

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	22.82	-0.50	20.17	<=34.77	Pass		
			13	23.02	-0.50	20.37	<=34.77	Pass		
			24	22.78	-0.50	20.13	<=34.77	Pass		
		12	0	22.09	-0.50	19.44	<=34.77	Pass		
			6	22.03	-0.50	19.38	<=34.77	Pass		
			13	21.94	-0.50	19.29	<=34.77	Pass		
		25	0	22.10	-0.50	19.45	<=34.77	Pass		
		782	1	0	22.71	-0.50	20.06	<=34.77	Pass	
				13	22.80	-0.50	20.15	<=34.77	Pass	
	24			22.87	-0.50	20.22	<=34.77	Pass		
	12		0	21.91	-0.50	19.26	<=34.77	Pass		
			6	22.13	-0.50	19.48	<=34.77	Pass		
			13	22.13	-0.50	19.48	<=34.77	Pass		
	25	0	21.99	-0.50	19.34	<=34.77	Pass			
	784.5	1	0	23.02	-0.50	20.37	<=34.77	Pass		
			13	23.01	-0.50	20.36	<=34.77	Pass		
			24	22.93	-0.50	20.28	<=34.77	Pass		
		12	0	22.02	-0.50	19.37	<=34.77	Pass		
			6	22.04	-0.50	19.39	<=34.77	Pass		
			13	21.93	-0.50	19.28	<=34.77	Pass		
		25	0	22.02	-0.50	19.37	<=34.77	Pass		
		16QAM	779.5	1	0	21.52	-0.50	18.87	<=34.77	Pass
					13	21.79	-0.50	19.14	<=34.77	Pass
	24				21.70	-0.50	19.05	<=34.77	Pass	
12	0			21.15	-0.50	18.50	<=34.77	Pass		
	6			20.87	-0.50	18.22	<=34.77	Pass		
	13			20.76	-0.50	18.11	<=34.77	Pass		
25	0			21.05	-0.50	18.40	<=34.77	Pass		
782	1			0	22.55	-0.50	19.90	<=34.77	Pass	
				13	22.65	-0.50	20.00	<=34.77	Pass	
			24	22.29	-0.50	19.64	<=34.77	Pass		
	12		0	20.88	-0.50	18.23	<=34.77	Pass		
			6	20.90	-0.50	18.25	<=34.77	Pass		
			13	20.91	-0.50	18.26	<=34.77	Pass		
25	0		20.92	-0.50	18.27	<=34.77	Pass			
784.5	1		0	21.81	-0.50	19.16	<=34.77	Pass		
			13	22.05	-0.50	19.40	<=34.77	Pass		
			24	21.78	-0.50	19.13	<=34.77	Pass		
	12		0	21.06	-0.50	18.41	<=34.77	Pass		
			6	21.00	-0.50	18.35	<=34.77	Pass		
			13	20.98	-0.50	18.33	<=34.77	Pass		
	25		0	21.01	-0.50	18.36	<=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	23.13	-0.50	20.48	<=34.77	Pass
			25	23.18	-0.50	20.53	<=34.77	Pass
			49	22.94	-0.50	20.29	<=34.77	Pass
		25	0	22.06	-0.50	19.41	<=34.77	Pass
			13	22.04	-0.50	19.39	<=34.77	Pass
			25	22.01	-0.50	19.36	<=34.77	Pass
		50	0	21.96	-0.50	19.31	<=34.77	Pass
16QAM	782	1	0	22.46	-0.50	19.81	<=34.77	Pass
			25	22.96	-0.50	20.31	<=34.77	Pass
			49	22.20	-0.50	19.55	<=34.77	Pass
		25	0	20.91	-0.50	18.26	<=34.77	Pass
			13	20.92	-0.50	18.27	<=34.77	Pass
			25	21.11	-0.50	18.46	<=34.77	Pass
		50	0	20.90	-0.50	18.25	<=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	3.27	0.589	0.0008	-2.5 to 2.5	Pass
					3.85	-1.032	-0.0013	-2.5 to 2.5	Pass
					4.43	-0.876	-0.0011	-2.5 to 2.5	Pass
				-30	3.85	-0.149	-0.0002	-2.5 to 2.5	Pass
				-20	3.85	-0.949	-0.0012	-2.5 to 2.5	Pass
				-10	3.85	-0.934	-0.0012	-2.5 to 2.5	Pass
				0	3.85	-1.114	-0.0014	-2.5 to 2.5	Pass
				10	3.85	-1.564	-0.0020	-2.5 to 2.5	Pass
				30	3.85	-1.486	-0.0019	-2.5 to 2.5	Pass
				40	3.85	-1.276	-0.0016	-2.5 to 2.5	Pass
				50	3.85	0.454	0.0006	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band13_OBW

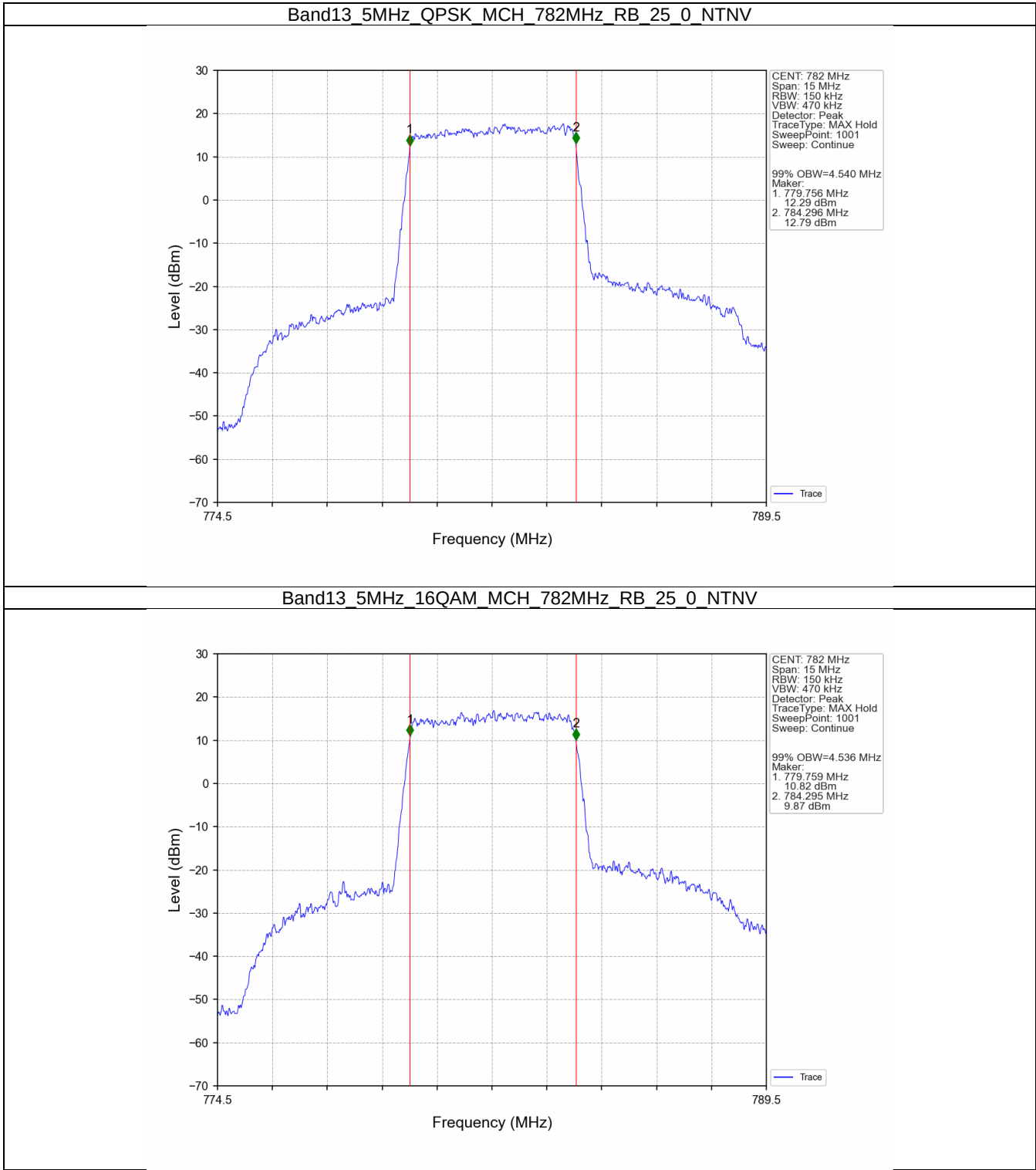
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.540	/	Pass
	16QAM	782	25	0	4.536	/	Pass
10	QPSK	782	50	0	9.006	/	Pass
	16QAM	782	50	0	9.022	/	Pass

3.1.2 Band13_XDB

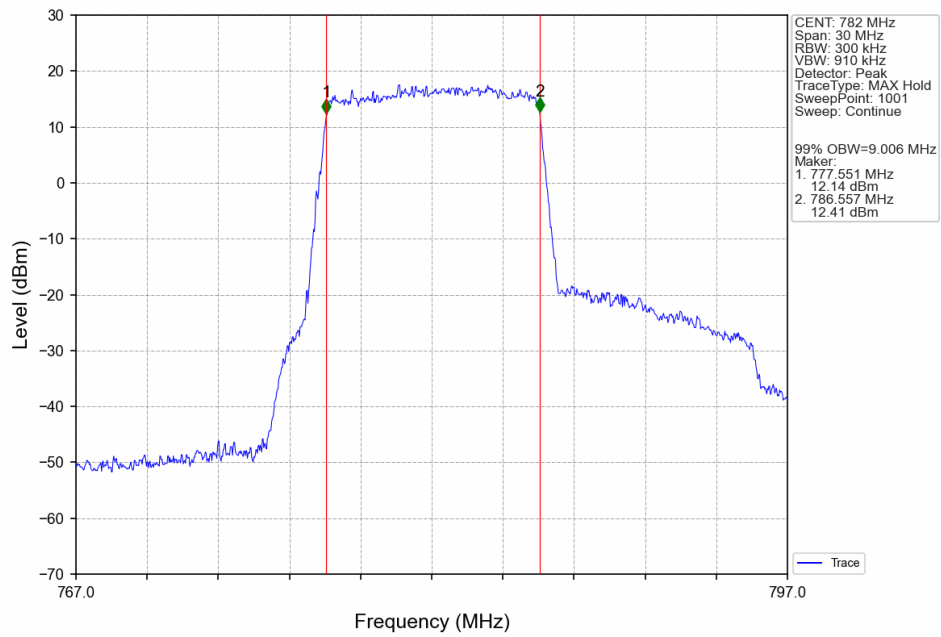
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	5.077	/	Pass
	16QAM	782	25	0	5.078	/	Pass
10	QPSK	782	50	0	10.037	/	Pass
	16QAM	782	50	0	9.940	/	Pass

3.2 Test Graph

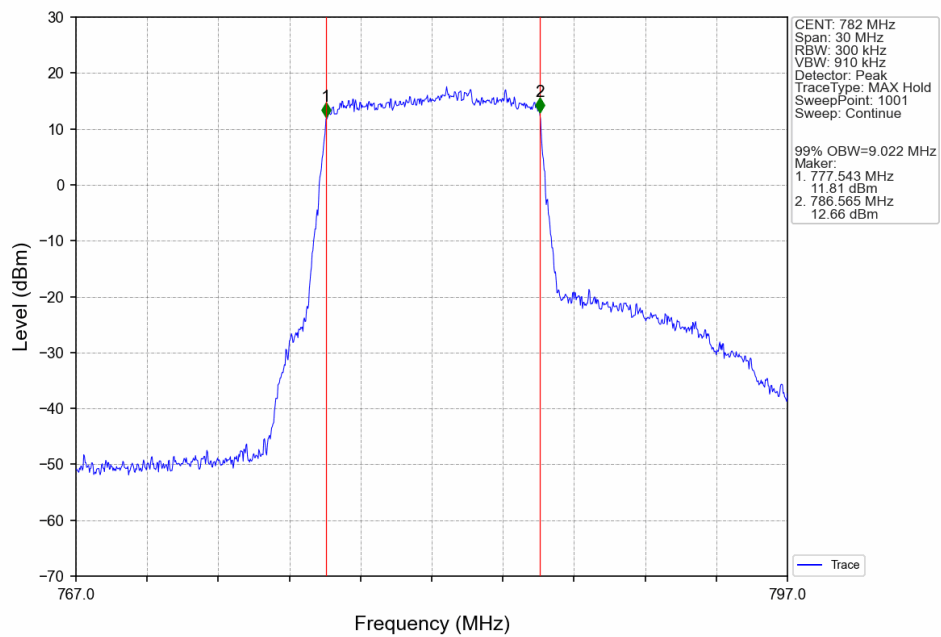
3.2.1 Band13_OBW



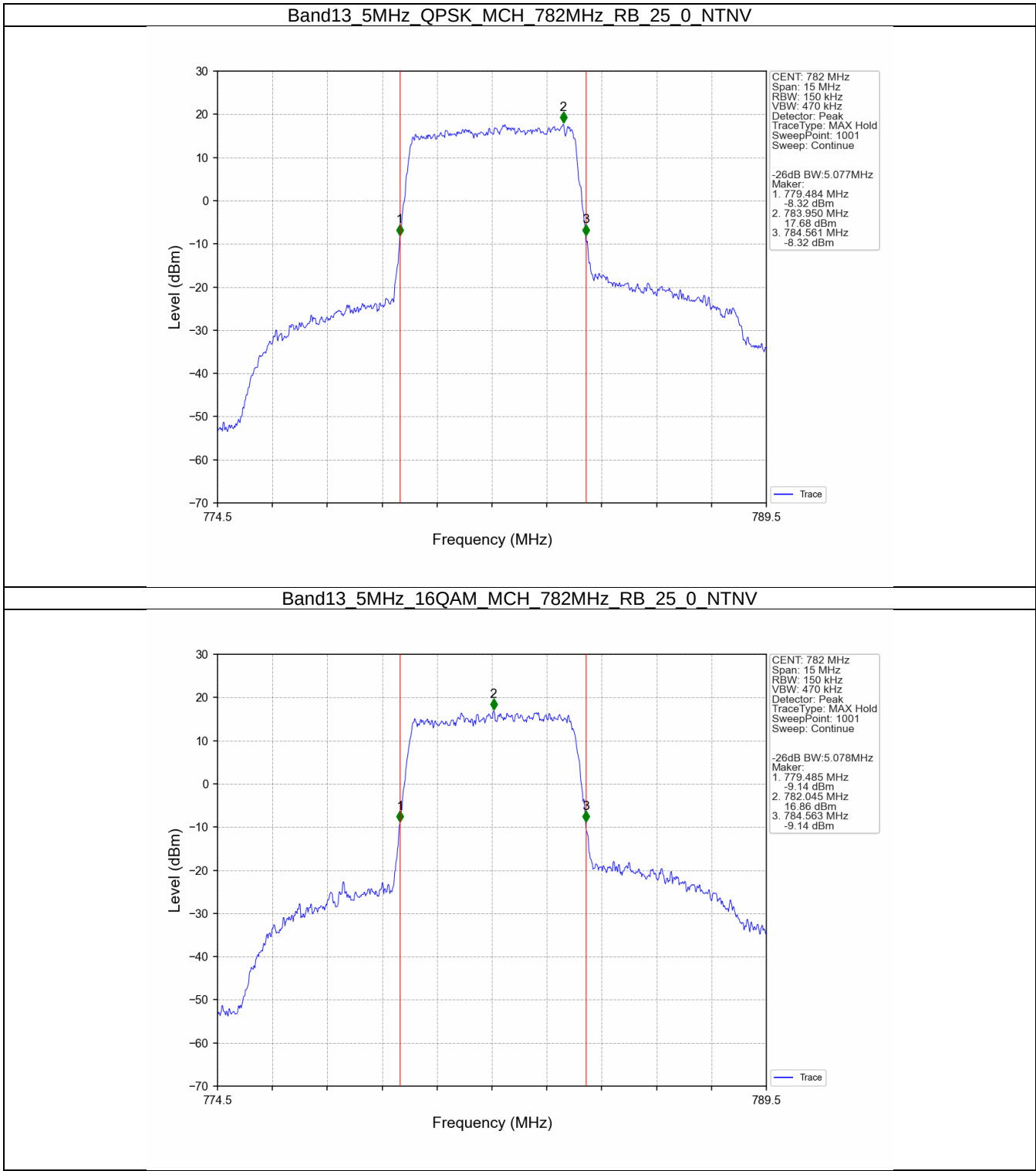
Band13 10MHz QPSK MCH 782MHz RB 50 0 NTN



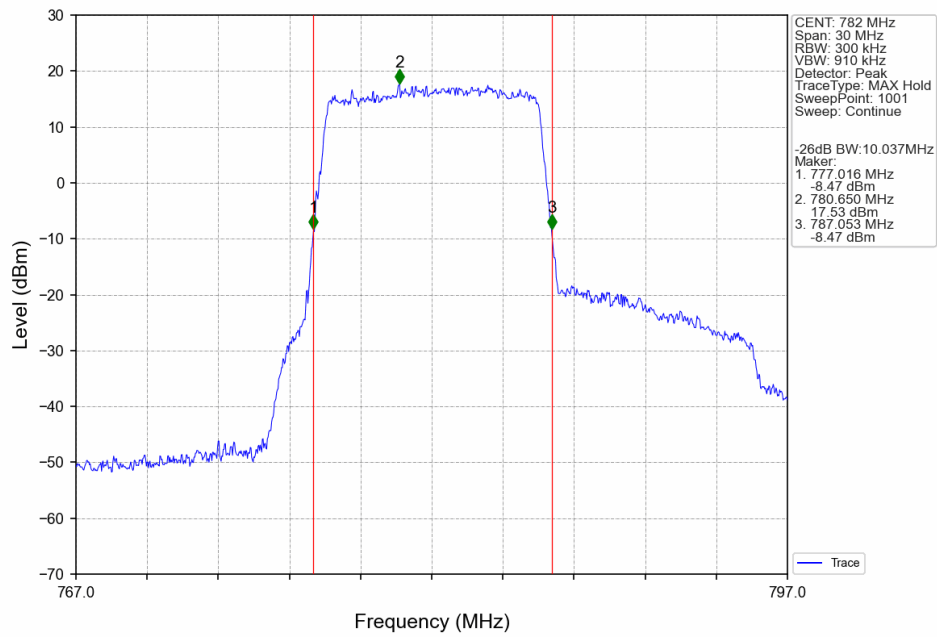
Band13 10MHz 16QAM MCH 782MHz RB 50 0 NTN



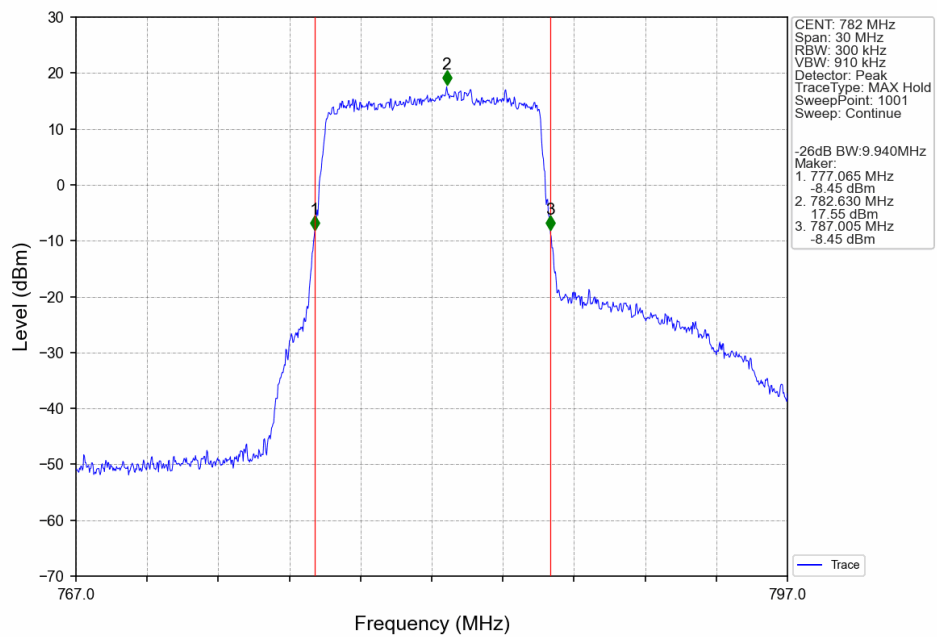
3.2.2 Band13_XDB



Band13 10MHz QPSK MCH 782MHz RB 50 0 NTNV



Band13 10MHz 16QAM MCH 782MHz RB 50 0 NTNV



4. Peak-Average Ratio

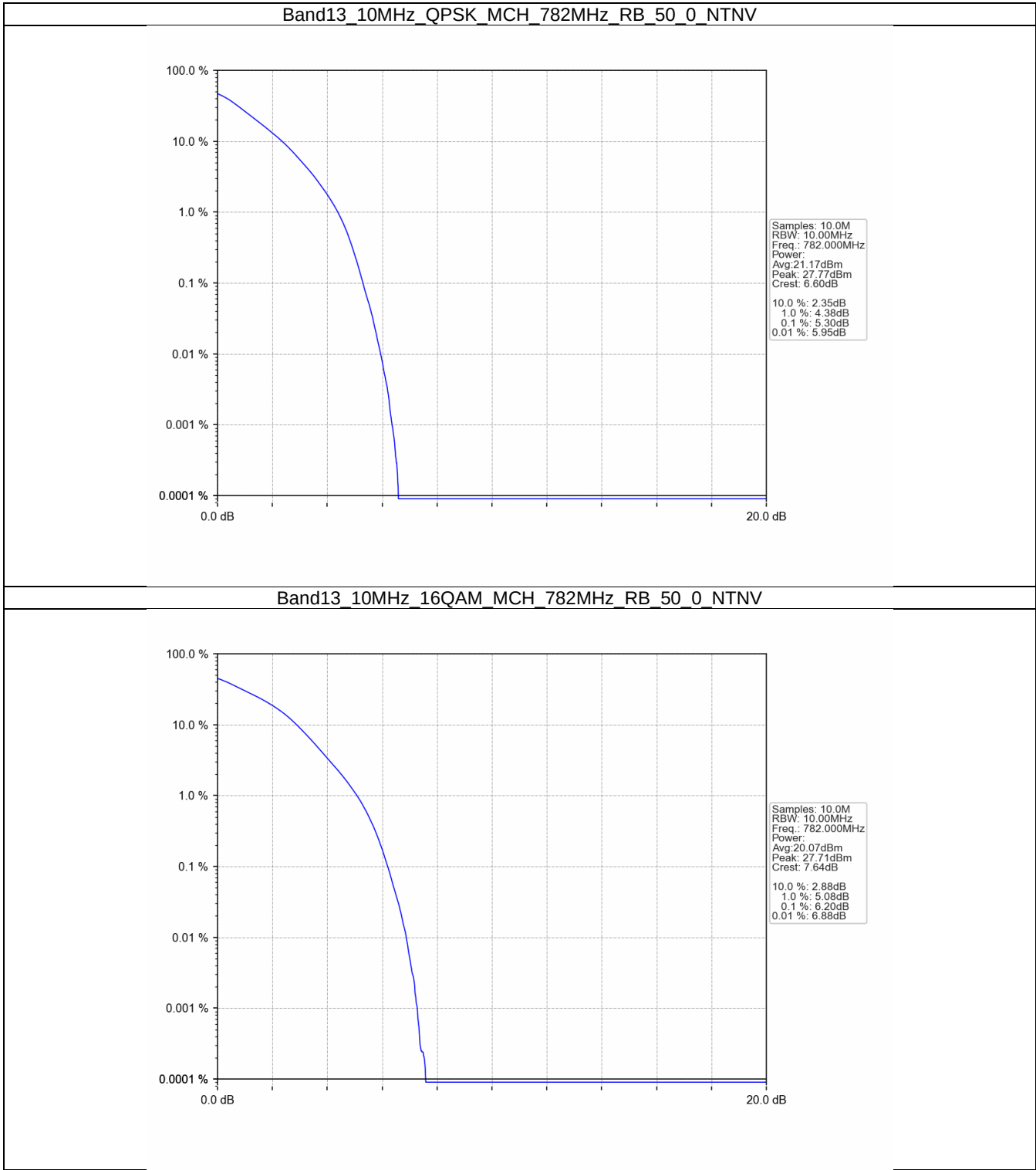
4.1 Test Result

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	5.30	<=13	Pass
16QAM	782	50	0	6.20	<=13	Pass

4.2 Test Graph

4.2.1 B13_10MHz



Band13_10MHz_16QAM_MCH_782MHz_RB_50_0_NTNV

Samples: 10.0M
RBW: 10.00MHz
Freq.: 782.000MHz
Power:
Avg: 20.07dBm
Peak: 27.71dBm
Crest: 7.64dB

5. Spurious Emission

5.1 Test Result

5.1.1 B13_5MHz

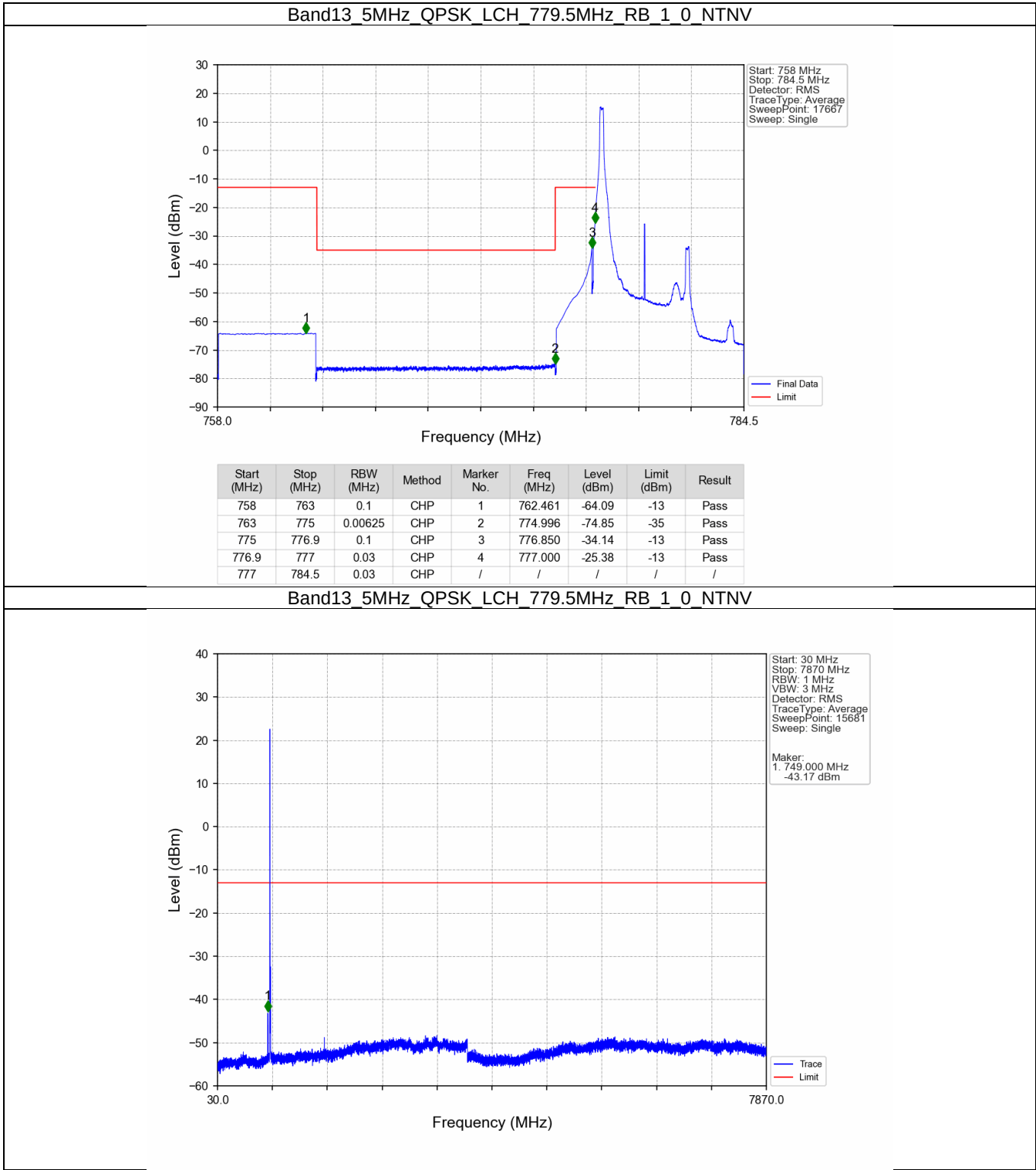
Band: 13 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B13_10MHz

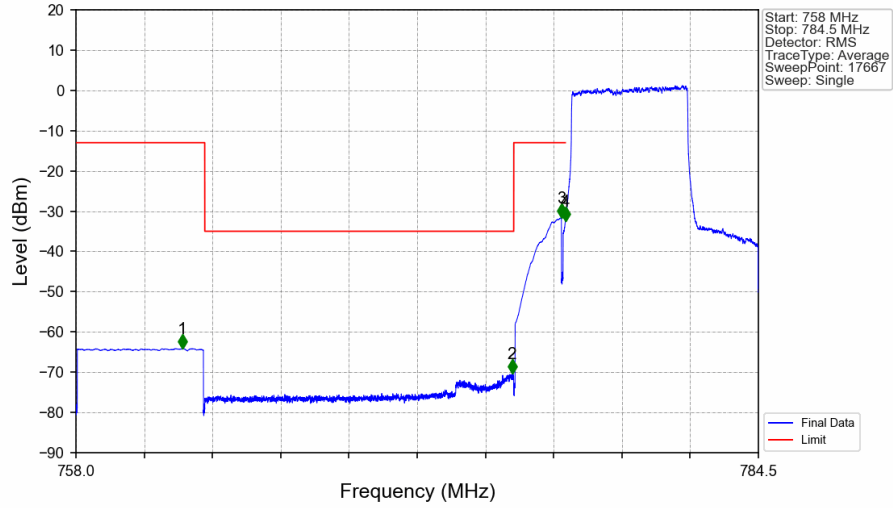
Band: 13 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B13_5MHz

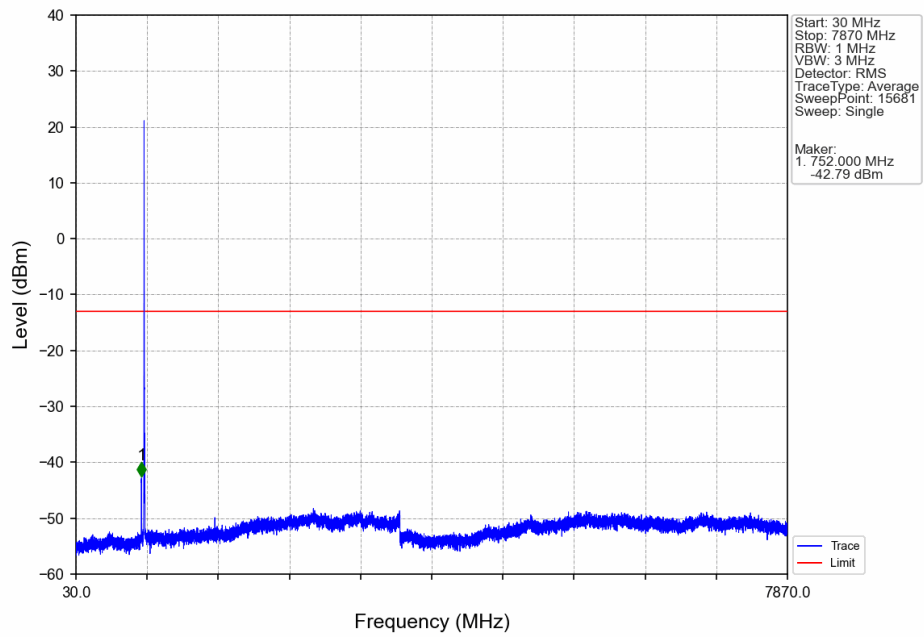


Band13 5MHz QPSK LCH 779.5MHz RB 25 0 NTNV

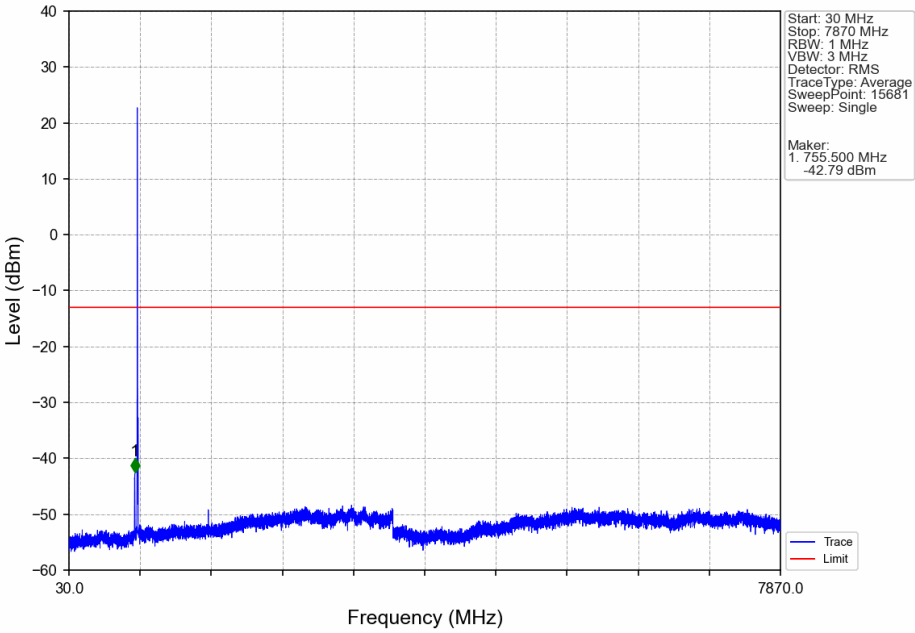


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	762.121	-64.07	-13	Pass
763	775	0.00625	CHP	2	774.933	-70.34	-35	Pass
775	776.9	0.1	CHP	3	776.844	-31.56	-13	Pass
776.9	777	0.03	CHP	4	777.000	-32.49	-13	Pass
777	784.5	0.03	CHP	/	/	/	/	/

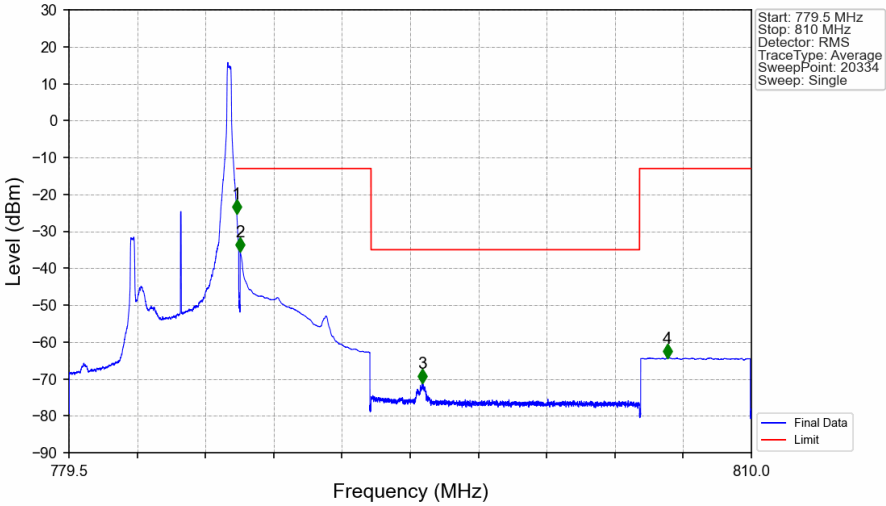
Band13 5MHz QPSK MCH 782MHz RB 1 0 NTNV



Band13 5MHz QPSK HCH 784.5MHz RB 1 0 NTN

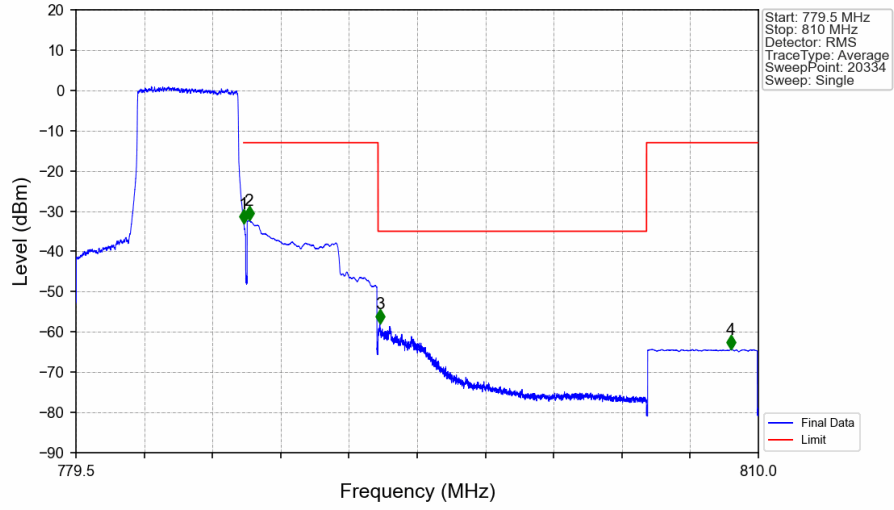


Band13 5MHz QPSK HCH 784.5MHz RB 1 24 NTN



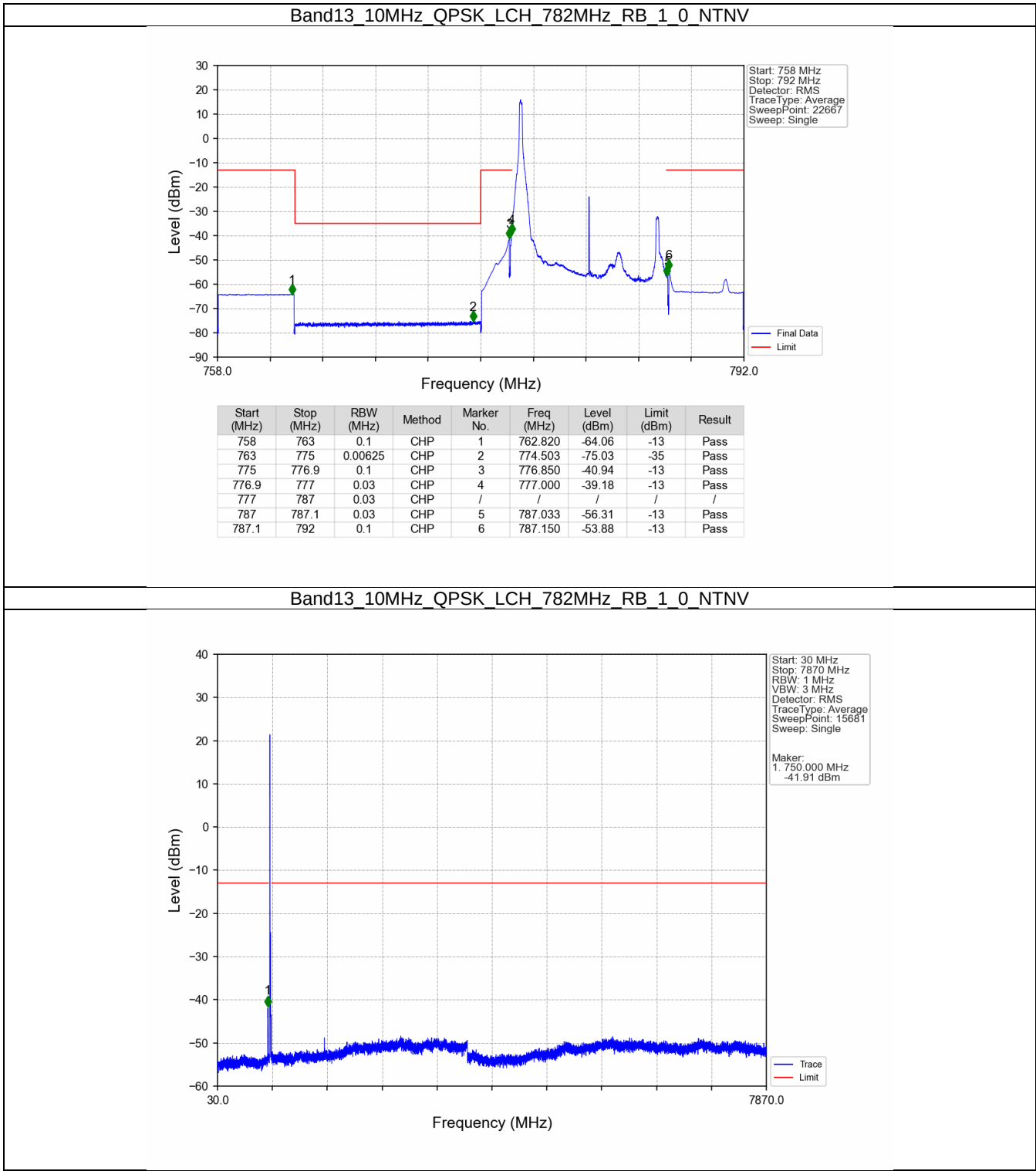
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-25.34	-13	Pass
787.1	793	0.1	CHP	2	787.150	-35.43	-13	Pass
793	805	0.00625	CHP	3	795.292	-71.15	-35	Pass
805	810	0.1	CHP	4	806.236	-64.30	-13	Pass

Band13 5MHz QPSK HCH 784.5MHz RB 25 0 NTV

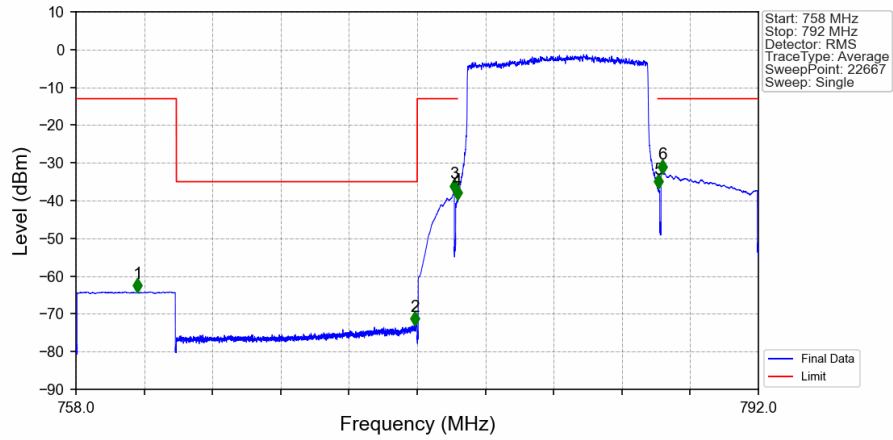


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-33.03	-13	Pass
787.1	793	0.1	CHP	2	787.236	-32.33	-13	Pass
793	805	0.00625	CHP	3	793.086	-57.89	-35	Pass
805	810	0.1	CHP	4	808.773	-64.32	-13	Pass

5.2.2 B13_10MHz

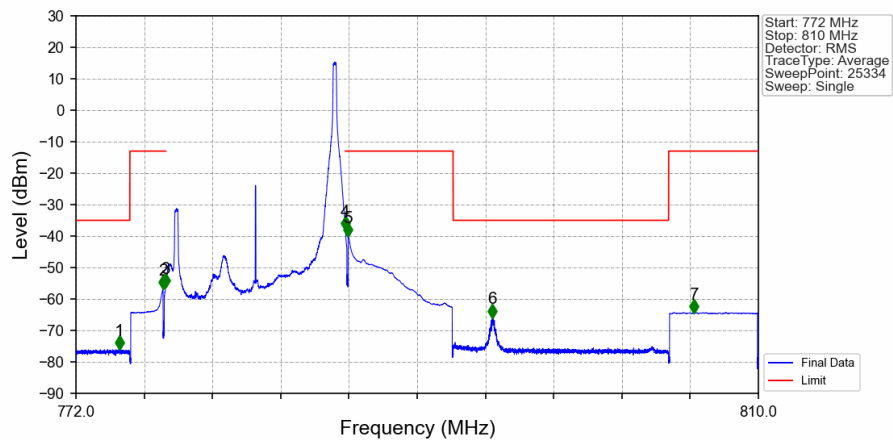


Band13 10MHz QPSK LCH 782MHz RB 50 0 NTN



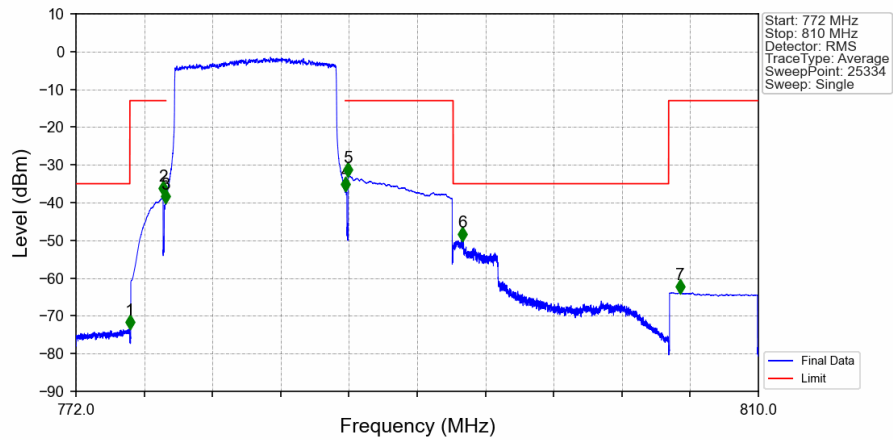
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	761.060	-64.12	-13	Pass
763	775	0.00625	CHP	2	774.880	-72.81	-35	Pass
775	776.9	0.1	CHP	3	776.850	-37.67	-13	Pass
776.9	777	0.03	CHP	4	776.992	-39.40	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.032	-36.50	-13	Pass
787.1	792	0.1	CHP	6	787.219	-32.54	-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	774.423	-75.71	-35	Pass
775	776.9	0.1	CHP	2	776.850	-56.49	-13	Pass
776.9	777	0.03	CHP	3	777.000	-55.97	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-37.82	-13	Pass
787.1	793	0.1	CHP	5	787.150	-39.92	-13	Pass
793	805	0.00625	CHP	6	795.192	-65.67	-35	Pass
805	810	0.1	CHP	7	806.427	-64.29	-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	774.996	-73.31	-35	Pass
775	776.9	0.1	CHP	2	776.850	-37.73	-13	Pass
776.9	777	0.03	CHP	3	776.983	-39.83	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.023	-36.61	-13	Pass
787.1	793	0.1	CHP	5	787.150	-32.85	-13	Pass
793	805	0.00625	CHP	6	793.527	-49.91	-35	Pass
805	810	0.1	CHP	7	805.644	-63.84	-13	Pass