

# 1. Effective (Isotropic) Radiated Power Output Data

## 1.1 Test Result

### 1.1.1 B5\_1.4MHz\_ERP

Band: 5 / Bandwidth: 1.4MHz / NTV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	824.7	1	0	24.22	-3.46	18.61	<=38.45	Pass
			2	24.21	-3.46	18.60	<=38.45	Pass
			5	24.17	-3.46	18.56	<=38.45	Pass
		3	0	24.29	-3.46	18.68	<=38.45	Pass
			2	24.28	-3.46	18.67	<=38.45	Pass
			3	24.27	-3.46	18.66	<=38.45	Pass
	6	0	23.38	-3.46	17.77	<=38.45	Pass	
	836.5	1	0	24.15	-3.46	18.54	<=38.45	Pass
			2	24.20	-3.46	18.59	<=38.45	Pass
			5	24.15	-3.46	18.54	<=38.45	Pass
		3	0	24.19	-3.46	18.58	<=38.45	Pass
			2	24.20	-3.46	18.59	<=38.45	Pass
			3	24.19	-3.46	18.58	<=38.45	Pass
	6	0	23.30	-3.46	17.69	<=38.45	Pass	
	848.3	1	0	24.05	-3.46	18.44	<=38.45	Pass
			2	24.09	-3.46	18.48	<=38.45	Pass
			5	24.09	-3.46	18.48	<=38.45	Pass
		3	0	24.14	-3.46	18.53	<=38.45	Pass
2			24.16	-3.46	18.55	<=38.45	Pass	
3			24.14	-3.46	18.53	<=38.45	Pass	
6	0	23.22	-3.46	17.61	<=38.45	Pass		
16QAM	824.7	1	0	23.16	-3.46	17.55	<=38.45	Pass
			2	23.19	-3.46	17.58	<=38.45	Pass
			5	23.14	-3.46	17.53	<=38.45	Pass
		3	0	23.46	-3.46	17.85	<=38.45	Pass
			2	23.48	-3.46	17.87	<=38.45	Pass
			3	23.44	-3.46	17.83	<=38.45	Pass
	6	0	22.39	-3.46	16.78	<=38.45	Pass	
	836.5	1	0	23.21	-3.46	17.60	<=38.45	Pass
			2	23.23	-3.46	17.62	<=38.45	Pass
			5	23.22	-3.46	17.61	<=38.45	Pass
		3	0	23.32	-3.46	17.71	<=38.45	Pass
			2	23.32	-3.46	17.71	<=38.45	Pass
			3	23.28	-3.46	17.67	<=38.45	Pass
	6	0	22.29	-3.46	16.68	<=38.45	Pass	
	848.3	1	0	23.20	-3.46	17.59	<=38.45	Pass
			2	23.23	-3.46	17.62	<=38.45	Pass
			5	23.19	-3.46	17.58	<=38.45	Pass
		3	0	23.09	-3.46	17.48	<=38.45	Pass
2			23.10	-3.46	17.49	<=38.45	Pass	
3			23.08	-3.46	17.47	<=38.45	Pass	
6	0	22.25	-3.46	16.64	<=38.45	Pass		
64QAM	824.7	1	0	22.47	-3.46	16.86	<=38.45	Pass
			2	22.52	-3.46	16.91	<=38.45	Pass
			5	22.43	-3.46	16.82	<=38.45	Pass
		3	0	22.48	-3.46	16.87	<=38.45	Pass
			2	22.53	-3.46	16.92	<=38.45	Pass
			3	22.50	-3.46	16.89	<=38.45	Pass
6	0	21.71	-3.46	16.10	<=38.45	Pass		

	836.5	1	0	22.68	-3.46	17.07	<=38.45	Pass	
			2	22.79	-3.46	17.18	<=38.45	Pass	
			5	22.70	-3.46	17.09	<=38.45	Pass	
		3	0	22.63	-3.46	17.02	<=38.45	Pass	
			2	22.63	-3.46	17.02	<=38.45	Pass	
			3	22.62	-3.46	17.01	<=38.45	Pass	
	6	0	21.36	-3.46	15.75	<=38.45	Pass		
	848.3	1	0	22.32	-3.46	16.71	<=38.45	Pass	
			2	22.41	-3.46	16.80	<=38.45	Pass	
			5	22.30	-3.46	16.69	<=38.45	Pass	
		3	0	22.36	-3.46	16.75	<=38.45	Pass	
			2	22.39	-3.46	16.78	<=38.45	Pass	
			3	22.37	-3.46	16.76	<=38.45	Pass	
	6	0	21.57	-3.46	15.96	<=38.45	Pass		
	Note1: ERP=Conducted Power+Antenna Gain-2.15								

### 1.1.2 B5\_3MHz\_ERP

Band: 5 / Bandwidth: 3MHz / NTNV									
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict	
		Size	Offset			Result	Limit		
QPSK	825.5	1	0	24.05	-3.46	18.44	<=38.45	Pass	
			7	24.16	-3.46	18.55	<=38.45	Pass	
			14	24.09	-3.46	18.48	<=38.45	Pass	
		8	0	23.28	-3.46	17.67	<=38.45	Pass	
			4	23.34	-3.46	17.73	<=38.45	Pass	
			7	23.27	-3.46	17.66	<=38.45	Pass	
		15	0	23.26	-3.46	17.65	<=38.45	Pass	
		836.5	1	0	24.04	-3.46	18.43	<=38.45	Pass
				7	24.15	-3.46	18.54	<=38.45	Pass
	14			24.01	-3.46	18.40	<=38.45	Pass	
	8		0	23.27	-3.46	17.66	<=38.45	Pass	
			4	23.31	-3.46	17.70	<=38.45	Pass	
			7	23.26	-3.46	17.65	<=38.45	Pass	
	15		0	23.25	-3.46	17.64	<=38.45	Pass	
	847.5		1	0	24.03	-3.46	18.42	<=38.45	Pass
				7	24.11	-3.46	18.50	<=38.45	Pass
		14		24.01	-3.46	18.40	<=38.45	Pass	
		8	0	23.20	-3.46	17.59	<=38.45	Pass	
			4	23.22	-3.46	17.61	<=38.45	Pass	
			7	23.17	-3.46	17.56	<=38.45	Pass	
	15	0	23.16	-3.46	17.55	<=38.45	Pass		
	16QAM	825.5	1	0	23.61	-3.46	18.00	<=38.45	Pass
				7	23.66	-3.46	18.05	<=38.45	Pass
				14	23.55	-3.46	17.94	<=38.45	Pass
8			0	22.40	-3.46	16.79	<=38.45	Pass	
			4	22.48	-3.46	16.87	<=38.45	Pass	
			7	22.45	-3.46	16.84	<=38.45	Pass	
15			0	22.35	-3.46	16.74	<=38.45	Pass	
836.5			1	0	23.20	-3.46	17.59	<=38.45	Pass
				7	23.34	-3.46	17.73	<=38.45	Pass
		14		23.22	-3.46	17.61	<=38.45	Pass	
		8	0	22.22	-3.46	16.61	<=38.45	Pass	
			4	22.29	-3.46	16.68	<=38.45	Pass	
			7	22.22	-3.46	16.61	<=38.45	Pass	
15		0	22.22	-3.46	16.61	<=38.45	Pass		
847.5		1	0	23.00	-3.46	17.39	<=38.45	Pass	

64QAM	825.5	8	7	23.14	-3.46	17.53	<=38.45	Pass	
			14	22.99	-3.46	17.38	<=38.45	Pass	
			0	22.27	-3.46	16.66	<=38.45	Pass	
		15	4	22.29	-3.46	16.68	<=38.45	Pass	
			7	22.24	-3.46	16.63	<=38.45	Pass	
			0	22.22	-3.46	16.61	<=38.45	Pass	
	836.5	1	0	22.48	-3.46	16.87	<=38.45	Pass	
			7	22.57	-3.46	16.96	<=38.45	Pass	
			14	22.50	-3.46	16.89	<=38.45	Pass	
		8	0	21.42	-3.46	15.81	<=38.45	Pass	
			4	21.45	-3.46	15.84	<=38.45	Pass	
			7	21.36	-3.46	15.75	<=38.45	Pass	
		15	0	21.26	-3.46	15.65	<=38.45	Pass	
		847.5	1	0	22.34	-3.46	16.73	<=38.45	Pass
				7	22.44	-3.46	16.83	<=38.45	Pass
14	22.36			-3.46	16.75	<=38.45	Pass		
8	0		21.30	-3.46	15.69	<=38.45	Pass		
	4		21.36	-3.46	15.75	<=38.45	Pass		
	7		21.34	-3.46	15.73	<=38.45	Pass		
15	0		21.30	-3.46	15.69	<=38.45	Pass		
847.5	1		0	22.33	-3.46	16.72	<=38.45	Pass	
			7	22.38	-3.46	16.77	<=38.45	Pass	
		14	22.21	-3.46	16.60	<=38.45	Pass		
	8	0	21.17	-3.46	15.56	<=38.45	Pass		
		4	21.20	-3.46	15.59	<=38.45	Pass		
		7	21.11	-3.46	15.50	<=38.45	Pass		
15	0	21.26	-3.46	15.65	<=38.45	Pass			

Note1: ERP=Conducted Power+Antenna Gain-2.15

### 1.1.3 B5\_5MHz\_ERP

Band: 5 / Bandwidth: 5MHz / NTNV										
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict		
		Size	Offset			Result	Limit			
QPSK	826.5	1	0	24.35	-3.46	18.74	<=38.45	Pass		
			13	24.43	-3.46	18.82	<=38.45	Pass		
			24	24.36	-3.46	18.75	<=38.45	Pass		
		12	0	23.32	-3.46	17.71	<=38.45	Pass		
			6	23.40	-3.46	17.79	<=38.45	Pass		
			13	23.38	-3.46	17.77	<=38.45	Pass		
		25	0	23.36	-3.46	17.75	<=38.45	Pass		
		836.5	1	0	24.29	-3.46	18.68	<=38.45	Pass	
				13	24.33	-3.46	18.72	<=38.45	Pass	
	24			24.31	-3.46	18.70	<=38.45	Pass		
	12		0	23.31	-3.46	17.70	<=38.45	Pass		
			6	23.39	-3.46	17.78	<=38.45	Pass		
			13	23.33	-3.46	17.72	<=38.45	Pass		
	25	0	23.33	-3.46	17.72	<=38.45	Pass			
	846.5	1	0	24.30	-3.46	18.69	<=38.45	Pass		
			13	24.35	-3.46	18.74	<=38.45	Pass		
			24	24.24	-3.46	18.63	<=38.45	Pass		
		12	0	23.29	-3.46	17.68	<=38.45	Pass		
			6	23.31	-3.46	17.70	<=38.45	Pass		
			13	23.19	-3.46	17.58	<=38.45	Pass		
		25	0	23.26	-3.46	17.65	<=38.45	Pass		
		16QAM	826.5	1	0	23.19	-3.46	17.58	<=38.45	Pass
					13	23.28	-3.46	17.67	<=38.45	Pass

		12	24	23.21	-3.46	17.60	<=38.45	Pass		
			0	22.30	-3.46	16.69	<=38.45	Pass		
			6	22.38	-3.46	16.77	<=38.45	Pass		
			13	22.36	-3.46	16.75	<=38.45	Pass		
		25	0	22.40	-3.46	16.79	<=38.45	Pass		
	836.5	1	0	23.55	-3.46	17.94	<=38.45	Pass		
			13	23.60	-3.46	17.99	<=38.45	Pass		
			24	23.59	-3.46	17.98	<=38.45	Pass		
		12	0	22.32	-3.46	16.71	<=38.45	Pass		
			6	22.42	-3.46	16.81	<=38.45	Pass		
			13	22.37	-3.46	16.76	<=38.45	Pass		
		25	0	22.32	-3.46	16.71	<=38.45	Pass		
		846.5	1	0	23.38	-3.46	17.77	<=38.45	Pass	
				13	23.43	-3.46	17.82	<=38.45	Pass	
	24			23.29	-3.46	17.68	<=38.45	Pass		
	12		0	22.29	-3.46	16.68	<=38.45	Pass		
			6	22.29	-3.46	16.68	<=38.45	Pass		
			13	22.21	-3.46	16.60	<=38.45	Pass		
	25		0	22.32	-3.46	16.71	<=38.45	Pass		
	64QAM		826.5	1	0	22.33	-3.46	16.72	<=38.45	Pass
					13	22.38	-3.46	16.77	<=38.45	Pass
		24			22.35	-3.46	16.74	<=38.45	Pass	
		12		0	21.36	-3.46	15.75	<=38.45	Pass	
				6	21.45	-3.46	15.84	<=38.45	Pass	
13				21.42	-3.46	15.81	<=38.45	Pass		
25		0		21.37	-3.46	15.76	<=38.45	Pass		
836.5		1		0	22.71	-3.46	17.10	<=38.45	Pass	
				13	22.81	-3.46	17.20	<=38.45	Pass	
			24	22.70	-3.46	17.09	<=38.45	Pass		
		12	0	21.26	-3.46	15.65	<=38.45	Pass		
			6	21.31	-3.46	15.70	<=38.45	Pass		
			13	21.29	-3.46	15.68	<=38.45	Pass		
		25	0	21.32	-3.46	15.71	<=38.45	Pass		
		846.5	1	0	22.54	-3.46	16.93	<=38.45	Pass	
				13	22.57	-3.46	16.96	<=38.45	Pass	
24				22.49	-3.46	16.88	<=38.45	Pass		
12			0	21.38	-3.46	15.77	<=38.45	Pass		
			6	21.44	-3.46	15.83	<=38.45	Pass		
			13	21.31	-3.46	15.70	<=38.45	Pass		
25			0	21.35	-3.46	15.74	<=38.45	Pass		
Note1: ERP=Conducted Power+Antenna Gain-2.15										

#### 1.1.4 B5\_10MHz\_ERP

Band: 5 / Bandwidth: 10MHz / NTN									
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict	
		Size	Offset			Result	Limit		
QPSK	829	1	0	24.34	-3.46	18.73	<=38.45	Pass	
			25	24.42	-3.46	18.81	<=38.45	Pass	
			49	24.32	-3.46	18.71	<=38.45	Pass	
		25	0	23.34	-3.46	17.73	<=38.45	Pass	
			13	23.40	-3.46	17.79	<=38.45	Pass	
			25	23.37	-3.46	17.76	<=38.45	Pass	
		50	0	23.37	-3.46	17.76	<=38.45	Pass	
		836.5	1	0	24.33	-3.46	18.72	<=38.45	Pass
				25	24.37	-3.46	18.76	<=38.45	Pass
49	24.27			-3.46	18.66	<=38.45	Pass		

		25	0	23.29	-3.46	17.68	<=38.45	Pass		
			13	23.38	-3.46	17.77	<=38.45	Pass		
			25	23.34	-3.46	17.73	<=38.45	Pass		
		50	0	23.36	-3.46	17.75	<=38.45	Pass		
			844	1	0	24.31	-3.46	18.70	<=38.45	Pass
					25	24.39	-3.46	18.78	<=38.45	Pass
	49	24.29			-3.46	18.68	<=38.45	Pass		
	25	25	0	23.26	-3.46	17.65	<=38.45	Pass		
			13	23.39	-3.46	17.78	<=38.45	Pass		
			25	23.23	-3.46	17.62	<=38.45	Pass		
	50	0	23.27	-3.46	17.66	<=38.45	Pass			
	16QAM	829	1	0	23.84	-3.46	18.23	<=38.45	Pass	
25				23.92	-3.46	18.31	<=38.45	Pass		
49				23.82	-3.46	18.21	<=38.45	Pass		
25			25	0	22.40	-3.46	16.79	<=38.45	Pass	
				13	22.50	-3.46	16.89	<=38.45	Pass	
				25	22.42	-3.46	16.81	<=38.45	Pass	
50			0	22.36	-3.46	16.75	<=38.45	Pass		
836.5			1	0	23.48	-3.46	17.87	<=38.45	Pass	
				25	23.56	-3.46	17.95	<=38.45	Pass	
		49		23.45	-3.46	17.84	<=38.45	Pass		
		25	25	0	22.33	-3.46	16.72	<=38.45	Pass	
				13	22.43	-3.46	16.82	<=38.45	Pass	
				25	22.38	-3.46	16.77	<=38.45	Pass	
50		0	22.35	-3.46	16.74	<=38.45	Pass			
844		1	0	23.32	-3.46	17.71	<=38.45	Pass		
			25	23.34	-3.46	17.73	<=38.45	Pass		
			49	23.23	-3.46	17.62	<=38.45	Pass		
		25	25	0	22.33	-3.46	16.72	<=38.45	Pass	
				13	22.47	-3.46	16.86	<=38.45	Pass	
				25	22.33	-3.46	16.72	<=38.45	Pass	
		50	0	22.30	-3.46	16.69	<=38.45	Pass		
		64QAM	829	1	0	22.63	-3.46	17.02	<=38.45	Pass
					25	22.75	-3.46	17.14	<=38.45	Pass
49					22.65	-3.46	17.04	<=38.45	Pass	
25	25			0	21.41	-3.46	15.80	<=38.45	Pass	
				13	21.50	-3.46	15.89	<=38.45	Pass	
				25	21.42	-3.46	15.81	<=38.45	Pass	
50	0			21.37	-3.46	15.76	<=38.45	Pass		
836.5	1			0	22.50	-3.46	16.89	<=38.45	Pass	
				25	22.58	-3.46	16.97	<=38.45	Pass	
			49	22.51	-3.46	16.90	<=38.45	Pass		
	25		25	0	21.38	-3.46	15.77	<=38.45	Pass	
				13	21.50	-3.46	15.89	<=38.45	Pass	
				25	21.41	-3.46	15.80	<=38.45	Pass	
50	0		21.41	-3.46	15.80	<=38.45	Pass			
844	1		0	22.50	-3.46	16.89	<=38.45	Pass		
			25	22.57	-3.46	16.96	<=38.45	Pass		
			49	22.43	-3.46	16.82	<=38.45	Pass		
	25		25	0	21.33	-3.46	15.72	<=38.45	Pass	
				13	21.47	-3.46	15.86	<=38.45	Pass	
				25	21.33	-3.46	15.72	<=38.45	Pass	
	50		0	21.28	-3.46	15.67	<=38.45	Pass		
	Note1: ERP=Conducted Power+Antenna Gain-2.15									

## 2. Frequency Stability

### 2.1 Test Result

#### 2.1.1 B5\_10MHz

Band: 5 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	836.5	50	0	20	LV	-4.091	-0.0049	-2.5 to 2.5	Pass
					NV	-2.518	-0.0030	-2.5 to 2.5	Pass
					HV	-2.217	-0.0027	-2.5 to 2.5	Pass
				-30	NV	-4.320	-0.0052	-2.5 to 2.5	Pass
					-20	NV	-4.363	-0.0052	-2.5 to 2.5
				-10	NV	-4.835	-0.0058	-2.5 to 2.5	Pass
				0	NV	-2.418	-0.0029	-2.5 to 2.5	Pass
				10	NV	-3.076	-0.0037	-2.5 to 2.5	Pass
				30	NV	-3.004	-0.0036	-2.5 to 2.5	Pass
				40	NV	-2.403	-0.0029	-2.5 to 2.5	Pass
50	NV	-2.747	-0.0033	-2.5 to 2.5	Pass				

## 3. 99% & 26dB Bandwidth

### 3.1 Test Result

#### 3.1.1 Band5\_OBW

Band: 5 / NTN							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	836.5	6	0	1.113	/	Pass
	16QAM	836.5	6	0	1.118	/	Pass
	64QAM	836.5	6	0	1.116	/	Pass
3	QPSK	836.5	15	0	2.731	/	Pass
	16QAM	836.5	15	0	2.716	/	Pass
	64QAM	836.5	15	0	2.711	/	Pass
5	QPSK	836.5	25	0	4.544	/	Pass
	16QAM	836.5	25	0	4.526	/	Pass
	64QAM	836.5	25	0	4.532	/	Pass
10	QPSK	836.5	50	0	9.052	/	Pass
	16QAM	836.5	50	0	9.053	/	Pass
	64QAM	836.5	50	0	9.024	/	Pass

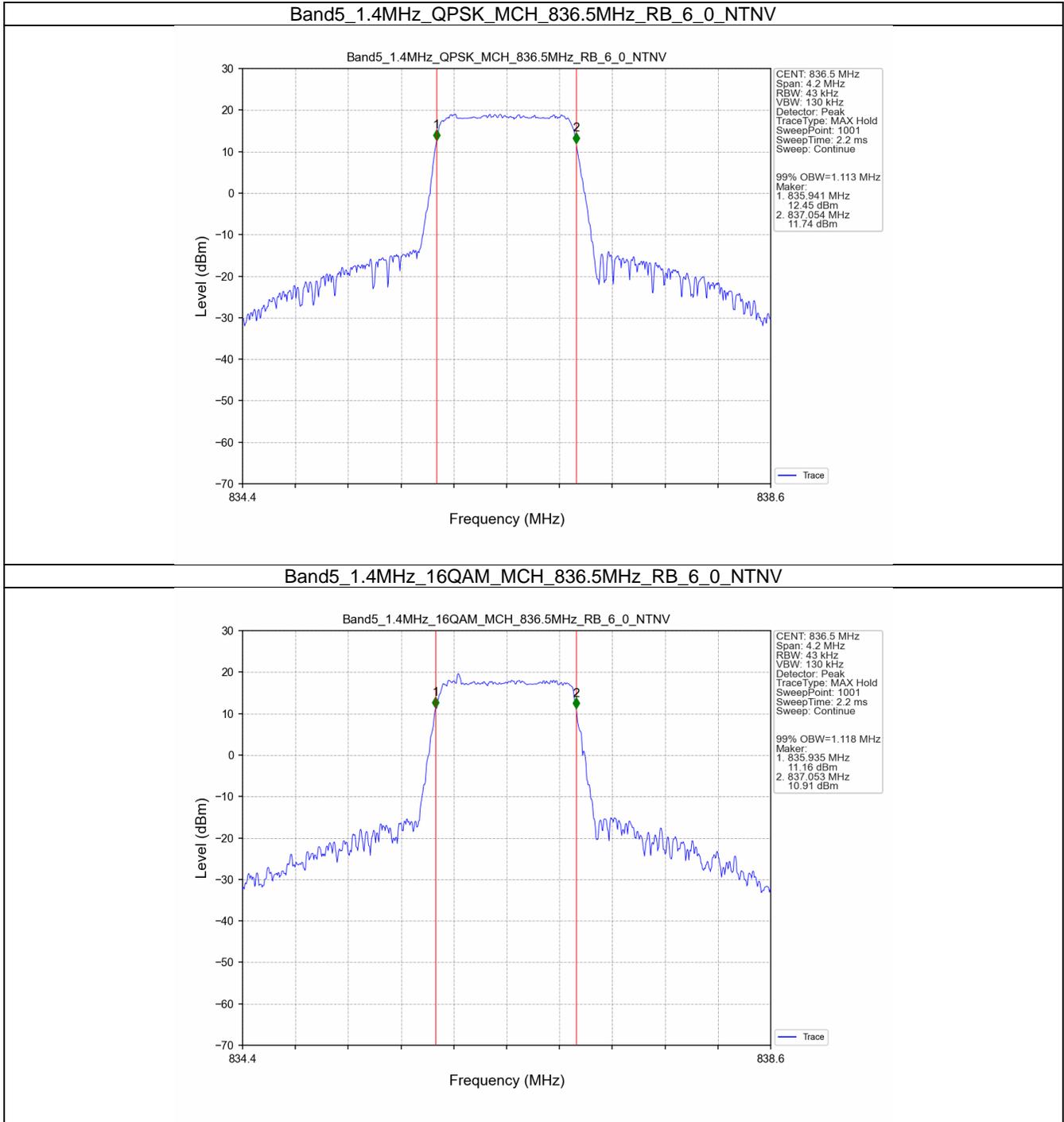
#### 3.1.2 Band5\_XDB

Band: 5 / NTN							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	836.5	6	0	1.306	/	Pass
	16QAM	836.5	6	0	1.291	/	Pass
	64QAM	836.5	6	0	1.313	/	Pass
3	QPSK	836.5	15	0	3.052	/	Pass
	16QAM	836.5	15	0	3.019	/	Pass
	64QAM	836.5	15	0	3.022	/	Pass

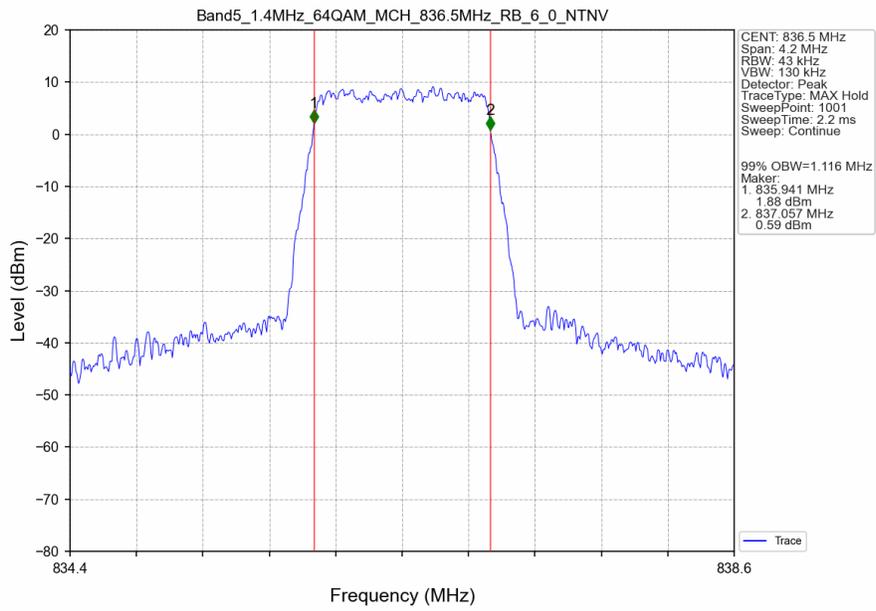
5	QPSK	836.5	25	0	4.980	/	Pass
	16QAM	836.5	25	0	4.978	/	Pass
	64QAM	836.5	25	0	5.006	/	Pass
10	QPSK	836.5	50	0	9.908	/	Pass
	16QAM	836.5	50	0	9.857	/	Pass
	64QAM	836.5	50	0	9.893	/	Pass

### 3.2 Test Graph

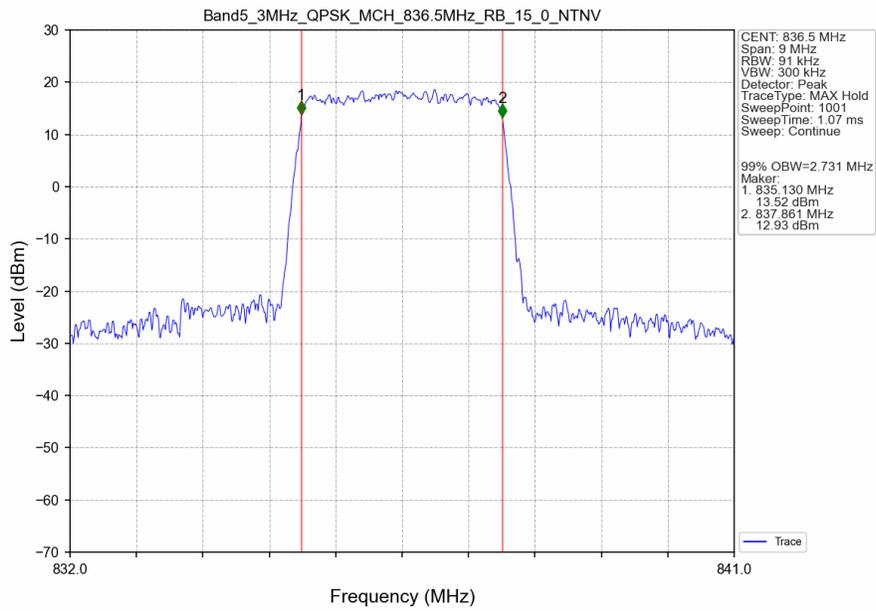
#### 3.2.1 Band5\_OBW



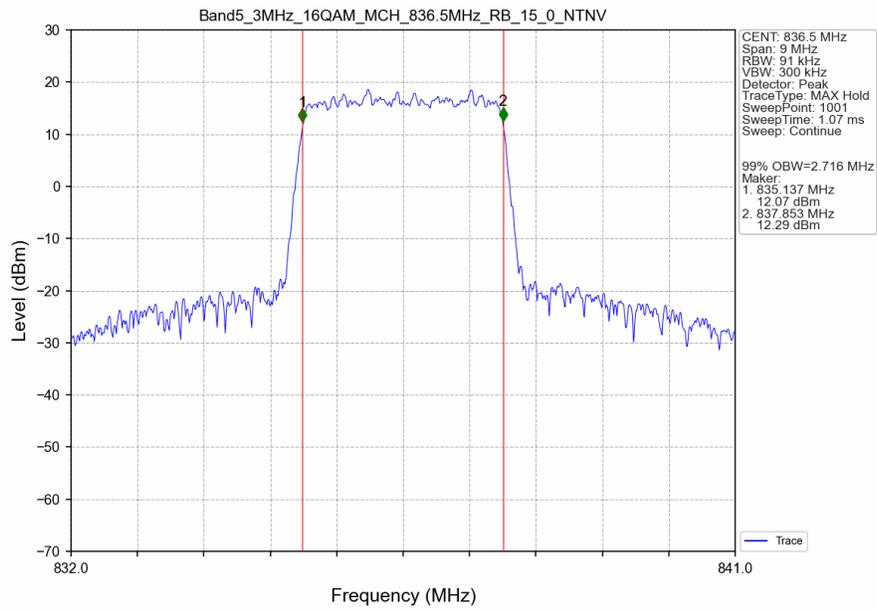
Band5\_1.4MHz\_64QAM\_MCH\_836.5MHz\_RB\_6\_0\_NTNV



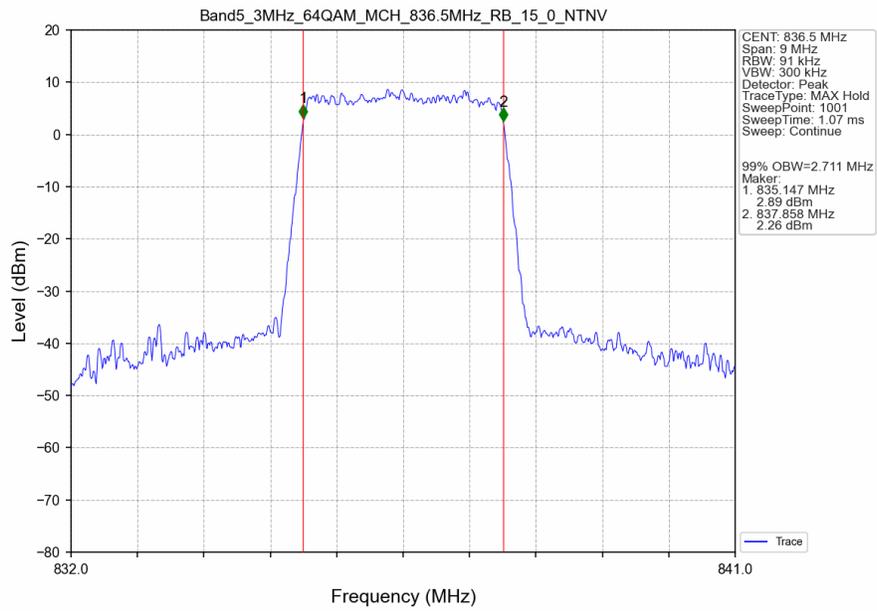
Band5\_3MHz\_QPSK\_MCH\_836.5MHz\_RB\_15\_0\_NTNV



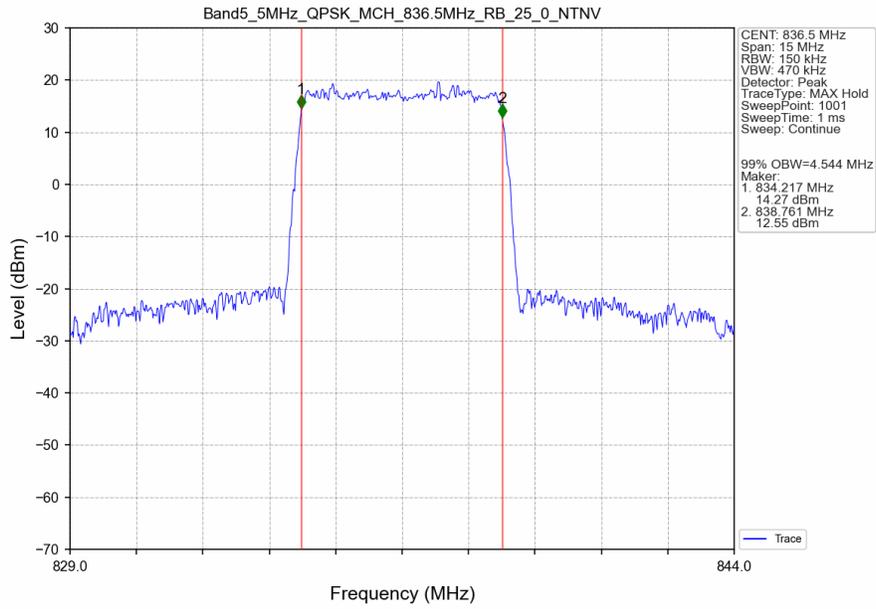
Band5\_3MHz\_16QAM\_MCH\_836.5MHz\_RB\_15\_0\_NTNV



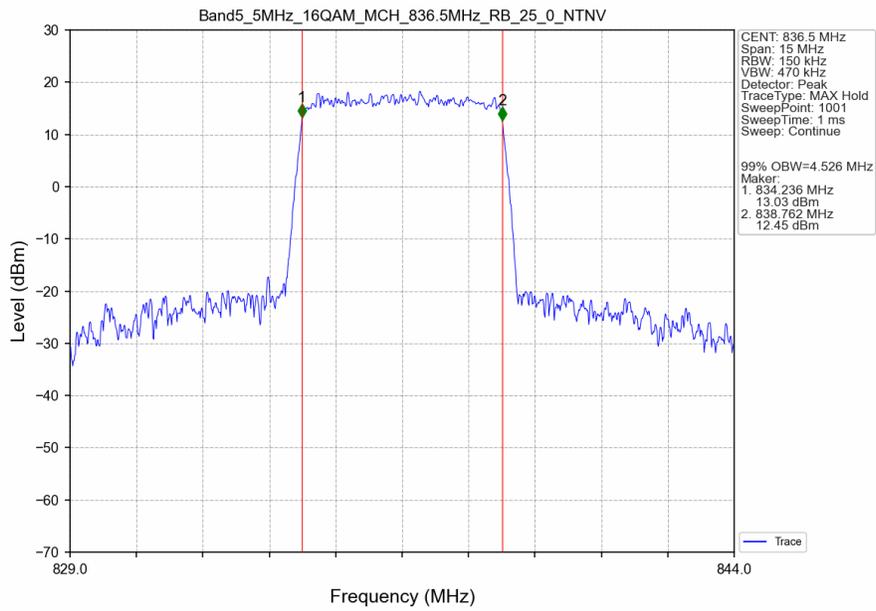
Band5\_3MHz\_64QAM\_MCH\_836.5MHz\_RB\_15\_0\_NTNV



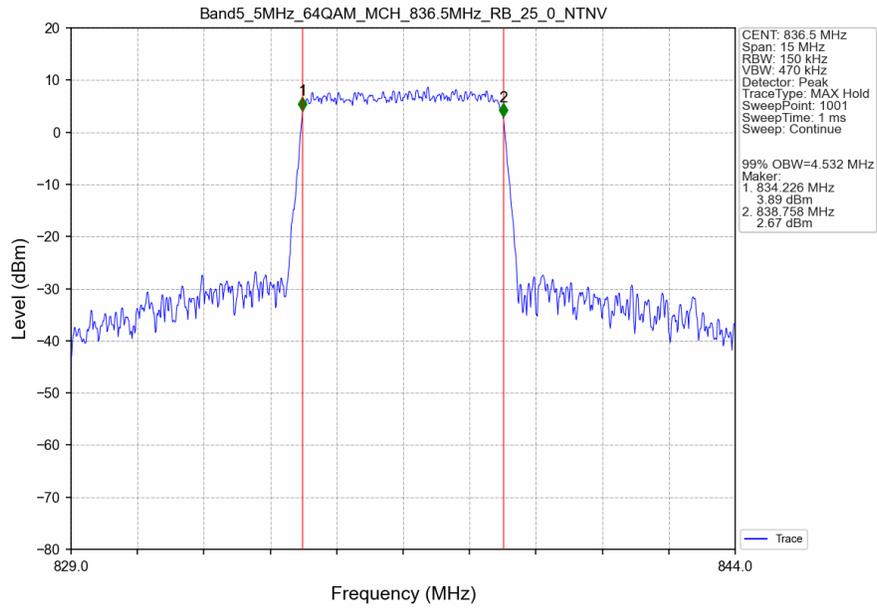
Band5\_5MHz\_QPSK\_MCH\_836.5MHz\_RB\_25\_0\_NTNV



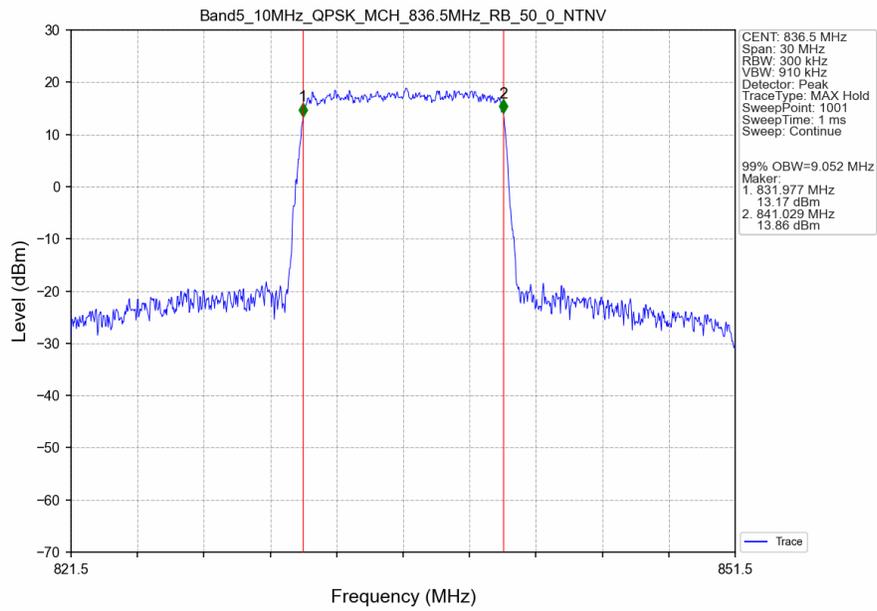
Band5\_5MHz\_16QAM\_MCH\_836.5MHz\_RB\_25\_0\_NTNV



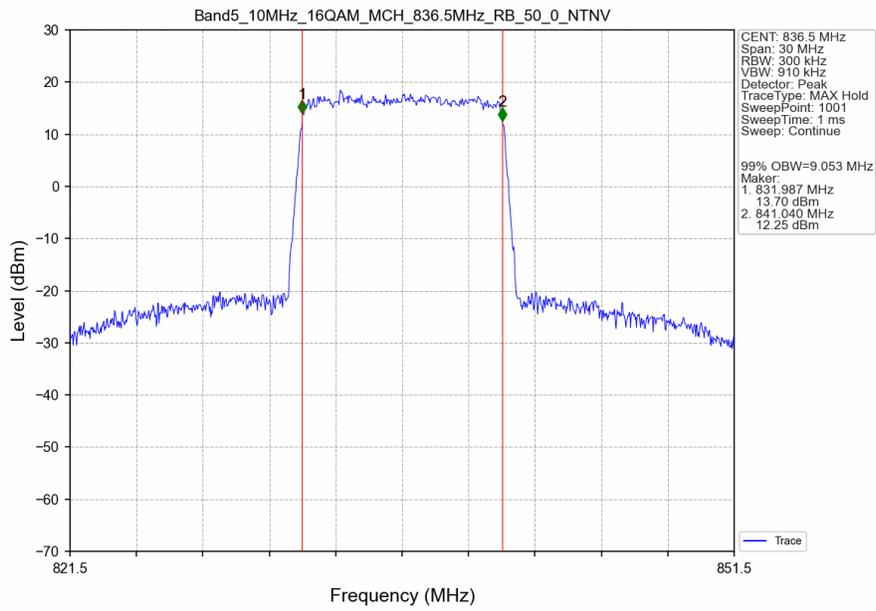
Band5\_5MHz\_64QAM\_MCH\_836.5MHz\_RB\_25\_0\_NTNV



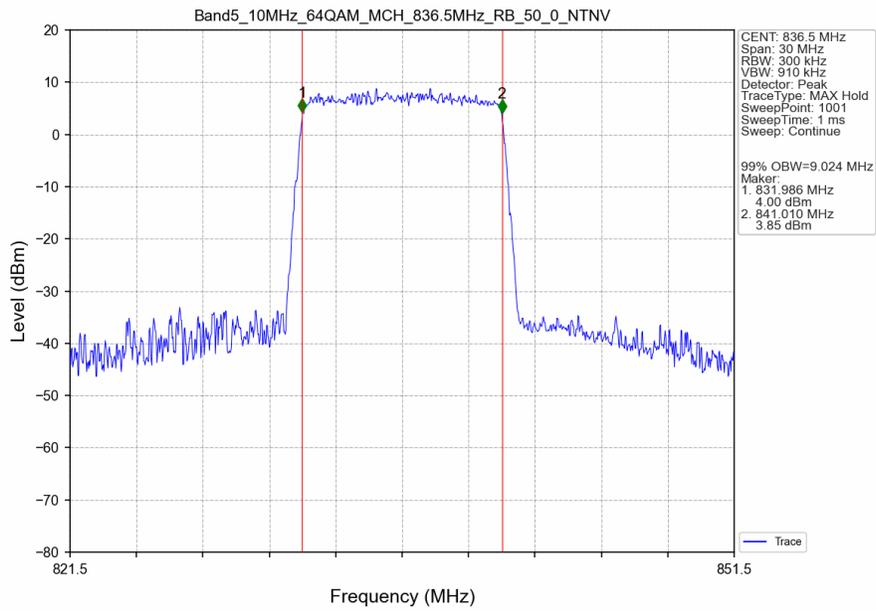
Band5\_10MHz\_QPSK\_MCH\_836.5MHz\_RB\_50\_0\_NTNV



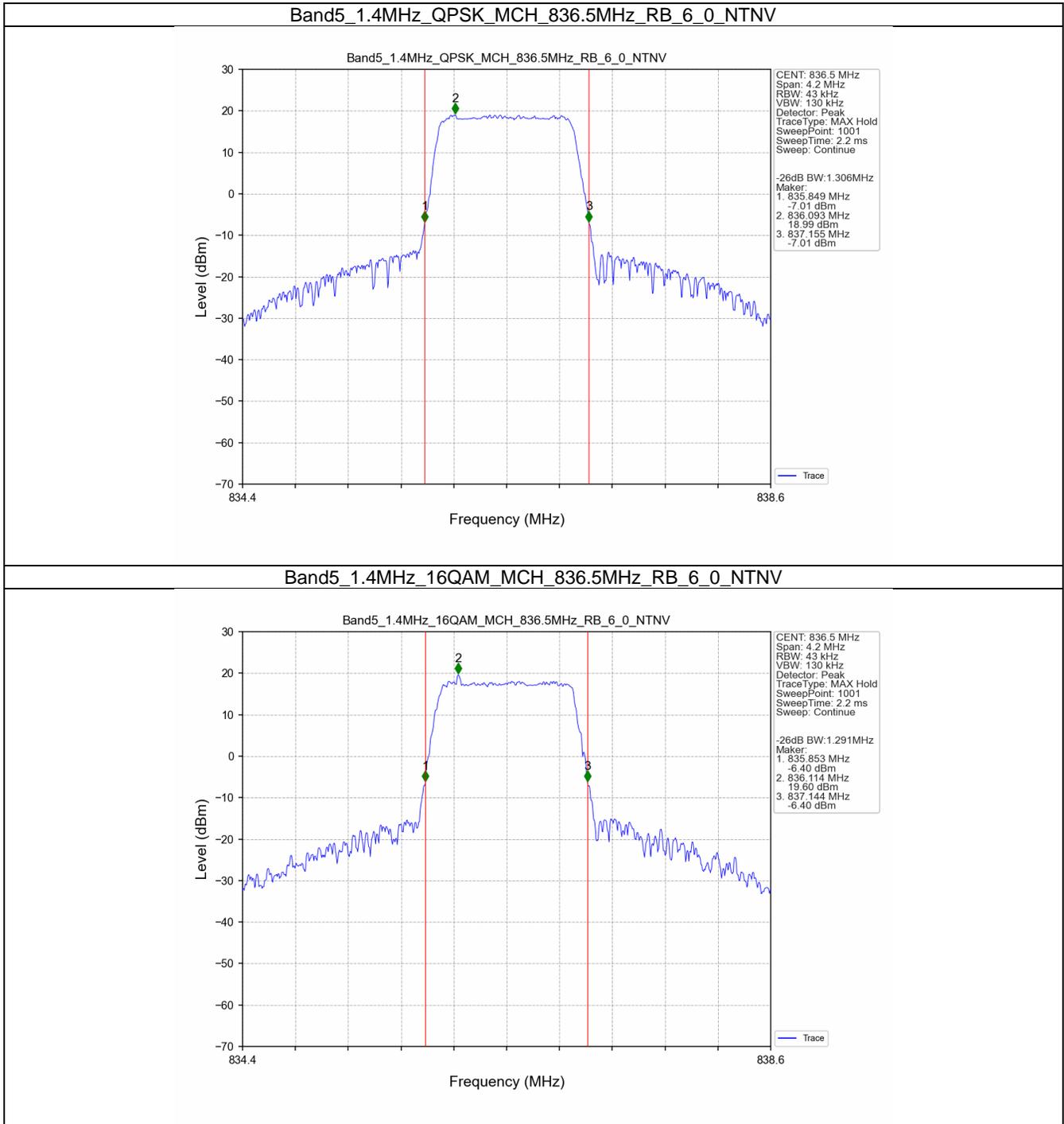
Band5\_10MHz\_16QAM\_MCH\_836.5MHz\_RB\_50\_0\_NTNV



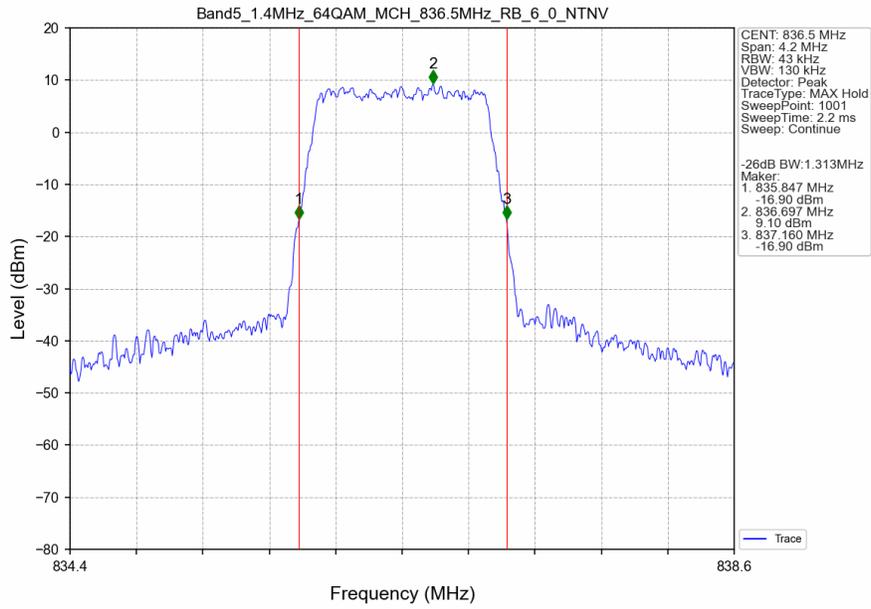
Band5\_10MHz\_64QAM\_MCH\_836.5MHz\_RB\_50\_0\_NTNV



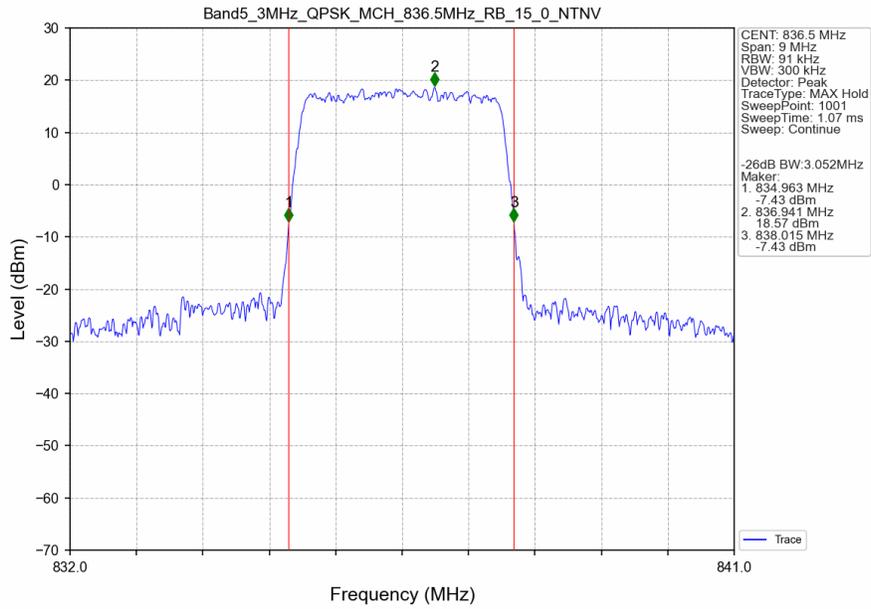
### 3.2.2 Band5\_XDB



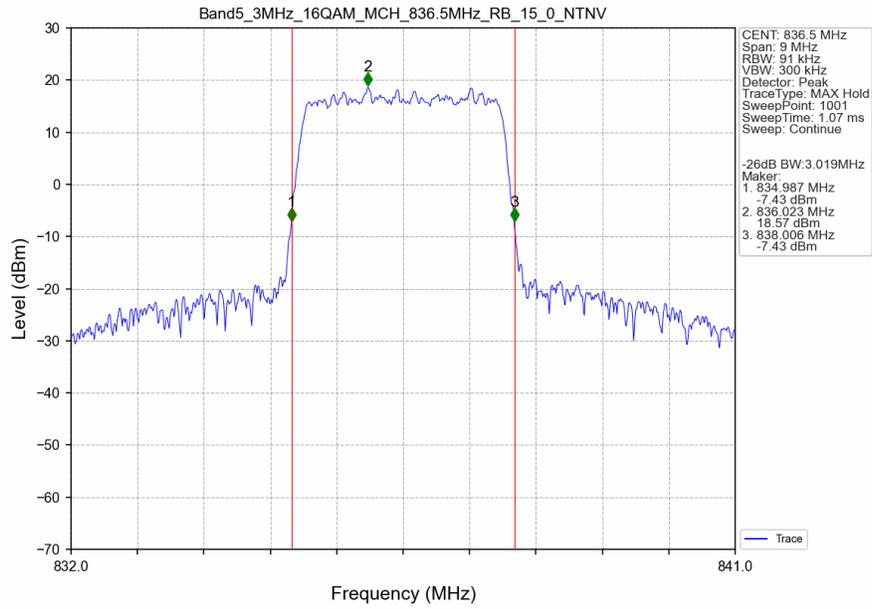
Band5\_1.4MHz\_64QAM\_MCH\_836.5MHz\_RB\_6\_0\_NTNV



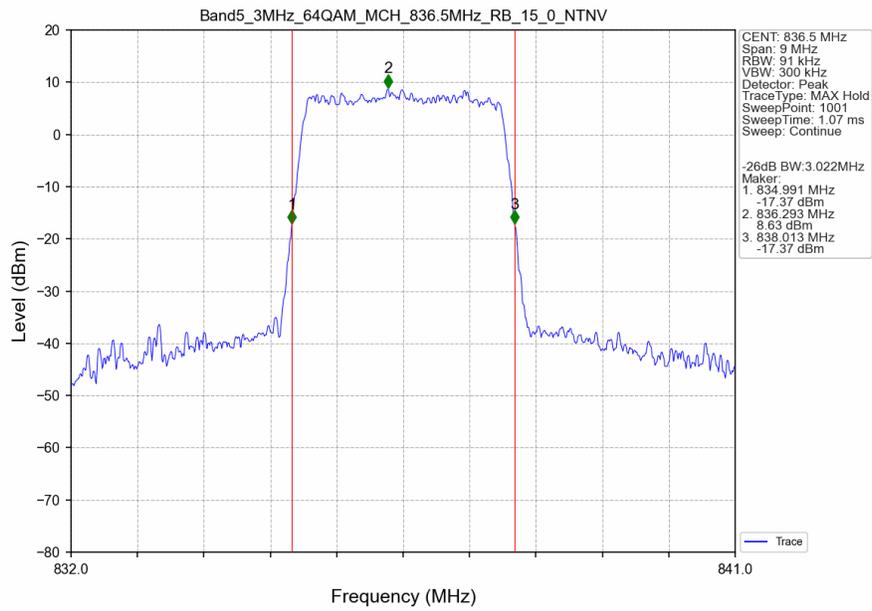
Band5\_3MHz\_QPSK\_MCH\_836.5MHz\_RB\_15\_0\_NTNV



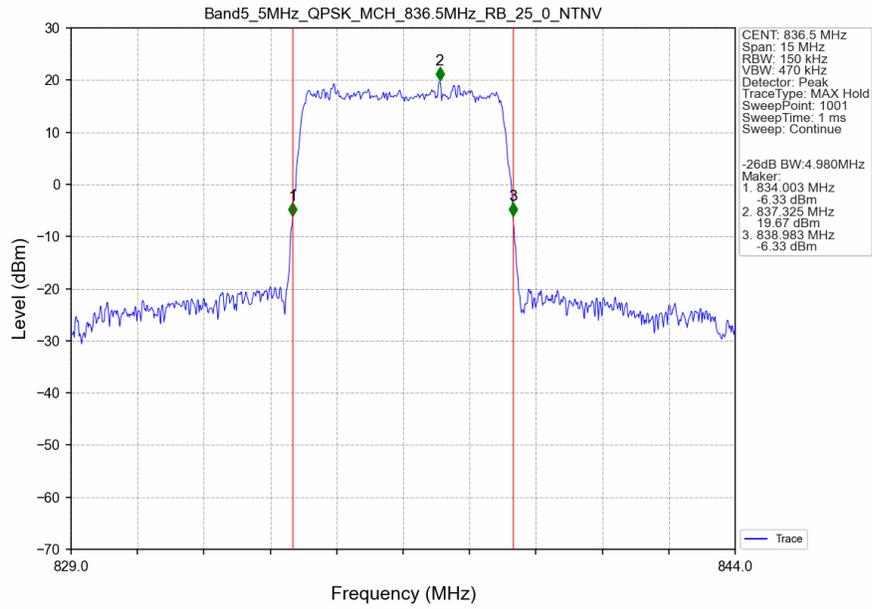
Band5\_3MHz\_16QAM\_MCH\_836.5MHz\_RB\_15\_0\_NTNV



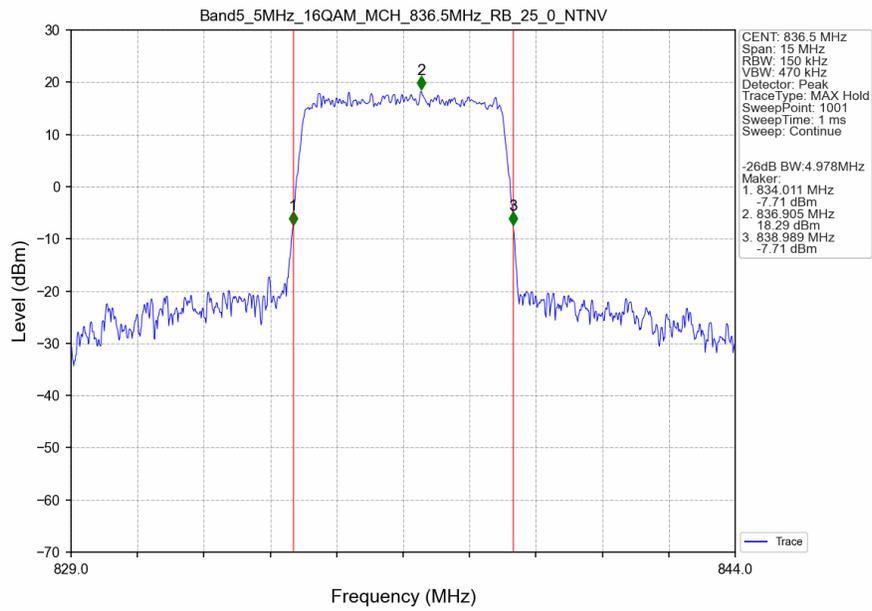
Band5\_3MHz\_64QAM\_MCH\_836.5MHz\_RB\_15\_0\_NTNV



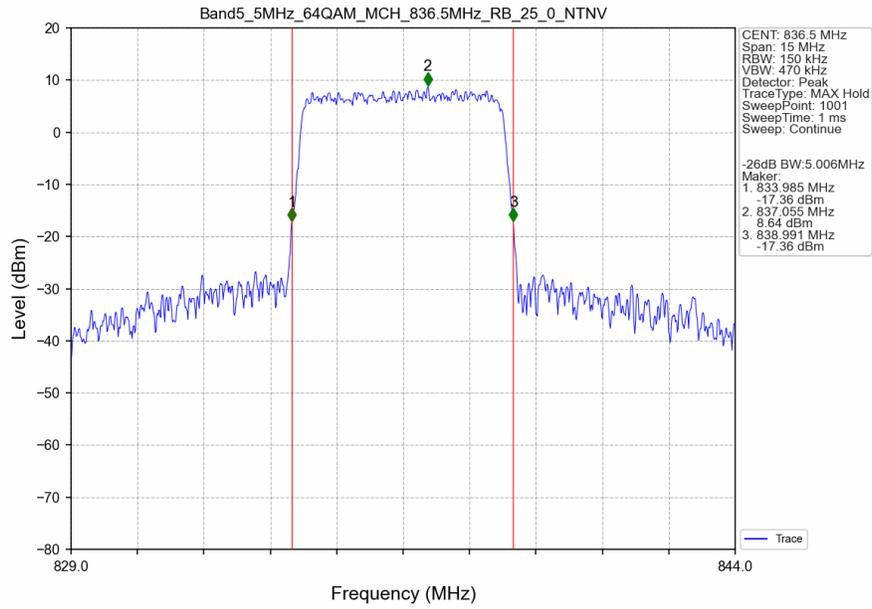
Band5\_5MHz\_QPSK\_MCH\_836.5MHz\_RB\_25\_0\_NTNV



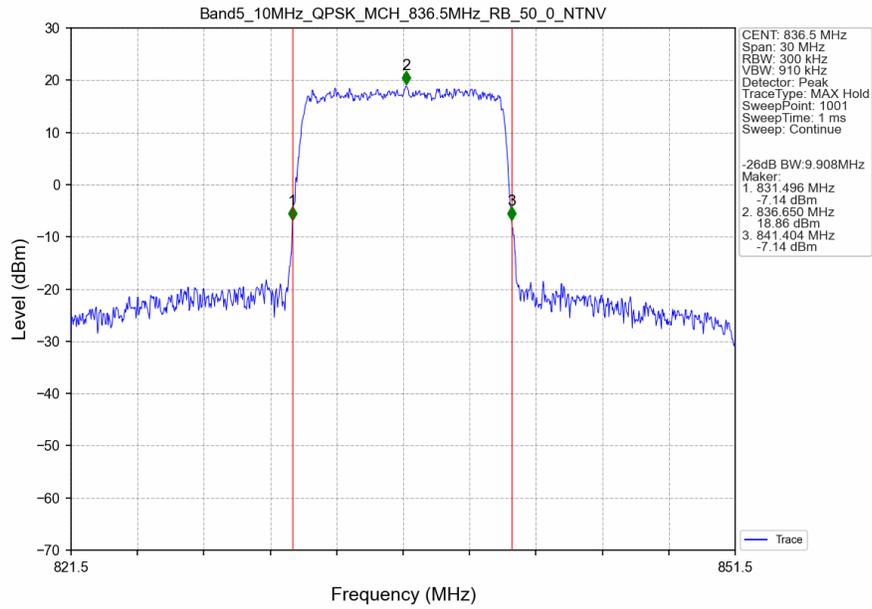
Band5\_5MHz\_16QAM\_MCH\_836.5MHz\_RB\_25\_0\_NTNV



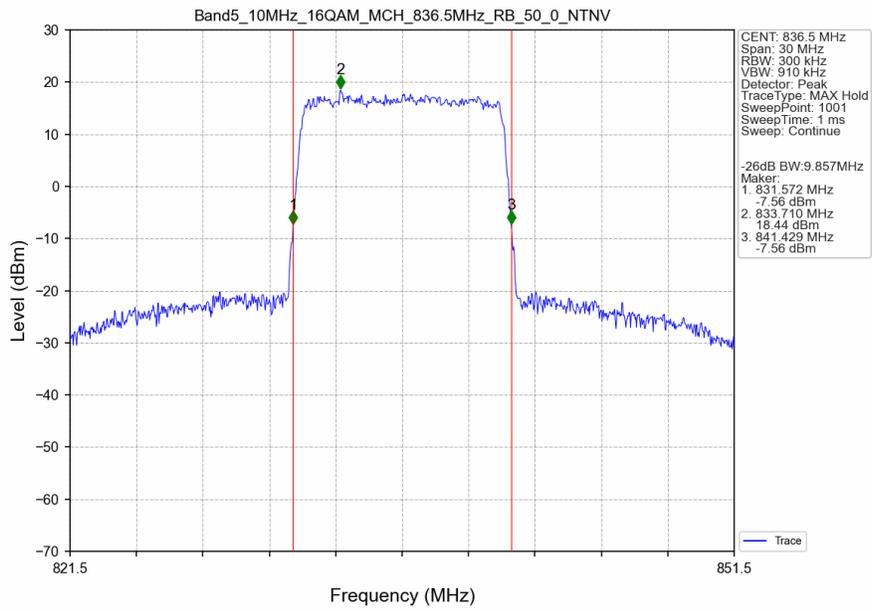
Band5\_5MHz\_64QAM\_MCH\_836.5MHz\_RB\_25\_0\_NTNV



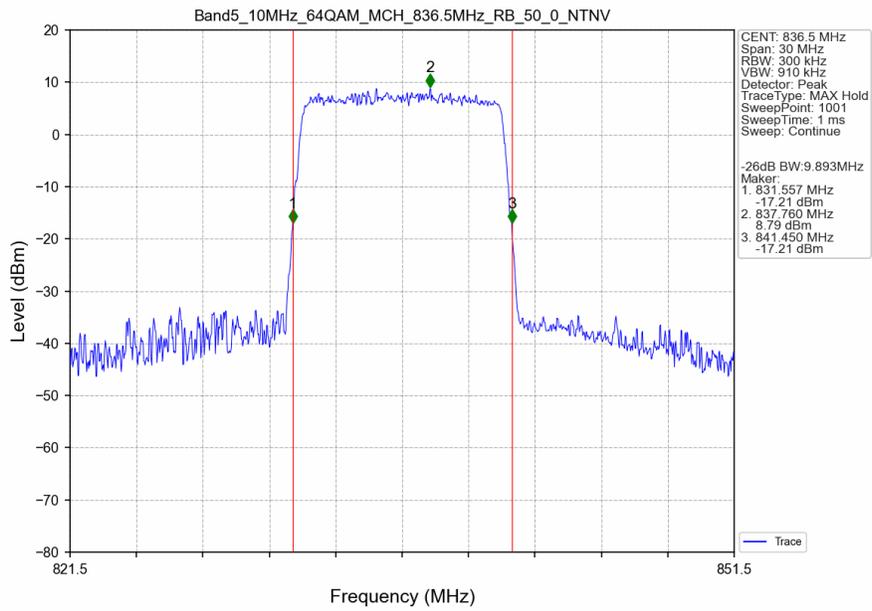
Band5\_10MHz\_QPSK\_MCH\_836.5MHz\_RB\_50\_0\_NTNV



Band5\_10MHz\_16QAM\_MCH\_836.5MHz\_RB\_50\_0\_NTNV



Band5\_10MHz\_64QAM\_MCH\_836.5MHz\_RB\_50\_0\_NTNV



## 4. Peak-Average Ratio

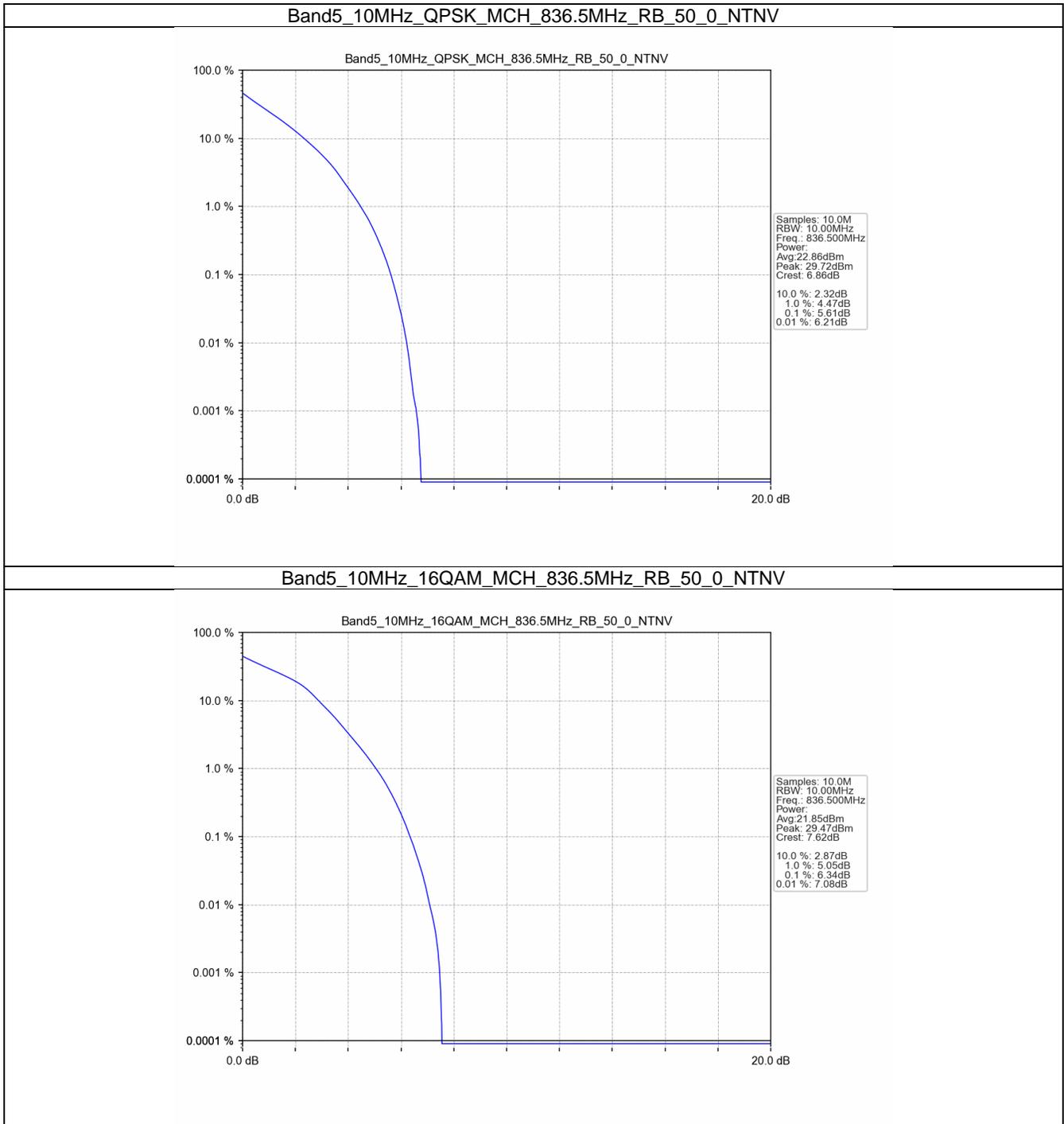
### 4.1 Test Result

#### 4.1.1 B5\_10MHz

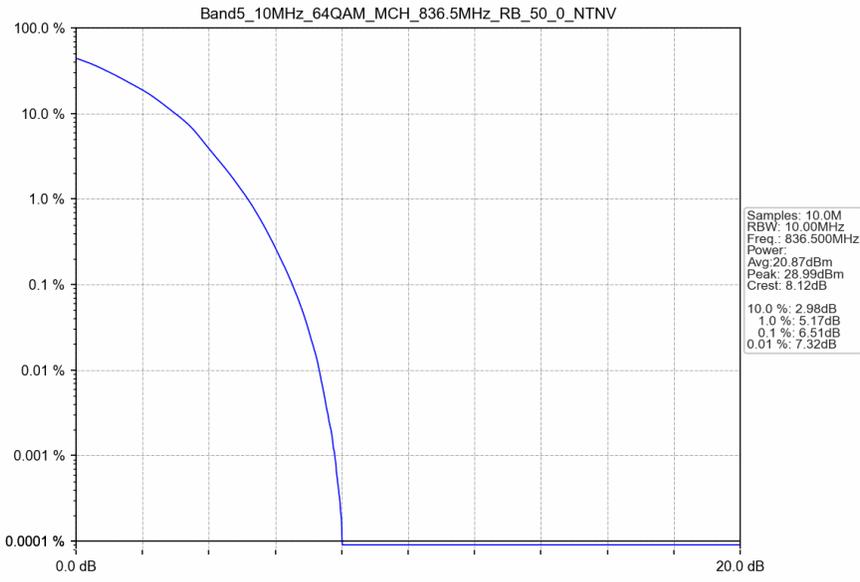
Band: 5 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	50	0	5.61	<=13	Pass
16QAM	836.5	50	0	6.34	<=13	Pass
64QAM	836.5	50	0	6.51	<=13	Pass

## 4.2 Test Graph

### 4.2.1 B5\_10MHz



Band5\_10MHz\_64QAM\_MCH\_836.5MHz\_RB\_50\_0\_NTNV



## 5. Spurious Emission

### 5.1 Test Result

#### 5.1.1 B5\_1.4MHz

Band: 5 / Bandwidth: 1.4MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	824.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	848.3	1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

#### 5.1.2 B5\_3MHz

Band: 5 / Bandwidth: 3MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	825.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	847.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

#### 5.1.3 B5\_5MHz

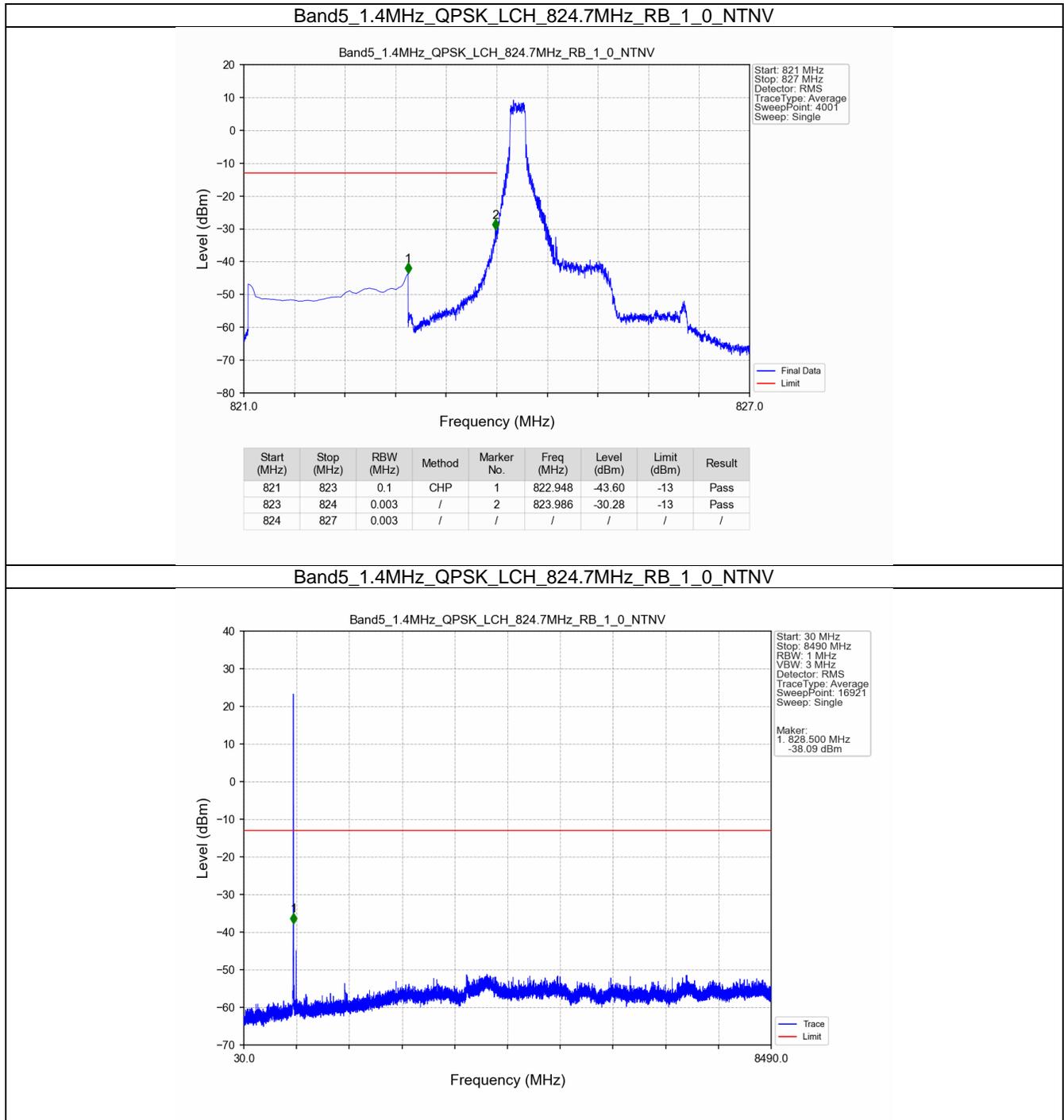
Band: 5 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	826.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	846.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

#### 5.1.4 B5\_10MHz

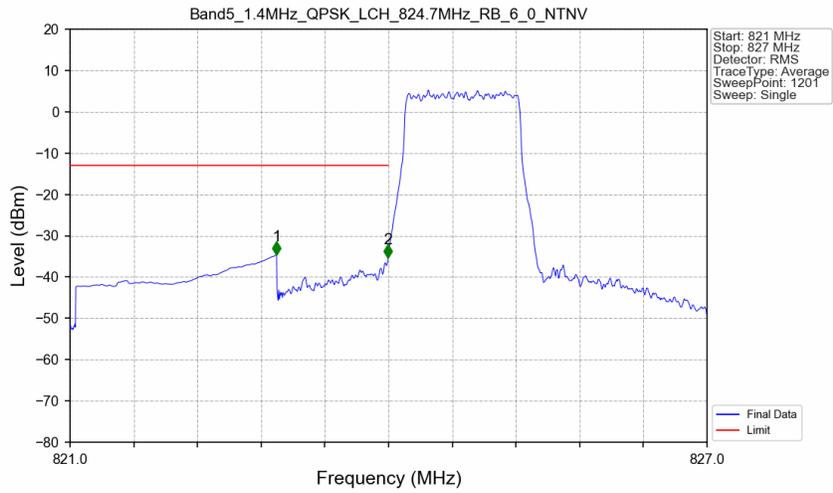
Band: 5 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	829	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	836.5	1	0	Refer To Test Graph		Pass
	844	1	0	Refer To Test Graph		Pass
			49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

## 5.2 Test Graph

### 5.2.1 B5\_1.4MHz

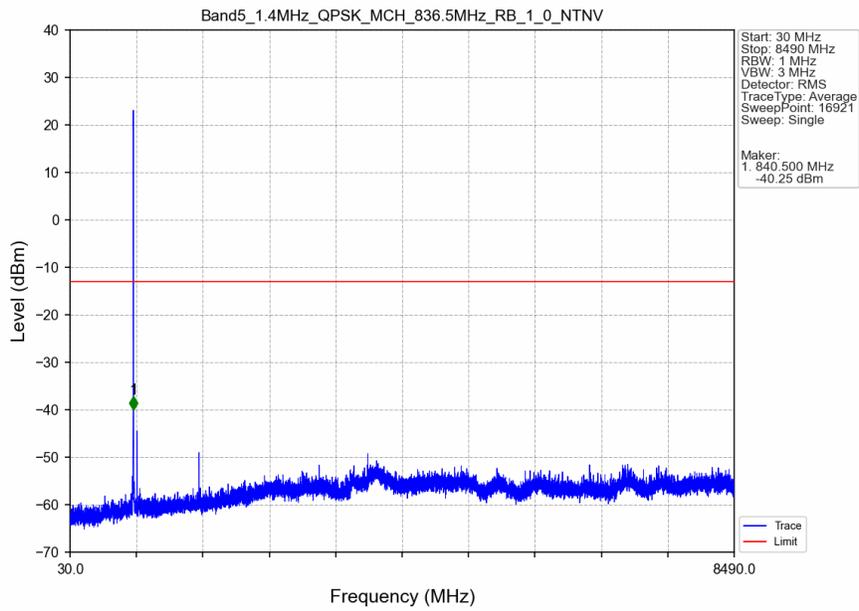


Band5\_1.4MHz\_QPSK\_LCH\_824.7MHz\_RB\_6\_0\_NTNV

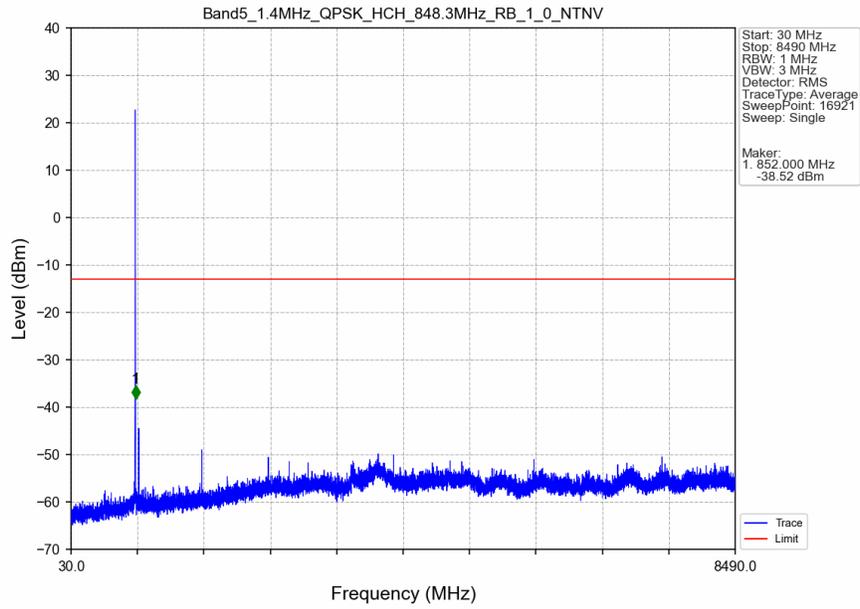


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	823	0.1	CHP	1	822.945	-34.64	-13	Pass
823	824	0.013	CHP	2	823.995	-35.32	-13	Pass
824	827	0.013	CHP	/	/	/	/	/

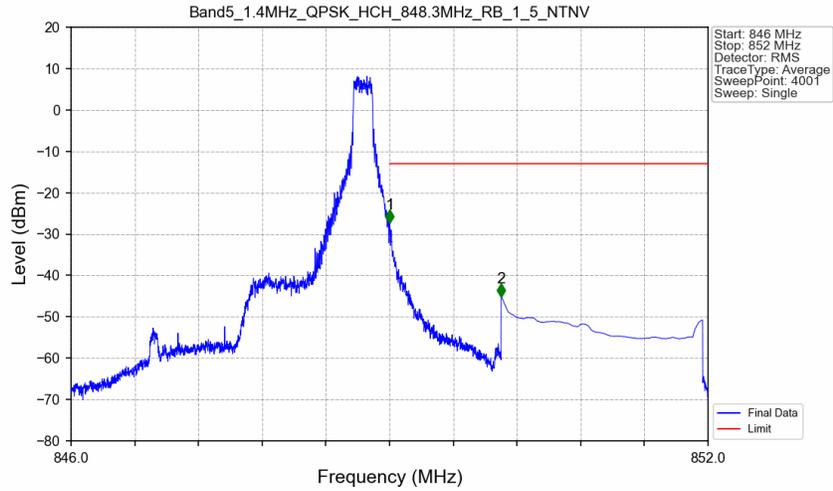
Band5\_1.4MHz\_QPSK\_MCH\_836.5MHz\_RB\_1\_0\_NTNV



Band5\_1.4MHz\_QPSK\_HCH\_848.3MHz\_RB\_1\_0\_NTNV

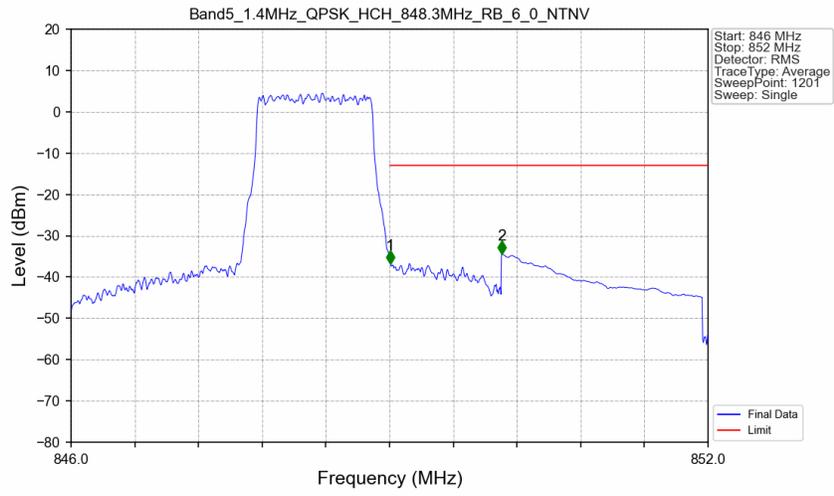


Band5\_1.4MHz\_QPSK\_HCH\_848.3MHz\_RB\_1\_5\_NTNV



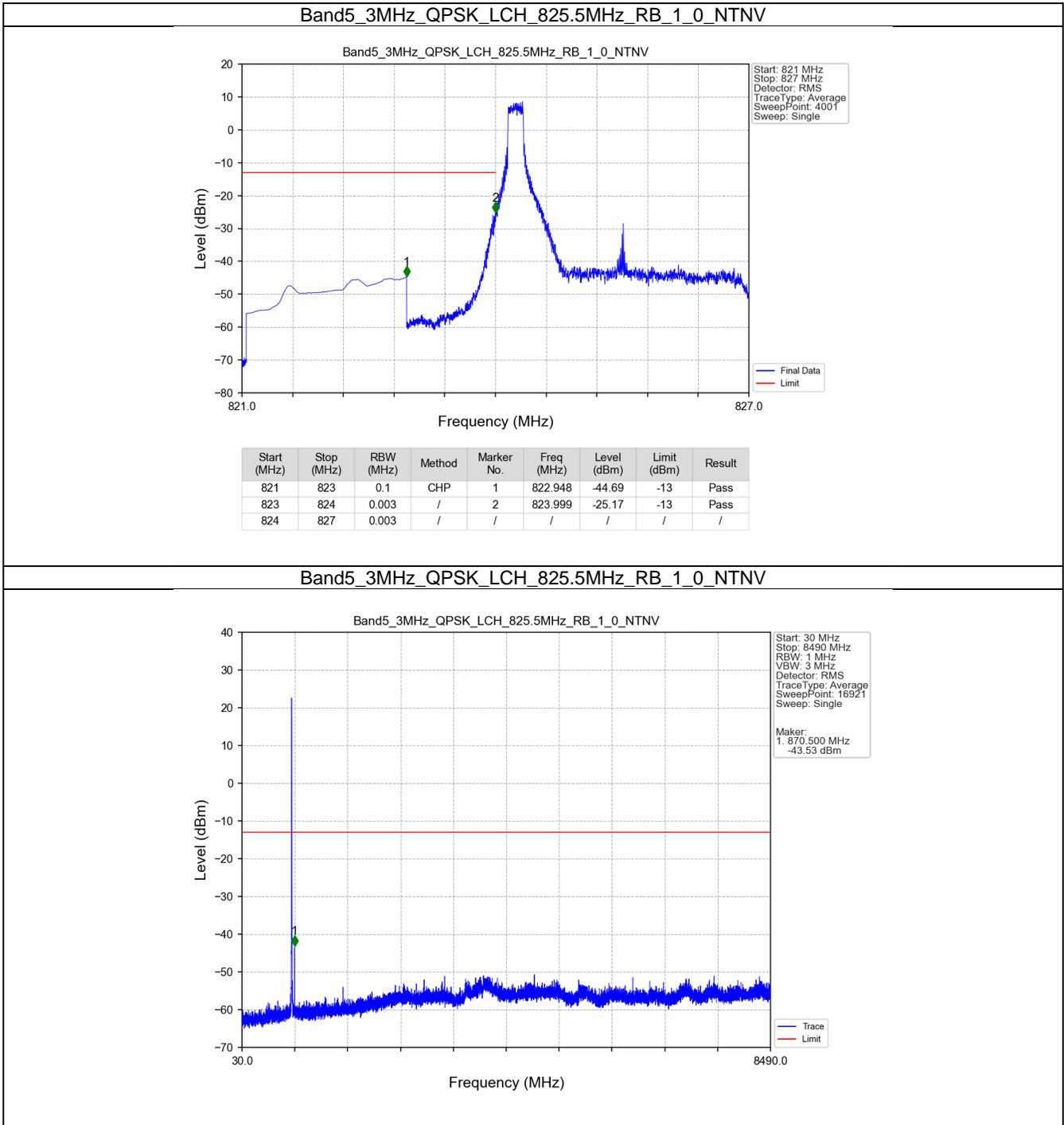
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.001	-27.39	-13	Pass
850	852	0.1	CHP	2	850.052	-45.19	-13	Pass

Band5\_1.4MHz\_QPSK\_HCH\_848.3MHz\_RB\_6\_0\_NTNV

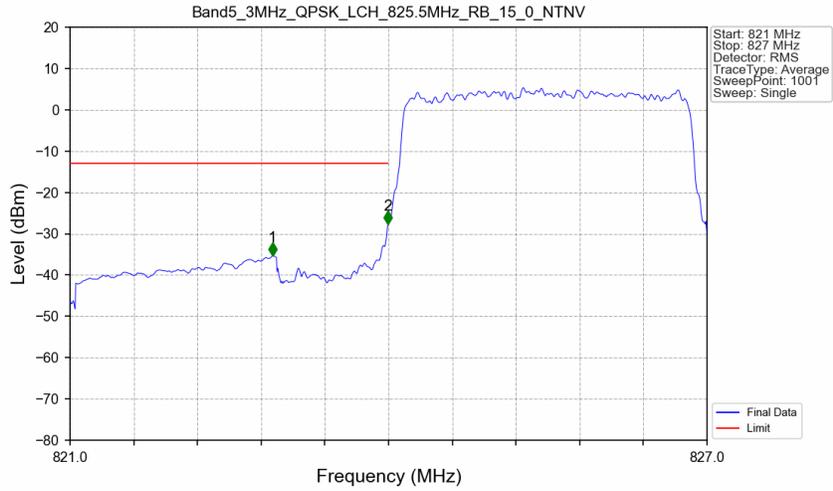


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.013	CHP	/	/	/	/	/
849	850	0.013	CHP	1	849.005	-36.69	-13	Pass
850	852	0.1	CHP	2	850.055	-34.39	-13	Pass

### 5.2.2 B5\_3MHz

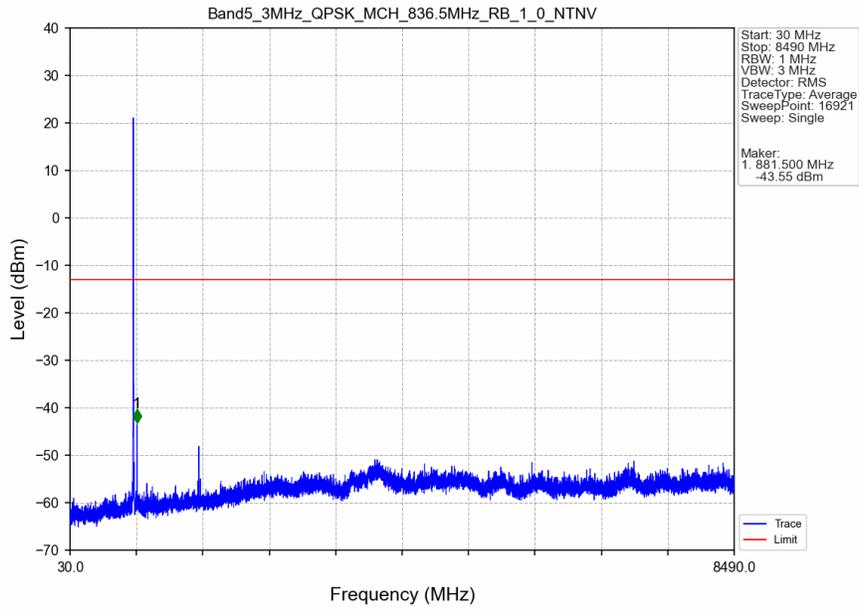


Band5\_3MHz\_QPSK\_LCH\_825.5MHz\_RB\_15\_0\_NTNV

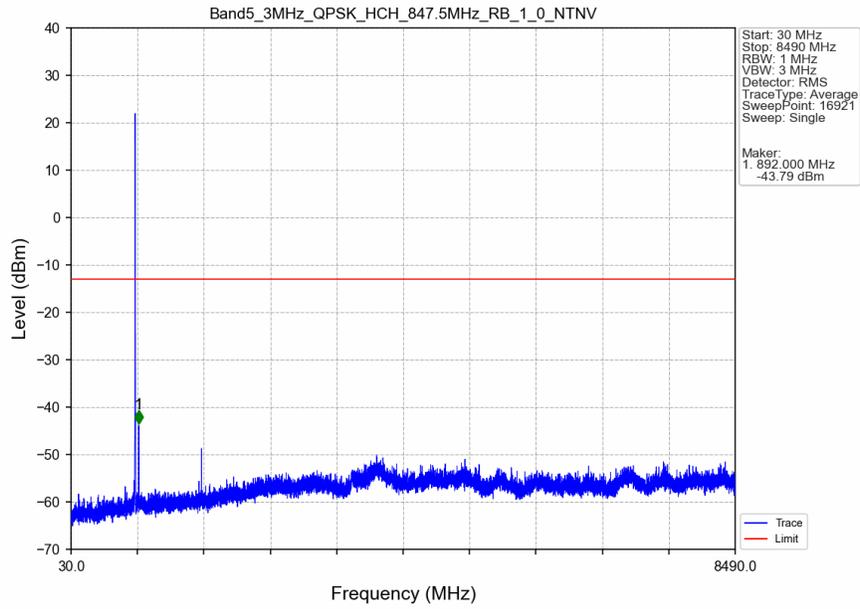


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	823	0.1	CHP	1	822.908	-35.34	-13	Pass
823	824	0.031	CHP	2	823.994	-27.69	-13	Pass
824	827	0.031	CHP	/	/	/	/	/

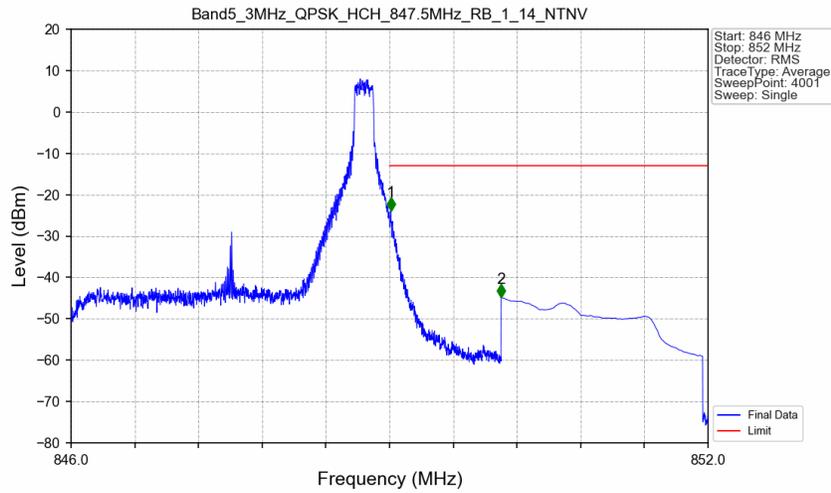
Band5\_3MHz\_QPSK\_MCH\_836.5MHz\_RB\_1\_0\_NTNV



Band5\_3MHz\_QPSK\_HCH\_847.5MHz\_RB\_1\_0\_NTNV

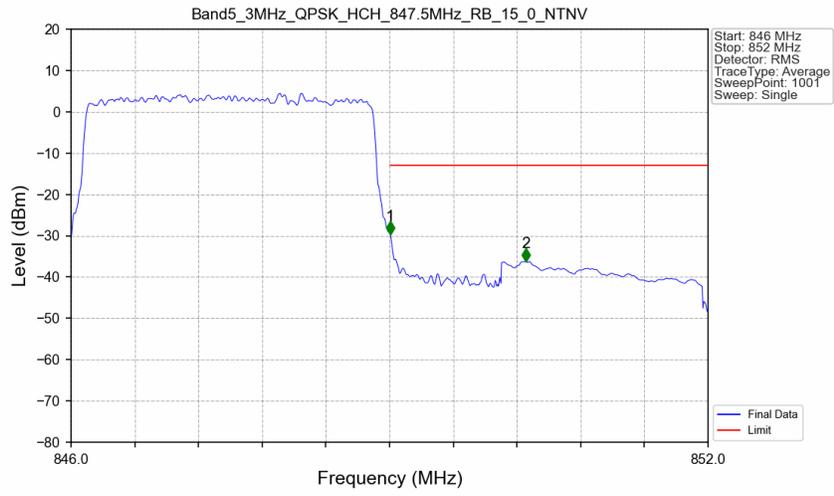


Band5\_3MHz\_QPSK\_HCH\_847.5MHz\_RB\_1\_14\_NTNV



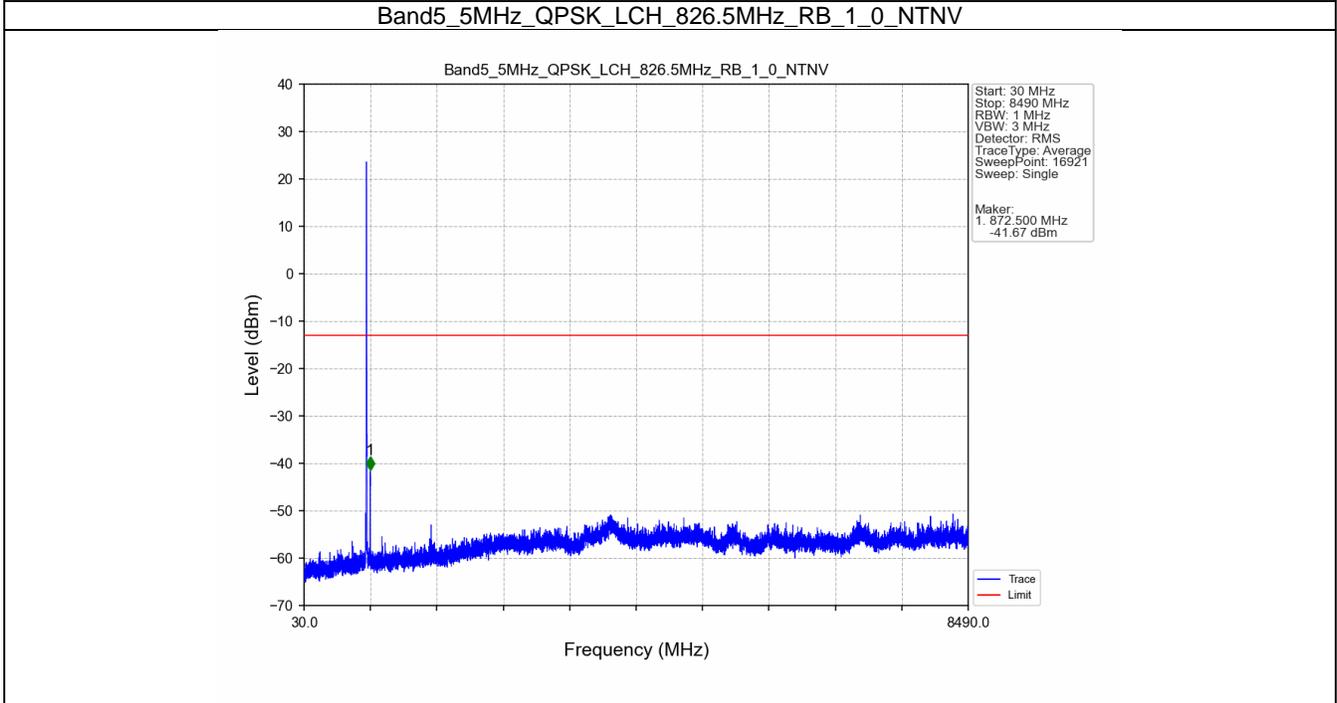
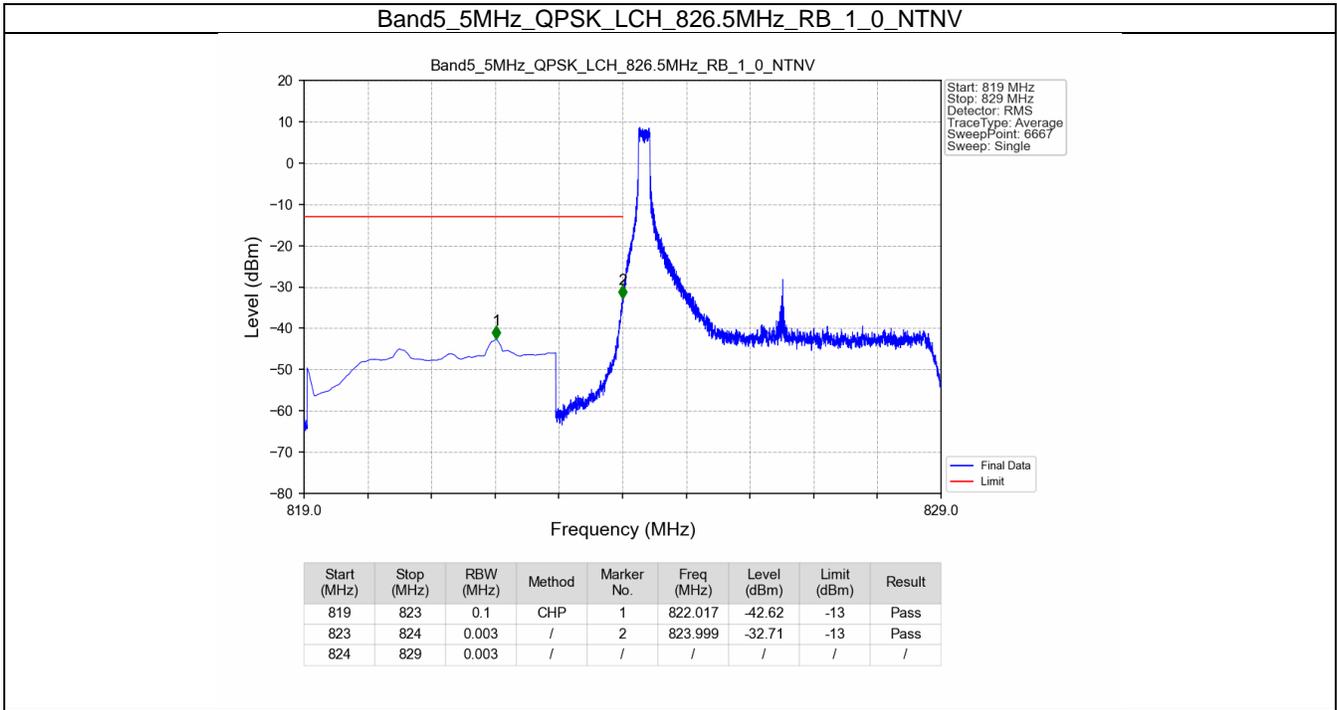
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.012	-23.93	-13	Pass
850	852	0.1	CHP	2	850.052	-44.86	-13	Pass

Band5\_3MHz\_QPSK\_HCH\_847.5MHz\_RB\_15\_0\_NTNV

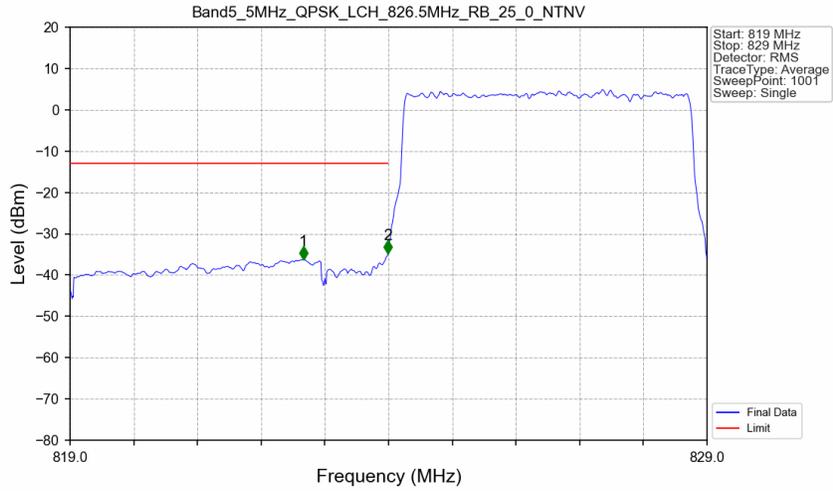


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
846	849	0.031	CHP	/	/	/	/	/
849	850	0.031	CHP	1	849.006	-29.59	-13	Pass
850	852	0.1	CHP	2	850.284	-36.27	-13	Pass

### 5.2.3 B5\_5MHz

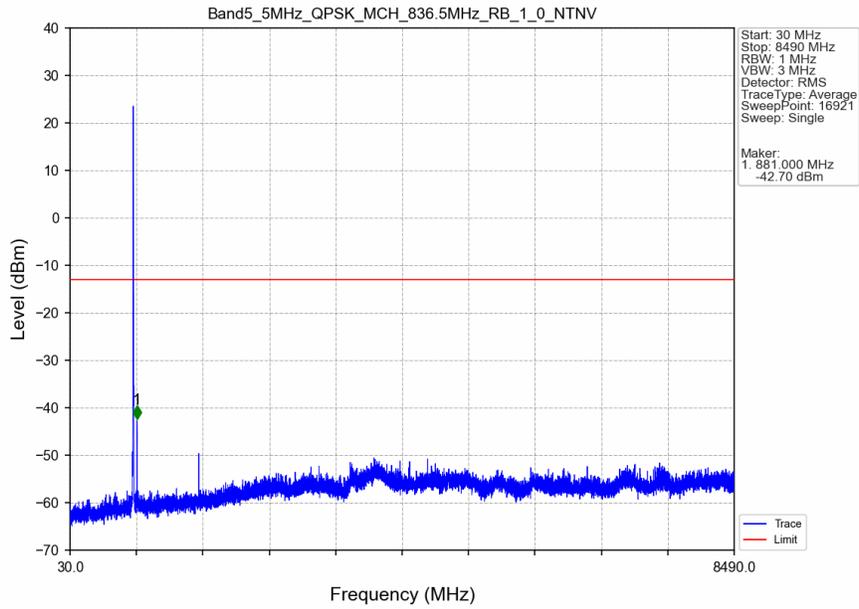


Band5\_5MHz\_QPSK\_LCH\_826.5MHz\_RB\_25\_0\_NTNV

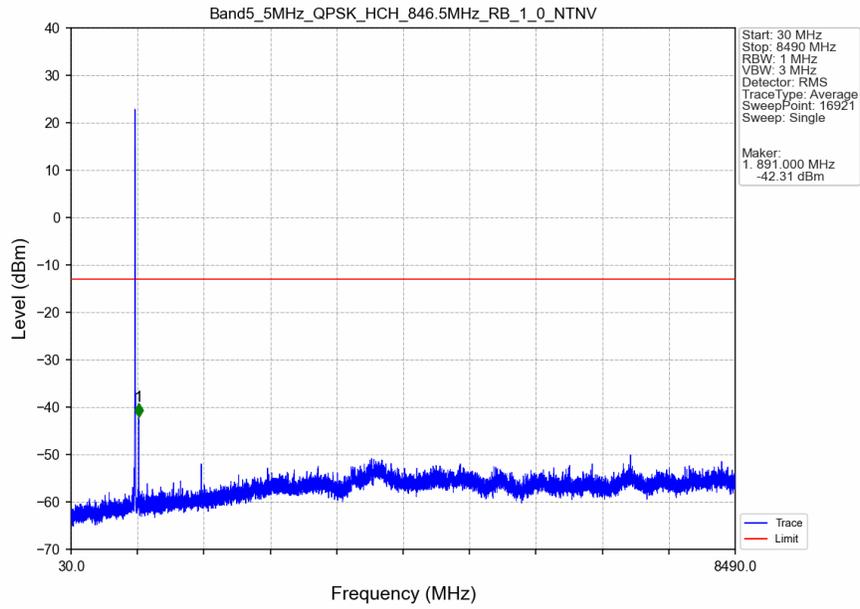


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	823	0.1	CHP	1	822.660	-36.19	-13	Pass
823	824	0.05	CHP	2	823.990	-34.72	-13	Pass
824	829	0.05	CHP	/	/	/	/	/

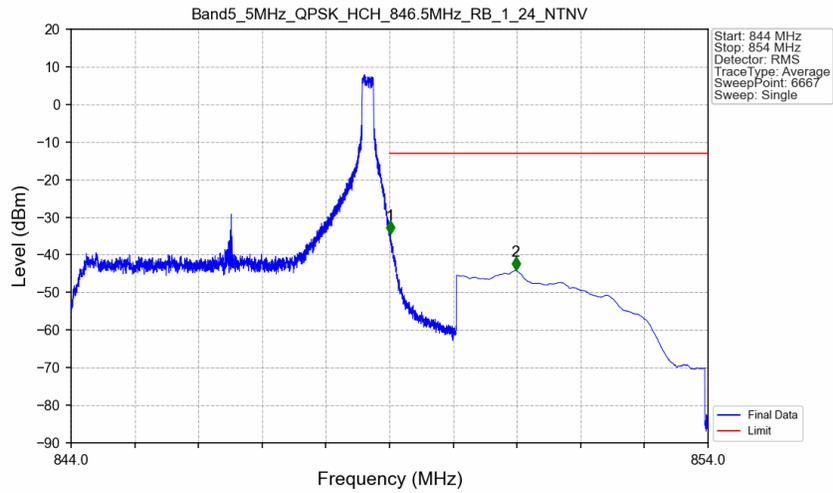
Band5\_5MHz\_QPSK\_MCH\_836.5MHz\_RB\_1\_0\_NTNV



Band5\_5MHz\_QPSK\_HCH\_846.5MHz\_RB\_1\_0\_NTNV

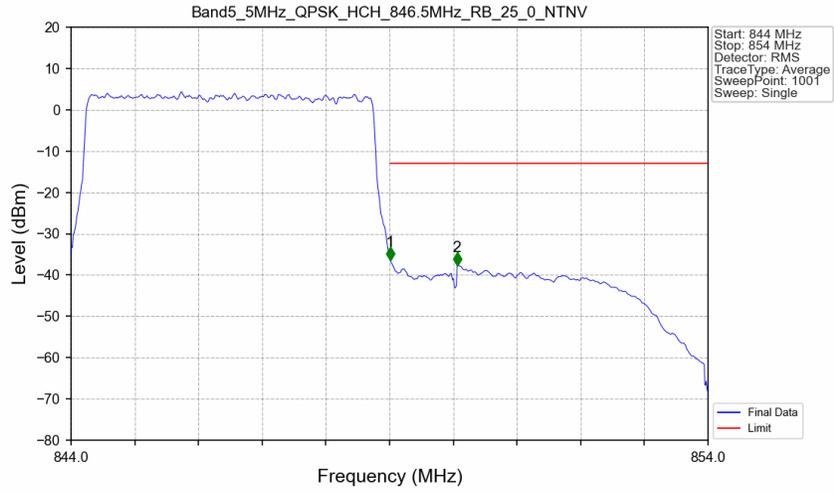


Band5\_5MHz\_QPSK\_HCH\_846.5MHz\_RB\_1\_24\_NTNV



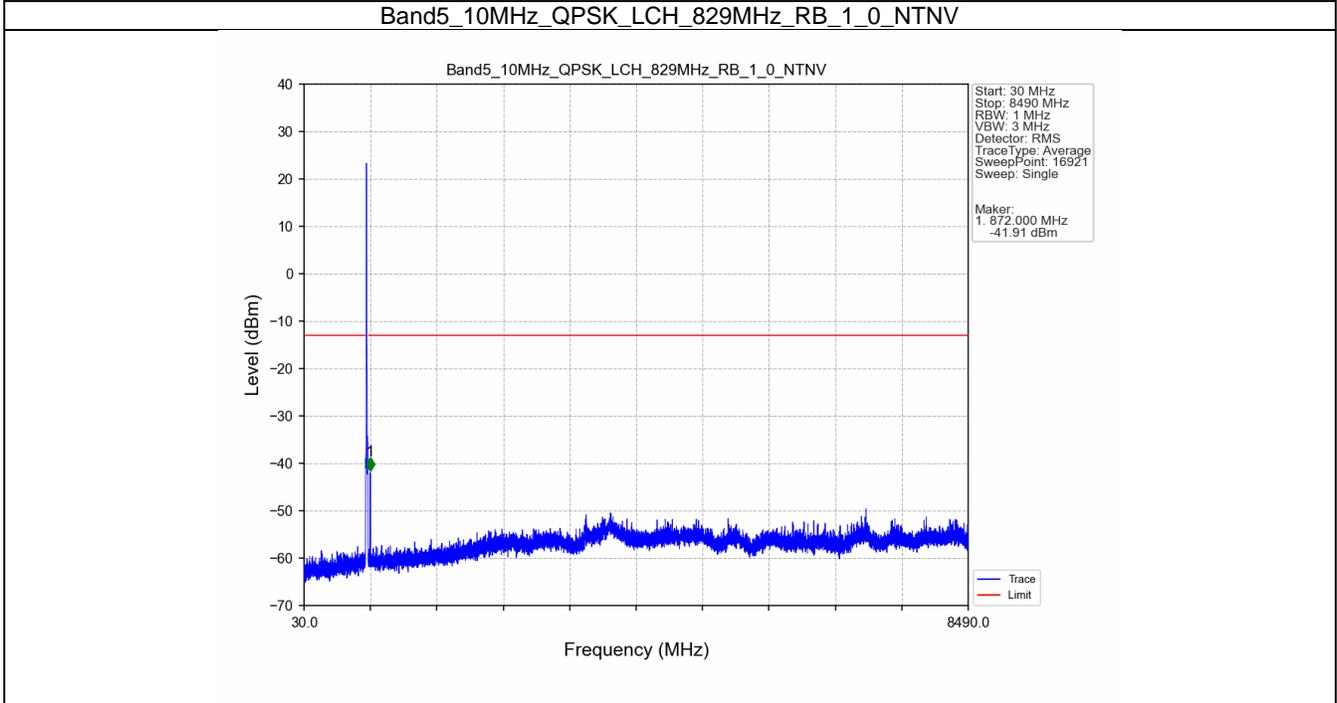
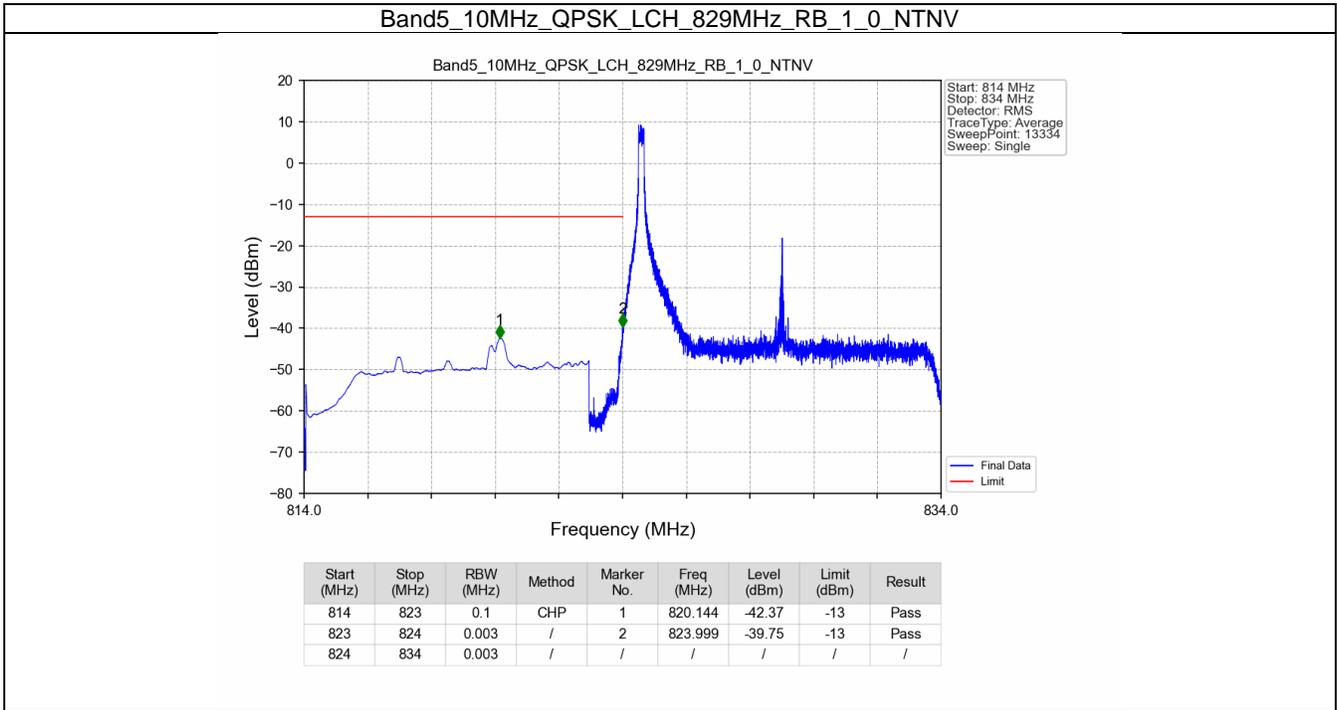
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
844	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.012	-34.43	-13	Pass
850	854	0.1	CHP	2	850.980	-44.14	-13	Pass

Band5\_5MHz\_QPSK\_HCH\_846.5MHz\_RB\_25\_0\_NTNV

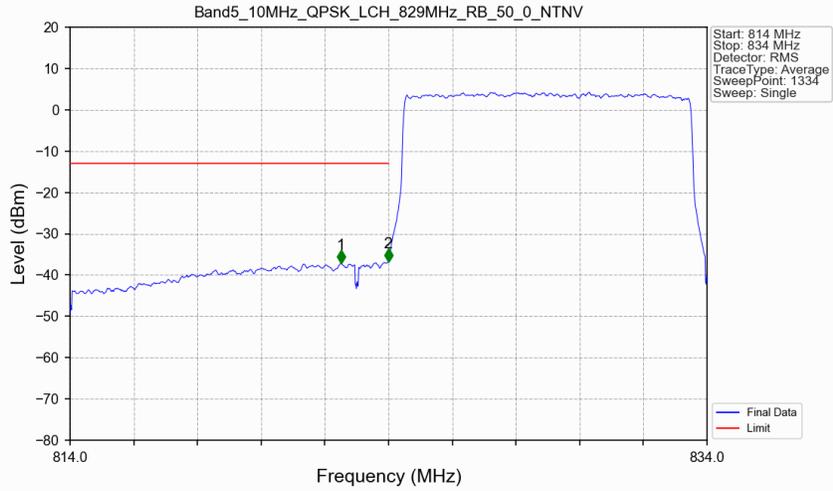


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
844	849	0.05	CHP	/	/	/	/	/
849	850	0.05	CHP	1	849.010	-36.36	-13	Pass
850	854	0.1	CHP	2	850.060	-37.62	-13	Pass

### 5.2.4 B5\_10MHz

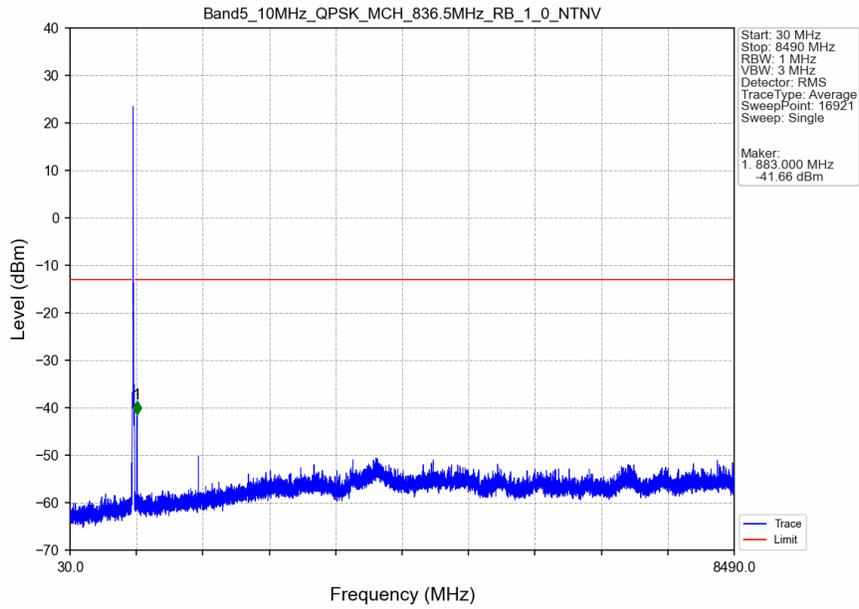


Band5\_10MHz\_QPSK\_LCH\_829MHz\_RB\_50\_0\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
814	823	0.1	CHP	1	822.507	-37.10	-13	Pass
823	824	0.099	CHP	2	823.992	-36.79	-13	Pass
824	834	0.099	CHP	/	/	/	/	/

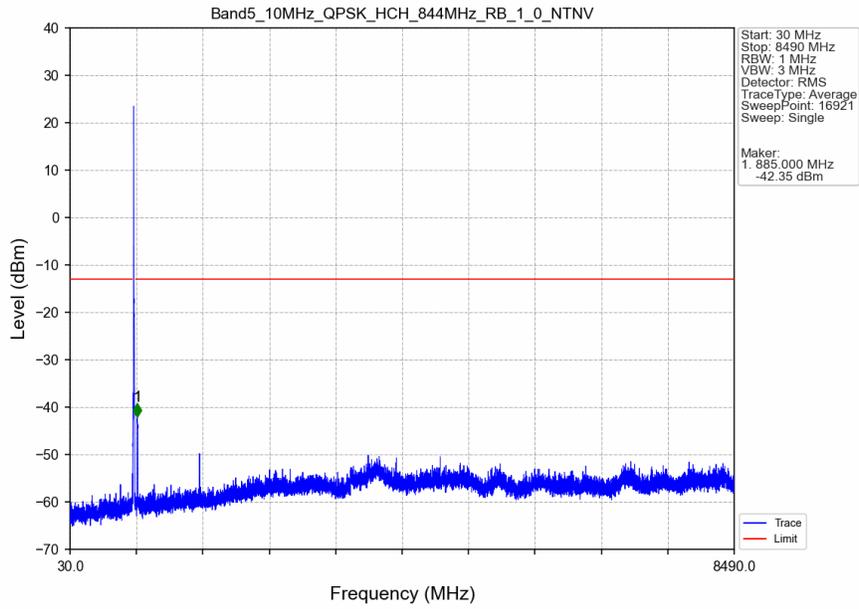
Band5\_10MHz\_QPSK\_MCH\_836.5MHz\_RB\_1\_0\_NTNV



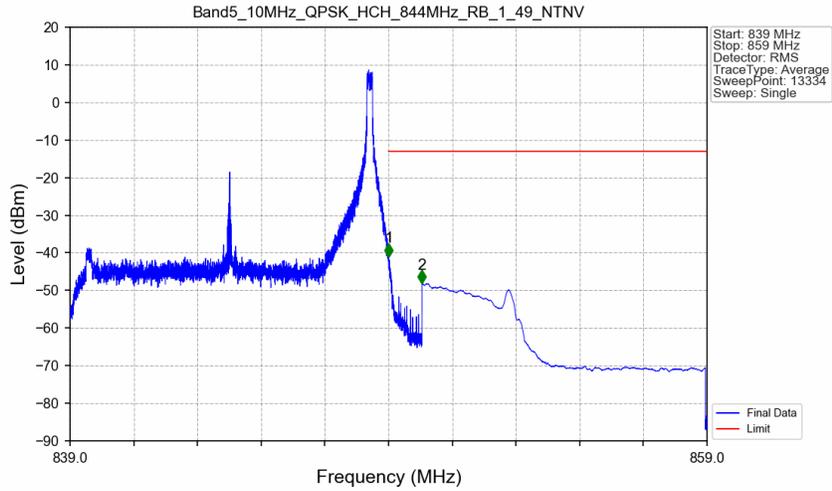
Start: 30 MHz  
 Stop: 8490 MHz  
 RBW: 1 MHz  
 VBW: 3 MHz  
 Detector: RMS  
 Trace Type: Average  
 Sweep Point: 16921  
 Sweep: Single

Marker:  
 1: 836.500 MHz  
 -41.66 dBm

Band5\_10MHz\_QPSK\_HCH\_844MHz\_RB\_1\_0\_NTNV

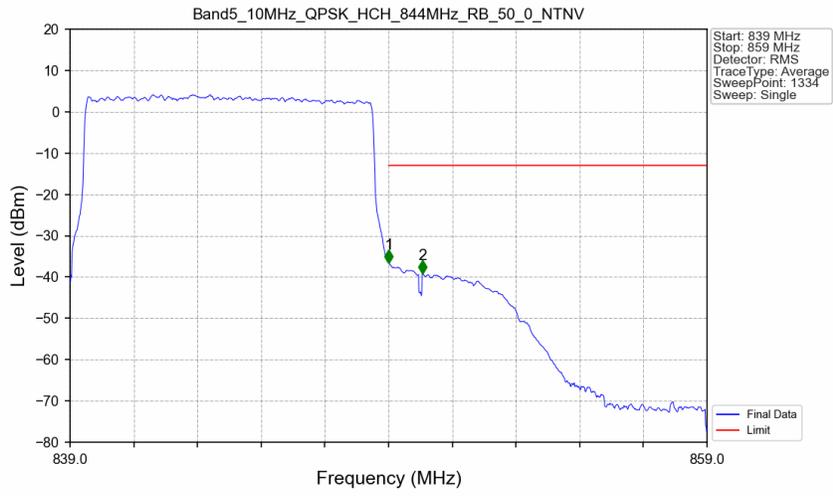


Band5\_10MHz\_QPSK\_HCH\_844MHz\_RB\_1\_49\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
839	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.002	-40.95	-13	Pass
850	859	0.1	CHP	2	850.051	-48.11	-13	Pass

Band5\_10MHz\_QPSK\_HCH\_844MHz\_RB\_50\_0\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
839	849	0.099	CHP	/	/	/	/	/
849	850	0.099	CHP	1	849.008	-36.58	-13	Pass
850	859	0.1	CHP	2	850.058	-39.16	-13	Pass