

1. Effective (Isotropic) Radiated Power Output Data

1.1 B12_1.4MHz_ERP

1.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTN										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	699.7	1	0	22.33	-6.40	13.78	<=34.77	Pass		
			2	22.47	-6.40	13.92	<=34.77	Pass		
			5	22.60	-6.40	14.05	<=34.77	Pass		
		3	0	22.44	-6.40	13.89	<=34.77	Pass		
			2	22.47	-6.40	13.92	<=34.77	Pass		
			3	22.59	-6.40	14.04	<=34.77	Pass		
		6	0	21.72	-6.40	13.17	<=34.77	Pass		
		707.5	1	0	22.89	-6.40	14.34	<=34.77	Pass	
				2	22.92	-6.40	14.37	<=34.77	Pass	
	5			22.80	-6.40	14.25	<=34.77	Pass		
	3		0	22.71	-6.40	14.16	<=34.77	Pass		
			2	22.80	-6.40	14.25	<=34.77	Pass		
			3	22.72	-6.40	14.17	<=34.77	Pass		
	6		0	21.71	-6.40	13.16	<=34.77	Pass		
	715.3		1	0	22.88	-6.40	14.33	<=34.77	Pass	
				2	22.76	-6.40	14.21	<=34.77	Pass	
		5		22.96	-6.40	14.41	<=34.77	Pass		
		3	0	22.87	-6.40	14.32	<=34.77	Pass		
			2	23.34	-6.40	14.79	<=34.77	Pass		
			3	22.98	-6.40	14.43	<=34.77	Pass		
		6	0	21.94	-6.40	13.39	<=34.77	Pass		
		16QAM	699.7	1	0	21.48	-6.40	12.93	<=34.77	Pass
					2	22.25	-6.40	13.70	<=34.77	Pass
	5				22.37	-6.40	13.82	<=34.77	Pass	
3	0			21.56	-6.40	13.01	<=34.77	Pass		
	2			21.56	-6.40	13.01	<=34.77	Pass		
	3			21.58	-6.40	13.03	<=34.77	Pass		
6	0			20.49	-6.40	11.94	<=34.77	Pass		
707.5	1			0	21.58	-6.40	13.03	<=34.77	Pass	
				2	21.95	-6.40	13.40	<=34.77	Pass	
			5	21.85	-6.40	13.30	<=34.77	Pass		
	3		0	21.88	-6.40	13.33	<=34.77	Pass		
			2	21.91	-6.40	13.36	<=34.77	Pass		
			3	21.76	-6.40	13.21	<=34.77	Pass		
	6		0	20.76	-6.40	12.21	<=34.77	Pass		
	715.3		1	0	21.70	-6.40	13.15	<=34.77	Pass	
				2	22.15	-6.40	13.60	<=34.77	Pass	
5				21.92	-6.40	13.37	<=34.77	Pass		
3			0	22.06	-6.40	13.51	<=34.77	Pass		
			2	22.54	-6.40	13.99	<=34.77	Pass		
			3	22.29	-6.40	13.74	<=34.77	Pass		
6			0	21.02	-6.40	12.47	<=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	22.58	-6.40	14.03	<=34.77	Pass		
			7	22.77	-6.40	14.22	<=34.77	Pass		
			14	22.74	-6.40	14.19	<=34.77	Pass		
		8	0	21.65	-6.40	13.10	<=34.77	Pass		
			4	21.83	-6.40	13.28	<=34.77	Pass		
			7	21.81	-6.40	13.26	<=34.77	Pass		
		15	0	21.72	-6.40	13.17	<=34.77	Pass		
		707.5	1	0	22.95	-6.40	14.40	<=34.77	Pass	
				7	22.76	-6.40	14.21	<=34.77	Pass	
	14			22.61	-6.40	14.06	<=34.77	Pass		
	8		0	21.86	-6.40	13.31	<=34.77	Pass		
			4	21.81	-6.40	13.26	<=34.77	Pass		
			7	21.83	-6.40	13.28	<=34.77	Pass		
	15		0	21.89	-6.40	13.34	<=34.77	Pass		
	714.5		1	0	23.14	-6.40	14.59	<=34.77	Pass	
				7	23.06	-6.40	14.51	<=34.77	Pass	
		14		23.16	-6.40	14.61	<=34.77	Pass		
		8	0	21.99	-6.40	13.44	<=34.77	Pass		
			4	22.10	-6.40	13.55	<=34.77	Pass		
			7	22.13	-6.40	13.58	<=34.77	Pass		
		15	0	21.96	-6.40	13.41	<=34.77	Pass		
		16QAM	700.5	1	0	21.36	-6.40	12.81	<=34.77	Pass
					7	21.61	-6.40	13.06	<=34.77	Pass
	14				21.74	-6.40	13.19	<=34.77	Pass	
	8			0	20.71	-6.40	12.16	<=34.77	Pass	
				4	20.93	-6.40	12.38	<=34.77	Pass	
				7	20.99	-6.40	12.44	<=34.77	Pass	
15	0			20.83	-6.40	12.28	<=34.77	Pass		
707.5	1			0	21.56	-6.40	13.01	<=34.77	Pass	
				7	22.34	-6.40	13.79	<=34.77	Pass	
			14	21.87	-6.40	13.32	<=34.77	Pass		
	8		0	20.76	-6.40	12.21	<=34.77	Pass		
			4	20.73	-6.40	12.18	<=34.77	Pass		
			7	20.74	-6.40	12.19	<=34.77	Pass		
	15		0	20.76	-6.40	12.21	<=34.77	Pass		
	714.5		1	0	21.96	-6.40	13.41	<=34.77	Pass	
				7	21.99	-6.40	13.44	<=34.77	Pass	
14				22.37	-6.40	13.82	<=34.77	Pass		
8			0	21.12	-6.40	12.57	<=34.77	Pass		
			4	21.17	-6.40	12.62	<=34.77	Pass		
			7	21.26	-6.40	12.71	<=34.77	Pass		
15			0	21.13	-6.40	12.58	<=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	22.39	-6.40	13.84	<=34.77	Pass	
			13	22.76	-6.40	14.21	<=34.77	Pass	
			24	22.72	-6.40	14.17	<=34.77	Pass	
		12	0	21.73	-6.40	13.18	<=34.77	Pass	
			6	21.84	-6.40	13.29	<=34.77	Pass	
			13	21.82	-6.40	13.27	<=34.77	Pass	
		25	0	21.81	-6.40	13.26	<=34.77	Pass	
		707.5	1	0	22.75	-6.40	14.20	<=34.77	Pass
				13	22.61	-6.40	14.06	<=34.77	Pass
	24			22.47	-6.40	13.92	<=34.77	Pass	
	12		0	21.93	-6.40	13.38	<=34.77	Pass	
			6	21.83	-6.40	13.28	<=34.77	Pass	
			13	21.83	-6.40	13.28	<=34.77	Pass	
	25		0	21.90	-6.40	13.35	<=34.77	Pass	
	713.5		1	0	22.60	-6.40	14.05	<=34.77	Pass
				13	23.01	-6.40	14.46	<=34.77	Pass
		24		23.02	-6.40	14.47	<=34.77	Pass	
		12	0	21.96	-6.40	13.41	<=34.77	Pass	
6			22.11	-6.40	13.56	<=34.77	Pass		
13			22.05	-6.40	13.50	<=34.77	Pass		
25		0	22.00	-6.40	13.45	<=34.77	Pass		
16QAM		701.5	1	0	21.48	-6.40	12.93	<=34.77	Pass
				13	21.77	-6.40	13.22	<=34.77	Pass
	24			21.90	-6.40	13.35	<=34.77	Pass	
	12		0	20.66	-6.40	12.11	<=34.77	Pass	
			6	20.81	-6.40	12.26	<=34.77	Pass	
			13	20.70	-6.40	12.15	<=34.77	Pass	
	25		0	20.74	-6.40	12.19	<=34.77	Pass	
	707.5		1	0	21.91	-6.40	13.36	<=34.77	Pass
				13	22.14	-6.40	13.59	<=34.77	Pass
		24		22.10	-6.40	13.55	<=34.77	Pass	
		12	0	20.79	-6.40	12.24	<=34.77	Pass	
			6	20.81	-6.40	12.26	<=34.77	Pass	
			13	20.73	-6.40	12.18	<=34.77	Pass	
		25	0	20.73	-6.40	12.18	<=34.77	Pass	
		713.5	1	0	21.11	-6.40	12.56	<=34.77	Pass
				13	21.63	-6.40	13.08	<=34.77	Pass
	24			21.62	-6.40	13.07	<=34.77	Pass	
	12		0	20.79	-6.40	12.24	<=34.77	Pass	
6			21.04	-6.40	12.49	<=34.77	Pass		
13			21.00	-6.40	12.45	<=34.77	Pass		
25	0		20.87	-6.40	12.32	<=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 / NTV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	704	1	0	22.56	-6.40	14.01	<=34.77	Pass
			25	23.18	-6.40	14.63	<=34.77	Pass
			49	22.58	-6.40	14.03	<=34.77	Pass
		25	0	21.84	-6.40	13.29	<=34.77	Pass
			13	21.94	-6.40	13.39	<=34.77	Pass
			25	21.76	-6.40	13.21	<=34.77	Pass
	50	0	21.83	-6.40	13.28	<=34.77	Pass	
	707.5	1	0	22.38	-6.40	13.83	<=34.77	Pass
			25	22.58	-6.40	14.03	<=34.77	Pass
			49	22.29	-6.40	13.74	<=34.77	Pass
		25	0	21.63	-6.40	13.08	<=34.77	Pass
			13	21.60	-6.40	13.05	<=34.77	Pass
			25	21.58	-6.40	13.03	<=34.77	Pass
	50	0	21.66	-6.40	13.11	<=34.77	Pass	
	711	1	0	22.51	-6.40	13.96	<=34.77	Pass
			25	22.55	-6.40	14.00	<=34.77	Pass
			49	22.61	-6.40	14.06	<=34.77	Pass
		25	0	21.63	-6.40	13.08	<=34.77	Pass
13			21.79	-6.40	13.24	<=34.77	Pass	
25			21.76	-6.40	13.21	<=34.77	Pass	
50	0	21.65	-6.40	13.10	<=34.77	Pass		
16QAM	704	1	0	21.68	-6.40	13.13	<=34.77	Pass
			25	22.33	-6.40	13.78	<=34.77	Pass
			49	21.37	-6.40	12.82	<=34.77	Pass
		12	0	21.36	-6.40	12.81	<=34.77	Pass
			19	21.55	-6.40	13.00	<=34.77	Pass
			38	21.33	-6.40	12.78	<=34.77	Pass
	27	0	20.42	-6.40	11.87	<=34.77	Pass	
	707.5	1	0	21.70	-6.40	13.15	<=34.77	Pass
			25	22.24	-6.40	13.69	<=34.77	Pass
			49	21.60	-6.40	13.05	<=34.77	Pass
		12	0	21.57	-6.40	13.02	<=34.77	Pass
			19	21.78	-6.40	13.23	<=34.77	Pass
			38	21.52	-6.40	12.97	<=34.77	Pass
	27	0	20.74	-6.40	12.19	<=34.77	Pass	
	711	1	0	21.18	-6.40	12.63	<=34.77	Pass
			25	21.88	-6.40	13.33	<=34.77	Pass
			49	22.00	-6.40	13.45	<=34.77	Pass
		12	0	21.38	-6.40	12.83	<=34.77	Pass
19			21.54	-6.40	12.99	<=34.77	Pass	
38			21.83	-6.40	13.28	<=34.77	Pass	
27	23	20.75	-6.40	12.20	<=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	-0.944	-0.0013	-2.5 to 2.5	Pass
					3.85	-0.873	-0.0012	-2.5 to 2.5	Pass
					4.43	-0.601	-0.0009	-2.5 to 2.5	Pass
				-30	3.85	-1.173	-0.0017	-2.5 to 2.5	Pass
				-20	3.85	-0.257	-0.0004	-2.5 to 2.5	Pass
				-10	3.85	-1.144	-0.0016	-2.5 to 2.5	Pass
				0	3.85	0.029	0.0000	-2.5 to 2.5	Pass
				10	3.85	-1.402	-0.0020	-2.5 to 2.5	Pass
				30	3.85	-0.029	0.0000	-2.5 to 2.5	Pass
				40	3.85	-0.343	-0.0005	-2.5 to 2.5	Pass
	50	3.85	-0.329	-0.0005	-2.5 to 2.5	Pass			
	707.5	6	0	20	3.27	-0.143	-0.0002	-2.5 to 2.5	Pass
					3.85	-0.172	-0.0002	-2.5 to 2.5	Pass
					4.43	0.429	0.0006	-2.5 to 2.5	Pass
				-30	3.85	-0.730	-0.0010	-2.5 to 2.5	Pass
				-20	3.85	0.157	0.0002	-2.5 to 2.5	Pass
				-10	3.85	-0.744	-0.0011	-2.5 to 2.5	Pass
				0	3.85	-1.273	-0.0018	-2.5 to 2.5	Pass
				10	3.85	-0.772	-0.0011	-2.5 to 2.5	Pass
				30	3.85	-0.687	-0.0010	-2.5 to 2.5	Pass
				40	3.85	0.200	0.0003	-2.5 to 2.5	Pass
	50	3.85	0.644	0.0009	-2.5 to 2.5	Pass			
	715.3	6	0	20	3.27	-1.502	-0.0021	-2.5 to 2.5	Pass
					3.85	-0.887	-0.0012	-2.5 to 2.5	Pass
					4.43	-0.901	-0.0013	-2.5 to 2.5	Pass
				-30	3.85	-0.429	-0.0006	-2.5 to 2.5	Pass
				-20	3.85	-1.502	-0.0021	-2.5 to 2.5	Pass
				-10	3.85	-0.343	-0.0005	-2.5 to 2.5	Pass
				0	3.85	-1.845	-0.0026	-2.5 to 2.5	Pass
				10	3.85	-0.086	-0.0001	-2.5 to 2.5	Pass
30				3.85	-1.216	-0.0017	-2.5 to 2.5	Pass	
40				3.85	-1.116	-0.0016	-2.5 to 2.5	Pass	
50	3.85	-0.472	-0.0007	-2.5 to 2.5	Pass				
16QAM	699.7	6	0	20	3.27	-0.658	-0.0009	-2.5 to 2.5	Pass
					3.85	-0.014	0.0000	-2.5 to 2.5	Pass
					4.43	-0.072	-0.0001	-2.5 to 2.5	Pass
				-30	3.85	0.701	0.0010	-2.5 to 2.5	Pass
				-20	3.85	0.587	0.0008	-2.5 to 2.5	Pass
				-10	3.85	-0.787	-0.0011	-2.5 to 2.5	Pass
				0	3.85	-0.272	-0.0004	-2.5 to 2.5	Pass
				10	3.85	-0.472	-0.0007	-2.5 to 2.5	Pass
				30	3.85	0.143	0.0002	-2.5 to 2.5	Pass
				40	3.85	-0.343	-0.0005	-2.5 to 2.5	Pass
50	3.85	-0.529	-0.0008	-2.5 to 2.5	Pass				

	707.5	6	0	20	3.27	-0.658	-0.0009	-2.5 to 2.5	Pass	
					3.85	-0.057	-0.0001	-2.5 to 2.5	Pass	
					4.43	0.100	0.0001	-2.5 to 2.5	Pass	
				-30	3.85	0.014	0.0000	-2.5 to 2.5	Pass	
					-20	3.85	0.544	0.0008	-2.5 to 2.5	Pass
						-10	3.85	-0.343	-0.0005	-2.5 to 2.5
				0	3.85	-0.558	-0.0008	-2.5 to 2.5	Pass	
					10	3.85	-0.286	-0.0004	-2.5 to 2.5	Pass
					30	3.85	-0.572	-0.0008	-2.5 to 2.5	Pass
	715.3	6	0	20	3.27	-0.072	-0.0001	-2.5 to 2.5	Pass	
					3.85	-0.358	-0.0005	-2.5 to 2.5	Pass	
					4.43	0.844	0.0012	-2.5 to 2.5	Pass	
				-30	3.85	-1.345	-0.0019	-2.5 to 2.5	Pass	
					-20	3.85	0.029	0.0000	-2.5 to 2.5	Pass
						-10	3.85	0.086	0.0001	-2.5 to 2.5
				0	3.85	0.458	0.0006	-2.5 to 2.5	Pass	
					10	3.85	-0.114	-0.0002	-2.5 to 2.5	Pass
					30	3.85	-0.200	-0.0003	-2.5 to 2.5	Pass
50	3.85	-0.057	-0.0001	-2.5 to 2.5	Pass					
	3.85	0.443	0.0006	-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	-2.632	-0.0038	-2.5 to 2.5	Pass	
					3.85	-2.446	-0.0035	-2.5 to 2.5	Pass	
					4.43	-2.303	-0.0033	-2.5 to 2.5	Pass	
				-30	3.85	-1.988	-0.0028	-2.5 to 2.5	Pass	
					-20	3.85	-1.674	-0.0024	-2.5 to 2.5	Pass
						-10	3.85	-2.232	-0.0032	-2.5 to 2.5
				0	3.85	-2.718	-0.0039	-2.5 to 2.5	Pass	
					10	3.85	-2.346	-0.0033	-2.5 to 2.5	Pass
					30	3.85	-1.974	-0.0028	-2.5 to 2.5	Pass
	707.5	15	0	20	3.85	-2.260	-0.0032	-2.5 to 2.5	Pass	
					3.85	-1.116	-0.0016	-2.5 to 2.5	Pass	
					3.27	-0.629	-0.0009	-2.5 to 2.5	Pass	
				-30	3.85	-0.014	0.0000	-2.5 to 2.5	Pass	
					-20	3.85	-0.043	-0.0001	-2.5 to 2.5	Pass
						-10	3.85	0.200	0.0003	-2.5 to 2.5
				0	3.85	-0.930	-0.0013	-2.5 to 2.5	Pass	
					10	3.85	-0.129	-0.0002	-2.5 to 2.5	Pass
					30	3.85	0.000	0.0000	-2.5 to 2.5	Pass
50	3.85	0.000	0.0000	-2.5 to 2.5	Pass					
	10	3.85	-0.014	0.0000	-2.5 to 2.5	Pass				
	30	3.85	0.143	0.0002	-2.5 to 2.5	Pass				
50	3.85	-0.458	-0.0006	-2.5 to 2.5	Pass					
	3.85	-0.873	-0.0012	-2.5 to 2.5	Pass					

	714.5	15	0	20	3.27	-0.930	-0.0013	-2.5 to 2.5	Pass
					3.85	0.343	0.0005	-2.5 to 2.5	Pass
					4.43	0.300	0.0004	-2.5 to 2.5	Pass
				-30	3.85	0.830	0.0012	-2.5 to 2.5	Pass
					-20	3.85	0.243	0.0003	-2.5 to 2.5
				-10	3.85	-0.572	-0.0008	-2.5 to 2.5	Pass
					0	3.85	-0.329	-0.0005	-2.5 to 2.5
				10	3.85	-0.114	-0.0002	-2.5 to 2.5	Pass
					30	3.85	0.472	0.0007	-2.5 to 2.5
				40	3.85	-0.186	-0.0003	-2.5 to 2.5	Pass
50	3.85	1.101	0.0015		-2.5 to 2.5	Pass			
16QAM	700.5	15	0	20	3.27	-2.747	-0.0039	-2.5 to 2.5	Pass
					3.85	-1.159	-0.0017	-2.5 to 2.5	Pass
					4.43	-2.503	-0.0036	-2.5 to 2.5	Pass
				-30	3.85	-1.473	-0.0021	-2.5 to 2.5	Pass
					-20	3.85	-2.189	-0.0031	-2.5 to 2.5
				-10	3.85	-1.101	-0.0016	-2.5 to 2.5	Pass
					0	3.85	-2.017	-0.0029	-2.5 to 2.5
				10	3.85	-1.574	-0.0022	-2.5 to 2.5	Pass
					30	3.85	-2.403	-0.0034	-2.5 to 2.5
				40	3.85	-2.317	-0.0033	-2.5 to 2.5	Pass
	50	3.85	-1.845		-0.0026	-2.5 to 2.5	Pass		
	707.5	15	0	20	3.27	-0.815	-0.0012	-2.5 to 2.5	Pass
					3.85	0.229	0.0003	-2.5 to 2.5	Pass
					4.43	-0.286	-0.0004	-2.5 to 2.5	Pass
				-30	3.85	0.443	0.0006	-2.5 to 2.5	Pass
					-20	3.85	-0.372	-0.0005	-2.5 to 2.5
				-10	3.85	-0.329	-0.0005	-2.5 to 2.5	Pass
					0	3.85	-0.515	-0.0007	-2.5 to 2.5
				10	3.85	-0.615	-0.0009	-2.5 to 2.5	Pass
					30	3.85	-0.057	-0.0001	-2.5 to 2.5
				40	3.85	-0.186	-0.0003	-2.5 to 2.5	Pass
	50	3.85	-1.273		-0.0018	-2.5 to 2.5	Pass		
	714.5	15	0	20	3.27	-0.944	-0.0013	-2.5 to 2.5	Pass
					3.85	0.172	0.0002	-2.5 to 2.5	Pass
					4.43	0.257	0.0004	-2.5 to 2.5	Pass
				-30	3.85	-0.772	-0.0011	-2.5 to 2.5	Pass
					-20	3.85	-0.715	-0.0010	-2.5 to 2.5
				-10	3.85	-0.243	-0.0003	-2.5 to 2.5	Pass
0					3.85	0.358	0.0005	-2.5 to 2.5	Pass
10				3.85	1.416	0.0020	-2.5 to 2.5	Pass	
				30	3.85	0.601	0.0008	-2.5 to 2.5	Pass
40				3.85	-0.043	-0.0001	-2.5 to 2.5	Pass	
	50	3.85	0.472	0.0007	-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	-0.558	-0.0008	-2.5 to 2.5	Pass
					3.85	-0.844	-0.0012	-2.5 to 2.5	Pass
					4.43	-0.644	-0.0009	-2.5 to 2.5	Pass
				-30	3.85	-0.587	-0.0008	-2.5 to 2.5	Pass
				-20	3.85	-0.315	-0.0004	-2.5 to 2.5	Pass
				-10	3.85	-0.286	-0.0004	-2.5 to 2.5	Pass
				0	3.85	-0.587	-0.0008	-2.5 to 2.5	Pass
				10	3.85	-0.229	-0.0003	-2.5 to 2.5	Pass
				30	3.85	-0.687	-0.0010	-2.5 to 2.5	Pass
				40	3.85	-0.343	-0.0005	-2.5 to 2.5	Pass
	50	3.85	-0.758	-0.0011	-2.5 to 2.5	Pass			
	707.5	25	0	20	3.27	-0.801	-0.0011	-2.5 to 2.5	Pass
					3.85	-0.629	-0.0009	-2.5 to 2.5	Pass
					4.43	0.072	0.0001	-2.5 to 2.5	Pass
				-30	3.85	0.229	0.0003	-2.5 to 2.5	Pass
				-20	3.85	-0.658	-0.0009	-2.5 to 2.5	Pass
				-10	3.85	-0.730	-0.0010	-2.5 to 2.5	Pass
				0	3.85	0.272	0.0004	-2.5 to 2.5	Pass
				10	3.85	-0.558	-0.0008	-2.5 to 2.5	Pass
				30	3.85	-0.057	-0.0001	-2.5 to 2.5	Pass
				40	3.85	-0.744	-0.0011	-2.5 to 2.5	Pass
	50	3.85	-0.529	-0.0007	-2.5 to 2.5	Pass			
	713.5	25	0	20	3.27	-1.116	-0.0016	-2.5 to 2.5	Pass
					3.85	-0.415	-0.0006	-2.5 to 2.5	Pass
					4.43	-0.129	-0.0002	-2.5 to 2.5	Pass
				-30	3.85	-0.501	-0.0007	-2.5 to 2.5	Pass
				-20	3.85	-0.801	-0.0011	-2.5 to 2.5	Pass
				-10	3.85	-1.016	-0.0014	-2.5 to 2.5	Pass
				0	3.85	-0.057	-0.0001	-2.5 to 2.5	Pass
				10	3.85	-0.501	-0.0007	-2.5 to 2.5	Pass
30				3.85	-0.343	-0.0005	-2.5 to 2.5	Pass	
40				3.85	0.629	0.0009	-2.5 to 2.5	Pass	
50	3.85	-0.386	-0.0005	-2.5 to 2.5	Pass				
16QAM	701.5	25	0	20	3.27	-0.758	-0.0011	-2.5 to 2.5	Pass
					3.85	-0.658	-0.0009	-2.5 to 2.5	Pass
					4.43	-0.544	-0.0008	-2.5 to 2.5	Pass
				-30	3.85	-1.130	-0.0016	-2.5 to 2.5	Pass
				-20	3.85	-0.057	-0.0001	-2.5 to 2.5	Pass
				-10	3.85	0.072	0.0001	-2.5 to 2.5	Pass
				0	3.85	-0.815	-0.0012	-2.5 to 2.5	Pass
				10	3.85	-1.960	-0.0028	-2.5 to 2.5	Pass
				30	3.85	-0.272	-0.0004	-2.5 to 2.5	Pass
				40	3.85	-0.715	-0.0010	-2.5 to 2.5	Pass
	50	3.85	-1.130	-0.0016	-2.5 to 2.5	Pass			
	707.5	25	0	20	3.27	-0.343	-0.0005	-2.5 to 2.5	Pass
					3.85	-0.114	-0.0002	-2.5 to 2.5	Pass
4.43					-0.672	-0.0009	-2.5 to 2.5	Pass	

				-30	3.85	0.172	0.0002	-2.5 to 2.5	Pass			
				-20	3.85	-0.157	-0.0002	-2.5 to 2.5	Pass			
				-10	3.85	-1.187	-0.0017	-2.5 to 2.5	Pass			
				0	3.85	0.014	0.0000	-2.5 to 2.5	Pass			
				10	3.85	-0.315	-0.0004	-2.5 to 2.5	Pass			
				30	3.85	-0.715	-0.0010	-2.5 to 2.5	Pass			
				40	3.85	-0.229	-0.0003	-2.5 to 2.5	Pass			
				50	3.85	-0.014	0.0000	-2.5 to 2.5	Pass			
				713.5	25	0	20	3.27	0.358	0.0005	-2.5 to 2.5	Pass
								3.85	0.086	0.0001	-2.5 to 2.5	Pass
	4.43	-0.658	-0.0009					-2.5 to 2.5	Pass			
	-30	3.85	-0.057				-0.0001	-2.5 to 2.5	Pass			
	-20	3.85	0.472				0.0007	-2.5 to 2.5	Pass			
	-10	3.85	-0.072				-0.0001	-2.5 to 2.5	Pass			
	0	3.85	-1.016				-0.0014	-2.5 to 2.5	Pass			
	10	3.85	0.329				0.0005	-2.5 to 2.5	Pass			
	30	3.85	0.072				0.0001	-2.5 to 2.5	Pass			
	40	3.85	0.229				0.0003	-2.5 to 2.5	Pass			
	50	3.85	1.044	0.0015	-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	0.801	0.0011	-2.5 to 2.5	Pass			
					3.85	0.701	0.0010	-2.5 to 2.5	Pass			
					4.43	0.472	0.0007	-2.5 to 2.5	Pass			
				-30	3.85	0.086	0.0001	-2.5 to 2.5	Pass			
				-20	3.85	0.558	0.0008	-2.5 to 2.5	Pass			
				-10	3.85	0.801	0.0011	-2.5 to 2.5	Pass			
				0	3.85	0.057	0.0001	-2.5 to 2.5	Pass			
				10	3.85	0.129	0.0002	-2.5 to 2.5	Pass			
				30	3.85	0.043	0.0001	-2.5 to 2.5	Pass			
				40	3.85	0.300	0.0004	-2.5 to 2.5	Pass			
				50	3.85	0.057	0.0001	-2.5 to 2.5	Pass			
				707.5	50	0	20	3.27	-1.245	-0.0018	-2.5 to 2.5	Pass
								3.85	-0.329	-0.0005	-2.5 to 2.5	Pass
								4.43	-0.701	-0.0010	-2.5 to 2.5	Pass
							-30	3.85	0.043	0.0001	-2.5 to 2.5	Pass
	-20	3.85	0.257				0.0004	-2.5 to 2.5	Pass			
	-10	3.85	-0.157				-0.0002	-2.5 to 2.5	Pass			
	0	3.85	0.272				0.0004	-2.5 to 2.5	Pass			
	10	3.85	0.215				0.0003	-2.5 to 2.5	Pass			
	30	3.85	-0.858				-0.0012	-2.5 to 2.5	Pass			
	40	3.85	-0.887				-0.0013	-2.5 to 2.5	Pass			
	50	3.85	-0.372	-0.0005	-2.5 to 2.5	Pass						
	711	50	0	20	3.27	-1.516	-0.0021	-2.5 to 2.5	Pass			
					3.85	-1.173	-0.0016	-2.5 to 2.5	Pass			
					4.43	-1.588	-0.0022	-2.5 to 2.5	Pass			

				-30	3.85	-1.545	-0.0022	-2.5 to 2.5	Pass	
				-20	3.85	-1.860	-0.0026	-2.5 to 2.5	Pass	
				-10	3.85	-1.116	-0.0016	-2.5 to 2.5	Pass	
				0	3.85	-0.858	-0.0012	-2.5 to 2.5	Pass	
				10	3.85	-1.030	-0.0014	-2.5 to 2.5	Pass	
				30	3.85	-0.715	-0.0010	-2.5 to 2.5	Pass	
				40	3.85	-1.488	-0.0021	-2.5 to 2.5	Pass	
				50	3.85	-1.802	-0.0025	-2.5 to 2.5	Pass	
16QAM	704	27	0	20	3.27	-0.143	-0.0002	-2.5 to 2.5	Pass	
					3.85	0.029	0.0000	-2.5 to 2.5	Pass	
					4.43	0.458	0.0007	-2.5 to 2.5	Pass	
				-30	3.85	-0.844	-0.0012	-2.5 to 2.5	Pass	
					-20	3.85	-0.129	-0.0002	-2.5 to 2.5	Pass
						-10	3.85	0.687	0.0010	-2.5 to 2.5
				0	3.85	-0.186	-0.0003	-2.5 to 2.5	Pass	
					10	3.85	-0.415	-0.0006	-2.5 to 2.5	Pass
				30	3.85	0.715	0.0010	-2.5 to 2.5	Pass	
					40	3.85	0.057	0.0001	-2.5 to 2.5	Pass
	50	3.85	-0.243	-0.0003	-2.5 to 2.5	Pass				
	707.5	27	0	20	3.27	-0.558	-0.0008	-2.5 to 2.5	Pass	
					3.85	0.143	0.0002	-2.5 to 2.5	Pass	
					4.43	0.515	0.0007	-2.5 to 2.5	Pass	
				-30	3.85	-0.715	-0.0010	-2.5 to 2.5	Pass	
					-20	3.85	-0.672	-0.0009	-2.5 to 2.5	Pass
						-10	3.85	0.672	0.0009	-2.5 to 2.5
				0	3.85	0.114	0.0002	-2.5 to 2.5	Pass	
					10	3.85	-0.043	-0.0001	-2.5 to 2.5	Pass
				30	3.85	0.072	0.0001	-2.5 to 2.5	Pass	
					40	3.85	0.257	0.0004	-2.5 to 2.5	Pass
	50	3.85	-0.272	-0.0004	-2.5 to 2.5	Pass				
	711	27	23	20	3.27	-1.845	-0.0026	-2.5 to 2.5	Pass	
					3.85	-1.001	-0.0014	-2.5 to 2.5	Pass	
					4.43	-2.031	-0.0029	-2.5 to 2.5	Pass	
				-30	3.85	-1.388	-0.0020	-2.5 to 2.5	Pass	
					-20	3.85	-0.930	-0.0013	-2.5 to 2.5	Pass
						-10	3.85	-0.987	-0.0014	-2.5 to 2.5
				0	3.85	-1.688	-0.0024	-2.5 to 2.5	Pass	
					10	3.85	-0.558	-0.0008	-2.5 to 2.5	Pass
30				3.85	-1.044	-0.0015	-2.5 to 2.5	Pass		
				40	3.85	-1.674	-0.0024	-2.5 to 2.5	Pass	
50	3.85	-1.316	-0.0019	-2.5 to 2.5	Pass					

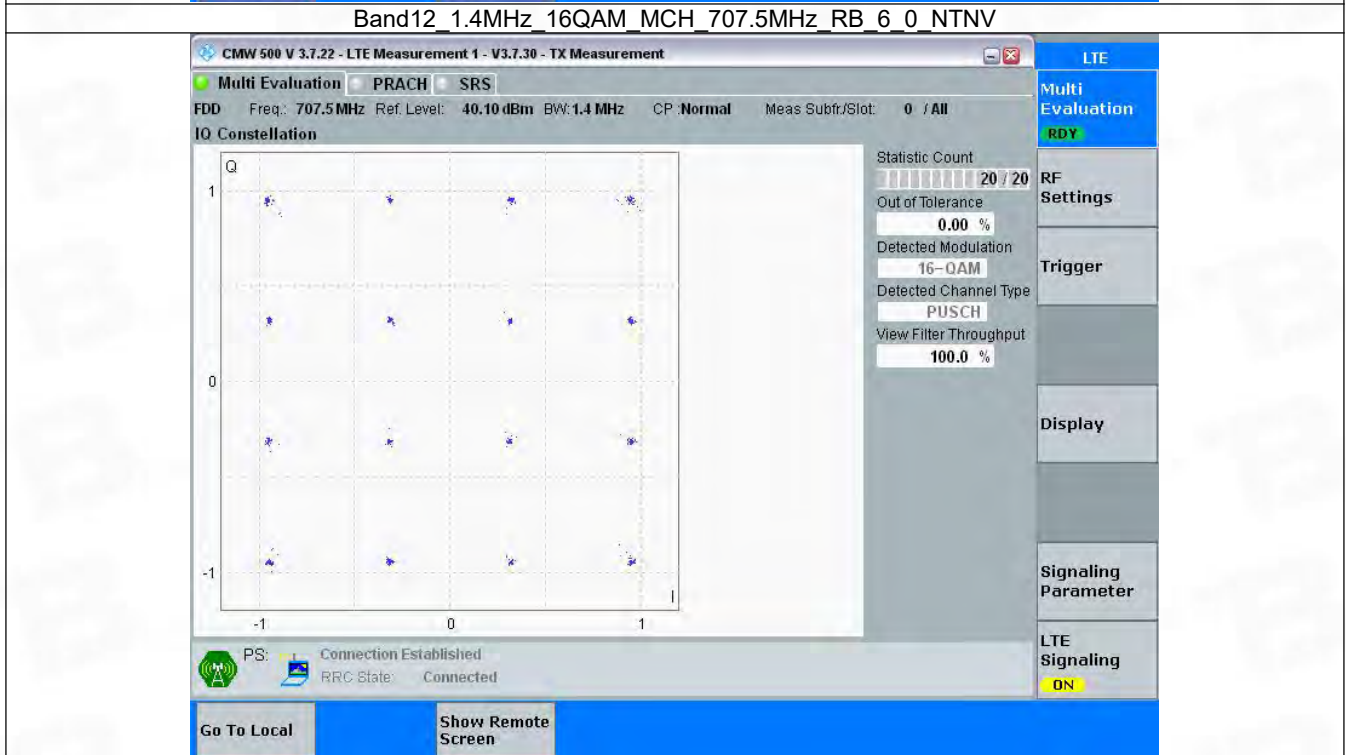
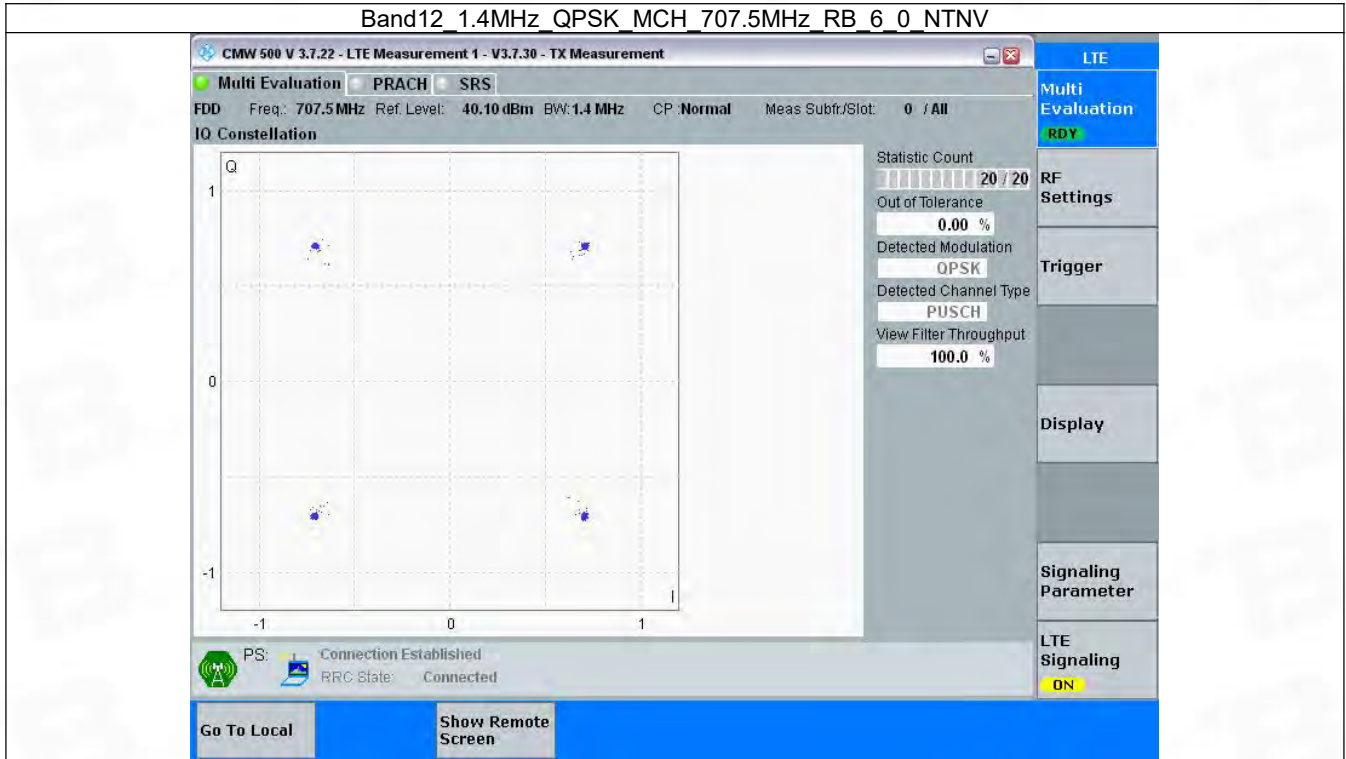
3. Modulation Characteristics

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

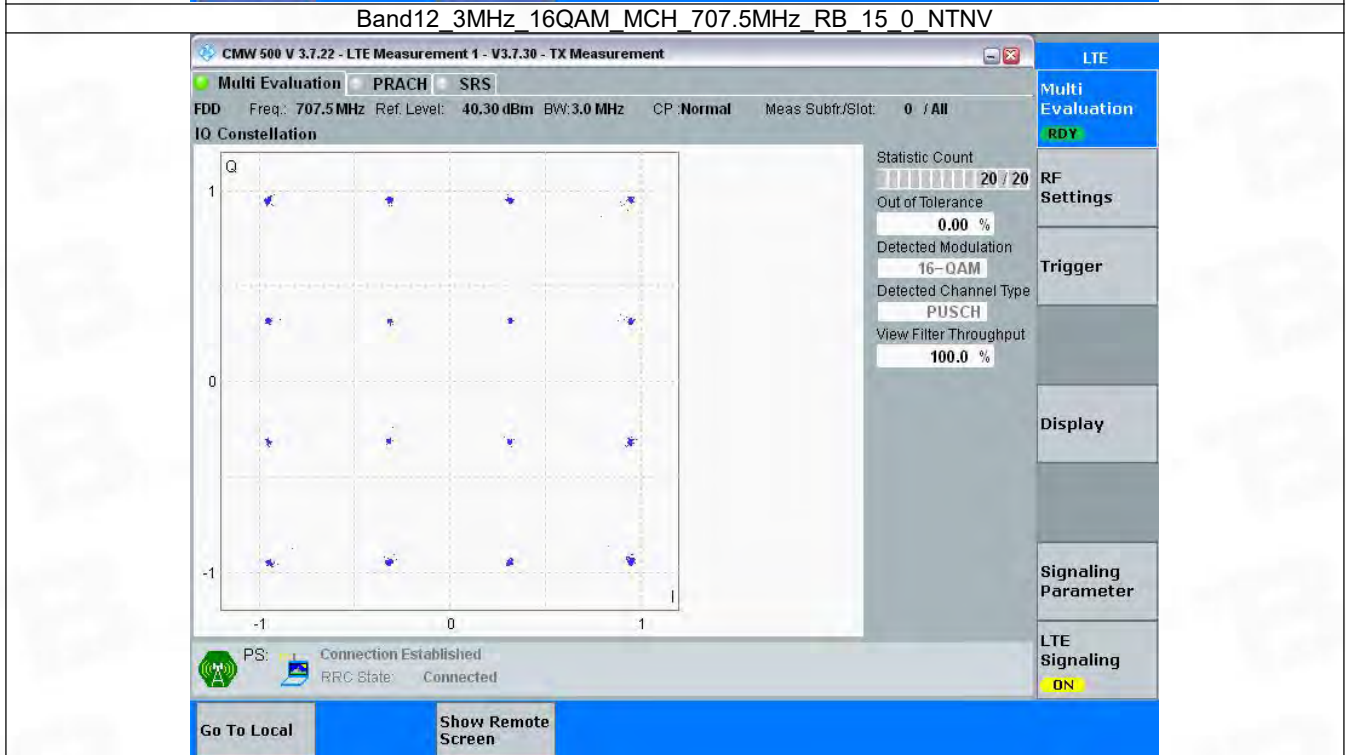
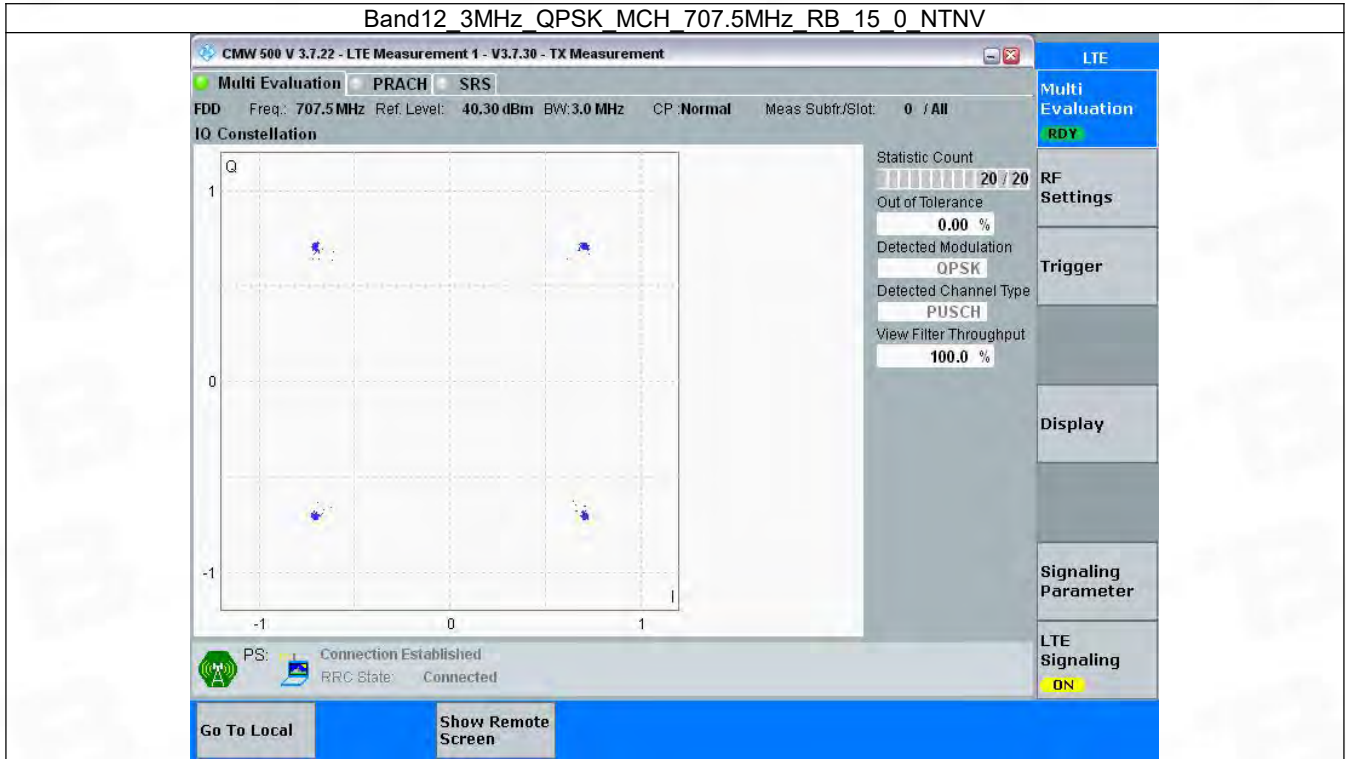


3.2 B12_3MHz

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

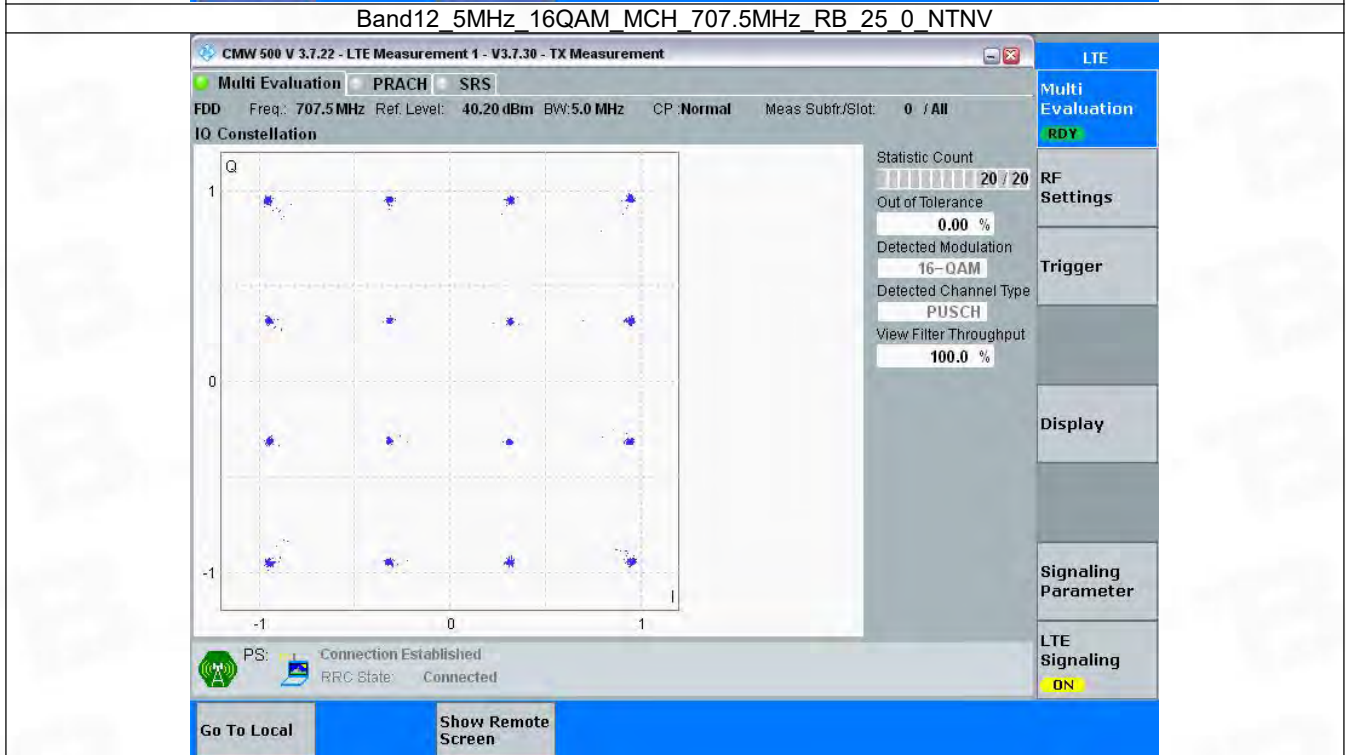
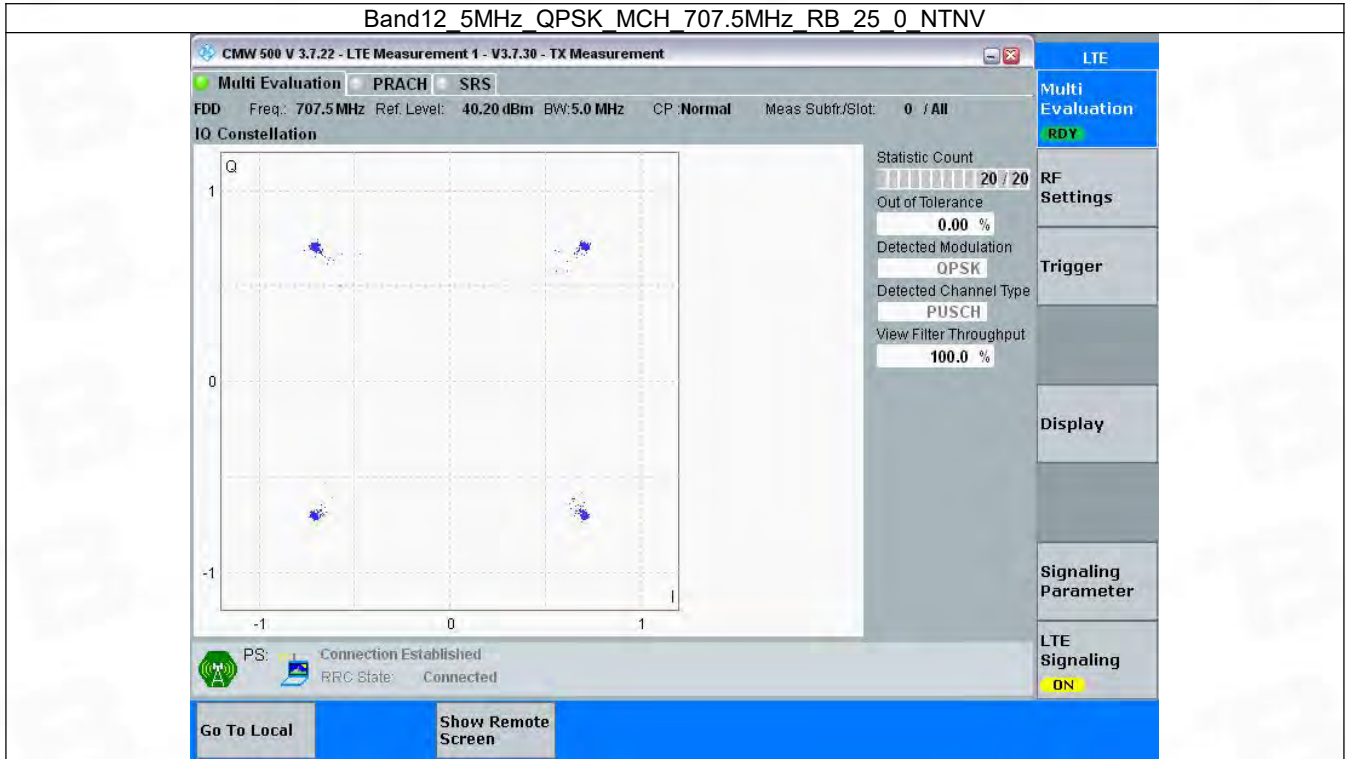


3.3 B12_5MHz

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

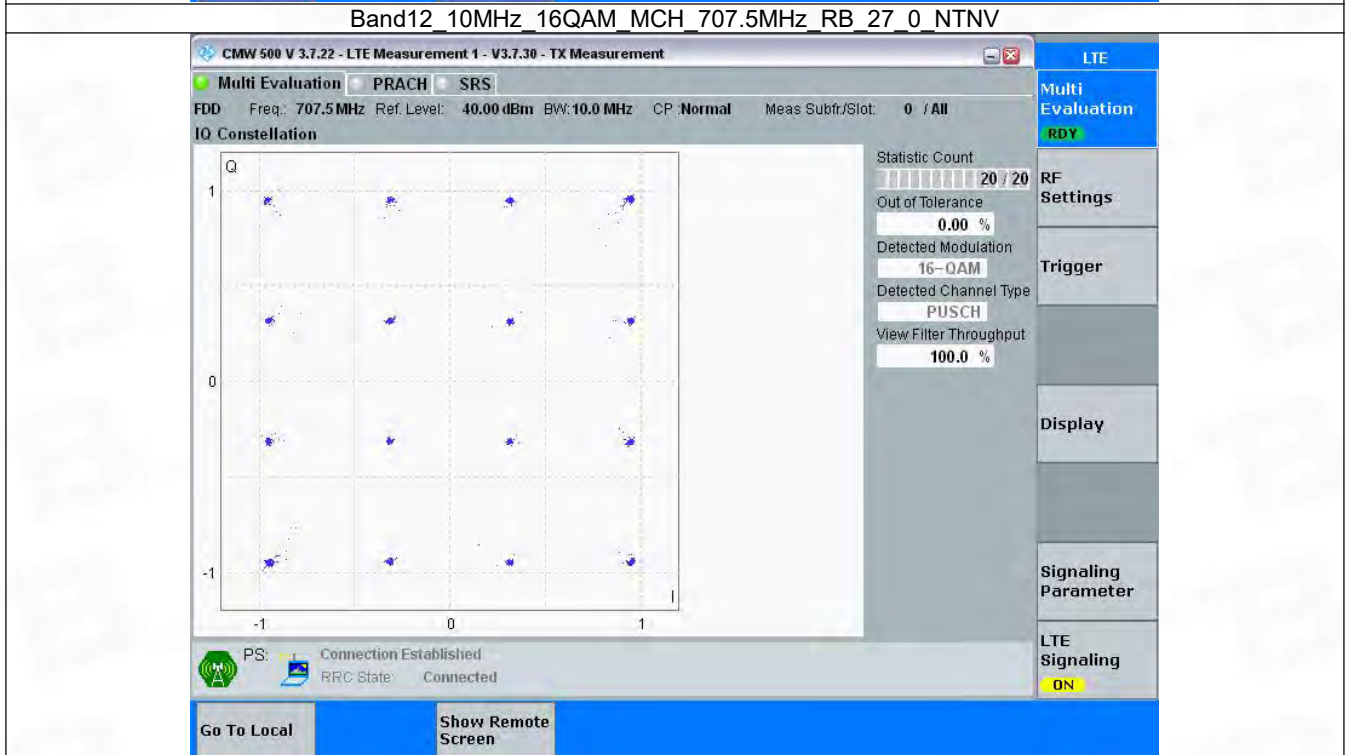
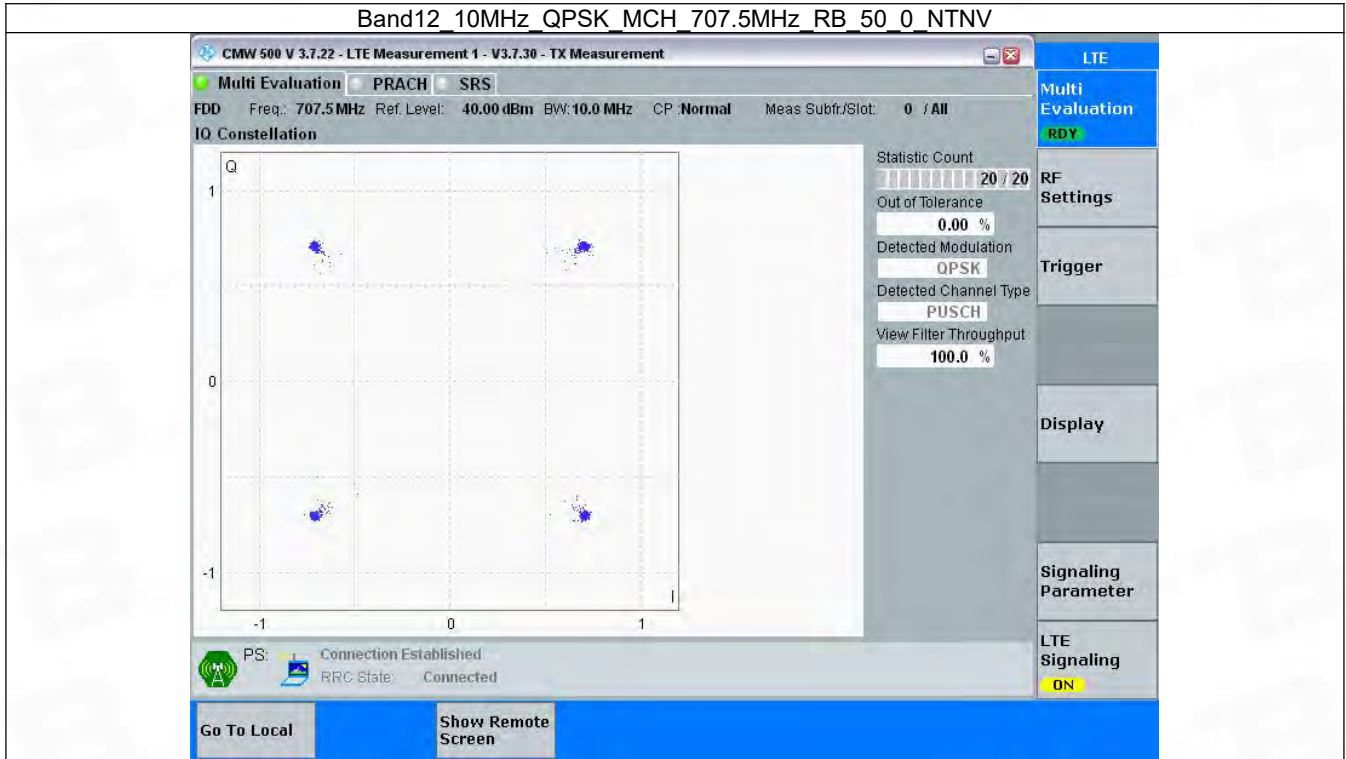


3.4 B12_10MHz

3.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	707.5	50	0	Refer To Test Graph		Pass
16QAM	707.5	27	0	Refer To Test Graph		Pass

3.4.2 Test Graph



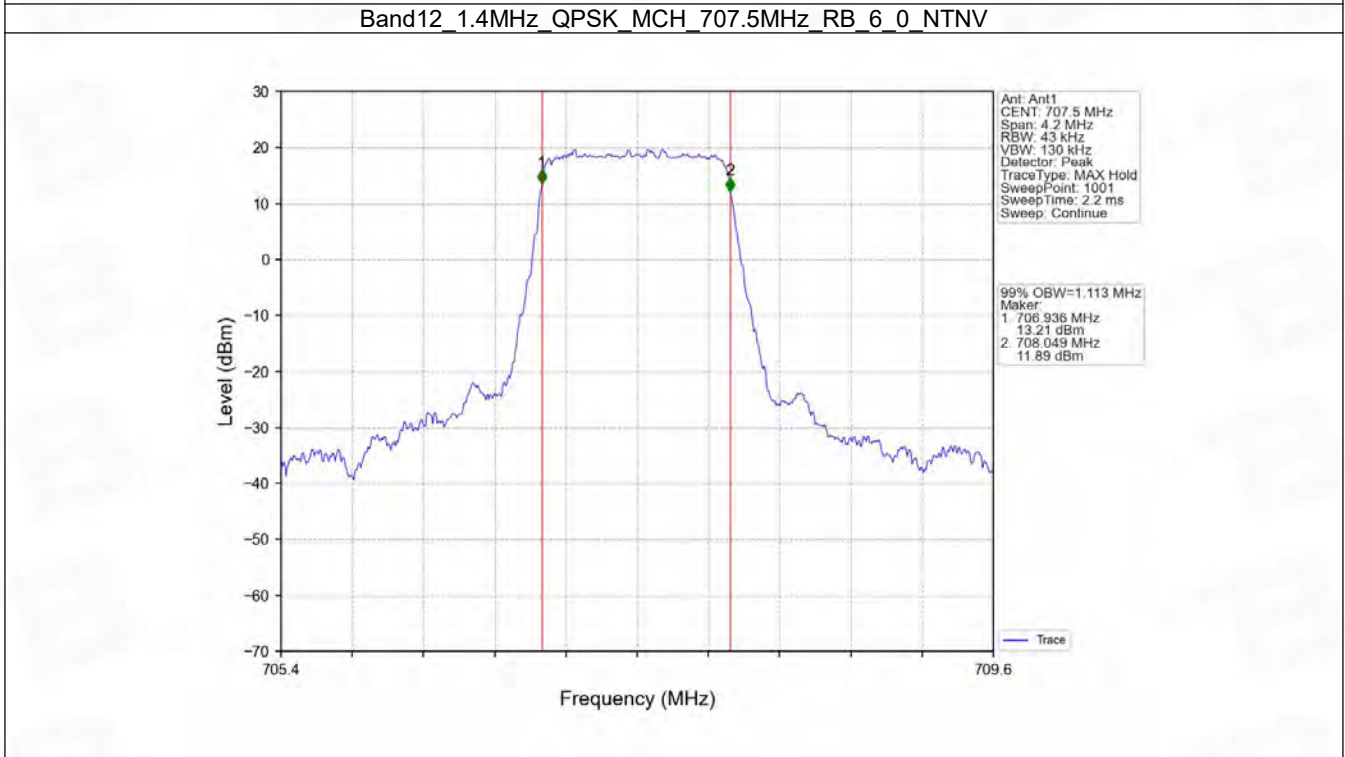
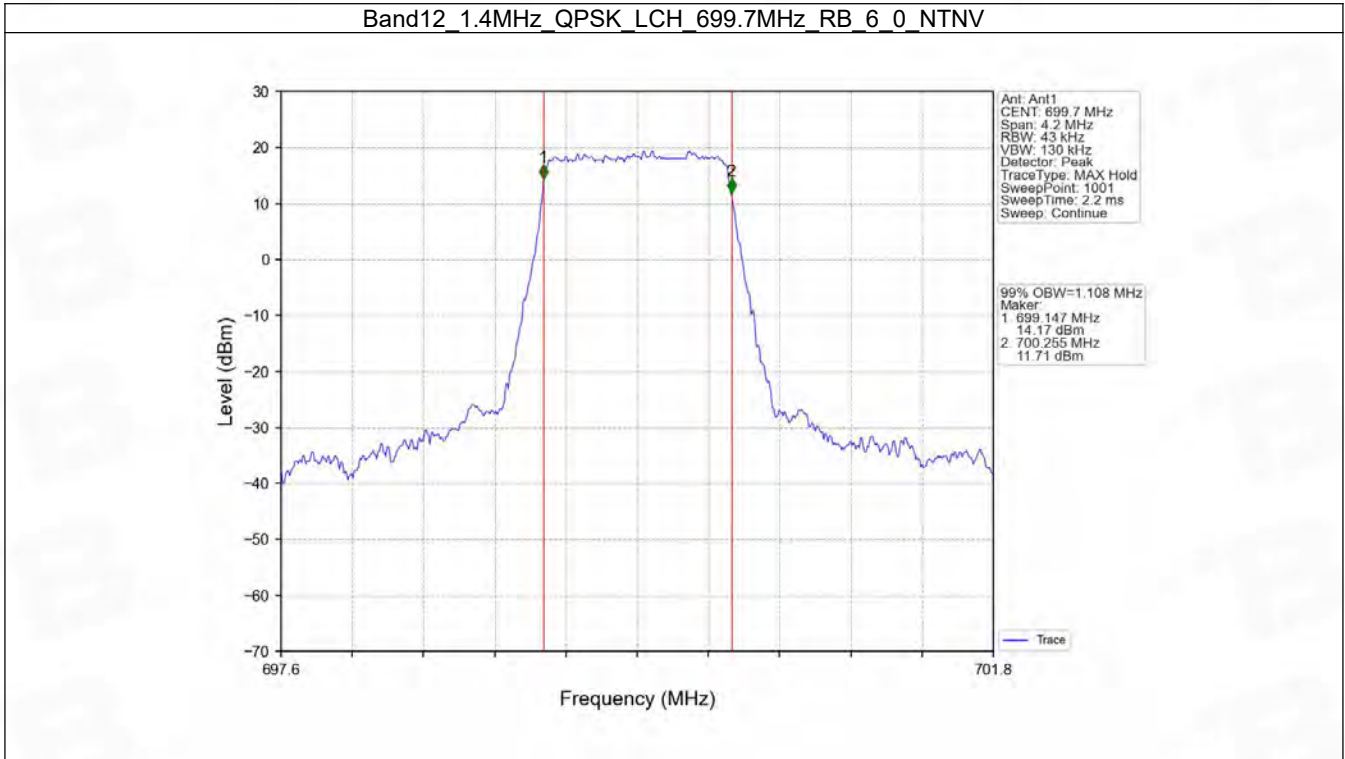
4. 99% & 26dB Bandwidth

4.1 Band12_OBW

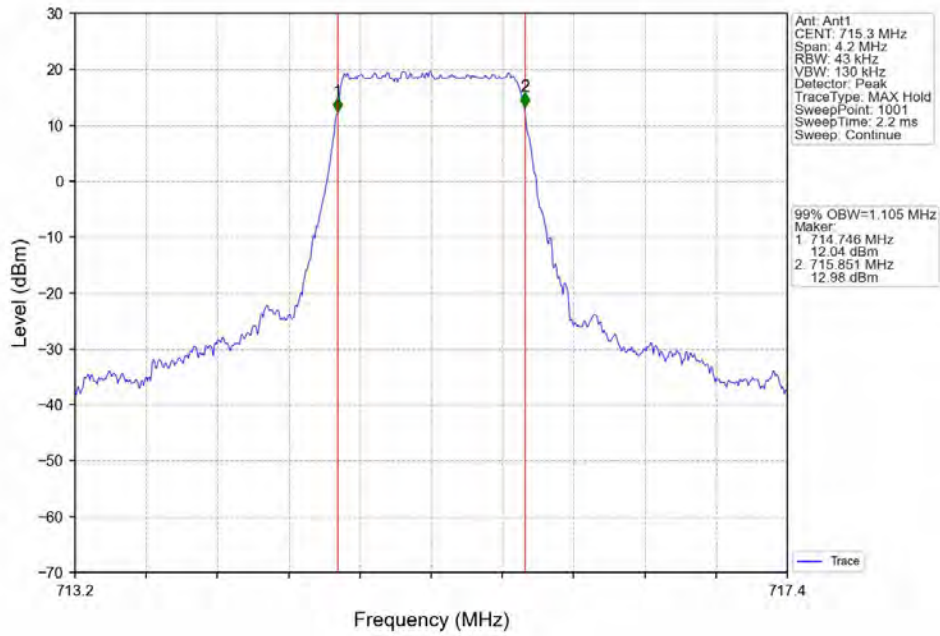
4.1.1 Test Result

Band: 12 / NTV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	699.7	6	0	1.108	/	Pass
		707.5	6	0	1.113	/	Pass
		715.3	6	0	1.105	/	Pass
	16QAM	699.7	6	0	1.109	/	Pass
		707.5	6	0	1.108	/	Pass
		715.3	6	0	1.102	/	Pass
3	QPSK	700.5	15	0	2.739	/	Pass
		707.5	15	0	2.748	/	Pass
		714.5	15	0	2.740	/	Pass
	16QAM	700.5	15	0	2.724	/	Pass
		707.5	15	0	2.734	/	Pass
		714.5	15	0	2.748	/	Pass
5	QPSK	701.5	25	0	4.540	/	Pass
		707.5	25	0	4.556	/	Pass
		713.5	25	0	4.540	/	Pass
	16QAM	701.5	25	0	4.559	/	Pass
		707.5	25	0	4.555	/	Pass
		713.5	25	0	4.536	/	Pass
10	QPSK	704	50	0	8.995	/	Pass
		707.5	50	0	9.042	/	Pass
		711	50	0	9.049	/	Pass
	16QAM	704	27	0	5.069	/	Pass
		707.5	27	0	5.089	/	Pass
		711	27	23	5.042	/	Pass

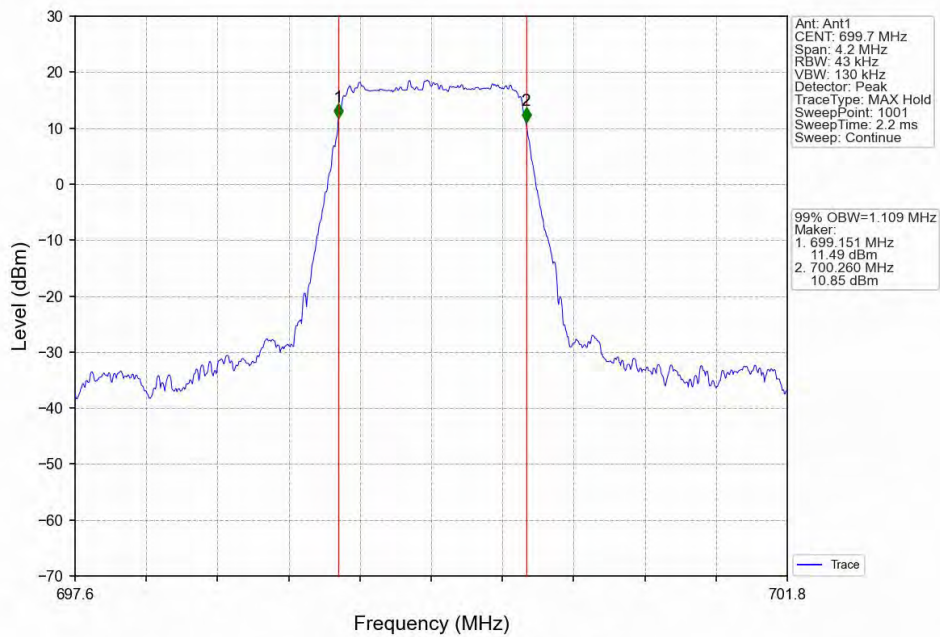
4.1.2 Test Graph



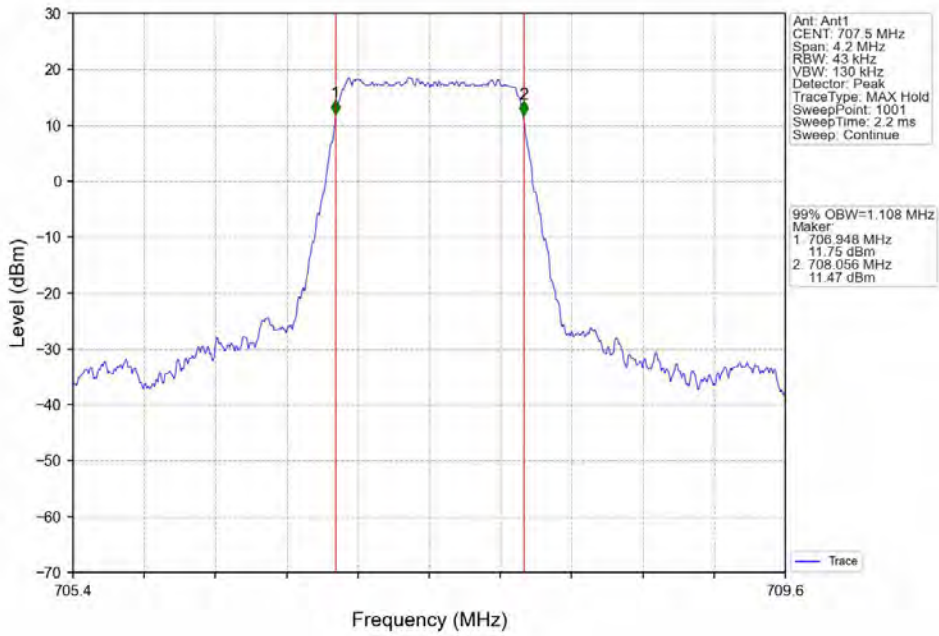
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



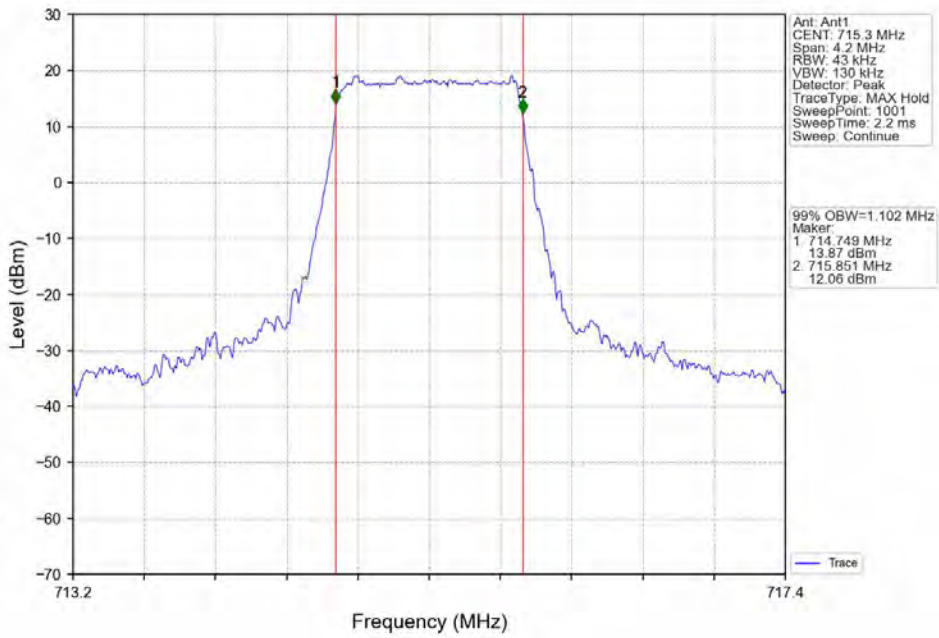
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



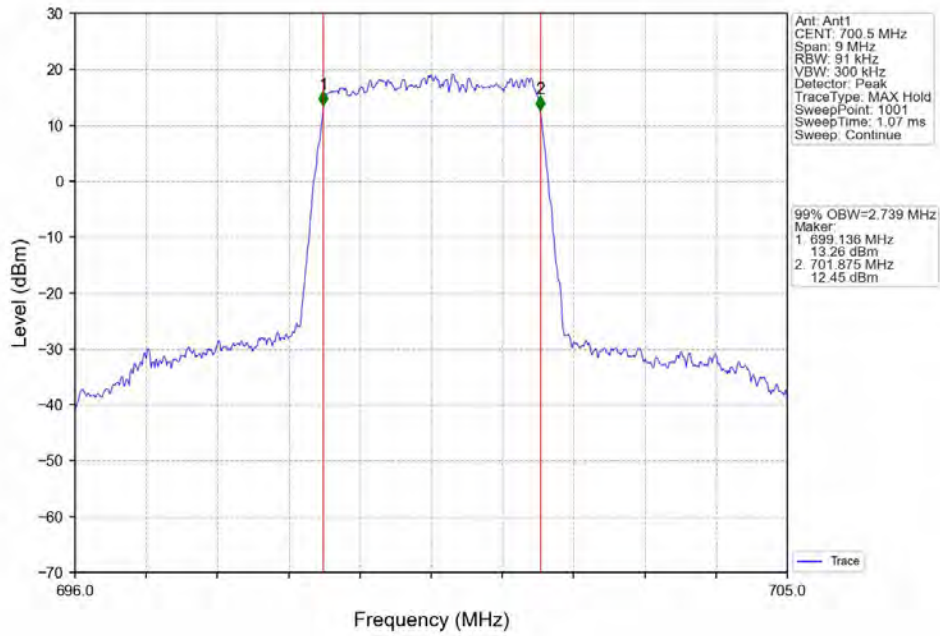
Band12 1.4MHz 16QAM MCH 707.5MHz RB 6 0 NTV



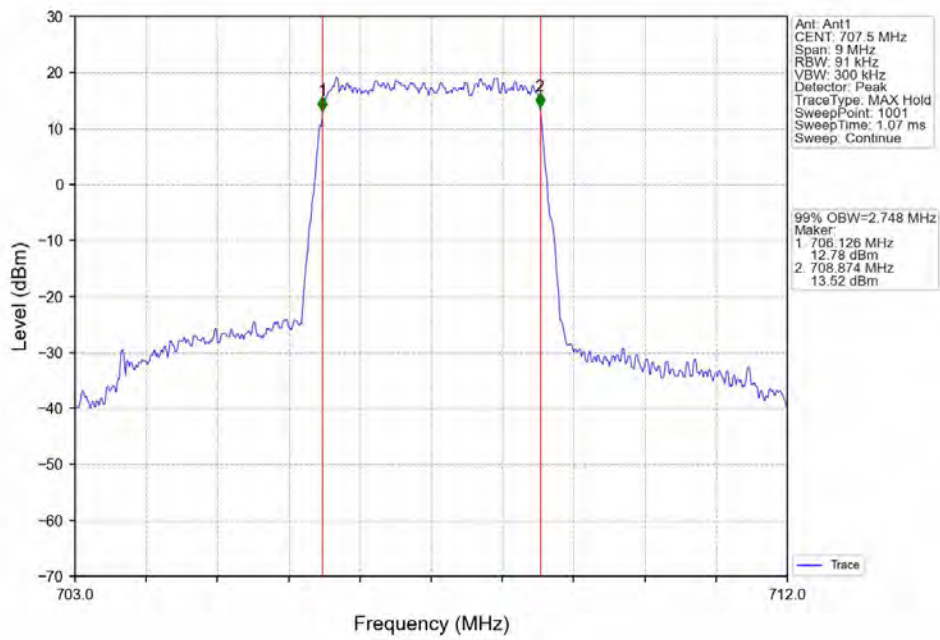
Band12 1.4MHz 16QAM HCH 715.3MHz RB 6 0 NTV



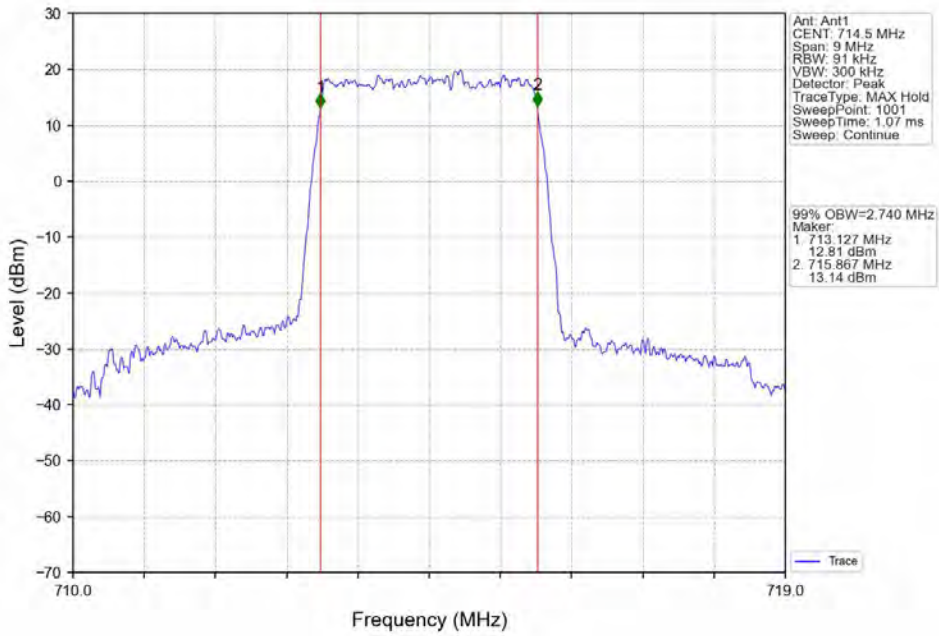
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



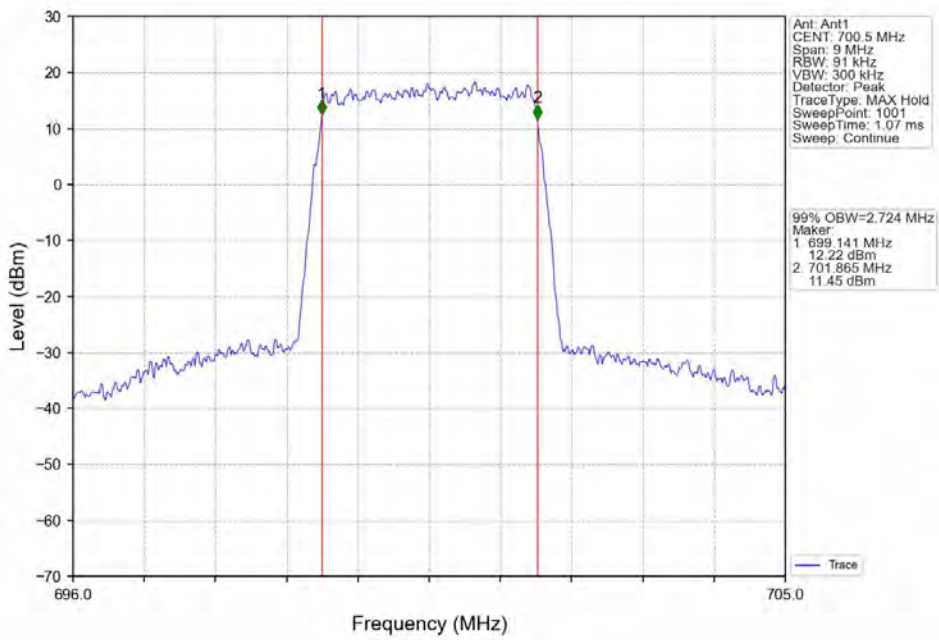
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



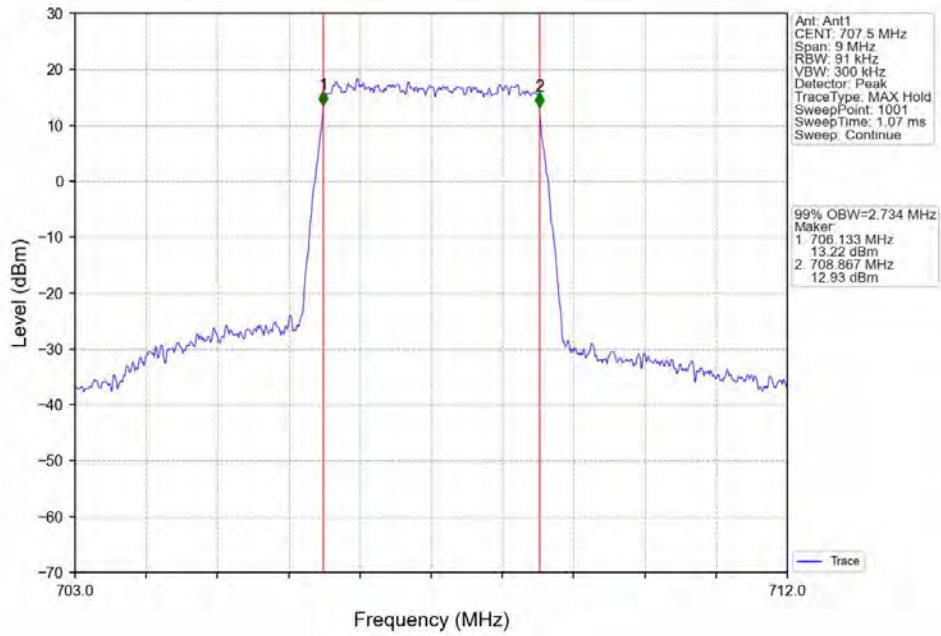
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



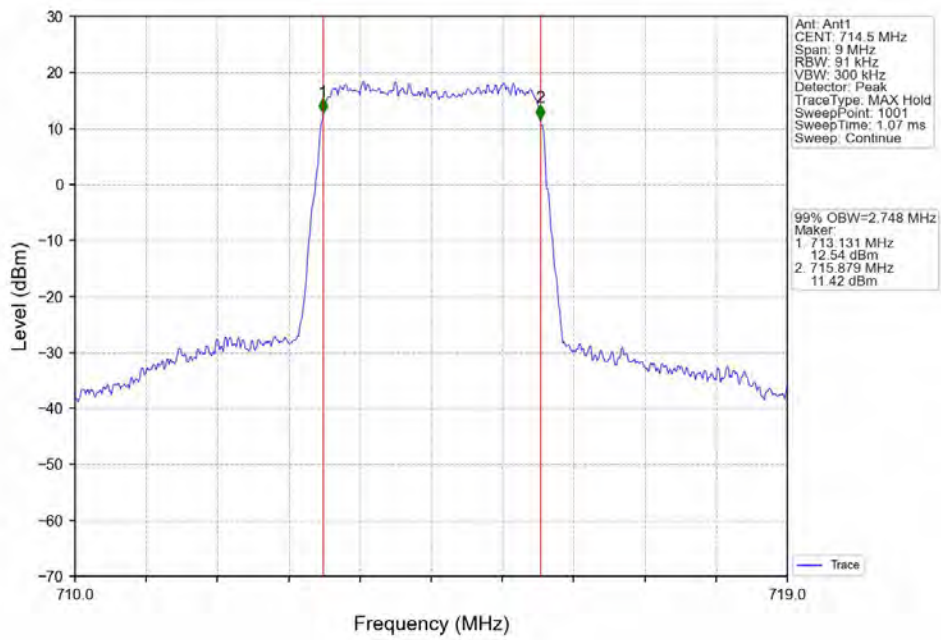
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



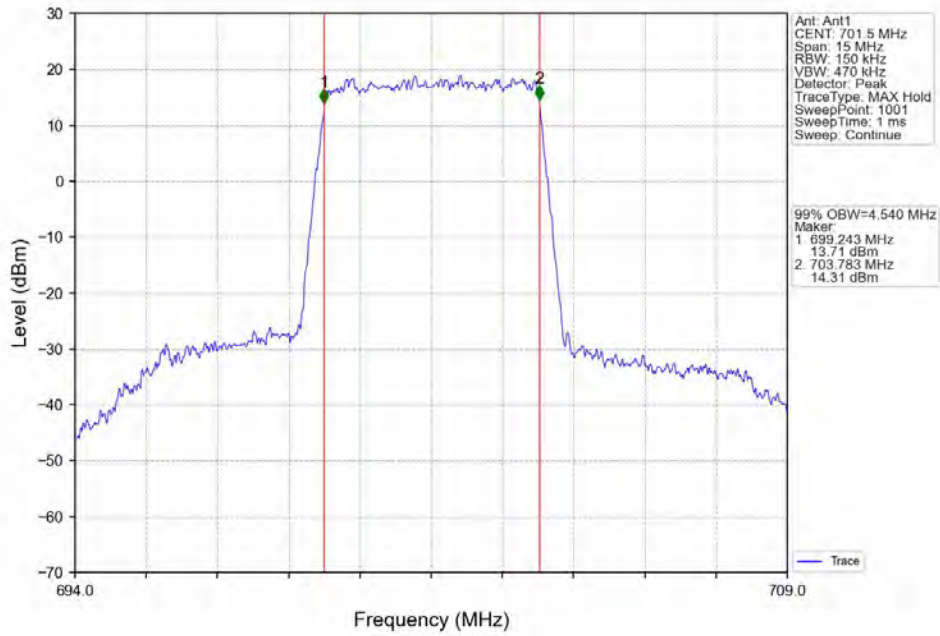
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



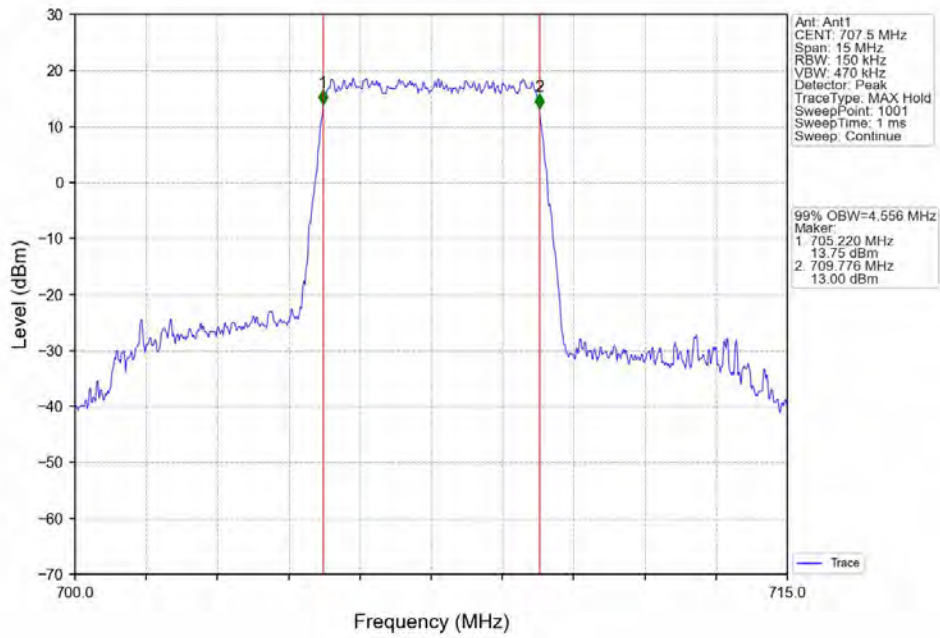
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



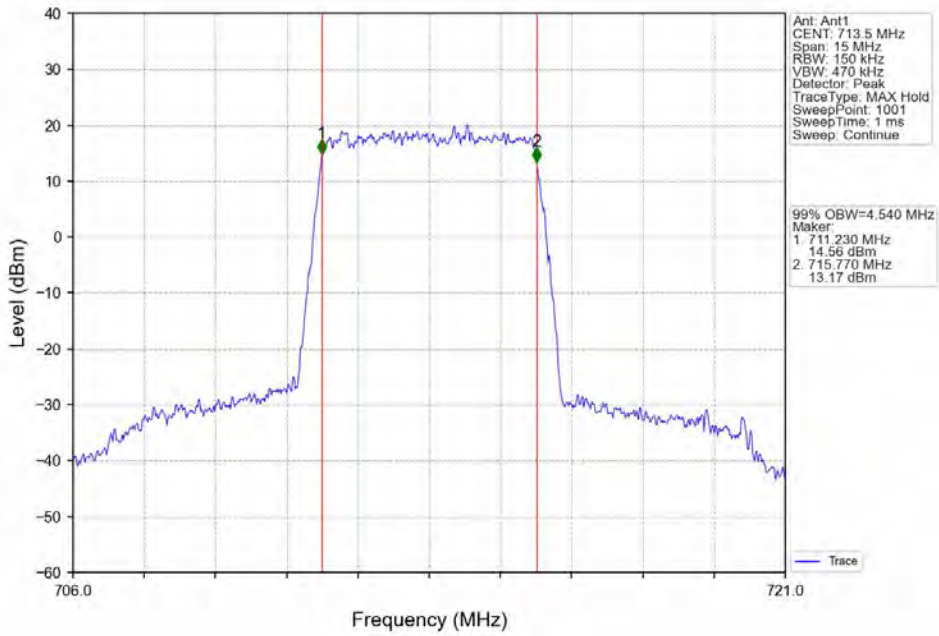
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



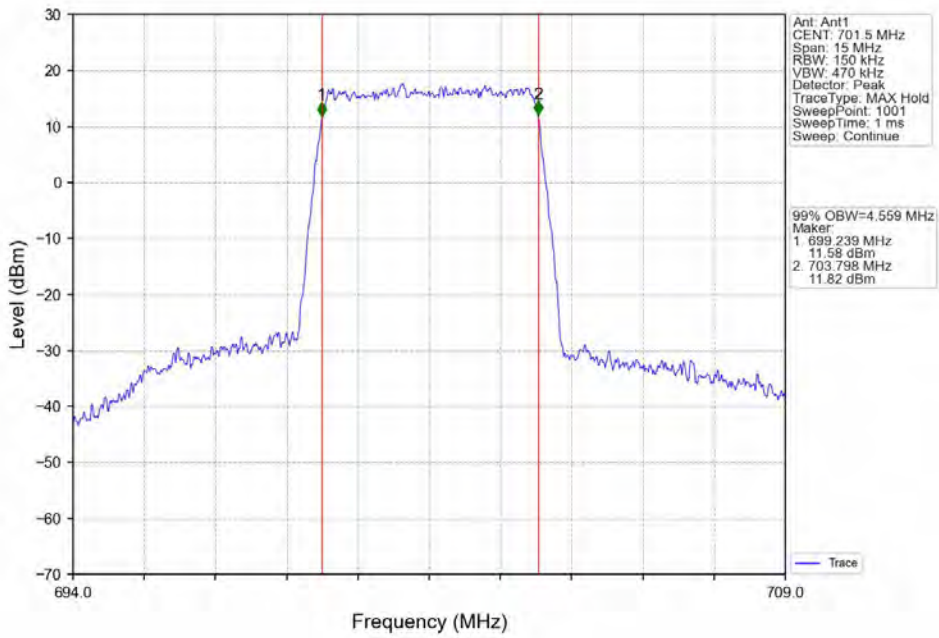
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



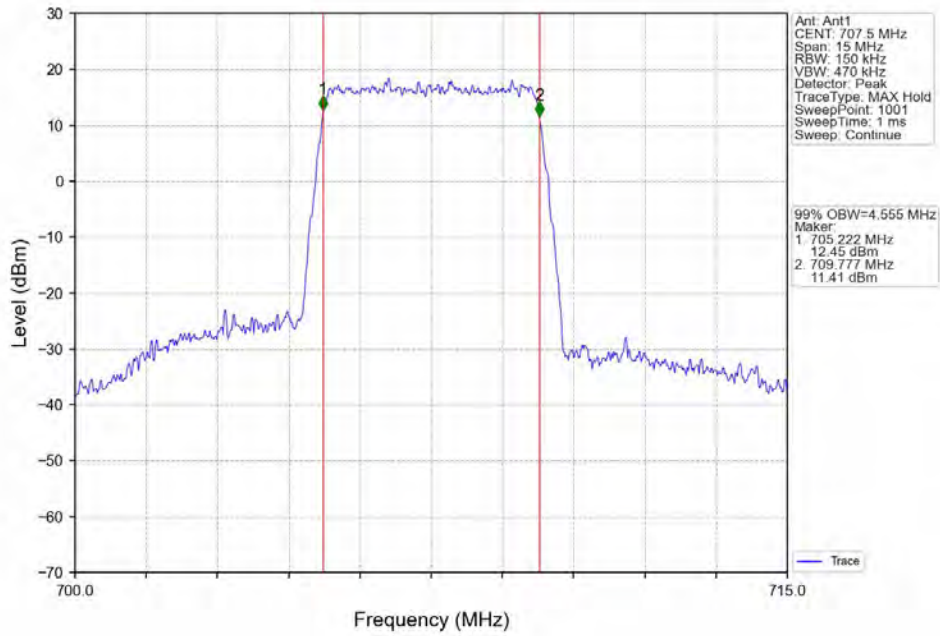
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



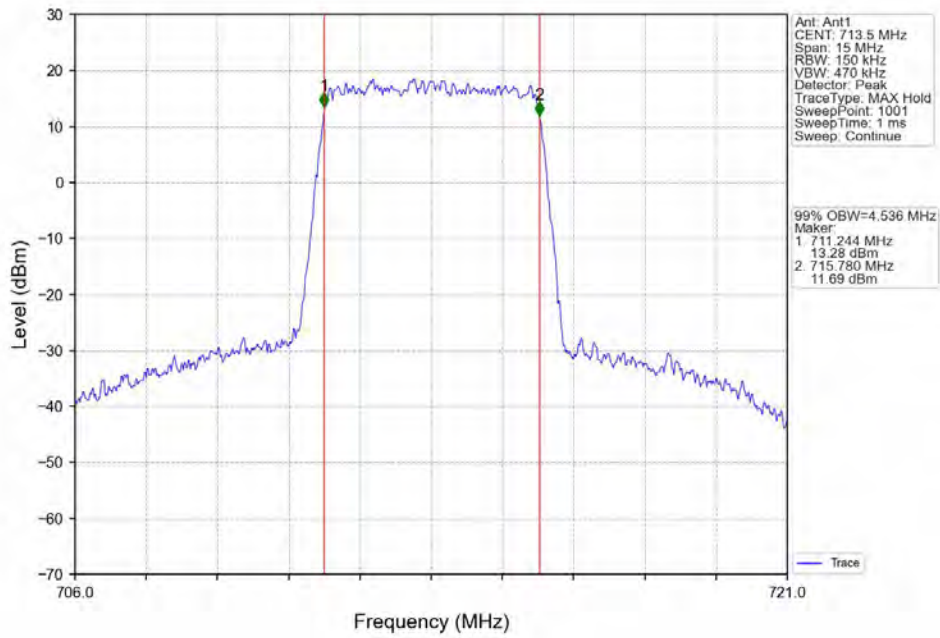
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



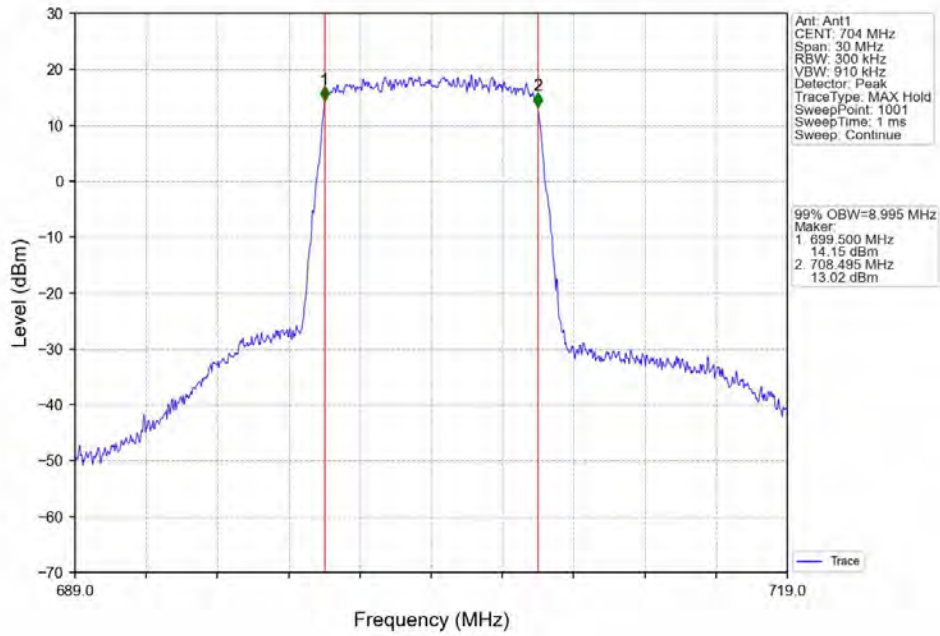
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



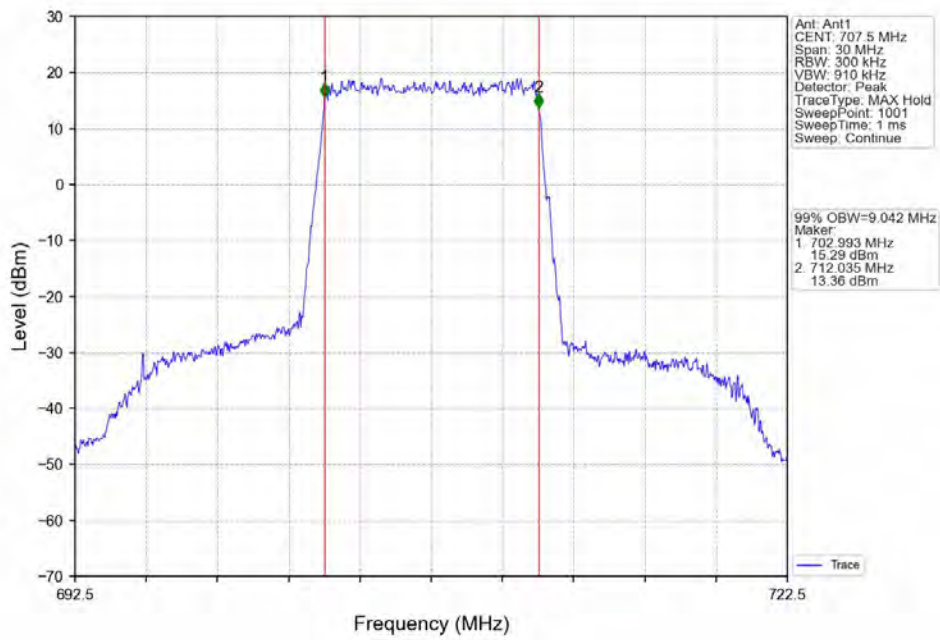
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



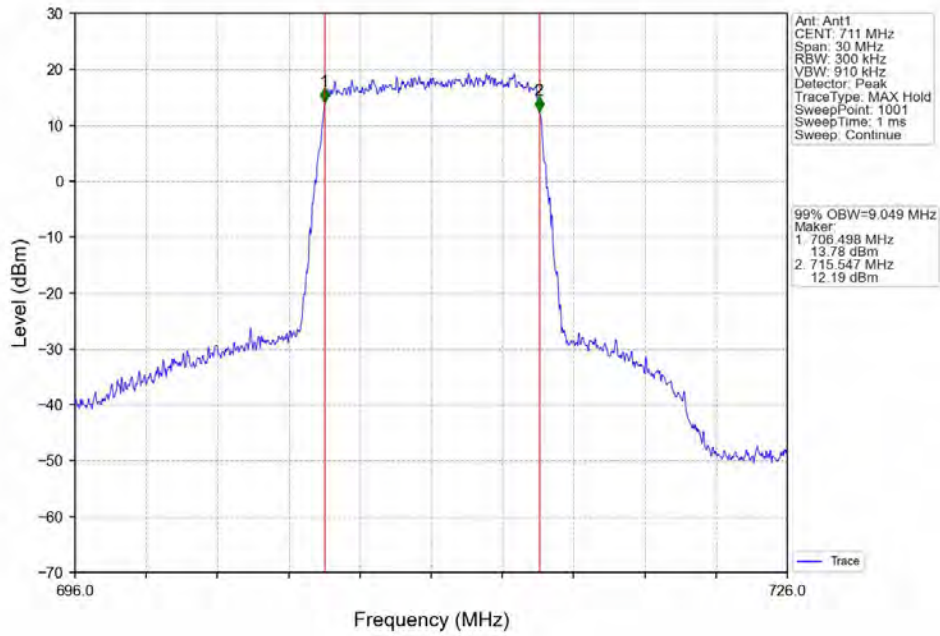
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



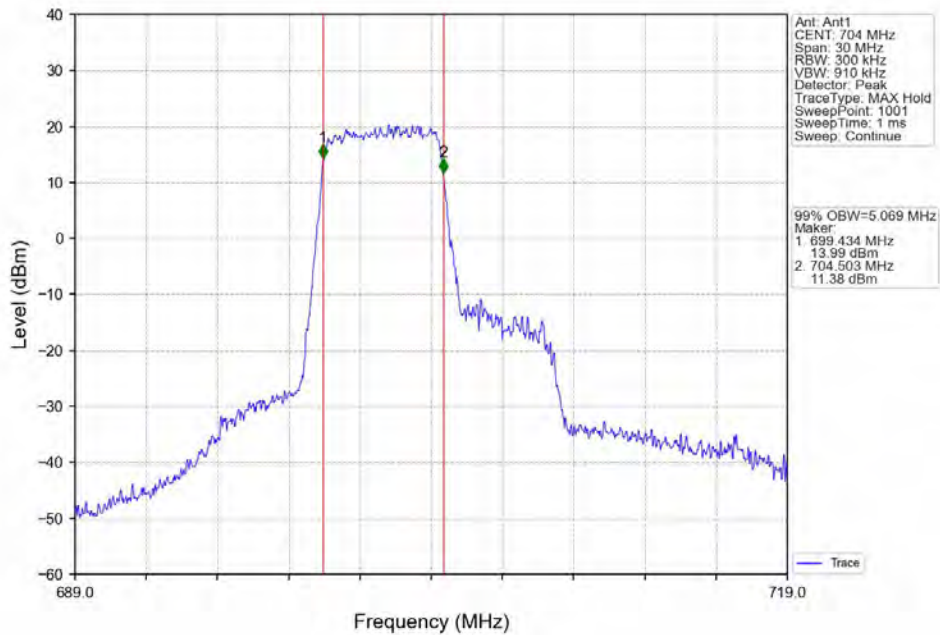
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



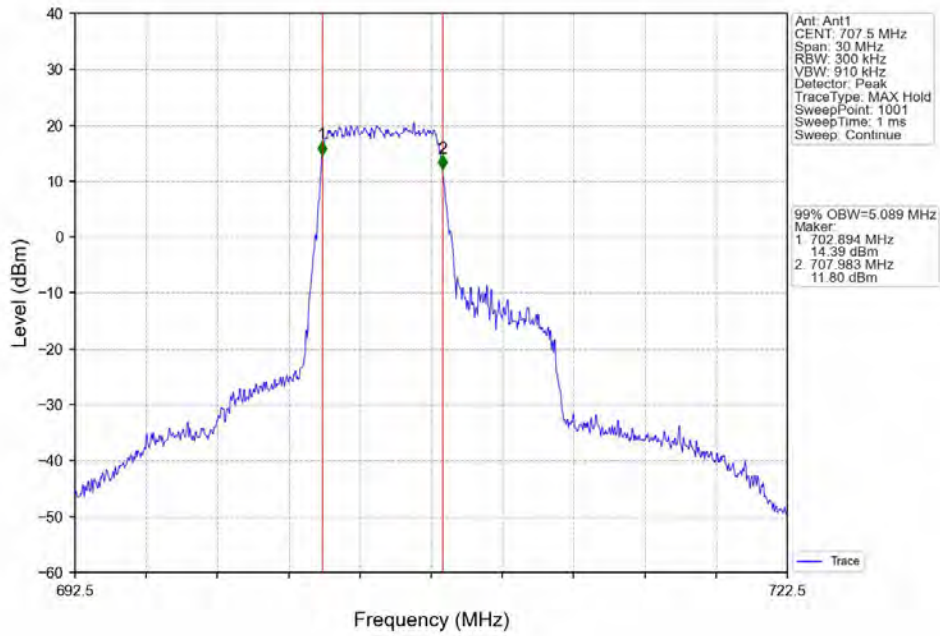
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



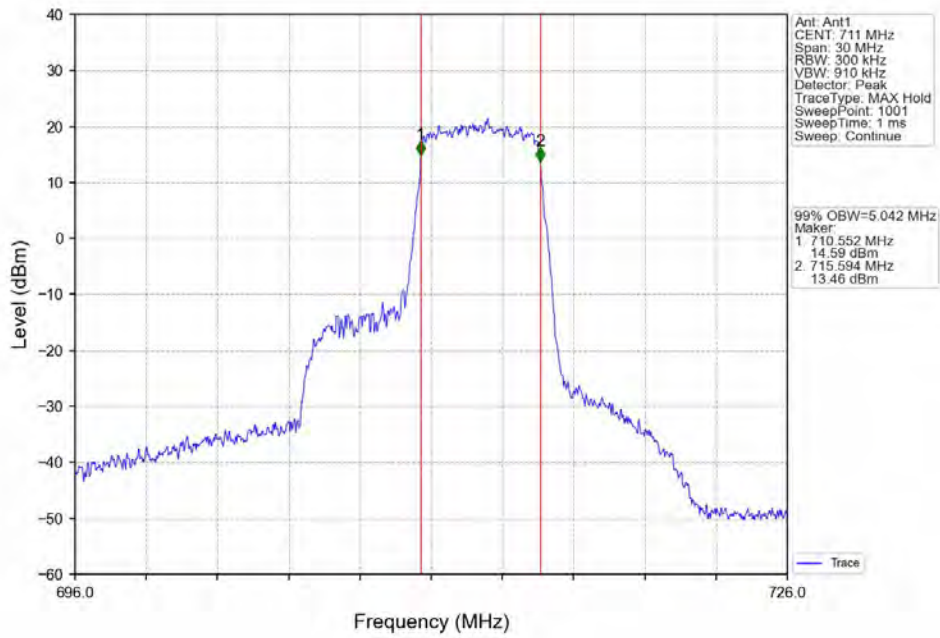
Band12_10MHz_16QAM_LCH_704MHz_RB_27_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_27_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_27_23_NTNV

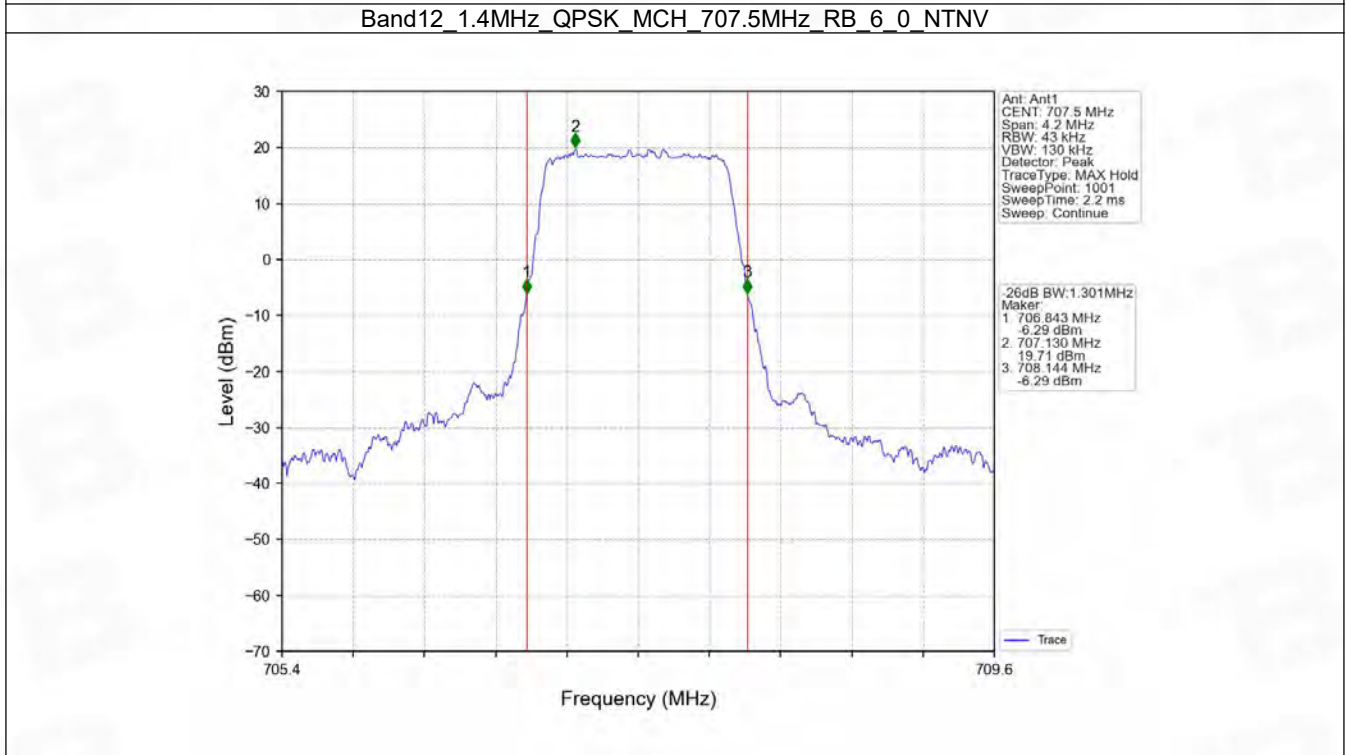
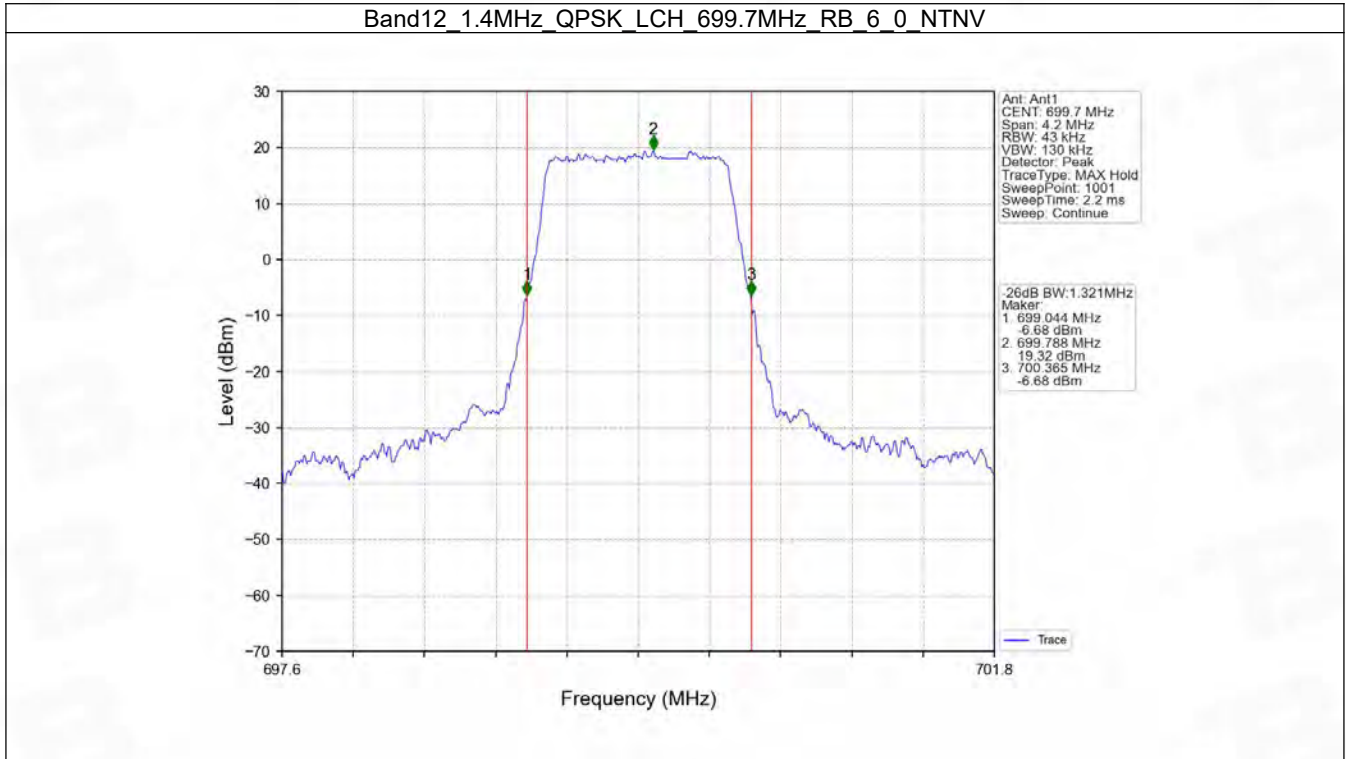


4.2 Band12_XDB

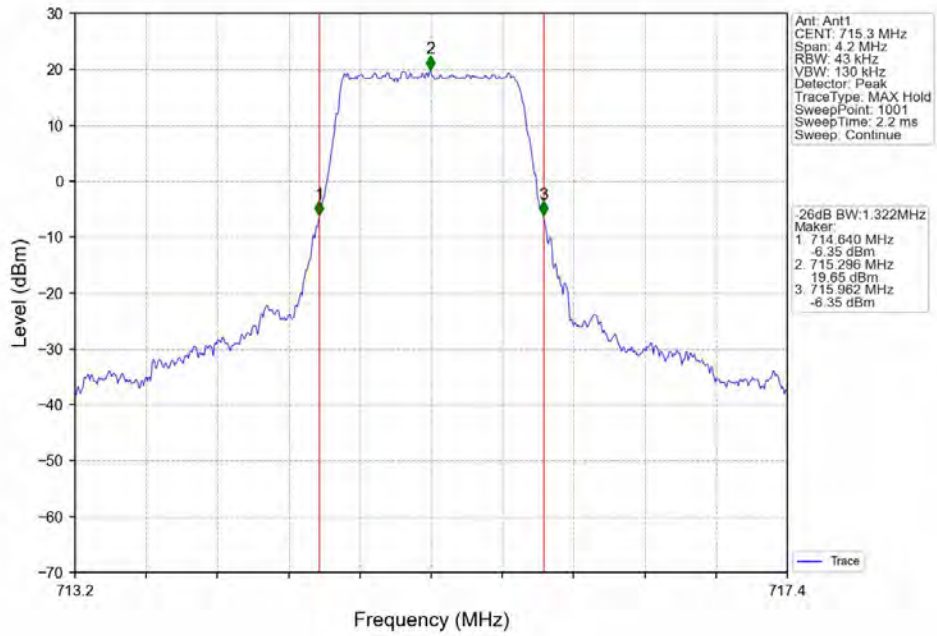
4.2.1 Test Result

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	1.321	/	Pass
		707.5	6	0	1.301	/	Pass
		715.3	6	0	1.322	/	Pass
	16QAM	699.7	6	0	1.326	/	Pass
		707.5	6	0	1.328	/	Pass
		715.3	6	0	1.318	/	Pass
3	QPSK	700.5	15	0	3.059	/	Pass
		707.5	15	0	3.062	/	Pass
		714.5	15	0	3.052	/	Pass
	16QAM	700.5	15	0	3.042	/	Pass
		707.5	15	0	3.049	/	Pass
		714.5	15	0	3.037	/	Pass
5	QPSK	701.5	25	0	5.076	/	Pass
		707.5	25	0	5.113	/	Pass
		713.5	25	0	5.071	/	Pass
	16QAM	701.5	25	0	5.109	/	Pass
		707.5	25	0	5.111	/	Pass
		713.5	25	0	5.062	/	Pass
10	QPSK	704	50	0	10.049	/	Pass
		707.5	50	0	10.056	/	Pass
		711	50	0	10.137	/	Pass
	16QAM	704	27	0	6.008	/	Pass
		707.5	27	0	5.969	/	Pass
		711	27	23	5.909	/	Pass

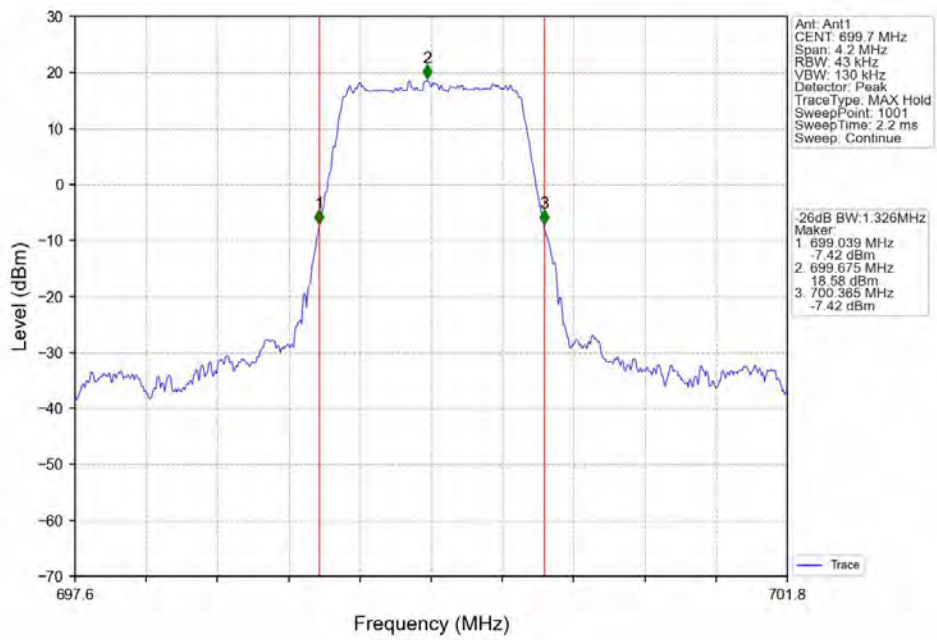
4.2.2 Test Graph



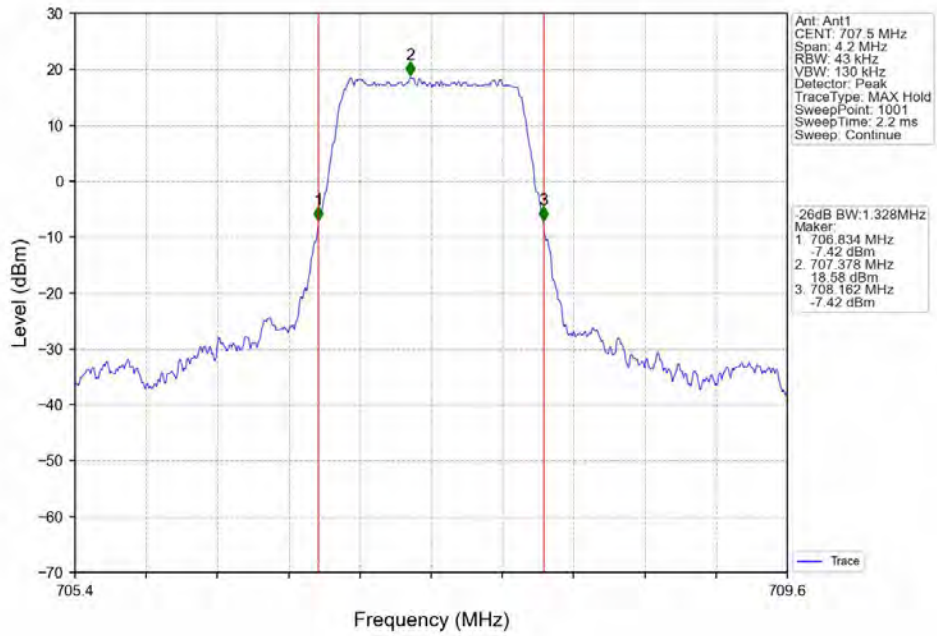
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



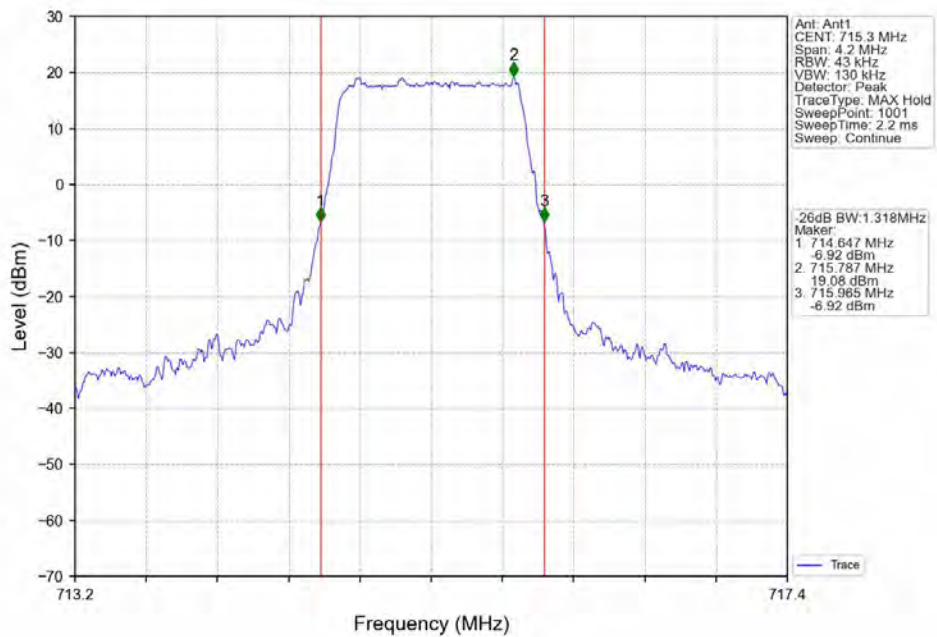
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



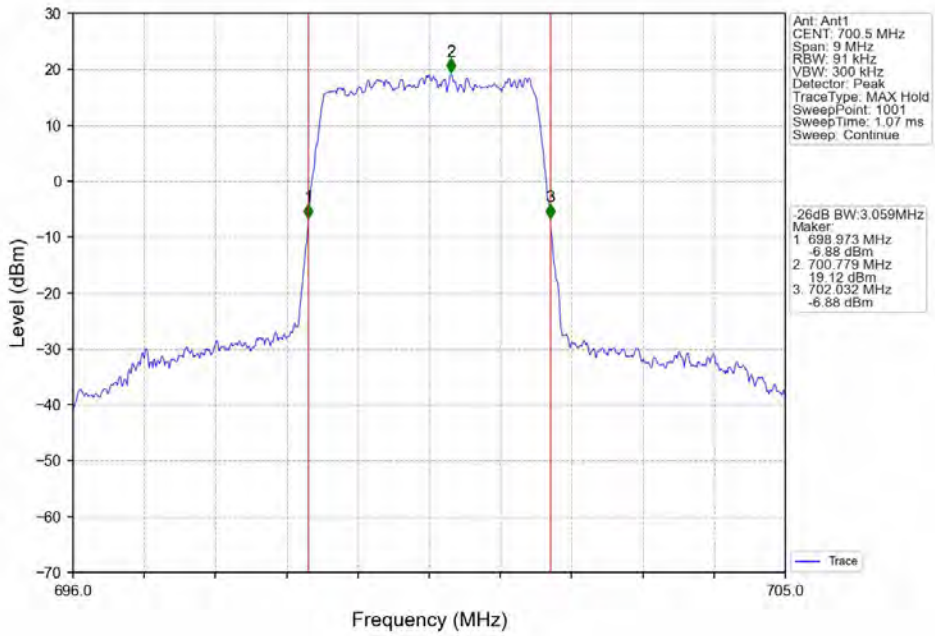
Band12_1.4MHz_16QAM_MCH_707.5MHz_RB_6_0_NTNV



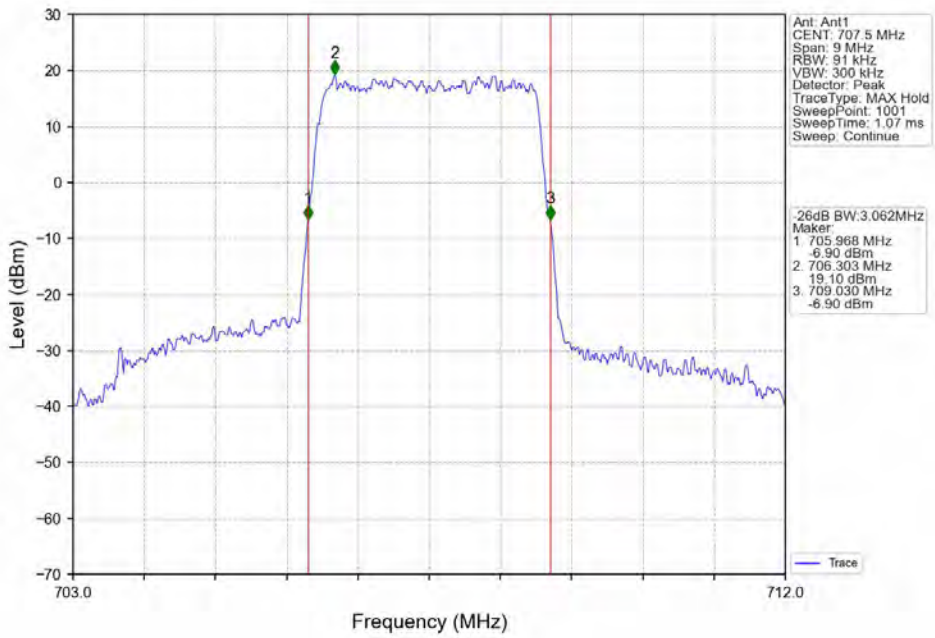
Band12_1.4MHz_16QAM_HCH_715.3MHz_RB_6_0_NTNV



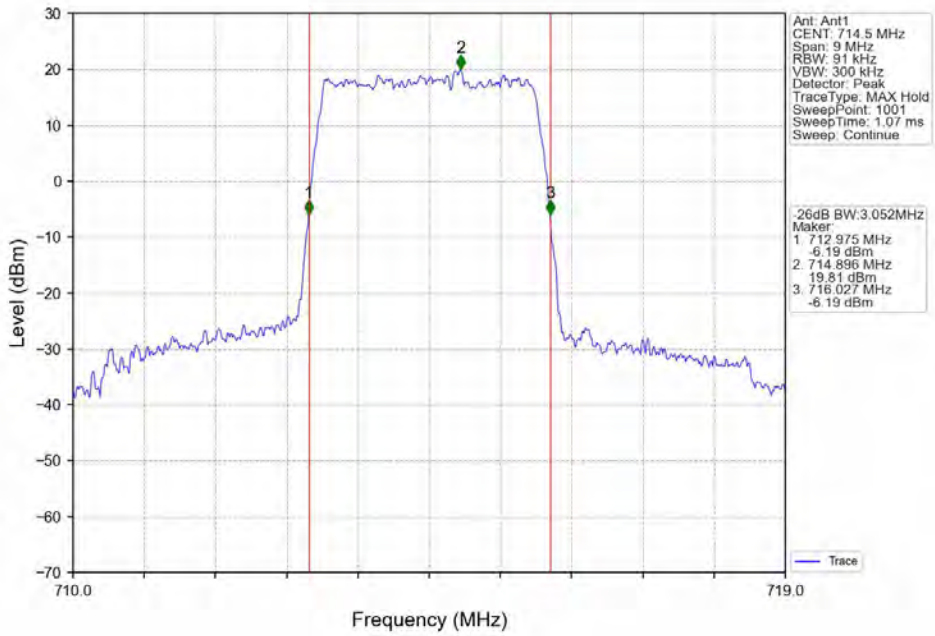
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



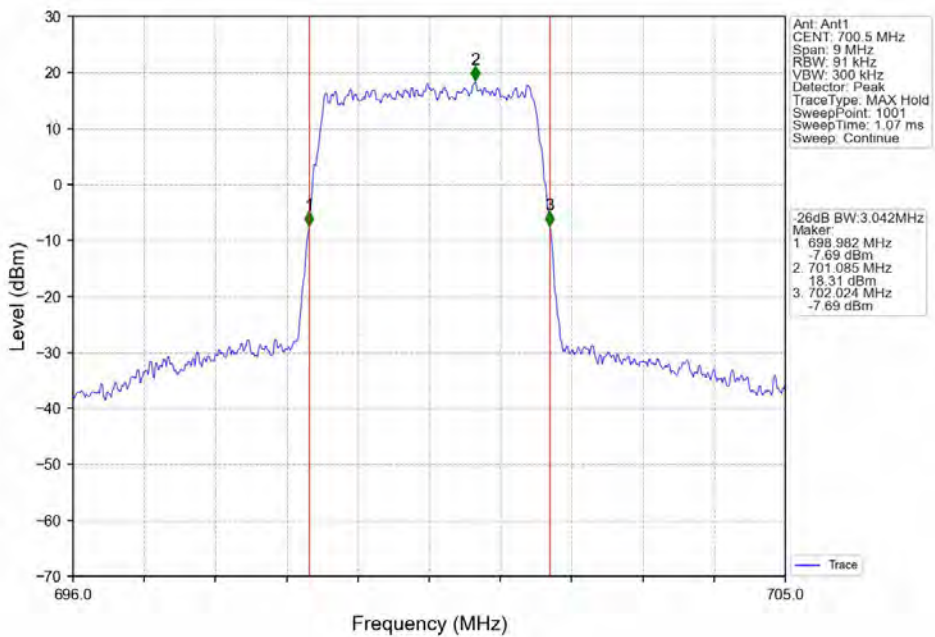
Band12_3MHz_QPSK_MCH_707.5MHz_RB_15_0_NTNV



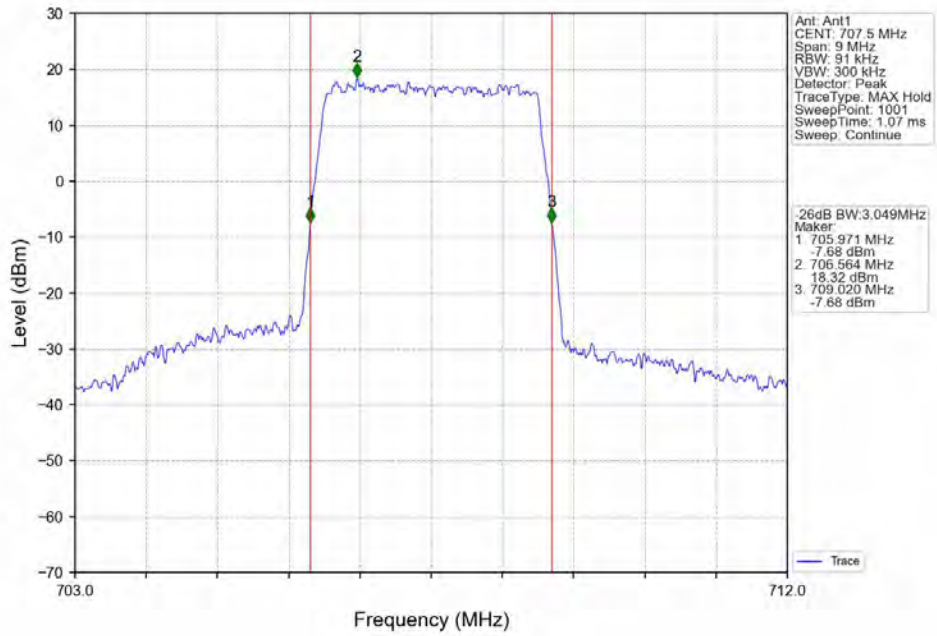
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



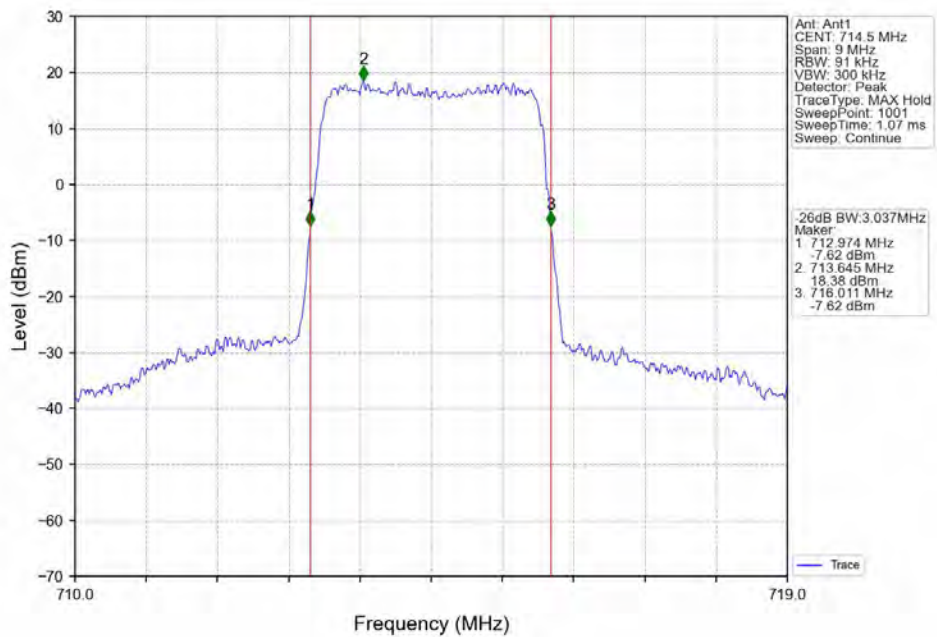
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



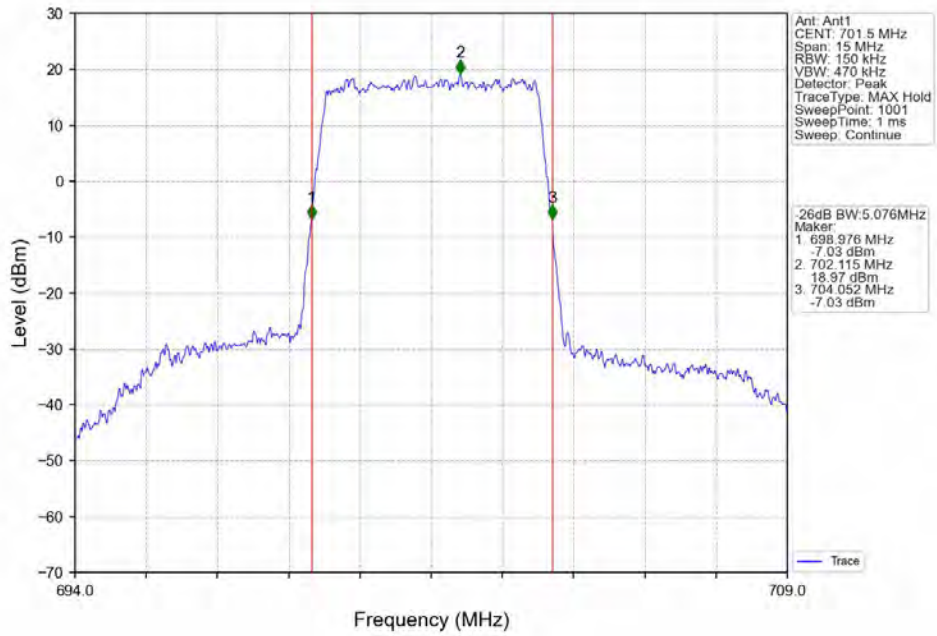
Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



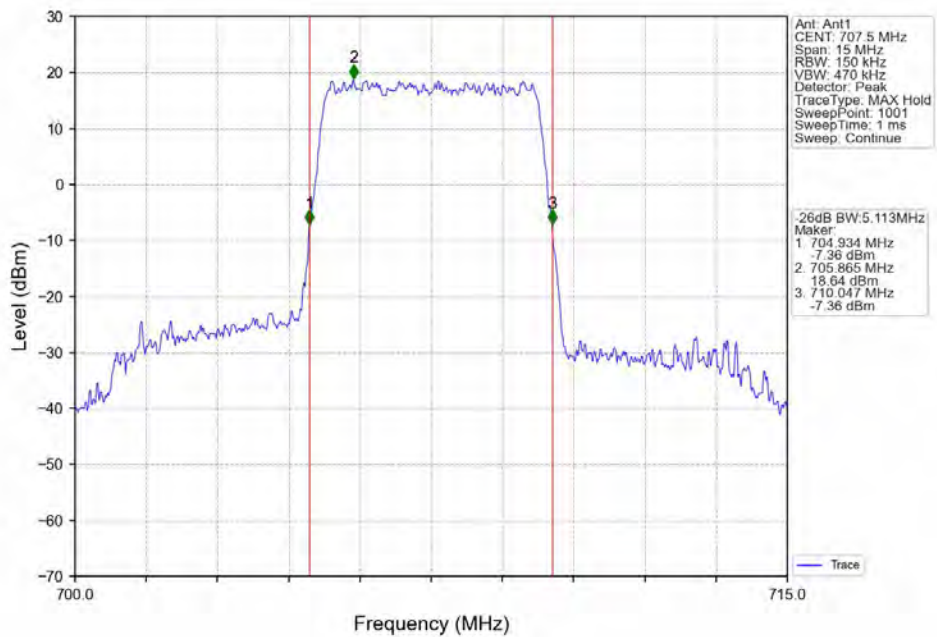
Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



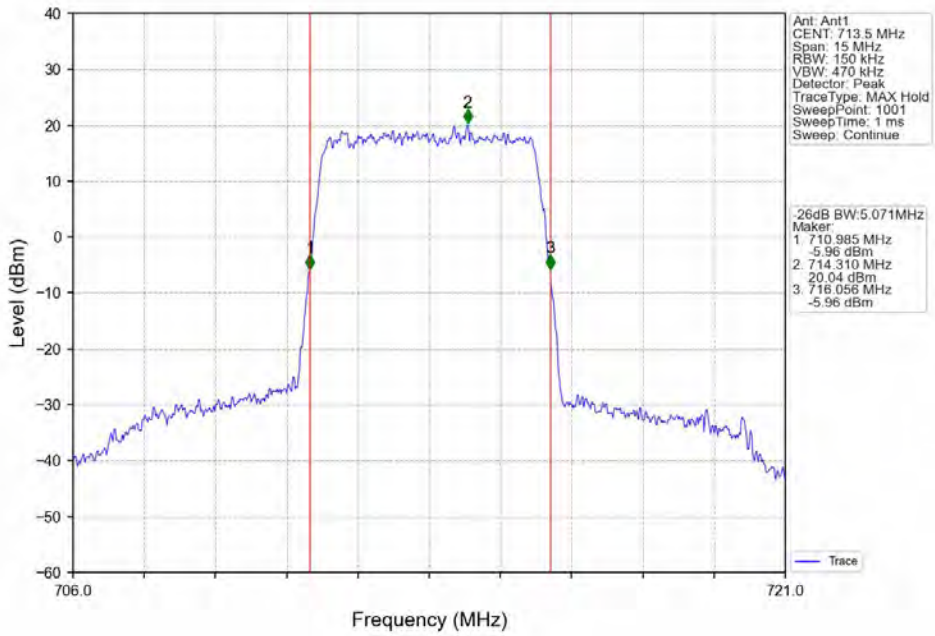
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



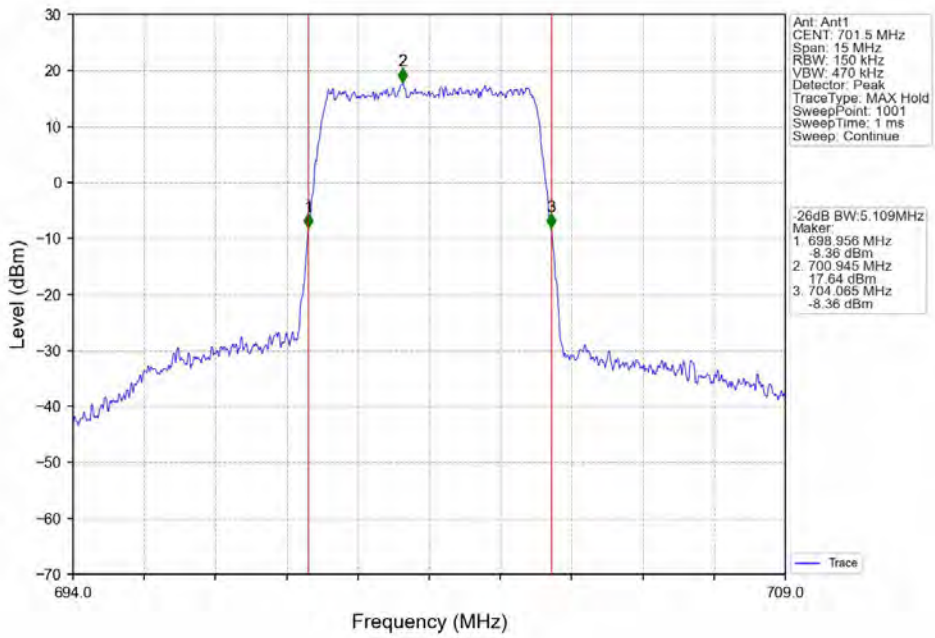
Band12_5MHz_QPSK_MCH_707.5MHz_RB_25_0_NTNV



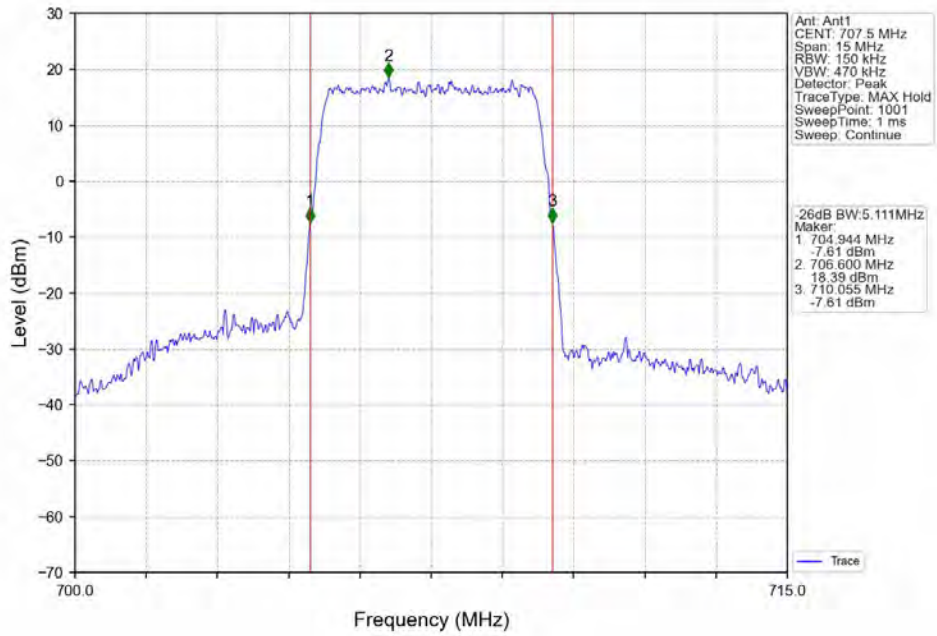
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



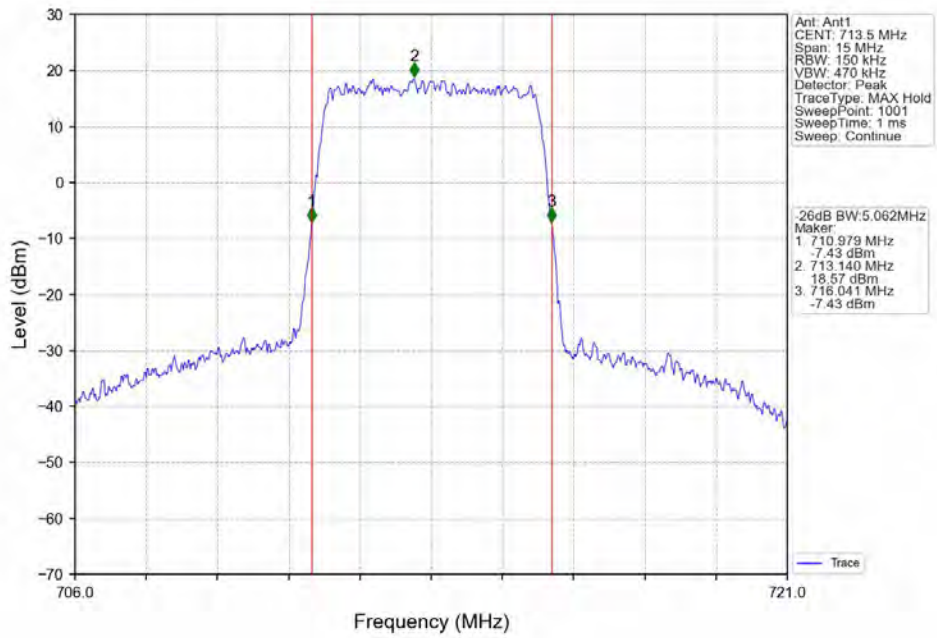
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



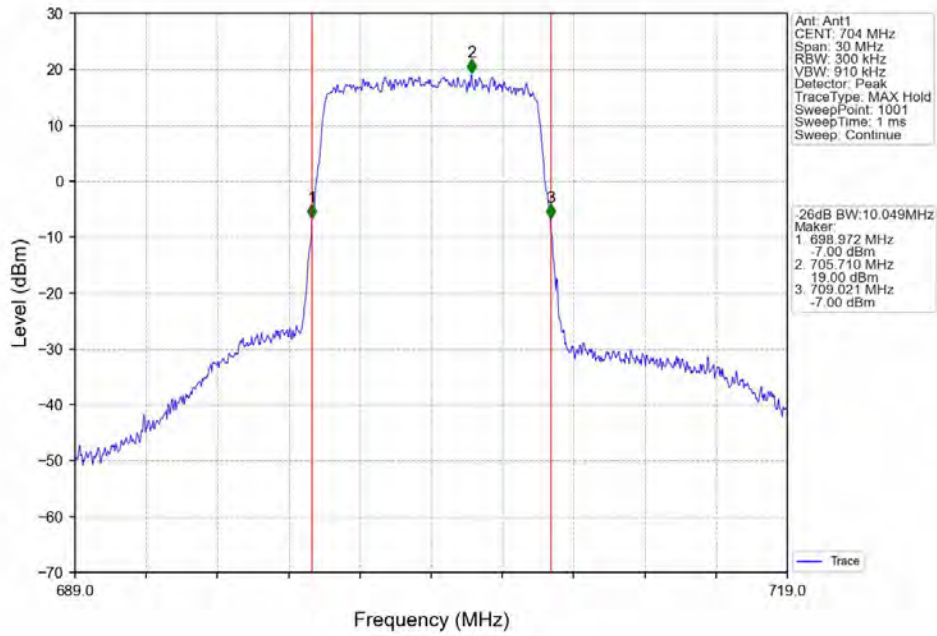
Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



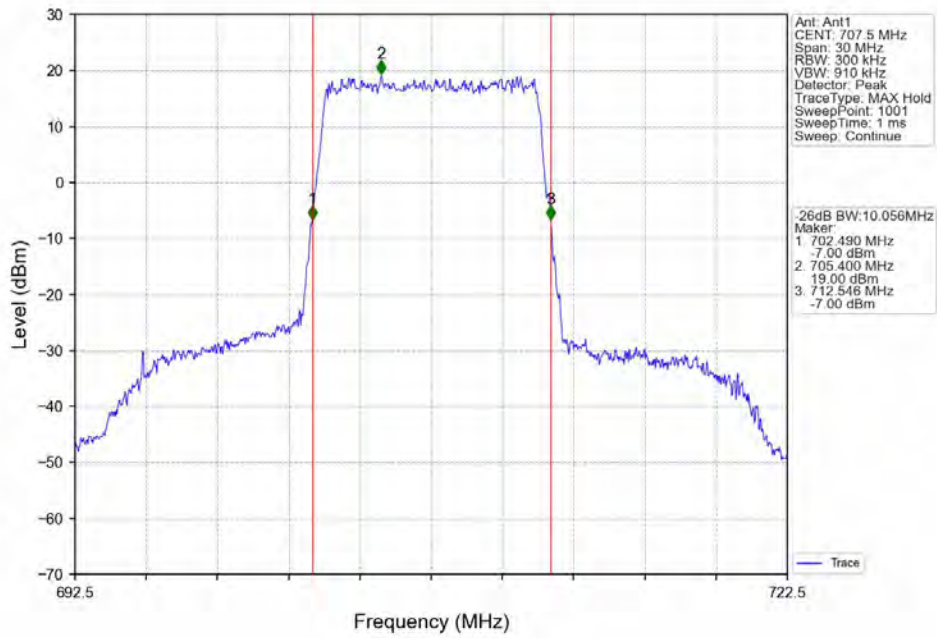
Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



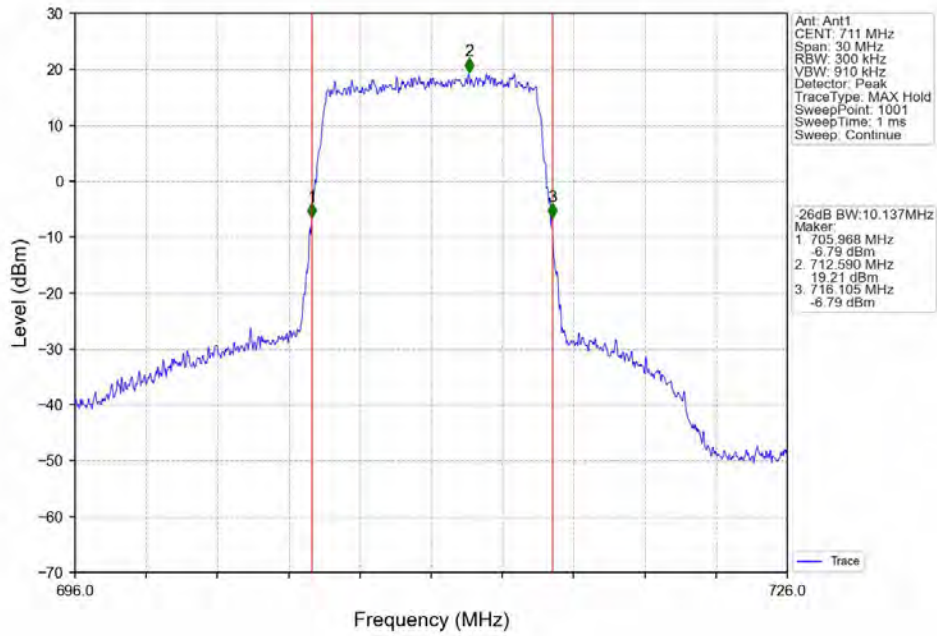
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



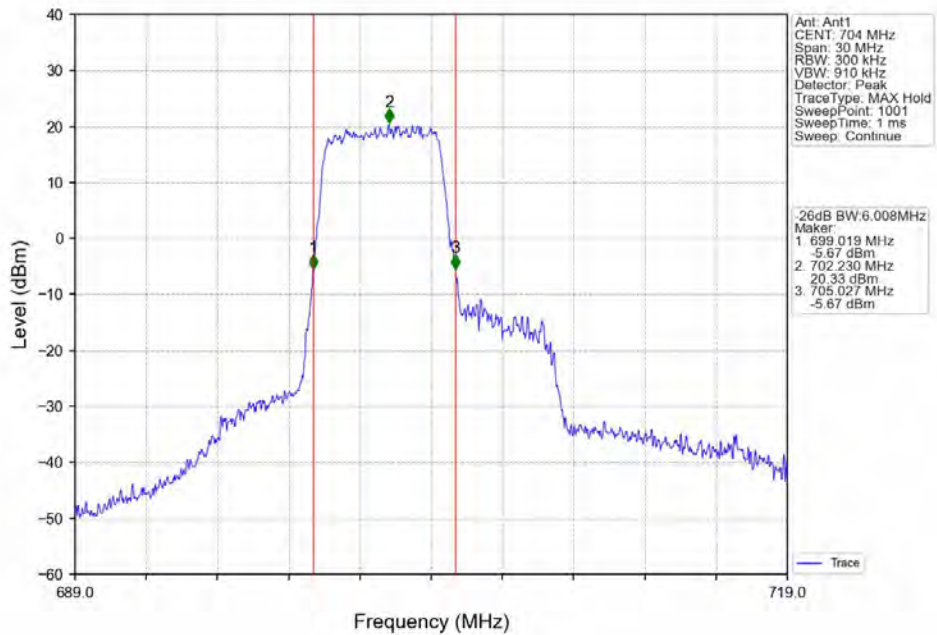
Band12_10MHz_QPSK_MCH_707.5MHz_RB_50_0_NTNV



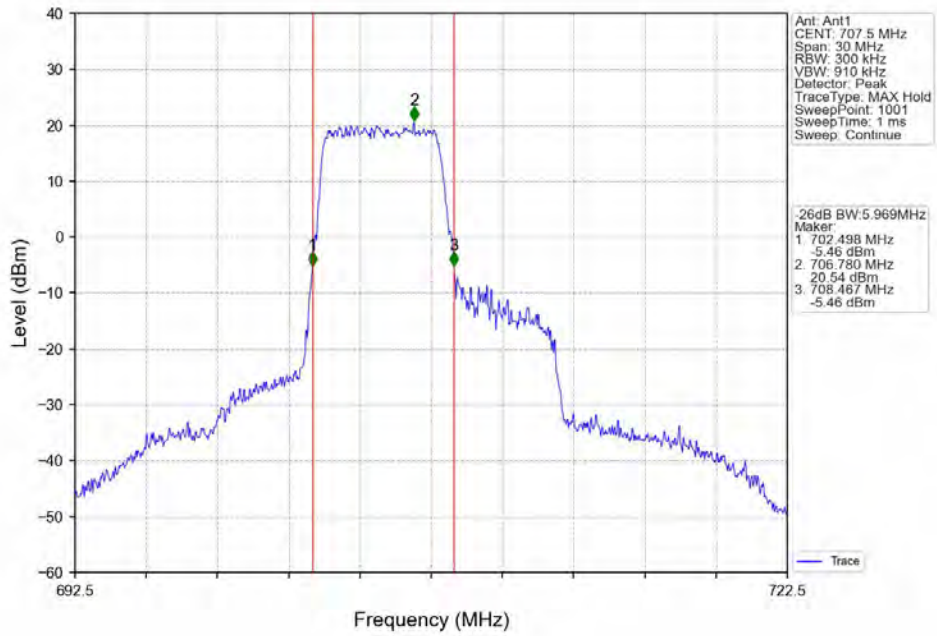
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



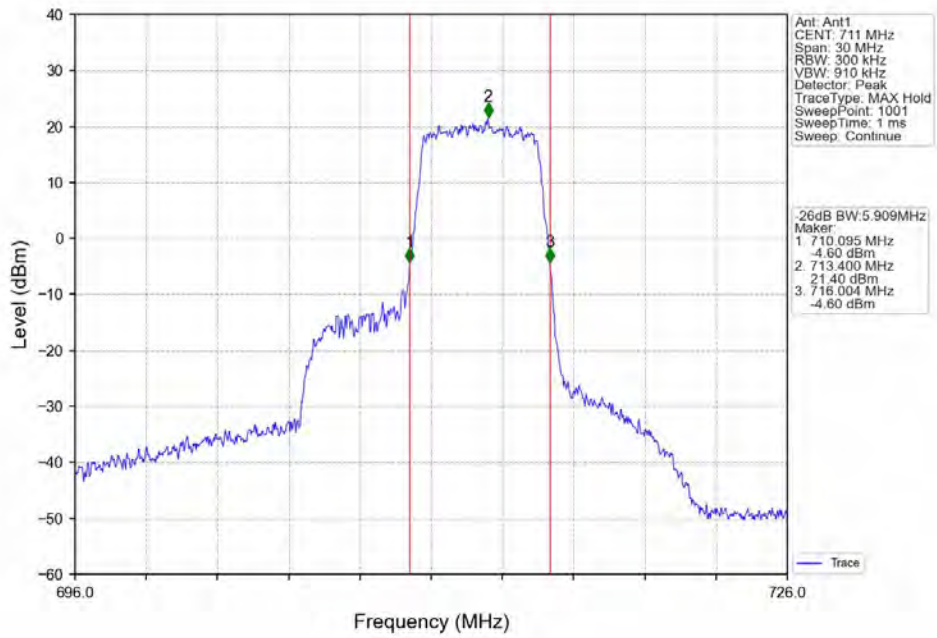
Band12_10MHz_16QAM_LCH_704MHz_RB_27_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_27_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_27_23_NTNV



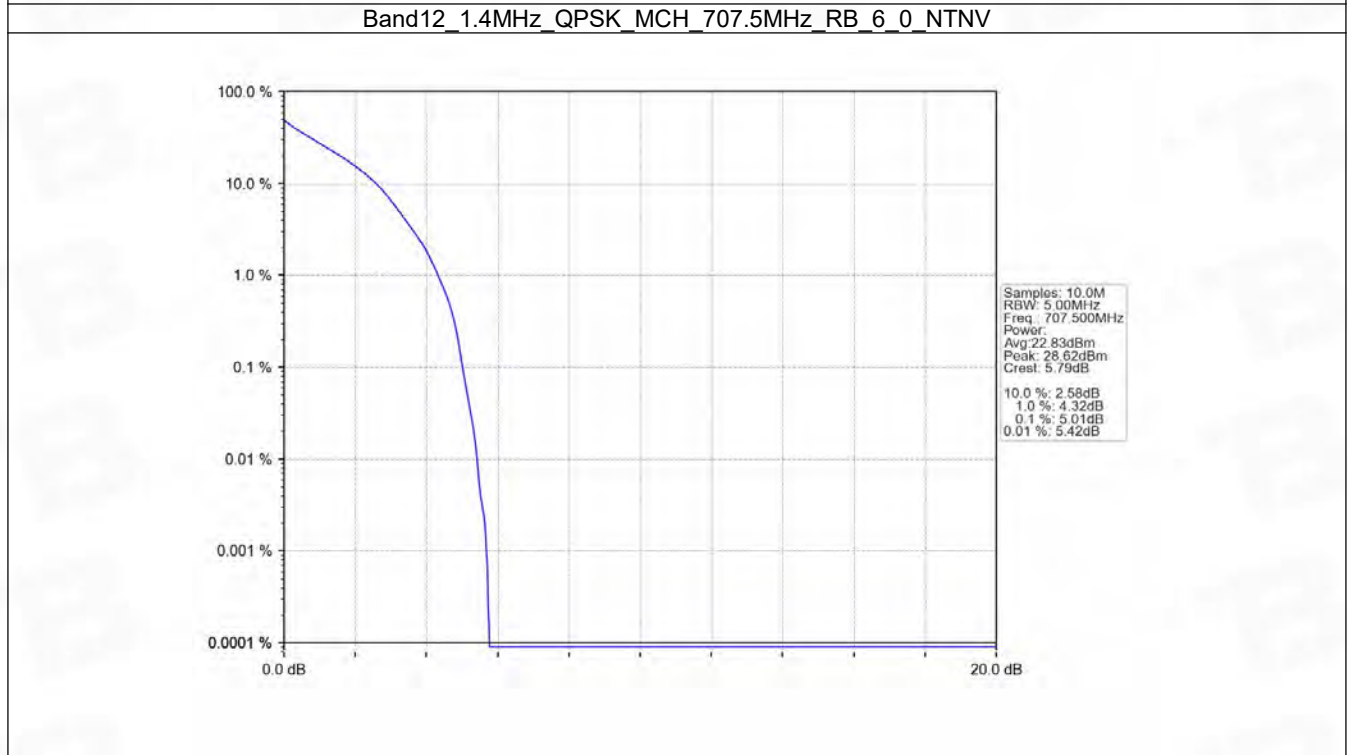
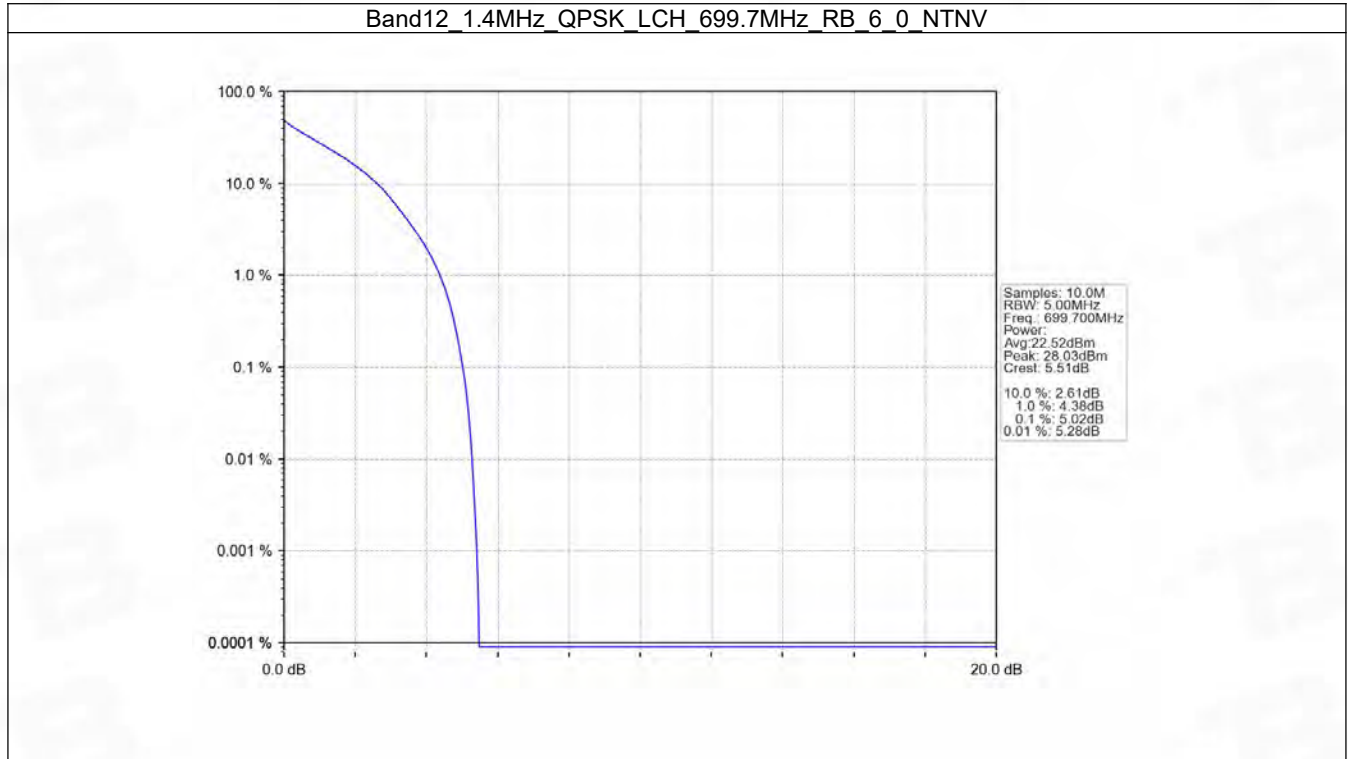
5. Peak-Average Ratio

5.1 B12_1.4MHz

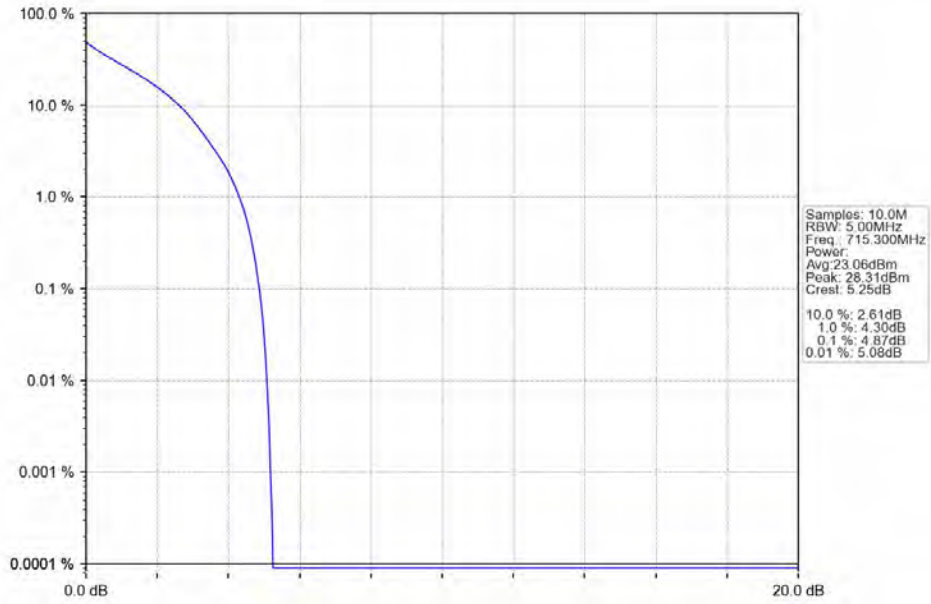
5.1.1 Test Result

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	5.02	<=13	Pass
	707.5	6	0	5.01	<=13	Pass
	715.3	6	0	4.87	<=13	Pass
16QAM	699.7	6	0	5.85	<=13	Pass
	707.5	6	0	5.87	<=13	Pass
	715.3	6	0	5.70	<=13	Pass

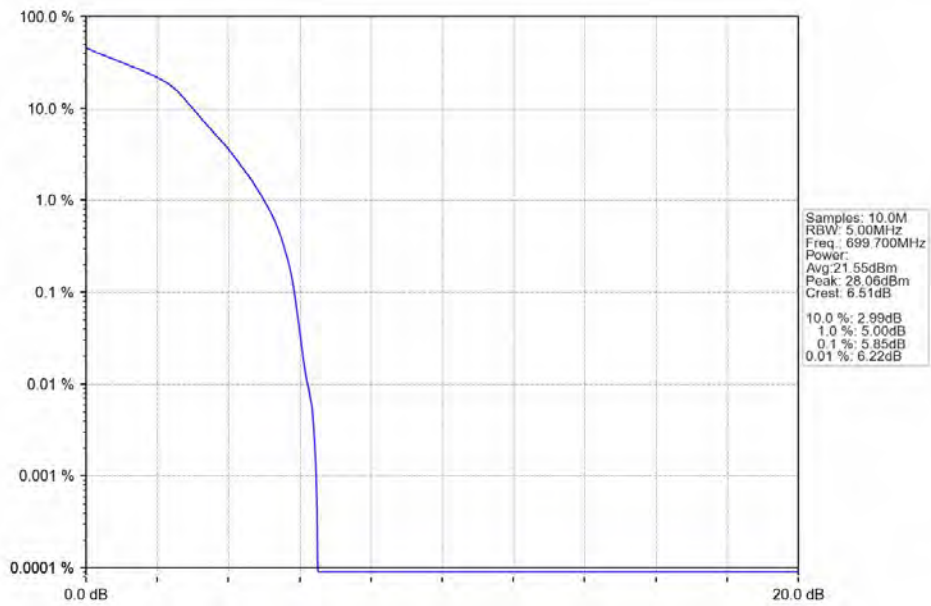
5.1.2 Test Graph



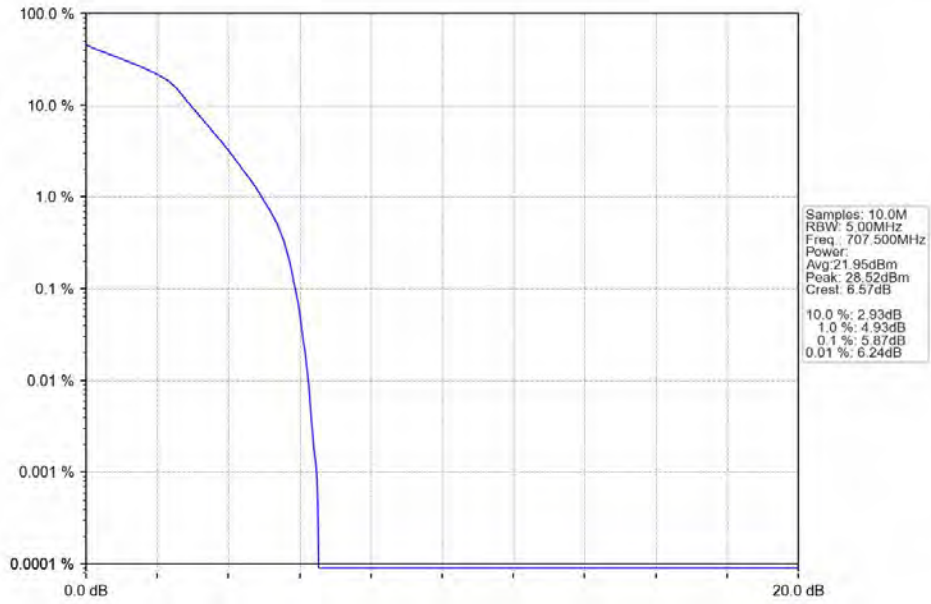
Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



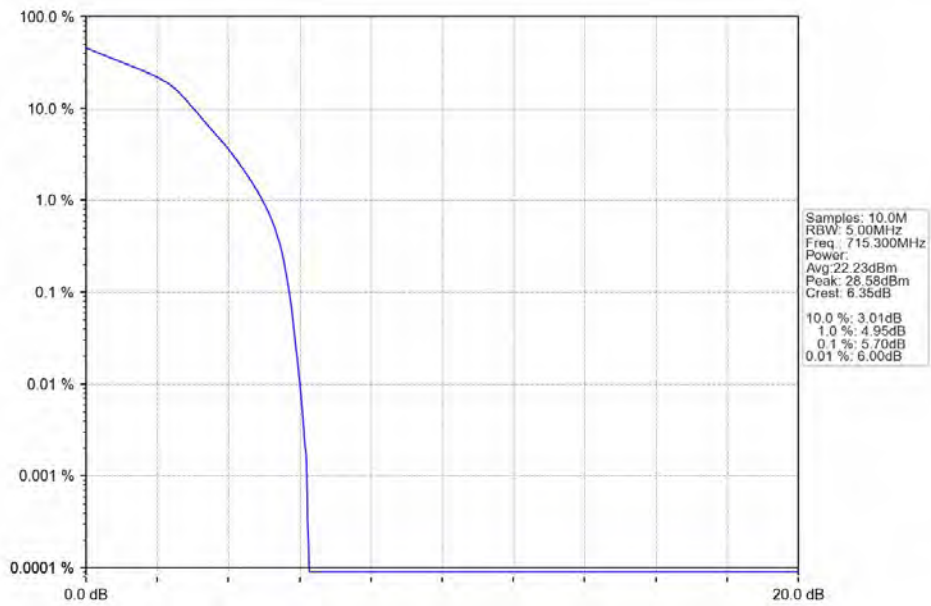
Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV



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



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

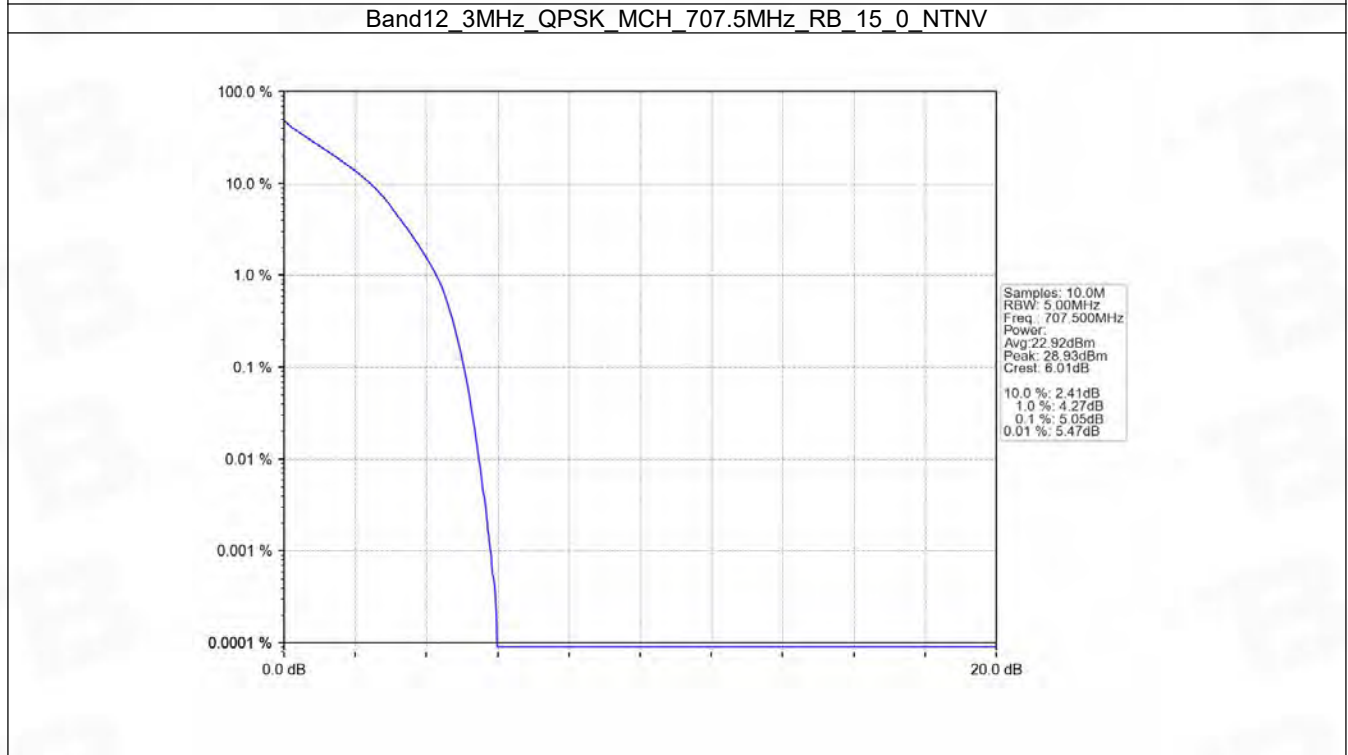
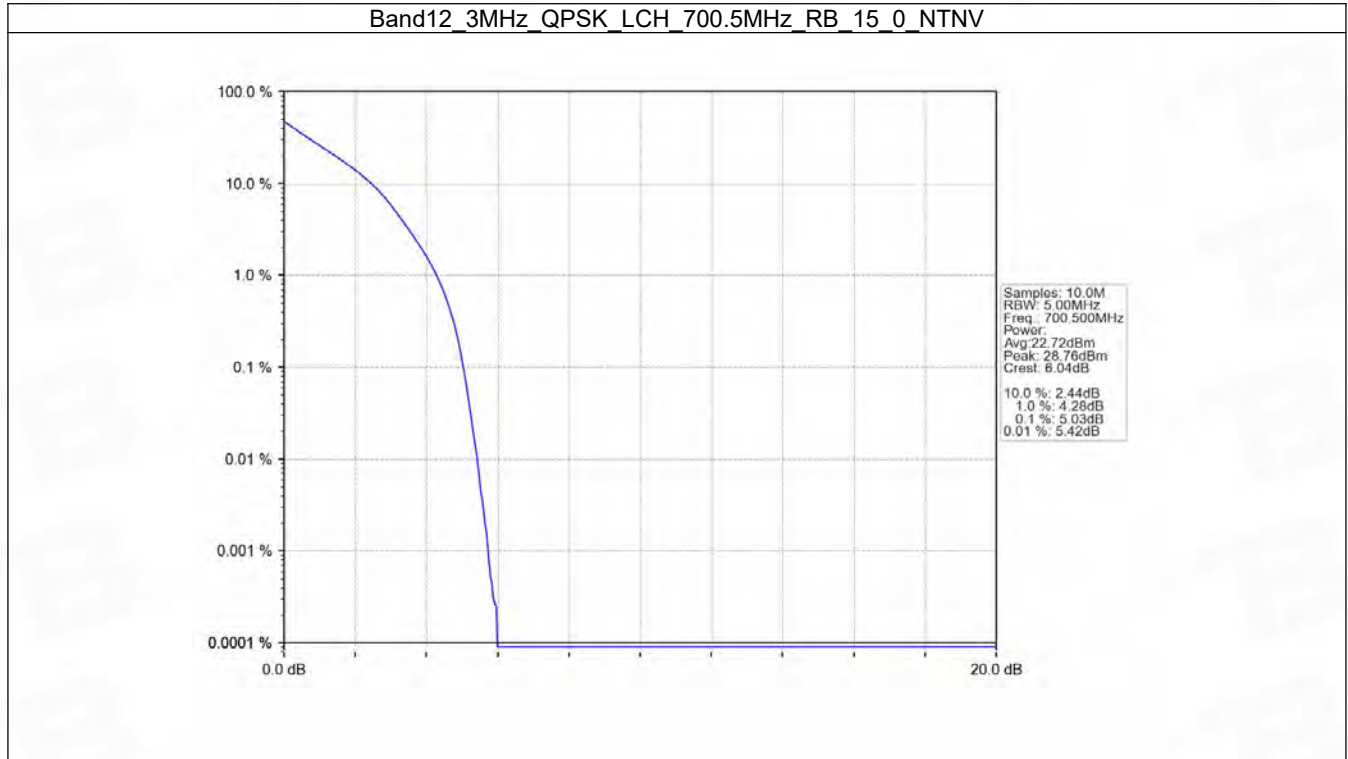


5.2 B12_3MHz

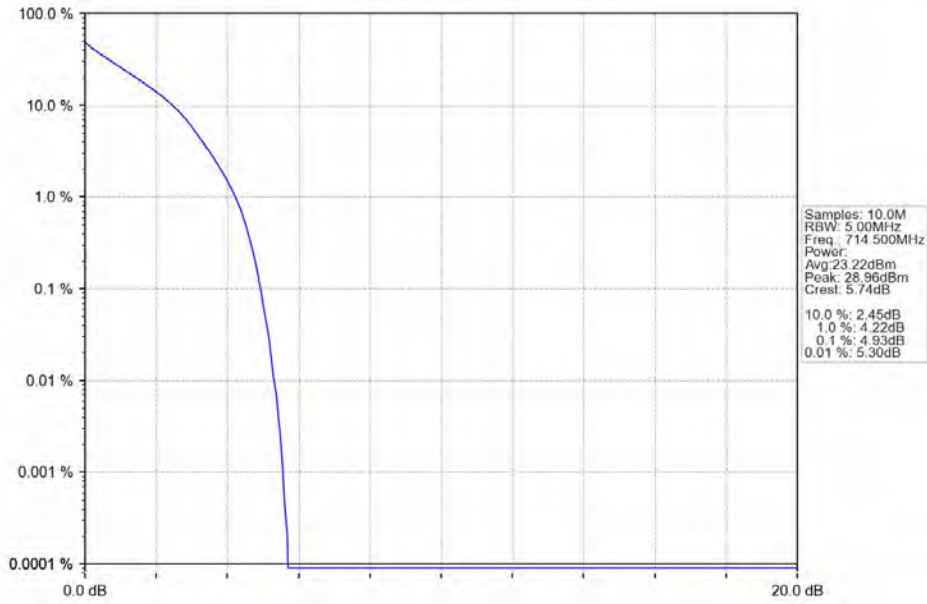
5.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	5.03	<=13	Pass
	707.5	15	0	5.05	<=13	Pass
	714.5	15	0	4.93	<=13	Pass
16QAM	700.5	15	0	5.87	<=13	Pass
	707.5	15	0	5.92	<=13	Pass
	714.5	15	0	5.80	<=13	Pass

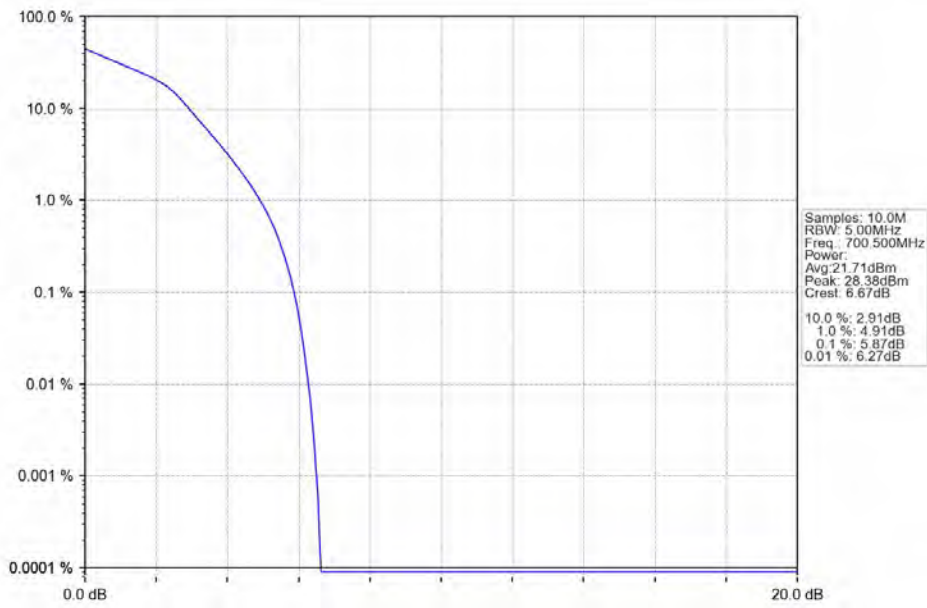
5.2.2 Test Graph



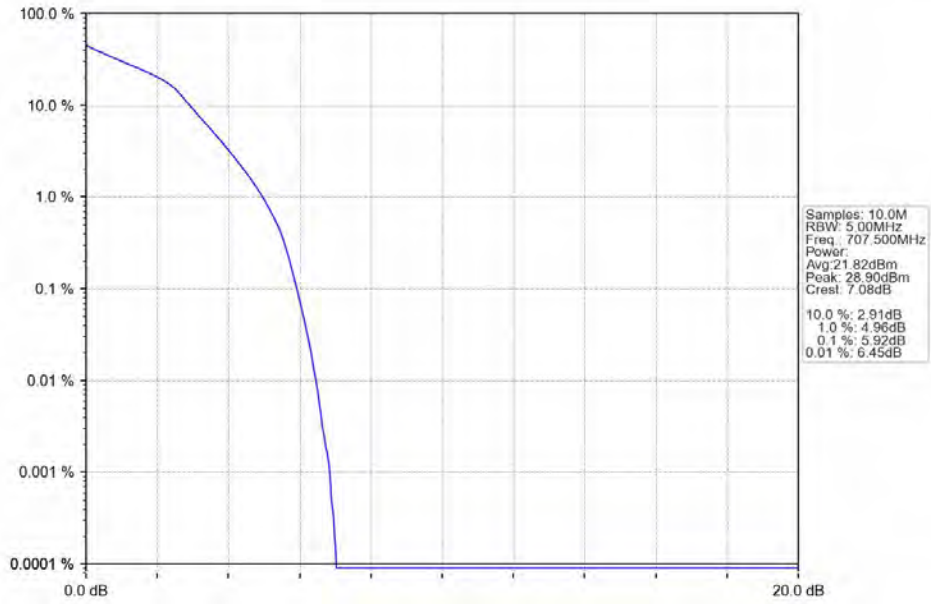
Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



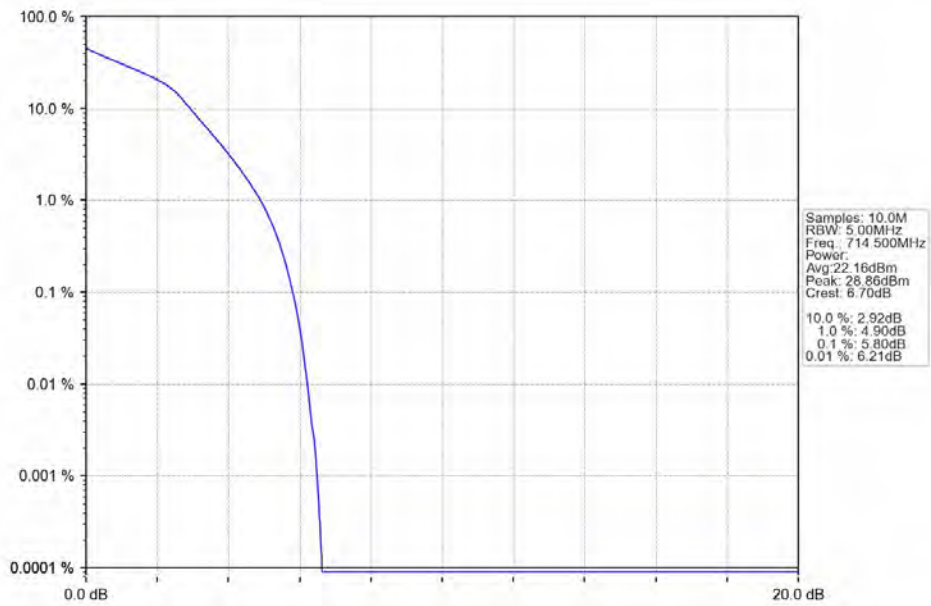
Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_MCH_707.5MHz_RB_15_0_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV

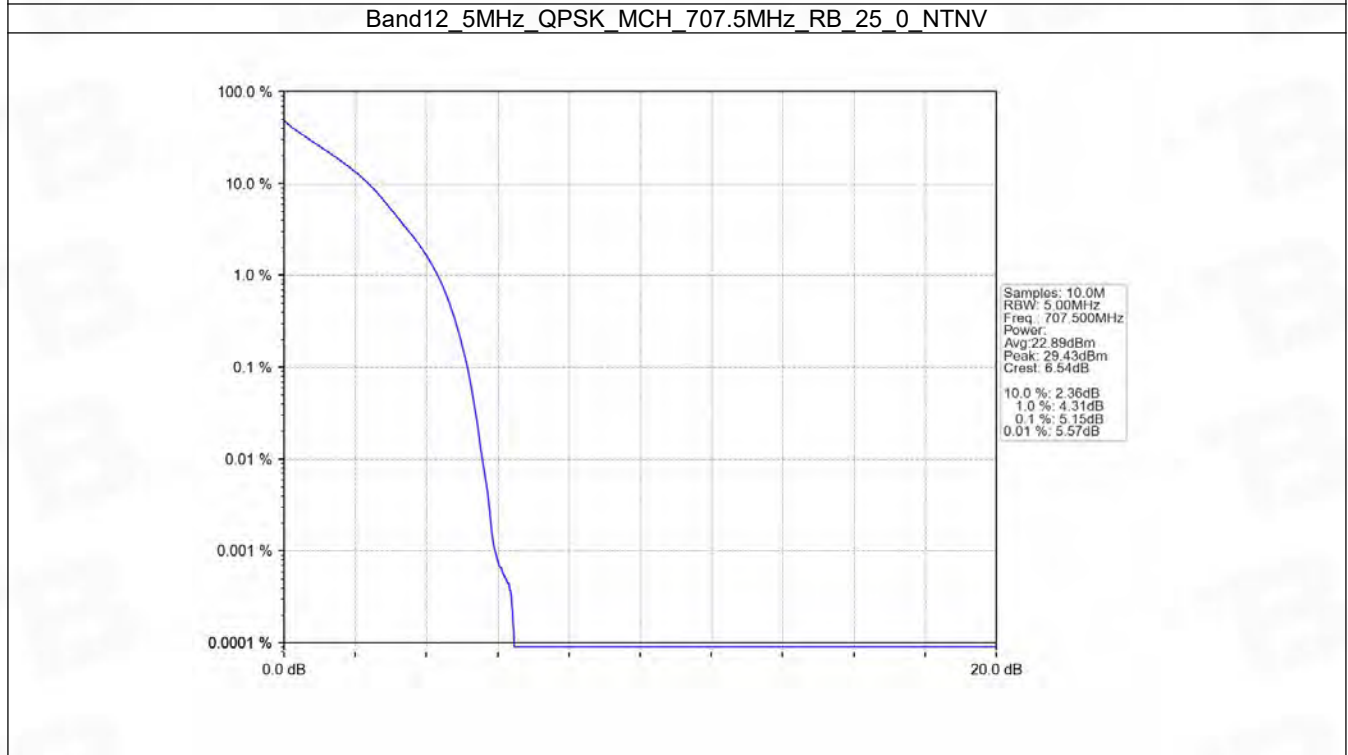
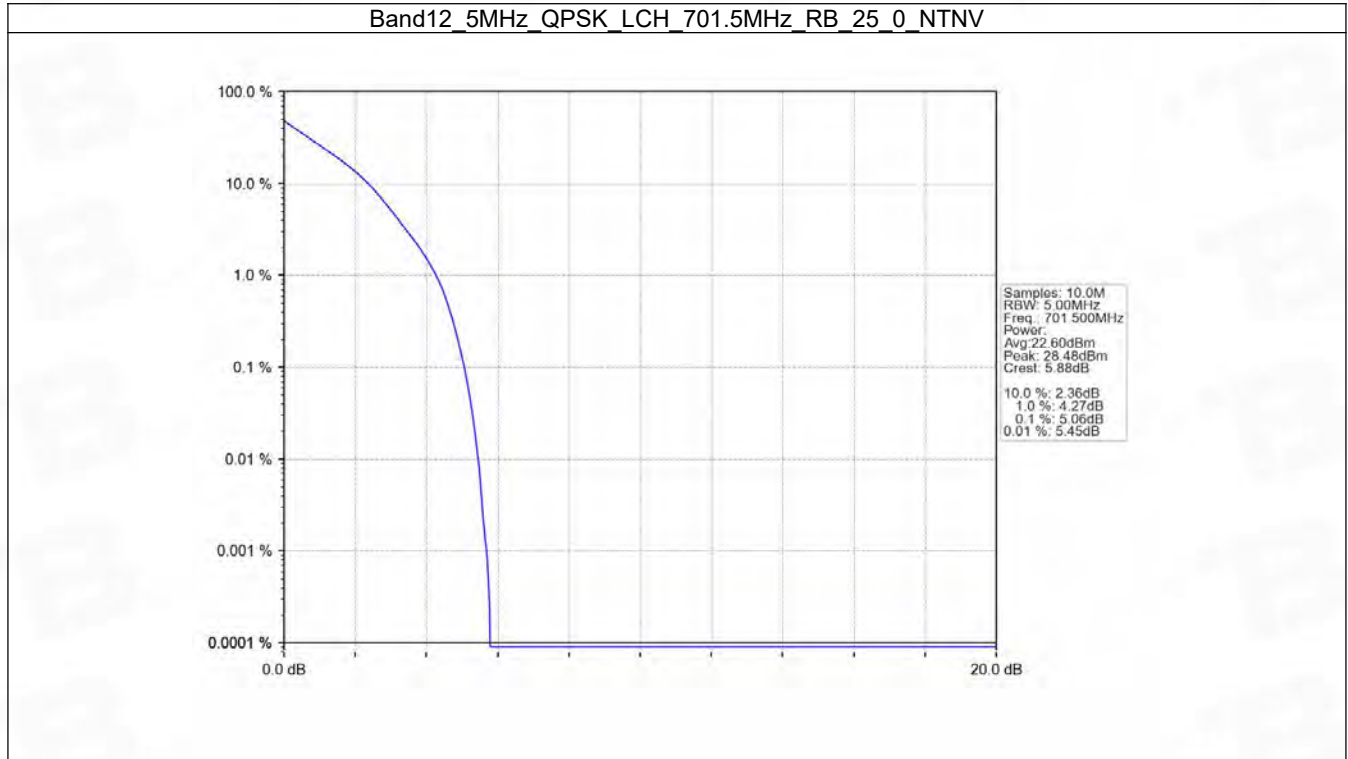


5.3 B12_5MHz

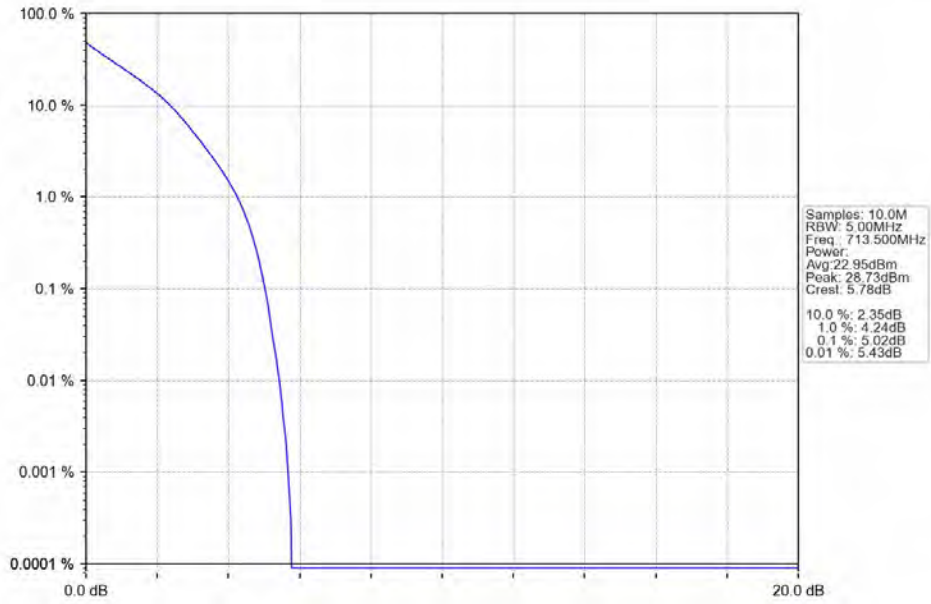
5.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	25	0	5.06	<=13	Pass
	707.5	25	0	5.15	<=13	Pass
	713.5	25	0	5.02	<=13	Pass
16QAM	701.5	25	0	5.88	<=13	Pass
	707.5	25	0	5.93	<=13	Pass
	713.5	25	0	5.82	<=13	Pass

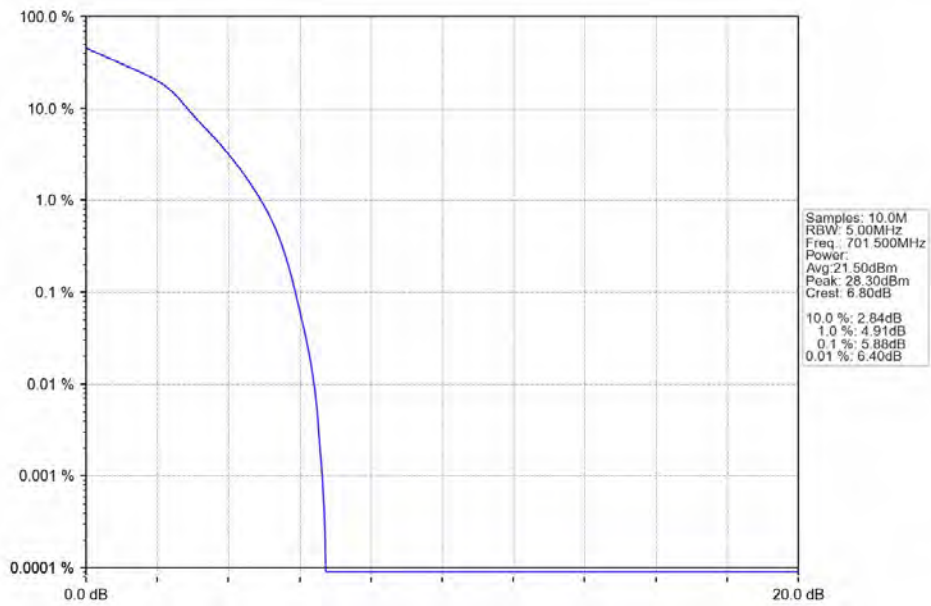
5.3.2 Test Graph



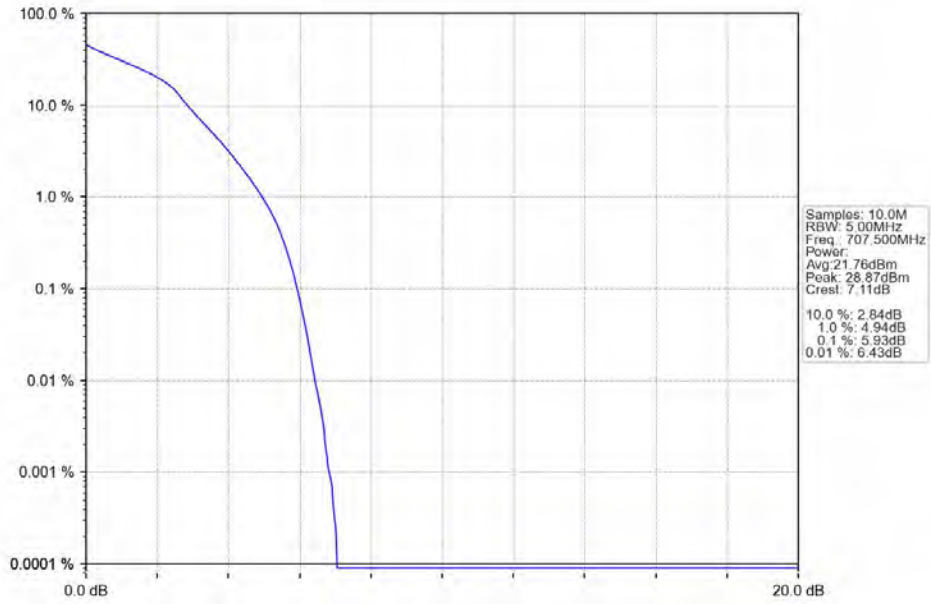
Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



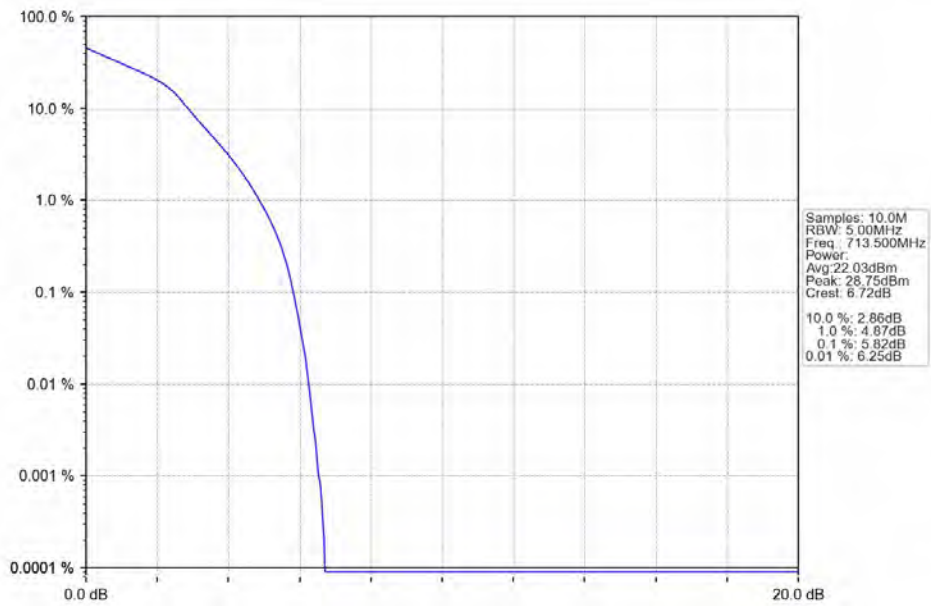
Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_MCH_707.5MHz_RB_25_0_NTNV



Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV

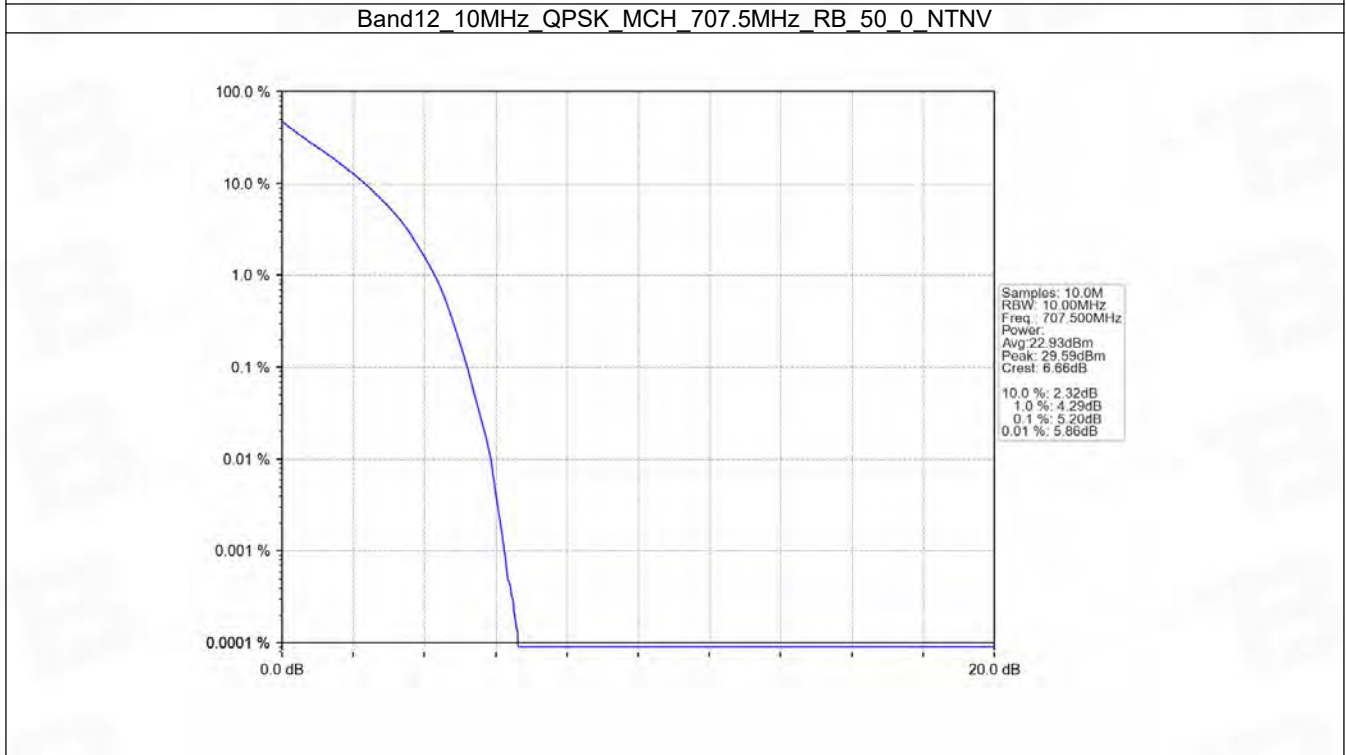
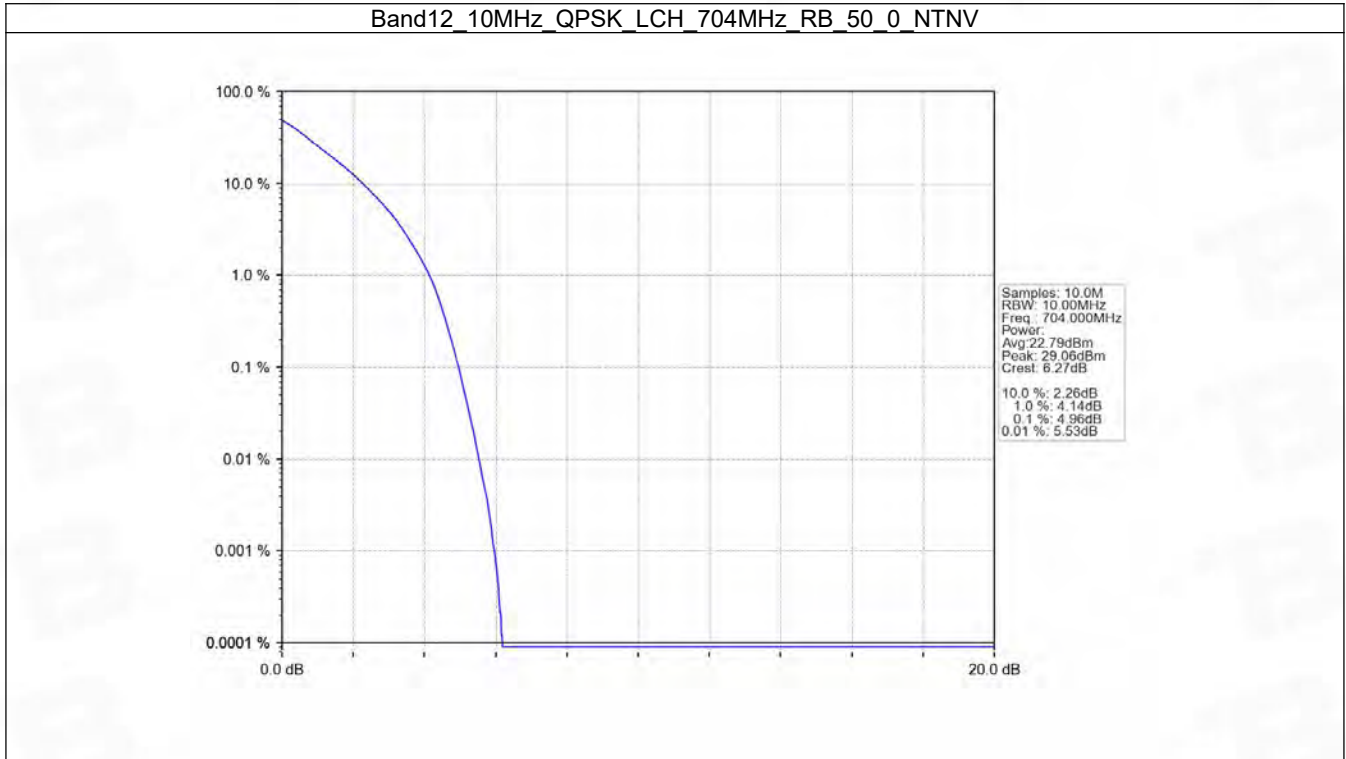


5.4 B12_10MHz

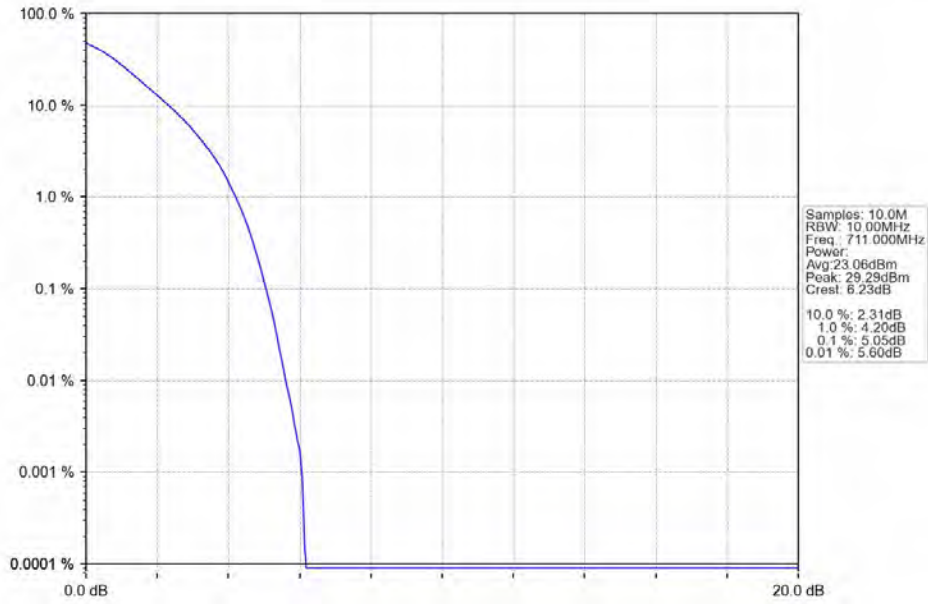
5.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	4.96	<=13	Pass
	707.5	50	0	5.20	<=13	Pass
	711	50	0	5.05	<=13	Pass
16QAM	704	27	0	5.66	<=13	Pass
	707.5	27	0	5.66	<=13	Pass
	711	27	23	5.63	<=13	Pass

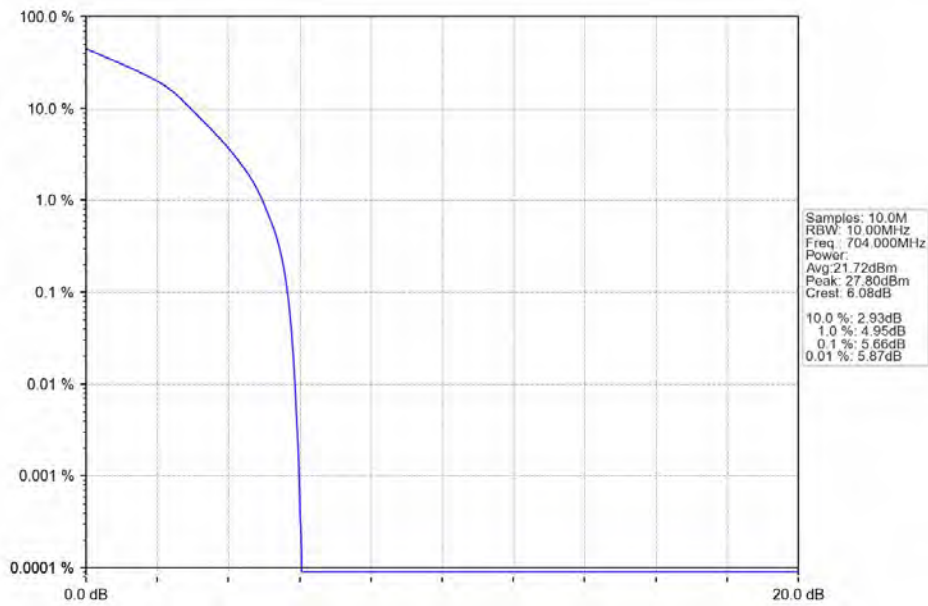
5.4.2 Test Graph



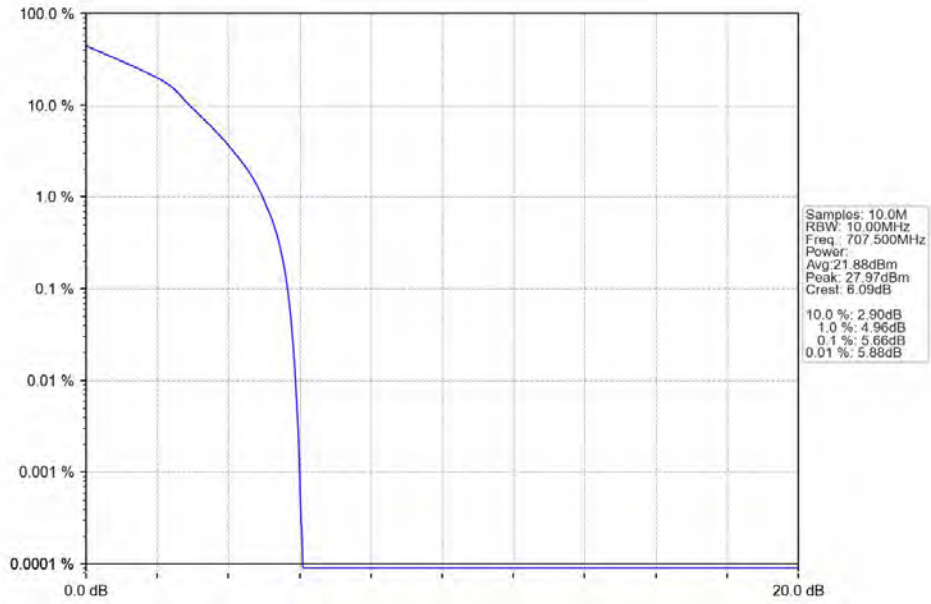
Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



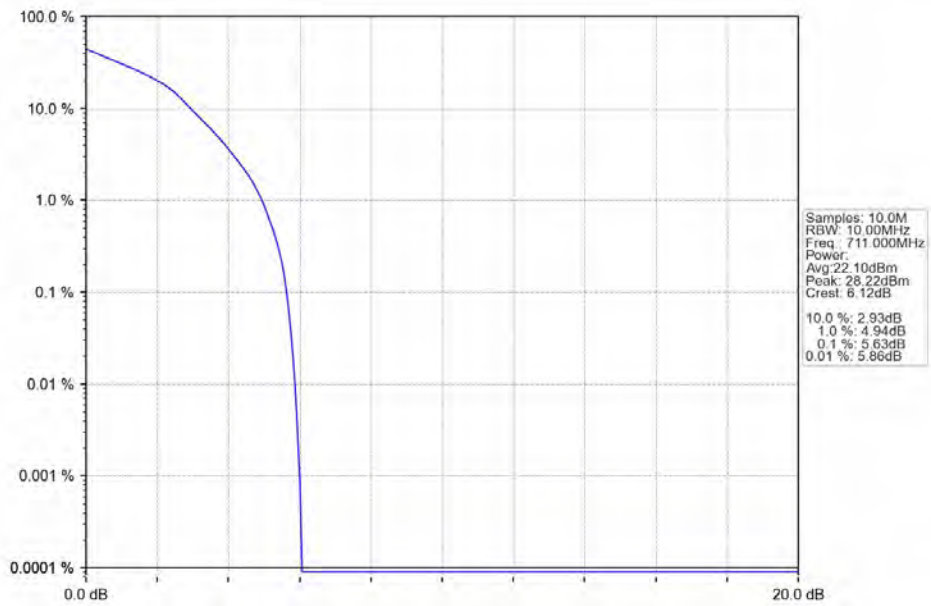
Band12_10MHz_16QAM_LCH_704MHz_RB_27_0_NTNV



Band12_10MHz_16QAM_MCH_707.5MHz_RB_27_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_27_23_NTNV



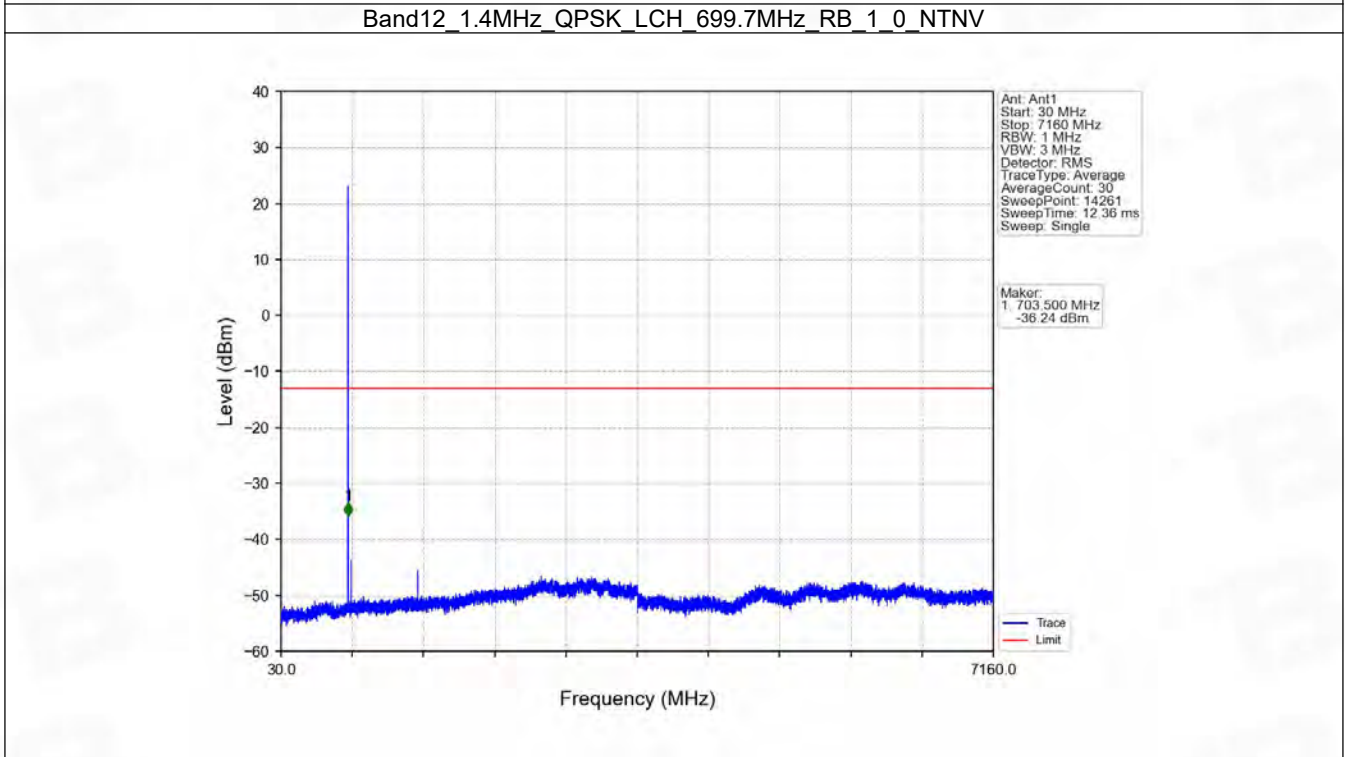
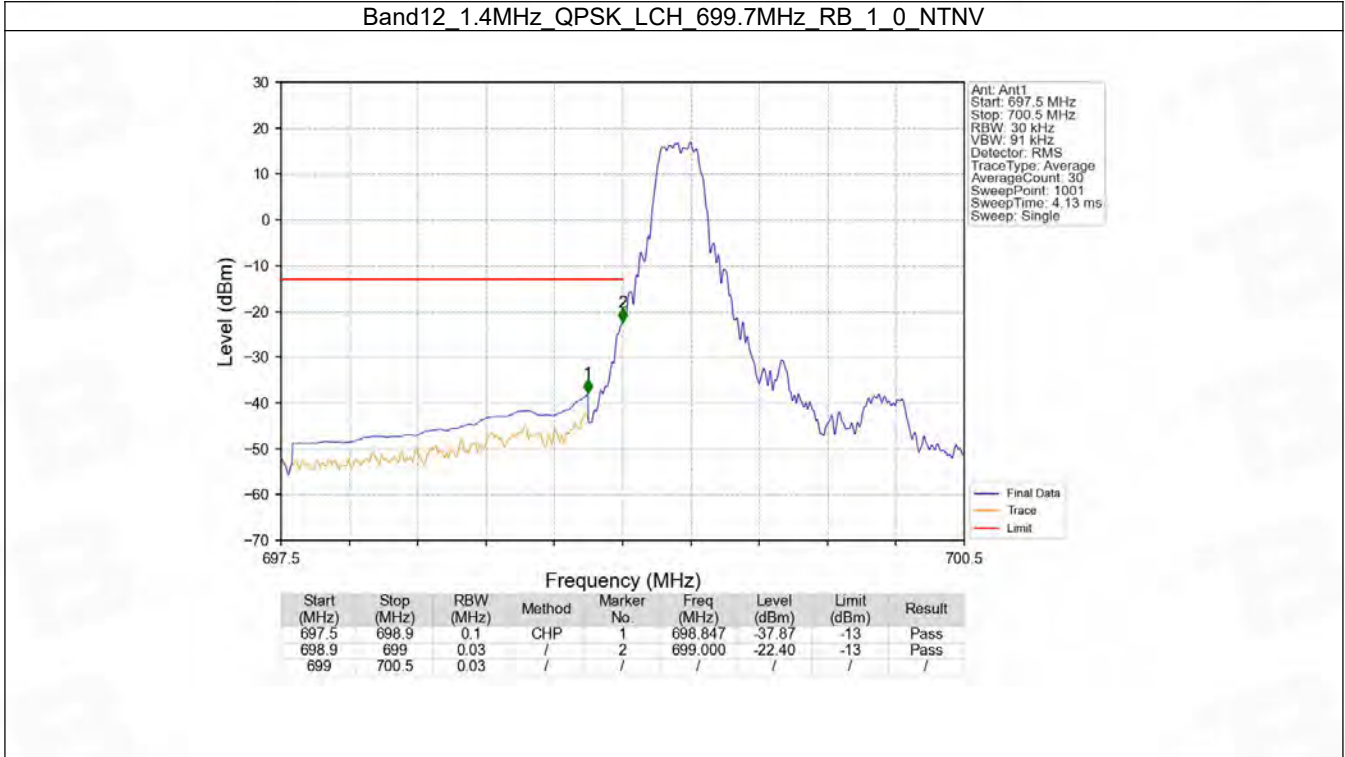
6. Spurious Emission

6.1 B12_1.4MHz

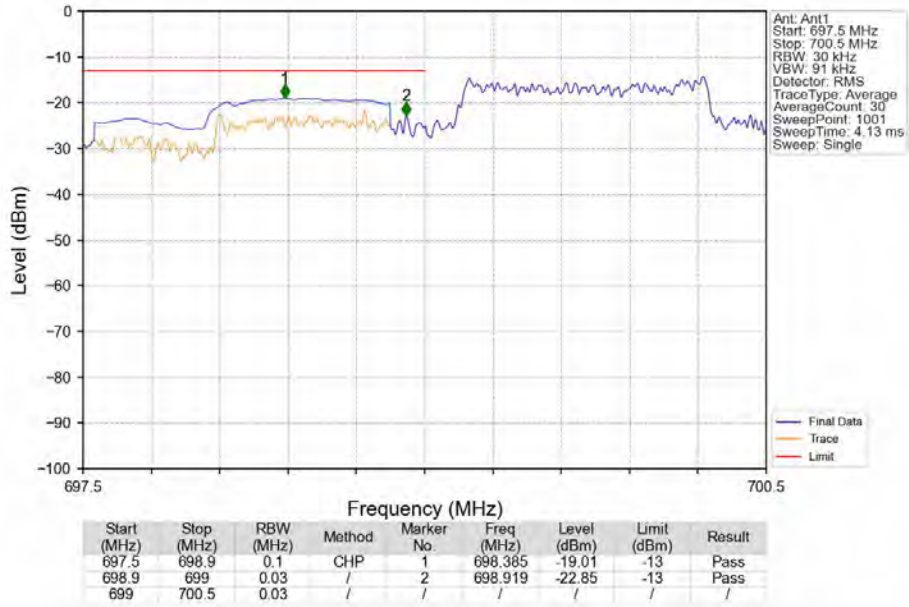
6.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz / NTVN						
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	

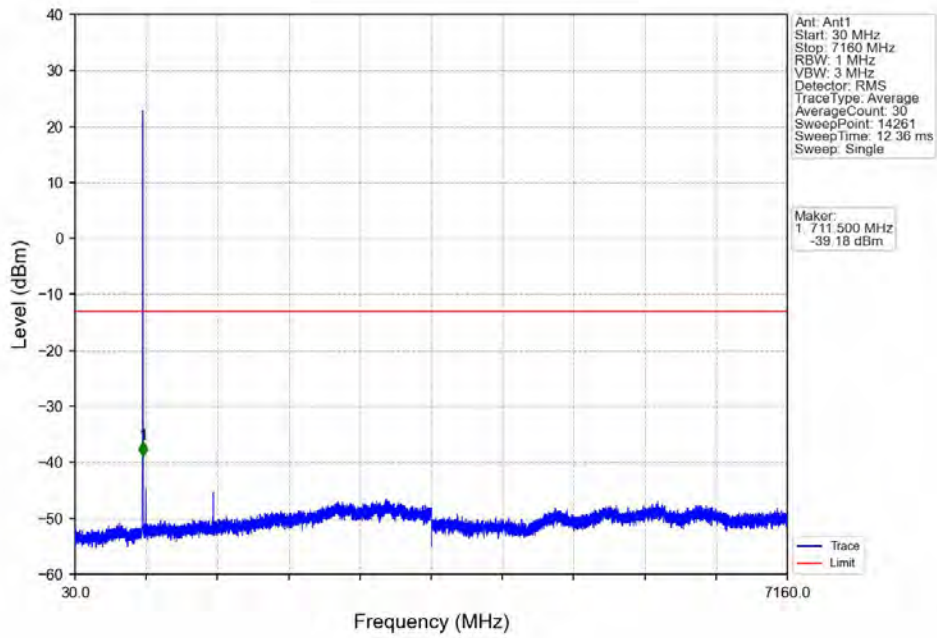
6.1.2 Test Graph



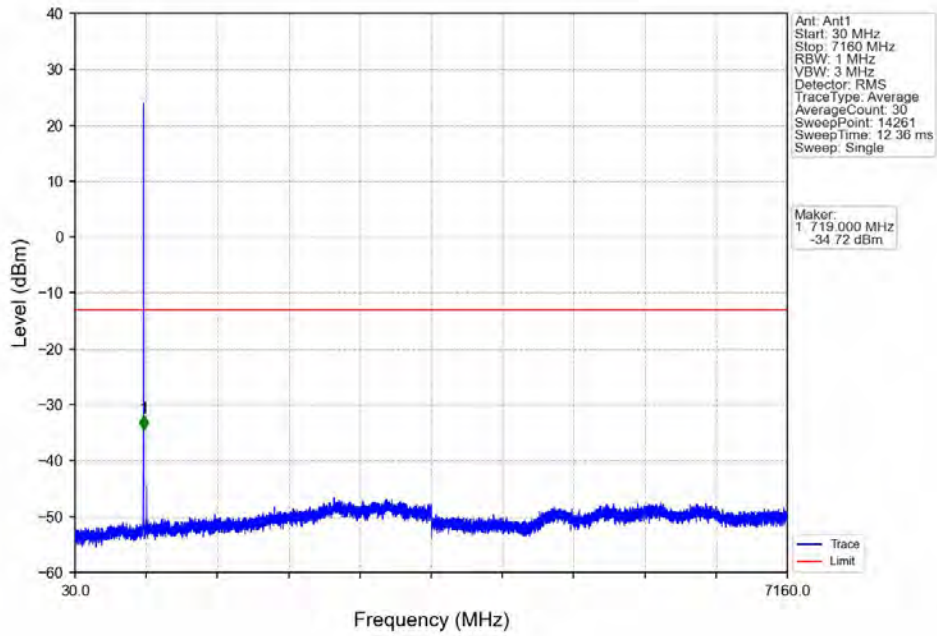
Band12_1.4MHz_QPSK_LCH_699.7MHz_RB_6_0_NTNV



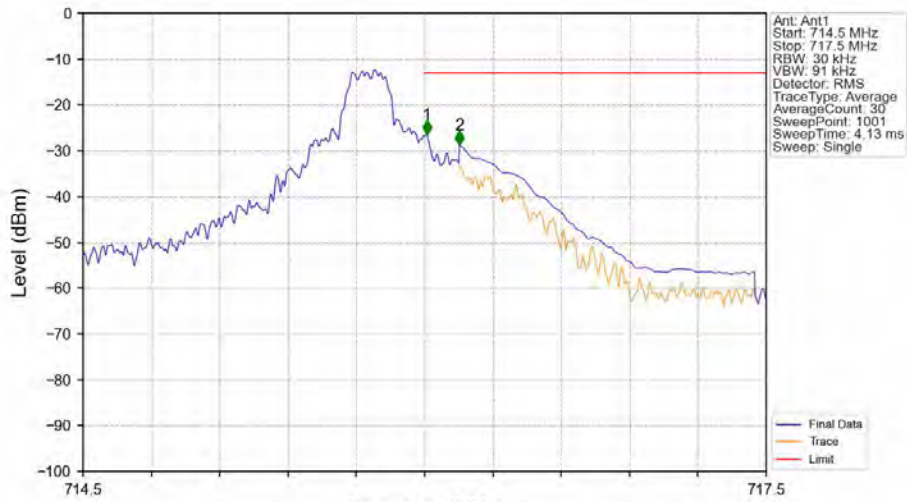
Band12_1.4MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_0_NTNV

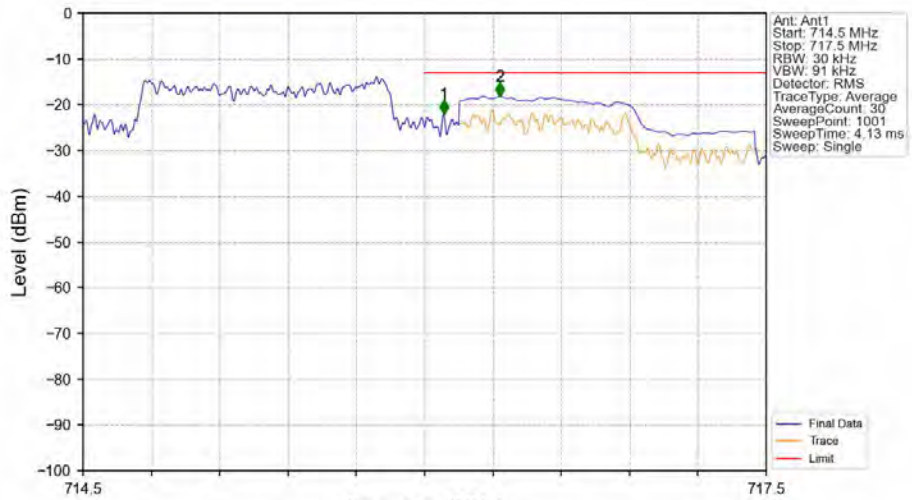


Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_1_5_NTNV



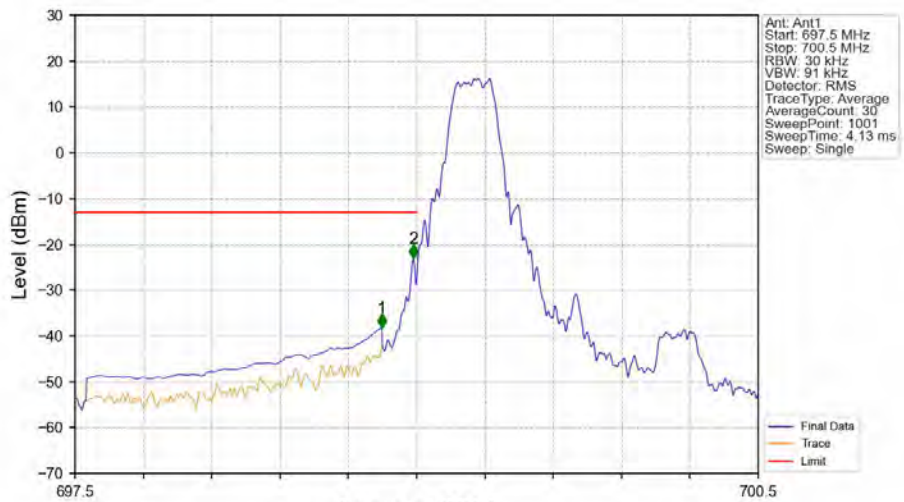
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.009	-26.45	-13	Pass
716.1	717.5	0.1	CHP	2	716.153	-28.80	-13	Pass

Band12_1.4MHz_QPSK_HCH_715.3MHz_RB_6_0_NTNV



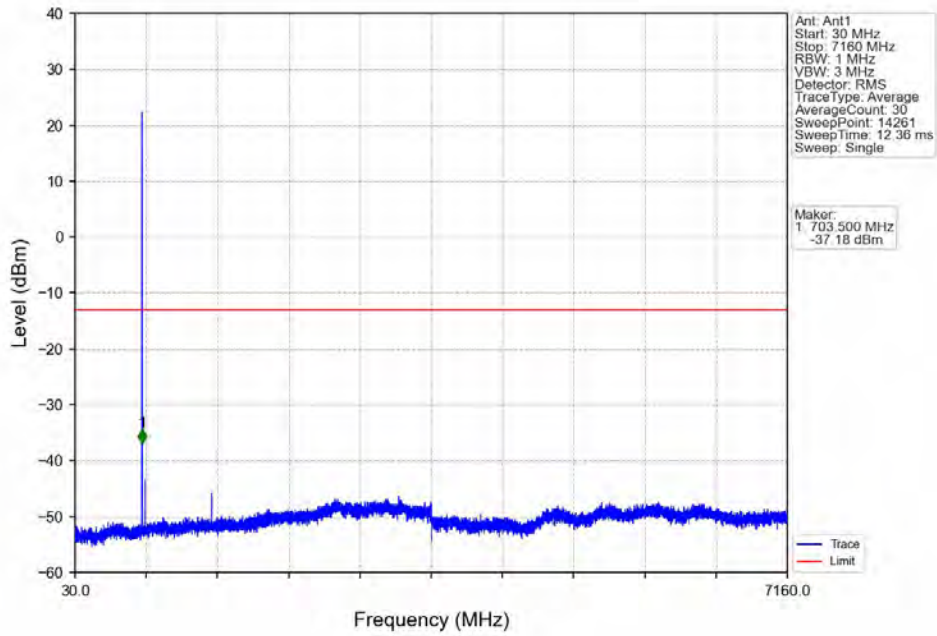
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.084	-22.05	-13	Pass
716.1	717.5	0.1	CHP	2	716.330	-18.12	-13	Pass

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

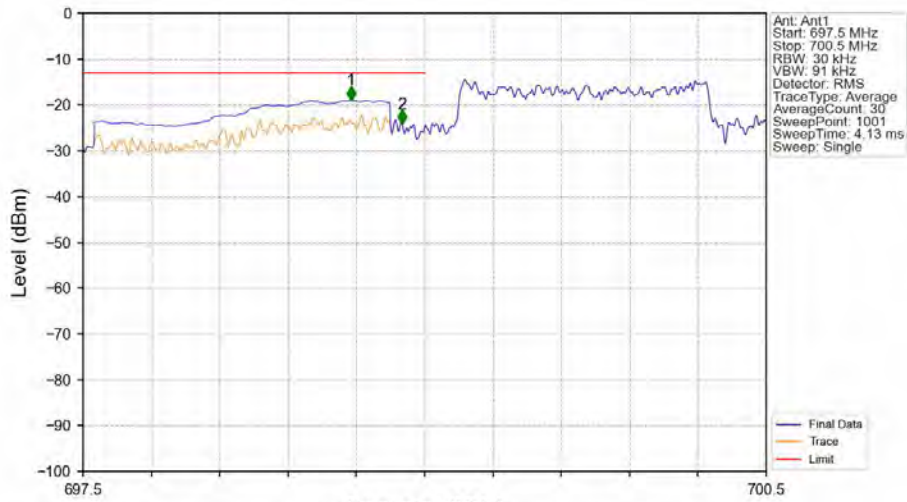


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.847	-38.21	-13	Pass
698.9	699	0.03	/	2	698.985	-23.16	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_1_0_NTNV

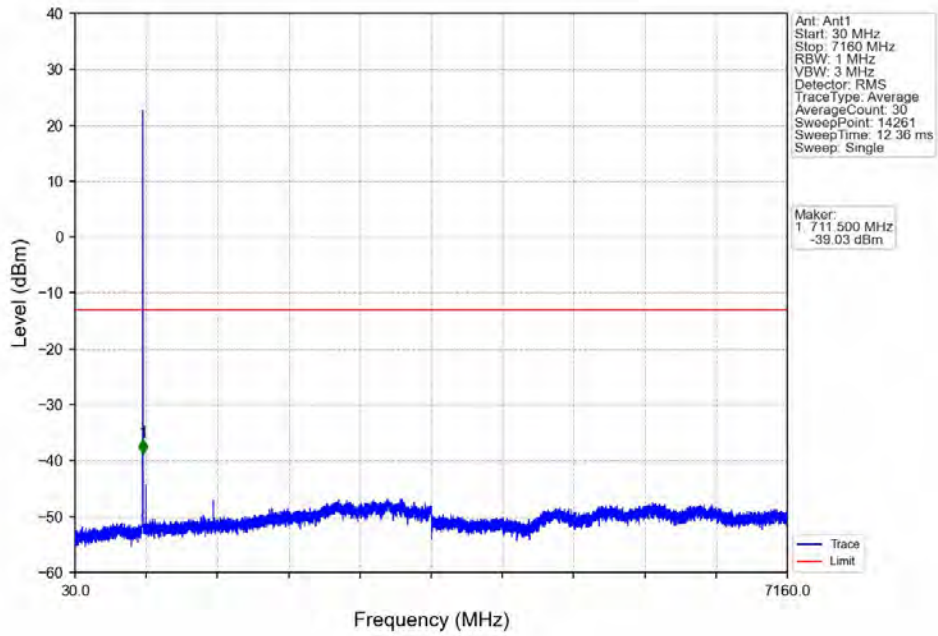


Band12_1.4MHz_16QAM_LCH_699.7MHz_RB_6_0_NTNV

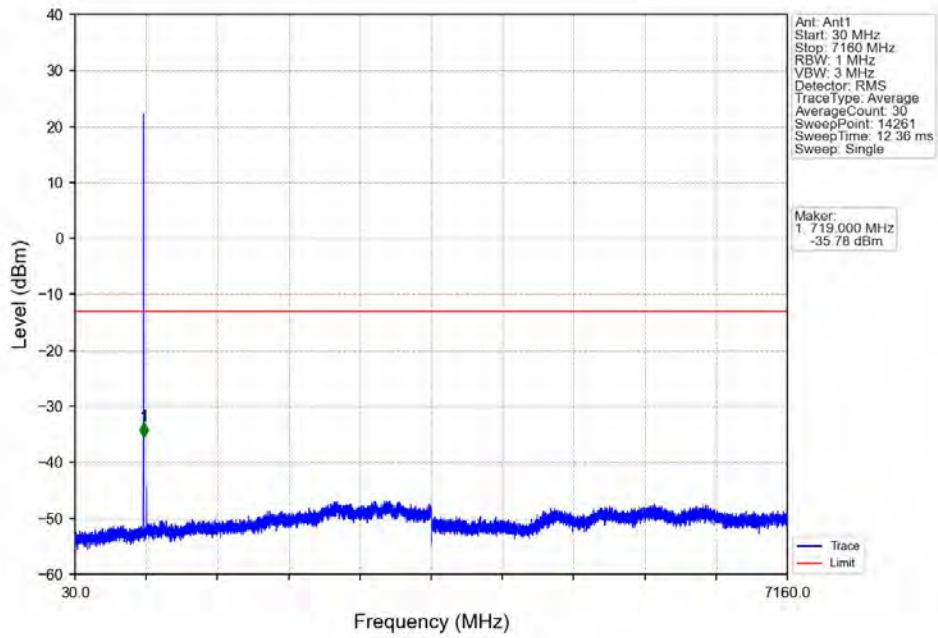


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.676	-18.96	-13	Pass
698.9	699	0.03	/	2	698.901	-24.15	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

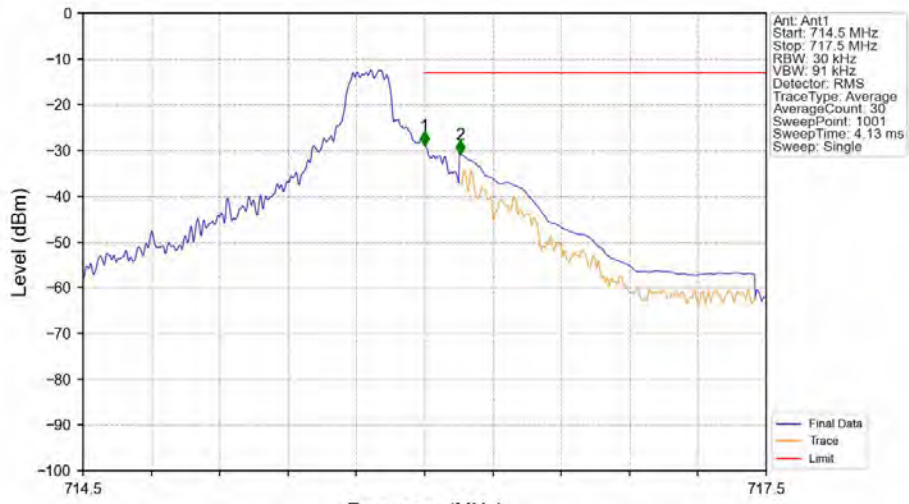
Band12 1.4MHz 16QAM MCH 707.5MHz RB 1 0 NTNV



Band12 1.4MHz 16QAM HCH 715.3MHz RB 1 0 NTNV

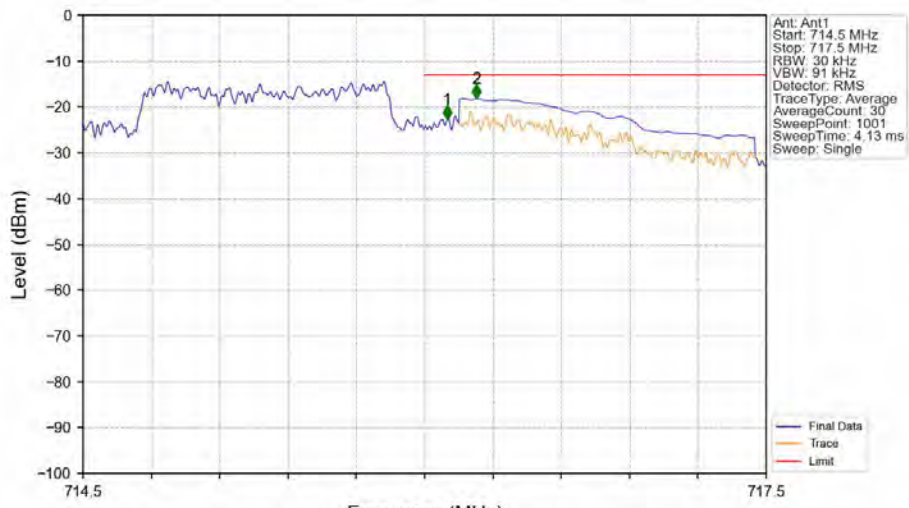


Band12 1.4MHz 16QAM HCH 715.3MHz RB 1 5 NTN



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	1	716.000	-28.88	-13	Pass
716	716.1	0.03	/	1	716.000	-28.88	-13	Pass
716.1	717.5	0.1	CHP	2	716.156	-30.84	-13	Pass

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



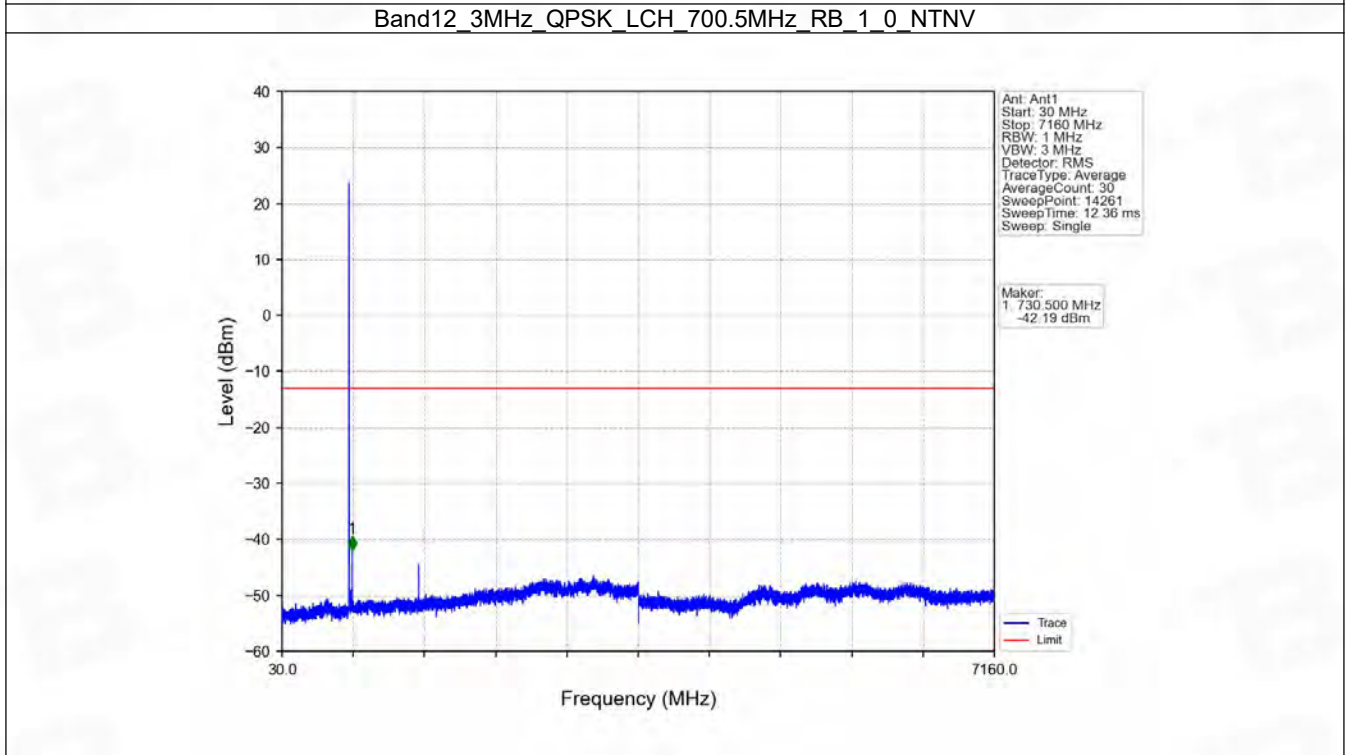
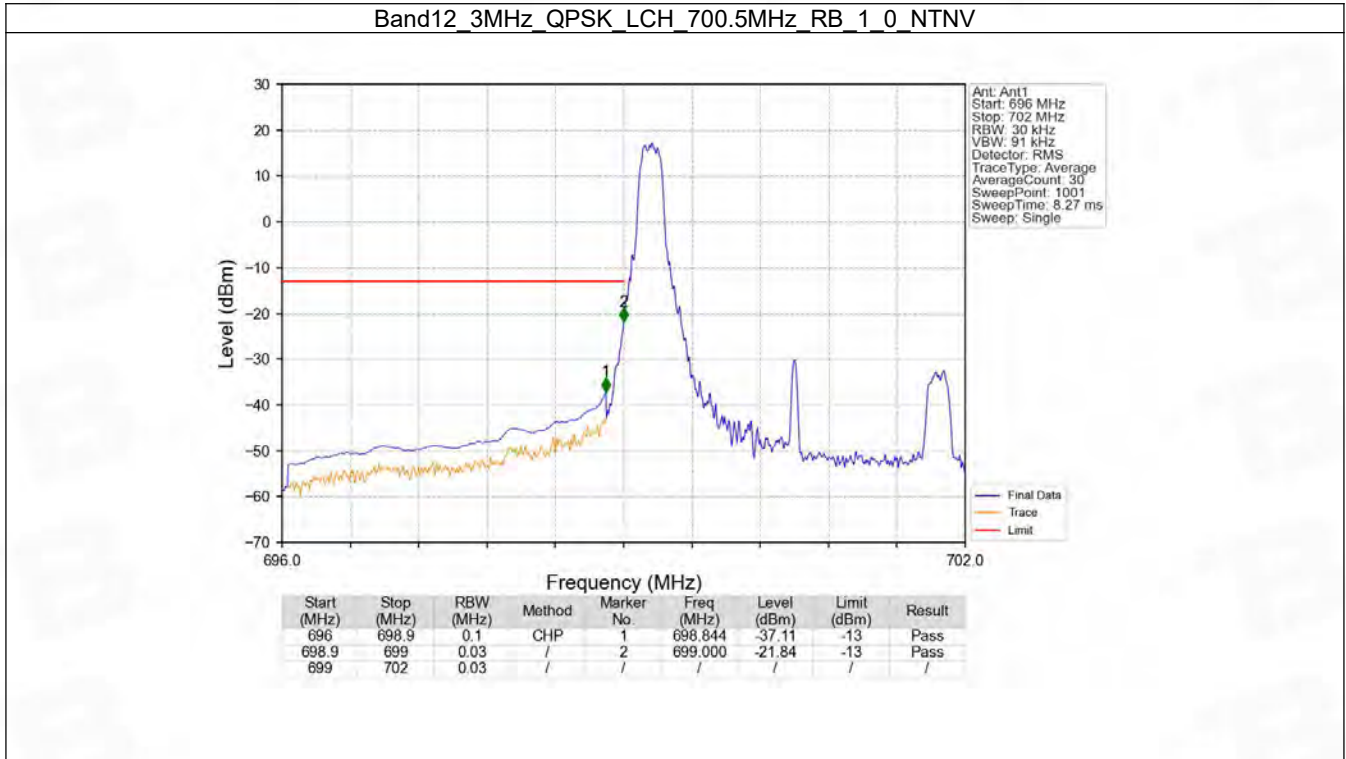
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	1	716.099	-22.71	-13	Pass
716	716.1	0.03	/	1	716.099	-22.71	-13	Pass
716.1	717.5	0.1	CHP	2	716.228	-18.19	-13	Pass

6.2 B12_3MHz

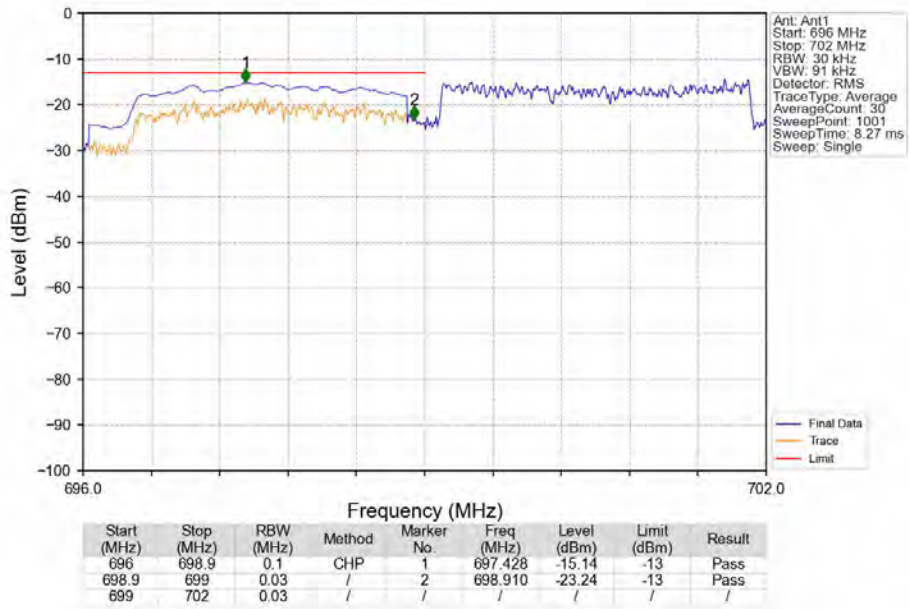
6.2.1 Test Result

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	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
16QAM	700.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	714.5	1	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

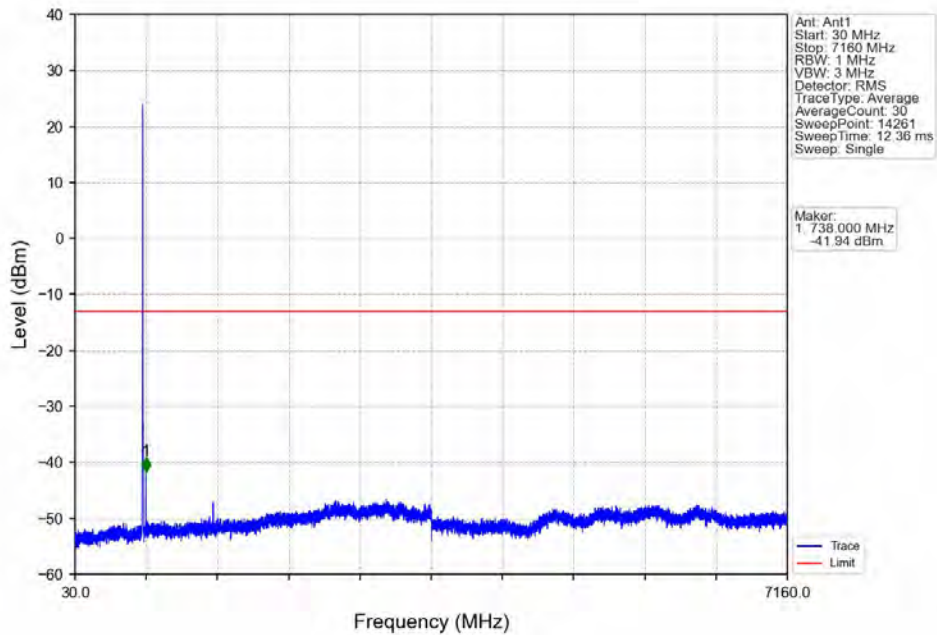
6.2.2 Test Graph



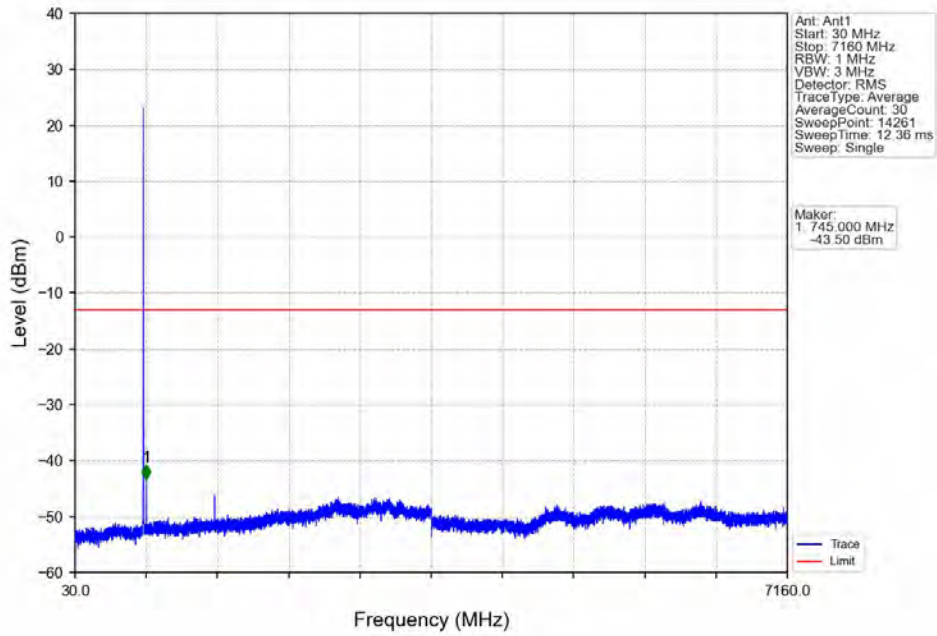
Band12_3MHz_QPSK_LCH_700.5MHz_RB_15_0_NTNV



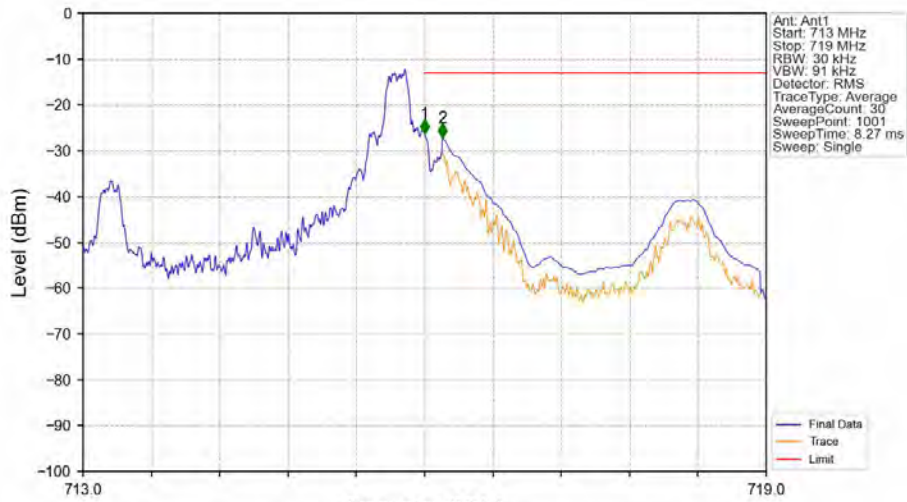
Band12_3MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_0_NTNV

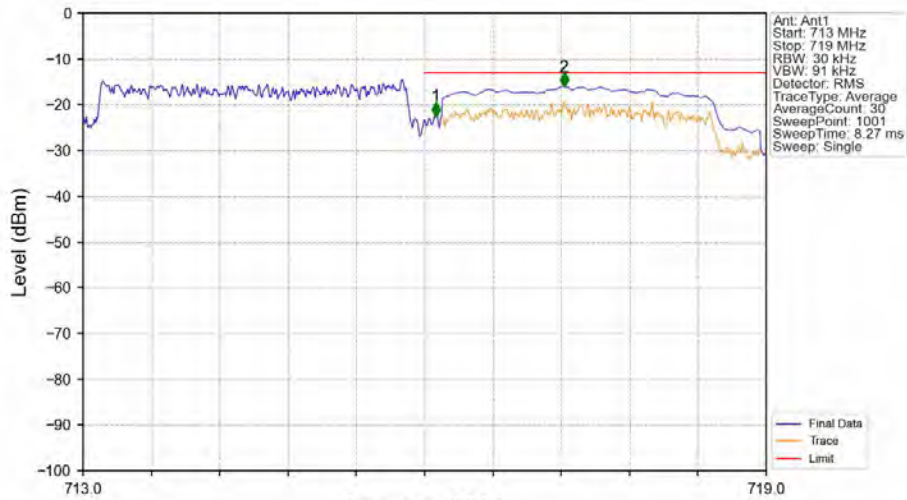


Band12_3MHz_QPSK_HCH_714.5MHz_RB_1_14_NTNV



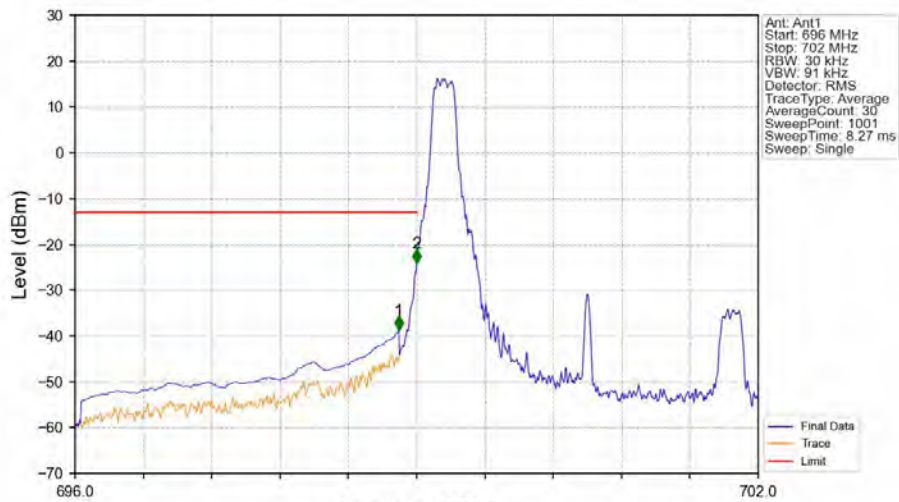
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.000	-26.32	-13	Pass
716.1	719	0.1	CHP	2	716.156	-27.11	-13	Pass

Band12_3MHz_QPSK_HCH_714.5MHz_RB_15_0_NTNV



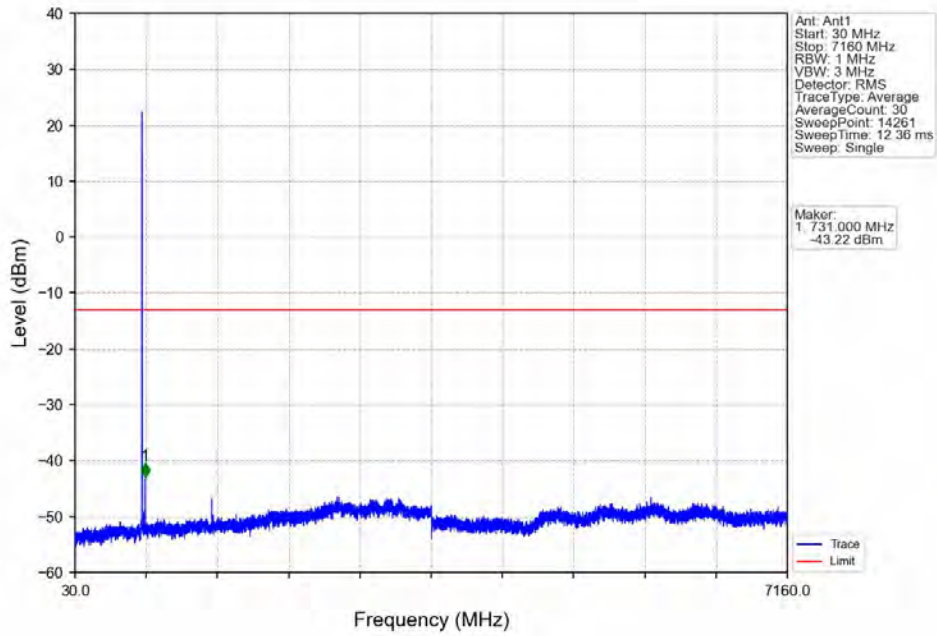
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	1	716.096	-22.49	-13	Pass
716.1	719	0.1	CHP	2	717.224	-16.03	-13	Pass

Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

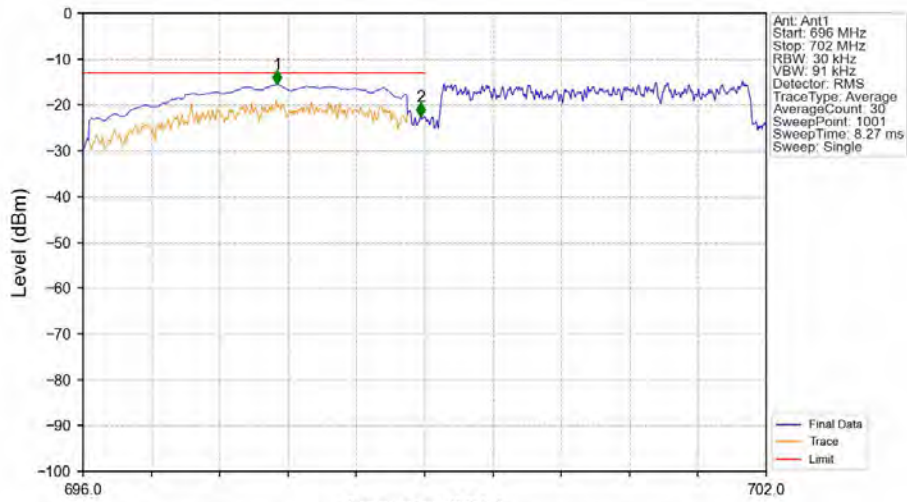


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-38.81	-13	Pass
698.9	699	0.03	/	2	699.000	-24.11	-13	Pass
699	702	0.03	/	/	/	/	/	/

Band12_3MHz_16QAM_LCH_700.5MHz_RB_1_0_NTNV

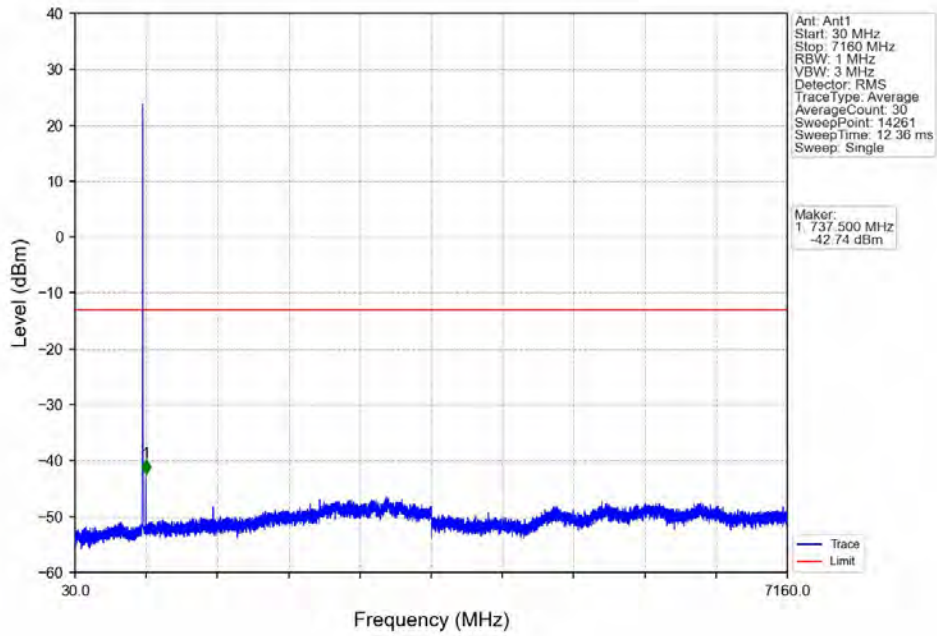


Band12_3MHz_16QAM_LCH_700.5MHz_RB_15_0_NTNV

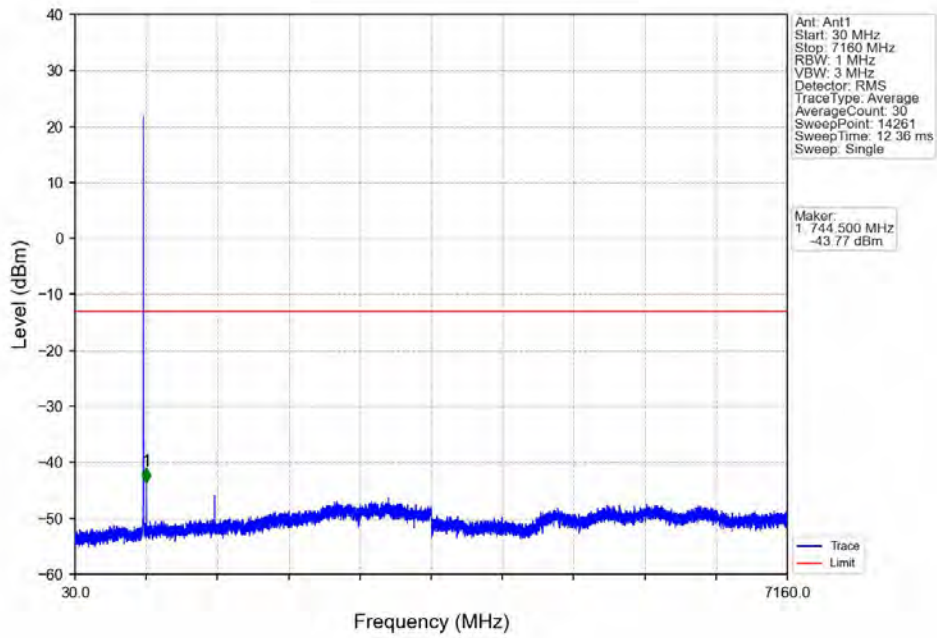


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	697.704	-15.57	-13	Pass
698.9	699	0.03	/	2	698.964	-22.52	-13	Pass
699	702	0.03	/	/	/	/	/	/

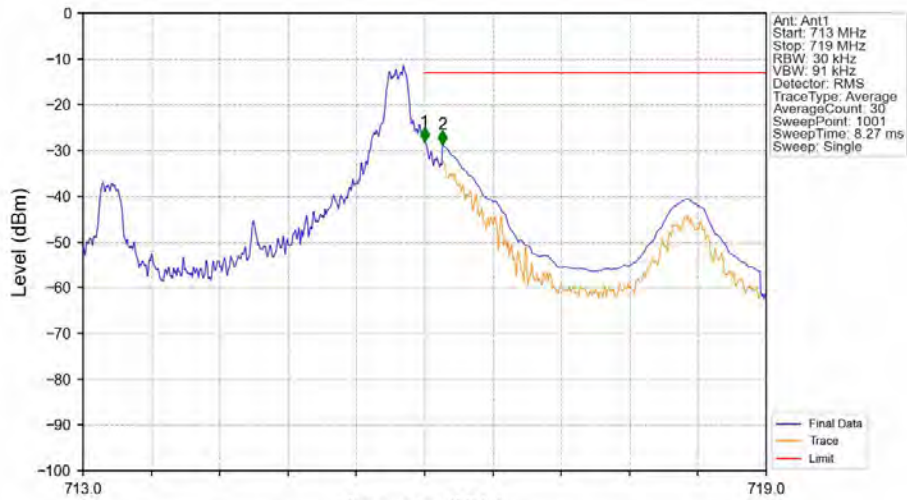
Band12_3MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_0_NTNV

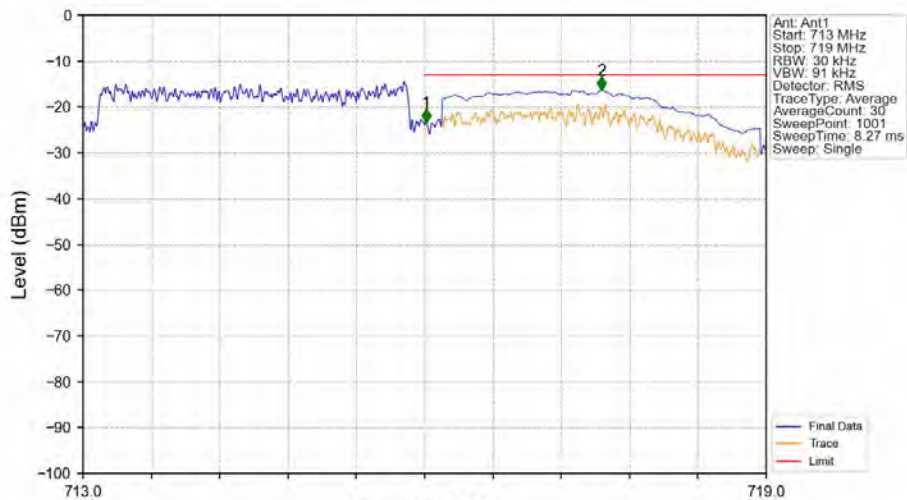


Band12_3MHz_16QAM_HCH_714.5MHz_RB_1_14_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	1	716.000	-28.09	-13	Pass
716.1	719	0.1	CHP	2	716.156	-28.67	-13	Pass

Band12_3MHz_16QAM_HCH_714.5MHz_RB_15_0_NTNV



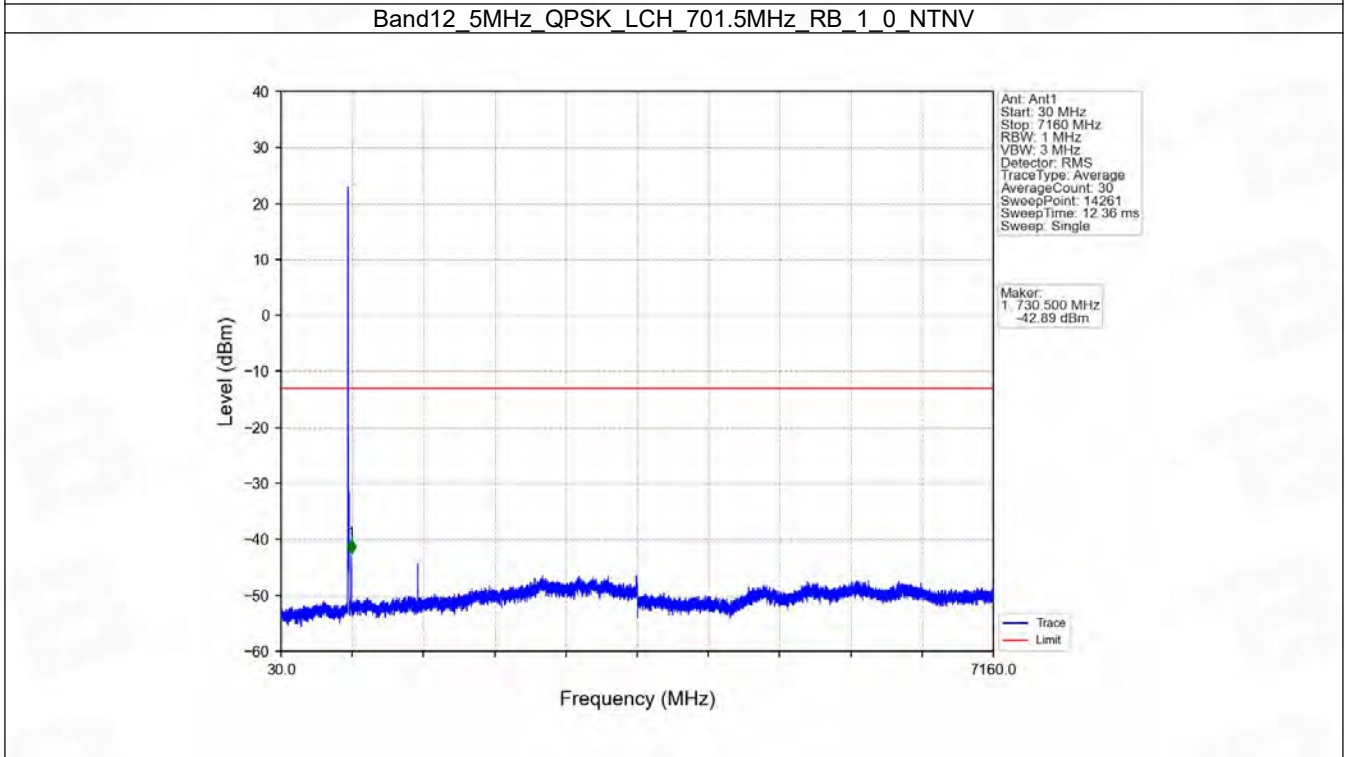
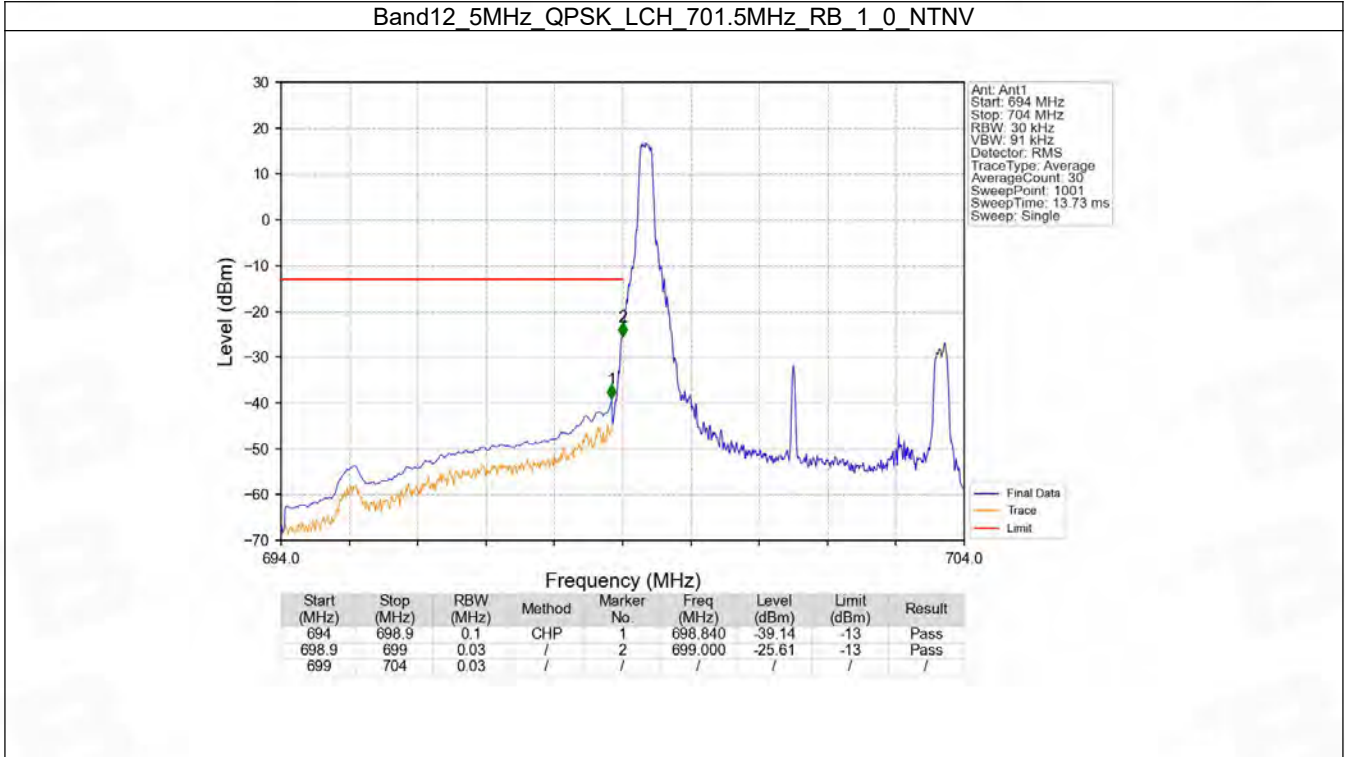
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	1	716.012	-23.41	-13	Pass
716.1	719	0.1	CHP	2	717.554	-16.36	-13	Pass

6.3 B12_5MHz

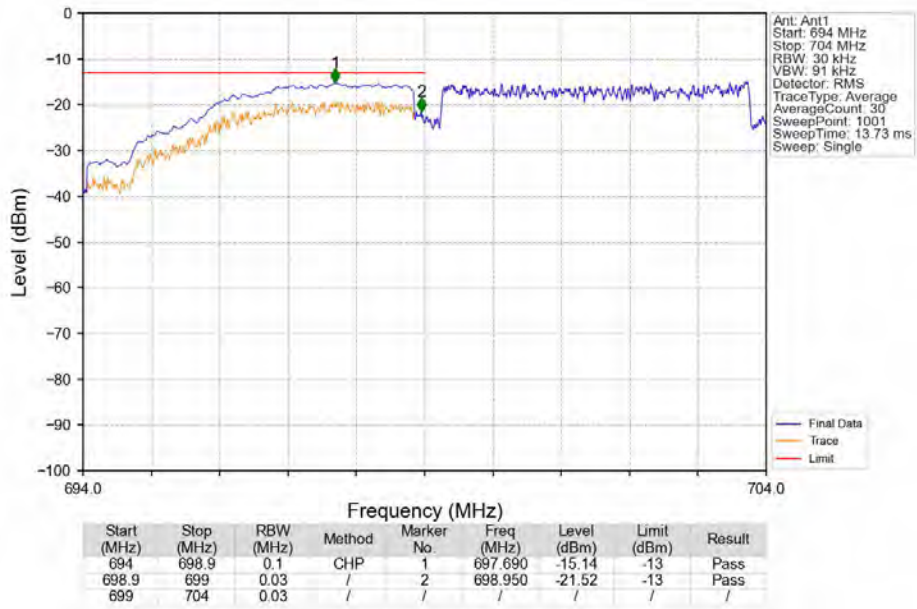
6.3.1 Test Result

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

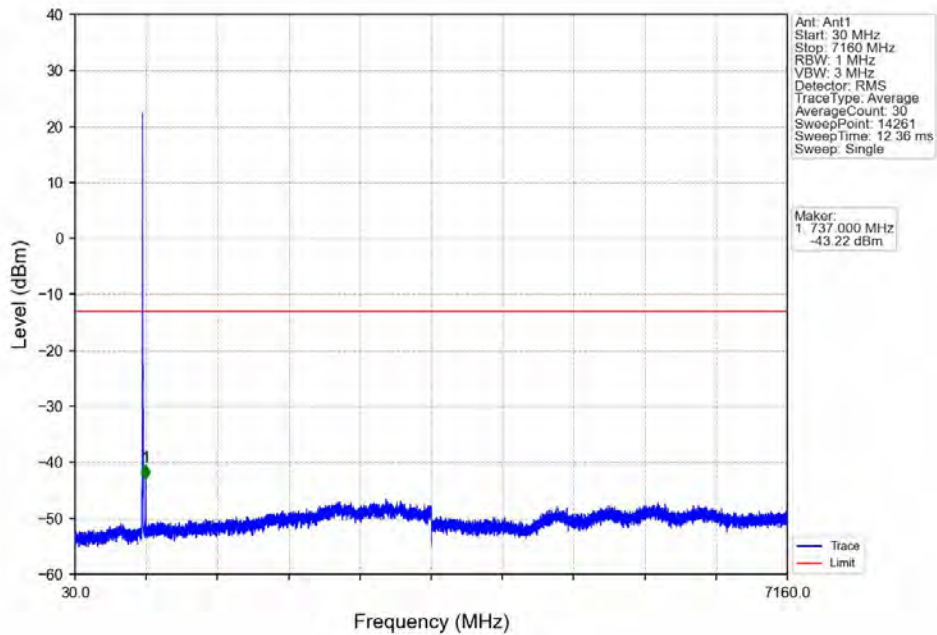
6.3.2 Test Graph



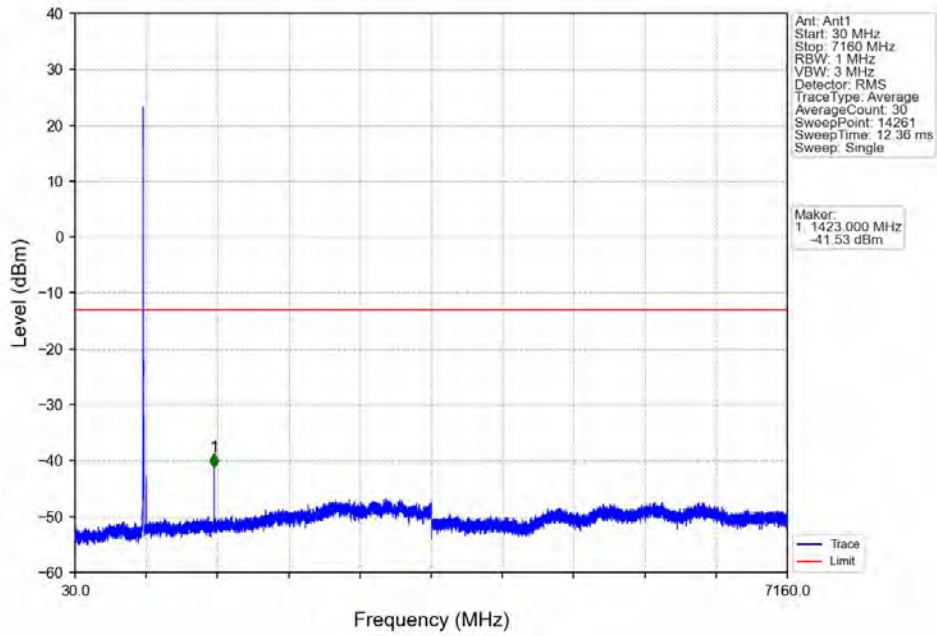
Band12_5MHz_QPSK_LCH_701.5MHz_RB_25_0_NTNV



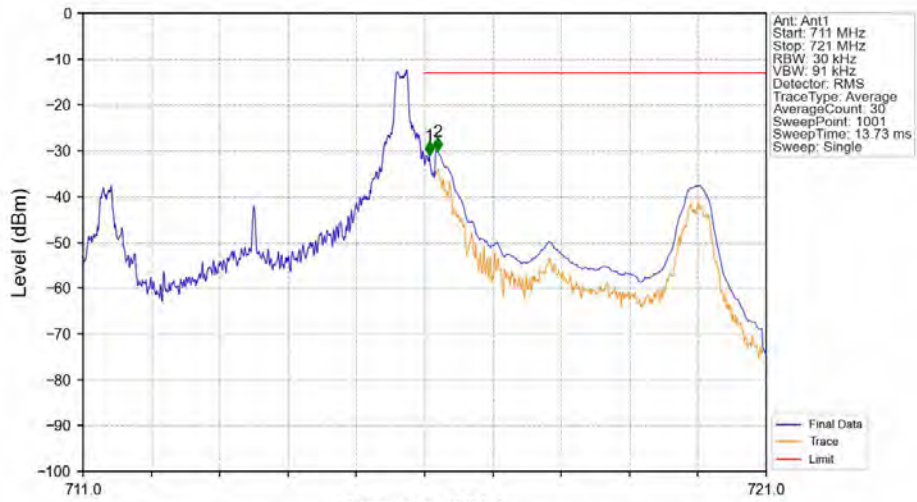
Band12_5MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_0_NTNV

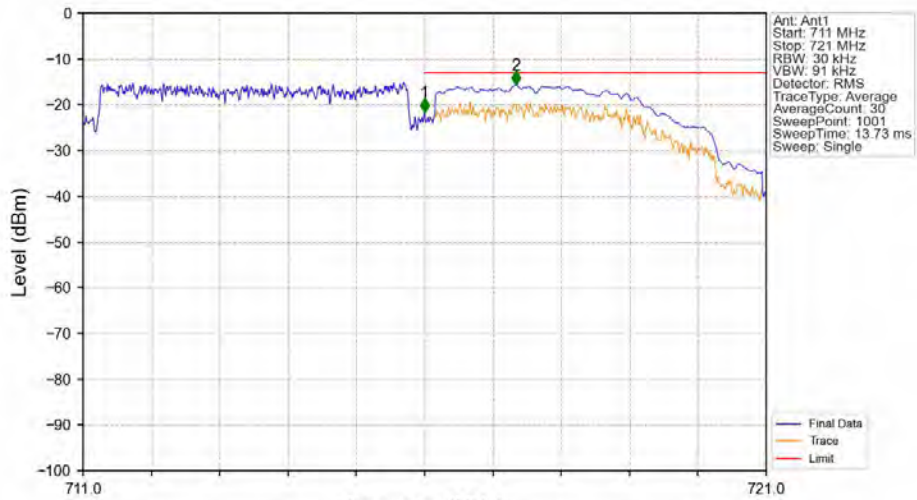


Band12_5MHz_QPSK_HCH_713.5MHz_RB_1_24_NTNV



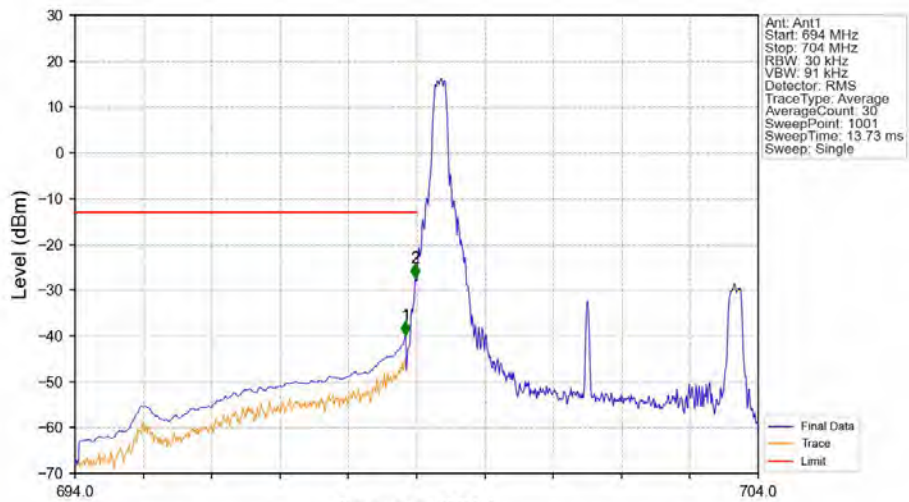
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	1	716.070	-31.01	-13	Pass
716.1	721	0.1	CHP	2	716.190	-30.13	-13	Pass

Band12_5MHz_QPSK_HCH_713.5MHz_RB_25_0_NTNV



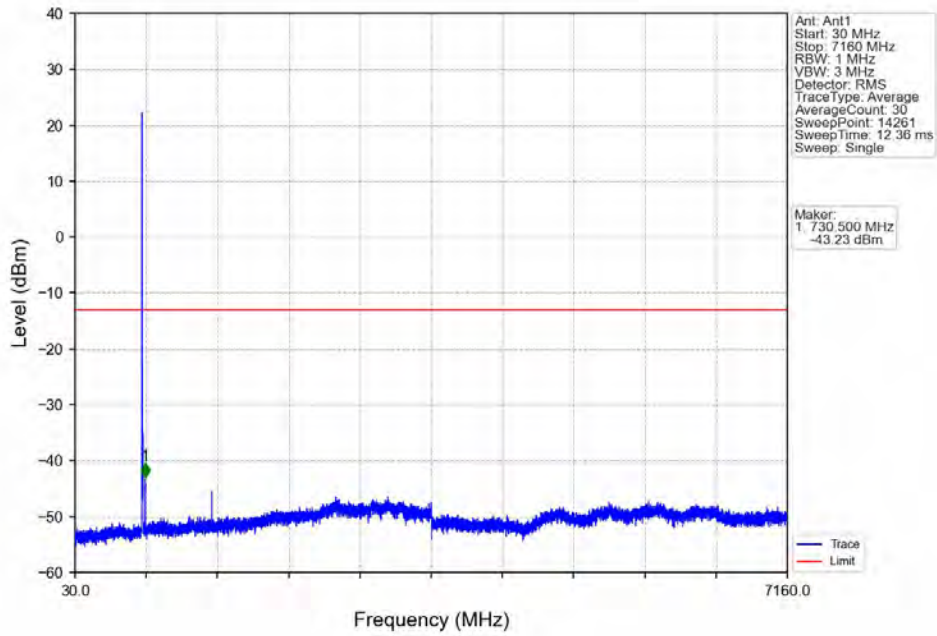
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	1	716.000	-21.72	-13	Pass
716.1	721	0.1	CHP	2	717.340	-15.74	-13	Pass

Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

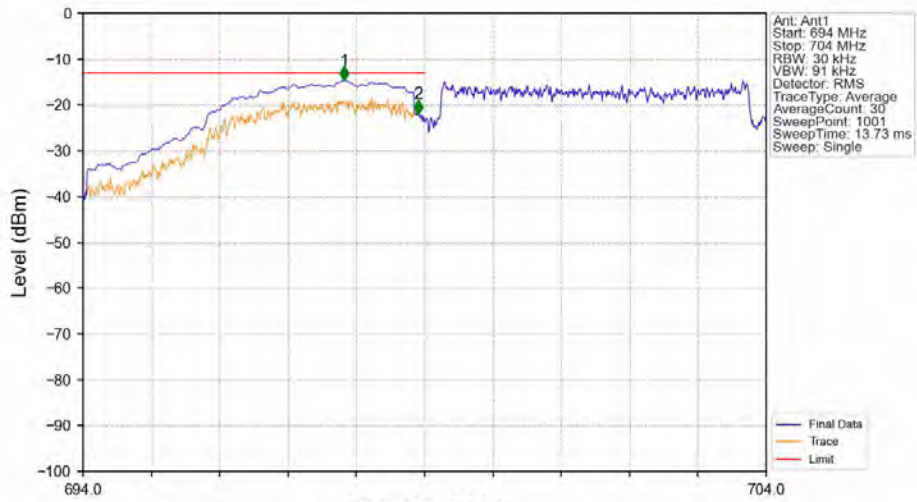


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.840	-39.81	-13	Pass
698.9	699	0.03	/	2	698.980	-27.38	-13	Pass
699	704	0.03	/	/	/	/	/	/

Band12_5MHz_16QAM_LCH_701.5MHz_RB_1_0_NTNV

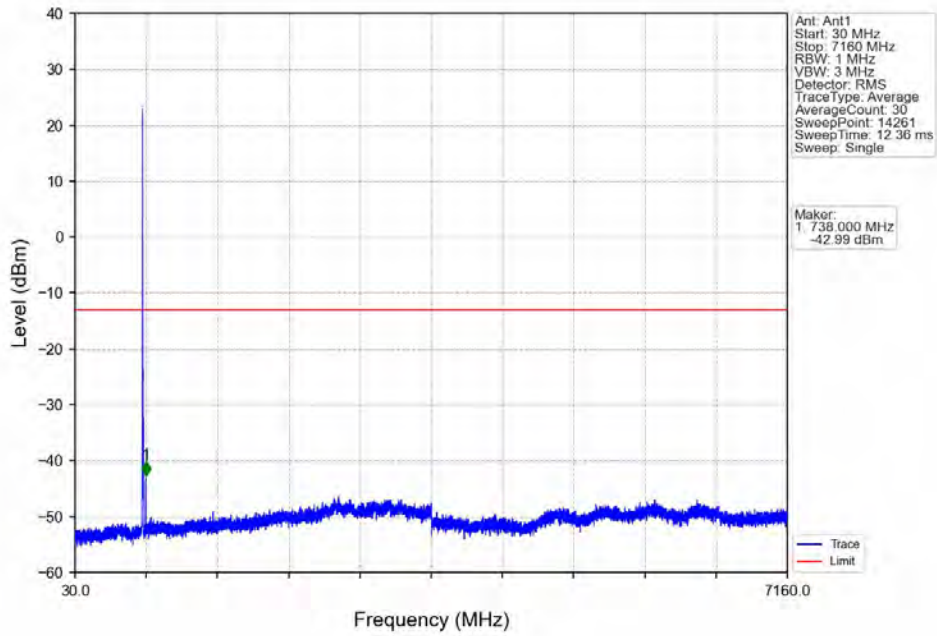


Band12_5MHz_16QAM_LCH_701.5MHz_RB_25_0_NTNV

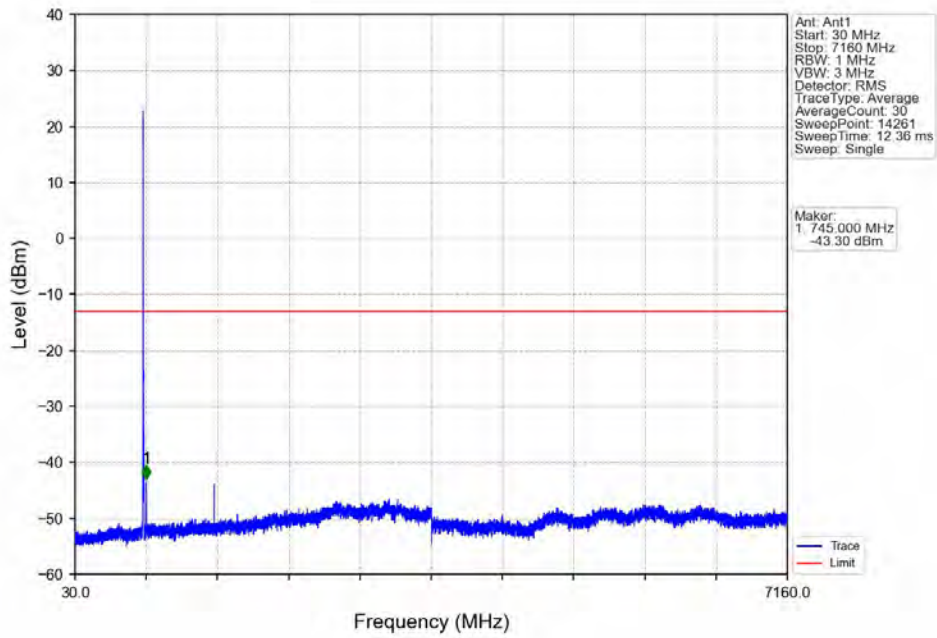


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	697.820	-14.62	-13	Pass
698.9	699	0.03	/	2	698.910	-21.95	-13	Pass
699	704	0.03	/	/	/	/	/	/

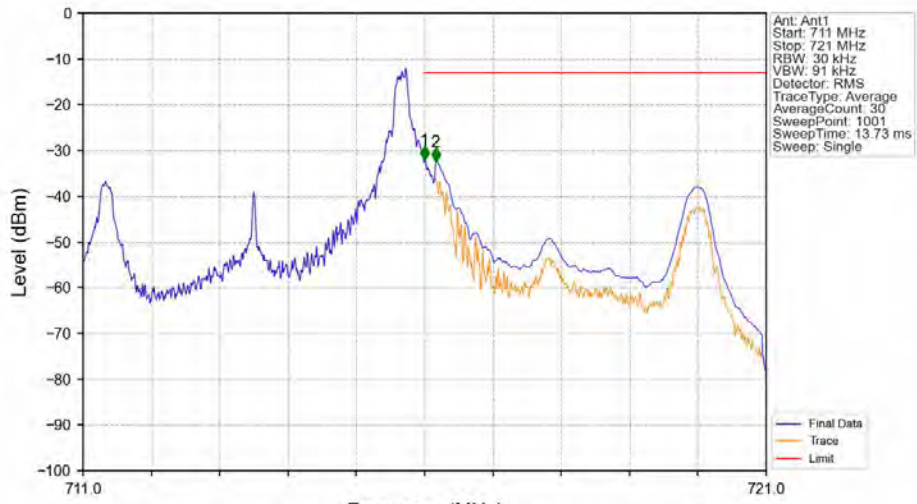
Band12_5MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_0_NTNV

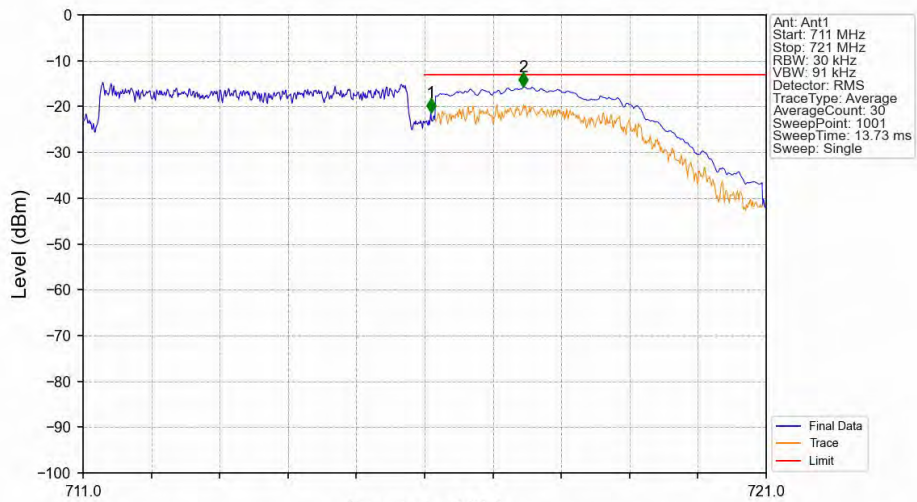


Band12_5MHz_16QAM_HCH_713.5MHz_RB_1_24_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	1	716.000	-32.09	-13	Pass
716.1	721	0.1	CHP	2	716.160	-32.40	-13	Pass

Band12_5MHz_16QAM_HCH_713.5MHz_RB_25_0_NTNV



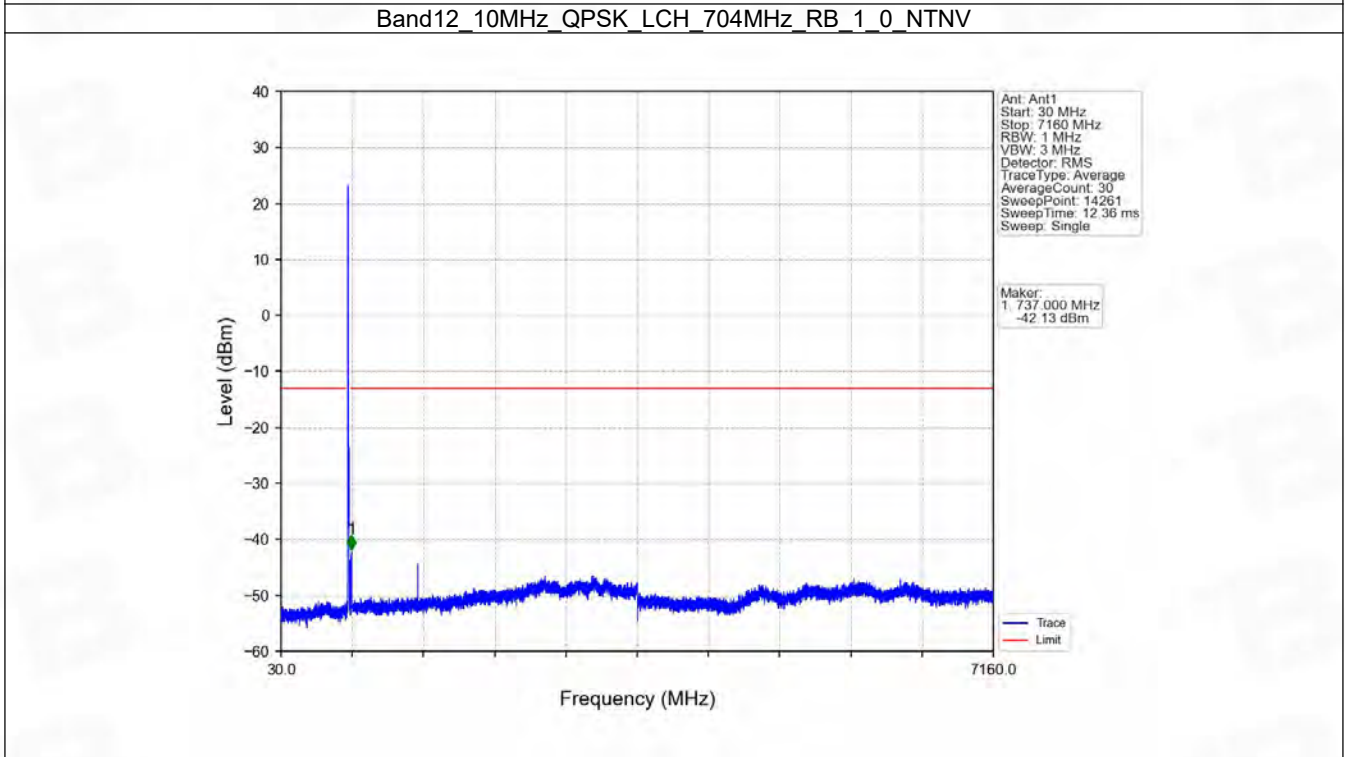
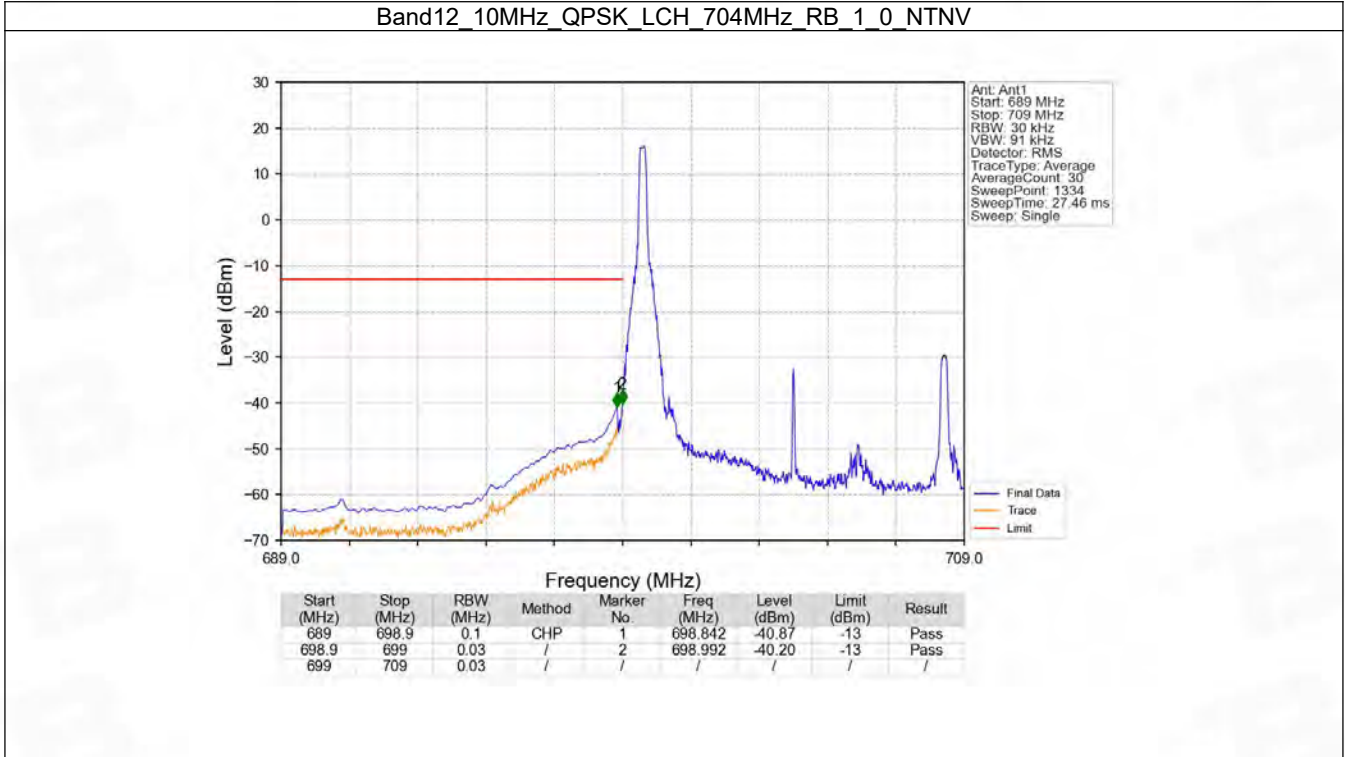
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	1	716.090	-21.41	-13	Pass
716.1	721	0.1	CHP	2	717.440	-15.76	-13	Pass

6.4 B12_10MHz

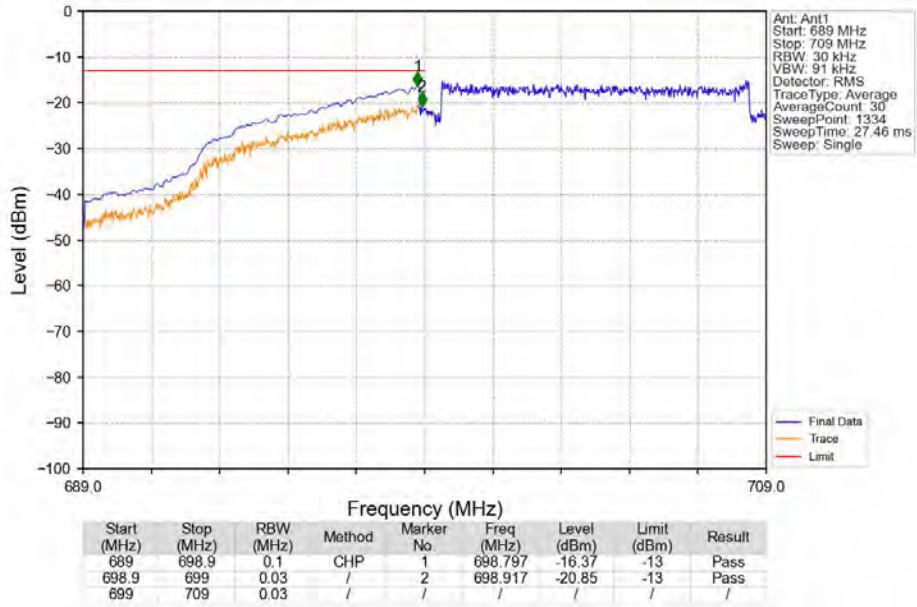
6.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	704	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
		1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
16QAM	704	1	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
		1	49	Refer To Test Graph		Pass

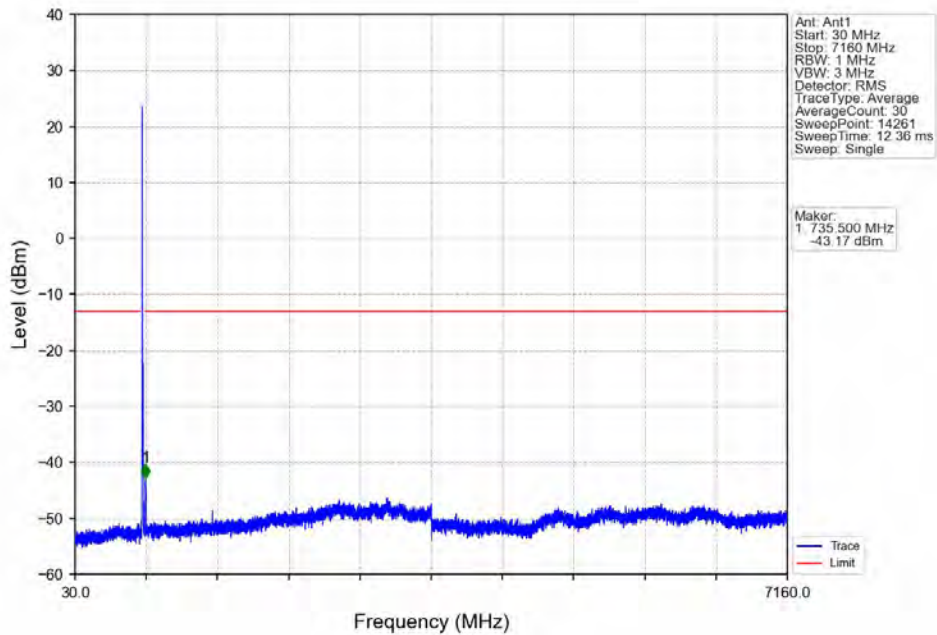
6.4.2 Test Graph



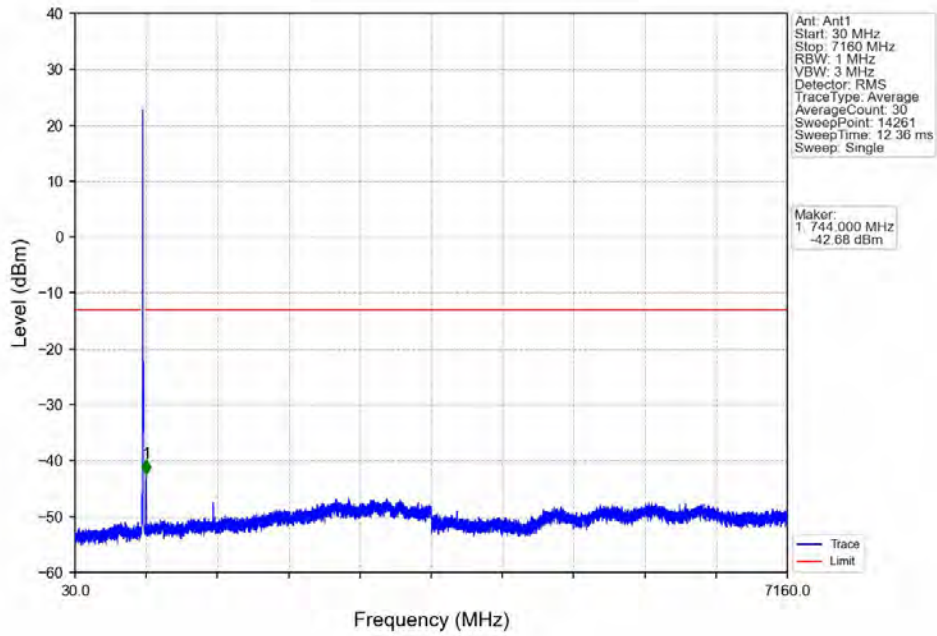
Band12_10MHz_QPSK_LCH_704MHz_RB_50_0_NTNV



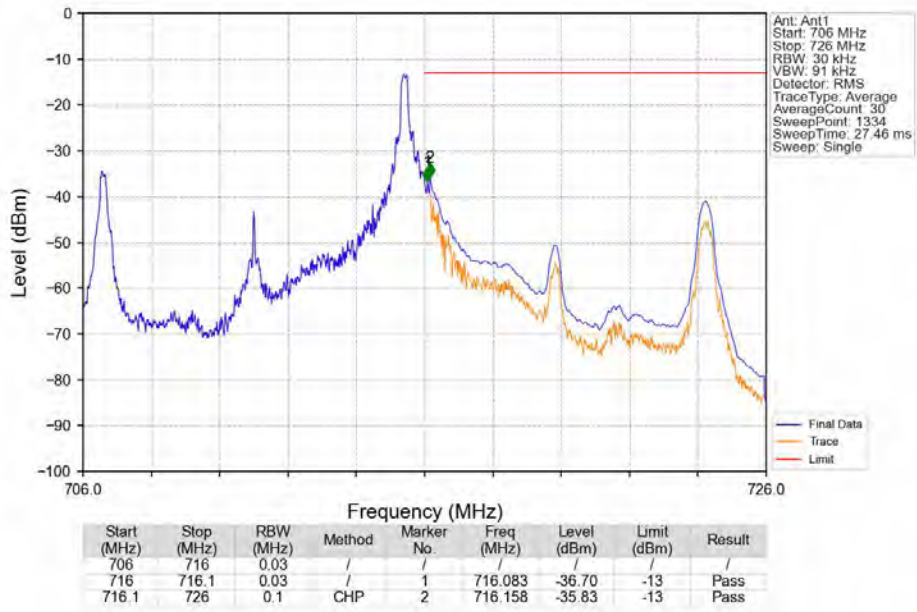
Band12_10MHz_QPSK_MCH_707.5MHz_RB_1_0_NTNV



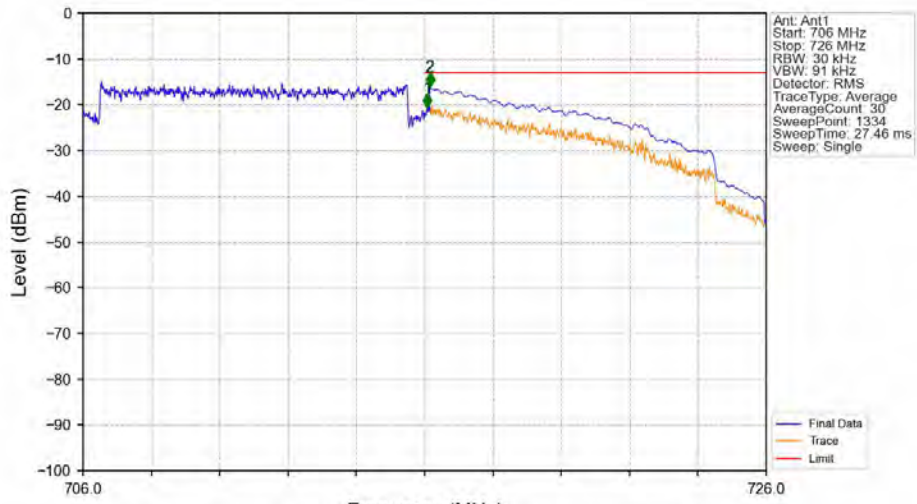
Band12_10MHz_QPSK_HCH_711MHz_RB_1_0_NTNV



Band12_10MHz_QPSK_HCH_711MHz_RB_1_49_NTNV

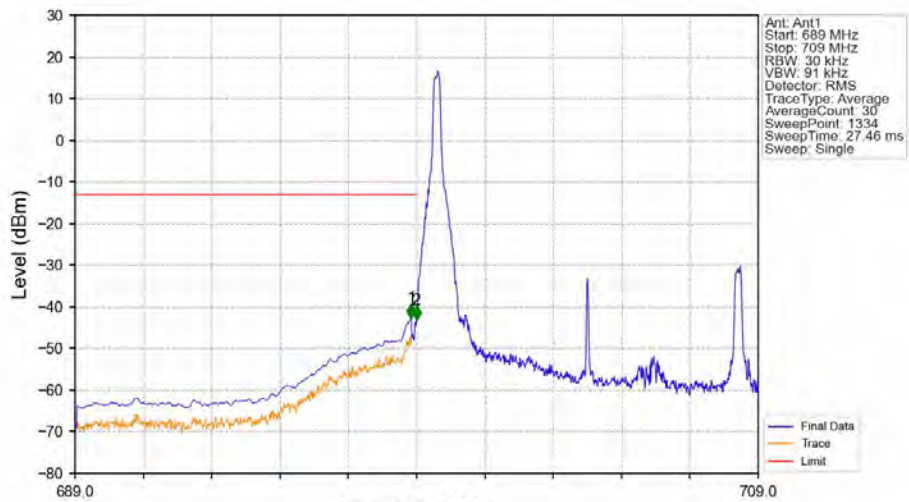


Band12_10MHz_QPSK_HCH_711MHz_RB_50_0_NTNV



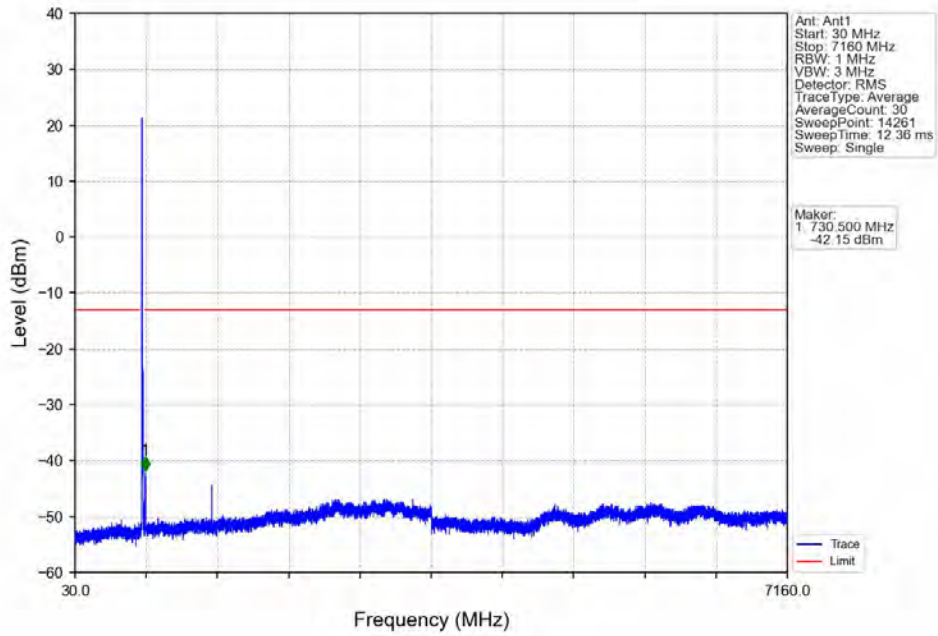
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	1	716.083	-20.68	-13	Pass
716.1	726	0.1	CHP	2	716.158	-16.12	-13	Pass

Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV

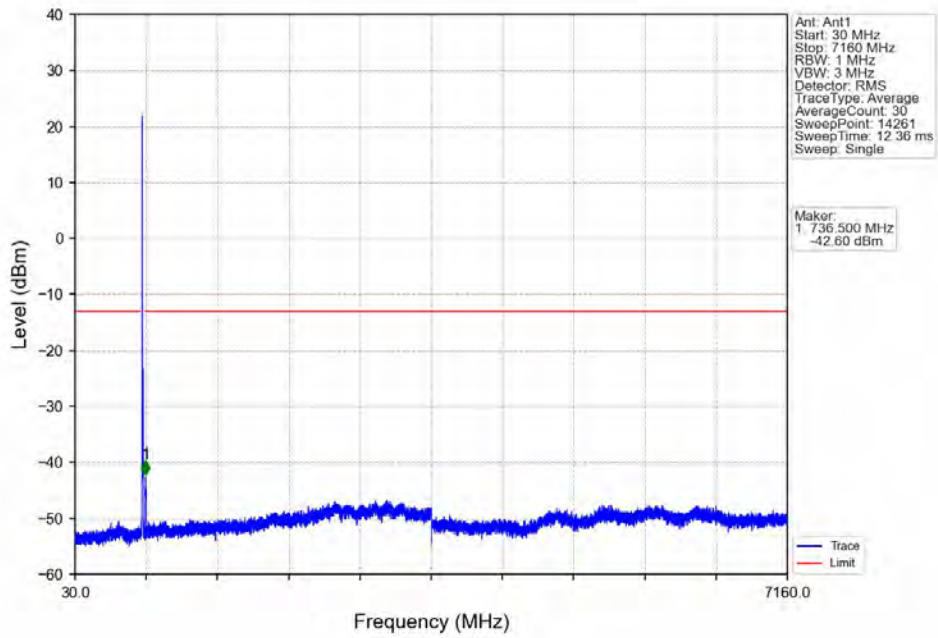


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-42.68	-13	Pass
698.9	709	0.03	/	2	698.992	-43.22	-13	Pass

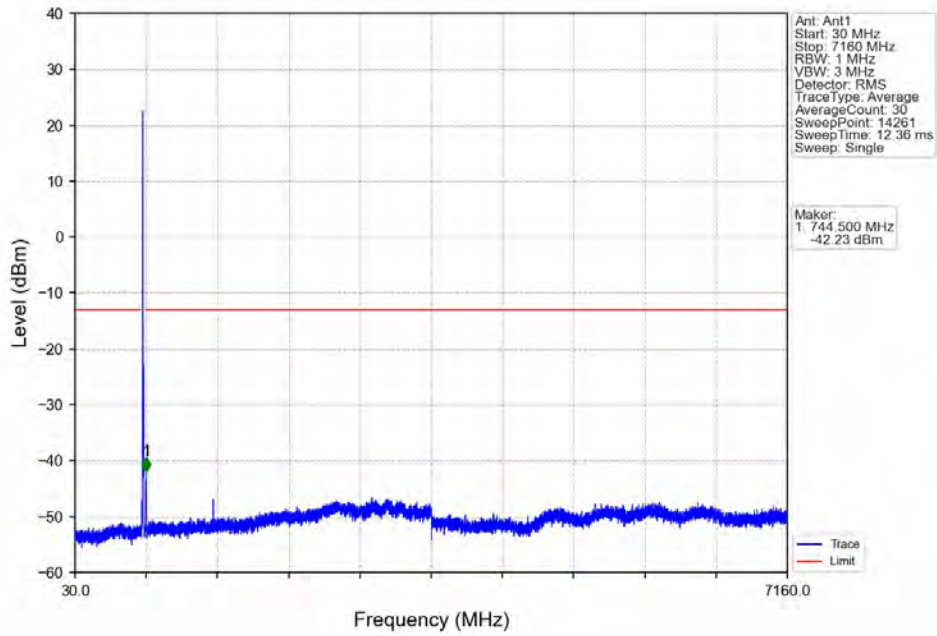
Band12_10MHz_16QAM_LCH_704MHz_RB_1_0_NTNV



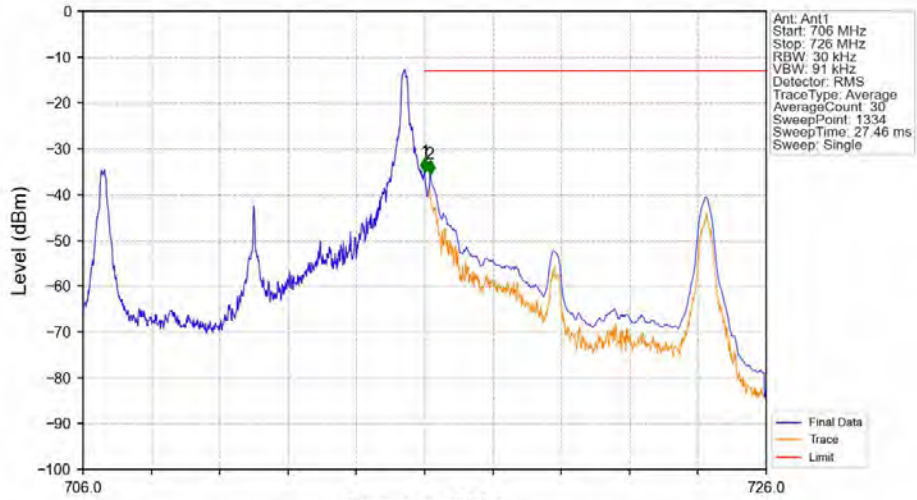
Band12_10MHz_16QAM_MCH_707.5MHz_RB_1_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_1_0_NTNV



Band12_10MHz_16QAM_HCH_711MHz_RB_1_49_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.008	-35.01	-13	Pass
716.1	726	0.1	CHP	2	716.158	-35.55	-13	Pass

7. Form731

7.1 Form731_Power

7.1.1 Test Result

Band	BW	Lower Freq	High Freq	MAX Power (W)	Value	Hz/ppm	Emission Designator	Rule Parts	MAX Power (dBm)
12	1.4	699.7	715.3	0.2158	0.0026	ppm	1M11G7D	27H	23.34
12	1.4	699.7	715.3	0.1795	0.0019	ppm	1M11W7D	27H	22.54
12	3	700.5	714.5	0.2070	0.0039	ppm	2M75G7D	27H	23.16
12	3	700.5	714.5	0.1726	0.0039	ppm	2M75W7D	27H	22.37
12	5	701.5	713.5	0.2004	0.0016	ppm	4M56G7D	27H	23.02
12	5	701.5	713.5	0.1637	0.0028	ppm	4M56W7D	27H	22.14
12	10	704	711	0.2080	0.0026	ppm	9M05G7D	27H	23.18
12	10	704	711	0.1710	0.0029	ppm	5M09W7D	27H	22.33

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	0.0301	0.0026	ppm	1M11G7D	27H	14.79
12	1.4	699.7	715.3	0.0251	0.0019	ppm	1M11W7D	27H	13.99
12	3	700.5	714.5	0.0289	0.0039	ppm	2M75G7D	27H	14.61
12	3	700.5	714.5	0.0241	0.0039	ppm	2M75W7D	27H	13.82
12	5	701.5	713.5	0.0280	0.0016	ppm	4M56G7D	27H	14.47
12	5	701.5	713.5	0.0229	0.0028	ppm	4M56W7D	27H	13.59
12	10	704	711	0.0290	0.0026	ppm	9M05G7D	27H	14.63
12	10	704	711	0.0239	0.0029	ppm	5M09W7D	27H	13.78