

1. Effective (Isotropic) Radiated Power Output Data

1.1 B12_1.4MHz_ERP

1.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTN										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	699.7	1	0	22.74	-3.02	17.57	<=34.77	Pass		
			2	22.88	-3.02	17.71	<=34.77	Pass		
			5	22.78	-3.02	17.61	<=34.77	Pass		
		3	0	22.73	-3.02	17.56	<=34.77	Pass		
			2	22.75	-3.02	17.58	<=34.77	Pass		
			3	22.74	-3.02	17.57	<=34.77	Pass		
		6	0	21.78	-3.02	16.61	<=34.77	Pass		
		707.5	1	0	22.69	-3.02	17.52	<=34.77	Pass	
				2	22.80	-3.02	17.63	<=34.77	Pass	
	5			22.73	-3.02	17.56	<=34.77	Pass		
	3		0	22.74	-3.02	17.57	<=34.77	Pass		
			2	22.78	-3.02	17.61	<=34.77	Pass		
			3	22.76	-3.02	17.59	<=34.77	Pass		
	6		0	21.83	-3.02	16.66	<=34.77	Pass		
	715.3		1	0	22.78	-3.02	17.61	<=34.77	Pass	
				2	22.90	-3.02	17.73	<=34.77	Pass	
		5		22.65	-3.02	17.48	<=34.77	Pass		
		3	0	22.33	-3.02	17.16	<=34.77	Pass		
			2	22.39	-3.02	17.22	<=34.77	Pass		
			3	22.30	-3.02	17.13	<=34.77	Pass		
		6	0	21.47	-3.02	16.30	<=34.77	Pass		
		16QAM	699.7	1	0	21.67	-3.02	16.50	<=34.77	Pass
					2	21.72	-3.02	16.55	<=34.77	Pass
	5				21.68	-3.02	16.51	<=34.77	Pass	
	3			0	21.72	-3.02	16.55	<=34.77	Pass	
				2	21.73	-3.02	16.56	<=34.77	Pass	
				3	21.71	-3.02	16.54	<=34.77	Pass	
6	0			20.68	-3.02	15.51	<=34.77	Pass		
707.5	1			0	21.78	-3.02	16.61	<=34.77	Pass	
				2	21.90	-3.02	16.73	<=34.77	Pass	
			5	21.85	-3.02	16.68	<=34.77	Pass		
	3		0	21.68	-3.02	16.51	<=34.77	Pass		
			2	21.71	-3.02	16.54	<=34.77	Pass		
			3	21.72	-3.02	16.55	<=34.77	Pass		
	6		0	20.78	-3.02	15.61	<=34.77	Pass		
	715.3		1	0	21.11	-3.02	15.94	<=34.77	Pass	
				2	21.28	-3.02	16.11	<=34.77	Pass	
5				21.21	-3.02	16.04	<=34.77	Pass		
3			0	21.32	-3.02	16.15	<=34.77	Pass		
			2	21.39	-3.02	16.22	<=34.77	Pass		
			3	21.33	-3.02	16.16	<=34.77	Pass		
6			0	20.28	-3.02	15.11	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.2 B12_3MHz_ERP

1.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	700.5	1	0	22.87	-3.02	17.70	<=34.77	Pass		
			7	23.01	-3.02	17.84	<=34.77	Pass		
			14	22.92	-3.02	17.75	<=34.77	Pass		
		8	0	21.78	-3.02	16.61	<=34.77	Pass		
			4	21.86	-3.02	16.69	<=34.77	Pass		
			7	21.87	-3.02	16.70	<=34.77	Pass		
		15	0	21.78	-3.02	16.61	<=34.77	Pass		
		707.5	1	0	22.84	-3.02	17.67	<=34.77	Pass	
				7	22.87	-3.02	17.70	<=34.77	Pass	
	14			22.48	-3.02	17.31	<=34.77	Pass		
	8		0	21.38	-3.02	16.21	<=34.77	Pass		
			4	21.41	-3.02	16.24	<=34.77	Pass		
			7	21.36	-3.02	16.19	<=34.77	Pass		
	15		0	21.34	-3.02	16.17	<=34.77	Pass		
	714.5		1	0	22.97	-3.02	17.80	<=34.77	Pass	
				7	22.46	-3.02	17.29	<=34.77	Pass	
		14		22.35	-3.02	17.18	<=34.77	Pass		
		8	0	21.35	-3.02	16.18	<=34.77	Pass		
			4	21.41	-3.02	16.24	<=34.77	Pass		
			7	21.36	-3.02	16.19	<=34.77	Pass		
		15	0	21.25	-3.02	16.08	<=34.77	Pass		
		16QAM	700.5	1	0	21.76	-3.02	16.59	<=34.77	Pass
					7	21.89	-3.02	16.72	<=34.77	Pass
	14				21.73	-3.02	16.56	<=34.77	Pass	
	8			0	20.79	-3.02	15.62	<=34.77	Pass	
				4	20.86	-3.02	15.69	<=34.77	Pass	
				7	20.83	-3.02	15.66	<=34.77	Pass	
15	0			20.76	-3.02	15.59	<=34.77	Pass		
707.5	1			0	21.43	-3.02	16.26	<=34.77	Pass	
				7	21.59	-3.02	16.42	<=34.77	Pass	
			14	21.46	-3.02	16.29	<=34.77	Pass		
	8		0	20.32	-3.02	15.15	<=34.77	Pass		
			4	20.36	-3.02	15.19	<=34.77	Pass		
			7	20.41	-3.02	15.24	<=34.77	Pass		
	15		0	20.30	-3.02	15.13	<=34.77	Pass		
	714.5		1	0	21.64	-3.02	16.47	<=34.77	Pass	
				7	21.70	-3.02	16.53	<=34.77	Pass	
14				21.61	-3.02	16.44	<=34.77	Pass		
8			0	20.36	-3.02	15.19	<=34.77	Pass		
			4	20.44	-3.02	15.27	<=34.77	Pass		
			7	20.39	-3.02	15.22	<=34.77	Pass		
15			0	20.23	-3.02	15.06	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.3 B12_5MHz_ERP

1.3.1 Test Result

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	22.61	-3.02	17.44	<=34.77	Pass		
			13	22.79	-3.02	17.62	<=34.77	Pass		
			24	22.72	-3.02	17.55	<=34.77	Pass		
		12	0	21.61	-3.02	16.44	<=34.77	Pass		
			6	21.71	-3.02	16.54	<=34.77	Pass		
			13	21.72	-3.02	16.55	<=34.77	Pass		
		25	0	21.68	-3.02	16.51	<=34.77	Pass		
		707.5	1	0	22.64	-3.02	17.47	<=34.77	Pass	
				13	22.67	-3.02	17.50	<=34.77	Pass	
	24			22.27	-3.02	17.10	<=34.77	Pass		
	12		0	21.20	-3.02	16.03	<=34.77	Pass		
			6	21.26	-3.02	16.09	<=34.77	Pass		
			13	21.10	-3.02	15.93	<=34.77	Pass		
	25		0	21.17	-3.02	16.00	<=34.77	Pass		
	713.5		1	0	22.51	-3.02	17.34	<=34.77	Pass	
				13	22.35	-3.02	17.18	<=34.77	Pass	
		24		22.18	-3.02	17.01	<=34.77	Pass		
		12	0	21.12	-3.02	15.95	<=34.77	Pass		
			6	21.19	-3.02	16.02	<=34.77	Pass		
			13	21.16	-3.02	15.99	<=34.77	Pass		
		25	0	21.16	-3.02	15.99	<=34.77	Pass		
		16QAM	701.5	1	0	21.63	-3.02	16.46	<=34.77	Pass
					13	21.72	-3.02	16.55	<=34.77	Pass
	24				21.63	-3.02	16.46	<=34.77	Pass	
12	0			20.55	-3.02	15.38	<=34.77	Pass		
	6			20.68	-3.02	15.51	<=34.77	Pass		
	13			20.67	-3.02	15.50	<=34.77	Pass		
25	0			20.60	-3.02	15.43	<=34.77	Pass		
707.5	1			0	21.30	-3.02	16.13	<=34.77	Pass	
				13	21.44	-3.02	16.27	<=34.77	Pass	
			24	21.37	-3.02	16.20	<=34.77	Pass		
	12		0	20.25	-3.02	15.08	<=34.77	Pass		
			6	20.31	-3.02	15.14	<=34.77	Pass		
			13	20.17	-3.02	15.00	<=34.77	Pass		
	25		0	20.16	-3.02	14.99	<=34.77	Pass		
	713.5		1	0	20.95	-3.02	15.78	<=34.77	Pass	
				13	21.01	-3.02	15.84	<=34.77	Pass	
24				20.94	-3.02	15.77	<=34.77	Pass		
12			0	20.14	-3.02	14.97	<=34.77	Pass		
			6	20.18	-3.02	15.01	<=34.77	Pass		
			13	20.11	-3.02	14.94	<=34.77	Pass		
25			0	20.15	-3.02	14.98	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.4 B12_10MHz_ERP

1.4.1 Test Result

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	22.69	-3.02	17.52	<=34.77	Pass		
			25	23.01	-3.02	17.84	<=34.77	Pass		
			49	22.79	-3.02	17.62	<=34.77	Pass		
		25	0	21.58	-3.02	16.41	<=34.77	Pass		
			13	21.77	-3.02	16.60	<=34.77	Pass		
			25	21.69	-3.02	16.52	<=34.77	Pass		
		50	0	21.61	-3.02	16.44	<=34.77	Pass		
		707.5	1	0	22.68	-3.02	17.51	<=34.77	Pass	
				25	22.85	-3.02	17.68	<=34.77	Pass	
	49			22.31	-3.02	17.14	<=34.77	Pass		
	25		0	21.25	-3.02	16.08	<=34.77	Pass		
			13	21.30	-3.02	16.13	<=34.77	Pass		
			25	21.20	-3.02	16.03	<=34.77	Pass		
	50		0	21.24	-3.02	16.07	<=34.77	Pass		
	711		1	0	22.60	-3.02	17.43	<=34.77	Pass	
				25	22.48	-3.02	17.31	<=34.77	Pass	
		49		22.34	-3.02	17.17	<=34.77	Pass		
		25	0	21.44	-3.02	16.27	<=34.77	Pass		
			13	21.30	-3.02	16.13	<=34.77	Pass		
			25	21.39	-3.02	16.22	<=34.77	Pass		
		50	0	21.41	-3.02	16.24	<=34.77	Pass		
		16QAM	704	1	0	21.57	-3.02	16.40	<=34.77	Pass
					25	21.71	-3.02	16.54	<=34.77	Pass
	49				21.65	-3.02	16.48	<=34.77	Pass	
25	0			20.41	-3.02	15.24	<=34.77	Pass		
	13			20.65	-3.02	15.48	<=34.77	Pass		
	25			20.74	-3.02	15.57	<=34.77	Pass		
50	0			20.61	-3.02	15.44	<=34.77	Pass		
707.5	1			0	21.22	-3.02	16.05	<=34.77	Pass	
				25	21.52	-3.02	16.35	<=34.77	Pass	
			49	21.30	-3.02	16.13	<=34.77	Pass		
	25		0	20.24	-3.02	15.07	<=34.77	Pass		
			13	20.30	-3.02	15.13	<=34.77	Pass		
			25	20.20	-3.02	15.03	<=34.77	Pass		
	50		0	20.22	-3.02	15.05	<=34.77	Pass		
	711		1	0	21.65	-3.02	16.48	<=34.77	Pass	
				25	21.82	-3.02	16.65	<=34.77	Pass	
49				21.58	-3.02	16.41	<=34.77	Pass		
25			0	20.46	-3.02	15.29	<=34.77	Pass		
			13	20.33	-3.02	15.16	<=34.77	Pass		
			25	20.37	-3.02	15.20	<=34.77	Pass		
50			0	20.40	-3.02	15.23	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 B12_1.4MHz

2.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	699.7	6	0	20	3.27	16.923	0.0242	-2.5 to 2.5	Pass
					3.85	-2.618	-0.0037	-2.5 to 2.5	Pass
					4.43	-7.124	-0.0102	-2.5 to 2.5	Pass
				-30	3.85	-7.782	-0.0111	-2.5 to 2.5	Pass
				-20	3.85	-0.572	-0.0008	-2.5 to 2.5	Pass
				-10	3.85	-2.375	-0.0034	-2.5 to 2.5	Pass
				0	3.85	-8.540	-0.0122	-2.5 to 2.5	Pass
				10	3.85	-6.824	-0.0098	-2.5 to 2.5	Pass
				30	3.85	-2.289	-0.0033	-2.5 to 2.5	Pass
	40	3.85	-9.313	-0.0133	-2.5 to 2.5	Pass			
	50	3.85	-6.466	-0.0092	-2.5 to 2.5	Pass			
	707.5	6	0	20	3.27	-15.993	-0.0226	-2.5 to 2.5	Pass
					3.85	-1.688	-0.0024	-2.5 to 2.5	Pass
					4.43	-8.211	-0.0116	-2.5 to 2.5	Pass
				-30	3.85	-6.437	-0.0091	-2.5 to 2.5	Pass
				-20	3.85	-7.110	-0.0100	-2.5 to 2.5	Pass
				-10	3.85	-5.536	-0.0078	-2.5 to 2.5	Pass
				0	3.85	-5.851	-0.0083	-2.5 to 2.5	Pass
				10	3.85	-7.753	-0.0110	-2.5 to 2.5	Pass
				30	3.85	-5.722	-0.0081	-2.5 to 2.5	Pass
	40	3.85	-8.626	-0.0122	-2.5 to 2.5	Pass			
	50	3.85	-4.463	-0.0063	-2.5 to 2.5	Pass			
	715.3	6	0	20	3.27	-4.835	-0.0068	-2.5 to 2.5	Pass
					3.85	-3.018	-0.0042	-2.5 to 2.5	Pass
					4.43	-4.864	-0.0068	-2.5 to 2.5	Pass
				-30	3.85	-8.869	-0.0124	-2.5 to 2.5	Pass
				-20	3.85	0.558	0.0008	-2.5 to 2.5	Pass
-10				3.85	-4.334	-0.0061	-2.5 to 2.5	Pass	
0				3.85	-1.087	-0.0015	-2.5 to 2.5	Pass	
10				3.85	-2.546	-0.0036	-2.5 to 2.5	Pass	
30				3.85	-5.665	-0.0079	-2.5 to 2.5	Pass	
40	3.85	-3.247	-0.0045	-2.5 to 2.5	Pass				
50	3.85	-9.227	-0.0129	-2.5 to 2.5	Pass				
16QAM	699.7	6	0	20	3.27	-3.204	-0.0046	-2.5 to 2.5	Pass
					3.85	-6.051	-0.0086	-2.5 to 2.5	Pass
					4.43	-9.456	-0.0135	-2.5 to 2.5	Pass
				-30	3.85	-9.356	-0.0134	-2.5 to 2.5	Pass
				-20	3.85	-7.968	-0.0114	-2.5 to 2.5	Pass
				-10	3.85	-5.293	-0.0076	-2.5 to 2.5	Pass
				0	3.85	-2.832	-0.0040	-2.5 to 2.5	Pass
				10	3.85	1.302	0.0019	-2.5 to 2.5	Pass
				30	3.85	0.172	0.0002	-2.5 to 2.5	Pass
	40	3.85	-4.950	-0.0071	-2.5 to 2.5	Pass			
	50	3.85	-2.990	-0.0043	-2.5 to 2.5	Pass			
	707.5	6	0	20	3.27	-6.938	-0.0098	-2.5 to 2.5	Pass
					3.85	-4.735	-0.0067	-2.5 to 2.5	Pass
					4.43	-7.167	-0.0101	-2.5 to 2.5	Pass
				-30	3.85	-4.635	-0.0066	-2.5 to 2.5	Pass
				-20	3.85	-4.249	-0.0060	-2.5 to 2.5	Pass
				-10	3.85	-3.161	-0.0045	-2.5 to 2.5	Pass
				0	3.85	-4.048	-0.0057	-2.5 to 2.5	Pass
10				3.85	-2.775	-0.0039	-2.5 to 2.5	Pass	

				30	3.85	-4.048	-0.0057	-2.5 to 2.5	Pass
				40	3.85	-6.194	-0.0088	-2.5 to 2.5	Pass
				50	3.85	-8.211	-0.0116	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	-5.951	-0.0083	-2.5 to 2.5	Pass
					3.85	-7.195	-0.0101	-2.5 to 2.5	Pass
					4.43	-2.131	-0.0030	-2.5 to 2.5	Pass
				-30	3.85	-3.734	-0.0052	-2.5 to 2.5	Pass
				-20	3.85	-10.257	-0.0143	-2.5 to 2.5	Pass
				-10	3.85	-6.537	-0.0091	-2.5 to 2.5	Pass
				0	3.85	-9.584	-0.0134	-2.5 to 2.5	Pass
				10	3.85	-5.651	-0.0079	-2.5 to 2.5	Pass
				30	3.85	-8.826	-0.0123	-2.5 to 2.5	Pass
				40	3.85	-6.022	-0.0084	-2.5 to 2.5	Pass
				50	3.85	-6.981	-0.0098	-2.5 to 2.5	Pass

2.2 B12_3MHz

2.2.1 Test Result

Band: 12 / Bandwidth: 3MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	700.5	15	0	20	3.27	-11.272	-0.0161	-2.5 to 2.5	Pass
					3.85	-6.452	-0.0092	-2.5 to 2.5	Pass
					4.43	-8.726	-0.0125	-2.5 to 2.5	Pass
				-30	3.85	-7.768	-0.0111	-2.5 to 2.5	Pass
				-20	3.85	-2.189	-0.0031	-2.5 to 2.5	Pass
				-10	3.85	-10.328	-0.0147	-2.5 to 2.5	Pass
				0	3.85	-7.896	-0.0113	-2.5 to 2.5	Pass
				10	3.85	-6.495	-0.0093	-2.5 to 2.5	Pass
				30	3.85	-7.868	-0.0112	-2.5 to 2.5	Pass
				40	3.85	-9.456	-0.0135	-2.5 to 2.5	Pass
				50	3.85	-8.497	-0.0121	-2.5 to 2.5	Pass
				707.5	15	0	20	3.27	-4.606
	3.85	-5.851	-0.0083					-2.5 to 2.5	Pass
	4.43	-2.718	-0.0038					-2.5 to 2.5	Pass
	-30	3.85	-4.091				-0.0058	-2.5 to 2.5	Pass
	-20	3.85	-9.885				-0.0140	-2.5 to 2.5	Pass
	-10	3.85	-9.041				-0.0128	-2.5 to 2.5	Pass
	0	3.85	-9.742				-0.0138	-2.5 to 2.5	Pass
	10	3.85	-5.665				-0.0080	-2.5 to 2.5	Pass
	30	3.85	-0.329				-0.0005	-2.5 to 2.5	Pass
	40	3.85	-5.236				-0.0074	-2.5 to 2.5	Pass
	50	3.85	-10.872				-0.0154	-2.5 to 2.5	Pass
	714.5	15	0				20	3.27	-6.166
				3.85	-6.638	-0.0093		-2.5 to 2.5	Pass
				4.43	-10.343	-0.0145		-2.5 to 2.5	Pass
				-30	3.85	-9.999	-0.0140	-2.5 to 2.5	Pass
				-20	3.85	-3.161	-0.0044	-2.5 to 2.5	Pass
				-10	3.85	-6.266	-0.0088	-2.5 to 2.5	Pass
				0	3.85	-7.124	-0.0100	-2.5 to 2.5	Pass
				10	3.85	-4.334	-0.0061	-2.5 to 2.5	Pass

				30	3.85	-11.358	-0.0159	-2.5 to 2.5	Pass
				40	3.85	-1.473	-0.0021	-2.5 to 2.5	Pass
				50	3.85	-4.420	-0.0062	-2.5 to 2.5	Pass
16QAM	700.5	15	0	20	3.27	-9.155	-0.0131	-2.5 to 2.5	Pass
					3.85	-8.197	-0.0117	-2.5 to 2.5	Pass
					4.43	-9.284	-0.0133	-2.5 to 2.5	Pass
				-30	3.85	-9.027	-0.0129	-2.5 to 2.5	Pass
				-20	3.85	-10.014	-0.0143	-2.5 to 2.5	Pass
				-10	3.85	-4.406	-0.0063	-2.5 to 2.5	Pass
				0	3.85	-4.406	-0.0063	-2.5 to 2.5	Pass
				10	3.85	-7.854	-0.0112	-2.5 to 2.5	Pass
				30	3.85	-5.822	-0.0083	-2.5 to 2.5	Pass
				40	3.85	-9.856	-0.0141	-2.5 to 2.5	Pass
	50	3.85	-10.142	-0.0145	-2.5 to 2.5	Pass			
	707.5	15	0	20	3.27	-6.208	-0.0088	-2.5 to 2.5	Pass
					3.85	-3.948	-0.0056	-2.5 to 2.5	Pass
					4.43	-6.537	-0.0092	-2.5 to 2.5	Pass
				-30	3.85	-2.947	-0.0042	-2.5 to 2.5	Pass
				-20	3.85	-9.084	-0.0128	-2.5 to 2.5	Pass
				-10	3.85	-7.181	-0.0101	-2.5 to 2.5	Pass
				0	3.85	-5.665	-0.0080	-2.5 to 2.5	Pass
				10	3.85	-5.579	-0.0079	-2.5 to 2.5	Pass
				30	3.85	-6.824	-0.0096	-2.5 to 2.5	Pass
				40	3.85	-3.119	-0.0044	-2.5 to 2.5	Pass
	50	3.85	-1.144	-0.0016	-2.5 to 2.5	Pass			
	714.5	15	0	20	3.27	-5.994	-0.0084	-2.5 to 2.5	Pass
					3.85	-4.249	-0.0059	-2.5 to 2.5	Pass
					4.43	-8.869	-0.0124	-2.5 to 2.5	Pass
				-30	3.85	-5.879	-0.0082	-2.5 to 2.5	Pass
				-20	3.85	-5.407	-0.0076	-2.5 to 2.5	Pass
				-10	3.85	-4.234	-0.0059	-2.5 to 2.5	Pass
				0	3.85	-6.895	-0.0097	-2.5 to 2.5	Pass
				10	3.85	-8.025	-0.0112	-2.5 to 2.5	Pass
30				3.85	-9.141	-0.0128	-2.5 to 2.5	Pass	
40				3.85	-3.619	-0.0051	-2.5 to 2.5	Pass	
50	3.85	-6.480	-0.0091	-2.5 to 2.5	Pass				

2.3 B12_5MHz

2.3.1 Test Result

Band: 12 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	701.5	25	0	20	3.27	-8.454	-0.0121	-2.5 to 2.5	Pass
					3.85	-8.454	-0.0121	-2.5 to 2.5	Pass
					4.43	-2.632	-0.0038	-2.5 to 2.5	Pass
				-30	3.85	-8.669	-0.0124	-2.5 to 2.5	Pass
				-20	3.85	-6.437	-0.0092	-2.5 to 2.5	Pass
				-10	3.85	-4.091	-0.0058	-2.5 to 2.5	Pass
				0	3.85	-4.120	-0.0059	-2.5 to 2.5	Pass
				10	3.85	-9.084	-0.0129	-2.5 to 2.5	Pass

	707.5	25	0	30	3.85	-2.947	-0.0042	-2.5 to 2.5	Pass				
				40	3.85	-8.025	-0.0114	-2.5 to 2.5	Pass				
				50	3.85	-8.984	-0.0128	-2.5 to 2.5	Pass				
				20	3.27	-2.832	-0.0040	-2.5 to 2.5	Pass				
					3.85	-8.082	-0.0114	-2.5 to 2.5	Pass				
					4.43	-8.669	-0.0123	-2.5 to 2.5	Pass				
				-30	3.85	-5.136	-0.0073	-2.5 to 2.5	Pass				
				-20	3.85	-2.718	-0.0038	-2.5 to 2.5	Pass				
				-10	3.85	-8.011	-0.0113	-2.5 to 2.5	Pass				
				0	3.85	-3.719	-0.0053	-2.5 to 2.5	Pass				
				10	3.85	-5.450	-0.0077	-2.5 to 2.5	Pass				
				30	3.85	-4.735	-0.0067	-2.5 to 2.5	Pass				
				40	3.85	-5.164	-0.0073	-2.5 to 2.5	Pass				
				50	3.85	-4.120	-0.0058	-2.5 to 2.5	Pass				
				713.5	25	0	20	3.27	-5.422	-0.0076	-2.5 to 2.5	Pass	
	3.85	-8.726	-0.0122					-2.5 to 2.5	Pass				
	4.43	-5.794	-0.0081					-2.5 to 2.5	Pass				
	-30	3.85	-7.725				-0.0108	-2.5 to 2.5	Pass				
	-20	3.85	-5.794				-0.0081	-2.5 to 2.5	Pass				
	-10	3.85	-5.436				-0.0076	-2.5 to 2.5	Pass				
	0	3.85	-6.008				-0.0084	-2.5 to 2.5	Pass				
	10	3.85	-4.907				-0.0069	-2.5 to 2.5	Pass				
	30	3.85	-3.262				-0.0046	-2.5 to 2.5	Pass				
	40	3.85	-4.964				-0.0070	-2.5 to 2.5	Pass				
	50	3.85	-5.093				-0.0071	-2.5 to 2.5	Pass				
	16QAM	701.5	25				0	20	3.27	-7.038	-0.0100	-2.5 to 2.5	Pass
									3.85	-8.254	-0.0118	-2.5 to 2.5	Pass
									4.43	-6.080	-0.0087	-2.5 to 2.5	Pass
								-30	3.85	-9.584	-0.0137	-2.5 to 2.5	Pass
				-20	3.85	-7.296		-0.0104	-2.5 to 2.5	Pass			
-10				3.85	-4.807	-0.0069		-2.5 to 2.5	Pass				
0				3.85	-10.715	-0.0153		-2.5 to 2.5	Pass				
10				3.85	-7.296	-0.0104		-2.5 to 2.5	Pass				
30				3.85	-1.917	-0.0027		-2.5 to 2.5	Pass				
40				3.85	-8.554	-0.0122		-2.5 to 2.5	Pass				
50				3.85	-5.679	-0.0081		-2.5 to 2.5	Pass				
707.5				25	0	20		3.27	-5.121	-0.0072	-2.5 to 2.5	Pass	
								3.85	-8.283	-0.0117	-2.5 to 2.5	Pass	
								4.43	-9.384	-0.0133	-2.5 to 2.5	Pass	
						-30		3.85	-3.076	-0.0043	-2.5 to 2.5	Pass	
		-20	3.85			-4.077	-0.0058	-2.5 to 2.5	Pass				
		-10	3.85			-8.898	-0.0126	-2.5 to 2.5	Pass				
		0	3.85			-4.692	-0.0066	-2.5 to 2.5	Pass				
		10	3.85			-5.579	-0.0079	-2.5 to 2.5	Pass				
		30	3.85			-4.563	-0.0064	-2.5 to 2.5	Pass				
		40	3.85			-5.779	-0.0082	-2.5 to 2.5	Pass				
		50	3.85			-8.082	-0.0114	-2.5 to 2.5	Pass				
		713.5	25			0	20	3.27	-7.710	-0.0108	-2.5 to 2.5	Pass	
								3.85	-5.479	-0.0077	-2.5 to 2.5	Pass	
								4.43	-8.154	-0.0114	-2.5 to 2.5	Pass	
							-30	3.85	-6.981	-0.0098	-2.5 to 2.5	Pass	
-20				3.85	-9.813		-0.0138	-2.5 to 2.5	Pass				
-10				3.85	-7.081		-0.0099	-2.5 to 2.5	Pass				
0				3.85	-8.540		-0.0120	-2.5 to 2.5	Pass				
10				3.85	-4.578		-0.0064	-2.5 to 2.5	Pass				

				30	3.85	-3.576	-0.0050	-2.5 to 2.5	Pass
				40	3.85	-6.123	-0.0086	-2.5 to 2.5	Pass
				50	3.85	-7.782	-0.0109	-2.5 to 2.5	Pass

2.4 B12_10MHz

2.4.1 Test Result

Band: 12 / Bandwidth: 10MHz										
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict	
		Size	Offset				Result	Limit		
QPSK	704	50	0	20	3.27	3.27	-5.364	-0.0076	-2.5 to 2.5	
					3.85	3.85	-6.752	-0.0096	-2.5 to 2.5	
					4.43	4.43	-5.822	-0.0083	-2.5 to 2.5	
				-30	3.85	3.85	-5.465	-0.0078	-2.5 to 2.5	
					-20	3.85	3.85	-5.808	-0.0083	-2.5 to 2.5
						-10	3.85	3.85	-6.223	-0.0088
				0	3.85	3.85	-3.576	-0.0051	-2.5 to 2.5	
					10	3.85	3.85	-8.154	-0.0116	-2.5 to 2.5
					30	3.85	3.85	-6.037	-0.0086	-2.5 to 2.5
	40	3.85	3.85		-6.609	-0.0094	-2.5 to 2.5			
	50	3.85	3.85		-4.935	-0.0070	-2.5 to 2.5			
	707.5	50	0	20	3.27	3.27	-1.059	-0.0015	-2.5 to 2.5	
					3.85	3.85	-2.661	-0.0038	-2.5 to 2.5	
					4.43	4.43	-5.350	-0.0076	-2.5 to 2.5	
				-30	3.85	3.85	-3.791	-0.0054	-2.5 to 2.5	
					-20	3.85	3.85	-4.821	-0.0068	-2.5 to 2.5
						-10	3.85	3.85	-4.120	-0.0058
				0	3.85	3.85	-5.765	-0.0081	-2.5 to 2.5	
					10	3.85	3.85	-7.396	-0.0105	-2.5 to 2.5
					30	3.85	3.85	-5.593	-0.0079	-2.5 to 2.5
	40	3.85	3.85		-4.392	-0.0062	-2.5 to 2.5			
	50	3.85	3.85		-4.678	-0.0066	-2.5 to 2.5			
	711	50	0	20	3.27	3.27	-4.478	-0.0063	-2.5 to 2.5	
					3.85	3.85	-10.028	-0.0141	-2.5 to 2.5	
					4.43	4.43	-8.039	-0.0113	-2.5 to 2.5	
				-30	3.85	3.85	-9.241	-0.0130	-2.5 to 2.5	
					-20	3.85	3.85	-9.484	-0.0133	-2.5 to 2.5
-10						3.85	3.85	-9.127	-0.0128	-2.5 to 2.5
0				3.85	3.85	-4.907	-0.0069	-2.5 to 2.5		
				10	3.85	3.85	-8.411	-0.0118	-2.5 to 2.5	
				30	3.85	3.85	-8.039	-0.0113	-2.5 to 2.5	
	40	3.85	3.85	-7.124	-0.0100	-2.5 to 2.5				
	50	3.85	3.85	-7.954	-0.0112	-2.5 to 2.5				
16QAM	704	50	0	20	3.27	3.27	-8.168	-0.0116	-2.5 to 2.5	
					3.85	3.85	-5.608	-0.0080	-2.5 to 2.5	
					4.43	4.43	-4.535	-0.0064	-2.5 to 2.5	
				-30	3.85	3.85	-2.103	-0.0030	-2.5 to 2.5	
					-20	3.85	3.85	-5.851	-0.0083	-2.5 to 2.5
				-10	3.85	3.85	-5.565	-0.0079	-2.5 to 2.5	
0	3.85	3.85	-7.739	-0.0110	-2.5 to 2.5					
10	3.85	3.85	-4.163	-0.0059	-2.5 to 2.5					

	707.5	50	0	30	3.85	3.85	-3.963	-0.0056	-2.5 to 2.5
				40	3.85	3.85	-7.453	-0.0106	-2.5 to 2.5
				50	3.85	3.85	-7.911	-0.0112	-2.5 to 2.5
				20	3.27	3.27	-6.452	-0.0091	-2.5 to 2.5
					3.85	3.85	-2.789	-0.0039	-2.5 to 2.5
					4.43	4.43	-7.238	-0.0102	-2.5 to 2.5
				-30	3.85	3.85	-3.991	-0.0056	-2.5 to 2.5
				-20	3.85	3.85	-6.351	-0.0090	-2.5 to 2.5
				-10	3.85	3.85	-5.107	-0.0072	-2.5 to 2.5
				0	3.85	3.85	-5.307	-0.0075	-2.5 to 2.5
	10	3.85	3.85	-6.781	-0.0096	-2.5 to 2.5			
	30	3.85	3.85	-5.636	-0.0080	-2.5 to 2.5			
	40	3.85	3.85	-3.290	-0.0047	-2.5 to 2.5			
	50	3.85	3.85	-3.619	-0.0051	-2.5 to 2.5			
	711	50	0	20	3.27	3.27	-2.632	-0.0037	-2.5 to 2.5
					3.85	3.85	-4.663	-0.0066	-2.5 to 2.5
					4.43	4.43	-9.313	-0.0131	-2.5 to 2.5
				-30	3.85	3.85	-9.098	-0.0128	-2.5 to 2.5
				-20	3.85	3.85	-6.952	-0.0098	-2.5 to 2.5
				-10	3.85	3.85	-7.253	-0.0102	-2.5 to 2.5
0				3.85	3.85	-7.482	-0.0105	-2.5 to 2.5	
10				3.85	3.85	-5.536	-0.0078	-2.5 to 2.5	
30				3.85	3.85	-8.712	-0.0123	-2.5 to 2.5	
40				3.85	3.85	-7.725	-0.0109	-2.5 to 2.5	
50	3.85	3.85	-5.164	-0.0073	-2.5 to 2.5				

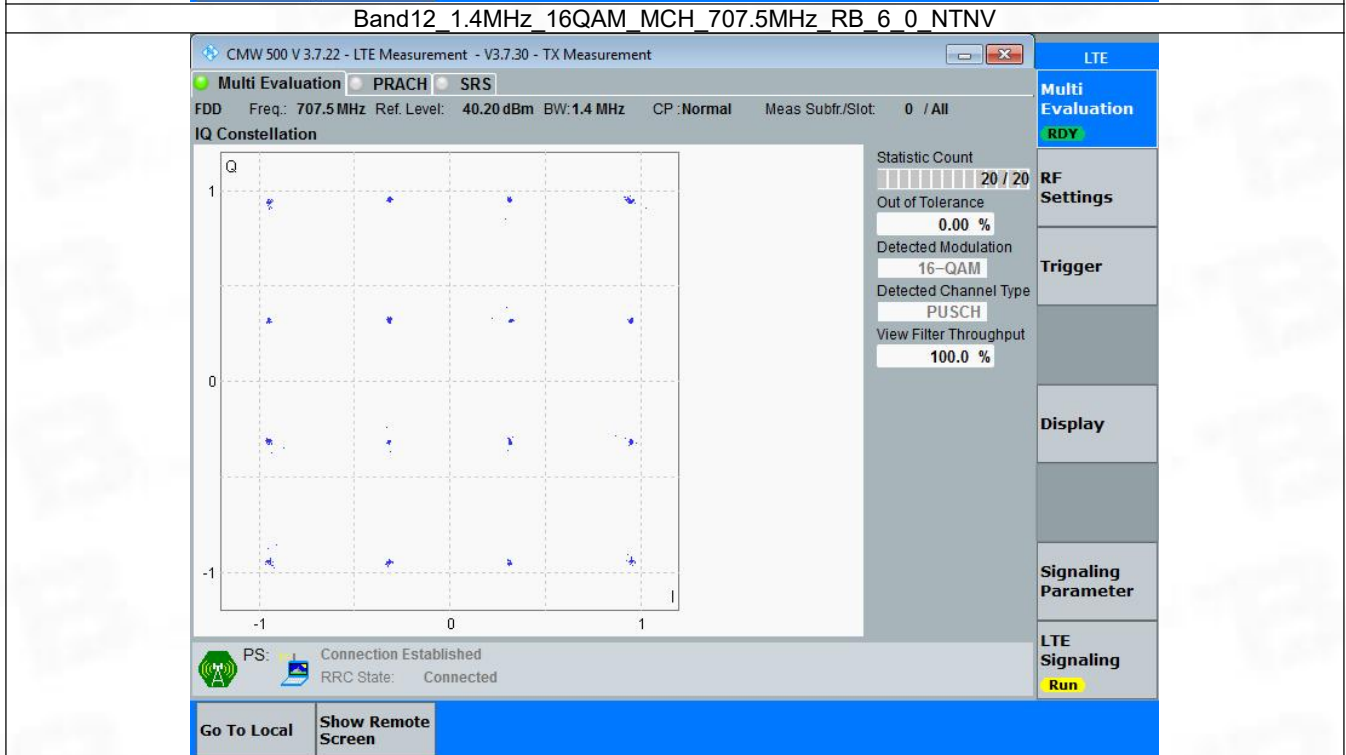
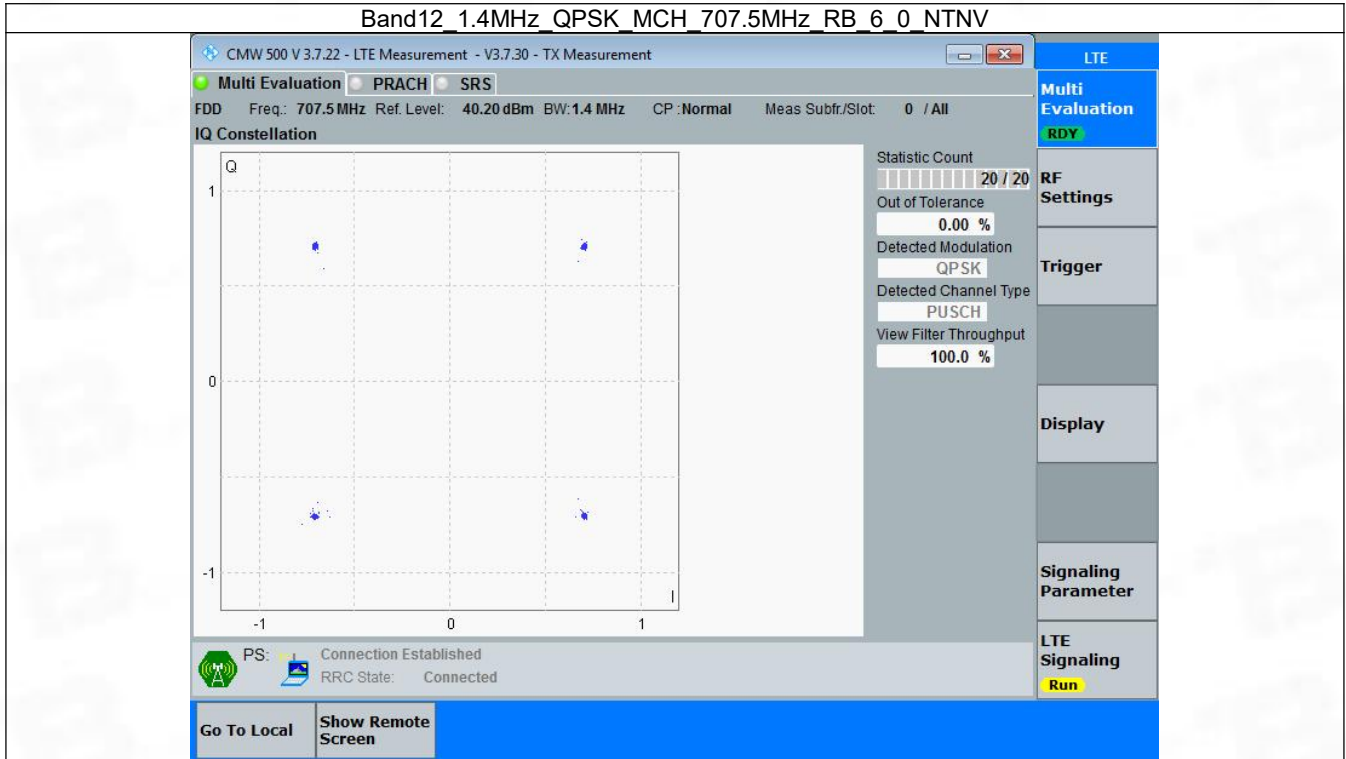
3. Modulation Characteristics

3.1 B12_1.4MHz

3.1.1 Test Result

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

3.1.2 Test Graph

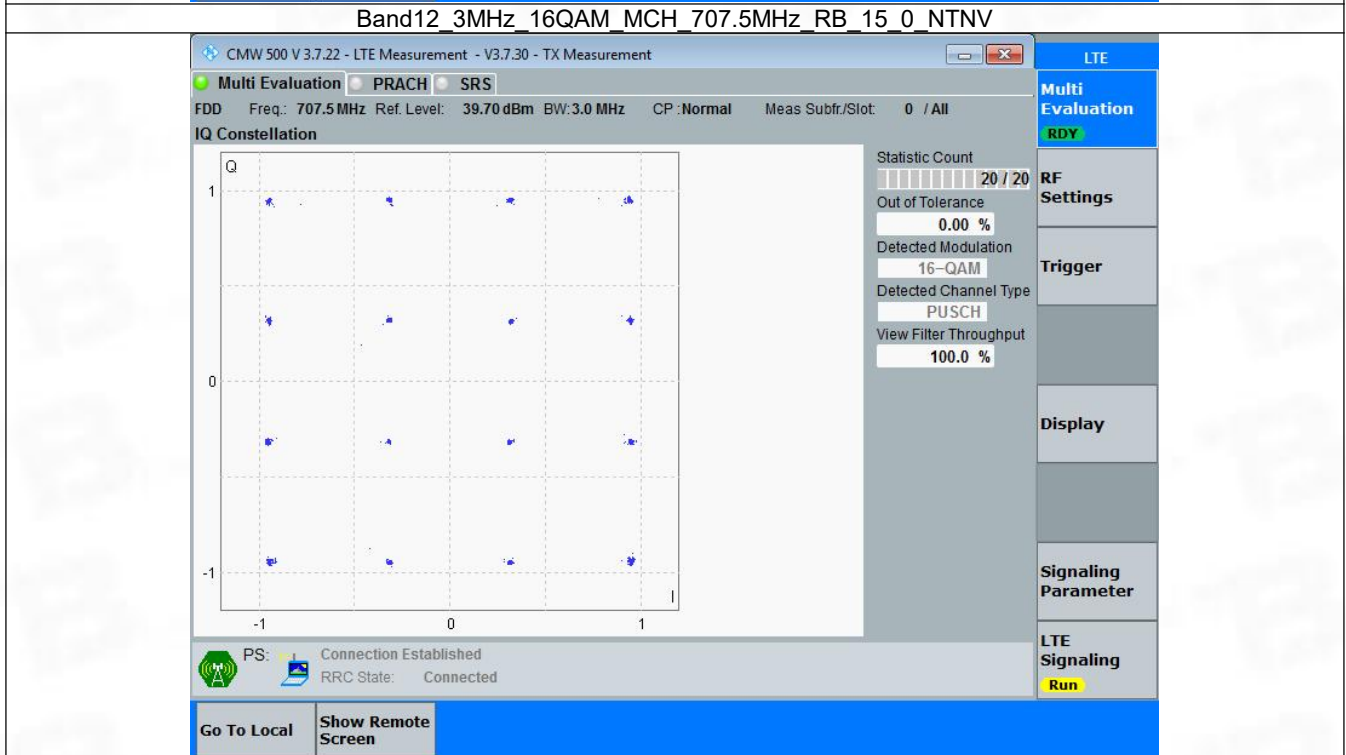
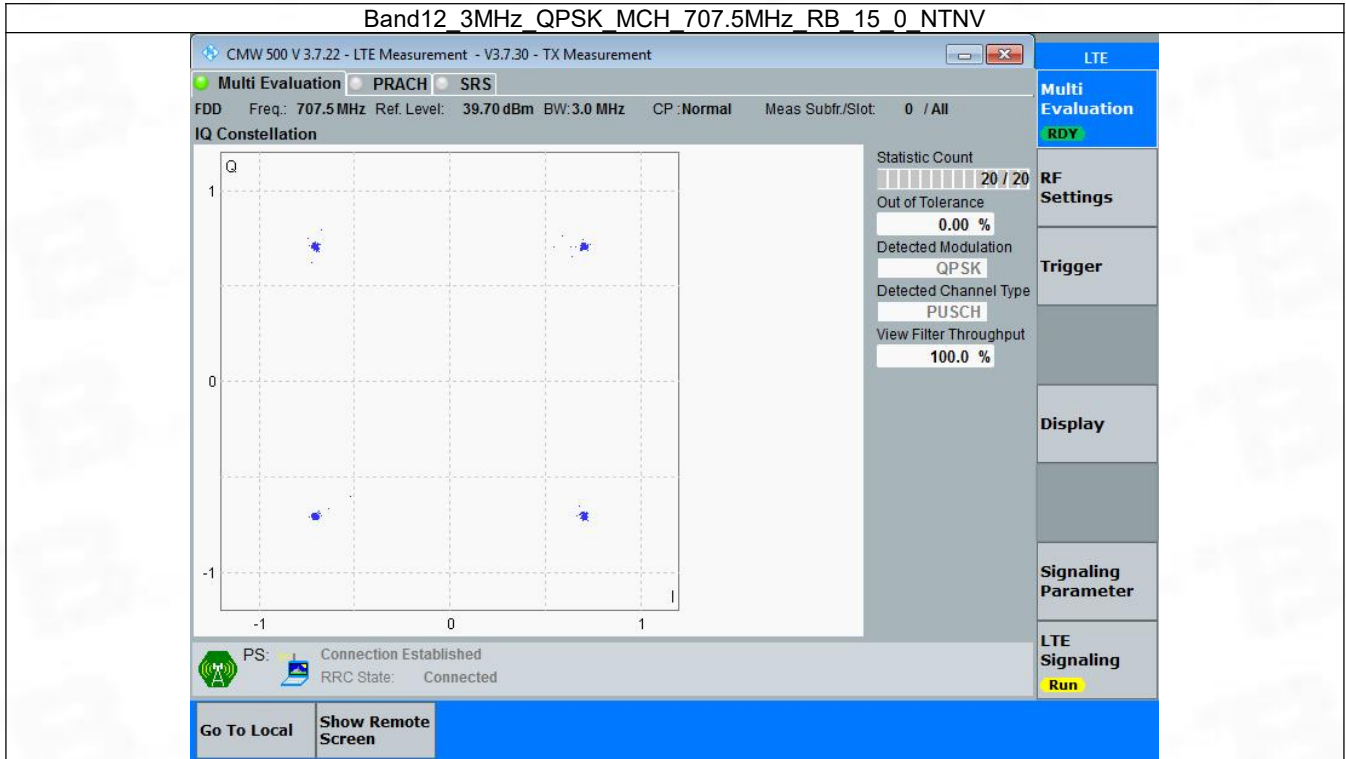


3.2 B12_3MHz

3.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV						
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

3.2.2 Test Graph

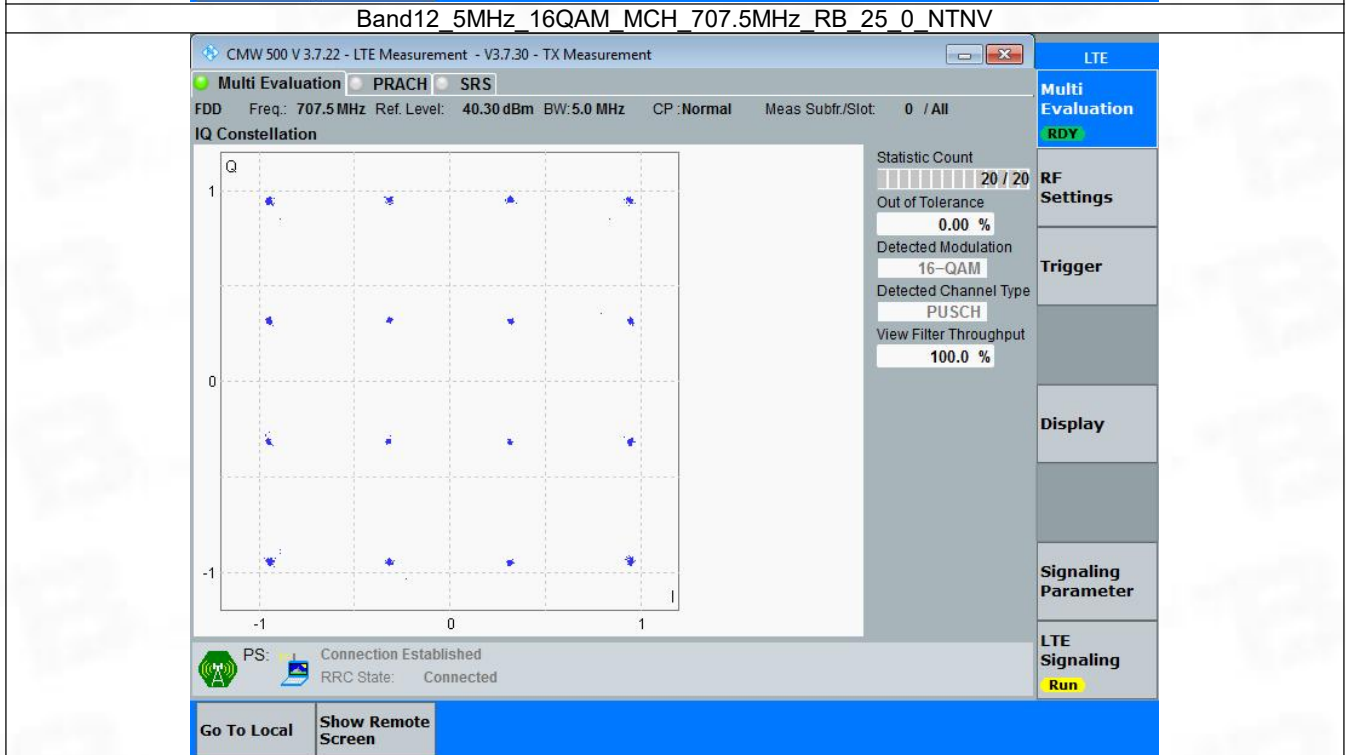
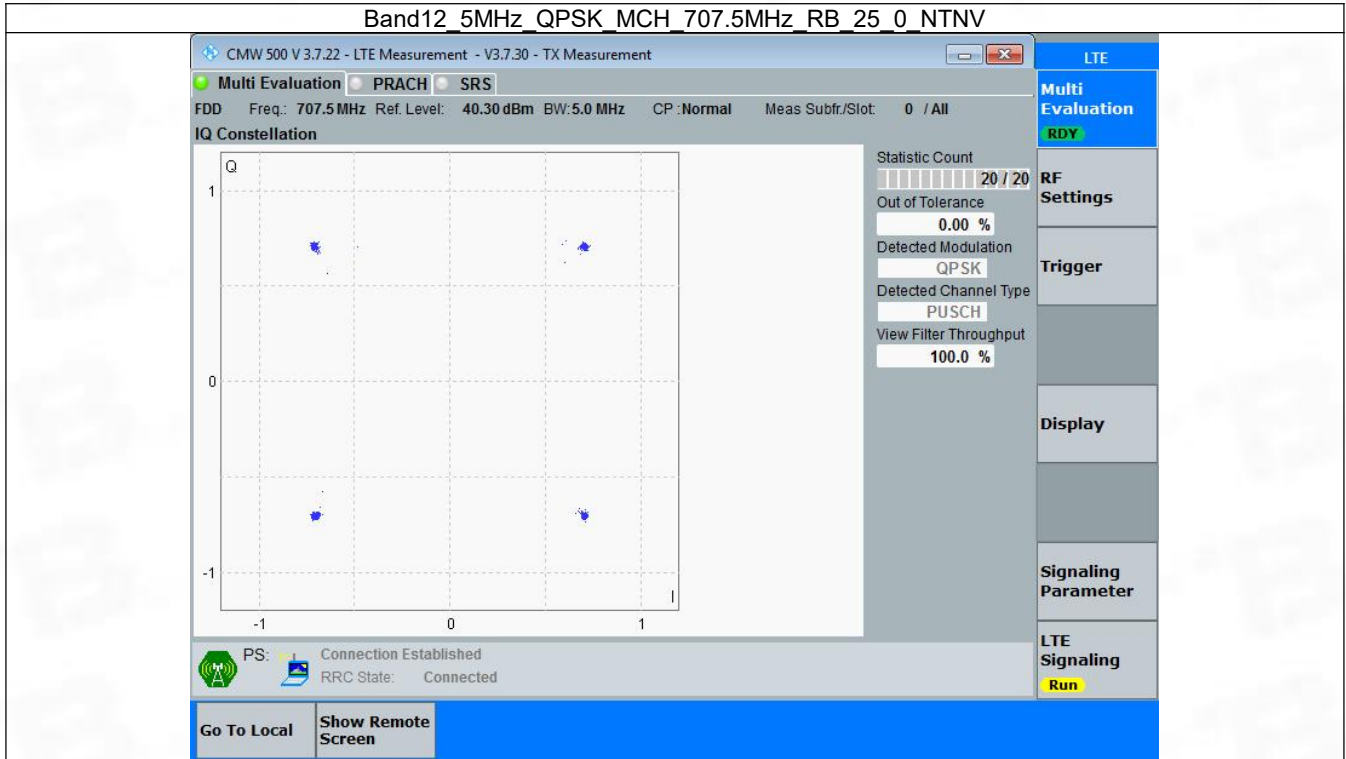


3.3 B12_5MHz

3.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTV						
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

3.3.2 Test Graph

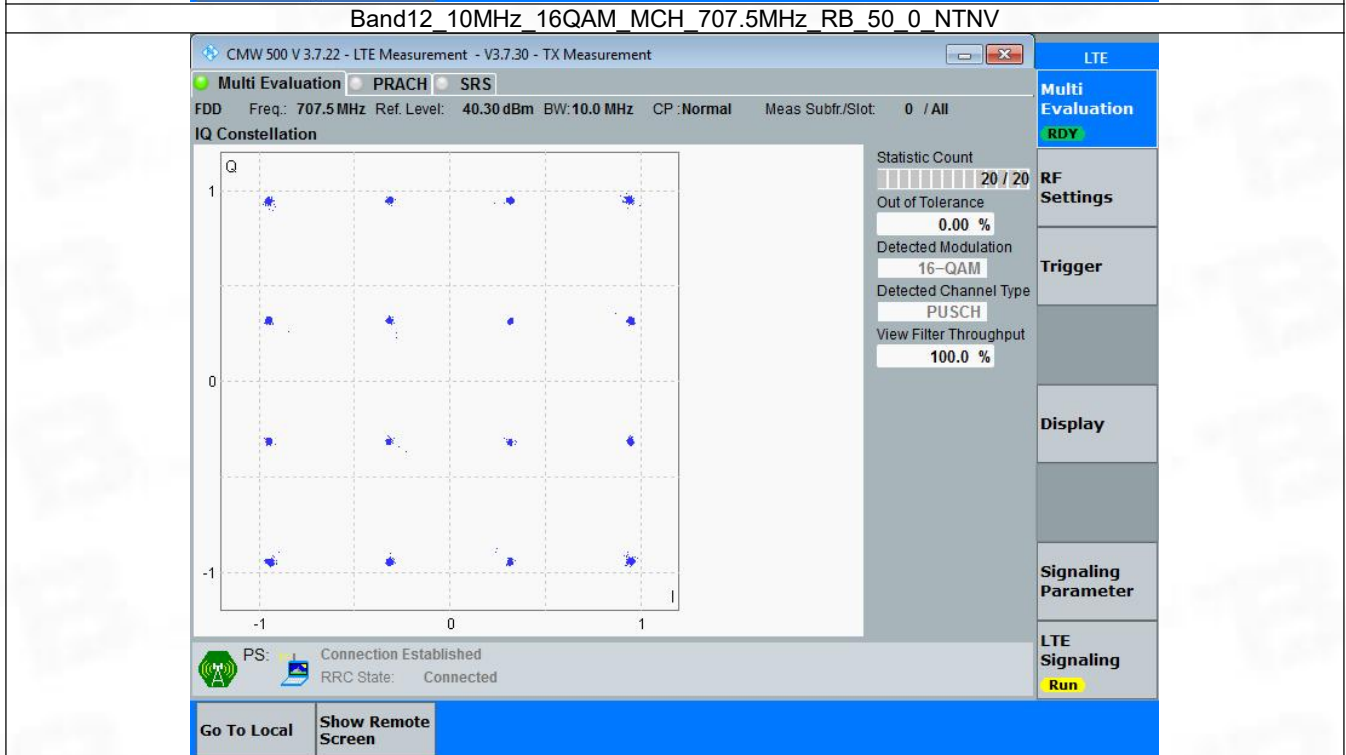
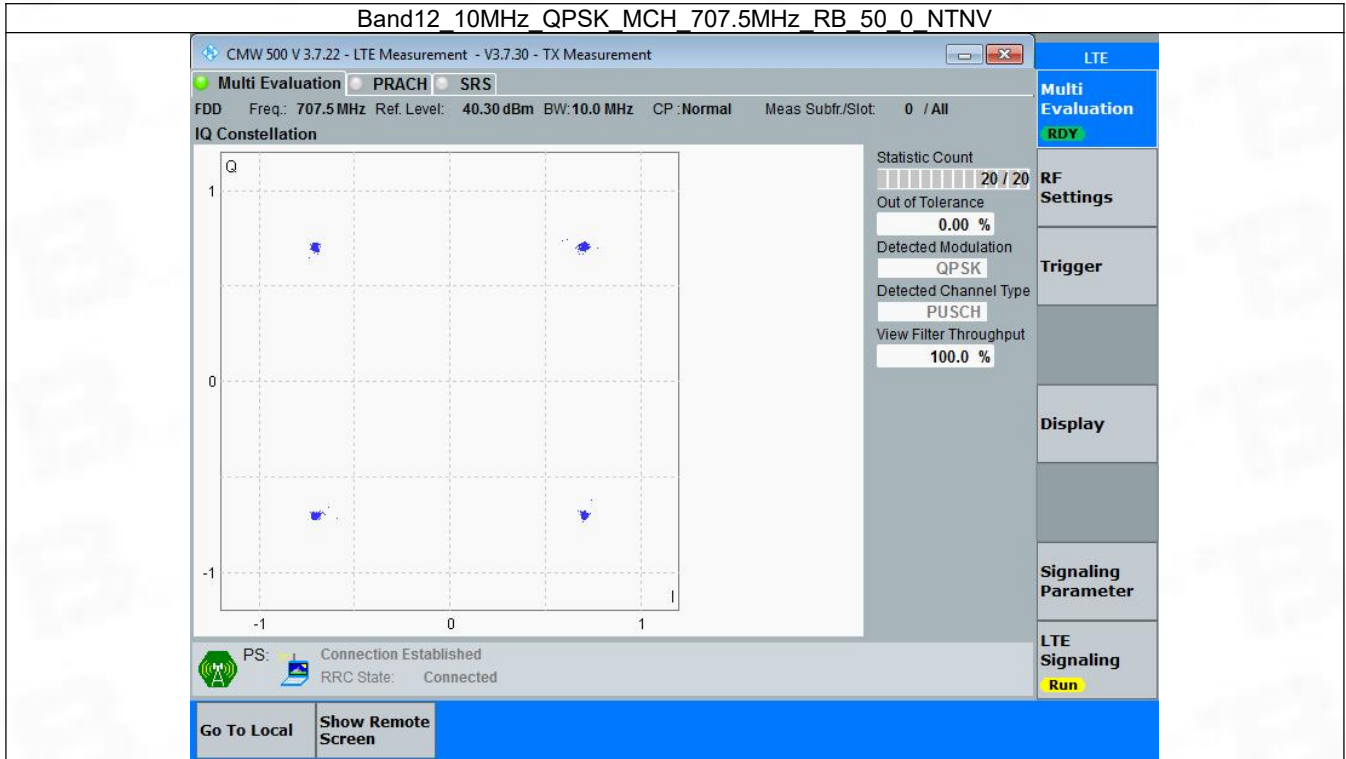


3.4 B12_10MHz

3.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTN						
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

3.4.2 Test Graph



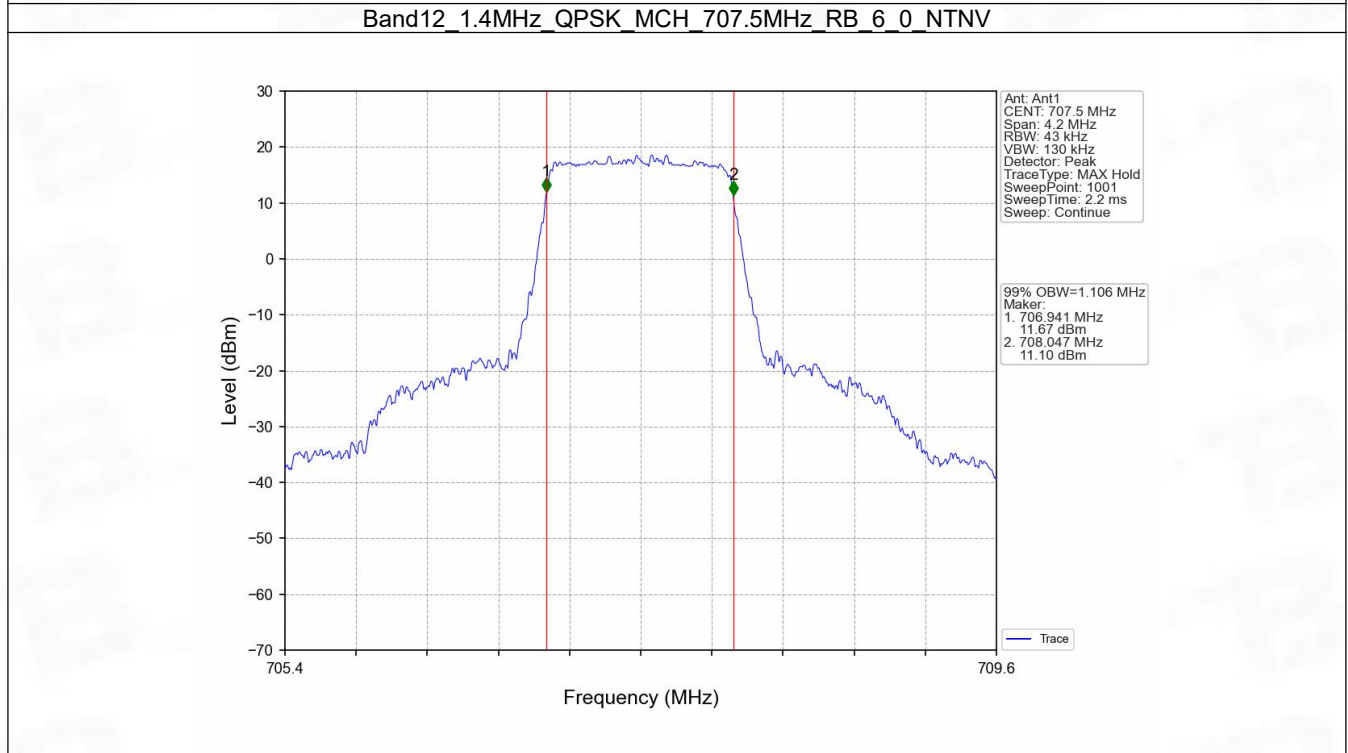
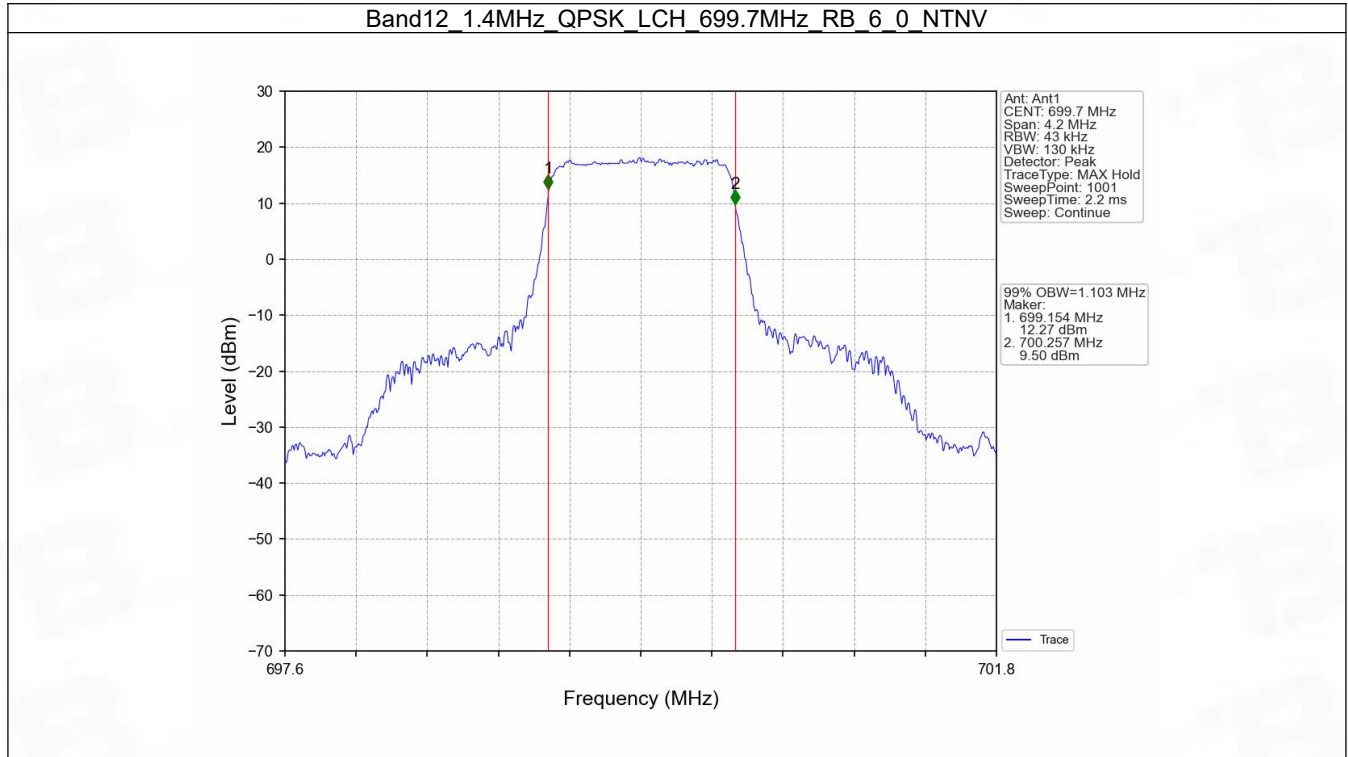
4. 99% & 26dB Bandwidth

4.1 Band12_OBW

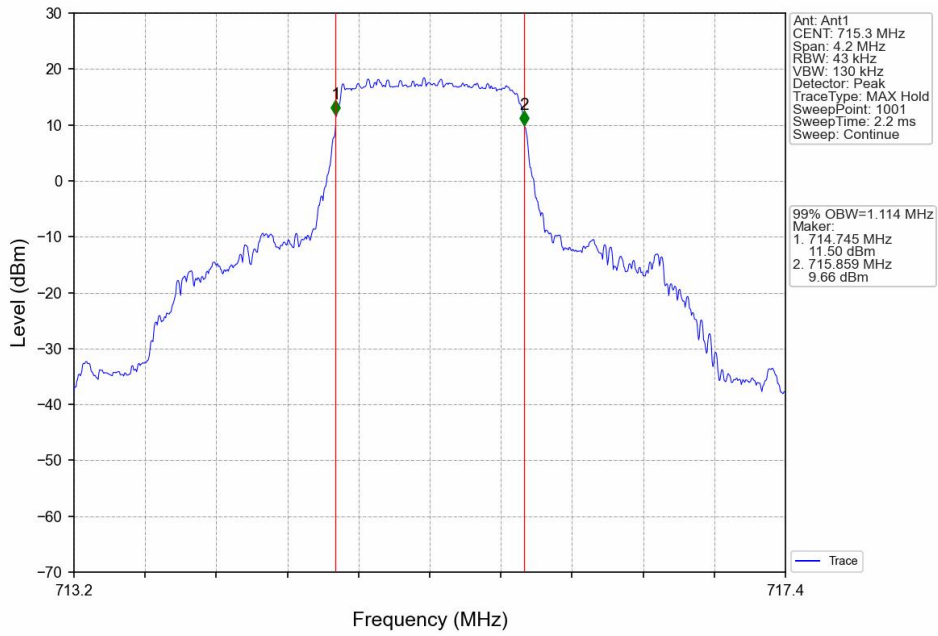
4.1.1 Test Result

Band: 12 / NTV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	699.7	6	0	1.103	Pass
		707.5	6	0	1.106	Pass
		715.3	6	0	1.114	Pass
	16QAM	699.7	6	0	1.117	Pass
		707.5	6	0	1.112	Pass
		715.3	6	0	1.113	Pass
3	QPSK	700.5	15	0	2.734	Pass
		707.5	15	0	2.725	Pass
		714.5	15	0	2.728	Pass
	16QAM	700.5	15	0	2.721	Pass
		707.5	15	0	2.726	Pass
		714.5	15	0	2.725	Pass
5	QPSK	701.5	25	0	4.555	Pass
		707.5	25	0	4.558	Pass
		713.5	25	0	4.590	Pass
	16QAM	701.5	25	0	4.585	Pass
		707.5	25	0	4.586	Pass
		713.5	25	0	4.577	Pass
10	QPSK	704	50	0	9.057	Pass
		707.5	50	0	9.055	Pass
		711	50	0	9.142	Pass
	16QAM	704	50	0	9.039	Pass
		707.5	50	0	9.049	Pass
		711	50	0	9.108	Pass

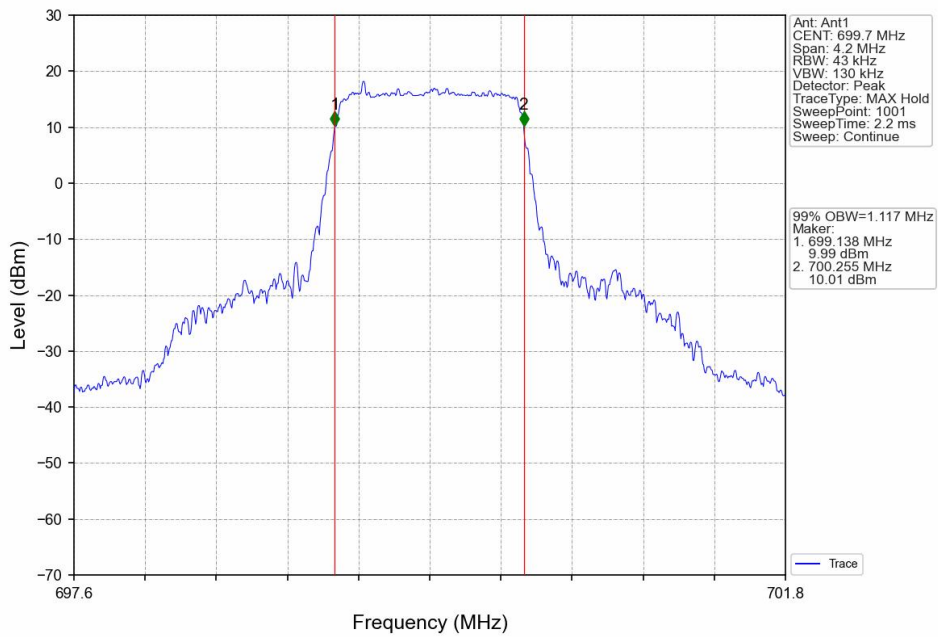
4.1.2 Test Graph



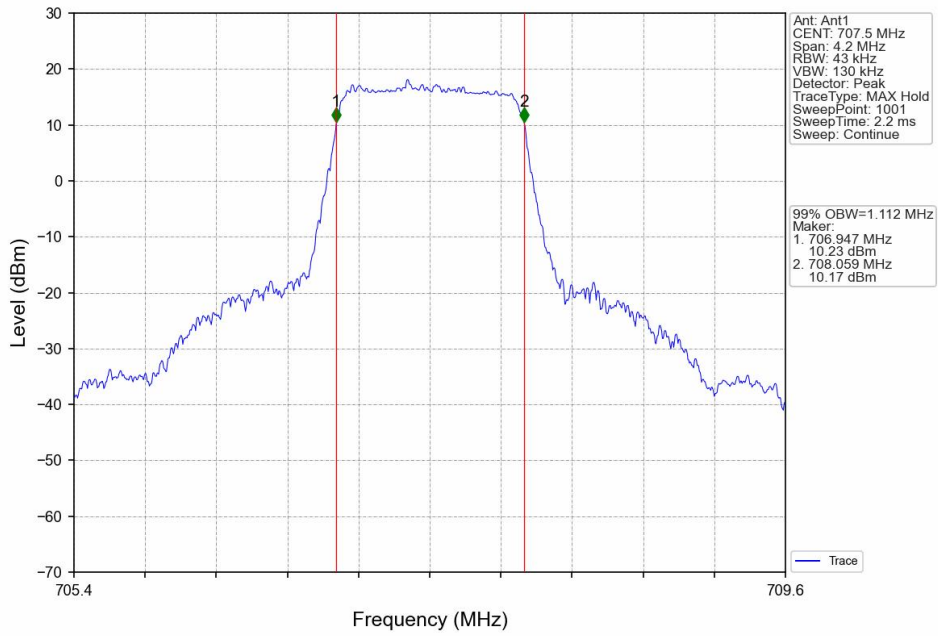
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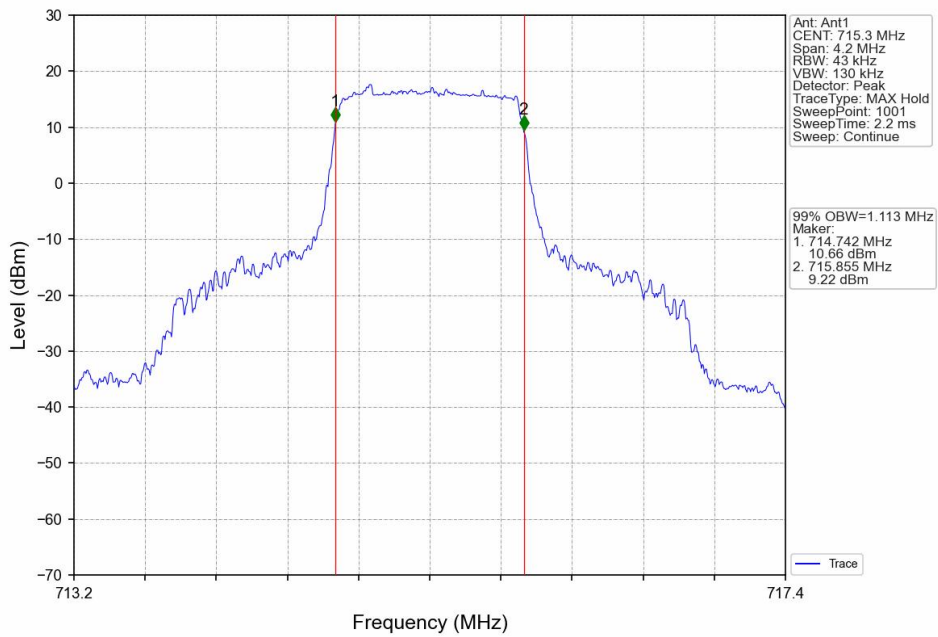
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



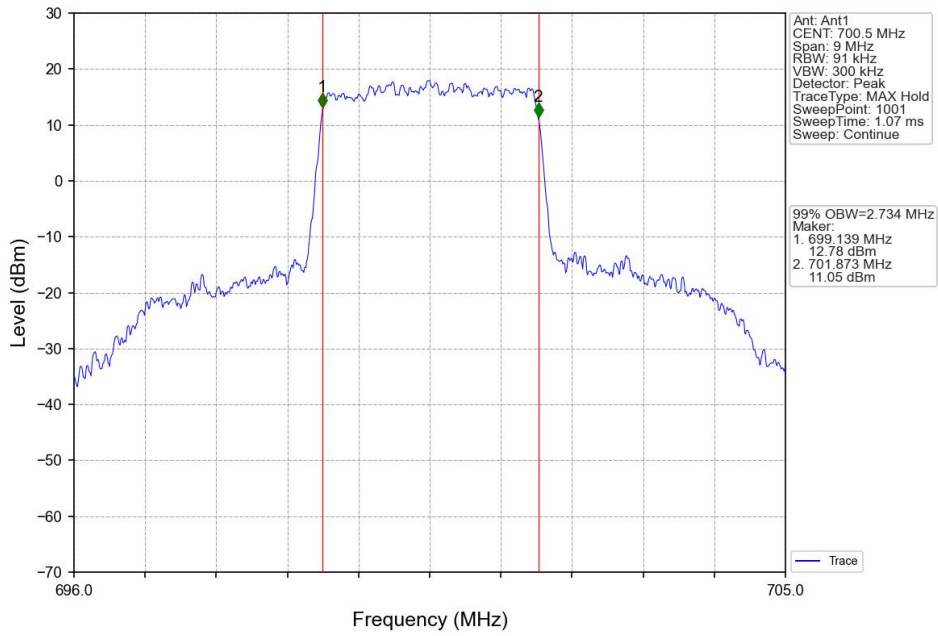
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTNV



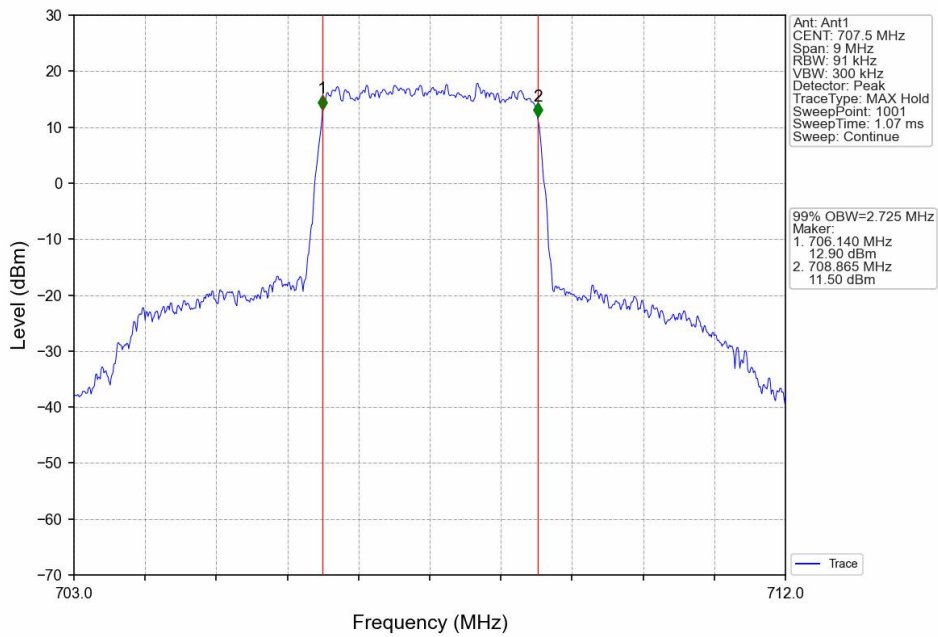
Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTNV



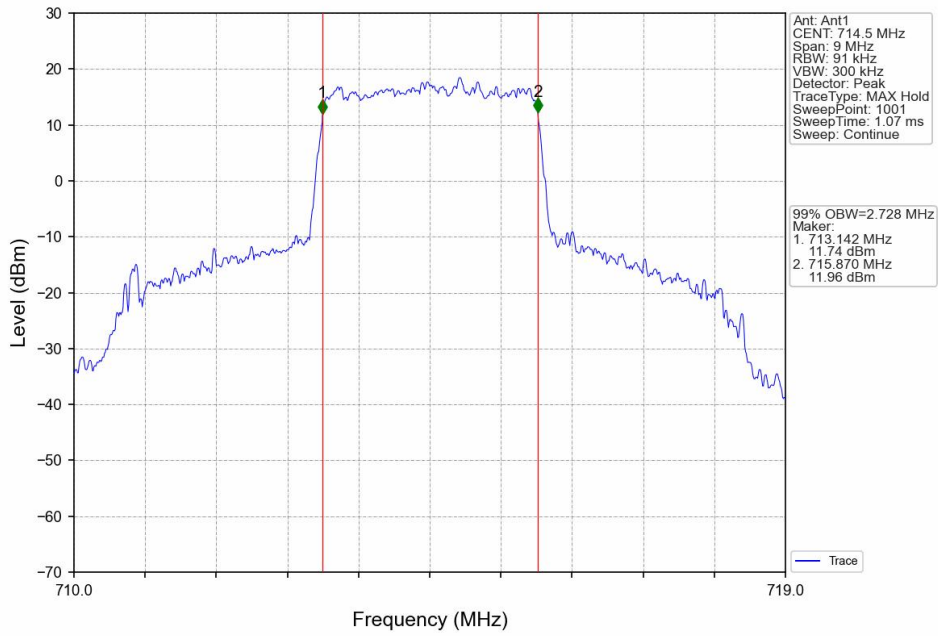
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



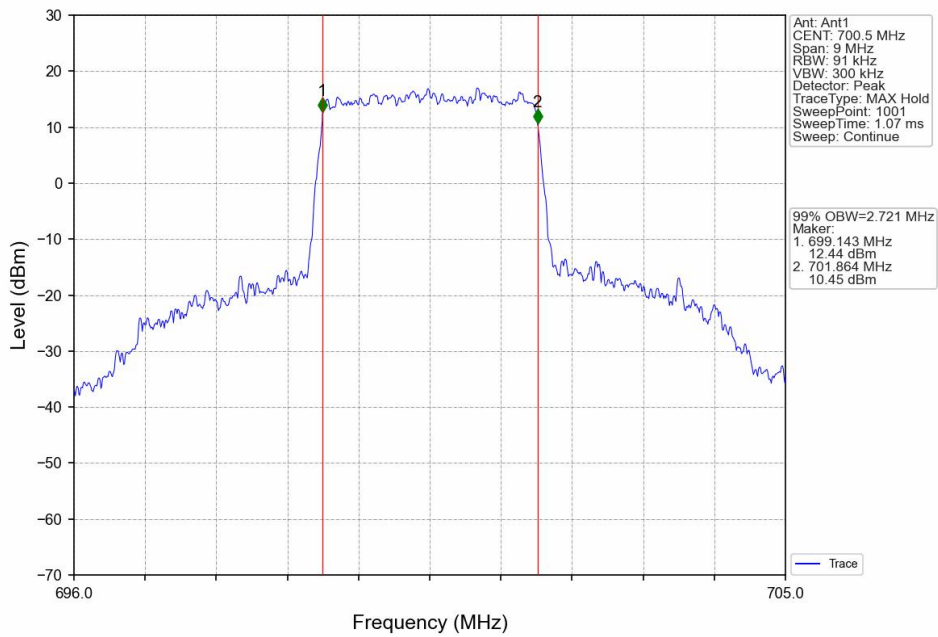
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



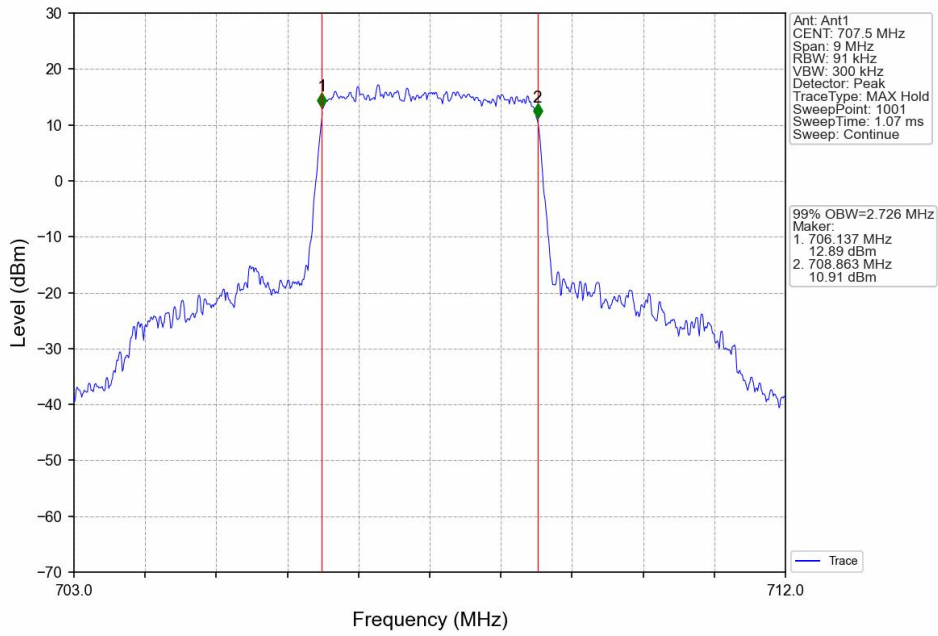
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



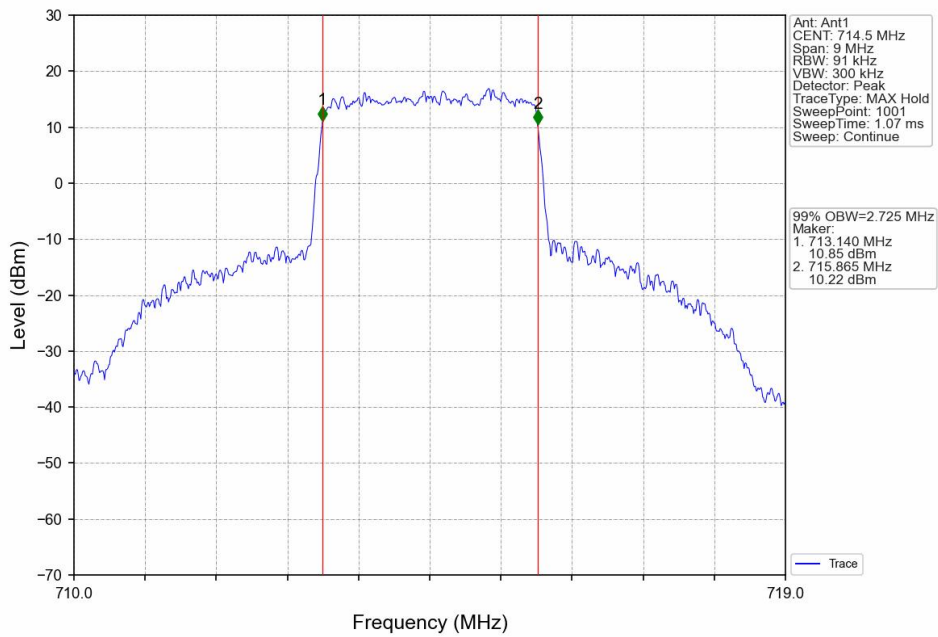
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



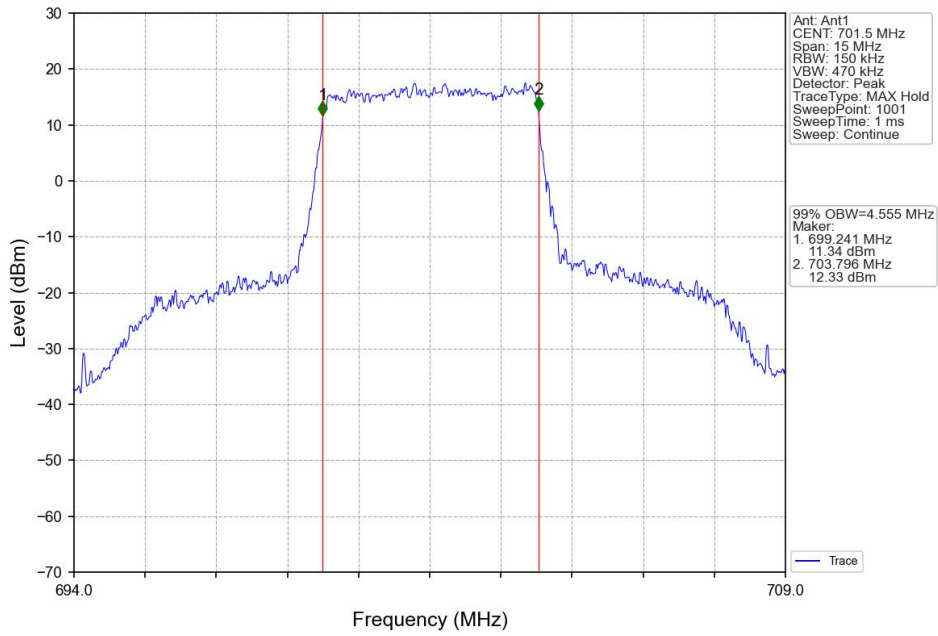
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



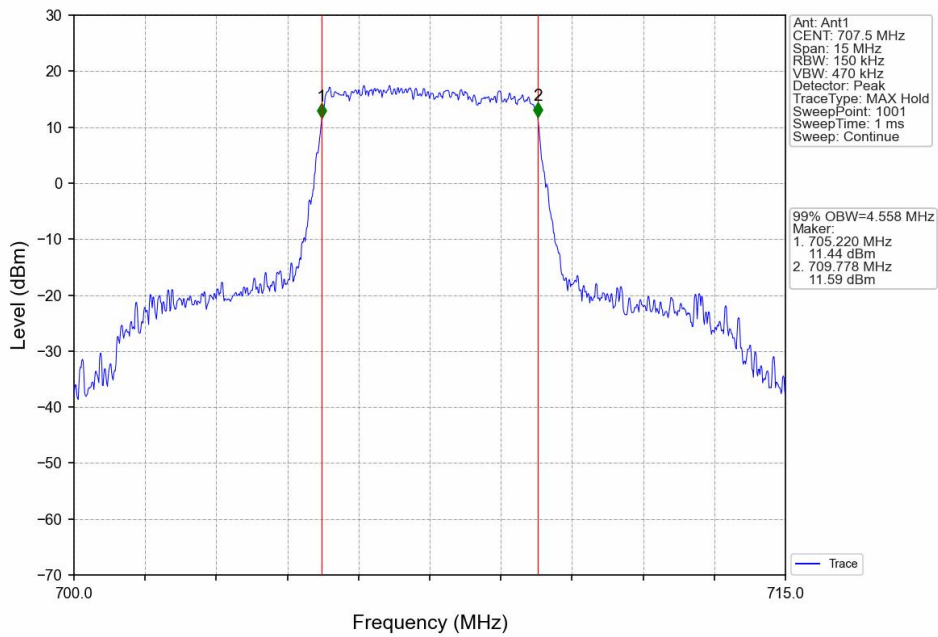
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



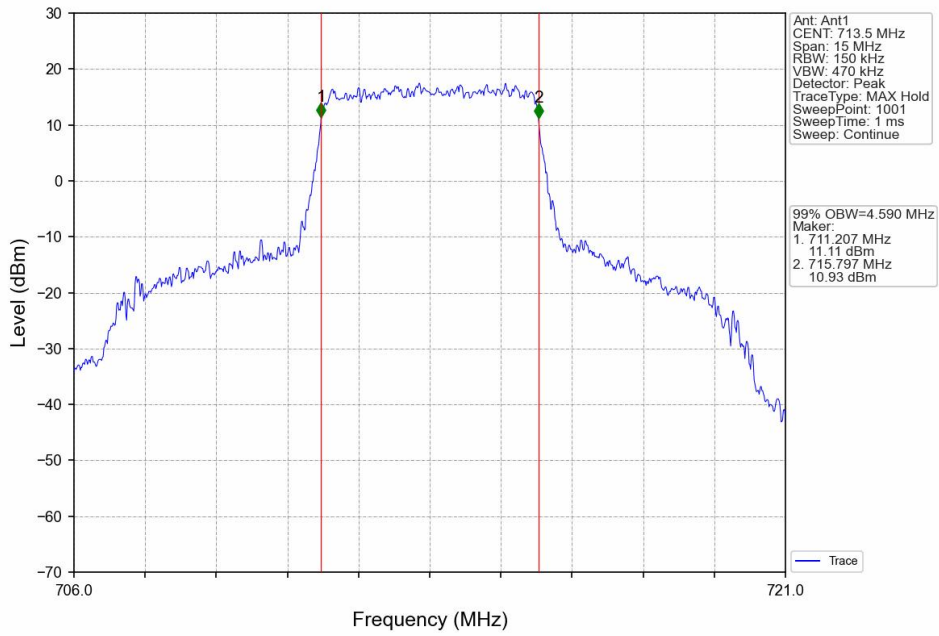
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



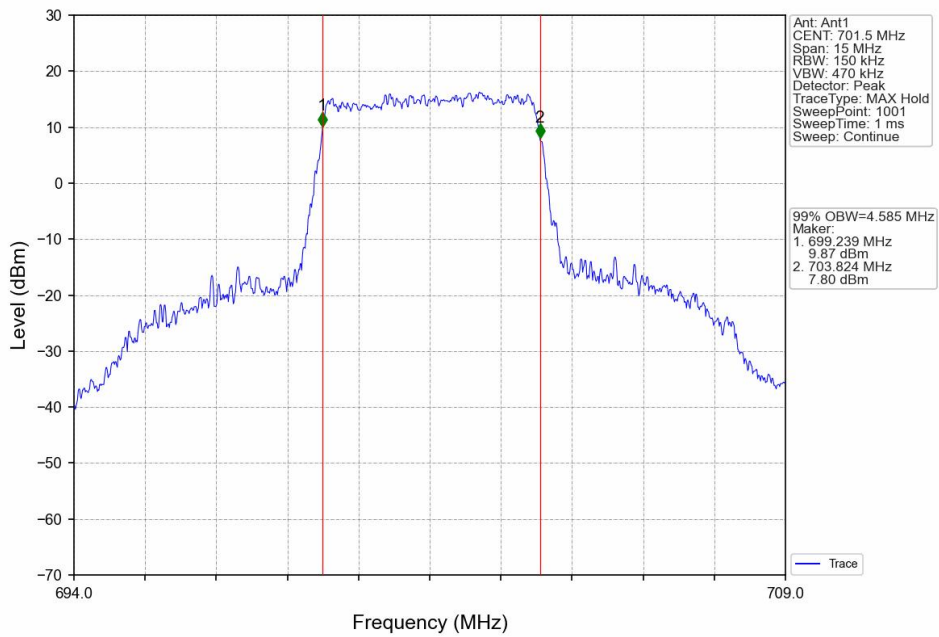
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



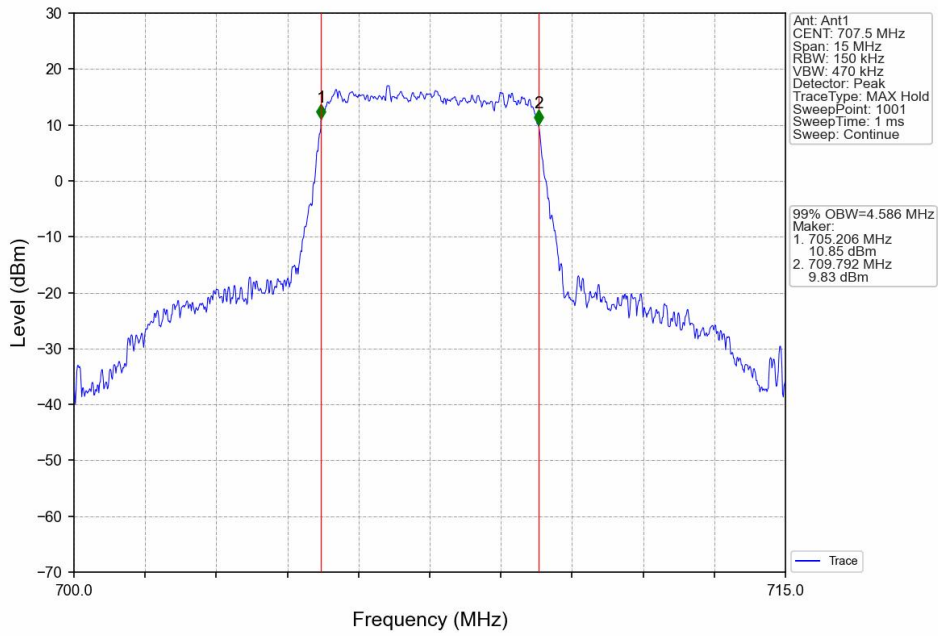
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



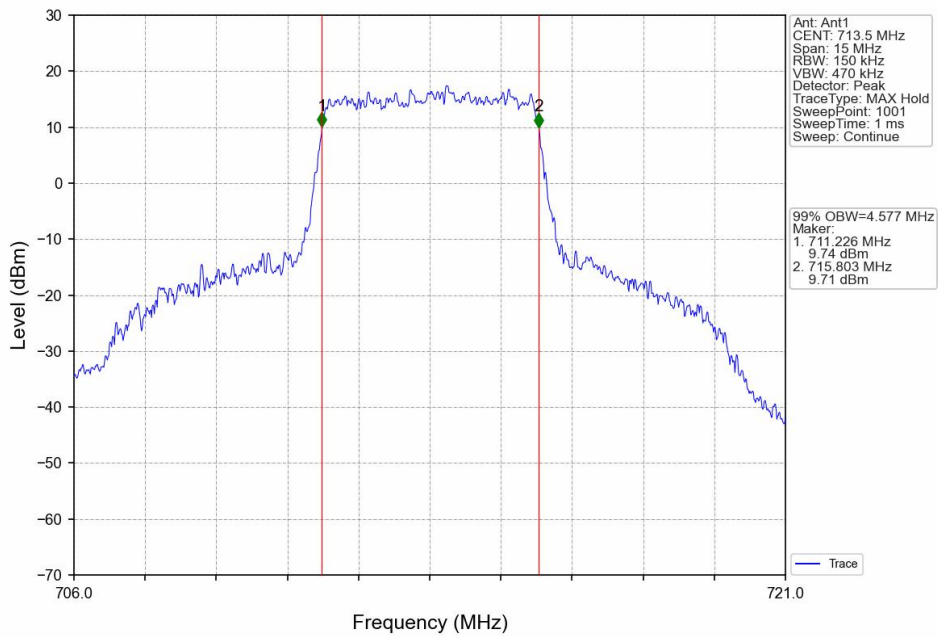
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



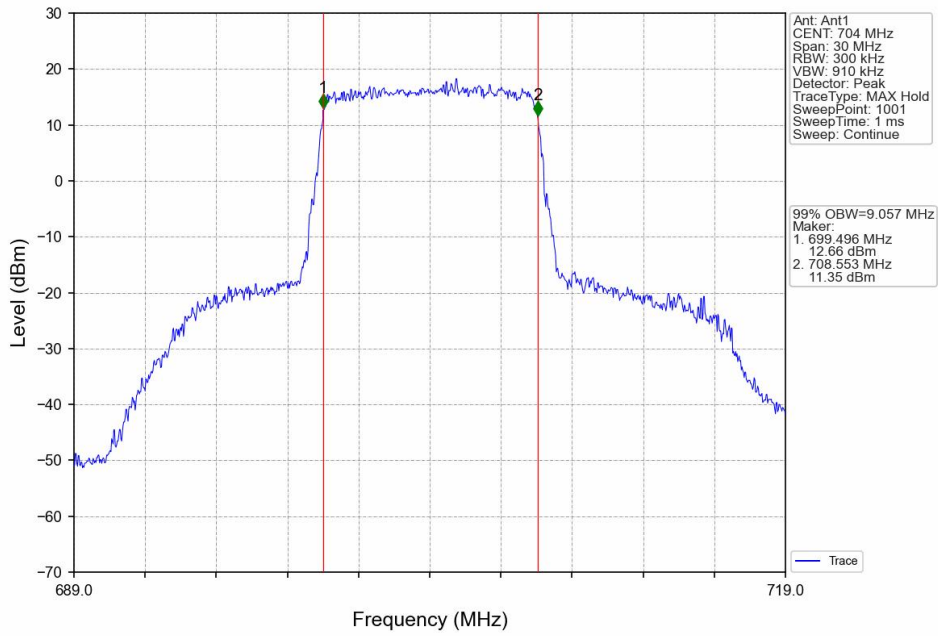
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



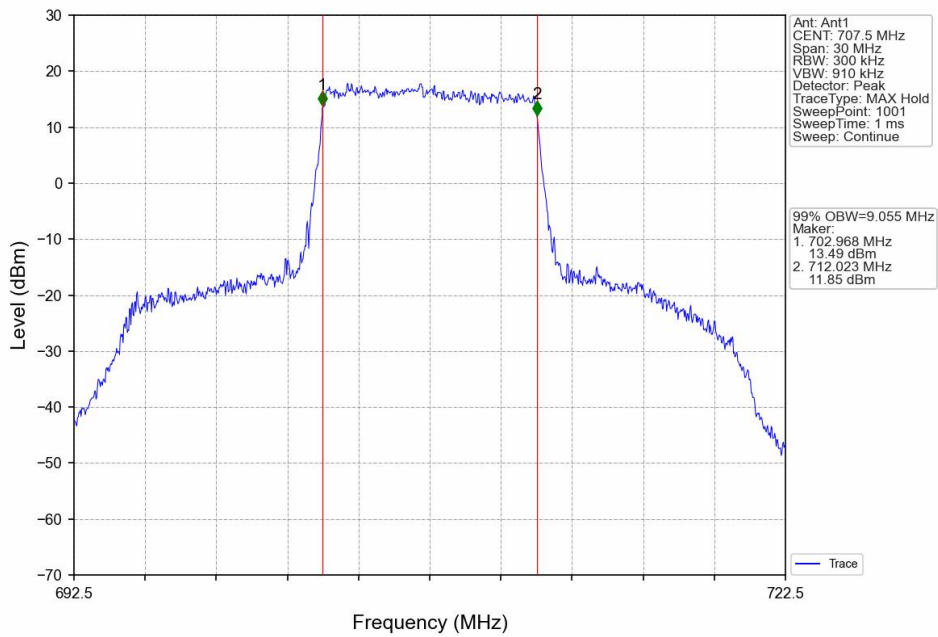
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



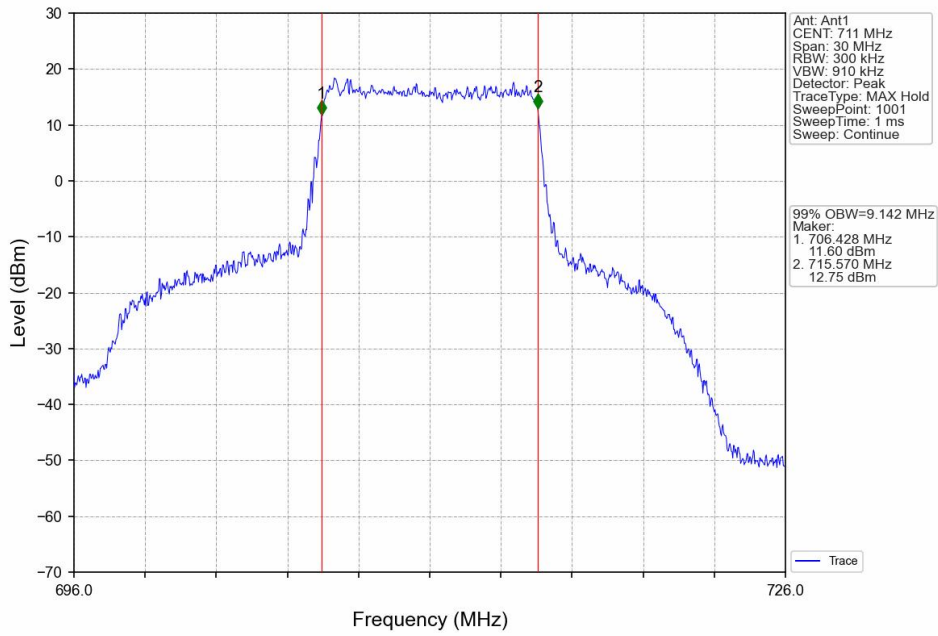
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



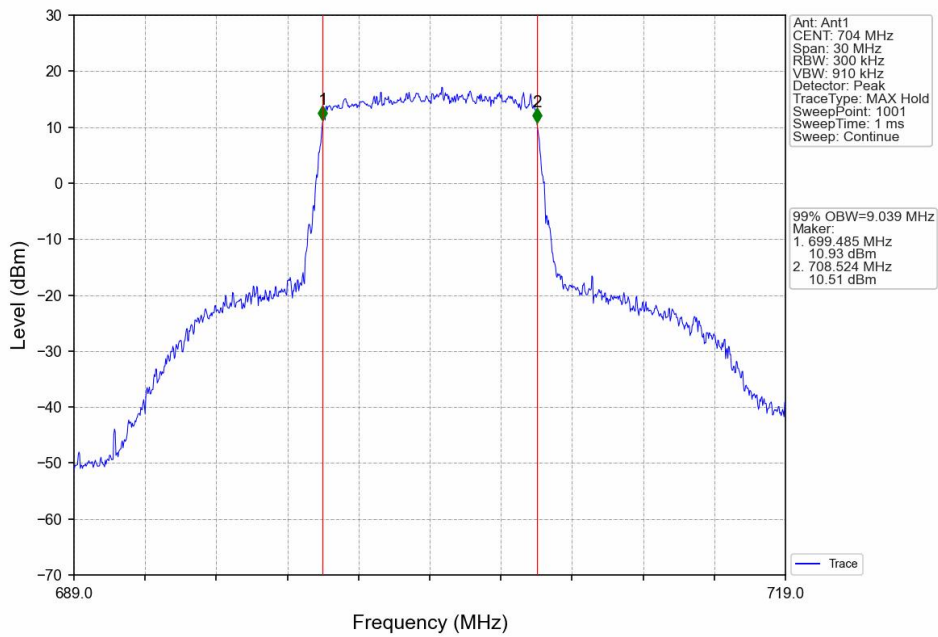
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



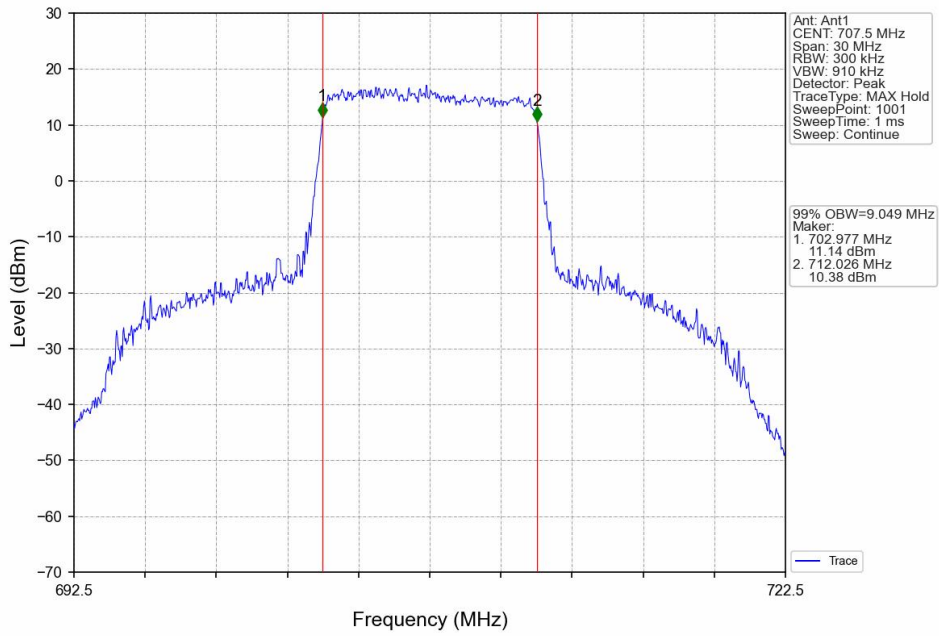
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



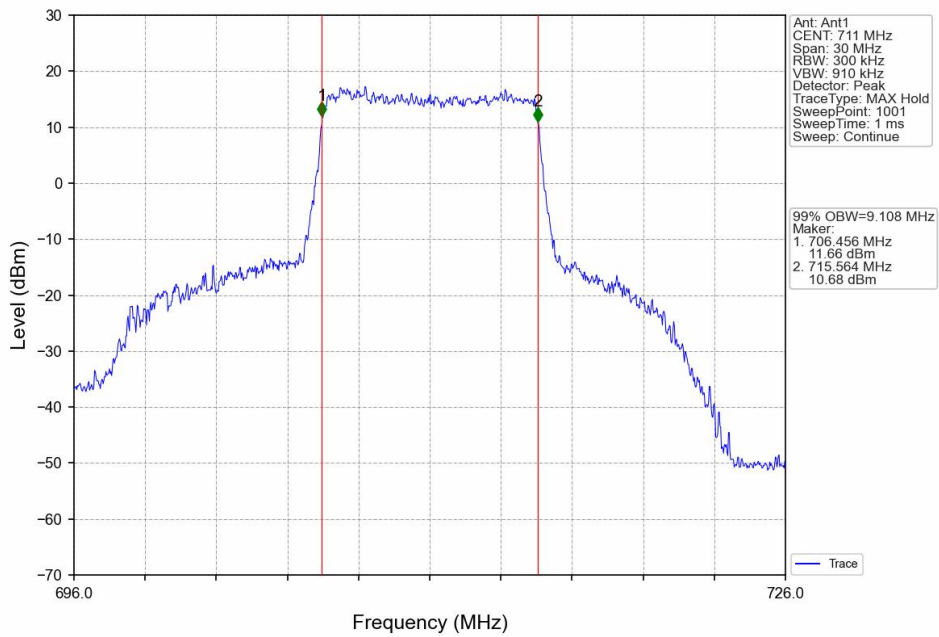
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

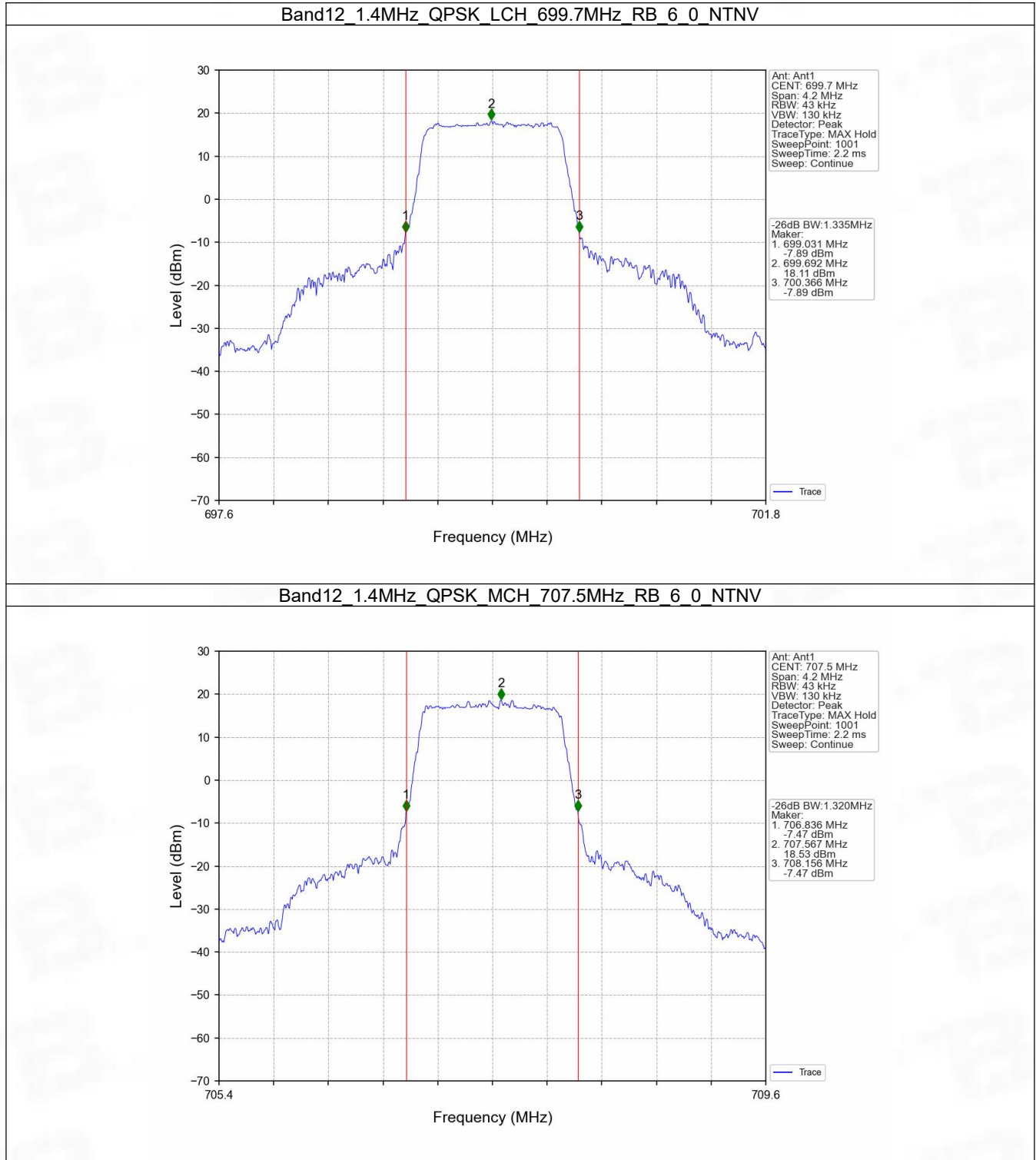


4.2 Band12_XDB

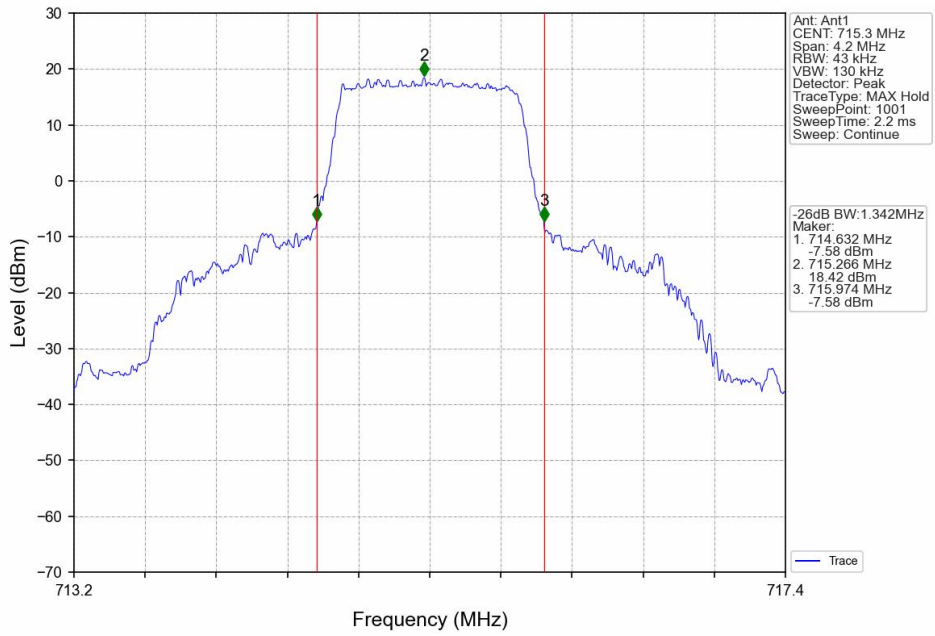
4.2.1 Test Result

Band: 12 / NTNV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	699.7	6	0	1.335	Pass
		707.5	6	0	1.320	Pass
		715.3	6	0	1.342	Pass
	16QAM	699.7	6	0	1.310	Pass
		707.5	6	0	1.319	Pass
		715.3	6	0	1.322	Pass
3	QPSK	700.5	15	0	3.014	Pass
		707.5	15	0	2.997	Pass
		714.5	15	0	3.013	Pass
	16QAM	700.5	15	0	2.977	Pass
		707.5	15	0	2.977	Pass
		714.5	15	0	2.990	Pass
5	QPSK	701.5	25	0	5.253	Pass
		707.5	25	0	5.211	Pass
		713.5	25	0	5.425	Pass
	16QAM	701.5	25	0	5.308	Pass
		707.5	25	0	5.289	Pass
		713.5	25	0	5.281	Pass
10	QPSK	704	50	0	10.212	Pass
		707.5	50	0	10.278	Pass
		711	50	0	10.428	Pass
	16QAM	704	50	0	10.230	Pass
		707.5	50	0	10.212	Pass
		711	50	0	10.231	Pass

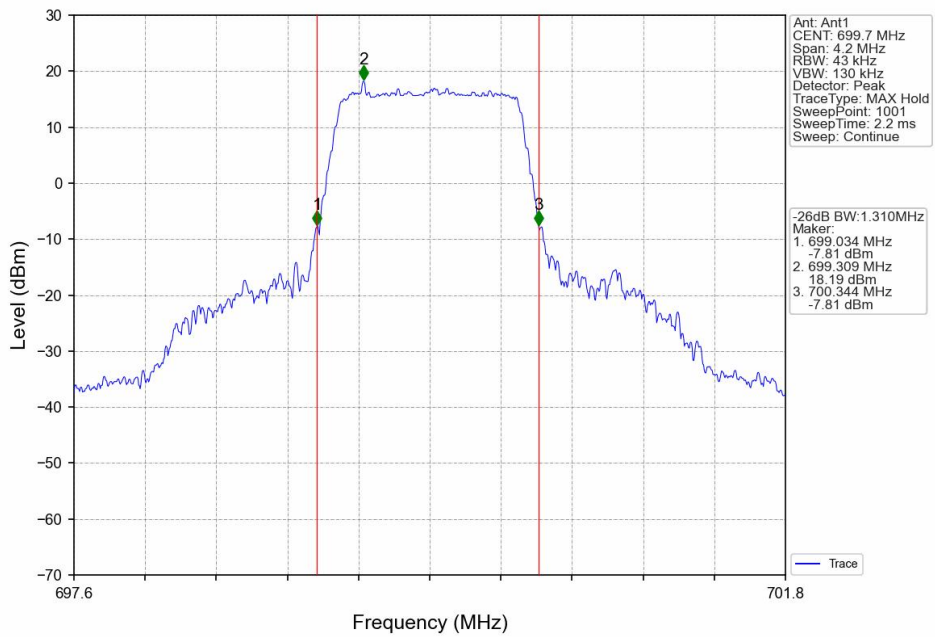
4.2.2 Test Graph



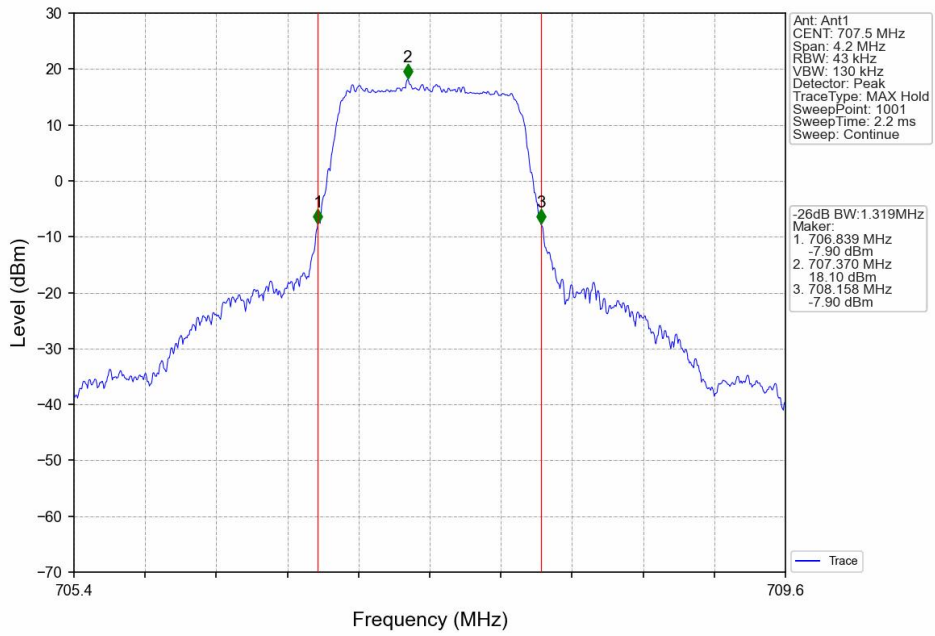
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



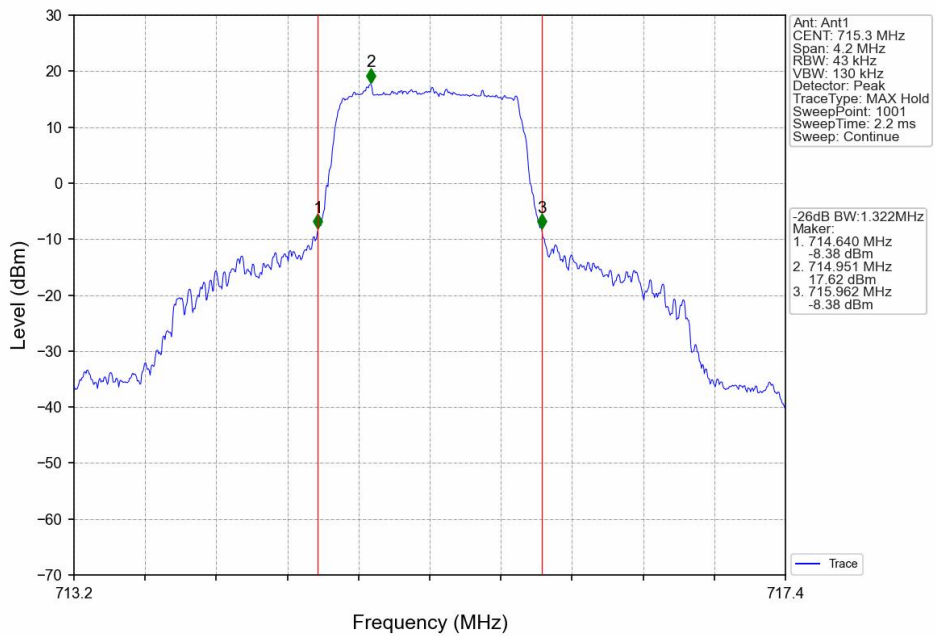
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



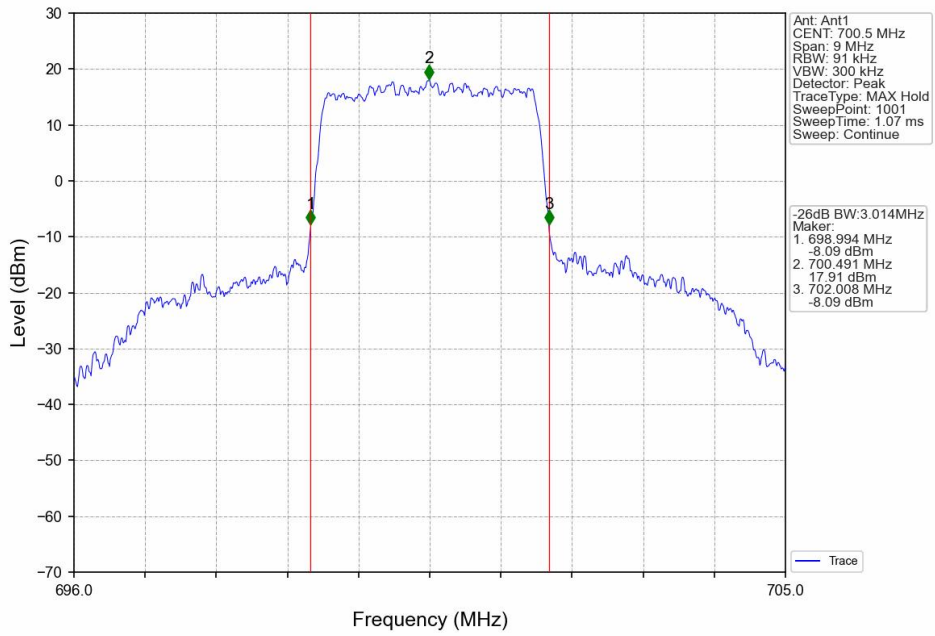
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTN



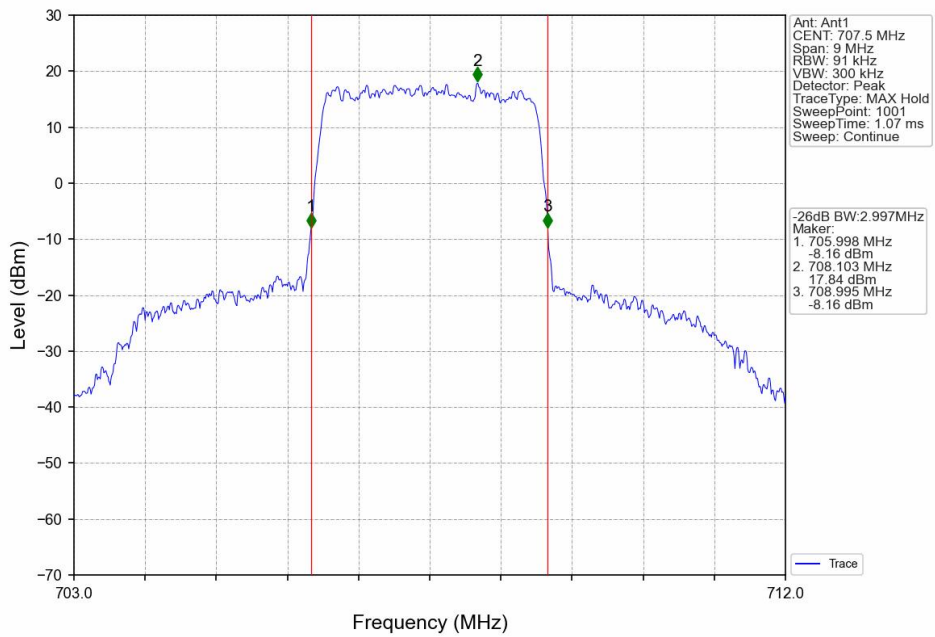
Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTN



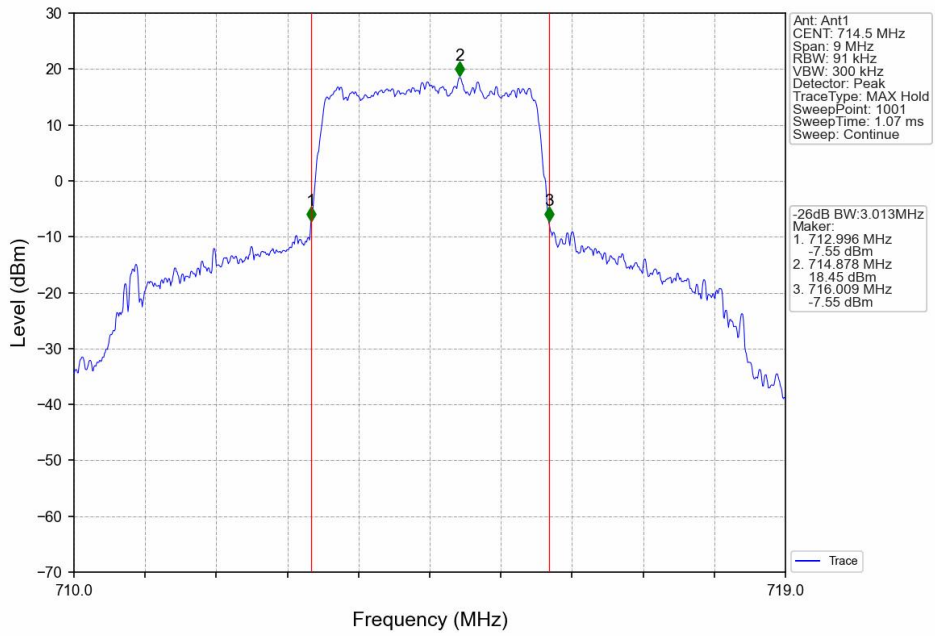
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



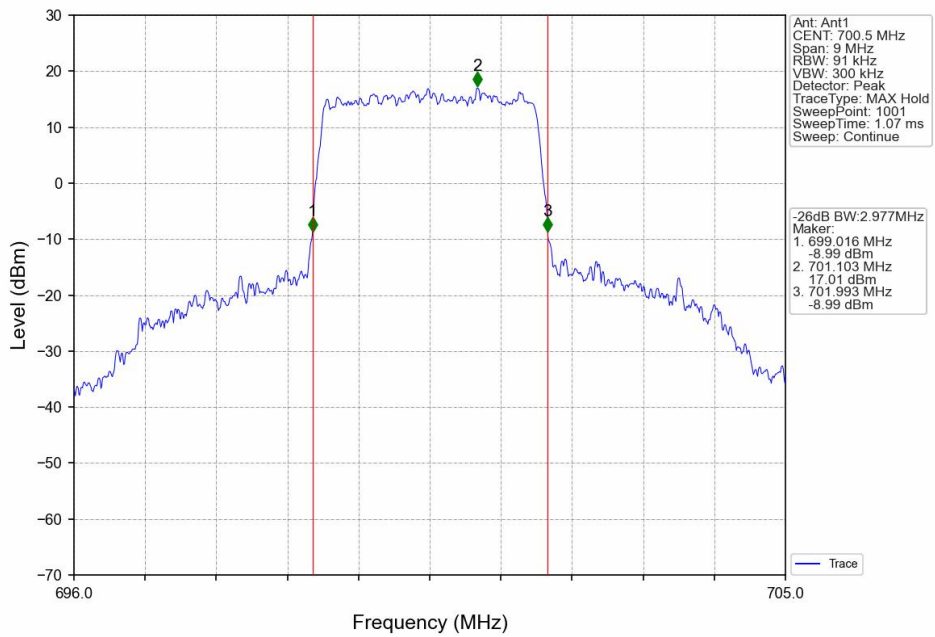
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



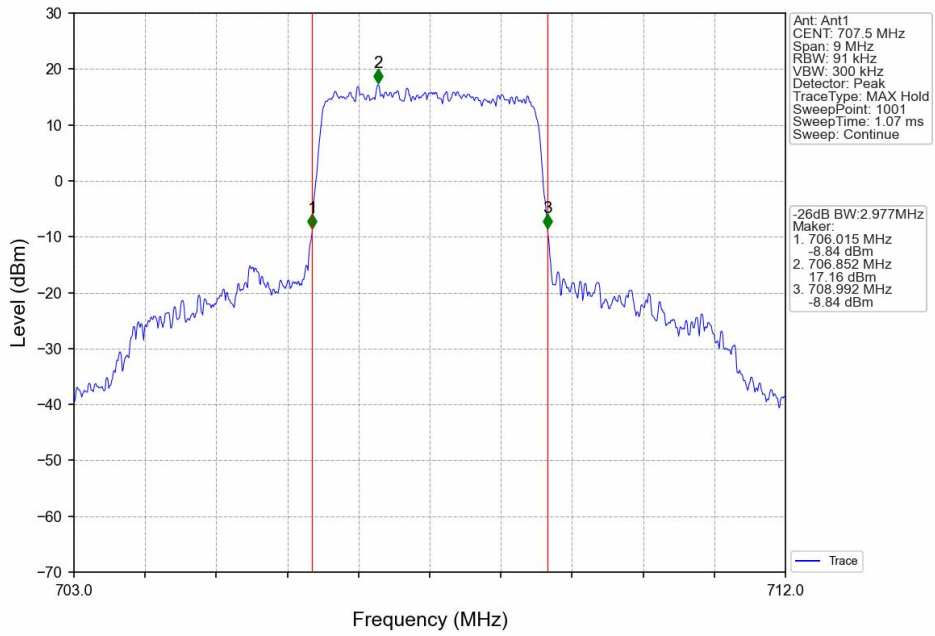
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



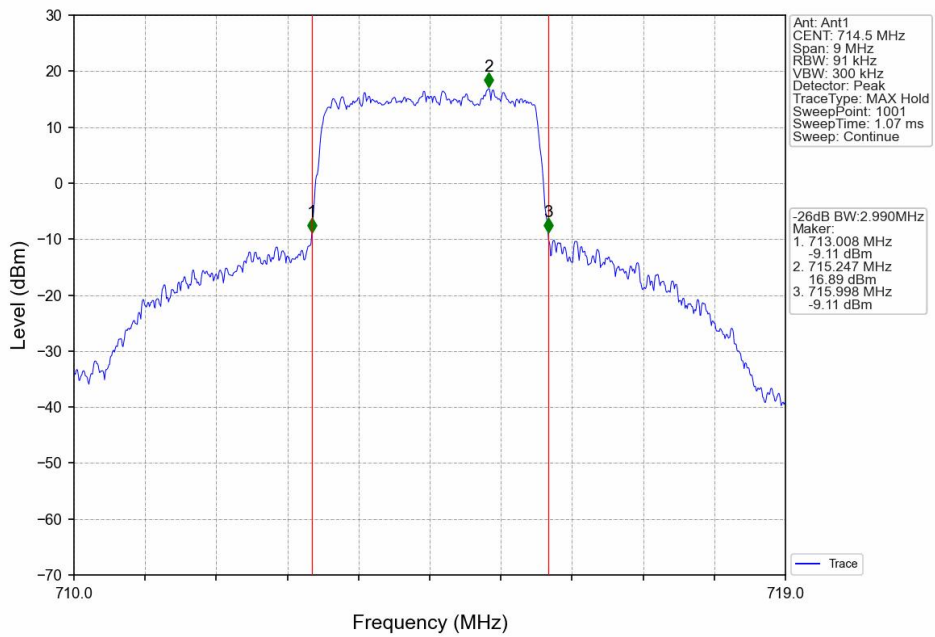
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



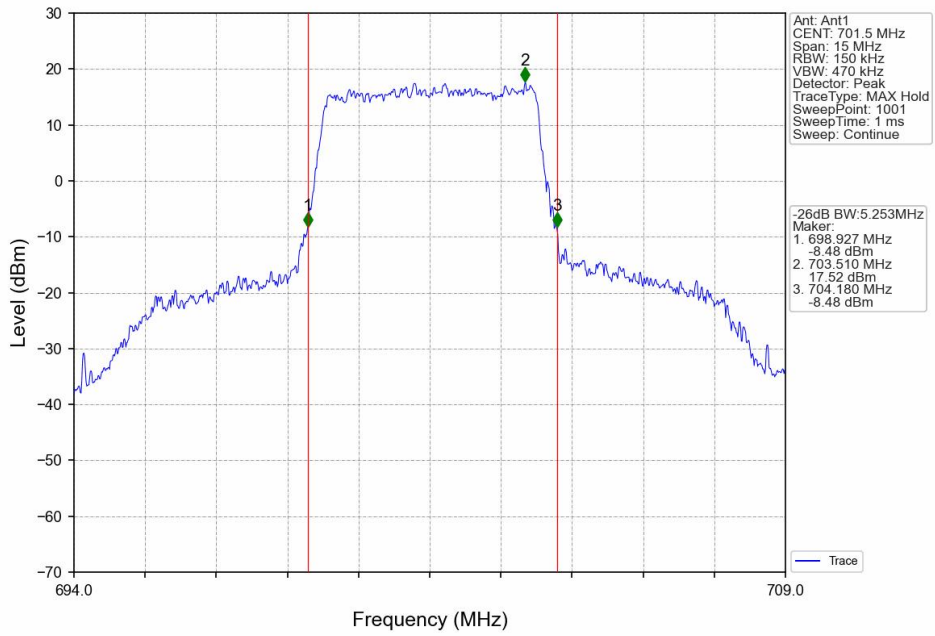
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



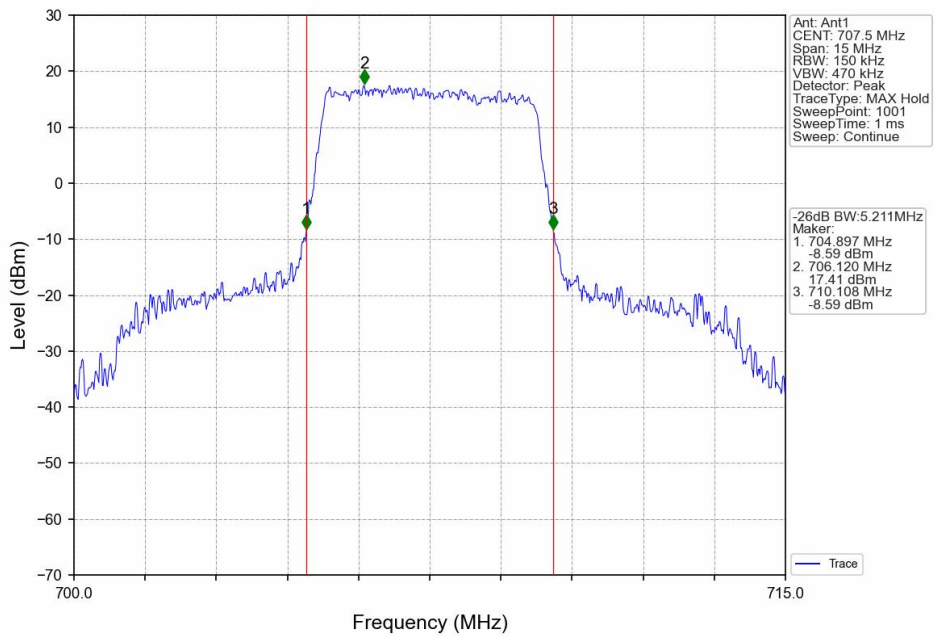
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



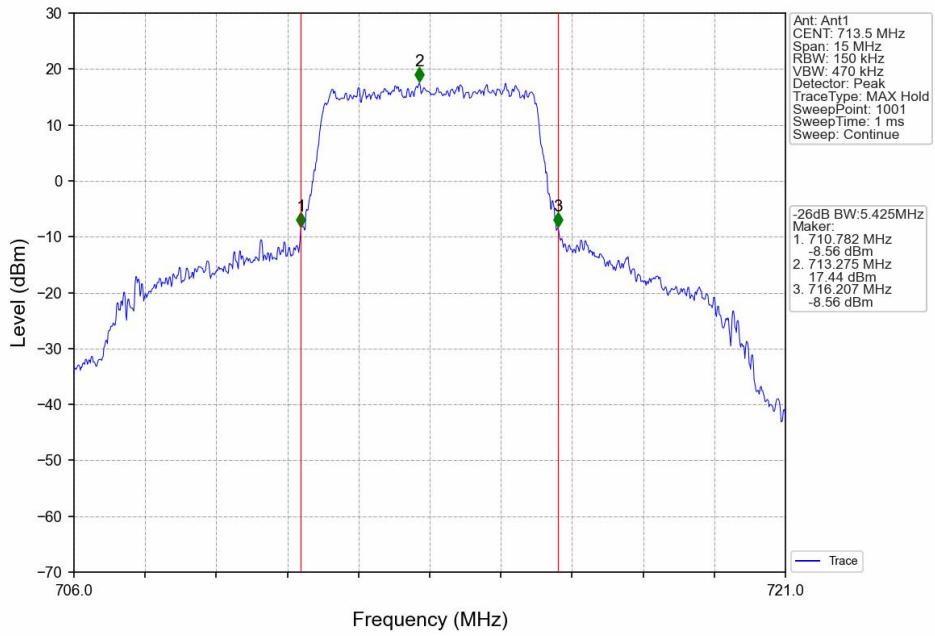
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



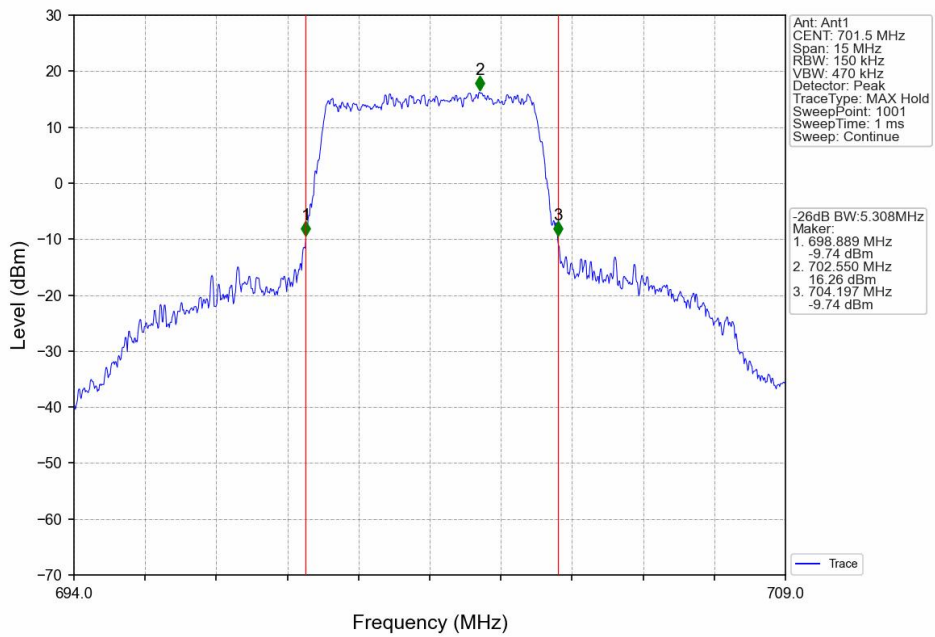
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



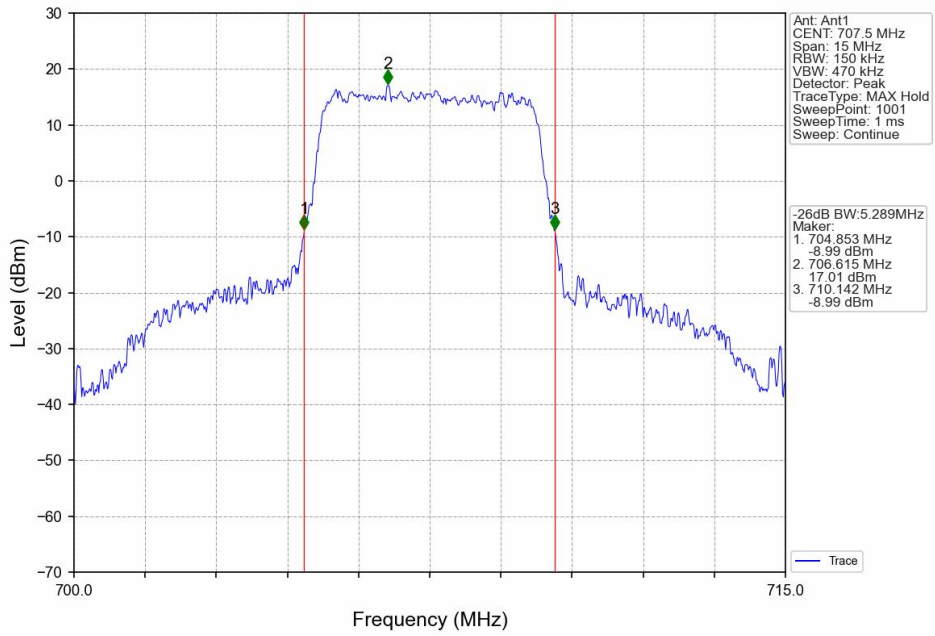
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



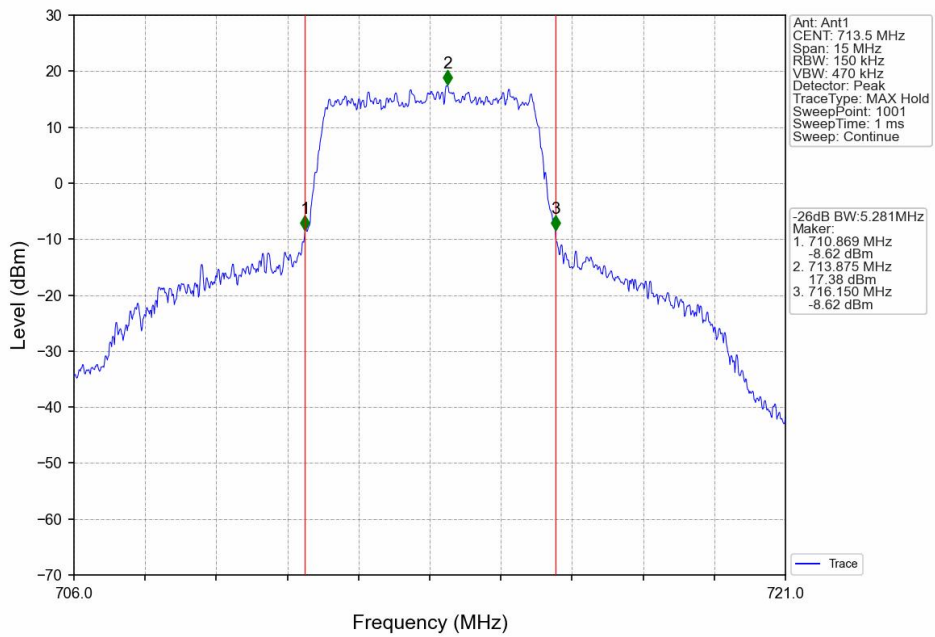
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



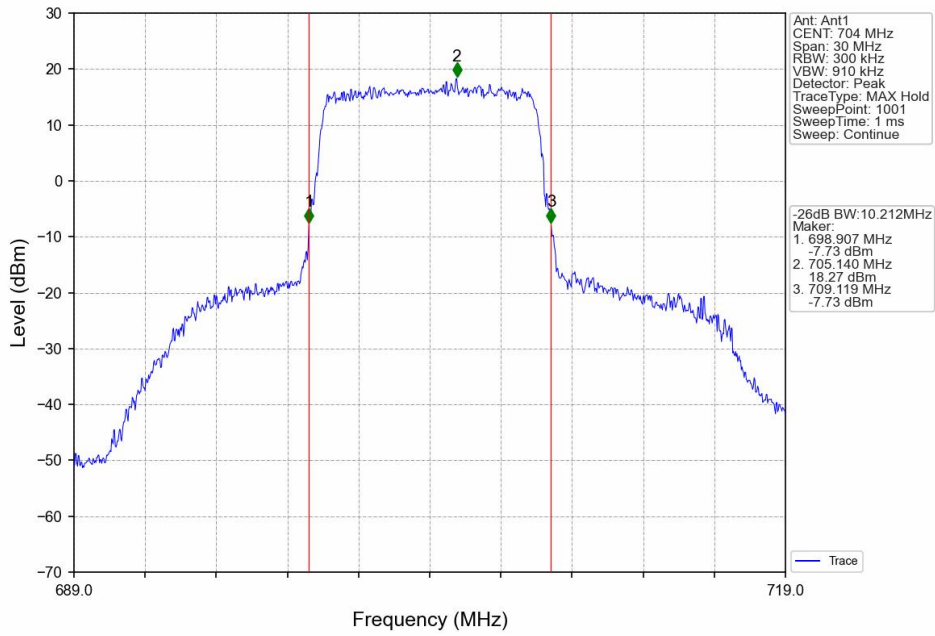
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



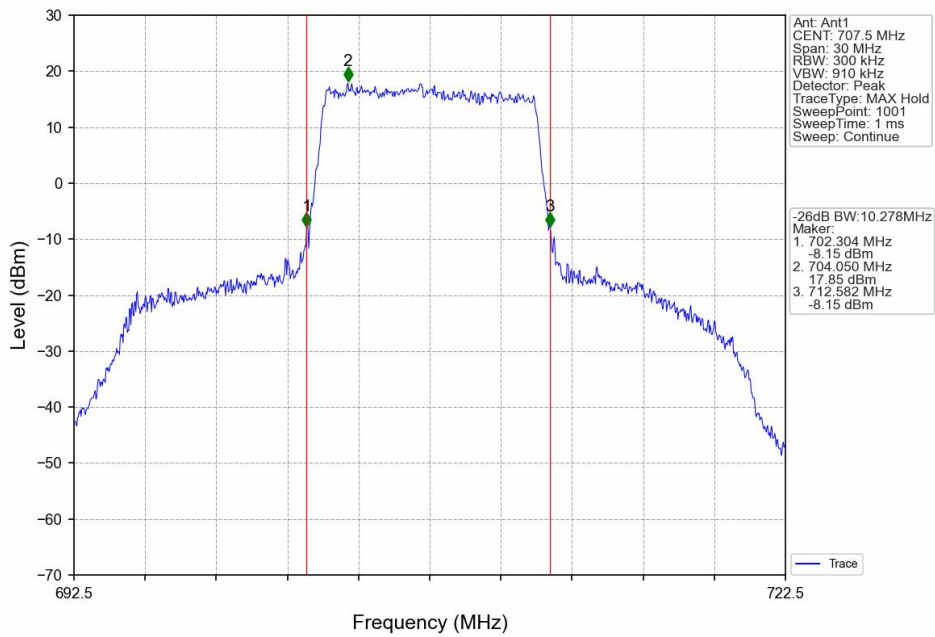
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



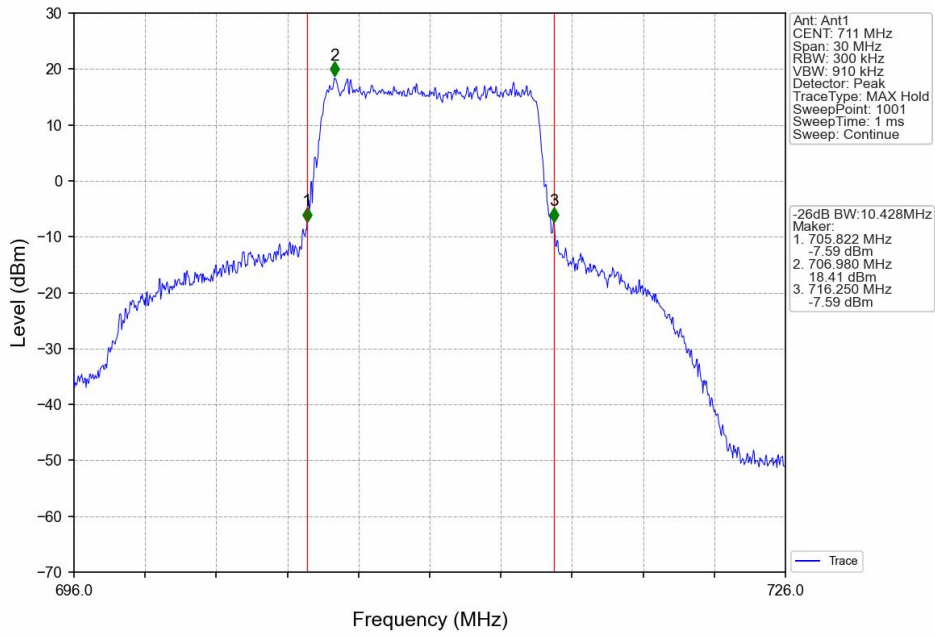
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



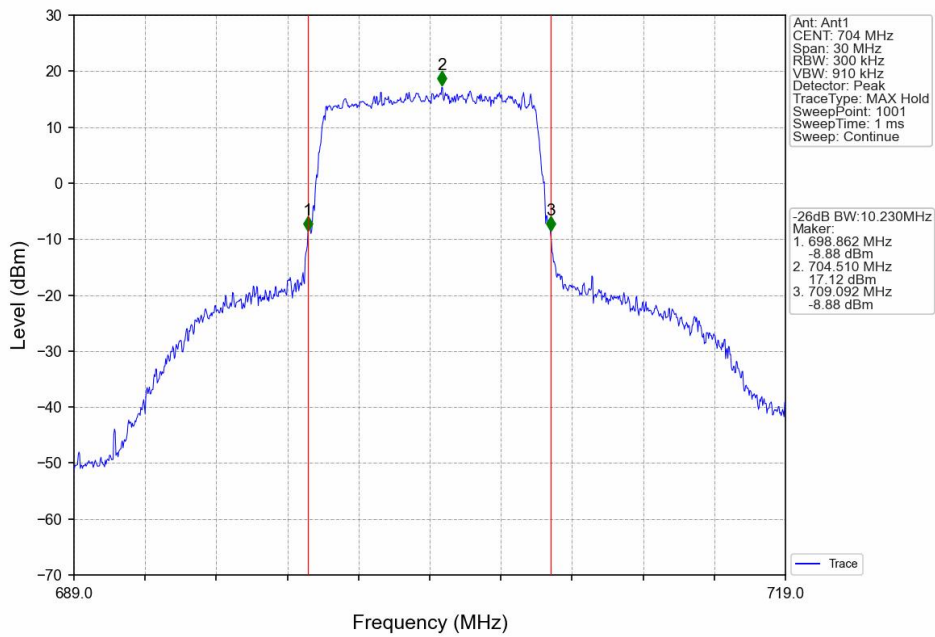
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



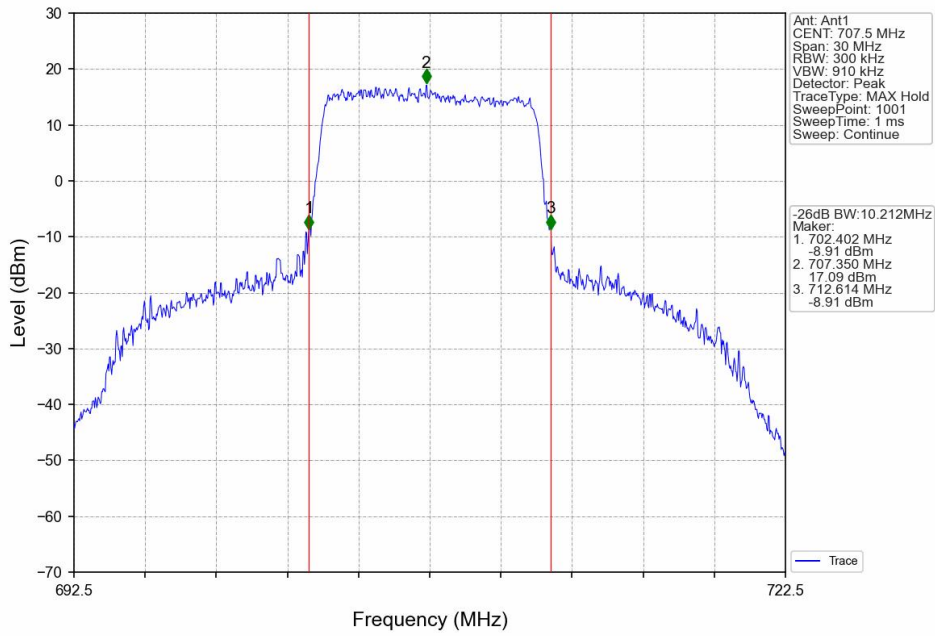
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



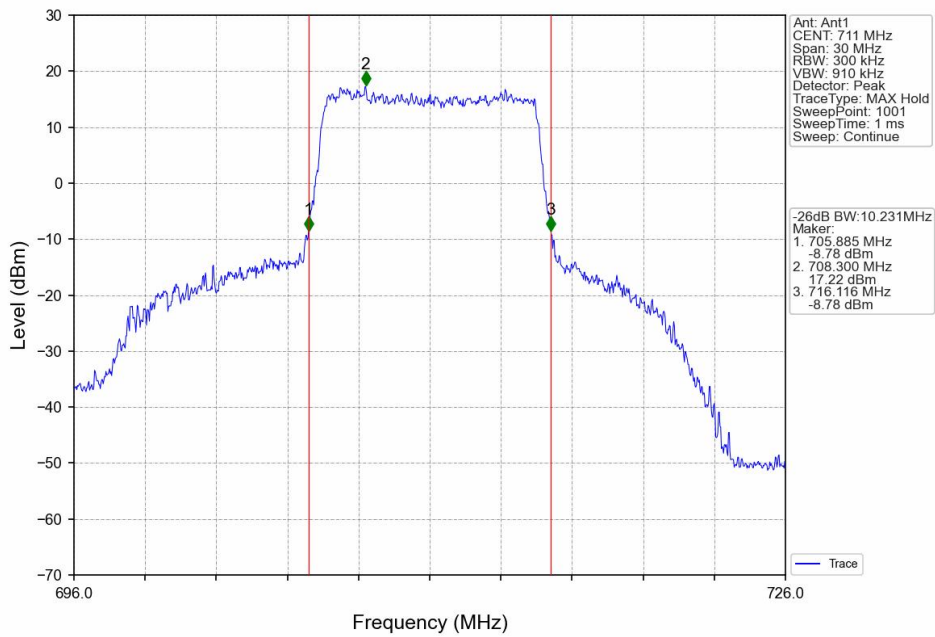
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



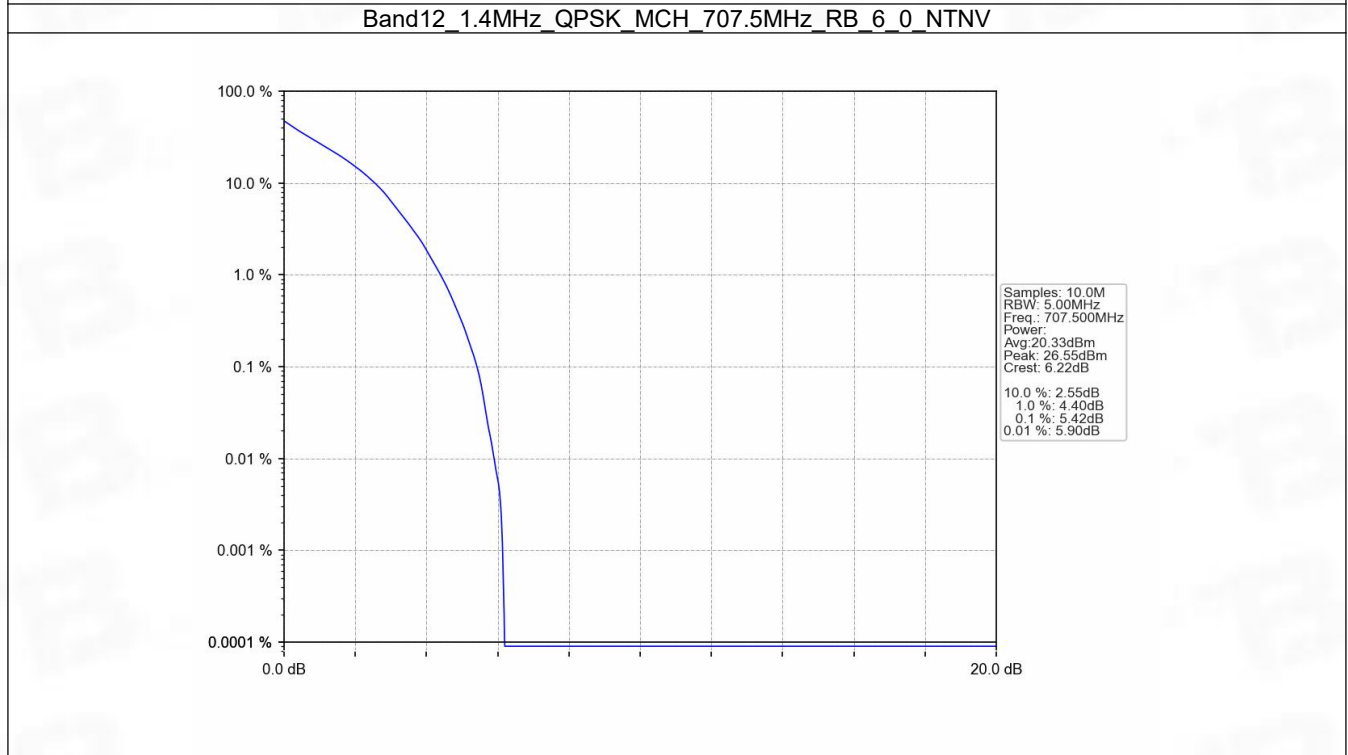
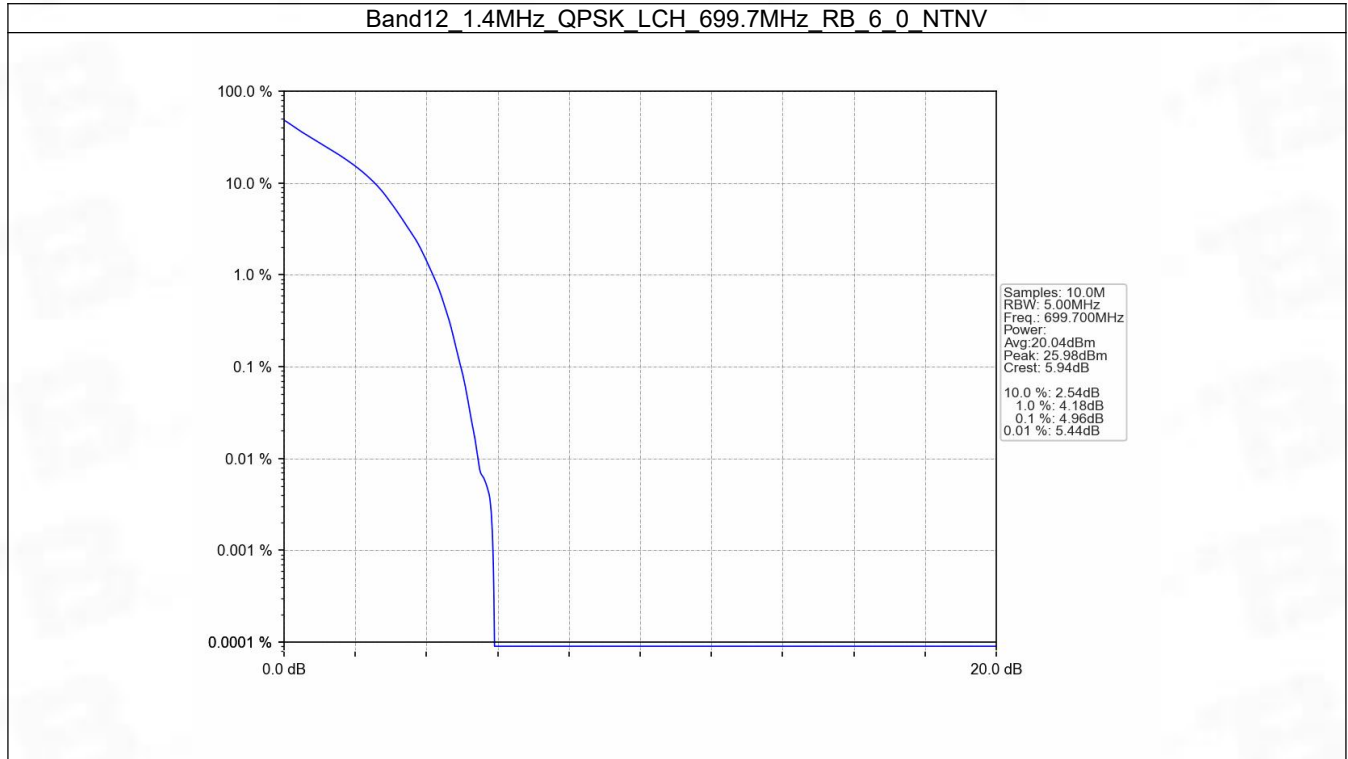
5. Peak-Average Ratio

5.1 B12_1.4MHz

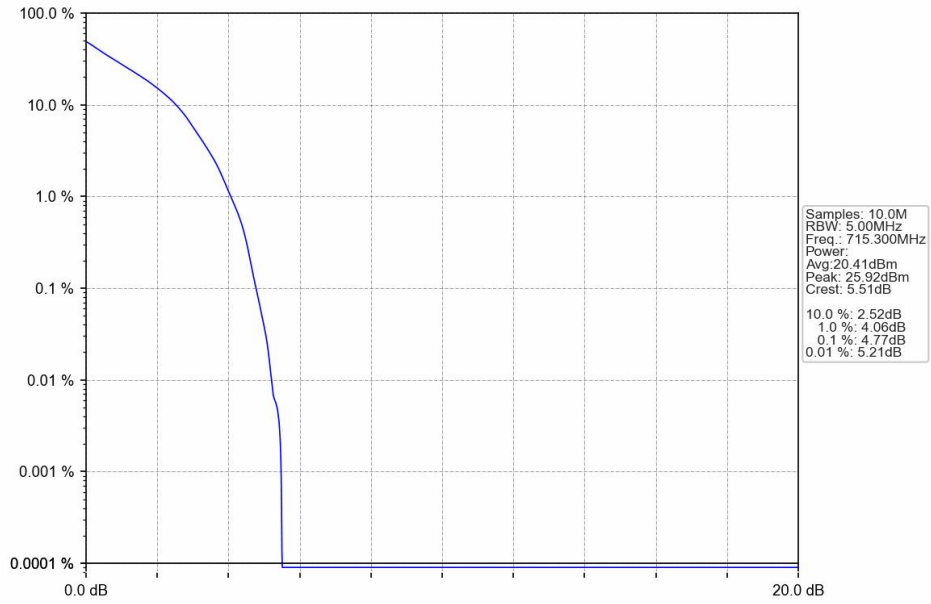
5.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	699.7	6	0	4.96	<=13	Pass
	707.5	6	0	5.42	<=13	Pass
	715.3	6	0	4.77	<=13	Pass
16QAM	699.7	6	0	5.77	<=13	Pass
	707.5	6	0	6.16	<=13	Pass
	715.3	6	0	5.66	<=13	Pass

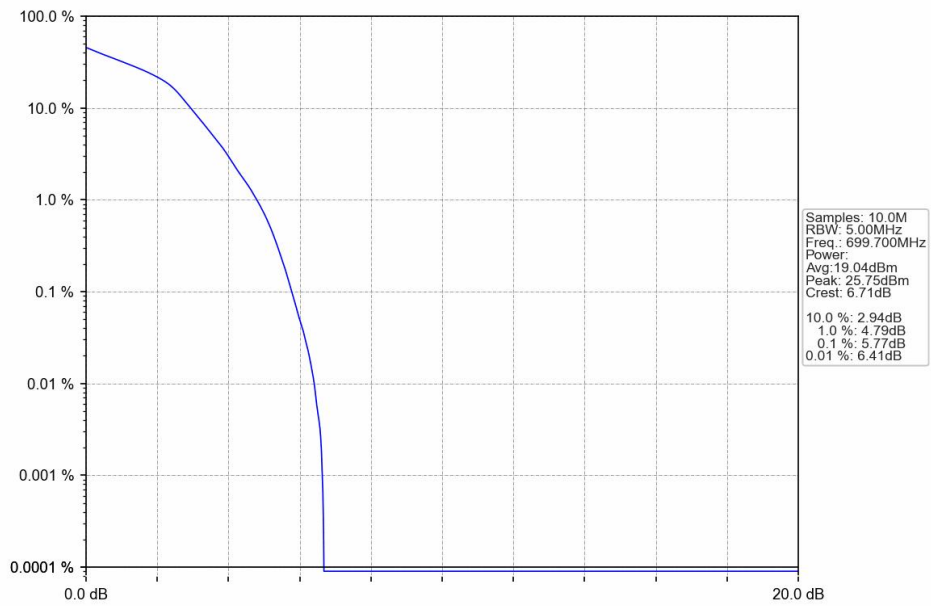
5.1.2 Test Graph



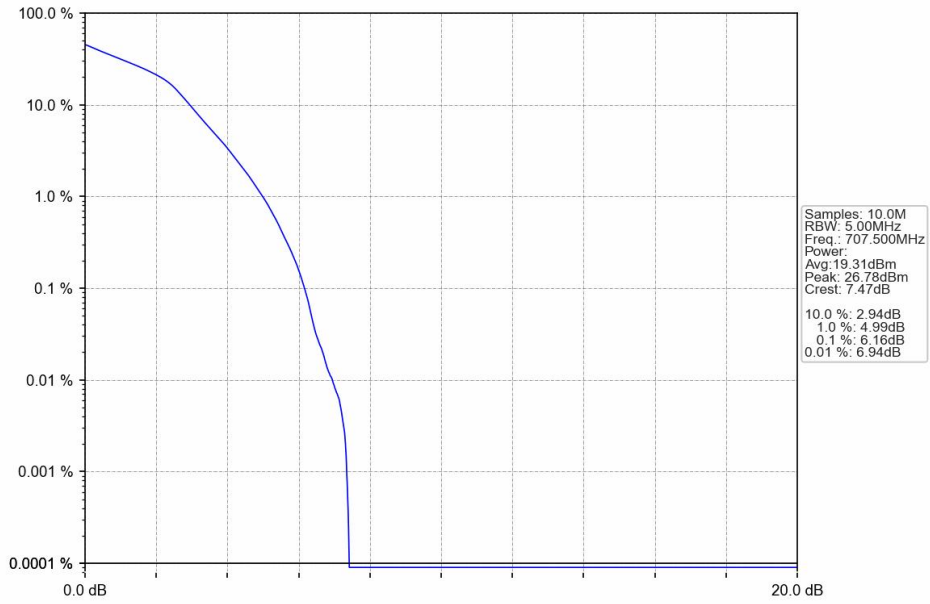
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



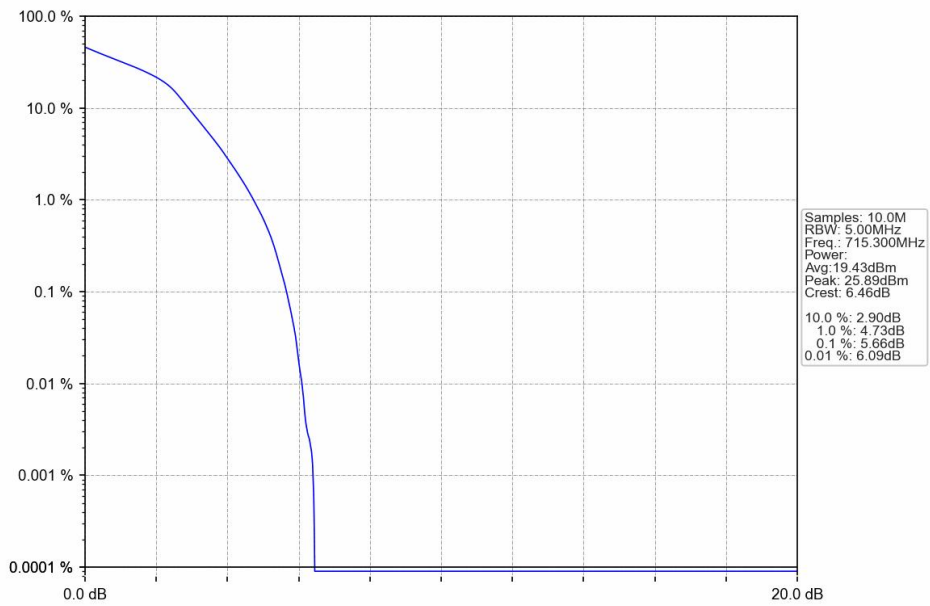
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



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



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



5.2 B12_3MHz

5.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	5.00	<=13	Pass
	707.5	15	0	5.28	<=13	Pass
	714.5	15	0	4.93	<=13	Pass
16QAM	700.5	15	0	5.85	<=13	Pass
	707.5	15	0	6.11	<=13	Pass
	714.5	15	0	5.75	<=13	Pass