pass
				30	3.85	-1.144	-0.0016	-2.5 to 2.5	Pass
				40	3.85	0.129	0.0002	-2.5 to 2.5	Pass
16QAM	701.5	25	0	20	3.27	-0.286	-0.0004	-2.5 to 2.5	Pass
					3.85	0.100	0.0001	-2.5 to 2.5	Pass
					4.43	1.073	0.0015	-2.5 to 2.5	Pass
				-30	3.85	-1.073	-0.0015	-2.5 to 2.5	Pass
				-20	3.85	-2.460	-0.0035	-2.5 to 2.5	Pass
				-10	3.85	5.007	0.0071	-2.5 to 2.5	Pass
				0	3.85	-2.117	-0.0030	-2.5 to 2.5	Pass
				10	3.85	0.544	0.0008	-2.5 to 2.5	Pass
				30	3.85	0.601	0.0009	-2.5 to 2.5	Pass
				40	3.85	-0.730	-0.0010	-2.5 to 2.5	Pass
				50	3.85	-0.701	-0.0010	-2.5 to 2.5	Pass
	707.5	25	0	20	3.27	-1.974	-0.0028	-2.5 to 2.5	Pass
					3.85	0.229	0.0003	-2.5 to 2.5	Pass
					4.43	2.804	0.0040	-2.5 to 2.5	Pass
				-30	3.85	1.030	0.0015	-2.5 to 2.5	Pass

				-20	3.85	-0.801	-0.0011	-2.5 to 2.5	Pass
				-10	3.85	2.646	0.0037	-2.5 to 2.5	Pass
				0	3.85	1.588	0.0022	-2.5 to 2.5	Pass
				10	3.85	-2.646	-0.0037	-2.5 to 2.5	Pass
				30	3.85	-1.431	-0.0020	-2.5 to 2.5	Pass
				40	3.85	-2.031	-0.0029	-2.5 to 2.5	Pass
				50	3.85	0.072	0.0001	-2.5 to 2.5	Pass
	713.5	25	0	20	3.27	-0.272	-0.0004	-2.5 to 2.5	Pass
					3.85	-3.605	-0.0051	-2.5 to 2.5	Pass
					4.43	-2.146	-0.0030	-2.5 to 2.5	Pass
				-30	3.85	1.545	0.0022	-2.5 to 2.5	Pass
				-20	3.85	1.159	0.0016	-2.5 to 2.5	Pass
				-10	3.85	0.501	0.0007	-2.5 to 2.5	Pass
				0	3.85	-1.559	-0.0022	-2.5 to 2.5	Pass
				10	3.85	-0.529	-0.0007	-2.5 to 2.5	Pass
				30	3.85	-2.561	-0.0036	-2.5 to 2.5	Pass
				40	3.85	-2.117	-0.0030	-2.5 to 2.5	Pass
				50	3.85	-2.675	-0.0037	-2.5 to 2.5	Pass

2.1.4 B12_10MHz

Band: 12 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	704	50	0	20	3.27	-1.488	-0.0021	-2.5 to 2.5	Pass
					3.85	-0.501	-0.0007	-2.5 to 2.5	Pass
					4.43	-0.029	0.0000	-2.5 to 2.5	Pass
				-30	3.85	-0.572	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	-3.533	-0.0050	-2.5 to 2.5	Pass
				-10	3.85	-2.232	-0.0032	-2.5 to 2.5	Pass
				0	3.85	-3.576	-0.0051	-2.5 to 2.5	Pass
				10	3.85	-1.431	-0.0020	-2.5 to 2.5	Pass
				30	3.85	-0.672	-0.0010	-2.5 to 2.5	Pass
				40	3.85	-1.259	-0.0018	-2.5 to 2.5	Pass
				50	3.85	-1.831	-0.0026	-2.5 to 2.5	Pass
	707.5	50	0	20	3.27	-2.546	-0.0036	-2.5 to 2.5	Pass
					3.85	-0.200	-0.0003	-2.5 to 2.5	Pass
					4.43	-1.402	-0.0020	-2.5 to 2.5	Pass
				-30	3.85	-1.273	-0.0018	-2.5 to 2.5	Pass
				-20	3.85	-3.705	-0.0052	-2.5 to 2.5	Pass
				-10	3.85	-0.815	-0.0012	-2.5 to 2.5	Pass
				0	3.85	0.687	0.0010	-2.5 to 2.5	Pass
				10	3.85	0.100	0.0001	-2.5 to 2.5	Pass
				30	3.85	-1.817	-0.0026	-2.5 to 2.5	Pass
				40	3.85	-0.215	-0.0003	-2.5 to 2.5	Pass
				50	3.85	-0.515	-0.0007	-2.5 to 2.5	Pass
	711	50	0	20	3.27	-1.302	-0.0018	-2.5 to 2.5	Pass
					3.85	1.016	0.0014	-2.5 to 2.5	Pass
					4.43	-3.004	-0.0042	-2.5 to 2.5	Pass
				-30	3.85	-0.944	-0.0013	-2.5 to 2.5	Pass
				-20	3.85	-2.747	-0.0039	-2.5 to 2.5	Pass
				-10	3.85	1.445	0.0020	-2.5 to 2.5	Pass
				0	3.85	-2.446	-0.0034	-2.5 to 2.5	Pass
				10	3.85	-1.159	-0.0016	-2.5 to 2.5	Pass
				30	3.85	-2.418	-0.0034	-2.5 to 2.5	Pass
				40	3.85	-2.933	-0.0041	-2.5 to 2.5	Pass
				50	3.85	-1.702	-0.0024	-2.5 to 2.5	Pass
16QAM	704	50	0	20	3.27	-2.961	-0.0042	-2.5 to 2.5	Pass

					3.85	-1.230	-0.0017	-2.5 to 2.5	Pass
					4.43	-3.448	-0.0049	-2.5 to 2.5	Pass
				-30	3.85	-1.402	-0.0020	-2.5 to 2.5	Pass
				-20	3.85	1.702	0.0024	-2.5 to 2.5	Pass
				-10	3.85	0.772	0.0011	-2.5 to 2.5	Pass
				0	3.85	0.229	0.0003	-2.5 to 2.5	Pass
				10	3.85	-2.146	-0.0030	-2.5 to 2.5	Pass
				30	3.85	-0.758	-0.0011	-2.5 to 2.5	Pass
				40	3.85	-0.701	-0.0010	-2.5 to 2.5	Pass
				50	3.85	1.731	0.0025	-2.5 to 2.5	Pass
	707.5	50	0	20	3.27	-0.200	-0.0003	-2.5 to 2.5	Pass
					3.85	-1.159	-0.0016	-2.5 to 2.5	Pass
					4.43	1.302	0.0018	-2.5 to 2.5	Pass
				-30	3.85	-1.202	-0.0017	-2.5 to 2.5	Pass
				-20	3.85	-0.100	-0.0001	-2.5 to 2.5	Pass
				-10	3.85	0.672	0.0009	-2.5 to 2.5	Pass
				0	3.85	0.787	0.0011	-2.5 to 2.5	Pass
				10	3.85	0.257	0.0004	-2.5 to 2.5	Pass
				30	3.85	0.100	0.0001	-2.5 to 2.5	Pass
				40	3.85	-1.187	-0.0017	-2.5 to 2.5	Pass
				50	3.85	1.674	0.0024	-2.5 to 2.5	Pass
	711	50	0	20	3.27	-3.462	-0.0049	-2.5 to 2.5	Pass
					3.85	0.458	0.0006	-2.5 to 2.5	Pass
					4.43	-2.489	-0.0035	-2.5 to 2.5	Pass
				-30	3.85	-0.043	-0.0001	-2.5 to 2.5	Pass
				-20	3.85	-1.488	-0.0021	-2.5 to 2.5	Pass
				-10	3.85	0.243	0.0003	-2.5 to 2.5	Pass
				0	3.85	-2.546	-0.0036	-2.5 to 2.5	Pass
				10	3.85	-2.260	-0.0032	-2.5 to 2.5	Pass
				30	3.85	-2.933	-0.0041	-2.5 to 2.5	Pass
				40	3.85	-1.116	-0.0016	-2.5 to 2.5	Pass
				50	3.85	-0.358	-0.0005	-2.5 to 2.5	Pass

3. Modulation Characteristics

3.1 Test Result

3.1.1 B12_1.4MHz

Band: 12 / Bandwidth: 1.4MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	707.5	6	0	Refer To Test Graph		Pass
16QAM	707.5	6	0	Refer To Test Graph		Pass

3.1.2 B12_3MHz

Band: 12 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	707.5	15	0	Refer To Test Graph		Pass
16QAM	707.5	15	0	Refer To Test Graph		Pass

3.1.3 B12_5MHz

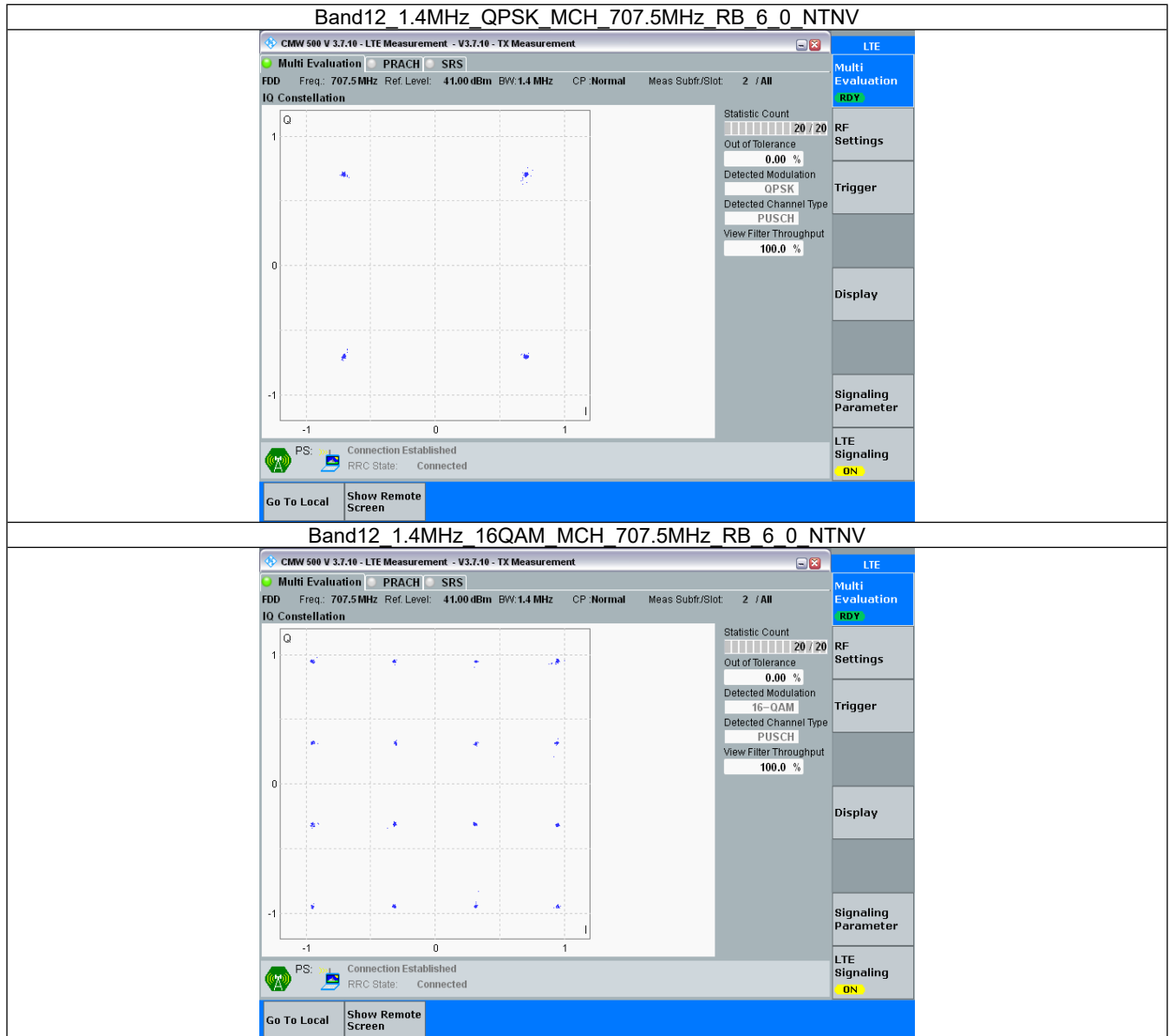
Band: 12 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	707.5	25	0	Refer To Test Graph		Pass
16QAM	707.5	25	0	Refer To Test Graph		Pass

3.1.4 B12_10MHz

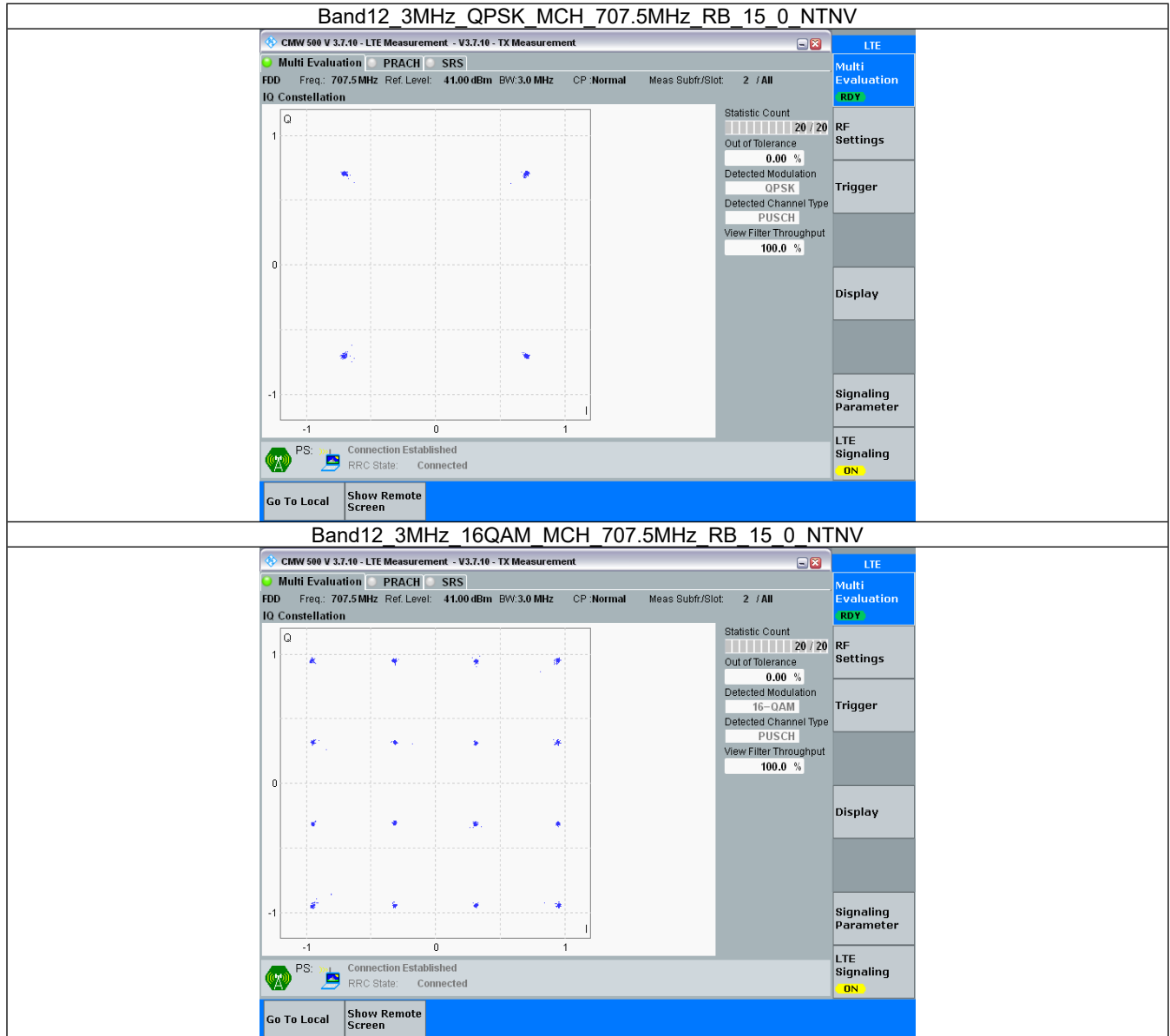
Band: 12 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	707.5	50	0	Refer To Test Graph		Pass
16QAM	707.5	50	0	Refer To Test Graph		Pass

3.2 Test Graph

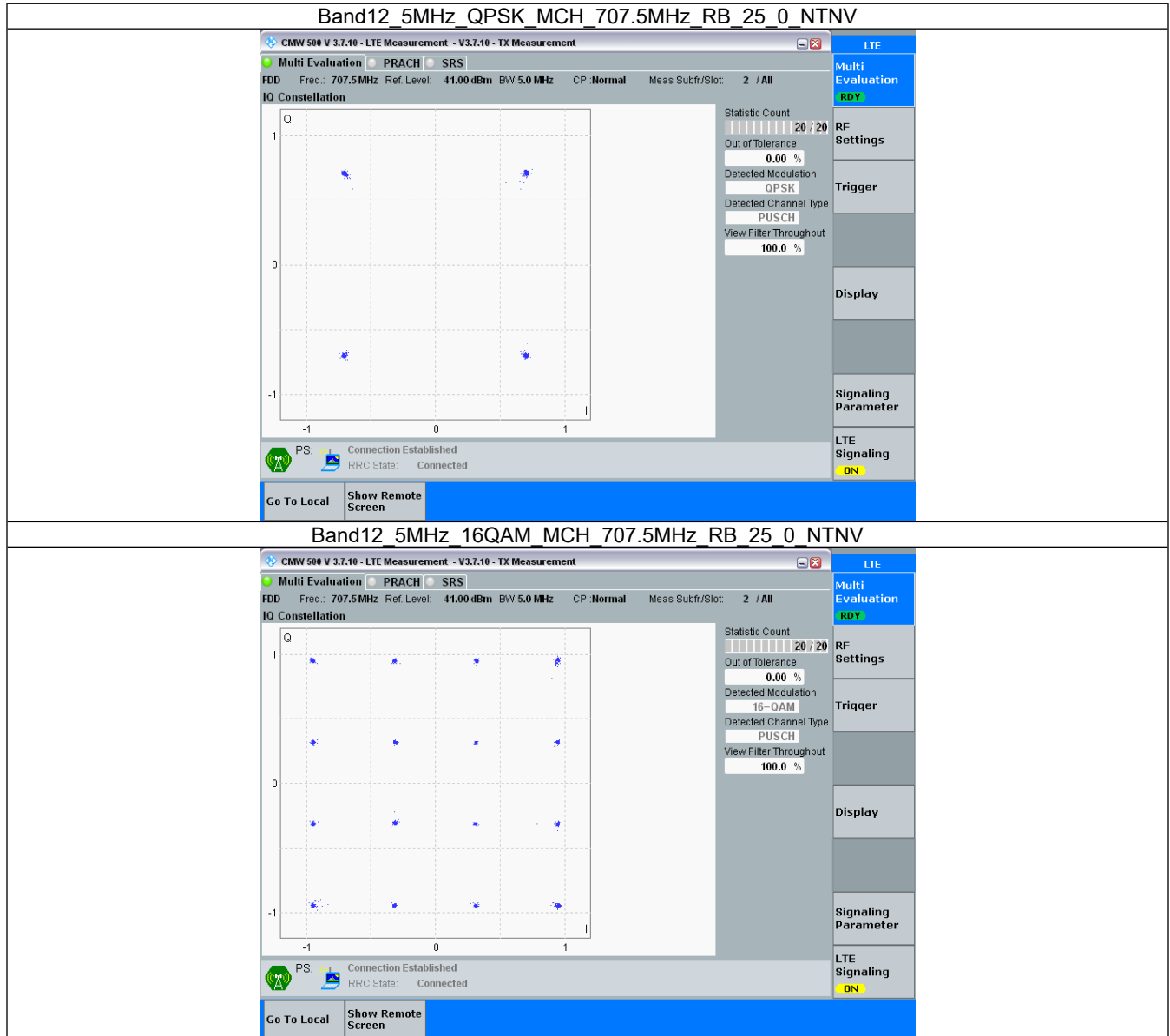
3.2.1 B12_1.4MHz



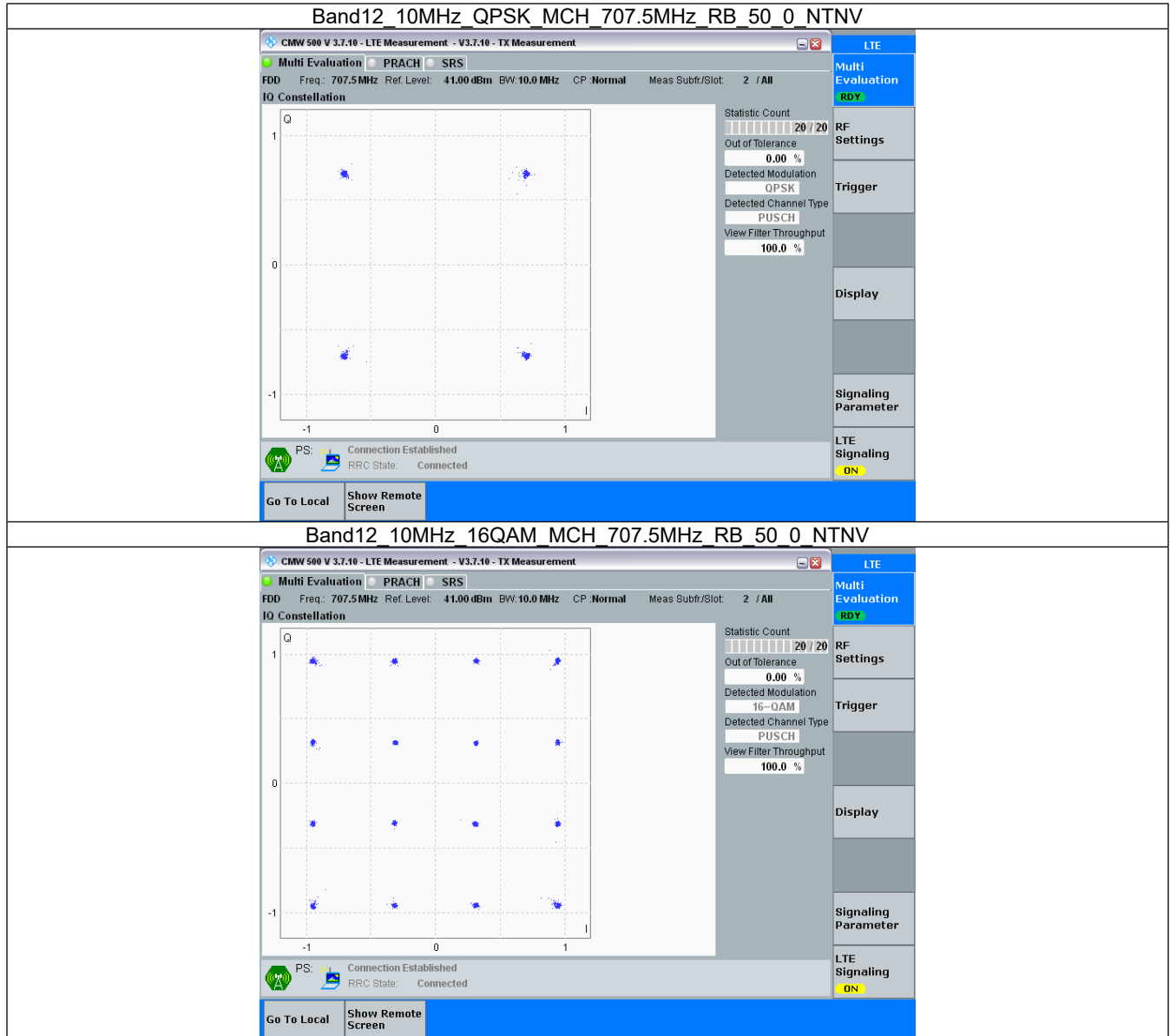
3.2.2 B12_3MHz



3.2.3 B12_5MHz



3.2.4 B12_10MHz



4. 99% & 26dB Bandwidth

4.1 Test Result

4.1.1 Band12_OBW

Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	699.7	6	0	1.114	/	Pass
		707.5	6	0	1.113	/	Pass
		715.3	6	0	1.116	/	Pass
	16QAM	699.7	6	0	1.112	/	Pass
		707.5	6	0	1.106	/	Pass
		715.3	6	0	1.118	/	Pass
3	QPSK	700.5	15	0	2.739	/	Pass
		707.5	15	0	2.734	/	Pass
		714.5	15	0	2.733	/	Pass
	16QAM	700.5	15	0	2.722	/	Pass
		707.5	15	0	2.730	/	Pass
		714.5	15	0	2.736	/	Pass
5	QPSK	701.5	25	0	4.557	/	Pass
		707.5	25	0	4.539	/	Pass
		713.5	25	0	4.565	/	Pass
	16QAM	701.5	25	0	4.553	/	Pass
		707.5	25	0	4.568	/	Pass
		713.5	25	0	4.549	/	Pass
10	QPSK	704	50	0	9.074	/	Pass
		707.5	50	0	9.000	/	Pass
		711	50	0	9.070	/	Pass
	16QAM	704	50	0	9.036	/	Pass
		707.5	50	0	9.031	/	Pass
		711	50	0	9.049	/	Pass

4.1.2 Band12_XDB

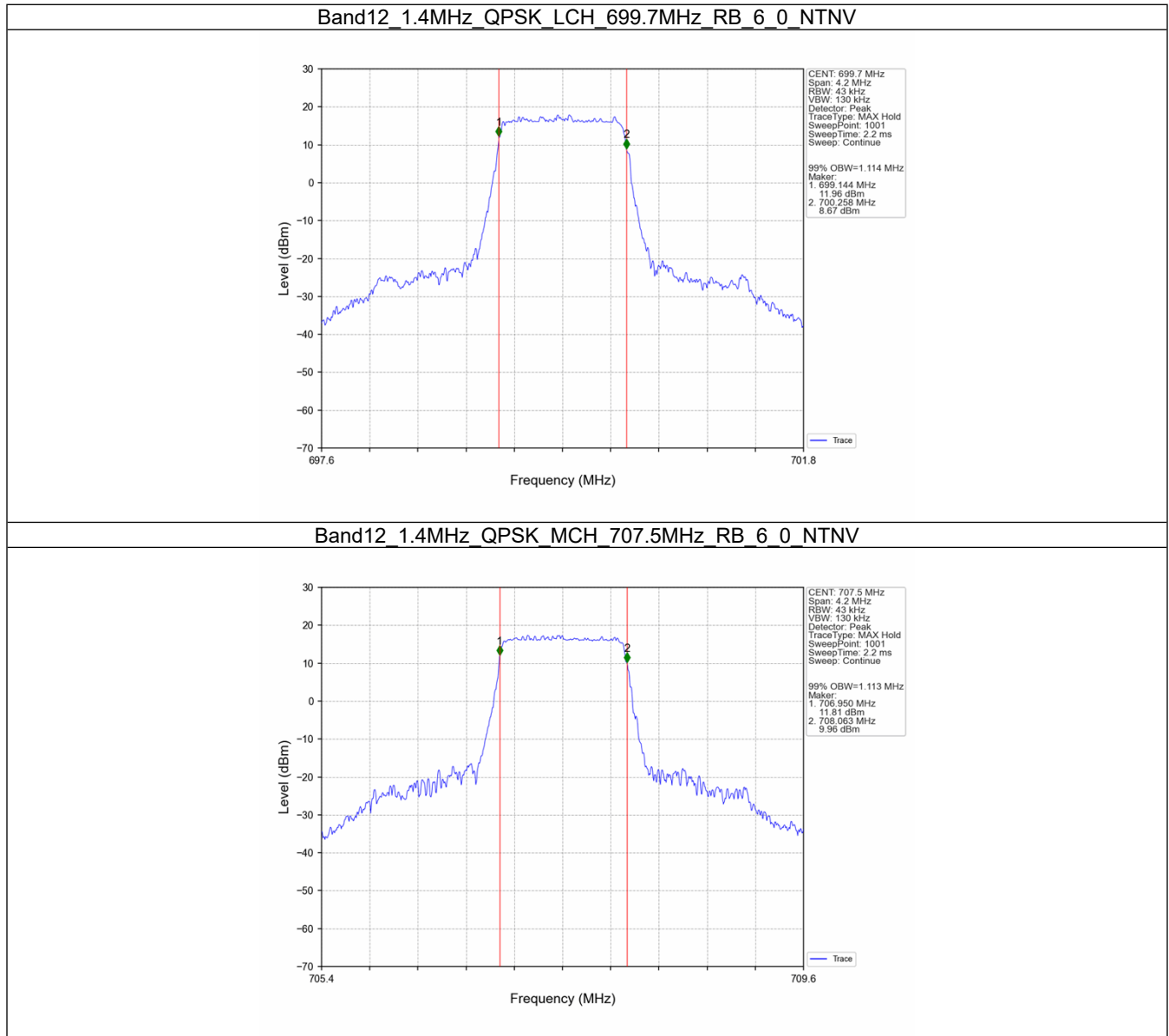
Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	699.7	6	0	1.319	/	Pass
		707.5	6	0	1.322	/	Pass
		715.3	6	0	1.330	/	Pass
	16QAM	699.7	6	0	1.330	/	Pass
		707.5	6	0	1.308	/	Pass
		715.3	6	0	1.327	/	Pass
3	QPSK	700.5	15	0	3.023	/	Pass
		707.5	15	0	3.023	/	Pass
		714.5	15	0	3.024	/	Pass
	16QAM	700.5	15	0	3.021	/	Pass
		707.5	15	0	3.016	/	Pass
		714.5	15	0	3.009	/	Pass
5	QPSK	701.5	25	0	5.018	/	Pass
		707.5	25	0	5.095	/	Pass
		713.5	25	0	5.048	/	Pass
	16QAM	701.5	25	0	5.092	/	Pass
		707.5	25	0	5.040	/	Pass
		713.5	25	0	5.043	/	Pass
10	QPSK	704	50	0	9.972	/	Pass



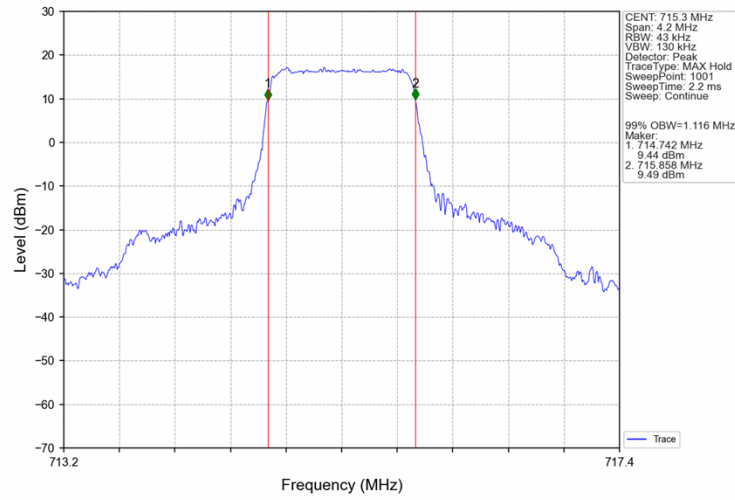
		707.5	50	0	9.922	/	Pass
		711	50	0	9.979	/	Pass
	16QAM	704	50	0	9.996	/	Pass
		707.5	50	0	9.919	/	Pass
		711	50	0	9.909	/	Pass

4.2 Test Graph

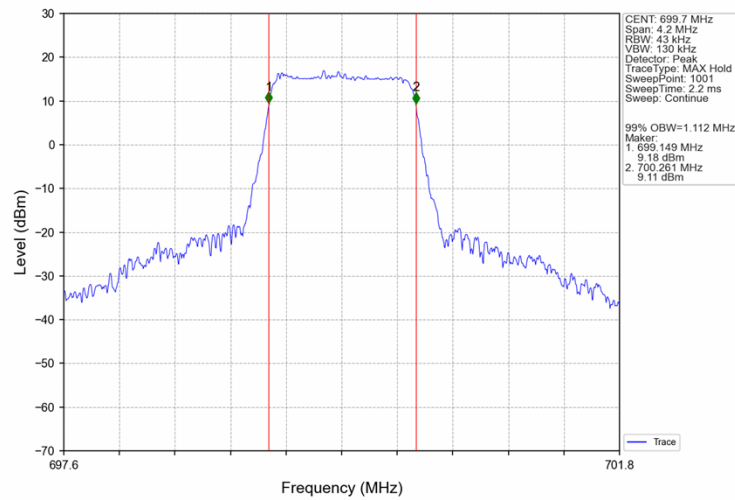
4.2.1 Band12_OBW



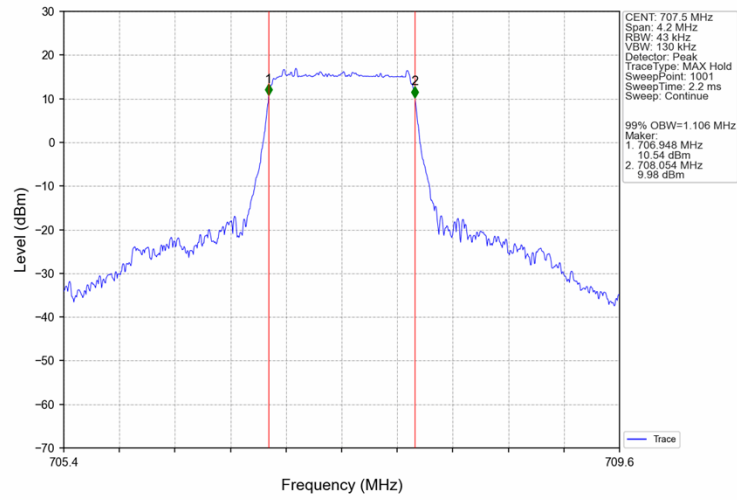
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



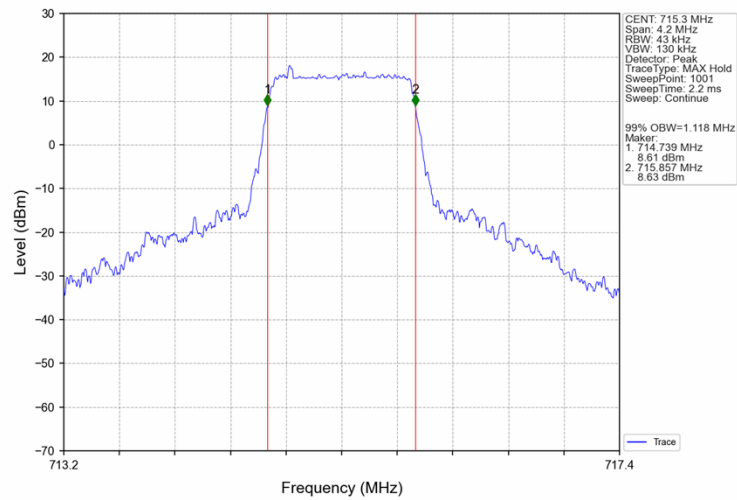
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



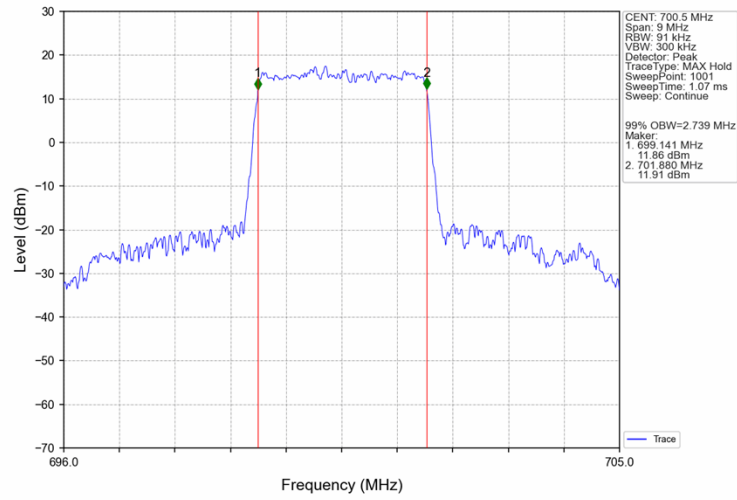
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



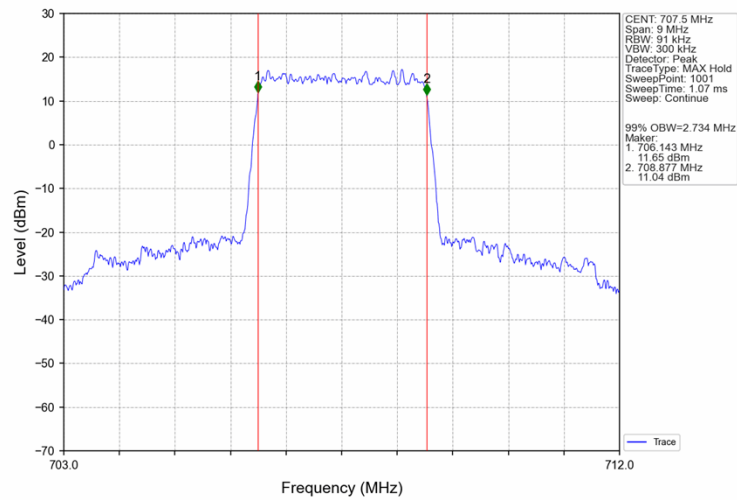
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



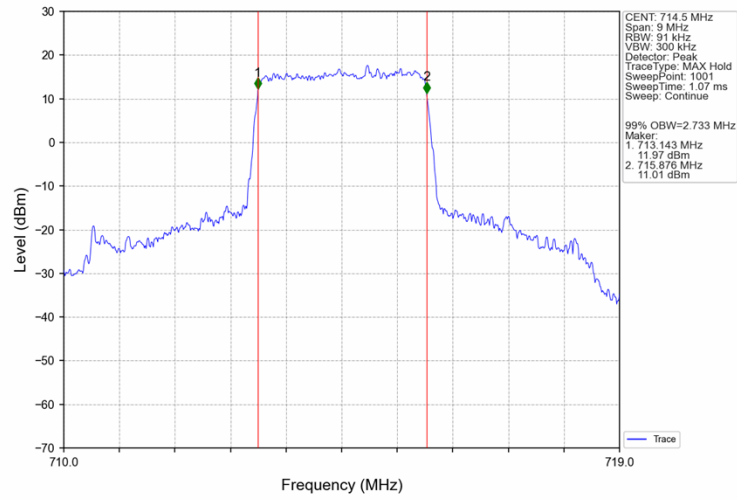
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



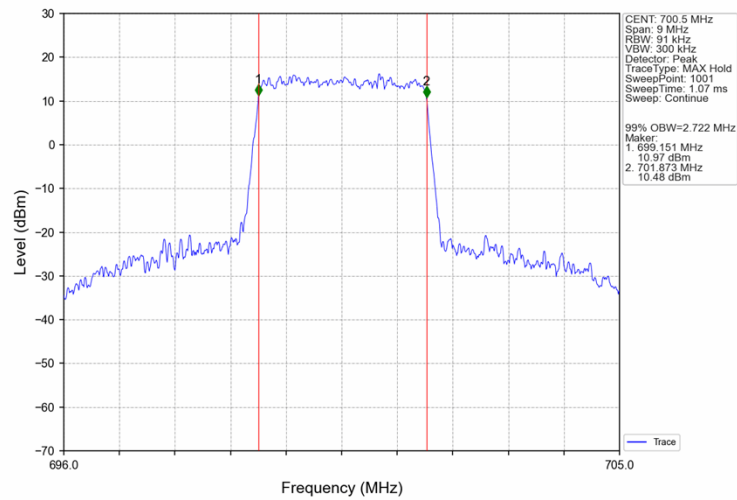
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



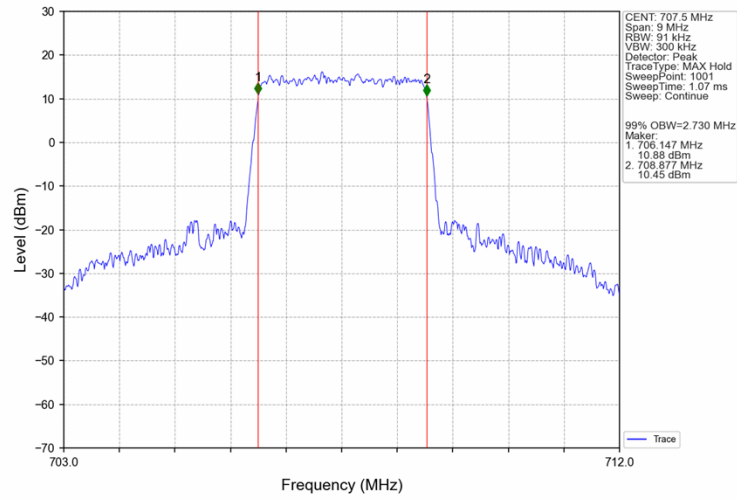
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



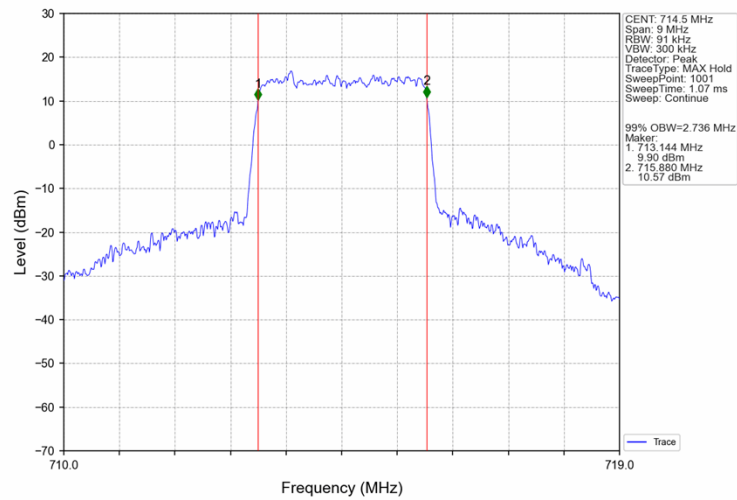
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



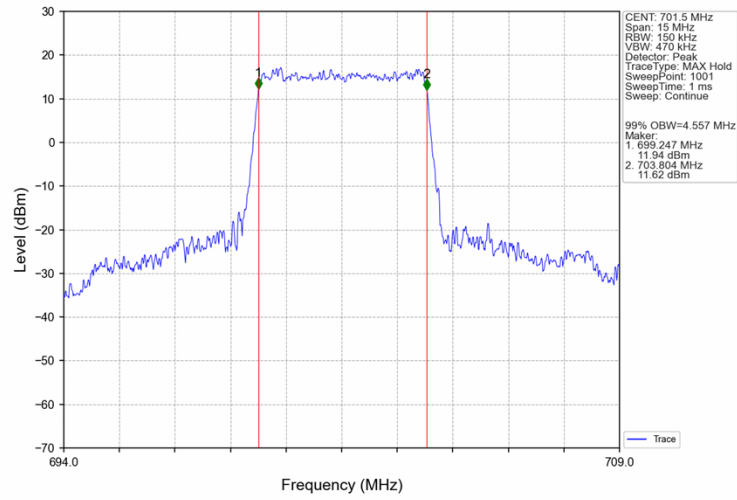
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



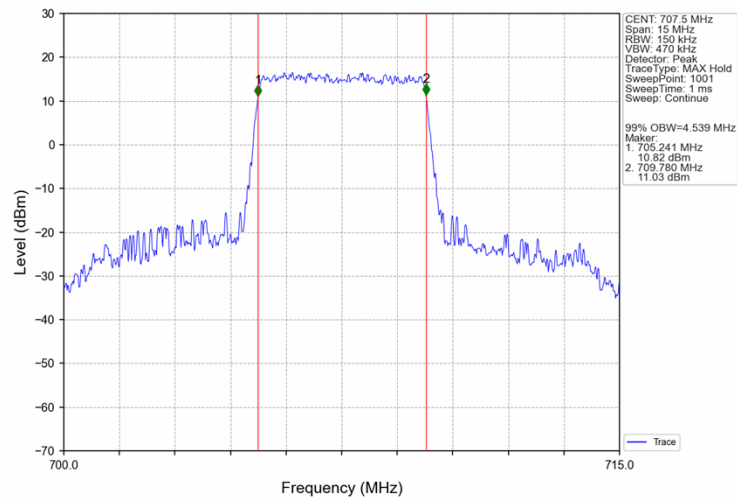
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



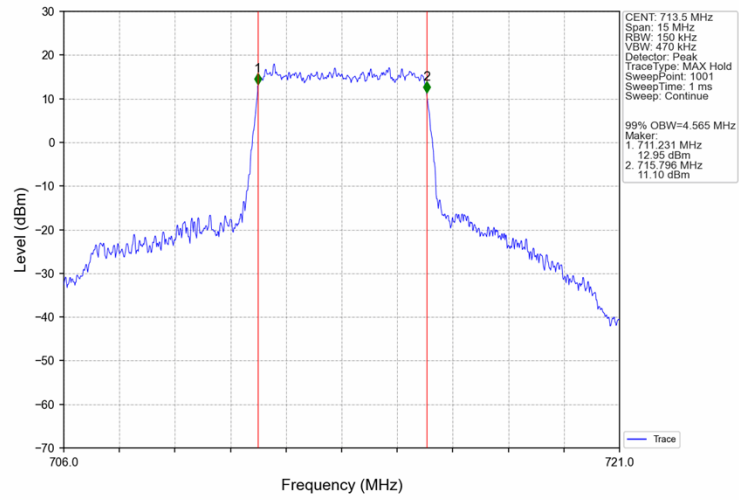
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



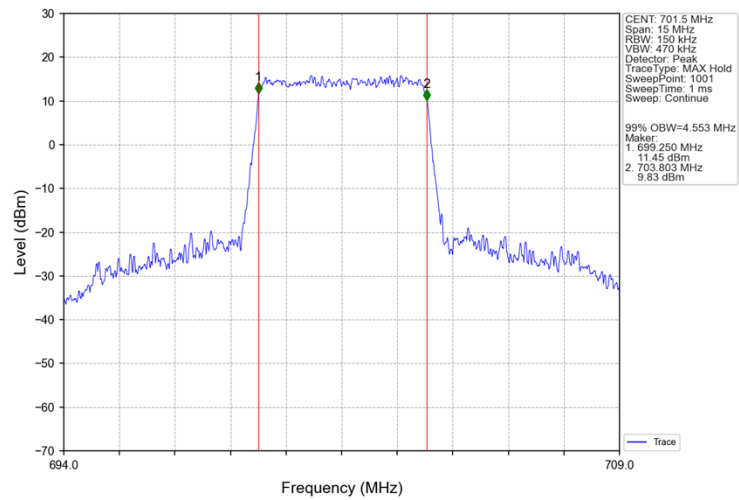
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



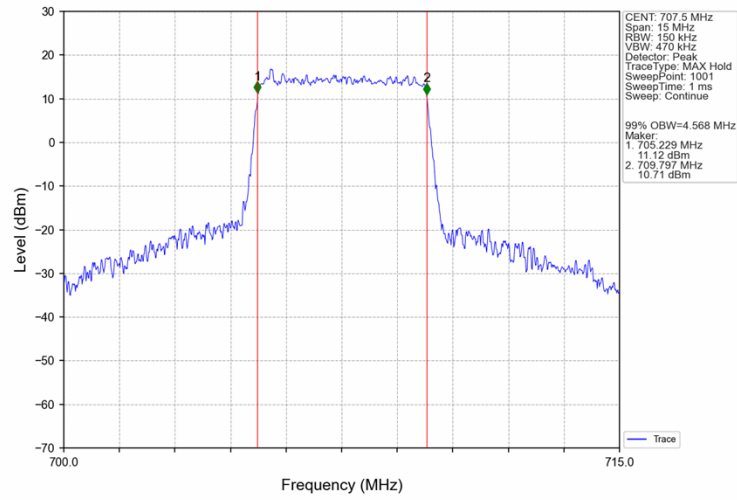
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



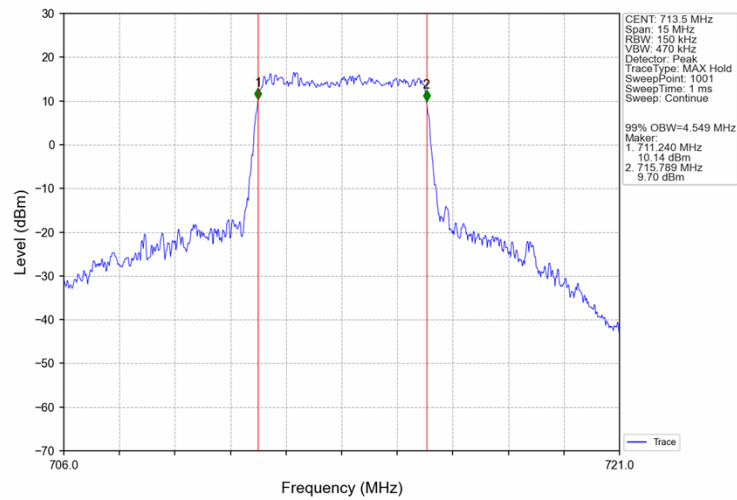
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



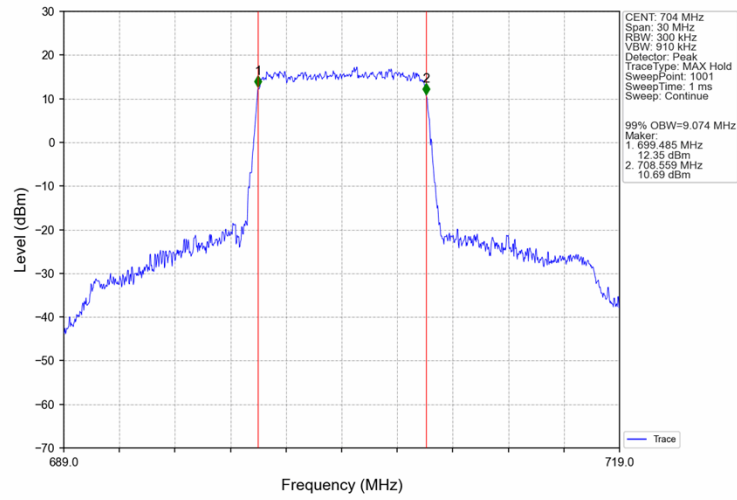
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



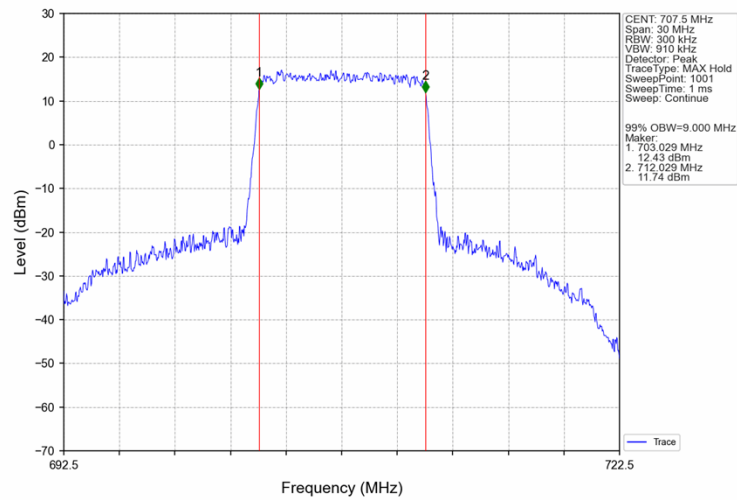
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



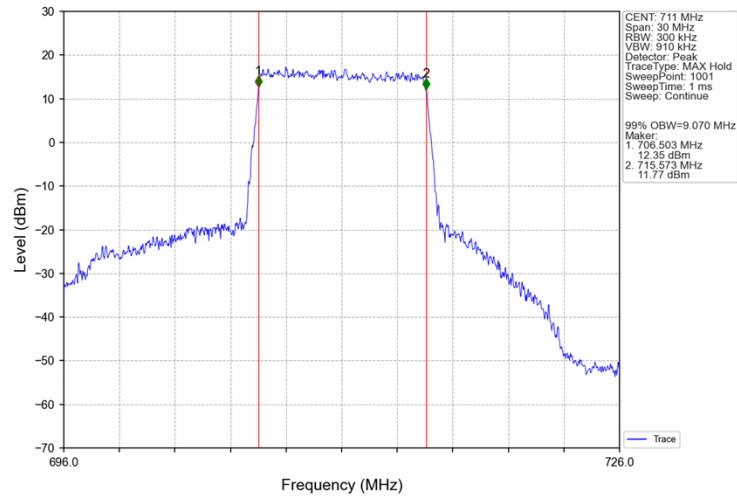
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



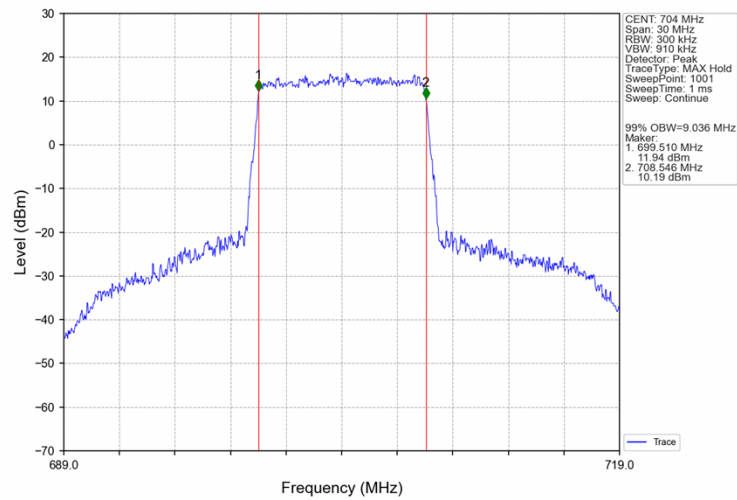
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



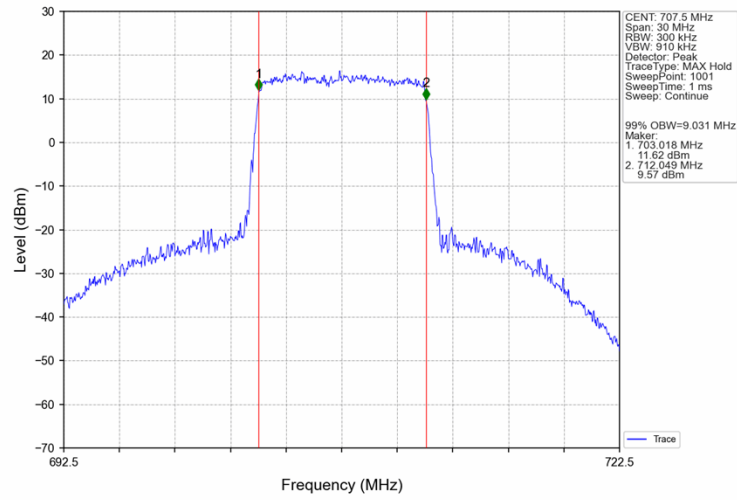
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



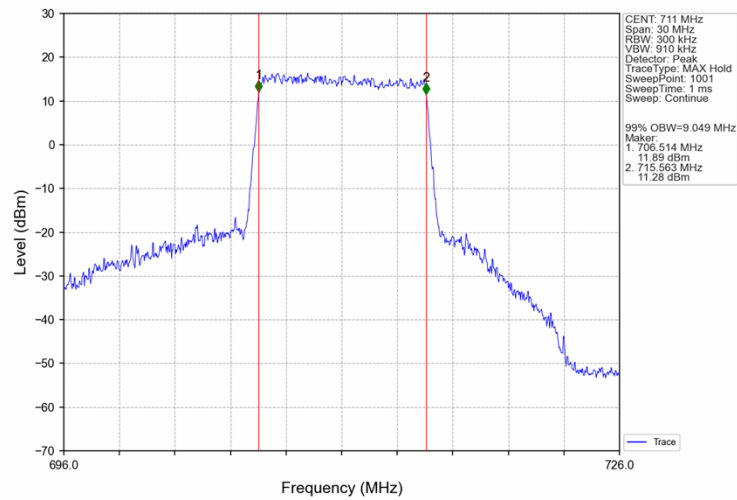
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV

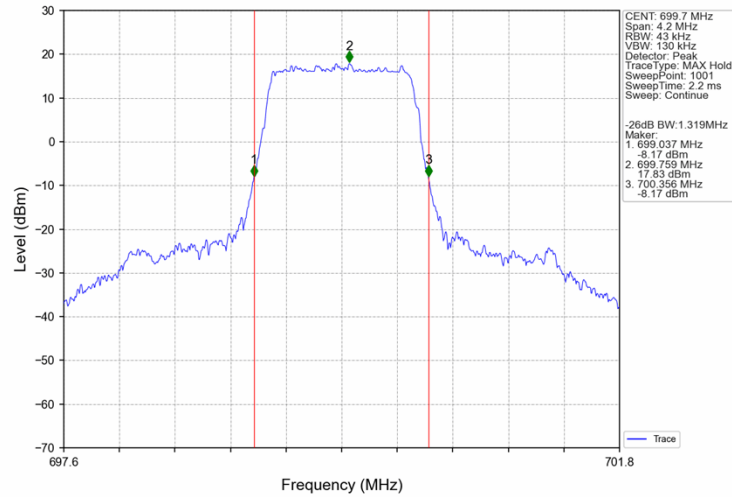


Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

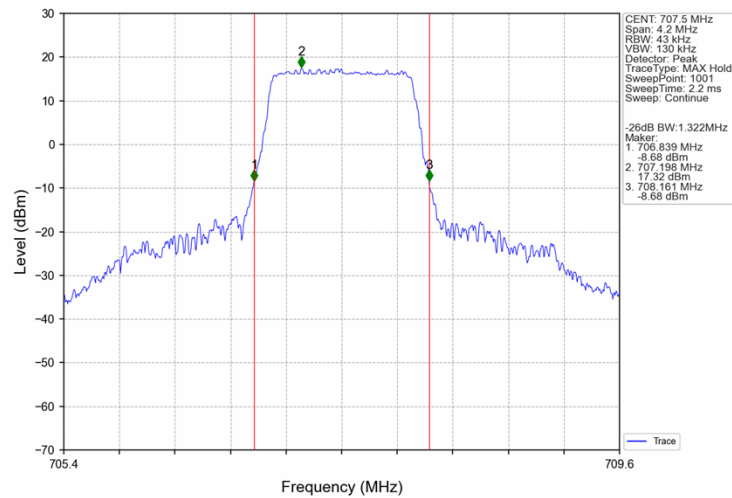


4.2.2 Band12_XDB

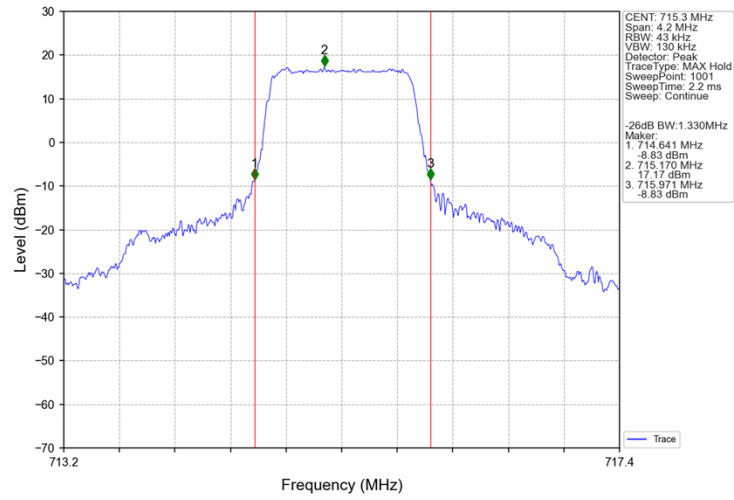
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



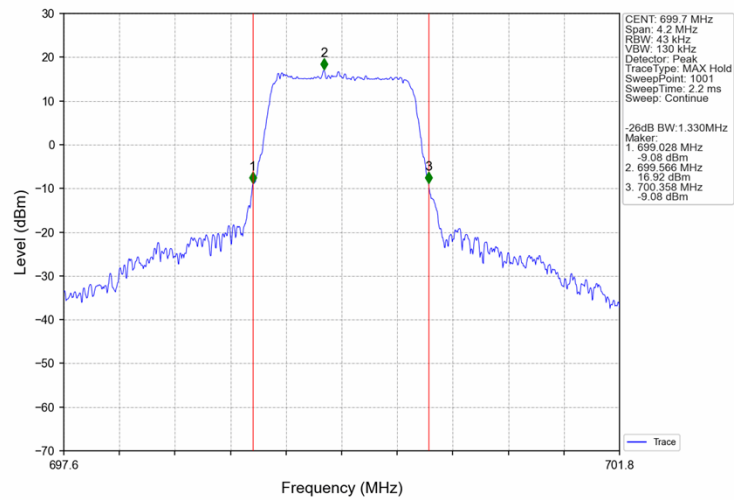
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



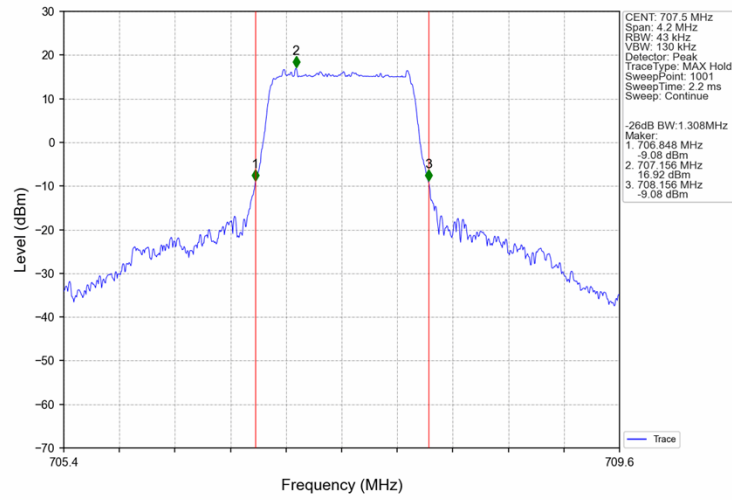
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



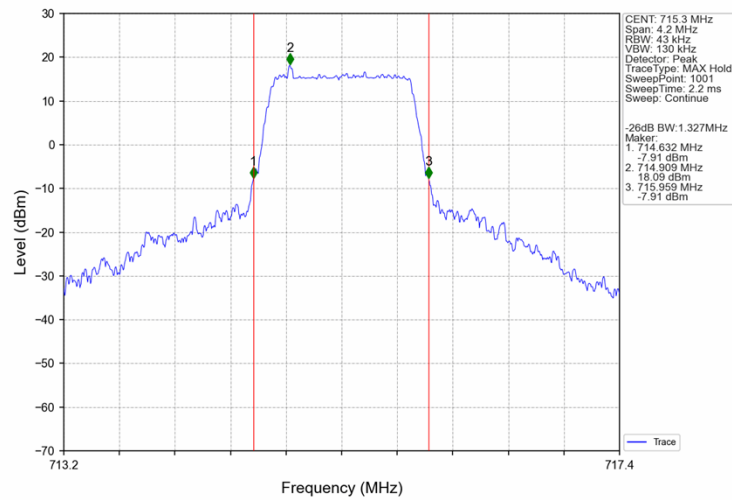
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



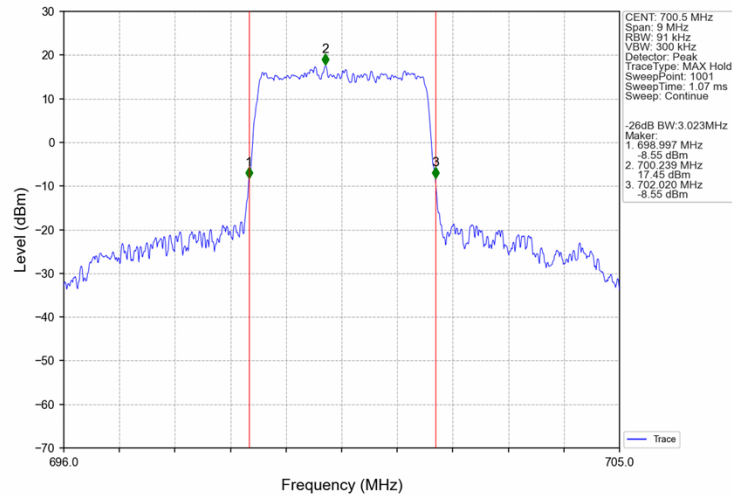
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



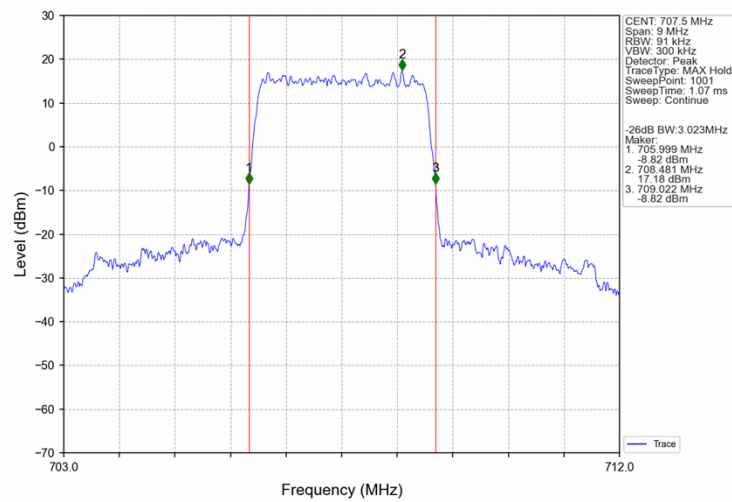
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



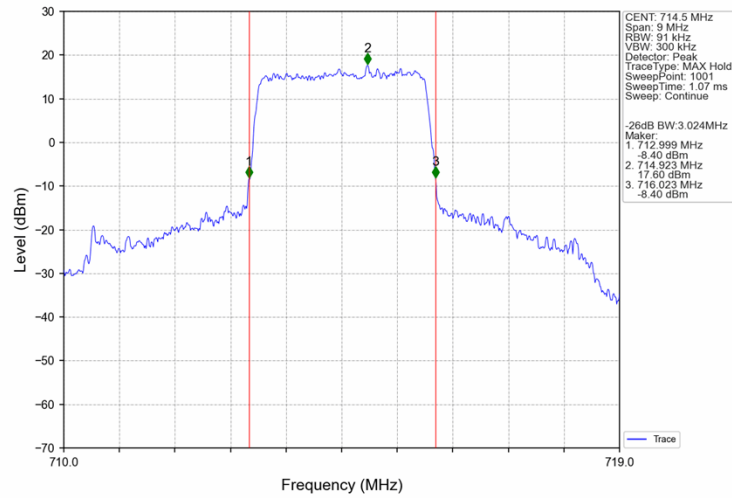
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



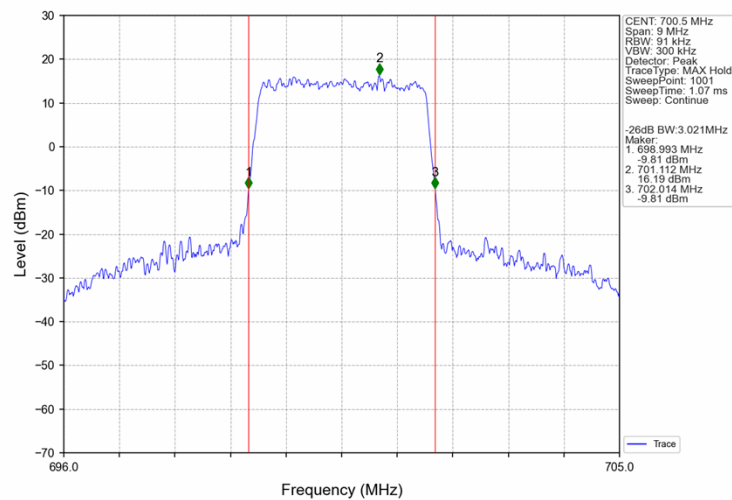
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



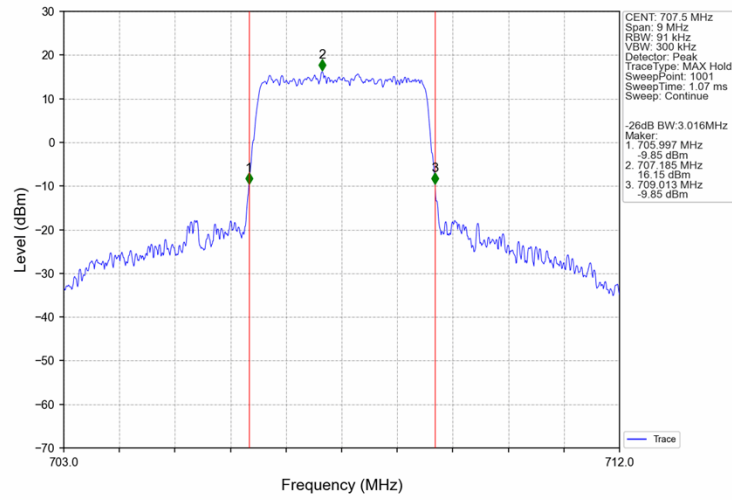
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



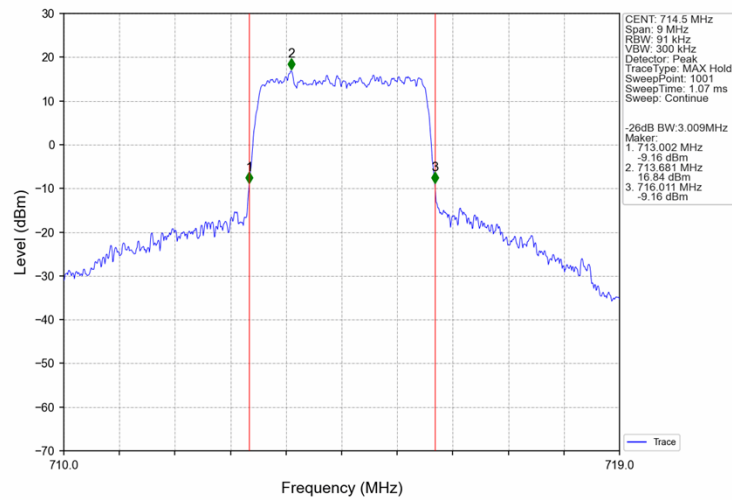
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



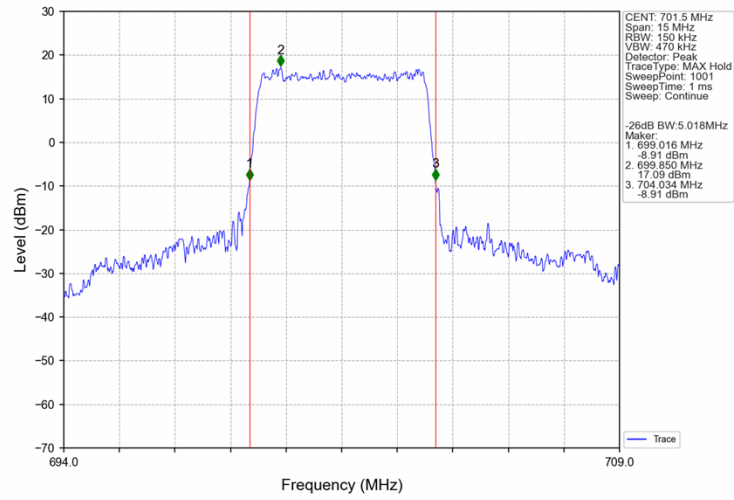
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



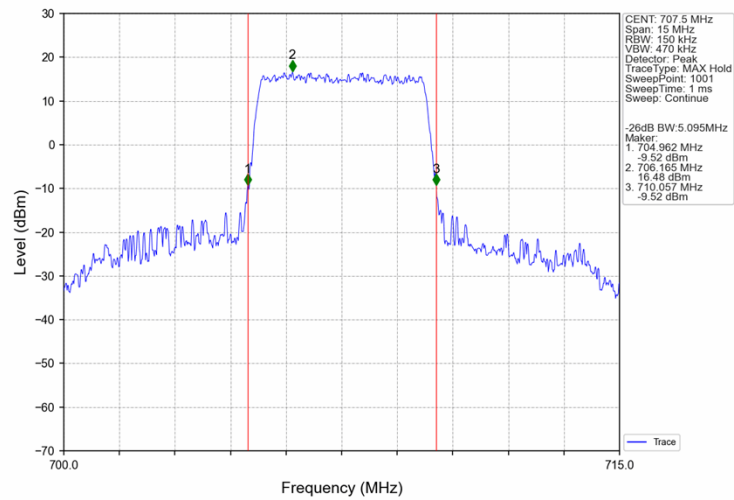
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



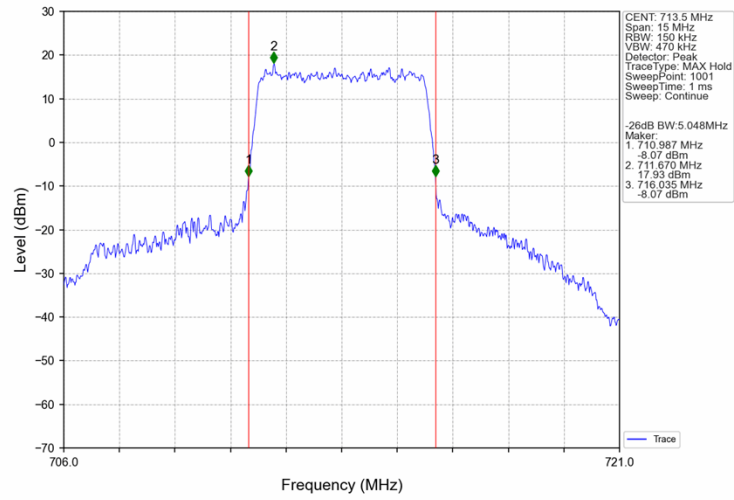
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



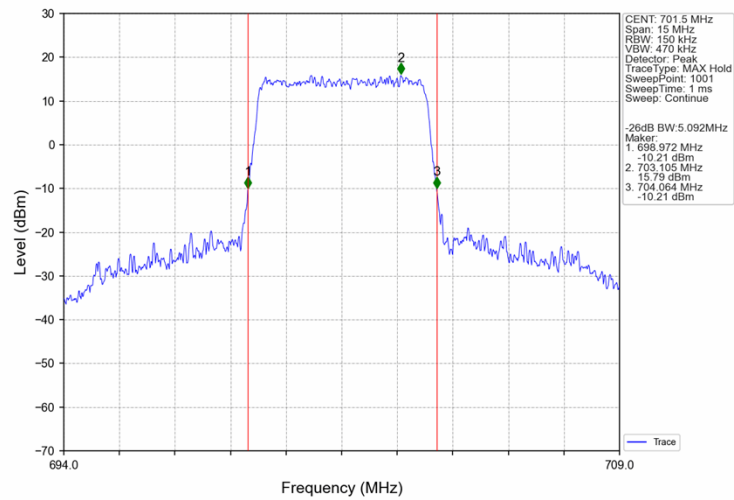
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



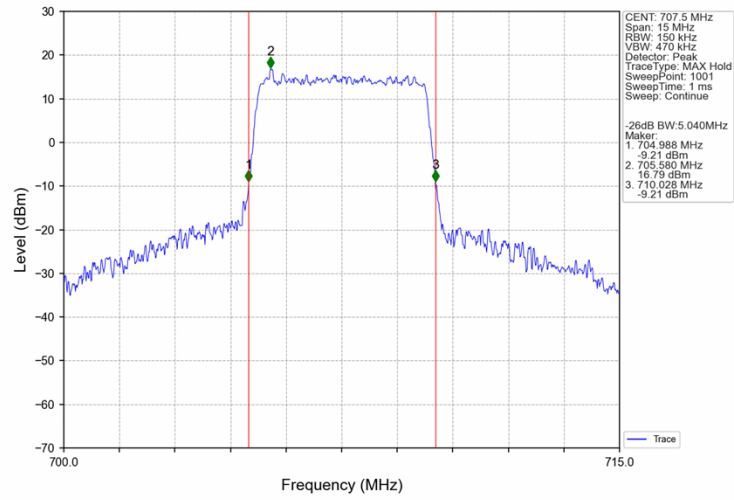
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



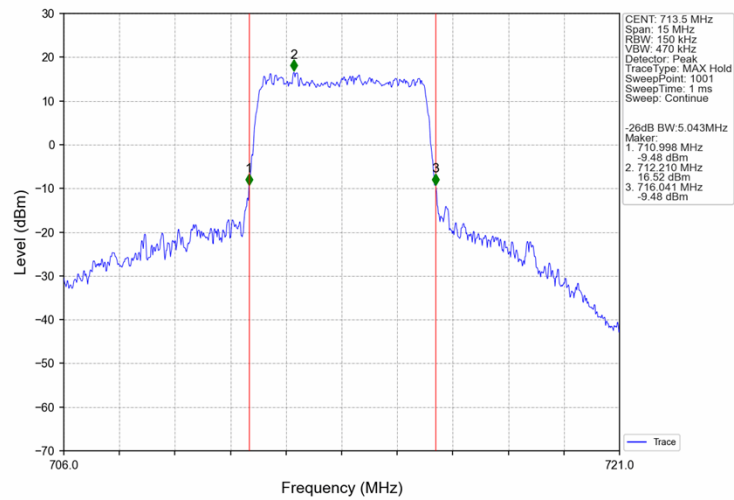
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



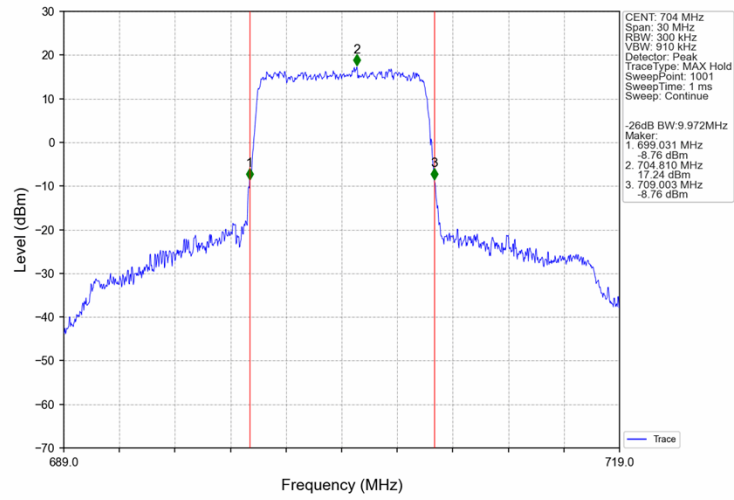
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



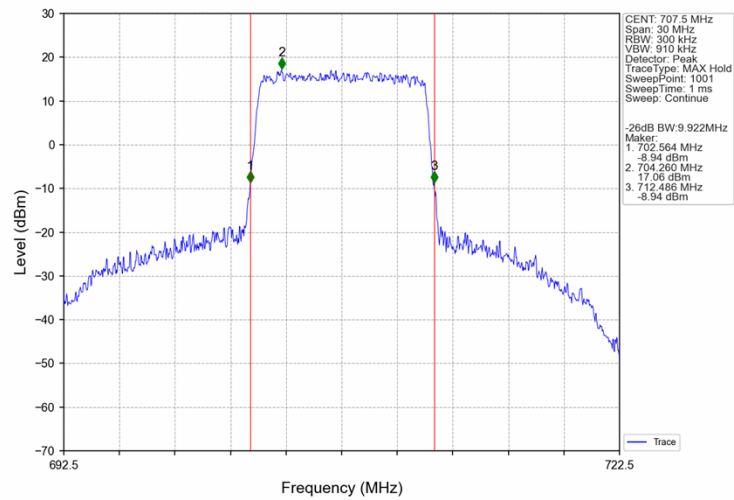
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



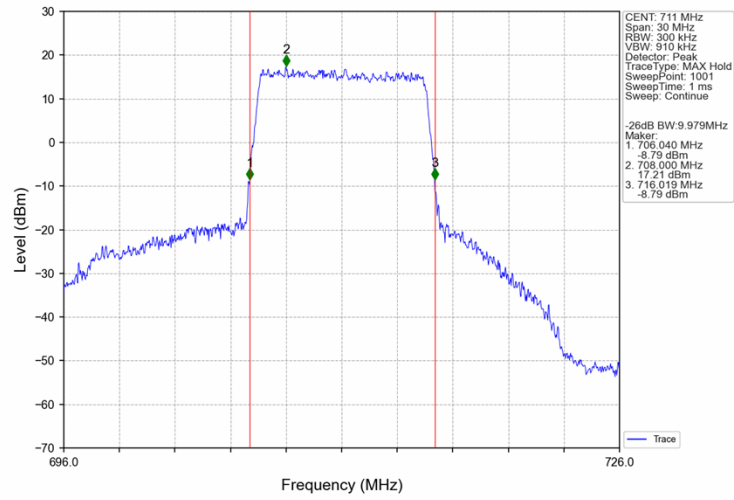
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



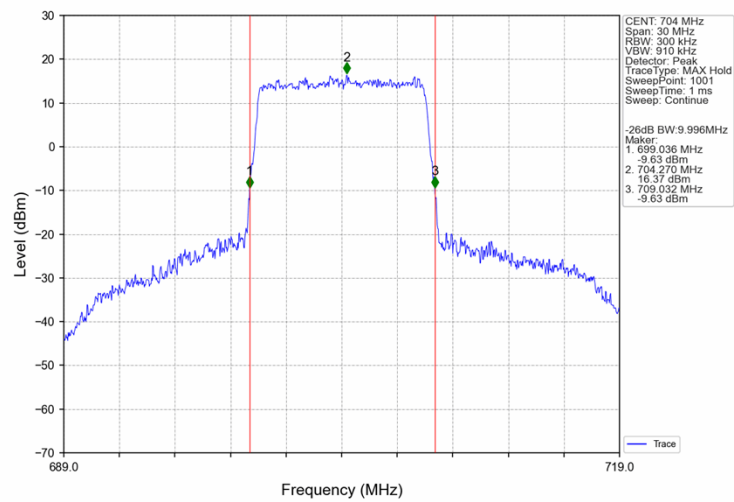
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



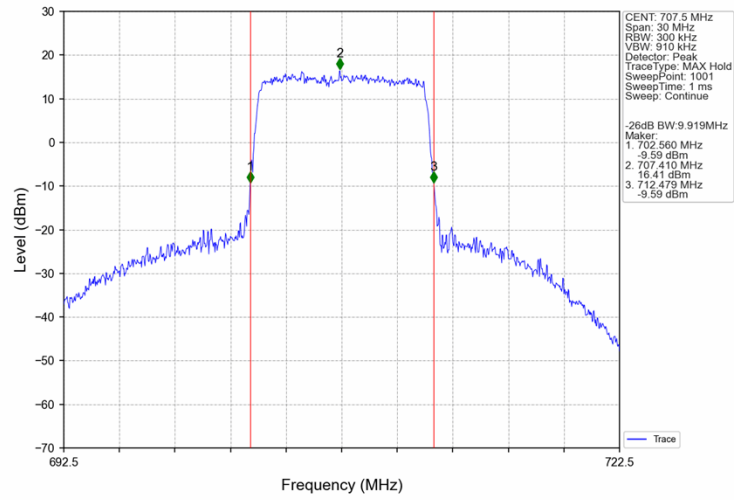
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



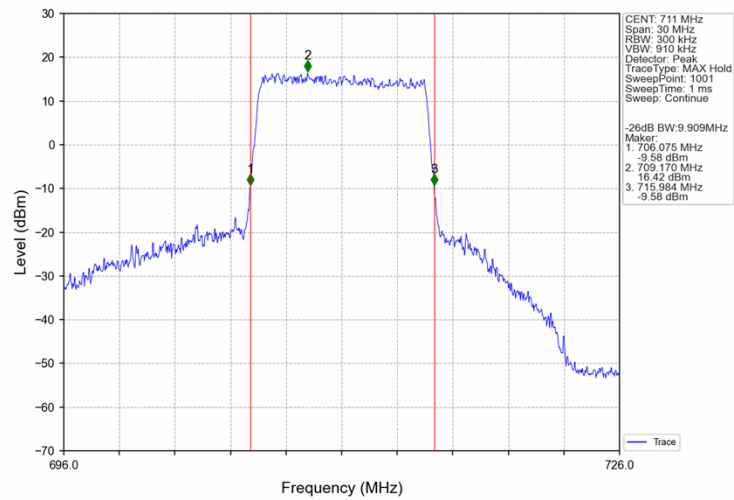
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



5. Peak-Average Ratio

5.1 Test Result

5.1.1 B12_1.4MHz

Band: 12 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	699.7	6	0	5.22	<=13	Pass
	707.5	6	0	4.95	<=13	Pass
	715.3	6	0	4.23	<=13	Pass
16QAM	699.7	6	0	6.04	<=13	Pass
	707.5	6	0	5.83	<=13	Pass
	715.3	6	0	5.01	<=13	Pass

5.1.2 B12_3MHz

Band: 12 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	5.41	<=13	Pass
	707.5	15	0	5.15	<=13	Pass
	714.5	15	0	4.64	<=13	Pass
16QAM	700.5	15	0	6.22	<=13	Pass
	707.5	15	0	6.01	<=13	Pass
	714.5	15	0	5.45	<=13	Pass

5.1.3 B12_5MHz

Band: 12 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	25	0	5.50	<=13	Pass
	707.5	25	0	5.44	<=13	Pass
	713.5	25	0	5.17	<=13	Pass
16QAM	701.5	25	0	6.26	<=13	Pass
	707.5	25	0	6.18	<=13	Pass
	713.5	25	0	5.86	<=13	Pass

5.1.4 B12_10MHz

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	5.28	<=13	Pass
	707.5	50	0	5.28	<=13	Pass
	711	50	0	5.30	<=13	Pass
16QAM	704	50	0	6.09	<=13	Pass
	707.5	50	0	6.10	<=13	Pass
	711	50	0	6.07	<=13	Pass

5.2 Test Graph

5.2.1 B12_1.4MHz

