

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	23.56	4.45	25.86	<=34.77	Pass
			13	24.62	4.45	26.92	<=34.77	Pass
			24	23.86	4.45	26.16	<=34.77	Pass
		12	0	23.06	4.45	25.36	<=34.77	Pass
			6	23.37	4.45	25.67	<=34.77	Pass
			13	23.29	4.45	25.59	<=34.77	Pass
		25	0	23.18	4.45	25.48	<=34.77	Pass
	782	1	0	24.85	4.45	27.15	<=34.77	Pass
			13	23.23	4.45	25.53	<=34.77	Pass
			24	23.06	4.45	25.36	<=34.77	Pass
		12	0	23.06	4.45	25.36	<=34.77	Pass
			6	22.51	4.45	24.81	<=34.77	Pass
			13	22.18	4.45	24.48	<=34.77	Pass
		25	0	22.45	4.45	24.75	<=34.77	Pass
	784.5	1	0	23.59	4.45	25.89	<=34.77	Pass
			13	23.03	4.45	25.33	<=34.77	Pass
			24	23.57	4.45	25.87	<=34.77	Pass
		12	0	22.18	4.45	24.48	<=34.77	Pass
			6	22.19	4.45	24.49	<=34.77	Pass
			13	22.41	4.45	24.71	<=34.77	Pass
		25	0	22.28	4.45	24.58	<=34.77	Pass
16QAM	779.5	1	0	22.68	4.45	24.98	<=34.77	Pass
			13	23.79	4.45	26.09	<=34.77	Pass
			24	22.99	4.45	25.29	<=34.77	Pass
		12	0	22.12	4.45	24.42	<=34.77	Pass
			6	22.43	4.45	24.73	<=34.77	Pass
			13	22.24	4.45	24.54	<=34.77	Pass
		25	0	22.21	4.45	24.51	<=34.77	Pass
	782	1	0	23.98	4.45	26.28	<=34.77	Pass
			13	22.50	4.45	24.80	<=34.77	Pass
			24	22.41	4.45	24.71	<=34.77	Pass
		12	0	22.06	4.45	24.36	<=34.77	Pass
			6	21.44	4.45	23.74	<=34.77	Pass
			13	21.17	4.45	23.47	<=34.77	Pass
		25	0	21.44	4.45	23.74	<=34.77	Pass
	784.5	1	0	22.80	4.45	25.10	<=34.77	Pass
			13	22.40	4.45	24.70	<=34.77	Pass
			24	22.96	4.45	25.26	<=34.77	Pass
		12	0	21.16	4.45	23.46	<=34.77	Pass
			6	21.17	4.45	23.47	<=34.77	Pass
			13	21.34	4.45	23.64	<=34.77	Pass
		25	0	21.28	4.45	23.58	<=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	24.01	4.45	26.31	<=34.77	Pass
			25	23.32	4.45	25.62	<=34.77	Pass
			49	23.60	4.45	25.90	<=34.77	Pass
		25	0	23.18	4.45	25.48	<=34.77	Pass
			13	22.38	4.45	24.68	<=34.77	Pass
			25	22.23	4.45	24.53	<=34.77	Pass
		50	0	22.40	4.45	24.70	<=34.77	Pass
16QAM	782	1	0	23.19	4.45	25.49	<=34.77	Pass
			25	22.69	4.45	24.99	<=34.77	Pass
			49	23.01	4.45	25.31	<=34.77	Pass
		12	0	23.43	4.45	25.73	<=34.77	Pass
			19	22.46	4.45	24.76	<=34.77	Pass
			38	22.37	4.45	24.67	<=34.77	Pass
		27	0	22.16	4.45	24.46	<=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	9.200	0.0118	-2.5 to 2.5	Pass
					3.85	11.300	0.0145	-2.5 to 2.5	Pass
					4.43	4.800	0.0061	-2.5 to 2.5	Pass
				-30	3.85	4.100	0.0052	-2.5 to 2.5	Pass
				-20	3.85	4.000	0.0051	-2.5 to 2.5	Pass
				-10	3.85	8.600	0.0110	-2.5 to 2.5	Pass
				0	3.85	7.600	0.0097	-2.5 to 2.5	Pass
				10	3.85	10.900	0.0139	-2.5 to 2.5	Pass
				30	3.85	12.700	0.0162	-2.5 to 2.5	Pass
				40	3.85	12.200	0.0156	-2.5 to 2.5	Pass
				50	3.85	9.400	0.0120	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band13_OBW

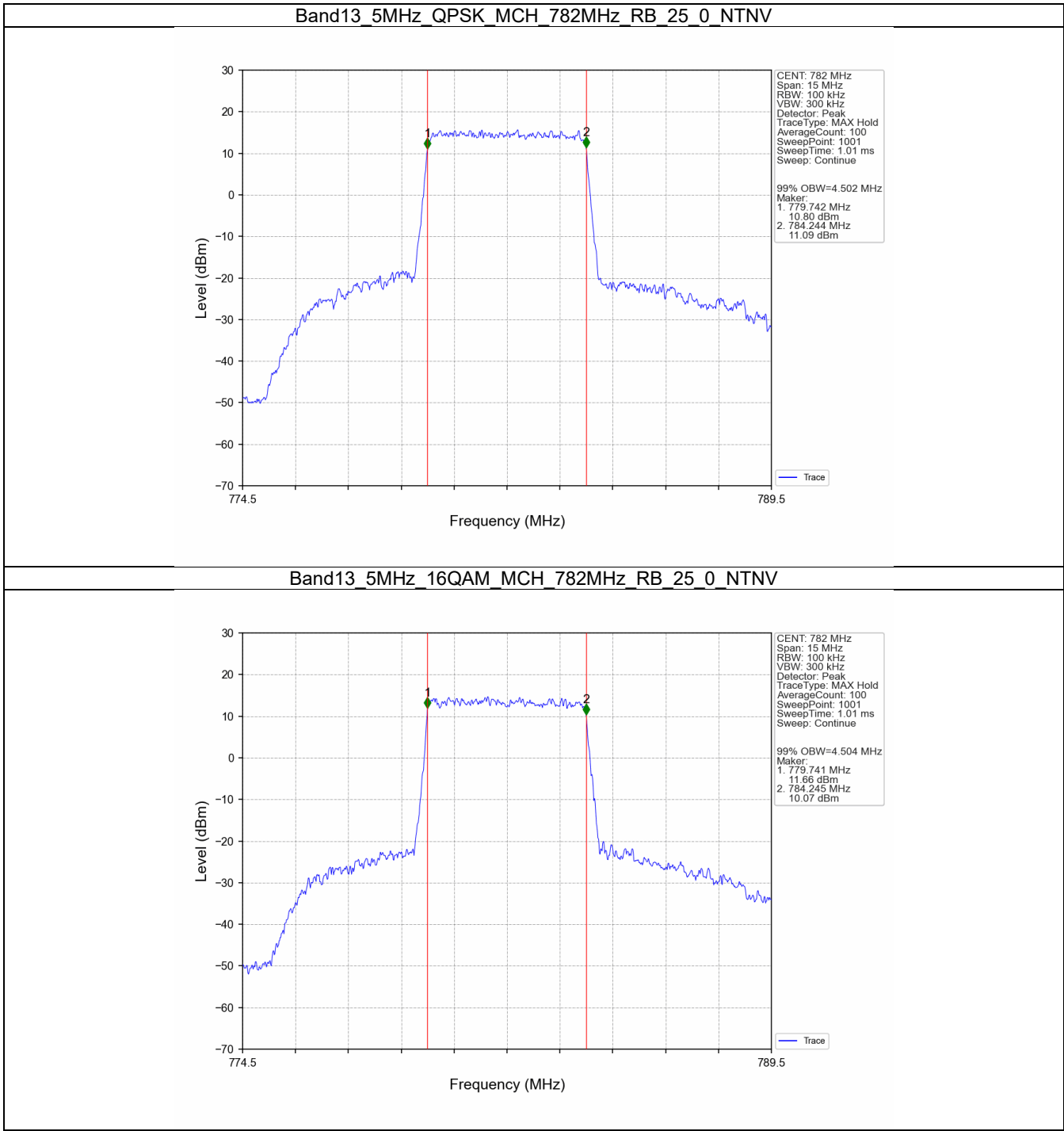
Band: 13 / NTV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.502	/	Pass
	16QAM	782	25	0	4.504	/	Pass
10	QPSK	782	50	0	8.997	/	Pass
	16QAM	782	27	0	4.947	/	Pass

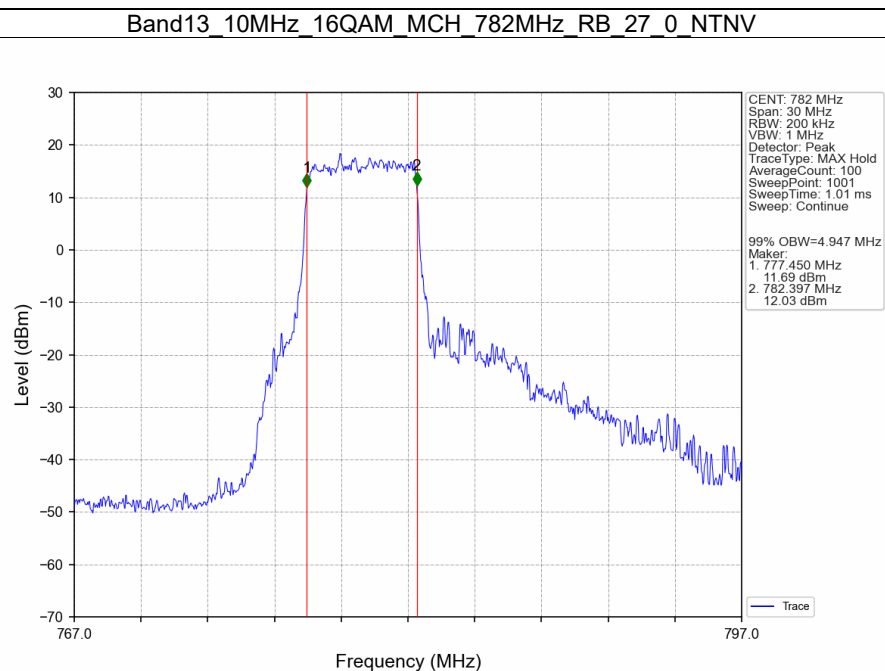
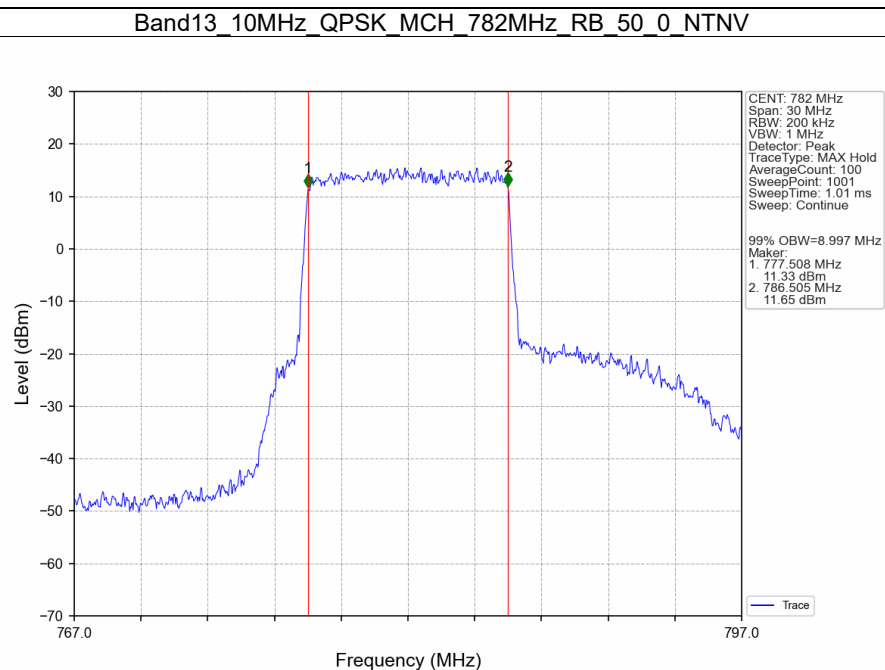
3.1.2 Band13_XDB

Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.970	/	Pass
	16QAM	782	25	0	4.981	/	Pass
10	QPSK	782	50	0	9.724	/	Pass
	16QAM	782	27	0	5.592	/	Pass

3.2 Test Graph

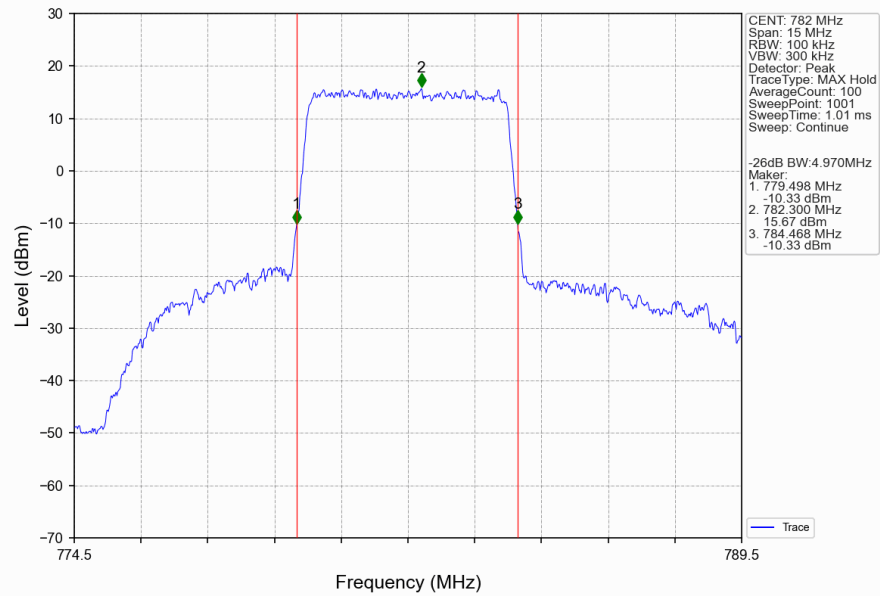
3.2.1 Band13_OBW



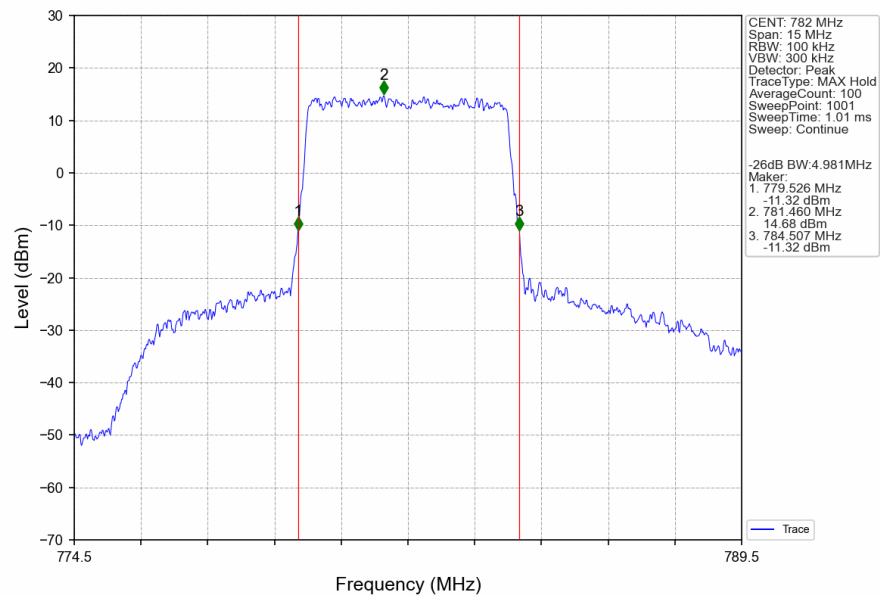


3.2.2 Band13_XDB

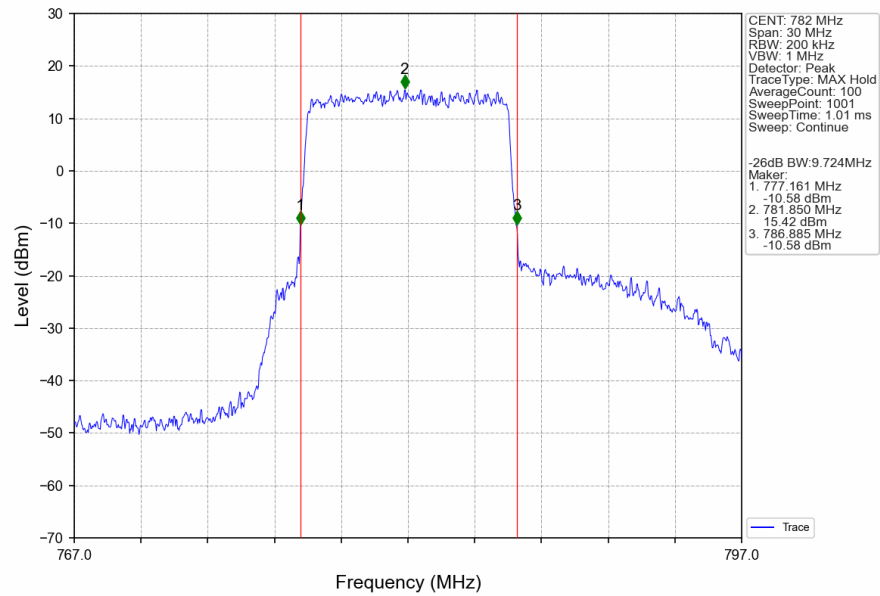
Band13_5MHz_QPSK_MCH_782MHz_RB_25_0_NTNV



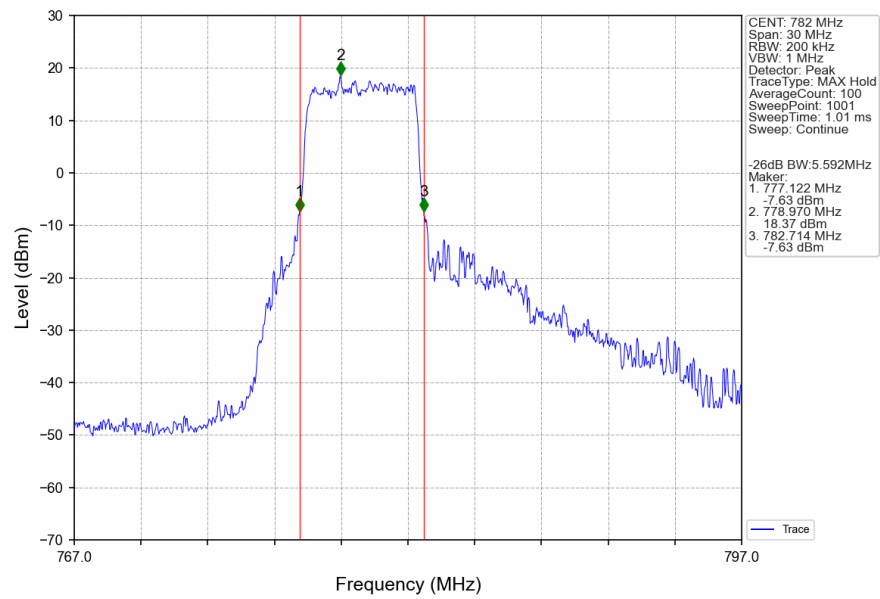
Band13_5MHz_16QAM_MCH_782MHz_RB_25_0_NTNV



Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



Band13_10MHz_16QAM_MCH_782MHz_RB_27_0_NTNV



4. Peak-Average Ratio

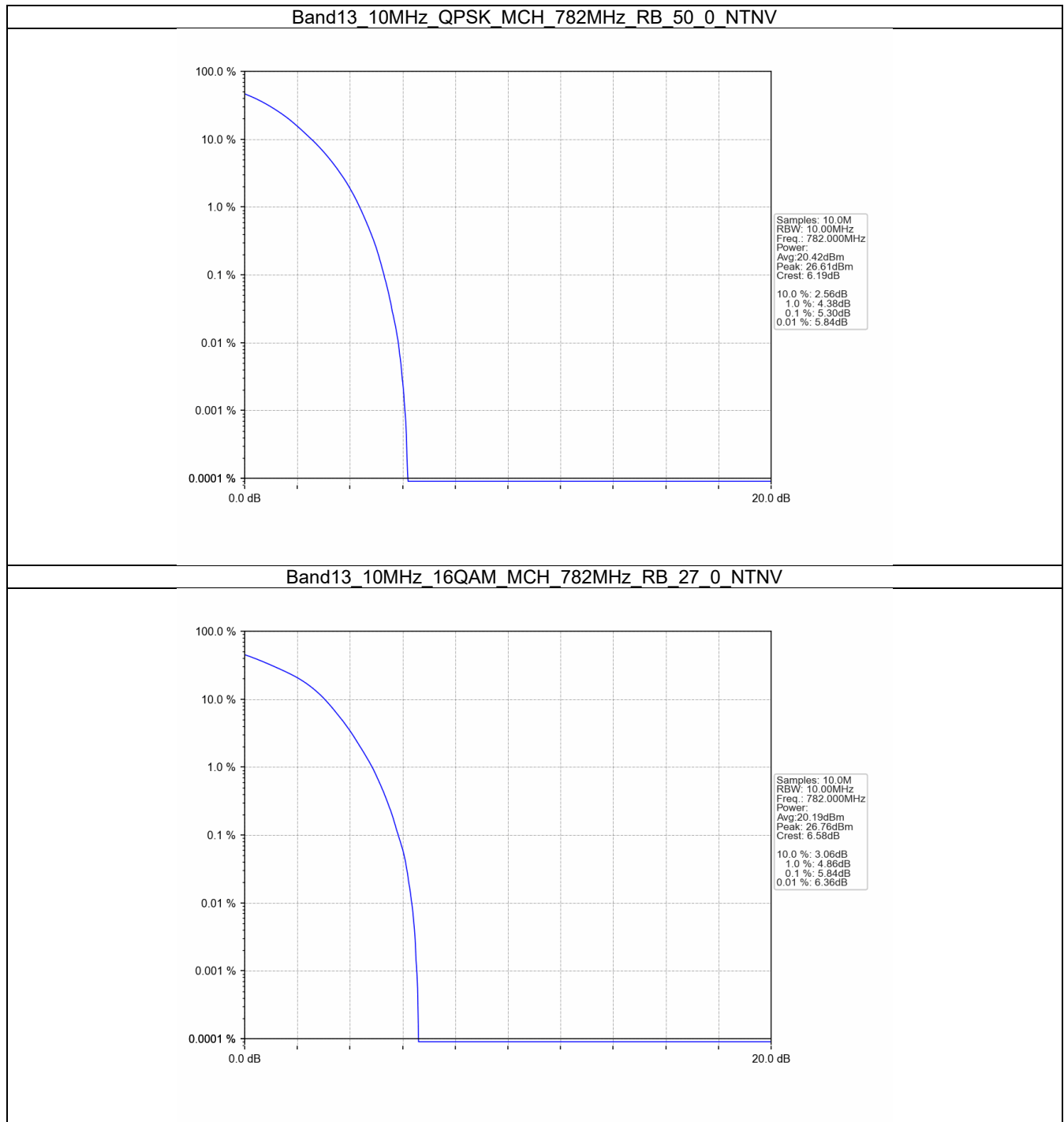
4.1 Test Result

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	5.30	<=13	Pass
16QAM	782	27	0	5.84	<=13	Pass

4.2 Test Graph

4.2.1 B13_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B13_5MHz

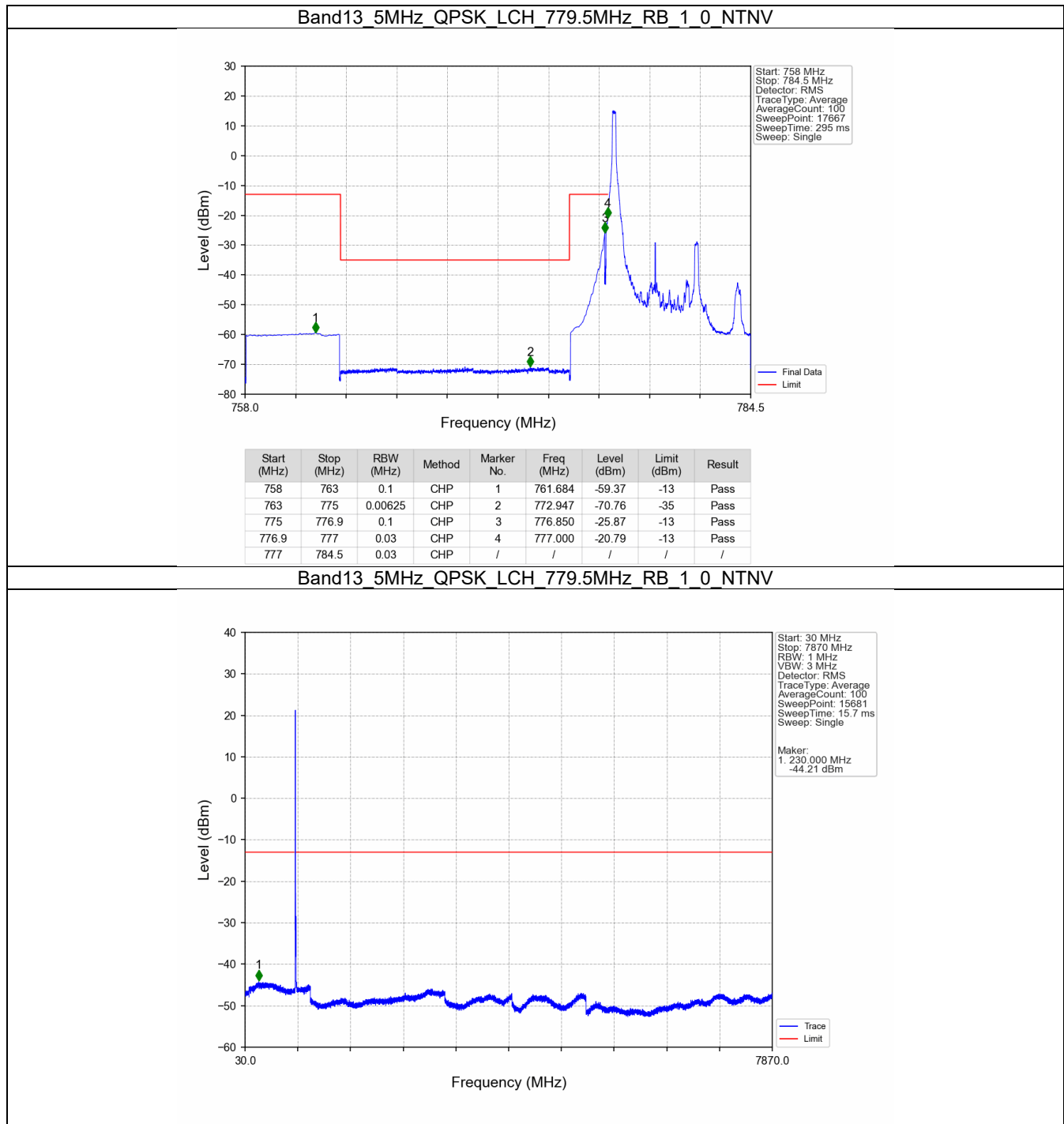
Band: 13 / Bandwidth: 5MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B13_10MHz

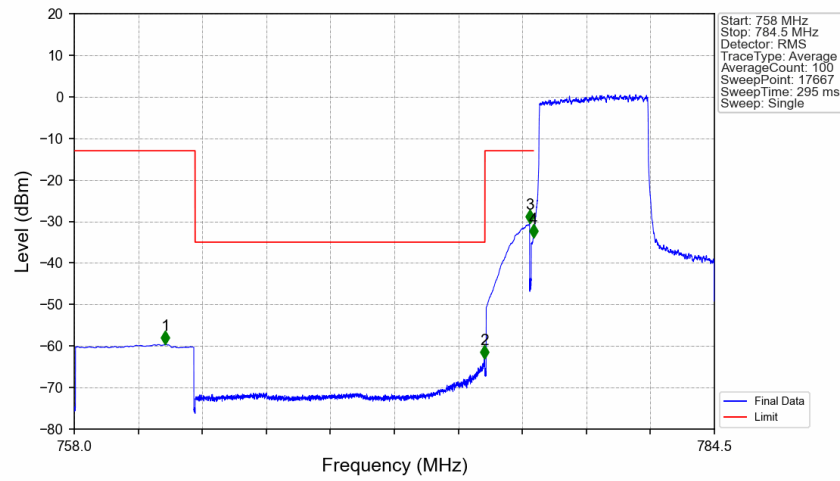
Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B13_5MHz

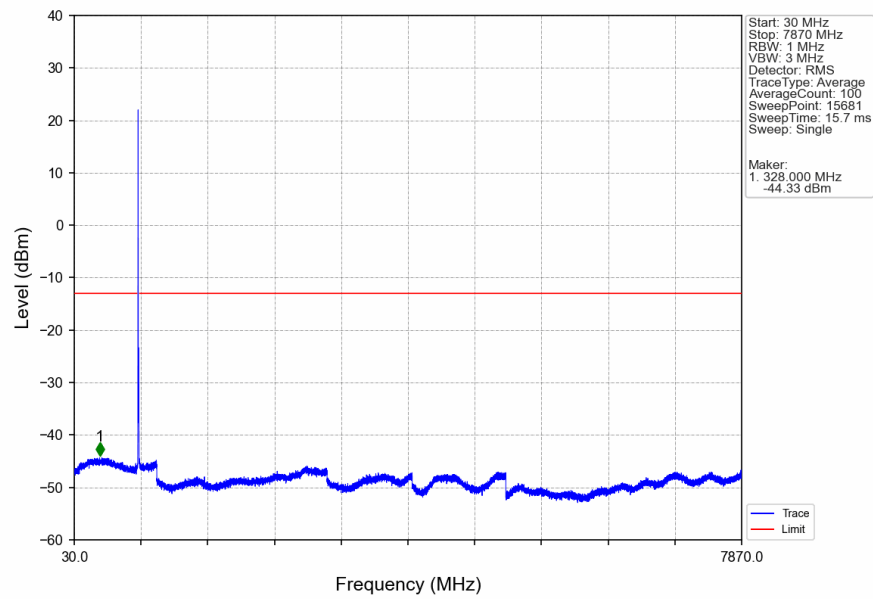


Band13_5MHz_QPSK_LCH_779.5MHz_RB_25_0_NTNV

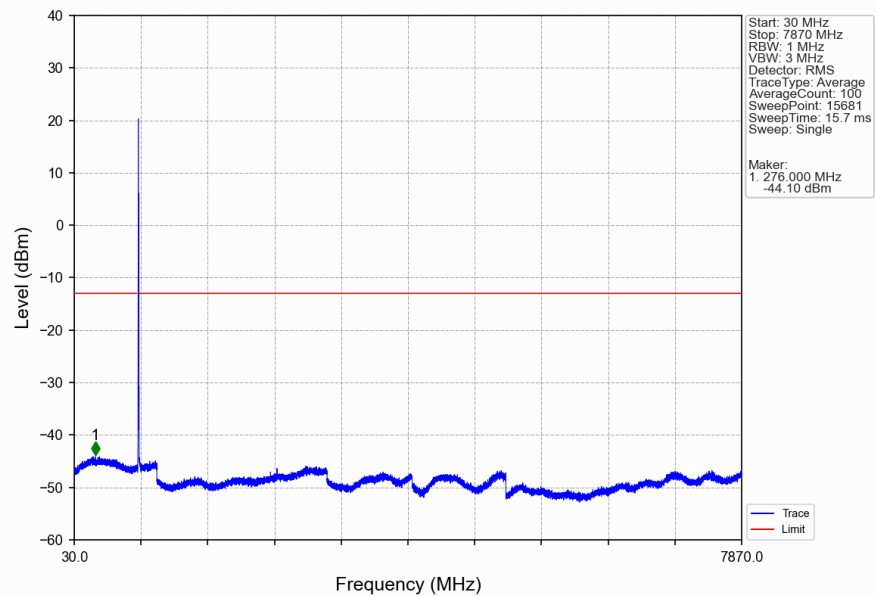


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	761.768	-59.63	-13	Pass
763	775	0.00625	CHP	2	774.990	-63.06	-35	Pass
775	776.9	0.1	CHP	3	776.850	-30.43	-13	Pass
776.9	777	0.03	CHP	4	777.000	-33.93	-13	Pass
777	784.5	0.03	CHP	/	/	/	/	/

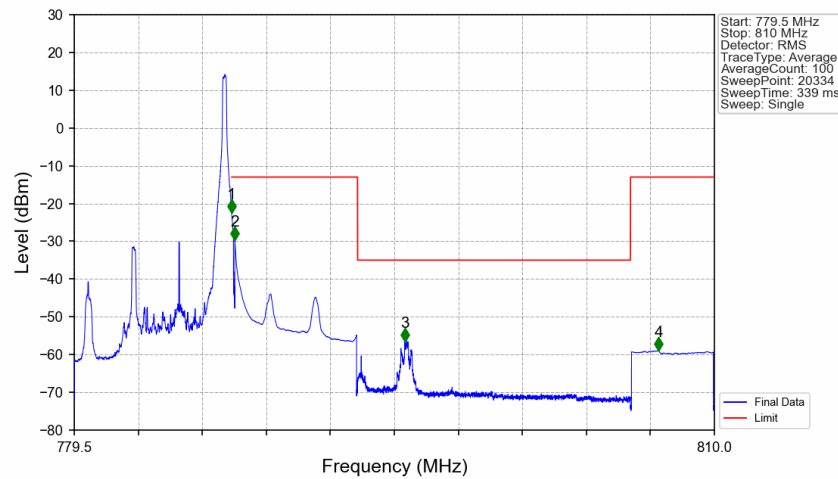
Band13_5MHz_QPSK_MCH_782MHz_RB_1_0_NTNV



Band13_5MHz_QPSK_HCH_784.5MHz_RB_1_0_NTNV

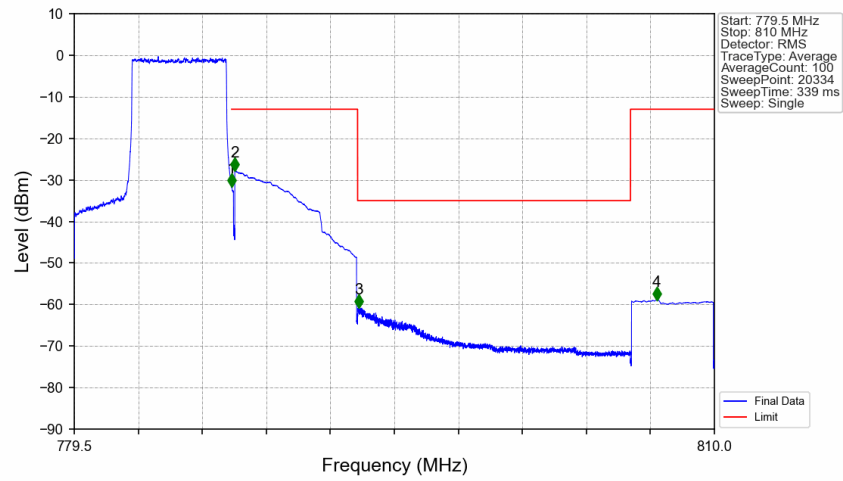


Band13_5MHz_QPSK_HCH_784.5MHz_RB_1_24_NTNV



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	-22.48	-13	Pass
787.1	793	0.1	CHP	2	787.150	-29.74	-13	Pass
793	806	0.00625	CHP	3	795.246	-56.44	-35	Pass
806	810	0.1	CHP	4	807.346	-58.93	-13	Pass

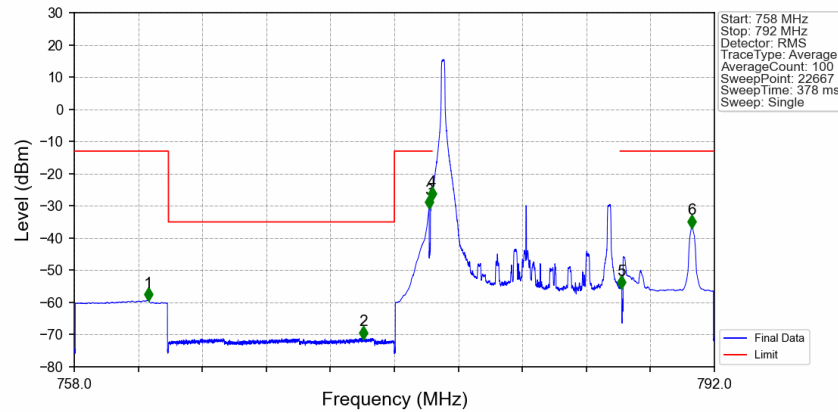
Band13_5MHz_QPSK_HCH_784.5MHz_RB_25_0_NTNV



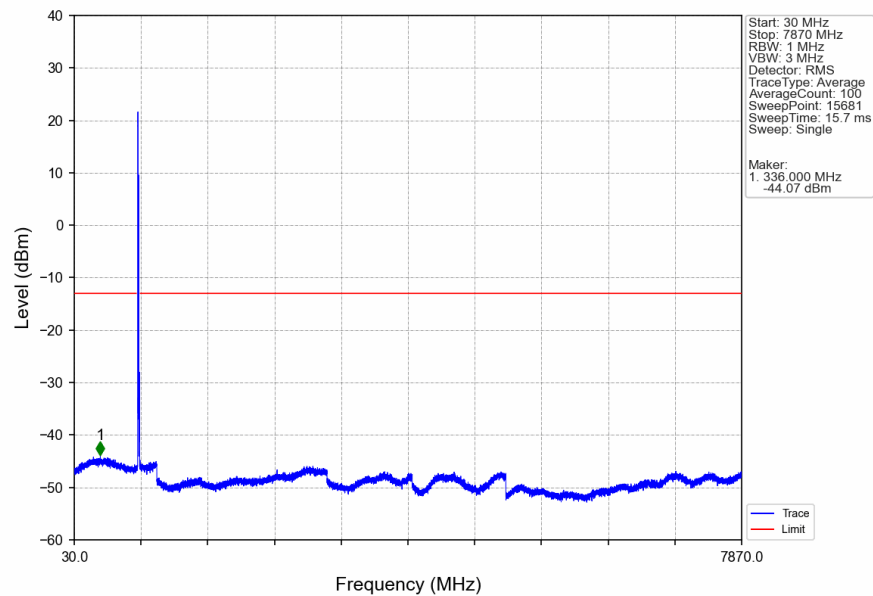
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-31.68	-13	Pass
787.1	793	0.1	CHP	2	787.150	-27.75	-13	Pass
793	806	0.00625	CHP	3	793.041	-60.77	-35	Pass
806	810	0.1	CHP	4	807.243	-58.90	-13	Pass

5.2.2 B13_10MHz

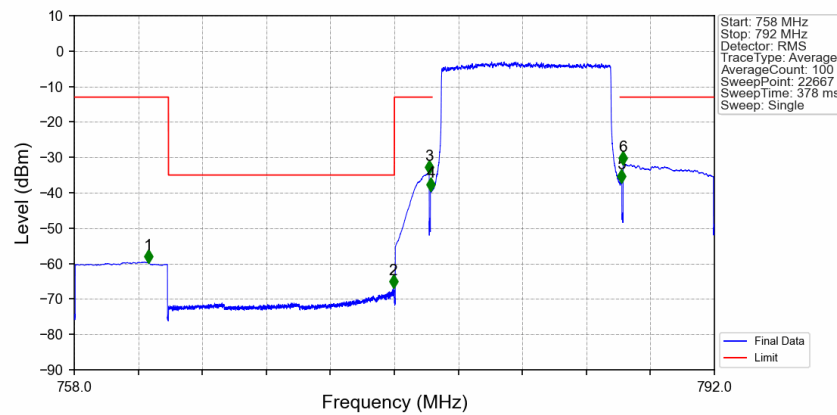
Band13_10MHz_QPSK_LCH_782MHz_RB_1_0_NTNV



Band13_10MHz_QPSK_LCH_782MHz_RB_1_0_NTNV

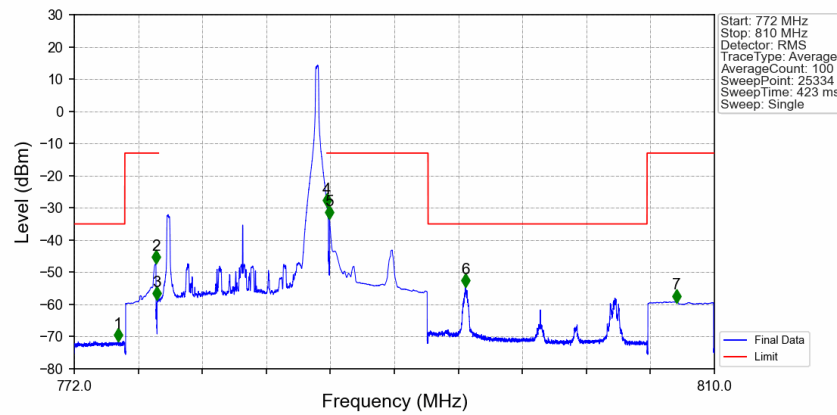


Band13_10MHz_QPSK_LCH_782MHz_RB_50_0_NTNV



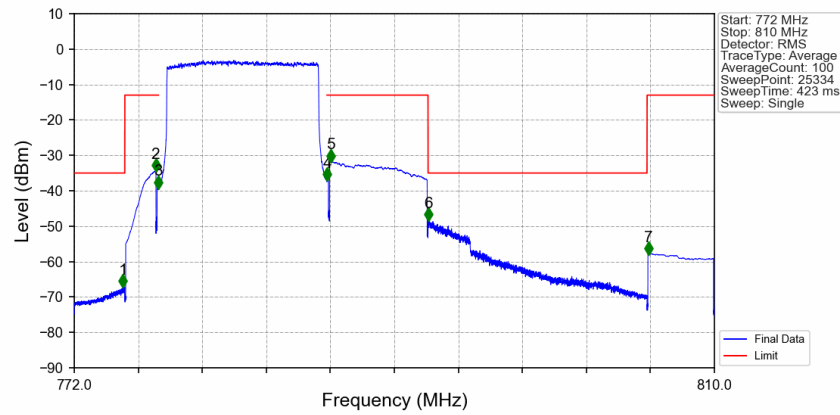
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	761.933	-59.51	-13	Pass
763	775	0.00625	CHP	2	774.943	-66.59	-35	Pass
775	776.9	0.1	CHP	3	776.838	-34.29	-13	Pass
776.9	777	0.03	CHP	4	776.932	-39.13	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.062	-36.79	-13	Pass
787.1	792	0.1	CHP	6	787.150	-31.82	-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	774.585	-71.20	-35	Pass
775	776.9	0.1	CHP	2	776.847	-46.99	-13	Pass
776.9	777	0.03	CHP	3	776.916	-58.19	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-29.37	-13	Pass
787.1	793	0.1	CHP	5	787.150	-33.10	-13	Pass
793	806	0.00625	CHP	6	795.223	-54.29	-35	Pass
806	810	0.1	CHP	7	807.759	-59.08	-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	774.882	-67.08	-35	Pass
775	776.9	0.1	CHP	2	776.836	-34.41	-13	Pass
776.9	777	0.03	CHP	3	777.000	-39.17	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.020	-36.92	-13	Pass
787.1	793	0.1	CHP	5	787.240	-31.70	-13	Pass
793	806	0.00625	CHP	6	793.017	-48.23	-35	Pass
806	810	0.1	CHP	7	806.094	-57.78	-13	Pass

-End of the Appendix-