

# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Test Result

### 1.1.1 B12\_1.4MHz\_ERP

Band: 12 / Bandwidth: 1.4MHz / NTVN								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	699.7	1	0	23.78	-5.07	16.56	<=34.77	Pass
			2	23.80	-5.07	16.58	<=34.77	Pass
			5	23.79	-5.07	16.57	<=34.77	Pass
		3	0	23.89	-5.07	16.67	<=34.77	Pass
			2	23.89	-5.07	16.67	<=34.77	Pass
			3	23.90	-5.07	16.68	<=34.77	Pass
	6	0	22.95	-5.07	15.73	<=34.77	Pass	
	707.5	1	0	23.81	-5.07	16.59	<=34.77	Pass
			2	23.86	-5.07	16.64	<=34.77	Pass
			5	23.79	-5.07	16.57	<=34.77	Pass
		3	0	23.85	-5.07	16.63	<=34.77	Pass
			2	23.87	-5.07	16.65	<=34.77	Pass
			3	23.86	-5.07	16.64	<=34.77	Pass
	6	0	22.96	-5.07	15.74	<=34.77	Pass	
	715.3	1	0	23.88	-5.07	16.66	<=34.77	Pass
			2	23.92	-5.07	16.70	<=34.77	Pass
			5	23.90	-5.07	16.68	<=34.77	Pass
		3	0	23.94	-5.07	16.72	<=34.77	Pass
2			23.96	-5.07	16.74	<=34.77	Pass	
3			23.92	-5.07	16.70	<=34.77	Pass	
6	0	23.04	-5.07	15.82	<=34.77	Pass		
16QAM	699.7	1	0	22.95	-5.07	15.73	<=34.77	Pass
			2	22.98	-5.07	15.76	<=34.77	Pass
			5	22.94	-5.07	15.72	<=34.77	Pass
		3	0	22.82	-5.07	15.60	<=34.77	Pass
			2	22.86	-5.07	15.64	<=34.77	Pass
			3	22.86	-5.07	15.64	<=34.77	Pass
	6	0	22.01	-5.07	14.79	<=34.77	Pass	
	707.5	1	0	22.79	-5.07	15.57	<=34.77	Pass
			2	22.82	-5.07	15.60	<=34.77	Pass
			5	22.82	-5.07	15.60	<=34.77	Pass
		3	0	22.90	-5.07	15.68	<=34.77	Pass
			2	22.90	-5.07	15.68	<=34.77	Pass
			3	22.88	-5.07	15.66	<=34.77	Pass
	6	0	21.91	-5.07	14.69	<=34.77	Pass	
	715.3	1	0	22.98	-5.07	15.76	<=34.77	Pass
			2	23.01	-5.07	15.79	<=34.77	Pass
			5	22.96	-5.07	15.74	<=34.77	Pass
		3	0	22.85	-5.07	15.63	<=34.77	Pass
2			22.88	-5.07	15.66	<=34.77	Pass	
3			22.86	-5.07	15.64	<=34.77	Pass	
6	0	22.03	-5.07	14.81	<=34.77	Pass		
64QAM	699.7	1	0	22.08	-5.07	14.86	<=34.77	Pass
			2	22.14	-5.07	14.92	<=34.77	Pass
			5	22.07	-5.07	14.85	<=34.77	Pass
		3	0	22.07	-5.07	14.85	<=34.77	Pass
			2	22.12	-5.07	14.90	<=34.77	Pass
			3	22.11	-5.07	14.89	<=34.77	Pass
6	0	21.33	-5.07	14.11	<=34.77	Pass		

	707.5	1	0	22.08	-5.07	14.86	<=34.77	Pass
			2	22.08	-5.07	14.86	<=34.77	Pass
			5	22.11	-5.07	14.89	<=34.77	Pass
		3	0	21.90	-5.07	14.68	<=34.77	Pass
			2	21.93	-5.07	14.71	<=34.77	Pass
			3	21.90	-5.07	14.68	<=34.77	Pass
	6	0	21.12	-5.07	13.90	<=34.77	Pass	
	715.3	1	0	22.12	-5.07	14.90	<=34.77	Pass
			2	22.18	-5.07	14.96	<=34.77	Pass
			5	22.08	-5.07	14.86	<=34.77	Pass
		3	0	22.10	-5.07	14.88	<=34.77	Pass
			2	22.13	-5.07	14.91	<=34.77	Pass
			3	22.11	-5.07	14.89	<=34.77	Pass
	6	0	21.36	-5.07	14.14	<=34.77	Pass	

Note1: ERP=Conducted Power+Antenna Gain-2.15

### 1.1.2 B12\_3MHz\_ERP

Band: 12 / Bandwidth: 3MHz / NTNV									
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict	
		Size	Offset			Result	Limit		
QPSK	700.5	1	0	23.70	-5.07	16.48	<=34.77	Pass	
			7	23.81	-5.07	16.59	<=34.77	Pass	
			14	23.72	-5.07	16.50	<=34.77	Pass	
		8	0	22.88	-5.07	15.66	<=34.77	Pass	
			4	22.95	-5.07	15.73	<=34.77	Pass	
			7	22.89	-5.07	15.67	<=34.77	Pass	
		15	0	22.90	-5.07	15.68	<=34.77	Pass	
		707.5	1	0	23.69	-5.07	16.47	<=34.77	Pass
				7	23.80	-5.07	16.58	<=34.77	Pass
	14			23.65	-5.07	16.43	<=34.77	Pass	
	8		0	22.90	-5.07	15.68	<=34.77	Pass	
			4	22.92	-5.07	15.70	<=34.77	Pass	
			7	22.86	-5.07	15.64	<=34.77	Pass	
	15		0	22.86	-5.07	15.64	<=34.77	Pass	
	714.5		1	0	23.76	-5.07	16.54	<=34.77	Pass
				7	23.90	-5.07	16.68	<=34.77	Pass
		14		23.82	-5.07	16.60	<=34.77	Pass	
		8	0	22.99	-5.07	15.77	<=34.77	Pass	
			4	23.00	-5.07	15.78	<=34.77	Pass	
			7	22.93	-5.07	15.71	<=34.77	Pass	
	15	0	22.92	-5.07	15.70	<=34.77	Pass		
	16QAM	700.5	1	0	23.24	-5.07	16.02	<=34.77	Pass
				7	23.36	-5.07	16.14	<=34.77	Pass
				14	23.18	-5.07	15.96	<=34.77	Pass
8			0	22.04	-5.07	14.82	<=34.77	Pass	
			4	22.11	-5.07	14.89	<=34.77	Pass	
			7	22.05	-5.07	14.83	<=34.77	Pass	
15		0	21.94	-5.07	14.72	<=34.77	Pass		
707.5		1	0	22.85	-5.07	15.63	<=34.77	Pass	
			7	22.95	-5.07	15.73	<=34.77	Pass	
			14	22.82	-5.07	15.60	<=34.77	Pass	
		8	0	21.86	-5.07	14.64	<=34.77	Pass	
			4	21.91	-5.07	14.69	<=34.77	Pass	
			7	21.85	-5.07	14.63	<=34.77	Pass	
15		0	21.82	-5.07	14.60	<=34.77	Pass		
714.5		1	0	22.73	-5.07	15.51	<=34.77	Pass	

64QAM	700.5	8	7	22.88	-5.07	15.66	<=34.77	Pass			
			14	22.75	-5.07	15.53	<=34.77	Pass			
			0	22.03	-5.07	14.81	<=34.77	Pass			
		15	1	4	22.03	-5.07	14.81	<=34.77	Pass		
				7	21.96	-5.07	14.74	<=34.77	Pass		
				0	21.97	-5.07	14.75	<=34.77	Pass		
		707.5	8	1	0	22.12	-5.07	14.90	<=34.77	Pass	
					7	22.24	-5.07	15.02	<=34.77	Pass	
					14	22.12	-5.07	14.90	<=34.77	Pass	
			15	8	0	21.02	-5.07	13.80	<=34.77	Pass	
					4	21.06	-5.07	13.84	<=34.77	Pass	
					7	20.97	-5.07	13.75	<=34.77	Pass	
			714.5	15	1	0	20.92	-5.07	13.70	<=34.77	Pass
						0	21.96	-5.07	14.74	<=34.77	Pass
						7	22.07	-5.07	14.85	<=34.77	Pass
8	1	14		21.95	-5.07	14.73	<=34.77	Pass			
		0		20.94	-5.07	13.72	<=34.77	Pass			
		4		20.98	-5.07	13.76	<=34.77	Pass			
714.5	8	1		7	20.93	-5.07	13.71	<=34.77	Pass		
				0	20.91	-5.07	13.69	<=34.77	Pass		
				0	22.03	-5.07	14.81	<=34.77	Pass		
	15	8	7	22.16	-5.07	14.94	<=34.77	Pass			
			14	21.99	-5.07	14.77	<=34.77	Pass			
			0	20.93	-5.07	13.71	<=34.77	Pass			
714.5	1	4	20.94	-5.07	13.72	<=34.77	Pass				
		7	20.87	-5.07	13.65	<=34.77	Pass				
		0	21.01	-5.07	13.79	<=34.77	Pass				

Note1: ERP=Conducted Power+Antenna Gain-2.15

### 1.1.3 B12\_5MHz\_ERP

Band: 12 / Bandwidth: 5MHz / NTNv										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	701.5	1	0	23.99	-5.07	16.77	<=34.77	Pass		
			13	24.10	-5.07	16.88	<=34.77	Pass		
			24	24.01	-5.07	16.79	<=34.77	Pass		
		12	0	22.97	-5.07	15.75	<=34.77	Pass		
			6	23.04	-5.07	15.82	<=34.77	Pass		
			13	22.98	-5.07	15.76	<=34.77	Pass		
		25	0	22.96	-5.07	15.74	<=34.77	Pass		
		707.5	1	0	23.97	-5.07	16.75	<=34.77	Pass	
				13	24.02	-5.07	16.80	<=34.77	Pass	
	24			23.95	-5.07	16.73	<=34.77	Pass		
	12		0	22.93	-5.07	15.71	<=34.77	Pass		
			6	23.01	-5.07	15.79	<=34.77	Pass		
			13	22.98	-5.07	15.76	<=34.77	Pass		
	25	0	22.96	-5.07	15.74	<=34.77	Pass			
	713.5	1	0	24.04	-5.07	16.82	<=34.77	Pass		
			13	24.11	-5.07	16.89	<=34.77	Pass		
			24	24.09	-5.07	16.87	<=34.77	Pass		
		12	0	23.04	-5.07	15.82	<=34.77	Pass		
			6	23.04	-5.07	15.82	<=34.77	Pass		
			13	22.99	-5.07	15.77	<=34.77	Pass		
		25	0	23.03	-5.07	15.81	<=34.77	Pass		
		16QAM	701.5	1	0	22.85	-5.07	15.63	<=34.77	Pass
					13	22.97	-5.07	15.75	<=34.77	Pass

	707.5	12	24	22.87	-5.07	15.65	<=34.77	Pass	
			0	21.97	-5.07	14.75	<=34.77	Pass	
			6	22.05	-5.07	14.83	<=34.77	Pass	
			13	21.96	-5.07	14.74	<=34.77	Pass	
		25	0	22.00	-5.07	14.78	<=34.77	Pass	
			1	0	23.22	-5.07	16.00	<=34.77	Pass
				13	23.28	-5.07	16.06	<=34.77	Pass
		12	24	23.21	-5.07	15.99	<=34.77	Pass	
			0	21.96	-5.07	14.74	<=34.77	Pass	
			6	22.03	-5.07	14.81	<=34.77	Pass	
		25	13	22.01	-5.07	14.79	<=34.77	Pass	
			0	21.96	-5.07	14.74	<=34.77	Pass	
	713.5		1	0	23.12	-5.07	15.90	<=34.77	Pass
		13		23.15	-5.07	15.93	<=34.77	Pass	
		24		23.09	-5.07	15.87	<=34.77	Pass	
	12	0	22.02	-5.07	14.80	<=34.77	Pass		
		6	22.05	-5.07	14.83	<=34.77	Pass		
		13	21.98	-5.07	14.76	<=34.77	Pass		
	25	0	22.07	-5.07	14.85	<=34.77	Pass		
	64QAM	701.5	1	0	21.99	-5.07	14.77	<=34.77	Pass
				13	22.03	-5.07	14.81	<=34.77	Pass
				24	22.00	-5.07	14.78	<=34.77	Pass
			12	0	21.04	-5.07	13.82	<=34.77	Pass
				6	21.09	-5.07	13.87	<=34.77	Pass
13				21.00	-5.07	13.78	<=34.77	Pass	
25			0	20.99	-5.07	13.77	<=34.77	Pass	
707.5			1	0	22.32	-5.07	15.10	<=34.77	Pass
				13	22.42	-5.07	15.20	<=34.77	Pass
				24	22.36	-5.07	15.14	<=34.77	Pass
			12	0	20.89	-5.07	13.67	<=34.77	Pass
				6	20.97	-5.07	13.75	<=34.77	Pass
		13		20.97	-5.07	13.75	<=34.77	Pass	
		25	0	20.98	-5.07	13.76	<=34.77	Pass	
		713.5	1	0	22.27	-5.07	15.05	<=34.77	Pass
				13	22.34	-5.07	15.12	<=34.77	Pass
				24	22.28	-5.07	15.06	<=34.77	Pass
			12	0	21.14	-5.07	13.92	<=34.77	Pass
				6	21.17	-5.07	13.95	<=34.77	Pass
13				21.10	-5.07	13.88	<=34.77	Pass	
25			0	21.12	-5.07	13.90	<=34.77	Pass	

Note1: ERP=Conducted Power+Antenna Gain-2.15

#### 1.1.4 B12\_10MHz\_ERP

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	24.00	-5.07	16.78	<=34.77	Pass
			25	24.05	-5.07	16.83	<=34.77	Pass
			49	23.95	-5.07	16.73	<=34.77	Pass
		25	0	23.02	-5.07	15.80	<=34.77	Pass
			13	23.08	-5.07	15.86	<=34.77	Pass
			25	23.00	-5.07	15.78	<=34.77	Pass
	50	0	23.04	-5.07	15.82	<=34.77	Pass	
	707.5	1	0	23.98	-5.07	16.76	<=34.77	Pass
			25	24.02	-5.07	16.80	<=34.77	Pass
			49	23.98	-5.07	16.76	<=34.77	Pass

		25	0	22.89	-5.07	15.67	<=34.77	Pass		
			13	23.00	-5.07	15.78	<=34.77	Pass		
			25	22.98	-5.07	15.76	<=34.77	Pass		
		50	0	22.95	-5.07	15.73	<=34.77	Pass		
			711	1	0	24.02	-5.07	16.80	<=34.77	Pass
					25	24.13	-5.07	16.91	<=34.77	Pass
	49	24.10			-5.07	16.88	<=34.77	Pass		
	25	25	0	22.96	-5.07	15.74	<=34.77	Pass		
			13	23.06	-5.07	15.84	<=34.77	Pass		
			25	22.91	-5.07	15.69	<=34.77	Pass		
	50	0	22.99	-5.07	15.77	<=34.77	Pass			
	16QAM	704	1	0	23.51	-5.07	16.29	<=34.77	Pass	
25				23.60	-5.07	16.38	<=34.77	Pass		
49				23.47	-5.07	16.25	<=34.77	Pass		
25			25	0	22.09	-5.07	14.87	<=34.77	Pass	
				13	22.14	-5.07	14.92	<=34.77	Pass	
				25	22.08	-5.07	14.86	<=34.77	Pass	
50			0	22.03	-5.07	14.81	<=34.77	Pass		
707.5			1	0	23.12	-5.07	15.90	<=34.77	Pass	
				25	23.20	-5.07	15.98	<=34.77	Pass	
		49		23.15	-5.07	15.93	<=34.77	Pass		
		25	25	0	21.93	-5.07	14.71	<=34.77	Pass	
				13	22.06	-5.07	14.84	<=34.77	Pass	
				25	21.99	-5.07	14.77	<=34.77	Pass	
		50	0	21.96	-5.07	14.74	<=34.77	Pass		
		711	1	0	23.03	-5.07	15.81	<=34.77	Pass	
				25	23.14	-5.07	15.92	<=34.77	Pass	
49				23.02	-5.07	15.80	<=34.77	Pass		
25			25	0	22.06	-5.07	14.84	<=34.77	Pass	
				13	22.18	-5.07	14.96	<=34.77	Pass	
				25	22.02	-5.07	14.80	<=34.77	Pass	
50			0	22.00	-5.07	14.78	<=34.77	Pass		
64QAM			704	1	0	22.29	-5.07	15.07	<=34.77	Pass
					25	22.39	-5.07	15.17	<=34.77	Pass
		49			22.27	-5.07	15.05	<=34.77	Pass	
	25	25		0	21.09	-5.07	13.87	<=34.77	Pass	
				13	21.15	-5.07	13.93	<=34.77	Pass	
				25	21.08	-5.07	13.86	<=34.77	Pass	
	50	0		21.05	-5.07	13.83	<=34.77	Pass		
	707.5	1		0	22.15	-5.07	14.93	<=34.77	Pass	
				25	22.23	-5.07	15.01	<=34.77	Pass	
			49	22.21	-5.07	14.99	<=34.77	Pass		
		25	25	0	21.00	-5.07	13.78	<=34.77	Pass	
				13	21.12	-5.07	13.90	<=34.77	Pass	
				25	21.09	-5.07	13.87	<=34.77	Pass	
		50	0	21.02	-5.07	13.80	<=34.77	Pass		
		711	1	0	22.21	-5.07	14.99	<=34.77	Pass	
				25	22.30	-5.07	15.08	<=34.77	Pass	
	49			22.19	-5.07	14.97	<=34.77	Pass		
	25		25	0	21.07	-5.07	13.85	<=34.77	Pass	
				13	21.20	-5.07	13.98	<=34.77	Pass	
				25	21.04	-5.07	13.82	<=34.77	Pass	
	50		0	21.00	-5.07	13.78	<=34.77	Pass		
	Note1: ERP=Conducted Power+Antenna Gain-2.15									

## 2. Frequency Stability

### 2.1 Test Result

#### 2.1.1 B12\_10MHz

Band: 12 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	707.5	50	0	20	LV	-2.275	-0.0032	-2.5 to 2.5	Pass
					NV	-2.074	-0.0029	-2.5 to 2.5	Pass
					HV	-2.475	-0.0035	-2.5 to 2.5	Pass
				-30	NV	-1.674	-0.0024	-2.5 to 2.5	Pass
					-20	NV	-3.891	-0.0055	-2.5 to 2.5
				-10	NV	-3.448	-0.0049	-2.5 to 2.5	Pass
				0	NV	-4.377	-0.0062	-2.5 to 2.5	Pass
				10	NV	-4.892	-0.0069	-2.5 to 2.5	Pass
				30	NV	-3.004	-0.0042	-2.5 to 2.5	Pass
				40	NV	-4.134	-0.0058	-2.5 to 2.5	Pass
50	NV	-2.160	-0.0031	-2.5 to 2.5	Pass				

## 3. 99% & 26dB Bandwidth

### 3.1 Test Result

#### 3.1.1 Band12\_OBW

Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	707.5	6	0	1.102	/	Pass
	16QAM	707.5	6	0	1.117	/	Pass
	64QAM	707.5	6	0	1.115	/	Pass
3	QPSK	707.5	15	0	2.729	/	Pass
	16QAM	707.5	15	0	2.718	/	Pass
	64QAM	707.5	15	0	2.716	/	Pass
5	QPSK	707.5	25	0	4.548	/	Pass
	16QAM	707.5	25	0	4.534	/	Pass
	64QAM	707.5	25	0	4.534	/	Pass
10	QPSK	707.5	50	0	9.048	/	Pass
	16QAM	707.5	50	0	9.010	/	Pass
	64QAM	707.5	50	0	9.037	/	Pass

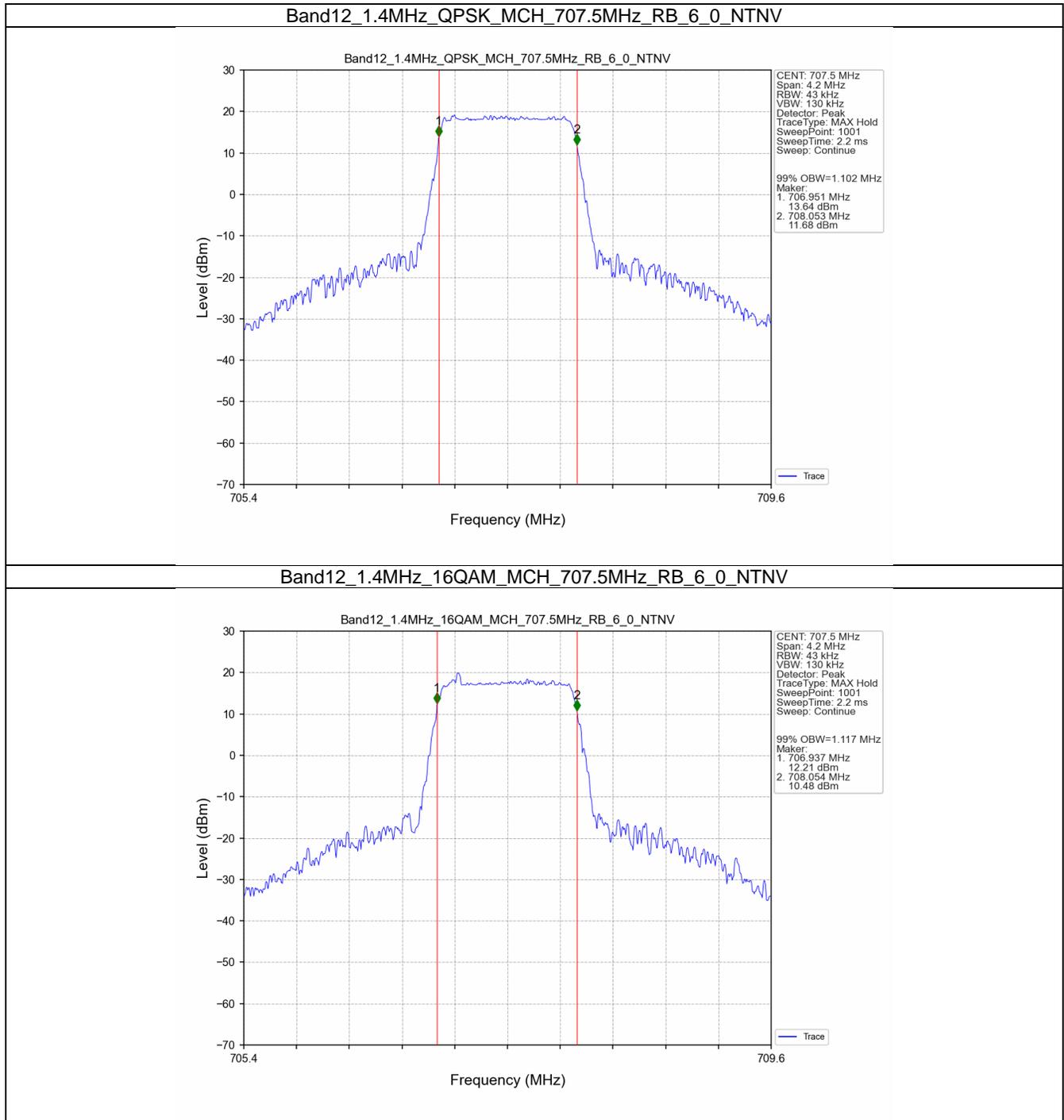
#### 3.1.2 Band12\_XDB

Band: 12 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	707.5	6	0	1.305	/	Pass
	16QAM	707.5	6	0	1.299	/	Pass
	64QAM	707.5	6	0	1.310	/	Pass
3	QPSK	707.5	15	0	3.032	/	Pass
	16QAM	707.5	15	0	3.045	/	Pass
	64QAM	707.5	15	0	3.023	/	Pass

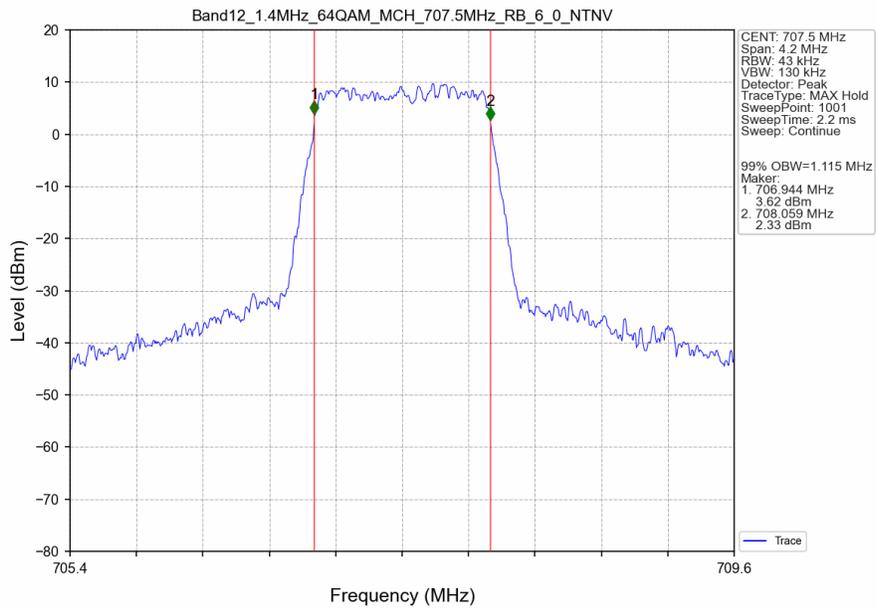
5	QPSK	707.5	25	0	5.000	/	Pass
	16QAM	707.5	25	0	4.962	/	Pass
	64QAM	707.5	25	0	4.985	/	Pass
10	QPSK	707.5	50	0	9.858	/	Pass
	16QAM	707.5	50	0	9.830	/	Pass
	64QAM	707.5	50	0	9.862	/	Pass

## 3.2 Test Graph

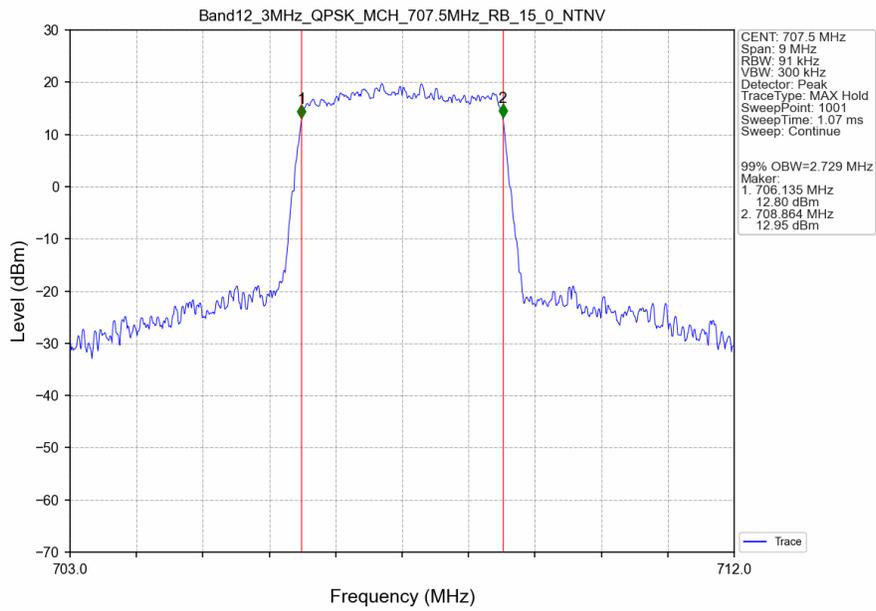
### 3.2.1 Band12\_OBW



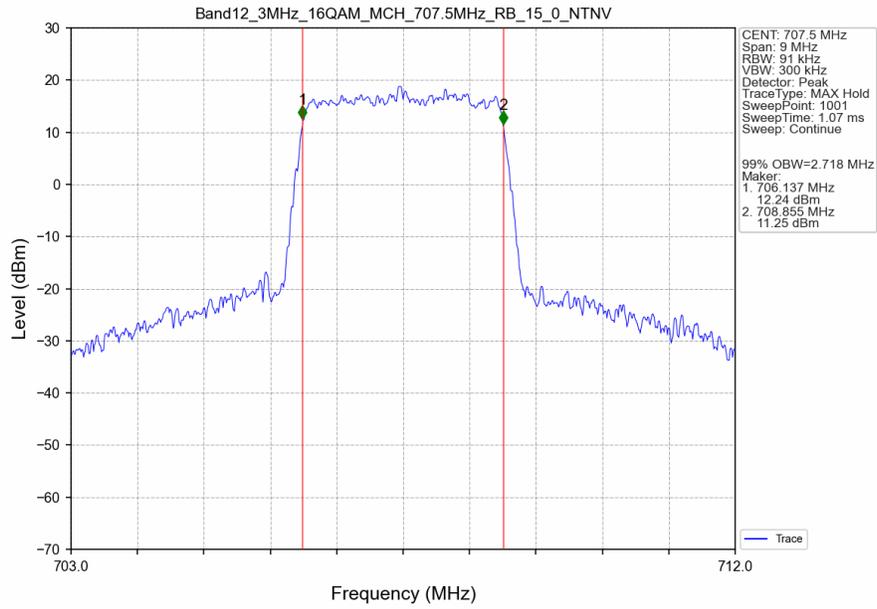
Band12\_1.4MHz\_64QAM\_MCH\_707.5MHz\_RB\_6\_0\_NTNV



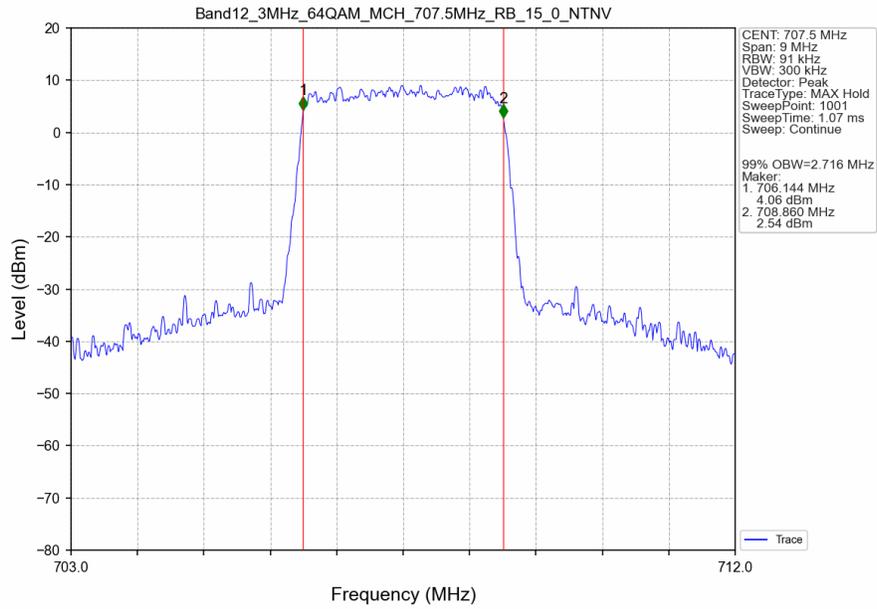
Band12\_3MHz\_QPSK\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



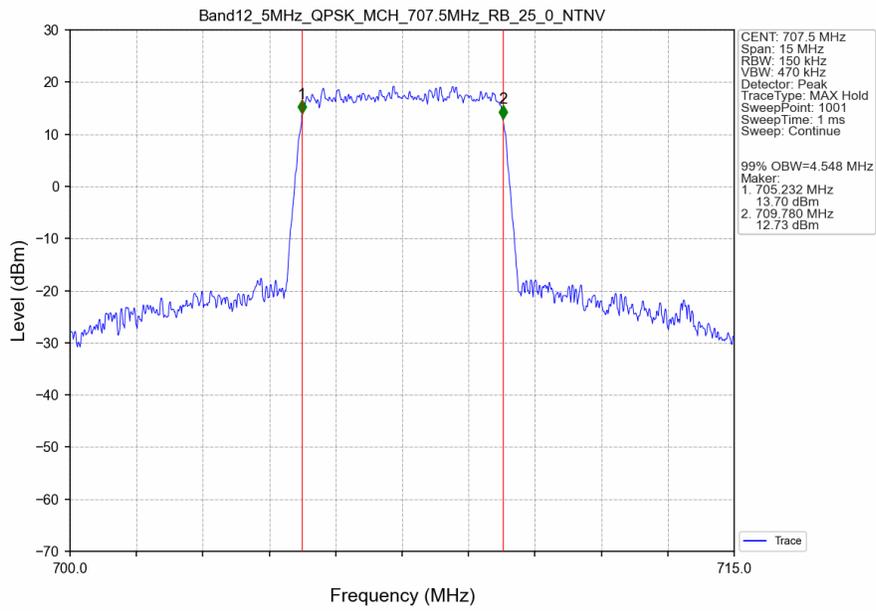
Band12\_3MHz\_16QAM\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



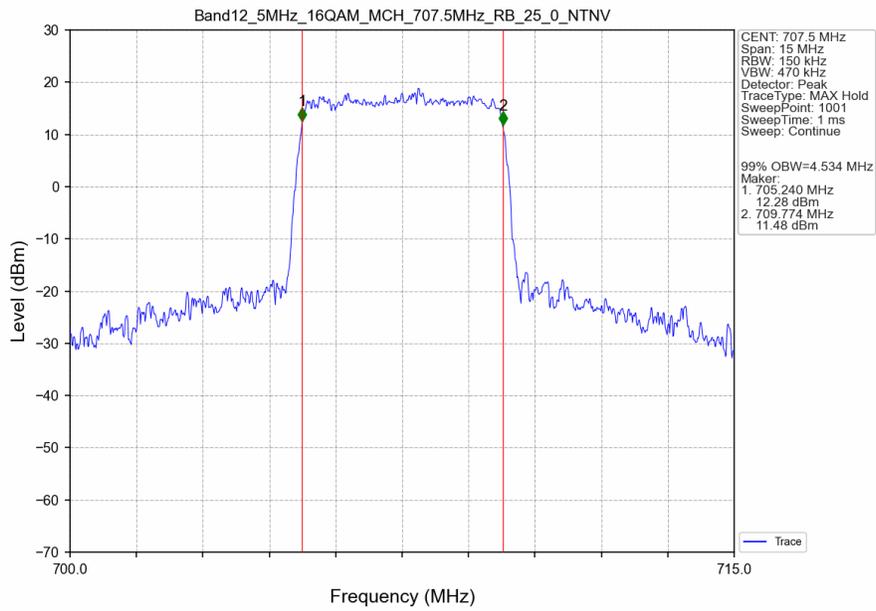
Band12\_3MHz\_64QAM\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



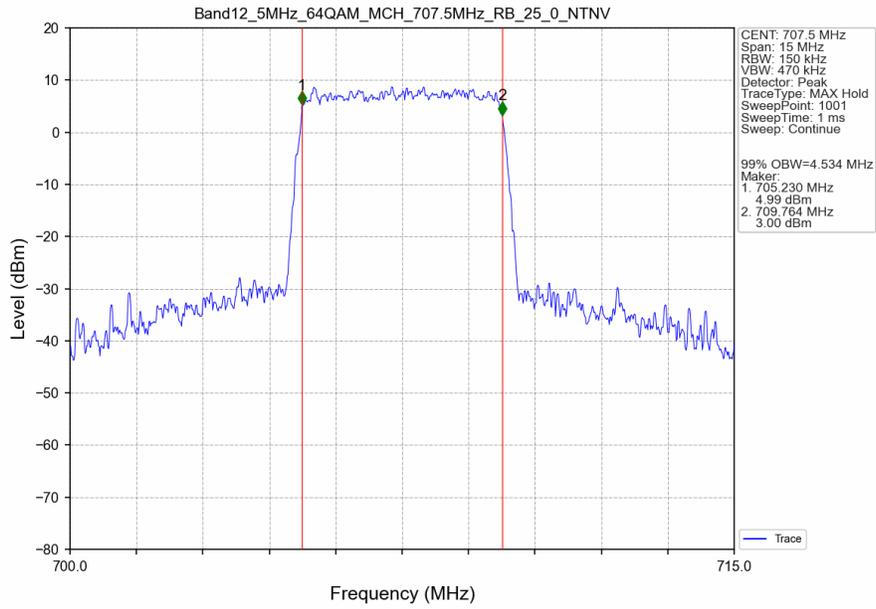
Band12\_5MHz\_QPSK\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



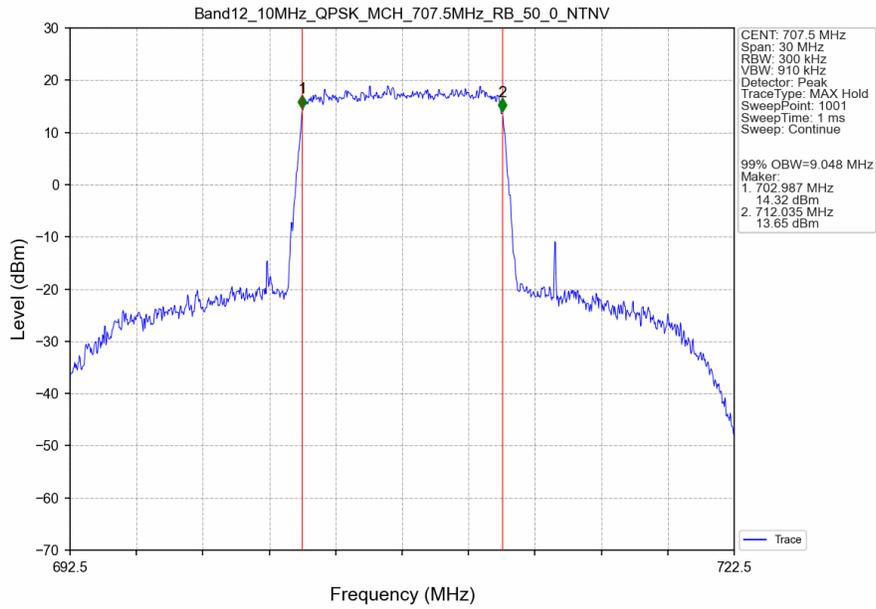
Band12\_5MHz\_16QAM\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



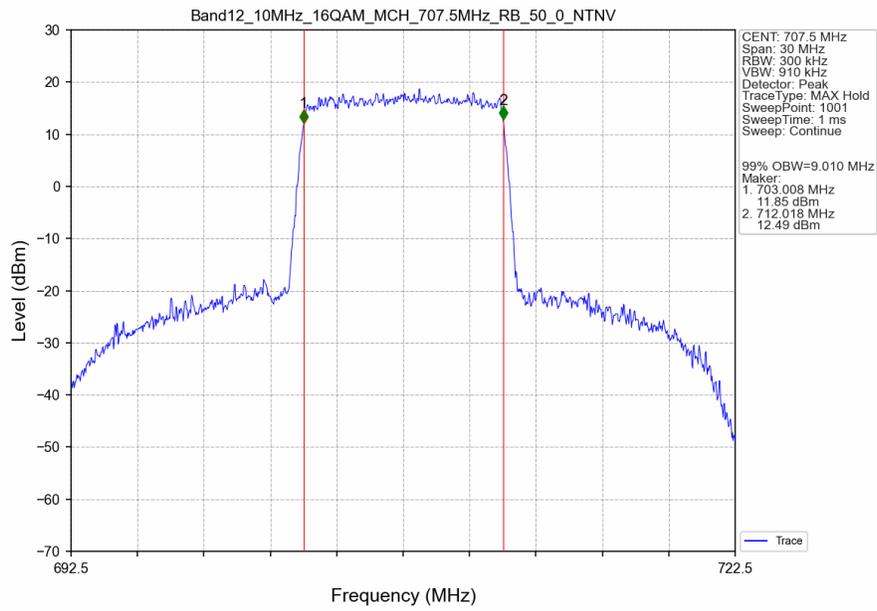
Band12\_5MHz\_64QAM\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



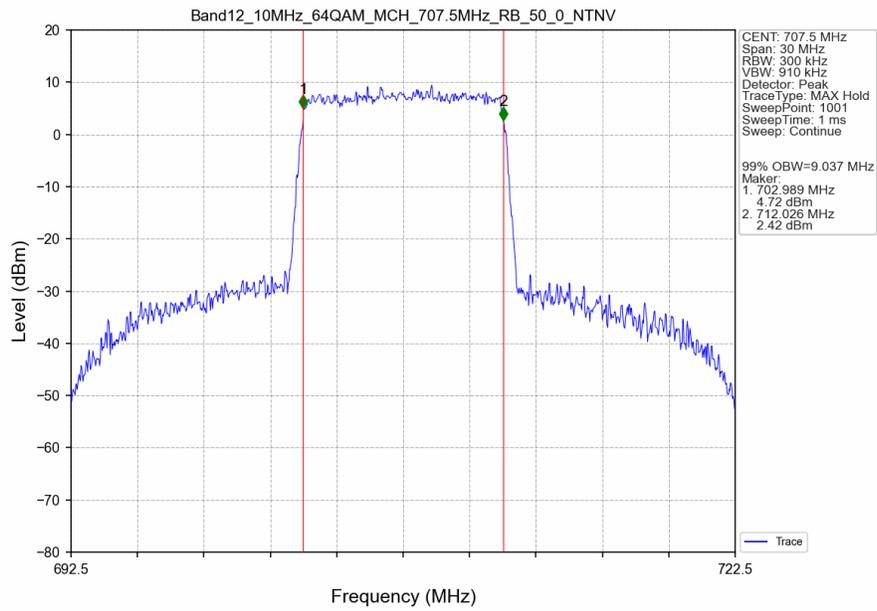
Band12\_10MHz\_QPSK\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



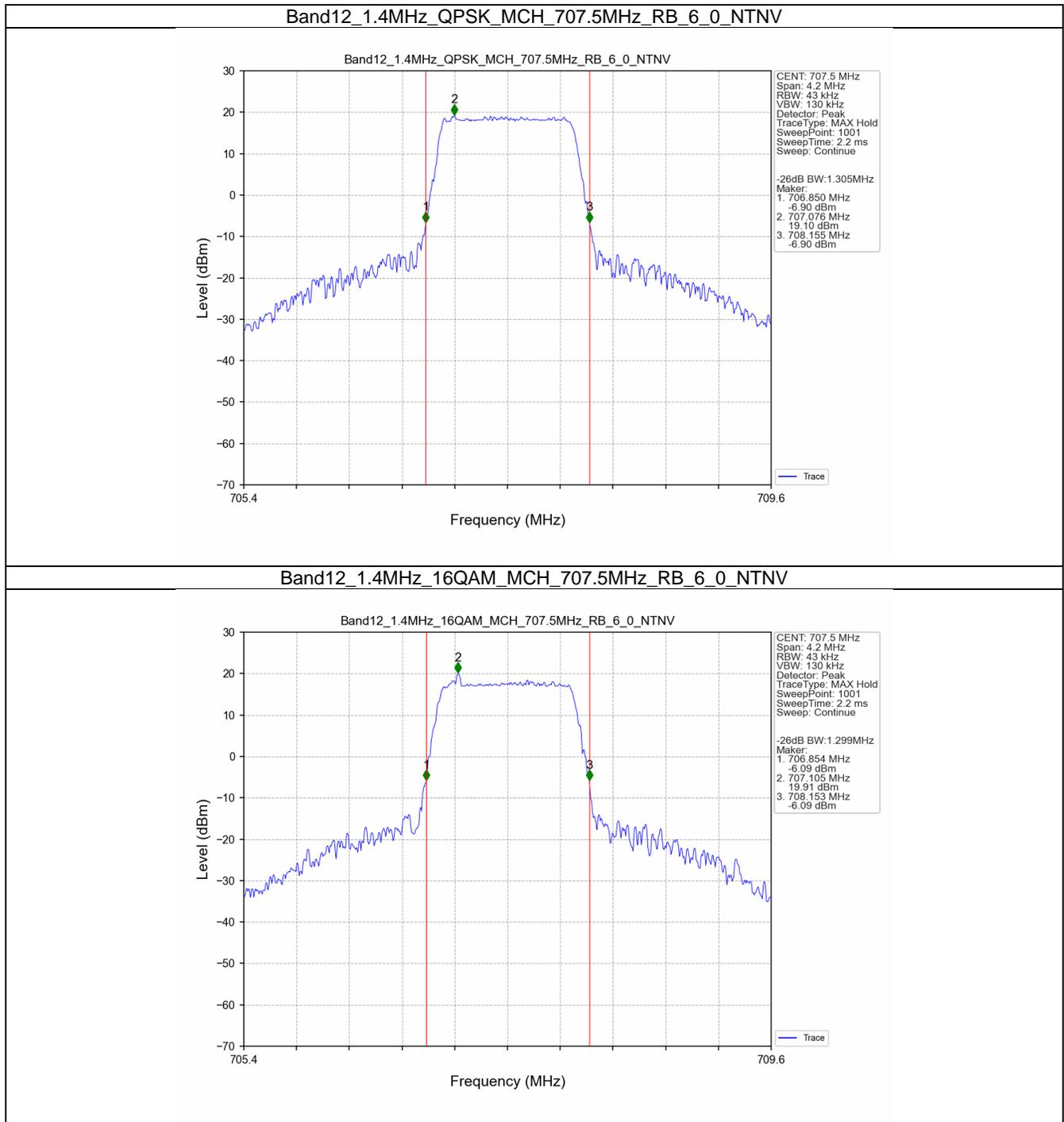
Band12\_10MHz\_16QAM\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



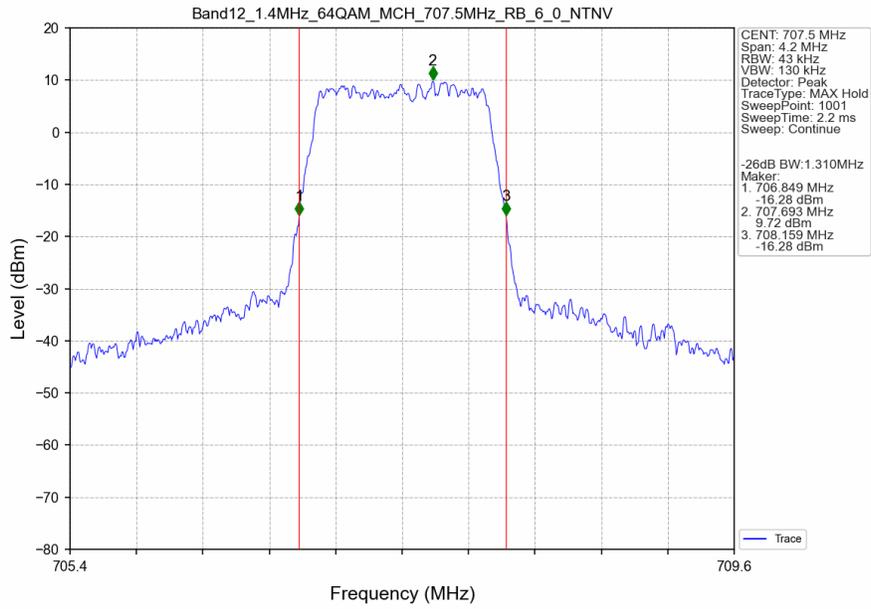
Band12\_10MHz\_64QAM\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



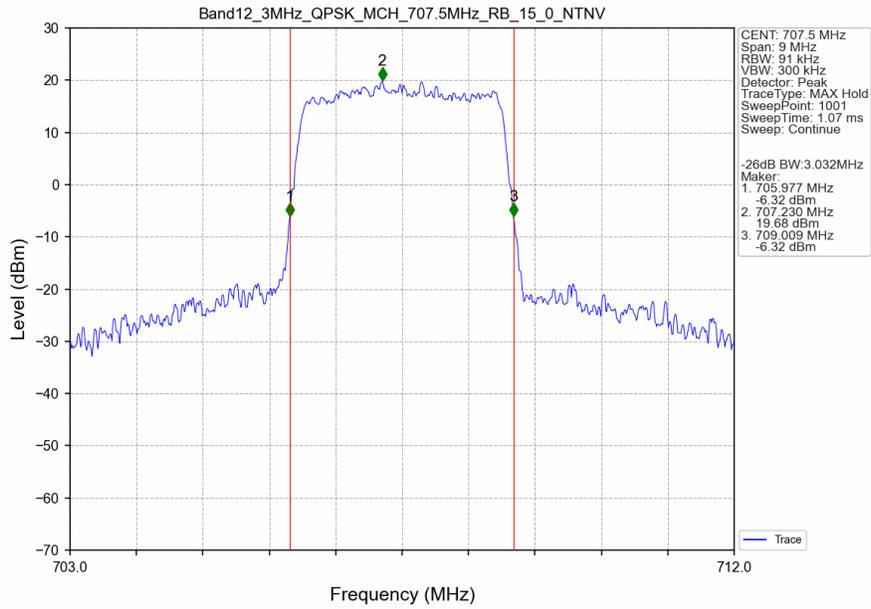
### 3.2.2 Band12\_XDB



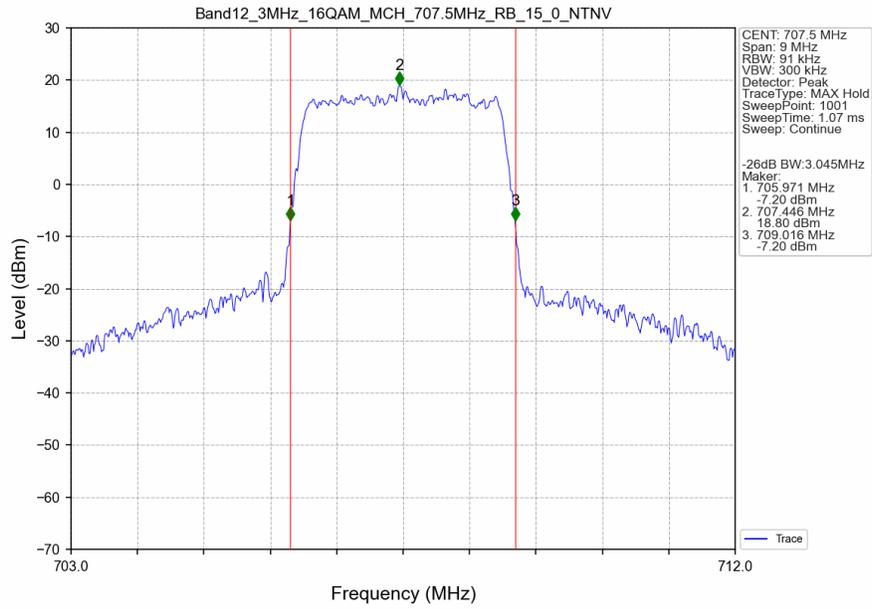
Band12\_1.4MHz\_64QAM\_MCH\_707.5MHz\_RB\_6\_0\_NTNV



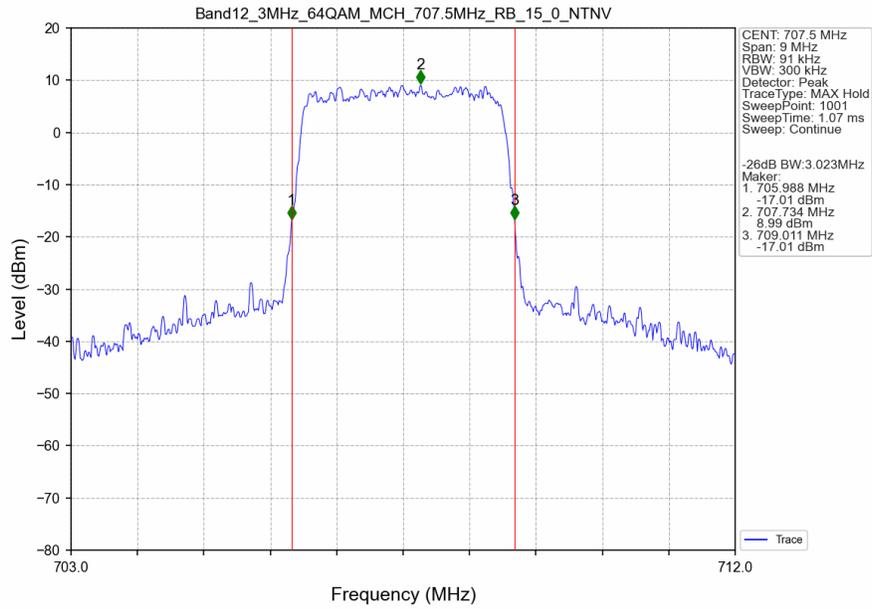
Band12\_3MHz\_QPSK\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



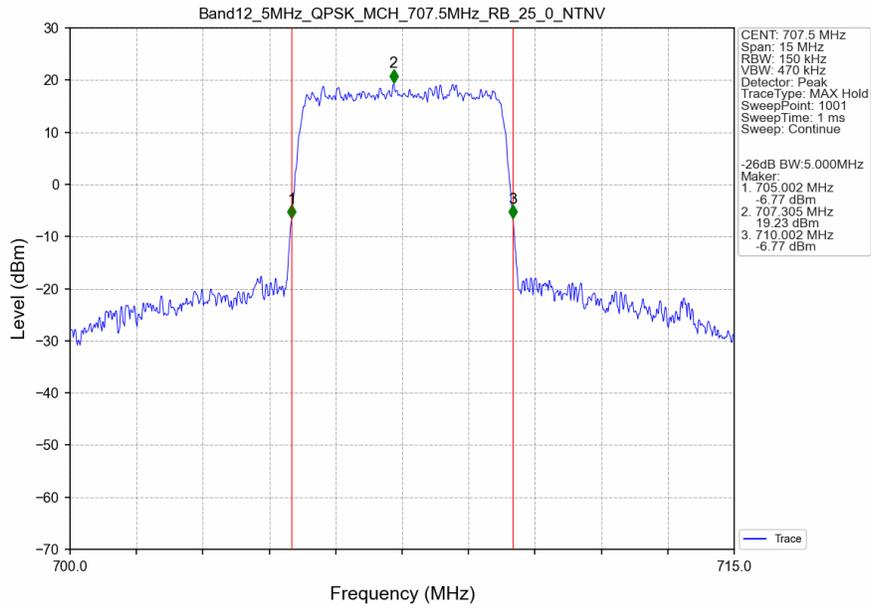
Band12\_3MHz\_16QAM\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



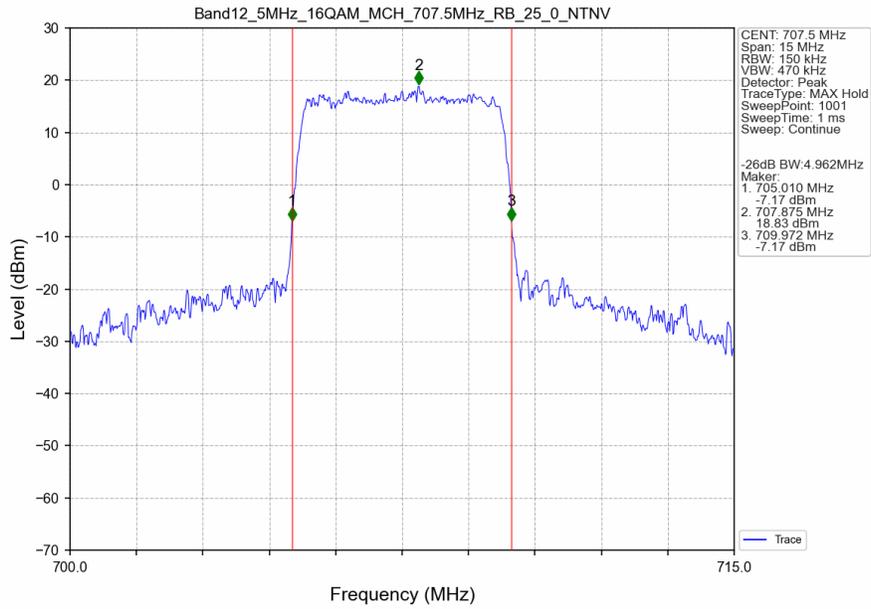
Band12\_3MHz\_64QAM\_MCH\_707.5MHz\_RB\_15\_0\_NTNV



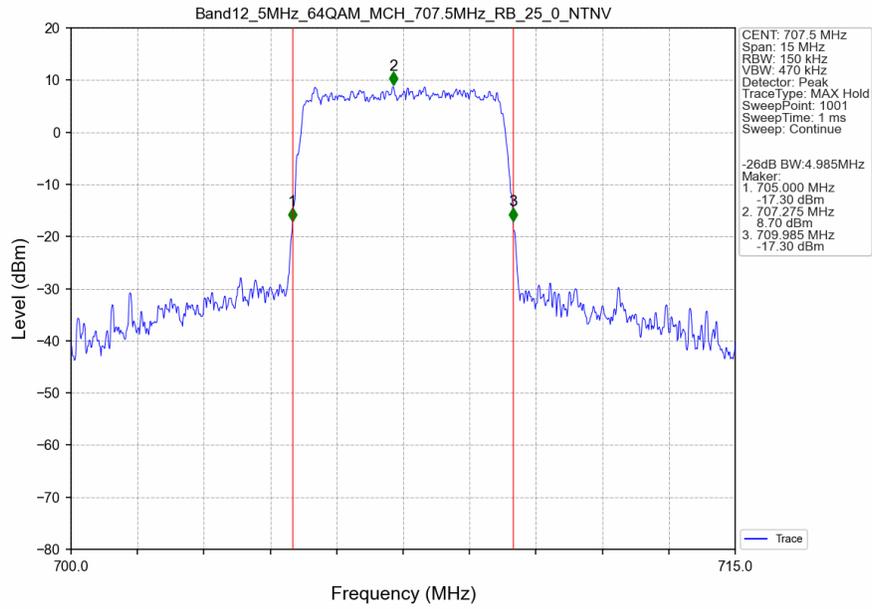
Band12\_5MHz\_QPSK\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



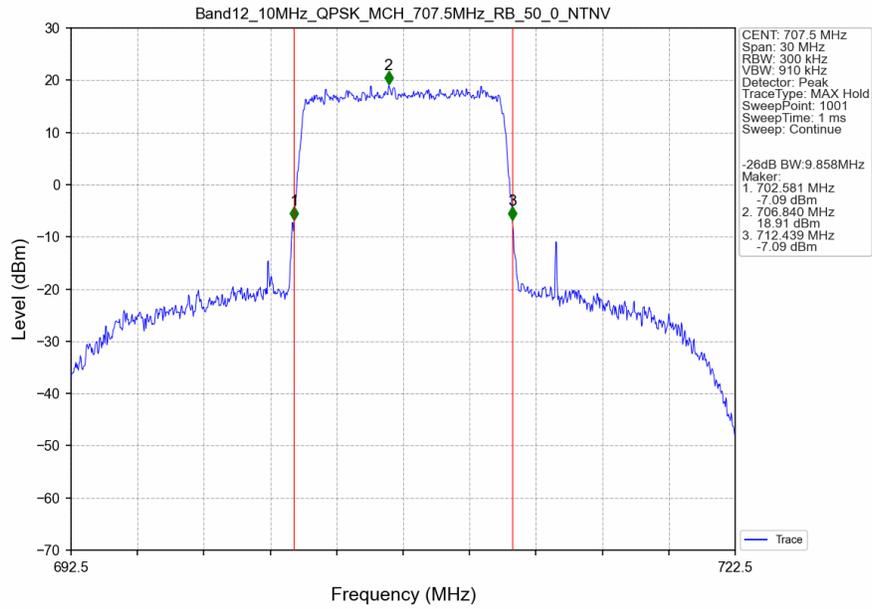
Band12\_5MHz\_16QAM\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



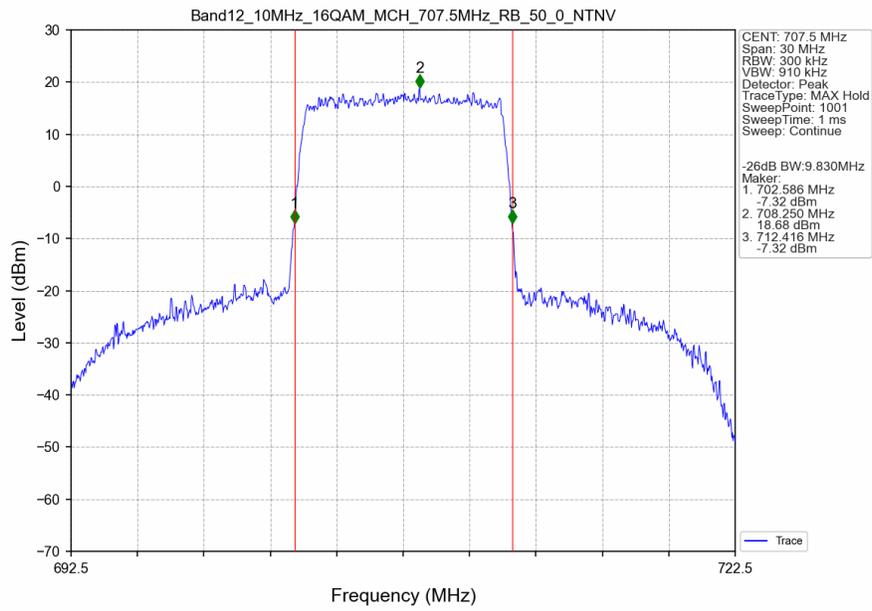
Band12\_5MHz\_64QAM\_MCH\_707.5MHz\_RB\_25\_0\_NTNV



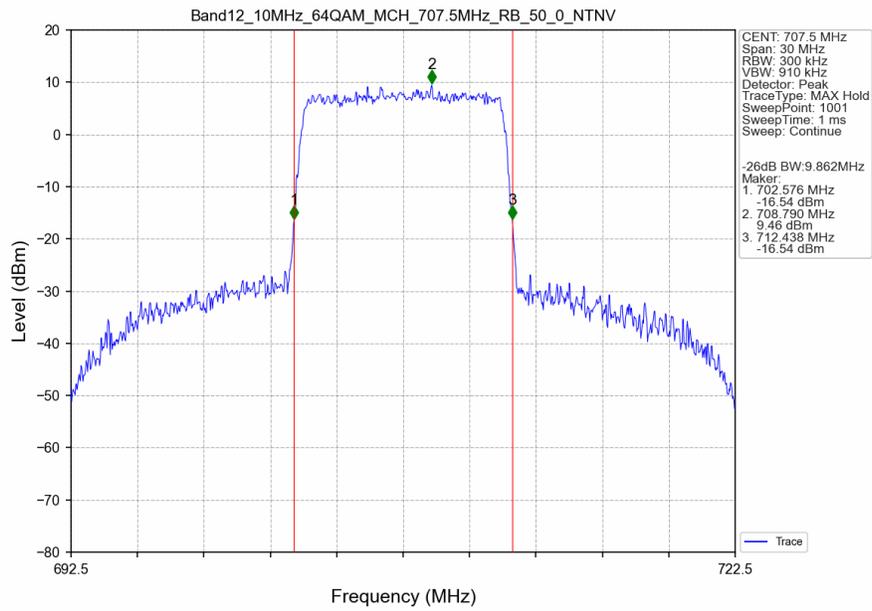
Band12\_10MHz\_QPSK\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



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



Band12\_10MHz\_64QAM\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



## 4. Peak-Average Ratio

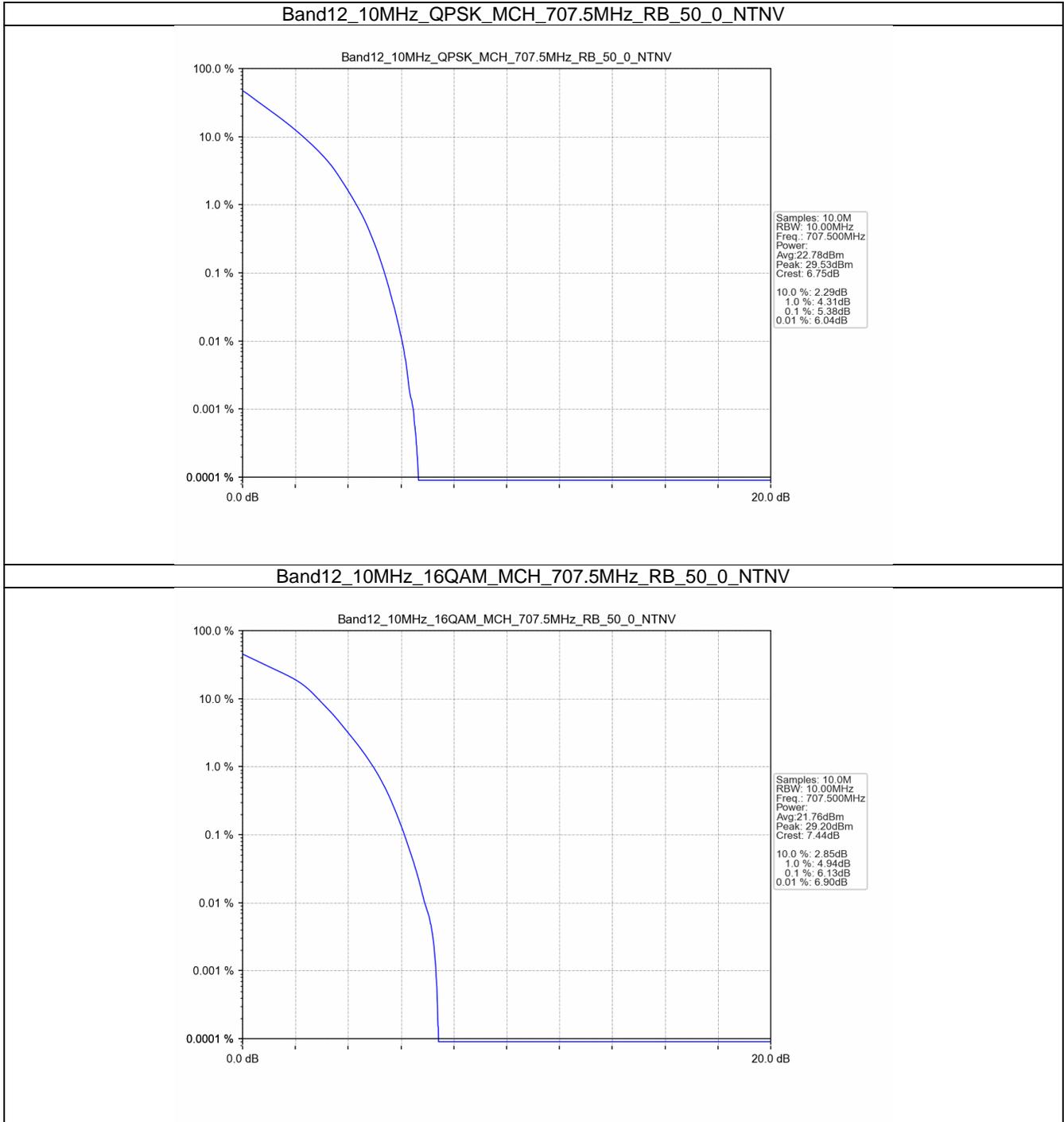
### 4.1 Test Result

#### 4.1.1 B12\_10MHz

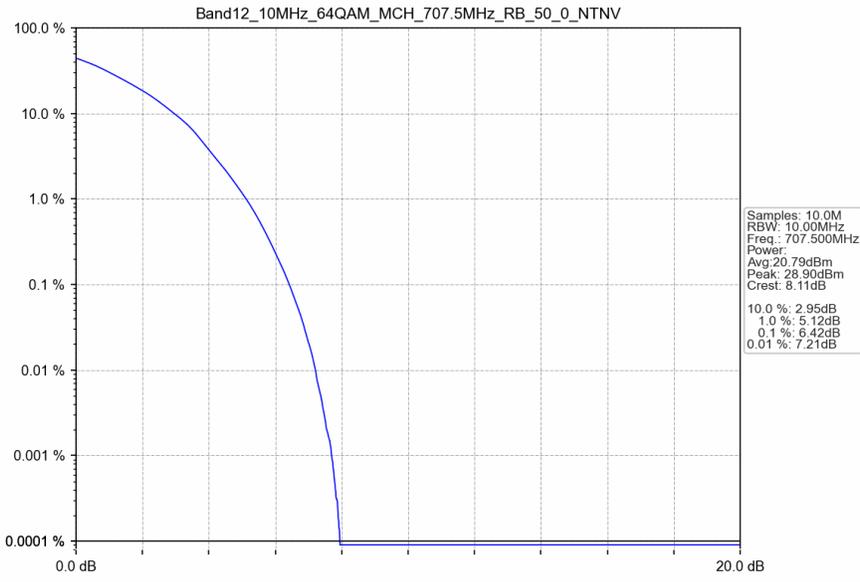
Band: 12 / Bandwidth: 10MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	707.5	50	0	5.38	<=13	Pass
16QAM	707.5	50	0	6.13	<=13	Pass
64QAM	707.5	50	0	6.42	<=13	Pass

## 4.2 Test Graph

### 4.2.1 B12\_10MHz



Band12\_10MHz\_64QAM\_MCH\_707.5MHz\_RB\_50\_0\_NTNV



## 5. Spurious Emission

### 5.1 Test Result

#### 5.1.1 B12\_1.4MHz

Band: 12 / Bandwidth: 1.4MHz / NTV						
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		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

#### 5.1.2 B12\_3MHz

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
	707.5	1	0	Refer To Test Graph		Pass
	714.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

#### 5.1.3 B12\_5MHz

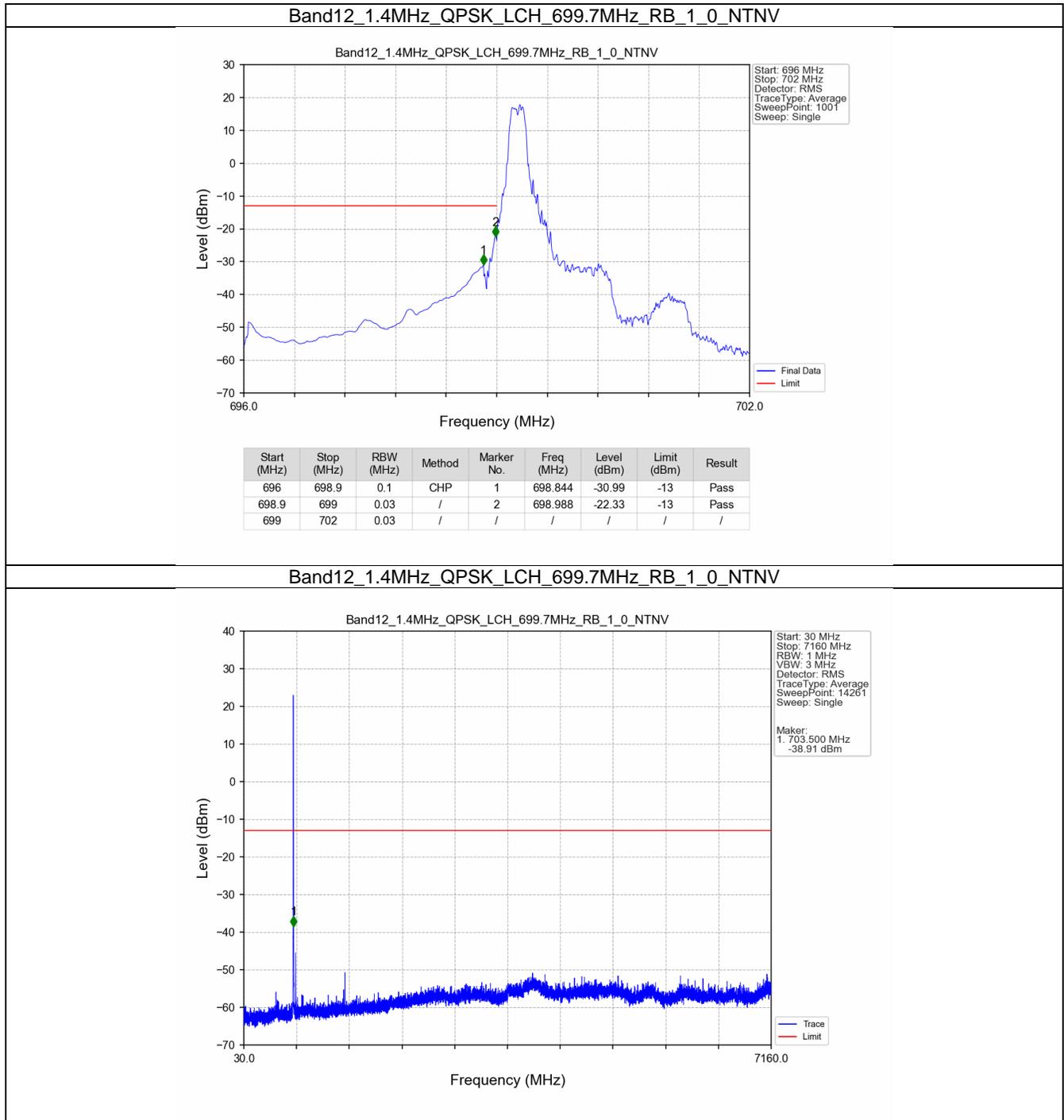
Band: 12 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	701.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	713.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

#### 5.1.4 B12\_10MHz

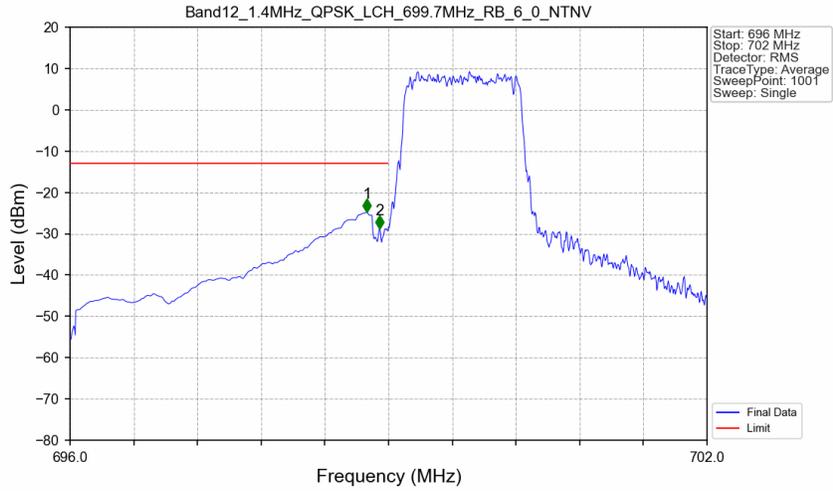
Band: 12 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	704	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	707.5	1	0	Refer To Test Graph		Pass
	711	1	0	Refer To Test Graph		Pass
			49	Refer To Test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

## 5.2 Test Graph

### 5.2.1 B12\_1.4MHz

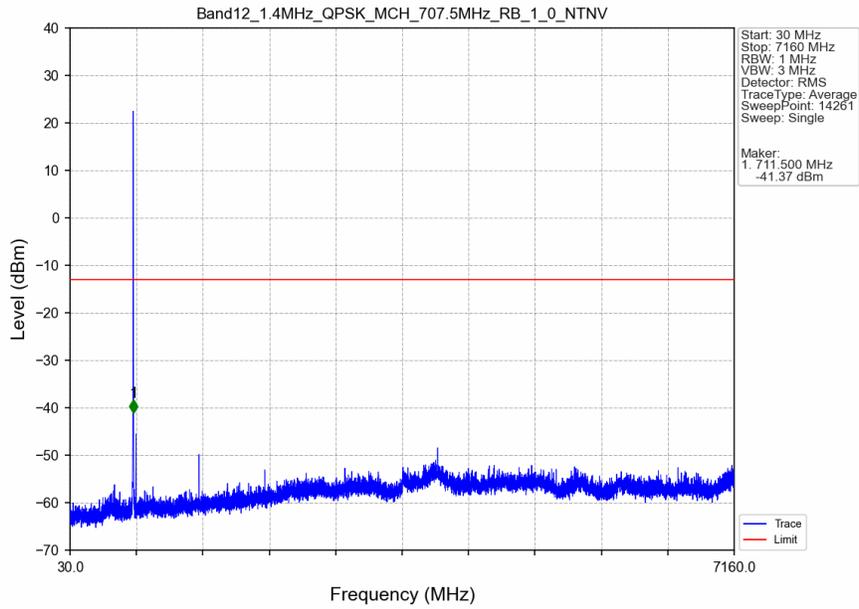


Band12\_1.4MHz\_QPSK\_LCH\_699.7MHz\_RB\_6\_0\_NTNV

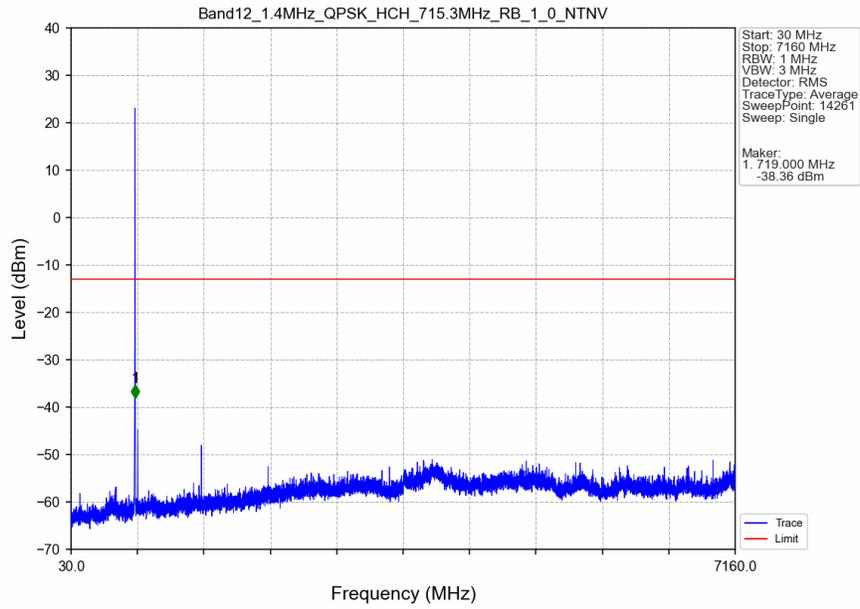


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.796	-24.84	-13	Pass
698.9	699	0.03	/	2	698.916	-28.77	-13	Pass
699	702	0.03	/	/	/	/	/	/

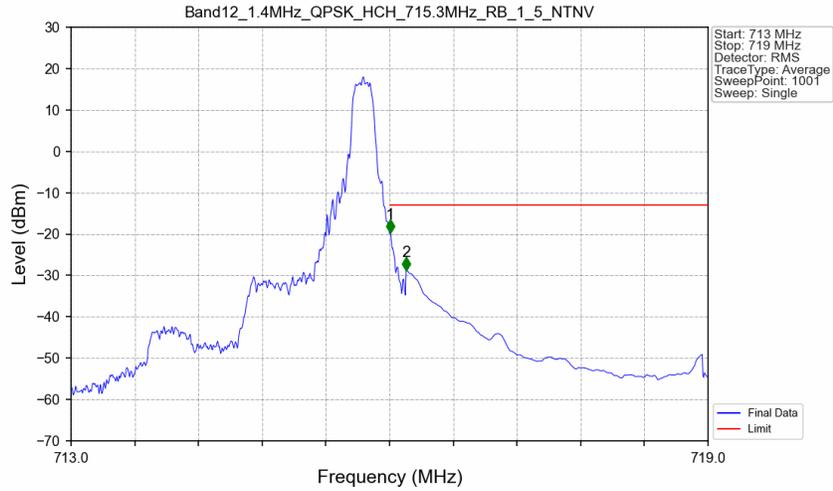
Band12\_1.4MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



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

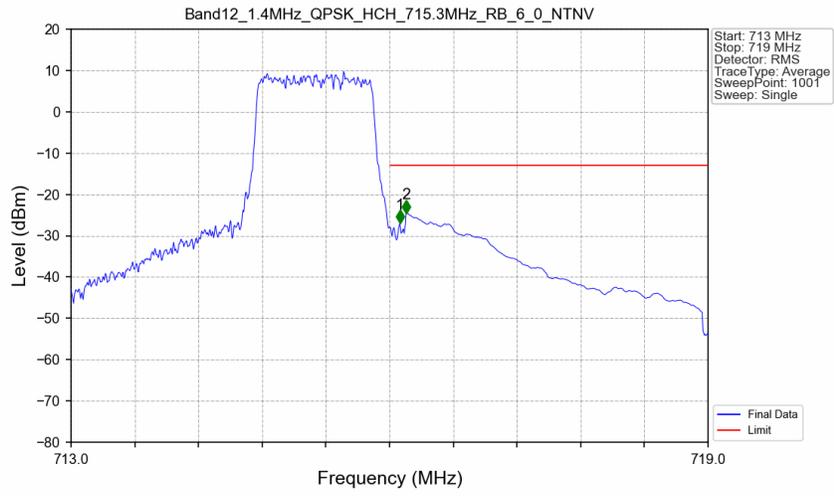


Band12\_1.4MHz\_QPSK\_HCH\_715.3MHz\_RB\_1\_5\_NTV



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	716.006	-19.75	-13	Pass
716.1	719	0.1	CHP	2	716.156	-28.84	-13	Pass

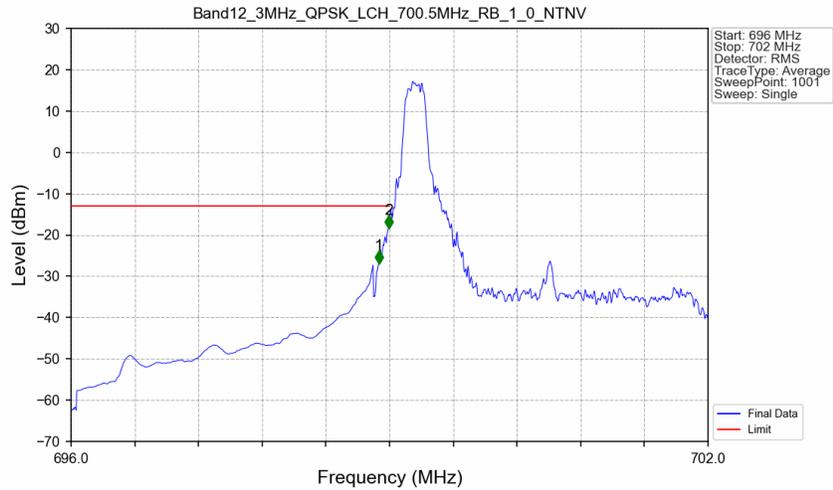
Band12\_1.4MHz\_QPSK\_HCH\_715.3MHz\_RB\_6\_0\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.096	-26.93	-13	Pass
716.1	719	0.1	CHP	2	716.156	-24.48	-13	Pass

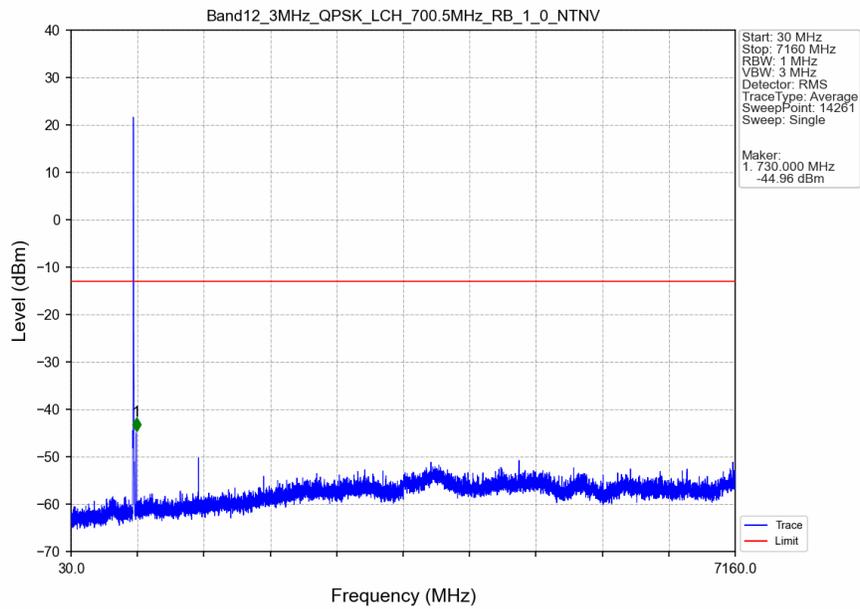
## 5.2.2 B12\_3MHz

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

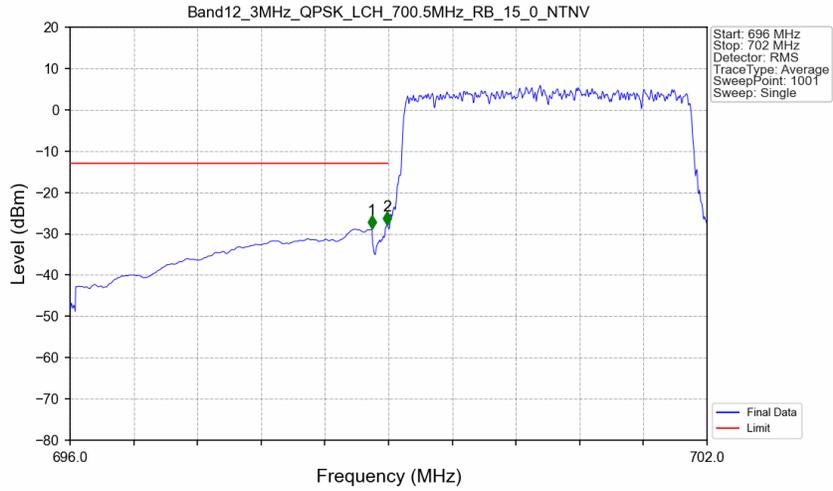


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.898	-26.90	-13	Pass
698.9	699	0.03	/	2	698.994	-18.37	-13	Pass
699	702	0.03	/	/	/	/	/	/

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

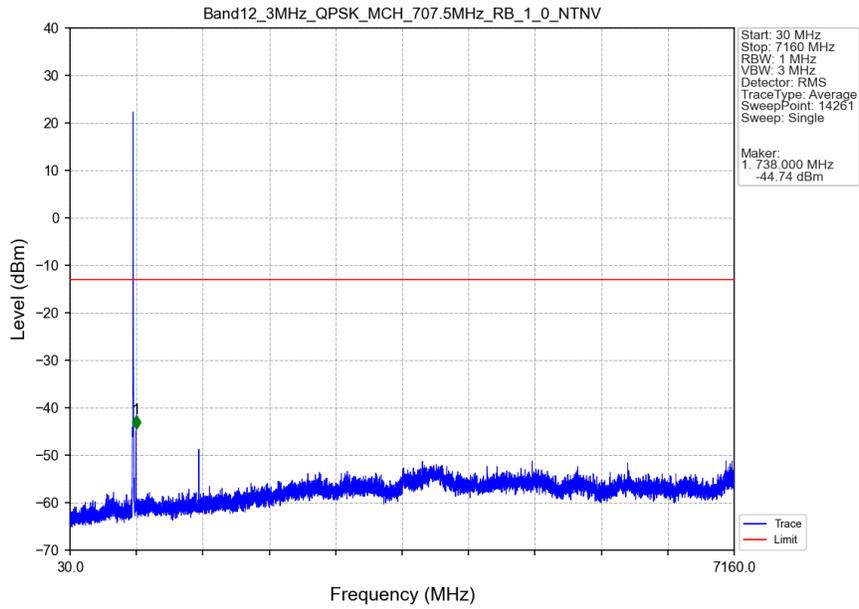


Band12\_3MHz\_QPSK\_LCH\_700.5MHz\_RB\_15\_0\_NTNV

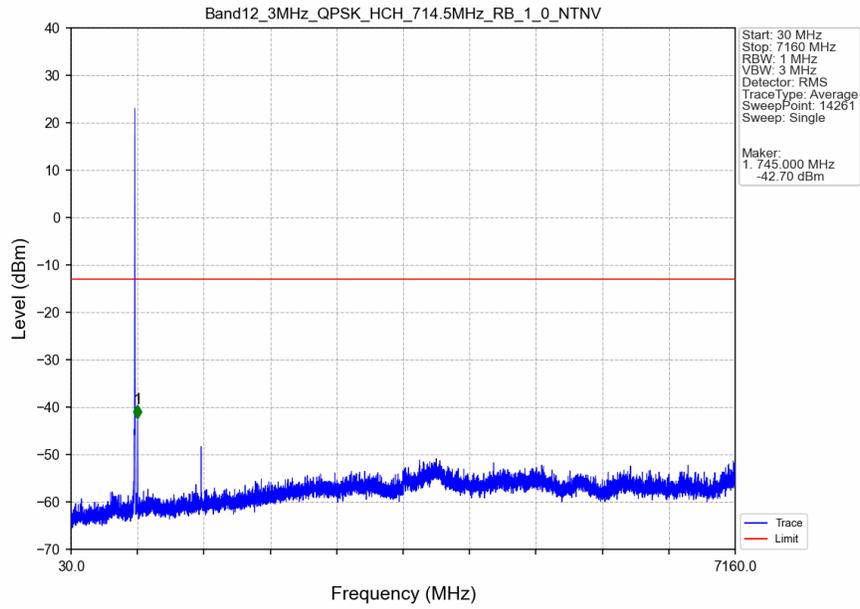


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
696	698.9	0.1	CHP	1	698.844	-28.82	-13	Pass
698.9	699	0.03	/	2	698.988	-27.89	-13	Pass
699	702	0.03	/	/	/	/	/	/

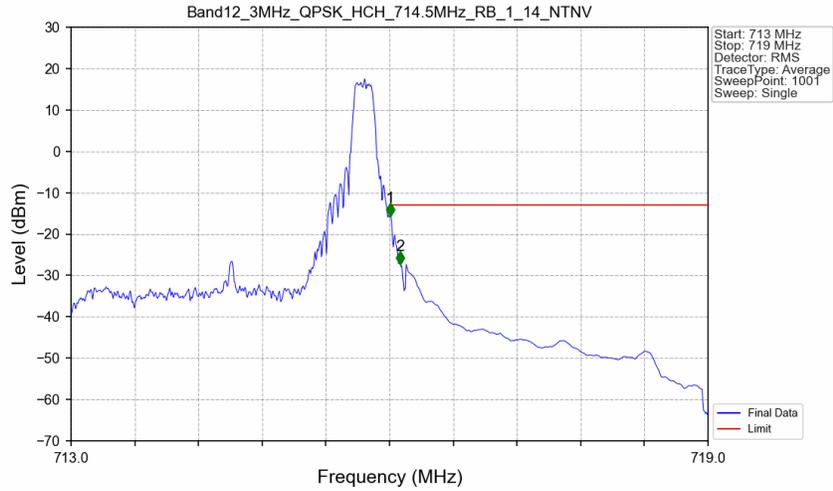
Band12\_3MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



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

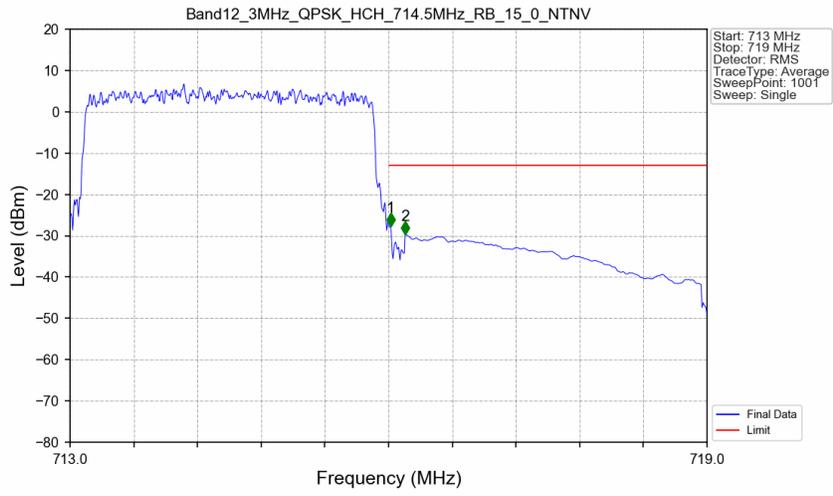


Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_1\_14\_NTNV



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	716.006	-15.68	-13	Pass
716.1	719	0.1	CHP	2	716.102	-27.29	-13	Pass

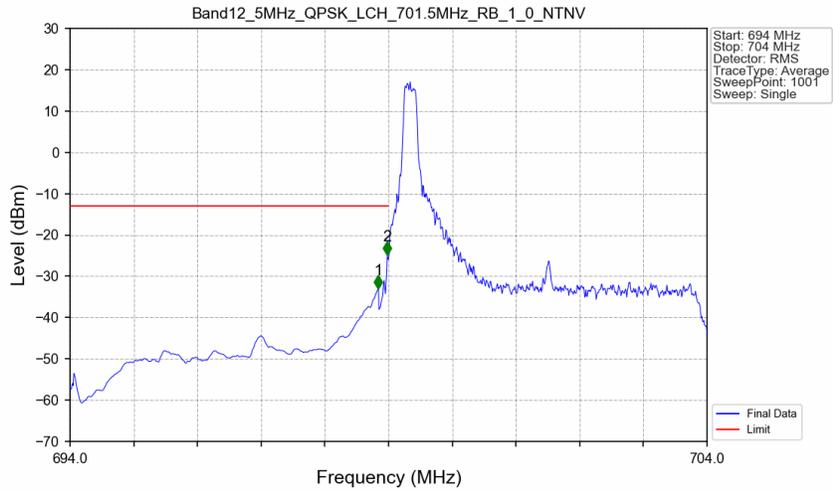
Band12\_3MHz\_QPSK\_HCH\_714.5MHz\_RB\_15\_0\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
713	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.018	-27.73	-13	Pass
716.1	719	0.1	CHP	2	716.156	-29.75	-13	Pass

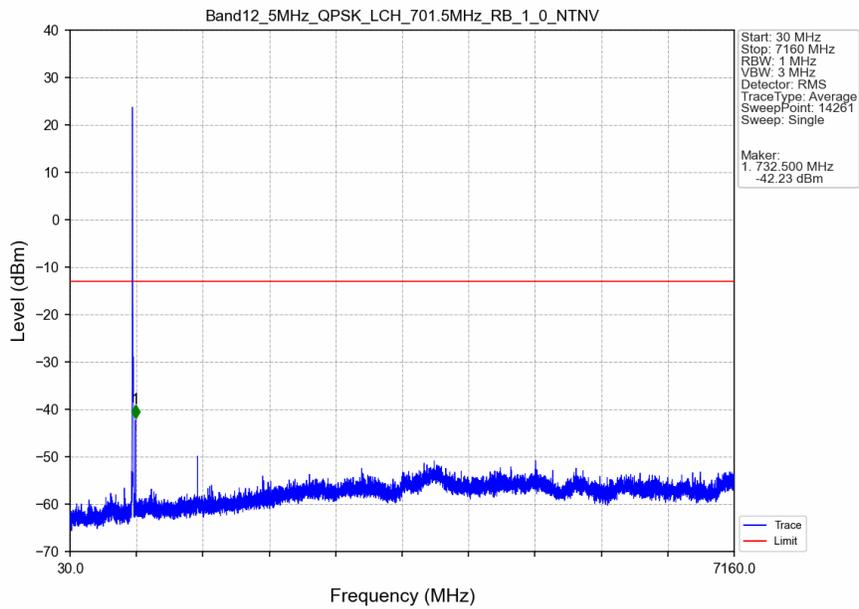
### 5.2.3 B12\_5MHz

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

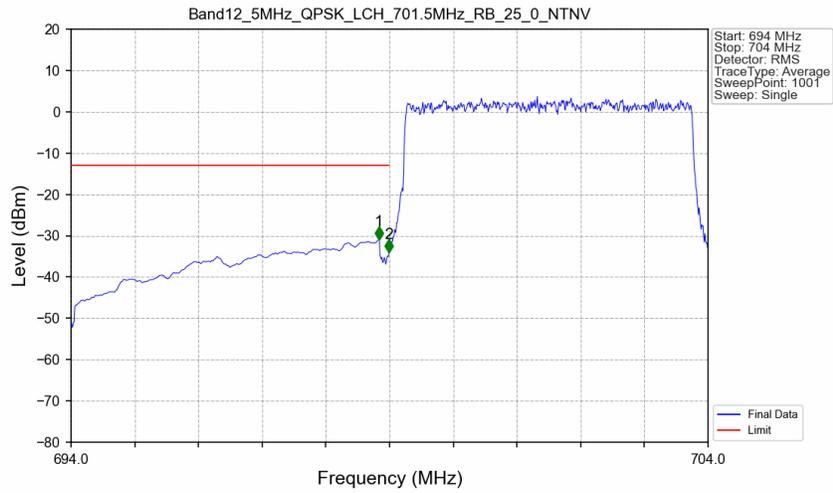


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.840	-32.96	-13	Pass
698.9	699	0.03	/	2	698.980	-24.74	-13	Pass
699	704	0.03	/	/	/	/	/	/

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

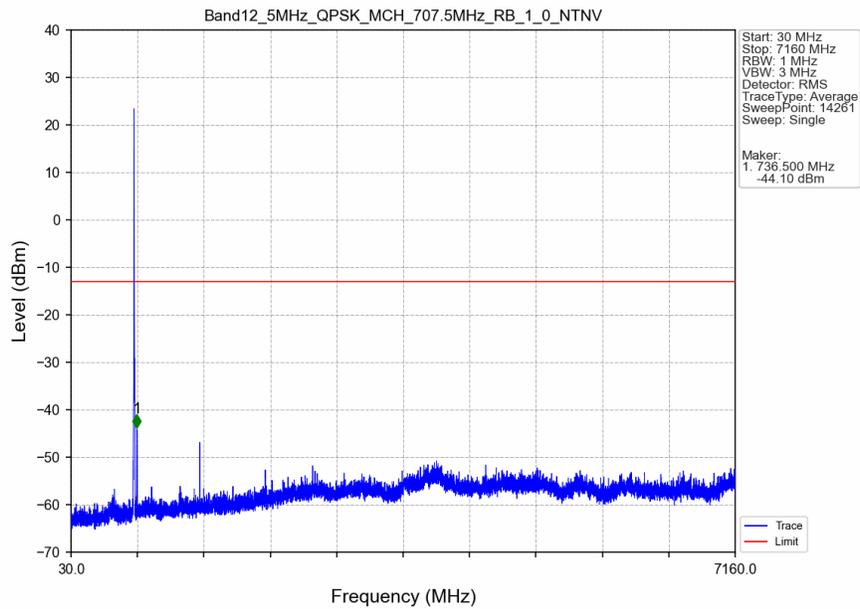


Band12\_5MHz\_QPSK\_LCH\_701.5MHz\_RB\_25\_0\_NTNV

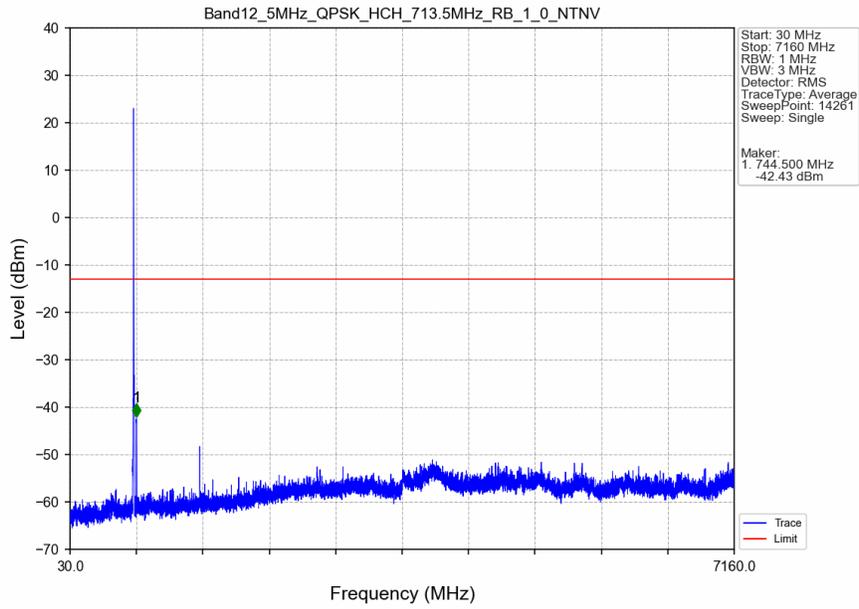


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
694	698.9	0.1	CHP	1	698.830	-31.03	-13	Pass
698.9	699	0.03	/	2	698.990	-34.08	-13	Pass
699	704	0.03	/	/	/	/	/	/

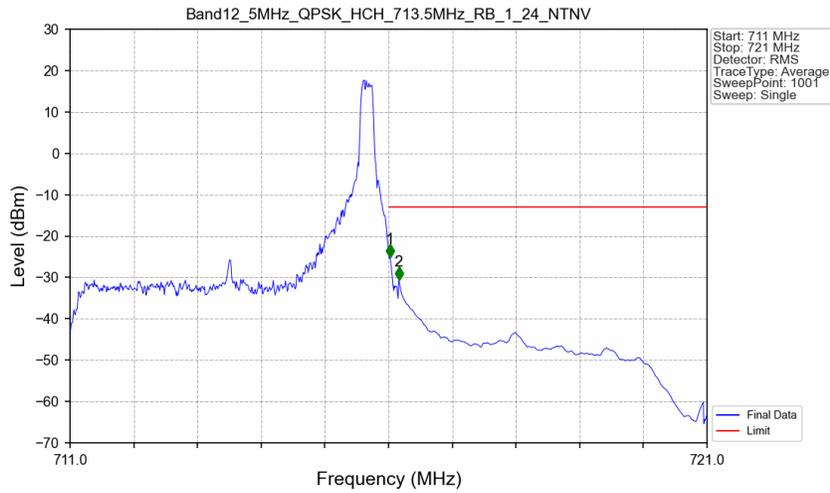
Band12\_5MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



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

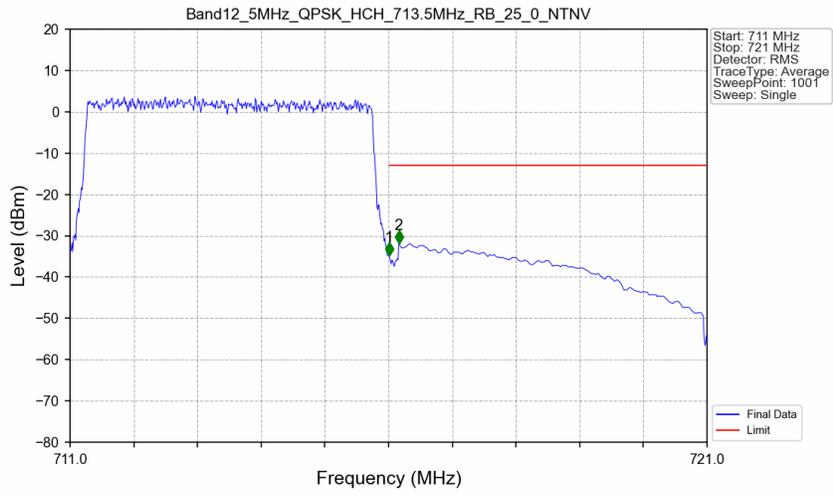


Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_1\_24\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.020	-25.14	-13	Pass
716.1	721	0.1	CHP	2	716.160	-30.53	-13	Pass

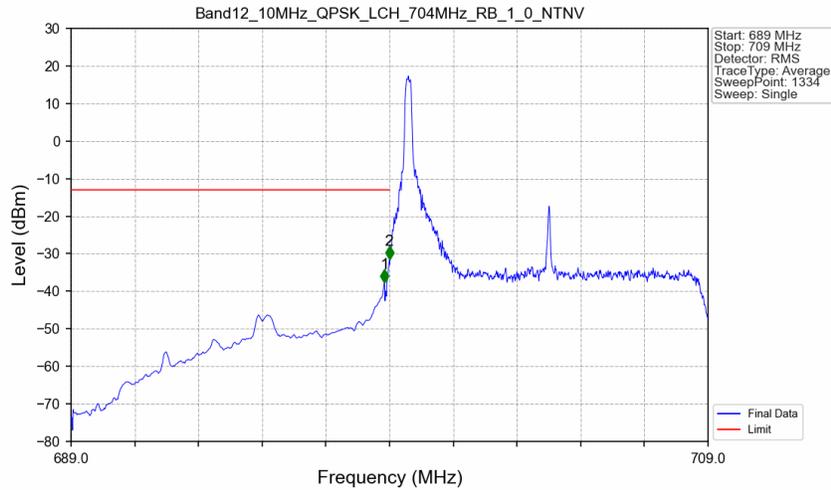
Band12\_5MHz\_QPSK\_HCH\_713.5MHz\_RB\_25\_0\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
711	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.010	-34.81	-13	Pass
716.1	721	0.1	CHP	2	716.160	-31.89	-13	Pass

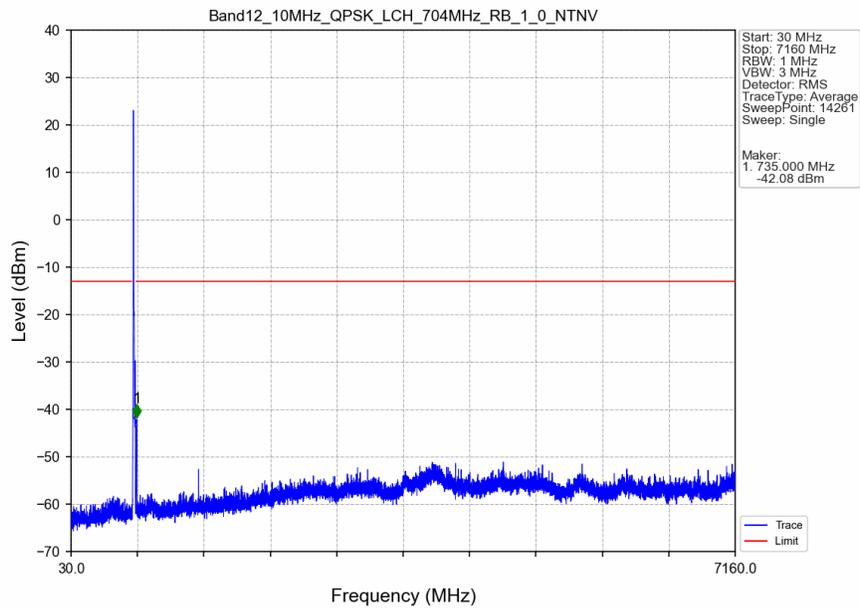
### 5.2.4 B12\_10MHz

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

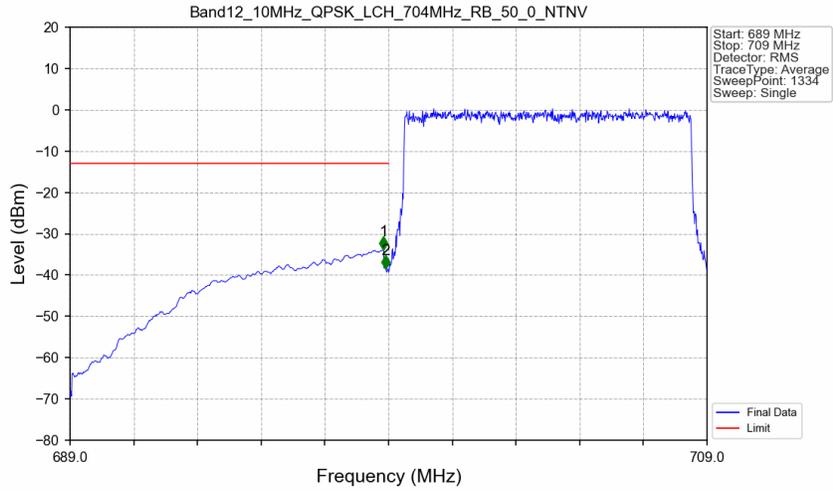


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-37.66	-13	Pass
698.9	699	0.03	/	2	698.992	-31.47	-13	Pass
699	709	0.03	/	/	/	/	/	/

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

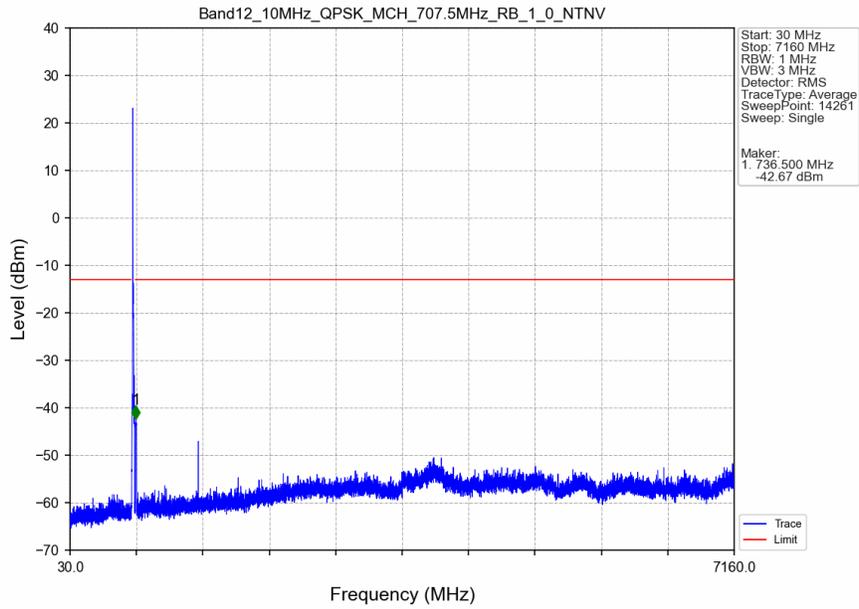


Band12\_10MHz\_QPSK\_LCH\_704MHz\_RB\_50\_0\_NTNV

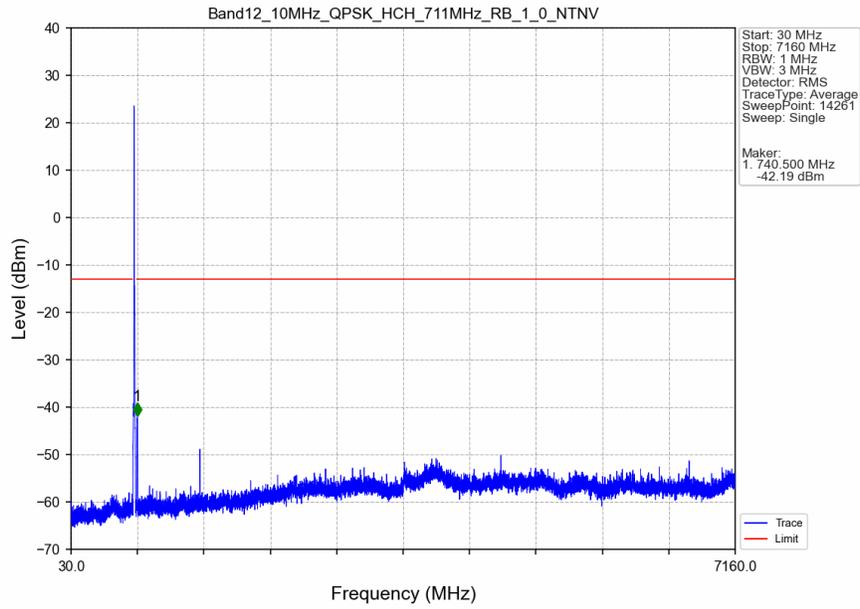


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
689	698.9	0.1	CHP	1	698.842	-33.82	-13	Pass
698.9	699	0.03	/	2	698.902	-38.38	-13	Pass
699	709	0.03	/	/	/	/	/	/

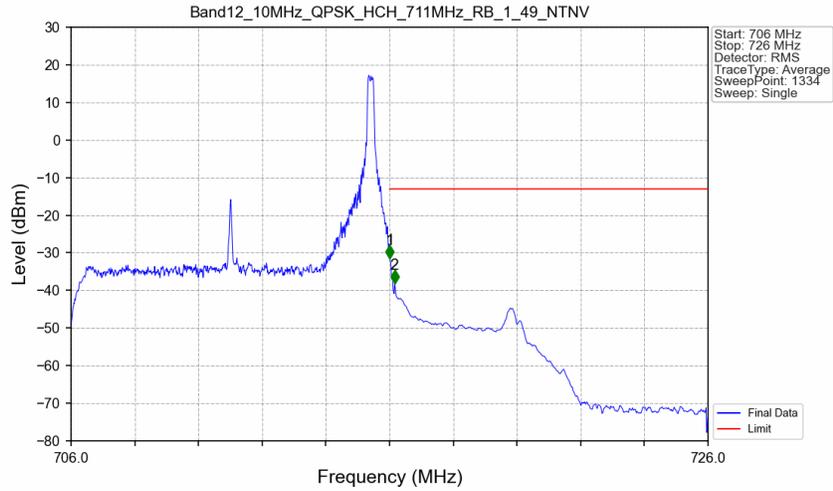
Band12\_10MHz\_QPSK\_MCH\_707.5MHz\_RB\_1\_0\_NTNV



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

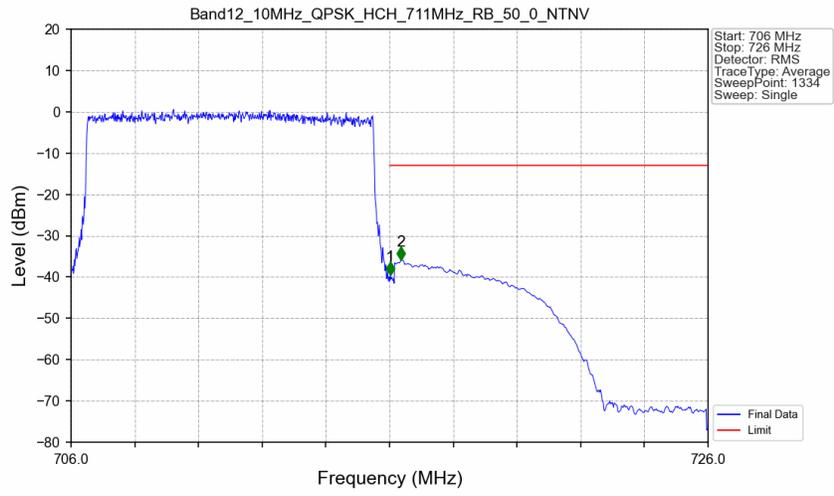


Band12\_10MHz\_QPSK\_HCH\_711MHz\_RB\_1\_49\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.008	-31.38	-13	Pass
716.1	726	0.1	CHP	2	716.158	-37.99	-13	Pass

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



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
706	716	0.03	/	/	/	/	/	/
716	716.1	0.03	/	1	716.023	-39.49	-13	Pass
716.1	726	0.1	CHP	2	716.353	-35.86	-13	Pass