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Annex for LTE Band 12

Test Report No.: CTL2405163031-WF

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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	22.09	-4.87	15.07	<=34.77	Pass
			2	22.34	-4.87	15.32	<=34.77	Pass
			5	22.08	-4.87	15.06	<=34.77	Pass
		3	0	22.32	-4.87	15.30	<=34.77	Pass
			2	22.18	-4.87	15.16	<=34.77	Pass
			3	22.11	-4.87	15.09	<=34.77	Pass
		6	0	21.29	-4.87	14.27	<=34.77	Pass
	707.5	1	0	22.35	-4.87	15.33	<=34.77	Pass
			2	22.28	-4.87	15.26	<=34.77	Pass
			5	22.04	-4.87	15.02	<=34.77	Pass
		3	0	22.13	-4.87	15.11	<=34.77	Pass
			2	22.29	-4.87	15.27	<=34.77	Pass
			3	22.27	-4.87	15.25	<=34.77	Pass
		6	0	21.26	-4.87	14.24	<=34.77	Pass
	715.3	1	0	22.35	-4.87	15.33	<=34.77	Pass
			2	22.37	-4.87	15.35	<=34.77	Pass
			5	22.28	-4.87	15.26	<=34.77	Pass
		3	0	22.40	-4.87	15.38	<=34.77	Pass
			2	22.56	-4.87	15.54	<=34.77	Pass
			3	22.30	-4.87	15.28	<=34.77	Pass
		6	0	21.50	-4.87	14.48	<=34.77	Pass
16QAM	699.7	1	0	20.81	-4.87	13.79	<=34.77	Pass
			2	21.12	-4.87	14.10	<=34.77	Pass
			5	21.16	-4.87	14.14	<=34.77	Pass
		3	0	21.32	-4.87	14.30	<=34.77	Pass
			2	21.22	-4.87	14.20	<=34.77	Pass
			3	21.25	-4.87	14.23	<=34.77	Pass
		6	0	20.27	-4.87	13.25	<=34.77	Pass
	707.5	1	0	21.61	-4.87	14.59	<=34.77	Pass
			2	21.94	-4.87	14.92	<=34.77	Pass
			5	21.93	-4.87	14.91	<=34.77	Pass
		3	0	21.35	-4.87	14.33	<=34.77	Pass
			2	21.55	-4.87	14.53	<=34.77	Pass
			3	21.55	-4.87	14.53	<=34.77	Pass
		6	0	20.51	-4.87	13.49	<=34.77	Pass
	715.3	1	0	21.09	-4.87	14.07	<=34.77	Pass
			2	21.10	-4.87	14.08	<=34.77	Pass
			5	21.09	-4.87	14.07	<=34.77	Pass
		3	0	21.31	-4.87	14.29	<=34.77	Pass
			2	21.52	-4.87	14.50	<=34.77	Pass
			3	21.36	-4.87	14.34	<=34.77	Pass
		6	0	20.12	-4.87	13.10	<=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	22.19	-4.87	15.17	<=34.77	Pass
			7	22.30	-4.87	15.28	<=34.77	Pass
			14	21.94	-4.87	14.92	<=34.77	Pass
		8	0	21.23	-4.87	14.21	<=34.77	Pass
			4	21.25	-4.87	14.23	<=34.77	Pass
			7	21.17	-4.87	14.15	<=34.77	Pass
		15	0	21.20	-4.87	14.18	<=34.77	Pass
	707.5	1	0	22.03	-4.87	15.01	<=34.77	Pass
			7	22.15	-4.87	15.13	<=34.77	Pass
			14	22.37	-4.87	15.35	<=34.77	Pass
		8	0	21.27	-4.87	14.25	<=34.77	Pass
			4	21.34	-4.87	14.32	<=34.77	Pass
			7	21.32	-4.87	14.30	<=34.77	Pass
		15	0	21.27	-4.87	14.25	<=34.77	Pass
	714.5	1	0	22.45	-4.87	15.43	<=34.77	Pass
			7	22.54	-4.87	15.52	<=34.77	Pass
			14	22.41	-4.87	15.39	<=34.77	Pass
		8	0	21.41	-4.87	14.39	<=34.77	Pass
			4	21.37	-4.87	14.35	<=34.77	Pass
			7	21.40	-4.87	14.38	<=34.77	Pass
		15	0	21.33	-4.87	14.31	<=34.77	Pass
16QAM	700.5	1	0	21.57	-4.87	14.55	<=34.77	Pass
			7	21.61	-4.87	14.59	<=34.77	Pass
			14	21.38	-4.87	14.36	<=34.77	Pass
		8	0	20.19	-4.87	13.17	<=34.77	Pass
			4	20.45	-4.87	13.43	<=34.77	Pass
			7	20.26	-4.87	13.24	<=34.77	Pass
		15	0	20.18	-4.87	13.16	<=34.77	Pass
	707.5	1	0	20.97	-4.87	13.95	<=34.77	Pass
			7	20.93	-4.87	13.91	<=34.77	Pass
			14	21.27	-4.87	14.25	<=34.77	Pass
		8	0	20.19	-4.87	13.17	<=34.77	Pass
			4	20.43	-4.87	13.41	<=34.77	Pass
			7	20.55	-4.87	13.53	<=34.77	Pass
		15	0	20.29	-4.87	13.27	<=34.77	Pass
	714.5	1	0	21.09	-4.87	14.07	<=34.77	Pass
			7	22.01	-4.87	14.99	<=34.77	Pass
			14	21.77	-4.87	14.75	<=34.77	Pass
		8	0	20.54	-4.87	13.52	<=34.77	Pass
			4	20.13	-4.87	13.11	<=34.77	Pass
			7	20.15	-4.87	13.13	<=34.77	Pass
		15	0	20.16	-4.87	13.14	<=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	22.24	-4.87	15.22	<=34.77	Pass
			13	22.15	-4.87	15.13	<=34.77	Pass
			24	21.87	-4.87	14.85	<=34.77	Pass
		12	0	21.14	-4.87	14.12	<=34.77	Pass

			6	21.12	-4.87	14.10	<=34.77	Pass
			13	21.14	-4.87	14.12	<=34.77	Pass
		25	0	21.20	-4.87	14.18	<=34.77	Pass
	707.5	1	0	22.10	-4.87	15.08	<=34.77	Pass
			13	22.37	-4.87	15.35	<=34.77	Pass
			24	22.19	-4.87	15.17	<=34.77	Pass
		12	0	21.27	-4.87	14.25	<=34.77	Pass
			6	21.31	-4.87	14.29	<=34.77	Pass
			13	21.28	-4.87	14.26	<=34.77	Pass
		25	0	21.27	-4.87	14.25	<=34.77	Pass
	713.5	1	0	22.07	-4.87	15.05	<=34.77	Pass
			13	22.16	-4.87	15.14	<=34.77	Pass
			24	22.06	-4.87	15.04	<=34.77	Pass
		12	0	21.34	-4.87	14.32	<=34.77	Pass
			6	21.31	-4.87	14.29	<=34.77	Pass
			13	21.33	-4.87	14.31	<=34.77	Pass
		25	0	21.27	-4.87	14.25	<=34.77	Pass
16QAM	701.5	1	0	20.57	-4.87	13.55	<=34.77	Pass
			13	20.53	-4.87	13.51	<=34.77	Pass
			24	20.28	-4.87	13.26	<=34.77	Pass
		12	0	20.06	-4.87	13.04	<=34.77	Pass
			6	20.06	-4.87	13.04	<=34.77	Pass
			13	19.99	-4.87	12.97	<=34.77	Pass
		25	0	20.29	-4.87	13.27	<=34.77	Pass
	707.5	1	0	21.18	-4.87	14.16	<=34.77	Pass
			13	20.87	-4.87	13.85	<=34.77	Pass
			24	20.93	-4.87	13.91	<=34.77	Pass
		12	0	20.05	-4.87	13.03	<=34.77	Pass
			6	20.21	-4.87	13.19	<=34.77	Pass
			13	19.86	-4.87	12.84	<=34.77	Pass
		25	0	20.14	-4.87	13.12	<=34.77	Pass
	713.5	1	0	21.33	-4.87	14.31	<=34.77	Pass
			13	21.58	-4.87	14.56	<=34.77	Pass
			24	21.57	-4.87	14.55	<=34.77	Pass
		12	0	20.11	-4.87	13.09	<=34.77	Pass
			6	20.20	-4.87	13.18	<=34.77	Pass
			13	20.18	-4.87	13.16	<=34.77	Pass
		25	0	20.21	-4.87	13.19	<=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	22.39	-4.87	15.37	<=34.77	Pass
			25	22.35	-4.87	15.33	<=34.77	Pass
			49	22.26	-4.87	15.24	<=34.77	Pass
		25	0	21.52	-4.87	14.50	<=34.77	Pass
			13	21.38	-4.87	14.36	<=34.77	Pass
			25	21.59	-4.87	14.57	<=34.77	Pass
		50	0	21.53	-4.87	14.51	<=34.77	Pass
	707.5	1	0	22.24	-4.87	15.22	<=34.77	Pass
			25	22.78	-4.87	15.76	<=34.77	Pass
			49	22.54	-4.87	15.52	<=34.77	Pass
		25	0	21.38	-4.87	14.36	<=34.77	Pass
			13	21.54	-4.87	14.52	<=34.77	Pass

			25	21.57	-4.87	14.55	<=34.77	Pass
		50	0	21.49	-4.87	14.47	<=34.77	Pass
	711	1	0	22.46	-4.87	15.44	<=34.77	Pass
			25	23.03	-4.87	16.01	<=34.77	Pass
			49	22.58	-4.87	15.56	<=34.77	Pass
		25	0	21.43	-4.87	14.41	<=34.77	Pass
			13	21.55	-4.87	14.53	<=34.77	Pass
			25	21.47	-4.87	14.45	<=34.77	Pass
		50	0	21.55	-4.87	14.53	<=34.77	Pass
16QAM	704	1	0	21.46	-4.87	14.44	<=34.77	Pass
			25	21.51	-4.87	14.49	<=34.77	Pass
			49	21.31	-4.87	14.29	<=34.77	Pass
		25	0	20.29	-4.87	13.27	<=34.77	Pass
			13	20.27	-4.87	13.25	<=34.77	Pass
			25	20.28	-4.87	13.26	<=34.77	Pass
		50	0	20.24	-4.87	13.22	<=34.77	Pass
	707.5	1	0	20.54	-4.87	13.52	<=34.77	Pass
			25	21.01	-4.87	13.99	<=34.77	Pass
			49	20.90	-4.87	13.88	<=34.77	Pass
		25	0	20.04	-4.87	13.02	<=34.77	Pass
			13	20.52	-4.87	13.50	<=34.77	Pass
			25	20.53	-4.87	13.51	<=34.77	Pass
		50	0	20.07	-4.87	13.05	<=34.77	Pass
	711	1	0	21.84	-4.87	14.82	<=34.77	Pass
			25	21.67	-4.87	14.65	<=34.77	Pass
			49	21.84	-4.87	14.82	<=34.77	Pass
		25	0	20.12	-4.87	13.10	<=34.77	Pass
			13	20.31	-4.87	13.29	<=34.77	Pass
			25	20.18	-4.87	13.16	<=34.77	Pass
		50	0	20.26	-4.87	13.24	<=34.77	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

2. Frequency Stability

2.1 Test Result

2.1.1 B12_1.4MHz

Band: 12 / Bandwidth: 1.4MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	699.7	6	0	20	3.27	-0.501	-0.0007	-2.5 to 2.5	Pass
					3.85	-1.087	-0.0016	-2.5 to 2.5	Pass
					4.43	-0.429	-0.0006	-2.5 to 2.5	Pass
				-30	3.85	-0.501	-0.0007	-2.5 to 2.5	Pass
				-20	3.85	-0.072	-0.0001	-2.5 to 2.5	Pass
				-10	3.85	-0.916	-0.0013	-2.5 to 2.5	Pass
				0	3.85	-1.702	-0.0024	-2.5 to 2.5	Pass
				10	3.85	-0.858	-0.0012	-2.5 to 2.5	Pass
				30	3.85	-0.386	-0.0006	-2.5 to 2.5	Pass
				40	3.85	-0.701	-0.0010	-2.5 to 2.5	Pass
				50	3.85	0.429	0.0006	-2.5 to 2.5	Pass
	707.5	6	0	20	3.27	-0.715	-0.0010	-2.5 to 2.5	Pass
					3.85	-1.402	-0.0020	-2.5 to 2.5	Pass
					4.43	-1.402	-0.0020	-2.5 to 2.5	Pass

				-30	3.85	-0.401	-0.0006	-2.5 to 2.5	Pass
				-20	3.85	-0.801	-0.0011	-2.5 to 2.5	Pass
				-10	3.85	-1.302	-0.0018	-2.5 to 2.5	Pass
				0	3.85	-0.501	-0.0007	-2.5 to 2.5	Pass
				10	3.85	0.458	0.0006	-2.5 to 2.5	Pass
				30	3.85	-0.200	-0.0003	-2.5 to 2.5	Pass
				40	3.85	-1.488	-0.0021	-2.5 to 2.5	Pass
				50	3.85	-0.172	-0.0002	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	-1.001	-0.0014	-2.5 to 2.5	Pass
					3.85	-0.200	-0.0003	-2.5 to 2.5	Pass
					4.43	0.172	0.0002	-2.5 to 2.5	Pass
				-30	3.85	-1.373	-0.0019	-2.5 to 2.5	Pass
				-20	3.85	-0.329	-0.0005	-2.5 to 2.5	Pass
				-10	3.85	-0.958	-0.0013	-2.5 to 2.5	Pass
				0	3.85	-0.486	-0.0007	-2.5 to 2.5	Pass
				10	3.85	-0.830	-0.0012	-2.5 to 2.5	Pass
				30	3.85	0.629	0.0009	-2.5 to 2.5	Pass
				40	3.85	-0.472	-0.0007	-2.5 to 2.5	Pass
				50	3.85	-1.316	-0.0018	-2.5 to 2.5	Pass
16QAM	699.7	6	0	20	3.27	-0.916	-0.0013	-2.5 to 2.5	Pass
					3.85	-0.515	-0.0007	-2.5 to 2.5	Pass
					4.43	-0.415	-0.0006	-2.5 to 2.5	Pass
				-30	3.85	-1.330	-0.0019	-2.5 to 2.5	Pass
				-20	3.85	-0.658	-0.0009	-2.5 to 2.5	Pass
				-10	3.85	-1.745	-0.0025	-2.5 to 2.5	Pass
				0	3.85	-0.901	-0.0013	-2.5 to 2.5	Pass
				10	3.85	-1.144	-0.0016	-2.5 to 2.5	Pass
				30	3.85	-0.587	-0.0008	-2.5 to 2.5	Pass
				40	3.85	-1.888	-0.0027	-2.5 to 2.5	Pass
				50	3.85	-1.588	-0.0023	-2.5 to 2.5	Pass
	707.5	6	0	20	3.27	-0.930	-0.0013	-2.5 to 2.5	Pass
					3.85	0.100	0.0001	-2.5 to 2.5	Pass
					4.43	-0.916	-0.0013	-2.5 to 2.5	Pass
				-30	3.85	0.973	0.0014	-2.5 to 2.5	Pass
				-20	3.85	-0.157	-0.0002	-2.5 to 2.5	Pass
				-10	3.85	-0.343	-0.0005	-2.5 to 2.5	Pass
				0	3.85	-0.486	-0.0007	-2.5 to 2.5	Pass
				10	3.85	-1.402	-0.0020	-2.5 to 2.5	Pass
				30	3.85	0.029	0.0000	-2.5 to 2.5	Pass
				40	3.85	0.944	0.0013	-2.5 to 2.5	Pass
				50	3.85	1.502	0.0021	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	0.429	0.0006	-2.5 to 2.5	Pass
					3.85	-0.057	-0.0001	-2.5 to 2.5	Pass
					4.43	-0.172	-0.0002	-2.5 to 2.5	Pass
				-30	3.85	0.057	0.0001	-2.5 to 2.5	Pass
				-20	3.85	0.415	0.0006	-2.5 to 2.5	Pass
				-10	3.85	-0.329	-0.0005	-2.5 to 2.5	Pass
				0	3.85	-1.359	-0.0019	-2.5 to 2.5	Pass
				10	3.85	0.672	0.0009	-2.5 to 2.5	Pass
				30	3.85	-0.358	-0.0005	-2.5 to 2.5	Pass
				40	3.85	-0.215	-0.0003	-2.5 to 2.5	Pass
				50	3.85	-0.443	-0.0006	-2.5 to 2.5	Pass

2.1.2 B12_3MHz

Band: 12 / Bandwidth: 3MHz							
Modulation	Frequency	RB Allocation	Temp.	Voltage	Freq. Error	Freq. vs. Rated (ppm)	Verdict

	(MHz)	Size	Offset	(°C)	(VDC)	(Hz)	Result	Limit	
QPSK	700.5	15	0	20	3.27	-2.675	-0.0038	-2.5 to 2.5	Pass
					3.85	-1.159	-0.0017	-2.5 to 2.5	Pass
					4.43	-1.245	-0.0018	-2.5 to 2.5	Pass
				-30	3.85	-1.860	-0.0027	-2.5 to 2.5	Pass
				-20	3.85	-0.858	-0.0012	-2.5 to 2.5	Pass
				-10	3.85	-2.060	-0.0029	-2.5 to 2.5	Pass
				0	3.85	-1.116	-0.0016	-2.5 to 2.5	Pass
				10	3.85	-1.731	-0.0025	-2.5 to 2.5	Pass
				30	3.85	-1.874	-0.0027	-2.5 to 2.5	Pass
				40	3.85	-1.631	-0.0023	-2.5 to 2.5	Pass
				50	3.85	-0.658	-0.0009	-2.5 to 2.5	Pass
	707.5	15	0	20	3.27	-0.901	-0.0013	-2.5 to 2.5	Pass
					3.85	-1.945	-0.0027	-2.5 to 2.5	Pass
					4.43	-0.672	-0.0009	-2.5 to 2.5	Pass
				-30	3.85	-1.431	-0.0020	-2.5 to 2.5	Pass
				-20	3.85	-0.544	-0.0008	-2.5 to 2.5	Pass
				-10	3.85	-0.658	-0.0009	-2.5 to 2.5	Pass
				0	3.85	-0.343	-0.0005	-2.5 to 2.5	Pass
				10	3.85	-1.216	-0.0017	-2.5 to 2.5	Pass
				30	3.85	-0.129	-0.0002	-2.5 to 2.5	Pass
				40	3.85	-0.229	-0.0003	-2.5 to 2.5	Pass
				50	3.85	-1.602	-0.0023	-2.5 to 2.5	Pass
	714.5	15	0	20	3.27	-0.815	-0.0011	-2.5 to 2.5	Pass
					3.85	-1.302	-0.0018	-2.5 to 2.5	Pass
					4.43	0.815	0.0011	-2.5 to 2.5	Pass
				-30	3.85	-0.973	-0.0014	-2.5 to 2.5	Pass
				-20	3.85	-1.388	-0.0019	-2.5 to 2.5	Pass
				-10	3.85	-1.016	-0.0014	-2.5 to 2.5	Pass
				0	3.85	0.973	0.0014	-2.5 to 2.5	Pass
				10	3.85	0.014	0.0000	-2.5 to 2.5	Pass
				30	3.85	-2.117	-0.0030	-2.5 to 2.5	Pass
				40	3.85	0.601	0.0008	-2.5 to 2.5	Pass
				50	3.85	-1.760	-0.0025	-2.5 to 2.5	Pass
16QAM	700.5	15	0	20	3.27	-2.403	-0.0034	-2.5 to 2.5	Pass
					3.85	-1.187	-0.0017	-2.5 to 2.5	Pass
					4.43	-1.402	-0.0020	-2.5 to 2.5	Pass
				-30	3.85	-1.016	-0.0015	-2.5 to 2.5	Pass
				-20	3.85	-1.273	-0.0018	-2.5 to 2.5	Pass
				-10	3.85	-1.645	-0.0023	-2.5 to 2.5	Pass
				0	3.85	-2.303	-0.0033	-2.5 to 2.5	Pass
				10	3.85	-2.575	-0.0037	-2.5 to 2.5	Pass
				30	3.85	-0.787	-0.0011	-2.5 to 2.5	Pass
				40	3.85	-1.245	-0.0018	-2.5 to 2.5	Pass
				50	3.85	-1.788	-0.0026	-2.5 to 2.5	Pass
	707.5	15	0	20	3.27	-0.973	-0.0014	-2.5 to 2.5	Pass
					3.85	-1.473	-0.0021	-2.5 to 2.5	Pass
					4.43	-0.830	-0.0012	-2.5 to 2.5	Pass
				-30	3.85	-1.187	-0.0017	-2.5 to 2.5	Pass
				-20	3.85	-0.629	-0.0009	-2.5 to 2.5	Pass
				-10	3.85	-1.731	-0.0024	-2.5 to 2.5	Pass
				0	3.85	-0.787	-0.0011	-2.5 to 2.5	Pass
				10	3.85	-1.845	-0.0026	-2.5 to 2.5	Pass
				30	3.85	-2.103	-0.0030	-2.5 to 2.5	Pass
				40	3.85	-0.987	-0.0014	-2.5 to 2.5	Pass
				50	3.85	-0.987	-0.0014	-2.5 to 2.5	Pass
	714.5	15	0	20	3.27	-0.072	-0.0001	-2.5 to 2.5	Pass
					3.85	-0.744	-0.0010	-2.5 to 2.5	Pass

					4.43	-1.588	-0.0022	-2.5 to 2.5	Pass
				-30	3.85	-1.101	-0.0015	-2.5 to 2.5	Pass
				-20	3.85	-0.629	-0.0009	-2.5 to 2.5	Pass
				-10	3.85	-0.429	-0.0006	-2.5 to 2.5	Pass
				0	3.85	0.515	0.0007	-2.5 to 2.5	Pass
				10	3.85	-0.687	-0.0010	-2.5 to 2.5	Pass
				30	3.85	-1.159	-0.0016	-2.5 to 2.5	Pass
				40	3.85	0.329	0.0005	-2.5 to 2.5	Pass
				50	3.85	0.401	0.0006	-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	-1.216	-0.0017	-2.5 to 2.5	Pass
					3.85	0.057	0.0001	-2.5 to 2.5	Pass
					4.43	-1.216	-0.0017	-2.5 to 2.5	Pass
				-30	3.85	-1.287	-0.0018	-2.5 to 2.5	Pass
				-20	3.85	-0.286	-0.0004	-2.5 to 2.5	Pass
				-10	3.85	-0.143	-0.0002	-2.5 to 2.5	Pass
				0	3.85	-0.286	-0.0004	-2.5 to 2.5	Pass
				10	3.85	-0.916	-0.0013	-2.5 to 2.5	Pass
				30	3.85	-0.787	-0.0011	-2.5 to 2.5	Pass
				40	3.85	0.415	0.0006	-2.5 to 2.5	Pass
				50	3.85	-0.715	-0.0010	-2.5 to 2.5	Pass
	707.5	25	0	20	3.27	-1.016	-0.0014	-2.5 to 2.5	Pass
					3.85	-1.388	-0.0020	-2.5 to 2.5	Pass
					4.43	-0.587	-0.0008	-2.5 to 2.5	Pass
				-30	3.85	-0.672	-0.0009	-2.5 to 2.5	Pass
				-20	3.85	-0.415	-0.0006	-2.5 to 2.5	Pass
				-10	3.85	-1.230	-0.0017	-2.5 to 2.5	Pass
				0	3.85	-0.844	-0.0012	-2.5 to 2.5	Pass
				10	3.85	-0.443	-0.0006	-2.5 to 2.5	Pass
				30	3.85	-1.016	-0.0014	-2.5 to 2.5	Pass
				40	3.85	-0.129	-0.0002	-2.5 to 2.5	Pass
				50	3.85	-0.243	-0.0003	-2.5 to 2.5	Pass
	713.5	25	0	20	3.27	-0.858	-0.0012	-2.5 to 2.5	Pass
					3.85	-1.574	-0.0022	-2.5 to 2.5	Pass
					4.43	-1.974	-0.0028	-2.5 to 2.5	Pass
				-30	3.85	-0.143	-0.0002	-2.5 to 2.5	Pass
				-20	3.85	-0.758	-0.0011	-2.5 to 2.5	Pass
				-10	3.85	-1.445	-0.0020	-2.5 to 2.5	Pass
				0	3.85	-1.574	-0.0022	-2.5 to 2.5	Pass
				10	3.85	-1.545	-0.0022	-2.5 to 2.5	Pass
				30	3.85	-1.473	-0.0021	-2.5 to 2.5	Pass
				40	3.85	-1.230	-0.0017	-2.5 to 2.5	Pass
				50	3.85	-1.359	-0.0019	-2.5 to 2.5	Pass
16QAM	701.5	25	0	20	3.27	-1.402	-0.0020	-2.5 to 2.5	Pass
					3.85	-1.631	-0.0023	-2.5 to 2.5	Pass
					4.43	-1.030	-0.0015	-2.5 to 2.5	Pass
				-30	3.85	0.229	0.0003	-2.5 to 2.5	Pass
				-20	3.85	0.458	0.0007	-2.5 to 2.5	Pass
				-10	3.85	0.072	0.0001	-2.5 to 2.5	Pass
				0	3.85	-0.272	-0.0004	-2.5 to 2.5	Pass
				10	3.85	0.658	0.0009	-2.5 to 2.5	Pass
				30	3.85	0.744	0.0011	-2.5 to 2.5	Pass

				40	3.85	-1.302	-0.0019	-2.5 to 2.5	Pass
				50	3.85	0.057	0.0001	-2.5 to 2.5	Pass
	707.5	25	0	20	3.27	0.072	0.0001	-2.5 to 2.5	Pass
					3.85	-0.830	-0.0012	-2.5 to 2.5	Pass
					4.43	1.187	0.0017	-2.5 to 2.5	Pass
				-30	3.85	0.515	0.0007	-2.5 to 2.5	Pass
				-20	3.85	-0.715	-0.0010	-2.5 to 2.5	Pass
				-10	3.85	-1.173	-0.0017	-2.5 to 2.5	Pass
				0	3.85	-1.903	-0.0027	-2.5 to 2.5	Pass
				10	3.85	-0.086	-0.0001	-2.5 to 2.5	Pass
				30	3.85	-0.443	-0.0006	-2.5 to 2.5	Pass
				40	3.85	-1.202	-0.0017	-2.5 to 2.5	Pass
				50	3.85	-0.429	-0.0006	-2.5 to 2.5	Pass
	713.5	25	0	20	3.27	-1.860	-0.0026	-2.5 to 2.5	Pass
					3.85	-1.116	-0.0016	-2.5 to 2.5	Pass
					4.43	-0.987	-0.0014	-2.5 to 2.5	Pass
				-30	3.85	-0.486	-0.0007	-2.5 to 2.5	Pass
				-20	3.85	-0.672	-0.0009	-2.5 to 2.5	Pass
				-10	3.85	-0.730	-0.0010	-2.5 to 2.5	Pass
				0	3.85	-0.043	-0.0001	-2.5 to 2.5	Pass
				10	3.85	-1.416	-0.0020	-2.5 to 2.5	Pass
				30	3.85	-0.587	-0.0008	-2.5 to 2.5	Pass
				40	3.85	-0.644	-0.0009	-2.5 to 2.5	Pass
				50	3.85	-1.030	-0.0014	-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	-0.401	-0.0006	-2.5 to 2.5	Pass
					3.85	0.186	0.0003	-2.5 to 2.5	Pass
					4.43	-0.257	-0.0004	-2.5 to 2.5	Pass
				-30	3.85	0.272	0.0004	-2.5 to 2.5	Pass
				-20	3.85	0.787	0.0011	-2.5 to 2.5	Pass
				-10	3.85	-0.157	-0.0002	-2.5 to 2.5	Pass
				0	3.85	-0.343	-0.0005	-2.5 to 2.5	Pass
				10	3.85	0.257	0.0004	-2.5 to 2.5	Pass
				30	3.85	-0.916	-0.0013	-2.5 to 2.5	Pass
				40	3.85	-0.458	-0.0007	-2.5 to 2.5	Pass
				50	3.85	0.443	0.0006	-2.5 to 2.5	Pass
	707.5	50	0	20	3.27	-0.901	-0.0013	-2.5 to 2.5	Pass
					3.85	-0.286	-0.0004	-2.5 to 2.5	Pass
					4.43	-1.116	-0.0016	-2.5 to 2.5	Pass
				-30	3.85	0.057	0.0001	-2.5 to 2.5	Pass
				-20	3.85	-1.044	-0.0015	-2.5 to 2.5	Pass
				-10	3.85	0.029	0.0000	-2.5 to 2.5	Pass
				0	3.85	-1.259	-0.0018	-2.5 to 2.5	Pass
				10	3.85	0.215	0.0003	-2.5 to 2.5	Pass
				30	3.85	-0.658	-0.0009	-2.5 to 2.5	Pass
				40	3.85	0.057	0.0001	-2.5 to 2.5	Pass
				50	3.85	-1.059	-0.0015	-2.5 to 2.5	Pass
	711	50	0	20	3.27	-1.974	-0.0028	-2.5 to 2.5	Pass
					3.85	-0.730	-0.0010	-2.5 to 2.5	Pass
					4.43	-0.844	-0.0012	-2.5 to 2.5	Pass
				-30	3.85	-1.845	-0.0026	-2.5 to 2.5	Pass
				-20	3.85	-2.460	-0.0035	-2.5 to 2.5	Pass

				-10	3.85	-2.532	-0.0036	-2.5 to 2.5	Pass
				0	3.85	-1.588	-0.0022	-2.5 to 2.5	Pass
				10	3.85	-1.731	-0.0024	-2.5 to 2.5	Pass
				30	3.85	-2.131	-0.0030	-2.5 to 2.5	Pass
				40	3.85	-1.144	-0.0016	-2.5 to 2.5	Pass
				50	3.85	-0.601	-0.0008	-2.5 to 2.5	Pass
16QAM	704	50	0	20	3.27	0.257	0.0004	-2.5 to 2.5	Pass
					3.85	-0.801	-0.0011	-2.5 to 2.5	Pass
					4.43	-0.601	-0.0009	-2.5 to 2.5	Pass
				-30	3.85	-0.272	-0.0004	-2.5 to 2.5	Pass
				-20	3.85	0.315	0.0004	-2.5 to 2.5	Pass
				-10	3.85	0.114	0.0002	-2.5 to 2.5	Pass
				0	3.85	0.672	0.0010	-2.5 to 2.5	Pass
				10	3.85	-0.529	-0.0008	-2.5 to 2.5	Pass
				30	3.85	-0.372	-0.0005	-2.5 to 2.5	Pass
				40	3.85	-0.558	-0.0008	-2.5 to 2.5	Pass
				50	3.85	-0.587	-0.0008	-2.5 to 2.5	Pass
	707.5	50	0	20	3.27	-0.186	-0.0003	-2.5 to 2.5	Pass
					3.85	-0.830	-0.0012	-2.5 to 2.5	Pass
					4.43	-0.844	-0.0012	-2.5 to 2.5	Pass
				-30	3.85	-1.259	-0.0018	-2.5 to 2.5	Pass
				-20	3.85	-1.488	-0.0021	-2.5 to 2.5	Pass
				-10	3.85	-0.644	-0.0009	-2.5 to 2.5	Pass
				0	3.85	0.744	0.0011	-2.5 to 2.5	Pass
				10	3.85	0.072	0.0001	-2.5 to 2.5	Pass
				30	3.85	0.157	0.0002	-2.5 to 2.5	Pass
				40	3.85	-1.187	-0.0017	-2.5 to 2.5	Pass
				50	3.85	-0.730	-0.0010	-2.5 to 2.5	Pass
	711	50	0	20	3.27	-0.372	-0.0005	-2.5 to 2.5	Pass
					3.85	-1.302	-0.0018	-2.5 to 2.5	Pass
					4.43	-2.003	-0.0028	-2.5 to 2.5	Pass
				-30	3.85	-2.732	-0.0038	-2.5 to 2.5	Pass
				-20	3.85	-1.473	-0.0021	-2.5 to 2.5	Pass
				-10	3.85	-2.432	-0.0034	-2.5 to 2.5	Pass
				0	3.85	-1.216	-0.0017	-2.5 to 2.5	Pass
				10	3.85	-2.074	-0.0029	-2.5 to 2.5	Pass
				30	3.85	-1.445	-0.0020	-2.5 to 2.5	Pass
				40	3.85	-1.101	-0.0015	-2.5 to 2.5	Pass
				50	3.85	-1.888	-0.0027	-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

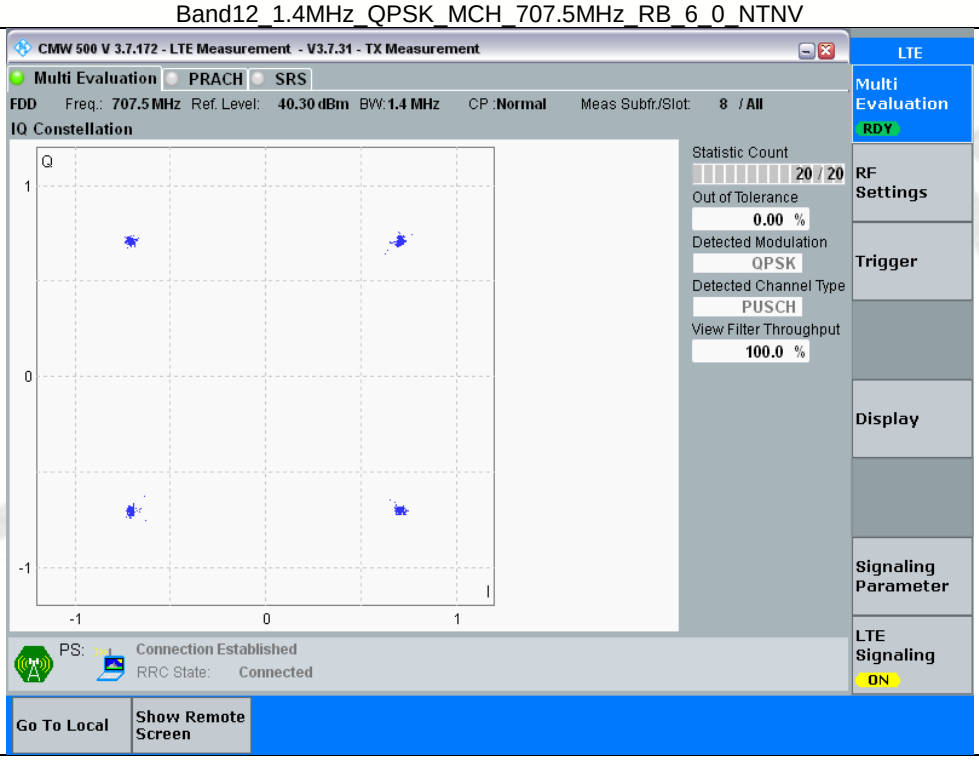
3.1.4 B12_10MHz

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

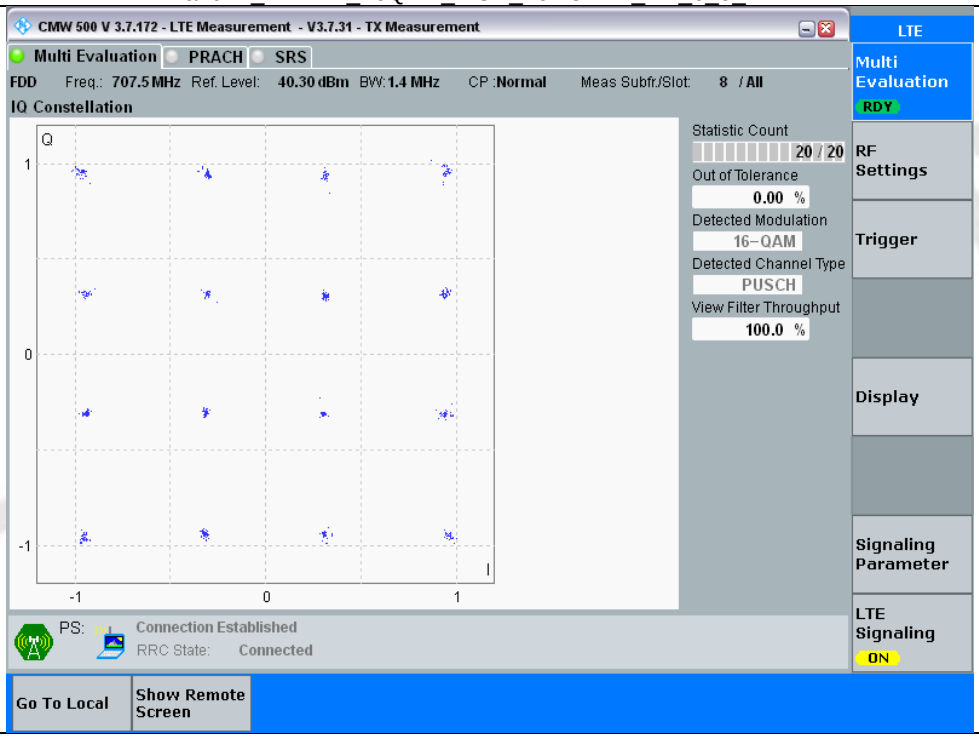
3.2 Test Graph

3.2.1 B12_1.4MHz

Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV

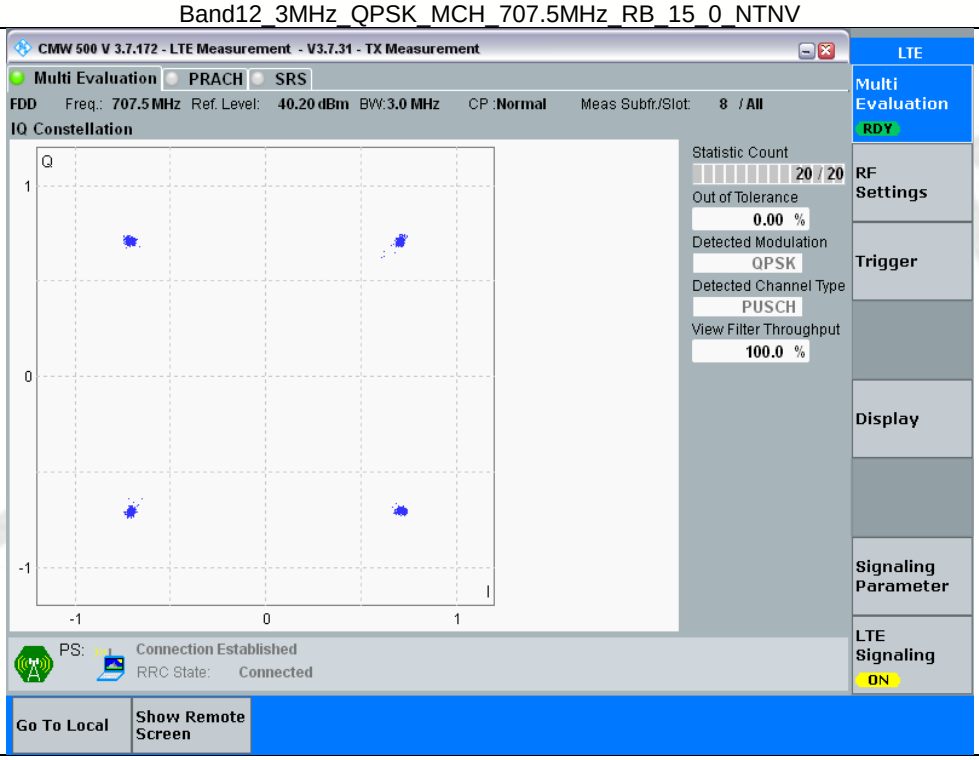


Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV

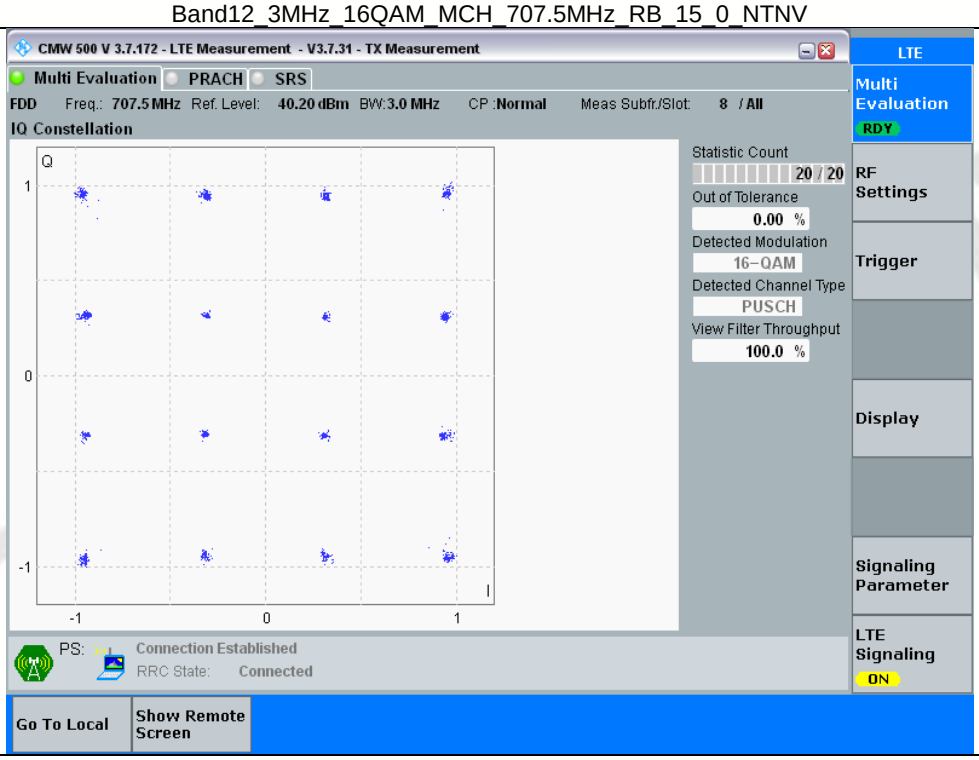


3.2.2 B12_3MHz

Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV

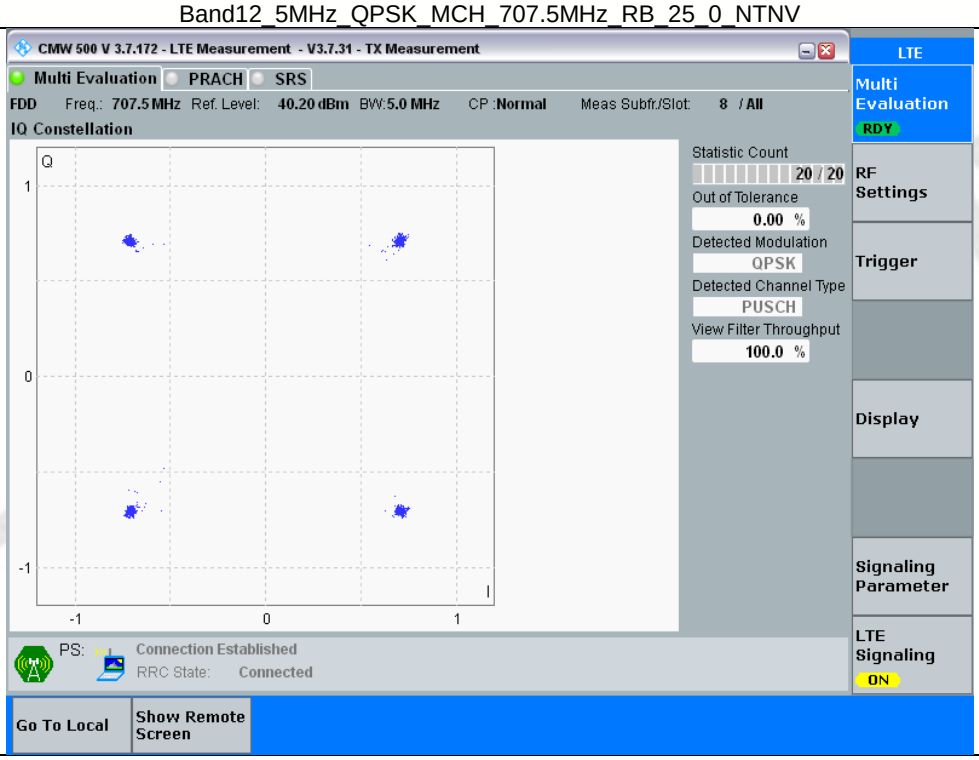


Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV

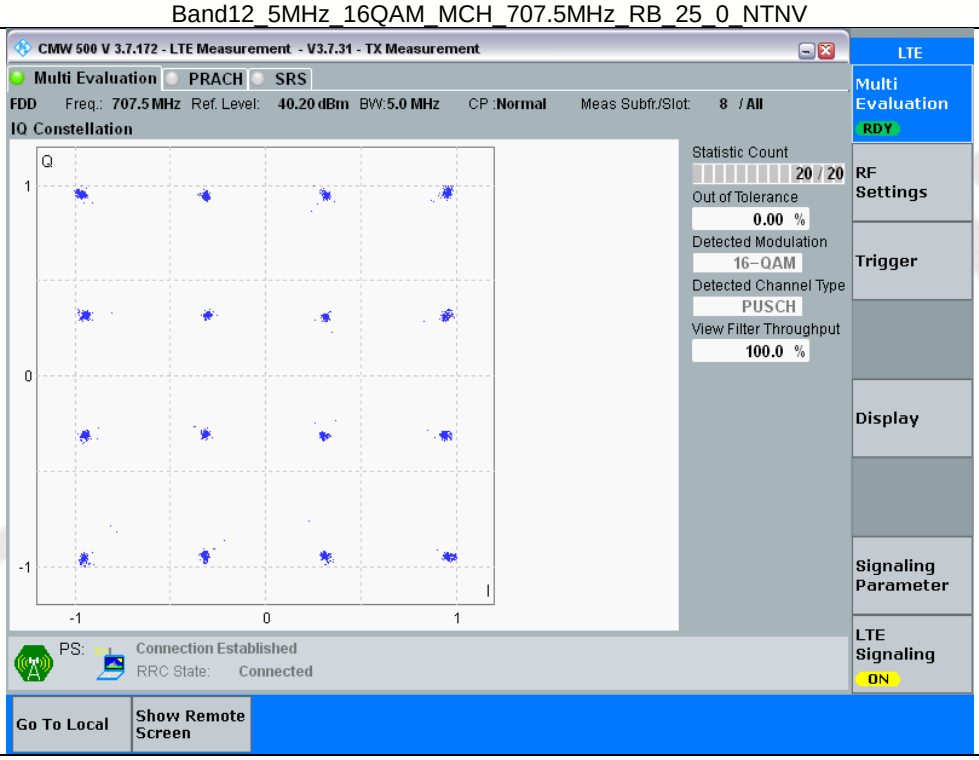


3.2.3 B12_5MHz

Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV

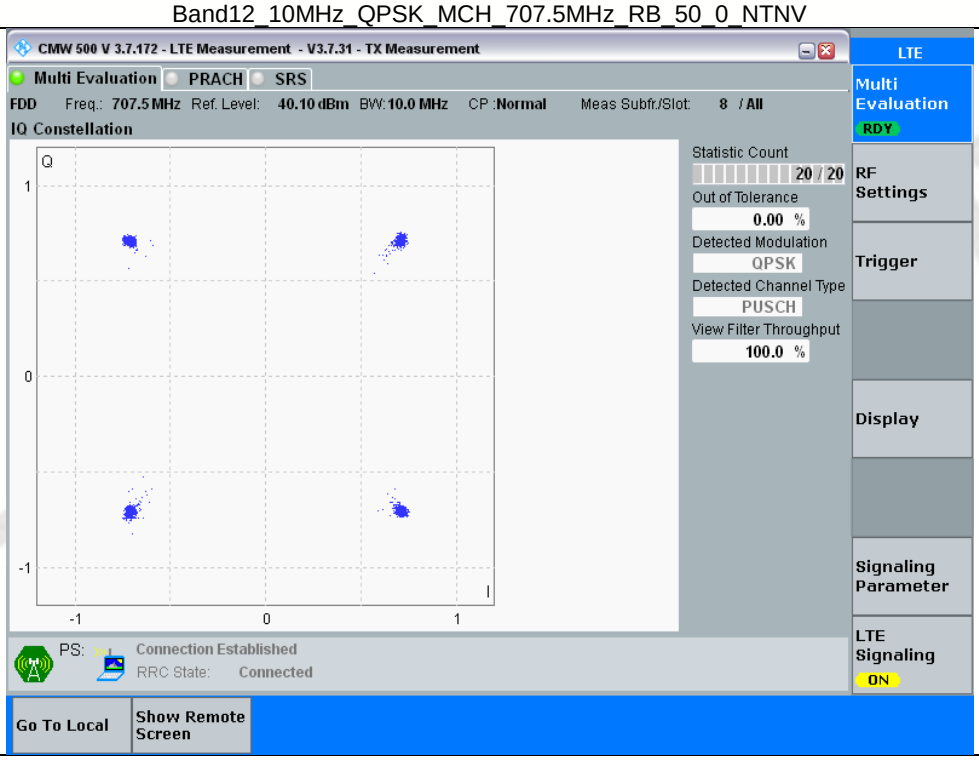


Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV

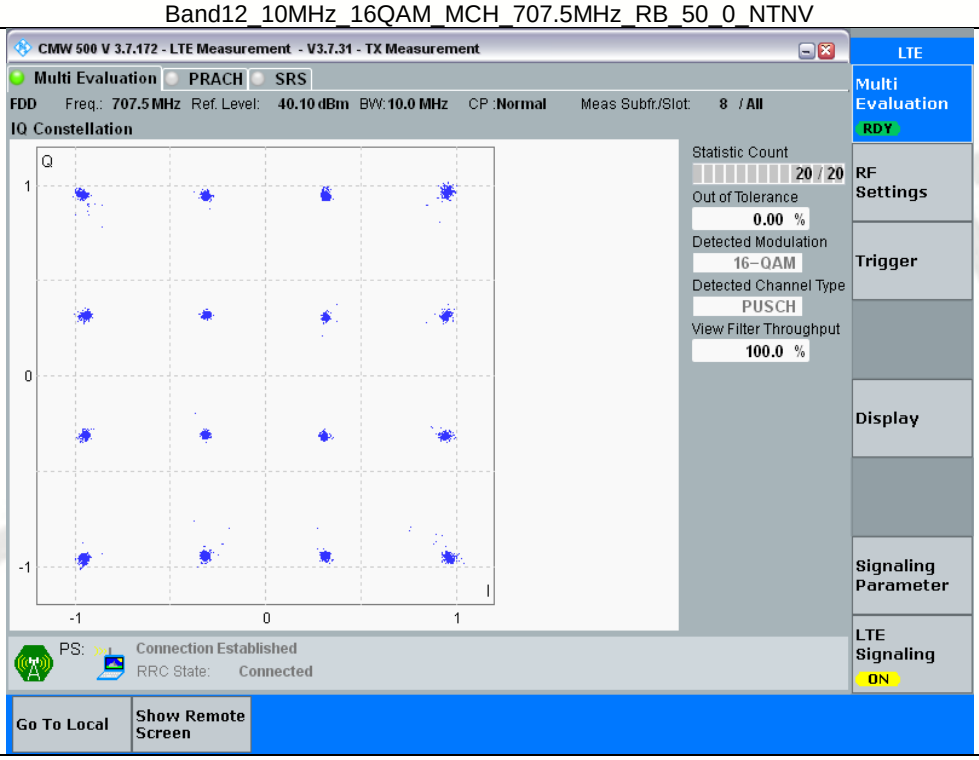


3.2.4 B12_10MHz

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	1.120	/	Pass
		707.5	6	0	1.118	/	Pass
		715.3	6	0	1.123	/	Pass
	16QAM	699.7	6	0	1.114	/	Pass
		707.5	6	0	1.112	/	Pass
		715.3	6	0	1.107	/	Pass
3	QPSK	700.5	15	0	2.744	/	Pass
		707.5	15	0	2.748	/	Pass
		714.5	15	0	2.750	/	Pass
	16QAM	700.5	15	0	2.736	/	Pass
		707.5	15	0	2.735	/	Pass
		714.5	15	0	2.732	/	Pass
5	QPSK	701.5	25	0	4.565	/	Pass
		707.5	25	0	4.559	/	Pass
		713.5	25	0	4.532	/	Pass
	16QAM	701.5	25	0	4.535	/	Pass
		707.5	25	0	4.569	/	Pass
		713.5	25	0	4.563	/	Pass
10	QPSK	704	50	0	9.100	/	Pass
		707.5	50	0	9.106	/	Pass
		711	50	0	8.964	/	Pass
	16QAM	704	50	0	9.076	/	Pass
		707.5	50	0	9.055	/	Pass
		711	50	0	8.983	/	Pass

4.1.2 Band12_XDB

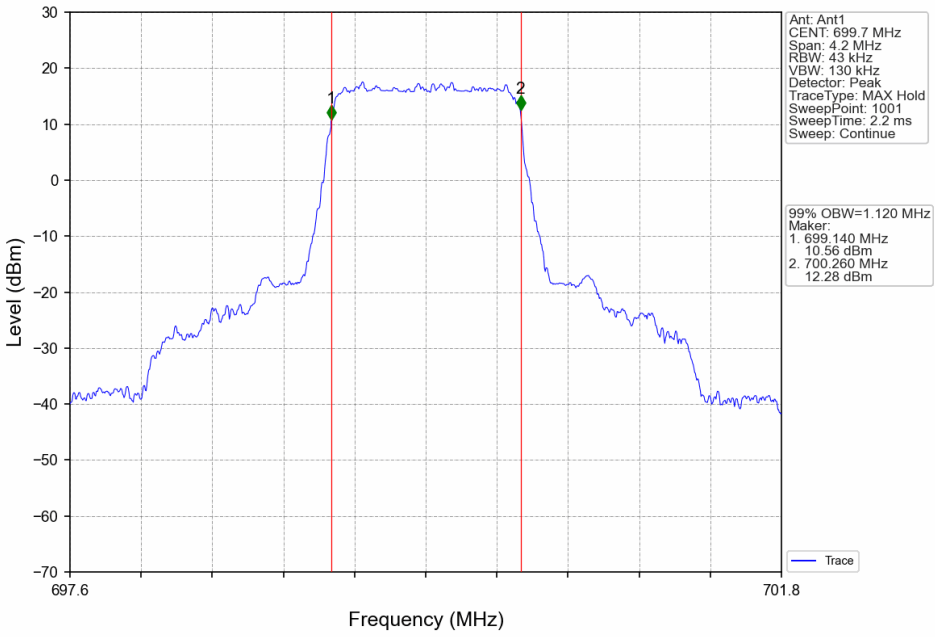
Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	699.7	6	0	1.310	/	Pass
		707.5	6	0	1.320	/	Pass
		715.3	6	0	1.313	/	Pass
	16QAM	699.7	6	0	1.338	/	Pass
		707.5	6	0	1.316	/	Pass
		715.3	6	0	1.329	/	Pass
3	QPSK	700.5	15	0	3.053	/	Pass
		707.5	15	0	3.052	/	Pass
		714.5	15	0	3.053	/	Pass
	16QAM	700.5	15	0	3.023	/	Pass
		707.5	15	0	3.062	/	Pass
		714.5	15	0	3.039	/	Pass
5	QPSK	701.5	25	0	5.082	/	Pass
		707.5	25	0	5.076	/	Pass

		713.5	25	0	5.073	/	Pass
	16QAM	701.5	25	0	5.094	/	Pass
		707.5	25	0	5.103	/	Pass
		713.5	25	0	5.098	/	Pass
10	QPSK	704	50	0	10.140	/	Pass
		707.5	50	0	9.961	/	Pass
		711	50	0	10.019	/	Pass
	16QAM	704	50	0	10.035	/	Pass
		707.5	50	0	9.983	/	Pass
		711	50	0	9.922	/	Pass

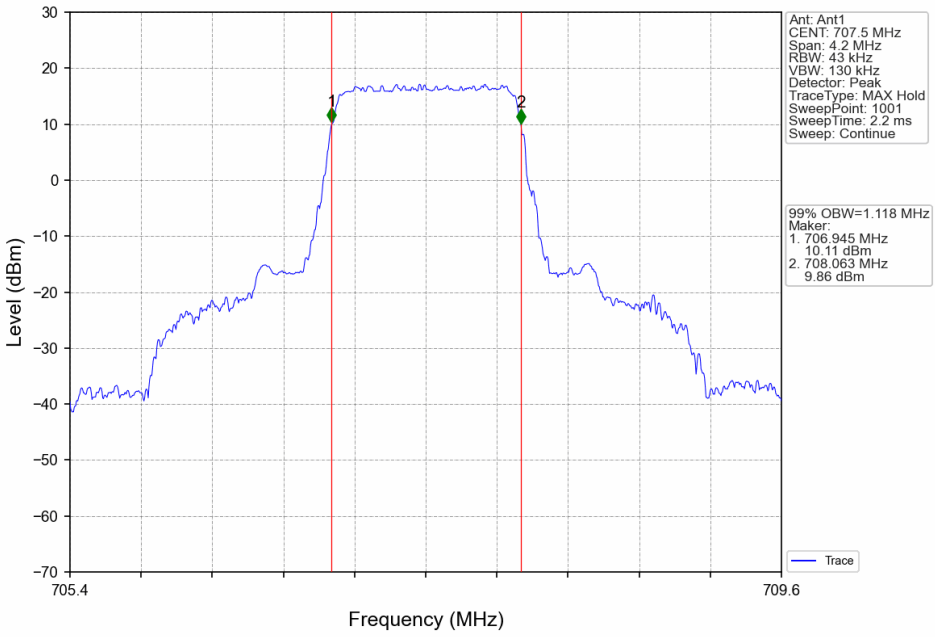
4.2 Test Graph

4.2.1 Band12_OBW

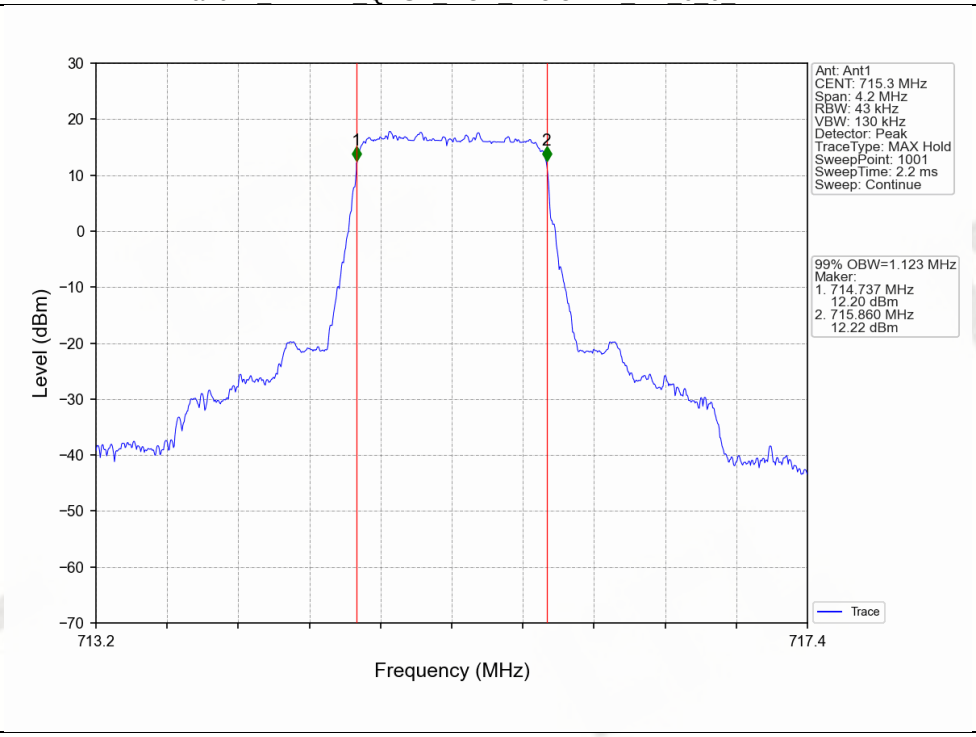
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



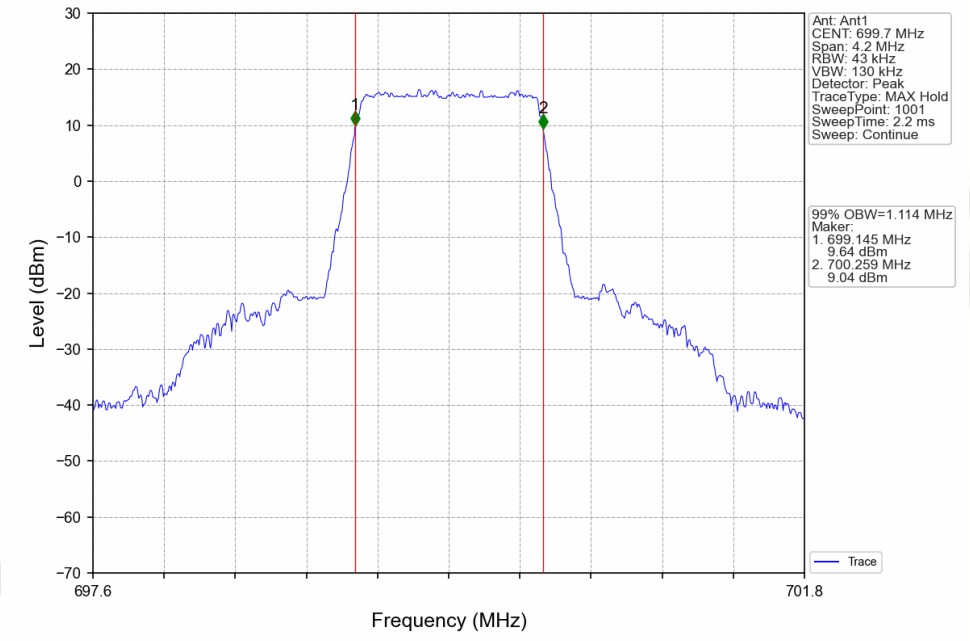
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



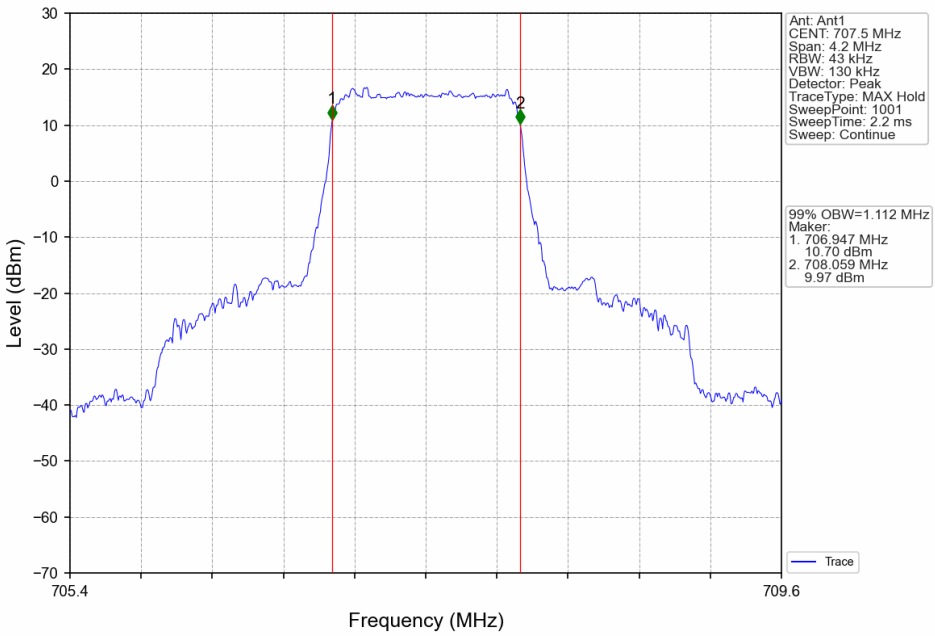
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



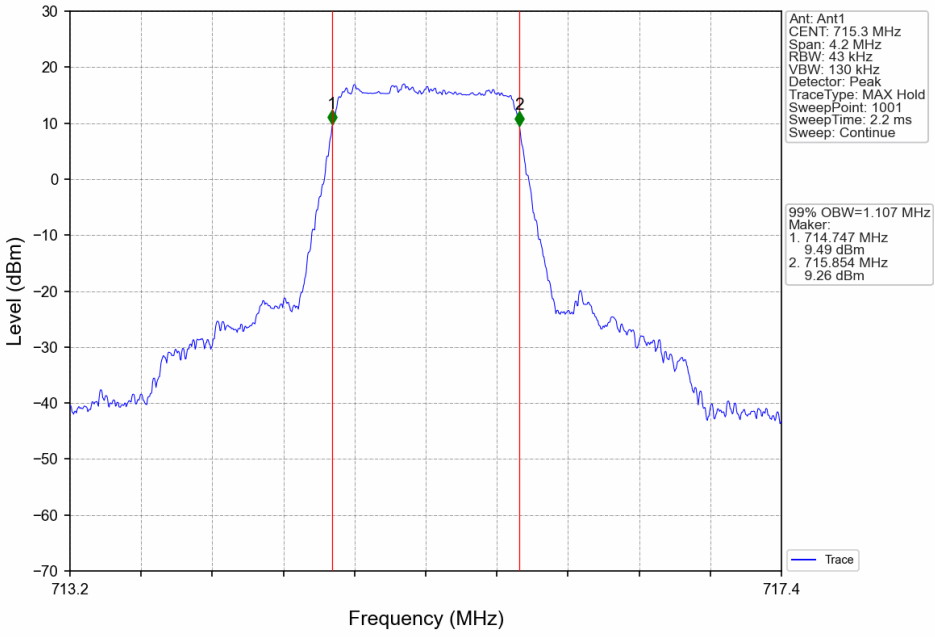
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



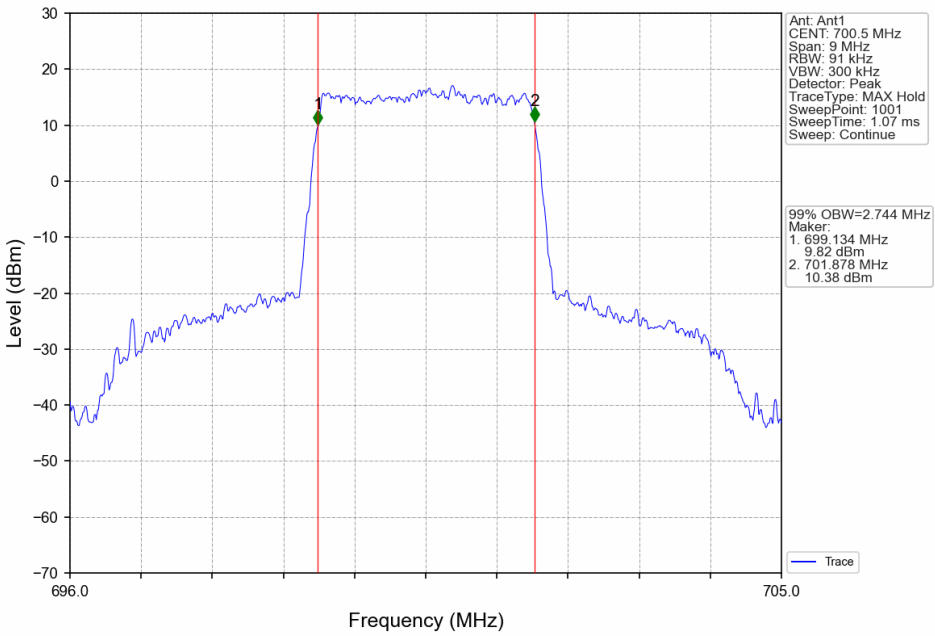
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



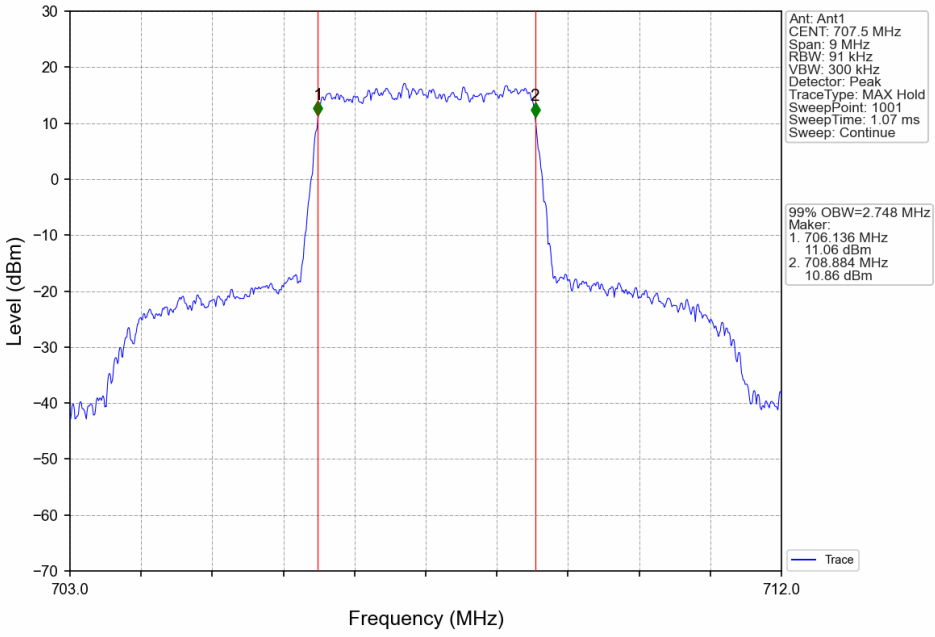
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



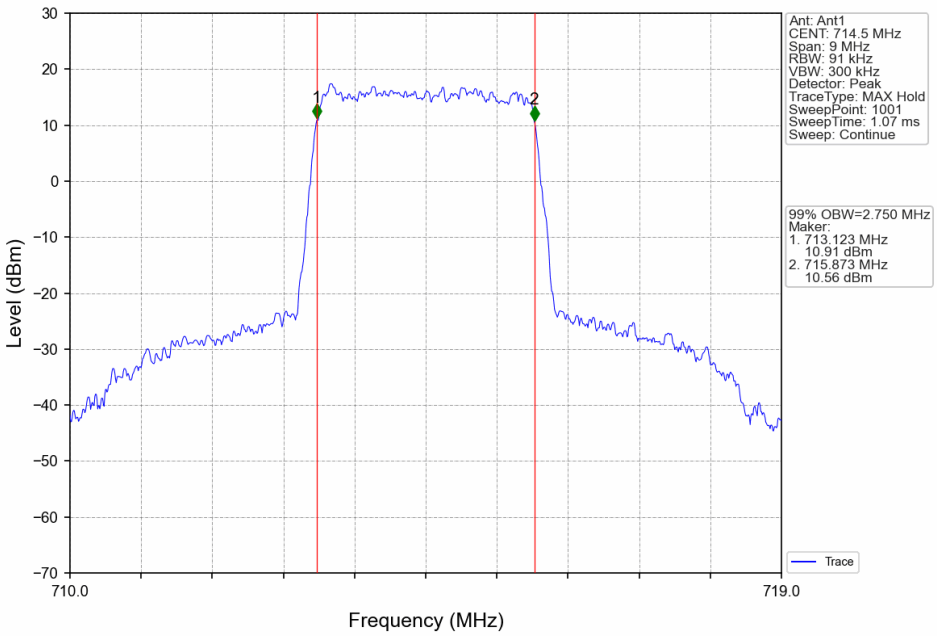
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



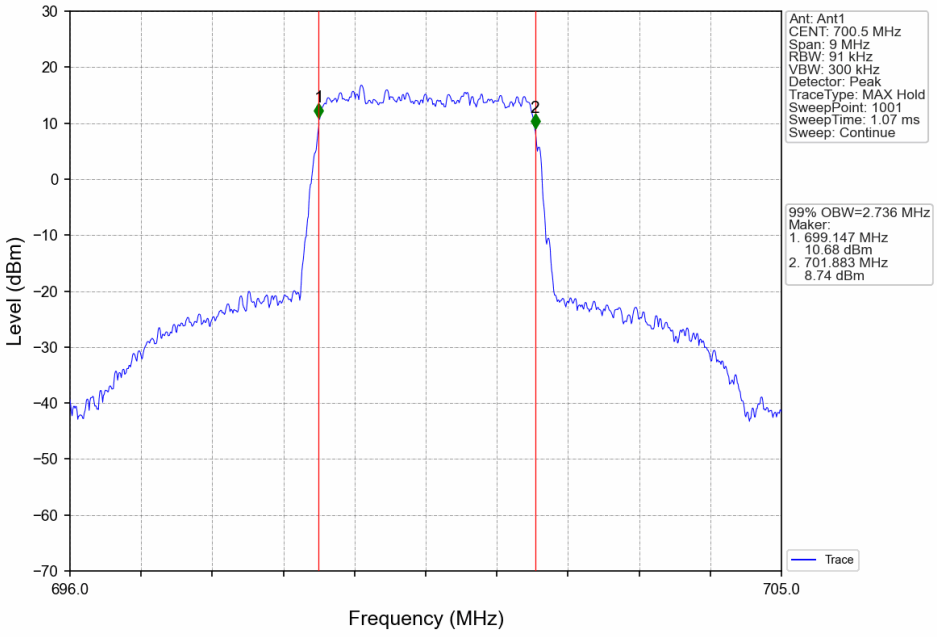
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



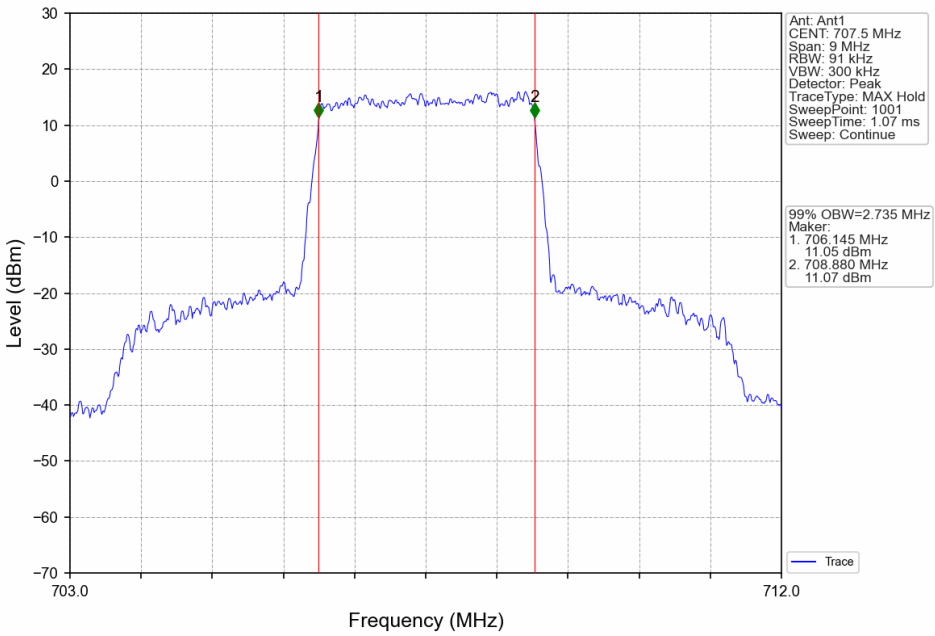
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



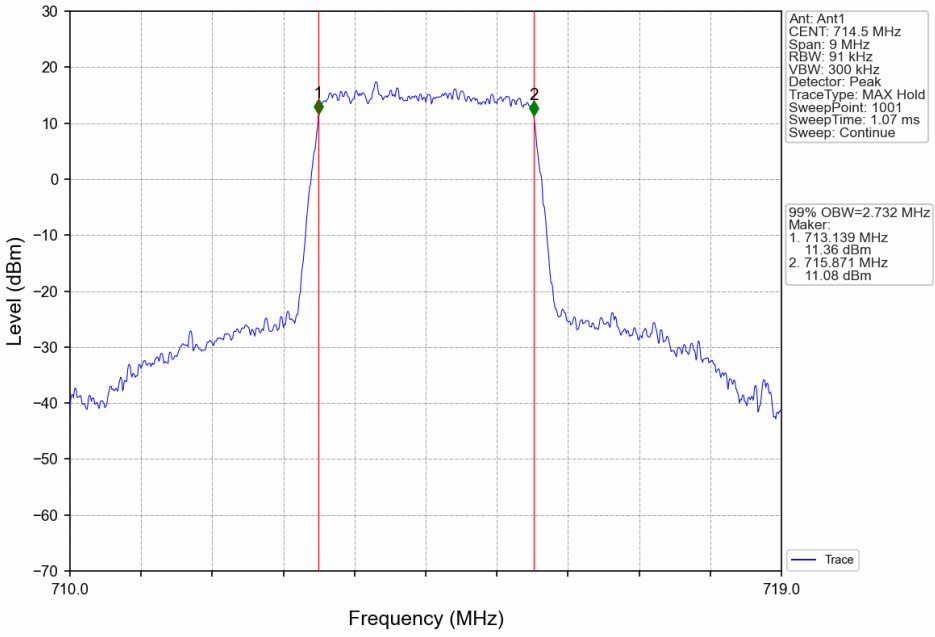
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



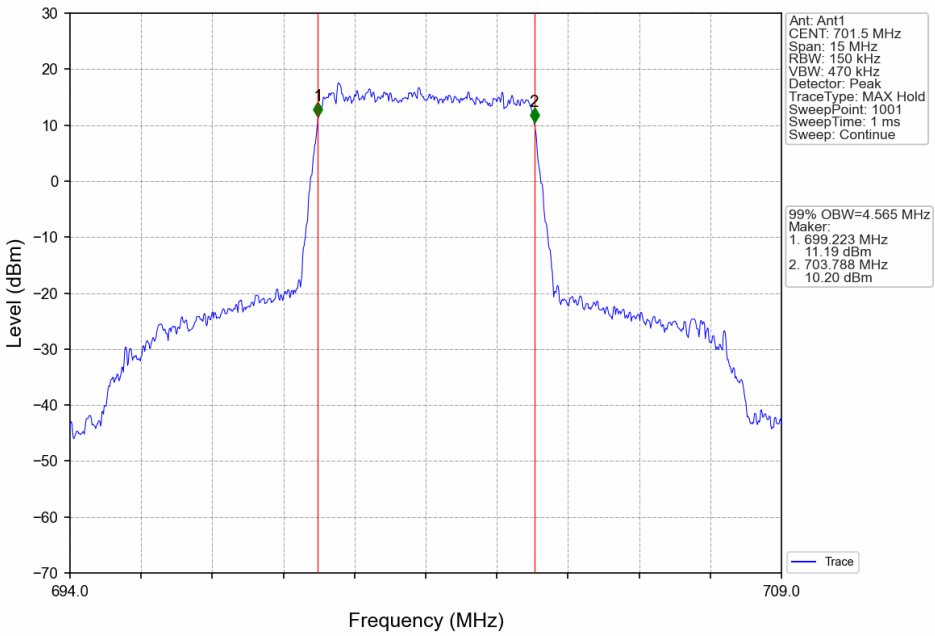
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



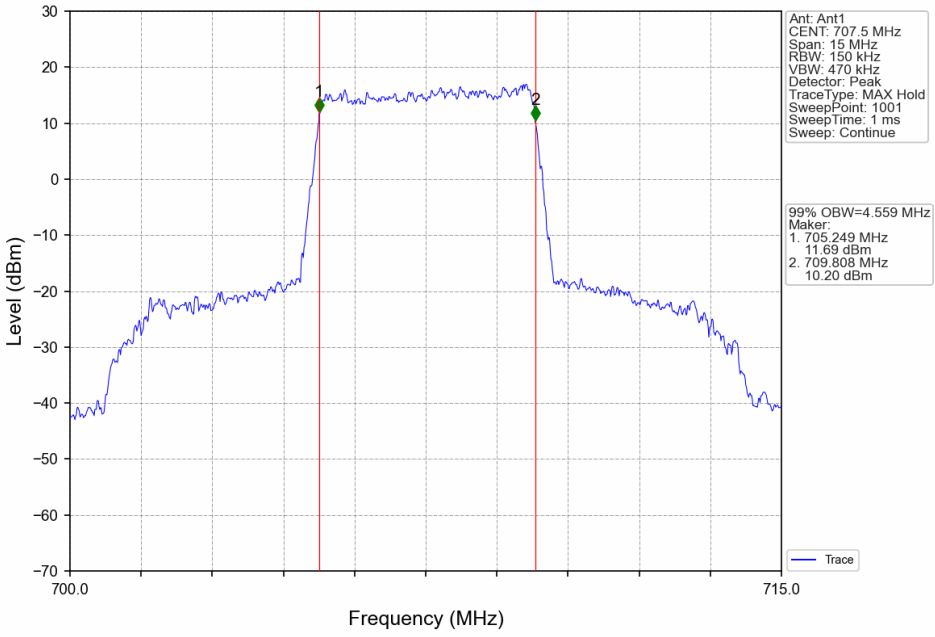
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



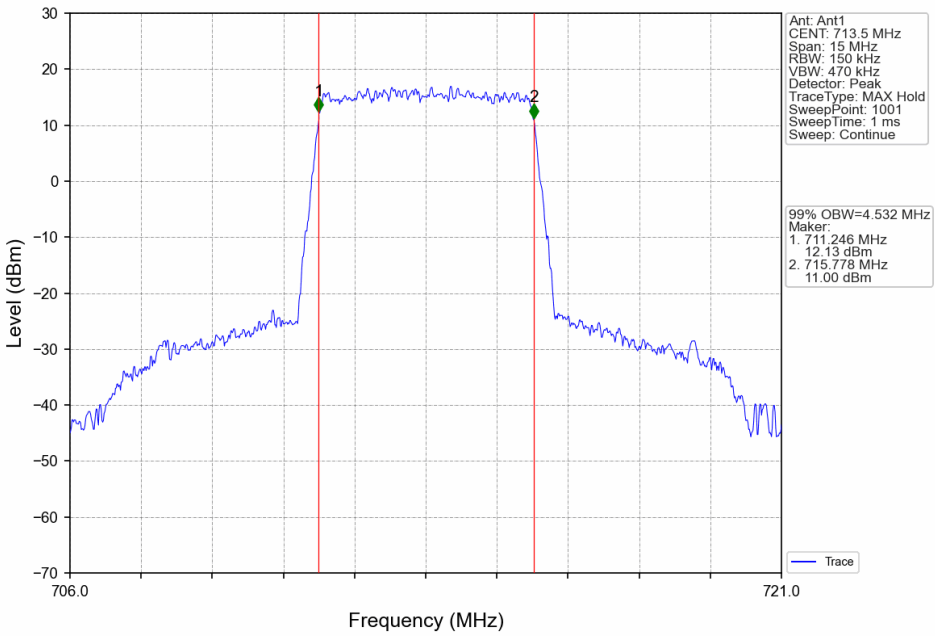
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



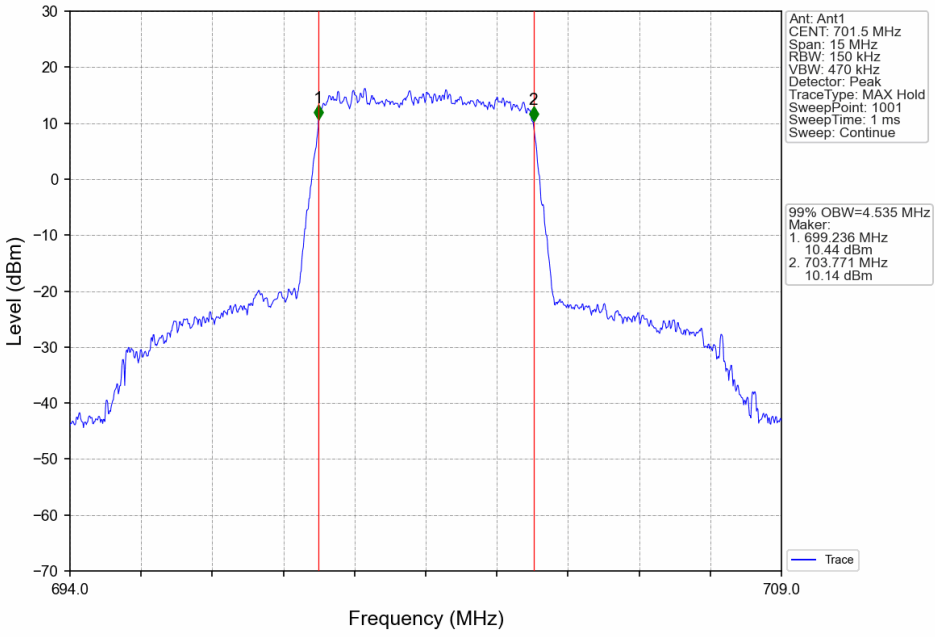
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



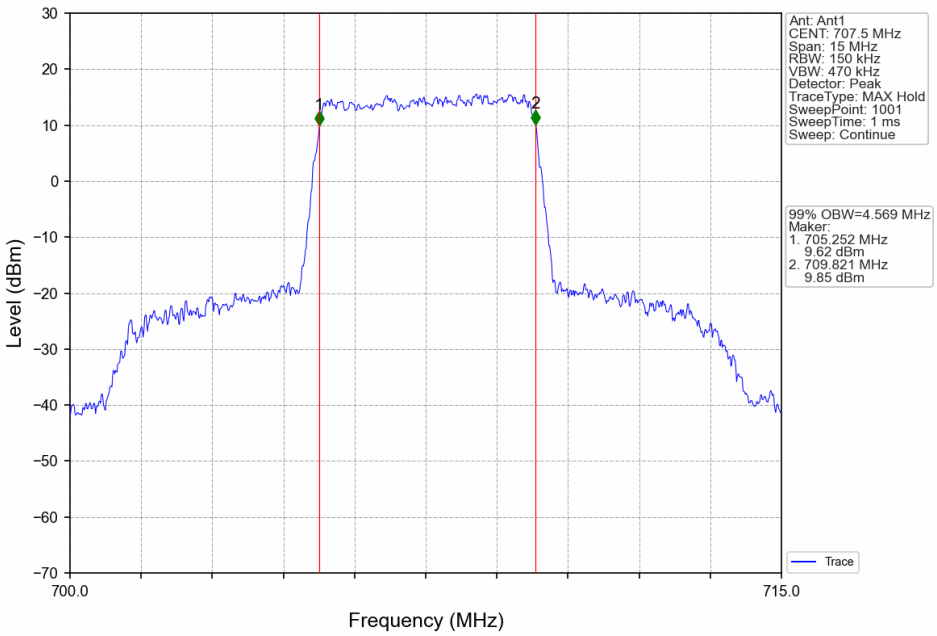
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



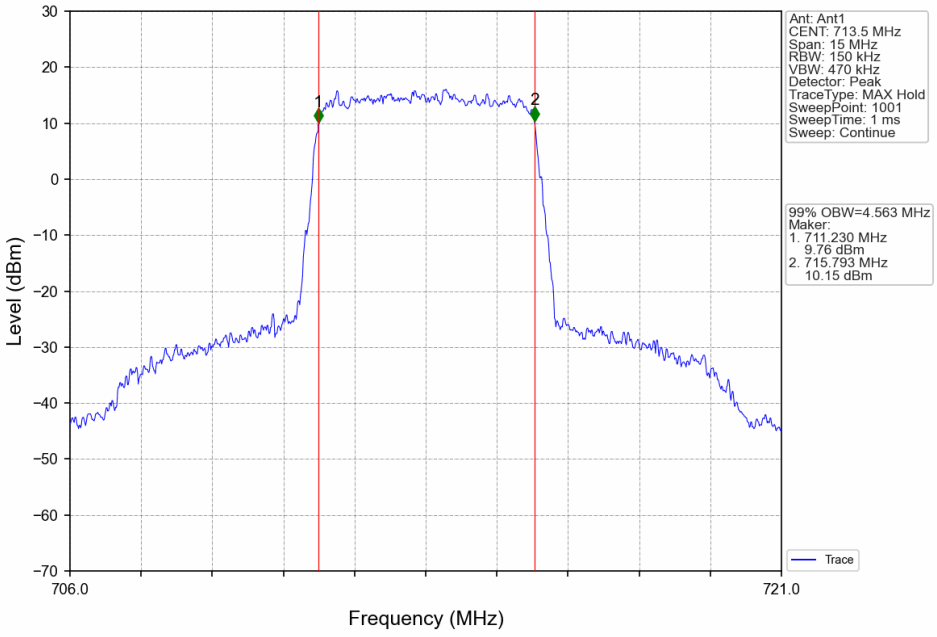
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



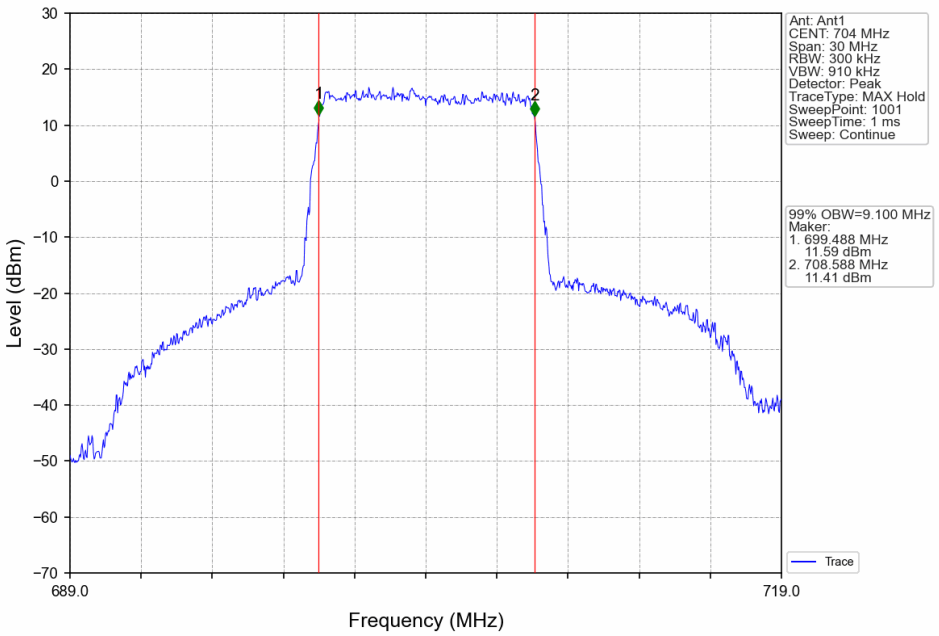
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



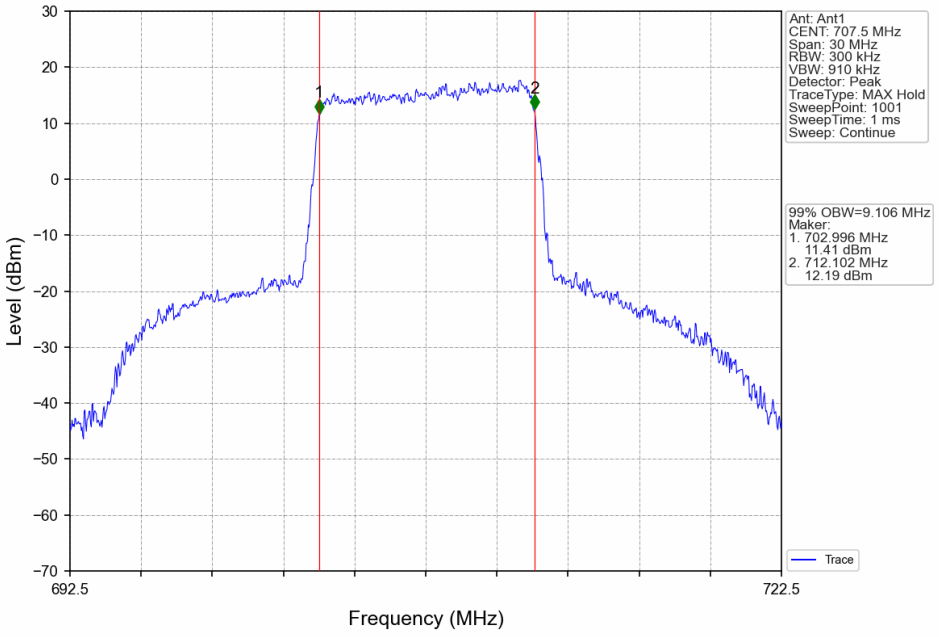
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



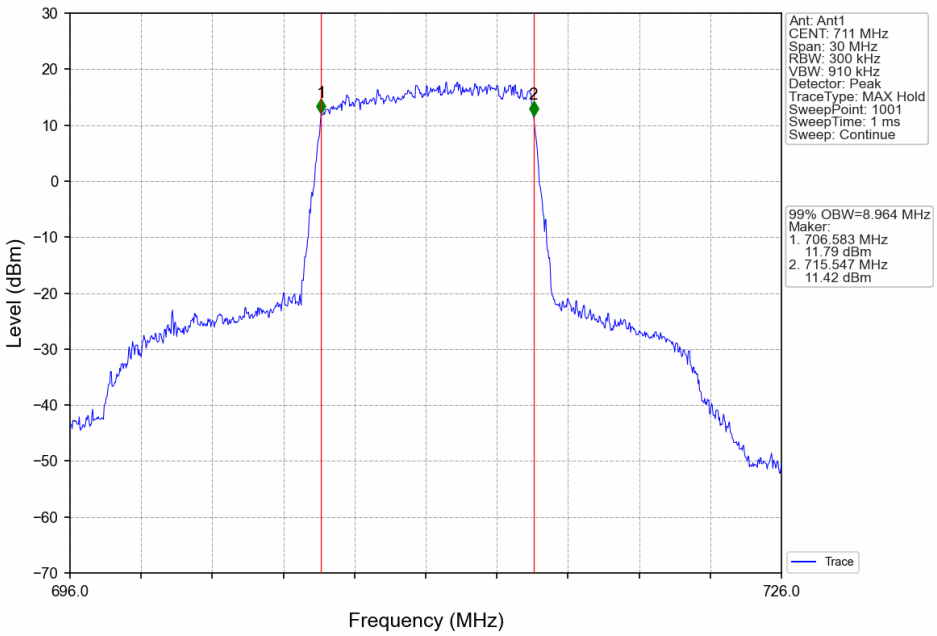
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



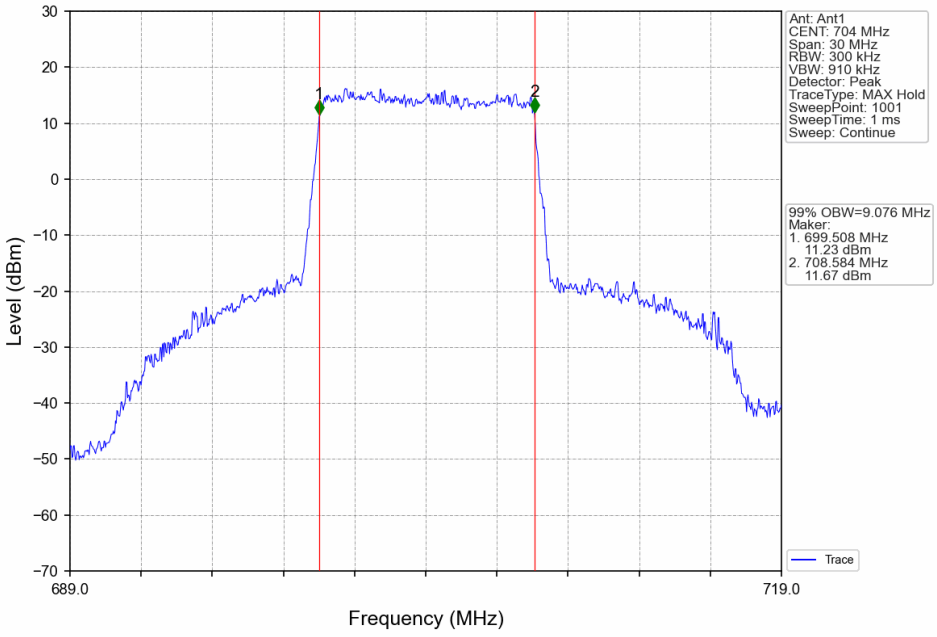
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



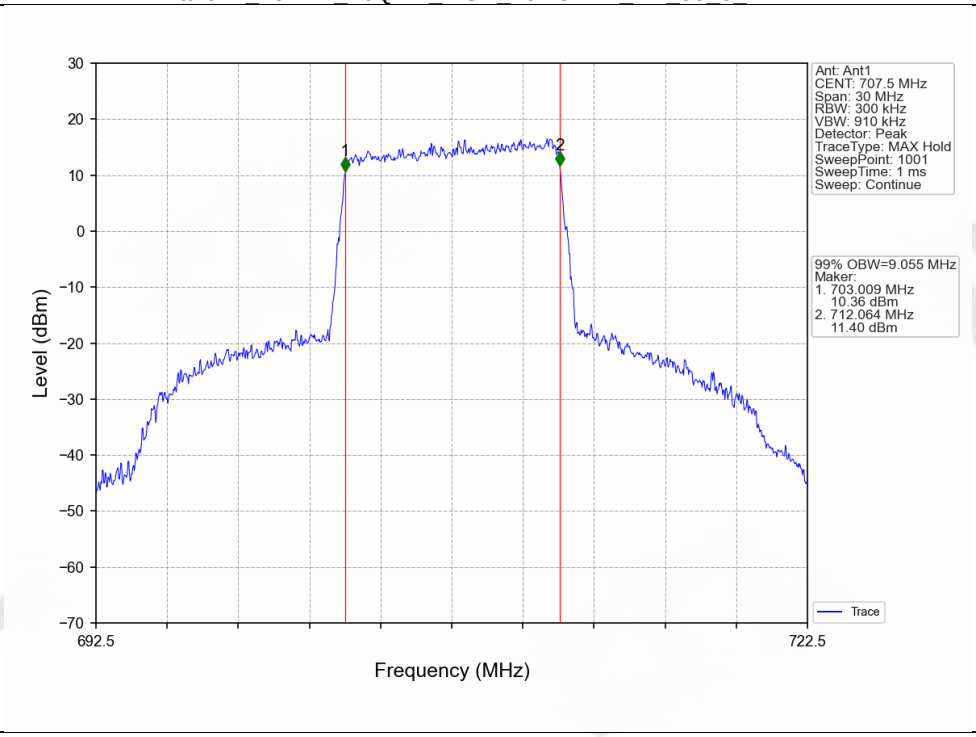
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



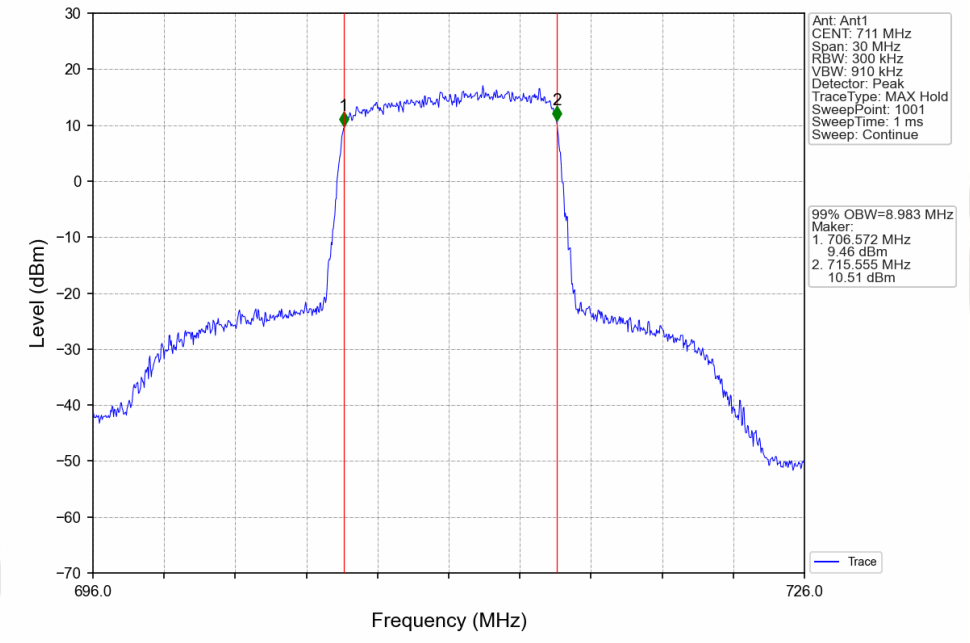
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV

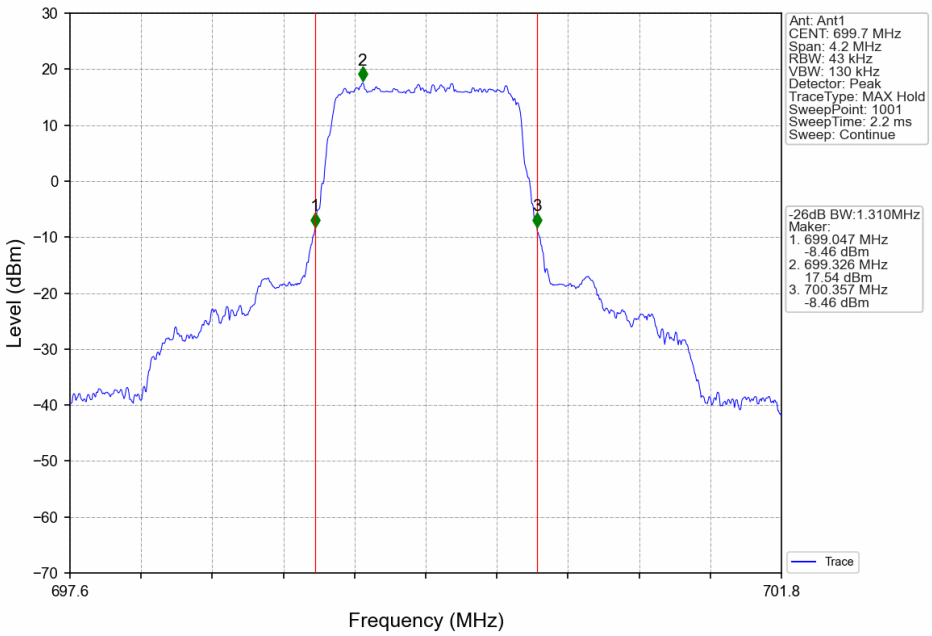


Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

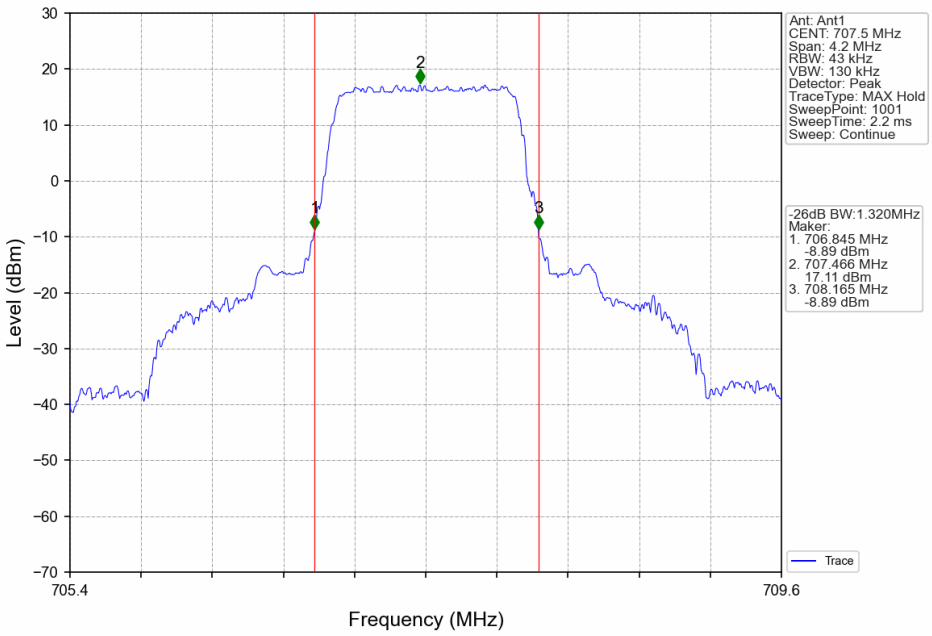


4.2.2 Band12_XDB

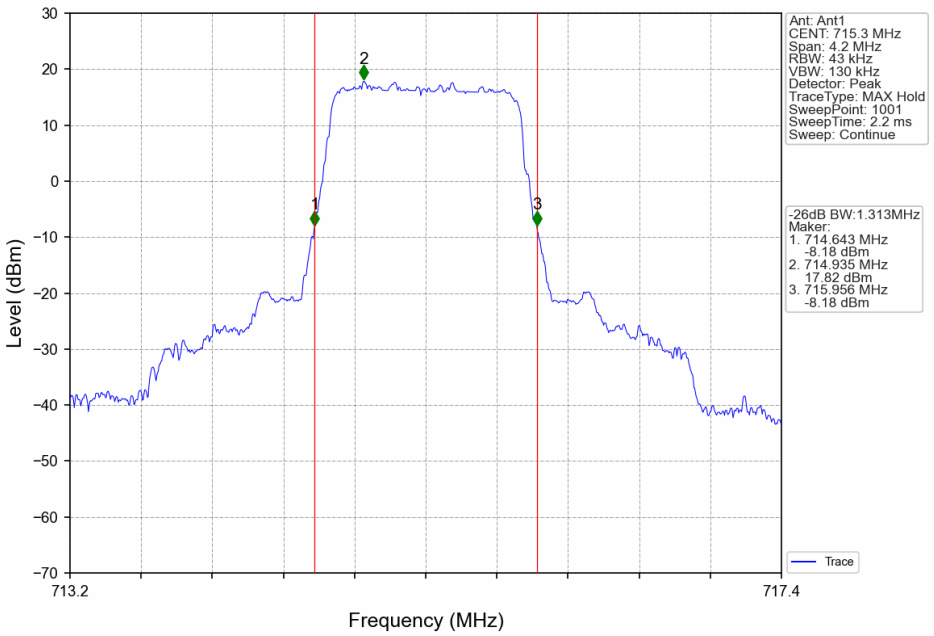
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



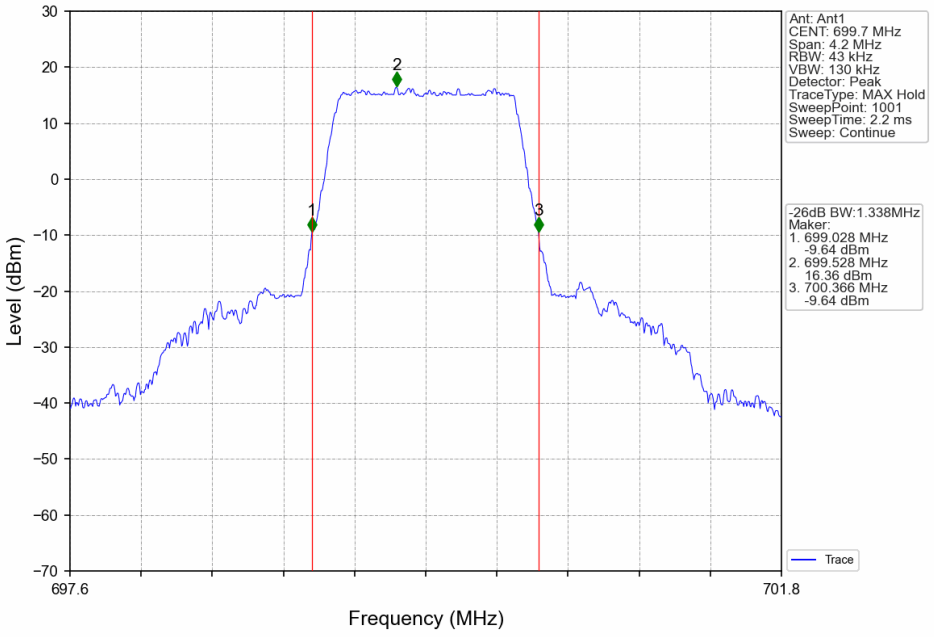
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



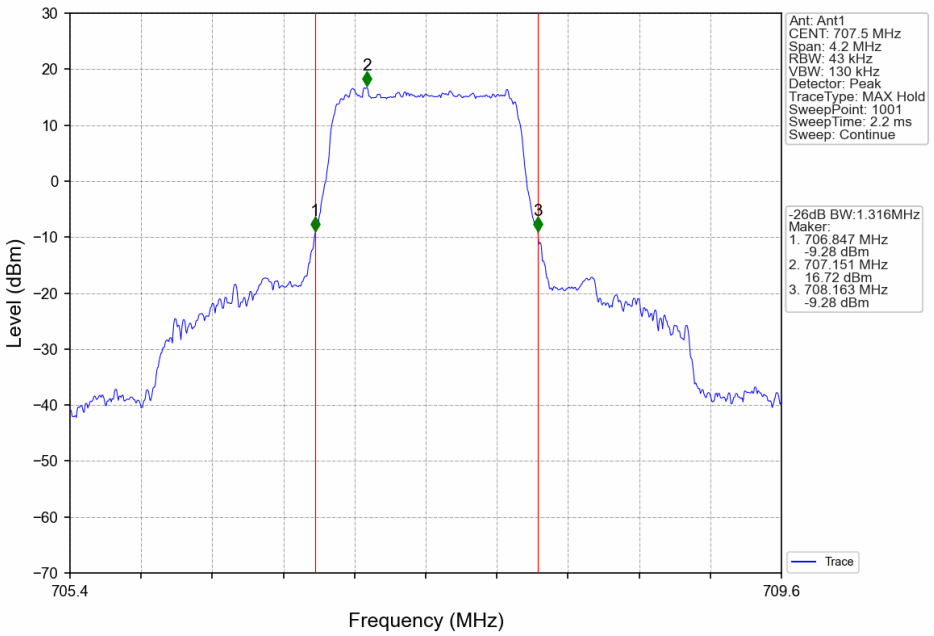
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



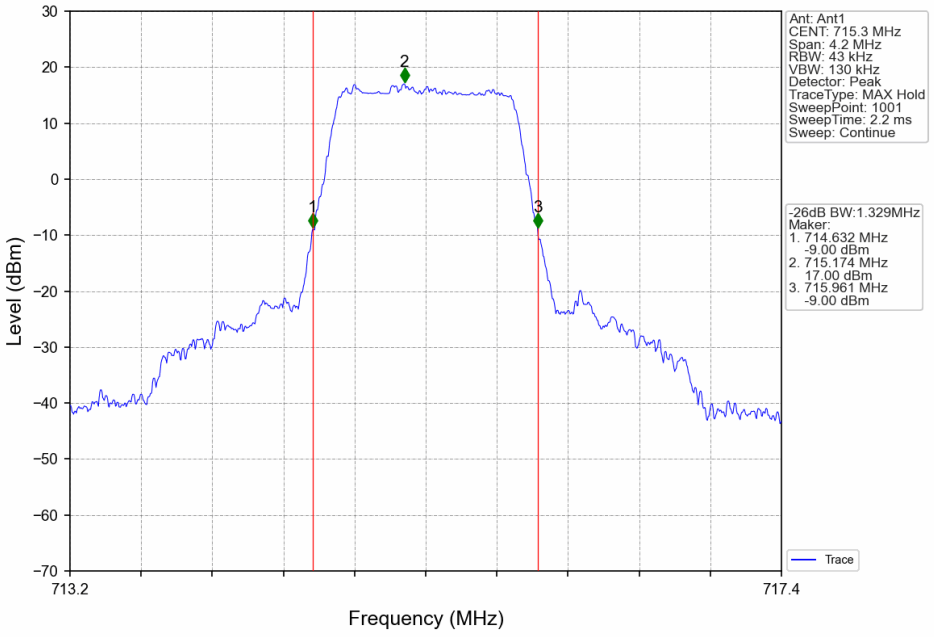
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



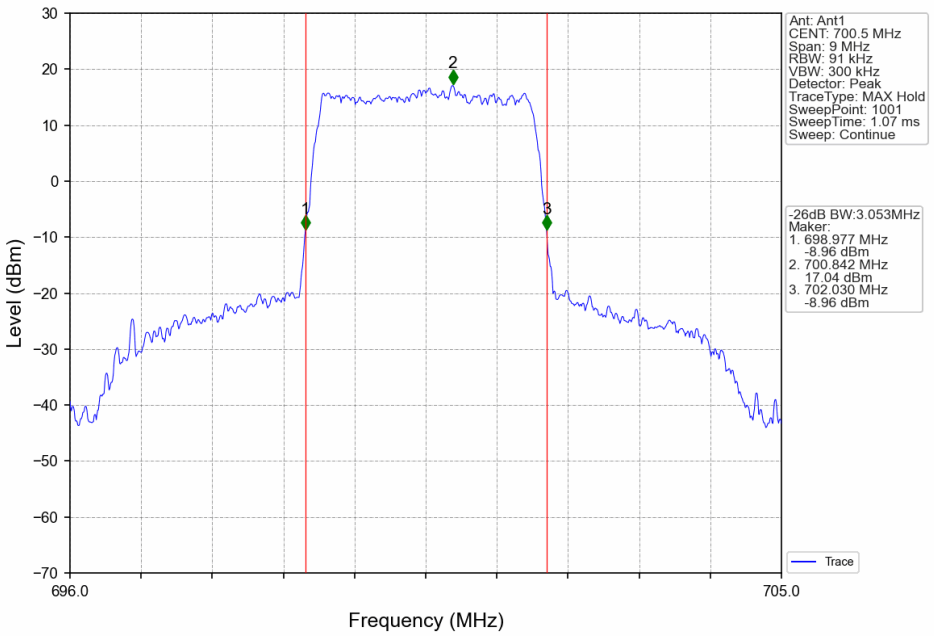
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



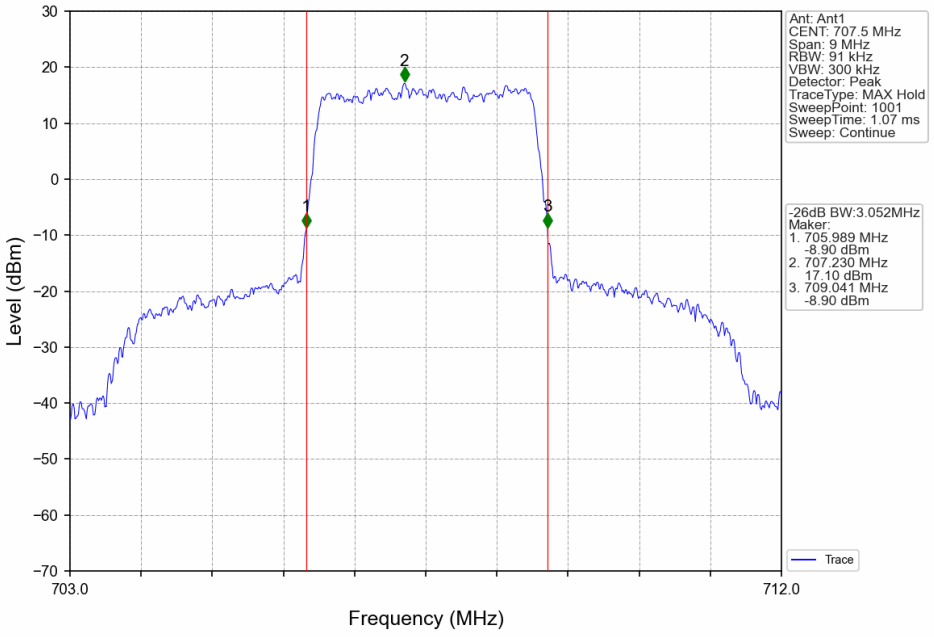
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



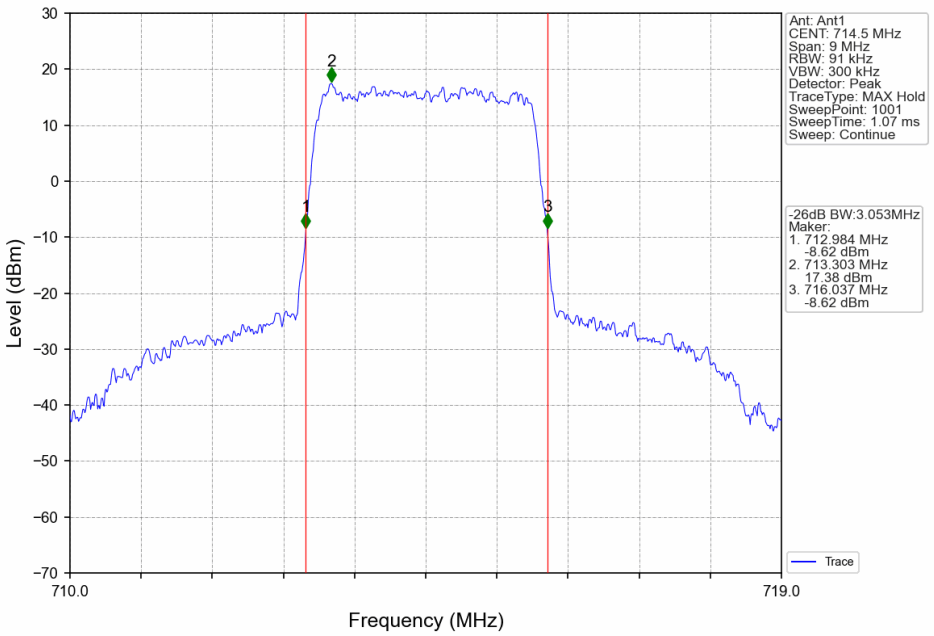
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



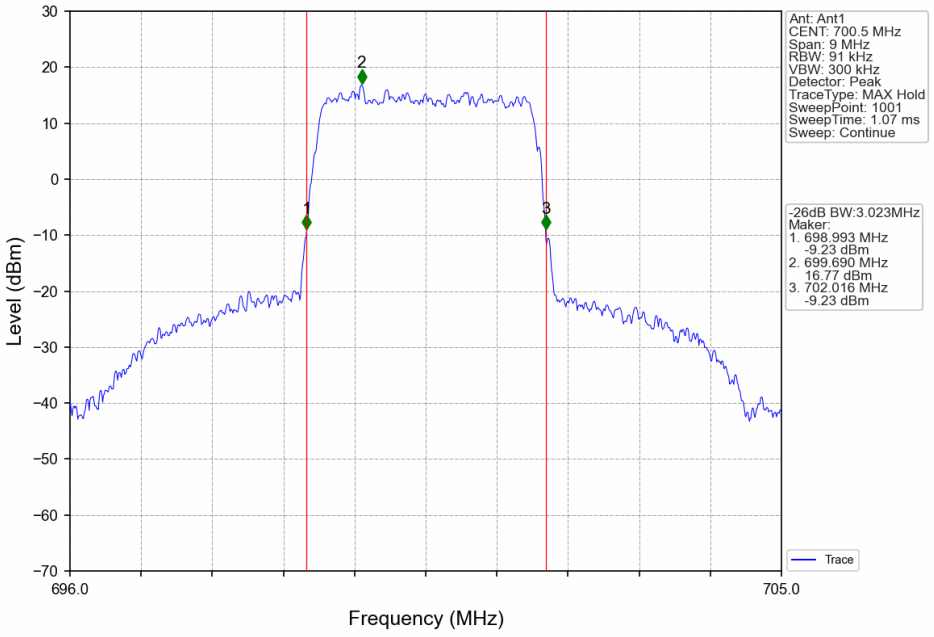
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



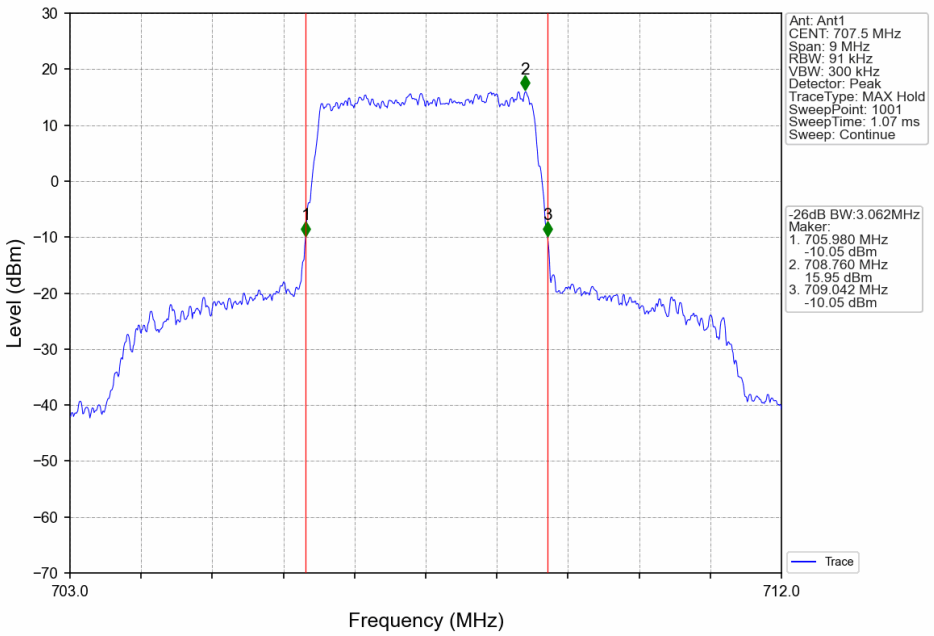
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



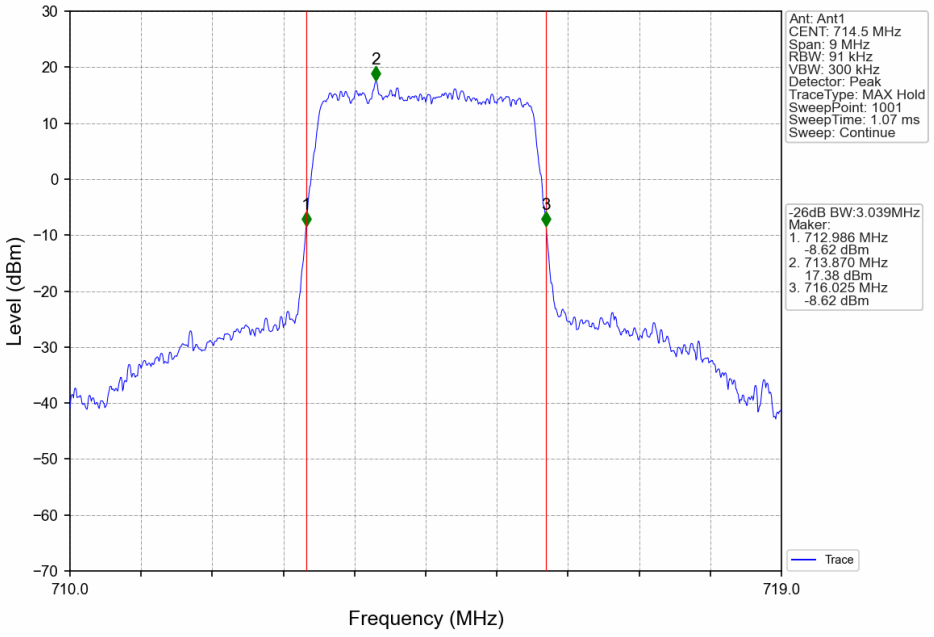
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



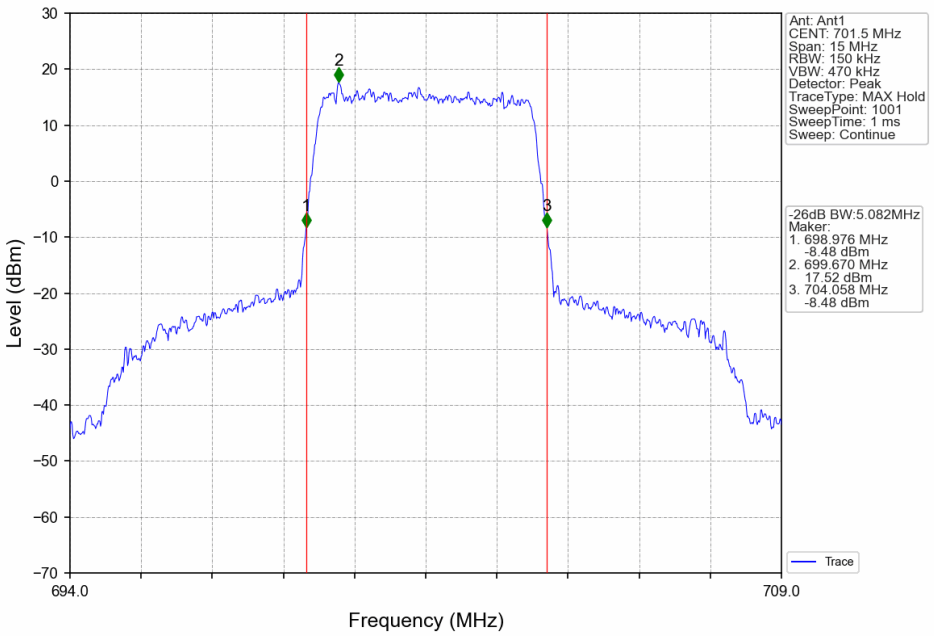
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



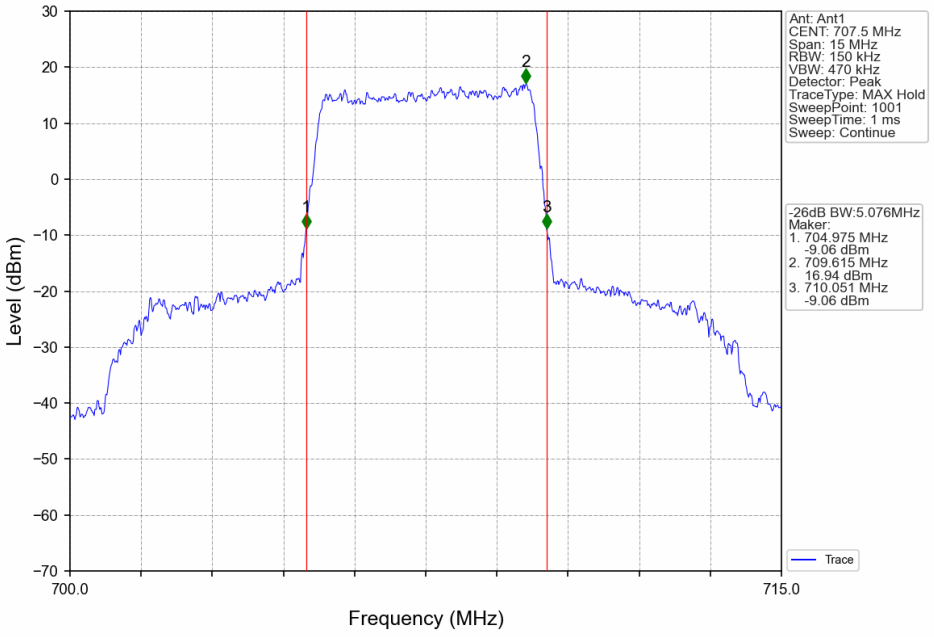
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



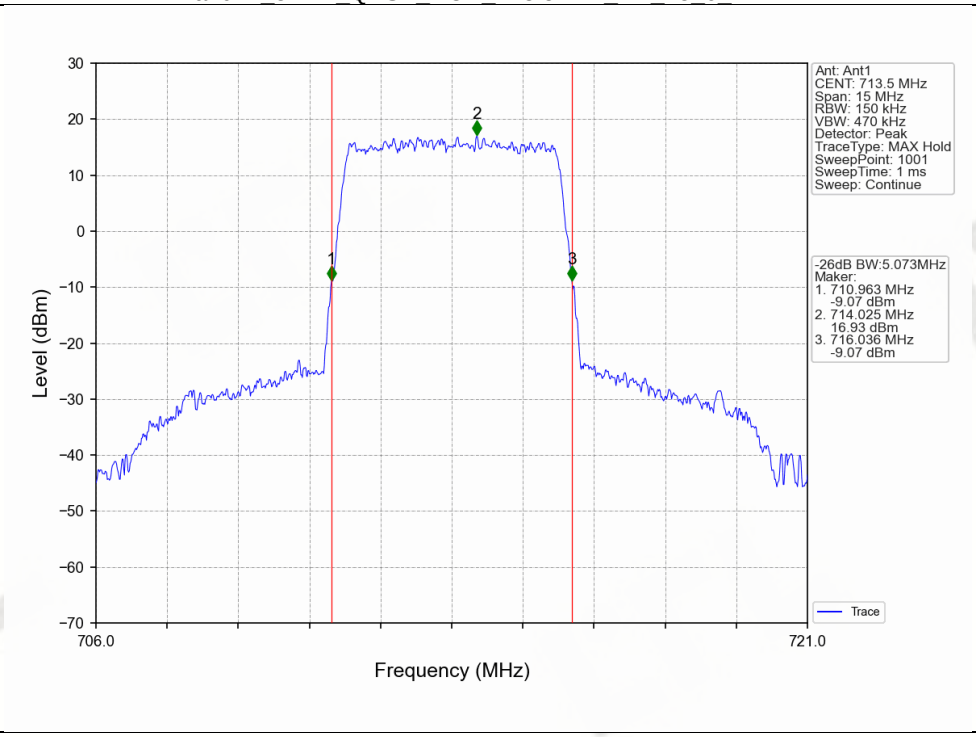
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



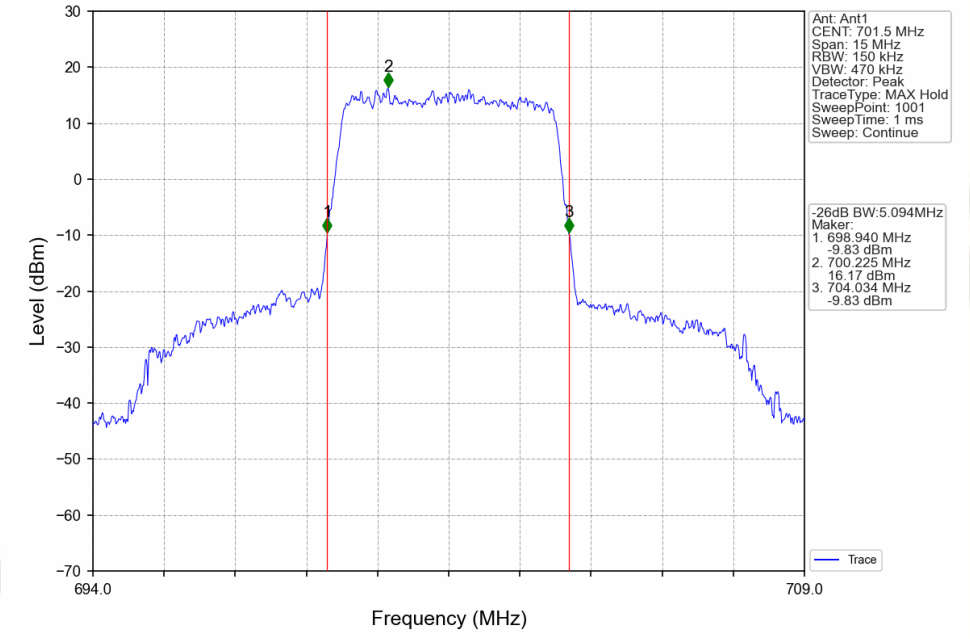
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



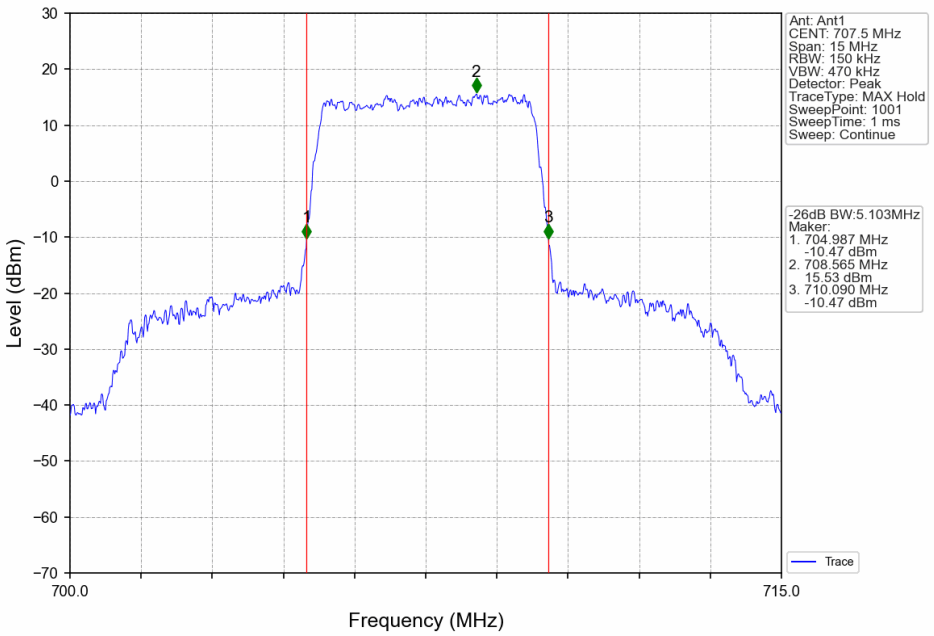
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



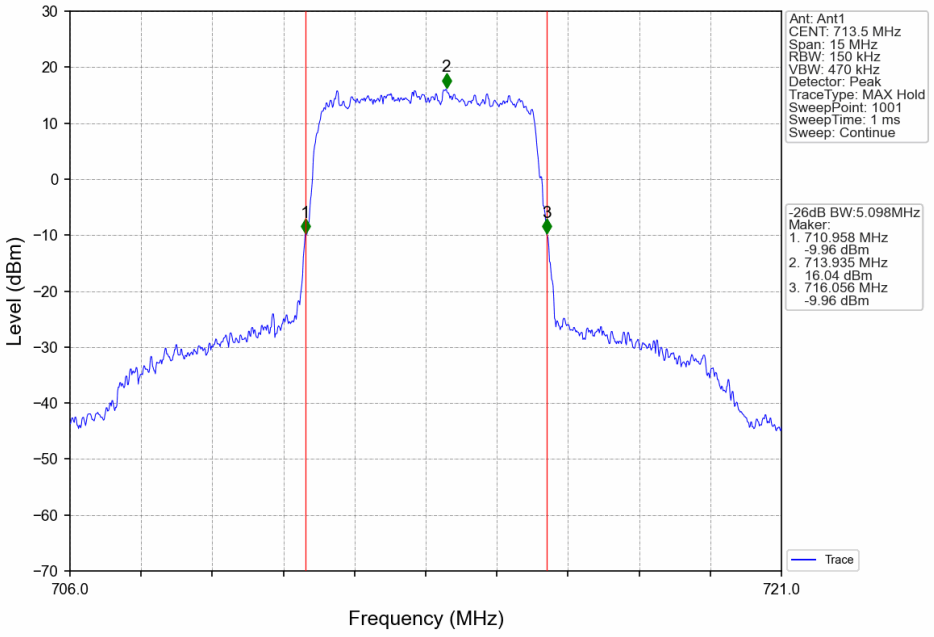
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



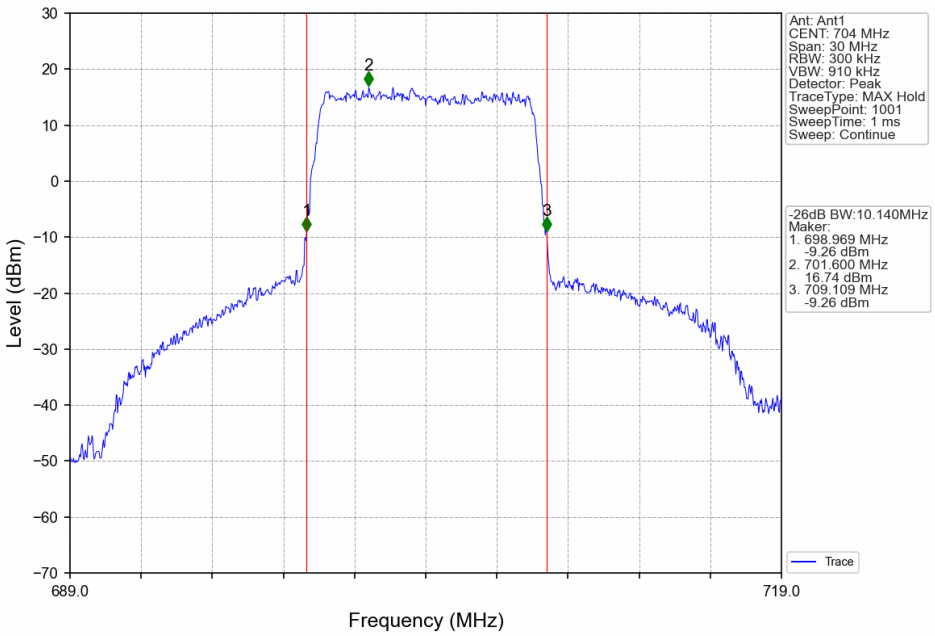
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



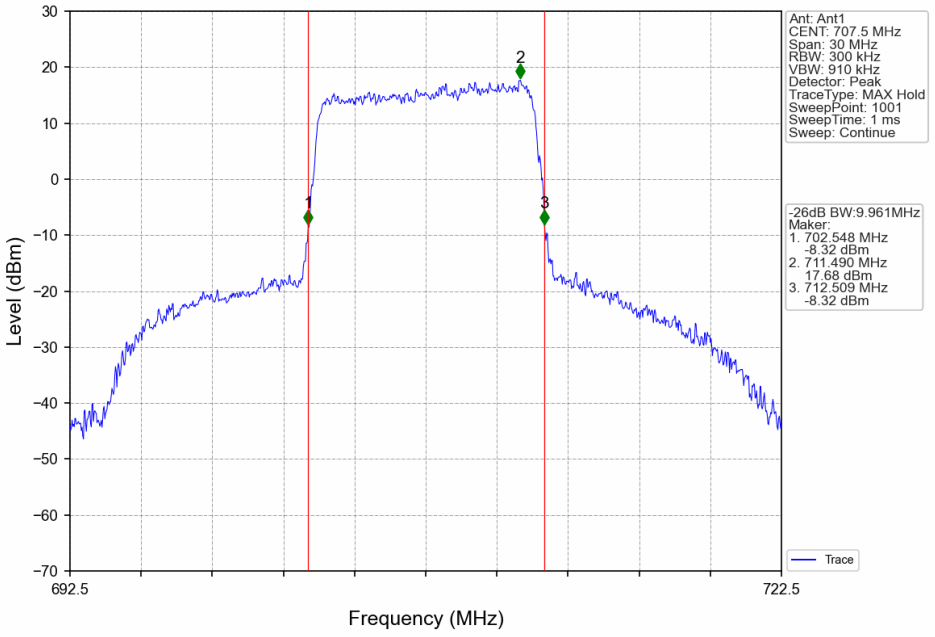
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



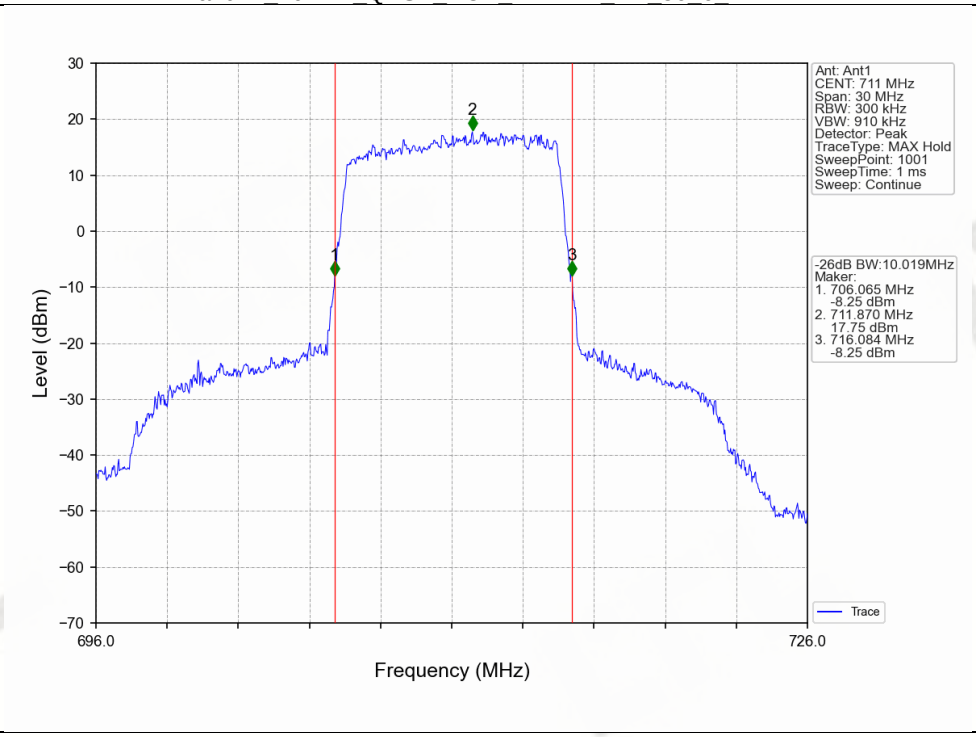
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



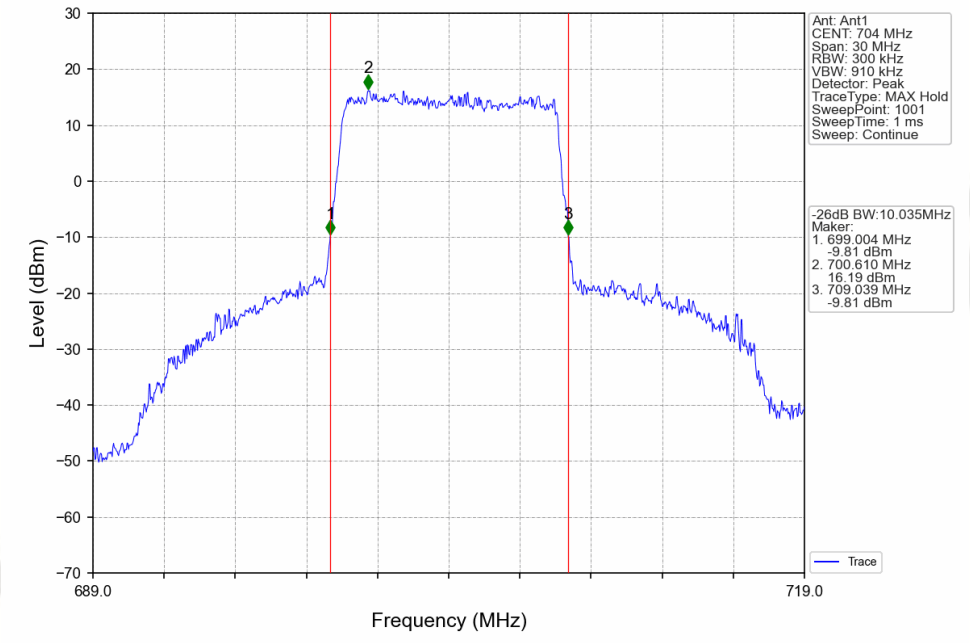
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



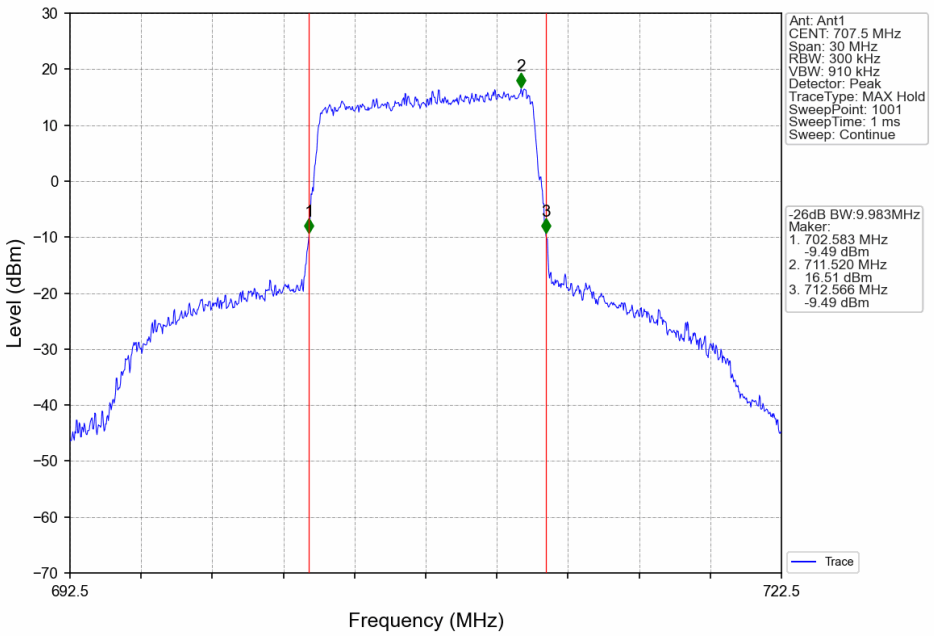
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



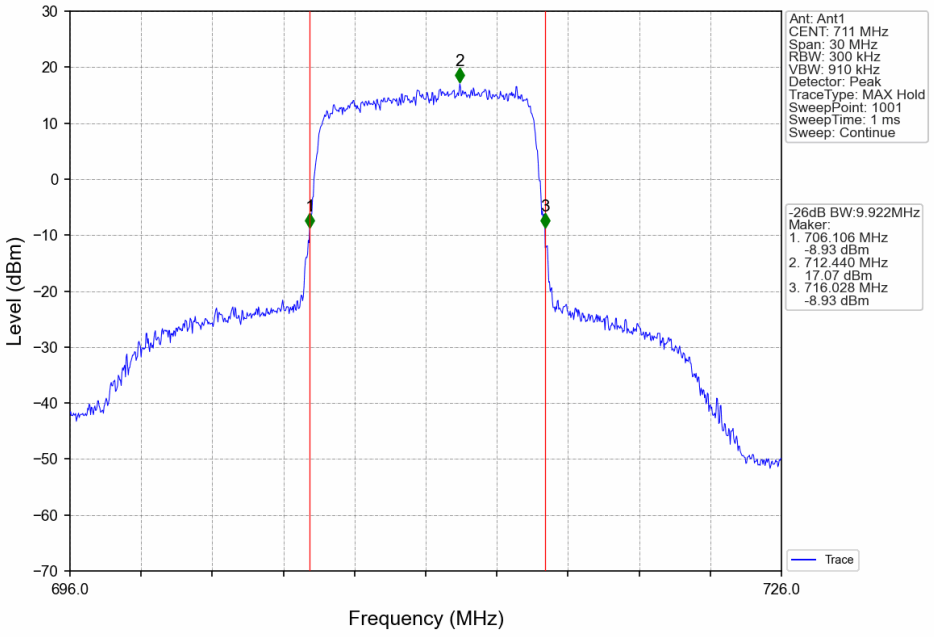
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



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	5.60	<=13	Pass
	707.5	6	0	5.77	<=13	Pass
	715.3	6	0	5.42	<=13	Pass
16QAM	699.7	6	0	6.45	<=13	Pass
	707.5	6	0	6.69	<=13	Pass
	715.3	6	0	6.26	<=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	5.61	<=13	Pass
	707.5	15	0	5.78	<=13	Pass
	714.5	15	0	5.44	<=13	Pass
16QAM	700.5	15	0	6.45	<=13	Pass
	707.5	15	0	6.66	<=13	Pass
	714.5	15	0	6.28	<=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	5.47	<=13	Pass
	707.5	25	0	5.59	<=13	Pass
	713.5	25	0	5.33	<=13	Pass
16QAM	701.5	25	0	6.30	<=13	Pass
	707.5	25	0	6.43	<=13	Pass
	713.5	25	0	6.17	<=13	Pass

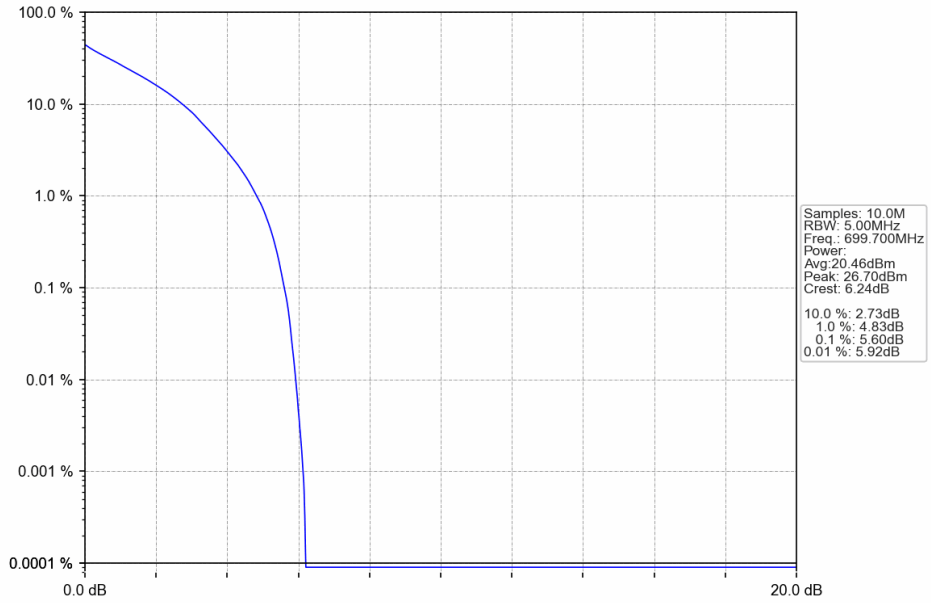
5.1.4 B12_10MHz

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	5.64	<=13	Pass
	707.5	50	0	5.62	<=13	Pass
	711	50	0	5.34	<=13	Pass
16QAM	704	50	0	6.42	<=13	Pass
	707.5	50	0	6.45	<=13	Pass
	711	50	0	6.27	<=13	Pass

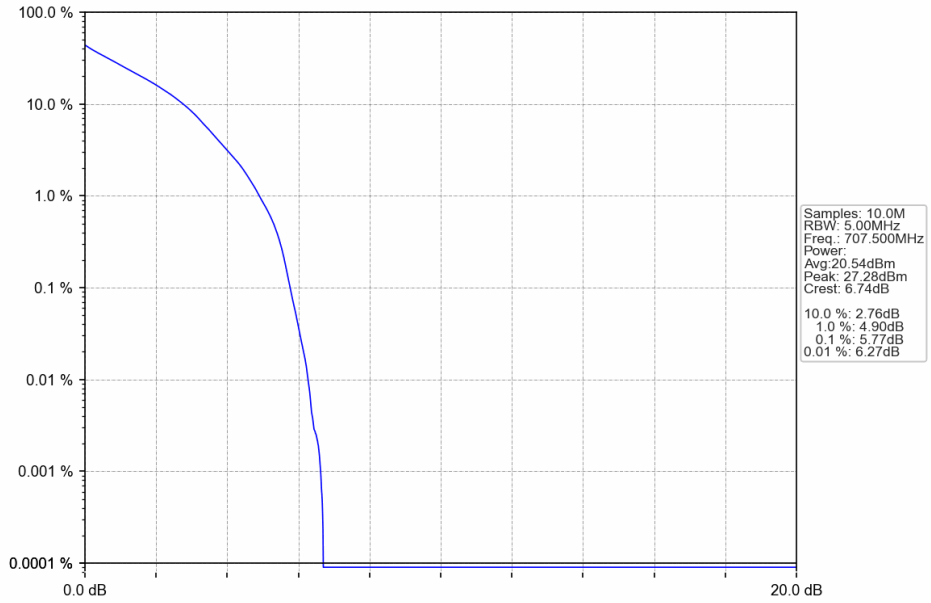
5.2 Test Graph

5.2.1 B12_1.4MHz

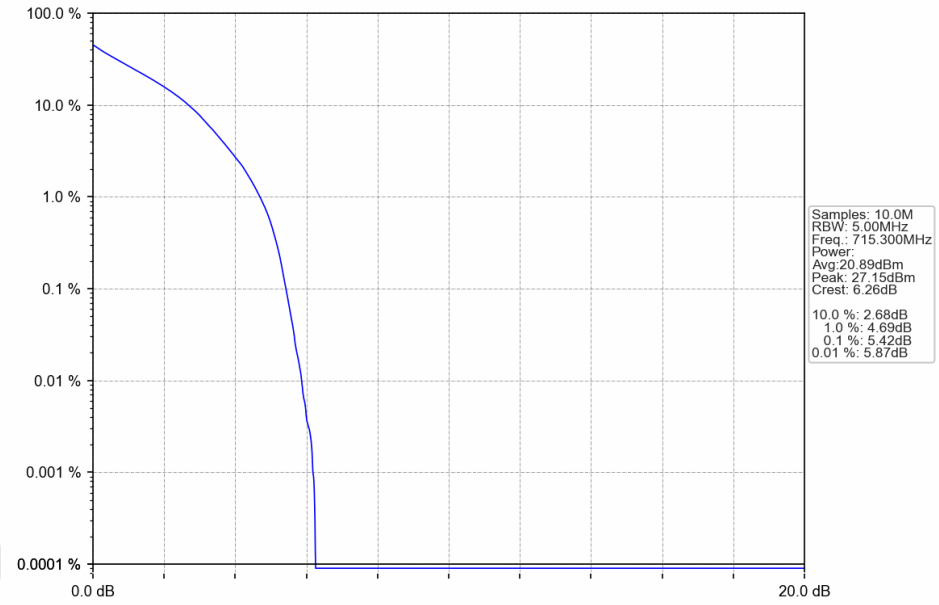
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



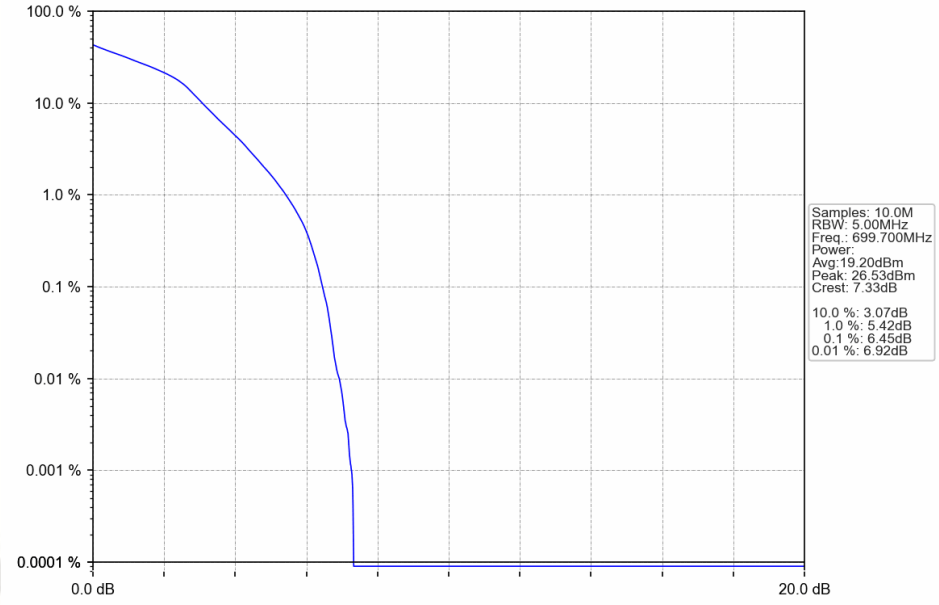
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_6_0_NTNV



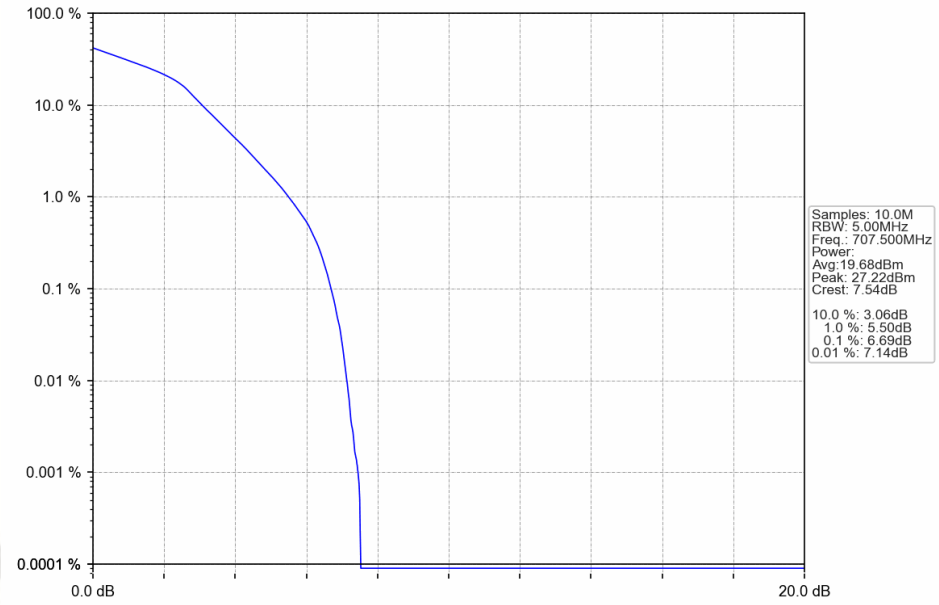
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



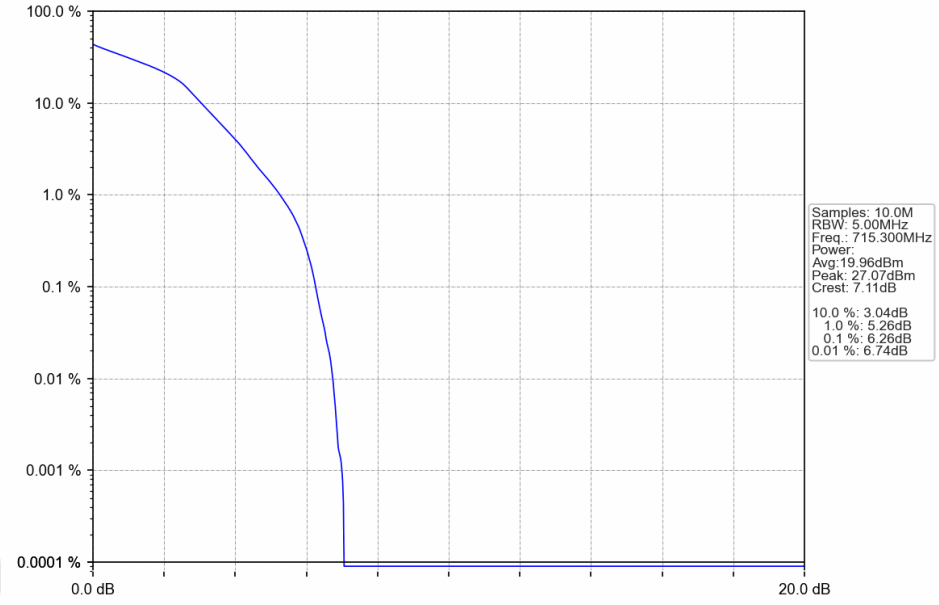
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV

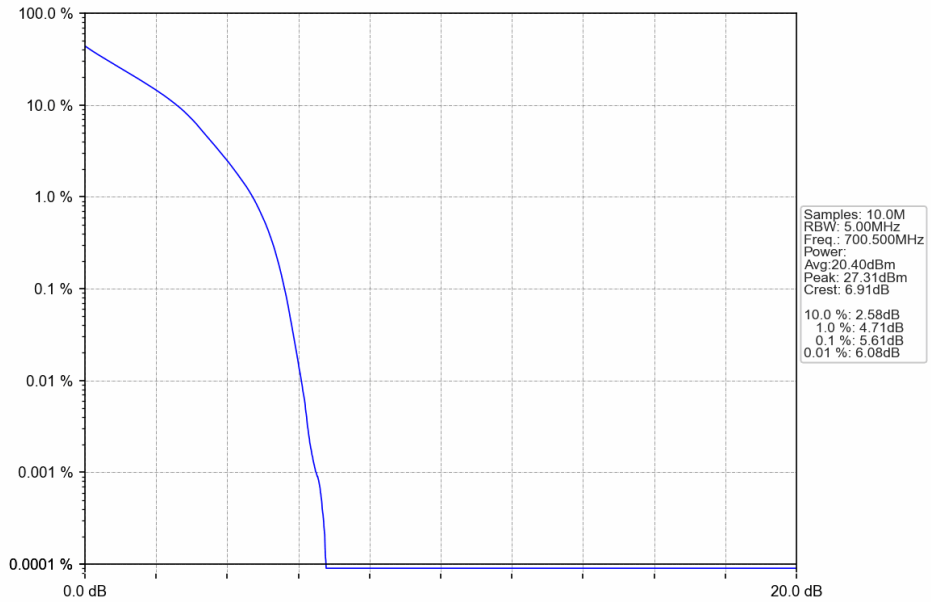


Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV

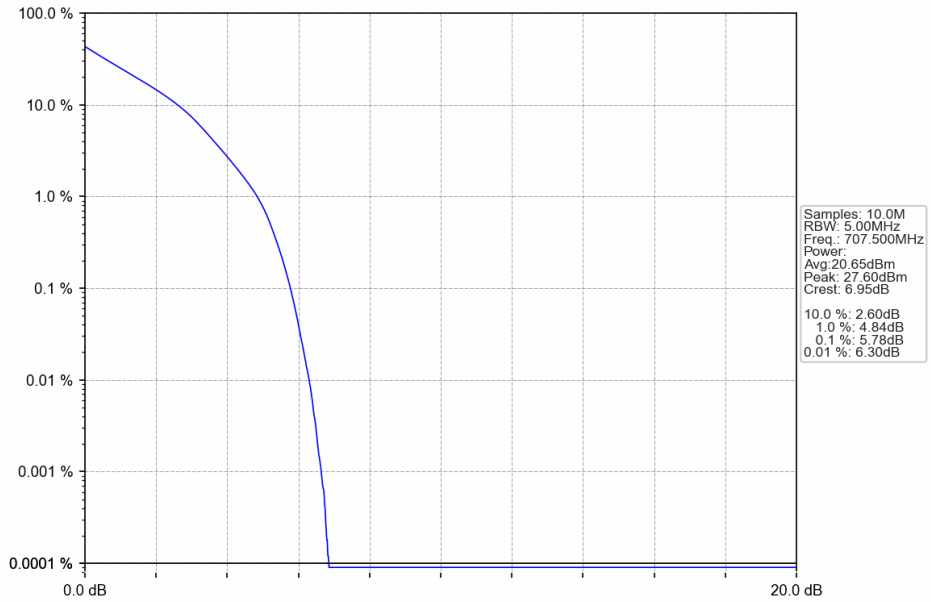


5.2.2 B12_3MHz

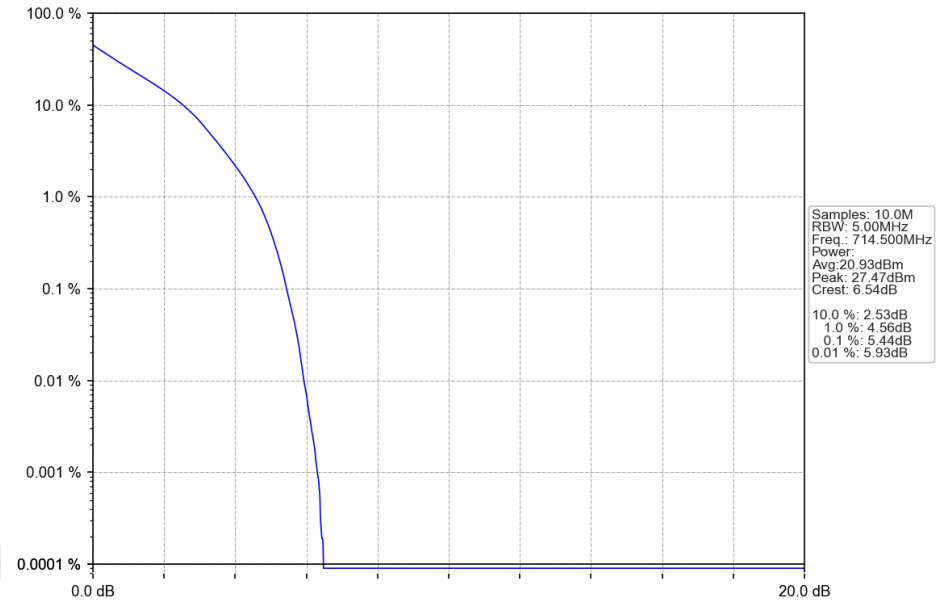
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



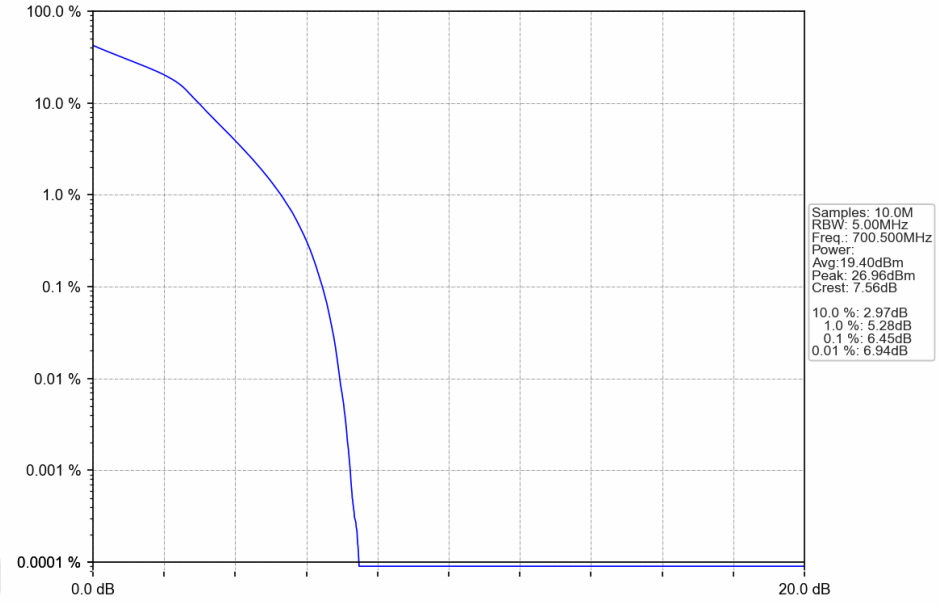
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



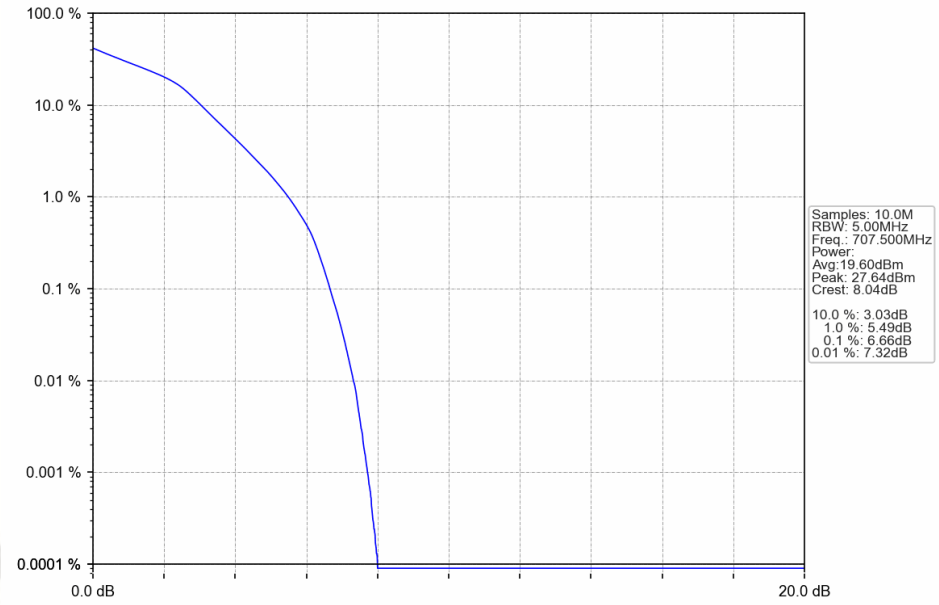
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



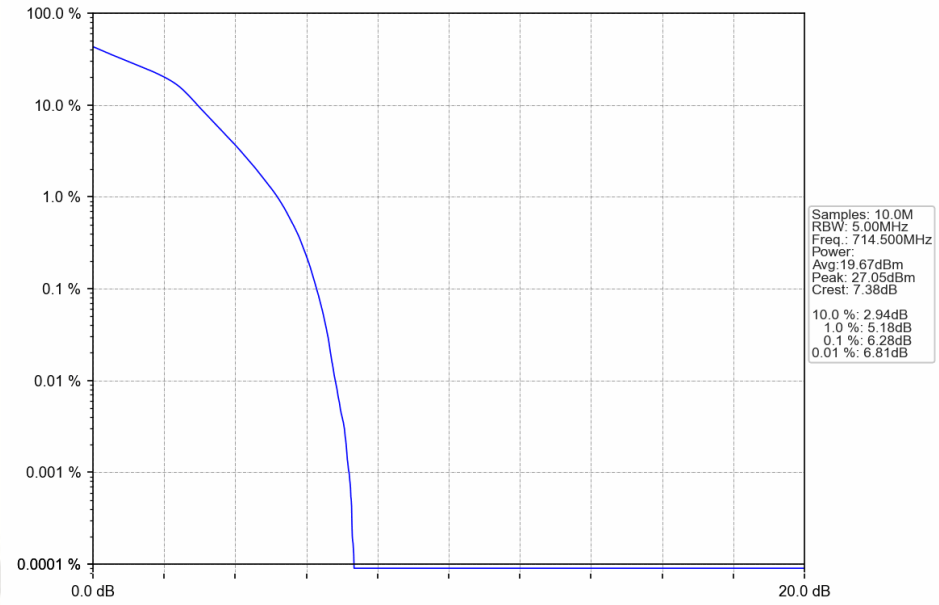
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV

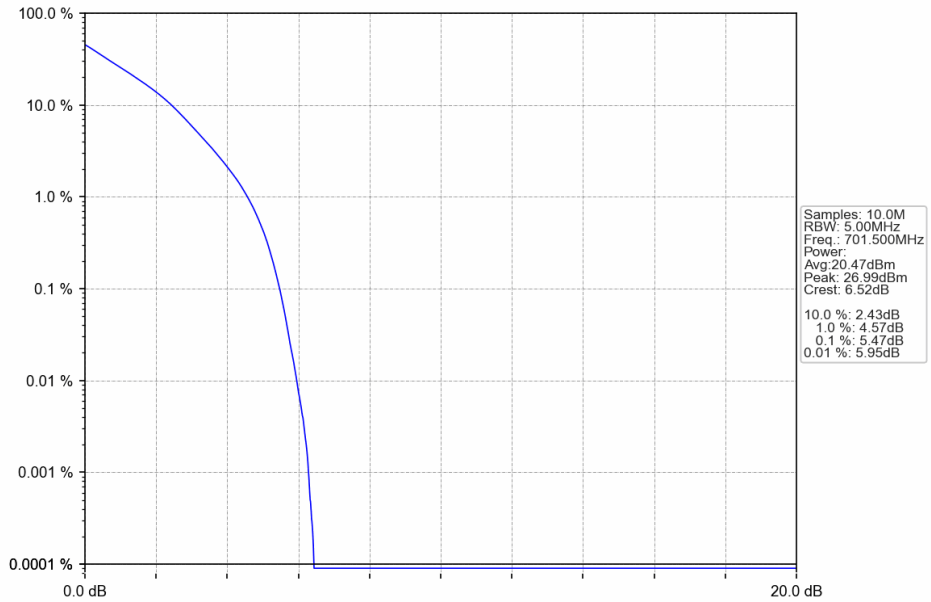


Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV

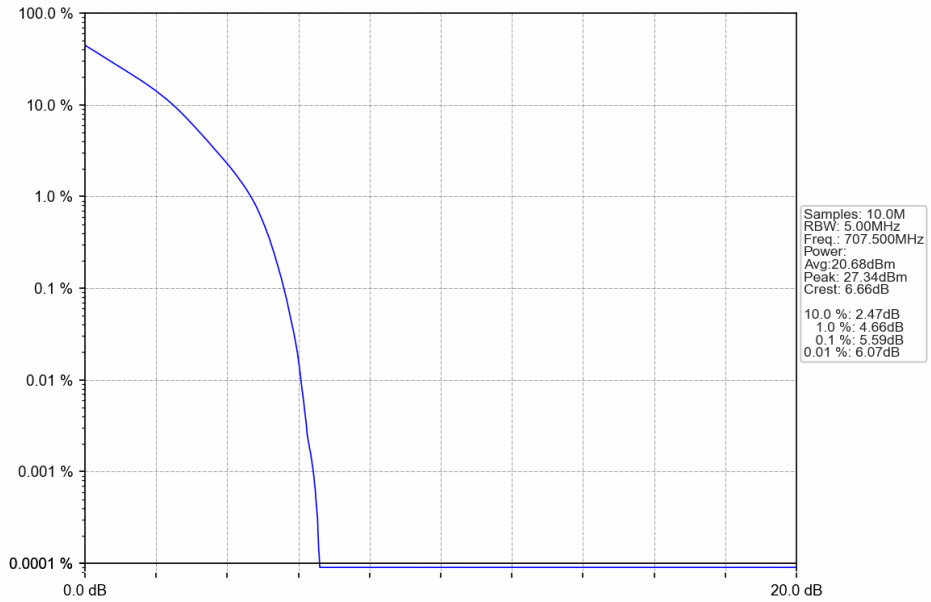


5.2.3 B12_5MHz

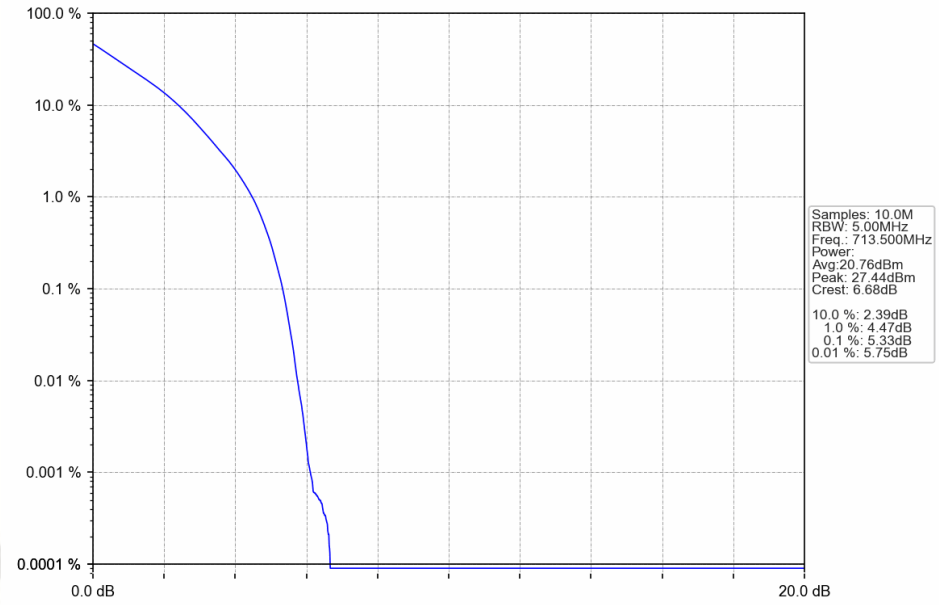
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



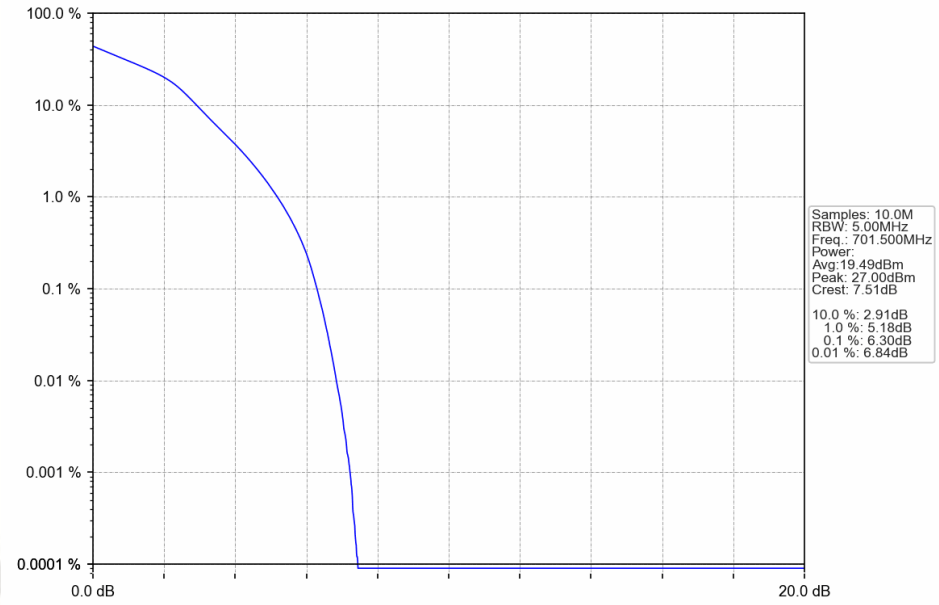
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



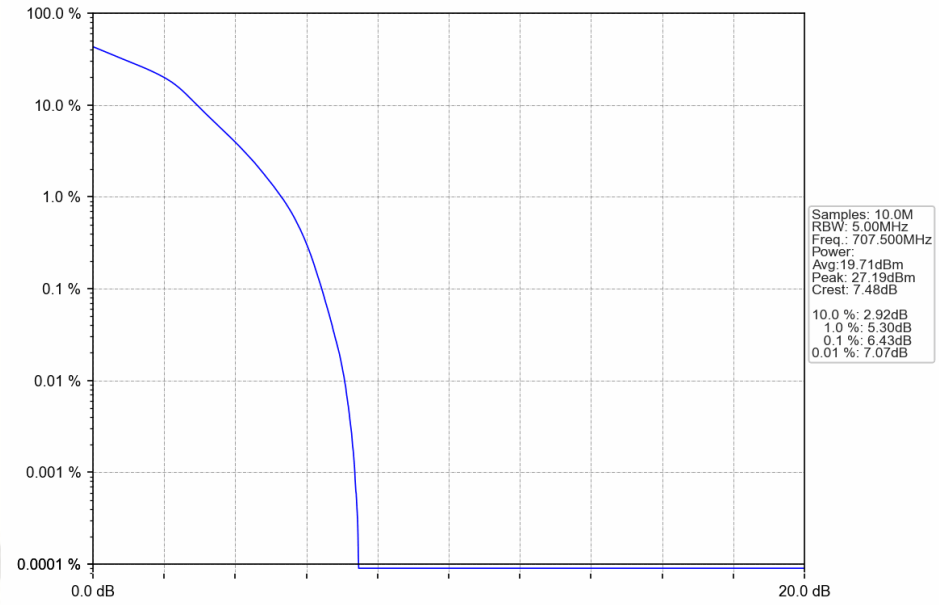
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



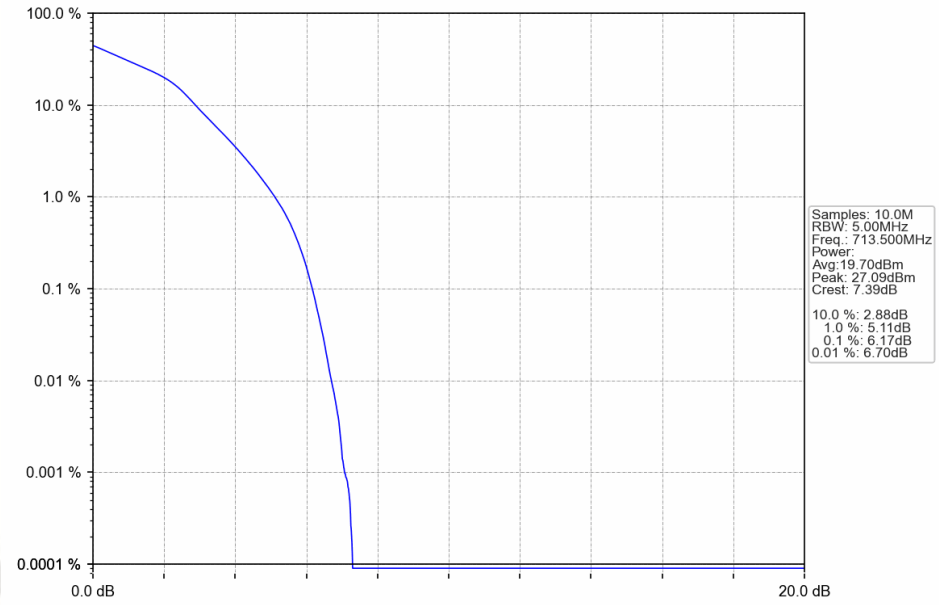
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV

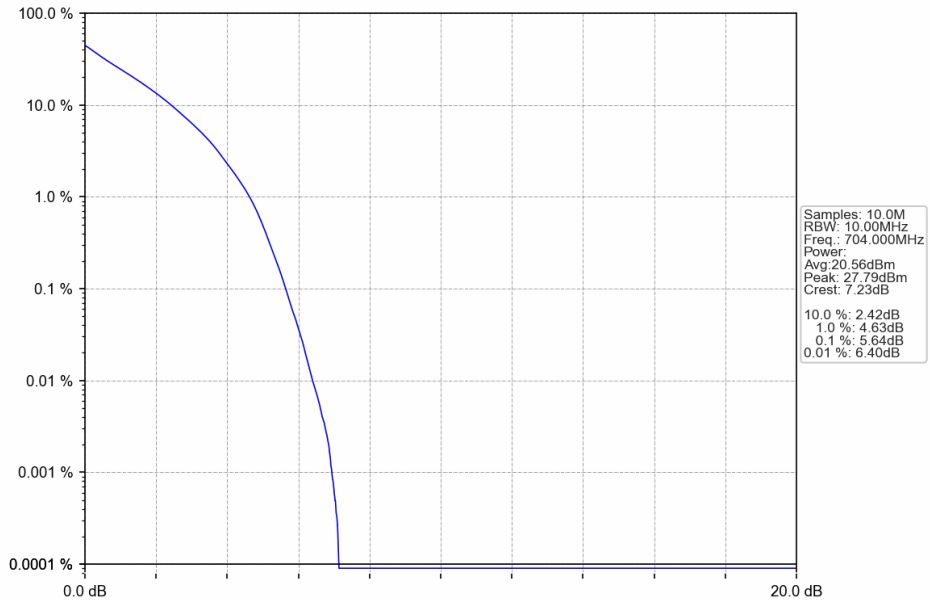


Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV

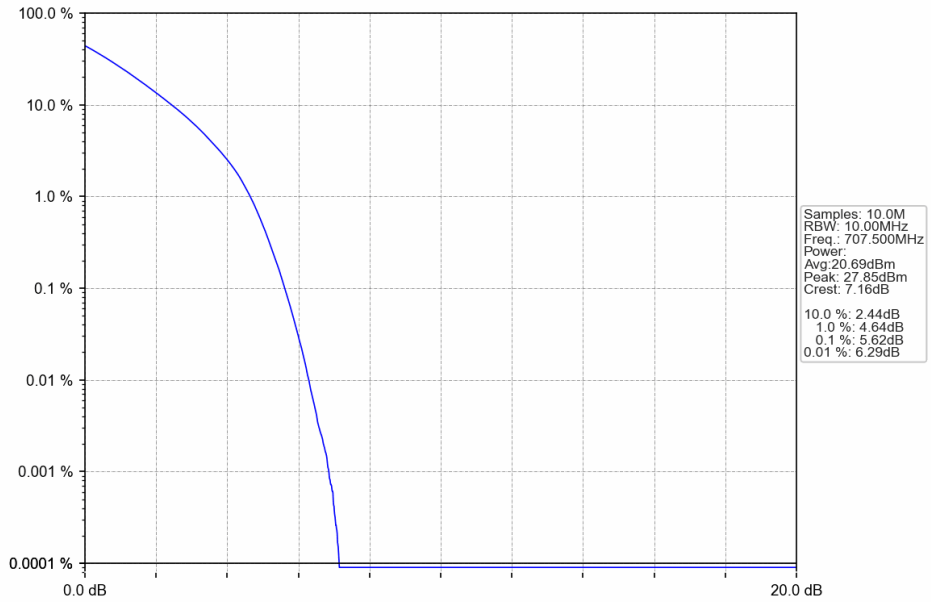


5.2.4 B12_10MHz

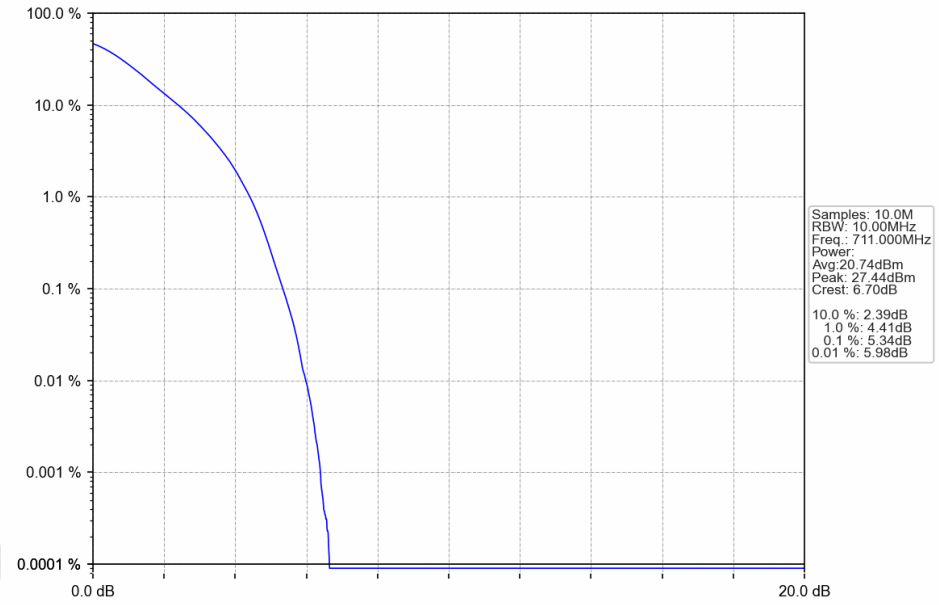
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



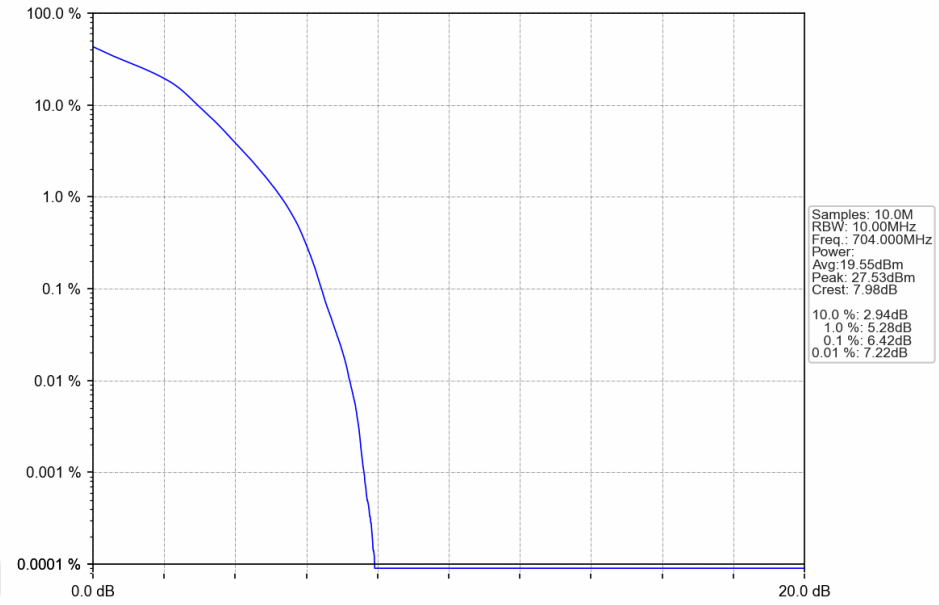
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



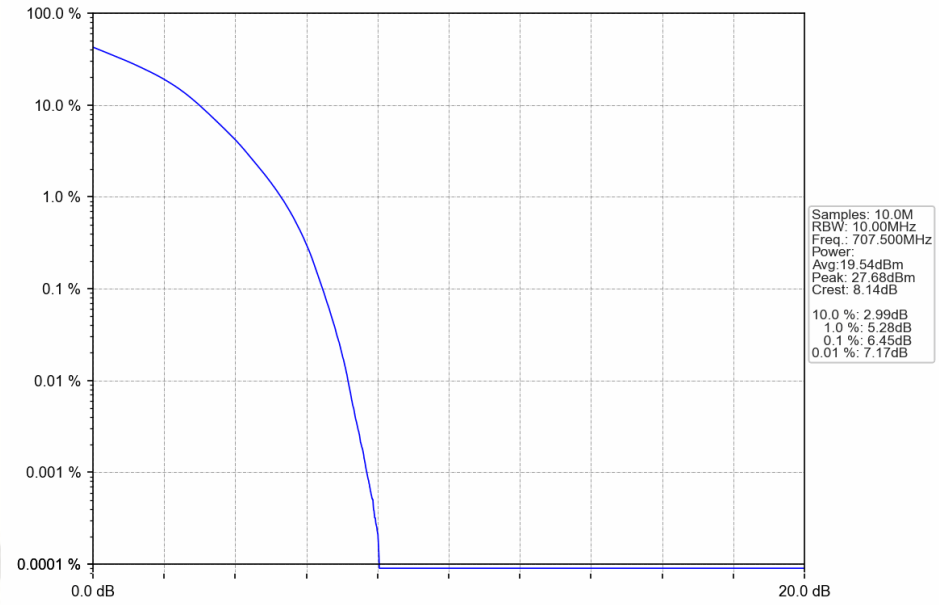
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



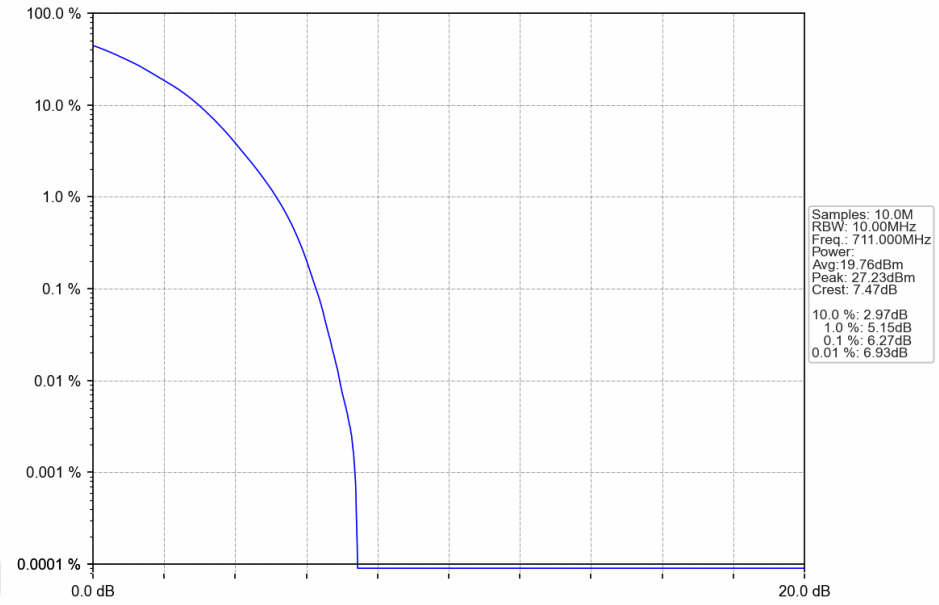
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



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

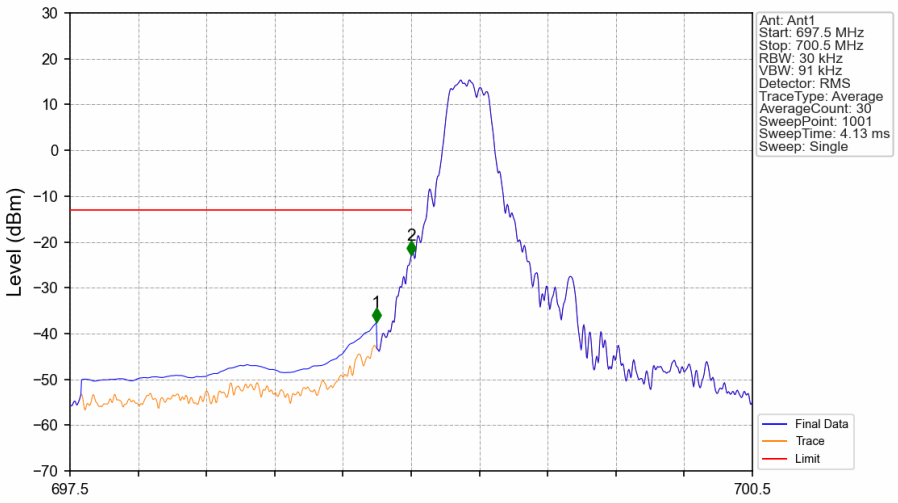
6.1.4 B12_10MHz

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

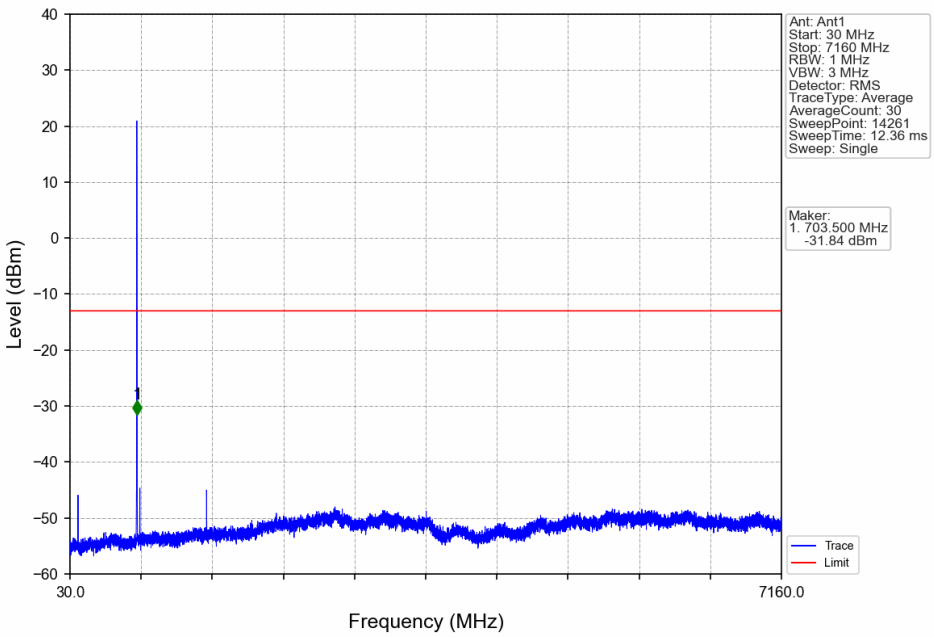
6.2.1 B12_1.4MHz

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

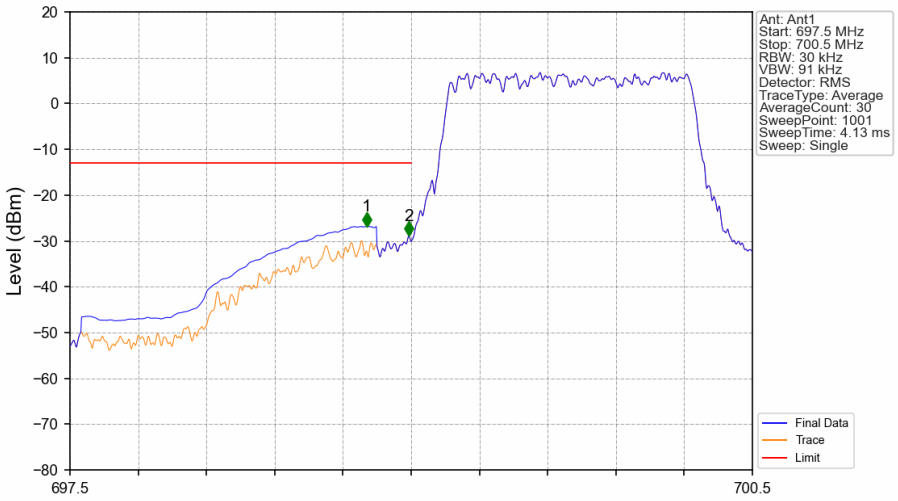


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.847	-37.62	-13	Pass
698.9	699	0.03	/	2	699.000	-22.94	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_1_0_NTNV

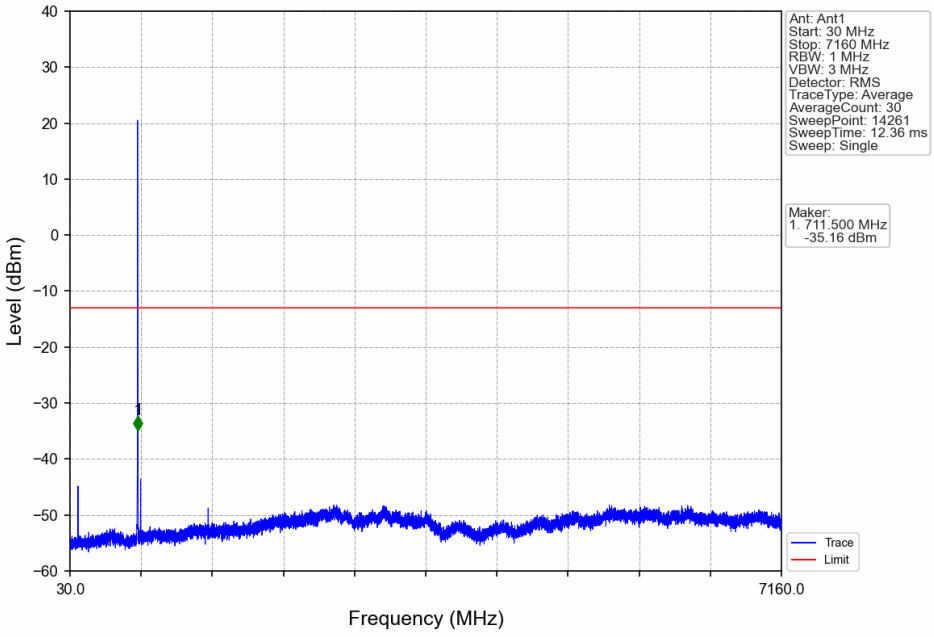


Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV

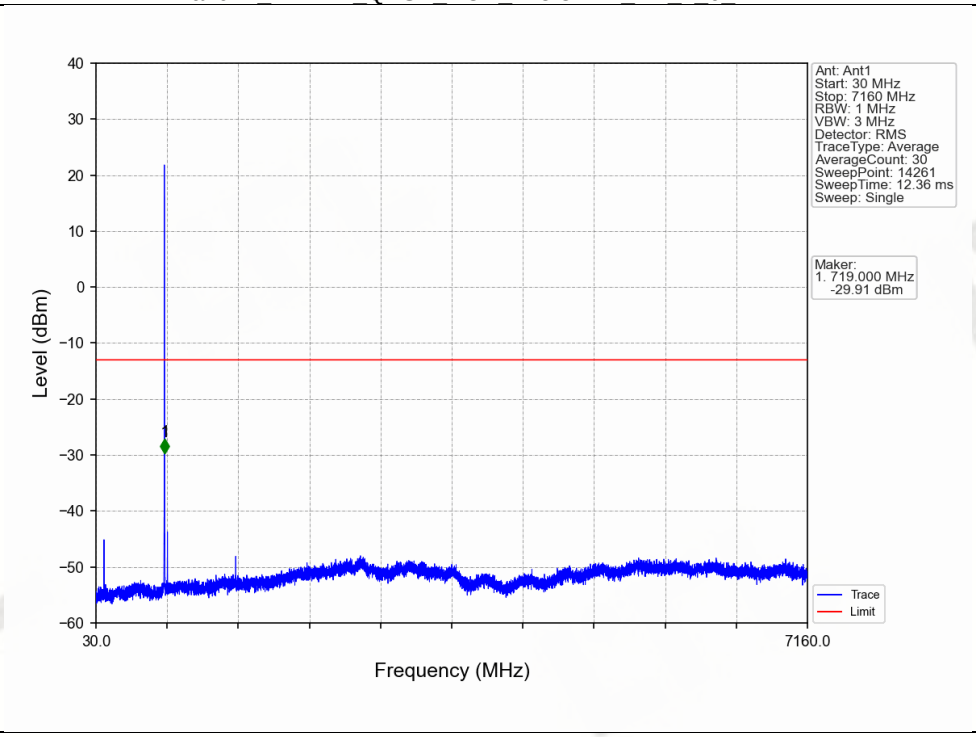


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.805	-26.82	-13	Pass
698.9	699	0.03	/	2	698.991	-28.88	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

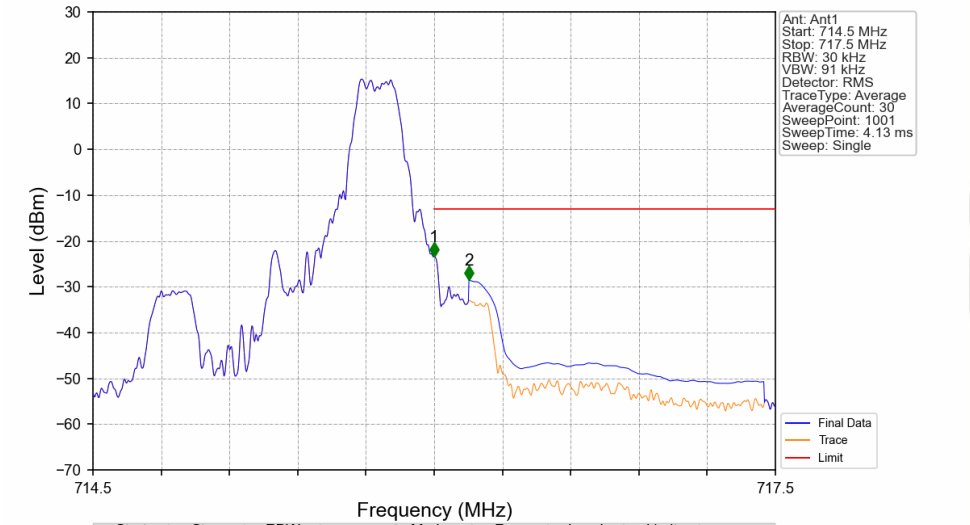
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_0_NTNV

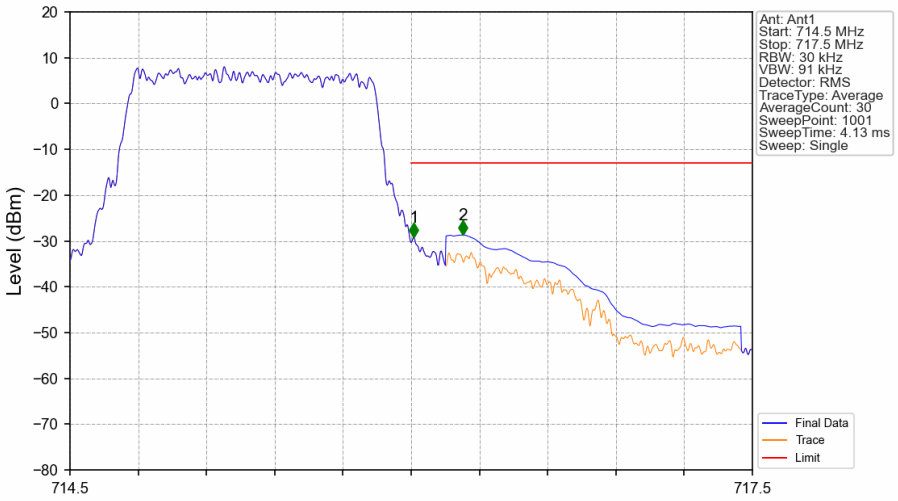


Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_5_NTNV



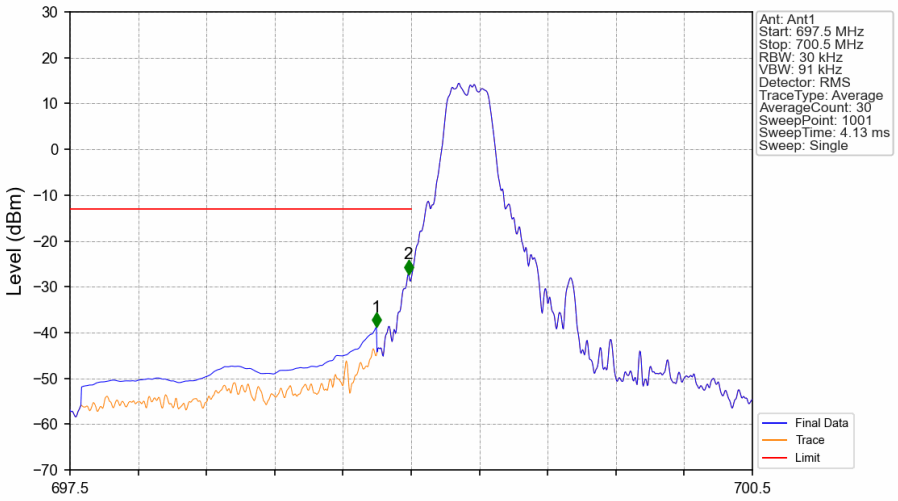
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-23.48	-13	Pass
716.1	717.5	0.1	CHP	2	716.153	-28.55	-13	Pass

Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



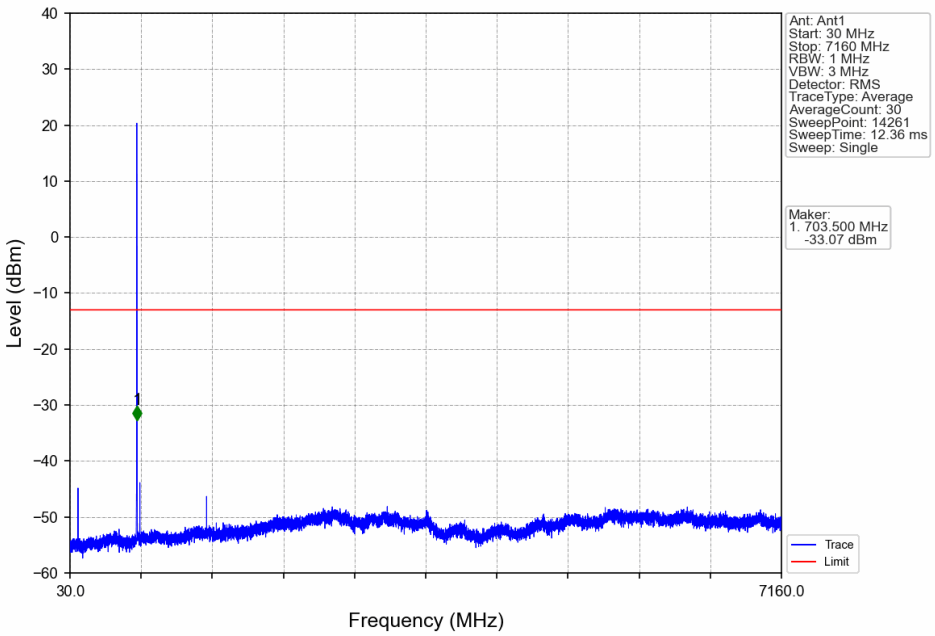
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.012	-29.22	-13	Pass
716.1	717.5	0.1	CHP	2	716.228	-28.71	-13	Pass

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

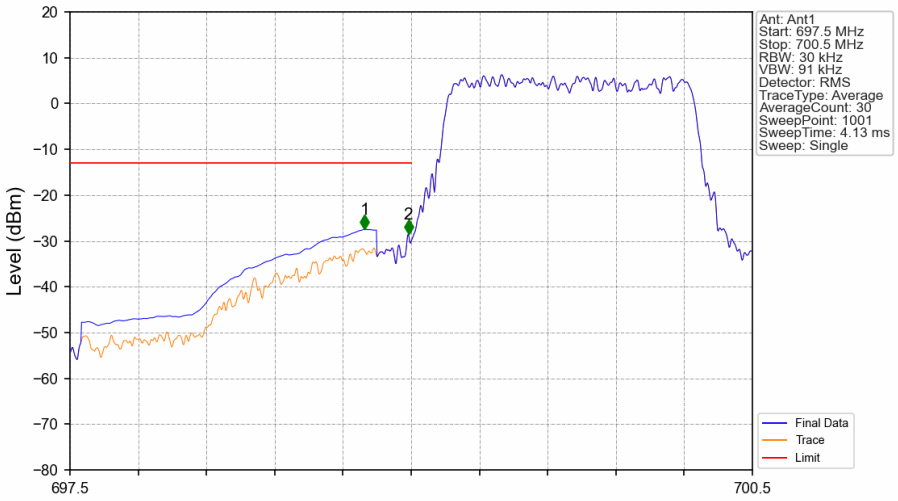


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.847	-38.73	-13	Pass
698.9	699	0.03	/	2	698.988	-27.24	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

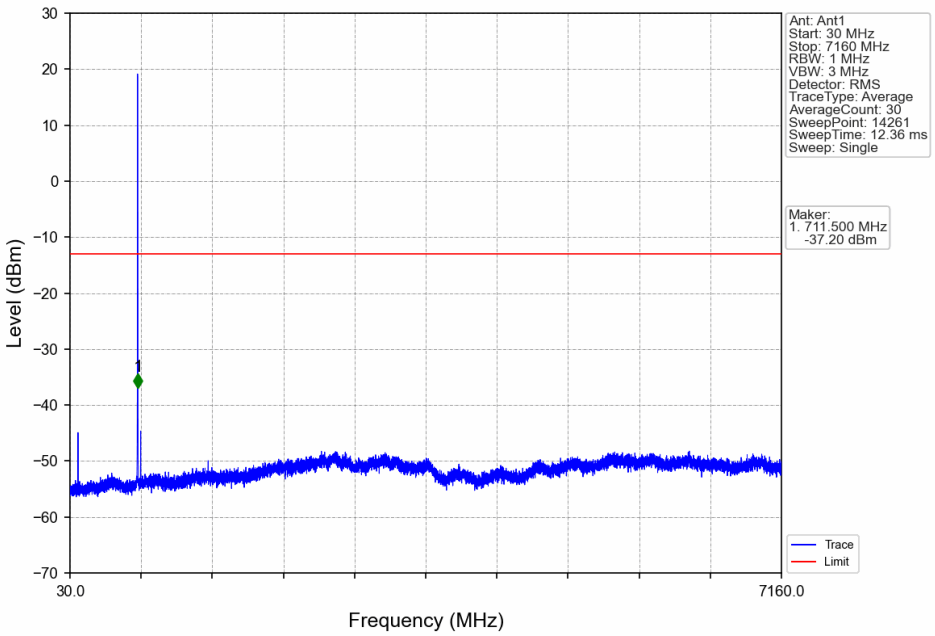


Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.796	-27.48	-13	Pass
698.9	699	0.03	/	2	698.988	-28.58	-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