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	21.75	-0.13	19.47	<=34.77	Pass
			2	21.90	-0.13	19.62	<=34.77	Pass
			5	21.37	-0.13	19.09	<=34.77	Pass
		3	0	21.30	-0.13	19.02	<=34.77	Pass
			2	21.34	-0.13	19.06	<=34.77	Pass
			3	21.33	-0.13	19.05	<=34.77	Pass
		6	0	20.30	-0.13	18.02	<=34.77	Pass
	707.5	1	0	21.47	-0.13	19.19	<=34.77	Pass
			2	21.59	-0.13	19.31	<=34.77	Pass
			5	21.49	-0.13	19.21	<=34.77	Pass
		3	0	21.56	-0.13	19.28	<=34.77	Pass
			2	21.60	-0.13	19.32	<=34.77	Pass
			3	21.53	-0.13	19.25	<=34.77	Pass
		6	0	20.59	-0.13	18.31	<=34.77	Pass
	715.3	1	0	21.65	-0.13	19.37	<=34.77	Pass
			2	21.76	-0.13	19.48	<=34.77	Pass
			5	21.71	-0.13	19.43	<=34.77	Pass
		3	0	21.72	-0.13	19.44	<=34.77	Pass
			2	21.75	-0.13	19.47	<=34.77	Pass
			3	21.69	-0.13	19.41	<=34.77	Pass
		6	0	20.78	-0.13	18.50	<=34.77	Pass
16QAM	699.7	1	0	20.19	-0.13	17.91	<=34.77	Pass
			2	20.29	-0.13	18.01	<=34.77	Pass
			5	20.30	-0.13	18.02	<=34.77	Pass
		3	0	20.33	-0.13	18.05	<=34.77	Pass
			2	20.31	-0.13	18.03	<=34.77	Pass
			3	20.37	-0.13	18.09	<=34.77	Pass
		6	0	19.27	-0.13	16.99	<=34.77	Pass
	707.5	1	0	20.60	-0.13	18.32	<=34.77	Pass
			2	20.71	-0.13	18.43	<=34.77	Pass
			5	20.59	-0.13	18.31	<=34.77	Pass
		3	0	20.50	-0.13	18.22	<=34.77	Pass
			2	20.54	-0.13	18.26	<=34.77	Pass
			3	20.53	-0.13	18.25	<=34.77	Pass
		6	0	19.59	-0.13	17.31	<=34.77	Pass
	715.3	1	0	20.59	-0.13	18.31	<=34.77	Pass
			2	20.63	-0.13	18.35	<=34.77	Pass
			5	20.57	-0.13	18.29	<=34.77	Pass
		3	0	20.86	-0.13	18.58	<=34.77	Pass
			2	20.89	-0.13	18.61	<=34.77	Pass
			3	20.84	-0.13	18.56	<=34.77	Pass
		6	0	19.74	-0.13	17.46	<=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	21.34	-0.13	19.06	<=34.77	Pass
			7	21.51	-0.13	19.23	<=34.77	Pass
			14	21.40	-0.13	19.12	<=34.77	Pass
		8	0	20.27	-0.13	17.99	<=34.77	Pass
			4	20.37	-0.13	18.09	<=34.77	Pass
			7	20.33	-0.13	18.05	<=34.77	Pass
		15	0	20.29	-0.13	18.01	<=34.77	Pass
	707.5	1	0	21.49	-0.13	19.21	<=34.77	Pass
			7	21.67	-0.13	19.39	<=34.77	Pass
			14	21.53	-0.13	19.25	<=34.77	Pass
		8	0	20.52	-0.13	18.24	<=34.77	Pass
			4	20.57	-0.13	18.29	<=34.77	Pass
			7	20.55	-0.13	18.27	<=34.77	Pass
		15	0	20.51	-0.13	18.23	<=34.77	Pass
	714.5	1	0	21.66	-0.13	19.38	<=34.77	Pass
			7	21.85	-0.13	19.57	<=34.77	Pass
			14	21.76	-0.13	19.48	<=34.77	Pass
		8	0	20.68	-0.13	18.40	<=34.77	Pass
			4	20.72	-0.13	18.44	<=34.77	Pass
			7	20.70	-0.13	18.42	<=34.77	Pass
		15	0	20.68	-0.13	18.40	<=34.77	Pass
16QAM	700.5	1	0	20.29	-0.13	18.01	<=34.77	Pass
			7	20.46	-0.13	18.18	<=34.77	Pass
			14	20.37	-0.13	18.09	<=34.77	Pass
		8	0	19.33	-0.13	17.05	<=34.77	Pass
			4	19.45	-0.13	17.17	<=34.77	Pass
			7	19.43	-0.13	17.15	<=34.77	Pass
		15	0	19.37	-0.13	17.09	<=34.77	Pass
	707.5	1	0	20.66	-0.13	18.38	<=34.77	Pass
			7	20.77	-0.13	18.49	<=34.77	Pass
			14	20.66	-0.13	18.38	<=34.77	Pass
		8	0	19.51	-0.13	17.23	<=34.77	Pass
			4	19.57	-0.13	17.29	<=34.77	Pass
			7	19.55	-0.13	17.27	<=34.77	Pass
		15	0	19.50	-0.13	17.22	<=34.77	Pass
	714.5	1	0	21.15	-0.13	18.87	<=34.77	Pass
			7	21.28	-0.13	19.00	<=34.77	Pass
			14	21.06	-0.13	18.78	<=34.77	Pass
		8	0	19.85	-0.13	17.57	<=34.77	Pass
			4	19.91	-0.13	17.63	<=34.77	Pass
			7	19.88	-0.13	17.60	<=34.77	Pass
		15	0	19.76	-0.13	17.48	<=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	21.19	-0.13	18.91	<=34.77	Pass
			13	21.40	-0.13	19.12	<=34.77	Pass
			24	21.37	-0.13	19.09	<=34.77	Pass

		12	0	20.24	-0.13	17.96	<=34.77	Pass
			6	20.35	-0.13	18.07	<=34.77	Pass
			13	20.27	-0.13	17.99	<=34.77	Pass
		25	0	20.28	-0.13	18.00	<=34.77	Pass
	707.5	1	0	21.38	-0.13	19.10	<=34.77	Pass
			13	21.54	-0.13	19.26	<=34.77	Pass
			24	21.49	-0.13	19.21	<=34.77	Pass
		12	0	20.47	-0.13	18.19	<=34.77	Pass
			6	20.53	-0.13	18.25	<=34.77	Pass
			13	20.56	-0.13	18.28	<=34.77	Pass
		25	0	20.54	-0.13	18.26	<=34.77	Pass
	713.5	1	0	21.52	-0.13	19.24	<=34.77	Pass
			13	21.72	-0.13	19.44	<=34.77	Pass
			24	21.70	-0.13	19.42	<=34.77	Pass
		12	0	20.72	-0.13	18.44	<=34.77	Pass
			6	20.68	-0.13	18.40	<=34.77	Pass
			13	20.59	-0.13	18.31	<=34.77	Pass
		25	0	20.64	-0.13	18.36	<=34.77	Pass
16QAM	701.5	1	0	20.23	-0.13	17.95	<=34.77	Pass
			13	20.44	-0.13	18.16	<=34.77	Pass
			24	20.45	-0.13	18.17	<=34.77	Pass
		12	0	19.24	-0.13	16.96	<=34.77	Pass
			6	19.39	-0.13	17.11	<=34.77	Pass
			13	19.31	-0.13	17.03	<=34.77	Pass
		25	0	19.33	-0.13	17.05	<=34.77	Pass
	707.5	1	0	20.61	-0.13	18.33	<=34.77	Pass
			13	20.77	-0.13	18.49	<=34.77	Pass
			24	20.68	-0.13	18.40	<=34.77	Pass
		12	0	19.54	-0.13	17.26	<=34.77	Pass
			6	19.62	-0.13	17.34	<=34.77	Pass
			13	19.66	-0.13	17.38	<=34.77	Pass
		25	0	19.56	-0.13	17.28	<=34.77	Pass
	713.5	1	0	20.36	-0.13	18.08	<=34.77	Pass
			13	20.57	-0.13	18.29	<=34.77	Pass
			24	20.44	-0.13	18.16	<=34.77	Pass
		12	0	19.73	-0.13	17.45	<=34.77	Pass
			6	19.74	-0.13	17.46	<=34.77	Pass
			13	19.61	-0.13	17.33	<=34.77	Pass
		25	0	19.72	-0.13	17.44	<=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	21.31	-0.13	19.03	<=34.77	Pass
			25	21.60	-0.13	19.32	<=34.77	Pass
			49	21.59	-0.13	19.31	<=34.77	Pass
		25	0	20.44	-0.13	18.16	<=34.77	Pass
			13	20.44	-0.13	18.16	<=34.77	Pass
			25	20.54	-0.13	18.26	<=34.77	Pass
		50	0	20.50	-0.13	18.22	<=34.77	Pass
	707.5	1	0	21.37	-0.13	19.09	<=34.77	Pass
			25	21.63	-0.13	19.35	<=34.77	Pass

			49	21.66	-0.13	19.38	<=34.77	Pass
		25	0	20.56	-0.13	18.28	<=34.77	Pass
			13	20.58	-0.13	18.30	<=34.77	Pass
			25	20.71	-0.13	18.43	<=34.77	Pass
		50	0	20.66	-0.13	18.38	<=34.77	Pass
	711	1	0	21.50	-0.13	19.22	<=34.77	Pass
			25	21.75	-0.13	19.47	<=34.77	Pass
			49	21.78	-0.13	19.50	<=34.77	Pass
		25	0	20.44	-0.13	18.16	<=34.77	Pass
			13	20.64	-0.13	18.36	<=34.77	Pass
			25	20.56	-0.13	18.28	<=34.77	Pass
		50	0	20.50	-0.13	18.22	<=34.77	Pass
16QAM	704	1	0	20.24	-0.13	17.96	<=34.77	Pass
			25	20.58	-0.13	18.30	<=34.77	Pass
			49	20.53	-0.13	18.25	<=34.77	Pass
		25	0	19.55	-0.13	17.27	<=34.77	Pass
			13	19.58	-0.13	17.30	<=34.77	Pass
			25	19.67	-0.13	17.39	<=34.77	Pass
		50	0	19.52	-0.13	17.24	<=34.77	Pass
	707.5	1	0	20.51	-0.13	18.23	<=34.77	Pass
			25	20.81	-0.13	18.53	<=34.77	Pass
			49	20.76	-0.13	18.48	<=34.77	Pass
		25	0	19.60	-0.13	17.32	<=34.77	Pass
			13	19.63	-0.13	17.35	<=34.77	Pass
			25	19.78	-0.13	17.50	<=34.77	Pass
		50	0	19.67	-0.13	17.39	<=34.77	Pass
	711	1	0	20.97	-0.13	18.69	<=34.77	Pass
			25	21.24	-0.13	18.96	<=34.77	Pass
			49	21.12	-0.13	18.84	<=34.77	Pass
		25	0	19.52	-0.13	17.24	<=34.77	Pass
			13	19.71	-0.13	17.43	<=34.77	Pass
			25	19.64	-0.13	17.36	<=34.77	Pass
		50	0	19.56	-0.13	17.28	<=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	-9.327	-0.0133	-2.5 to 2.5	Pass
					3.85	-3.934	-0.0056	-2.5 to 2.5	Pass
					4.43	-3.476	-0.0050	-2.5 to 2.5	Pass
				-30	3.85	-3.691	-0.0053	-2.5 to 2.5	Pass
				-20	3.85	-2.847	-0.0041	-2.5 to 2.5	Pass
				-10	3.85	-6.666	-0.0095	-2.5 to 2.5	Pass
				0	3.85	-6.108	-0.0087	-2.5 to 2.5	Pass
				10	3.85	-6.309	-0.0090	-2.5 to 2.5	Pass
				30	3.85	-7.710	-0.0110	-2.5 to 2.5	Pass
				40	3.85	-8.168	-0.0117	-2.5 to 2.5	Pass

				50	3.85	-9.098	-0.0130	-2.5 to 2.5	Pass
	707.5	6	0	20	3.27	-1.931	-0.0027	-2.5 to 2.5	Pass
					3.85	-5.078	-0.0072	-2.5 to 2.5	Pass
					4.43	-2.732	-0.0039	-2.5 to 2.5	Pass
				-30	3.85	-10.858	-0.0153	-2.5 to 2.5	Pass
				-20	3.85	-7.110	-0.0100	-2.5 to 2.5	Pass
				-10	3.85	-5.393	-0.0076	-2.5 to 2.5	Pass
				0	3.85	-7.367	-0.0104	-2.5 to 2.5	Pass
				10	3.85	-7.510	-0.0106	-2.5 to 2.5	Pass
				30	3.85	-2.346	-0.0033	-2.5 to 2.5	Pass
				40	3.85	-5.794	-0.0082	-2.5 to 2.5	Pass
				50	3.85	-1.044	-0.0015	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	-2.275	-0.0032	-2.5 to 2.5	Pass
					3.85	-10.214	-0.0143	-2.5 to 2.5	Pass
					4.43	-3.934	-0.0055	-2.5 to 2.5	Pass
				-30	3.85	-7.539	-0.0105	-2.5 to 2.5	Pass
				-20	3.85	-9.513	-0.0133	-2.5 to 2.5	Pass
				-10	3.85	-5.479	-0.0077	-2.5 to 2.5	Pass
				0	3.85	-8.612	-0.0120	-2.5 to 2.5	Pass
				10	3.85	-5.350	-0.0075	-2.5 to 2.5	Pass
				30	3.85	-5.279	-0.0074	-2.5 to 2.5	Pass
				40	3.85	-7.124	-0.0100	-2.5 to 2.5	Pass
				50	3.85	-2.632	-0.0037	-2.5 to 2.5	Pass
16QAM	699.7	6	0	20	3.27	-2.203	-0.0031	-2.5 to 2.5	Pass
					3.85	-6.638	-0.0095	-2.5 to 2.5	Pass
					4.43	-2.017	-0.0029	-2.5 to 2.5	Pass
				-30	3.85	-6.480	-0.0093	-2.5 to 2.5	Pass
				-20	3.85	-5.794	-0.0083	-2.5 to 2.5	Pass
				-10	3.85	-4.206	-0.0060	-2.5 to 2.5	Pass
				0	3.85	-6.838	-0.0098	-2.5 to 2.5	Pass
				10	3.85	-5.293	-0.0076	-2.5 to 2.5	Pass
				30	3.85	-6.323	-0.0090	-2.5 to 2.5	Pass
				40	3.85	-9.398	-0.0134	-2.5 to 2.5	Pass
				50	3.85	-5.221	-0.0075	-2.5 to 2.5	Pass
	707.5	6	0	20	3.27	-7.224	-0.0102	-2.5 to 2.5	Pass
					3.85	-6.437	-0.0091	-2.5 to 2.5	Pass
					4.43	-10.571	-0.0149	-2.5 to 2.5	Pass
				-30	3.85	-7.095	-0.0100	-2.5 to 2.5	Pass
				-20	3.85	-1.645	-0.0023	-2.5 to 2.5	Pass
				-10	3.85	-6.537	-0.0092	-2.5 to 2.5	Pass
				0	3.85	-4.191	-0.0059	-2.5 to 2.5	Pass
				10	3.85	-2.189	-0.0031	-2.5 to 2.5	Pass
				30	3.85	-7.997	-0.0113	-2.5 to 2.5	Pass
				40	3.85	-5.322	-0.0075	-2.5 to 2.5	Pass
				50	3.85	-6.065	-0.0086	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	-7.153	-0.0100	-2.5 to 2.5	Pass
					3.85	-2.990	-0.0042	-2.5 to 2.5	Pass
					4.43	-2.103	-0.0029	-2.5 to 2.5	Pass
				-30	3.85	-3.204	-0.0045	-2.5 to 2.5	Pass
				-20	3.85	-7.052	-0.0099	-2.5 to 2.5	Pass
				-10	3.85	-6.094	-0.0085	-2.5 to 2.5	Pass
				0	3.85	-4.449	-0.0062	-2.5 to 2.5	Pass
				10	3.85	-5.894	-0.0082	-2.5 to 2.5	Pass
				30	3.85	-7.124	-0.0100	-2.5 to 2.5	Pass
				40	3.85	-5.178	-0.0072	-2.5 to 2.5	Pass
				50	3.85	-1.960	-0.0027	-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	-9.241	-0.0132	-2.5 to 2.5	Pass
					3.85	-6.666	-0.0095	-2.5 to 2.5	Pass
					4.43	-8.726	-0.0125	-2.5 to 2.5	Pass
				-30	3.85	-5.593	-0.0080	-2.5 to 2.5	Pass
				-20	3.85	-6.795	-0.0097	-2.5 to 2.5	Pass
				-10	3.85	-10.715	-0.0153	-2.5 to 2.5	Pass
				0	3.85	-6.466	-0.0092	-2.5 to 2.5	Pass
				10	3.85	-3.247	-0.0046	-2.5 to 2.5	Pass
				30	3.85	-5.522	-0.0079	-2.5 to 2.5	Pass
				40	3.85	-8.683	-0.0124	-2.5 to 2.5	Pass
				50	3.85	-7.081	-0.0101	-2.5 to 2.5	Pass
	707.5	15	0	20	3.27	-2.303	-0.0033	-2.5 to 2.5	Pass
					3.85	-5.794	-0.0082	-2.5 to 2.5	Pass
					4.43	-4.692	-0.0066	-2.5 to 2.5	Pass
				-30	3.85	-0.572	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	-3.548	-0.0050	-2.5 to 2.5	Pass
				-10	3.85	-5.937	-0.0084	-2.5 to 2.5	Pass
				0	3.85	-9.599	-0.0136	-2.5 to 2.5	Pass
				10	3.85	-7.110	-0.0100	-2.5 to 2.5	Pass
				30	3.85	-4.492	-0.0063	-2.5 to 2.5	Pass
				40	3.85	-7.925	-0.0112	-2.5 to 2.5	Pass
				50	3.85	-7.195	-0.0102	-2.5 to 2.5	Pass
	714.5	15	0	20	3.27	-8.168	-0.0114	-2.5 to 2.5	Pass
					3.85	-4.320	-0.0060	-2.5 to 2.5	Pass
					4.43	-7.825	-0.0110	-2.5 to 2.5	Pass
				-30	3.85	-4.163	-0.0058	-2.5 to 2.5	Pass
				-20	3.85	-6.909	-0.0097	-2.5 to 2.5	Pass
				-10	3.85	-4.663	-0.0065	-2.5 to 2.5	Pass
				0	3.85	-9.155	-0.0128	-2.5 to 2.5	Pass
				10	3.85	-6.909	-0.0097	-2.5 to 2.5	Pass
				30	3.85	-9.727	-0.0136	-2.5 to 2.5	Pass
				40	3.85	-6.480	-0.0091	-2.5 to 2.5	Pass
				50	3.85	-5.693	-0.0080	-2.5 to 2.5	Pass
16QAM	700.5	15	0	20	3.27	-7.839	-0.0112	-2.5 to 2.5	Pass
					3.85	-7.811	-0.0112	-2.5 to 2.5	Pass
					4.43	-8.998	-0.0128	-2.5 to 2.5	Pass
				-30	3.85	-6.266	-0.0089	-2.5 to 2.5	Pass
				-20	3.85	-9.155	-0.0131	-2.5 to 2.5	Pass
				-10	3.85	-11.816	-0.0169	-2.5 to 2.5	Pass
				0	3.85	-5.436	-0.0078	-2.5 to 2.5	Pass
				10	3.85	-7.596	-0.0108	-2.5 to 2.5	Pass
				30	3.85	-4.549	-0.0065	-2.5 to 2.5	Pass
				40	3.85	-4.621	-0.0066	-2.5 to 2.5	Pass
				50	3.85	-12.689	-0.0181	-2.5 to 2.5	Pass
	707.5	15	0	20	3.27	-6.838	-0.0097	-2.5 to 2.5	Pass
					3.85	-5.136	-0.0073	-2.5 to 2.5	Pass
					4.43	-3.419	-0.0048	-2.5 to 2.5	Pass
				-30	3.85	-6.552	-0.0093	-2.5 to 2.5	Pass
				-20	3.85	-5.522	-0.0078	-2.5 to 2.5	Pass
				-10	3.85	-4.048	-0.0057	-2.5 to 2.5	Pass
				0	3.85	-6.952	-0.0098	-2.5 to 2.5	Pass

				10	3.85	-7.052	-0.0100	-2.5 to 2.5	Pass
				30	3.85	-4.077	-0.0058	-2.5 to 2.5	Pass
				40	3.85	-6.723	-0.0095	-2.5 to 2.5	Pass
				50	3.85	-8.497	-0.0120	-2.5 to 2.5	Pass
	714.5	15	0	20	3.27	-4.578	-0.0064	-2.5 to 2.5	Pass
					3.85	-7.868	-0.0110	-2.5 to 2.5	Pass
					4.43	-5.550	-0.0078	-2.5 to 2.5	Pass
				-30	3.85	-4.678	-0.0065	-2.5 to 2.5	Pass
				-20	3.85	-1.745	-0.0024	-2.5 to 2.5	Pass
				-10	3.85	-6.881	-0.0096	-2.5 to 2.5	Pass
				0	3.85	-6.866	-0.0096	-2.5 to 2.5	Pass
				10	3.85	-7.982	-0.0112	-2.5 to 2.5	Pass
				30	3.85	-0.987	-0.0014	-2.5 to 2.5	Pass
				40	3.85	-5.951	-0.0083	-2.5 to 2.5	Pass
				50	3.85	-5.150	-0.0072	-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	-7.339	-0.0105	-2.5 to 2.5	Pass
					3.85	-7.968	-0.0114	-2.5 to 2.5	Pass
					4.43	-5.050	-0.0072	-2.5 to 2.5	Pass
				-30	3.85	-6.008	-0.0086	-2.5 to 2.5	Pass
				-20	3.85	-9.012	-0.0128	-2.5 to 2.5	Pass
				-10	3.85	-3.948	-0.0056	-2.5 to 2.5	Pass
				0	3.85	-8.626	-0.0123	-2.5 to 2.5	Pass
				10	3.85	-4.263	-0.0061	-2.5 to 2.5	Pass
				30	3.85	-8.497	-0.0121	-2.5 to 2.5	Pass
				40	3.85	-8.483	-0.0121	-2.5 to 2.5	Pass
				50	3.85	-7.081	-0.0101	-2.5 to 2.5	Pass
	707.5	25	0	20	3.27	-4.048	-0.0057	-2.5 to 2.5	Pass
					3.85	-9.556	-0.0135	-2.5 to 2.5	Pass
					4.43	-5.636	-0.0080	-2.5 to 2.5	Pass
				-30	3.85	-4.120	-0.0058	-2.5 to 2.5	Pass
				-20	3.85	-2.689	-0.0038	-2.5 to 2.5	Pass
				-10	3.85	-8.998	-0.0127	-2.5 to 2.5	Pass
				0	3.85	-8.297	-0.0117	-2.5 to 2.5	Pass
				10	3.85	-6.652	-0.0094	-2.5 to 2.5	Pass
				30	3.85	-7.267	-0.0103	-2.5 to 2.5	Pass
				40	3.85	-3.877	-0.0055	-2.5 to 2.5	Pass
				50	3.85	-7.668	-0.0108	-2.5 to 2.5	Pass
	713.5	25	0	20	3.27	-3.219	-0.0045	-2.5 to 2.5	Pass
					3.85	-3.462	-0.0049	-2.5 to 2.5	Pass
					4.43	-5.307	-0.0074	-2.5 to 2.5	Pass
				-30	3.85	-7.653	-0.0107	-2.5 to 2.5	Pass
				-20	3.85	-3.963	-0.0056	-2.5 to 2.5	Pass
				-10	3.85	-3.190	-0.0045	-2.5 to 2.5	Pass
				0	3.85	-9.842	-0.0138	-2.5 to 2.5	Pass
				10	3.85	-5.136	-0.0072	-2.5 to 2.5	Pass
				30	3.85	-6.108	-0.0086	-2.5 to 2.5	Pass
				40	3.85	-1.388	-0.0019	-2.5 to 2.5	Pass
				50	3.85	-6.223	-0.0087	-2.5 to 2.5	Pass
16QAM	701.5	25	0	20	3.27	-6.337	-0.0090	-2.5 to 2.5	Pass

					3.85	-1.974	-0.0028	-2.5 to 2.5	Pass
					4.43	-5.193	-0.0074	-2.5 to 2.5	Pass
				-30	3.85	-3.991	-0.0057	-2.5 to 2.5	Pass
				-20	3.85	-3.562	-0.0051	-2.5 to 2.5	Pass
				-10	3.85	-4.320	-0.0062	-2.5 to 2.5	Pass
				0	3.85	-8.025	-0.0114	-2.5 to 2.5	Pass
				10	3.85	-6.909	-0.0098	-2.5 to 2.5	Pass
				30	3.85	-11.973	-0.0171	-2.5 to 2.5	Pass
				40	3.85	-6.208	-0.0088	-2.5 to 2.5	Pass
				50	3.85	-4.735	-0.0067	-2.5 to 2.5	Pass
	707.5	25	0		3.27	-8.397	-0.0119	-2.5 to 2.5	Pass
				20	3.85	-5.193	-0.0073	-2.5 to 2.5	Pass
					4.43	-8.082	-0.0114	-2.5 to 2.5	Pass
				-30	3.85	-3.548	-0.0050	-2.5 to 2.5	Pass
				-20	3.85	-2.789	-0.0039	-2.5 to 2.5	Pass
				-10	3.85	-3.319	-0.0047	-2.5 to 2.5	Pass
				0	3.85	-5.894	-0.0083	-2.5 to 2.5	Pass
				10	3.85	-6.337	-0.0090	-2.5 to 2.5	Pass
				30	3.85	-8.554	-0.0121	-2.5 to 2.5	Pass
				40	3.85	-6.094	-0.0086	-2.5 to 2.5	Pass
				50	3.85	-7.410	-0.0105	-2.5 to 2.5	Pass
	713.5	25	0		3.27	-6.323	-0.0089	-2.5 to 2.5	Pass
				20	3.85	-7.968	-0.0112	-2.5 to 2.5	Pass
					4.43	-8.554	-0.0120	-2.5 to 2.5	Pass
				-30	3.85	-9.627	-0.0135	-2.5 to 2.5	Pass
				-20	3.85	-5.107	-0.0072	-2.5 to 2.5	Pass
				-10	3.85	-8.640	-0.0121	-2.5 to 2.5	Pass
				0	3.85	-5.708	-0.0080	-2.5 to 2.5	Pass
				10	3.85	-7.052	-0.0099	-2.5 to 2.5	Pass
				30	3.85	-5.665	-0.0079	-2.5 to 2.5	Pass
				40	3.85	-8.125	-0.0114	-2.5 to 2.5	Pass
				50	3.85	-3.633	-0.0051	-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	-5.965	-0.0085	-2.5 to 2.5	Pass
					3.85	-6.852	-0.0097	-2.5 to 2.5	Pass
					4.43	-6.781	-0.0096	-2.5 to 2.5	Pass
				-30	3.85	-7.753	-0.0110	-2.5 to 2.5	Pass
				-20	3.85	-4.978	-0.0071	-2.5 to 2.5	Pass
				-10	3.85	-3.233	-0.0046	-2.5 to 2.5	Pass
				0	3.85	-7.553	-0.0107	-2.5 to 2.5	Pass
				10	3.85	-8.383	-0.0119	-2.5 to 2.5	Pass
				30	3.85	-7.482	-0.0106	-2.5 to 2.5	Pass
				40	3.85	-3.762	-0.0053	-2.5 to 2.5	Pass
				50	3.85	-4.921	-0.0070	-2.5 to 2.5	Pass
	707.5	50	0	20	3.27	-3.333	-0.0047	-2.5 to 2.5	Pass
					3.85	-6.580	-0.0093	-2.5 to 2.5	Pass
					4.43	-5.951	-0.0084	-2.5 to 2.5	Pass
				-30	3.85	-7.896	-0.0112	-2.5 to 2.5	Pass
				-20	3.85	-5.107	-0.0072	-2.5 to 2.5	Pass
				-10	3.85	-5.021	-0.0071	-2.5 to 2.5	Pass

				0	3.85	-6.523	-0.0092	-2.5 to 2.5	Pass
				10	3.85	-2.875	-0.0041	-2.5 to 2.5	Pass
				30	3.85	-7.811	-0.0110	-2.5 to 2.5	Pass
				40	3.85	-5.221	-0.0074	-2.5 to 2.5	Pass
				50	3.85	-5.193	-0.0073	-2.5 to 2.5	Pass
	711	50	0	20	3.27	-4.134	-0.0058	-2.5 to 2.5	Pass
					3.85	-0.944	-0.0013	-2.5 to 2.5	Pass
					4.43	-6.065	-0.0085	-2.5 to 2.5	Pass
				-30	3.85	-4.621	-0.0065	-2.5 to 2.5	Pass
				-20	3.85	-4.907	-0.0069	-2.5 to 2.5	Pass
				-10	3.85	-5.708	-0.0080	-2.5 to 2.5	Pass
				0	3.85	-6.495	-0.0091	-2.5 to 2.5	Pass
				10	3.85	-2.475	-0.0035	-2.5 to 2.5	Pass
				30	3.85	-4.878	-0.0069	-2.5 to 2.5	Pass
				40	3.85	-7.024	-0.0099	-2.5 to 2.5	Pass
				50	3.85	-4.234	-0.0060	-2.5 to 2.5	Pass
16QAM	704	50	0	20	3.27	-5.951	-0.0085	-2.5 to 2.5	Pass
					3.85	-7.696	-0.0109	-2.5 to 2.5	Pass
					4.43	-6.909	-0.0098	-2.5 to 2.5	Pass
				-30	3.85	-4.978	-0.0071	-2.5 to 2.5	Pass
				-20	3.85	-6.680	-0.0095	-2.5 to 2.5	Pass
				-10	3.85	-4.306	-0.0061	-2.5 to 2.5	Pass
				0	3.85	-7.939	-0.0113	-2.5 to 2.5	Pass
				10	3.85	-5.279	-0.0075	-2.5 to 2.5	Pass
				30	3.85	-6.108	-0.0087	-2.5 to 2.5	Pass
				40	3.85	-6.952	-0.0099	-2.5 to 2.5	Pass
				50	3.85	-6.752	-0.0096	-2.5 to 2.5	Pass
	707.5	50	0	20	3.27	-7.424	-0.0105	-2.5 to 2.5	Pass
					3.85	-3.633	-0.0051	-2.5 to 2.5	Pass
					4.43	-5.093	-0.0072	-2.5 to 2.5	Pass
				-30	3.85	-8.183	-0.0116	-2.5 to 2.5	Pass
				-20	3.85	-4.792	-0.0068	-2.5 to 2.5	Pass
				-10	3.85	-6.924	-0.0098	-2.5 to 2.5	Pass
				0	3.85	-6.680	-0.0094	-2.5 to 2.5	Pass
				10	3.85	-6.366	-0.0090	-2.5 to 2.5	Pass
				30	3.85	-5.507	-0.0078	-2.5 to 2.5	Pass
				40	3.85	-6.151	-0.0087	-2.5 to 2.5	Pass
				50	3.85	-5.093	-0.0072	-2.5 to 2.5	Pass
	711	50	0	20	3.27	-5.064	-0.0071	-2.5 to 2.5	Pass
					3.85	-6.380	-0.0090	-2.5 to 2.5	Pass
					4.43	-5.379	-0.0076	-2.5 to 2.5	Pass
				-30	3.85	-5.507	-0.0077	-2.5 to 2.5	Pass
				-20	3.85	-5.722	-0.0080	-2.5 to 2.5	Pass
				-10	3.85	-4.563	-0.0064	-2.5 to 2.5	Pass
				0	3.85	-3.576	-0.0050	-2.5 to 2.5	Pass
				10	3.85	-4.463	-0.0063	-2.5 to 2.5	Pass
				30	3.85	-7.710	-0.0108	-2.5 to 2.5	Pass
				40	3.85	-7.739	-0.0109	-2.5 to 2.5	Pass
				50	3.85	-1.631	-0.0023	-2.5 to 2.5	Pass

3. Modulation Characteristics

3.1 Test Result

3.1.1 B12_1.4MHz

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 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

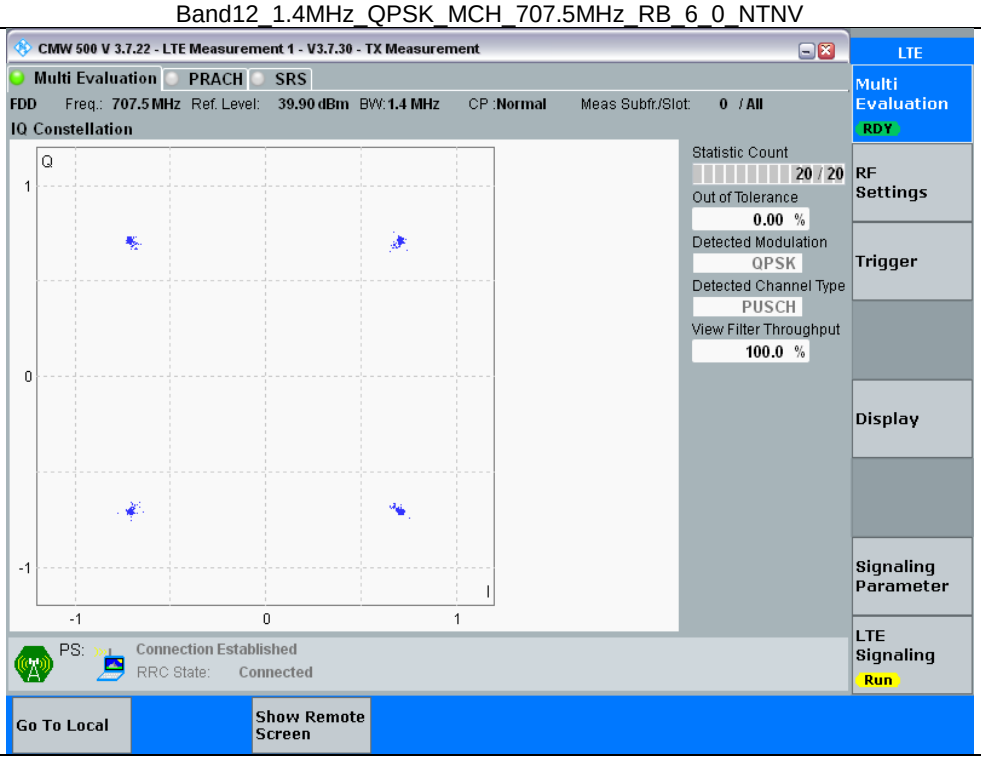
3.1.4 B12_10MHz

Band: 12 / Bandwidth: 10MHz / NTNV						
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

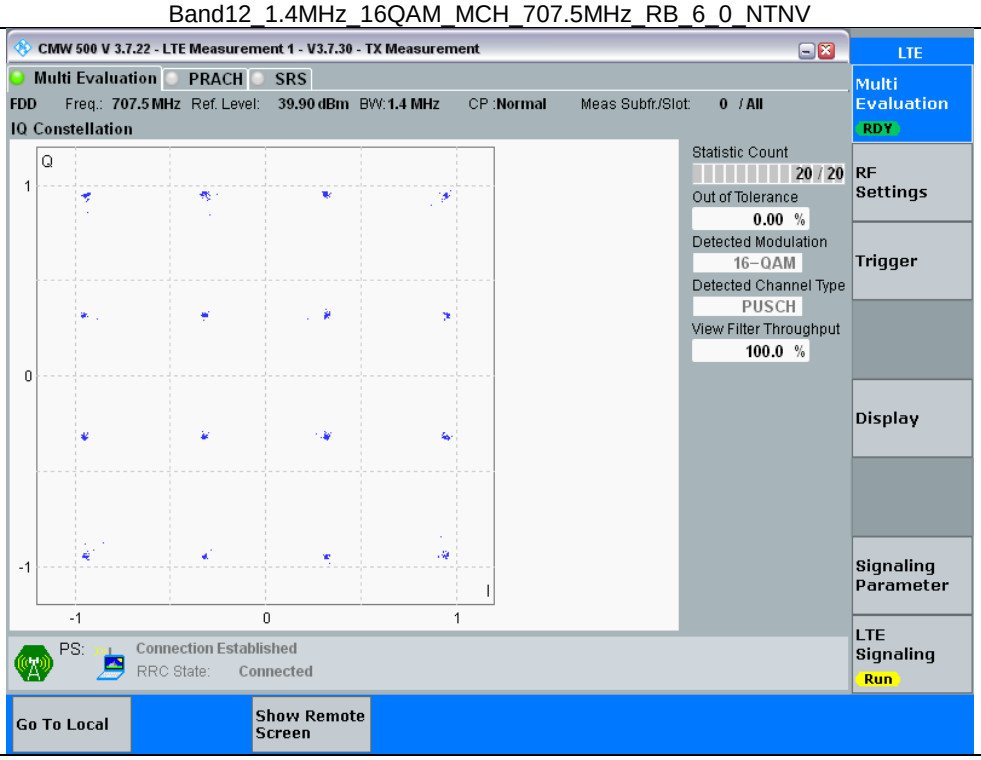
3.2 Test Graph

3.2.1 B12_1.4MHz

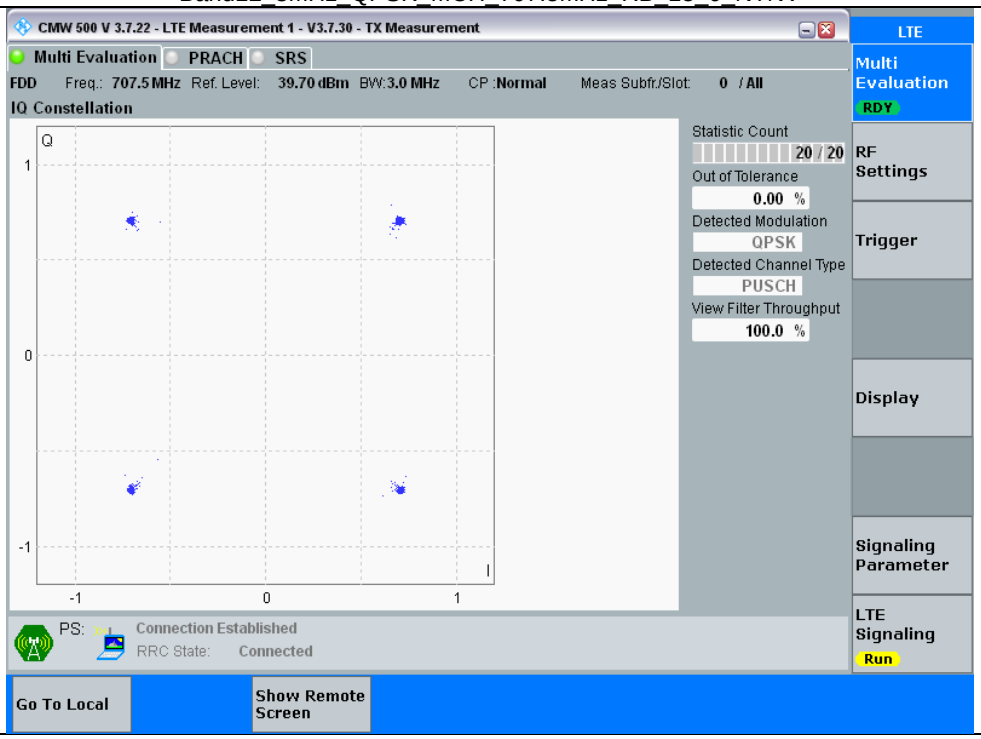
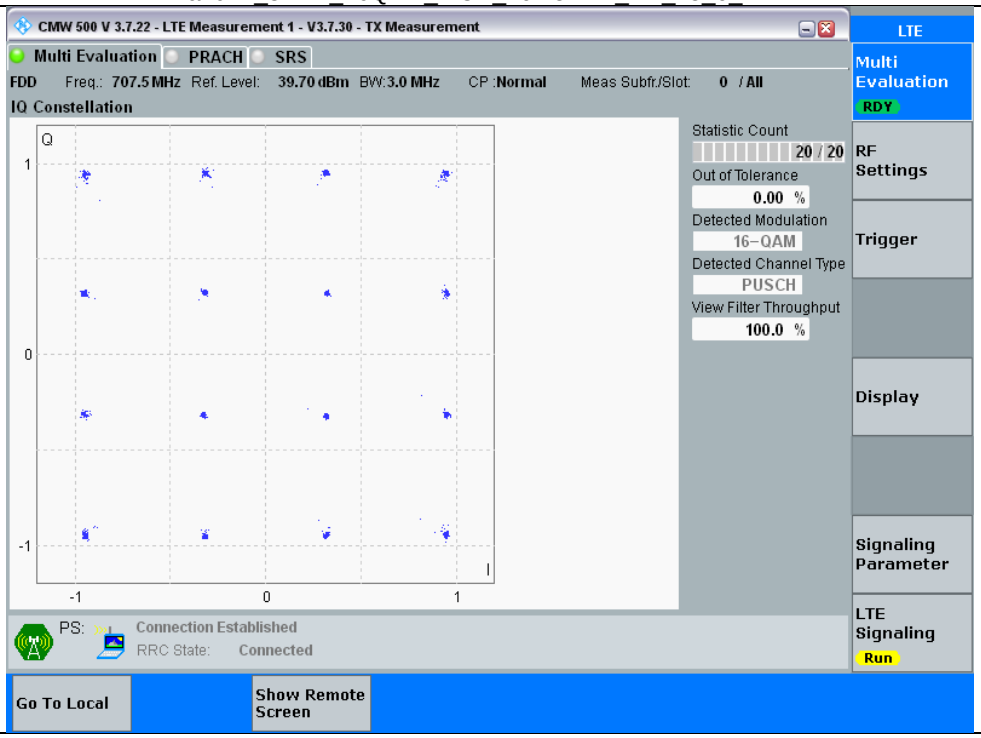
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



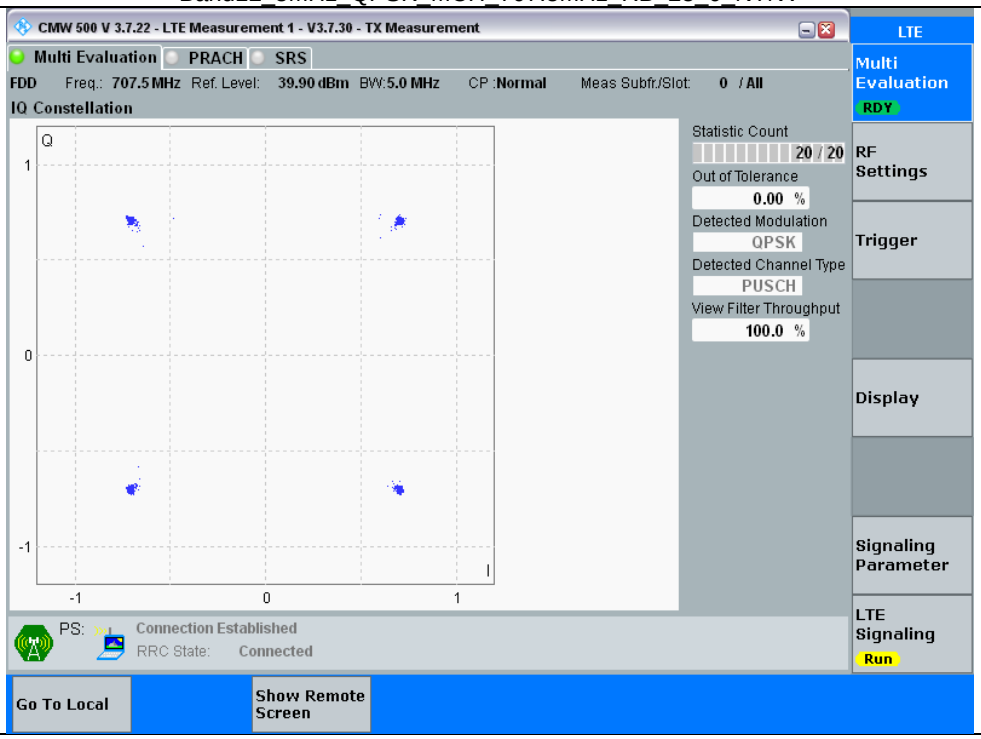
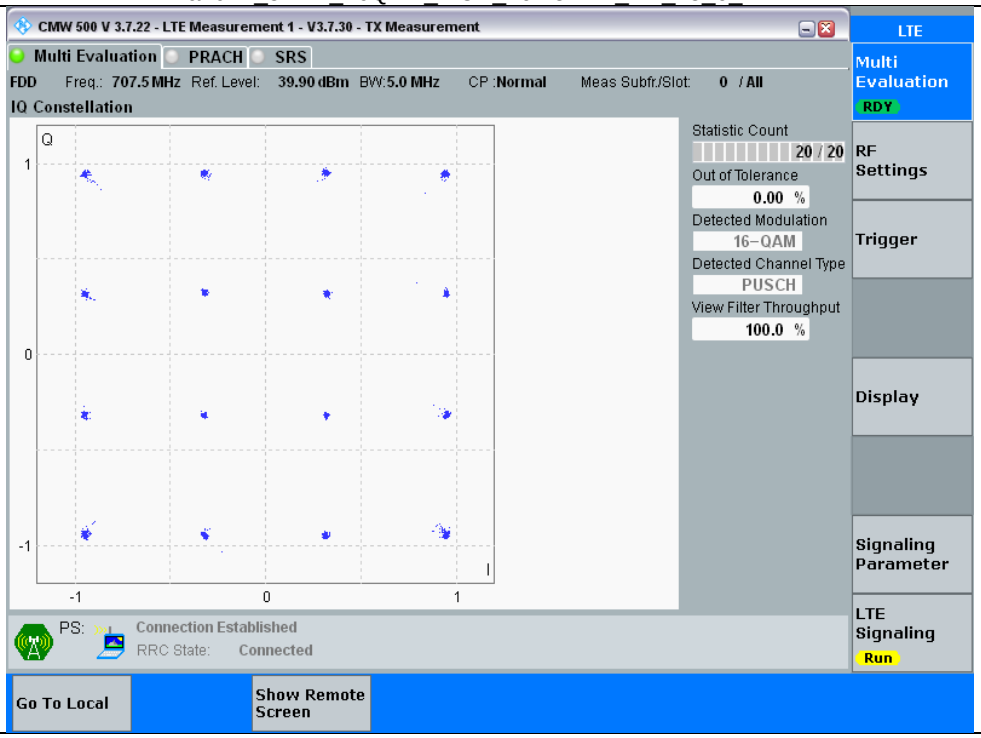
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



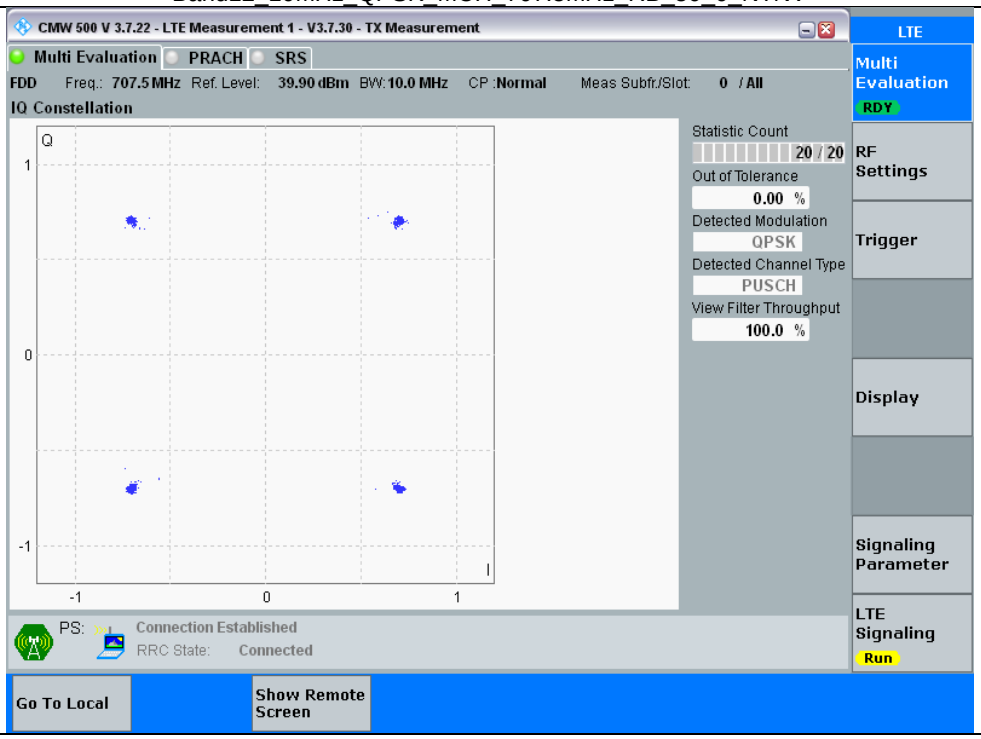
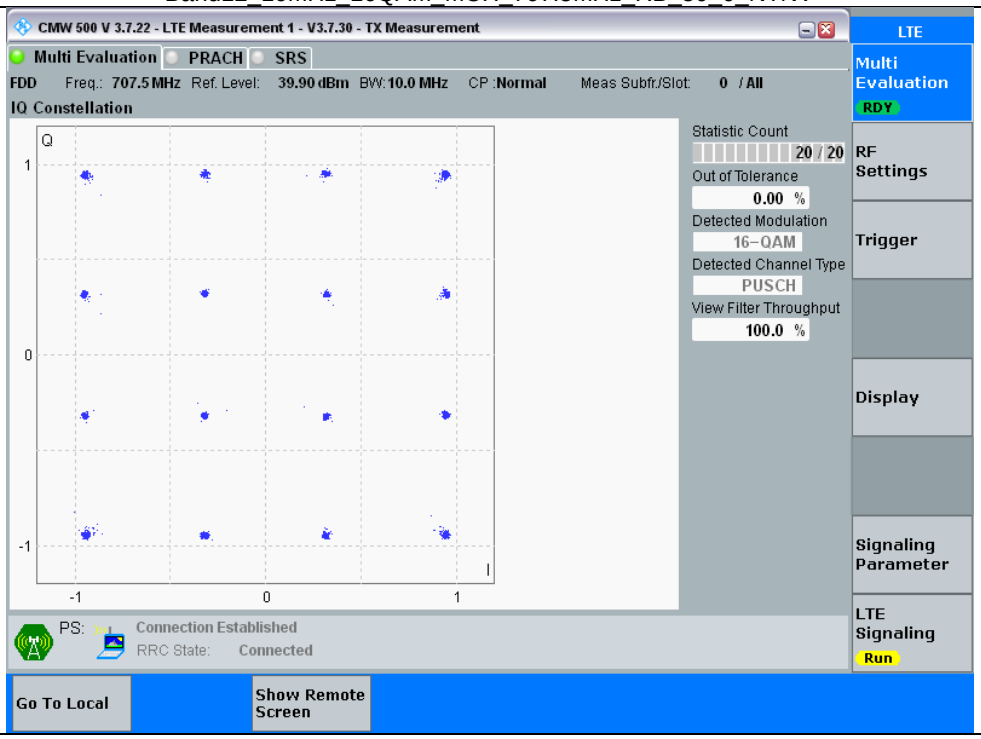
3.2.2 B12_3MHz

Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV

Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV


3.2.3 B12_5MHz

Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV

Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV


3.2.4 B12_10MHz

Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV

Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV


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	1.108	/	Pass
		715.3	6	0	1.110	/	Pass
	16QAM	699.7	6	0	1.108	/	Pass
		707.5	6	0	1.110	/	Pass
		715.3	6	0	1.114	/	Pass
3	QPSK	700.5	15	0	2.726	/	Pass
		707.5	15	0	2.725	/	Pass
		714.5	15	0	2.735	/	Pass
	16QAM	700.5	15	0	2.728	/	Pass
		707.5	15	0	2.728	/	Pass
		714.5	15	0	2.710	/	Pass
5	QPSK	701.5	25	0	4.559	/	Pass
		707.5	25	0	4.575	/	Pass
		713.5	25	0	4.581	/	Pass
	16QAM	701.5	25	0	4.569	/	Pass
		707.5	25	0	4.582	/	Pass
		713.5	25	0	4.551	/	Pass
10	QPSK	704	50	0	9.101	/	Pass
		707.5	50	0	9.058	/	Pass
		711	50	0	9.058	/	Pass
	16QAM	704	50	0	9.092	/	Pass
		707.5	50	0	9.068	/	Pass
		711	50	0	9.041	/	Pass

4.1.2 Band12_XDB

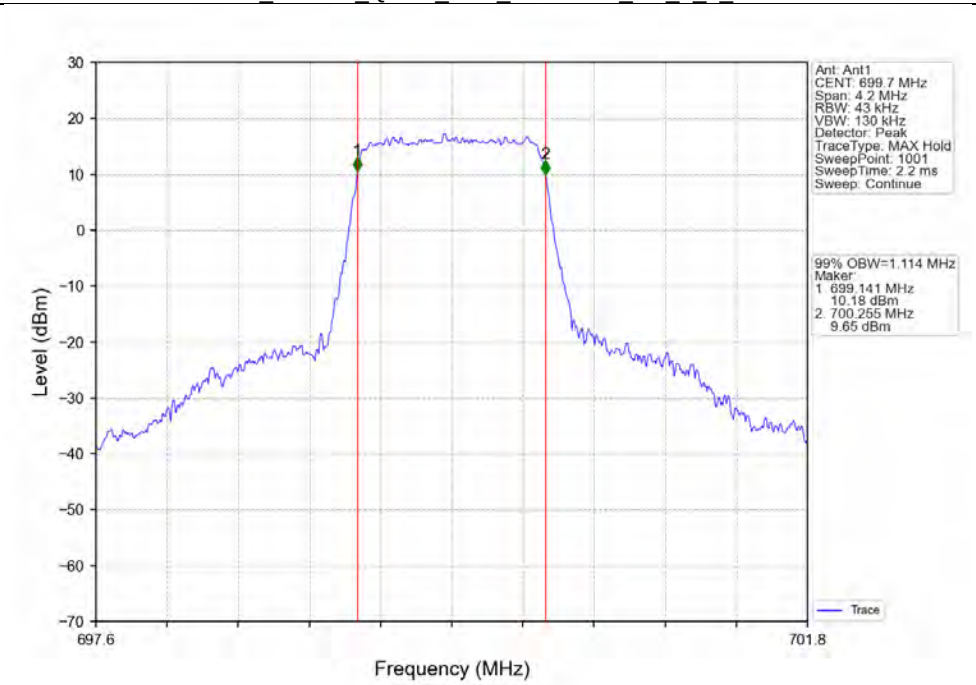
Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	699.7	6	0	1.313	/	Pass
		707.5	6	0	1.336	/	Pass
		715.3	6	0	1.321	/	Pass
	16QAM	699.7	6	0	1.309	/	Pass
		707.5	6	0	1.308	/	Pass
		715.3	6	0	1.328	/	Pass
3	QPSK	700.5	15	0	2.990	/	Pass
		707.5	15	0	2.997	/	Pass
		714.5	15	0	2.992	/	Pass
	16QAM	700.5	15	0	3.754	/	Pass
		707.5	15	0	2.981	/	Pass
		714.5	15	0	2.977	/	Pass
5	QPSK	701.5	25	0	5.239	/	Pass
		707.5	25	0	5.241	/	Pass
		713.5	25	0	5.255	/	Pass

	16QAM	701.5	25	0	5.269	/	Pass
		707.5	25	0	5.311	/	Pass
		713.5	25	0	5.272	/	Pass
10	QPSK	704	50	0	10.348	/	Pass
		707.5	50	0	10.387	/	Pass
		711	50	0	10.208	/	Pass
	16QAM	704	50	0	10.241	/	Pass
		707.5	50	0	10.371	/	Pass
		711	50	0	10.108	/	Pass

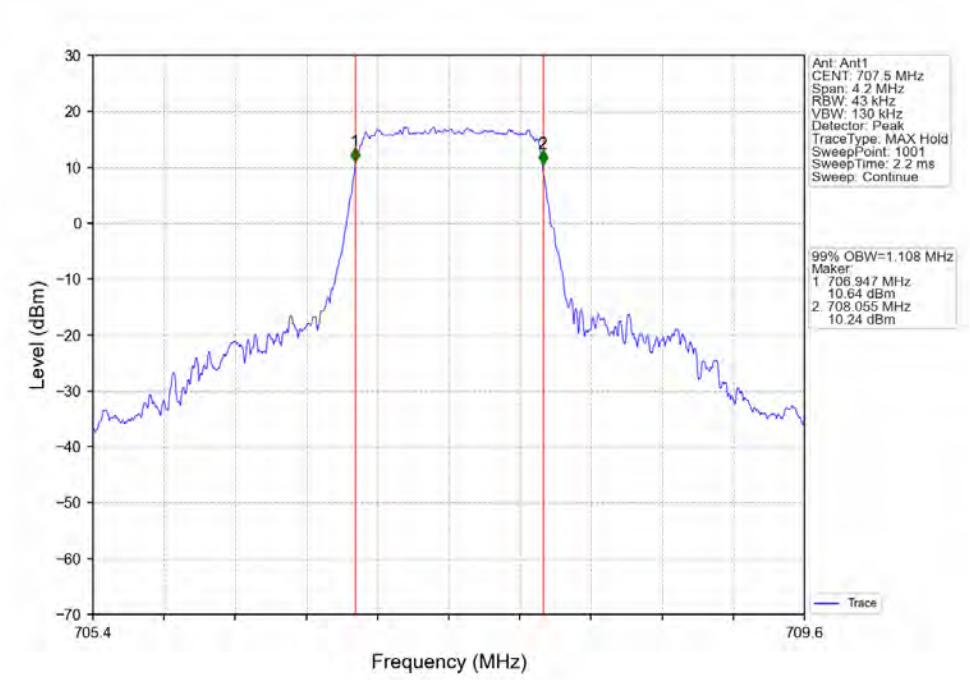
4.2 Test Graph

4.2.1 Band12_OBW

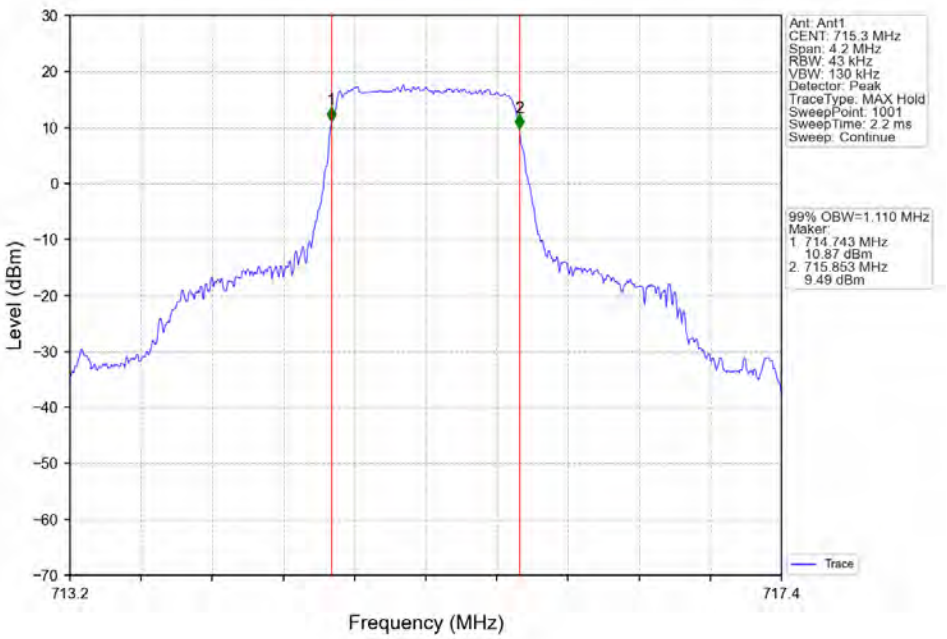
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



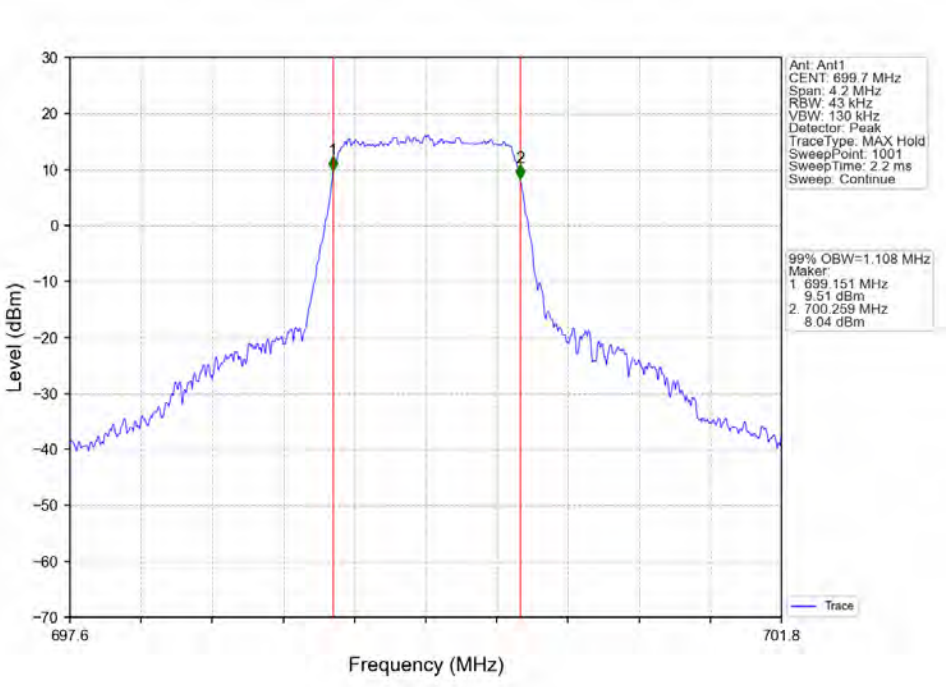
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



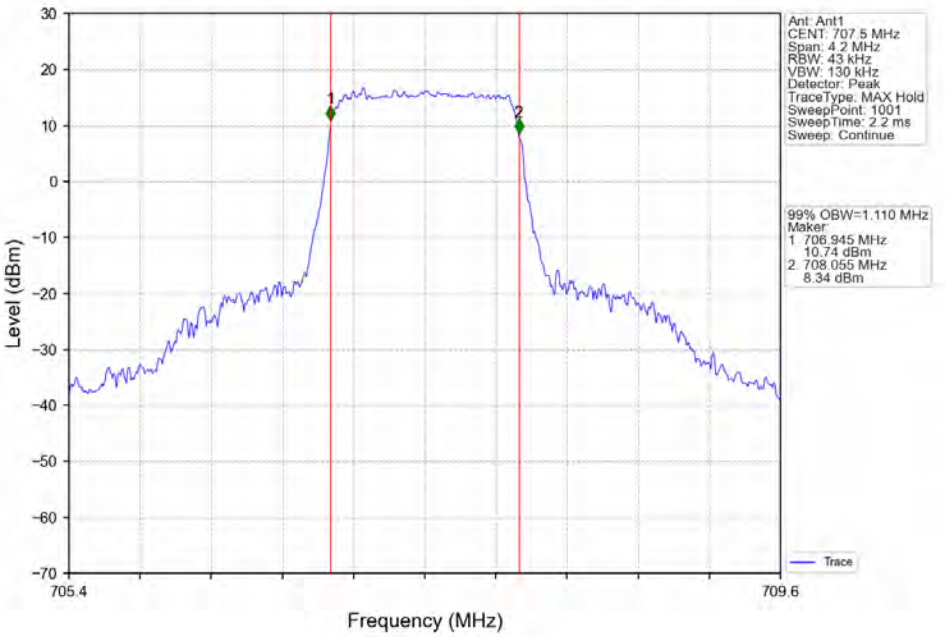
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



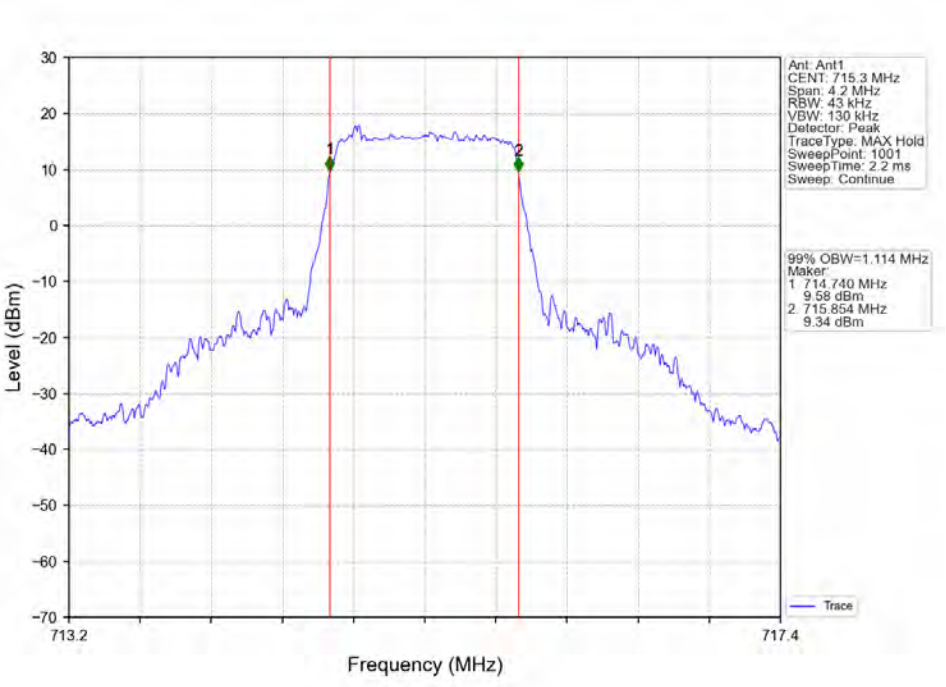
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



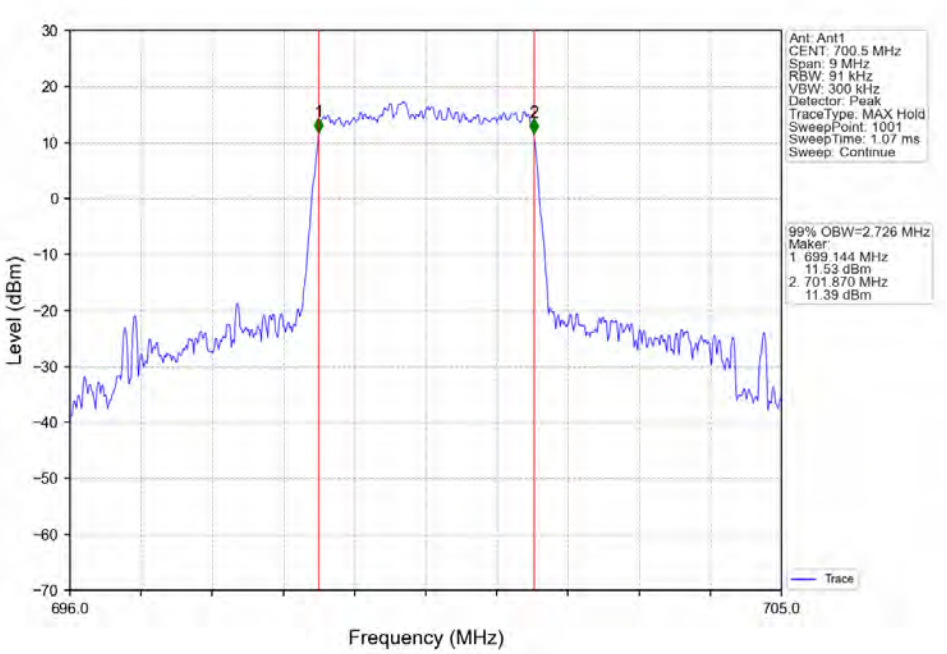
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



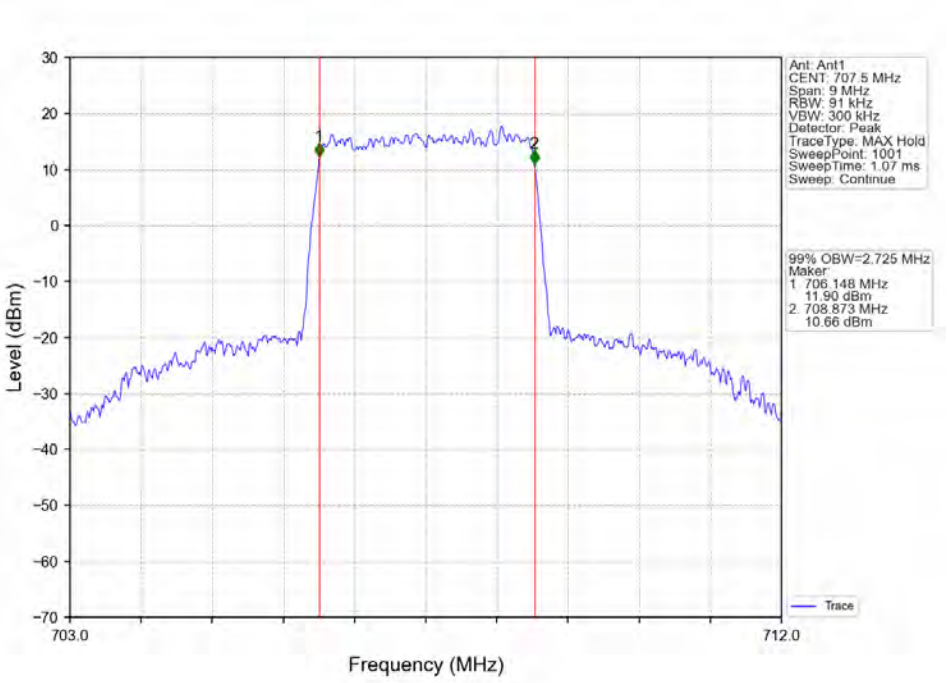
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



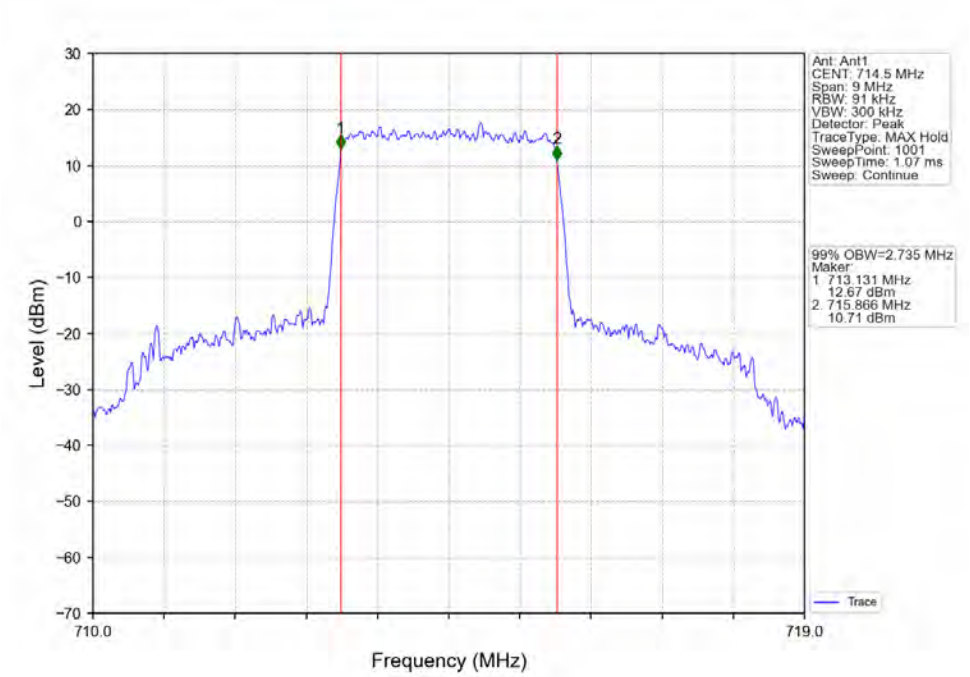
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



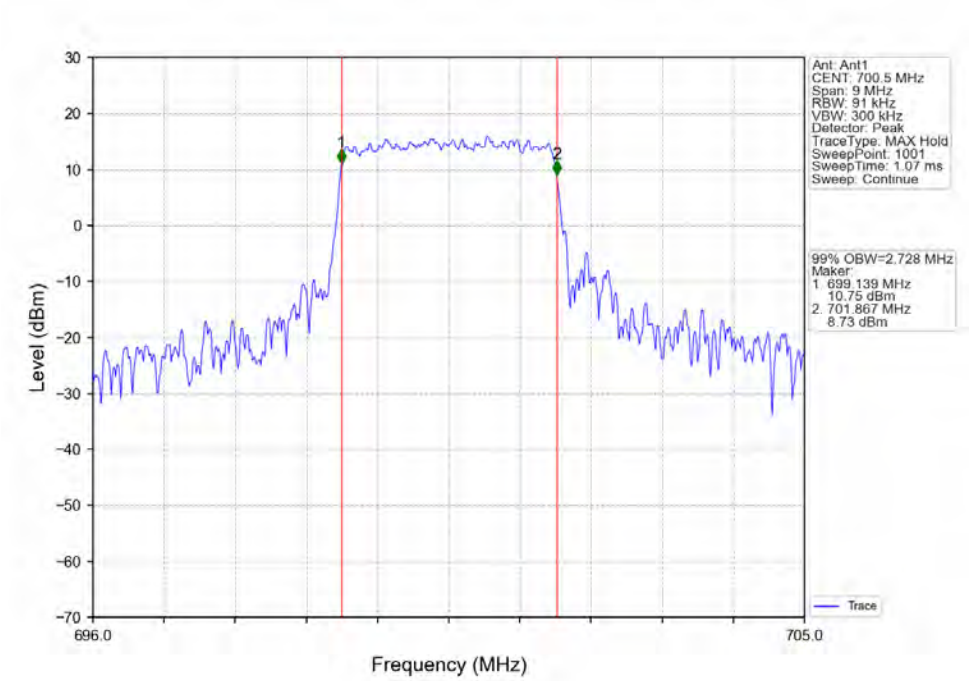
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



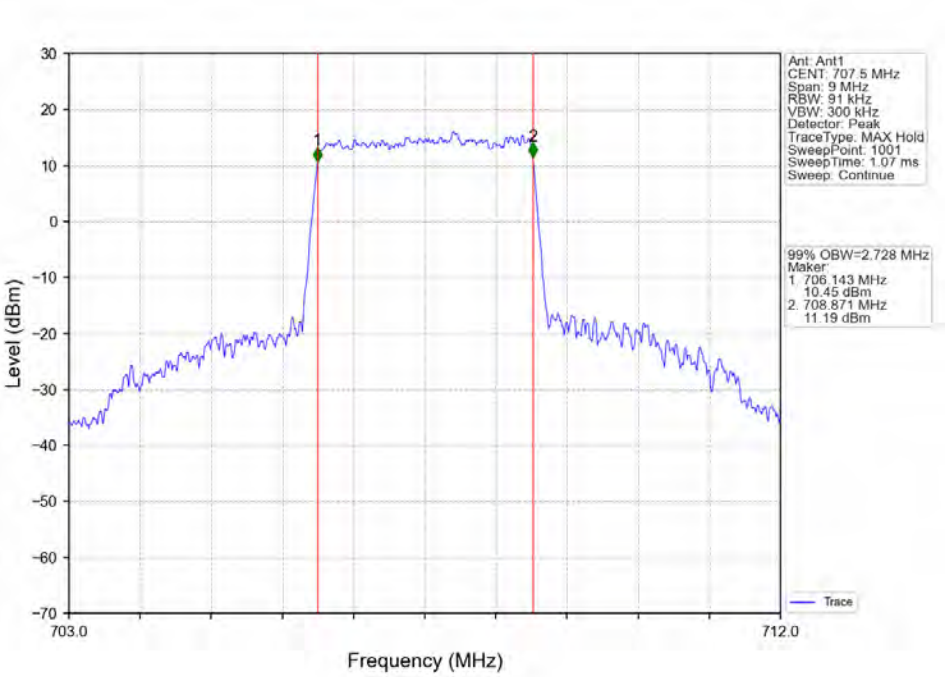
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



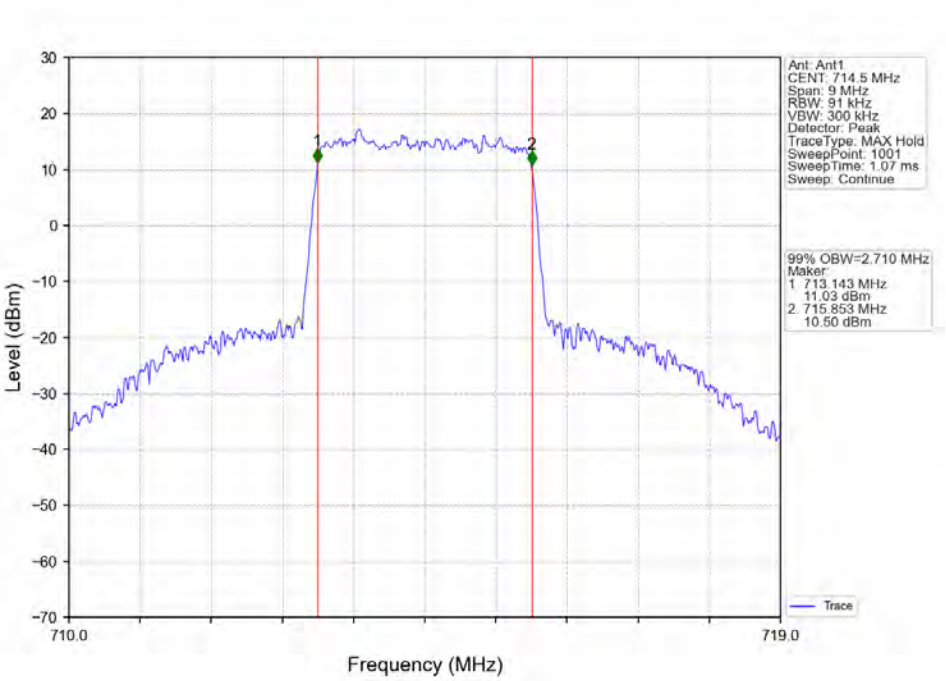
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



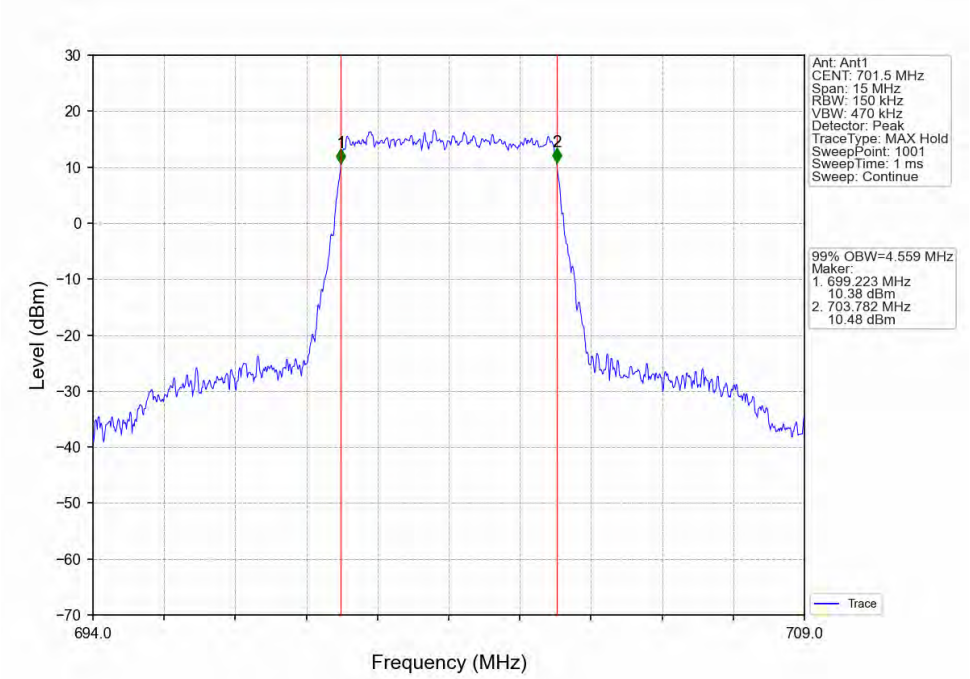
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



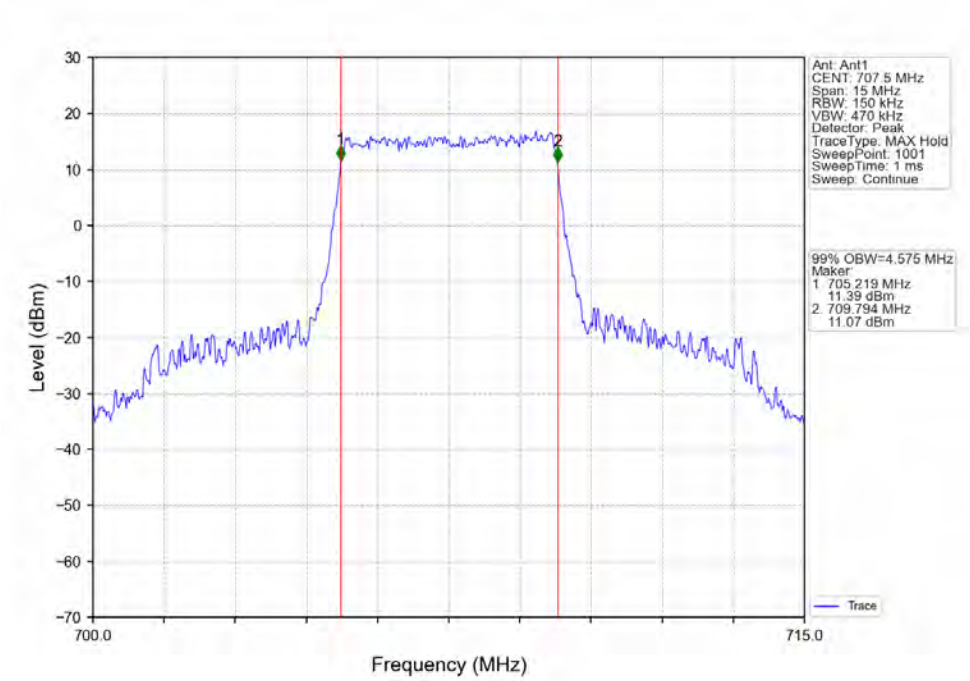
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



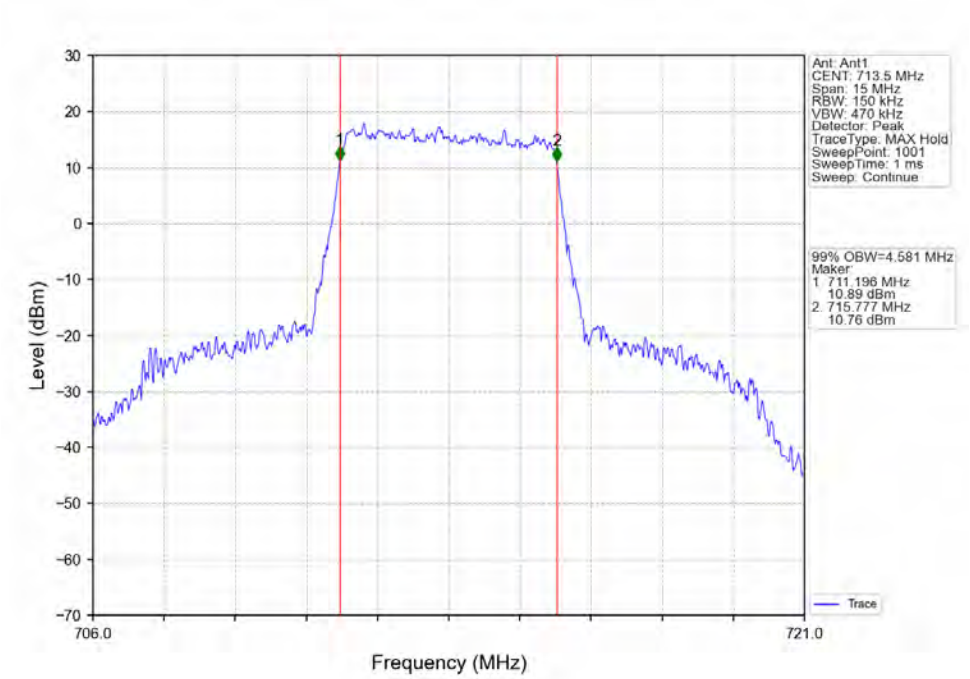
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



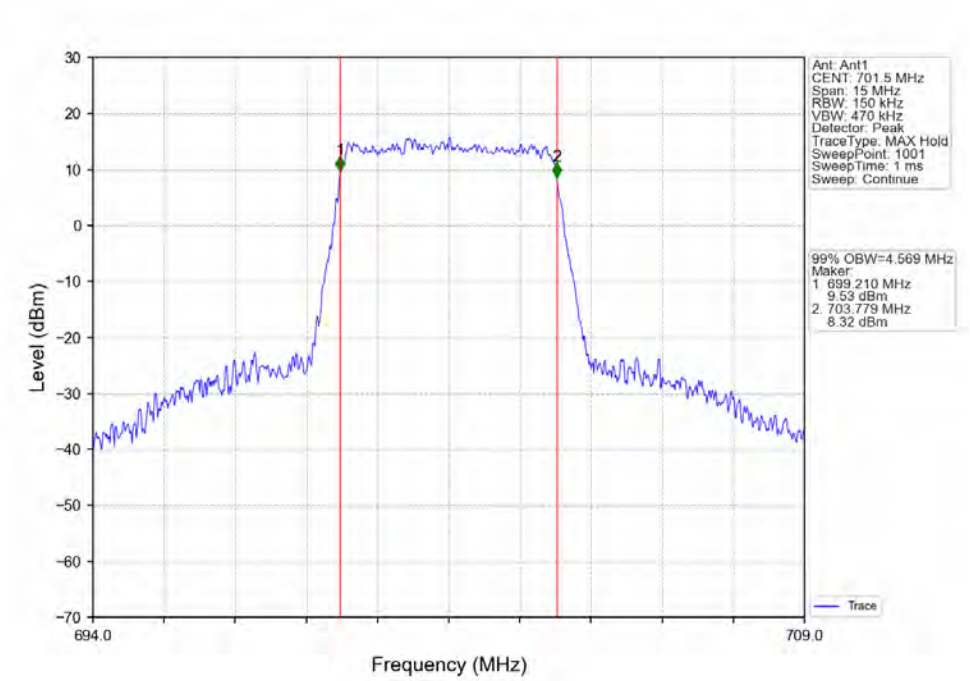
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



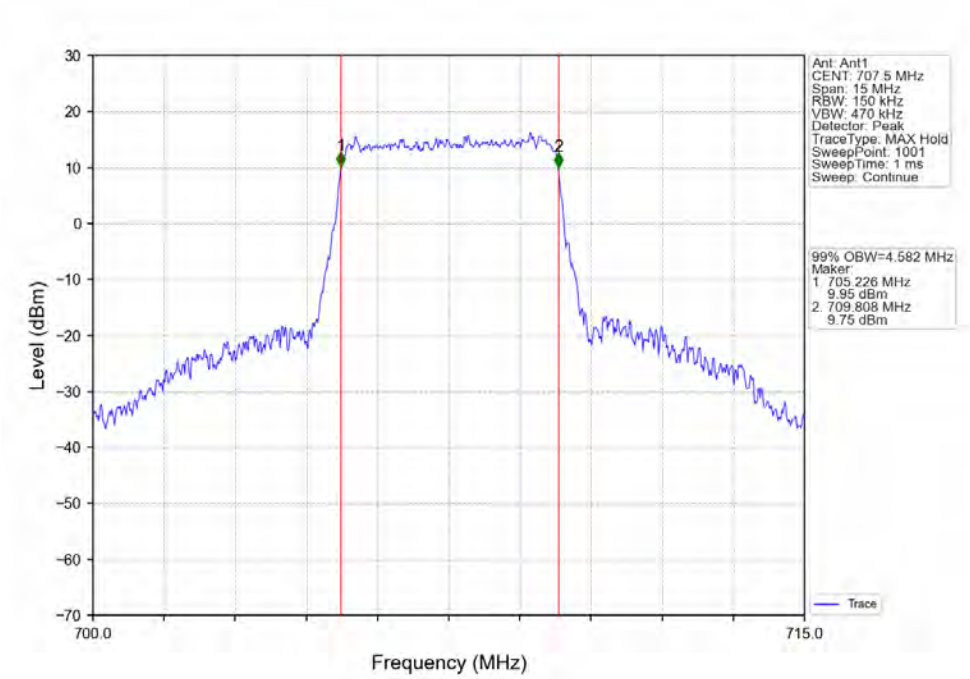
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



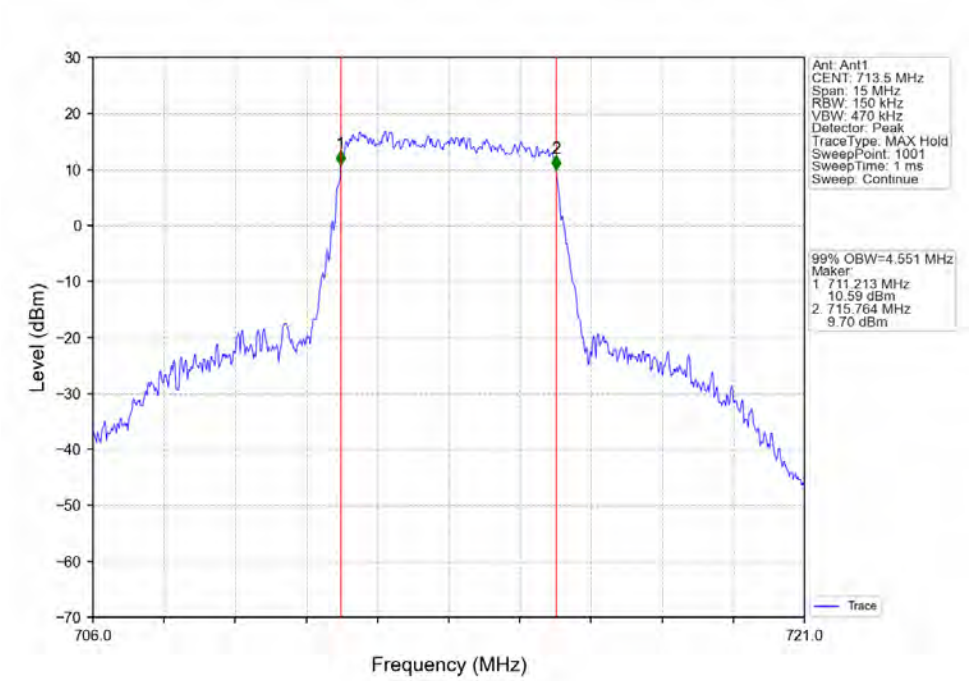
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



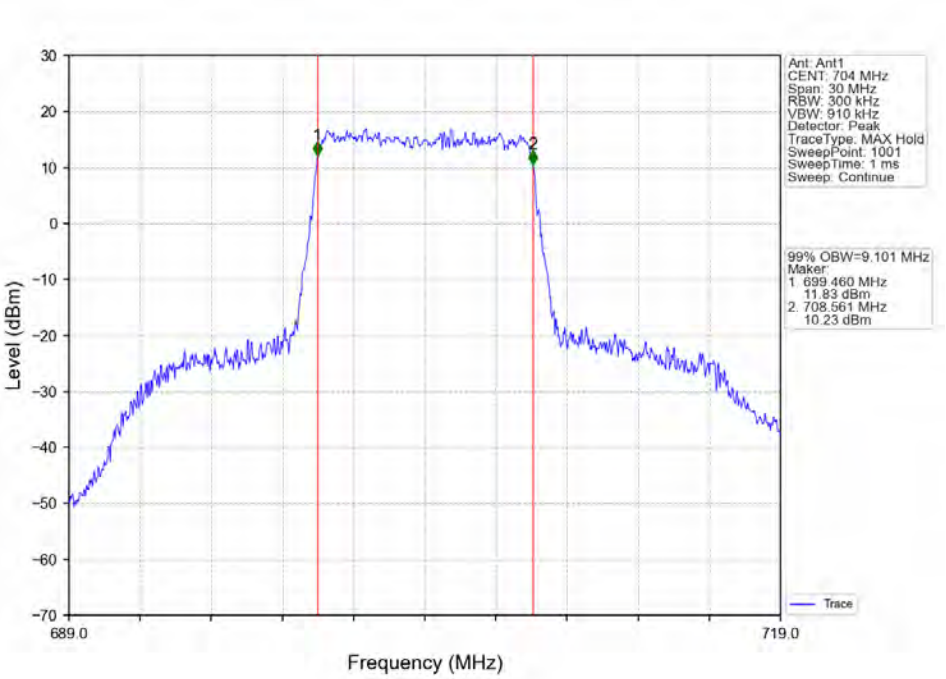
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



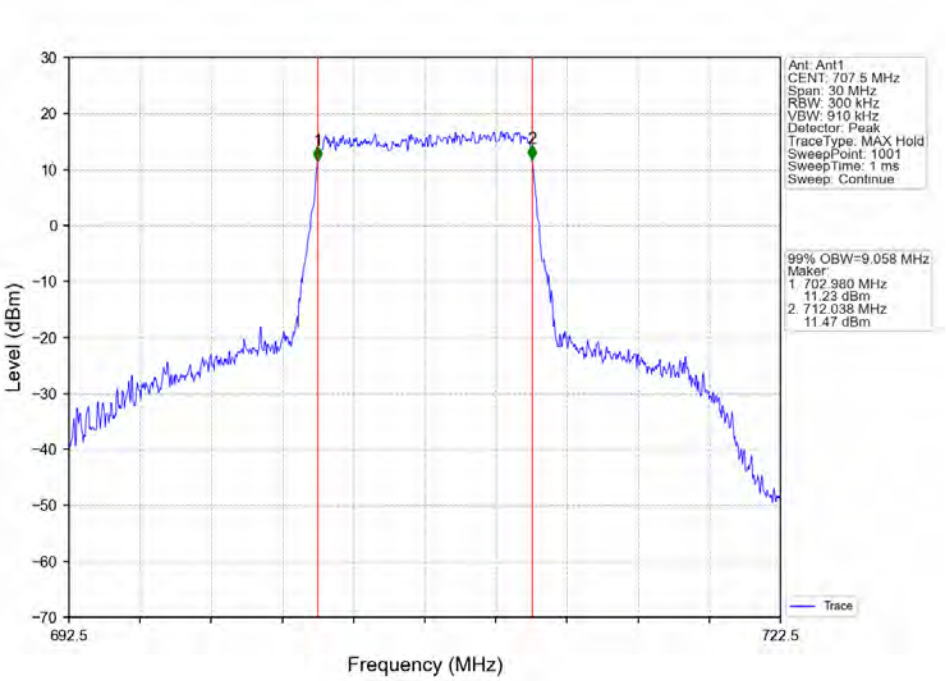
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



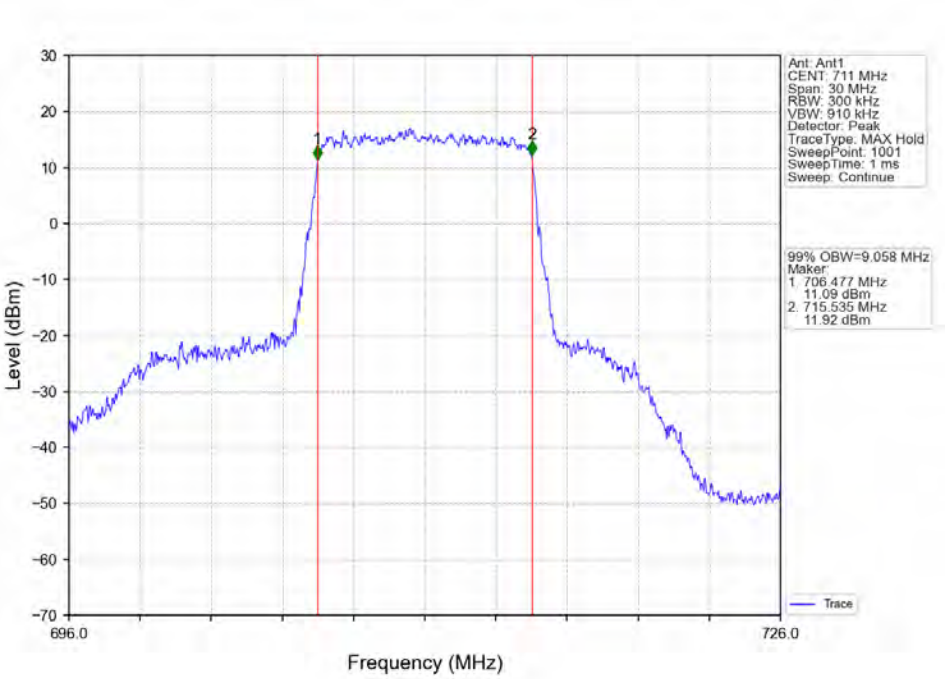
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



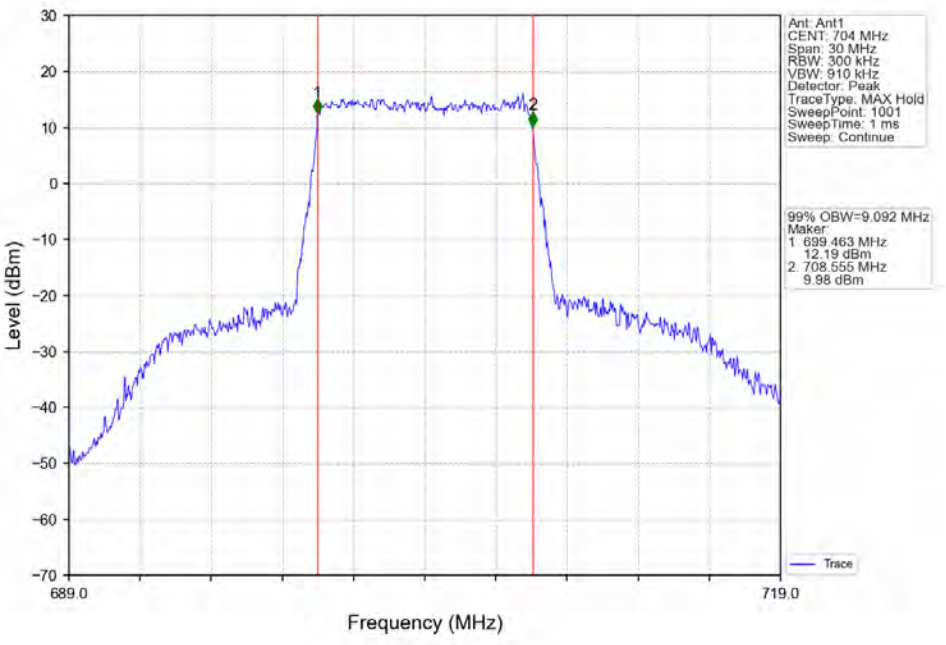
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



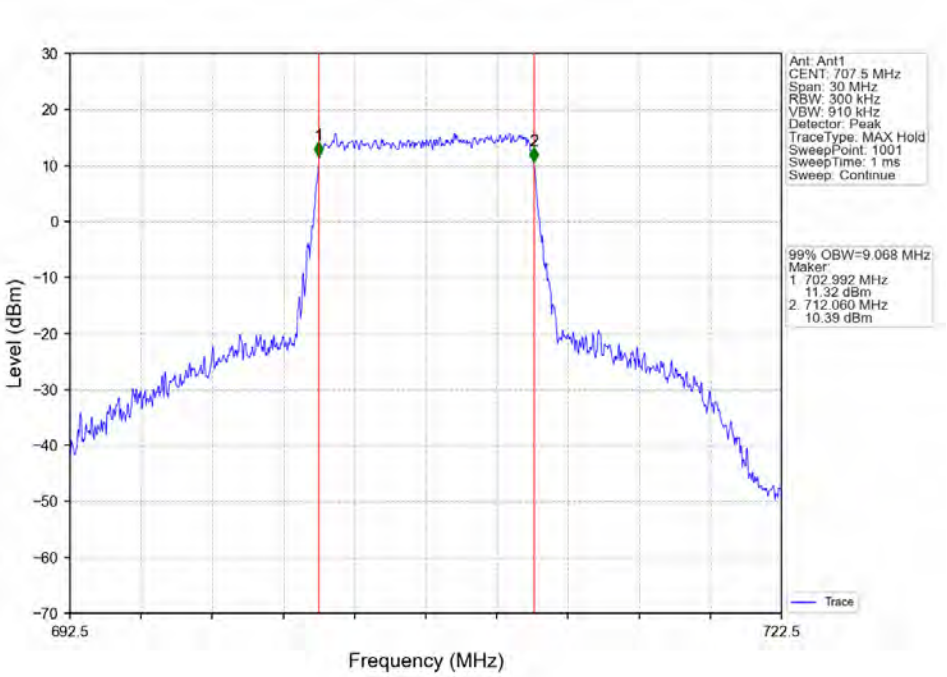
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



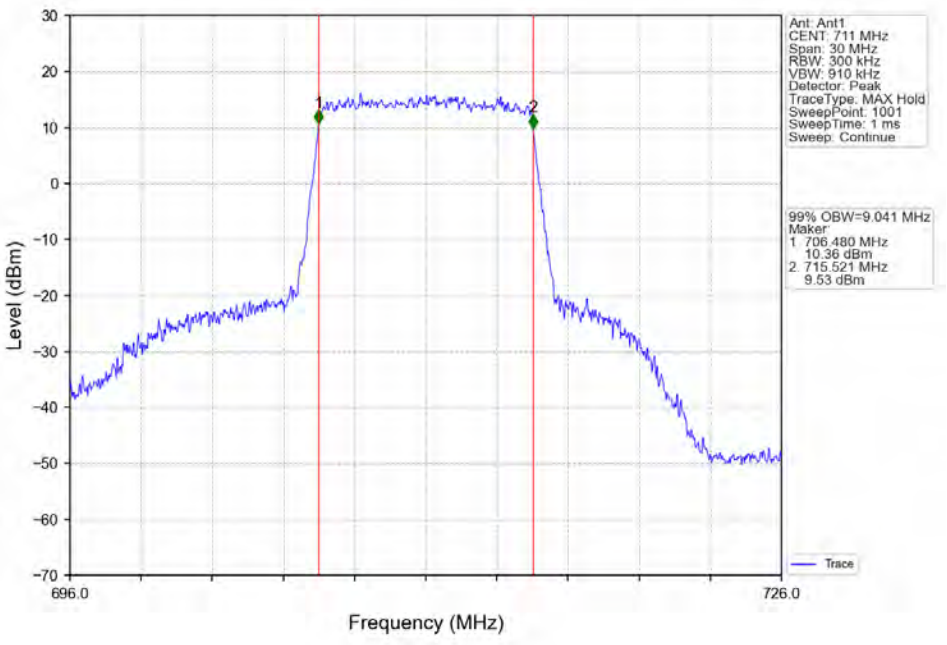
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV

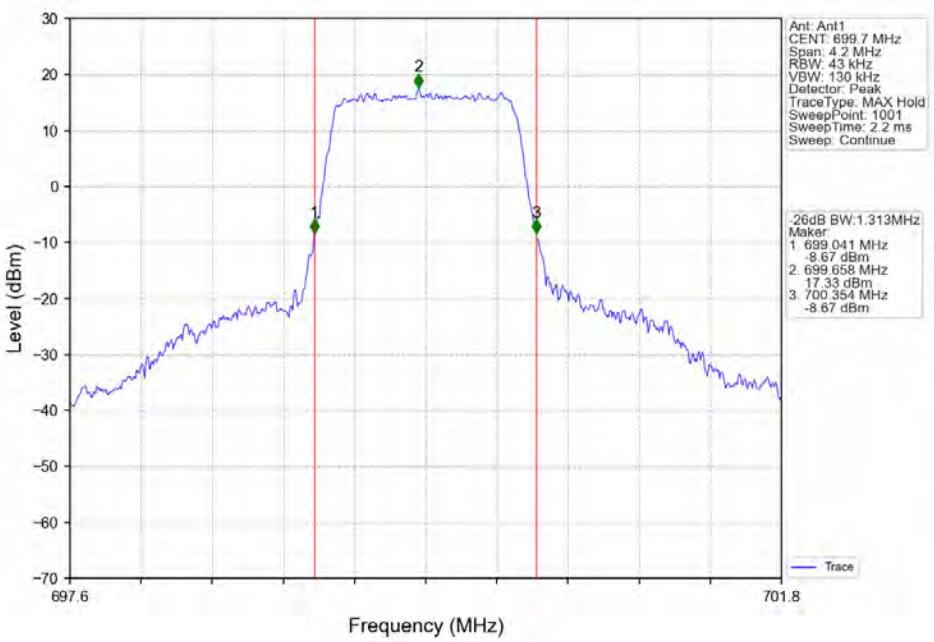


Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

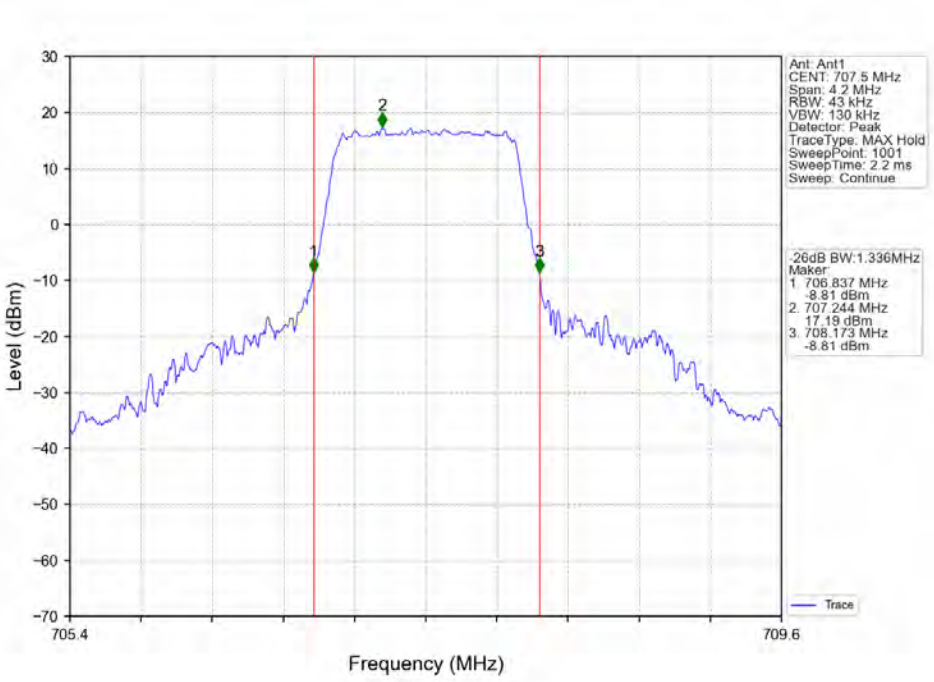


4.2.2 Band12_XDB

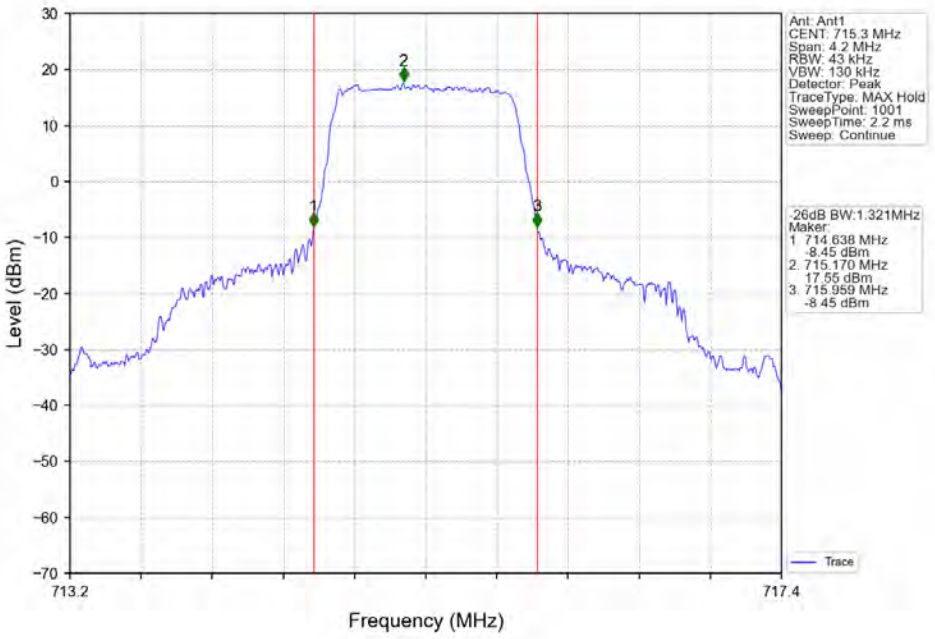
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



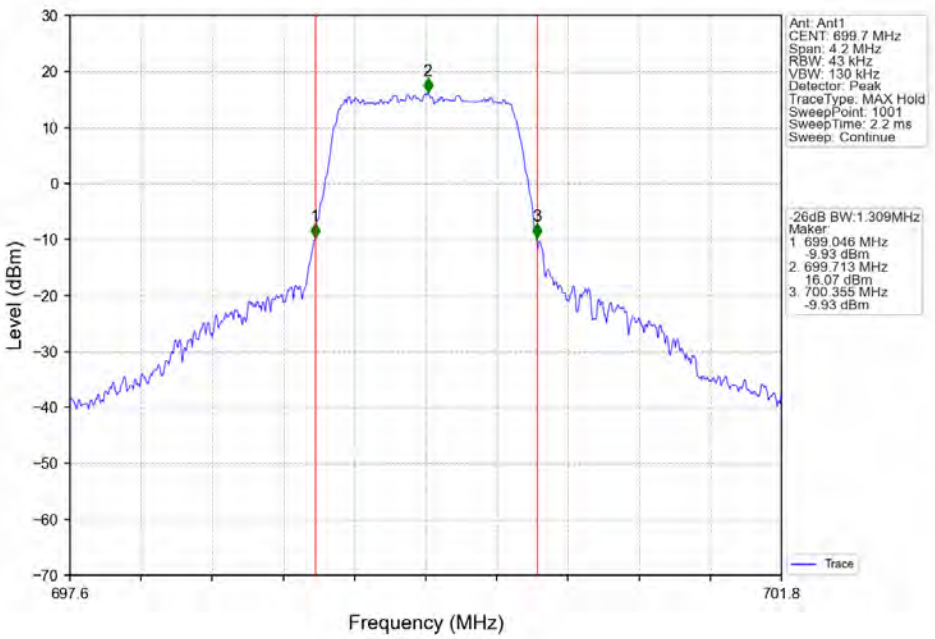
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



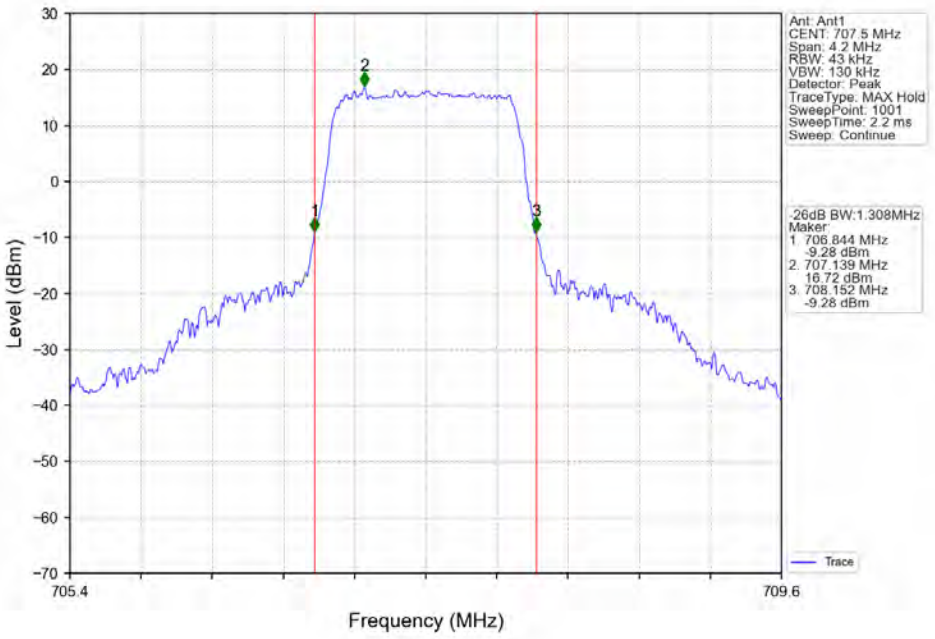
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



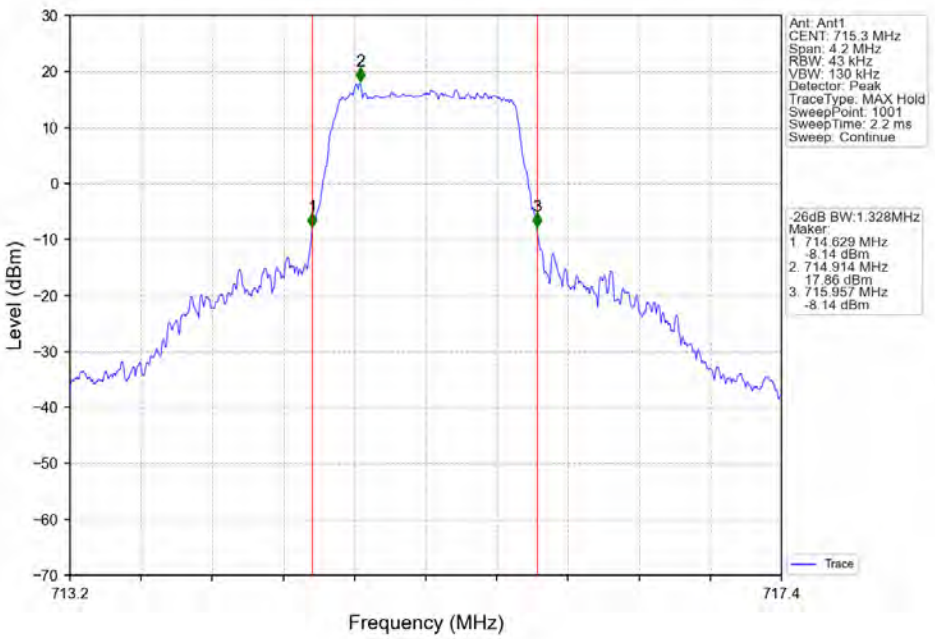
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



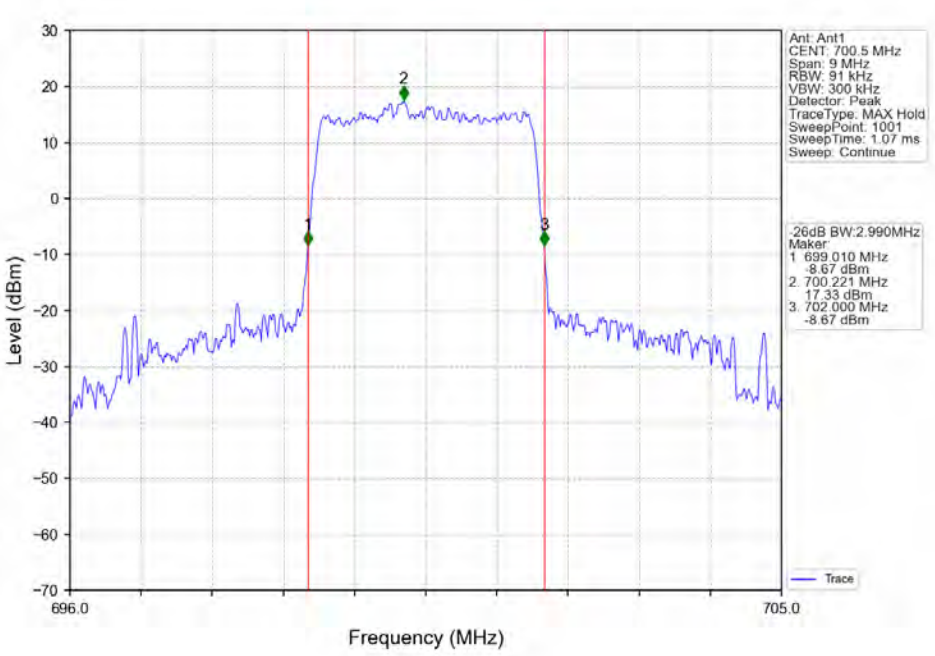
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



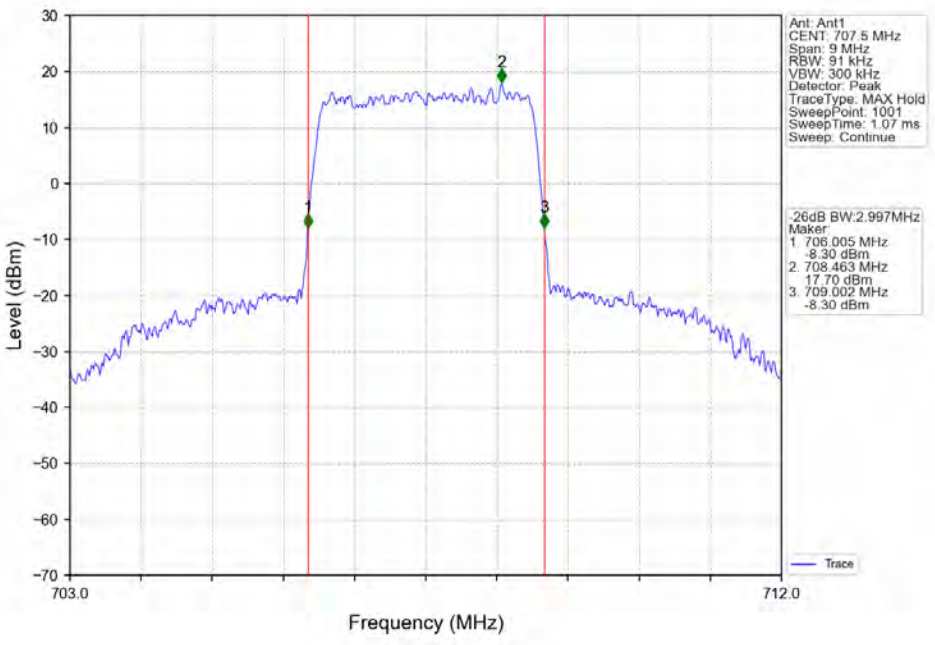
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



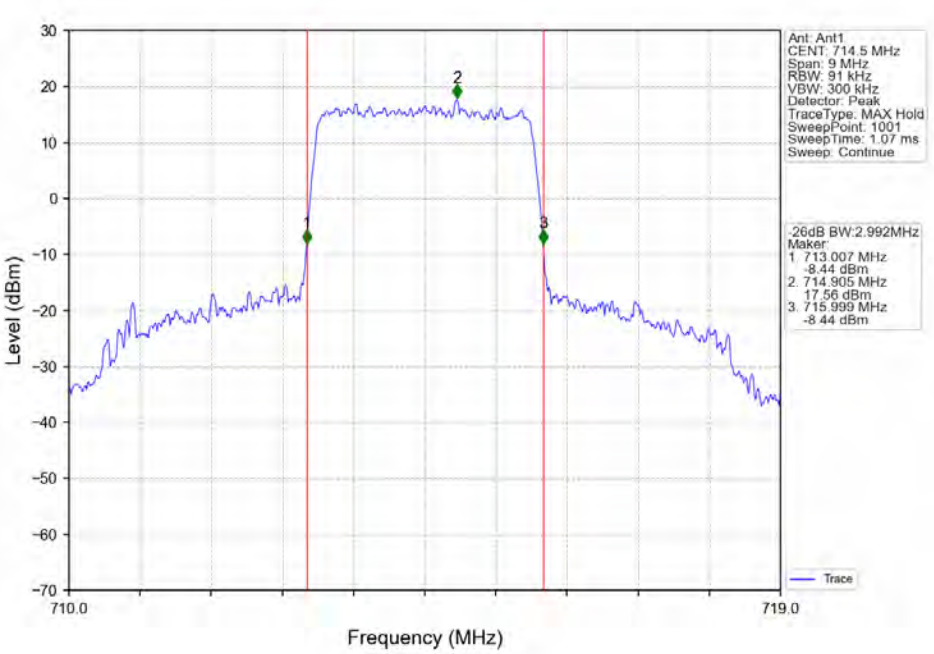
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



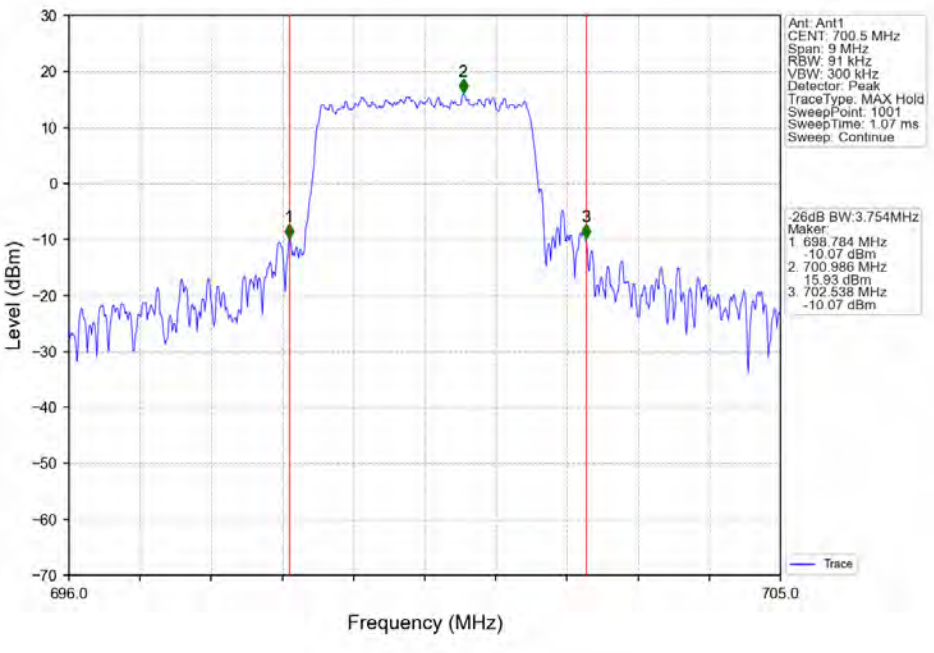
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



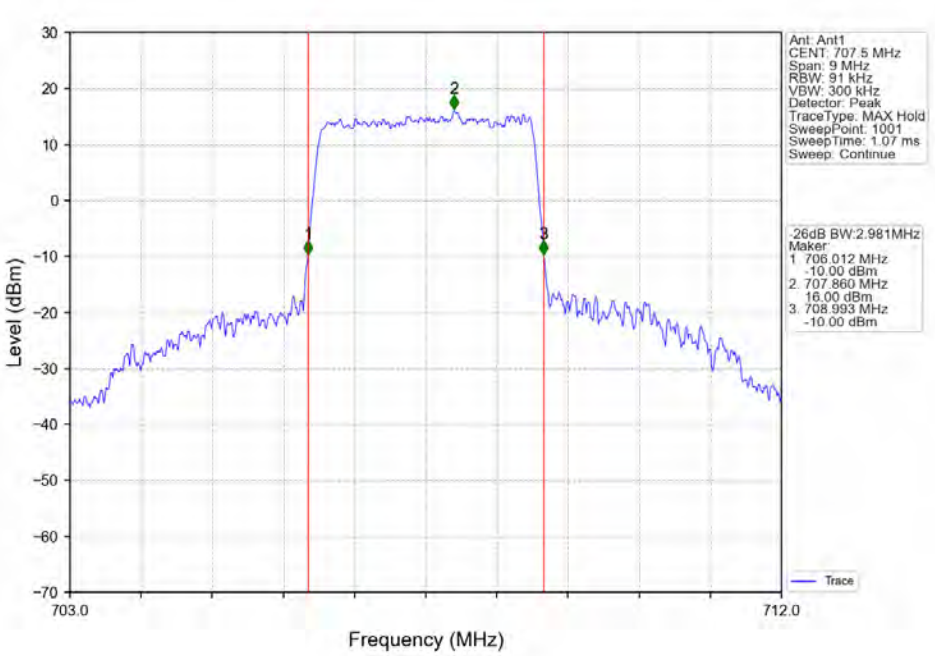
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



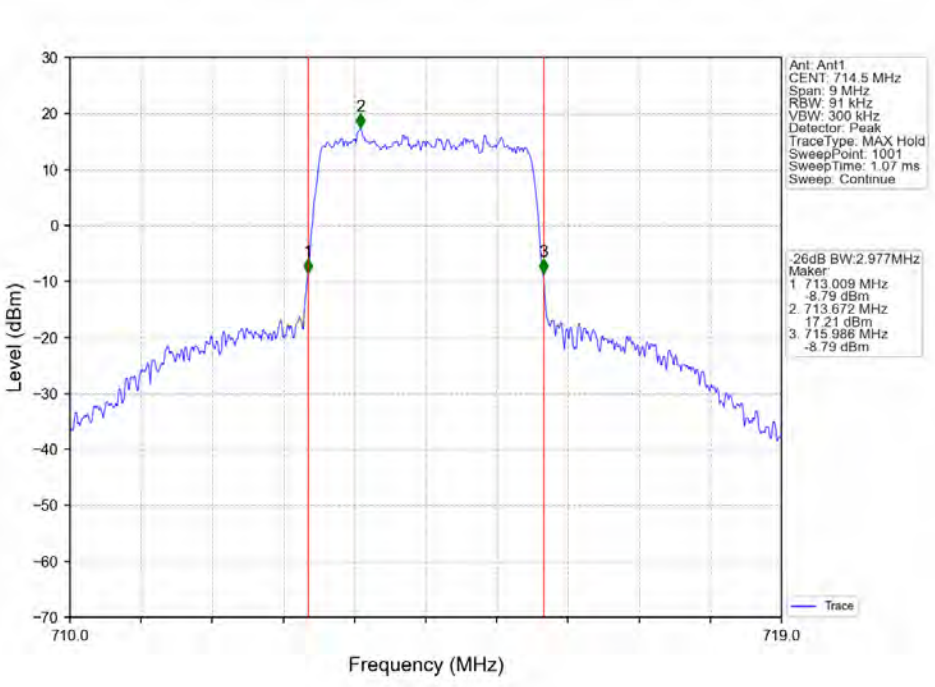
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



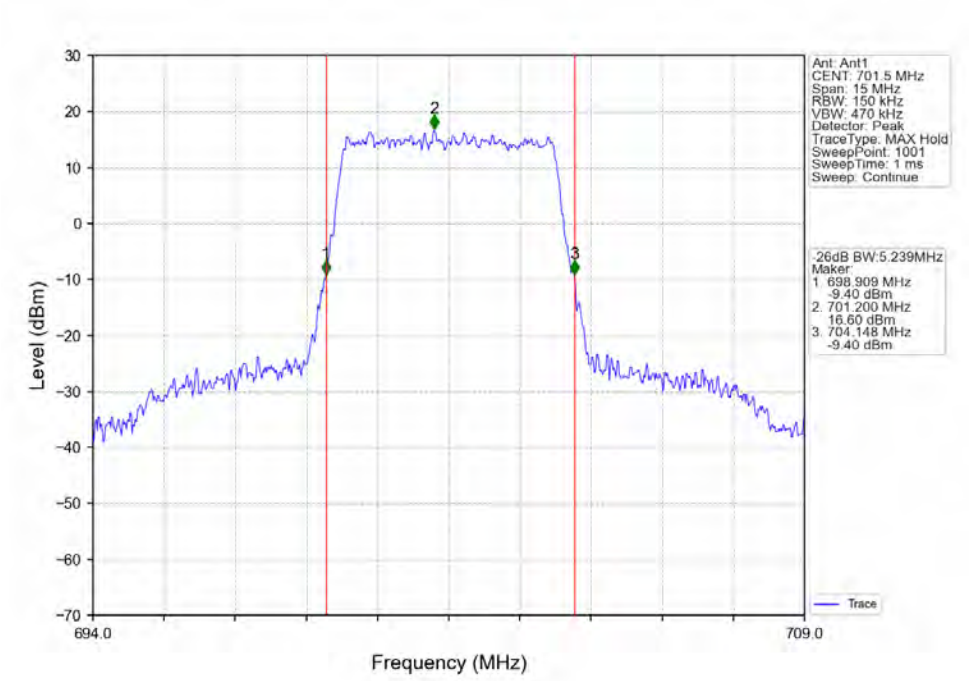
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



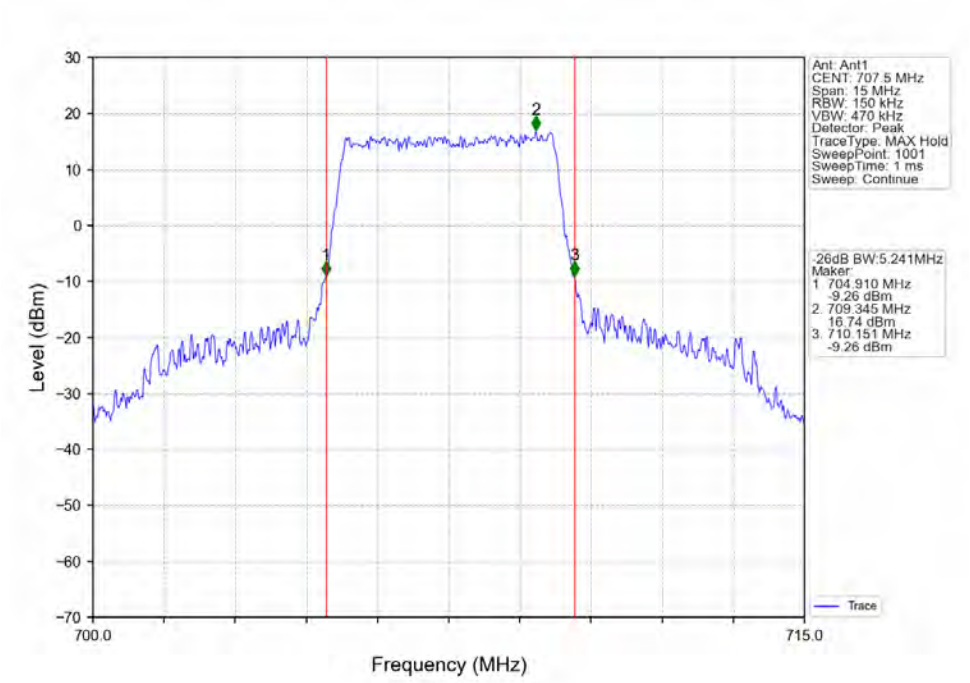
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



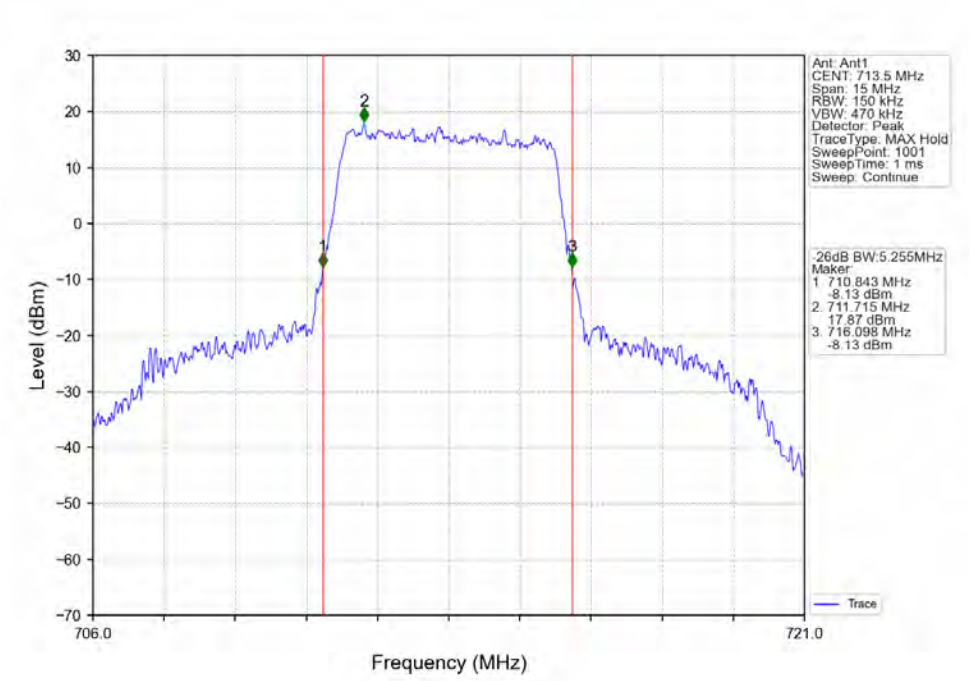
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



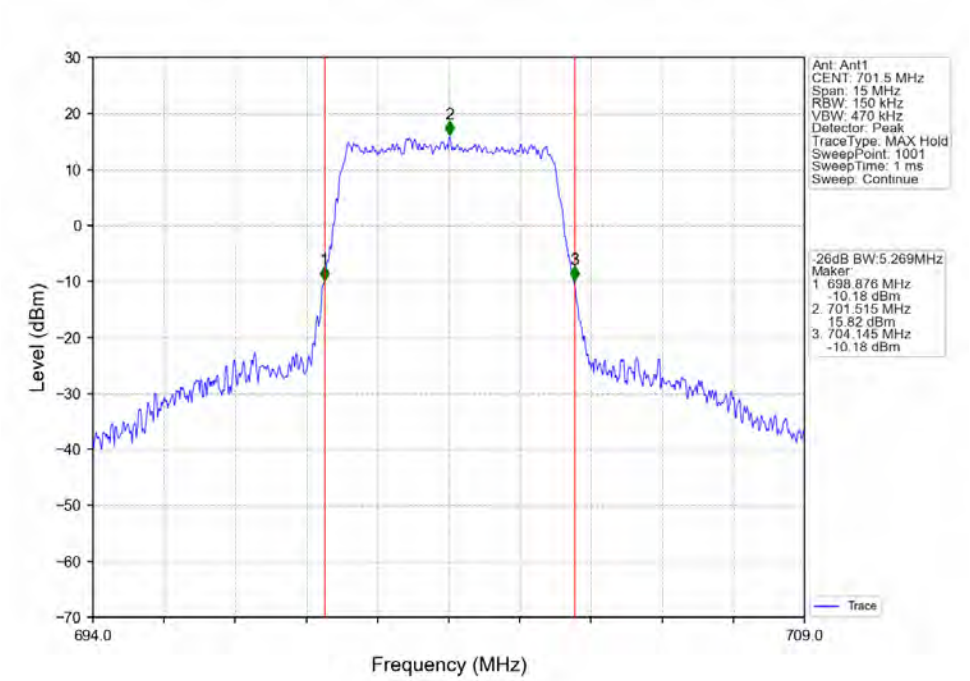
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



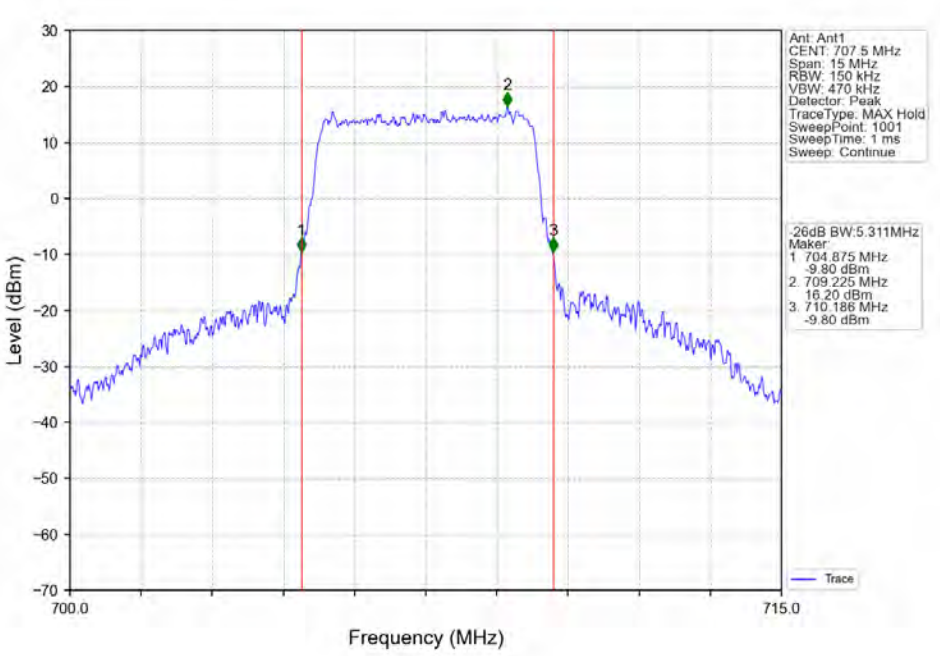
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



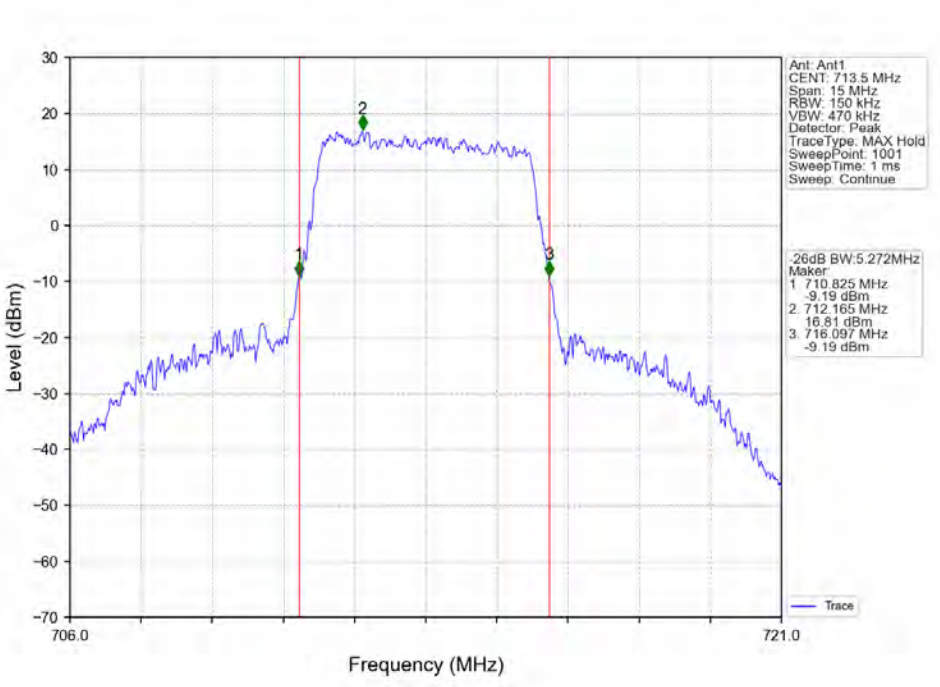
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



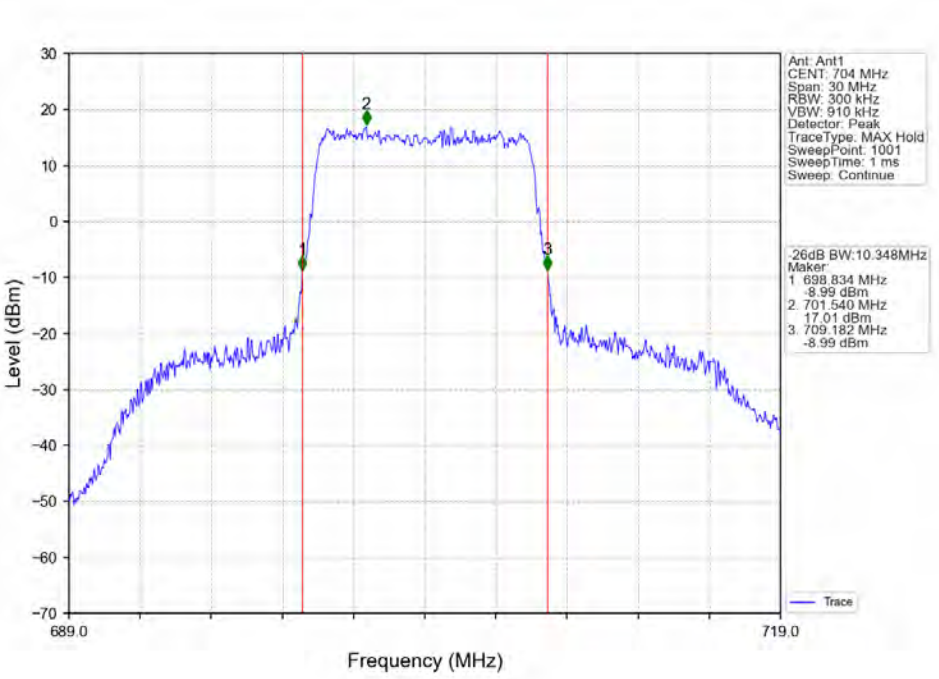
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



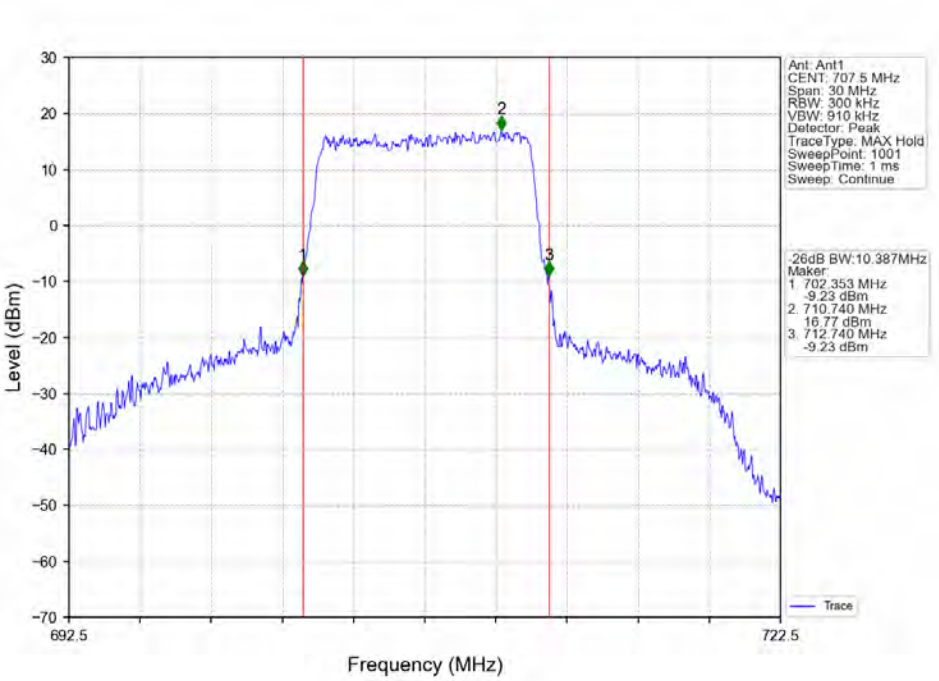
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



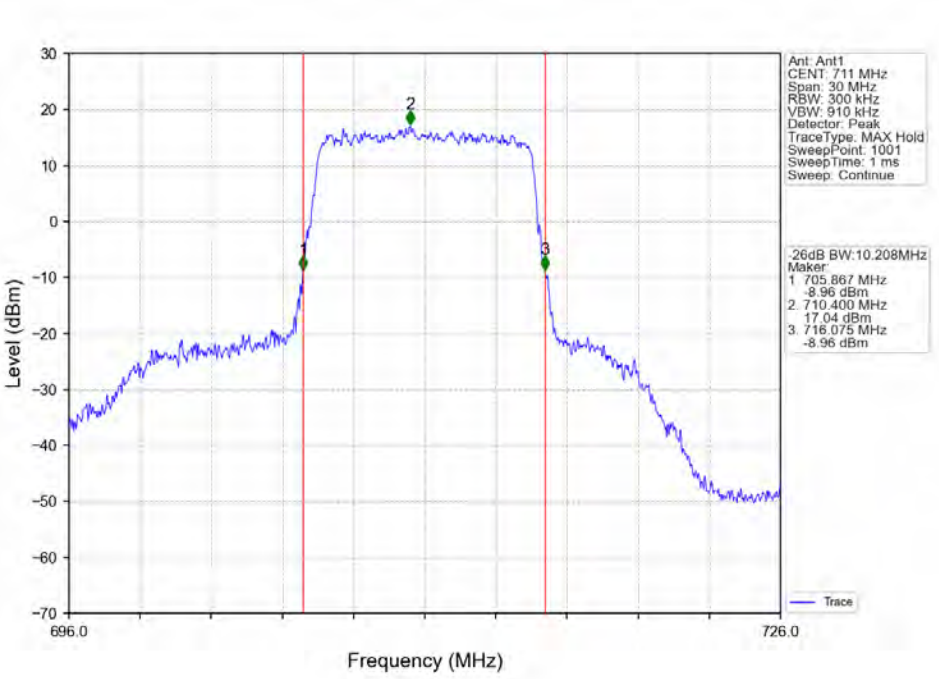
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



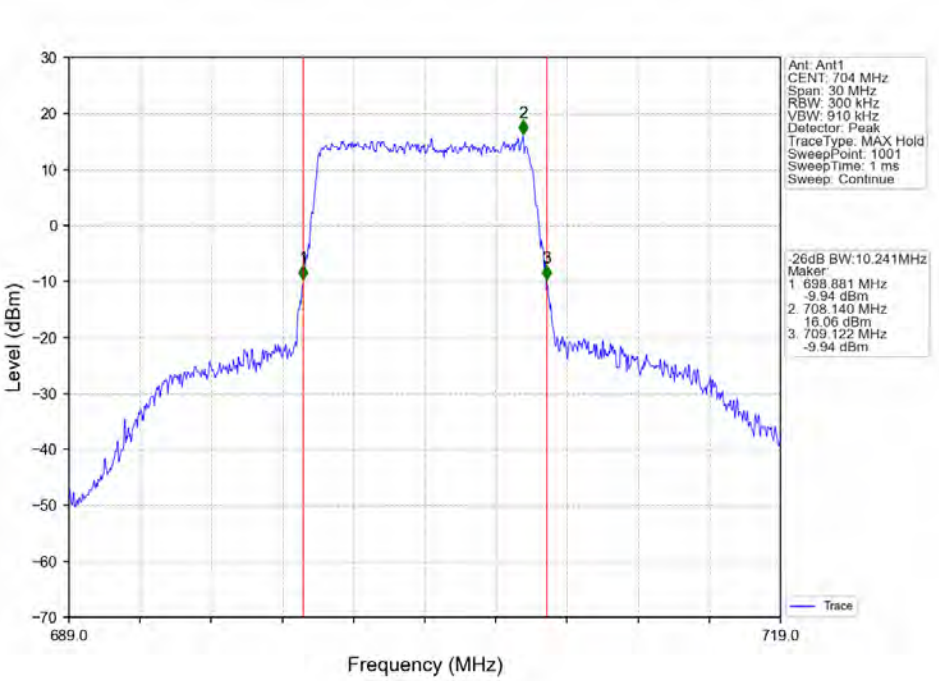
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



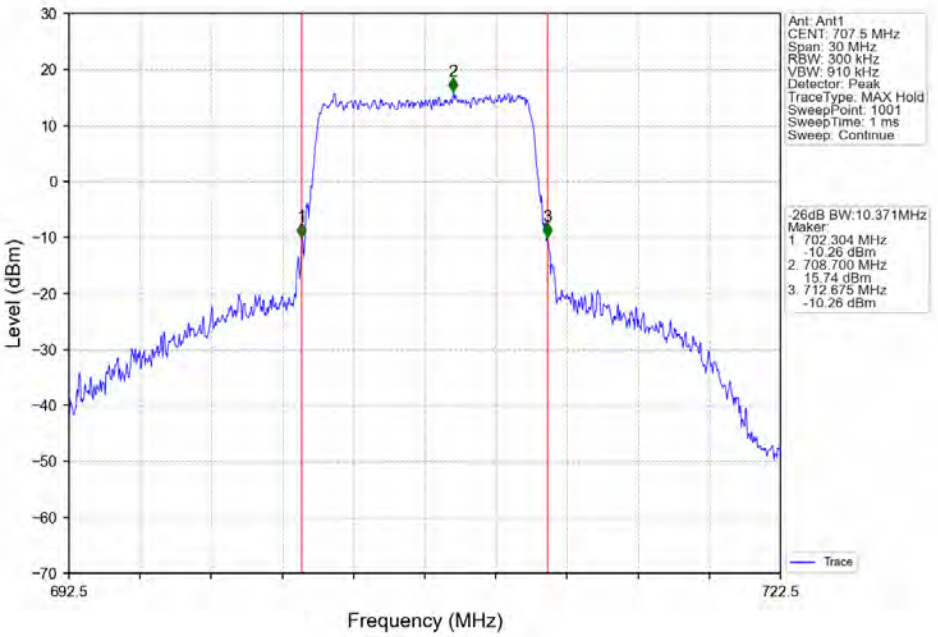
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



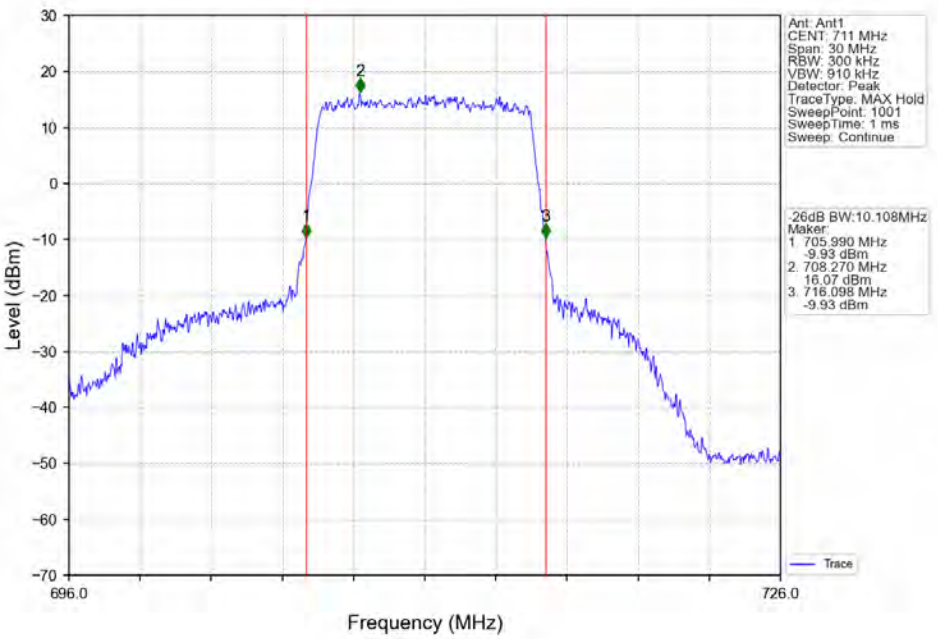
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



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	4.78	<=13	Pass
	707.5	6	0	4.31	<=13	Pass
	715.3	6	0	4.17	<=13	Pass
16QAM	699.7	6	0	5.62	<=13	Pass
	707.5	6	0	5.46	<=13	Pass
	715.3	6	0	5.07	<=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	5.02	<=13	Pass
	707.5	15	0	4.78	<=13	Pass
	714.5	15	0	4.74	<=13	Pass
16QAM	700.5	15	0	5.89	<=13	Pass
	707.5	15	0	5.63	<=13	Pass
	714.5	15	0	5.58	<=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	5.40	<=13	Pass
	707.5	25	0	5.23	<=13	Pass
	713.5	25	0	5.20	<=13	Pass
16QAM	701.5	25	0	6.14	<=13	Pass
	707.5	25	0	5.90	<=13	Pass
	713.5	25	0	5.88	<=13	Pass

5.1.4 B12_10MHz

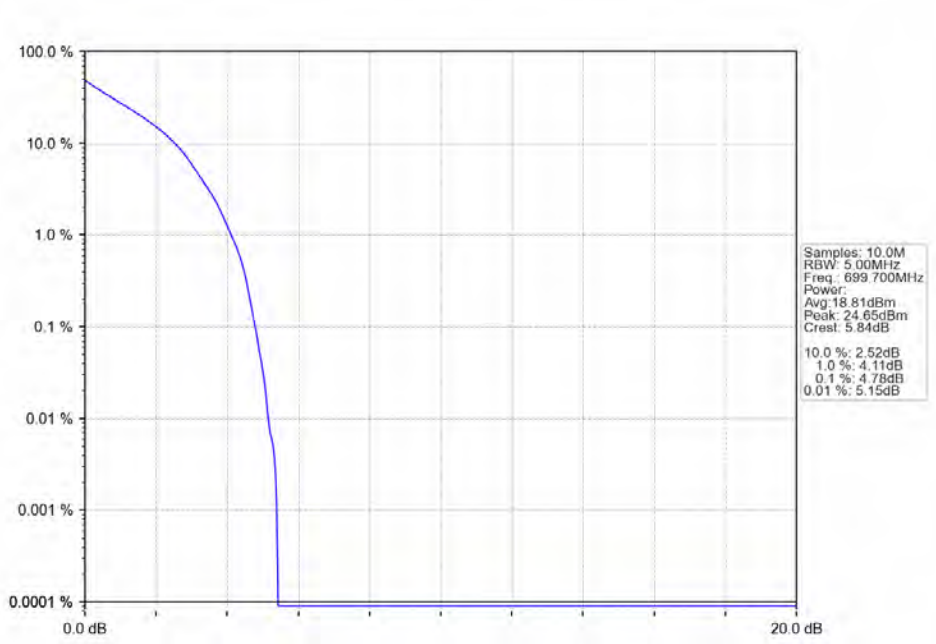
Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	5.32	<=13	Pass
	707.5	50	0	5.47	<=13	Pass
	711	50	0	5.16	<=13	Pass

16QAM	704	50	0	6.14	<=13	Pass
	707.5	50	0	6.16	<=13	Pass
	711	50	0	5.89	<=13	Pass

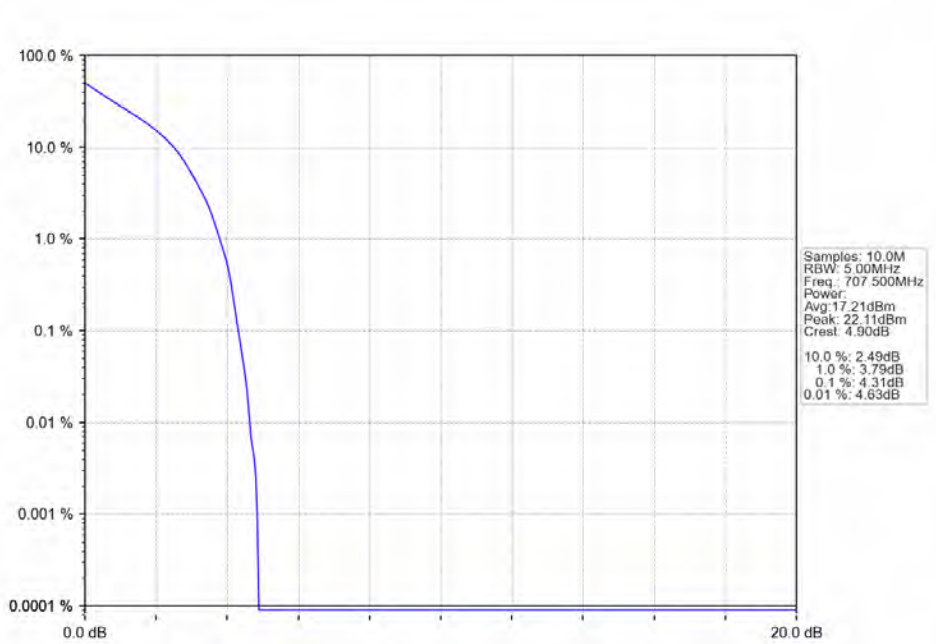
5.2 Test Graph

5.2.1 B12_1.4MHz

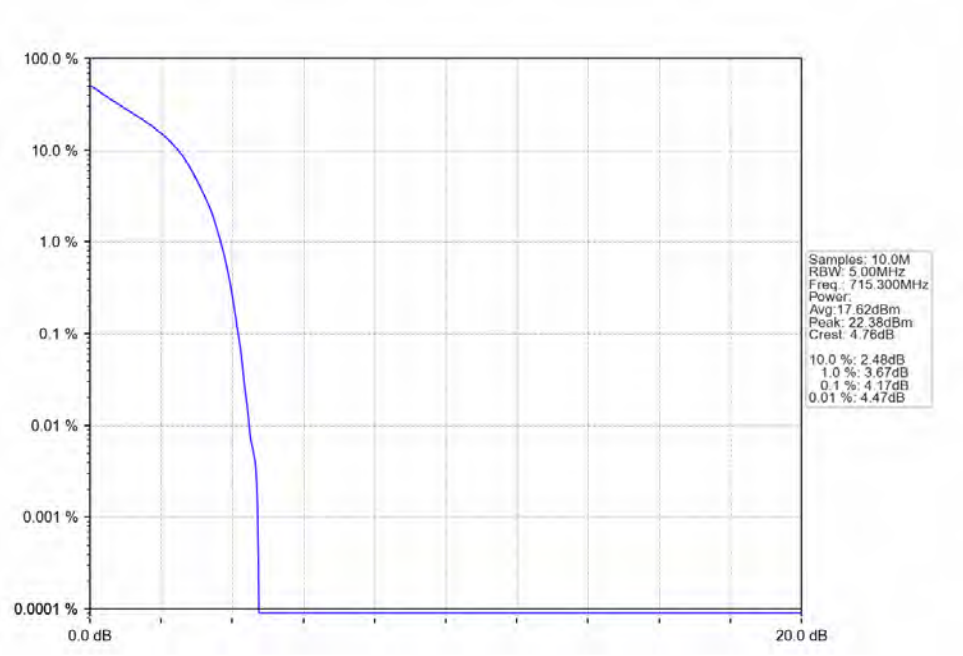
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



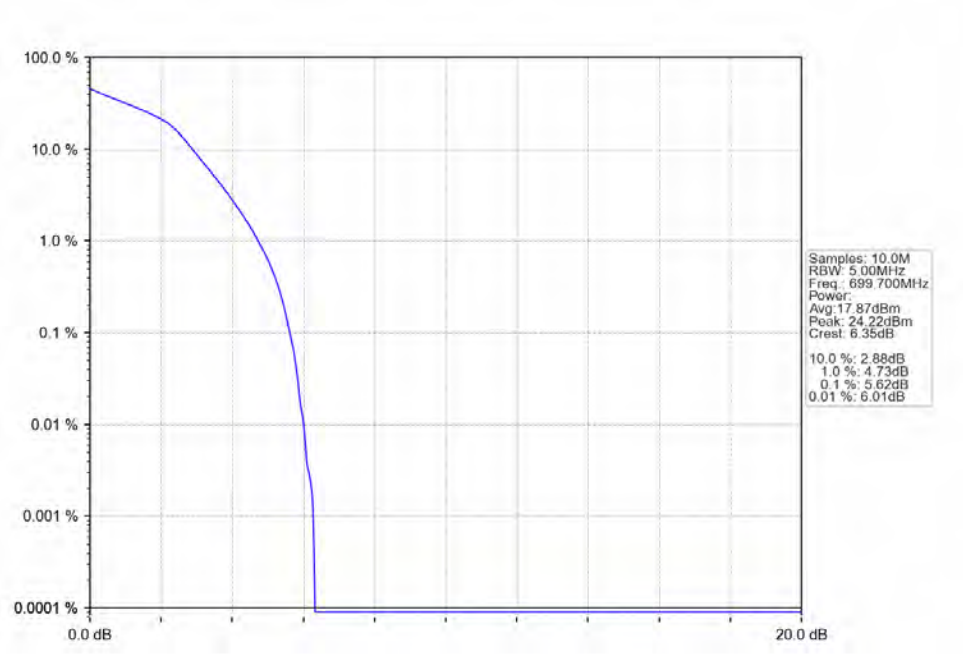
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



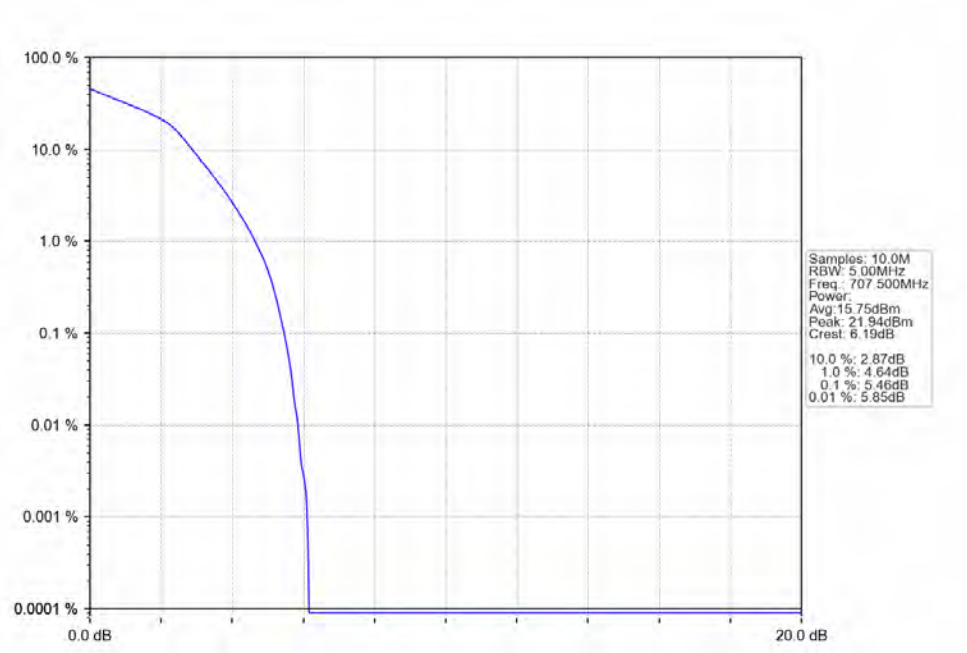
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



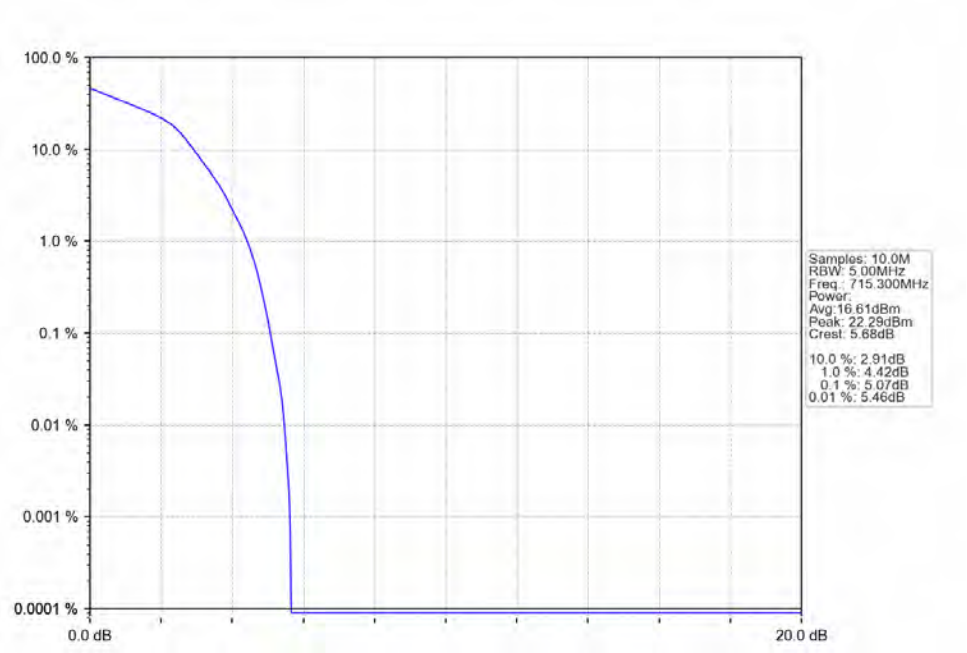
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV

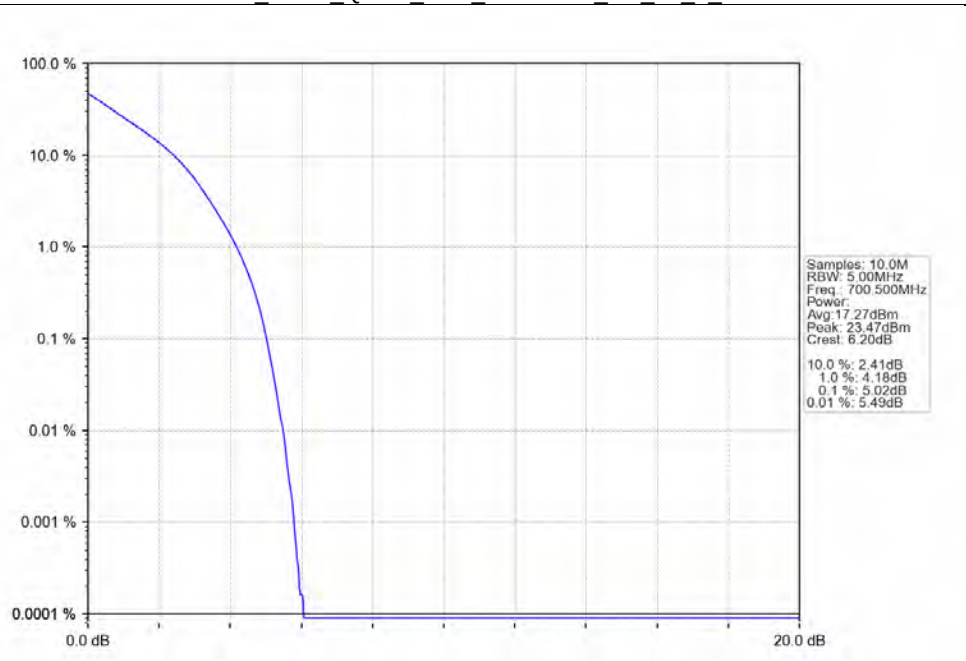


Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV

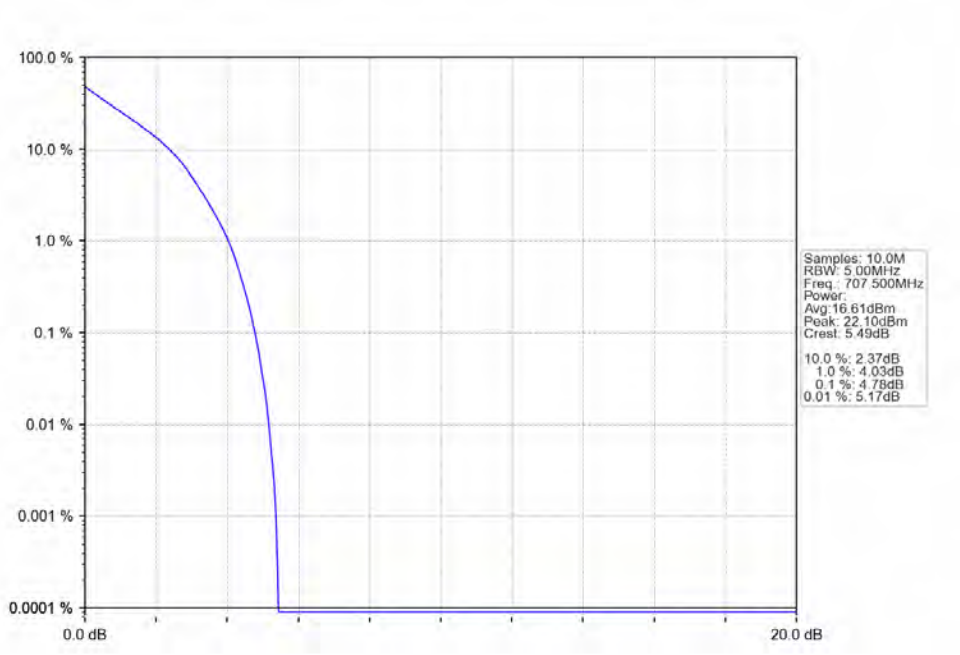


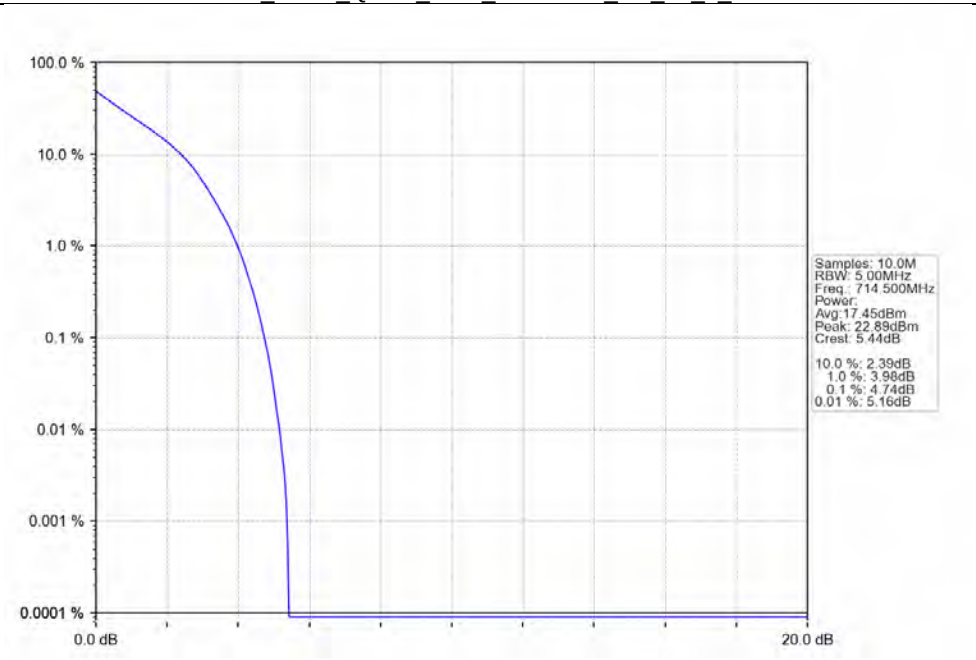
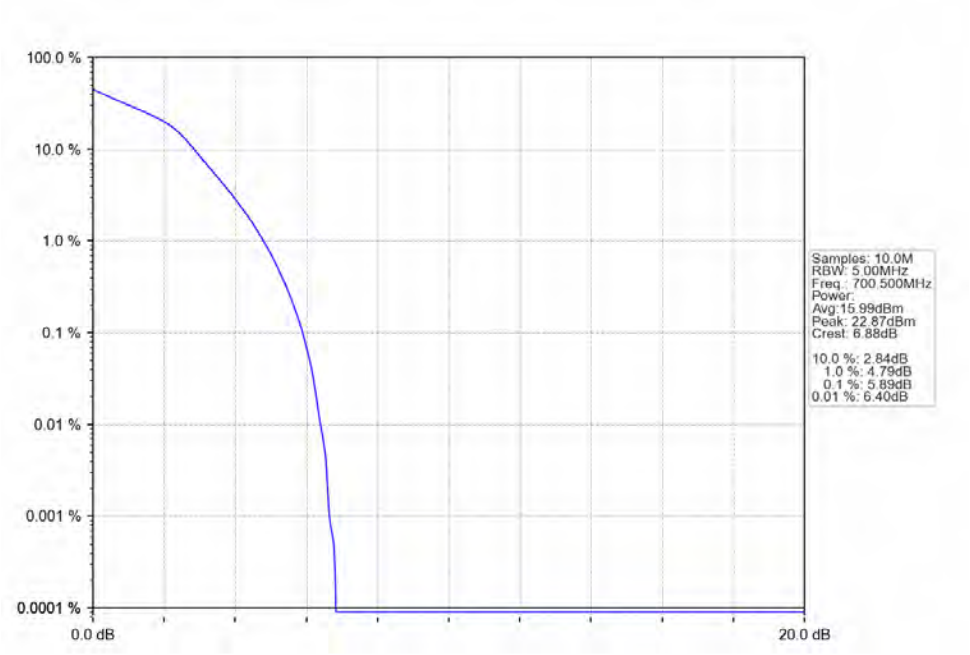
5.2.2 B12_3MHz

Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV

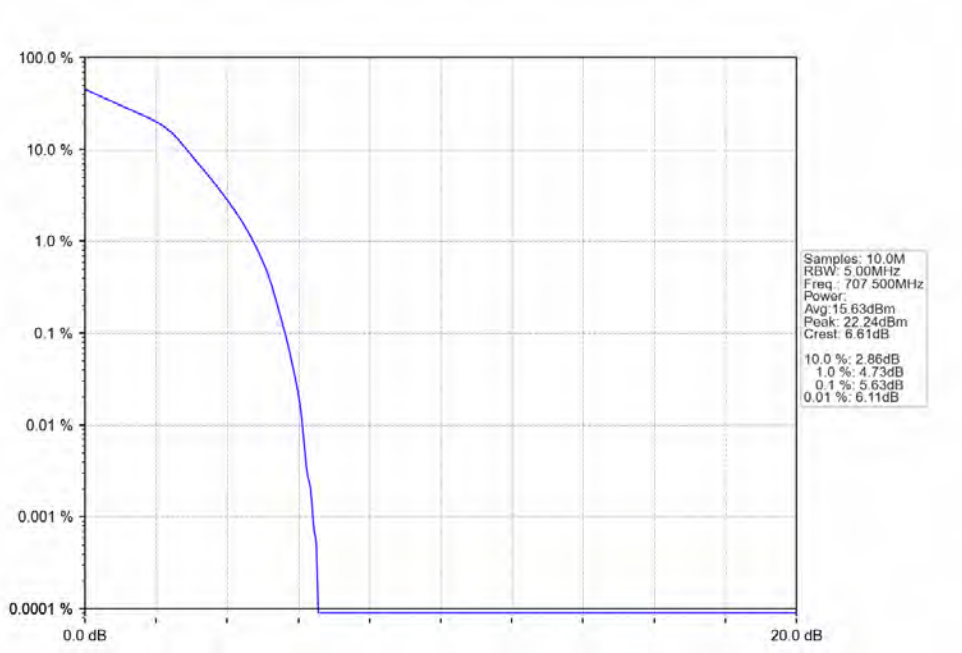


Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV

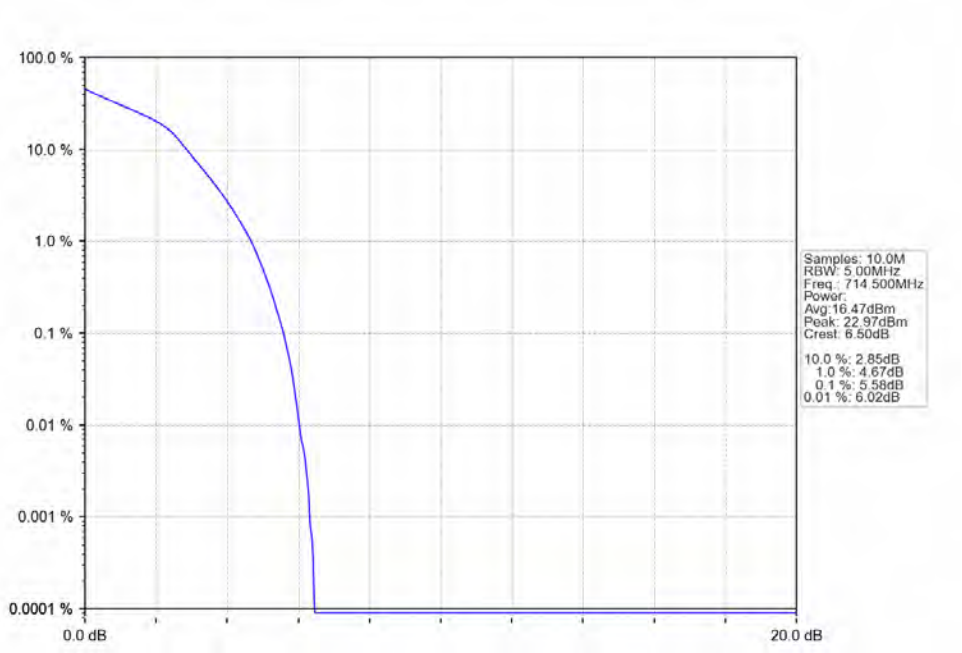


Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV

Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV


Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV

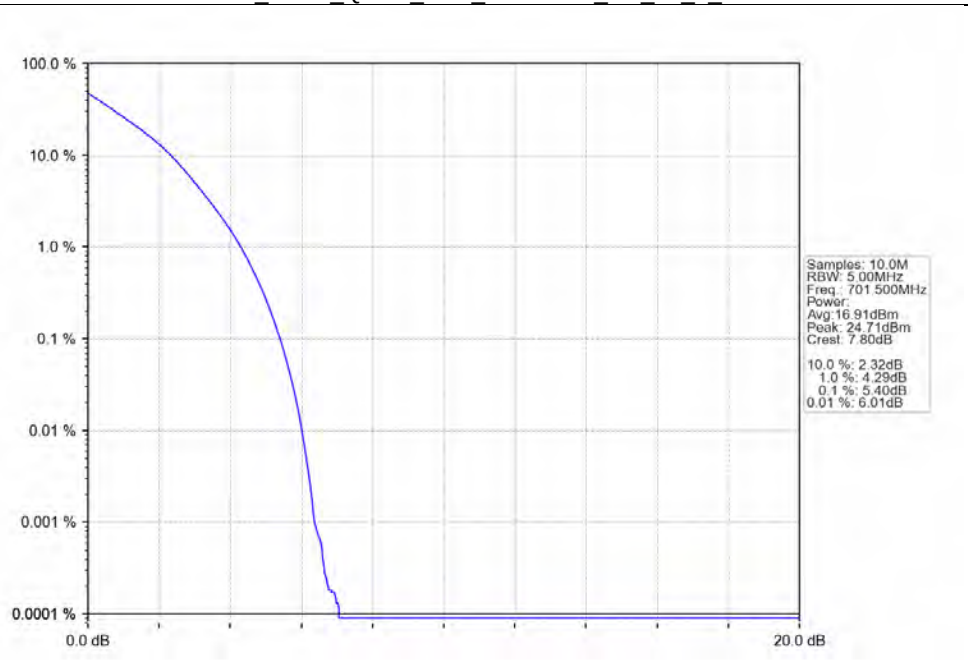


Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV

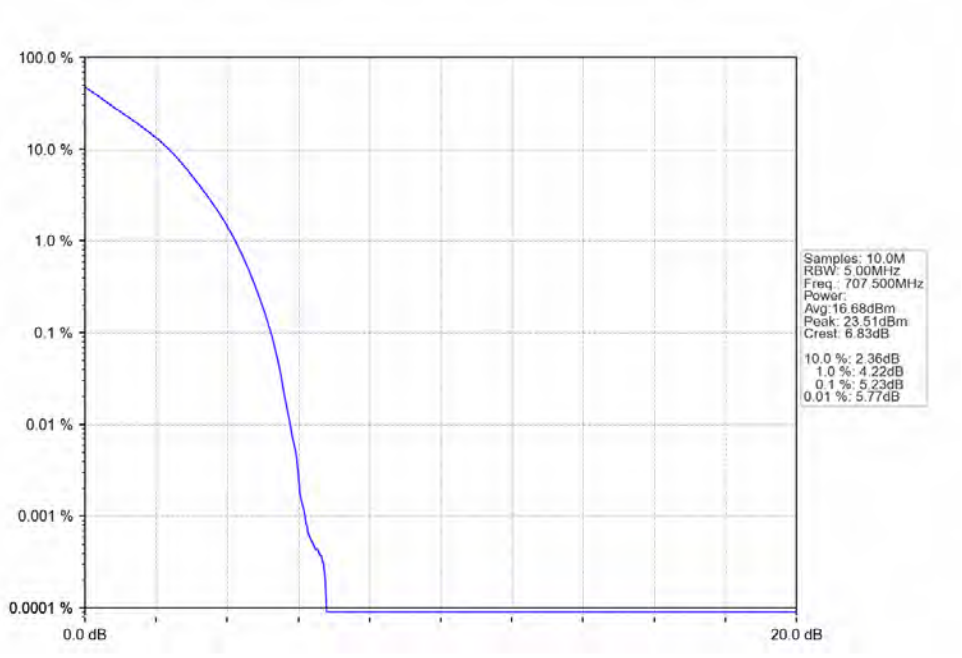


5.2.3 B12_5MHz

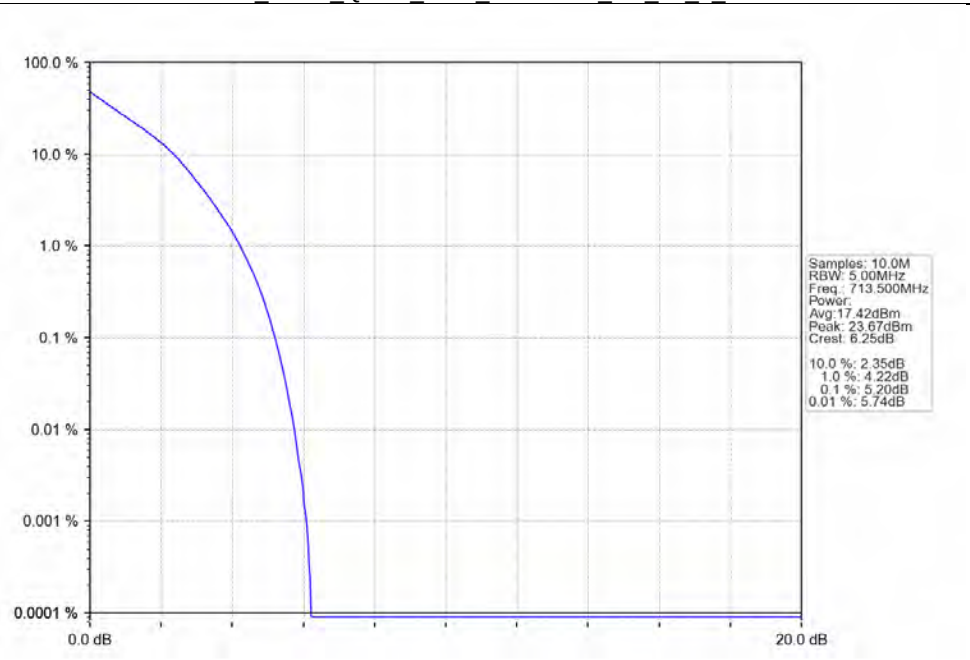
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



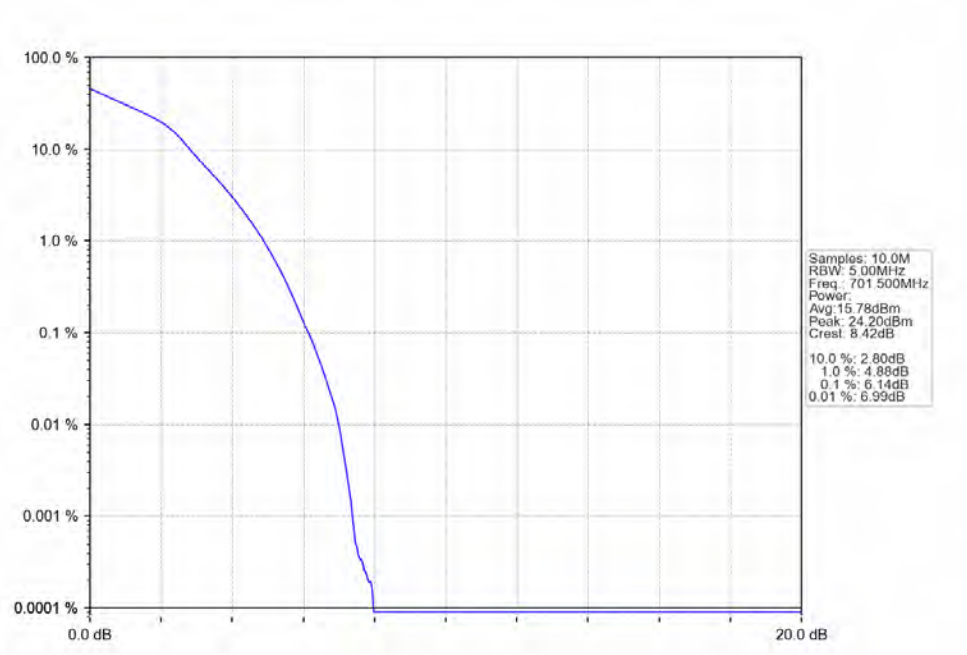
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



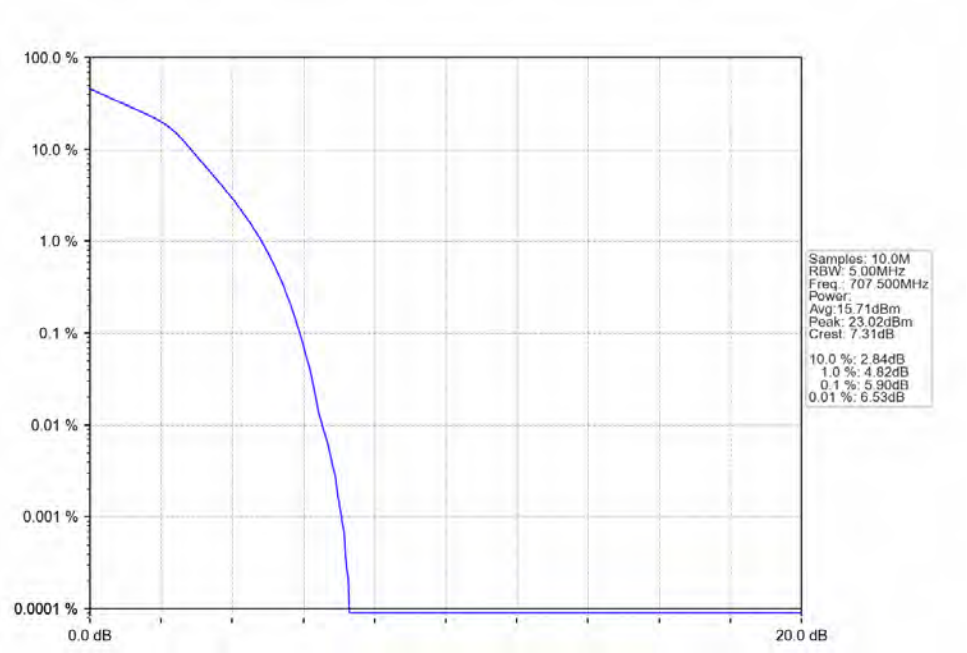
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



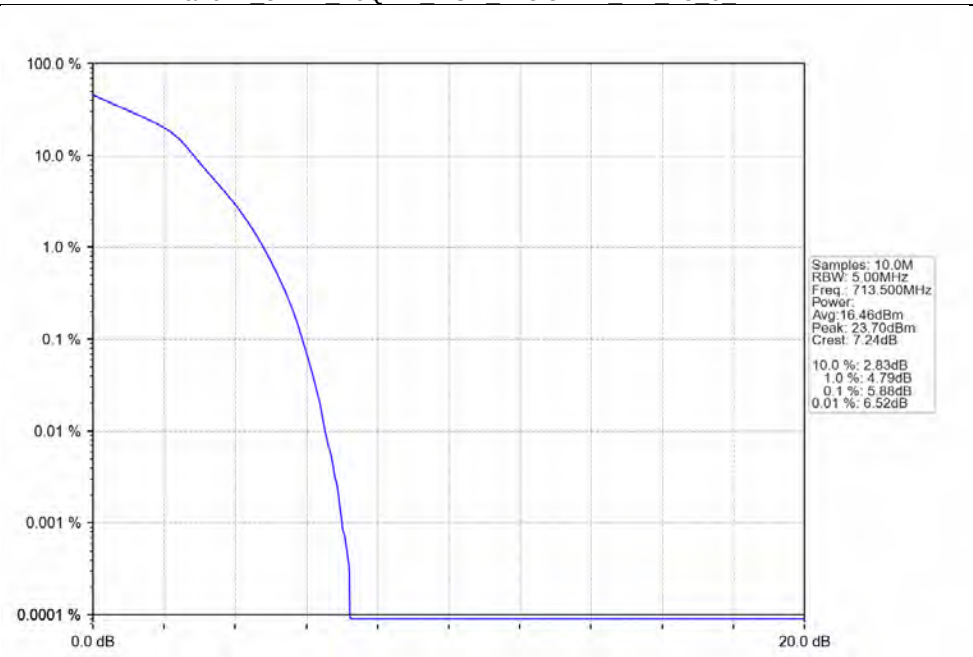
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV

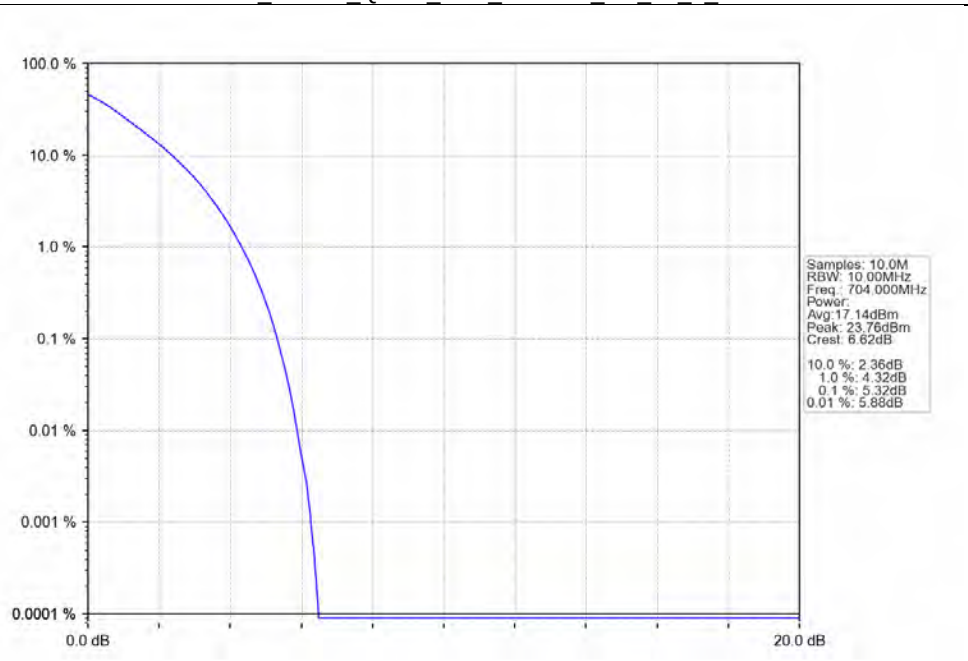


Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV

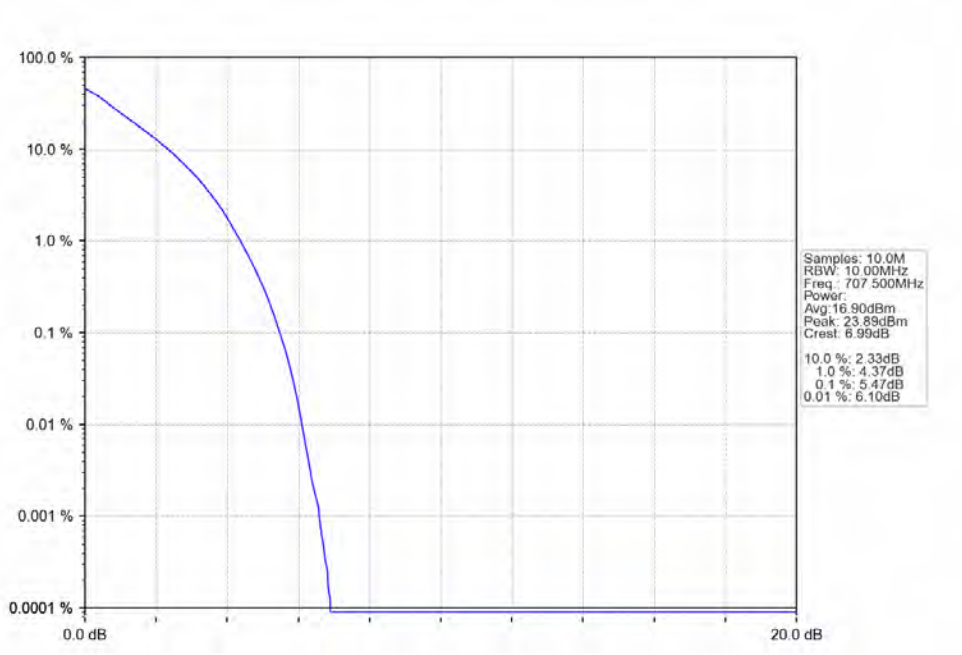


5.2.4 B12_10MHz

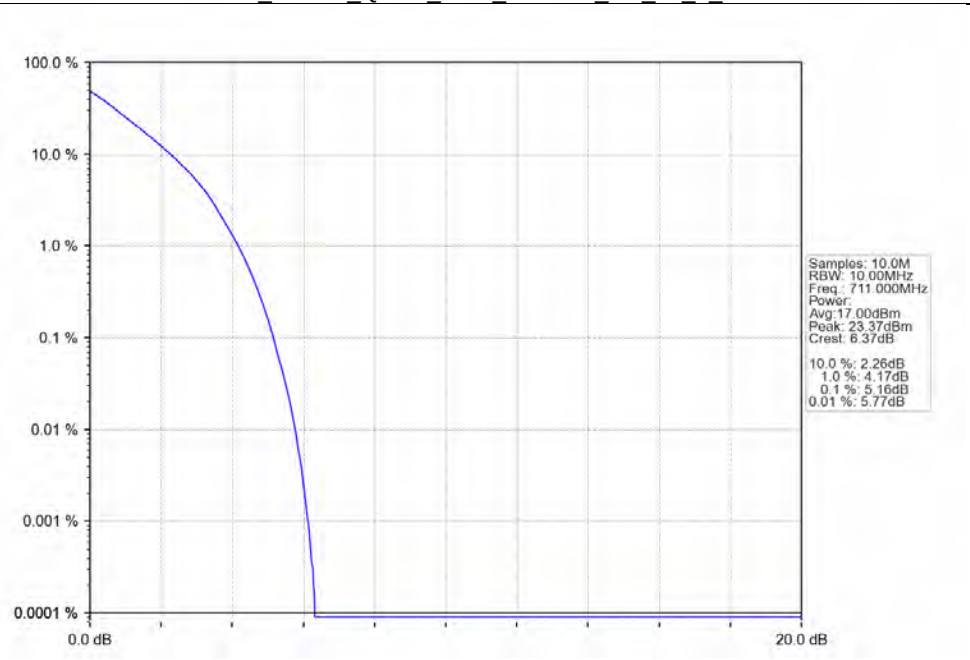
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



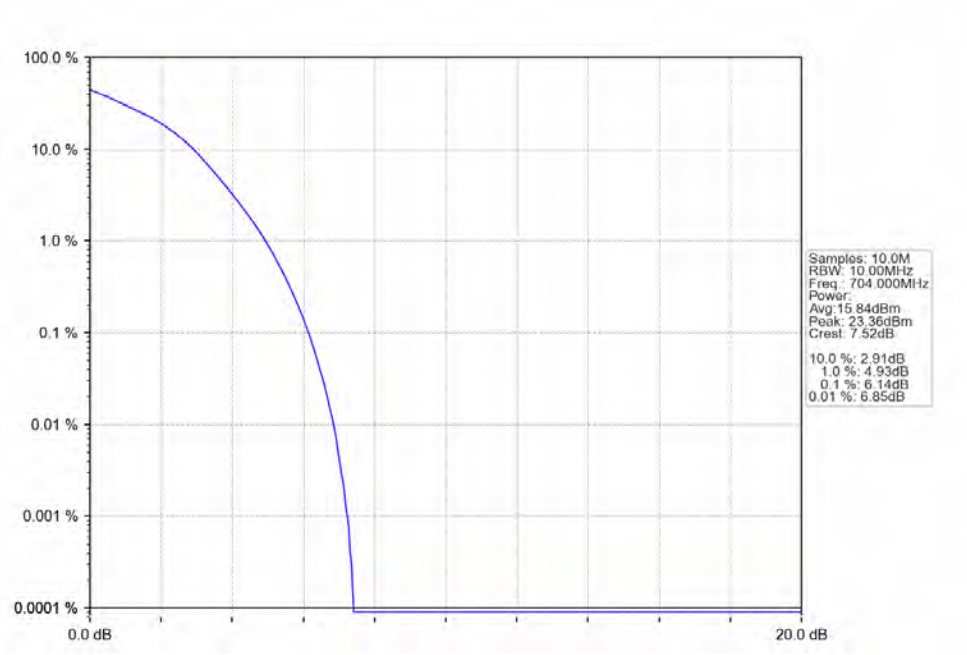
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



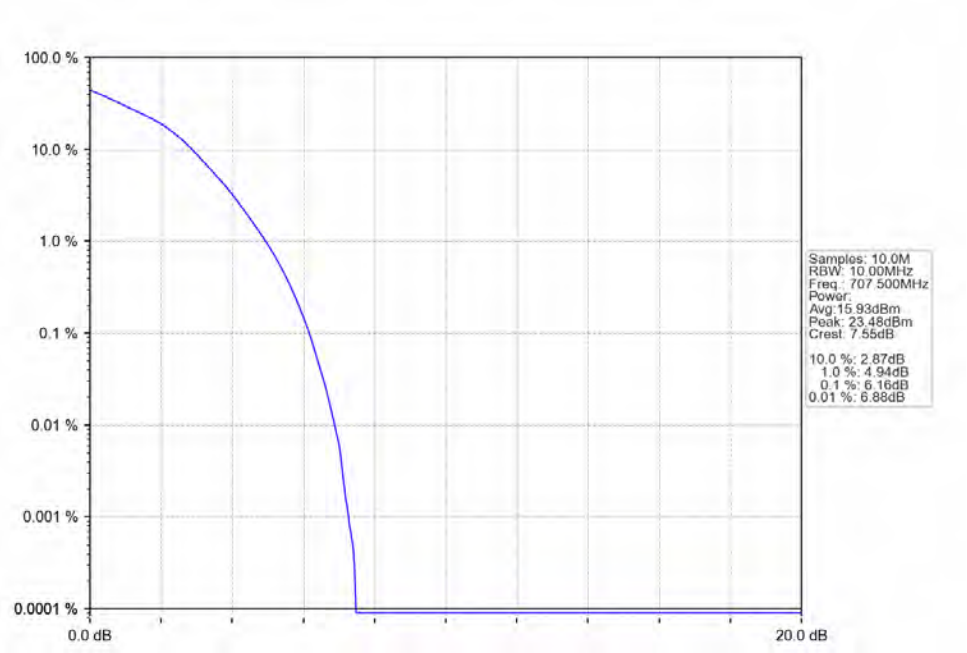
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



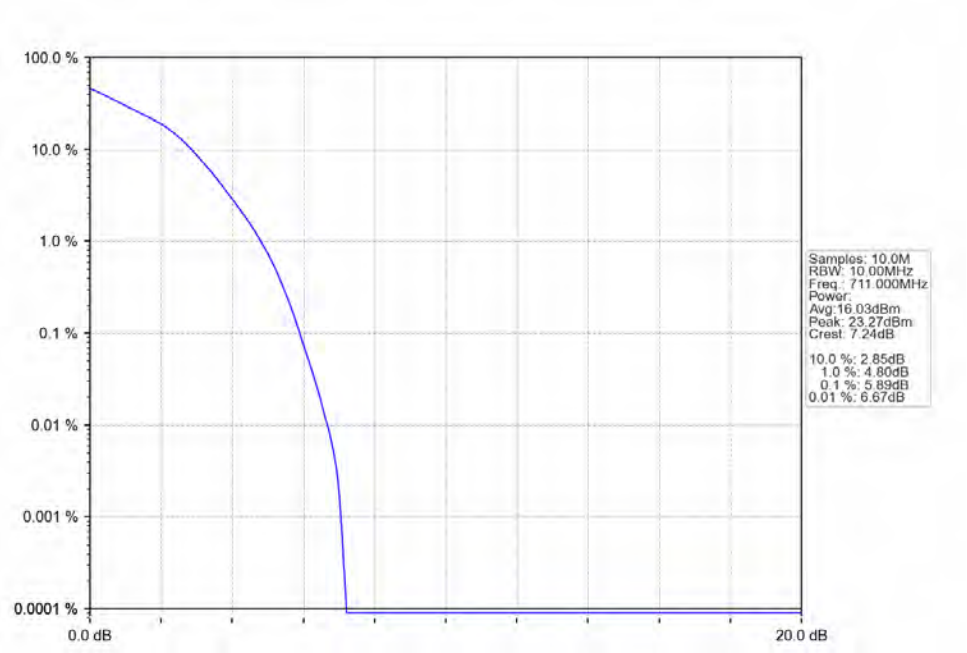
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



6. Spurious Emission

6.1 Test Result

6.1.1 B12_1.4MHz

Band: 12 / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	699.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	715.3	1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
16QAM	699.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	715.3	1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

6.1.2 B12_3MHz

Band: 12 / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	714.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
16QAM	700.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	714.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

6.1.3 B12_5MHz

Band: 12 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass

		25	0	Refer To Test Graph	Pass
16QAM	701.5	1	0	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass
	707.5	1	0	Refer To Test Graph	Pass
	713.5	1	0	Refer To Test Graph	Pass
			24	Refer To Test Graph	Pass
		25	0	Refer To Test Graph	Pass

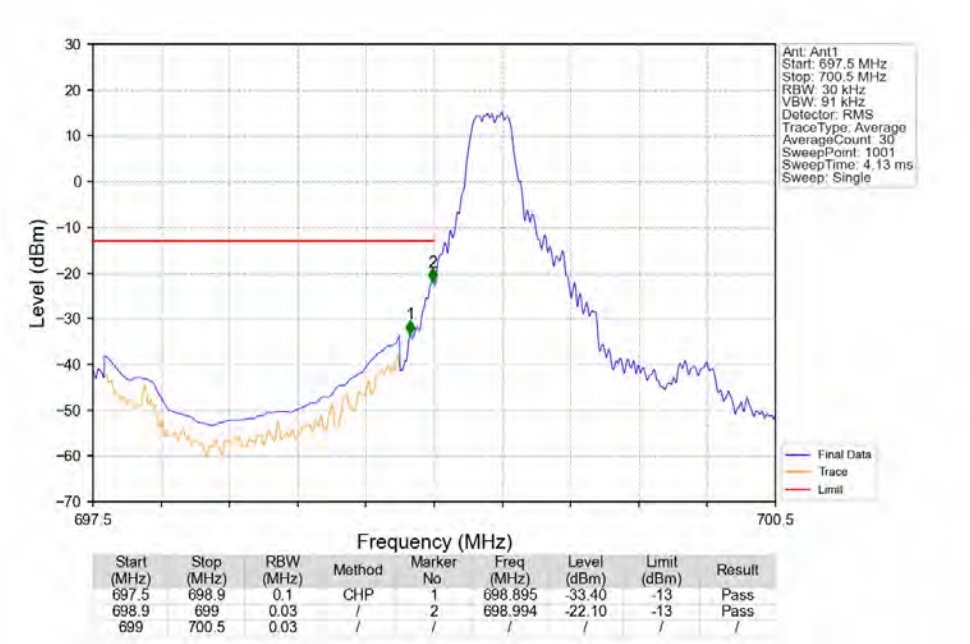
6.1.4 B12_10MHz

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	704	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
16QAM	704	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

6.2 Test Graph

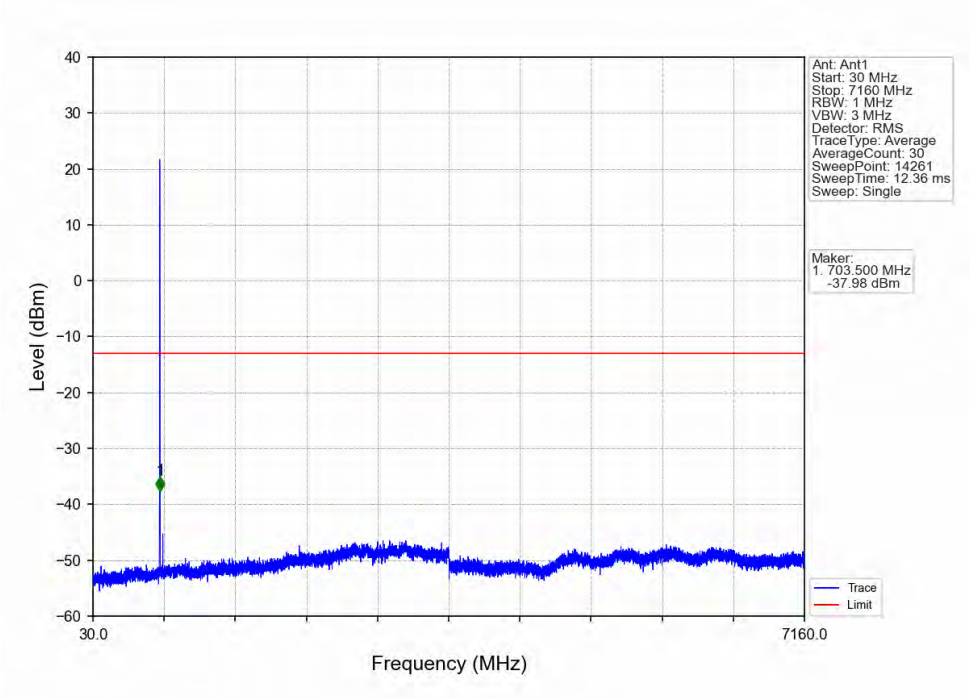
6.2.1 B12_1.4MHz

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

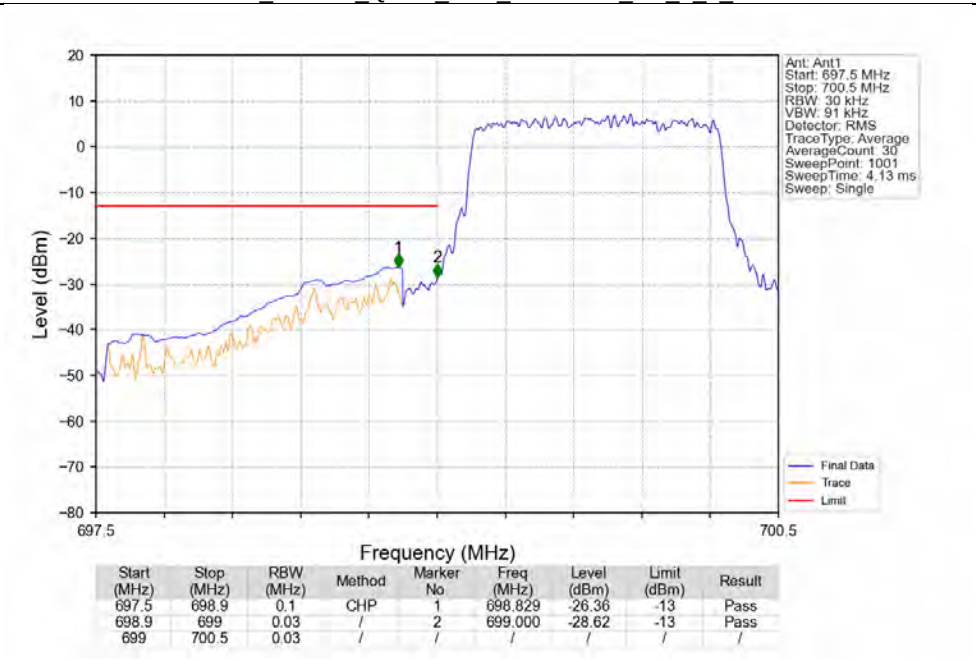


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.895	-33.40	-13	Pass
698.9	699	0.03	/	2	698.994	-22.10	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

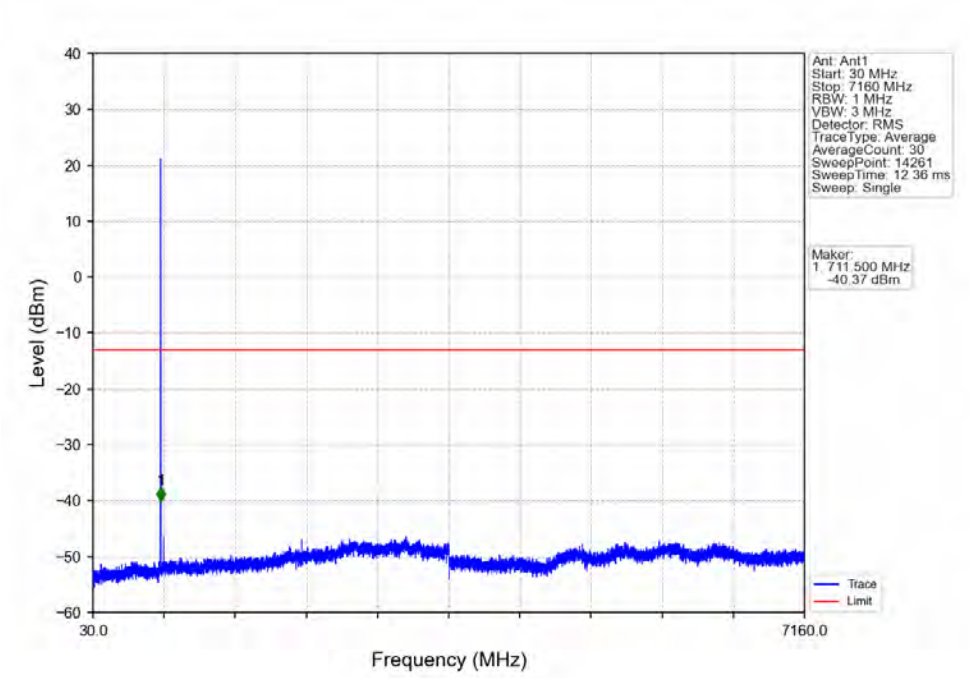


Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV

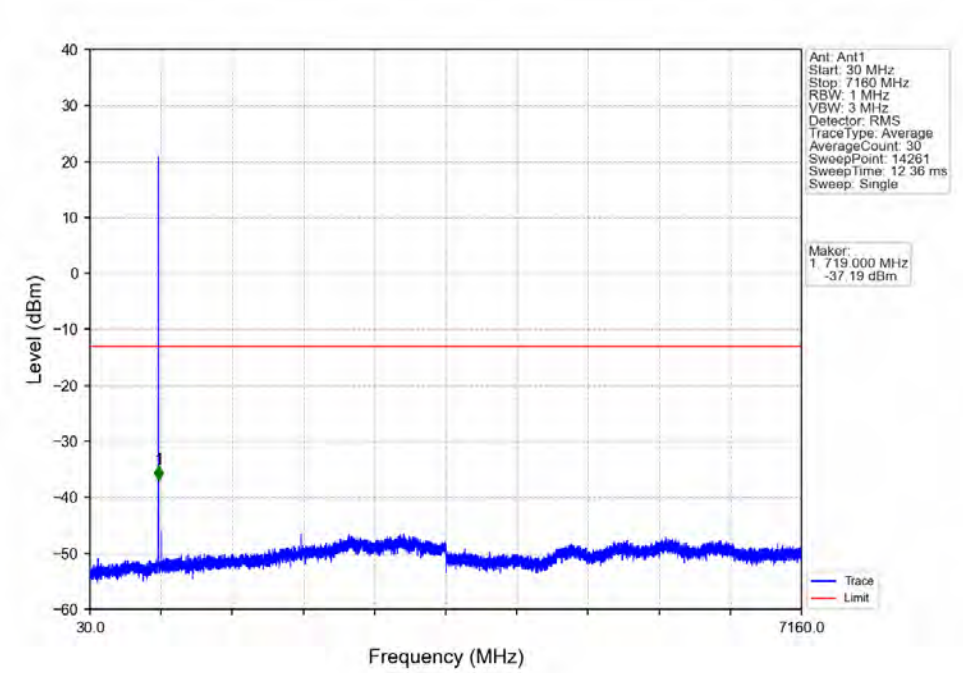


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.829	-26.36	-13	Pass
698.9	699	0.03	/	2	699.000	-28.62	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

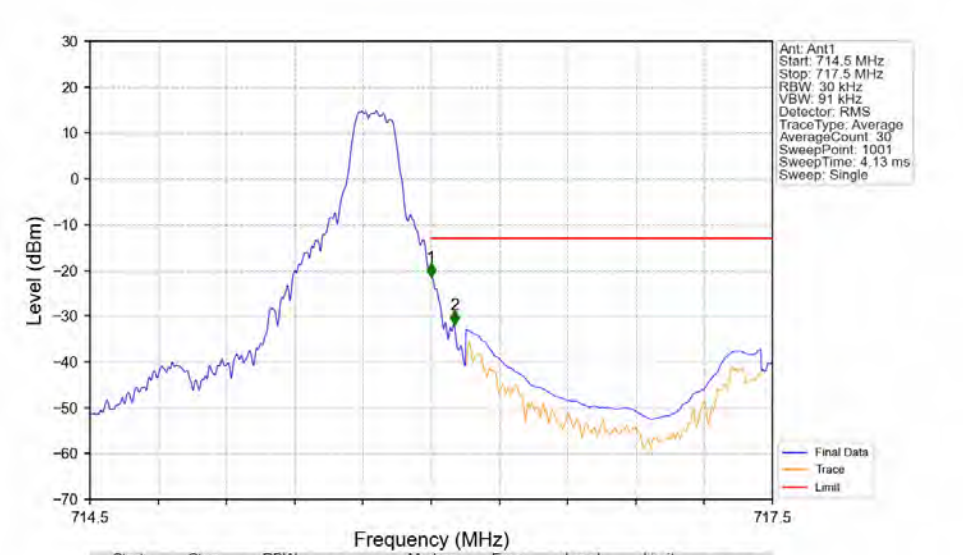
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_0_NTNV

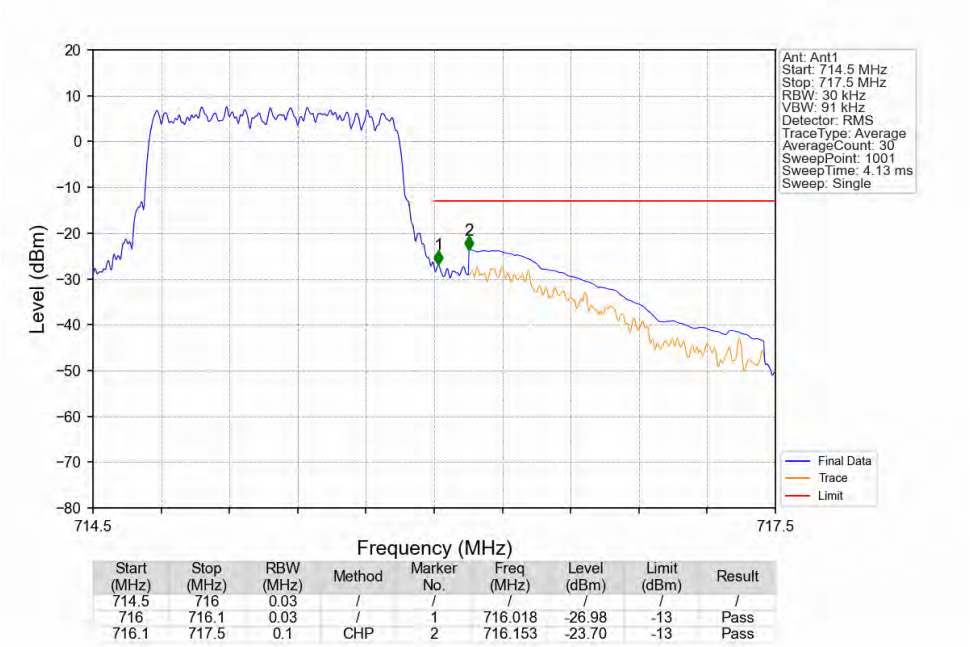


Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_5_NTNV



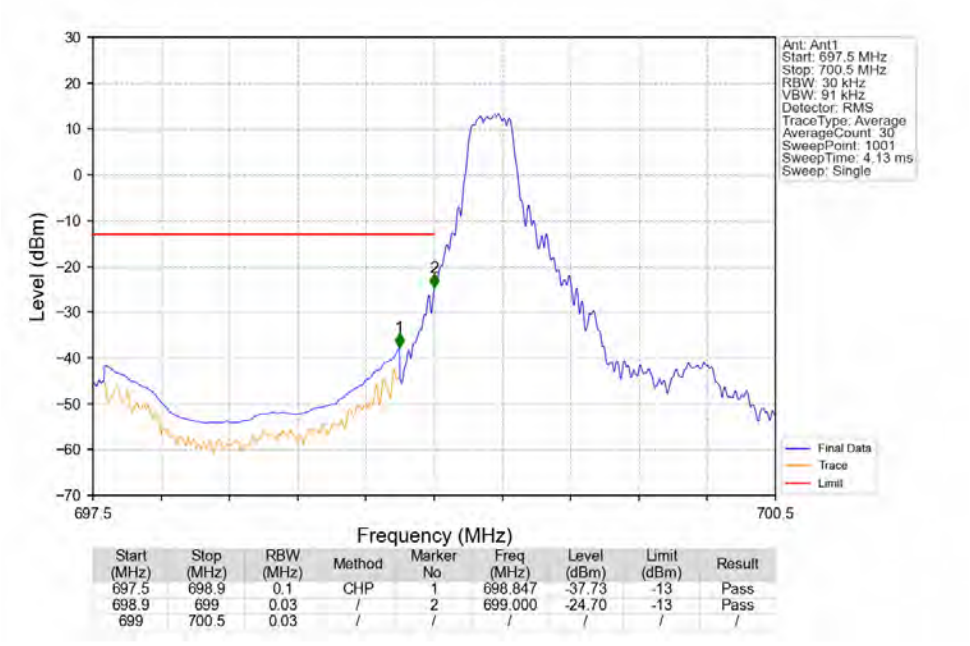
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-21.52	-13	Pass
716.1	717.5	0.1	CHP	2	716.102	-31.94	-13	Pass

Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



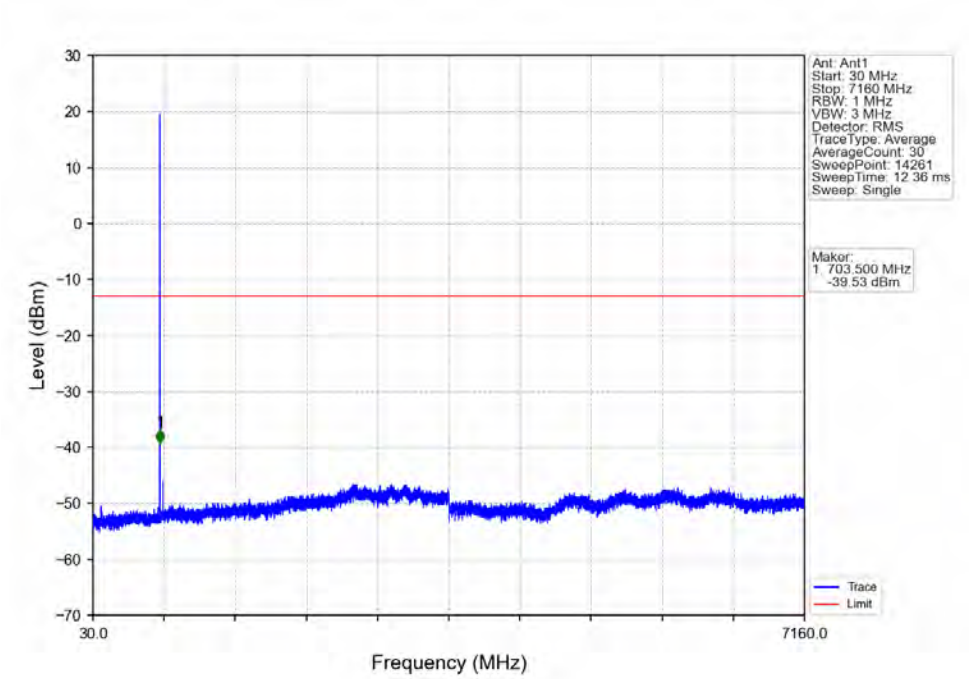
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.018	-26.98	-13	Pass
716.1	717.5	0.1	CHP	2	716.153	-23.70	-13	Pass

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

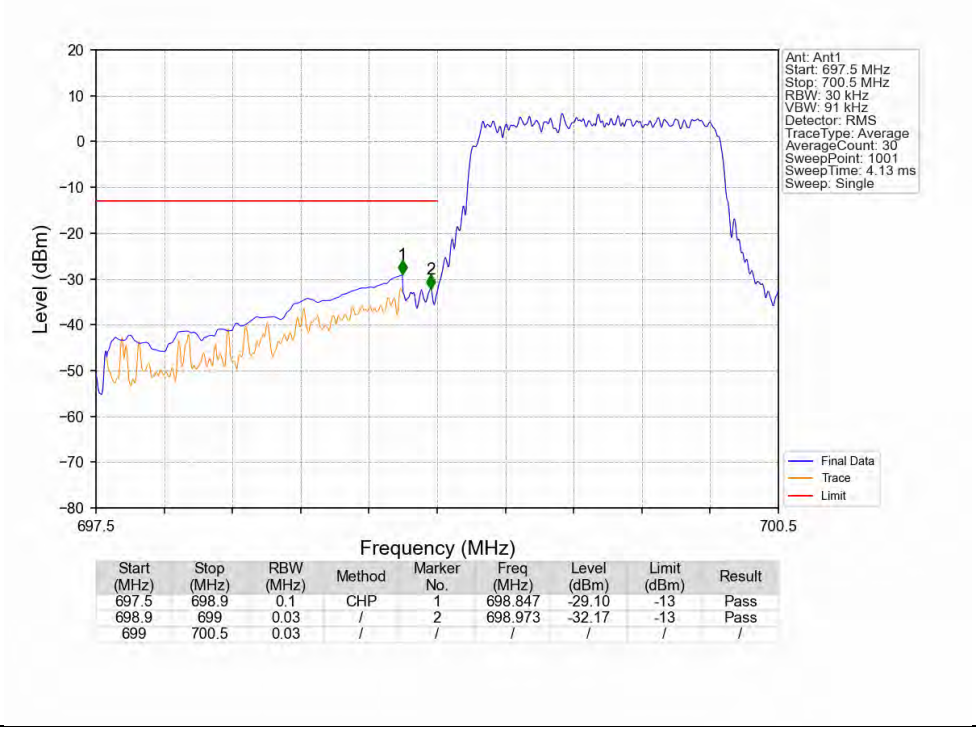


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.847	-37.73	-13	Pass
698.9	699	0.03	/	2	699.000	-24.70	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

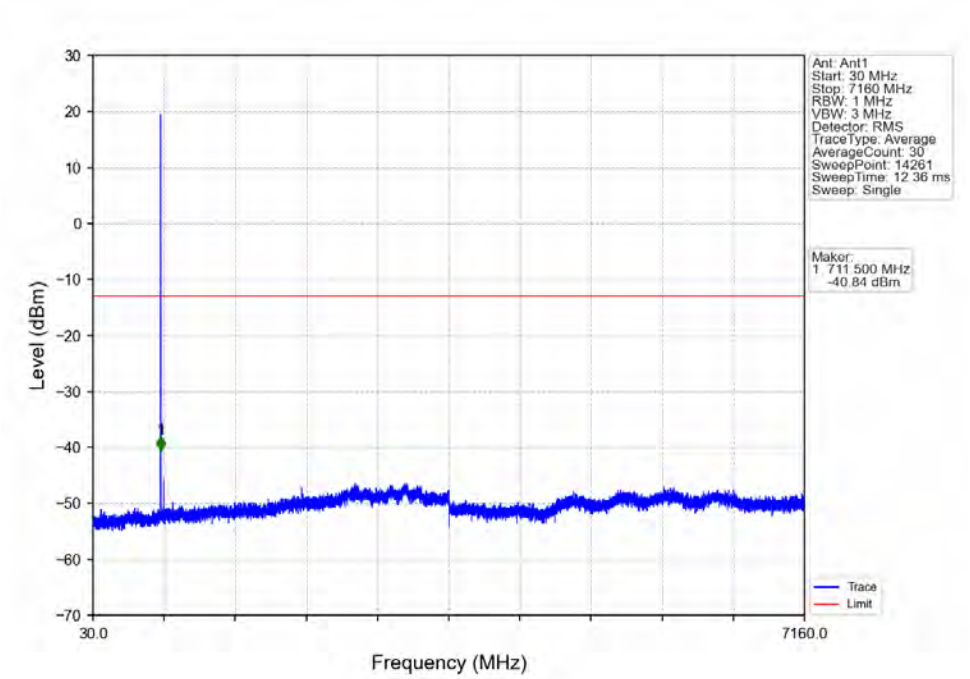


Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV

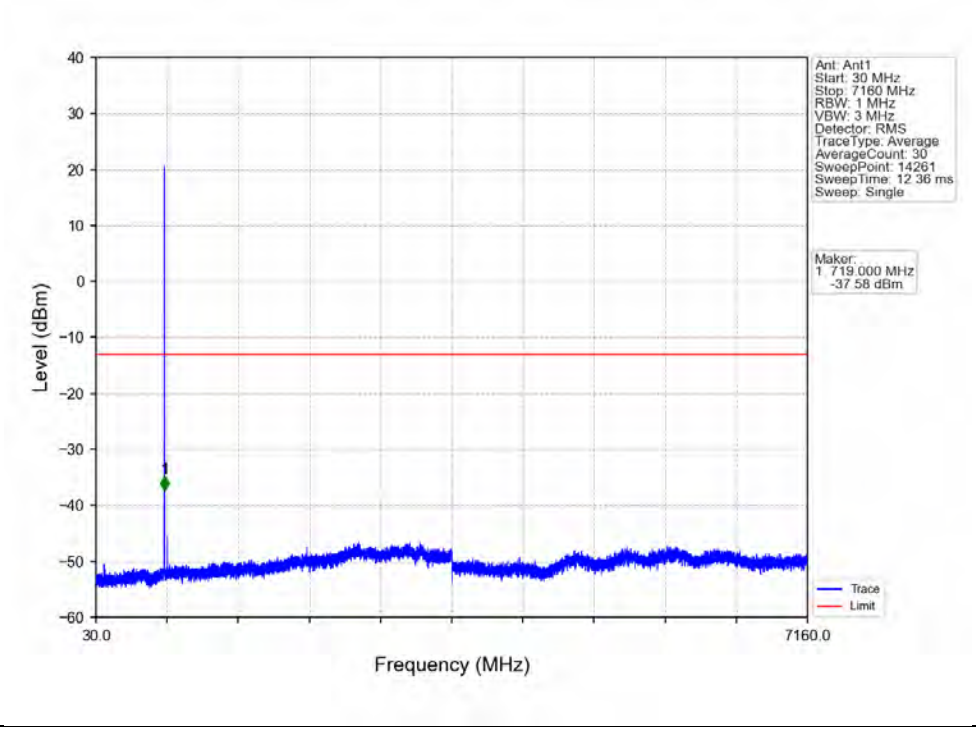


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.847	-29.10	-13	Pass
698.9	699	0.03	/	2	698.973	-32.17	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

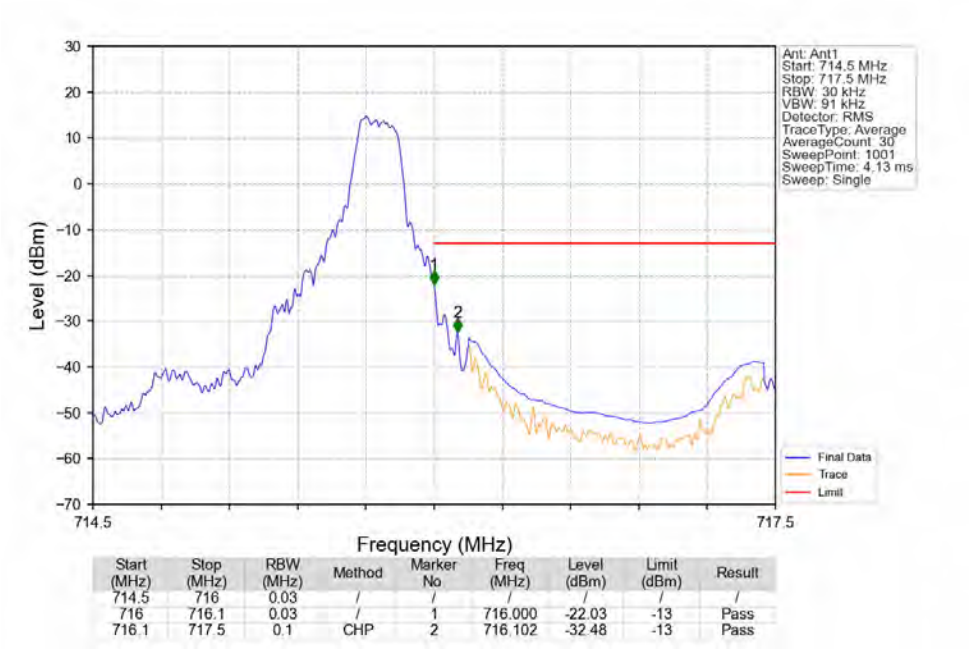
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_0_NTNV

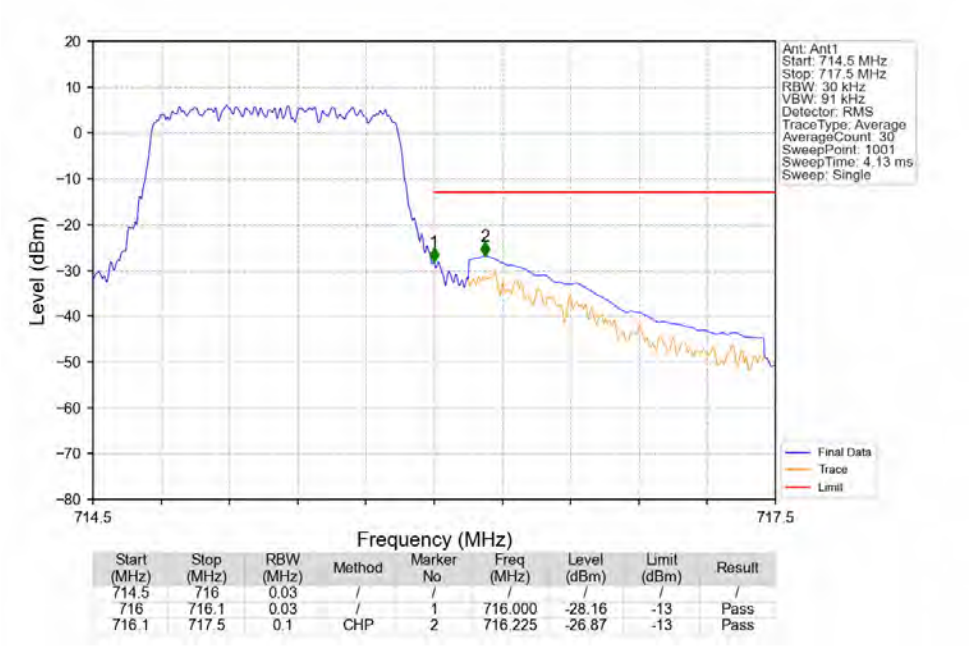


Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_5_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-22.03	-13	Pass
716.1	717.5	0.1	CHP	2	716.102	-32.48	-13	Pass

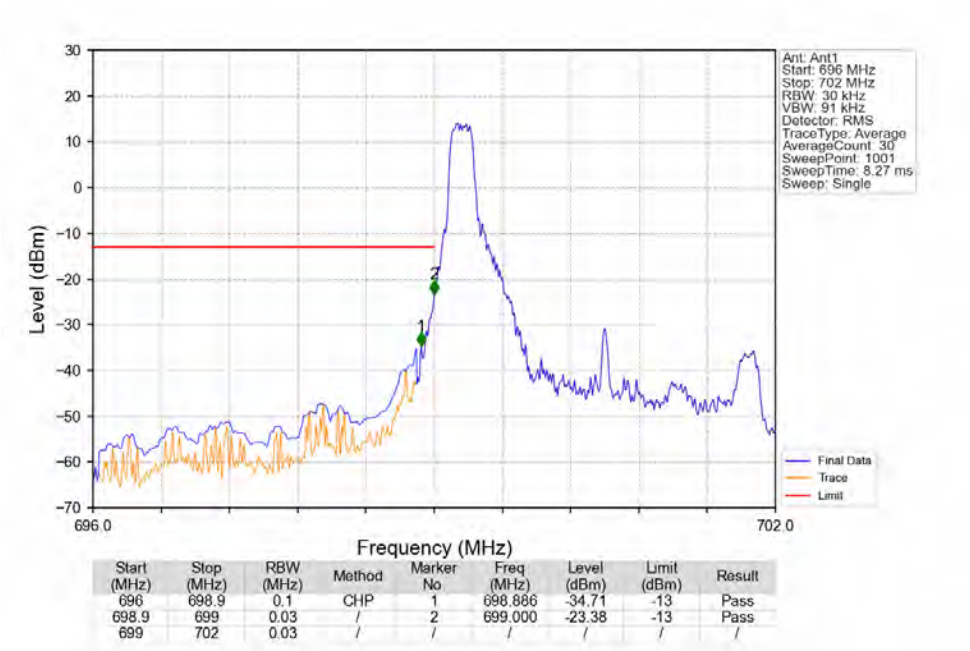
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-28.16	-13	Pass
716.1	717.5	0.1	CHP	2	716.225	-26.87	-13	Pass

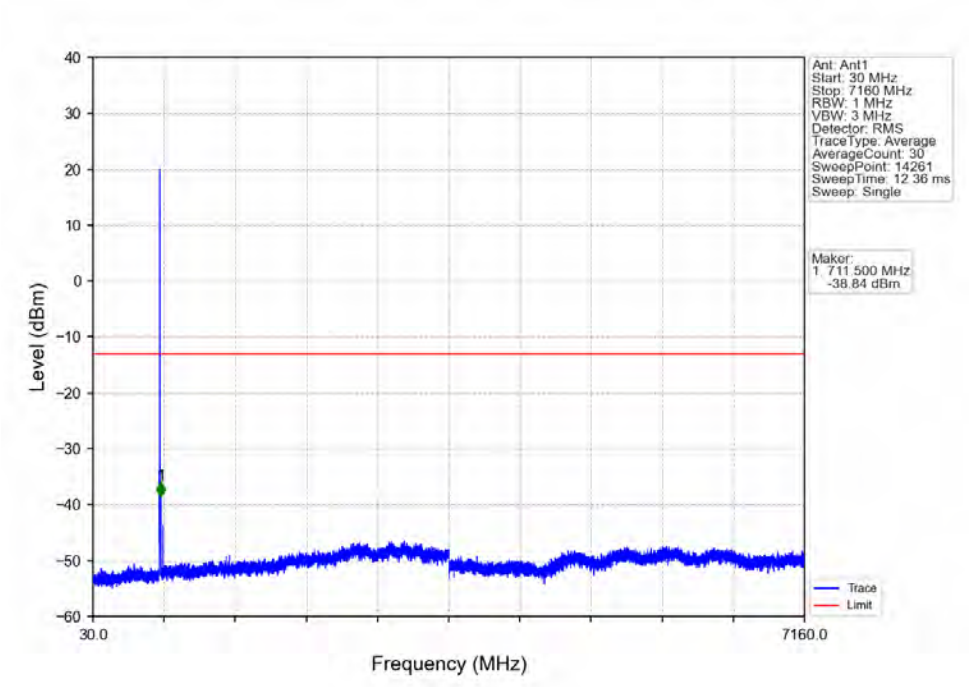
6.2.2 B12_3MHz

Band12_3MHz_QPSK_LCH_700.5MHz_RB_1_0_NTNV

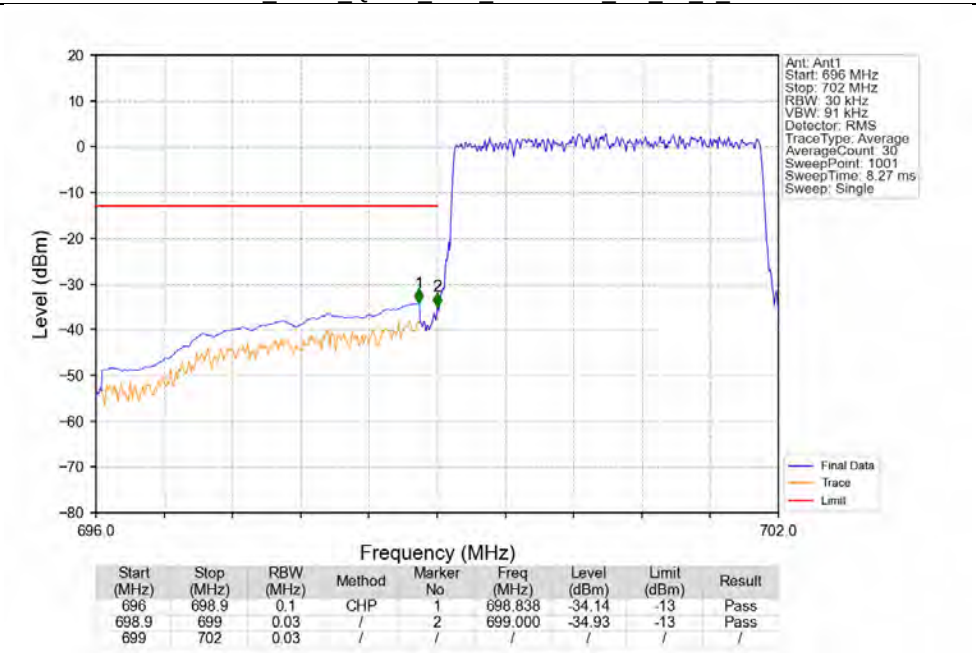


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.886	-34.71	-13	Pass
698.9	699	0.03	/	2	699.000	-23.38	-13	Pass
699	702	0.03	/	/	/	/	/	/

Band12_3MHz_QPSK_LCH_700.5MHz_RB_1_0_NTNV

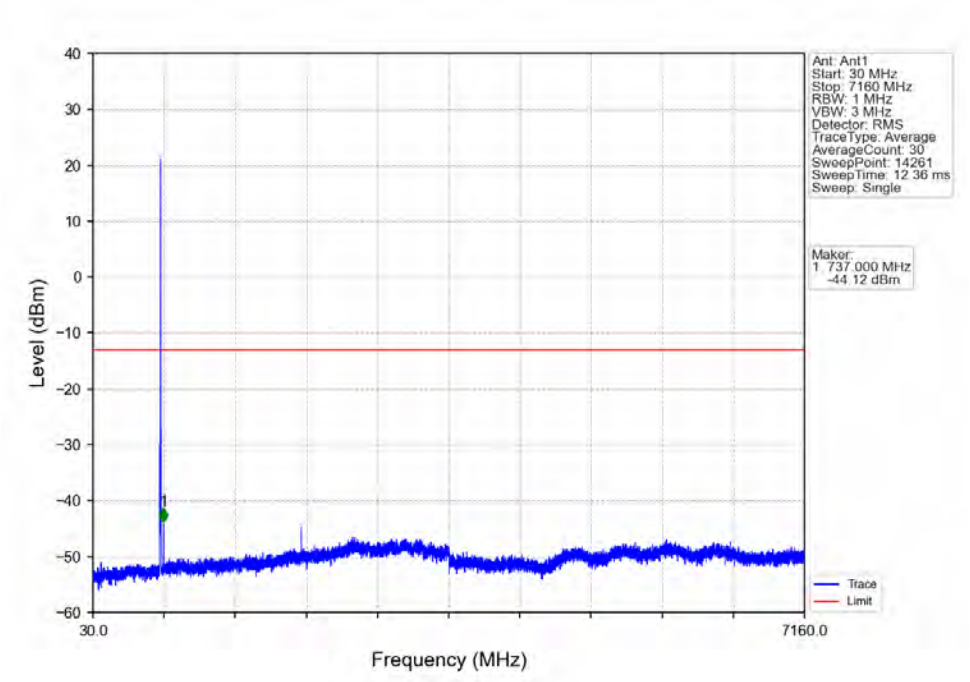


Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV

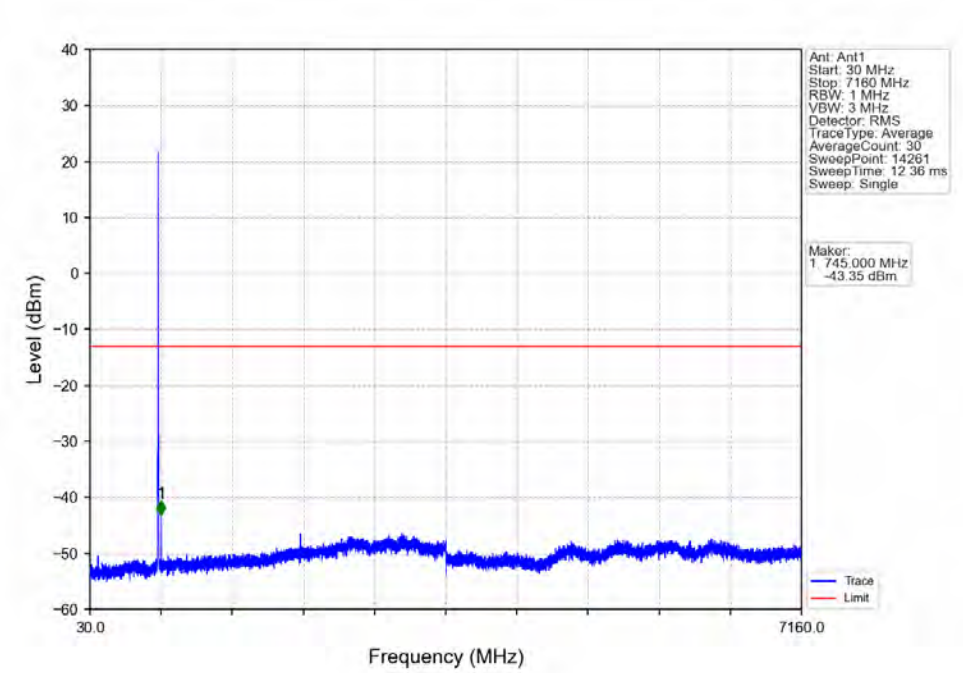


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.838	-34.14	-13	Pass
698.9	699	0.03	/	2	699.000	-34.93	-13	Pass
699	702	0.03	/	/	/	/	/	/

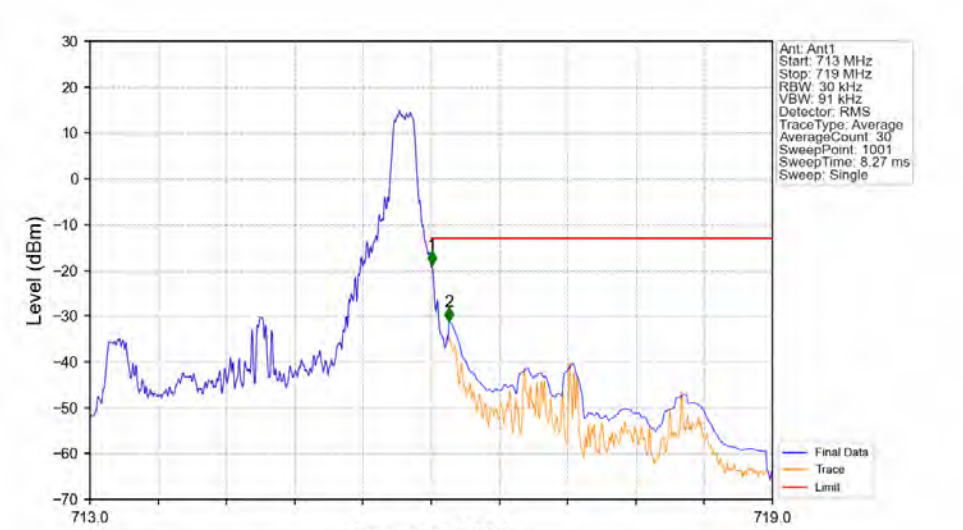
Band12_3MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_0_NTNV

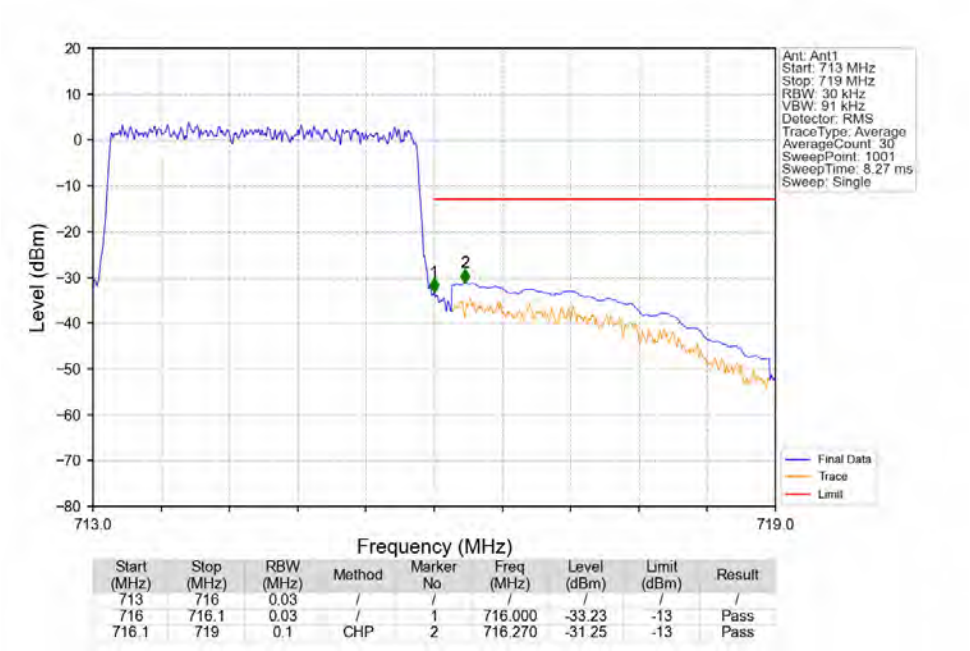


Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_14_NTNV



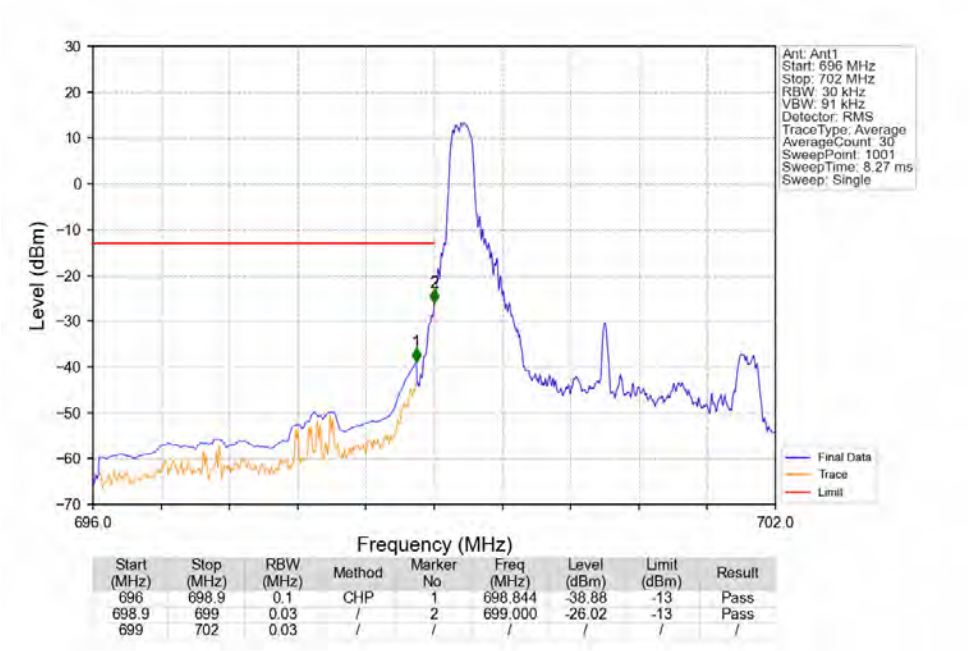
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.006	-18.90	-13	Pass
716.1	719	0.1	CHP	2	716.156	-31.19	-13	Pass

Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



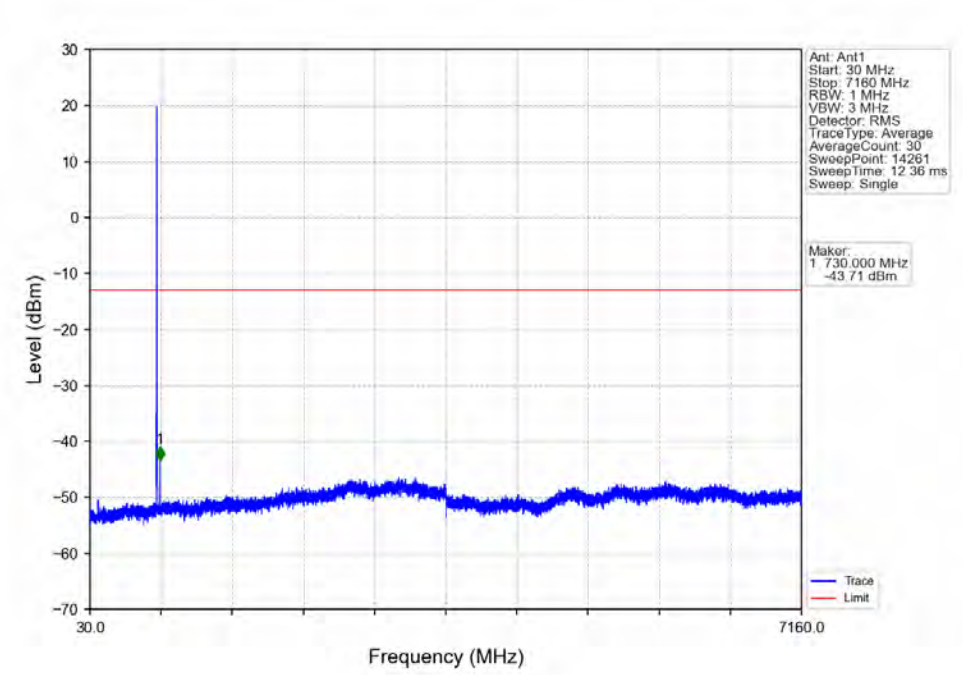
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-33.23	-13	Pass
716.1	719	0.1	CHP	2	716.270	-31.25	-13	Pass

Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

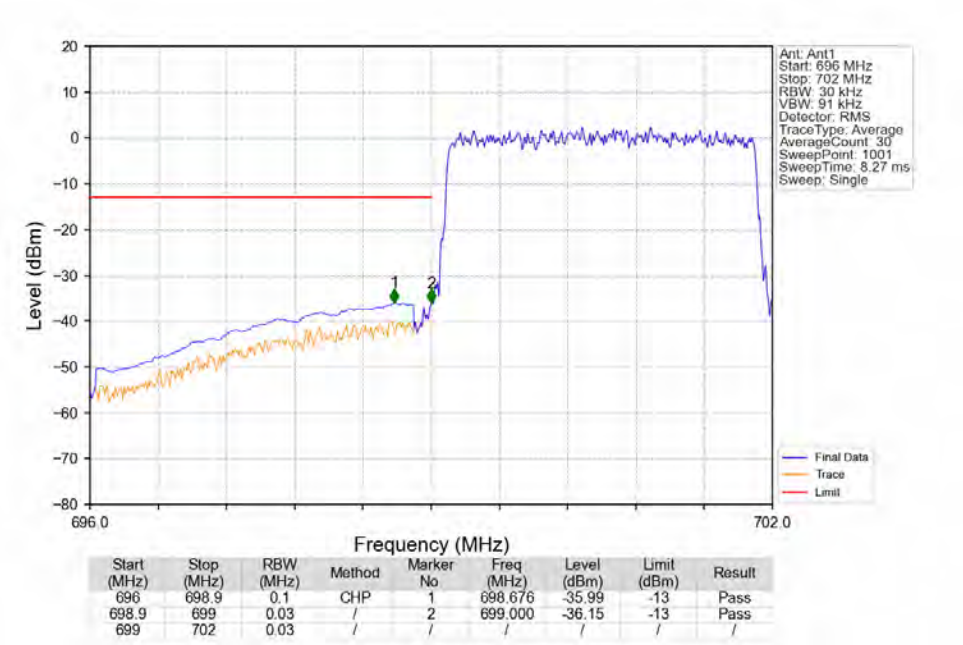


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-38.88	-13	Pass
698.9	699	0.03	/	2	699.000	-26.02	-13	Pass
699	702	0.03	/	/	/	/	/	/

Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

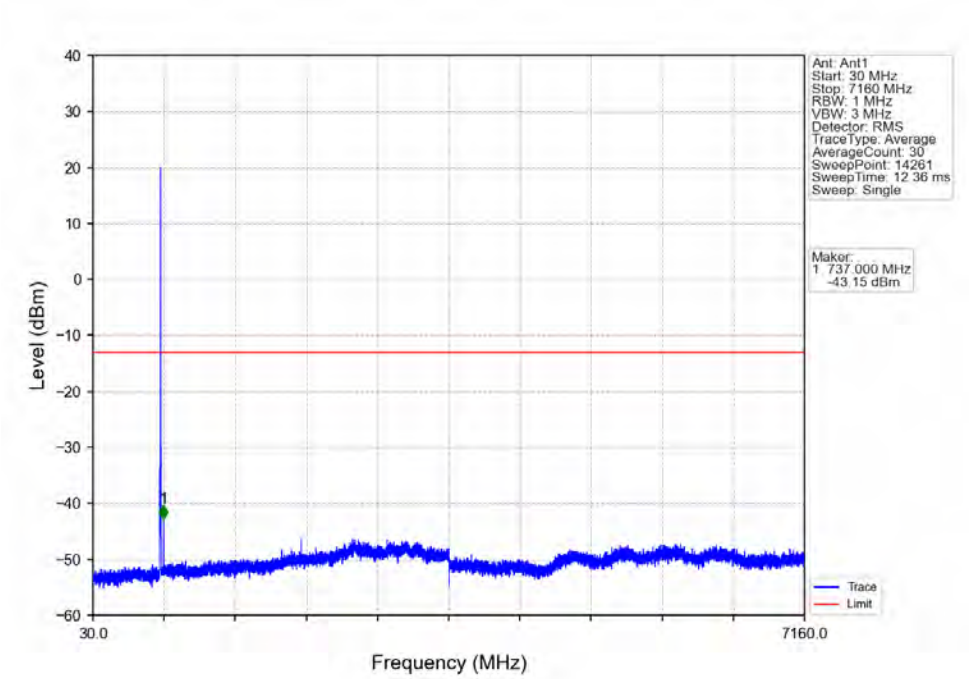


Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

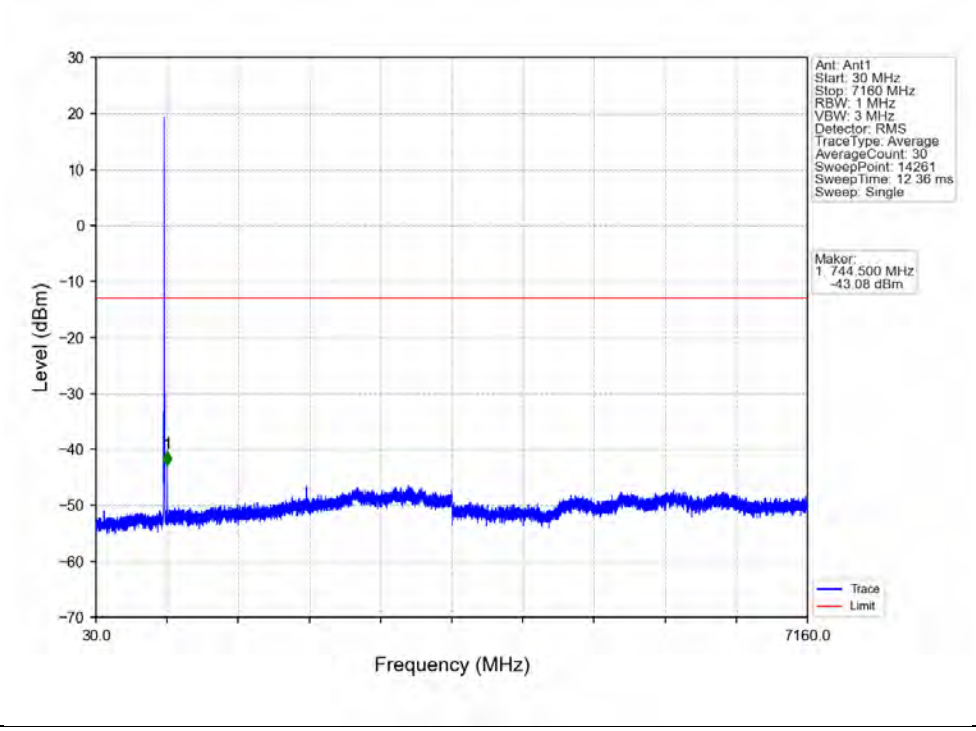


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.676	-35.99	-13	Pass
698.9	699	0.03	/	2	699.000	-36.15	-13	Pass
699	702	0.03	/	/	/	/	/	/

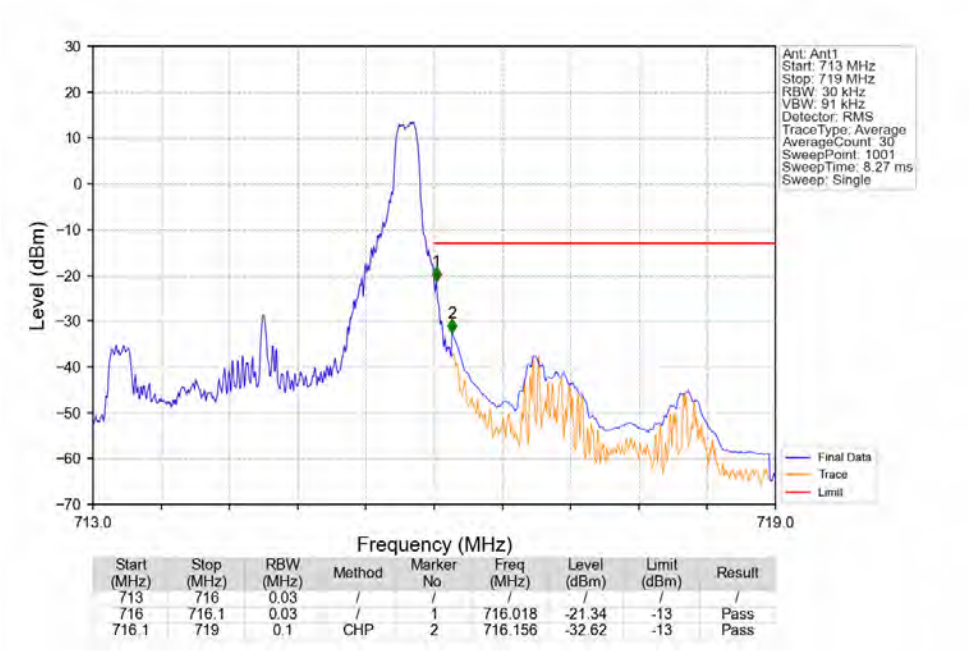
Band12_3MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_0_NTNV

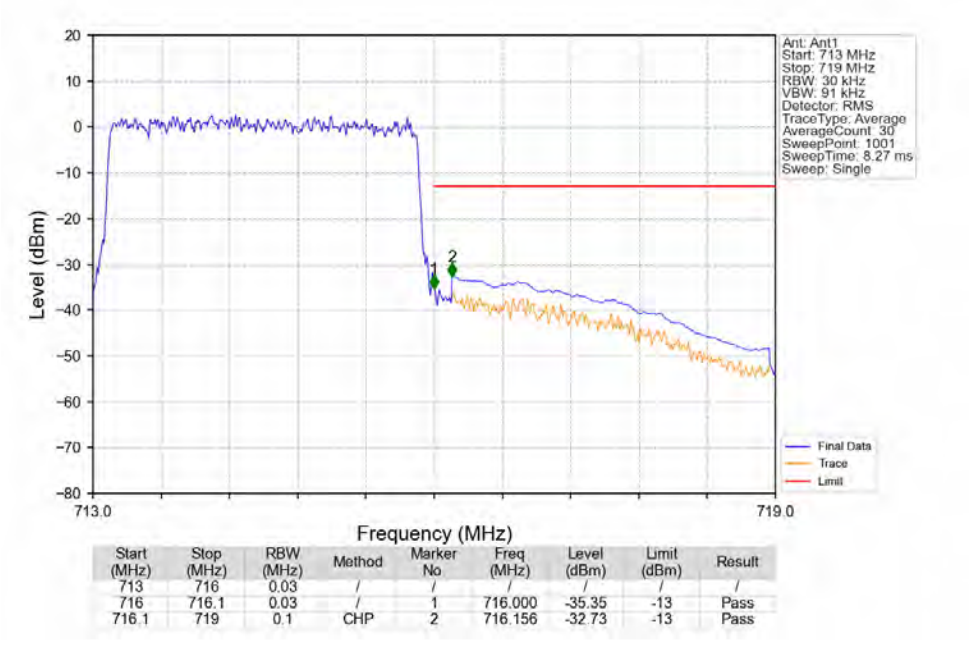


Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_14_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.018	-21.34	-13	Pass
716.1	719	0.1	CHP	2	716.156	-32.62	-13	Pass

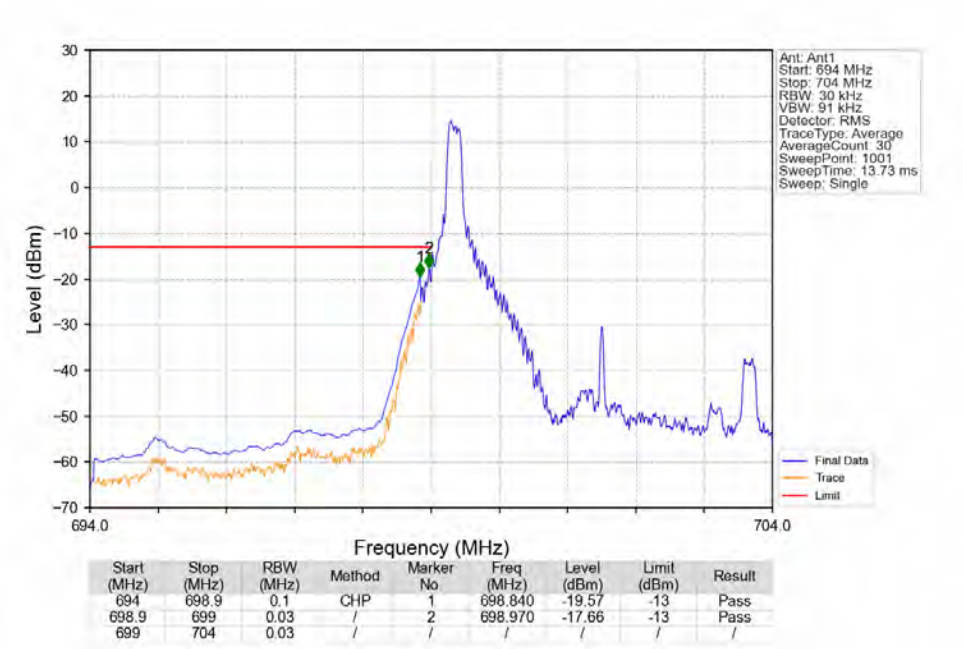
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-35.35	-13	Pass
716.1	719	0.1	CHP	2	716.156	-32.73	-13	Pass

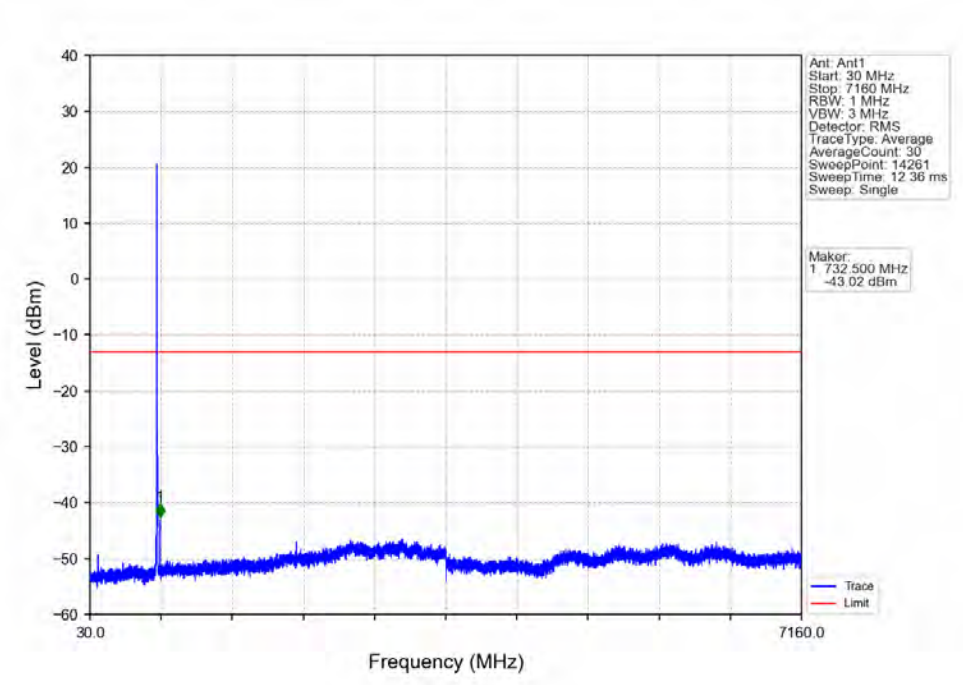
6.2.3 B12_5MHz

Band12_5MHz_QPSK_LCH_701.5MHz_RB_1_0_NTNV

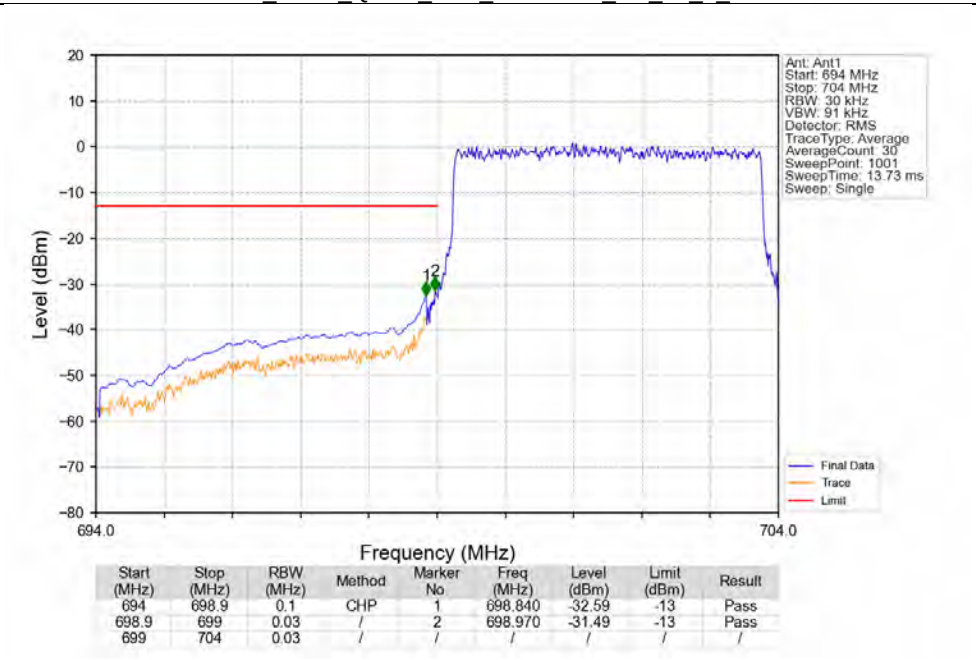


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.840	-19.57	-13	Pass
698.9	699	0.03	/	2	698.970	-17.66	-13	Pass
699	704	0.03	/	/	/	/	/	/

Band12_5MHz_QPSK_LCH_701.5MHz_RB_1_0_NTNV

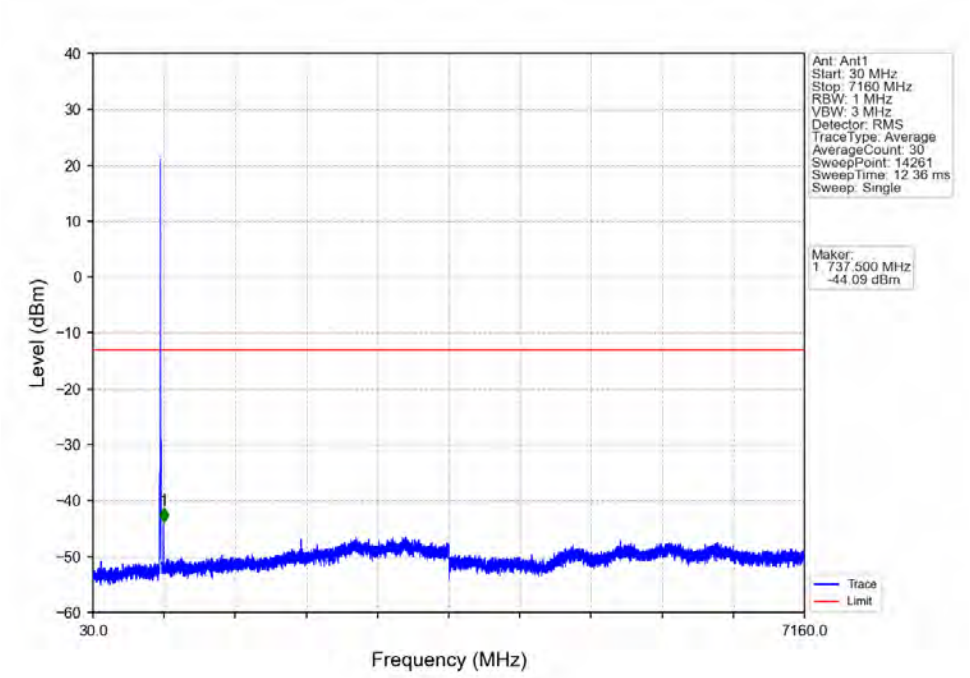


Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV

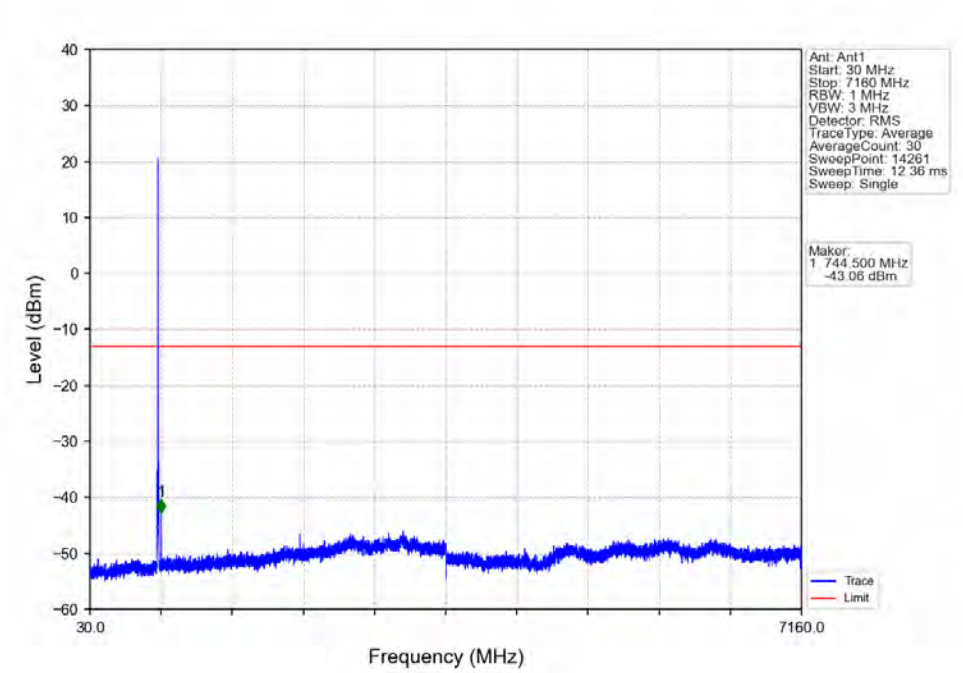


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.840	-32.59	-13	Pass
698.9	699	0.03	/	2	698.970	-31.49	-13	Pass
699	704	0.03	/	/	/	/	/	/

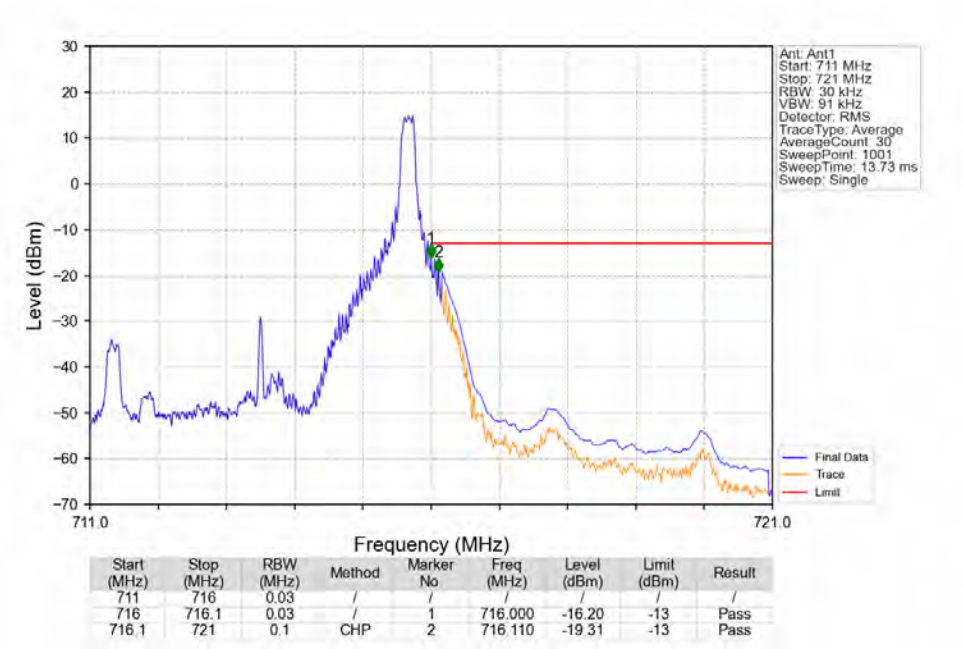
Band12_5MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

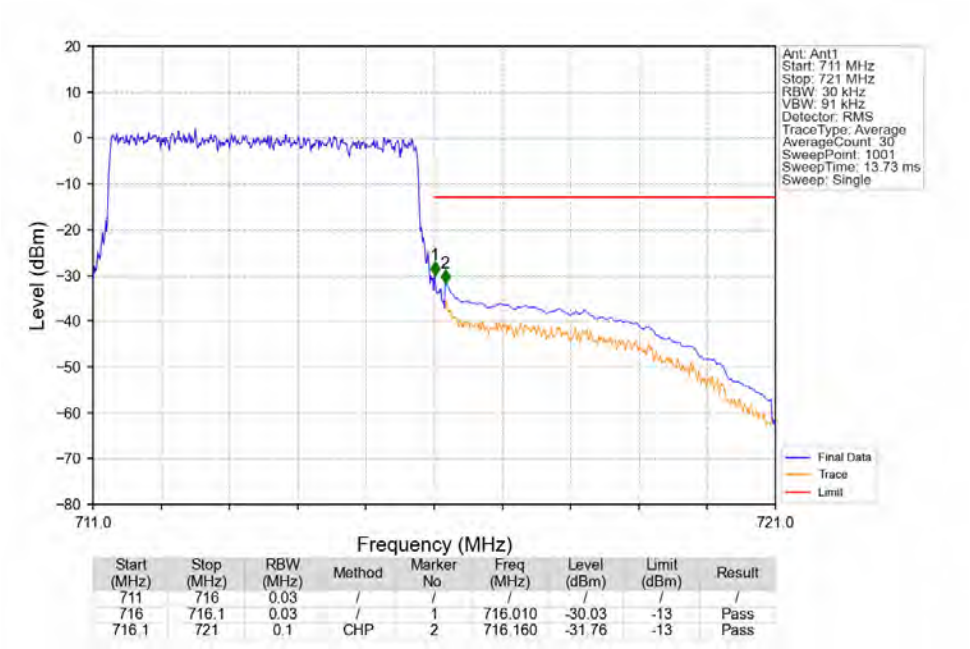


Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



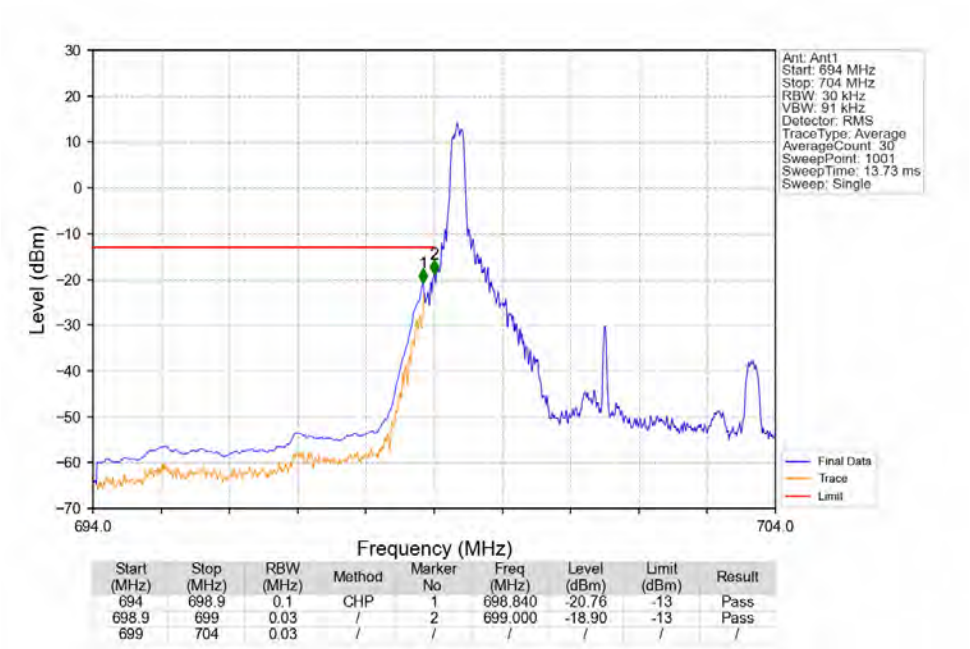
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-16.20	-13	Pass
716.1	721	0.1	CHP	2	716.110	-19.31	-13	Pass

Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



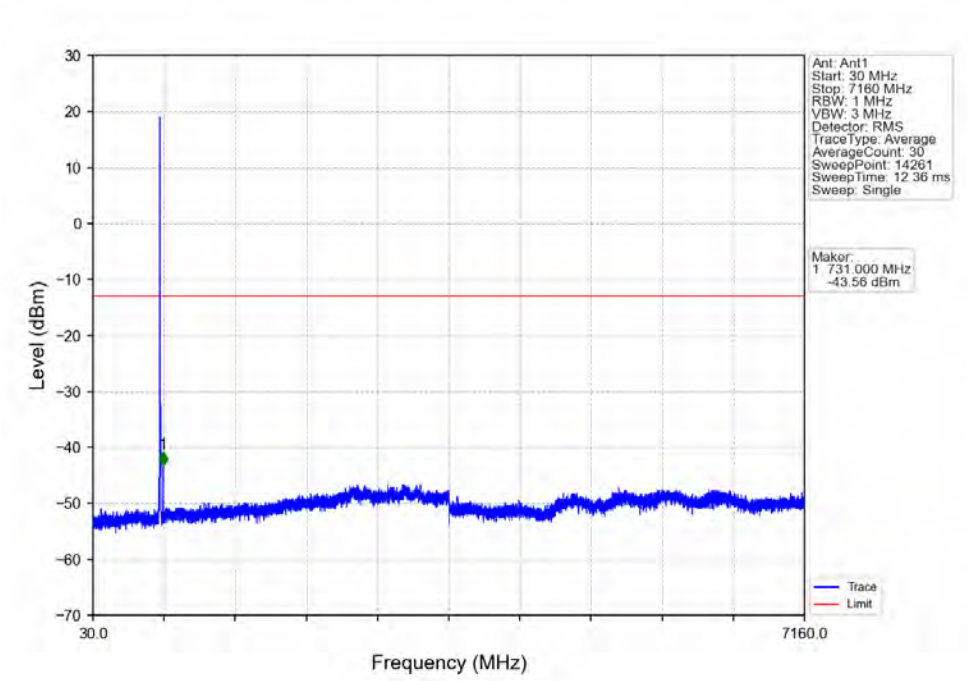
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-30.03	-13	Pass
716.1	721	0.1	CHP	2	716.160	-31.76	-13	Pass

Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

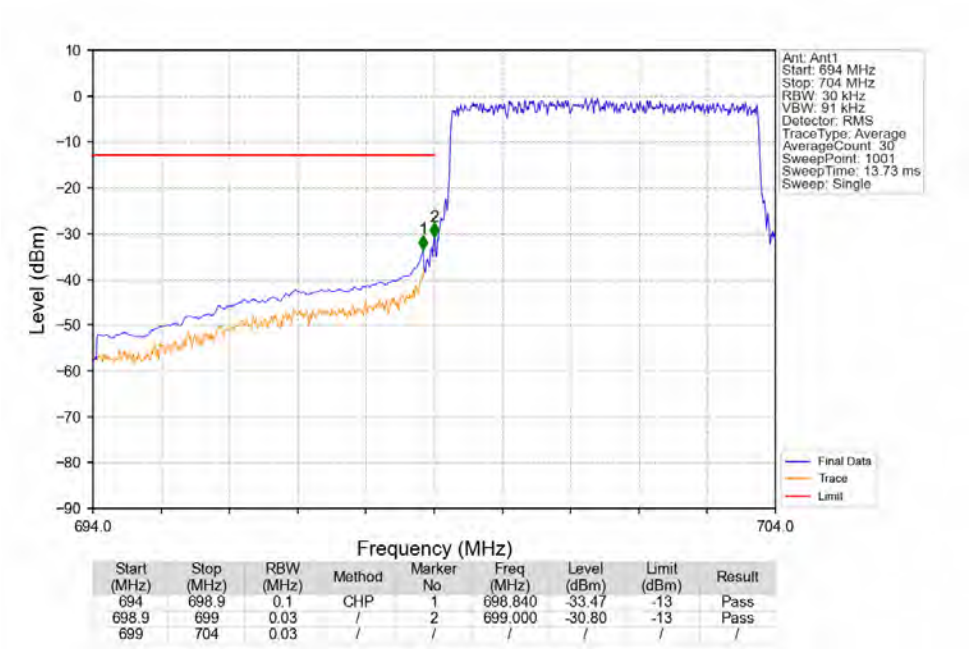


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.840	-20.76	-13	Pass
698.9	699	0.03	/	2	699.000	-18.90	-13	Pass
699	704	0.03	/	/	/	/	/	/

Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

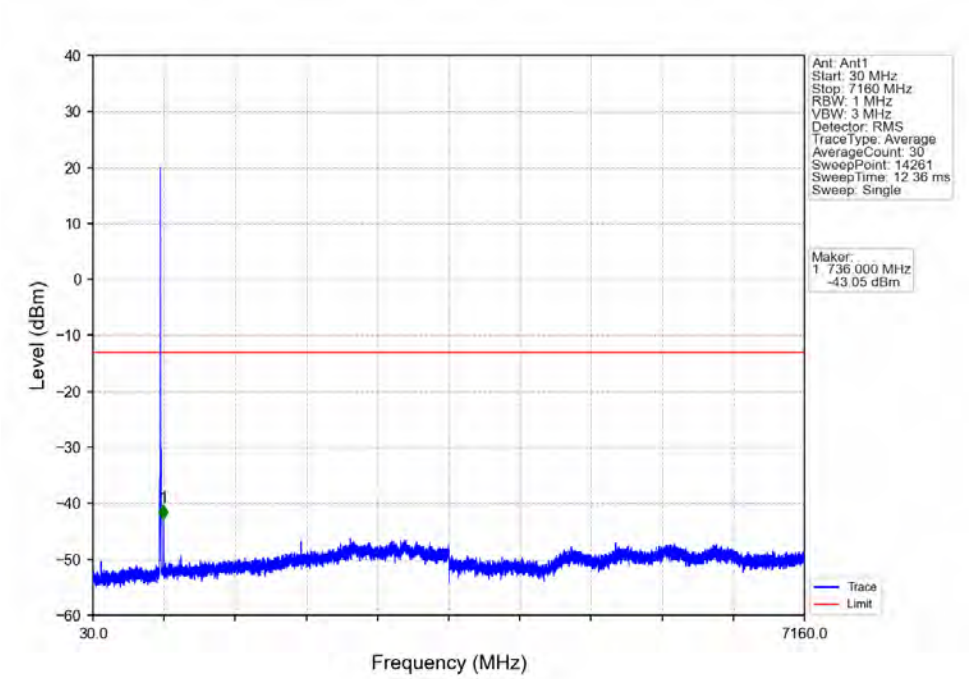


Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV

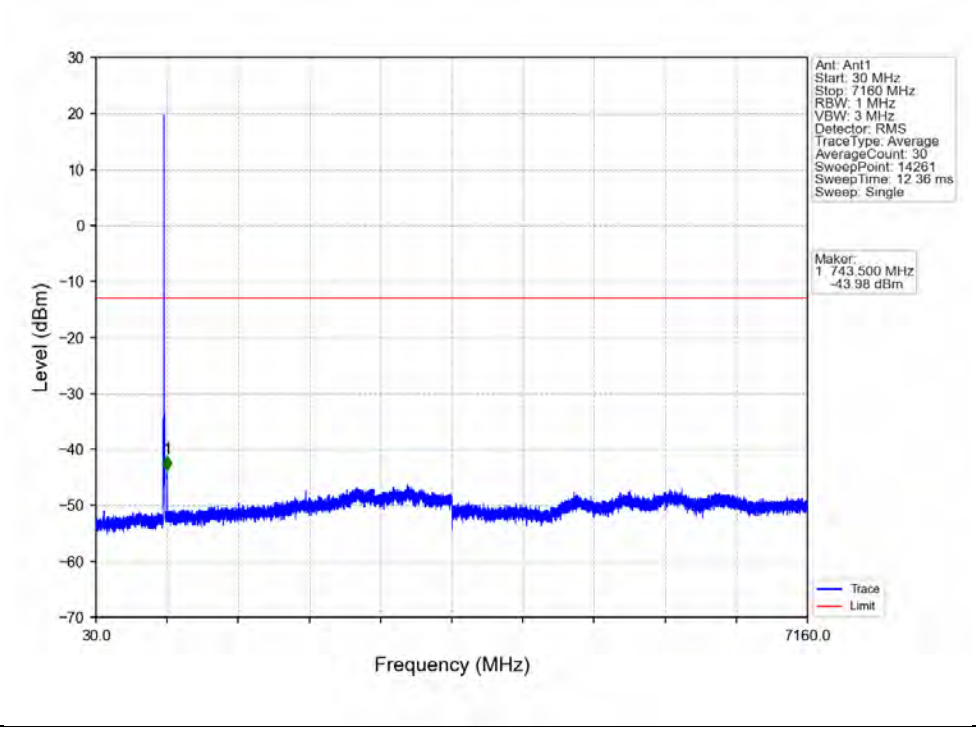


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.840	-33.47	-13	Pass
698.9	699	0.03	/	2	699.000	-30.80	-13	Pass
699	704	0.03	/	/	/	/	/	/

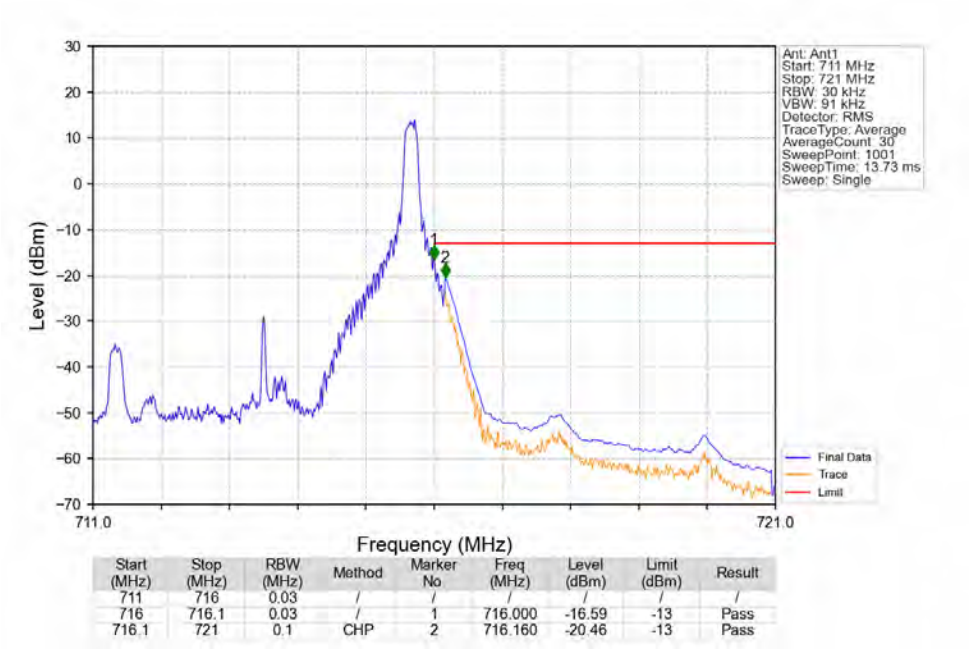
Band12_5MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_0_NTNV

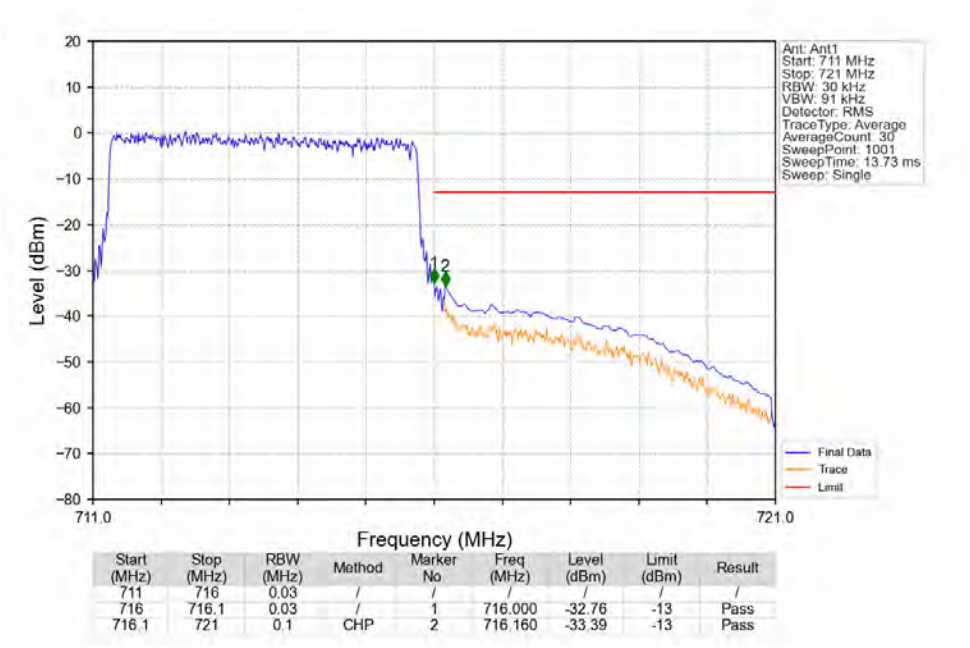


Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_24_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-16.59	-13	Pass
716.1	721	0.1	CHP	2	716.160	-20.46	-13	Pass

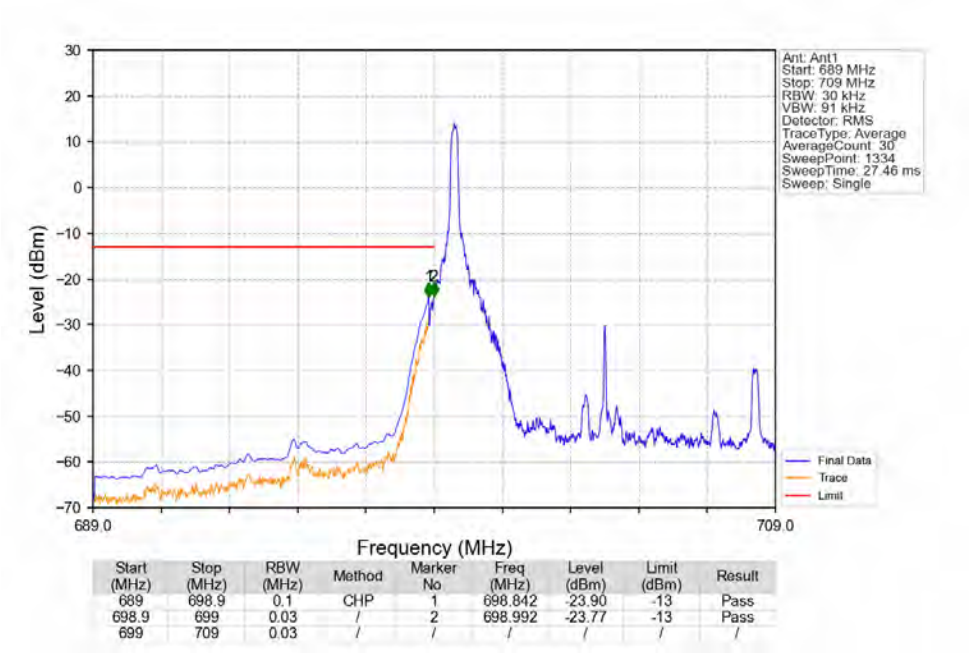
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-32.76	-13	Pass
716.1	721	0.1	CHP	2	716.160	-33.39	-13	Pass

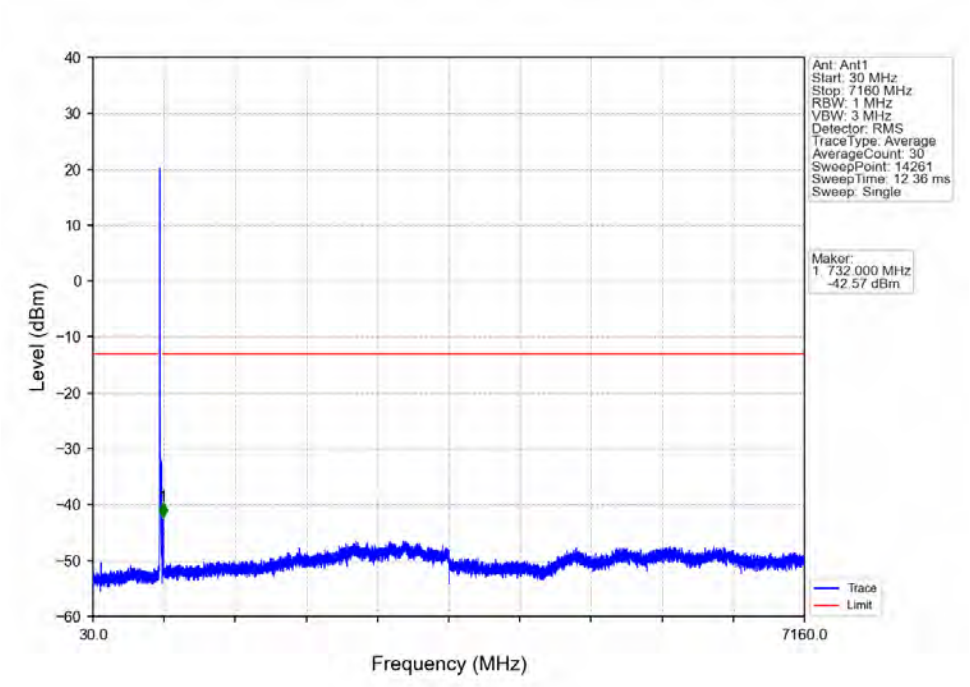
6.2.4 B12_10MHz

Band12_10MHz_QPSK_LCH_704MHz_RB_1_0_NTNV

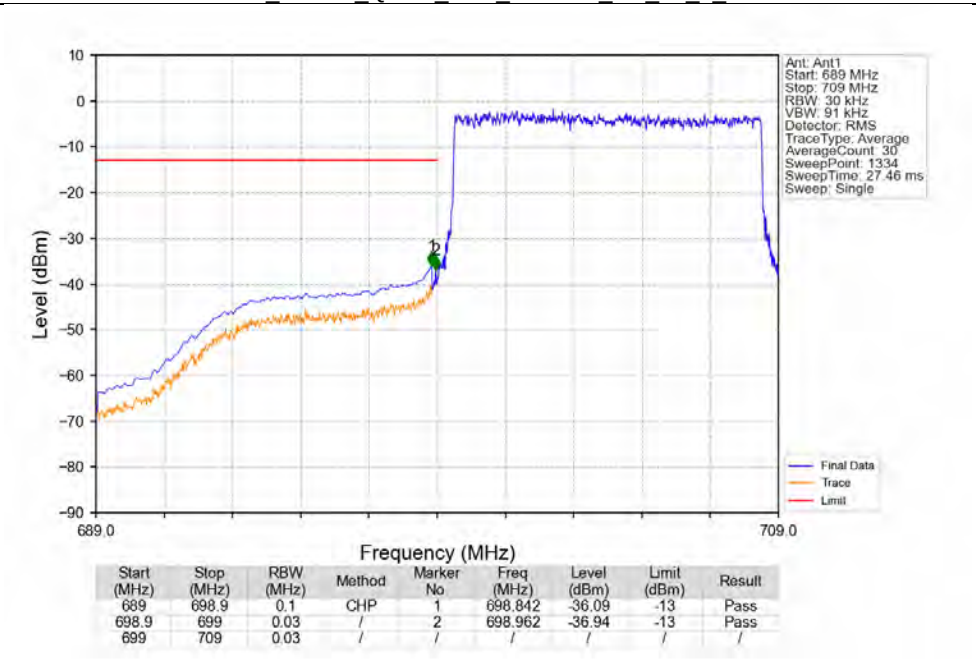


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-23.90	-13	Pass
698.9	699	0.03	/	2	698.992	-23.77	-13	Pass
699	709	0.03	/	/	/	/	/	/

Band12_10MHz_QPSK_LCH_704MHz_RB_1_0_NTNV

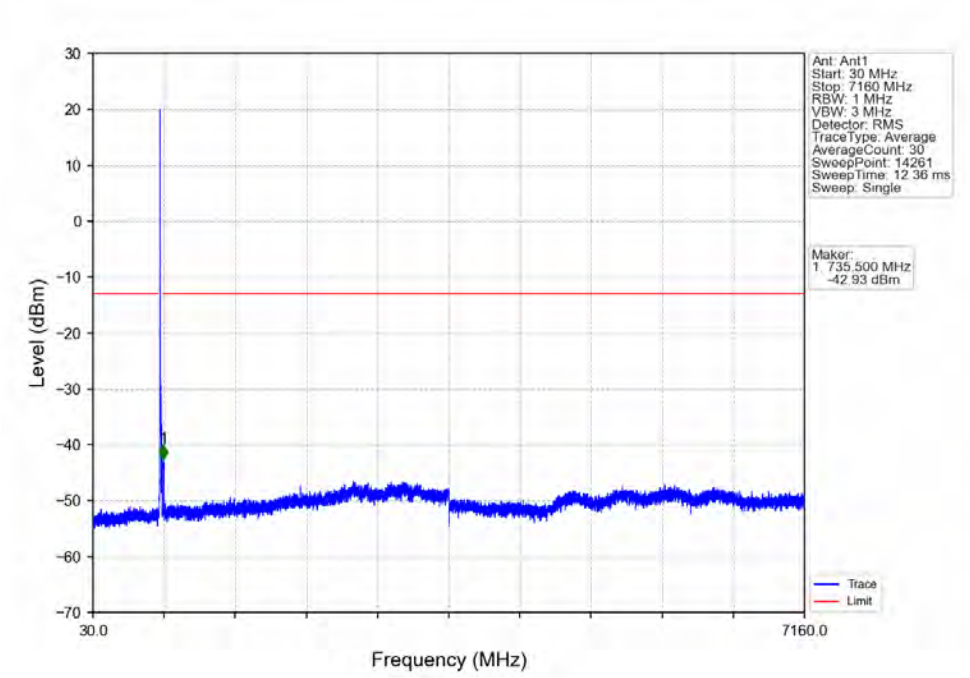


Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV

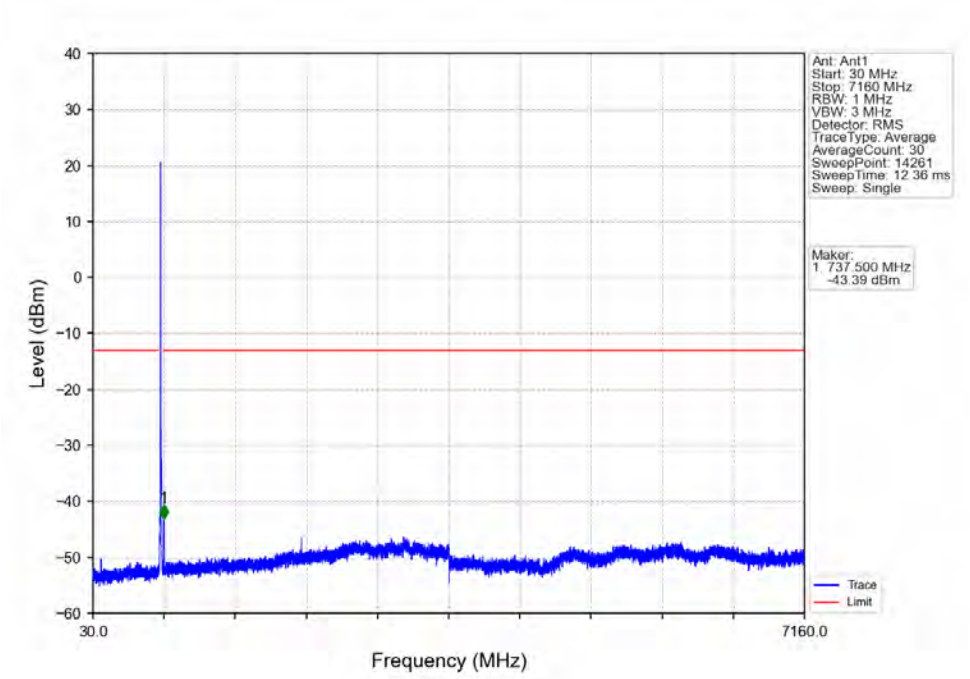


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-36.09	-13	Pass
698.9	699	0.03	/	2	698.962	-36.94	-13	Pass
699	709	0.03	/	/	/	/	/	/

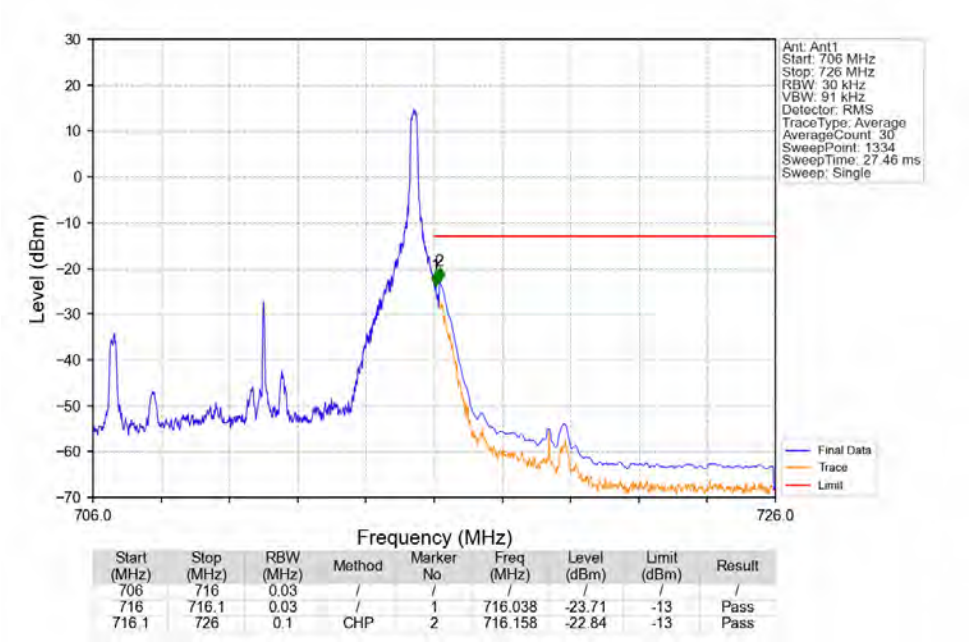
Band12_10MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

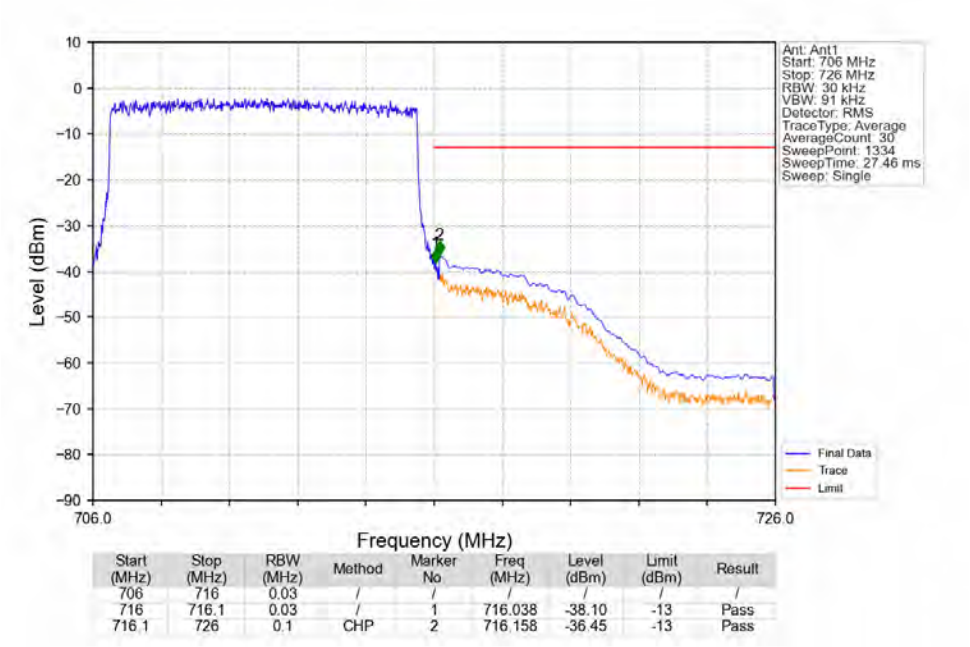


Band12_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



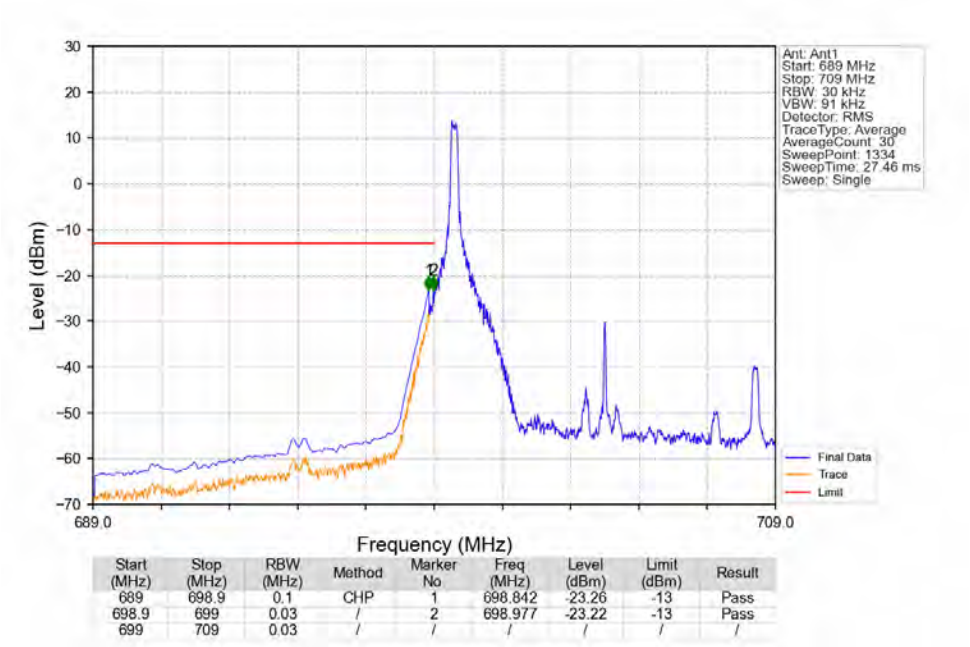
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.038	-23.71	-13	Pass
716.1	726	0.1	CHP	2	716.158	-22.84	-13	Pass

Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



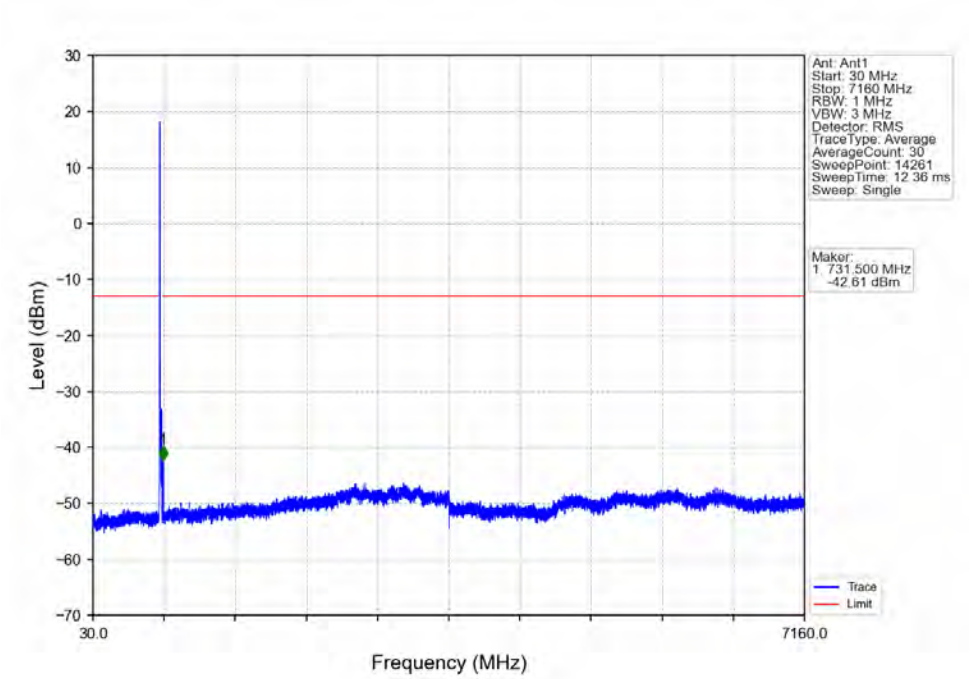
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.038	-38.10	-13	Pass
716.1	726	0.1	CHP	2	716.158	-36.45	-13	Pass

Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

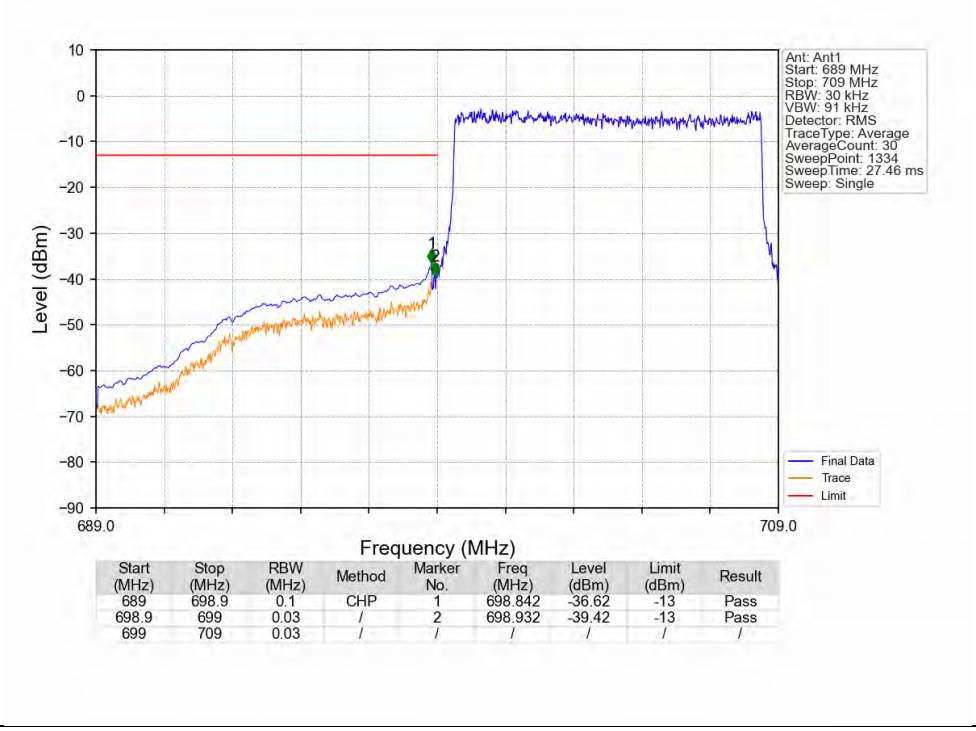


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-23.26	-13	Pass
698.9	699	0.03	/	2	698.977	-23.22	-13	Pass
699	709	0.03	/	/	/	/	/	/

Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

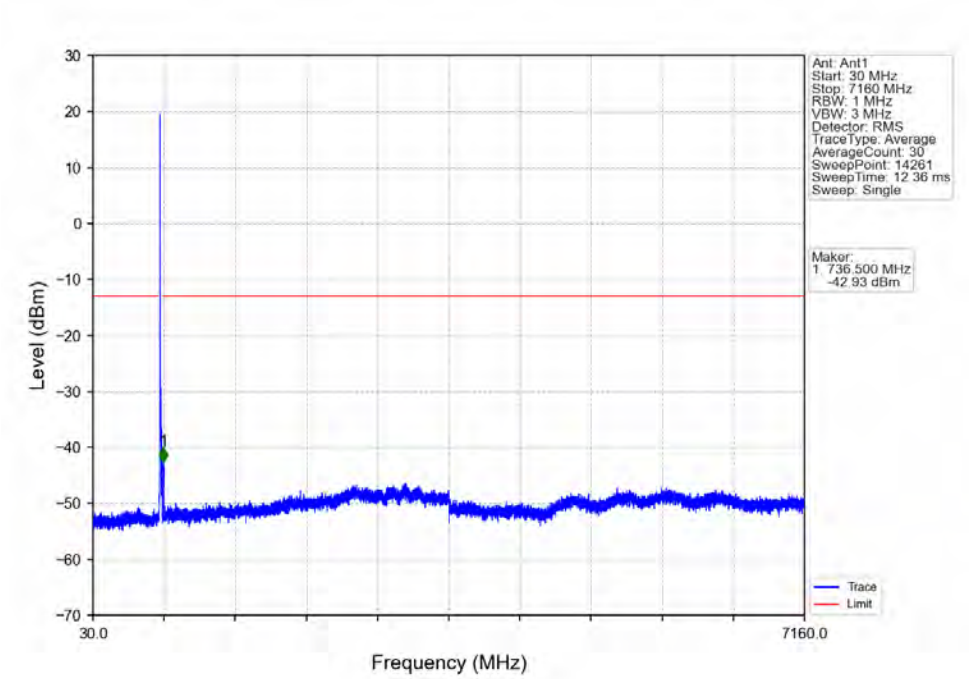


Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV

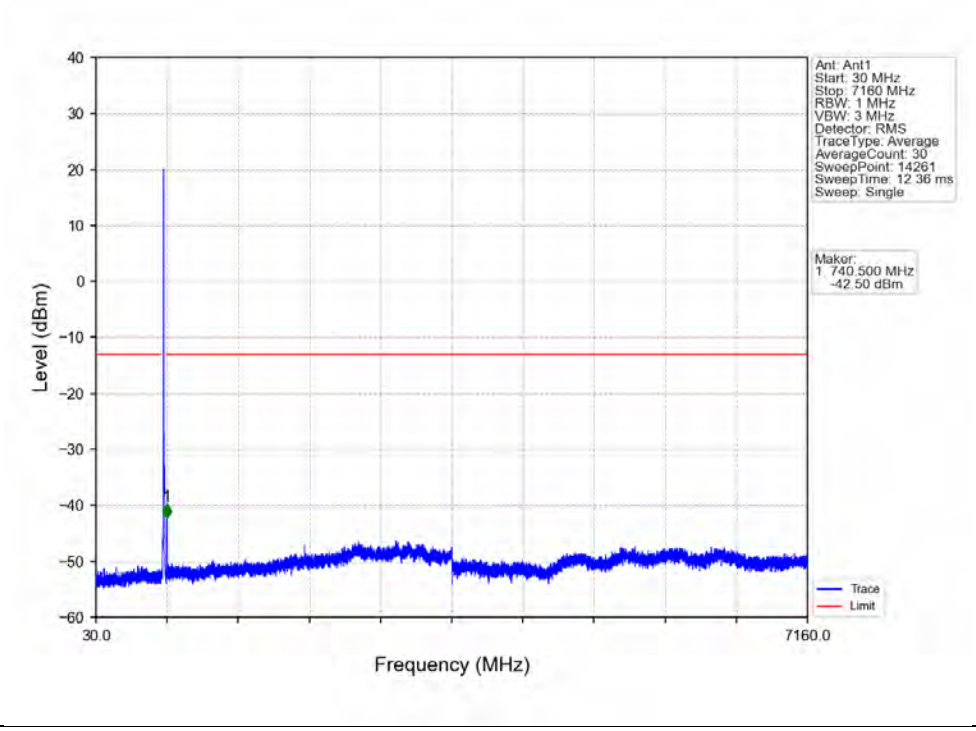


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-36.62	-13	Pass
698.9	699	0.03	/	2	698.932	-39.42	-13	Pass
699	709	0.03	/	/	/	/	/	/

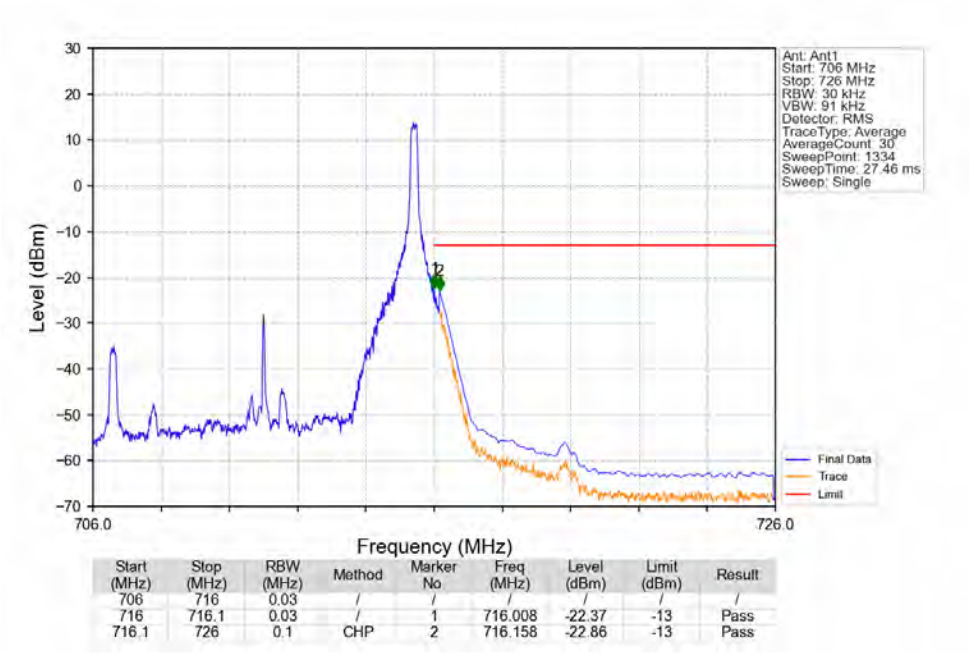
Band12_10MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_1_0_NTNV

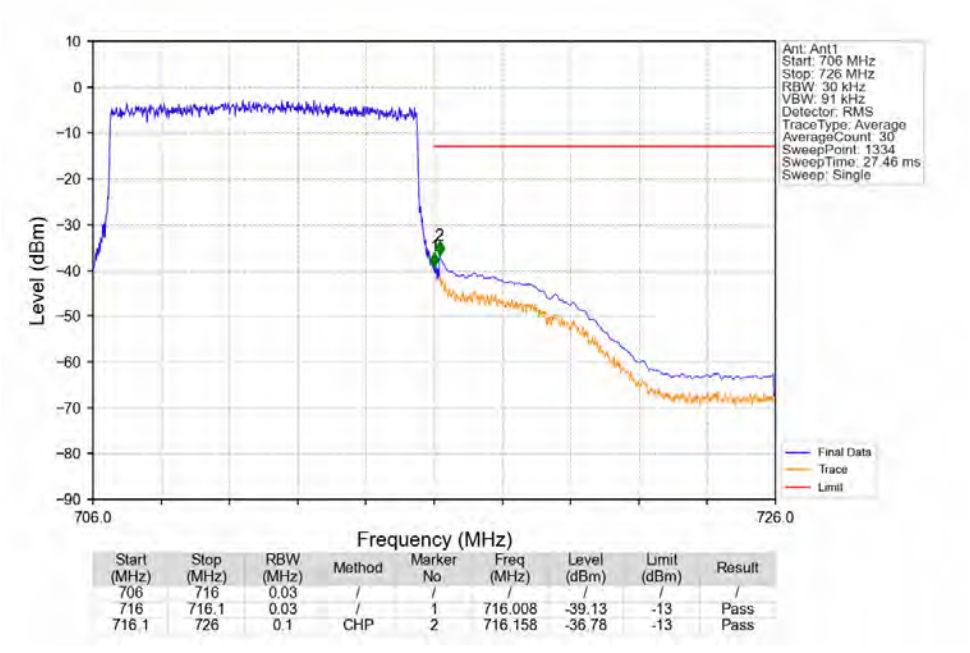


Band12_10MHz_16QAM_HCH_711MHz_RB_1_49_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.008	-22.37	-13	Pass
716.1	726	0.1	CHP	2	716.158	-22.86	-13	Pass

Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.008	-39.13	-13	Pass
716.1	726	0.1	CHP	2	716.158	-36.78	-13	Pass

7. Form731

7.1 Test Result

7.1.1 Form731_Power

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
12	1.4	699.7	715.3	0.1549	0.0153	ppm	1M11G7D	27H	21.90
12	1.4	699.7	715.3	0.1227	0.0149	ppm	1M11W7D	27H	20.89
12	3	700.5	714.5	0.1531	0.0153	ppm	2M73G7D	27H	21.85
12	3	700.5	714.5	0.1343	0.0181	ppm	2M73W7D	27H	21.28
12	5	701.5	713.5	0.1486	0.0138	ppm	4M58G7D	27H	21.72
12	5	701.5	713.5	0.1194	0.0171	ppm	4M58W7D	27H	20.77
12	10	704	711	0.1507	0.0119	ppm	9M10G7D	27H	21.78
12	10	704	711	0.1330	0.0116	ppm	9M09W7D	27H	21.24

7.1.2 Form731_ERP

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
12	1.4	699.7	715.3	0.0916	0.0153	ppm	1M11G7D	27H	19.62
12	1.4	699.7	715.3	0.0726	0.0149	ppm	1M11W7D	27H	18.61
12	3	700.5	714.5	0.0906	0.0153	ppm	2M73G7D	27H	19.57
12	3	700.5	714.5	0.0794	0.0181	ppm	2M73W7D	27H	19.00
12	5	701.5	713.5	0.0879	0.0138	ppm	4M58G7D	27H	19.44
12	5	701.5	713.5	0.0706	0.0171	ppm	4M58W7D	27H	18.49
12	10	704	711	0.0891	0.0119	ppm	9M10G7D	27H	19.50
12	10	704	711	0.0787	0.0116	ppm	9M09W7D	27H	18.96