

# 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	22.96	-2.23	18.58	<=34.77	Pass		
			2	22.97	-2.23	18.59	<=34.77	Pass		
			5	23.10	-2.23	18.72	<=34.77	Pass		
		3	0	22.97	-2.23	18.59	<=34.77	Pass		
			2	22.97	-2.23	18.59	<=34.77	Pass		
			3	22.97	-2.23	18.59	<=34.77	Pass		
		6	0	21.83	-2.23	17.45	<=34.77	Pass		
		707.5	1	0	23.09	-2.23	18.71	<=34.77	Pass	
				2	23.12	-2.23	18.74	<=34.77	Pass	
	5			23.13	-2.23	18.75	<=34.77	Pass		
	3		0	23.02	-2.23	18.64	<=34.77	Pass		
			2	23.04	-2.23	18.66	<=34.77	Pass		
			3	23.09	-2.23	18.71	<=34.77	Pass		
	6		0	22.20	-2.23	17.82	<=34.77	Pass		
	715.3		1	0	22.93	-2.23	18.55	<=34.77	Pass	
				2	23.12	-2.23	18.74	<=34.77	Pass	
		5		23.13	-2.23	18.75	<=34.77	Pass		
		3	0	23.15	-2.23	18.77	<=34.77	Pass		
			2	23.18	-2.23	18.80	<=34.77	Pass		
			3	23.18	-2.23	18.80	<=34.77	Pass		
		6	0	21.95	-2.23	17.57	<=34.77	Pass		
		16QAM	699.7	1	0	21.41	-2.23	17.03	<=34.77	Pass
					2	21.40	-2.23	17.02	<=34.77	Pass
	5				21.55	-2.23	17.17	<=34.77	Pass	
3	0			21.64	-2.23	17.26	<=34.77	Pass		
	2			21.80	-2.23	17.42	<=34.77	Pass		
	3			21.75	-2.23	17.37	<=34.77	Pass		
6	0			20.89	-2.23	16.51	<=34.77	Pass		
707.5	1			0	22.05	-2.23	17.67	<=34.77	Pass	
				2	22.11	-2.23	17.73	<=34.77	Pass	
			5	22.09	-2.23	17.71	<=34.77	Pass		
	3		0	22.10	-2.23	17.72	<=34.77	Pass		
			2	22.12	-2.23	17.74	<=34.77	Pass		
			3	22.17	-2.23	17.79	<=34.77	Pass		
	6		0	21.84	-2.23	17.46	<=34.77	Pass		
	715.3		1	0	22.41	-2.23	18.03	<=34.77	Pass	
				2	22.53	-2.23	18.15	<=34.77	Pass	
5				22.46	-2.23	18.08	<=34.77	Pass		
3			0	21.93	-2.23	17.55	<=34.77	Pass		
			2	21.88	-2.23	17.50	<=34.77	Pass		
			3	21.87	-2.23	17.49	<=34.77	Pass		
6			0	21.71	-2.23	17.33	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

## 1.2 B12\_3MHz\_ERP

### 1.2.1 Test Result

Band: 12 / Bandwidth: 3MHz / NTN										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	700.5	1	0	23.13	-2.23	18.75	<=34.77	Pass		
			7	23.06	-2.23	18.68	<=34.77	Pass		
			14	23.12	-2.23	18.74	<=34.77	Pass		
		8	0	21.94	-2.23	17.56	<=34.77	Pass		
			4	22.17	-2.23	17.79	<=34.77	Pass		
			7	21.96	-2.23	17.58	<=34.77	Pass		
		15	0	21.96	-2.23	17.58	<=34.77	Pass		
		707.5	1	0	23.17	-2.23	18.79	<=34.77	Pass	
				7	23.13	-2.23	18.75	<=34.77	Pass	
	14			23.12	-2.23	18.74	<=34.77	Pass		
	8		0	22.08	-2.23	17.70	<=34.77	Pass		
			4	22.12	-2.23	17.74	<=34.77	Pass		
			7	22.04	-2.23	17.66	<=34.77	Pass		
	15		0	22.08	-2.23	17.70	<=34.77	Pass		
	714.5		1	0	23.09	-2.23	18.71	<=34.77	Pass	
				7	23.11	-2.23	18.73	<=34.77	Pass	
		14		23.09	-2.23	18.71	<=34.77	Pass		
		8	0	22.09	-2.23	17.71	<=34.77	Pass		
			4	22.17	-2.23	17.79	<=34.77	Pass		
			7	21.97	-2.23	17.59	<=34.77	Pass		
		15	0	22.13	-2.23	17.75	<=34.77	Pass		
		16QAM	700.5	1	0	21.61	-2.23	17.23	<=34.77	Pass
					7	21.71	-2.23	17.33	<=34.77	Pass
	14				21.69	-2.23	17.31	<=34.77	Pass	
8	0			20.99	-2.23	16.61	<=34.77	Pass		
	4			20.99	-2.23	16.61	<=34.77	Pass		
	7			21.00	-2.23	16.62	<=34.77	Pass		
15	0			20.98	-2.23	16.60	<=34.77	Pass		
707.5	1			0	22.74	-2.23	18.36	<=34.77	Pass	
				7	22.69	-2.23	18.31	<=34.77	Pass	
			14	22.70	-2.23	18.32	<=34.77	Pass		
	8		0	21.26	-2.23	16.88	<=34.77	Pass		
			4	21.86	-2.23	17.48	<=34.77	Pass		
			7	21.92	-2.23	17.54	<=34.77	Pass		
	15		0	21.71	-2.23	17.33	<=34.77	Pass		
	714.5		1	0	21.94	-2.23	17.56	<=34.77	Pass	
				7	21.91	-2.23	17.53	<=34.77	Pass	
14				21.89	-2.23	17.51	<=34.77	Pass		
8			0	21.41	-2.23	17.03	<=34.77	Pass		
			4	21.34	-2.23	16.96	<=34.77	Pass		
			7	21.90	-2.23	17.52	<=34.77	Pass		
15			0	21.15	-2.23	16.77	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

### 1.3 B12\_5MHz\_ERP

#### 1.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTN
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Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	701.5	1	0	22.92	-2.23	18.54	<=34.77	Pass		
			13	22.98	-2.23	18.60	<=34.77	Pass		
			24	23.08	-2.23	18.70	<=34.77	Pass		
		12	0	22.11	-2.23	17.73	<=34.77	Pass		
			6	22.00	-2.23	17.62	<=34.77	Pass		
			13	22.12	-2.23	17.74	<=34.77	Pass		
		25	0	22.10	-2.23	17.72	<=34.77	Pass		
		707.5	1	0	23.08	-2.23	18.70	<=34.77	Pass	
				13	23.08	-2.23	18.70	<=34.77	Pass	
	24			23.13	-2.23	18.75	<=34.77	Pass		
	12		0	22.14	-2.23	17.76	<=34.77	Pass		
			6	22.16	-2.23	17.78	<=34.77	Pass		
			13	22.15	-2.23	17.77	<=34.77	Pass		
	25		0	22.22	-2.23	17.84	<=34.77	Pass		
	713.5		1	0	23.18	-2.23	18.80	<=34.77	Pass	
				13	23.12	-2.23	18.74	<=34.77	Pass	
		24		23.13	-2.23	18.75	<=34.77	Pass		
		12	0	22.19	-2.23	17.81	<=34.77	Pass		
			6	22.16	-2.23	17.78	<=34.77	Pass		
			13	22.15	-2.23	17.77	<=34.77	Pass		
		25	0	22.20	-2.23	17.82	<=34.77	Pass		
		16QAM	701.5	1	0	22.21	-2.23	17.83	<=34.77	Pass
					13	22.25	-2.23	17.87	<=34.77	Pass
	24				22.37	-2.23	17.99	<=34.77	Pass	
12	0			20.98	-2.23	16.60	<=34.77	Pass		
	6			20.88	-2.23	16.50	<=34.77	Pass		
	13			20.99	-2.23	16.61	<=34.77	Pass		
25	0			21.02	-2.23	16.64	<=34.77	Pass		
707.5	1			0	21.98	-2.23	17.60	<=34.77	Pass	
				13	21.97	-2.23	17.59	<=34.77	Pass	
			24	21.94	-2.23	17.56	<=34.77	Pass		
	12		0	20.92	-2.23	16.54	<=34.77	Pass		
			6	21.59	-2.23	17.21	<=34.77	Pass		
			13	21.56	-2.23	17.18	<=34.77	Pass		
	25		0	21.65	-2.23	17.27	<=34.77	Pass		
	713.5		1	0	21.62	-2.23	17.24	<=34.77	Pass	
				13	21.61	-2.23	17.23	<=34.77	Pass	
24				21.62	-2.23	17.24	<=34.77	Pass		
12			0	21.69	-2.23	17.31	<=34.77	Pass		
			6	21.21	-2.23	16.83	<=34.77	Pass		
			13	21.19	-2.23	16.81	<=34.77	Pass		
25			0	21.26	-2.23	16.88	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

## 1.4 B12\_10MHz\_ERP

### 1.4.1 Test Result

Band: 12 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	704	1	0	22.95	-2.23	18.57	<=34.77	Pass
			25	23.16	-2.23	18.78	<=34.77	Pass

		25	49	23.11	-2.23	18.73	<=34.77	Pass	
			0	22.02	-2.23	17.64	<=34.77	Pass	
			13	22.19	-2.23	17.81	<=34.77	Pass	
			25	22.14	-2.23	17.76	<=34.77	Pass	
		50	0	22.04	-2.23	17.66	<=34.77	Pass	
			1	0	23.03	-2.23	18.65	<=34.77	Pass
				25	23.11	-2.23	18.73	<=34.77	Pass
		49		23.20	-2.23	18.82	<=34.77	Pass	
		707.5	25	0	22.09	-2.23	17.71	<=34.77	Pass
	13			22.26	-2.23	17.88	<=34.77	Pass	
	25			22.05	-2.23	17.67	<=34.77	Pass	
	50	0	22.22	-2.23	17.84	<=34.77	Pass		
		1	0	23.14	-2.23	18.76	<=34.77	Pass	
			25	22.91	-2.23	18.53	<=34.77	Pass	
	49		23.08	-2.23	18.70	<=34.77	Pass		
	711	25	0	22.06	-2.23	17.68	<=34.77	Pass	
			13	22.10	-2.23	17.72	<=34.77	Pass	
			25	22.15	-2.23	17.77	<=34.77	Pass	
	50	0	22.17	-2.23	17.79	<=34.77	Pass		
		1	0	21.86	-2.23	17.48	<=34.77	Pass	
			25	21.91	-2.23	17.53	<=34.77	Pass	
	49		21.97	-2.23	17.59	<=34.77	Pass		
	16QAM	704	1	0	21.00	-2.23	16.62	<=34.77	Pass
				13	21.14	-2.23	16.76	<=34.77	Pass
				25	21.14	-2.23	16.76	<=34.77	Pass
			25	0	21.06	-2.23	16.68	<=34.77	Pass
				1	0	22.12	-2.23	17.74	<=34.77
25					22.16	-2.23	17.78	<=34.77	Pass
49			22.30		-2.23	17.92	<=34.77	Pass	
707.5			25	0	21.15	-2.23	16.77	<=34.77	Pass
				13	21.71	-2.23	17.33	<=34.77	Pass
		25		21.11	-2.23	16.73	<=34.77	Pass	
50		0	21.65	-2.23	17.27	<=34.77	Pass		
		1	0	21.71	-2.23	17.33	<=34.77	Pass	
			25	21.77	-2.23	17.39	<=34.77	Pass	
49			21.79	-2.23	17.41	<=34.77	Pass		
711		25	0	21.67	-2.23	17.29	<=34.77	Pass	
			13	20.94	-2.23	16.56	<=34.77	Pass	
			25	21.23	-2.23	16.85	<=34.77	Pass	
50		0	21.01	-2.23	16.63	<=34.77	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

## 2. Frequency Stability

### 2.1 B12\_1.4MHz

#### 2.1.1 Test Result

Band: 12 / Bandwidth: 1.4MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	699.7	6	0	20	3.27	3.448	0.0049	-2.5 to 2.5	Pass
					3.85	-0.215	-0.0003	-2.5 to 2.5	Pass
					4.43	4.106	0.0059	-2.5 to 2.5	Pass

				-30	3.85	8.469	0.0121	-2.5 to 2.5	Pass			
				-20	3.85	10.543	0.0151	-2.5 to 2.5	Pass			
				-10	3.85	13.232	0.0189	-2.5 to 2.5	Pass			
				0	3.85	13.490	0.0193	-2.5 to 2.5	Pass			
				10	3.85	13.275	0.0190	-2.5 to 2.5	Pass			
				30	3.85	13.518	0.0193	-2.5 to 2.5	Pass			
				40	3.85	13.204	0.0189	-2.5 to 2.5	Pass			
	50	3.85	16.208	0.0232	-2.5 to 2.5	Pass						
	707.5	6	0	20	3.27	7.124	0.0101	-2.5 to 2.5	Pass			
					3.85	-3.748	-0.0053	-2.5 to 2.5	Pass			
					4.43	1.945	0.0027	-2.5 to 2.5	Pass			
				-30	3.85	5.751	0.0081	-2.5 to 2.5	Pass			
				-20	3.85	10.629	0.0150	-2.5 to 2.5	Pass			
				-10	3.85	15.321	0.0217	-2.5 to 2.5	Pass			
				0	3.85	20.671	0.0292	-2.5 to 2.5	Pass			
				10	3.85	25.048	0.0354	-2.5 to 2.5	Pass			
				30	3.85	28.753	0.0406	-2.5 to 2.5	Pass			
				40	3.85	31.528	0.0446	-2.5 to 2.5	Pass			
				50	3.85	34.890	0.0493	-2.5 to 2.5	Pass			
				715.3	6	0	20	3.27	17.638	0.0247	-2.5 to 2.5	Pass
								3.85	-16.165	-0.0226	-2.5 to 2.5	Pass
								4.43	-20.714	-0.0290	-2.5 to 2.5	Pass
	-30	3.85	-15.635				-0.0219	-2.5 to 2.5	Pass			
	-20	3.85	-46.492				-0.0650	-2.5 to 2.5	Pass			
	-10	3.85	-5.293				-0.0074	-2.5 to 2.5	Pass			
	0	3.85	-14.763				-0.0206	-2.5 to 2.5	Pass			
	10	3.85	-16.665				-0.0233	-2.5 to 2.5	Pass			
30	3.85	-7.796	-0.0109				-2.5 to 2.5	Pass				
40	3.85	-42.558	-0.0595				-2.5 to 2.5	Pass				
50	3.85	-18.454	-0.0258				-2.5 to 2.5	Pass				
16QAM	699.7	6	0	20	3.27	14.434	0.0206	-2.5 to 2.5	Pass			
					3.85	14.262	0.0204	-2.5 to 2.5	Pass			
					4.43	9.999	0.0143	-2.5 to 2.5	Pass			
				-30	3.85	7.753	0.0111	-2.5 to 2.5	Pass			
				-20	3.85	6.552	0.0094	-2.5 to 2.5	Pass			
				-10	3.85	6.452	0.0092	-2.5 to 2.5	Pass			
				0	3.85	5.207	0.0074	-2.5 to 2.5	Pass			
				10	3.85	5.951	0.0085	-2.5 to 2.5	Pass			
				30	3.85	5.336	0.0076	-2.5 to 2.5	Pass			
				40	3.85	5.836	0.0083	-2.5 to 2.5	Pass			
				50	3.85	6.266	0.0090	-2.5 to 2.5	Pass			
				707.5	6	0	20	3.27	39.096	0.0553	-2.5 to 2.5	Pass
								3.85	40.026	0.0566	-2.5 to 2.5	Pass
								4.43	39.768	0.0562	-2.5 to 2.5	Pass
	-30	3.85	39.668				0.0561	-2.5 to 2.5	Pass			
	-20	3.85	40.855				0.0577	-2.5 to 2.5	Pass			
	-10	3.85	40.383				0.0571	-2.5 to 2.5	Pass			
	0	3.85	40.298				0.0570	-2.5 to 2.5	Pass			
	10	3.85	39.368				0.0556	-2.5 to 2.5	Pass			
	30	3.85	39.868				0.0564	-2.5 to 2.5	Pass			
	40	3.85	41.513				0.0587	-2.5 to 2.5	Pass			
	50	3.85	40.312				0.0570	-2.5 to 2.5	Pass			
	715.3	6	0	20	3.27	-2.217	-0.0031	-2.5 to 2.5	Pass			
					3.85	-22.159	-0.0310	-2.5 to 2.5	Pass			
					4.43	-38.981	-0.0545	-2.5 to 2.5	Pass			
				-30	3.85	-5.507	-0.0077	-2.5 to 2.5	Pass			
				-20	3.85	-20.213	-0.0283	-2.5 to 2.5	Pass			

				-10	3.85	-32.344	-0.0452	-2.5 to 2.5	Pass
				0	3.85	-45.104	-0.0631	-2.5 to 2.5	Pass
				10	3.85	-7.310	-0.0102	-2.5 to 2.5	Pass
				30	3.85	-18.225	-0.0255	-2.5 to 2.5	Pass
				40	3.85	-27.223	-0.0381	-2.5 to 2.5	Pass
				50	3.85	-35.634	-0.0498	-2.5 to 2.5	Pass

## 2.2 B12\_3MHz

### 2.2.1 Test Result

Band: 12 / Bandwidth: 3MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	700.5	15	0	20	3.27	-9.227	-0.0132	-2.5 to 2.5	Pass
					3.85	-27.967	-0.0399	-2.5 to 2.5	Pass
					4.43	-27.494	-0.0392	-2.5 to 2.5	Pass
				-30	3.85	-24.891	-0.0355	-2.5 to 2.5	Pass
				-20	3.85	-8.984	-0.0128	-2.5 to 2.5	Pass
				-10	3.85	-39.196	-0.0560	-2.5 to 2.5	Pass
				0	3.85	-19.927	-0.0284	-2.5 to 2.5	Pass
				10	3.85	-41.084	-0.0586	-2.5 to 2.5	Pass
				30	3.85	-12.774	-0.0182	-2.5 to 2.5	Pass
				40	3.85	-27.380	-0.0391	-2.5 to 2.5	Pass
	50	3.85	-40.212	-0.0574	-2.5 to 2.5	Pass			
	707.5	15	0	20	3.27	9.656	0.0136	-2.5 to 2.5	Pass
					3.85	-9.527	-0.0135	-2.5 to 2.5	Pass
					4.43	-16.580	-0.0234	-2.5 to 2.5	Pass
				-30	3.85	-19.369	-0.0274	-2.5 to 2.5	Pass
				-20	3.85	-23.446	-0.0331	-2.5 to 2.5	Pass
				-10	3.85	-24.390	-0.0345	-2.5 to 2.5	Pass
				0	3.85	-23.503	-0.0332	-2.5 to 2.5	Pass
				10	3.85	-21.915	-0.0310	-2.5 to 2.5	Pass
				30	3.85	-19.569	-0.0277	-2.5 to 2.5	Pass
				40	3.85	-15.807	-0.0223	-2.5 to 2.5	Pass
	50	3.85	-12.689	-0.0179	-2.5 to 2.5	Pass			
	714.5	15	0	20	3.27	10.614	0.0149	-2.5 to 2.5	Pass
					3.85	-6.938	-0.0097	-2.5 to 2.5	Pass
					4.43	-8.597	-0.0120	-2.5 to 2.5	Pass
				-30	3.85	-7.296	-0.0102	-2.5 to 2.5	Pass
				-20	3.85	-11.044	-0.0155	-2.5 to 2.5	Pass
				-10	3.85	-11.101	-0.0155	-2.5 to 2.5	Pass
				0	3.85	-11.988	-0.0168	-2.5 to 2.5	Pass
				10	3.85	-12.875	-0.0180	-2.5 to 2.5	Pass
30				3.85	-12.331	-0.0173	-2.5 to 2.5	Pass	
40				3.85	-11.973	-0.0168	-2.5 to 2.5	Pass	
50	3.85	-12.774	-0.0179	-2.5 to 2.5	Pass				
16QAM	700.5	15	0	20	3.27	2.904	0.0041	-2.5 to 2.5	Pass
					3.85	-0.944	-0.0013	-2.5 to 2.5	Pass
					4.43	-5.465	-0.0078	-2.5 to 2.5	Pass
				-30	3.85	-10.829	-0.0155	-2.5 to 2.5	Pass
				-20	3.85	-14.591	-0.0208	-2.5 to 2.5	Pass
				-10	3.85	-18.711	-0.0267	-2.5 to 2.5	Pass
				0	3.85	-22.230	-0.0317	-2.5 to 2.5	Pass
10	3.85	-24.862	-0.0355	-2.5 to 2.5	Pass				

	707.5	15	0	30	3.85	-27.881	-0.0398	-2.5 to 2.5	Pass
				40	3.85	-31.028	-0.0443	-2.5 to 2.5	Pass
				50	3.85	-32.902	-0.0470	-2.5 to 2.5	Pass
				20	3.27	-8.297	-0.0117	-2.5 to 2.5	Pass
					3.85	-4.449	-0.0063	-2.5 to 2.5	Pass
					4.43	-1.645	-0.0023	-2.5 to 2.5	Pass
				-30	3.85	-0.129	-0.0002	-2.5 to 2.5	Pass
				-20	3.85	3.633	0.0051	-2.5 to 2.5	Pass
				-10	3.85	6.294	0.0089	-2.5 to 2.5	Pass
				0	3.85	8.297	0.0117	-2.5 to 2.5	Pass
				10	3.85	12.474	0.0176	-2.5 to 2.5	Pass
				30	3.85	15.092	0.0213	-2.5 to 2.5	Pass
	40	3.85	18.182	0.0257	-2.5 to 2.5	Pass			
	50	3.85	22.645	0.0320	-2.5 to 2.5	Pass			
	714.5	15	0	20	3.27	-10.171	-0.0142	-2.5 to 2.5	Pass
					3.85	-12.360	-0.0173	-2.5 to 2.5	Pass
					4.43	-16.551	-0.0232	-2.5 to 2.5	Pass
				-30	3.85	-20.127	-0.0282	-2.5 to 2.5	Pass
				-20	3.85	-22.216	-0.0311	-2.5 to 2.5	Pass
				-10	3.85	-24.247	-0.0339	-2.5 to 2.5	Pass
				0	3.85	-26.035	-0.0364	-2.5 to 2.5	Pass
				10	3.85	-27.523	-0.0385	-2.5 to 2.5	Pass
				30	3.85	-28.825	-0.0403	-2.5 to 2.5	Pass
				40	3.85	-29.898	-0.0418	-2.5 to 2.5	Pass
50				3.85	-30.355	-0.0425	-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	7.167	0.0102	-2.5 to 2.5	Pass
					3.85	-9.212	-0.0131	-2.5 to 2.5	Pass
					4.43	-13.704	-0.0195	-2.5 to 2.5	Pass
				-30	3.85	-15.650	-0.0223	-2.5 to 2.5	Pass
				-20	3.85	-14.520	-0.0207	-2.5 to 2.5	Pass
				-10	3.85	-12.946	-0.0185	-2.5 to 2.5	Pass
				0	3.85	-9.799	-0.0140	-2.5 to 2.5	Pass
				10	3.85	-6.466	-0.0092	-2.5 to 2.5	Pass
				30	3.85	-3.791	-0.0054	-2.5 to 2.5	Pass
				40	3.85	0.043	0.0001	-2.5 to 2.5	Pass
				50	3.85	4.635	0.0066	-2.5 to 2.5	Pass
				707.5	25	0	20	3.27	3.977
	3.85	-4.678	-0.0066					-2.5 to 2.5	Pass
	4.43	8.125	0.0115					-2.5 to 2.5	Pass
	-30	3.85	22.159				0.0313	-2.5 to 2.5	Pass
	-20	3.85	34.103				0.0482	-2.5 to 2.5	Pass
	-10	3.85	45.791				0.0647	-2.5 to 2.5	Pass
	0	3.85	9.398				0.0133	-2.5 to 2.5	Pass
	10	3.85	20.785				0.0294	-2.5 to 2.5	Pass
	30	3.85	31.300				0.0442	-2.5 to 2.5	Pass
	40	3.85	42.386				0.0599	-2.5 to 2.5	Pass
	50	3.85	8.225				0.0116	-2.5 to 2.5	Pass

	713.5	25	0	20	3.27	-8.984	-0.0126	-2.5 to 2.5	Pass					
					3.85	-45.304	-0.0635	-2.5 to 2.5	Pass					
					4.43	-0.815	-0.0011	-2.5 to 2.5	Pass					
								-30	3.85	-9.899	-0.0139	-2.5 to 2.5	Pass	
								-20	3.85	-17.881	-0.0251	-2.5 to 2.5	Pass	
								-10	3.85	-24.076	-0.0337	-2.5 to 2.5	Pass	
								0	3.85	-29.283	-0.0410	-2.5 to 2.5	Pass	
								10	3.85	-33.116	-0.0464	-2.5 to 2.5	Pass	
								30	3.85	-35.377	-0.0496	-2.5 to 2.5	Pass	
								40	3.85	-39.110	-0.0548	-2.5 to 2.5	Pass	
50	3.85	-40.555	-0.0568	-2.5 to 2.5	Pass									
16QAM	701.5	25	0	20	3.27	8.912	0.0127	-2.5 to 2.5	Pass					
					3.85	13.304	0.0190	-2.5 to 2.5	Pass					
					4.43	12.589	0.0179	-2.5 to 2.5	Pass					
								-30	3.85	13.361	0.0190	-2.5 to 2.5	Pass	
								-20	3.85	11.601	0.0165	-2.5 to 2.5	Pass	
								-10	3.85	13.547	0.0193	-2.5 to 2.5	Pass	
								0	3.85	13.289	0.0189	-2.5 to 2.5	Pass	
								10	3.85	14.033	0.0200	-2.5 to 2.5	Pass	
								30	3.85	14.477	0.0206	-2.5 to 2.5	Pass	
								40	3.85	14.534	0.0207	-2.5 to 2.5	Pass	
	50	3.85	15.922	0.0227	-2.5 to 2.5	Pass								
		707.5	25	0	20	3.27	22.144	0.0313	-2.5 to 2.5	Pass				
						3.85	30.456	0.0430	-2.5 to 2.5	Pass				
						4.43	34.833	0.0492	-2.5 to 2.5	Pass				
									-30	3.85	39.454	0.0558	-2.5 to 2.5	Pass
									-20	3.85	46.048	0.0651	-2.5 to 2.5	Pass
									-10	3.85	2.031	0.0029	-2.5 to 2.5	Pass
									0	3.85	7.381	0.0104	-2.5 to 2.5	Pass
									10	3.85	13.332	0.0188	-2.5 to 2.5	Pass
									30	3.85	19.169	0.0271	-2.5 to 2.5	Pass
									40	3.85	24.319	0.0344	-2.5 to 2.5	Pass
	50	3.85	29.984	0.0424	-2.5 to 2.5	Pass								
		713.5	25	0	20	3.27	-44.360	-0.0622	-2.5 to 2.5	Pass				
						3.85	-8.283	-0.0116	-2.5 to 2.5	Pass				
						4.43	-16.079	-0.0225	-2.5 to 2.5	Pass				
									-30	3.85	-22.845	-0.0320	-2.5 to 2.5	Pass
									-20	3.85	-27.967	-0.0392	-2.5 to 2.5	Pass
									-10	3.85	-32.802	-0.0460	-2.5 to 2.5	Pass
									0	3.85	-36.635	-0.0513	-2.5 to 2.5	Pass
									10	3.85	-39.554	-0.0554	-2.5 to 2.5	Pass
30									3.85	-43.373	-0.0608	-2.5 to 2.5	Pass	
40									3.85	-45.791	-0.0642	-2.5 to 2.5	Pass	
50	3.85	-2.131	-0.0030	-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	2.661	0.0038	-2.5 to 2.5	Pass
					3.85	-10.357	-0.0147	-2.5 to 2.5	Pass
					4.43	-9.155	-0.0130	-2.5 to 2.5	Pass



				-30	3.85	0.029	0.0000	-2.5 to 2.5	Pass			
				-20	3.85	11.086	0.0157	-2.5 to 2.5	Pass			
				-10	3.85	23.460	0.0333	-2.5 to 2.5	Pass			
				0	3.85	36.335	0.0516	-2.5 to 2.5	Pass			
				10	3.85	2.232	0.0032	-2.5 to 2.5	Pass			
				30	3.85	12.789	0.0182	-2.5 to 2.5	Pass			
				40	3.85	23.932	0.0340	-2.5 to 2.5	Pass			
	50	3.85	35.133	0.0499	-2.5 to 2.5	Pass						
	707.5	50	0	20	3.27	-4.978	-0.0070	-2.5 to 2.5	Pass			
					3.85	-11.129	-0.0157	-2.5 to 2.5	Pass			
					4.43	6.051	0.0086	-2.5 to 2.5	Pass			
				-30	3.85	22.144	0.0313	-2.5 to 2.5	Pass			
				-20	3.85	36.907	0.0522	-2.5 to 2.5	Pass			
				-10	3.85	11.301	0.0160	-2.5 to 2.5	Pass			
				0	3.85	27.223	0.0385	-2.5 to 2.5	Pass			
				10	3.85	42.014	0.0594	-2.5 to 2.5	Pass			
				30	3.85	2.561	0.0036	-2.5 to 2.5	Pass			
				40	3.85	12.774	0.0181	-2.5 to 2.5	Pass			
				50	3.85	20.828	0.0294	-2.5 to 2.5	Pass			
				711	50	0	20	3.27	-5.307	-0.0075	-2.5 to 2.5	Pass
								3.85	-29.225	-0.0411	-2.5 to 2.5	Pass
								4.43	-26.193	-0.0368	-2.5 to 2.5	Pass
	-30	3.85	-23.603				-0.0332	-2.5 to 2.5	Pass			
	-20	3.85	-22.616				-0.0318	-2.5 to 2.5	Pass			
	-10	3.85	-20.785				-0.0292	-2.5 to 2.5	Pass			
	0	3.85	-19.655				-0.0276	-2.5 to 2.5	Pass			
	10	3.85	-18.554				-0.0261	-2.5 to 2.5	Pass			
30	3.85	-16.193	-0.0228				-2.5 to 2.5	Pass				
40	3.85	-15.793	-0.0222				-2.5 to 2.5	Pass				
50	3.85	-15.407	-0.0217				-2.5 to 2.5	Pass				
16QAM	704	50	0	20	3.27	45.033	0.0640	-2.5 to 2.5	Pass			
					3.85	-0.730	-0.0010	-2.5 to 2.5	Pass			
					4.43	-1.459	-0.0021	-2.5 to 2.5	Pass			
				-30	3.85	-1.159	-0.0016	-2.5 to 2.5	Pass			
				-20	3.85	-0.100	-0.0001	-2.5 to 2.5	Pass			
				-10	3.85	1.974	0.0028	-2.5 to 2.5	Pass			
				0	3.85	3.076	0.0044	-2.5 to 2.5	Pass			
				10	3.85	5.150	0.0073	-2.5 to 2.5	Pass			
				30	3.85	5.851	0.0083	-2.5 to 2.5	Pass			
				40	3.85	6.337	0.0090	-2.5 to 2.5	Pass			
				50	3.85	8.612	0.0122	-2.5 to 2.5	Pass			
				707.5	50	0	20	3.27	28.539	0.0403	-2.5 to 2.5	Pass
								3.85	28.782	0.0407	-2.5 to 2.5	Pass
								4.43	28.296	0.0400	-2.5 to 2.5	Pass
	-30	3.85	27.437				0.0388	-2.5 to 2.5	Pass			
	-20	3.85	28.353				0.0401	-2.5 to 2.5	Pass			
	-10	3.85	28.067				0.0397	-2.5 to 2.5	Pass			
	0	3.85	28.481				0.0403	-2.5 to 2.5	Pass			
	10	3.85	29.826				0.0422	-2.5 to 2.5	Pass			
	30	3.85	30.828				0.0436	-2.5 to 2.5	Pass			
	40	3.85	31.042				0.0439	-2.5 to 2.5	Pass			
	50	3.85	32.802				0.0464	-2.5 to 2.5	Pass			
	711	50	0	20	3.27	-14.820	-0.0208	-2.5 to 2.5	Pass			
					3.85	-24.533	-0.0345	-2.5 to 2.5	Pass			
					4.43	-39.754	-0.0559	-2.5 to 2.5	Pass			
				-30	3.85	-8.183	-0.0115	-2.5 to 2.5	Pass			
				-20	3.85	-18.454	-0.0260	-2.5 to 2.5	Pass			

				-10	3.85	-29.497	-0.0415	-2.5 to 2.5	Pass
				0	3.85	-36.078	-0.0507	-2.5 to 2.5	Pass
				10	3.85	-42.000	-0.0591	-2.5 to 2.5	Pass
				30	3.85	-46.148	-0.0649	-2.5 to 2.5	Pass
				40	3.85	-39.253	-0.0552	-2.5 to 2.5	Pass
				50	3.85	0.114	0.0002	-2.5 to 2.5	Pass

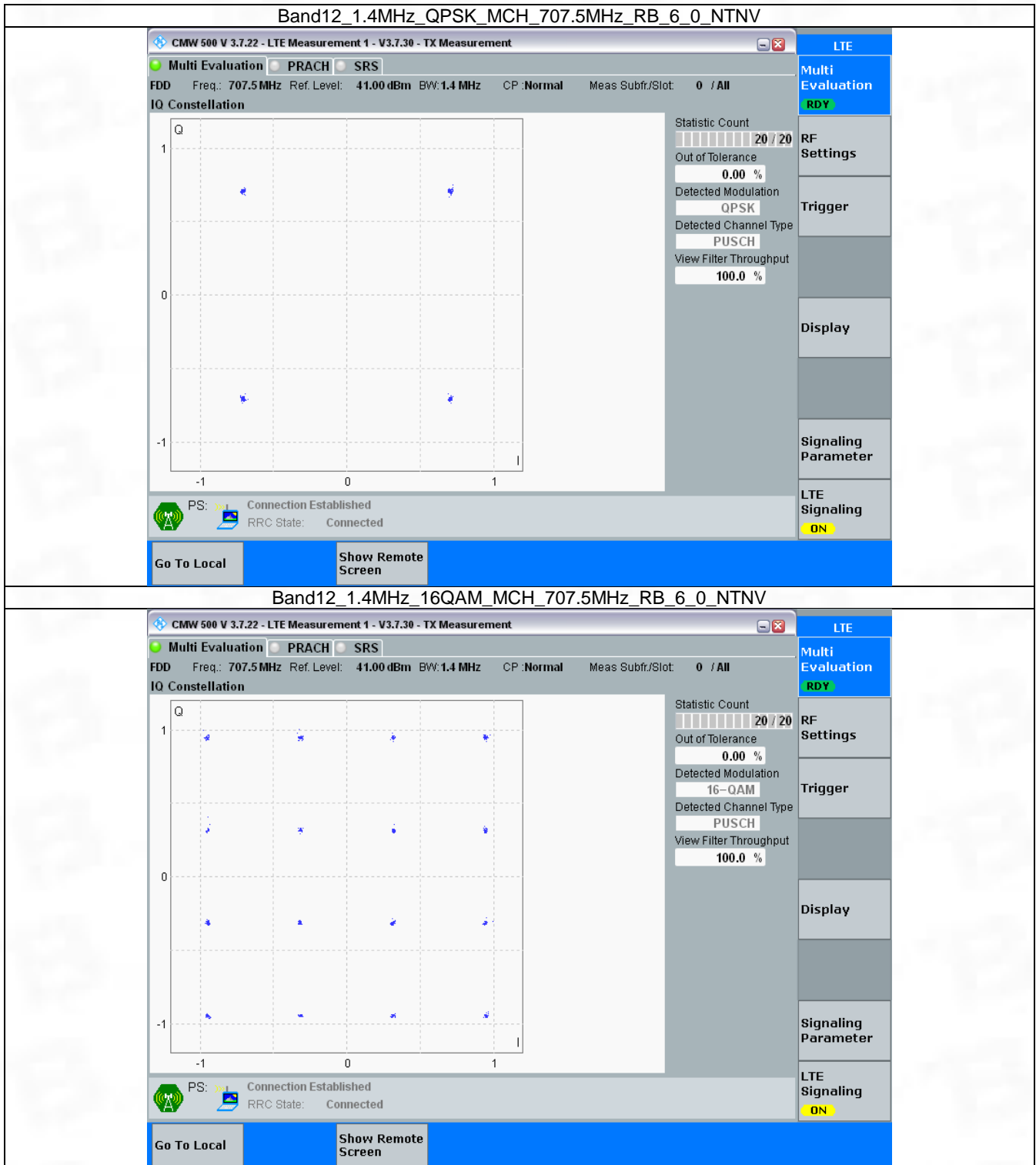
### 3. Modulation Characteristics

#### 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

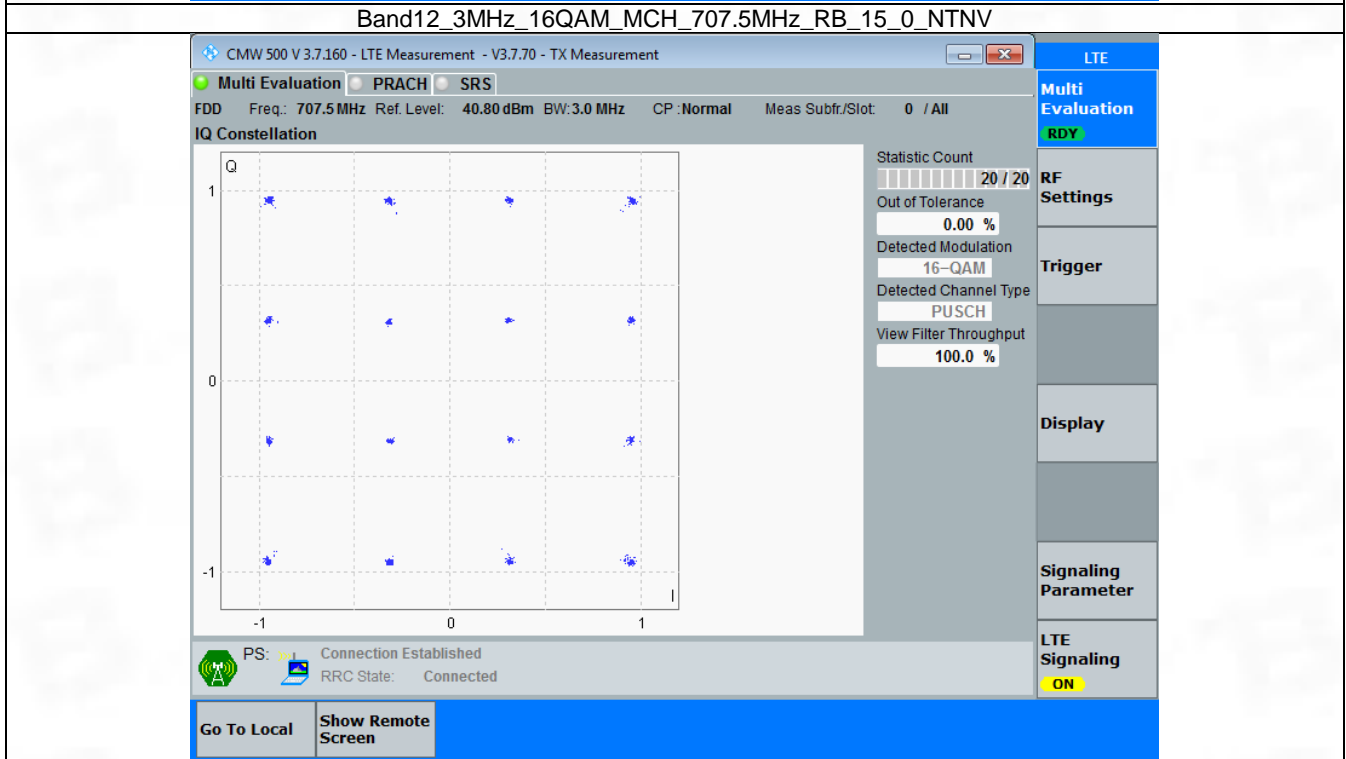
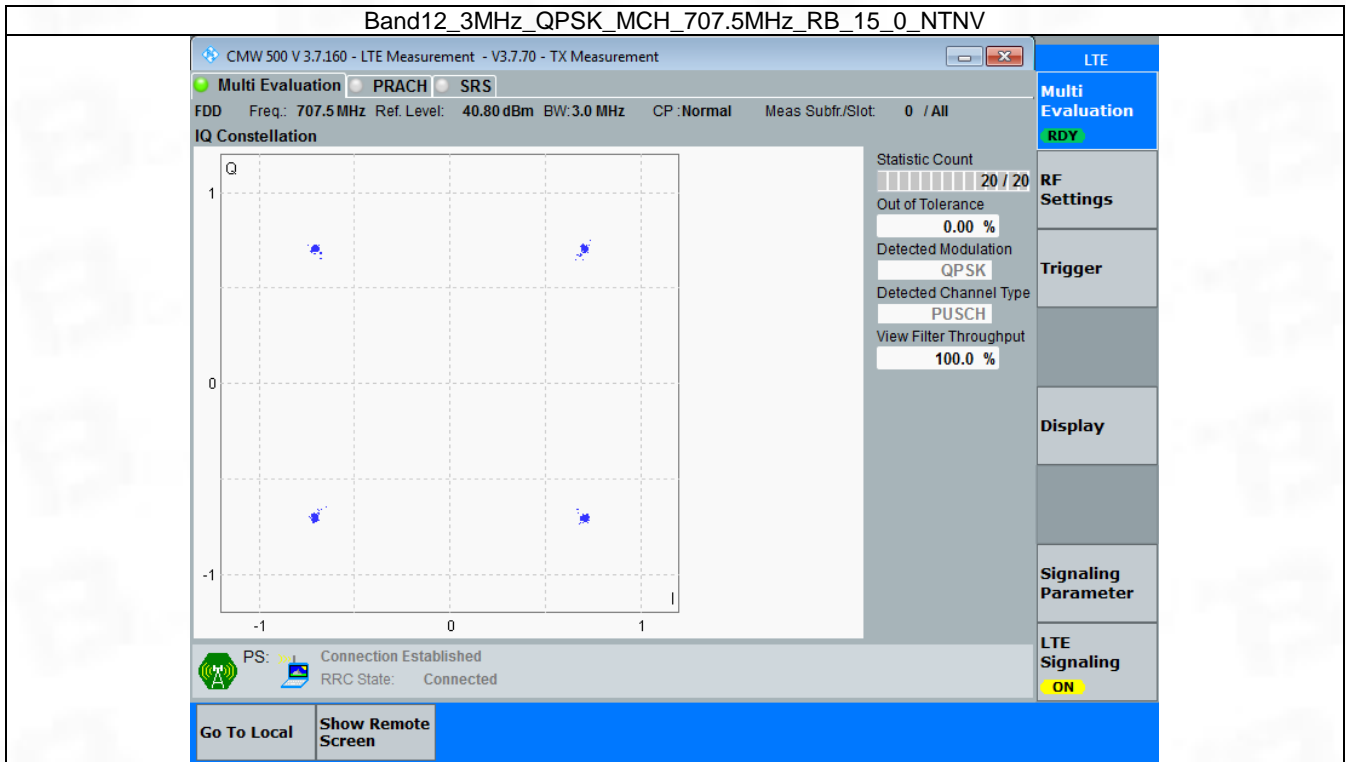


### 3.2 B12\_3MHz

#### 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

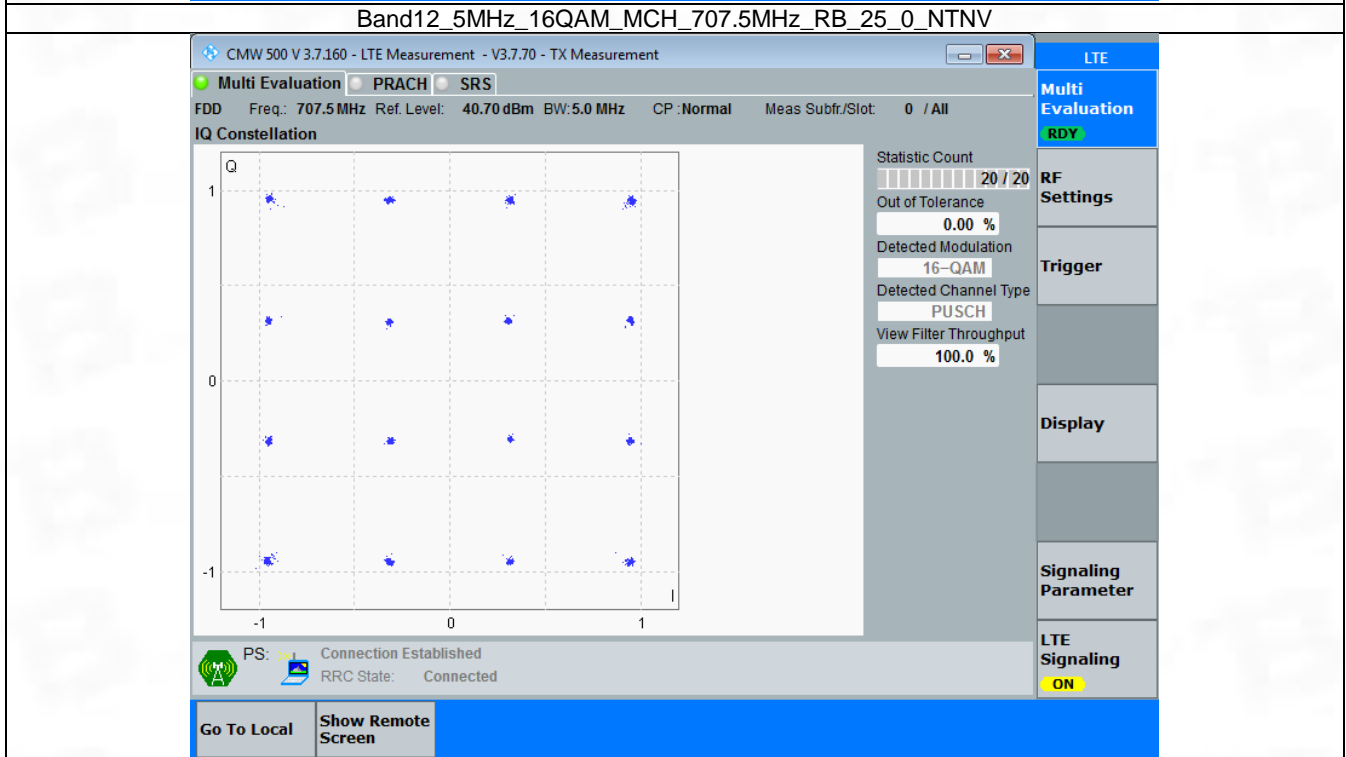
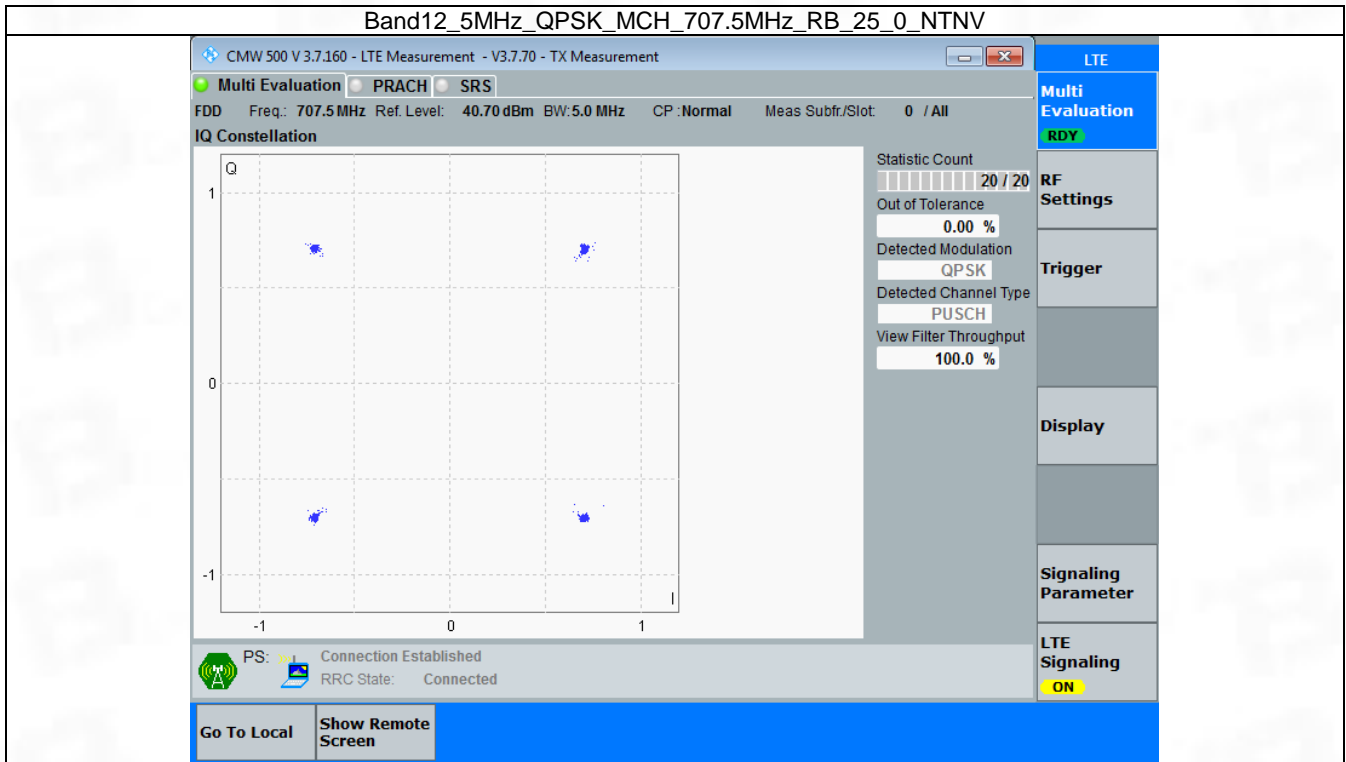


### 3.3 B12\_5MHz

### 3.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTN						
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



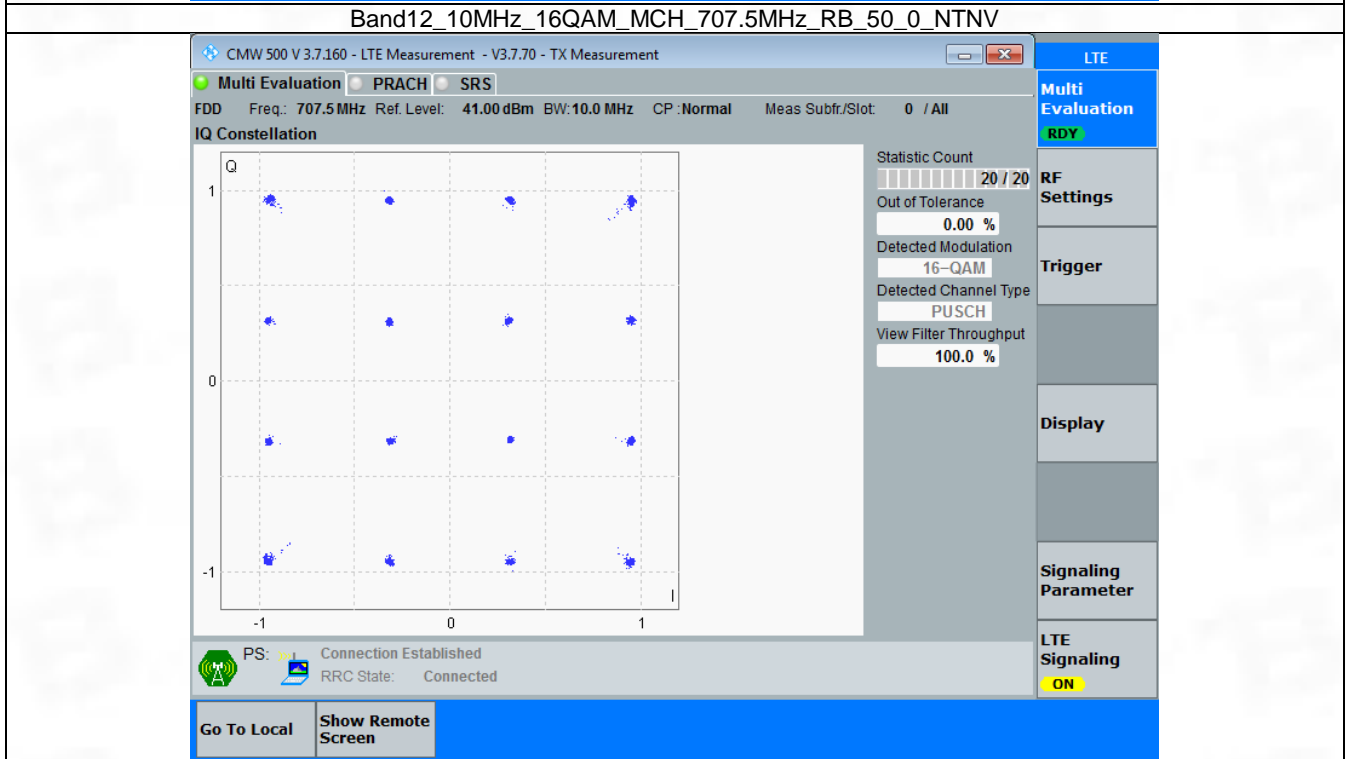
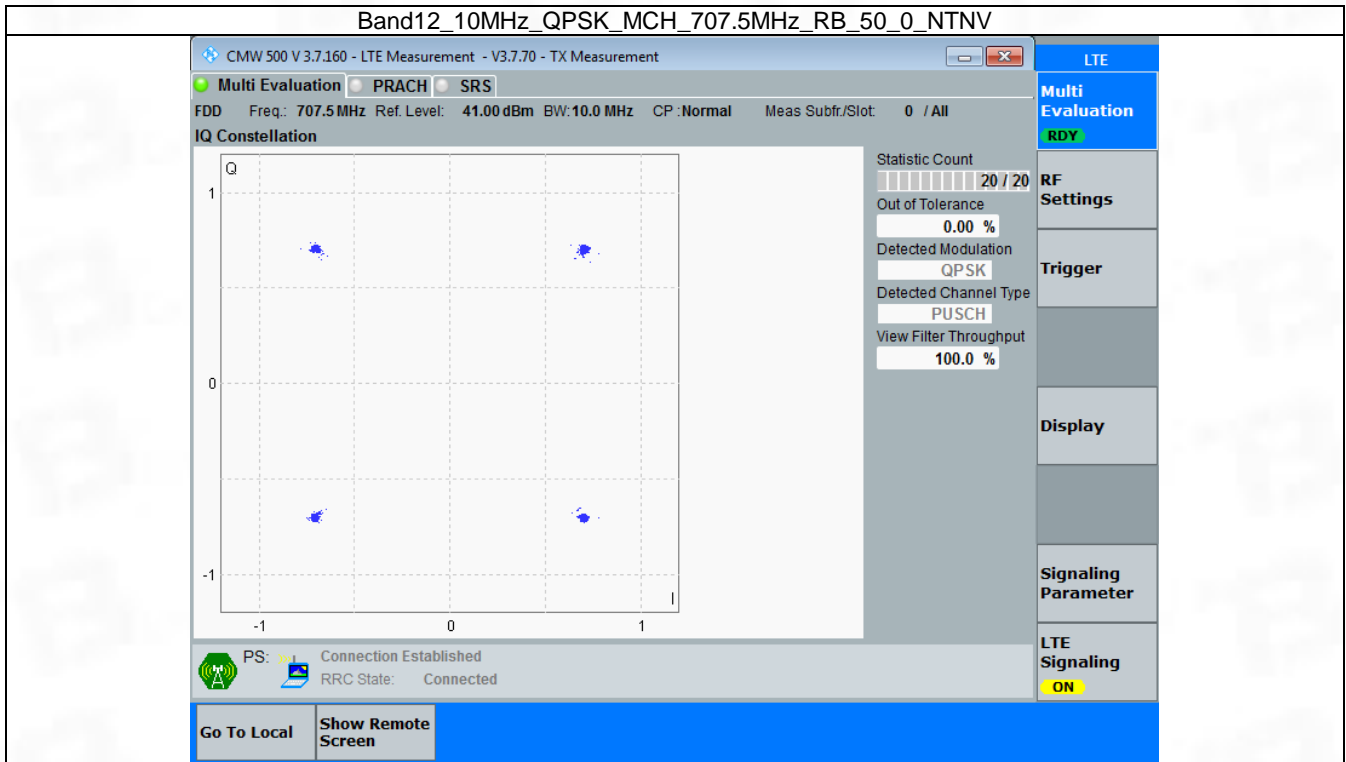
### 3.4 B12\_10MHz

### 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	50	0	Refer To Test Graph		Pass



### 3.4.2 Test Graph



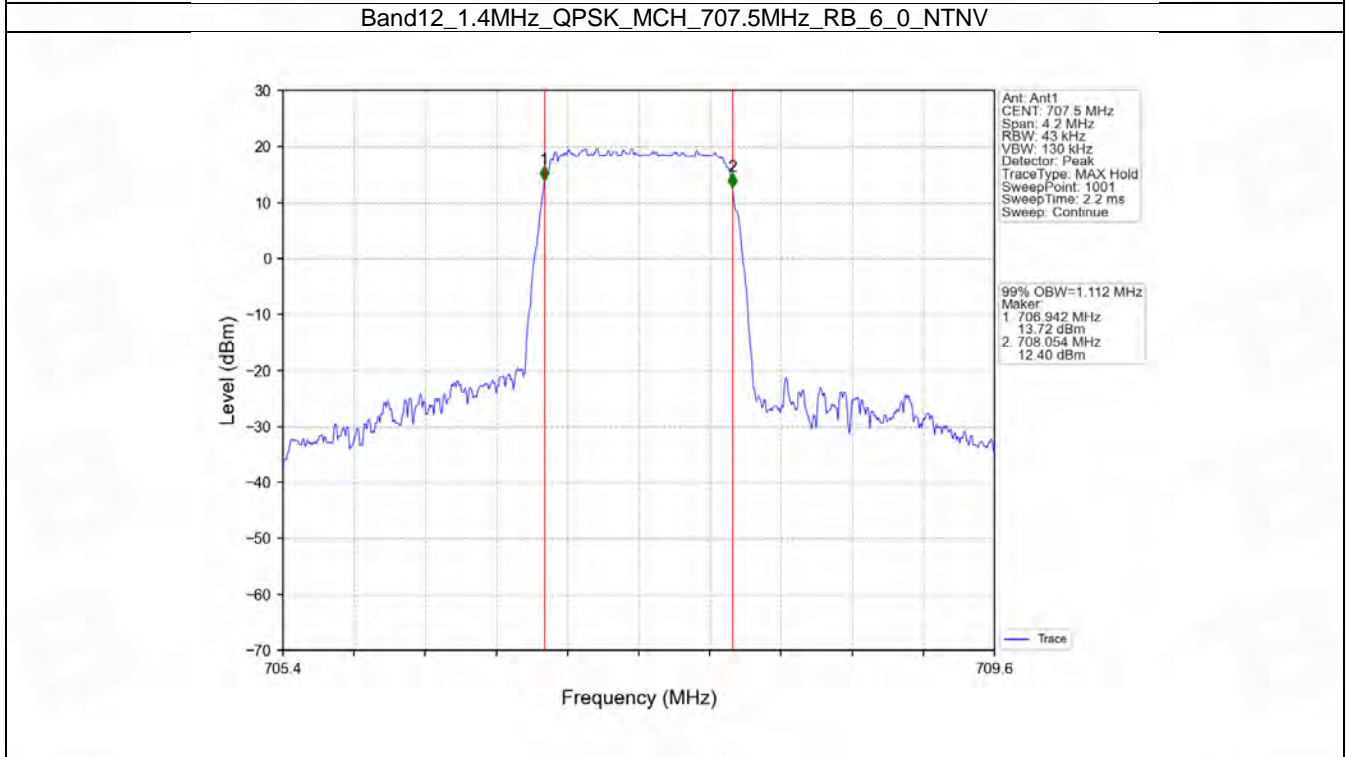
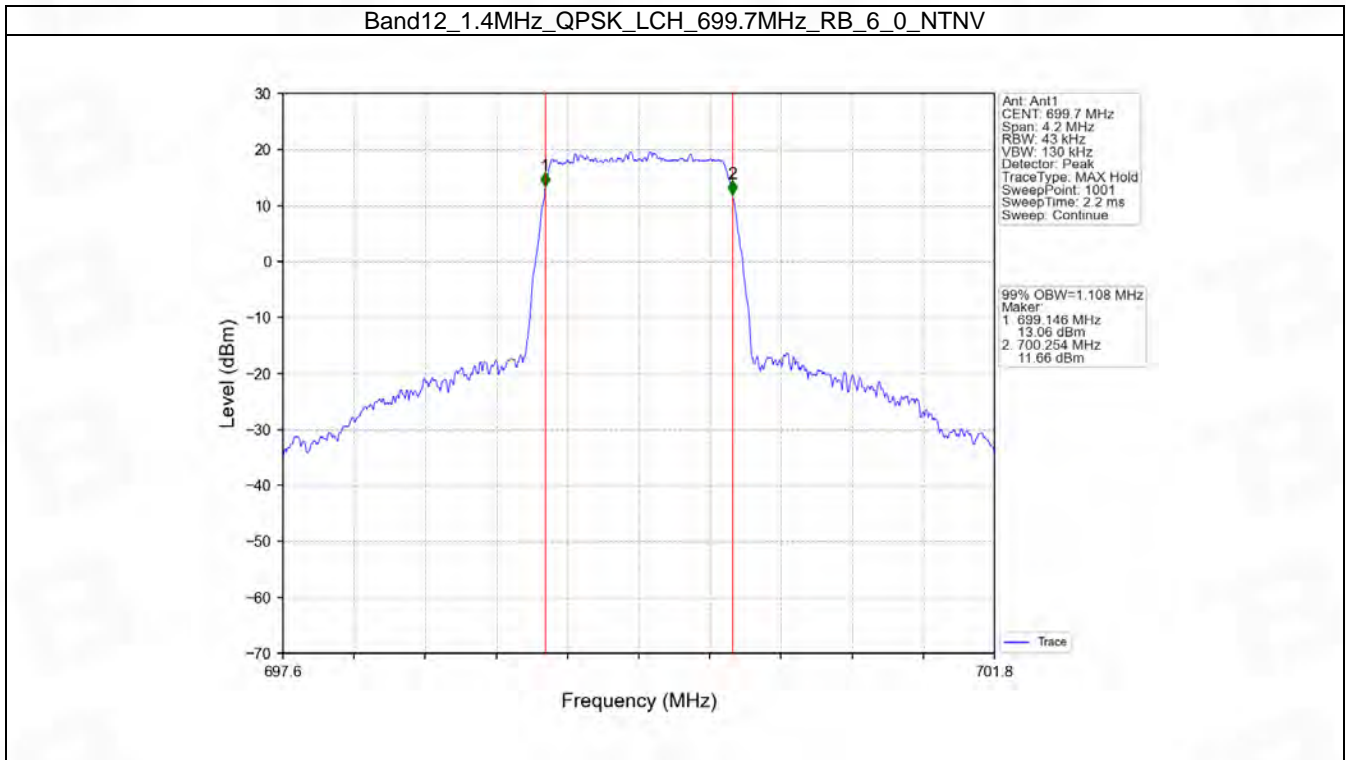
## 4. 99% & 26dB Bandwidth

### 4.1 Band12\_OBW

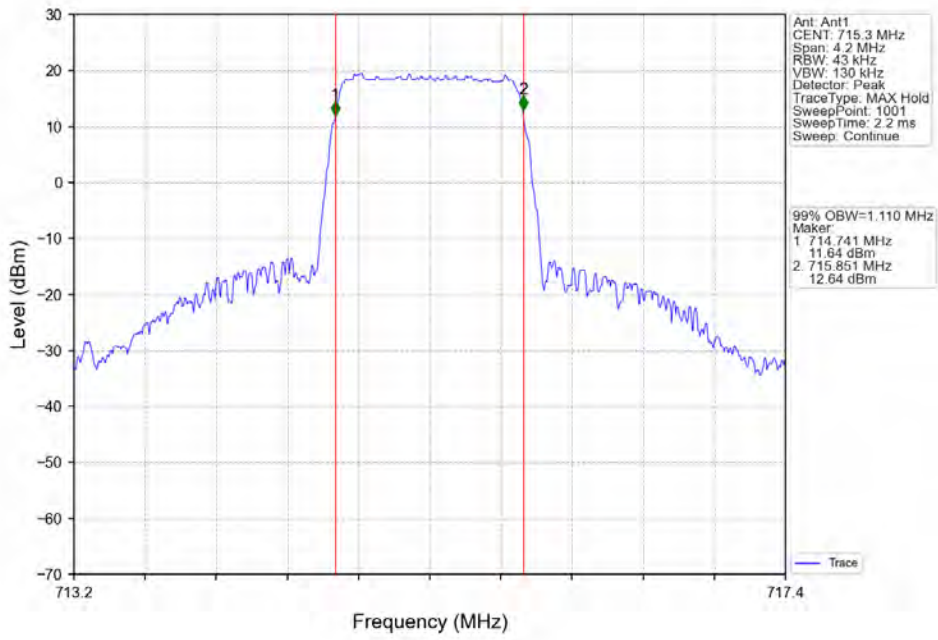
#### 4.1.1 Test Result

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	1.108	/	Pass
		707.5	6	0	1.112	/	Pass
		715.3	6	0	1.110	/	Pass
	16QAM	699.7	6	0	1.115	/	Pass
		707.5	6	0	1.109	/	Pass
		715.3	6	0	1.120	/	Pass
3	QPSK	700.5	15	0	2.760	/	Pass
		707.5	15	0	2.762	/	Pass
		714.5	15	0	2.752	/	Pass
	16QAM	700.5	15	0	2.756	/	Pass
		707.5	15	0	2.747	/	Pass
		714.5	15	0	2.768	/	Pass
5	QPSK	701.5	25	0	4.540	/	Pass
		707.5	25	0	4.550	/	Pass
		713.5	25	0	4.544	/	Pass
	16QAM	701.5	25	0	4.558	/	Pass
		707.5	25	0	4.585	/	Pass
		713.5	25	0	4.542	/	Pass
10	QPSK	704	50	0	9.080	/	Pass
		707.5	50	0	9.098	/	Pass
		711	50	0	9.061	/	Pass
	16QAM	704	50	0	9.050	/	Pass
		707.5	50	0	9.086	/	Pass
		711	50	0	9.059	/	Pass

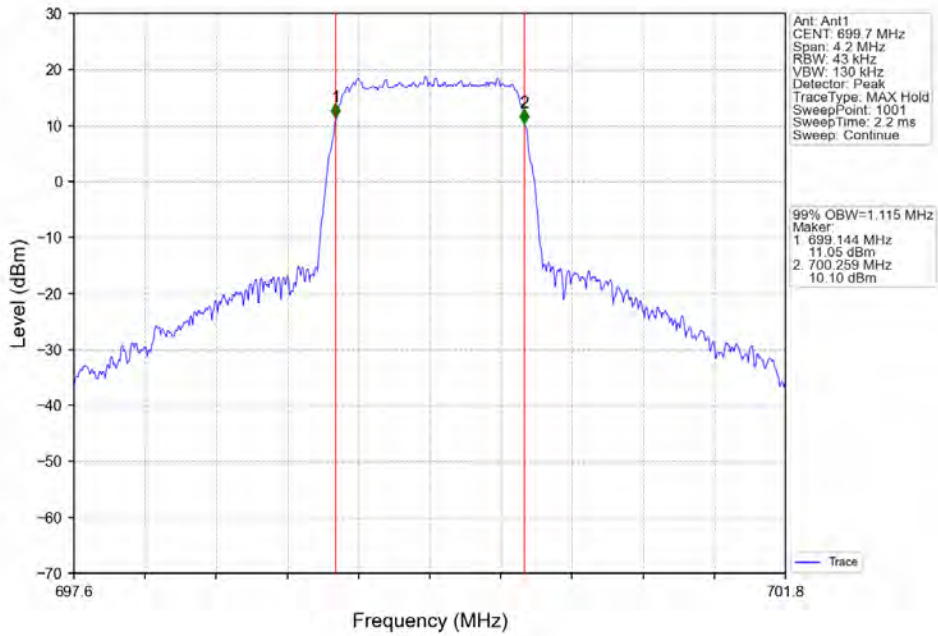
### 4.1.2 Test Graph



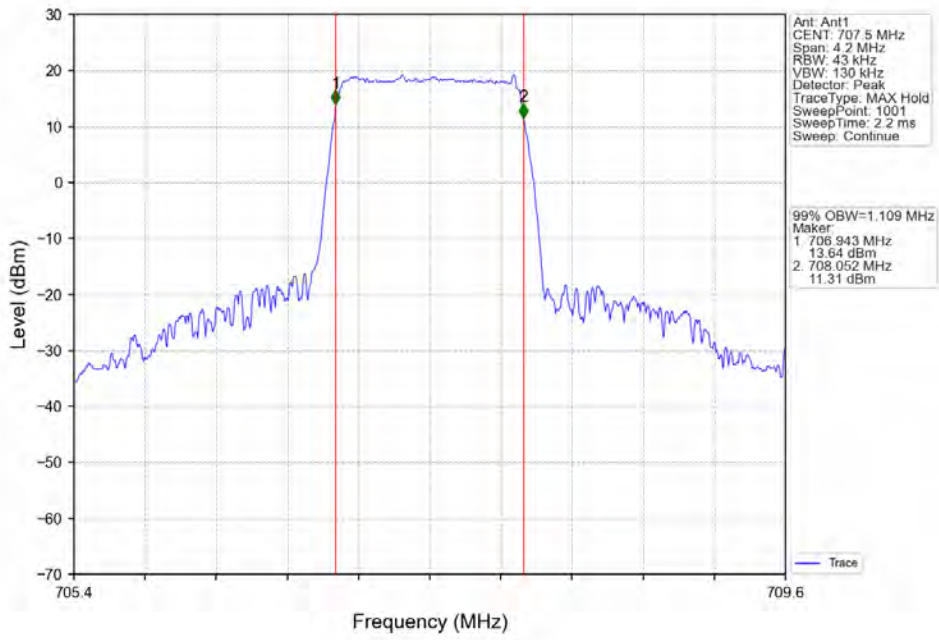
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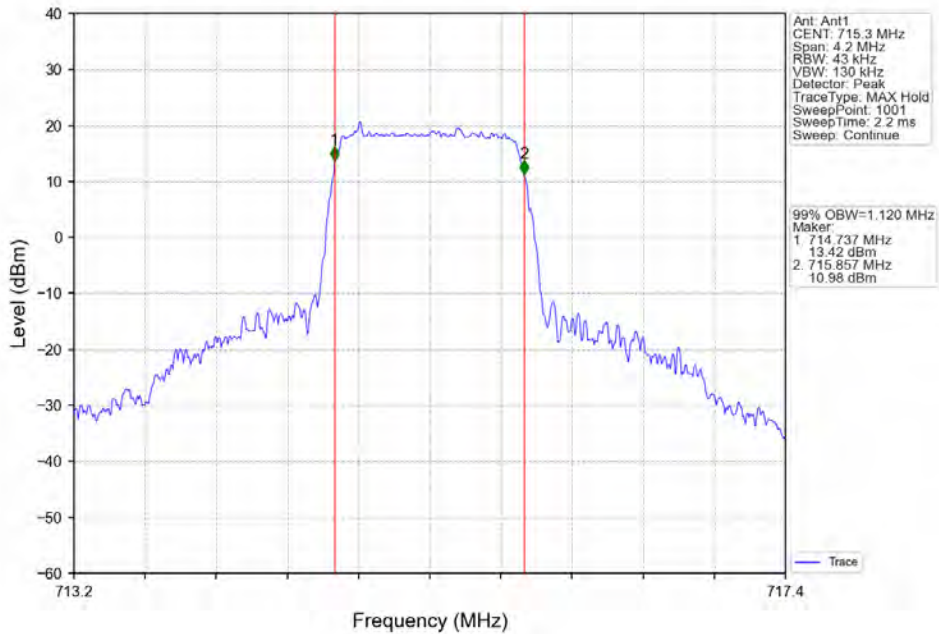
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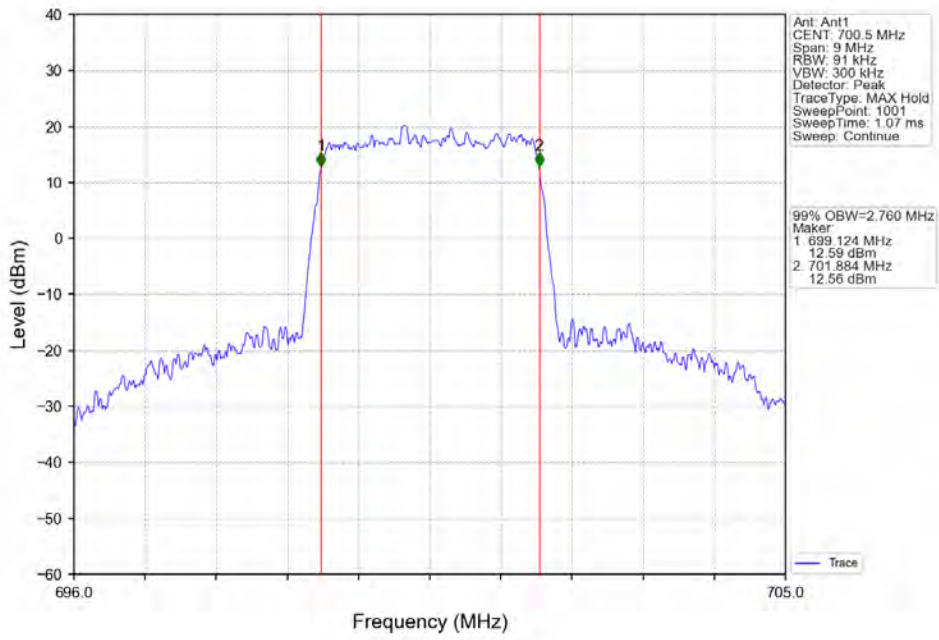
Band12\_1.4MHz\_16QAM\_MCH\_707.5MHz\_RB\_6\_0\_NTNV



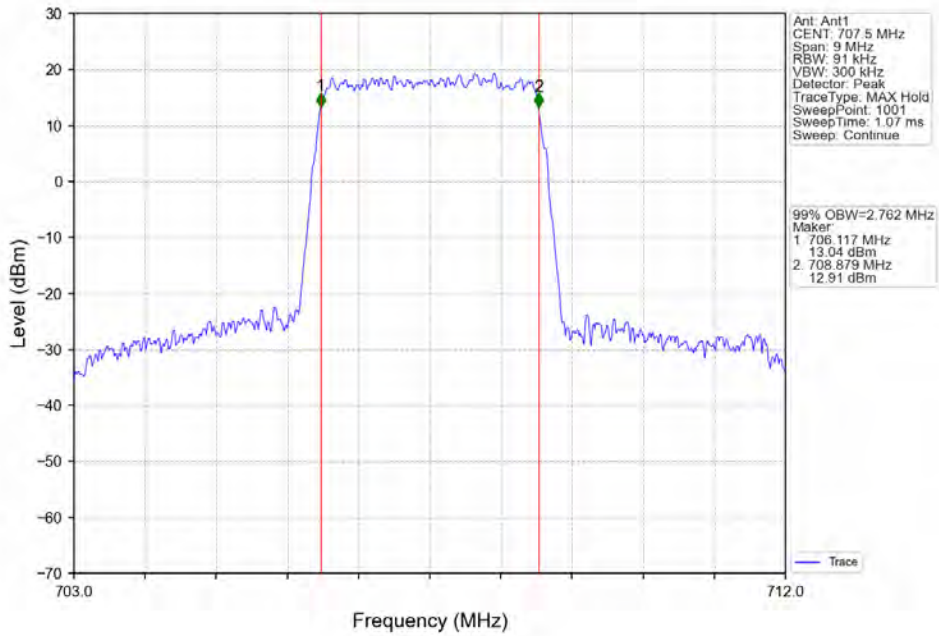
Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



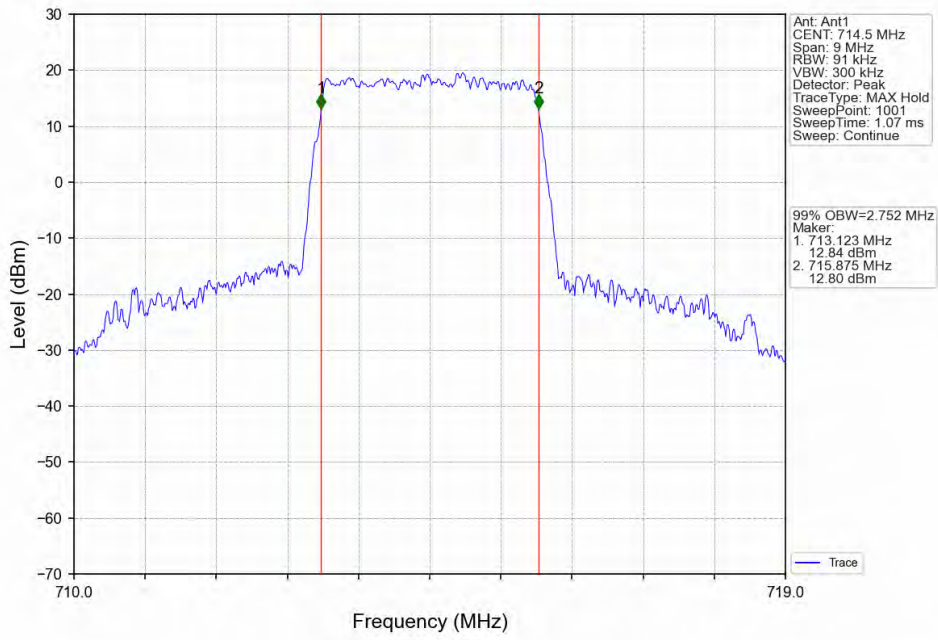
Band12\_3MHz\_QPSK\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



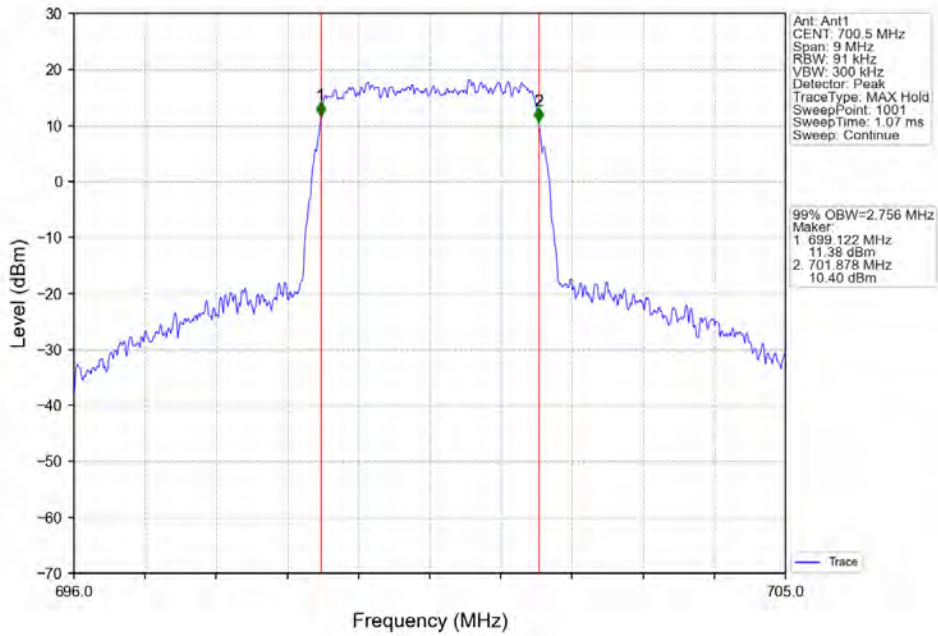
Band12\_3MHz\_QPSK\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



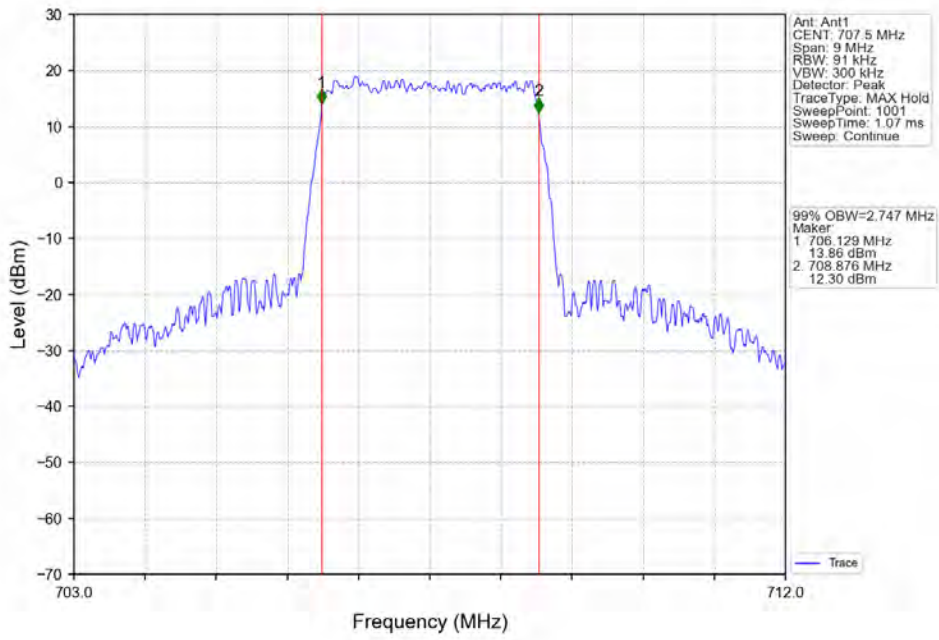
Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_15\_0\_NTNV



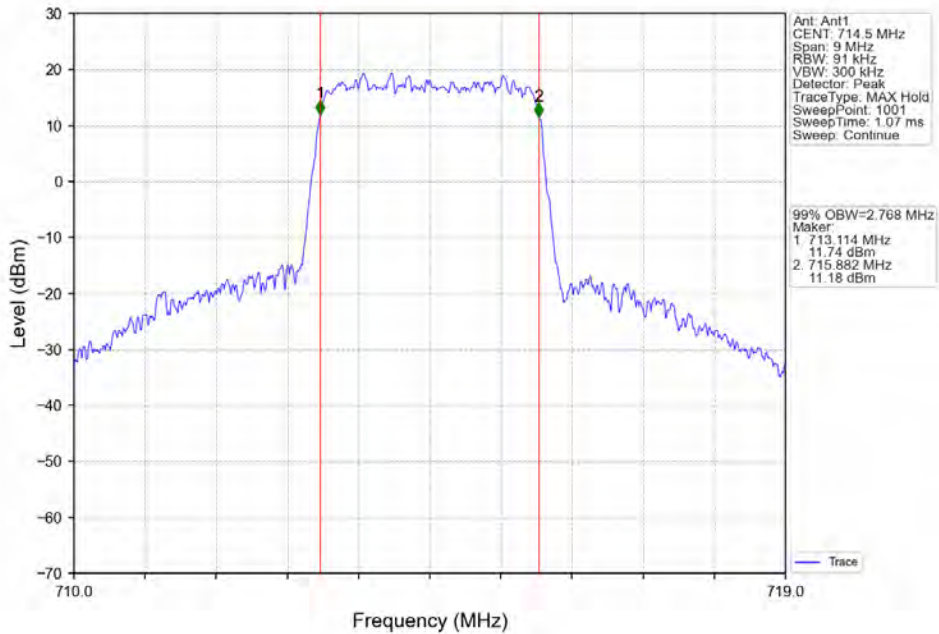
Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



Band12\_3MHz\_16QAM\_MCH\_707.5MHz\_RB\_15\_0\_NTNV

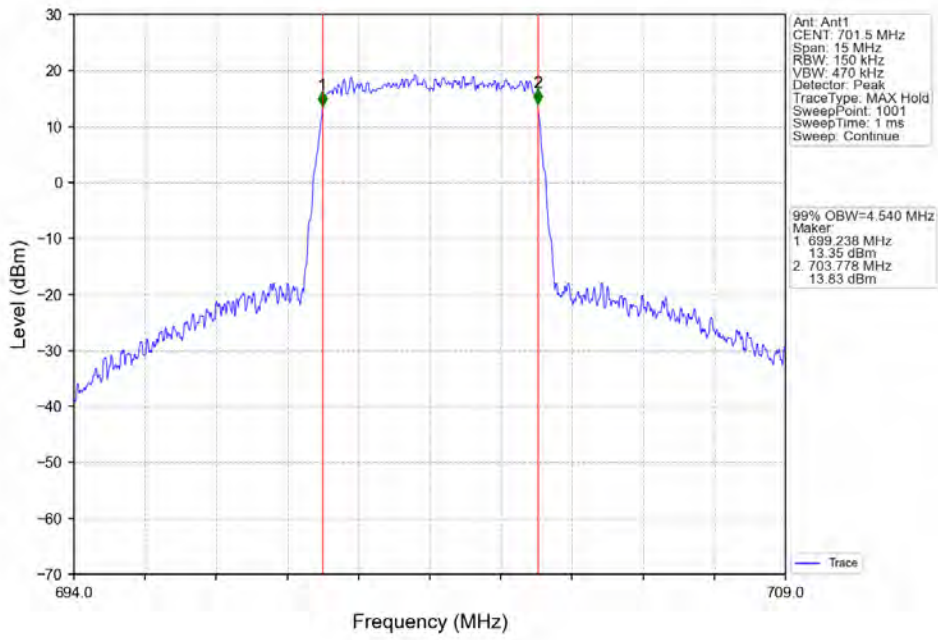


Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_15\_0\_NTNV

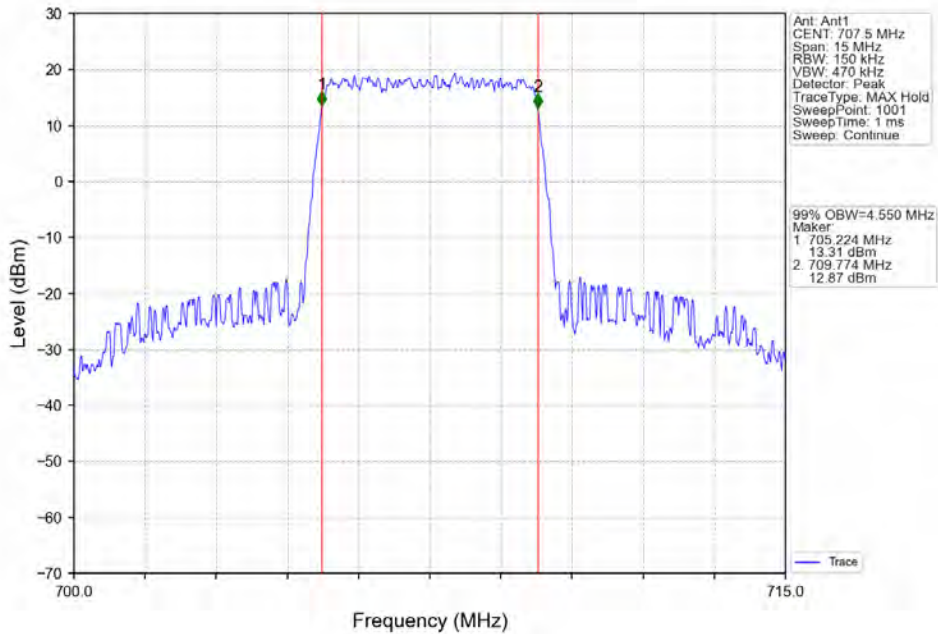




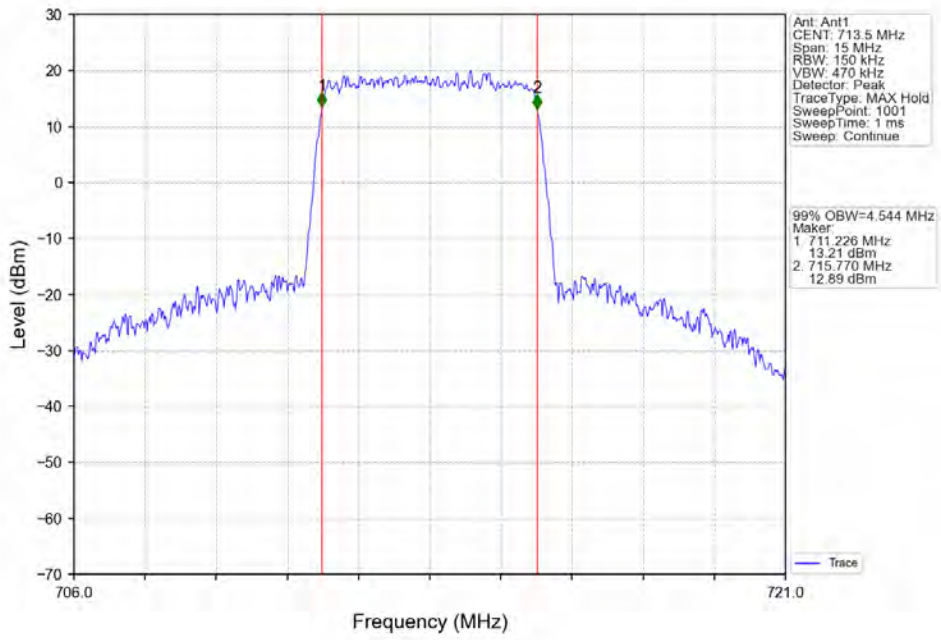
Band12\_5MHz\_QPSK\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



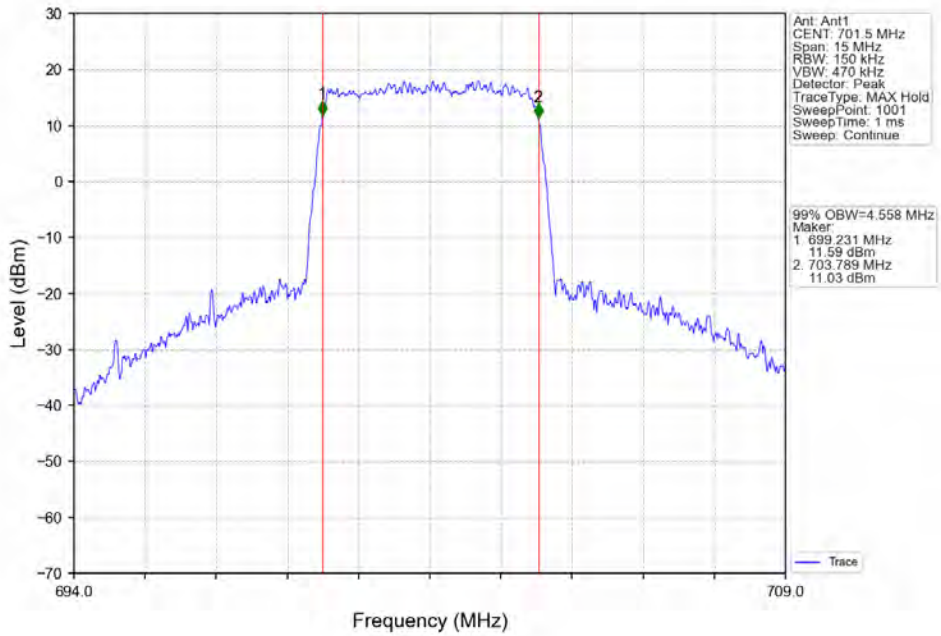
Band12\_5MHz\_QPSK\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



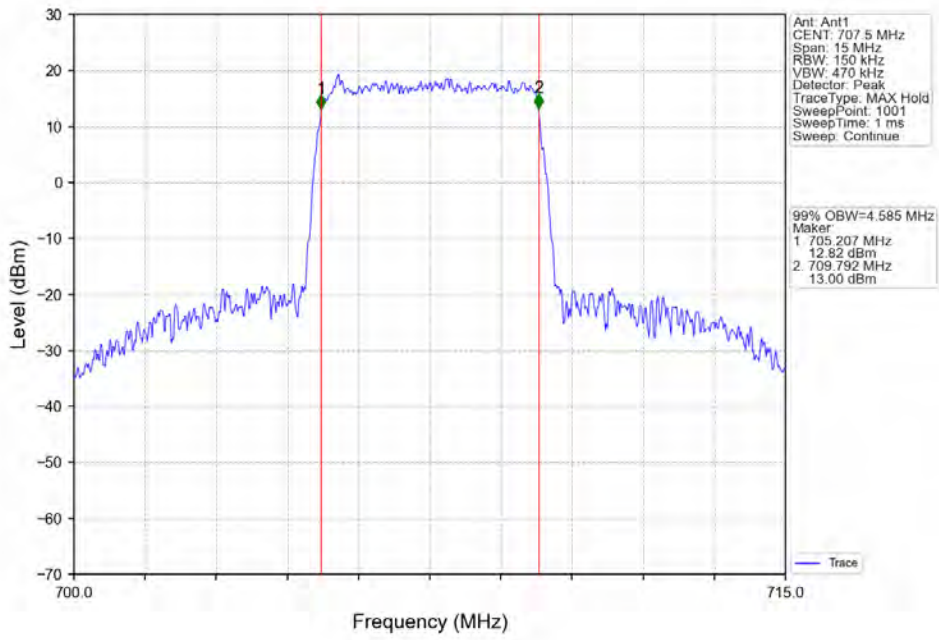
Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_25\_0\_NTNV



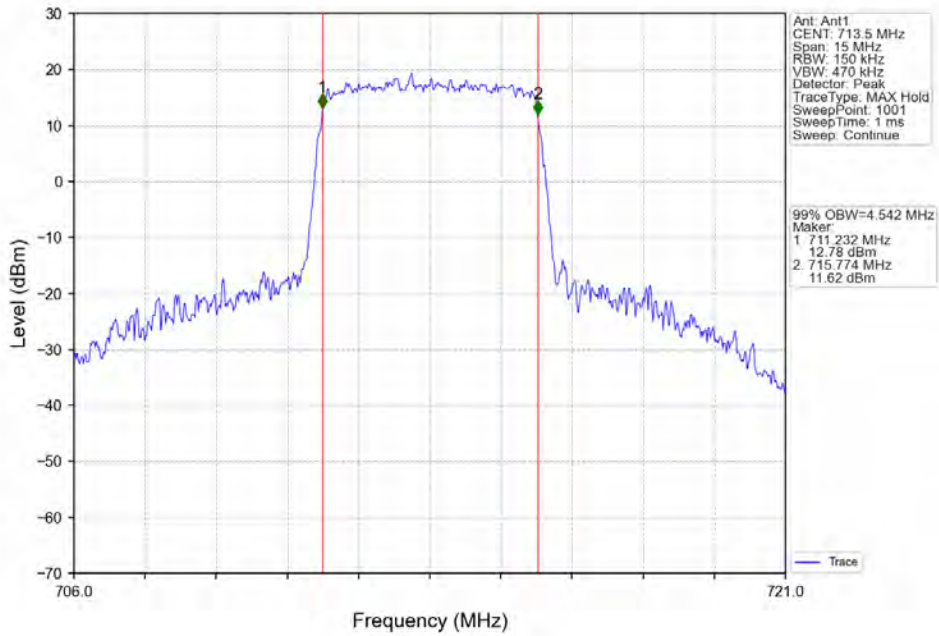
Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



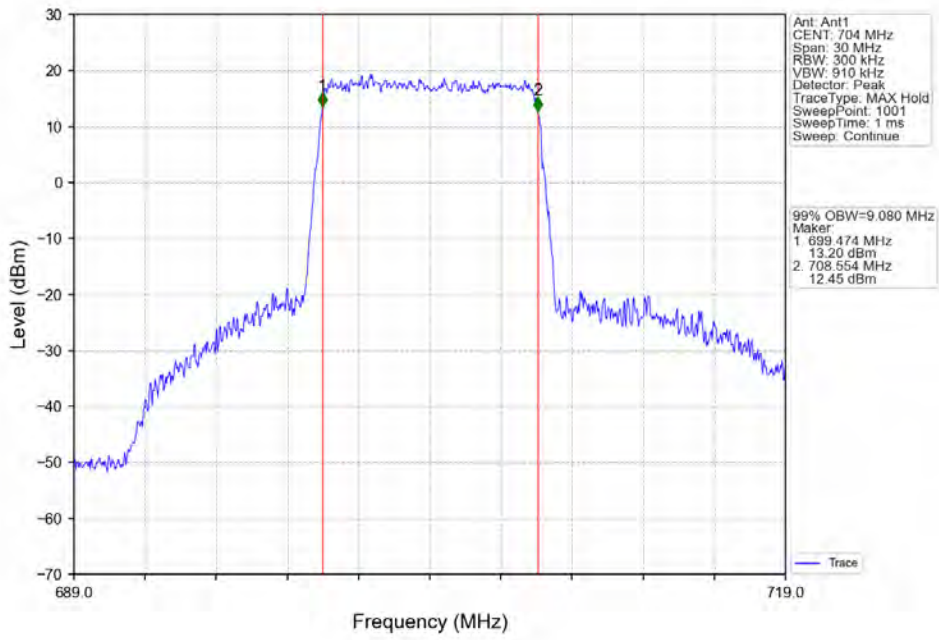
Band12\_5MHz\_16QAM\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



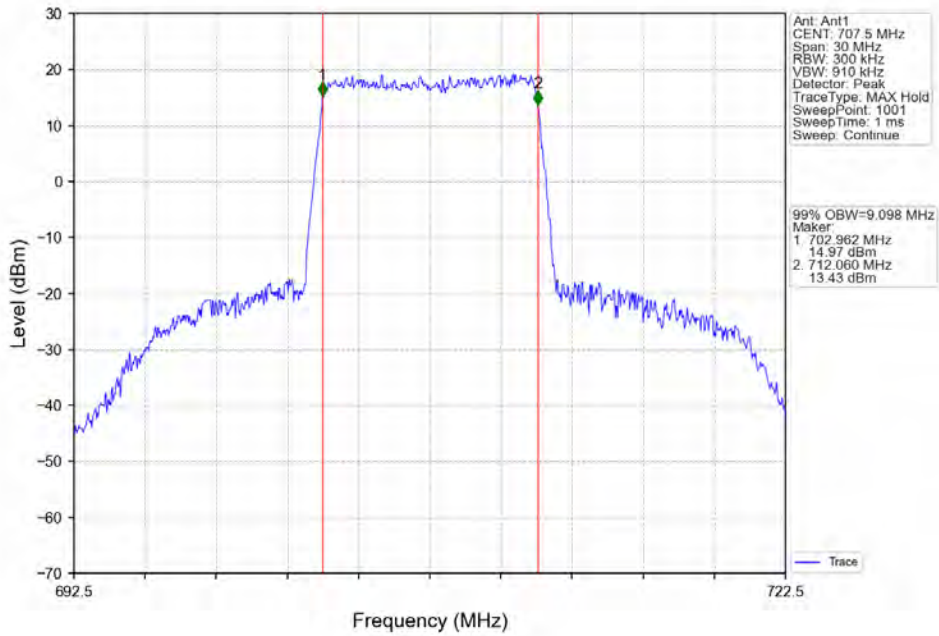
Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_25\_0\_NTNV



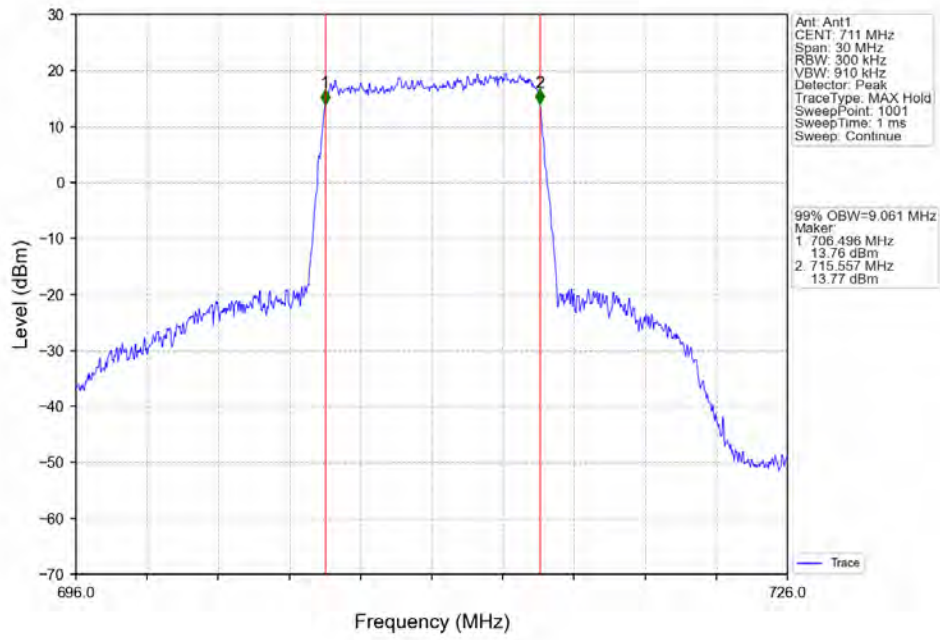
Band12\_10MHz\_QPSK\_LCH\_704MHz\_RB\_50\_0\_NTNV



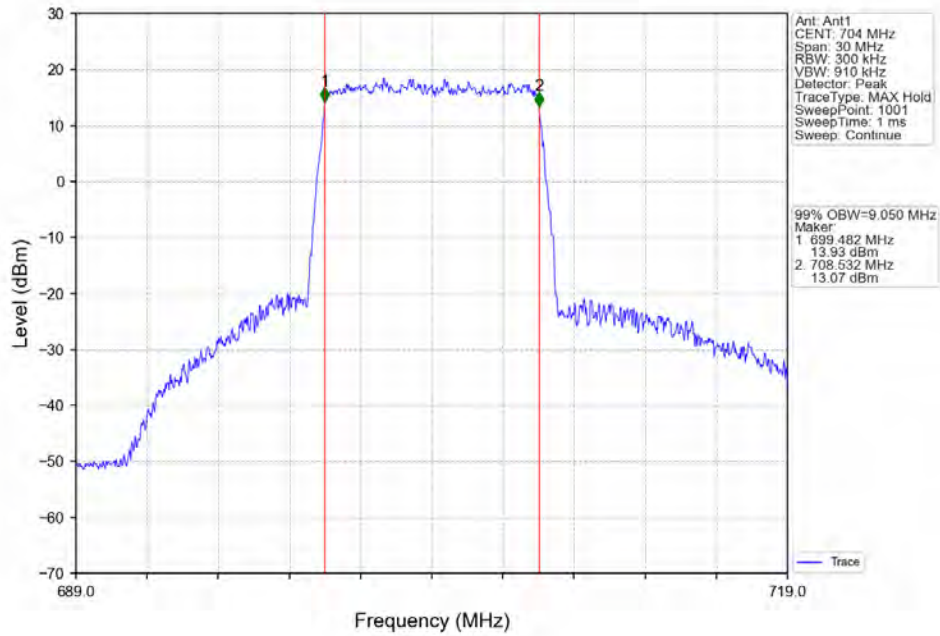
Band12\_10MHz\_QPSK\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



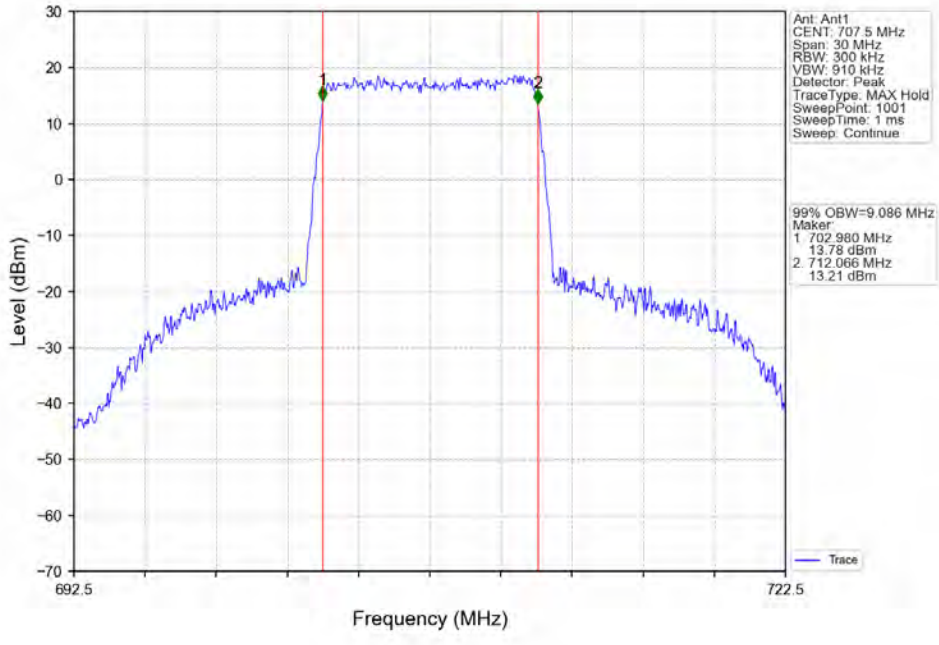
Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_50\_0\_NTNV



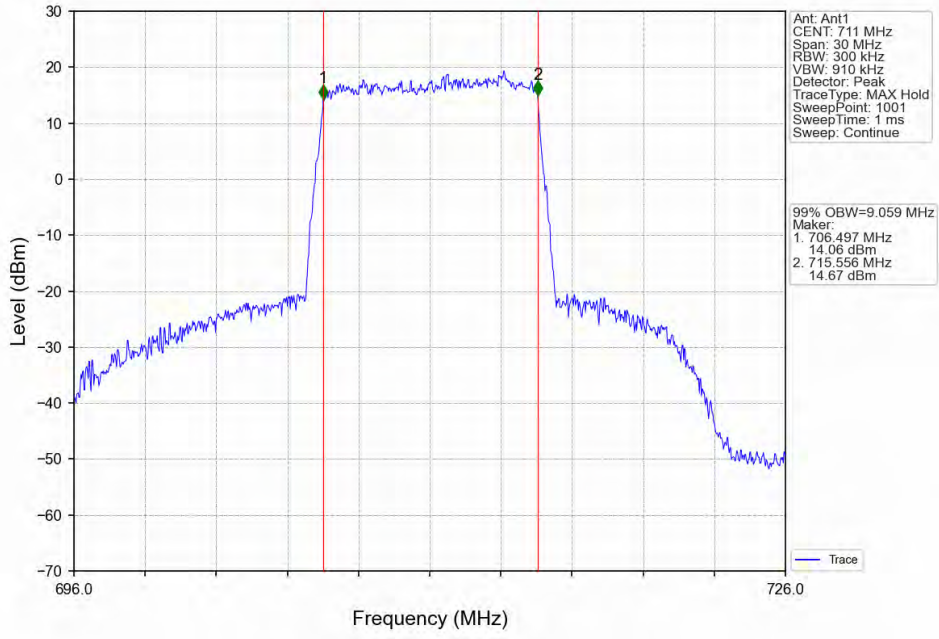
Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_HCH\_711MHz\_RB\_50\_0\_NTNV

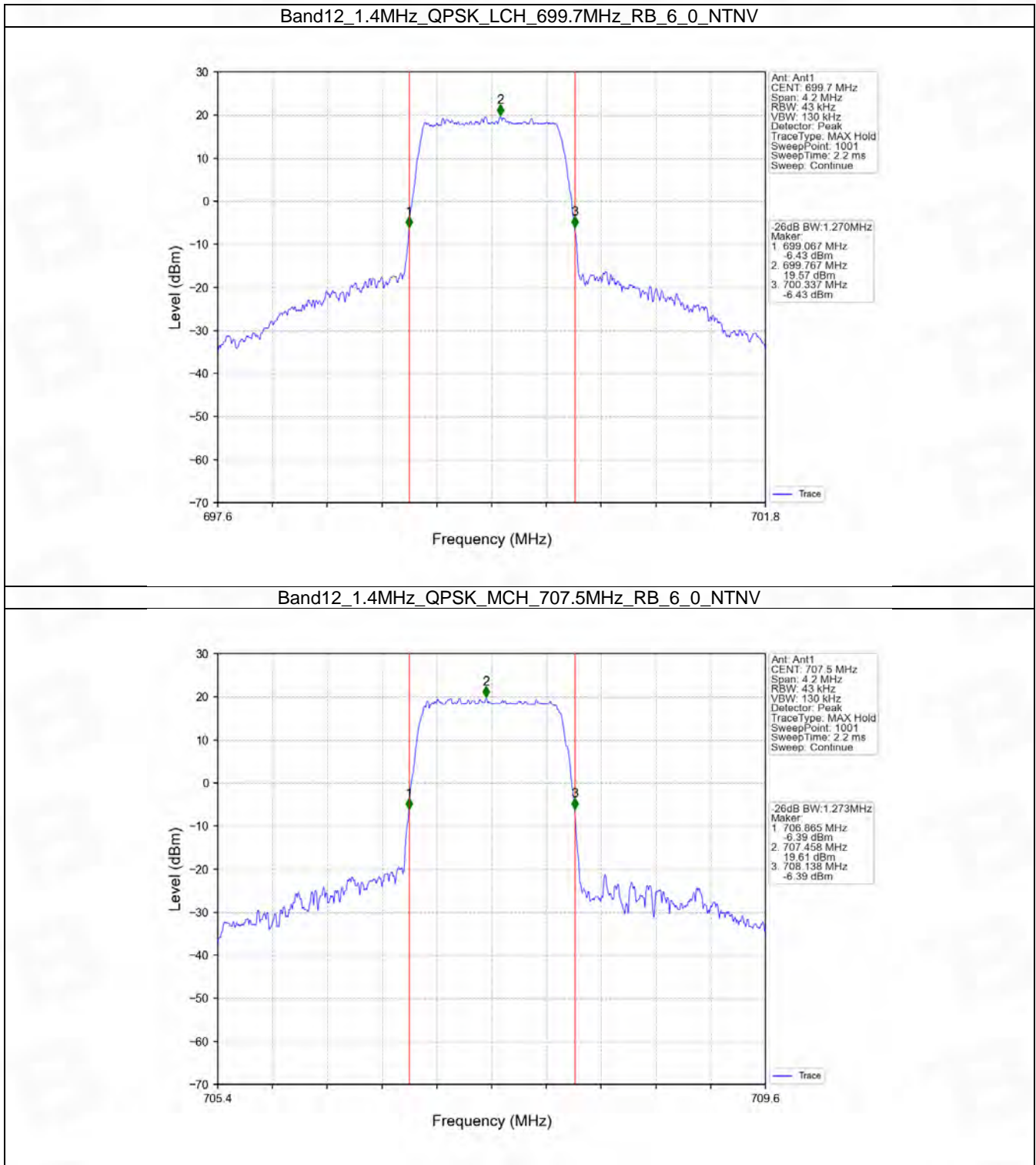


## 4.2 Band12\_XDB

### 4.2.1 Test Result

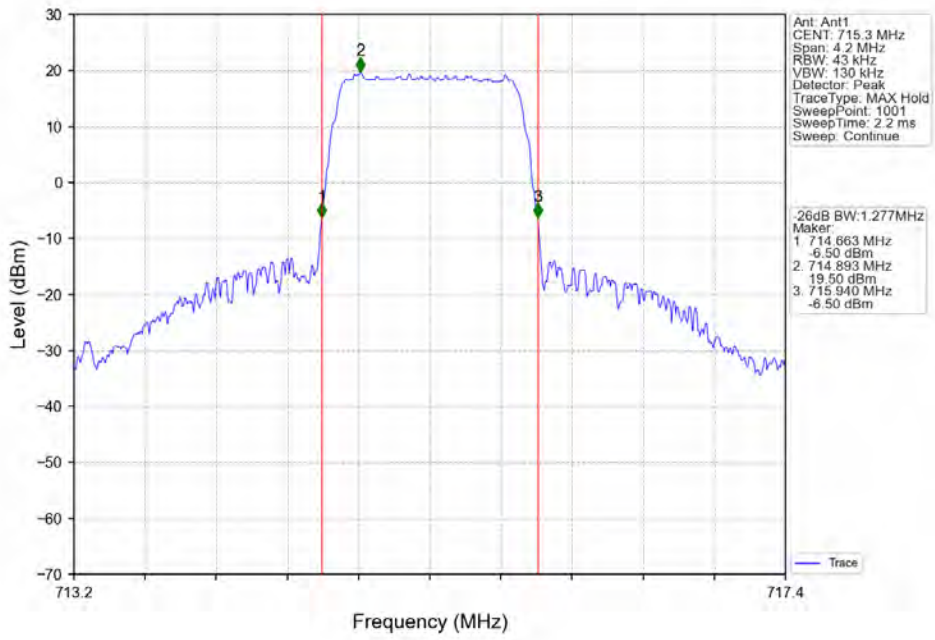
Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	699.7	6	0	1.270	/	Pass
		707.5	6	0	1.273	/	Pass
		715.3	6	0	1.277	/	Pass
	16QAM	699.7	6	0	1.280	/	Pass
		707.5	6	0	1.271	/	Pass
		715.3	6	0	1.279	/	Pass
3	QPSK	700.5	15	0	3.080	/	Pass
		707.5	15	0	3.087	/	Pass
		714.5	15	0	3.103	/	Pass
	16QAM	700.5	15	0	3.124	/	Pass
		707.5	15	0	3.111	/	Pass
		714.5	15	0	3.086	/	Pass
5	QPSK	701.5	25	0	5.017	/	Pass
		707.5	25	0	5.073	/	Pass
		713.5	25	0	5.042	/	Pass
	16QAM	701.5	25	0	5.067	/	Pass
		707.5	25	0	5.046	/	Pass
		713.5	25	0	5.024	/	Pass
10	QPSK	704	50	0	10.041	/	Pass
		707.5	50	0	10.139	/	Pass
		711	50	0	9.999	/	Pass
	16QAM	704	50	0	10.011	/	Pass
		707.5	50	0	10.038	/	Pass
		711	50	0	9.972	/	Pass

### 4.2.2 Test Graph

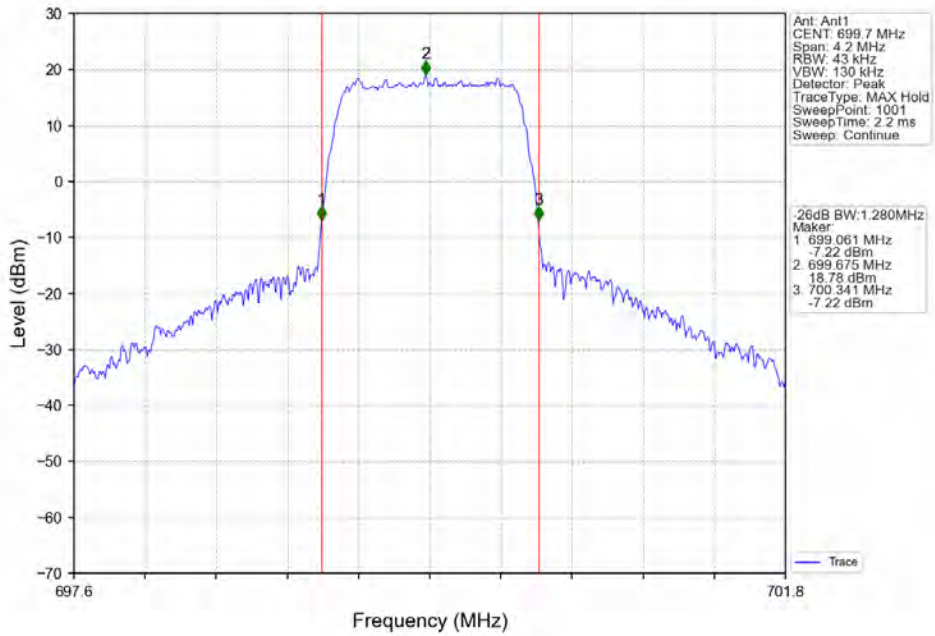




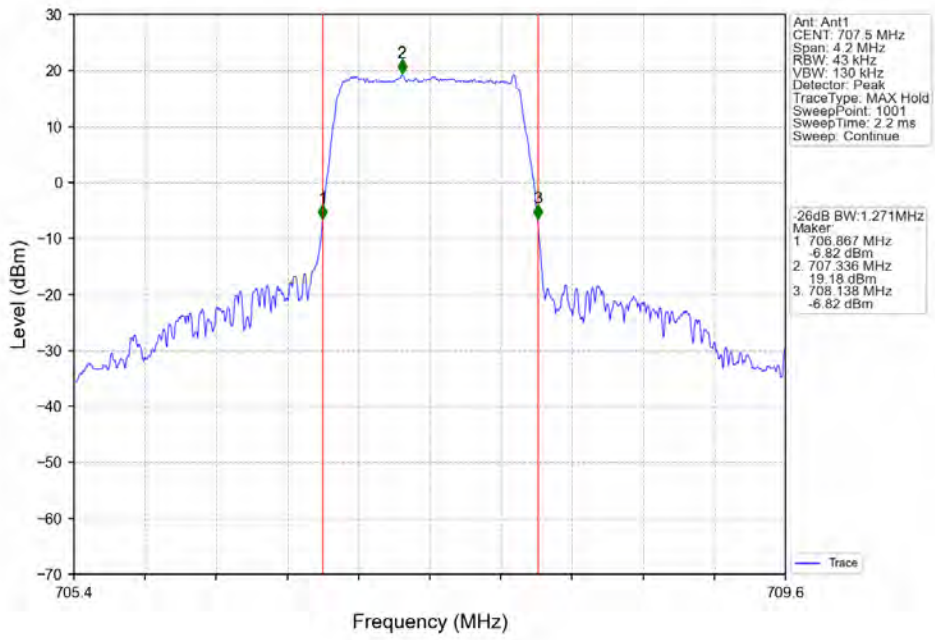
Band12\_1.4MHz\_QPSK\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



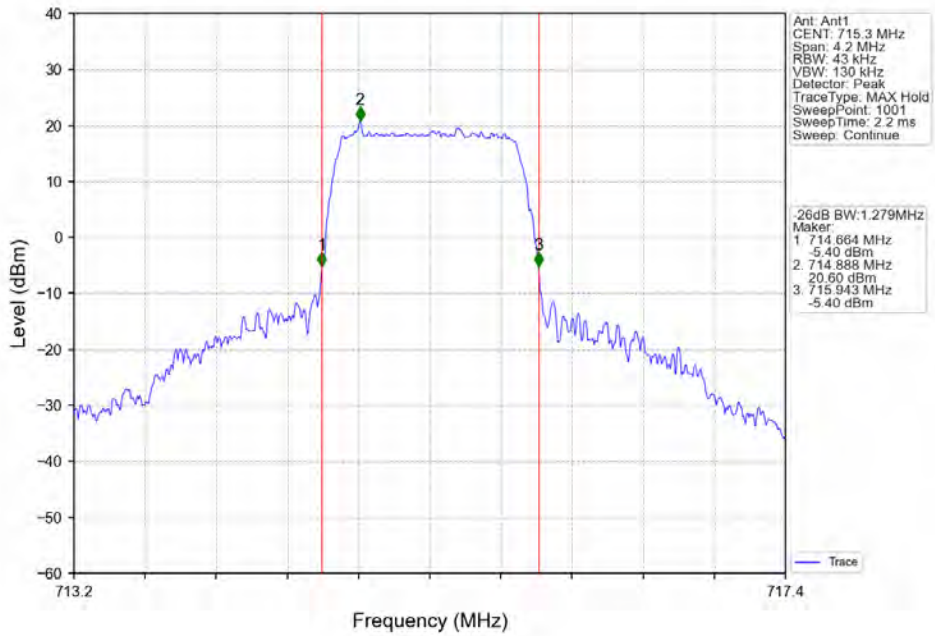
Band12\_1.4MHz\_16QAM\_LCH\_699.7MHz\_RB\_6\_0\_NTNV



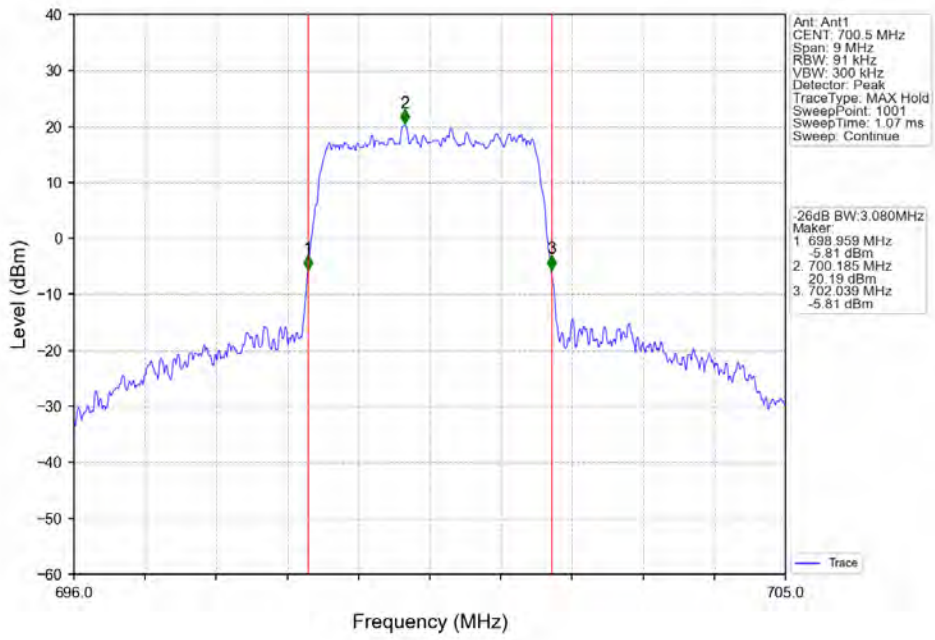
Band12\_1.4MHz\_16QAM\_MCH\_707.5MHz\_RB\_6\_0\_NTNV



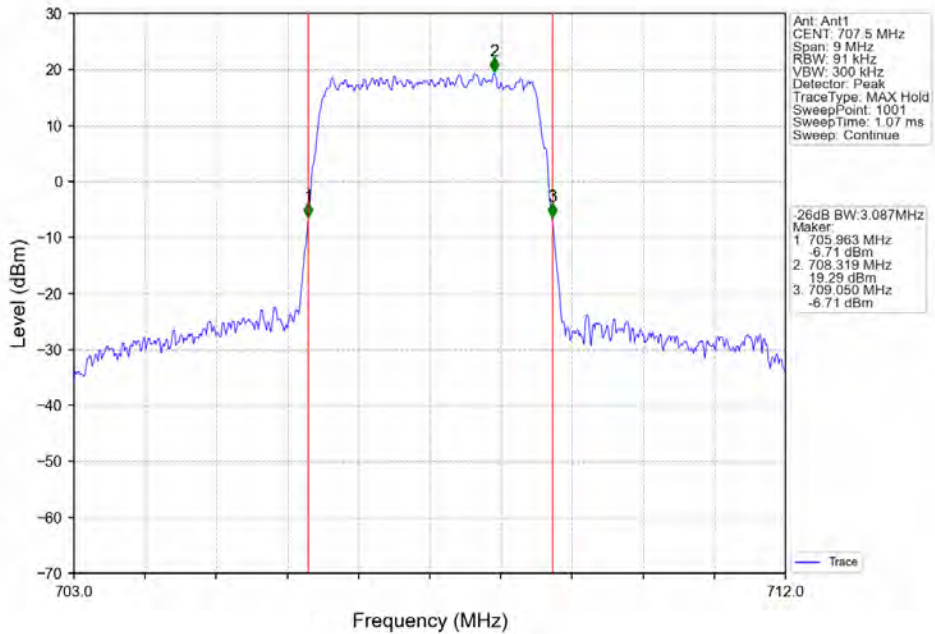
Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



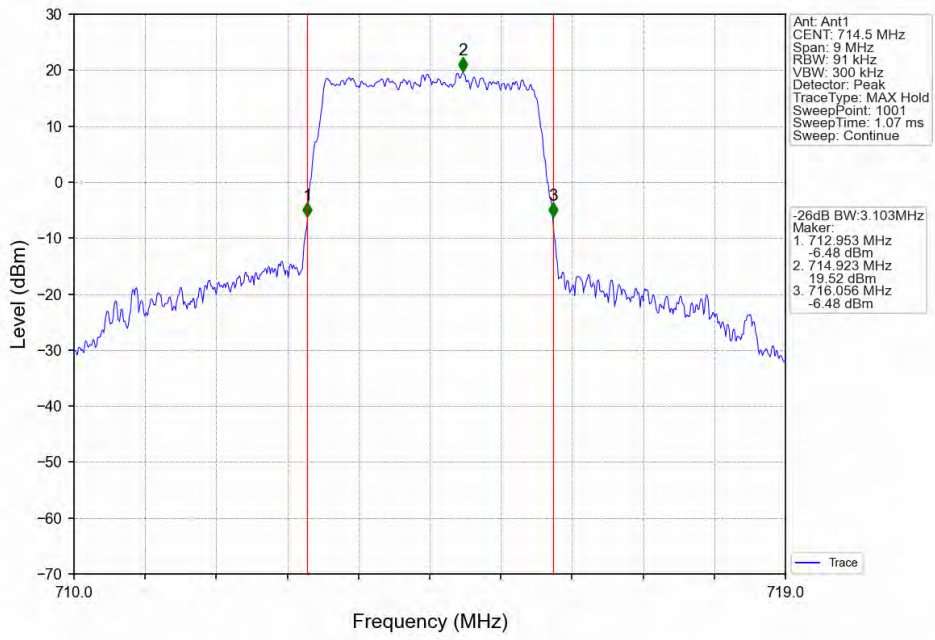
Band12\_3MHz\_QPSK\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



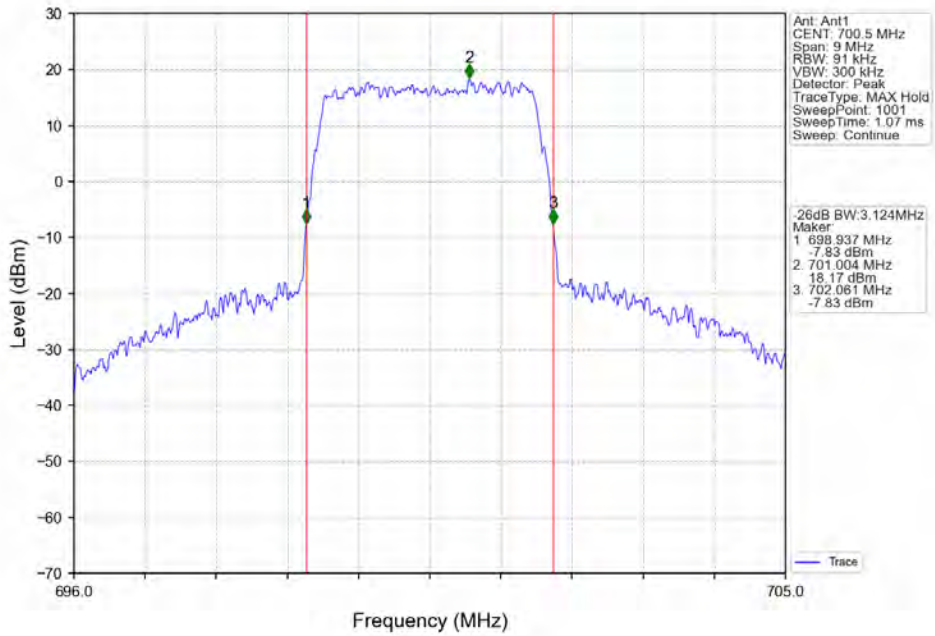
Band12\_3MHz\_QPSK\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



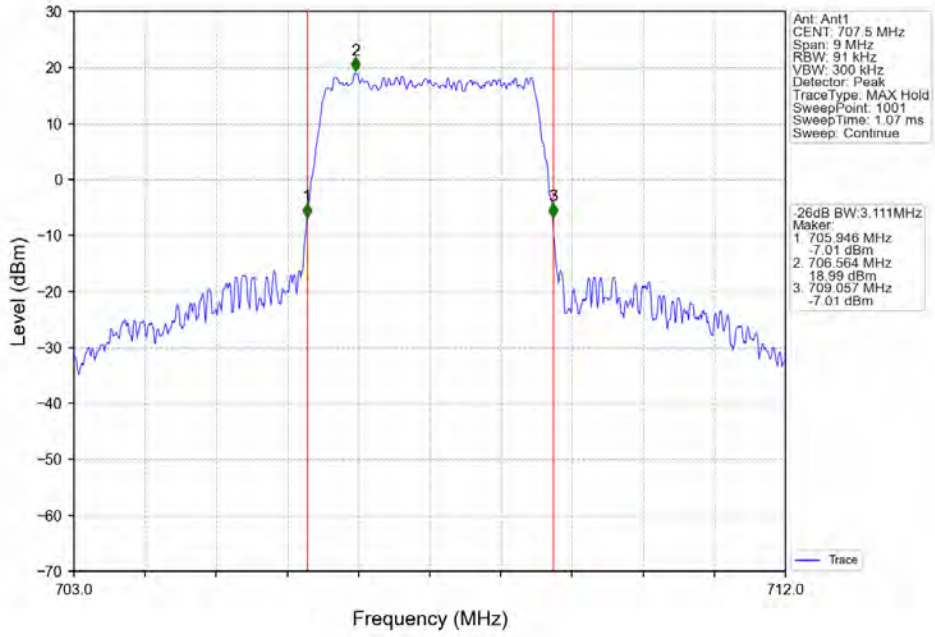
Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_15\_0\_NTNV



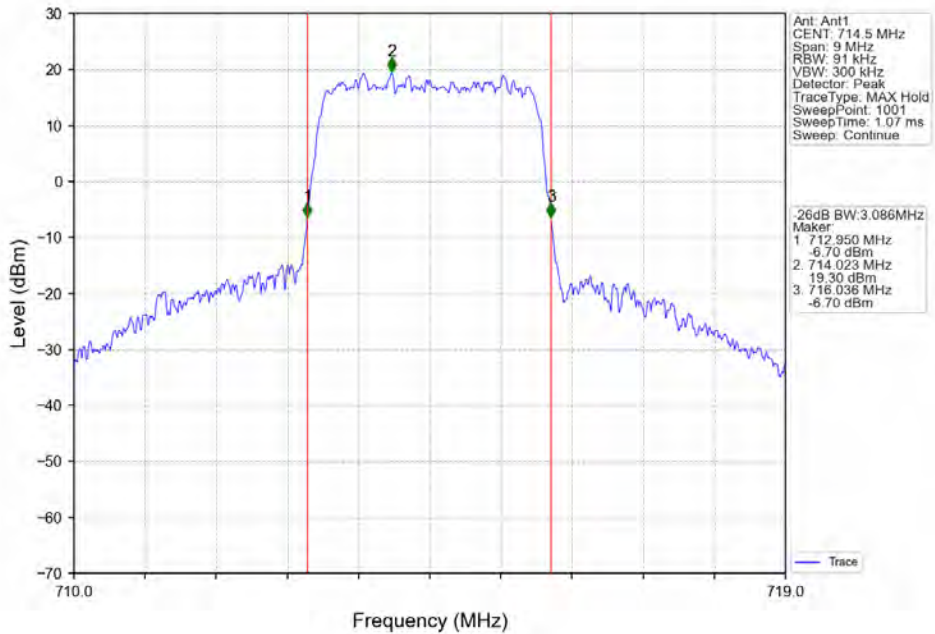
Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



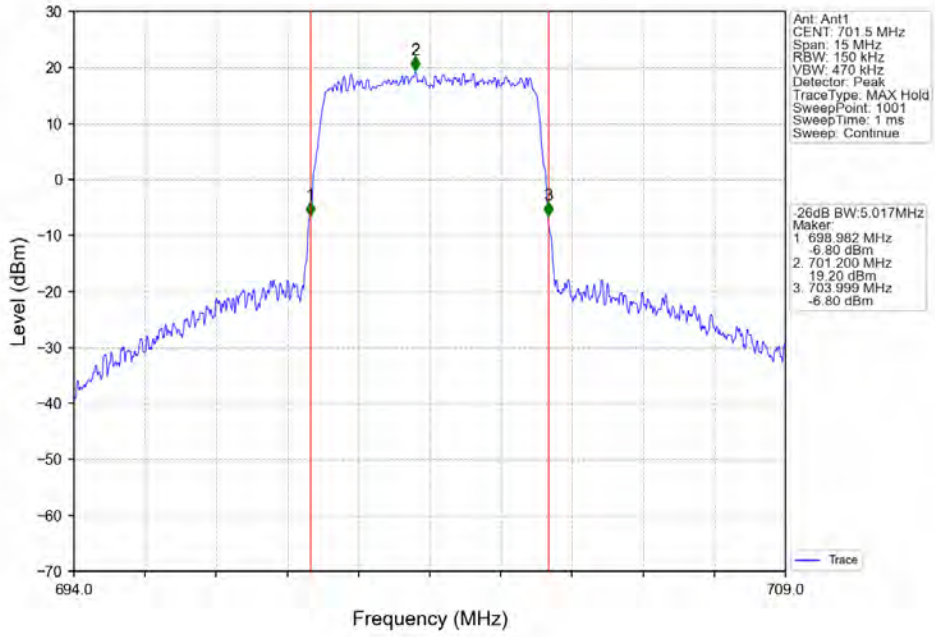
Band12\_3MHz\_16QAM\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



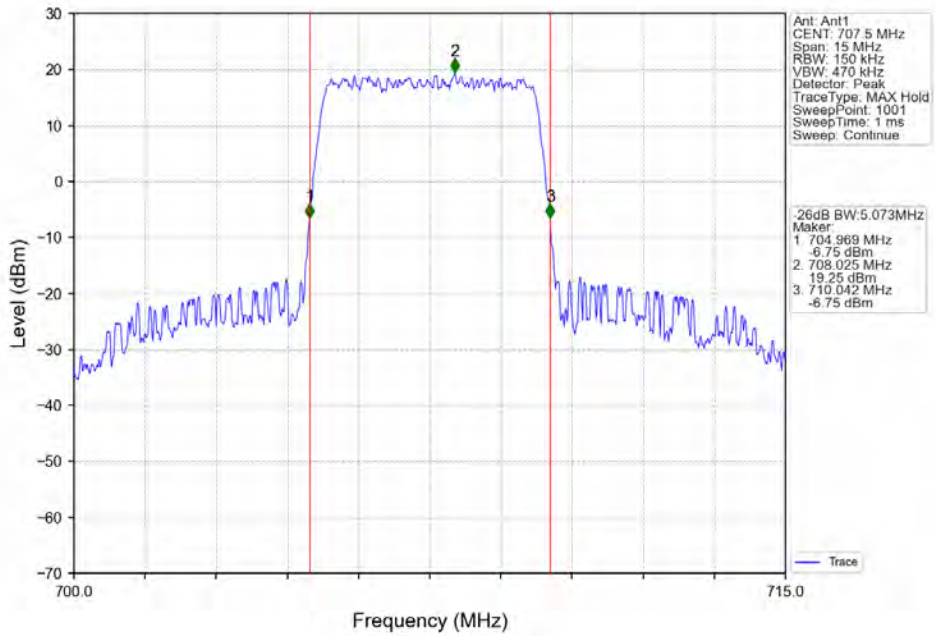
Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_15\_0\_NTNV



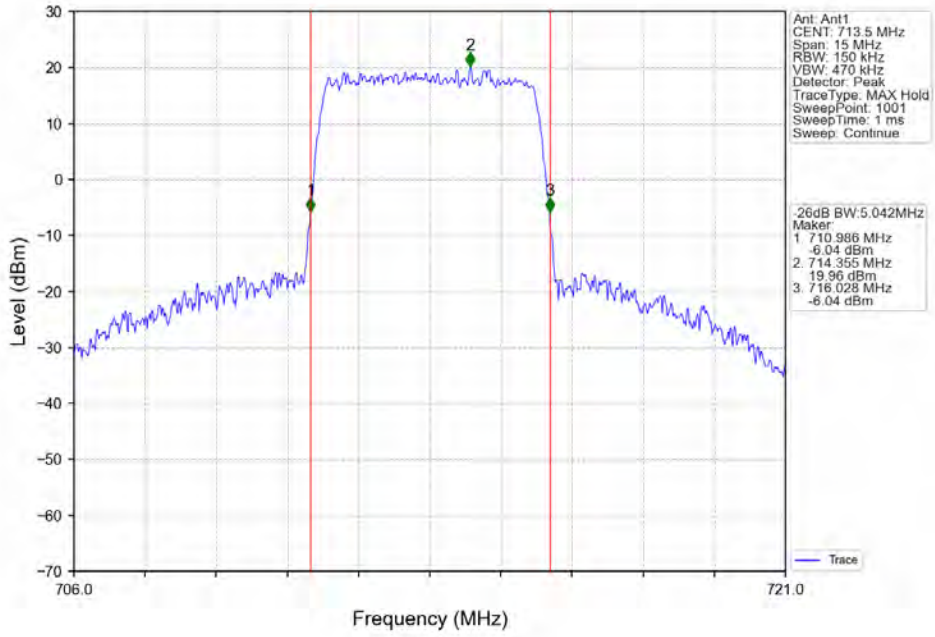
Band12\_5MHz\_QPSK\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



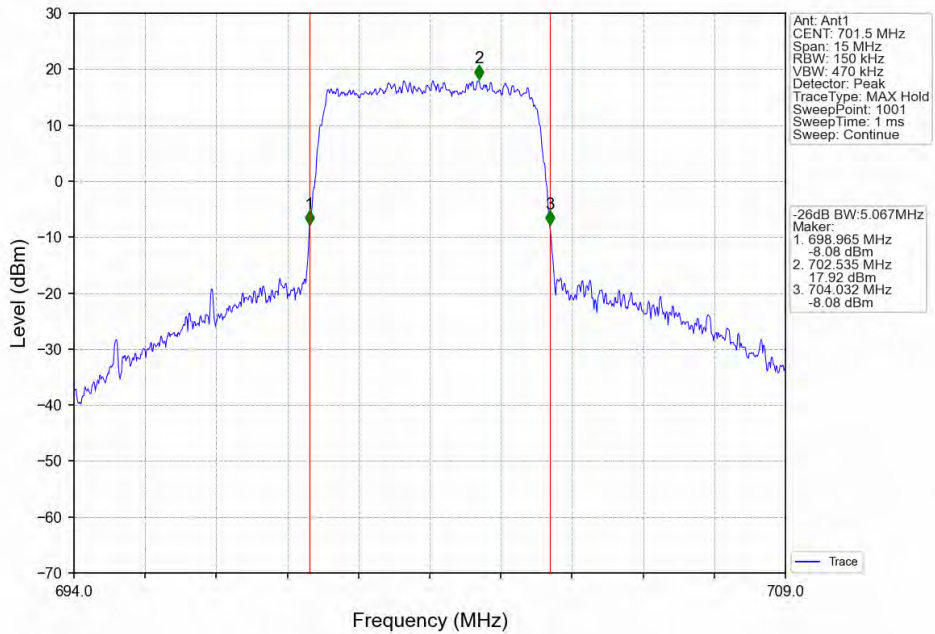
Band12\_5MHz\_QPSK\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



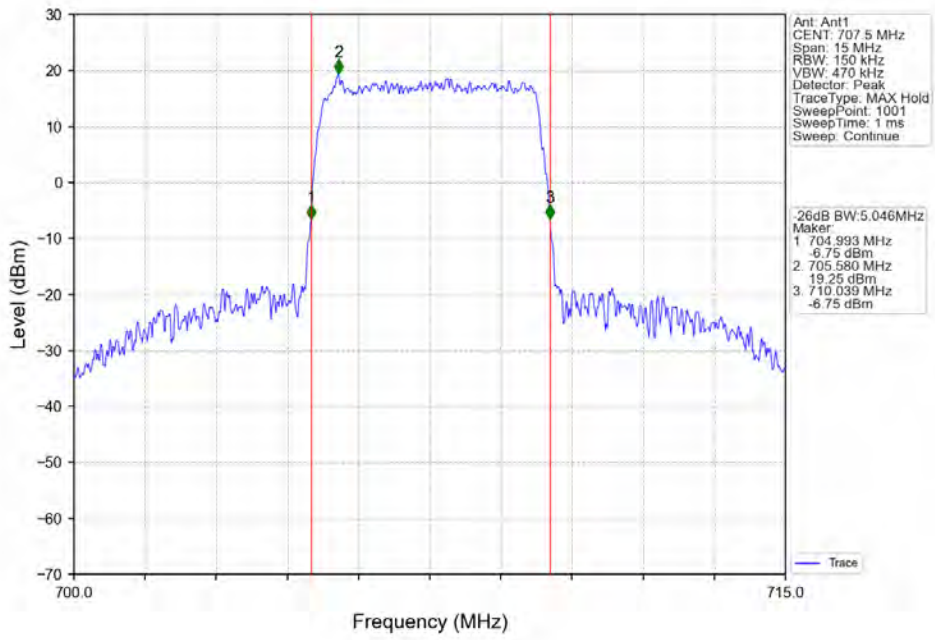
Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_25\_0\_NTNV



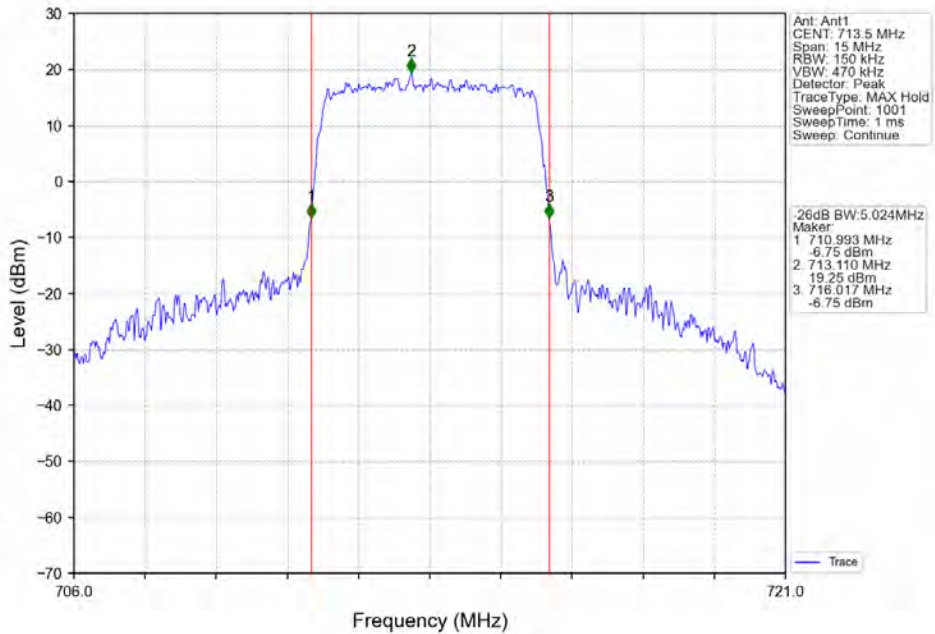
Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



Band12\_5MHz\_16QAM\_MCH\_707.5MHz\_RB\_25\_0\_NTNV

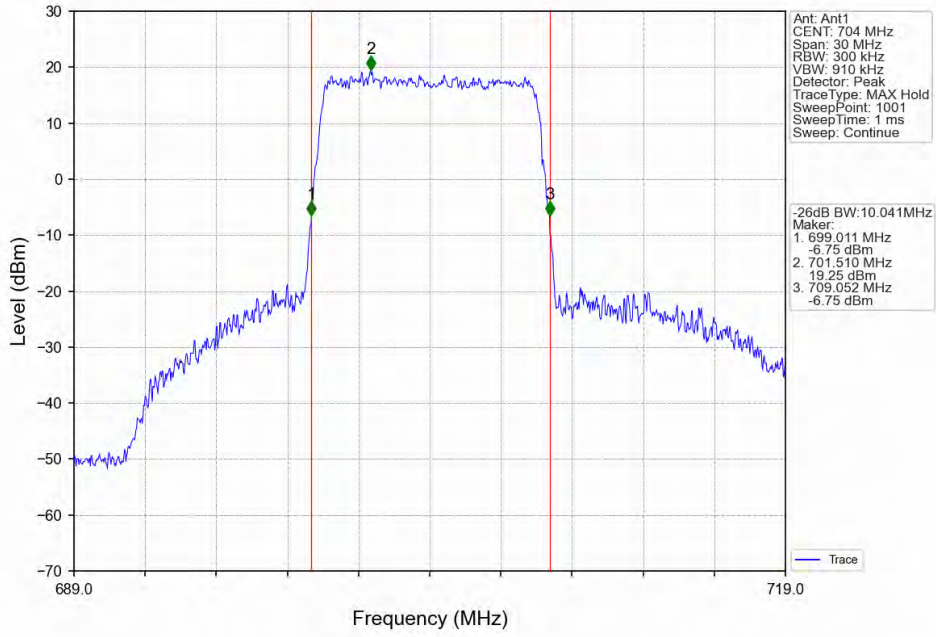


Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_25\_0\_NTNV

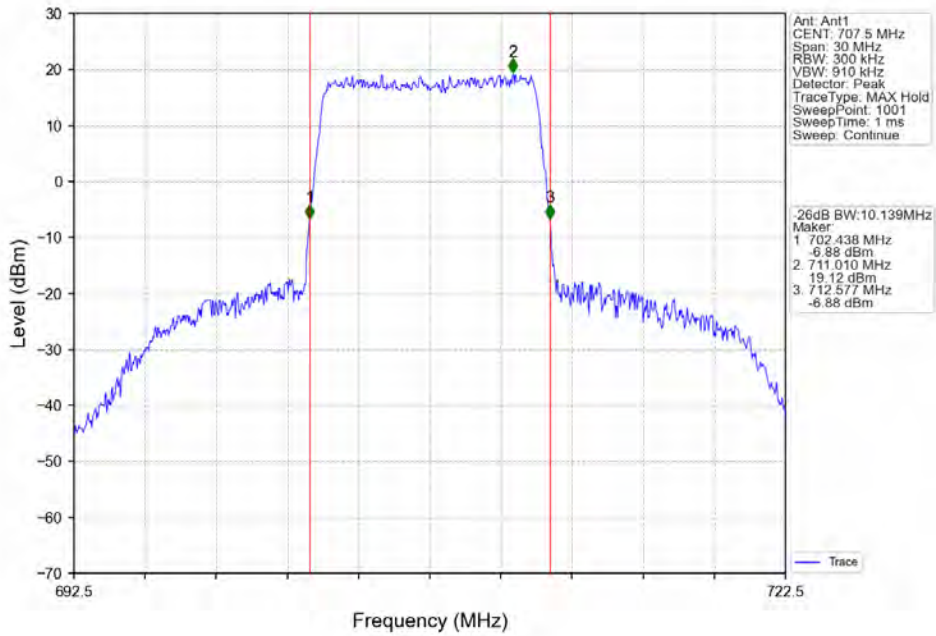




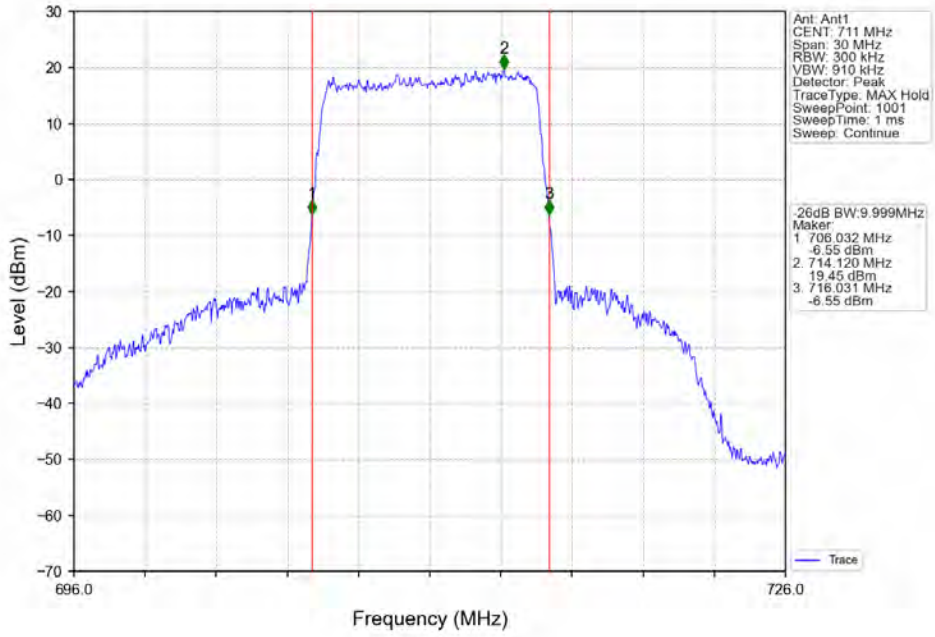
Band12\_10MHz\_QPSK\_LCH\_704MHz\_RB\_50\_0\_NTNV



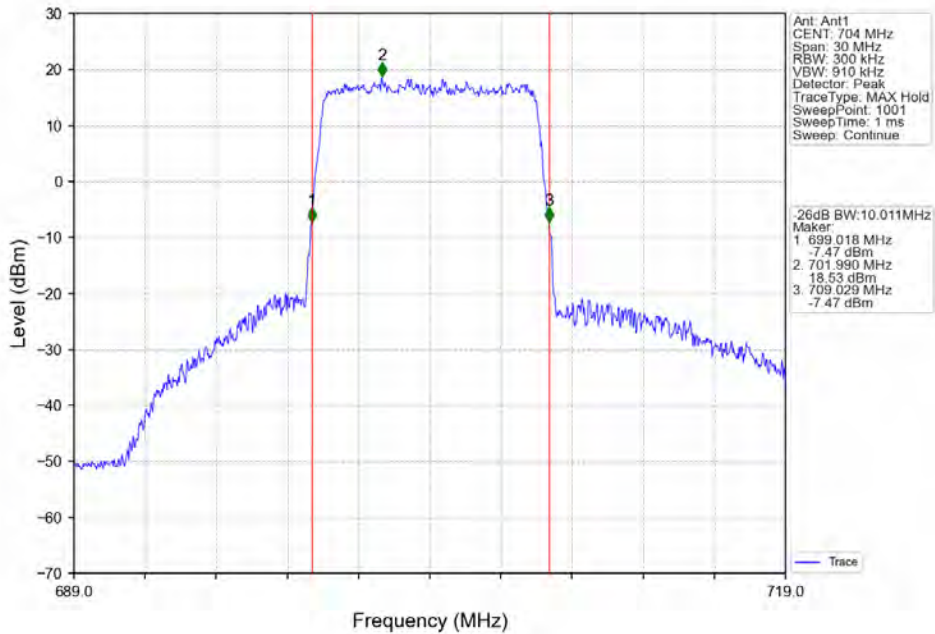
Band12\_10MHz\_QPSK\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



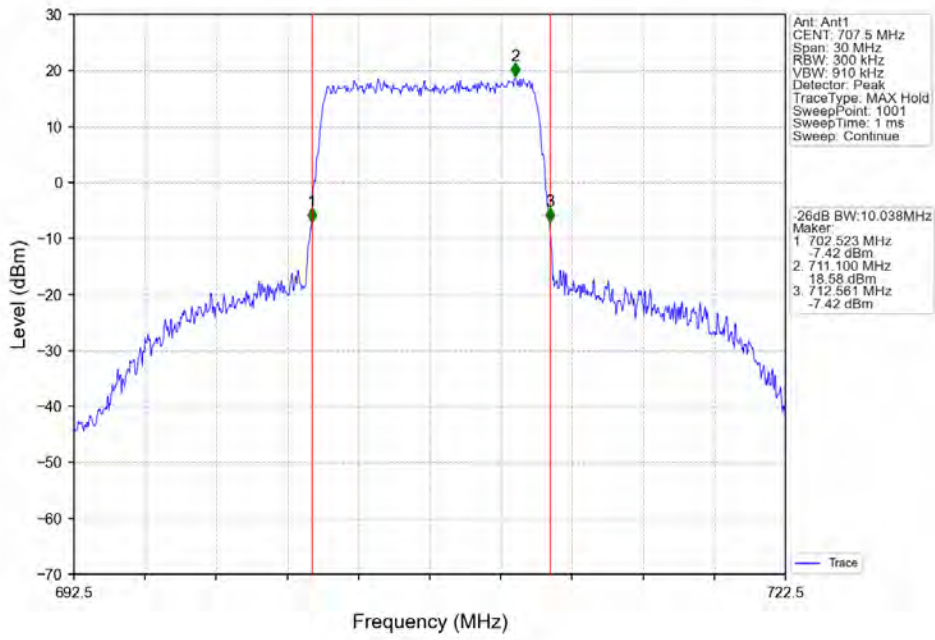
Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_50\_0\_NTNV



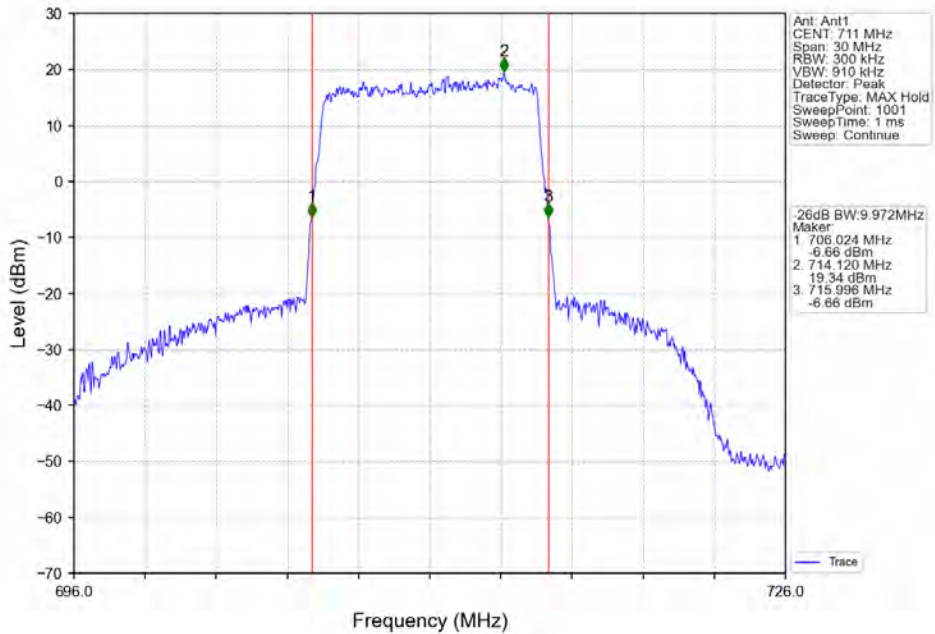
Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_HCH\_711MHz\_RB\_50\_0\_NTNV



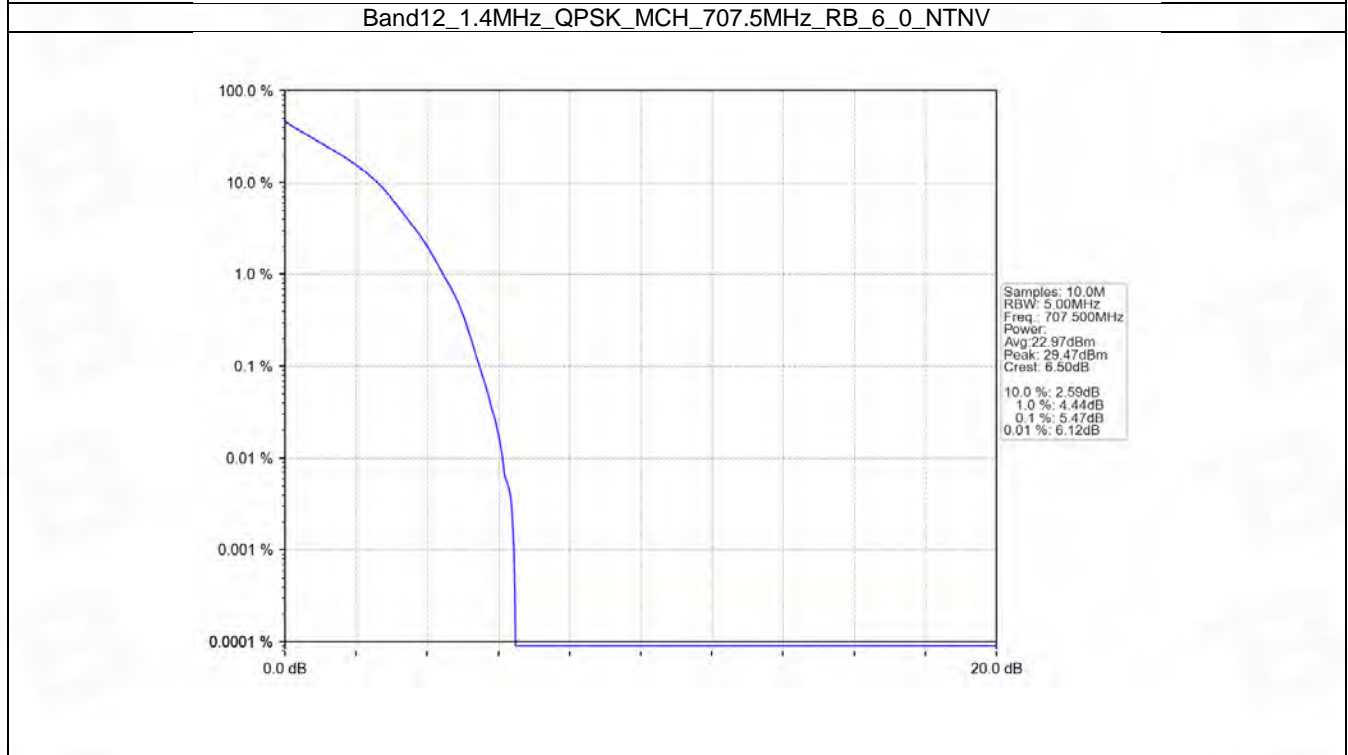
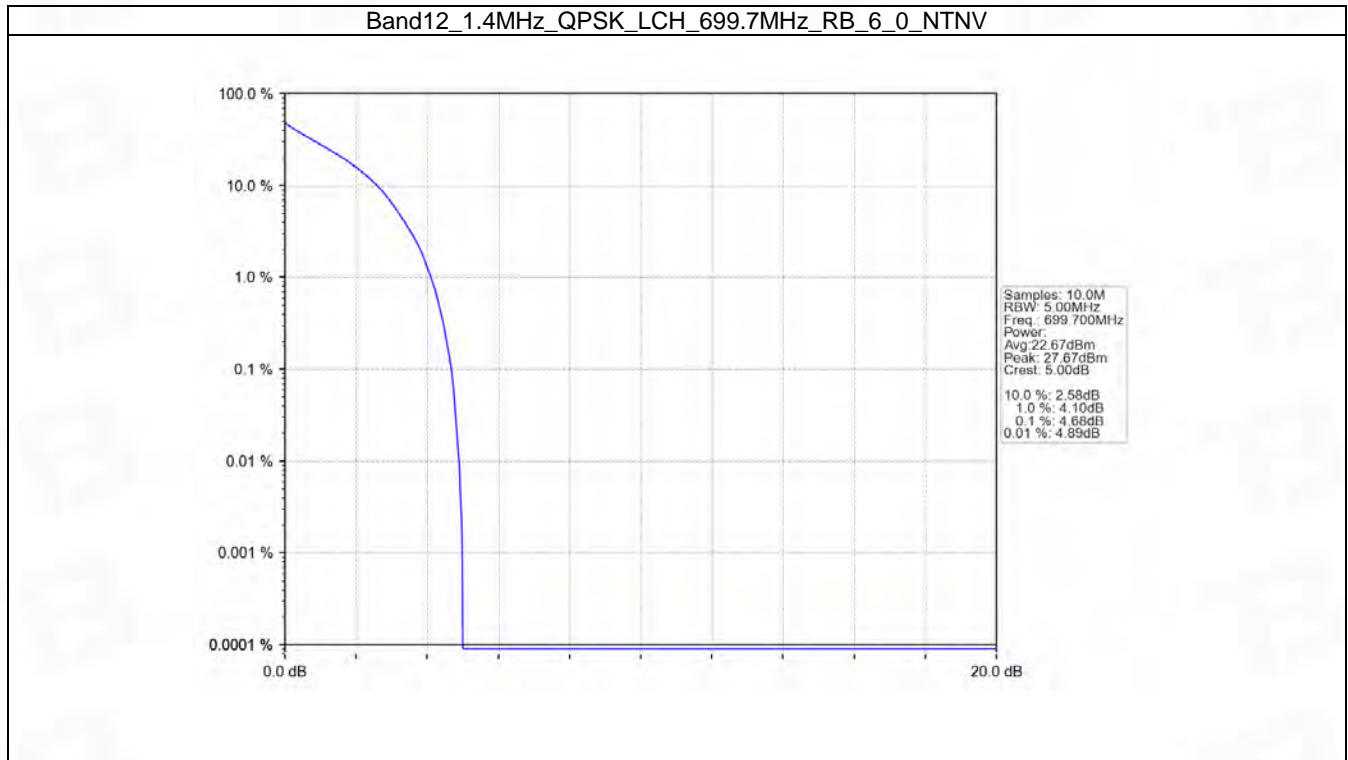
## 5. Peak-Average Ratio

### 5.1 B12\_1.4MHz

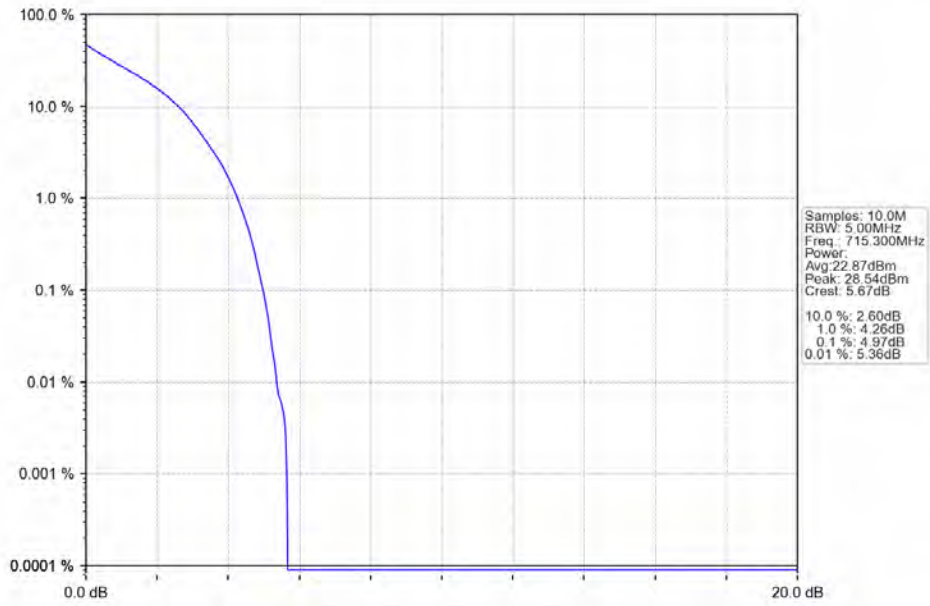
#### 5.1.1 Test Result

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	4.68	<=13	Pass
	707.5	6	0	5.47	<=13	Pass
	715.3	6	0	4.97	<=13	Pass
16QAM	699.7	6	0	5.51	<=13	Pass
	707.5	6	0	6.18	<=13	Pass
	715.3	6	0	5.41	<=13	Pass

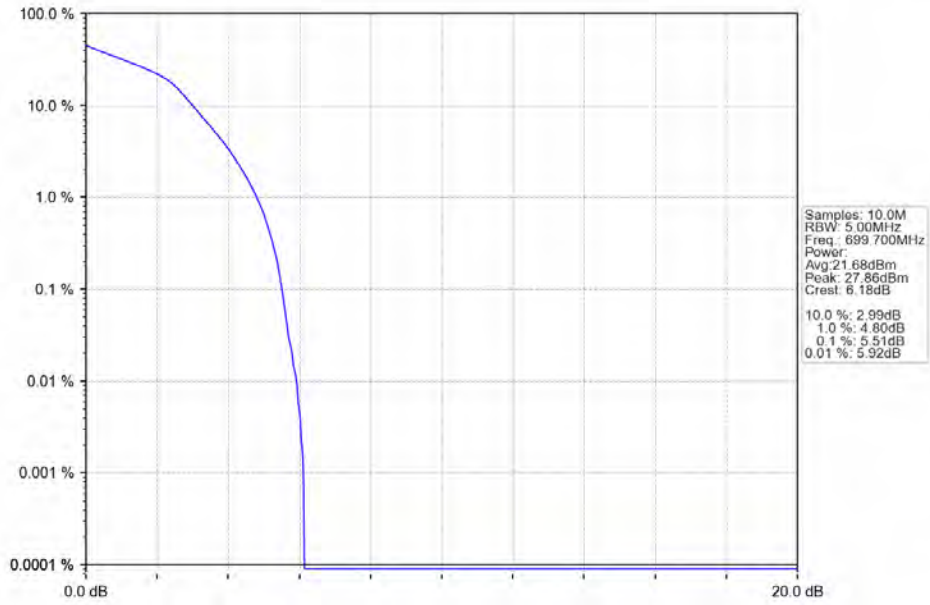
### 5.1.2 Test Graph



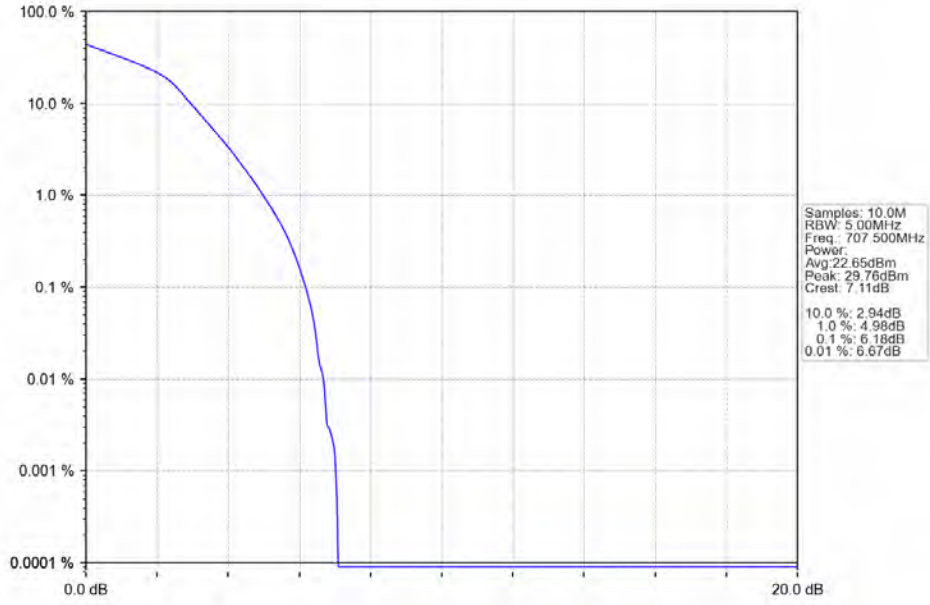
Band12\_1.4MHz\_QPSK\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



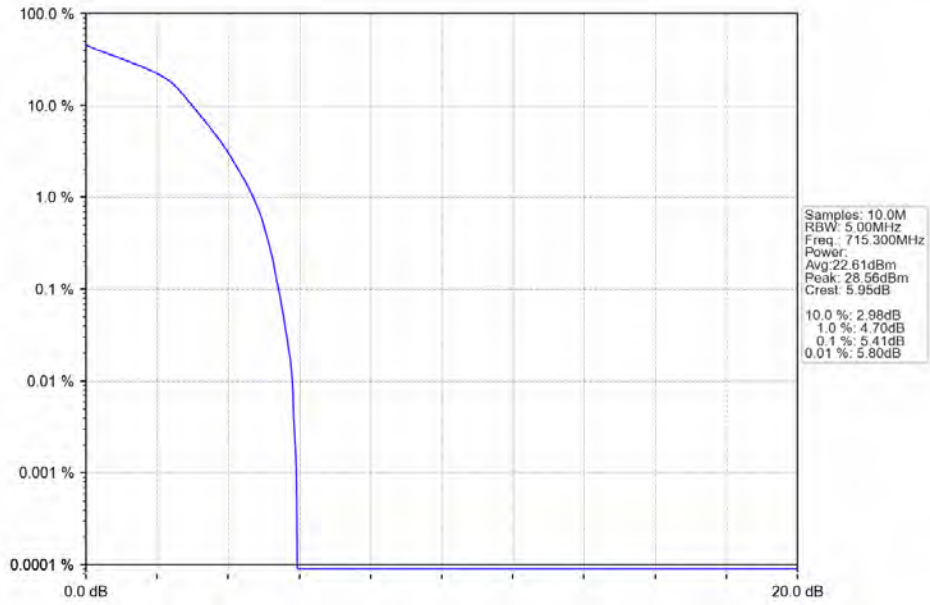
Band12\_1.4MHz\_16QAM\_LCH\_699.7MHz\_RB\_6\_0\_NTNV



Band12\_1.4MHz\_16QAM\_MCH\_707.5MHz\_RB\_6\_0\_NTNV



Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



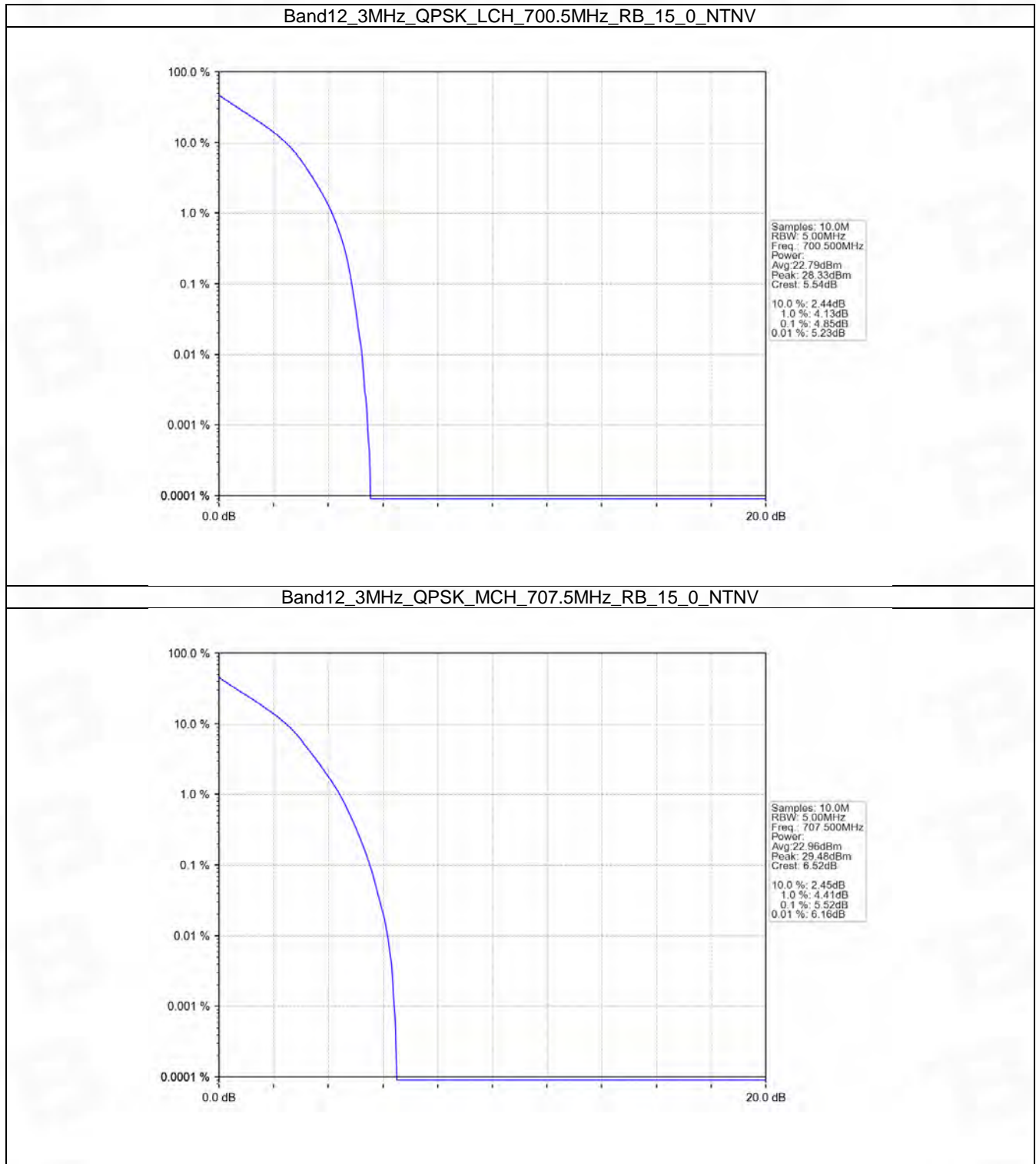
## 5.2 B12\_3MHz

### 5.2.1 Test Result

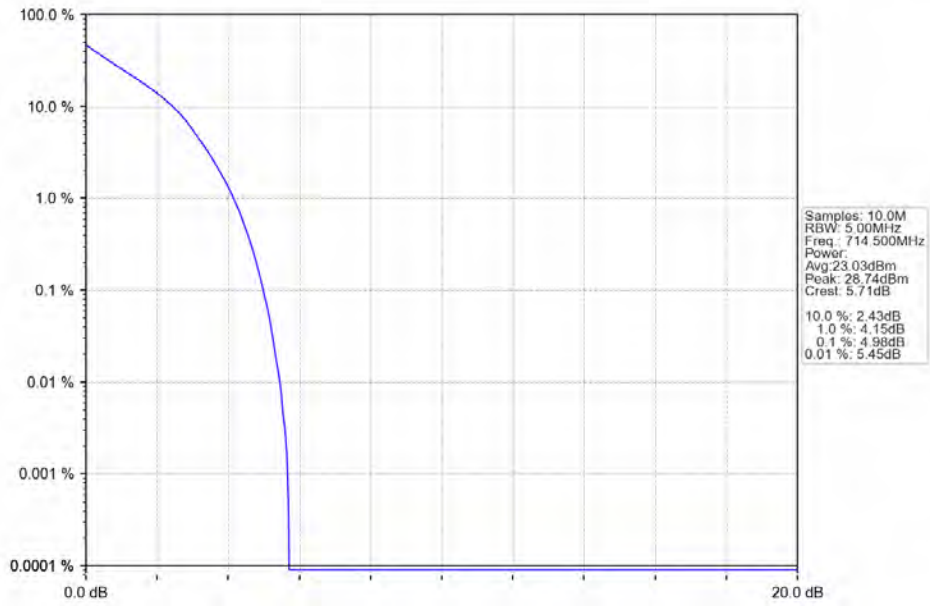
Band: 12 / Bandwidth: 3MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	700.5	15	0	4.85	<=13	Pass
	707.5	15	0	5.52	<=13	Pass
	714.5	15	0	4.98	<=13	Pass
16QAM	700.5	15	0	5.77	<=13	Pass
	707.5	15	0	6.22	<=13	Pass
	714.5	15	0	5.81	<=13	Pass



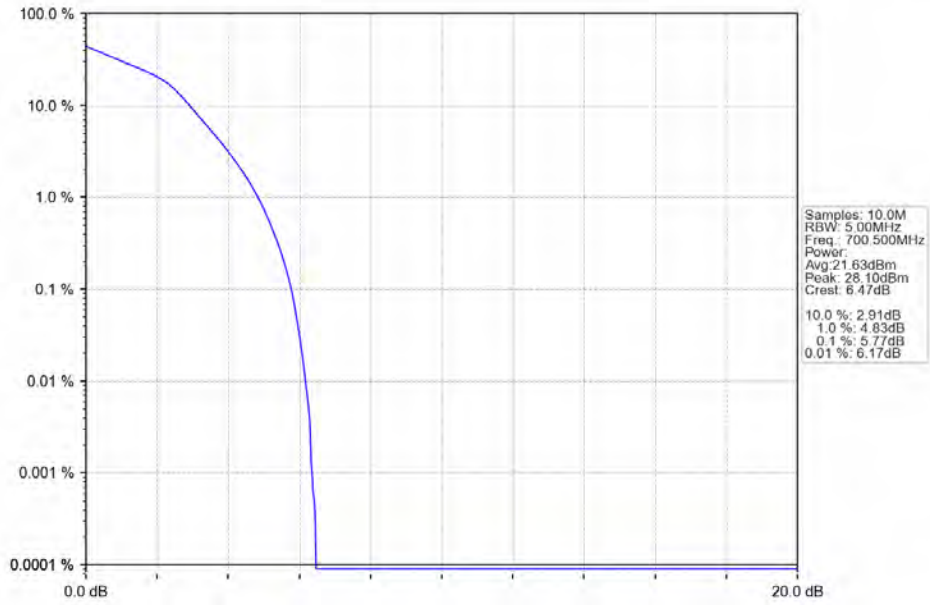
## 5.2.2 Test Graph



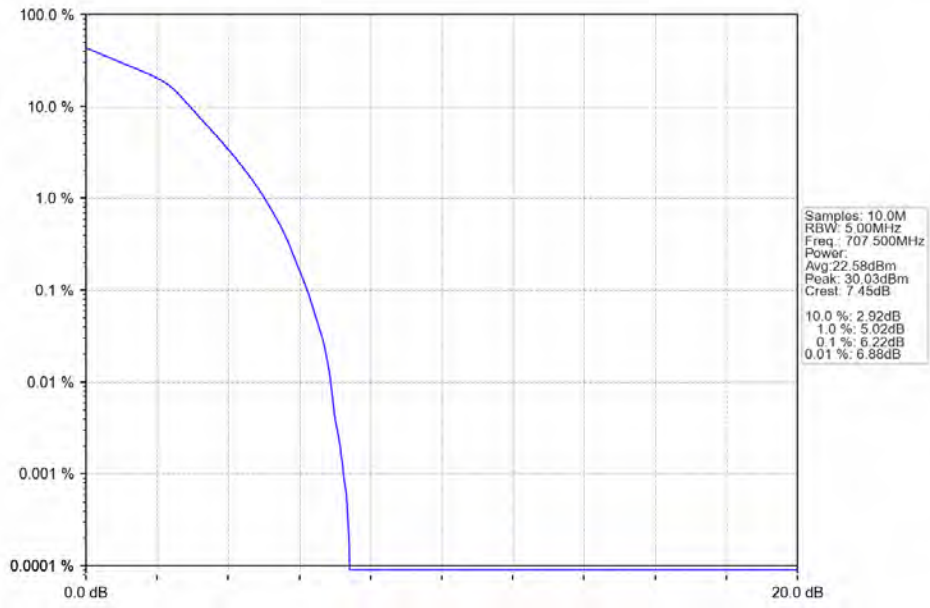
Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_15\_0\_NTNV



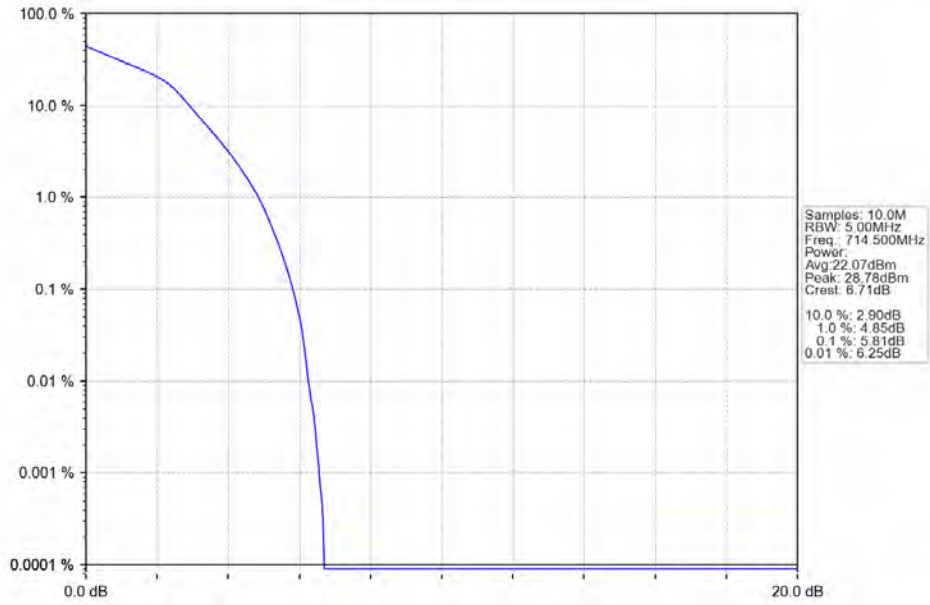
Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



Band12\_3MHz\_16QAM\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_15\_0\_NTNV

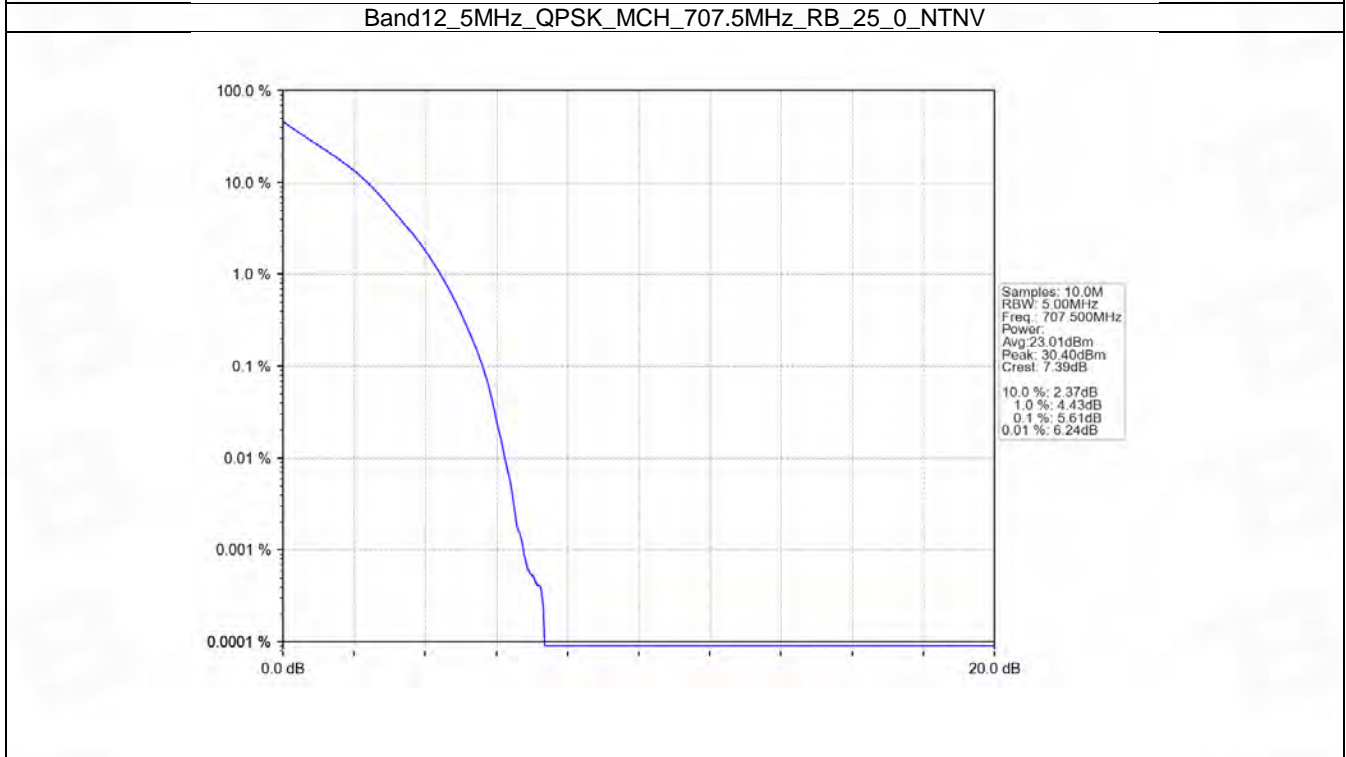
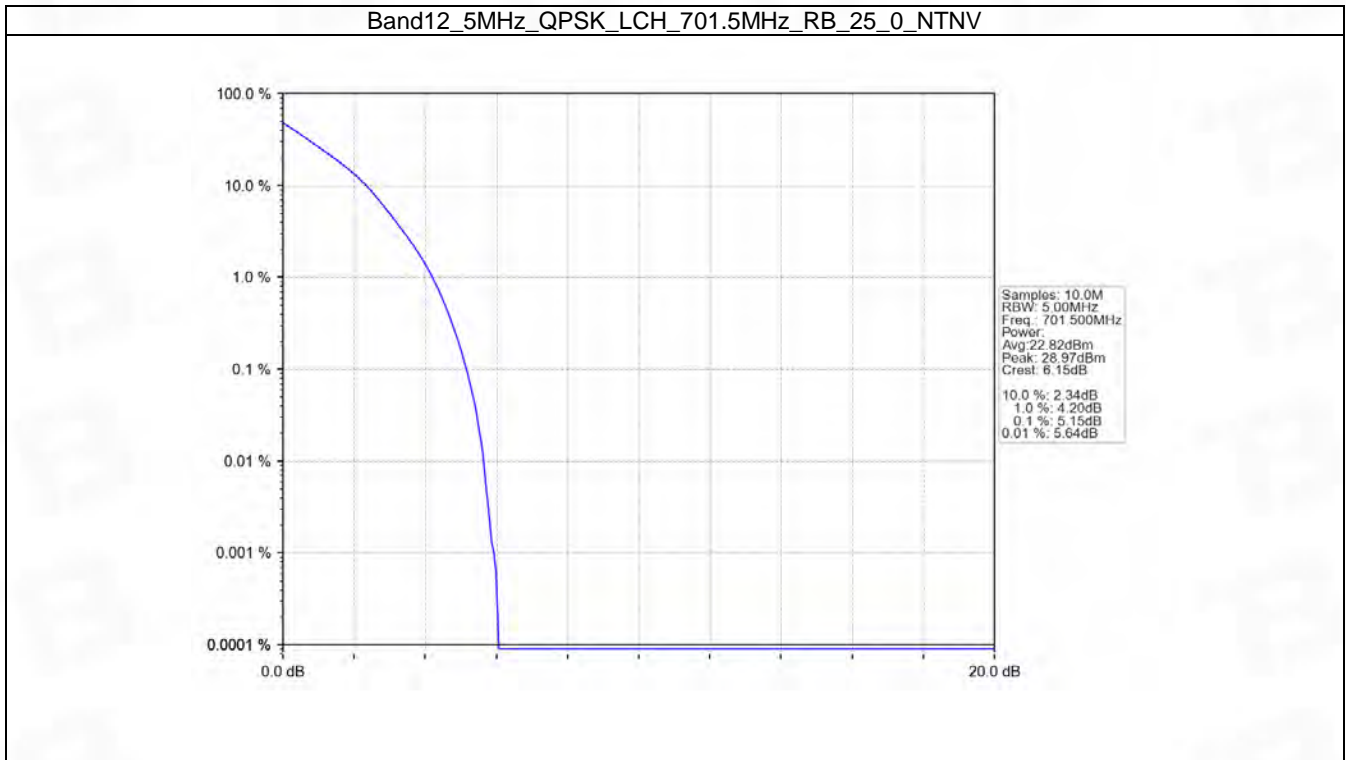


## 5.3 B12\_5MHz

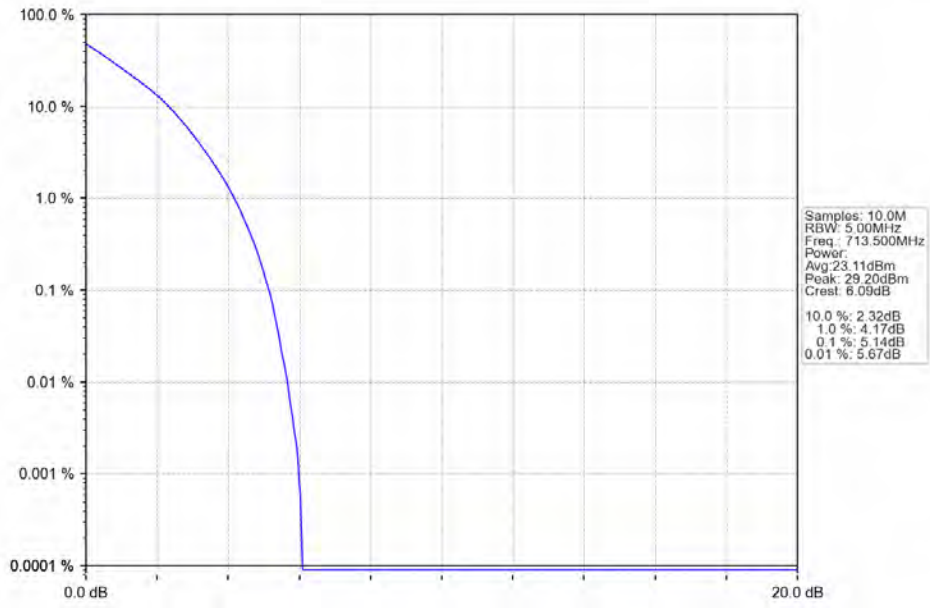
### 5.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	25	0	5.15	<=13	Pass
	707.5	25	0	5.61	<=13	Pass
	713.5	25	0	5.14	<=13	Pass
16QAM	701.5	25	0	5.98	<=13	Pass
	707.5	25	0	6.23	<=13	Pass
	713.5	25	0	5.85	<=13	Pass

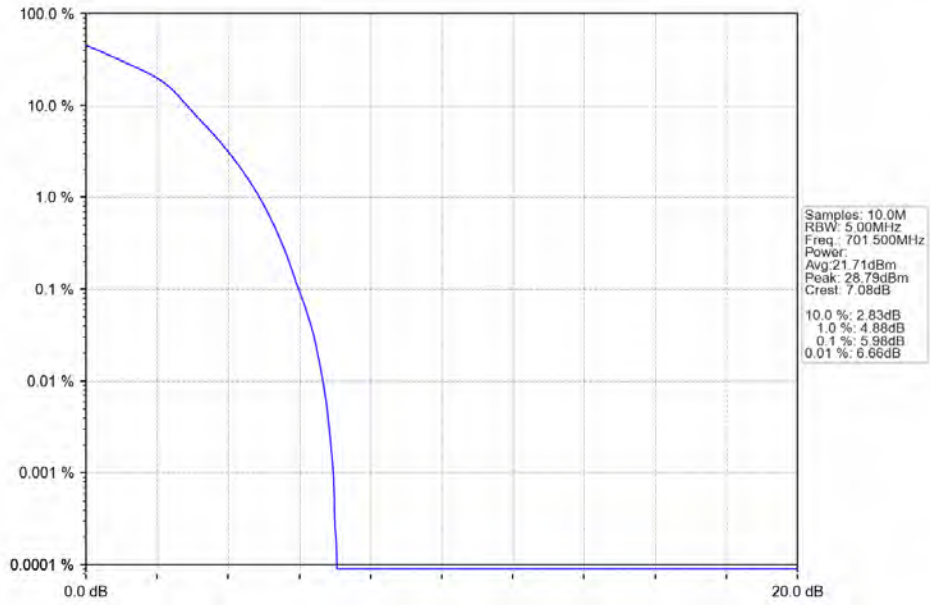
### 5.3.2 Test Graph



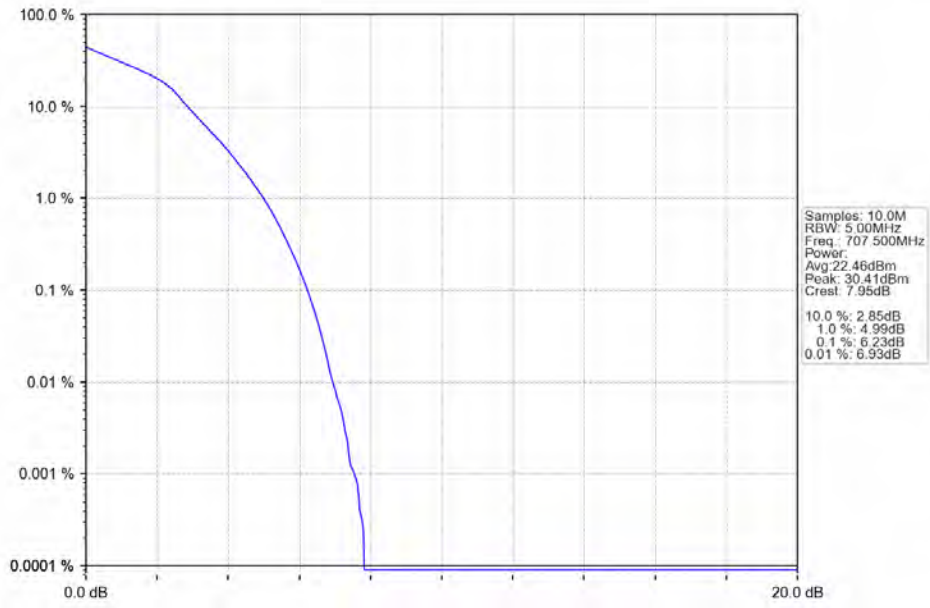
Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_25\_0\_NTNV



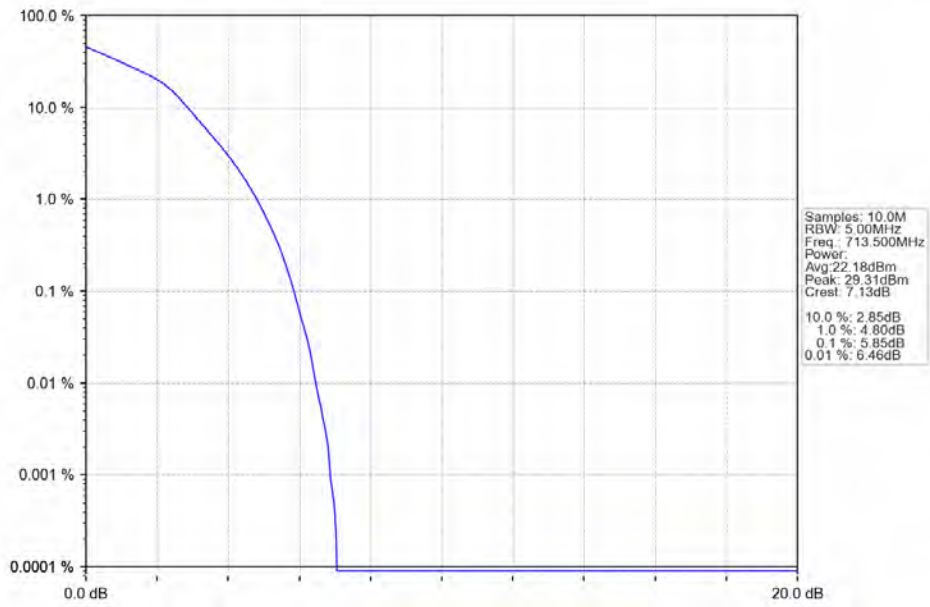
Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



Band12\_5MHz\_16QAM\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_25\_0\_NTNV



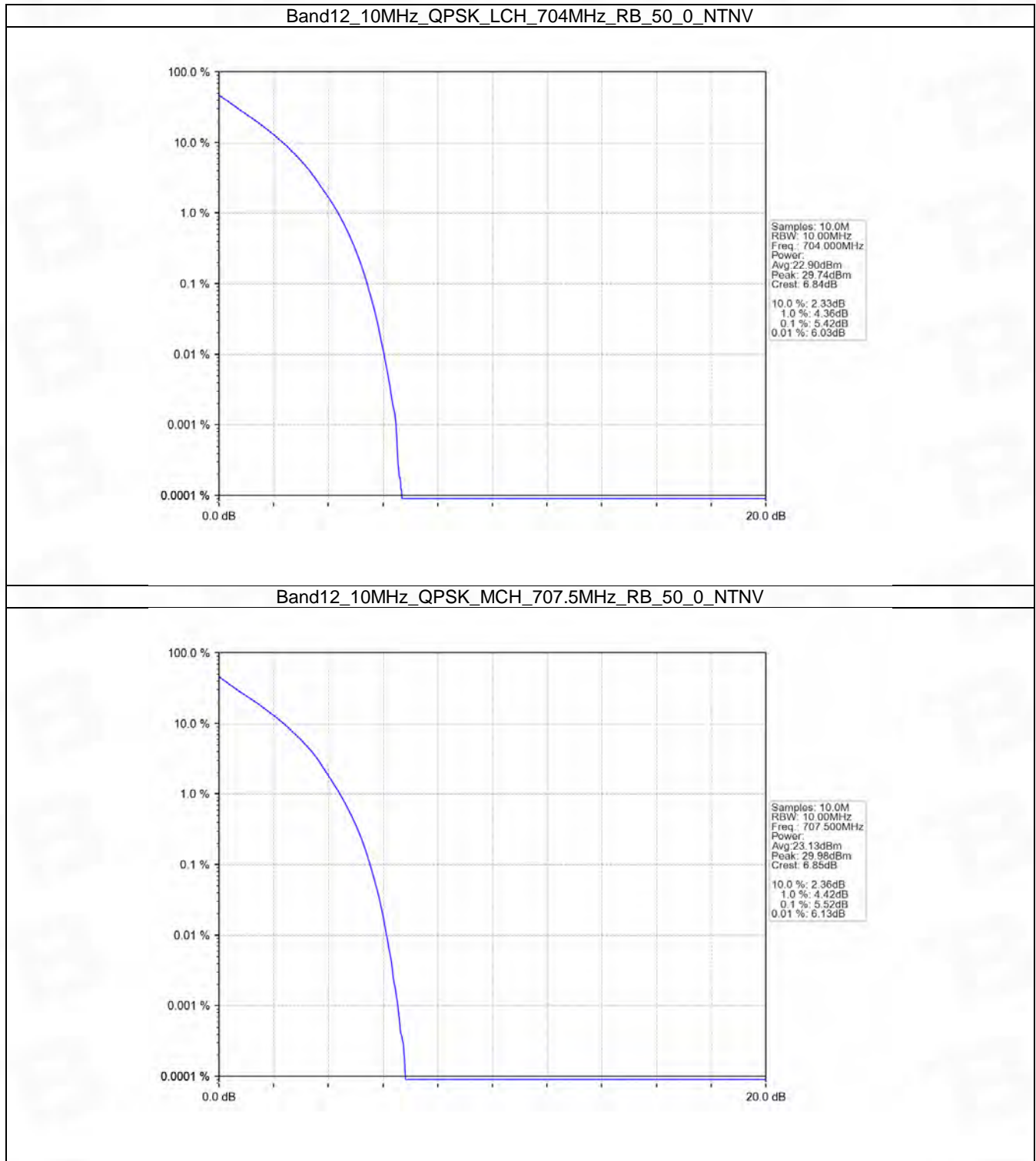
## 5.4 B12\_10MHz

### 5.4.1 Test Result

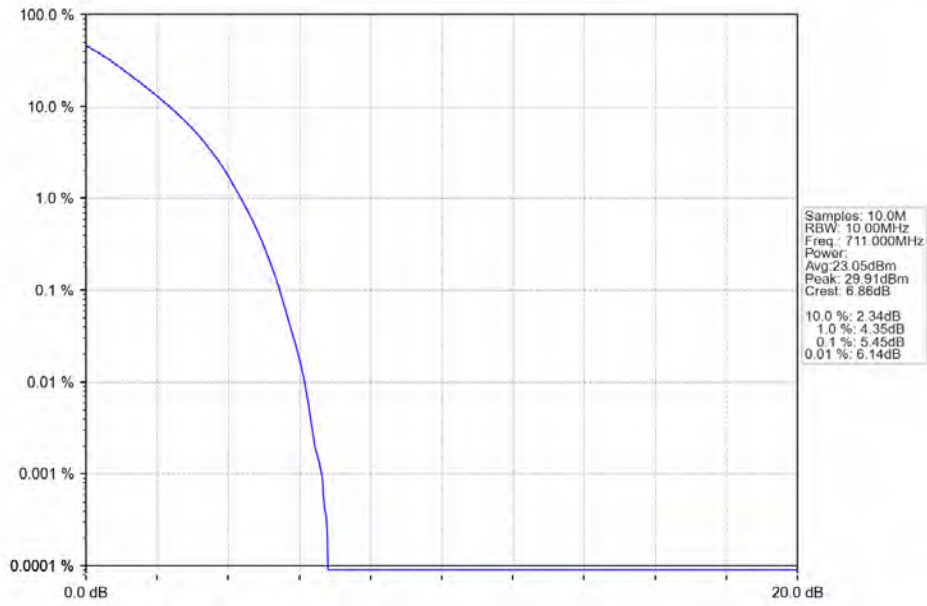
Band: 12 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	704	50	0	5.42	<=13	Pass
	707.5	50	0	5.52	<=13	Pass
	711	50	0	5.45	<=13	Pass
16QAM	704	50	0	6.21	<=13	Pass
	707.5	50	0	6.21	<=13	Pass
	711	50	0	6.20	<=13	Pass



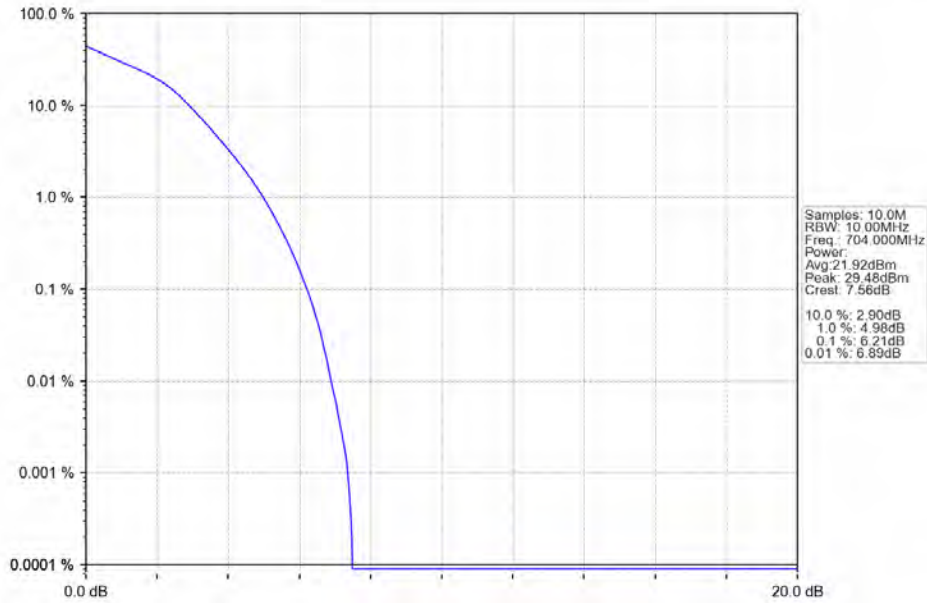
## 5.4.2 Test Graph



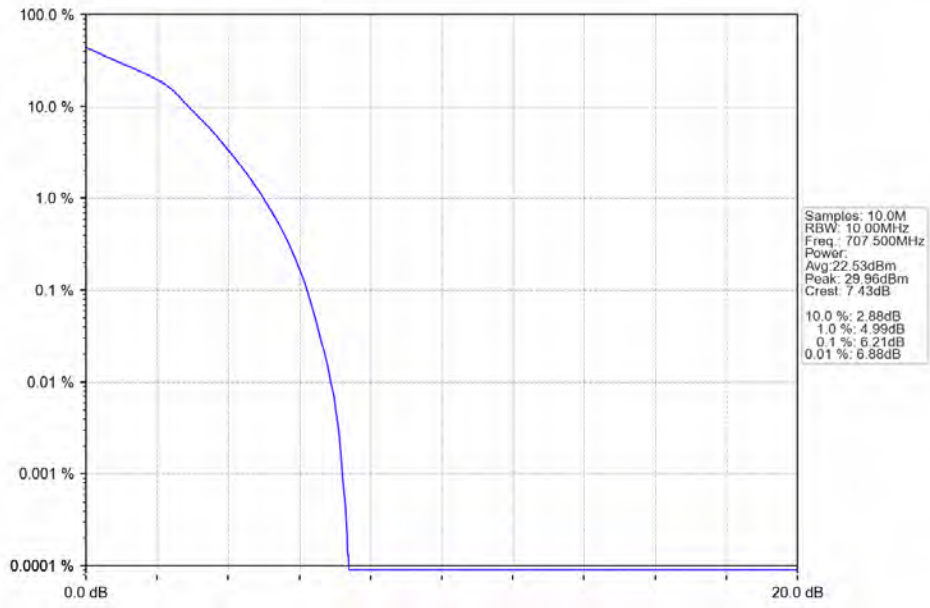
Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_50\_0\_NTNV



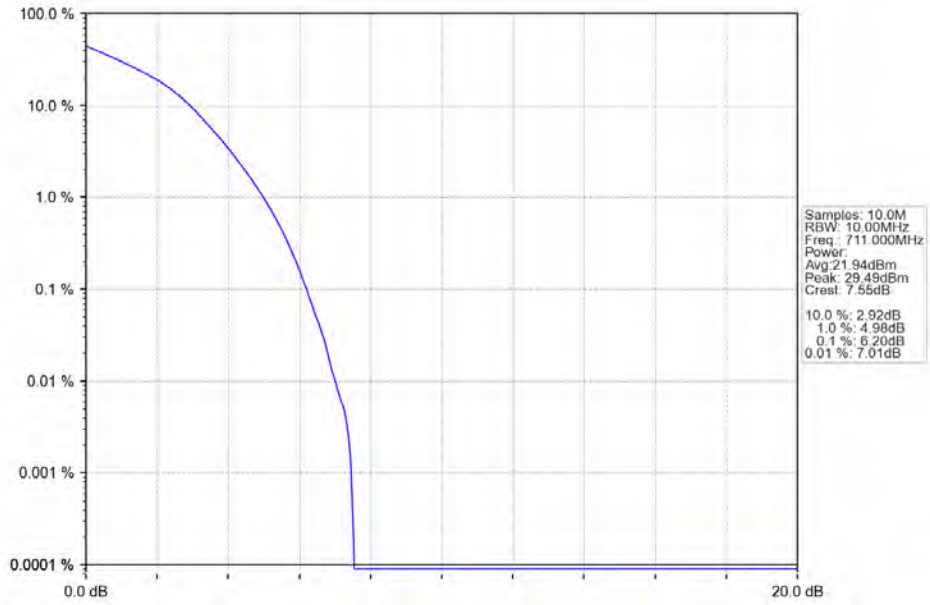
Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



Band12\_10MHz\_16QAM\_HCH\_711MHz\_RB\_50\_0\_NTNV



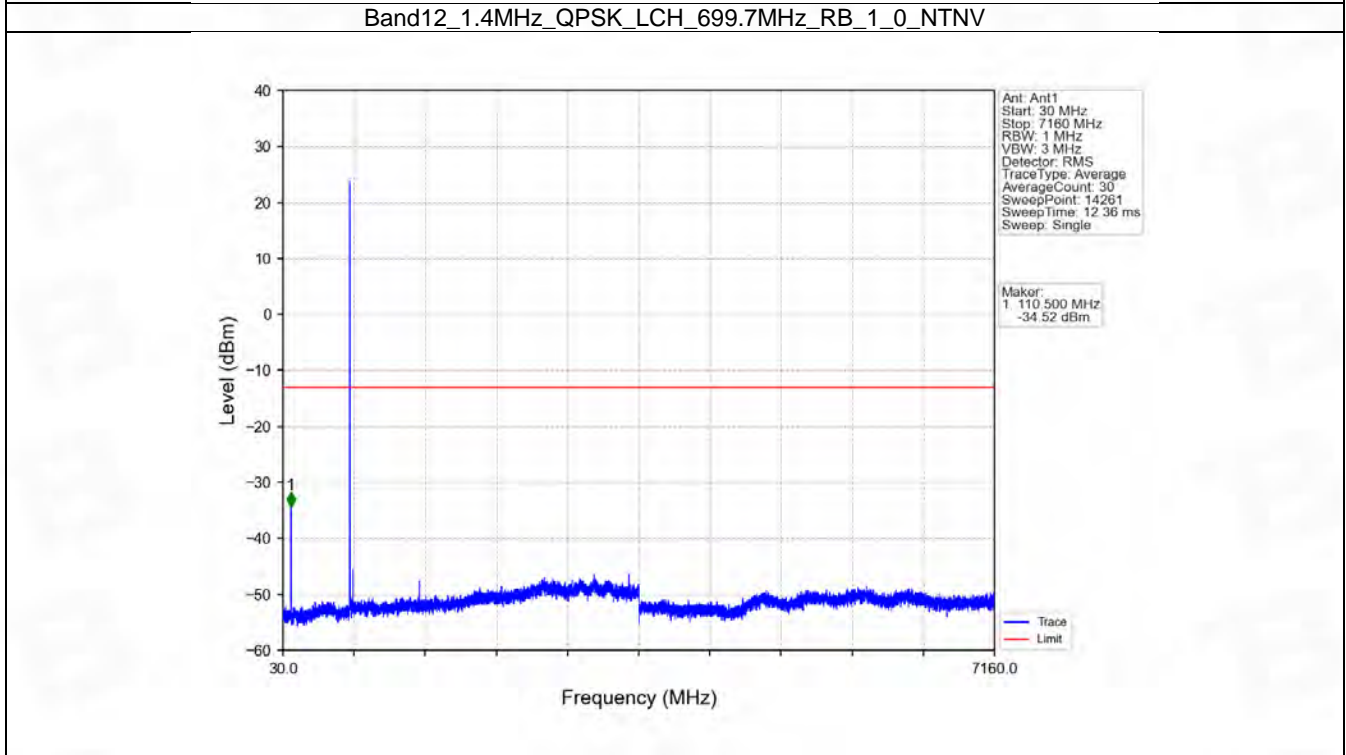
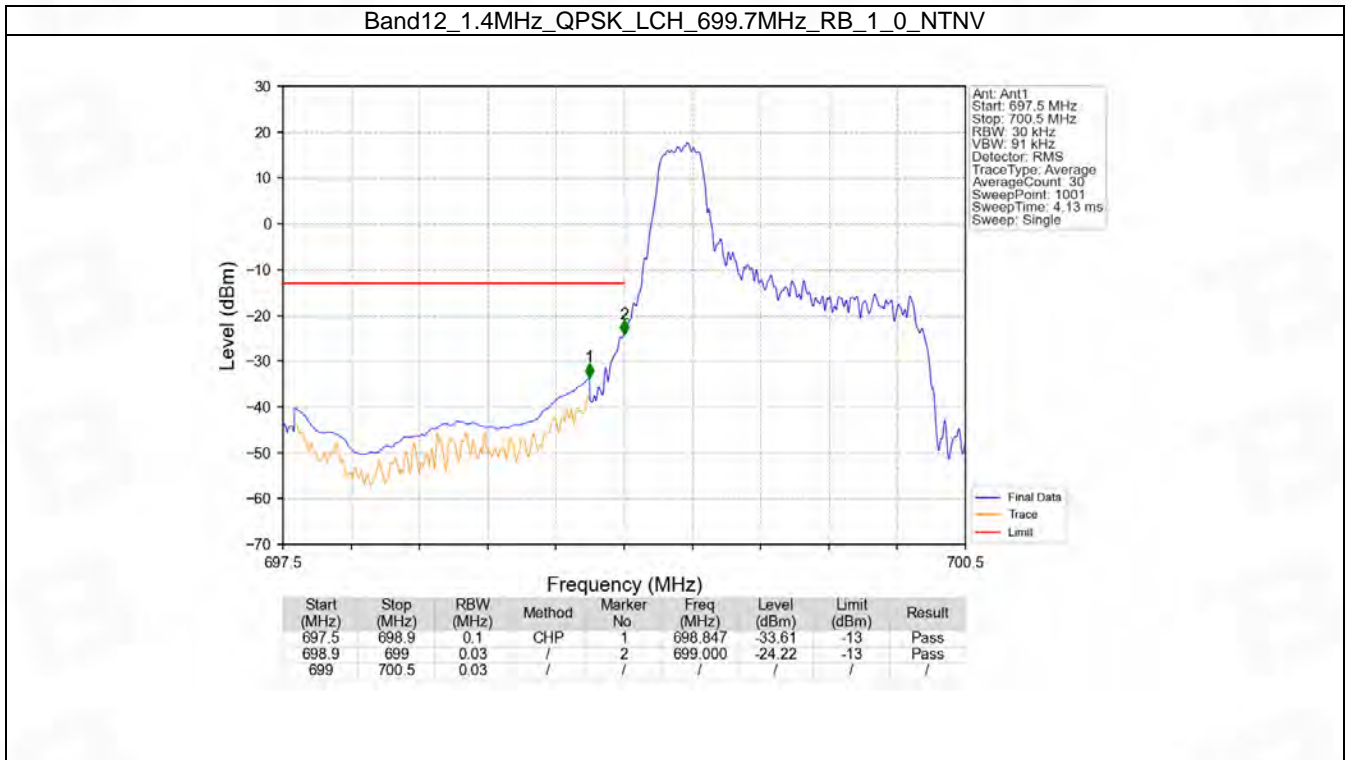
## 6. Spurious Emission

### 6.1 B12\_1.4MHz

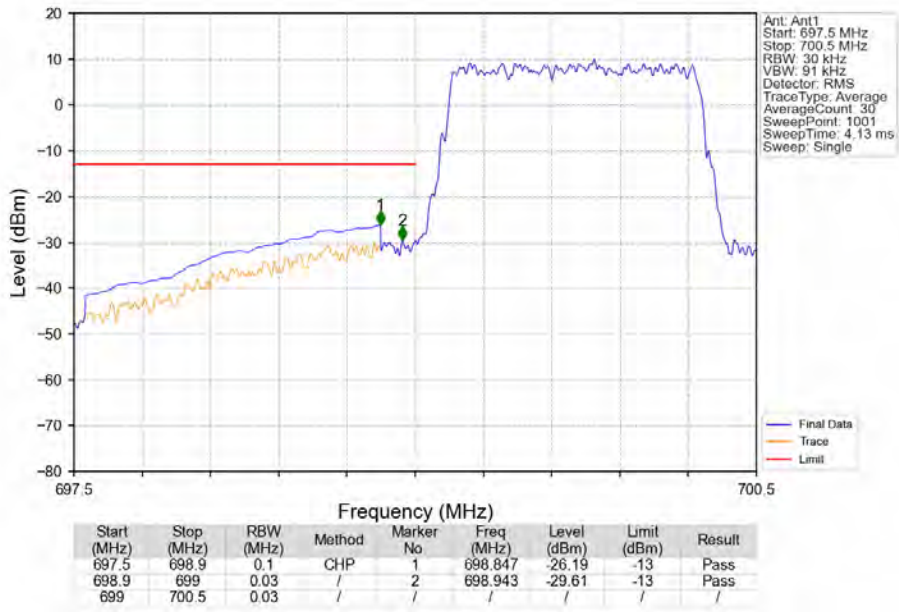
#### 6.1.1 Test Result

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	

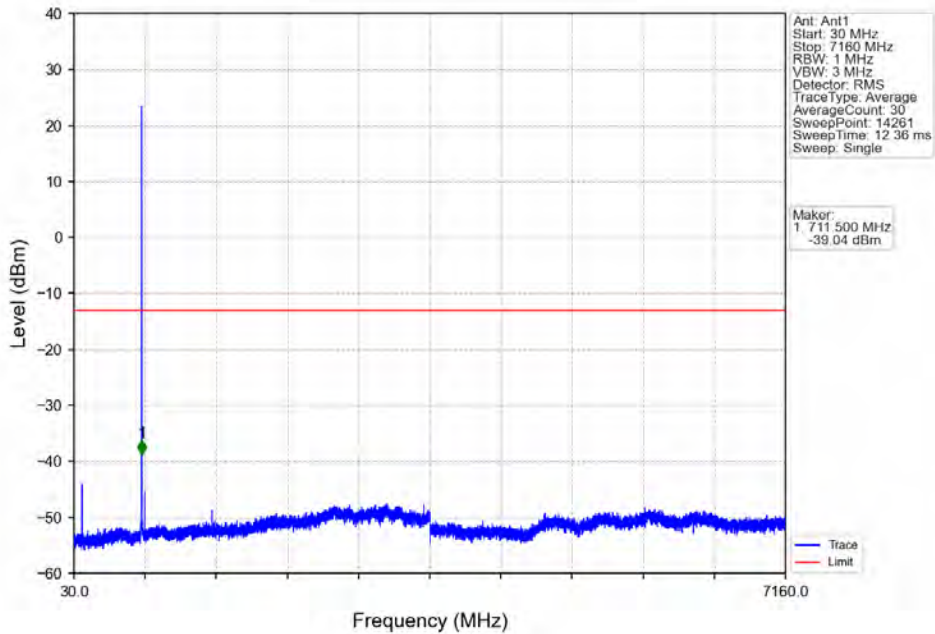
### 6.1.2 Test Graph



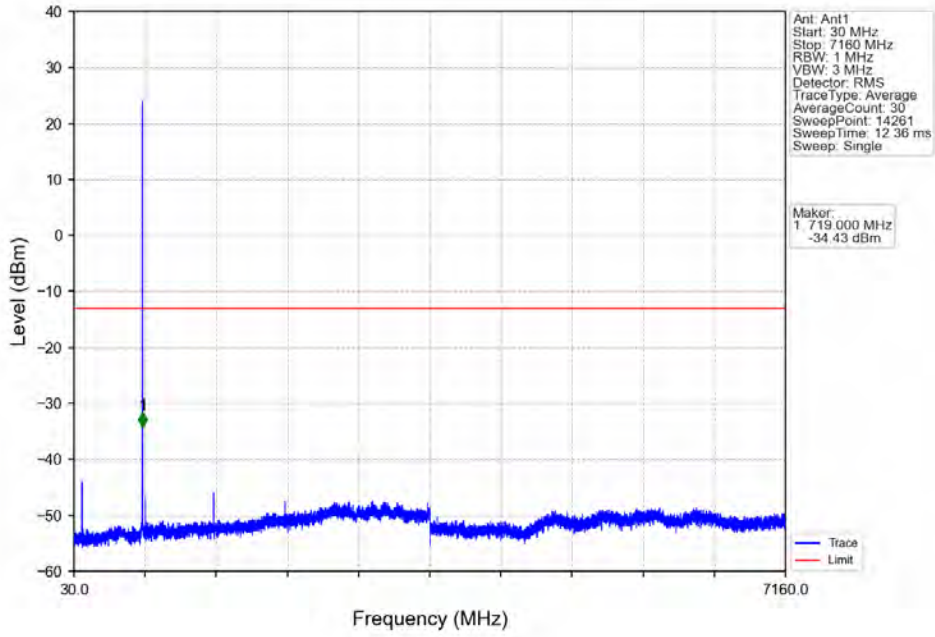
Band12\_1.4MHz\_QPSK\_LCH\_699.7MHz\_RB\_6\_0\_NTNV



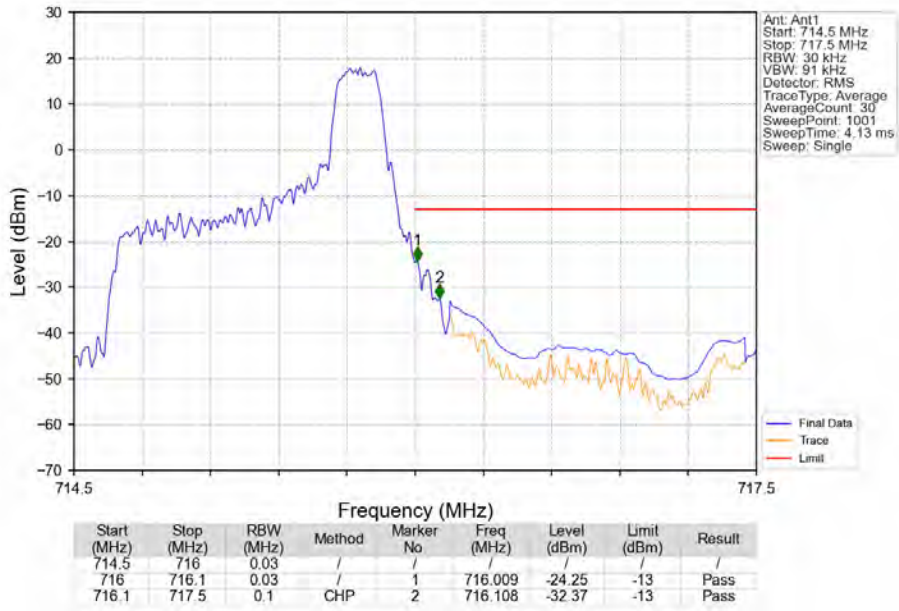
Band12\_1.4MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



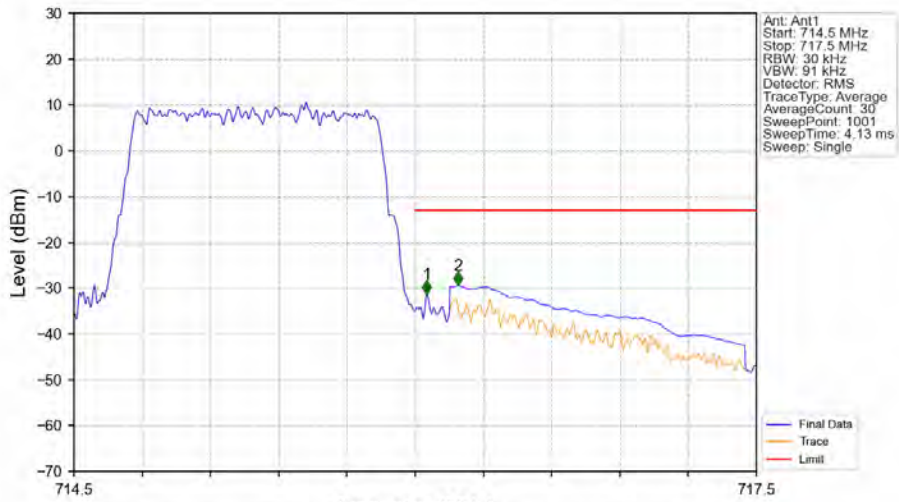
Band12\_1.4MHz\_QPSK\_HCH\_715.3MHz\_RB\_1\_0\_NTNV



Band12\_1.4MHz\_QPSK\_HCH\_715.3MHz\_RB\_1\_5\_NTNV

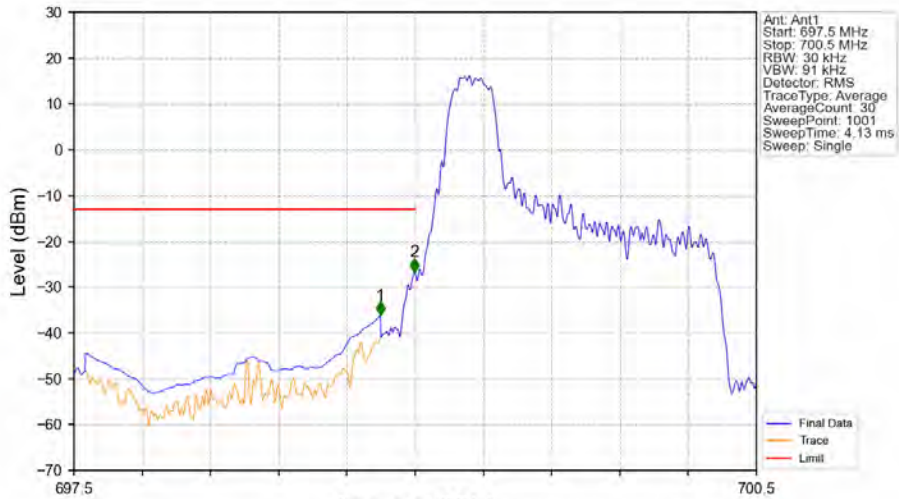


Band12\_1.4MHz\_QPSK\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
714.5	716	0.03	/	1	716.051	-31.35	-13	Pass
716	716.1	0.03	/	1	716.051	-31.35	-13	Pass
716.1	717.5	0.1	CHP	2	716.189	-29.51	-13	Pass

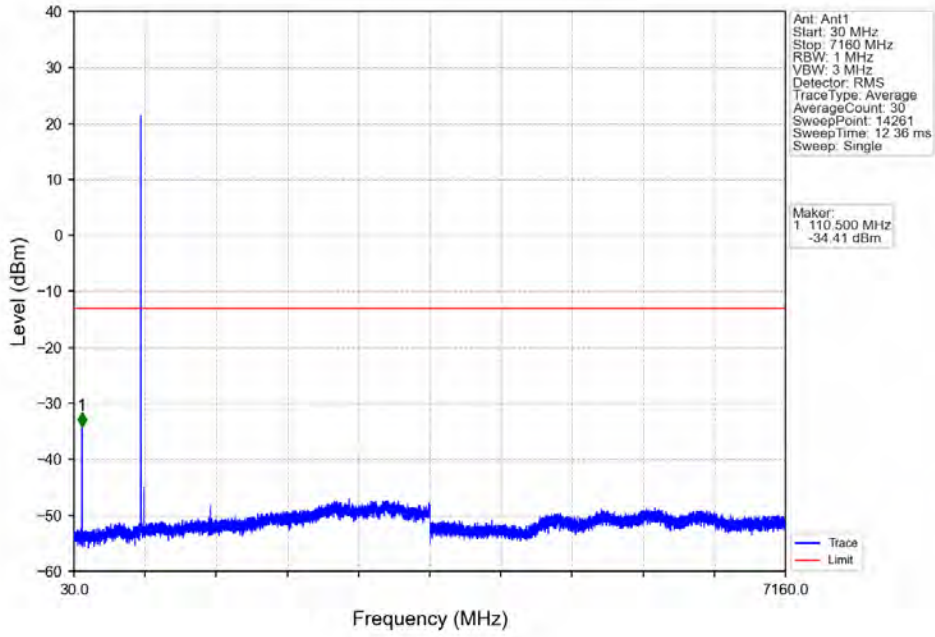
Band12\_1.4MHz\_16QAM\_LCH\_699.7MHz\_RB\_1\_0\_NTNV



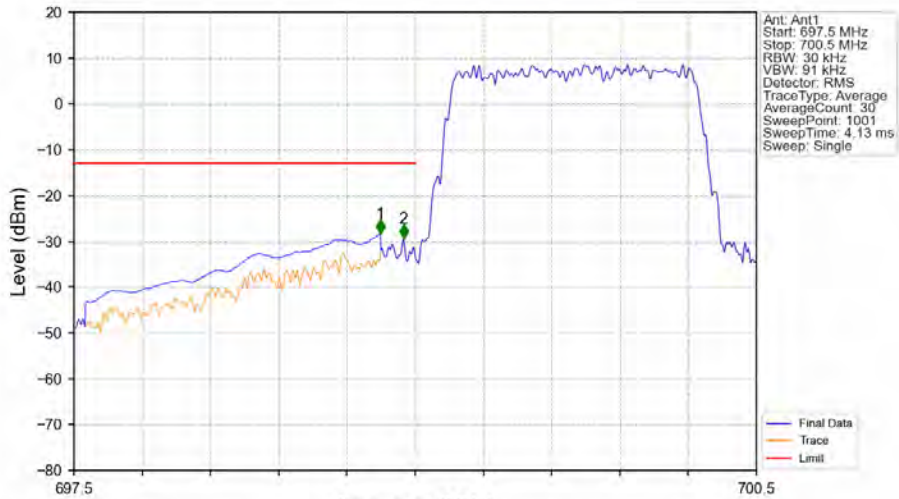
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.847	-36.19	-13	Pass
698.9	699	0.03	/	2	698.997	-26.72	-13	Pass
699	700.5	0.03	/	/	/	/	/	/



Band12\_1.4MHz\_16QAM\_LCH\_699.7MHz\_RB\_1\_0\_NTNV

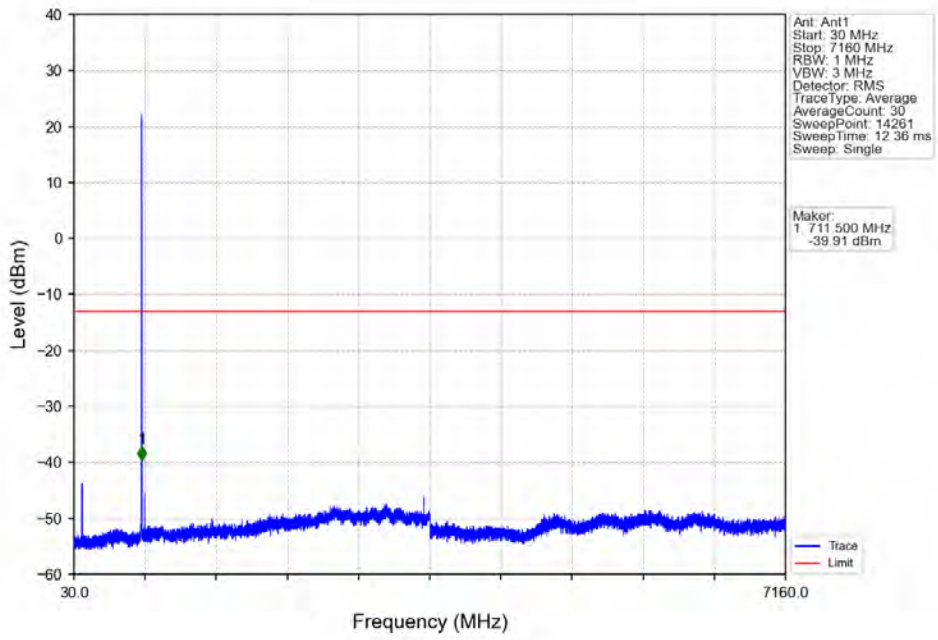


Band12\_1.4MHz\_16QAM\_LCH\_699.7MHz\_RB\_6\_0\_NTNV

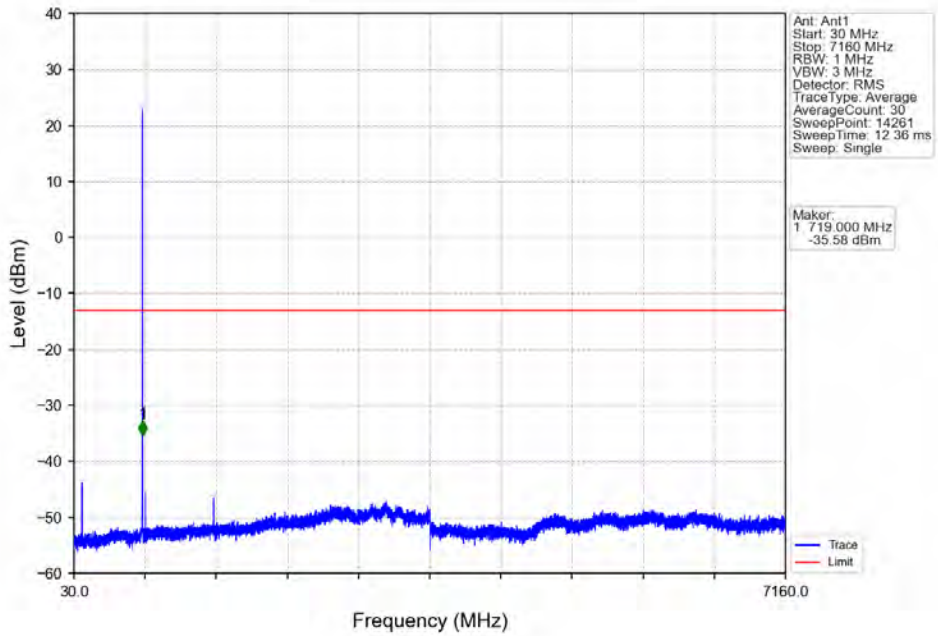


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
697.5	698.9	0.1	CHP	1	698.847	-28.28	-13	Pass
698.9	699	0.03	/	2	698.949	-29.46	-13	Pass
699	700.5	0.03	/	/	/	/	/	/

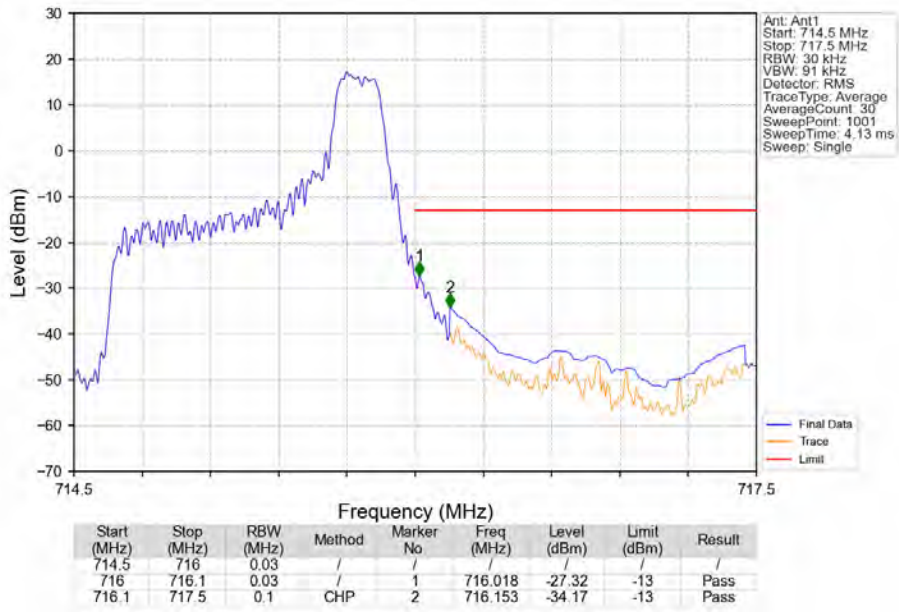
Band12\_1.4MHz\_16QAM\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



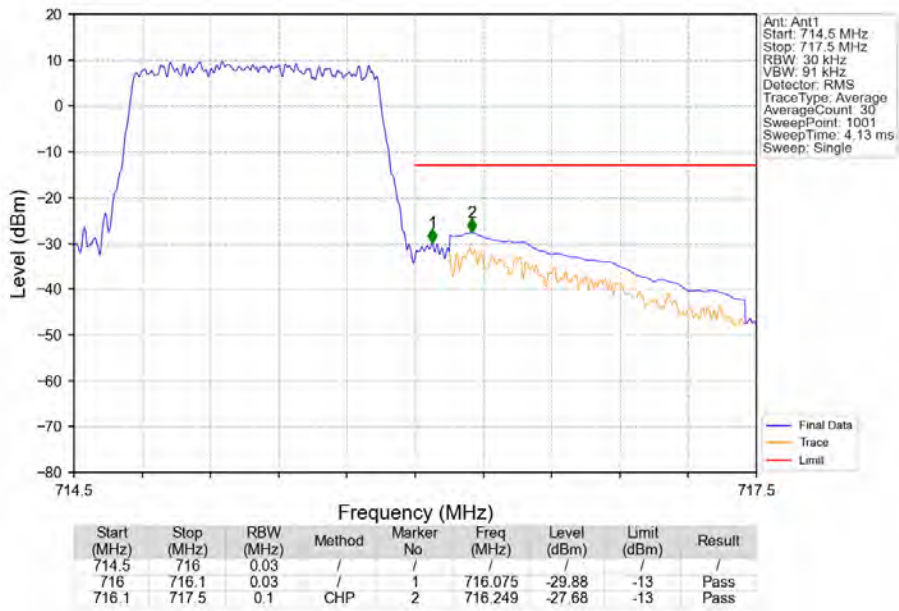
Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_1\_0\_NTNV



Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_1\_5\_NTNV



Band12\_1.4MHz\_16QAM\_HCH\_715.3MHz\_RB\_6\_0\_NTNV

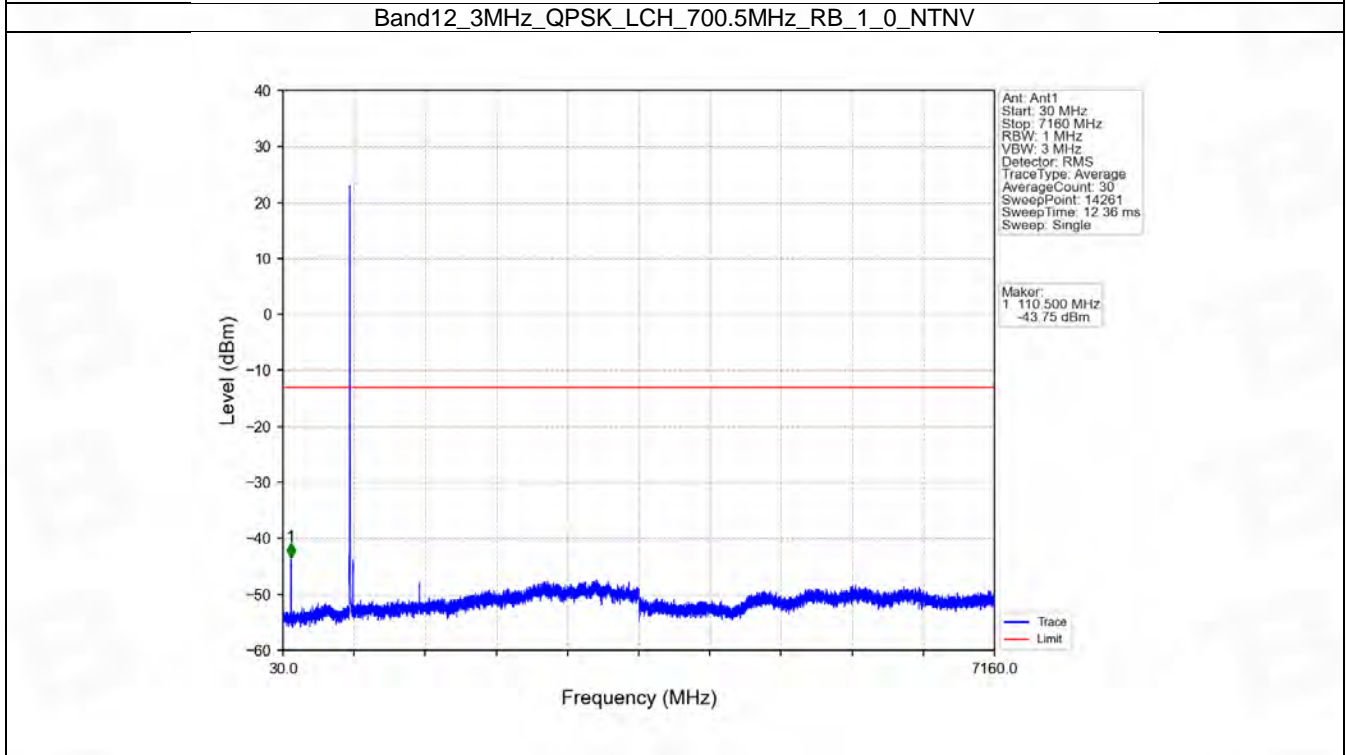
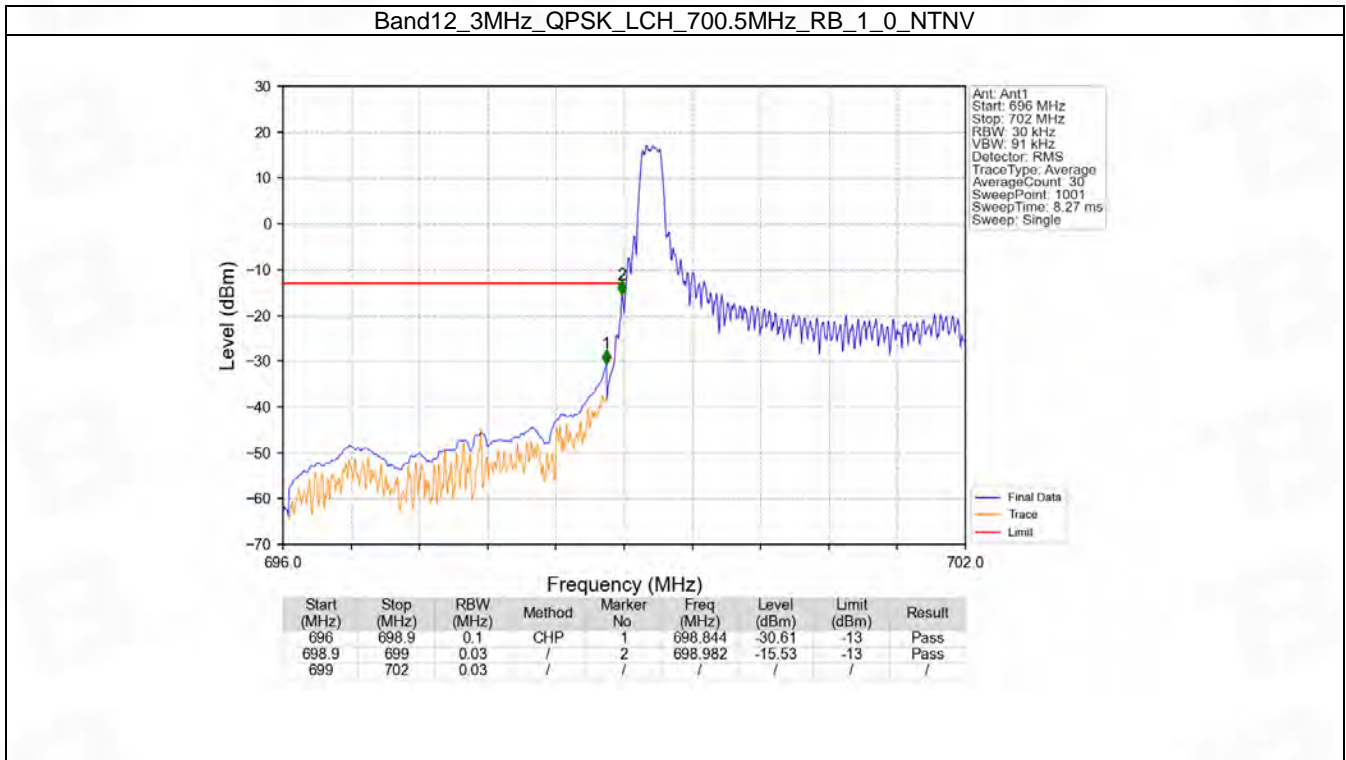


## 6.2 B12\_3MHz

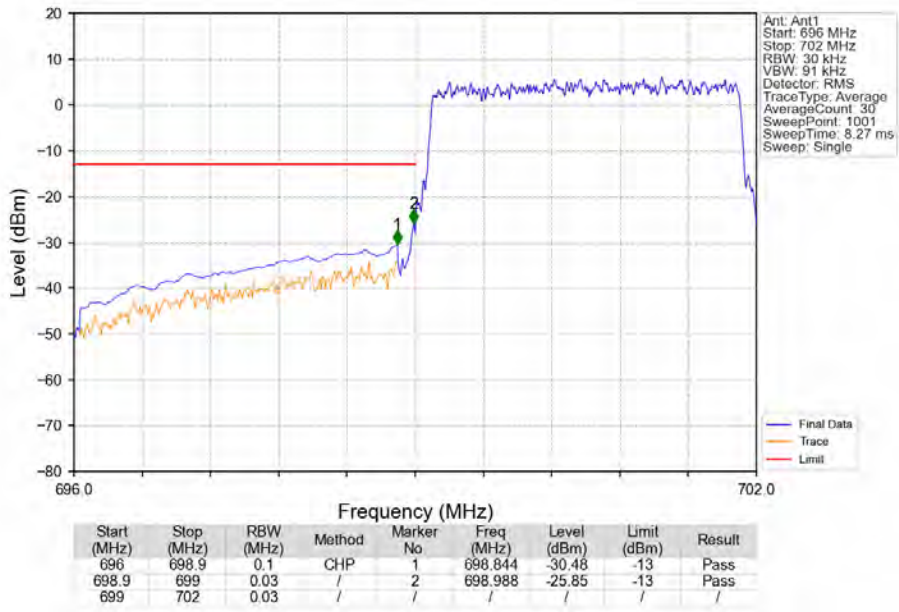
### 6.2.1 Test Result

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

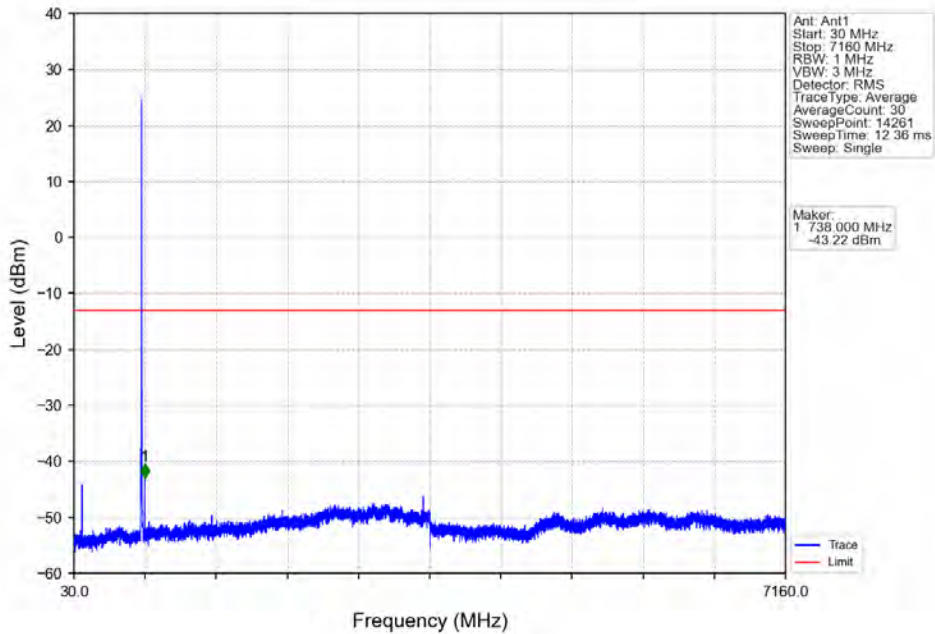
### 6.2.2 Test Graph



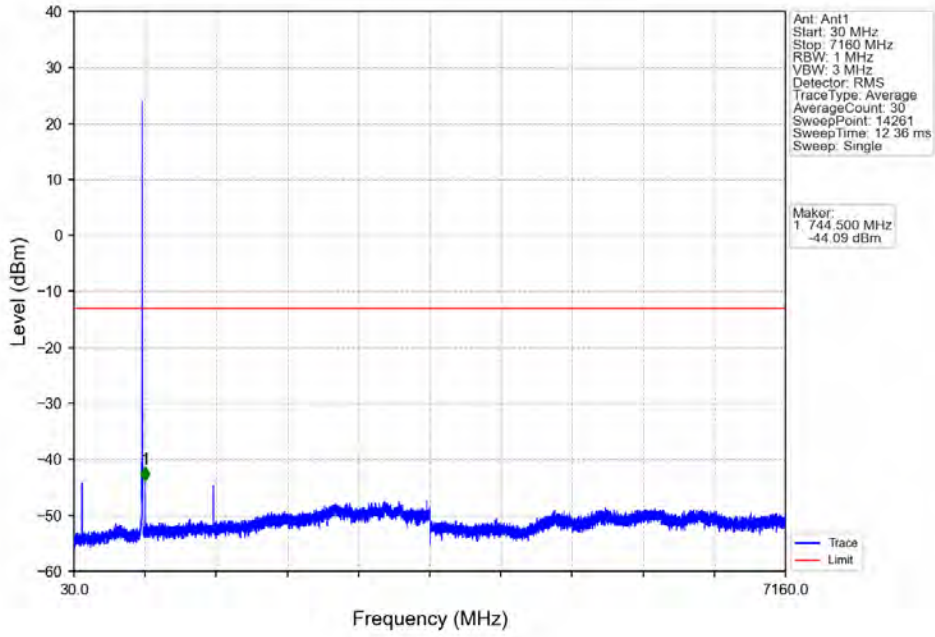
Band12\_3MHz\_QPSK\_LCH\_700.5MHz\_RB\_15\_0\_NTNV



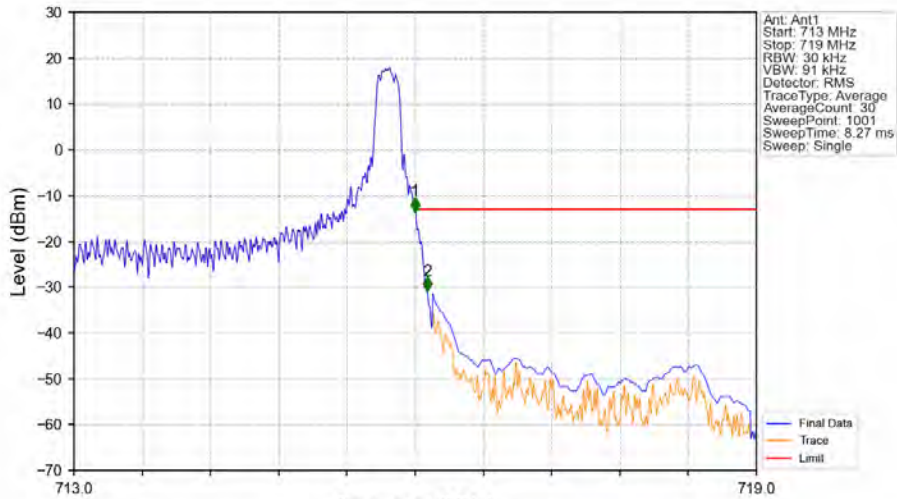
Band12\_3MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_1\_0\_NTNV

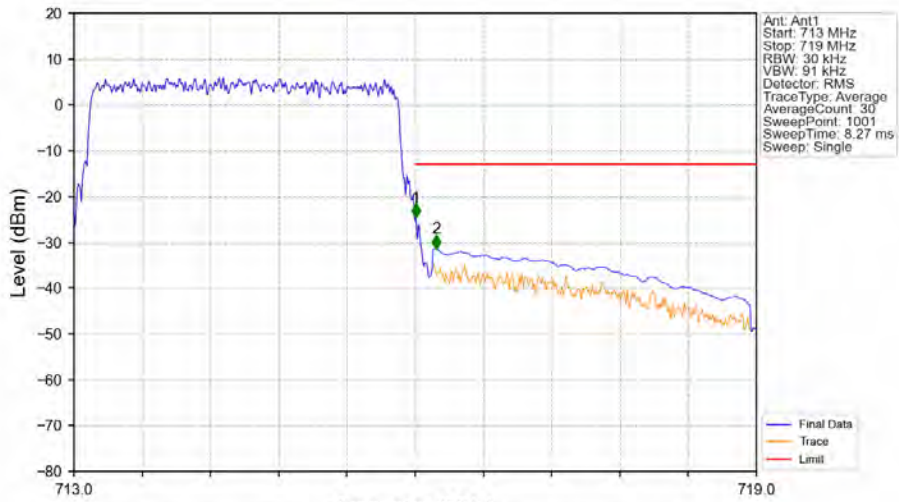


Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_1\_14\_NTNV



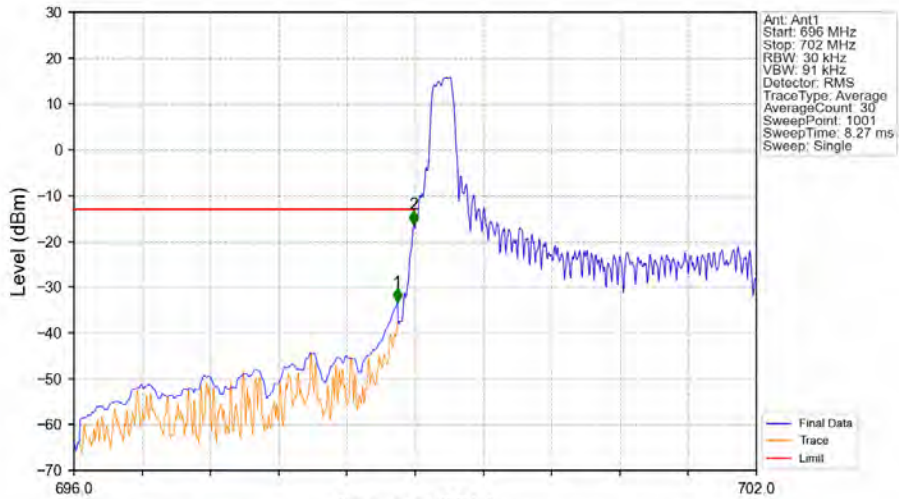
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	1	716.000	-13.49	-13	Pass
716.1	719	0.1	CHP	2	716.108	-30.88	-13	Pass

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	716.006	-24.69	-13	Pass
716.1	719	0.1	CHP	2	716.186	-31.41	-13	Pass

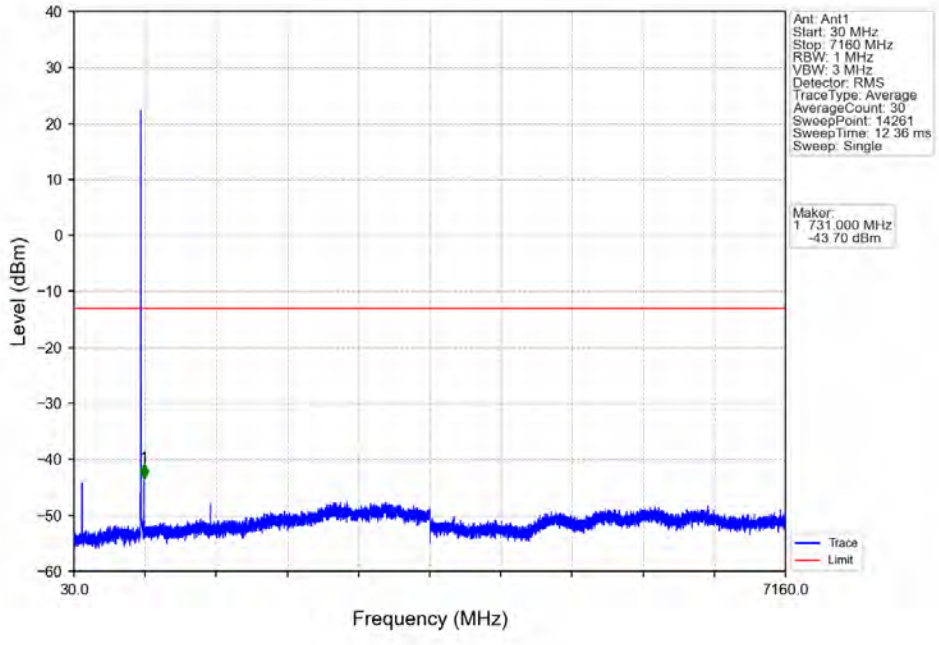
Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_1\_0\_NTNV



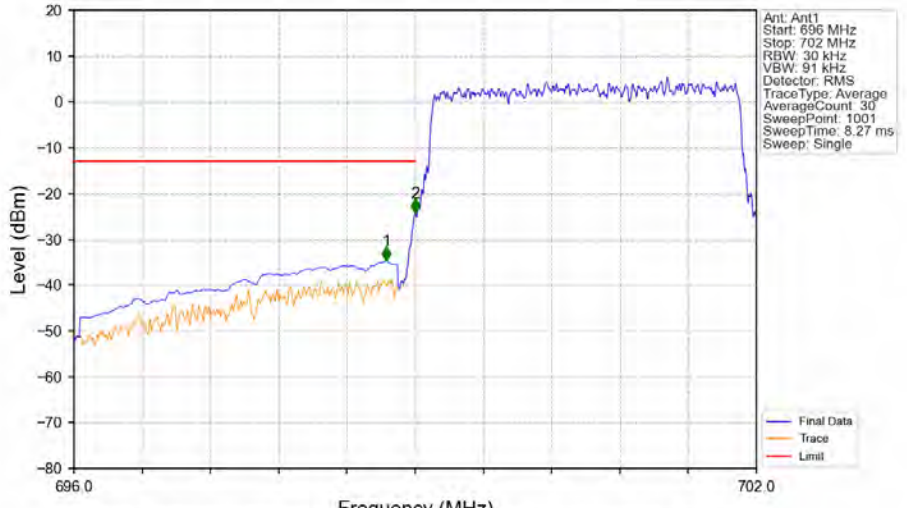
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	699.9	0.1	CHP	1	698.844	-33.29	-13	Pass
698.9	699	0.03	/	2	698.988	-16.31	-13	Pass
699	702	0.03	/	/	/	/	/	/



Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_1\_0\_NTNV

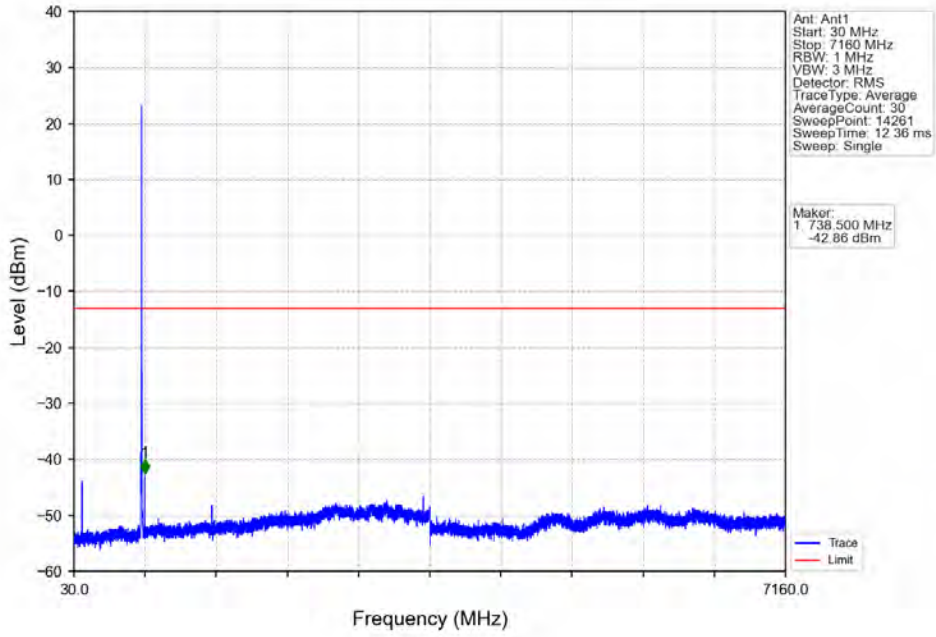


Band12\_3MHz\_16QAM\_LCH\_700.5MHz\_RB\_15\_0\_NTNV

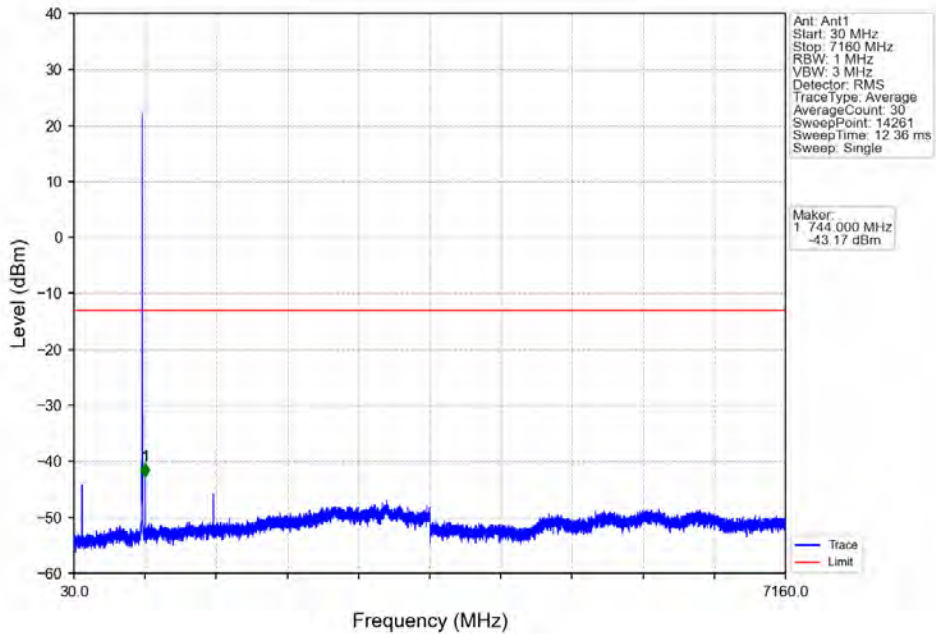


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.748	-34.73	-13	Pass
698.9	699	0.03	/	2	699.000	-24.34	-13	Pass
699	702	0.03	/	/	/	/	/	/

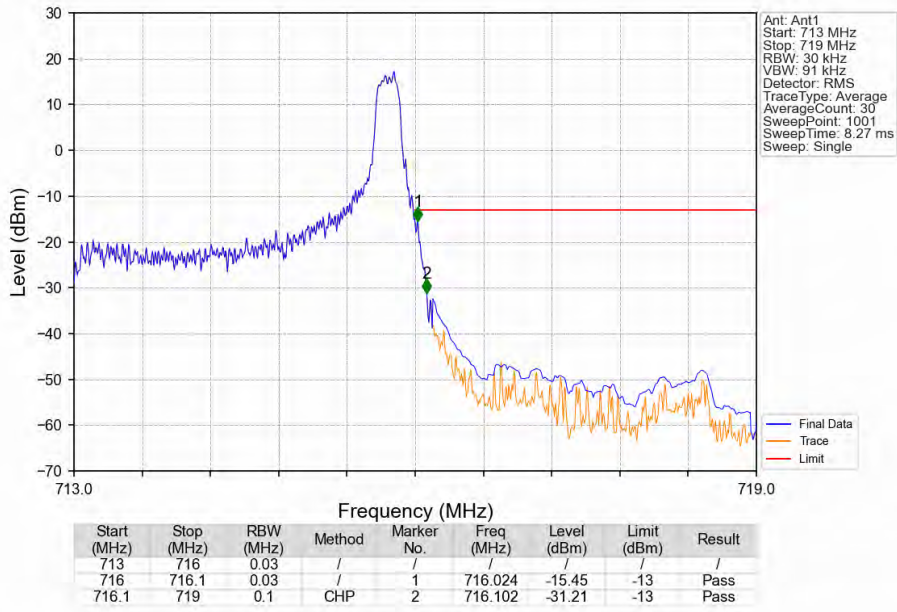
Band12\_3MHz\_16QAM\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



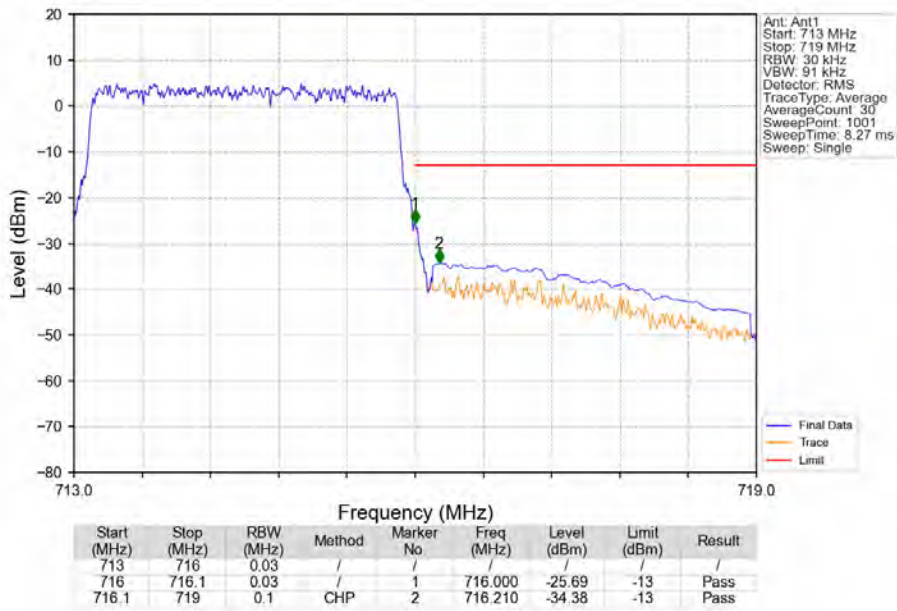
Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_1\_0\_NTNV



Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_1\_14\_NTNV



Band12\_3MHz\_16QAM\_HCH\_714.5MHz\_RB\_15\_0\_NTNV

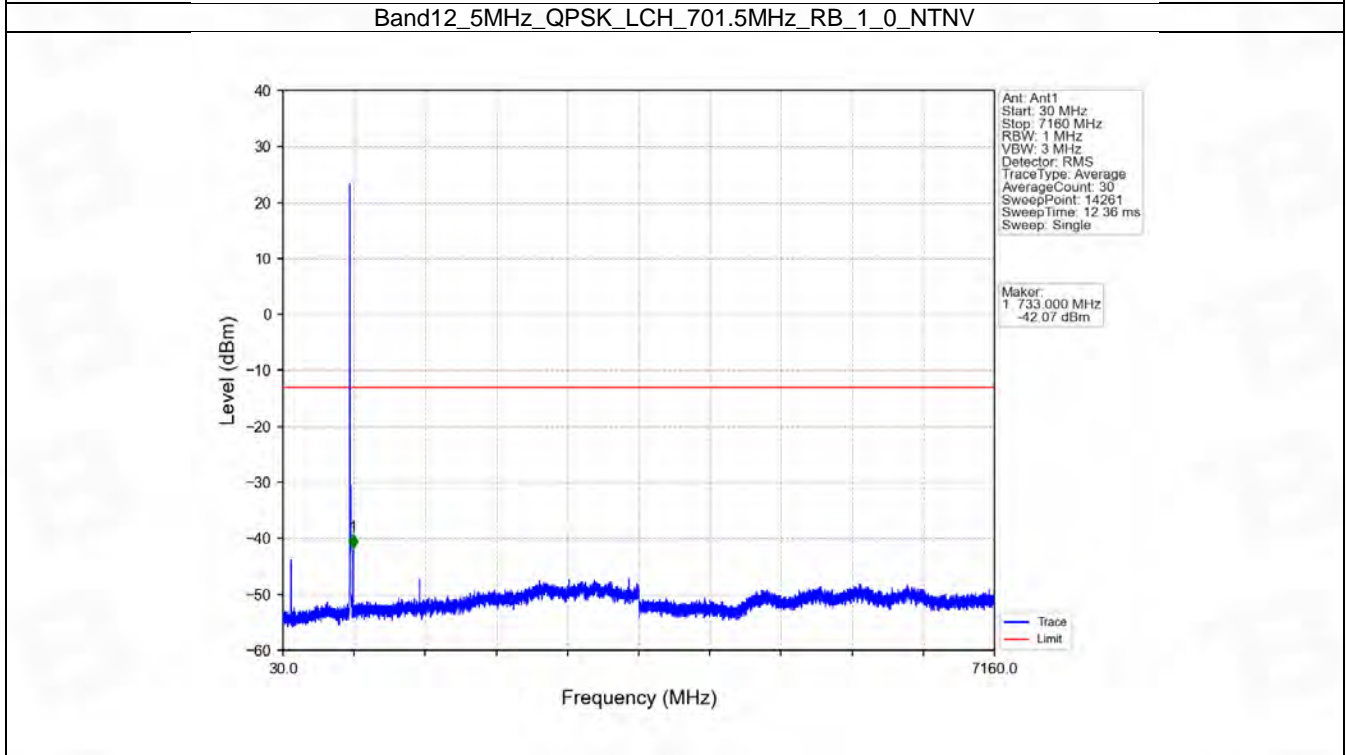
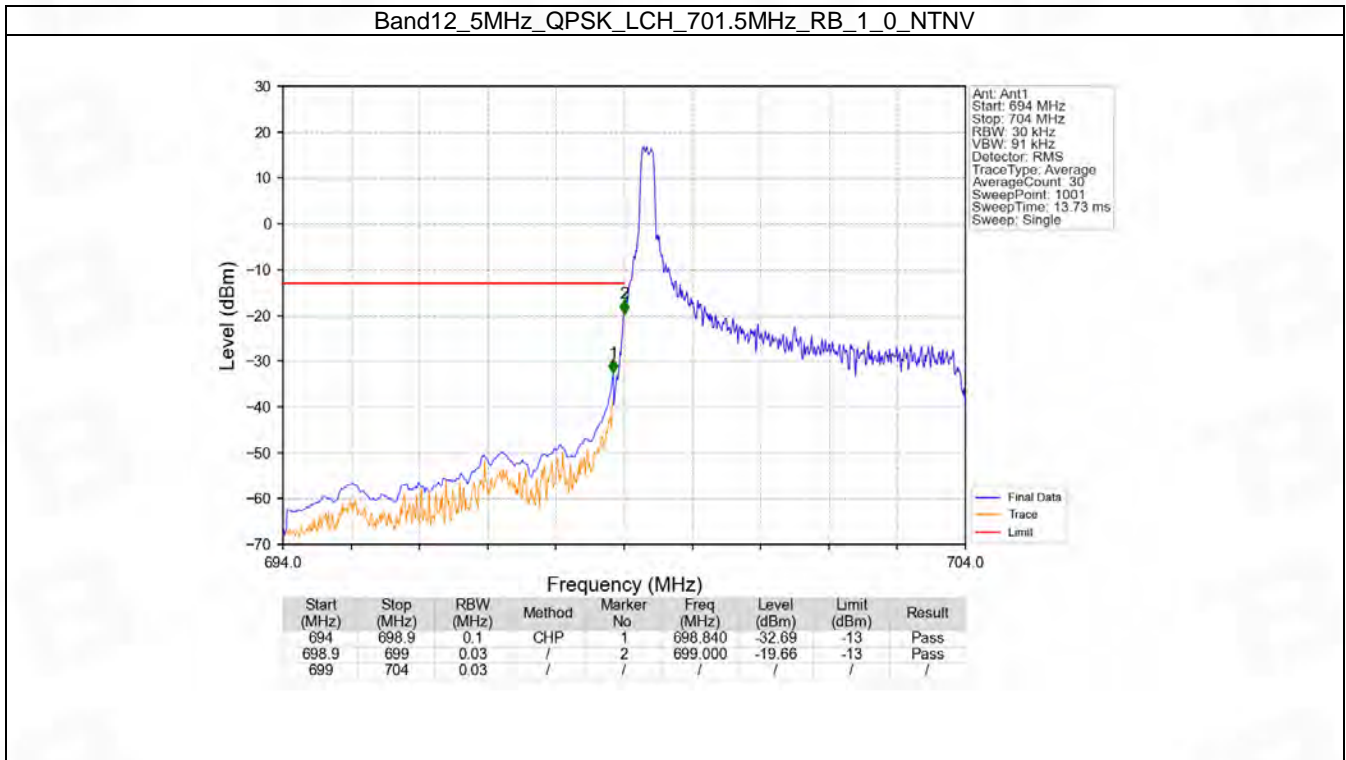


## 6.3 B12\_5MHz

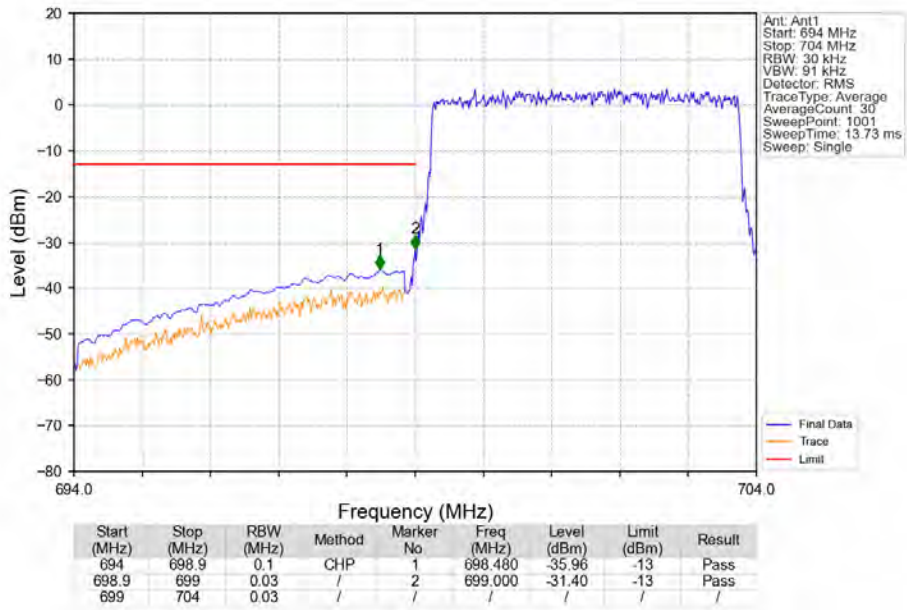
### 6.3.1 Test Result

Band: 12 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
			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
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
			0	Refer To Test Graph		Pass

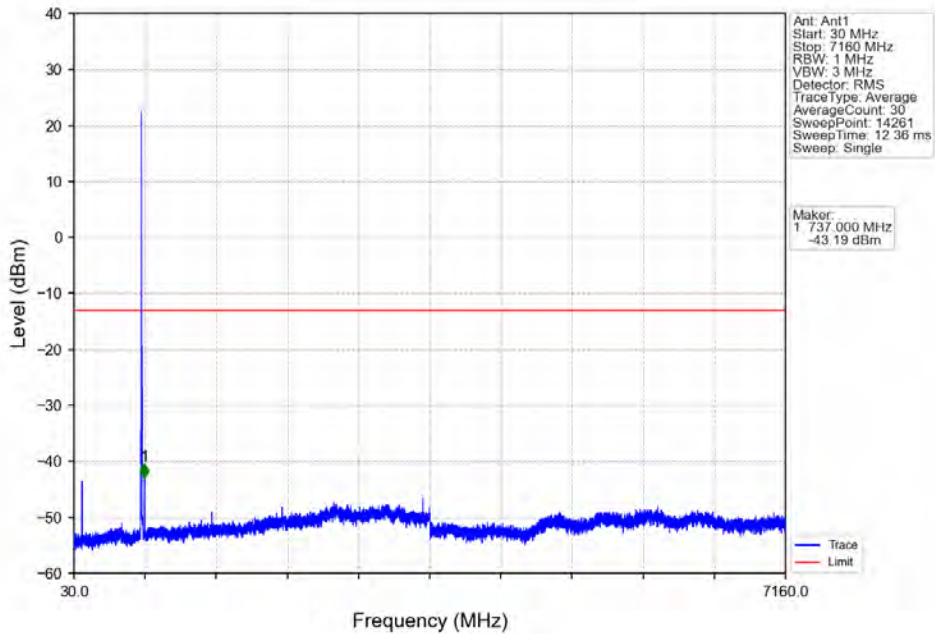
### 6.3.2 Test Graph



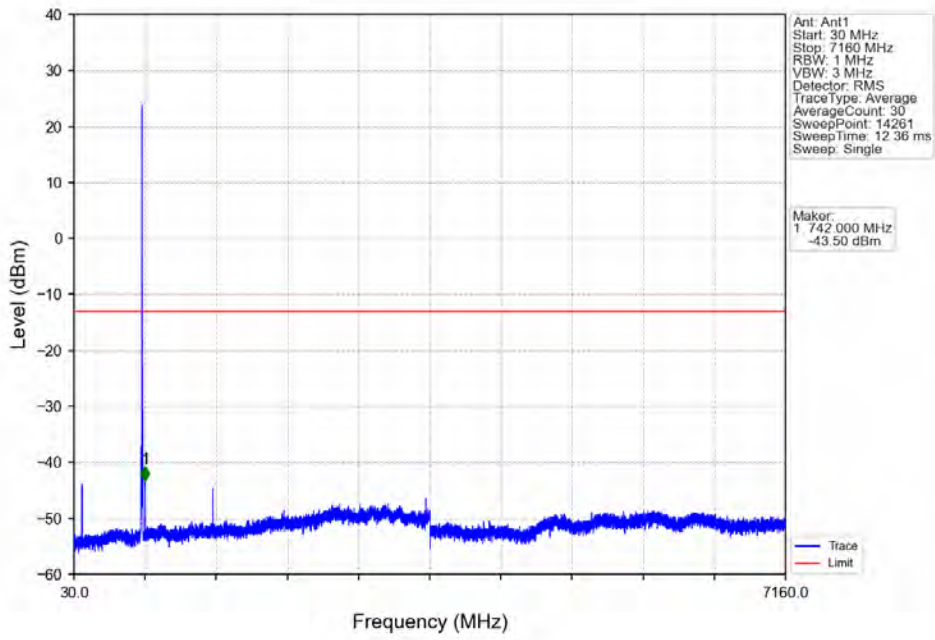
Band12\_5MHz\_QPSK\_LCH\_701.5MHz\_RB\_25\_0\_NTNV



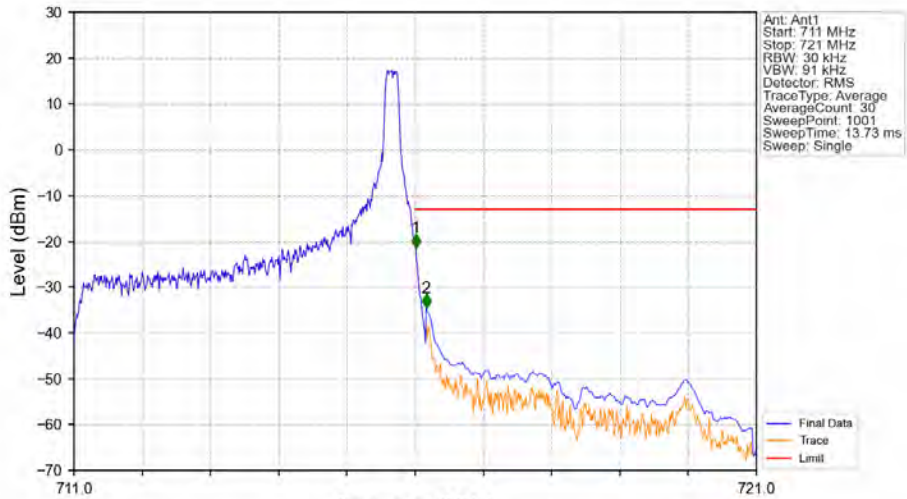
Band12\_5MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_1\_0\_NTNV

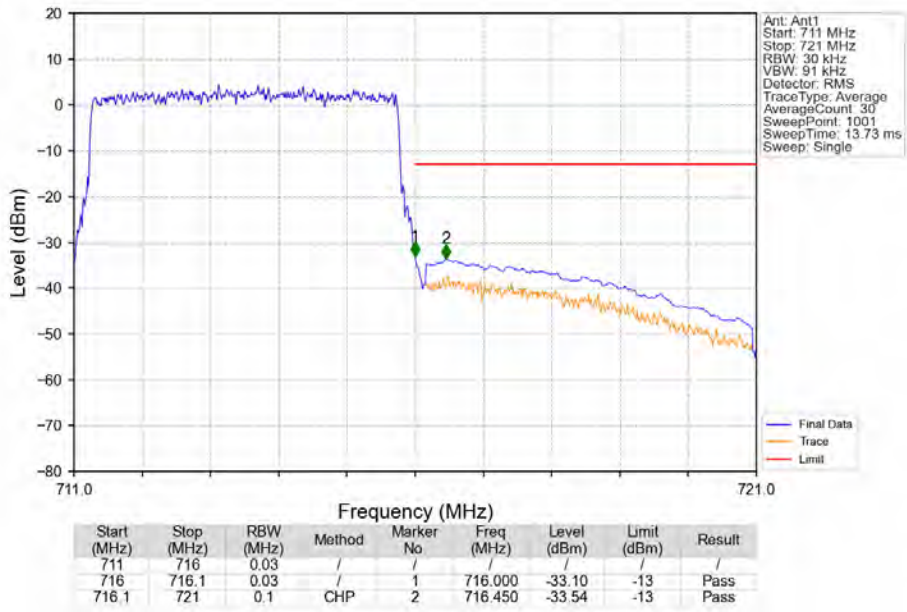


Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_1\_24\_NTNV

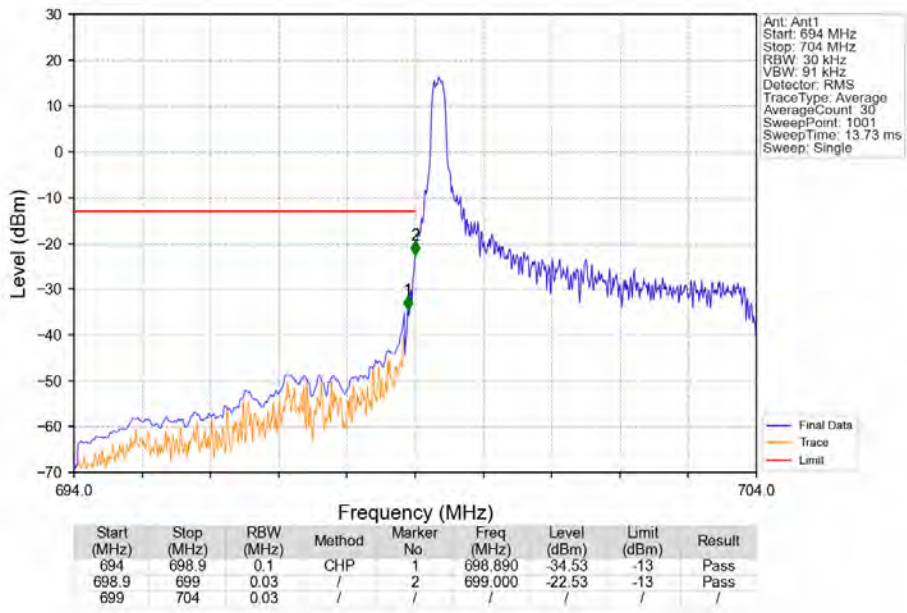


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	1	716.010	-21.42	-13	Pass
716.1	721	0.1	CHP	2	716.160	-34.59	-13	Pass

Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_25\_0\_NTNV

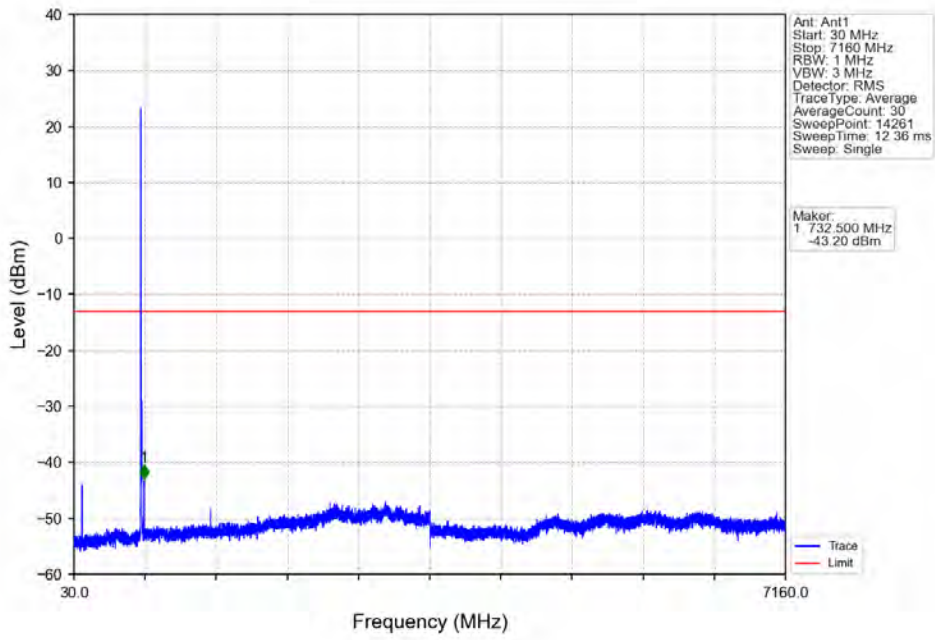


Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_1\_0\_NTNV

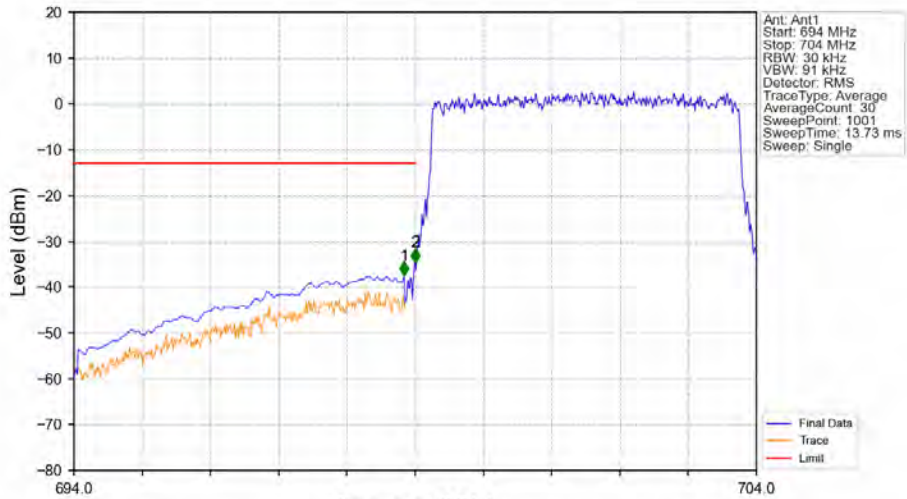




Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_1\_0\_NTNV

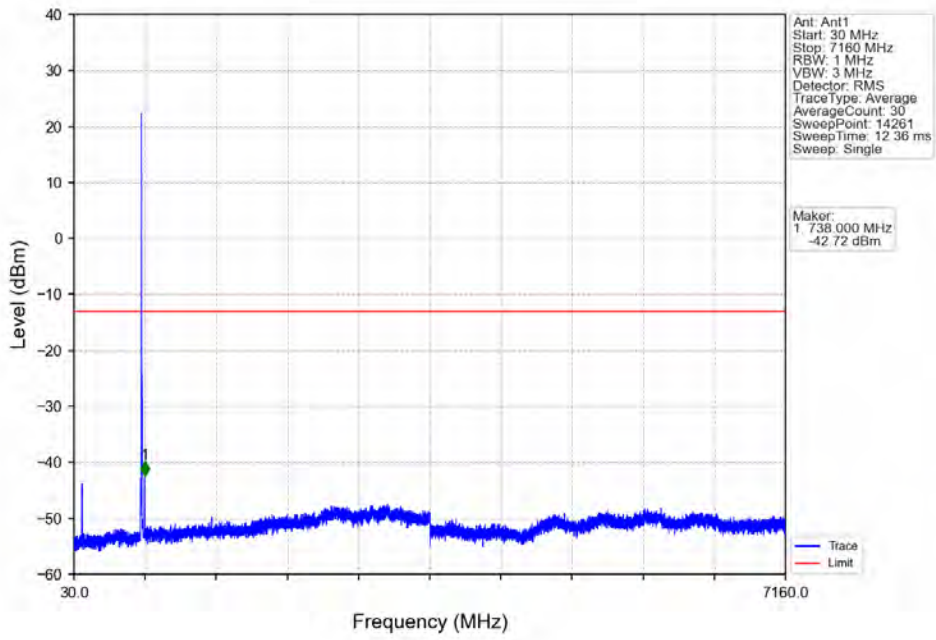


Band12\_5MHz\_16QAM\_LCH\_701.5MHz\_RB\_25\_0\_NTNV

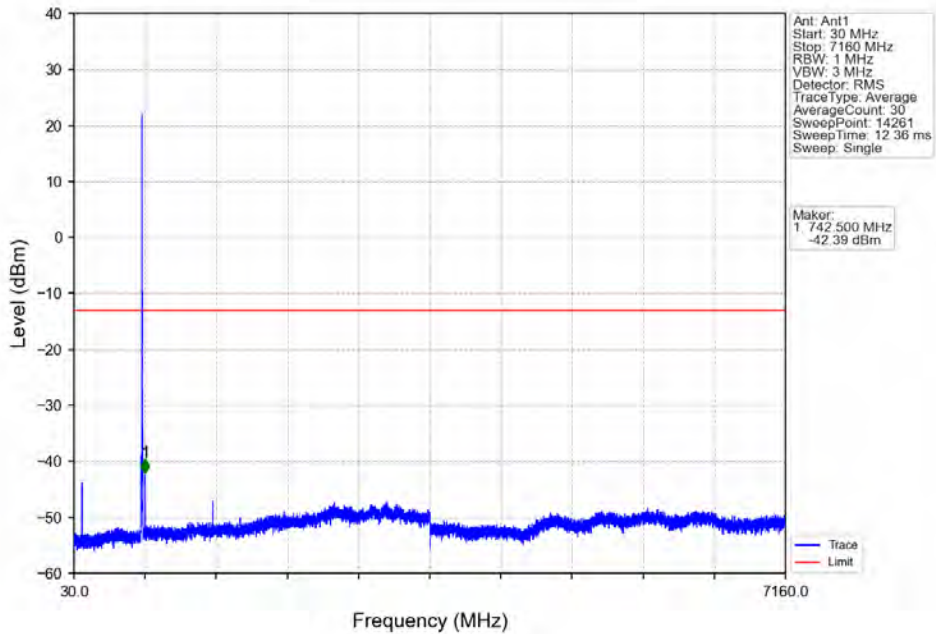


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.840	-37.44	-13	Pass
698.9	699	0.03	/	2	699.000	-34.60	-13	Pass
699	704	0.03	/	/	/	/	/	/

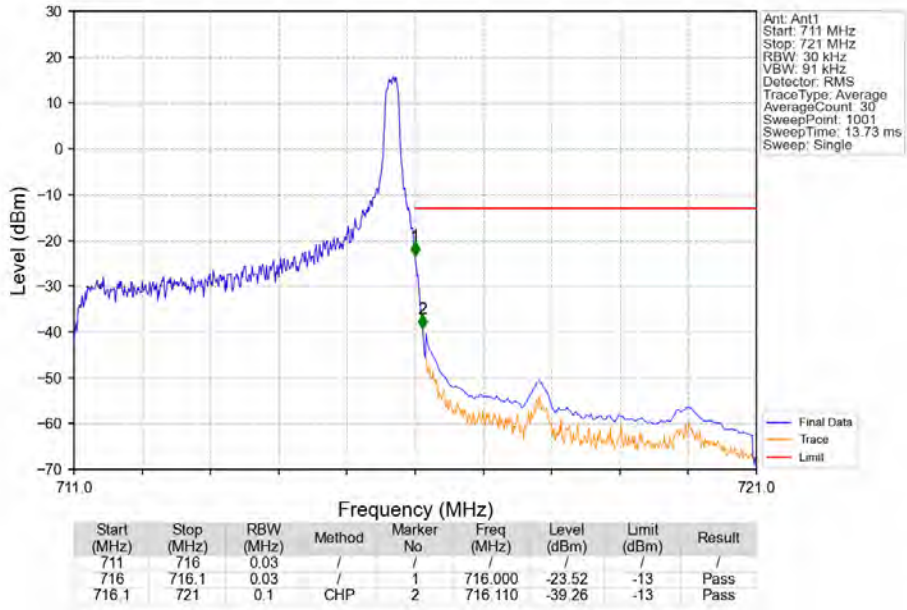
Band12\_5MHz\_16QAM\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



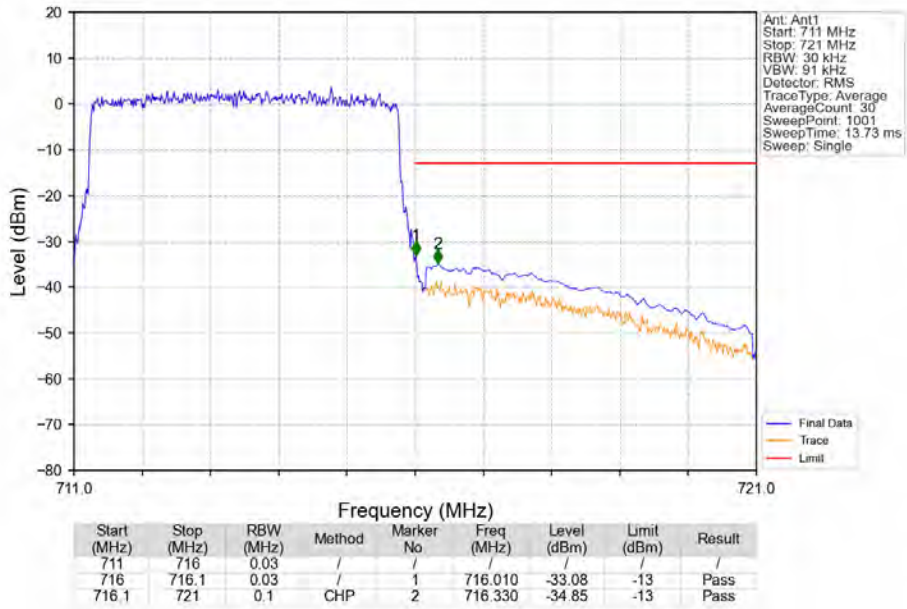
Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_1\_0\_NTNV



Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_1\_24\_NTV



Band12\_5MHz\_16QAM\_HCH\_713.5MHz\_RB\_25\_0\_NTV

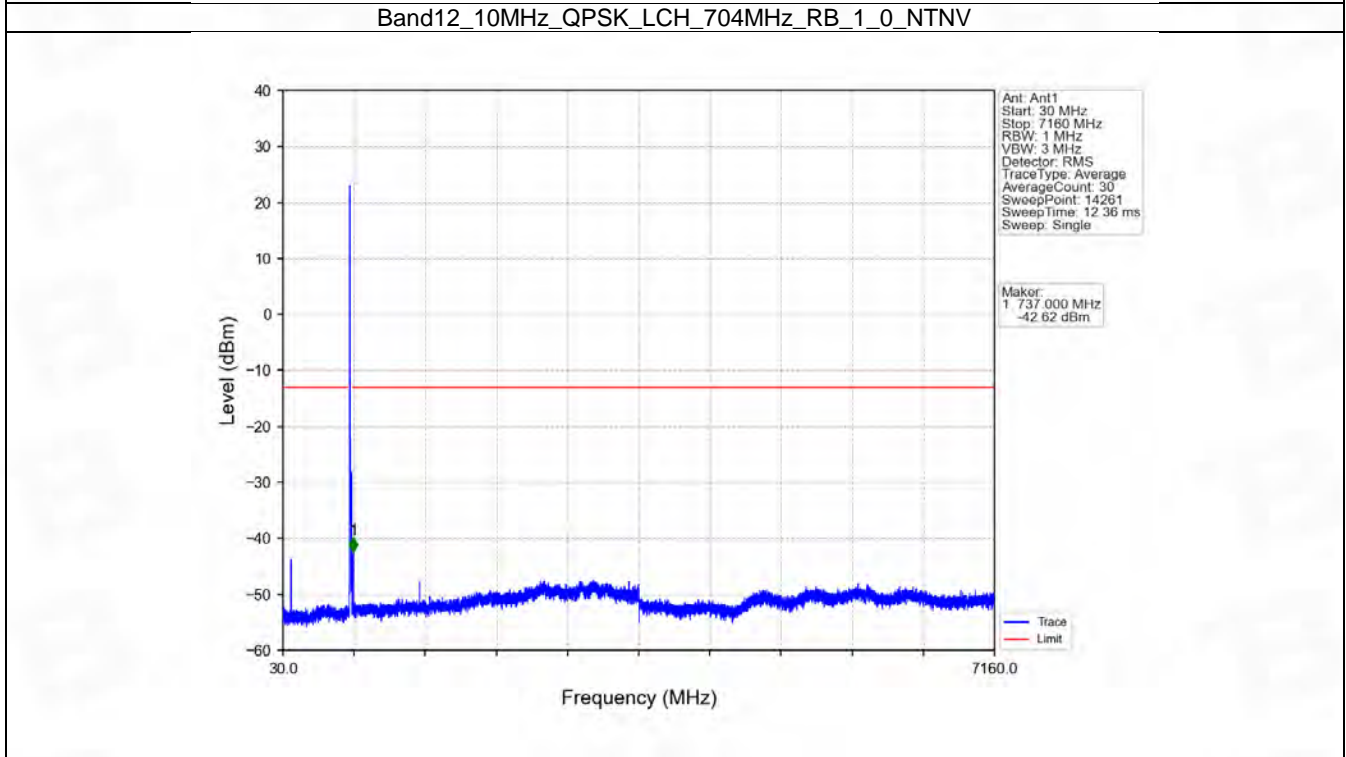
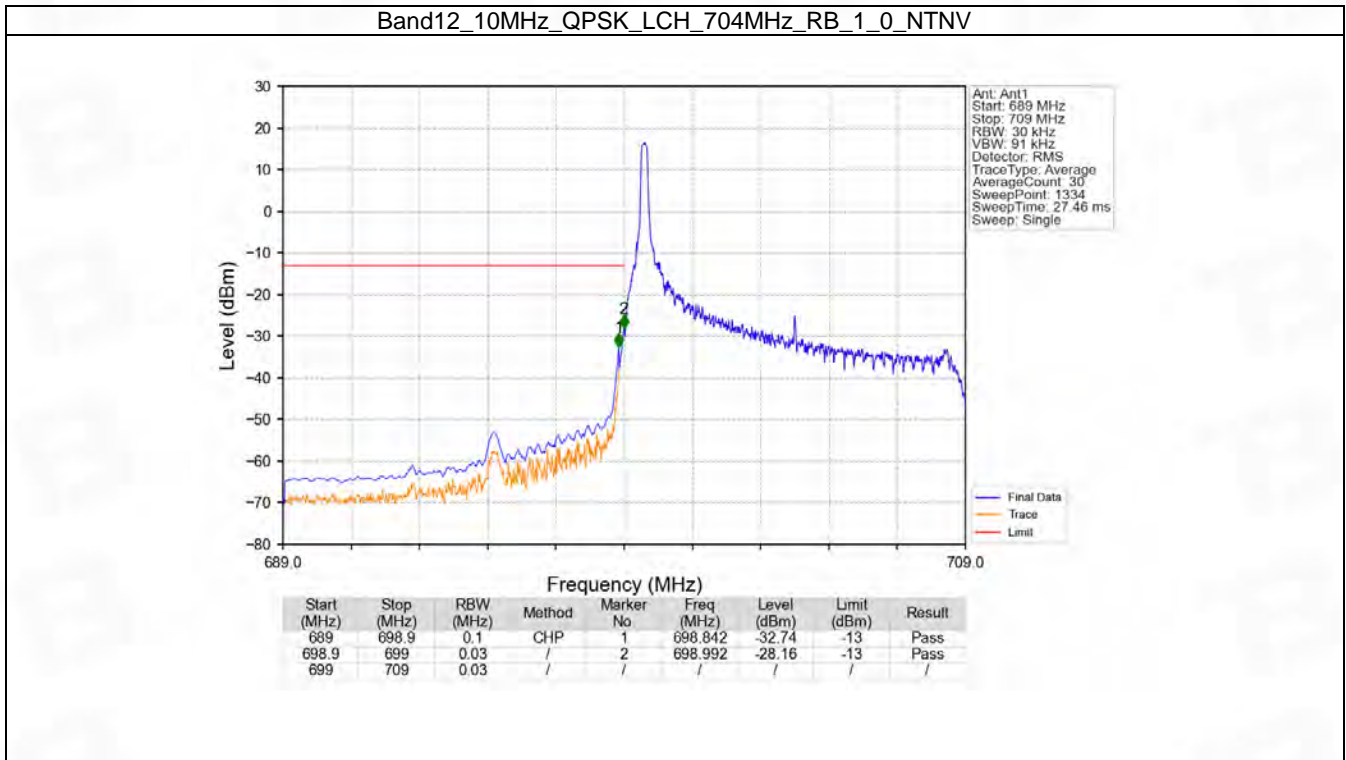


## 6.4 B12\_10MHz

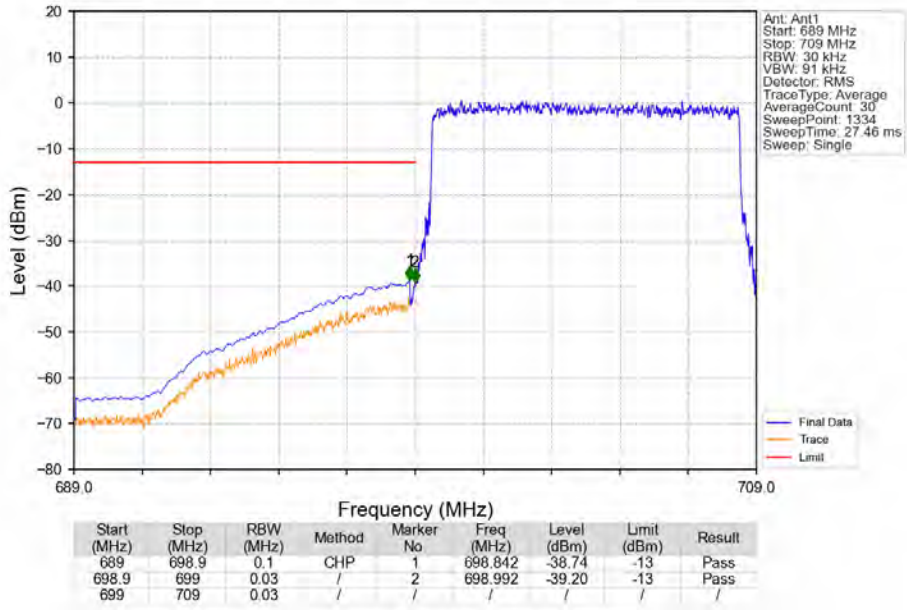
### 6.4.1 Test Result

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	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

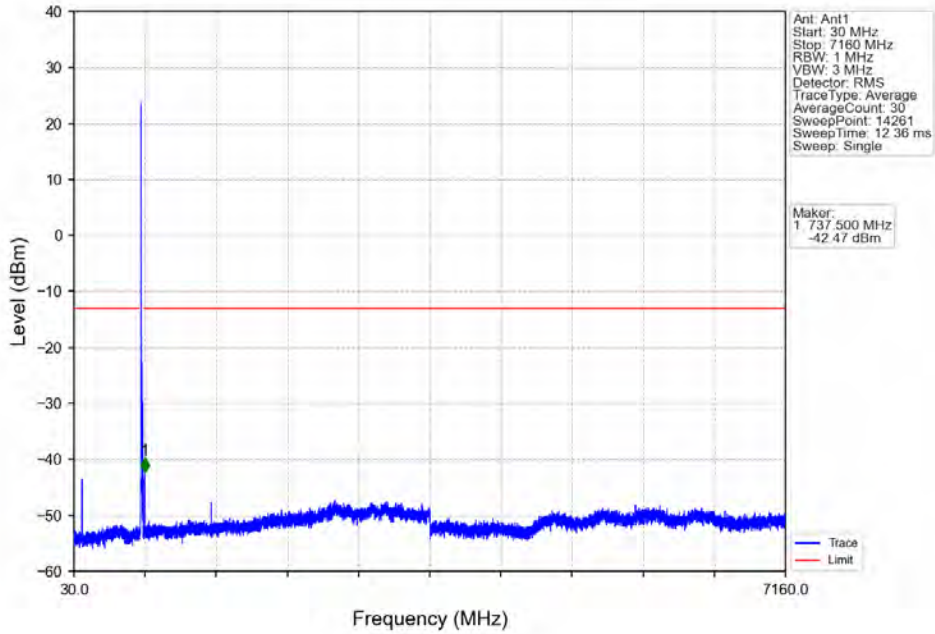
### 6.4.2 Test Graph



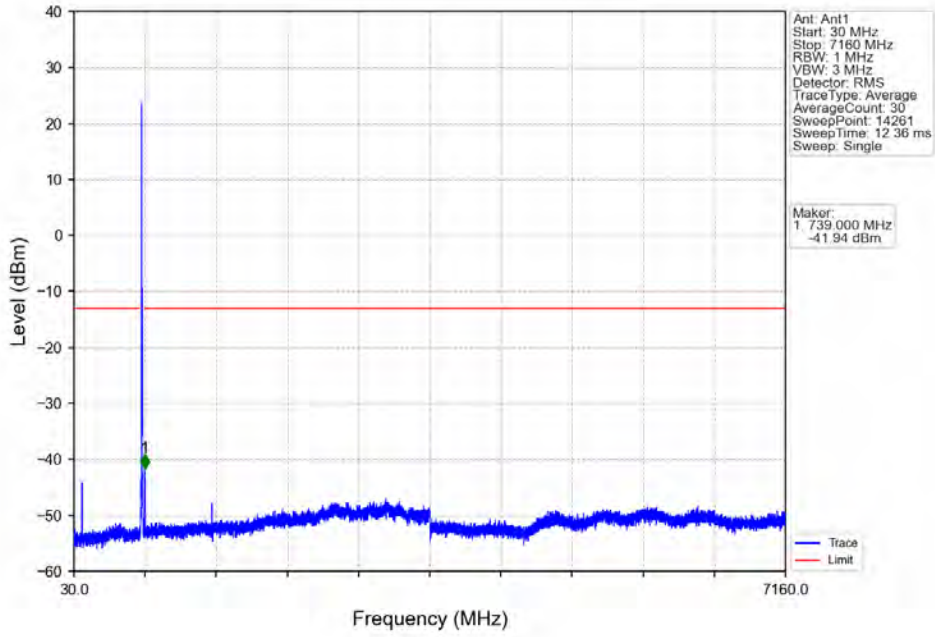
Band12\_10MHz\_QPSK\_LCH\_704MHz\_RB\_50\_0\_NTNV



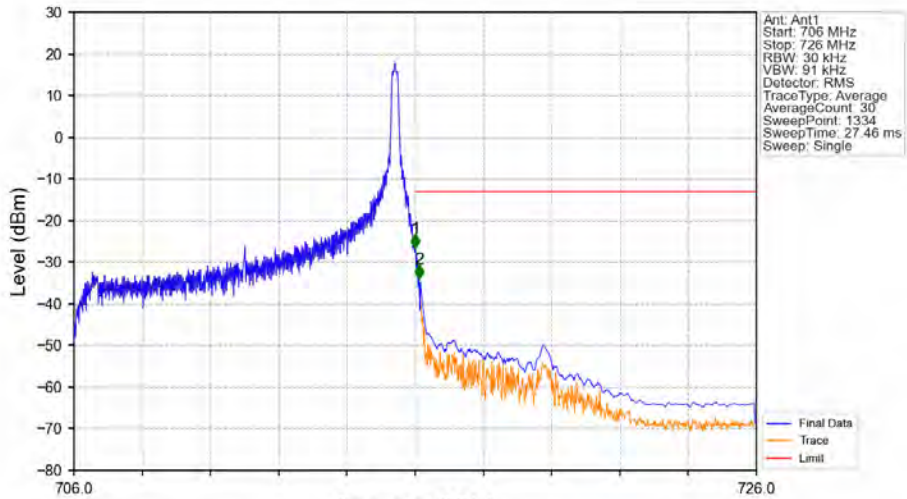
Band12\_10MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_1\_0\_NTNV

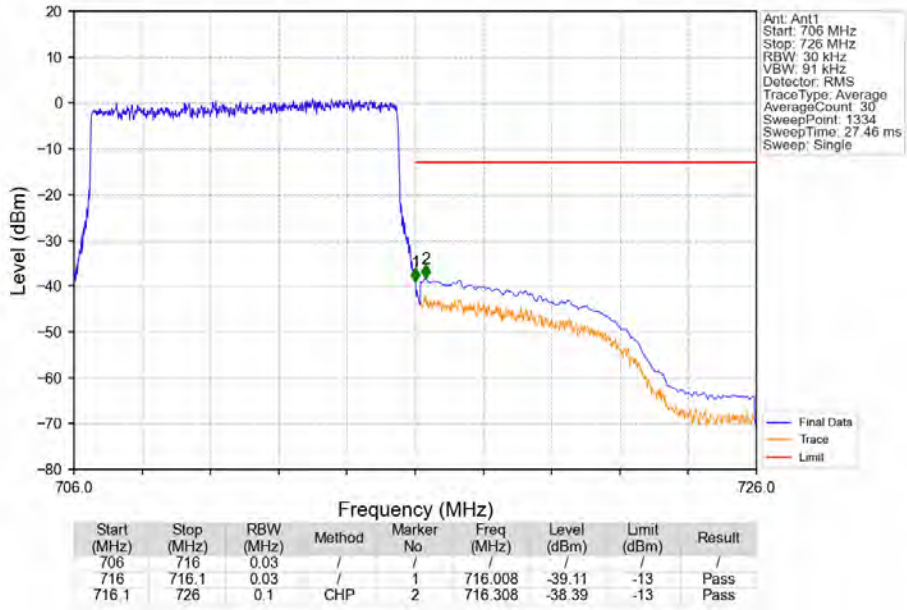


Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_1\_49\_NTNV

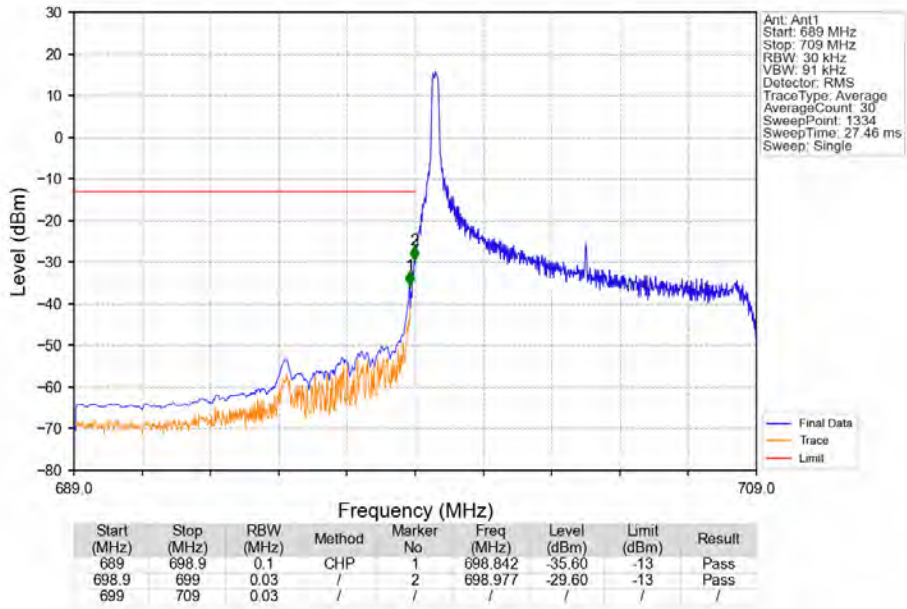


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	1	716.008	-26.62	-13	Pass
716.1	726	0.1	CHP	2	716.113	-34.06	-13	Pass

Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_50\_0\_NTNV

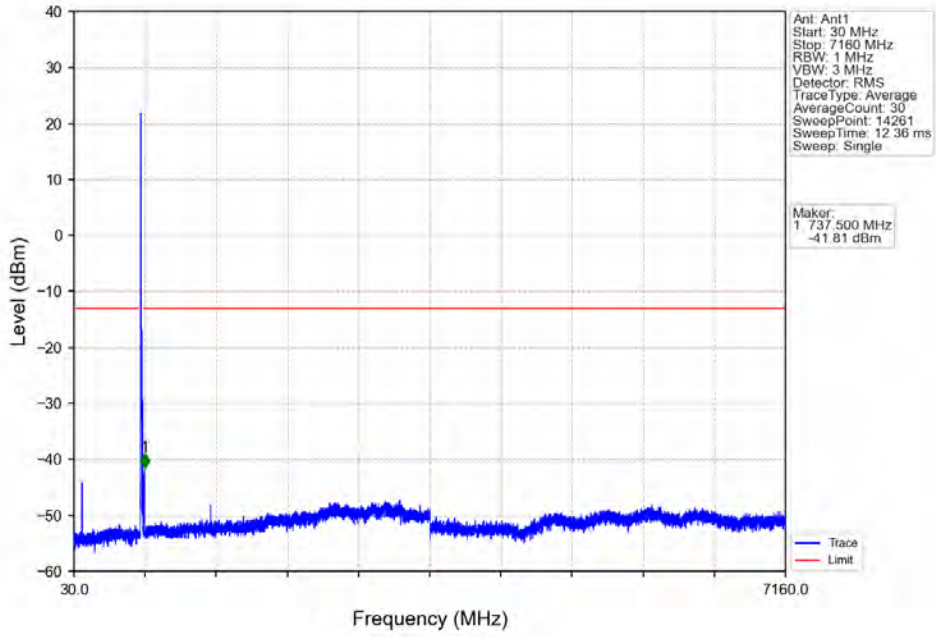


Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_1\_0\_NTNV

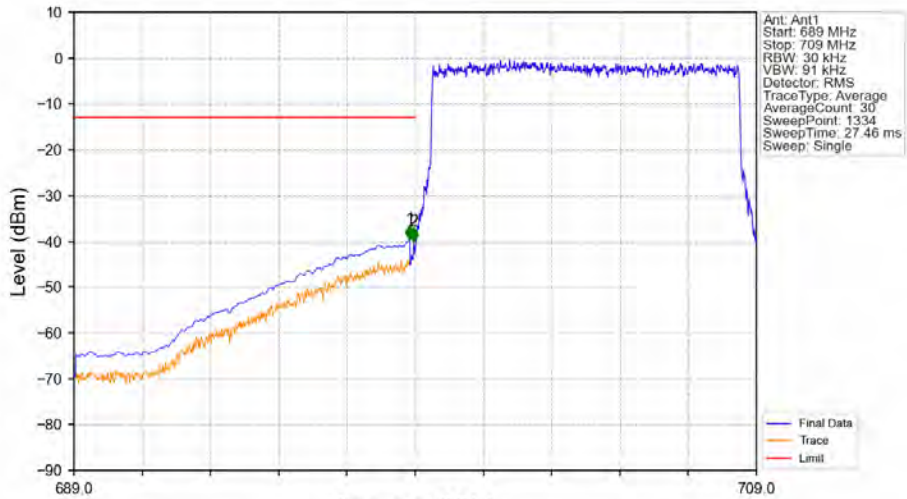




Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_1\_0\_NTNV

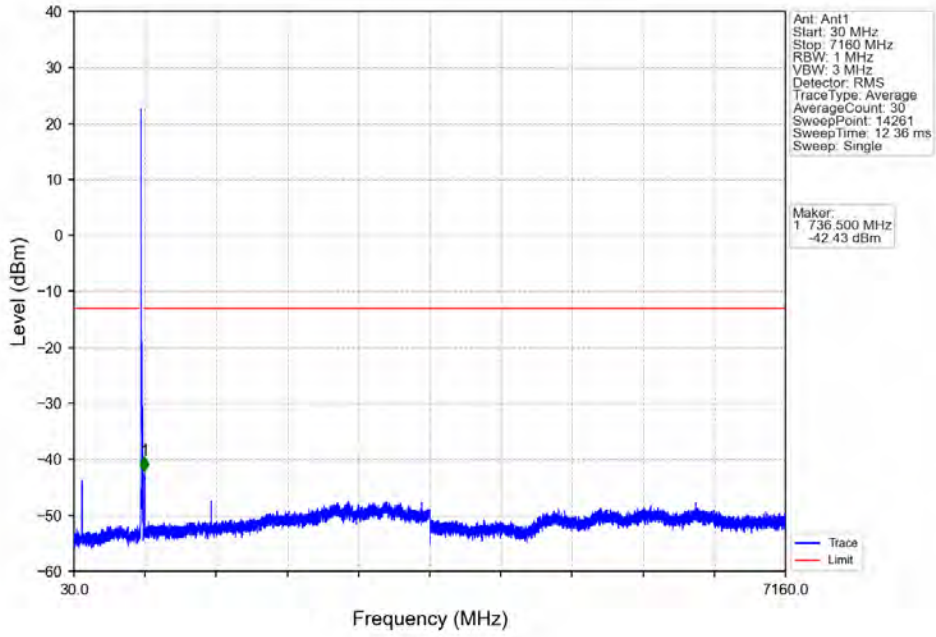


Band12\_10MHz\_16QAM\_LCH\_704MHz\_RB\_50\_0\_NTNV

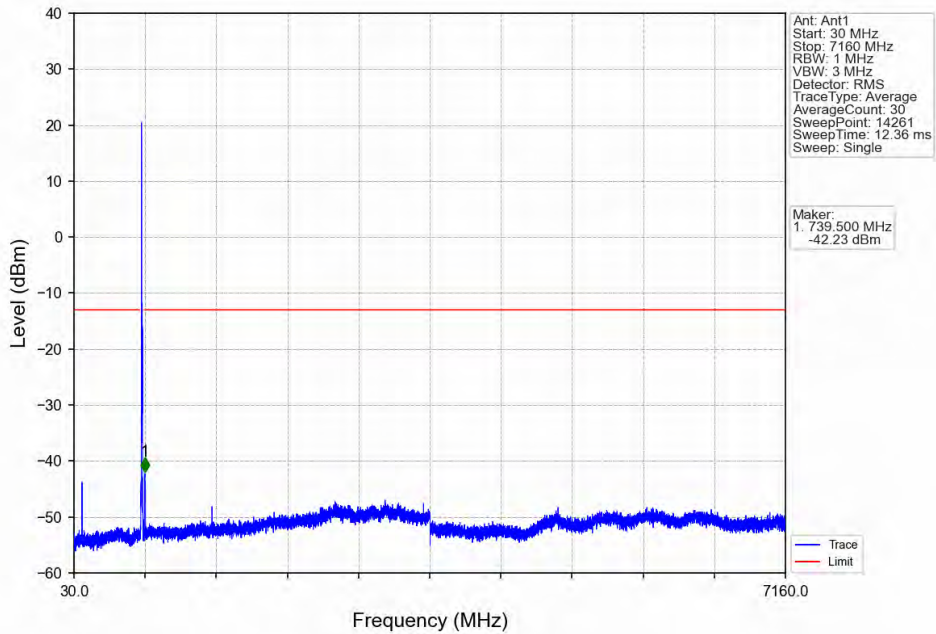


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-39.49	-13	Pass
698.9	699	0.03	/	2	698.962	-40.02	-13	Pass
699	709	0.03	/	/	/	/	/	/

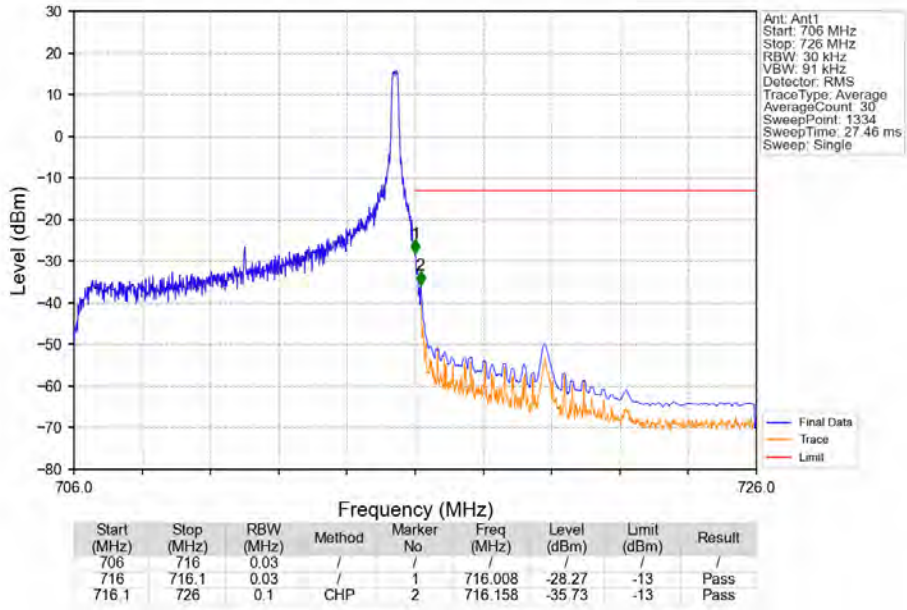
Band12\_10MHz\_16QAM\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



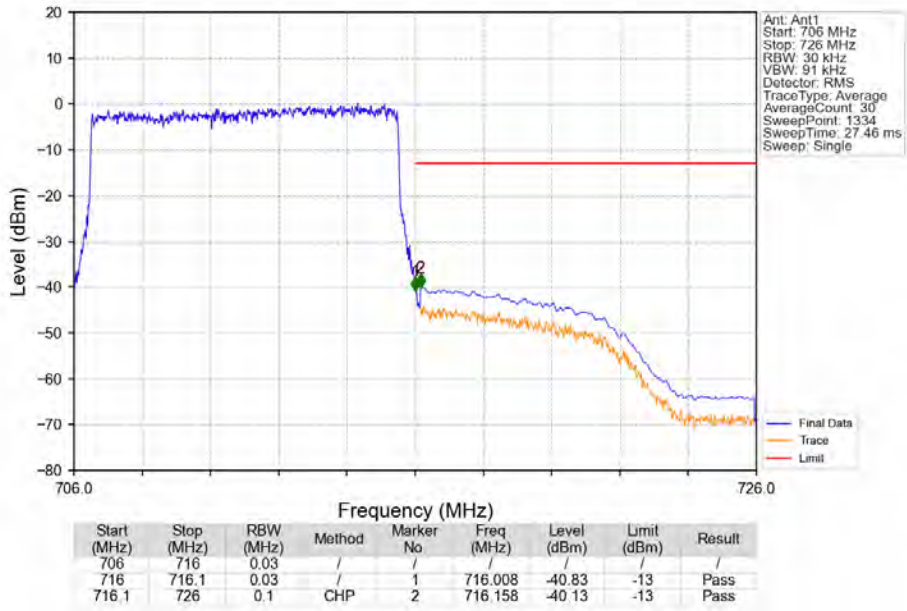
Band12\_10MHz\_16QAM\_HCH\_711MHz\_RB\_1\_0\_NTNV



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	0.2080	0.0650	ppm	1M11G7D	27H	23.18
12	1.4	699.7	715.3	0.1791	0.0631	ppm	1M12W7D	27H	22.53
12	3	700.5	714.5	0.2075	0.0586	ppm	2M76G7D	27H	23.17
12	3	700.5	714.5	0.1879	0.0470	ppm	2M77W7D	27H	22.74
12	5	701.5	713.5	0.2080	0.0647	ppm	4M55G7D	27H	23.18
12	5	701.5	713.5	0.1726	0.0651	ppm	4M58W7D	27H	22.37
12	10	704	711	0.2089	0.0594	ppm	9M10G7D	27H	23.20
12	10	704	711	0.1698	0.0649	ppm	9M09W7D	27H	22.30

## 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	0.0759	0.0650	ppm	1M11G7D	27H	18.80
12	1.4	699.7	715.3	0.0653	0.0631	ppm	1M12W7D	27H	18.15
12	3	700.5	714.5	0.0757	0.0586	ppm	2M76G7D	27H	18.79
12	3	700.5	714.5	0.0685	0.0470	ppm	2M77W7D	27H	18.36
12	5	701.5	713.5	0.0759	0.0647	ppm	4M55G7D	27H	18.80
12	5	701.5	713.5	0.0630	0.0651	ppm	4M58W7D	27H	17.99
12	10	704	711	0.0762	0.0594	ppm	9M10G7D	27H	18.82
12	10	704	711	0.0619	0.0649	ppm	9M09W7D	27H	17.92