

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B13_5MHz_ERP

Band: 13 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	779.5	1	0	20.45	-3.54	14.76	<=34.77	Pass
			13	20.47	-3.54	14.78	<=34.77	Pass
			24	20.59	-3.54	14.90	<=34.77	Pass
		12	0	19.52	-3.54	13.83	<=34.77	Pass
			6	19.50	-3.54	13.81	<=34.77	Pass
			13	19.52	-3.54	13.83	<=34.77	Pass
		25	0	19.54	-3.54	13.85	<=34.77	Pass
	782	1	0	20.46	-3.54	14.77	<=34.77	Pass
			13	20.88	-3.54	15.19	<=34.77	Pass
			24	20.67	-3.54	14.98	<=34.77	Pass
		12	0	19.54	-3.54	13.85	<=34.77	Pass
			6	19.77	-3.54	14.08	<=34.77	Pass
			13	19.88	-3.54	14.19	<=34.77	Pass
		25	0	19.71	-3.54	14.02	<=34.77	Pass
	784.5	1	0	20.76	-3.54	15.07	<=34.77	Pass
			13	20.80	-3.54	15.11	<=34.77	Pass
			24	20.62	-3.54	14.93	<=34.77	Pass
		12	0	19.76	-3.54	14.07	<=34.77	Pass
			6	19.81	-3.54	14.12	<=34.77	Pass
			13	19.70	-3.54	14.01	<=34.77	Pass
		25	0	19.72	-3.54	14.03	<=34.77	Pass
16QAM	779.5	1	0	19.63	-3.54	13.94	<=34.77	Pass
			13	19.75	-3.54	14.06	<=34.77	Pass
			24	19.81	-3.54	14.12	<=34.77	Pass
		12	0	18.43	-3.54	12.74	<=34.77	Pass
			6	18.45	-3.54	12.76	<=34.77	Pass
			13	18.49	-3.54	12.80	<=34.77	Pass
		25	0	18.51	-3.54	12.82	<=34.77	Pass
	782	1	0	19.59	-3.54	13.90	<=34.77	Pass
			13	20.19	-3.54	14.50	<=34.77	Pass
			24	19.97	-3.54	14.28	<=34.77	Pass
		12	0	18.51	-3.54	12.82	<=34.77	Pass
			6	18.77	-3.54	13.08	<=34.77	Pass
			13	18.88	-3.54	13.19	<=34.77	Pass
		25	0	18.70	-3.54	13.01	<=34.77	Pass
	784.5	1	0	20.07	-3.54	14.38	<=34.77	Pass
			13	20.15	-3.54	14.46	<=34.77	Pass
			24	19.96	-3.54	14.27	<=34.77	Pass
		12	0	18.75	-3.54	13.06	<=34.77	Pass
			6	18.80	-3.54	13.11	<=34.77	Pass
			13	18.55	-3.54	12.86	<=34.77	Pass
		25	0	18.70	-3.54	13.01	<=34.77	Pass
64QAM	779.5	1	0	18.58	-3.54	12.89	<=34.77	Pass
			13	18.65	-3.54	12.96	<=34.77	Pass
			24	18.75	-3.54	13.06	<=34.77	Pass
		12	0	17.57	-3.54	11.88	<=34.77	Pass

		25	6	17.60	-3.54	11.91	<=34.77	Pass
			13	17.57	-3.54	11.88	<=34.77	Pass
			0	17.61	-3.54	11.92	<=34.77	Pass
	782	1	0	18.47	-3.54	12.78	<=34.77	Pass
			13	18.95	-3.54	13.26	<=34.77	Pass
			24	18.63	-3.54	12.94	<=34.77	Pass
		12	0	17.65	-3.54	11.96	<=34.77	Pass
			6	17.88	-3.54	12.19	<=34.77	Pass
			13	17.88	-3.54	12.19	<=34.77	Pass
		25	0	17.79	-3.54	12.10	<=34.77	Pass
		784.5	1	0	18.87	-3.54	13.18	<=34.77
	13			18.97	-3.54	13.28	<=34.77	Pass
	24			18.87	-3.54	13.18	<=34.77	Pass
	12		0	17.69	-3.54	12.00	<=34.77	Pass
			6	17.83	-3.54	12.14	<=34.77	Pass
			13	17.64	-3.54	11.95	<=34.77	Pass
	25		0	17.73	-3.54	12.04	<=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	20.52	-3.54	14.83	<=34.77	Pass		
			25	20.88	-3.54	15.19	<=34.77	Pass		
			49	20.76	-3.54	15.07	<=34.77	Pass		
		25	0	19.56	-3.54	13.87	<=34.77	Pass		
			13	19.66	-3.54	13.97	<=34.77	Pass		
			25	19.82	-3.54	14.13	<=34.77	Pass		
		50	0	19.70	-3.54	14.01	<=34.77	Pass		
		16QAM	782	1	0	19.79	-3.54	14.10	<=34.77	Pass
					25	19.88	-3.54	14.19	<=34.77	Pass
49	19.97				-3.54	14.28	<=34.77	Pass		
25	0			18.61	-3.54	12.92	<=34.77	Pass		
	13			18.77	-3.54	13.08	<=34.77	Pass		
	25			18.81	-3.54	13.12	<=34.77	Pass		
50	0			18.66	-3.54	12.97	<=34.77	Pass		
64QAM	782			1	0	18.55	-3.54	12.86	<=34.77	Pass
					25	19.02	-3.54	13.33	<=34.77	Pass
		49	18.90		-3.54	13.21	<=34.77	Pass		
		25	0	17.65	-3.54	11.96	<=34.77	Pass		
			13	17.85	-3.54	12.16	<=34.77	Pass		
			25	17.86	-3.54	12.17	<=34.77	Pass		
		50	0	17.76	-3.54	12.07	<=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	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	782	50	0	20	LV	-3.700	-0.0047	-2.5 to 2.5	Pass
					NV	-4.300	-0.0055	-2.5 to 2.5	Pass
					HV	0.500	0.0006	-2.5 to 2.5	Pass
				-30	NV	-0.300	-0.0004	-2.5 to 2.5	Pass
				-20	NV	-2.600	-0.0033	-2.5 to 2.5	Pass
				-10	NV	-3.400	-0.0043	-2.5 to 2.5	Pass
				0	NV	-0.300	-0.0004	-2.5 to 2.5	Pass
				10	NV	-4.100	-0.0052	-2.5 to 2.5	Pass
				30	NV	-4.600	-0.0059	-2.5 to 2.5	Pass
				40	NV	-0.900	-0.0012	-2.5 to 2.5	Pass
				50	NV	-1.100	-0.0014	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band13_OBW

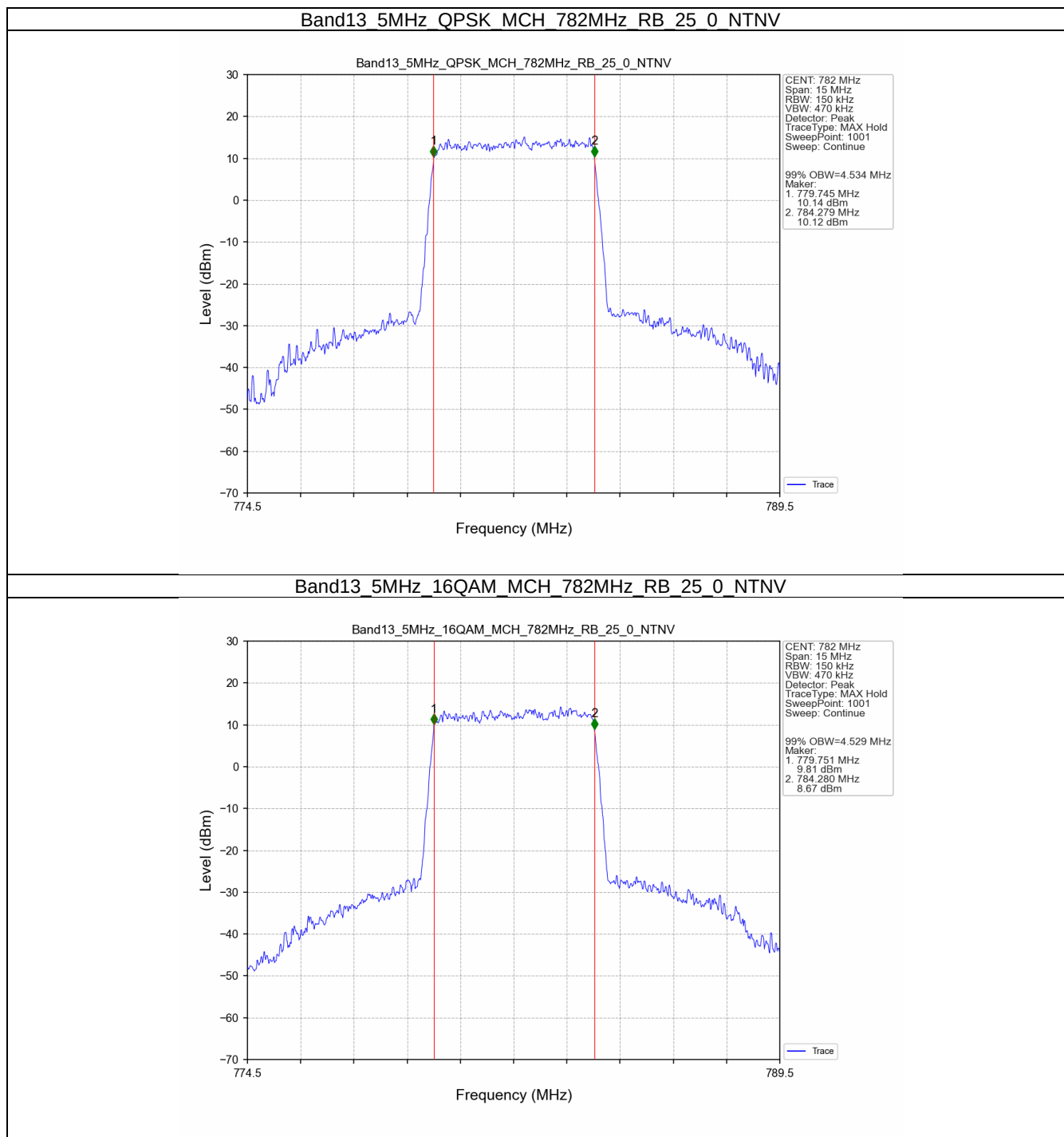
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	4.534	/	Pass
	16QAM	782	25	0	4.529	/	Pass
	64QAM	782	25	0	4.537	/	Pass
10	QPSK	782	50	0	9.063	/	Pass
	16QAM	782	50	0	9.028	/	Pass
	64QAM	782	50	0	9.041	/	Pass

3.1.2 Band13_XDB

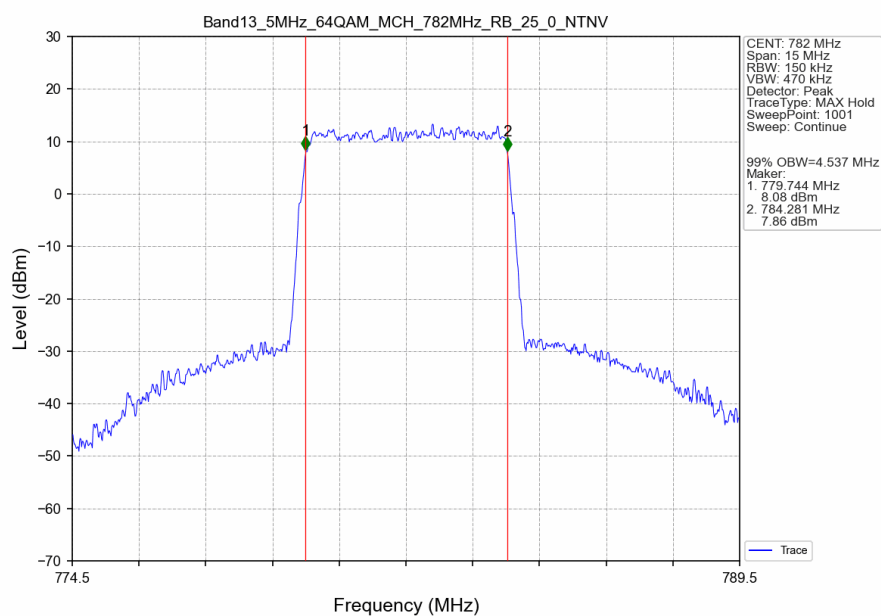
Band: 13 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	782	25	0	5.002	/	Pass
	16QAM	782	25	0	4.984	/	Pass
	64QAM	782	25	0	4.974	/	Pass
10	QPSK	782	50	0	9.906	/	Pass
	16QAM	782	50	0	9.859	/	Pass
	64QAM	782	50	0	9.881	/	Pass

3.2 Test Graph

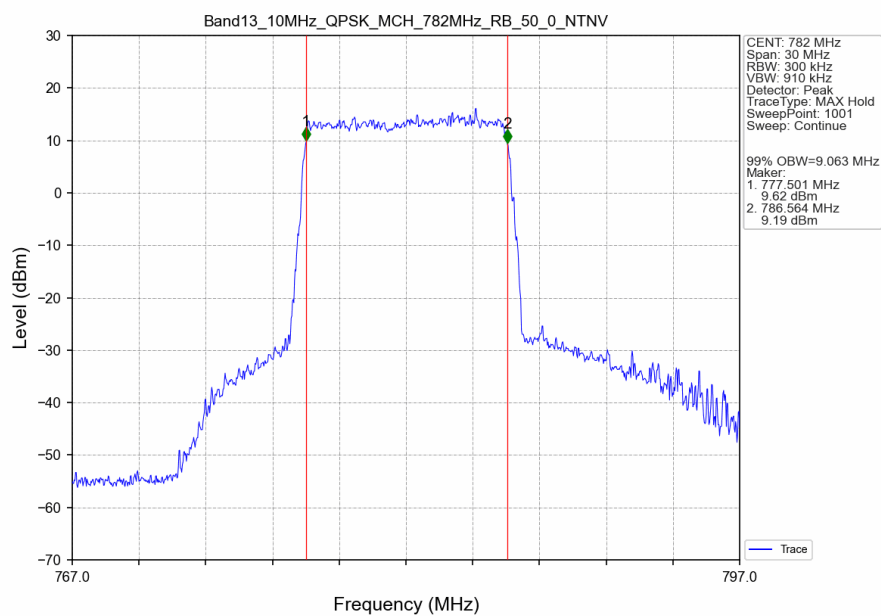
3.2.1 Band13_OBW



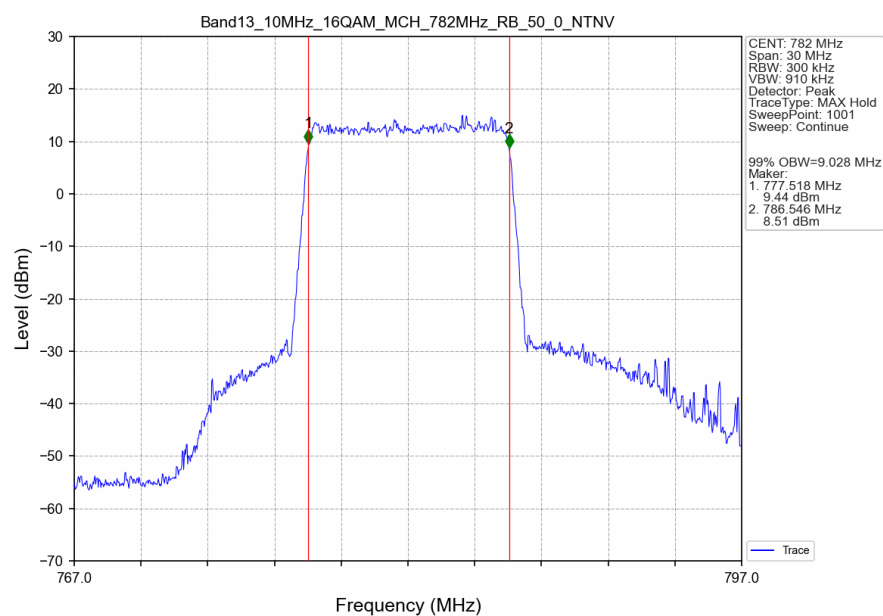
Band13_5MHz_64QAM_MCH_782MHz_RB_25_0_NTNV



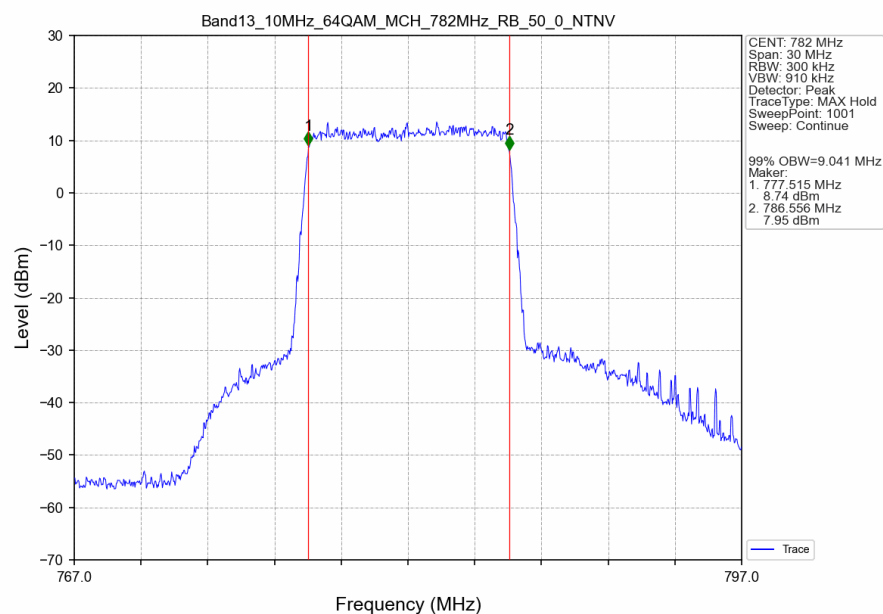
Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



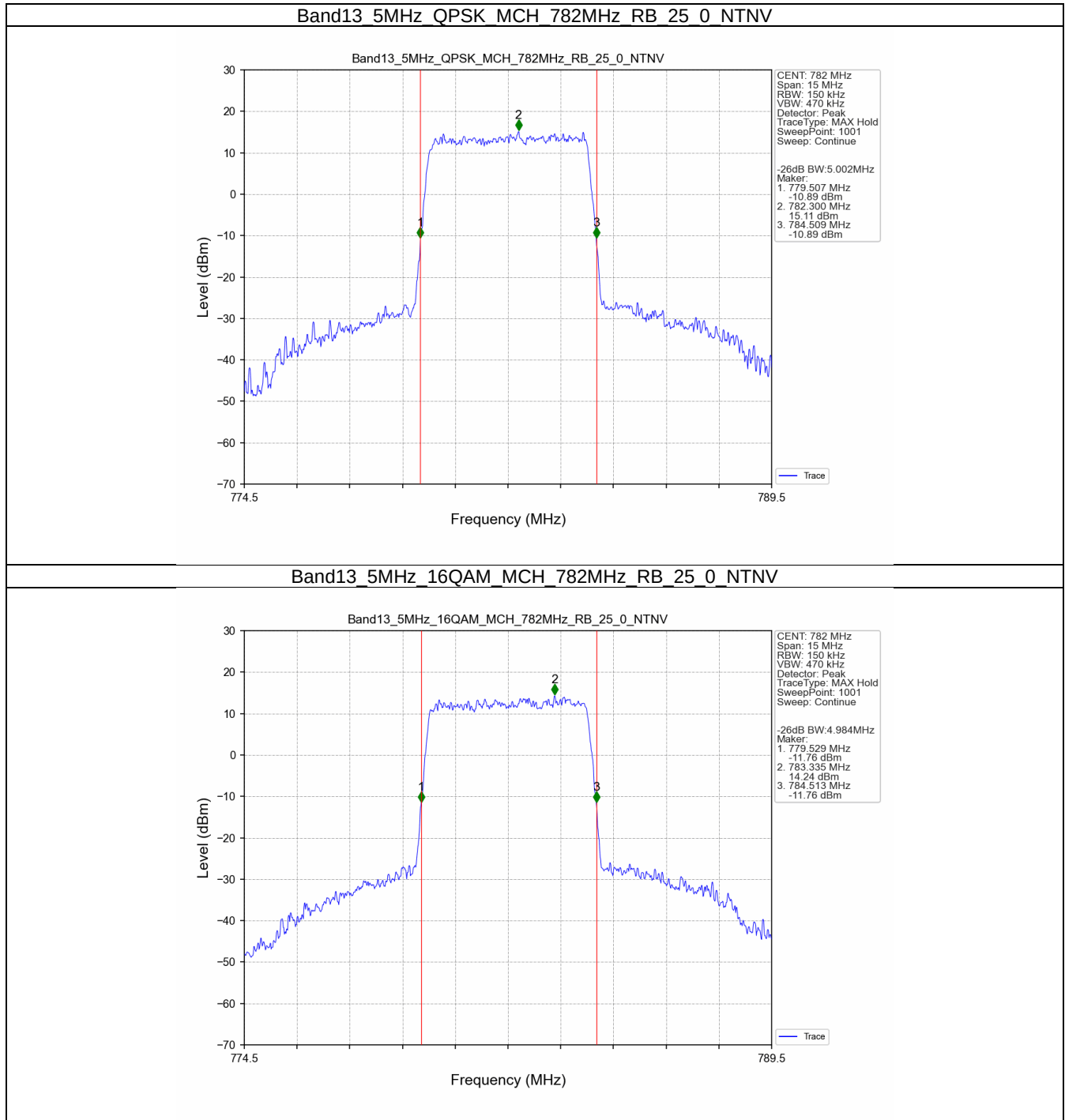
Band13_10MHz_16QAM_MCH_782MHz_RB_50_0_NTNV



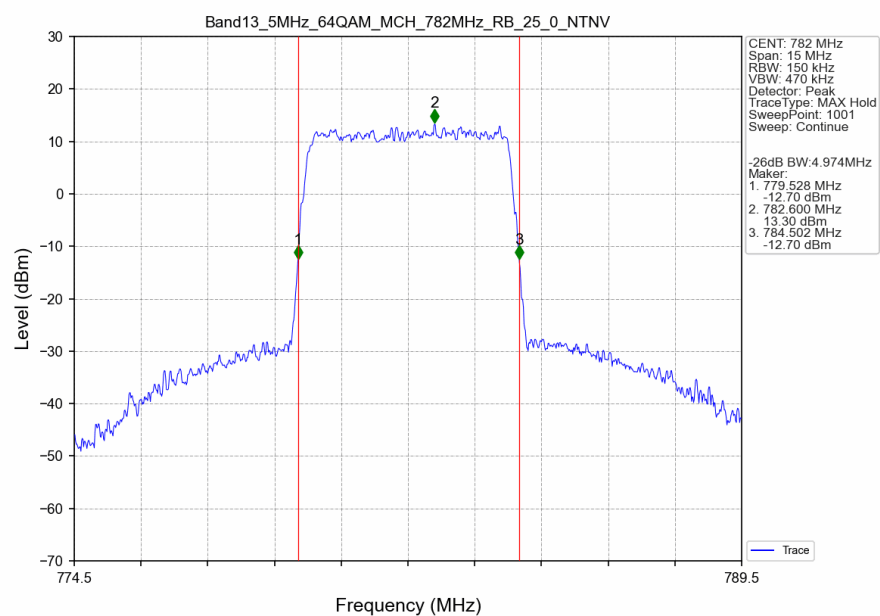
Band13_10MHz_64QAM_MCH_782MHz_RB_50_0_NTNV



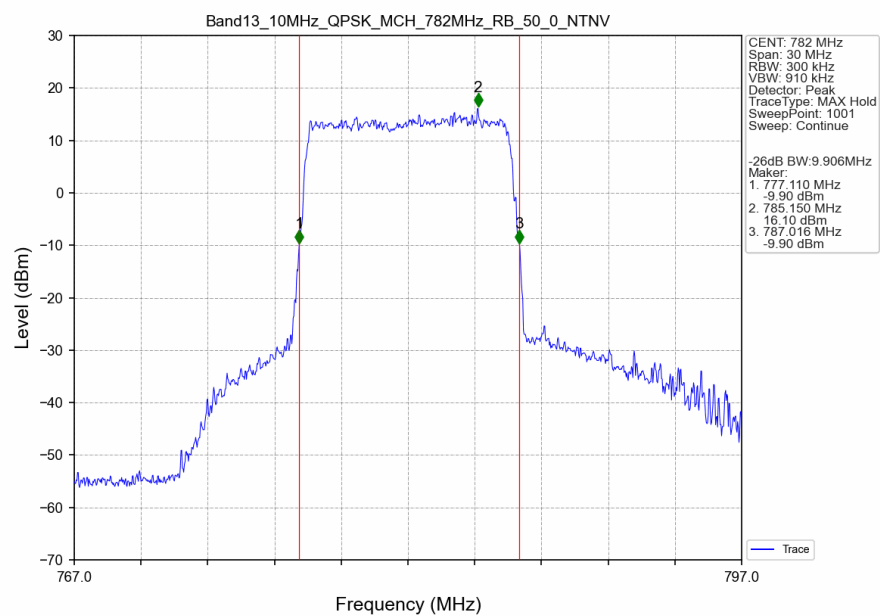
3.2.2 Band13_XDB



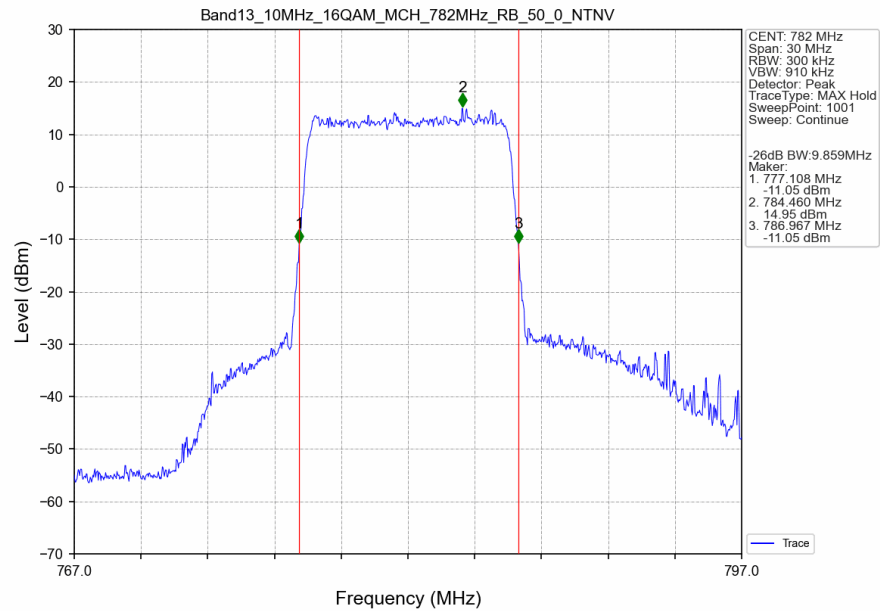
Band13_5MHz_64QAM_MCH_782MHz_RB_25_0_NTNV



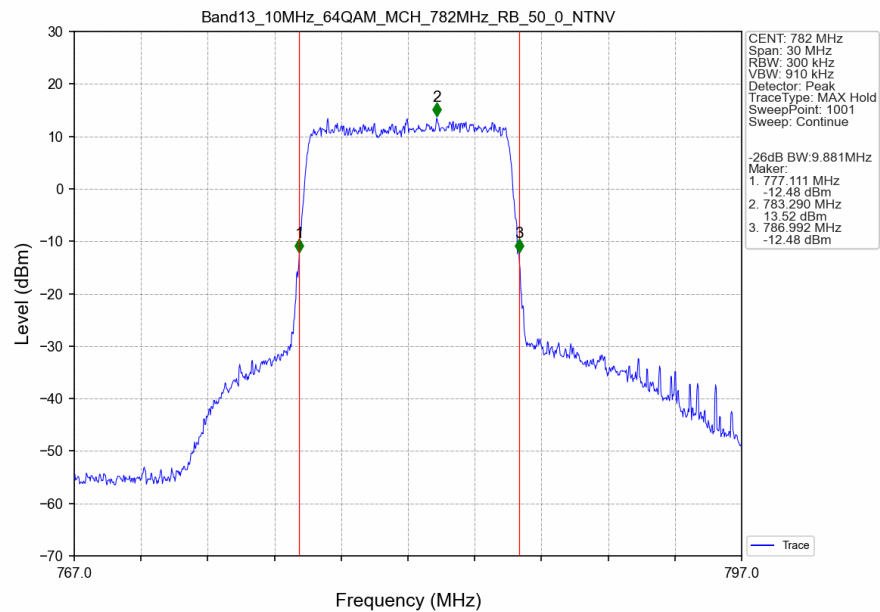
Band13_10MHz_QPSK_MCH_782MHz_RB_50_0_NTNV



Band13_10MHz_16QAM_MCH_782MHz_RB_50_0_NTNV



Band13_10MHz_64QAM_MCH_782MHz_RB_50_0_NTNV





4. Peak-Average Ratio

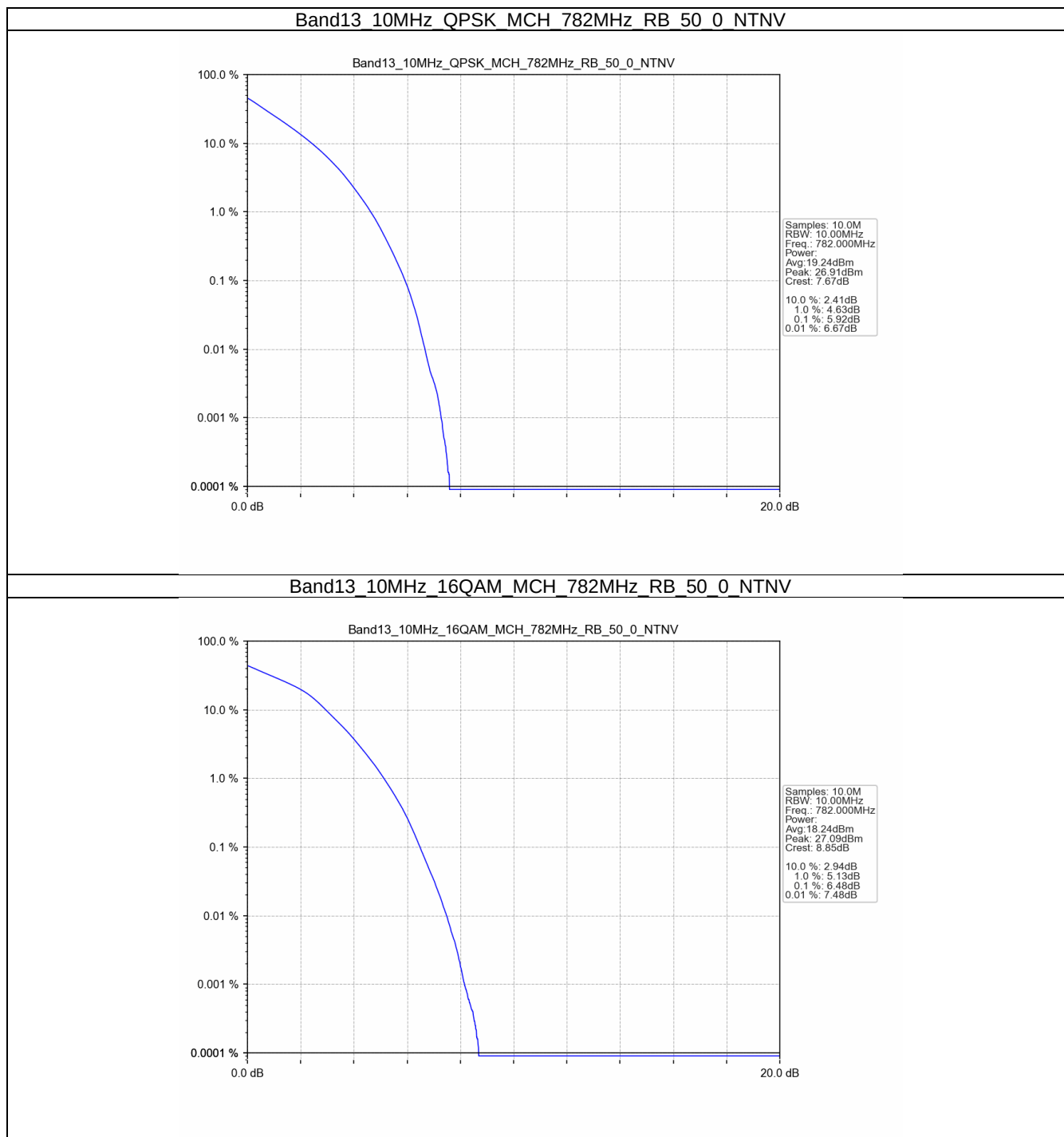
4.1 Test Result

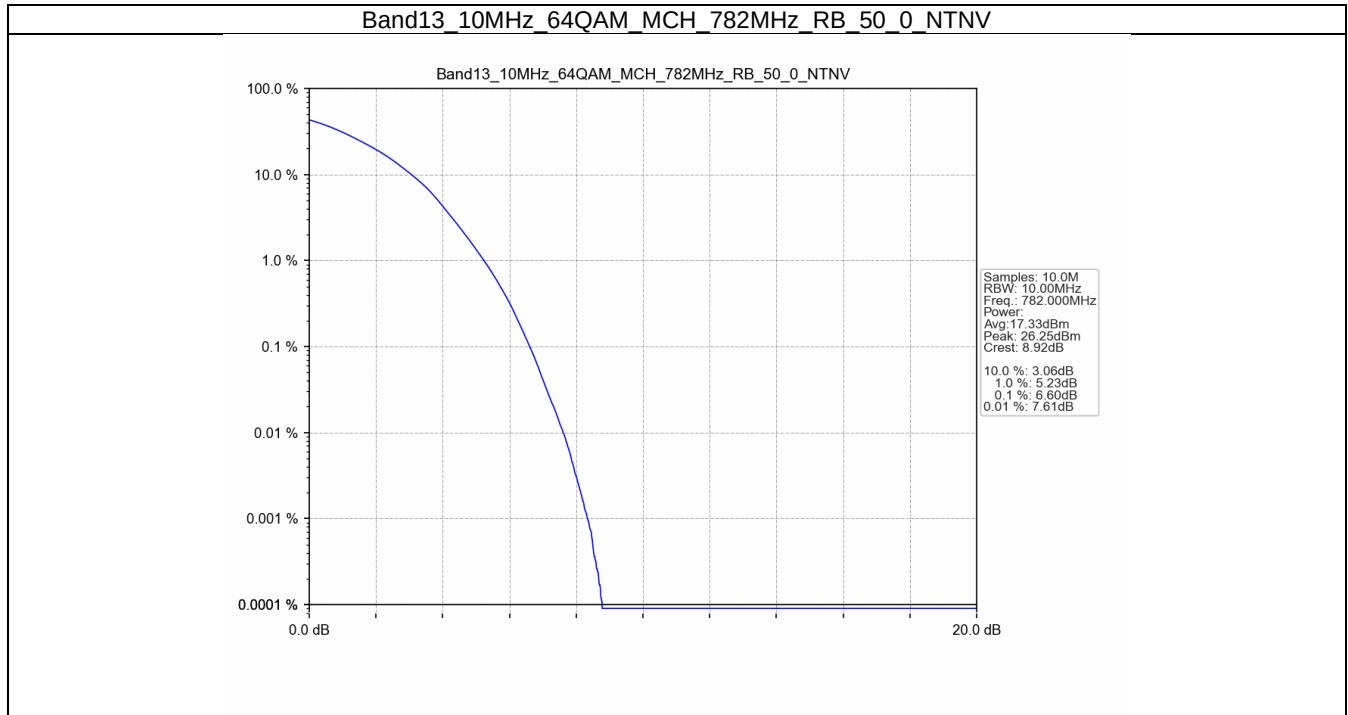
4.1.1 B13_10MHz

Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	782	50	0	5.92	<=13	Pass
16QAM	782	50	0	6.48	<=13	Pass
64QAM	782	50	0	6.60	<=13	Pass

4.2 Test Graph

4.2.1 B13_10MHz





5. Spurious Emission

5.1 Test Result

5.1.1 B13_5MHz

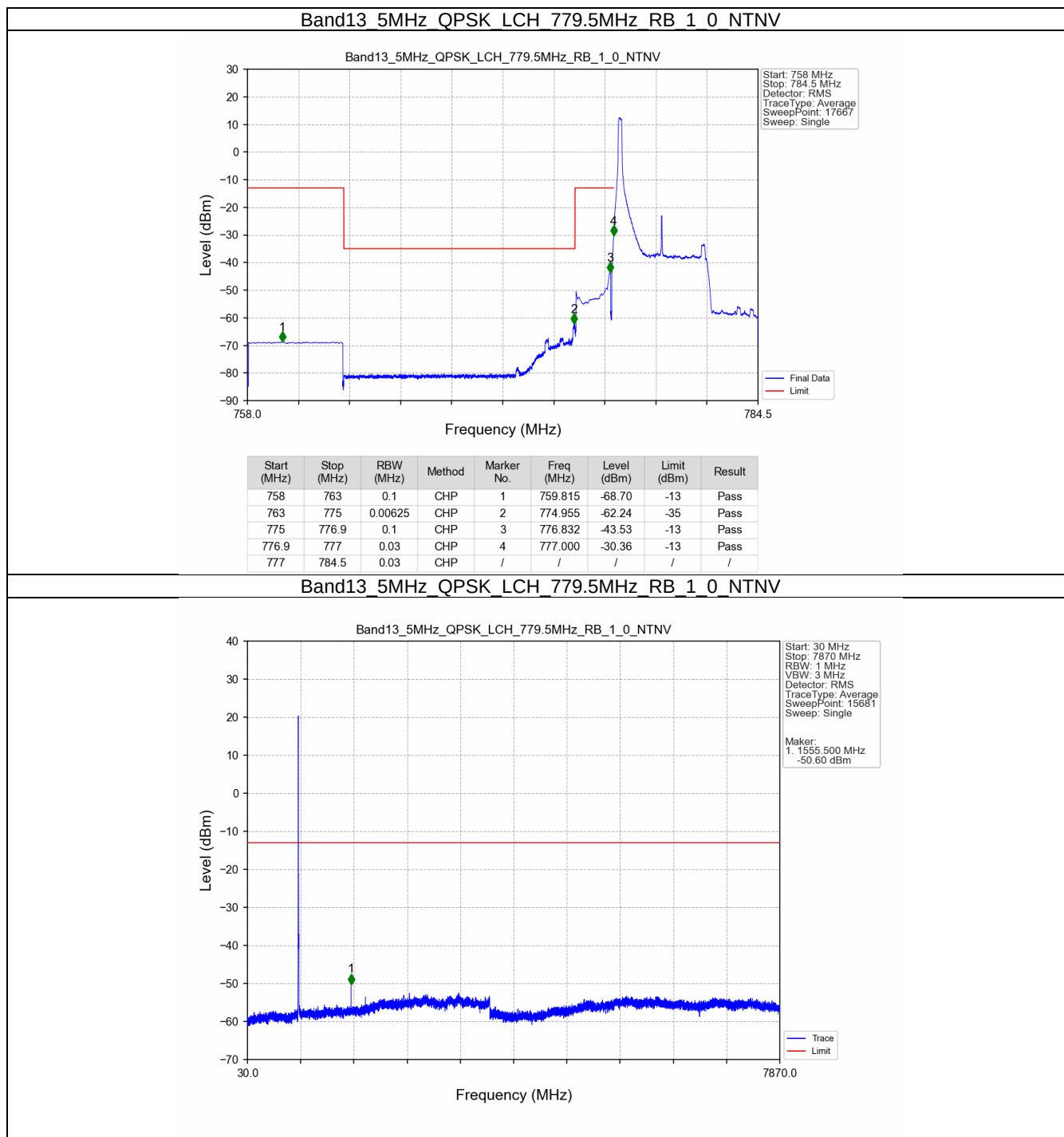
Band: 13 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	779.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	782	1	0	Refer To Test Graph		Pass
	784.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B13_10MHz

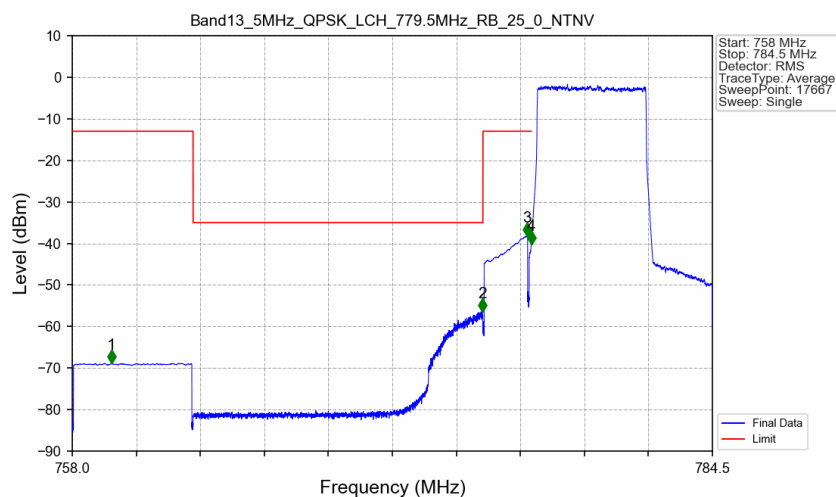
Band: 13 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	782	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	782	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

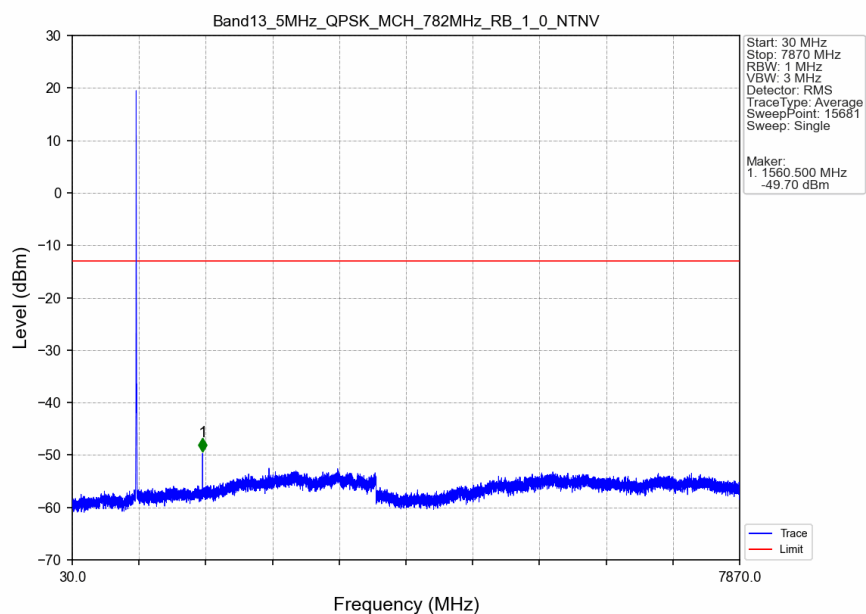
5.2.1 B13_5MHz



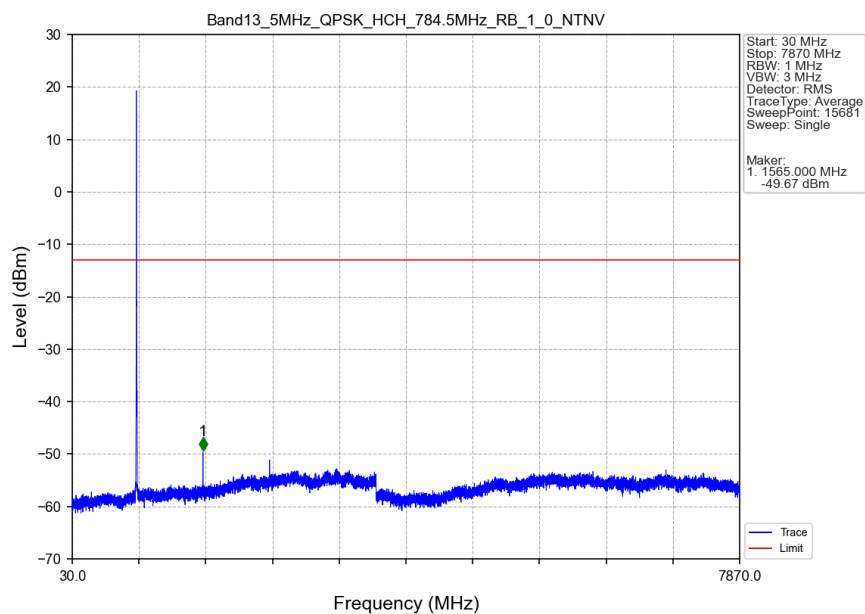
Band13_5MHz_QPSK_LCH_779.5MHz_RB_25_0_NTNV



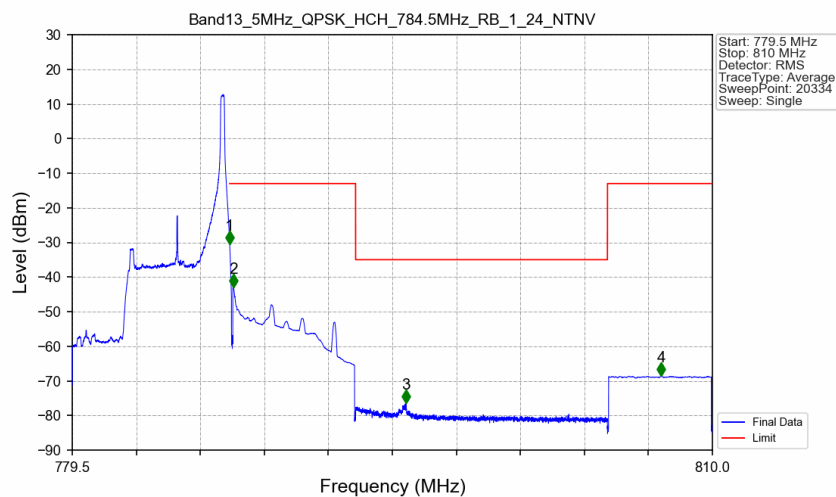
Band13_5MHz_QPSK_MCH_782MHz_RB_1_0_NTNV



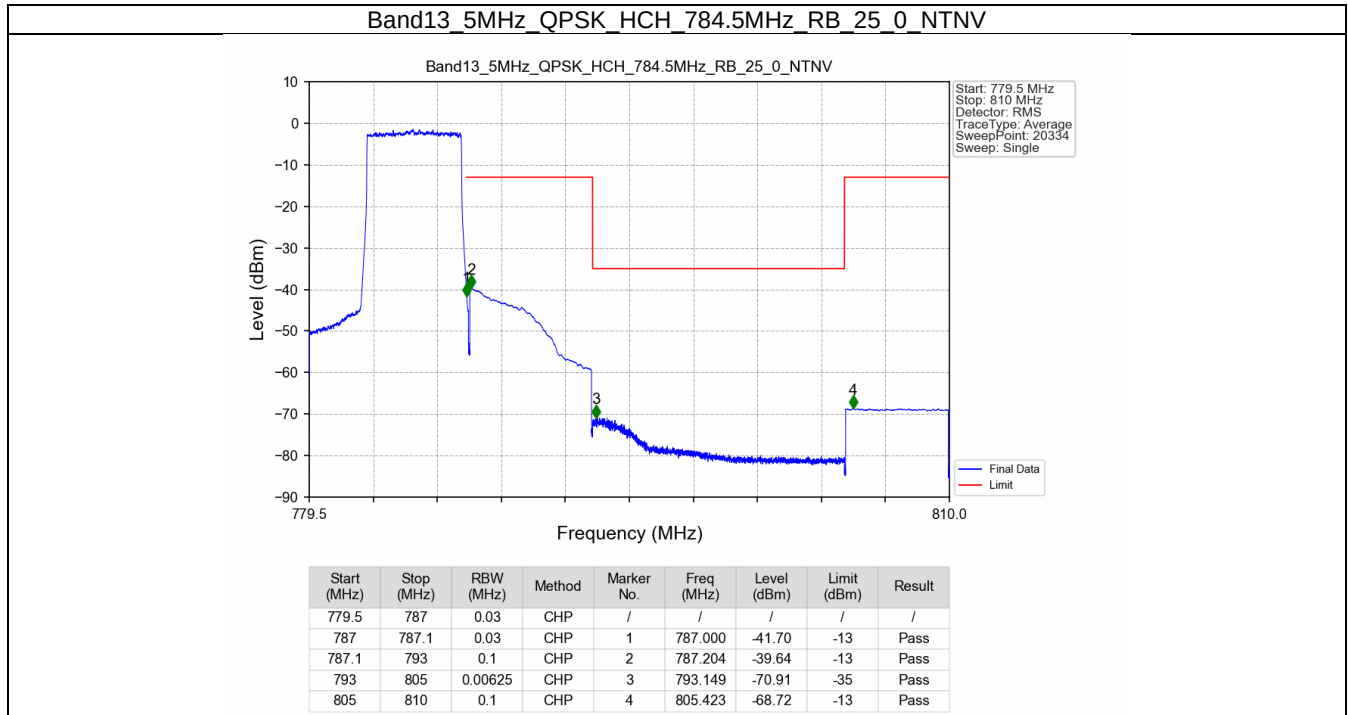
Band13_5MHz_QPSK_HCH_784.5MHz_RB_1_0_NTNV



Band13_5MHz_QPSK_HCH_784.5MHz_RB_1_24_NTNV

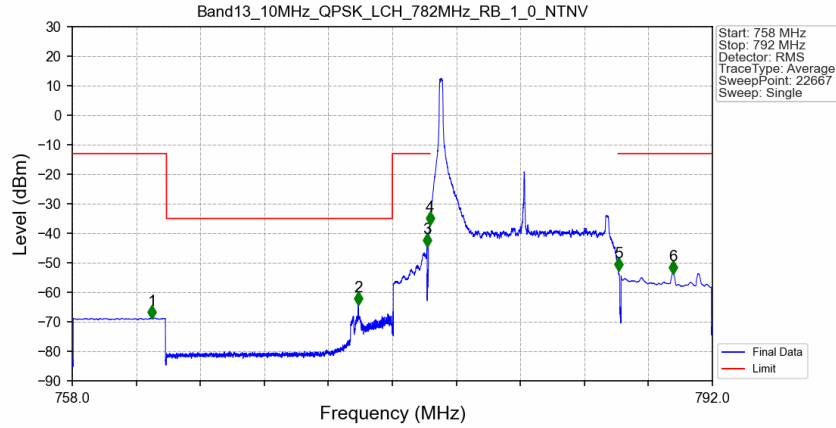


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
779.5	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	1	787.000	-30.39	-13	Pass
787.1	793	0.1	CHP	2	787.174	-43.00	-13	Pass
793	805	0.00625	CHP	3	795.396	-76.49	-35	Pass
805	810	0.1	CHP	4	807.565	-68.59	-13	Pass

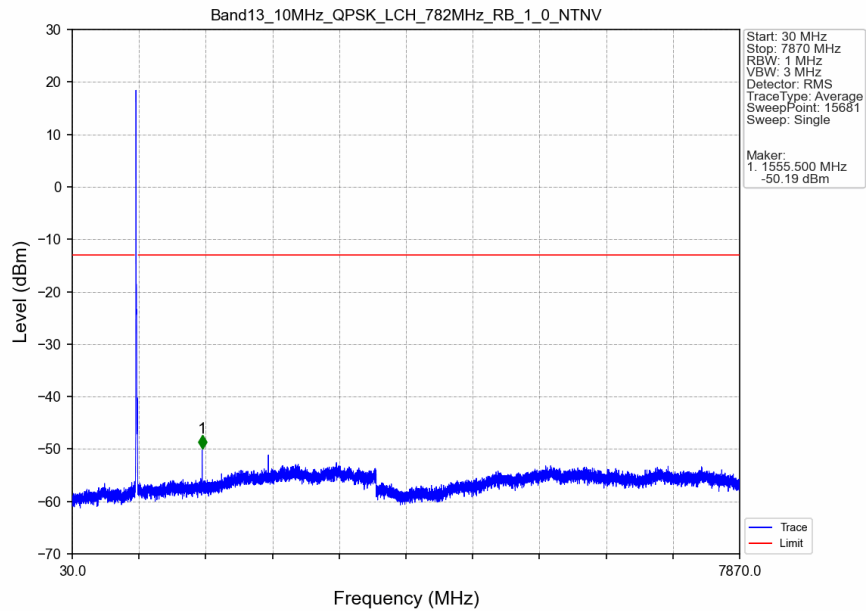


5.2.2 B13_10MHz

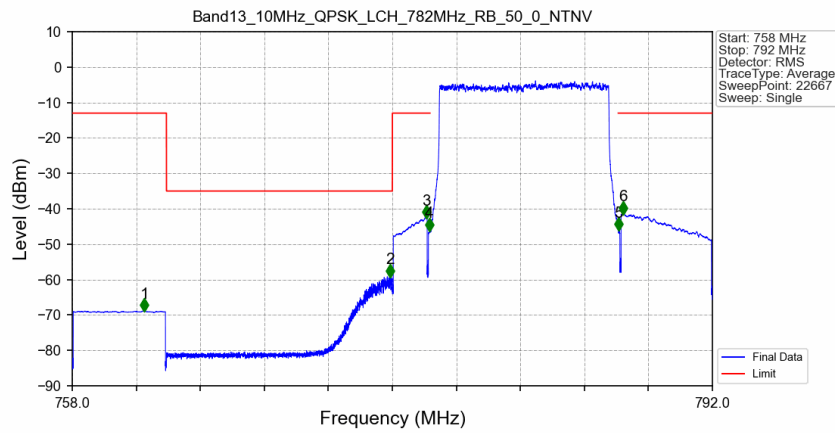
Band13_10MHz_QPSK_LCH_782MHz_RB_1_0_NTNV



Band13_10MHz_QPSK_LCH_782MHz_RB_1_0_NTNV

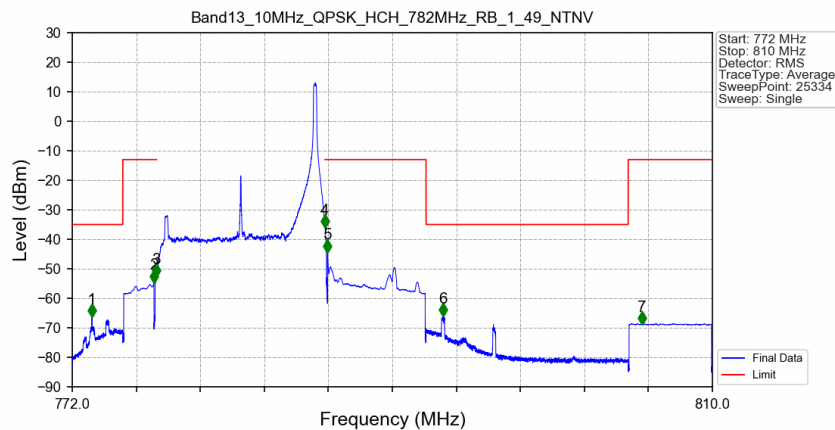


Band13_10MHz_QPSK_LCH_782MHz_RB_50_0_NTNV



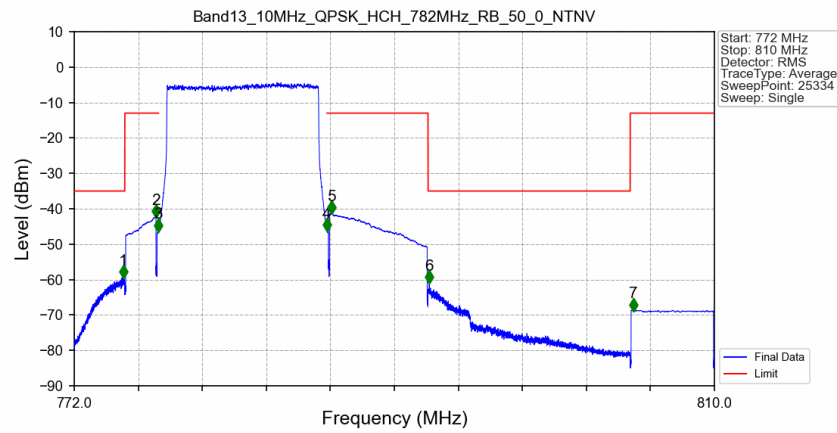
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
758	763	0.1	CHP	1	761.825	-68.81	-13	Pass
763	775	0.00625	CHP	2	774.881	-59.00	-35	Pass
775	776.9	0.1	CHP	3	776.790	-42.51	-13	Pass
776.9	777	0.03	CHP	4	776.967	-46.00	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	5	787.000	-45.92	-13	Pass
787.1	792	0.1	CHP	6	787.257	-41.26	-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	773.166	-66.11	-35	Pass
775	776.9	0.1	CHP	2	776.850	-54.40	-13	Pass
776.9	777	0.03	CHP	3	777.000	-52.36	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.000	-35.72	-13	Pass
787.1	793	0.1	CHP	5	787.150	-44.14	-13	Pass
793	805	0.00625	CHP	6	793.990	-65.82	-35	Pass
805	810	0.1	CHP	7	805.815	-68.62	-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	774.910	-59.28	-35	Pass
775	776.9	0.1	CHP	2	776.844	-42.20	-13	Pass
776.9	777	0.03	CHP	3	777.000	-46.22	-13	Pass
777	787	0.03	CHP	/	/	/	/	/
787	787.1	0.03	CHP	4	787.003	-46.03	-13	Pass
787.1	793	0.1	CHP	5	787.285	-41.25	-13	Pass
793	805	0.00625	CHP	6	793.074	-60.81	-35	Pass
805	810	0.1	CHP	7	805.194	-68.61	-13	Pass

- End of the Appendix -