

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B13_5MHz_ERP

Band: 13 / Bandwidth: 5MHz / NTVN								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	779.5	1	0	23.02	3.17	24.04	<=34.77	Pass
			24	22.95	3.17	23.97	<=34.77	Pass
		25	0	22.08	3.17	23.10	<=34.77	Pass
	782	1	0	22.93	3.17	23.95	<=34.77	Pass
			24	22.96	3.17	23.98	<=34.77	Pass
		25	0	22.01	3.17	23.03	<=34.77	Pass
	784.5	1	0	23.08	3.17	24.10	<=34.77	Pass
			24	22.52	3.17	23.54	<=34.77	Pass
		25	0	22.07	3.17	23.09	<=34.77	Pass
16QAM	779.5	1	0	22.19	3.17	23.21	<=34.77	Pass
			24	22.13	3.17	23.15	<=34.77	Pass
		25	0	21.16	3.17	22.18	<=34.77	Pass
	782	1	0	22.05	3.17	23.07	<=34.77	Pass
			24	22.13	3.17	23.15	<=34.77	Pass
		25	0	20.99	3.17	22.01	<=34.77	Pass
	784.5	1	0	22.31	3.17	23.33	<=34.77	Pass
			24	21.75	3.17	22.77	<=34.77	Pass
		25	0	21.15	3.17	22.17	<=34.77	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

1.1.2 B13_10MHz_ERP

Band: 13 / Bandwidth: 10MHz / NTVN								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	782	1	0	23.08	3.17	24.10	<=34.77	Pass
			49	22.54	3.17	23.56	<=34.77	Pass
		50	0	22.09	3.17	23.11	<=34.77	Pass
16QAM	782	1	0	22.28	3.17	23.30	<=34.77	Pass
			49	21.78	3.17	22.80	<=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	3.40	-0.272	-0.0003	-2.5 to 2.5	Pass
					3.80	-1.116	-0.0014	-2.5 to 2.5	Pass
					4.20	-0.100	-0.0001	-2.5 to 2.5	Pass
				-30	3.80	-0.229	-0.0003	-2.5 to 2.5	Pass
				-20	3.80	-0.730	-0.0009	-2.5 to 2.5	Pass
				-10	3.80	-0.916	-0.0012	-2.5 to 2.5	Pass
				0	3.80	-0.701	-0.0009	-2.5 to 2.5	Pass
				10	3.80	-0.587	-0.0008	-2.5 to 2.5	Pass
				30	3.80	-0.629	-0.0008	-2.5 to 2.5	Pass
				40	3.80	-0.887	-0.0011	-2.5 to 2.5	Pass
				50	3.80	-0.515	-0.0007	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band13_OBW

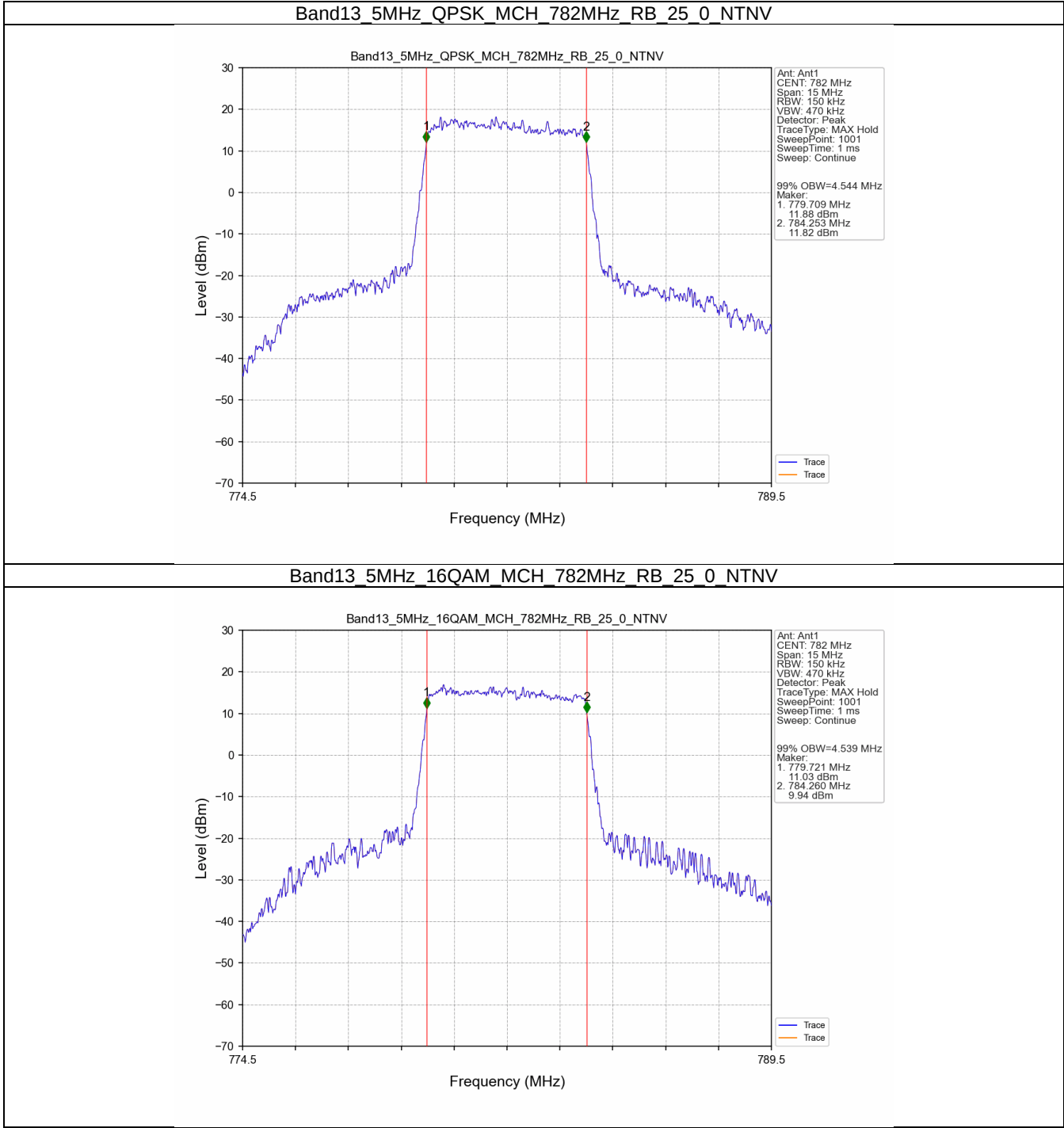
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.544	/	Pass
	16QAM	782	25	0	4.539	/	Pass
10	QPSK	782	50	0	9.044	/	Pass
	16QAM	782	27	0	5.087	/	Pass

3.1.2 Band13_XDB

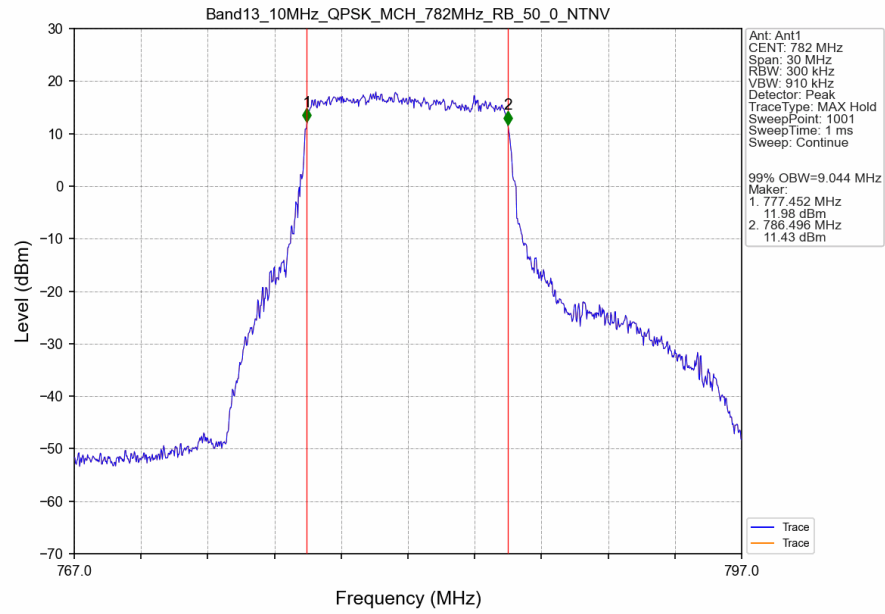
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	5.115	/	Pass
	16QAM	782	25	0	5.118	/	Pass
10	QPSK	782	50	0	10.305	/	Pass
	16QAM	782	27	0	6.187	/	Pass

3.2 Test Graph

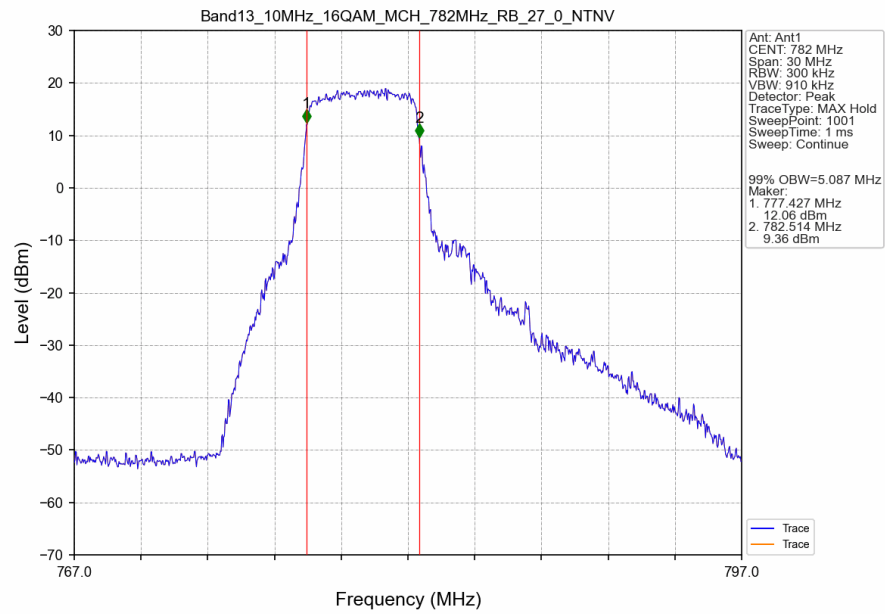
3.2.1 Band13_OBW



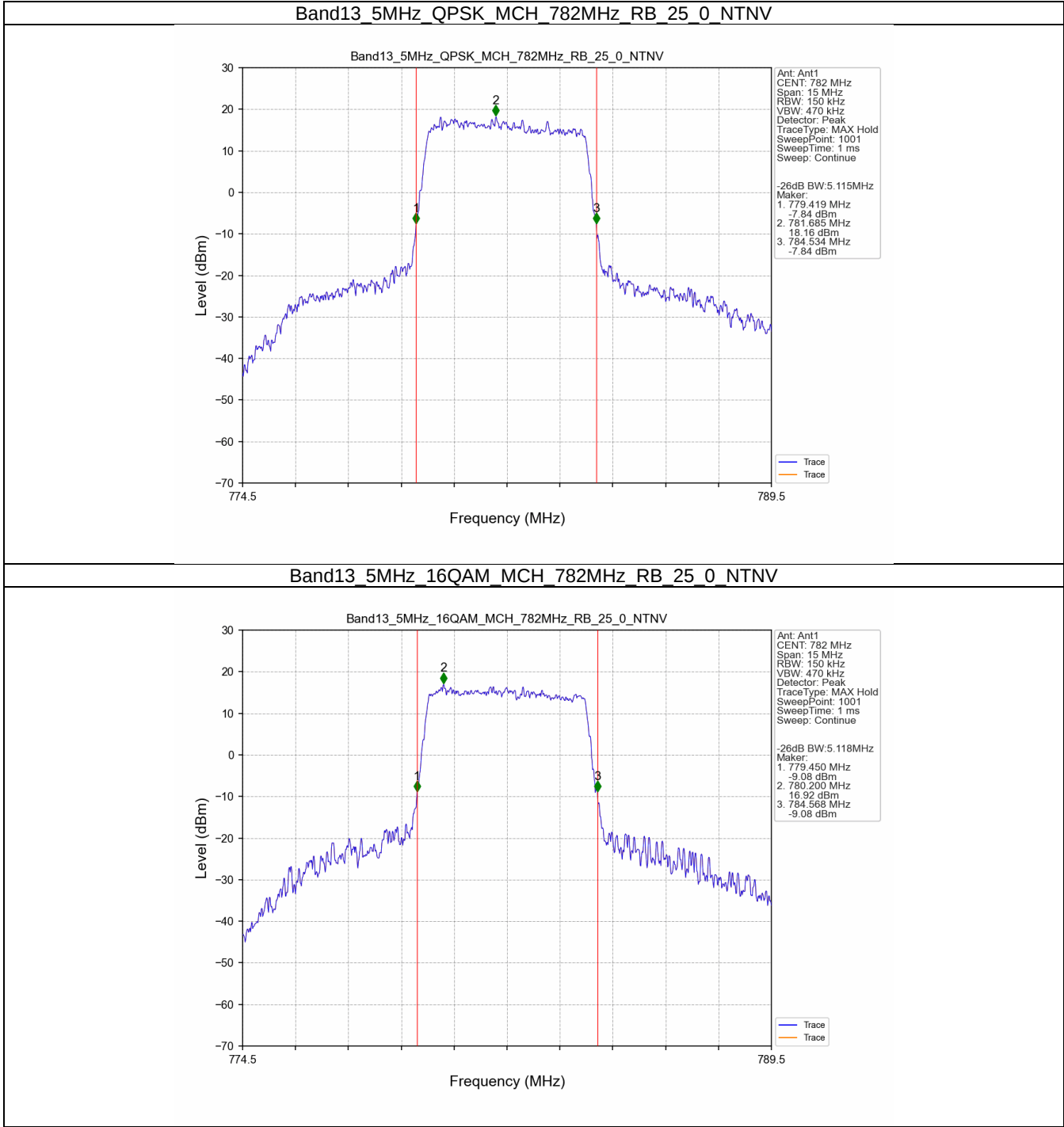
Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



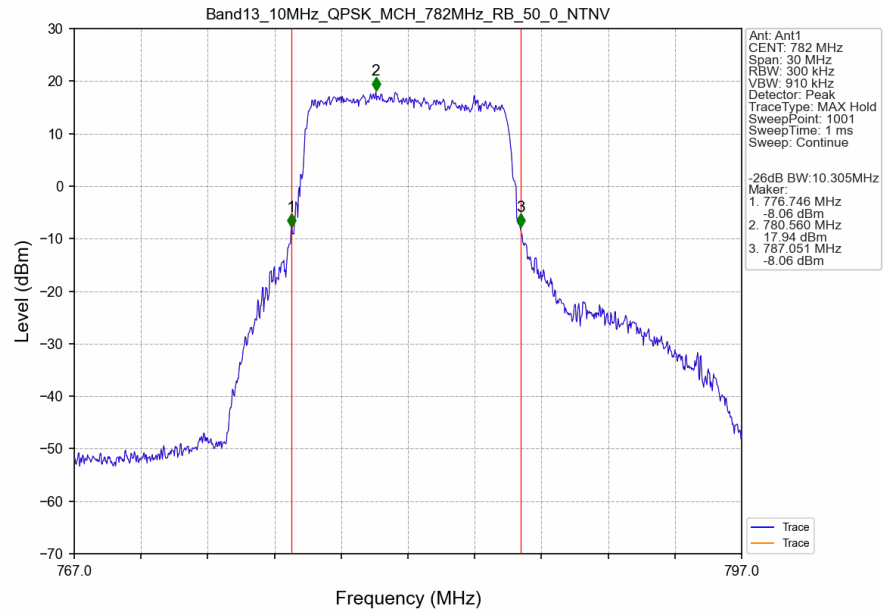
Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV



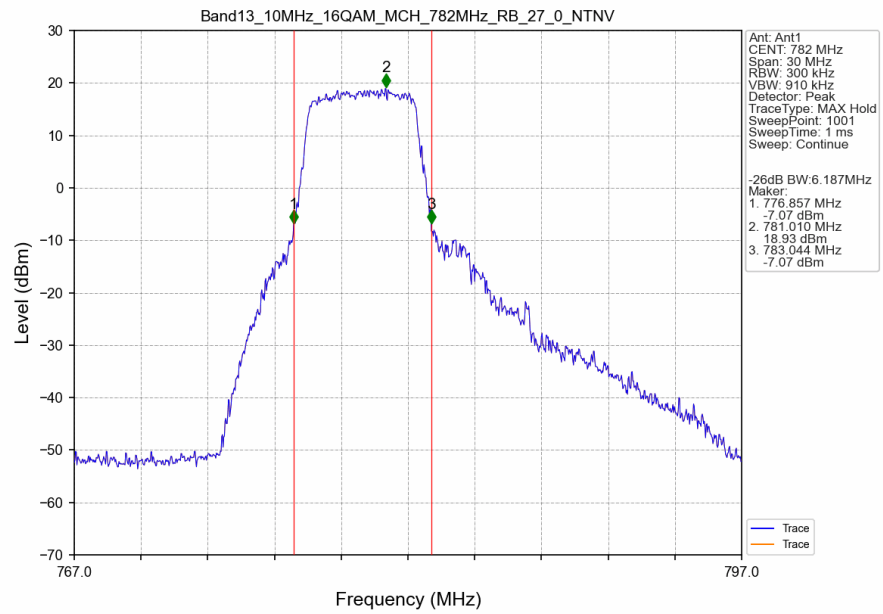
3.2.2 Band13_XDB



Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV



4. Peak-Average Ratio

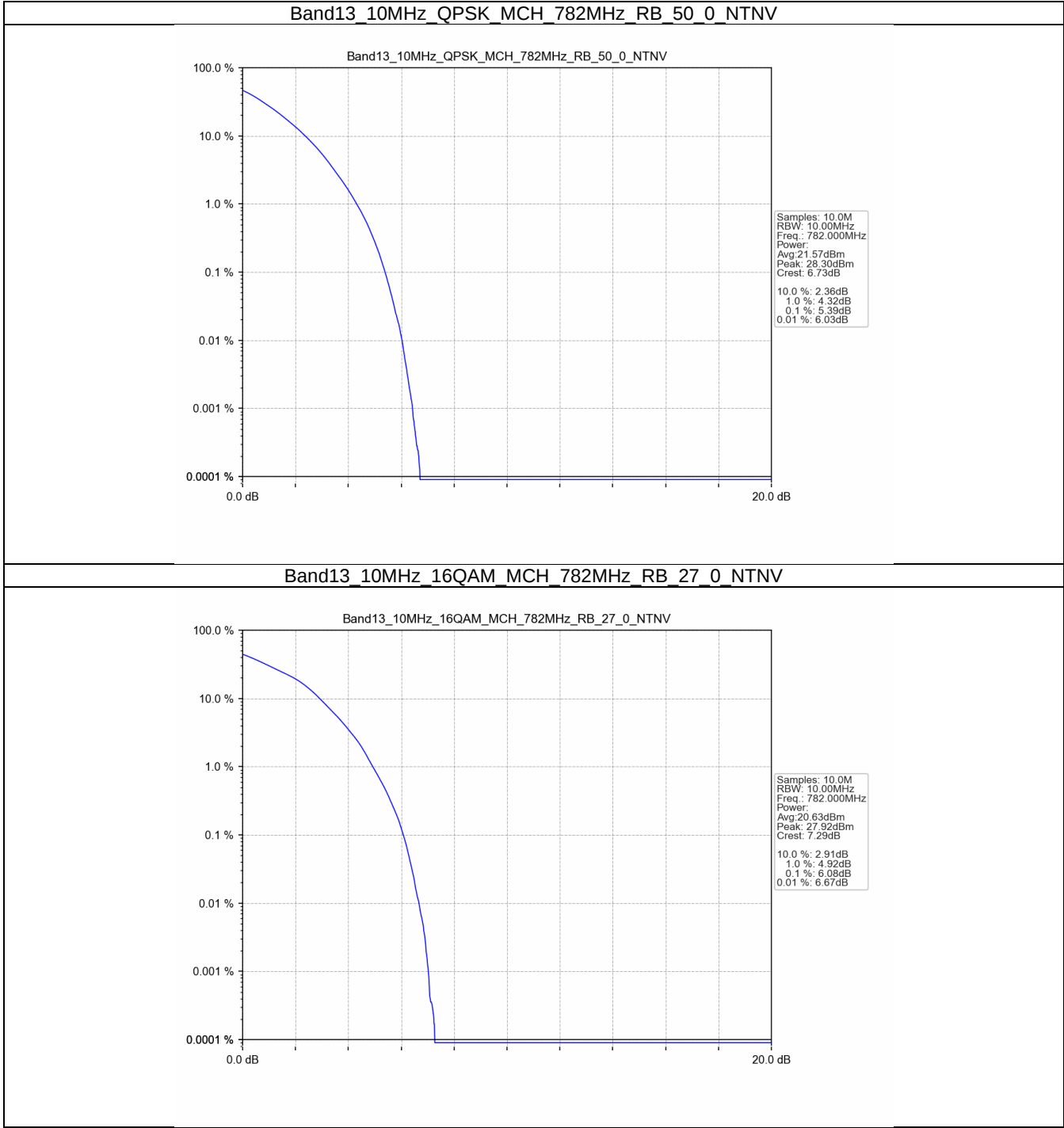
4.1 Test Result

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	5.39	<=13	Pass
16QAM	782	27	0	6.08	<=13	Pass

4.2 Test Graph

4.2.1 B13_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B13_5MHz

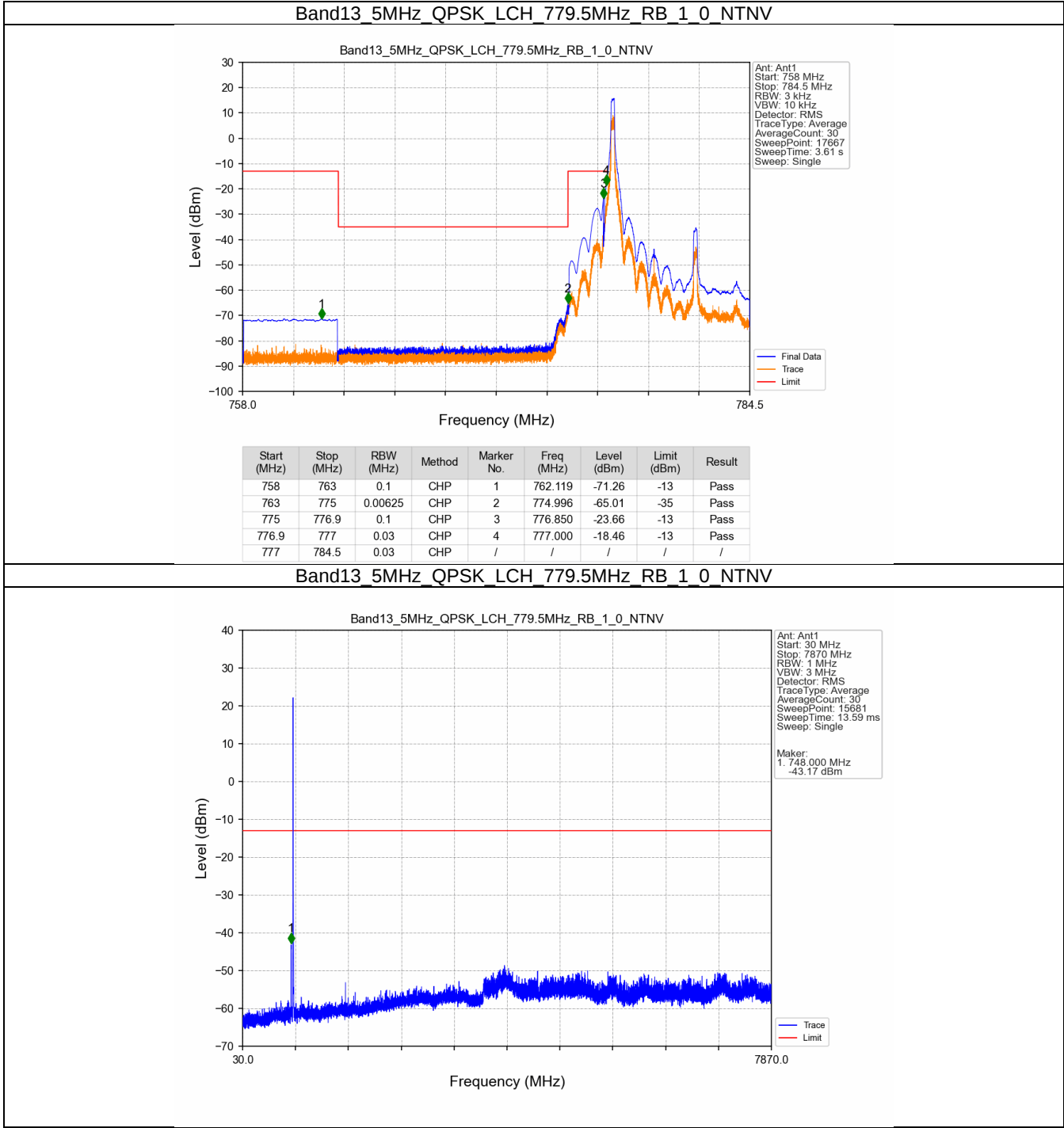
Band: 13 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B13_10MHz

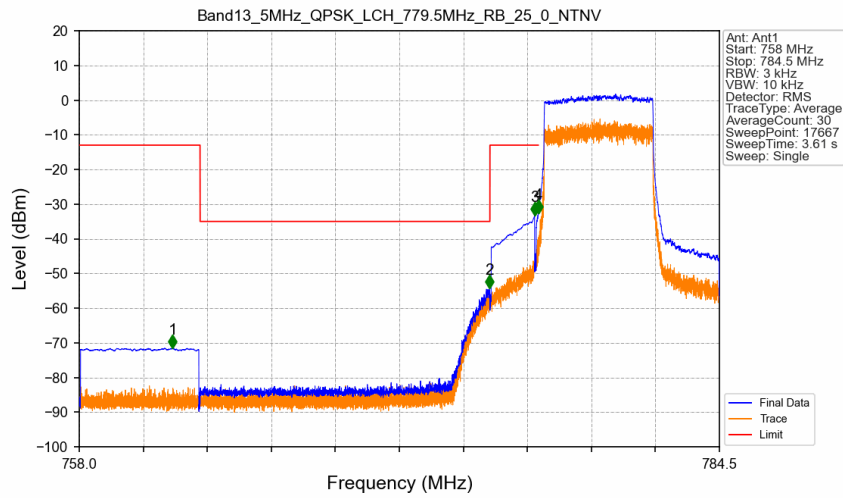
Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

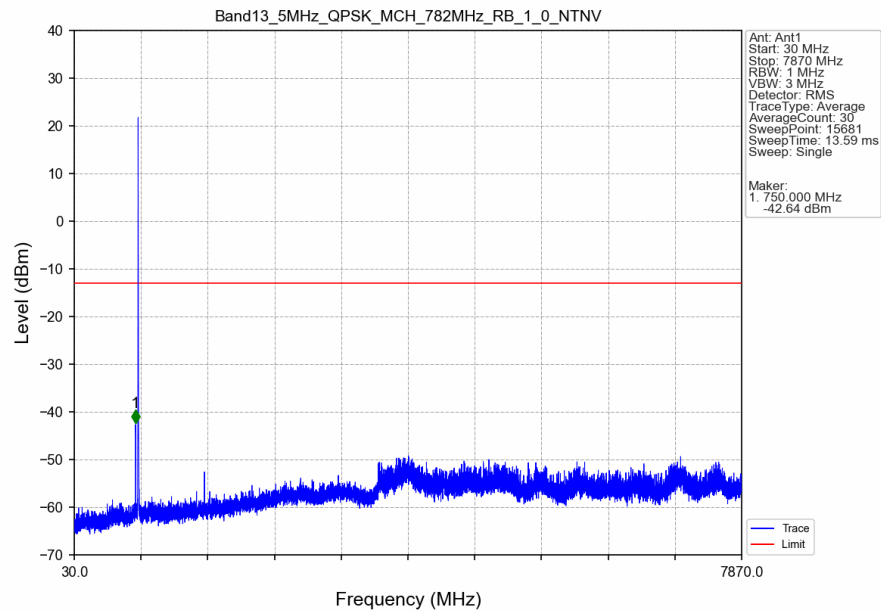
5.2.1 B13_5MHz



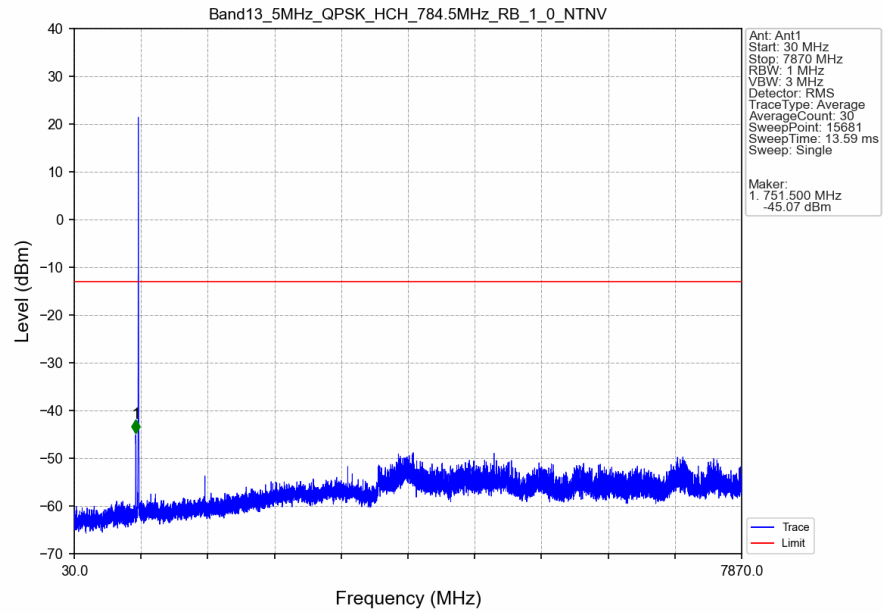
Band13 5MHz QPSK LCH 779.5MHz RB 25 0 NTN



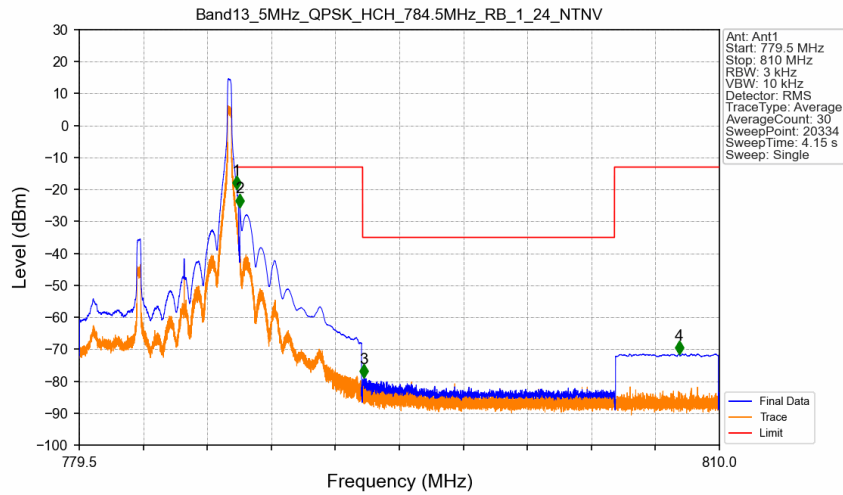
Band13 5MHz QPSK MCH 782MHz RB 1 0 NTN



Band13 5MHz QPSK HCH 784.5MHz RB 1 0 NTN

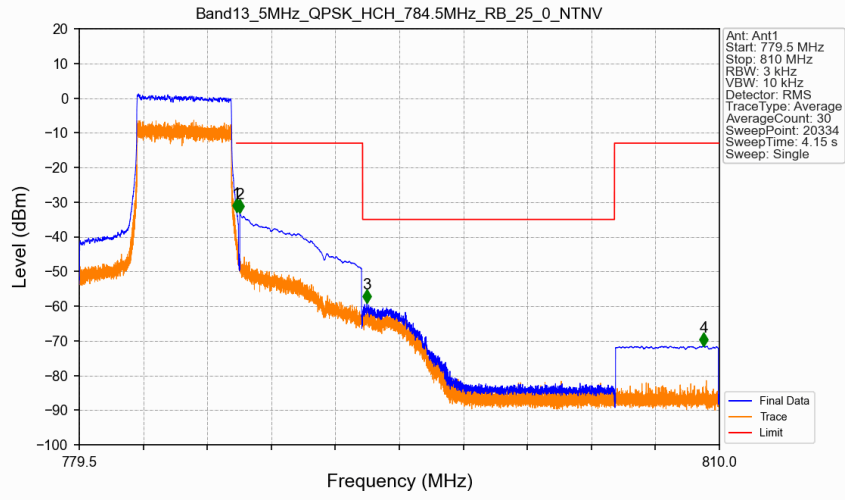


Band13 5MHz QPSK HCH 784.5MHz RB 1 24 NTN



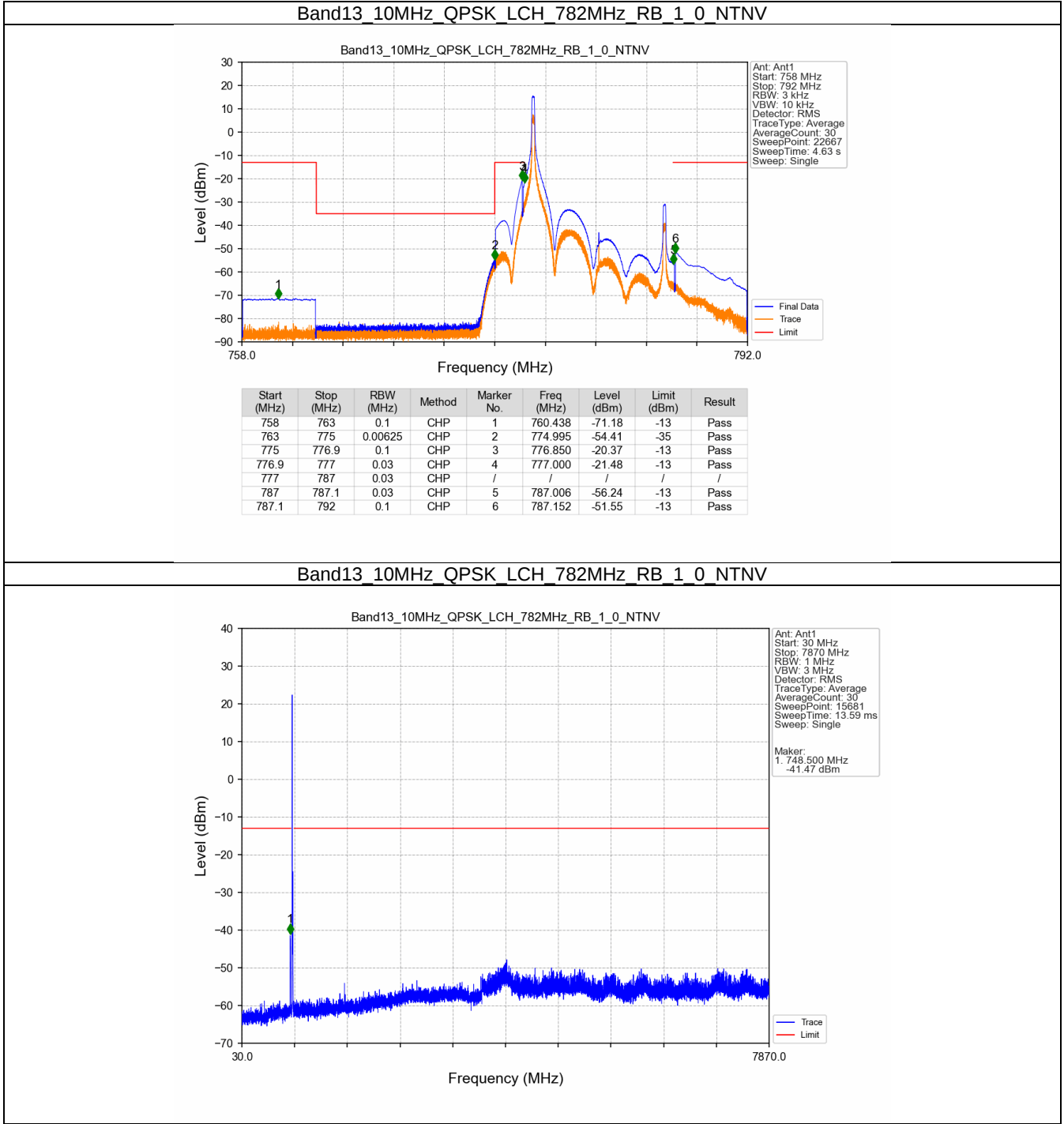
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-19.79	-13	Pass
787.1	793	0.1	CHP	2	787.150	-25.46	-13	Pass
793	805	0.00625	CHP	3	793.066	-78.96	-35	Pass
805	810	0.1	CHP	4	808.077	-71.46	-13	Pass

Band13 5MHz QPSK HCH 784.5MHz RB 25 0_NTNV

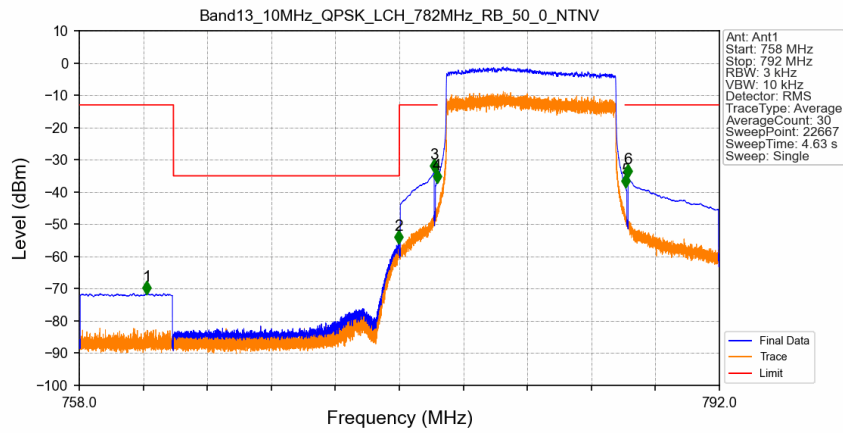


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-32.75	-13	Pass
787.1	793	0.1	CHP	2	787.150	-33.11	-13	Pass
793	805	0.00625	CHP	3	793.207	-59.00	-35	Pass
805	810	0.1	CHP	4	809.247	-71.53	-13	Pass

5.2.2 B13_10MHz

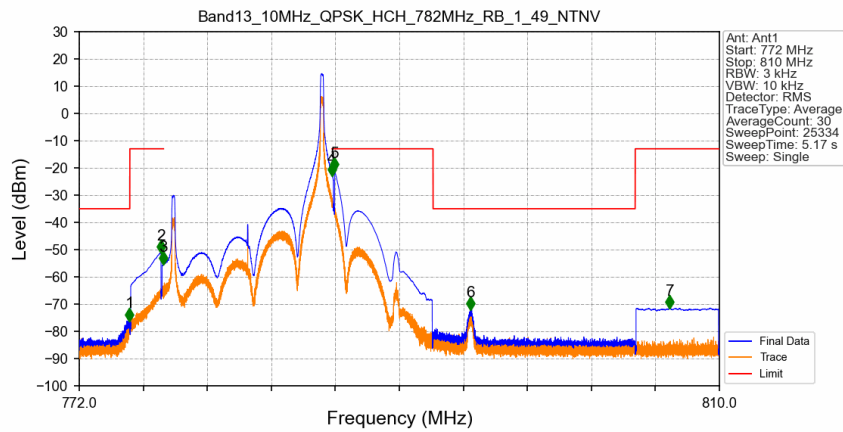


Band13 10MHz QPSK LCH 782MHz RB 50 0 NTN



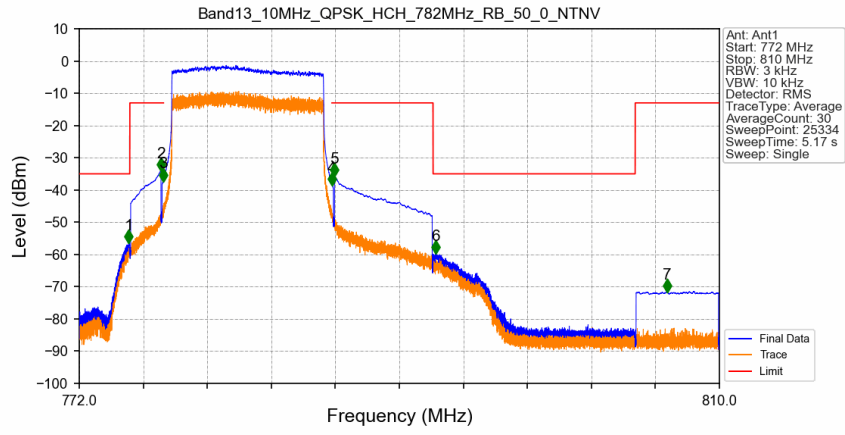
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	761.591	-71.40	-13	Pass
763	775	0.00625	CHP	2	774.958	-55.73	-35	Pass
775	776.9	0.1	CHP	3	776.850	-33.66	-13	Pass
776.9	777	0.03	CHP	4	776.992	-36.88	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.003	-38.26	-13	Pass
787.1	792	0.1	CHP	6	787.150	-35.14	-13	Pass

Band13 10MHz QPSK HCH 782MHz RB 1 49 NTN



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
772	775	0.00625	CHP	1	774.985	-75.83	-35	Pass
775	776.9	0.1	CHP	2	776.845	-50.96	-13	Pass
776.9	777	0.03	CHP	3	776.979	-55.22	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-22.64	-13	Pass
787.1	793	0.1	CHP	5	787.150	-20.75	-13	Pass
793	805	0.00625	CHP	6	795.237	-71.92	-35	Pass
805	810	0.1	CHP	7	807.051	-71.33	-13	Pass

Band13 10MHz QPSK HCH 782MHz RB 50 0 NTN



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
772	775	0.00625	CHP	1	774.939	-56.17	-35	Pass
775	776.9	0.1	CHP	2	776.850	-33.87	-13	Pass
776.9	777	0.03	CHP	3	776.992	-37.05	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-38.24	-13	Pass
787.1	793	0.1	CHP	5	787.150	-35.42	-13	Pass
793	805	0.00625	CHP	6	793.150	-59.52	-35	Pass
805	810	0.1	CHP	7	806.896	-71.46	-13	Pass