

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	23.87	3.17	24.89	<=34.77	Pass
			13	23.53	3.17	24.55	<=34.77	Pass
			24	22.86	3.17	23.88	<=34.77	Pass
		12	0	23.36	3.17	24.38	<=34.77	Pass
			6	22.82	3.17	23.84	<=34.77	Pass
			13	22.10	3.17	23.12	<=34.77	Pass
		25	0	22.78	3.17	23.80	<=34.77	Pass
	782	1	0	23.48	3.17	24.50	<=34.77	Pass
			13	22.98	3.17	24.00	<=34.77	Pass
			24	23.48	3.17	24.50	<=34.77	Pass
		12	0	22.12	3.17	23.14	<=34.77	Pass
			6	22.03	3.17	23.05	<=34.77	Pass
			13	22.30	3.17	23.32	<=34.77	Pass
	25	0	22.20	3.17	23.22	<=34.77	Pass	
	784.5	1	0	22.62	3.17	23.64	<=34.77	Pass
			13	23.16	3.17	24.18	<=34.77	Pass
			24	22.72	3.17	23.74	<=34.77	Pass
		12	0	21.96	3.17	22.98	<=34.77	Pass
			6	22.15	3.17	23.17	<=34.77	Pass
			13	22.08	3.17	23.10	<=34.77	Pass
		25	0	22.02	3.17	23.04	<=34.77	Pass
16QAM	779.5	1	0	23.25	3.17	24.27	<=34.77	Pass
			13	22.77	3.17	23.79	<=34.77	Pass
			24	22.12	3.17	23.14	<=34.77	Pass
		12	0	22.42	3.17	23.44	<=34.77	Pass
			6	21.84	3.17	22.86	<=34.77	Pass
			13	21.13	3.17	22.15	<=34.77	Pass
		25	0	21.84	3.17	22.86	<=34.77	Pass
	782	1	0	22.63	3.17	23.65	<=34.77	Pass
			13	22.15	3.17	23.17	<=34.77	Pass
			24	22.67	3.17	23.69	<=34.77	Pass
		12	0	21.05	3.17	22.07	<=34.77	Pass
			6	20.98	3.17	22.00	<=34.77	Pass
	13	21.26	3.17	22.28	<=34.77	Pass		
	25	0	21.17	3.17	22.19	<=34.77	Pass	
	784.5	1	0	21.93	3.17	22.95	<=34.77	Pass
			13	22.50	3.17	23.52	<=34.77	Pass
			24	22.07	3.17	23.09	<=34.77	Pass
		12	0	20.98	3.17	22.00	<=34.77	Pass
6			21.17	3.17	22.19	<=34.77	Pass	
13		21.09	3.17	22.11	<=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	24.18	3.17	25.20	<=34.77	Pass
			25	23.04	3.17	24.06	<=34.77	Pass
			49	23.24	3.17	24.26	<=34.77	Pass
		25	0	22.79	3.17	23.81	<=34.77	Pass
			13	22.22	3.17	23.24	<=34.77	Pass
			25	22.41	3.17	23.43	<=34.77	Pass
		50	0	22.61	3.17	23.63	<=34.77	Pass
16QAM	782	1	0	23.27	3.17	24.29	<=34.77	Pass
			25	22.24	3.17	23.26	<=34.77	Pass
			49	22.47	3.17	23.49	<=34.77	Pass
		12	0	23.24	3.17	24.26	<=34.77	Pass
			19	22.07	3.17	23.09	<=34.77	Pass
			38	22.52	3.17	23.54	<=34.77	Pass
		27	0	21.75	3.17	22.77	<=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	-2.074	-0.0027	-2.5 to 2.5	Pass
					3.80	-0.615	-0.0008	-2.5 to 2.5	Pass
					4.20	-0.815	-0.0010	-2.5 to 2.5	Pass
				-30	3.80	-0.286	-0.0004	-2.5 to 2.5	Pass
				-20	3.80	-0.830	-0.0011	-2.5 to 2.5	Pass
				-10	3.80	-0.372	-0.0005	-2.5 to 2.5	Pass
				0	3.80	-0.987	-0.0013	-2.5 to 2.5	Pass
				10	3.80	-0.401	-0.0005	-2.5 to 2.5	Pass
				30	3.80	0.443	0.0006	-2.5 to 2.5	Pass
				40	3.80	0.014	0.0000	-2.5 to 2.5	Pass
				50	3.80	-0.186	-0.0002	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band13_OBW

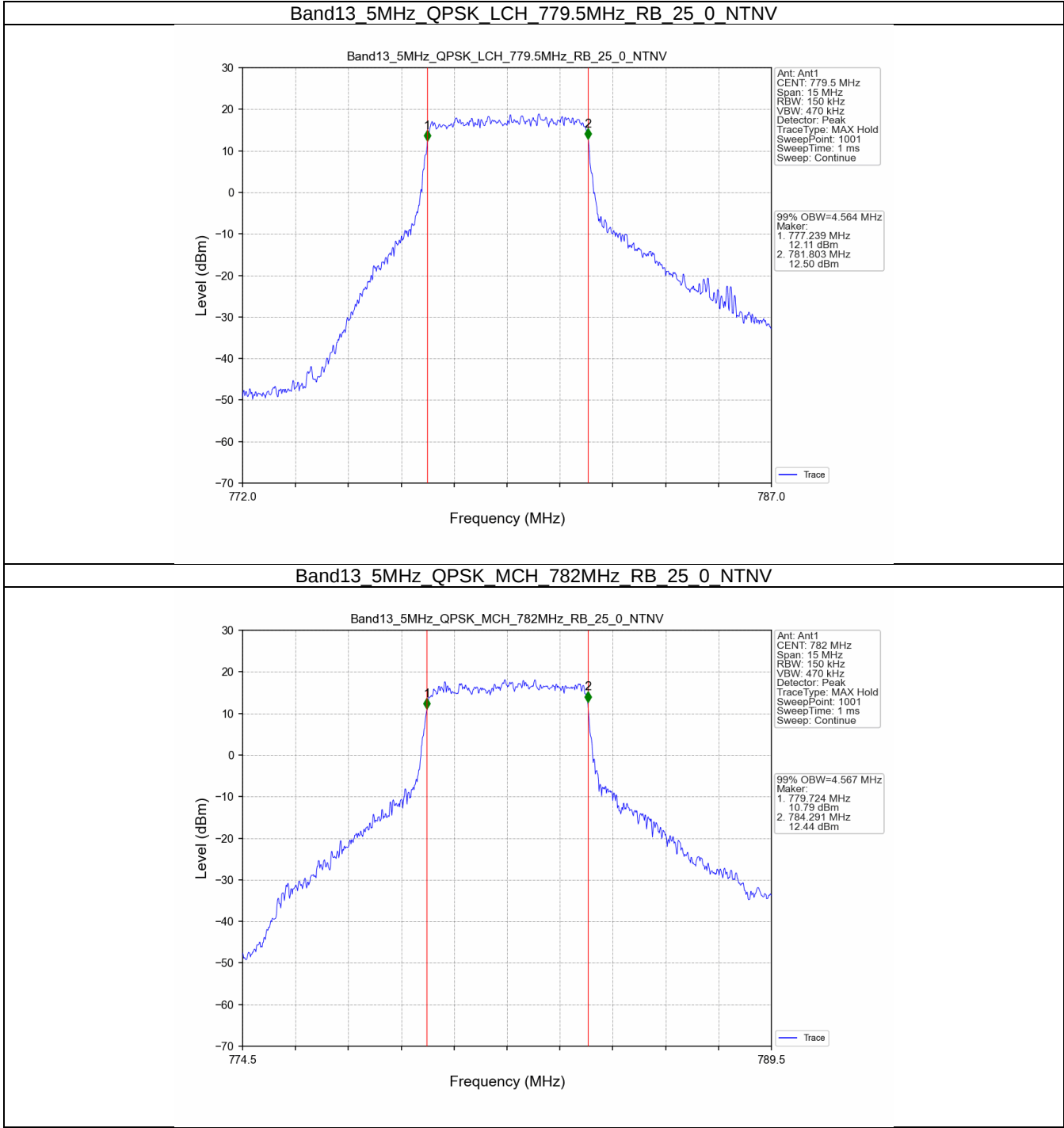
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	779.5	25	0	4.564	/	Pass
		782	25	0	4.567	/	Pass
		784.5	25	0	4.575	/	Pass
	16QAM	779.5	25	0	4.556	/	Pass
		782	25	0	4.555	/	Pass
		784.5	25	0	4.540	/	Pass
10	QPSK	782	50	0	9.052	/	Pass
	16QAM	782	27	0	5.095	/	Pass

3.1.2 Band13_XDB

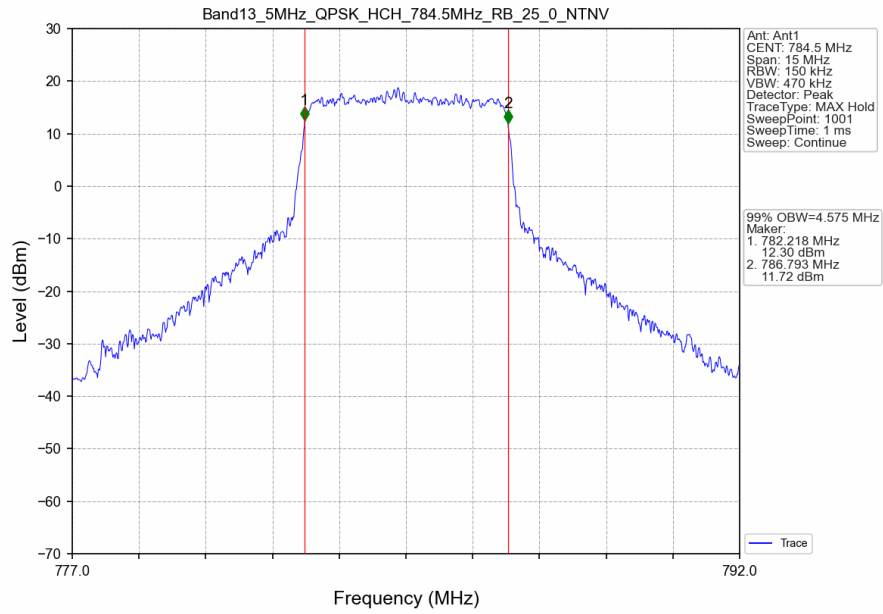
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	779.5	25	0	5.418	/	Pass
		782	25	0	5.476	/	Pass
		784.5	25	0	5.323	/	Pass
	16QAM	779.5	25	0	5.341	/	Pass
		782	25	0	5.306	/	Pass
		784.5	25	0	5.382	/	Pass
10	QPSK	782	50	0	10.424	/	Pass
	16QAM	782	27	0	6.240	/	Pass

3.2 Test Graph

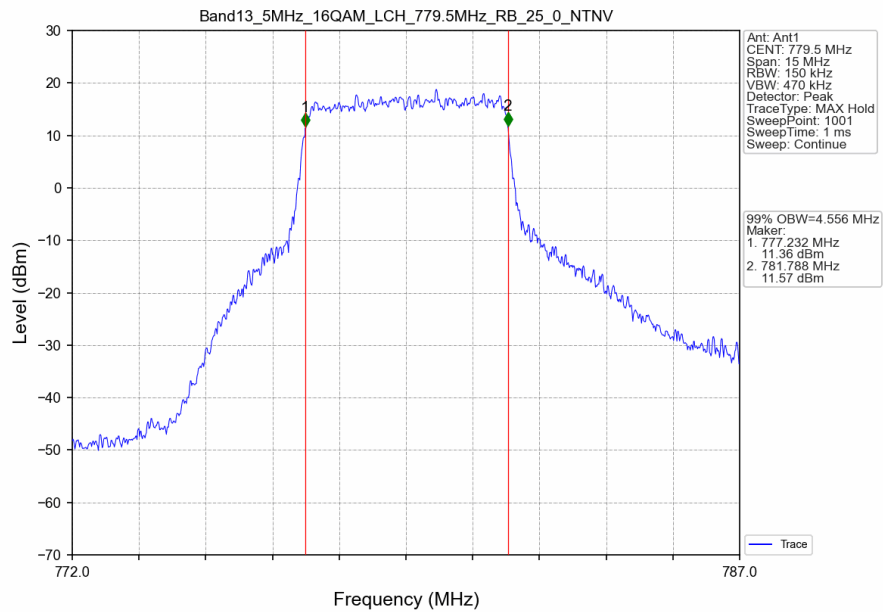
3.2.1 Band13_OBW



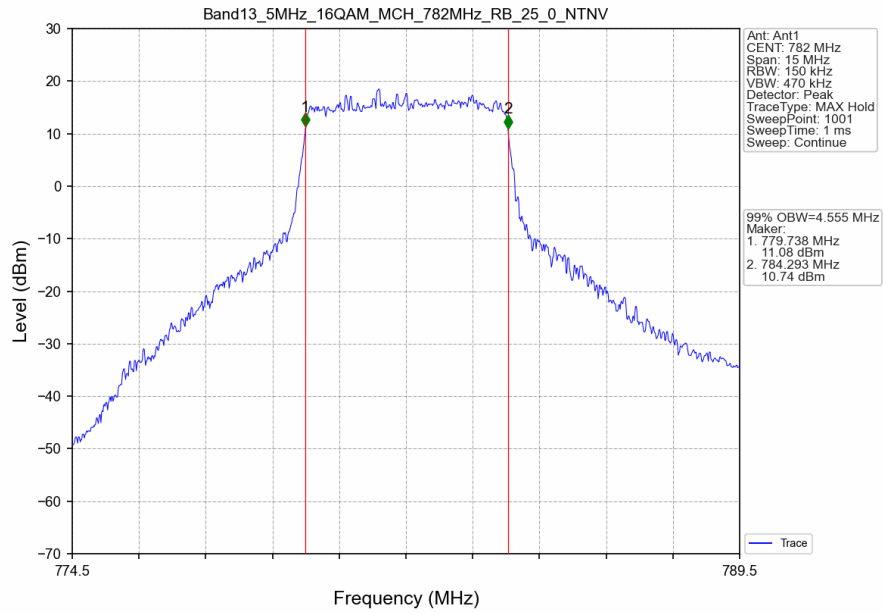
Band13_5MHz_QPSK_HCH_784.5MHz_RB_25_0_NTNV



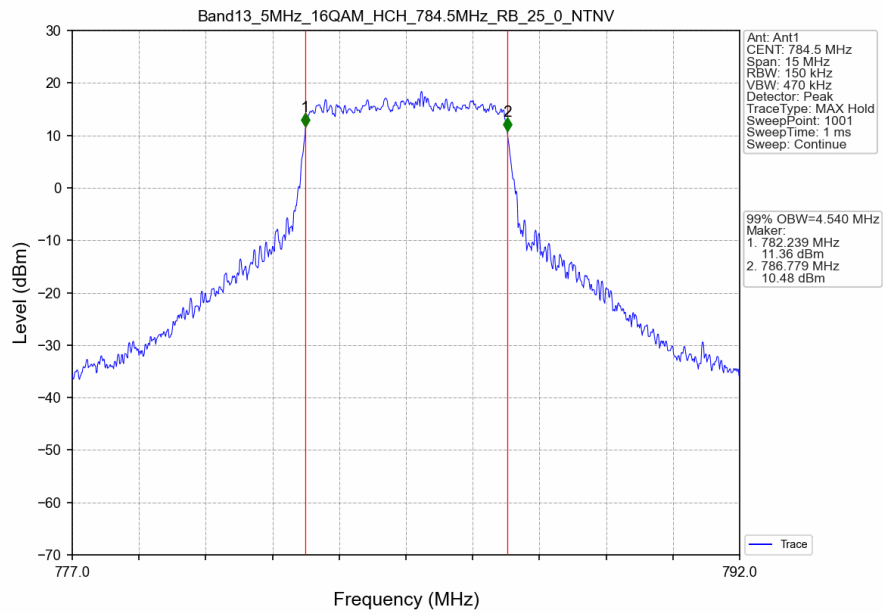
Band13_5MHz_16QAM_LCH_779.5MHz_RB_25_0_NTNV



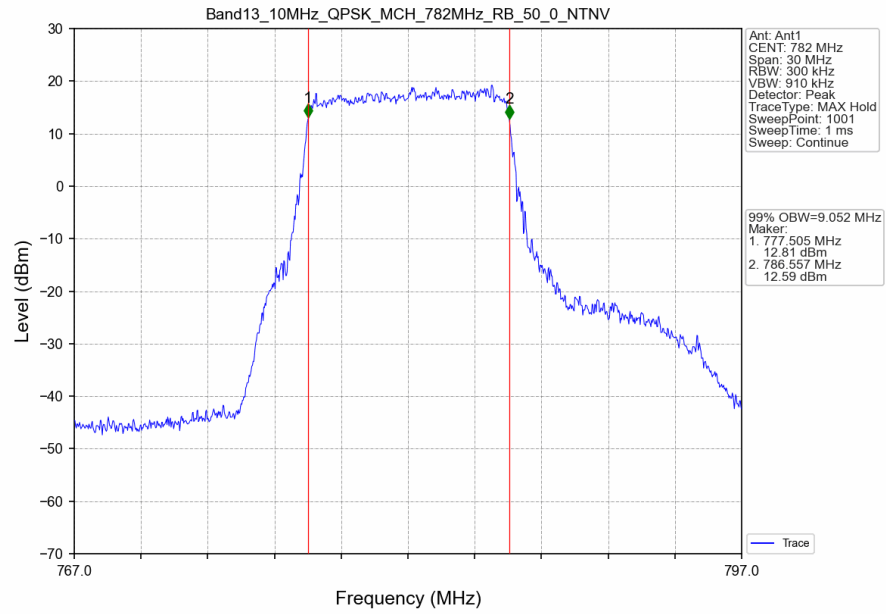
Band13_5MHz_16QAM_MCH_782MHz_RB_25_0_NTNV



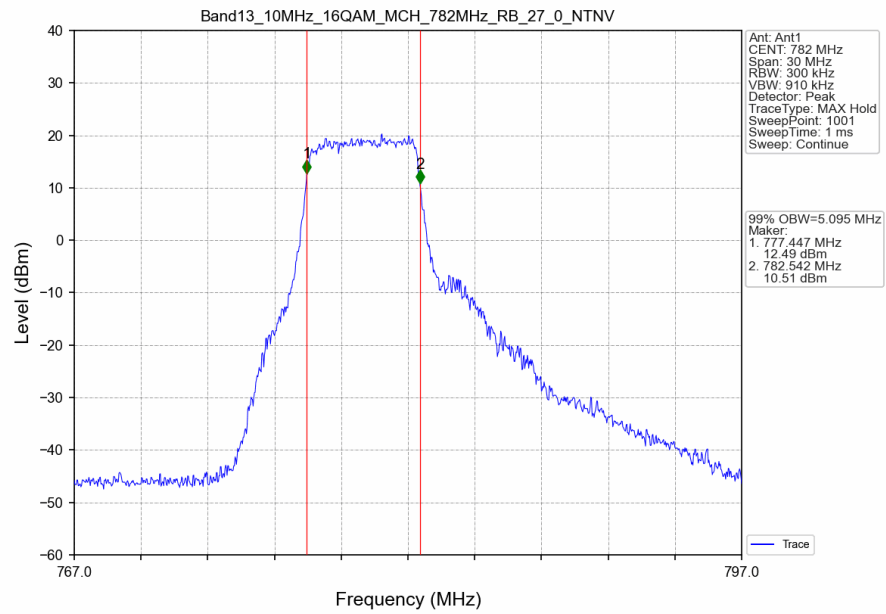
Band13_5MHz_16QAM_HCH_784.5MHz_RB_25_0_NTNV



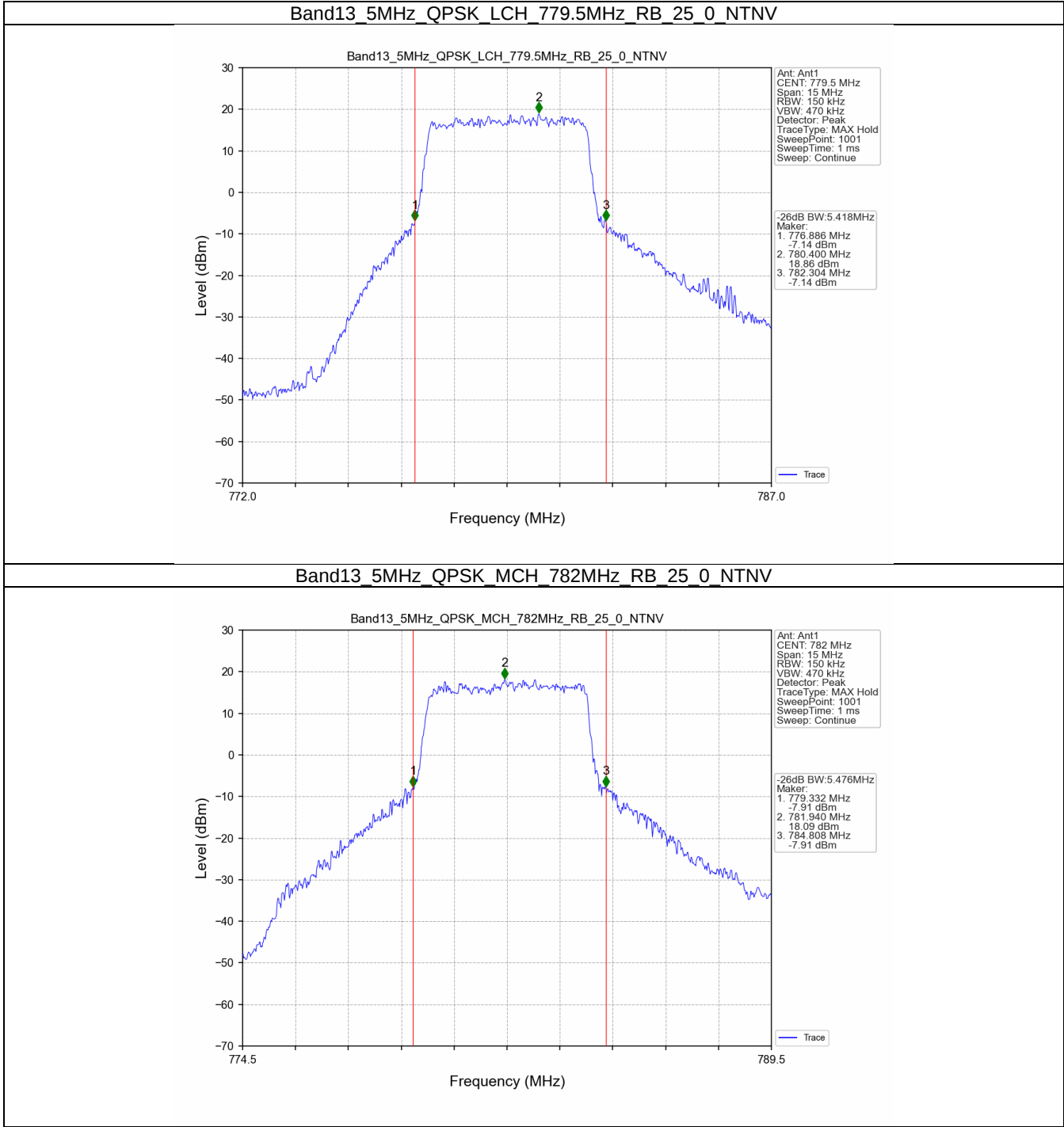
Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



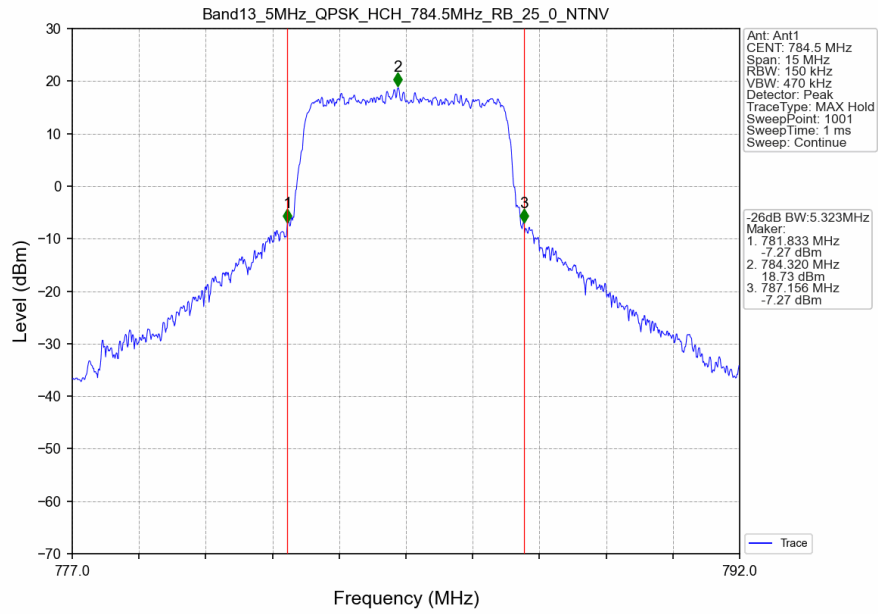
Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV



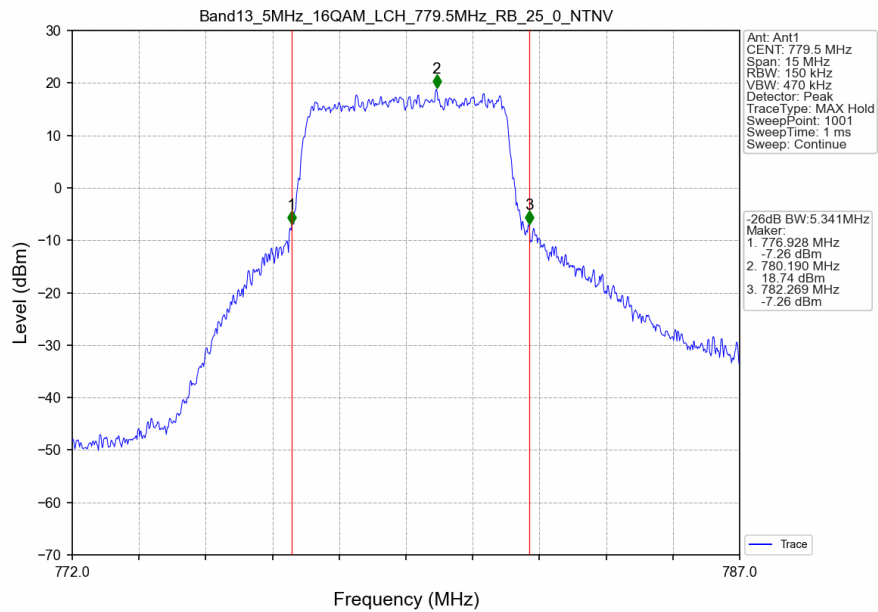
3.2.2 Band13_XDB



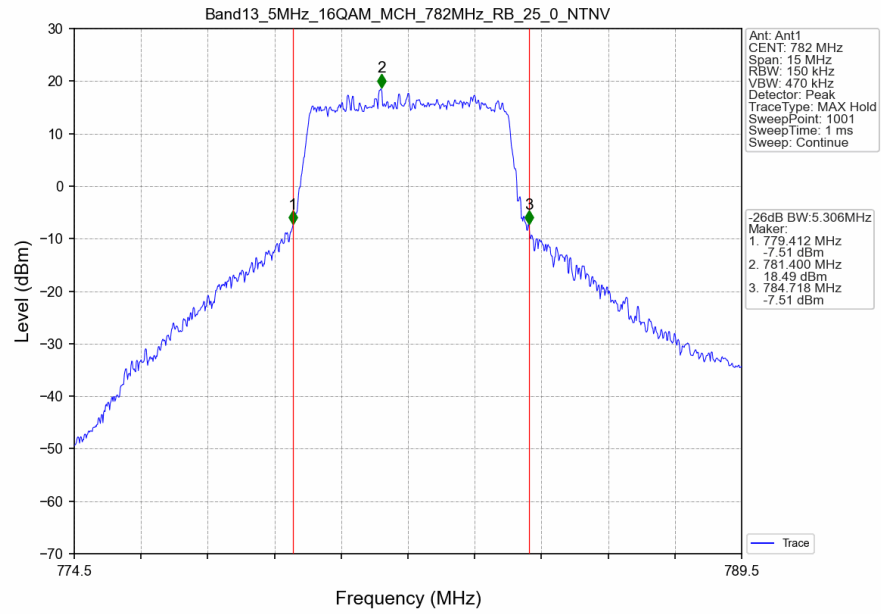
Band13_5MHz_QPSK_HCH_784.5MHz_RB_25_0_NTNV



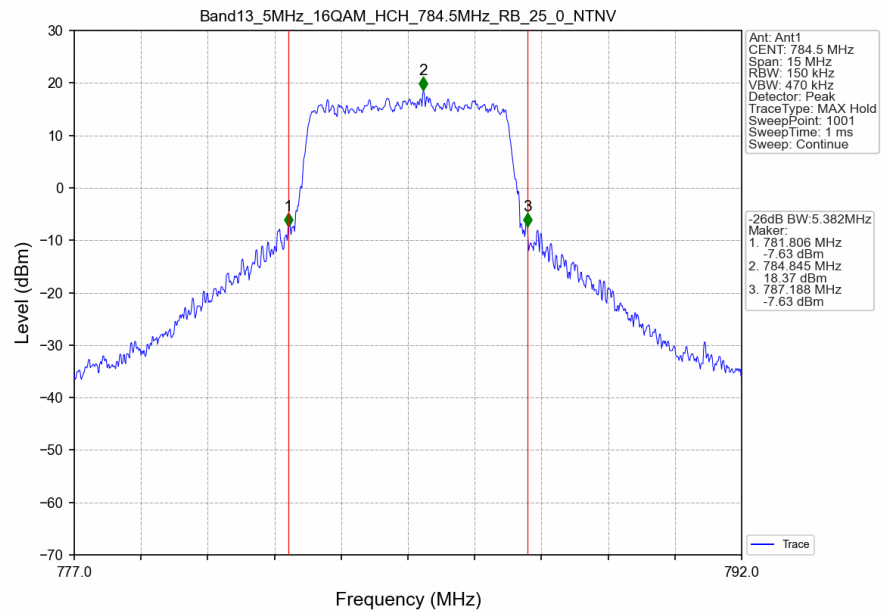
Band13_5MHz_16QAM_LCH_779.5MHz_RB_25_0_NTNV



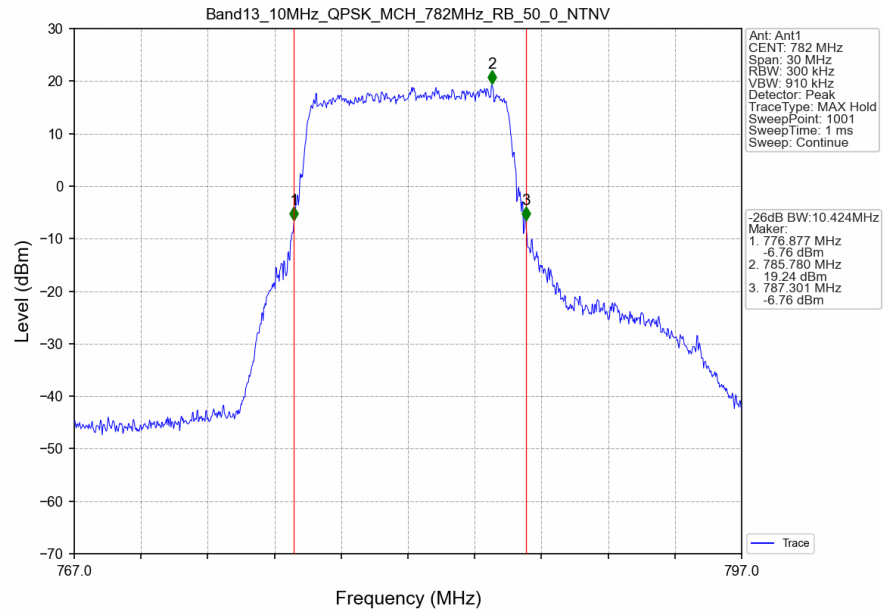
Band13_5MHz_16QAM_MCH_782MHz_RB_25_0_NTNV



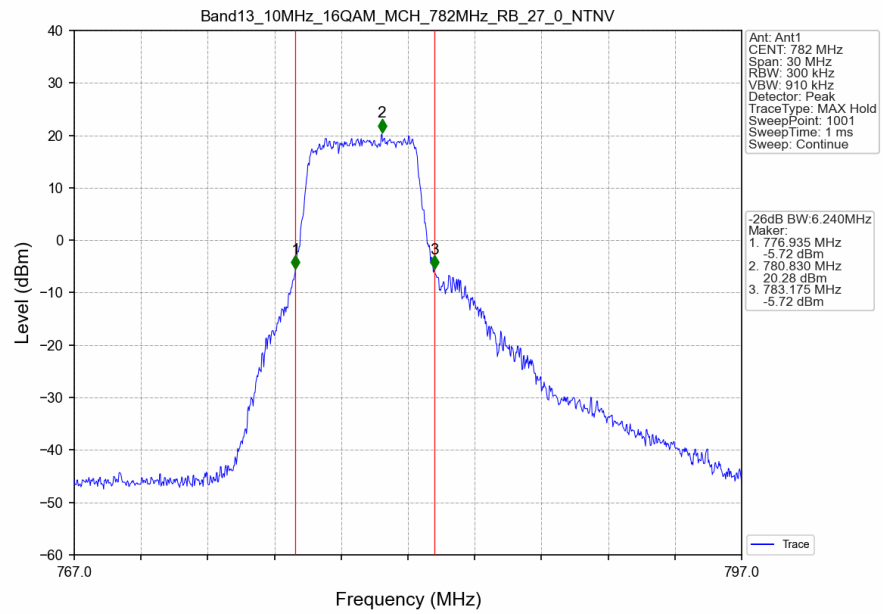
Band13_5MHz_16QAM_HCH_784.5MHz_RB_25_0_NTNV



Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV



4. Peak-Average Ratio

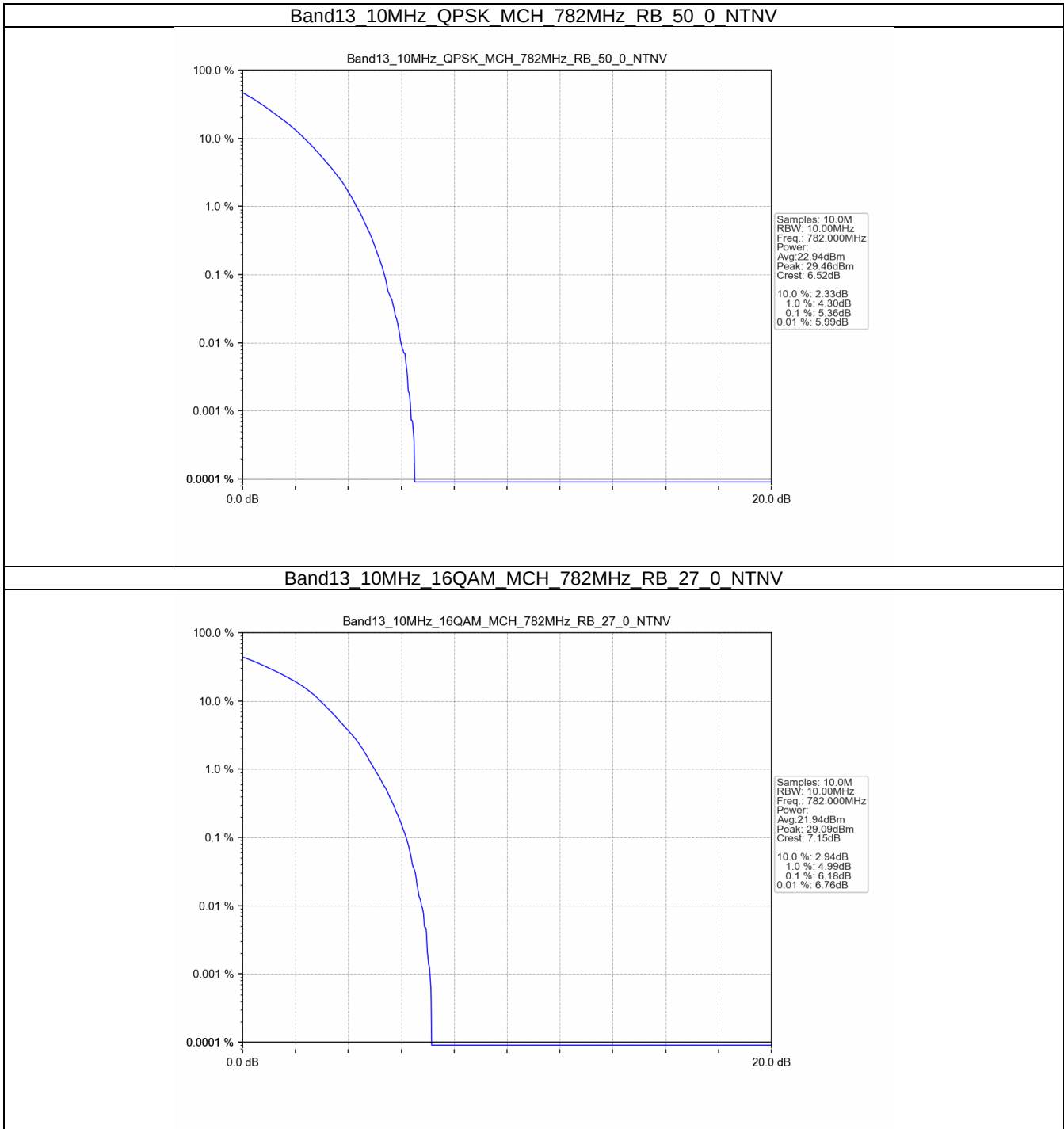
4.1 Test Result

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	5.36	<=13	Pass
16QAM	782	27	0	6.18	<=13	Pass

4.2 Test Graph

4.2.1 B13_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B13_5MHz

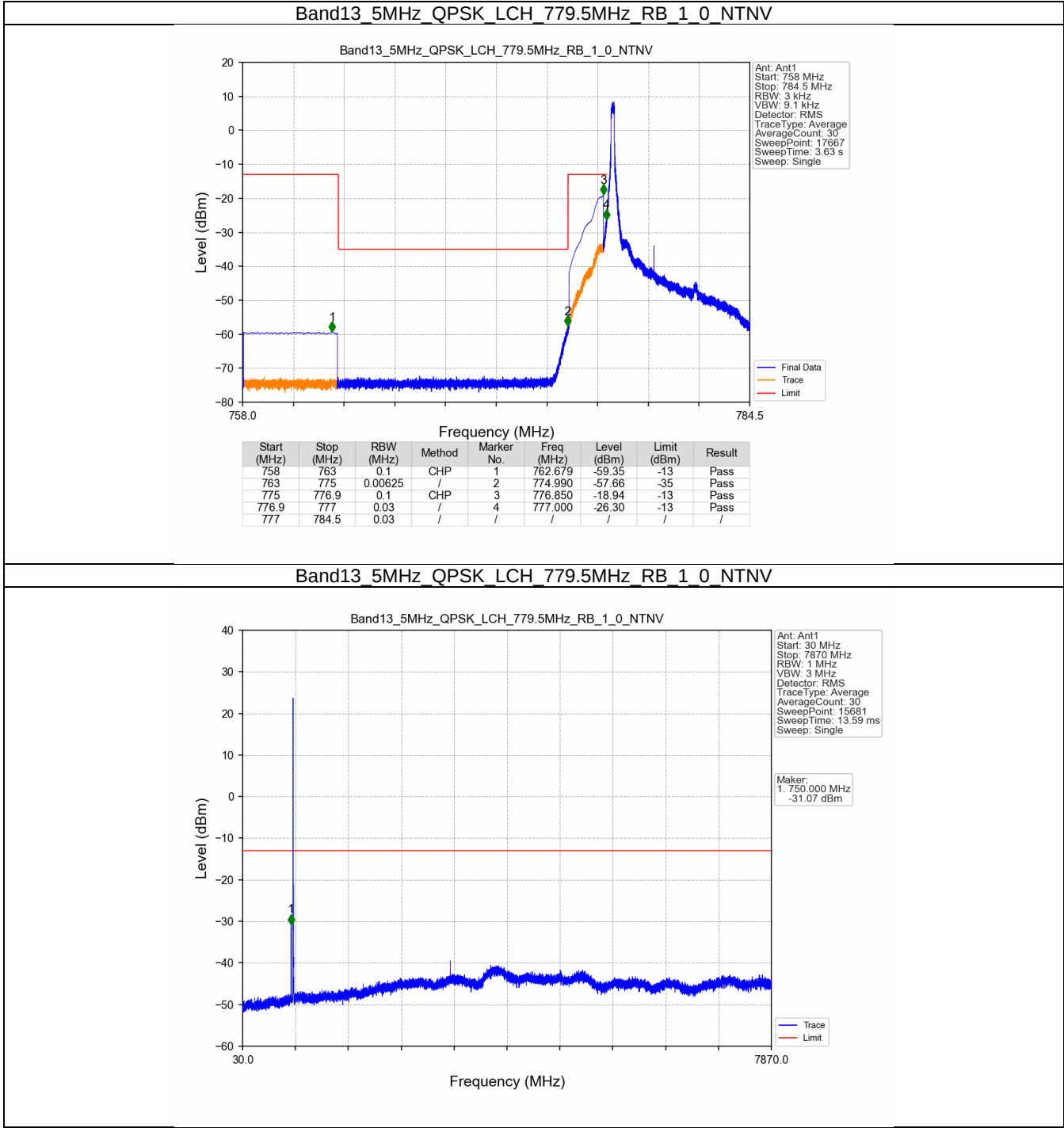
Band: 13 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B13_10MHz

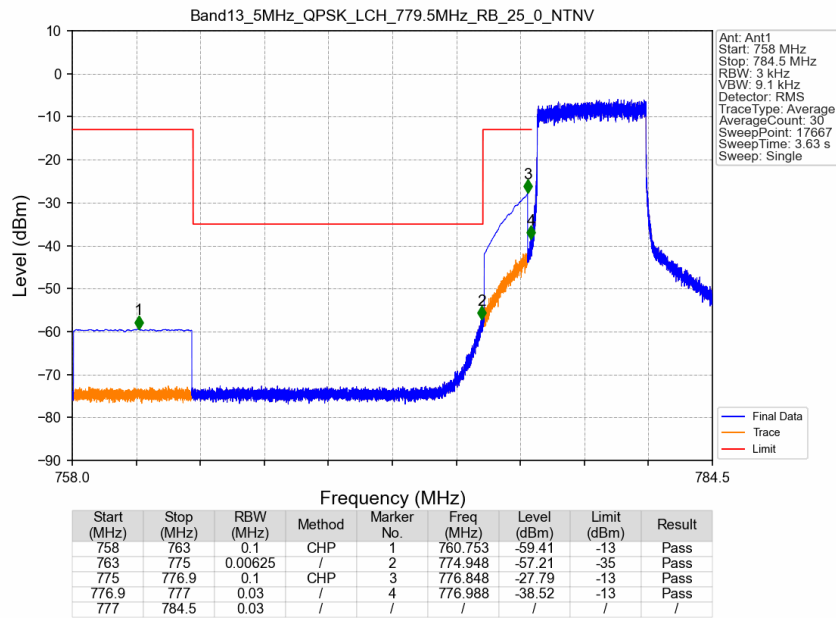
Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

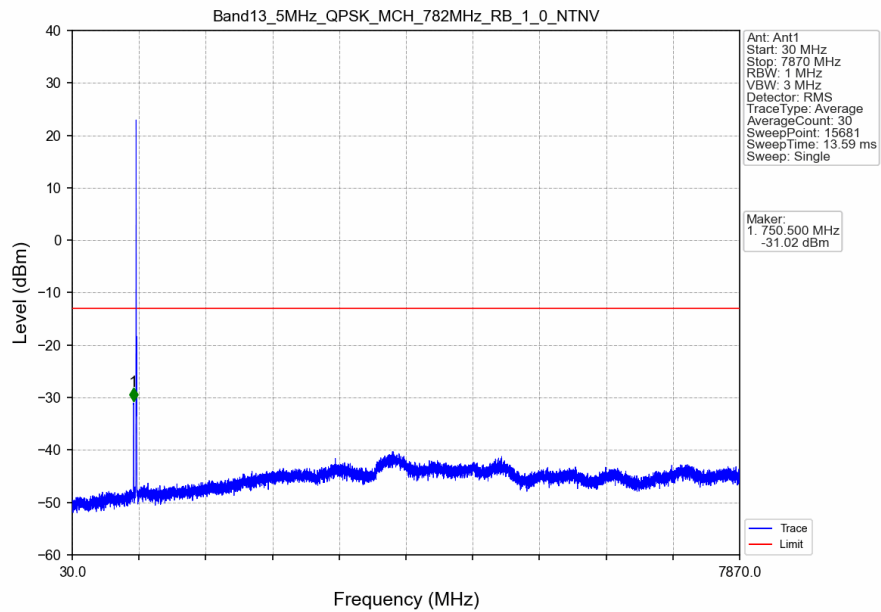
5.2.1 B13_5MHz



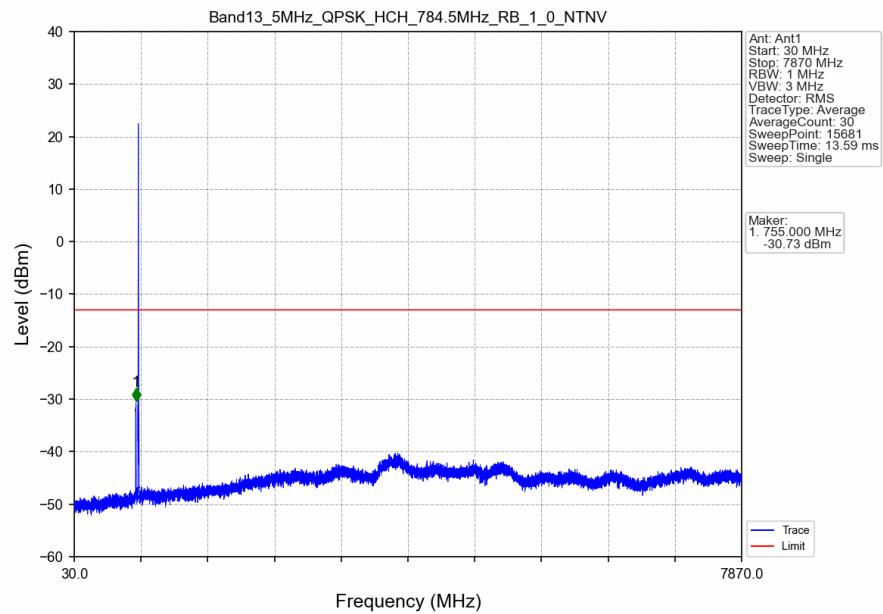
Band13 5MHz QPSK LCH 779.5MHz RB 25 0 NTN



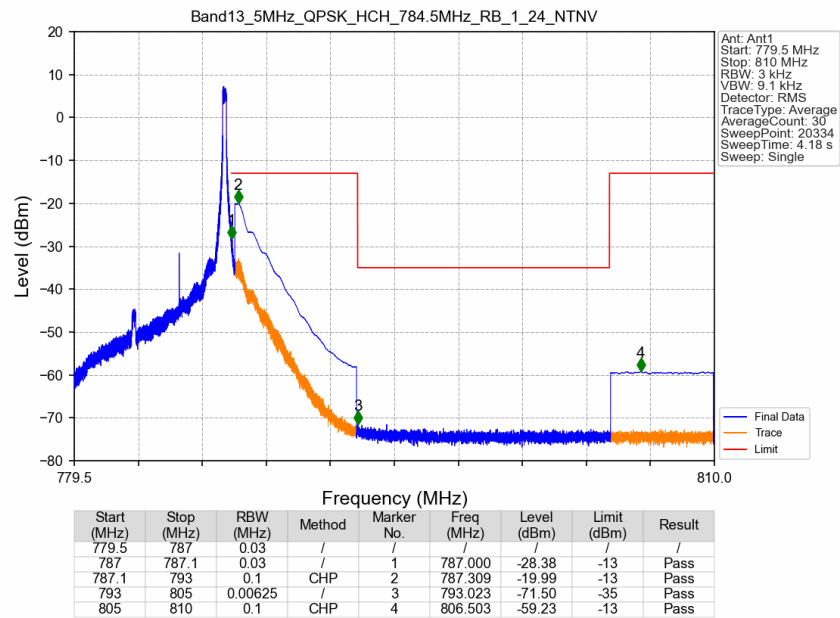
Band13 5MHz QPSK MCH 782MHz RB 1 0 NTN



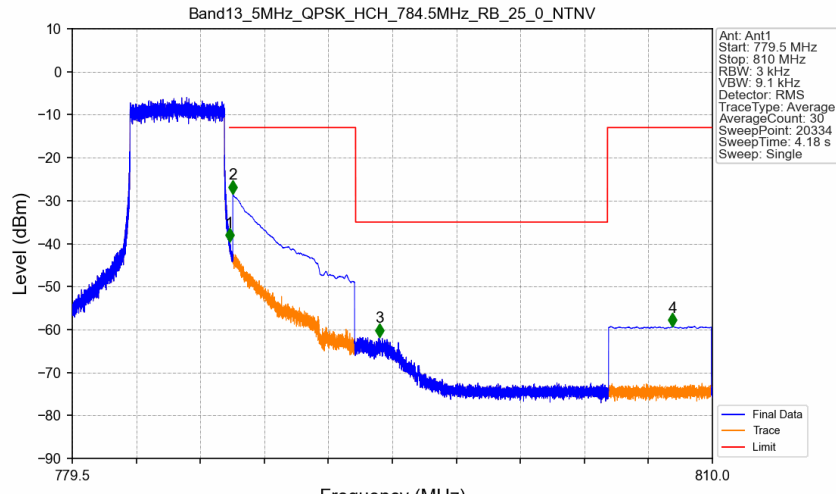
Band13 5MHz QPSK HCH 784.5MHz RB 1 0 NTV



Band13 5MHz QPSK HCH 784.5MHz RB 1 24 NTV

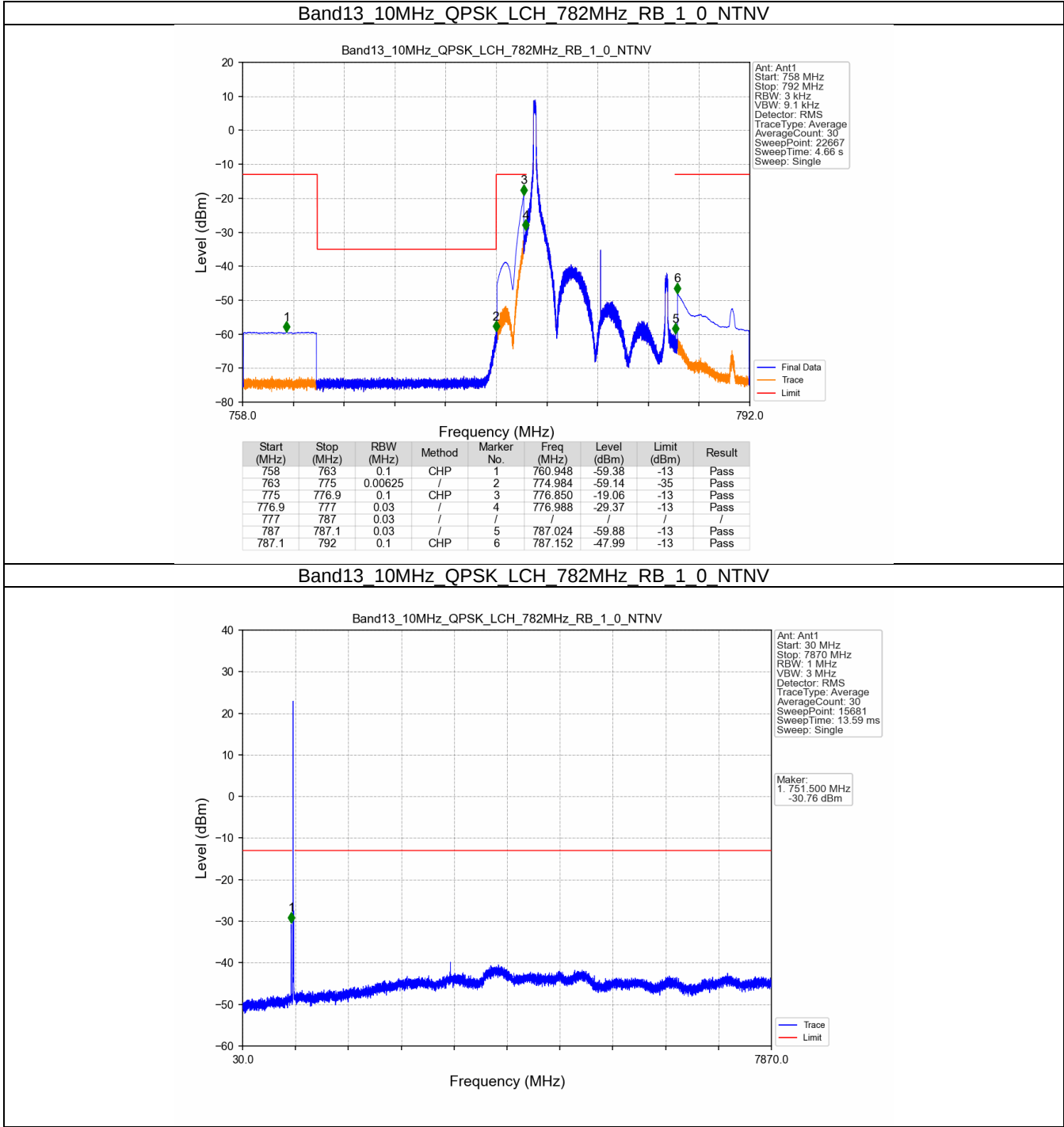


Band13 5MHz QPSK HCH 784.5MHz RB 25 0_NTNV

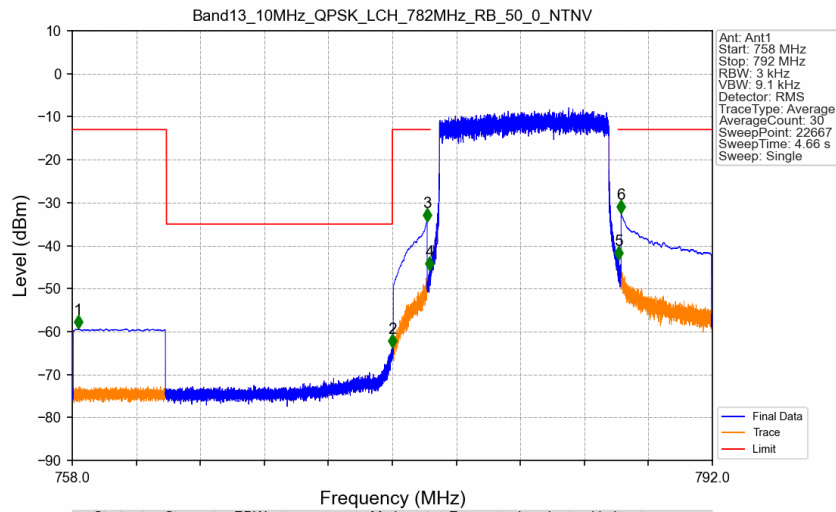


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	/	/	/	/	/	/
787	787.1	0.03	/	1	787.000	-39.59	-13	Pass
787.1	793	0.1	CHP	2	787.150	-28.37	-13	Pass
793	805	0.00625	/	3	794.152	-61.70	-35	Pass
805	810	0.1	CHP	4	808.107	-59.27	-13	Pass

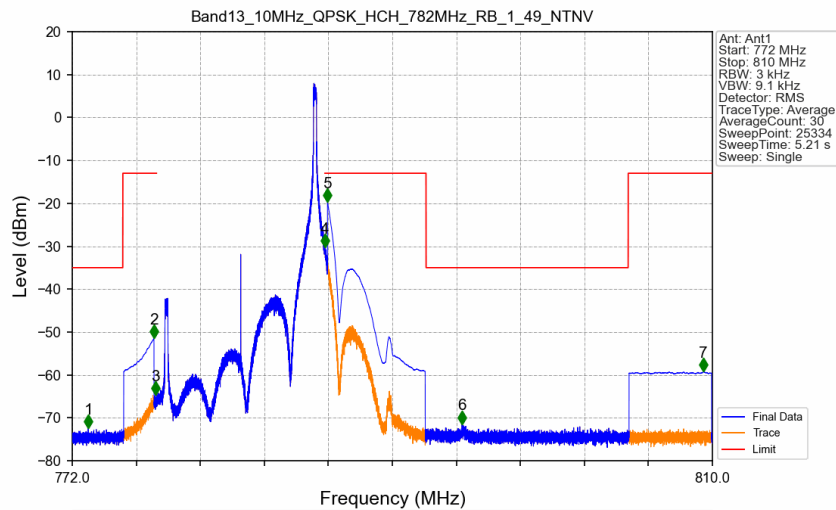
5.2.2 B13_10MHz



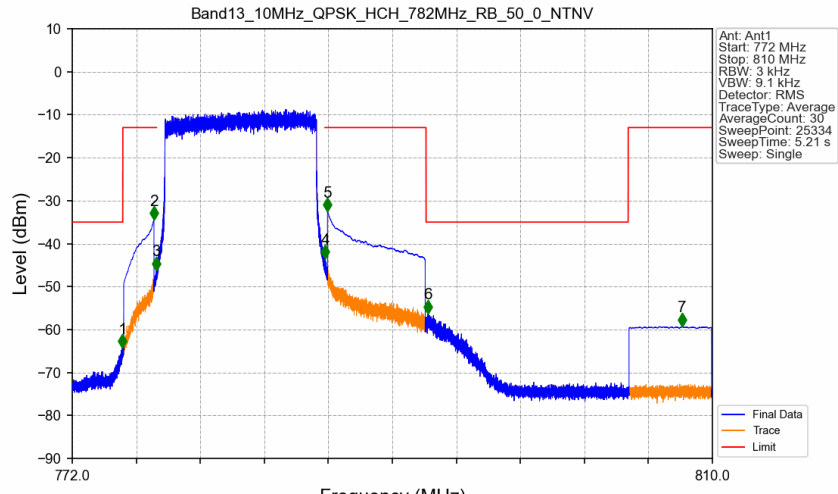
Band13 10MHz QPSK LCH 782MHz RB 50 0 NTNV



Band13 10MHz QPSK HCH 782MHz RB 1 49 NTNV



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	/	1	774.969	-64.27	-35	Pass
775	776.9	0.1	CHP	2	776.850	-34.50	-13	Pass
776.9	777	0.03	/	3	776.998	-46.17	-13	Pass
777	787	0.03	/	/	/	/	/	/
787	787.1	0.03	/	4	787.017	-43.43	-13	Pass
787.1	793	0.1	CHP	5	787.150	-32.54	-13	Pass
793	805	0.00625	/	6	793.107	-56.22	-35	Pass
805	810	0.1	CHP	7	808.216	-59.23	-13	Pass