

1. Effective (Isotropic) Radiated Power Output Data

1.1 B12_1.4MHz_ERP

1.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTN										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	699.7	1	0	21.48	-1.12	18.21	<=34.77	Pass		
			2	21.60	-1.12	18.33	<=34.77	Pass		
			5	21.55	-1.12	18.28	<=34.77	Pass		
		3	0	21.63	-1.12	18.36	<=34.77	Pass		
			2	21.61	-1.12	18.34	<=34.77	Pass		
			3	21.63	-1.12	18.36	<=34.77	Pass		
		6	0	20.61	-1.12	17.34	<=34.77	Pass		
		707.5	1	0	21.65	-1.12	18.38	<=34.77	Pass	
				2	21.74	-1.12	18.47	<=34.77	Pass	
	5			21.68	-1.12	18.41	<=34.77	Pass		
	3		0	21.74	-1.12	18.47	<=34.77	Pass		
			2	21.76	-1.12	18.49	<=34.77	Pass		
			3	21.73	-1.12	18.46	<=34.77	Pass		
	6		0	20.75	-1.12	17.48	<=34.77	Pass		
	715.3		1	0	21.83	-1.12	18.56	<=34.77	Pass	
				2	21.99	-1.12	18.72	<=34.77	Pass	
		5		21.95	-1.12	18.68	<=34.77	Pass		
		3	0	21.78	-1.12	18.51	<=34.77	Pass		
			2	21.85	-1.12	18.58	<=34.77	Pass		
			3	21.83	-1.12	18.56	<=34.77	Pass		
		6	0	20.90	-1.12	17.63	<=34.77	Pass		
		16QAM	699.7	1	0	20.64	-1.12	17.37	<=34.77	Pass
					2	20.78	-1.12	17.51	<=34.77	Pass
	5				20.71	-1.12	17.44	<=34.77	Pass	
3	0			20.56	-1.12	17.29	<=34.77	Pass		
	2			20.56	-1.12	17.29	<=34.77	Pass		
	3			20.63	-1.12	17.36	<=34.77	Pass		
6	0			19.61	-1.12	16.34	<=34.77	Pass		
707.5	1			0	20.61	-1.12	17.34	<=34.77	Pass	
				2	20.69	-1.12	17.42	<=34.77	Pass	
			5	20.63	-1.12	17.36	<=34.77	Pass		
	3		0	20.87	-1.12	17.60	<=34.77	Pass		
			2	20.93	-1.12	17.66	<=34.77	Pass		
			3	20.86	-1.12	17.59	<=34.77	Pass		
	6		0	19.78	-1.12	16.51	<=34.77	Pass		
	715.3		1	0	20.68	-1.12	17.41	<=34.77	Pass	
				2	20.80	-1.12	17.53	<=34.77	Pass	
5				20.78	-1.12	17.51	<=34.77	Pass		
3			0	20.79	-1.12	17.52	<=34.77	Pass		
			2	20.81	-1.12	17.54	<=34.77	Pass		
			3	20.79	-1.12	17.52	<=34.77	Pass		
6			0	19.77	-1.12	16.50	<=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	21.65	-1.12	18.38	<=34.77	Pass		
			7	21.88	-1.12	18.61	<=34.77	Pass		
			14	21.69	-1.12	18.42	<=34.77	Pass		
		8	0	20.62	-1.12	17.35	<=34.77	Pass		
			4	20.70	-1.12	17.43	<=34.77	Pass		
			7	20.67	-1.12	17.40	<=34.77	Pass		
		15	0	20.63	-1.12	17.36	<=34.77	Pass		
		707.5	1	0	21.75	-1.12	18.48	<=34.77	Pass	
				7	21.86	-1.12	18.59	<=34.77	Pass	
	14			21.77	-1.12	18.50	<=34.77	Pass		
	8		0	20.76	-1.12	17.49	<=34.77	Pass		
			4	20.82	-1.12	17.55	<=34.77	Pass		
			7	20.78	-1.12	17.51	<=34.77	Pass		
	15		0	20.73	-1.12	17.46	<=34.77	Pass		
	714.5		1	0	21.88	-1.12	18.61	<=34.77	Pass	
				7	22.00	-1.12	18.73	<=34.77	Pass	
		14		22.03	-1.12	18.76	<=34.77	Pass		
		8	0	20.87	-1.12	17.60	<=34.77	Pass		
			4	20.93	-1.12	17.66	<=34.77	Pass		
			7	20.90	-1.12	17.63	<=34.77	Pass		
		15	0	20.79	-1.12	17.52	<=34.77	Pass		
		16QAM	700.5	1	0	20.62	-1.12	17.35	<=34.77	Pass
					7	20.73	-1.12	17.46	<=34.77	Pass
	14				20.71	-1.12	17.44	<=34.77	Pass	
8	0			19.69	-1.12	16.42	<=34.77	Pass		
	4			19.79	-1.12	16.52	<=34.77	Pass		
	7			19.74	-1.12	16.47	<=34.77	Pass		
15	0			19.70	-1.12	16.43	<=34.77	Pass		
707.5	1			0	20.85	-1.12	17.58	<=34.77	Pass	
				7	21.01	-1.12	17.74	<=34.77	Pass	
			14	20.88	-1.12	17.61	<=34.77	Pass		
	8		0	19.74	-1.12	16.47	<=34.77	Pass		
			4	19.80	-1.12	16.53	<=34.77	Pass		
			7	19.75	-1.12	16.48	<=34.77	Pass		
	15		0	19.73	-1.12	16.46	<=34.77	Pass		
	714.5		1	0	21.29	-1.12	18.02	<=34.77	Pass	
				7	21.36	-1.12	18.09	<=34.77	Pass	
14				21.21	-1.12	17.94	<=34.77	Pass		
8			0	20.00	-1.12	16.73	<=34.77	Pass		
			4	20.07	-1.12	16.80	<=34.77	Pass		
			7	20.00	-1.12	16.73	<=34.77	Pass		
15			0	19.88	-1.12	16.61	<=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	21.56	-1.12	18.29	<=34.77	Pass		
			13	21.74	-1.12	18.47	<=34.77	Pass		
			24	21.67	-1.12	18.40	<=34.77	Pass		
		12	0	20.62	-1.12	17.35	<=34.77	Pass		
			6	20.67	-1.12	17.40	<=34.77	Pass		
			13	20.62	-1.12	17.35	<=34.77	Pass		
		25	0	20.62	-1.12	17.35	<=34.77	Pass		
		707.5	1	0	21.66	-1.12	18.39	<=34.77	Pass	
				13	21.80	-1.12	18.53	<=34.77	Pass	
	24			21.75	-1.12	18.48	<=34.77	Pass		
	12		0	20.69	-1.12	17.42	<=34.77	Pass		
			6	20.79	-1.12	17.52	<=34.77	Pass		
			13	20.82	-1.12	17.55	<=34.77	Pass		
	25		0	20.76	-1.12	17.49	<=34.77	Pass		
	713.5		1	0	21.72	-1.12	18.45	<=34.77	Pass	
				13	21.89	-1.12	18.62	<=34.77	Pass	
		24		21.90	-1.12	18.63	<=34.77	Pass		
		12	0	20.89	-1.12	17.62	<=34.77	Pass		
			6	20.88	-1.12	17.61	<=34.77	Pass		
			13	20.79	-1.12	17.52	<=34.77	Pass		
		25	0	20.84	-1.12	17.57	<=34.77	Pass		
		16QAM	701.5	1	0	20.61	-1.12	17.34	<=34.77	Pass
					13	20.81	-1.12	17.54	<=34.77	Pass
	24				20.73	-1.12	17.46	<=34.77	Pass	
12	0			19.65	-1.12	16.38	<=34.77	Pass		
	6			19.72	-1.12	16.45	<=34.77	Pass		
	13			19.59	-1.12	16.32	<=34.77	Pass		
25	0			19.64	-1.12	16.37	<=34.77	Pass		
707.5	1			0	20.87	-1.12	17.60	<=34.77	Pass	
				13	21.04	-1.12	17.77	<=34.77	Pass	
			24	20.96	-1.12	17.69	<=34.77	Pass		
	12		0	19.77	-1.12	16.50	<=34.77	Pass		
			6	19.85	-1.12	16.58	<=34.77	Pass		
			13	19.86	-1.12	16.59	<=34.77	Pass		
	25		0	19.76	-1.12	16.49	<=34.77	Pass		
	713.5		1	0	20.55	-1.12	17.28	<=34.77	Pass	
				13	20.71	-1.12	17.44	<=34.77	Pass	
24				20.60	-1.12	17.33	<=34.77	Pass		
12			0	19.92	-1.12	16.65	<=34.77	Pass		
			6	19.92	-1.12	16.65	<=34.77	Pass		
			13	19.78	-1.12	16.51	<=34.77	Pass		
25			0	19.89	-1.12	16.62	<=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	21.63	-1.12	18.36	<=34.77	Pass
			25	21.94	-1.12	18.67	<=34.77	Pass

		25	49	21.83	-1.12	18.56	<=34.77	Pass		
			0	20.75	-1.12	17.48	<=34.77	Pass		
			13	20.77	-1.12	17.50	<=34.77	Pass		
			25	20.86	-1.12	17.59	<=34.77	Pass		
			50	20.80	-1.12	17.53	<=34.77	Pass		
	707.5	1	0	21.61	-1.12	18.34	<=34.77	Pass		
				25	21.91	-1.12	18.64	<=34.77	Pass	
				49	21.81	-1.12	18.54	<=34.77	Pass	
		25	0	20.70	-1.12	17.43	<=34.77	Pass		
				13	20.81	-1.12	17.54	<=34.77	Pass	
				25	20.86	-1.12	17.59	<=34.77	Pass	
		50	20.80	-1.12	17.53	<=34.77	Pass			
		711	1	0	21.74	-1.12	18.47	<=34.77	Pass	
					25	21.97	-1.12	18.70	<=34.77	Pass
	49				21.98	-1.12	18.71	<=34.77	Pass	
	25		0	20.75	-1.12	17.48	<=34.77	Pass		
				13	20.86	-1.12	17.59	<=34.77	Pass	
				25	20.79	-1.12	17.52	<=34.77	Pass	
	50		20.75	-1.12	17.48	<=34.77	Pass			
	16QAM		704	1	0	20.58	-1.12	17.31	<=34.77	Pass
					25	20.85	-1.12	17.58	<=34.77	Pass
		49			20.77	-1.12	17.50	<=34.77	Pass	
		25		0	19.85	-1.12	16.58	<=34.77	Pass	
					13	19.86	-1.12	16.59	<=34.77	Pass
					25	19.95	-1.12	16.68	<=34.77	Pass
		50		19.82	-1.12	16.55	<=34.77	Pass		
		707.5		1	0	20.77	-1.12	17.50	<=34.77	Pass
25						21.04	-1.12	17.77	<=34.77	Pass
49			20.99			-1.12	17.72	<=34.77	Pass	
25			0	19.73	-1.12	16.46	<=34.77	Pass		
				13	19.86	-1.12	16.59	<=34.77	Pass	
				25	19.90	-1.12	16.63	<=34.77	Pass	
50			19.81	-1.12	16.54	<=34.77	Pass			
711			1	0	21.18	-1.12	17.91	<=34.77	Pass	
					25	21.46	-1.12	18.19	<=34.77	Pass
		49			21.25	-1.12	17.98	<=34.77	Pass	
		25	0	19.82	-1.12	16.55	<=34.77	Pass		
				13	19.95	-1.12	16.68	<=34.77	Pass	
				25	19.83	-1.12	16.56	<=34.77	Pass	
		50	19.80	-1.12	16.53	<=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	-6.266	-0.0090	-2.5 to 2.5	Pass
					3.85	-9.885	-0.0141	-2.5 to 2.5	Pass
					4.43	-3.390	-0.0048	-2.5 to 2.5	Pass

				-30	3.85	-6.909	-0.0099	-2.5 to 2.5	Pass			
				-20	3.85	-9.670	-0.0138	-2.5 to 2.5	Pass			
				-10	3.85	-8.855	-0.0127	-2.5 to 2.5	Pass			
				0	3.85	-4.821	-0.0069	-2.5 to 2.5	Pass			
				10	3.85	-8.483	-0.0121	-2.5 to 2.5	Pass			
				30	3.85	-5.679	-0.0081	-2.5 to 2.5	Pass			
				40	3.85	-5.865	-0.0084	-2.5 to 2.5	Pass			
	50	3.85	-4.191	-0.0060	-2.5 to 2.5	Pass						
	707.5	6	0	20	3.27	-0.587	-0.0008	-2.5 to 2.5	Pass			
					3.85	-6.523	-0.0092	-2.5 to 2.5	Pass			
					4.43	-0.529	-0.0007	-2.5 to 2.5	Pass			
				-30	3.85	-2.117	-0.0030	-2.5 to 2.5	Pass			
				-20	3.85	-6.838	-0.0097	-2.5 to 2.5	Pass			
				-10	3.85	-3.319	-0.0047	-2.5 to 2.5	Pass			
				0	3.85	-5.450	-0.0077	-2.5 to 2.5	Pass			
				10	3.85	-3.319	-0.0047	-2.5 to 2.5	Pass			
				30	3.85	-5.608	-0.0079	-2.5 to 2.5	Pass			
				40	3.85	-1.259	-0.0018	-2.5 to 2.5	Pass			
				50	3.85	-0.958	-0.0014	-2.5 to 2.5	Pass			
				715.3	6	0	20	3.27	-0.215	-0.0003	-2.5 to 2.5	Pass
								3.85	-8.912	-0.0125	-2.5 to 2.5	Pass
								4.43	-9.685	-0.0135	-2.5 to 2.5	Pass
	-30	3.85	-9.613				-0.0134	-2.5 to 2.5	Pass			
	-20	3.85	-4.191				-0.0059	-2.5 to 2.5	Pass			
	-10	3.85	0.257				0.0004	-2.5 to 2.5	Pass			
	0	3.85	-6.180				-0.0086	-2.5 to 2.5	Pass			
	10	3.85	-8.898				-0.0124	-2.5 to 2.5	Pass			
30	3.85	-2.260	-0.0032				-2.5 to 2.5	Pass				
40	3.85	-5.937	-0.0083				-2.5 to 2.5	Pass				
50	3.85	-3.891	-0.0054				-2.5 to 2.5	Pass				
16QAM	699.7	6	0	20	3.27	-8.068	-0.0115	-2.5 to 2.5	Pass			
					3.85	-2.675	-0.0038	-2.5 to 2.5	Pass			
					4.43	-11.802	-0.0169	-2.5 to 2.5	Pass			
				-30	3.85	-6.795	-0.0097	-2.5 to 2.5	Pass			
				-20	3.85	-8.354	-0.0119	-2.5 to 2.5	Pass			
				-10	3.85	-8.240	-0.0118	-2.5 to 2.5	Pass			
				0	3.85	-7.510	-0.0107	-2.5 to 2.5	Pass			
				10	3.85	-4.191	-0.0060	-2.5 to 2.5	Pass			
				30	3.85	-8.111	-0.0116	-2.5 to 2.5	Pass			
				40	3.85	-9.527	-0.0136	-2.5 to 2.5	Pass			
				50	3.85	-3.877	-0.0055	-2.5 to 2.5	Pass			
				707.5	6	0	20	3.27	-0.300	-0.0004	-2.5 to 2.5	Pass
								3.85	-4.506	-0.0064	-2.5 to 2.5	Pass
								4.43	0.415	0.0006	-2.5 to 2.5	Pass
	-30	3.85	-5.465				-0.0077	-2.5 to 2.5	Pass			
	-20	3.85	-9.828				-0.0139	-2.5 to 2.5	Pass			
	-10	3.85	-9.727				-0.0137	-2.5 to 2.5	Pass			
	0	3.85	-2.890				-0.0041	-2.5 to 2.5	Pass			
	10	3.85	-6.566				-0.0093	-2.5 to 2.5	Pass			
	30	3.85	-3.362				-0.0048	-2.5 to 2.5	Pass			
	40	3.85	-6.280				-0.0089	-2.5 to 2.5	Pass			
	50	3.85	-1.588				-0.0022	-2.5 to 2.5	Pass			
	715.3	6	0				20	3.27	-6.695	-0.0094	-2.5 to 2.5	Pass
								3.85	-3.648	-0.0051	-2.5 to 2.5	Pass
				4.43	-1.917	-0.0027		-2.5 to 2.5	Pass			
				-30	3.85	-5.951	-0.0083	-2.5 to 2.5	Pass			
	-20	3.85	-4.549	-0.0064	-2.5 to 2.5	Pass						

				-10	3.85	-6.566	-0.0092	-2.5 to 2.5	Pass
				0	3.85	-10.185	-0.0142	-2.5 to 2.5	Pass
				10	3.85	-7.968	-0.0111	-2.5 to 2.5	Pass
				30	3.85	-6.709	-0.0094	-2.5 to 2.5	Pass
				40	3.85	-5.207	-0.0073	-2.5 to 2.5	Pass
				50	3.85	-8.340	-0.0117	-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	-7.467	-0.0107	-2.5 to 2.5	Pass
					3.85	-6.022	-0.0086	-2.5 to 2.5	Pass
					4.43	-4.864	-0.0069	-2.5 to 2.5	Pass
				-30	3.85	-9.427	-0.0135	-2.5 to 2.5	Pass
				-20	3.85	-4.435	-0.0063	-2.5 to 2.5	Pass
				-10	3.85	-8.626	-0.0123	-2.5 to 2.5	Pass
				0	3.85	-3.991	-0.0057	-2.5 to 2.5	Pass
				10	3.85	-3.862	-0.0055	-2.5 to 2.5	Pass
				30	3.85	-3.619	-0.0052	-2.5 to 2.5	Pass
				40	3.85	-5.050	-0.0072	-2.5 to 2.5	Pass
	50	3.85	-7.610	-0.0109	-2.5 to 2.5	Pass			
	707.5	15	0	20	3.27	-4.377	-0.0062	-2.5 to 2.5	Pass
					3.85	-2.561	-0.0036	-2.5 to 2.5	Pass
					4.43	-0.930	-0.0013	-2.5 to 2.5	Pass
				-30	3.85	-6.852	-0.0097	-2.5 to 2.5	Pass
				-20	3.85	-5.307	-0.0075	-2.5 to 2.5	Pass
				-10	3.85	-5.636	-0.0080	-2.5 to 2.5	Pass
				0	3.85	-8.225	-0.0116	-2.5 to 2.5	Pass
				10	3.85	-1.001	-0.0014	-2.5 to 2.5	Pass
				30	3.85	-9.656	-0.0136	-2.5 to 2.5	Pass
				40	3.85	-2.761	-0.0039	-2.5 to 2.5	Pass
	50	3.85	-5.822	-0.0082	-2.5 to 2.5	Pass			
	714.5	15	0	20	3.27	-6.051	-0.0085	-2.5 to 2.5	Pass
					3.85	-6.065	-0.0085	-2.5 to 2.5	Pass
					4.43	-5.851	-0.0082	-2.5 to 2.5	Pass
				-30	3.85	-8.311	-0.0116	-2.5 to 2.5	Pass
				-20	3.85	-6.323	-0.0088	-2.5 to 2.5	Pass
				-10	3.85	-7.596	-0.0106	-2.5 to 2.5	Pass
				0	3.85	-4.520	-0.0063	-2.5 to 2.5	Pass
				10	3.85	-9.255	-0.0130	-2.5 to 2.5	Pass
30				3.85	-8.769	-0.0123	-2.5 to 2.5	Pass	
40				3.85	-5.593	-0.0078	-2.5 to 2.5	Pass	
50	3.85	-7.067	-0.0099	-2.5 to 2.5	Pass				
16QAM	700.5	15	0	20	3.27	-6.423	-0.0092	-2.5 to 2.5	Pass
					3.85	-8.268	-0.0118	-2.5 to 2.5	Pass
					4.43	-9.799	-0.0140	-2.5 to 2.5	Pass
				-30	3.85	-7.682	-0.0110	-2.5 to 2.5	Pass
				-20	3.85	-5.836	-0.0083	-2.5 to 2.5	Pass
				-10	3.85	-8.354	-0.0119	-2.5 to 2.5	Pass
				0	3.85	-8.354	-0.0119	-2.5 to 2.5	Pass
10	3.85	-4.835	-0.0069	-2.5 to 2.5	Pass				

	707.5	15	0	30	3.85	-4.363	-0.0062	-2.5 to 2.5	Pass
				40	3.85	-3.777	-0.0054	-2.5 to 2.5	Pass
				50	3.85	-4.864	-0.0069	-2.5 to 2.5	Pass
				20	3.27	-2.131	-0.0030	-2.5 to 2.5	Pass
					3.85	-7.367	-0.0104	-2.5 to 2.5	Pass
					4.43	-12.488	-0.0177	-2.5 to 2.5	Pass
				-30	3.85	-7.925	-0.0112	-2.5 to 2.5	Pass
				-20	3.85	-0.758	-0.0011	-2.5 to 2.5	Pass
				-10	3.85	-0.887	-0.0013	-2.5 to 2.5	Pass
				0	3.85	-7.868	-0.0111	-2.5 to 2.5	Pass
				10	3.85	-2.618	-0.0037	-2.5 to 2.5	Pass
				30	3.85	-5.264	-0.0074	-2.5 to 2.5	Pass
	40	3.85	-4.034	-0.0057	-2.5 to 2.5	Pass			
	50	3.85	-3.977	-0.0056	-2.5 to 2.5	Pass			
	714.5	15	0	20	3.27	-7.610	-0.0107	-2.5 to 2.5	Pass
					3.85	-8.054	-0.0113	-2.5 to 2.5	Pass
					4.43	-6.065	-0.0085	-2.5 to 2.5	Pass
				-30	3.85	-4.463	-0.0062	-2.5 to 2.5	Pass
				-20	3.85	-6.008	-0.0084	-2.5 to 2.5	Pass
				-10	3.85	-11.930	-0.0167	-2.5 to 2.5	Pass
				0	3.85	-4.735	-0.0066	-2.5 to 2.5	Pass
				10	3.85	-3.276	-0.0046	-2.5 to 2.5	Pass
				30	3.85	-10.257	-0.0144	-2.5 to 2.5	Pass
				40	3.85	-6.523	-0.0091	-2.5 to 2.5	Pass
50				3.85	-5.608	-0.0078	-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	-5.164	-0.0074	-2.5 to 2.5	Pass
					3.85	-10.686	-0.0152	-2.5 to 2.5	Pass
					4.43	-5.851	-0.0083	-2.5 to 2.5	Pass
				-30	3.85	-5.264	-0.0075	-2.5 to 2.5	Pass
				-20	3.85	-4.692	-0.0067	-2.5 to 2.5	Pass
				-10	3.85	-4.706	-0.0067	-2.5 to 2.5	Pass
				0	3.85	-9.513	-0.0136	-2.5 to 2.5	Pass
				10	3.85	-6.981	-0.0100	-2.5 to 2.5	Pass
				30	3.85	-6.380	-0.0091	-2.5 to 2.5	Pass
				40	3.85	-5.679	-0.0081	-2.5 to 2.5	Pass
				50	3.85	-9.899	-0.0141	-2.5 to 2.5	Pass
				707.5	25	0	20	3.27	-2.575
	3.85	-3.147	-0.0044					-2.5 to 2.5	Pass
	4.43	-8.440	-0.0119					-2.5 to 2.5	Pass
	-30	3.85	-2.546				-0.0036	-2.5 to 2.5	Pass
	-20	3.85	-3.262				-0.0046	-2.5 to 2.5	Pass
	-10	3.85	-6.452				-0.0091	-2.5 to 2.5	Pass
	0	3.85	-7.668				-0.0108	-2.5 to 2.5	Pass
	10	3.85	-4.020				-0.0057	-2.5 to 2.5	Pass
	30	3.85	-7.939				-0.0112	-2.5 to 2.5	Pass
	40	3.85	-9.813				-0.0139	-2.5 to 2.5	Pass
	50	3.85	-4.621				-0.0065	-2.5 to 2.5	Pass

	713.5	25	0	20	3.27	-7.753	-0.0109	-2.5 to 2.5	Pass
					3.85	-4.277	-0.0060	-2.5 to 2.5	Pass
					4.43	-5.894	-0.0083	-2.5 to 2.5	Pass
				-30	3.85	-8.597	-0.0120	-2.5 to 2.5	Pass
					-20	3.85	-7.625	-0.0107	-2.5 to 2.5
				-10	3.85	-8.140	-0.0114	-2.5 to 2.5	Pass
					0	3.85	-3.448	-0.0048	-2.5 to 2.5
				10	3.85	-8.826	-0.0124	-2.5 to 2.5	Pass
					30	3.85	-6.166	-0.0086	-2.5 to 2.5
				40	3.85	-7.982	-0.0112	-2.5 to 2.5	Pass
50	3.85	-7.410	-0.0104		-2.5 to 2.5	Pass			
16QAM	701.5	25	0	20	3.27	-4.320	-0.0062	-2.5 to 2.5	Pass
					3.85	-5.107	-0.0073	-2.5 to 2.5	Pass
					4.43	-7.768	-0.0111	-2.5 to 2.5	Pass
				-30	3.85	-3.133	-0.0045	-2.5 to 2.5	Pass
					-20	3.85	-5.608	-0.0080	-2.5 to 2.5
				-10	3.85	-6.709	-0.0096	-2.5 to 2.5	Pass
					0	3.85	-6.466	-0.0092	-2.5 to 2.5
				10	3.85	-5.779	-0.0082	-2.5 to 2.5	Pass
					30	3.85	-6.752	-0.0096	-2.5 to 2.5
	40	3.85	-7.424	-0.0106	-2.5 to 2.5	Pass			
		50	3.85	-6.523	-0.0093	-2.5 to 2.5	Pass		
	707.5	25	0	20	3.27	-7.696	-0.0109	-2.5 to 2.5	Pass
					3.85	-3.405	-0.0048	-2.5 to 2.5	Pass
					4.43	-1.860	-0.0026	-2.5 to 2.5	Pass
				-30	3.85	-3.405	-0.0048	-2.5 to 2.5	Pass
					-20	3.85	-6.437	-0.0091	-2.5 to 2.5
				-10	3.85	-6.866	-0.0097	-2.5 to 2.5	Pass
					0	3.85	-5.922	-0.0084	-2.5 to 2.5
10				3.85	-1.001	-0.0014	-2.5 to 2.5	Pass	
				30	3.85	-2.003	-0.0028	-2.5 to 2.5	Pass
40	3.85	-9.012	-0.0127	-2.5 to 2.5	Pass				
	50	3.85	-4.706	-0.0067	-2.5 to 2.5	Pass			
713.5	25	0	20	3.27	-10.843	-0.0152	-2.5 to 2.5	Pass	
				3.85	-4.764	-0.0067	-2.5 to 2.5	Pass	
				4.43	-2.489	-0.0035	-2.5 to 2.5	Pass	
			-30	3.85	-7.153	-0.0100	-2.5 to 2.5	Pass	
				-20	3.85	-6.094	-0.0085	-2.5 to 2.5	Pass
			-10	3.85	-11.659	-0.0163	-2.5 to 2.5	Pass	
				0	3.85	-5.980	-0.0084	-2.5 to 2.5	Pass
			10	3.85	-7.052	-0.0099	-2.5 to 2.5	Pass	
				30	3.85	-4.549	-0.0064	-2.5 to 2.5	Pass
40	3.85	-8.597	-0.0120	-2.5 to 2.5	Pass				
	50	3.85	-9.413	-0.0132	-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	-6.895	-0.0098	-2.5 to 2.5	Pass
					3.85	-6.151	-0.0087	-2.5 to 2.5	Pass
					4.43	-6.809	-0.0097	-2.5 to 2.5	Pass

				-30	3.85	-4.478	-0.0064	-2.5 to 2.5	Pass			
				-20	3.85	-7.782	-0.0111	-2.5 to 2.5	Pass			
				-10	3.85	-4.792	-0.0068	-2.5 to 2.5	Pass			
				0	3.85	-5.765	-0.0082	-2.5 to 2.5	Pass			
				10	3.85	-6.695	-0.0095	-2.5 to 2.5	Pass			
				30	3.85	-6.452	-0.0092	-2.5 to 2.5	Pass			
				40	3.85	-4.649	-0.0066	-2.5 to 2.5	Pass			
	50	3.85	-6.065	-0.0086	-2.5 to 2.5	Pass						
	707.5	50	0	20	3.27	-9.742	-0.0138	-2.5 to 2.5	Pass			
					3.85	-5.107	-0.0072	-2.5 to 2.5	Pass			
					4.43	-10.242	-0.0145	-2.5 to 2.5	Pass			
				-30	3.85	-8.512	-0.0120	-2.5 to 2.5	Pass			
				-20	3.85	-2.747	-0.0039	-2.5 to 2.5	Pass			
				-10	3.85	-7.181	-0.0101	-2.5 to 2.5	Pass			
				0	3.85	-6.022	-0.0085	-2.5 to 2.5	Pass			
				10	3.85	-2.990	-0.0042	-2.5 to 2.5	Pass			
				30	3.85	-6.795	-0.0096	-2.5 to 2.5	Pass			
				40	3.85	-6.995	-0.0099	-2.5 to 2.5	Pass			
				50	3.85	-5.479	-0.0077	-2.5 to 2.5	Pass			
				711	50	0	20	3.27	-4.077	-0.0057	-2.5 to 2.5	Pass
								3.85	-6.323	-0.0089	-2.5 to 2.5	Pass
								4.43	-3.076	-0.0043	-2.5 to 2.5	Pass
	-30	3.85	-4.263				-0.0060	-2.5 to 2.5	Pass			
	-20	3.85	-4.005				-0.0056	-2.5 to 2.5	Pass			
	-10	3.85	-3.662				-0.0052	-2.5 to 2.5	Pass			
	0	3.85	-6.695				-0.0094	-2.5 to 2.5	Pass			
	10	3.85	-4.721				-0.0066	-2.5 to 2.5	Pass			
30	3.85	-5.836	-0.0082				-2.5 to 2.5	Pass				
40	3.85	-5.536	-0.0078				-2.5 to 2.5	Pass				
50	3.85	-5.908	-0.0083				-2.5 to 2.5	Pass				
16QAM	704	50	0	20	3.27	-6.895	-0.0098	-2.5 to 2.5	Pass			
					3.85	-4.363	-0.0062	-2.5 to 2.5	Pass			
					4.43	-5.593	-0.0079	-2.5 to 2.5	Pass			
				-30	3.85	-5.422	-0.0077	-2.5 to 2.5	Pass			
				-20	3.85	-5.579	-0.0079	-2.5 to 2.5	Pass			
				-10	3.85	-6.008	-0.0085	-2.5 to 2.5	Pass			
				0	3.85	-8.297	-0.0118	-2.5 to 2.5	Pass			
				10	3.85	-9.642	-0.0137	-2.5 to 2.5	Pass			
				30	3.85	-6.723	-0.0095	-2.5 to 2.5	Pass			
				40	3.85	-7.682	-0.0109	-2.5 to 2.5	Pass			
				50	3.85	-4.148	-0.0059	-2.5 to 2.5	Pass			
				707.5	50	0	20	3.27	-3.877	-0.0055	-2.5 to 2.5	Pass
								3.85	-11.501	-0.0163	-2.5 to 2.5	Pass
								4.43	-8.168	-0.0115	-2.5 to 2.5	Pass
	-30	3.85	-7.296				-0.0103	-2.5 to 2.5	Pass			
	-20	3.85	-6.852				-0.0097	-2.5 to 2.5	Pass			
	-10	3.85	-4.406				-0.0062	-2.5 to 2.5	Pass			
	0	3.85	-7.582				-0.0107	-2.5 to 2.5	Pass			
	10	3.85	-4.392				-0.0062	-2.5 to 2.5	Pass			
	30	3.85	-7.210				-0.0102	-2.5 to 2.5	Pass			
	40	3.85	-3.691				-0.0052	-2.5 to 2.5	Pass			
	50	3.85	-2.718				-0.0038	-2.5 to 2.5	Pass			
	711	50	0	20	3.27	-3.734	-0.0053	-2.5 to 2.5	Pass			
					3.85	-6.738	-0.0095	-2.5 to 2.5	Pass			
					4.43	-5.679	-0.0080	-2.5 to 2.5	Pass			
				-30	3.85	-3.605	-0.0051	-2.5 to 2.5	Pass			
				-20	3.85	-6.609	-0.0093	-2.5 to 2.5	Pass			

				-10	3.85	-3.819	-0.0054	-2.5 to 2.5	Pass
				0	3.85	-5.107	-0.0072	-2.5 to 2.5	Pass
				10	3.85	-9.785	-0.0138	-2.5 to 2.5	Pass
				30	3.85	-9.370	-0.0132	-2.5 to 2.5	Pass
				40	3.85	-8.955	-0.0126	-2.5 to 2.5	Pass
				50	3.85	-9.842	-0.0138	-2.5 to 2.5	Pass

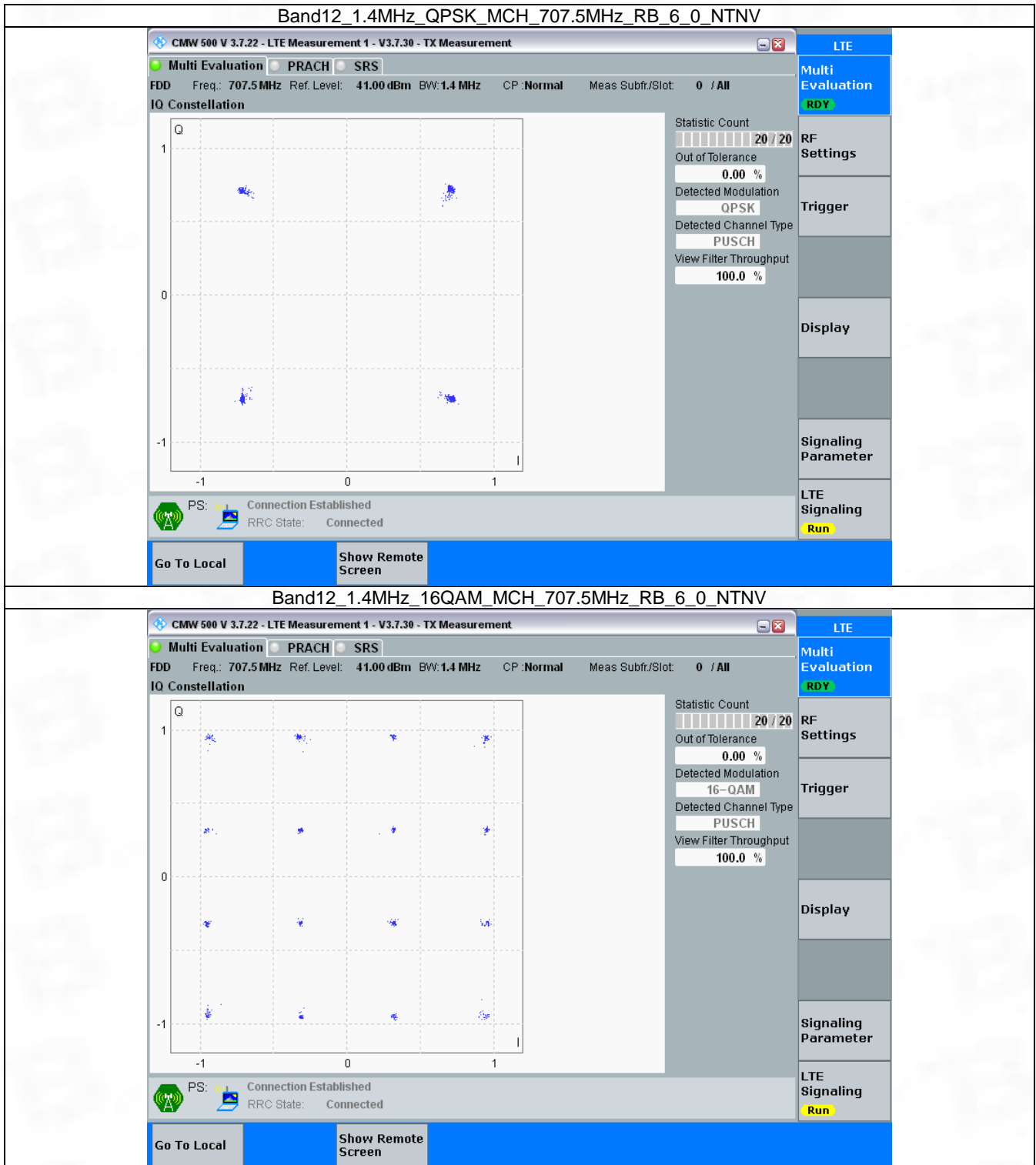
3. Modulation Characteristics

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

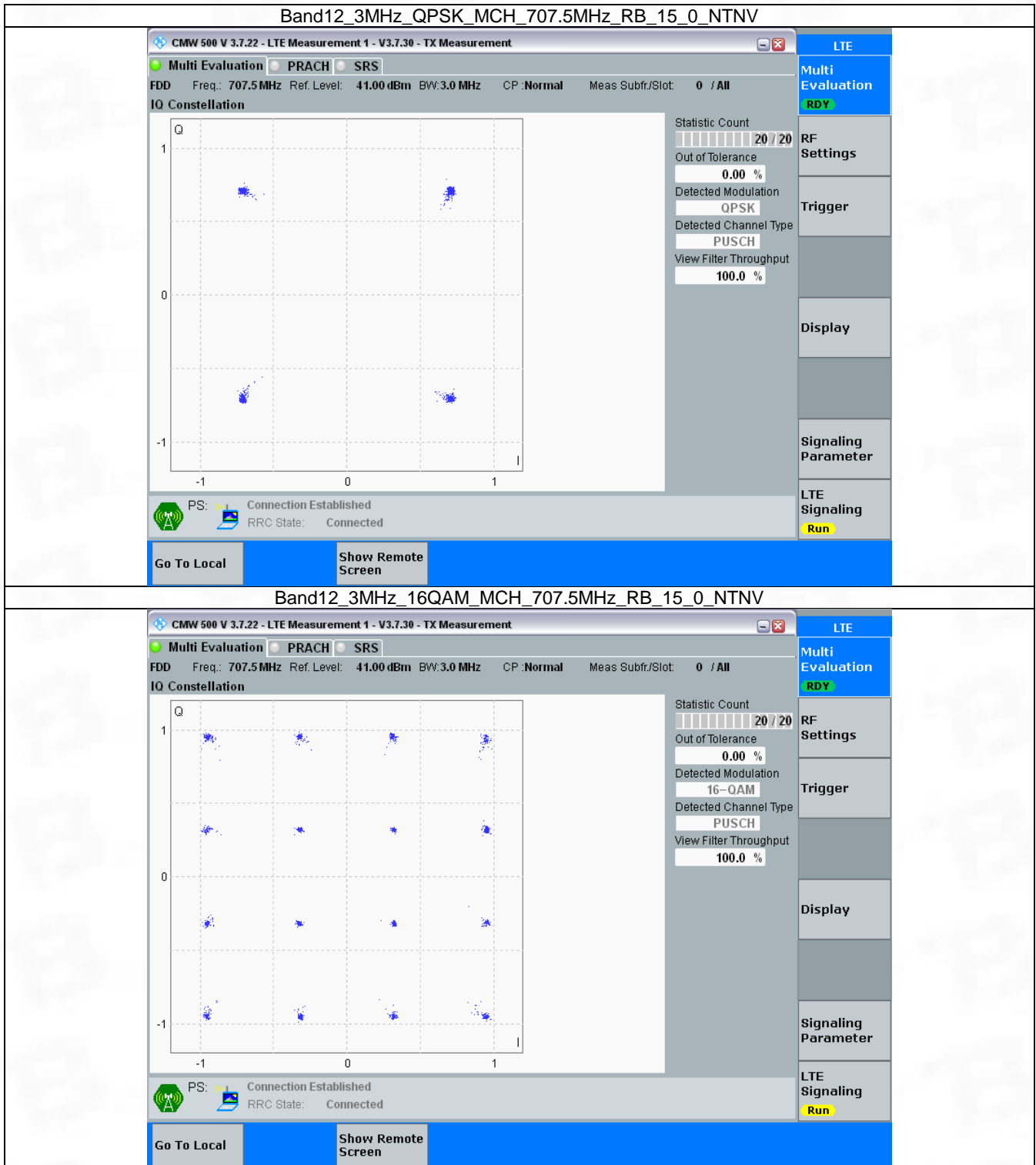


3.2 B12_3MHz

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

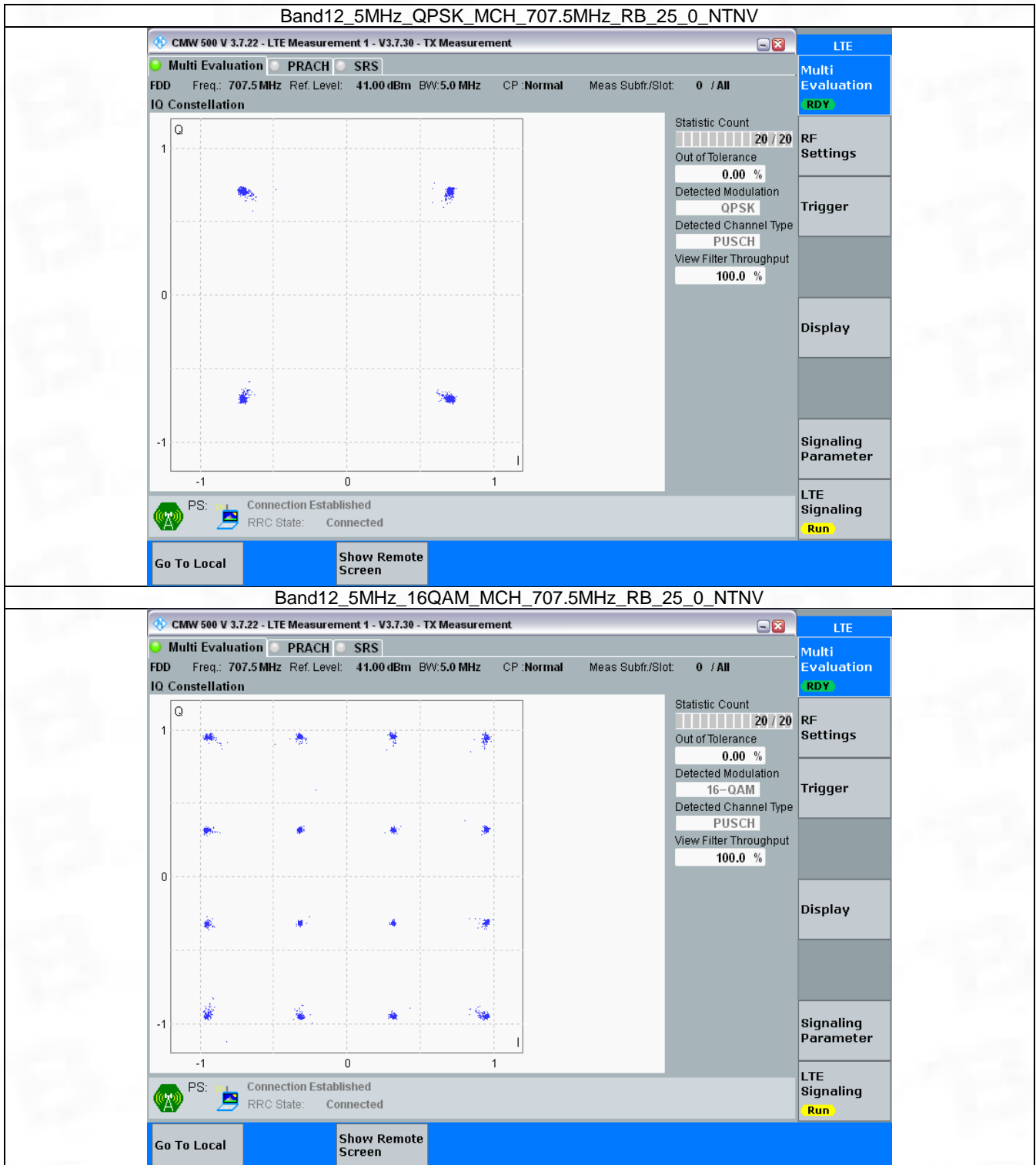


3.3 B12_5MHz

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

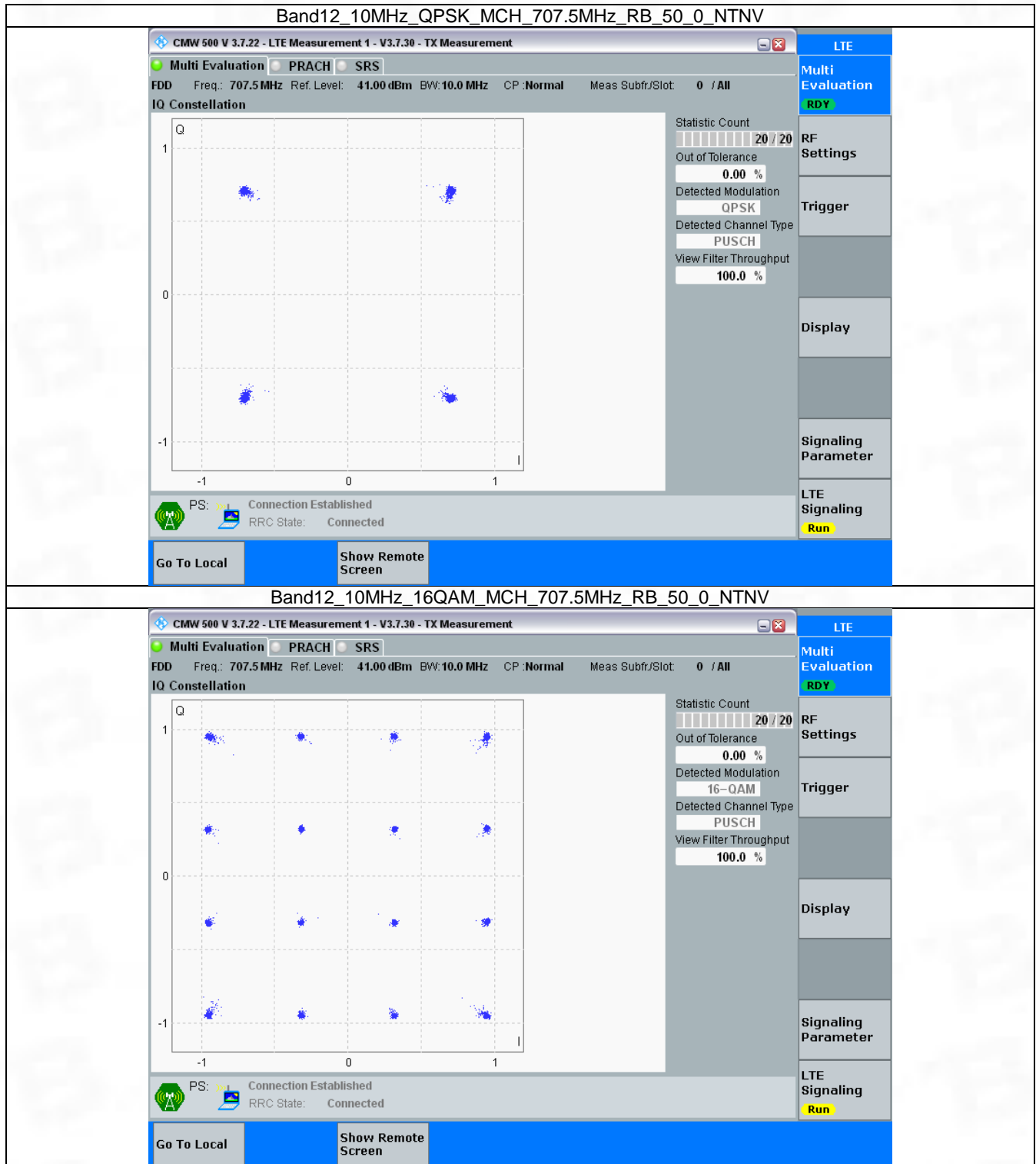


3.4 B12_10MHz

3.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTV						
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



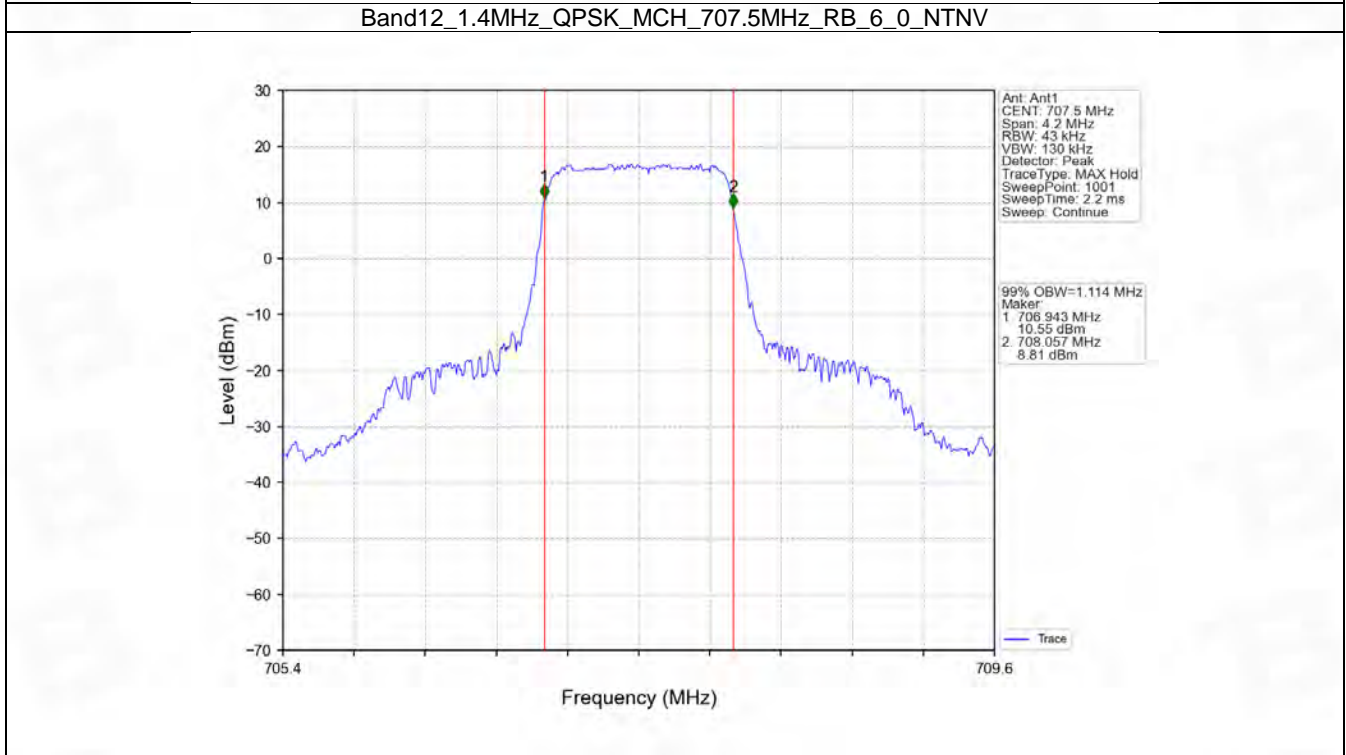
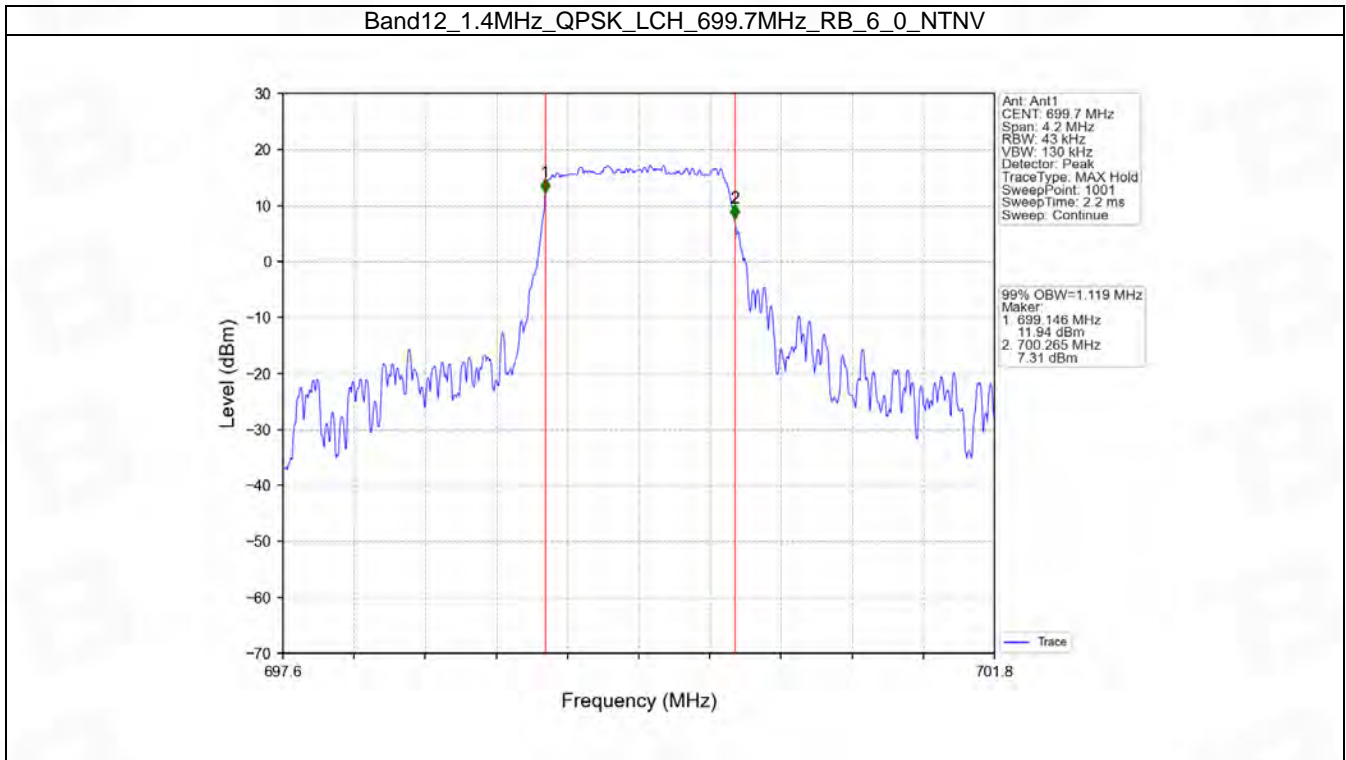
4. 99% & 26dB Bandwidth

4.1 Band12_OBW

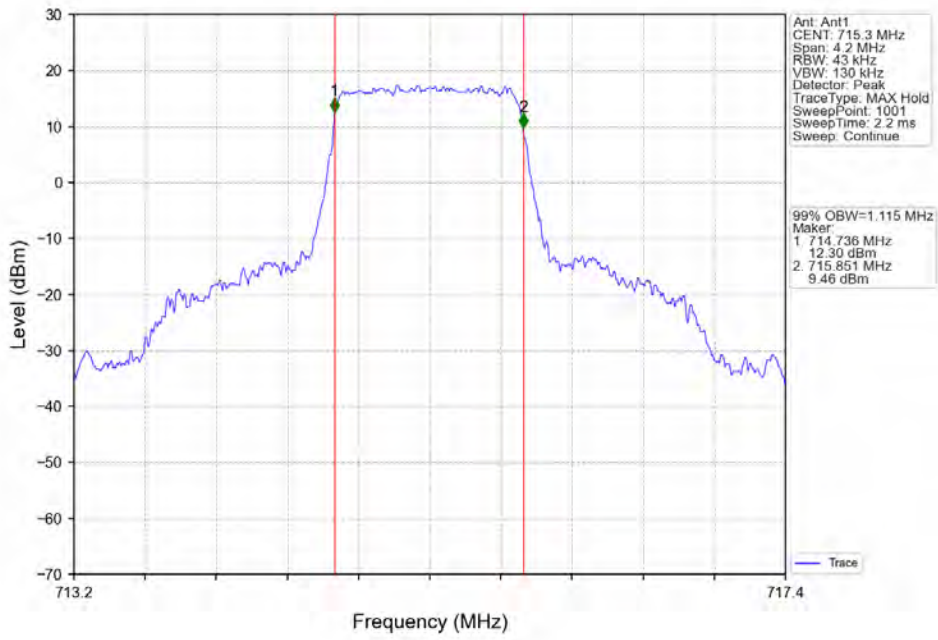
4.1.1 Test Result

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	1.119	/	Pass
		707.5	6	0	1.114	/	Pass
		715.3	6	0	1.115	/	Pass
	16QAM	699.7	6	0	1.109	/	Pass
		707.5	6	0	1.116	/	Pass
		715.3	6	0	1.113	/	Pass
3	QPSK	700.5	15	0	2.725	/	Pass
		707.5	15	0	2.735	/	Pass
		714.5	15	0	2.722	/	Pass
	16QAM	700.5	15	0	2.726	/	Pass
		707.5	15	0	2.721	/	Pass
		714.5	15	0	2.734	/	Pass
5	QPSK	701.5	25	0	4.559	/	Pass
		707.5	25	0	4.564	/	Pass
		713.5	25	0	4.593	/	Pass
	16QAM	701.5	25	0	4.582	/	Pass
		707.5	25	0	4.587	/	Pass
		713.5	25	0	4.547	/	Pass
10	QPSK	704	50	0	9.105	/	Pass
		707.5	50	0	9.073	/	Pass
		711	50	0	9.053	/	Pass
	16QAM	704	50	0	9.102	/	Pass
		707.5	50	0	9.046	/	Pass
		711	50	0	9.006	/	Pass

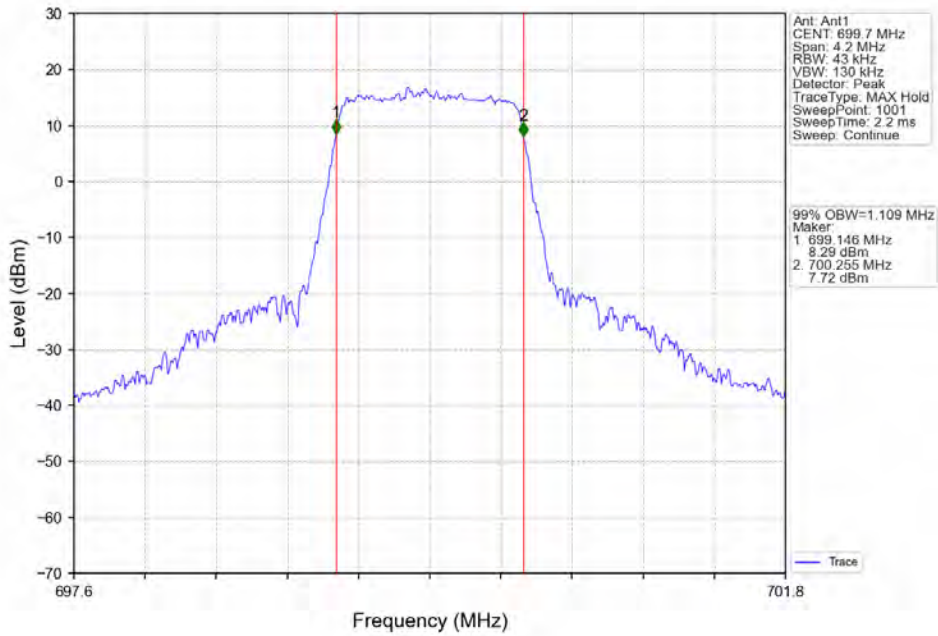
4.1.2 Test Graph



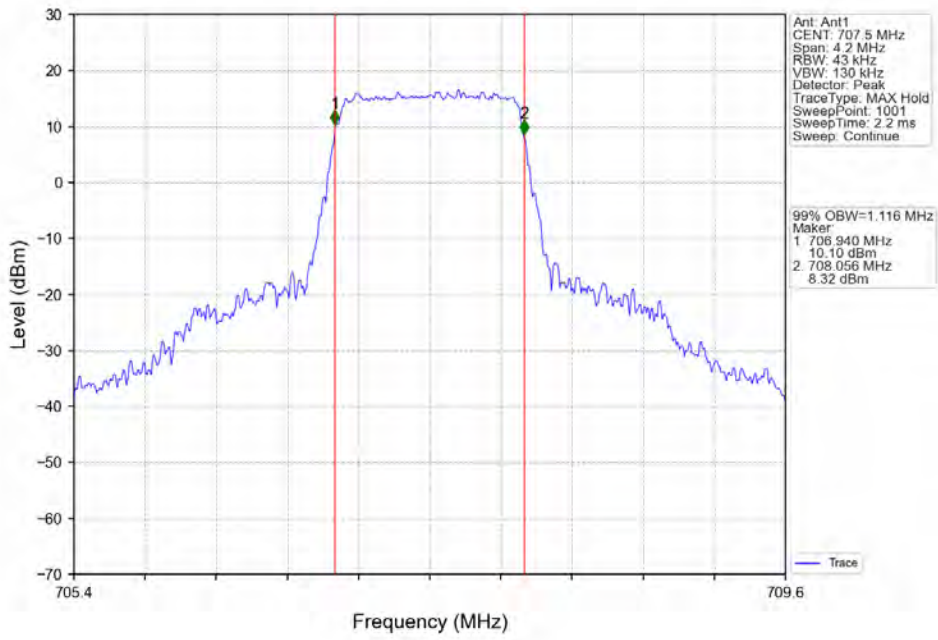
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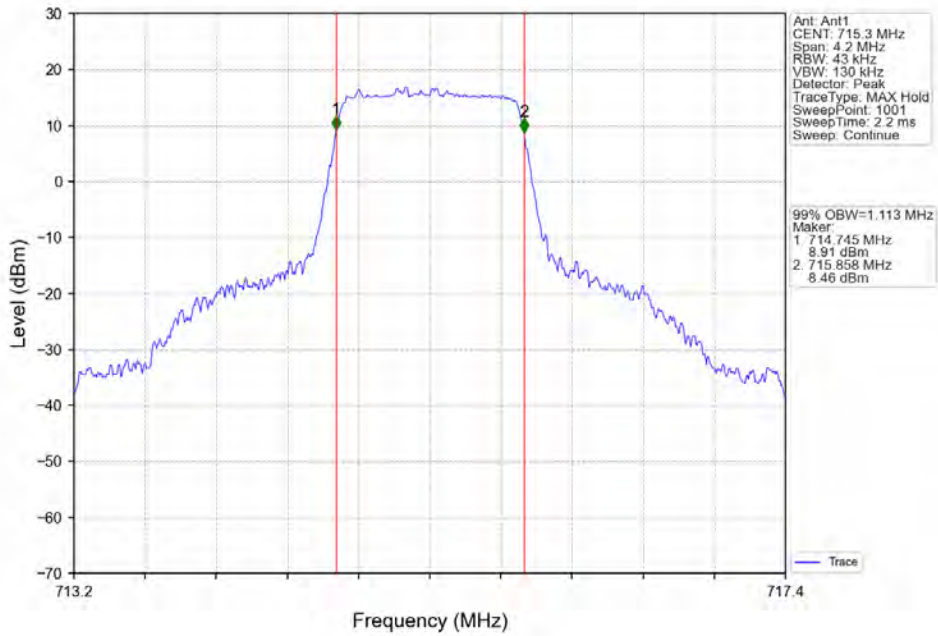
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



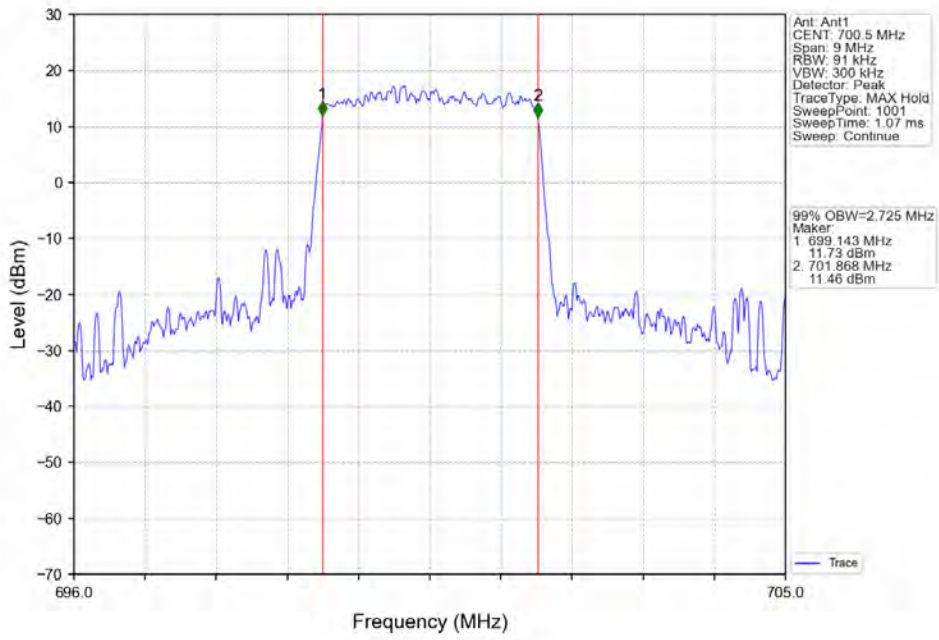
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



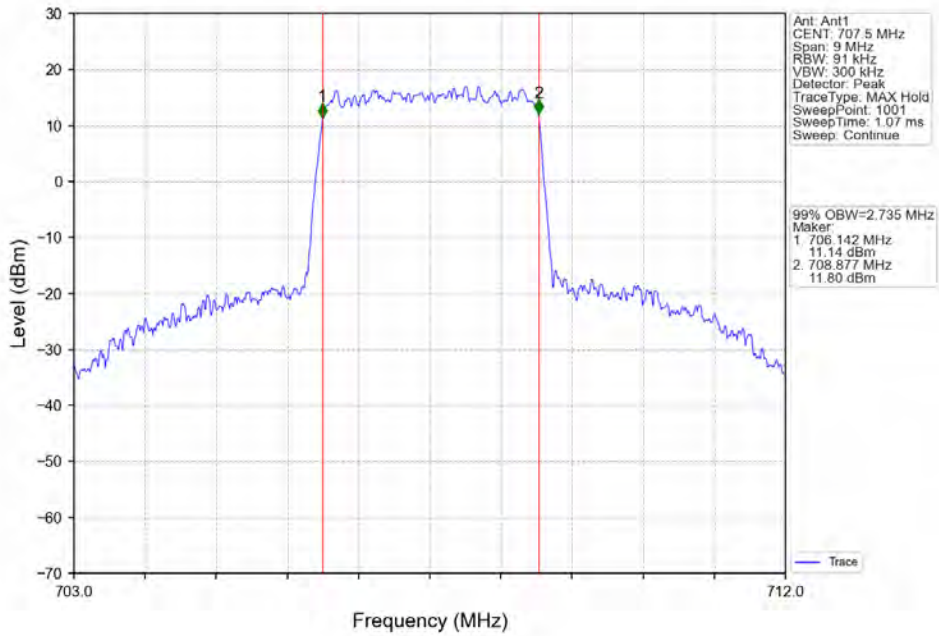
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



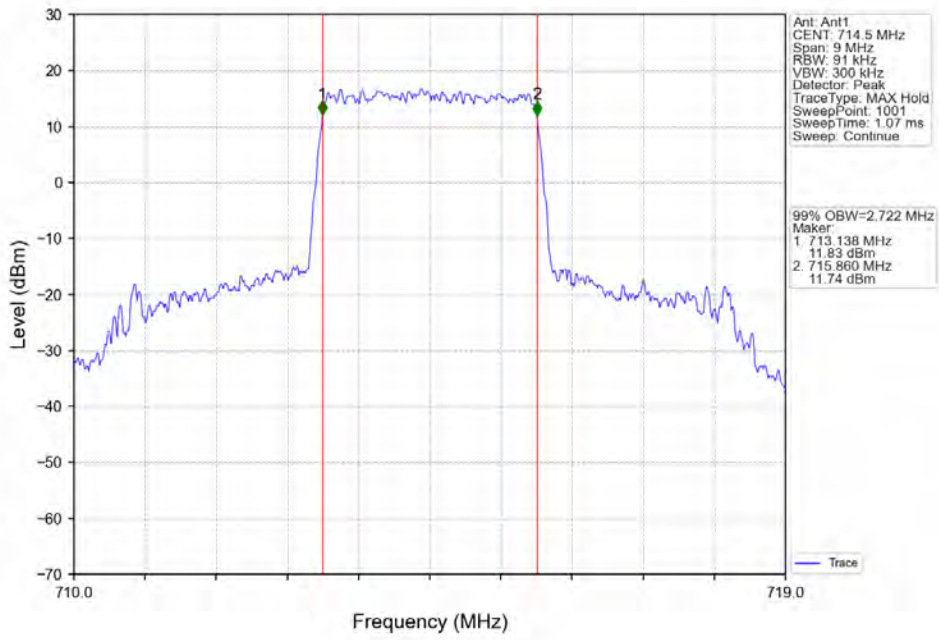
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



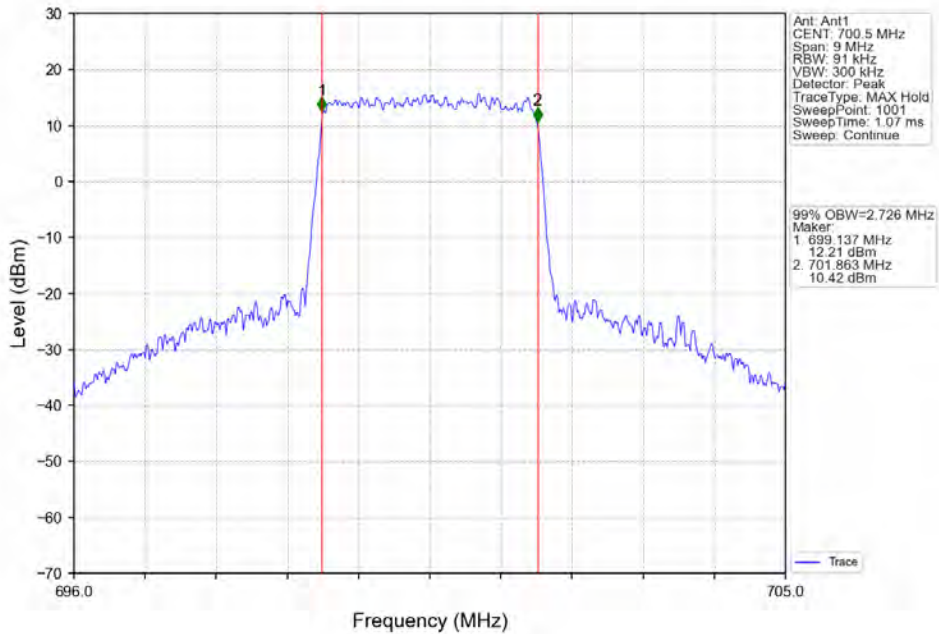
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



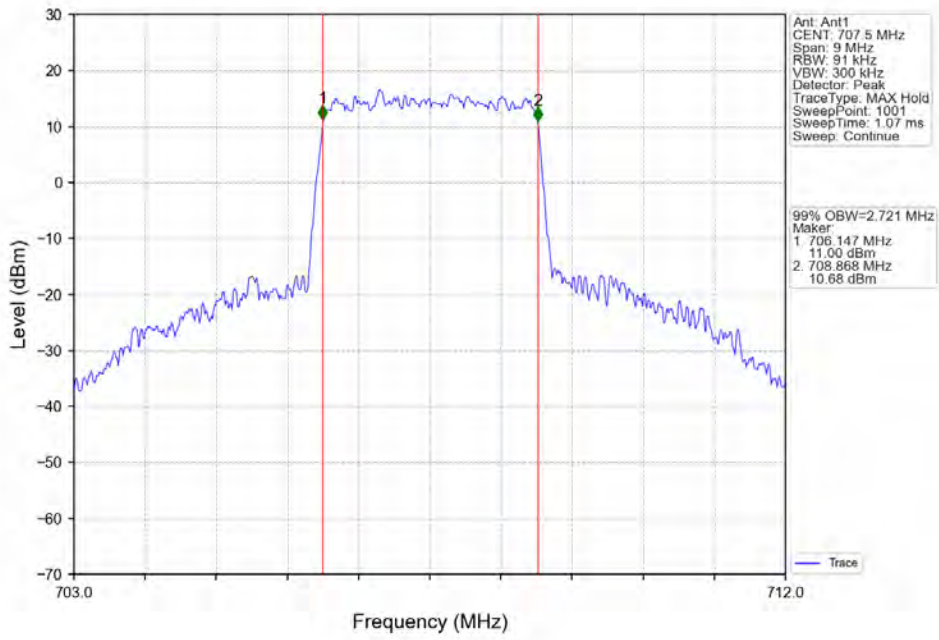
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



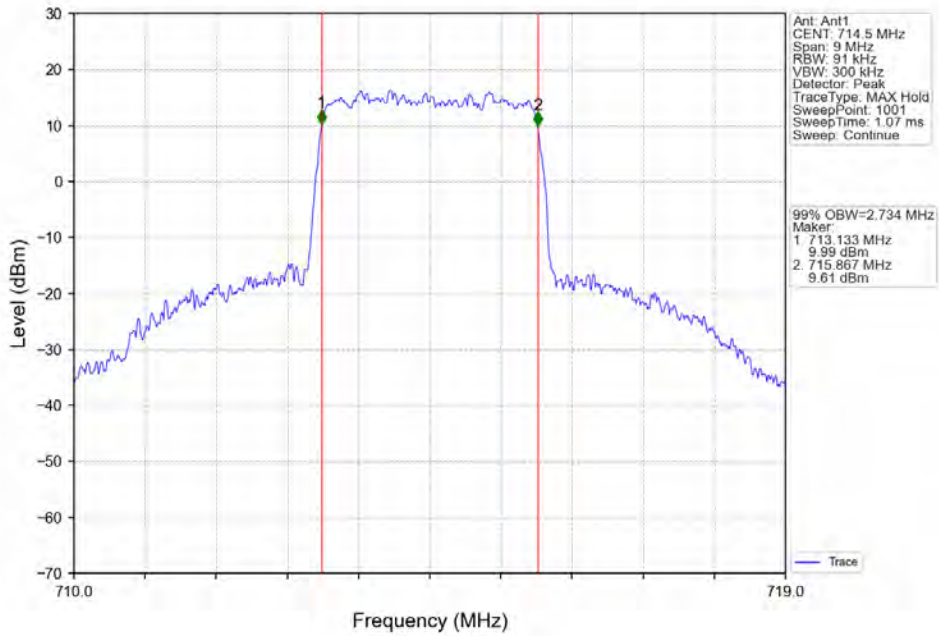
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



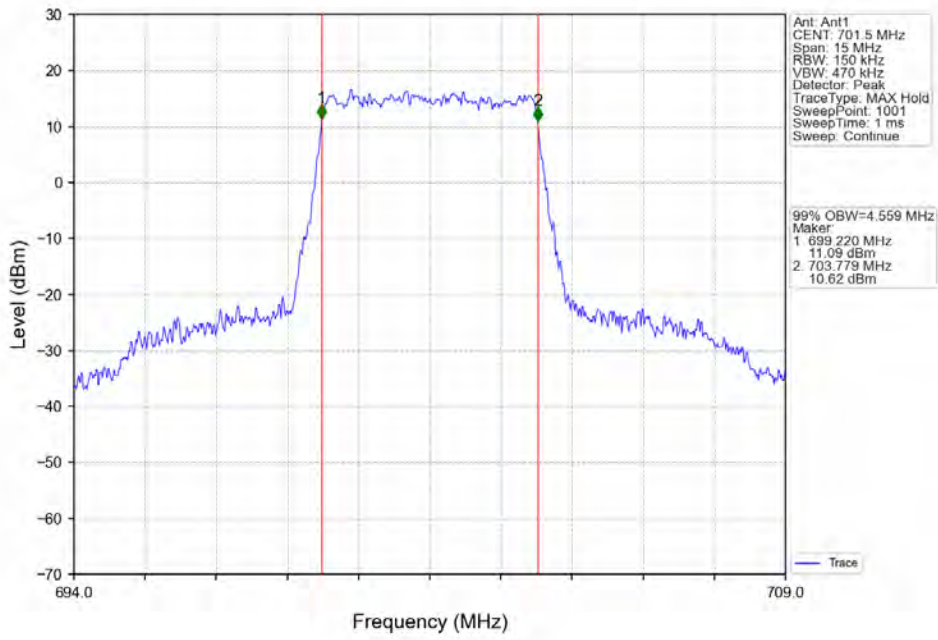
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



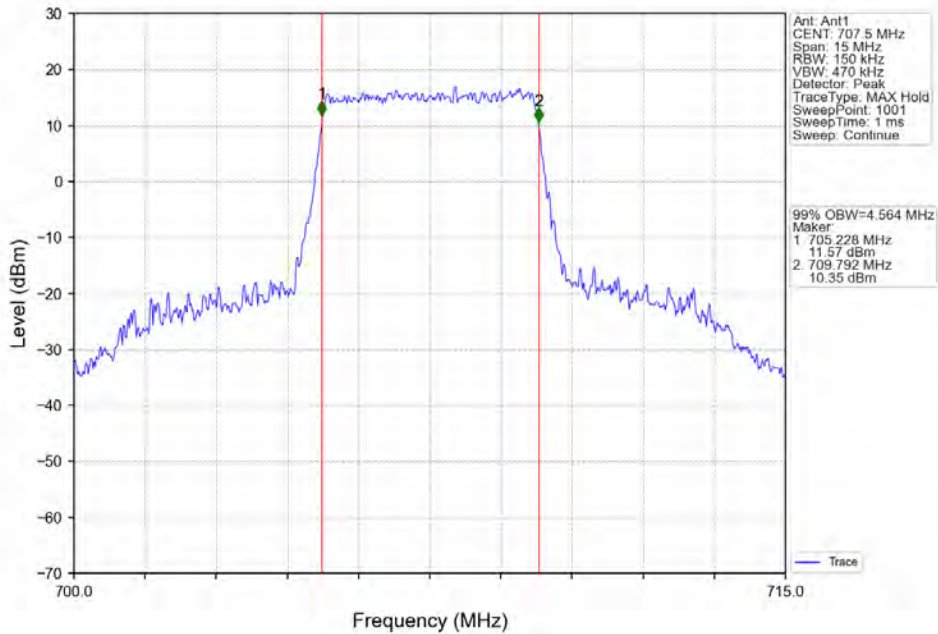
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



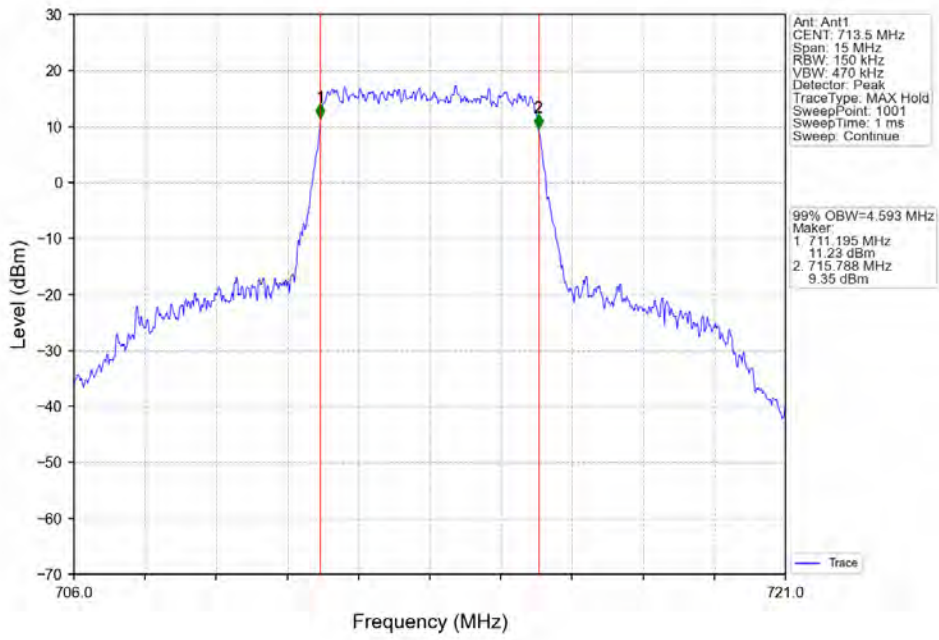
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



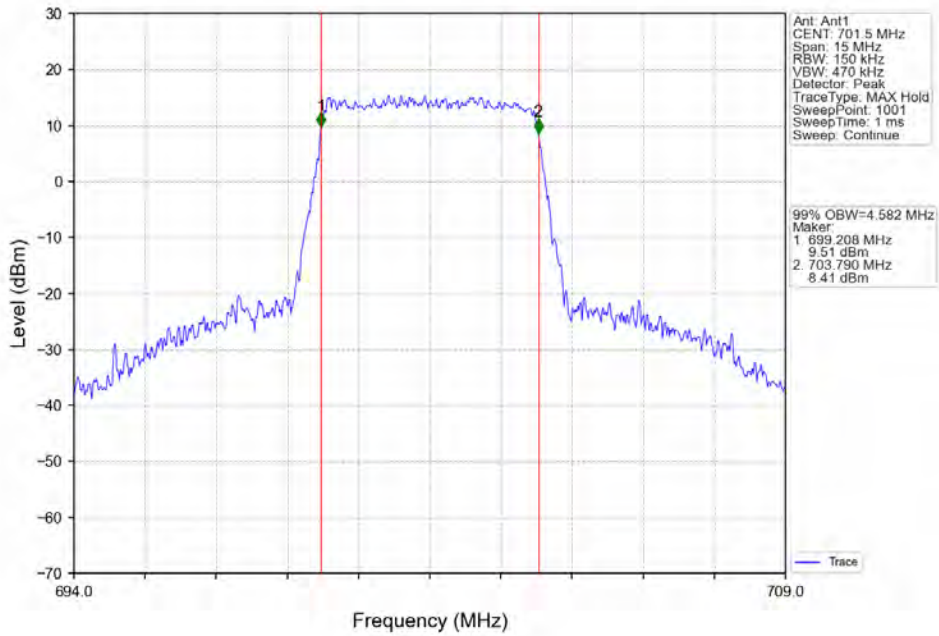
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



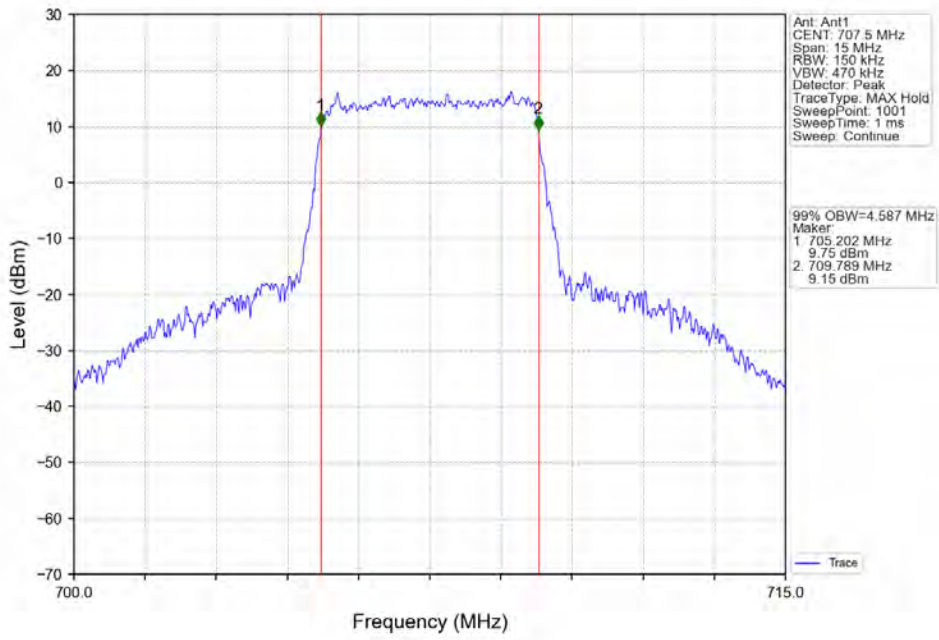
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



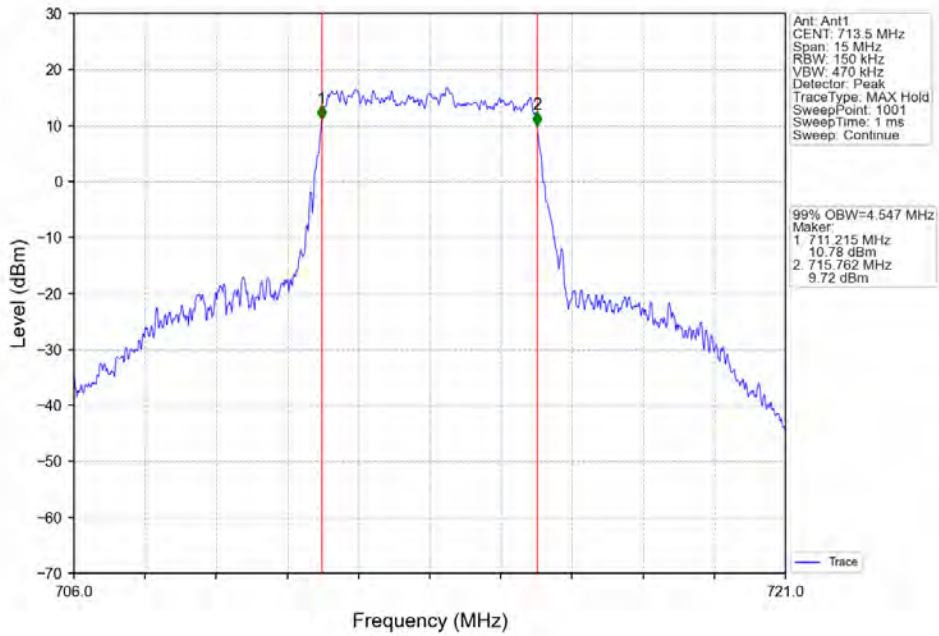
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



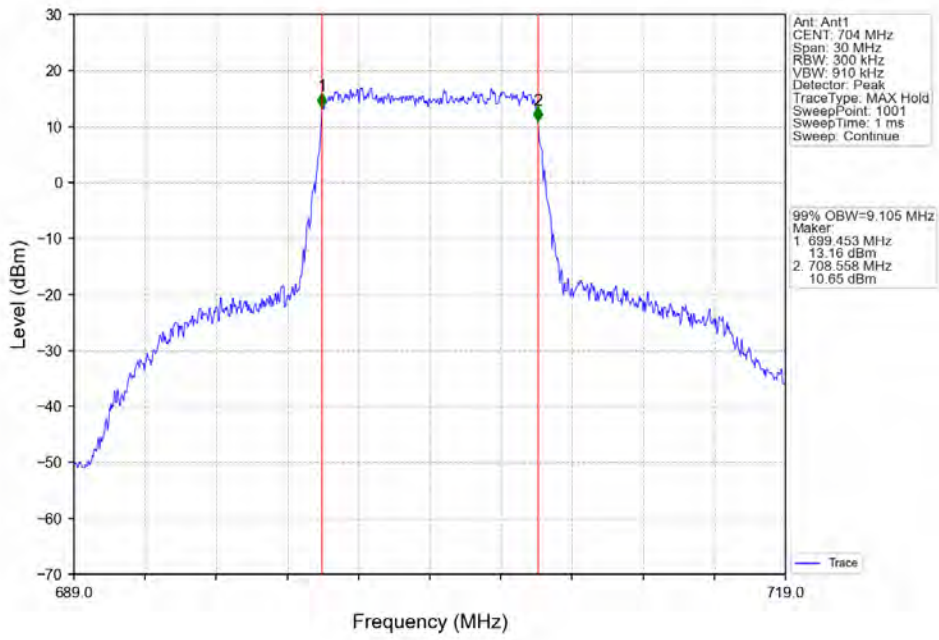
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



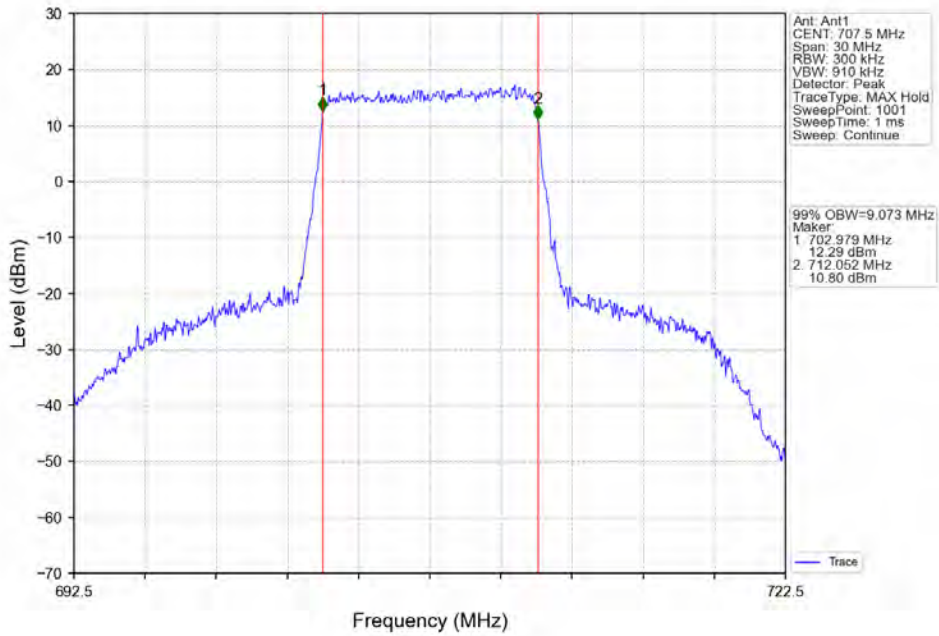
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



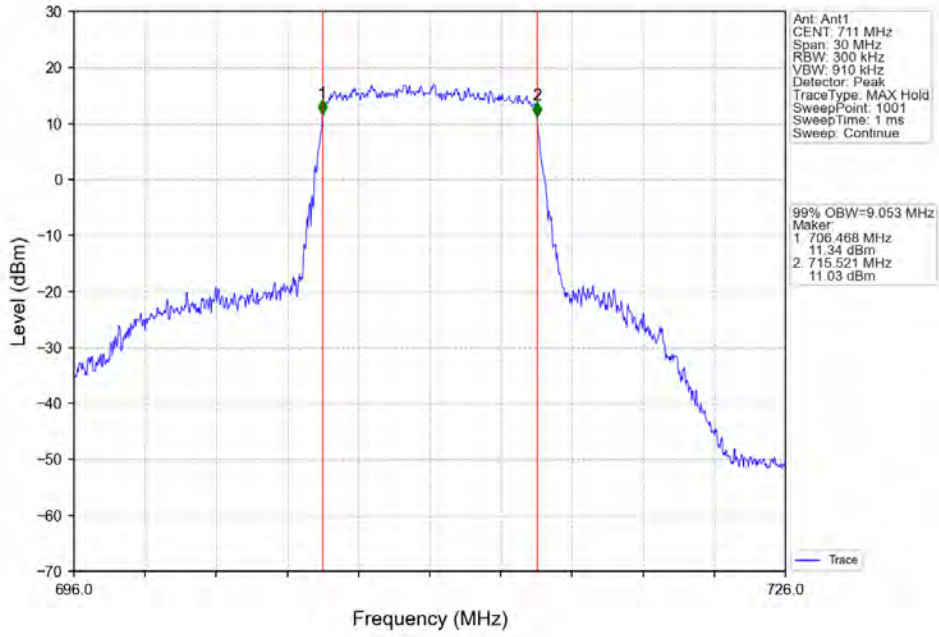
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



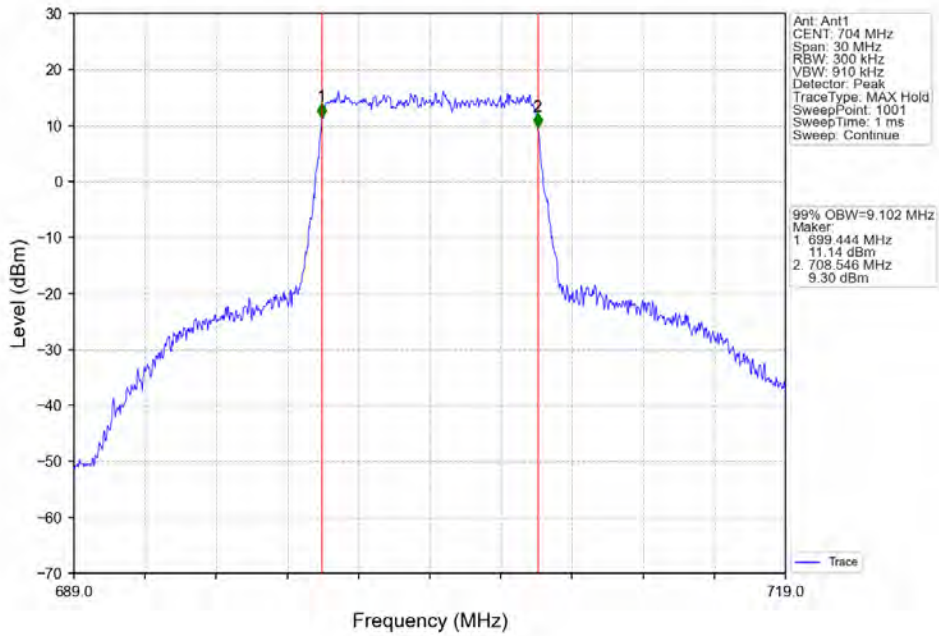
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



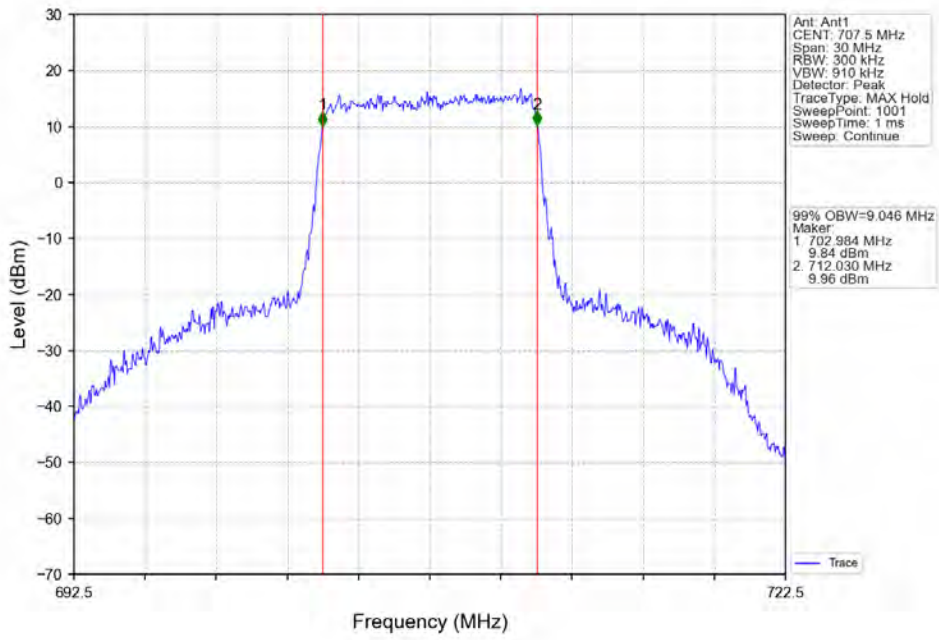
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



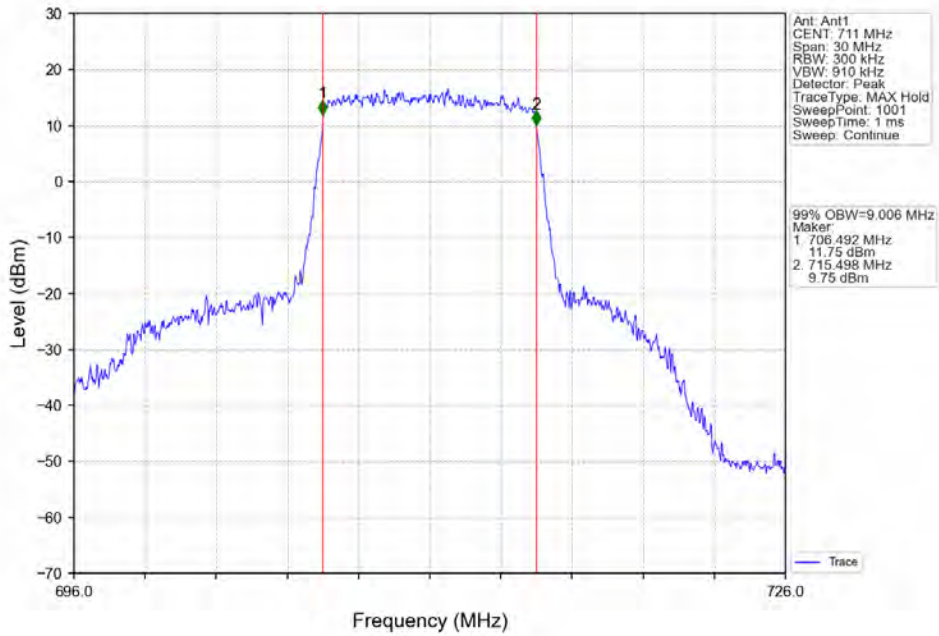
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV

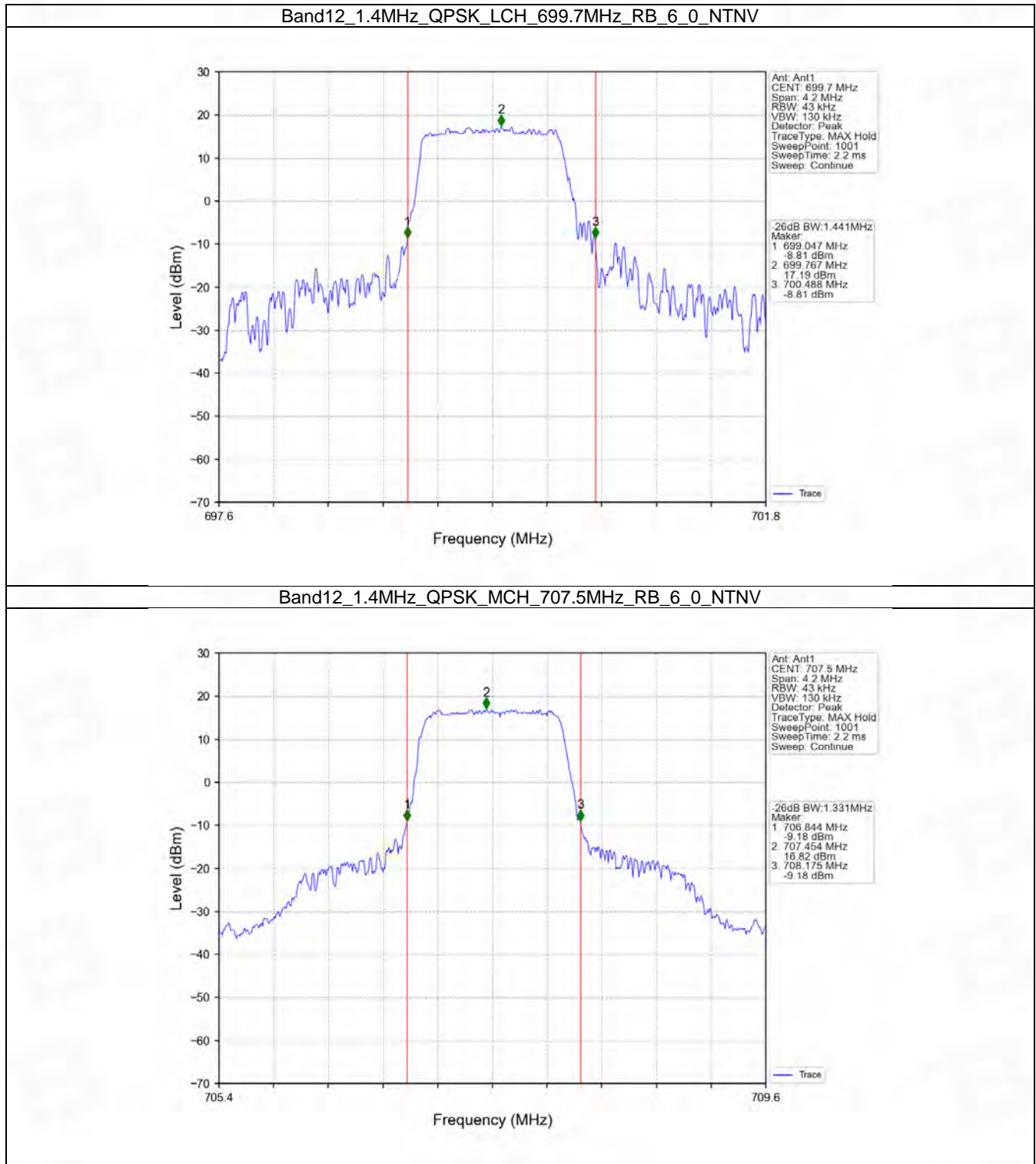


4.2 Band12_XDB

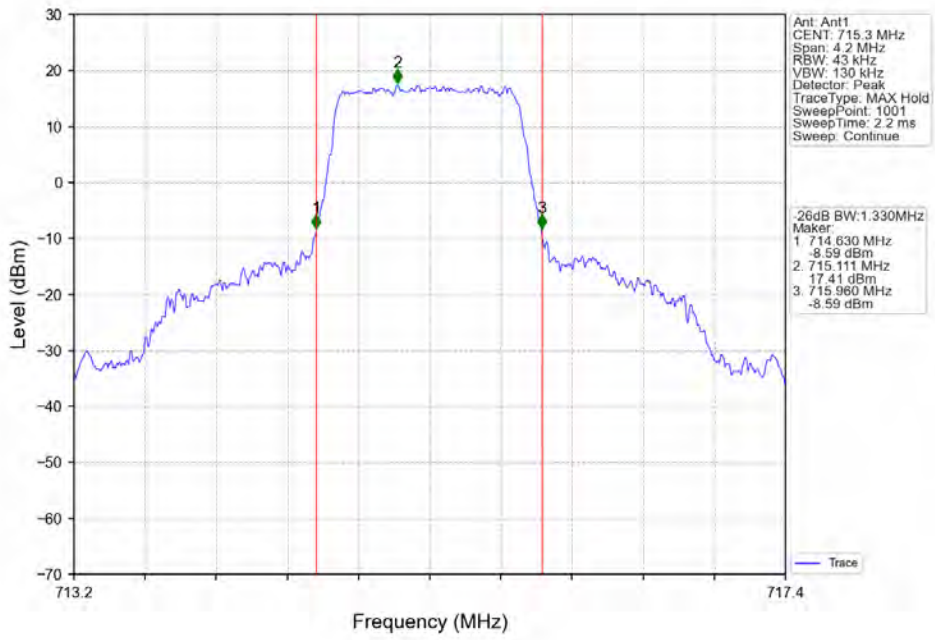
4.2.1 Test Result

Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	699.7	6	0	1.441	/	Pass
		707.5	6	0	1.331	/	Pass
		715.3	6	0	1.330	/	Pass
	16QAM	699.7	6	0	1.319	/	Pass
		707.5	6	0	1.324	/	Pass
		715.3	6	0	1.318	/	Pass
3	QPSK	700.5	15	0	2.980	/	Pass
		707.5	15	0	3.005	/	Pass
		714.5	15	0	3.002	/	Pass
	16QAM	700.5	15	0	2.987	/	Pass
		707.5	15	0	2.983	/	Pass
		714.5	15	0	2.998	/	Pass
5	QPSK	701.5	25	0	5.229	/	Pass
		707.5	25	0	5.270	/	Pass
		713.5	25	0	5.328	/	Pass
	16QAM	701.5	25	0	5.315	/	Pass
		707.5	25	0	5.267	/	Pass
		713.5	25	0	5.219	/	Pass
10	QPSK	704	50	0	10.345	/	Pass
		707.5	50	0	10.202	/	Pass
		711	50	0	10.366	/	Pass
	16QAM	704	50	0	10.279	/	Pass
		707.5	50	0	10.204	/	Pass
		711	50	0	10.168	/	Pass

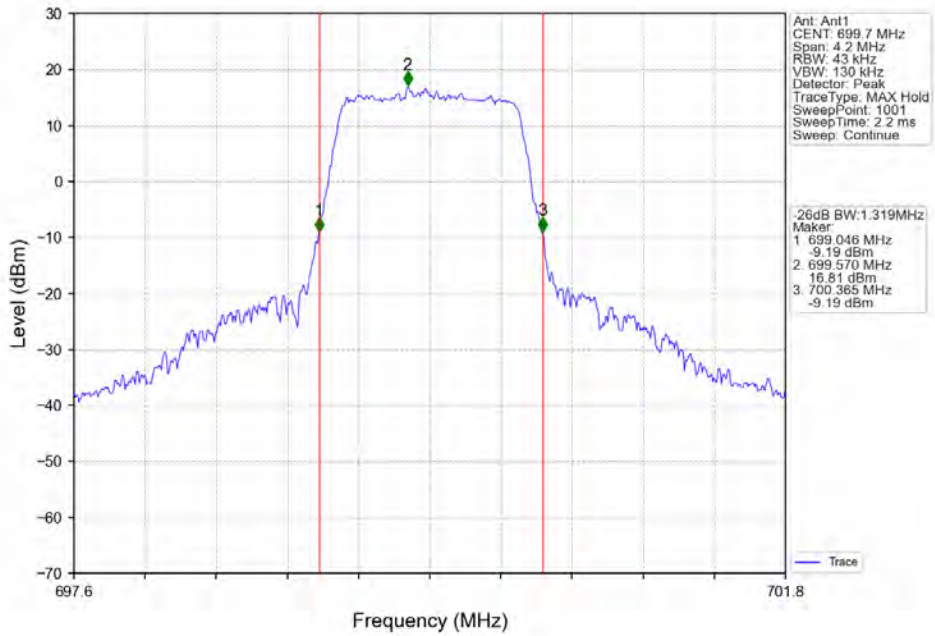
4.2.2 Test Graph



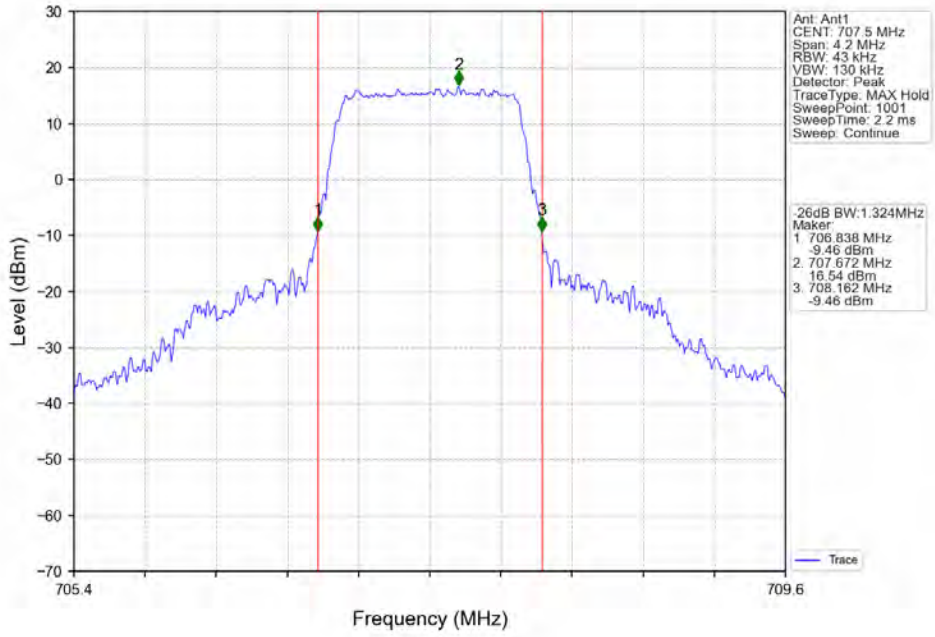
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



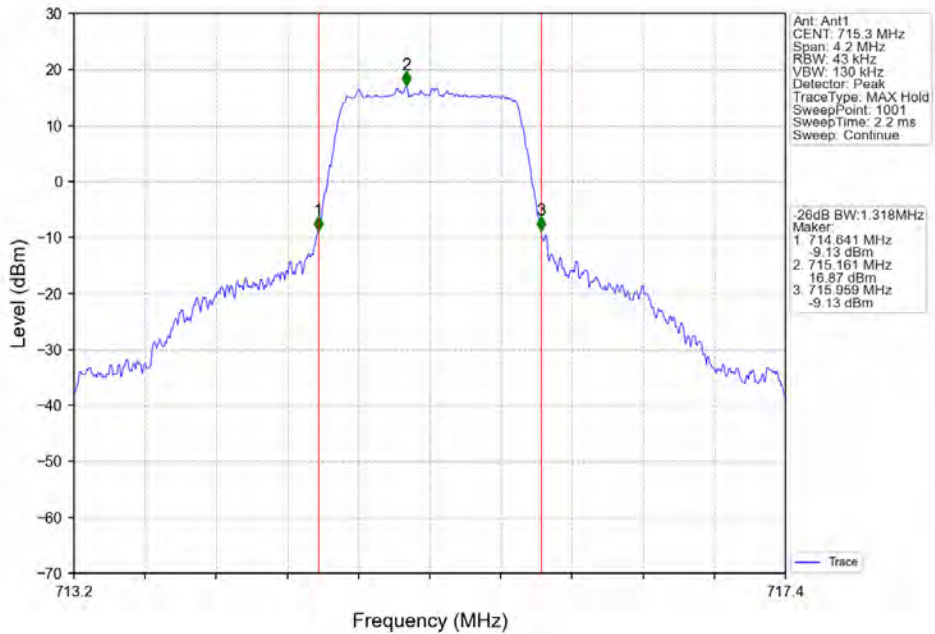
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



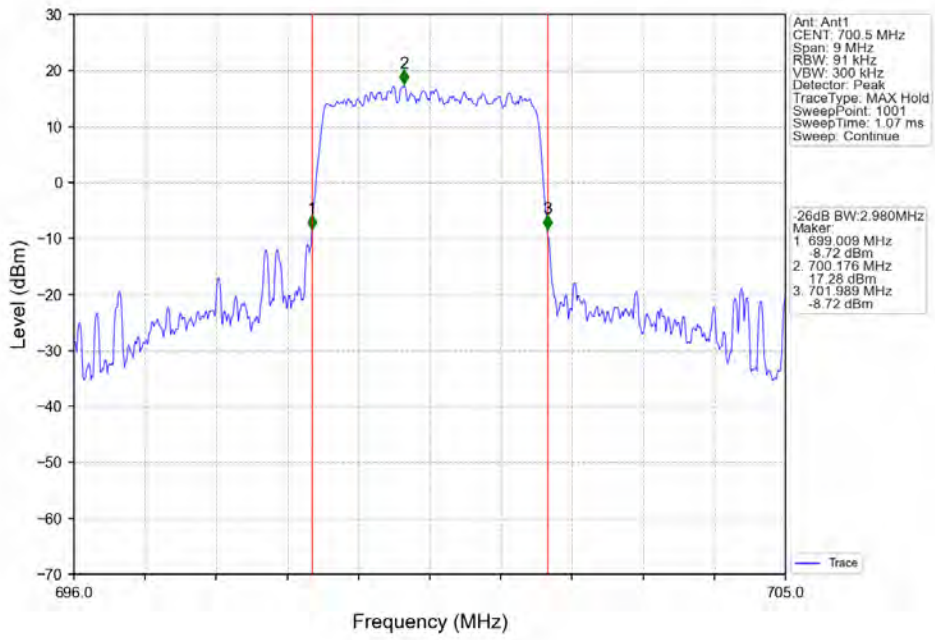
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



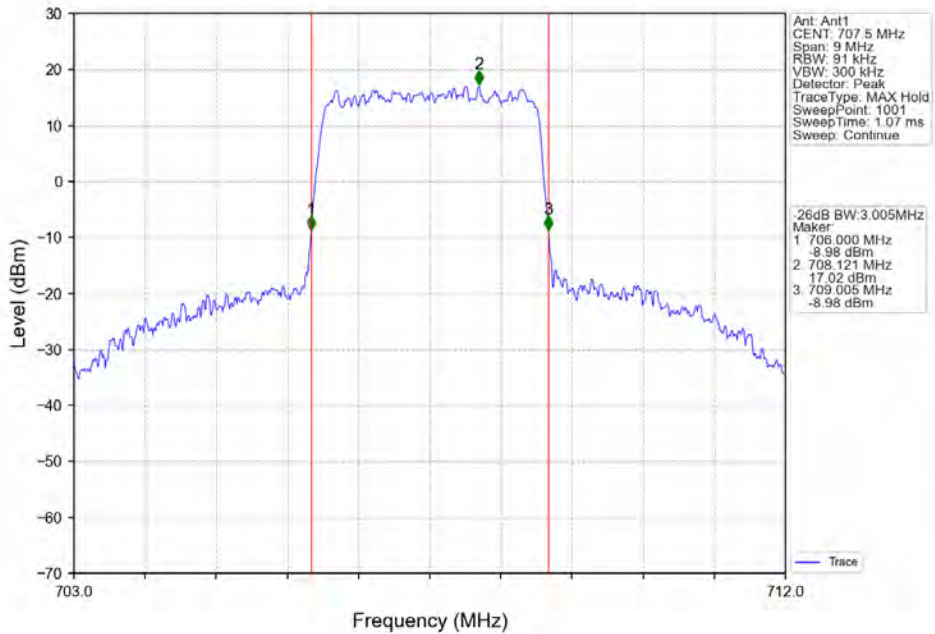
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



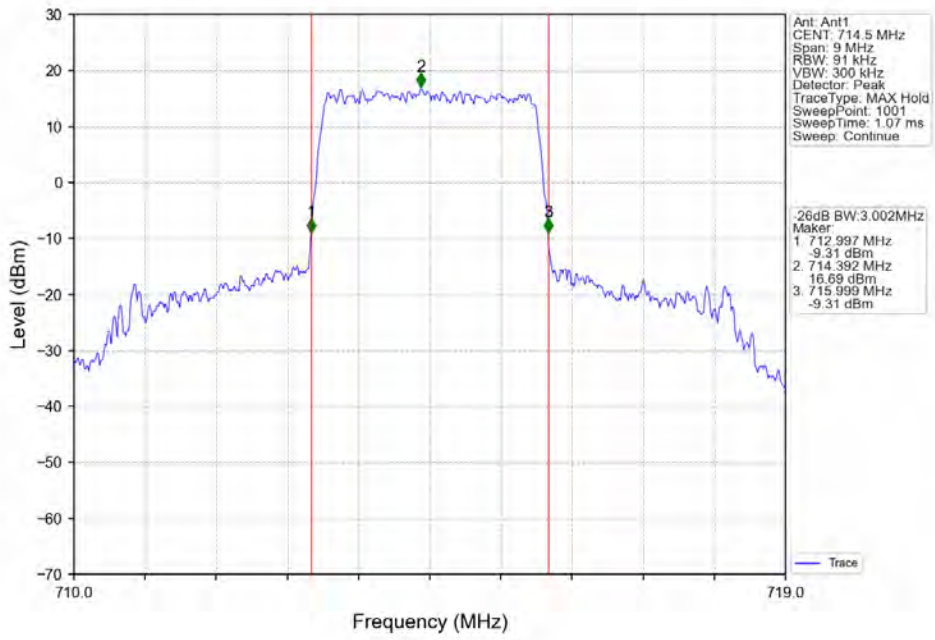
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



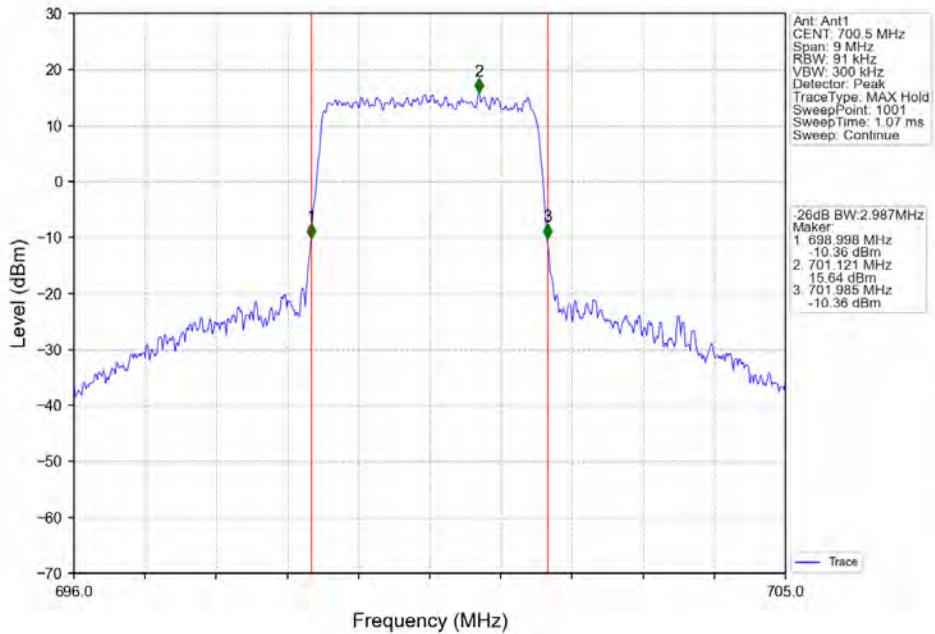
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



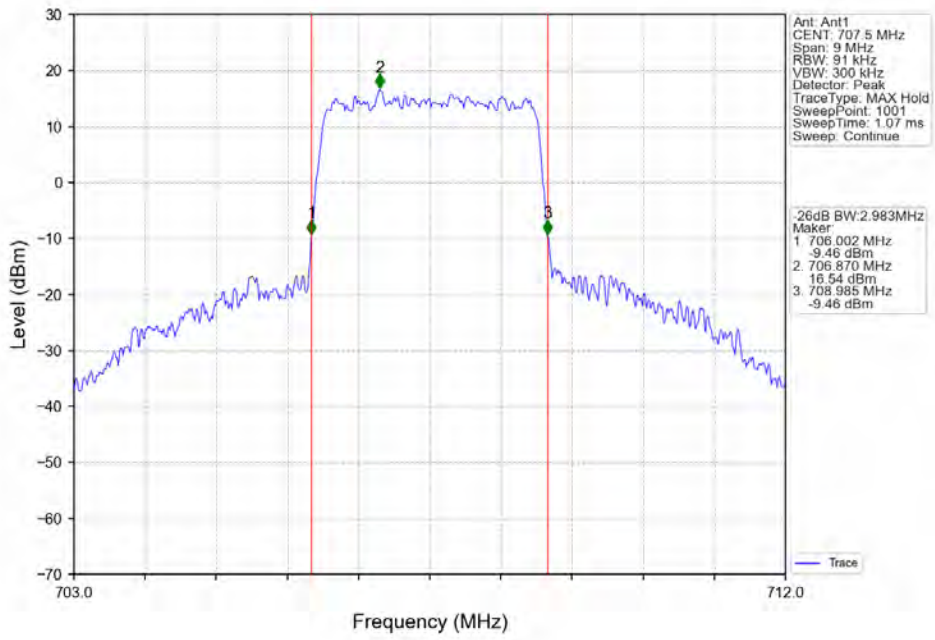
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



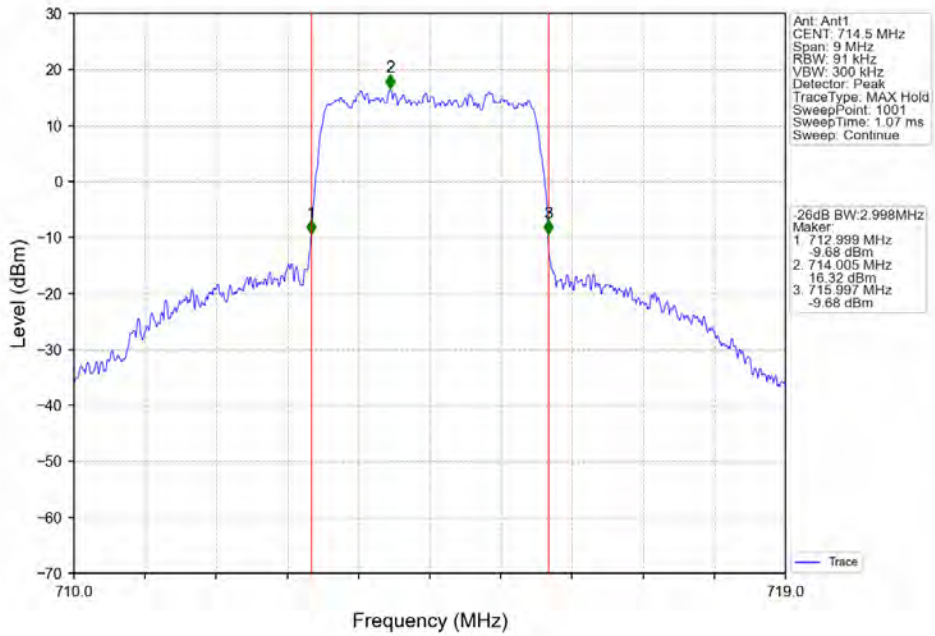
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



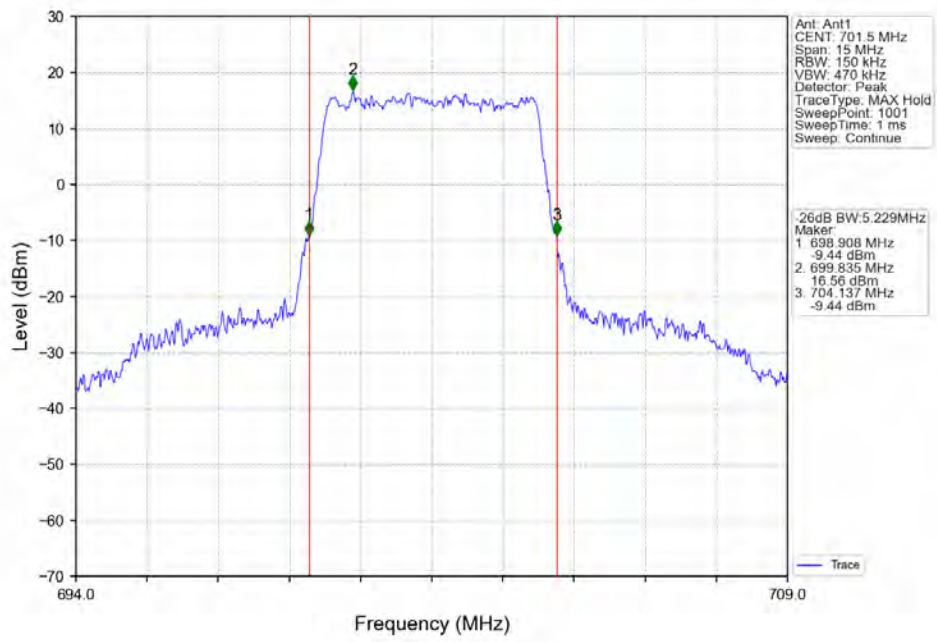
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



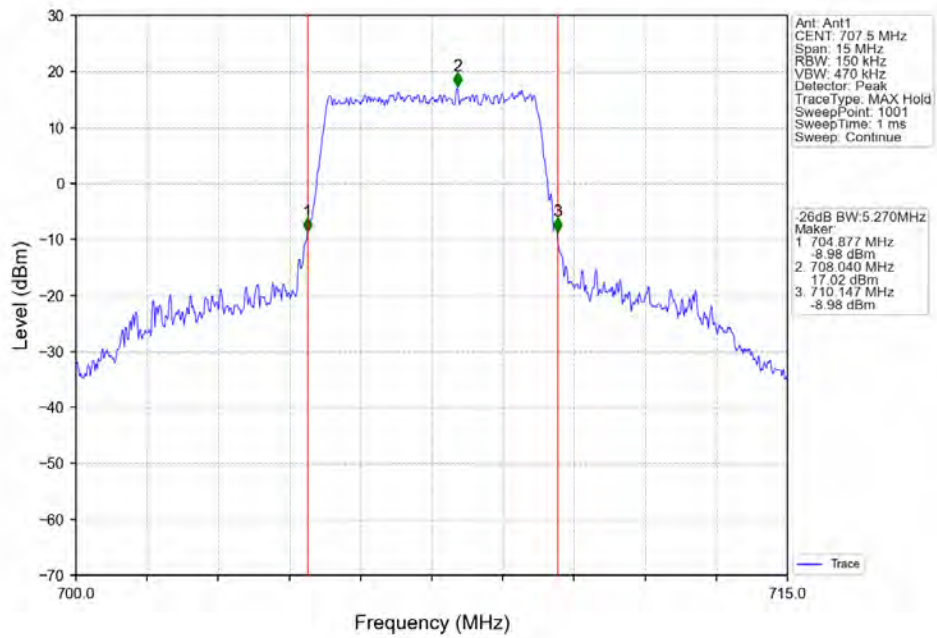
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



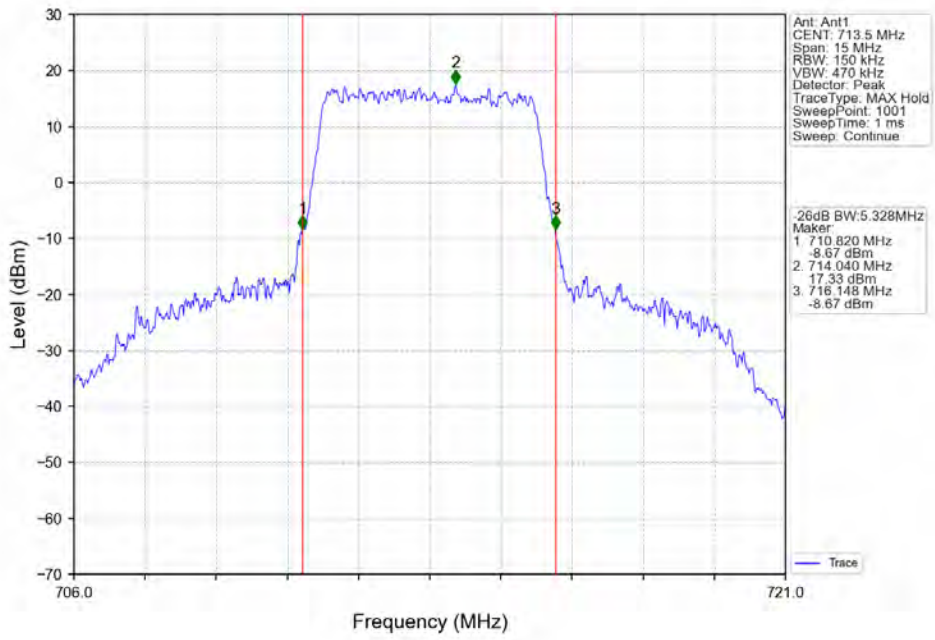
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



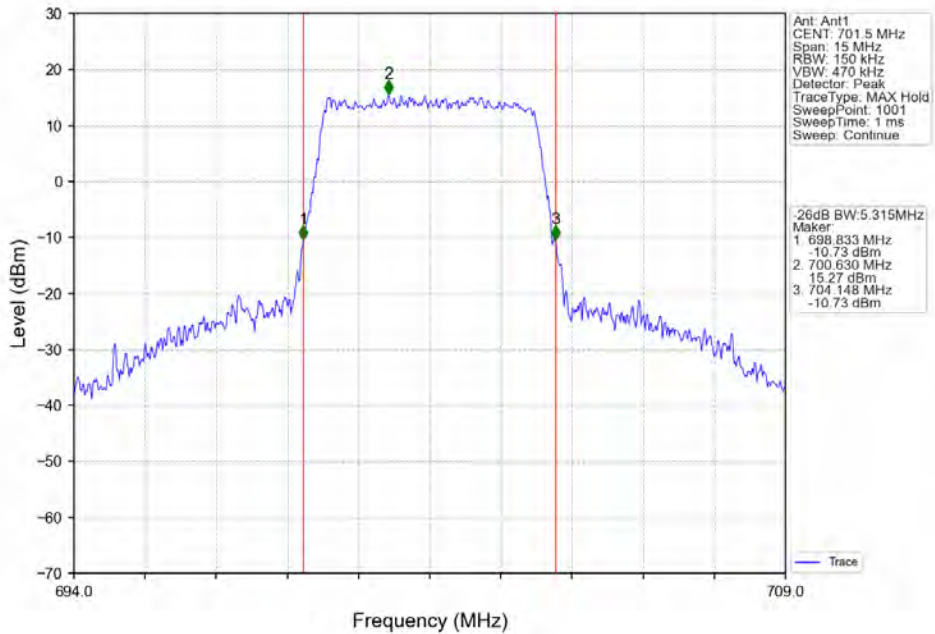
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



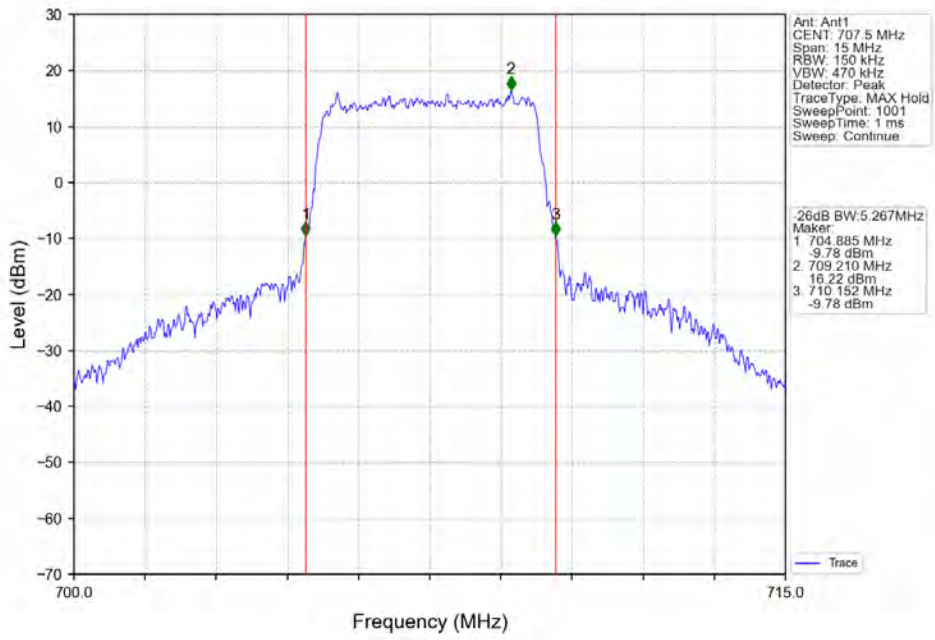
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



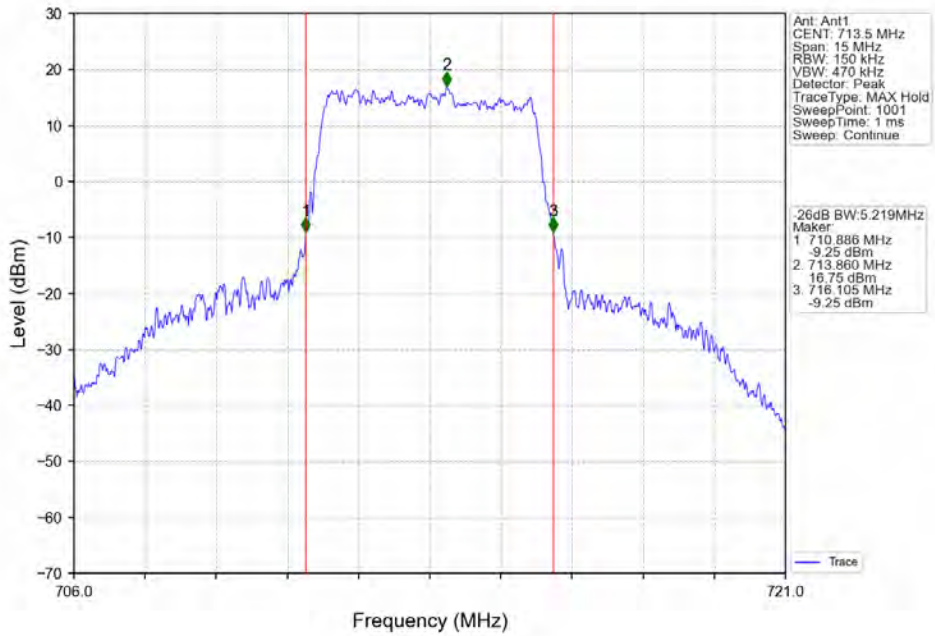
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



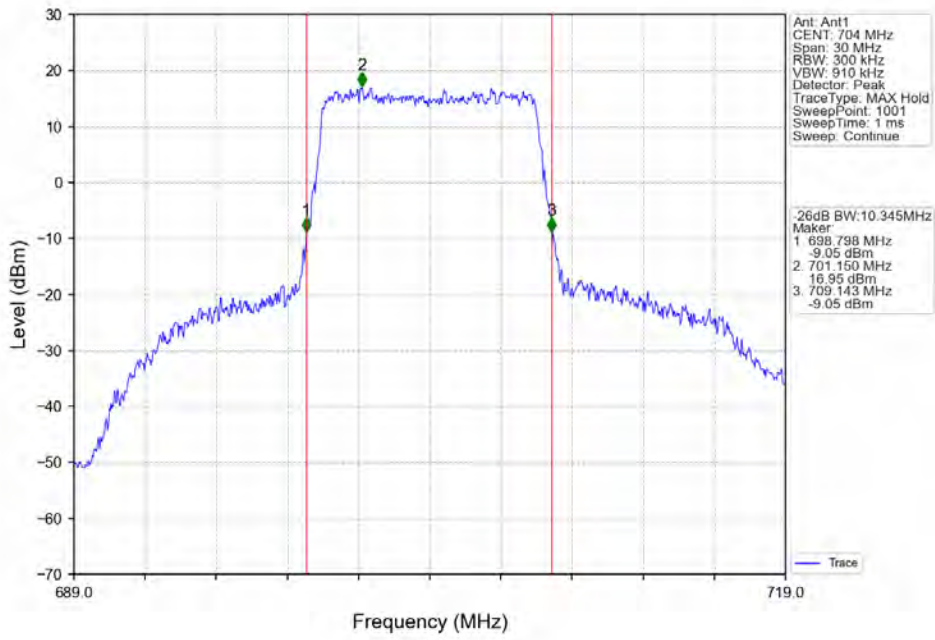
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



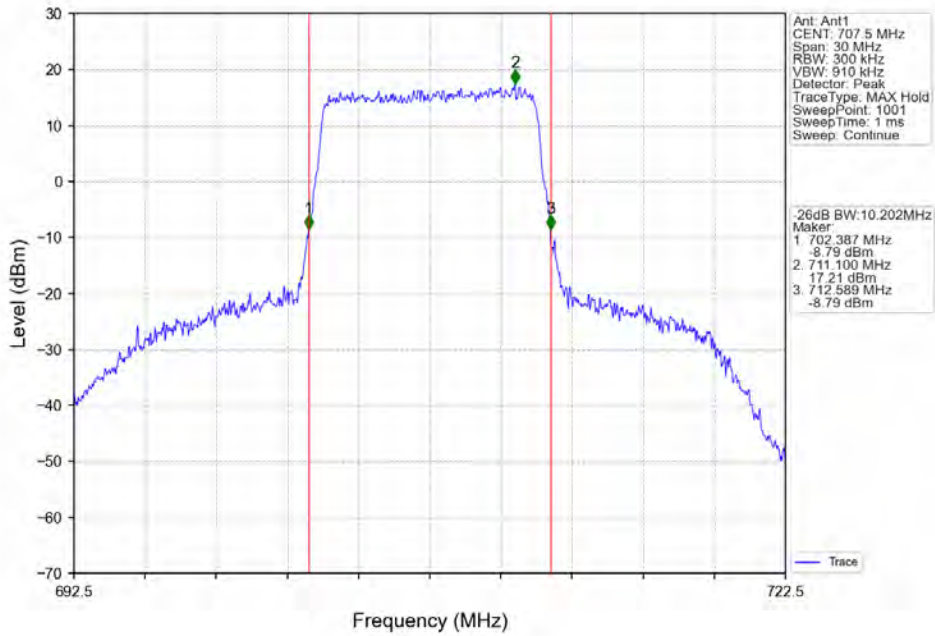
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



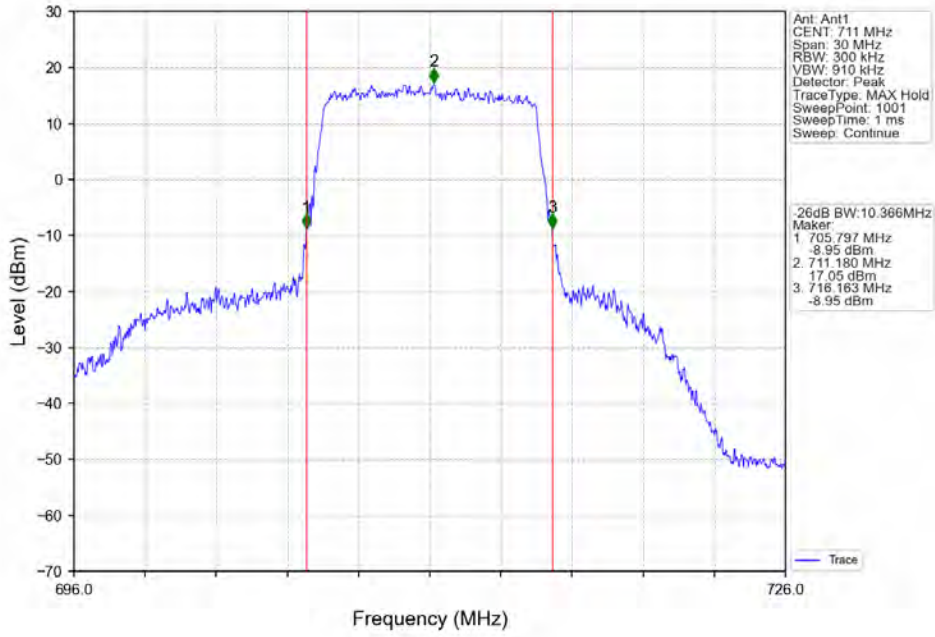
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



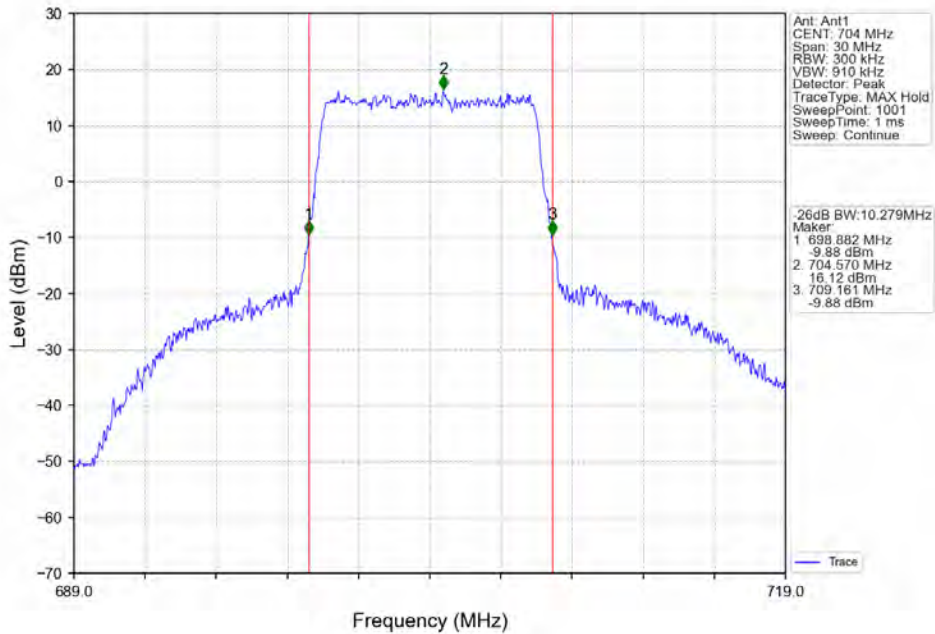
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



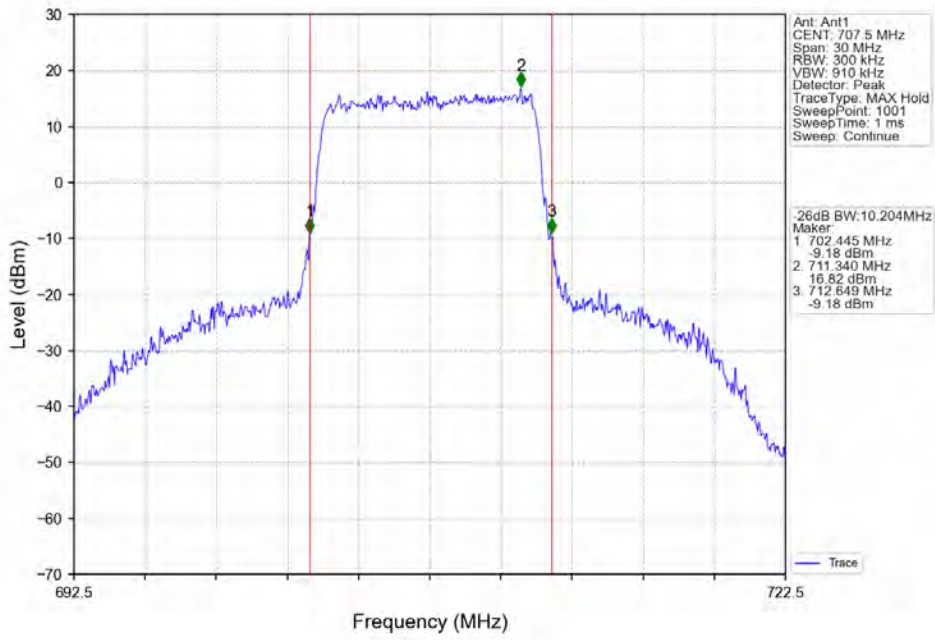
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



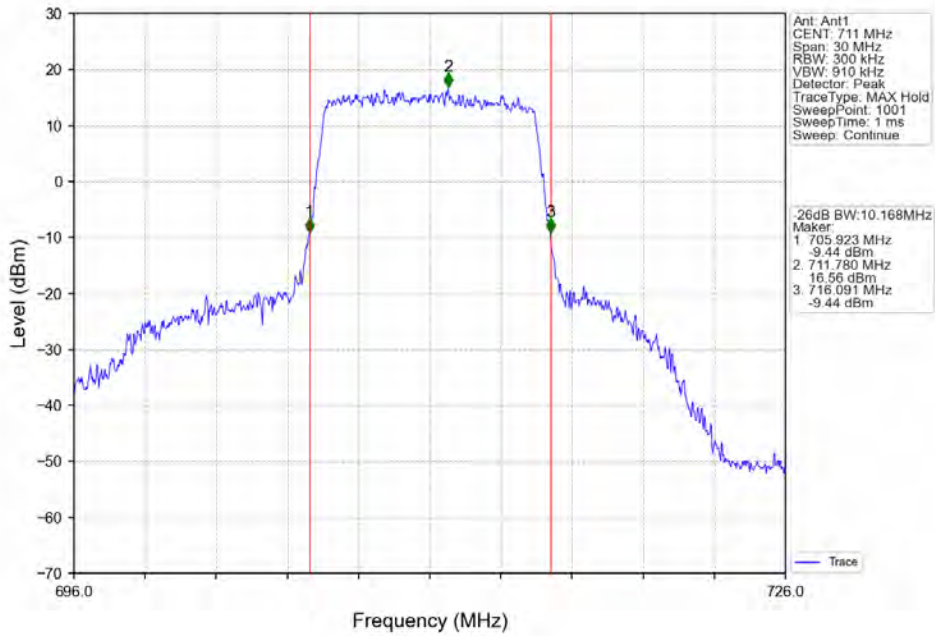
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



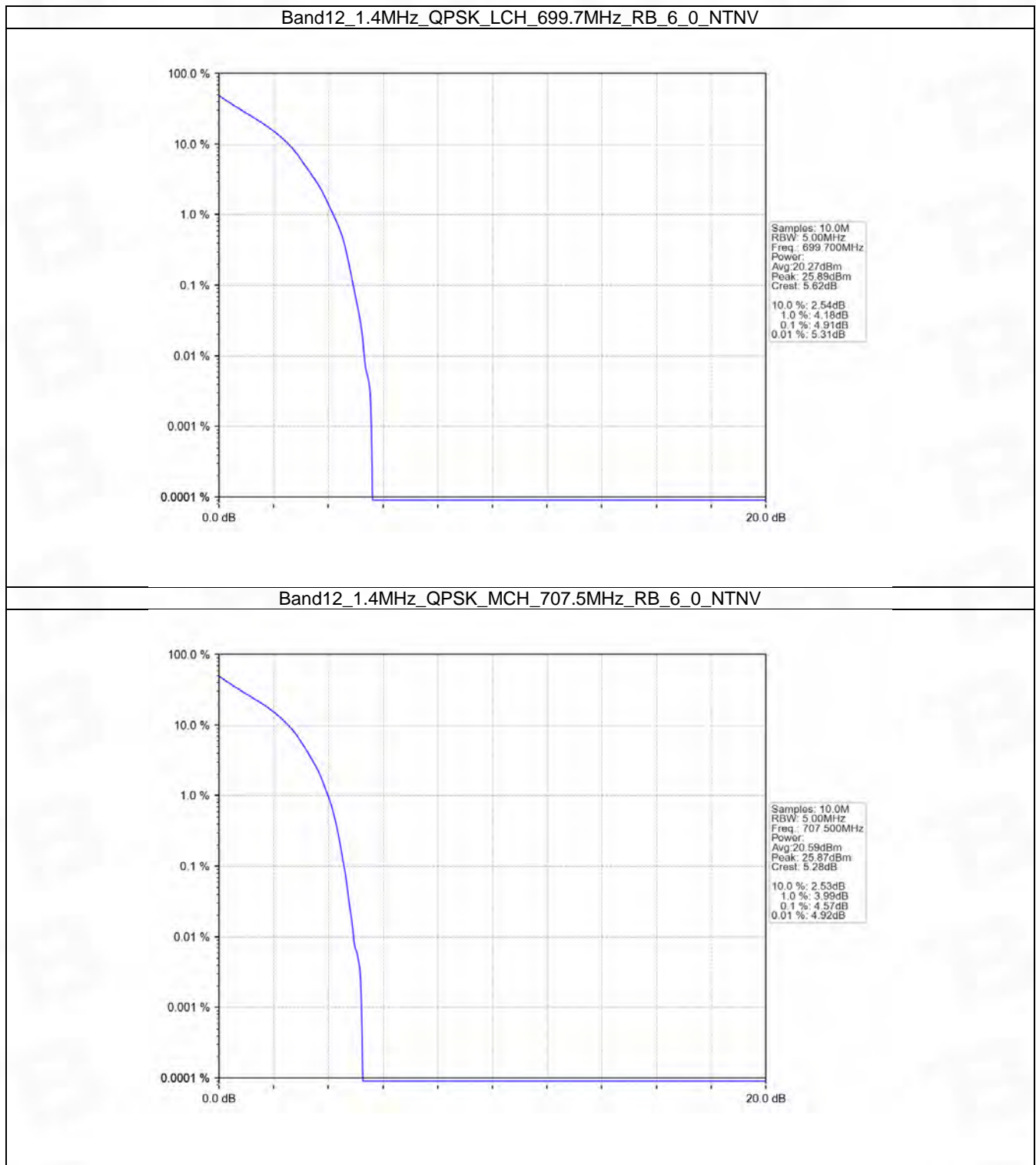
5. Peak-Average Ratio

5.1 B12_1.4MHz

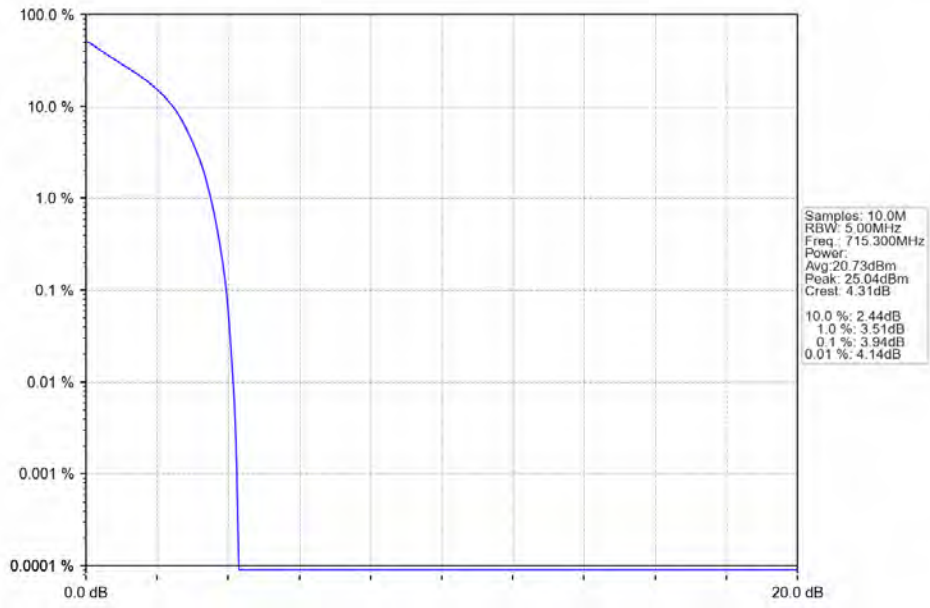
5.1.1 Test Result

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	4.91	<=13	Pass
	707.5	6	0	4.57	<=13	Pass
	715.3	6	0	3.94	<=13	Pass
16QAM	699.7	6	0	5.77	<=13	Pass
	707.5	6	0	5.40	<=13	Pass
	715.3	6	0	4.88	<=13	Pass

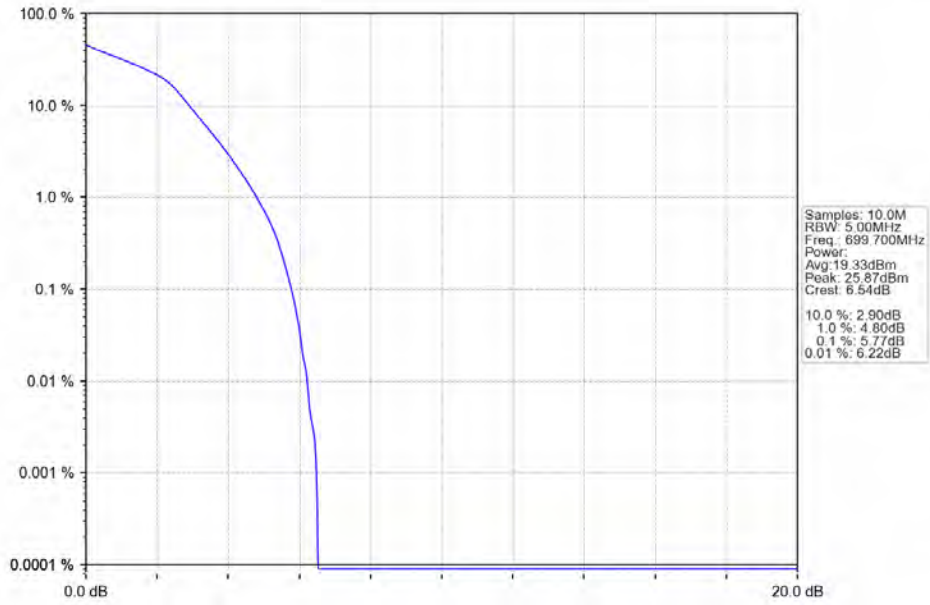
5.1.2 Test Graph



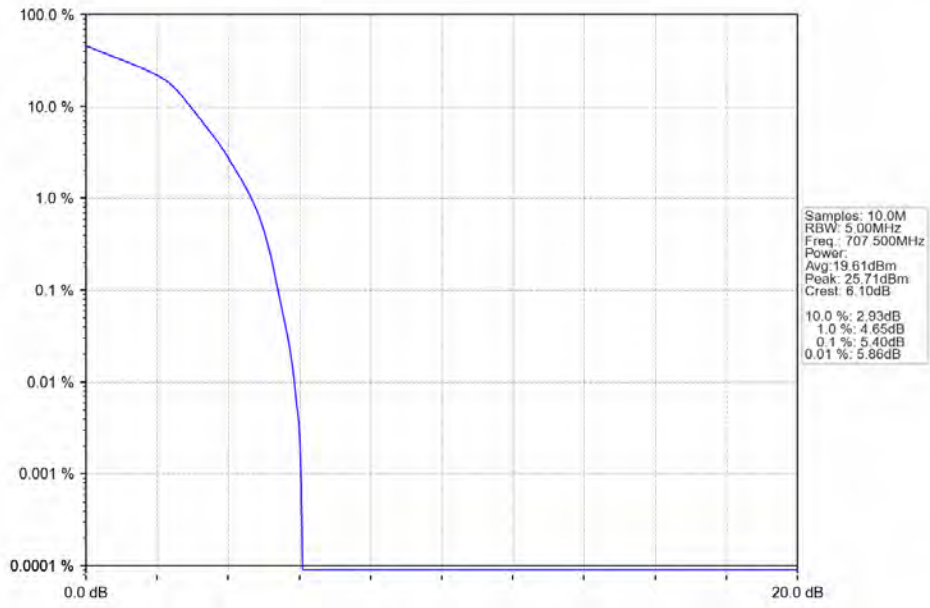
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



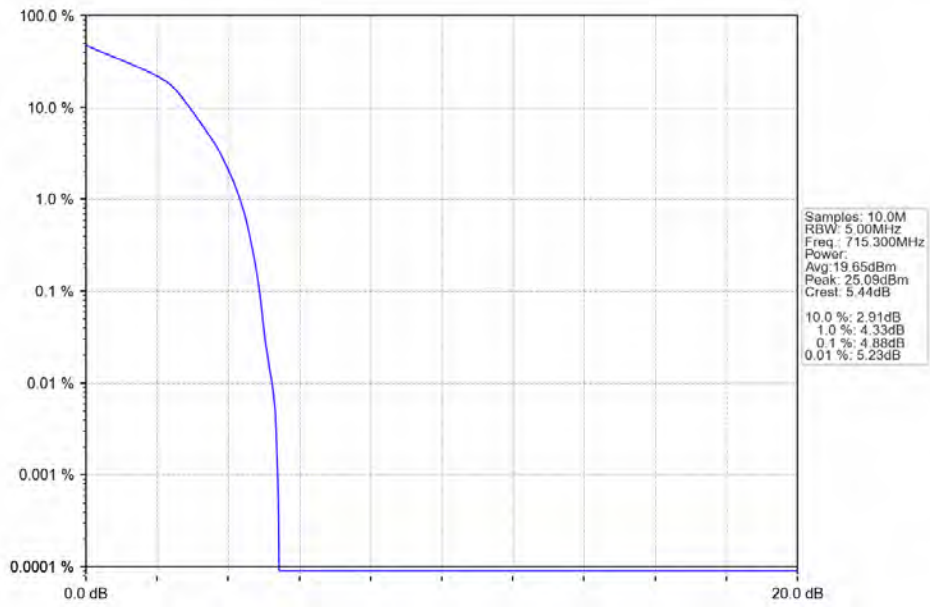
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV

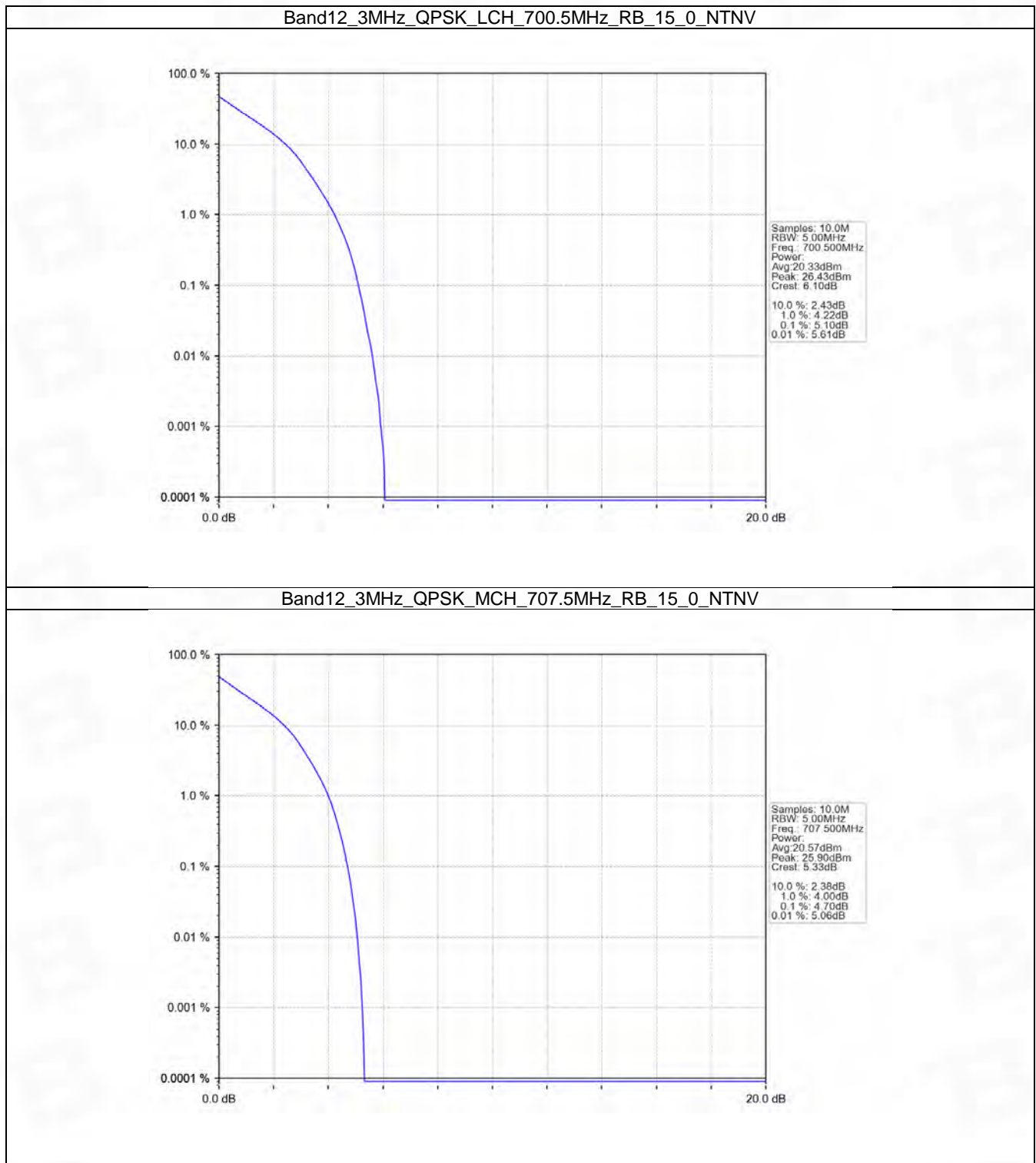


5.2 B12_3MHz

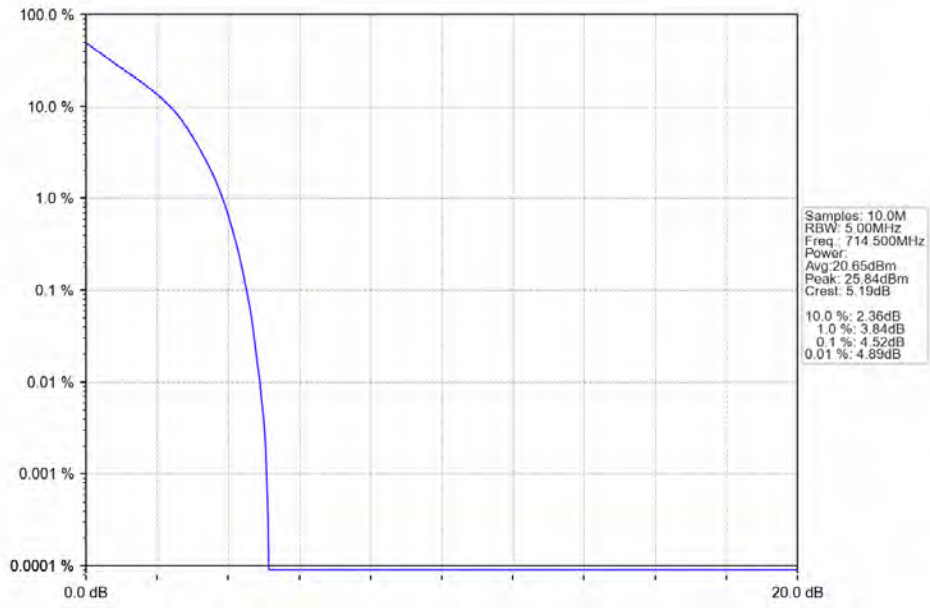
5.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	5.10	<=13	Pass
	707.5	15	0	4.70	<=13	Pass
	714.5	15	0	4.52	<=13	Pass
16QAM	700.5	15	0	5.90	<=13	Pass
	707.5	15	0	5.56	<=13	Pass
	714.5	15	0	5.39	<=13	Pass

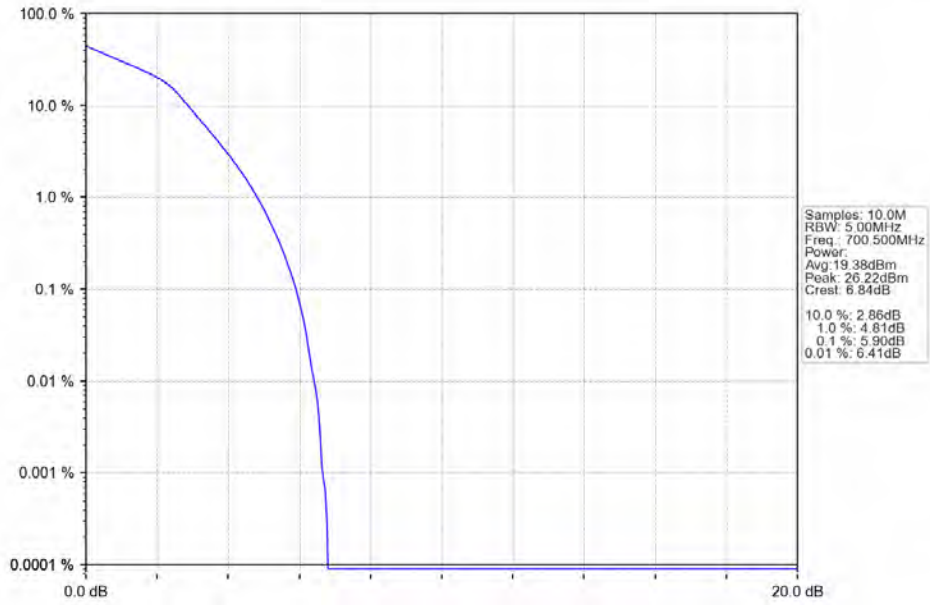
5.2.2 Test Graph



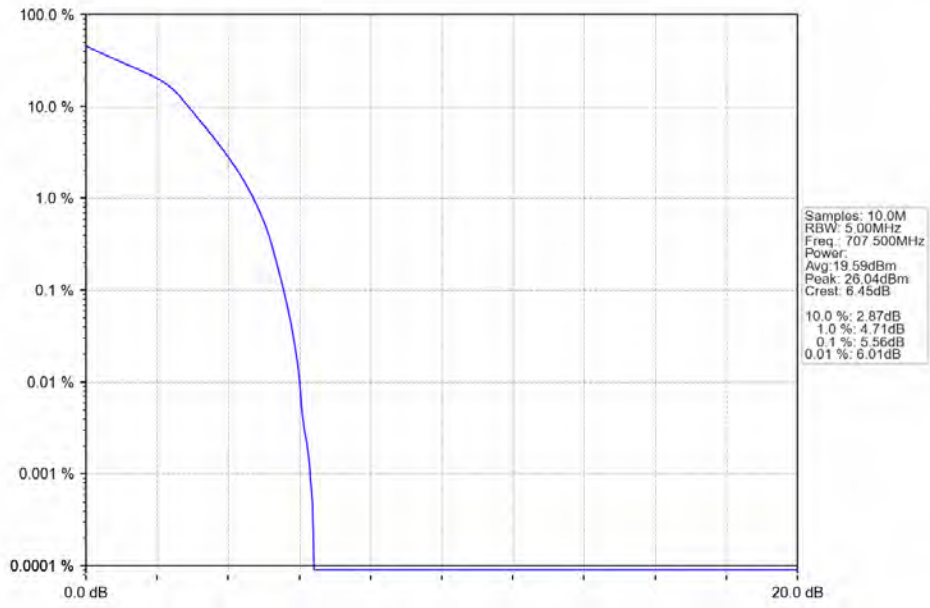
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



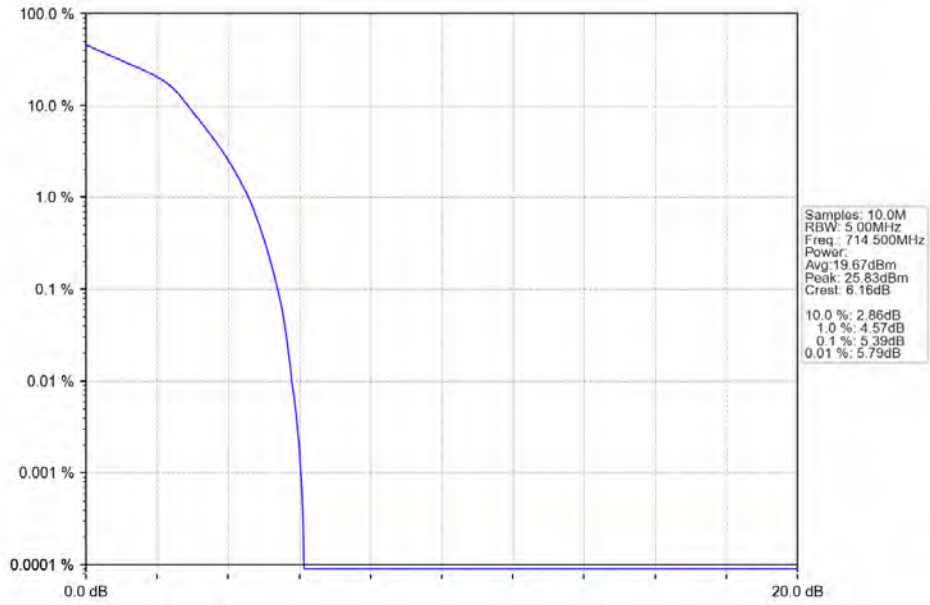
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV

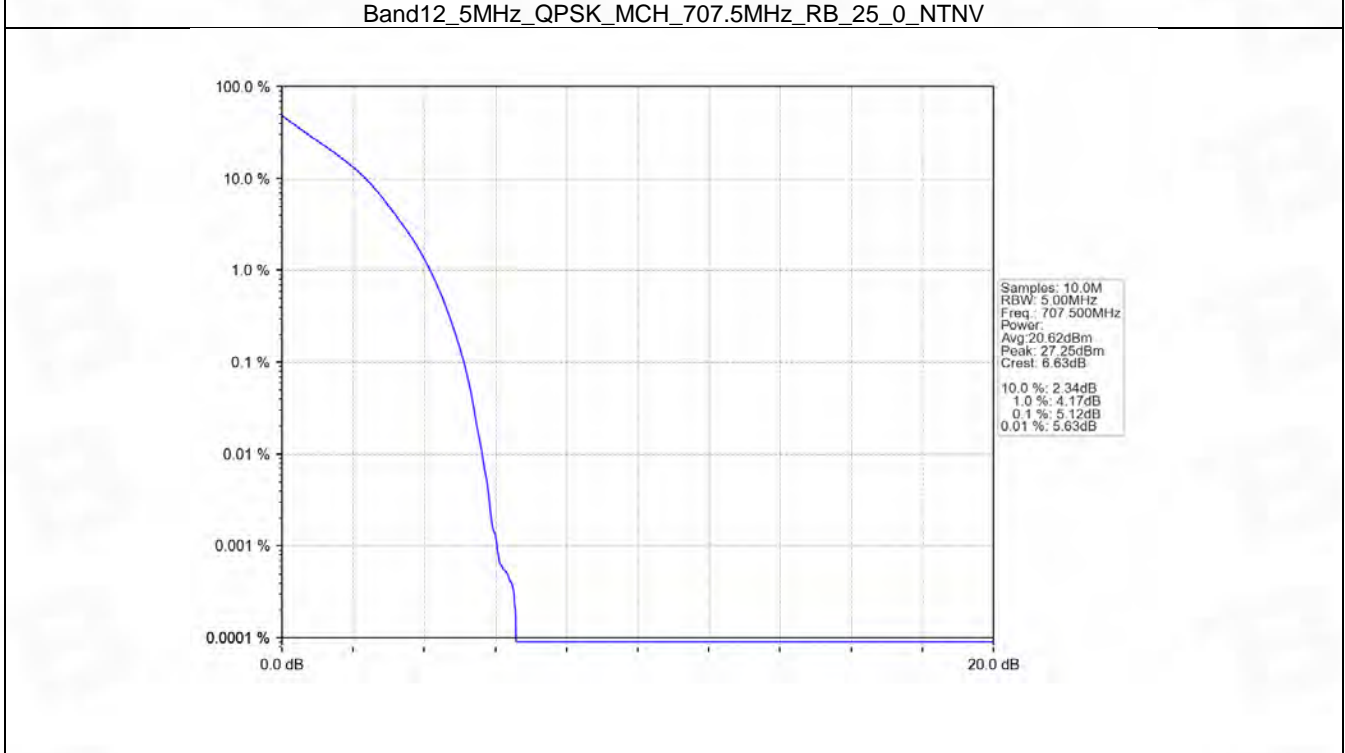
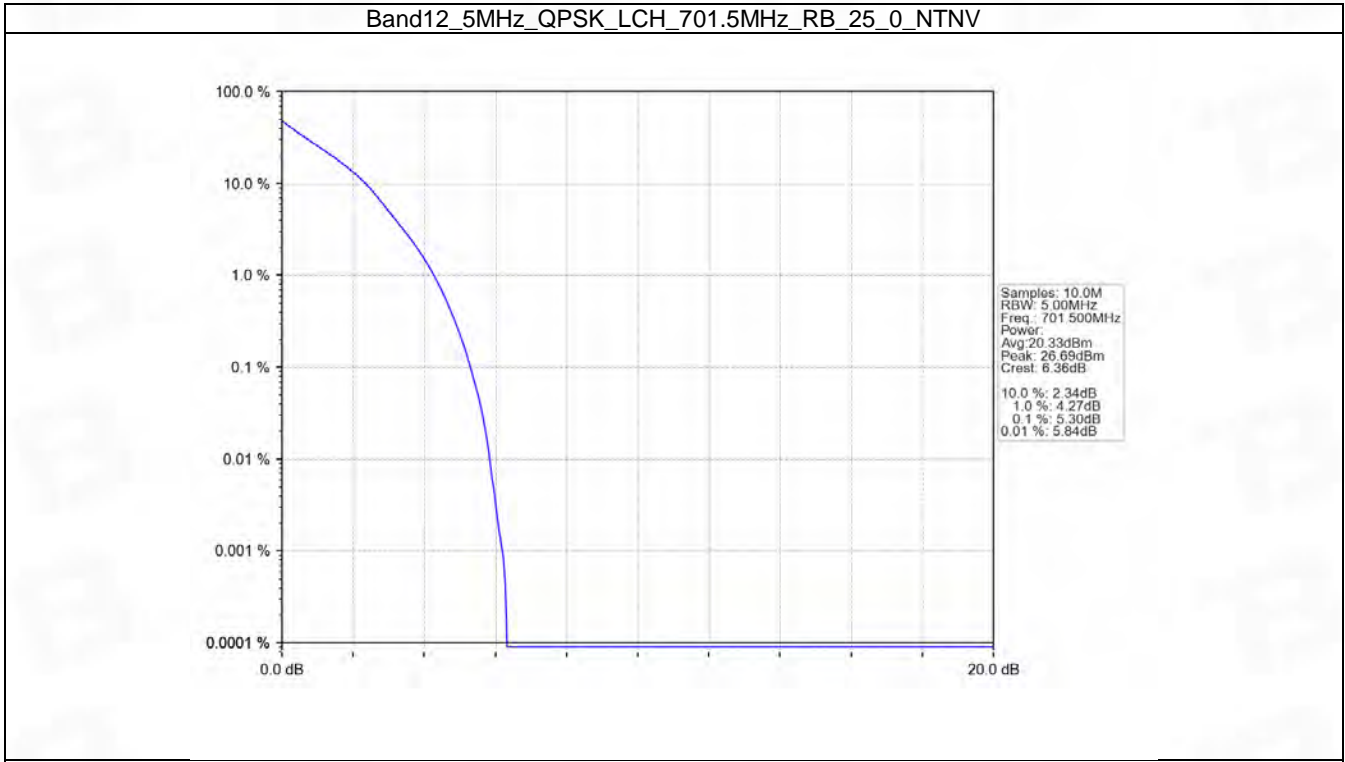


5.3 B12_5MHz

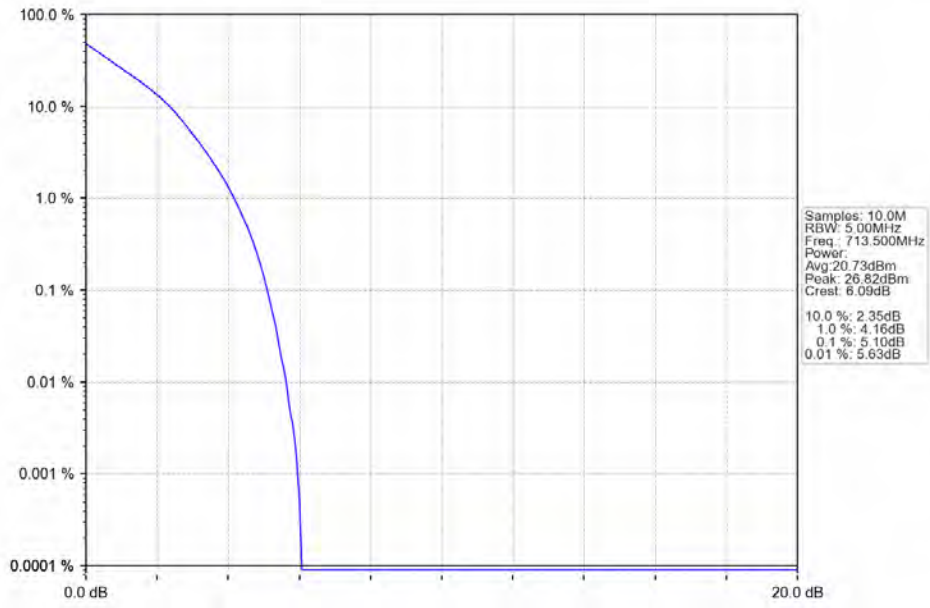
5.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	25	0	5.30	<=13	Pass
	707.5	25	0	5.12	<=13	Pass
	713.5	25	0	5.10	<=13	Pass
16QAM	701.5	25	0	6.02	<=13	Pass
	707.5	25	0	5.80	<=13	Pass
	713.5	25	0	5.83	<=13	Pass

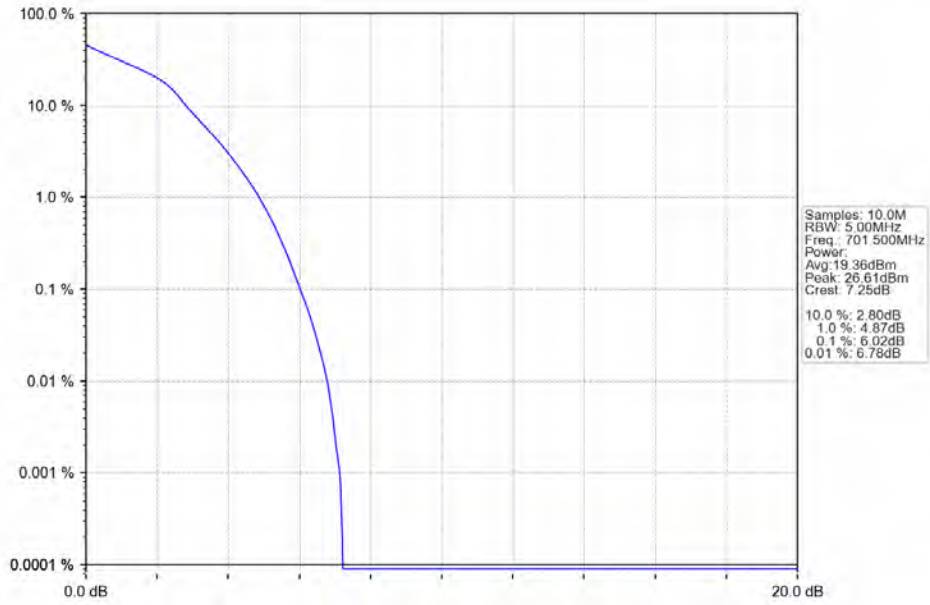
5.3.2 Test Graph



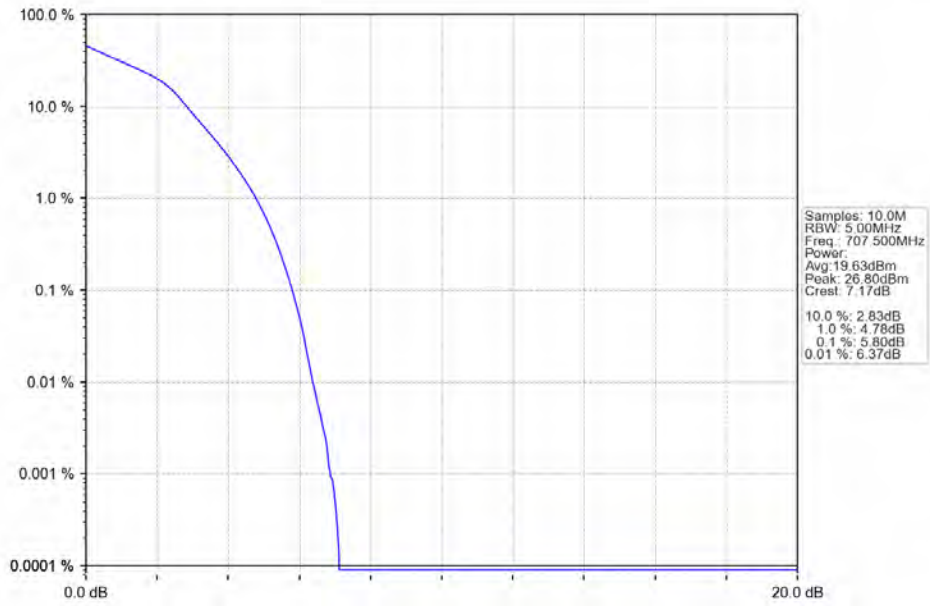
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



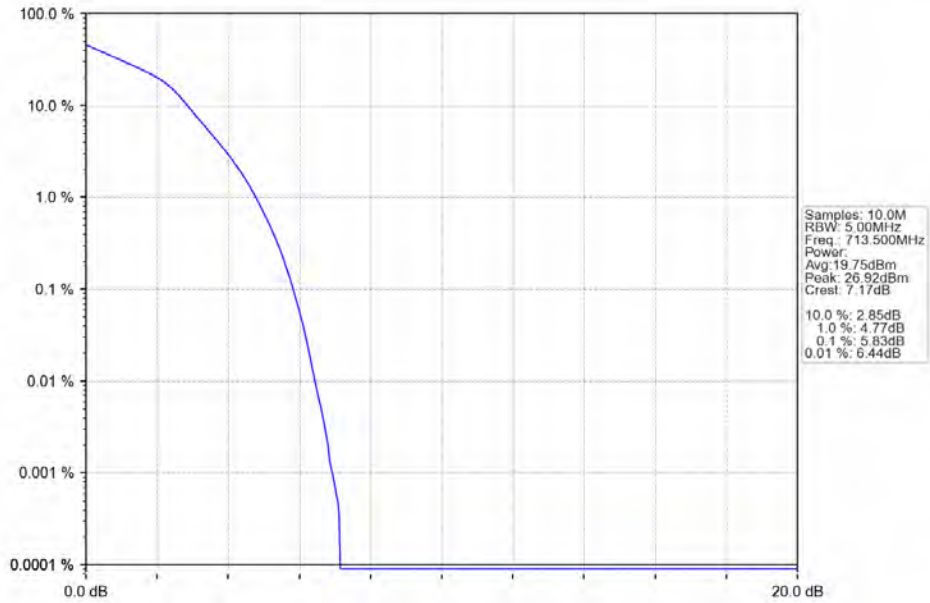
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV

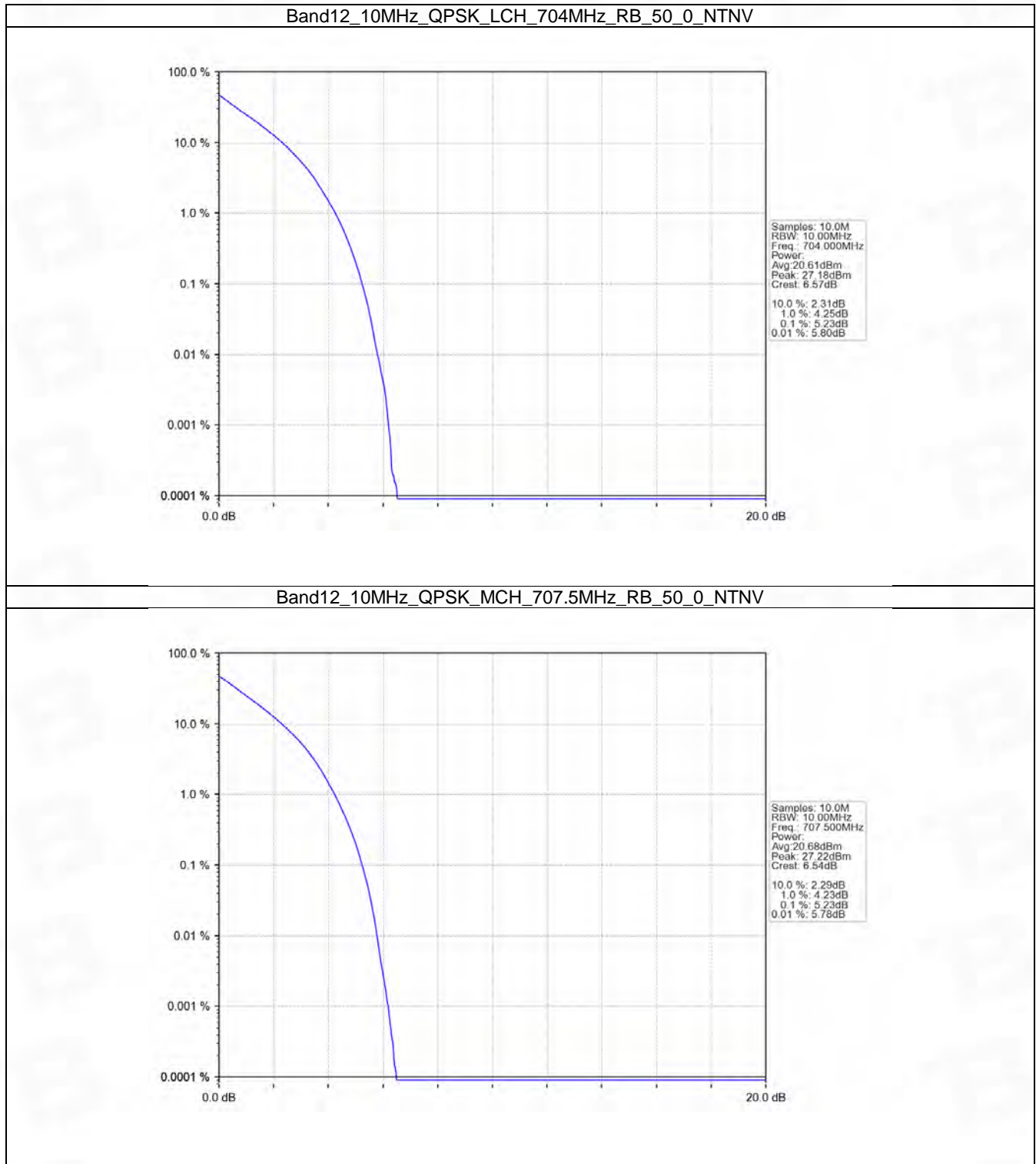


5.4 B12_10MHz

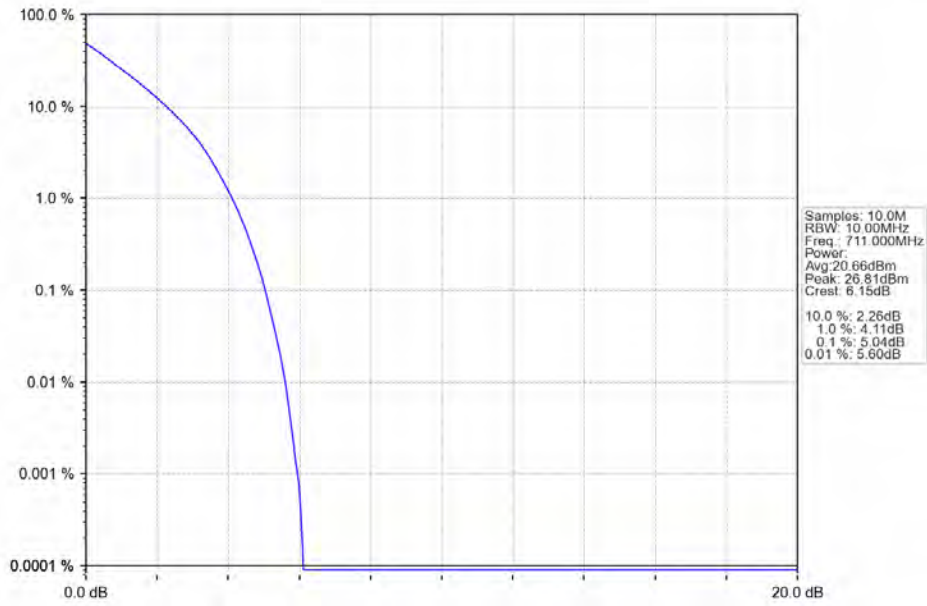
5.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	5.23	<=13	Pass
	707.5	50	0	5.23	<=13	Pass
	711	50	0	5.04	<=13	Pass
16QAM	704	50	0	5.96	<=13	Pass
	707.5	50	0	5.98	<=13	Pass
	711	50	0	5.82	<=13	Pass

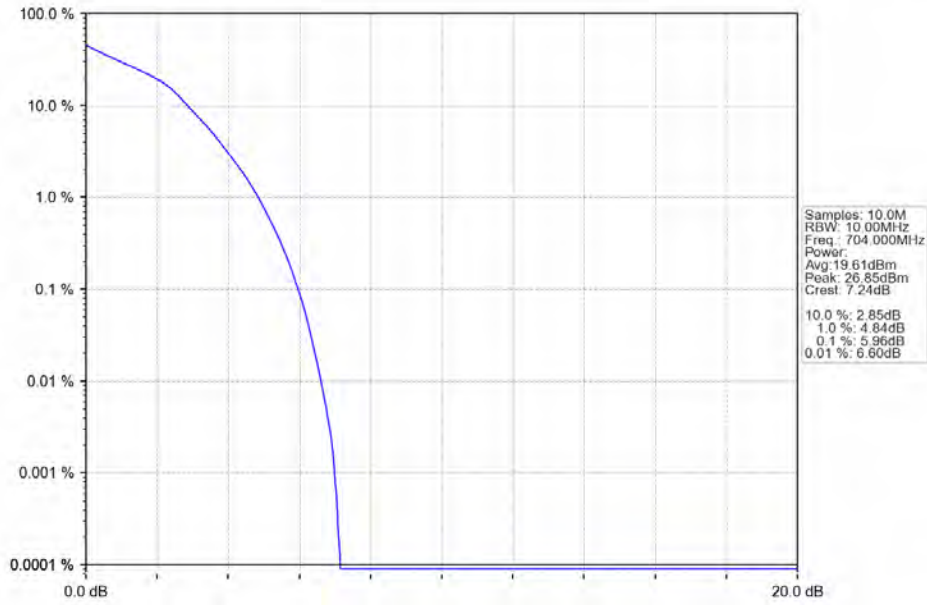
5.4.2 Test Graph



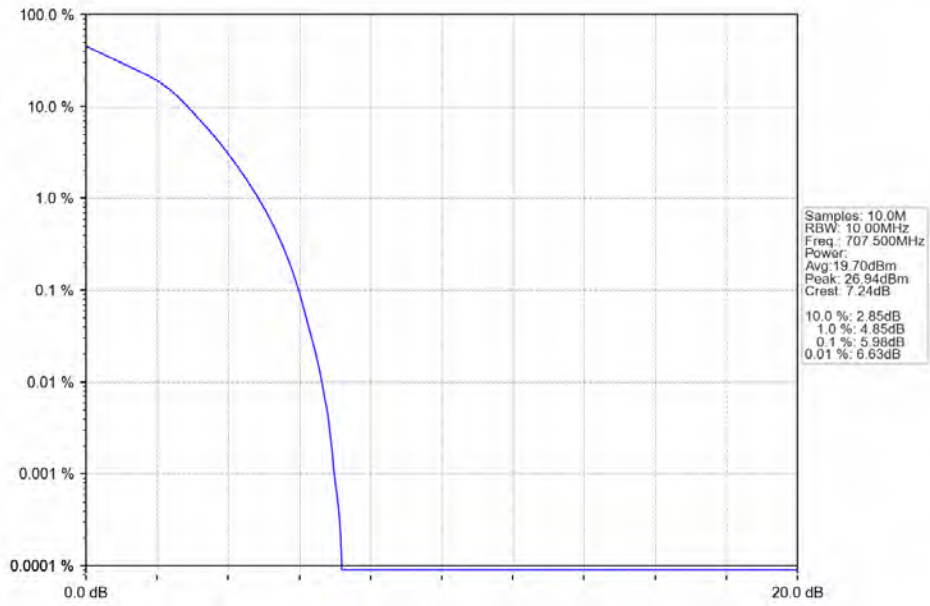
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



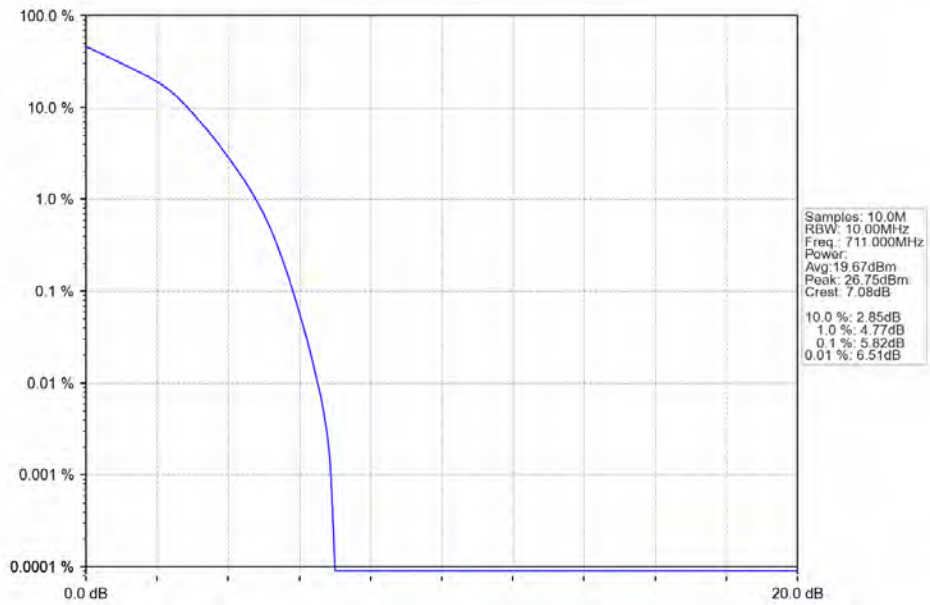
Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_50_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



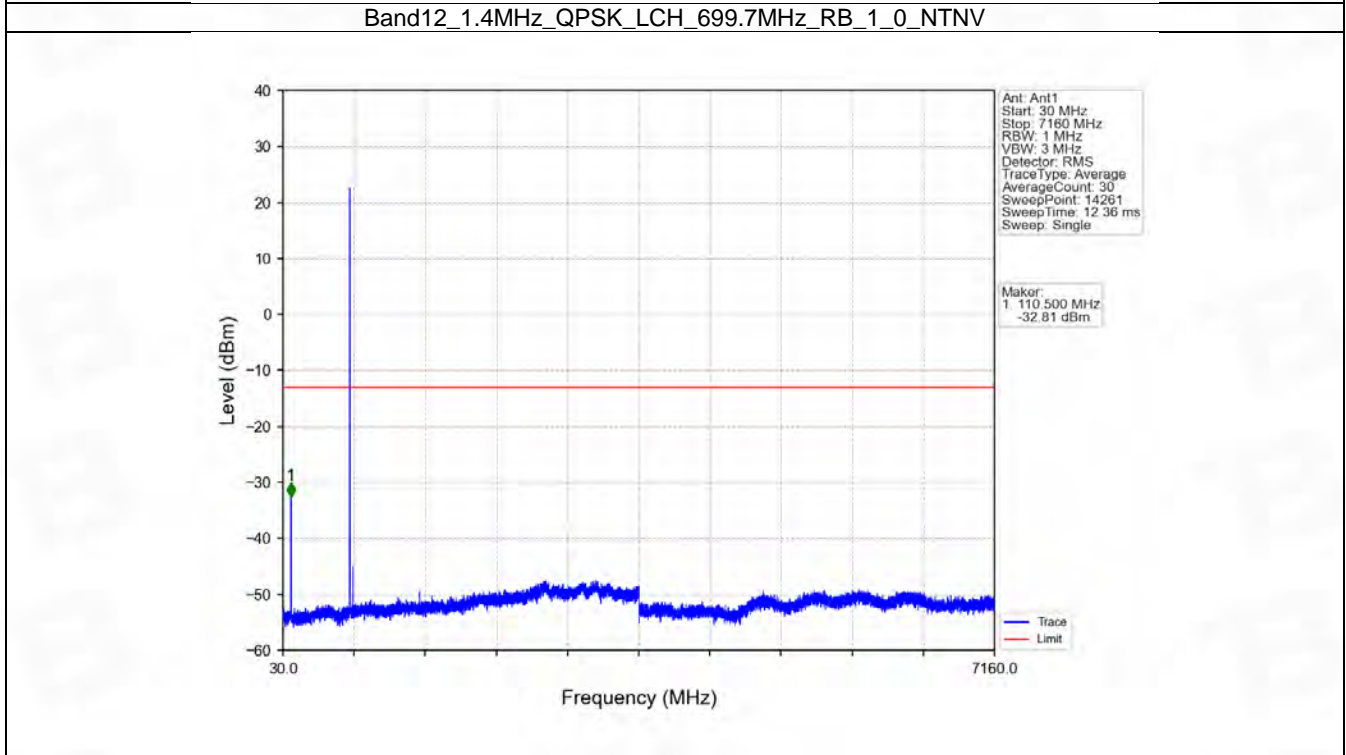
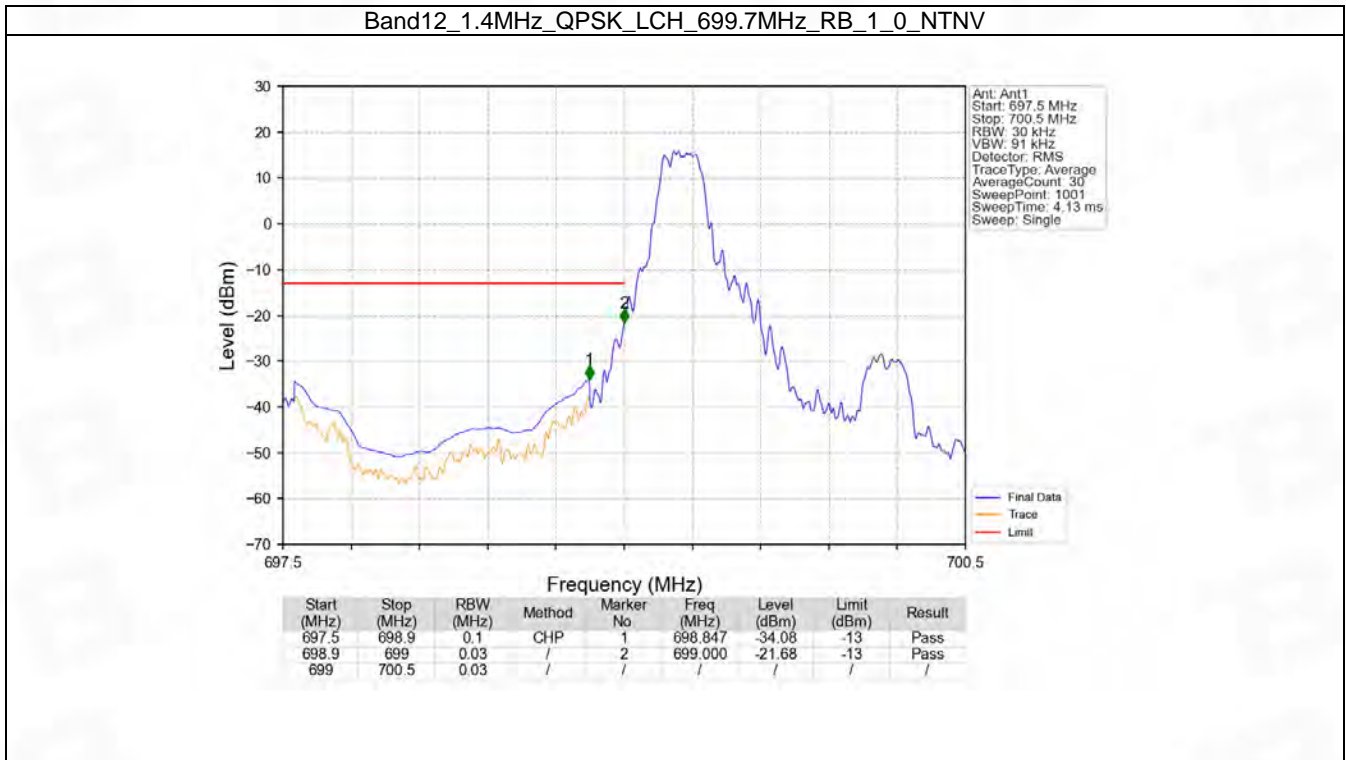
6. Spurious Emission

6.1 B12_1.4MHz

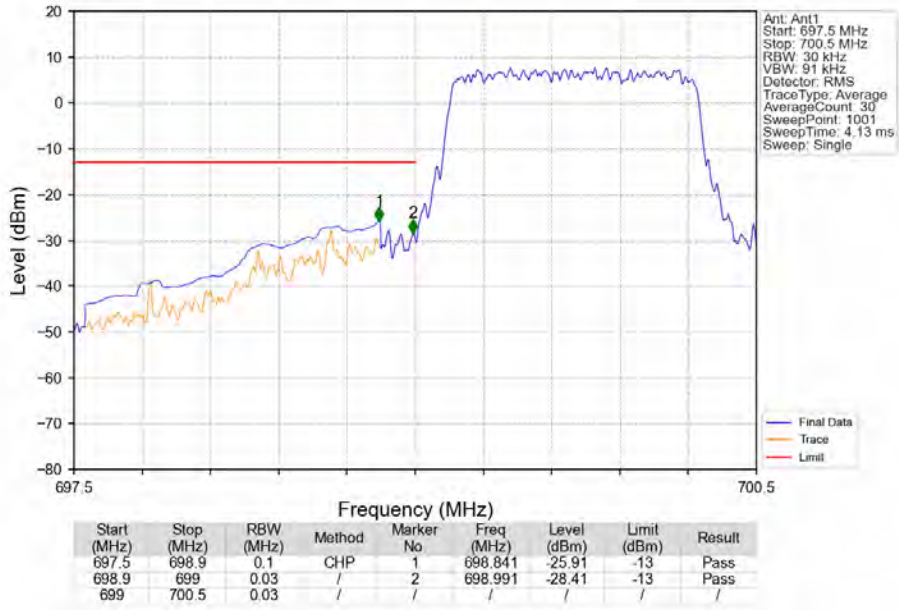
6.1.1 Test Result

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	
			6	0	Refer To Test Graph	
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	
			6	0	Refer To Test Graph	

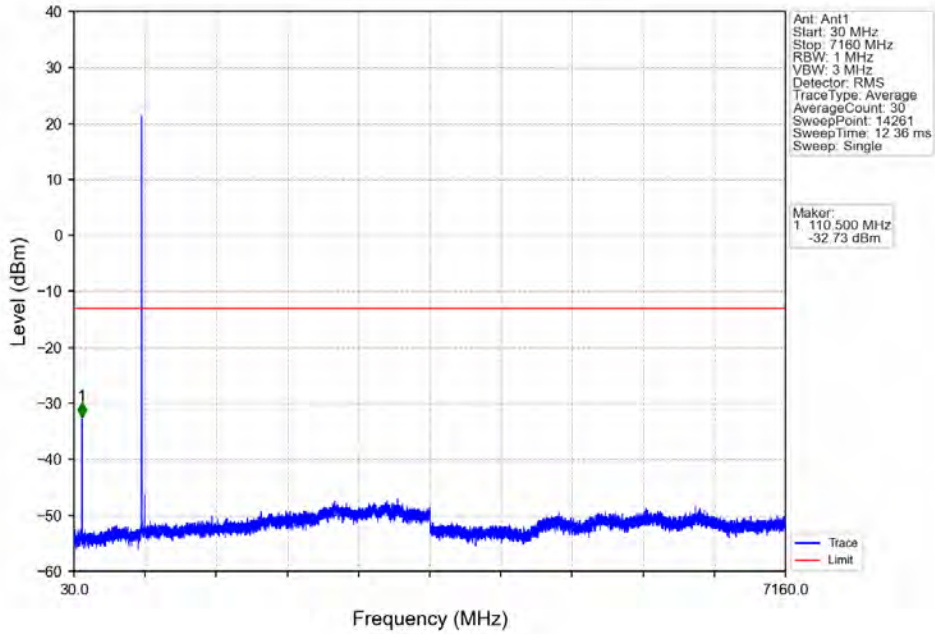
6.1.2 Test Graph



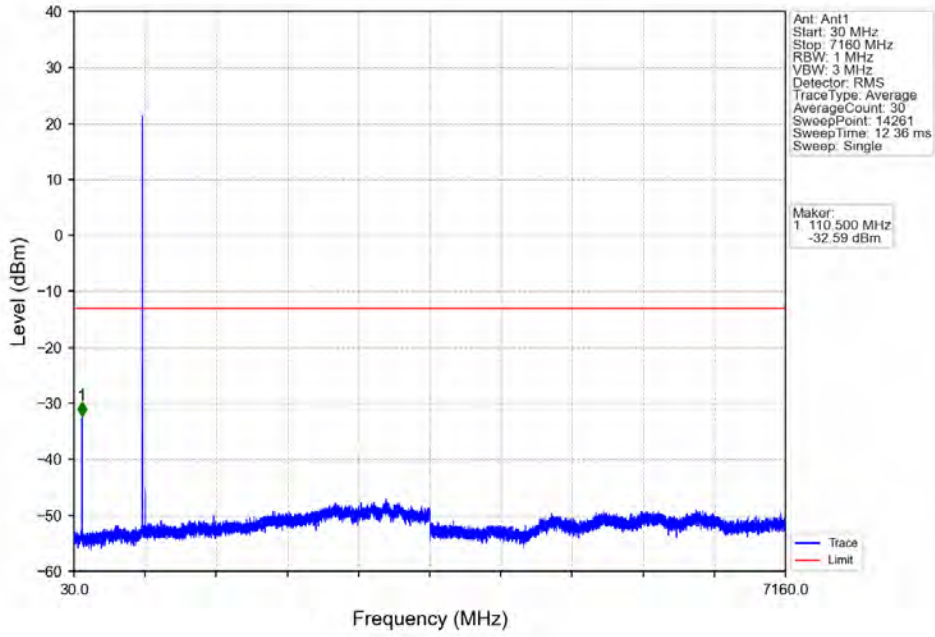
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



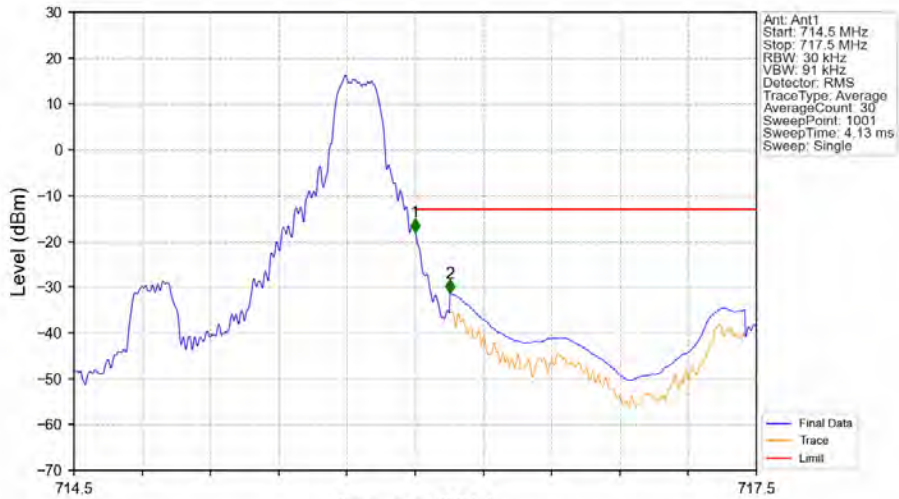
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_0_NTNV

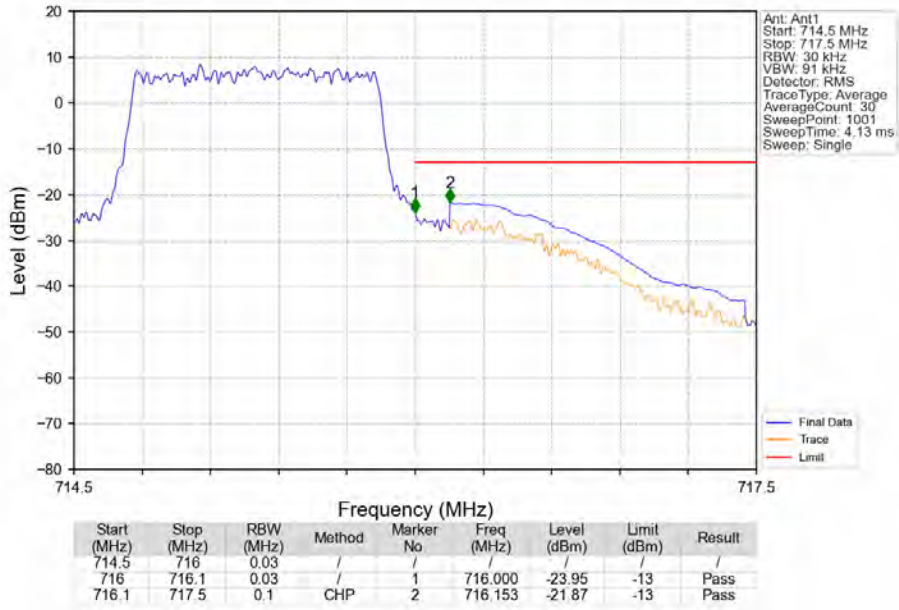


Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_5_NTNV

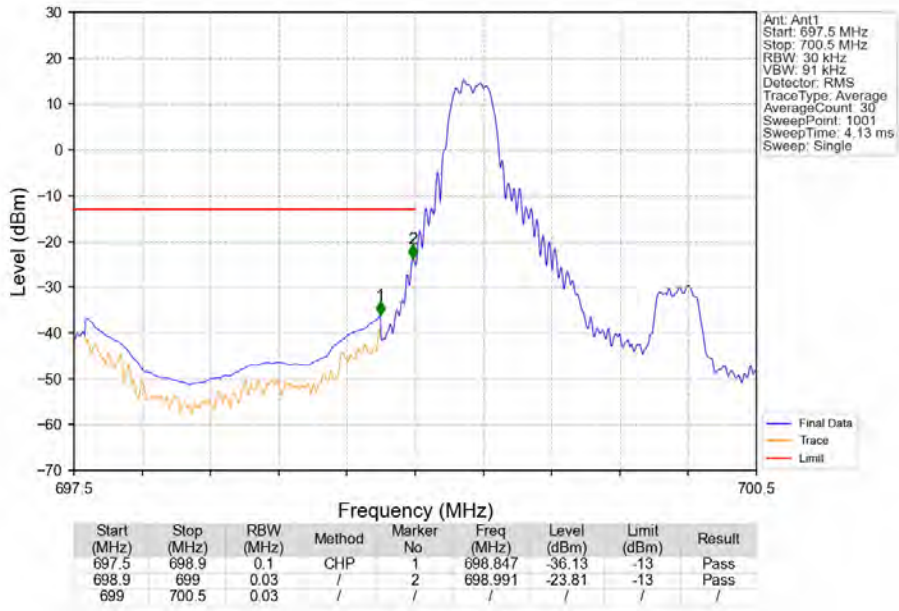


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	1	716.000	-18.09	-13	Pass
716	716.1	0.03	CHP	2	716.153	-31.40	-13	Pass

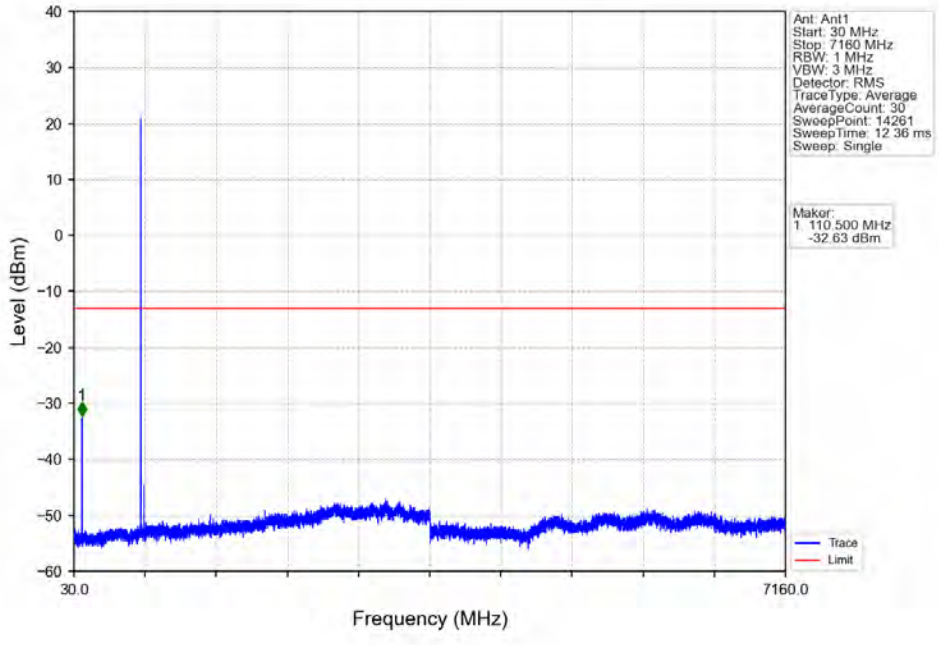
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



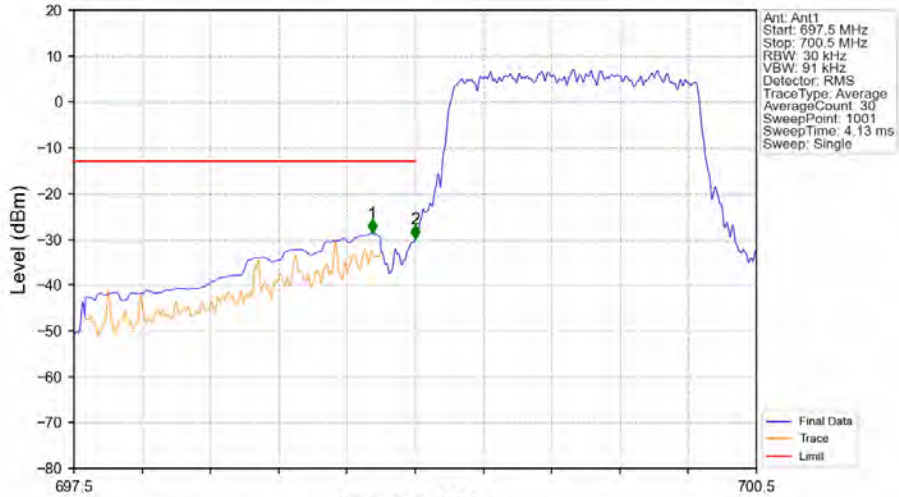
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV



Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

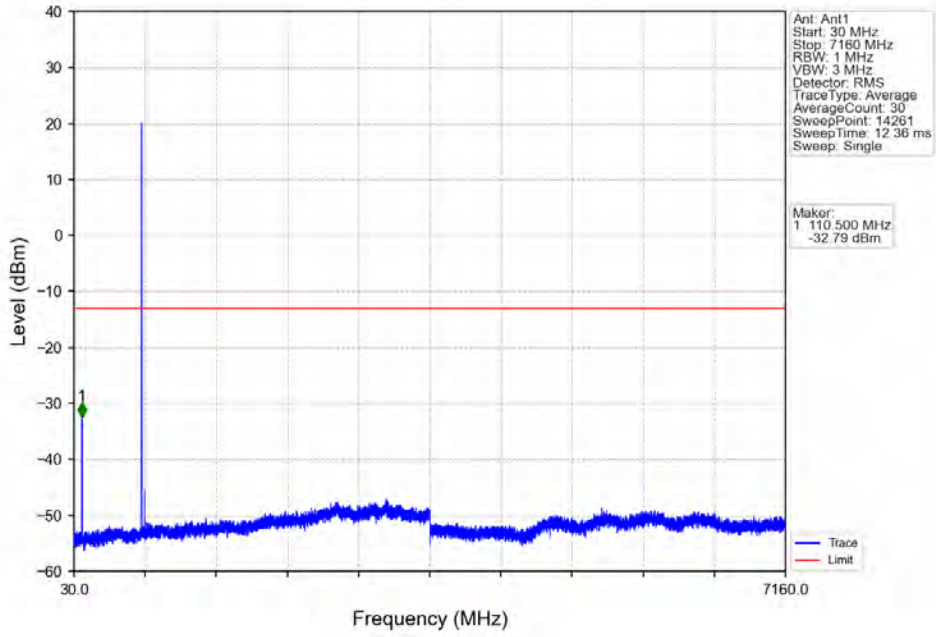


Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV

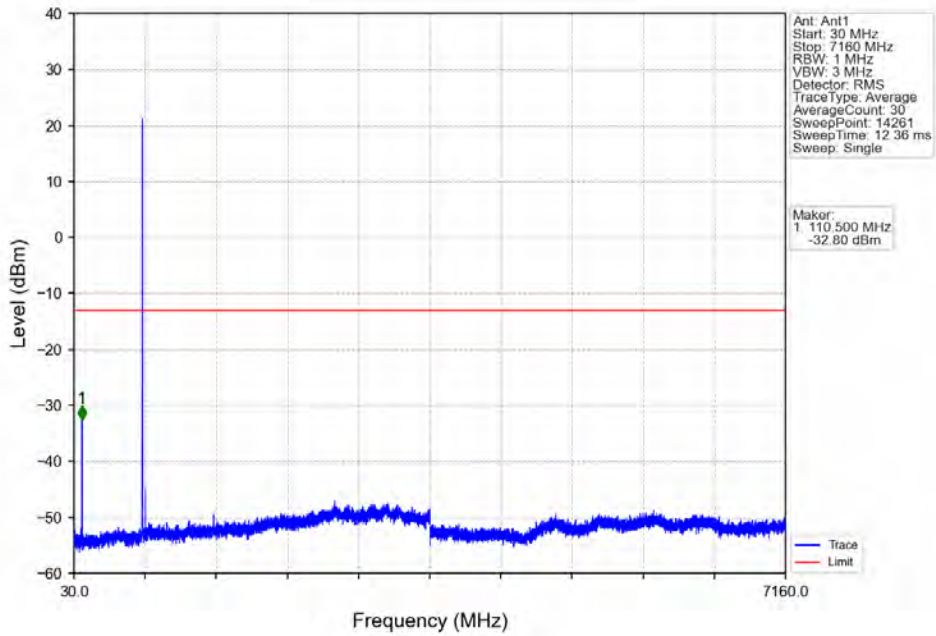


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.811	-28.62	-13	Pass
698.9	699	0.03	/	2	699.000	-29.91	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

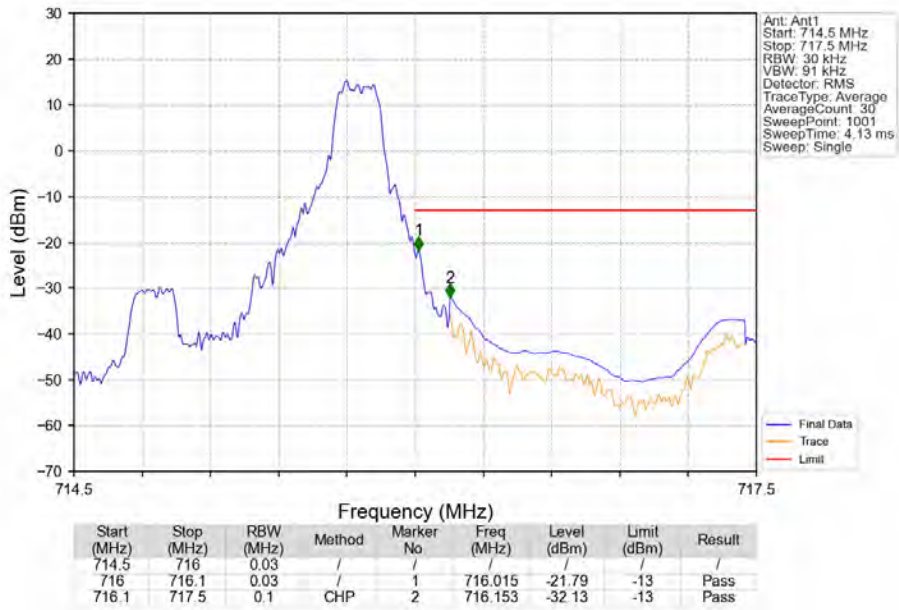
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



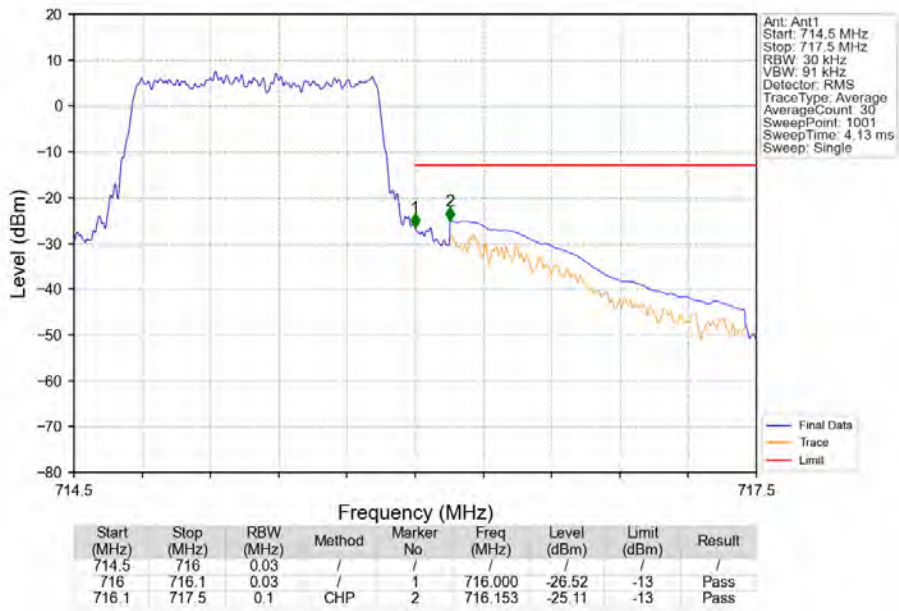
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_0_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_1_5_NTNV



Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV

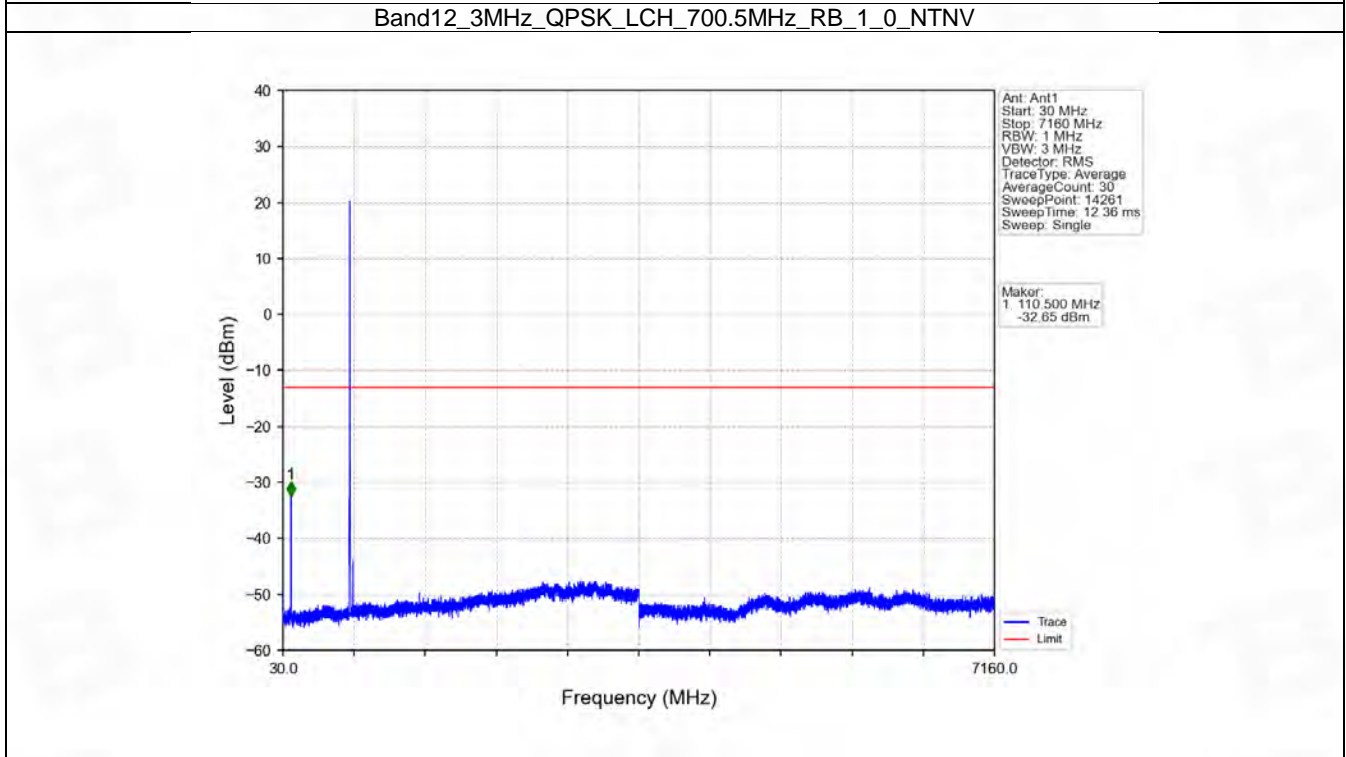
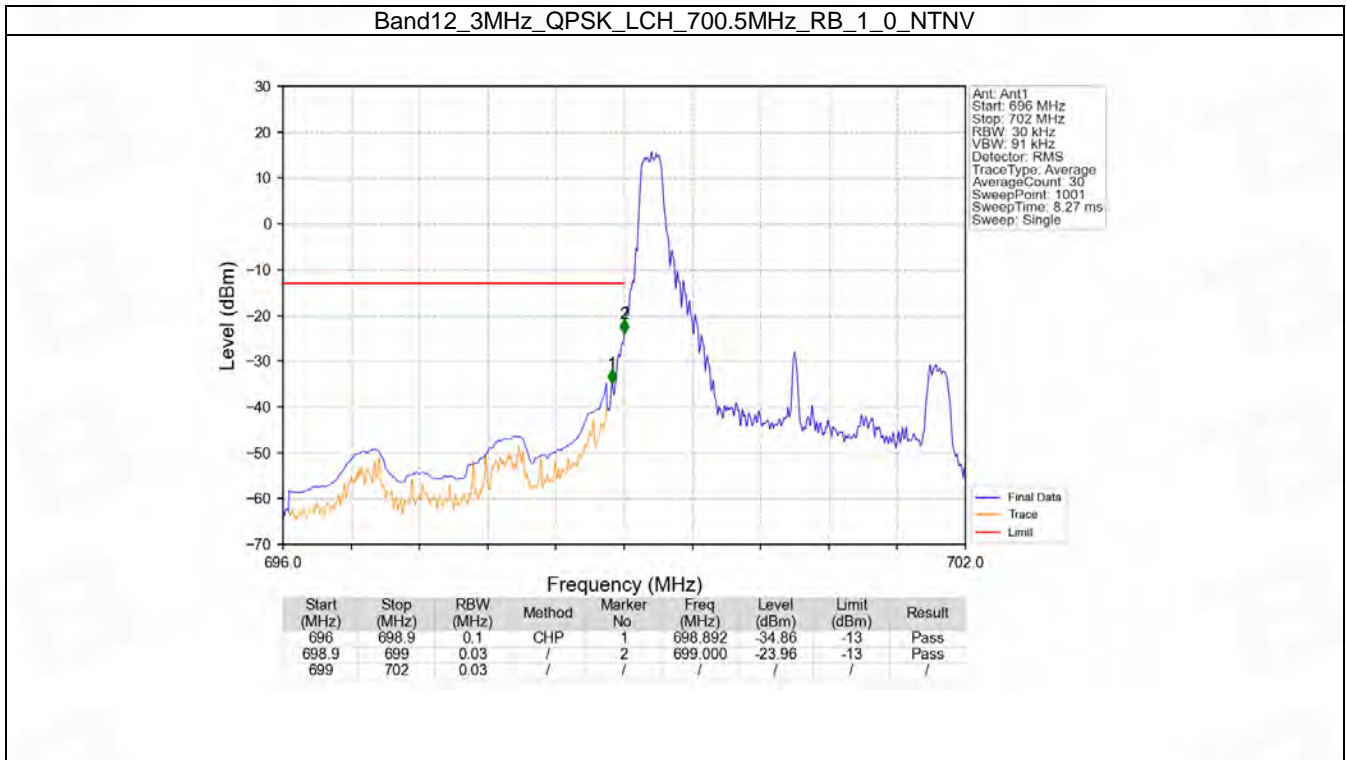


6.2 B12_3MHz

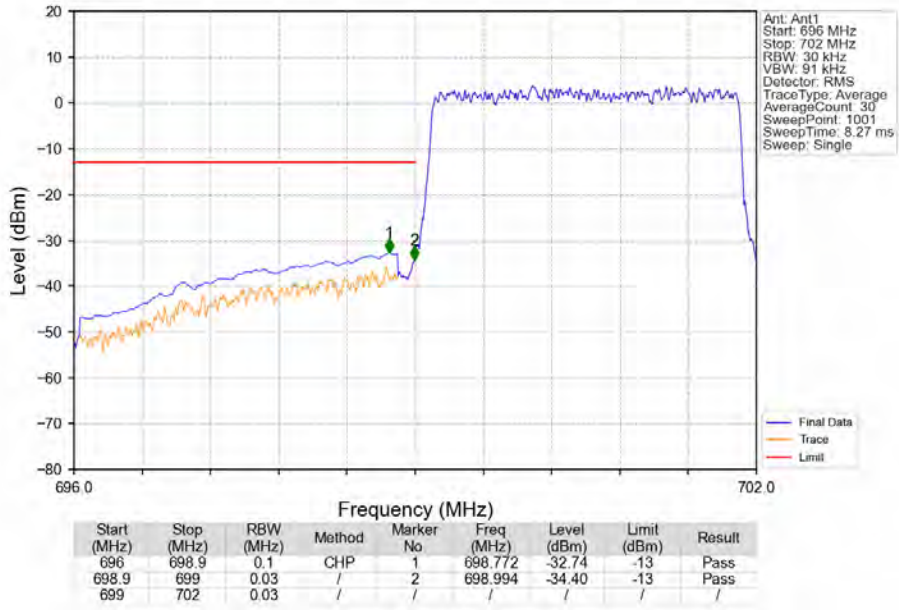
6.2.1 Test Result

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
	714.5	1	0	Refer To Test Graph		Pass
		1	14	Refer To Test Graph		Pass
		15	0	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
	714.5	1	0	Refer To Test Graph		Pass
		1	14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

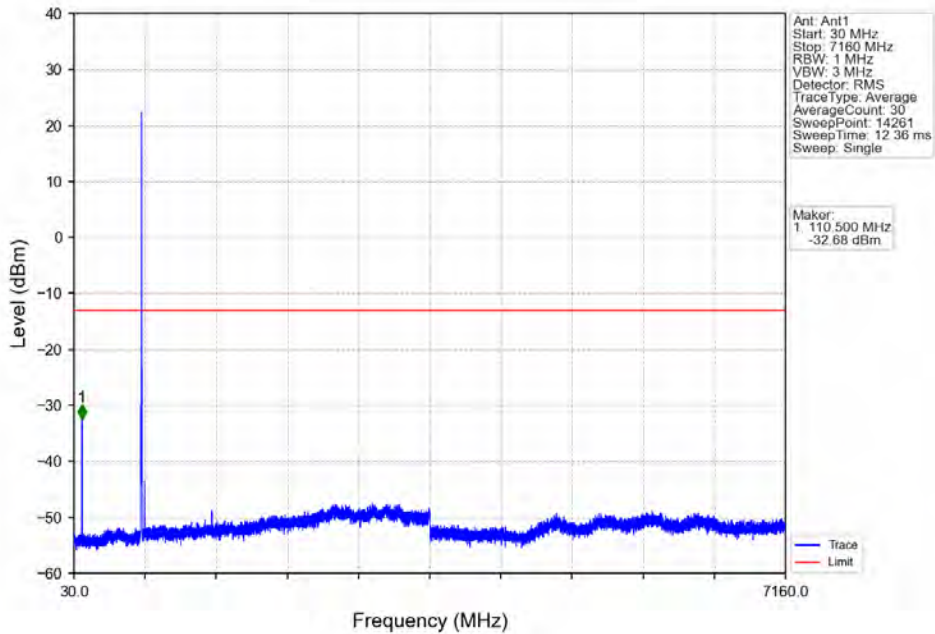
6.2.2 Test Graph



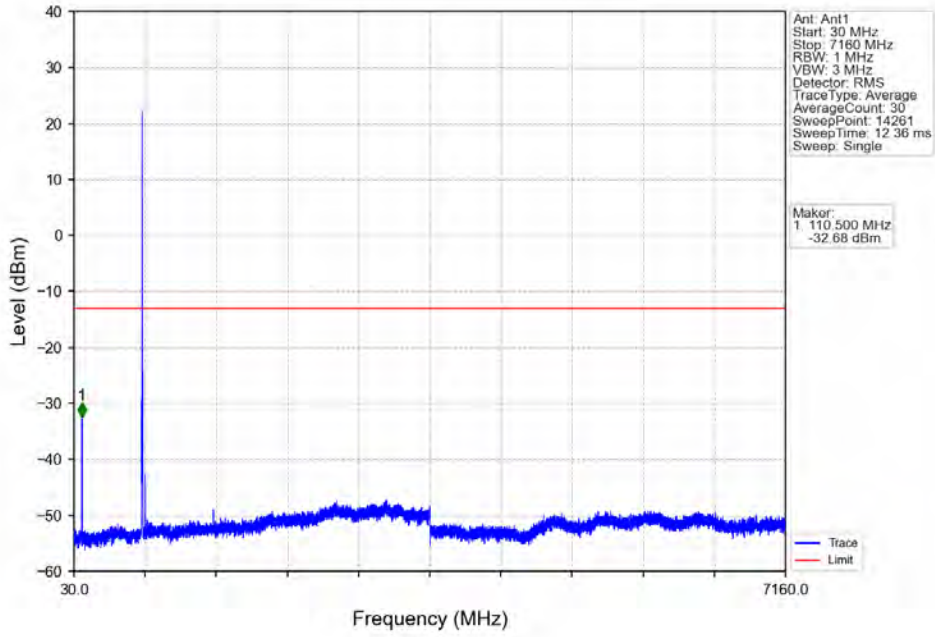
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



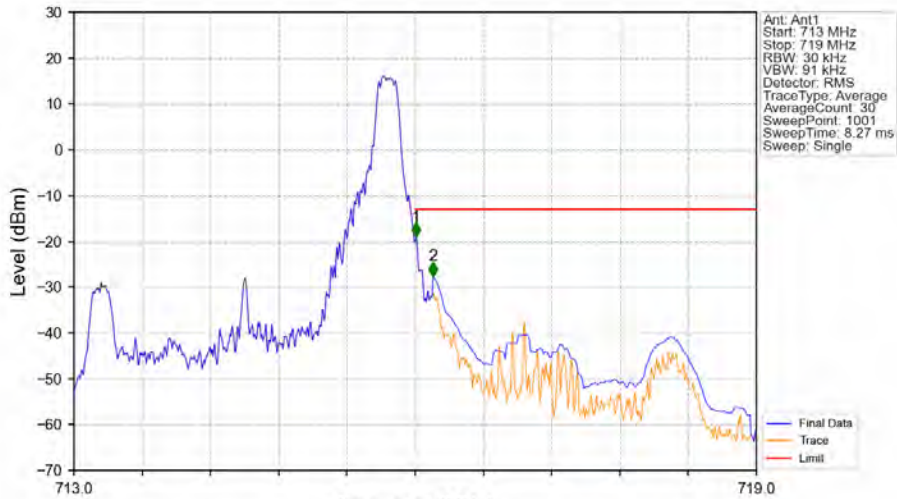
Band12_3MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_0_NTNV

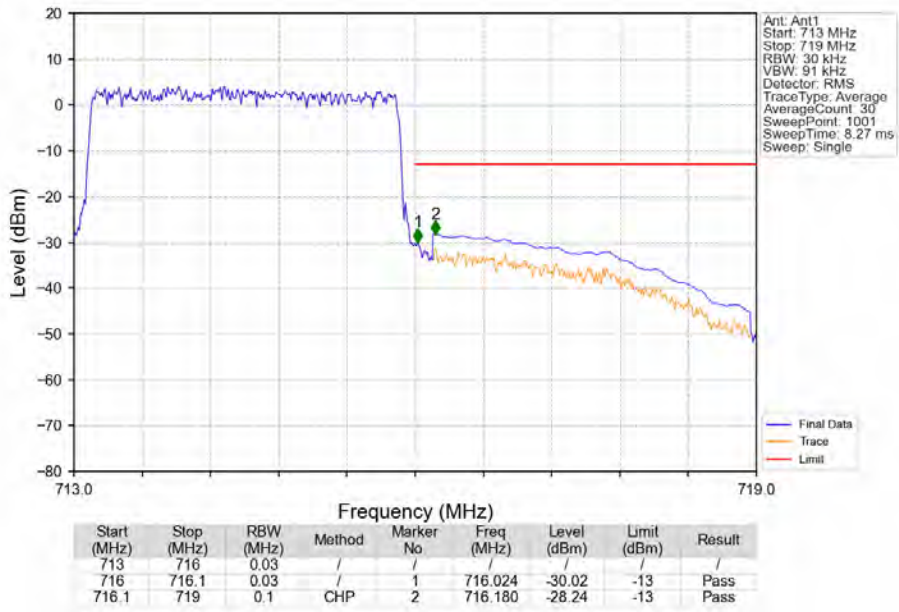


Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_14_NTNV

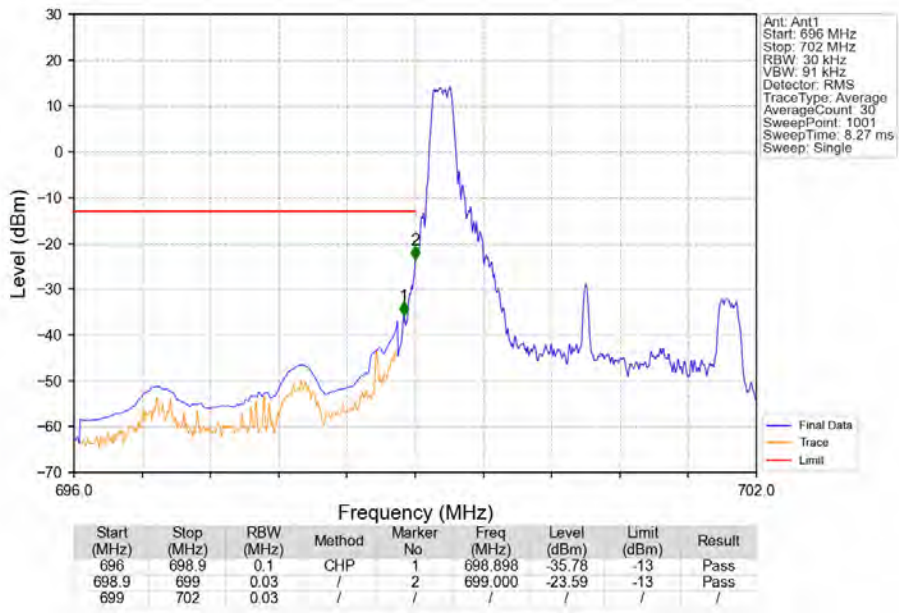


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	1	716.006	-18.99	-13	Pass
716.1	719	0.1	CHP	2	716.156	-27.61	-13	Pass

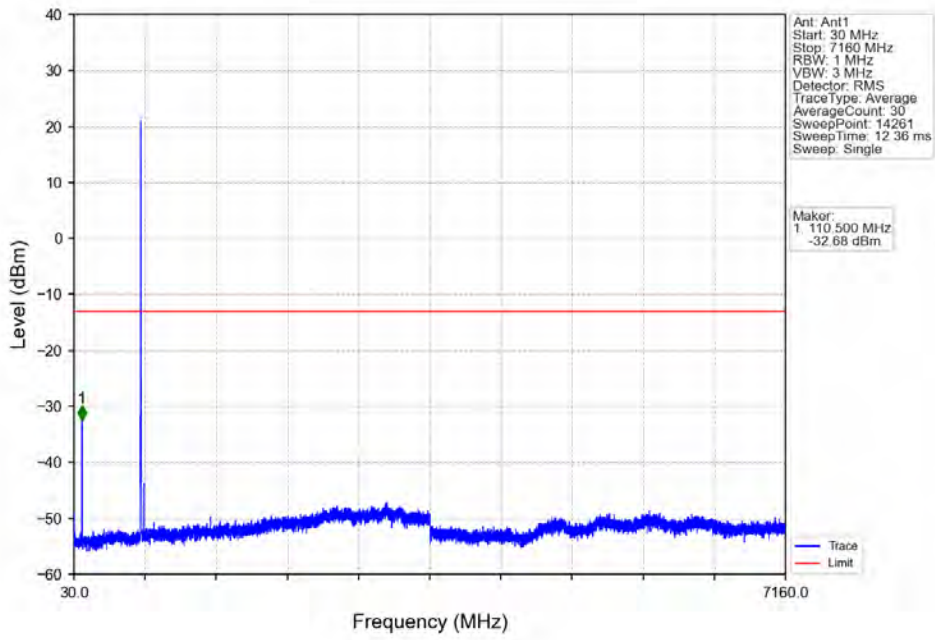
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



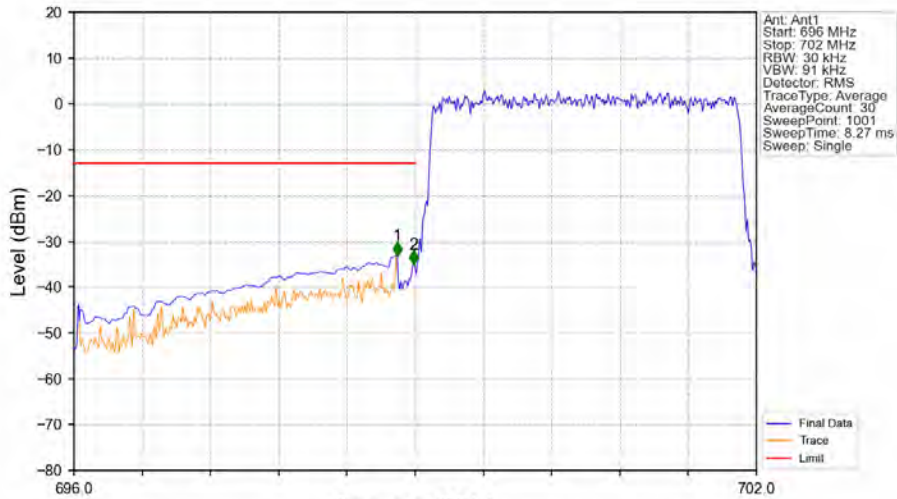
Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV



Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

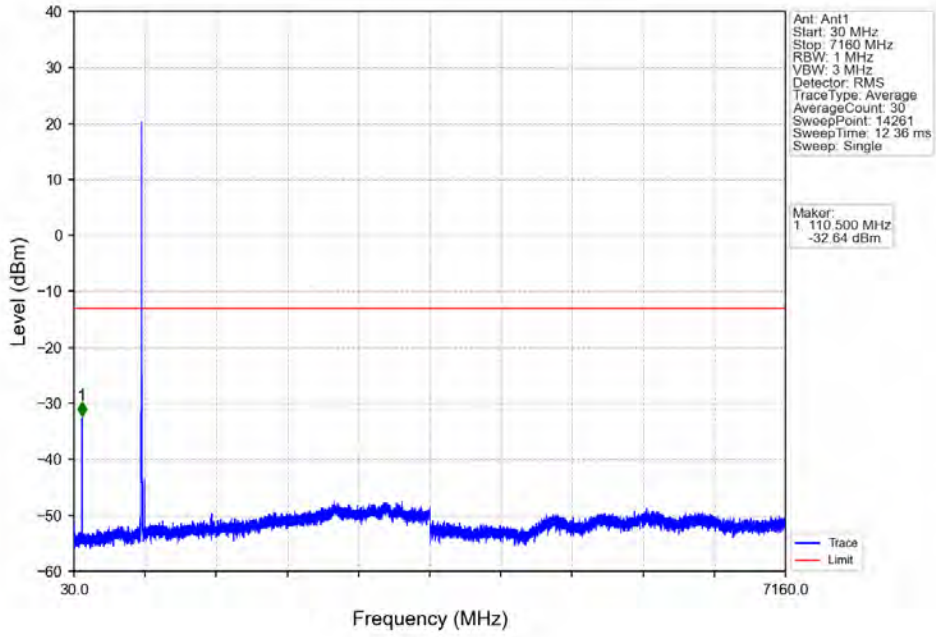


Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

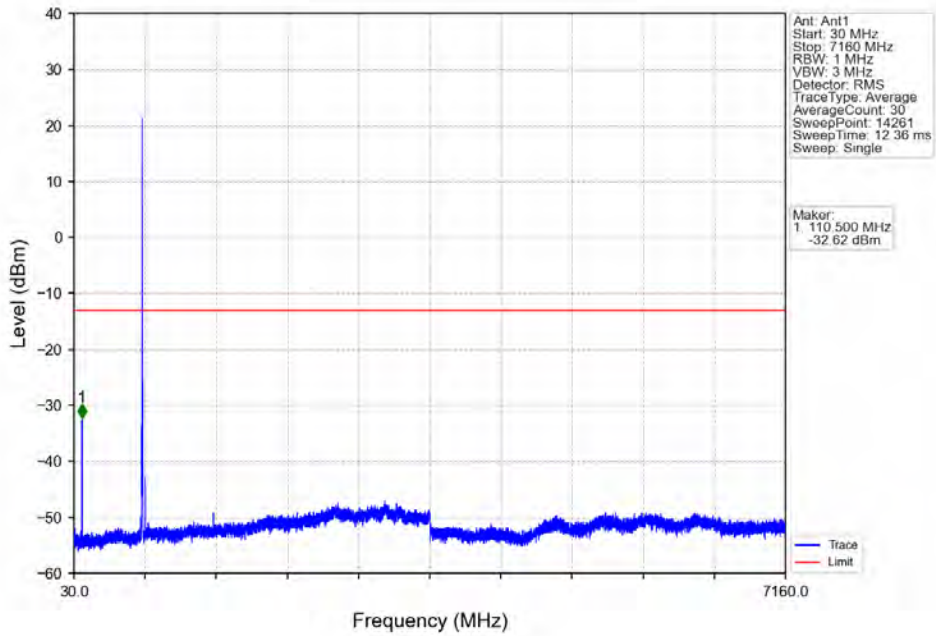


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-33.17	-13	Pass
698.9	699	0.03	/	2	698.988	-34.98	-13	Pass
699	702	0.03	/	/	/	/	/	/

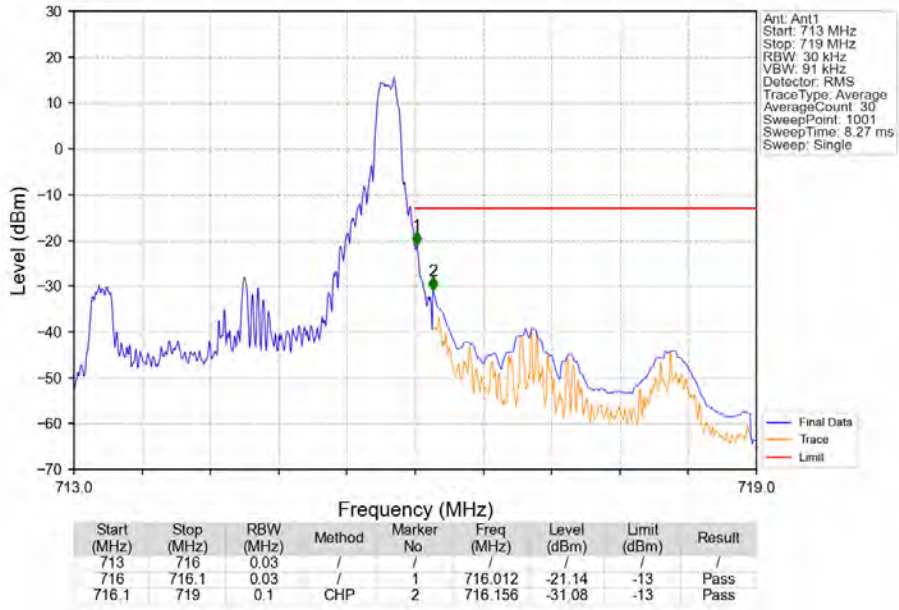
Band12_3MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



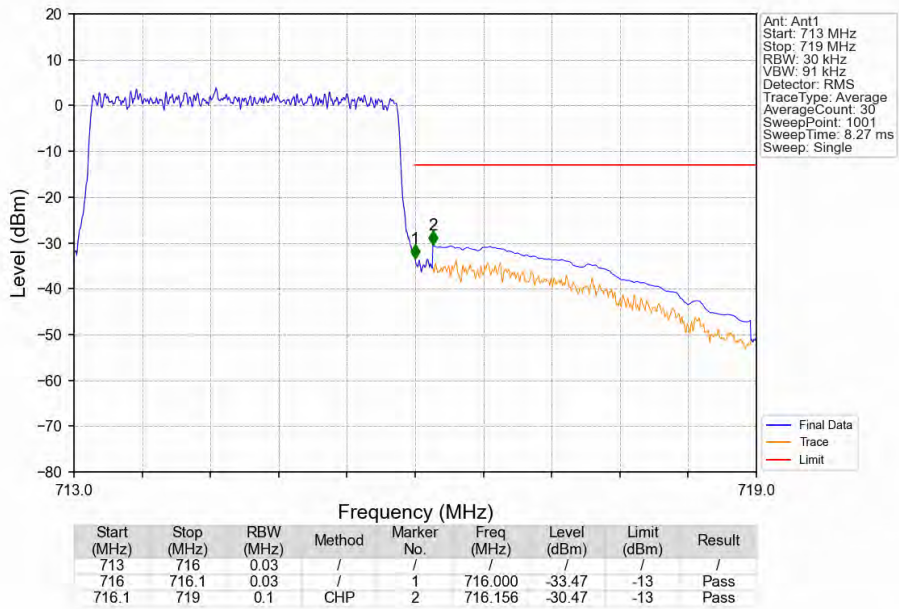
Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_0_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_14_NTV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTV

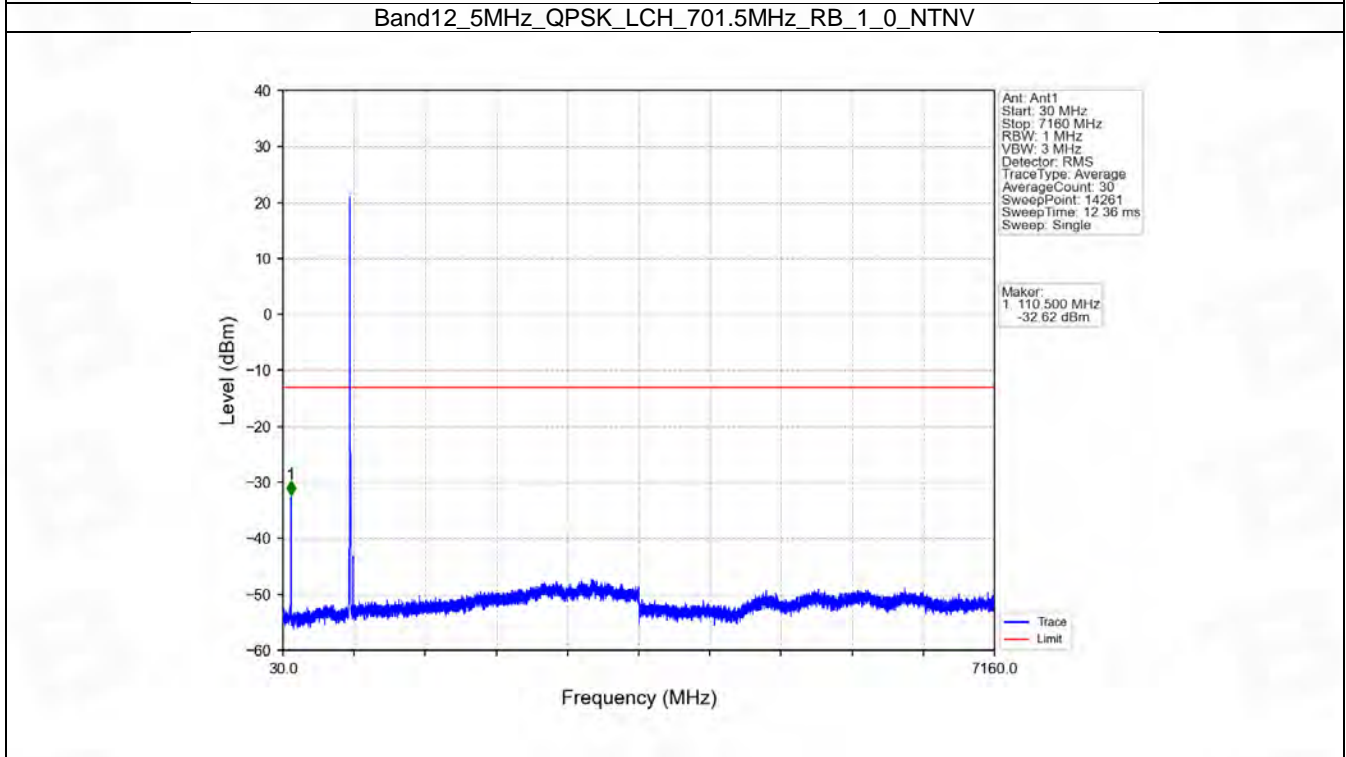
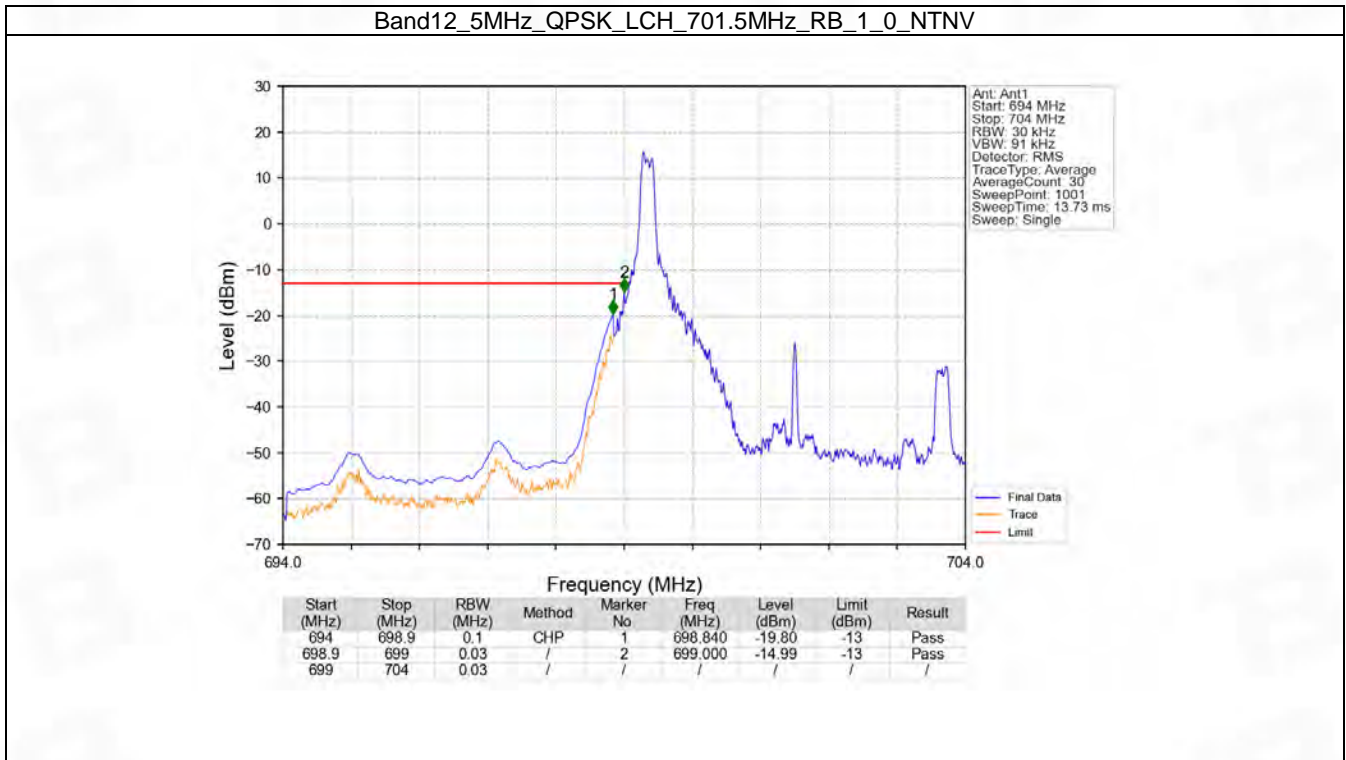


6.3 B12_5MHz

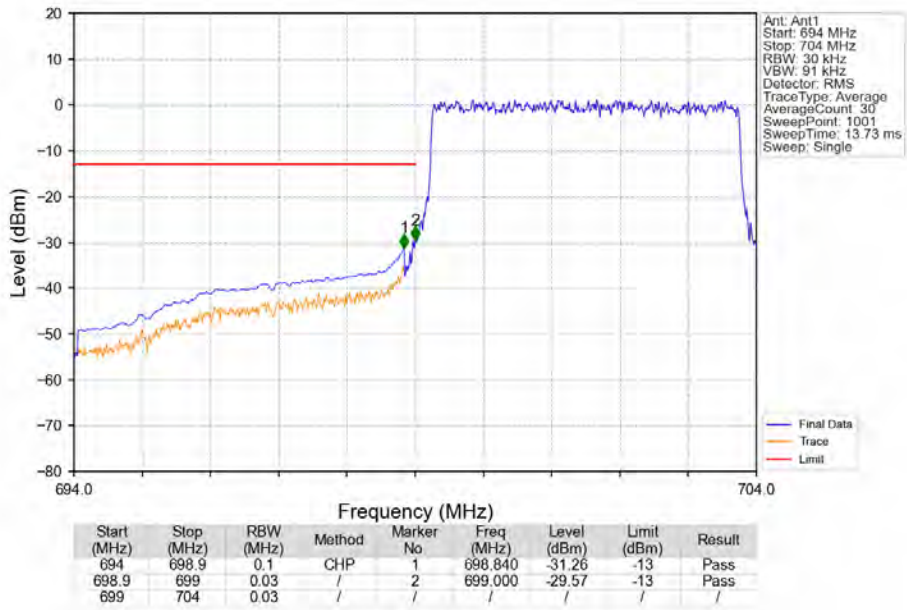
6.3.1 Test Result

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
	713.5	1	0	Refer To Test Graph		Pass
		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
	713.5	1	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

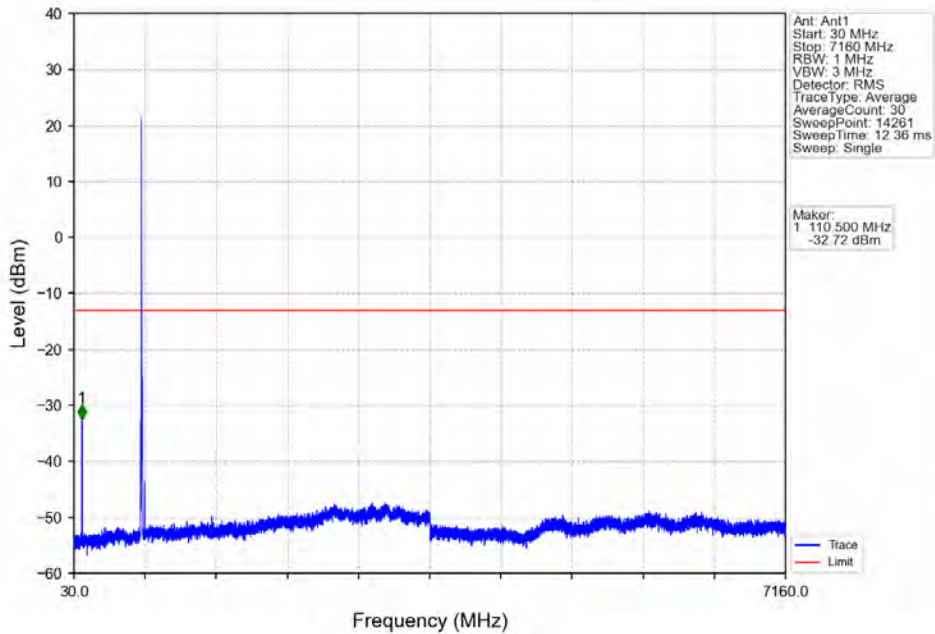
6.3.2 Test Graph



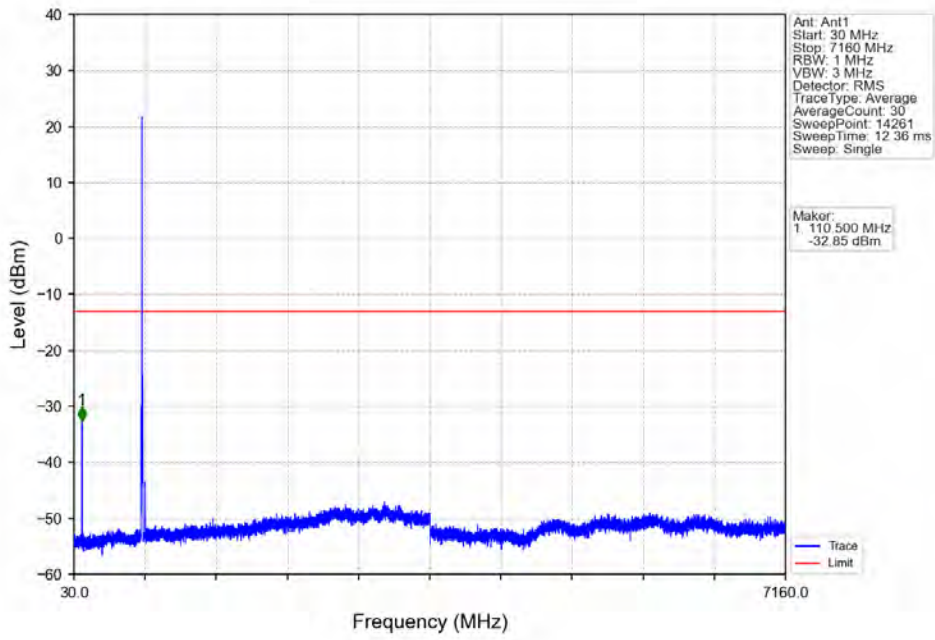
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



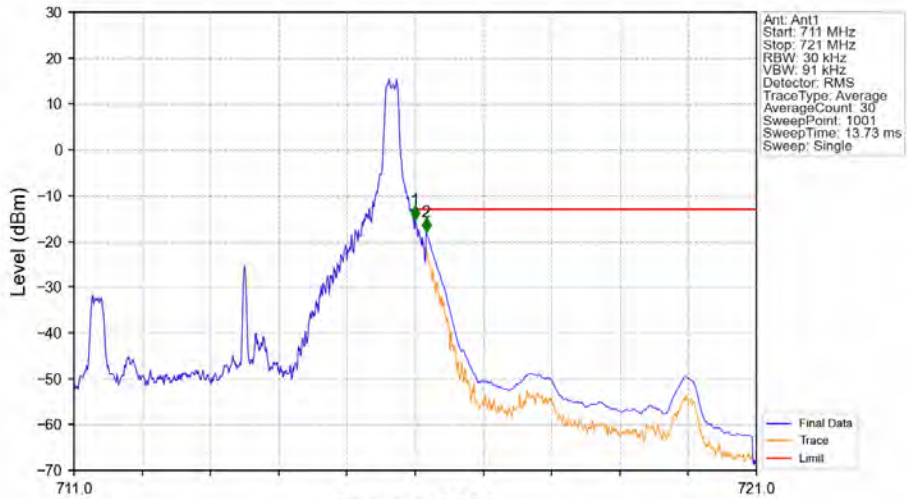
Band12_5MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

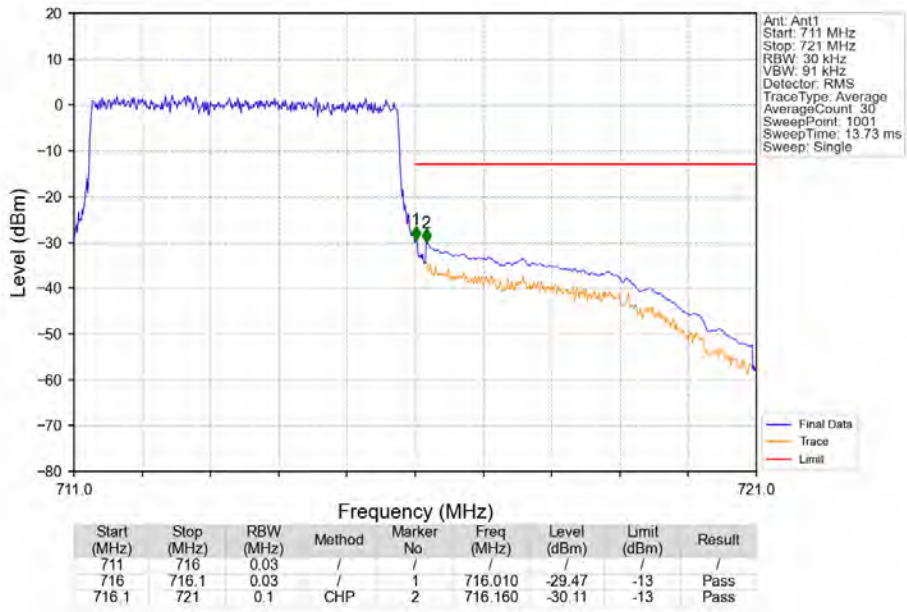


Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV

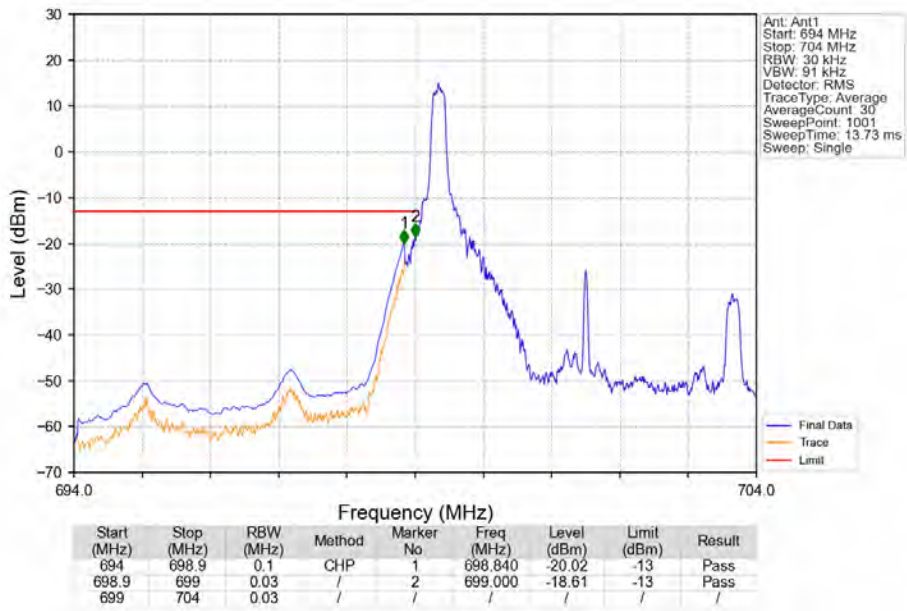


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	1	716.000	-15.35	-13	Pass
716.1	721	0.1	CHP	2	716.160	-17.96	-13	Pass

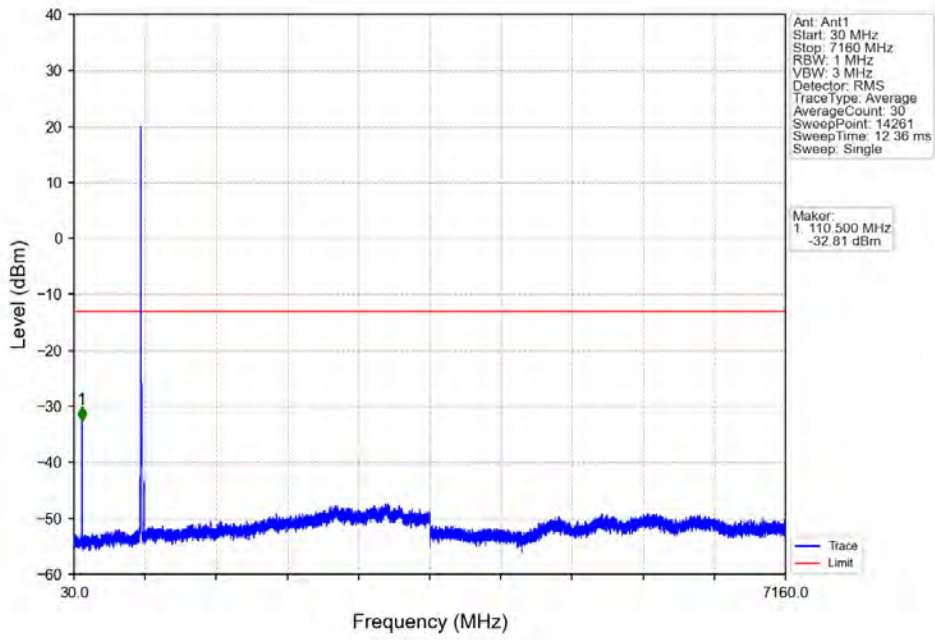
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



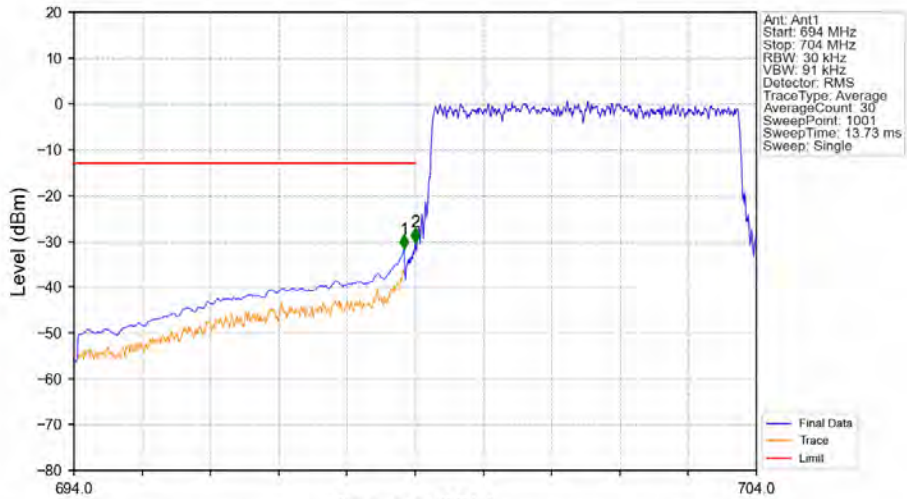
Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV



Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

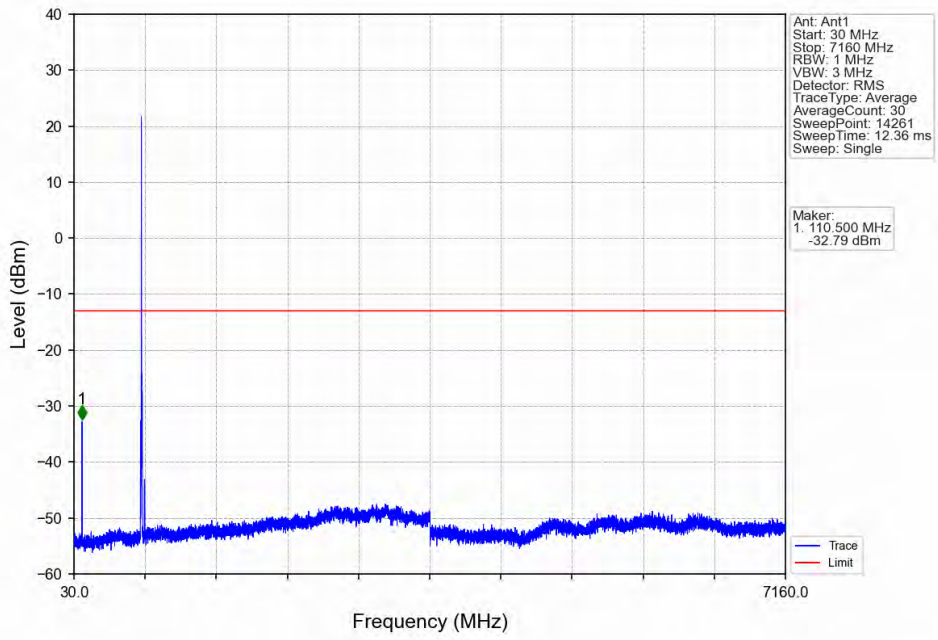


Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV

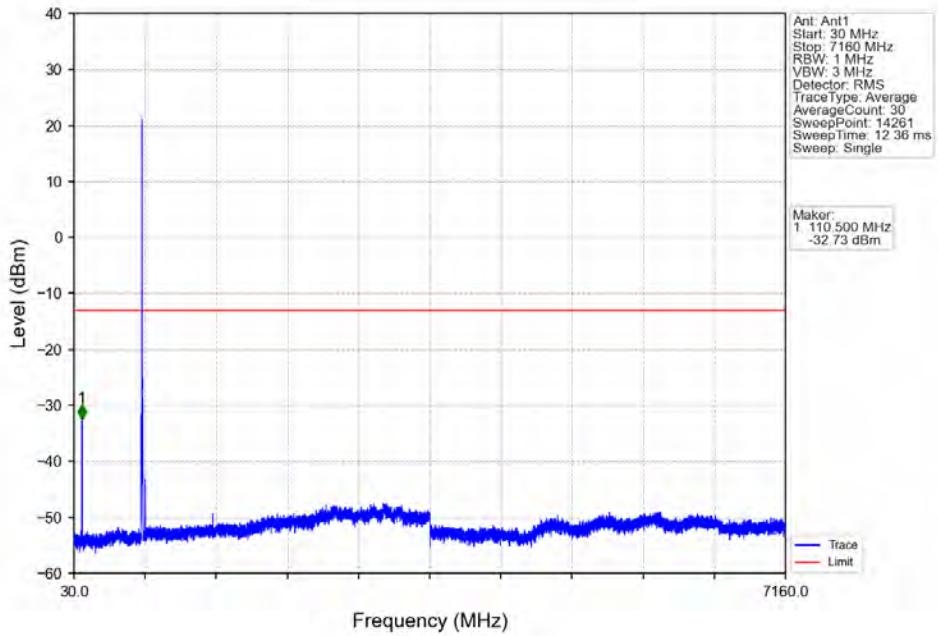


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.840	-31.69	-13	Pass
698.9	699	0.03	/	2	699.000	-30.18	-13	Pass
699	704	0.03	/	/	/	/	/	/

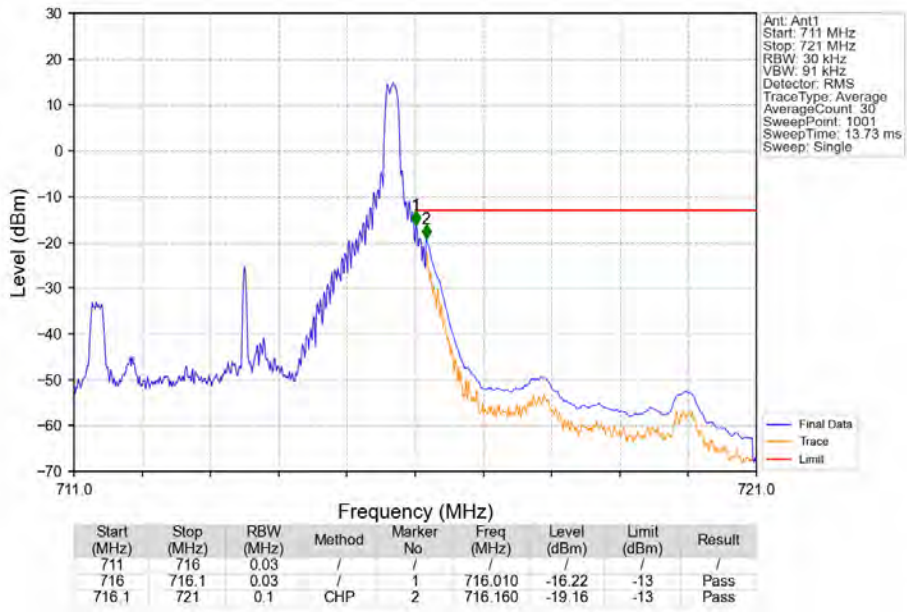
Band12_5MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



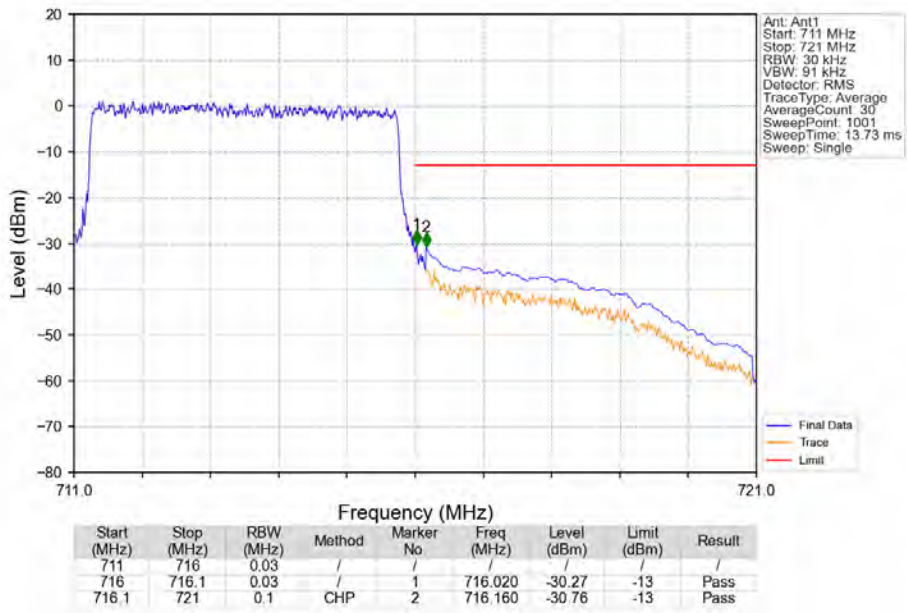
Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_0_NTNV



Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_24_NTNV



Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV

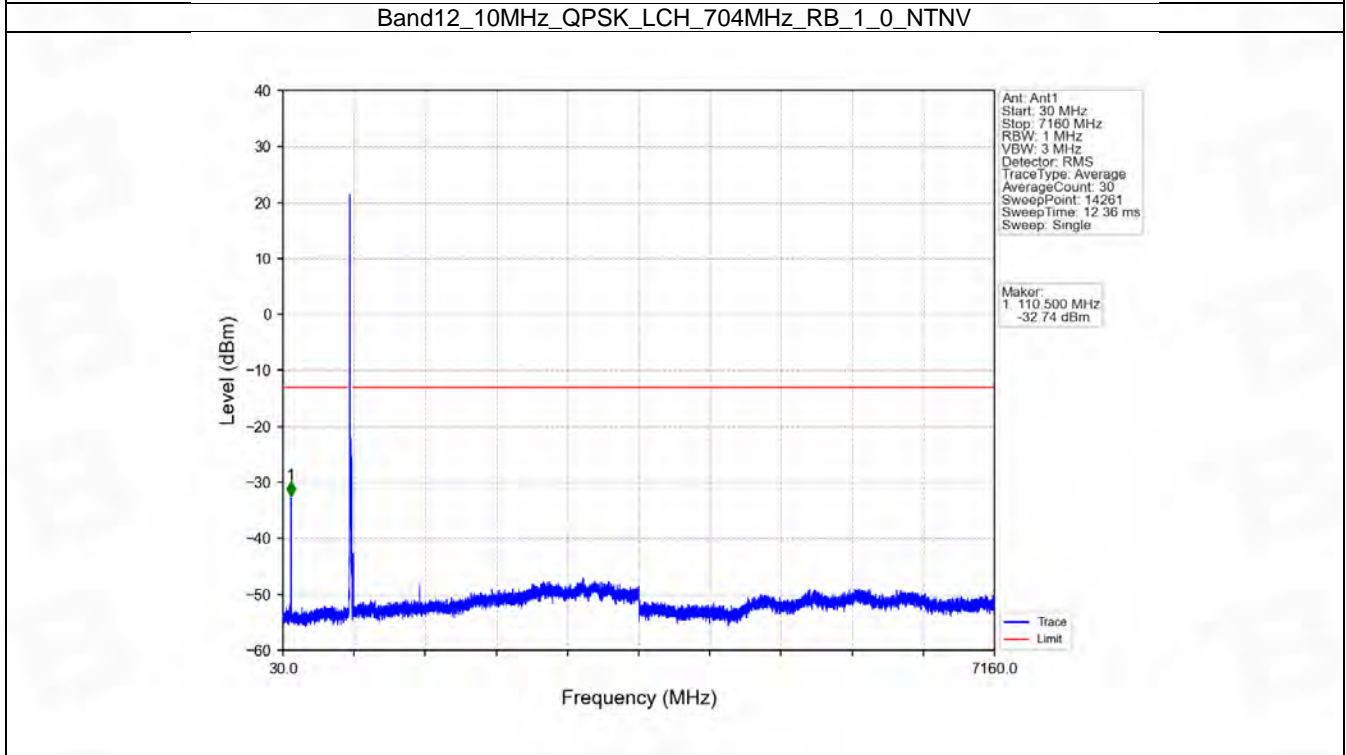
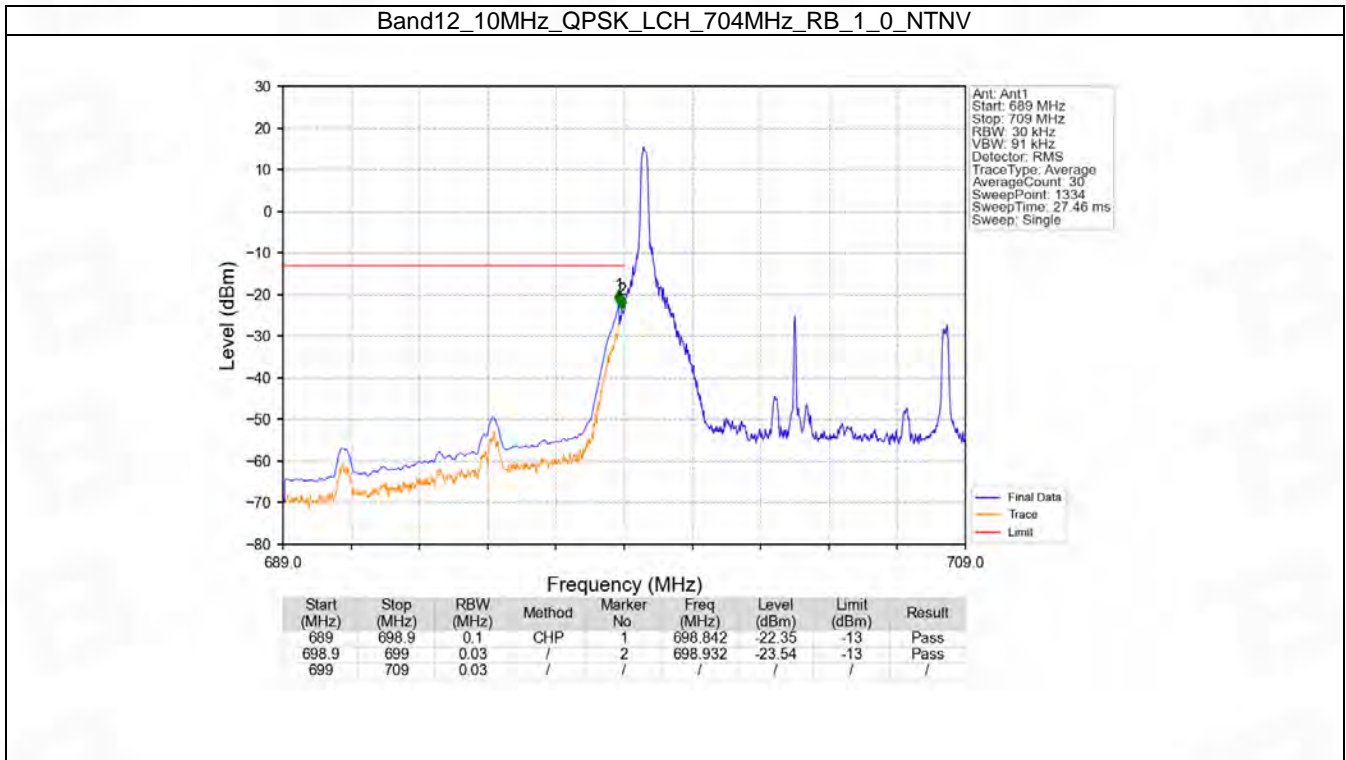


6.4 B12_10MHz

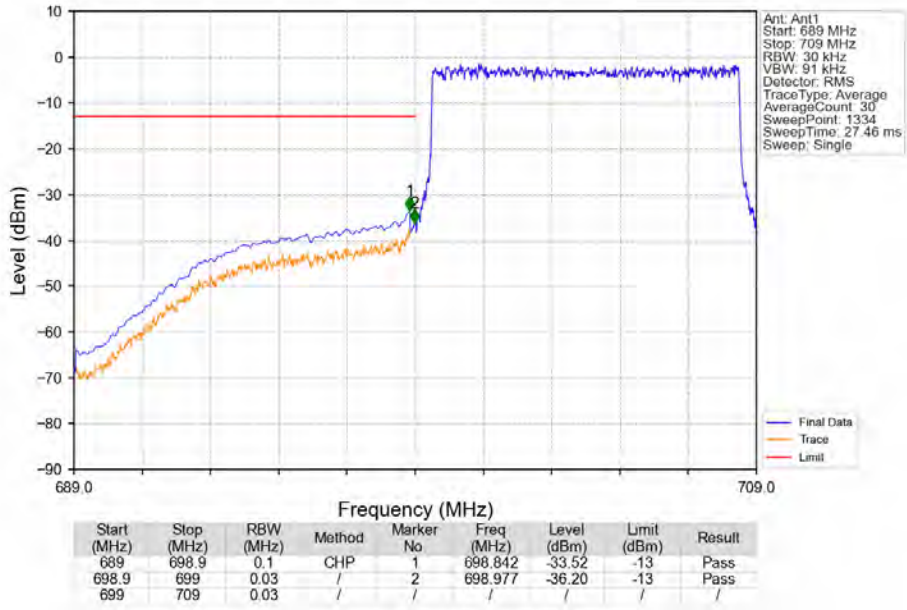
6.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	704	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
		1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
16QAM	704	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
		1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

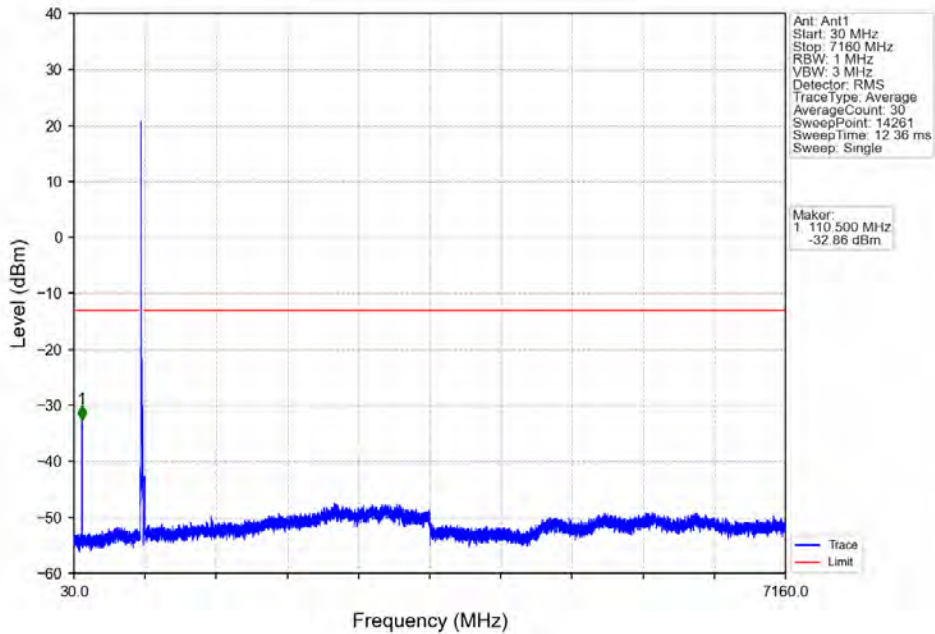
6.4.2 Test Graph



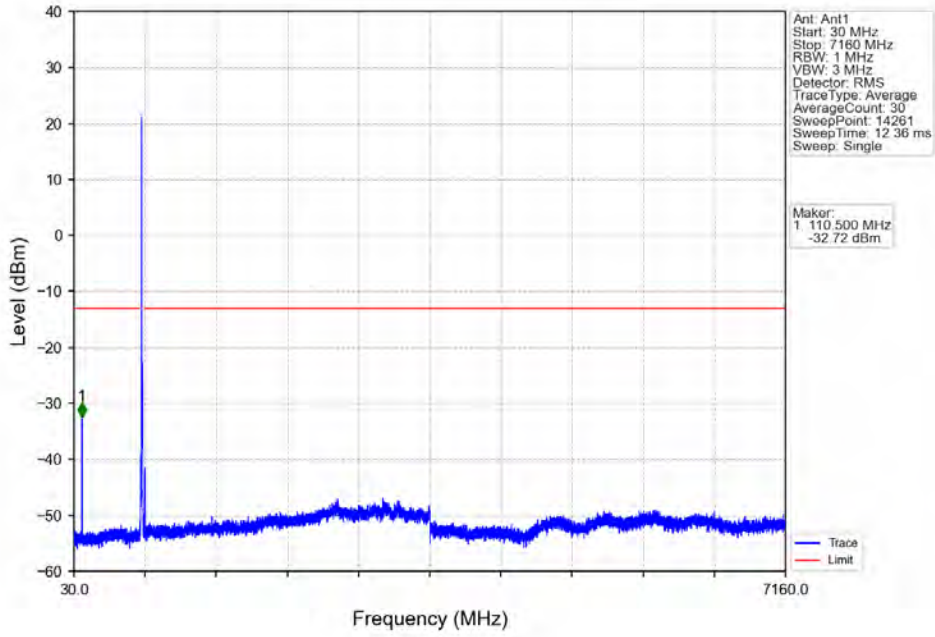
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



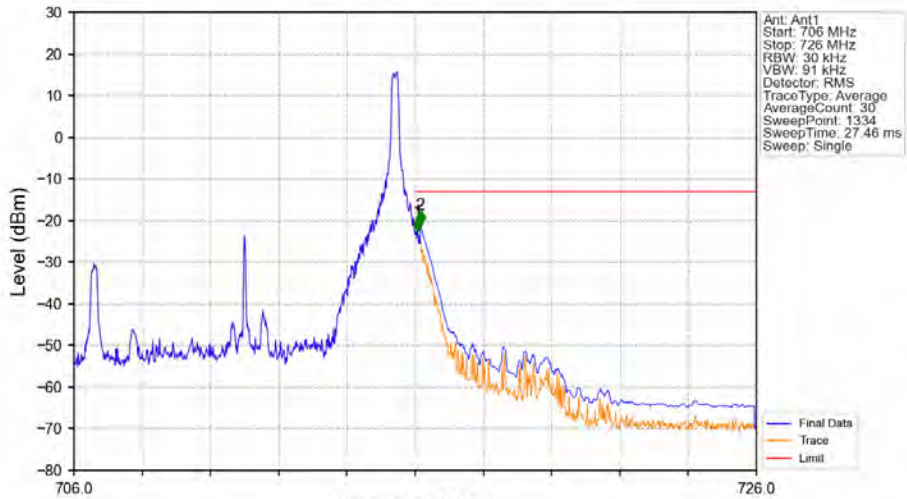
Band12_10MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV

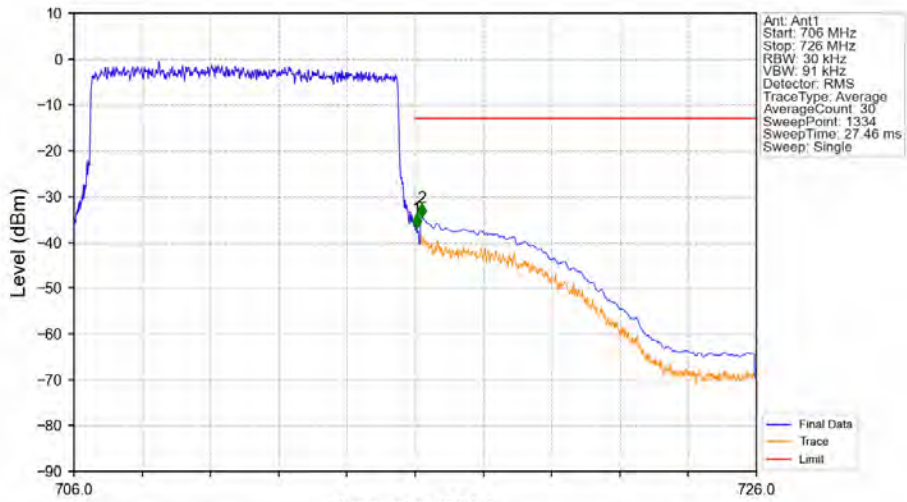


Band12_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV



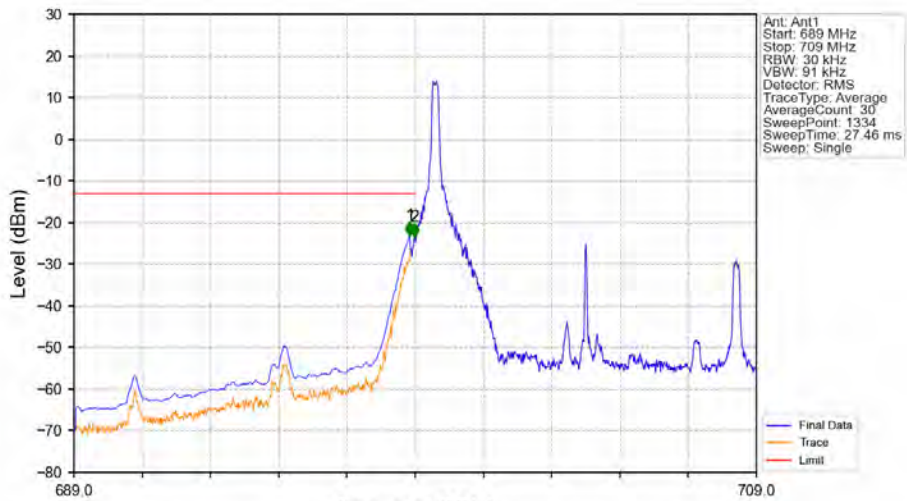
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	1	716.068	-22.66	-13	Pass
716	716.1	0.03	/	1	716.068	-22.66	-13	Pass
716.1	726	0.1	CHP	2	716.158	-20.99	-13	Pass

Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



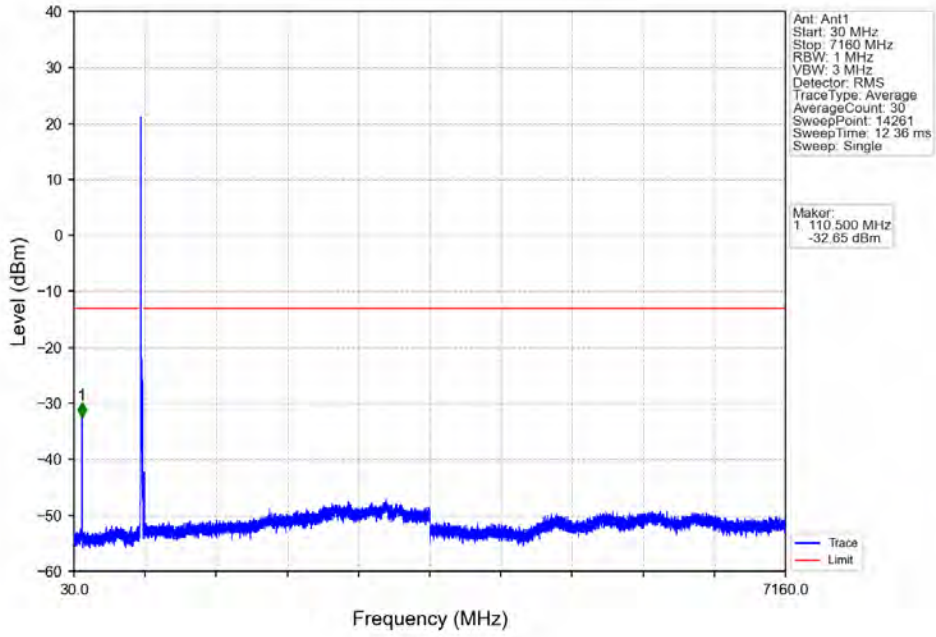
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	1	716.038	-36.97	-13	Pass
716.1	726	0.1	CHP	2	716.188	-34.67	-13	Pass

Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

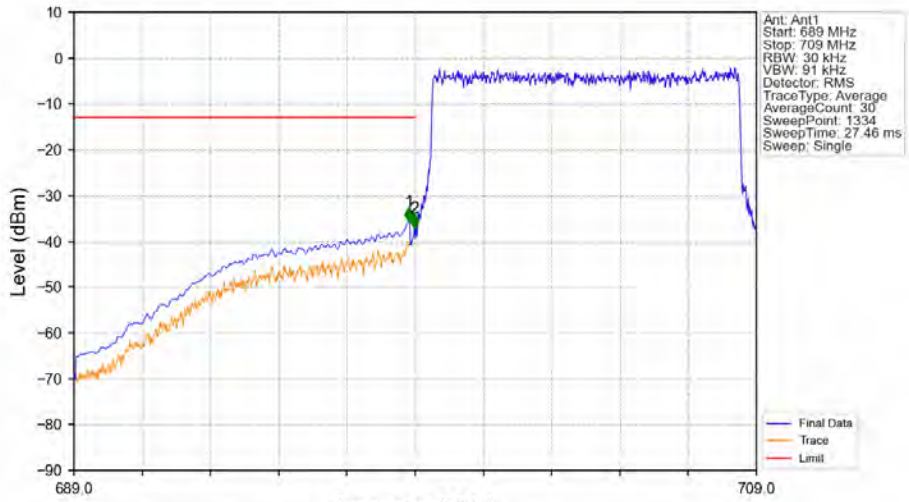


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-23.08	-13	Pass
698.9	699	0.03	/	2	698.977	-23.48	-13	Pass
699	709	0.03	/	/	/	/	/	/

Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

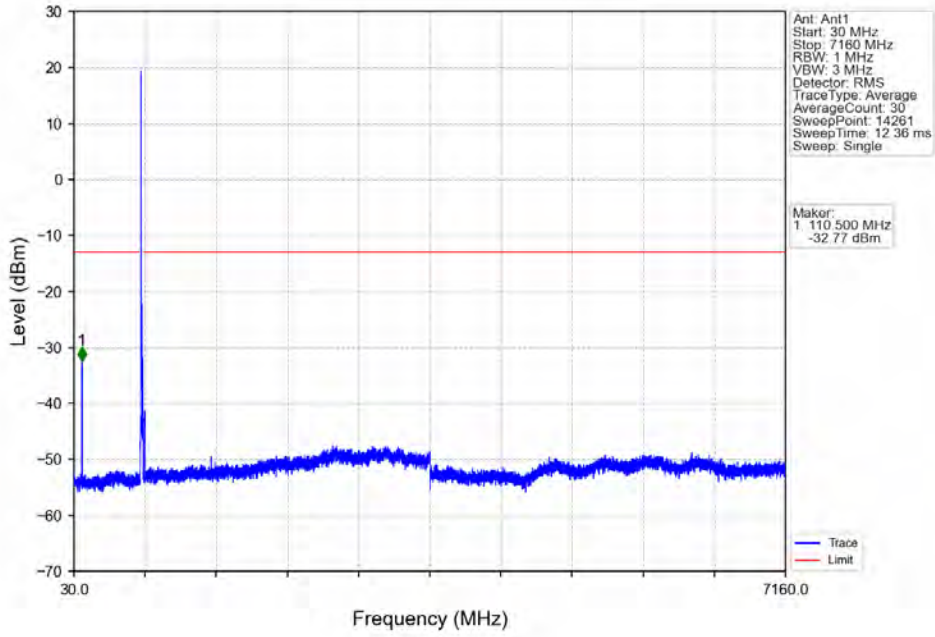


Band12_10MHz_16QAM_LCH_704MHz_RB_50_0_NTNV

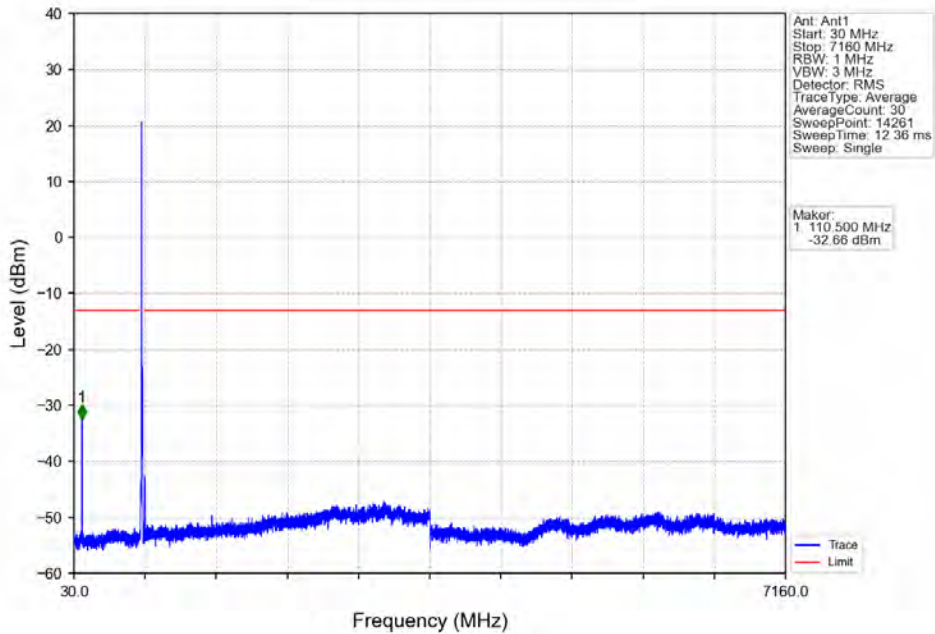


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.812	-35.75	-13	Pass
698.9	699	0.03	/	2	698.977	-37.04	-13	Pass
699	709	0.03	/	/	/	/	/	/

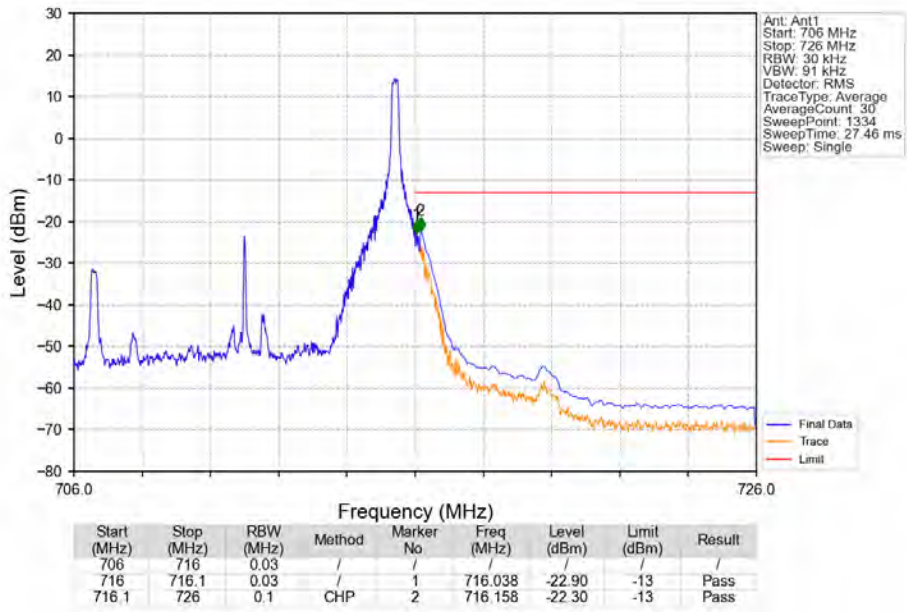
Band12_10MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



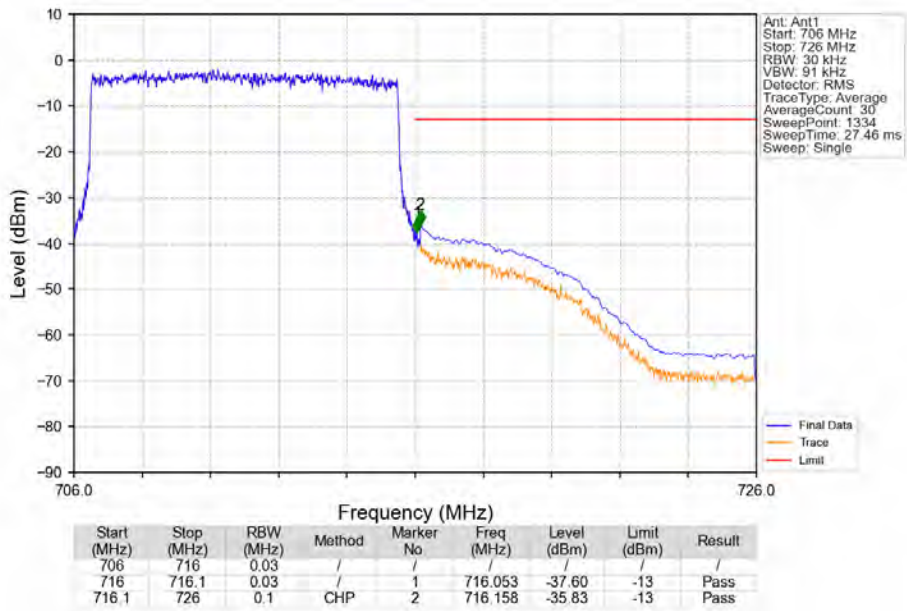
Band12_10MHz_16QAM_HCH_711MHz_RB_1_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_1_49_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_50_0_NTNV



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	0.1581	0.0141	ppm	1M12G7D	27H	21.99
12	1.4	699.7	715.3	0.1239	0.0169	ppm	1M12W7D	27H	20.93
12	3	700.5	714.5	0.1596	0.0136	ppm	2M73G7D	27H	22.03
12	3	700.5	714.5	0.1368	0.0177	ppm	2M73W7D	27H	21.36
12	5	701.5	713.5	0.1549	0.0152	ppm	4M59G7D	27H	21.90
12	5	701.5	713.5	0.1271	0.0163	ppm	4M59W7D	27H	21.04
12	10	704	711	0.1578	0.0145	ppm	9M11G7D	27H	21.98
12	10	704	711	0.1400	0.0163	ppm	9M10W7D	27H	21.46

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	0.0745	0.0141	ppm	1M12G7D	27H	18.72
12	1.4	699.7	715.3	0.0583	0.0169	ppm	1M12W7D	27H	17.66
12	3	700.5	714.5	0.0752	0.0136	ppm	2M73G7D	27H	18.76
12	3	700.5	714.5	0.0644	0.0177	ppm	2M73W7D	27H	18.09
12	5	701.5	713.5	0.0729	0.0152	ppm	4M59G7D	27H	18.63
12	5	701.5	713.5	0.0598	0.0163	ppm	4M59W7D	27H	17.77
12	10	704	711	0.0743	0.0145	ppm	9M11G7D	27H	18.71
12	10	704	711	0.0659	0.0163	ppm	9M10W7D	27H	18.19