

1. Effective (Isotropic) Radiated Power Output Data

1.1 B12_1.4MHz_ERP

1.1.1 Test Result

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	27.22	-0.34	24.73	<=38.45	Pass
			2	27.19	-0.34	24.70	<=38.45	Pass
			5	26.97	-0.34	24.48	<=38.45	Pass
		3	0	27.02	-0.34	24.53	<=38.45	Pass
			2	27.01	-0.34	24.52	<=38.45	Pass
			3	26.92	-0.34	24.43	<=38.45	Pass
		6	0	26.97	-0.34	24.48	<=38.45	Pass
	836.5	1	0	27.94	-0.34	25.45	<=38.45	Pass
			2	27.99	-0.34	25.50	<=38.45	Pass
			5	27.77	-0.34	25.28	<=38.45	Pass
		3	0	28.09	-0.34	25.60	<=38.45	Pass
			2	28.07	-0.34	25.58	<=38.45	Pass
			3	27.97	-0.34	25.48	<=38.45	Pass
		6	0	28.07	-0.34	25.58	<=38.45	Pass
	848.3	1	0	26.41	-0.34	23.92	<=38.45	Pass
			2	26.31	-0.34	23.82	<=38.45	Pass
			5	25.86	-0.34	23.37	<=38.45	Pass
		3	0	26.44	-0.34	23.95	<=38.45	Pass
			2	26.29	-0.34	23.80	<=38.45	Pass
			3	26.11	-0.34	23.62	<=38.45	Pass
		6	0	26.32	-0.34	23.83	<=38.45	Pass
16QAM	824.7	1	0	26.69	-0.34	24.20	<=38.45	Pass
			2	26.78	-0.34	24.29	<=38.45	Pass
			5	26.65	-0.34	24.16	<=38.45	Pass
		3	0	26.77	-0.34	24.28	<=38.45	Pass
			2	26.78	-0.34	24.29	<=38.45	Pass
			3	26.71	-0.34	24.22	<=38.45	Pass
		6	0	26.70	-0.34	24.21	<=38.45	Pass
	836.5	1	0	27.90	-0.34	25.41	<=38.45	Pass
			2	27.97	-0.34	25.48	<=38.45	Pass
			5	27.77	-0.34	25.28	<=38.45	Pass
		3	0	27.83	-0.34	25.34	<=38.45	Pass
			2	27.83	-0.34	25.34	<=38.45	Pass
			3	27.75	-0.34	25.26	<=38.45	Pass
		6	0	27.87	-0.34	25.38	<=38.45	Pass
	848.3	1	0	26.17	-0.34	23.68	<=38.45	Pass
			2	26.11	-0.34	23.62	<=38.45	Pass
			5	25.69	-0.34	23.20	<=38.45	Pass
		3	0	26.38	-0.34	23.89	<=38.45	Pass
			2	26.27	-0.34	23.78	<=38.45	Pass
			3	26.13	-0.34	23.64	<=38.45	Pass
		6	0	26.13	-0.34	23.64	<=38.45	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.2 B12_3MHz_ERP

1.2.1 Test Result

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	26.05	-0.34	23.56	<=38.45	Pass
			7	26.71	-0.34	24.22	<=38.45	Pass
			14	26.05	-0.34	23.56	<=38.45	Pass
		8	0	26.55	-0.34	24.06	<=38.45	Pass
			4	26.71	-0.34	24.22	<=38.45	Pass
			7	26.55	-0.34	24.06	<=38.45	Pass
		15	0	26.52	-0.34	24.03	<=38.45	Pass
	836.5	1	0	27.48	-0.34	24.99	<=38.45	Pass
			7	27.94	-0.34	25.45	<=38.45	Pass
			14	26.91	-0.34	24.42	<=38.45	Pass
		8	0	27.91	-0.34	25.42	<=38.45	Pass
			4	27.94	-0.34	25.45	<=38.45	Pass
			7	27.67	-0.34	25.18	<=38.45	Pass
		15	0	27.79	-0.34	25.30	<=38.45	Pass
	847.5	1	0	26.45	-0.34	23.96	<=38.45	Pass
			7	26.66	-0.34	24.17	<=38.45	Pass
			14	25.31	-0.34	22.82	<=38.45	Pass
		8	0	26.79	-0.34	24.30	<=38.45	Pass
			4	26.66	-0.34	24.17	<=38.45	Pass
			7	26.23	-0.34	23.74	<=38.45	Pass
		15	0	26.53	-0.34	24.04	<=38.45	Pass
16QAM	825.5	1	0	26.34	-0.34	23.85	<=38.45	Pass
			7	26.95	-0.34	24.46	<=38.45	Pass
			14	26.30	-0.34	23.81	<=38.45	Pass
		8	0	26.54	-0.34	24.05	<=38.45	Pass
			4	26.70	-0.34	24.21	<=38.45	Pass
			7	26.55	-0.34	24.06	<=38.45	Pass
		15	0	26.46	-0.34	23.97	<=38.45	Pass
	836.5	1	0	27.28	-0.34	24.79	<=38.45	Pass
			7	27.77	-0.34	25.28	<=38.45	Pass
			14	26.87	-0.34	24.38	<=38.45	Pass
		8	0	27.76	-0.34	25.27	<=38.45	Pass
			4	27.81	-0.34	25.32	<=38.45	Pass
			7	27.57	-0.34	25.08	<=38.45	Pass
	15	0	27.67	-0.34	25.18	<=38.45	Pass	
	847.5	1	0	26.39	-0.34	23.90	<=38.45	Pass
			7	26.64	-0.34	24.15	<=38.45	Pass
			14	25.41	-0.34	22.92	<=38.45	Pass
		8	0	26.54	-0.34	24.05	<=38.45	Pass
4			26.46	-0.34	23.97	<=38.45	Pass	
7			26.08	-0.34	23.59	<=38.45	Pass	
15		0	26.32	-0.34	23.83	<=38.45	Pass	
Note1: ERP=Conducted Power+Antenna Gain-2.15								

1.3 B12_5MHz_ERP

1.3.1 Test Result

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	26.89	-0.34	24.40	<=38.45	Pass	
			13	26.94	-0.34	24.45	<=38.45	Pass	
			24	27.02	-0.34	24.53	<=38.45	Pass	
		12	0	26.78	-0.34	24.29	<=38.45	Pass	
			6	26.85	-0.34	24.36	<=38.45	Pass	
			13	26.93	-0.34	24.44	<=38.45	Pass	
		25	0	26.82	-0.34	24.33	<=38.45	Pass	
		836.5	1	0	27.99	-0.34	25.50	<=38.45	Pass
				13	27.94	-0.34	25.45	<=38.45	Pass
	24			27.31	-0.34	24.82	<=38.45	Pass	
	12		0	28.08	-0.34	25.59	<=38.45	Pass	
			6	28.01	-0.34	25.52	<=38.45	Pass	
			13	27.68	-0.34	25.19	<=38.45	Pass	
	25		0	27.90	-0.34	25.41	<=38.45	Pass	
	846.5		1	0	26.96	-0.34	24.47	<=38.45	Pass
				13	26.97	-0.34	24.48	<=38.45	Pass
		24		25.97	-0.34	23.48	<=38.45	Pass	
		12	0	27.10	-0.34	24.61	<=38.45	Pass	
			6	27.06	-0.34	24.57	<=38.45	Pass	
			13	26.62	-0.34	24.13	<=38.45	Pass	
		25	0	26.89	-0.34	24.40	<=38.45	Pass	
16QAM		826.5	1	0	26.63	-0.34	24.14	<=38.45	Pass
				13	26.74	-0.34	24.25	<=38.45	Pass
	24			26.85	-0.34	24.36	<=38.45	Pass	
	12		0	26.59	-0.34	24.10	<=38.45	Pass	
			6	26.66	-0.34	24.17	<=38.45	Pass	
			13	26.72	-0.34	24.23	<=38.45	Pass	
	25		0	26.69	-0.34	24.20	<=38.45	Pass	
	836.5		1	0	27.95	-0.34	25.46	<=38.45	Pass
				13	27.97	-0.34	25.48	<=38.45	Pass
		24		27.42	-0.34	24.93	<=38.45	Pass	
		12	0	27.88	-0.34	25.39	<=38.45	Pass	
			6	27.85	-0.34	25.36	<=38.45	Pass	
			13	27.58	-0.34	25.09	<=38.45	Pass	
		25	0	27.74	-0.34	25.25	<=38.45	Pass	
		846.5	1	0	26.61	-0.34	24.12	<=38.45	Pass
				13	26.64	-0.34	24.15	<=38.45	Pass
	24			25.70	-0.34	23.21	<=38.45	Pass	
	12		0	26.88	-0.34	24.39	<=38.45	Pass	
			6	26.83	-0.34	24.34	<=38.45	Pass	
			13	26.44	-0.34	23.95	<=38.45	Pass	
	25		0	26.74	-0.34	24.25	<=38.45	Pass	
Note1: ERP=Conducted Power+Antenna Gain-2.15									

1.4 B12_10MHz_ERP

1.4.1 Test Result

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	26.67	-0.34	24.18	<=38.45	Pass
			25	27.18	-0.34	24.69	<=38.45	Pass
			49	27.84	-0.34	25.35	<=38.45	Pass
		25	0	26.89	-0.34	24.40	<=38.45	Pass
			13	27.24	-0.34	24.75	<=38.45	Pass
			25	27.61	-0.34	25.12	<=38.45	Pass

		50	0	27.28	-0.34	24.79	<=38.45	Pass	
	836.5	1	0	27.60	-0.34	25.11	<=38.45	Pass	
			25	27.96	-0.34	25.47	<=38.45	Pass	
			49	26.66	-0.34	24.17	<=38.45	Pass	
			0	28.02	-0.34	25.53	<=38.45	Pass	
		25	13	27.95	-0.34	25.46	<=38.45	Pass	
			25	27.41	-0.34	24.92	<=38.45	Pass	
			50	0	27.78	-0.34	25.29	<=38.45	Pass
	844	1	0	26.99	-0.34	24.50	<=38.45	Pass	
			25	27.07	-0.34	24.58	<=38.45	Pass	
			49	26.06	-0.34	23.57	<=38.45	Pass	
		25	0	26.91	-0.34	24.42	<=38.45	Pass	
			13	27.05	-0.34	24.56	<=38.45	Pass	
			25	26.94	-0.34	24.45	<=38.45	Pass	
		50	0	26.96	-0.34	24.47	<=38.45	Pass	
	16QAM	829	1	0	26.57	-0.34	24.08	<=38.45	Pass
25				27.06	-0.34	24.57	<=38.45	Pass	
49				27.71	-0.34	25.22	<=38.45	Pass	
25			0	26.73	-0.34	24.24	<=38.45	Pass	
			13	27.04	-0.34	24.55	<=38.45	Pass	
			25	27.38	-0.34	24.89	<=38.45	Pass	
50			0	27.07	-0.34	24.58	<=38.45	Pass	
836.5		1	0	27.67	-0.34	25.18	<=38.45	Pass	
			25	28.13	-0.34	25.64	<=38.45	Pass	
			49	26.99	-0.34	24.50	<=38.45	Pass	
		25	0	27.82	-0.34	25.33	<=38.45	Pass	
			13	27.81	-0.34	25.32	<=38.45	Pass	
			25	27.35	-0.34	24.86	<=38.45	Pass	
		50	0	27.60	-0.34	25.11	<=38.45	Pass	
844		1	0	26.84	-0.34	24.35	<=38.45	Pass	
			25	26.83	-0.34	24.34	<=38.45	Pass	
			49	25.90	-0.34	23.41	<=38.45	Pass	
		25	0	26.85	-0.34	24.36	<=38.45	Pass	
			13	26.92	-0.34	24.43	<=38.45	Pass	
			25	26.79	-0.34	24.30	<=38.45	Pass	
		50	0	26.80	-0.34	24.31	<=38.45	Pass	
Note1: ERP=Conducted Power+Antenna Gain-2.15									

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 B12_1.4MHz

2.1.1 Test Result

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	-4.706	-0.0067	-2.5 to 2.5	Pass
					3.85	0.157	0.0002	-2.5 to 2.5	Pass
					4.43	-5.536	-0.0079	-2.5 to 2.5	Pass
				-30	3.85	-7.095	-0.0101	-2.5 to 2.5	Pass
				-20	3.85	4.592	0.0066	-2.5 to 2.5	Pass
				-10	3.85	-2.317	-0.0033	-2.5 to 2.5	Pass
				0	3.85	3.991	0.0057	-2.5 to 2.5	Pass
				10	3.85	-1.531	-0.0022	-2.5 to 2.5	Pass
				30	3.85	-6.795	-0.0097	-2.5 to 2.5	Pass

	707.5	6	0	40	3.85	-5.164	-0.0074	-2.5 to 2.5	Pass
				50	3.85	6.437	0.0092	-2.5 to 2.5	Pass
				20	3.27	-2.689	-0.0038	-2.5 to 2.5	Pass
					3.85	-5.736	-0.0081	-2.5 to 2.5	Pass
					4.43	-6.938	-0.0098	-2.5 to 2.5	Pass
				-30	3.85	-1.674	-0.0024	-2.5 to 2.5	Pass
				-20	3.85	1.860	0.0026	-2.5 to 2.5	Pass
				-10	3.85	-9.341	-0.0132	-2.5 to 2.5	Pass
				0	3.85	-6.595	-0.0093	-2.5 to 2.5	Pass
				10	3.85	-6.709	-0.0095	-2.5 to 2.5	Pass
				30	3.85	-2.403	-0.0034	-2.5 to 2.5	Pass
				40	3.85	3.934	0.0056	-2.5 to 2.5	Pass
				50	3.85	-4.077	-0.0058	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	-0.987	-0.0014	-2.5 to 2.5	Pass
					3.85	4.463	0.0062	-2.5 to 2.5	Pass
					4.43	4.206	0.0059	-2.5 to 2.5	Pass
				-30	3.85	-2.031	-0.0028	-2.5 to 2.5	Pass
				-20	3.85	-7.367	-0.0103	-2.5 to 2.5	Pass
				-10	3.85	-7.210	-0.0101	-2.5 to 2.5	Pass
				0	3.85	4.692	0.0066	-2.5 to 2.5	Pass
				10	3.85	-0.615	-0.0009	-2.5 to 2.5	Pass
				30	3.85	-9.813	-0.0137	-2.5 to 2.5	Pass
				40	3.85	-4.606	-0.0064	-2.5 to 2.5	Pass
				50	3.85	-8.140	-0.0114	-2.5 to 2.5	Pass
16QAM	699.7	6	0	20	3.27	-8.969	-0.0128	-2.5 to 2.5	Pass
					3.85	-2.232	-0.0032	-2.5 to 2.5	Pass
					4.43	-0.200	-0.0003	-2.5 to 2.5	Pass
				-30	3.85	-7.181	-0.0103	-2.5 to 2.5	Pass
				-20	3.85	4.148	0.0059	-2.5 to 2.5	Pass
				-10	3.85	-3.519	-0.0050	-2.5 to 2.5	Pass
				0	3.85	-4.177	-0.0060	-2.5 to 2.5	Pass
				10	3.85	4.020	0.0057	-2.5 to 2.5	Pass
				30	3.85	-4.549	-0.0065	-2.5 to 2.5	Pass
				40	3.85	3.877	0.0055	-2.5 to 2.5	Pass
				50	3.85	-6.709	-0.0096	-2.5 to 2.5	Pass
	707.5	6	0	20	3.27	-10.042	-0.0142	-2.5 to 2.5	Pass
					3.85	1.559	0.0022	-2.5 to 2.5	Pass
					4.43	2.503	0.0035	-2.5 to 2.5	Pass
				-30	3.85	-9.856	-0.0139	-2.5 to 2.5	Pass
				-20	3.85	2.117	0.0030	-2.5 to 2.5	Pass
				-10	3.85	-0.243	-0.0003	-2.5 to 2.5	Pass
				0	3.85	-2.732	-0.0039	-2.5 to 2.5	Pass
				10	3.85	-8.712	-0.0123	-2.5 to 2.5	Pass
				30	3.85	-3.161	-0.0045	-2.5 to 2.5	Pass
				40	3.85	-10.042	-0.0142	-2.5 to 2.5	Pass
				50	3.85	-1.059	-0.0015	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	-8.411	-0.0118	-2.5 to 2.5	Pass
					3.85	-8.926	-0.0125	-2.5 to 2.5	Pass
					4.43	-0.815	-0.0011	-2.5 to 2.5	Pass
				-30	3.85	1.545	0.0022	-2.5 to 2.5	Pass
				-20	3.85	-2.418	-0.0034	-2.5 to 2.5	Pass
				-10	3.85	-4.334	-0.0061	-2.5 to 2.5	Pass
				0	3.85	-2.675	-0.0037	-2.5 to 2.5	Pass
				10	3.85	-5.350	-0.0075	-2.5 to 2.5	Pass
				30	3.85	4.649	0.0065	-2.5 to 2.5	Pass
				40	3.85	3.176	0.0044	-2.5 to 2.5	Pass
				50	3.85	1.059	0.0015	-2.5 to 2.5	Pass

2.2 B12_3MHz

2.2.1 Test Result

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	-1.745	-0.0025	-2.5 to 2.5	Pass
					3.85	-6.480	-0.0093	-2.5 to 2.5	Pass
					4.43	-0.329	-0.0005	-2.5 to 2.5	Pass
				-30	3.85	4.177	0.0060	-2.5 to 2.5	Pass
				-20	3.85	-2.360	-0.0034	-2.5 to 2.5	Pass
				-10	3.85	1.173	0.0017	-2.5 to 2.5	Pass
				0	3.85	3.605	0.0051	-2.5 to 2.5	Pass
				10	3.85	-0.486	-0.0007	-2.5 to 2.5	Pass
				30	3.85	-5.322	-0.0076	-2.5 to 2.5	Pass
				40	3.85	1.044	0.0015	-2.5 to 2.5	Pass
				50	3.85	4.764	0.0068	-2.5 to 2.5	Pass
	707.5	15	0	20	3.27	-4.134	-0.0058	-2.5 to 2.5	Pass
					3.85	-1.316	-0.0019	-2.5 to 2.5	Pass
					4.43	-2.918	-0.0041	-2.5 to 2.5	Pass
				-30	3.85	2.346	0.0033	-2.5 to 2.5	Pass
				-20	3.85	-8.211	-0.0116	-2.5 to 2.5	Pass
				-10	3.85	-10.142	-0.0143	-2.5 to 2.5	Pass
				0	3.85	-5.093	-0.0072	-2.5 to 2.5	Pass
				10	3.85	-0.687	-0.0010	-2.5 to 2.5	Pass
				30	3.85	-0.215	-0.0003	-2.5 to 2.5	Pass
				40	3.85	-5.579	-0.0079	-2.5 to 2.5	Pass
				50	3.85	-11.702	-0.0165	-2.5 to 2.5	Pass
	714.5	15	0	20	3.27	-3.133	-0.0044	-2.5 to 2.5	Pass
					3.85	-4.549	-0.0064	-2.5 to 2.5	Pass
					4.43	3.076	0.0043	-2.5 to 2.5	Pass
				-30	3.85	-9.141	-0.0128	-2.5 to 2.5	Pass
				-20	3.85	1.402	0.0020	-2.5 to 2.5	Pass
				-10	3.85	-2.317	-0.0032	-2.5 to 2.5	Pass
				0	3.85	-4.778	-0.0067	-2.5 to 2.5	Pass
				10	3.85	1.202	0.0017	-2.5 to 2.5	Pass
				30	3.85	5.107	0.0071	-2.5 to 2.5	Pass
				40	3.85	-9.642	-0.0135	-2.5 to 2.5	Pass
16QAM	700.5	15	0	20	3.27	-10.543	-0.0151	-2.5 to 2.5	Pass
					3.85	-0.944	-0.0013	-2.5 to 2.5	Pass
					4.43	-8.712	-0.0124	-2.5 to 2.5	Pass
				-30	3.85	-0.072	-0.0001	-2.5 to 2.5	Pass
				-20	3.85	-7.396	-0.0106	-2.5 to 2.5	Pass
				-10	3.85	-2.418	-0.0035	-2.5 to 2.5	Pass
				0	3.85	1.144	0.0016	-2.5 to 2.5	Pass
				10	3.85	1.774	0.0025	-2.5 to 2.5	Pass
				30	3.85	-3.676	-0.0052	-2.5 to 2.5	Pass
				40	3.85	-5.093	-0.0073	-2.5 to 2.5	Pass
				50	3.85	-1.502	-0.0021	-2.5 to 2.5	Pass
	707.5	15	0	20	3.27	-5.951	-0.0084	-2.5 to 2.5	Pass
					3.85	-2.418	-0.0034	-2.5 to 2.5	Pass
					4.43	1.030	0.0015	-2.5 to 2.5	Pass
				-30	3.85	-6.924	-0.0098	-2.5 to 2.5	Pass
				-20	3.85	-3.419	-0.0048	-2.5 to 2.5	Pass
				-10	3.85	-6.552	-0.0093	-2.5 to 2.5	Pass
				0	3.85	2.689	0.0038	-2.5 to 2.5	Pass

				10	3.85	-10.343	-0.0146	-2.5 to 2.5	Pass
				30	3.85	-1.459	-0.0021	-2.5 to 2.5	Pass
				40	3.85	-7.339	-0.0104	-2.5 to 2.5	Pass
				50	3.85	2.847	0.0040	-2.5 to 2.5	Pass
	714.5	15	0	20	3.27	-3.047	-0.0043	-2.5 to 2.5	Pass
					3.85	5.035	0.0070	-2.5 to 2.5	Pass
					4.43	3.276	0.0046	-2.5 to 2.5	Pass
				-30	3.85	3.104	0.0043	-2.5 to 2.5	Pass
				-20	3.85	-5.636	-0.0079	-2.5 to 2.5	Pass
				-10	3.85	-8.454	-0.0118	-2.5 to 2.5	Pass
				0	3.85	-0.043	-0.0001	-2.5 to 2.5	Pass
				10	3.85	2.275	0.0032	-2.5 to 2.5	Pass
				30	3.85	-5.407	-0.0076	-2.5 to 2.5	Pass
				40	3.85	-7.668	-0.0107	-2.5 to 2.5	Pass
				50	3.85	0.515	0.0007	-2.5 to 2.5	Pass

2.3 B12_5MHz

2.3.1 Test Result

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	1.559	0.0022	-2.5 to 2.5	Pass
					3.85	-2.618	-0.0037	-2.5 to 2.5	Pass
					4.43	-1.116	-0.0016	-2.5 to 2.5	Pass
				-30	3.85	-0.930	-0.0013	-2.5 to 2.5	Pass
				-20	3.85	-1.030	-0.0015	-2.5 to 2.5	Pass
				-10	3.85	1.016	0.0014	-2.5 to 2.5	Pass
				0	3.85	-0.486	-0.0007	-2.5 to 2.5	Pass
				10	3.85	-5.393	-0.0077	-2.5 to 2.5	Pass
				30	3.85	-1.717	-0.0024	-2.5 to 2.5	Pass
				40	3.85	-4.735	-0.0067	-2.5 to 2.5	Pass
				50	3.85	-0.730	-0.0010	-2.5 to 2.5	Pass
	707.5	25	0	20	3.27	-2.575	-0.0036	-2.5 to 2.5	Pass
					3.85	-3.490	-0.0049	-2.5 to 2.5	Pass
					4.43	-2.403	-0.0034	-2.5 to 2.5	Pass
				-30	3.85	-8.597	-0.0122	-2.5 to 2.5	Pass
				-20	3.85	-8.211	-0.0116	-2.5 to 2.5	Pass
				-10	3.85	-4.463	-0.0063	-2.5 to 2.5	Pass
				0	3.85	-1.187	-0.0017	-2.5 to 2.5	Pass
				10	3.85	-0.944	-0.0013	-2.5 to 2.5	Pass
				30	3.85	-4.392	-0.0062	-2.5 to 2.5	Pass
				40	3.85	2.532	0.0036	-2.5 to 2.5	Pass
				50	3.85	-2.432	-0.0034	-2.5 to 2.5	Pass
	713.5	25	0	20	3.27	-2.360	-0.0033	-2.5 to 2.5	Pass
					3.85	-0.458	-0.0006	-2.5 to 2.5	Pass
					4.43	-5.093	-0.0071	-2.5 to 2.5	Pass
				-30	3.85	-7.339	-0.0103	-2.5 to 2.5	Pass
				-20	3.85	1.717	0.0024	-2.5 to 2.5	Pass
				-10	3.85	-2.046	-0.0029	-2.5 to 2.5	Pass
				0	3.85	-1.144	-0.0016	-2.5 to 2.5	Pass
				10	3.85	1.860	0.0026	-2.5 to 2.5	Pass
				30	3.85	-4.492	-0.0063	-2.5 to 2.5	Pass
				40	3.85	-3.362	-0.0047	-2.5 to 2.5	Pass
				50	3.85	-2.761	-0.0039	-2.5 to 2.5	Pass
16QAM	701.5	25	0	20	3.27	-1.631	-0.0023	-2.5 to 2.5	Pass

					3.85	-3.090	-0.0044	-2.5 to 2.5	Pass
					4.43	-4.520	-0.0064	-2.5 to 2.5	Pass
				-30	3.85	0.529	0.0008	-2.5 to 2.5	Pass
				-20	3.85	1.445	0.0021	-2.5 to 2.5	Pass
				-10	3.85	-1.760	-0.0025	-2.5 to 2.5	Pass
				0	3.85	-4.778	-0.0068	-2.5 to 2.5	Pass
				10	3.85	0.057	0.0001	-2.5 to 2.5	Pass
				30	3.85	3.233	0.0046	-2.5 to 2.5	Pass
				40	3.85	-6.137	-0.0087	-2.5 to 2.5	Pass
				50	3.85	0.787	0.0011	-2.5 to 2.5	Pass
	707.5	25	0	20	3.27	-3.676	-0.0052	-2.5 to 2.5	Pass
					3.85	-5.322	-0.0075	-2.5 to 2.5	Pass
					4.43	-3.405	-0.0048	-2.5 to 2.5	Pass
				-30	3.85	-5.493	-0.0078	-2.5 to 2.5	Pass
				-20	3.85	-4.077	-0.0058	-2.5 to 2.5	Pass
				-10	3.85	-7.482	-0.0106	-2.5 to 2.5	Pass
				0	3.85	-3.934	-0.0056	-2.5 to 2.5	Pass
				10	3.85	1.559	0.0022	-2.5 to 2.5	Pass
				30	3.85	-7.882	-0.0111	-2.5 to 2.5	Pass
				40	3.85	-6.166	-0.0087	-2.5 to 2.5	Pass
	50	3.85	-1.173	-0.0017	-2.5 to 2.5	Pass			
	713.5	25	0	20	3.27	-2.046	-0.0029	-2.5 to 2.5	Pass
					3.85	-3.147	-0.0044	-2.5 to 2.5	Pass
					4.43	-2.332	-0.0033	-2.5 to 2.5	Pass
				-30	3.85	0.157	0.0002	-2.5 to 2.5	Pass
				-20	3.85	-1.760	-0.0025	-2.5 to 2.5	Pass
				-10	3.85	-2.246	-0.0031	-2.5 to 2.5	Pass
				0	3.85	2.217	0.0031	-2.5 to 2.5	Pass
				10	3.85	-2.761	-0.0039	-2.5 to 2.5	Pass
				30	3.85	-1.516	-0.0021	-2.5 to 2.5	Pass
				40	3.85	-1.960	-0.0027	-2.5 to 2.5	Pass
	50	3.85	-3.104	-0.0044	-2.5 to 2.5	Pass			

2.4 B12_10MHz

2.4.1 Test Result

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	-2.861	-0.0041	-2.5 to 2.5	Pass
					3.85	-3.533	-0.0050	-2.5 to 2.5	Pass
					4.43	0.229	0.0003	-2.5 to 2.5	Pass
				-30	3.85	-1.888	-0.0027	-2.5 to 2.5	Pass
				-20	3.85	-1.359	-0.0019	-2.5 to 2.5	Pass
				-10	3.85	-0.200	-0.0003	-2.5 to 2.5	Pass
				0	3.85	-0.973	-0.0014	-2.5 to 2.5	Pass
				10	3.85	-3.519	-0.0050	-2.5 to 2.5	Pass
				30	3.85	-1.030	-0.0015	-2.5 to 2.5	Pass
				40	3.85	-0.887	-0.0013	-2.5 to 2.5	Pass
				50	3.85	-2.961	-0.0042	-2.5 to 2.5	Pass
	707.5	50	0	20	3.27	-4.048	-0.0057	-2.5 to 2.5	Pass
					3.85	-3.233	-0.0046	-2.5 to 2.5	Pass
					4.43	-0.529	-0.0007	-2.5 to 2.5	Pass
				-30	3.85	-1.030	-0.0015	-2.5 to 2.5	Pass
				-20	3.85	-4.606	-0.0065	-2.5 to 2.5	Pass
				-10	3.85	-2.618	-0.0037	-2.5 to 2.5	Pass

				0	3.85	-3.376	-0.0048	-2.5 to 2.5	Pass
				10	3.85	-2.089	-0.0030	-2.5 to 2.5	Pass
				30	3.85	-1.316	-0.0019	-2.5 to 2.5	Pass
				40	3.85	-3.619	-0.0051	-2.5 to 2.5	Pass
				50	3.85	-4.463	-0.0063	-2.5 to 2.5	Pass
	711	50	0	20	3.27	-4.292	-0.0060	-2.5 to 2.5	Pass
					3.85	-5.407	-0.0076	-2.5 to 2.5	Pass
					4.43	-4.520	-0.0064	-2.5 to 2.5	Pass
				-30	3.85	-4.792	-0.0067	-2.5 to 2.5	Pass
				-20	3.85	-2.360	-0.0033	-2.5 to 2.5	Pass
				-10	3.85	-5.522	-0.0078	-2.5 to 2.5	Pass
				0	3.85	-5.193	-0.0073	-2.5 to 2.5	Pass
				10	3.85	-3.476	-0.0049	-2.5 to 2.5	Pass
				30	3.85	-4.492	-0.0063	-2.5 to 2.5	Pass
				40	3.85	-3.376	-0.0047	-2.5 to 2.5	Pass
				50	3.85	0.529	0.0007	-2.5 to 2.5	Pass
16QAM	704	50	0	20	3.27	-1.330	-0.0019	-2.5 to 2.5	Pass
					3.85	-3.190	-0.0045	-2.5 to 2.5	Pass
					4.43	-5.107	-0.0073	-2.5 to 2.5	Pass
				-30	3.85	-1.688	-0.0024	-2.5 to 2.5	Pass
				-20	3.85	-3.619	-0.0051	-2.5 to 2.5	Pass
				-10	3.85	-3.147	-0.0045	-2.5 to 2.5	Pass
				0	3.85	-0.529	-0.0008	-2.5 to 2.5	Pass
				10	3.85	-1.116	-0.0016	-2.5 to 2.5	Pass
				30	3.85	-0.229	-0.0003	-2.5 to 2.5	Pass
				40	3.85	-1.731	-0.0025	-2.5 to 2.5	Pass
				50	3.85	-1.016	-0.0014	-2.5 to 2.5	Pass
	707.5	50	0	20	3.27	-1.960	-0.0028	-2.5 to 2.5	Pass
					3.85	-2.761	-0.0039	-2.5 to 2.5	Pass
					4.43	-0.272	-0.0004	-2.5 to 2.5	Pass
				-30	3.85	-2.303	-0.0033	-2.5 to 2.5	Pass
				-20	3.85	-3.490	-0.0049	-2.5 to 2.5	Pass
				-10	3.85	-0.100	-0.0001	-2.5 to 2.5	Pass
				0	3.85	-4.063	-0.0057	-2.5 to 2.5	Pass
				10	3.85	-4.377	-0.0062	-2.5 to 2.5	Pass
				30	3.85	-4.563	-0.0064	-2.5 to 2.5	Pass
				40	3.85	-2.446	-0.0035	-2.5 to 2.5	Pass
				50	3.85	0.043	0.0001	-2.5 to 2.5	Pass
	711	50	0	20	3.27	-1.488	-0.0021	-2.5 to 2.5	Pass
					3.85	-2.646	-0.0037	-2.5 to 2.5	Pass
					4.43	-3.347	-0.0047	-2.5 to 2.5	Pass
				-30	3.85	-2.503	-0.0035	-2.5 to 2.5	Pass
				-20	3.85	-6.108	-0.0086	-2.5 to 2.5	Pass
				-10	3.85	-2.761	-0.0039	-2.5 to 2.5	Pass
				0	3.85	-5.479	-0.0077	-2.5 to 2.5	Pass
				10	3.85	-3.233	-0.0045	-2.5 to 2.5	Pass
				30	3.85	-3.319	-0.0047	-2.5 to 2.5	Pass
				40	3.85	-6.094	-0.0086	-2.5 to 2.5	Pass
				50	3.85	-3.777	-0.0053	-2.5 to 2.5	Pass

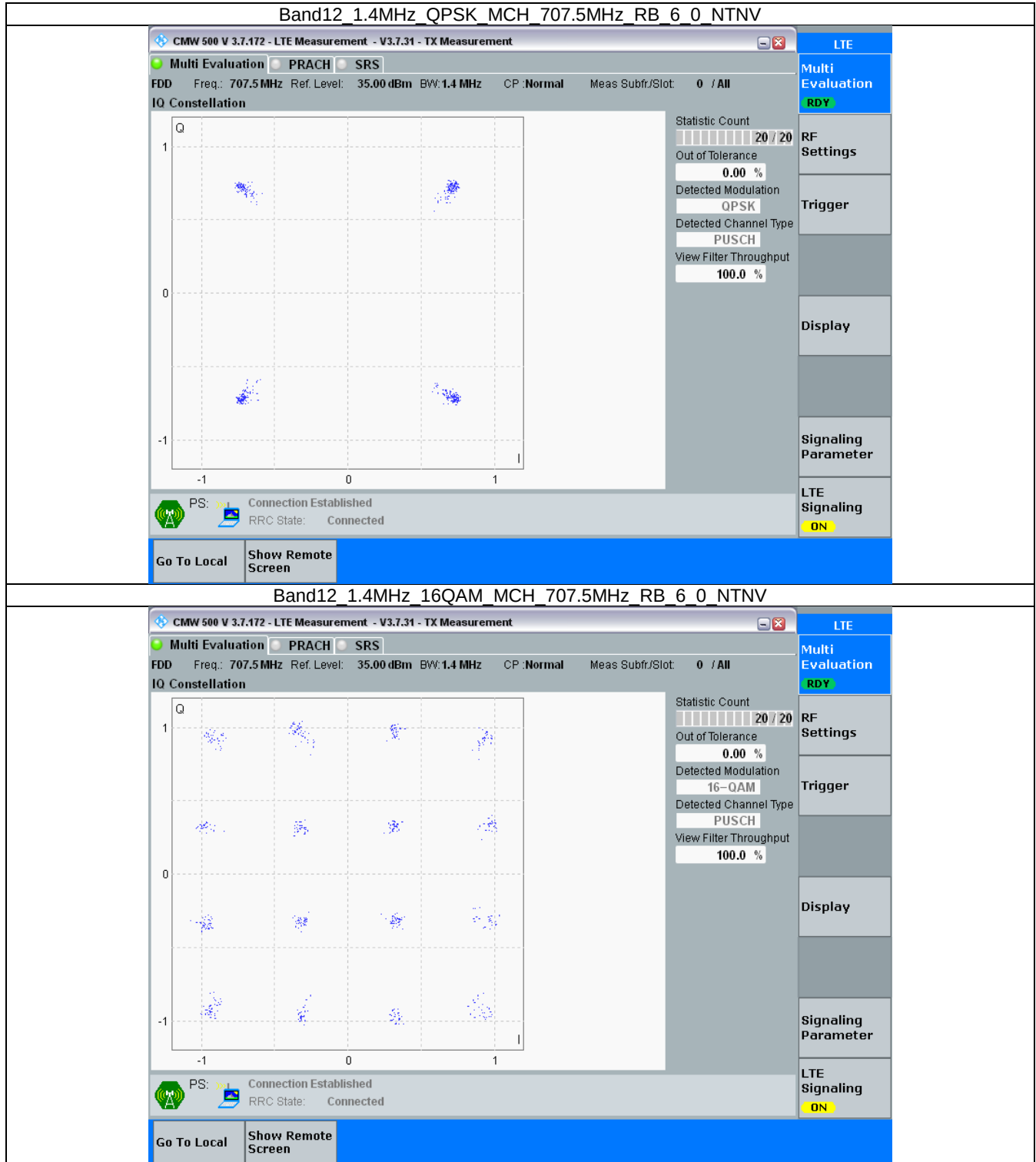
3. Modulation Characteristics

3.1 B12_1.4MHz

3.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTNV						
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 Test Graph

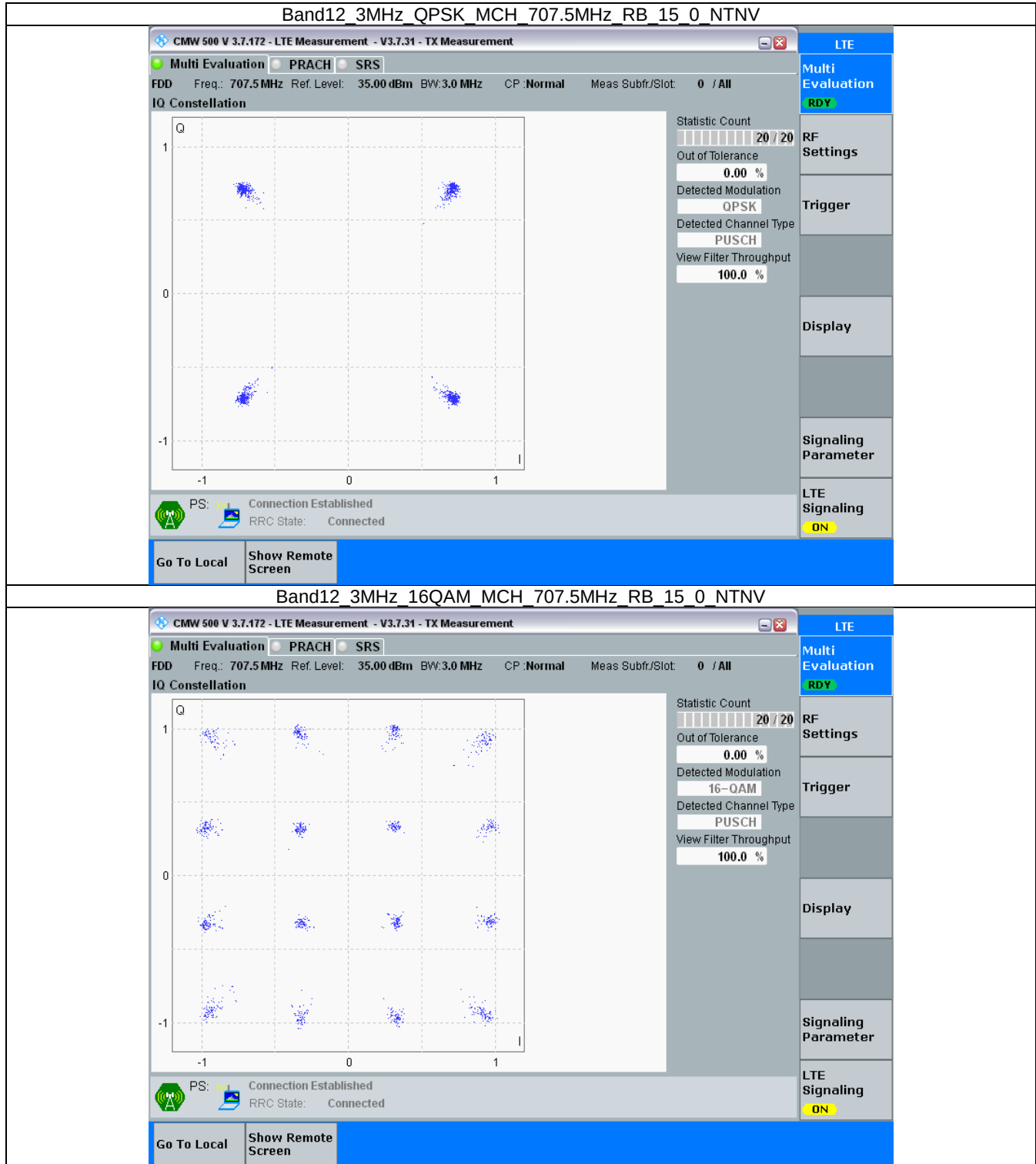


3.2 B12_3MHz

3.2.1 Test Result

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

3.2.2 Test Graph

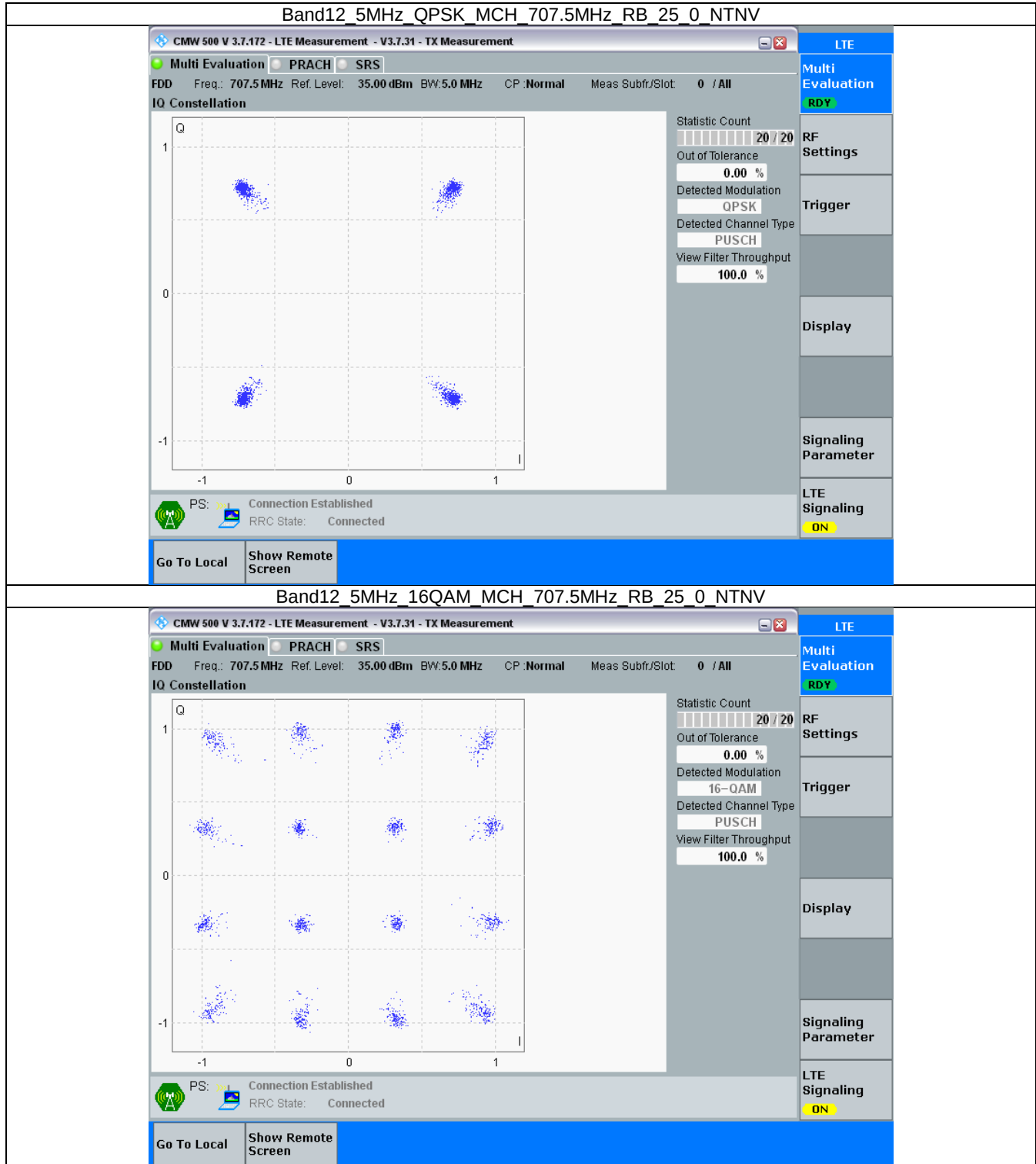


3.3 B12_5MHz

3.3.1 Test Result

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

3.3.2 Test Graph

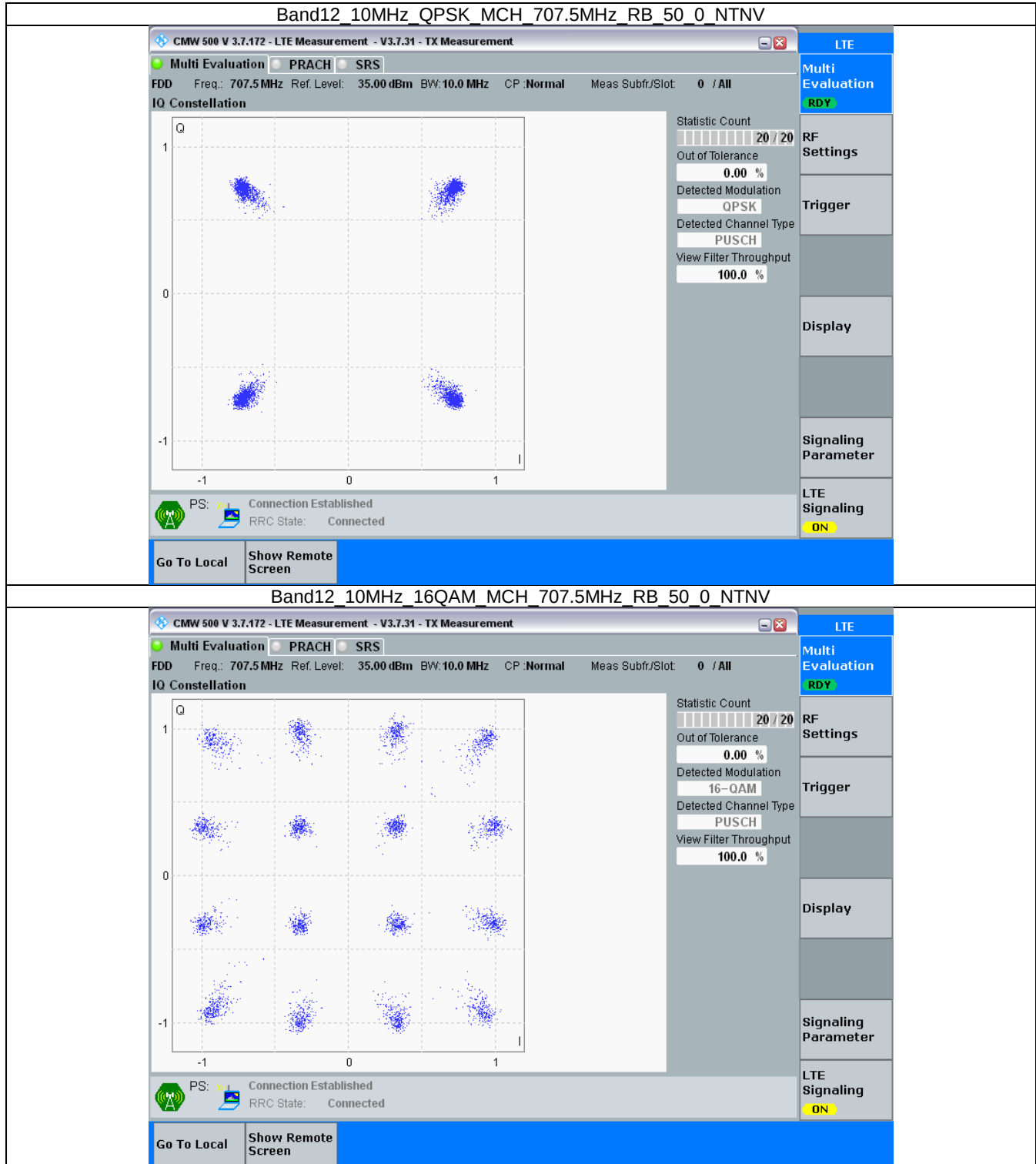


3.4 B12_10MHz

3.4.1 Test Result

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

3.4.2 Test Graph



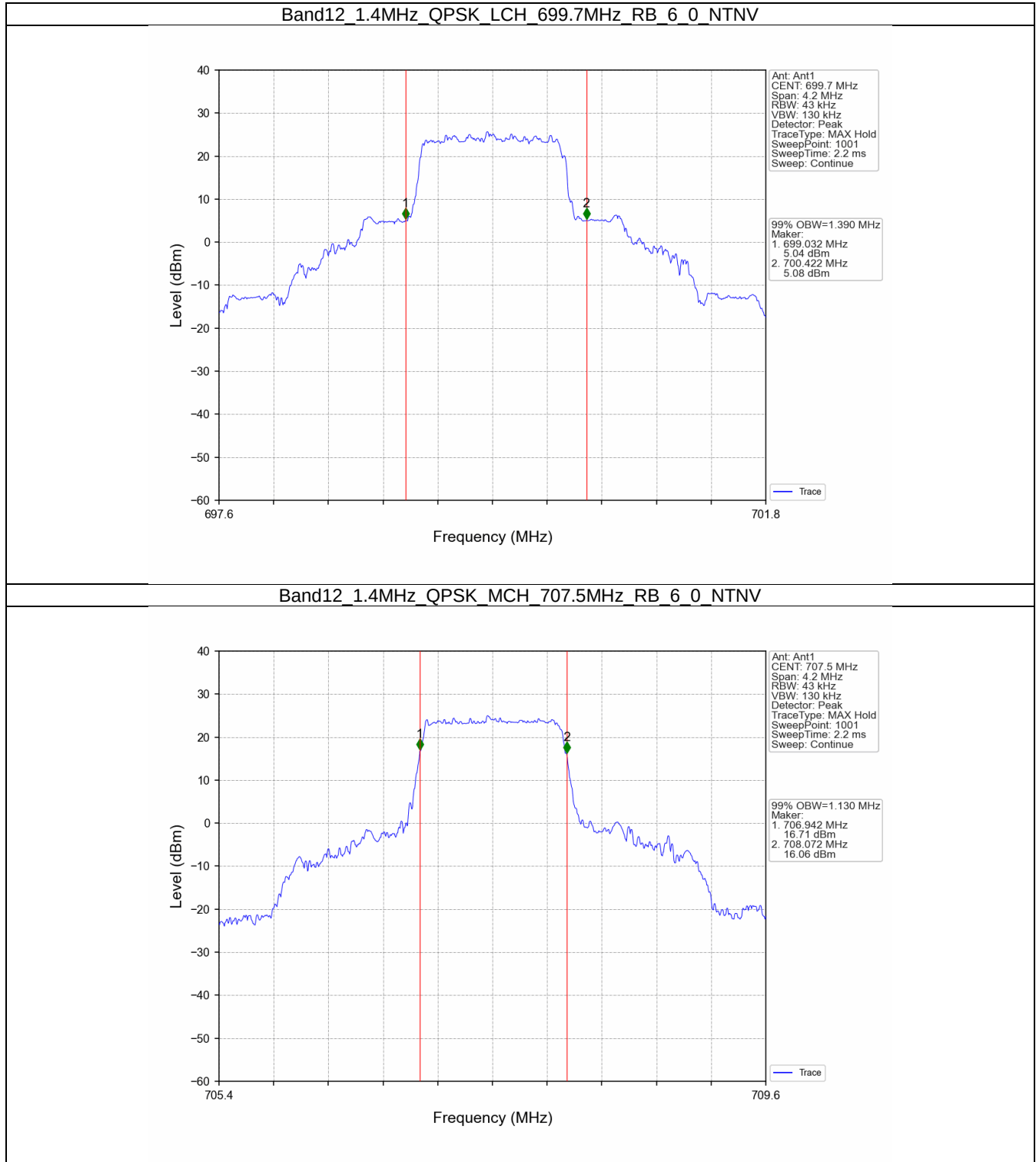
4. 99% & 26dB Bandwidth

4.1 Band12_OBW

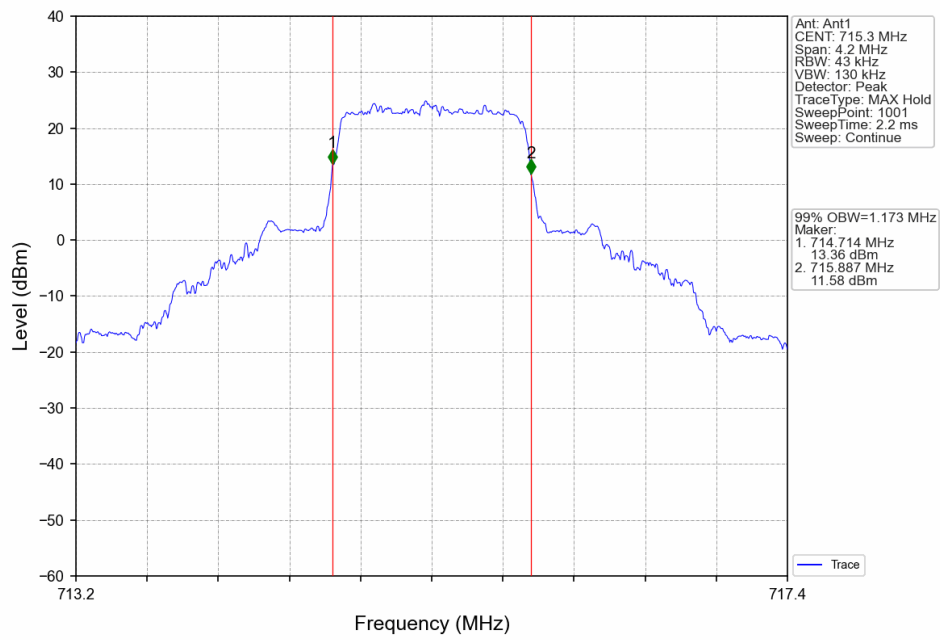
4.1.1 Test Result

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	1.390	/	Pass
		707.5	6	0	1.130	/	Pass
		715.3	6	0	1.173	/	Pass
	16QAM	699.7	6	0	1.492	/	Pass
		707.5	6	0	1.127	/	Pass
		715.3	6	0	1.196	/	Pass
3	QPSK	700.5	15	0	2.809	/	Pass
		707.5	15	0	2.738	/	Pass
		714.5	15	0	2.792	/	Pass
	16QAM	700.5	15	0	2.889	/	Pass
		707.5	15	0	2.773	/	Pass
		714.5	15	0	2.859	/	Pass
5	QPSK	701.5	25	0	4.649	/	Pass
		707.5	25	0	4.593	/	Pass
		713.5	25	0	4.785	/	Pass
	16QAM	701.5	25	0	5.039	/	Pass
		707.5	25	0	4.676	/	Pass
		713.5	25	0	5.538	/	Pass
10	QPSK	704	50	0	9.185	/	Pass
		707.5	50	0	9.148	/	Pass
		711	50	0	9.102	/	Pass
	16QAM	704	50	0	9.266	/	Pass
		707.5	50	0	9.305	/	Pass
		711	50	0	9.171	/	Pass

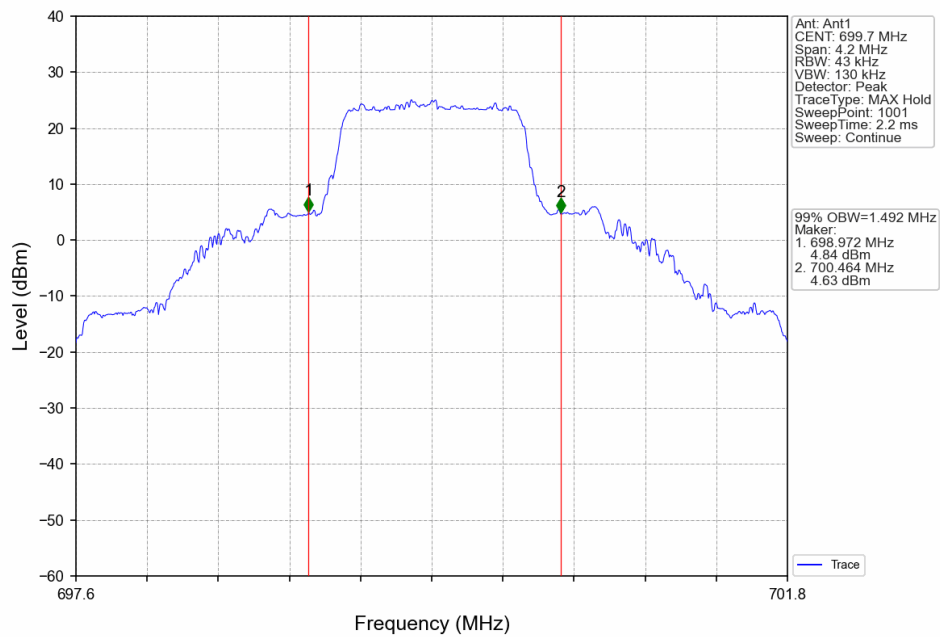
4.1.2 Test Graph



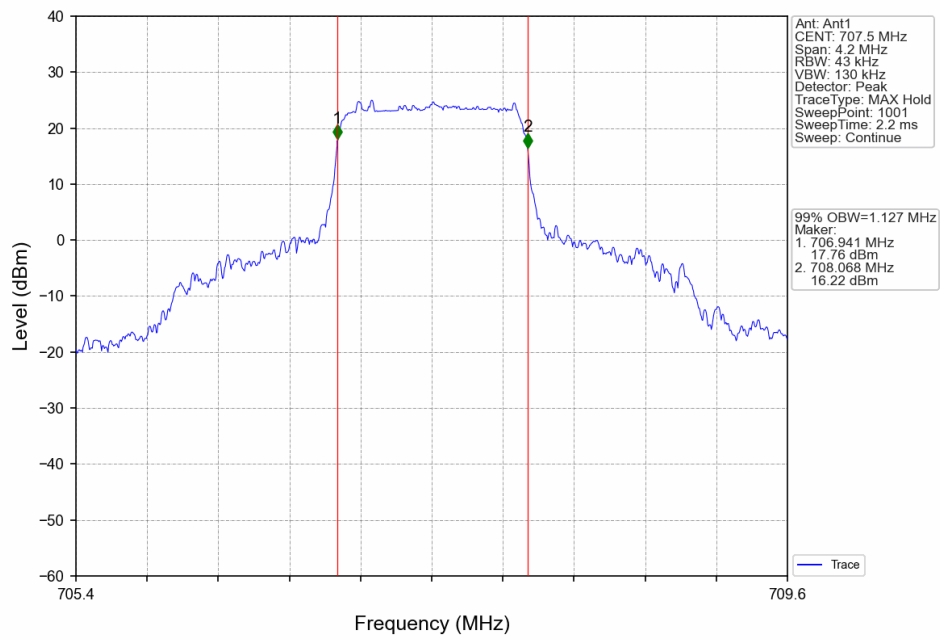
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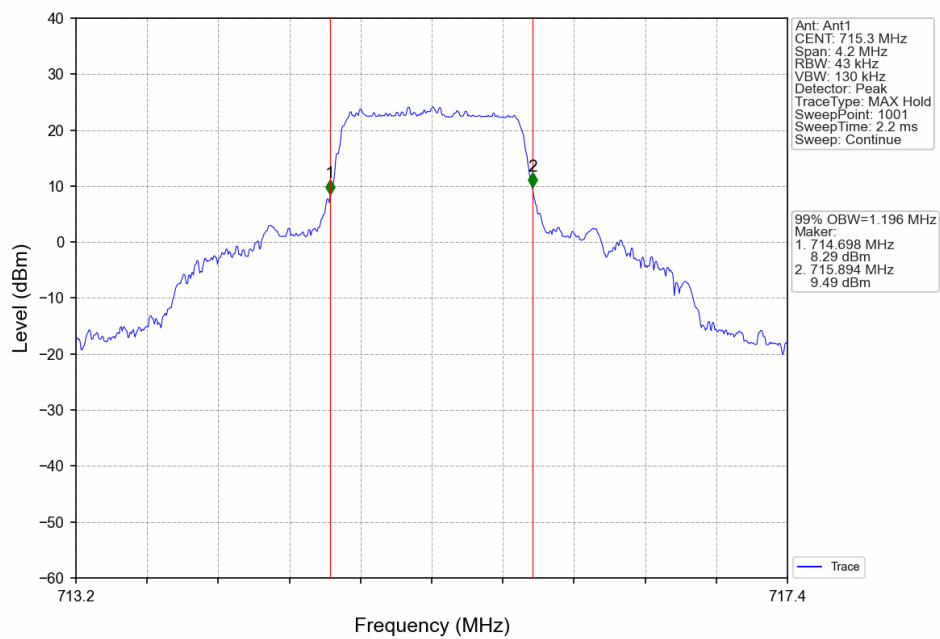
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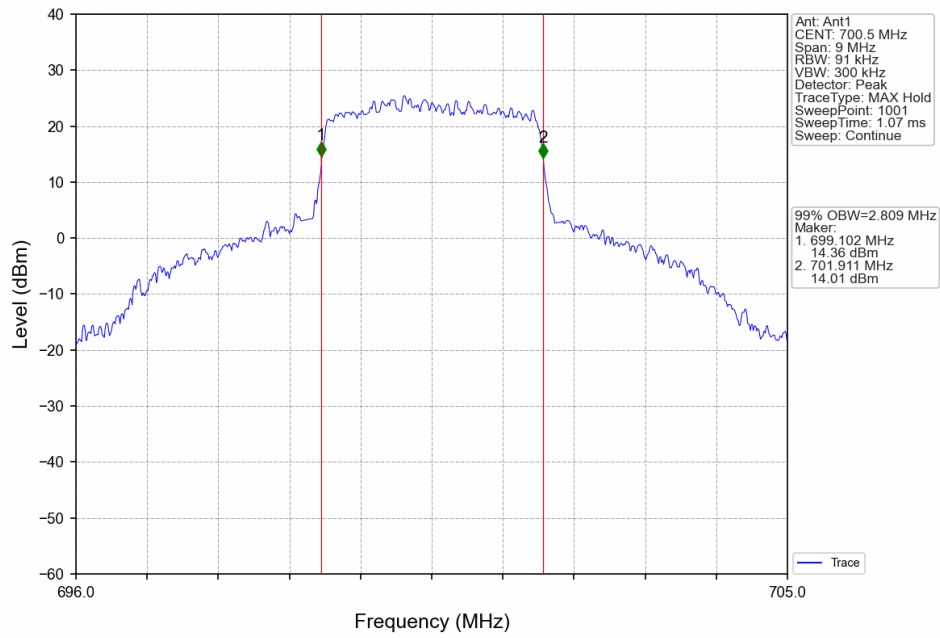
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



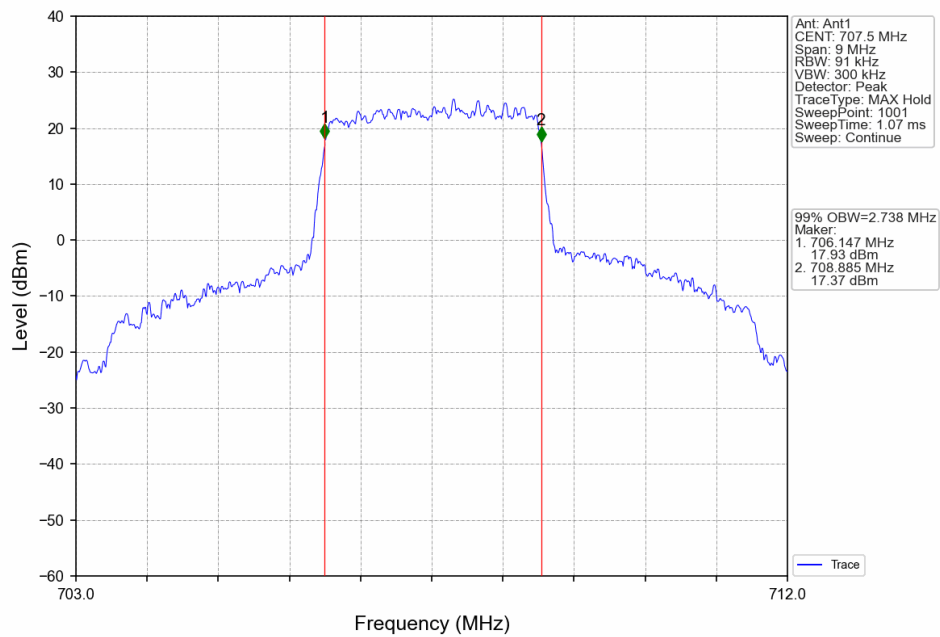
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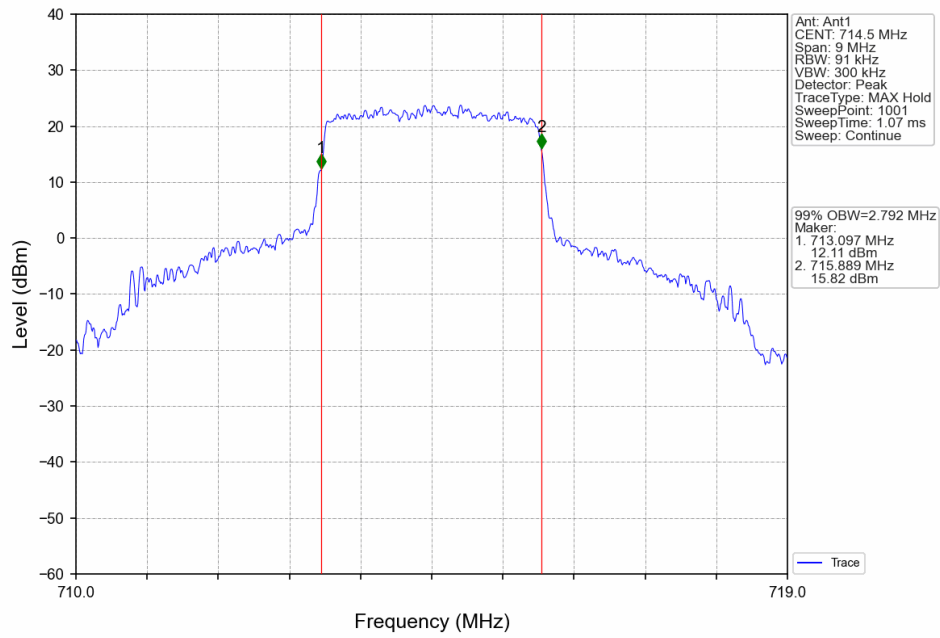
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



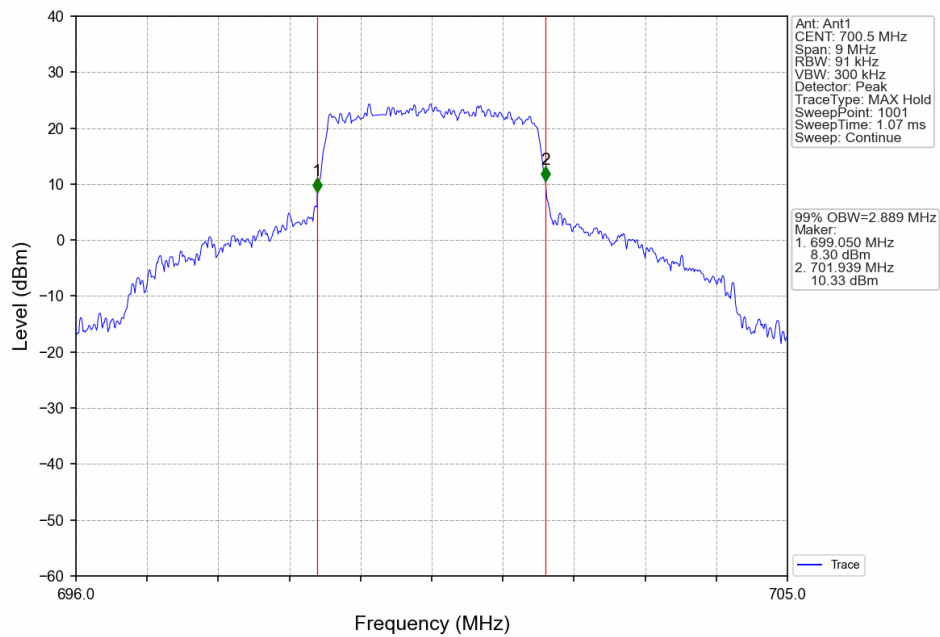
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



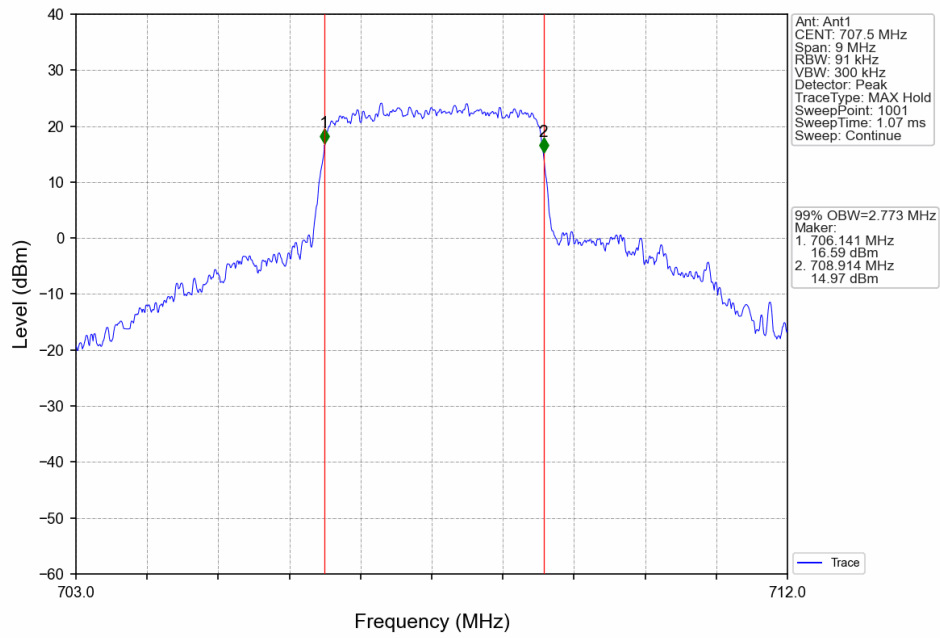
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



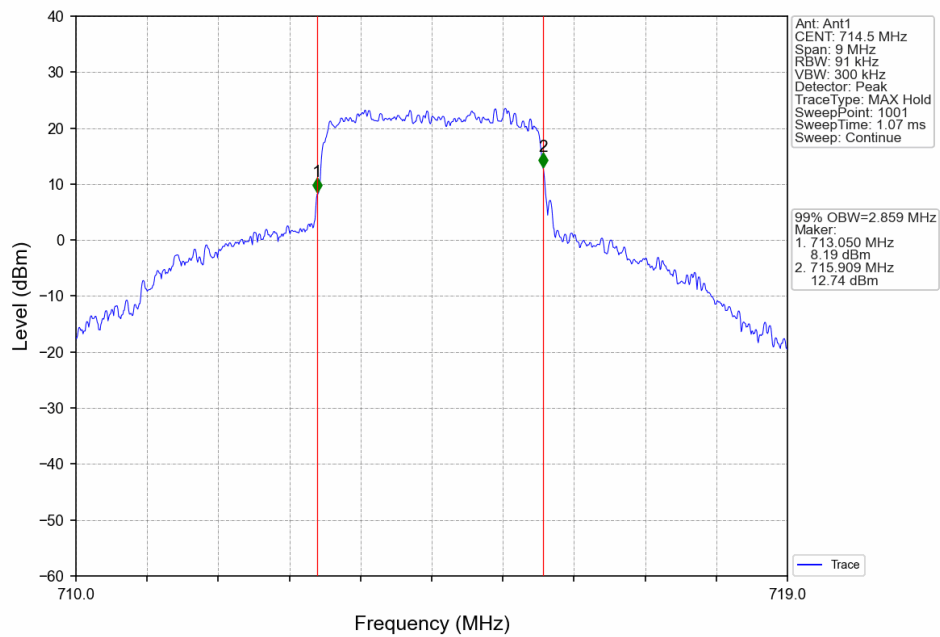
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



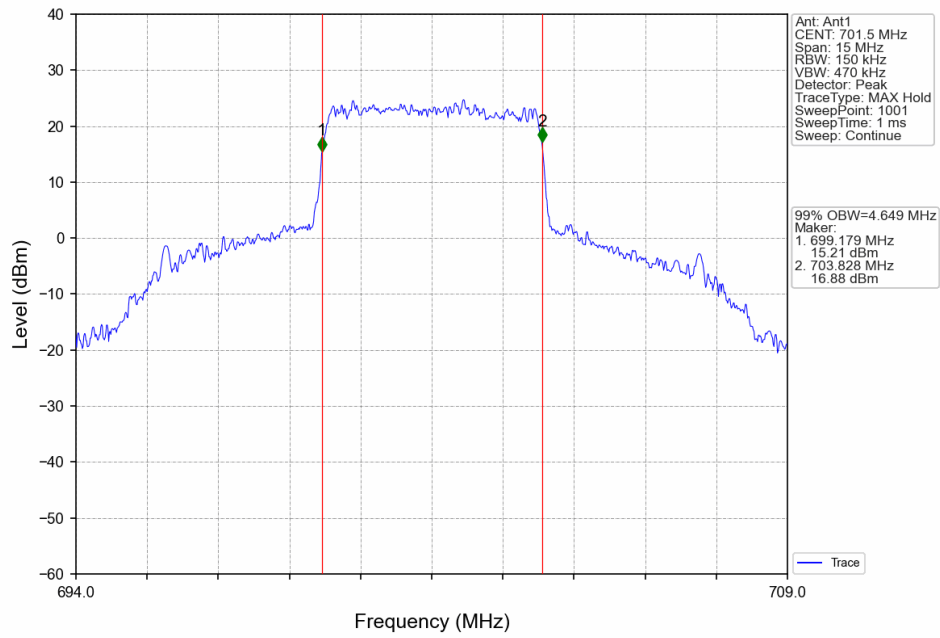
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



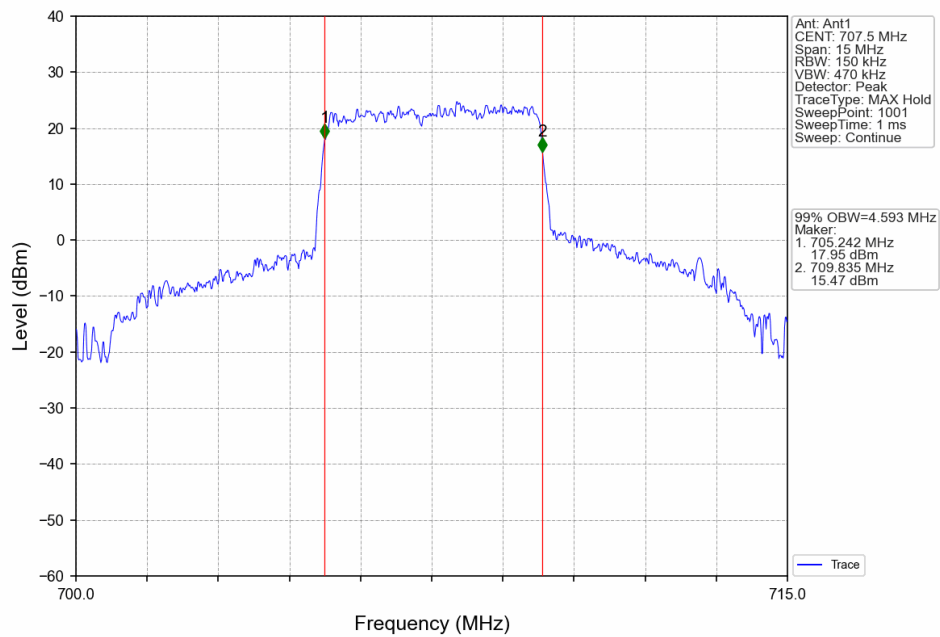
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



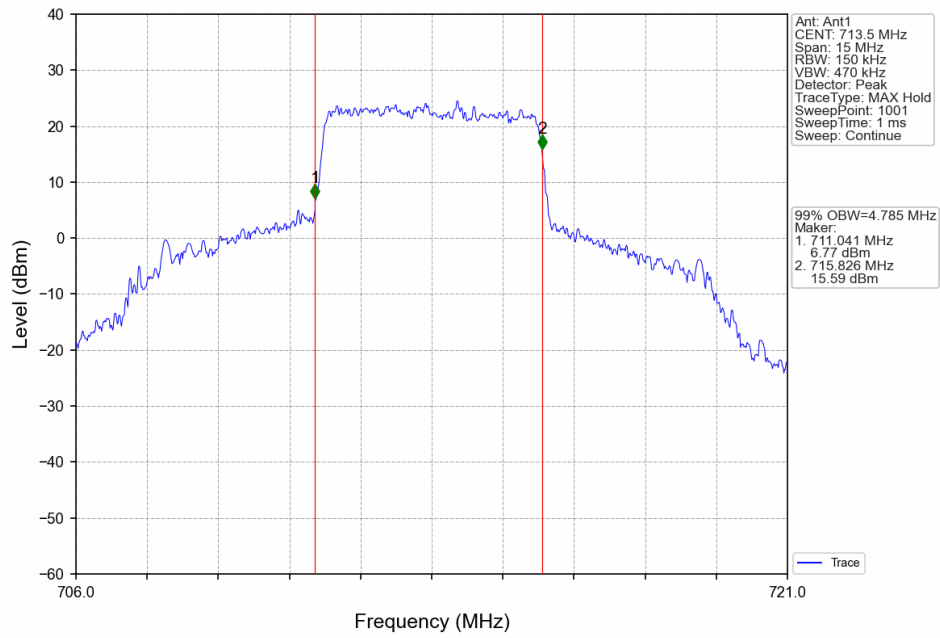
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



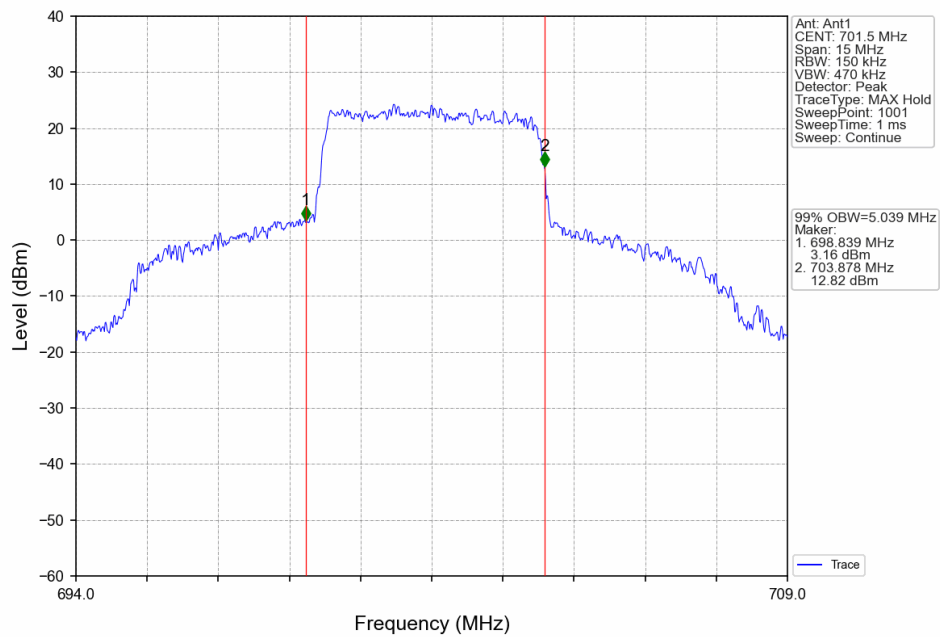
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



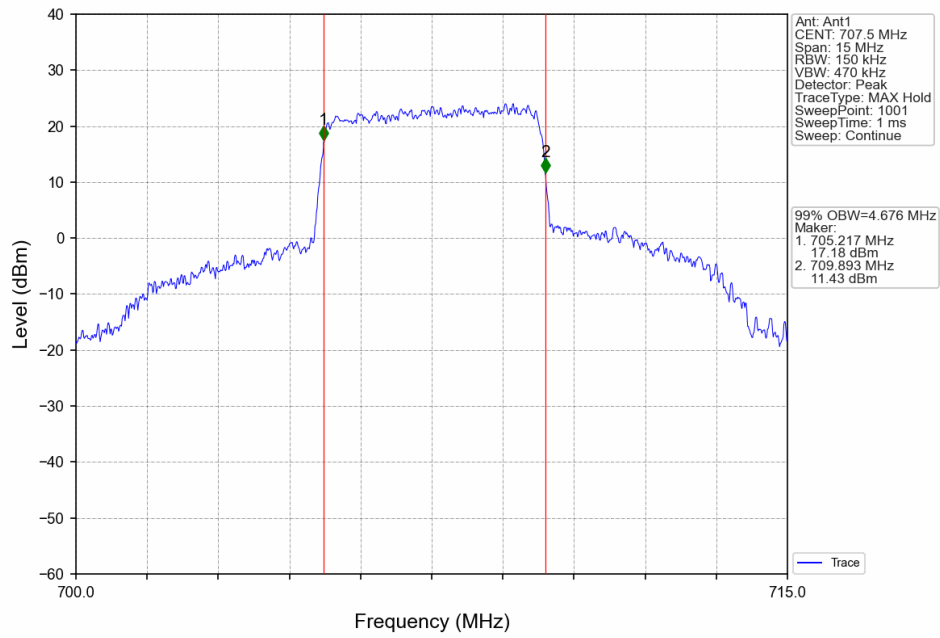
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



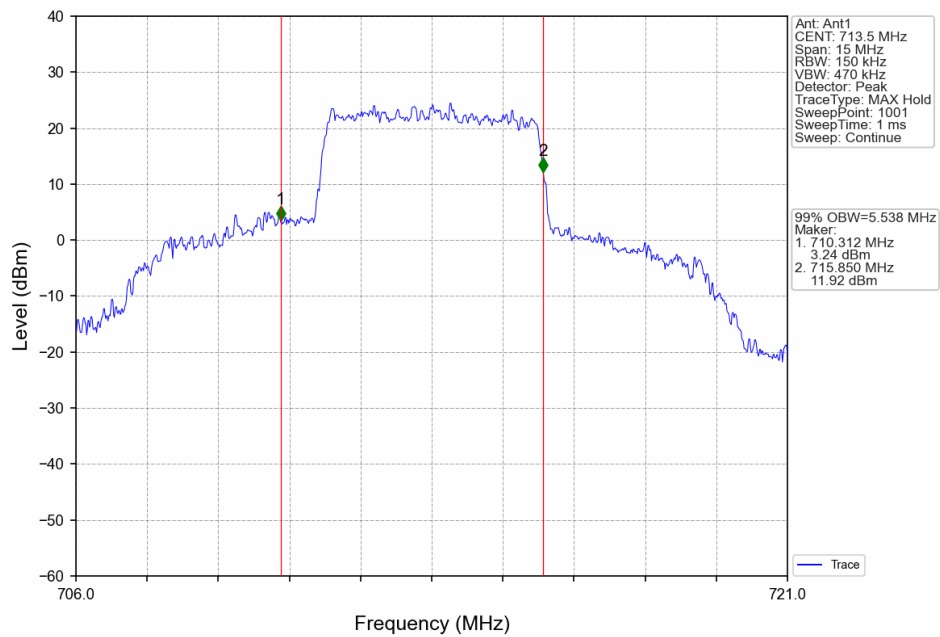
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



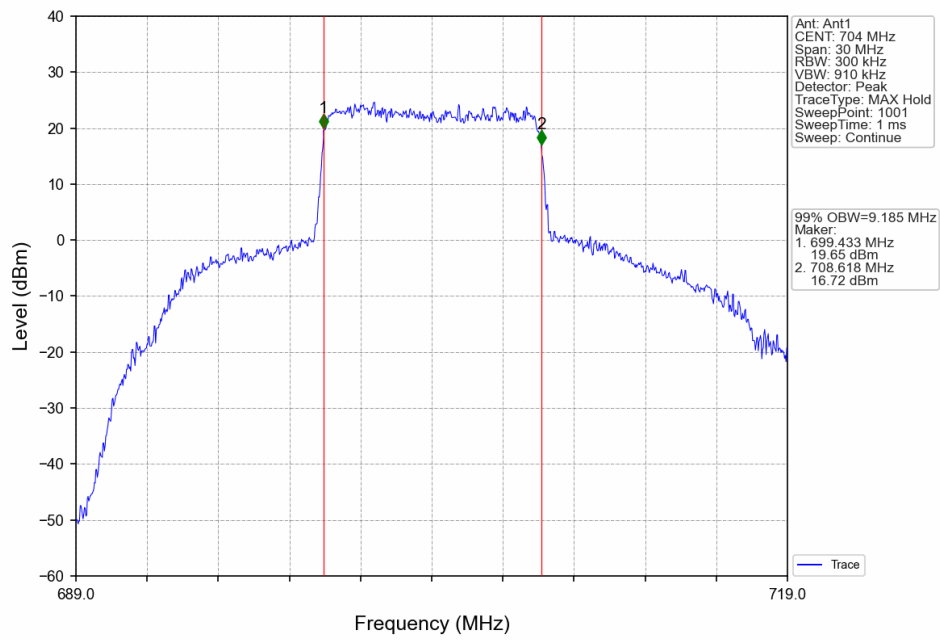
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



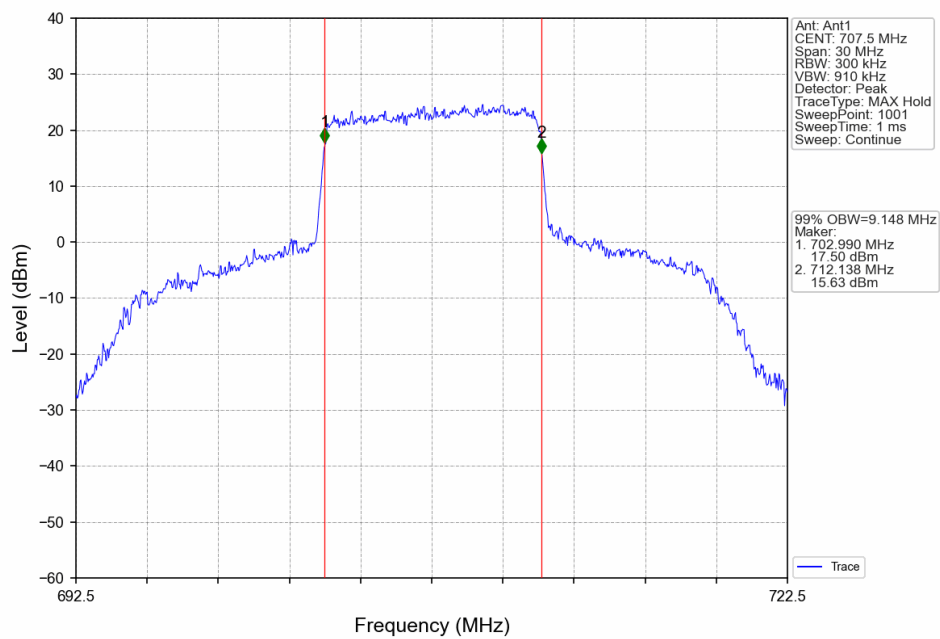
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



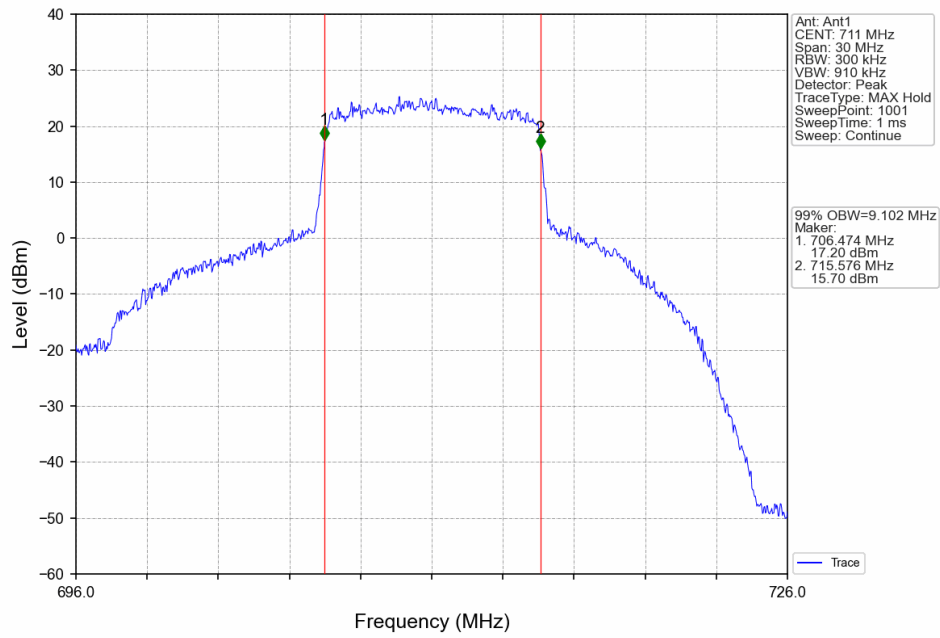
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



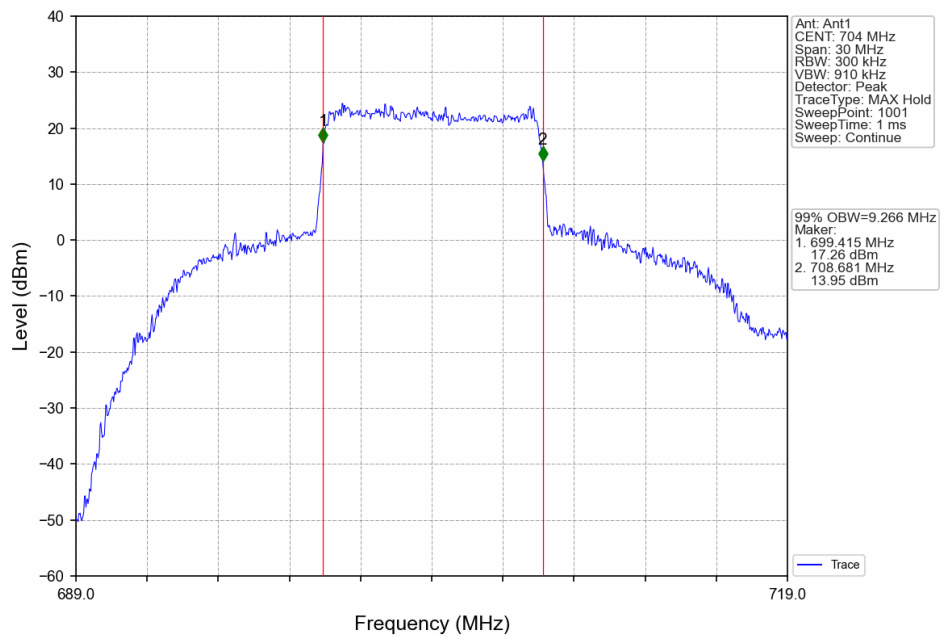
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



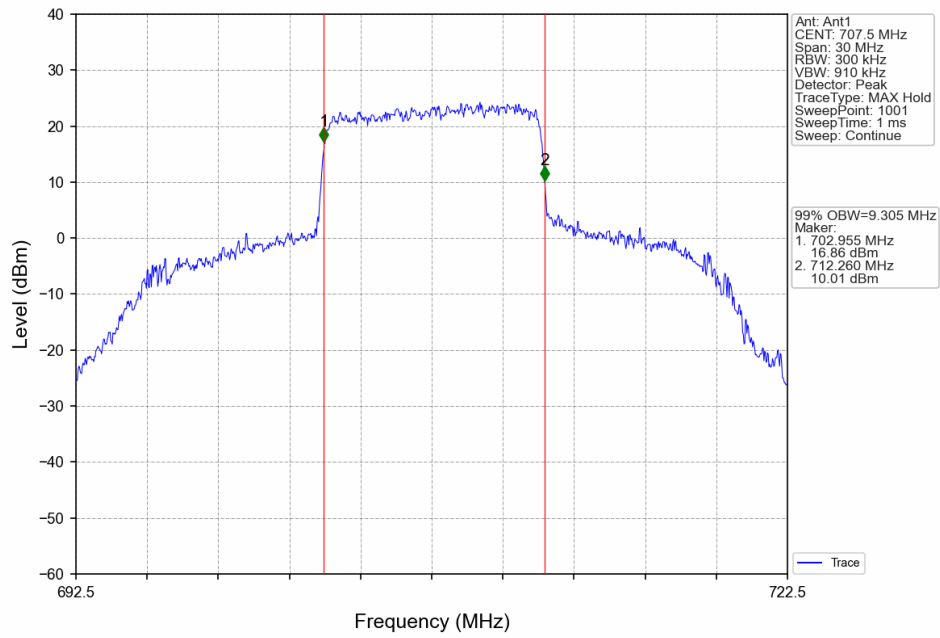
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



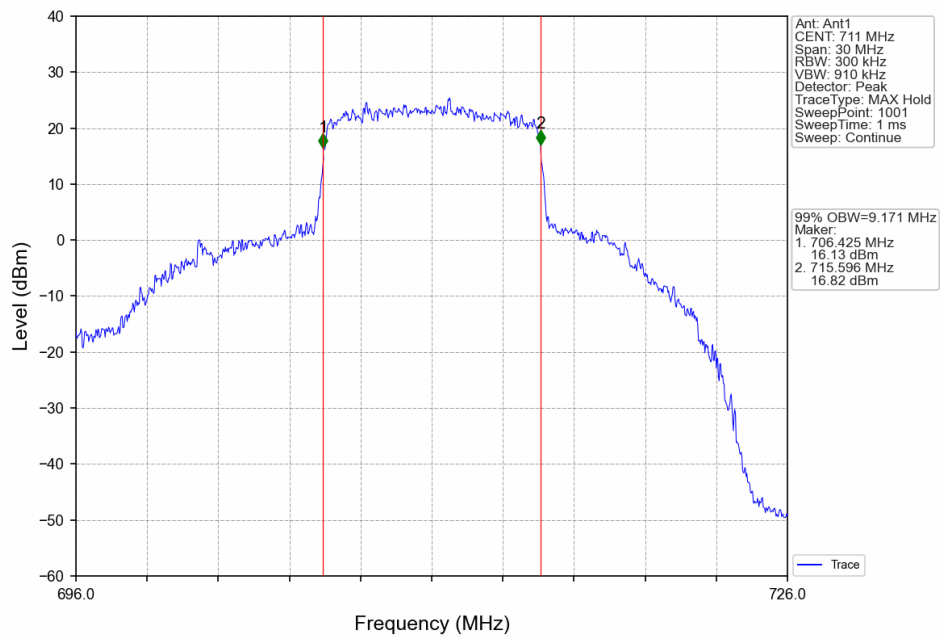
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

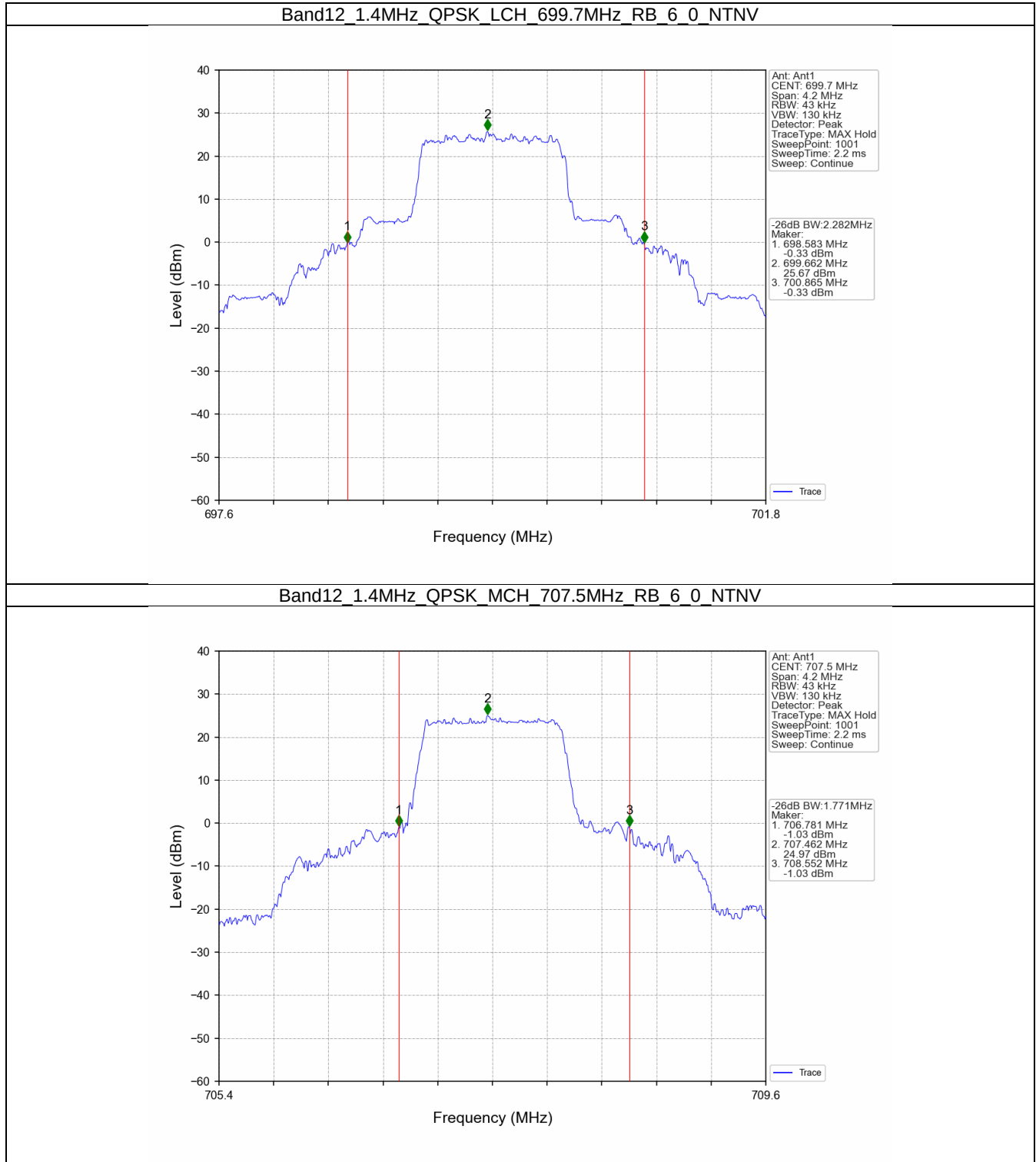


4.2 Band12_XDB

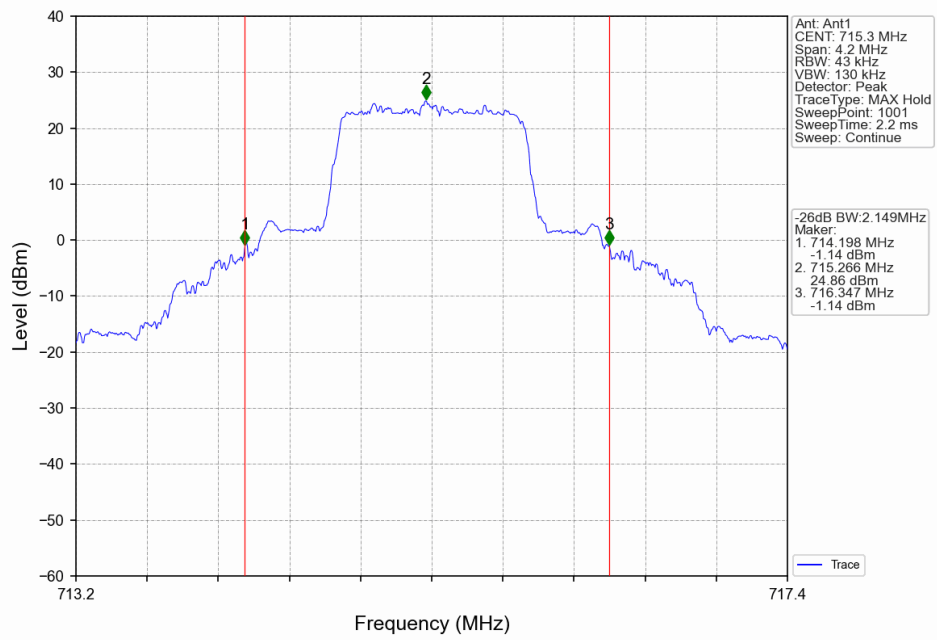
4.2.1 Test Result

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	2.282	/	Pass
		707.5	6	0	1.771	/	Pass
		715.3	6	0	2.149	/	Pass
	16QAM	699.7	6	0	2.639	/	Pass
		707.5	6	0	1.877	/	Pass
		715.3	6	0	2.409	/	Pass
3	QPSK	700.5	15	0	4.733	/	Pass
		707.5	15	0	3.066	/	Pass
		714.5	15	0	5.104	/	Pass
	16QAM	700.5	15	0	5.711	/	Pass
		707.5	15	0	4.686	/	Pass
		714.5	15	0	5.475	/	Pass
5	QPSK	701.5	25	0	8.451	/	Pass
		707.5	25	0	6.326	/	Pass
		713.5	25	0	9.778	/	Pass
	16QAM	701.5	25	0	10.674	/	Pass
		707.5	25	0	8.434	/	Pass
		713.5	25	0	10.246	/	Pass
10	QPSK	704	50	0	15.706	/	Pass
		707.5	50	0	16.216	/	Pass
		711	50	0	14.158	/	Pass
	16QAM	704	50	0	18.089	/	Pass
		707.5	50	0	19.513	/	Pass
		711	50	0	18.023	/	Pass

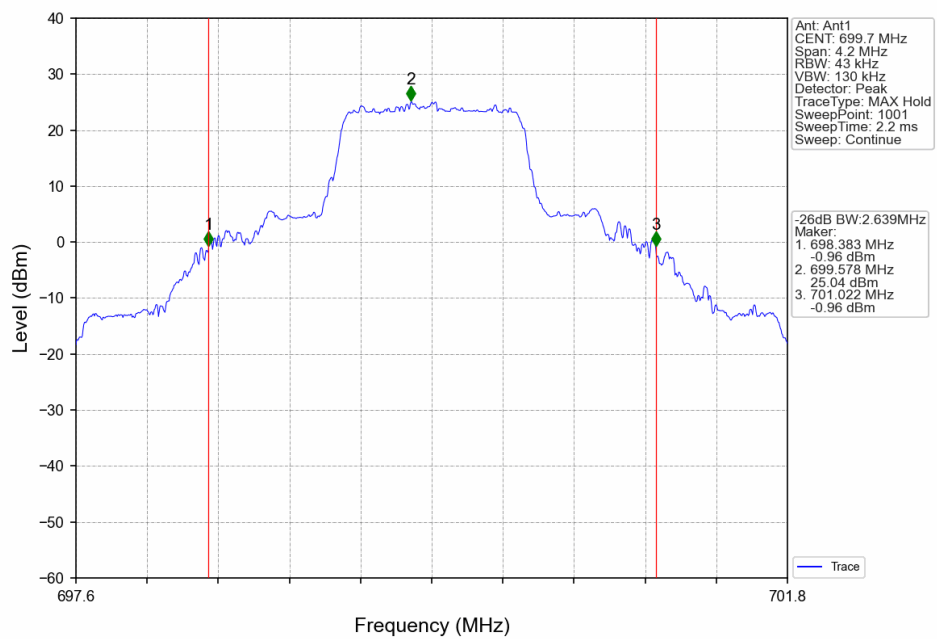
4.2.2 Test Graph



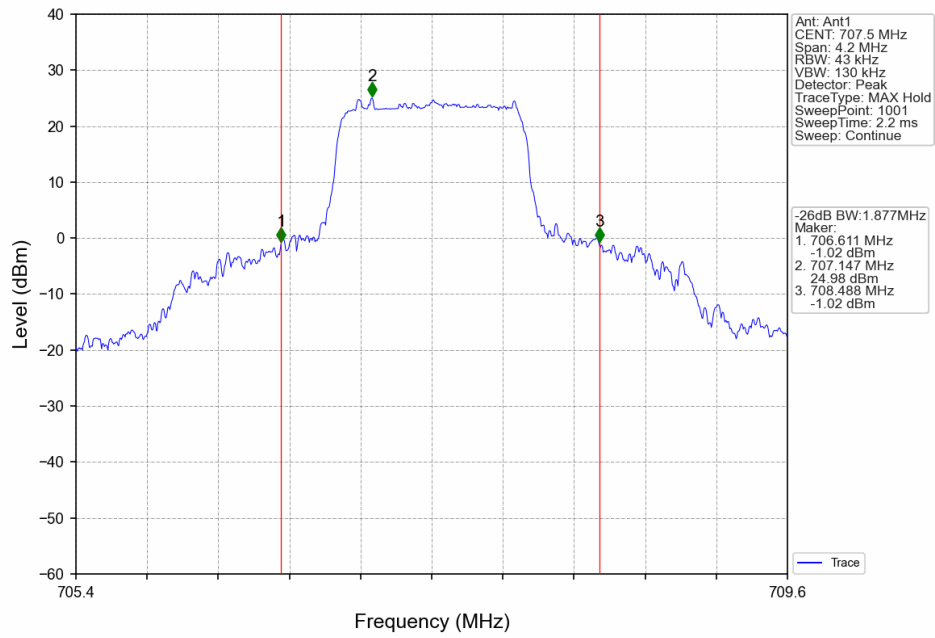
Band12 1.4MHz QPSK HCH 715.3MHz RB 6 0 NTV



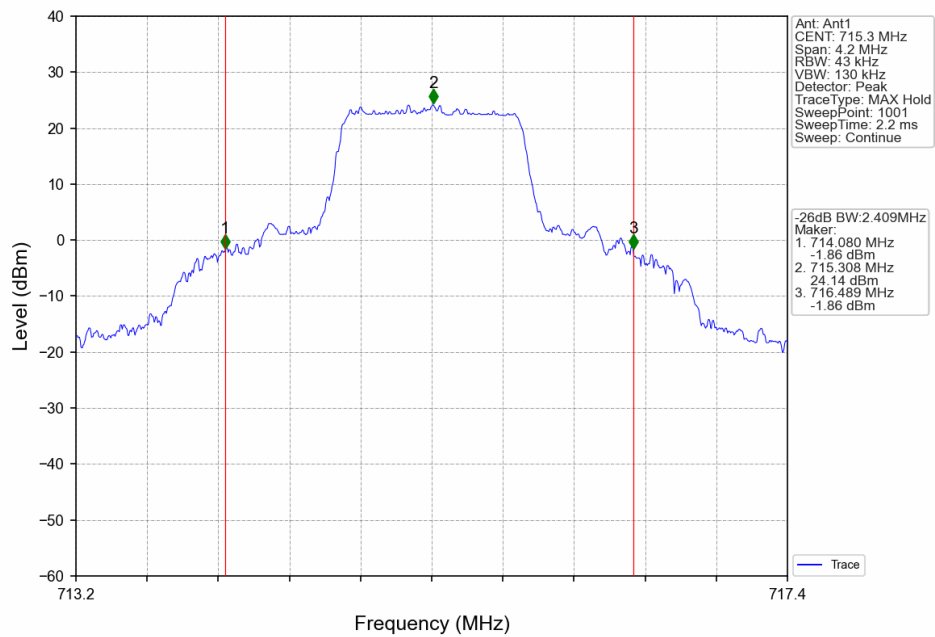
Band12 1.4MHz 16QAM LCH 699.7MHz RB 6 0 NTV



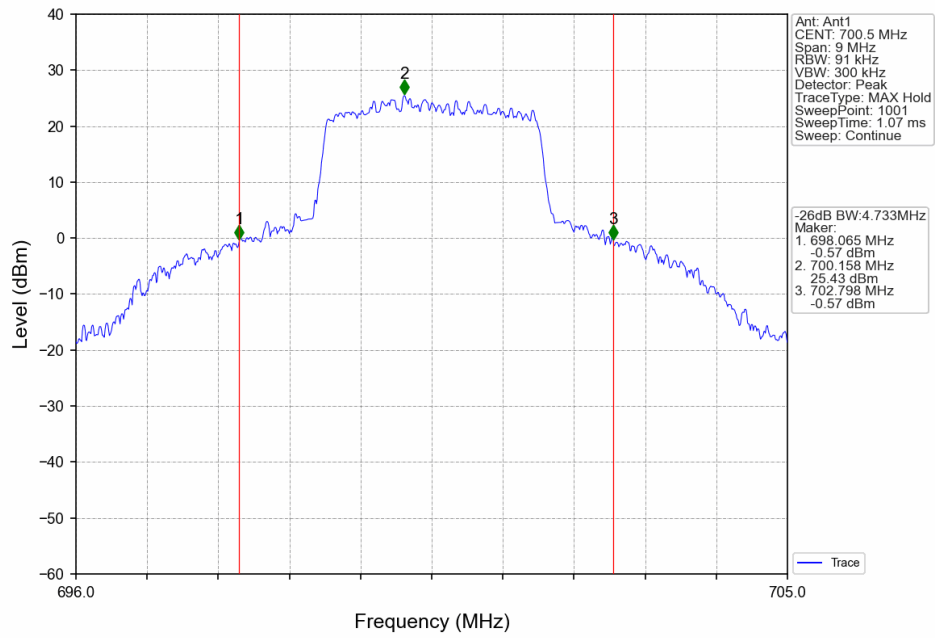
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTNV



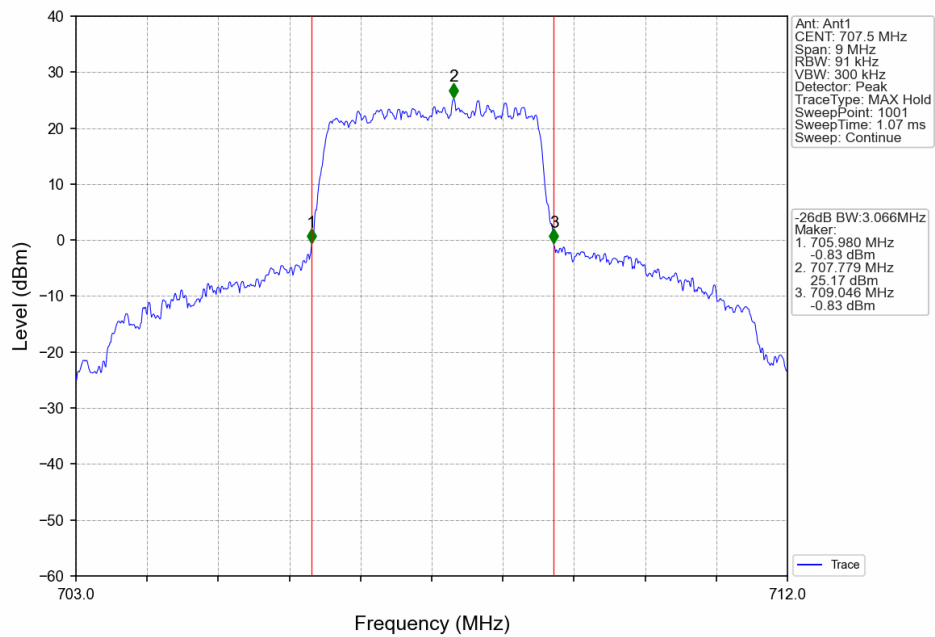
Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTNV



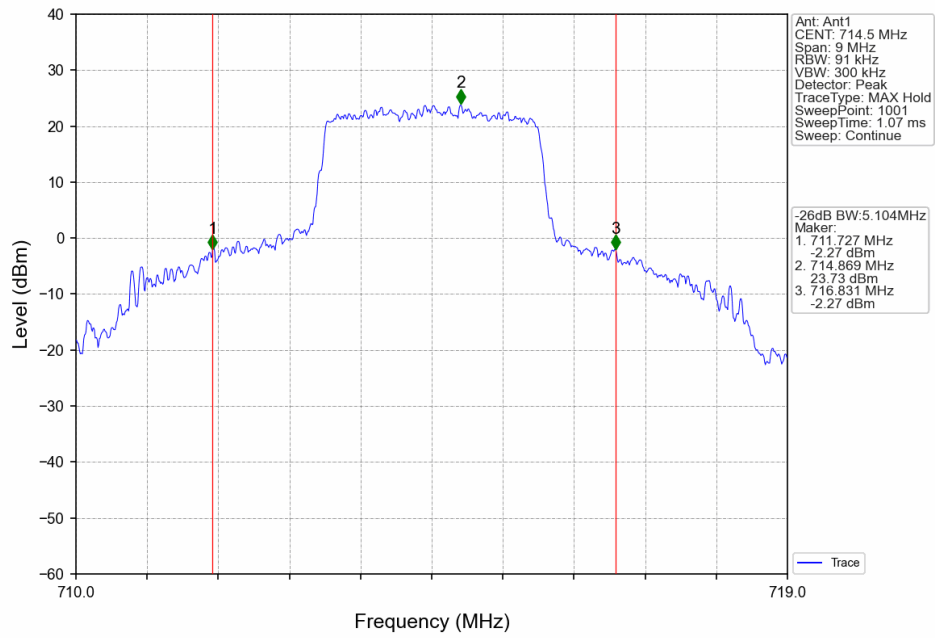
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



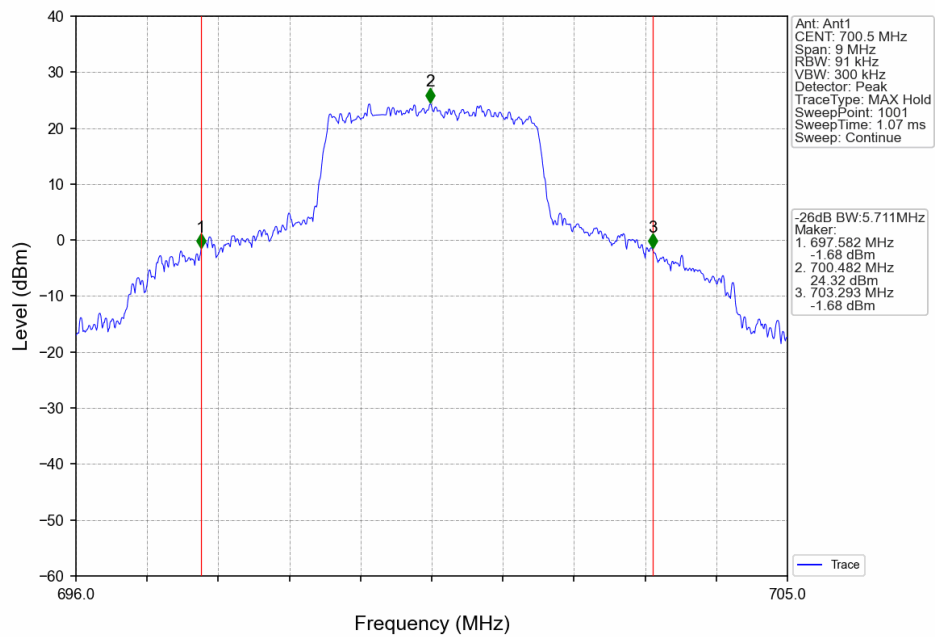
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



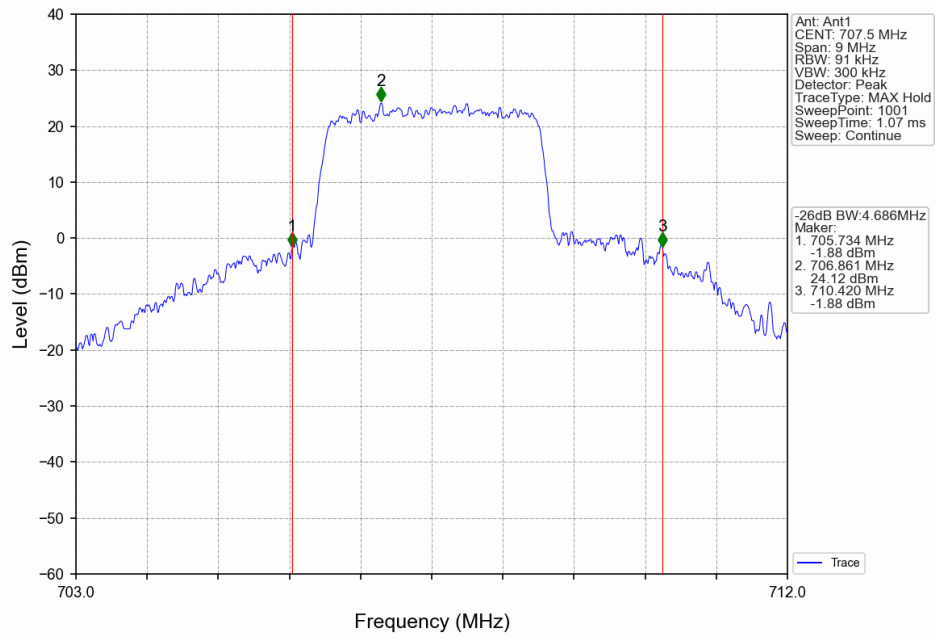
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



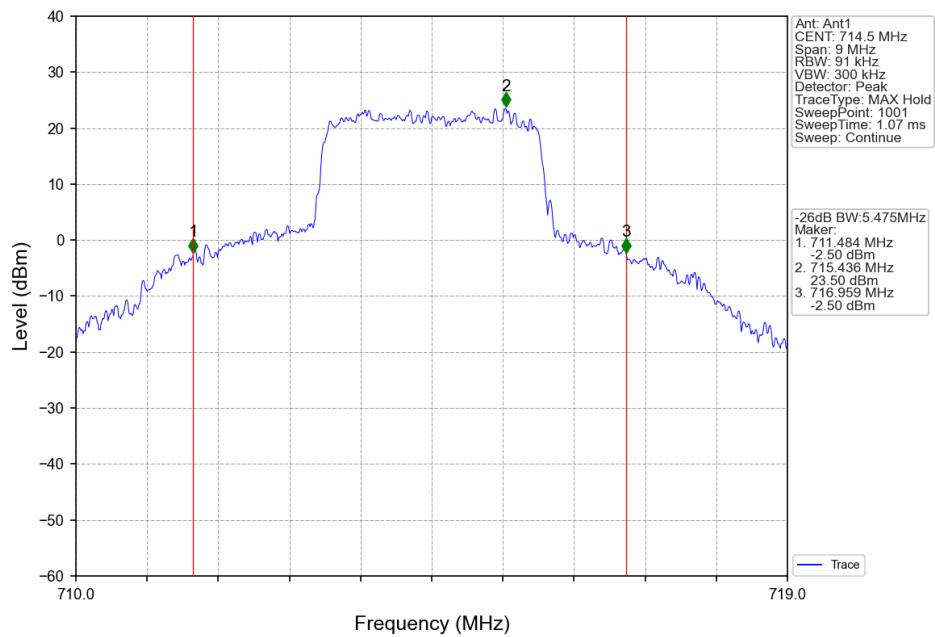
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



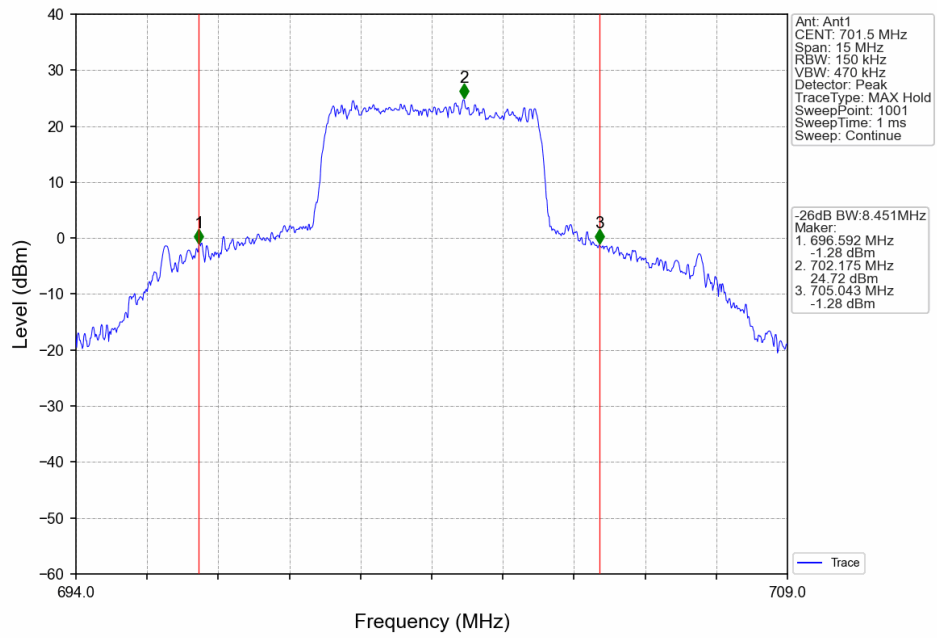
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



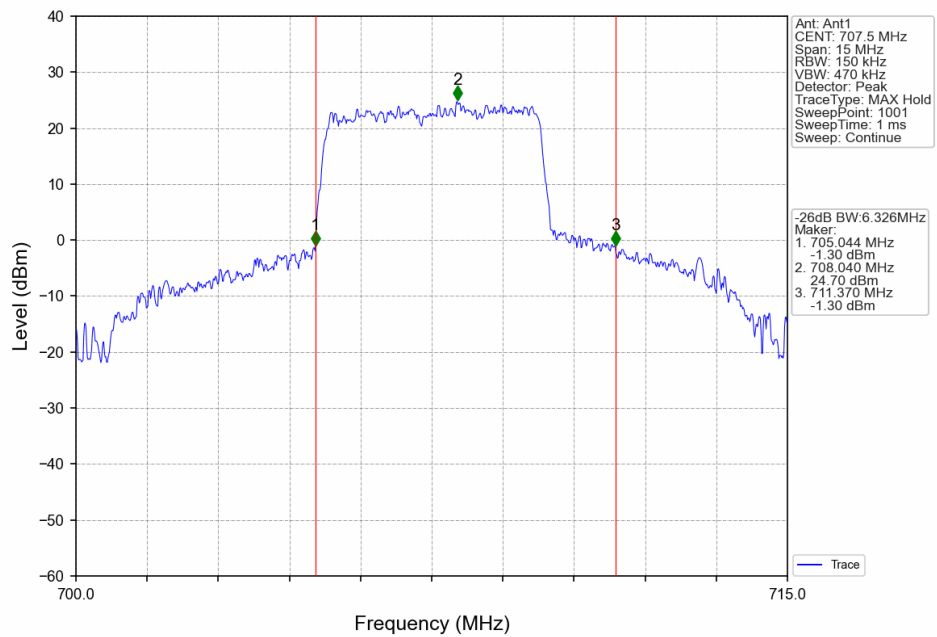
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



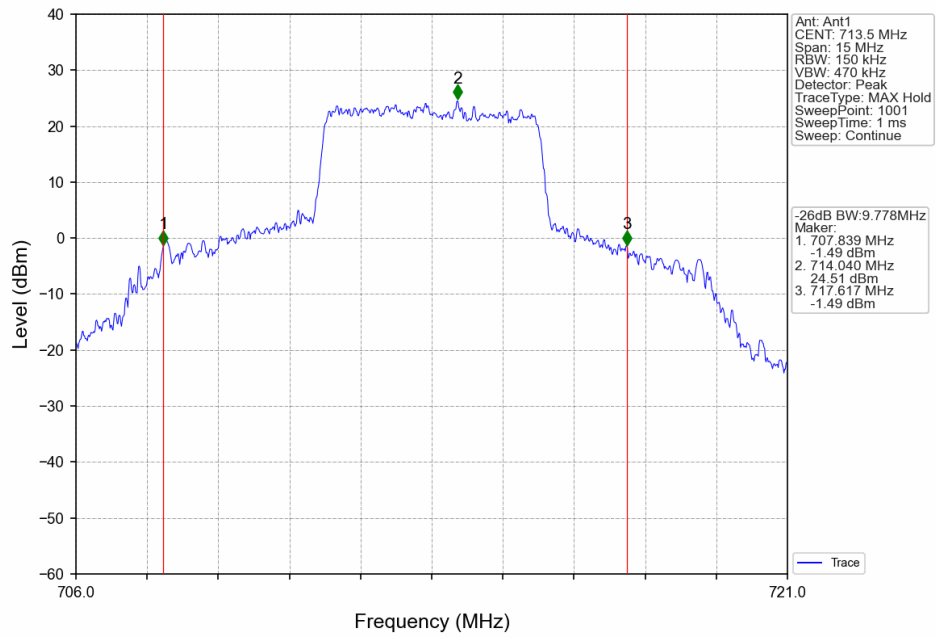
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



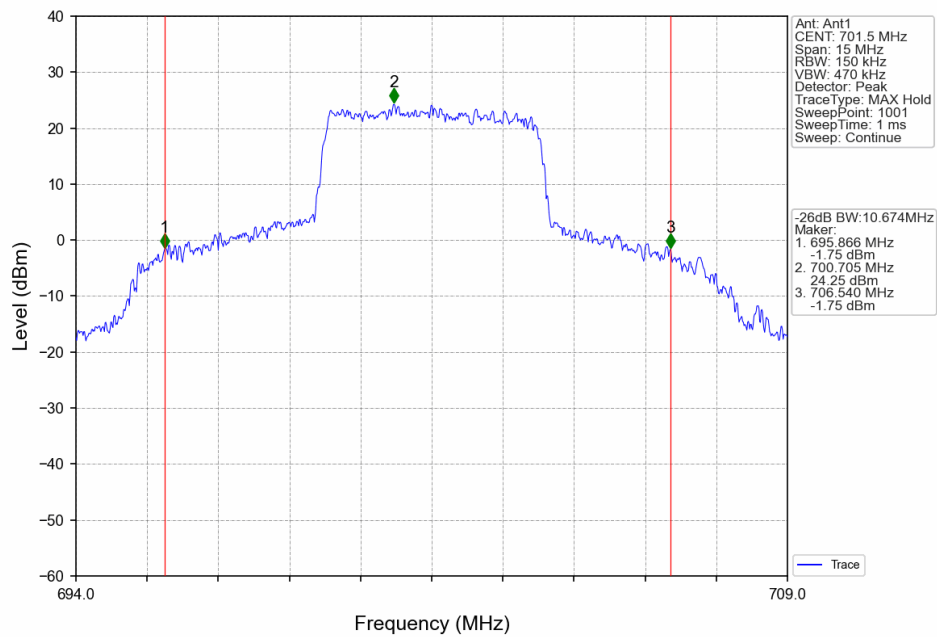
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



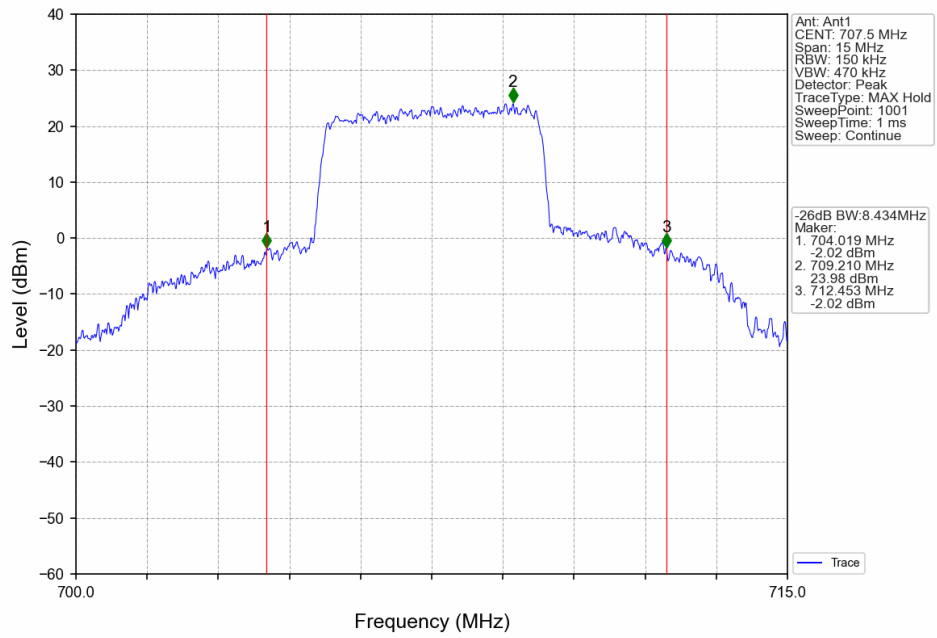
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



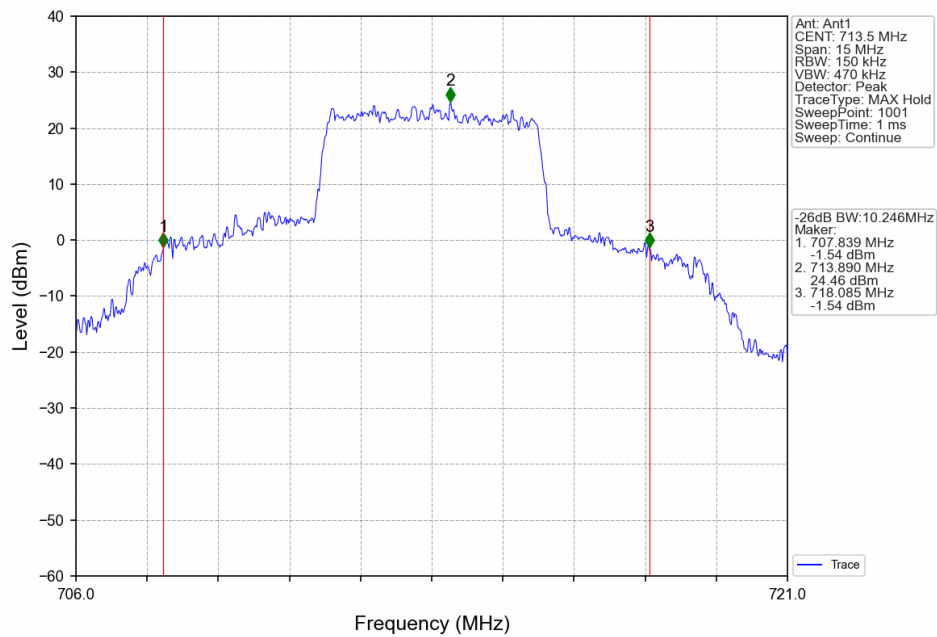
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



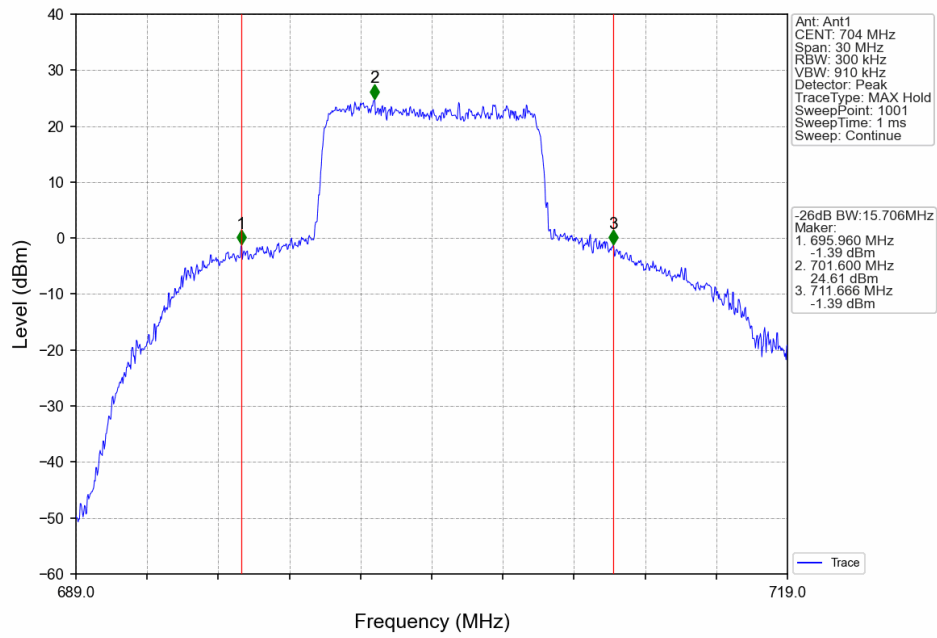
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



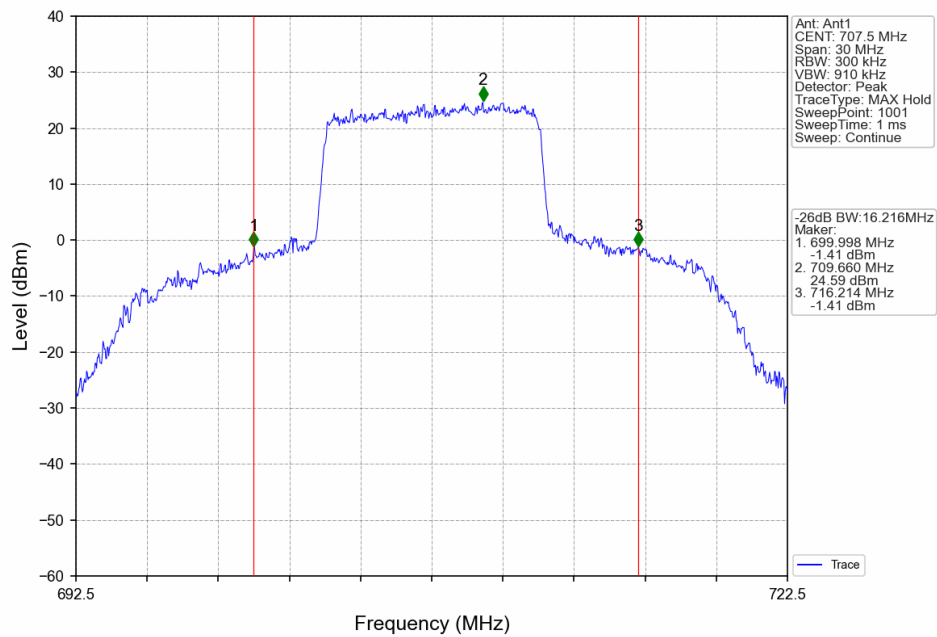
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



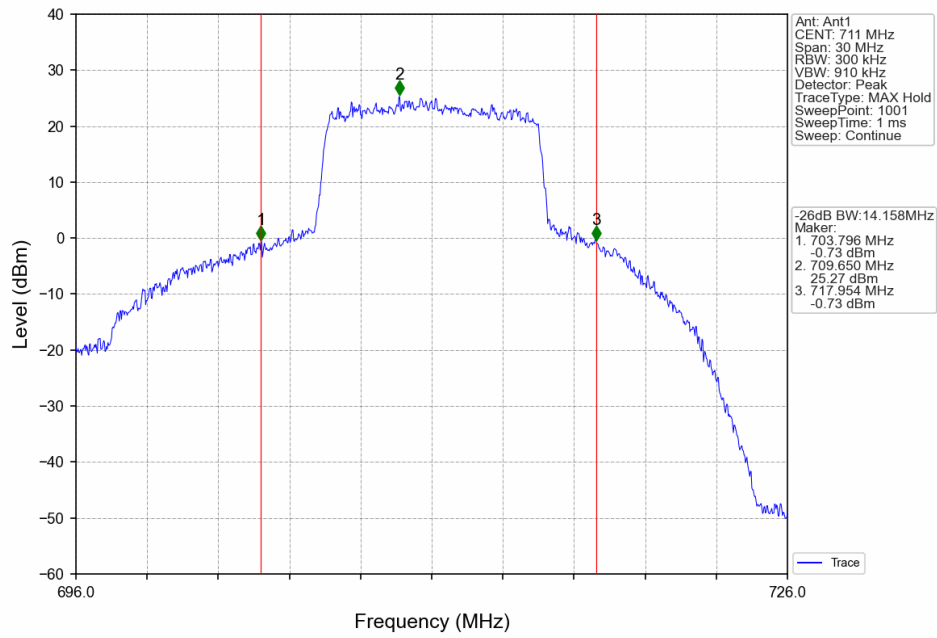
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



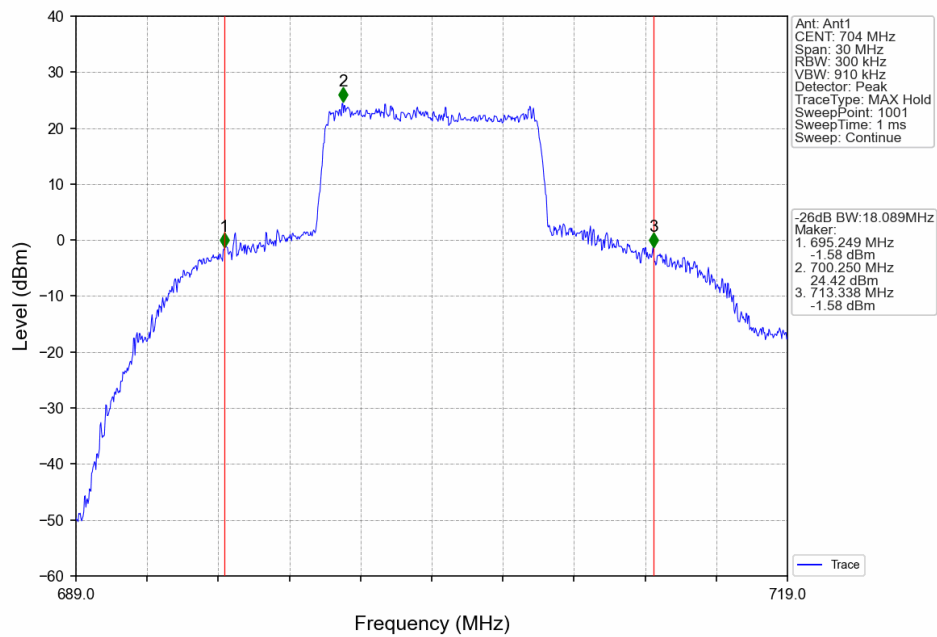
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



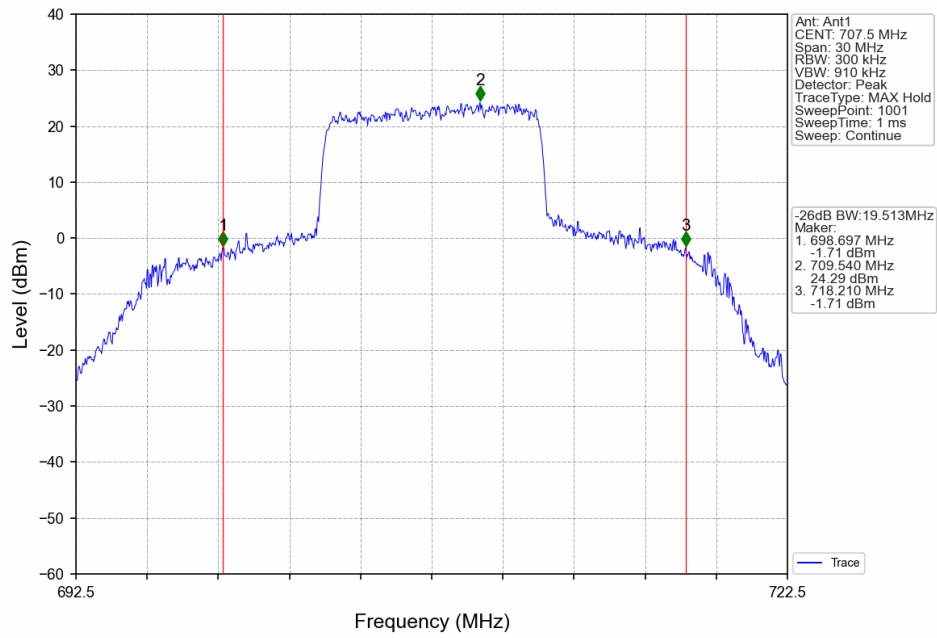
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



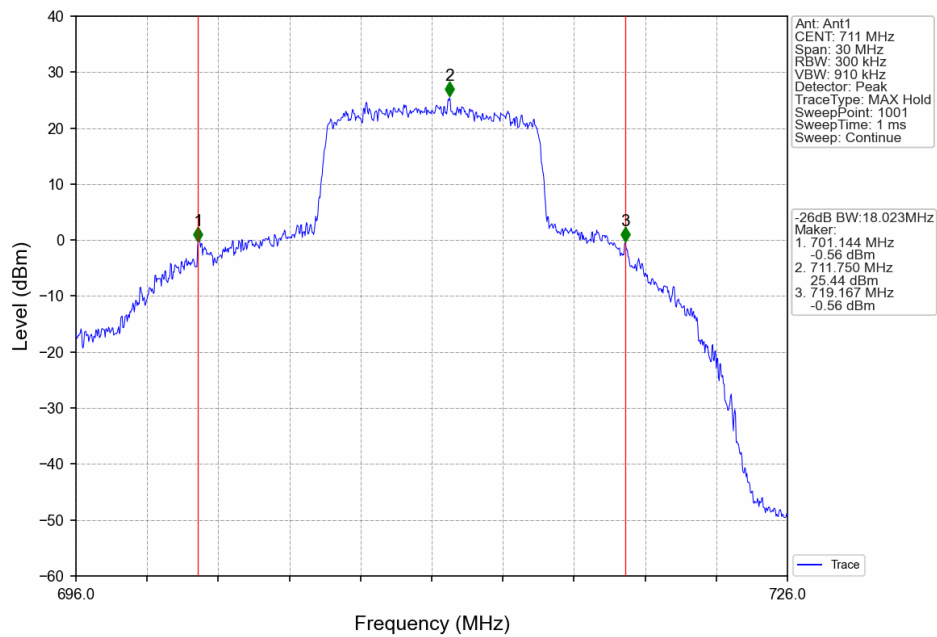
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



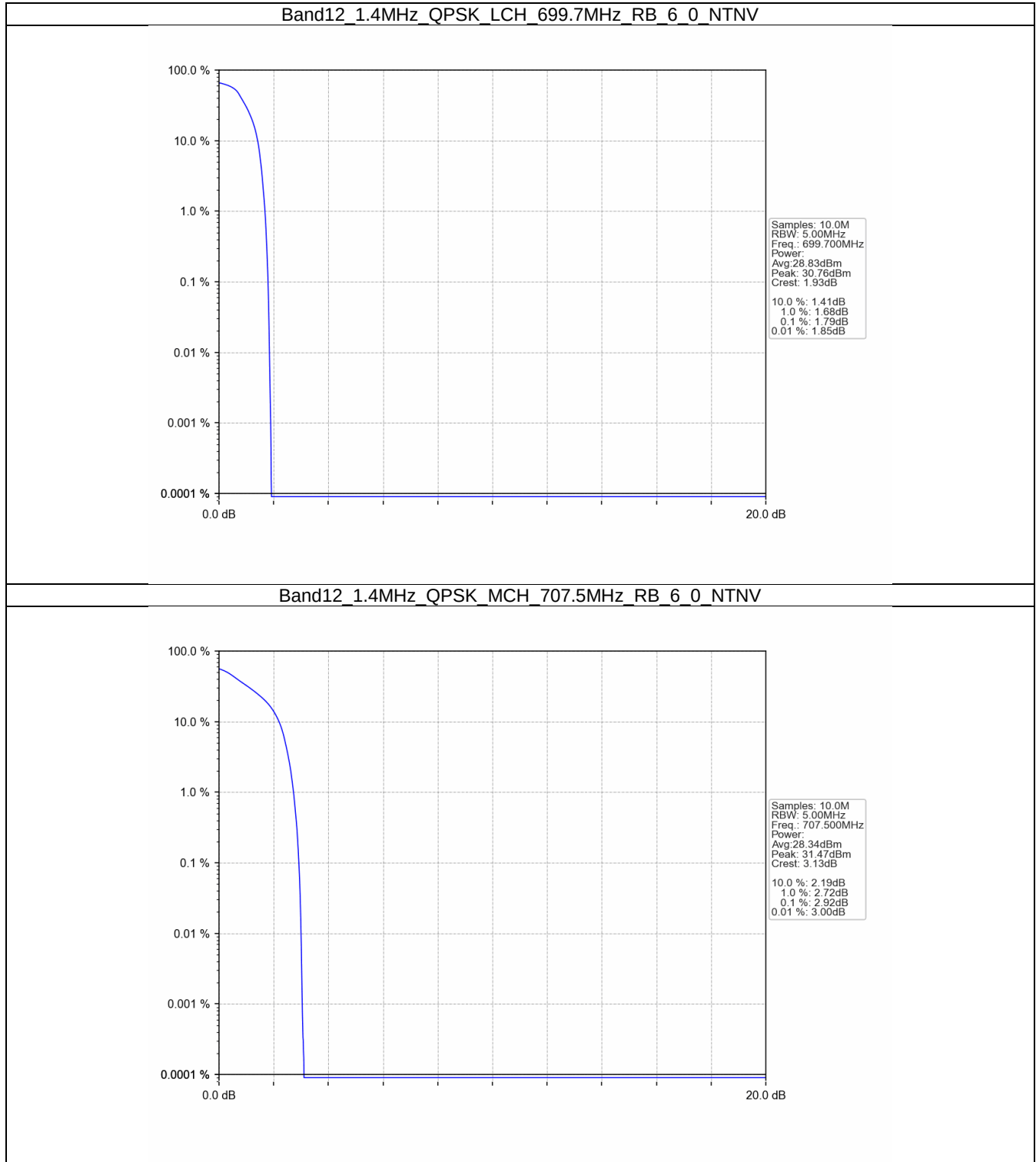
5. Peak-Average Ratio

5.1 B12_1.4MHz

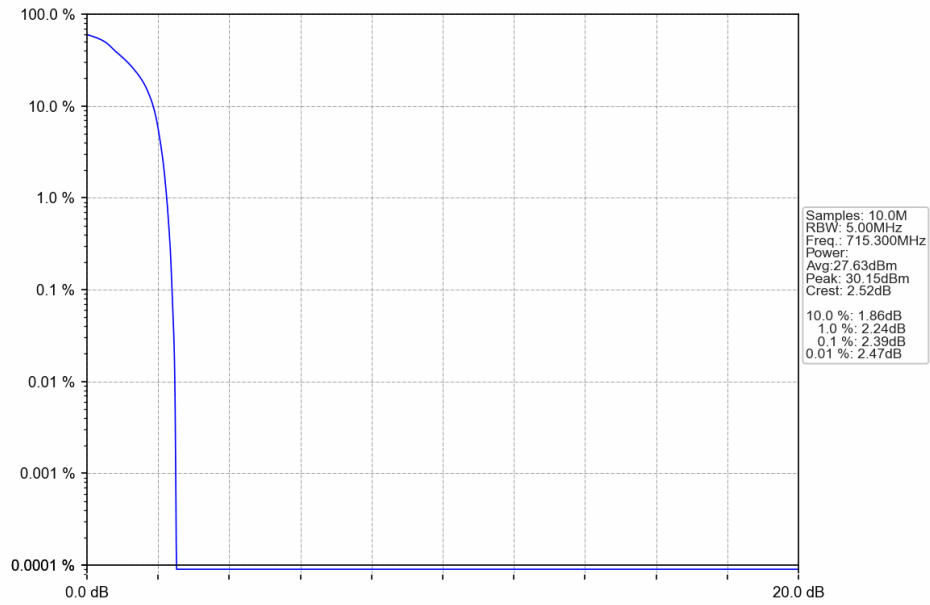
5.1.1 Test Result

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	1.79	<=13	Pass
	707.5	6	0	2.92	<=13	Pass
	715.3	6	0	2.39	<=13	Pass
16QAM	699.7	6	0	2.13	<=13	Pass
	707.5	6	0	3.18	<=13	Pass
	715.3	6	0	2.70	<=13	Pass

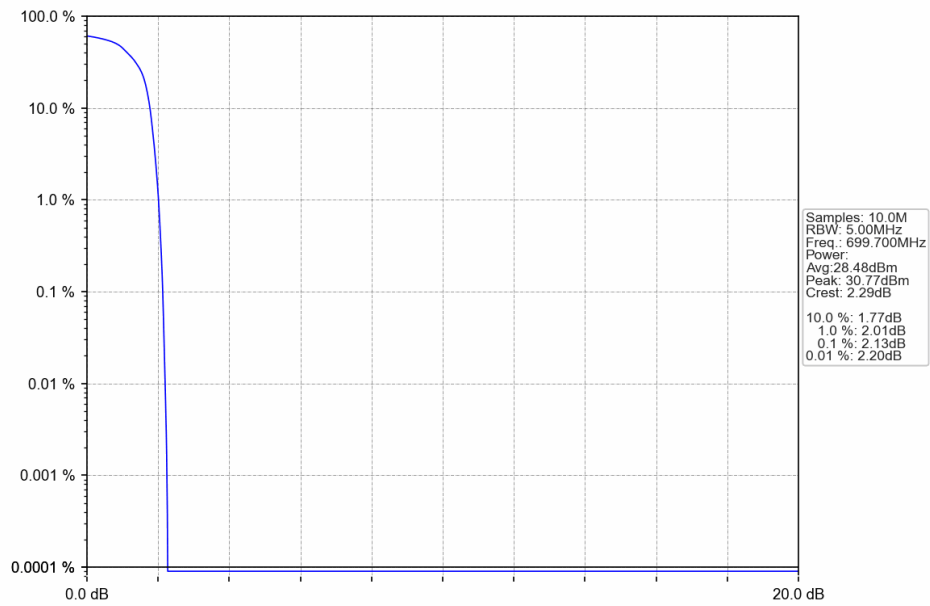
5.1.2 Test Graph



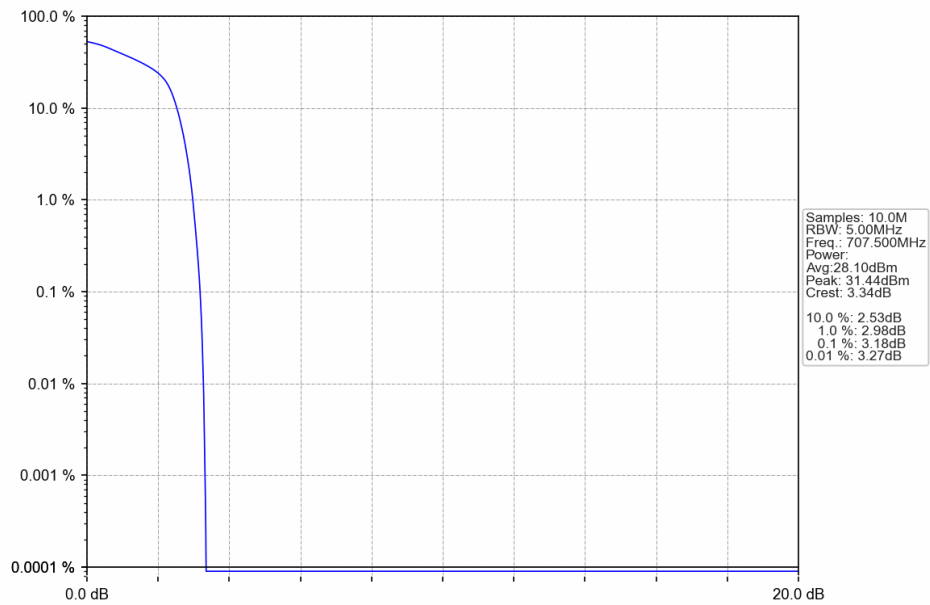
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



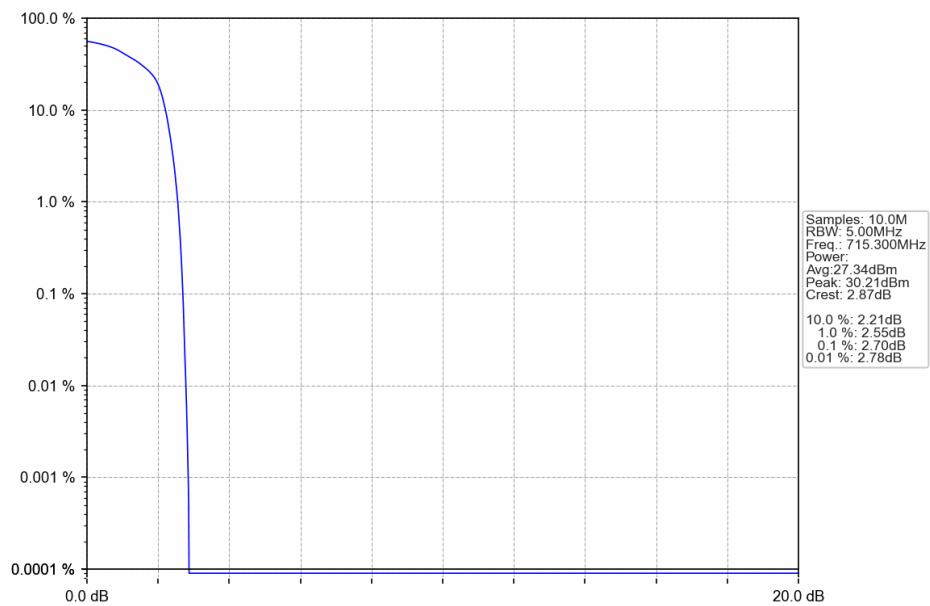
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV

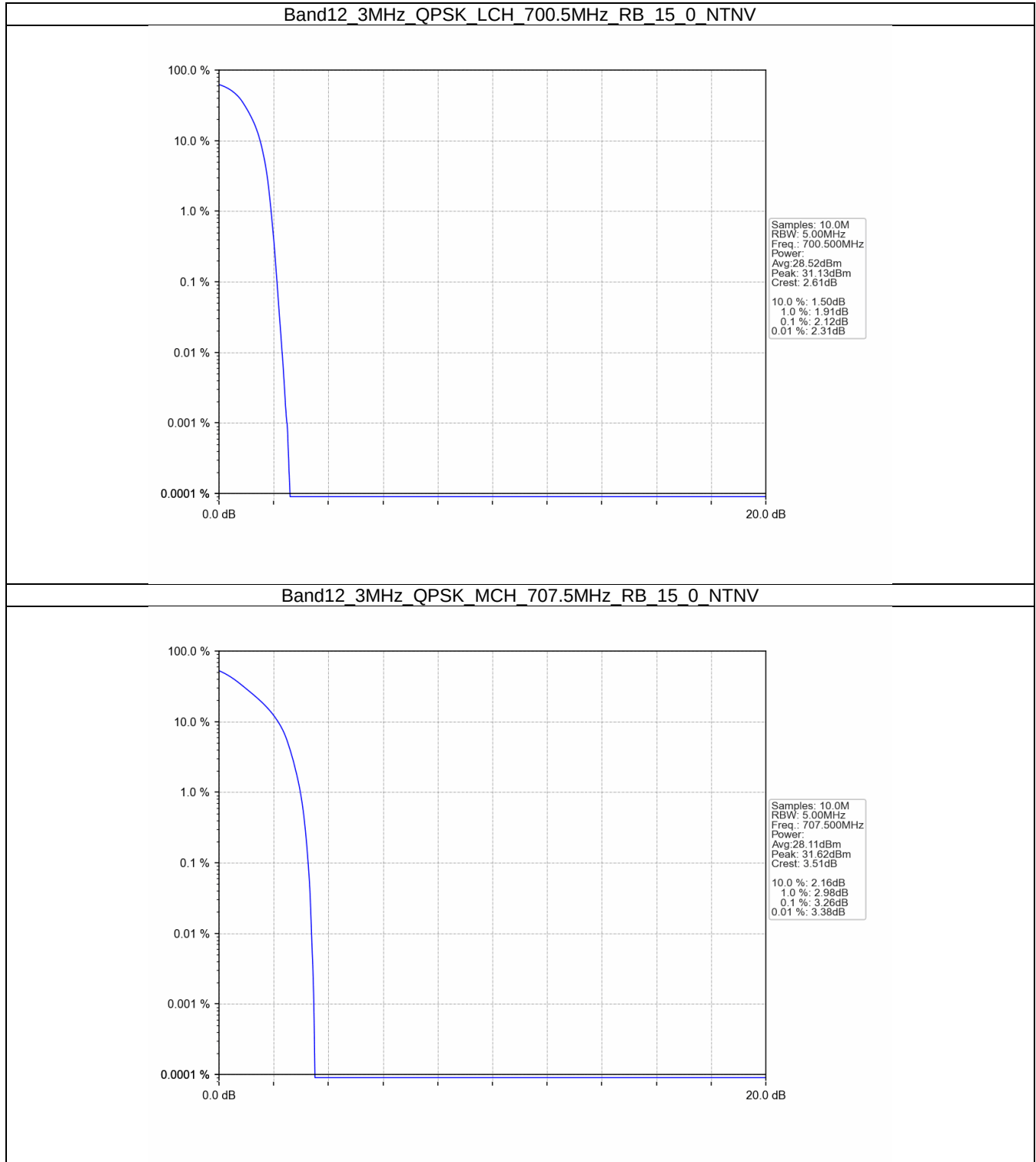


5.2 B12_3MHz

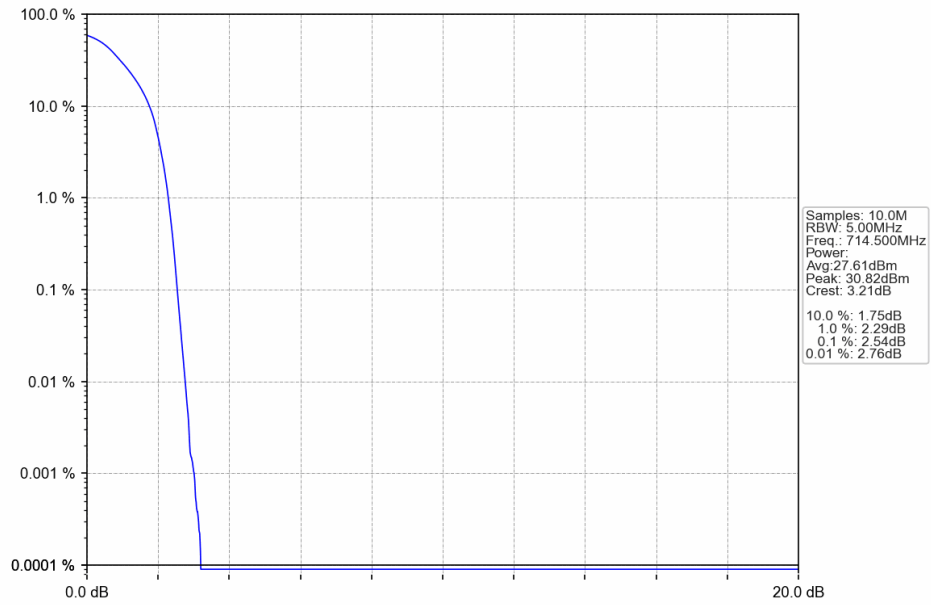
5.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	2.12	<=13	Pass
	707.5	15	0	3.26	<=13	Pass
	714.5	15	0	2.54	<=13	Pass
16QAM	700.5	15	0	2.52	<=13	Pass
	707.5	15	0	3.53	<=13	Pass
	714.5	15	0	2.84	<=13	Pass

5.2.2 Test Graph



Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

