

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	22.94	3.17	23.96	<=34.77	Pass
			13	22.77	3.17	23.79	<=34.77	Pass
			24	22.68	3.17	23.70	<=34.77	Pass
		12	0	22.16	3.17	23.18	<=34.77	Pass
			6	21.94	3.17	22.96	<=34.77	Pass
			13	21.76	3.17	22.78	<=34.77	Pass
		25	0	21.98	3.17	23.00	<=34.77	Pass
	782	1	0	22.92	3.17	23.94	<=34.77	Pass
			13	22.88	3.17	23.90	<=34.77	Pass
			24	23.12	3.17	24.14	<=34.77	Pass
		12	0	21.81	3.17	22.83	<=34.77	Pass
			6	21.80	3.17	22.82	<=34.77	Pass
			13	21.97	3.17	22.99	<=34.77	Pass
		25	0	21.89	3.17	22.91	<=34.77	Pass
	784.5	1	0	22.70	3.17	23.72	<=34.77	Pass
			13	22.95	3.17	23.97	<=34.77	Pass
			24	22.58	3.17	23.60	<=34.77	Pass
		12	0	21.81	3.17	22.83	<=34.77	Pass
			6	21.91	3.17	22.93	<=34.77	Pass
			13	21.81	3.17	22.83	<=34.77	Pass
		25	0	21.81	3.17	22.83	<=34.77	Pass
16QAM	779.5	1	0	22.23	3.17	23.25	<=34.77	Pass
			13	22.08	3.17	23.10	<=34.77	Pass
			24	22.01	3.17	23.03	<=34.77	Pass
		12	0	21.19	3.17	22.21	<=34.77	Pass
			6	20.98	3.17	22.00	<=34.77	Pass
			13	20.79	3.17	21.81	<=34.77	Pass
		25	0	21.04	3.17	22.06	<=34.77	Pass
	782	1	0	22.03	3.17	23.05	<=34.77	Pass
			13	22.01	3.17	23.03	<=34.77	Pass
			24	22.27	3.17	23.29	<=34.77	Pass
		12	0	20.79	3.17	21.81	<=34.77	Pass
			6	20.79	3.17	21.81	<=34.77	Pass
			13	20.97	3.17	21.99	<=34.77	Pass
		25	0	20.90	3.17	21.92	<=34.77	Pass
	784.5	1	0	21.96	3.17	22.98	<=34.77	Pass
			13	22.22	3.17	23.24	<=34.77	Pass
			24	21.84	3.17	22.86	<=34.77	Pass
		12	0	20.82	3.17	21.84	<=34.77	Pass
			6	20.92	3.17	21.94	<=34.77	Pass
			13	20.83	3.17	21.85	<=34.77	Pass
		25	0	20.88	3.17	21.90	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.2 B13_10MHz_ERP

Band: 13 / Bandwidth: 10MHz / NTV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	782	1	0	23.18	3.17	24.20	<=34.77	Pass
			25	23.00	3.17	24.02	<=34.77	Pass
			49	22.99	3.17	24.01	<=34.77	Pass
		25	0	22.08	3.17	23.10	<=34.77	Pass
			13	21.98	3.17	23.00	<=34.77	Pass
			25	22.11	3.17	23.13	<=34.77	Pass
		50	0	22.10	3.17	23.12	<=34.77	Pass
16QAM	782	1	0	22.51	3.17	23.53	<=34.77	Pass
			25	22.23	3.17	23.25	<=34.77	Pass
			49	22.24	3.17	23.26	<=34.77	Pass
		12	0	22.27	3.17	23.29	<=34.77	Pass
			19	21.98	3.17	23.00	<=34.77	Pass
			38	22.18	3.17	23.20	<=34.77	Pass
		27	0	21.04	3.17	22.06	<=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	-0.515	-0.0007	-2.5 to 2.5	Pass
					NV	-0.644	-0.0008	-2.5 to 2.5	Pass
					HV	-0.858	-0.0011	-2.5 to 2.5	Pass
				-30	NV	-0.114	-0.0001	-2.5 to 2.5	Pass
				-20	NV	-0.701	-0.0009	-2.5 to 2.5	Pass
				-10	NV	-0.958	-0.0012	-2.5 to 2.5	Pass
				0	NV	0.401	0.0005	-2.5 to 2.5	Pass
				10	NV	-0.057	-0.0001	-2.5 to 2.5	Pass
				30	NV	0.129	0.0002	-2.5 to 2.5	Pass
				40	NV	-0.114	-0.0001	-2.5 to 2.5	Pass
				50	NV	-0.601	-0.0008	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band13_OBW

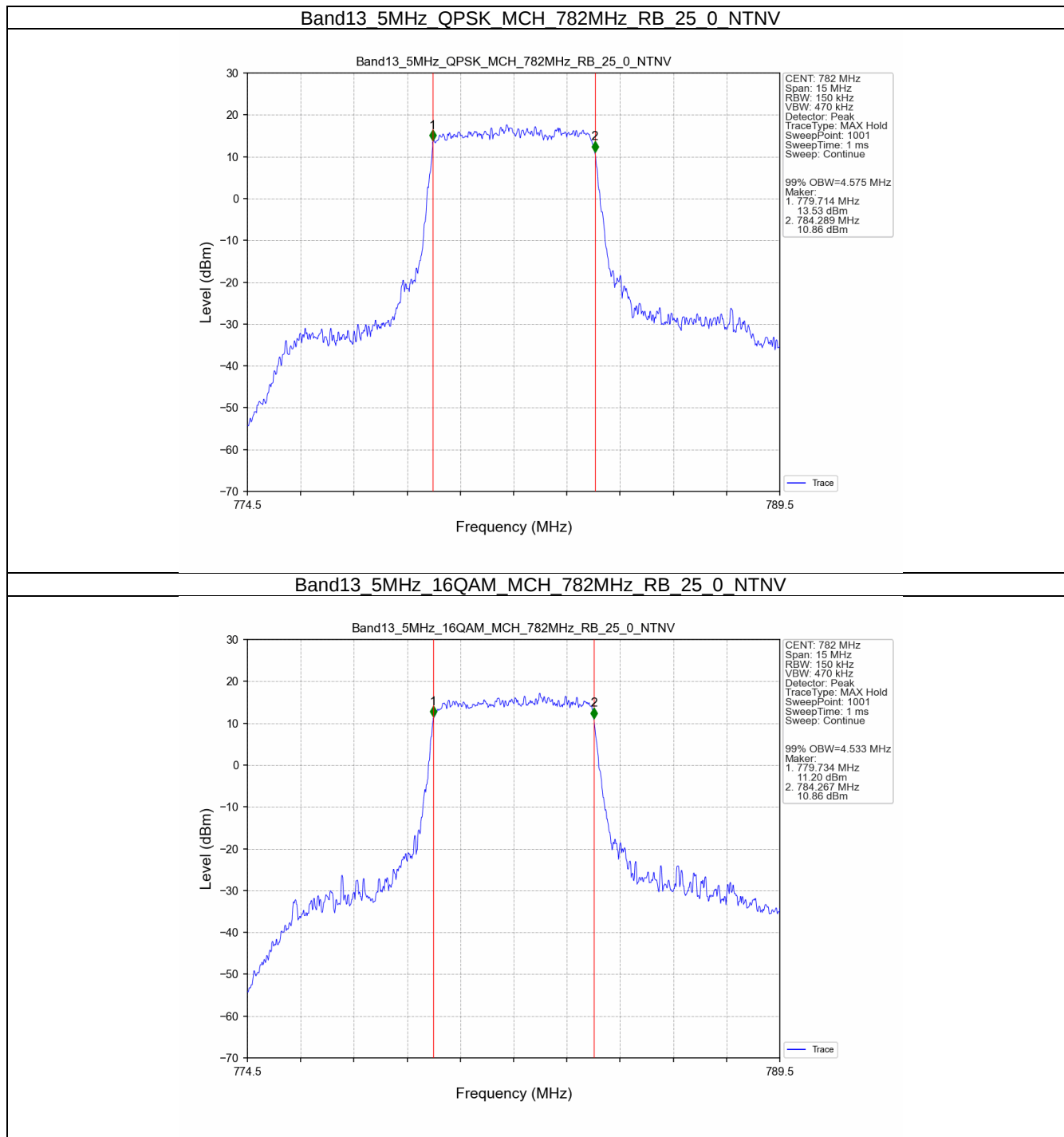
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.575	/	Pass
	16QAM	782	25	0	4.533	/	Pass
10	QPSK	782	50	0	9.040	/	Pass
	16QAM	782	27	0	5.084	/	Pass

3.1.2 Band13_XDB

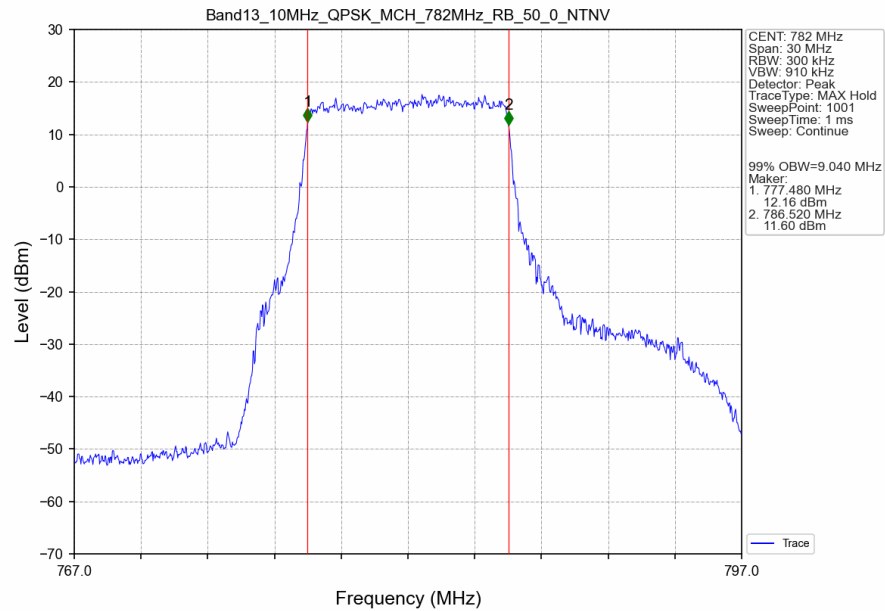
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	5.102	/	Pass
	16QAM	782	25	0	5.093	/	Pass
10	QPSK	782	50	0	10.185	/	Pass
	16QAM	782	27	0	6.221	/	Pass

3.2 Test Graph

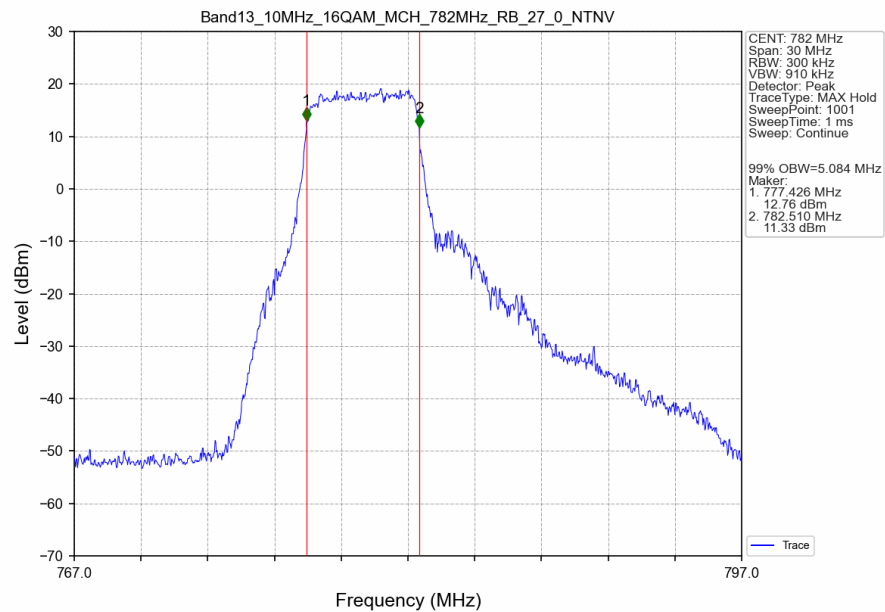
3.2.1 Band13_OBW



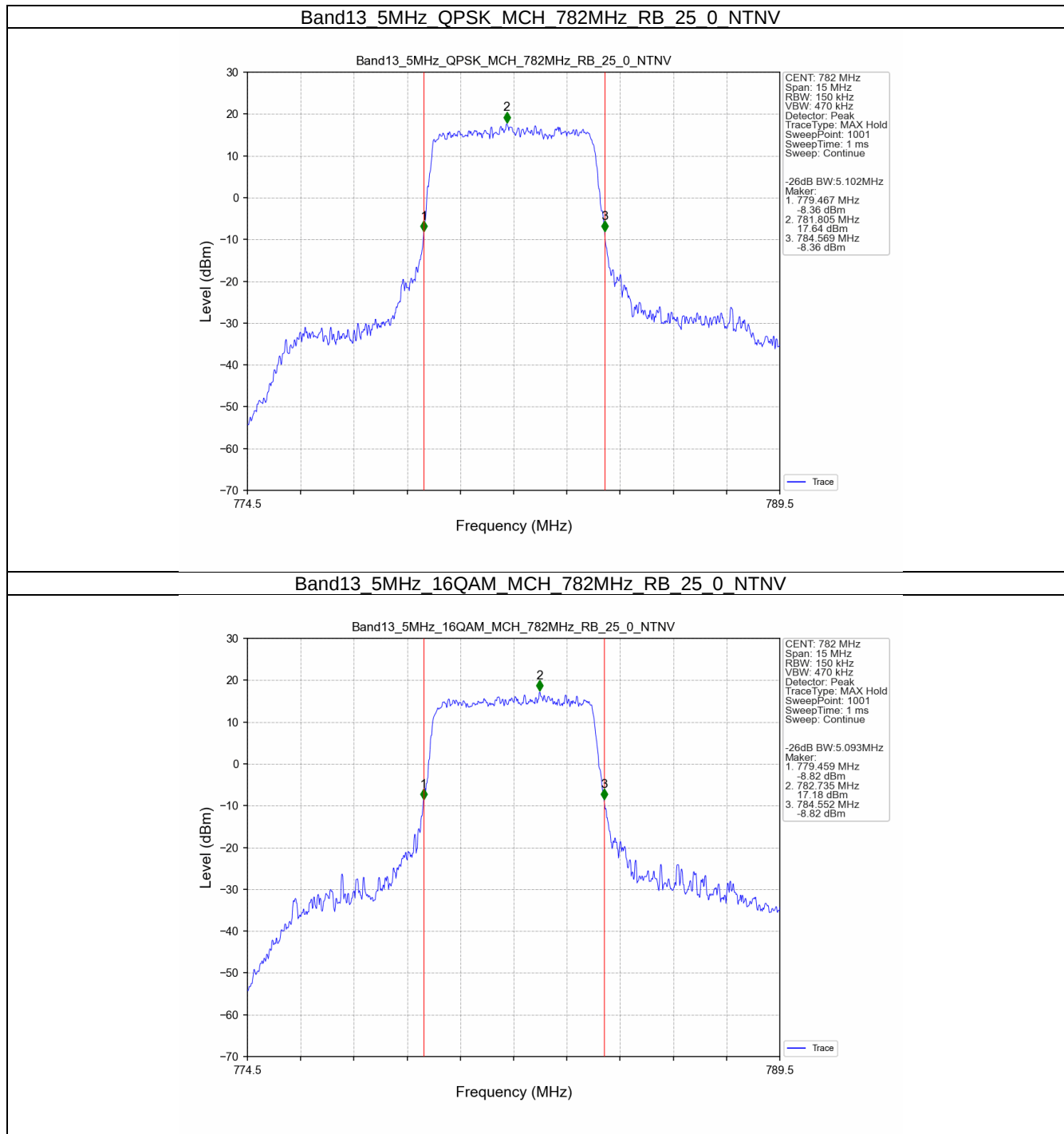
Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



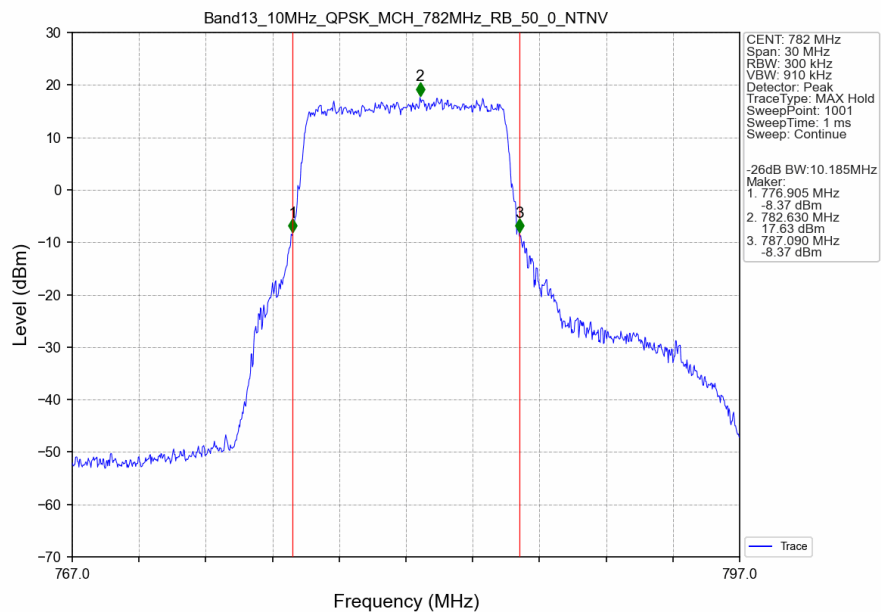
Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV



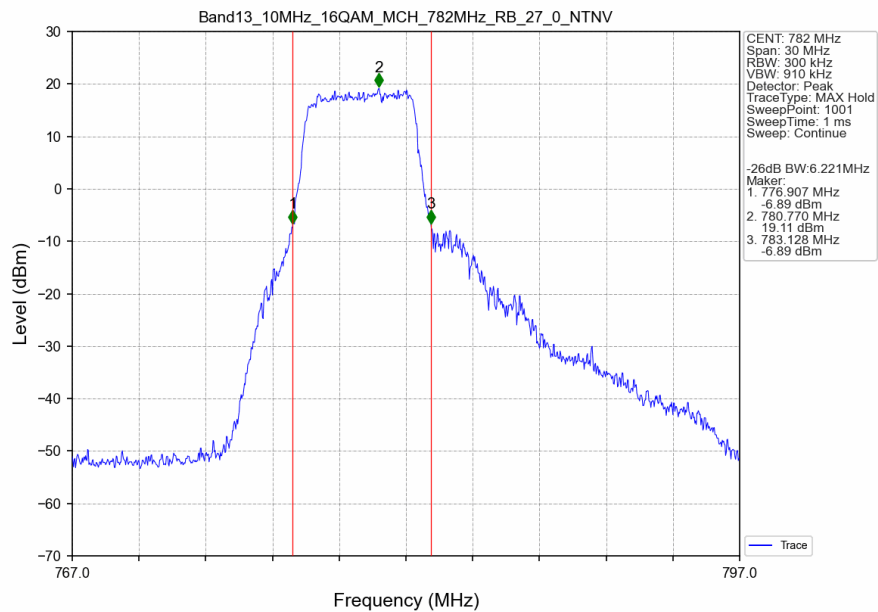
3.2.2 Band13_XDB



Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV





4. Peak-Average Ratio

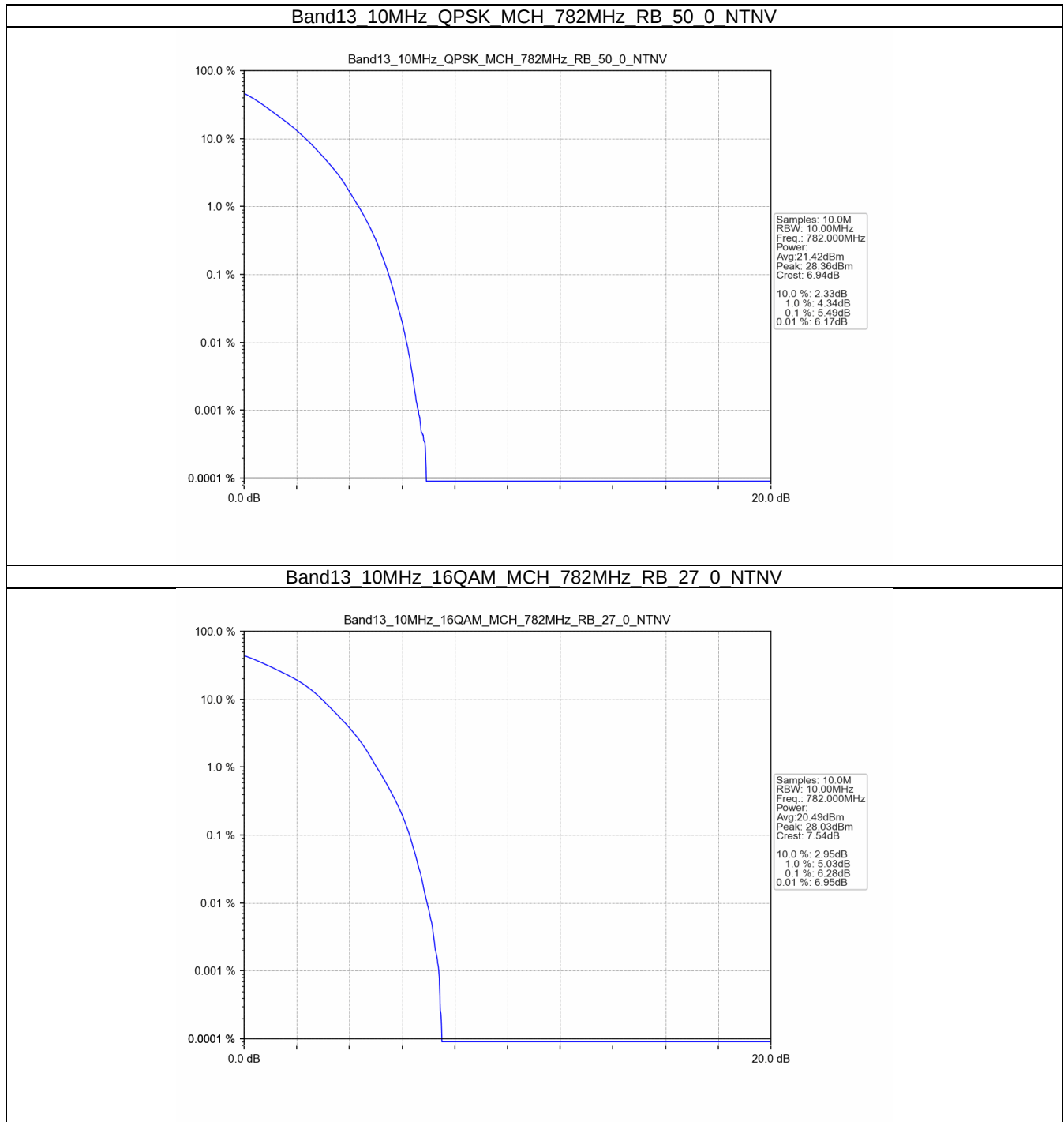
4.1 Test Result

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	5.49	<=13	Pass
16QAM	782	27	0	6.28	<=13	Pass

4.2 Test Graph

4.2.1 B13_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B13_5MHz

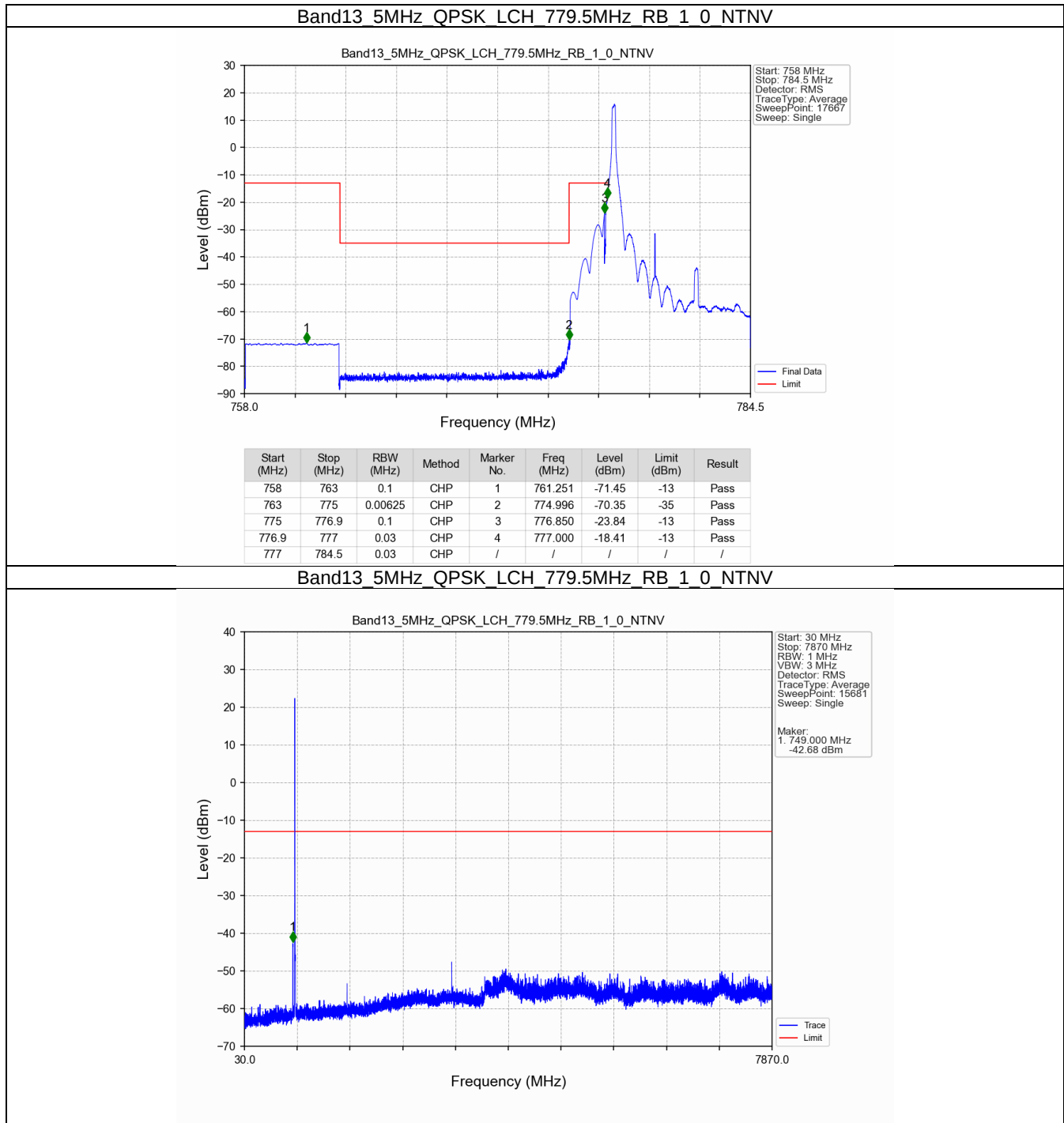
Band: 13 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B13_10MHz

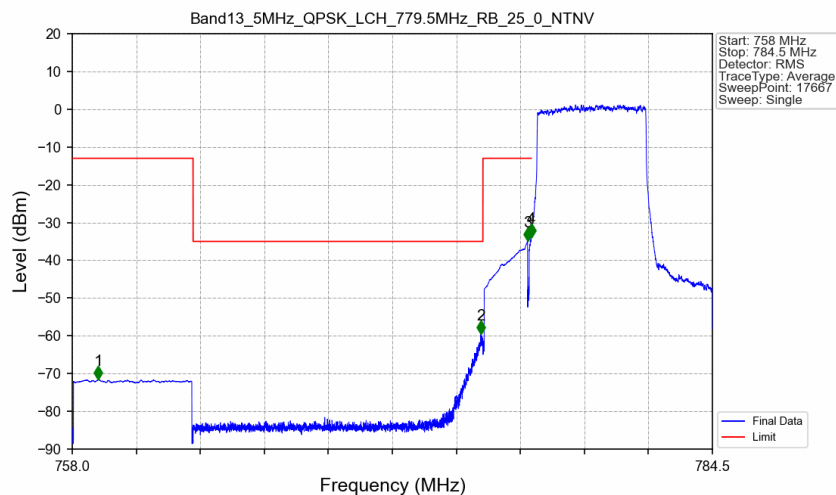
Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

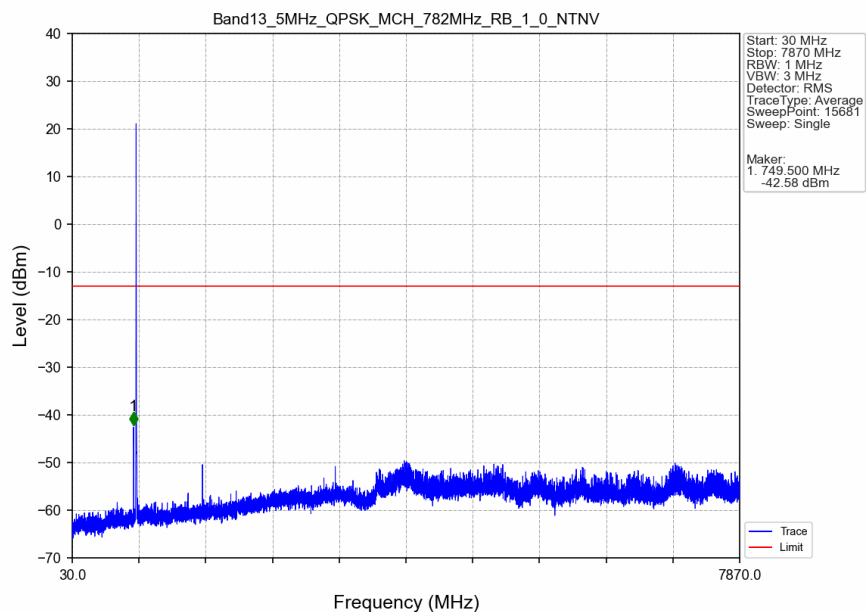
5.2.1 B13_5MHz



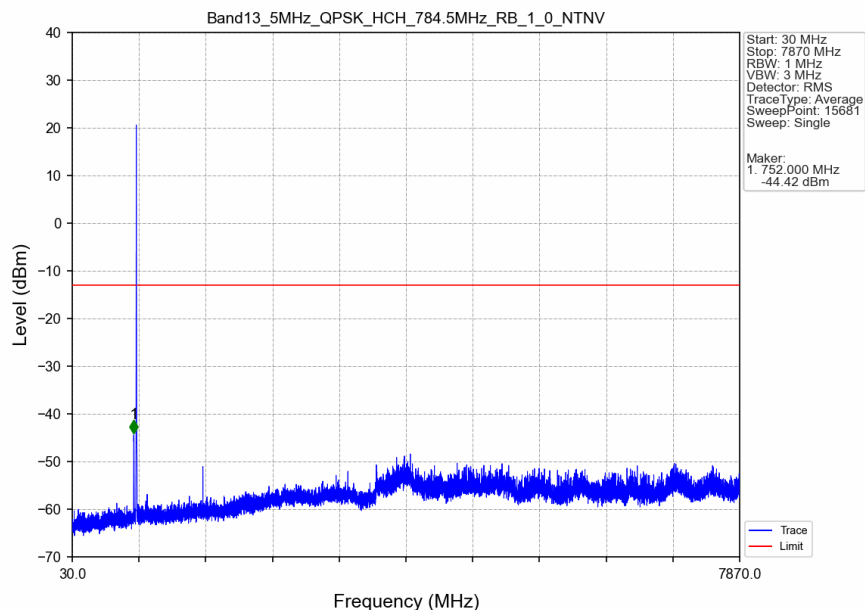
Band13_5MHz_QPSK_LCH_779.5MHz_RB_25_0_NTNV



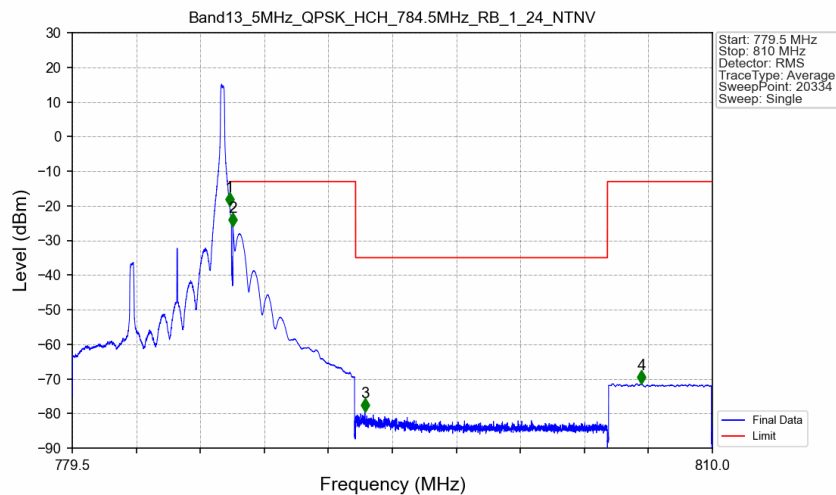
Band13_5MHz_QPSK_MCH_782MHz_RB_1_0_NTNV



Band13 5MHz QPSK HCH 784.5MHz RB 1 0 NTN

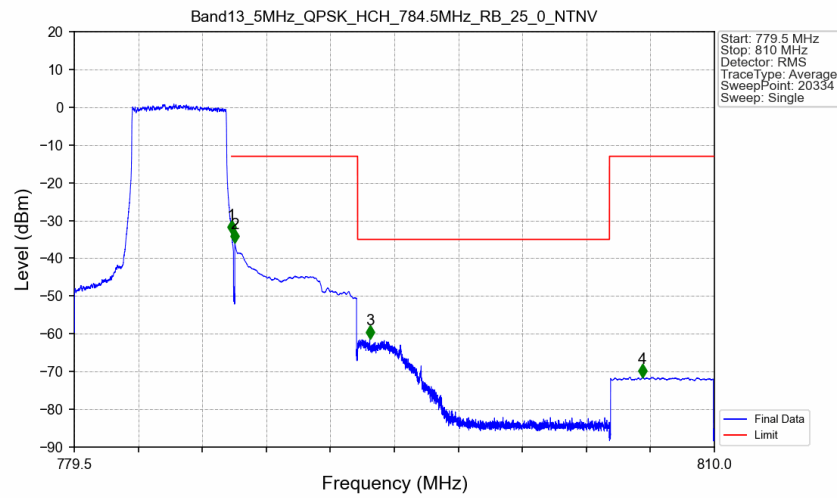


Band13 5MHz QPSK HCH 784.5MHz RB 1 24 NTN



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	-20.07	-13	Pass
787.1	793	0.1	CHP	2	787.150	-25.88	-13	Pass
793	805	0.00625	CHP	3	793.441	-79.36	-35	Pass
805	810	0.1	CHP	4	806.622	-71.37	-13	Pass

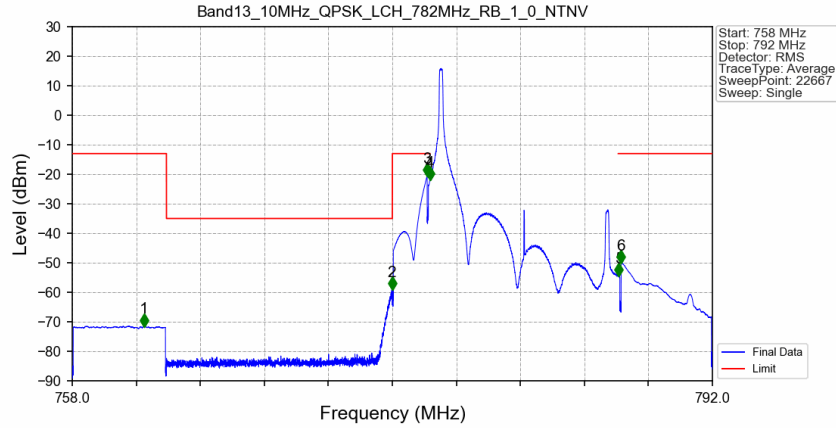
Band13_5MHz_QPSK_HCH_784.5MHz_RB_25_0_NTNV



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	787.000	-33.36	-13	Pass
787.1	793	0.1	CHP	2	787.150	-35.87	-13	Pass
793	805	0.00625	CHP	3	793.579	-61.25	-35	Pass
805	810	0.1	CHP	4	806.574	-71.51	-13	Pass

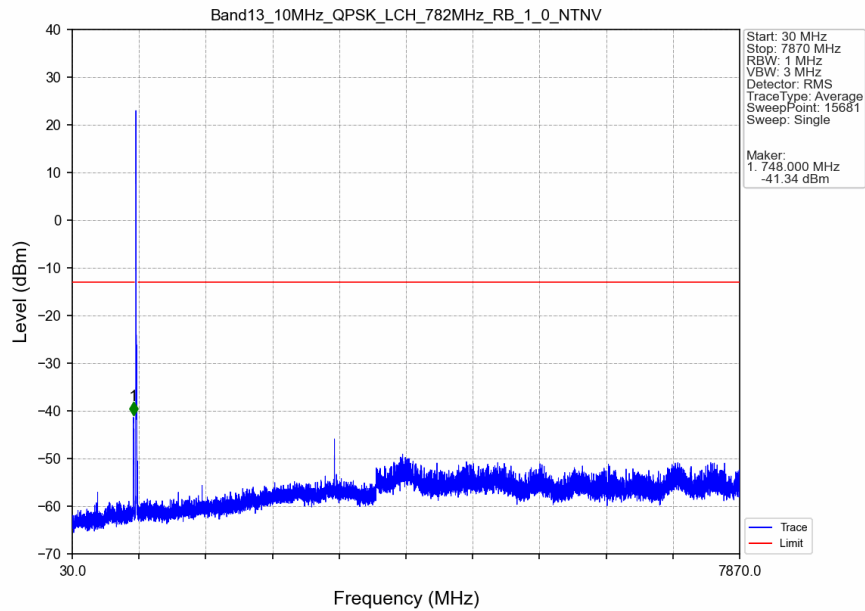
5.2.2 B13_10MHz

Band13_10MHz_QPSK_LCH_782MHz_RB_1_0_NTNV

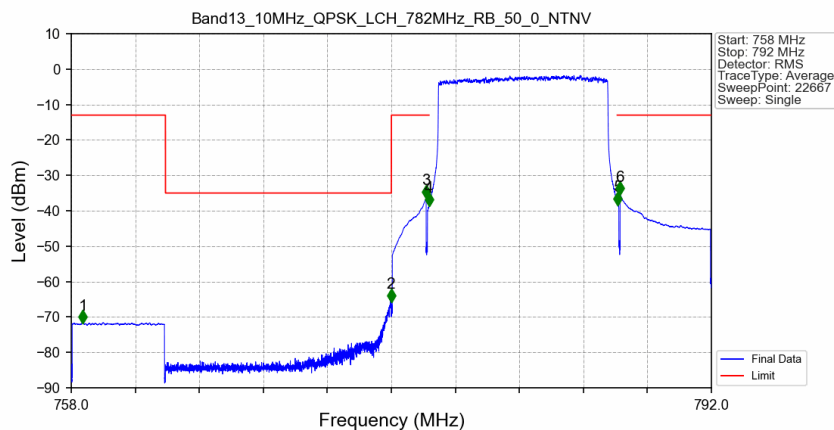


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	761.804	-71.33	-13	Pass
763	775	0.00625	CHP	2	774.985	-58.94	-35	Pass
775	776.9	0.1	CHP	3	776.850	-20.38	-13	Pass
776.9	777	0.03	CHP	4	777.000	-21.63	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.036	-54.30	-13	Pass
787.1	792	0.1	CHP	6	787.153	-49.91	-13	Pass

Band13_10MHz_QPSK_LCH_782MHz_RB_1_0_NTNV

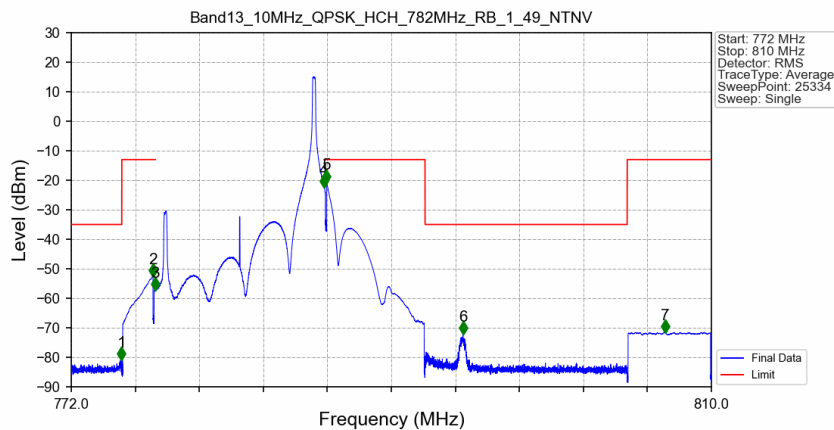


Band13_10MHz_QPSK_LCH_782MHz_RB_50_0_NTNV



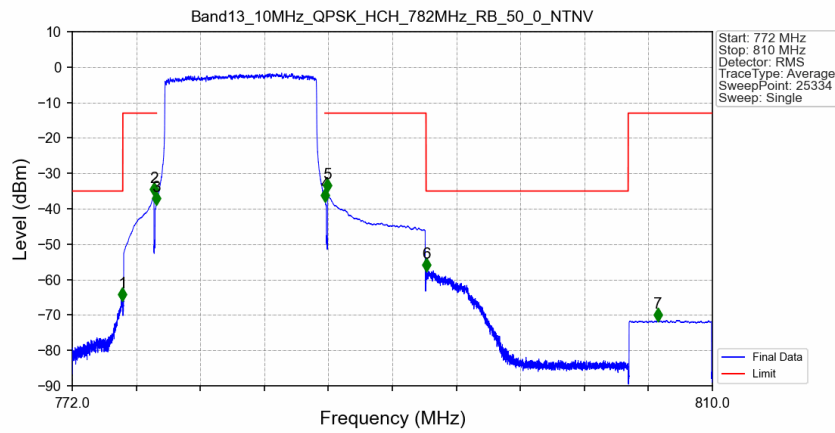
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	758.621	-71.57	-13	Pass
763	775	0.00625	CHP	2	774.984	-65.42	-35	Pass
775	776.9	0.1	CHP	3	776.850	-36.15	-13	Pass
776.9	777	0.03	CHP	4	777.000	-38.27	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.000	-38.10	-13	Pass
787.1	792	0.1	CHP	6	787.150	-35.21	-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	774.970	-80.72	-35	Pass
775	776.9	0.1	CHP	2	776.845	-52.37	-13	Pass
776.9	777	0.03	CHP	3	776.979	-57.05	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-22.20	-13	Pass
787.1	793	0.1	CHP	5	787.150	-20.53	-13	Pass
793	805	0.00625	CHP	6	795.253	-71.98	-35	Pass
805	810	0.1	CHP	7	807.240	-71.44	-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	774.970	-65.76	-35	Pass
775	776.9	0.1	CHP	2	776.850	-36.03	-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	787.006	-37.69	-13	Pass
787.1	793	0.1	CHP	5	787.150	-34.98	-13	Pass
793	805	0.00625	CHP	6	793.033	-57.47	-35	Pass
805	810	0.1	CHP	7	806.776	-71.47	-13	Pass