

1.1.1 B13_5MHz_ERP

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	23.24	0.94	22.03	<=34.77	Pass
			49	23.29	0.94	22.08	<=34.77	Pass
		50	0	22.21	0.94	21.00	<=34.77	Pass
16QAM	782	1	0	22.77	0.94	21.56	<=34.77	Pass
			49	22.85	0.94	21.64	<=34.77	Pass
		50	0	21.20	0.94	19.99	<=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	12	-0.844	-0.0011	-2.5 to 2.5	Pass
					24	-0.243	-0.0003	-2.5 to 2.5	Pass
					48	-0.644	-0.0008	-2.5 to 2.5	Pass
				-30	24	0.200	0.0003	-2.5 to 2.5	Pass
				-20	24	0.215	0.0003	-2.5 to 2.5	Pass
				-10	24	0.229	0.0003	-2.5 to 2.5	Pass
				0	24	0.844	0.0011	-2.5 to 2.5	Pass
				10	24	0.715	0.0009	-2.5 to 2.5	Pass
				30	24	0.973	0.0012	-2.5 to 2.5	Pass
				40	24	1.588	0.0020	-2.5 to 2.5	Pass
				50	24	0.873	0.0011	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band13_OBW

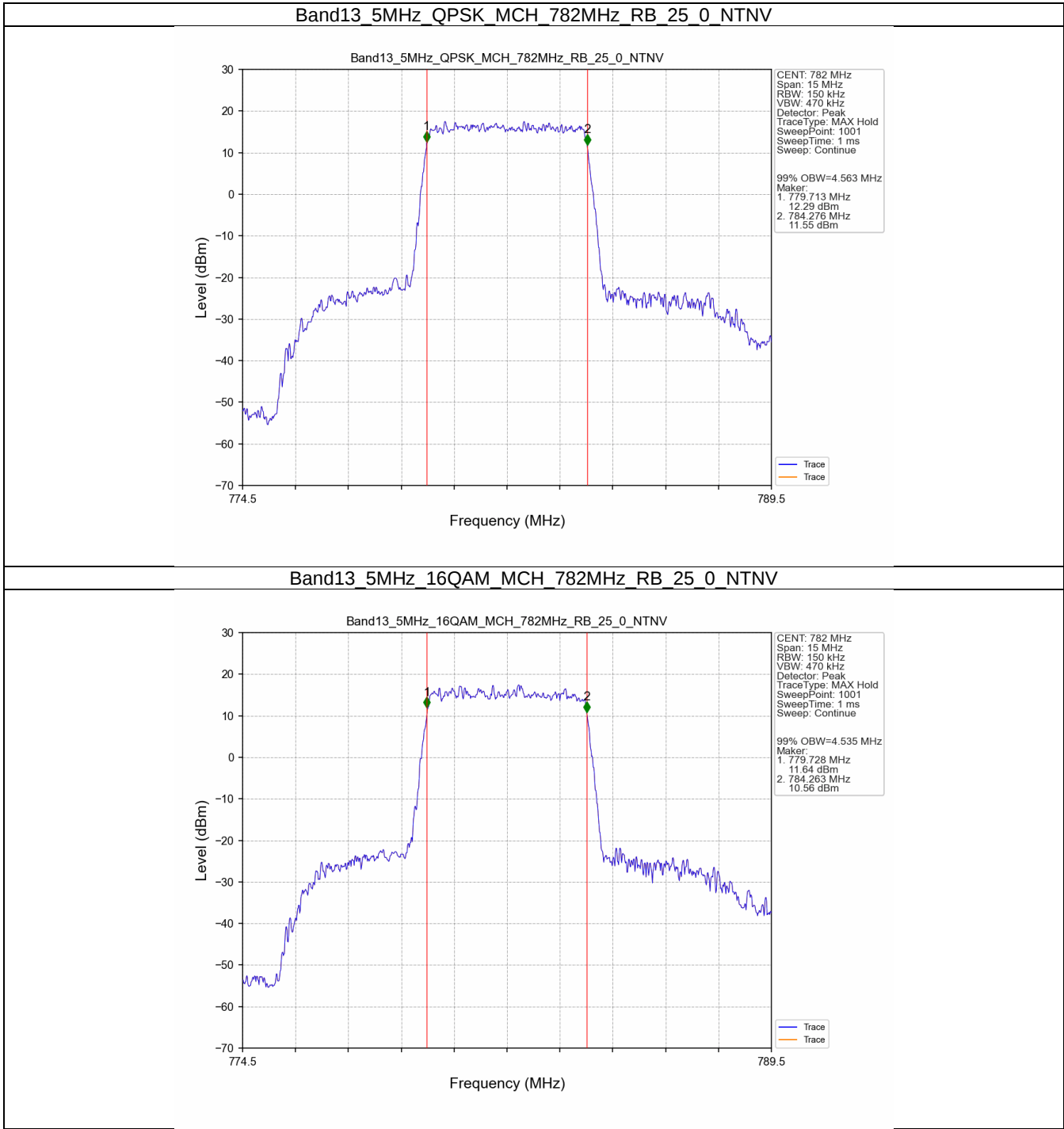
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.563	/	Pass
	16QAM	782	25	0	4.535	/	Pass
10	QPSK	782	50	0	9.013	/	Pass
	16QAM	782	50	0	9.027	/	Pass

3.1.2 Band13_XDB

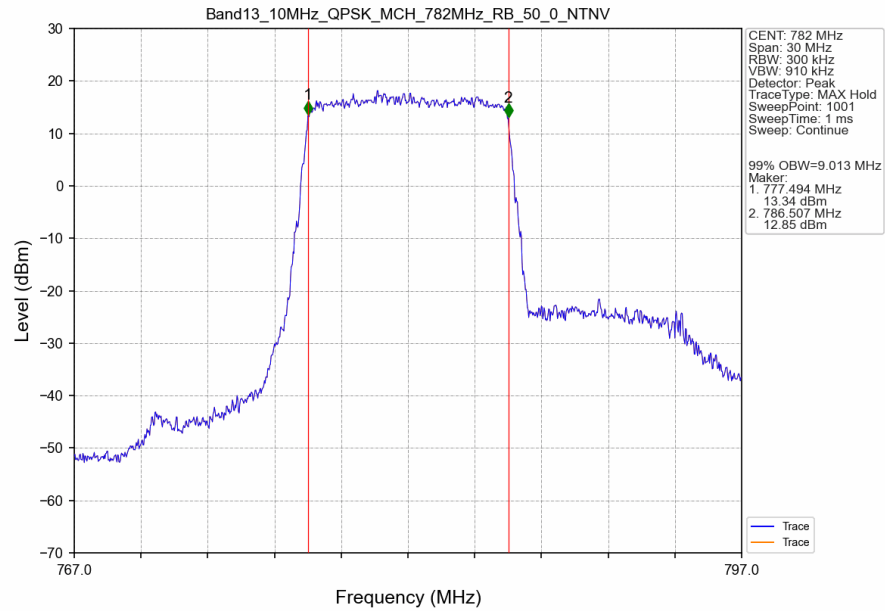
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	5.131	/	Pass
	16QAM	782	25	0	5.064	/	Pass
10	QPSK	782	50	0	10.021	/	Pass
	16QAM	782	50	0	10.003	/	Pass

3.2 Test Graph

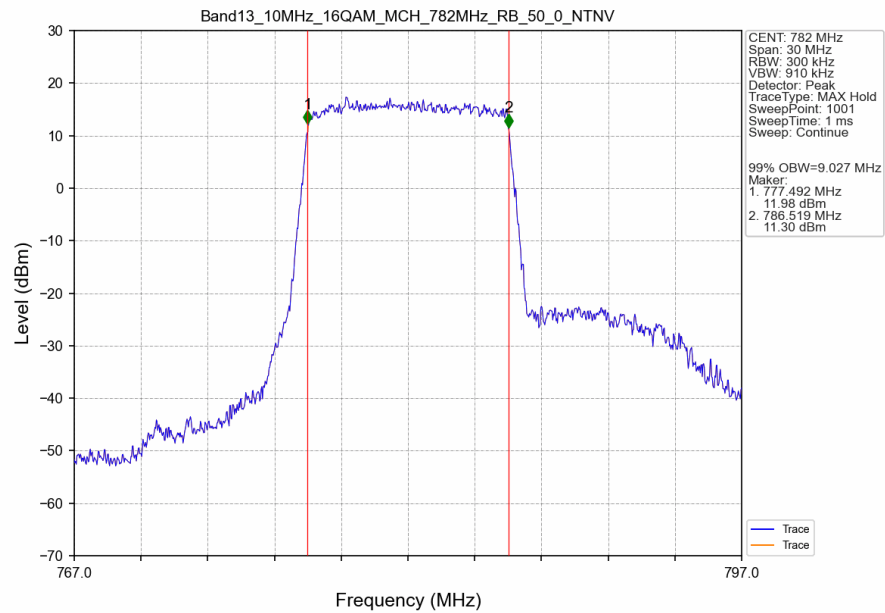
3.2.1 Band13_OBW



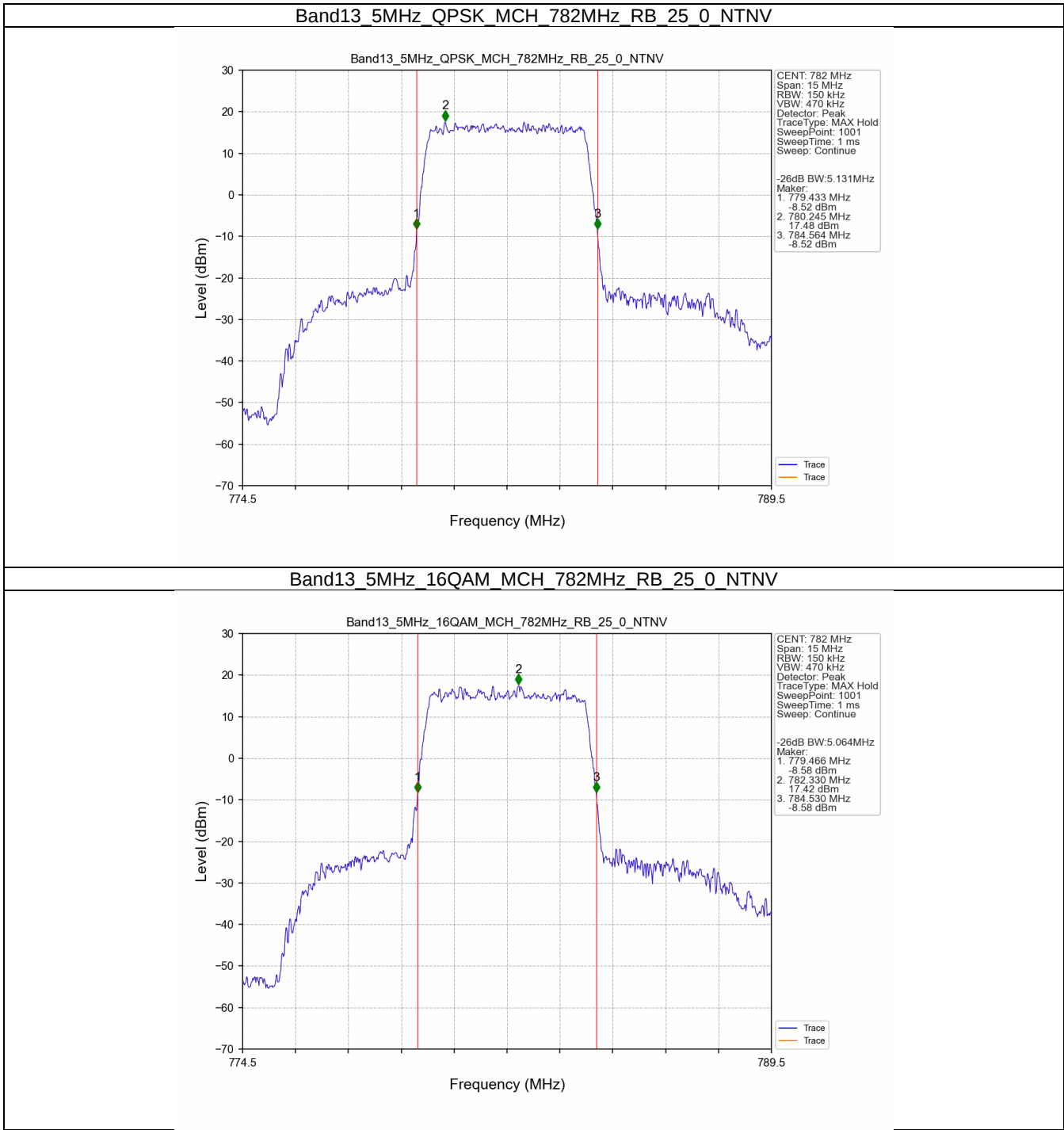
Band13 10MHz QPSK MCH 782MHz RB 50 0 NTNV



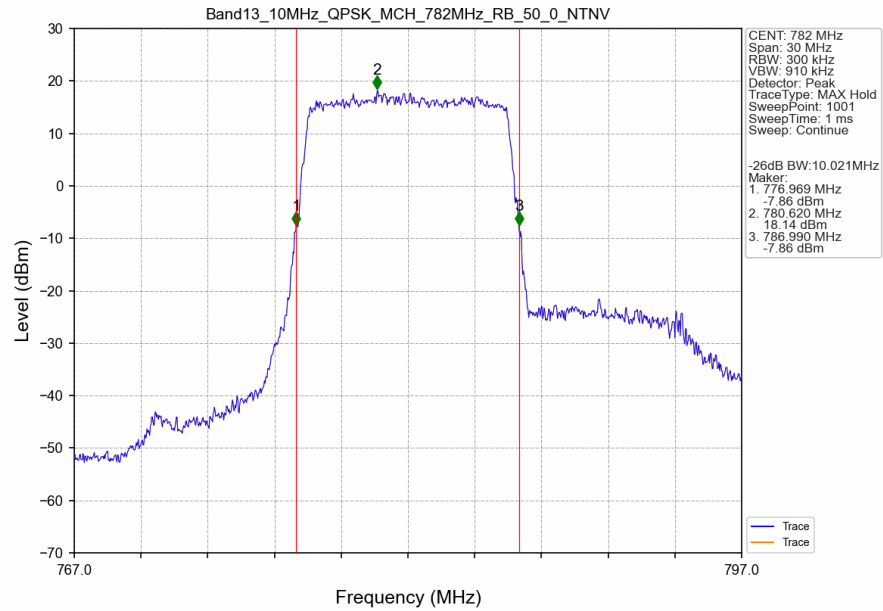
Band13 10MHz 16QAM MCH 782MHz RB 50 0 NTNV



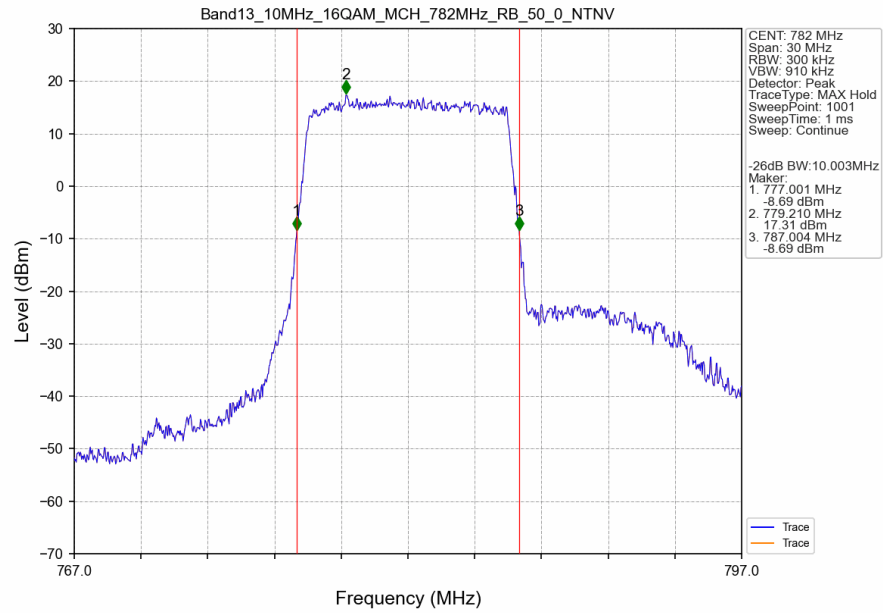
3.2.2 Band13_XDB



Band13 10MHz QPSK MCH 782MHz RB 50 0 NTN



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



4. Peak-Average Ratio

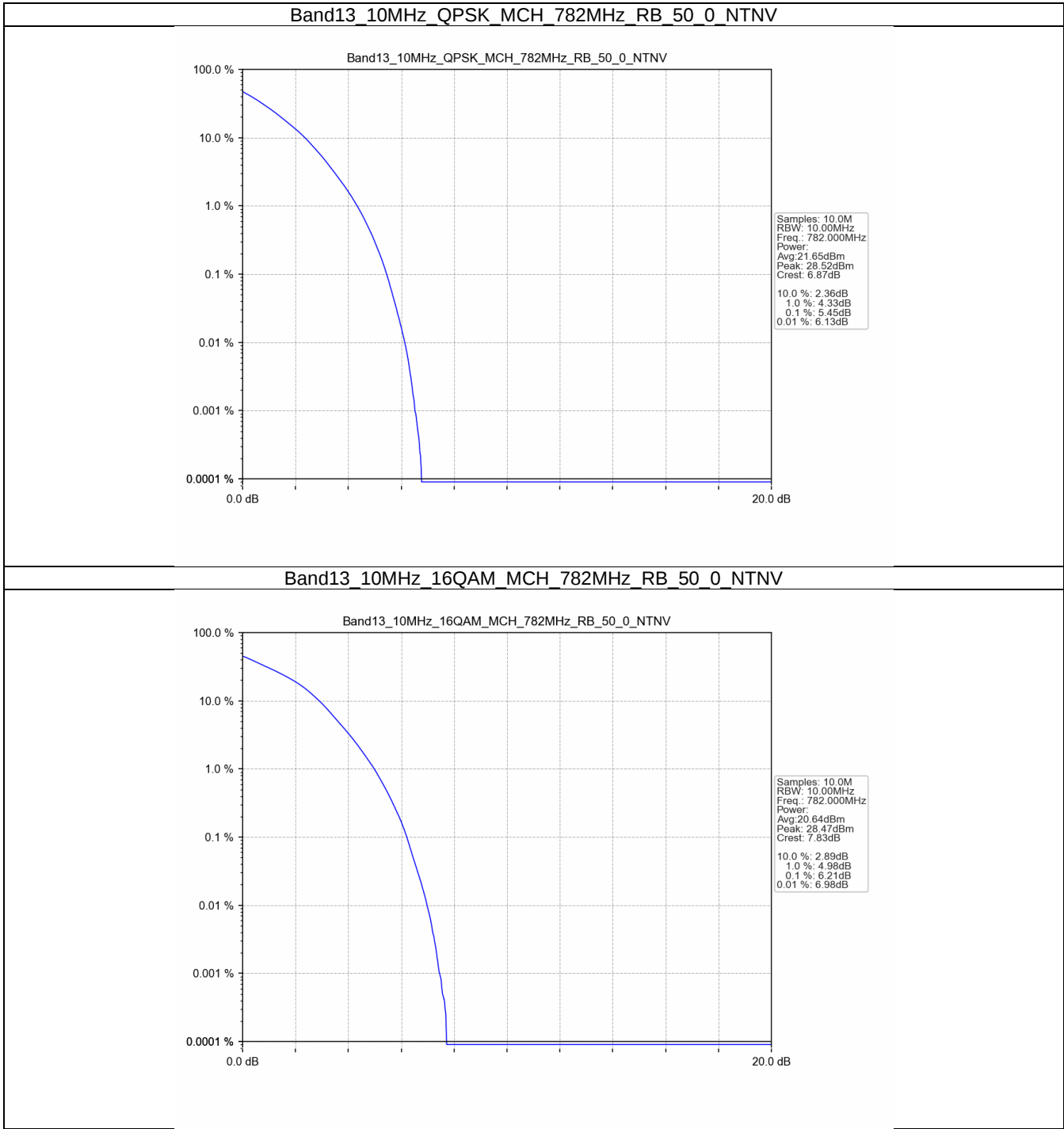
4.1 Test Result

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	5.45	<=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

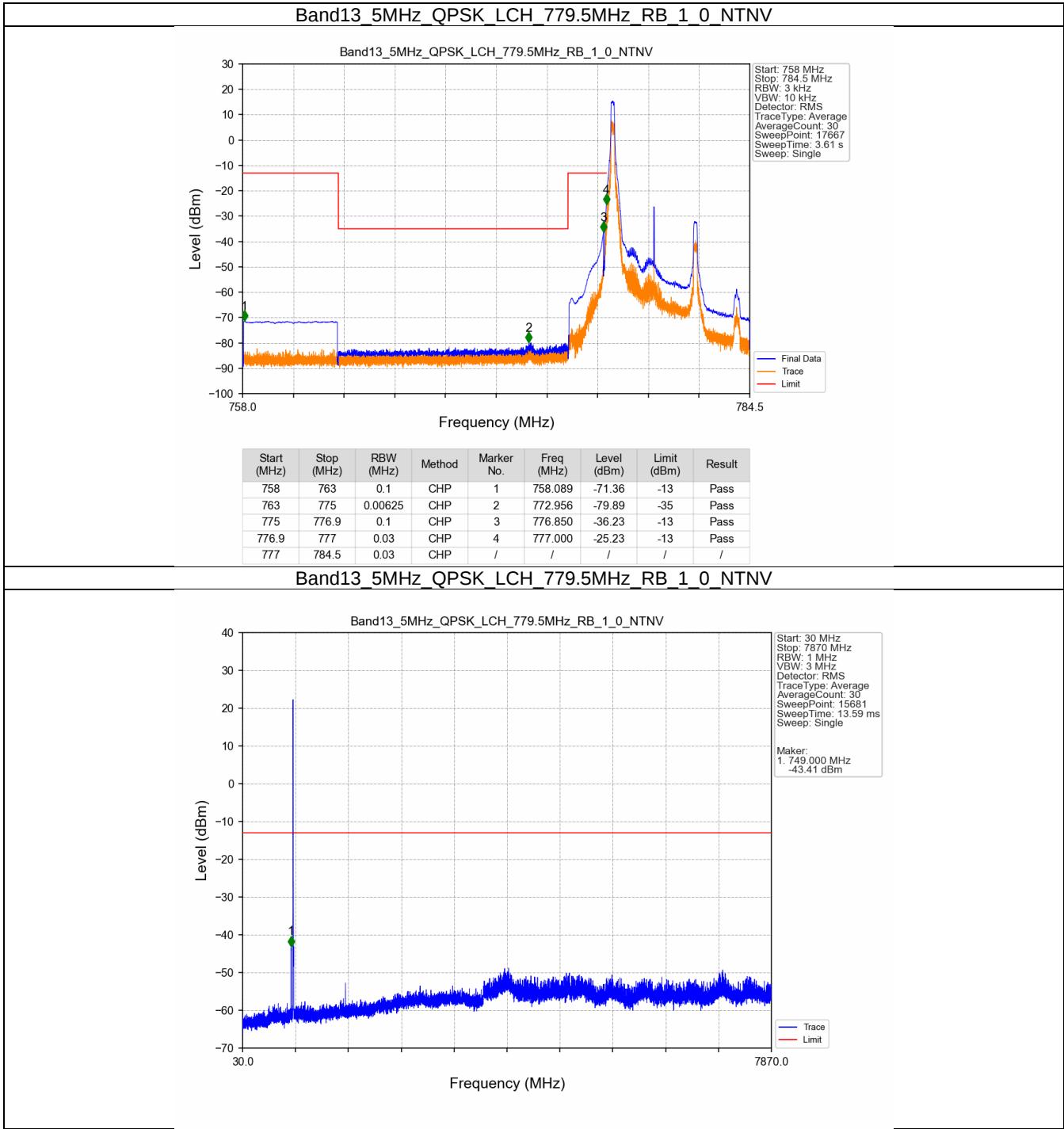
Band: 13 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B13_10MHz

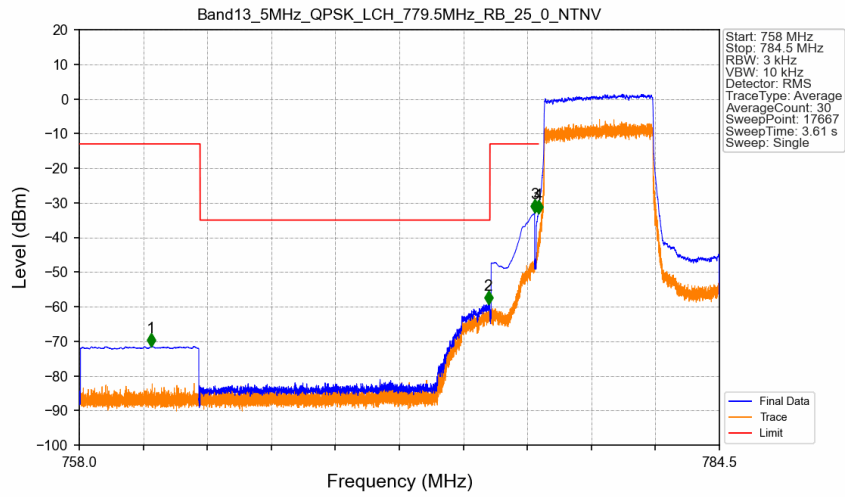
Band: 13 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

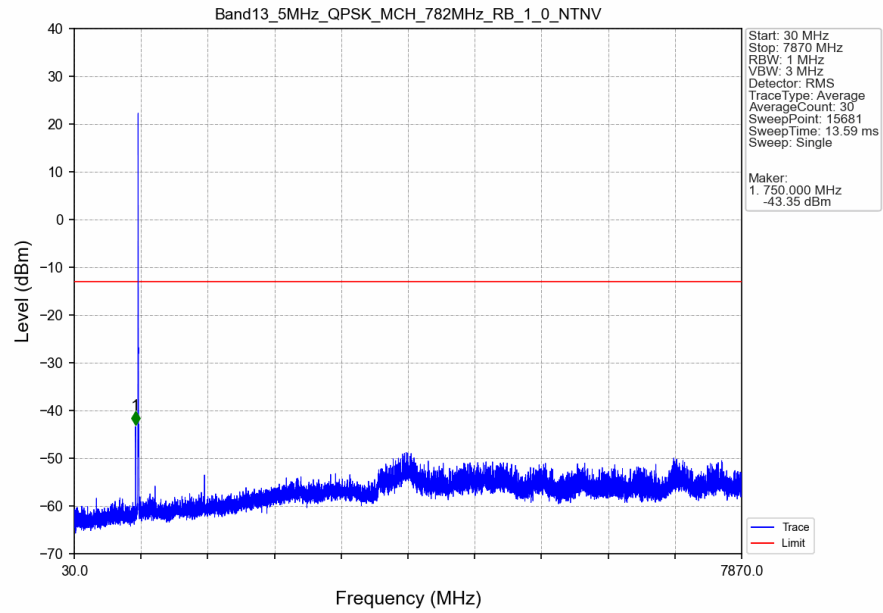
5.2.1 B13_5MHz



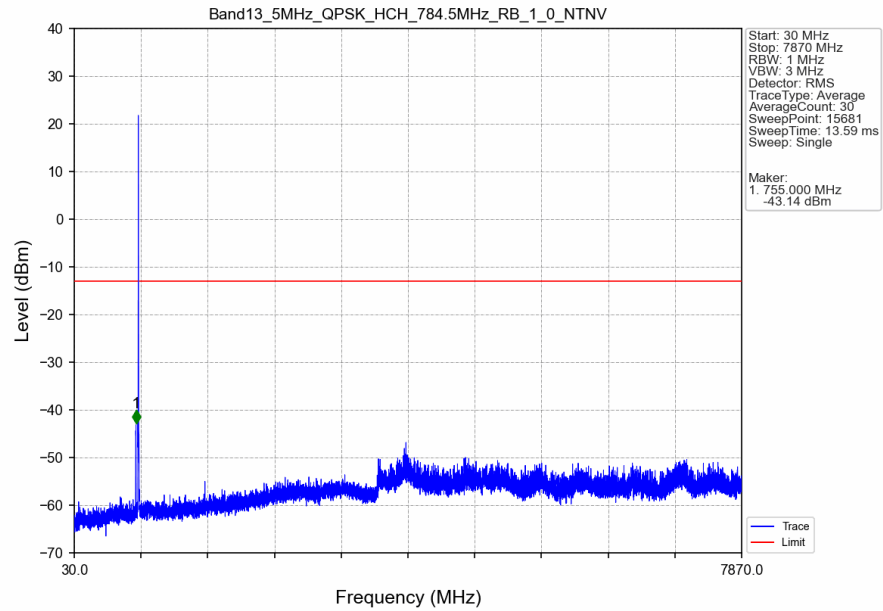
Band13 5MHz QPSK LCH 779.5MHz RB 25 0 NTNV



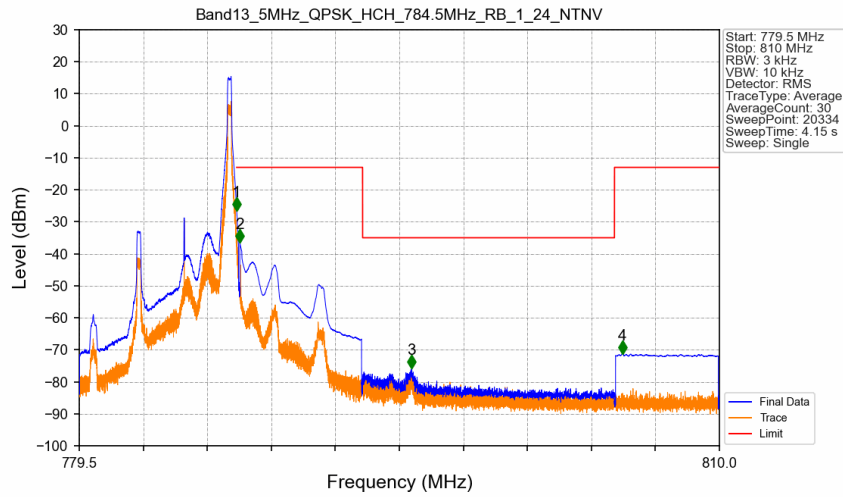
Band13 5MHz QPSK MCH 782MHz RB 1 0 NTNV



Band13 5MHz QPSK HCH 784.5MHz RB 1 0 NTV

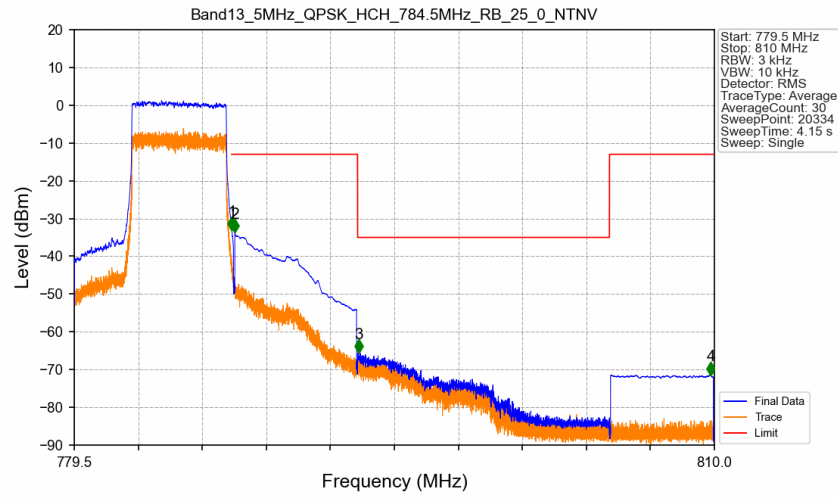


Band13 5MHz QPSK HCH 784.5MHz RB 1 24 NTV



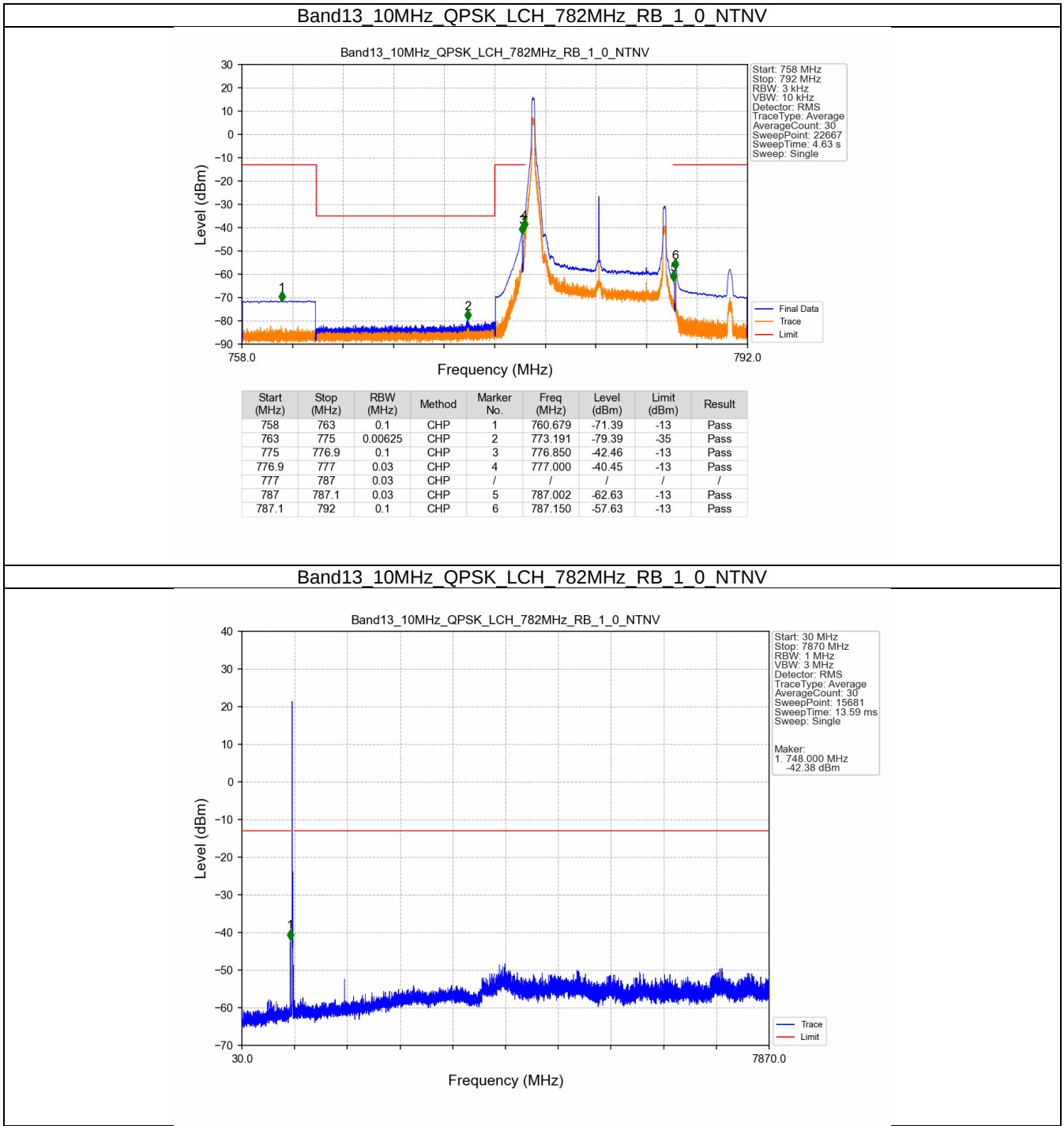
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-26.44	-13	Pass
787.1	793	0.1	CHP	2	787.150	-36.42	-13	Pass
793	805	0.00625	CHP	3	795.343	-75.73	-35	Pass
805	810	0.1	CHP	4	805.384	-71.21	-13	Pass

Band13 5MHz QPSK HCH 784.5MHz RB 25 0 NTN

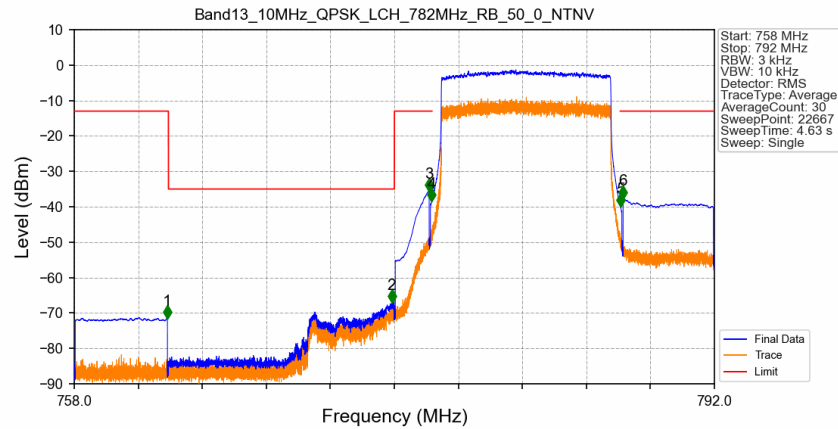


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.003	-33.00	-13	Pass
787.1	793	0.1	CHP	2	787.150	-33.66	-13	Pass
793	805	0.00625	CHP	3	793.041	-65.53	-35	Pass
805	810	0.1	CHP	4	809.836	-71.41	-13	Pass

5.2.2 B13_10MHz

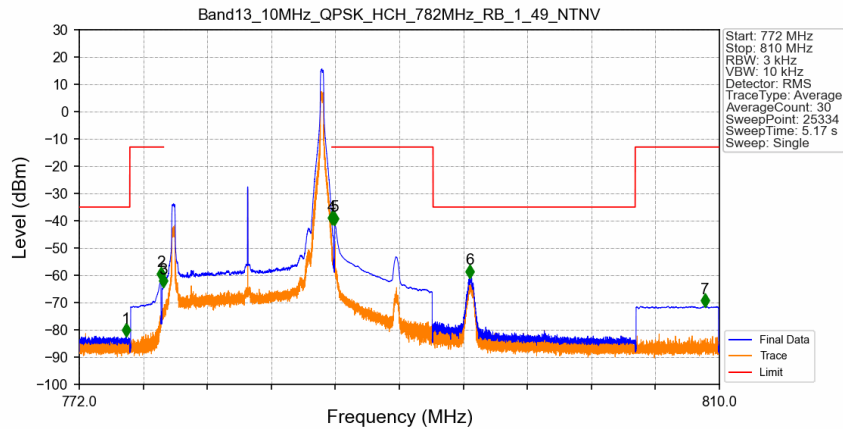


Band13 10MHz QPSK LCH 782MHz RB 50 0 NTNV



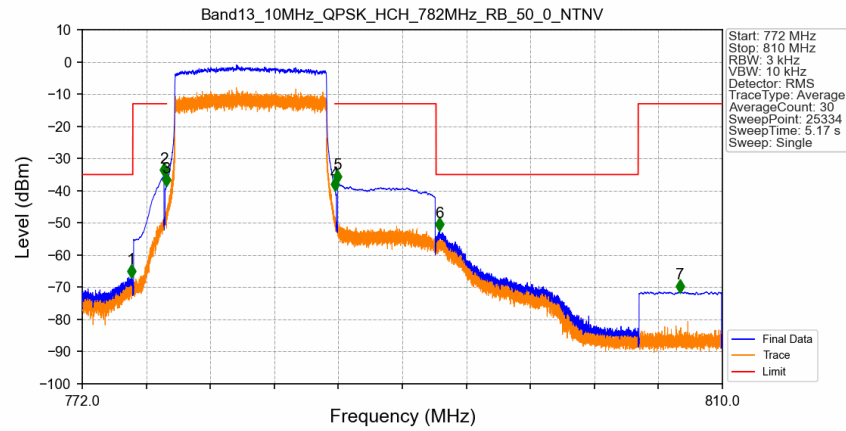
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	762.944	-71.26	-13	Pass
763	775	0.00625	CHP	2	774.863	-66.88	-35	Pass
775	776.9	0.1	CHP	3	776.847	-35.48	-13	Pass
776.9	777	0.03	CHP	4	776.983	-38.14	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.000	-39.70	-13	Pass
787.1	792	0.1	CHP	6	787.150	-37.43	-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	774.783	-82.16	-35	Pass
775	776.9	0.1	CHP	2	776.850	-61.44	-13	Pass
776.9	777	0.03	CHP	3	776.991	-64.07	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-41.02	-13	Pass
787.1	793	0.1	CHP	5	787.150	-41.11	-13	Pass
793	805	0.00625	CHP	6	795.192	-60.58	-35	Pass
805	810	0.1	CHP	7	809.125	-71.25	-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	774.912	-66.67	-35	Pass
775	776.9	0.1	CHP	2	776.850	-35.31	-13	Pass
776.9	777	0.03	CHP	3	776.980	-38.26	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-39.73	-13	Pass
787.1	793	0.1	CHP	5	787.150	-37.24	-13	Pass
793	805	0.00625	CHP	6	793.200	-52.10	-35	Pass
805	810	0.1	CHP	7	807.484	-71.35	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 13-Low channel, Modulation: QPSK, Bandwidth:5MHz, 1RB#0				
Frequency	Spurious Emission Level		Limit	Margin
(MHz)	Polaxis	(dBm)	(dBm)	(dB)
1558.5	H	-62.73	-13	49.73
2337.75	H	-60.09	-13	47.09
3117	H	-58.06	-13	45.06
1558.5	V	-62.85	-13	49.85
2337.75	V	-60.73	-13	47.73
3117	V	-57.17	-13	44.17

LTE Band 13-Middle channel, Modulation: QPSK, Bandwidth:5MHz, 1RB#0				
Frequency	Spurious Emission Level		Limit	Margin
(MHz)	Polaxis	(dBm)	(dBm)	(dB)
1559.5	H	-59.59	-40	19.59
2339.25	H	-57.95	-13	44.95
3119	H	-55.7	-13	42.7
1559.5	V	-53.57	-40	13.57
2339.25	V	-59.11	-13	46.11
3119	V	-56.44	-13	43.44

LTE Band 13-High channel, Modulation: QPSK, Bandwidth:5MHz, 1RB#0				
Frequency	Spurious Emission Level		Limit	Margin
(MHz)	Polaxis	(dBm)	(dBm)	(dB)
1560.5	H	-62.73	-40	22.73
2340.75	H	-59.29	-13	46.29
3121	H	-56.74	-13	43.74
1560.5	V	-63.12	-40	23.12
2340.75	V	-59.71	-13	46.71
3121	V	-56.83	-13	43.83