

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	22.35	0.42	20.62	<=34.77	Pass		
			2	22.50	0.42	20.77	<=34.77	Pass		
			5	22.41	0.42	20.68	<=34.77	Pass		
		3	0	22.33	0.42	20.60	<=34.77	Pass		
			2	22.32	0.42	20.59	<=34.77	Pass		
			3	22.35	0.42	20.62	<=34.77	Pass		
		6	0	21.32	0.42	19.59	<=34.77	Pass		
		707.5	1	0	22.48	0.42	20.75	<=34.77	Pass	
				2	22.66	0.42	20.93	<=34.77	Pass	
	5			22.51	0.42	20.78	<=34.77	Pass		
	3		0	22.49	0.42	20.76	<=34.77	Pass		
			2	22.53	0.42	20.80	<=34.77	Pass		
			3	22.51	0.42	20.78	<=34.77	Pass		
	6		0	21.57	0.42	19.84	<=34.77	Pass		
	715.3		1	0	22.69	0.42	20.96	<=34.77	Pass	
				2	22.90	0.42	21.17	<=34.77	Pass	
		5		22.79	0.42	21.06	<=34.77	Pass		
		3	0	22.60	0.42	20.87	<=34.77	Pass		
			2	22.64	0.42	20.91	<=34.77	Pass		
			3	22.60	0.42	20.87	<=34.77	Pass		
		6	0	21.69	0.42	19.96	<=34.77	Pass		
		16QAM	699.7	1	0	21.12	0.42	19.39	<=34.77	Pass
					2	21.24	0.42	19.51	<=34.77	Pass
	5				21.17	0.42	19.44	<=34.77	Pass	
3	0			21.29	0.42	19.56	<=34.77	Pass		
	2			21.32	0.42	19.59	<=34.77	Pass		
	3			21.33	0.42	19.60	<=34.77	Pass		
6	0			20.24	0.42	18.51	<=34.77	Pass		
707.5	1			0	21.49	0.42	19.76	<=34.77	Pass	
				2	21.62	0.42	19.89	<=34.77	Pass	
			5	21.51	0.42	19.78	<=34.77	Pass		
	3		0	21.51	0.42	19.78	<=34.77	Pass		
			2	21.55	0.42	19.82	<=34.77	Pass		
			3	21.51	0.42	19.78	<=34.77	Pass		
	6		0	20.42	0.42	18.69	<=34.77	Pass		
	715.3		1	0	21.42	0.42	19.69	<=34.77	Pass	
				2	21.60	0.42	19.87	<=34.77	Pass	
5				21.45	0.42	19.72	<=34.77	Pass		
3			0	21.71	0.42	19.98	<=34.77	Pass		
			2	21.73	0.42	20.00	<=34.77	Pass		
			3	21.71	0.42	19.98	<=34.77	Pass		
6			0	20.58	0.42	18.85	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.2 B12_3MHz_ERP

1.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	700.5	1	0	22.47	0.42	20.74	<=34.77	Pass		
			7	22.82	0.42	21.09	<=34.77	Pass		
			14	22.62	0.42	20.89	<=34.77	Pass		
		8	0	21.43	0.42	19.70	<=34.77	Pass		
			4	21.52	0.42	19.79	<=34.77	Pass		
			7	21.46	0.42	19.73	<=34.77	Pass		
		15	0	21.38	0.42	19.65	<=34.77	Pass		
		707.5	1	0	22.58	0.42	20.85	<=34.77	Pass	
				7	22.87	0.42	21.14	<=34.77	Pass	
	14			22.66	0.42	20.93	<=34.77	Pass		
	8		0	21.58	0.42	19.85	<=34.77	Pass		
			4	21.65	0.42	19.92	<=34.77	Pass		
			7	21.67	0.42	19.94	<=34.77	Pass		
	15		0	21.57	0.42	19.84	<=34.77	Pass		
	714.5		1	0	22.72	0.42	20.99	<=34.77	Pass	
				7	22.99	0.42	21.26	<=34.77	Pass	
		14		22.80	0.42	21.07	<=34.77	Pass		
		8	0	21.72	0.42	19.99	<=34.77	Pass		
			4	21.77	0.42	20.04	<=34.77	Pass		
			7	21.72	0.42	19.99	<=34.77	Pass		
		15	0	21.63	0.42	19.90	<=34.77	Pass		
		16QAM	700.5	1	0	21.22	0.42	19.49	<=34.77	Pass
					7	21.55	0.42	19.82	<=34.77	Pass
	14				21.38	0.42	19.65	<=34.77	Pass	
	8			0	20.36	0.42	18.63	<=34.77	Pass	
				4	20.45	0.42	18.72	<=34.77	Pass	
				7	20.41	0.42	18.68	<=34.77	Pass	
15	0			20.36	0.42	18.63	<=34.77	Pass		
707.5	1			0	21.63	0.42	19.90	<=34.77	Pass	
				7	21.89	0.42	20.16	<=34.77	Pass	
			14	21.63	0.42	19.90	<=34.77	Pass		
	8		0	20.52	0.42	18.79	<=34.77	Pass		
			4	20.58	0.42	18.85	<=34.77	Pass		
			7	20.57	0.42	18.84	<=34.77	Pass		
	15		0	20.44	0.42	18.71	<=34.77	Pass		
	714.5		1	0	21.82	0.42	20.09	<=34.77	Pass	
				7	22.15	0.42	20.42	<=34.77	Pass	
14				21.76	0.42	20.03	<=34.77	Pass		
8			0	20.67	0.42	18.94	<=34.77	Pass		
			4	20.71	0.42	18.98	<=34.77	Pass		
			7	20.64	0.42	18.91	<=34.77	Pass		
15			0	20.58	0.42	18.85	<=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 / NTV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	701.5	1	0	22.15	0.42	20.42	<=34.77	Pass
			13	22.40	0.42	20.67	<=34.77	Pass
			24	22.37	0.42	20.64	<=34.77	Pass

16QAM	707.5	12	0	21.35	0.42	19.62	<=34.77	Pass	
			6	21.41	0.42	19.68	<=34.77	Pass	
			13	21.29	0.42	19.56	<=34.77	Pass	
		25	0	21.35	0.42	19.62	<=34.77	Pass	
			1	0	22.42	0.42	20.69	<=34.77	Pass
				13	22.61	0.42	20.88	<=34.77	Pass
		12	24	22.51	0.42	20.78	<=34.77	Pass	
			0	21.42	0.42	19.69	<=34.77	Pass	
			6	21.55	0.42	19.82	<=34.77	Pass	
	25	13	21.61	0.42	19.88	<=34.77	Pass		
		0	21.55	0.42	19.82	<=34.77	Pass		
		713.5	1	0	22.48	0.42	20.75	<=34.77	Pass
	13			22.65	0.42	20.92	<=34.77	Pass	
	24			22.62	0.42	20.89	<=34.77	Pass	
	12	0	21.70	0.42	19.97	<=34.77	Pass		
		6	21.64	0.42	19.91	<=34.77	Pass		
		13	21.47	0.42	19.74	<=34.77	Pass		
	25	0	21.63	0.42	19.90	<=34.77	Pass		
	701.5	1	0	0	21.37	0.42	19.64	<=34.77	Pass
				13	21.61	0.42	19.88	<=34.77	Pass
				24	21.60	0.42	19.87	<=34.77	Pass
			12	0	20.37	0.42	18.64	<=34.77	Pass
				6	20.43	0.42	18.70	<=34.77	Pass
				13	20.31	0.42	18.58	<=34.77	Pass
25		0	20.33	0.42	18.60	<=34.77	Pass		
707.5		1	0	21.45	0.42	19.72	<=34.77	Pass	
			13	21.57	0.42	19.84	<=34.77	Pass	
			24	21.54	0.42	19.81	<=34.77	Pass	
		12	0	20.37	0.42	18.64	<=34.77	Pass	
			6	20.46	0.42	18.73	<=34.77	Pass	
			13	20.54	0.42	18.81	<=34.77	Pass	
		25	0	20.45	0.42	18.72	<=34.77	Pass	
		713.5	1	0	21.62	0.42	19.89	<=34.77	Pass
	13			21.79	0.42	20.06	<=34.77	Pass	
24	21.65			0.42	19.92	<=34.77	Pass		
12	0		20.67	0.42	18.94	<=34.77	Pass		
	6		20.59	0.42	18.86	<=34.77	Pass		
	13		20.42	0.42	18.69	<=34.77	Pass		
25	0	20.59	0.42	18.86	<=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	22.32	0.42	20.59	<=34.77	Pass
			25	22.76	0.42	21.03	<=34.77	Pass
			49	22.65	0.42	20.92	<=34.77	Pass
		25	0	21.69	0.42	19.96	<=34.77	Pass
			13	21.54	0.42	19.81	<=34.77	Pass
			25	21.64	0.42	19.91	<=34.77	Pass
	50	0	21.63	0.42	19.90	<=34.77	Pass	
	707.5	1	0	22.38	0.42	20.65	<=34.77	Pass
			25	22.56	0.42	20.83	<=34.77	Pass

16QAM	711	25	49	22.56	0.42	20.83	<=34.77	Pass		
			0	21.49	0.42	19.76	<=34.77	Pass		
			13	21.62	0.42	19.89	<=34.77	Pass		
			25	21.72	0.42	19.99	<=34.77	Pass		
		50	0	21.62	0.42	19.89	<=34.77	Pass		
			1	0	22.45	0.42	20.72	<=34.77	Pass	
			25	25	22.74	0.42	21.01	<=34.77	Pass	
			49	22.66	0.42	20.93	<=34.77	Pass		
		711	25	0	21.36	0.42	19.63	<=34.77	Pass	
				13	21.59	0.42	19.86	<=34.77	Pass	
				25	21.36	0.42	19.63	<=34.77	Pass	
				50	0	21.33	0.42	19.60	<=34.77	Pass
	16QAM	704	1	0	21.05	0.42	19.32	<=34.77	Pass	
				25	21.50	0.42	19.77	<=34.77	Pass	
				49	21.34	0.42	19.61	<=34.77	Pass	
				50	0	20.59	0.42	18.86	<=34.77	Pass
			25	0	20.64	0.42	18.91	<=34.77	Pass	
				13	20.50	0.42	18.77	<=34.77	Pass	
				25	20.54	0.42	18.81	<=34.77	Pass	
				50	0	20.59	0.42	18.86	<=34.77	Pass
			707.5	1	0	21.45	0.42	19.72	<=34.77	Pass
					25	21.70	0.42	19.97	<=34.77	Pass
					49	21.59	0.42	19.86	<=34.77	Pass
					50	0	20.54	0.42	18.81	<=34.77
25		0		20.46	0.42	18.73	<=34.77	Pass		
		13		20.56	0.42	18.83	<=34.77	Pass		
		25		20.67	0.42	18.94	<=34.77	Pass		
		50		0	20.54	0.42	18.81	<=34.77	Pass	
711		1		0	21.52	0.42	19.79	<=34.77	Pass	
				25	21.82	0.42	20.09	<=34.77	Pass	
				49	21.71	0.42	19.98	<=34.77	Pass	
				50	0	20.31	0.42	18.58	<=34.77	Pass
		25	0	20.35	0.42	18.62	<=34.77	Pass		
			13	20.62	0.42	18.89	<=34.77	Pass		
			25	20.36	0.42	18.63	<=34.77	Pass		
			50	0	20.31	0.42	18.58	<=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	-3.576	-0.0051	-2.5 to 2.5	Pass			
					3.85	-7.653	-0.0109	-2.5 to 2.5	Pass			
					4.43	-6.952	-0.0099	-2.5 to 2.5	Pass			
				-30	3.85	-6.194	-0.0089	-2.5 to 2.5	Pass			
					-20	3.85	-5.794	-0.0083	-2.5 to 2.5	Pass		
						-10	3.85	-4.077	-0.0058	-2.5 to 2.5	Pass	
					0	3.85	-5.593	-0.0080	-2.5 to 2.5	Pass		
					10	3.85	-6.452	-0.0092	-2.5 to 2.5	Pass		
					30	3.85	-9.470	-0.0135	-2.5 to 2.5	Pass		
					40	3.85	-7.868	-0.0112	-2.5 to 2.5	Pass		
				50	3.85	-8.197	-0.0117	-2.5 to 2.5	Pass			
				707.5	6	0	20	3.27	-10.529	-0.0149	-2.5 to 2.5	Pass

					3.85	-6.924	-0.0098	-2.5 to 2.5	Pass
					4.43	-3.176	-0.0045	-2.5 to 2.5	Pass
				-30	3.85	-3.891	-0.0055	-2.5 to 2.5	Pass
				-20	3.85	-6.223	-0.0088	-2.5 to 2.5	Pass
				-10	3.85	-8.211	-0.0116	-2.5 to 2.5	Pass
				0	3.85	-3.018	-0.0043	-2.5 to 2.5	Pass
				10	3.85	-5.236	-0.0074	-2.5 to 2.5	Pass
				30	3.85	-3.576	-0.0051	-2.5 to 2.5	Pass
				40	3.85	-9.127	-0.0129	-2.5 to 2.5	Pass
	50	3.85	-13.261	-0.0187	-2.5 to 2.5	Pass			
	715.3	6	0	20	3.27	-6.781	-0.0095	-2.5 to 2.5	Pass
					3.85	-2.904	-0.0041	-2.5 to 2.5	Pass
					4.43	-8.340	-0.0117	-2.5 to 2.5	Pass
				-30	3.85	-3.862	-0.0054	-2.5 to 2.5	Pass
				-20	3.85	-5.107	-0.0071	-2.5 to 2.5	Pass
				-10	3.85	-6.022	-0.0084	-2.5 to 2.5	Pass
				0	3.85	-6.223	-0.0087	-2.5 to 2.5	Pass
				10	3.85	-6.480	-0.0091	-2.5 to 2.5	Pass
30				3.85	-3.648	-0.0051	-2.5 to 2.5	Pass	
40	3.85	-6.251	-0.0087	-2.5 to 2.5	Pass				
50	3.85	-2.460	-0.0034	-2.5 to 2.5	Pass				
16QAM	699.7	6	0	20	3.27	-3.347	-0.0048	-2.5 to 2.5	Pass
					3.85	-3.576	-0.0051	-2.5 to 2.5	Pass
					4.43	-5.221	-0.0075	-2.5 to 2.5	Pass
				-30	3.85	-6.309	-0.0090	-2.5 to 2.5	Pass
				-20	3.85	-5.636	-0.0081	-2.5 to 2.5	Pass
				-10	3.85	-20.285	-0.0290	-2.5 to 2.5	Pass
				0	3.85	-6.909	-0.0099	-2.5 to 2.5	Pass
				10	3.85	-4.778	-0.0068	-2.5 to 2.5	Pass
				30	3.85	-6.909	-0.0099	-2.5 to 2.5	Pass
	40	3.85	-5.994	-0.0086	-2.5 to 2.5	Pass			
	50	3.85	-7.639	-0.0109	-2.5 to 2.5	Pass			
	707.5	6	0	20	3.27	-10.428	-0.0147	-2.5 to 2.5	Pass
					3.85	-6.537	-0.0092	-2.5 to 2.5	Pass
					4.43	-6.037	-0.0085	-2.5 to 2.5	Pass
				-30	3.85	-9.241	-0.0131	-2.5 to 2.5	Pass
				-20	3.85	-4.048	-0.0057	-2.5 to 2.5	Pass
				-10	3.85	-3.419	-0.0048	-2.5 to 2.5	Pass
				0	3.85	-7.753	-0.0110	-2.5 to 2.5	Pass
10				3.85	-15.936	-0.0225	-2.5 to 2.5	Pass	
30				3.85	-7.596	-0.0107	-2.5 to 2.5	Pass	
40	3.85	-8.368	-0.0118	-2.5 to 2.5	Pass				
50	3.85	-7.296	-0.0103	-2.5 to 2.5	Pass				
715.3	6	0	20	3.27	-9.055	-0.0127	-2.5 to 2.5	Pass	
				3.85	-10.157	-0.0142	-2.5 to 2.5	Pass	
				4.43	-11.358	-0.0159	-2.5 to 2.5	Pass	
			-30	3.85	-6.809	-0.0095	-2.5 to 2.5	Pass	
			-20	3.85	-8.955	-0.0125	-2.5 to 2.5	Pass	
			-10	3.85	-11.430	-0.0160	-2.5 to 2.5	Pass	
			0	3.85	-2.174	-0.0030	-2.5 to 2.5	Pass	
			10	3.85	-3.934	-0.0055	-2.5 to 2.5	Pass	
			30	3.85	-9.284	-0.0130	-2.5 to 2.5	Pass	
40	3.85	-7.982	-0.0112	-2.5 to 2.5	Pass				
50	3.85	-1.960	-0.0027	-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	-9.599	-0.0137	-2.5 to 2.5	Pass
					3.85	-3.233	-0.0046	-2.5 to 2.5	Pass
					4.43	-9.685	-0.0138	-2.5 to 2.5	Pass
				-30	3.85	-7.710	-0.0110	-2.5 to 2.5	Pass
				-20	3.85	-5.651	-0.0081	-2.5 to 2.5	Pass
				-10	3.85	-5.994	-0.0086	-2.5 to 2.5	Pass
				0	3.85	-5.836	-0.0083	-2.5 to 2.5	Pass
				10	3.85	-8.569	-0.0122	-2.5 to 2.5	Pass
				30	3.85	-4.435	-0.0063	-2.5 to 2.5	Pass
				40	3.85	-7.997	-0.0114	-2.5 to 2.5	Pass
	50	3.85	-2.060	-0.0029	-2.5 to 2.5	Pass			
	707.5	15	0	20	3.27	-4.621	-0.0065	-2.5 to 2.5	Pass
					3.85	-8.869	-0.0125	-2.5 to 2.5	Pass
					4.43	-3.133	-0.0044	-2.5 to 2.5	Pass
				-30	3.85	-4.935	-0.0070	-2.5 to 2.5	Pass
				-20	3.85	-5.450	-0.0077	-2.5 to 2.5	Pass
				-10	3.85	-7.310	-0.0103	-2.5 to 2.5	Pass
				0	3.85	-0.772	-0.0011	-2.5 to 2.5	Pass
				10	3.85	-7.339	-0.0104	-2.5 to 2.5	Pass
				30	3.85	-3.490	-0.0049	-2.5 to 2.5	Pass
				40	3.85	-5.121	-0.0072	-2.5 to 2.5	Pass
	50	3.85	-7.253	-0.0103	-2.5 to 2.5	Pass			
	714.5	15	0	20	3.27	-7.296	-0.0102	-2.5 to 2.5	Pass
					3.85	-8.554	-0.0120	-2.5 to 2.5	Pass
					4.43	-8.755	-0.0123	-2.5 to 2.5	Pass
				-30	3.85	-4.320	-0.0060	-2.5 to 2.5	Pass
				-20	3.85	-9.828	-0.0138	-2.5 to 2.5	Pass
				-10	3.85	-8.340	-0.0117	-2.5 to 2.5	Pass
				0	3.85	-4.649	-0.0065	-2.5 to 2.5	Pass
				10	3.85	-6.495	-0.0091	-2.5 to 2.5	Pass
30				3.85	-10.829	-0.0152	-2.5 to 2.5	Pass	
40				3.85	-8.283	-0.0116	-2.5 to 2.5	Pass	
50	3.85	-6.094	-0.0085	-2.5 to 2.5	Pass				
16QAM	700.5	15	0	20	3.27	-6.952	-0.0099	-2.5 to 2.5	Pass
					3.85	-8.726	-0.0125	-2.5 to 2.5	Pass
					4.43	-3.018	-0.0043	-2.5 to 2.5	Pass
				-30	3.85	-4.706	-0.0067	-2.5 to 2.5	Pass
				-20	3.85	-6.881	-0.0098	-2.5 to 2.5	Pass
				-10	3.85	-8.855	-0.0126	-2.5 to 2.5	Pass
				0	3.85	-9.327	-0.0133	-2.5 to 2.5	Pass
				10	3.85	-6.938	-0.0099	-2.5 to 2.5	Pass
				30	3.85	-9.642	-0.0138	-2.5 to 2.5	Pass
				40	3.85	-8.712	-0.0124	-2.5 to 2.5	Pass
	50	3.85	-6.194	-0.0088	-2.5 to 2.5	Pass			
	707.5	15	0	20	3.27	-2.661	-0.0038	-2.5 to 2.5	Pass
					3.85	-6.366	-0.0090	-2.5 to 2.5	Pass
					4.43	-5.851	-0.0083	-2.5 to 2.5	Pass
				-30	3.85	-10.128	-0.0143	-2.5 to 2.5	Pass
				-20	3.85	-8.183	-0.0116	-2.5 to 2.5	Pass
				-10	3.85	-1.659	-0.0023	-2.5 to 2.5	Pass
				0	3.85	-5.693	-0.0080	-2.5 to 2.5	Pass
				10	3.85	-6.537	-0.0092	-2.5 to 2.5	Pass
				30	3.85	-4.148	-0.0059	-2.5 to 2.5	Pass
40				3.85	-6.409	-0.0091	-2.5 to 2.5	Pass	

	714.5	15	0	50	3.85	-8.197	-0.0116	-2.5 to 2.5	Pass
				20	3.27	-5.679	-0.0079	-2.5 to 2.5	Pass
					3.85	-5.937	-0.0083	-2.5 to 2.5	Pass
				-30	4.43	-8.984	-0.0126	-2.5 to 2.5	Pass
					3.85	-4.349	-0.0061	-2.5 to 2.5	Pass
				-20	3.85	-7.353	-0.0103	-2.5 to 2.5	Pass
				-10	3.85	-4.921	-0.0069	-2.5 to 2.5	Pass
				0	3.85	-4.034	-0.0056	-2.5 to 2.5	Pass
				10	3.85	-5.093	-0.0071	-2.5 to 2.5	Pass
				30	3.85	-1.502	-0.0021	-2.5 to 2.5	Pass
				40	3.85	-3.490	-0.0049	-2.5 to 2.5	Pass
				50	3.85	-6.838	-0.0096	-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	-2.489	-0.0035	-2.5 to 2.5	Pass
					3.85	-7.124	-0.0102	-2.5 to 2.5	Pass
					4.43	-5.493	-0.0078	-2.5 to 2.5	Pass
				-30	3.85	-9.370	-0.0134	-2.5 to 2.5	Pass
				-20	3.85	-6.266	-0.0089	-2.5 to 2.5	Pass
				-10	3.85	-6.423	-0.0092	-2.5 to 2.5	Pass
				0	3.85	-5.150	-0.0073	-2.5 to 2.5	Pass
				10	3.85	-9.098	-0.0130	-2.5 to 2.5	Pass
				30	3.85	-7.968	-0.0114	-2.5 to 2.5	Pass
				40	3.85	-9.599	-0.0137	-2.5 to 2.5	Pass
				50	3.85	-6.809	-0.0097	-2.5 to 2.5	Pass
				707.5	25	0	20	3.27	-7.195
	3.85	-5.708	-0.0081					-2.5 to 2.5	Pass
	4.43	-2.589	-0.0037					-2.5 to 2.5	Pass
	-30	3.85	-5.550				-0.0078	-2.5 to 2.5	Pass
	-20	3.85	-5.393				-0.0076	-2.5 to 2.5	Pass
	-10	3.85	-6.108				-0.0086	-2.5 to 2.5	Pass
	0	3.85	-3.991				-0.0056	-2.5 to 2.5	Pass
	10	3.85	-6.194				-0.0088	-2.5 to 2.5	Pass
	30	3.85	-8.297				-0.0117	-2.5 to 2.5	Pass
	40	3.85	-4.292				-0.0061	-2.5 to 2.5	Pass
	50	3.85	-8.512				-0.0120	-2.5 to 2.5	Pass
	713.5	25	0				20	3.27	-9.756
				3.85	-8.740	-0.0122		-2.5 to 2.5	Pass
				4.43	-5.479	-0.0077		-2.5 to 2.5	Pass
				-30	3.85	-4.649	-0.0065	-2.5 to 2.5	Pass
				-20	3.85	-8.755	-0.0123	-2.5 to 2.5	Pass
				-10	3.85	-7.925	-0.0111	-2.5 to 2.5	Pass
				0	3.85	-7.796	-0.0109	-2.5 to 2.5	Pass
				10	3.85	-6.294	-0.0088	-2.5 to 2.5	Pass
30				3.85	-8.068	-0.0113	-2.5 to 2.5	Pass	
40				3.85	-5.708	-0.0080	-2.5 to 2.5	Pass	
50				3.85	-6.180	-0.0087	-2.5 to 2.5	Pass	
16QAM				701.5	25	0	20	3.27	-5.736
	3.85	-5.093	-0.0073					-2.5 to 2.5	Pass
	4.43	-6.495	-0.0093					-2.5 to 2.5	Pass
	-30	3.85	-8.883				-0.0127	-2.5 to 2.5	Pass

	707.5	25	0	-20	3.85	-8.440	-0.0120	-2.5 to 2.5	Pass
				-10	3.85	-7.367	-0.0105	-2.5 to 2.5	Pass
				0	3.85	-6.995	-0.0100	-2.5 to 2.5	Pass
				10	3.85	-4.349	-0.0062	-2.5 to 2.5	Pass
				30	3.85	-6.309	-0.0090	-2.5 to 2.5	Pass
				40	3.85	-7.582	-0.0108	-2.5 to 2.5	Pass
				50	3.85	-6.580	-0.0094	-2.5 to 2.5	Pass
				20	3.27	-4.892	-0.0069	-2.5 to 2.5	Pass
					3.85	-6.552	-0.0093	-2.5 to 2.5	Pass
					4.43	-9.356	-0.0132	-2.5 to 2.5	Pass
	-30	3.85	-7.339	-0.0104	-2.5 to 2.5	Pass			
	-20	3.85	-5.479	-0.0077	-2.5 to 2.5	Pass			
	-10	3.85	-8.254	-0.0117	-2.5 to 2.5	Pass			
	0	3.85	-6.566	-0.0093	-2.5 to 2.5	Pass			
	10	3.85	-6.337	-0.0090	-2.5 to 2.5	Pass			
	30	3.85	-7.725	-0.0109	-2.5 to 2.5	Pass			
	40	3.85	-5.236	-0.0074	-2.5 to 2.5	Pass			
	50	3.85	-8.039	-0.0114	-2.5 to 2.5	Pass			
	713.5	25	0	20	3.27	-6.294	-0.0088	-2.5 to 2.5	Pass
					3.85	-3.362	-0.0047	-2.5 to 2.5	Pass
					4.43	-4.134	-0.0058	-2.5 to 2.5	Pass
				-30	3.85	-5.693	-0.0080	-2.5 to 2.5	Pass
				-20	3.85	-2.217	-0.0031	-2.5 to 2.5	Pass
				-10	3.85	-4.849	-0.0068	-2.5 to 2.5	Pass
				0	3.85	-8.297	-0.0116	-2.5 to 2.5	Pass
				10	3.85	-6.008	-0.0084	-2.5 to 2.5	Pass
				30	3.85	-5.951	-0.0083	-2.5 to 2.5	Pass
				40	3.85	-3.805	-0.0053	-2.5 to 2.5	Pass
	50	3.85	-8.297	-0.0116	-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	-8.626	-0.0123	-2.5 to 2.5	Pass
					3.85	-5.164	-0.0073	-2.5 to 2.5	Pass
					4.43	-8.039	-0.0114	-2.5 to 2.5	Pass
				-30	3.85	-7.467	-0.0106	-2.5 to 2.5	Pass
				-20	3.85	-4.492	-0.0064	-2.5 to 2.5	Pass
				-10	3.85	-4.363	-0.0062	-2.5 to 2.5	Pass
				0	3.85	-4.034	-0.0057	-2.5 to 2.5	Pass
				10	3.85	-5.350	-0.0076	-2.5 to 2.5	Pass
				30	3.85	-5.422	-0.0077	-2.5 to 2.5	Pass
				40	3.85	-5.093	-0.0072	-2.5 to 2.5	Pass
	50	3.85	-6.208	-0.0088	-2.5 to 2.5	Pass			
	707.5	50	0	20	3.27	-6.795	-0.0096	-2.5 to 2.5	Pass
					3.85	-7.739	-0.0109	-2.5 to 2.5	Pass
					4.43	-10.943	-0.0155	-2.5 to 2.5	Pass
				-30	3.85	-6.866	-0.0097	-2.5 to 2.5	Pass
				-20	3.85	-3.819	-0.0054	-2.5 to 2.5	Pass
				-10	3.85	-7.224	-0.0102	-2.5 to 2.5	Pass
				0	3.85	-6.094	-0.0086	-2.5 to 2.5	Pass
				10	3.85	-5.536	-0.0078	-2.5 to 2.5	Pass
				30	3.85	-2.618	-0.0037	-2.5 to 2.5	Pass

	711	50	0	40	3.85	-0.257	-0.0004	-2.5 to 2.5	Pass				
				50	3.85	-2.632	-0.0037	-2.5 to 2.5	Pass				
				20	3.27	-7.296	-0.0103	-2.5 to 2.5	Pass				
					3.85	-4.892	-0.0069	-2.5 to 2.5	Pass				
					4.43	-5.522	-0.0078	-2.5 to 2.5	Pass				
				-30	3.85	-5.407	-0.0076	-2.5 to 2.5	Pass				
				-20	3.85	-4.063	-0.0057	-2.5 to 2.5	Pass				
				-10	3.85	-7.682	-0.0108	-2.5 to 2.5	Pass				
				0	3.85	-3.819	-0.0054	-2.5 to 2.5	Pass				
				10	3.85	-6.752	-0.0095	-2.5 to 2.5	Pass				
				30	3.85	-6.194	-0.0087	-2.5 to 2.5	Pass				
				40	3.85	-3.405	-0.0048	-2.5 to 2.5	Pass				
				50	3.85	-3.548	-0.0050	-2.5 to 2.5	Pass				
				16QAM	704	50	0	20	3.27	-4.034	-0.0057	-2.5 to 2.5	Pass
									3.85	-7.224	-0.0103	-2.5 to 2.5	Pass
4.43	-4.249	-0.0060	-2.5 to 2.5						Pass				
-30	3.85	-3.963	-0.0056					-2.5 to 2.5	Pass				
-20	3.85	-8.197	-0.0116					-2.5 to 2.5	Pass				
-10	3.85	-6.423	-0.0091					-2.5 to 2.5	Pass				
0	3.85	-8.869	-0.0126					-2.5 to 2.5	Pass				
10	3.85	-3.819	-0.0054					-2.5 to 2.5	Pass				
30	3.85	-2.775	-0.0039					-2.5 to 2.5	Pass				
40	3.85	-3.676	-0.0052					-2.5 to 2.5	Pass				
50	3.85	-3.419	-0.0049					-2.5 to 2.5	Pass				
707.5	50	0	20					3.27	-6.394	-0.0090	-2.5 to 2.5	Pass	
					3.85	-5.136	-0.0073	-2.5 to 2.5	Pass				
					4.43	-6.266	-0.0089	-2.5 to 2.5	Pass				
			-30		3.85	-6.194	-0.0088	-2.5 to 2.5	Pass				
			-20		3.85	-2.918	-0.0041	-2.5 to 2.5	Pass				
			-10		3.85	-4.778	-0.0068	-2.5 to 2.5	Pass				
			0		3.85	-3.691	-0.0052	-2.5 to 2.5	Pass				
			10		3.85	-7.281	-0.0103	-2.5 to 2.5	Pass				
			30		3.85	-6.394	-0.0090	-2.5 to 2.5	Pass				
			40		3.85	-7.267	-0.0103	-2.5 to 2.5	Pass				
			50		3.85	-3.376	-0.0048	-2.5 to 2.5	Pass				
			711		50	0	20	3.27	-2.947	-0.0041	-2.5 to 2.5	Pass	
3.85	-4.864	-0.0068						-2.5 to 2.5	Pass				
4.43	-7.653	-0.0108						-2.5 to 2.5	Pass				
-30	3.85	-7.310					-0.0103	-2.5 to 2.5	Pass				
-20	3.85	-4.978					-0.0070	-2.5 to 2.5	Pass				
-10	3.85	-7.267		-0.0102			-2.5 to 2.5	Pass					
0	3.85	-5.293		-0.0074			-2.5 to 2.5	Pass					
10	3.85	-6.495		-0.0091			-2.5 to 2.5	Pass					
30	3.85	-8.883		-0.0125			-2.5 to 2.5	Pass					
40	3.85	-5.336		-0.0075			-2.5 to 2.5	Pass					
50	3.85	-6.738		-0.0095			-2.5 to 2.5	Pass					

3. Modulation Characteristics

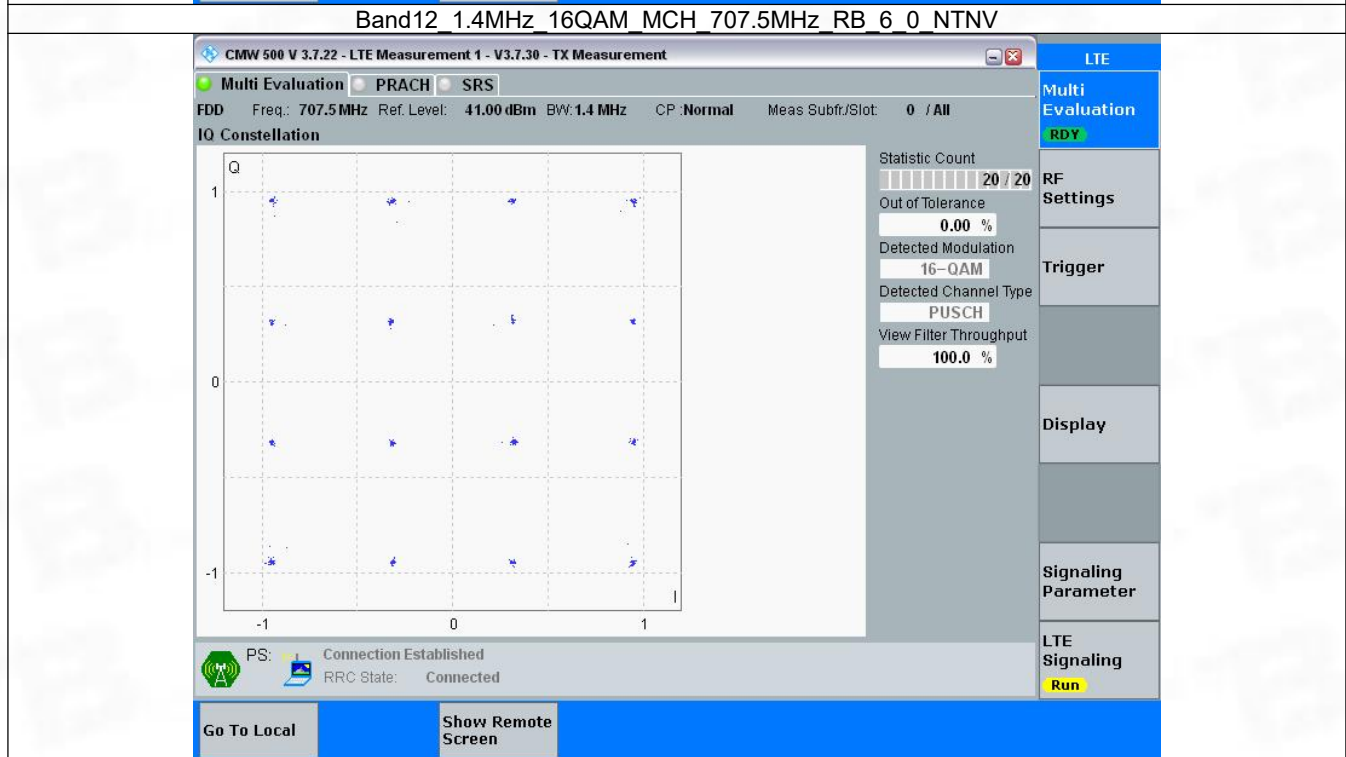
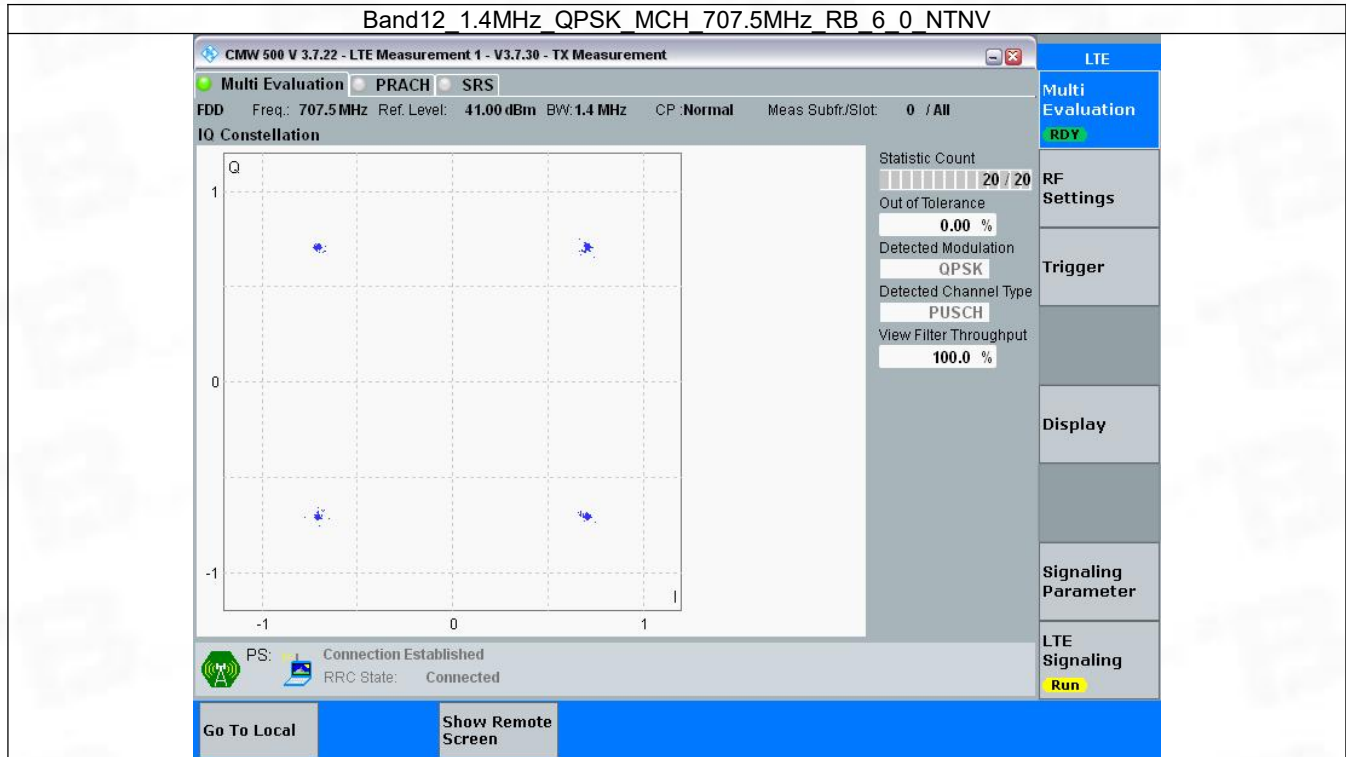
3.1 B12_1.4MHz

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

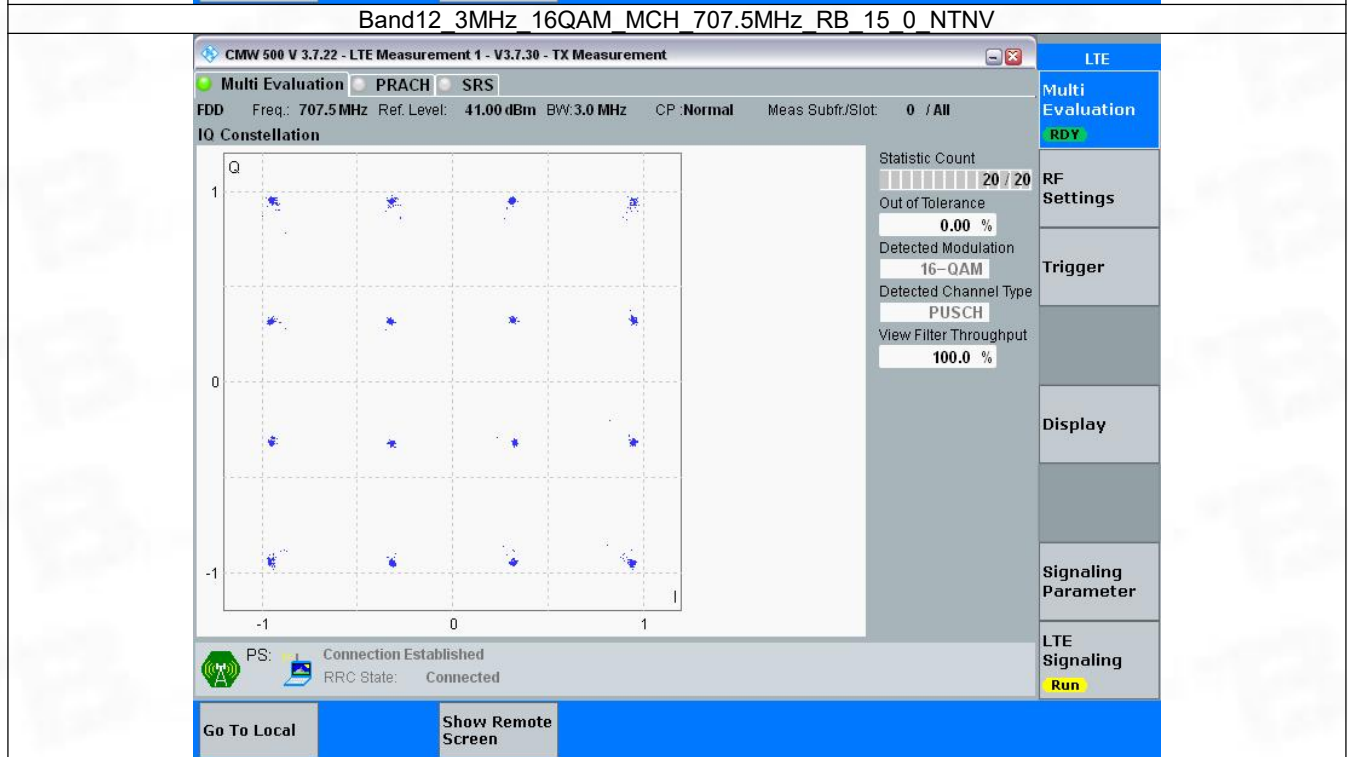
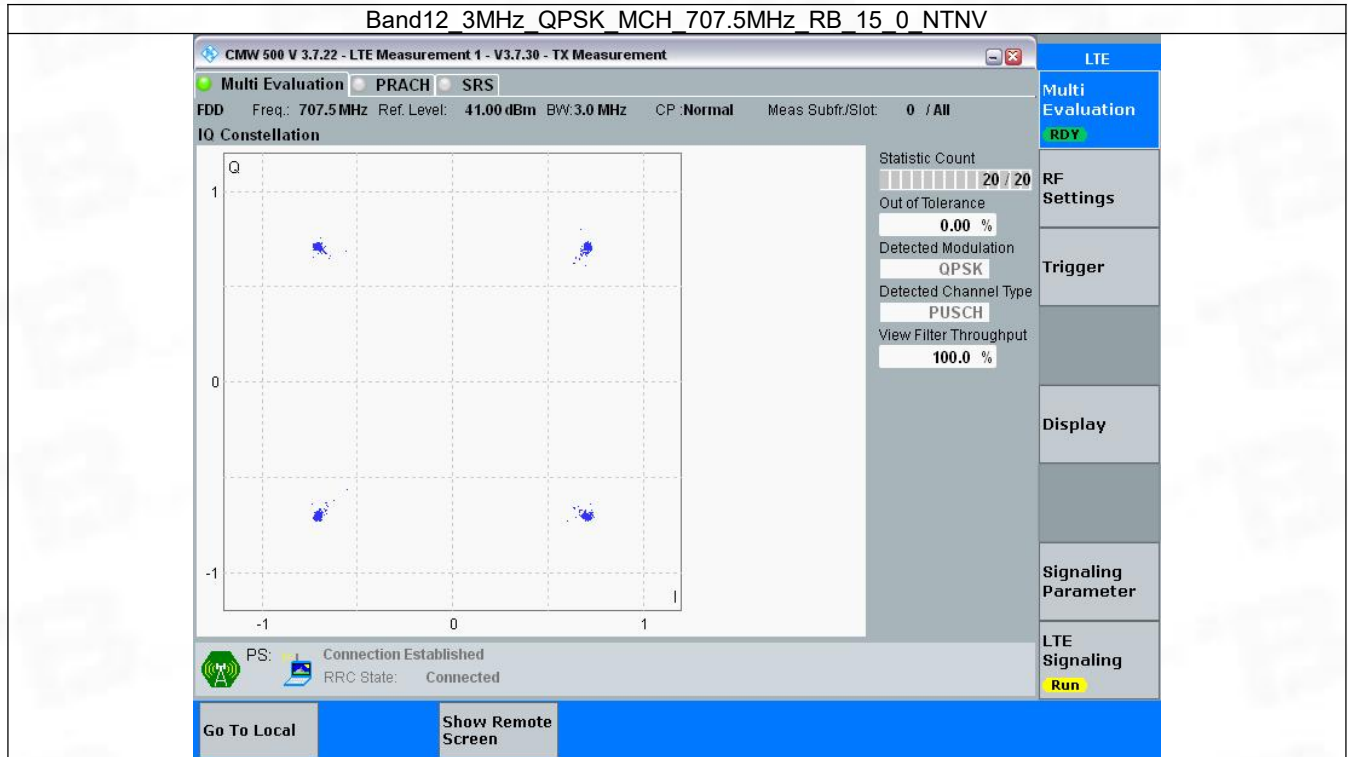


3.2 B12_3MHz

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

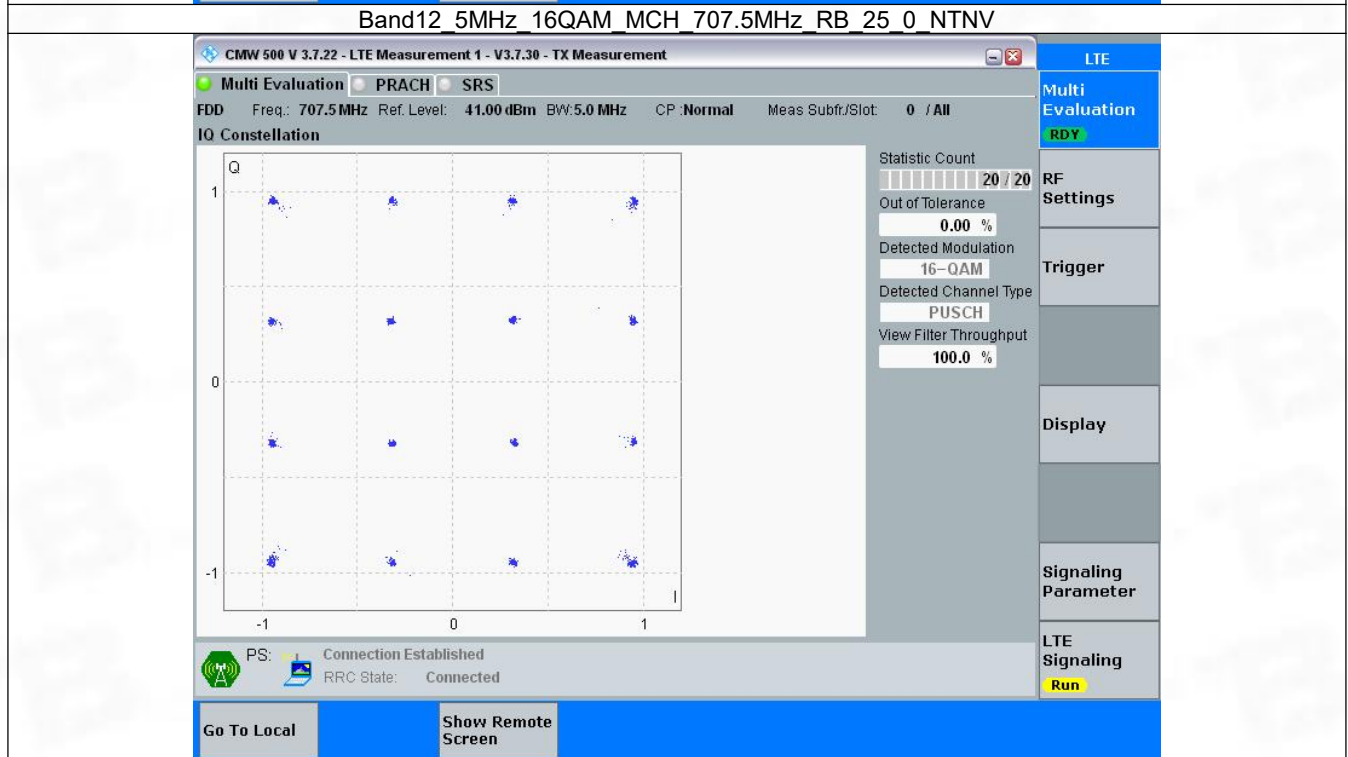
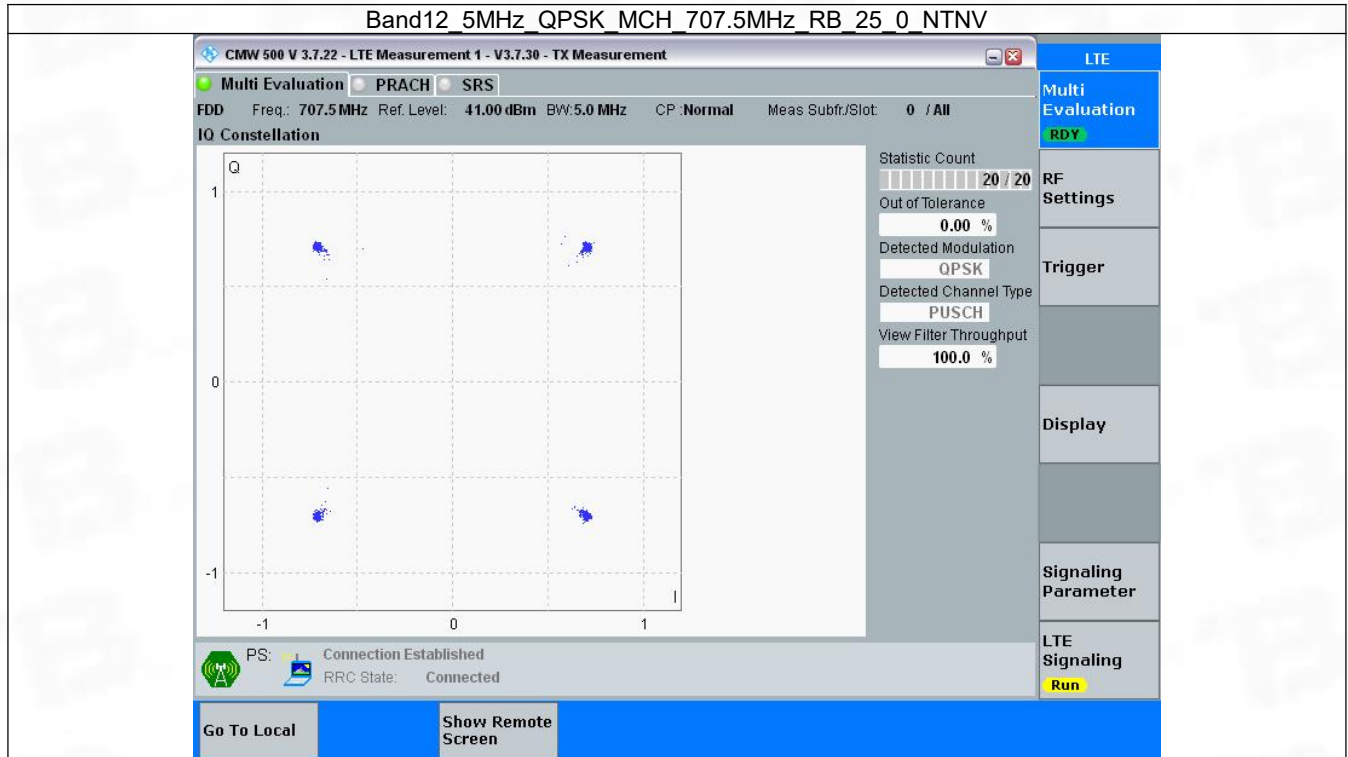


3.3 B12_5MHz

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

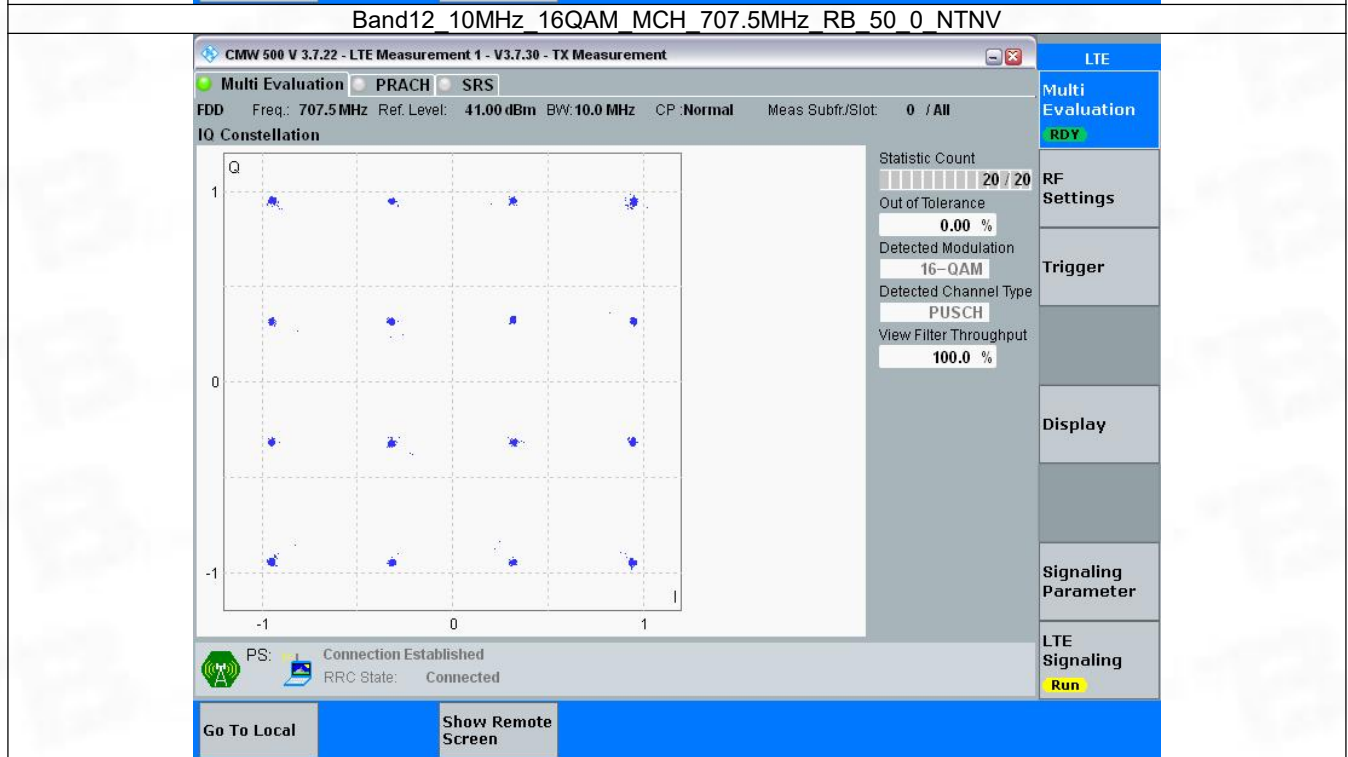
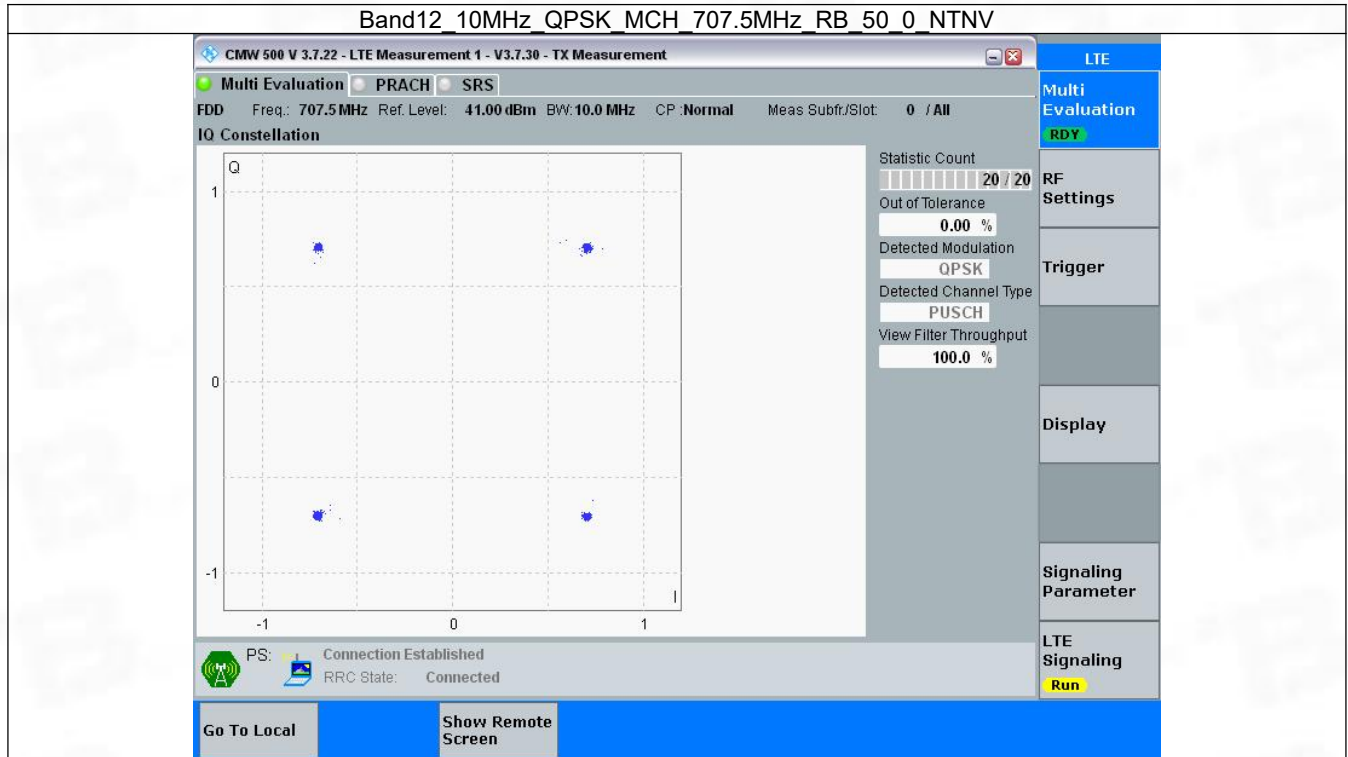


3.4 B12_10MHz

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



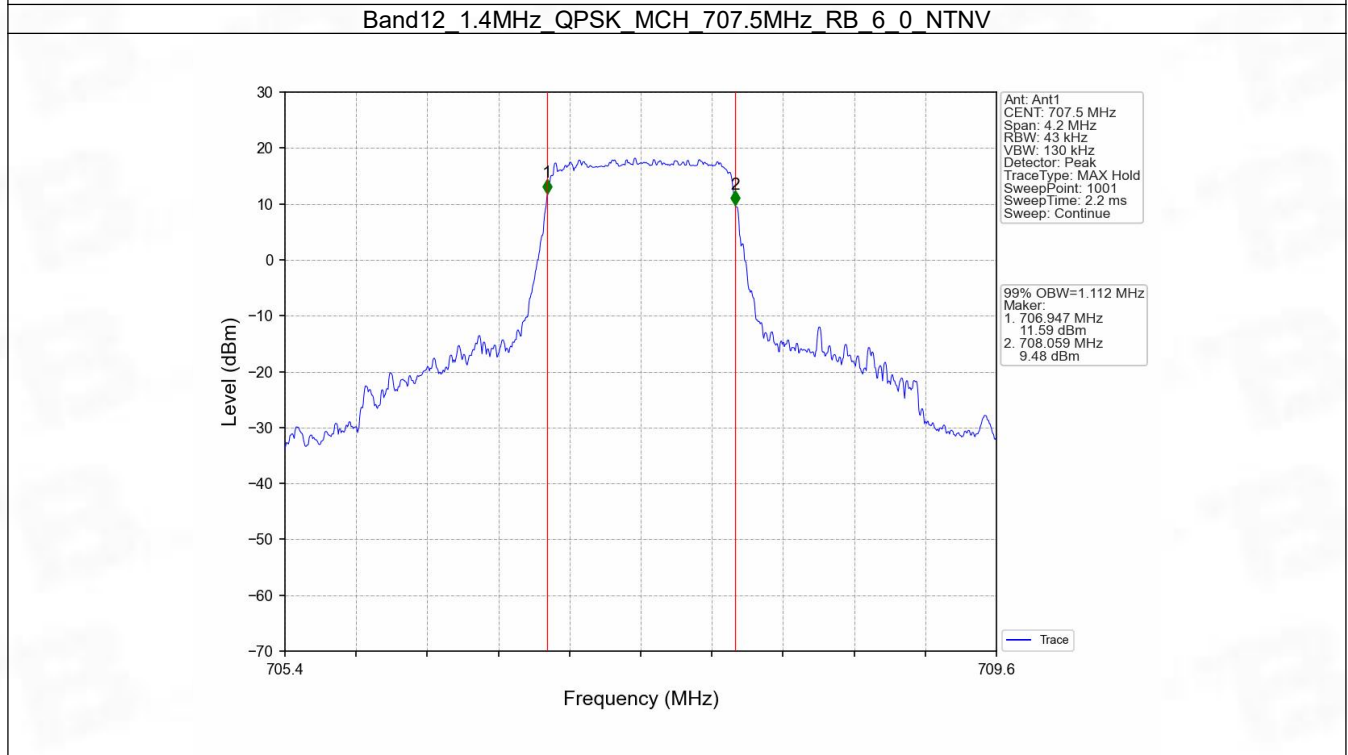
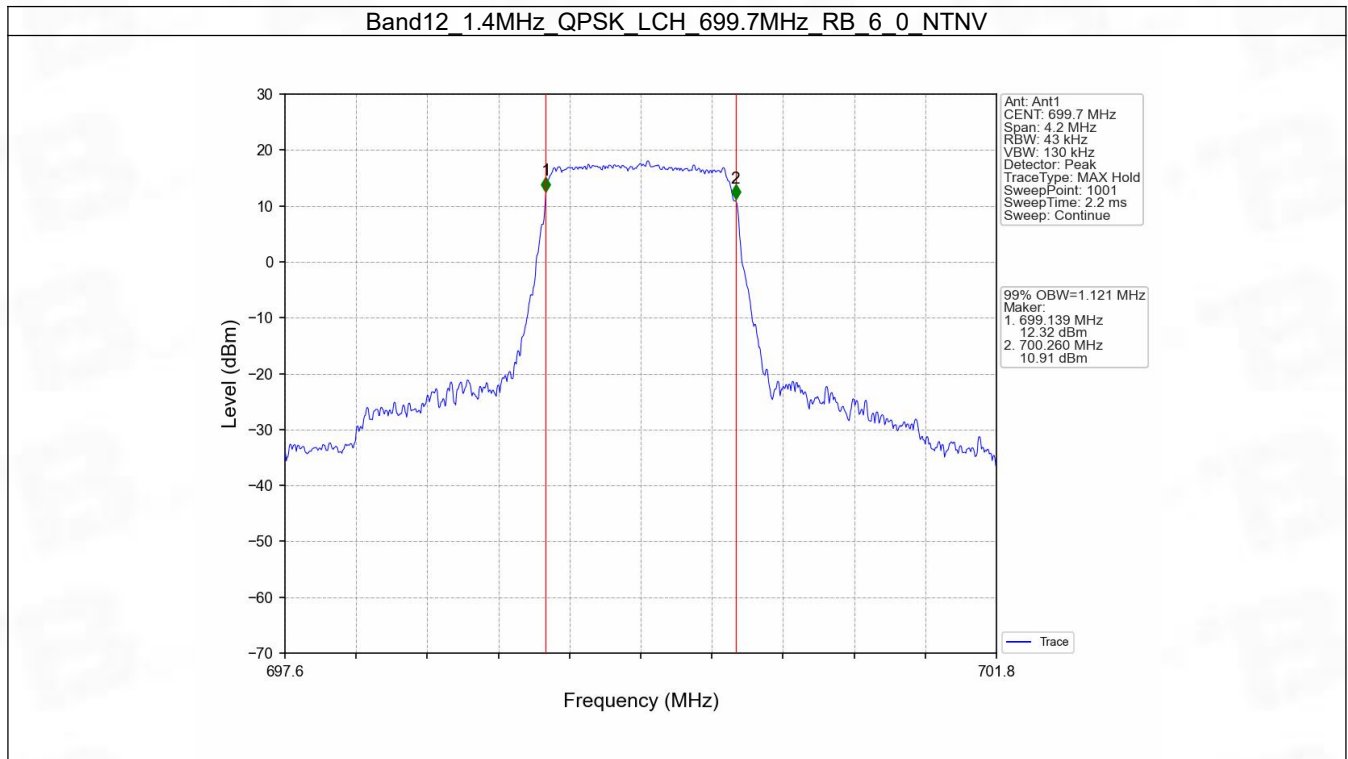
4. 99% & 26dB Bandwidth

4.1 Band12_OBW

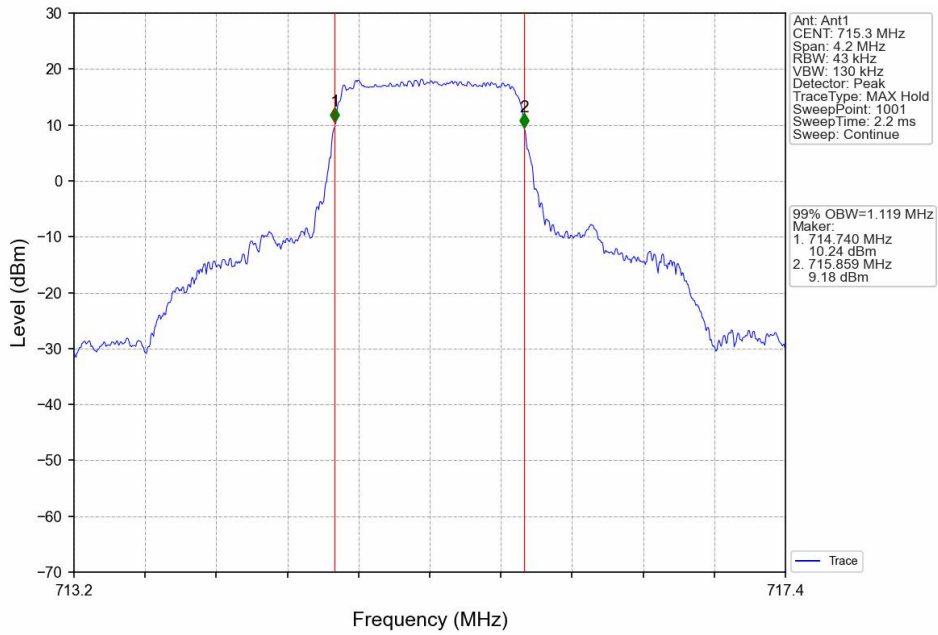
4.1.1 Test Result

Band: 12 / NTV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	699.7	6	0	1.121	Pass
		707.5	6	0	1.112	Pass
		715.3	6	0	1.119	Pass
	16QAM	699.7	6	0	1.110	Pass
		707.5	6	0	1.103	Pass
		715.3	6	0	1.124	Pass
3	QPSK	700.5	15	0	2.729	Pass
		707.5	15	0	2.737	Pass
		714.5	15	0	2.729	Pass
	16QAM	700.5	15	0	2.709	Pass
		707.5	15	0	2.730	Pass
		714.5	15	0	2.731	Pass
5	QPSK	701.5	25	0	4.564	Pass
		707.5	25	0	4.544	Pass
		713.5	25	0	4.599	Pass
	16QAM	701.5	25	0	4.569	Pass
		707.5	25	0	4.581	Pass
		713.5	25	0	4.580	Pass
10	QPSK	704	50	0	9.150	Pass
		707.5	50	0	9.017	Pass
		711	50	0	9.052	Pass
	16QAM	704	50	0	9.138	Pass
		707.5	50	0	9.050	Pass
		711	50	0	9.078	Pass

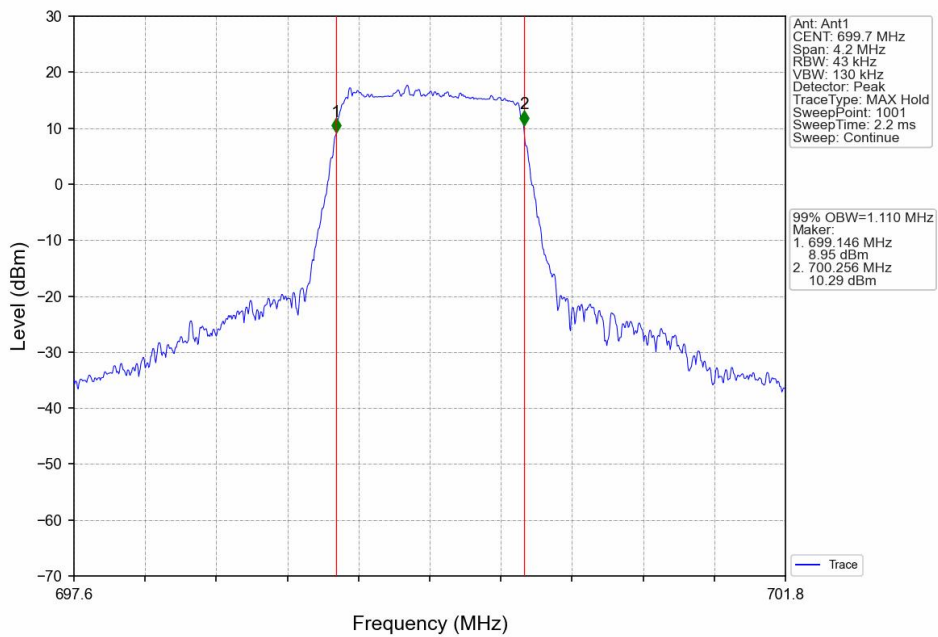
4.1.2 Test Graph



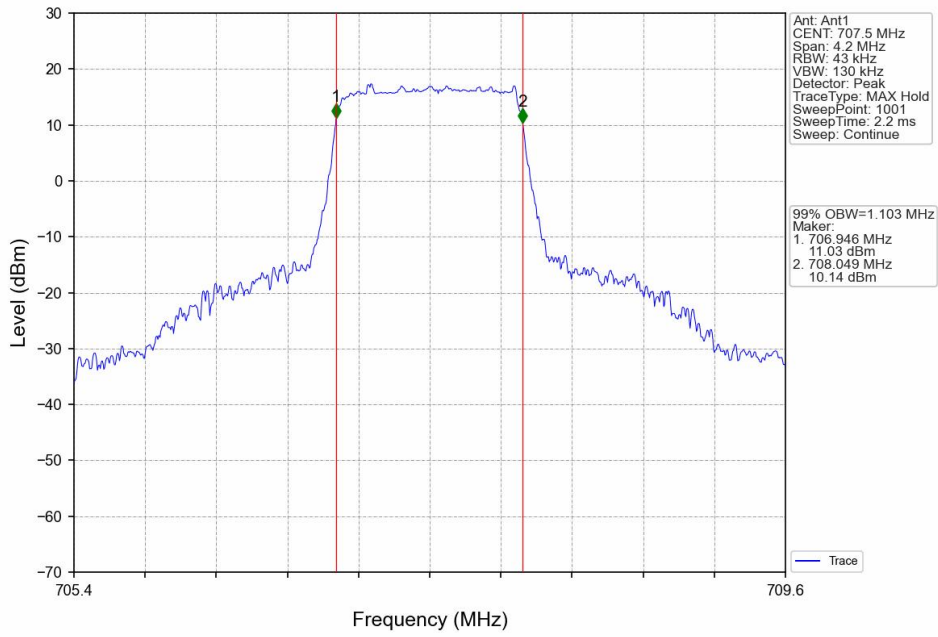
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



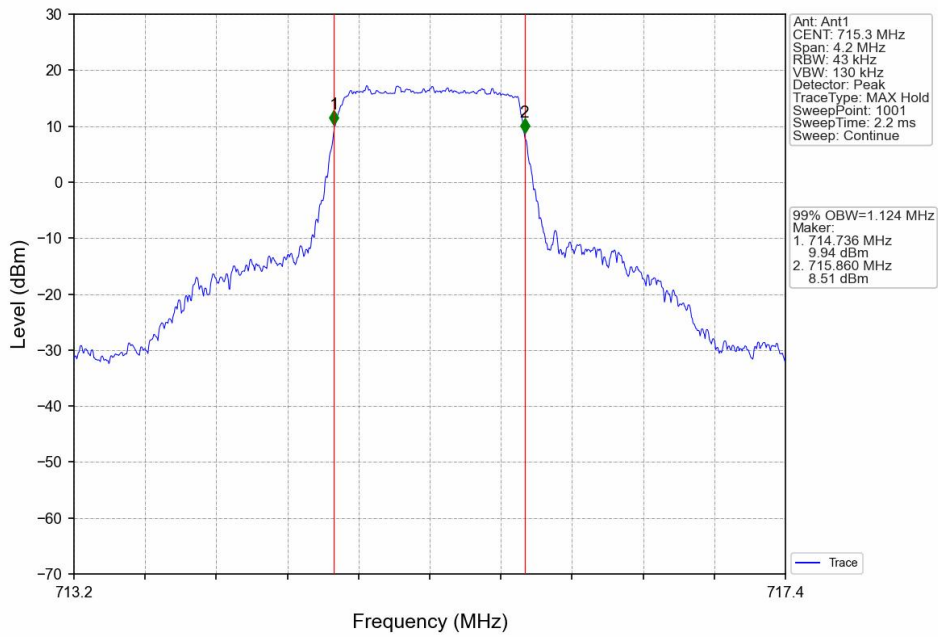
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



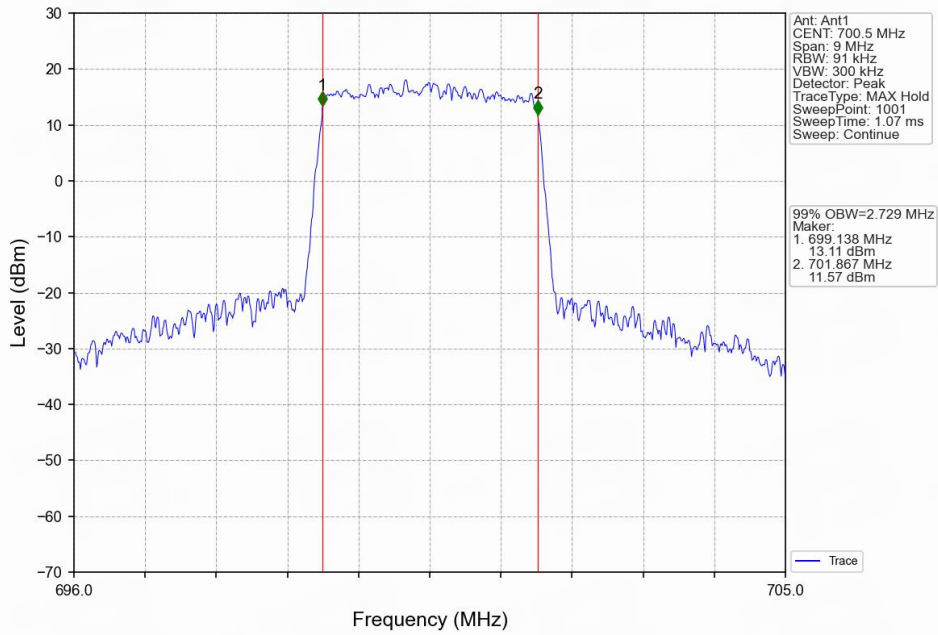
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTNV



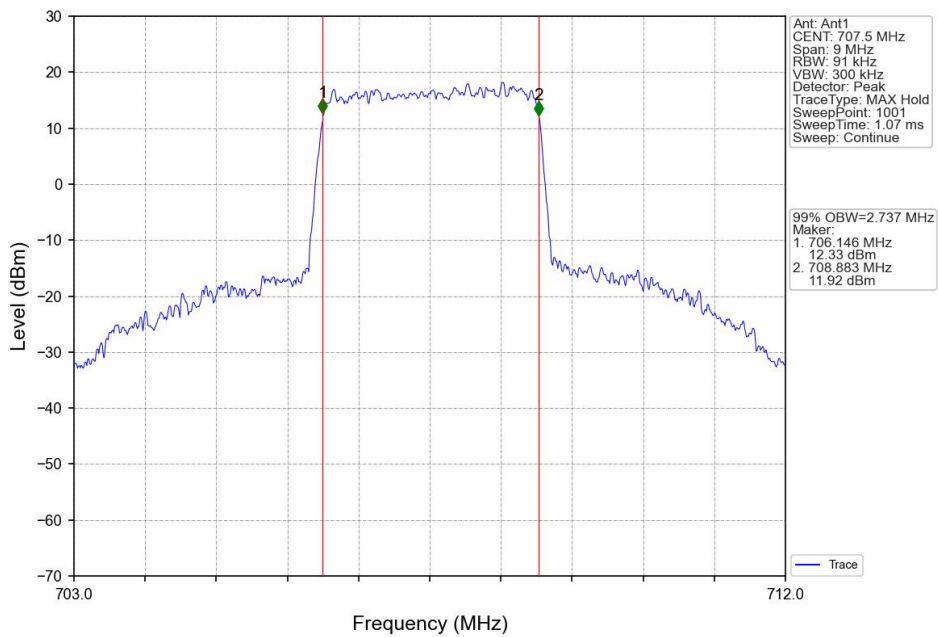
Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTNV



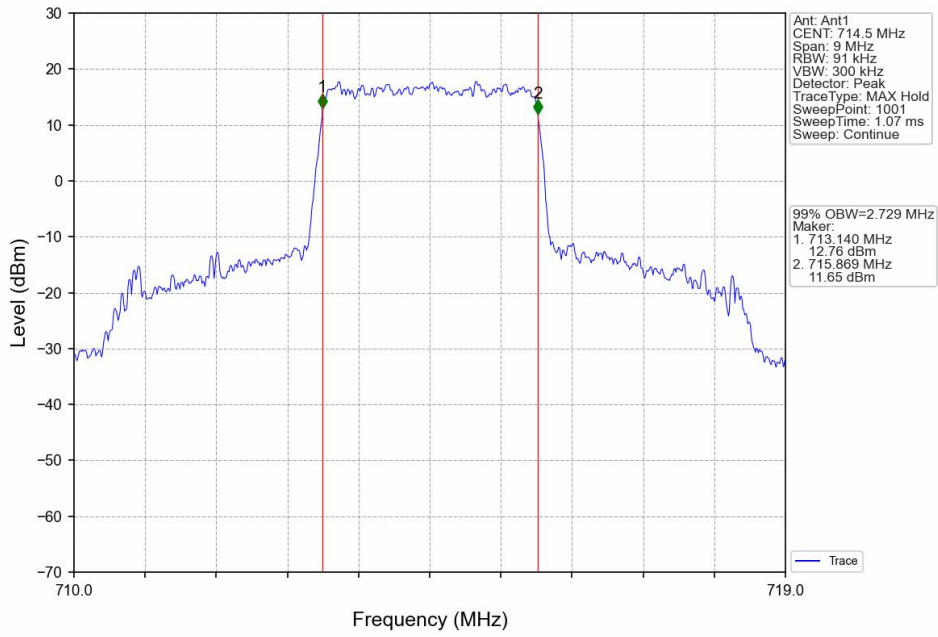
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



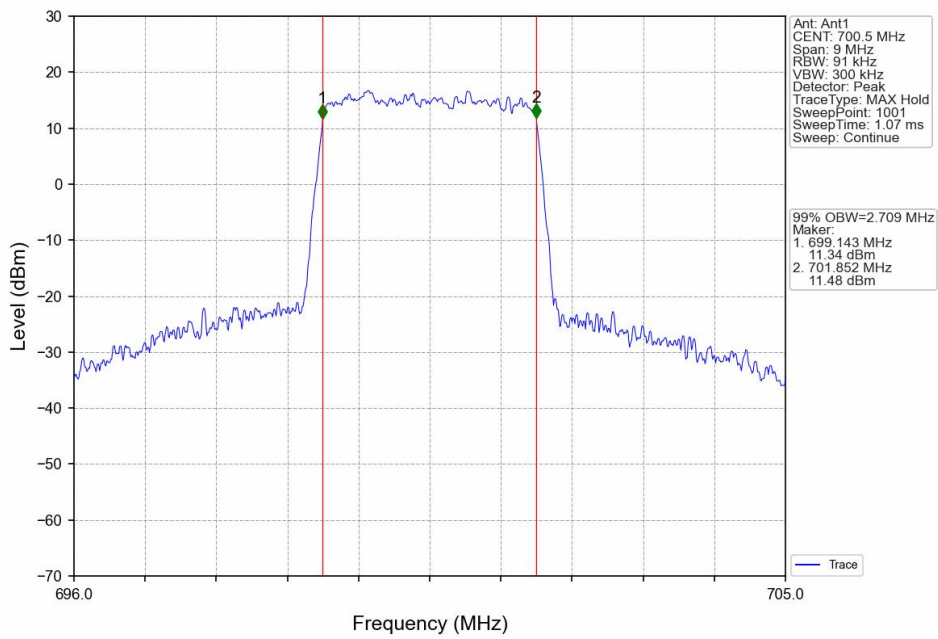
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



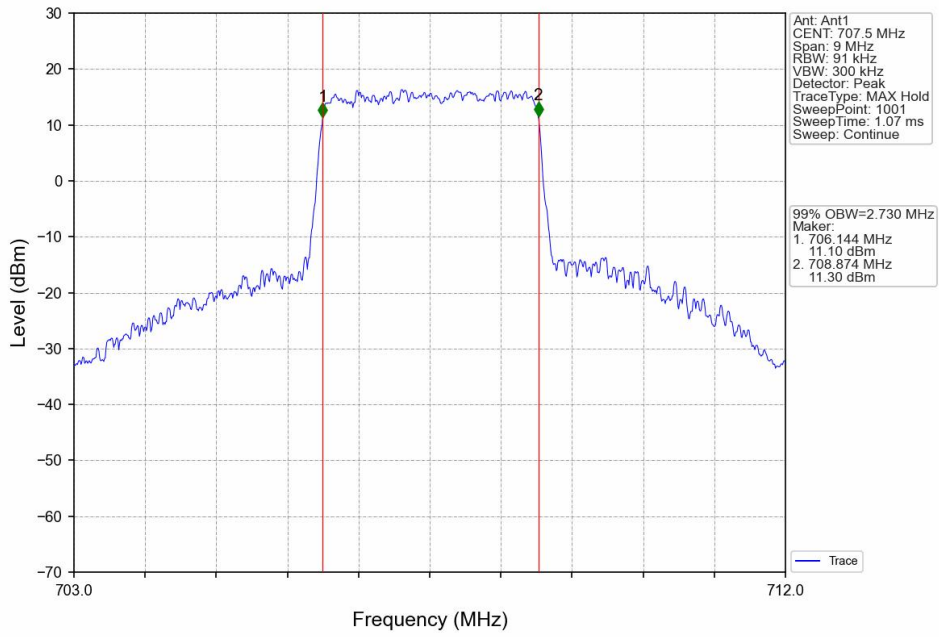
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



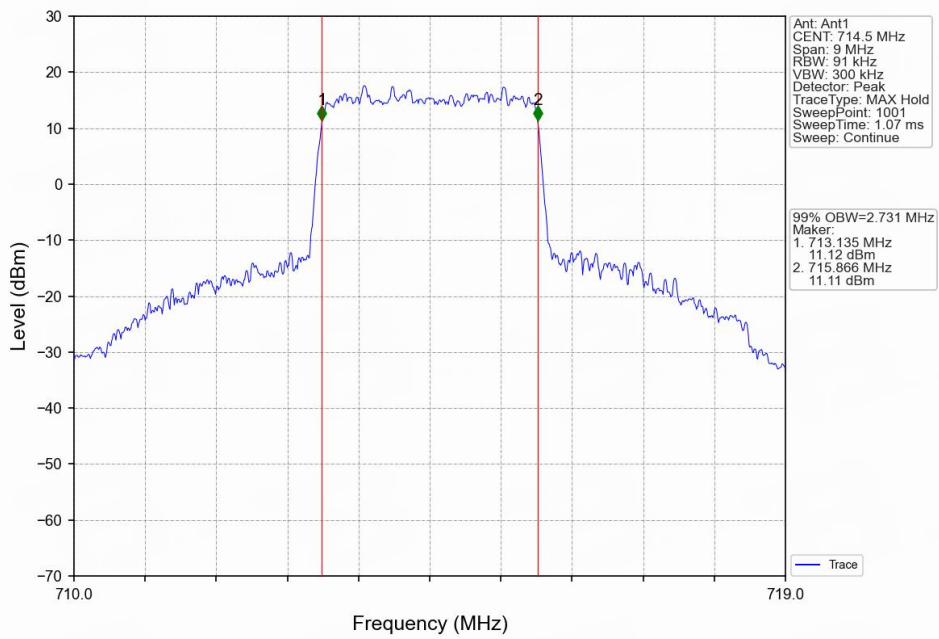
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



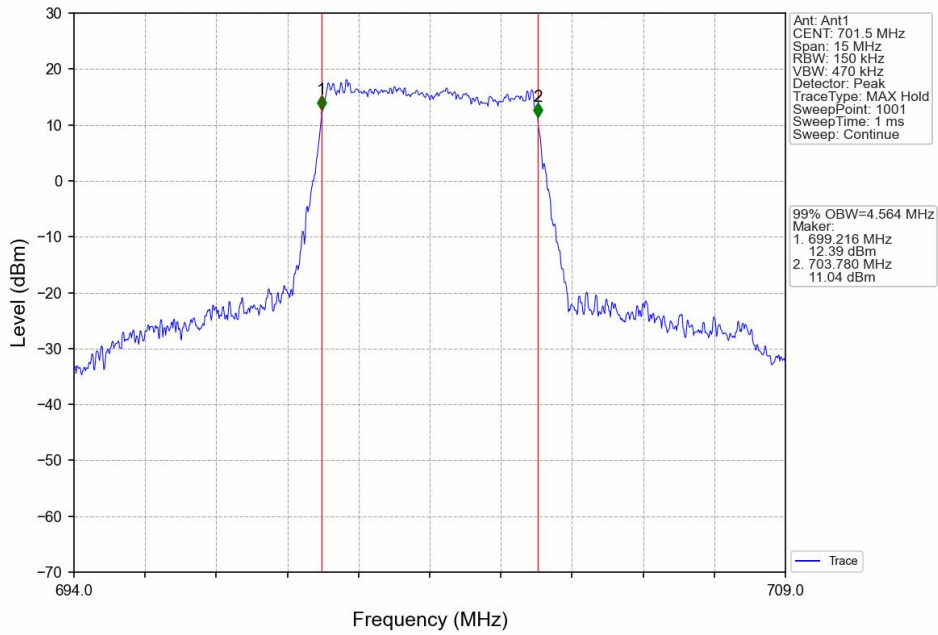
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



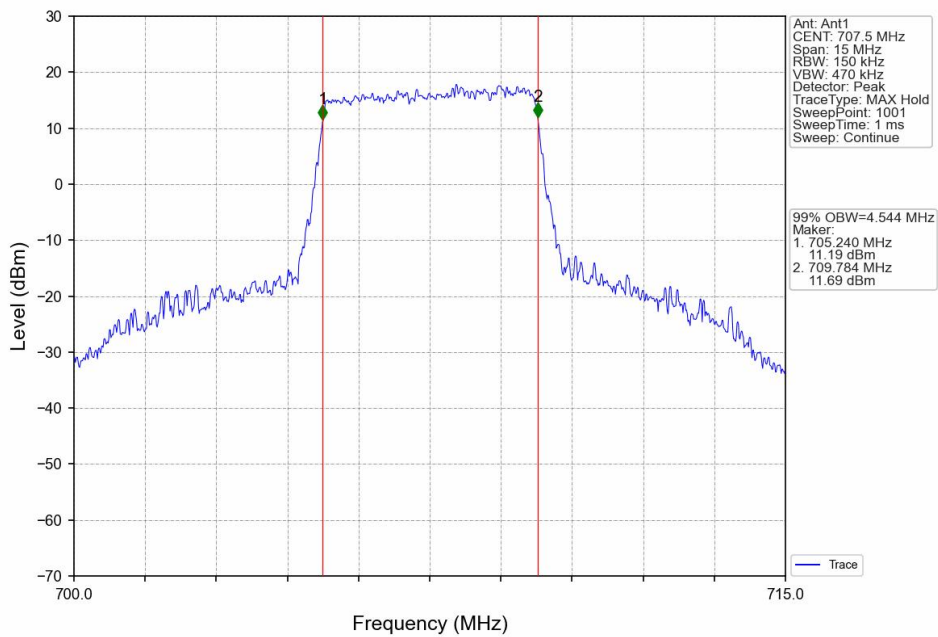
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



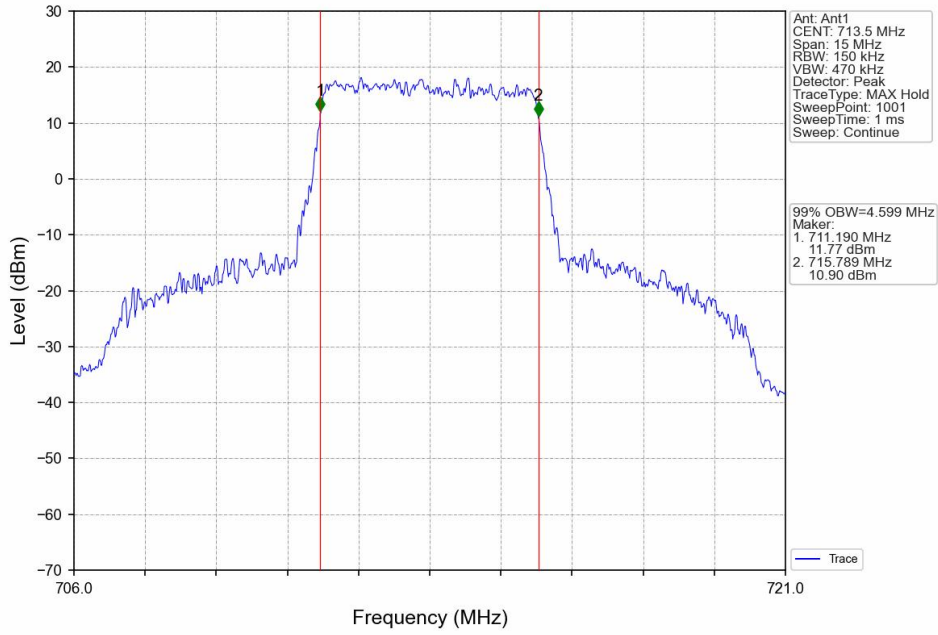
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



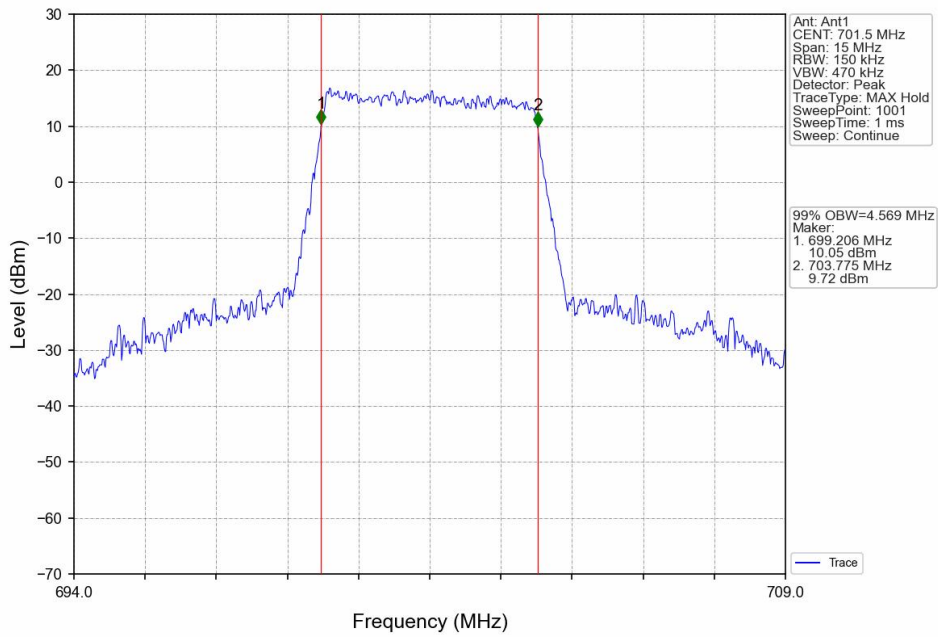
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



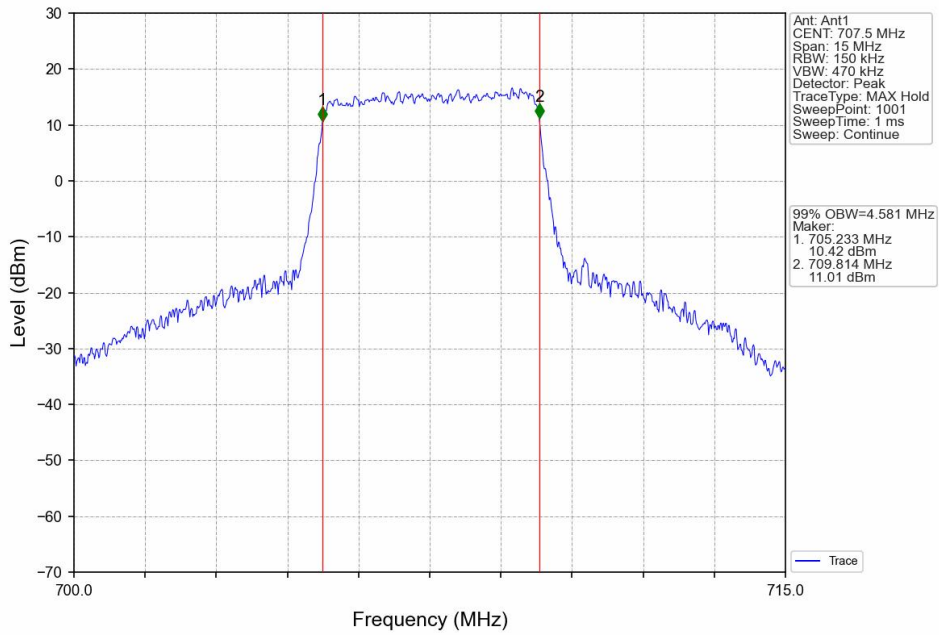
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



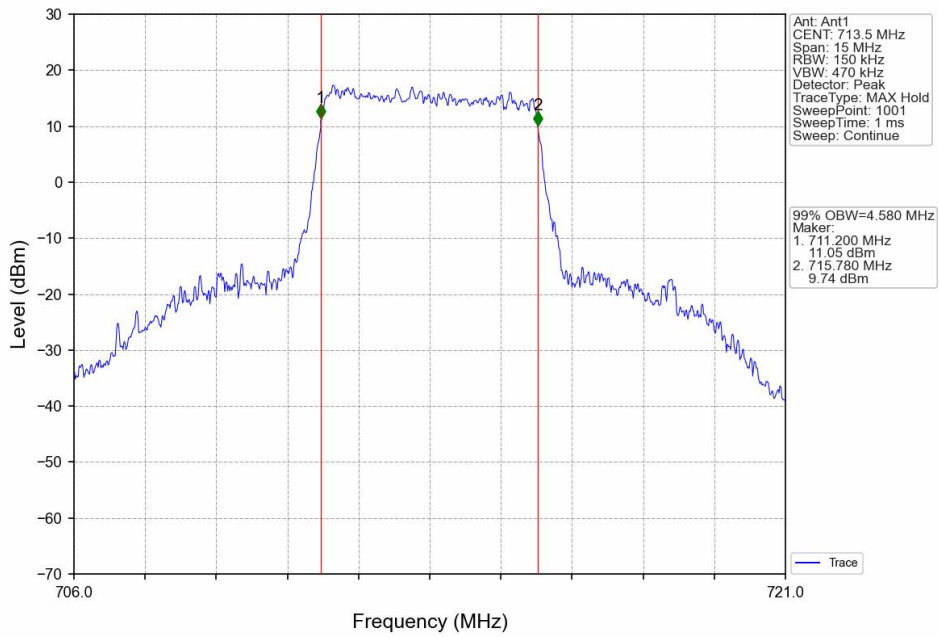
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



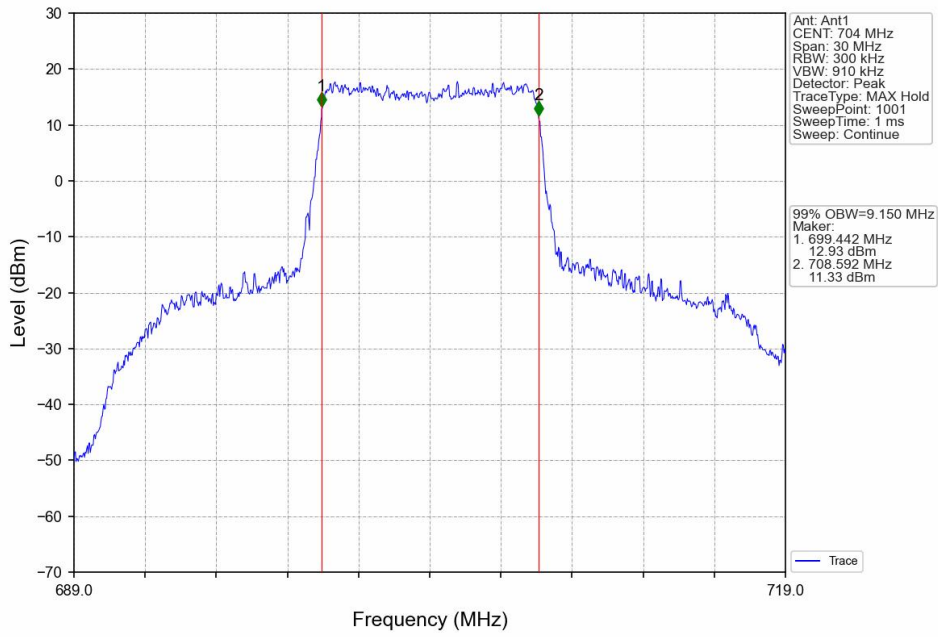
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



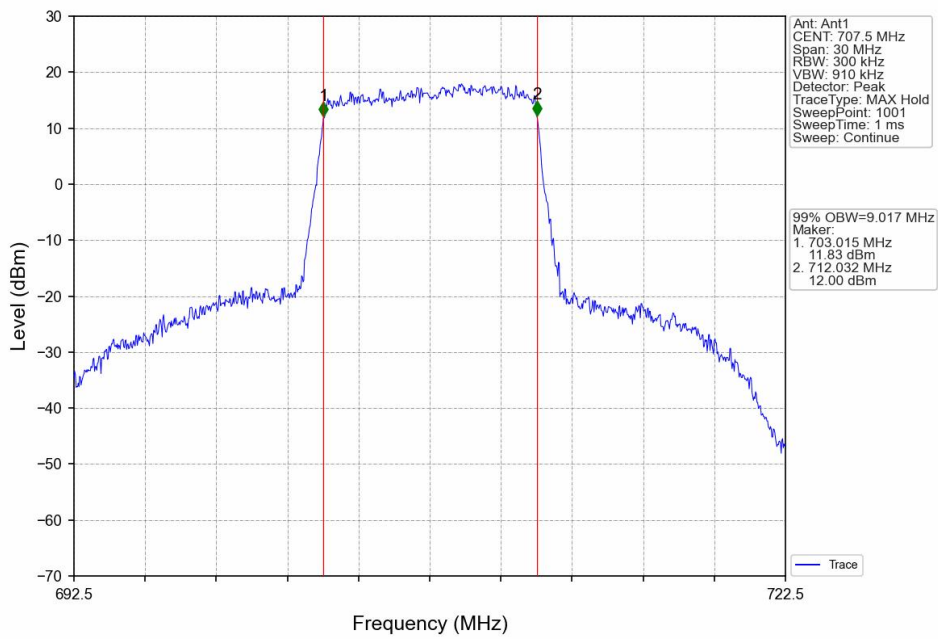
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



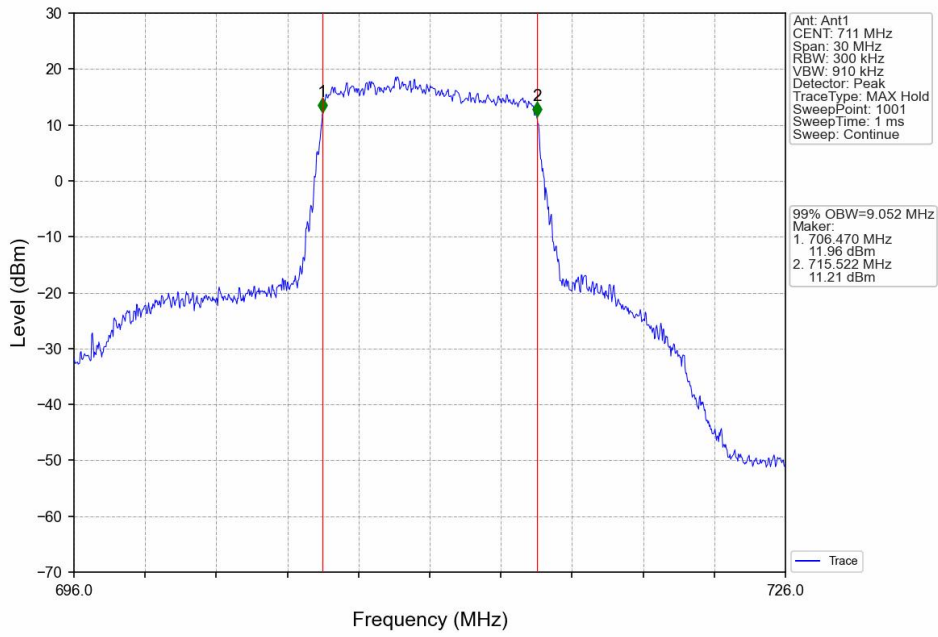
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



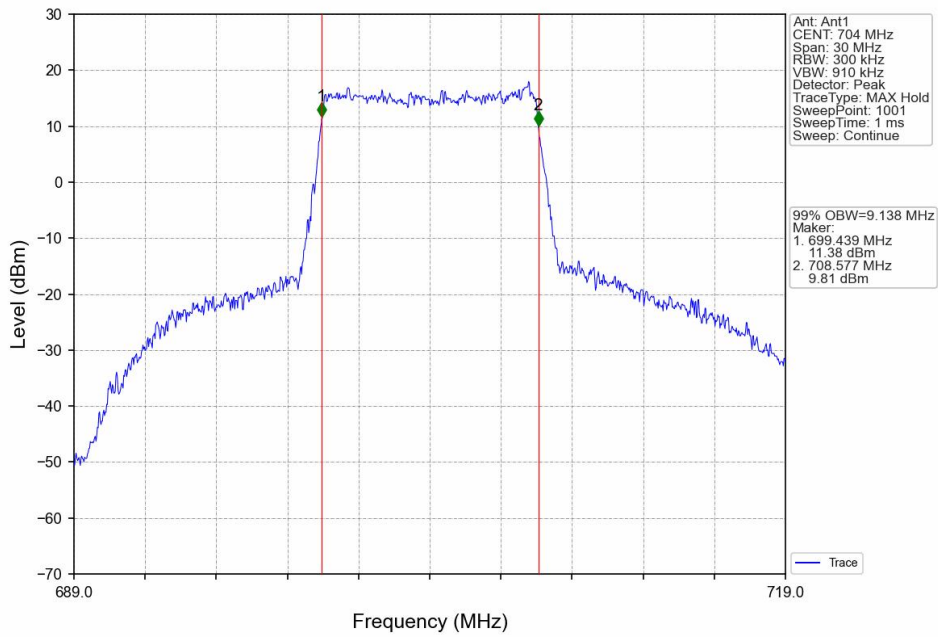
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



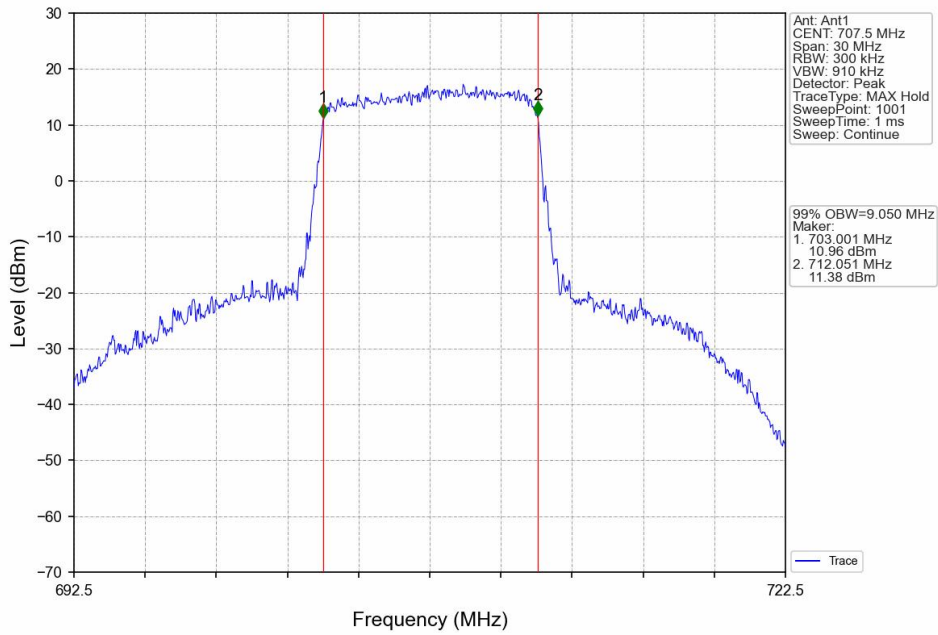
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



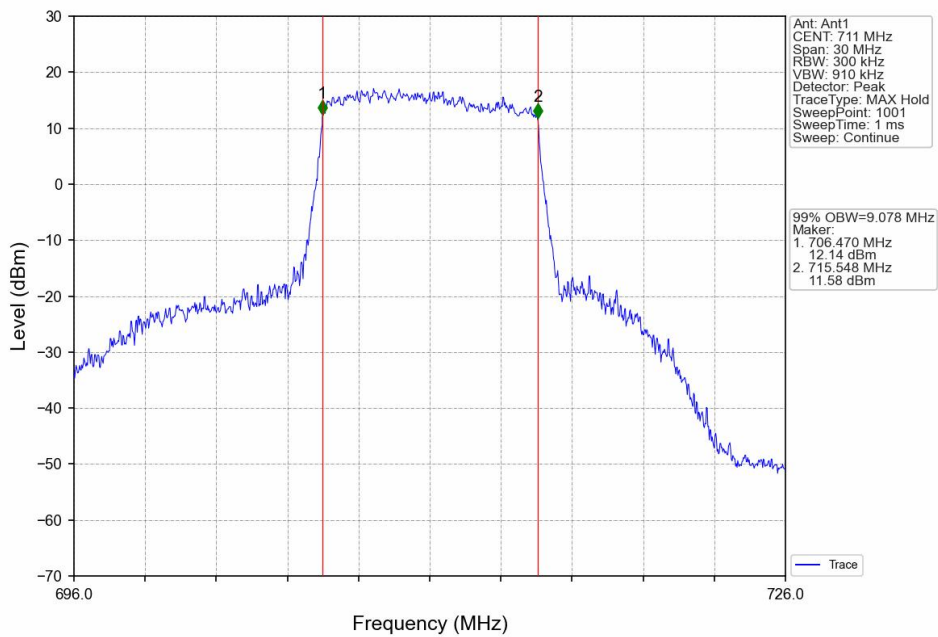
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

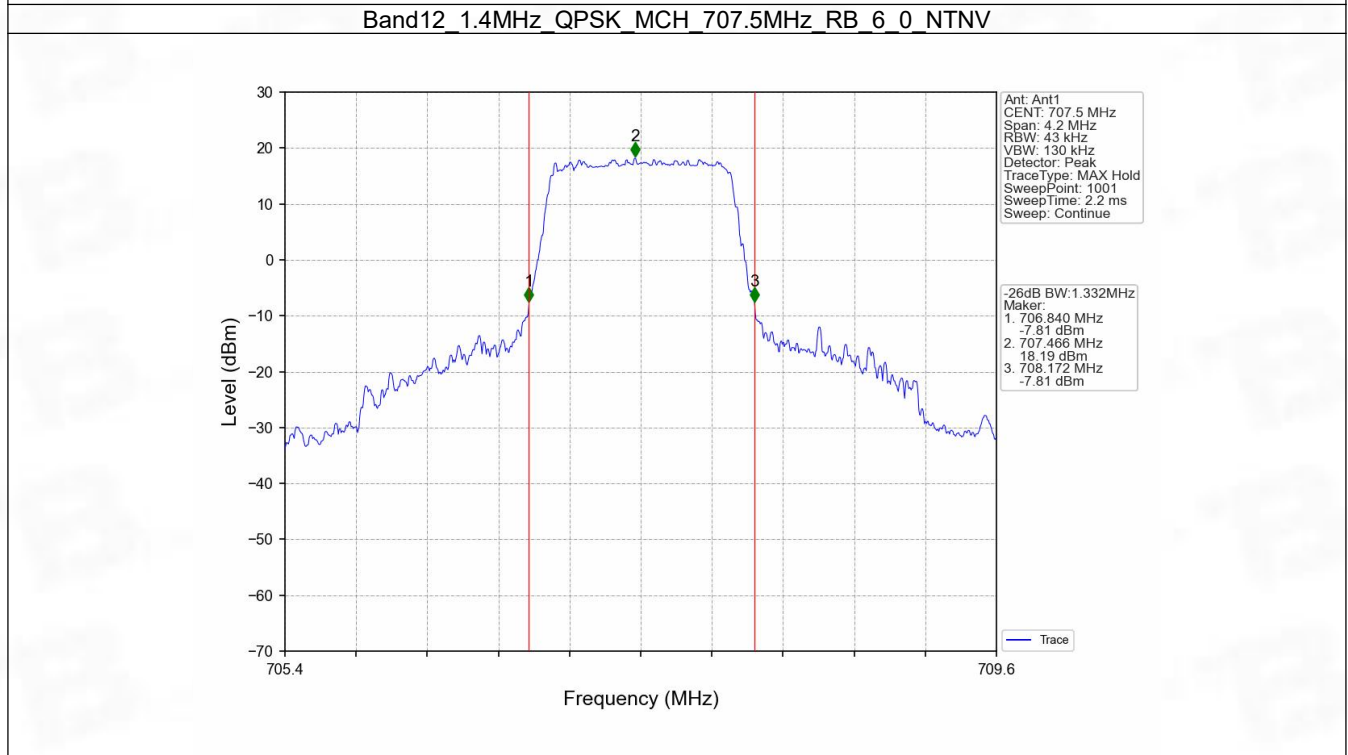
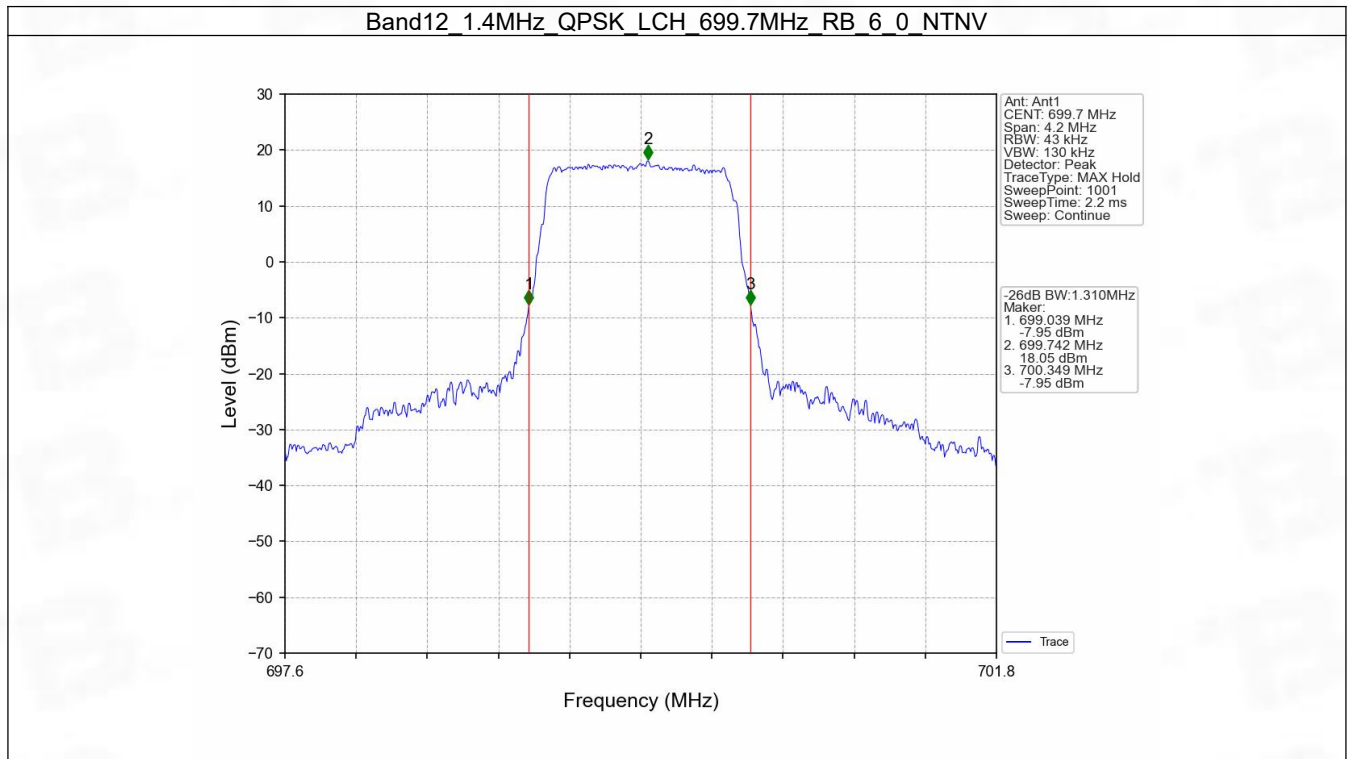


4.2 Band12_XDB

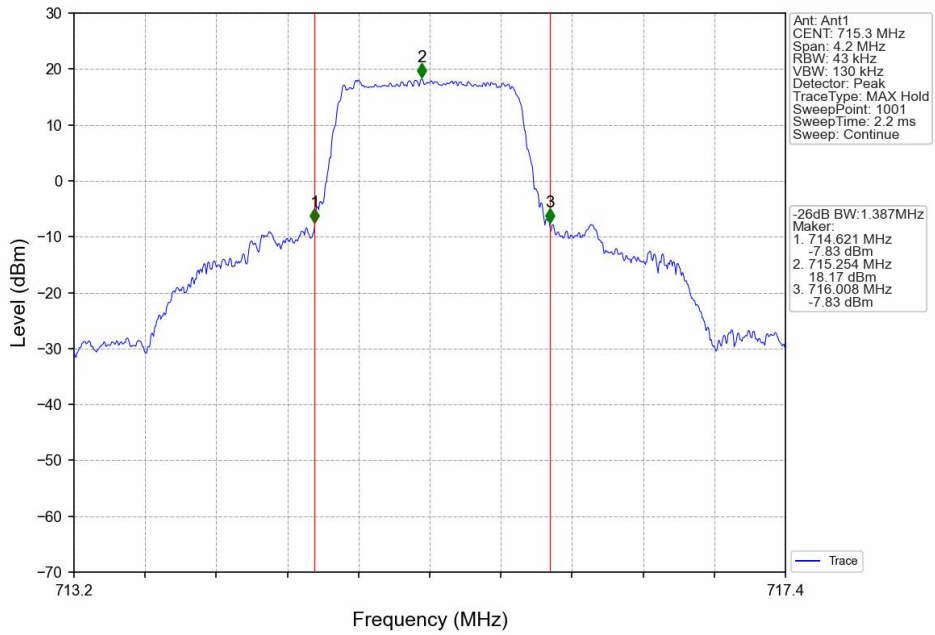
4.2.1 Test Result

Band: 12 / NTNV						
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)	Verdict
			Size	Offset	Result	
1.4	QPSK	699.7	6	0	1.310	Pass
		707.5	6	0	1.332	Pass
		715.3	6	0	1.387	Pass
	16QAM	699.7	6	0	1.317	Pass
		707.5	6	0	1.304	Pass
		715.3	6	0	1.423	Pass
3	QPSK	700.5	15	0	2.998	Pass
		707.5	15	0	2.999	Pass
		714.5	15	0	3.009	Pass
	16QAM	700.5	15	0	3.008	Pass
		707.5	15	0	3.016	Pass
		714.5	15	0	2.986	Pass
5	QPSK	701.5	25	0	5.262	Pass
		707.5	25	0	5.261	Pass
		713.5	25	0	5.323	Pass
	16QAM	701.5	25	0	5.318	Pass
		707.5	25	0	5.236	Pass
		713.5	25	0	5.303	Pass
10	QPSK	704	50	0	10.422	Pass
		707.5	50	0	10.197	Pass
		711	50	0	10.316	Pass
	16QAM	704	50	0	10.334	Pass
		707.5	50	0	10.127	Pass
		711	50	0	10.143	Pass

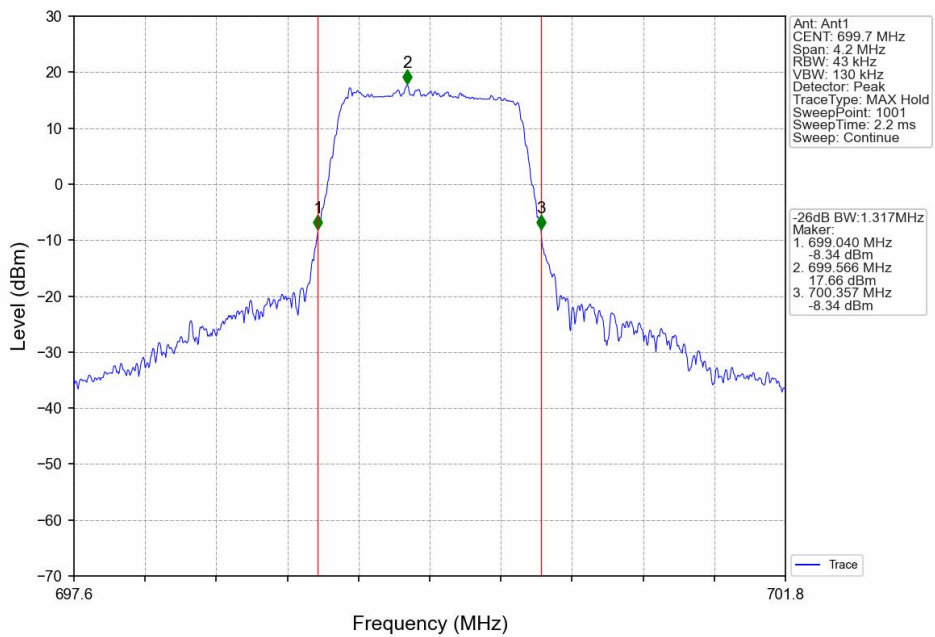
4.2.2 Test Graph



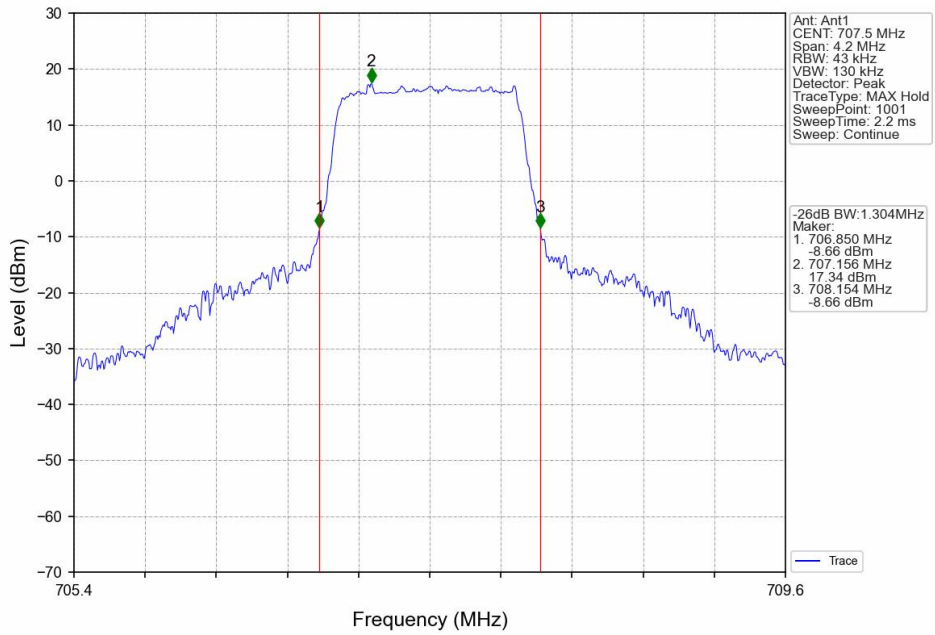
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



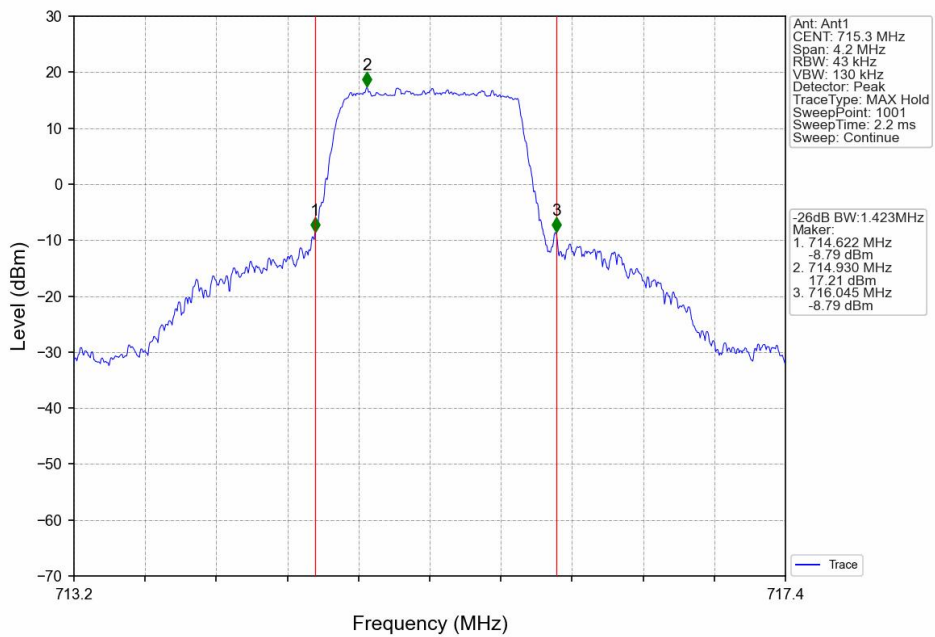
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



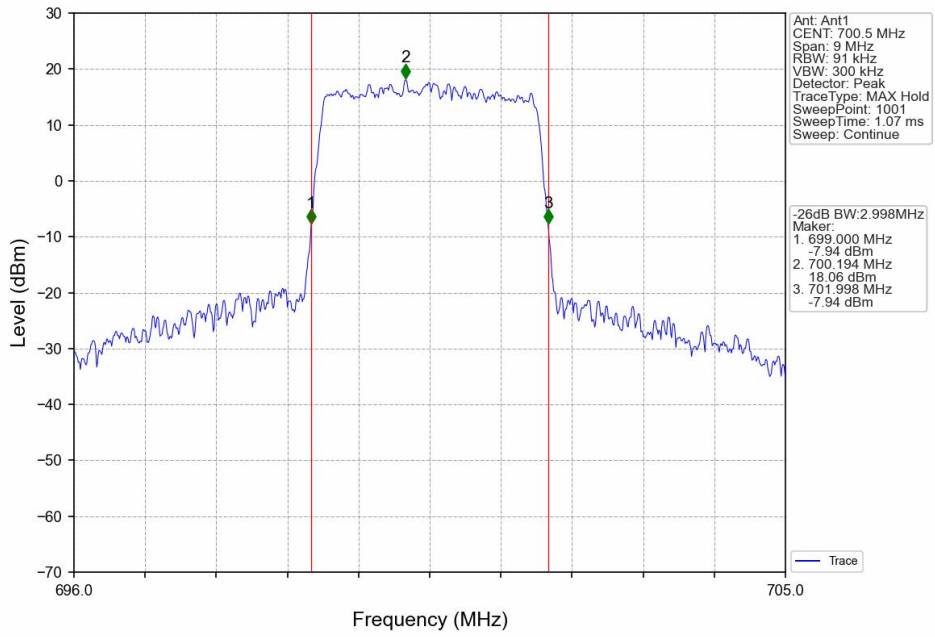
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTNV



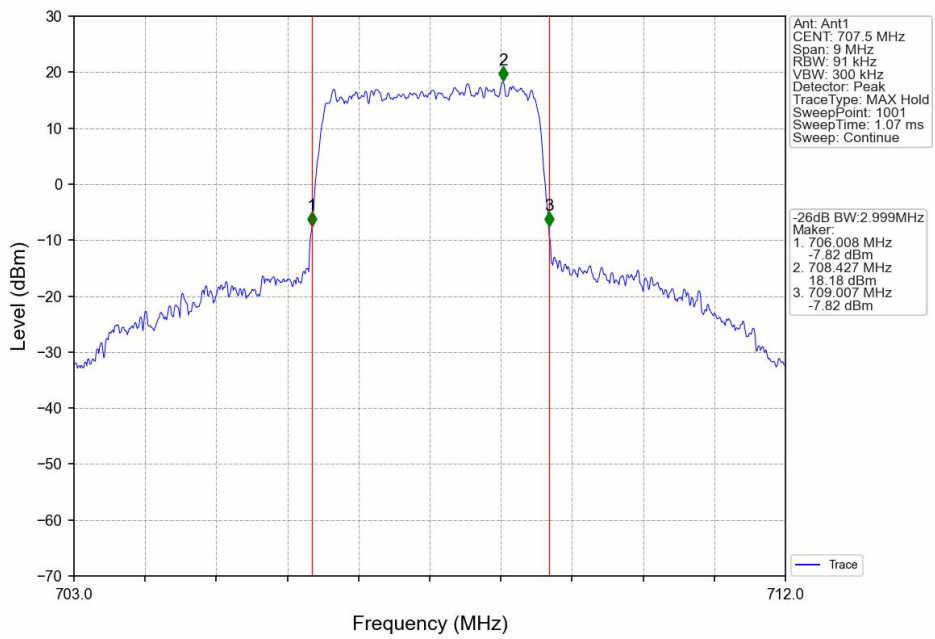
Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTNV



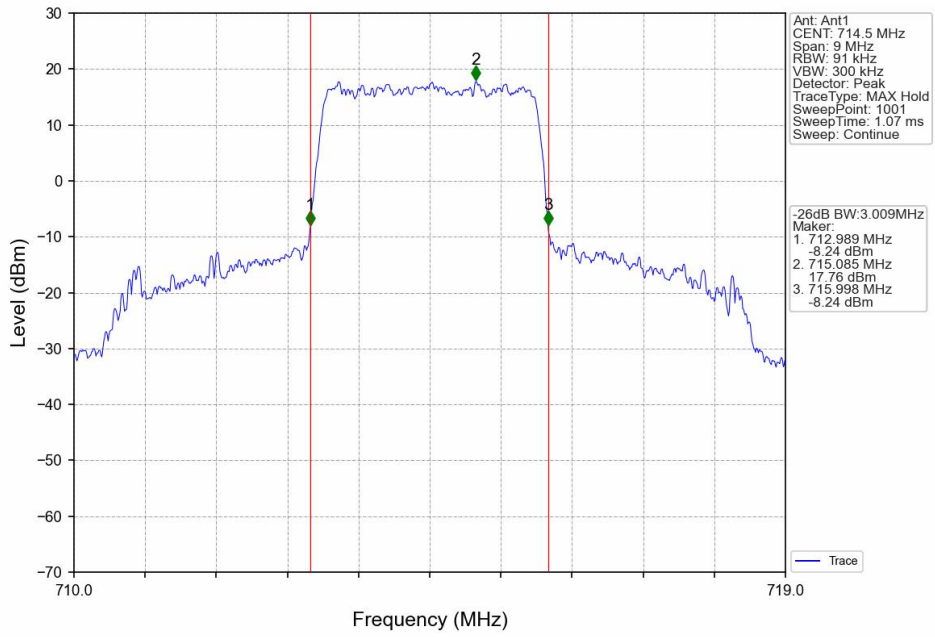
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



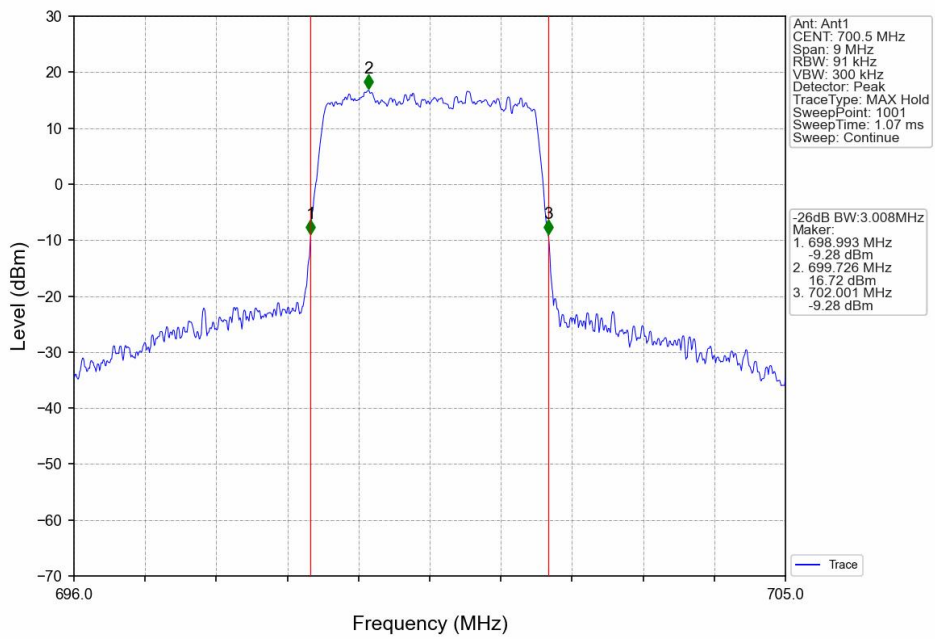
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



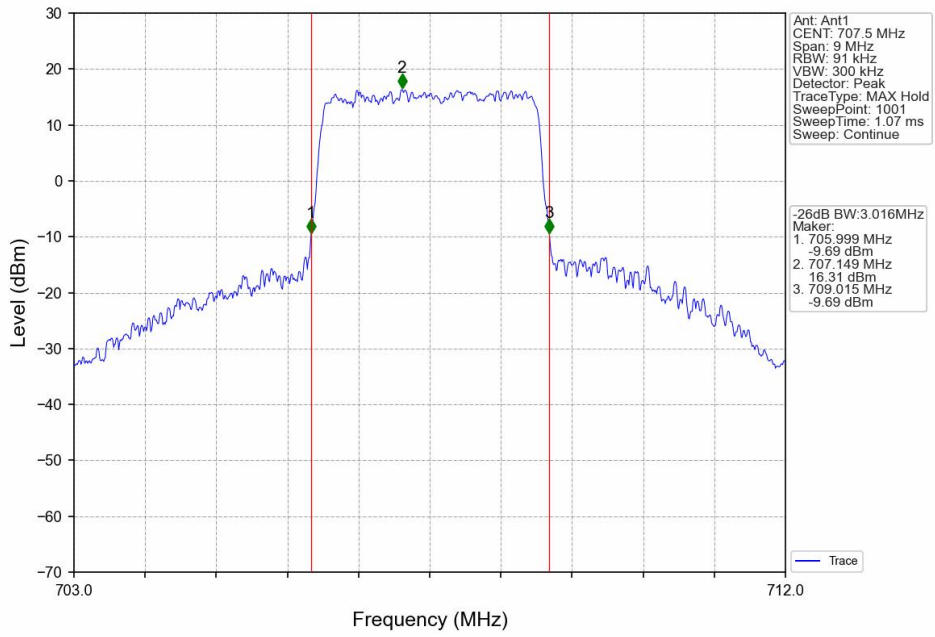
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



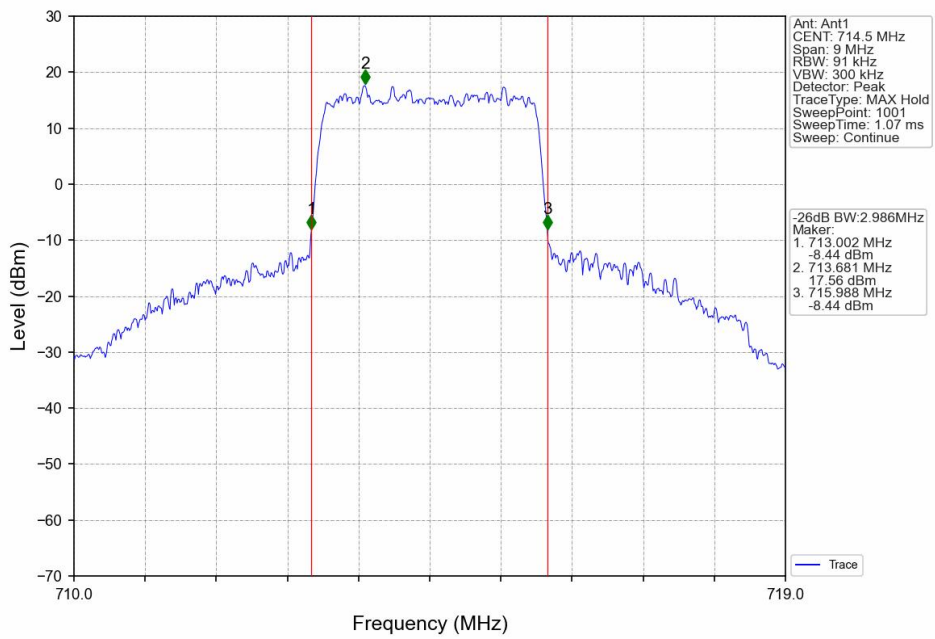
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



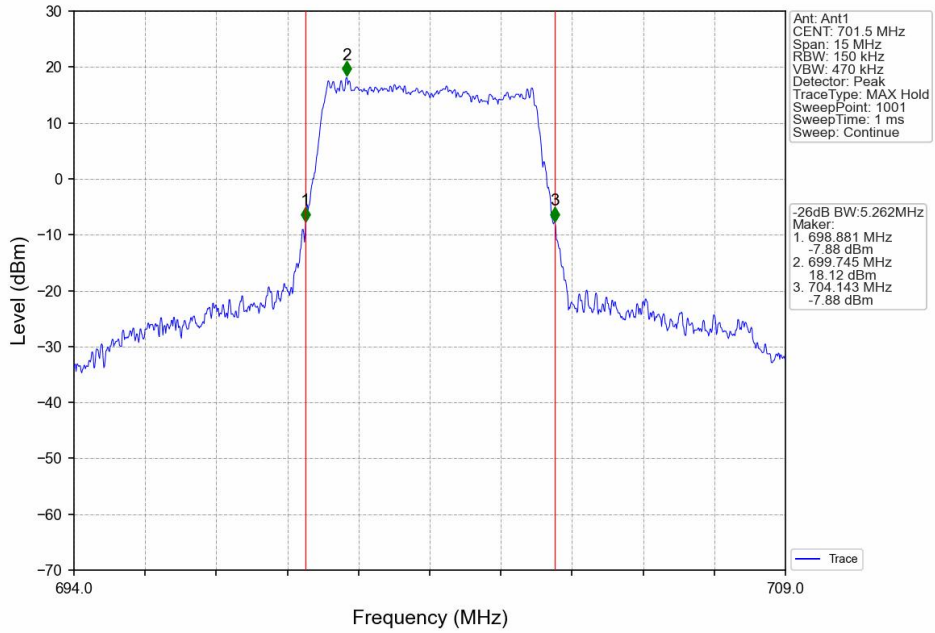
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



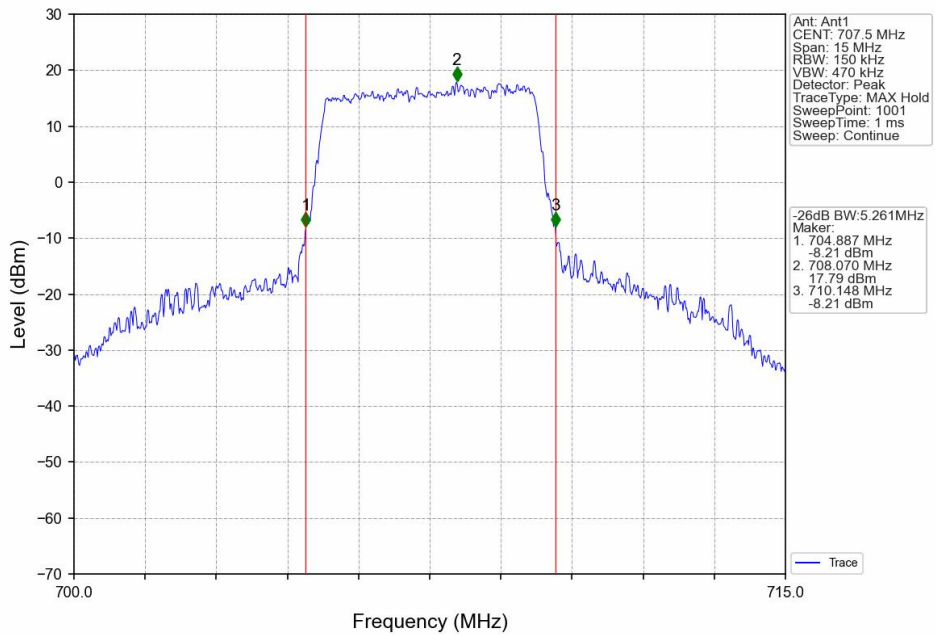
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



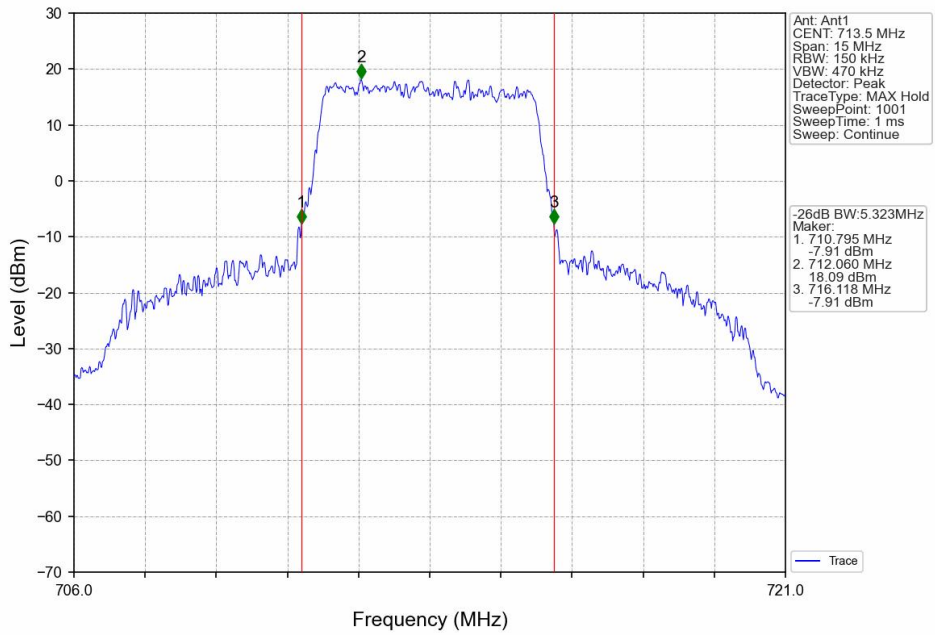
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



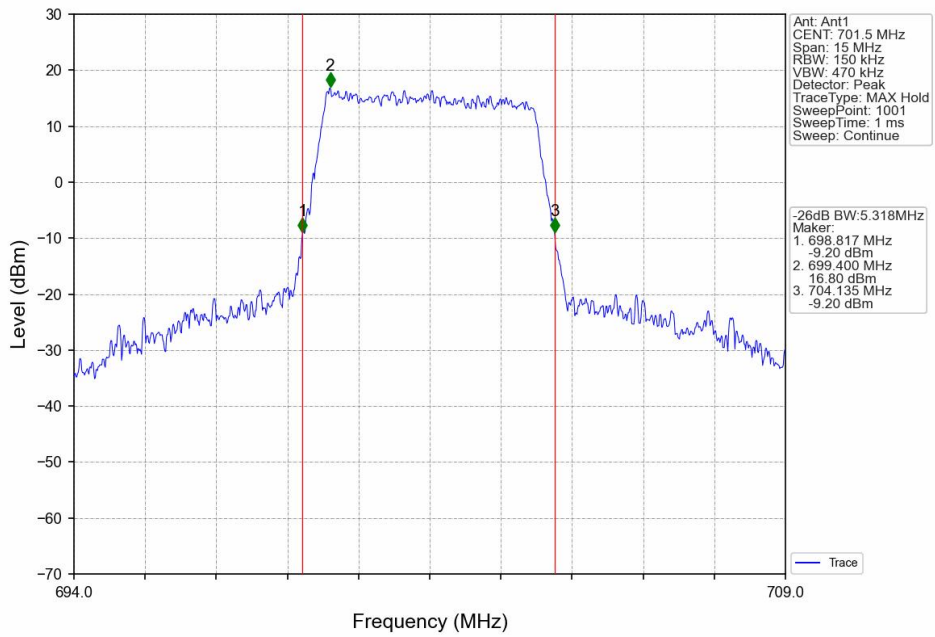
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



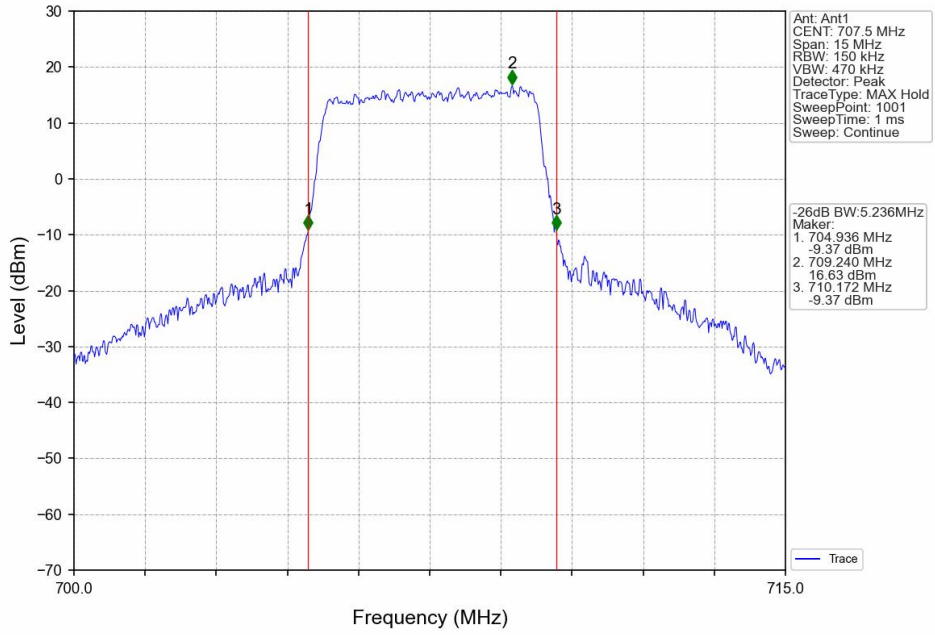
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



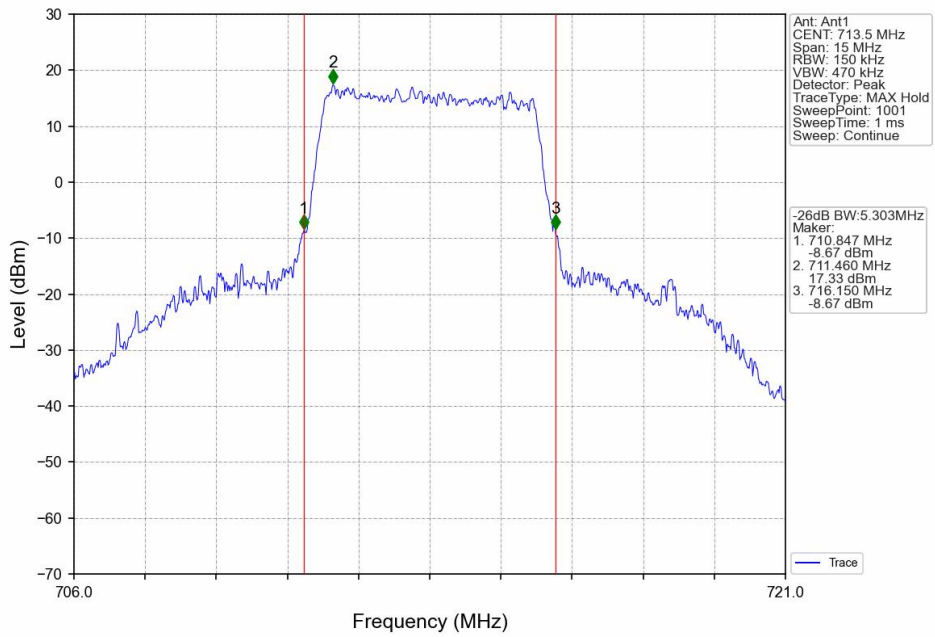
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



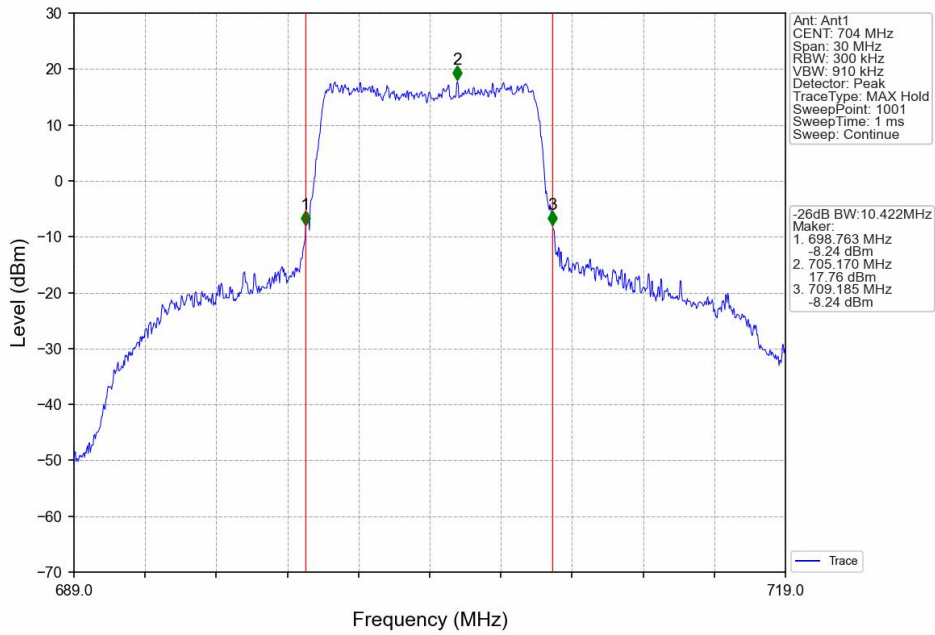
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



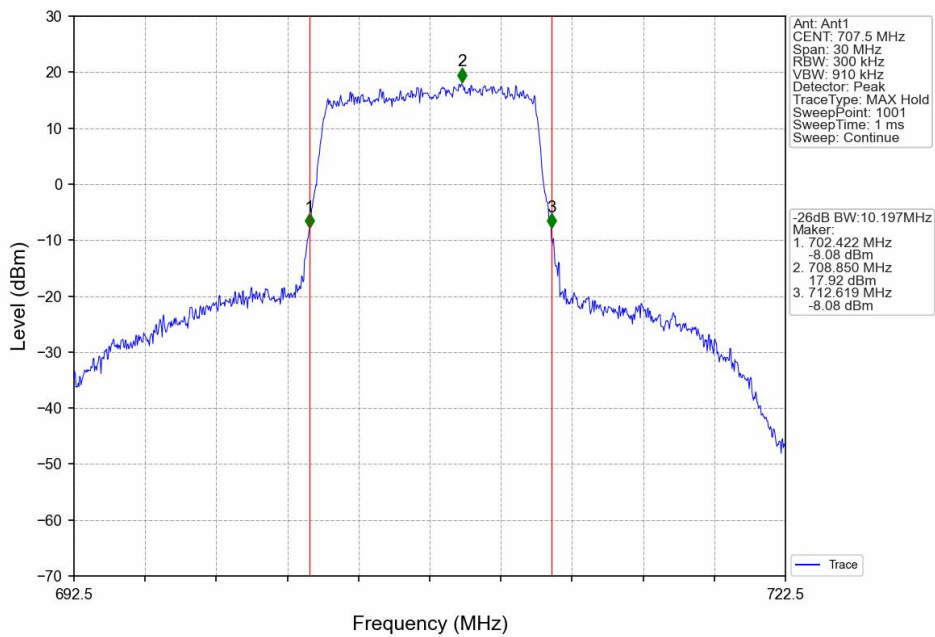
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



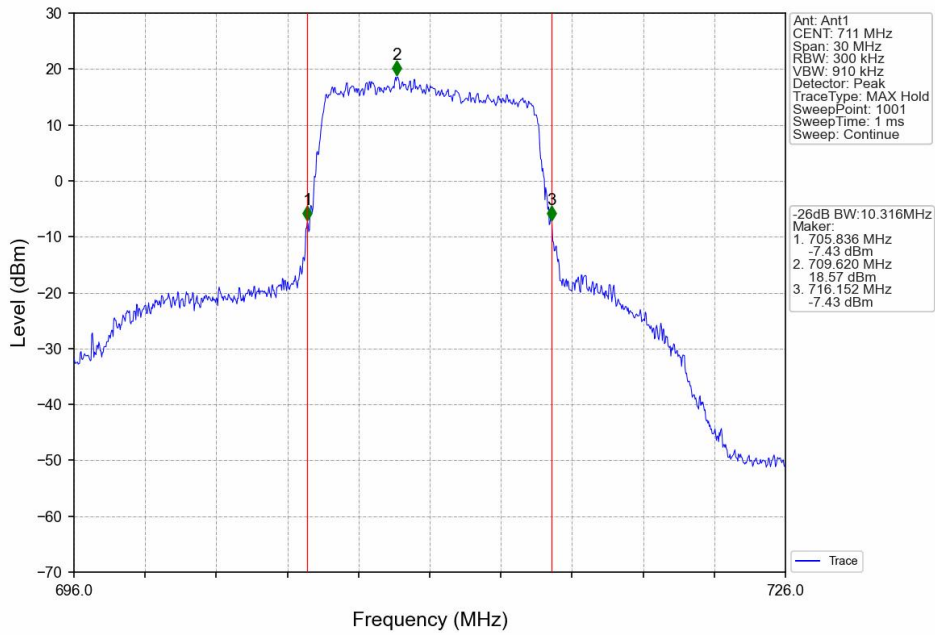
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



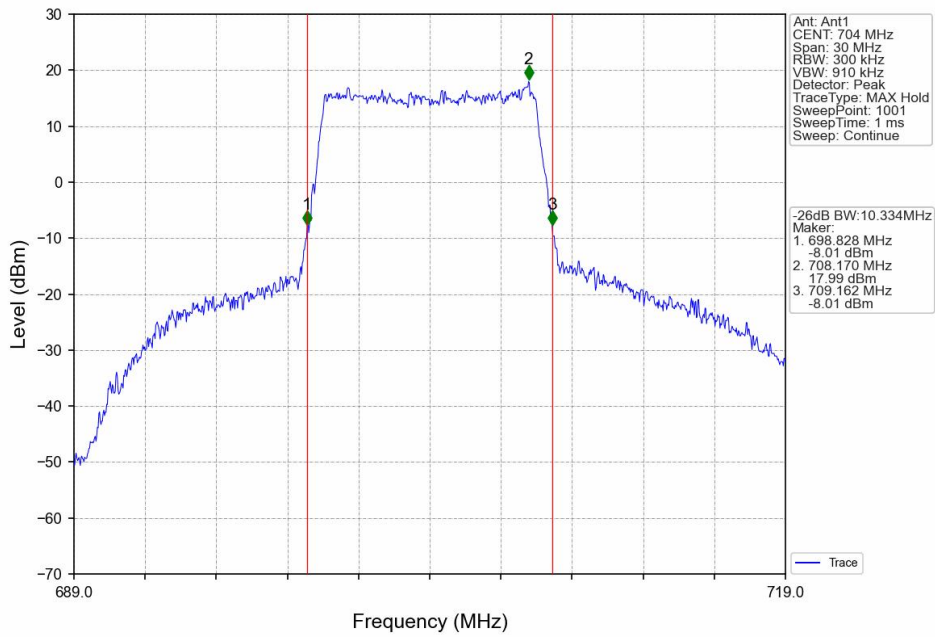
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



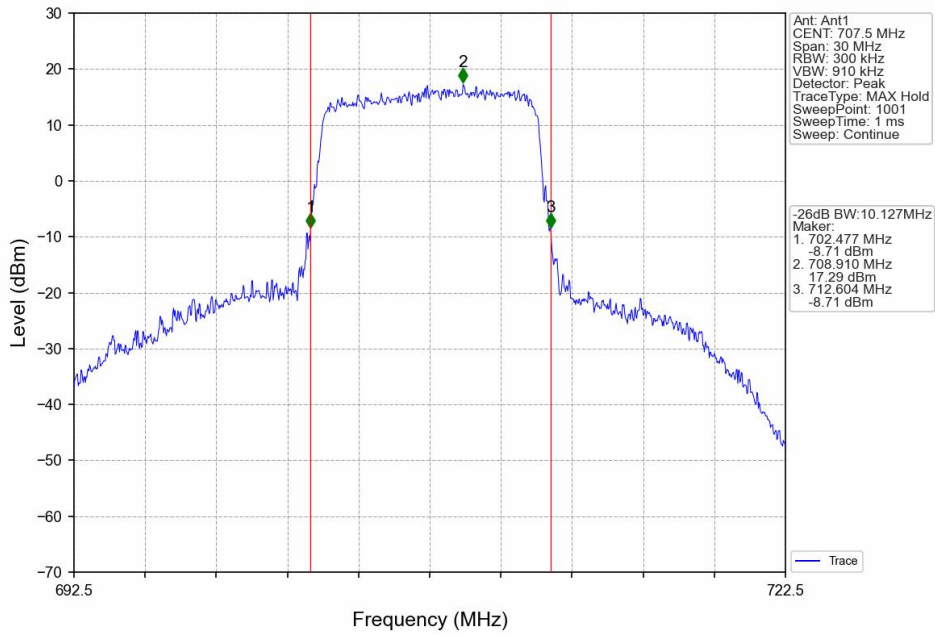
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



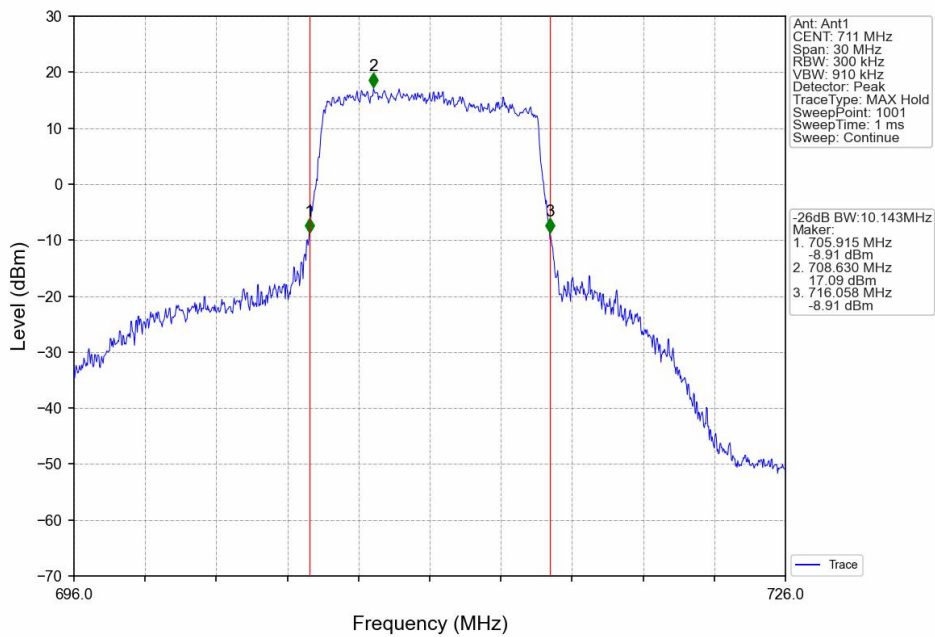
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



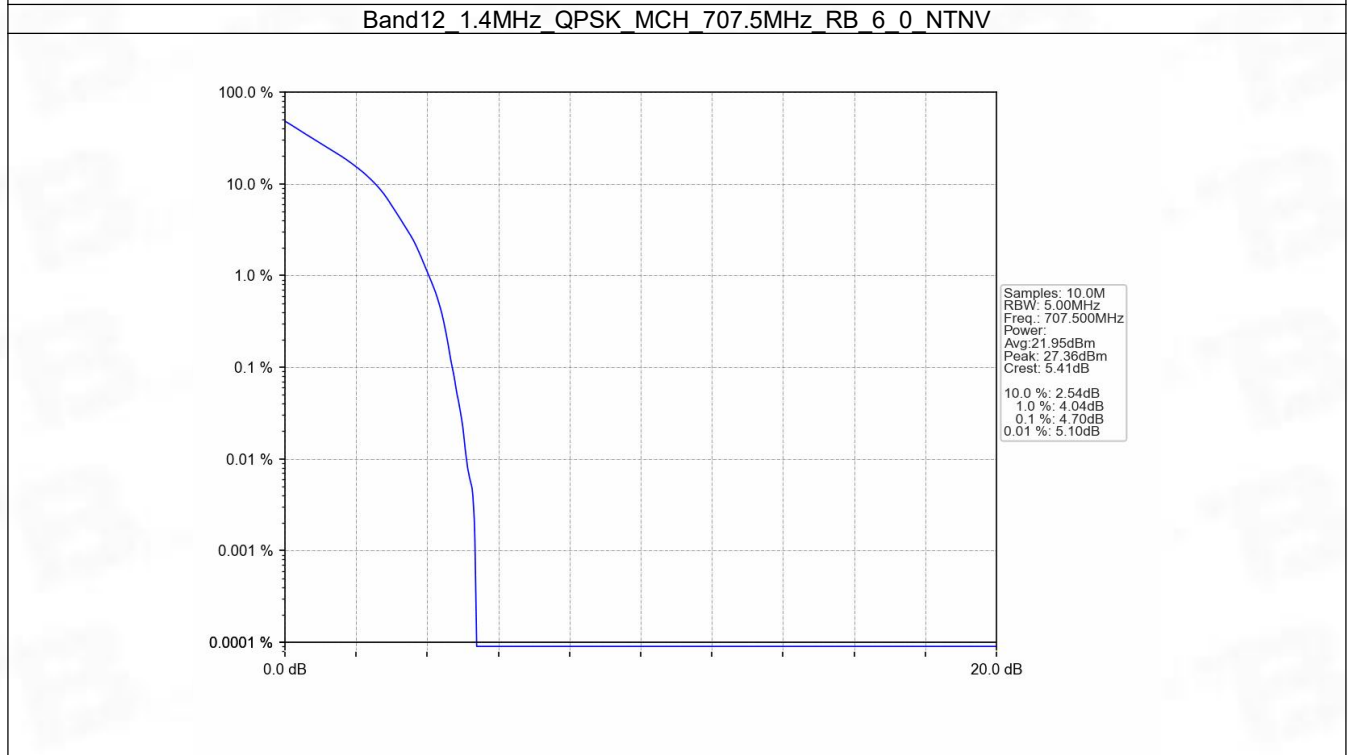
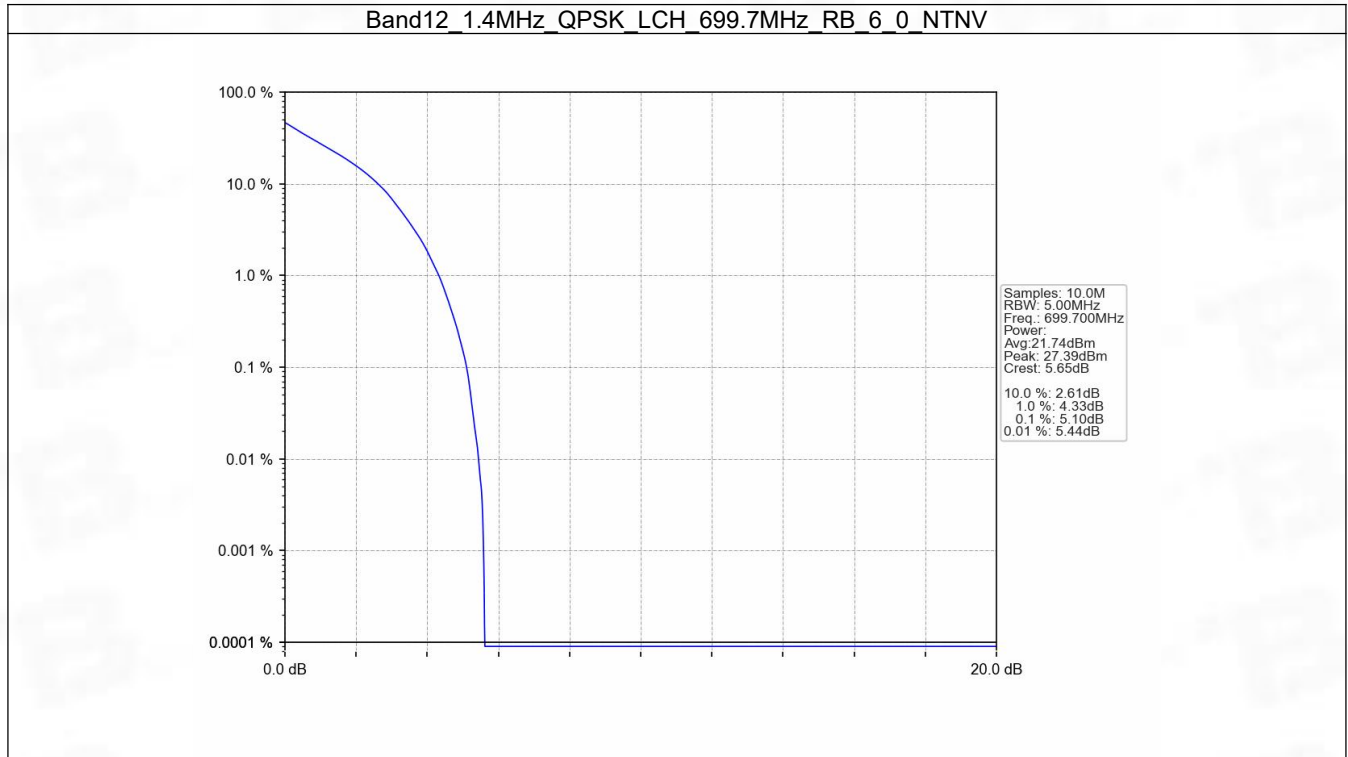
5. Peak-Average Ratio

5.1 B12_1.4MHz

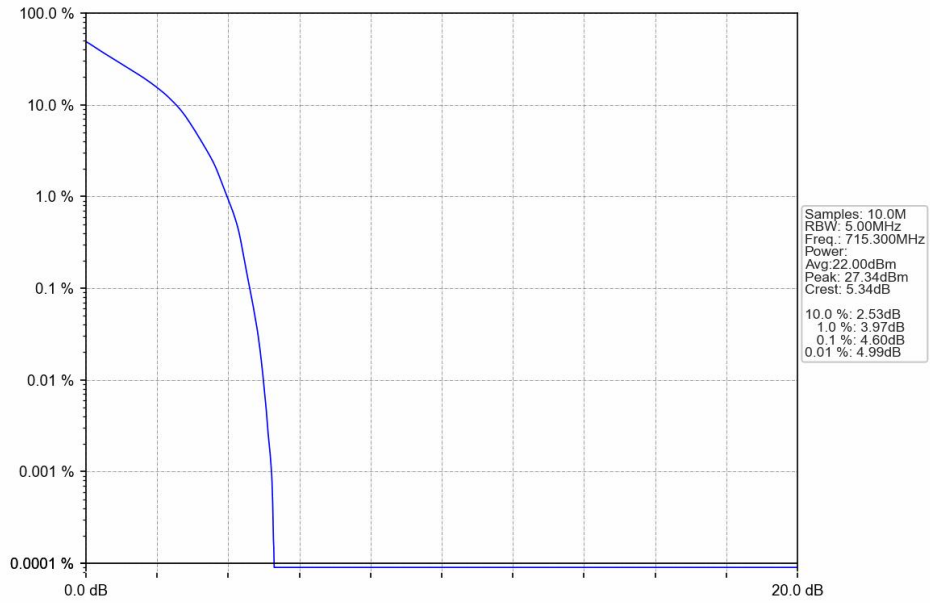
5.1.1 Test Result

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	5.10	<=13	Pass
	707.5	6	0	4.70	<=13	Pass
	715.3	6	0	4.60	<=13	Pass
16QAM	699.7	6	0	5.93	<=13	Pass
	707.5	6	0	5.61	<=13	Pass
	715.3	6	0	5.48	<=13	Pass

5.1.2 Test Graph



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTV



Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTV

