

1. Effective (Isotropic) Radiated Power Output Data

1.1 B12_1.4MHz_ERP

1.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTNV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dbi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	699.7	1	0	23.31	-0.31	20.85	<=34.77	Pass		
			2	23.38	-0.31	20.92	<=34.77	Pass		
			5	23.47	-0.31	21.01	<=34.77	Pass		
		3	0	23.79	-0.31	21.33	<=34.77	Pass		
			2	23.89	-0.31	21.43	<=34.77	Pass		
			3	23.89	-0.31	21.43	<=34.77	Pass		
		6	0	22.94	-0.31	20.48	<=34.77	Pass		
		707.5	1	0	23.53	-0.31	21.07	<=34.77	Pass	
				2	23.50	-0.31	21.04	<=34.77	Pass	
	5			23.54	-0.31	21.08	<=34.77	Pass		
	3		0	24.07	-0.31	21.61	<=34.77	Pass		
			2	24.07	-0.31	21.61	<=34.77	Pass		
			3	24.08	-0.31	21.62	<=34.77	Pass		
	6	0	23.05	-0.31	20.59	<=34.77	Pass			
	715.3	1	0	23.41	-0.31	20.95	<=34.77	Pass		
			2	23.36	-0.31	20.90	<=34.77	Pass		
			5	23.41	-0.31	20.95	<=34.77	Pass		
		3	0	23.94	-0.31	21.48	<=34.77	Pass		
			2	23.90	-0.31	21.44	<=34.77	Pass		
			3	23.96	-0.31	21.50	<=34.77	Pass		
		6	0	22.96	-0.31	20.50	<=34.77	Pass		
		16QAM	699.7	1	0	22.17	-0.31	19.71	<=34.77	Pass
					2	22.29	-0.31	19.83	<=34.77	Pass
	5				22.37	-0.31	19.91	<=34.77	Pass	
3	0			22.79	-0.31	20.33	<=34.77	Pass		
	2			22.86	-0.31	20.40	<=34.77	Pass		
	3			22.85	-0.31	20.39	<=34.77	Pass		
6	0			21.96	-0.31	19.50	<=34.77	Pass		
707.5	1			0	22.71	-0.31	20.25	<=34.77	Pass	
				2	22.74	-0.31	20.28	<=34.77	Pass	
			5	22.71	-0.31	20.25	<=34.77	Pass		
	3		0	22.97	-0.31	20.51	<=34.77	Pass		
			2	22.95	-0.31	20.49	<=34.77	Pass		
			3	22.93	-0.31	20.47	<=34.77	Pass		
6	0		21.94	-0.31	19.48	<=34.77	Pass			
715.3	1		0	22.65	-0.31	20.19	<=34.77	Pass		
			2	22.63	-0.31	20.17	<=34.77	Pass		
			5	22.63	-0.31	20.17	<=34.77	Pass		
	3		0	22.90	-0.31	20.44	<=34.77	Pass		
			2	22.99	-0.31	20.53	<=34.77	Pass		
			3	22.88	-0.31	20.42	<=34.77	Pass		
	6		0	22.05	-0.31	19.59	<=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 / NTNV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dbi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	700.5	1	0	23.27	-0.31	20.81	<=34.77	Pass		
			7	23.51	-0.31	21.05	<=34.77	Pass		
			14	23.49	-0.31	21.03	<=34.77	Pass		
		8	0	22.89	-0.31	20.43	<=34.77	Pass		
			4	23.00	-0.31	20.54	<=34.77	Pass		
			7	22.97	-0.31	20.51	<=34.77	Pass		
		15	0	22.96	-0.31	20.50	<=34.77	Pass		
		707.5	1	0	23.53	-0.31	21.07	<=34.77	Pass	
				7	23.55	-0.31	21.09	<=34.77	Pass	
	14			23.50	-0.31	21.04	<=34.77	Pass		
	8		0	23.02	-0.31	20.56	<=34.77	Pass		
			4	23.01	-0.31	20.55	<=34.77	Pass		
			7	23.00	-0.31	20.54	<=34.77	Pass		
	15		0	23.04	-0.31	20.58	<=34.77	Pass		
	714.5		1	0	23.48	-0.31	21.02	<=34.77	Pass	
				7	23.49	-0.31	21.03	<=34.77	Pass	
		14		23.44	-0.31	20.98	<=34.77	Pass		
		8	0	23.05	-0.31	20.59	<=34.77	Pass		
			4	22.98	-0.31	20.52	<=34.77	Pass		
			7	22.98	-0.31	20.52	<=34.77	Pass		
		15	0	22.99	-0.31	20.53	<=34.77	Pass		
		16QAM	700.5	1	0	22.43	-0.31	19.97	<=34.77	Pass
					7	22.68	-0.31	20.22	<=34.77	Pass
	14				22.64	-0.31	20.18	<=34.77	Pass	
8	0			21.97	-0.31	19.51	<=34.77	Pass		
	4			22.06	-0.31	19.60	<=34.77	Pass		
	7			22.06	-0.31	19.60	<=34.77	Pass		
15	0			22.00	-0.31	19.54	<=34.77	Pass		
707.5	1			0	22.43	-0.31	19.97	<=34.77	Pass	
				7	22.44	-0.31	19.98	<=34.77	Pass	
			14	22.44	-0.31	19.98	<=34.77	Pass		
	8		0	22.07	-0.31	19.61	<=34.77	Pass		
			4	22.10	-0.31	19.64	<=34.77	Pass		
			7	22.07	-0.31	19.61	<=34.77	Pass		
	15		0	21.94	-0.31	19.48	<=34.77	Pass		
	714.5		1	0	22.73	-0.31	20.27	<=34.77	Pass	
				7	22.70	-0.31	20.24	<=34.77	Pass	
14				22.62	-0.31	20.16	<=34.77	Pass		
8			0	22.04	-0.31	19.58	<=34.77	Pass		
			4	21.99	-0.31	19.53	<=34.77	Pass		
			7	21.98	-0.31	19.52	<=34.77	Pass		
15			0	21.99	-0.31	19.53	<=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	23.54	-0.31	21.08	<=34.77	Pass		
			13	23.67	-0.31	21.21	<=34.77	Pass		
			24	23.72	-0.31	21.26	<=34.77	Pass		
		12	0	22.94	-0.31	20.48	<=34.77	Pass		
			6	23.02	-0.31	20.56	<=34.77	Pass		
			13	22.99	-0.31	20.53	<=34.77	Pass		
		25	0	22.98	-0.31	20.52	<=34.77	Pass		
		707.5	1	0	23.71	-0.31	21.25	<=34.77	Pass	
				13	23.68	-0.31	21.22	<=34.77	Pass	
	24			23.70	-0.31	21.24	<=34.77	Pass		
	12		0	23.07	-0.31	20.61	<=34.77	Pass		
			6	23.07	-0.31	20.61	<=34.77	Pass		
			13	23.05	-0.31	20.59	<=34.77	Pass		
	25		0	23.05	-0.31	20.59	<=34.77	Pass		
	713.5		1	0	23.59	-0.31	21.13	<=34.77	Pass	
				13	23.57	-0.31	21.11	<=34.77	Pass	
		24		23.58	-0.31	21.12	<=34.77	Pass		
		12	0	23.06	-0.31	20.60	<=34.77	Pass		
			6	23.00	-0.31	20.54	<=34.77	Pass		
			13	22.86	-0.31	20.40	<=34.77	Pass		
		25	0	22.97	-0.31	20.51	<=34.77	Pass		
		16QAM	701.5	1	0	22.45	-0.31	19.99	<=34.77	Pass
					13	22.59	-0.31	20.13	<=34.77	Pass
	24				22.61	-0.31	20.15	<=34.77	Pass	
12	0			21.93	-0.31	19.47	<=34.77	Pass		
	6			22.02	-0.31	19.56	<=34.77	Pass		
	13			22.01	-0.31	19.55	<=34.77	Pass		
25	0			21.98	-0.31	19.52	<=34.77	Pass		
707.5	1			0	22.78	-0.31	20.32	<=34.77	Pass	
				13	22.73	-0.31	20.27	<=34.77	Pass	
			24	22.74	-0.31	20.28	<=34.77	Pass		
	12		0	22.10	-0.31	19.64	<=34.77	Pass		
			6	22.08	-0.31	19.62	<=34.77	Pass		
			13	22.06	-0.31	19.60	<=34.77	Pass		
	25		0	22.10	-0.31	19.64	<=34.77	Pass		
	713.5		1	0	22.72	-0.31	20.26	<=34.77	Pass	
				13	22.66	-0.31	20.20	<=34.77	Pass	
24				22.71	-0.31	20.25	<=34.77	Pass		
12			0	22.10	-0.31	19.64	<=34.77	Pass		
			6	22.04	-0.31	19.58	<=34.77	Pass		
			13	21.88	-0.31	19.42	<=34.77	Pass		
25			0	21.94	-0.31	19.48	<=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	23.44	-0.31	20.98	<=34.77	Pass
			25	23.56	-0.31	21.10	<=34.77	Pass

		25	49	23.63	-0.31	21.17	<=34.77	Pass		
			0	22.94	-0.31	20.48	<=34.77	Pass		
			13	23.05	-0.31	20.59	<=34.77	Pass		
			25	23.08	-0.31	20.62	<=34.77	Pass		
		50	0	23.04	-0.31	20.58	<=34.77	Pass		
		707.5	1	0	23.52	-0.31	21.06	<=34.77	Pass	
				25	23.57	-0.31	21.11	<=34.77	Pass	
				49	23.61	-0.31	21.15	<=34.77	Pass	
			25	0	23.10	-0.31	20.64	<=34.77	Pass	
	13			23.04	-0.31	20.58	<=34.77	Pass		
	25			23.12	-0.31	20.66	<=34.77	Pass		
	50		0	23.14	-0.31	20.68	<=34.77	Pass		
	711		1	0	23.56	-0.31	21.10	<=34.77	Pass	
				25	23.50	-0.31	21.04	<=34.77	Pass	
		49		23.53	-0.31	21.07	<=34.77	Pass		
		25	0	23.04	-0.31	20.58	<=34.77	Pass		
			13	23.06	-0.31	20.60	<=34.77	Pass		
			25	23.01	-0.31	20.55	<=34.77	Pass		
		50	0	23.04	-0.31	20.58	<=34.77	Pass		
		16QAM	704	1	0	22.59	-0.31	20.13	<=34.77	Pass
					25	22.71	-0.31	20.25	<=34.77	Pass
	49				22.80	-0.31	20.34	<=34.77	Pass	
	25			0	21.92	-0.31	19.46	<=34.77	Pass	
				13	22.04	-0.31	19.58	<=34.77	Pass	
				25	22.04	-0.31	19.58	<=34.77	Pass	
	50			0	22.01	-0.31	19.55	<=34.77	Pass	
	707.5			1	0	22.42	-0.31	19.96	<=34.77	Pass
25					22.42	-0.31	19.96	<=34.77	Pass	
49			22.52		-0.31	20.06	<=34.77	Pass		
25			0	22.16	-0.31	19.70	<=34.77	Pass		
			13	22.07	-0.31	19.61	<=34.77	Pass		
			25	22.14	-0.31	19.68	<=34.77	Pass		
50			0	22.12	-0.31	19.66	<=34.77	Pass		
711			1	0	22.82	-0.31	20.36	<=34.77	Pass	
				25	22.73	-0.31	20.27	<=34.77	Pass	
	49			22.77	-0.31	20.31	<=34.77	Pass		
	25		0	22.03	-0.31	19.57	<=34.77	Pass		
			13	22.08	-0.31	19.62	<=34.77	Pass		
			25	22.02	-0.31	19.56	<=34.77	Pass		
	50		0	22.05	-0.31	19.59	<=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	3.23	-1.431	-0.0020	-2.5 to 2.5	Pass
					3.8	1.874	0.0027	-2.5 to 2.5	Pass
					4.37	-1.044	-0.0015	-2.5 to 2.5	Pass

				-30	3.8	2.174	0.0031	-2.5 to 2.5	Pass			
				-20	3.8	-1.502	-0.0021	-2.5 to 2.5	Pass			
				-10	3.8	-0.830	-0.0012	-2.5 to 2.5	Pass			
				0	3.8	0.443	0.0006	-2.5 to 2.5	Pass			
				10	3.8	2.632	0.0038	-2.5 to 2.5	Pass			
				30	3.8	-1.631	-0.0023	-2.5 to 2.5	Pass			
				40	3.8	0.358	0.0005	-2.5 to 2.5	Pass			
	50	3.8	-1.130	-0.0016	-2.5 to 2.5	Pass						
	707.5	6	0	20	3.23	0.100	0.0001	-2.5 to 2.5	Pass			
					3.8	-1.745	-0.0025	-2.5 to 2.5	Pass			
					4.37	1.903	0.0027	-2.5 to 2.5	Pass			
				-30	3.8	-2.704	-0.0038	-2.5 to 2.5	Pass			
				-20	3.8	0.715	0.0010	-2.5 to 2.5	Pass			
				-10	3.8	-2.632	-0.0037	-2.5 to 2.5	Pass			
				0	3.8	-1.645	-0.0023	-2.5 to 2.5	Pass			
				10	3.8	0.243	0.0003	-2.5 to 2.5	Pass			
				30	3.8	1.130	0.0016	-2.5 to 2.5	Pass			
				40	3.8	-2.832	-0.0040	-2.5 to 2.5	Pass			
				50	3.8	1.616	0.0023	-2.5 to 2.5	Pass			
				715.3	6	0	20	3.23	-0.172	-0.0002	-2.5 to 2.5	Pass
								3.8	-1.216	-0.0017	-2.5 to 2.5	Pass
	4.37	0.358	0.0005					-2.5 to 2.5	Pass			
	-30	3.8	-2.804				-0.0039	-2.5 to 2.5	Pass			
	-20	3.8	3.533				0.0049	-2.5 to 2.5	Pass			
	-10	3.8	-5.150				-0.0072	-2.5 to 2.5	Pass			
	0	3.8	2.303				0.0032	-2.5 to 2.5	Pass			
	10	3.8	2.203				0.0031	-2.5 to 2.5	Pass			
30	3.8	1.702	0.0024				-2.5 to 2.5	Pass				
40	3.8	1.187	0.0017				-2.5 to 2.5	Pass				
50	3.8	-0.501	-0.0007				-2.5 to 2.5	Pass				
16QAM	699.7	6	0				20	3.23	-2.203	-0.0031	-2.5 to 2.5	Pass
								3.8	2.775	0.0040	-2.5 to 2.5	Pass
				4.37	0.186	0.0003		-2.5 to 2.5	Pass			
				-30	3.8	0.815	0.0012	-2.5 to 2.5	Pass			
				-20	3.8	1.616	0.0023	-2.5 to 2.5	Pass			
				-10	3.8	0.672	0.0010	-2.5 to 2.5	Pass			
				0	3.8	0.958	0.0014	-2.5 to 2.5	Pass			
				10	3.8	1.059	0.0015	-2.5 to 2.5	Pass			
				30	3.8	-2.031	-0.0029	-2.5 to 2.5	Pass			
				40	3.8	-0.100	-0.0001	-2.5 to 2.5	Pass			
				50	3.8	-4.821	-0.0069	-2.5 to 2.5	Pass			
				707.5	6	0	20	3.23	-5.121	-0.0072	-2.5 to 2.5	Pass
								3.8	0.801	0.0011	-2.5 to 2.5	Pass
	4.37	-2.446	-0.0035					-2.5 to 2.5	Pass			
	-30	3.8	-0.029				0.0000	-2.5 to 2.5	Pass			
	-20	3.8	-1.359				-0.0019	-2.5 to 2.5	Pass			
	-10	3.8	-1.431				-0.0020	-2.5 to 2.5	Pass			
	0	3.8	-1.101				-0.0016	-2.5 to 2.5	Pass			
	10	3.8	2.546				0.0036	-2.5 to 2.5	Pass			
	30	3.8	-0.644				-0.0009	-2.5 to 2.5	Pass			
	40	3.8	-0.658				-0.0009	-2.5 to 2.5	Pass			
	50	3.8	-1.574				-0.0022	-2.5 to 2.5	Pass			
	715.3	6	0				20	3.23	1.888	0.0026	-2.5 to 2.5	Pass
								3.8	2.103	0.0029	-2.5 to 2.5	Pass
				4.37	-0.029	0.0000		-2.5 to 2.5	Pass			
				-30	3.8	-1.602	-0.0022	-2.5 to 2.5	Pass			
				-20	3.8	-2.561	-0.0036	-2.5 to 2.5	Pass			

				-10	3.8	-2.046	-0.0029	-2.5 to 2.5	Pass
				0	3.8	-1.130	-0.0016	-2.5 to 2.5	Pass
				10	3.8	-6.580	-0.0092	-2.5 to 2.5	Pass
				30	3.8	-2.589	-0.0036	-2.5 to 2.5	Pass
				40	3.8	0.215	0.0003	-2.5 to 2.5	Pass
				50	3.8	-1.073	-0.0015	-2.5 to 2.5	Pass

2.2 B12_3MHz

2.2.1 Test Result

Band: 12 / Bandwidth: 3MHz										
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict	
		Size	Offset				Result	Limit		
QPSK	700.5	15	0	20	3.23	2.561	0.0037	-2.5 to 2.5	Pass	
					3.8	-1.101	-0.0016	-2.5 to 2.5	Pass	
					4.37	-0.615	-0.0009	-2.5 to 2.5	Pass	
				-30	3.8	-0.730	-0.0010	-2.5 to 2.5	Pass	
					-20	3.8	1.574	0.0022	-2.5 to 2.5	Pass
						3.8	0.415	0.0006	-2.5 to 2.5	Pass
				0	3.8	2.046	0.0029	-2.5 to 2.5	Pass	
					3.8	-0.172	-0.0002	-2.5 to 2.5	Pass	
				10	3.8	-0.315	-0.0004	-2.5 to 2.5	Pass	
	3.8	-0.529	-0.0008		-2.5 to 2.5	Pass				
	30	3.8	-1.173	-0.0017	-2.5 to 2.5	Pass				
		3.8	-1.688	-0.0024	-2.5 to 2.5	Pass				
	707.5	15	0	20	3.23	-1.688	-0.0024	-2.5 to 2.5	Pass	
					3.8	-0.815	-0.0012	-2.5 to 2.5	Pass	
					4.37	-1.345	-0.0019	-2.5 to 2.5	Pass	
				-30	3.8	-3.662	-0.0052	-2.5 to 2.5	Pass	
					-20	3.8	-3.805	-0.0054	-2.5 to 2.5	Pass
						3.8	-1.402	-0.0020	-2.5 to 2.5	Pass
				-10	3.8	-2.117	-0.0030	-2.5 to 2.5	Pass	
					3.8	0.858	0.0012	-2.5 to 2.5	Pass	
				0	3.8	-2.403	-0.0034	-2.5 to 2.5	Pass	
	3.8	-1.373	-0.0019		-2.5 to 2.5	Pass				
	10	3.8	-1.130	-0.0016	-2.5 to 2.5	Pass				
		3.8	1.144	0.0016	-2.5 to 2.5	Pass				
	714.5	15	0	20	3.23	1.144	0.0016	-2.5 to 2.5	Pass	
					3.8	-2.446	-0.0034	-2.5 to 2.5	Pass	
					4.37	0.243	0.0003	-2.5 to 2.5	Pass	
-30				3.8	1.717	0.0024	-2.5 to 2.5	Pass		
				-20	3.8	-0.772	-0.0011	-2.5 to 2.5	Pass	
					3.8	-0.143	-0.0002	-2.5 to 2.5	Pass	
-10				3.8	0.014	0.0000	-2.5 to 2.5	Pass		
				3.8	2.489	0.0035	-2.5 to 2.5	Pass		
0				3.8	1.316	0.0018	-2.5 to 2.5	Pass		
	3.8	-0.629	-0.0009	-2.5 to 2.5	Pass					
10	3.8	0.515	0.0007	-2.5 to 2.5	Pass					
	3.8	-0.386	-0.0006	-2.5 to 2.5	Pass					
16QAM	700.5	15	0	20	3.23	-0.386	-0.0006	-2.5 to 2.5	Pass	
					3.8	-2.260	-0.0032	-2.5 to 2.5	Pass	
					4.37	4.449	0.0064	-2.5 to 2.5	Pass	
				-30	3.8	1.659	0.0024	-2.5 to 2.5	Pass	
					-20	3.8	-1.245	-0.0018	-2.5 to 2.5	Pass
						3.8	-4.621	-0.0066	-2.5 to 2.5	Pass
				-10	3.8	-2.189	-0.0031	-2.5 to 2.5	Pass	
					3.8	0.072	0.0001	-2.5 to 2.5	Pass	

	707.5	15	0	30	3.8	1.588	0.0023	-2.5 to 2.5	Pass
				40	3.8	-2.432	-0.0035	-2.5 to 2.5	Pass
				50	3.8	0.215	0.0003	-2.5 to 2.5	Pass
				20	3.23	-1.116	-0.0016	-2.5 to 2.5	Pass
					3.8	-1.931	-0.0027	-2.5 to 2.5	Pass
					4.37	-2.832	-0.0040	-2.5 to 2.5	Pass
				-30	3.8	1.044	0.0015	-2.5 to 2.5	Pass
				-20	3.8	-1.187	-0.0017	-2.5 to 2.5	Pass
				-10	3.8	1.144	0.0016	-2.5 to 2.5	Pass
				0	3.8	-2.174	-0.0031	-2.5 to 2.5	Pass
	10	3.8	1.459	0.0021	-2.5 to 2.5	Pass			
	30	3.8	-2.260	-0.0032	-2.5 to 2.5	Pass			
	40	3.8	0.930	0.0013	-2.5 to 2.5	Pass			
	50	3.8	-1.888	-0.0027	-2.5 to 2.5	Pass			
	714.5	15	0	20	3.23	2.303	0.0032	-2.5 to 2.5	Pass
					3.8	-2.961	-0.0041	-2.5 to 2.5	Pass
					4.37	-0.916	-0.0013	-2.5 to 2.5	Pass
				-30	3.8	2.146	0.0030	-2.5 to 2.5	Pass
				-20	3.8	-3.548	-0.0050	-2.5 to 2.5	Pass
				-10	3.8	-3.748	-0.0052	-2.5 to 2.5	Pass
0				3.8	-1.788	-0.0025	-2.5 to 2.5	Pass	
10				3.8	1.817	0.0025	-2.5 to 2.5	Pass	
30				3.8	-1.144	-0.0016	-2.5 to 2.5	Pass	
40				3.8	1.874	0.0026	-2.5 to 2.5	Pass	
50	3.8	-2.017	-0.0028	-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	3.23	-0.601	-0.0009	-2.5 to 2.5	Pass
					3.8	-2.632	-0.0038	-2.5 to 2.5	Pass
					4.37	0.587	0.0008	-2.5 to 2.5	Pass
				-30	3.8	-1.745	-0.0025	-2.5 to 2.5	Pass
				-20	3.8	-1.831	-0.0026	-2.5 to 2.5	Pass
				-10	3.8	-1.974	-0.0028	-2.5 to 2.5	Pass
				0	3.8	-0.458	-0.0007	-2.5 to 2.5	Pass
				10	3.8	0.057	0.0001	-2.5 to 2.5	Pass
				30	3.8	-0.601	-0.0009	-2.5 to 2.5	Pass
				40	3.8	-2.346	-0.0033	-2.5 to 2.5	Pass
	50	3.8	-2.460	-0.0035	-2.5 to 2.5	Pass			
	707.5	25	0	20	3.23	-1.431	-0.0020	-2.5 to 2.5	Pass
					3.8	1.073	0.0015	-2.5 to 2.5	Pass
					4.37	3.319	0.0047	-2.5 to 2.5	Pass
				-30	3.8	3.076	0.0043	-2.5 to 2.5	Pass
				-20	3.8	-2.632	-0.0037	-2.5 to 2.5	Pass
				-10	3.8	1.373	0.0019	-2.5 to 2.5	Pass
				0	3.8	-0.257	-0.0004	-2.5 to 2.5	Pass
				10	3.8	-1.488	-0.0021	-2.5 to 2.5	Pass
				30	3.8	-1.030	-0.0015	-2.5 to 2.5	Pass
40				3.8	-0.358	-0.0005	-2.5 to 2.5	Pass	
50	3.8	1.059	0.0015	-2.5 to 2.5	Pass				

	713.5	25	0	20	3.23	-2.804	-0.0039	-2.5 to 2.5	Pass					
					3.8	3.076	0.0043	-2.5 to 2.5	Pass					
					4.37	0.372	0.0005	-2.5 to 2.5	Pass					
								-30	3.8	1.087	0.0015	-2.5 to 2.5	Pass	
								-20	3.8	-2.346	-0.0033	-2.5 to 2.5	Pass	
								-10	3.8	0.329	0.0005	-2.5 to 2.5	Pass	
								0	3.8	-0.043	-0.0001	-2.5 to 2.5	Pass	
								10	3.8	-0.300	-0.0004	-2.5 to 2.5	Pass	
								30	3.8	0.114	0.0002	-2.5 to 2.5	Pass	
								40	3.8	1.087	0.0015	-2.5 to 2.5	Pass	
50	3.8	0.987	0.0014	-2.5 to 2.5	Pass									
16QAM	701.5	25	0	20	3.23	0.730	0.0010	-2.5 to 2.5	Pass					
					3.8	-0.730	-0.0010	-2.5 to 2.5	Pass					
					4.37	-0.801	-0.0011	-2.5 to 2.5	Pass					
								-30	3.8	-2.131	-0.0030	-2.5 to 2.5	Pass	
								-20	3.8	-1.073	-0.0015	-2.5 to 2.5	Pass	
								-10	3.8	2.232	0.0032	-2.5 to 2.5	Pass	
								0	3.8	-0.186	-0.0003	-2.5 to 2.5	Pass	
								10	3.8	-3.519	-0.0050	-2.5 to 2.5	Pass	
								30	3.8	0.958	0.0014	-2.5 to 2.5	Pass	
								40	3.8	-4.020	-0.0057	-2.5 to 2.5	Pass	
	50	3.8	-0.529	-0.0008	-2.5 to 2.5	Pass								
		707.5	25	0	20	3.23	-0.744	-0.0011	-2.5 to 2.5	Pass				
						3.8	2.060	0.0029	-2.5 to 2.5	Pass				
						4.37	-1.202	-0.0017	-2.5 to 2.5	Pass				
									-30	3.8	1.001	0.0014	-2.5 to 2.5	Pass
									-20	3.8	-1.788	-0.0025	-2.5 to 2.5	Pass
									-10	3.8	2.246	0.0032	-2.5 to 2.5	Pass
									0	3.8	-0.229	-0.0003	-2.5 to 2.5	Pass
									10	3.8	2.303	0.0033	-2.5 to 2.5	Pass
									30	3.8	3.061	0.0043	-2.5 to 2.5	Pass
									40	3.8	1.774	0.0025	-2.5 to 2.5	Pass
	50	3.8	-0.715	-0.0010	-2.5 to 2.5	Pass								
		713.5	25	0	20	3.23	1.502	0.0021	-2.5 to 2.5	Pass				
						3.8	1.373	0.0019	-2.5 to 2.5	Pass				
						4.37	1.044	0.0015	-2.5 to 2.5	Pass				
									-30	3.8	1.945	0.0027	-2.5 to 2.5	Pass
									-20	3.8	1.287	0.0018	-2.5 to 2.5	Pass
									-10	3.8	1.702	0.0024	-2.5 to 2.5	Pass
									0	3.8	3.247	0.0046	-2.5 to 2.5	Pass
									10	3.8	2.818	0.0039	-2.5 to 2.5	Pass
30									3.8	0.844	0.0012	-2.5 to 2.5	Pass	
40									3.8	0.014	0.0000	-2.5 to 2.5	Pass	
50	3.8	4.506	0.0063	-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			3.23	-3.648	-0.0052	-2.5 to 2.5	Pass
							3.8	-2.017	-0.0029	-2.5 to 2.5	Pass
							4.37	-3.147	-0.0045	-2.5 to 2.5	Pass

				-30	3.8	-3.262	-0.0046	-2.5 to 2.5	Pass
				-20	3.8	-1.216	-0.0017	-2.5 to 2.5	Pass
				-10	3.8	-2.160	-0.0031	-2.5 to 2.5	Pass
				0	3.8	0.758	0.0011	-2.5 to 2.5	Pass
				10	3.8	-0.157	-0.0002	-2.5 to 2.5	Pass
				30	3.8	0.029	0.0000	-2.5 to 2.5	Pass
				40	3.8	0.901	0.0013	-2.5 to 2.5	Pass
				50	3.8	-0.443	-0.0006	-2.5 to 2.5	Pass
	707.5	50	0	20	3.23	1.245	0.0018	-2.5 to 2.5	Pass
					3.8	1.016	0.0014	-2.5 to 2.5	Pass
					4.37	0.744	0.0011	-2.5 to 2.5	Pass
				-30	3.8	1.545	0.0022	-2.5 to 2.5	Pass
				-20	3.8	0.186	0.0003	-2.5 to 2.5	Pass
				-10	3.8	0.830	0.0012	-2.5 to 2.5	Pass
				0	3.8	0.901	0.0013	-2.5 to 2.5	Pass
				10	3.8	-1.245	-0.0018	-2.5 to 2.5	Pass
				30	3.8	1.945	0.0027	-2.5 to 2.5	Pass
				40	3.8	-0.930	-0.0013	-2.5 to 2.5	Pass
				50	3.8	0.987	0.0014	-2.5 to 2.5	Pass
				711	50	0	20	3.23	-2.317
	3.8	-0.916	-0.0013					-2.5 to 2.5	Pass
	4.37	-1.016	-0.0014					-2.5 to 2.5	Pass
	-30	3.8	-0.730				-0.0010	-2.5 to 2.5	Pass
	-20	3.8	1.402				0.0020	-2.5 to 2.5	Pass
	-10	3.8	-1.631				-0.0023	-2.5 to 2.5	Pass
	0	3.8	1.202				0.0017	-2.5 to 2.5	Pass
	10	3.8	-1.874				-0.0026	-2.5 to 2.5	Pass
	30	3.8	-0.486				-0.0007	-2.5 to 2.5	Pass
	40	3.8	-0.100				-0.0001	-2.5 to 2.5	Pass
	50	3.8	-1.388				-0.0020	-2.5 to 2.5	Pass
16QAM	704	50	0				20	3.23	-2.146
				3.8	-3.548	-0.0050		-2.5 to 2.5	Pass
				4.37	-1.917	-0.0027		-2.5 to 2.5	Pass
				-30	3.8	-0.615	-0.0009	-2.5 to 2.5	Pass
				-20	3.8	0.057	0.0001	-2.5 to 2.5	Pass
				-10	3.8	0.215	0.0003	-2.5 to 2.5	Pass
				0	3.8	-0.601	-0.0009	-2.5 to 2.5	Pass
				10	3.8	-0.916	-0.0013	-2.5 to 2.5	Pass
				30	3.8	0.429	0.0006	-2.5 to 2.5	Pass
				40	3.8	-1.402	-0.0020	-2.5 to 2.5	Pass
				50	3.8	-3.362	-0.0048	-2.5 to 2.5	Pass
				707.5	50	0	20	3.23	-1.674
	3.8	-0.072	-0.0001					-2.5 to 2.5	Pass
	4.37	1.144	0.0016					-2.5 to 2.5	Pass
	-30	3.8	-1.388				-0.0020	-2.5 to 2.5	Pass
	-20	3.8	1.230				0.0017	-2.5 to 2.5	Pass
	-10	3.8	-0.801				-0.0011	-2.5 to 2.5	Pass
	0	3.8	0.200				0.0003	-2.5 to 2.5	Pass
	10	3.8	0.458				0.0006	-2.5 to 2.5	Pass
	30	3.8	-2.832				-0.0040	-2.5 to 2.5	Pass
	40	3.8	0.172				0.0002	-2.5 to 2.5	Pass
	50	3.8	0.629				0.0009	-2.5 to 2.5	Pass
	711	50	0				20	3.23	-0.587
				3.8	-1.101	-0.0015		-2.5 to 2.5	Pass
				4.37	-1.945	-0.0027		-2.5 to 2.5	Pass
				-30	3.8	-1.459	-0.0021	-2.5 to 2.5	Pass
				-20	3.8	-1.745	-0.0025	-2.5 to 2.5	Pass

				-10	3.8	-0.114	-0.0002	-2.5 to 2.5	Pass
				0	3.8	-0.787	-0.0011	-2.5 to 2.5	Pass
				10	3.8	0.501	0.0007	-2.5 to 2.5	Pass
				30	3.8	2.074	0.0029	-2.5 to 2.5	Pass
				40	3.8	-1.130	-0.0016	-2.5 to 2.5	Pass
				50	3.8	-2.489	-0.0035	-2.5 to 2.5	Pass

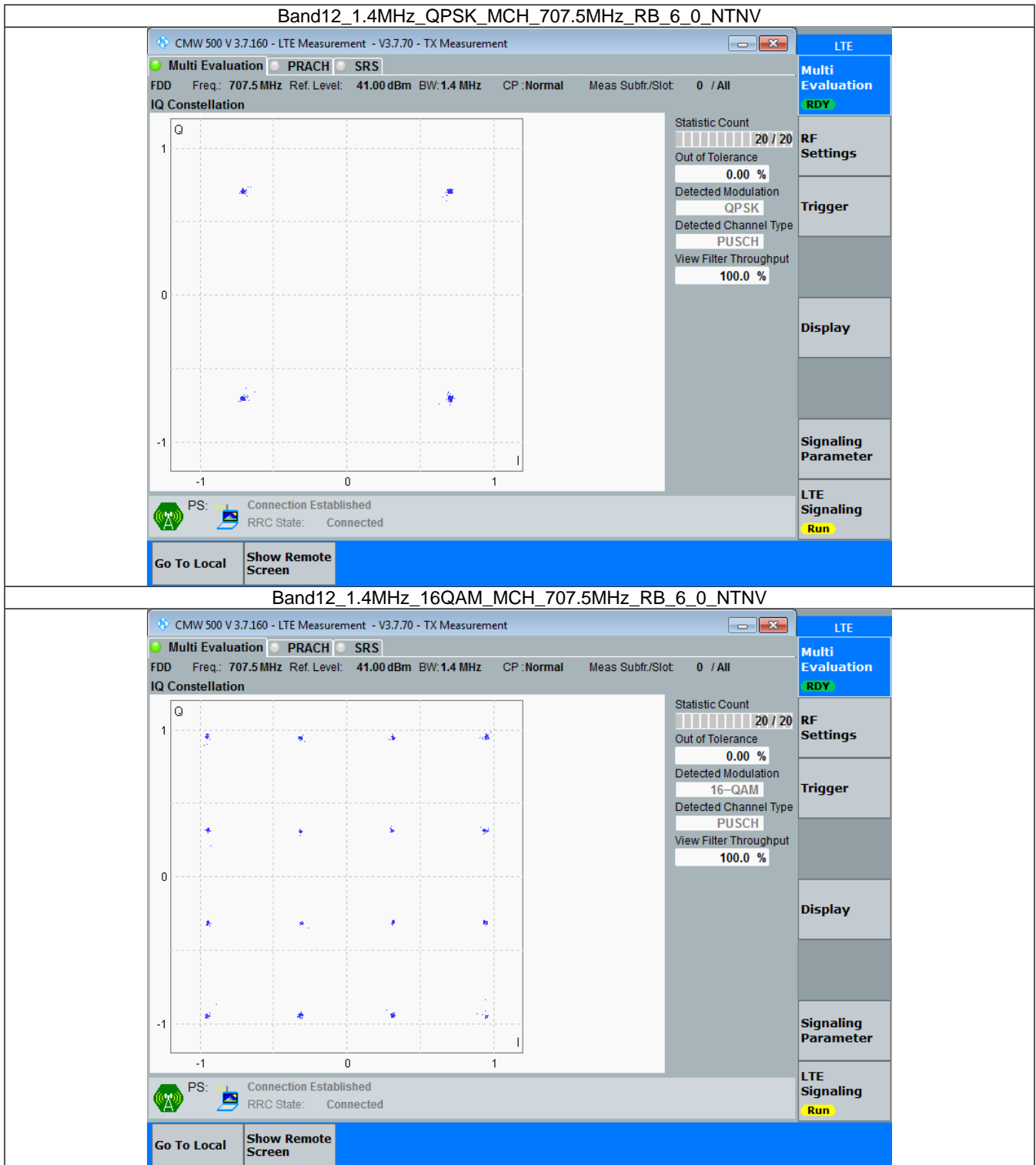
3. Modulation Characteristics

3.1 B12_1.4MHz

3.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTN						
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

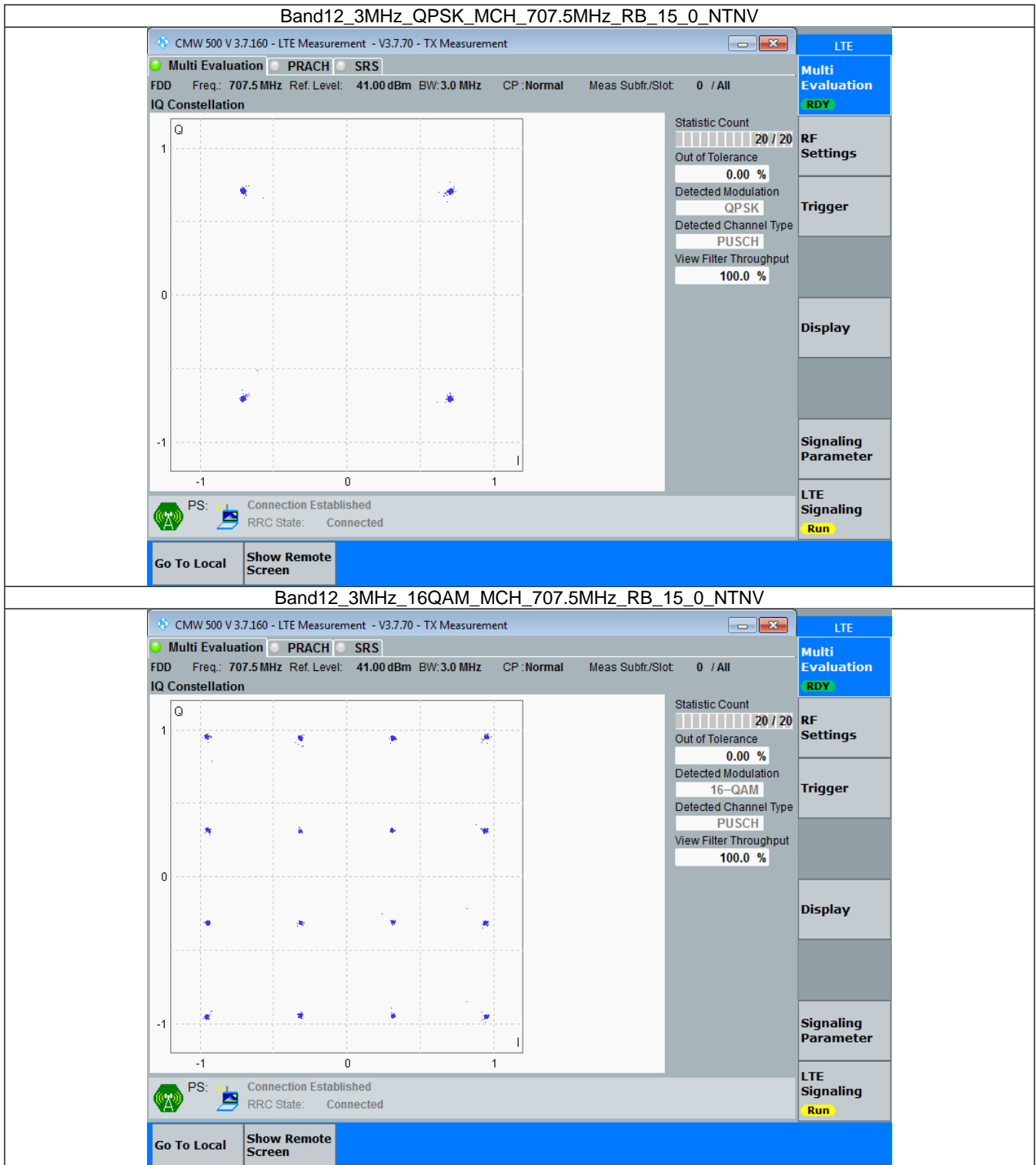


3.2 B12_3MHz

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

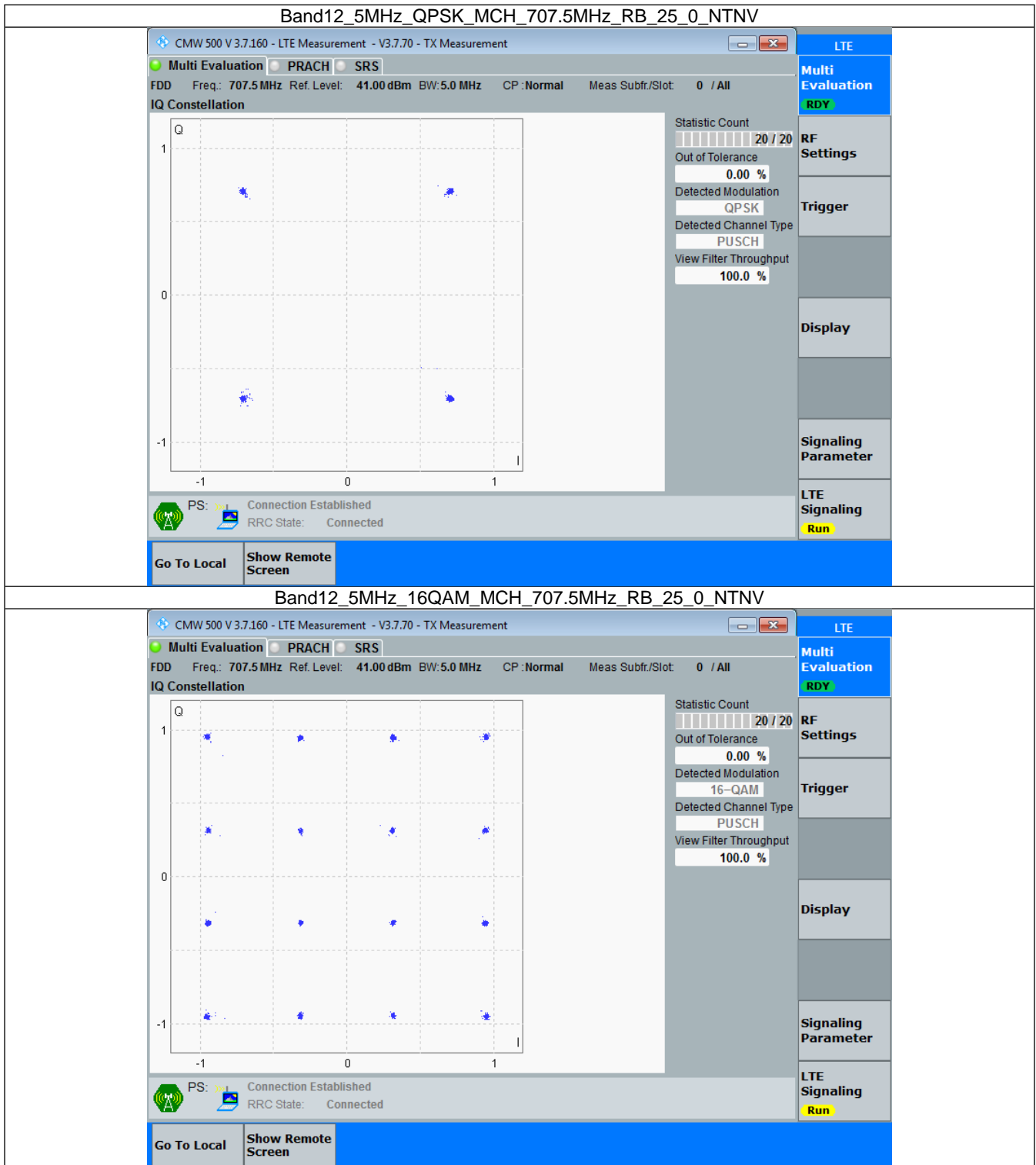


3.3 B12_5MHz

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

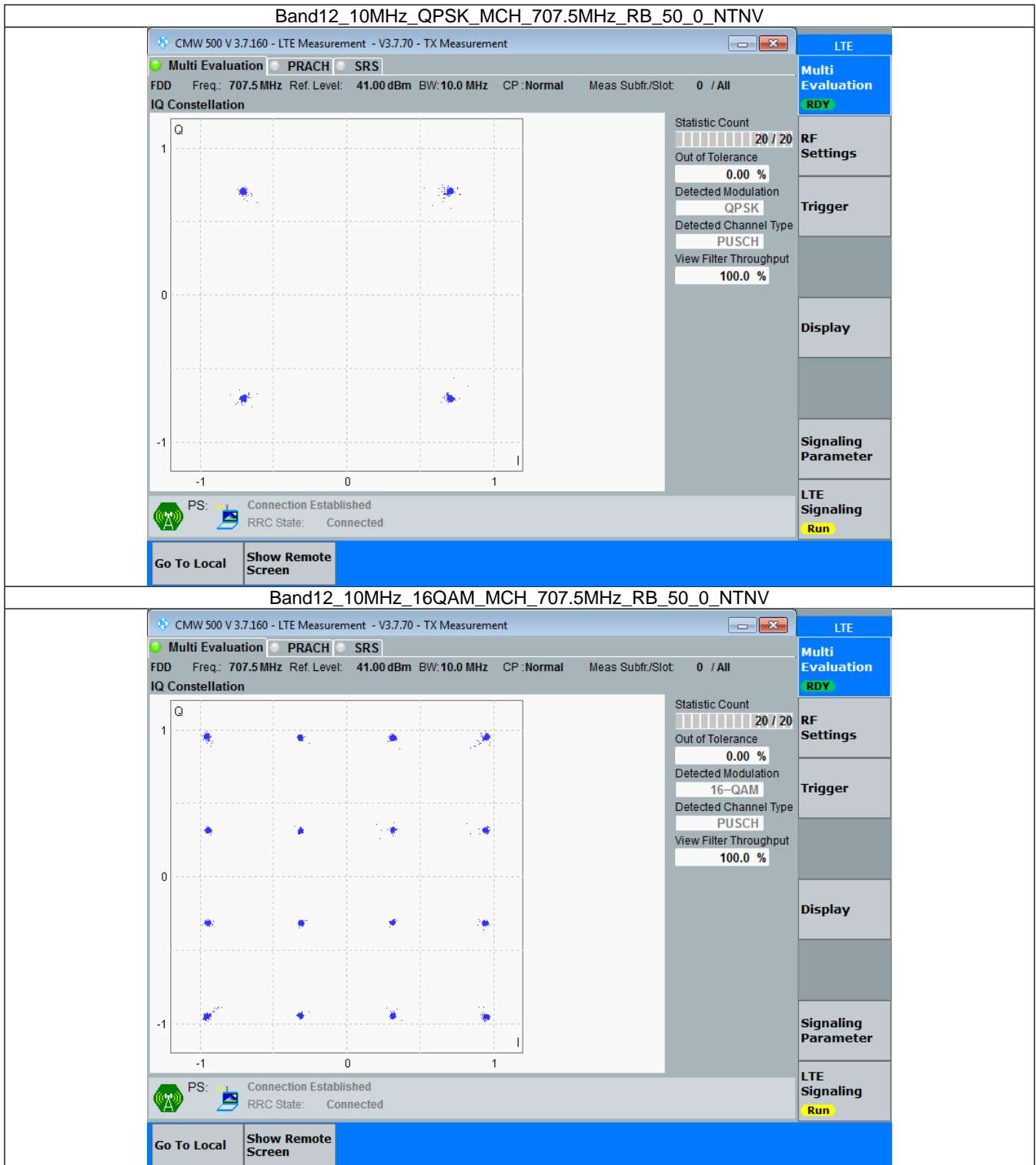


3.4 B12_10MHz

3.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / 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

3.4.2 Test Graph



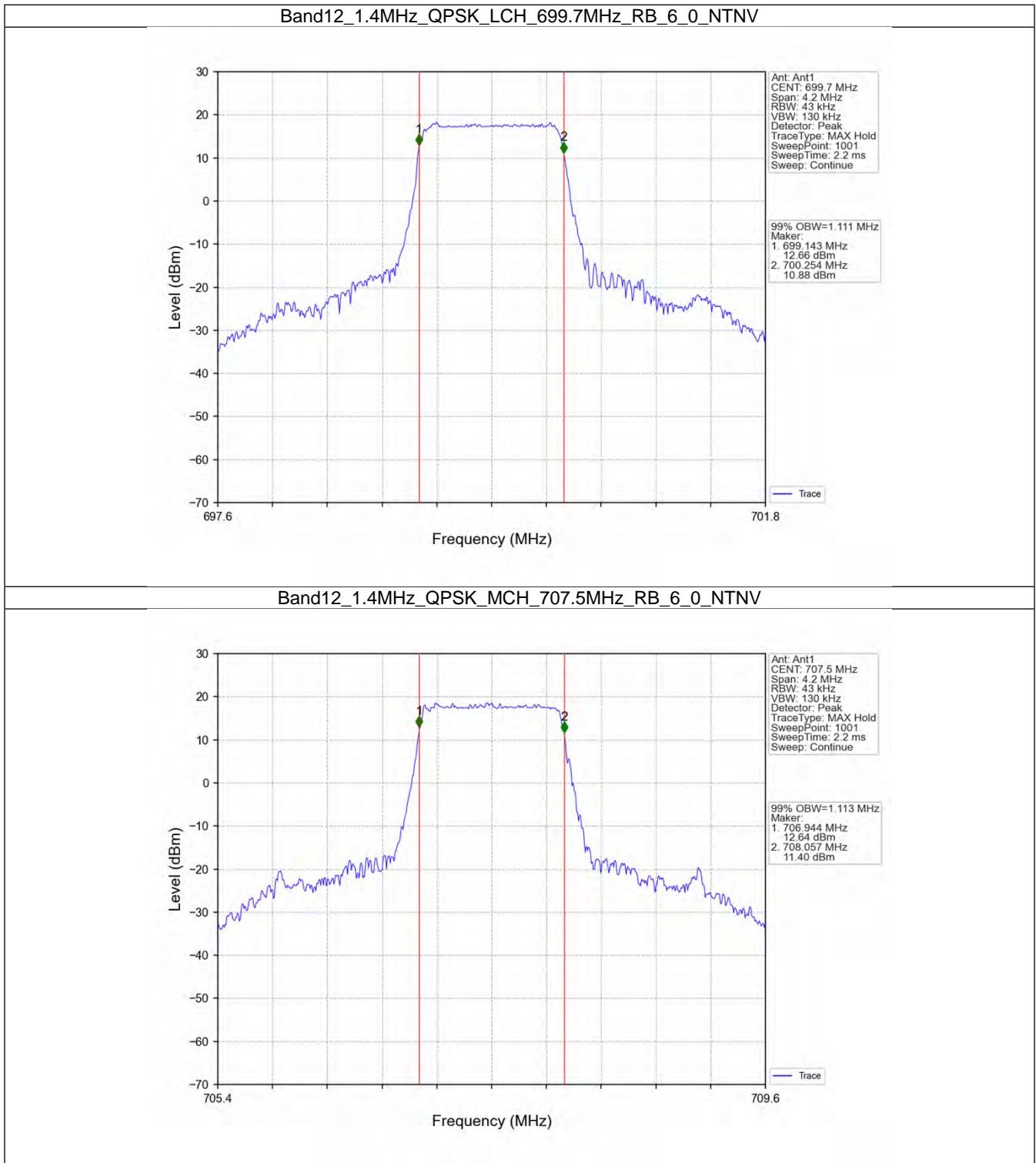
4. 99% & 26dB Bandwidth

4.1 Band12_OBW

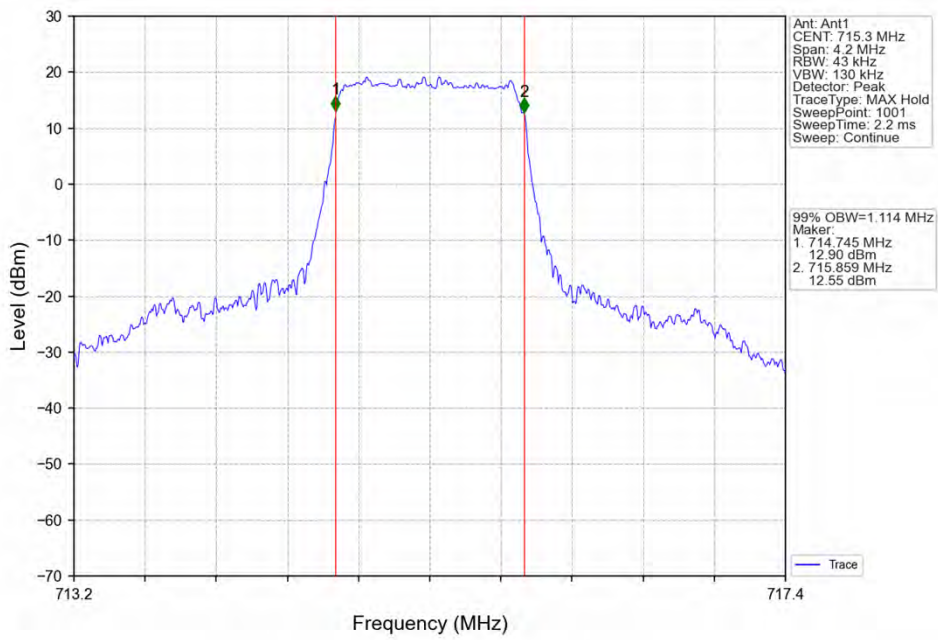
4.1.1 Test Result

Band: 12 / NTNV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	699.7	6	0	1.111	Pass
		707.5	6	0	1.113	Pass
		715.3	6	0	1.114	Pass
	16QAM	699.7	6	0	1.119	Pass
		707.5	6	0	1.109	Pass
		715.3	6	0	1.110	Pass
3	QPSK	700.5	15	0	2.734	Pass
		707.5	15	0	2.734	Pass
		714.5	15	0	2.729	Pass
	16QAM	700.5	15	0	2.723	Pass
		707.5	15	0	2.727	Pass
		714.5	15	0	2.729	Pass
5	QPSK	701.5	25	0	4.541	Pass
		707.5	25	0	4.547	Pass
		713.5	25	0	4.538	Pass
	16QAM	701.5	25	0	4.526	Pass
		707.5	25	0	4.551	Pass
		713.5	25	0	4.539	Pass
10	QPSK	704	50	0	9.057	Pass
		707.5	50	0	9.089	Pass
		711	50	0	9.025	Pass
	16QAM	704	50	0	9.025	Pass
		707.5	50	0	9.087	Pass
		711	50	0	9.030	Pass

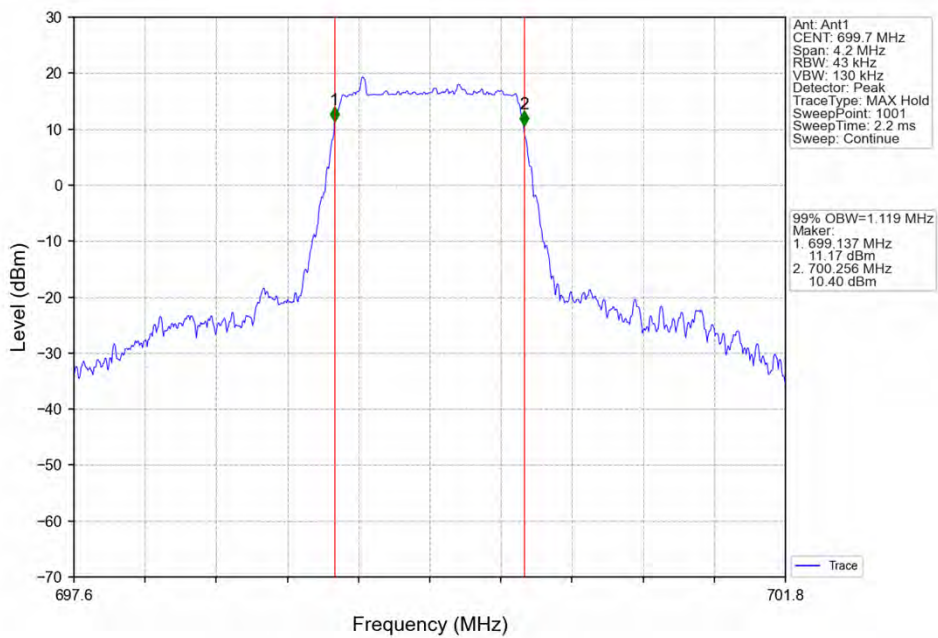
4.1.2 Test Graph



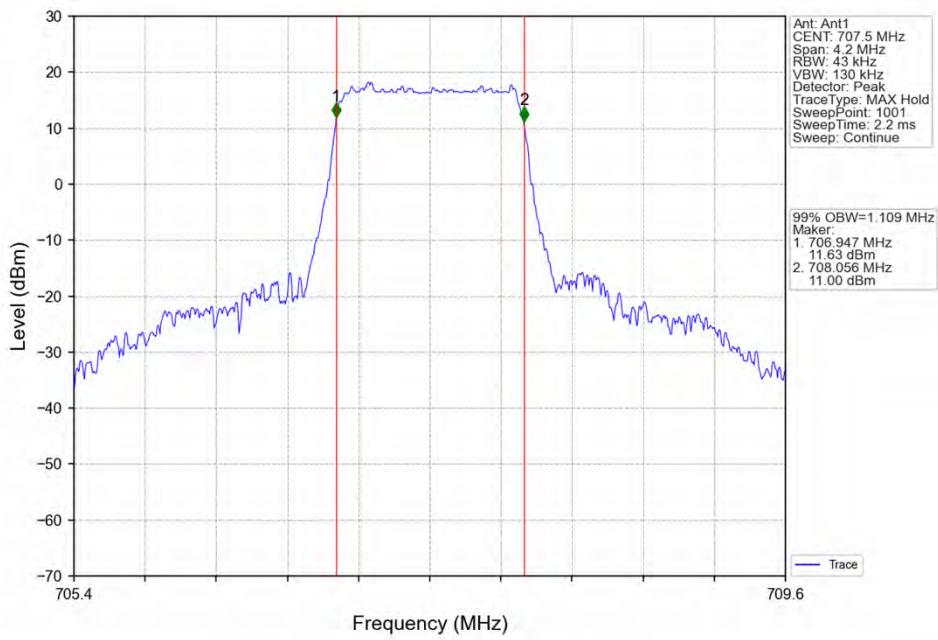
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



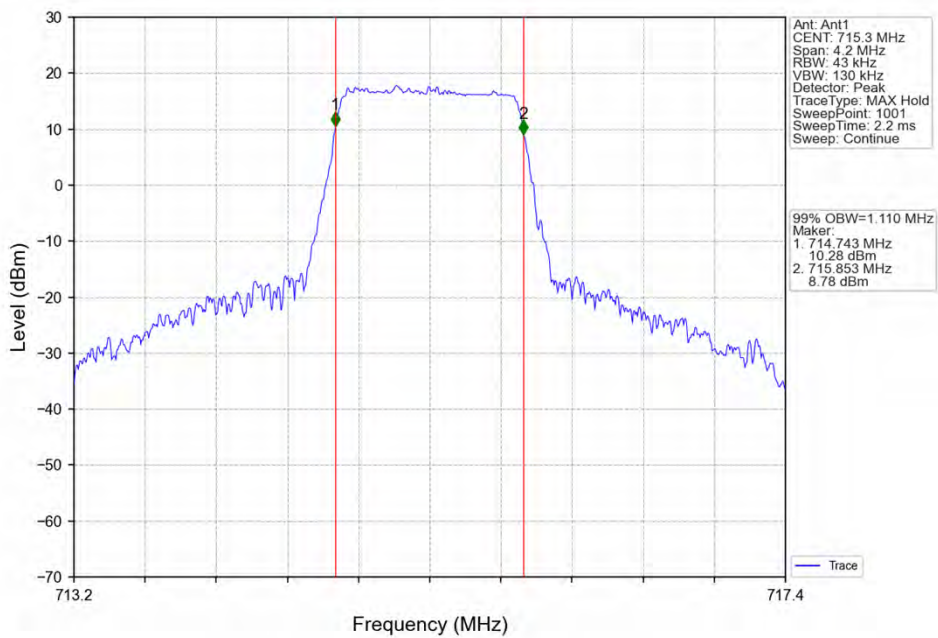
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



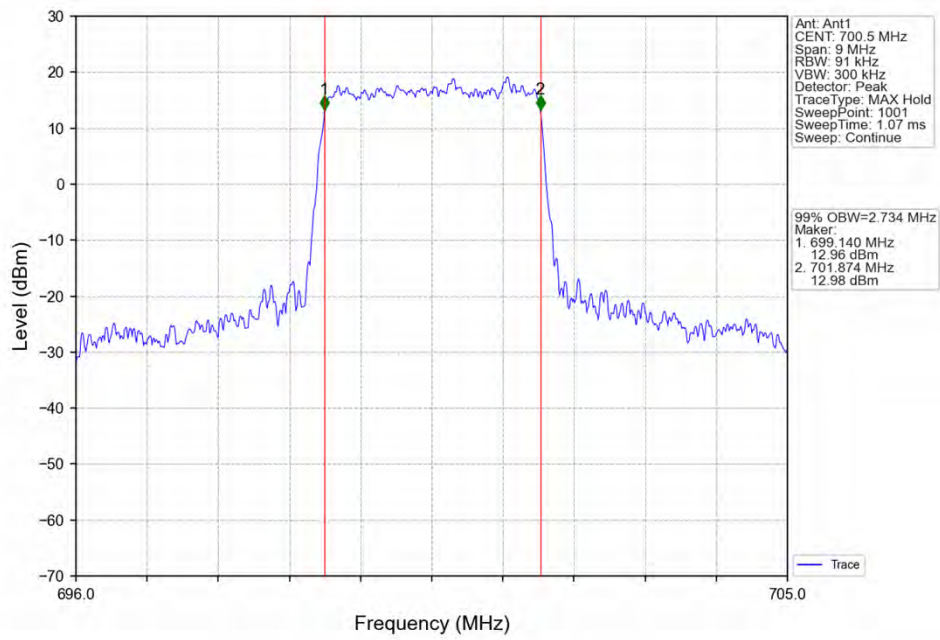
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



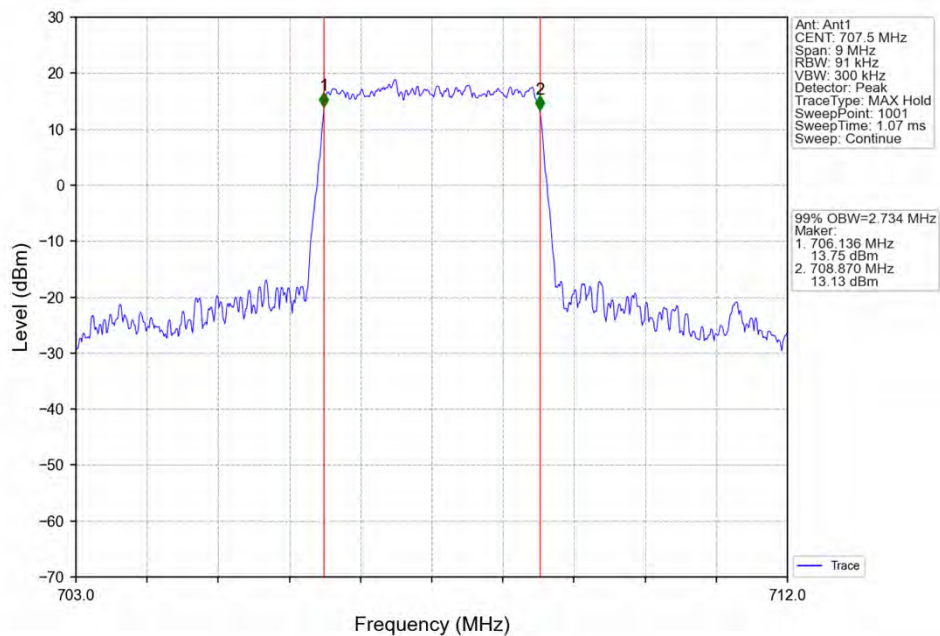
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



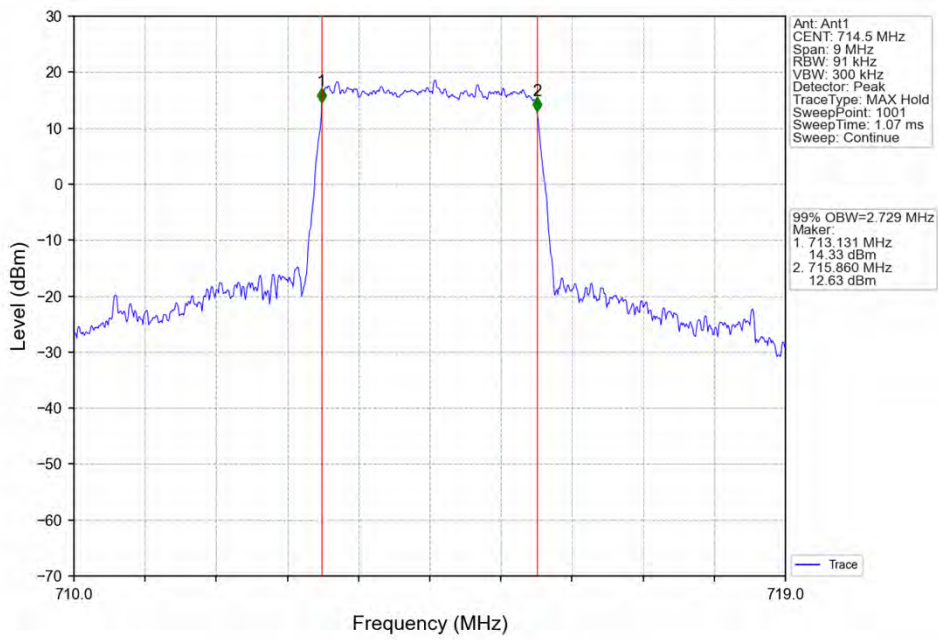
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



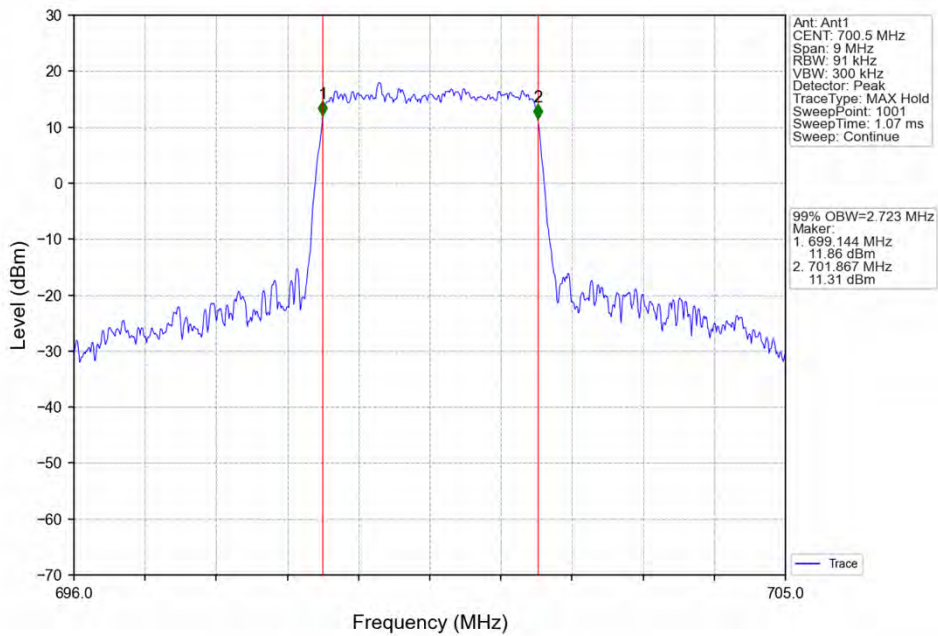
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



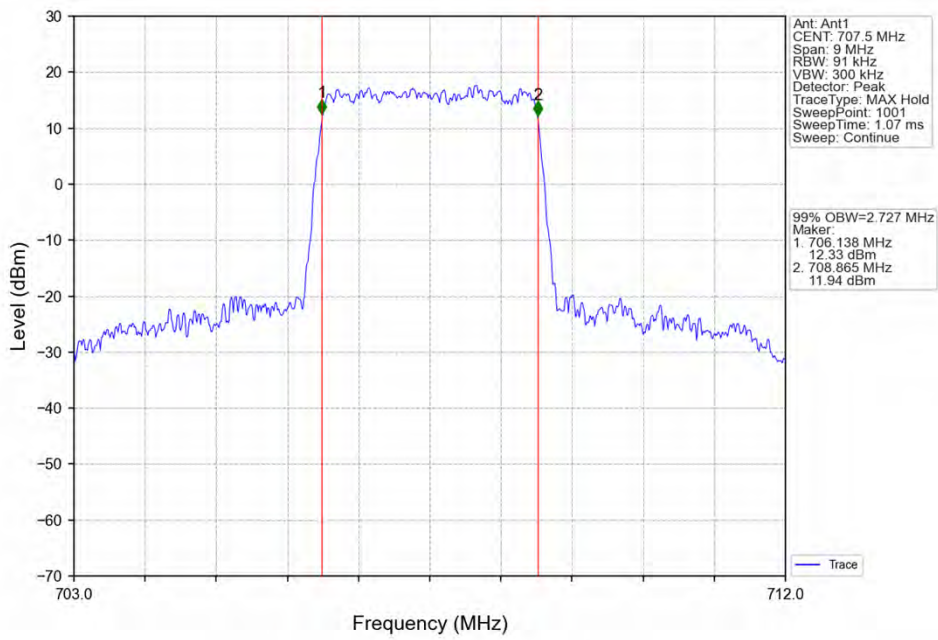
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



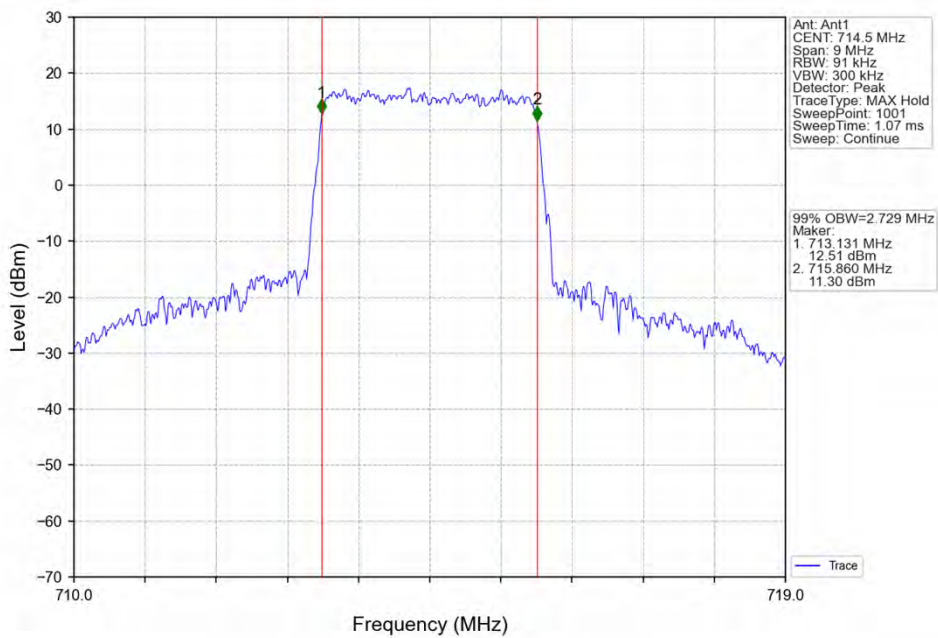
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



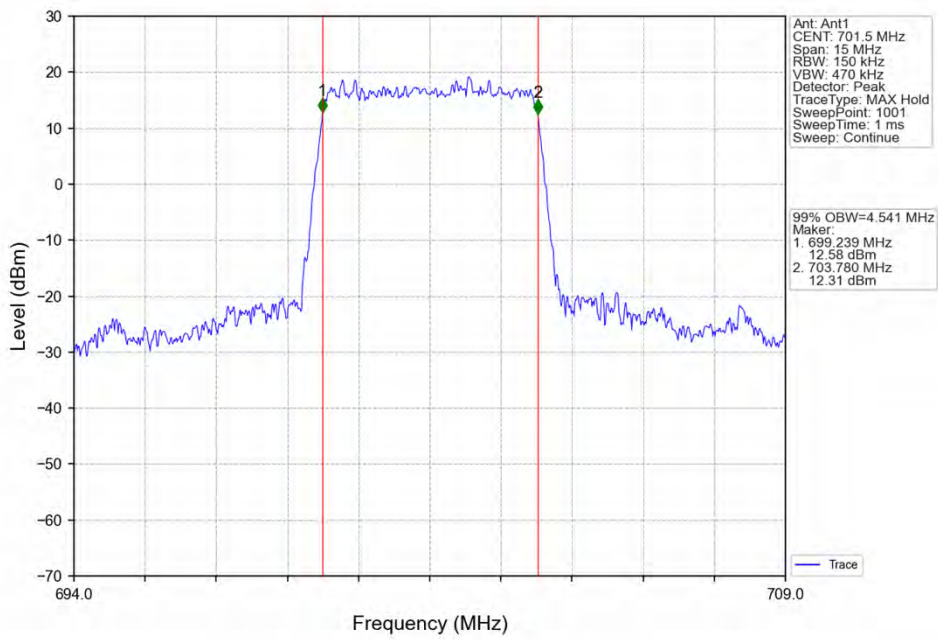
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



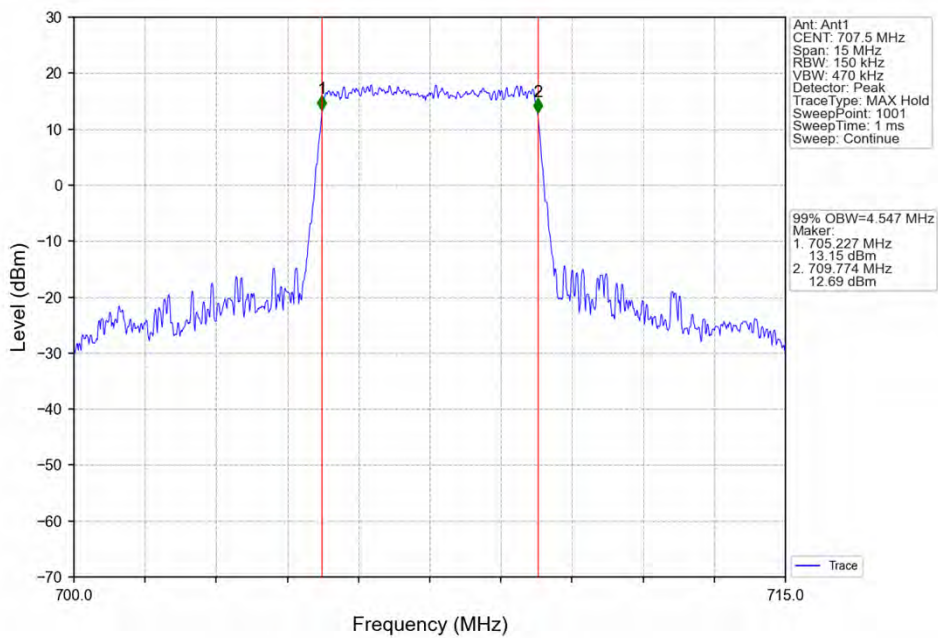
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



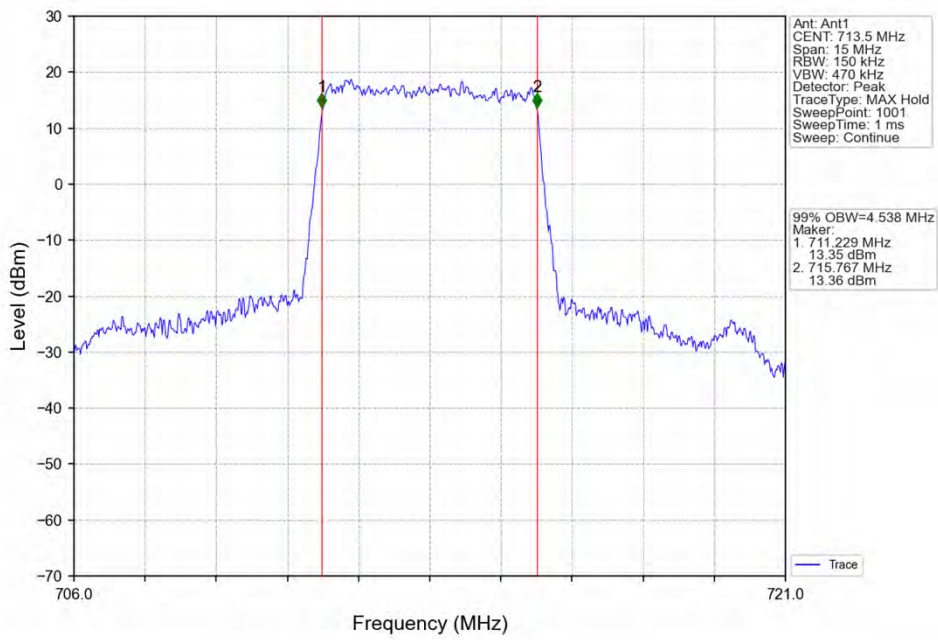
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



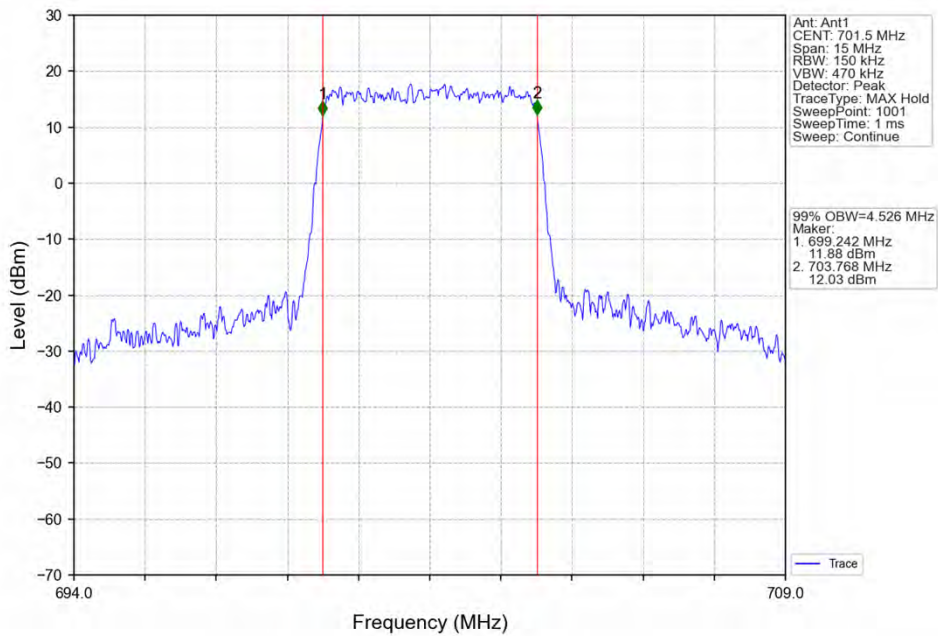
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



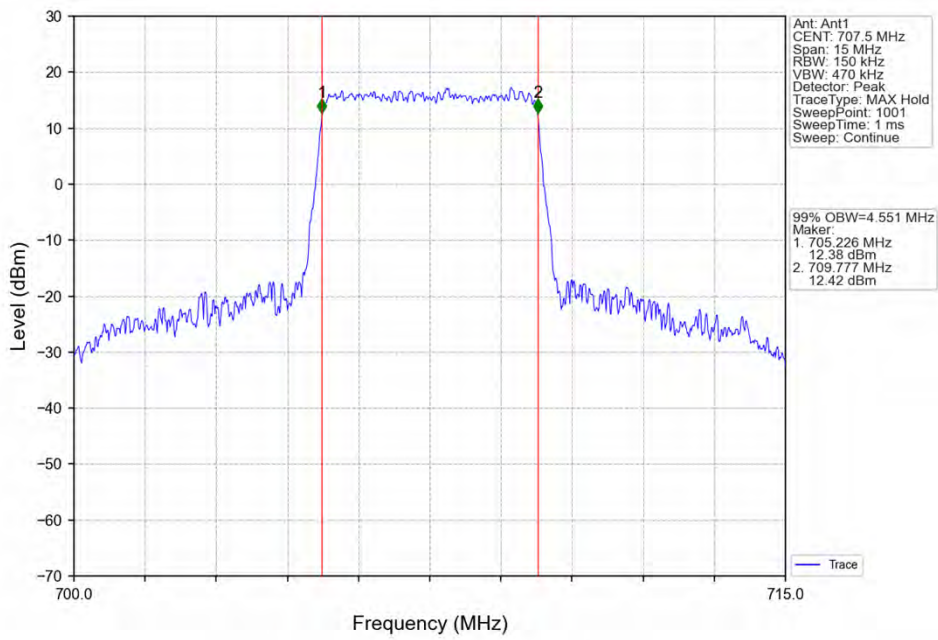
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



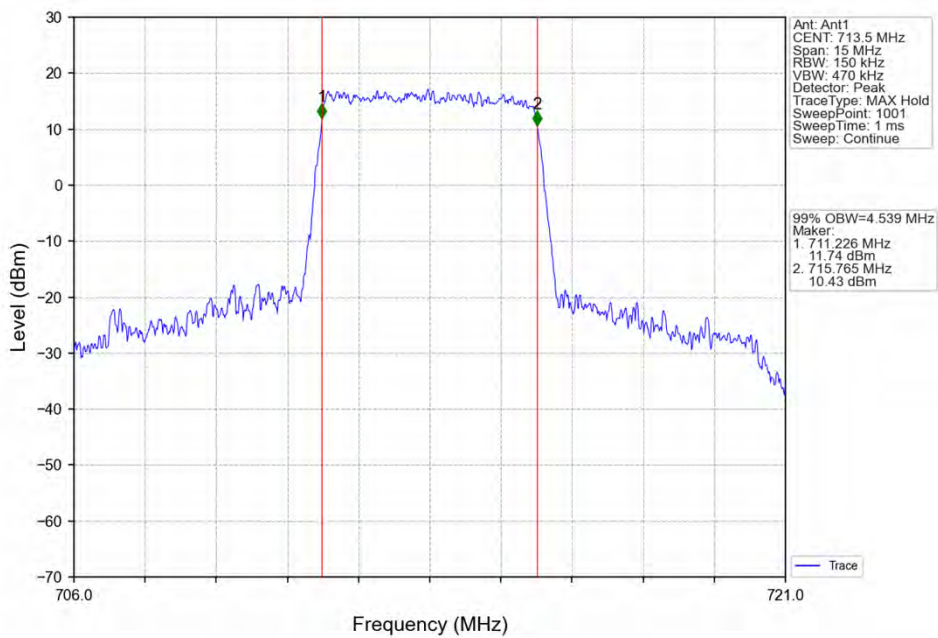
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



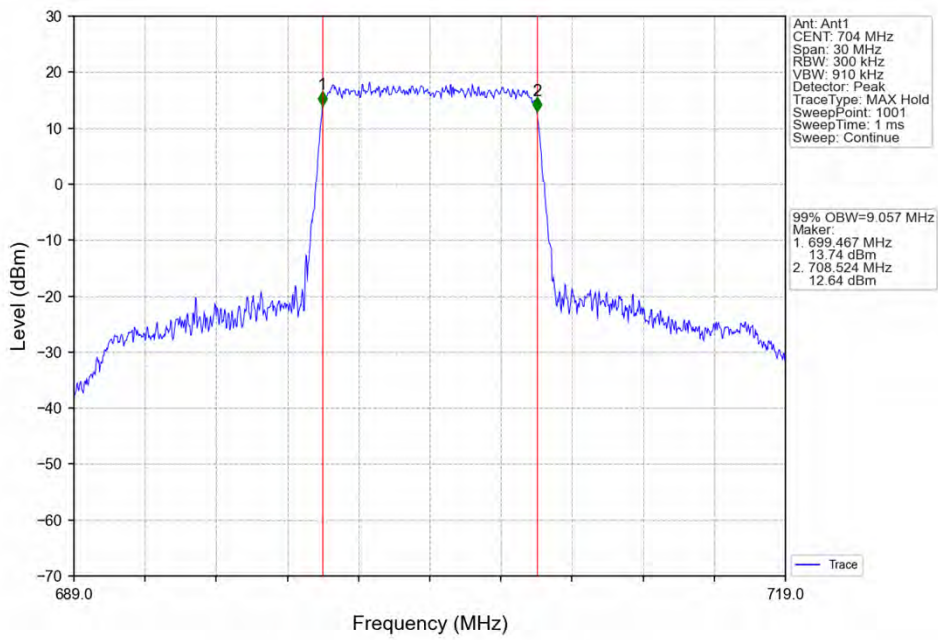
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



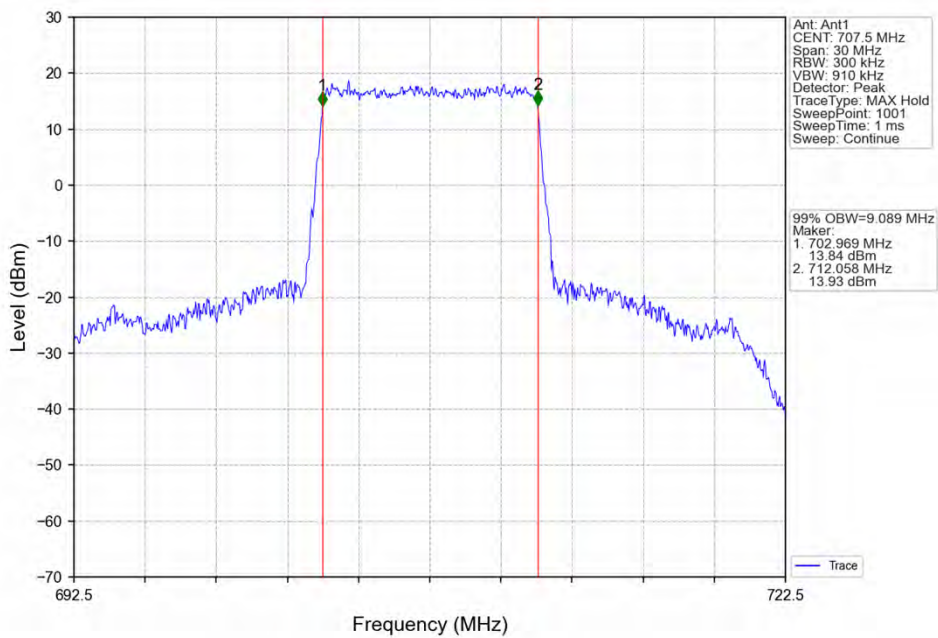
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



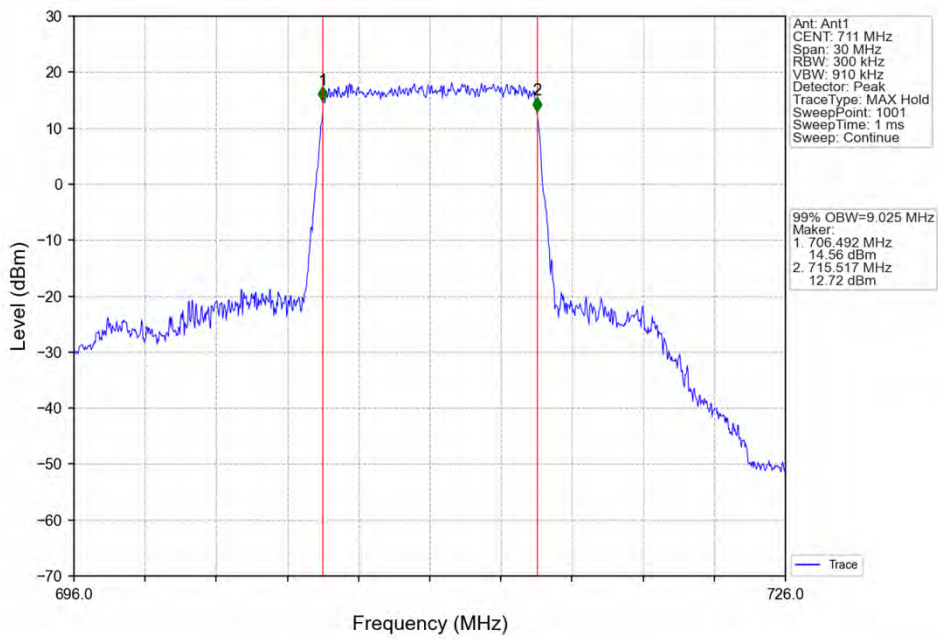
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



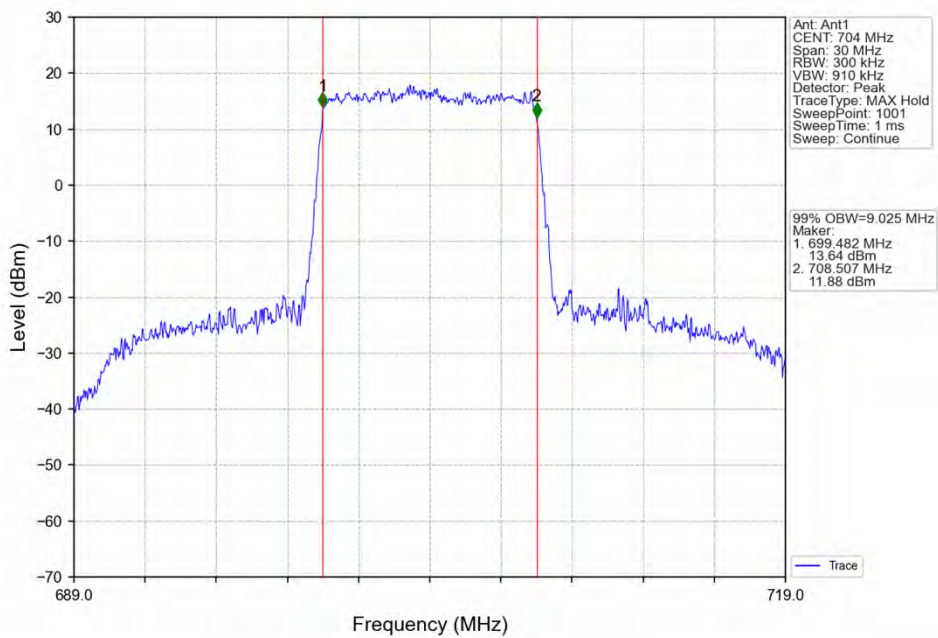
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



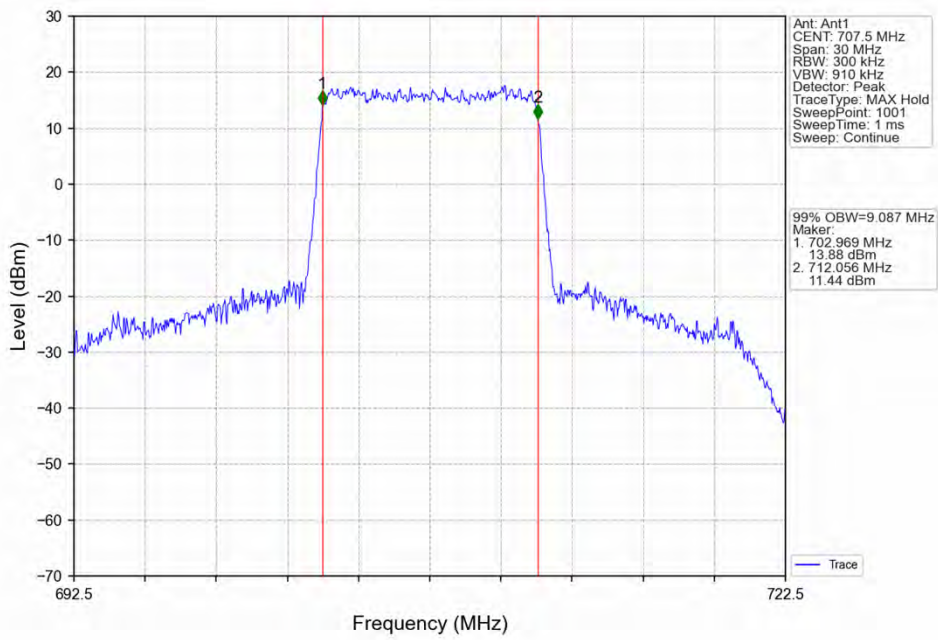
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



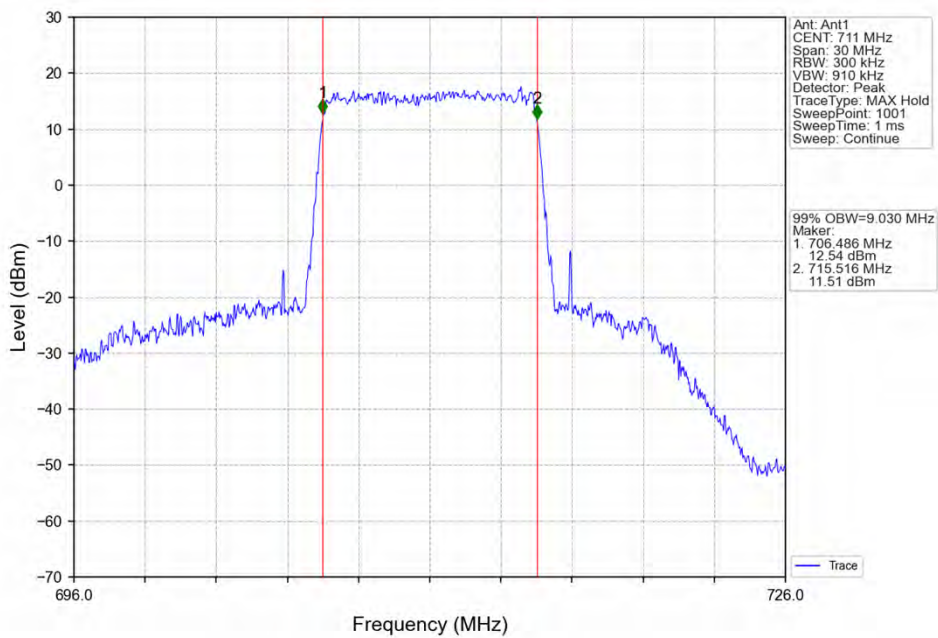
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

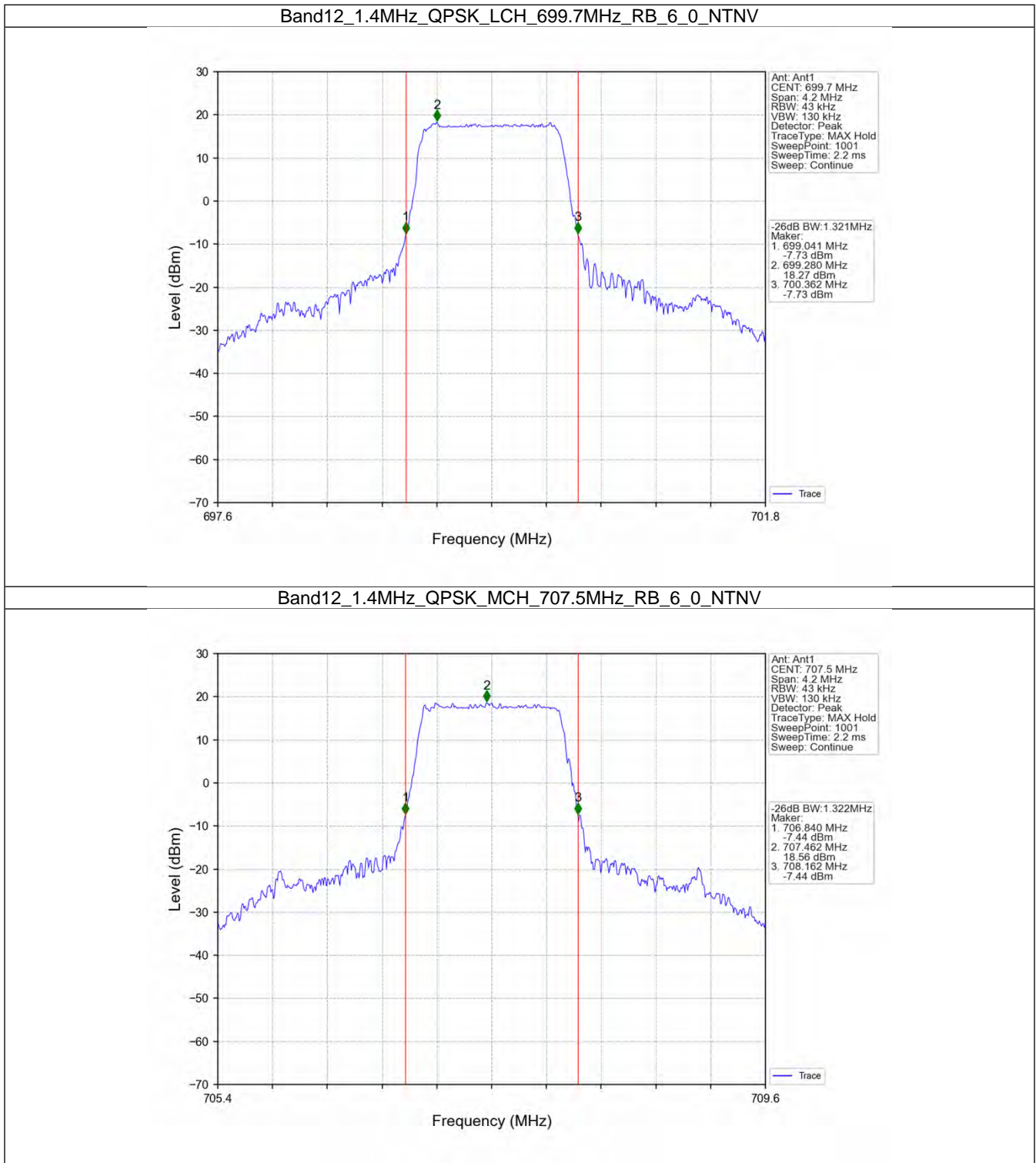


4.2 Band12_XDB

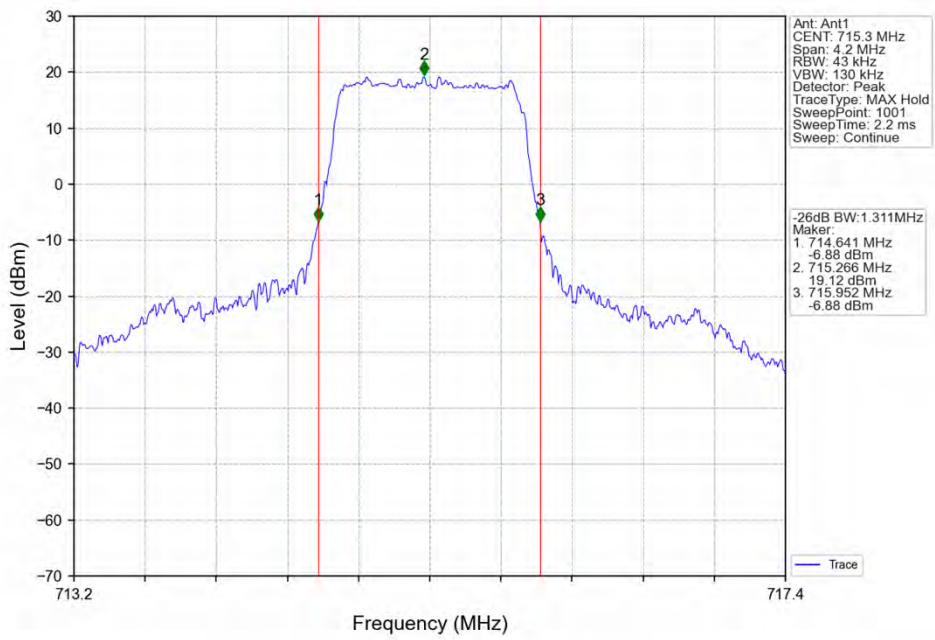
4.2.1 Test Result

Band: 12 / NTNV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	699.7	6	0	1.321	Pass
		707.5	6	0	1.322	Pass
		715.3	6	0	1.311	Pass
	16QAM	699.7	6	0	1.310	Pass
		707.5	6	0	1.296	Pass
		715.3	6	0	1.331	Pass
3	QPSK	700.5	15	0	3.020	Pass
		707.5	15	0	3.016	Pass
		714.5	15	0	3.002	Pass
	16QAM	700.5	15	0	2.992	Pass
		707.5	15	0	2.999	Pass
		714.5	15	0	3.035	Pass
5	QPSK	701.5	25	0	5.029	Pass
		707.5	25	0	5.052	Pass
		713.5	25	0	5.024	Pass
	16QAM	701.5	25	0	4.976	Pass
		707.5	25	0	5.091	Pass
		713.5	25	0	5.045	Pass
10	QPSK	704	50	0	9.990	Pass
		707.5	50	0	10.059	Pass
		711	50	0	9.999	Pass
	16QAM	704	50	0	9.929	Pass
		707.5	50	0	9.955	Pass
		711	50	0	9.866	Pass

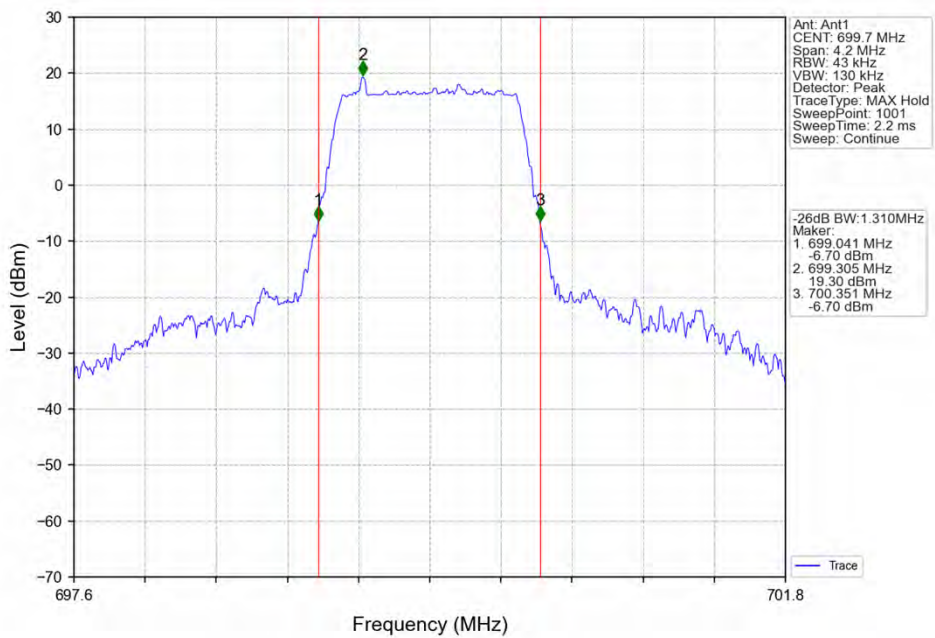
4.2.2 Test Graph



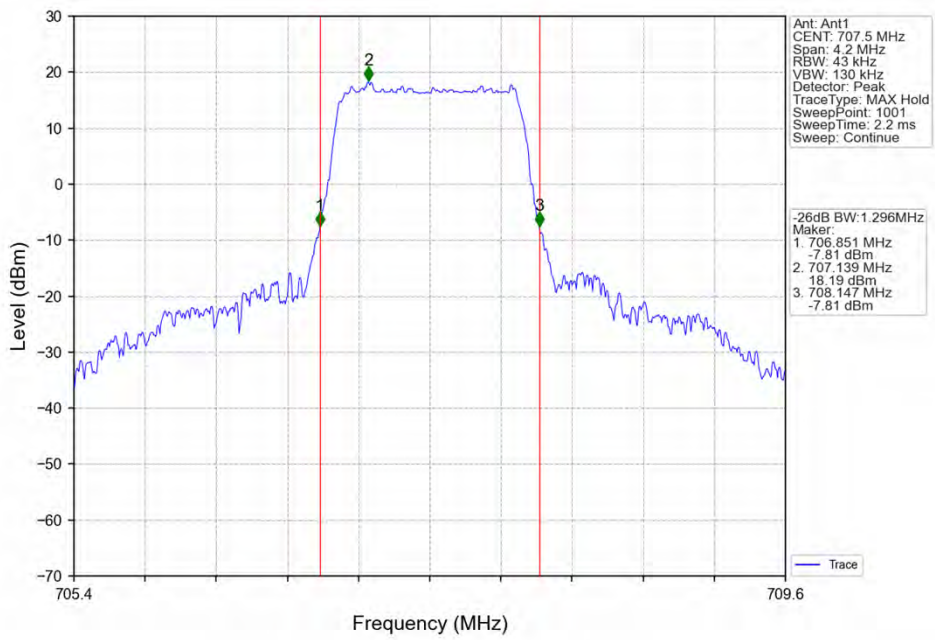
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



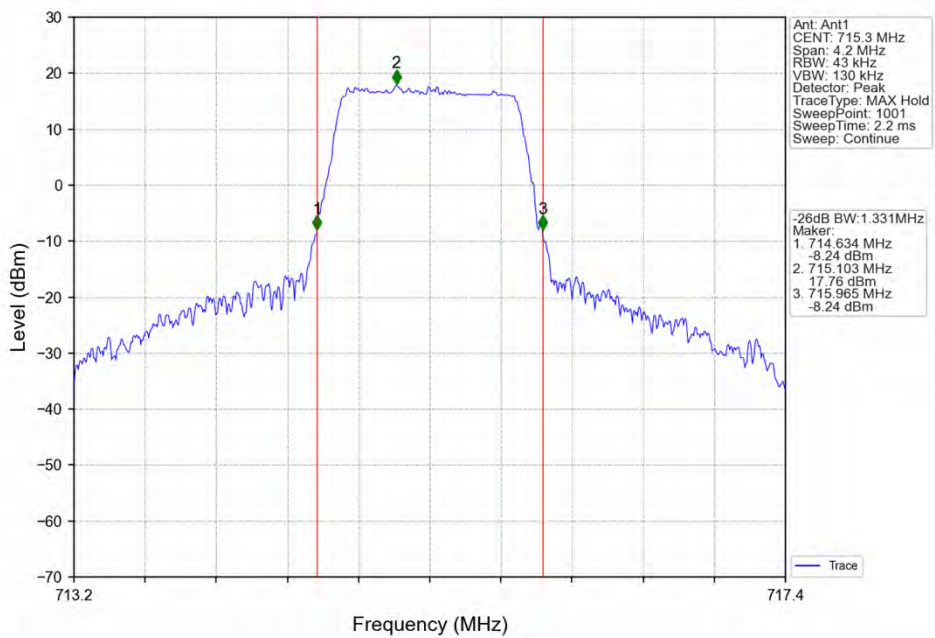
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



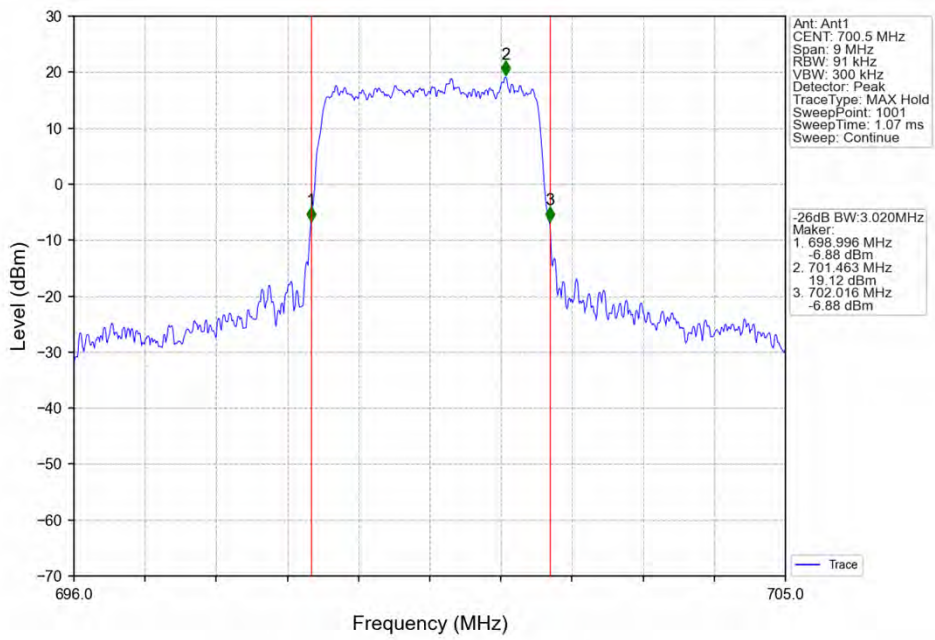
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



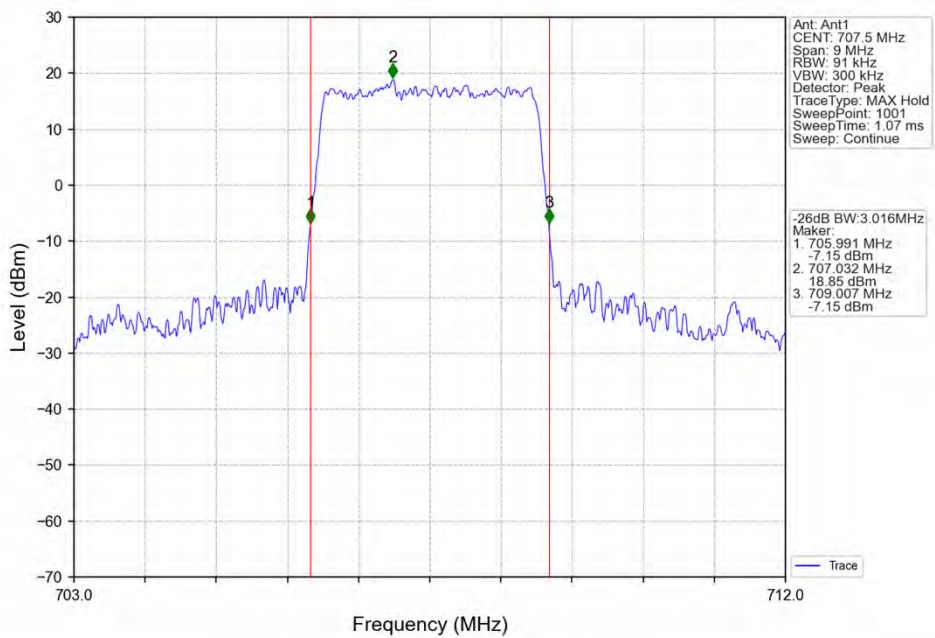
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



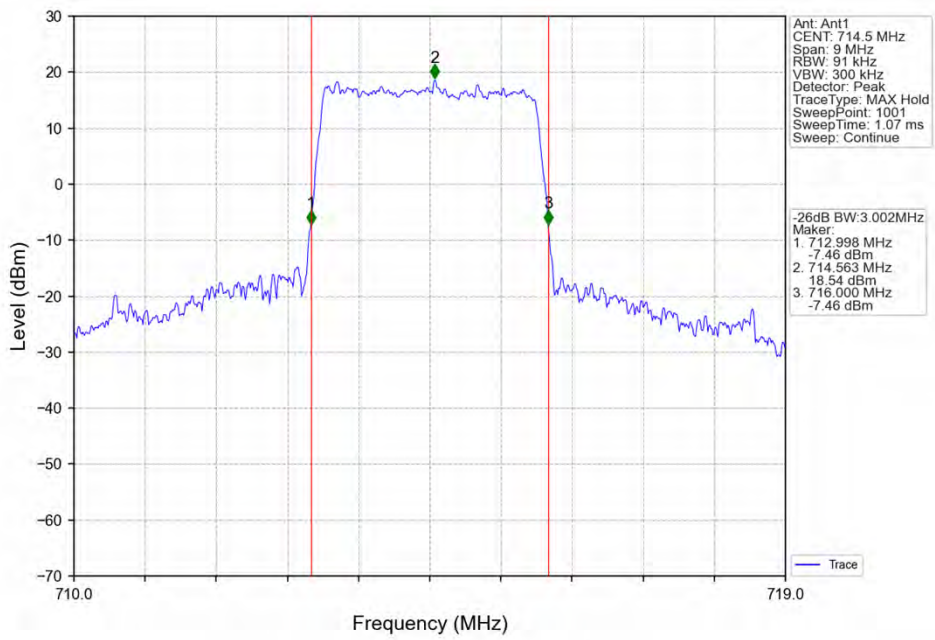
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



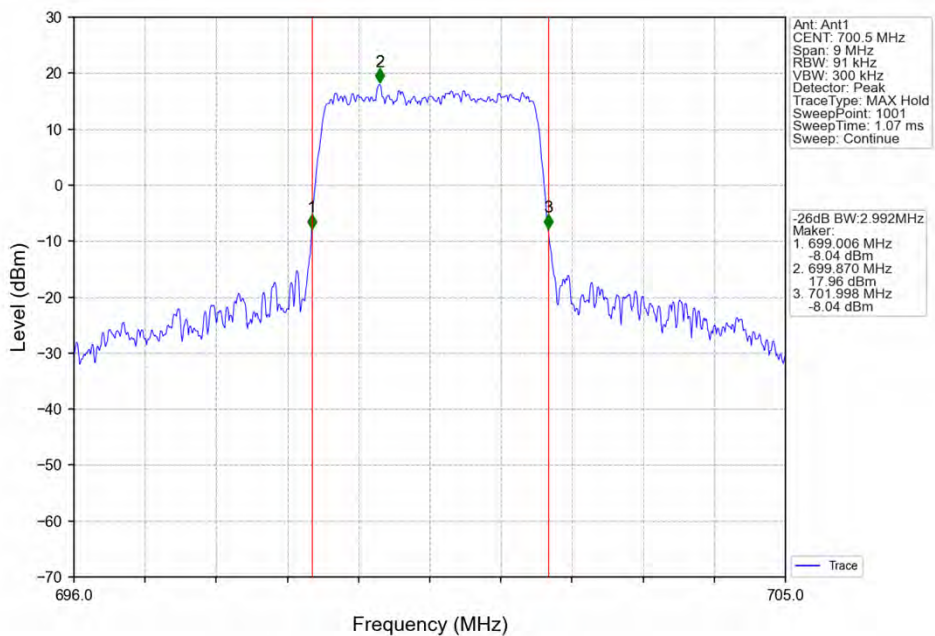
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



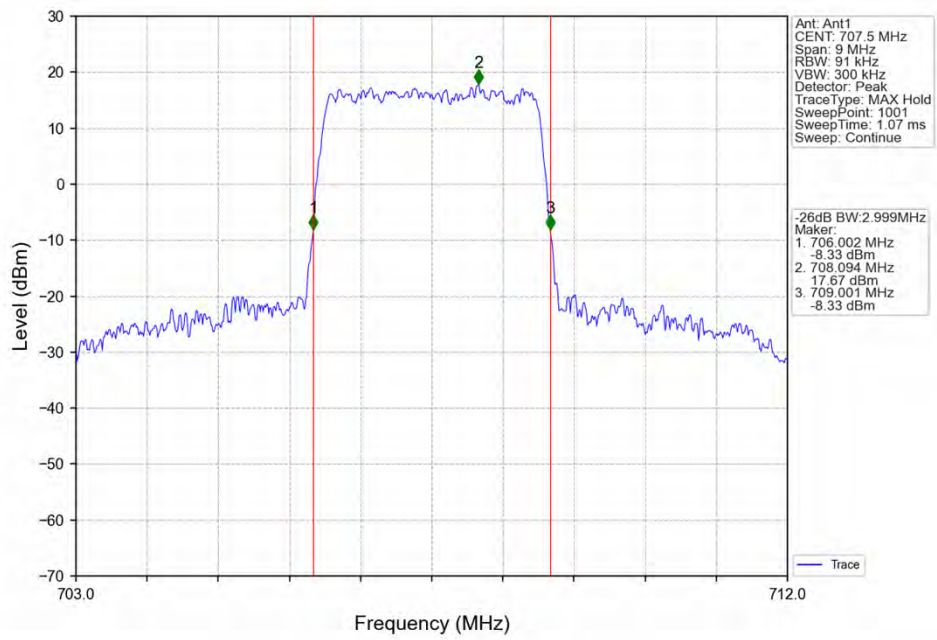
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



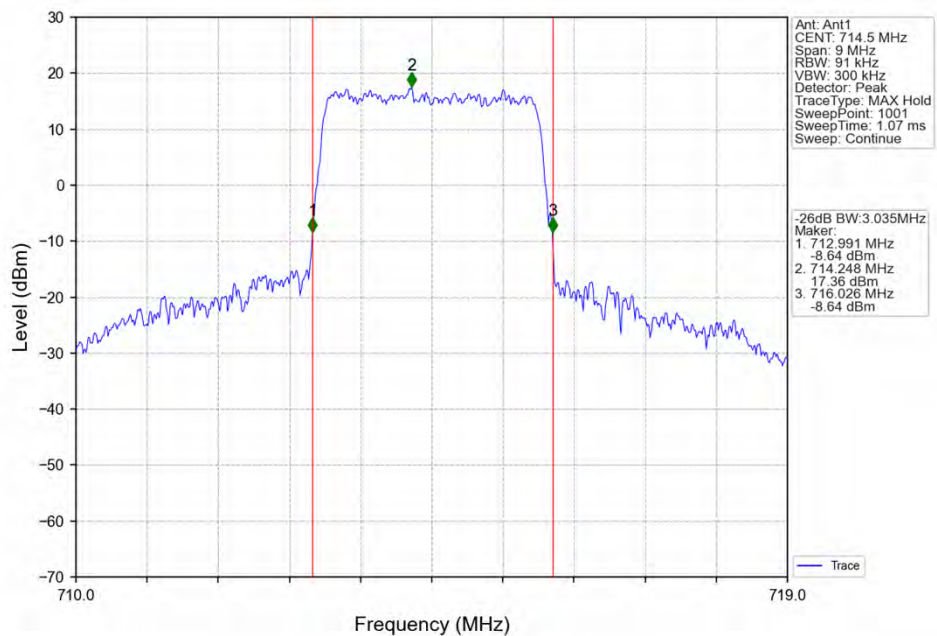
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



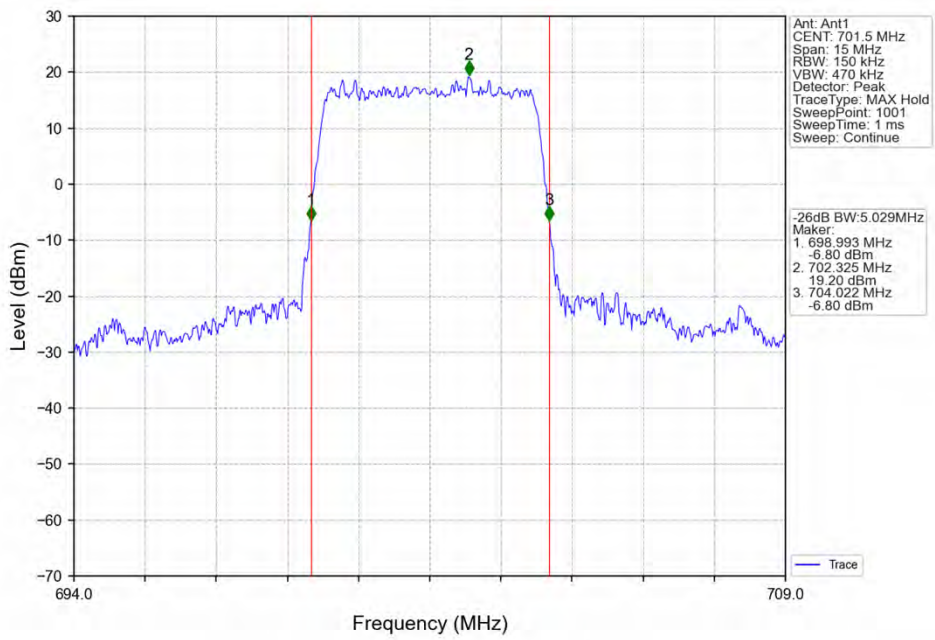
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



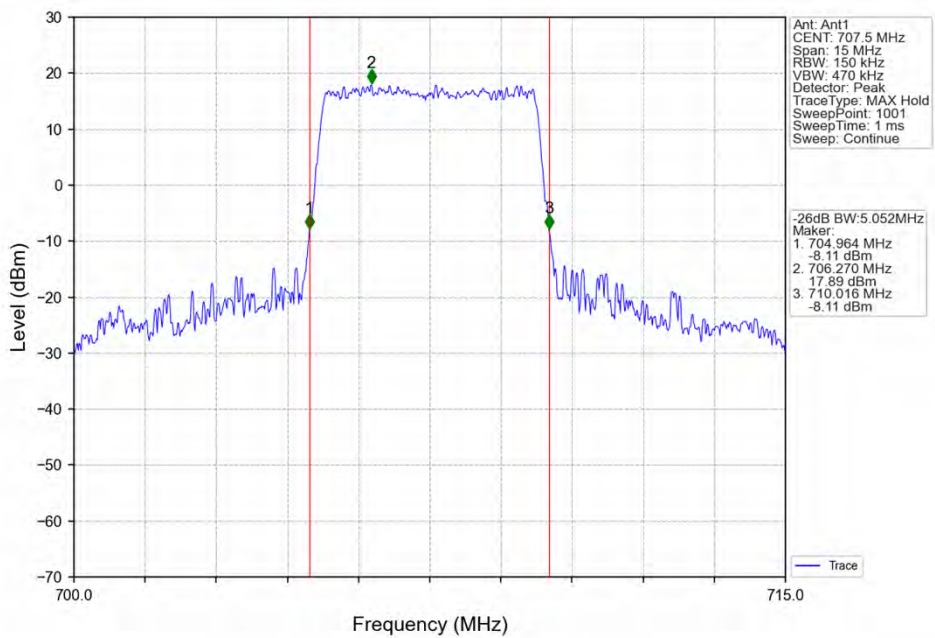
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



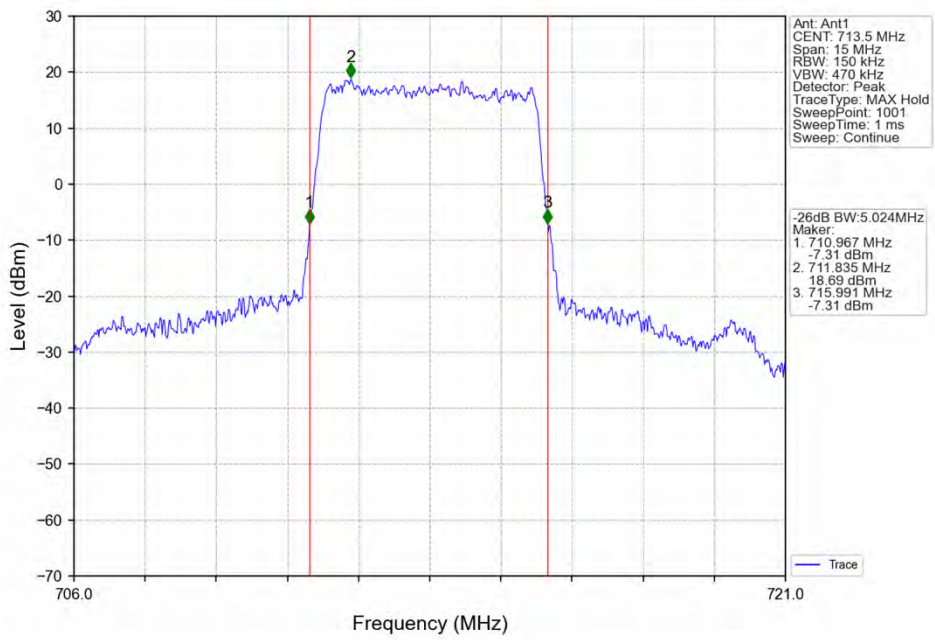
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



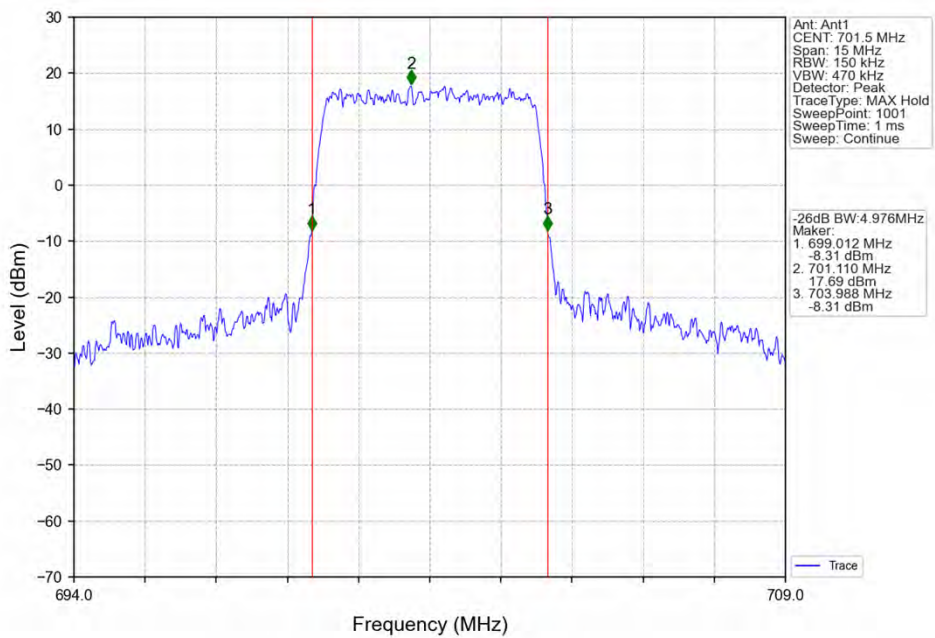
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



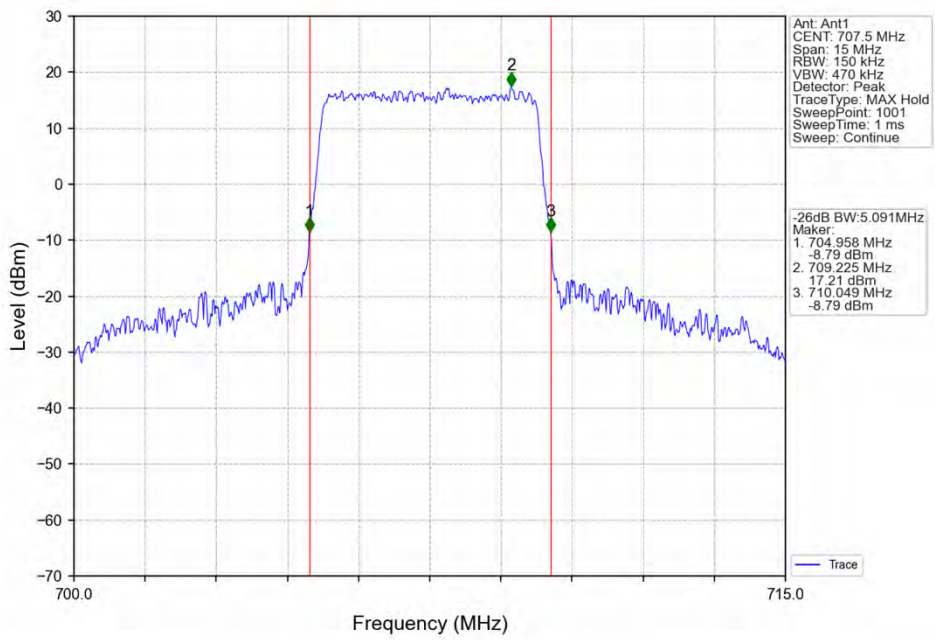
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



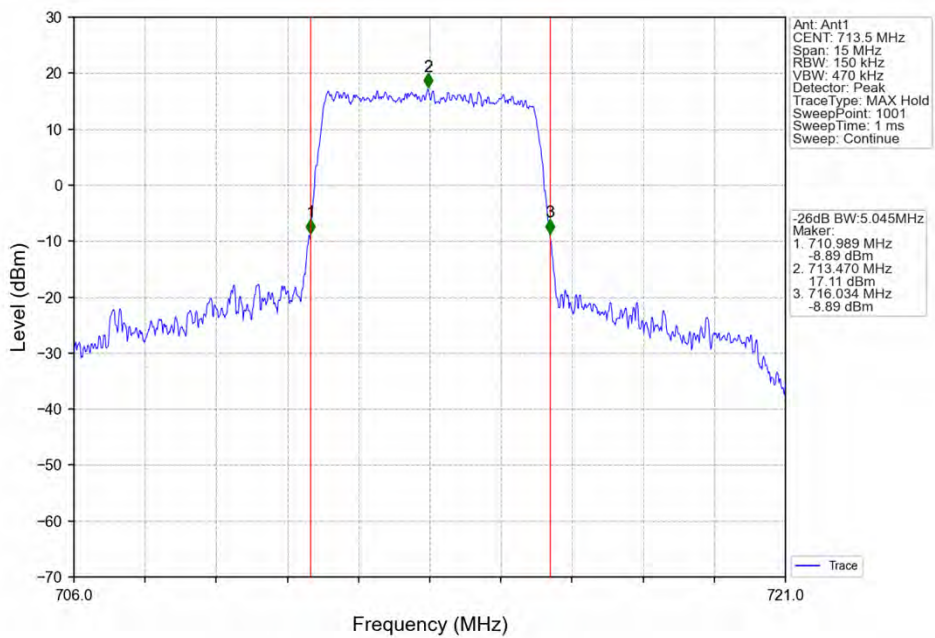
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



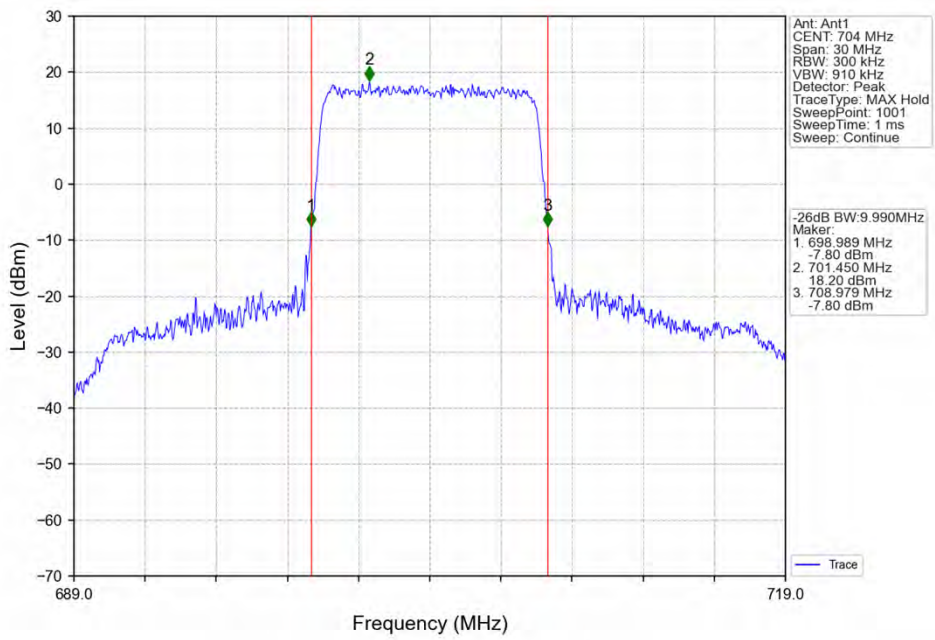
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



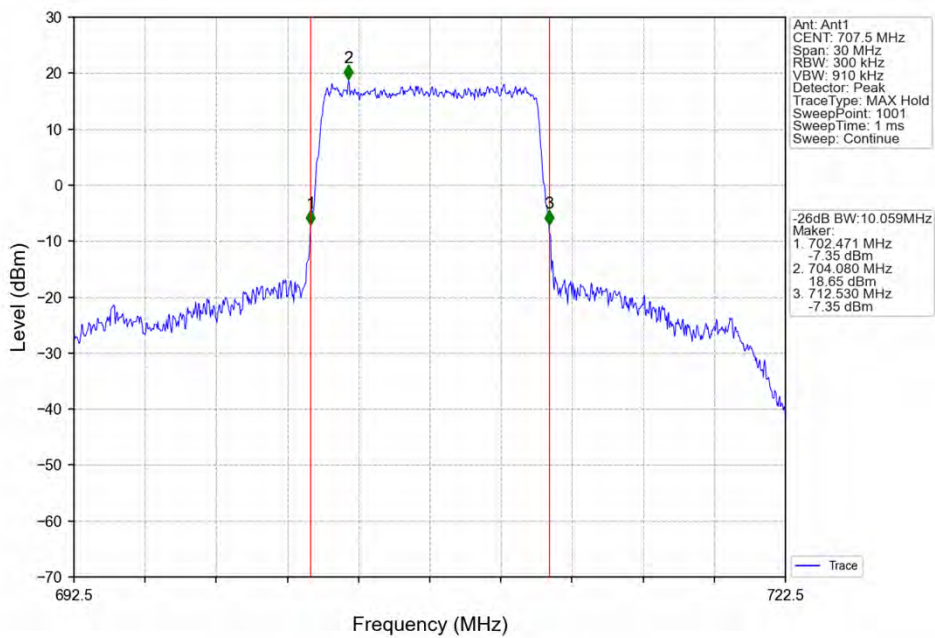
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



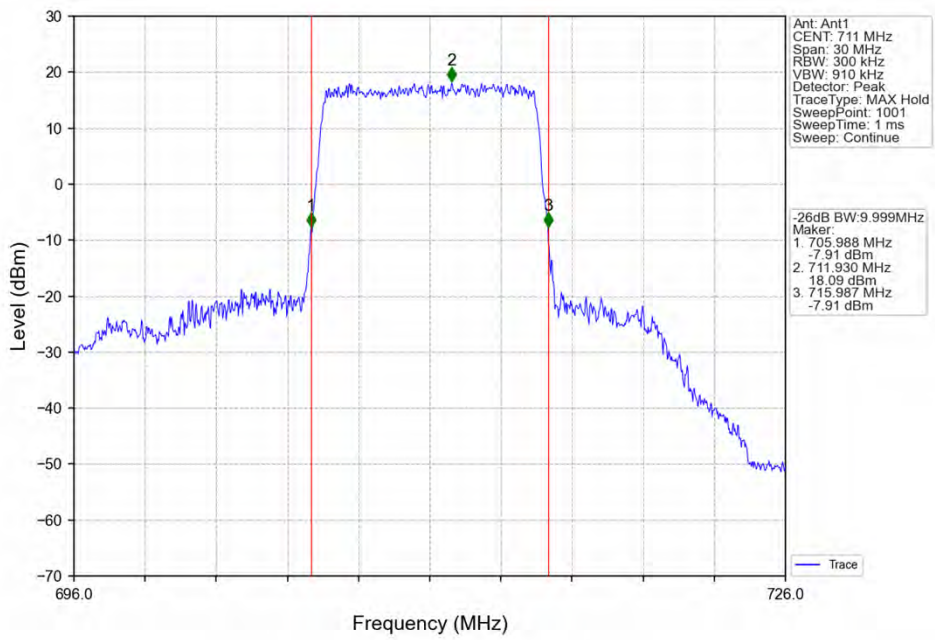
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



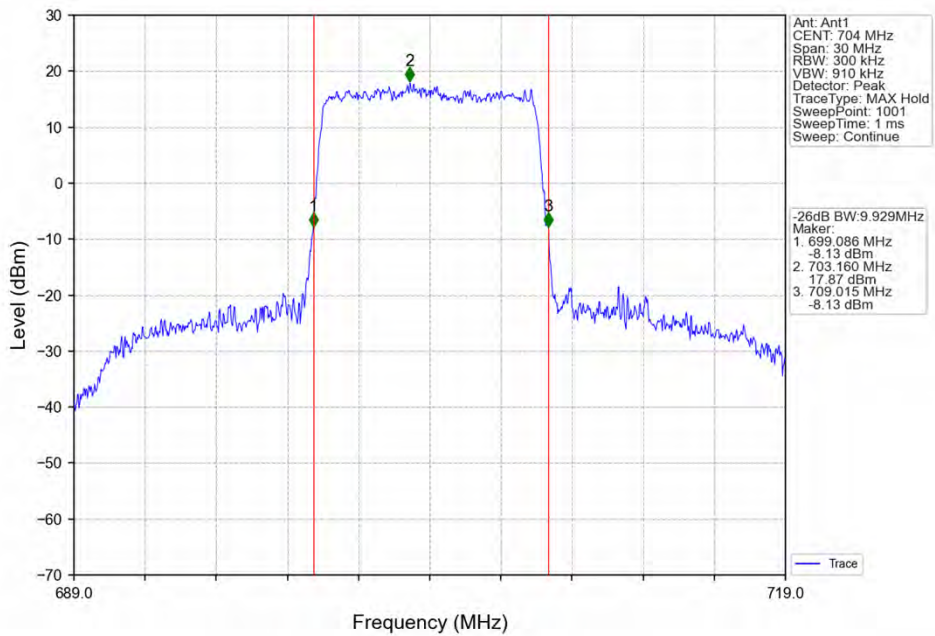
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



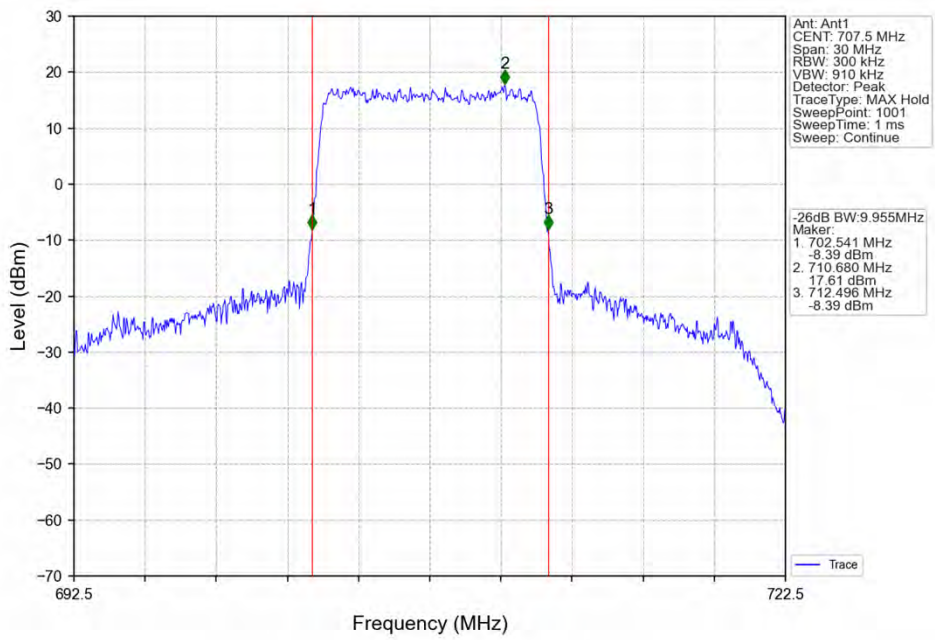
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



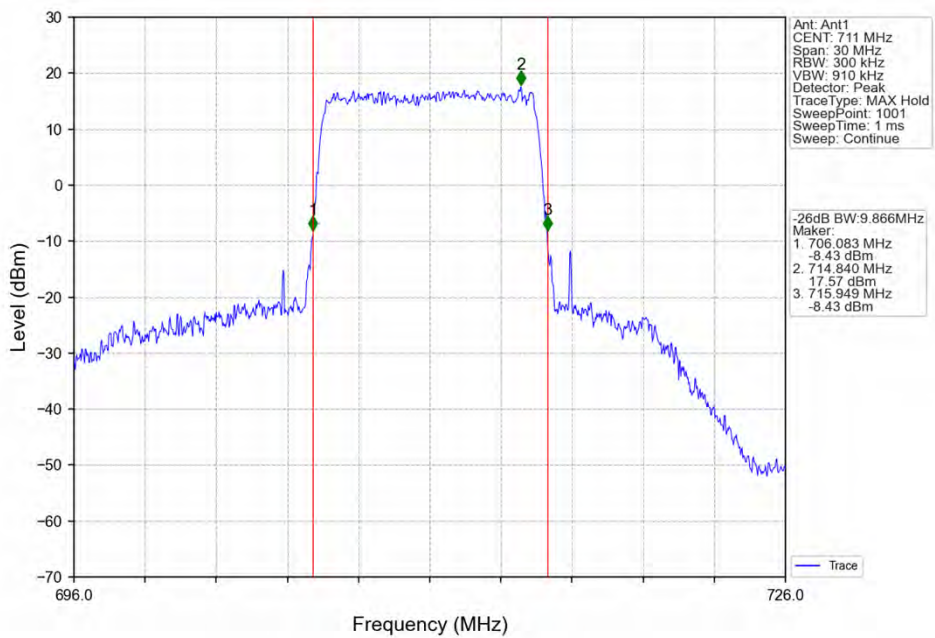
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



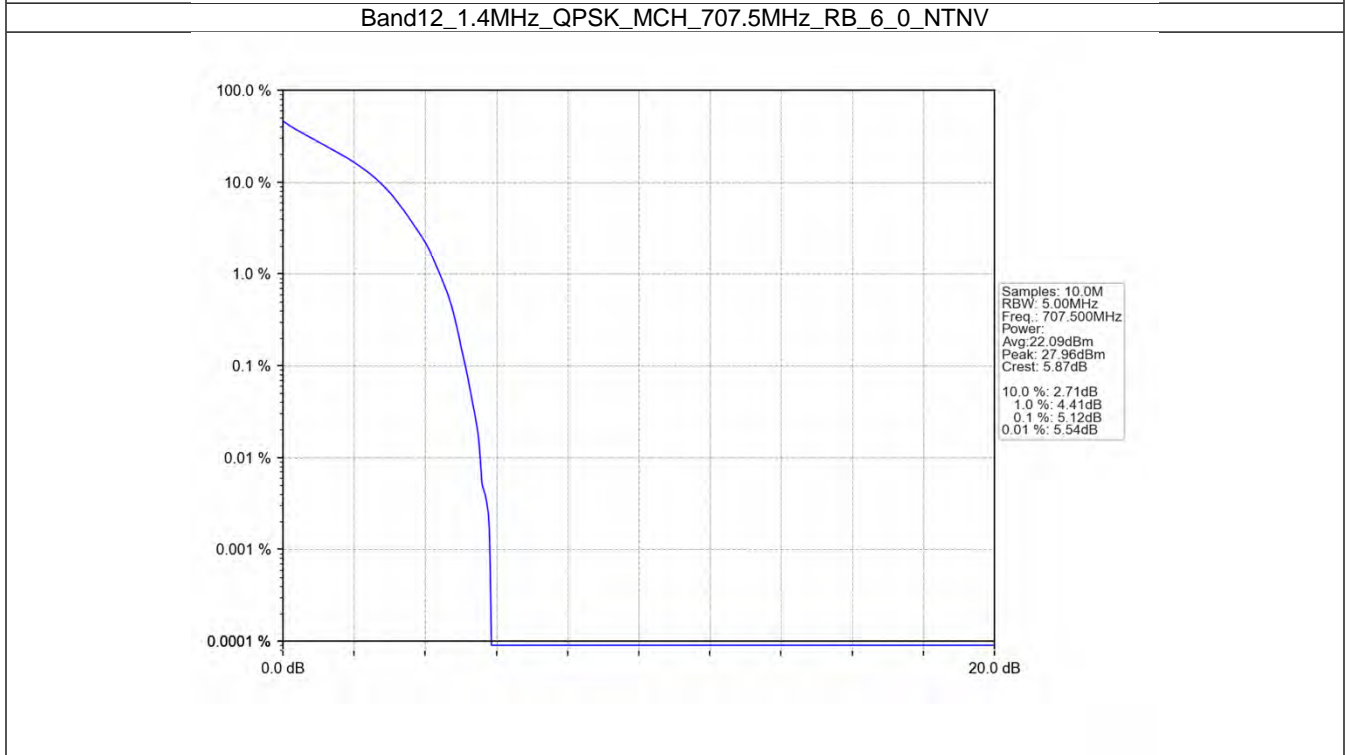
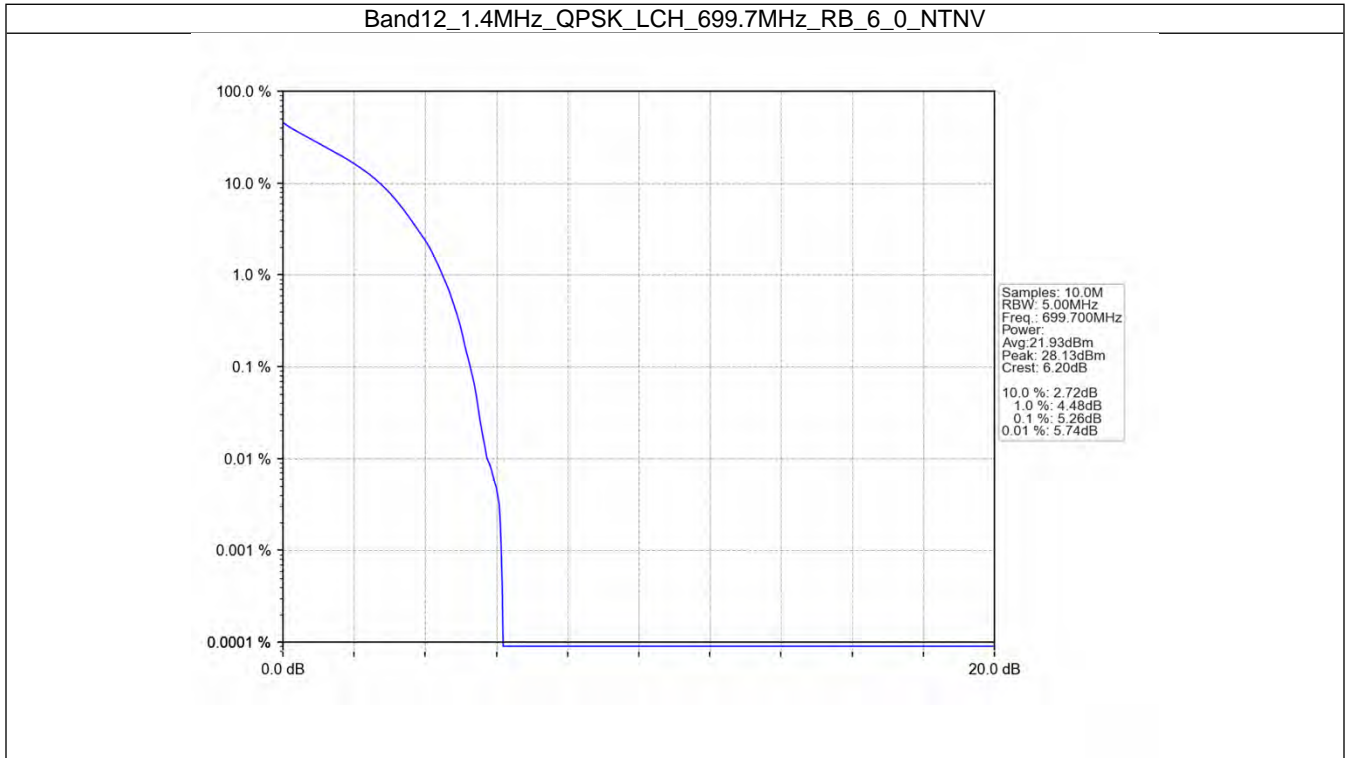
5. Peak-Average Ratio

5.1 B12_1.4MHz

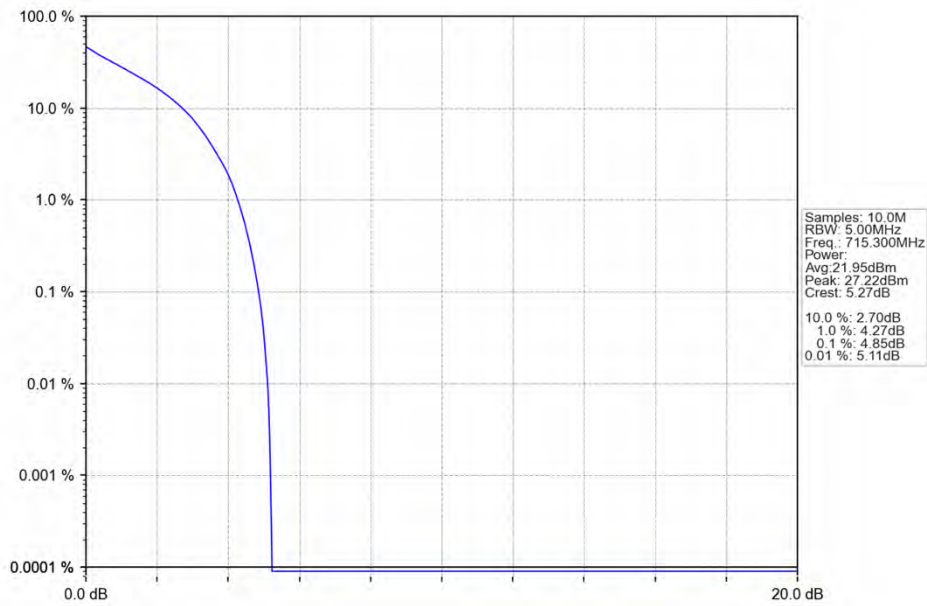
5.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	699.7	6	0	5.26	<=13	Pass
	707.5	6	0	5.12	<=13	Pass
	715.3	6	0	4.85	<=13	Pass
16QAM	699.7	6	0	6.05	<=13	Pass
	707.5	6	0	5.98	<=13	Pass
	715.3	6	0	5.71	<=13	Pass

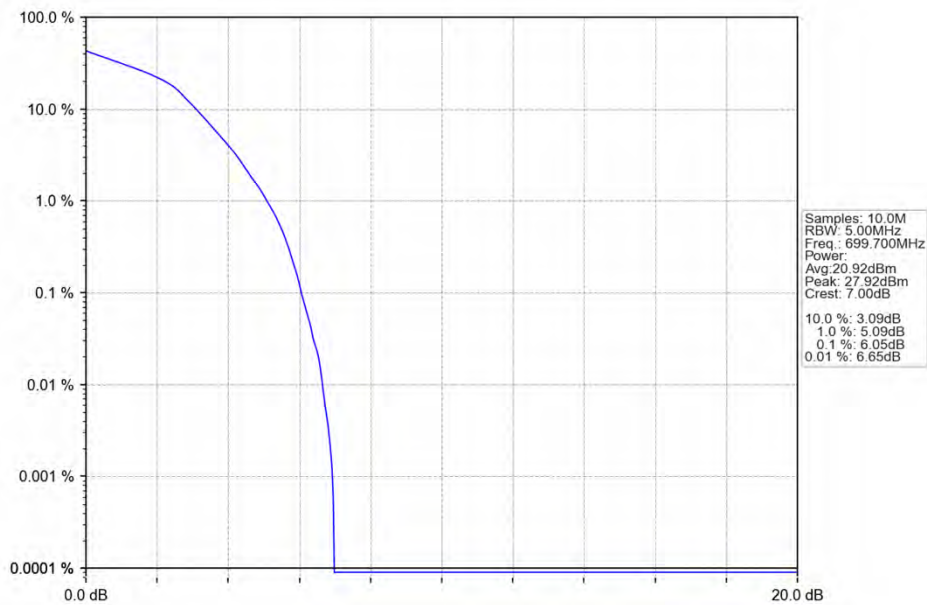
5.1.2 Test Graph



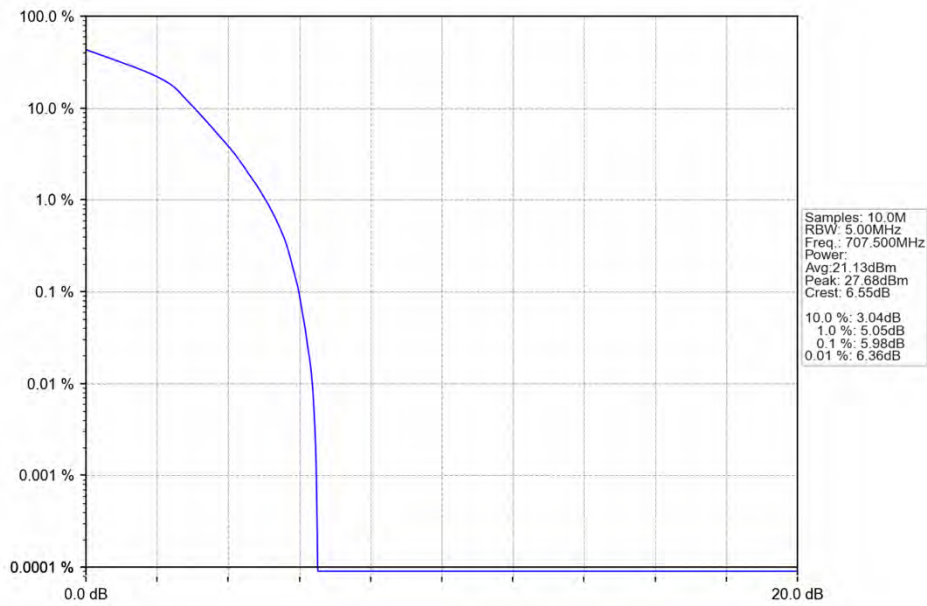
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



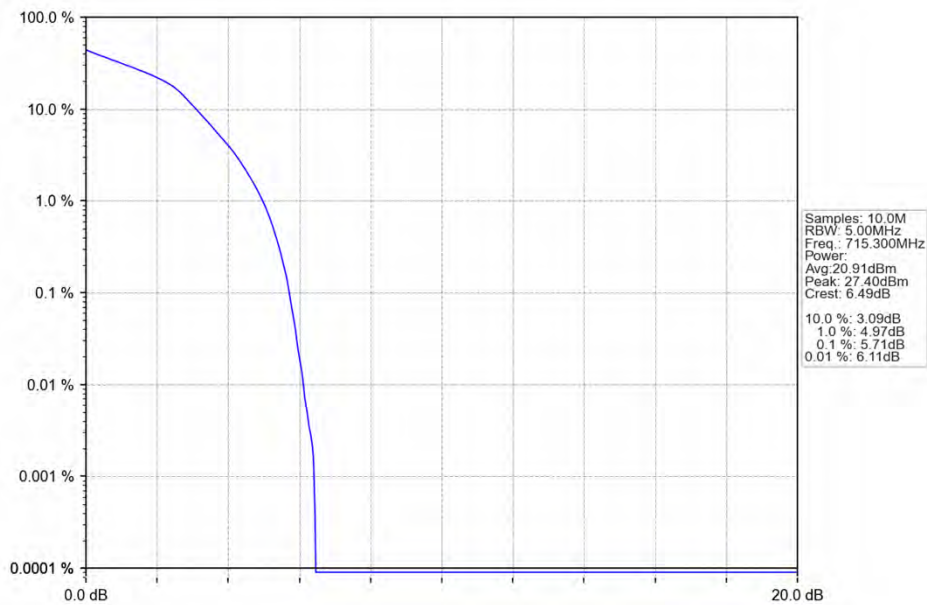
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV

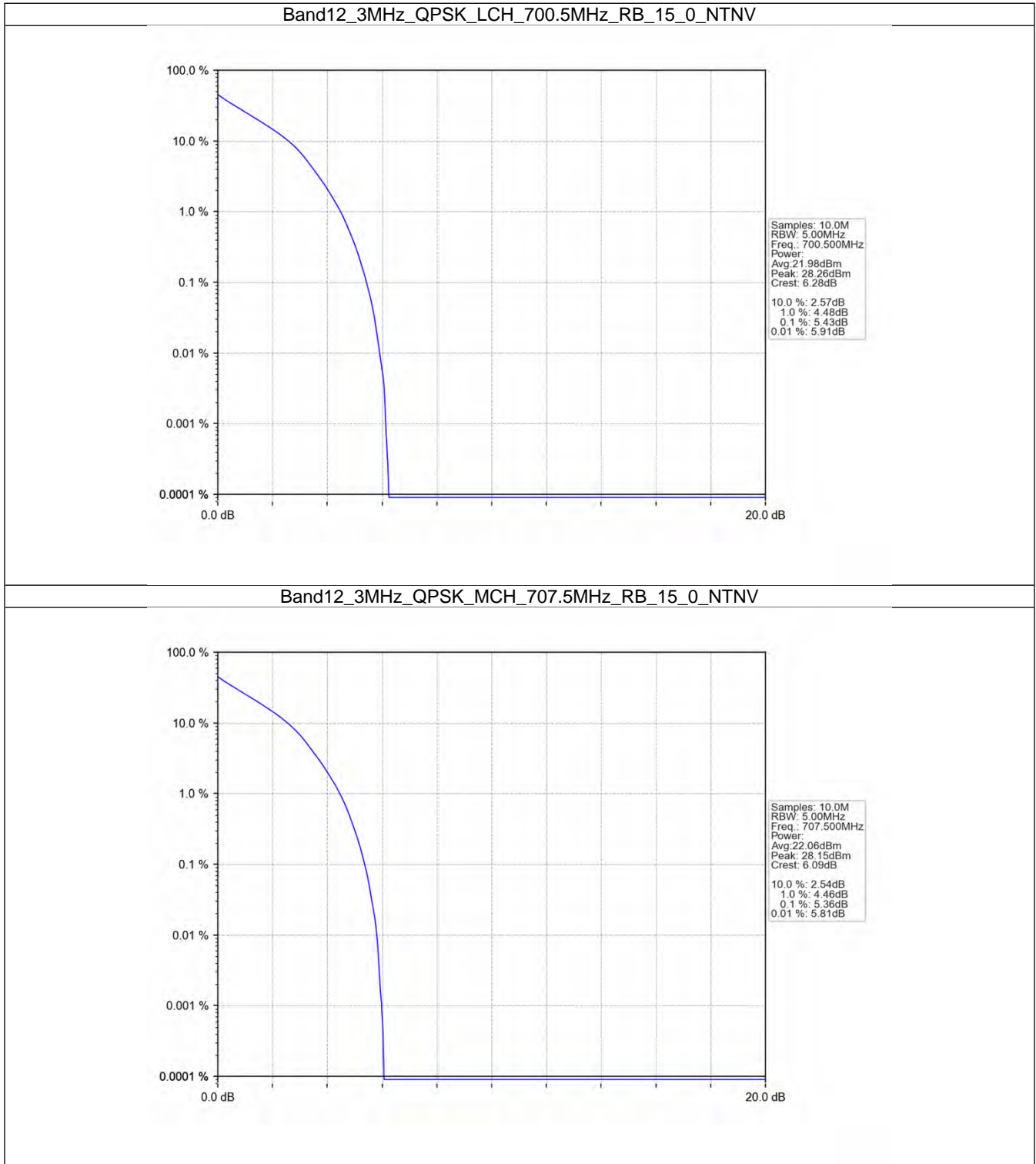


5.2 B12_3MHz

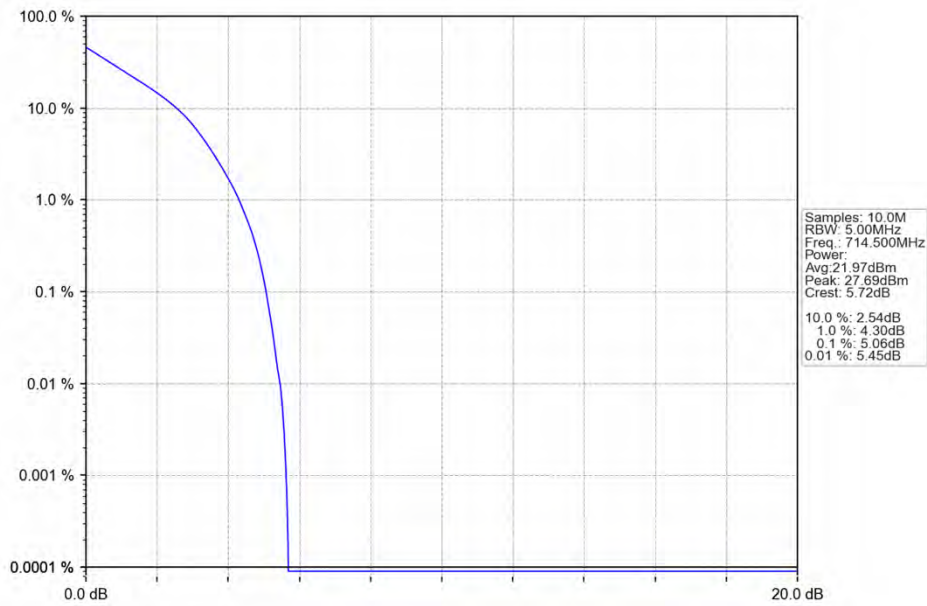
5.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	5.43	<=13	Pass
	707.5	15	0	5.36	<=13	Pass
	714.5	15	0	5.06	<=13	Pass
16QAM	700.5	15	0	6.23	<=13	Pass
	707.5	15	0	6.19	<=13	Pass
	714.5	15	0	5.89	<=13	Pass

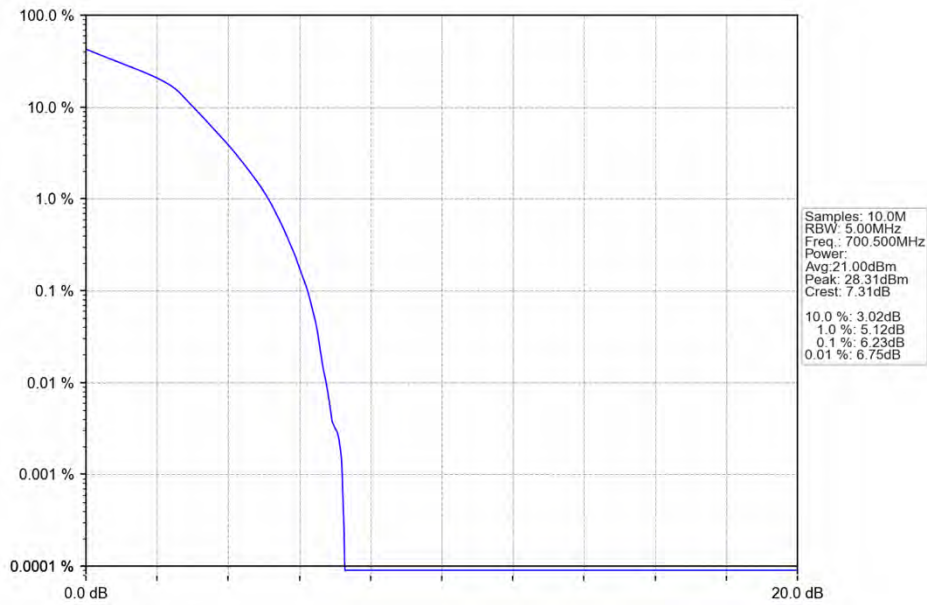
5.2.2 Test Graph



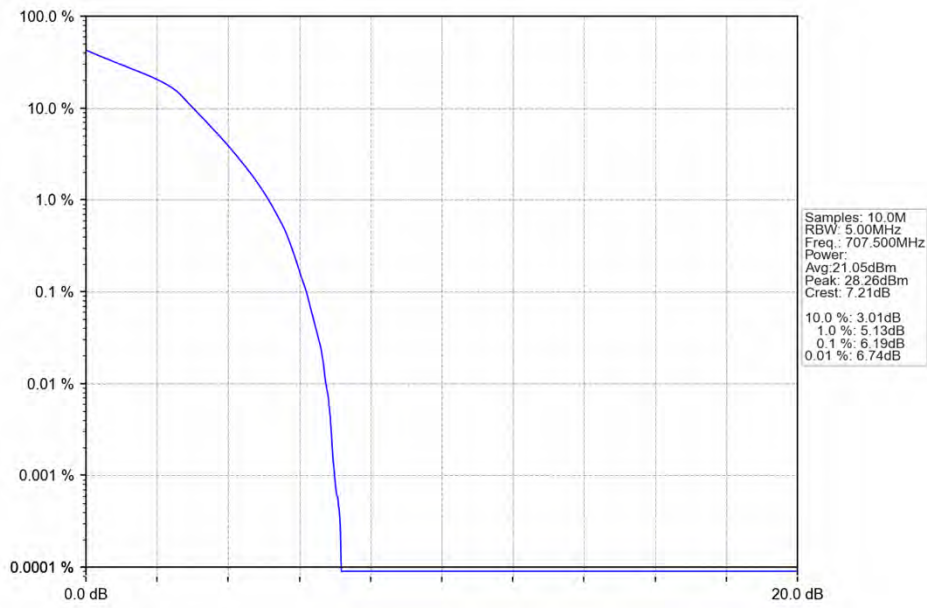
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



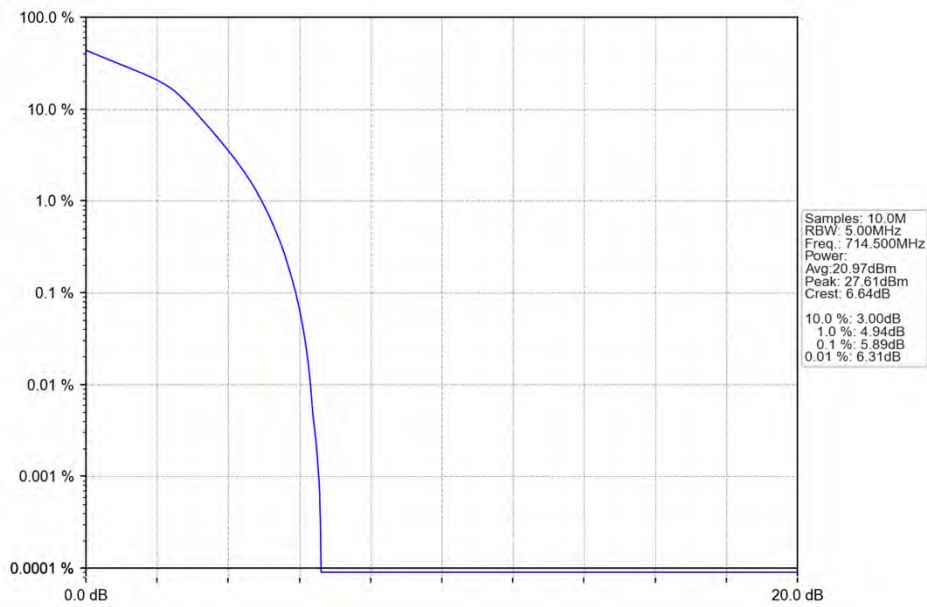
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV

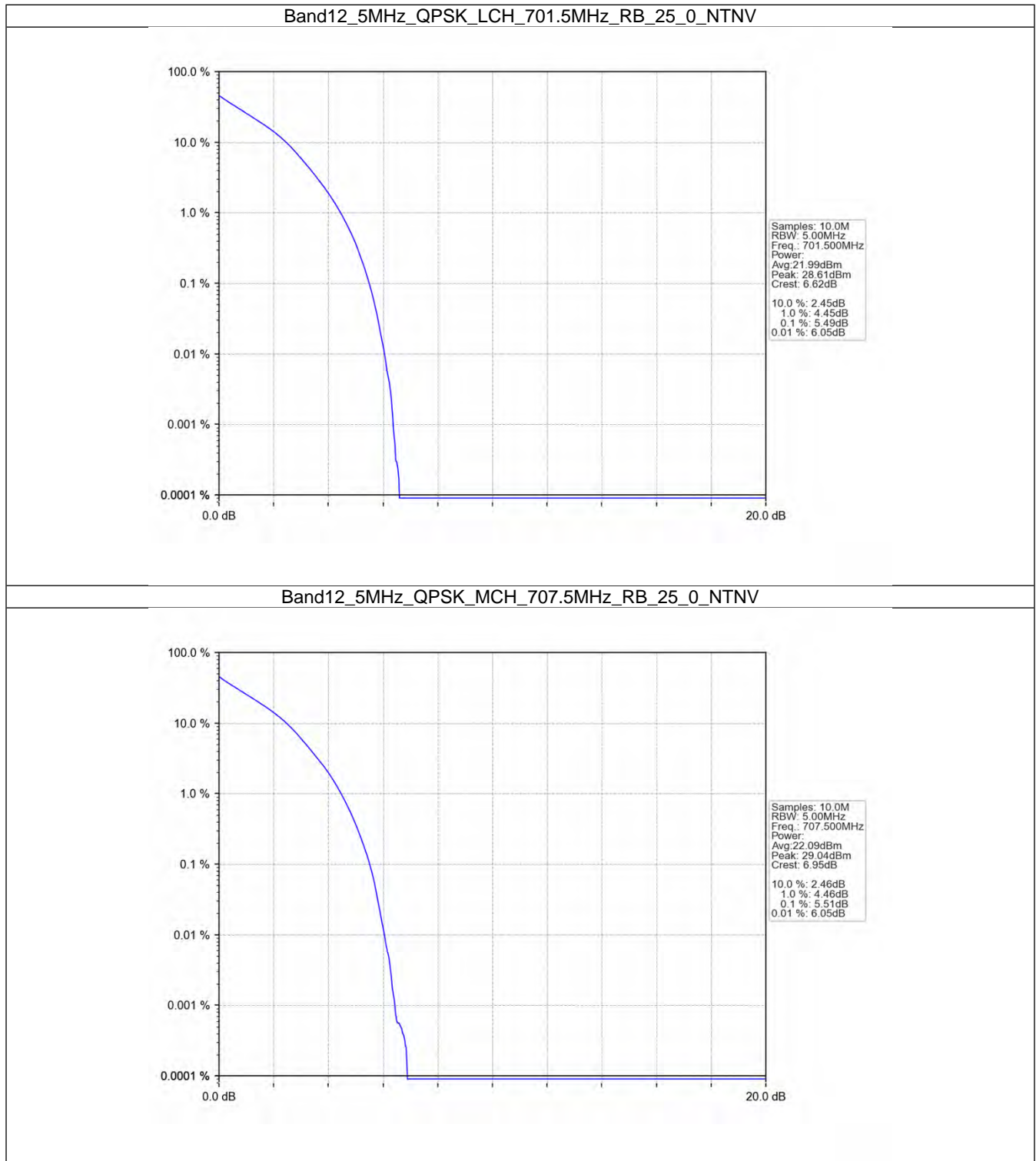


5.3 B12_5MHz

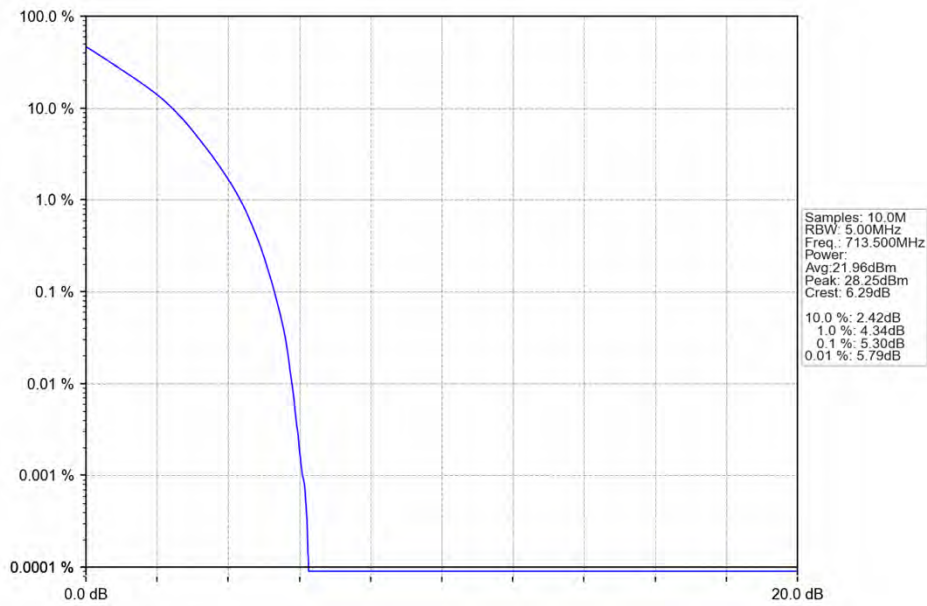
5.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	25	0	5.49	<=13	Pass
	707.5	25	0	5.51	<=13	Pass
	713.5	25	0	5.30	<=13	Pass
16QAM	701.5	25	0	6.20	<=13	Pass
	707.5	25	0	6.24	<=13	Pass
	713.5	25	0	6.07	<=13	Pass

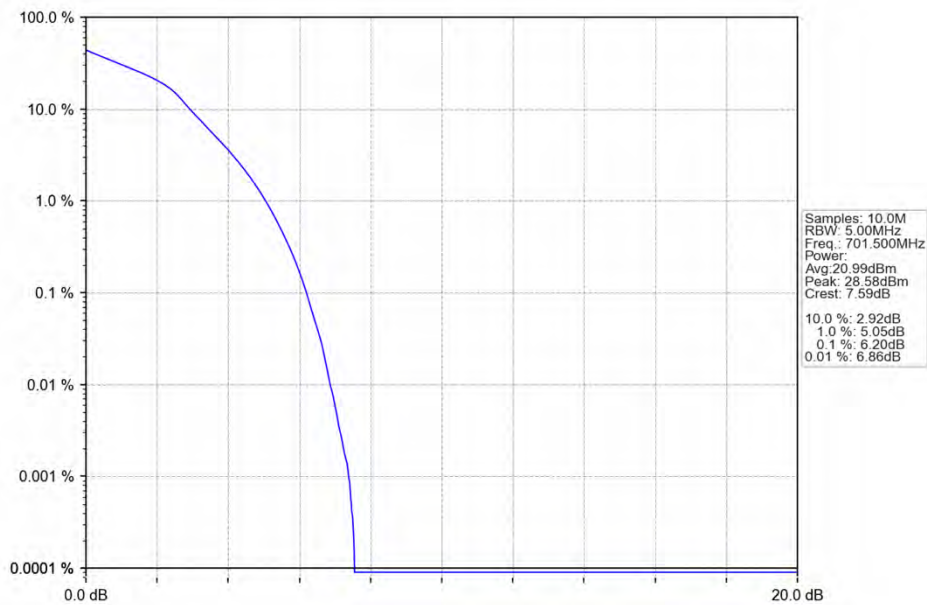
5.3.2 Test Graph



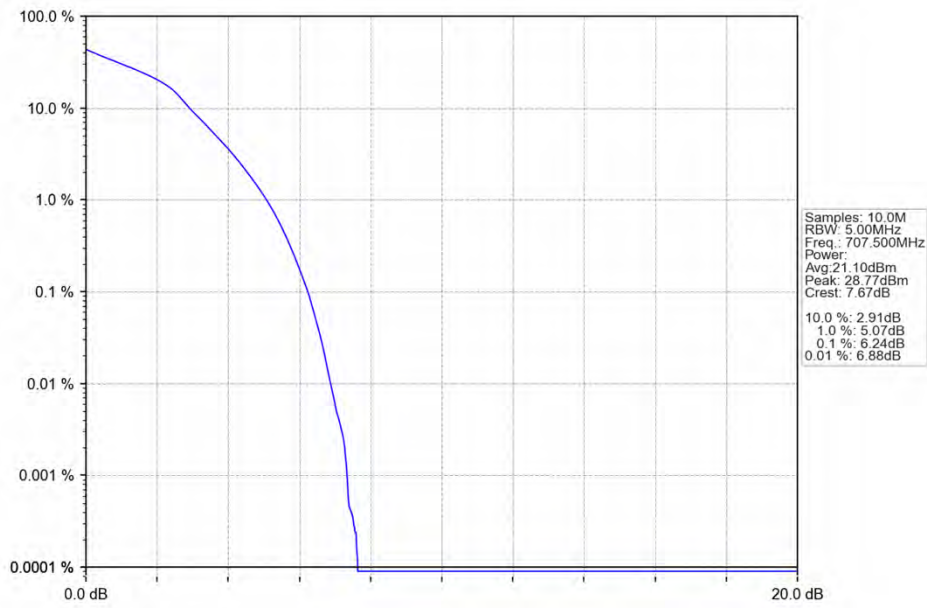
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



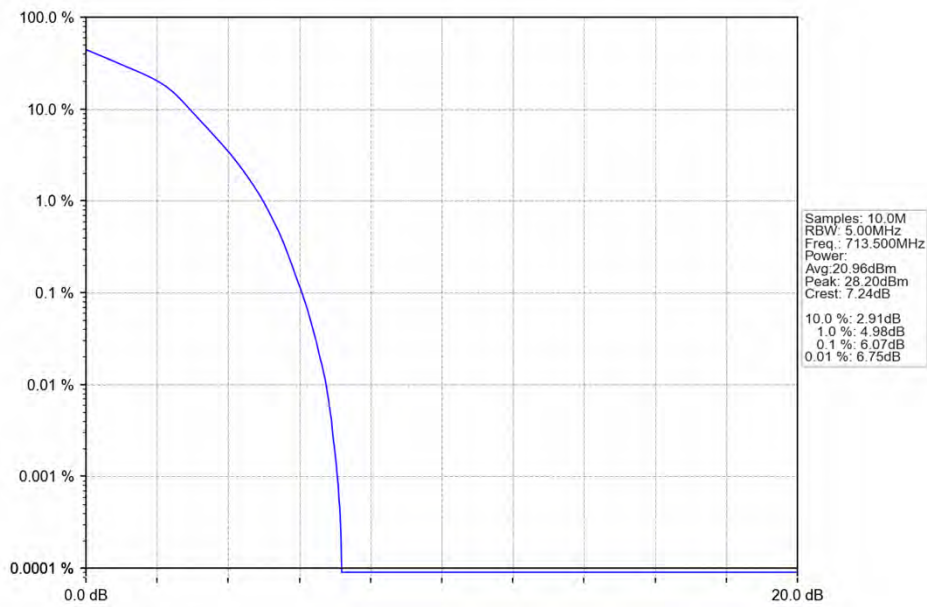
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV

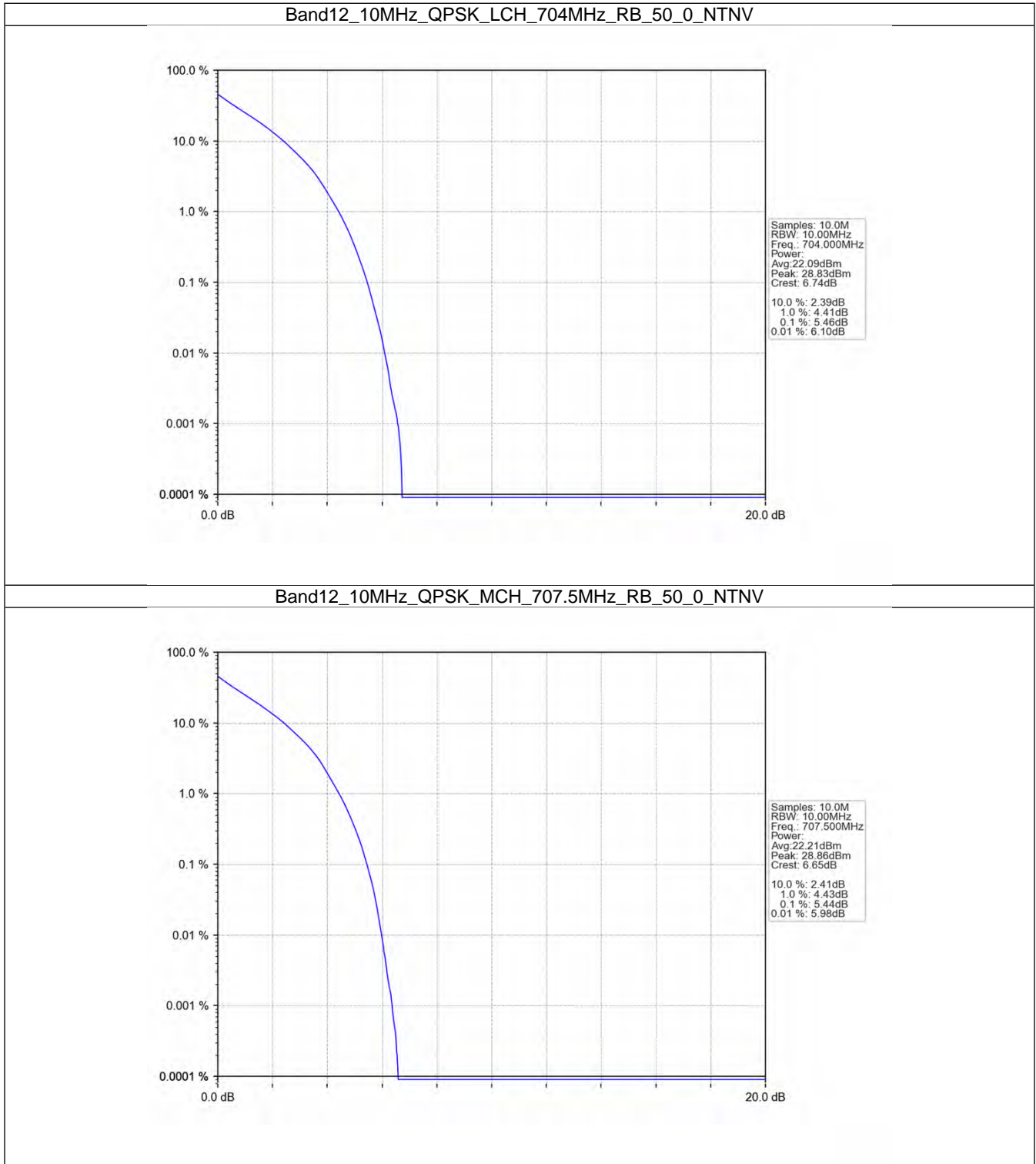


5.4 B12_10MHz

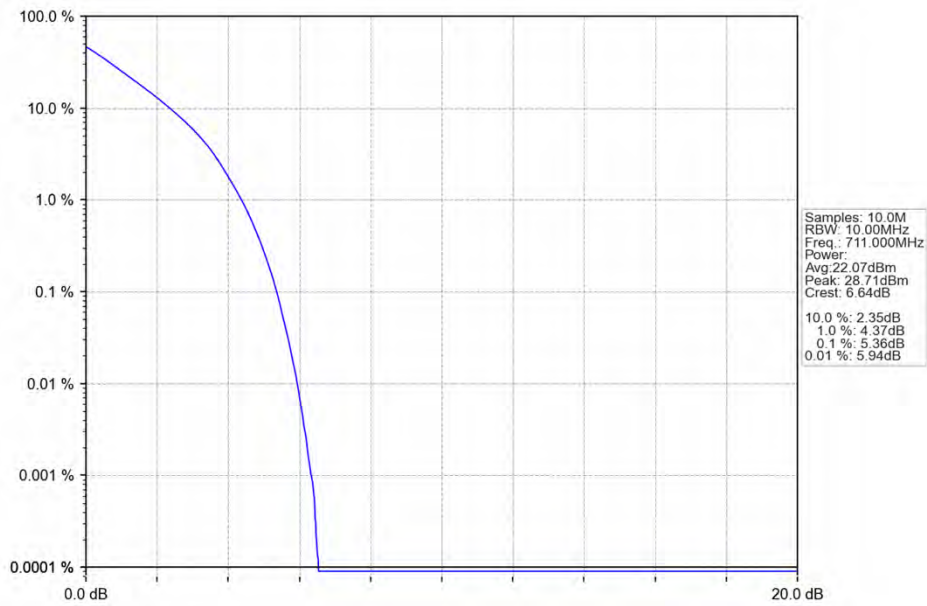
5.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	5.46	<=13	Pass
	707.5	50	0	5.44	<=13	Pass
	711	50	0	5.36	<=13	Pass
16QAM	704	50	0	6.21	<=13	Pass
	707.5	50	0	6.24	<=13	Pass
	711	50	0	6.18	<=13	Pass

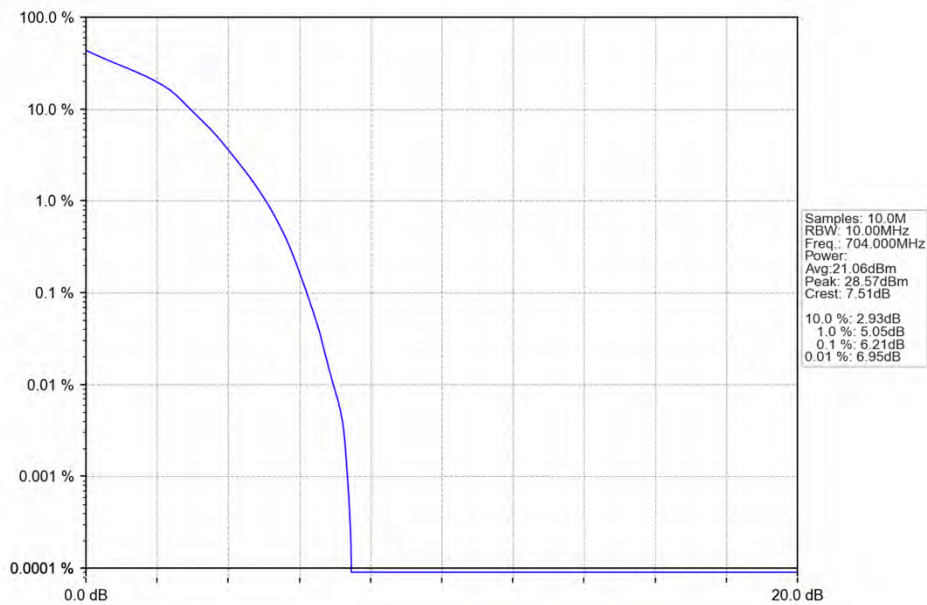
5.4.2 Test Graph



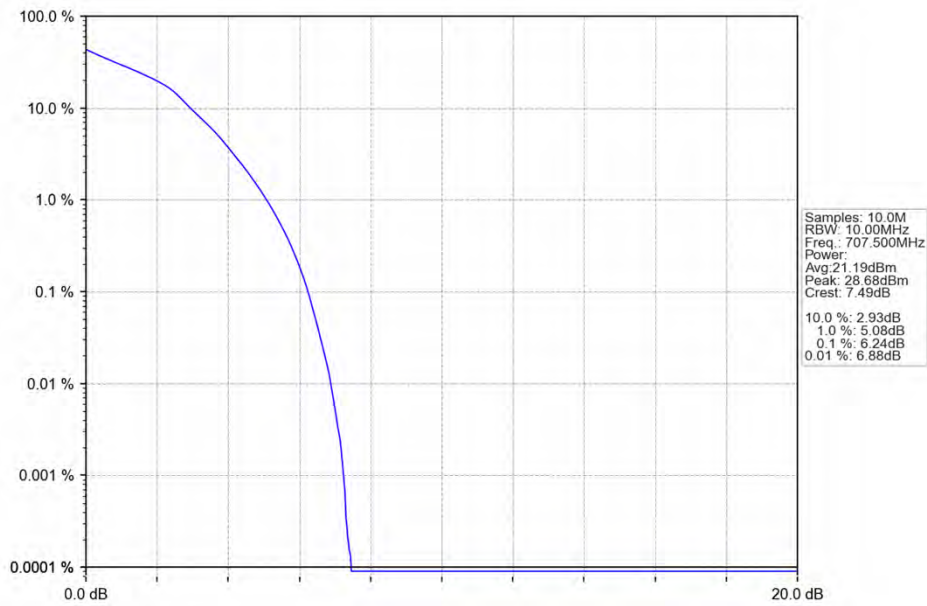
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



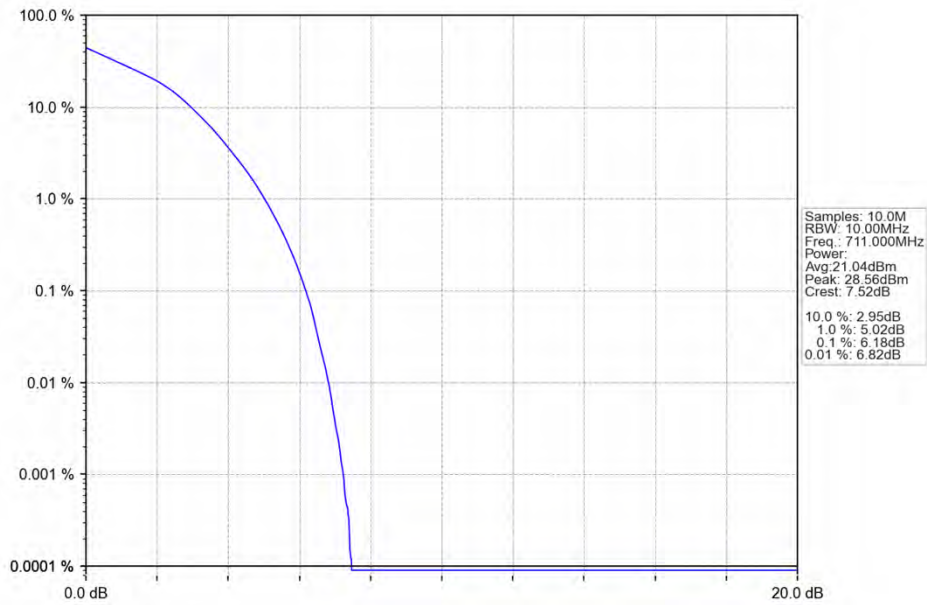
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



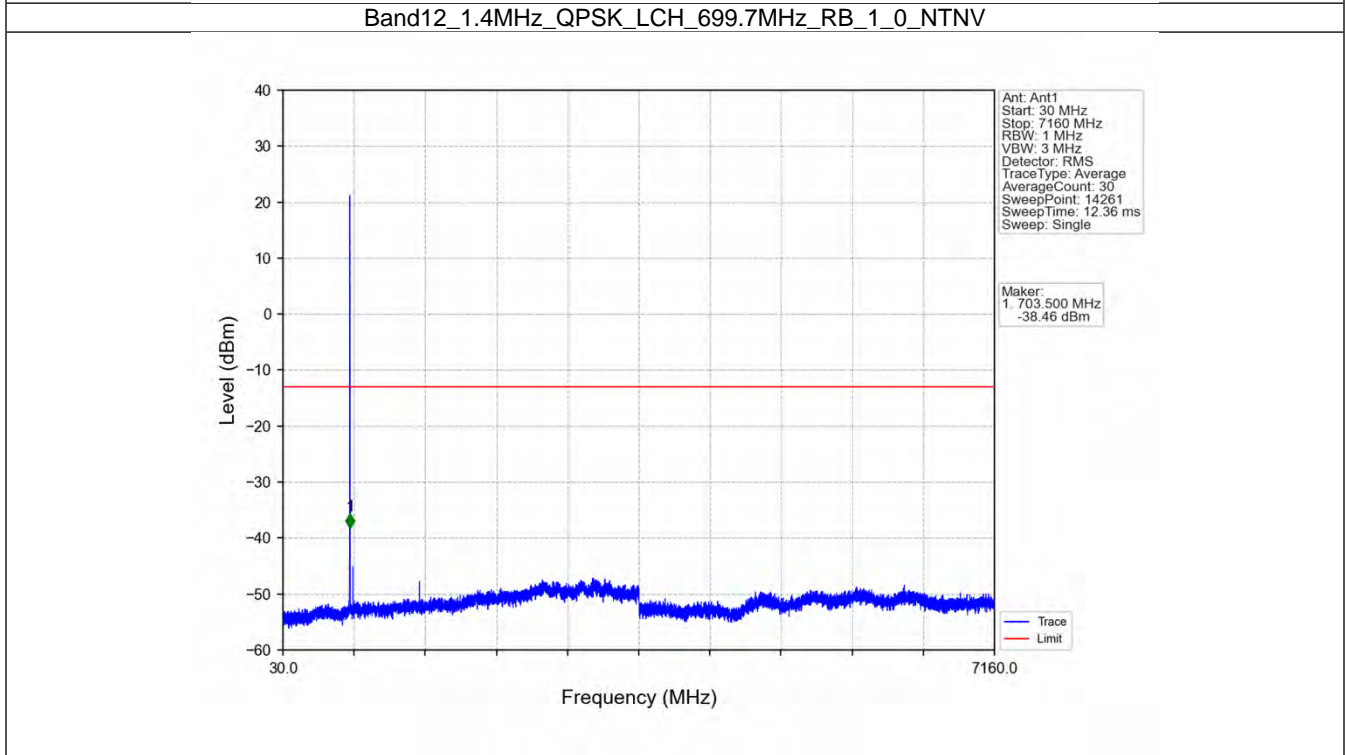
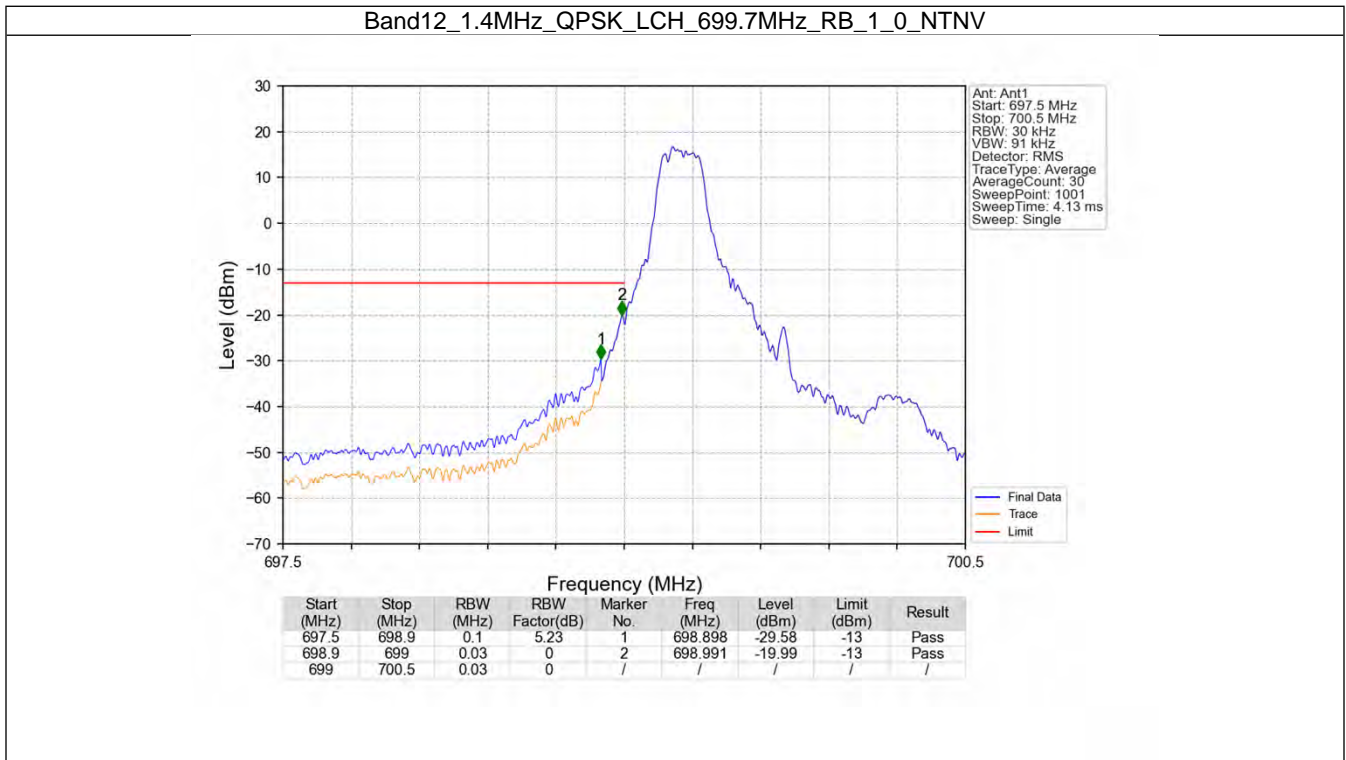
6. Spurious Emission

6.1 B12_1.4MHz

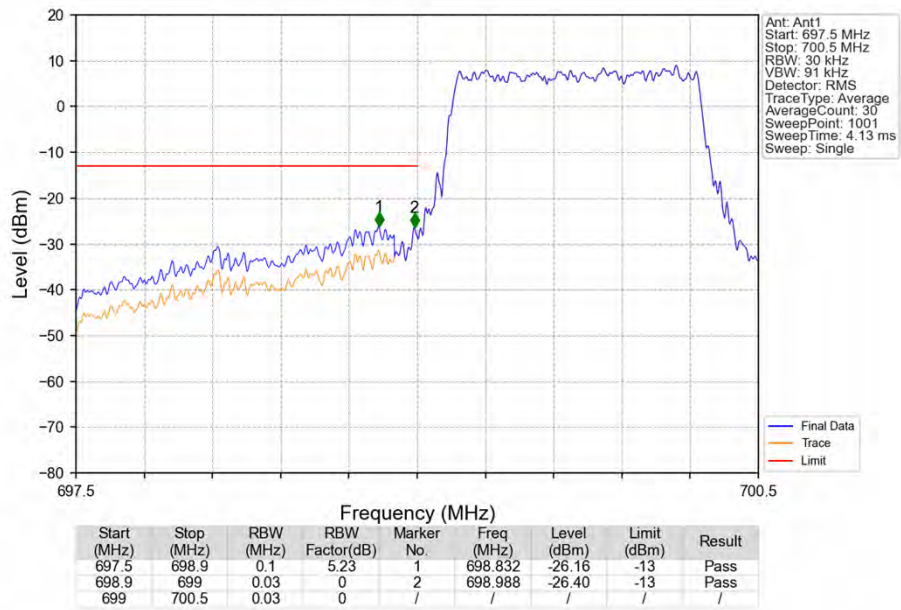
6.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTN						
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	
	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	
	5			Refer To Test Graph		Pass
	6	0	Refer To Test Graph		Pass	

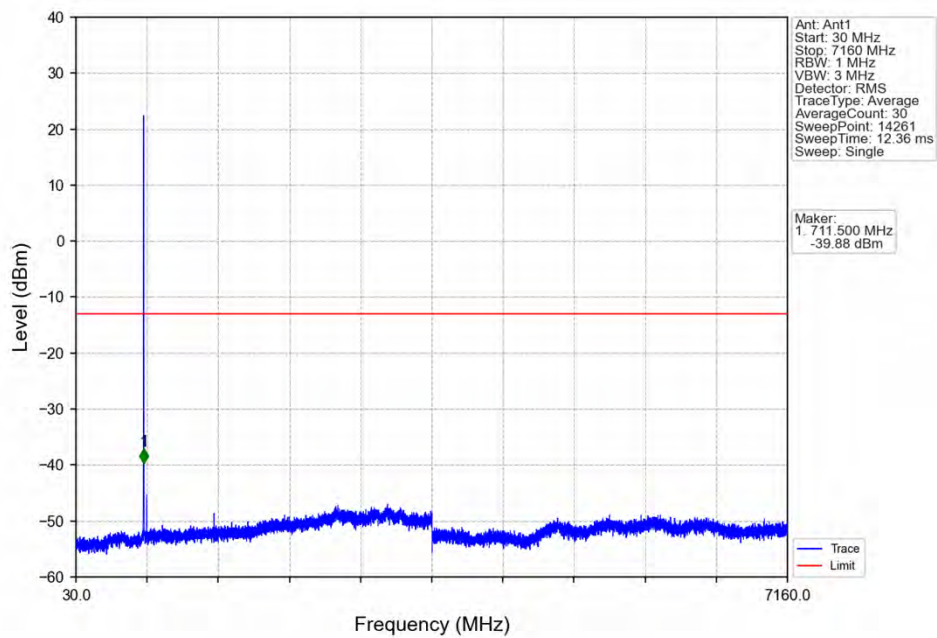
6.1.2 Test Graph



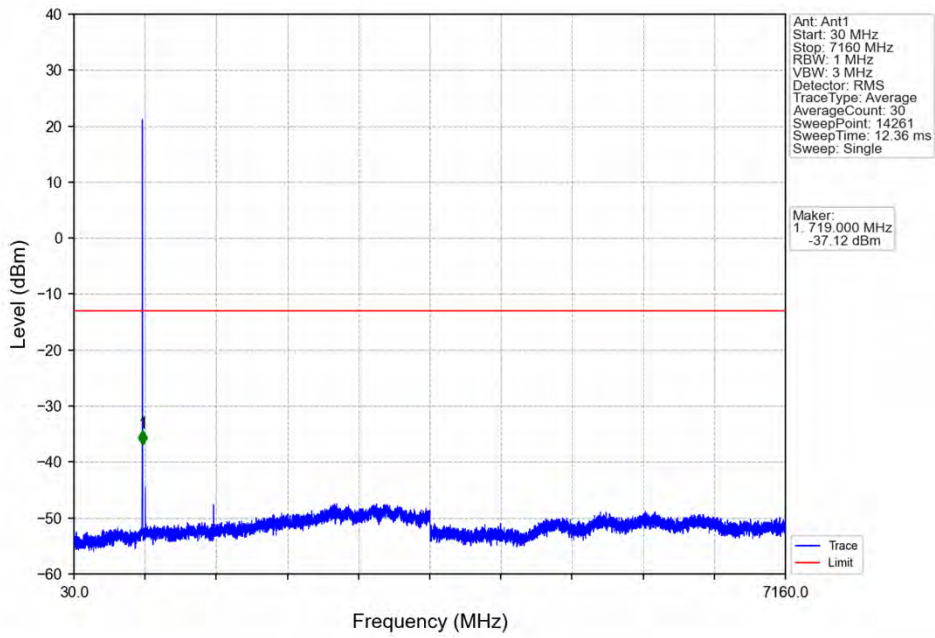
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



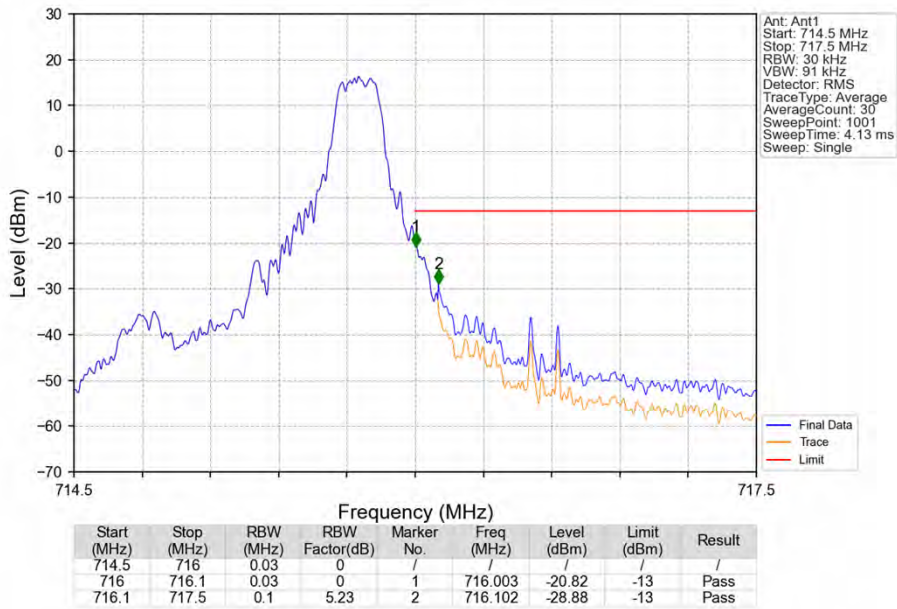
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



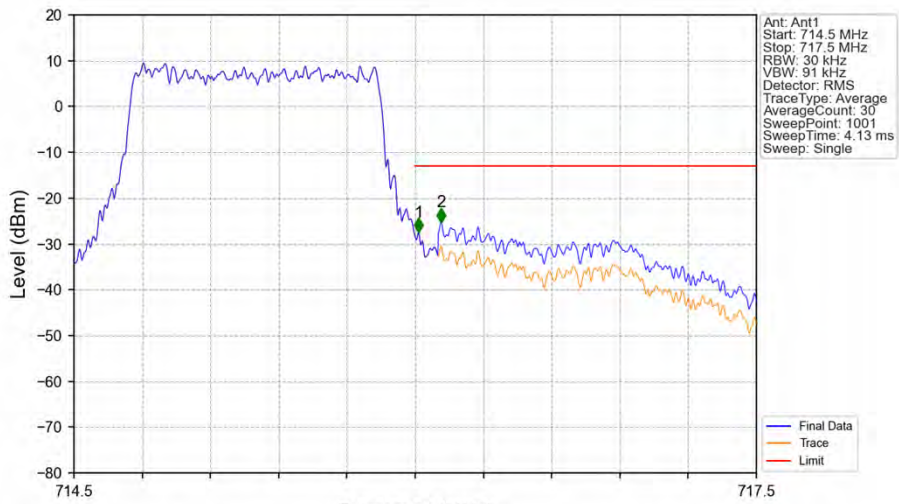
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_0_NTNV



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_5_NTNV

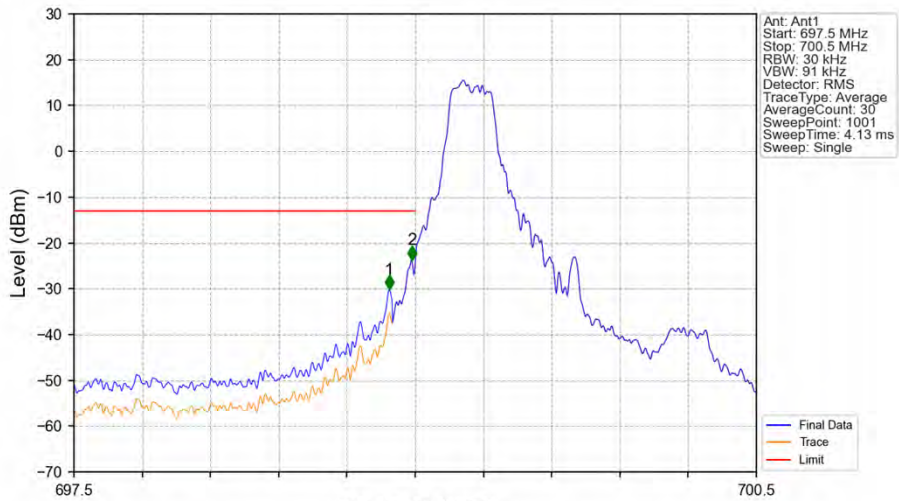


Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



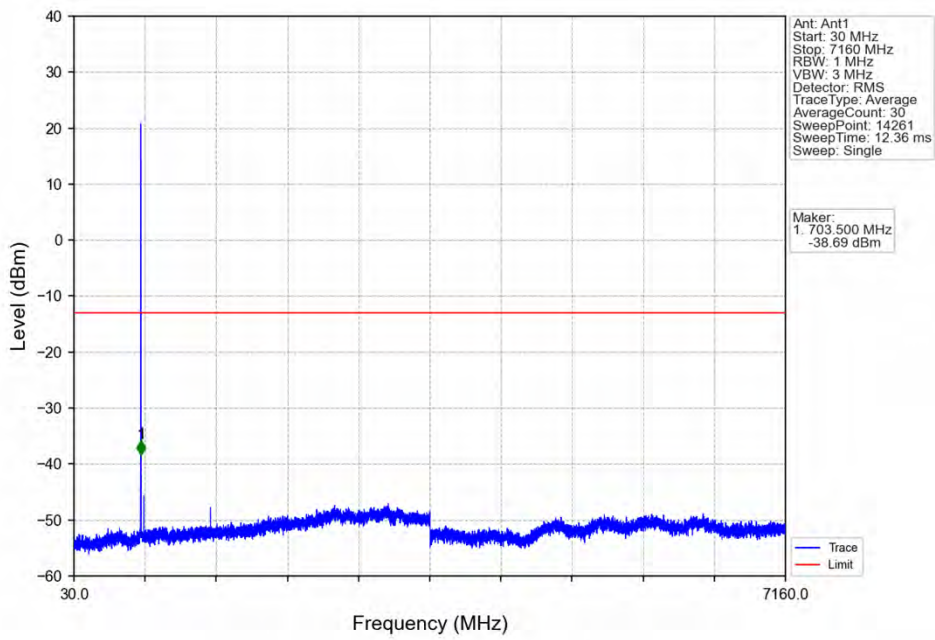
Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	0	/	/	/	/	/
716	716.1	0.03	0	1	716.015	-27.49	-13	Pass
716.1	717.5	0.1	5.23	2	716.114	-25.23	-13	Pass

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

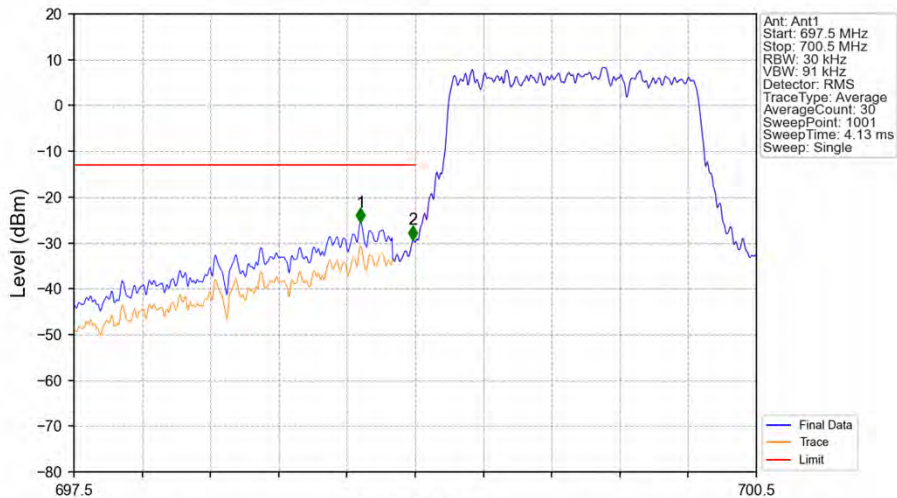


Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	5.23	1	698.886	-30.15	-13	Pass
698.9	699	0.03	0	2	698.985	-23.70	-13	Pass
699	700.5	0.03	0	/	/	/	/	/

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

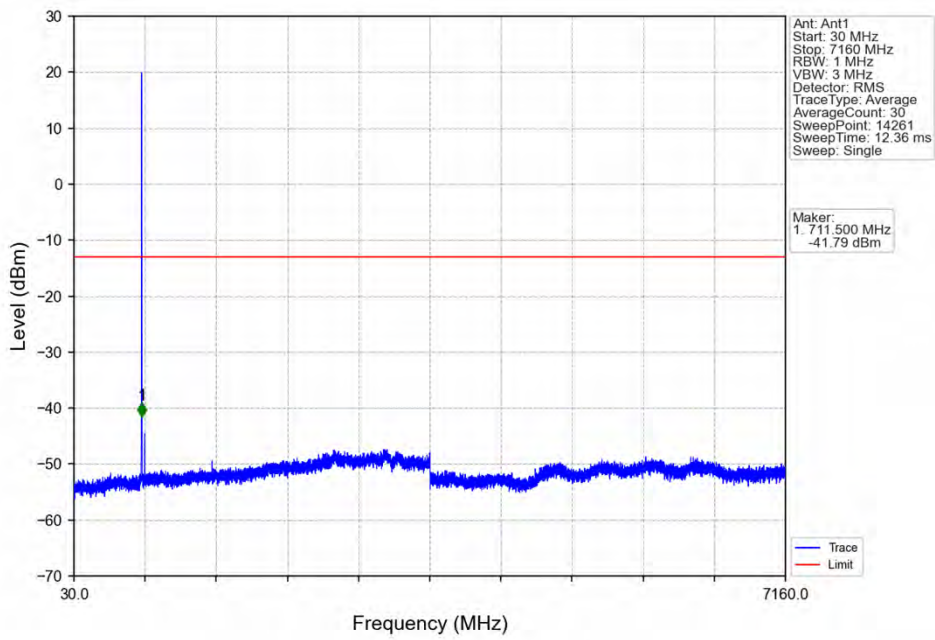


Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV

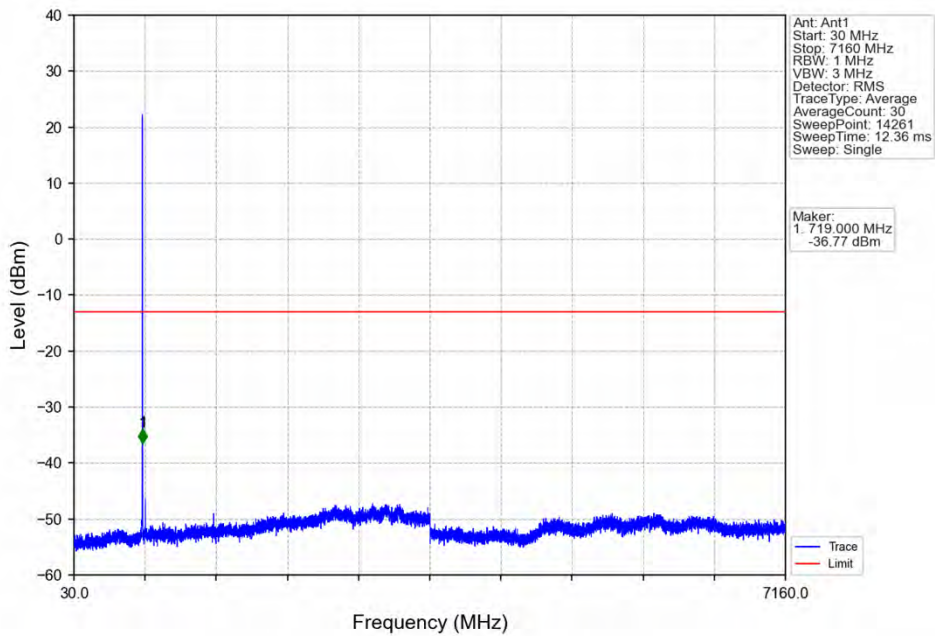


Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	5.23	1	698.760	-25.45	-13	Pass
698.9	699	0.03	0	2	698.991	-29.31	-13	Pass
699	700.5	0.03	0	/	/	/	/	/

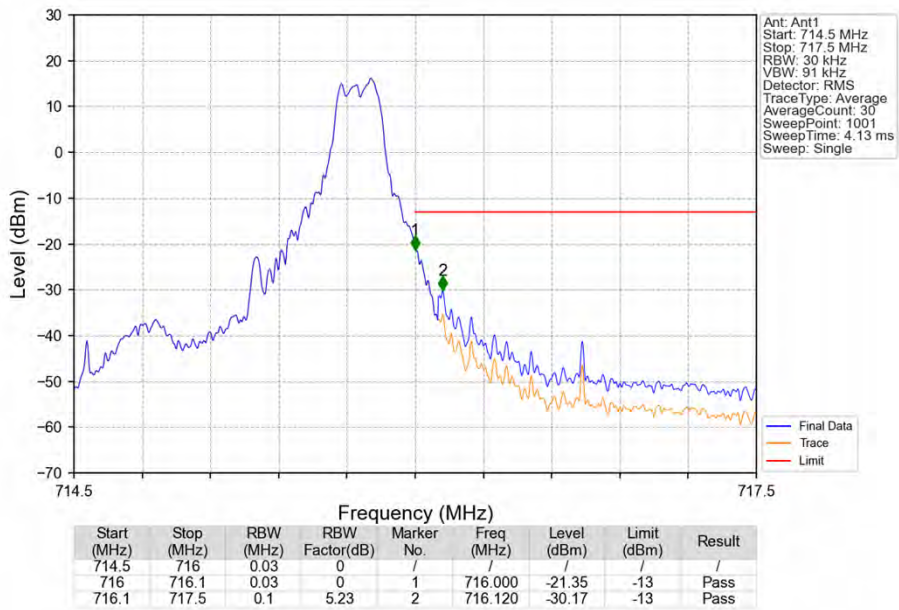
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



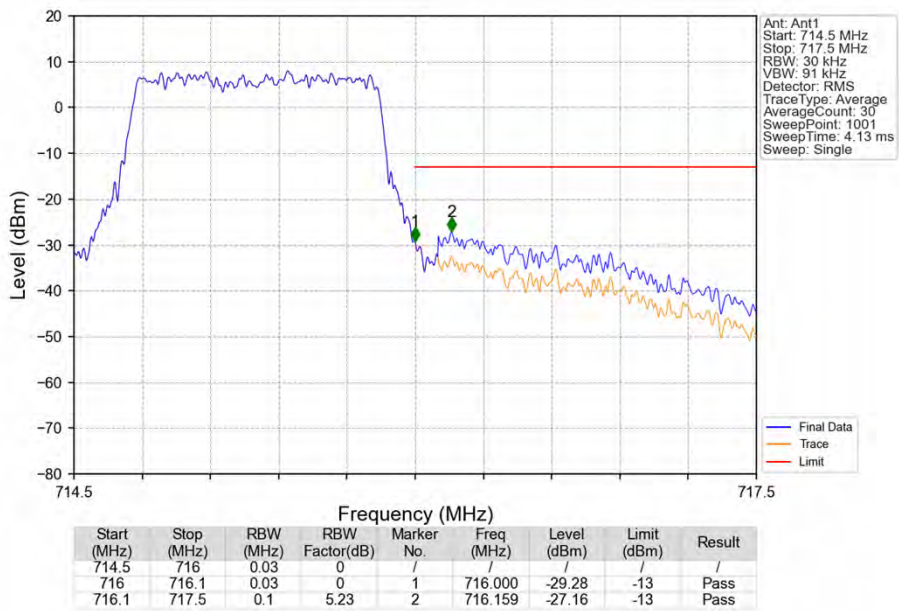
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_0_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_5_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV

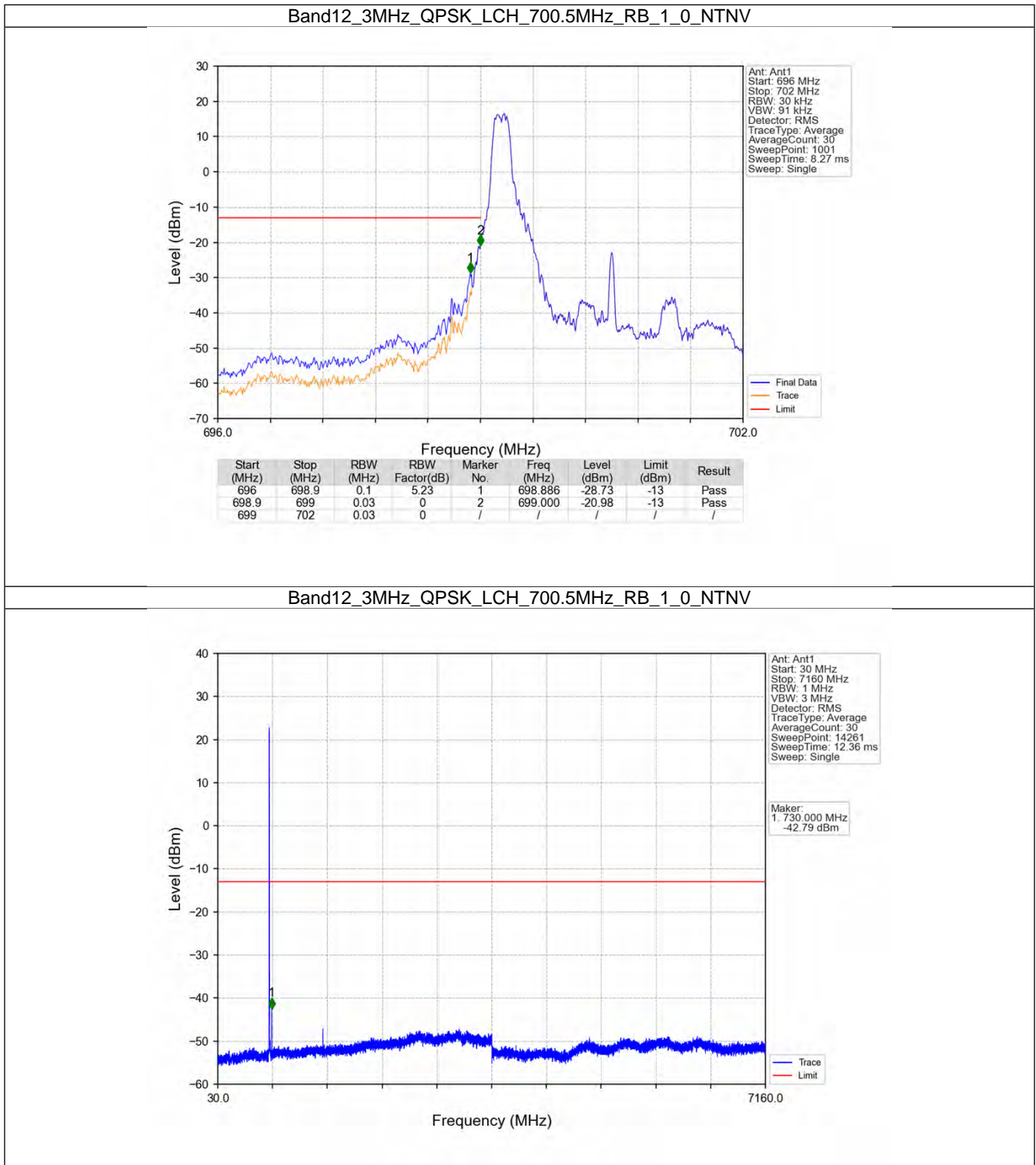


6.2 B12_3MHz

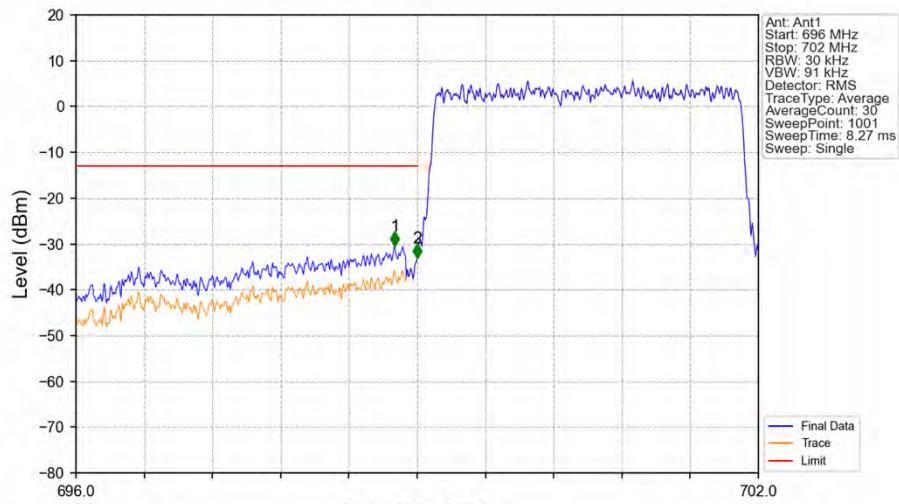
6.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV						
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

6.2.2 Test Graph

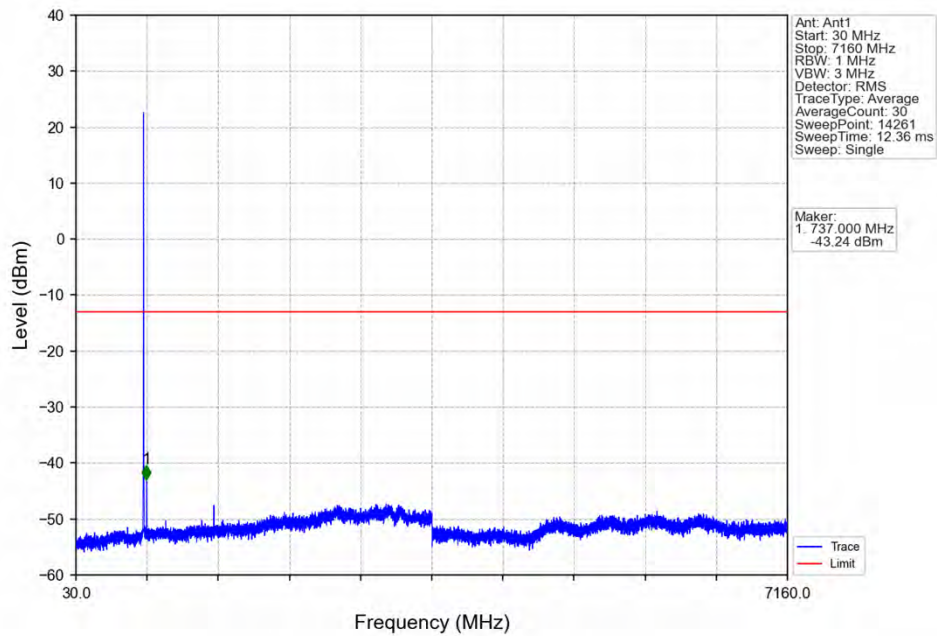


Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV

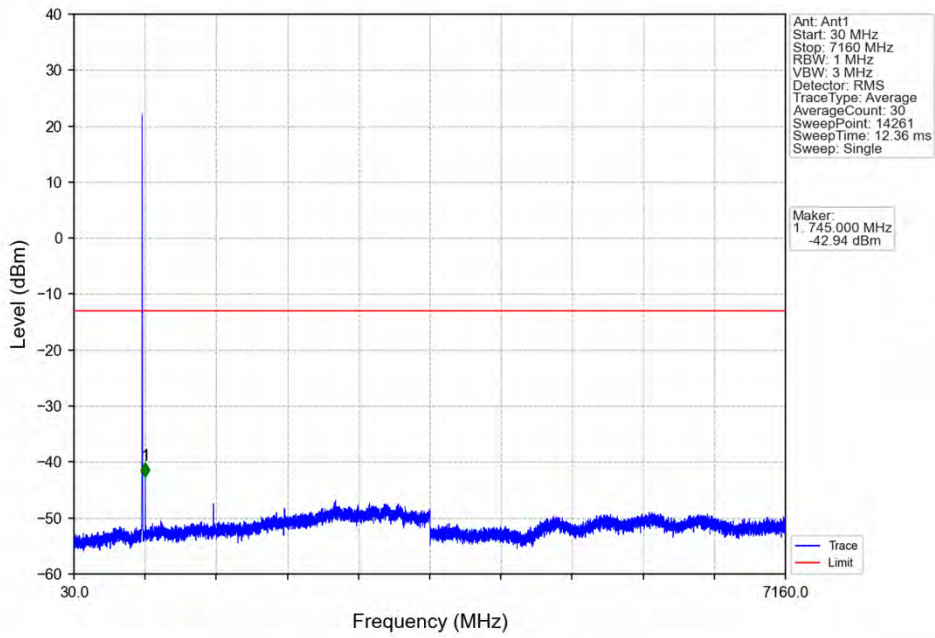


Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	5.23	1	698.802	-30.51	-13	Pass
698.9	699	0.03	0	2	699.000	-33.06	-13	Pass
699	702	0.03	0	/	/	/	/	/

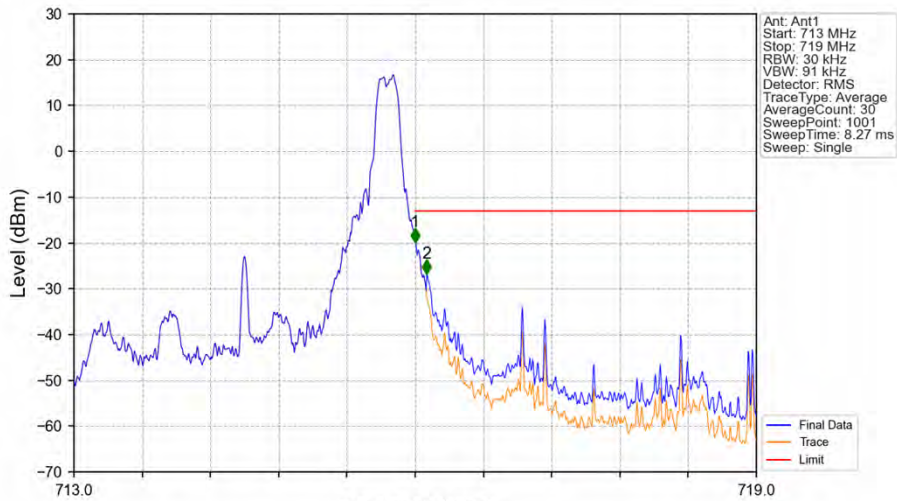
Band12_3MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_0_NTNV

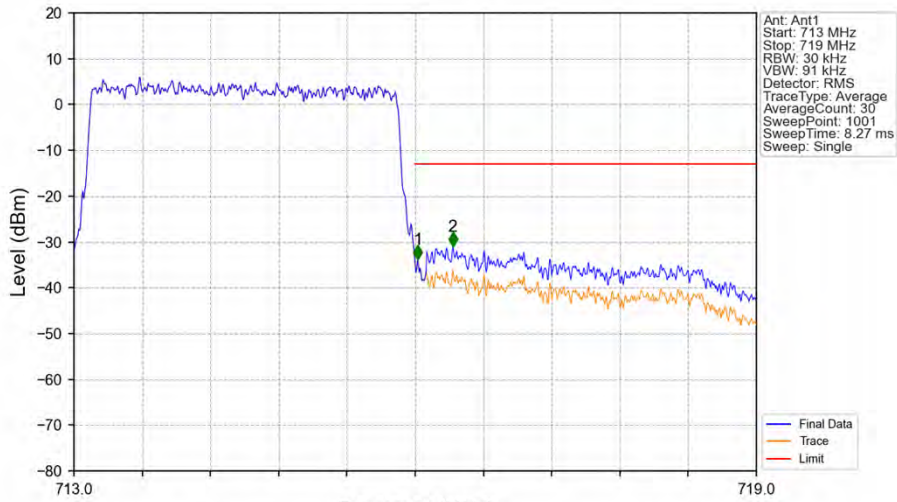


Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_14_NTNV



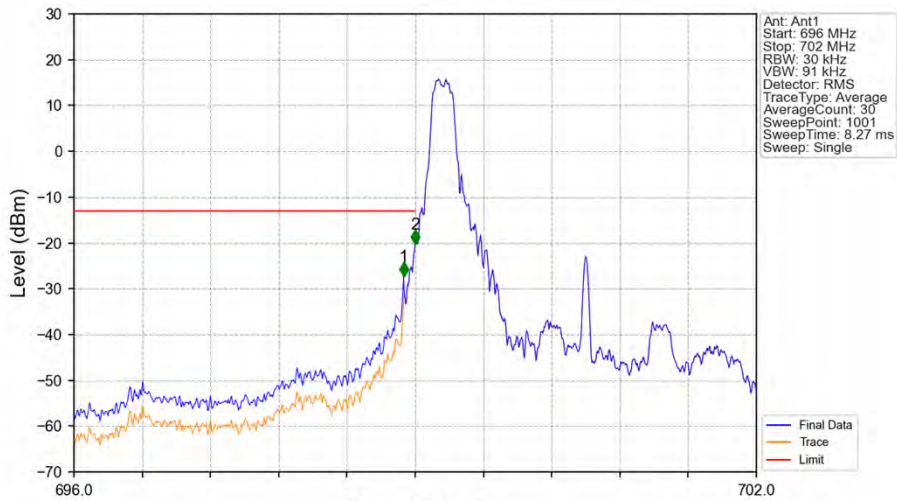
Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	0	/	/	/	/	/
716	716.1	0.03	0	1	716.000	-19.82	-13	Pass
716.1	719	0.1	5.23	2	716.102	-26.73	-13	Pass

Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



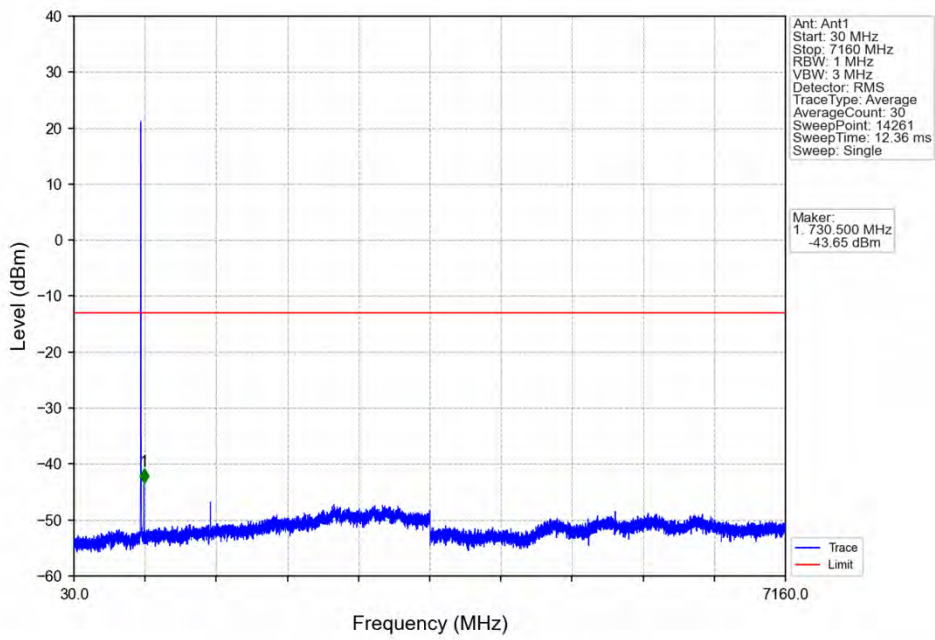
Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	0	/	/	/	/	/
716	716.1	0.03	0	1	716.024	-33.80	-13	Pass
716.1	719	0.1	5.23	2	716.330	-31.03	-13	Pass

Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

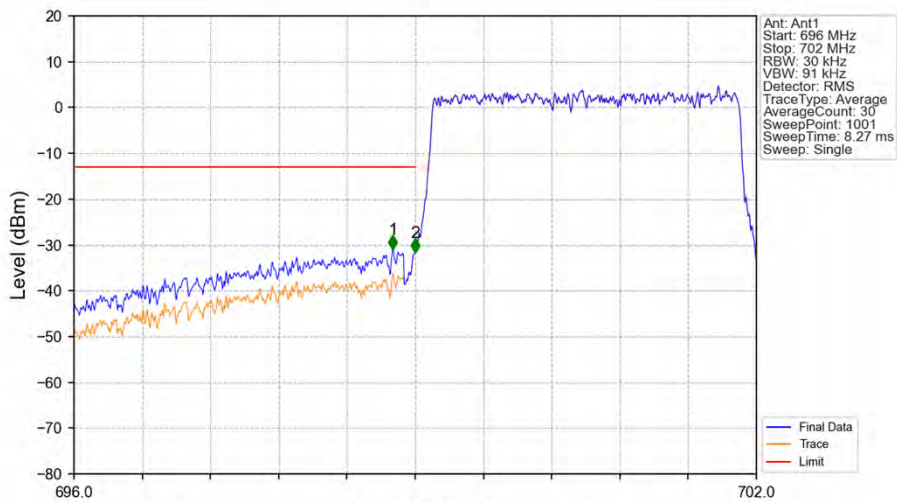


Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	5.23	1	698.898	-27.29	-13	Pass
698.9	699	0.03	0	2	699.000	-20.24	-13	Pass
699	702	0.03	0	/	/	/	/	/

Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

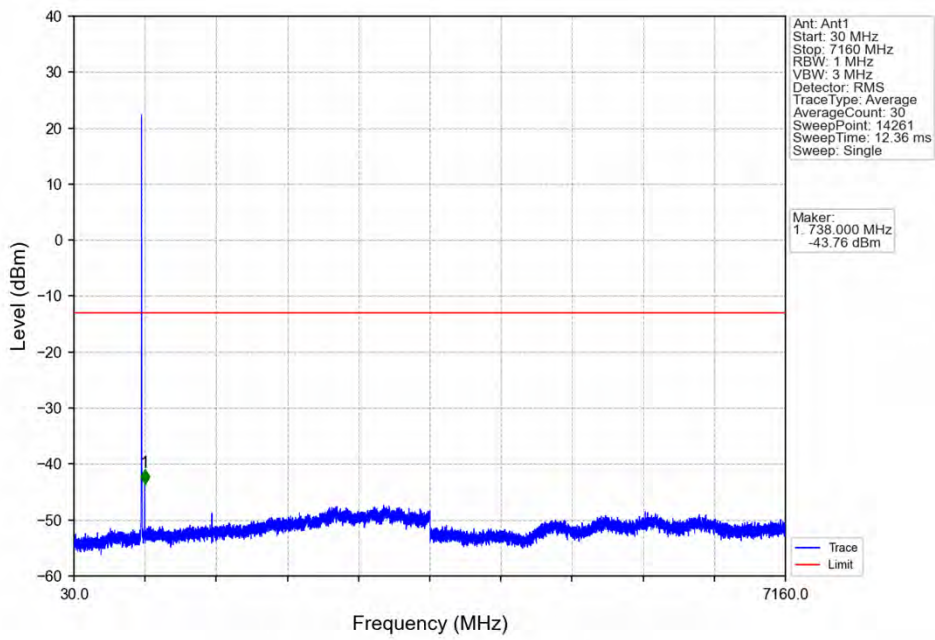


Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

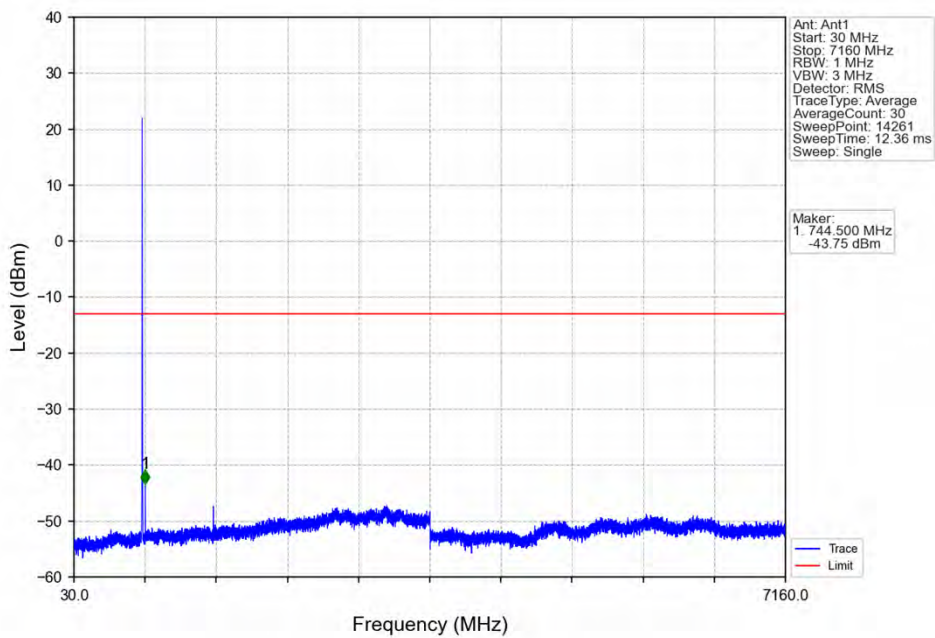


Frequency (MHz)								
Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	5.23	1	698.802	-30.92	-13	Pass
698.9	699	0.03	0	2	699.000	-31.69	-13	Pass
699	702	0.03	0	/	/	/	/	/

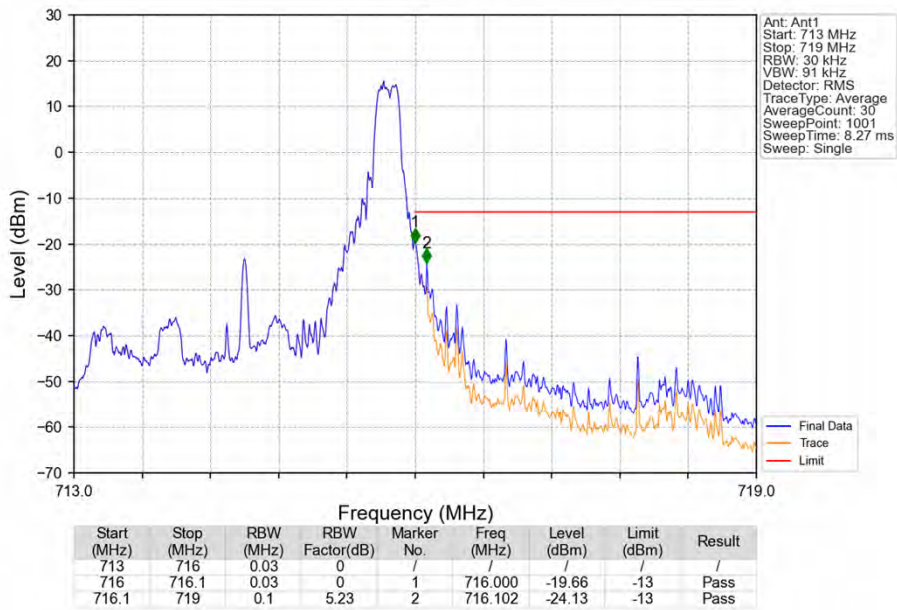
Band12_3MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



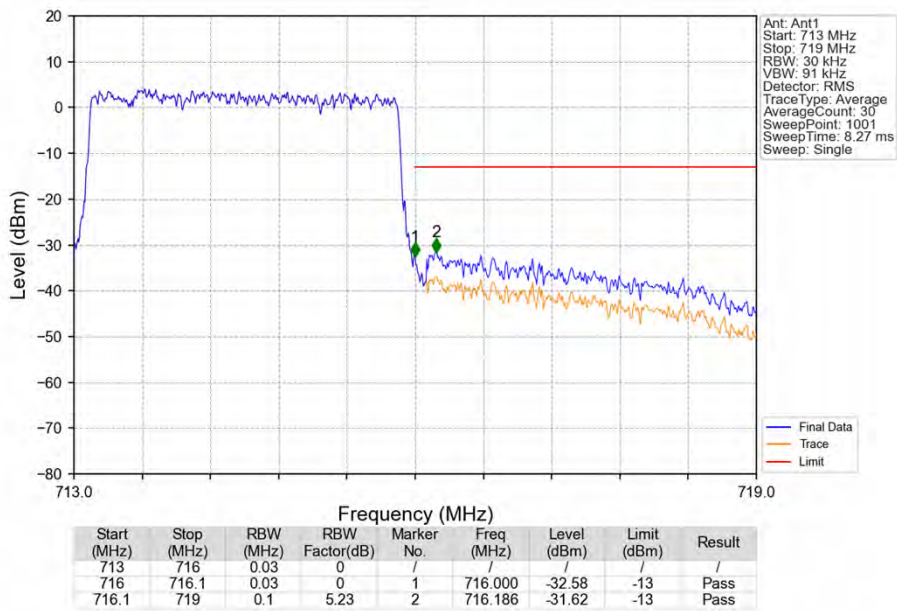
Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_0_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_14_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV

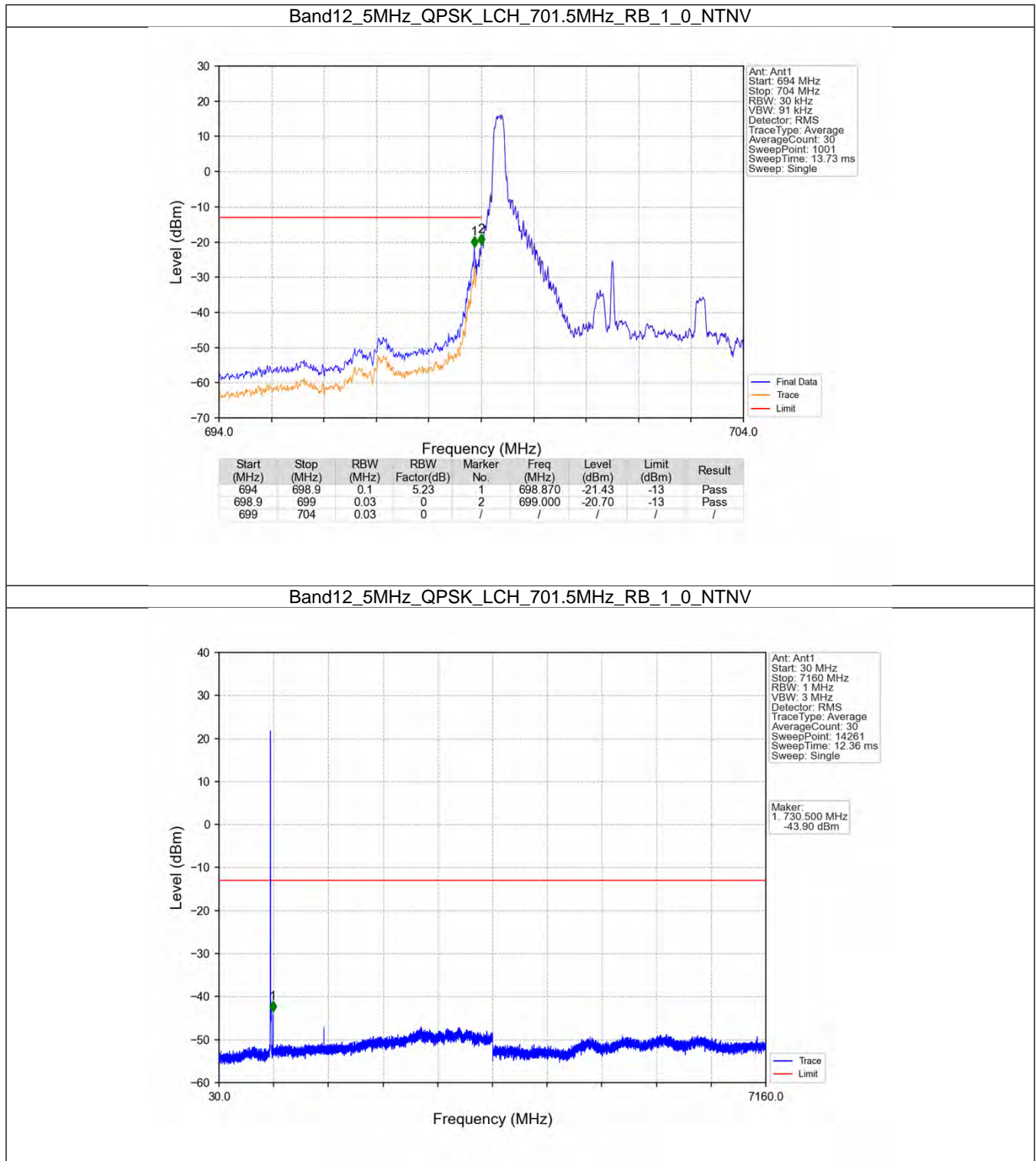


6.3 B12_5MHz

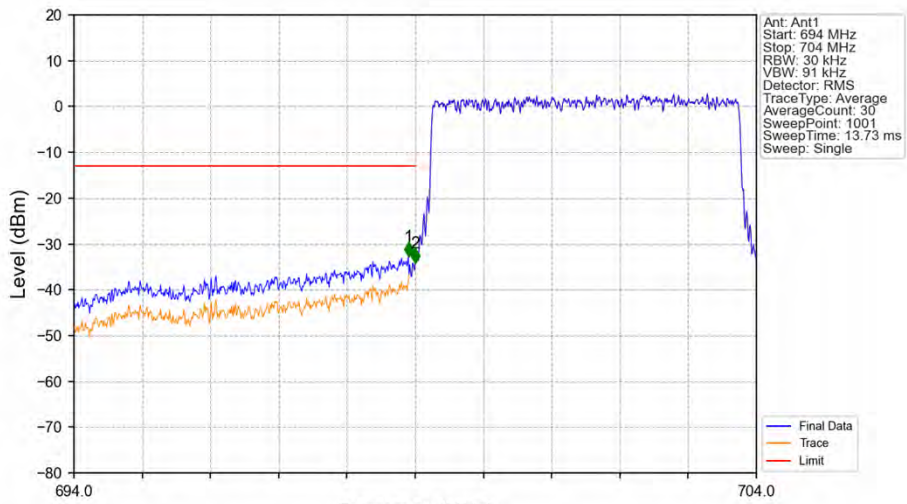
6.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTV						
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

6.3.2 Test Graph

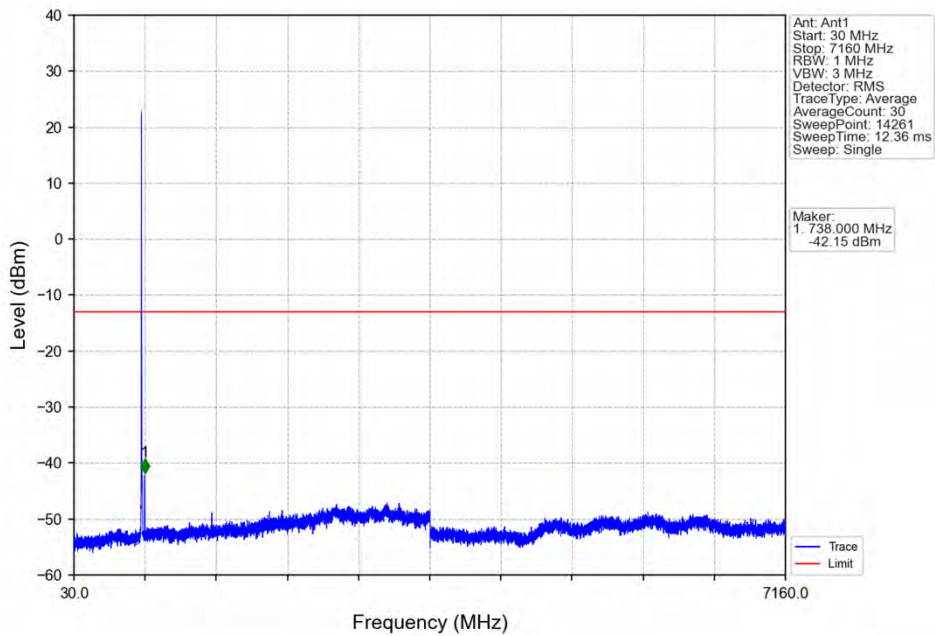


Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV

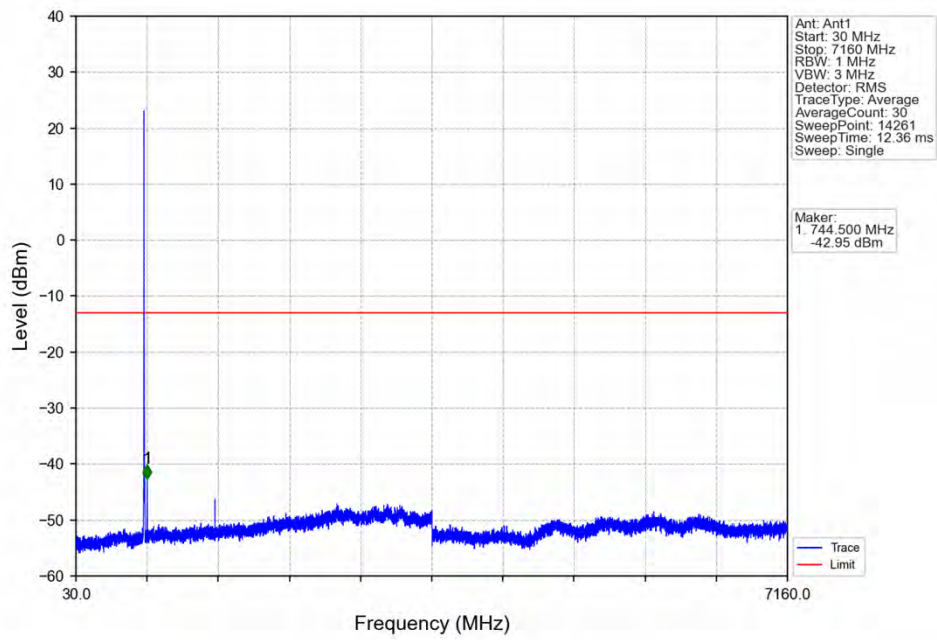


Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	5.23	1	698.900	-32.78	-13	Pass
698.9	699	0.03	0	2	699.000	-34.19	-13	Pass
699	704	0.03	0	/	/	/	/	/

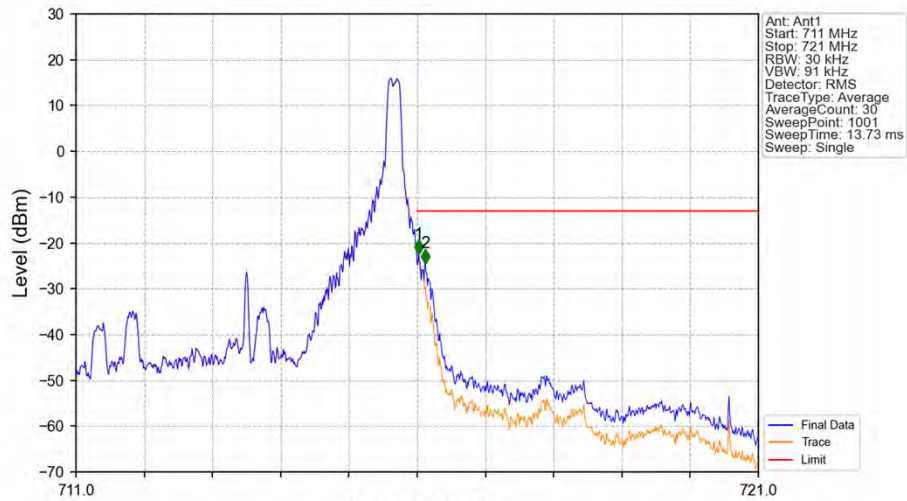
Band12_5MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

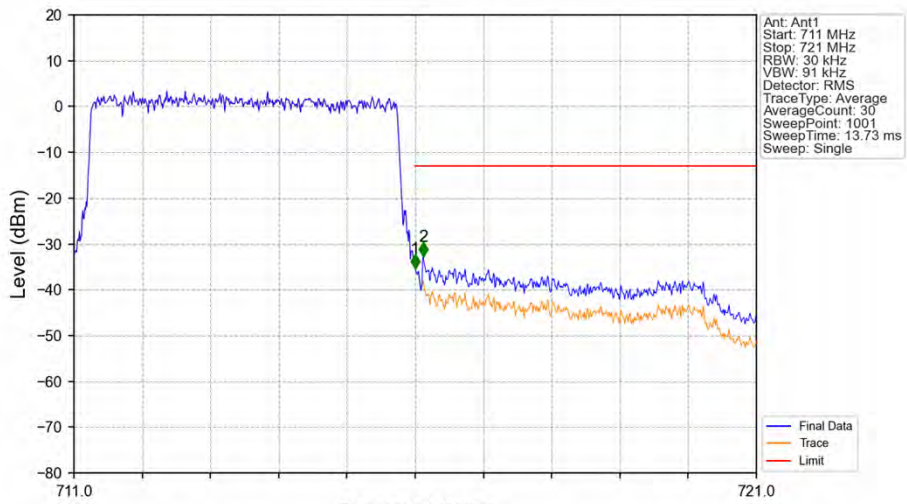


Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



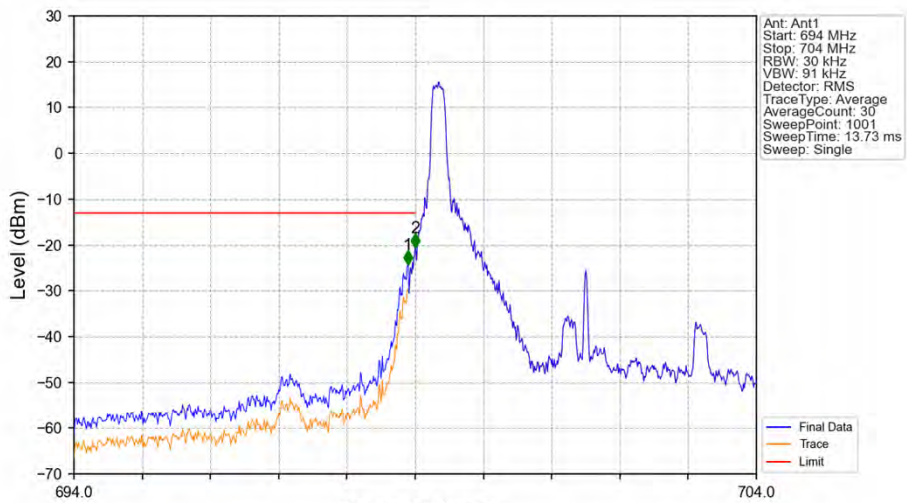
Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	0	/	/	/	/	/
716	716.1	0.03	0	1	716.020	-22.38	-13	Pass
716.1	721	0.1	5.23	2	716.120	-24.43	-13	Pass

Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



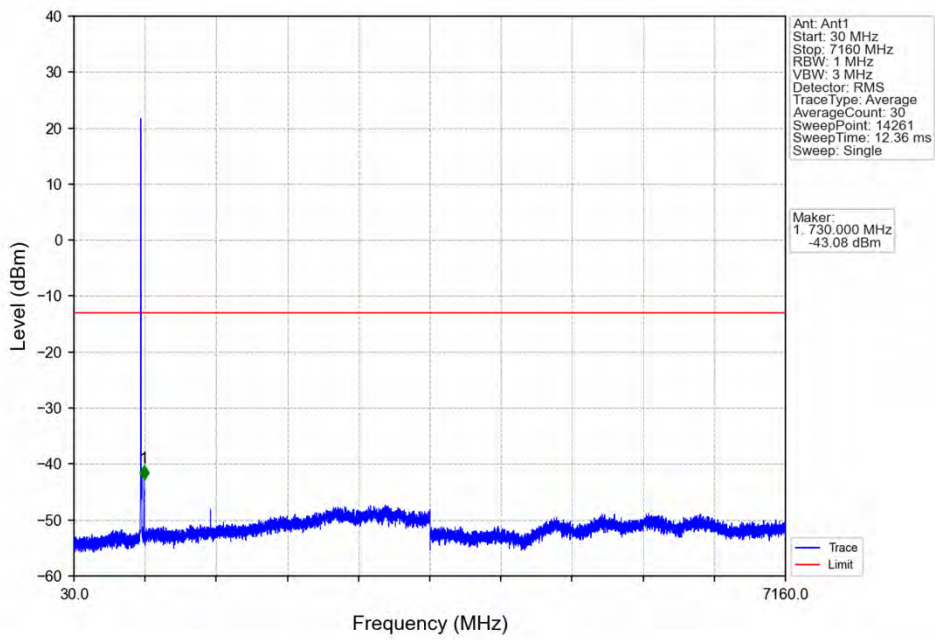
Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	0	/	/	/	/	/
716	716.1	0.03	0	1	716.000	-35.33	-13	Pass
716.1	721	0.1	5.23	2	716.120	-32.73	-13	Pass

Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

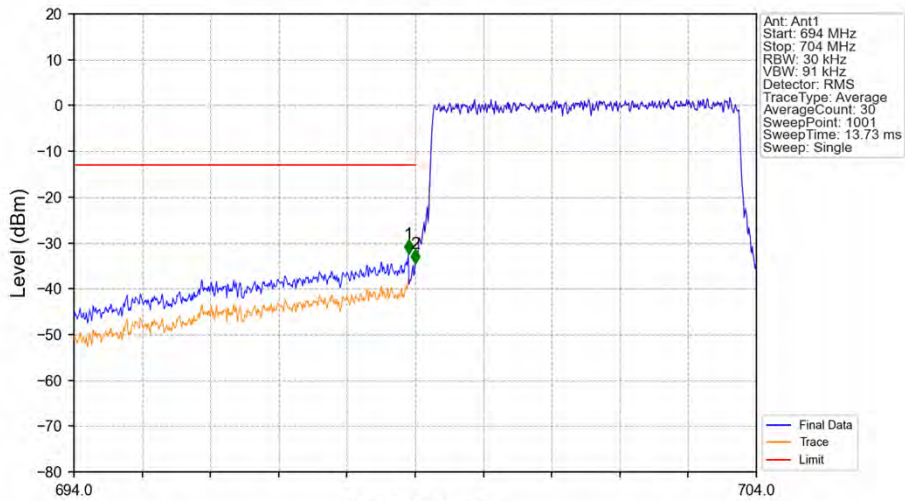


Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	5.23	1	698.890	-24.35	-13	Pass
698.9	699	0.03	0	2	699.000	-20.57	-13	Pass
699	704	0.03	0	/	/	/	/	/

Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

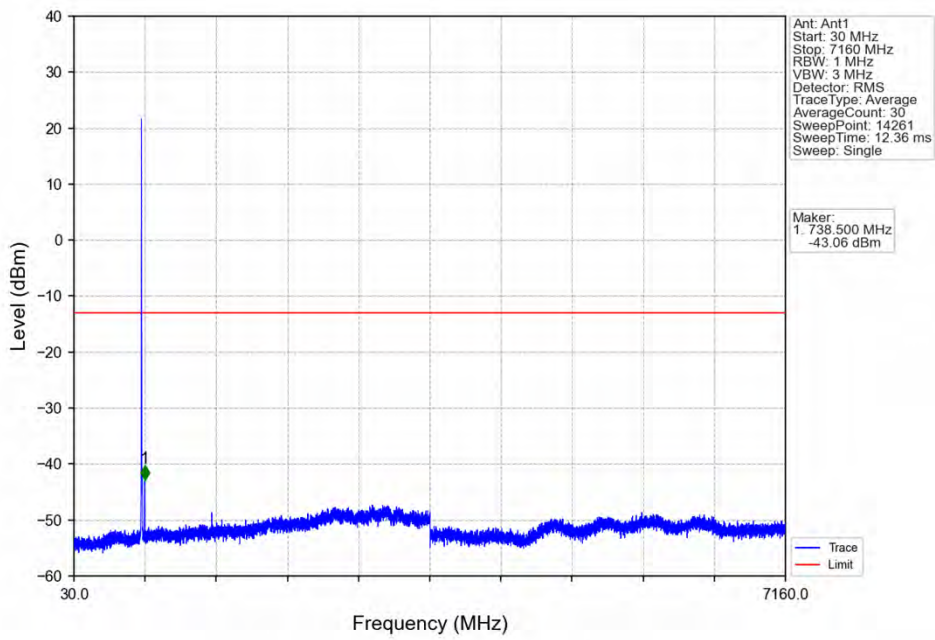


Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV

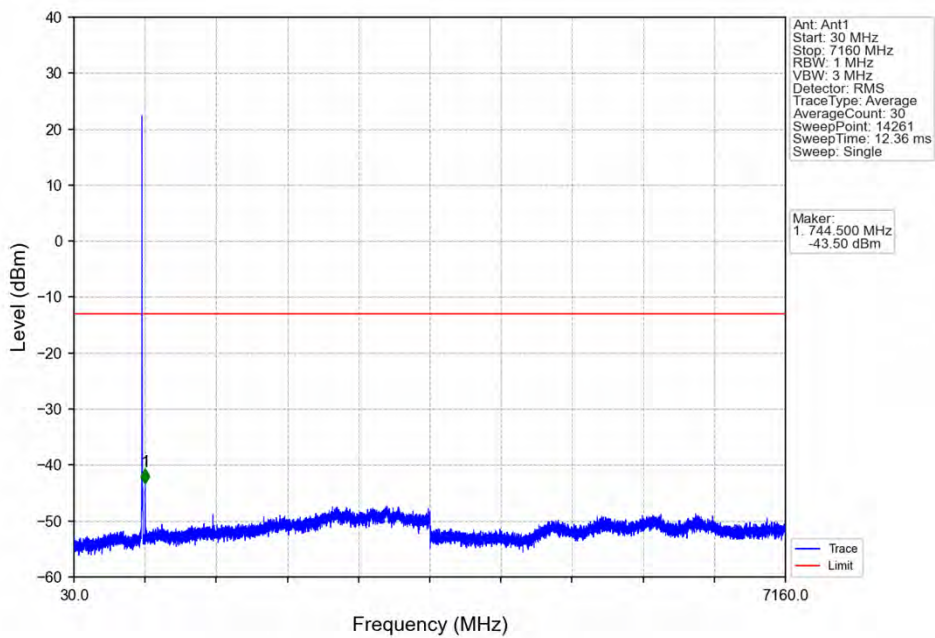


Frequency (MHz)								
Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	5.23	1	698.900	-32.44	-13	Pass
698.9	699	0.03	0	2	699.000	-34.50	-13	Pass
699	704	0.03	0	/	/	/	/	/

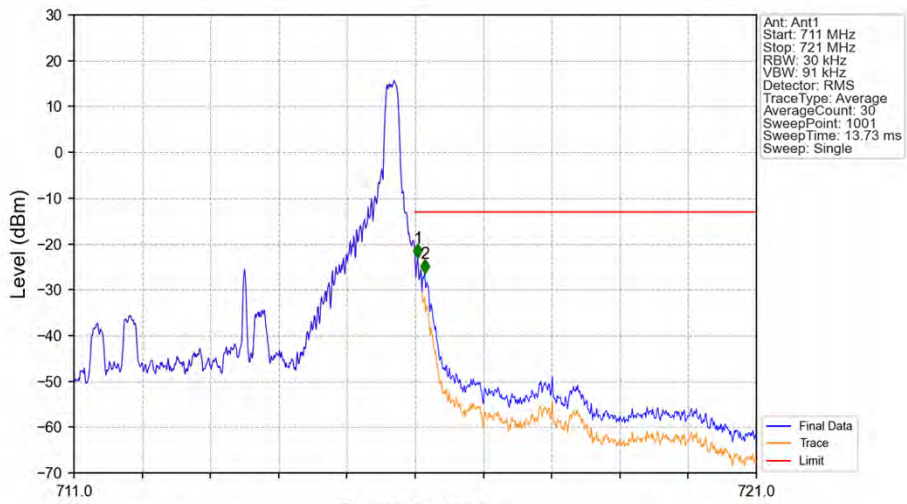
Band12_5MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_0_NTNV

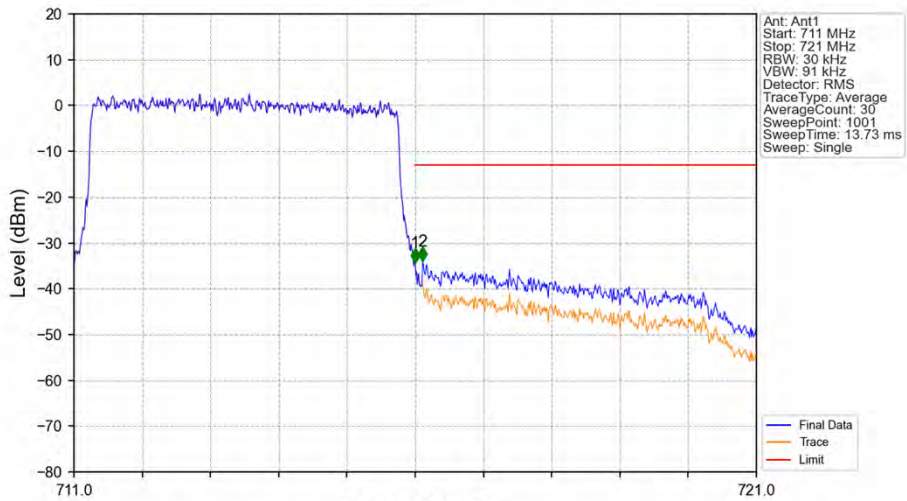


Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_24_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	0	/	/	/	/	/
716	716.1	0.03	0	1	716.040	-23.10	-13	Pass
716.1	721	0.1	5.23	2	716.140	-26.45	-13	Pass

Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



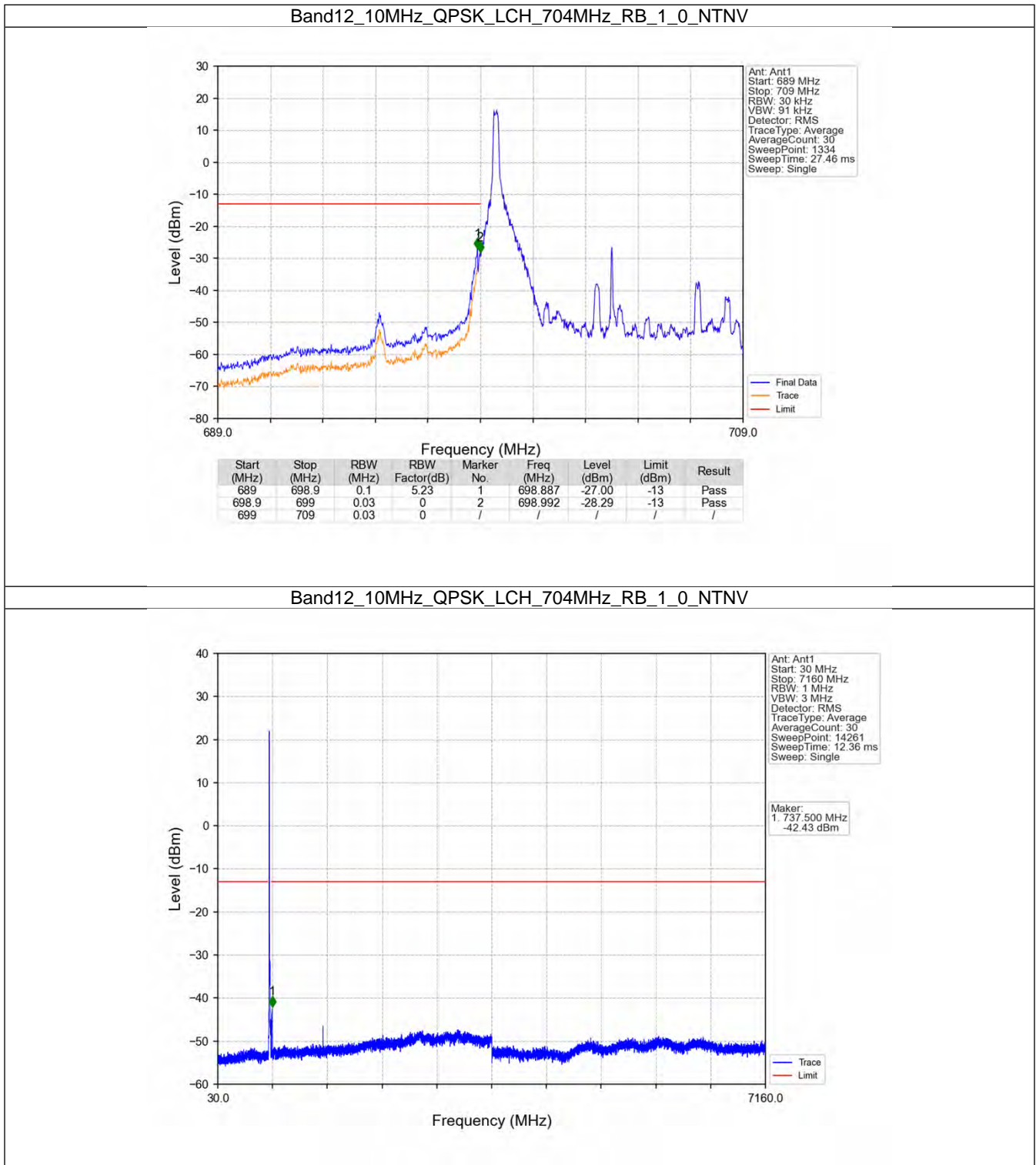
Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	0	/	/	/	/	/
716	716.1	0.03	0	1	716.000	-34.32	-13	Pass
716.1	721	0.1	5.23	2	716.110	-33.96	-13	Pass

6.4 B12_10MHz

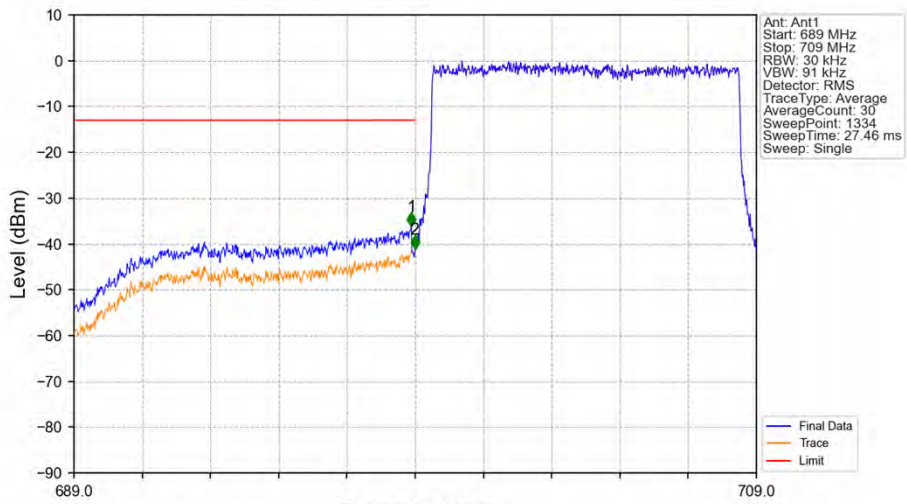
6.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTV						
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	
				49	Refer To Test Graph	
			50	0	Refer To Test Graph	
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	
				49	Refer To Test Graph	
			50	0	Refer To Test Graph	

6.4.2 Test Graph

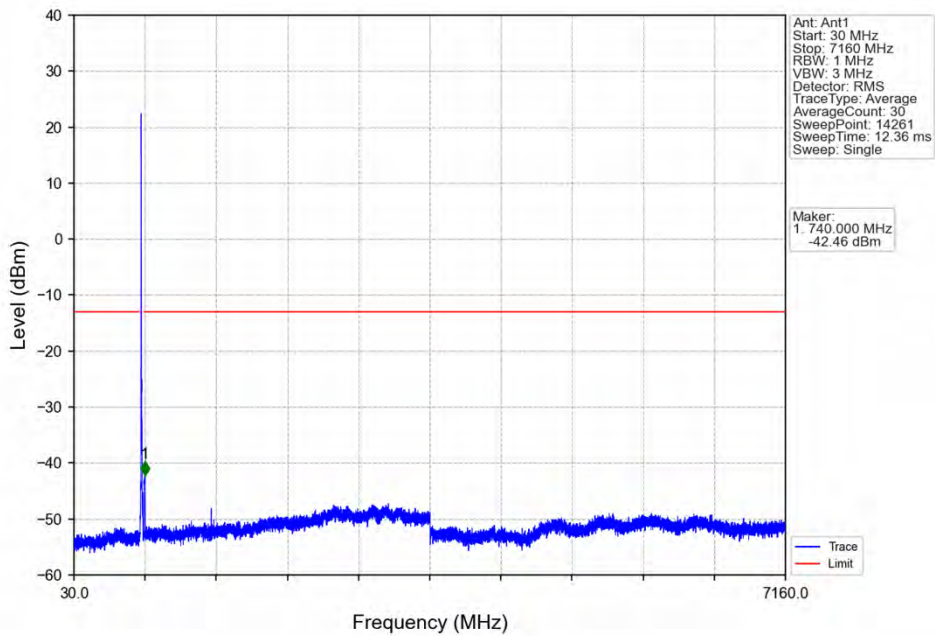


Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	5.23	1	698.887	-36.24	-13	Pass
698.9	699	0.03	0	2	698.992	-41.16	-13	Pass
699	709	0.03	0	/	/	/	/	/

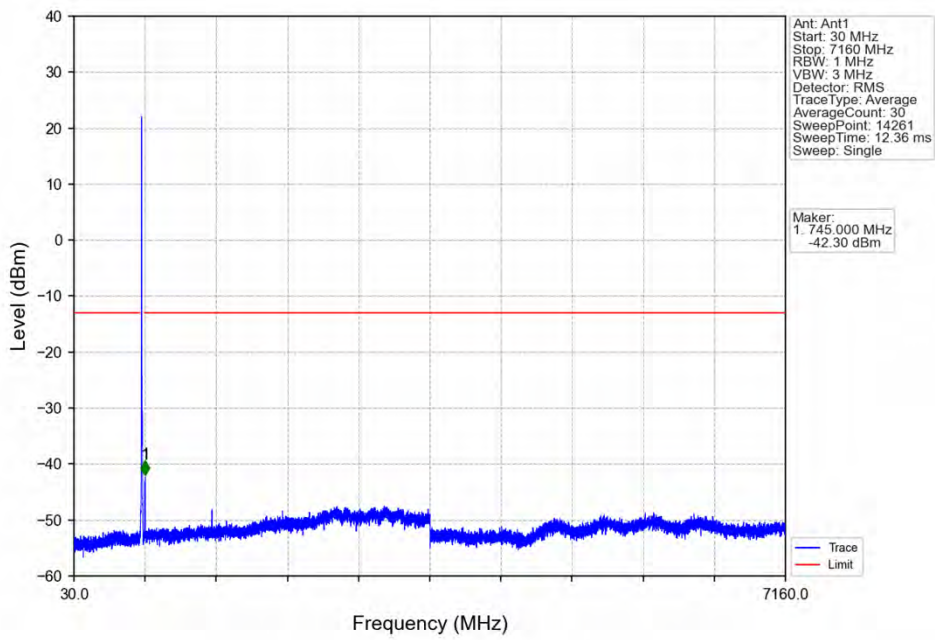
Band12_10MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



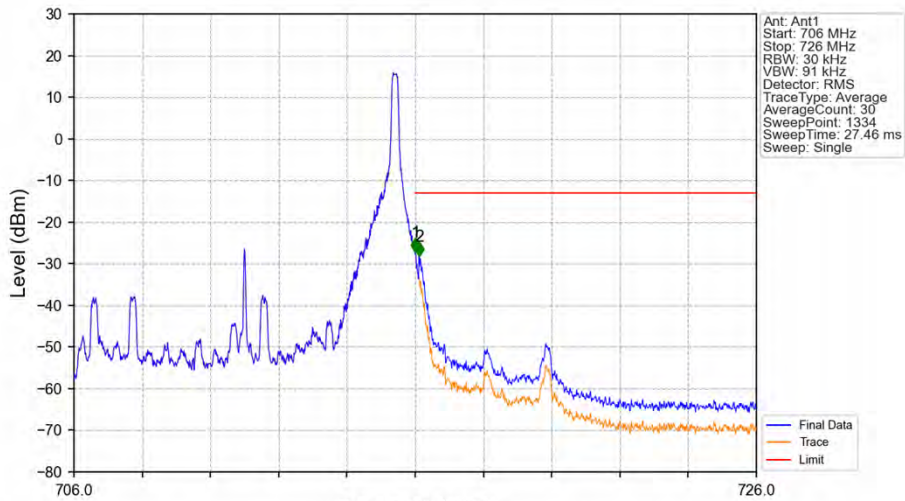
Ant: Ant1
 Start: 30 MHz
 Stop: 7160 MHz
 RBW: 1 MHz
 VBW: 3 MHz
 Detector: RMS
 Trace Type: Average
 Average Count: 30
 Sweep Point: 14261
 Sweep Time: 12.36 ms
 Sweep: Single

Marker:
 1: 740.000 MHz
 -42.46 dBm

Band12_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

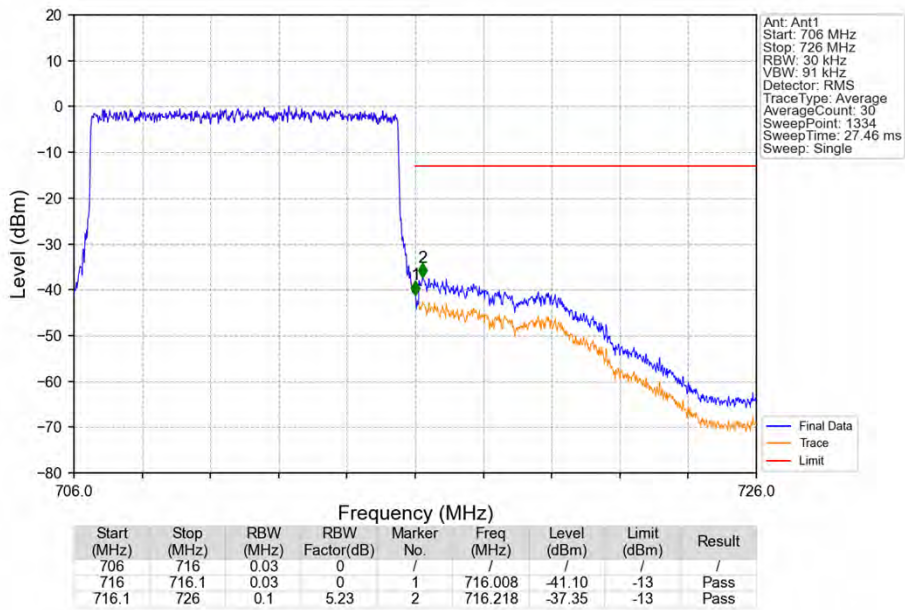


Band12_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV

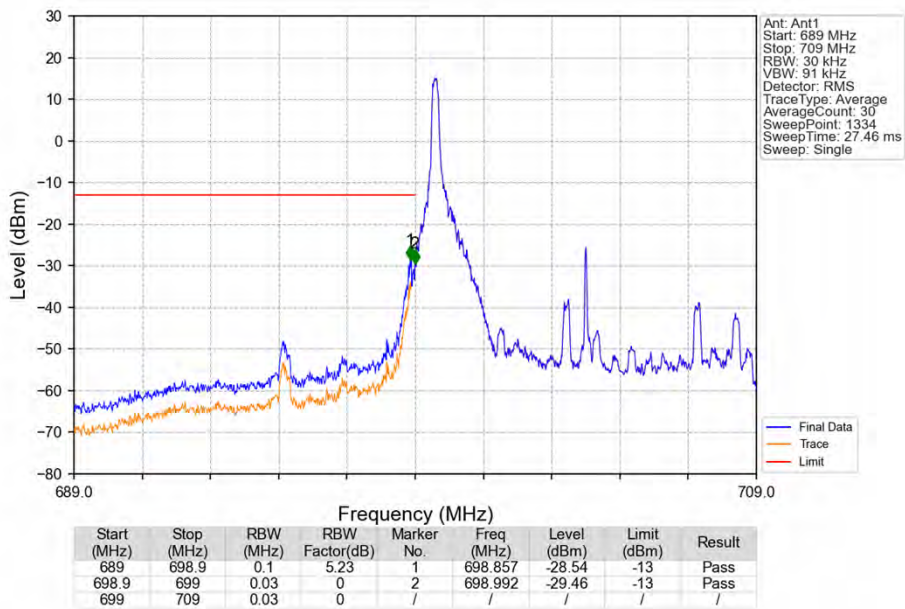


Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	0	/	/	/	/	/
716	716.1	0.03	0	1	716.008	-27.22	-13	Pass
716.1	726	0.1	5.23	2	716.113	-28.14	-13	Pass

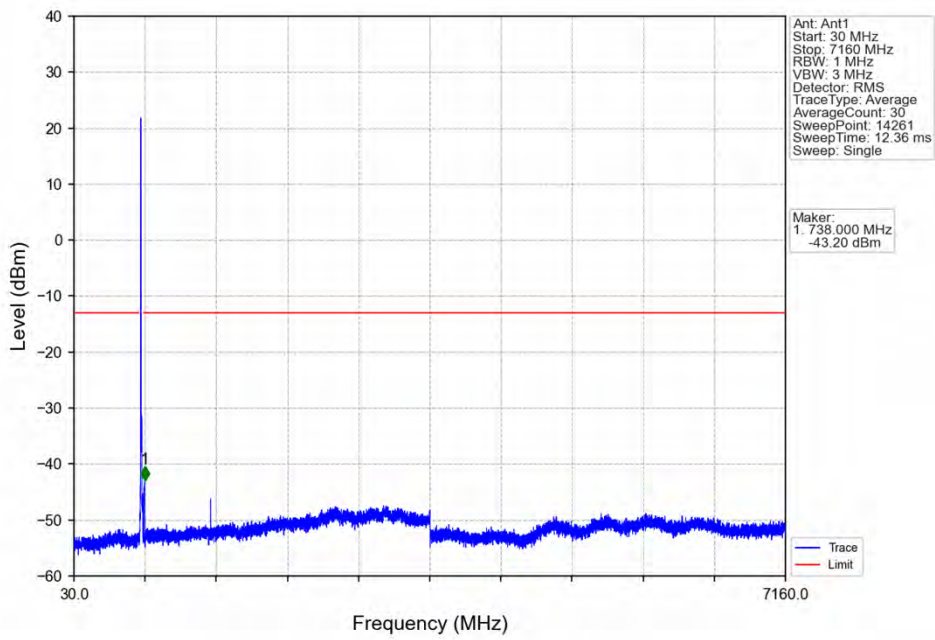
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



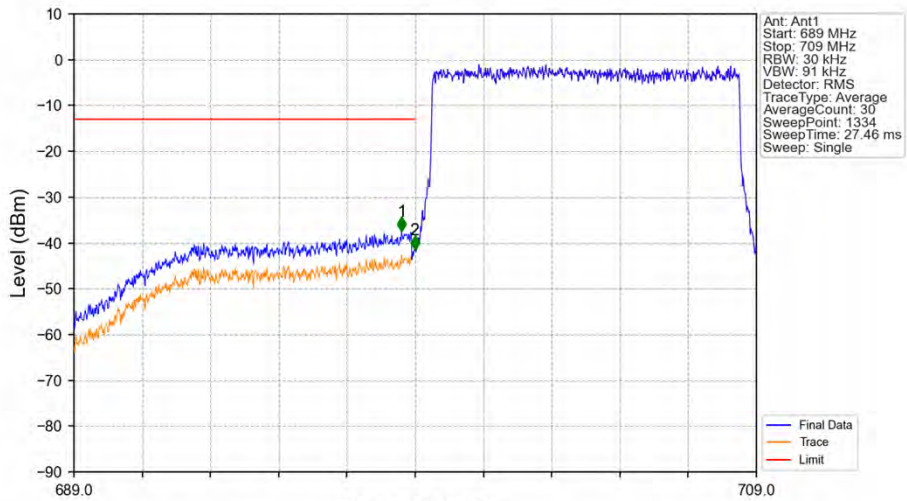
Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV



Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

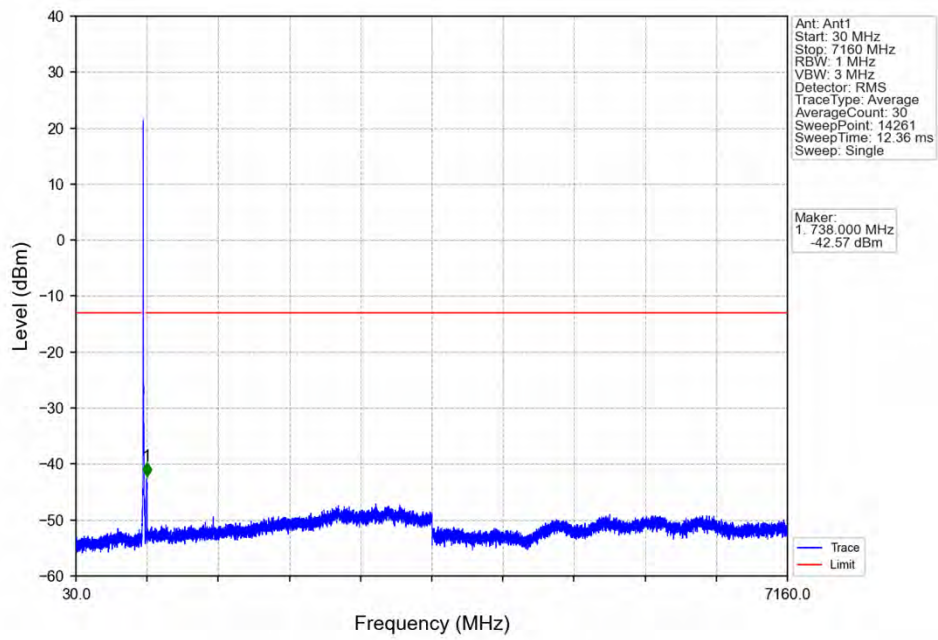


Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV

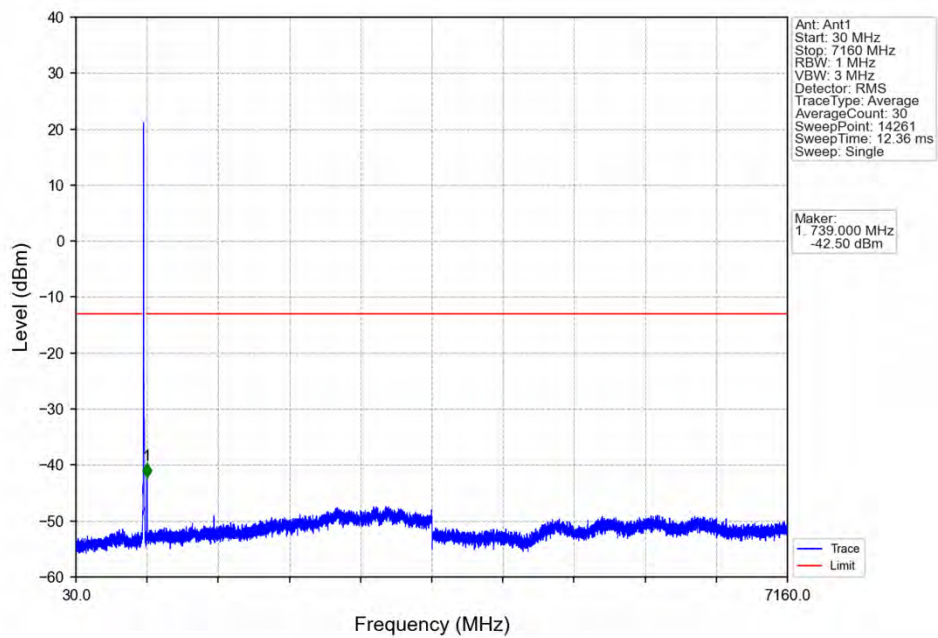


Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	5.23	1	698.602	-37.46	-13	Pass
698.9	699	0.03	0	2	698.992	-41.48	-13	Pass
699	709	0.03	0	/	/	/	/	/

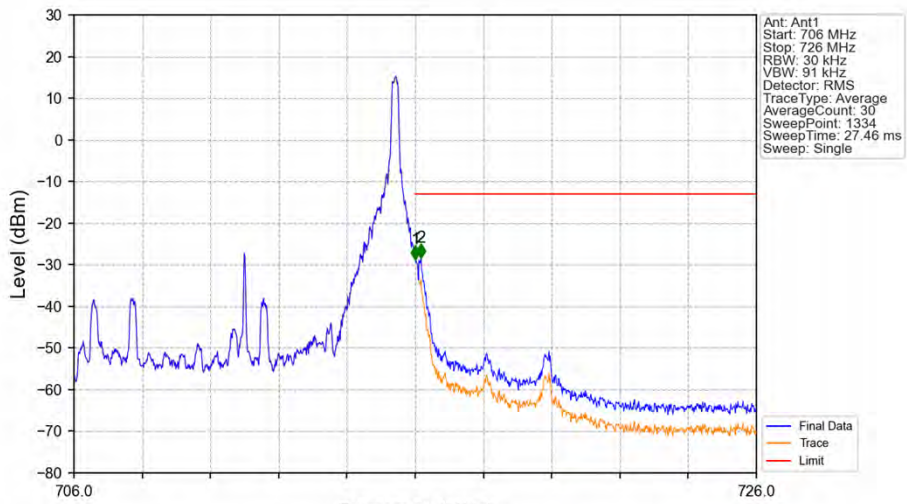
Band12_10MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_1_0_NTNV

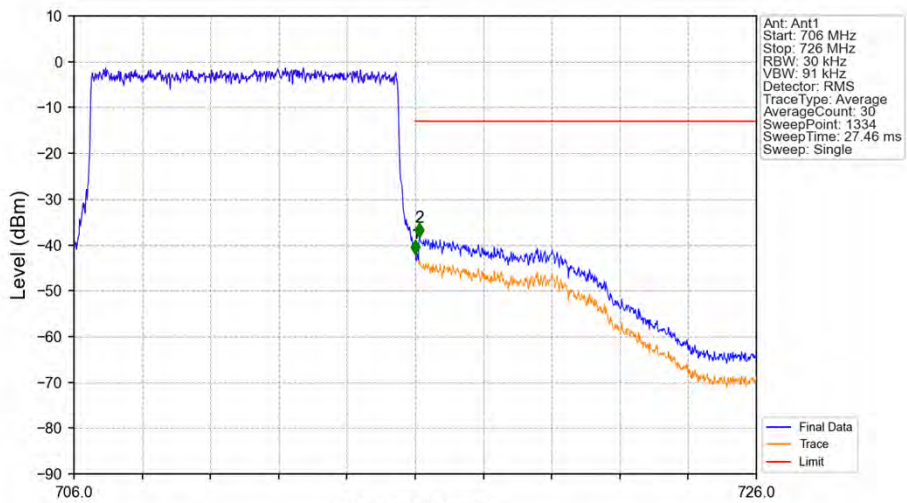


Band12_10MHz_16QAM_HCH_711MHz_RB_1_49_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	0	/	/	/	/	/
716	716.1	0.03	0	1	716.008	-28.72	-13	Pass
716.1	726	0.1	5.23	2	716.173	-28.30	-13	Pass

Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	RBW Factor(dB)	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	0	/	/	/	/	/
716	716.1	0.03	0	1	716.008	-41.95	-13	Pass
716.1	726	0.1	5.23	2	716.128	-38.27	-13	Pass

7. Form731

7.1 Form731_Power

7.1.1 Test Result

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
12	1.4	699.7	715.3	0.2559	0.0072	ppm	1M11G7D	27H	24.08
12	1.4	699.7	715.3	0.1991	0.0092	ppm	1M12W7D	27H	22.99
12	3	700.5	714.5	0.2265	0.0054	ppm	2M73G7D	27H	23.55
12	3	700.5	714.5	0.1875	0.0066	ppm	2M73W7D	27H	22.73
12	5	701.5	713.5	0.2355	0.0047	ppm	4M55G7D	27H	23.72
12	5	701.5	713.5	0.1897	0.0063	ppm	4M55W7D	27H	22.78
12	10	704	711	0.2307	0.0052	ppm	9M09G7D	27H	23.63
12	10	704	711	0.1914	0.0050	ppm	9M09W7D	27H	22.82

7.2 Form731_ERP

7.2.1 Test Result

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
12	1.4	699.7	715.3	0.1452	0.0072	ppm	1M11G7D	27H	21.62
12	1.4	699.7	715.3	0.1130	0.0092	ppm	1M12W7D	27H	20.53
12	3	700.5	714.5	0.1285	0.0054	ppm	2M73G7D	27H	21.09
12	3	700.5	714.5	0.1064	0.0066	ppm	2M73W7D	27H	20.27
12	5	701.5	713.5	0.1337	0.0047	ppm	4M55G7D	27H	21.26
12	5	701.5	713.5	0.1076	0.0063	ppm	4M55W7D	27H	20.32
12	10	704	711	0.1309	0.0052	ppm	9M09G7D	27H	21.17
12	10	704	711	0.1086	0.0050	ppm	9M09W7D	27H	20.36