



1. Effective (Isotropic) Radiated Power Output Data

1.1 B12_1.4MHz_ERP

1.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	699.7	1	0	23.89	-1.80	19.94	<=34.77	Pass		
			2	23.52	-1.80	19.57	<=34.77	Pass		
			5	23.49	-1.80	19.54	<=34.77	Pass		
		3	0	23.63	-1.80	19.68	<=34.77	Pass		
			2	23.68	-1.80	19.73	<=34.77	Pass		
			3	23.71	-1.80	19.76	<=34.77	Pass		
		6	0	22.64	-1.80	18.69	<=34.77	Pass		
		707.5	1	0	23.83	-1.80	19.88	<=34.77	Pass	
				2	23.95	-1.80	20	<=34.77	Pass	
	5			23.88	-1.80	19.93	<=34.77	Pass		
	3		0	23.65	-1.80	19.7	<=34.77	Pass		
			2	23.67	-1.80	19.72	<=34.77	Pass		
			3	23.63	-1.80	19.68	<=34.77	Pass		
	6		0	23.06	-1.80	19.11	<=34.77	Pass		
	715.3		1	0	23.91	-1.80	19.96	<=34.77	Pass	
				2	24.00	-1.80	20.05	<=34.77	Pass	
		5		23.86	-1.80	19.91	<=34.77	Pass		
		3	0	23.64	-1.80	19.69	<=34.77	Pass		
			2	23.66	-1.80	19.71	<=34.77	Pass		
			3	23.62	-1.80	19.67	<=34.77	Pass		
		6	0	23.18	-1.80	19.23	<=34.77	Pass		
		16QAM	699.7	1	0	22.51	-1.80	18.56	<=34.77	Pass
					2	22.59	-1.80	18.64	<=34.77	Pass
	5				22.60	-1.80	18.65	<=34.77	Pass	
3	0			22.67	-1.80	18.72	<=34.77	Pass		
	2			22.73	-1.80	18.78	<=34.77	Pass		
	3			22.72	-1.80	18.77	<=34.77	Pass		
6	0			21.63	-1.80	17.68	<=34.77	Pass		
707.5	1			0	22.75	-1.80	18.8	<=34.77	Pass	
				2	22.78	-1.80	18.83	<=34.77	Pass	
			5	22.73	-1.80	18.78	<=34.77	Pass		
	3		0	22.45	-1.80	18.5	<=34.77	Pass		
			2	22.50	-1.80	18.55	<=34.77	Pass		
			3	22.50	-1.80	18.55	<=34.77	Pass		
	6		0	21.78	-1.80	17.83	<=34.77	Pass		
	715.3		1	0	22.77	-1.80	18.82	<=34.77	Pass	
				2	22.86	-1.80	18.91	<=34.77	Pass	
5				22.78	-1.80	18.83	<=34.77	Pass		
3			0	22.38	-1.80	18.43	<=34.77	Pass		
			2	22.39	-1.80	18.44	<=34.77	Pass		
			3	22.34	-1.80	18.39	<=34.77	Pass		
6			0	21.86	-1.80	17.91	<=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 / NTN										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	700.5	1	0	23.37	-1.80	19.42	<=34.77	Pass		
			7	23.62	-1.80	19.67	<=34.77	Pass		
			14	23.53	-1.80	19.58	<=34.77	Pass		
		8	0	22.72	-1.80	18.77	<=34.77	Pass		
			4	22.73	-1.80	18.78	<=34.77	Pass		
			7	22.65	-1.80	18.7	<=34.77	Pass		
		15	0	22.67	-1.80	18.72	<=34.77	Pass		
		707.5	1	0	24.33	-1.80	20.38	<=34.77	Pass	
				7	24.03	-1.80	20.08	<=34.77	Pass	
	14			23.70	-1.80	19.75	<=34.77	Pass		
	8		0	22.77	-1.80	18.82	<=34.77	Pass		
			4	22.89	-1.80	18.94	<=34.77	Pass		
			7	22.79	-1.80	18.84	<=34.77	Pass		
	15		0	22.68	-1.80	18.73	<=34.77	Pass		
	714.5		1	0	23.57	-1.80	19.62	<=34.77	Pass	
				7	23.97	-1.80	20.02	<=34.77	Pass	
		14		23.82	-1.80	19.87	<=34.77	Pass		
		8	0	22.81	-1.80	18.86	<=34.77	Pass		
			4	22.96	-1.80	19.01	<=34.77	Pass		
			7	22.92	-1.80	18.97	<=34.77	Pass		
		15	0	22.74	-1.80	18.79	<=34.77	Pass		
		16QAM	700.5	1	0	22.45	-1.80	18.5	<=34.77	Pass
					7	22.68	-1.80	18.73	<=34.77	Pass
	14				22.55	-1.80	18.6	<=34.77	Pass	
8	0			21.76	-1.80	17.81	<=34.77	Pass		
	4			21.82	-1.80	17.87	<=34.77	Pass		
	7			21.75	-1.80	17.8	<=34.77	Pass		
15	0			21.71	-1.80	17.76	<=34.77	Pass		
707.5	1			0	22.44	-1.80	18.49	<=34.77	Pass	
				7	22.69	-1.80	18.74	<=34.77	Pass	
			14	22.52	-1.80	18.57	<=34.77	Pass		
	8		0	21.67	-1.80	17.72	<=34.77	Pass		
			4	21.80	-1.80	17.85	<=34.77	Pass		
			7	21.69	-1.80	17.74	<=34.77	Pass		
	15		0	21.63	-1.80	17.68	<=34.77	Pass		
	714.5		1	0	22.69	-1.80	18.74	<=34.77	Pass	
				7	22.80	-1.80	18.85	<=34.77	Pass	
14				22.74	-1.80	18.79	<=34.77	Pass		
8			0	21.68	-1.80	17.73	<=34.77	Pass		
			4	21.70	-1.80	17.75	<=34.77	Pass		
			7	21.64	-1.80	17.69	<=34.77	Pass		
15			0	21.54	-1.80	17.59	<=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 / NTN						
Modulation	Frequency	RB Allocation	Conducted Power	Gain	ERP (dBm)	Verdict



	(MHz)	Size	Offset	(dBm)	(dBi)	Result	Limit	
QPSK	701.5	1	0	23.63	-1.80	19.68	<=34.77	Pass
			13	23.86	-1.80	19.91	<=34.77	Pass
			24	23.80	-1.80	19.85	<=34.77	Pass
		12	0	22.82	-1.80	18.87	<=34.77	Pass
			6	22.81	-1.80	18.86	<=34.77	Pass
			13	22.83	-1.80	18.88	<=34.77	Pass
	25	0	22.81	-1.80	18.86	<=34.77	Pass	
	707.5	1	0	23.90	-1.80	19.95	<=34.77	Pass
			13	24.06	-1.80	20.11	<=34.77	Pass
			24	23.76	-1.80	19.81	<=34.77	Pass
		12	0	22.62	-1.80	18.67	<=34.77	Pass
			6	22.79	-1.80	18.84	<=34.77	Pass
			13	22.66	-1.80	18.71	<=34.77	Pass
	25	0	22.60	-1.80	18.65	<=34.77	Pass	
	713.5	1	0	23.74	-1.80	19.79	<=34.77	Pass
			13	24.04	-1.80	20.09	<=34.77	Pass
			24	23.99	-1.80	20.04	<=34.77	Pass
		12	0	22.79	-1.80	18.84	<=34.77	Pass
6			22.86	-1.80	18.91	<=34.77	Pass	
13			22.79	-1.80	18.84	<=34.77	Pass	
25	0	22.82	-1.80	18.87	<=34.77	Pass		
16QAM	701.5	1	0	22.91	-1.80	18.96	<=34.77	Pass
			13	23.11	-1.80	19.16	<=34.77	Pass
			24	22.90	-1.80	18.95	<=34.77	Pass
		12	0	21.86	-1.80	17.91	<=34.77	Pass
			6	21.82	-1.80	17.87	<=34.77	Pass
			13	21.87	-1.80	17.92	<=34.77	Pass
	25	0	21.84	-1.80	17.89	<=34.77	Pass	
	707.5	1	0	22.45	-1.80	18.5	<=34.77	Pass
			13	22.66	-1.80	18.71	<=34.77	Pass
			24	22.57	-1.80	18.62	<=34.77	Pass
		12	0	21.49	-1.80	17.54	<=34.77	Pass
			6	21.65	-1.80	17.7	<=34.77	Pass
			13	21.59	-1.80	17.64	<=34.77	Pass
	25	0	21.58	-1.80	17.63	<=34.77	Pass	
	713.5	1	0	23.06	-1.80	19.11	<=34.77	Pass
			13	23.05	-1.80	19.1	<=34.77	Pass
			24	22.96	-1.80	19.01	<=34.77	Pass
		12	0	21.86	-1.80	17.91	<=34.77	Pass
6			21.88	-1.80	17.93	<=34.77	Pass	
13			21.70	-1.80	17.75	<=34.77	Pass	
25	0	21.81	-1.80	17.86	<=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	23.73	-1.80	19.78	<=34.77	Pass
			25	23.95	-1.80	20	<=34.77	Pass
			49	24.02	-1.80	20.07	<=34.77	Pass
		25	0	22.70	-1.80	18.75	<=34.77	Pass



16QAM	707.5	50	13	22.79	-1.80	18.84	<=34.77	Pass	
			25	22.84	-1.80	18.89	<=34.77	Pass	
			0	22.80	-1.80	18.85	<=34.77	Pass	
		1	0	23.78	-1.80	19.83	<=34.77	Pass	
			25	24.09	-1.80	20.14	<=34.77	Pass	
			49	23.90	-1.80	19.95	<=34.77	Pass	
		25	0	22.51	-1.80	18.56	<=34.77	Pass	
			13	22.75	-1.80	18.8	<=34.77	Pass	
			25	22.51	-1.80	18.56	<=34.77	Pass	
		50	0	22.61	-1.80	18.66	<=34.77	Pass	
		711	1	0	24.44	-1.80	20.49	<=34.77	Pass
				25	24.30	-1.80	20.35	<=34.77	Pass
				49	24.14	-1.80	20.19	<=34.77	Pass
			25	0	22.90	-1.80	18.95	<=34.77	Pass
				13	22.83	-1.80	18.88	<=34.77	Pass
	25			22.81	-1.80	18.86	<=34.77	Pass	
	50		0	22.94	-1.80	18.99	<=34.77	Pass	
	704		1	0	22.85	-1.80	18.9	<=34.77	Pass
				25	22.91	-1.80	18.96	<=34.77	Pass
				49	22.94	-1.80	18.99	<=34.77	Pass
			25	0	21.79	-1.80	17.84	<=34.77	Pass
				13	21.84	-1.80	17.89	<=34.77	Pass
				25	21.80	-1.80	17.85	<=34.77	Pass
			50	0	21.78	-1.80	17.83	<=34.77	Pass
			707.5	1	0	23.21	-1.80	19.26	<=34.77
		25			23.16	-1.80	19.21	<=34.77	Pass
		49			23.46	-1.80	19.51	<=34.77	Pass
		25		0	21.50	-1.80	17.55	<=34.77	Pass
				13	21.73	-1.80	17.78	<=34.77	Pass
				25	21.58	-1.80	17.63	<=34.77	Pass
50		0		21.55	-1.80	17.6	<=34.77	Pass	
711		1		0	22.75	-1.80	18.8	<=34.77	Pass
	25			22.96	-1.80	19.01	<=34.77	Pass	
	49			22.89	-1.80	18.94	<=34.77	Pass	
	25	0		21.95	-1.80	18	<=34.77	Pass	
		13		21.98	-1.80	18.03	<=34.77	Pass	
		25		22.00	-1.80	18.05	<=34.77	Pass	
	50	0		21.93	-1.80	17.98	<=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	-4.334	-0.0062	-2.5 to 2.5	Pass	
					3.85	-11.287	-0.0161	-2.5 to 2.5	Pass	
					4.43	-11.244	-0.0161	-2.5 to 2.5	Pass	
				-30	3.85	-1.302	-0.0019	-2.5 to 2.5	Pass	
					-20	3.85	-7.296	-0.0104	-2.5 to 2.5	Pass
						3.85	-4.735	-0.0068	-2.5 to 2.5	Pass



				0	3.85	-2.532	-0.0036	-2.5 to 2.5	Pass	
				10	3.85	-3.948	-0.0056	-2.5 to 2.5	Pass	
				30	3.85	-6.895	-0.0099	-2.5 to 2.5	Pass	
				40	3.85	0.958	0.0014	-2.5 to 2.5	Pass	
				50	3.85	1.016	0.0015	-2.5 to 2.5	Pass	
	707.5	6	0	20	3.27	-6.137	-0.0087	-2.5 to 2.5	Pass	
					3.85	-7.424	-0.0105	-2.5 to 2.5	Pass	
					4.43	2.489	0.0035	-2.5 to 2.5	Pass	
				-30	3.85	-0.186	-0.0003	-2.5 to 2.5	Pass	
				-20	3.85	-7.954	-0.0112	-2.5 to 2.5	Pass	
				-10	3.85	-6.623	-0.0094	-2.5 to 2.5	Pass	
				0	3.85	-0.043	-0.0001	-2.5 to 2.5	Pass	
				10	3.85	-9.313	-0.0132	-2.5 to 2.5	Pass	
				30	3.85	-5.078	-0.0072	-2.5 to 2.5	Pass	
				40	3.85	-7.210	-0.0102	-2.5 to 2.5	Pass	
	50	3.85	-5.064	-0.0072	-2.5 to 2.5	Pass				
	715.3	6	0	20	3.27	0.787	0.0011	-2.5 to 2.5	Pass	
					3.85	-5.279	-0.0074	-2.5 to 2.5	Pass	
					4.43	-5.922	-0.0083	-2.5 to 2.5	Pass	
				-30	3.85	4.363	0.0061	-2.5 to 2.5	Pass	
				-20	3.85	-3.490	-0.0049	-2.5 to 2.5	Pass	
				-10	3.85	-1.874	-0.0026	-2.5 to 2.5	Pass	
				0	3.85	0.272	0.0004	-2.5 to 2.5	Pass	
				10	3.85	2.761	0.0039	-2.5 to 2.5	Pass	
				30	3.85	-7.424	-0.0104	-2.5 to 2.5	Pass	
				40	3.85	-7.238	-0.0101	-2.5 to 2.5	Pass	
	50	3.85	-7.267	-0.0102	-2.5 to 2.5	Pass				
	16QAM	699.7	6	0	20	3.27	-2.933	-0.0042	-2.5 to 2.5	Pass
						3.85	-6.709	-0.0096	-2.5 to 2.5	Pass
						4.43	-9.770	-0.0140	-2.5 to 2.5	Pass
-30					3.85	-10.972	-0.0157	-2.5 to 2.5	Pass	
-20					3.85	-10.657	-0.0152	-2.5 to 2.5	Pass	
-10					3.85	-11.244	-0.0161	-2.5 to 2.5	Pass	
0					3.85	-9.956	-0.0142	-2.5 to 2.5	Pass	
10					3.85	2.403	0.0034	-2.5 to 2.5	Pass	
30					3.85	-3.047	-0.0044	-2.5 to 2.5	Pass	
40					3.85	-7.195	-0.0103	-2.5 to 2.5	Pass	
50		3.85	-9.899	-0.0141	-2.5 to 2.5	Pass				
707.5		6	0	20	3.27	-0.215	-0.0003	-2.5 to 2.5	Pass	
					3.85	-9.155	-0.0129	-2.5 to 2.5	Pass	
					4.43	-0.572	-0.0008	-2.5 to 2.5	Pass	
				-30	3.85	1.931	0.0027	-2.5 to 2.5	Pass	
				-20	3.85	-0.916	-0.0013	-2.5 to 2.5	Pass	
				-10	3.85	-7.024	-0.0099	-2.5 to 2.5	Pass	
				0	3.85	-2.289	-0.0032	-2.5 to 2.5	Pass	
				10	3.85	2.046	0.0029	-2.5 to 2.5	Pass	
				30	3.85	-8.740	-0.0124	-2.5 to 2.5	Pass	
				40	3.85	-2.289	-0.0032	-2.5 to 2.5	Pass	
50		3.85	-4.449	-0.0063	-2.5 to 2.5	Pass				
715.3		6	0	20	3.27	0.501	0.0007	-2.5 to 2.5	Pass	
					3.85	0.901	0.0013	-2.5 to 2.5	Pass	
					4.43	3.548	0.0050	-2.5 to 2.5	Pass	
				-30	3.85	-0.958	-0.0013	-2.5 to 2.5	Pass	
				-20	3.85	-5.264	-0.0074	-2.5 to 2.5	Pass	
				-10	3.85	4.964	0.0069	-2.5 to 2.5	Pass	
				0	3.85	-0.687	-0.0010	-2.5 to 2.5	Pass	
				10	3.85	-7.353	-0.0103	-2.5 to 2.5	Pass	
	30			3.85	-2.675	-0.0037	-2.5 to 2.5	Pass		



				40	3.85	-6.166	-0.0086	-2.5 to 2.5	Pass
				50	3.85	4.120	0.0058	-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	-4.320	-0.0062	-2.5 to 2.5	Pass
					3.85	-2.503	-0.0036	-2.5 to 2.5	Pass
					4.43	0.916	0.0013	-2.5 to 2.5	Pass
				-30	3.85	-0.572	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	-5.550	-0.0079	-2.5 to 2.5	Pass
				-10	3.85	-3.762	-0.0054	-2.5 to 2.5	Pass
				0	3.85	-6.824	-0.0097	-2.5 to 2.5	Pass
				10	3.85	1.130	0.0016	-2.5 to 2.5	Pass
				30	3.85	-0.744	-0.0011	-2.5 to 2.5	Pass
				40	3.85	-9.069	-0.0129	-2.5 to 2.5	Pass
	50	3.85	-8.640	-0.0123	-2.5 to 2.5	Pass			
	707.5	15	0	20	3.27	1.044	0.0015	-2.5 to 2.5	Pass
					3.85	-5.293	-0.0075	-2.5 to 2.5	Pass
					4.43	4.463	0.0063	-2.5 to 2.5	Pass
				-30	3.85	-7.281	-0.0103	-2.5 to 2.5	Pass
				-20	3.85	-2.947	-0.0042	-2.5 to 2.5	Pass
				-10	3.85	-2.260	-0.0032	-2.5 to 2.5	Pass
				0	3.85	2.518	0.0036	-2.5 to 2.5	Pass
				10	3.85	0.715	0.0010	-2.5 to 2.5	Pass
				30	3.85	0.057	0.0001	-2.5 to 2.5	Pass
				40	3.85	-4.106	-0.0058	-2.5 to 2.5	Pass
	50	3.85	2.904	0.0041	-2.5 to 2.5	Pass			
	714.5	15	0	20	3.27	-4.191	-0.0059	-2.5 to 2.5	Pass
					3.85	1.130	0.0016	-2.5 to 2.5	Pass
					4.43	-7.939	-0.0111	-2.5 to 2.5	Pass
				-30	3.85	3.018	0.0042	-2.5 to 2.5	Pass
				-20	3.85	3.476	0.0049	-2.5 to 2.5	Pass
				-10	3.85	0.300	0.0004	-2.5 to 2.5	Pass
				0	3.85	-5.965	-0.0083	-2.5 to 2.5	Pass
				10	3.85	-5.651	-0.0079	-2.5 to 2.5	Pass
30				3.85	-3.676	-0.0051	-2.5 to 2.5	Pass	
40				3.85	-4.735	-0.0066	-2.5 to 2.5	Pass	
50	3.85	-7.396	-0.0104	-2.5 to 2.5	Pass				
16QAM	700.5	15	0	20	3.27	-5.522	-0.0079	-2.5 to 2.5	Pass
					3.85	-3.862	-0.0055	-2.5 to 2.5	Pass
					4.43	-1.416	-0.0020	-2.5 to 2.5	Pass
				-30	3.85	-1.044	-0.0015	-2.5 to 2.5	Pass
				-20	3.85	-10.114	-0.0144	-2.5 to 2.5	Pass
				-10	3.85	-5.150	-0.0074	-2.5 to 2.5	Pass
				0	3.85	-3.905	-0.0056	-2.5 to 2.5	Pass
				10	3.85	-4.435	-0.0063	-2.5 to 2.5	Pass
				30	3.85	1.187	0.0017	-2.5 to 2.5	Pass
				40	3.85	-7.067	-0.0101	-2.5 to 2.5	Pass
	50	3.85	-4.249	-0.0061	-2.5 to 2.5	Pass			
	707.5	15	0	20	3.27	5.722	0.0081	-2.5 to 2.5	Pass
					3.85	-4.892	-0.0069	-2.5 to 2.5	Pass



					4.43	0.958	0.0014	-2.5 to 2.5	Pass
				-30	3.85	-4.349	-0.0061	-2.5 to 2.5	Pass
				-20	3.85	-4.277	-0.0060	-2.5 to 2.5	Pass
				-10	3.85	-5.407	-0.0076	-2.5 to 2.5	Pass
				0	3.85	-2.904	-0.0041	-2.5 to 2.5	Pass
				10	3.85	3.877	0.0055	-2.5 to 2.5	Pass
				30	3.85	-7.210	-0.0102	-2.5 to 2.5	Pass
				40	3.85	2.689	0.0038	-2.5 to 2.5	Pass
				50	3.85	-6.723	-0.0095	-2.5 to 2.5	Pass
				714.5	15	0	20	3.27	2.861
	3.85	-10.815	-0.0151					-2.5 to 2.5	Pass
	4.43	2.031	0.0028					-2.5 to 2.5	Pass
	-30	3.85	0.000				0.0000	-2.5 to 2.5	Pass
	-20	3.85	-6.266				-0.0088	-2.5 to 2.5	Pass
	-10	3.85	-5.579				-0.0078	-2.5 to 2.5	Pass
	0	3.85	-2.632				-0.0037	-2.5 to 2.5	Pass
	10	3.85	4.120				0.0058	-2.5 to 2.5	Pass
	30	3.85	0.229				0.0003	-2.5 to 2.5	Pass
	40	3.85	-1.974				-0.0028	-2.5 to 2.5	Pass
	50	3.85	-1.760	-0.0025	-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	-3.676	-0.0052	-2.5 to 2.5	Pass			
					3.85	-6.452	-0.0092	-2.5 to 2.5	Pass			
					4.43	-6.709	-0.0096	-2.5 to 2.5	Pass			
				-30	3.85	-2.289	-0.0033	-2.5 to 2.5	Pass			
				-20	3.85	3.219	0.0046	-2.5 to 2.5	Pass			
				-10	3.85	4.177	0.0060	-2.5 to 2.5	Pass			
				0	3.85	-0.029	0.0000	-2.5 to 2.5	Pass			
				10	3.85	0.501	0.0007	-2.5 to 2.5	Pass			
				30	3.85	2.961	0.0042	-2.5 to 2.5	Pass			
				40	3.85	-0.744	-0.0011	-2.5 to 2.5	Pass			
				50	3.85	-3.777	-0.0054	-2.5 to 2.5	Pass			
				707.5	25	0	20	3.27	-1.788	-0.0025	-2.5 to 2.5	Pass
								3.85	-0.315	-0.0004	-2.5 to 2.5	Pass
								4.43	-3.576	-0.0051	-2.5 to 2.5	Pass
							-30	3.85	-7.668	-0.0108	-2.5 to 2.5	Pass
	-20	3.85	-4.463				-0.0063	-2.5 to 2.5	Pass			
	-10	3.85	-7.210				-0.0102	-2.5 to 2.5	Pass			
	0	3.85	-0.572				-0.0008	-2.5 to 2.5	Pass			
	10	3.85	-5.307				-0.0075	-2.5 to 2.5	Pass			
	30	3.85	-2.332				-0.0033	-2.5 to 2.5	Pass			
	40	3.85	-5.136	-0.0073	-2.5 to 2.5	Pass						
	50	3.85	-2.460	-0.0035	-2.5 to 2.5	Pass						
	713.5	25	0	20	3.27	-7.324	-0.0103	-2.5 to 2.5	Pass			
					3.85	-6.409	-0.0090	-2.5 to 2.5	Pass			
					4.43	-7.868	-0.0110	-2.5 to 2.5	Pass			
				-30	3.85	0.958	0.0013	-2.5 to 2.5	Pass			
				-20	3.85	-2.317	-0.0032	-2.5 to 2.5	Pass			
				-10	3.85	2.146	0.0030	-2.5 to 2.5	Pass			



				0	3.85	-4.020	-0.0056	-2.5 to 2.5	Pass
				10	3.85	2.503	0.0035	-2.5 to 2.5	Pass
				30	3.85	-5.622	-0.0079	-2.5 to 2.5	Pass
				40	3.85	-6.423	-0.0090	-2.5 to 2.5	Pass
				50	3.85	-5.522	-0.0077	-2.5 to 2.5	Pass
16QAM	701.5	25	0	20	3.27	-1.760	-0.0025	-2.5 to 2.5	Pass
					3.85	-1.545	-0.0022	-2.5 to 2.5	Pass
					4.43	-5.035	-0.0072	-2.5 to 2.5	Pass
				-30	3.85	-0.186	-0.0003	-2.5 to 2.5	Pass
				-20	3.85	-4.592	-0.0065	-2.5 to 2.5	Pass
				-10	3.85	-1.044	-0.0015	-2.5 to 2.5	Pass
				0	3.85	-2.346	-0.0033	-2.5 to 2.5	Pass
				10	3.85	-3.262	-0.0047	-2.5 to 2.5	Pass
				30	3.85	-0.458	-0.0007	-2.5 to 2.5	Pass
				40	3.85	-2.017	-0.0029	-2.5 to 2.5	Pass
	50	3.85	0.515	0.0007	-2.5 to 2.5	Pass			
	707.5	25	0	20	3.27	-8.111	-0.0115	-2.5 to 2.5	Pass
					3.85	-3.591	-0.0051	-2.5 to 2.5	Pass
					4.43	-5.465	-0.0077	-2.5 to 2.5	Pass
				-30	3.85	-0.916	-0.0013	-2.5 to 2.5	Pass
				-20	3.85	-0.057	-0.0001	-2.5 to 2.5	Pass
				-10	3.85	-1.845	-0.0026	-2.5 to 2.5	Pass
				0	3.85	2.432	0.0034	-2.5 to 2.5	Pass
				10	3.85	-3.190	-0.0045	-2.5 to 2.5	Pass
				30	3.85	-0.086	-0.0001	-2.5 to 2.5	Pass
				40	3.85	-6.995	-0.0099	-2.5 to 2.5	Pass
	50	3.85	-4.263	-0.0060	-2.5 to 2.5	Pass			
	713.5	25	0	20	3.27	-5.379	-0.0075	-2.5 to 2.5	Pass
					3.85	-2.203	-0.0031	-2.5 to 2.5	Pass
					4.43	1.159	0.0016	-2.5 to 2.5	Pass
				-30	3.85	-4.406	-0.0062	-2.5 to 2.5	Pass
				-20	3.85	-3.977	-0.0056	-2.5 to 2.5	Pass
				-10	3.85	1.531	0.0021	-2.5 to 2.5	Pass
				0	3.85	-1.245	-0.0017	-2.5 to 2.5	Pass
				10	3.85	0.544	0.0008	-2.5 to 2.5	Pass
30				3.85	-6.566	-0.0092	-2.5 to 2.5	Pass	
40				3.85	-0.300	-0.0004	-2.5 to 2.5	Pass	
50	3.85	-4.935	-0.0069	-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	-3.190	-0.0045	-2.5 to 2.5	Pass
					3.85	-4.449	-0.0063	-2.5 to 2.5	Pass
					4.43	-4.034	-0.0057	-2.5 to 2.5	Pass
				-30	3.85	-4.063	-0.0058	-2.5 to 2.5	Pass
				-20	3.85	-0.343	-0.0005	-2.5 to 2.5	Pass
				-10	3.85	0.200	0.0003	-2.5 to 2.5	Pass
				0	3.85	-2.732	-0.0039	-2.5 to 2.5	Pass
				10	3.85	-2.561	-0.0036	-2.5 to 2.5	Pass
				30	3.85	0.272	0.0004	-2.5 to 2.5	Pass
				40	3.85	-5.021	-0.0071	-2.5 to 2.5	Pass



	707.5	50	0	50	3.85	-0.958	-0.0014	-2.5 to 2.5	Pass
					3.27	-3.533	-0.0050	-2.5 to 2.5	Pass
				20	3.85	-2.575	-0.0036	-2.5 to 2.5	Pass
					4.43	-2.761	-0.0039	-2.5 to 2.5	Pass
				-30	3.85	-1.745	-0.0025	-2.5 to 2.5	Pass
				-20	3.85	-3.247	-0.0046	-2.5 to 2.5	Pass
				-10	3.85	-0.844	-0.0012	-2.5 to 2.5	Pass
				0	3.85	-2.918	-0.0041	-2.5 to 2.5	Pass
				10	3.85	-3.591	-0.0051	-2.5 to 2.5	Pass
				30	3.85	-1.531	-0.0022	-2.5 to 2.5	Pass
	40	3.85	-1.702	-0.0024	-2.5 to 2.5	Pass			
	50	3.85	-3.004	-0.0042	-2.5 to 2.5	Pass			
	711	50	0		3.27	-2.589	-0.0036	-2.5 to 2.5	Pass
				20	3.85	-2.618	-0.0037	-2.5 to 2.5	Pass
					4.43	-1.245	-0.0018	-2.5 to 2.5	Pass
				-30	3.85	-0.386	-0.0005	-2.5 to 2.5	Pass
				-20	3.85	-2.904	-0.0041	-2.5 to 2.5	Pass
				-10	3.85	-0.272	-0.0004	-2.5 to 2.5	Pass
				0	3.85	-2.160	-0.0030	-2.5 to 2.5	Pass
				10	3.85	-4.764	-0.0067	-2.5 to 2.5	Pass
30				3.85	-1.931	-0.0027	-2.5 to 2.5	Pass	
40				3.85	-1.717	-0.0024	-2.5 to 2.5	Pass	
50	3.85	0.443	0.0006	-2.5 to 2.5	Pass				
16QAM	704	50	0		3.27	-3.448	-0.0049	-2.5 to 2.5	Pass
				20	3.85	-0.930	-0.0013	-2.5 to 2.5	Pass
					4.43	-0.730	-0.0010	-2.5 to 2.5	Pass
				-30	3.85	-1.388	-0.0020	-2.5 to 2.5	Pass
				-20	3.85	-1.659	-0.0024	-2.5 to 2.5	Pass
				-10	3.85	-2.446	-0.0035	-2.5 to 2.5	Pass
				0	3.85	-2.017	-0.0029	-2.5 to 2.5	Pass
				10	3.85	-1.144	-0.0016	-2.5 to 2.5	Pass
				30	3.85	-1.659	-0.0024	-2.5 to 2.5	Pass
				40	3.85	-1.645	-0.0023	-2.5 to 2.5	Pass
	50	3.85	-2.303	-0.0033	-2.5 to 2.5	Pass			
	707.5	50	0		3.27	-4.420	-0.0062	-2.5 to 2.5	Pass
				20	3.85	-2.875	-0.0041	-2.5 to 2.5	Pass
					4.43	-1.459	-0.0021	-2.5 to 2.5	Pass
				-30	3.85	-2.046	-0.0029	-2.5 to 2.5	Pass
				-20	3.85	-4.306	-0.0061	-2.5 to 2.5	Pass
				-10	3.85	-6.180	-0.0087	-2.5 to 2.5	Pass
				0	3.85	-1.173	-0.0017	-2.5 to 2.5	Pass
				10	3.85	-1.431	-0.0020	-2.5 to 2.5	Pass
				30	3.85	-2.503	-0.0035	-2.5 to 2.5	Pass
40				3.85	-0.458	-0.0006	-2.5 to 2.5	Pass	
50	3.85	-3.147	-0.0044	-2.5 to 2.5	Pass				
711	50	0		3.27	-4.964	-0.0070	-2.5 to 2.5	Pass	
			20	3.85	-0.772	-0.0011	-2.5 to 2.5	Pass	
				4.43	-1.144	-0.0016	-2.5 to 2.5	Pass	
			-30	3.85	-3.390	-0.0048	-2.5 to 2.5	Pass	
			-20	3.85	-1.516	-0.0021	-2.5 to 2.5	Pass	
			-10	3.85	-1.760	-0.0025	-2.5 to 2.5	Pass	
			0	3.85	-3.333	-0.0047	-2.5 to 2.5	Pass	
			10	3.85	-2.246	-0.0032	-2.5 to 2.5	Pass	
			30	3.85	-1.688	-0.0024	-2.5 to 2.5	Pass	
			40	3.85	-2.017	-0.0028	-2.5 to 2.5	Pass	
50	3.85	-1.531	-0.0022	-2.5 to 2.5	Pass				



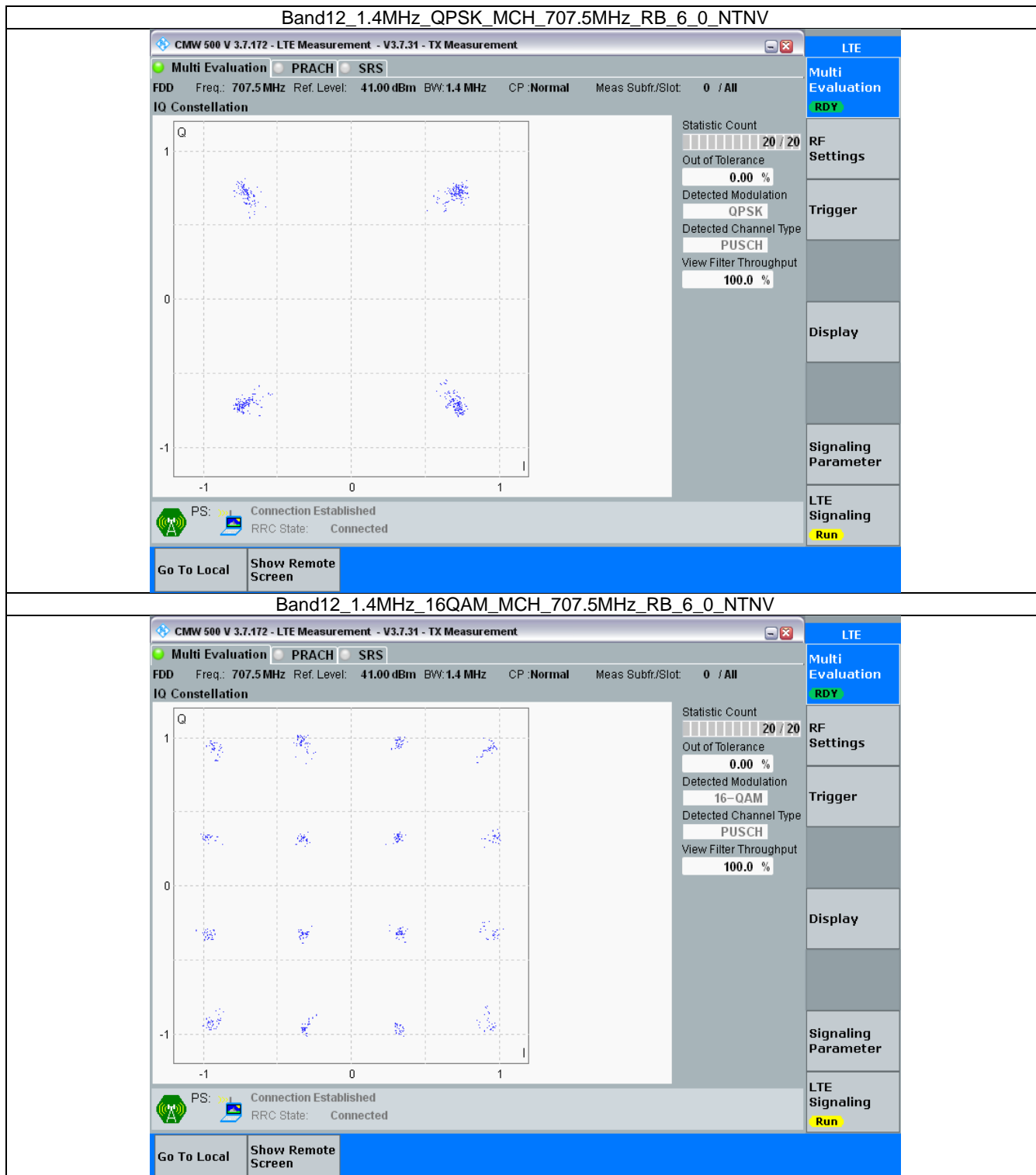
3. Modulation Characteristics

3.1 B12_1.4MHz

3.1.1 Test Result

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

3.1.2 Test Graph



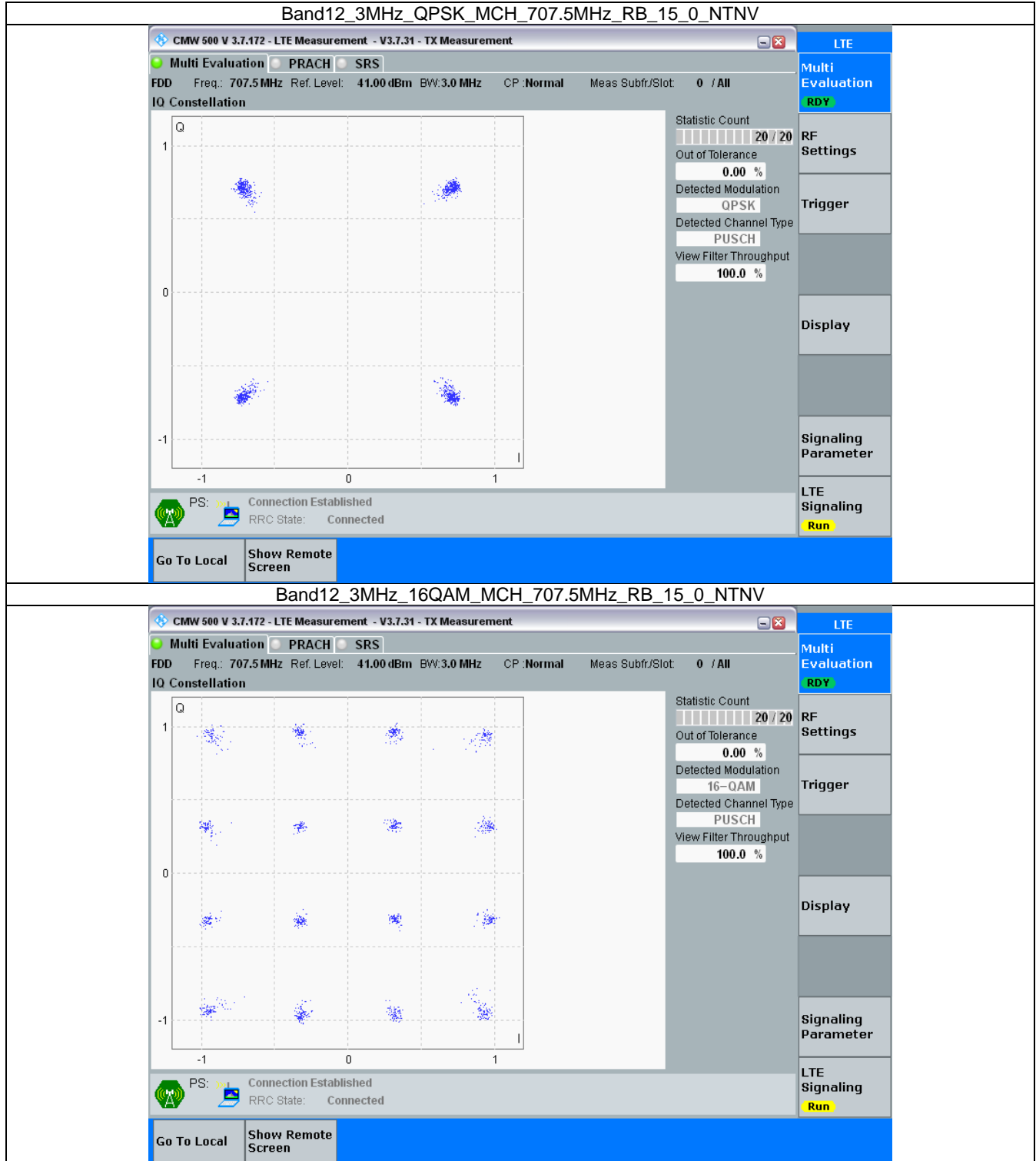


3.2 B12_3MHz

3.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / 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



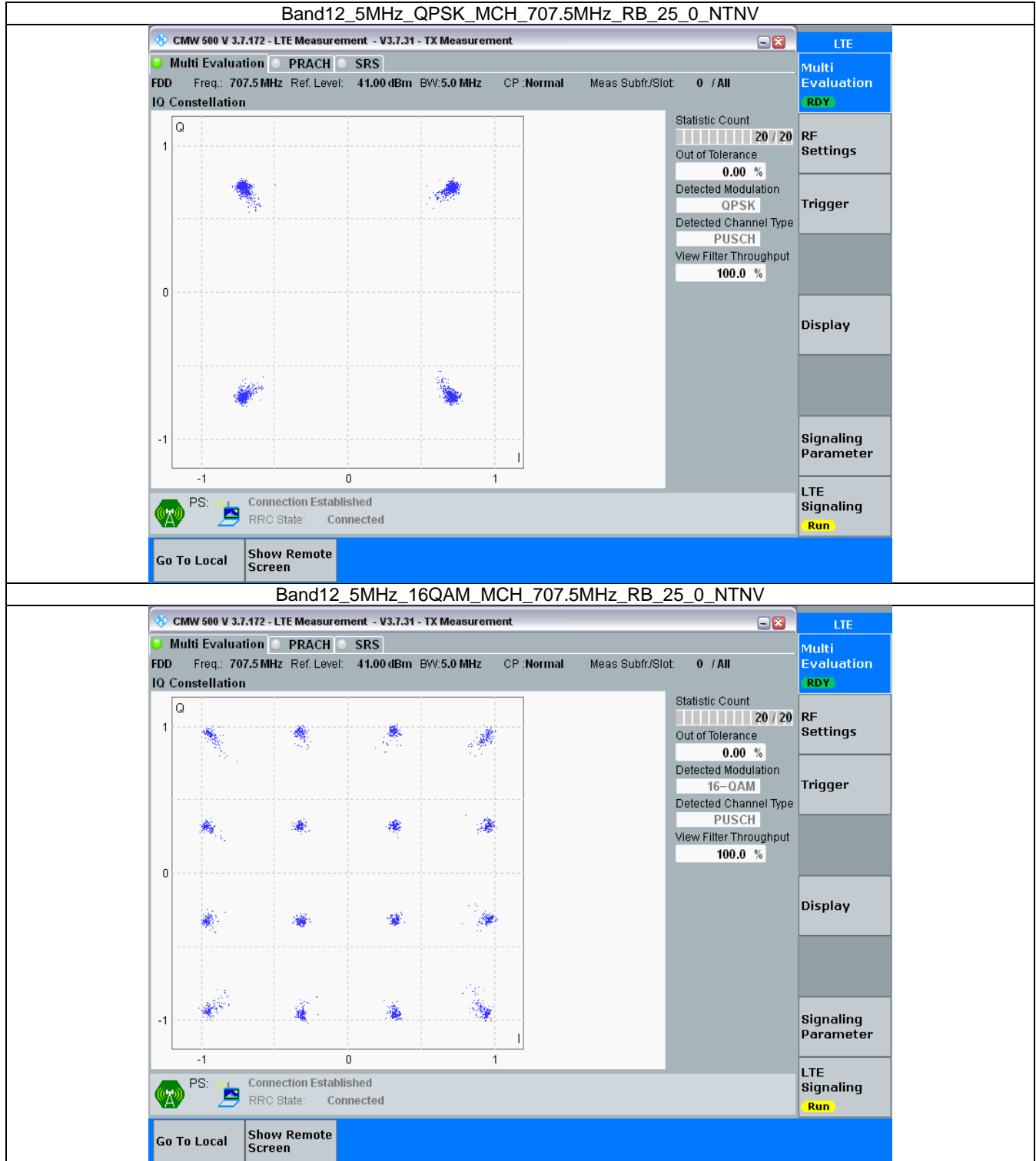


3.3 B12_5MHz

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



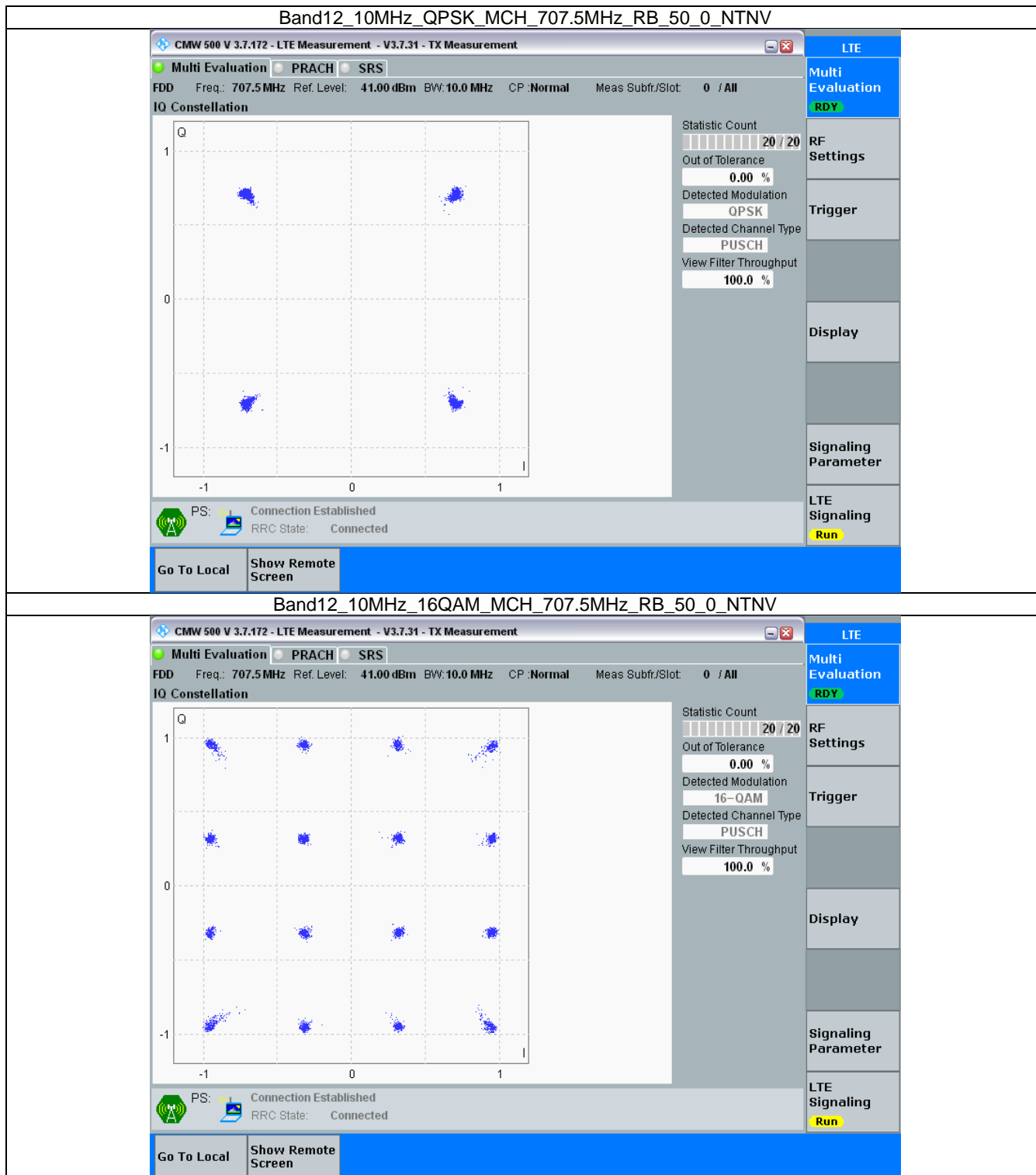


3.4 B12_10MHz

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





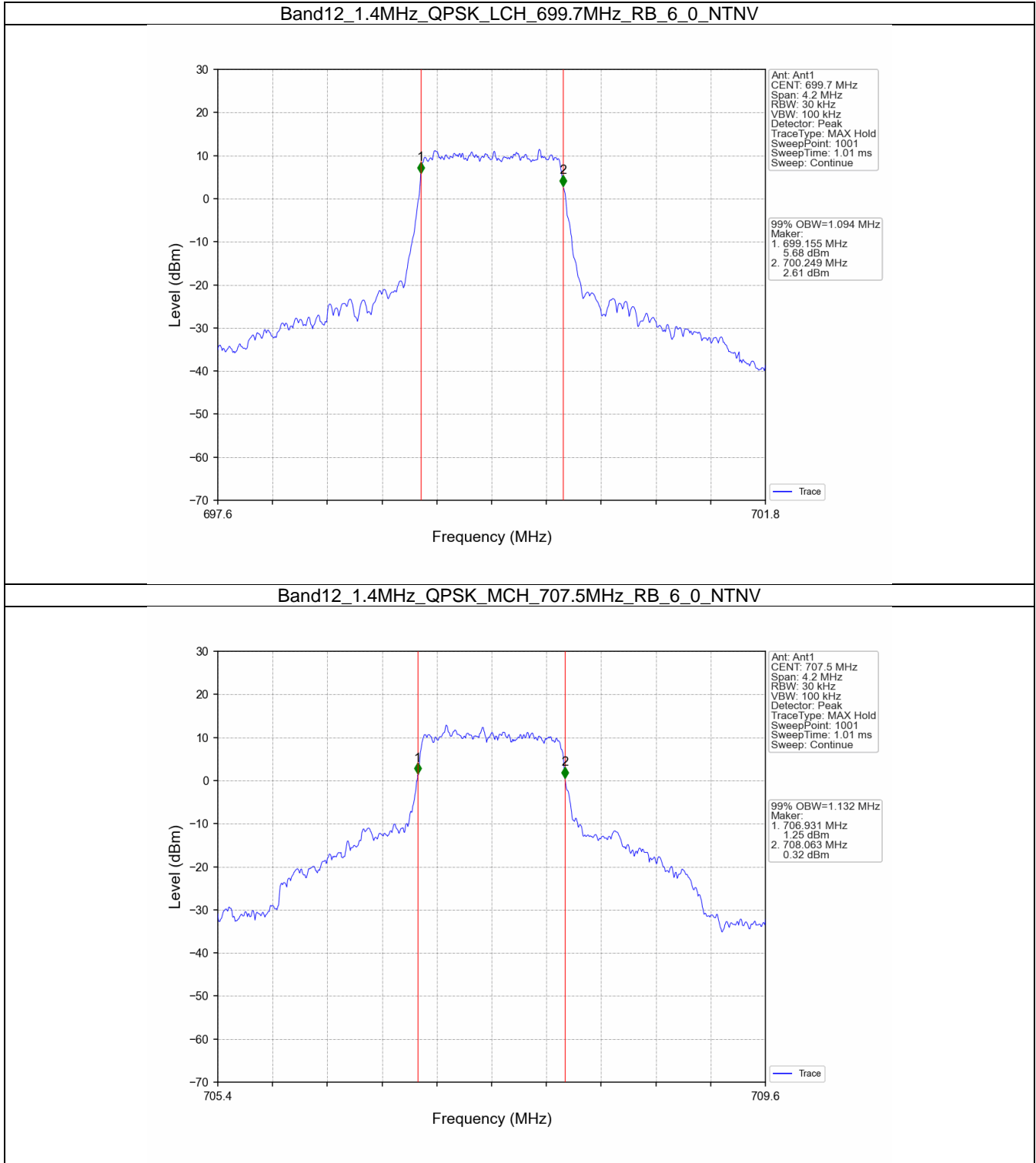
4. 99% & 26dB Bandwidth

4.1 Band12_OBW

4.1.1 Test Result

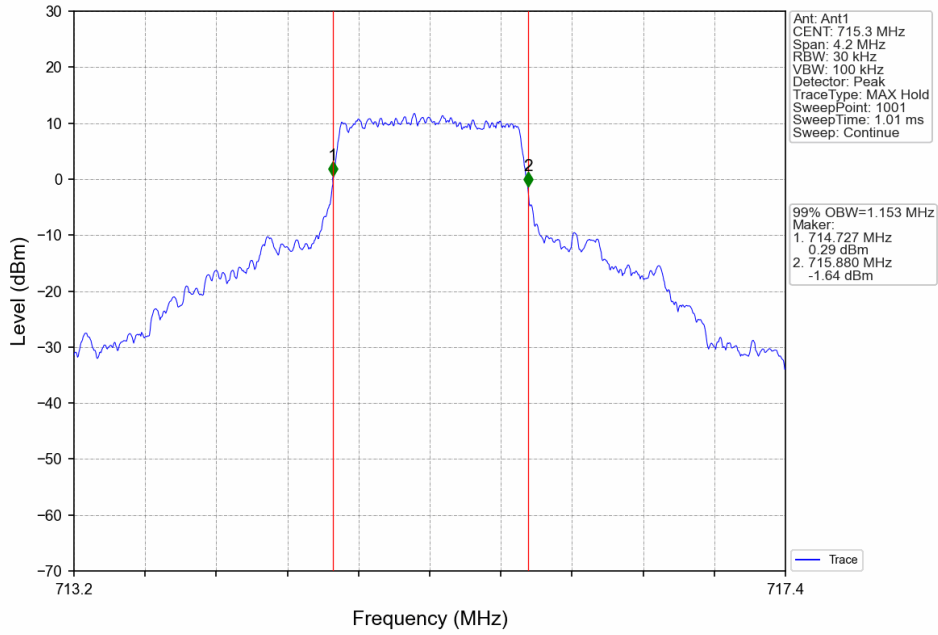
Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	699.7	6	0	1.094	/	Pass
		707.5	6	0	1.132	/	Pass
		715.3	6	0	1.153	/	Pass
	16QAM	699.7	6	0	1.108	/	Pass
		707.5	6	0	1.113	/	Pass
		715.3	6	0	1.112	/	Pass
3	QPSK	700.5	15	0	2.731	/	Pass
		707.5	15	0	2.755	/	Pass
		714.5	15	0	2.742	/	Pass
	16QAM	700.5	15	0	2.719	/	Pass
		707.5	15	0	2.734	/	Pass
		714.5	15	0	2.753	/	Pass
5	QPSK	701.5	25	0	4.509	/	Pass
		707.5	25	0	4.523	/	Pass
		713.5	25	0	4.501	/	Pass
	16QAM	701.5	25	0	4.509	/	Pass
		707.5	25	0	4.509	/	Pass
		713.5	25	0	4.519	/	Pass
10	QPSK	704	50	0	9.013	/	Pass
		707.5	50	0	8.947	/	Pass
		711	50	0	9.033	/	Pass
	16QAM	704	50	0	9.015	/	Pass
		707.5	50	0	8.966	/	Pass
		711	50	0	9.023	/	Pass

4.1.2 Test Graph

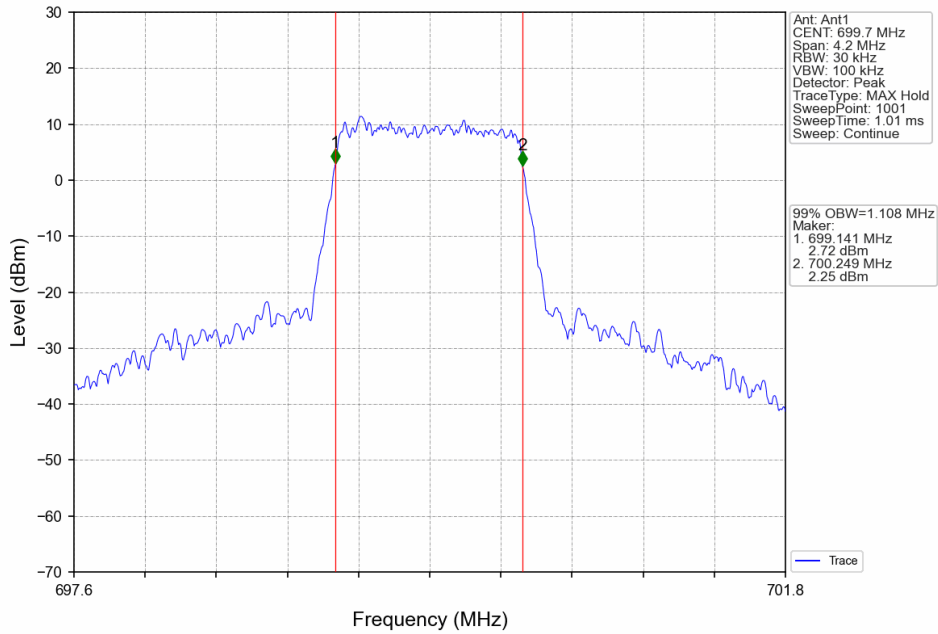




Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV

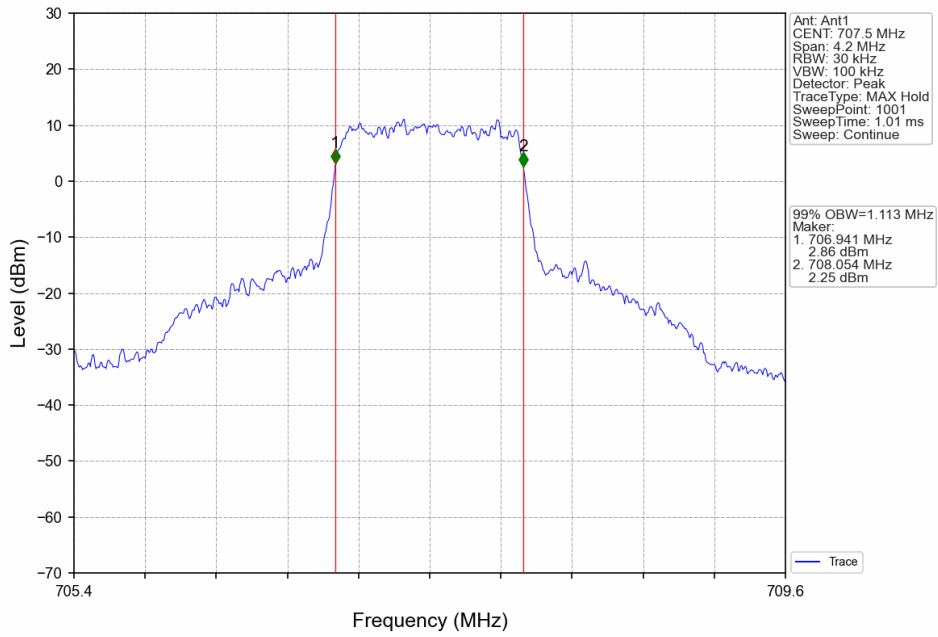


Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV

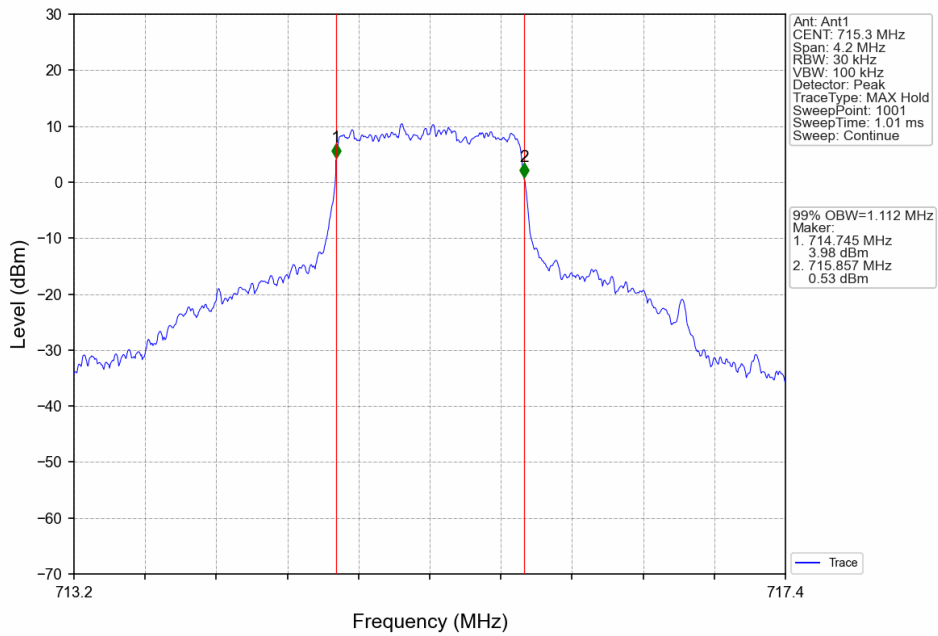




Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV

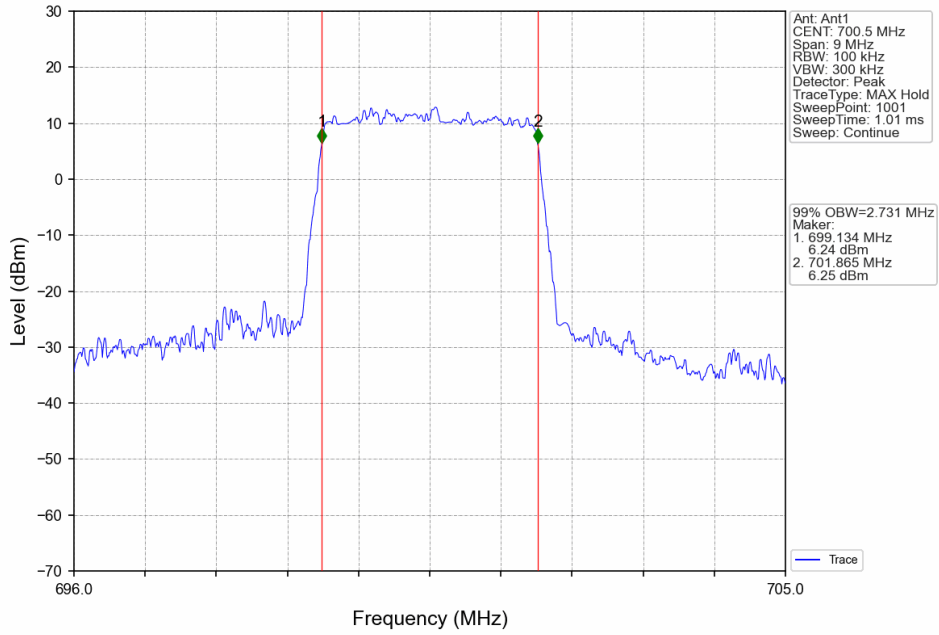


Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV

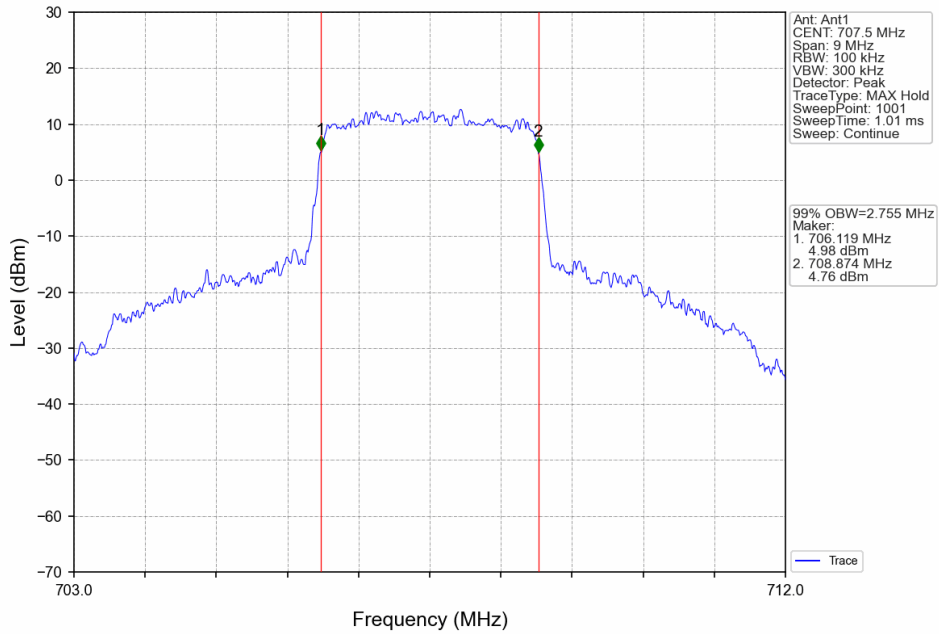




Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV

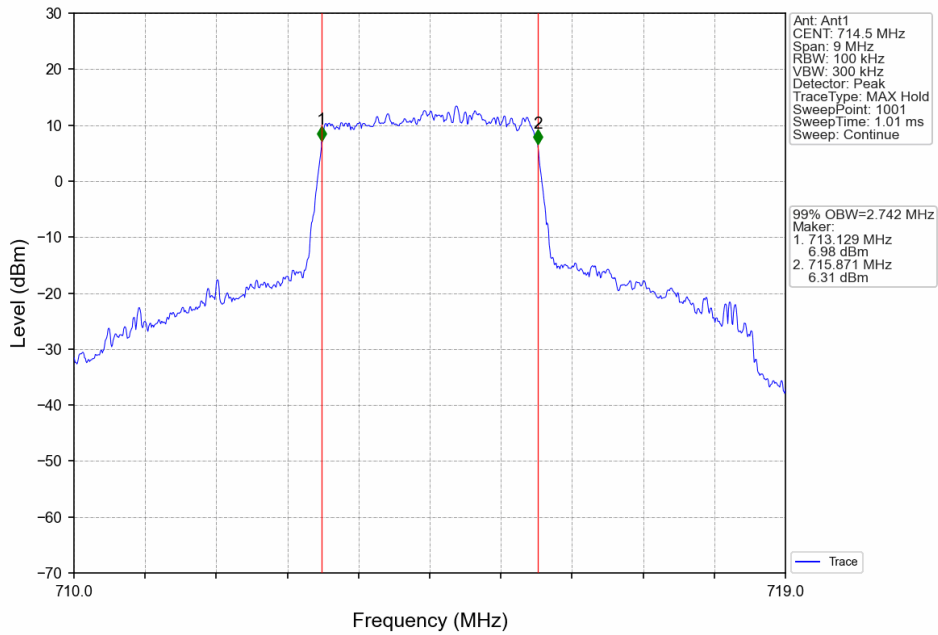


Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV

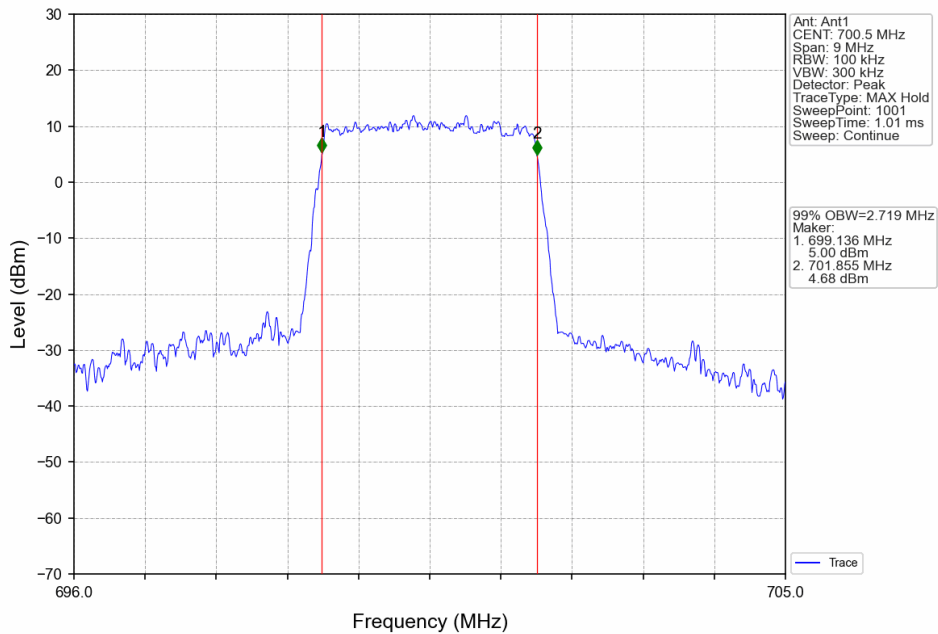




Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV

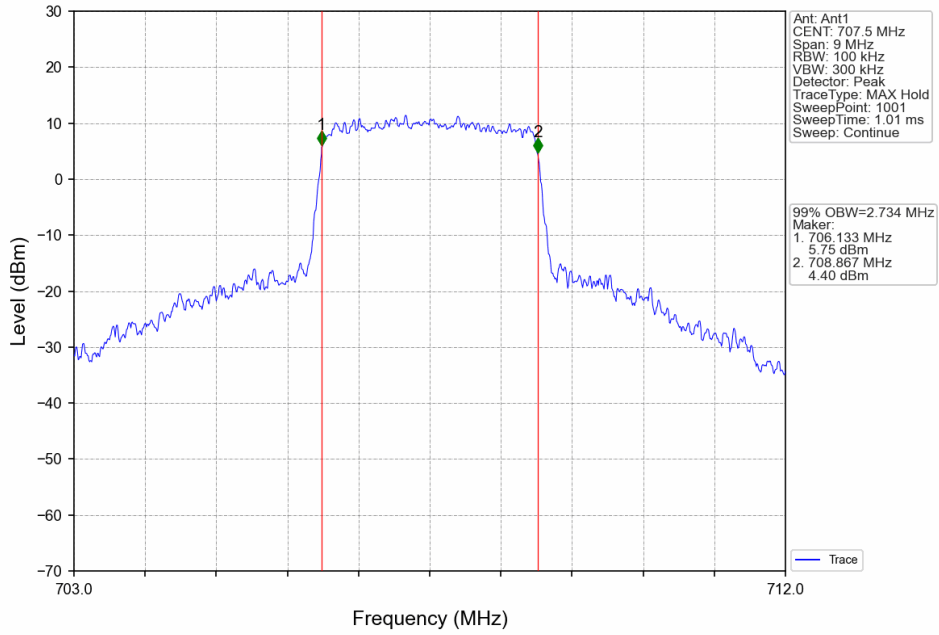


Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

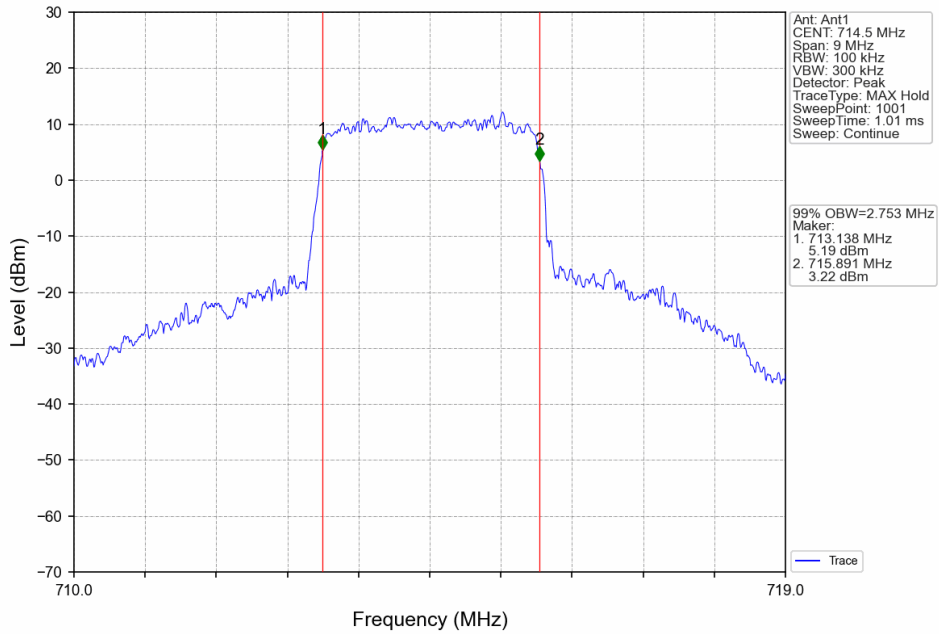




Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV

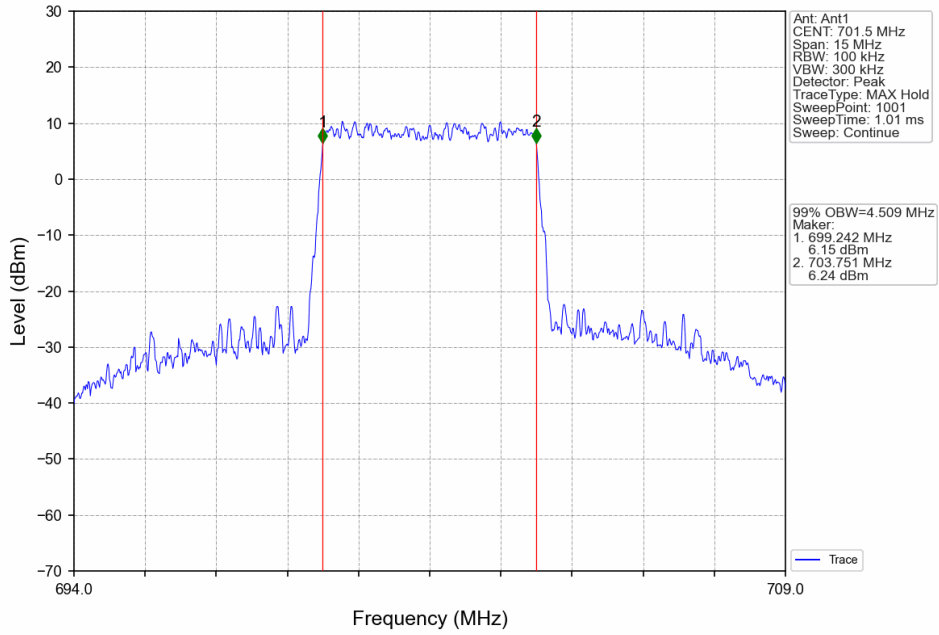


Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV

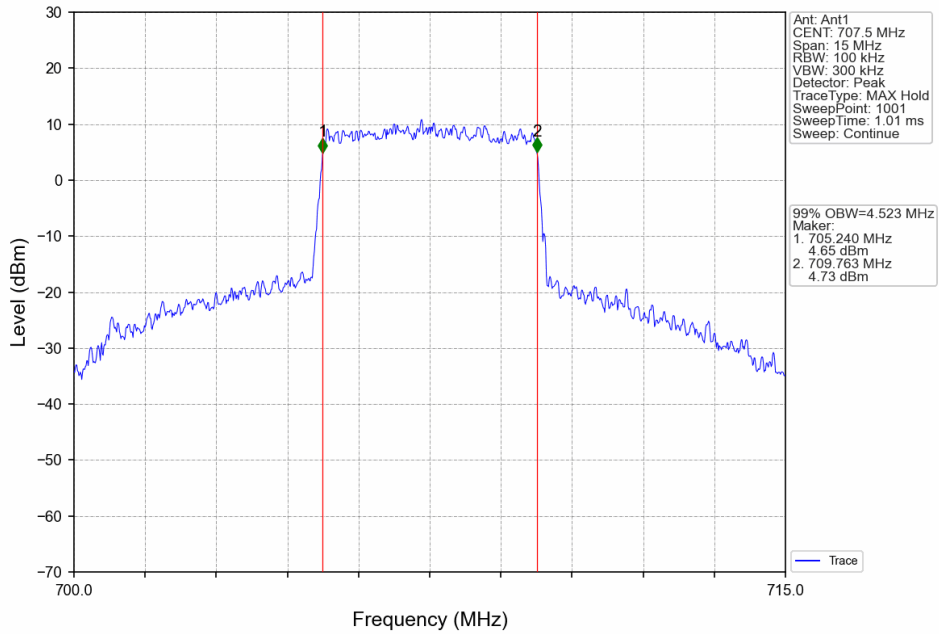




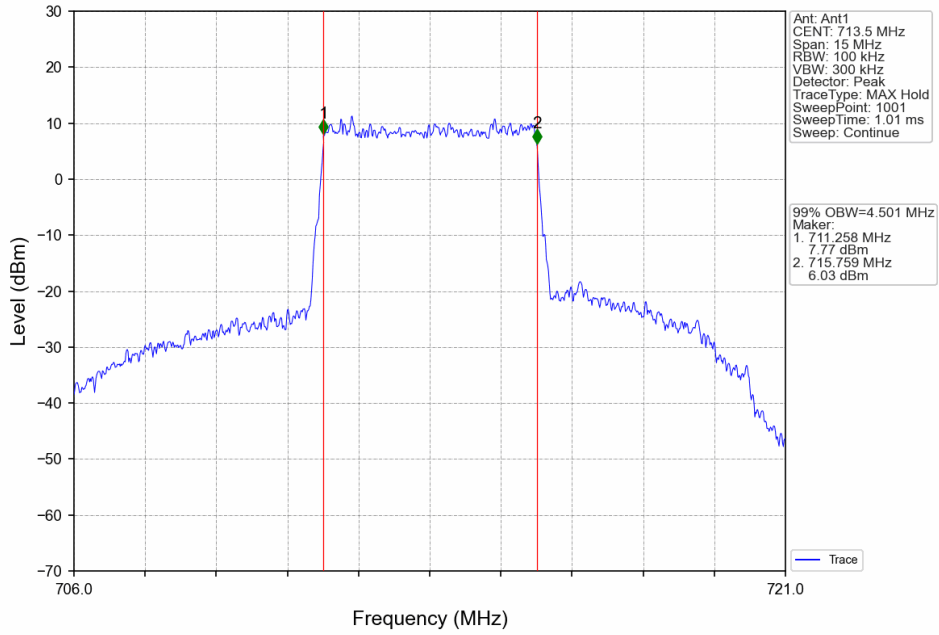
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



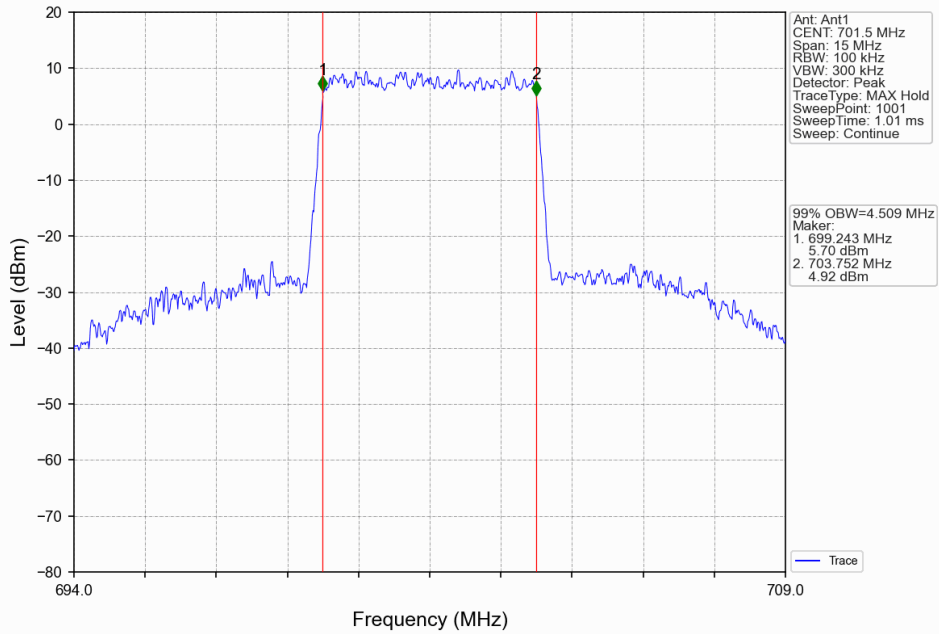
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV

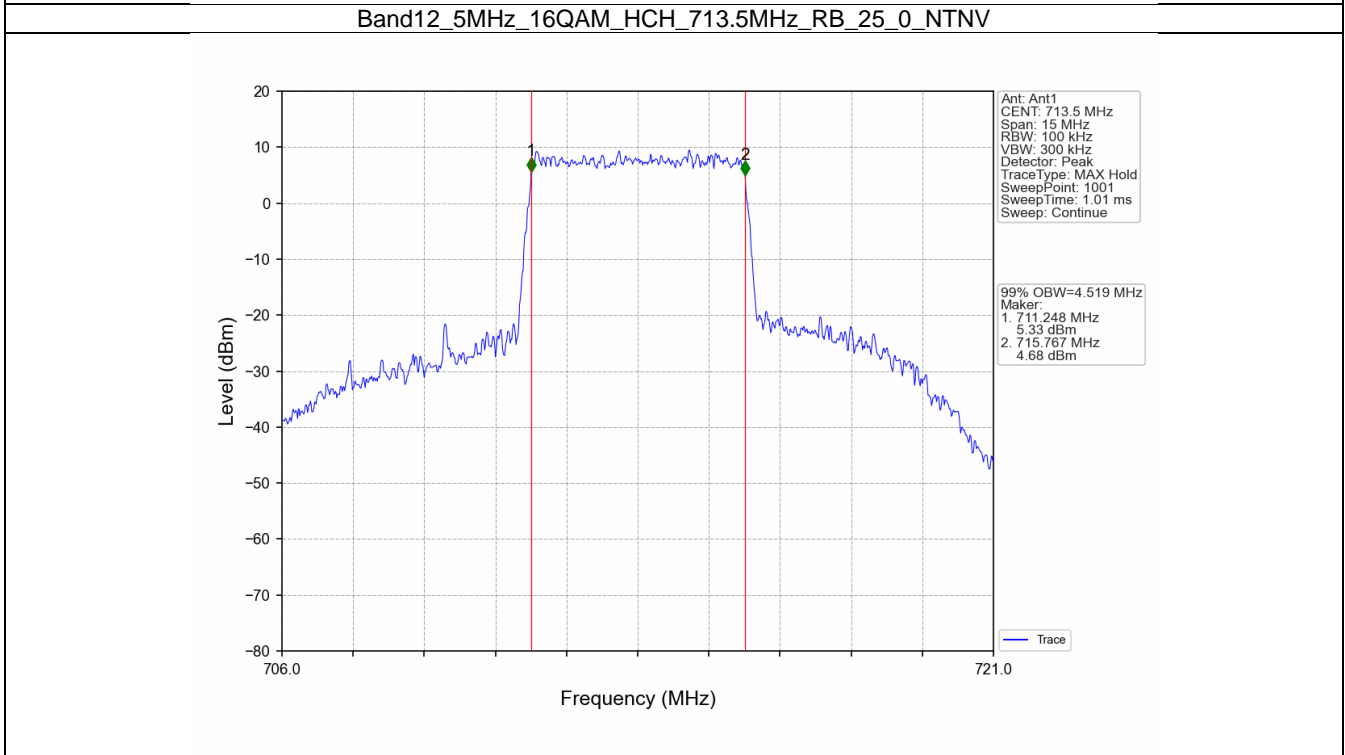
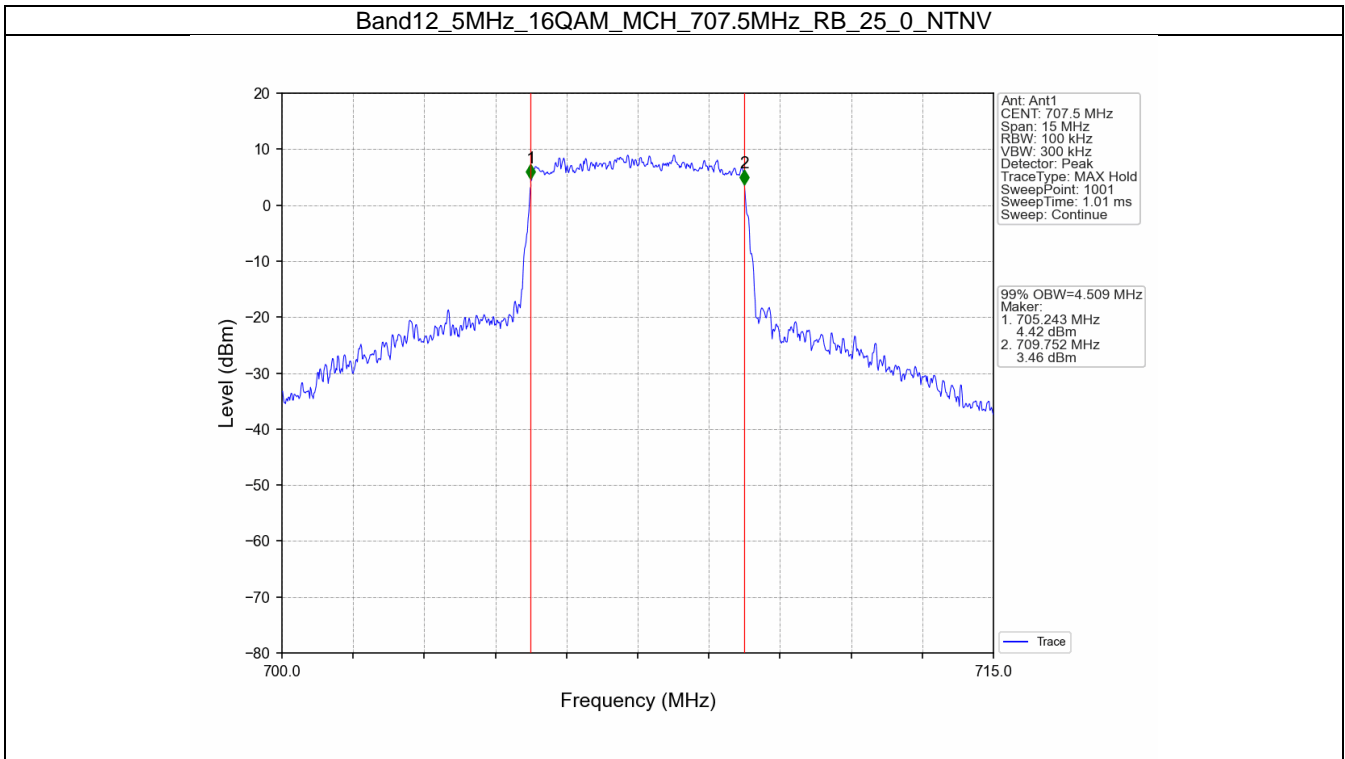


Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV

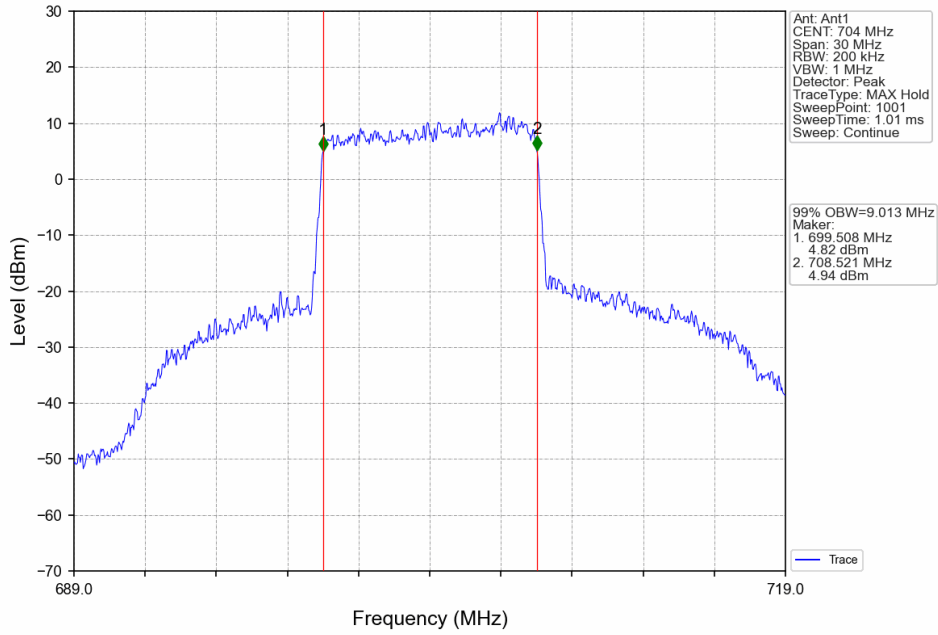


Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV

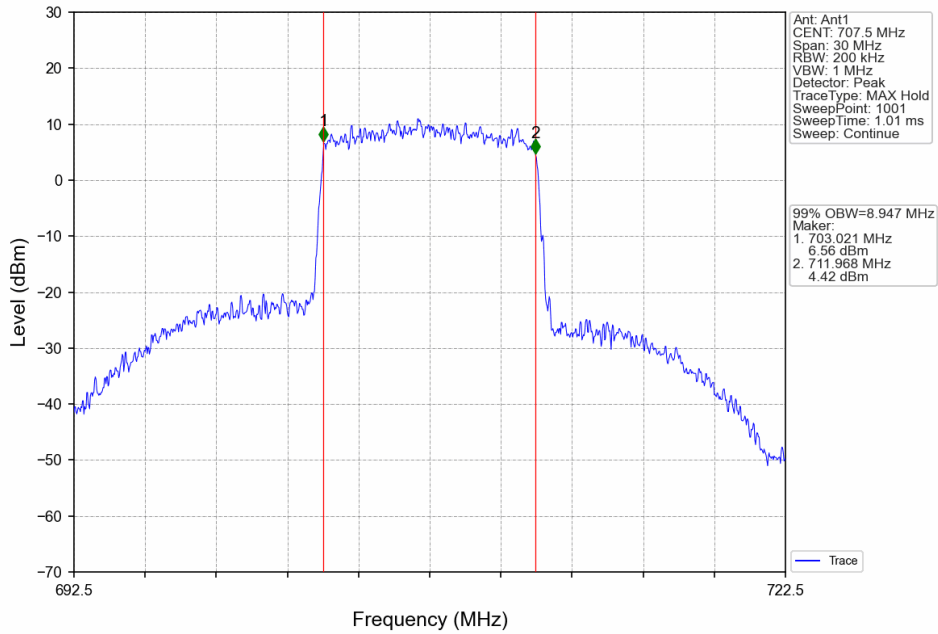




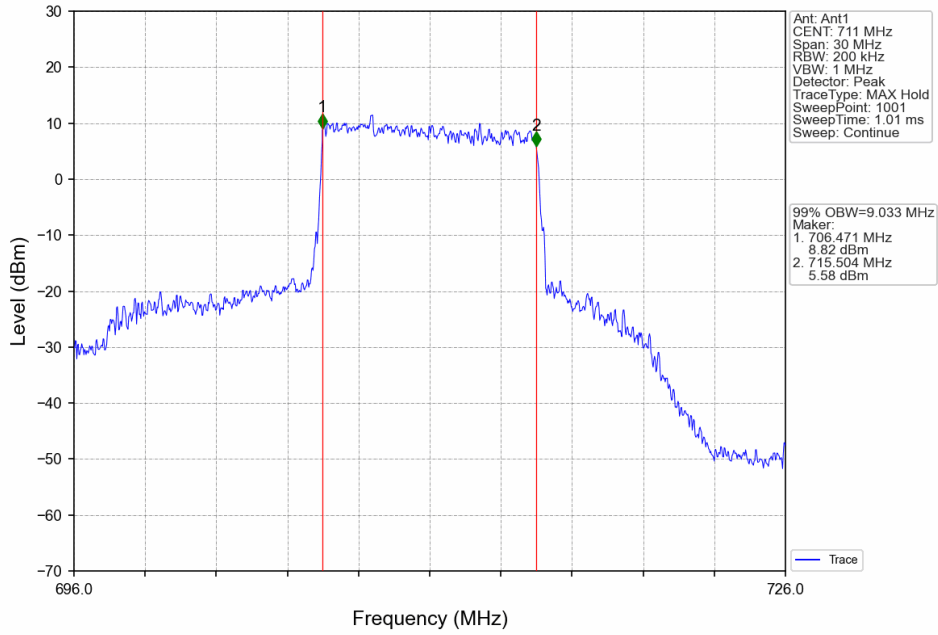
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



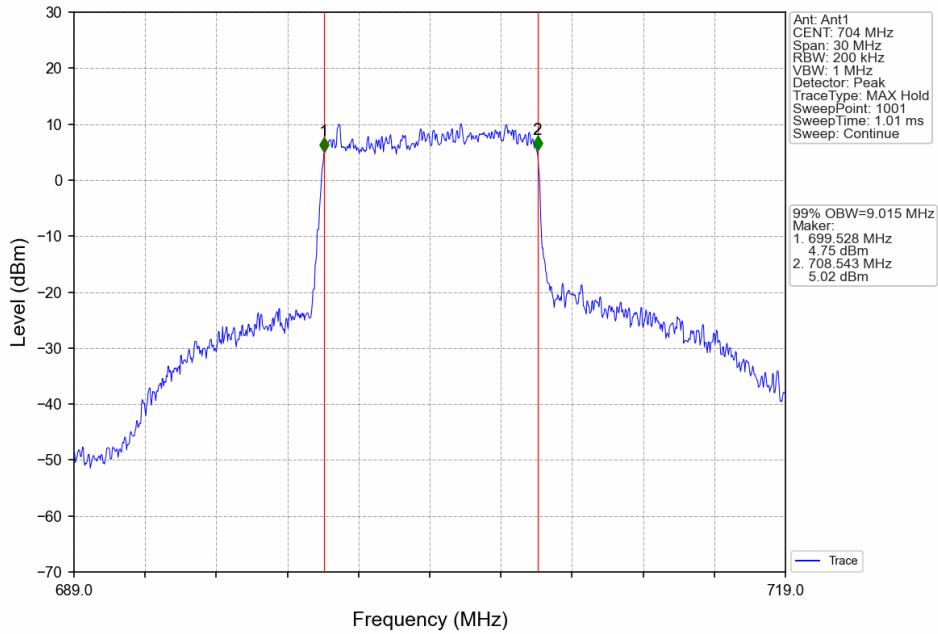
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV

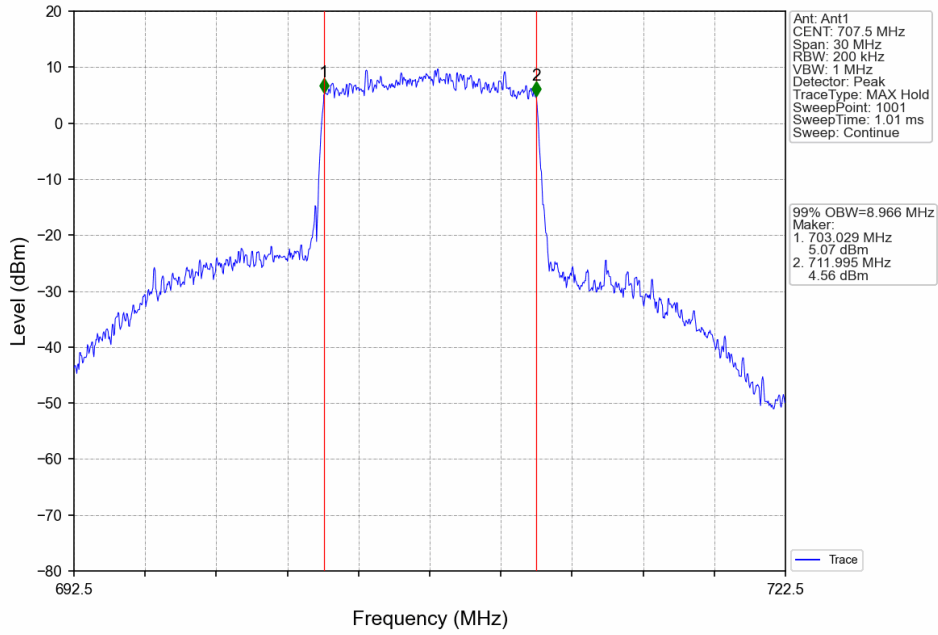


Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV

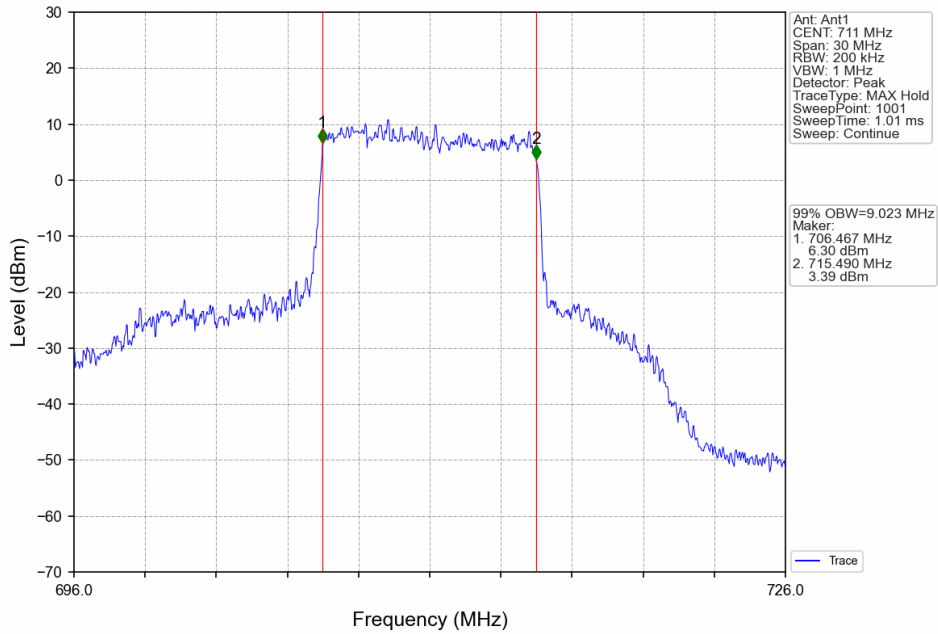




Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



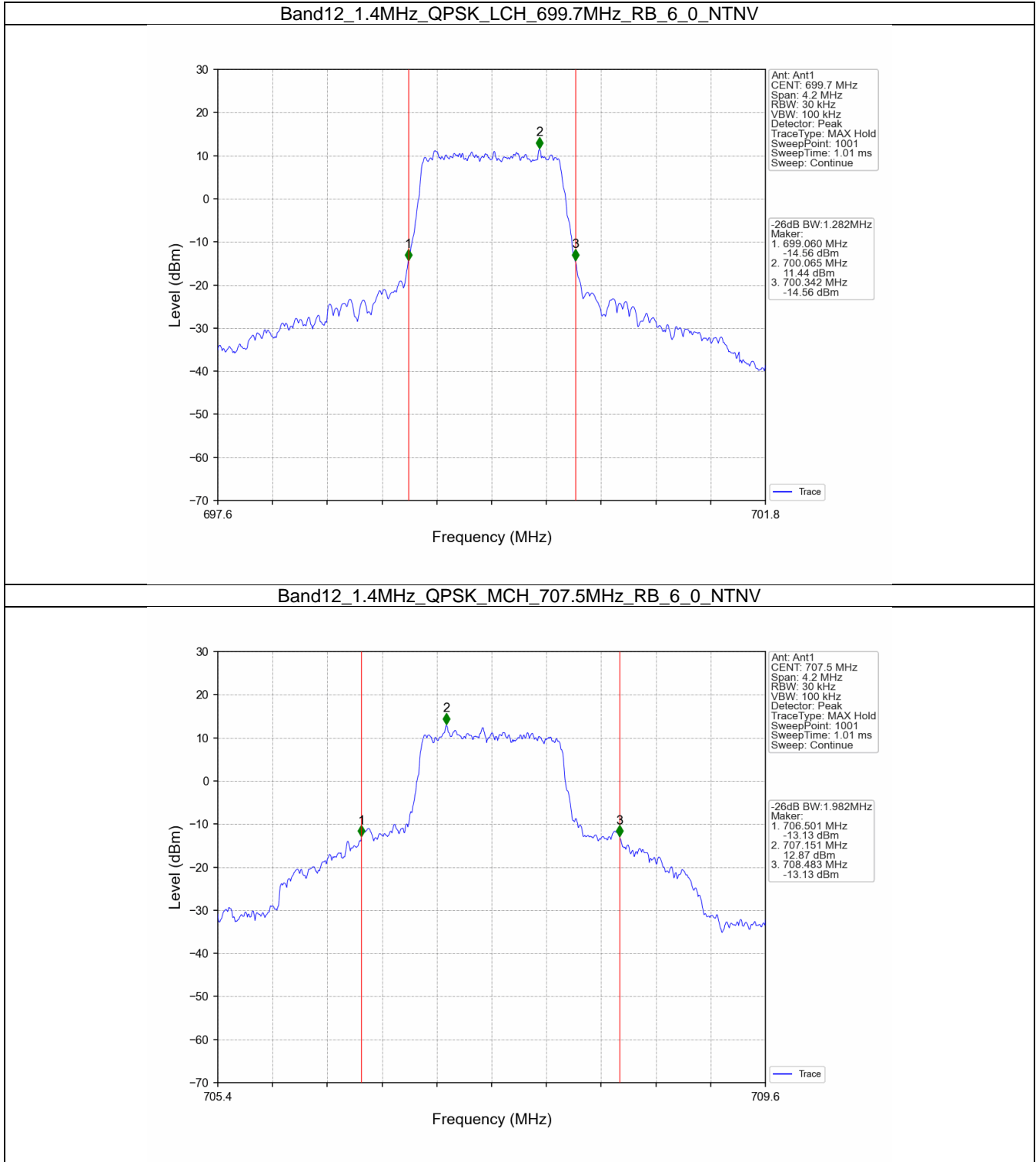


4.2 Band12_XDB

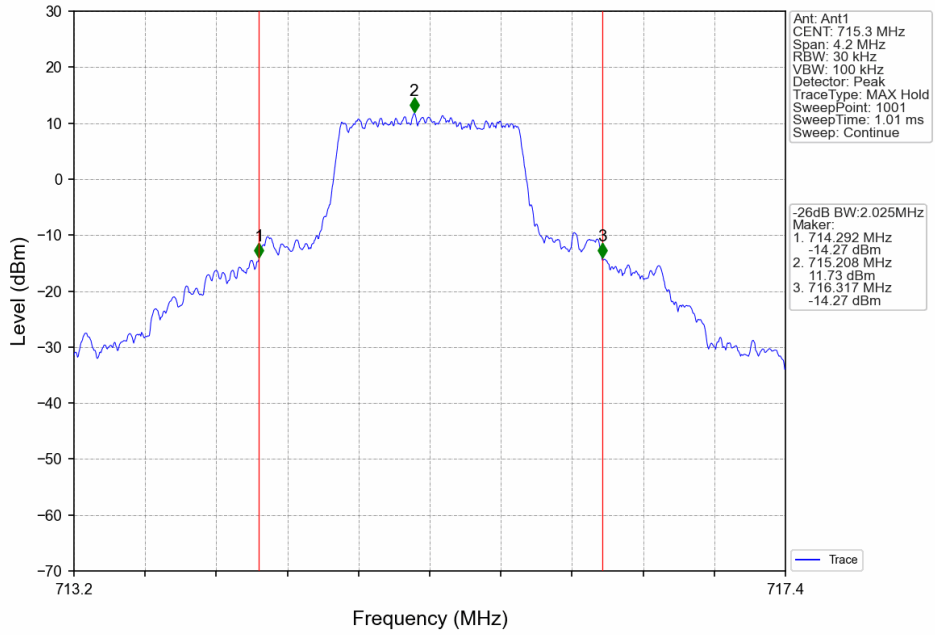
4.2.1 Test Result

Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	699.7	6	0	1.282	/	Pass
		707.5	6	0	1.982	/	Pass
		715.3	6	0	2.025	/	Pass
	16QAM	699.7	6	0	1.292	/	Pass
		707.5	6	0	1.643	/	Pass
		715.3	6	0	1.582	/	Pass
3	QPSK	700.5	15	0	3.067	/	Pass
		707.5	15	0	3.260	/	Pass
		714.5	15	0	3.044	/	Pass
	16QAM	700.5	15	0	3.059	/	Pass
		707.5	15	0	3.047	/	Pass
		714.5	15	0	3.073	/	Pass
5	QPSK	701.5	25	0	4.942	/	Pass
		707.5	25	0	4.913	/	Pass
		713.5	25	0	4.929	/	Pass
	16QAM	701.5	25	0	4.924	/	Pass
		707.5	25	0	4.940	/	Pass
		713.5	25	0	4.939	/	Pass
10	QPSK	704	50	0	9.674	/	Pass
		707.5	50	0	9.648	/	Pass
		711	50	0	9.755	/	Pass
	16QAM	704	50	0	9.722	/	Pass
		707.5	50	0	9.692	/	Pass
		711	50	0	9.672	/	Pass

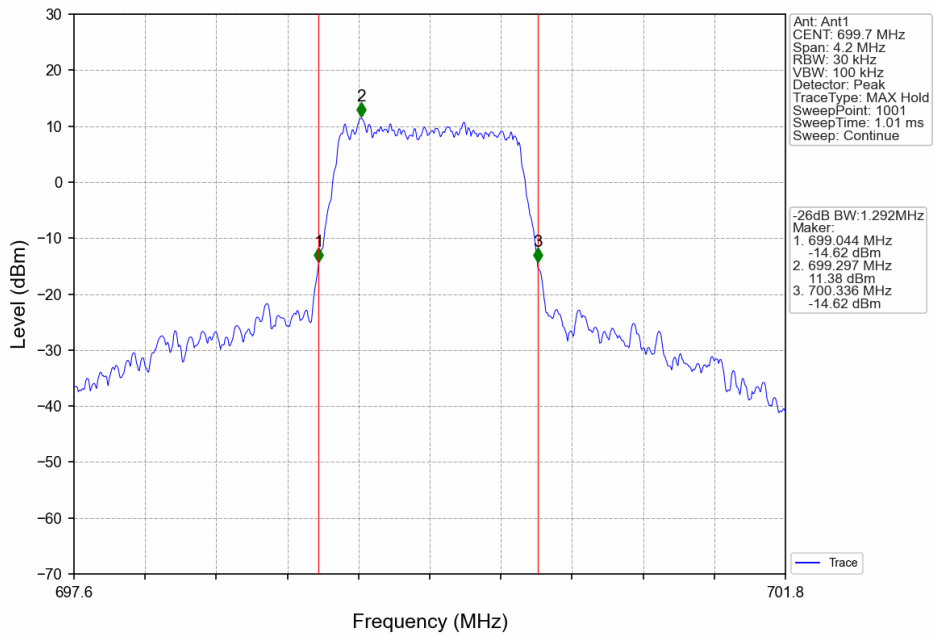
4.2.2 Test Graph



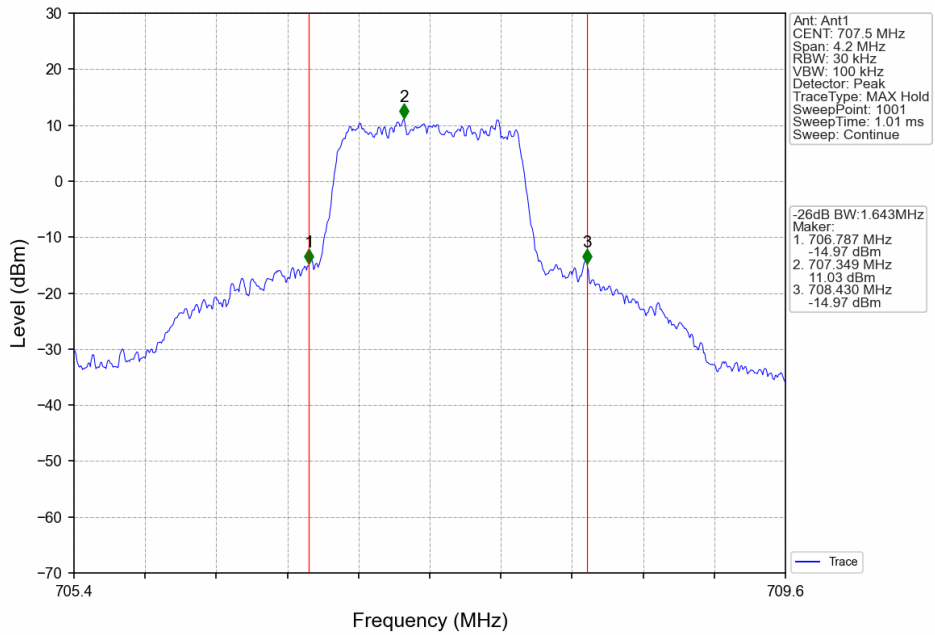
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



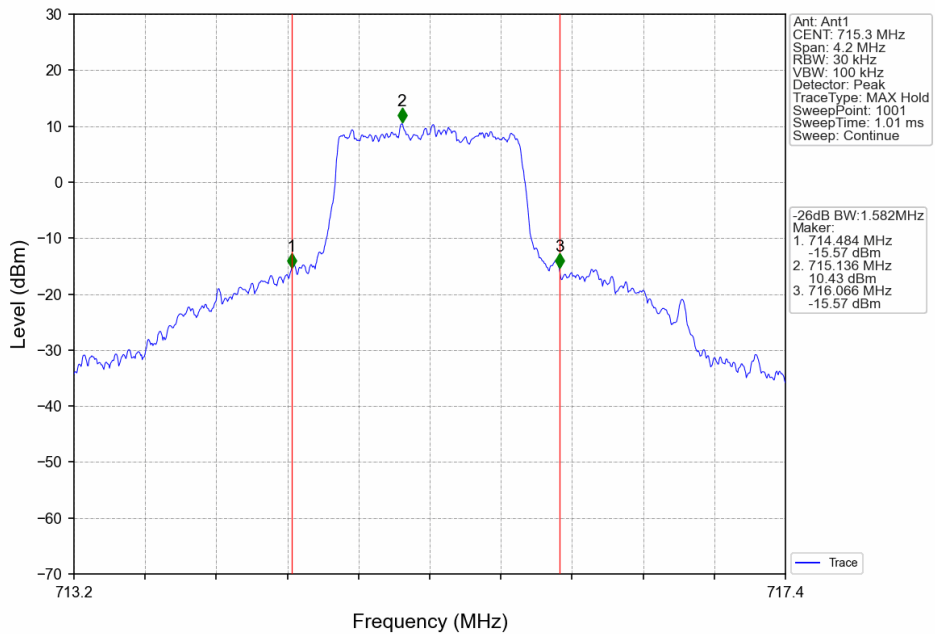
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV

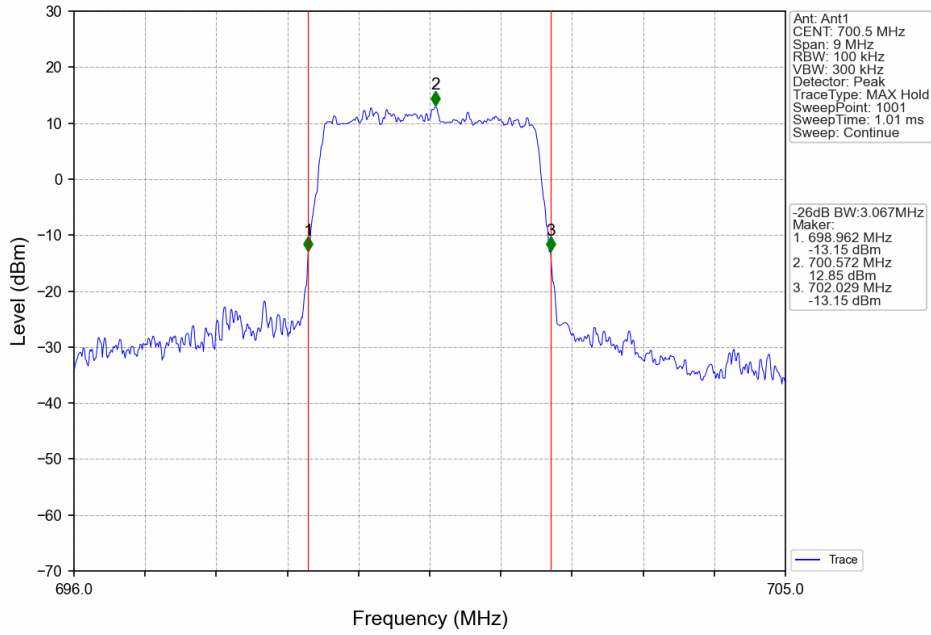


Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV

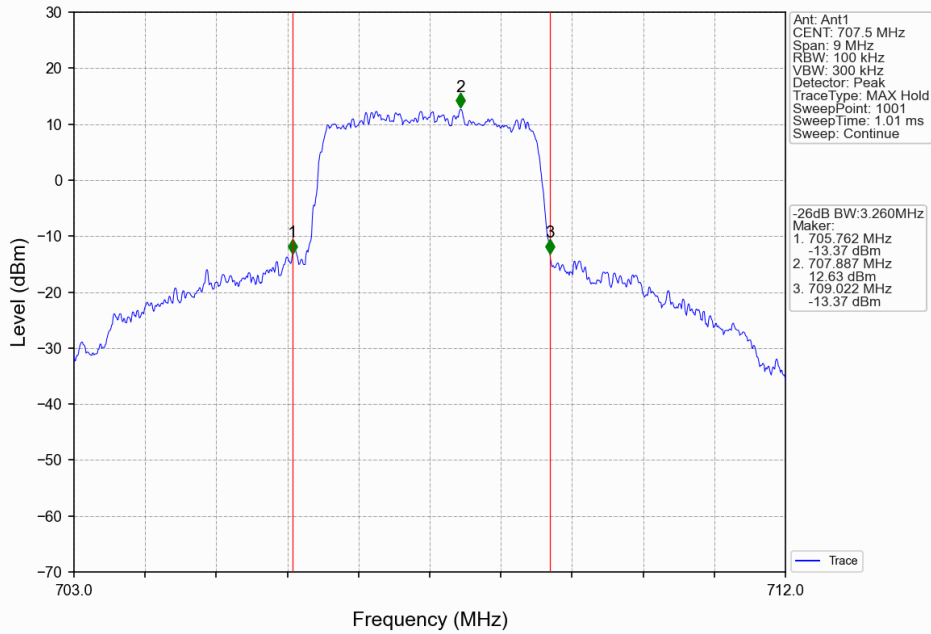




Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV

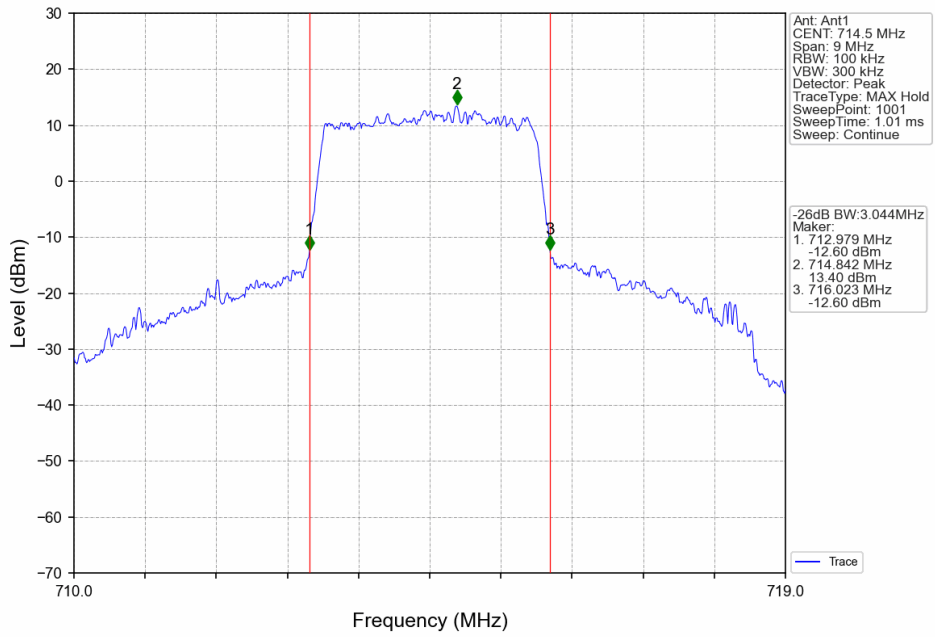


Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV

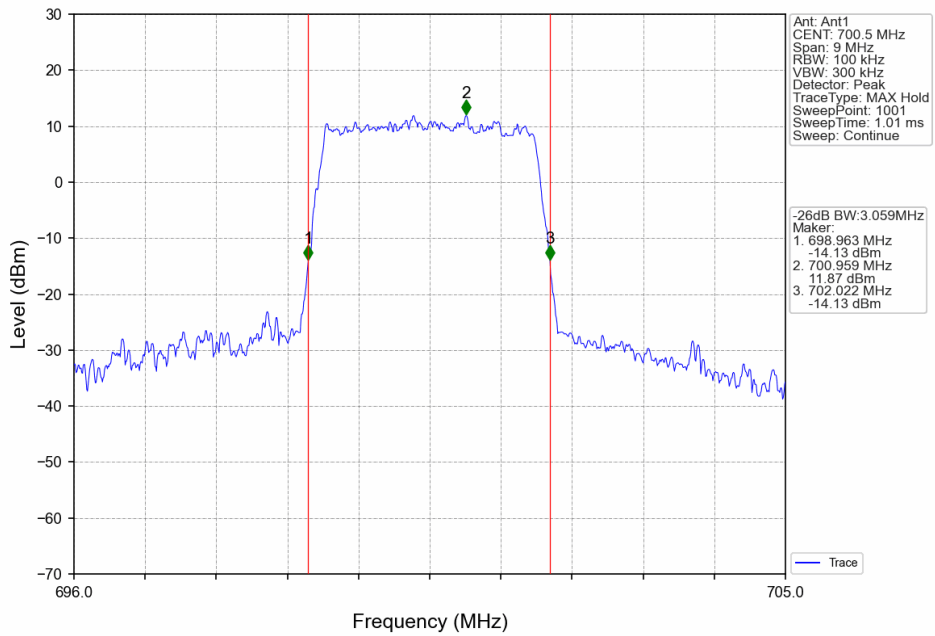




Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV

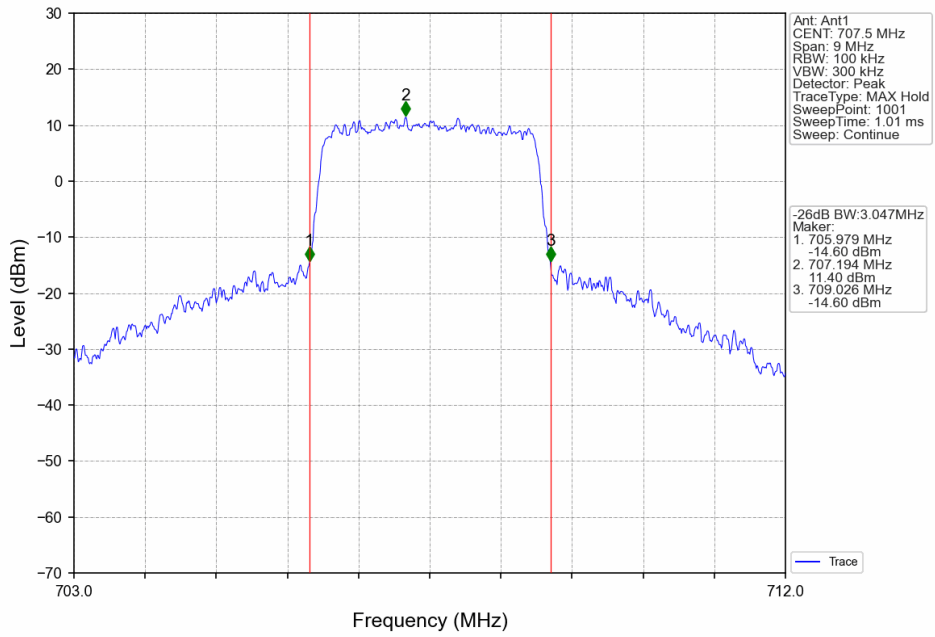


Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

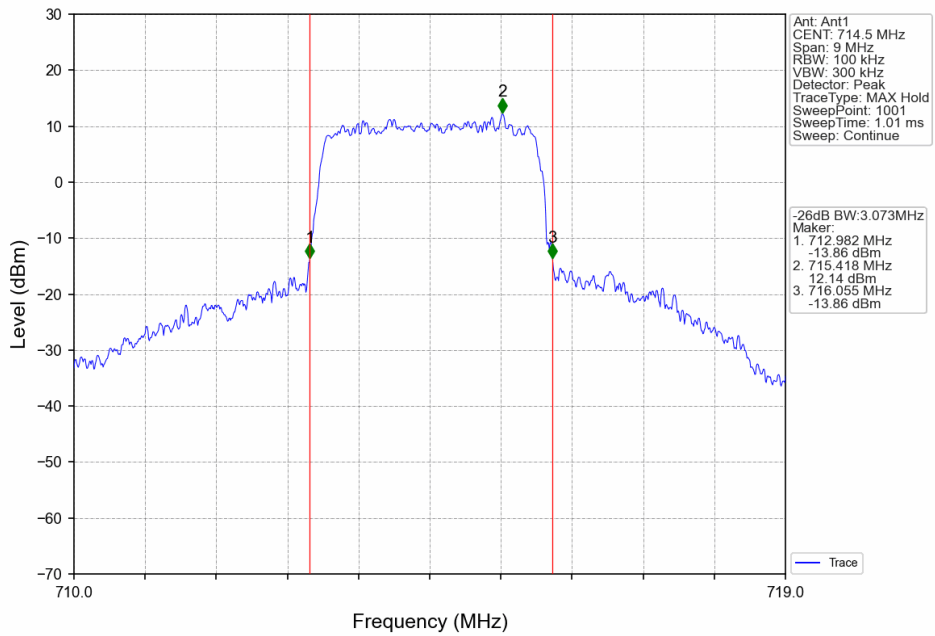




Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV

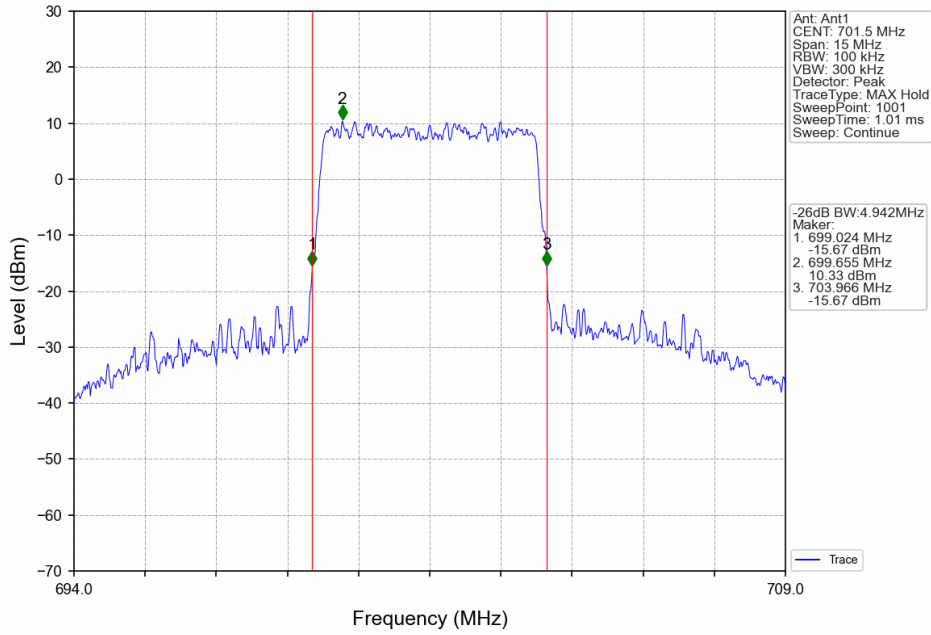


Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV

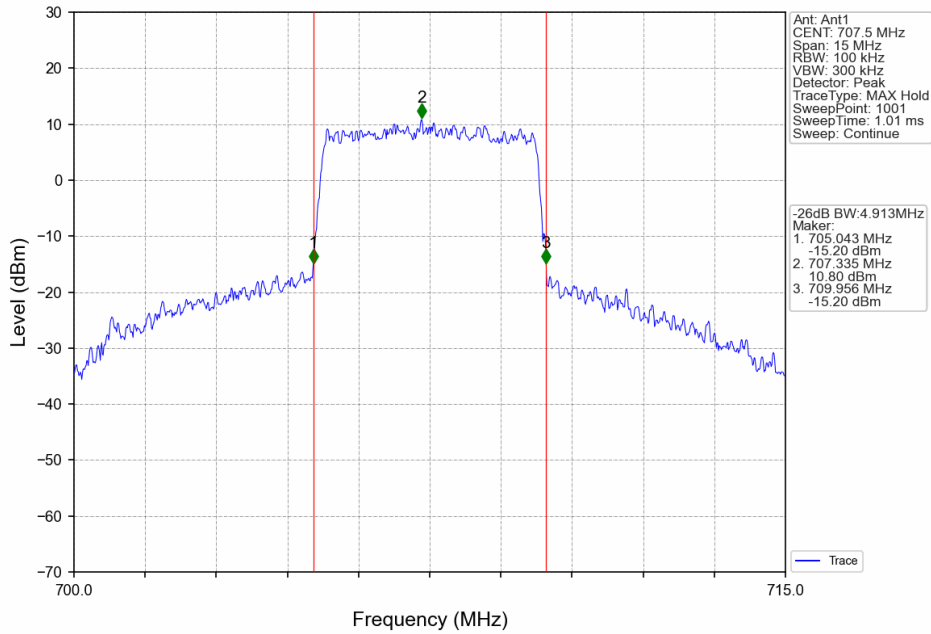




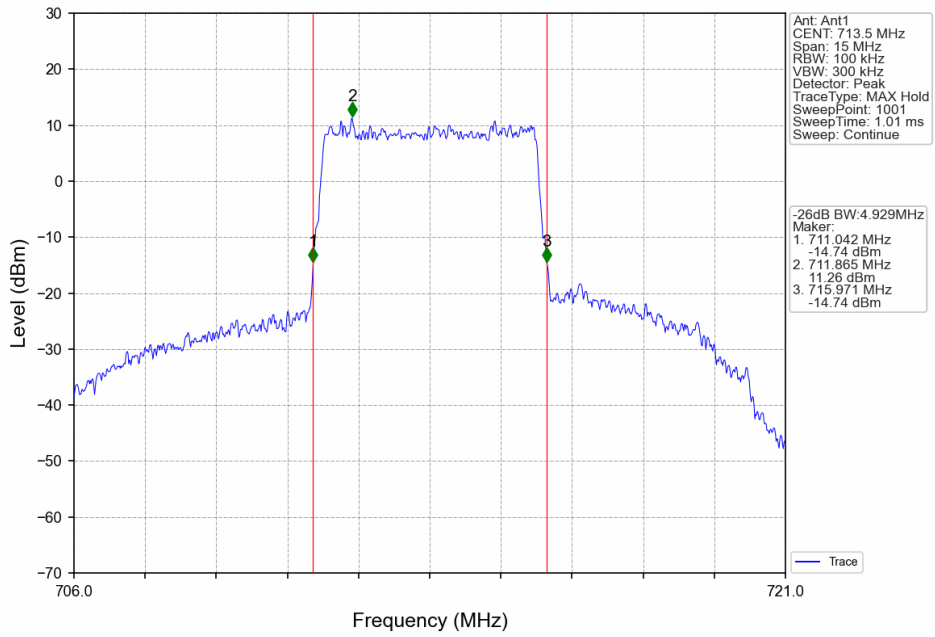
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



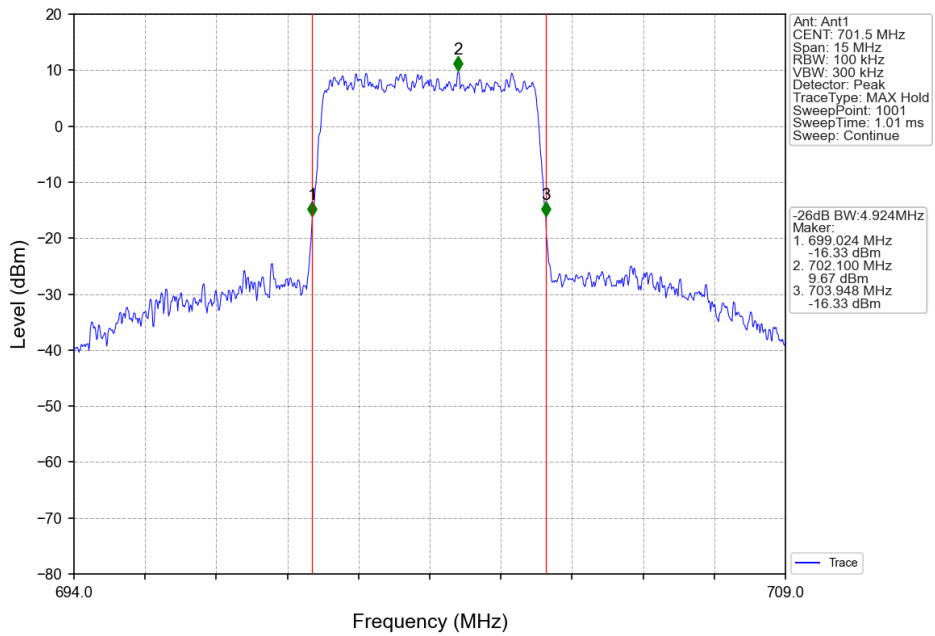
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV

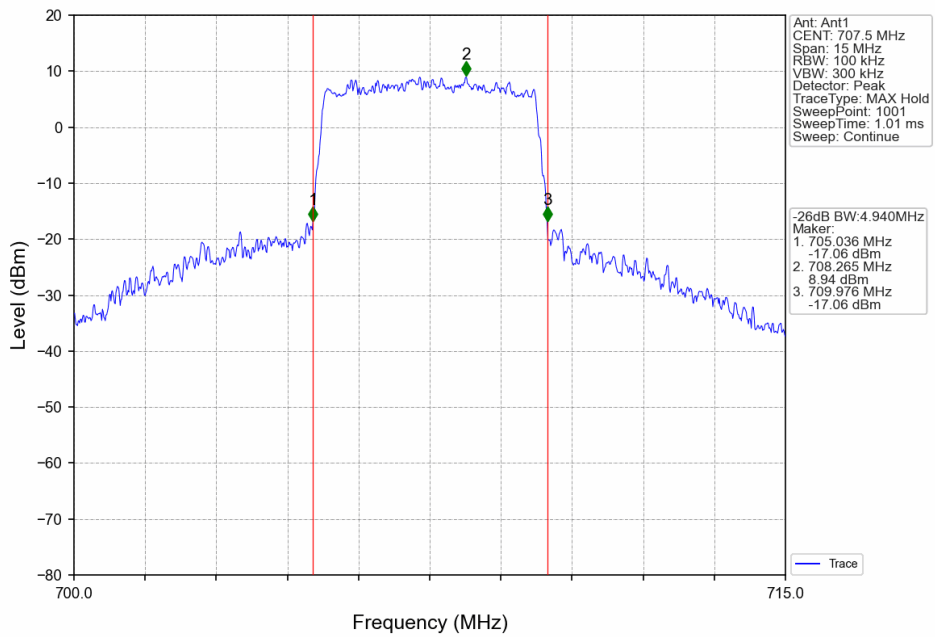


Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV

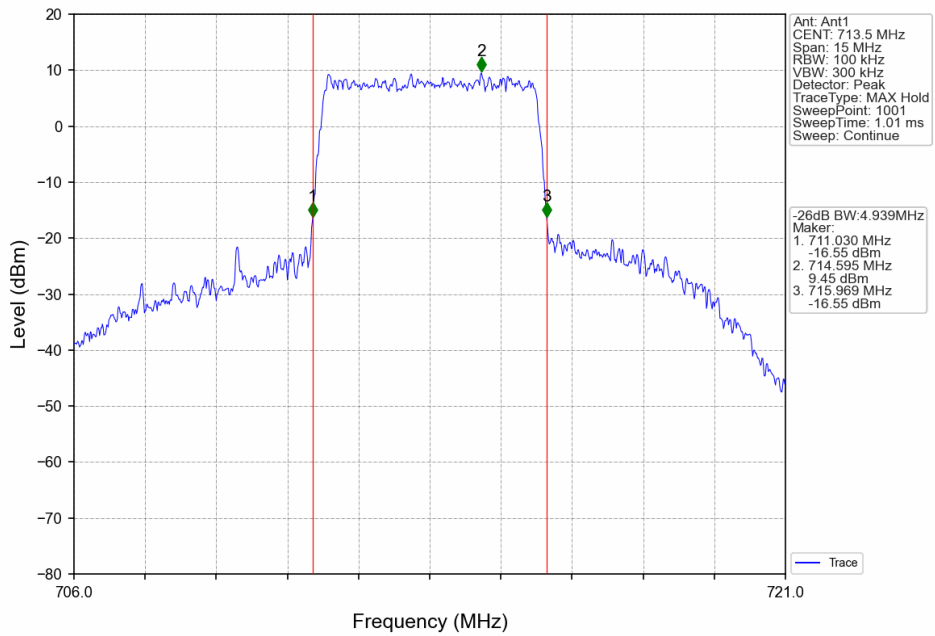




Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV

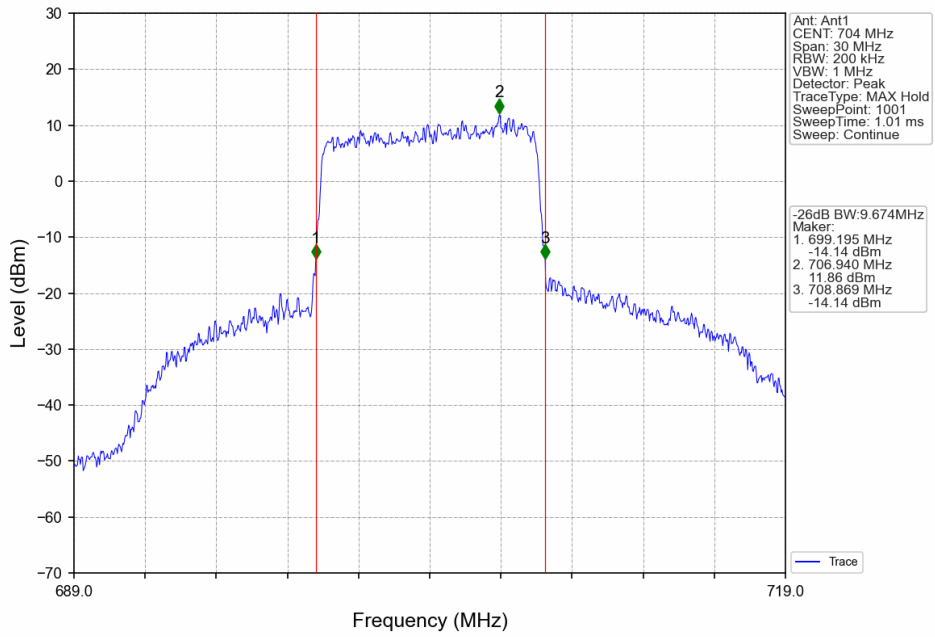


Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV

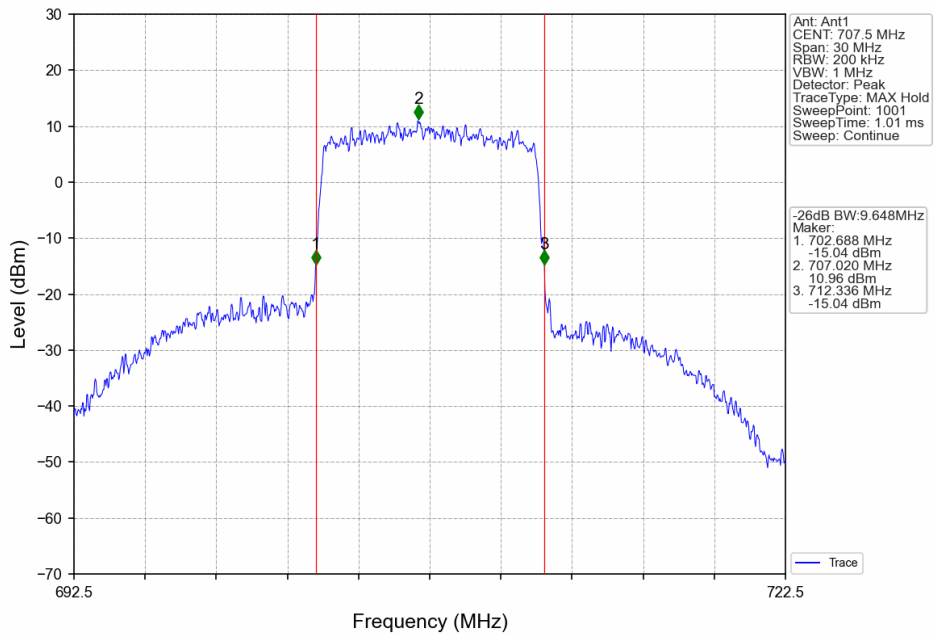




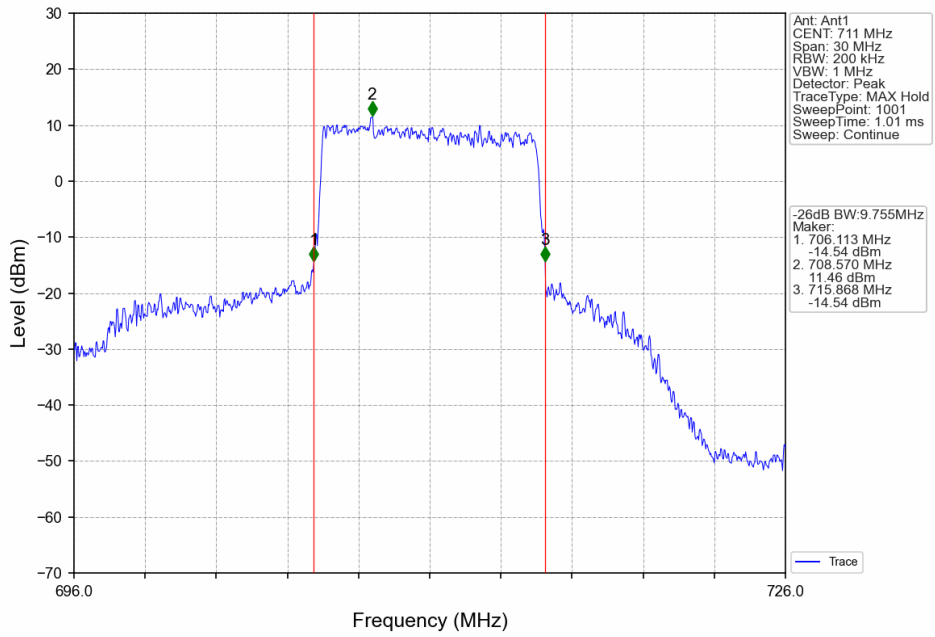
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



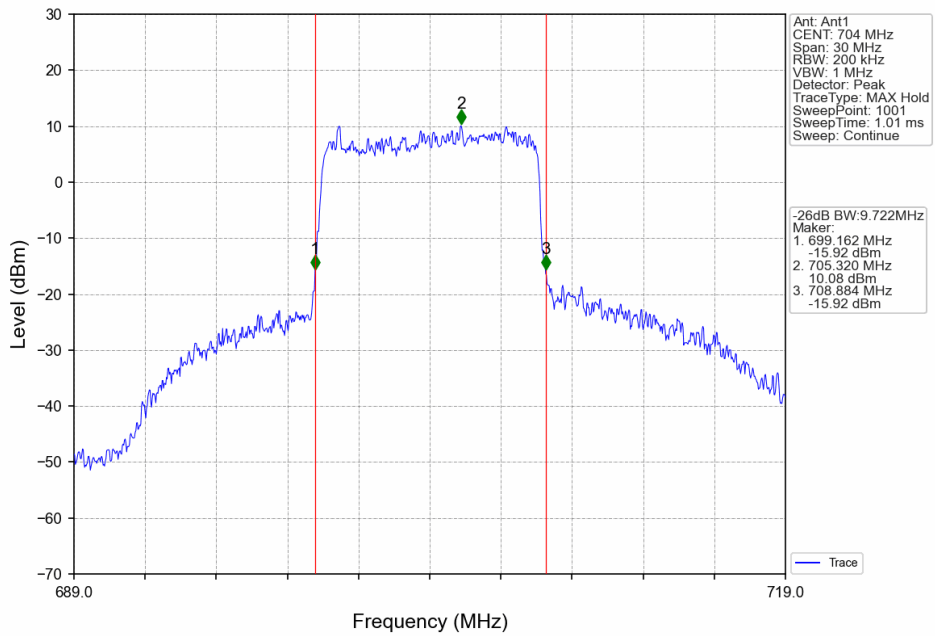
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV

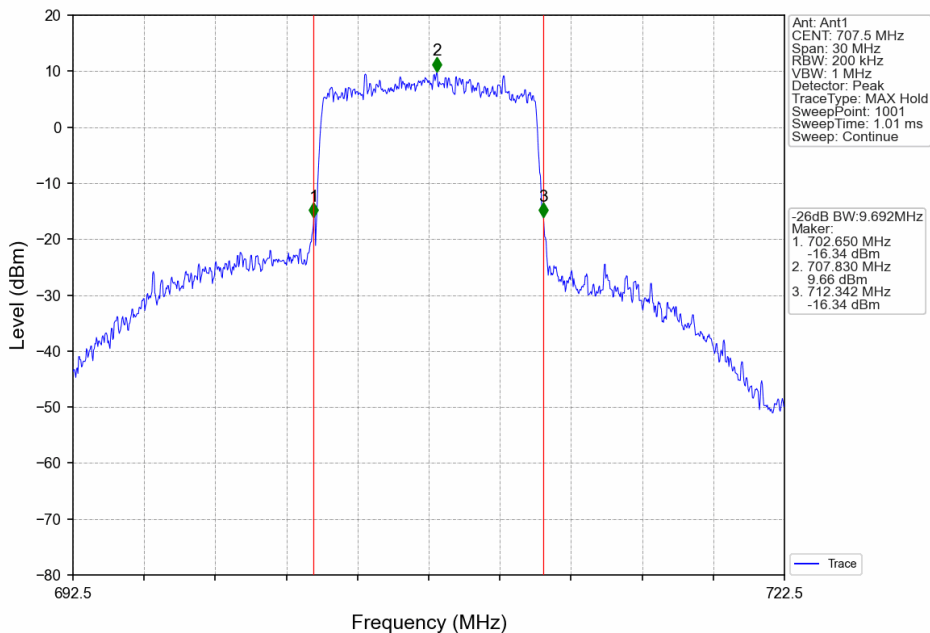


Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV

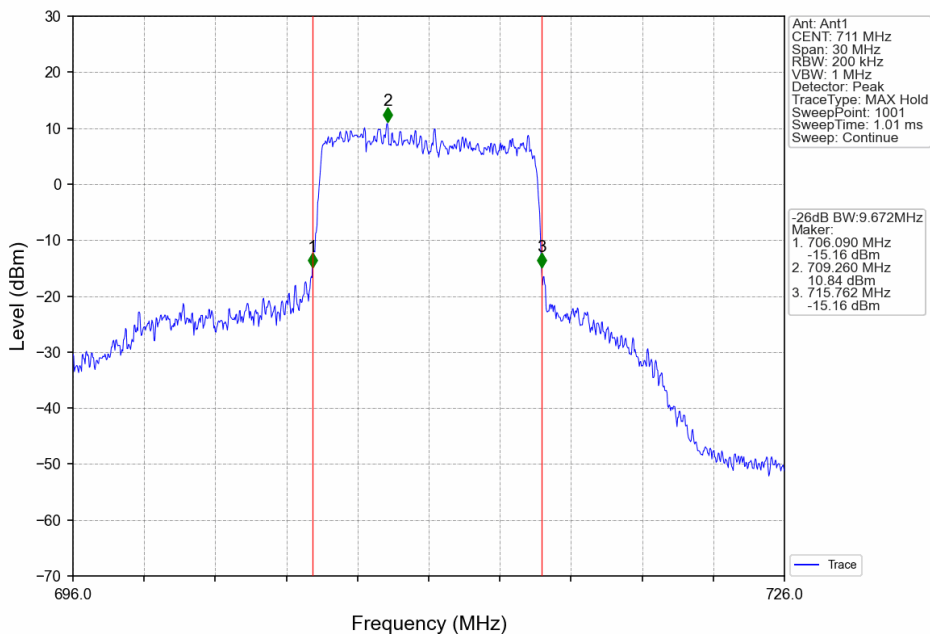




Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV





5. Peak-Average Ratio

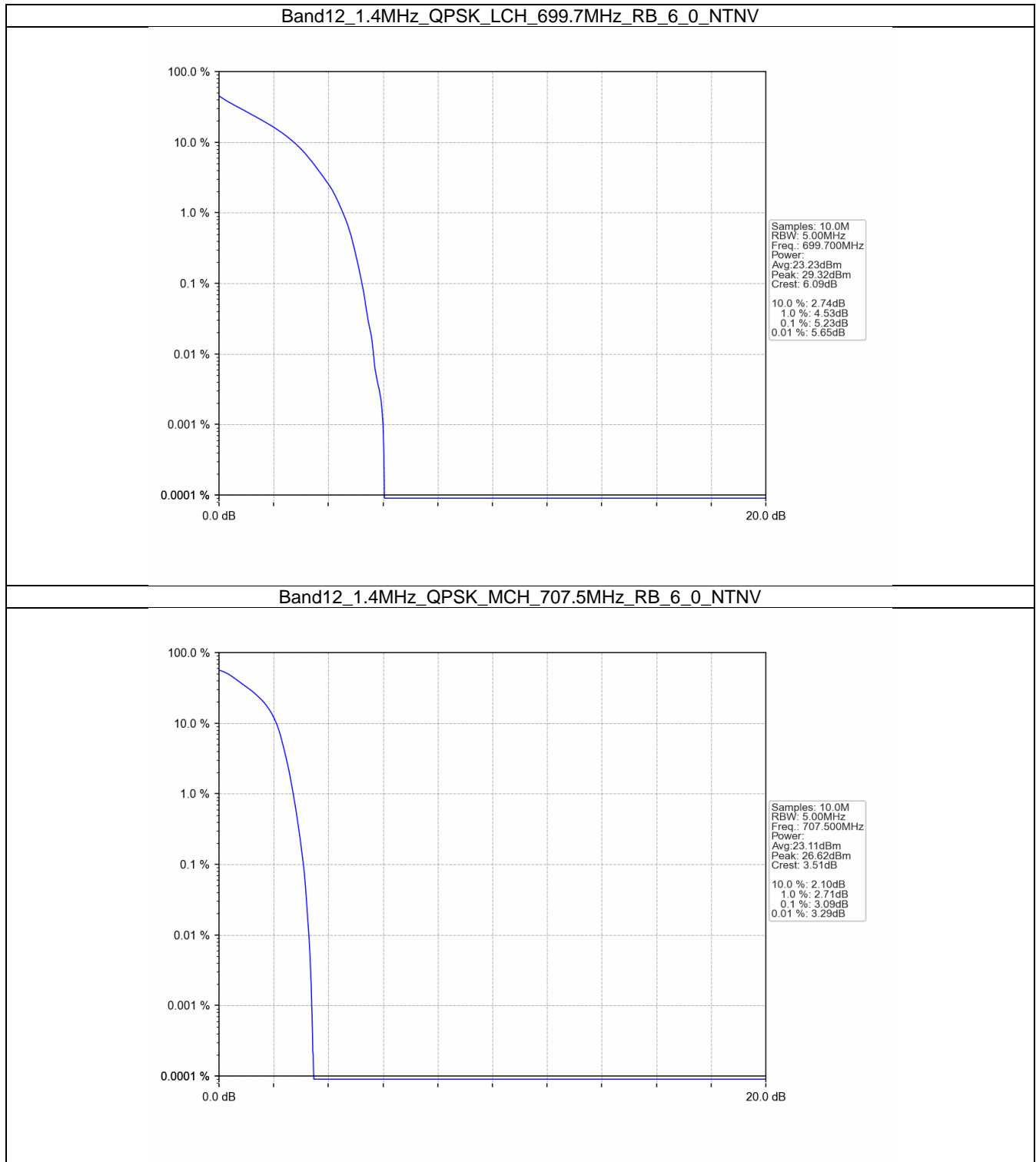
5.1 B12_1.4MHz

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	5.23	<=13	Pass
	707.5	6	0	3.09	<=13	Pass
	715.3	6	0	2.66	<=13	Pass
16QAM	699.7	6	0	6.10	<=13	Pass
	707.5	6	0	4.10	<=13	Pass
	715.3	6	0	3.80	<=13	Pass

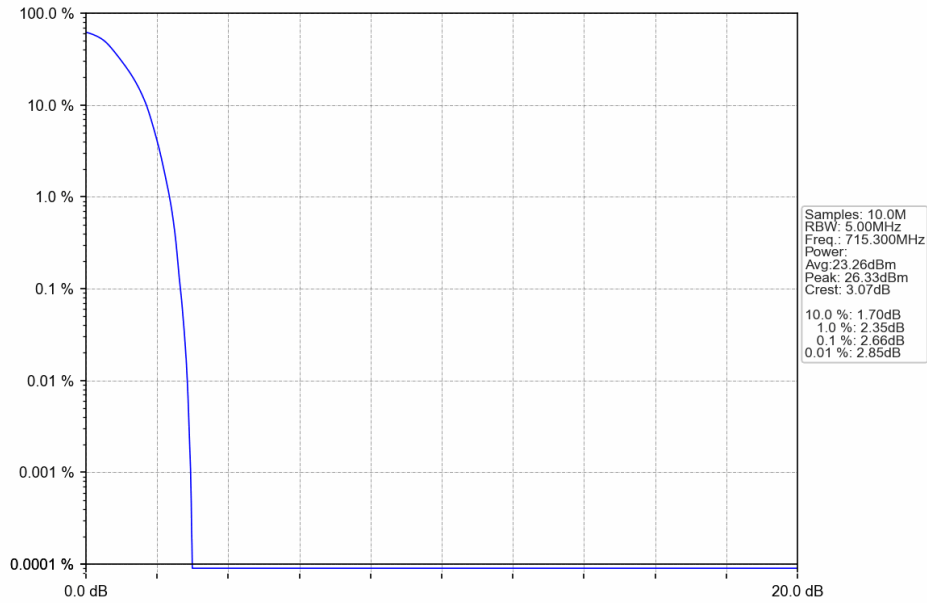


5.1.2 Test Graph

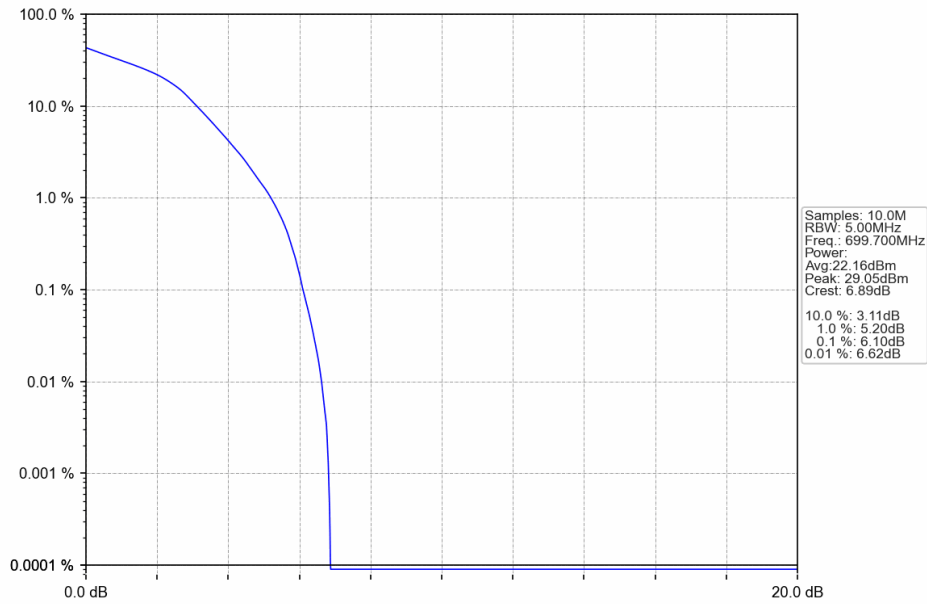




Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV

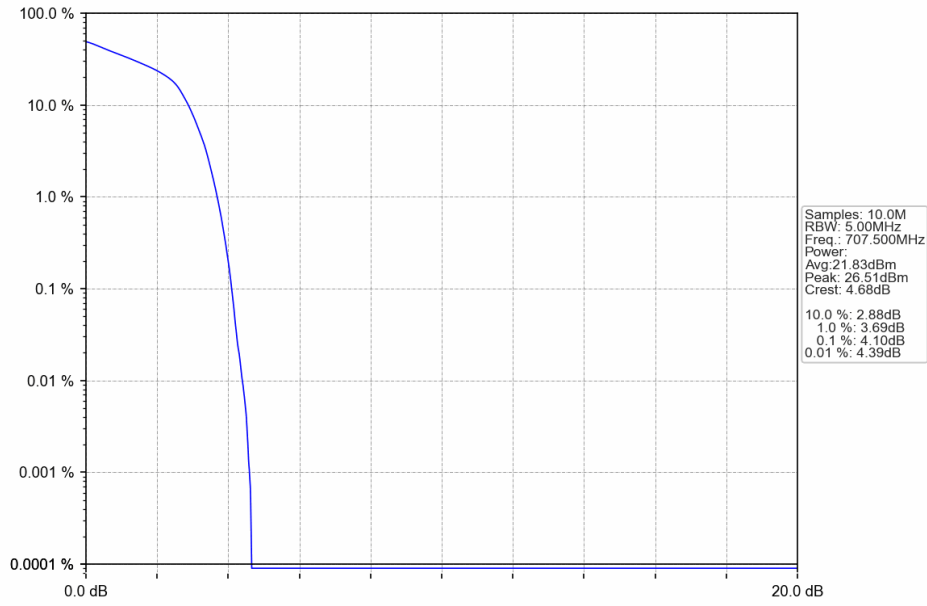


Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV

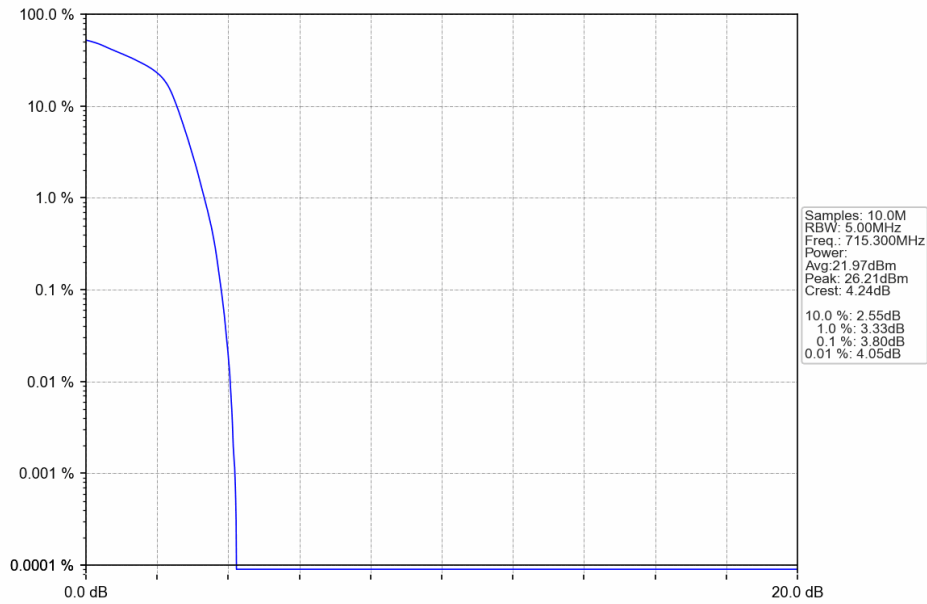




Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV





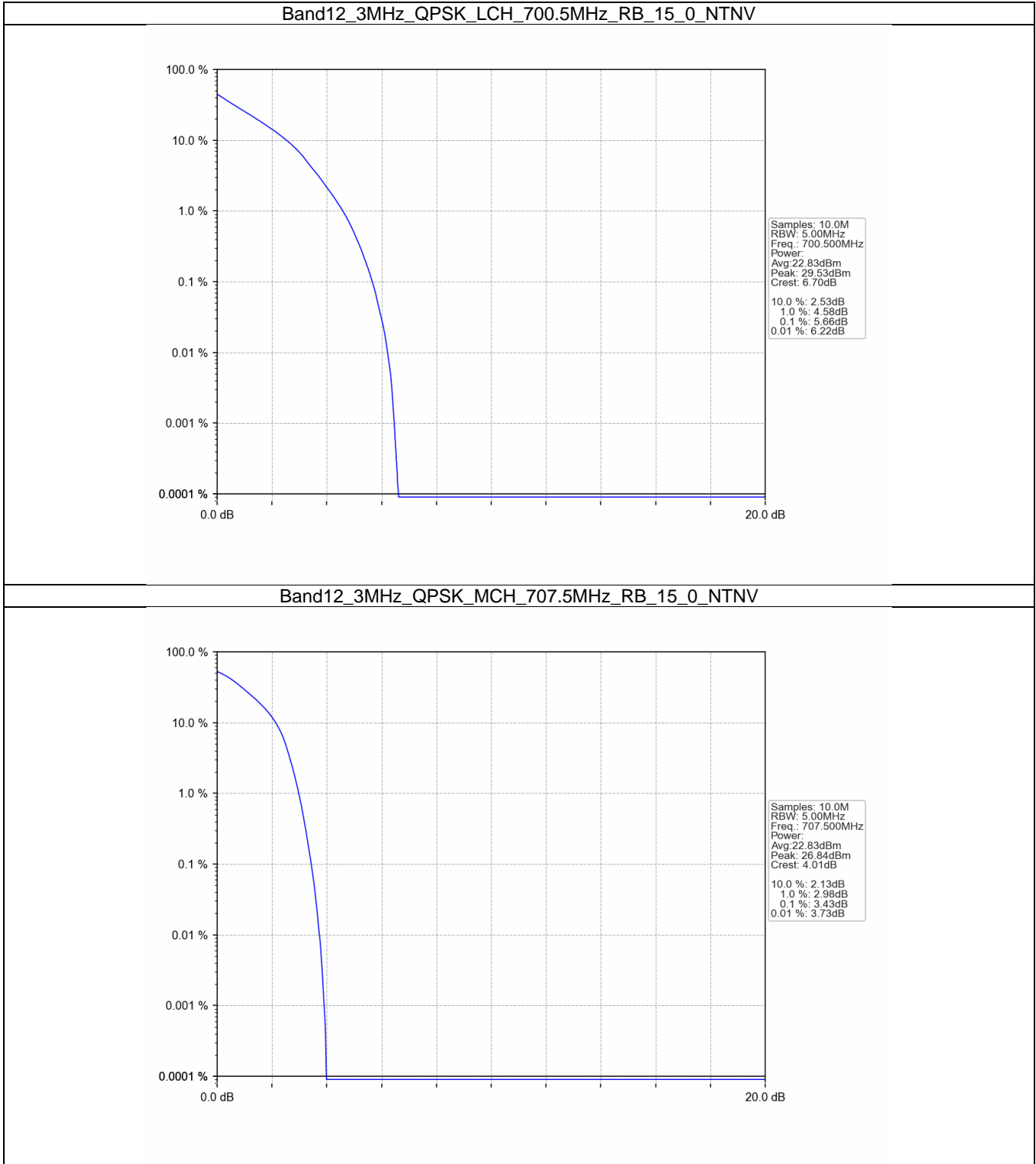
5.2 B12_3MHz

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	5.66	<=13	Pass
	707.5	15	0	3.43	<=13	Pass
	714.5	15	0	3.76	<=13	Pass
16QAM	700.5	15	0	6.57	<=13	Pass
	707.5	15	0	4.36	<=13	Pass
	714.5	15	0	4.75	<=13	Pass

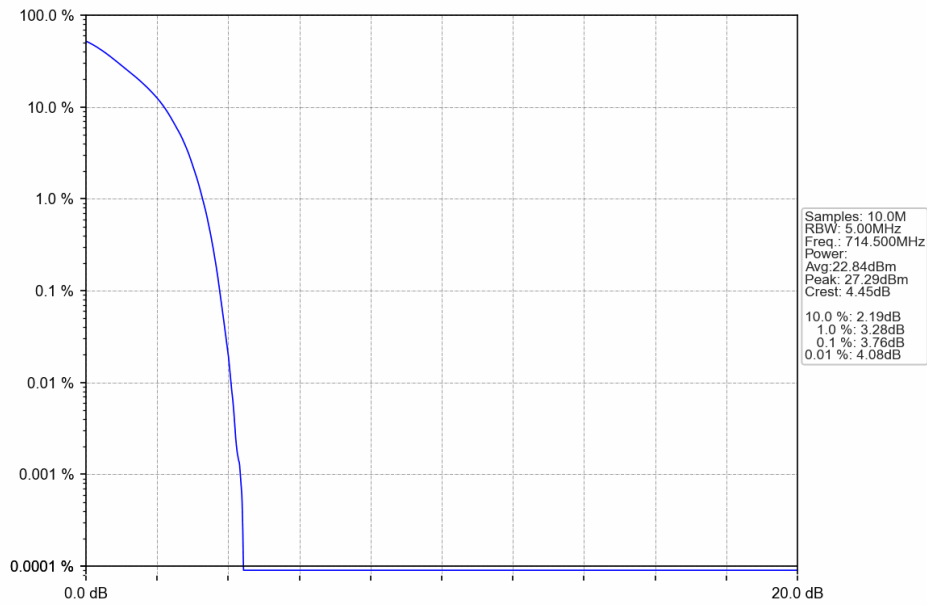


5.2.2 Test Graph





Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

