

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	23.87	-3.04	18.68	<=34.77	Pass
			13	24.22	-3.04	19.03	<=34.77	Pass
			24	23.85	-3.04	18.66	<=34.77	Pass
		12	0	23.06	-3.04	17.87	<=34.77	Pass
			6	23.21	-3.04	18.02	<=34.77	Pass
			13	23.17	-3.04	17.98	<=34.77	Pass
		25	0	23.12	-3.04	17.93	<=34.77	Pass
	782	1	0	23.99	-3.04	18.80	<=34.77	Pass
			13	23.96	-3.04	18.77	<=34.77	Pass
			24	24.13	-3.04	18.94	<=34.77	Pass
		12	0	23.20	-3.04	18.01	<=34.77	Pass
			6	23.25	-3.04	18.06	<=34.77	Pass
			13	23.30	-3.04	18.11	<=34.77	Pass
		25	0	23.25	-3.04	18.06	<=34.77	Pass
	784.5	1	0	23.98	-3.04	18.79	<=34.77	Pass
			13	23.95	-3.04	18.76	<=34.77	Pass
			24	23.97	-3.04	18.78	<=34.77	Pass
		12	0	23.13	-3.04	17.94	<=34.77	Pass
			6	23.29	-3.04	18.10	<=34.77	Pass
			13	23.20	-3.04	18.01	<=34.77	Pass
		25	0	23.24	-3.04	18.05	<=34.77	Pass
16QAM	779.5	1	0	22.95	-3.04	17.76	<=34.77	Pass
			13	23.70	-3.04	18.51	<=34.77	Pass
			24	23.04	-3.04	17.85	<=34.77	Pass
		12	0	22.16	-3.04	16.97	<=34.77	Pass
			6	22.00	-3.04	16.81	<=34.77	Pass
			13	21.84	-3.04	16.65	<=34.77	Pass
		25	0	22.19	-3.04	17.00	<=34.77	Pass
	782	1	0	22.80	-3.04	17.61	<=34.77	Pass
			13	22.77	-3.04	17.58	<=34.77	Pass
			24	22.86	-3.04	17.67	<=34.77	Pass
		12	0	22.16	-3.04	16.97	<=34.77	Pass
			6	22.23	-3.04	17.04	<=34.77	Pass
			13	22.18	-3.04	16.99	<=34.77	Pass
		25	0	22.05	-3.04	16.86	<=34.77	Pass
	784.5	1	0	23.04	-3.04	17.85	<=34.77	Pass
			13	23.47	-3.04	18.28	<=34.77	Pass
			24	23.11	-3.04	17.92	<=34.77	Pass
		12	0	21.85	-3.04	16.66	<=34.77	Pass
			6	22.36	-3.04	17.17	<=34.77	Pass
			13	22.37	-3.04	17.18	<=34.77	Pass
		25	0	22.11	-3.04	16.92	<=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	24.00	-3.04	18.81	<=34.77	Pass
			25	24.11	-3.04	18.92	<=34.77	Pass
			49	24.26	-3.04	19.07	<=34.77	Pass
		25	0	23.16	-3.04	17.97	<=34.77	Pass
			13	23.27	-3.04	18.08	<=34.77	Pass
			25	23.33	-3.04	18.14	<=34.77	Pass
		50	0	23.17	-3.04	17.98	<=34.77	Pass
16QAM	782	1	0	23.62	-3.04	18.43	<=34.77	Pass
			25	23.54	-3.04	18.35	<=34.77	Pass
			49	23.81	-3.04	18.62	<=34.77	Pass
		25	0	22.24	-3.04	17.05	<=34.77	Pass
			13	22.04	-3.04	16.85	<=34.77	Pass
			25	22.18	-3.04	16.99	<=34.77	Pass
		50	0	22.34	-3.04	17.15	<=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	1.574	0.0020	-2.5 to 2.5	Pass
					NV	2.389	0.0031	-2.5 to 2.5	Pass
					HV	2.089	0.0027	-2.5 to 2.5	Pass
				-30	NV	1.173	0.0015	-2.5 to 2.5	Pass
				-20	NV	2.375	0.0030	-2.5 to 2.5	Pass
				-10	NV	1.287	0.0016	-2.5 to 2.5	Pass
				0	NV	2.418	0.0031	-2.5 to 2.5	Pass
				10	NV	2.289	0.0029	-2.5 to 2.5	Pass
				30	NV	0.958	0.0012	-2.5 to 2.5	Pass
				40	NV	1.802	0.0023	-2.5 to 2.5	Pass
				50	NV	1.960	0.0025	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band13_OBW

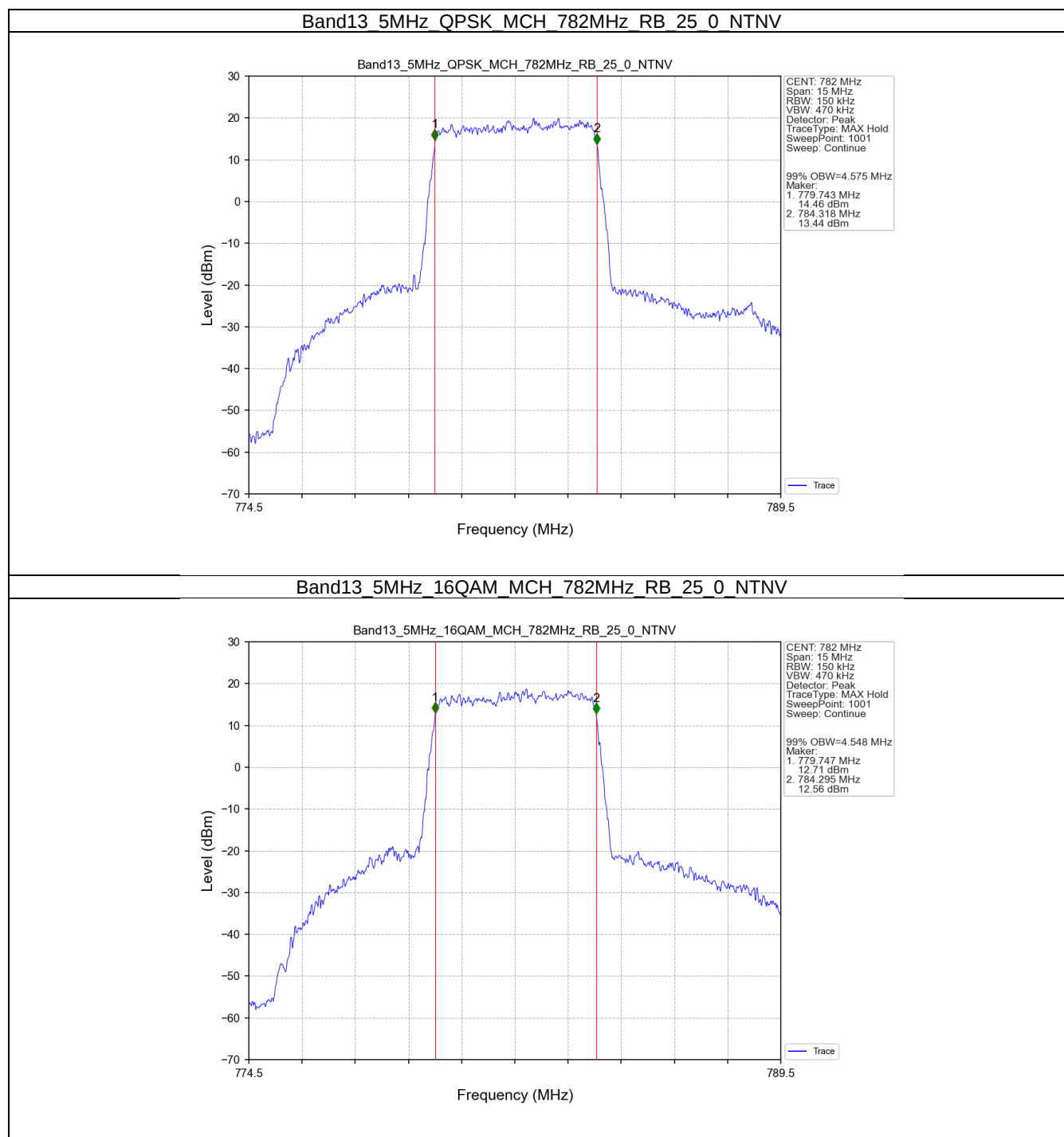
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.575	/	Pass
	16QAM	782	25	0	4.548	/	Pass
10	QPSK	782	50	0	9.044	/	Pass
	16QAM	782	50	0	9.016	/	Pass

3.1.2 Band13_XDB

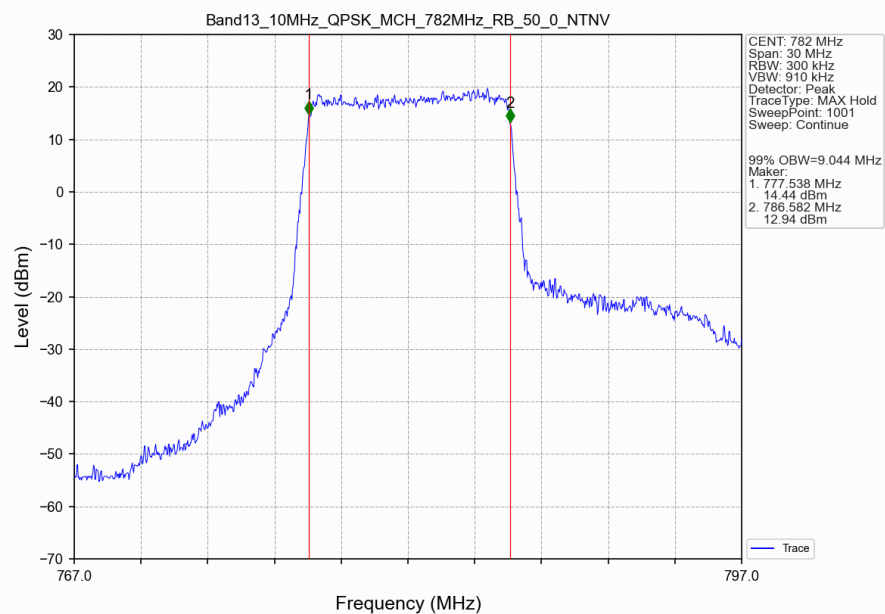
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	5.076	/	Pass
	16QAM	782	25	0	5.037	/	Pass
10	QPSK	782	50	0	10.076	/	Pass
	16QAM	782	50	0	9.965	/	Pass

3.2 Test Graph

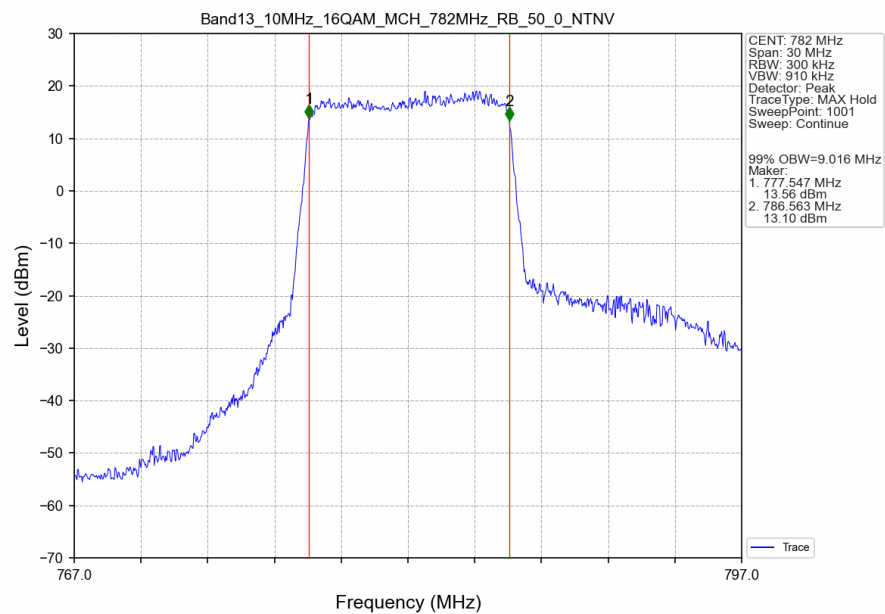
3.2.1 Band13_OBW



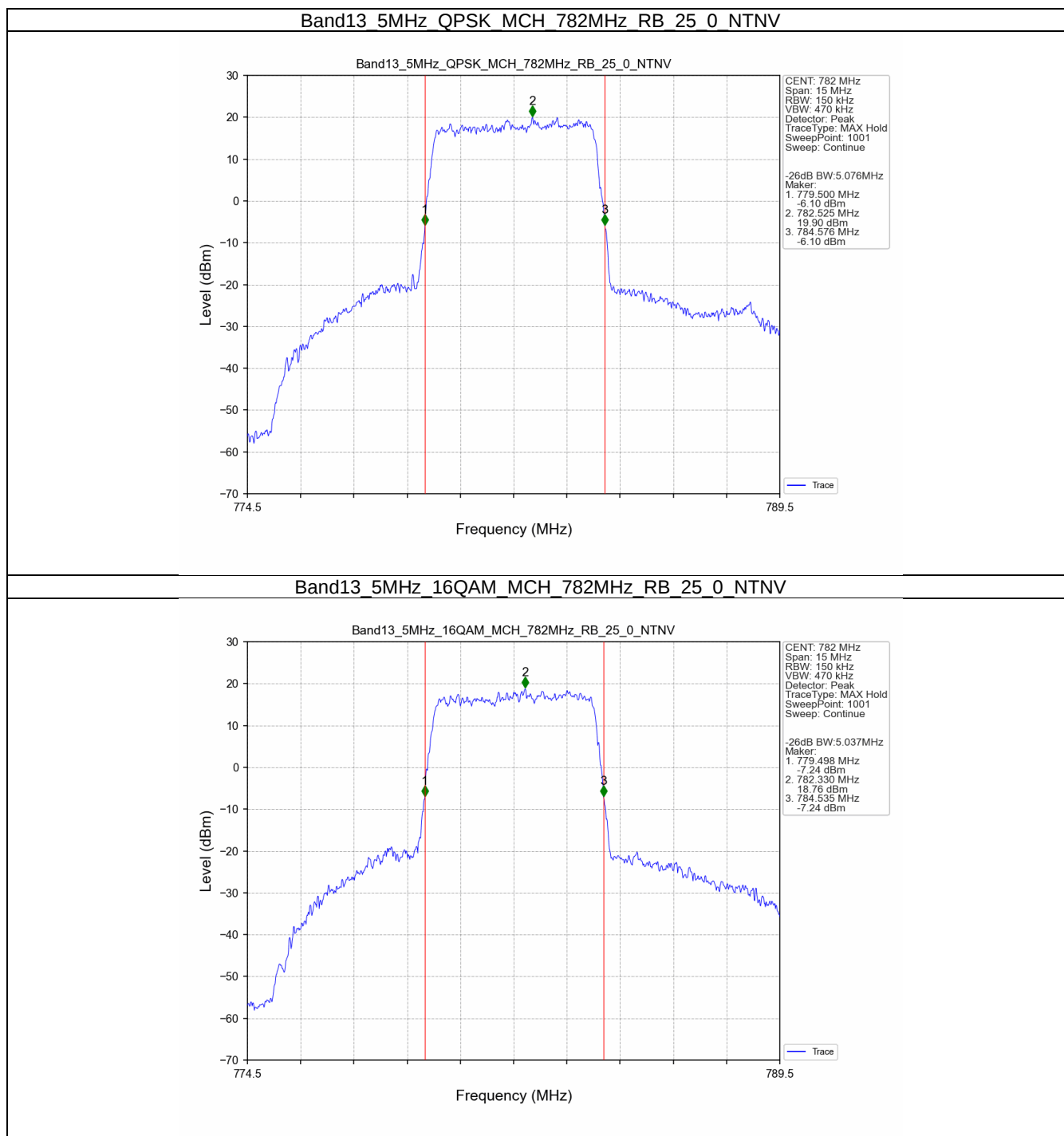
Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



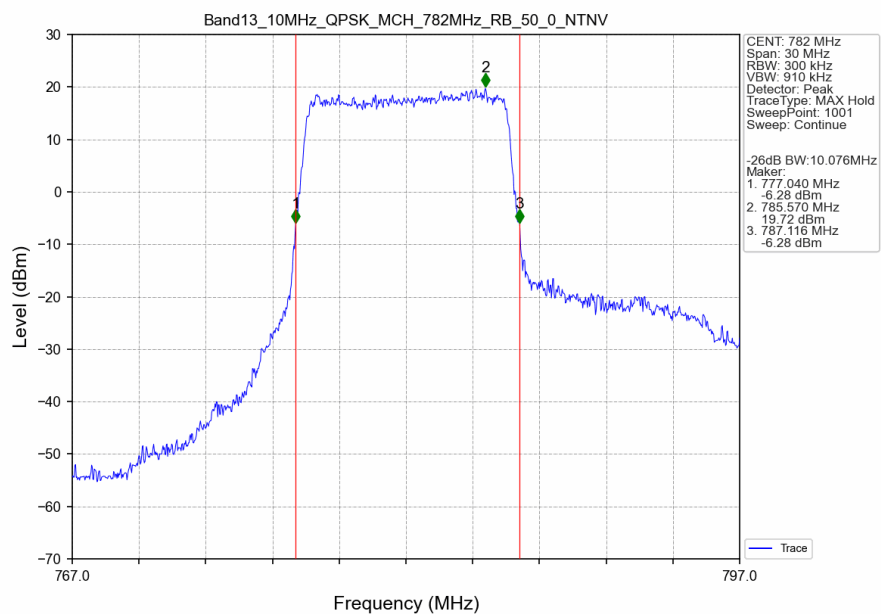
Band13_10MHz_16QAM_MCH_782MHz_RB_50_0_NTNV



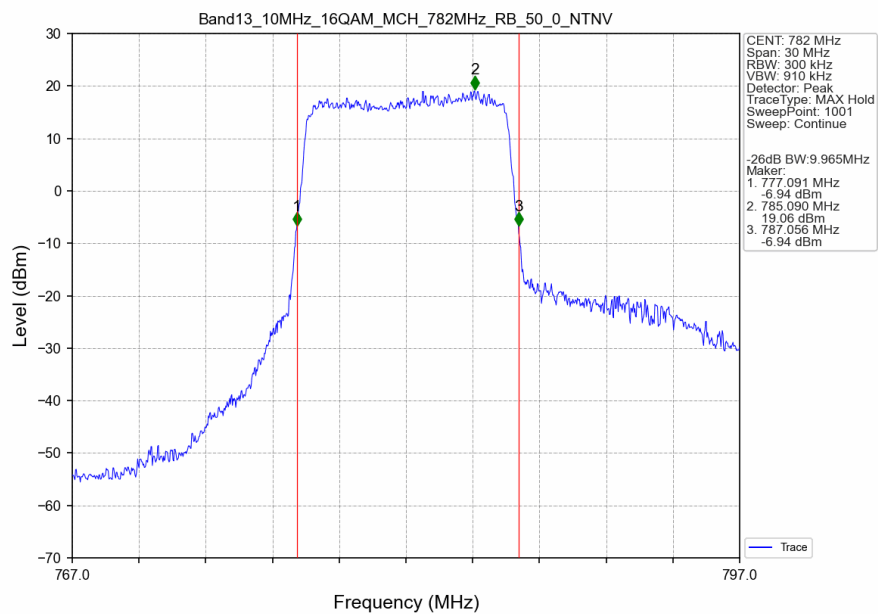
3.2.2 Band13_XDB



Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



Band13_10MHz_16QAM_MCH_782MHz_RB_50_0_NTNV





4. Peak-Average Ratio

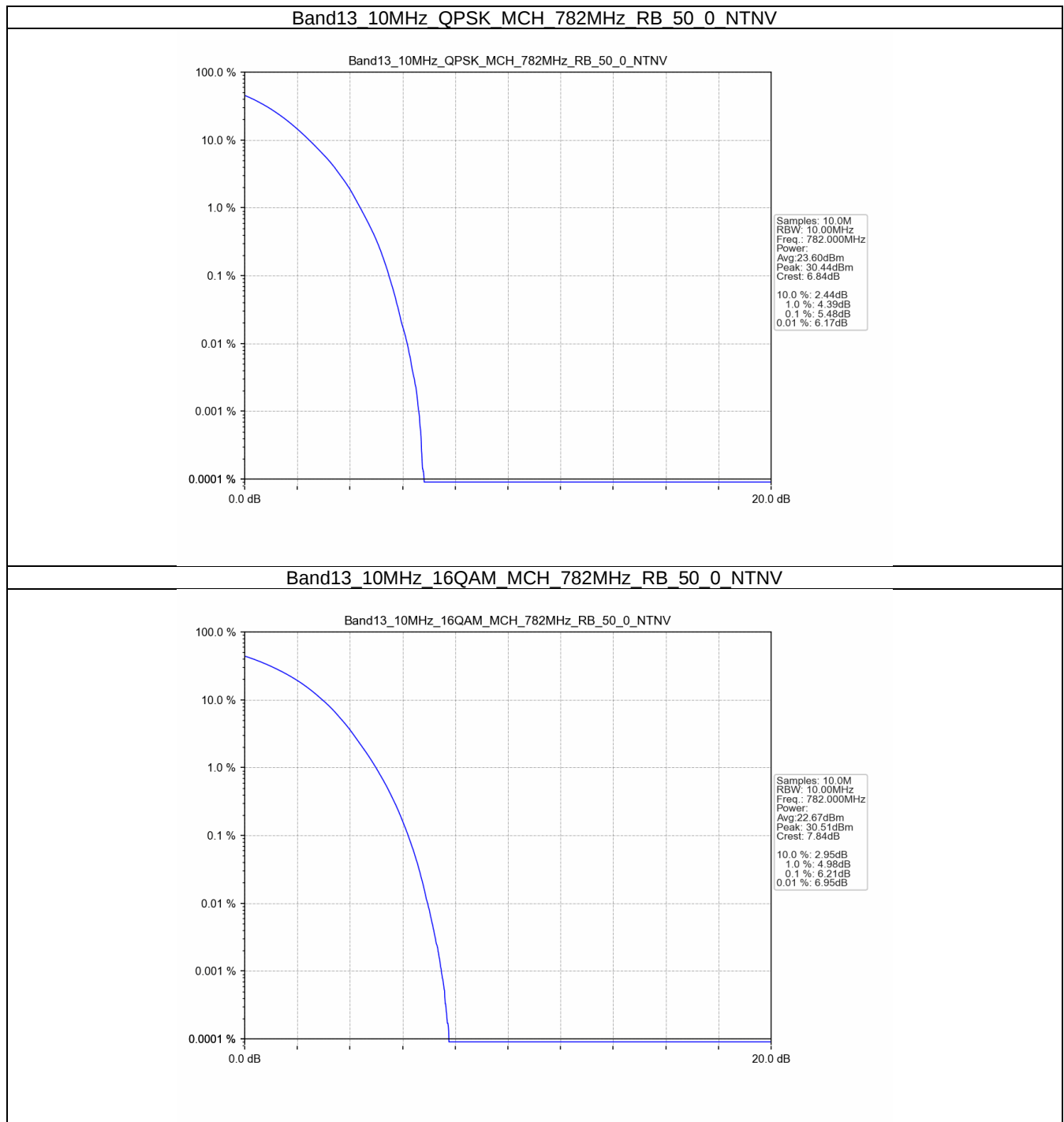
4.1 Test Result

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	5.48	<=13	Pass
16QAM	782	50	0	6.21	<=13	Pass

4.2 Test Graph

4.2.1 B13_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B13_5MHz

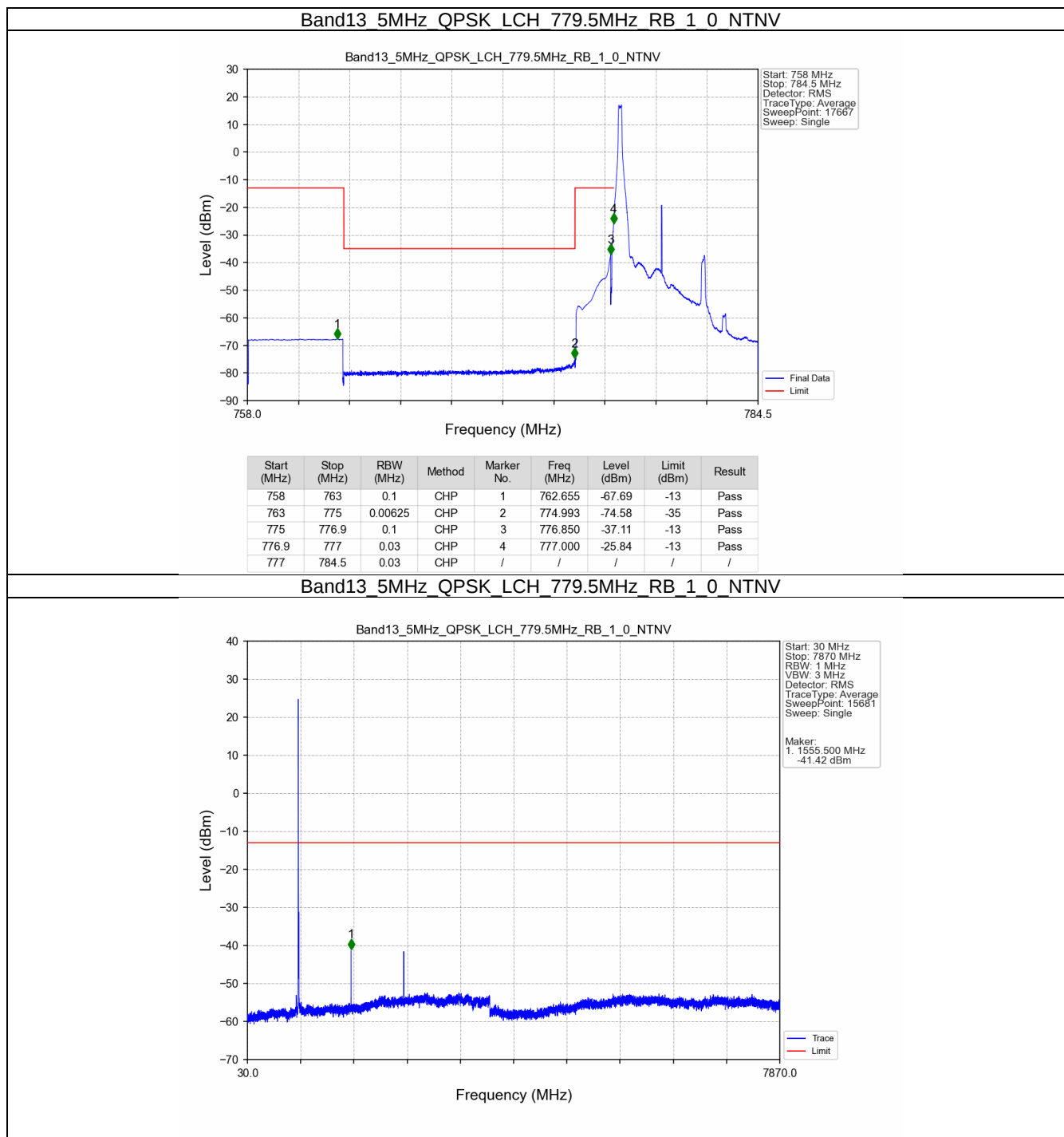
Band: 13 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B13_10MHz

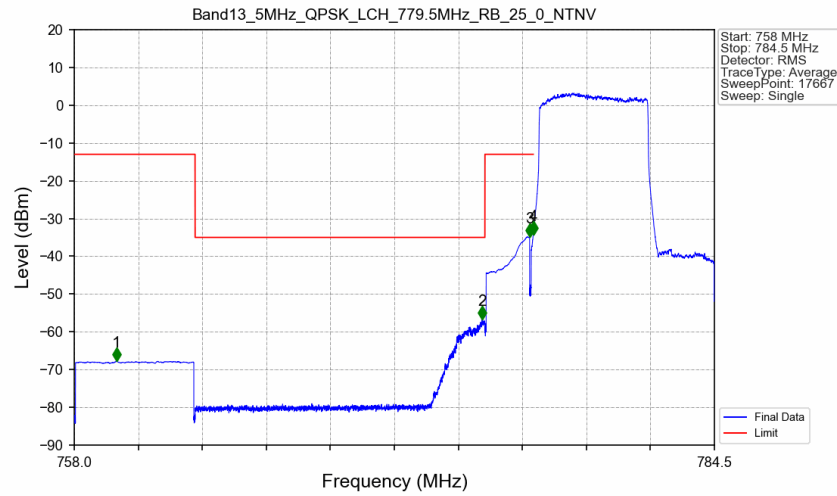
Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B13_5MHz

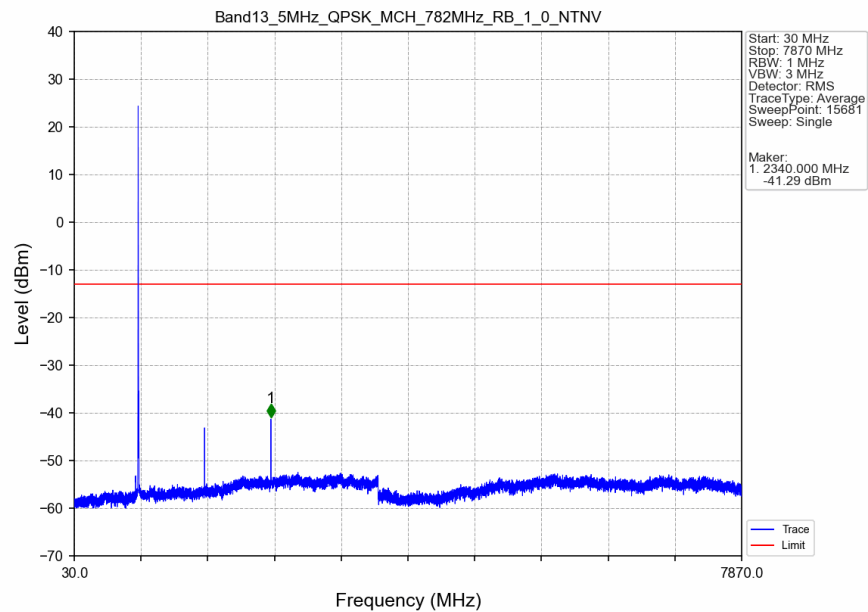


Band13_5MHz_QPSK_LCH_779.5MHz_RB_25_0_NTNV

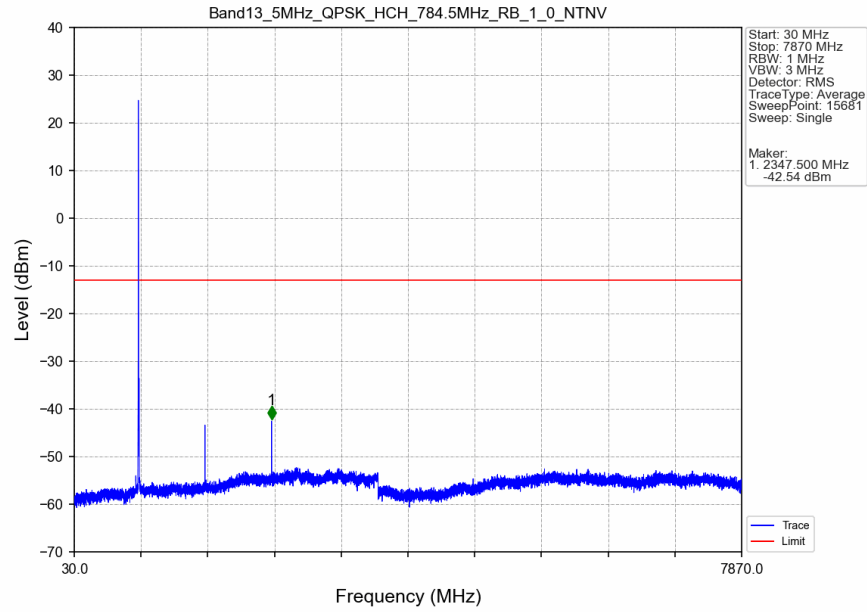


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	759.742	-67.79	-13	Pass
763	775	0.00625	CHP	2	774.886	-56.65	-35	Pass
775	776.9	0.1	CHP	3	776.850	-34.75	-13	Pass
776.9	777	0.03	CHP	4	777.000	-34.24	-13	Pass
777	784.5	0.03	CHP	/	/	/	/	/

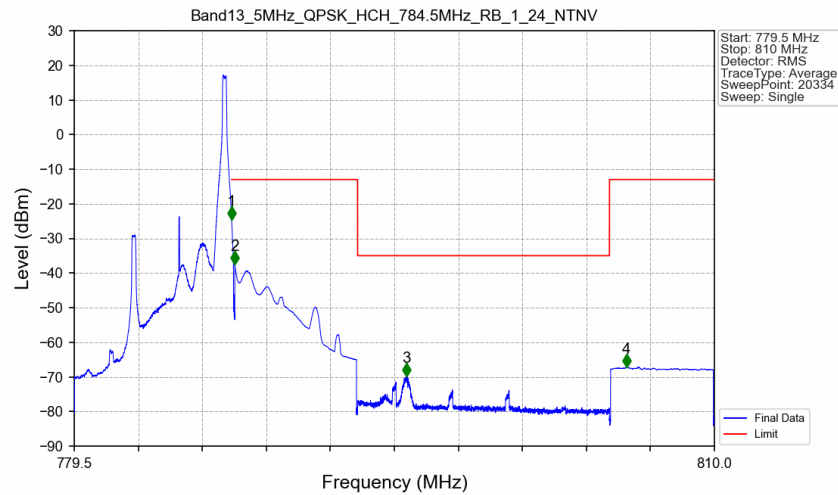
Band13_5MHz_QPSK_MCH_782MHz_RB_1_0_NTNV



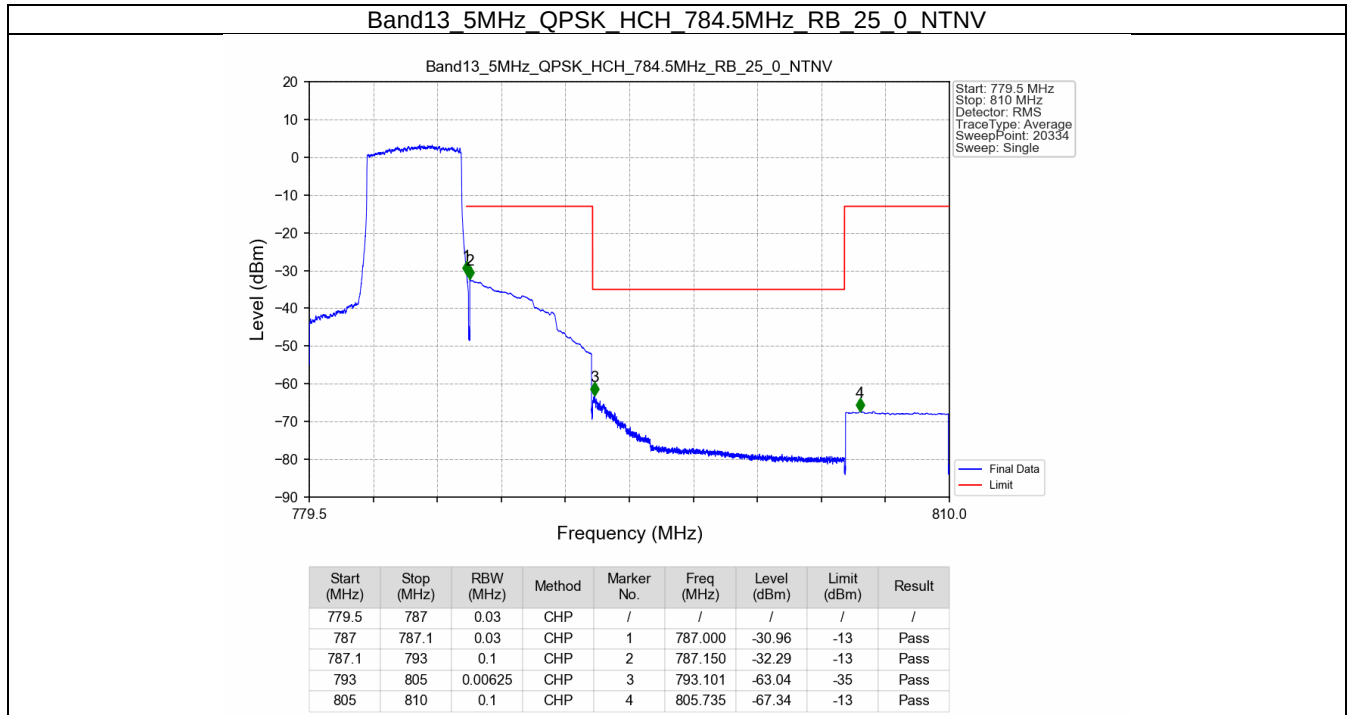
Band13_5MHz_QPSK_HCH_784.5MHz_RB_1_0_NTNV



Band13_5MHz_QPSK_HCH_784.5MHz_RB_1_24_NTNV

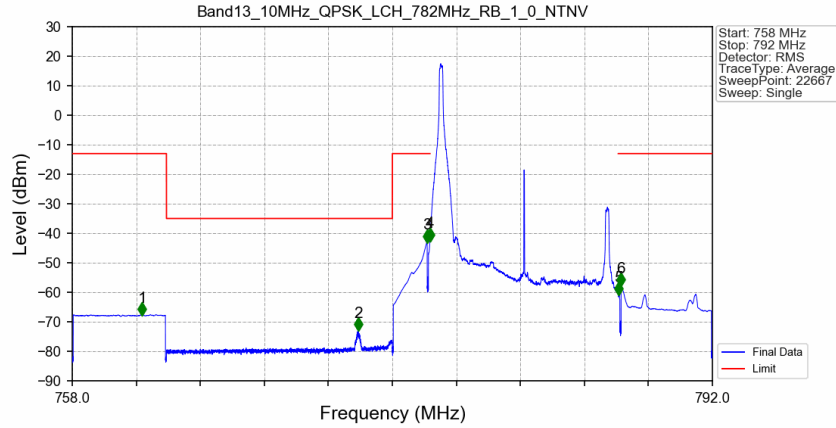


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-24.56	-13	Pass
787.1	793	0.1	CHP	2	787.150	-37.39	-13	Pass
793	805	0.00625	CHP	3	795.340	-69.91	-35	Pass
805	810	0.1	CHP	4	805.818	-67.15	-13	Pass



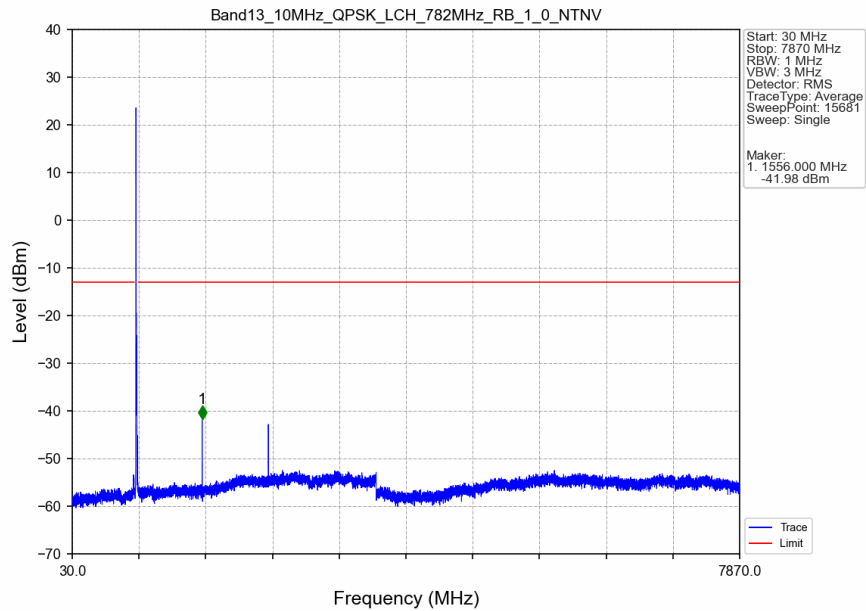
5.2.2 B13_10MHz

Band13_10MHz_QPSK_LCH_782MHz_RB_1_0_NTNV

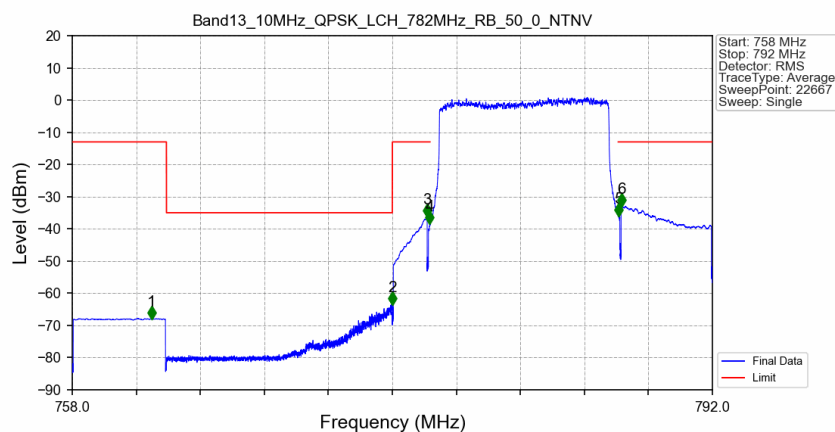


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	761.716	-67.59	-13	Pass
763	775	0.00625	CHP	2	773.192	-72.78	-35	Pass
775	776.9	0.1	CHP	3	776.847	-42.86	-13	Pass
776.9	777	0.03	CHP	4	777.000	-42.31	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.000	-60.61	-13	Pass
787.1	792	0.1	CHP	6	787.150	-57.52	-13	Pass

Band13_10MHz_QPSK_LCH_782MHz_RB_1_0_NTNV

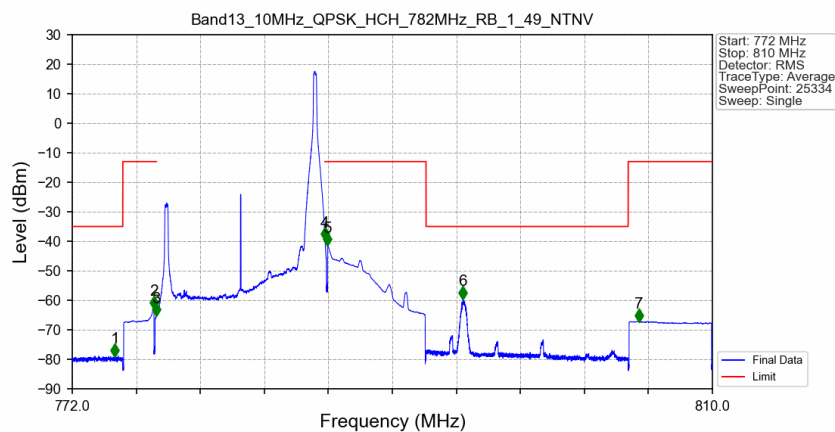


Band13_10MHz_QPSK_LCH_782MHz_RB_50_0_NTNV



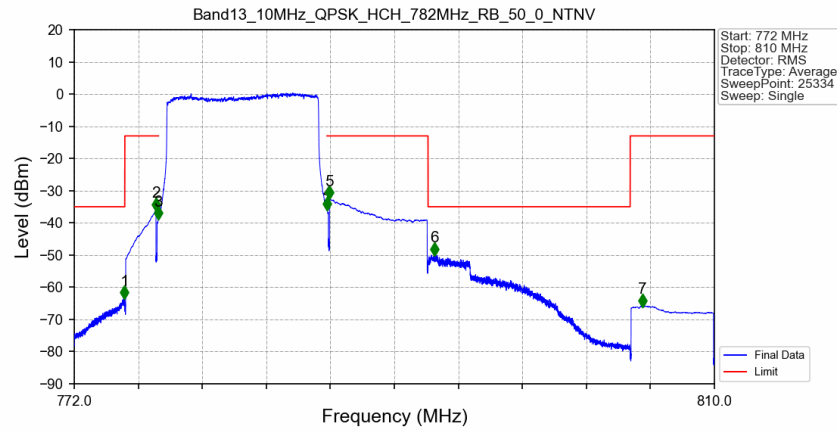
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	762.212	-67.80	-13	Pass
763	775	0.00625	CHP	2	774.988	-63.28	-35	Pass
775	776.9	0.1	CHP	3	776.850	-36.14	-13	Pass
776.9	777	0.03	CHP	4	776.989	-38.19	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.015	-35.84	-13	Pass
787.1	792	0.1	CHP	6	787.194	-32.85	-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	774.535	-78.75	-35	Pass
775	776.9	0.1	CHP	2	776.850	-62.58	-13	Pass
776.9	777	0.03	CHP	3	777.000	-64.95	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-39.39	-13	Pass
787.1	793	0.1	CHP	5	787.150	-41.19	-13	Pass
793	805	0.00625	CHP	6	795.192	-59.26	-35	Pass
805	810	0.1	CHP	7	805.650	-66.91	-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	774.972	-63.26	-35	Pass
775	776.9	0.1	CHP	2	776.850	-35.97	-13	Pass
776.9	777	0.03	CHP	3	777.000	-38.60	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.014	-35.82	-13	Pass
787.1	793	0.1	CHP	5	787.150	-32.34	-13	Pass
793	805	0.00625	CHP	6	793.378	-49.84	-35	Pass
805	810	0.1	CHP	7	805.713	-65.82	-13	Pass