

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B13_5MHz_ERP

Band: 13 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	779.5	1	0	22.24	-9.50	10.59	<=34.77	Pass
			13	22.30	-9.50	10.65	<=34.77	Pass
			24	22.41	-9.50	10.76	<=34.77	Pass
		12	0	21.37	-9.50	9.72	<=34.77	Pass
			6	21.38	-9.50	9.73	<=34.77	Pass
			13	21.48	-9.50	9.83	<=34.77	Pass
		25	0	21.43	-9.50	9.78	<=34.77	Pass
	782	1	0	22.28	-9.50	10.63	<=34.77	Pass
			13	22.37	-9.50	10.72	<=34.77	Pass
			24	22.25	-9.50	10.60	<=34.77	Pass
		12	0	21.42	-9.50	9.77	<=34.77	Pass
			6	21.43	-9.50	9.78	<=34.77	Pass
			13	21.39	-9.50	9.74	<=34.77	Pass
		25	0	21.41	-9.50	9.76	<=34.77	Pass
	784.5	1	0	22.49	-9.50	10.84	<=34.77	Pass
			13	22.40	-9.50	10.75	<=34.77	Pass
			24	22.29	-9.50	10.64	<=34.77	Pass
		12	0	21.39	-9.50	9.74	<=34.77	Pass
			6	21.36	-9.50	9.71	<=34.77	Pass
			13	21.32	-9.50	9.67	<=34.77	Pass
		25	0	21.35	-9.50	9.70	<=34.77	Pass
16QAM	779.5	1	0	21.48	-9.50	9.83	<=34.77	Pass
			13	21.55	-9.50	9.90	<=34.77	Pass
			24	21.67	-9.50	10.02	<=34.77	Pass
		12	0	20.43	-9.50	8.78	<=34.77	Pass
			6	20.45	-9.50	8.80	<=34.77	Pass
			13	20.54	-9.50	8.89	<=34.77	Pass
		25	0	20.51	-9.50	8.86	<=34.77	Pass
	782	1	0	21.41	-9.50	9.76	<=34.77	Pass
			13	21.51	-9.50	9.86	<=34.77	Pass
			24	21.40	-9.50	9.75	<=34.77	Pass
		12	0	20.59	-9.50	8.94	<=34.77	Pass
			6	20.60	-9.50	8.95	<=34.77	Pass
			13	20.58	-9.50	8.93	<=34.77	Pass
		25	0	20.59	-9.50	8.94	<=34.77	Pass
	784.5	1	0	21.61	-9.50	9.96	<=34.77	Pass
			13	21.53	-9.50	9.88	<=34.77	Pass
			24	21.46	-9.50	9.81	<=34.77	Pass
		12	0	20.51	-9.50	8.86	<=34.77	Pass
			6	20.47	-9.50	8.82	<=34.77	Pass
			13	20.45	-9.50	8.80	<=34.77	Pass
		25	0	20.50	-9.50	8.85	<=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	22.18	-9.50	10.53	<=34.77	Pass
			25	22.38	-9.50	10.73	<=34.77	Pass
			49	22.15	-9.50	10.50	<=34.77	Pass
		25	0	21.36	-9.50	9.71	<=34.77	Pass
			13	21.39	-9.50	9.74	<=34.77	Pass
			25	21.36	-9.50	9.71	<=34.77	Pass
		50	0	21.34	-9.50	9.69	<=34.77	Pass
16QAM	782	1	0	21.41	-9.50	9.76	<=34.77	Pass
			25	21.62	-9.50	9.97	<=34.77	Pass
			49	21.41	-9.50	9.76	<=34.77	Pass
		12	0	21.32	-9.50	9.67	<=34.77	Pass
			19	21.45	-9.50	9.80	<=34.77	Pass
			38	21.34	-9.50	9.69	<=34.77	Pass
		27	0	20.49	-9.50	8.84	<=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	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	782	50	0	20	LV	-1.473	-0.0019	-2.5 to 2.5	Pass
					NV	-0.415	-0.0005	-2.5 to 2.5	Pass
					HV	-1.116	-0.0014	-2.5 to 2.5	Pass
				-30	NV	-0.315	-0.0004	-2.5 to 2.5	Pass
				-20	NV	-0.272	-0.0003	-2.5 to 2.5	Pass
				-10	NV	-0.229	-0.0003	-2.5 to 2.5	Pass
				0	NV	-0.358	-0.0005	-2.5 to 2.5	Pass
				10	NV	-0.429	-0.0005	-2.5 to 2.5	Pass
				30	NV	-0.844	-0.0011	-2.5 to 2.5	Pass
				40	NV	-0.429	-0.0005	-2.5 to 2.5	Pass
				50	NV	-0.658	-0.0008	-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	RB Allocation	99% Occupied Bandwidth (MHz)	Verdict

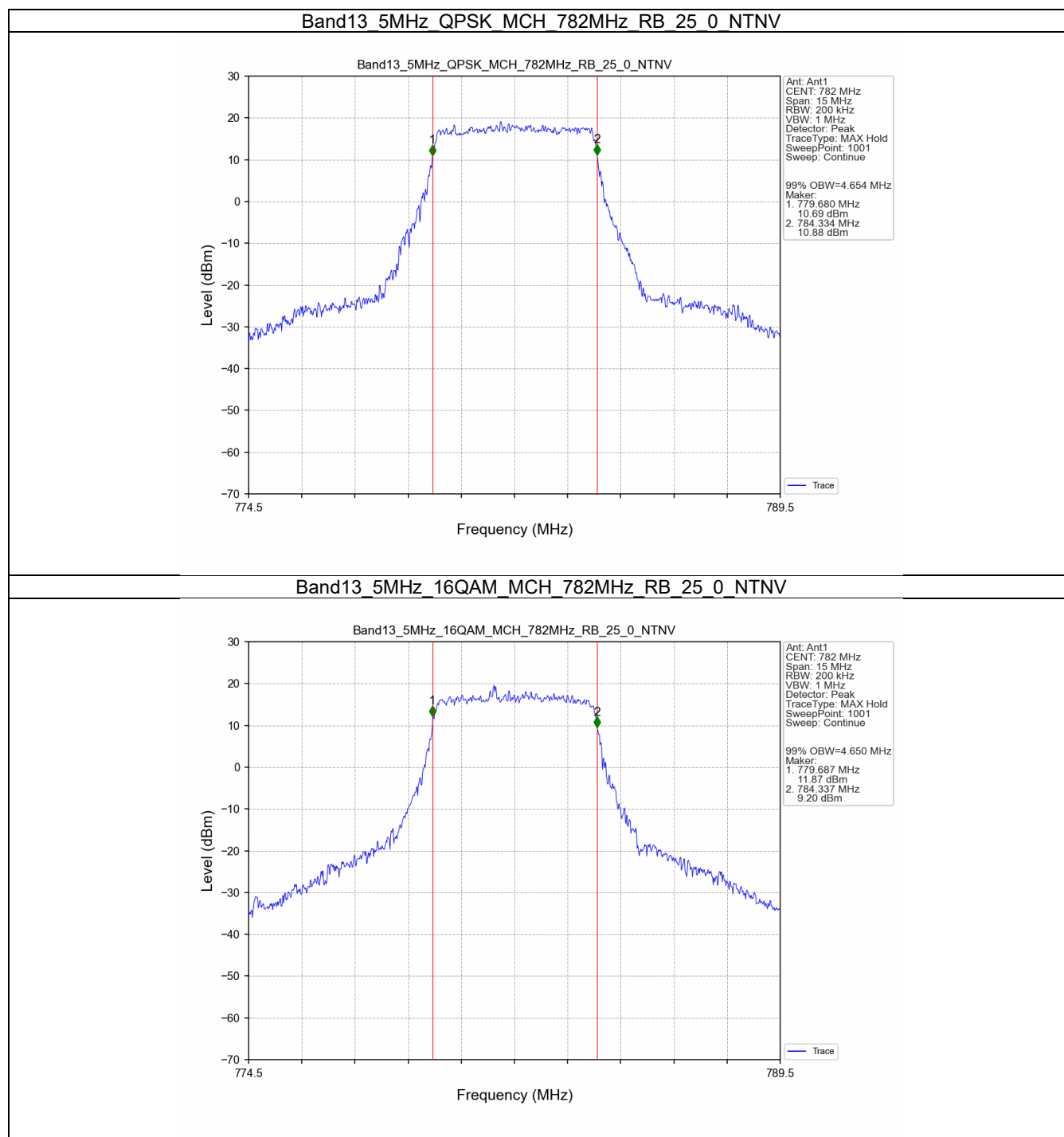
		(MHz)	Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.654	/	Pass
	16QAM	782	25	0	4.650	/	Pass
10	QPSK	782	50	0	9.067	/	Pass
	16QAM	782	27	0	5.055	/	Pass

3.1.2 Band13_XDB

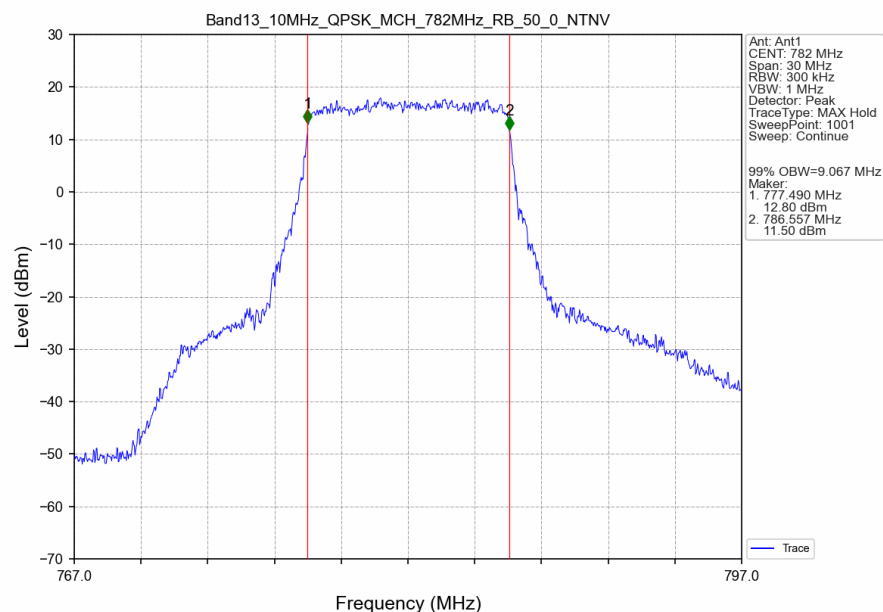
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	5.936	/	Pass
	16QAM	782	25	0	5.685	/	Pass
10	QPSK	782	50	0	10.754	/	Pass
	16QAM	782	27	0	6.537	/	Pass

3.2 Test Graph

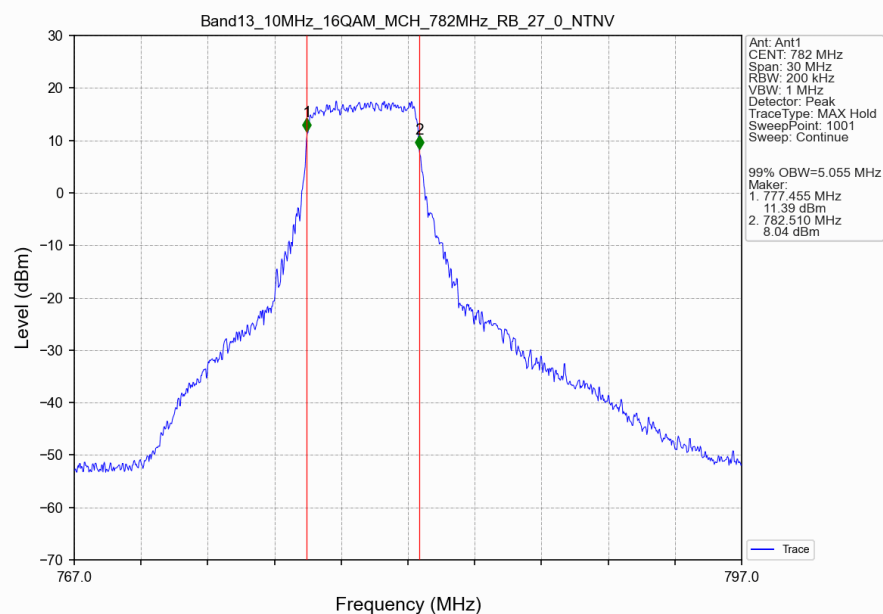
3.2.1 Band13_OBW



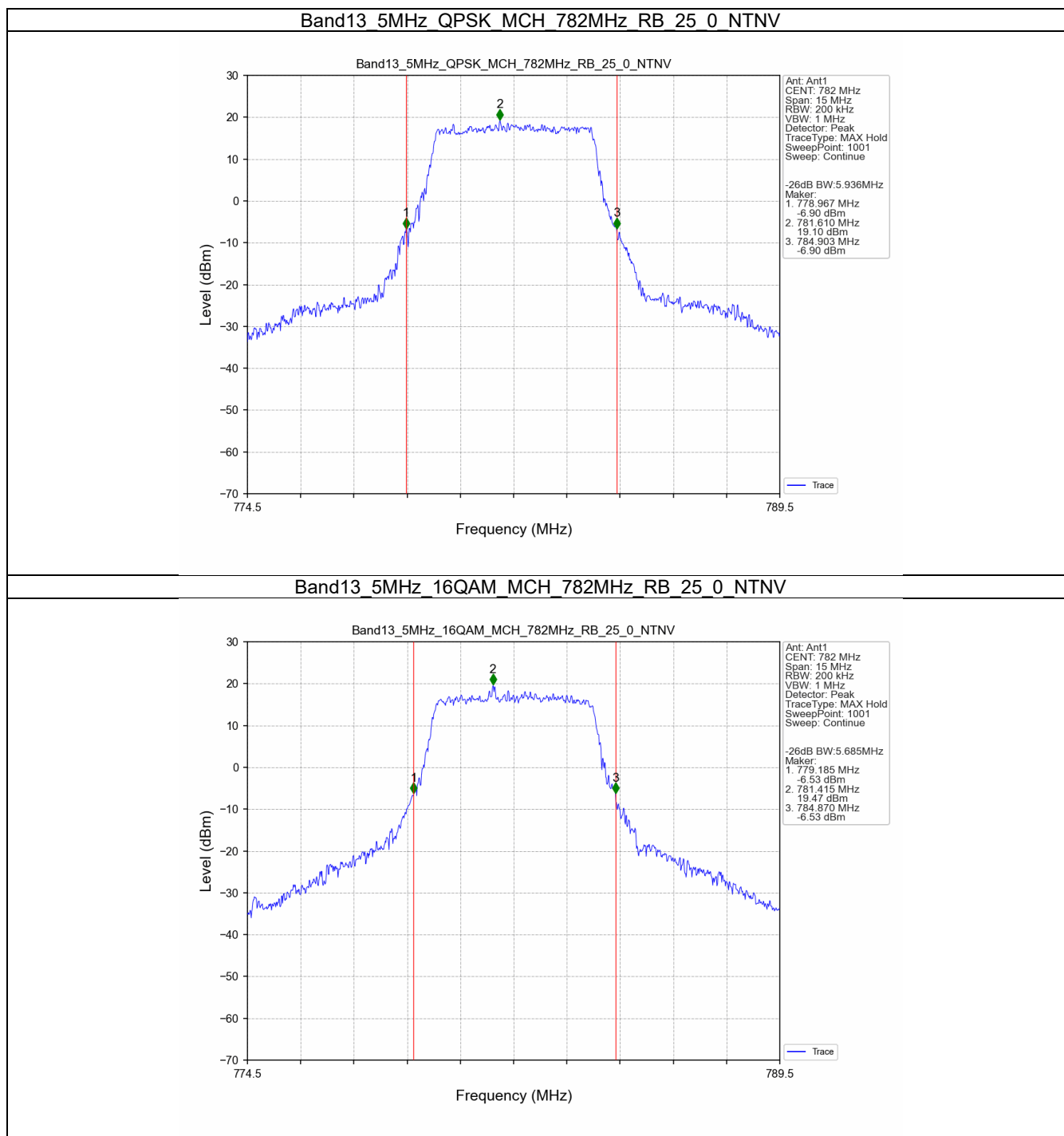
Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



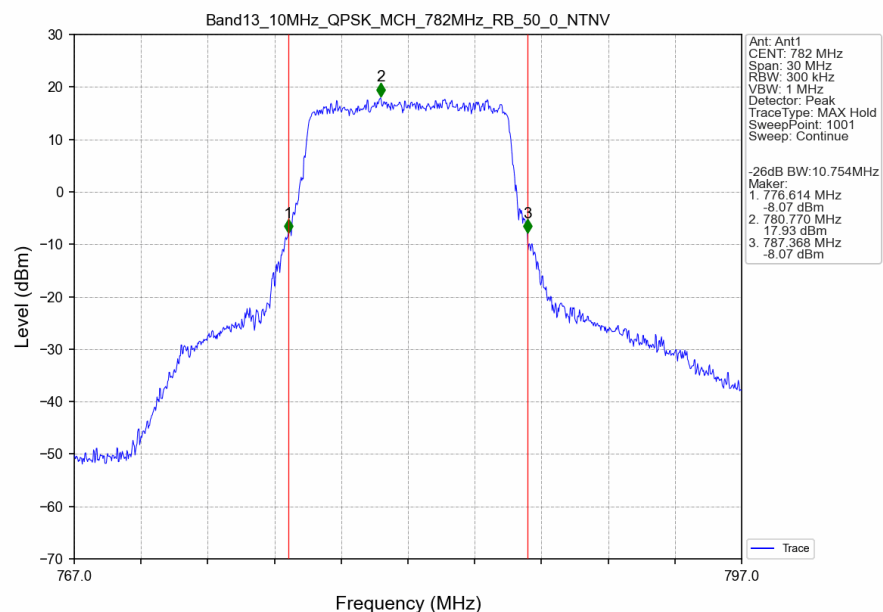
Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV



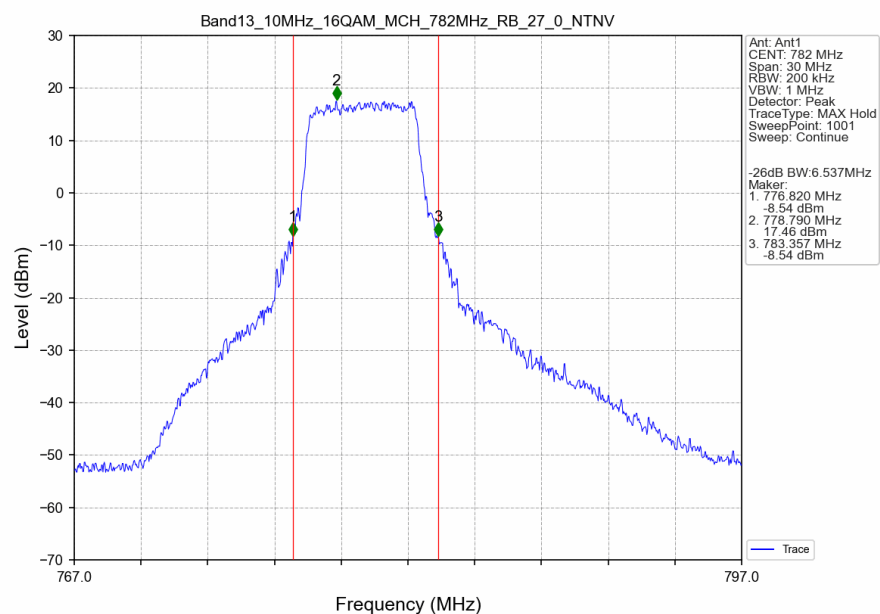
3.2.2 Band13_XDB



Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV





4. Peak-Average Ratio

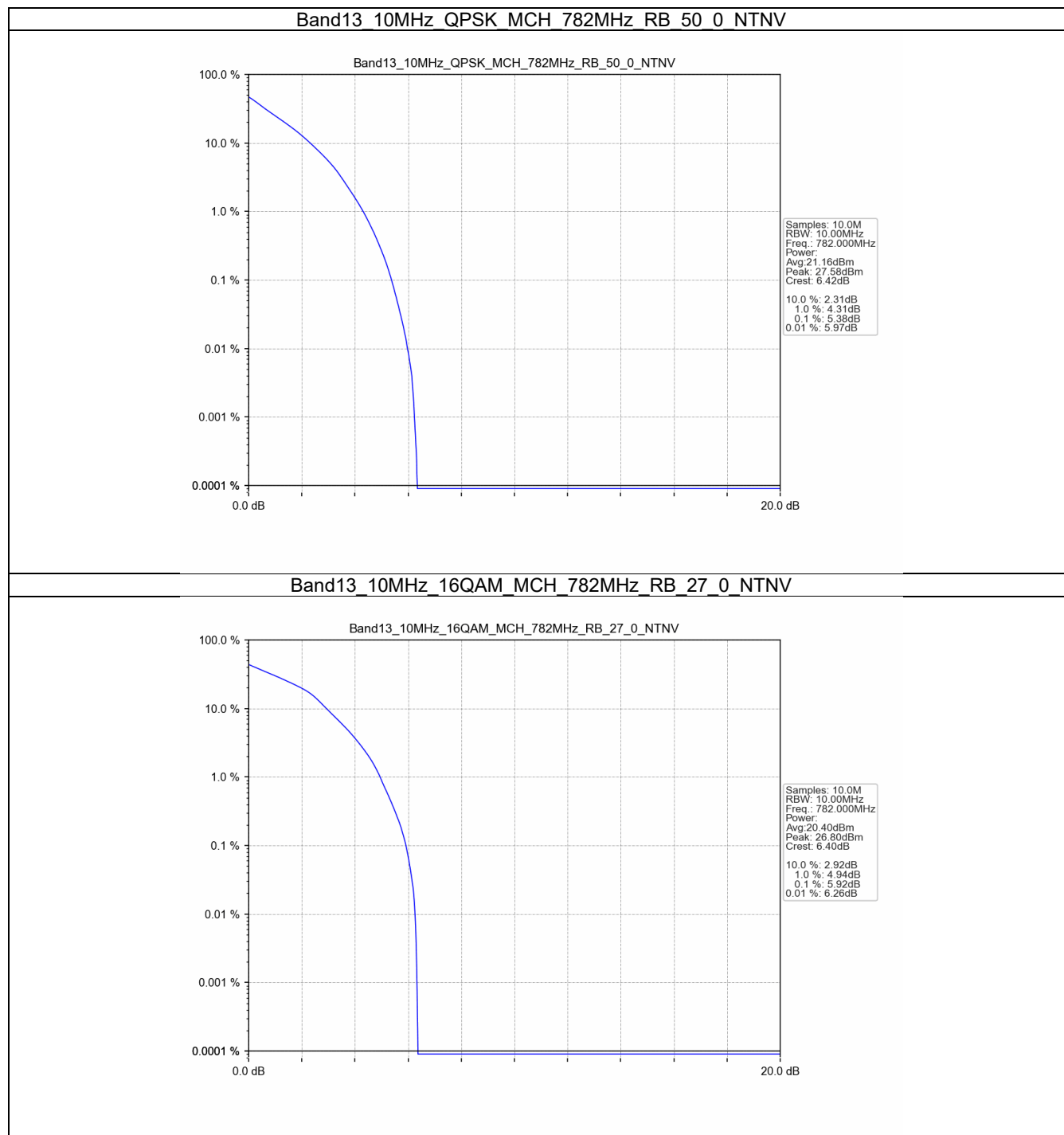
4.1 Test Result

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	5.38	<=13	Pass
16QAM	782	27	0	5.92	<=13	Pass

4.2 Test Graph

4.2.1 B13_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B13_5MHz

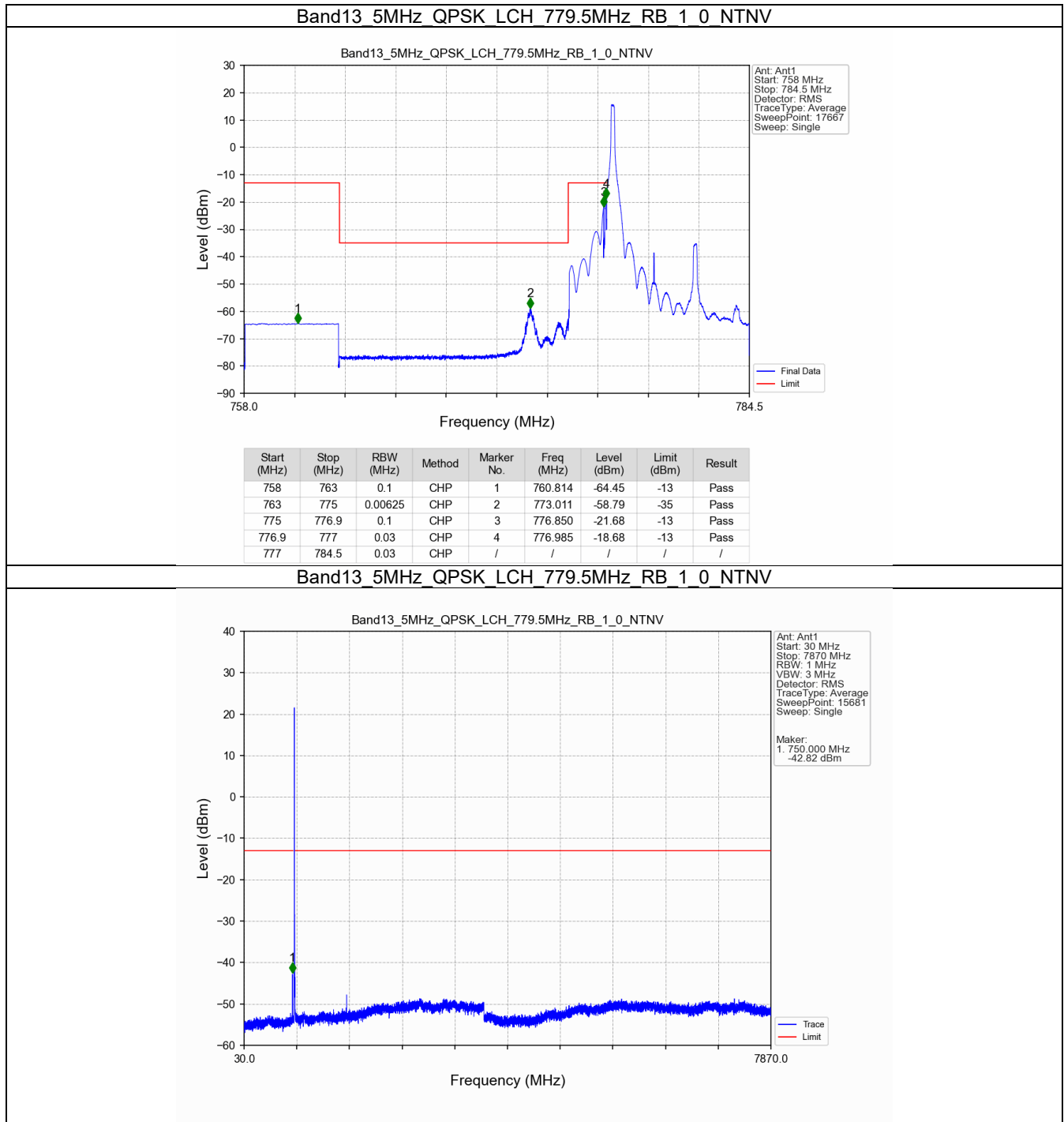
Band: 13 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B13_10MHz

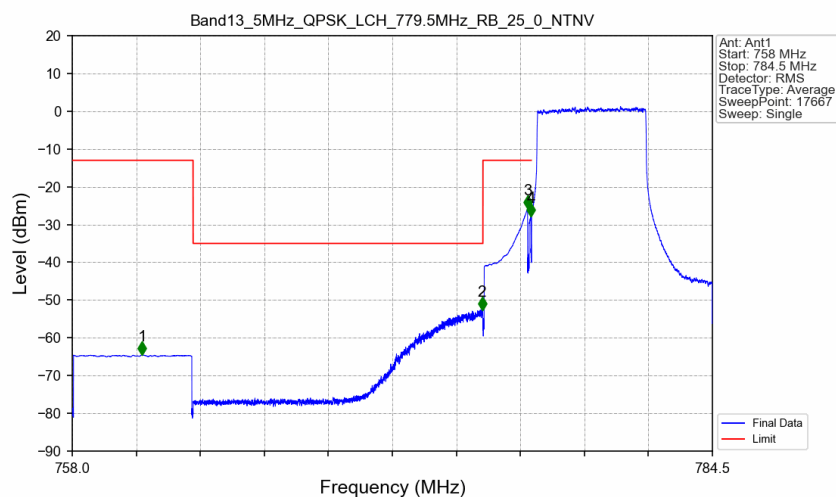
Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

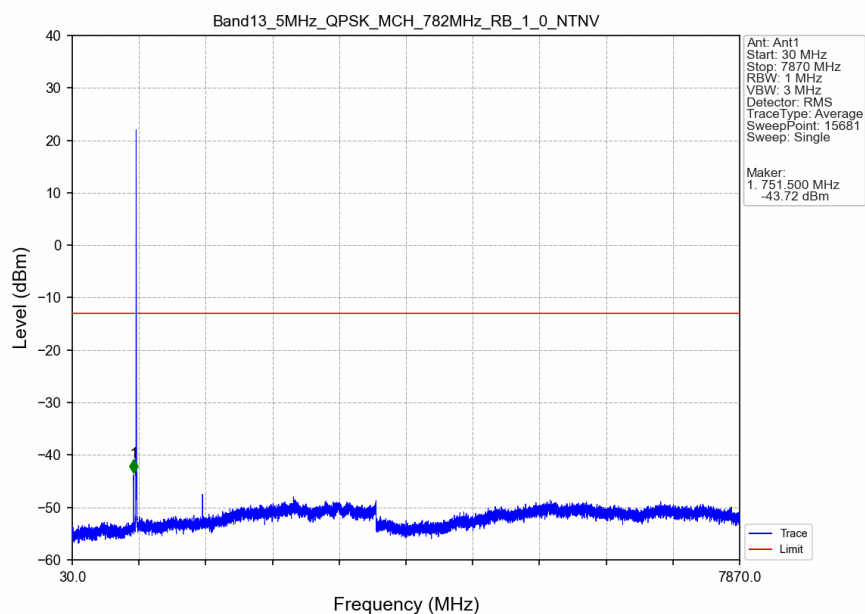
5.2.1 B13_5MHz



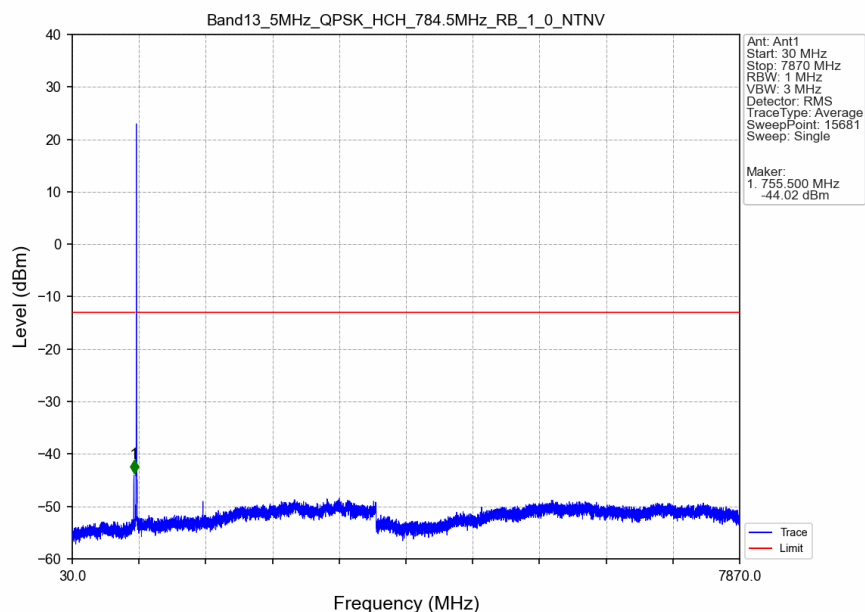
Band13_5MHz_QPSK_LCH_779.5MHz_RB_25_0_NTNV



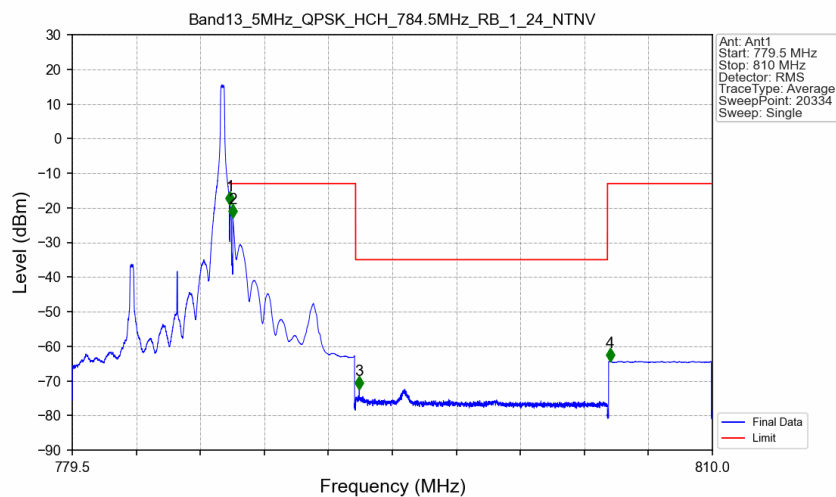
Band13_5MHz_QPSK_MCH_782MHz_RB_1_0_NTNV



Band13_5MHz_QPSK_HCH_784.5MHz_RB_1_0_NTNV

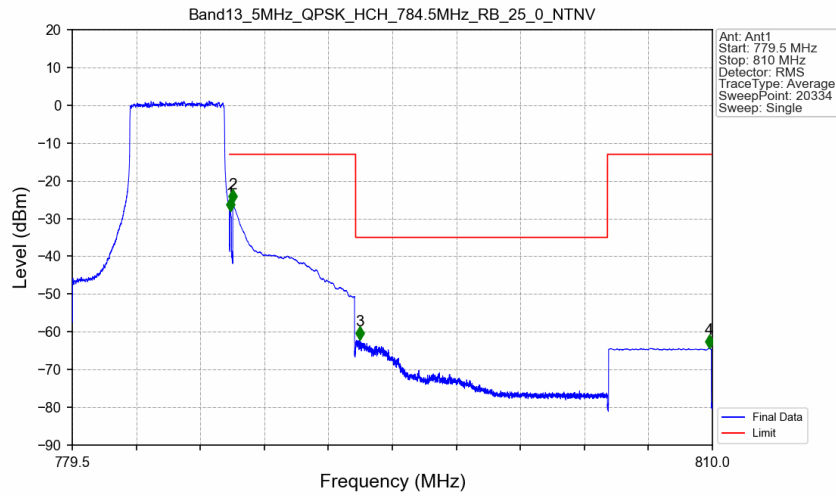


Band13_5MHz_QPSK_HCH_784.5MHz_RB_1_24_NTNV



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	787.015	-19.20	-13	Pass
787.1	793	0.1	CHP	2	787.150	-22.90	-13	Pass
793	805	0.00625	CHP	3	793.173	-72.40	-35	Pass
805	810	0.1	CHP	4	805.125	-64.31	-13	Pass

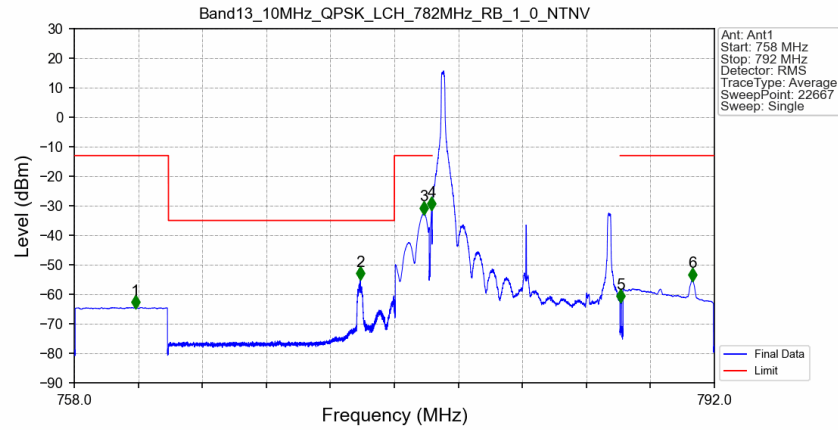
Band13_5MHz_QPSK_HCH_784.5MHz_RB_25_0_NTNV



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	787.018	-28.04	-13	Pass
787.1	793	0.1	CHP	2	787.150	-25.79	-13	Pass
793	805	0.00625	CHP	3	793.192	-62.09	-35	Pass
805	810	0.1	CHP	4	809.841	-64.36	-13	Pass

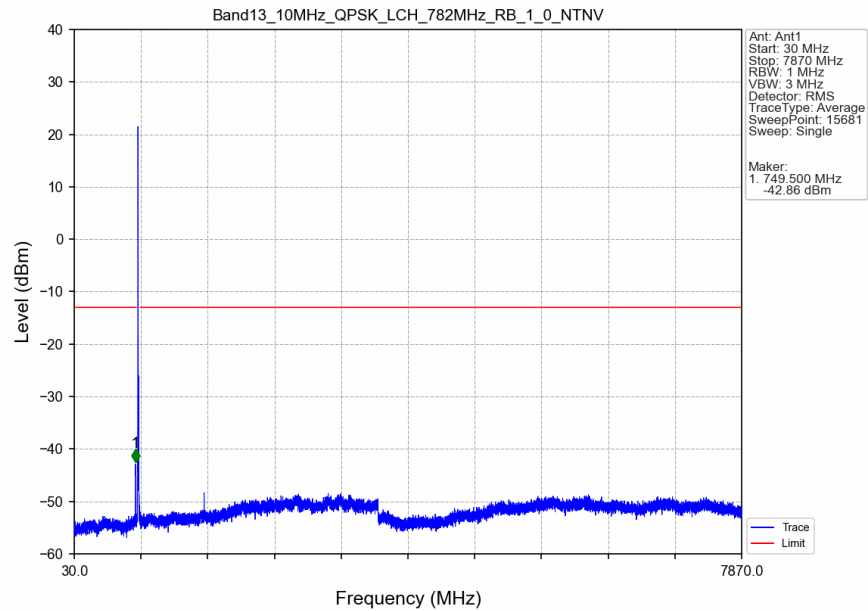
5.2.2 B13_10MHz

Band13_10MHz_QPSK_LCH_782MHz_RB_1_0_NTNV

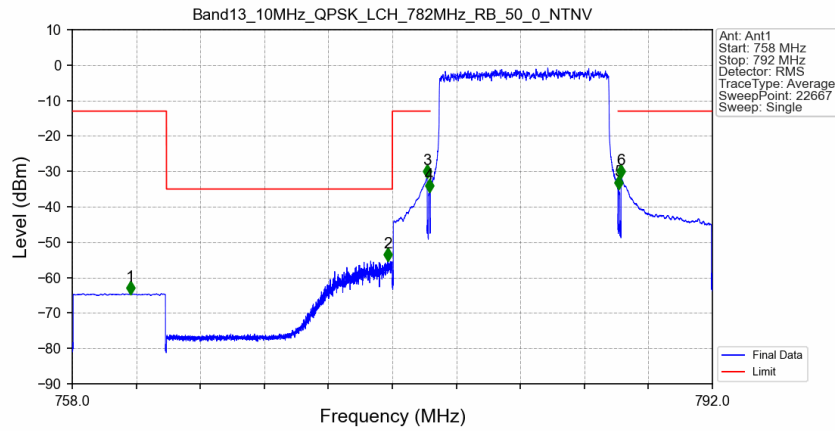


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	761.254	-64.42	-13	Pass
763	775	0.00625	CHP	2	773.192	-54.70	-35	Pass
775	776.9	0.1	CHP	3	776.560	-32.55	-13	Pass
776.9	777	0.03	CHP	4	776.985	-31.21	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.015	-62.42	-13	Pass
787.1	792	0.1	CHP	6	790.836	-55.12	-13	Pass

Band13_10MHz_QPSK_LCH_782MHz_RB_1_0_NTNV

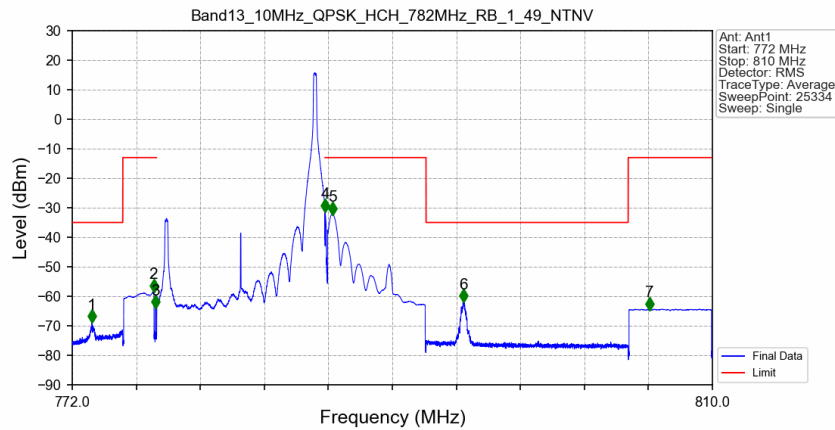


Band13_10MHz_QPSK_LCH_782MHz_RB_50_0_NTNV



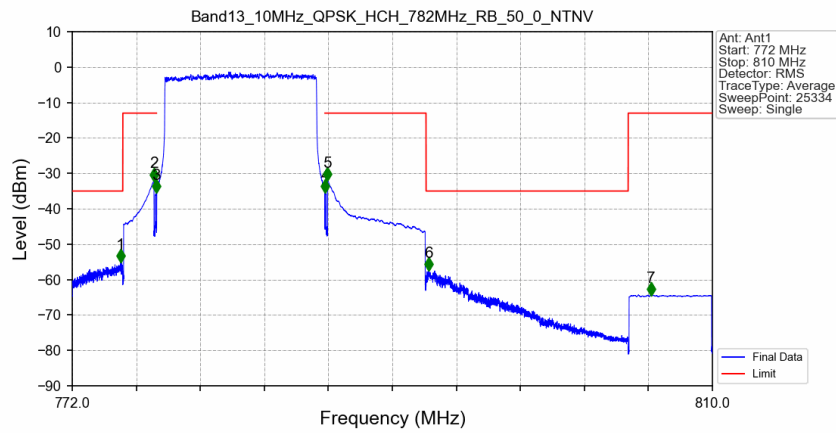
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	761.089	-64.52	-13	Pass
763	775	0.00625	CHP	2	774.776	-55.06	-35	Pass
775	776.9	0.1	CHP	3	776.847	-31.51	-13	Pass
776.9	777	0.03	CHP	4	776.953	-35.66	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.023	-34.83	-13	Pass
787.1	792	0.1	CHP	6	787.150	-31.58	-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	773.163	-68.66	-35	Pass
775	776.9	0.1	CHP	2	776.832	-58.21	-13	Pass
776.9	777	0.03	CHP	3	776.941	-63.72	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.015	-31.07	-13	Pass
787.1	793	0.1	CHP	5	787.455	-32.09	-13	Pass
793	805	0.00625	CHP	6	795.237	-61.60	-35	Pass
805	810	0.1	CHP	7	806.266	-64.35	-13	Pass

Band13_10MHz_QPSK_HCH_782MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
772	775	0.00625	CHP	1	774.868	-54.82	-35	Pass
775	776.9	0.1	CHP	2	776.850	-31.90	-13	Pass
776.9	777	0.03	CHP	3	776.983	-35.15	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.015	-35.14	-13	Pass
787.1	793	0.1	CHP	5	787.150	-31.81	-13	Pass
793	805	0.00625	CHP	6	793.150	-57.26	-35	Pass
805	810	0.1	CHP	7	806.362	-64.23	-13	Pass