

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	22.89	3.17	23.91	<=34.77	Pass
			24	22.91	3.17	23.93	<=34.77	Pass
		25	0	22.08	3.17	23.10	<=34.77	Pass
	782	1	0	23.12	3.17	24.14	<=34.77	Pass
			24	23.03	3.17	24.05	<=34.77	Pass
		25	0	22.13	3.17	23.15	<=34.77	Pass
	784.5	1	0	23.11	3.17	24.13	<=34.77	Pass
			24	22.03	3.17	23.05	<=34.77	Pass
		25	0	22.05	3.17	23.07	<=34.77	Pass
16QAM	779.5	1	0	22.15	3.17	23.17	<=34.77	Pass
			24	22.10	3.17	23.12	<=34.77	Pass
		25	0	21.21	3.17	22.23	<=34.77	Pass
	782	1	0	22.18	3.17	23.20	<=34.77	Pass
			24	22.18	3.17	23.20	<=34.77	Pass
		25	0	21.18	3.17	22.20	<=34.77	Pass
	784.5	1	0	22.34	3.17	23.36	<=34.77	Pass
			24	21.29	3.17	22.31	<=34.77	Pass
		25	0	21.08	3.17	22.10	<=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	23.30	3.17	24.32	<=34.77	Pass
			49	22.18	3.17	23.20	<=34.77	Pass
		50	0	22.23	3.17	23.25	<=34.77	Pass
16QAM	782	1	0	22.45	3.17	23.47	<=34.77	Pass
			49	21.40	3.17	22.42	<=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	-0.486	-0.0006	-2.5 to 2.5	Pass

					3.80	-0.343	-0.0004	-2.5 to 2.5	Pass
					4.20	-0.987	-0.0013	-2.5 to 2.5	Pass
				-30	3.80	-0.658	-0.0008	-2.5 to 2.5	Pass
				-20	3.80	-0.644	-0.0008	-2.5 to 2.5	Pass
				-10	3.80	-0.157	-0.0002	-2.5 to 2.5	Pass
				0	3.80	-0.386	-0.0005	-2.5 to 2.5	Pass
				10	3.80	-0.572	-0.0007	-2.5 to 2.5	Pass
				30	3.80	-0.215	-0.0003	-2.5 to 2.5	Pass
				40	3.80	-0.601	-0.0008	-2.5 to 2.5	Pass
				50	3.80	-0.229	-0.0003	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band13_OBW

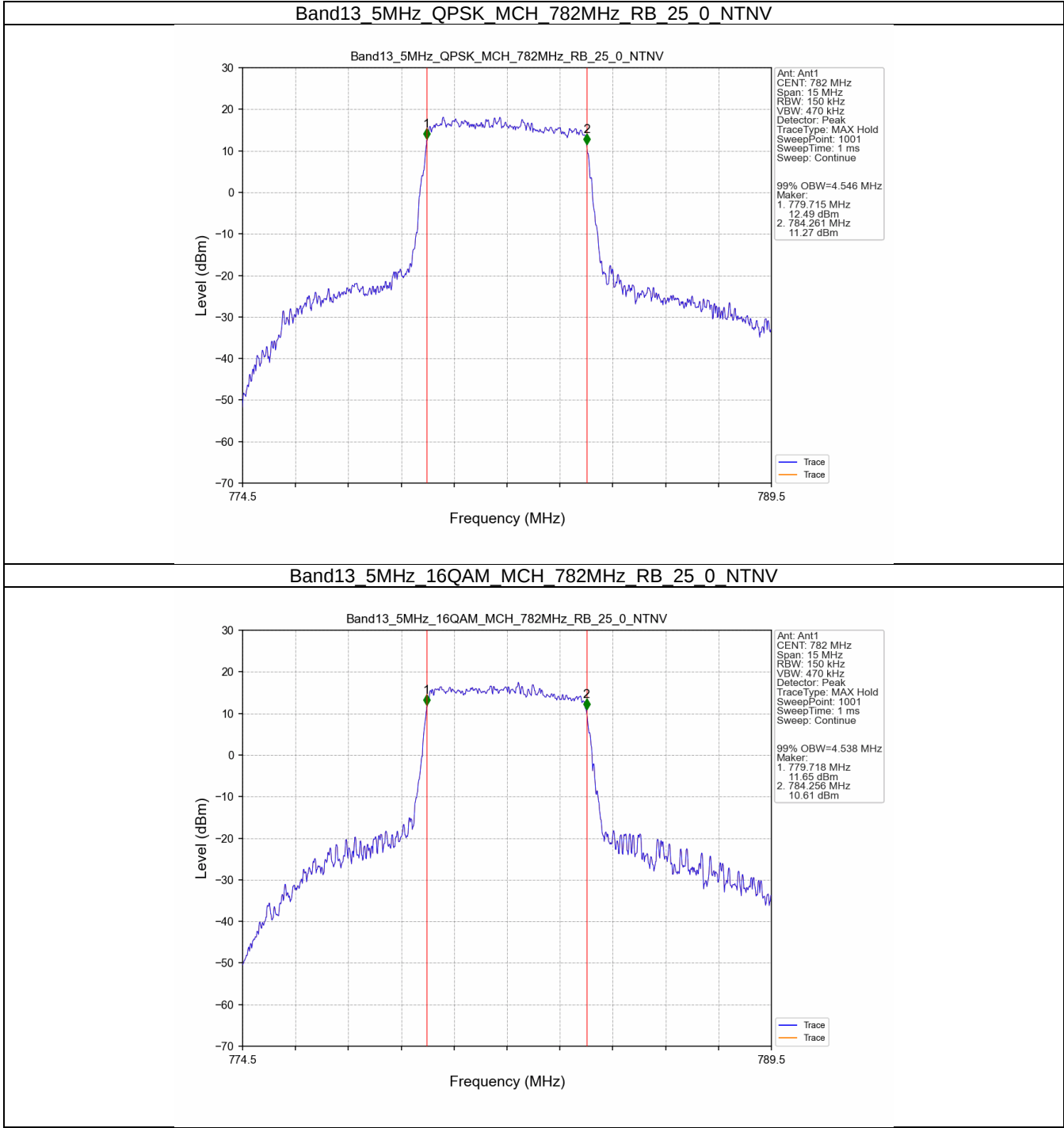
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.546	/	Pass
	16QAM	782	25	0	4.538	/	Pass
10	QPSK	782	50	0	9.013	/	Pass
	16QAM	782	27	0	5.065	/	Pass

3.1.2 Band13_XDB

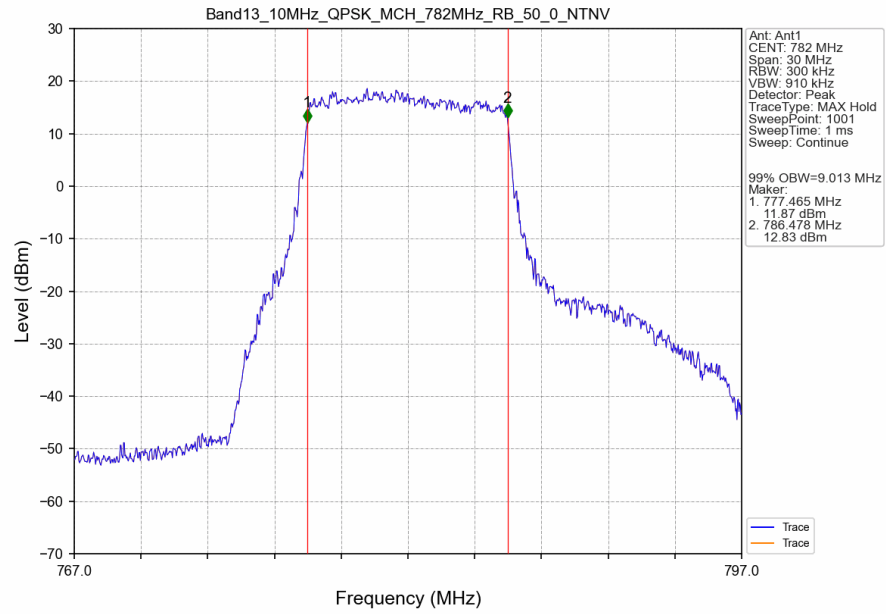
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	5.052	/	Pass
	16QAM	782	25	0	5.049	/	Pass
10	QPSK	782	50	0	10.178	/	Pass
	16QAM	782	27	0	6.247	/	Pass

3.2 Test Graph

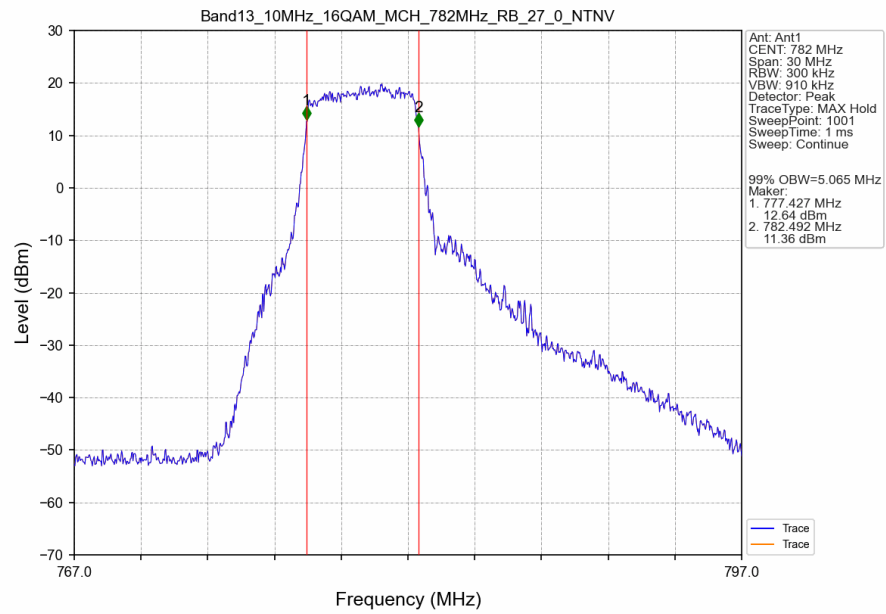
3.2.1 Band13_OBW



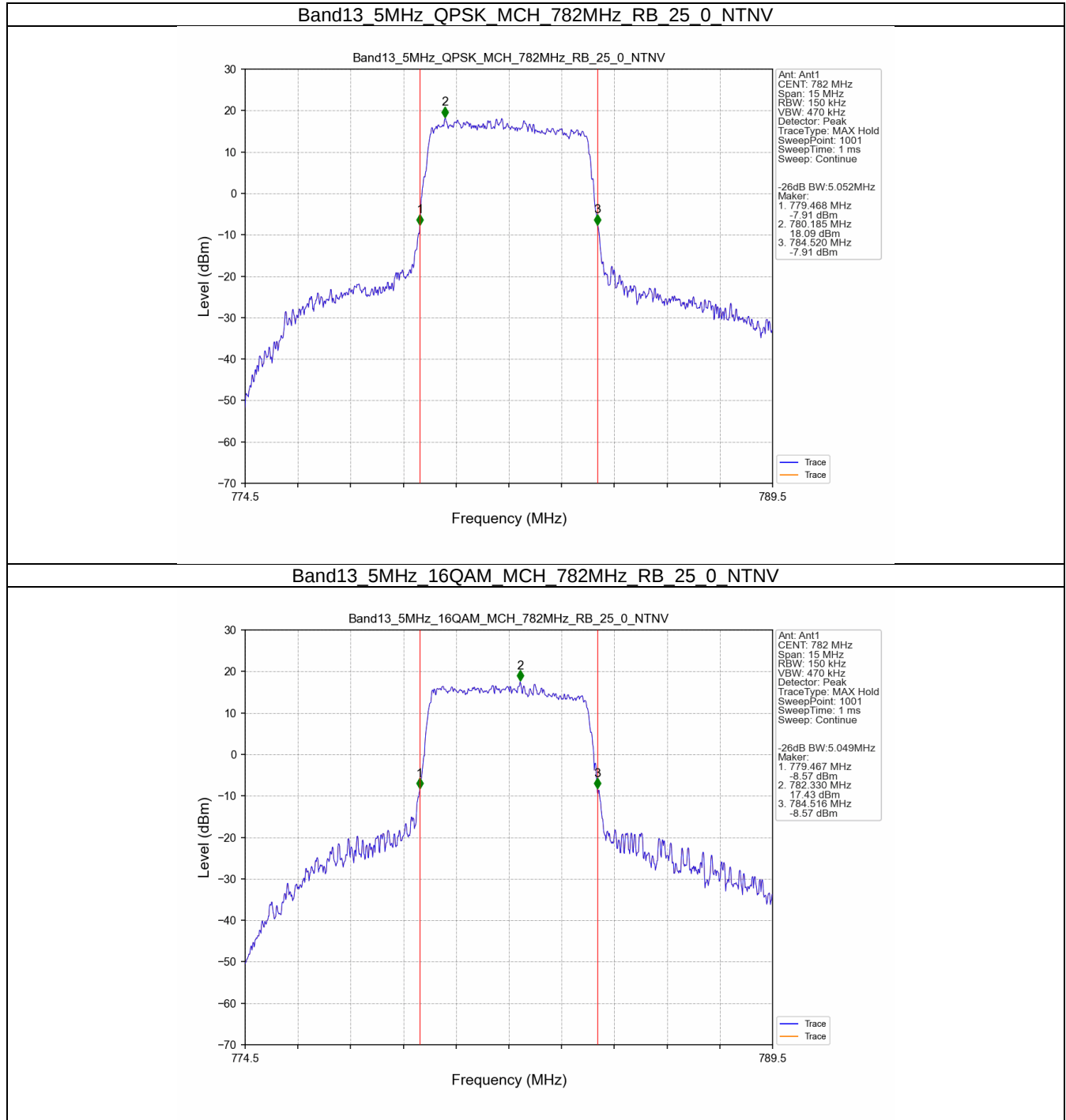
Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



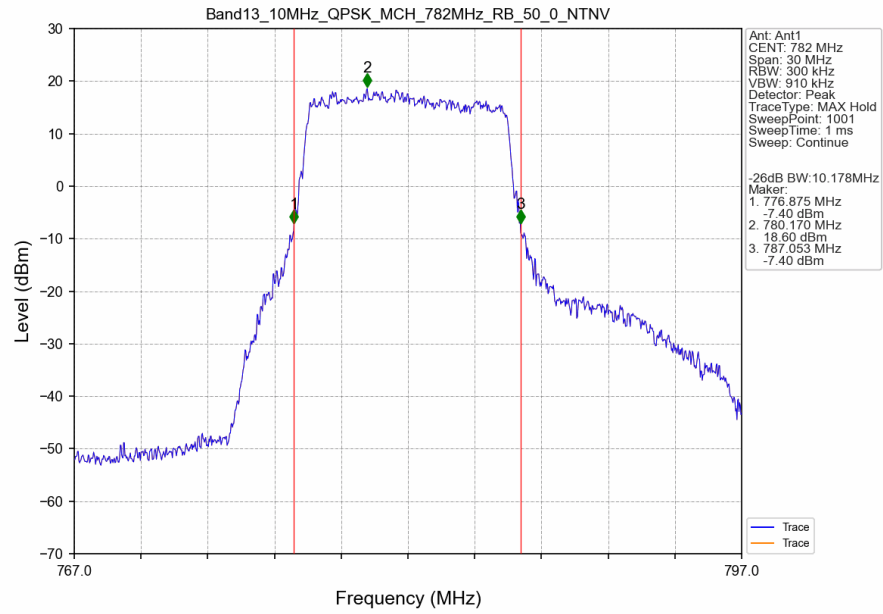
Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV



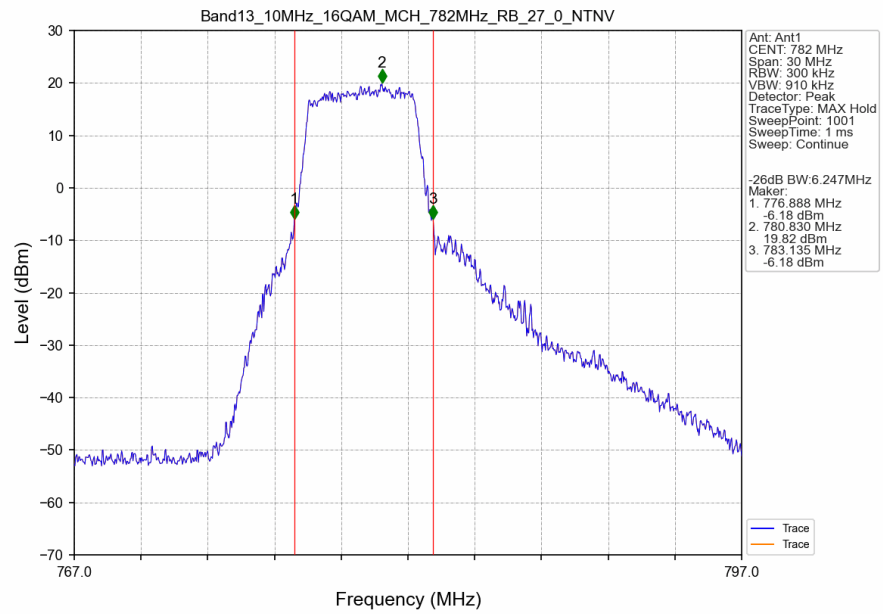
3.2.2 Band13_XDB



Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV



4. Peak-Average Ratio

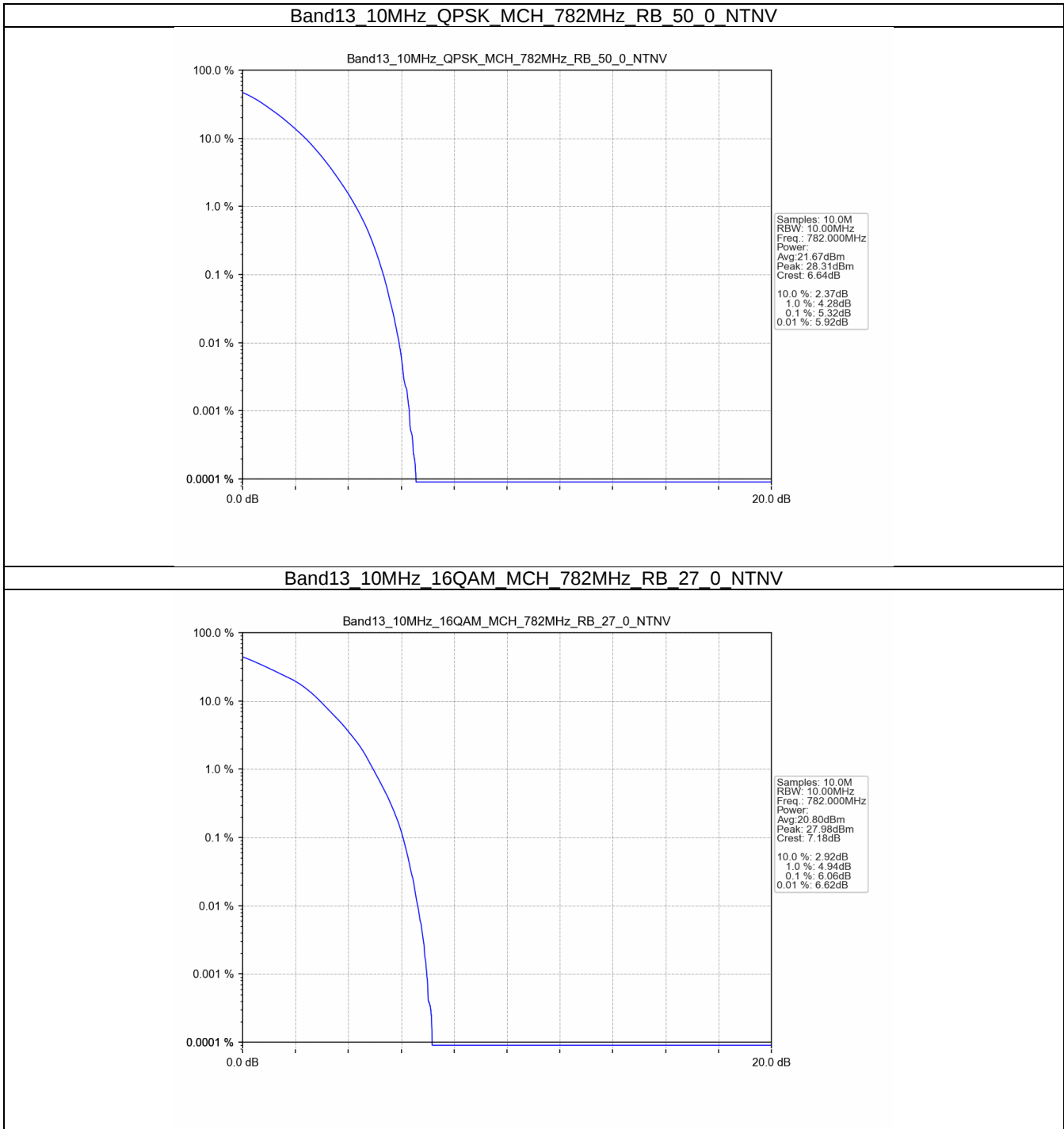
4.1 Test Result

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	5.32	<=13	Pass
16QAM	782	27	0	6.06	<=13	Pass

4.2 Test Graph

4.2.1 B13_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B13_5MHz

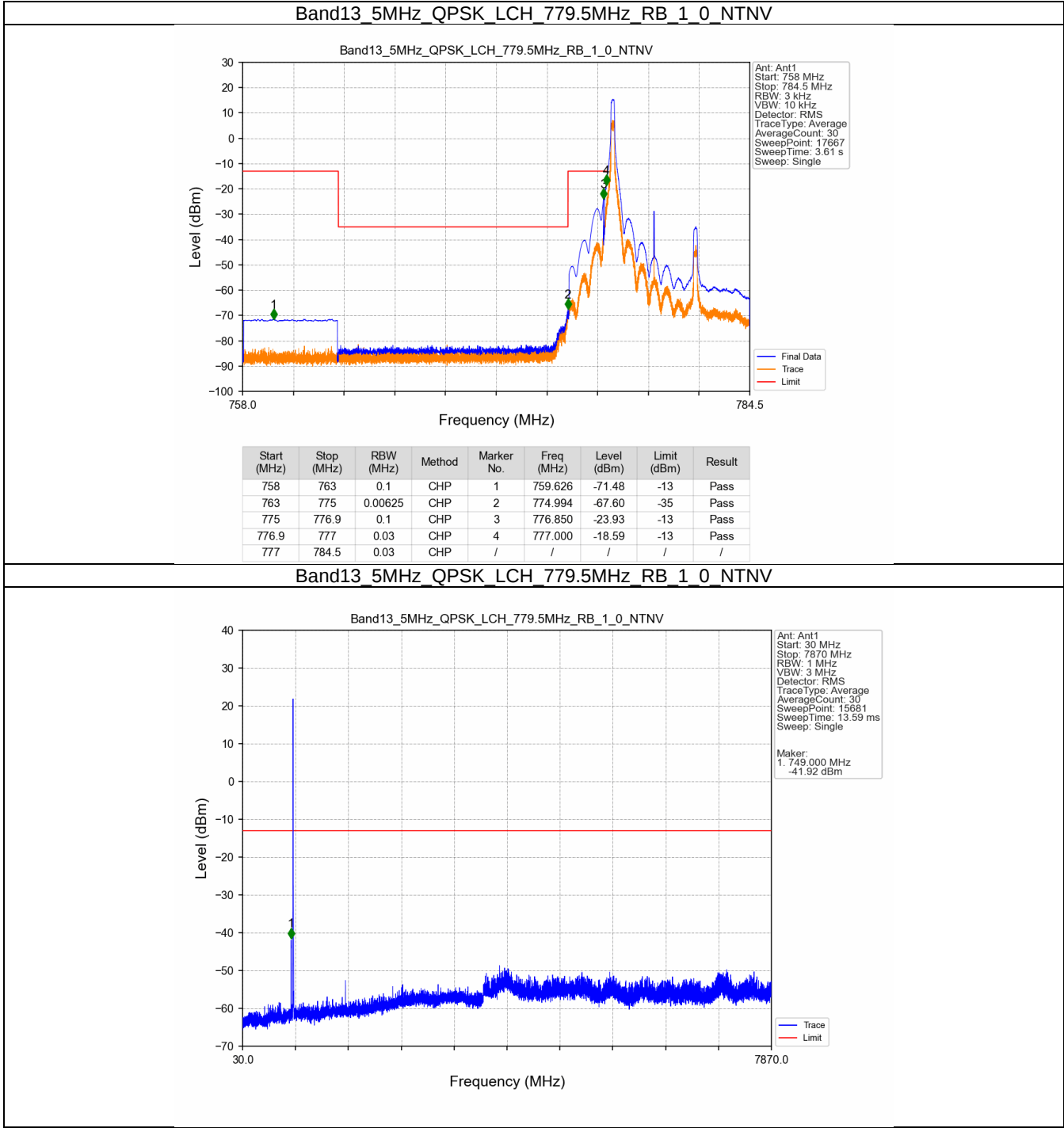
Band: 13 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B13_10MHz

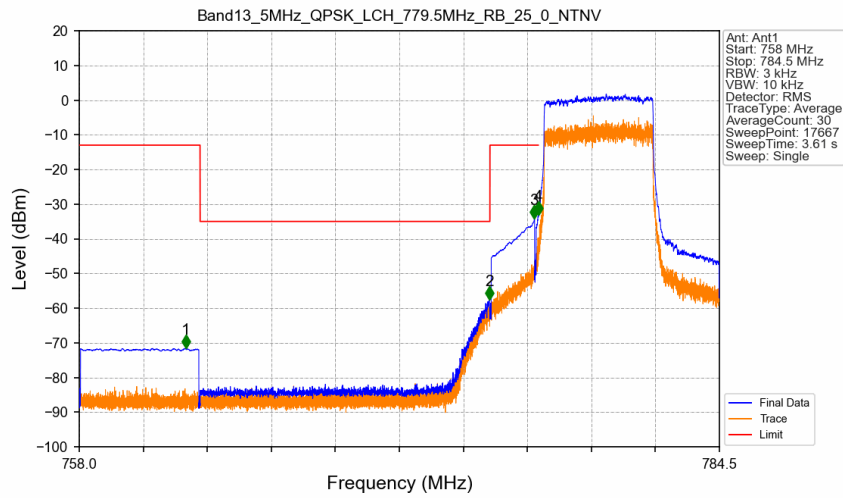
Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

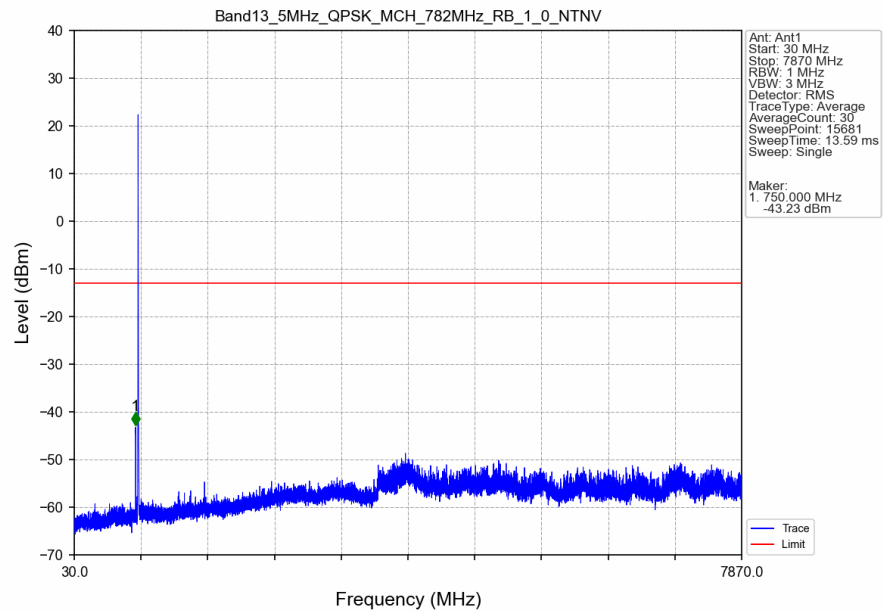
5.2.1 B13_5MHz



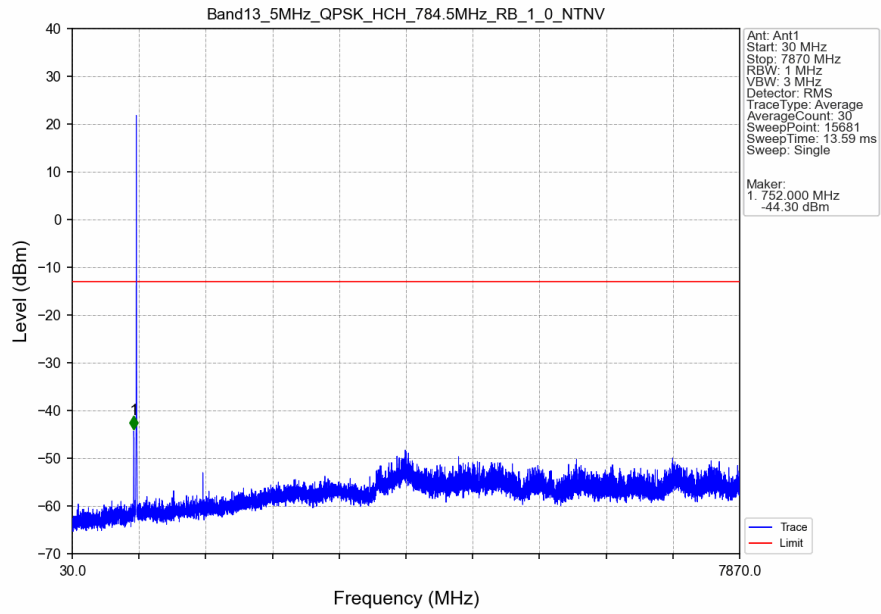
Band13 5MHz QPSK LCH 779.5MHz RB 25 0 NTN



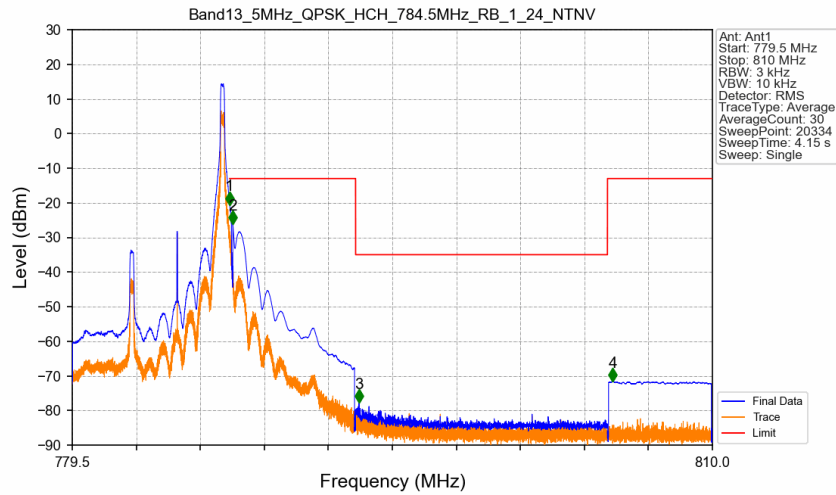
Band13 5MHz QPSK MCH 782MHz RB 1 0 NTN



Band13 5MHz QPSK HCH 784.5MHz RB 1 0 NTV

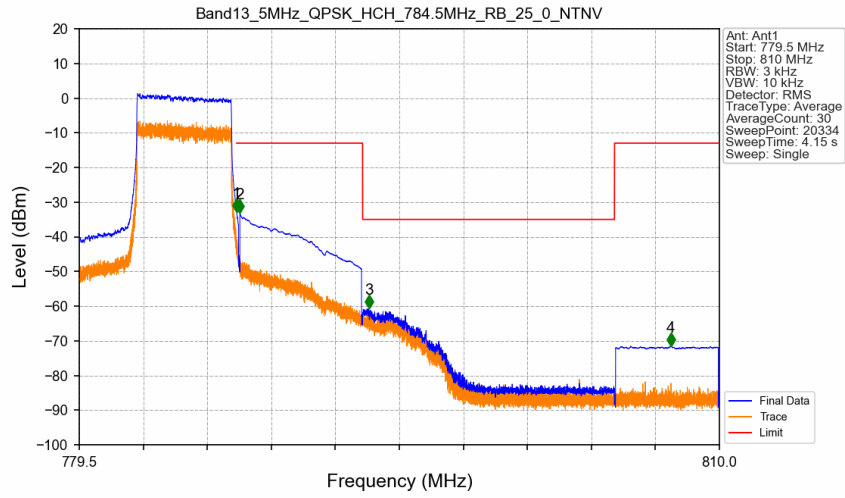


Band13 5MHz QPSK HCH 784.5MHz RB 1 24 NTV



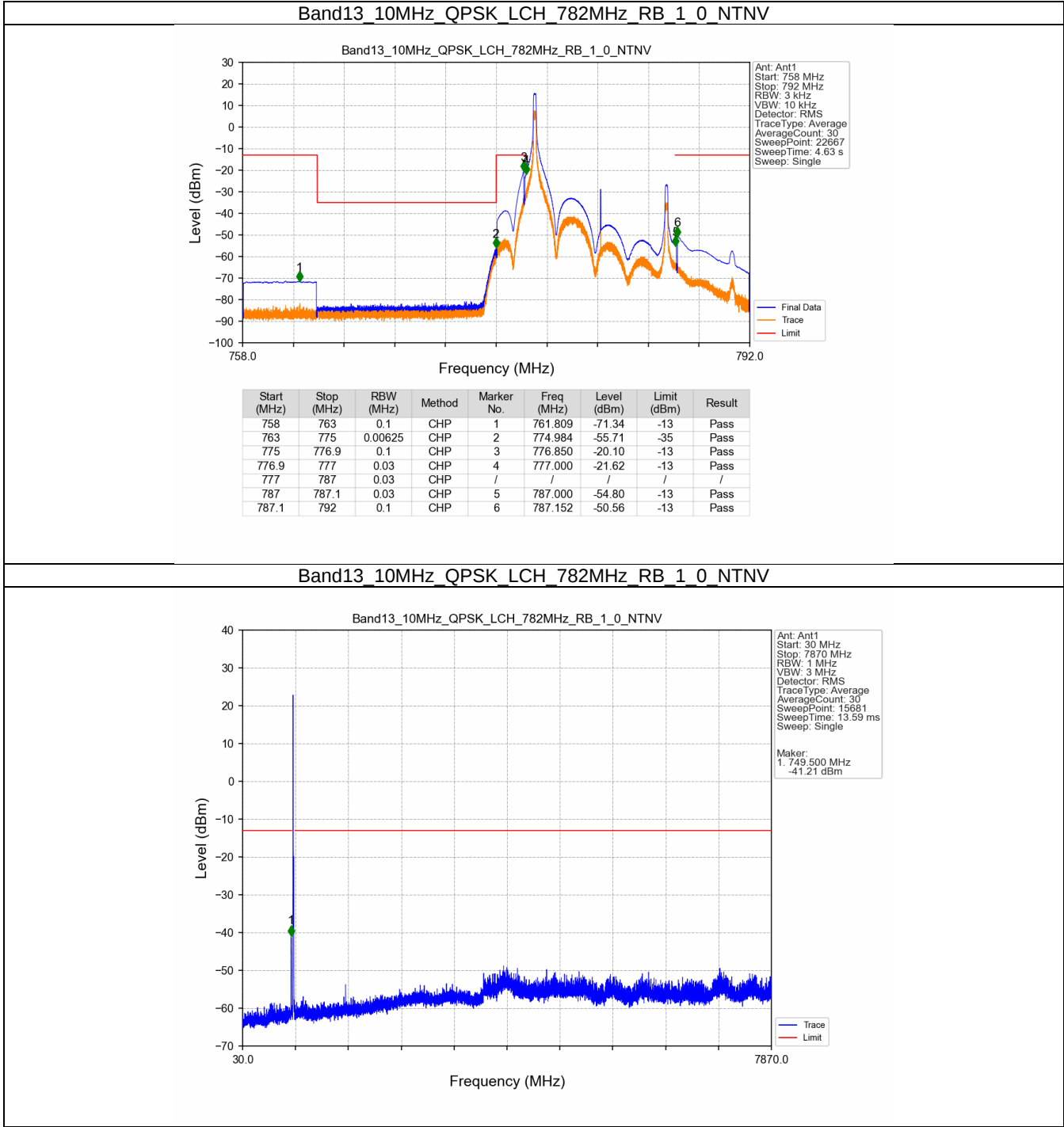
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-20.54	-13	Pass
787.1	793	0.1	CHP	2	787.150	-26.09	-13	Pass
793	805	0.00625	CHP	3	793.165	-77.61	-35	Pass
805	810	0.1	CHP	4	805.257	-71.54	-13	Pass

Band13 5MHz QPSK HCH 784.5MHz RB 25 0_NTNV

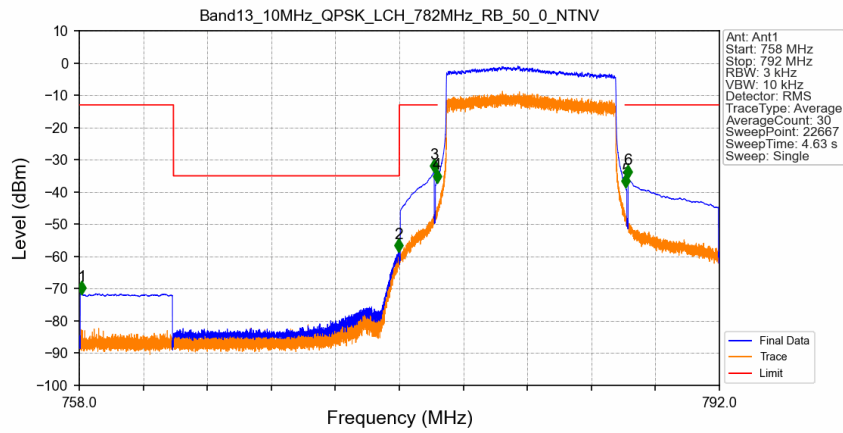


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-32.76	-13	Pass
787.1	793	0.1	CHP	2	787.150	-33.12	-13	Pass
793	805	0.00625	CHP	3	793.294	-60.67	-35	Pass
805	810	0.1	CHP	4	807.681	-71.51	-13	Pass

5.2.2 B13_10MHz

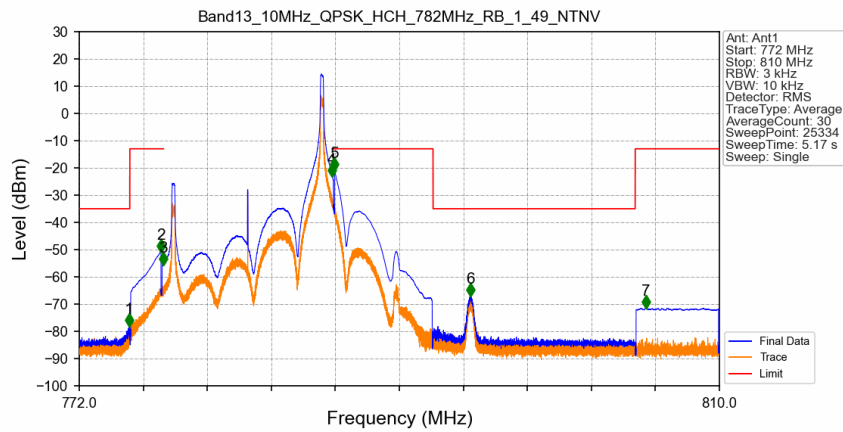


Band13 10MHz QPSK LCH 782MHz RB 50 0 NTN



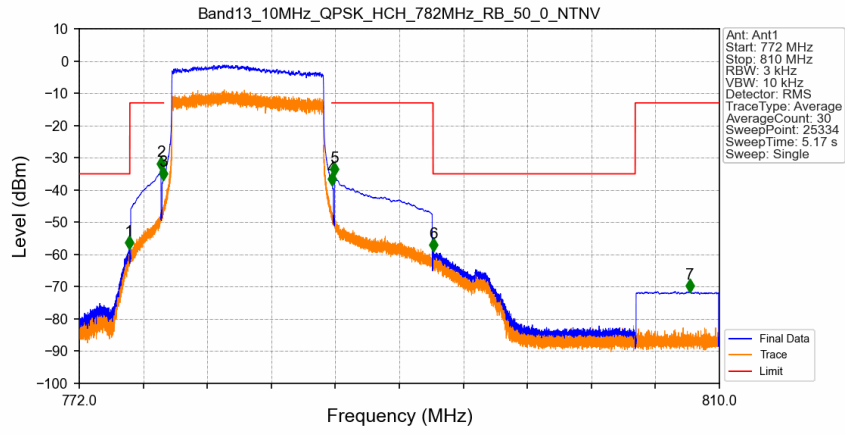
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	758.126	-71.52	-13	Pass
763	775	0.00625	CHP	2	774.958	-58.32	-35	Pass
775	776.9	0.1	CHP	3	776.850	-33.60	-13	Pass
776.9	777	0.03	CHP	4	776.998	-36.79	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.003	-38.39	-13	Pass
787.1	792	0.1	CHP	6	787.150	-35.36	-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	774.958	-77.94	-35	Pass
775	776.9	0.1	CHP	2	776.847	-50.80	-13	Pass
776.9	777	0.03	CHP	3	776.979	-55.36	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-22.85	-13	Pass
787.1	793	0.1	CHP	5	787.150	-20.77	-13	Pass
793	805	0.00625	CHP	6	795.235	-66.80	-35	Pass
805	810	0.1	CHP	7	805.633	-71.31	-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	774.957	-58.11	-35	Pass
775	776.9	0.1	CHP	2	776.850	-33.52	-13	Pass
776.9	777	0.03	CHP	3	777.000	-36.56	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.002	-38.33	-13	Pass
787.1	793	0.1	CHP	5	787.150	-35.20	-13	Pass
793	805	0.00625	CHP	6	793.018	-58.69	-35	Pass
805	810	0.1	CHP	7	808.260	-71.47	-13	Pass