

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B13_5MHz_ERP

Band: 13 / Bandwidth: 5MHz / NTN/V								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	779.5	1	0	24.10	-0.50	21.45	<=34.77	Pass
			13	24.04	-0.50	21.39	<=34.77	Pass
			24	24.15	-0.50	21.50	<=34.77	Pass
		12	0	23.51	-0.50	20.86	<=34.77	Pass
			6	23.56	-0.50	20.91	<=34.77	Pass
			13	23.40	-0.50	20.75	<=34.77	Pass
		25	0	23.57	-0.50	20.92	<=34.77	Pass
	782	1	0	24.17	-0.50	21.52	<=34.77	Pass
			13	24.17	-0.50	21.52	<=34.77	Pass
			24	24.11	-0.50	21.46	<=34.77	Pass
		12	0	23.50	-0.50	20.85	<=34.77	Pass
			6	23.54	-0.50	20.89	<=34.77	Pass
			13	23.46	-0.50	20.81	<=34.77	Pass
		25	0	23.50	-0.50	20.85	<=34.77	Pass
	784.5	1	0	24.22	-0.50	21.57	<=34.77	Pass
			13	24.10	-0.50	21.45	<=34.77	Pass
			24	24.10	-0.50	21.45	<=34.77	Pass
		12	0	23.51	-0.50	20.86	<=34.77	Pass
			6	23.55	-0.50	20.90	<=34.77	Pass
			13	23.52	-0.50	20.87	<=34.77	Pass
		25	0	23.55	-0.50	20.90	<=34.77	Pass
16QAM	779.5	1	0	23.40	-0.50	20.75	<=34.77	Pass
			13	23.34	-0.50	20.69	<=34.77	Pass
			24	23.31	-0.50	20.66	<=34.77	Pass
		12	0	22.57	-0.50	19.92	<=34.77	Pass
			6	22.57	-0.50	19.92	<=34.77	Pass
			13	22.43	-0.50	19.78	<=34.77	Pass
		25	0	22.52	-0.50	19.87	<=34.77	Pass
	782	1	0	23.76	-0.50	21.11	<=34.77	Pass
			13	23.79	-0.50	21.14	<=34.77	Pass
			24	23.73	-0.50	21.08	<=34.77	Pass
		12	0	22.52	-0.50	19.87	<=34.77	Pass
			6	22.57	-0.50	19.92	<=34.77	Pass
			13	22.52	-0.50	19.87	<=34.77	Pass
		25	0	22.53	-0.50	19.88	<=34.77	Pass
	784.5	1	0	23.75	-0.50	21.10	<=34.77	Pass
			13	23.65	-0.50	21.00	<=34.77	Pass
			24	23.75	-0.50	21.10	<=34.77	Pass
		12	0	22.47	-0.50	19.82	<=34.77	Pass
			6	22.57	-0.50	19.92	<=34.77	Pass
			13	22.52	-0.50	19.87	<=34.77	Pass
		25	0	22.59	-0.50	19.94	<=34.77	Pass
64QAM	779.5	1	0	22.52	-0.50	19.87	<=34.77	Pass
			13	22.52	-0.50	19.87	<=34.77	Pass
			24	22.50	-0.50	19.85	<=34.77	Pass
		12	0	21.46	-0.50	18.81	<=34.77	Pass
			6	21.43	-0.50	18.78	<=34.77	Pass
			13	21.27	-0.50	18.62	<=34.77	Pass
		25	0	21.47	-0.50	18.82	<=34.77	Pass
	782	1	0	22.62	-0.50	19.97	<=34.77	Pass
			13	22.71	-0.50	20.06	<=34.77	Pass
			24	22.65	-0.50	20.00	<=34.77	Pass
		12	0	21.49	-0.50	18.84	<=34.77	Pass
			6	21.57	-0.50	18.92	<=34.77	Pass

			13	21.49	-0.50	18.84	<=34.77	Pass
		25	0	21.61	-0.50	18.96	<=34.77	Pass
	784.5	1	0	22.67	-0.50	20.02	<=34.77	Pass
			13	22.57	-0.50	19.92	<=34.77	Pass
			24	22.62	-0.50	19.97	<=34.77	Pass
		12	0	21.64	-0.50	18.99	<=34.77	Pass
			6	21.69	-0.50	19.04	<=34.77	Pass
			13	21.66	-0.50	19.01	<=34.77	Pass
		25	0	21.57	-0.50	18.92	<=34.77	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

1.1.2 B13_10MHz_ERP

Band: 13 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	782	1	0	24.44	-0.50	21.79	<=34.77	Pass
			25	24.20	-0.50	21.55	<=34.77	Pass
			49	24.27	-0.50	21.62	<=34.77	Pass
		25	0	23.67	-0.50	21.02	<=34.77	Pass
			13	23.59	-0.50	20.94	<=34.77	Pass
			25	23.56	-0.50	20.91	<=34.77	Pass
		50	0	23.64	-0.50	20.99	<=34.77	Pass
16QAM	782	1	0	24.46	-0.50	21.81	<=34.77	Pass
			25	24.15	-0.50	21.50	<=34.77	Pass
			49	24.27	-0.50	21.62	<=34.77	Pass
		25	0	22.76	-0.50	20.11	<=34.77	Pass
			13	22.65	-0.50	20.00	<=34.77	Pass
			25	22.65	-0.50	20.00	<=34.77	Pass
		50	0	22.65	-0.50	20.00	<=34.77	Pass
64QAM	782	1	0	23.08	-0.50	20.43	<=34.77	Pass
			25	22.92	-0.50	20.27	<=34.77	Pass
			49	23.03	-0.50	20.38	<=34.77	Pass
		25	0	21.74	-0.50	19.09	<=34.77	Pass
			13	21.70	-0.50	19.05	<=34.77	Pass
			25	21.66	-0.50	19.01	<=34.77	Pass
		50	0	21.64	-0.50	18.99	<=34.77	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

2. Frequency Stability

2.1 Test Result

2.1.1 B13_10MHz

Band: 13 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	782	50	0	20	3.27	2.463	0.0031	-2.5 to 2.5	Pass
					3.85	0.694	0.0009	-2.5 to 2.5	Pass
					4.43	-0.188	-0.0002	-2.5 to 2.5	Pass
				-30	3.85	-0.108	-0.0001	-2.5 to 2.5	Pass
				-20	3.85	-0.538	-0.0007	-2.5 to 2.5	Pass
				-10	3.85	-0.988	-0.0013	-2.5 to 2.5	Pass
				0	3.85	-1.335	-0.0017	-2.5 to 2.5	Pass
				10	3.85	-0.528	-0.0007	-2.5 to 2.5	Pass
				30	3.85	-0.202	-0.0003	-2.5 to 2.5	Pass
				40	3.85	-0.124	-0.0002	-2.5 to 2.5	Pass
				50	3.85	-1.017	-0.0013	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band13_OBW

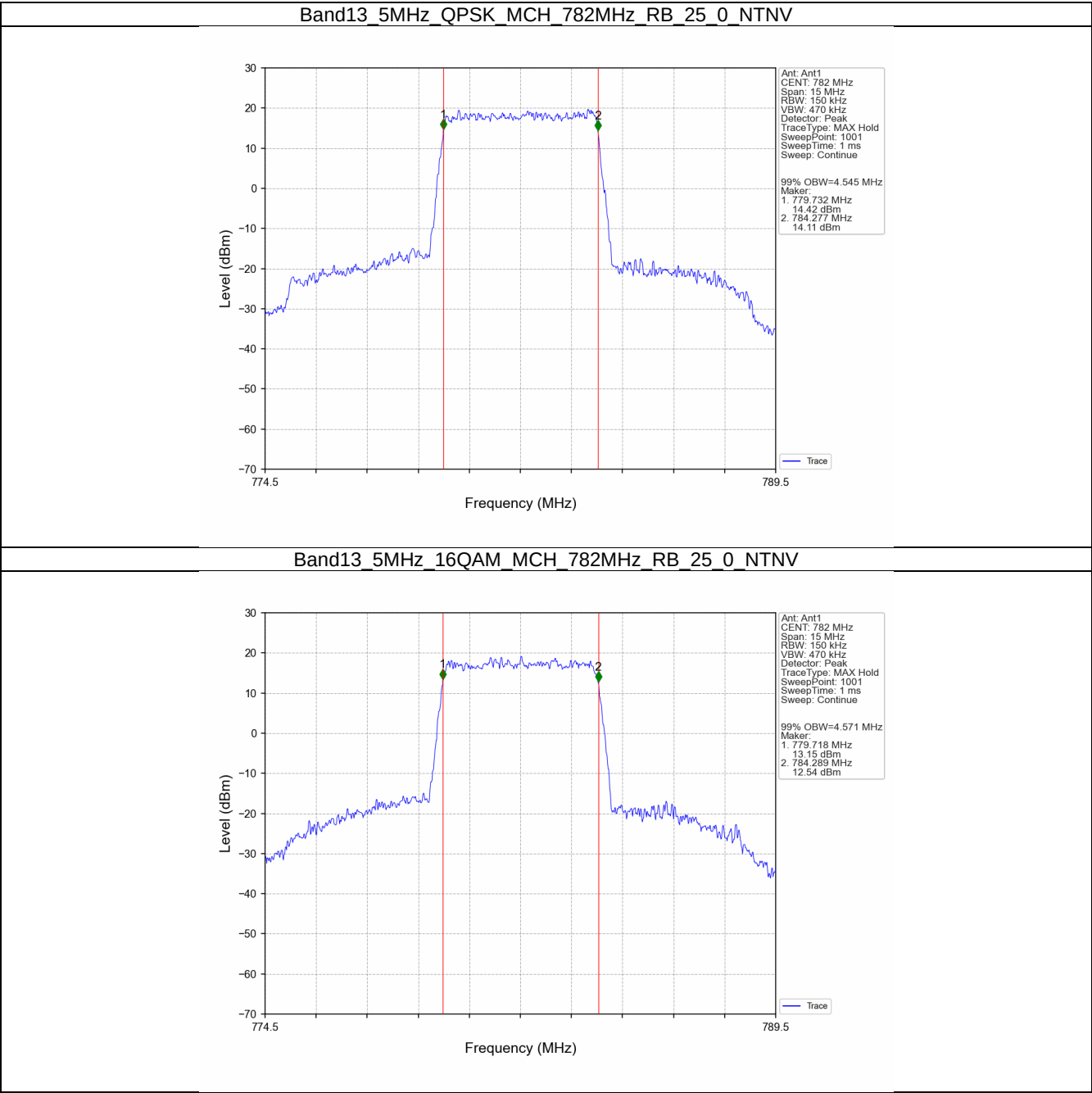
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.545	/	Pass
	16QAM	782	25	0	4.571	/	Pass
10	QPSK	782	50	0	9.052	/	Pass
	16QAM	782	50	0	9.049	/	Pass

3.1.2 Band13_XDB

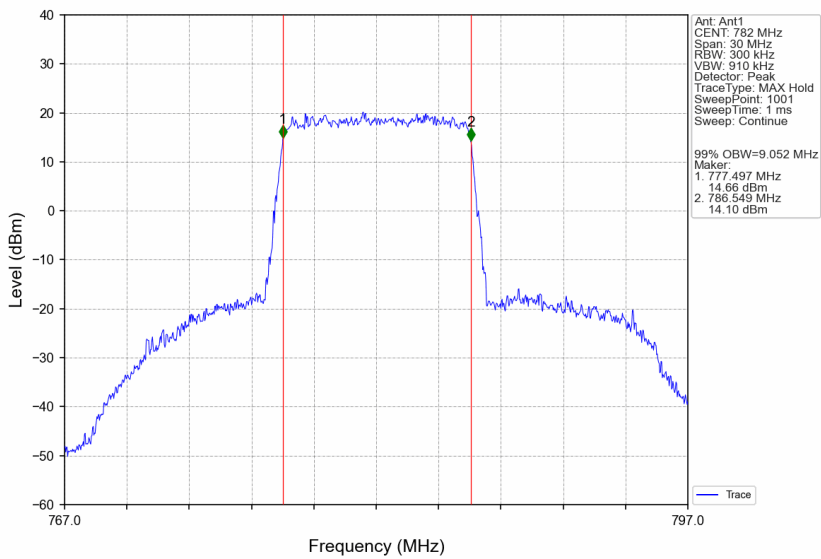
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	5.064	/	Pass
	16QAM	782	25	0	5.093	/	Pass
10	QPSK	782	50	0	10.063	/	Pass
	16QAM	782	50	0	10.054	/	Pass

3.2 Test Graph

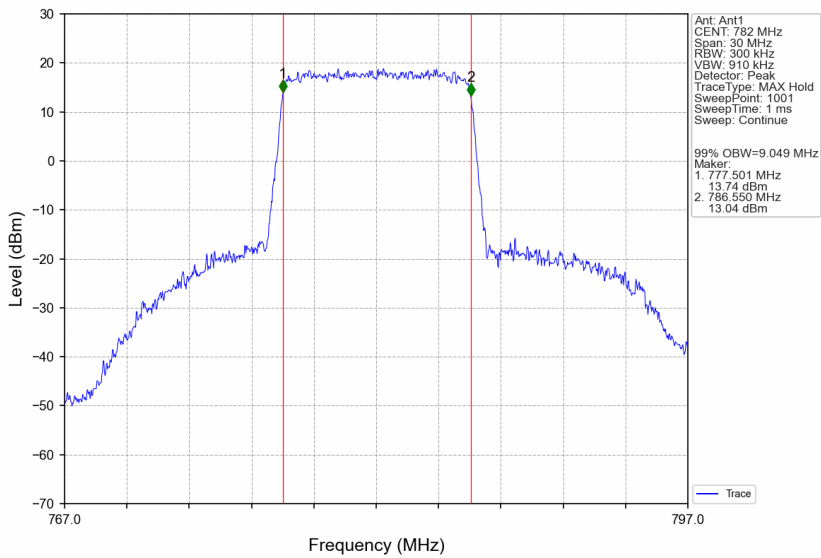
3.2.1 Band13_OBW



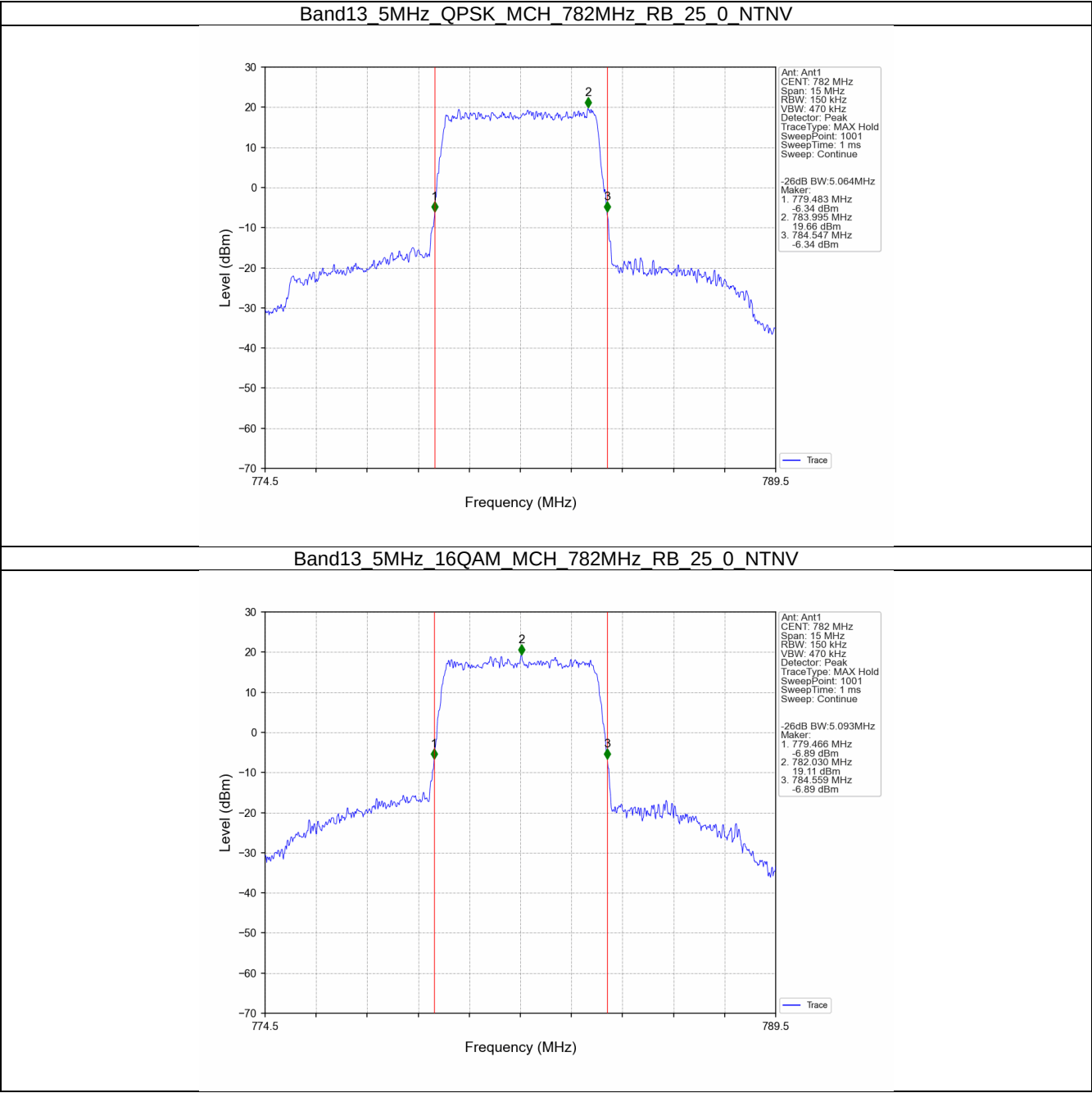
Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



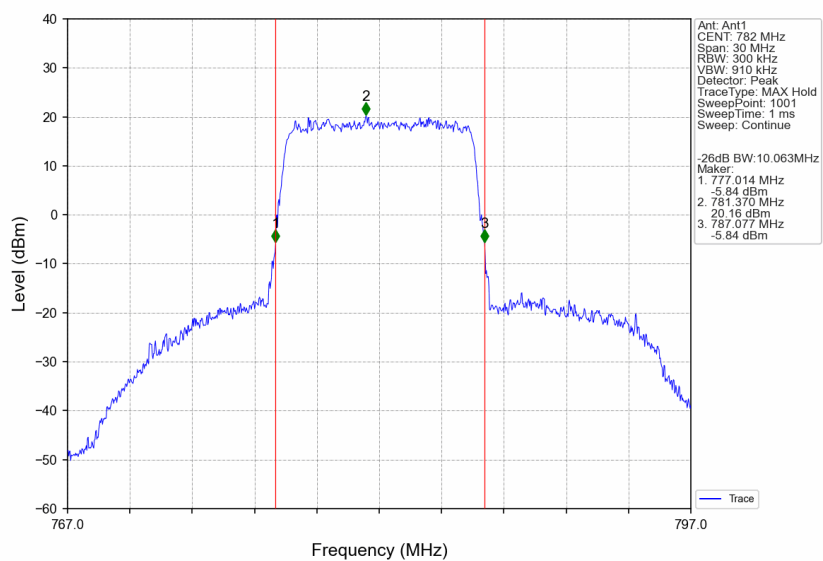
Band13_10MHz_16QAM_MCH_782MHz_RB_50_0_NTNV



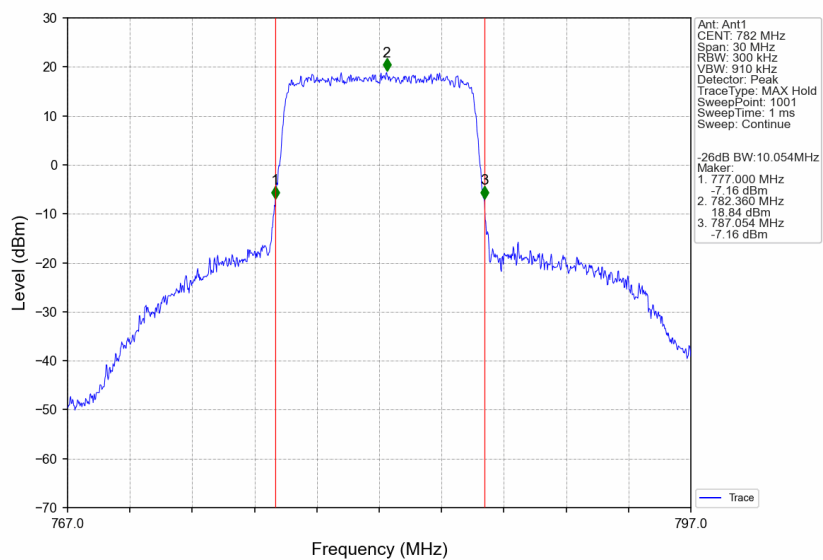
3.2.2 Band13_XDB



Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



Band13_10MHz_16QAM_MCH_782MHz_RB_50_0_NTNV



4. Peak-Average Ratio

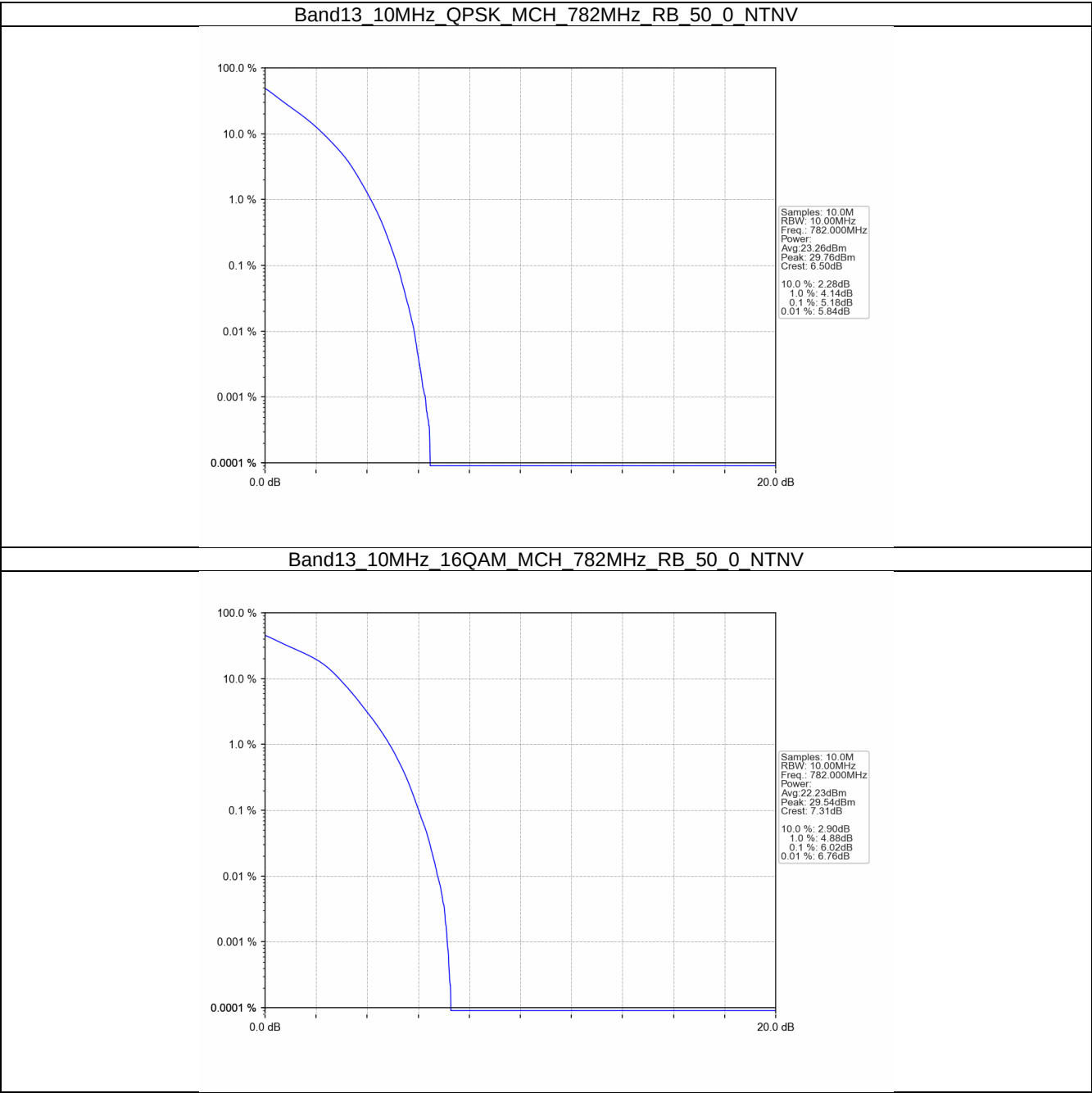
4.1 Test Result

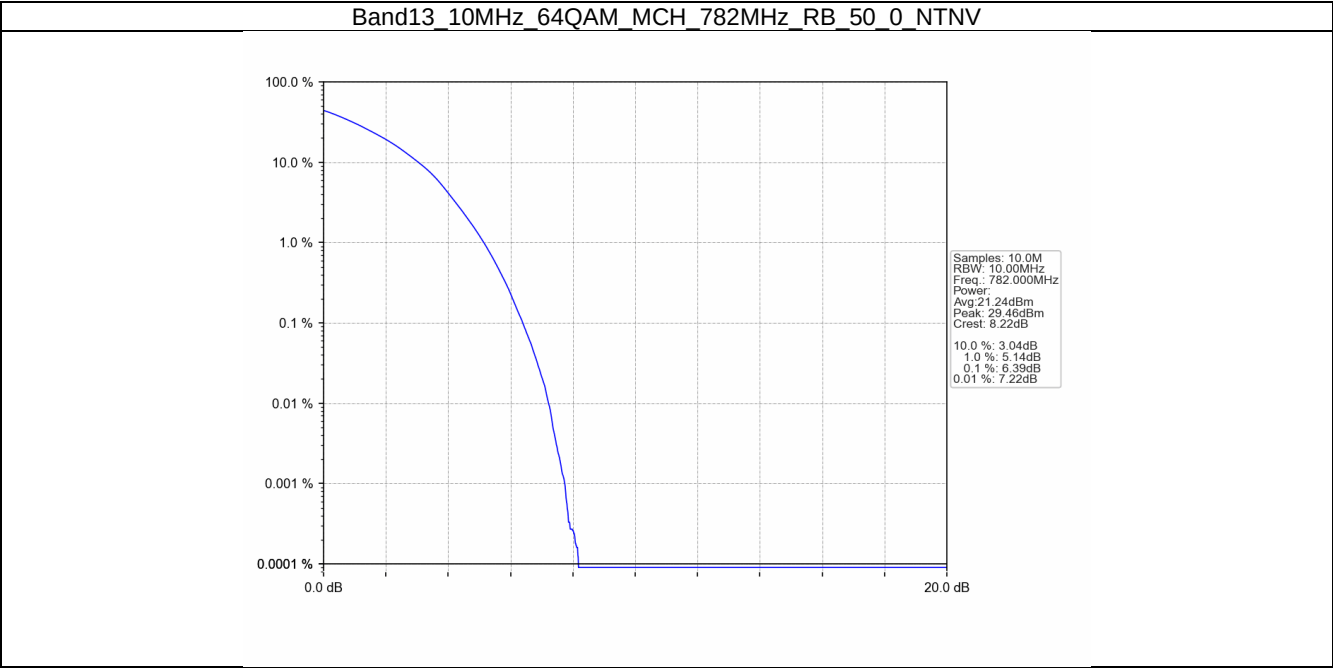
4.1.1 B13_10MHz

Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	782	50	0	5.18	<=13	Pass
16QAM	782	50	0	6.02	<=13	Pass
64QAM	782	50	0	6.39	<=13	Pass

4.2 Test Graph

4.2.1 B13_10MHz





5. Spurious Emission

5.1 Test Result

5.1.1 B13_5MHz

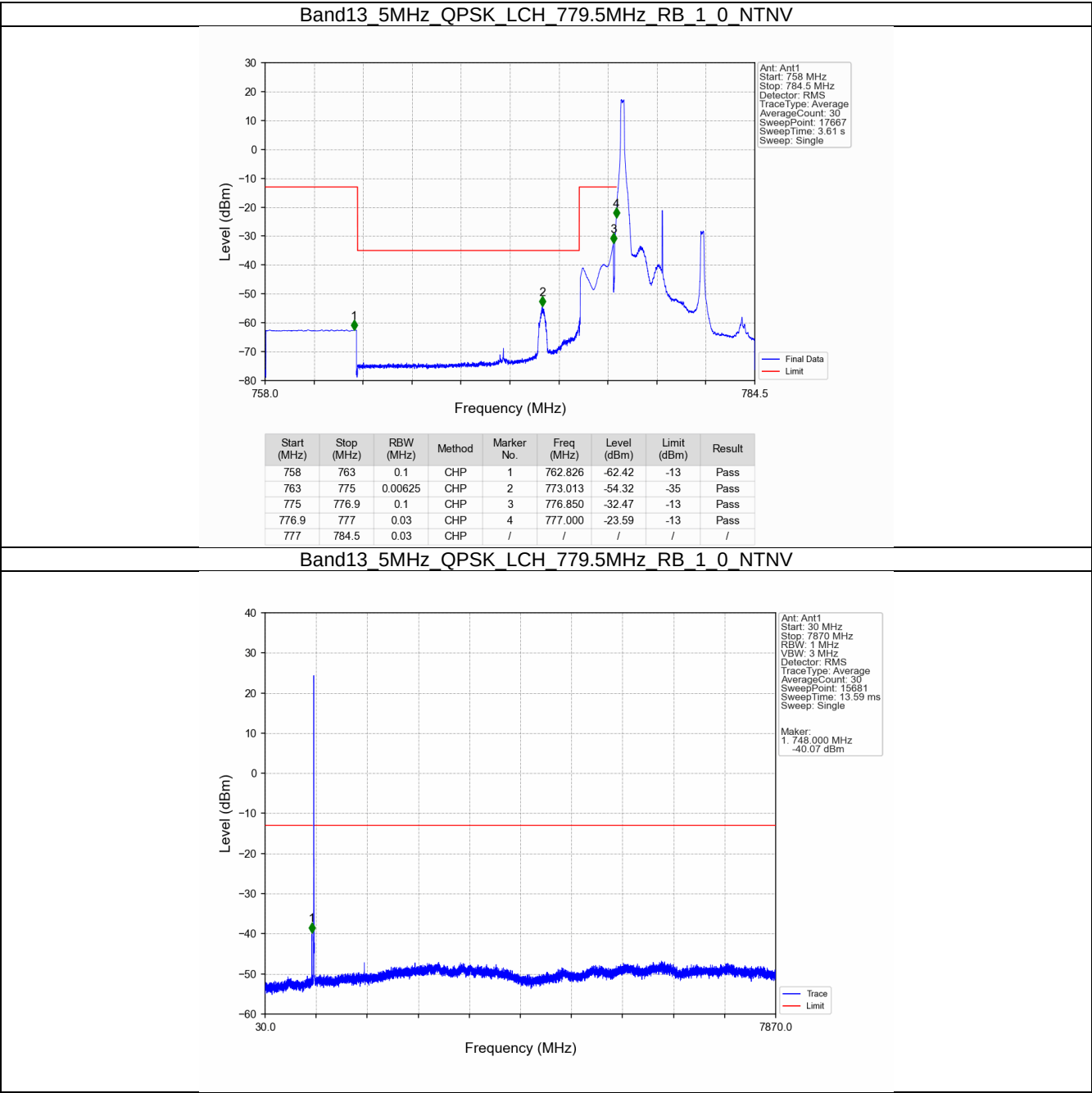
Band: 13 / Bandwidth: 5MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

5.1.2 B13_10MHz

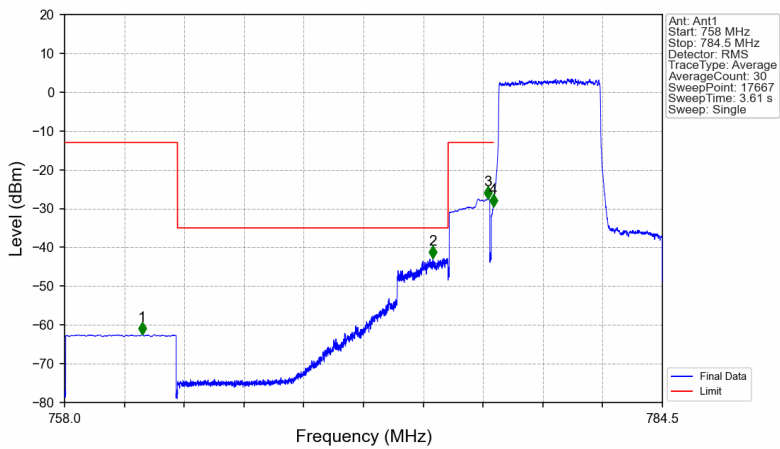
Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B13_5MHz

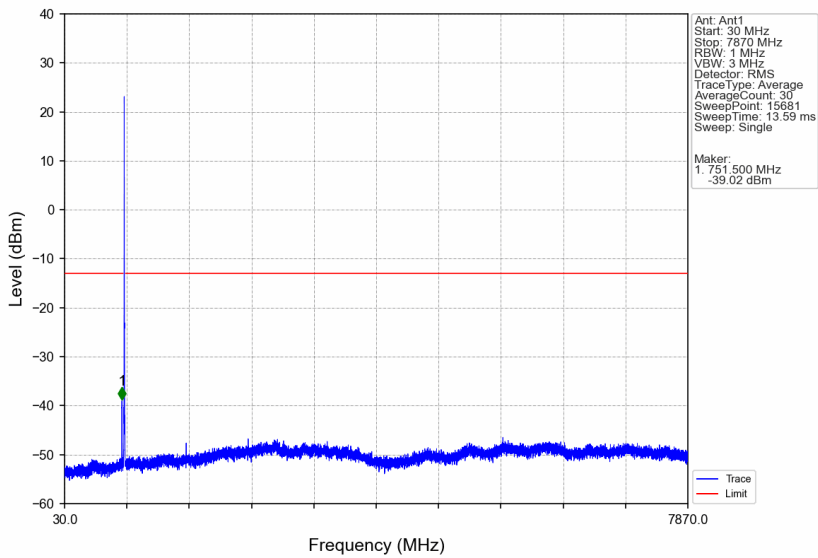


Band13_5MHz_QPSK_LCH_779.5MHz_RB_25_0_NTNV

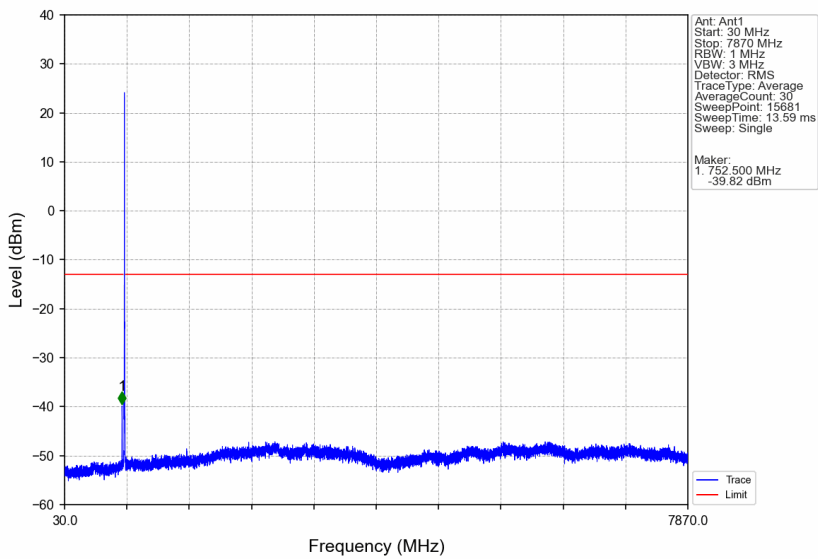


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	761.441	-62.54	-13	Pass
763	775	0.00625	CHP	2	774.328	-42.73	-35	Pass
775	776.9	0.1	CHP	3	776.758	-27.54	-13	Pass
776.9	777	0.03	CHP	4	777.000	-29.44	-13	Pass
777	784.5	0.03	CHP	/	/	/	/	/

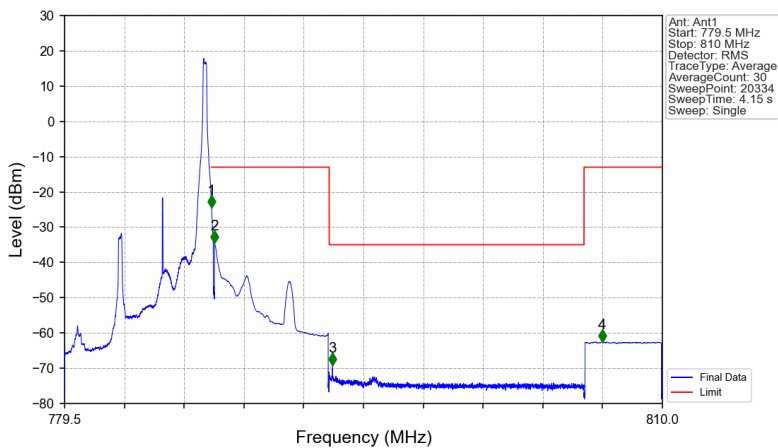
Band13_5MHz_QPSK_MCH_782MHz_RB_1_0_NTNV



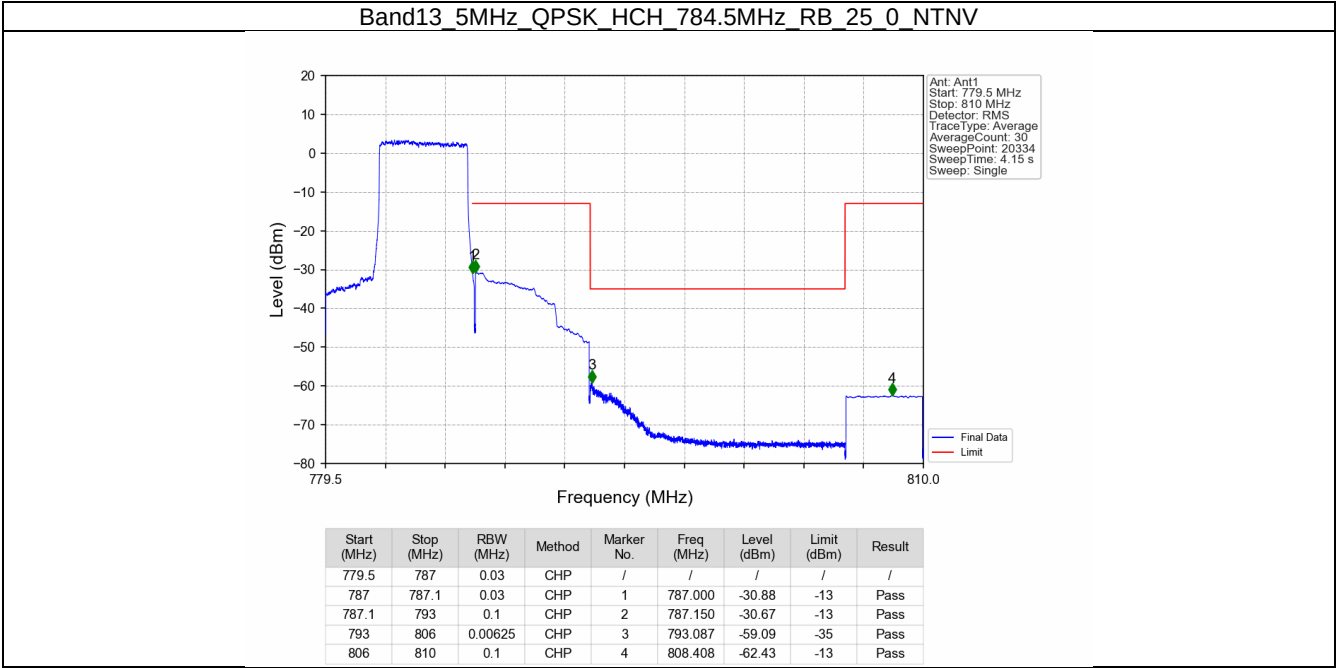
Band13_5MHz_QPSK_HCH_784.5MHz_RB_1_0_NTNV



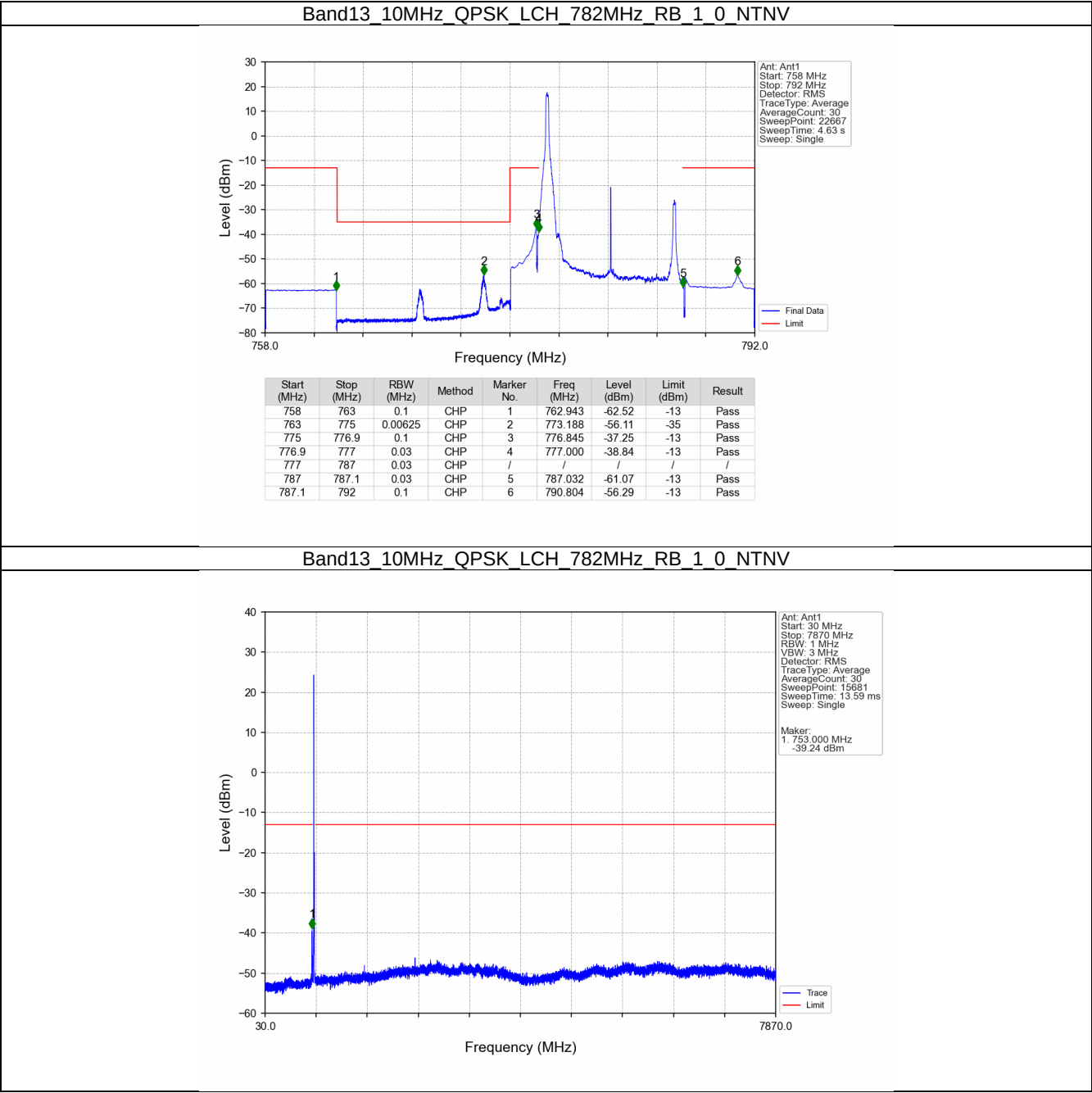
Band13_5MHz_QPSK_HCH_784.5MHz_RB_1_24_NTNV



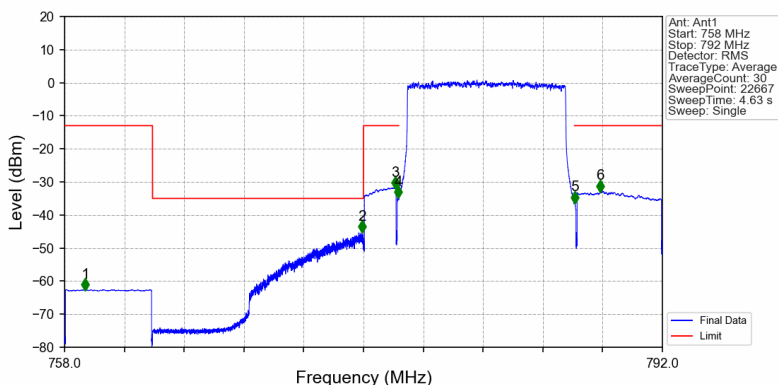
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-24.36	-13	Pass
787.1	793	0.1	CHP	2	787.150	-34.46	-13	Pass
793	806	0.00625	CHP	3	793.173	-69.21	-35	Pass
806	810	0.1	CHP	4	806.923	-62.51	-13	Pass



5.2.2 B13_10MHz

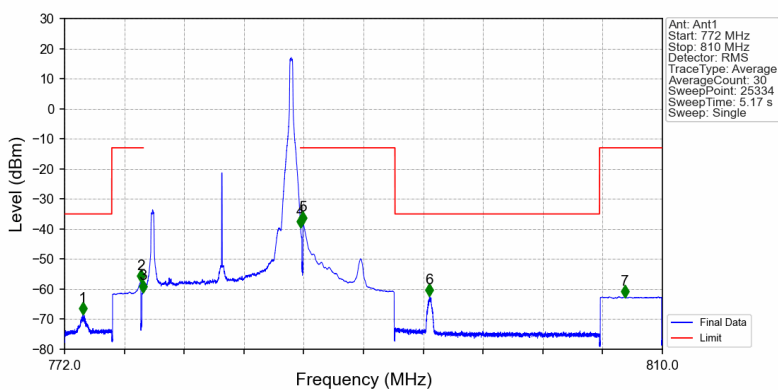


Band13 10MHz QPSK LCH 782MHz RB 50 0 NTNV

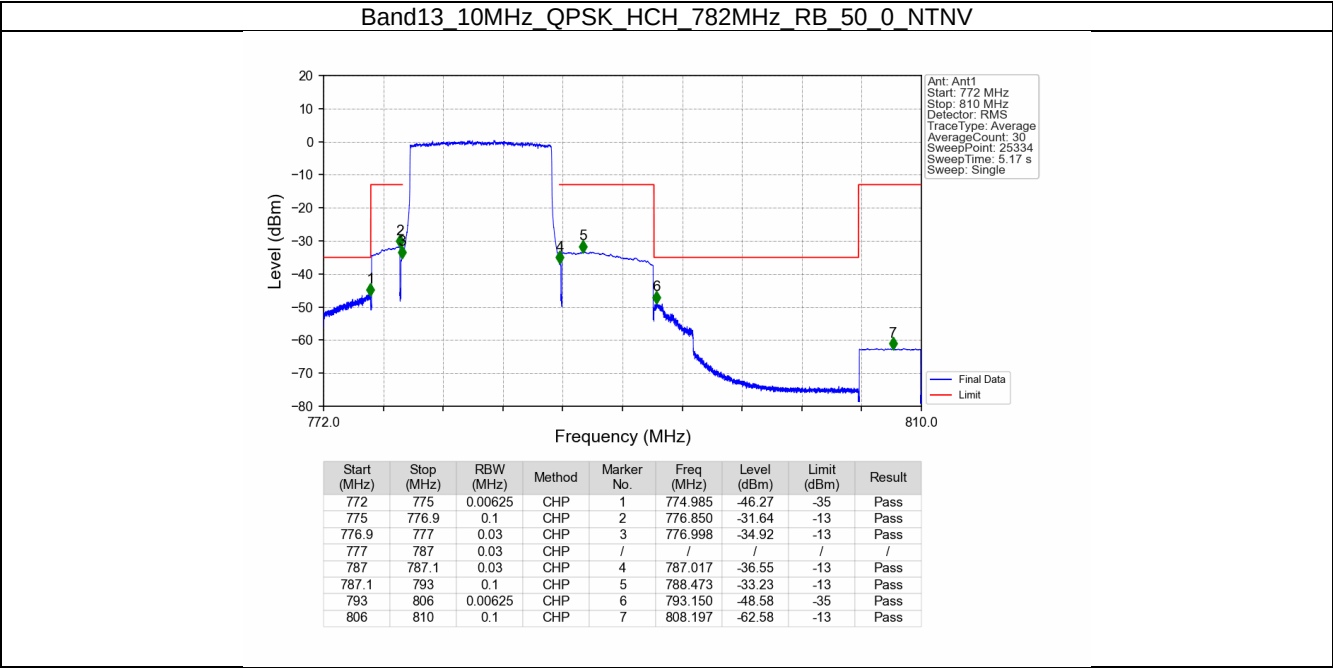


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	759.172	-62.54	-13	Pass
763	775	0.00625	CHP	2	774.911	-45.09	-35	Pass
775	776.9	0.1	CHP	3	776.805	-31.80	-13	Pass
776.9	777	0.03	CHP	4	776.982	-34.57	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.018	-36.21	-13	Pass
787.1	792	0.1	CHP	6	788.473	-32.79	-13	Pass

Band13 10MHz QPSK HCH 782MHz RB 1 49 NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
772	775	0.00625	CHP	1	773.164	-68.21	-35	Pass
775	776.9	0.1	CHP	2	776.850	-57.28	-13	Pass
776.9	777	0.03	CHP	3	776.992	-60.73	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-39.15	-13	Pass
787.1	793	0.1	CHP	5	787.150	-37.97	-13	Pass
793	806	0.00625	CHP	6	795.193	-62.01	-35	Pass
806	810	0.1	CHP	7	807.603	-62.55	-13	Pass



---End of Attachment---