

# 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	23.92	-0.71	21.06	<=38.45	Pass		
			2	23.96	-0.71	21.10	<=38.45	Pass		
			5	23.91	-0.71	21.05	<=38.45	Pass		
		3	0	23.97	-0.71	21.11	<=38.45	Pass		
			2	23.97	-0.71	21.11	<=38.45	Pass		
			3	23.96	-0.71	21.10	<=38.45	Pass		
		6	0	23.04	-0.71	20.18	<=38.45	Pass		
		836.5	1	0	23.85	-0.71	20.99	<=38.45	Pass	
				2	23.74	-0.71	20.88	<=38.45	Pass	
	5			23.45	-0.71	20.59	<=38.45	Pass		
	3		0	23.48	-0.71	20.62	<=38.45	Pass		
			2	23.50	-0.71	20.64	<=38.45	Pass		
			3	23.45	-0.71	20.59	<=38.45	Pass		
	6		0	22.55	-0.71	19.69	<=38.45	Pass		
	848.3		1	0	23.31	-0.71	20.45	<=38.45	Pass	
				2	23.34	-0.71	20.48	<=38.45	Pass	
		5		23.26	-0.71	20.40	<=38.45	Pass		
		3	0	23.44	-0.71	20.58	<=38.45	Pass		
			2	23.44	-0.71	20.58	<=38.45	Pass		
			3	23.41	-0.71	20.55	<=38.45	Pass		
		6	0	22.52	-0.71	19.66	<=38.45	Pass		
		16QAM	824.7	1	0	22.85	-0.71	19.99	<=38.45	Pass
					2	22.89	-0.71	20.03	<=38.45	Pass
	5				22.84	-0.71	19.98	<=38.45	Pass	
3	0			22.94	-0.71	20.08	<=38.45	Pass		
	2			22.95	-0.71	20.09	<=38.45	Pass		
	3			22.91	-0.71	20.05	<=38.45	Pass		
6	0			21.92	-0.71	19.06	<=38.45	Pass		
836.5	1			0	22.45	-0.71	19.59	<=38.45	Pass	
				2	22.56	-0.71	19.70	<=38.45	Pass	
			5	22.48	-0.71	19.62	<=38.45	Pass		
	3		0	22.43	-0.71	19.57	<=38.45	Pass		
			2	22.47	-0.71	19.61	<=38.45	Pass		
			3	22.47	-0.71	19.61	<=38.45	Pass		
	6		0	21.58	-0.71	18.72	<=38.45	Pass		
	848.3		1	0	22.35	-0.71	19.49	<=38.45	Pass	
				2	22.34	-0.71	19.48	<=38.45	Pass	
5				22.25	-0.71	19.39	<=38.45	Pass		
3			0	22.59	-0.71	19.73	<=38.45	Pass		
			2	22.61	-0.71	19.75	<=38.45	Pass		
			3	22.61	-0.71	19.75	<=38.45	Pass		
6			0	21.51	-0.71	18.65	<=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	23.71	-0.71	20.85	<=38.45	Pass		
			7	23.40	-0.71	20.54	<=38.45	Pass		
			14	23.22	-0.71	20.36	<=38.45	Pass		
		8	0	22.43	-0.71	19.57	<=38.45	Pass		
			4	22.45	-0.71	19.59	<=38.45	Pass		
			7	22.38	-0.71	19.52	<=38.45	Pass		
		15	0	22.37	-0.71	19.51	<=38.45	Pass		
		836.5	1	0	23.22	-0.71	20.36	<=38.45	Pass	
				7	23.36	-0.71	20.50	<=38.45	Pass	
	14			23.24	-0.71	20.38	<=38.45	Pass		
	8		0	22.47	-0.71	19.61	<=38.45	Pass		
			4	22.55	-0.71	19.69	<=38.45	Pass		
			7	22.44	-0.71	19.58	<=38.45	Pass		
	15		0	22.45	-0.71	19.59	<=38.45	Pass		
	847.5		1	0	23.20	-0.71	20.34	<=38.45	Pass	
				7	23.40	-0.71	20.54	<=38.45	Pass	
		14		23.23	-0.71	20.37	<=38.45	Pass		
		8	0	22.48	-0.71	19.62	<=38.45	Pass		
			4	22.48	-0.71	19.62	<=38.45	Pass		
			7	22.43	-0.71	19.57	<=38.45	Pass		
		15	0	22.41	-0.71	19.55	<=38.45	Pass		
		16QAM	825.5	1	0	22.34	-0.71	19.48	<=38.45	Pass
					7	22.47	-0.71	19.61	<=38.45	Pass
	14				22.37	-0.71	19.51	<=38.45	Pass	
8	0			21.38	-0.71	18.52	<=38.45	Pass		
	4			21.42	-0.71	18.56	<=38.45	Pass		
	7			21.35	-0.71	18.49	<=38.45	Pass		
15	0			21.34	-0.71	18.48	<=38.45	Pass		
836.5	1			0	22.86	-0.71	20.00	<=38.45	Pass	
				7	22.95	-0.71	20.09	<=38.45	Pass	
			14	22.81	-0.71	19.95	<=38.45	Pass		
	8		0	21.60	-0.71	18.74	<=38.45	Pass		
			4	21.69	-0.71	18.83	<=38.45	Pass		
			7	21.63	-0.71	18.77	<=38.45	Pass		
	15		0	21.48	-0.71	18.62	<=38.45	Pass		
	847.5		1	0	22.22	-0.71	19.36	<=38.45	Pass	
				7	22.40	-0.71	19.54	<=38.45	Pass	
14				22.28	-0.71	19.42	<=38.45	Pass		
8			0	21.52	-0.71	18.66	<=38.45	Pass		
			4	21.60	-0.71	18.74	<=38.45	Pass		
			7	21.48	-0.71	18.62	<=38.45	Pass		
15			0	21.44	-0.71	18.58	<=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	23.40	-0.71	20.54	<=38.45	Pass
			13	23.53	-0.71	20.67	<=38.45	Pass
			24	23.41	-0.71	20.55	<=38.45	Pass
		12	0	22.41	-0.71	19.55	<=38.45	Pass



16QAM	836.5	25	6	22.47	-0.71	19.61	<=38.45	Pass		
			13	22.38	-0.71	19.52	<=38.45	Pass		
			0	22.41	-0.71	19.55	<=38.45	Pass		
		1	12	0	23.51	-0.71	20.65	<=38.45	Pass	
				13	23.61	-0.71	20.75	<=38.45	Pass	
				24	23.52	-0.71	20.66	<=38.45	Pass	
		25	1	0	22.43	-0.71	19.57	<=38.45	Pass	
				6	22.54	-0.71	19.68	<=38.45	Pass	
				13	22.56	-0.71	19.70	<=38.45	Pass	
		846.5	25	1	0	22.50	-0.71	19.64	<=38.45	Pass
					0	23.45	-0.71	20.59	<=38.45	Pass
					13	23.61	-0.71	20.75	<=38.45	Pass
	1		12	24	23.46	-0.71	20.60	<=38.45	Pass	
				0	22.50	-0.71	19.64	<=38.45	Pass	
				6	22.53	-0.71	19.67	<=38.45	Pass	
	25		1	13	22.55	-0.71	19.69	<=38.45	Pass	
				0	22.54	-0.71	19.68	<=38.45	Pass	
				0	22.26	-0.71	19.40	<=38.45	Pass	
	826.5		25	1	13	22.37	-0.71	19.51	<=38.45	Pass
					24	22.26	-0.71	19.40	<=38.45	Pass
					0	21.43	-0.71	18.57	<=38.45	Pass
		1	12	6	21.44	-0.71	18.58	<=38.45	Pass	
				13	21.39	-0.71	18.53	<=38.45	Pass	
				0	21.46	-0.71	18.60	<=38.45	Pass	
836.5		25	1	0	22.58	-0.71	19.72	<=38.45	Pass	
				13	22.66	-0.71	19.80	<=38.45	Pass	
				24	22.60	-0.71	19.74	<=38.45	Pass	
		1	12	0	21.39	-0.71	18.53	<=38.45	Pass	
				6	21.52	-0.71	18.66	<=38.45	Pass	
				13	21.52	-0.71	18.66	<=38.45	Pass	
	25	1	0	21.57	-0.71	18.71	<=38.45	Pass		
			0	22.70	-0.71	19.84	<=38.45	Pass		
			13	22.84	-0.71	19.98	<=38.45	Pass		
	846.5	25	1	24	22.70	-0.71	19.84	<=38.45	Pass	
				0	21.49	-0.71	18.63	<=38.45	Pass	
				6	21.58	-0.71	18.72	<=38.45	Pass	
1		12	13	21.57	-0.71	18.71	<=38.45	Pass		
			0	21.54	-0.71	18.68	<=38.45	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

### 1.1.4 B5\_10MHz\_ERP

Band: 5 / Bandwidth: 10MHz / NTNV									
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict	
		Size	Offset			Result	Limit		
QPSK	829	1	0	23.46	-0.71	20.60	<=38.45	Pass	
			25	23.47	-0.71	20.61	<=38.45	Pass	
			49	23.52	-0.71	20.66	<=38.45	Pass	
		25	0	22.50	-0.71	19.64	<=38.45	Pass	
			13	22.46	-0.71	19.60	<=38.45	Pass	
			25	22.49	-0.71	19.63	<=38.45	Pass	
	836.5	50	0	22.51	-0.71	19.65	<=38.45	Pass	
			1	0	23.51	-0.71	20.65	<=38.45	Pass
				25	23.59	-0.71	20.73	<=38.45	Pass
		49		23.60	-0.71	20.74	<=38.45	Pass	
		25	0	22.39	-0.71	19.53	<=38.45	Pass	



16QAM	844	50	13	22.56	-0.71	19.70	<=38.45	Pass	
			25	22.53	-0.71	19.67	<=38.45	Pass	
			0	22.55	-0.71	19.69	<=38.45	Pass	
		1	0	23.54	-0.71	20.68	<=38.45	Pass	
			25	23.62	-0.71	20.76	<=38.45	Pass	
			49	23.53	-0.71	20.67	<=38.45	Pass	
	25	0	22.65	-0.71	19.79	<=38.45	Pass		
		13	22.52	-0.71	19.66	<=38.45	Pass		
		25	22.52	-0.71	19.66	<=38.45	Pass		
	50	0	22.58	-0.71	19.72	<=38.45	Pass		
	16QAM	829	1	0	22.61	-0.71	19.75	<=38.45	Pass
				25	22.66	-0.71	19.80	<=38.45	Pass
				49	22.68	-0.71	19.82	<=38.45	Pass
			25	0	21.46	-0.71	18.60	<=38.45	Pass
				13	21.50	-0.71	18.64	<=38.45	Pass
25				21.50	-0.71	18.64	<=38.45	Pass	
50		0	21.48	-0.71	18.62	<=38.45	Pass		
836.5		1	0	23.08	-0.71	20.22	<=38.45	Pass	
			25	23.15	-0.71	20.29	<=38.45	Pass	
			49	23.05	-0.71	20.19	<=38.45	Pass	
		25	0	21.46	-0.71	18.60	<=38.45	Pass	
			13	21.66	-0.71	18.80	<=38.45	Pass	
			25	21.63	-0.71	18.77	<=38.45	Pass	
50		0	21.52	-0.71	18.66	<=38.45	Pass		
844		1	0	22.52	-0.71	19.66	<=38.45	Pass	
			25	22.60	-0.71	19.74	<=38.45	Pass	
			49	22.50	-0.71	19.64	<=38.45	Pass	
		25	0	21.72	-0.71	18.86	<=38.45	Pass	
	13		21.61	-0.71	18.75	<=38.45	Pass		
	25		21.62	-0.71	18.76	<=38.45	Pass		
	50	0	21.58	-0.71	18.72	<=38.45	Pass		

Note1: ERP=Conducted Power+Antenna Gain-2.15

## 2. Frequency Stability

### 2.1 Test Result

#### 2.1.1 B5\_1.4MHz

Band: 5 / 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	824.7	6	0	20	3.27	-10.114	-0.0123	-2.5 to 2.5	Pass			
					3.85	-8.712	-0.0106	-2.5 to 2.5	Pass			
					4.43	-9.155	-0.0111	-2.5 to 2.5	Pass			
				-30	3.85	-1.674	-0.0020	-2.5 to 2.5	Pass			
					-20	3.85	-1.860	-0.0023	-2.5 to 2.5	Pass		
				-10	3.85	5.436	0.0066	-2.5 to 2.5	Pass			
					0	3.85	5.536	0.0067	-2.5 to 2.5	Pass		
				10	3.85	12.002	0.0146	-2.5 to 2.5	Pass			
				30	3.85	-2.475	-0.0030	-2.5 to 2.5	Pass			
				40	3.85	-3.333	-0.0040	-2.5 to 2.5	Pass			
				50	3.85	-3.304	-0.0040	-2.5 to 2.5	Pass			
				836.5	6	0	20	3.27	-2.575	-0.0031	-2.5 to 2.5	Pass
								3.85	-9.141	-0.0109	-2.5 to 2.5	Pass



	848.3	6	0		4.43	5.178	0.0062	-2.5 to 2.5	Pass	
				-30	3.85	-0.730	-0.0009	-2.5 to 2.5	Pass	
				-20	3.85	-3.676	-0.0044	-2.5 to 2.5	Pass	
				-10	3.85	0.300	0.0004	-2.5 to 2.5	Pass	
				0	3.85	2.604	0.0031	-2.5 to 2.5	Pass	
				10	3.85	1.330	0.0016	-2.5 to 2.5	Pass	
				30	3.85	4.349	0.0052	-2.5 to 2.5	Pass	
				40	3.85	4.635	0.0055	-2.5 to 2.5	Pass	
				50	3.85	-8.926	-0.0107	-2.5 to 2.5	Pass	
	20	3.27	-9.885	-0.0117	-2.5 to 2.5	Pass				
		3.85	-1.130	-0.0013	-2.5 to 2.5	Pass				
		4.43	-3.161	-0.0037	-2.5 to 2.5	Pass				
		-30	3.85	4.420	0.0052	-2.5 to 2.5	Pass			
		-20	3.85	-3.276	-0.0039	-2.5 to 2.5	Pass			
		-10	3.85	-5.407	-0.0064	-2.5 to 2.5	Pass			
		0	3.85	-7.181	-0.0085	-2.5 to 2.5	Pass			
		10	3.85	-10.357	-0.0122	-2.5 to 2.5	Pass			
		30	3.85	-6.895	-0.0081	-2.5 to 2.5	Pass			
16QAM	824.7	6	0	20	3.27	1.402	0.0017	-2.5 to 2.5	Pass	
					3.85	-5.007	-0.0061	-2.5 to 2.5	Pass	
					4.43	-4.048	-0.0049	-2.5 to 2.5	Pass	
					-30	3.85	7.238	0.0088	-2.5 to 2.5	Pass
					-20	3.85	1.645	0.0020	-2.5 to 2.5	Pass
					-10	3.85	-4.706	-0.0057	-2.5 to 2.5	Pass
					0	3.85	-5.565	-0.0067	-2.5 to 2.5	Pass
					10	3.85	4.435	0.0054	-2.5 to 2.5	Pass
					30	3.85	-3.920	-0.0048	-2.5 to 2.5	Pass
	836.5	6	0	20	3.27	2.232	0.0027	-2.5 to 2.5	Pass	
					3.85	-0.486	-0.0006	-2.5 to 2.5	Pass	
					4.43	2.604	0.0031	-2.5 to 2.5	Pass	
					-30	3.85	2.074	0.0025	-2.5 to 2.5	Pass
					-20	3.85	-1.559	-0.0019	-2.5 to 2.5	Pass
					-10	3.85	-8.454	-0.0101	-2.5 to 2.5	Pass
					0	3.85	4.263	0.0051	-2.5 to 2.5	Pass
					10	3.85	-2.460	-0.0029	-2.5 to 2.5	Pass
					30	3.85	3.376	0.0040	-2.5 to 2.5	Pass
848.3	6	0	20	3.27	-3.390	-0.0040	-2.5 to 2.5	Pass		
				3.85	-7.911	-0.0093	-2.5 to 2.5	Pass		
				4.43	2.289	0.0027	-2.5 to 2.5	Pass		
				-30	3.85	2.947	0.0035	-2.5 to 2.5	Pass	
				-20	3.85	-5.078	-0.0060	-2.5 to 2.5	Pass	
				-10	3.85	-0.701	-0.0008	-2.5 to 2.5	Pass	
				0	3.85	-6.795	-0.0080	-2.5 to 2.5	Pass	
				10	3.85	-6.909	-0.0081	-2.5 to 2.5	Pass	
				30	3.85	3.119	0.0037	-2.5 to 2.5	Pass	
				40	3.85	4.292	0.0051	-2.5 to 2.5	Pass	
					50	3.85	4.878	0.0058	-2.5 to 2.5	Pass

2.1.2 B5\_3MHz



Band: 5 / Bandwidth: 3MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	825.5	15	0	20	3.27	4.134	0.0050	-2.5 to 2.5	Pass
					3.85	-3.805	-0.0046	-2.5 to 2.5	Pass
					4.43	2.761	0.0033	-2.5 to 2.5	Pass
				-30	3.85	-5.164	-0.0063	-2.5 to 2.5	Pass
				-20	3.85	-4.663	-0.0056	-2.5 to 2.5	Pass
				-10	3.85	-1.345	-0.0016	-2.5 to 2.5	Pass
				0	3.85	-3.262	-0.0040	-2.5 to 2.5	Pass
				10	3.85	3.791	0.0046	-2.5 to 2.5	Pass
				30	3.85	-3.562	-0.0043	-2.5 to 2.5	Pass
				40	3.85	-7.396	-0.0090	-2.5 to 2.5	Pass
	50	3.85	5.836	0.0071	-2.5 to 2.5	Pass			
	836.5	15	0	20	3.27	-4.563	-0.0055	-2.5 to 2.5	Pass
					3.85	-8.740	-0.0104	-2.5 to 2.5	Pass
					4.43	-0.372	-0.0004	-2.5 to 2.5	Pass
				-30	3.85	-2.689	-0.0032	-2.5 to 2.5	Pass
				-20	3.85	1.616	0.0019	-2.5 to 2.5	Pass
				-10	3.85	-9.799	-0.0117	-2.5 to 2.5	Pass
				0	3.85	0.172	0.0002	-2.5 to 2.5	Pass
				10	3.85	-1.016	-0.0012	-2.5 to 2.5	Pass
				30	3.85	-12.660	-0.0151	-2.5 to 2.5	Pass
				40	3.85	0.215	0.0003	-2.5 to 2.5	Pass
	50	3.85	2.146	0.0026	-2.5 to 2.5	Pass			
	847.5	15	0	20	3.27	-1.860	-0.0022	-2.5 to 2.5	Pass
					3.85	-3.705	-0.0044	-2.5 to 2.5	Pass
					4.43	4.063	0.0048	-2.5 to 2.5	Pass
				-30	3.85	-10.443	-0.0123	-2.5 to 2.5	Pass
				-20	3.85	-5.164	-0.0061	-2.5 to 2.5	Pass
				-10	3.85	-1.588	-0.0019	-2.5 to 2.5	Pass
				0	3.85	-2.604	-0.0031	-2.5 to 2.5	Pass
				10	3.85	2.518	0.0030	-2.5 to 2.5	Pass
30				3.85	0.286	0.0003	-2.5 to 2.5	Pass	
40				3.85	-6.995	-0.0083	-2.5 to 2.5	Pass	
50	3.85	0.644	0.0008	-2.5 to 2.5	Pass				
16QAM	825.5	15	0	20	3.27	0.873	0.0011	-2.5 to 2.5	Pass
					3.85	-1.245	-0.0015	-2.5 to 2.5	Pass
					4.43	-6.552	-0.0079	-2.5 to 2.5	Pass
				-30	3.85	-0.544	-0.0007	-2.5 to 2.5	Pass
				-20	3.85	3.963	0.0048	-2.5 to 2.5	Pass
				-10	3.85	-0.157	-0.0002	-2.5 to 2.5	Pass
				0	3.85	-8.240	-0.0100	-2.5 to 2.5	Pass
				10	3.85	-9.928	-0.0120	-2.5 to 2.5	Pass
				30	3.85	-4.749	-0.0058	-2.5 to 2.5	Pass
				40	3.85	-9.112	-0.0110	-2.5 to 2.5	Pass
	50	3.85	-5.450	-0.0066	-2.5 to 2.5	Pass			
	836.5	15	0	20	3.27	-9.584	-0.0115	-2.5 to 2.5	Pass
					3.85	-8.554	-0.0102	-2.5 to 2.5	Pass
					4.43	-3.405	-0.0041	-2.5 to 2.5	Pass
				-30	3.85	-9.284	-0.0111	-2.5 to 2.5	Pass
				-20	3.85	2.475	0.0030	-2.5 to 2.5	Pass
				-10	3.85	-5.908	-0.0071	-2.5 to 2.5	Pass
				0	3.85	-2.346	-0.0028	-2.5 to 2.5	Pass
				10	3.85	-0.601	-0.0007	-2.5 to 2.5	Pass
				30	3.85	3.204	0.0038	-2.5 to 2.5	Pass
40				3.85	-7.954	-0.0095	-2.5 to 2.5	Pass	
50	3.85	1.516	0.0018	-2.5 to 2.5	Pass				



	847.5	15	0	20	3.27	-0.329	-0.0004	-2.5 to 2.5	Pass
					3.85	4.120	0.0049	-2.5 to 2.5	Pass
					4.43	-2.775	-0.0033	-2.5 to 2.5	Pass
				-30	3.85	-14.920	-0.0176	-2.5 to 2.5	Pass
					-20	3.85	-12.231	-0.0144	-2.5 to 2.5
				-10	3.85	-13.504	-0.0159	-2.5 to 2.5	Pass
					0	3.85	-7.396	-0.0087	-2.5 to 2.5
				10	3.85	-7.024	-0.0083	-2.5 to 2.5	Pass
				30	3.85	2.789	0.0033	-2.5 to 2.5	Pass
				40	3.85	-6.266	-0.0074	-2.5 to 2.5	Pass
50	3.85	-2.575	-0.0030	-2.5 to 2.5	Pass				

2.1.3 B5\_5MHz

Band: 5 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	826.5	25	0	20	3.27	1.101	0.0013	-2.5 to 2.5	Pass
					3.85	-1.974	-0.0024	-2.5 to 2.5	Pass
					4.43	-2.775	-0.0034	-2.5 to 2.5	Pass
				-30	3.85	1.745	0.0021	-2.5 to 2.5	Pass
					-20	3.85	-5.608	-0.0068	-2.5 to 2.5
				-10	3.85	-10.085	-0.0122	-2.5 to 2.5	Pass
					0	3.85	0.415	0.0005	-2.5 to 2.5
				10	3.85	-1.545	-0.0019	-2.5 to 2.5	Pass
				30	3.85	-0.472	-0.0006	-2.5 to 2.5	Pass
				40	3.85	-4.964	-0.0060	-2.5 to 2.5	Pass
	50	3.85	-5.708	-0.0069	-2.5 to 2.5	Pass			
	836.5	25	0	20	3.27	-0.286	-0.0003	-2.5 to 2.5	Pass
					3.85	-3.762	-0.0045	-2.5 to 2.5	Pass
					4.43	-2.017	-0.0024	-2.5 to 2.5	Pass
				-30	3.85	2.203	0.0026	-2.5 to 2.5	Pass
					-20	3.85	-2.975	-0.0036	-2.5 to 2.5
				-10	3.85	-4.349	-0.0052	-2.5 to 2.5	Pass
					0	3.85	-1.001	-0.0012	-2.5 to 2.5
				10	3.85	-6.566	-0.0078	-2.5 to 2.5	Pass
				30	3.85	-0.443	-0.0005	-2.5 to 2.5	Pass
				40	3.85	0.200	0.0002	-2.5 to 2.5	Pass
	50	3.85	-6.595	-0.0079	-2.5 to 2.5	Pass			
	846.5	25	0	20	3.27	-0.014	0.0000	-2.5 to 2.5	Pass
					3.85	-8.569	-0.0101	-2.5 to 2.5	Pass
					4.43	-1.702	-0.0020	-2.5 to 2.5	Pass
				-30	3.85	-8.082	-0.0095	-2.5 to 2.5	Pass
					-20	3.85	2.503	0.0030	-2.5 to 2.5
				-10	3.85	2.789	0.0033	-2.5 to 2.5	Pass
					0	3.85	-4.406	-0.0052	-2.5 to 2.5
				10	3.85	0.329	0.0004	-2.5 to 2.5	Pass
30				3.85	-3.562	-0.0042	-2.5 to 2.5	Pass	
40				3.85	-6.709	-0.0079	-2.5 to 2.5	Pass	
50	3.85	-0.873	-0.0010	-2.5 to 2.5	Pass				
16QAM	826.5	25	0	20	3.27	-4.792	-0.0058	-2.5 to 2.5	Pass
					3.85	0.572	0.0007	-2.5 to 2.5	Pass
					4.43	-6.108	-0.0074	-2.5 to 2.5	Pass
				-30	3.85	-4.935	-0.0060	-2.5 to 2.5	Pass
					-20	3.85	-3.233	-0.0039	-2.5 to 2.5
-10	3.85	1.202	0.0015	-2.5 to 2.5	Pass				



	836.5	25	0	0	3.85	-2.947	-0.0036	-2.5 to 2.5	Pass			
				10	3.85	-4.849	-0.0059	-2.5 to 2.5	Pass			
				30	3.85	0.715	0.0009	-2.5 to 2.5	Pass			
				40	3.85	-5.779	-0.0070	-2.5 to 2.5	Pass			
				50	3.85	-2.961	-0.0036	-2.5 to 2.5	Pass			
	846.5	25	0	20	3.27	-7.052	-0.0084	-2.5 to 2.5	Pass			
					3.85	-1.059	-0.0013	-2.5 to 2.5	Pass			
					4.43	4.392	0.0053	-2.5 to 2.5	Pass			
				-30	3.85	-0.186	-0.0002	-2.5 to 2.5	Pass			
				-20	3.85	-4.792	-0.0057	-2.5 to 2.5	Pass			
				-10	3.85	-5.364	-0.0064	-2.5 to 2.5	Pass			
				0	3.85	-6.652	-0.0080	-2.5 to 2.5	Pass			
				10	3.85	2.232	0.0027	-2.5 to 2.5	Pass			
				30	3.85	-4.992	-0.0060	-2.5 to 2.5	Pass			
				40	3.85	-7.839	-0.0094	-2.5 to 2.5	Pass			
				50	3.85	-2.203	-0.0026	-2.5 to 2.5	Pass			
				846.5	25	0	20	3.27	-1.259	-0.0015	-2.5 to 2.5	Pass
								3.85	2.346	0.0028	-2.5 to 2.5	Pass
								4.43	1.116	0.0013	-2.5 to 2.5	Pass
							-30	3.85	1.488	0.0018	-2.5 to 2.5	Pass
-20	3.85	-6.094	-0.0072				-2.5 to 2.5	Pass				
-10	3.85	-10.428	-0.0123				-2.5 to 2.5	Pass				
0	3.85	-1.130	-0.0013				-2.5 to 2.5	Pass				
10	3.85	-0.587	-0.0007				-2.5 to 2.5	Pass				
30	3.85	-5.393	-0.0064				-2.5 to 2.5	Pass				
40	3.85	-1.931	-0.0023	-2.5 to 2.5	Pass							
50	3.85	-2.174	-0.0026	-2.5 to 2.5	Pass							

2.1.4 B5\_10MHz

Band: 5 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	829	50	0	20	3.27	-0.587	-0.0007	-2.5 to 2.5	Pass
					3.85	-0.701	-0.0008	-2.5 to 2.5	Pass
					4.43	-1.187	-0.0014	-2.5 to 2.5	Pass
				-30	3.85	-4.807	-0.0058	-2.5 to 2.5	Pass
				-20	3.85	-1.645	-0.0020	-2.5 to 2.5	Pass
				-10	3.85	-1.845	-0.0022	-2.5 to 2.5	Pass
				0	3.85	-2.117	-0.0026	-2.5 to 2.5	Pass
				10	3.85	-5.007	-0.0060	-2.5 to 2.5	Pass
				30	3.85	0.629	0.0008	-2.5 to 2.5	Pass
				40	3.85	-6.952	-0.0084	-2.5 to 2.5	Pass
	50	3.85	-1.245	-0.0015	-2.5 to 2.5	Pass			
	836.5	50	0	20	3.27	-5.693	-0.0068	-2.5 to 2.5	Pass
					3.85	-4.034	-0.0048	-2.5 to 2.5	Pass
					4.43	-5.593	-0.0067	-2.5 to 2.5	Pass
				-30	3.85	-4.663	-0.0056	-2.5 to 2.5	Pass
				-20	3.85	-5.693	-0.0068	-2.5 to 2.5	Pass
				-10	3.85	-1.287	-0.0015	-2.5 to 2.5	Pass
				0	3.85	-2.089	-0.0025	-2.5 to 2.5	Pass
				10	3.85	-3.347	-0.0040	-2.5 to 2.5	Pass
				30	3.85	-3.948	-0.0047	-2.5 to 2.5	Pass
40	3.85	-3.090	-0.0037	-2.5 to 2.5	Pass				
50	3.85	-3.533	-0.0042	-2.5 to 2.5	Pass				
844	50	0	20	3.27	-3.562	-0.0042	-2.5 to 2.5	Pass	



					3.85	-2.718	-0.0032	-2.5 to 2.5	Pass
					4.43	-3.619	-0.0043	-2.5 to 2.5	Pass
				-30	3.85	-4.478	-0.0053	-2.5 to 2.5	Pass
				-20	3.85	-1.187	-0.0014	-2.5 to 2.5	Pass
				-10	3.85	-4.220	-0.0050	-2.5 to 2.5	Pass
				0	3.85	-0.815	-0.0010	-2.5 to 2.5	Pass
				10	3.85	-5.436	-0.0064	-2.5 to 2.5	Pass
				30	3.85	0.401	0.0005	-2.5 to 2.5	Pass
				40	3.85	-3.834	-0.0045	-2.5 to 2.5	Pass
				50	3.85	-5.178	-0.0061	-2.5 to 2.5	Pass
16QAM	829	50	0	20	3.27	-1.788	-0.0022	-2.5 to 2.5	Pass
					3.85	-2.403	-0.0029	-2.5 to 2.5	Pass
					4.43	-1.774	-0.0021	-2.5 to 2.5	Pass
				-30	3.85	-0.744	-0.0009	-2.5 to 2.5	Pass
				-20	3.85	-4.077	-0.0049	-2.5 to 2.5	Pass
				-10	3.85	-3.891	-0.0047	-2.5 to 2.5	Pass
				0	3.85	-1.645	-0.0020	-2.5 to 2.5	Pass
				10	3.85	-4.792	-0.0058	-2.5 to 2.5	Pass
				30	3.85	0.386	0.0005	-2.5 to 2.5	Pass
				40	3.85	-3.190	-0.0038	-2.5 to 2.5	Pass
	50	3.85	-2.532	-0.0031	-2.5 to 2.5	Pass			
	836.5	50	0	20	3.27	-3.648	-0.0044	-2.5 to 2.5	Pass
					3.85	-3.633	-0.0043	-2.5 to 2.5	Pass
					4.43	-4.220	-0.0050	-2.5 to 2.5	Pass
				-30	3.85	-3.648	-0.0044	-2.5 to 2.5	Pass
				-20	3.85	-2.418	-0.0029	-2.5 to 2.5	Pass
				-10	3.85	-3.104	-0.0037	-2.5 to 2.5	Pass
				0	3.85	-6.166	-0.0074	-2.5 to 2.5	Pass
				10	3.85	-5.393	-0.0064	-2.5 to 2.5	Pass
				30	3.85	-5.908	-0.0071	-2.5 to 2.5	Pass
				40	3.85	-2.618	-0.0031	-2.5 to 2.5	Pass
	50	3.85	-0.086	-0.0001	-2.5 to 2.5	Pass			
	844	50	0	20	3.27	-4.506	-0.0053	-2.5 to 2.5	Pass
					3.85	-1.431	-0.0017	-2.5 to 2.5	Pass
					4.43	0.515	0.0006	-2.5 to 2.5	Pass
				-30	3.85	-2.460	-0.0029	-2.5 to 2.5	Pass
				-20	3.85	-2.346	-0.0028	-2.5 to 2.5	Pass
				-10	3.85	-0.129	-0.0002	-2.5 to 2.5	Pass
0				3.85	-4.821	-0.0057	-2.5 to 2.5	Pass	
10				3.85	-2.403	-0.0028	-2.5 to 2.5	Pass	
30				3.85	-1.645	-0.0019	-2.5 to 2.5	Pass	
40				3.85	-0.615	-0.0007	-2.5 to 2.5	Pass	
50	3.85	0.830	0.0010	-2.5 to 2.5	Pass				

### 3. Modulation Characteristics

#### 3.1 Test Result

##### 3.1.1 B5\_1.4MHz

Band: 5 / Bandwidth: 1.4MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	6	0	Refer To Test Graph		Pass
16QAM	836.5	6	0	Refer To Test Graph		Pass

### 3.1.2 B5\_3MHz

Band: 5 / Bandwidth: 3MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	15	0	Refer To Test Graph		Pass
16QAM	836.5	15	0	Refer To Test Graph		Pass

### 3.1.3 B5\_5MHz

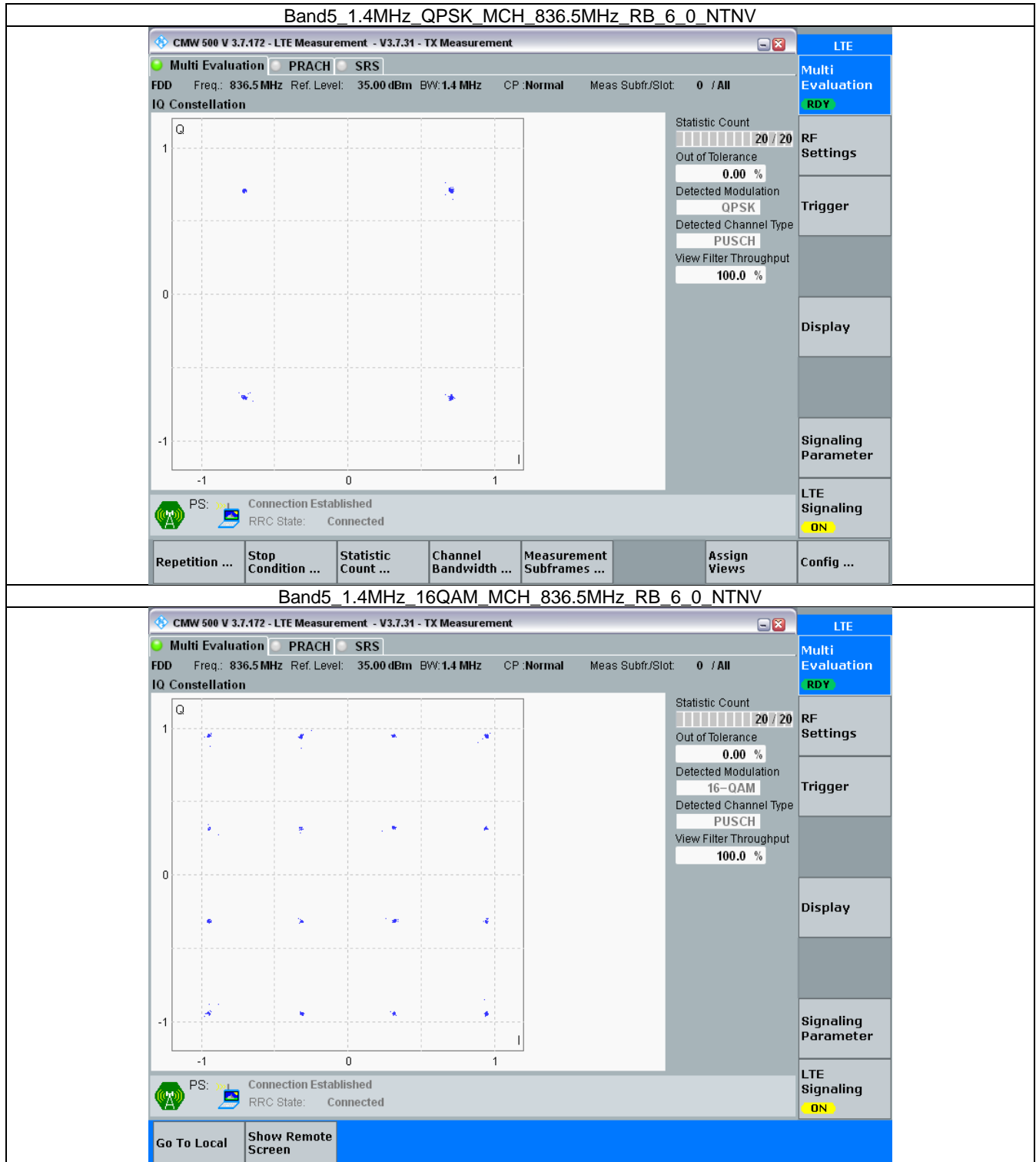
Band: 5 / Bandwidth: 5MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	25	0	Refer To Test Graph		Pass
16QAM	836.5	25	0	Refer To Test Graph		Pass

### 3.1.4 B5\_10MHz

Band: 5 / Bandwidth: 10MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Modulation Characteristics		Verdict
		Size	Offset	Result	Limit	
QPSK	836.5	50	0	Refer To Test Graph		Pass
16QAM	836.5	50	0	Refer To Test Graph		Pass

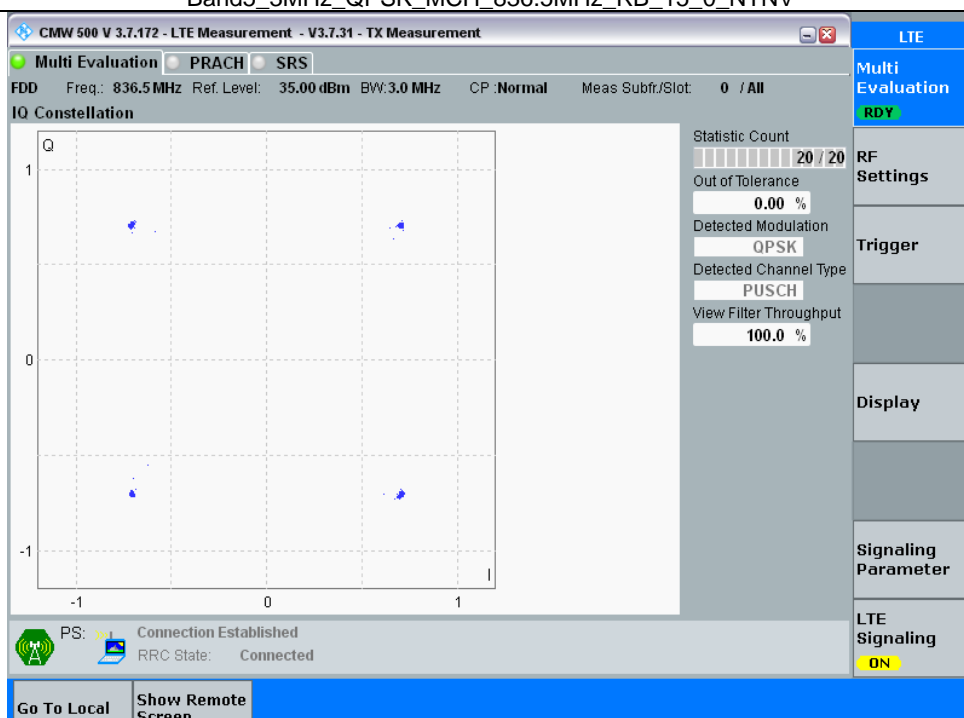
### 3.2 Test Graph

#### 3.2.1 B5\_1.4MHz



### 3.2.2 B5\_3MHz

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



CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 836.5 MHz Ref. Level: 35.00 dBm BW: 3.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

IQ Constellation

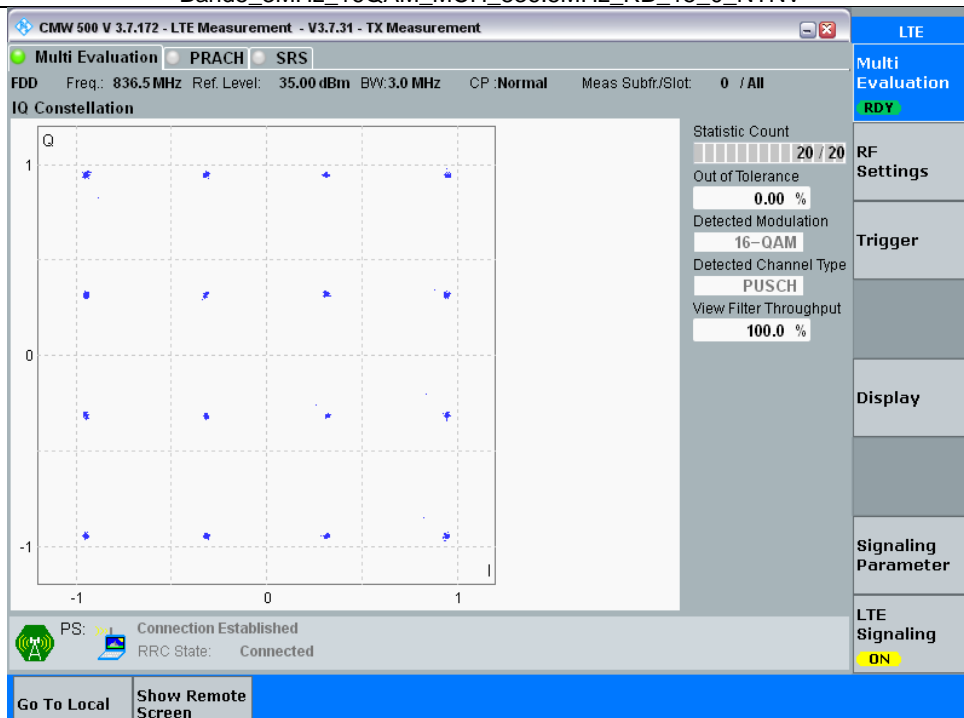
Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: QPSK  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established RRC State: Connected

Go To Local Show Remote Screen

LTE Multi Evaluation RDY RF Settings Trigger Display Signaling Parameter LTE Signaling ON

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



CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation PRACH SRS

FDD Freq.: 836.5 MHz Ref. Level: 35.00 dBm BW: 3.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

IQ Constellation

Statistic Count: 20 / 20  
 Out of Tolerance: 0.00 %  
 Detected Modulation: 16-QAM  
 Detected Channel Type: PUSCH  
 View Filter Throughput: 100.0 %

PS: Connection Established RRC State: Connected

Go To Local Show Remote Screen

LTE Multi Evaluation RDY RF Settings Trigger Display Signaling Parameter LTE Signaling ON

### 3.2.3 B5\_5MHz

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

CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation  PRACH  SRS

FDD Freq.: 836.5 MHz Ref. Level: 35.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

IQ Constellation

Statistic Count: 20 / 20

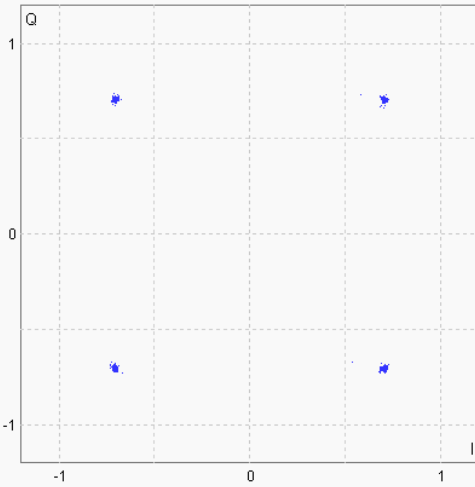
Out of Tolerance: 0.00 %

Detected Modulation: QPSK

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

LTE



QPSK constellation plot showing four points in a square grid on a coordinate system from -1 to 1 on both axes.

Multi Evaluation **RDY**

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling **ON**

PS: Connection Established

RRC State: Connected

Go To Local
Show Remote Screen

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

CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation  PRACH  SRS

FDD Freq.: 836.5 MHz Ref. Level: 35.00 dBm BW: 5.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

IQ Constellation

Statistic Count: 20 / 20

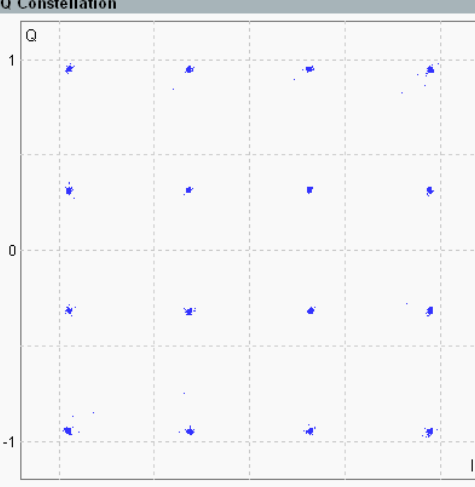
Out of Tolerance: 0.00 %

Detected Modulation: 16-QAM

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

LTE



16-QAM constellation plot showing 16 points in a 4x4 grid on a coordinate system from -1 to 1 on both axes.

Multi Evaluation **RDY**

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling **ON**

PS: Connection Established

RRC State: Connected

Go To Local
Show Remote Screen

### 3.2.4 B5\_10MHz

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

CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation  PRACH  SRS

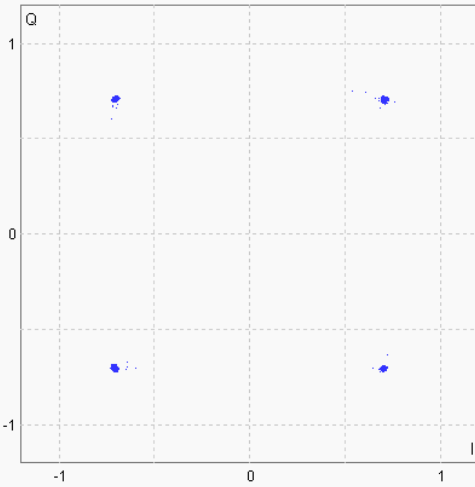
FDD Freq.: 836.5 MHz Ref. Level: 35.00 dBm BW: 10.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation

RDY

**IQ Constellation**



Statistic Count: 20 / 20

Out of Tolerance: 0.00 %

Detected Modulation: QPSK

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

PS: Connection Established  
RRC State: Connected

Go To Local
Show Remote Screen

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling ON

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

CMW 500 V 3.7.172 - LTE Measurement - V3.7.31 - TX Measurement

Multi Evaluation  PRACH  SRS

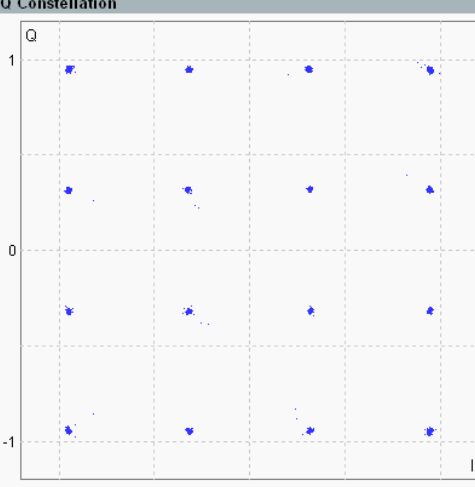
FDD Freq.: 836.5 MHz Ref. Level: 35.00 dBm BW: 10.0 MHz CP: Normal Meas Subfr./Slot: 0 / All

LTE

Multi Evaluation

RDY

**IQ Constellation**



Statistic Count: 20 / 20

Out of Tolerance: 0.00 %

Detected Modulation: 16-QAM

Detected Channel Type: PUSCH

View Filter Throughput: 100.0 %

PS: Connection Established  
RRC State: Connected

Go To Local
Show Remote Screen

RF Settings

Trigger

Display

Signaling Parameter

LTE Signaling ON

## 4. 99% & 26dB Bandwidth

### 4.1 Test Result

#### 4.1.1 Band5\_OBW

Band: 5 / NTN							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	824.7	6	0	1.114	/	Pass
		836.5	6	0	1.105	/	Pass
		848.3	6	0	1.106	/	Pass
	16QAM	824.7	6	0	1.115	/	Pass
		836.5	6	0	1.108	/	Pass
		848.3	6	0	1.108	/	Pass
3	QPSK	825.5	15	0	2.726	/	Pass
		836.5	15	0	2.718	/	Pass
		847.5	15	0	2.730	/	Pass
	16QAM	825.5	15	0	2.731	/	Pass
		836.5	15	0	2.715	/	Pass
		847.5	15	0	2.722	/	Pass
5	QPSK	826.5	25	0	4.561	/	Pass
		836.5	25	0	4.541	/	Pass
		846.5	25	0	4.552	/	Pass
	16QAM	826.5	25	0	4.549	/	Pass
		836.5	25	0	4.546	/	Pass
		846.5	25	0	4.534	/	Pass
10	QPSK	829	50	0	9.065	/	Pass
		836.5	50	0	9.047	/	Pass
		844	50	0	9.057	/	Pass
	16QAM	829	50	0	9.056	/	Pass
		836.5	50	0	9.031	/	Pass
		844	50	0	9.060	/	Pass

#### 4.1.2 Band5\_XDB

Band: 5 / NTN							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	824.7	6	0	1.297	/	Pass
		836.5	6	0	1.306	/	Pass
		848.3	6	0	1.302	/	Pass
	16QAM	824.7	6	0	1.301	/	Pass
		836.5	6	0	1.293	/	Pass
		848.3	6	0	1.316	/	Pass
3	QPSK	825.5	15	0	3.054	/	Pass
		836.5	15	0	3.032	/	Pass
		847.5	15	0	3.040	/	Pass
	16QAM	825.5	15	0	3.073	/	Pass
		836.5	15	0	3.014	/	Pass
		847.5	15	0	3.038	/	Pass
5	QPSK	826.5	25	0	4.999	/	Pass

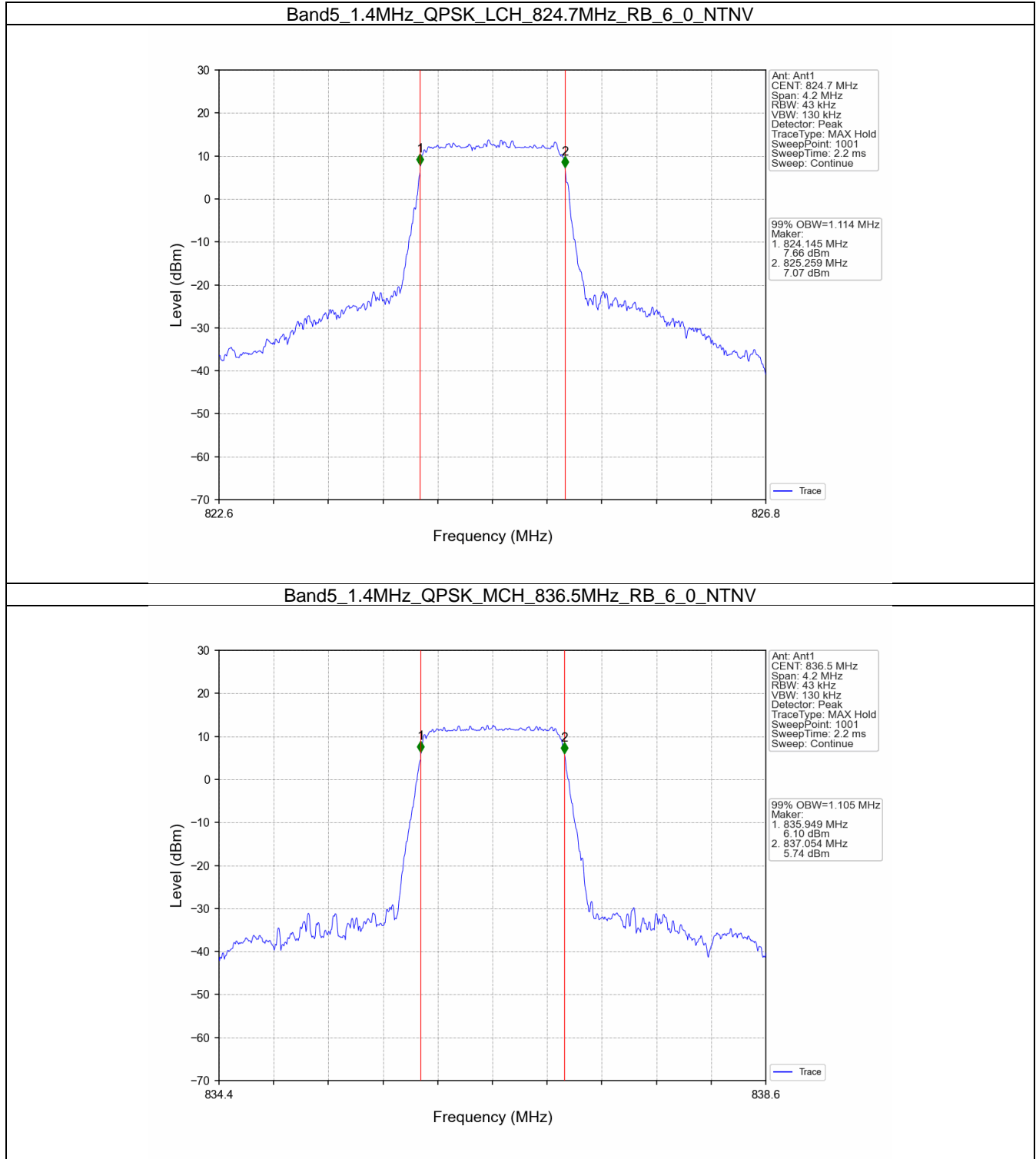


	16QAM	836.5	25	0	5.021	/	Pass
		846.5	25	0	5.024	/	Pass
		826.5	25	0	4.996	/	Pass
		836.5	25	0	5.007	/	Pass
		846.5	25	0	5.005	/	Pass
10	QPSK	829	50	0	9.929	/	Pass
		836.5	50	0	9.888	/	Pass
		844	50	0	9.833	/	Pass
	16QAM	829	50	0	9.904	/	Pass
		836.5	50	0	9.884	/	Pass
		844	50	0	9.864	/	Pass

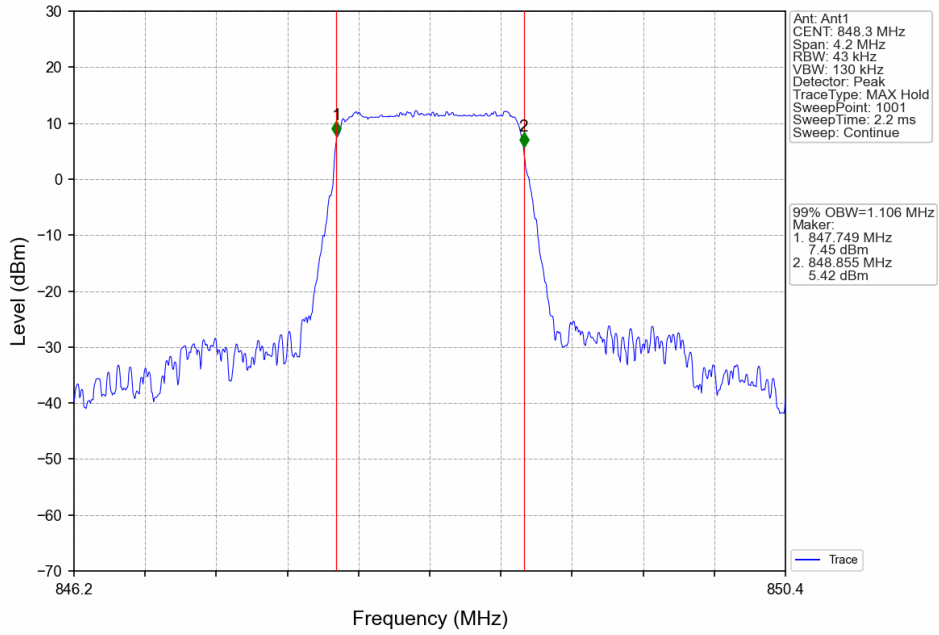


## 4.2 Test Graph

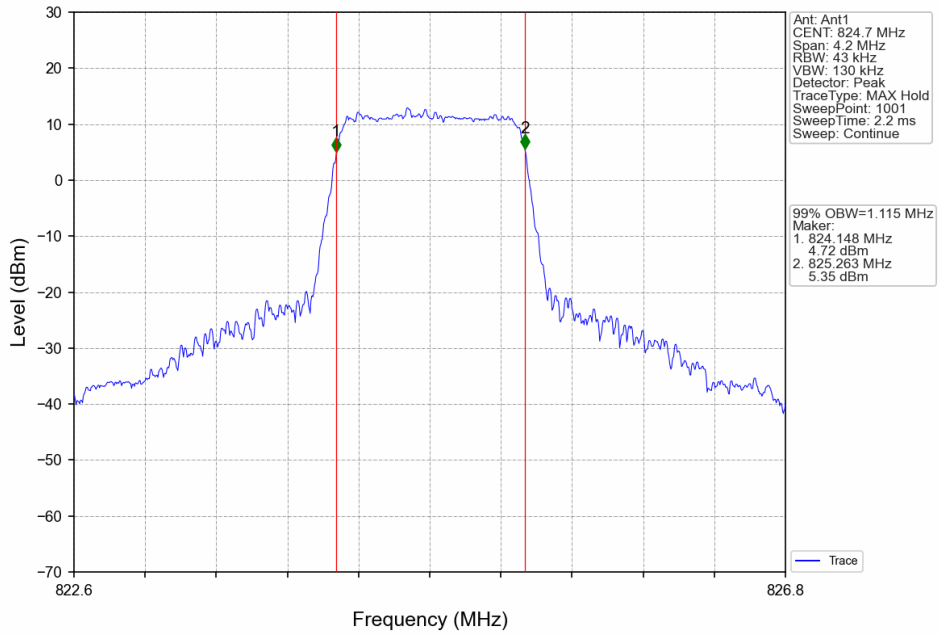
### 4.2.1 Band5\_OBW



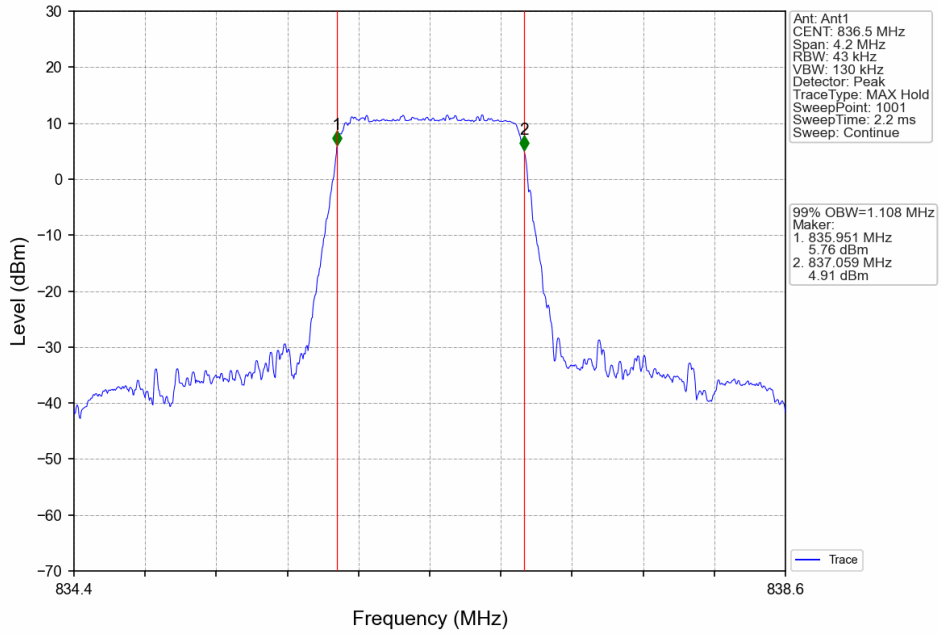
Band5\_1.4MHz\_QPSK\_HCH\_848.3MHz\_RB\_6\_0\_NTNV



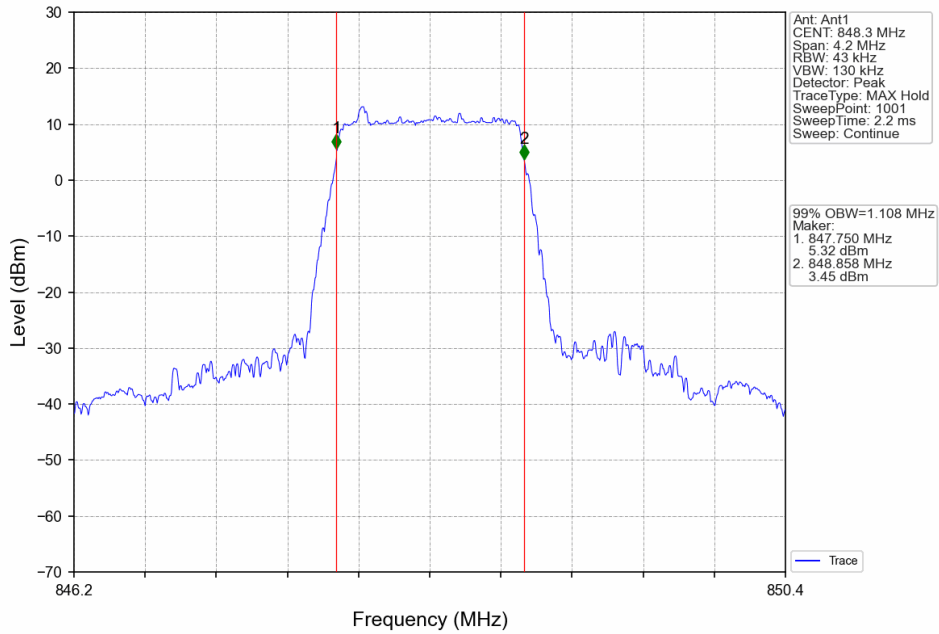
Band5\_1.4MHz\_16QAM\_LCH\_824.7MHz\_RB\_6\_0\_NTNV



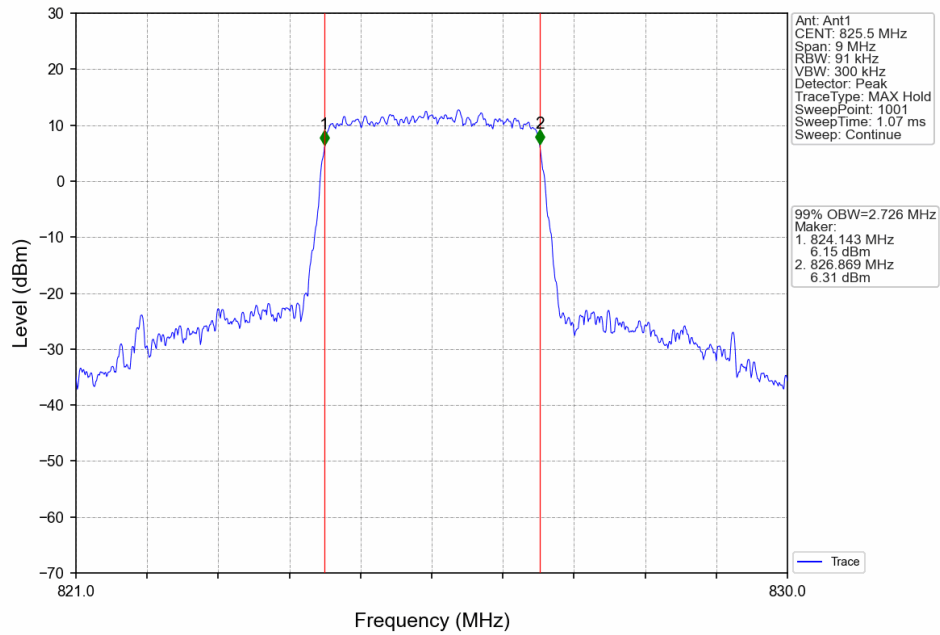
Band5\_1.4MHz\_16QAM\_MCH\_836.5MHz\_RB\_6\_0\_NTNV



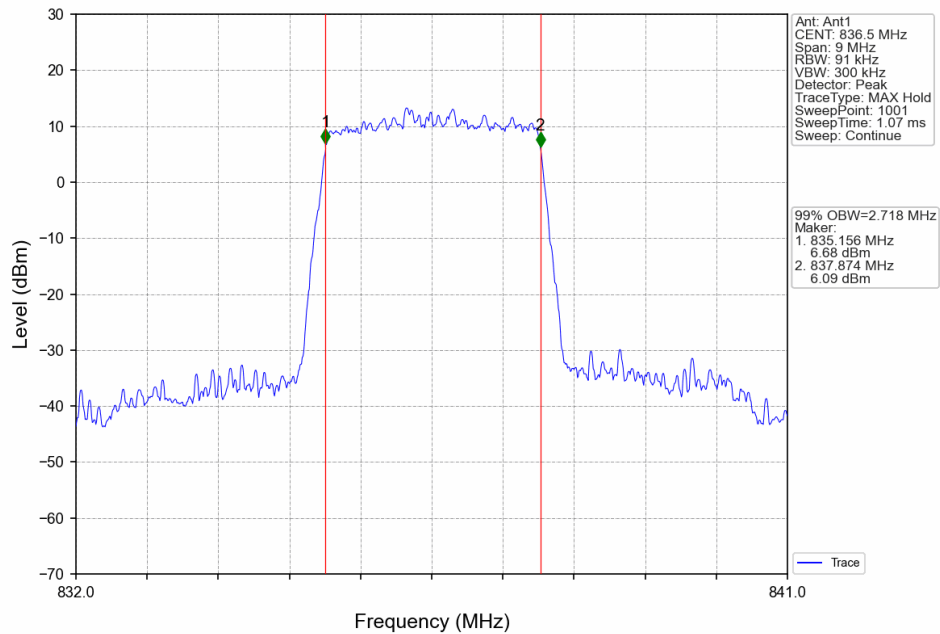
Band5\_1.4MHz\_16QAM\_HCH\_848.3MHz\_RB\_6\_0\_NTNV



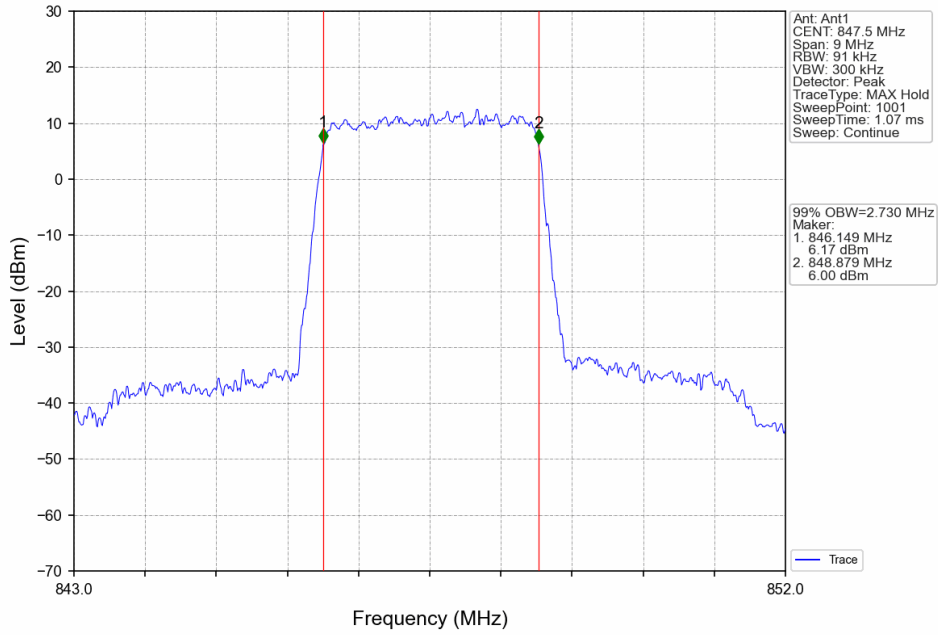
Band5\_3MHz\_QPSK\_LCH\_825.5MHz\_RB\_15\_0\_NTNV



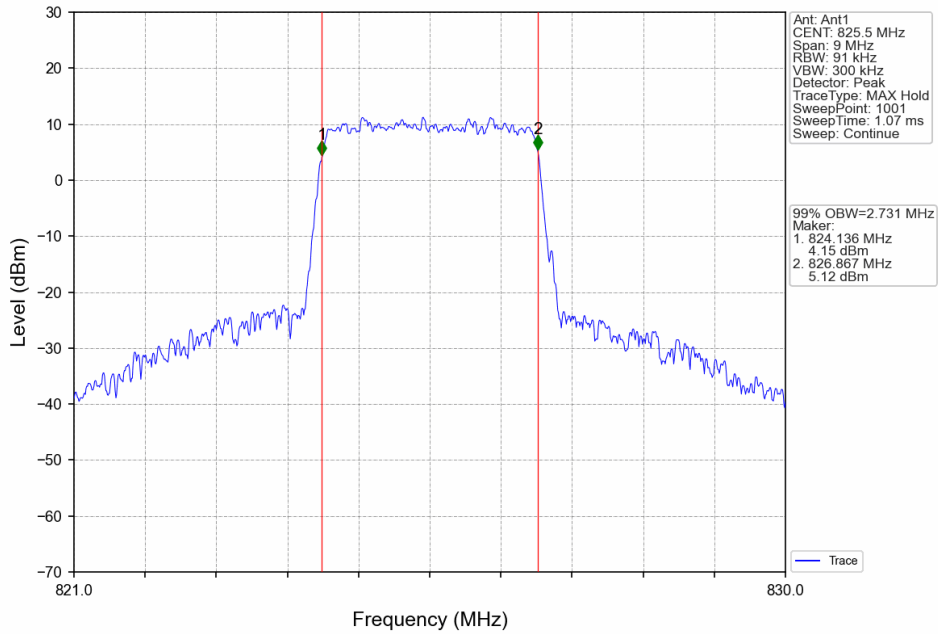
Band5\_3MHz\_QPSK\_MCH\_836.5MHz\_RB\_15\_0\_NTNV



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

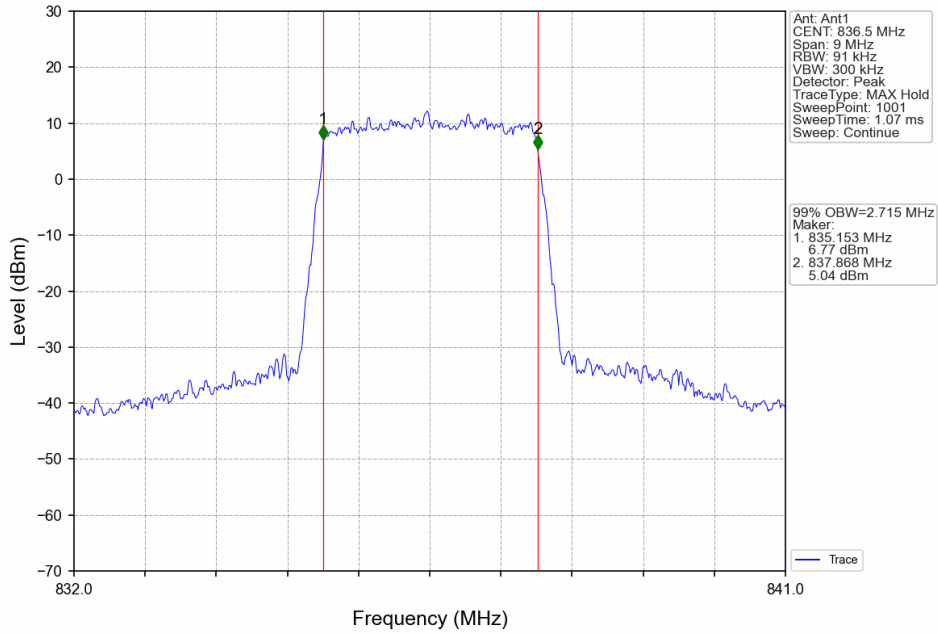


Band5\_3MHz\_16QAM\_LCH\_825.5MHz\_RB\_15\_0\_NTNV

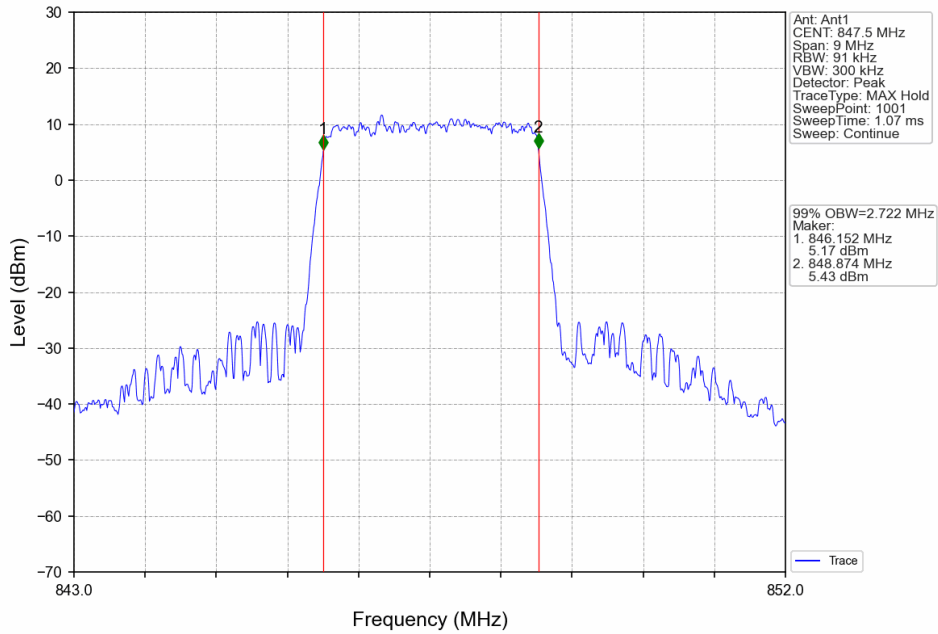




Band5\_3MHz\_16QAM\_MCH\_836.5MHz\_RB\_15\_0\_NTNV

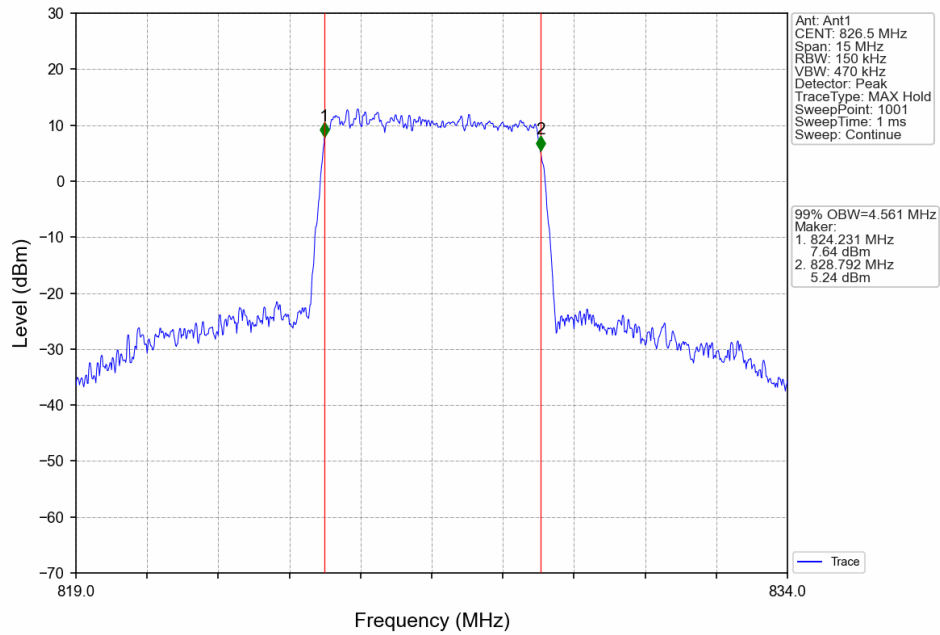


Band5\_3MHz\_16QAM\_HCH\_847.5MHz\_RB\_15\_0\_NTNV

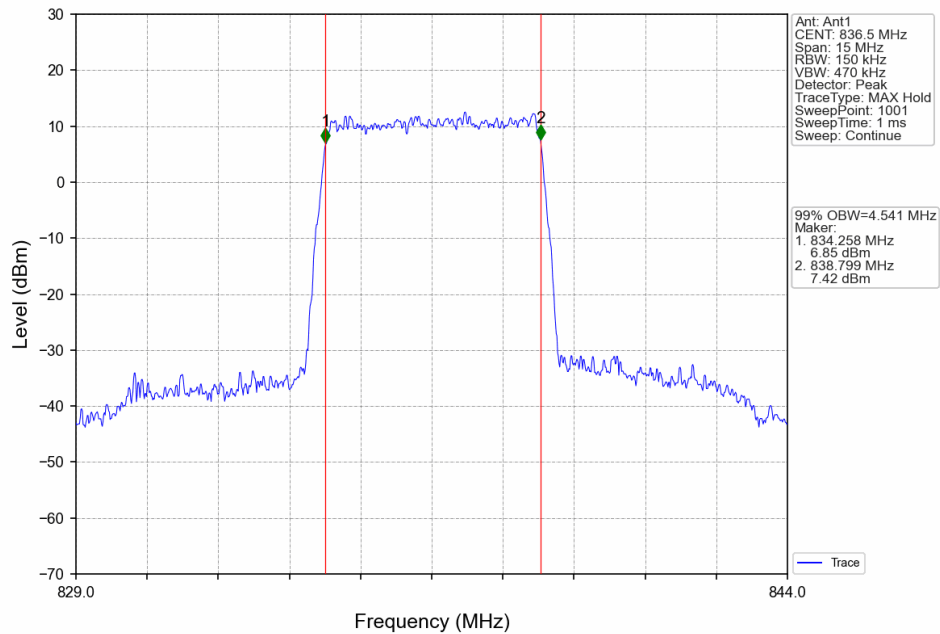




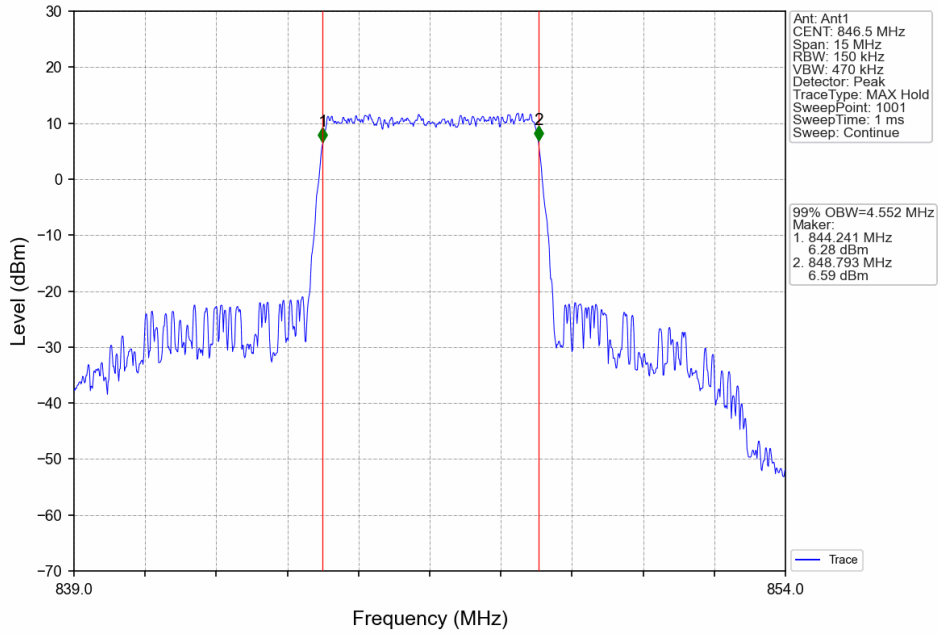
Band5\_5MHz\_QPSK\_LCH\_826.5MHz\_RB\_25\_0\_NTNV



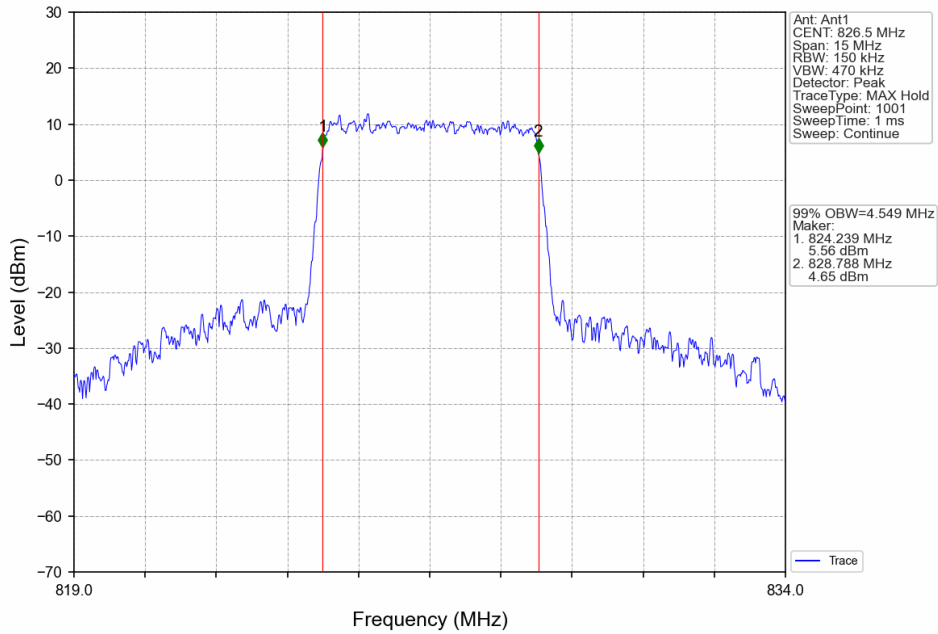
Band5\_5MHz\_QPSK\_MCH\_836.5MHz\_RB\_25\_0\_NTNV



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

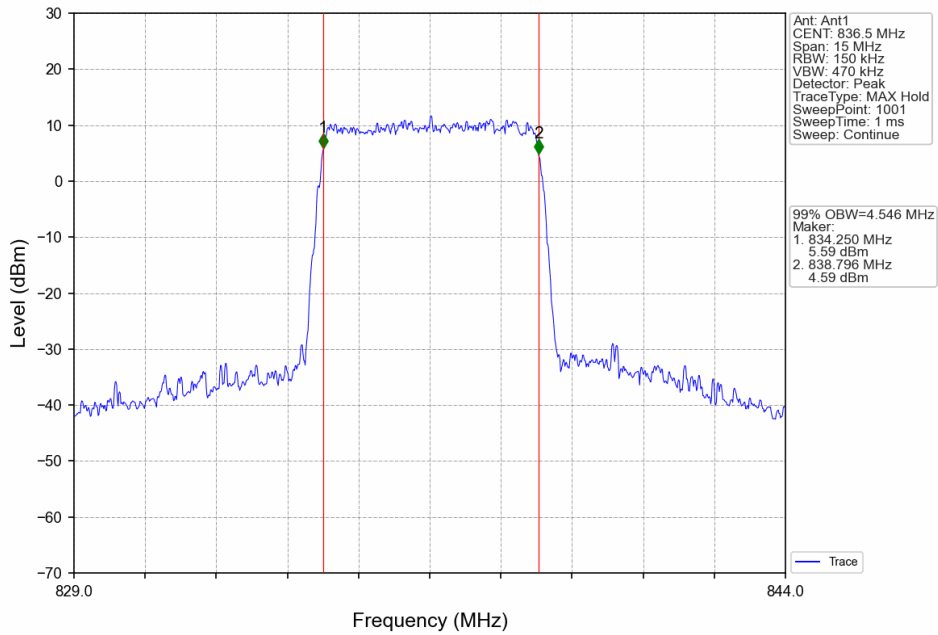


Band5\_5MHz\_16QAM\_LCH\_826.5MHz\_RB\_25\_0\_NTNV

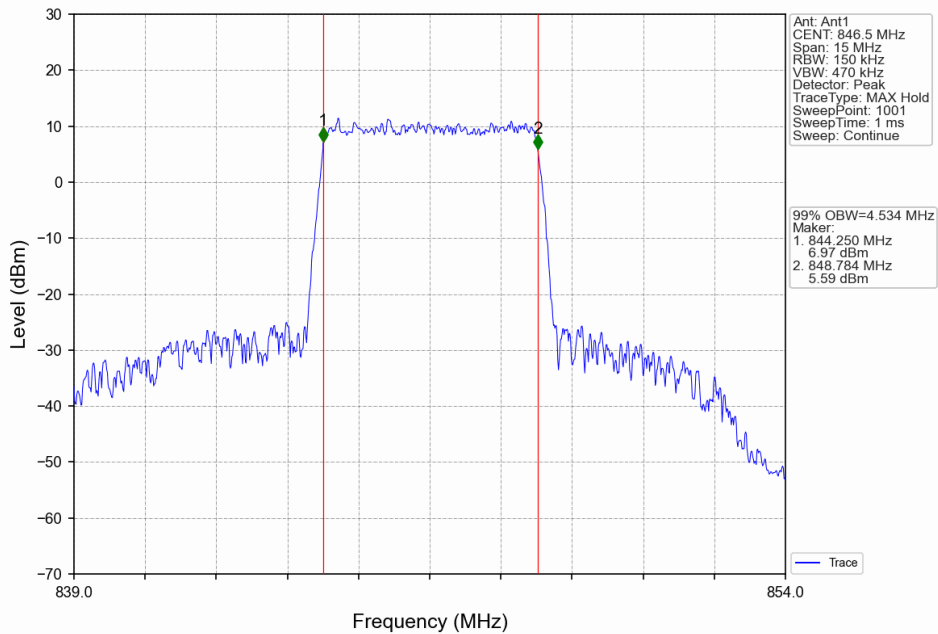




Band5\_5MHz\_16QAM\_MCH\_836.5MHz\_RB\_25\_0\_NTNV

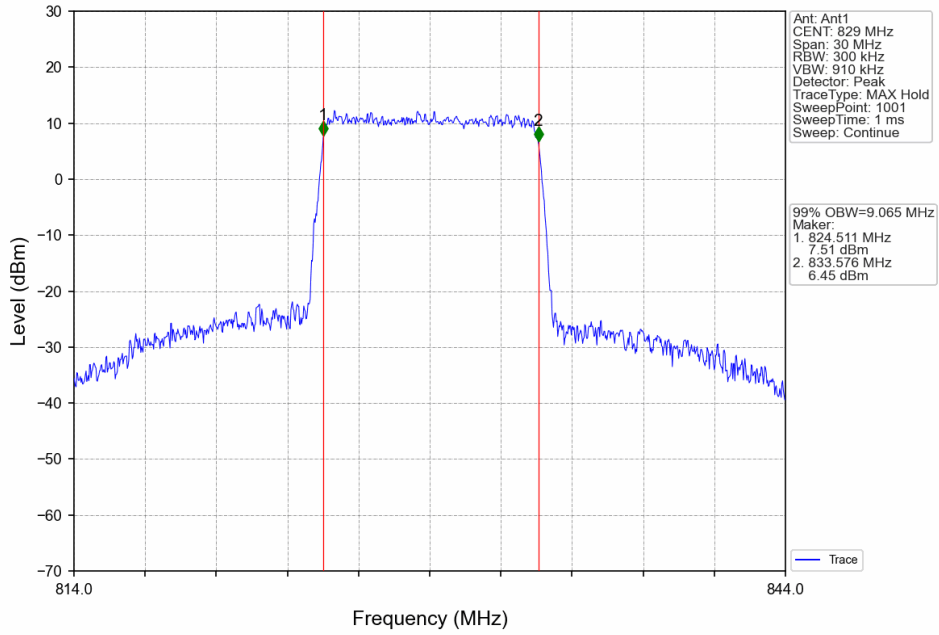


Band5\_5MHz\_16QAM\_HCH\_846.5MHz\_RB\_25\_0\_NTNV

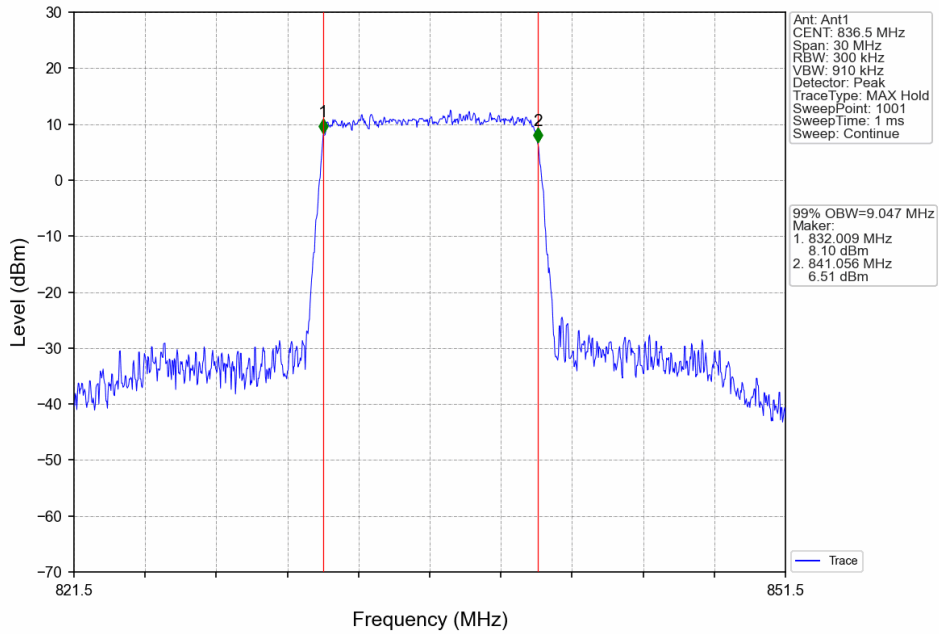




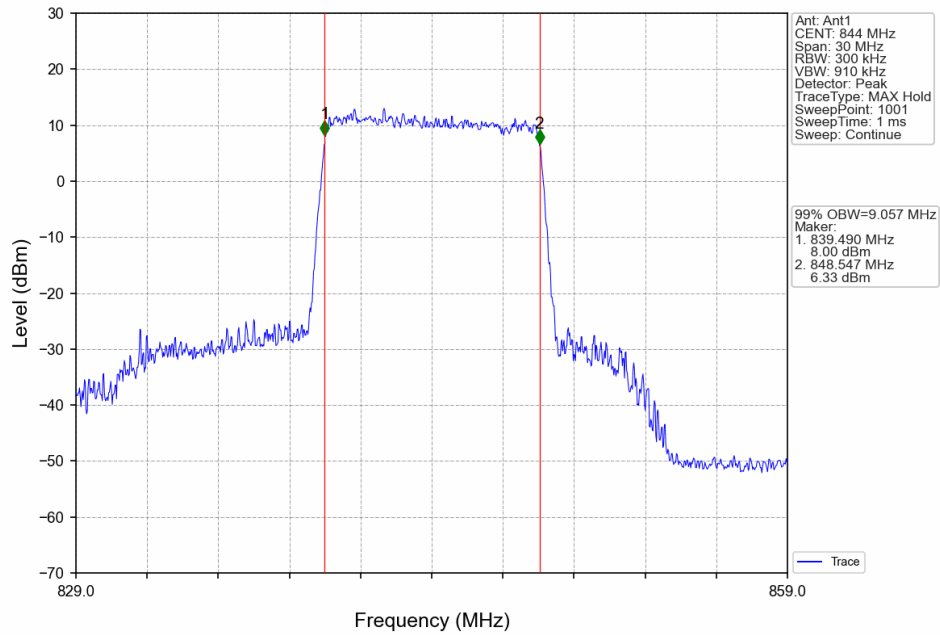
Band5\_10MHz\_QPSK\_LCH\_829MHz\_RB\_50\_0\_NTNV



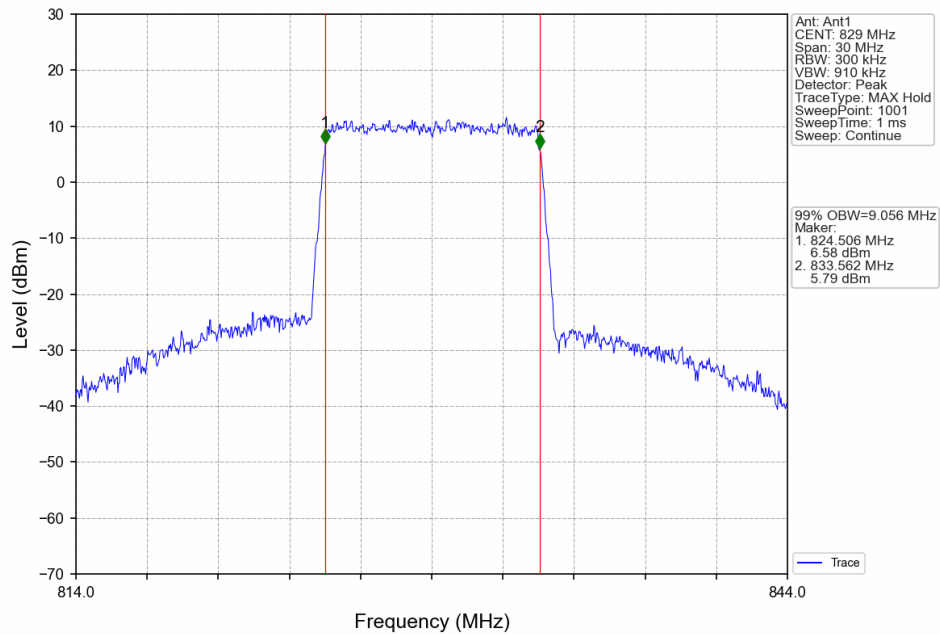
Band5\_10MHz\_QPSK\_MCH\_836.5MHz\_RB\_50\_0\_NTNV



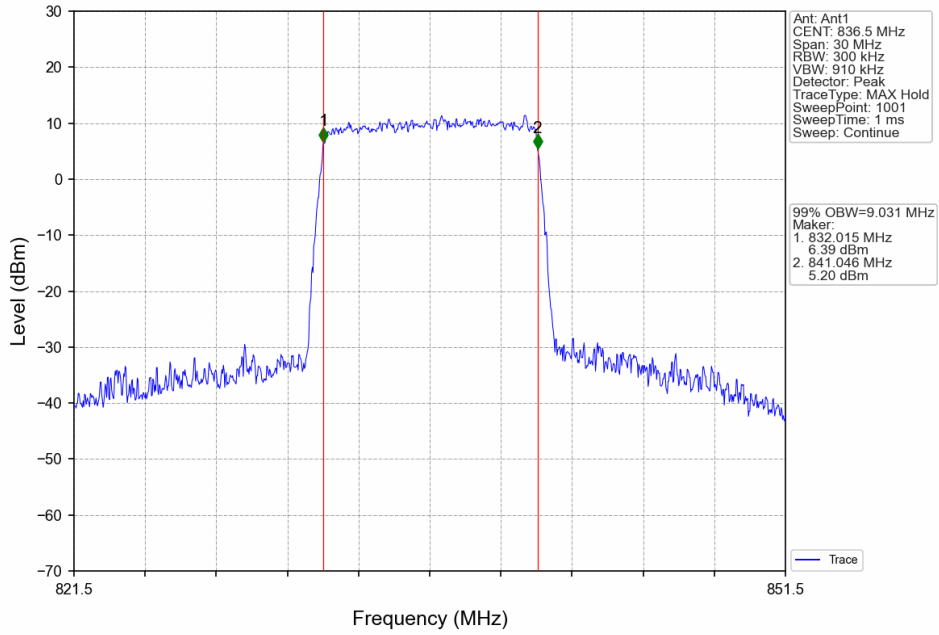
Band5\_10MHz\_QPSK\_HCH\_844MHz\_RB\_50\_0\_NTNV



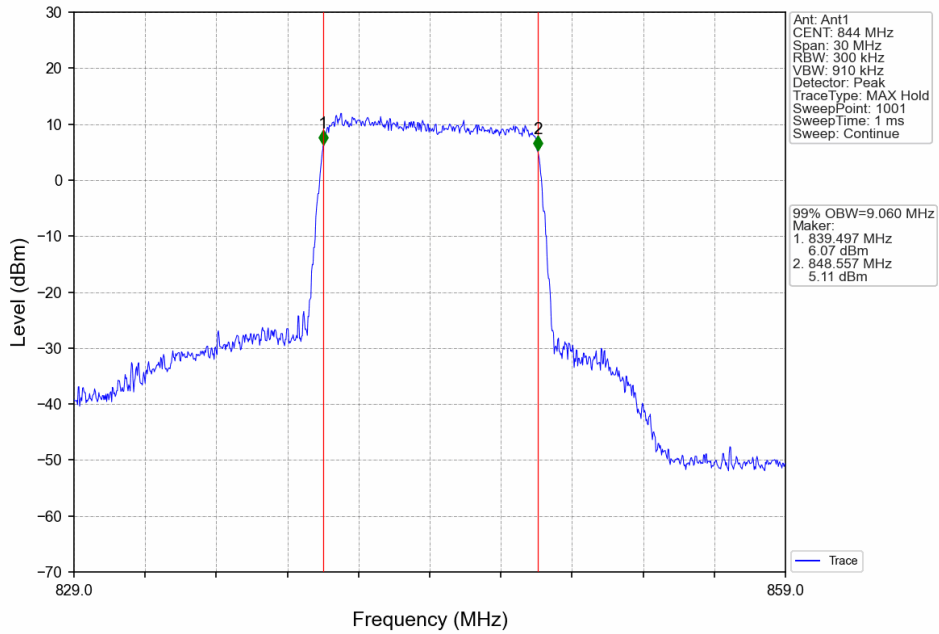
Band5\_10MHz\_16QAM\_LCH\_829MHz\_RB\_50\_0\_NTNV



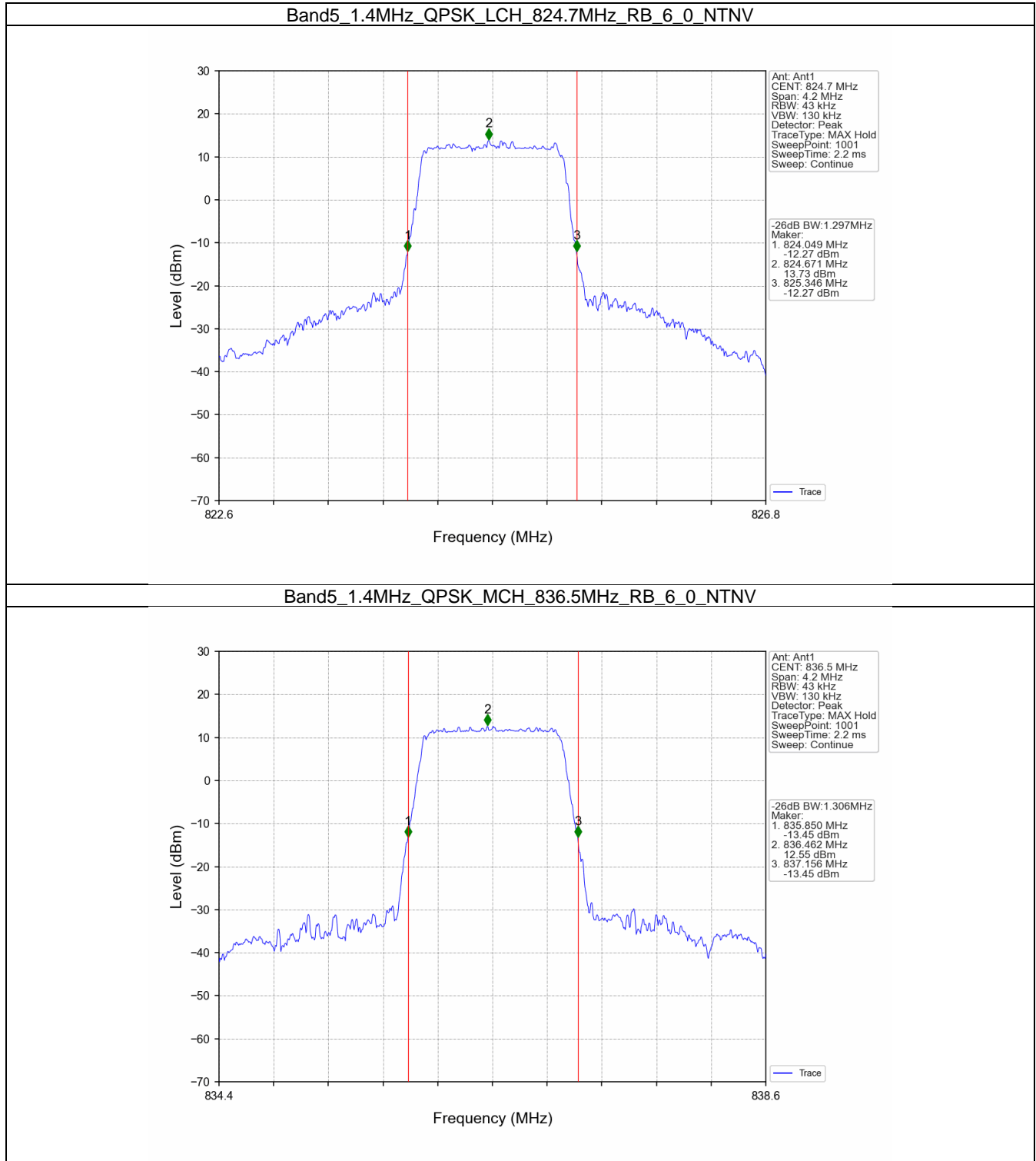
Band5\_10MHz\_16QAM\_MCH\_836.5MHz\_RB\_50\_0\_NTNV



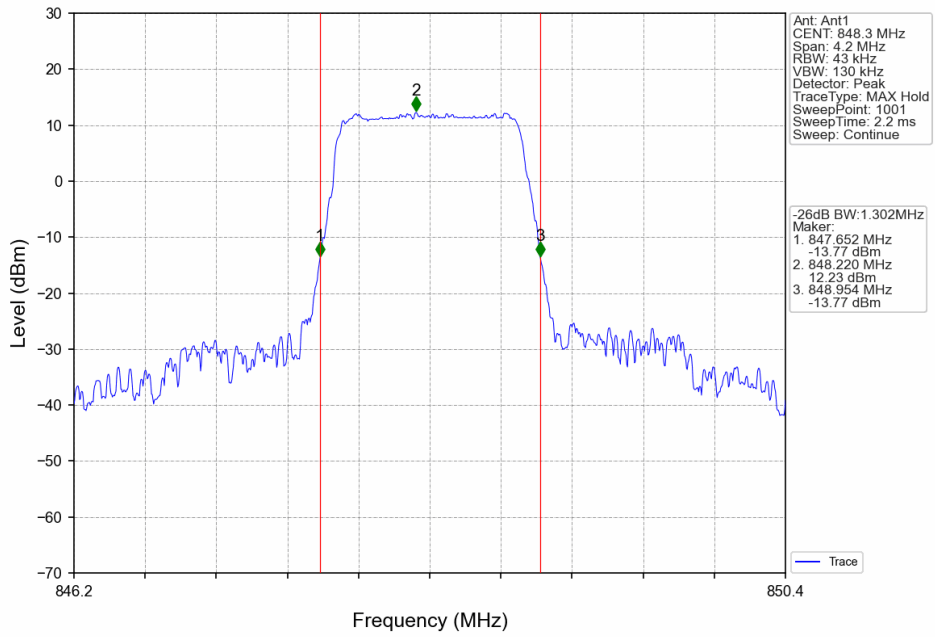
Band5\_10MHz\_16QAM\_HCH\_844MHz\_RB\_50\_0\_NTNV



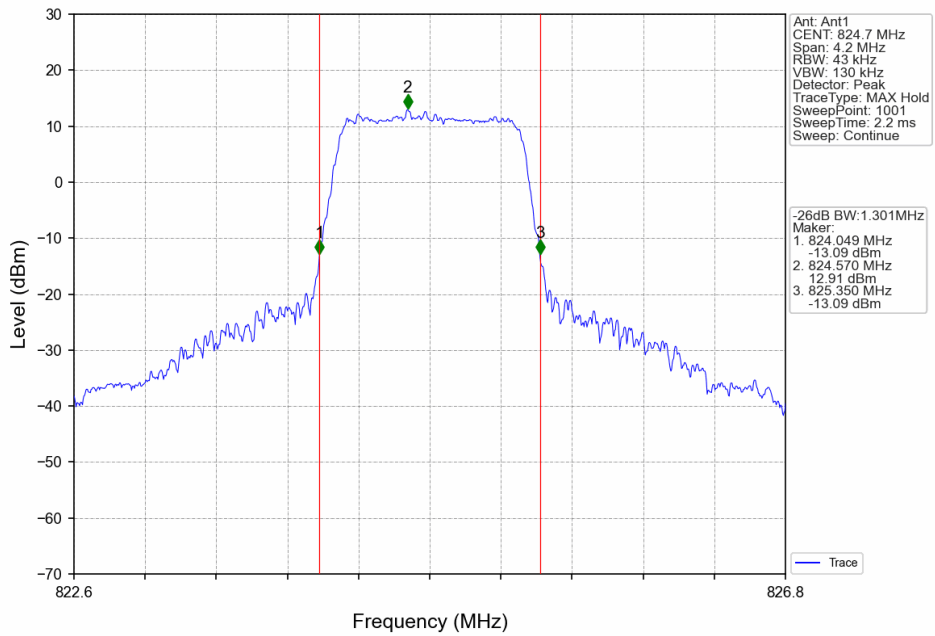
### 4.2.2 Band5\_XDB



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

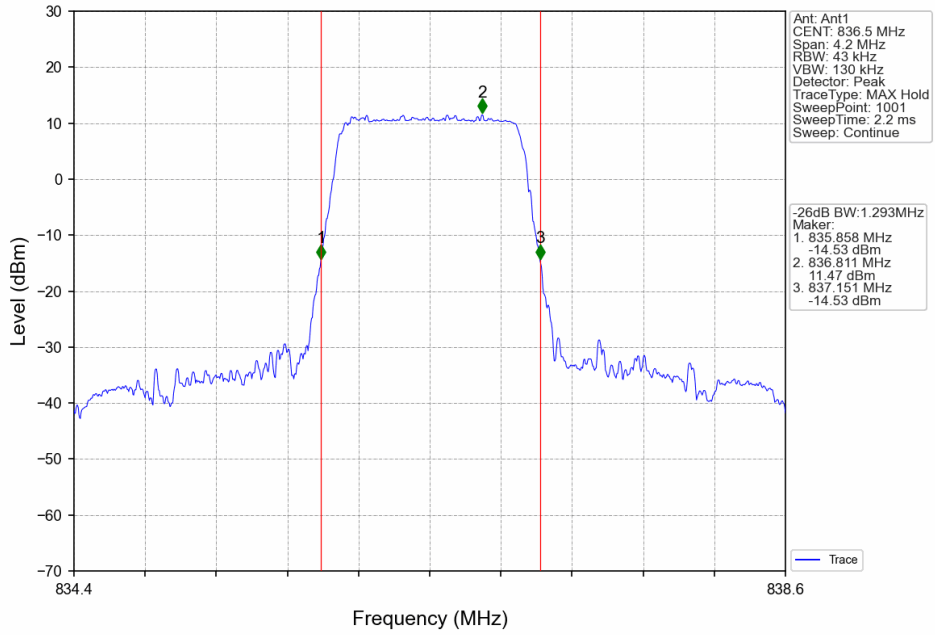


Band5\_1.4MHz\_16QAM\_LCH\_824.7MHz\_RB\_6\_0\_NTNV

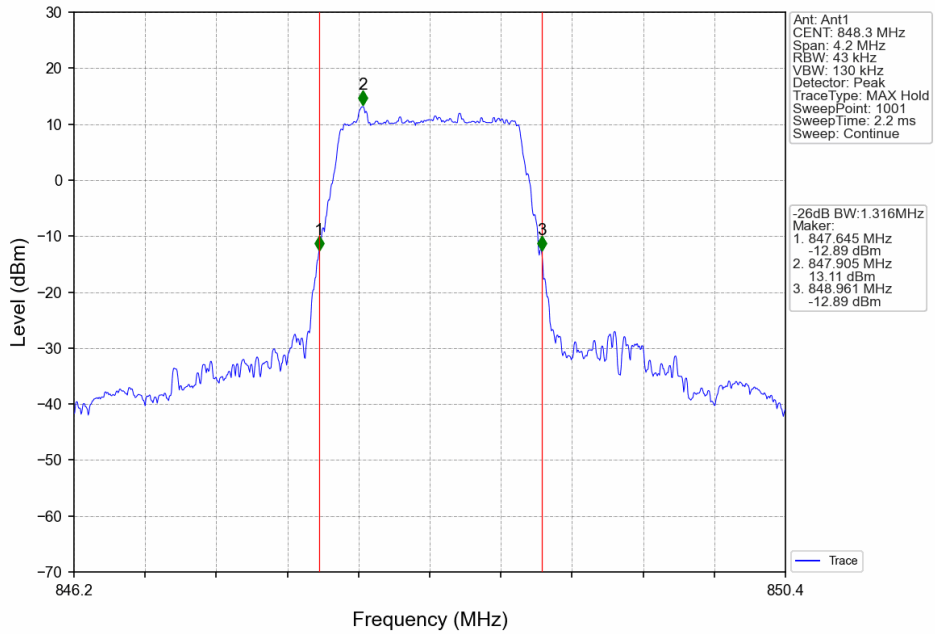




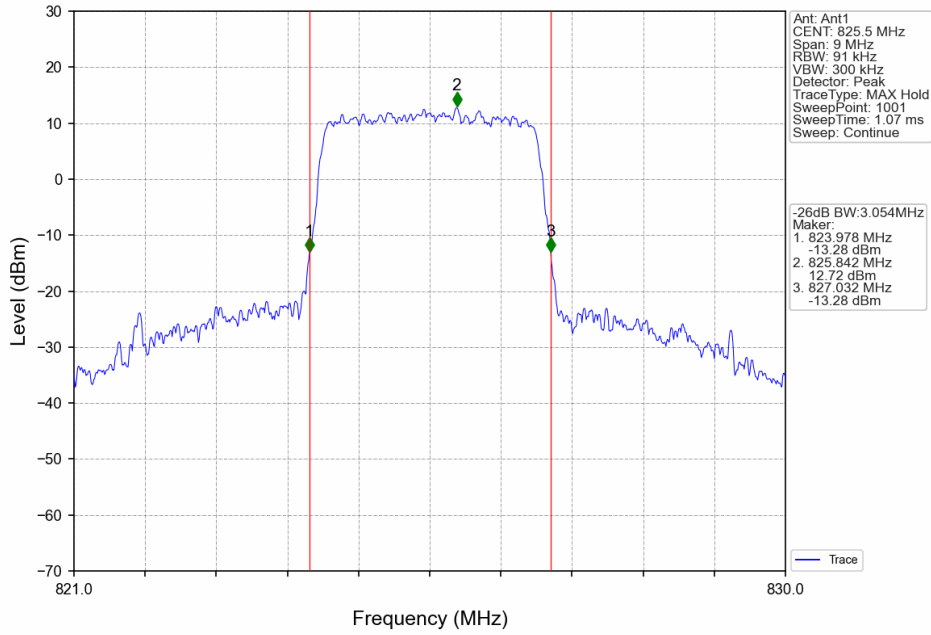
Band5\_1.4MHz\_16QAM\_MCH\_836.5MHz\_RB\_6\_0\_NTNV



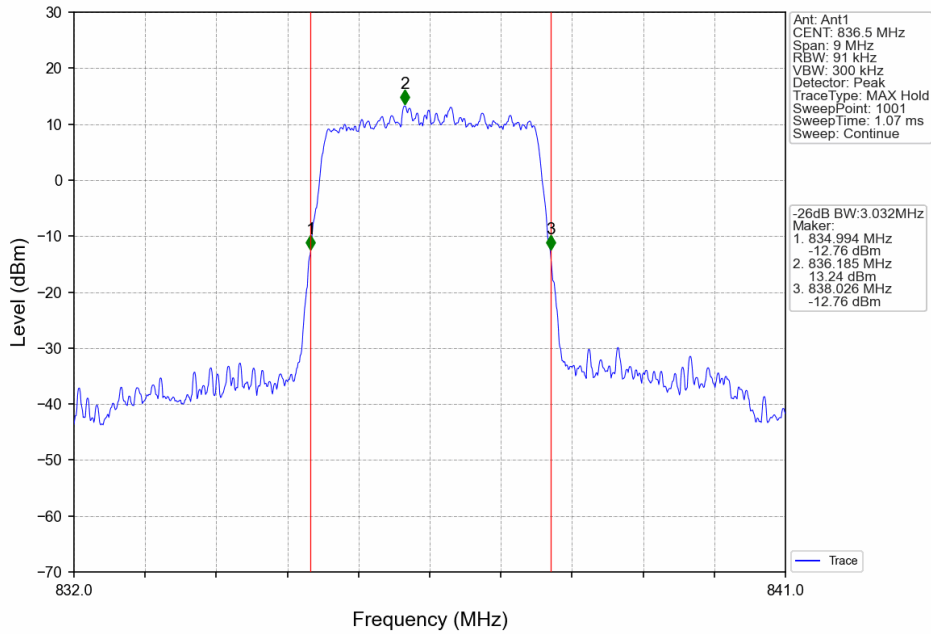
Band5\_1.4MHz\_16QAM\_HCH\_848.3MHz\_RB\_6\_0\_NTNV



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

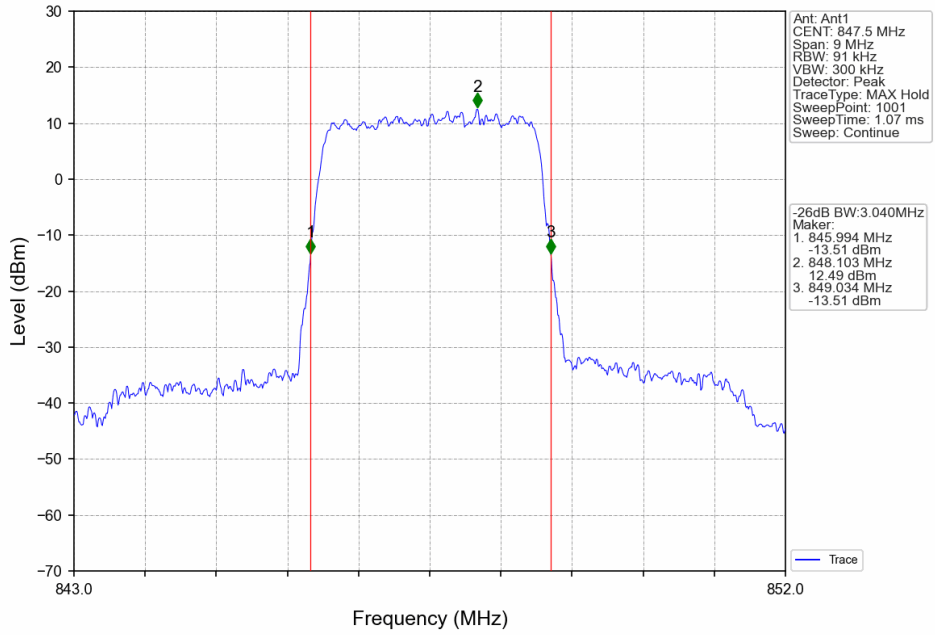


Band5\_3MHz\_QPSK\_MCH\_836.5MHz\_RB\_15\_0\_NTNV

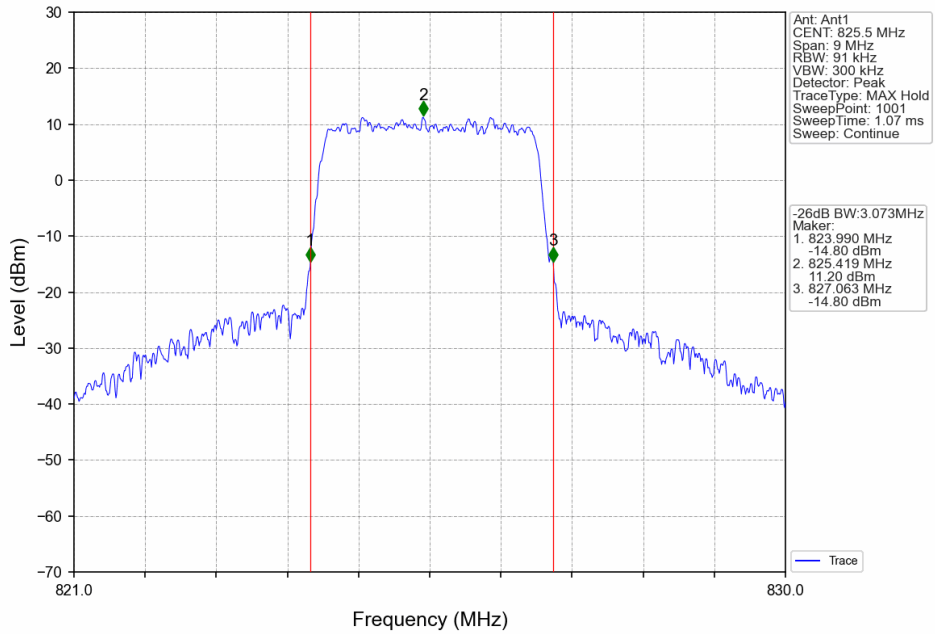




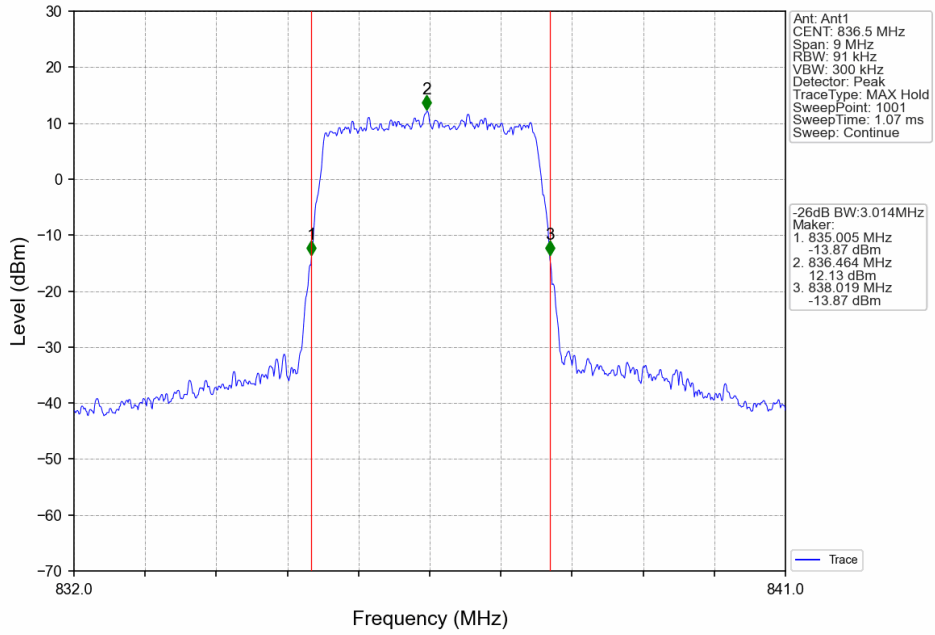
Band5\_3MHz\_QPSK\_HCH\_847.5MHz\_RB\_15\_0\_NTNV



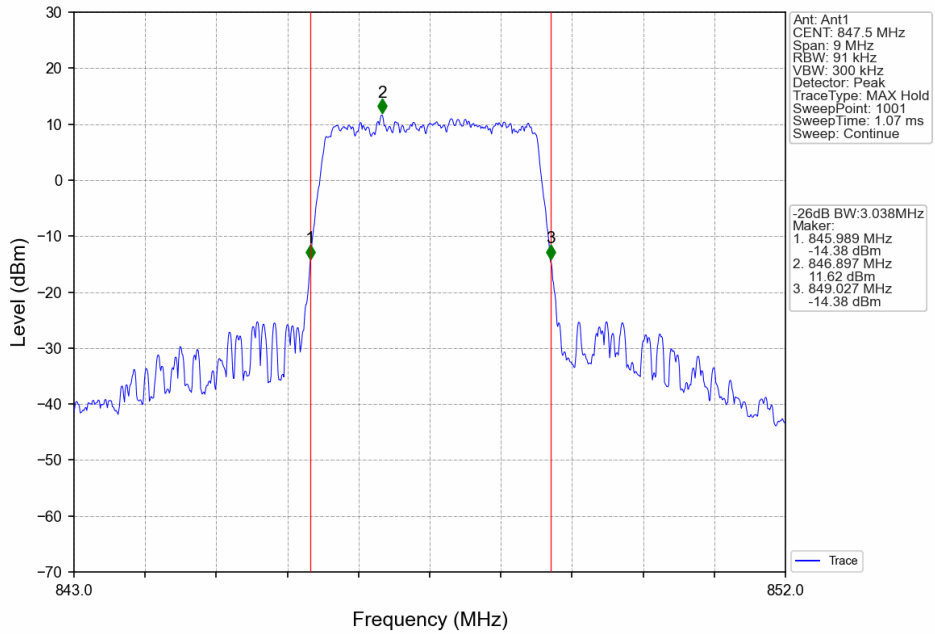
Band5\_3MHz\_16QAM\_LCH\_825.5MHz\_RB\_15\_0\_NTNV



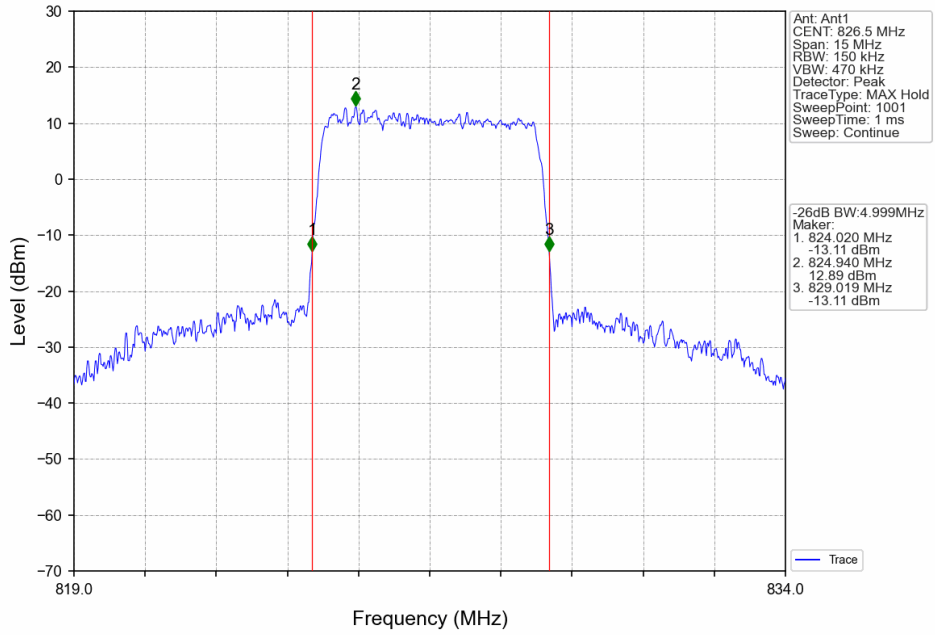
Band5\_3MHz\_16QAM\_MCH\_836.5MHz\_RB\_15\_0\_NTNV



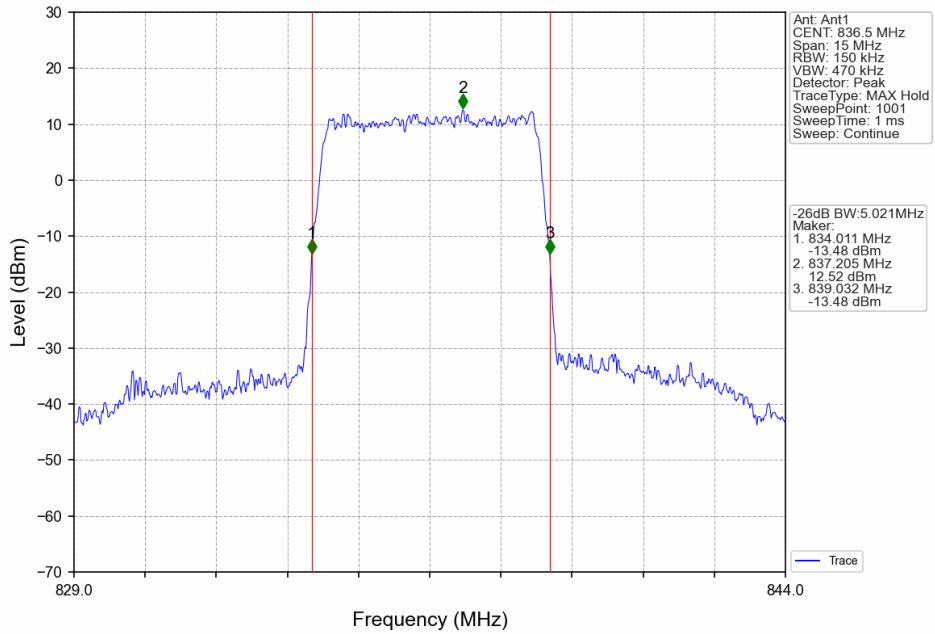
Band5\_3MHz\_16QAM\_HCH\_847.5MHz\_RB\_15\_0\_NTNV



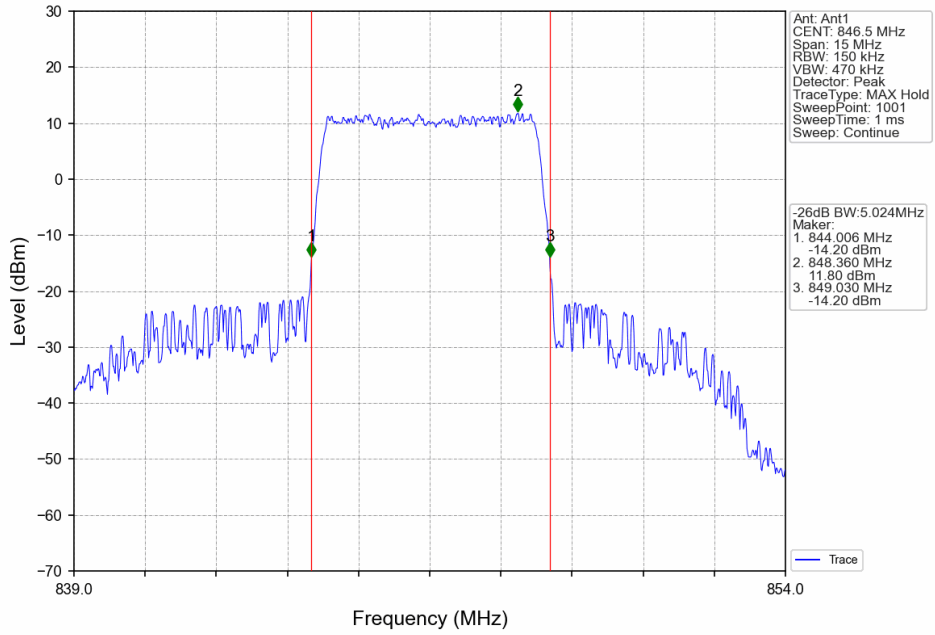
Band5\_5MHz\_QPSK\_LCH\_826.5MHz\_RB\_25\_0\_NTNV



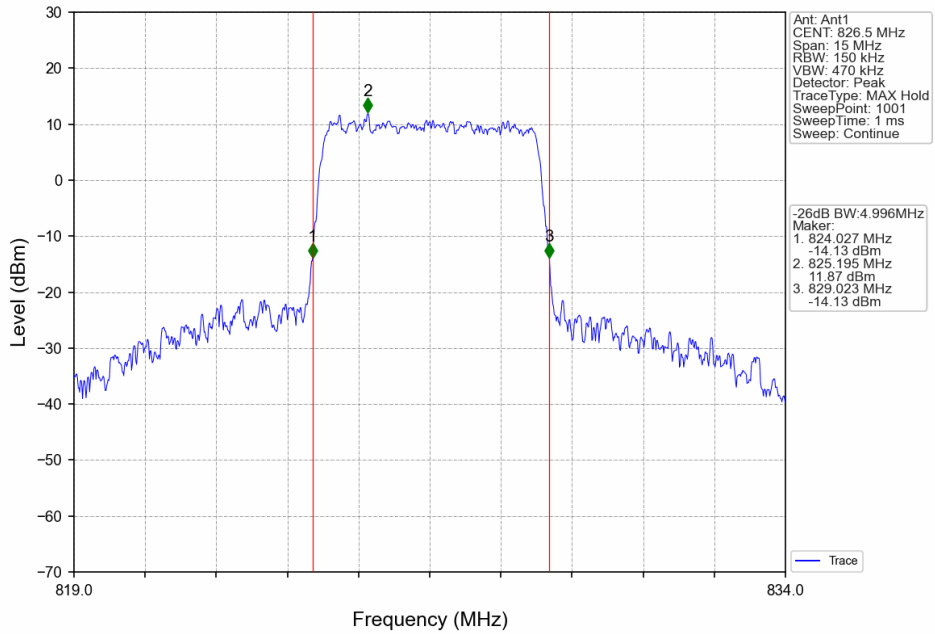
Band5\_5MHz\_QPSK\_MCH\_836.5MHz\_RB\_25\_0\_NTNV



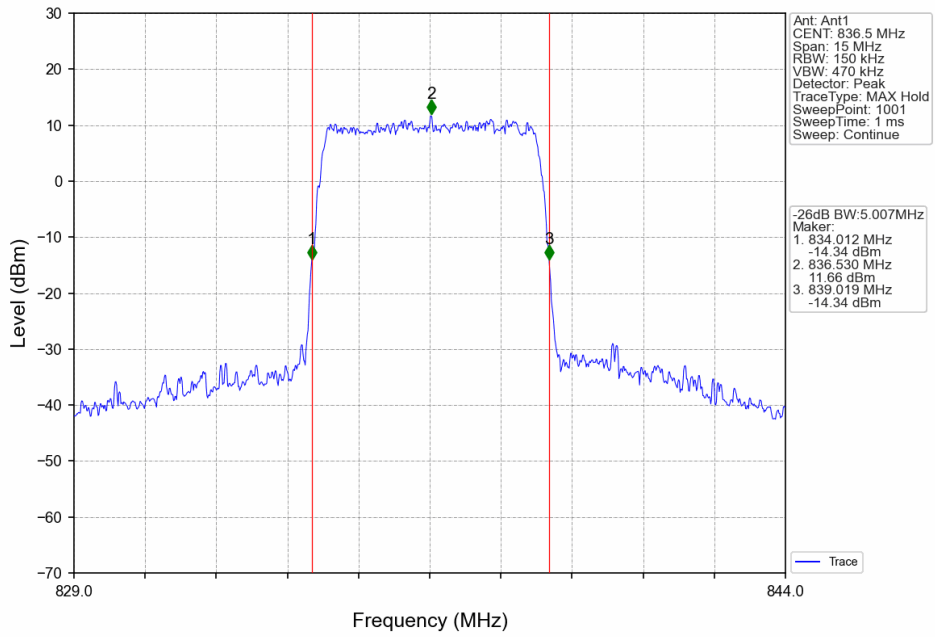
Band5\_5MHz\_QPSK\_HCH\_846.5MHz\_RB\_25\_0\_NTNV



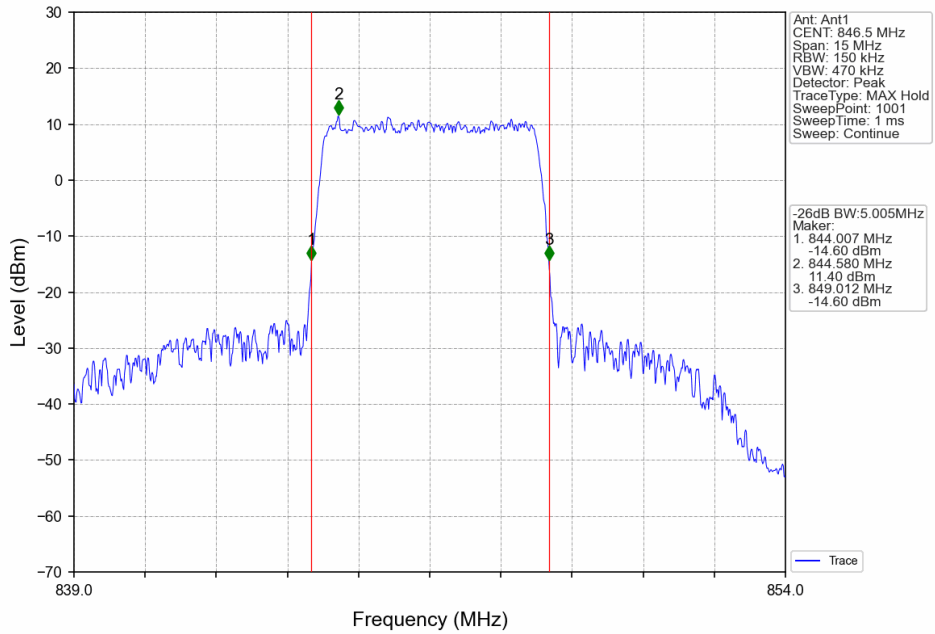
Band5\_5MHz\_16QAM\_LCH\_826.5MHz\_RB\_25\_0\_NTNV



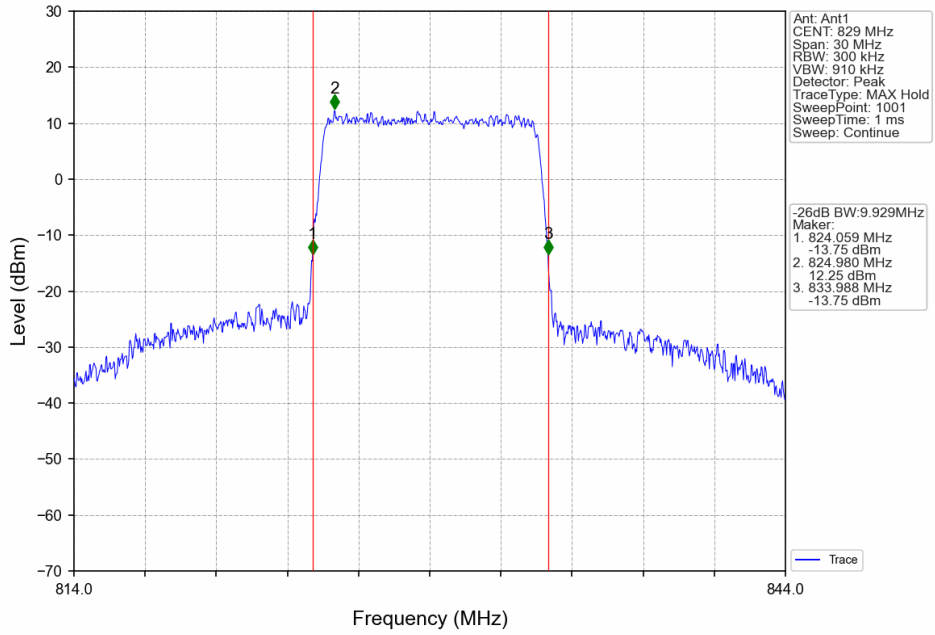
Band5\_5MHz\_16QAM\_MCH\_836.5MHz\_RB\_25\_0\_NTNV



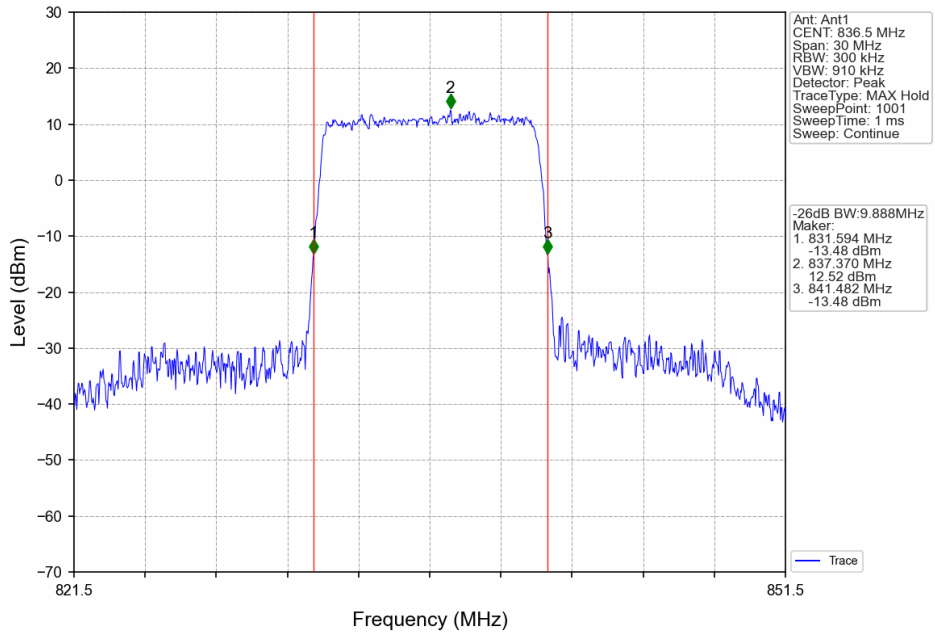
Band5\_5MHz\_16QAM\_HCH\_846.5MHz\_RB\_25\_0\_NTNV



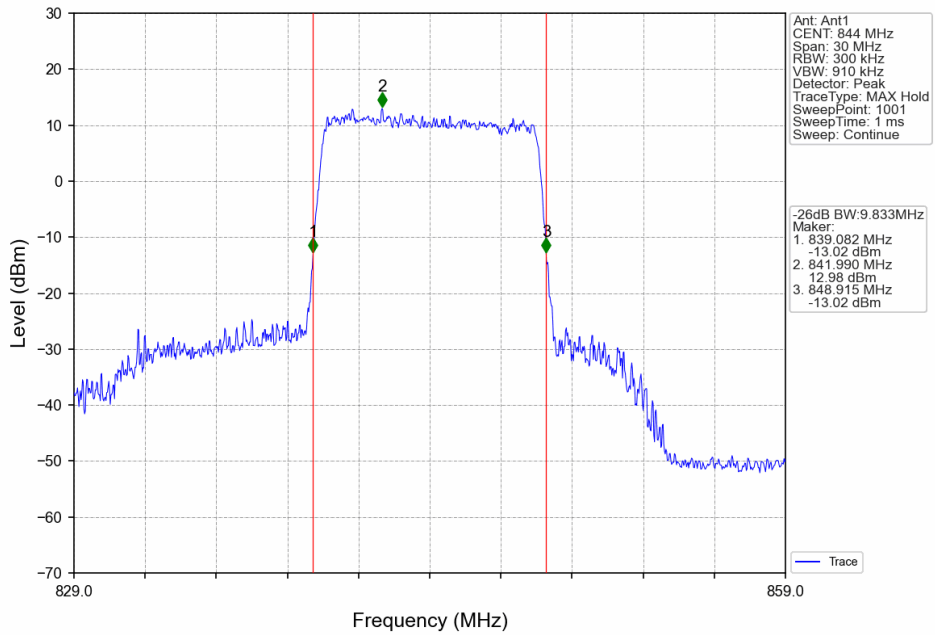
Band5\_10MHz\_QPSK\_LCH\_829MHz\_RB\_50\_0\_NTNV



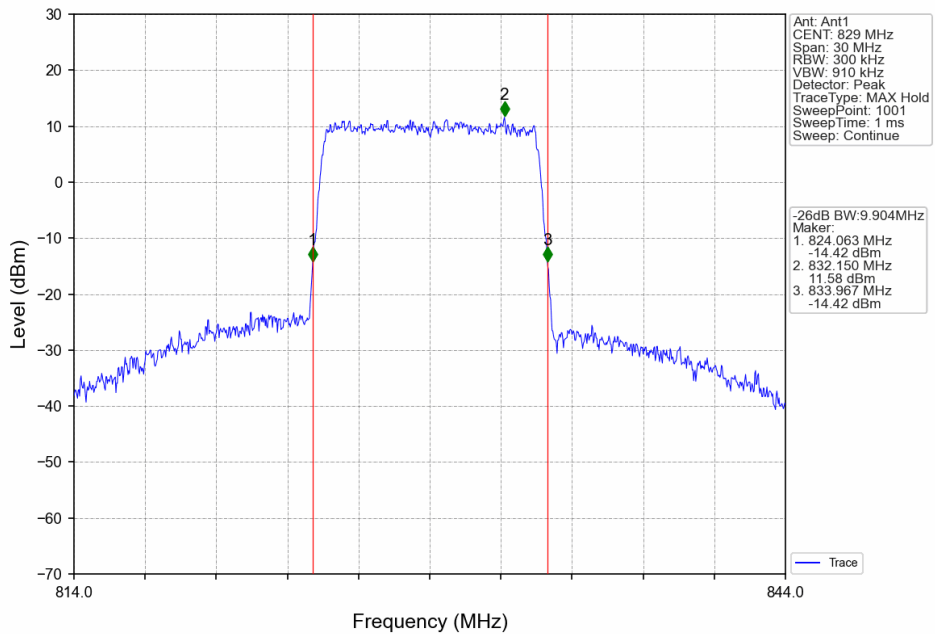
Band5\_10MHz\_QPSK\_MCH\_836.5MHz\_RB\_50\_0\_NTNV

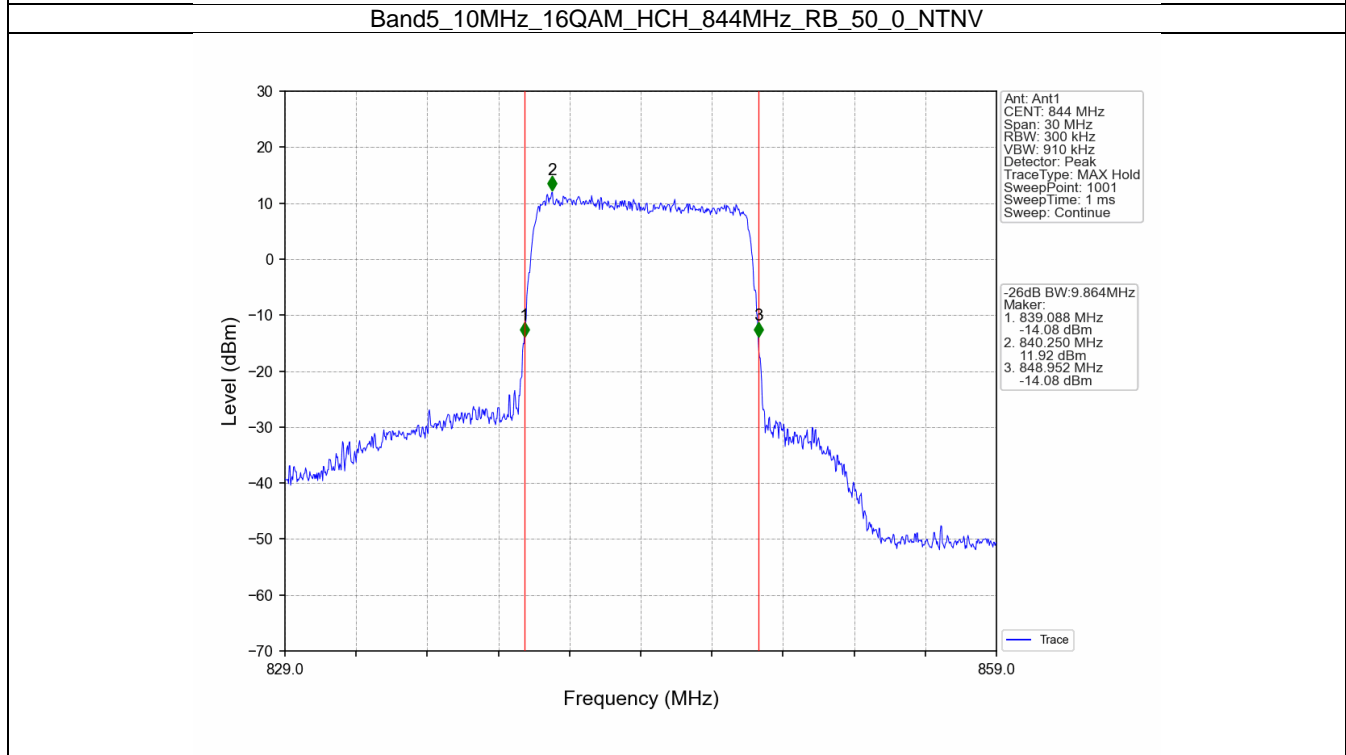
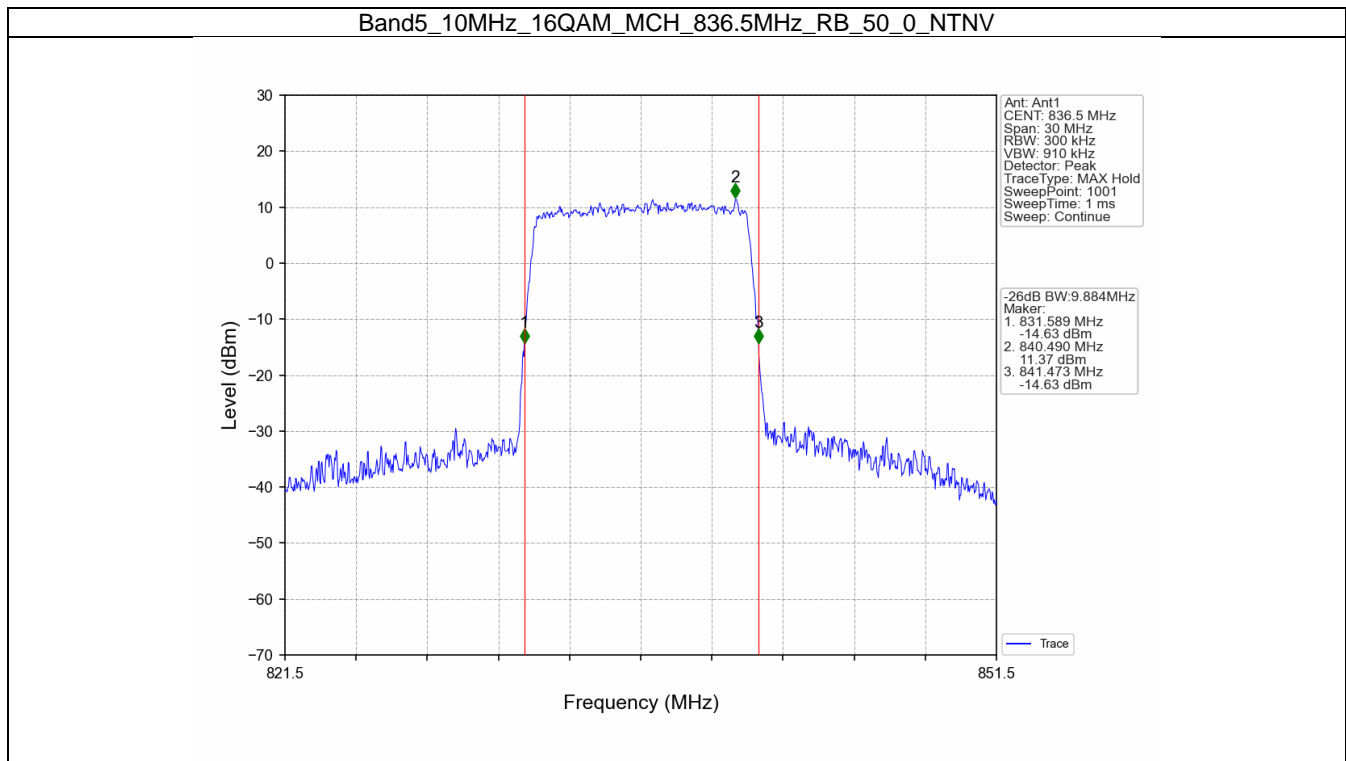


Band5\_10MHz\_QPSK\_HCH\_844MHz\_RB\_50\_0\_NTNV



Band5\_10MHz\_16QAM\_LCH\_829MHz\_RB\_50\_0\_NTNV







## 5. Peak-Average Ratio

### 5.1 Test Result

#### 5.1.1 B5\_1.4MHz

Band: 5 / Bandwidth: 1.4MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	824.7	6	0	4.96	<=13	Pass
	836.5	6	0	5.64	<=13	Pass
	848.3	6	0	5.59	<=13	Pass
16QAM	824.7	6	0	5.85	<=13	Pass
	836.5	6	0	6.46	<=13	Pass
	848.3	6	0	6.30	<=13	Pass

#### 5.1.2 B5\_3MHz

Band: 5 / Bandwidth: 3MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	825.5	15	0	5.03	<=13	Pass
	836.5	15	0	5.56	<=13	Pass
	847.5	15	0	5.42	<=13	Pass
16QAM	825.5	15	0	5.87	<=13	Pass
	836.5	15	0	6.37	<=13	Pass
	847.5	15	0	6.30	<=13	Pass

#### 5.1.3 B5\_5MHz

Band: 5 / Bandwidth: 5MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	826.5	25	0	5.25	<=13	Pass
	836.5	25	0	5.70	<=13	Pass
	846.5	25	0	5.67	<=13	Pass
16QAM	826.5	25	0	5.98	<=13	Pass
	836.5	25	0	6.39	<=13	Pass
	846.5	25	0	6.31	<=13	Pass

#### 5.1.4 B5\_10MHz

Band: 5 / Bandwidth: 10MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	829	50	0	5.40	<=13	Pass
	836.5	50	0	5.57	<=13	Pass
	844	50	0	5.53	<=13	Pass
16QAM	829	50	0	6.15	<=13	Pass

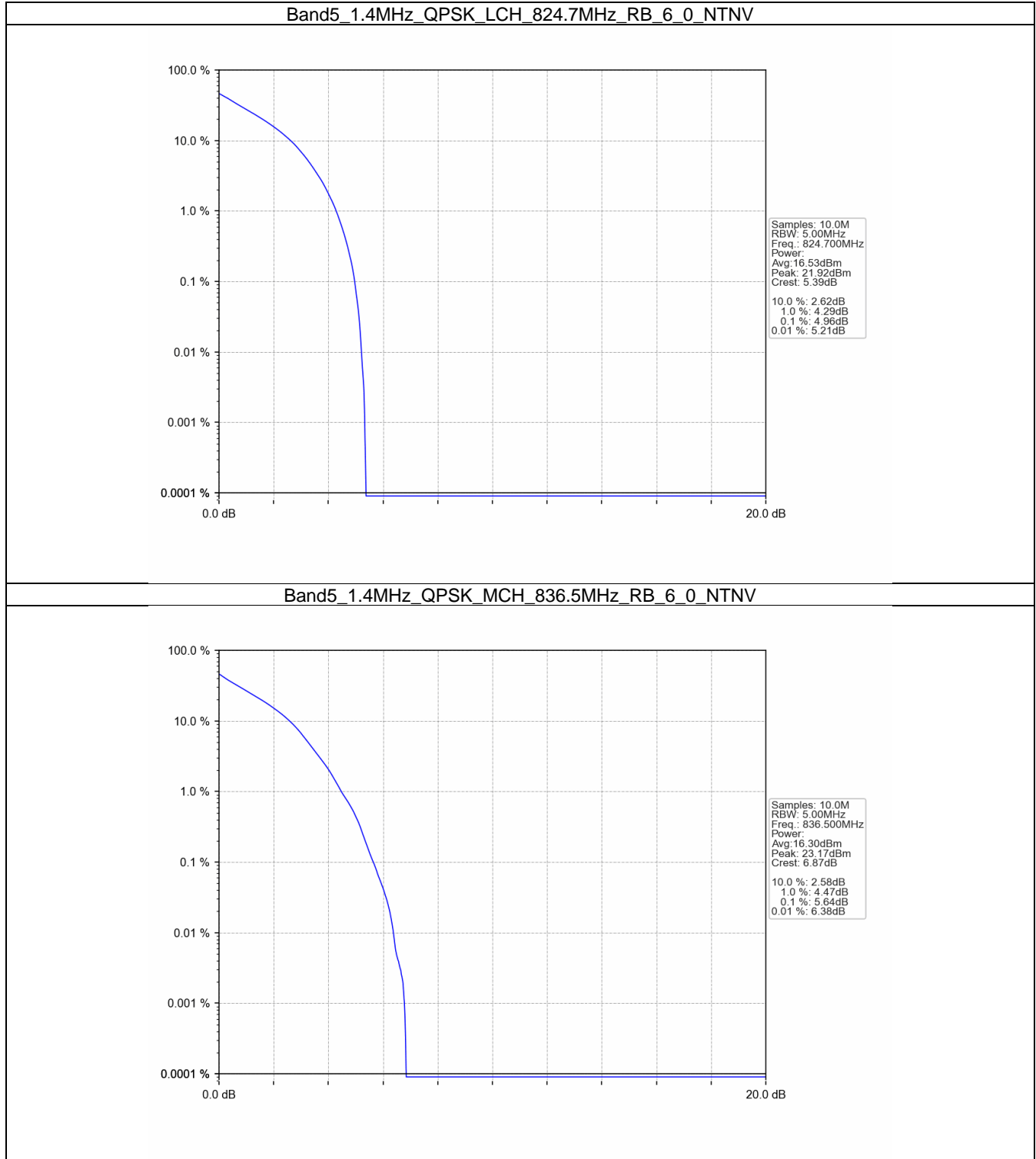


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	836.5	50	0	6.30	<=13	Pass
	844	50	0	6.28	<=13	Pass

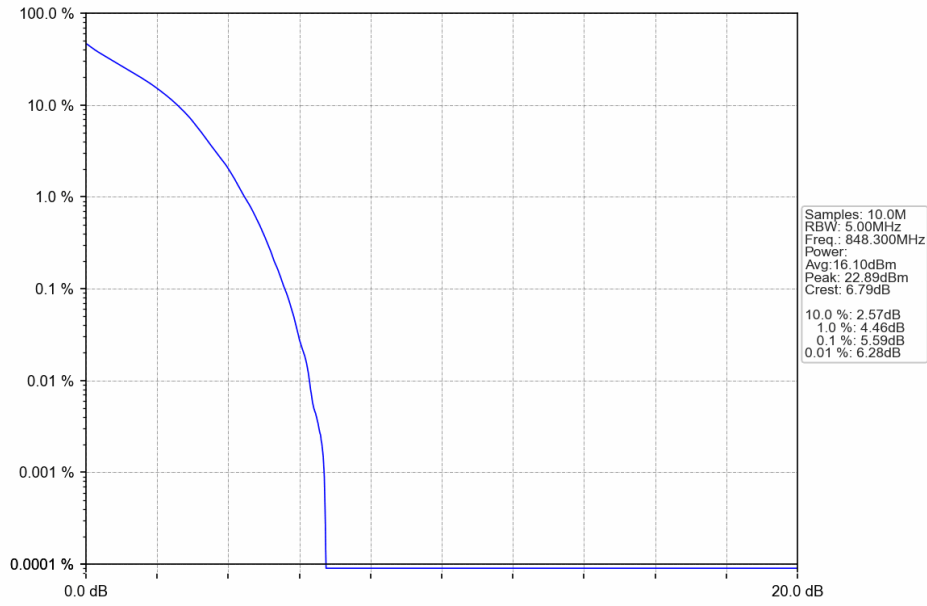
## 5.2 Test Graph

### 5.2.1 B5\_1.4MHz

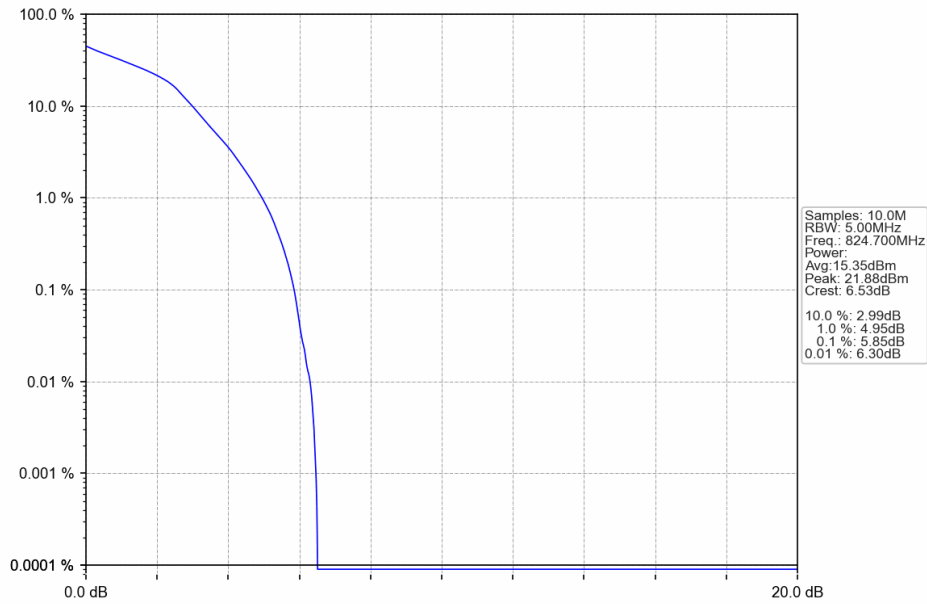




Band5\_1.4MHz\_QPSK\_HCH\_848.3MHz\_RB\_6\_0\_NTNV

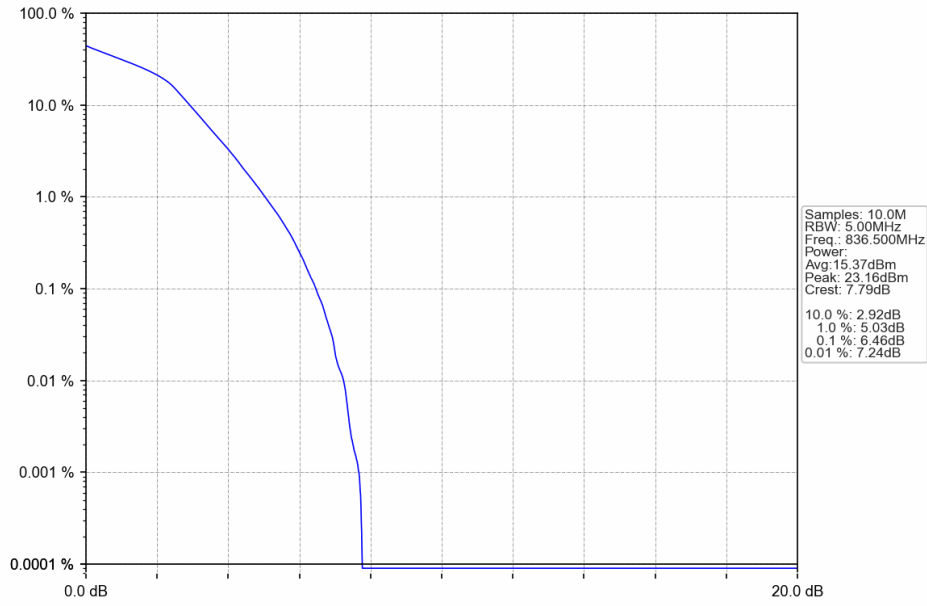


Band5\_1.4MHz\_16QAM\_LCH\_824.7MHz\_RB\_6\_0\_NTNV

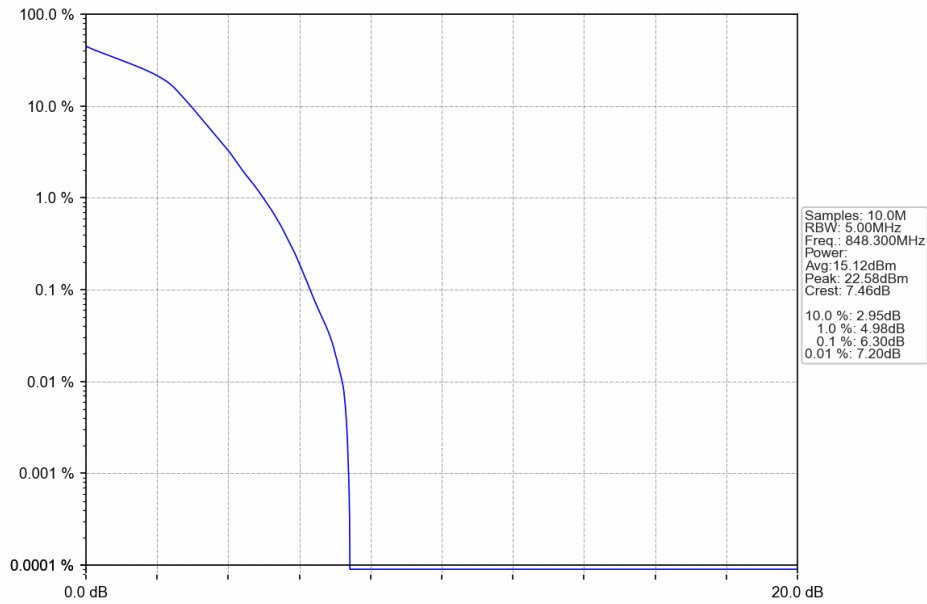




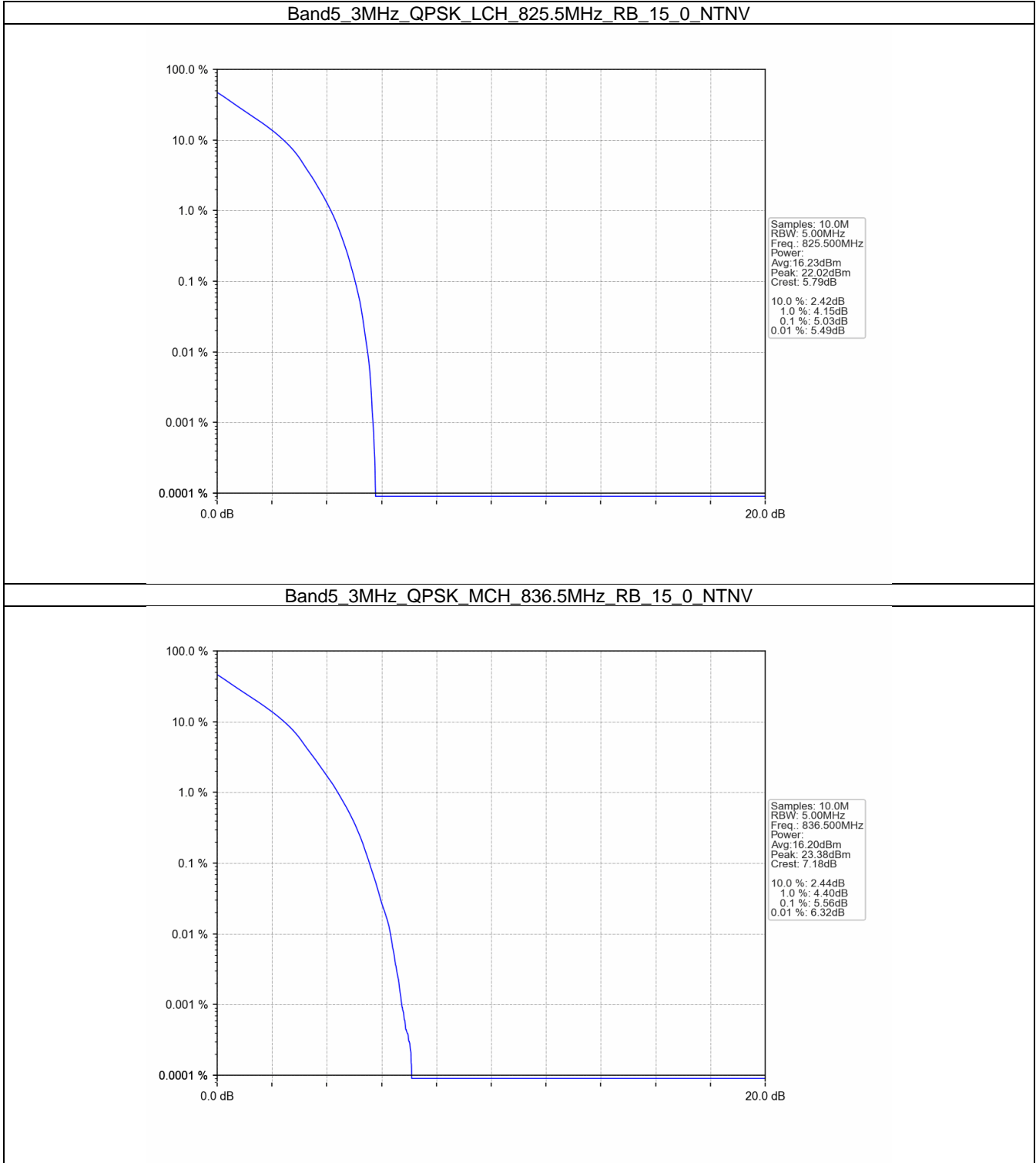
Band5\_1.4MHz\_16QAM\_MCH\_836.5MHz\_RB\_6\_0\_NTNV



Band5\_1.4MHz\_16QAM\_HCH\_848.3MHz\_RB\_6\_0\_NTNV

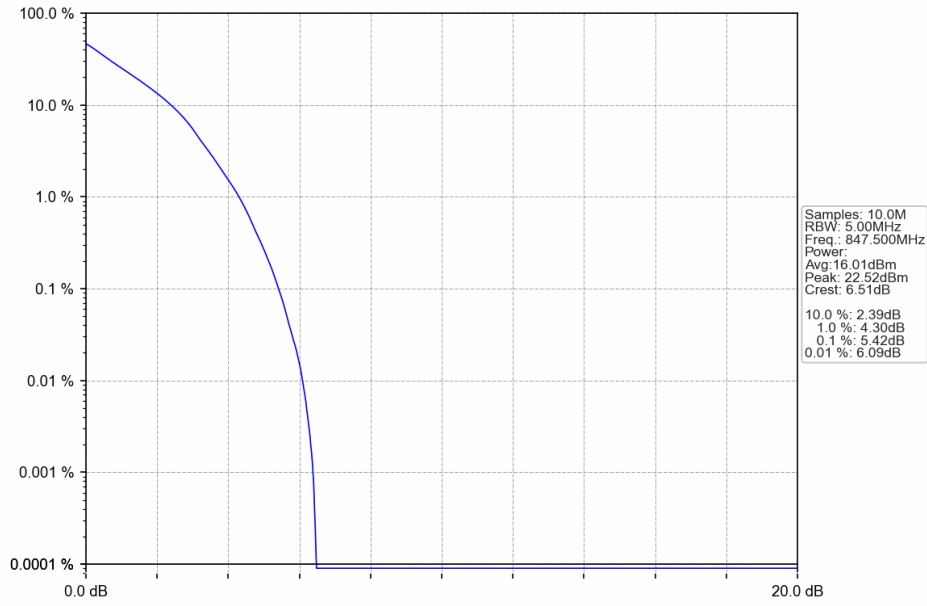


### 5.2.2 B5\_3MHz

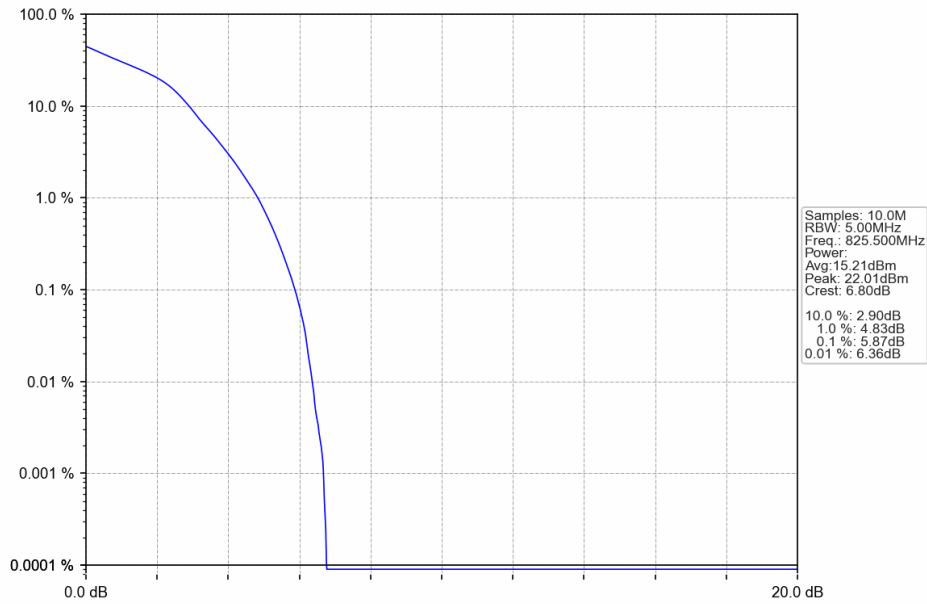




Band5\_3MHz\_QPSK\_HCH\_847.5MHz\_RB\_15\_0\_NTNV

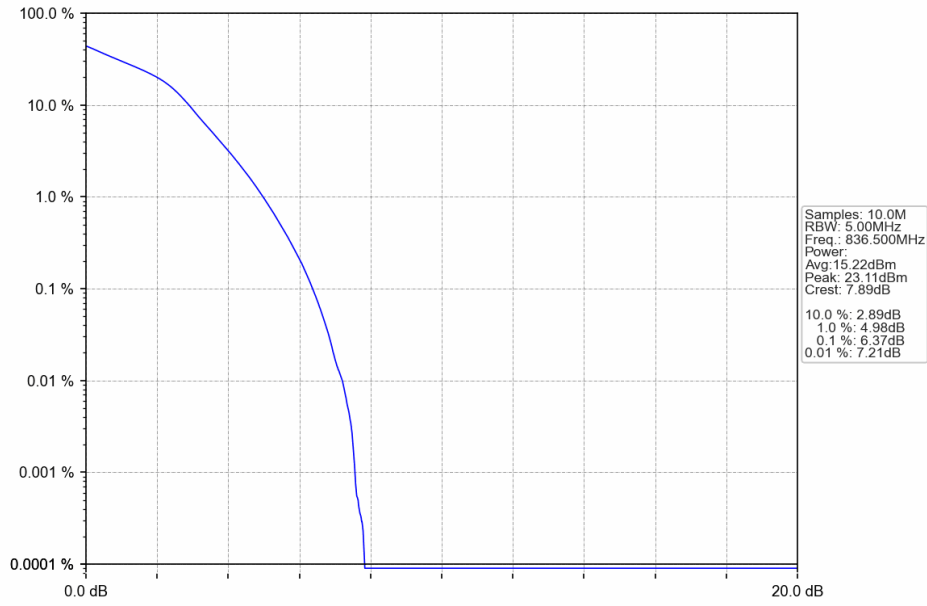


Band5\_3MHz\_16QAM\_LCH\_825.5MHz\_RB\_15\_0\_NTNV

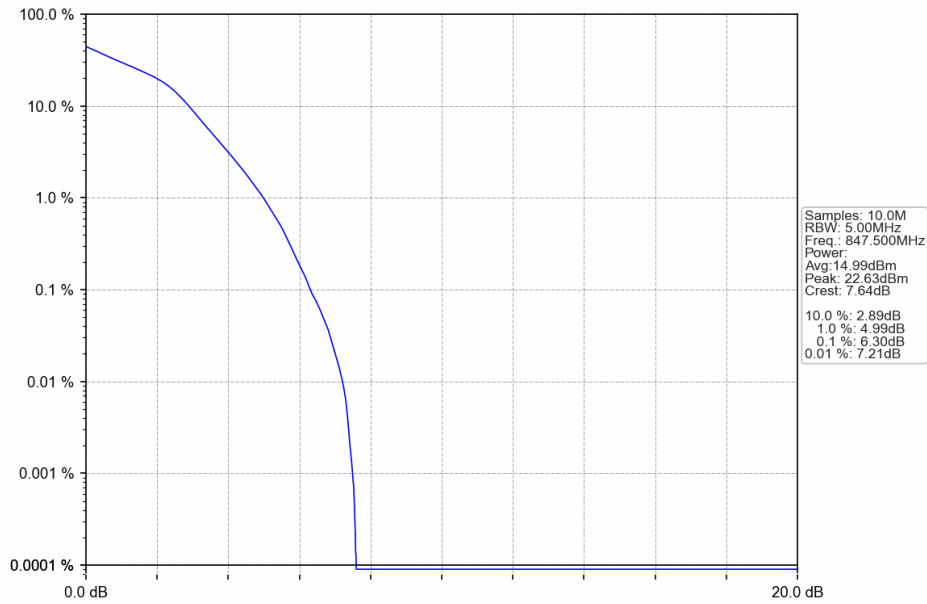




Band5\_3MHz\_16QAM\_MCH\_836.5MHz\_RB\_15\_0\_NTNV

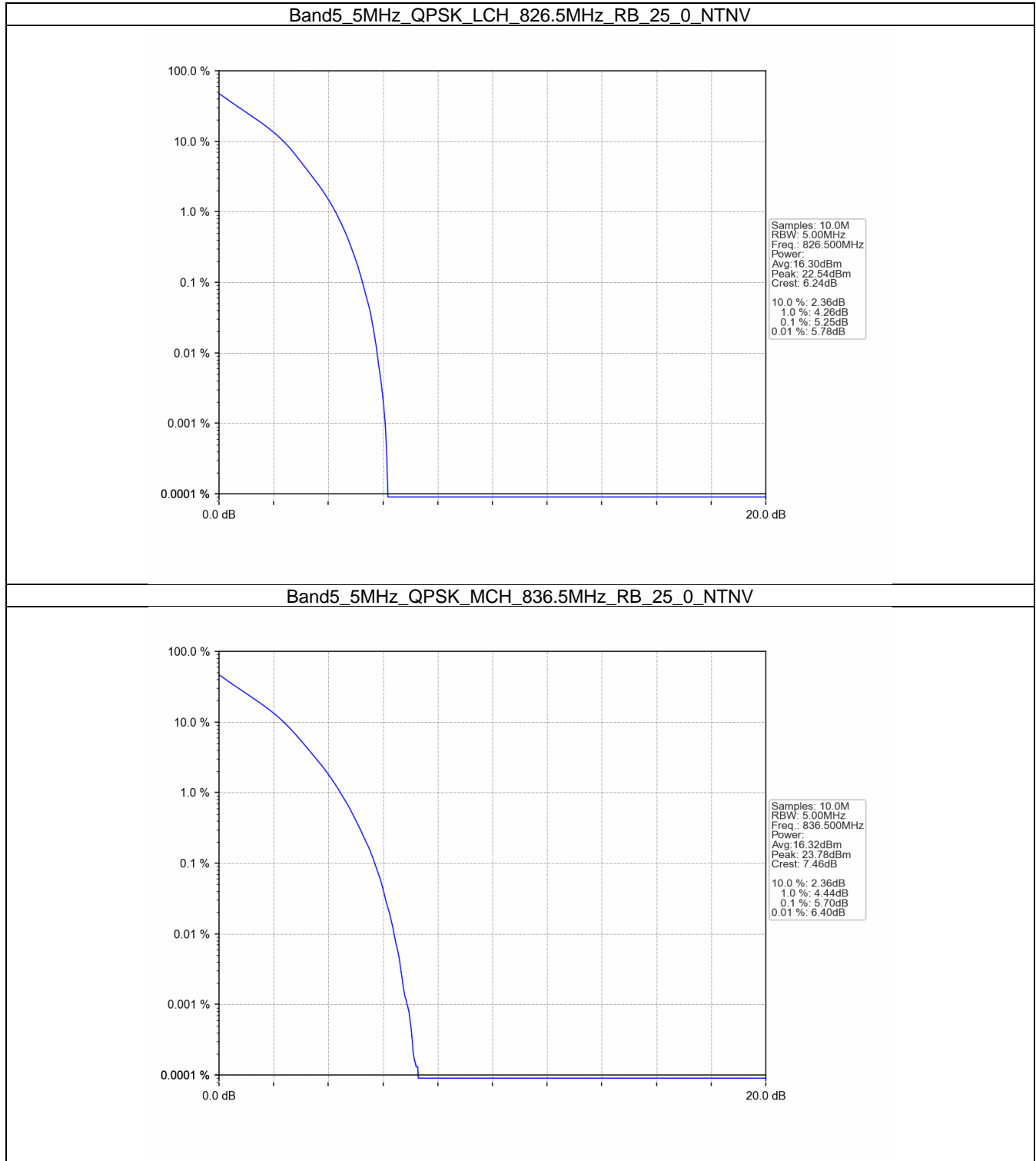


Band5\_3MHz\_16QAM\_HCH\_847.5MHz\_RB\_15\_0\_NTNV

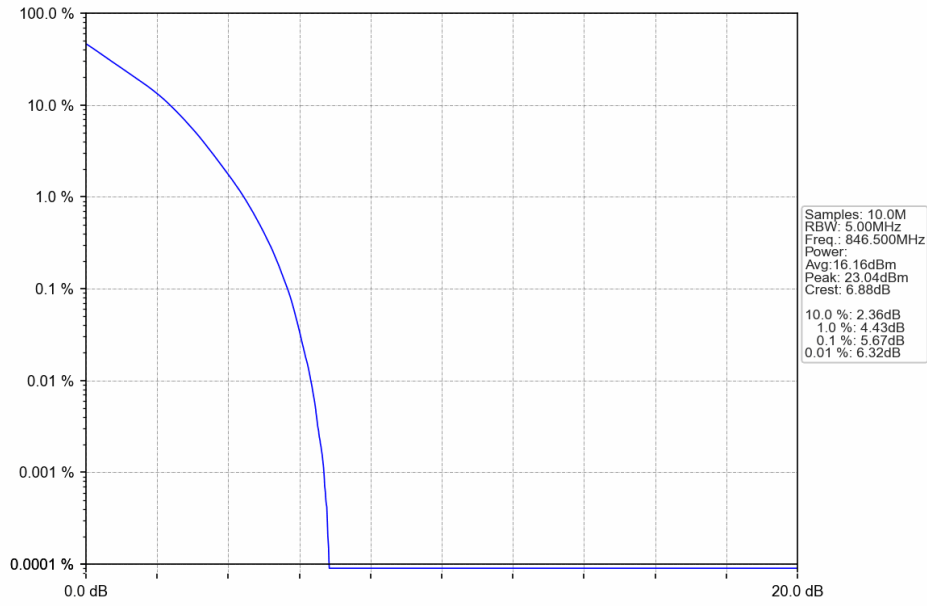




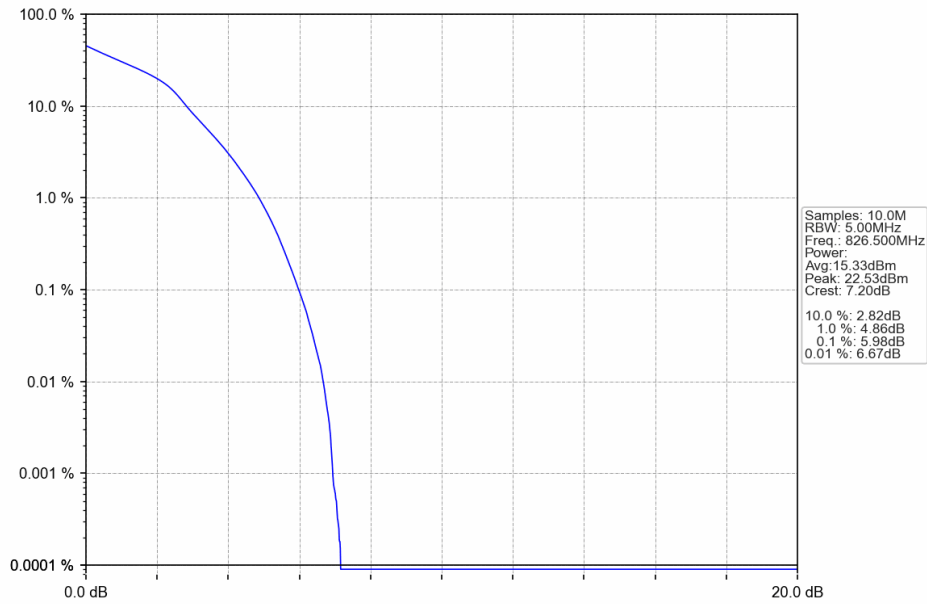
### 5.2.3 B5\_5MHz



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

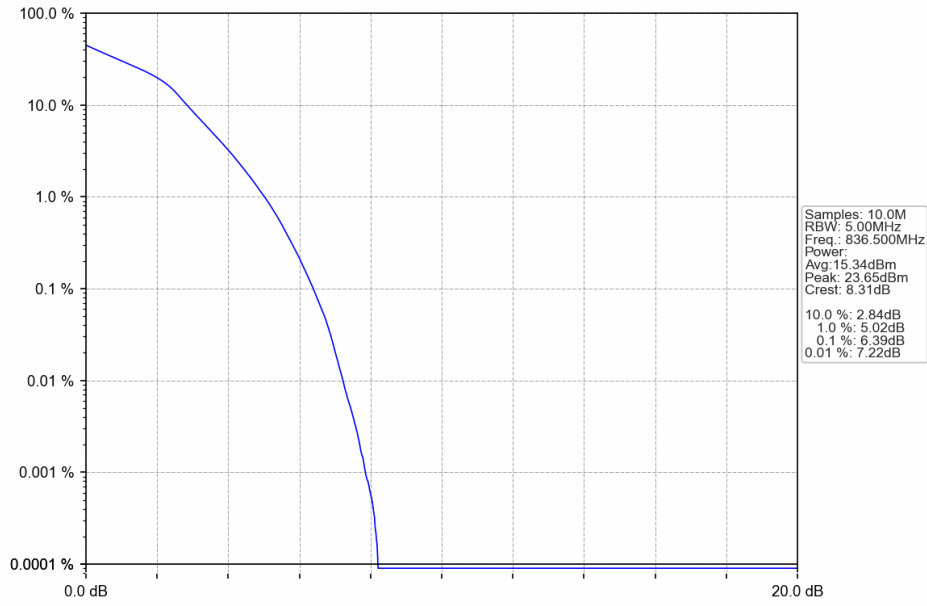


Band5\_5MHz\_16QAM\_LCH\_826.5MHz\_RB\_25\_0\_NTNV

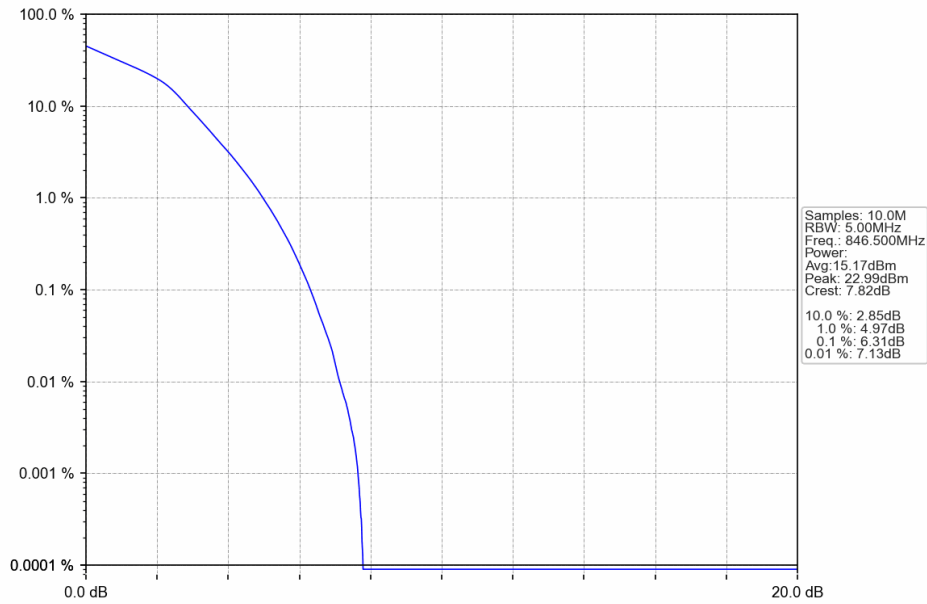




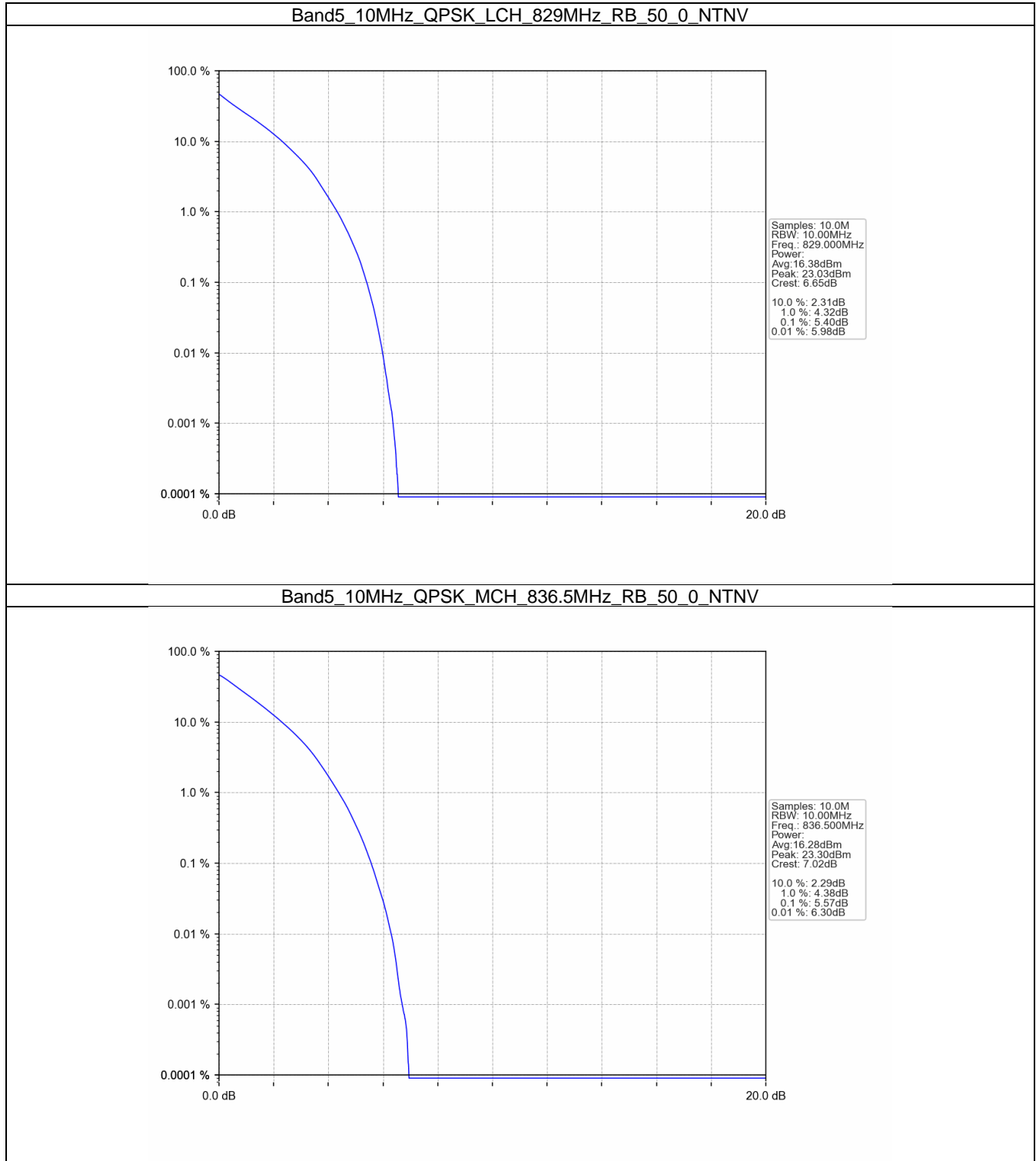
Band5\_5MHz\_16QAM\_MCH\_836.5MHz\_RB\_25\_0\_NTNV



Band5\_5MHz\_16QAM\_HCH\_846.5MHz\_RB\_25\_0\_NTNV

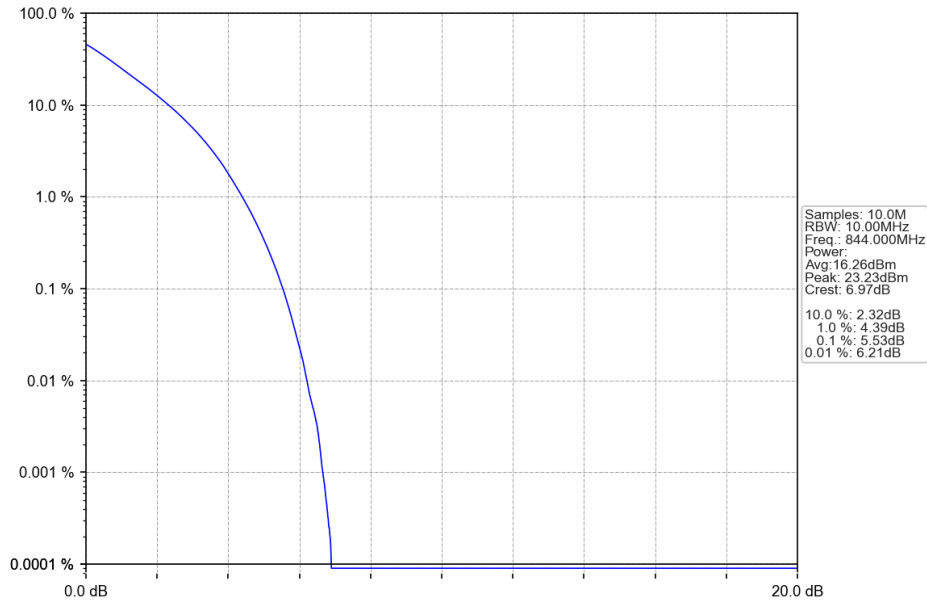


### 5.2.4 B5\_10MHz

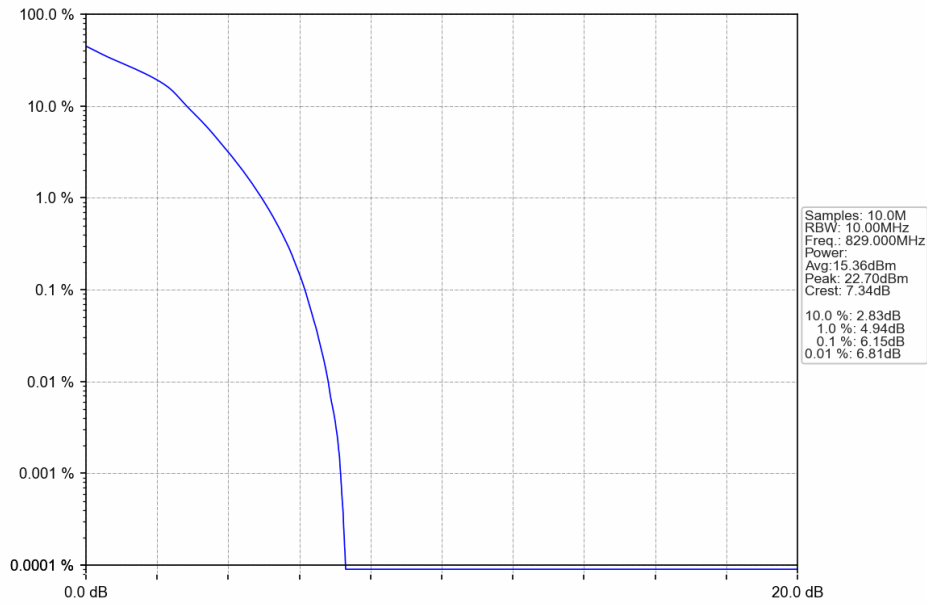




Band5\_10MHz\_QPSK\_HCH\_844MHz\_RB\_50\_0\_NTNV

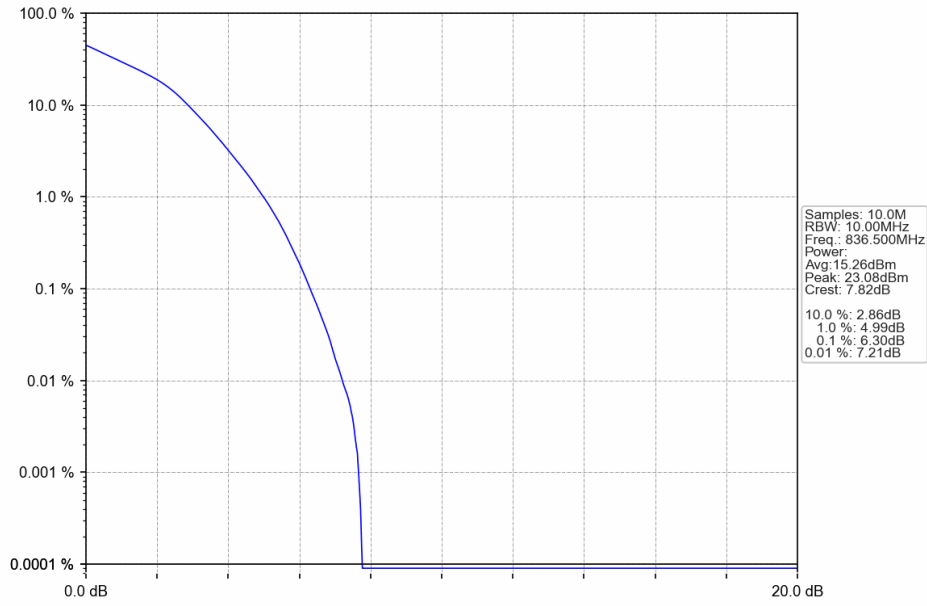


Band5\_10MHz\_16QAM\_LCH\_829MHz\_RB\_50\_0\_NTNV

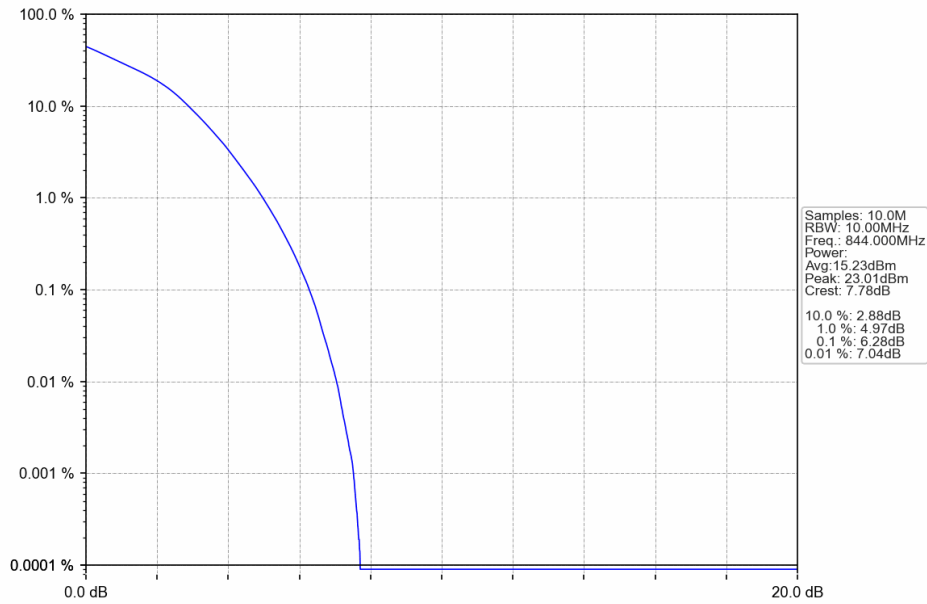




Band5\_10MHz\_16QAM\_MCH\_836.5MHz\_RB\_50\_0\_NTNV



Band5\_10MHz\_16QAM\_HCH\_844MHz\_RB\_50\_0\_NTNV



## 6. Spurious Emission

### 6.1 Test Result

#### 6.1.1 B5\_1.4MHz

Band: 5 / Bandwidth: 1.4MHz / NTN						
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
	848.3	1	0	Refer To Test Graph		Pass
		1	5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
16QAM	824.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	848.3	1	0	Refer To Test Graph		Pass
		1	5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

#### 6.1.2 B5\_3MHz

Band: 5 / Bandwidth: 3MHz / NTN						
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
	847.5	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	825.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	847.5	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

#### 6.1.3 B5\_5MHz

Band: 5 / Bandwidth: 5MHz / NTN						
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
	846.5	1	0	Refer To Test Graph		Pass
		1	24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass



16QAM	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

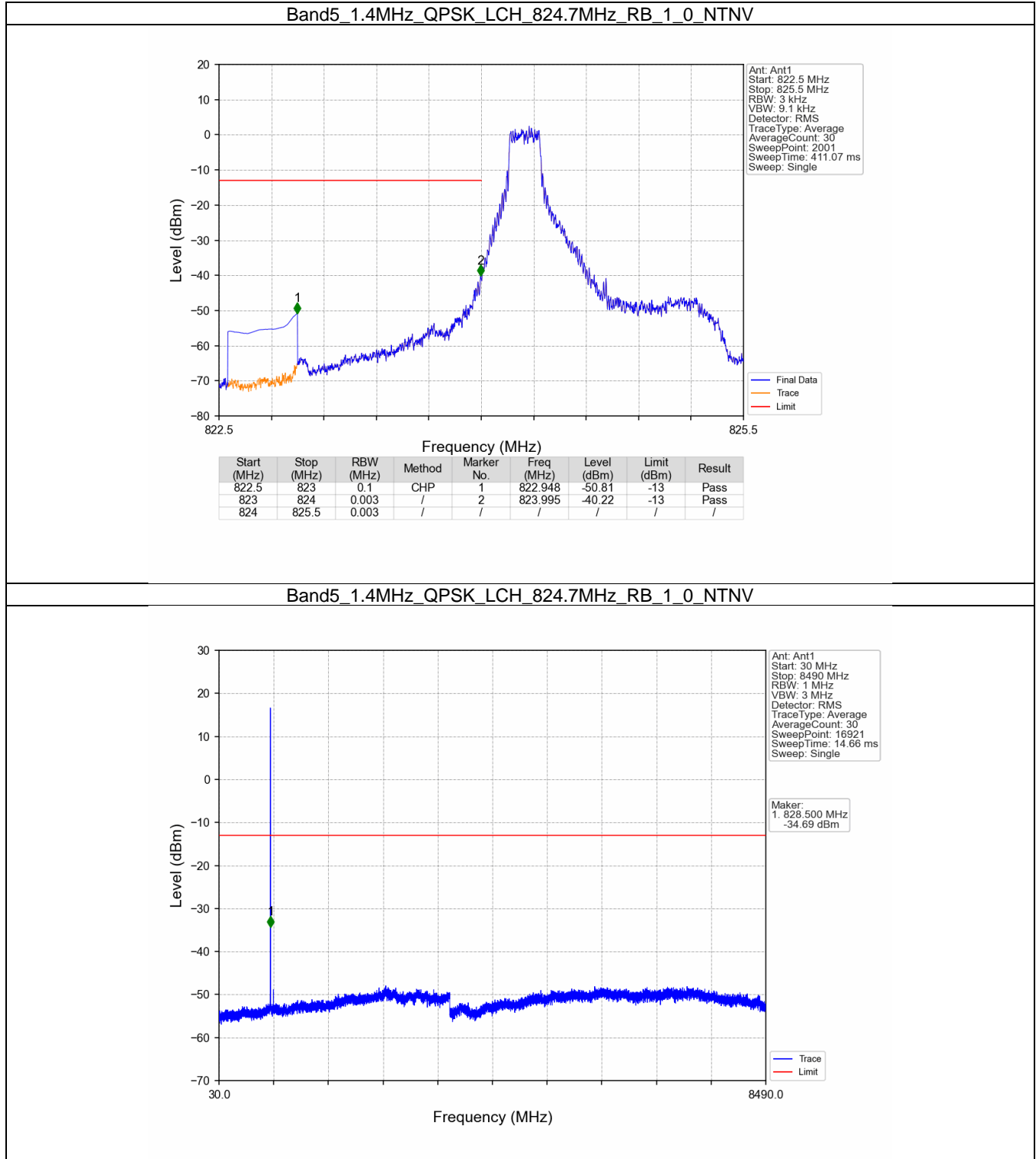
6.1.4 B5\_10MHz

Band: 5 / Bandwidth: 10MHz / NTNV						
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	
16QAM	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	

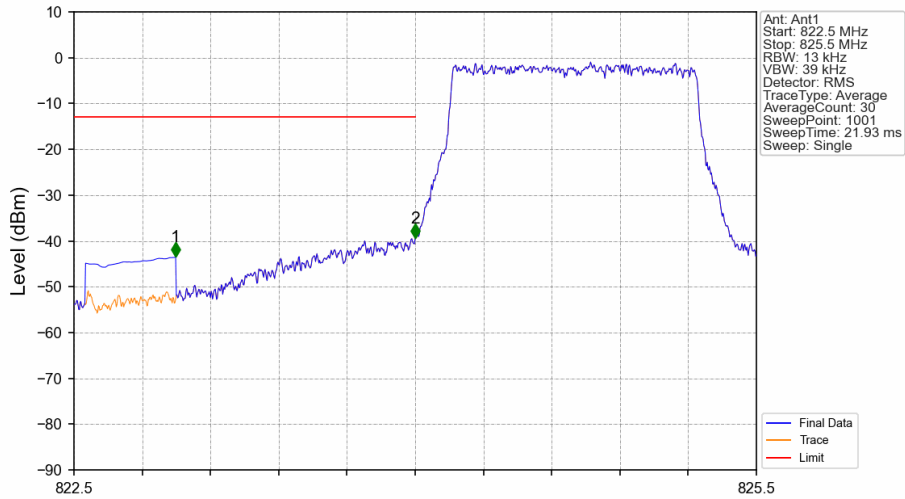


## 6.2 Test Graph

### 6.2.1 B5\_1.4MHz

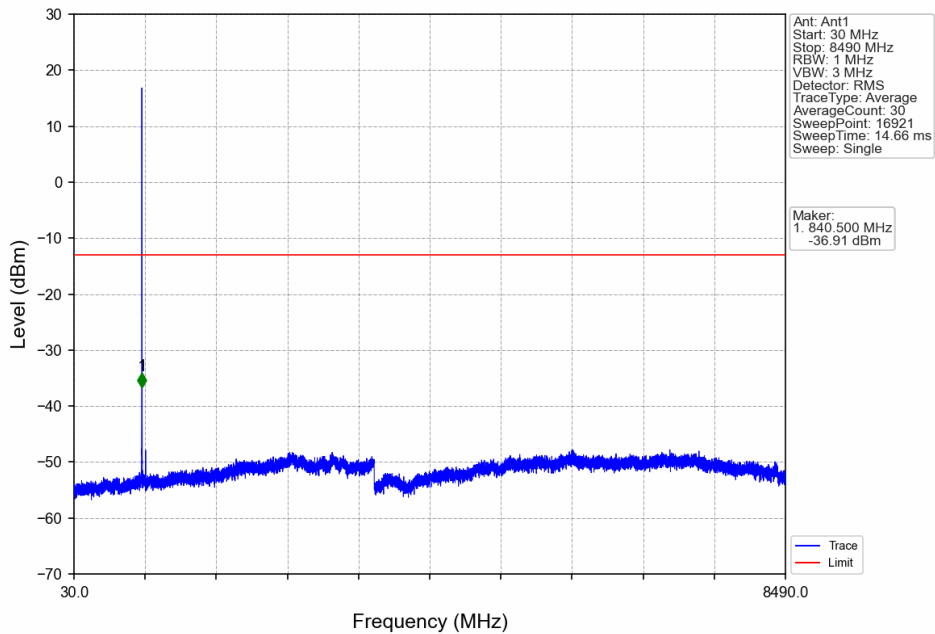


Band5\_1.4MHz\_QPSK\_LCH\_824.7MHz\_RB\_6\_0\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
822.5	823	0.1	CHP	1	822.947	-43.50	-13	Pass
823	824	0.013	/	2	824.000	-39.38	-13	Pass
824	825.5	0.013	/	/	/	/	/	/

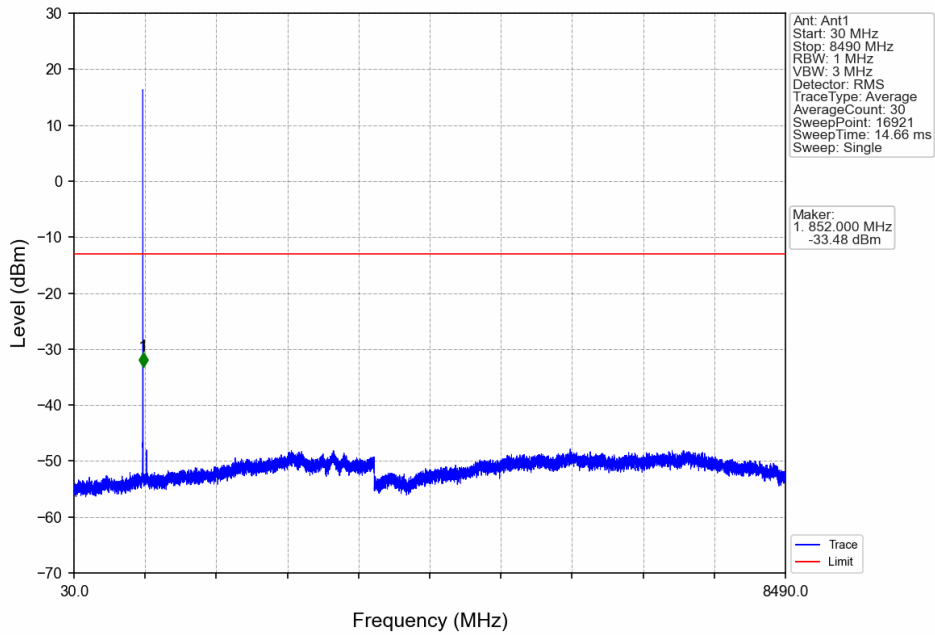
Band5\_1.4MHz\_QPSK\_MCH\_836.5MHz\_RB\_1\_0\_NTNV



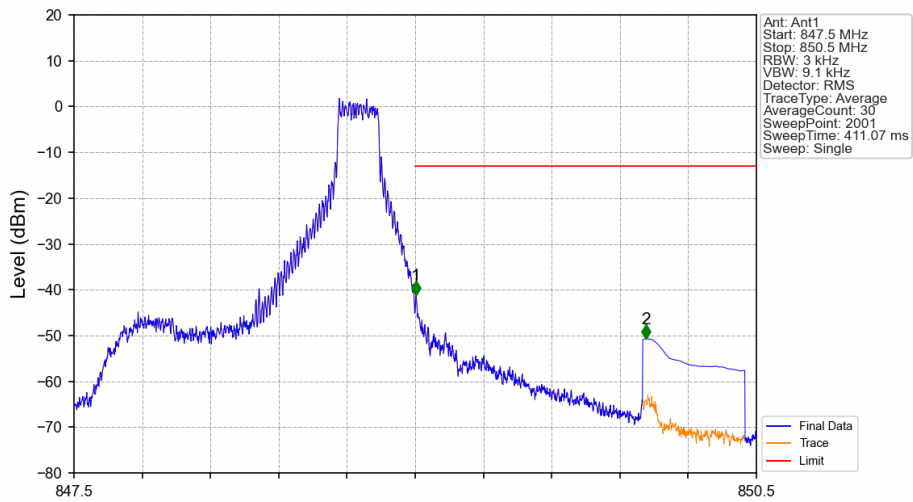
Ant: Ant1  
 Start: 30 MHz  
 Stop: 8490 MHz  
 RBW: 1 MHz  
 VBW: 3 MHz  
 Detector: RMS  
 Trace Type: Average  
 Average Count: 30  
 Sweep Point: 16921  
 Sweep Time: 14.66 ms  
 Sweep: Single

Marker:  
 1: 840.500 MHz  
 -36.91 dBm

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

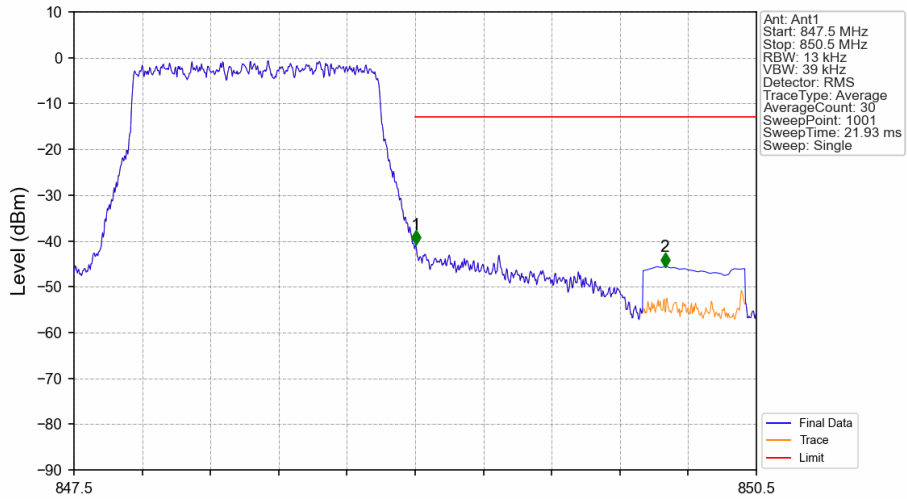


Band5\_1.4MHz\_QPSK\_HCH\_848.3MHz\_RB\_1\_5\_NTNV



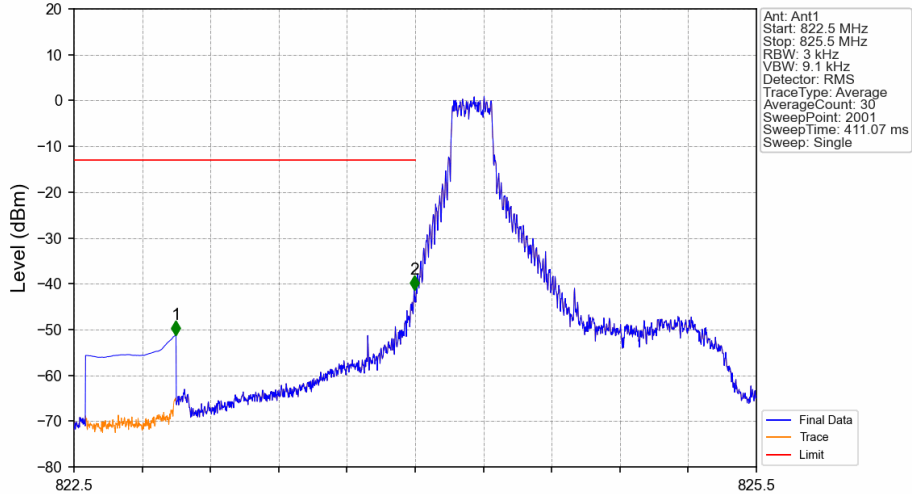
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
847.5	849	0.003	/	/	/	/	/	/
849	850	0.003	/	1	849.003	-41.27	-13	Pass
850	850.5	0.1	CHP	2	850.014	-50.72	-13	Pass

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
847.5	849	0.013	/	1	849.003	-40.80	-13	Pass
849	850.5	0.013	/	2	850.098	-45.64	-13	Pass

Band5\_1.4MHz\_16QAM\_LCH\_824.7MHz\_RB\_1\_0\_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
822.5	823	0.1	CHP	1	822.948	-51.19	-13	Pass
823	824	0.003	/	2	823.995	-41.29	-13	Pass
824	825.5	0.003	/	/	/	/	/	/