

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B14_5MHz_ERP

Band: 14 / Bandwidth: 5MHz / NTV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
64QAM	790.5	1	0	22.45	3.00	23.30	<=34.77	Pass
			13	22.50	3.00	23.35	<=34.77	Pass
			24	22.45	3.00	23.30	<=34.77	Pass
		12	0	21.53	3.00	22.38	<=34.77	Pass
			6	21.54	3.00	22.39	<=34.77	Pass
			13	21.51	3.00	22.36	<=34.77	Pass
		25	0	21.56	3.00	22.41	<=34.77	Pass
	793	1	0	22.63	3.00	23.48	<=34.77	Pass
			13	22.65	3.00	23.50	<=34.77	Pass
			24	22.66	3.00	23.51	<=34.77	Pass
		12	0	21.64	3.00	22.49	<=34.77	Pass
			6	21.62	3.00	22.47	<=34.77	Pass
			13	21.59	3.00	22.44	<=34.77	Pass
		25	0	21.50	3.00	22.35	<=34.77	Pass
	795.5	1	0	22.46	3.00	23.31	<=34.77	Pass
			13	22.62	3.00	23.47	<=34.77	Pass
			24	22.57	3.00	23.42	<=34.77	Pass
		12	0	21.56	3.00	22.41	<=34.77	Pass
			6	21.55	3.00	22.40	<=34.77	Pass
			13	21.63	3.00	22.48	<=34.77	Pass
		25	0	21.60	3.00	22.45	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.2 B14_10MHz_ERP

Band: 14 / Bandwidth: 10MHz / NTV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
64QAM	793	1	0	22.68	3.00	23.53	<=34.77	Pass
			25	22.61	3.00	23.46	<=34.77	Pass
			49	22.77	3.00	23.62	<=34.77	Pass
		25	0	21.52	3.00	22.37	<=34.77	Pass
			13	21.51	3.00	22.36	<=34.77	Pass
			25	21.46	3.00	22.31	<=34.77	Pass
		50	0	21.53	3.00	22.38	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

2. Frequency Stability

2.1 Test Result

2.1.1 B14_5MHz

Band: 14 / Bandwidth: 5MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
64QAM	790.5	25	0	20	3.27	0.386	0.0005	-2.5 to 2.5	Pass
					3.85	-1.516	-0.0019	-2.5 to 2.5	Pass
					4.43	-1.874	-0.0024	-2.5 to 2.5	Pass
				-30	3.85	-3.533	-0.0045	-2.5 to 2.5	Pass
				-20	3.85	-1.359	-0.0017	-2.5 to 2.5	Pass
				-10	3.85	-3.834	-0.0049	-2.5 to 2.5	Pass
				0	3.85	-3.176	-0.0040	-2.5 to 2.5	Pass
				10	3.85	-3.533	-0.0045	-2.5 to 2.5	Pass
				30	3.85	-0.401	-0.0005	-2.5 to 2.5	Pass
				40	3.85	-1.087	-0.0014	-2.5 to 2.5	Pass
				50	3.85	-0.315	-0.0004	-2.5 to 2.5	Pass
	793	25	0	20	3.27	-2.289	-0.0029	-2.5 to 2.5	Pass
					3.85	-3.819	-0.0048	-2.5 to 2.5	Pass
					4.43	-4.234	-0.0053	-2.5 to 2.5	Pass
				-30	3.85	-2.589	-0.0033	-2.5 to 2.5	Pass
				-20	3.85	-2.546	-0.0032	-2.5 to 2.5	Pass
				-10	3.85	-2.532	-0.0032	-2.5 to 2.5	Pass
				0	3.85	-2.518	-0.0032	-2.5 to 2.5	Pass
				10	3.85	-2.747	-0.0035	-2.5 to 2.5	Pass
				30	3.85	-2.618	-0.0033	-2.5 to 2.5	Pass
				40	3.85	-1.659	-0.0021	-2.5 to 2.5	Pass
				50	3.85	-1.960	-0.0025	-2.5 to 2.5	Pass
	795.5	25	0	20	3.27	1.230	0.0015	-2.5 to 2.5	Pass
					3.85	1.760	0.0022	-2.5 to 2.5	Pass
					4.43	2.732	0.0034	-2.5 to 2.5	Pass
				-30	3.85	4.978	0.0063	-2.5 to 2.5	Pass
				-20	3.85	2.146	0.0027	-2.5 to 2.5	Pass
				-10	3.85	4.749	0.0060	-2.5 to 2.5	Pass
				0	3.85	3.977	0.0050	-2.5 to 2.5	Pass
				10	3.85	3.419	0.0043	-2.5 to 2.5	Pass
				30	3.85	4.063	0.0051	-2.5 to 2.5	Pass
				40	3.85	0.429	0.0005	-2.5 to 2.5	Pass
				50	3.85	2.575	0.0032	-2.5 to 2.5	Pass

2.1.2 B14_10MHz

Band: 14 / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
64QAM	793	50	0	20	3.27	-2.718	-0.0034	-2.5 to 2.5	Pass
					3.85	-3.834	-0.0048	-2.5 to 2.5	Pass
					4.43	-1.373	-0.0017	-2.5 to 2.5	Pass
				-30	3.85	-2.503	-0.0032	-2.5 to 2.5	Pass
				-20	3.85	-0.687	-0.0009	-2.5 to 2.5	Pass
				-10	3.85	-3.862	-0.0049	-2.5 to 2.5	Pass
				0	3.85	-1.817	-0.0023	-2.5 to 2.5	Pass
				10	3.85	-4.592	-0.0058	-2.5 to 2.5	Pass
				30	3.85	-1.001	-0.0013	-2.5 to 2.5	Pass
				40	3.85	-2.918	-0.0037	-2.5 to 2.5	Pass
				50	3.85	-3.133	-0.0040	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band14_OBW

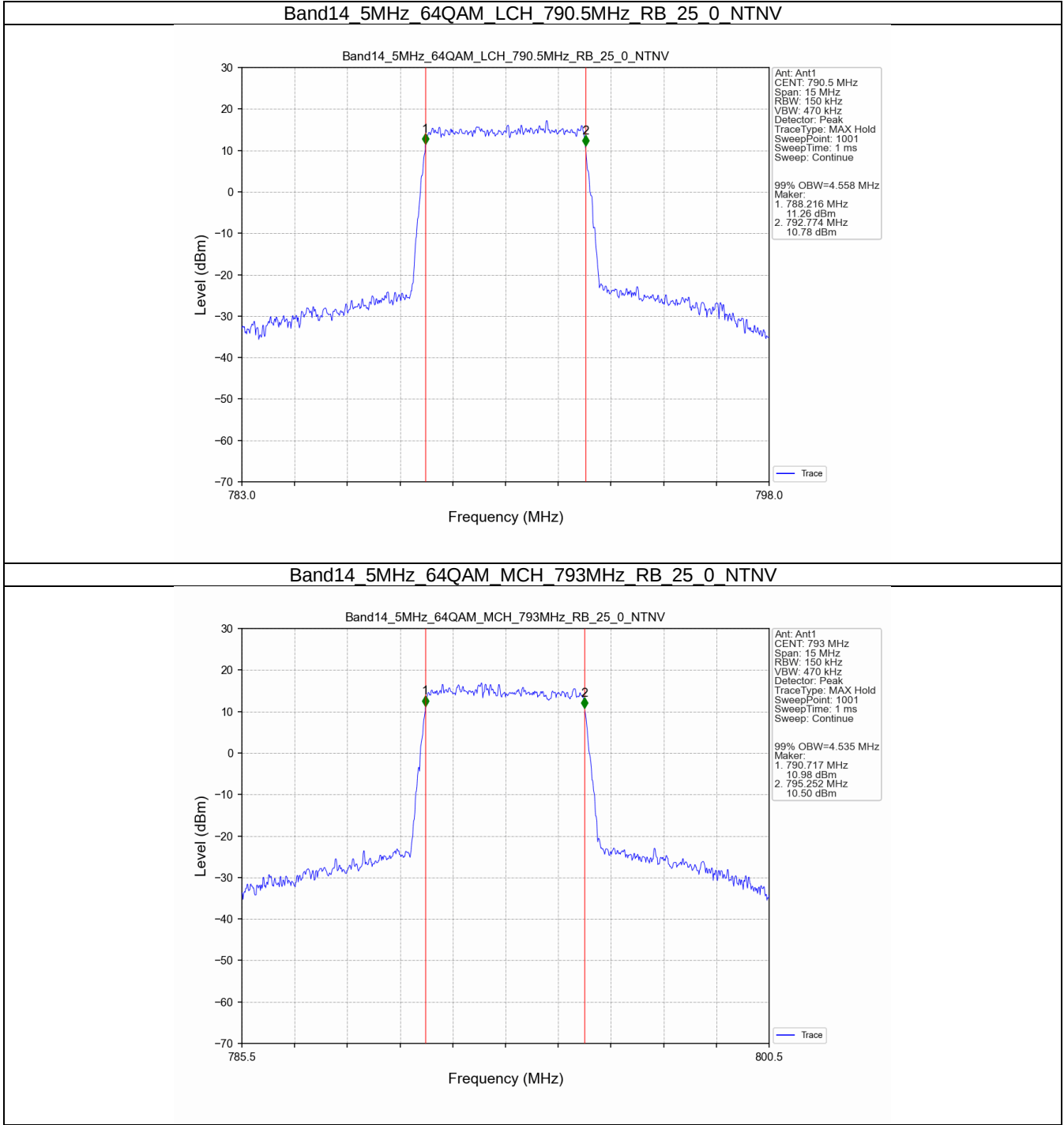
Band: 14 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	64QAM	790.5	25	0	4.558	/	Pass
		793	25	0	4.535	/	Pass
		795.5	25	0	4.556	/	Pass
10	64QAM	793	50	0	9.029	/	Pass

3.1.2 Band14_XDB

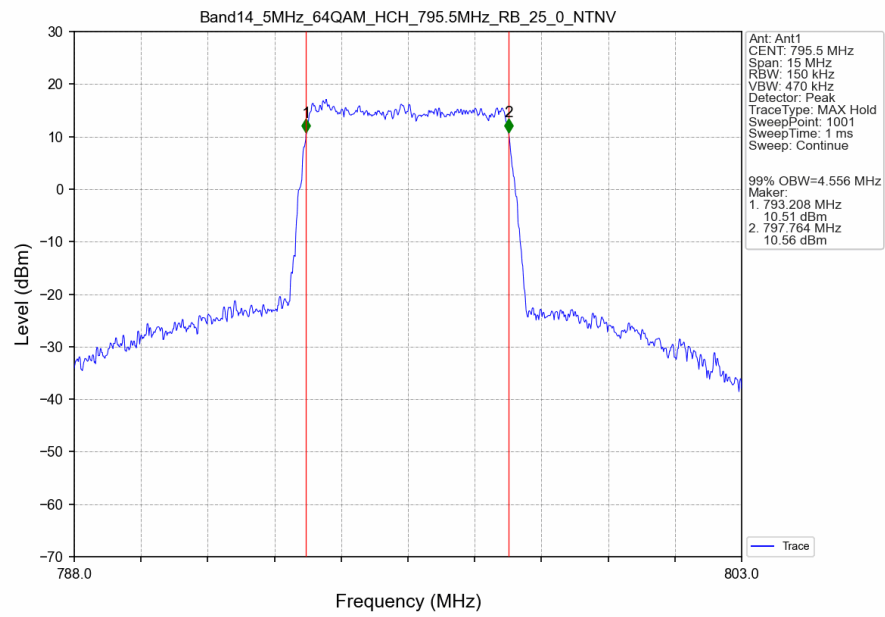
Band: 14 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	64QAM	790.5	25	0	5.059	/	Pass
		793	25	0	5.044	/	Pass
		795.5	25	0	5.037	/	Pass
10	64QAM	793	50	0	9.879	/	Pass

3.2 Test Graph

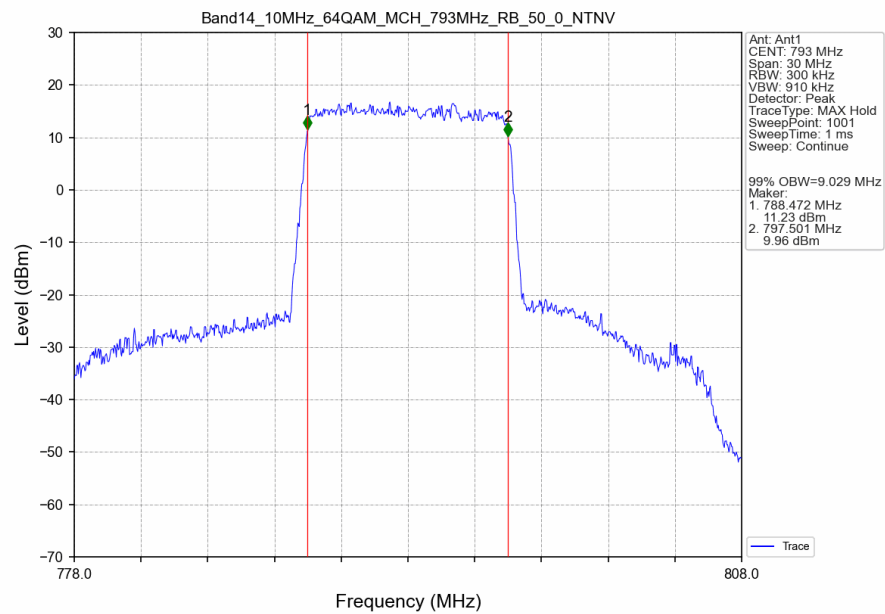
3.2.1 Band14_OBW



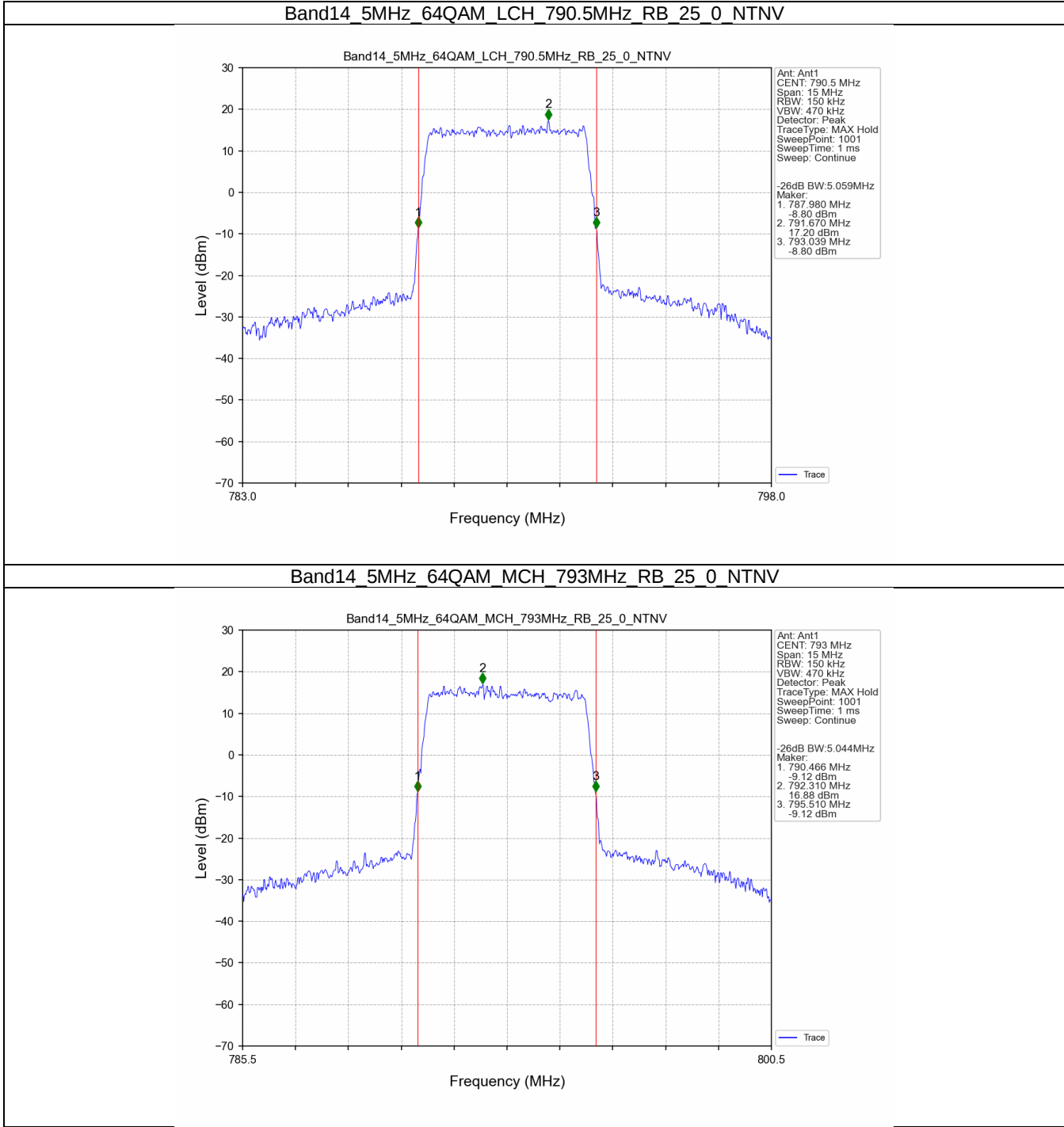
Band14_5MHz_64QAM_HCH_795.5MHz_RB_25_0_NTNV



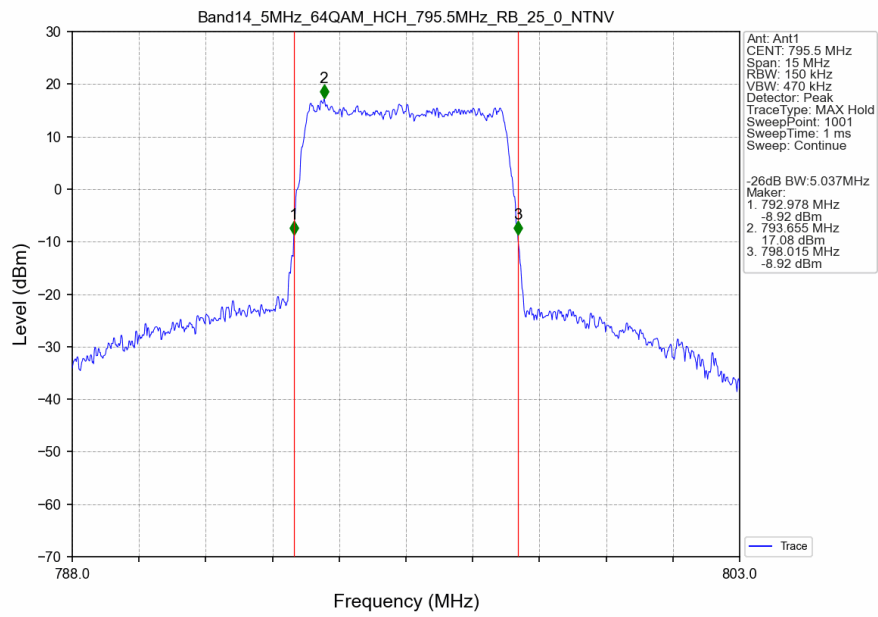
Band14_10MHz_64QAM_MCH_793MHz_RB_50_0_NTNV



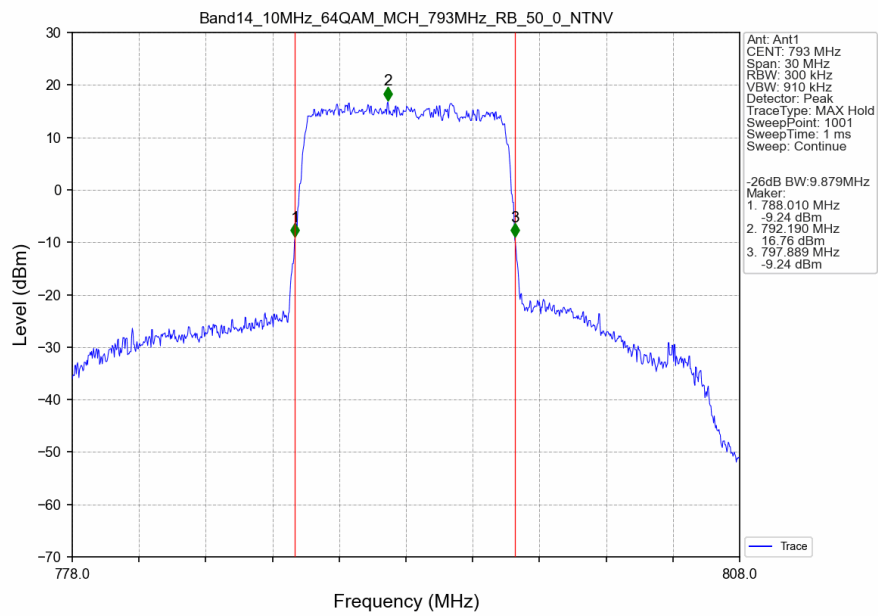
3.2.2 Band14_XDB



Band14_5MHz_64QAM_HCH_795.5MHz_RB_25_0_NTNV



Band14_10MHz_64QAM_MCH_793MHz_RB_50_0_NTNV



4. Peak-Average Ratio

4.1 Test Result

4.1.1 B14_5MHz

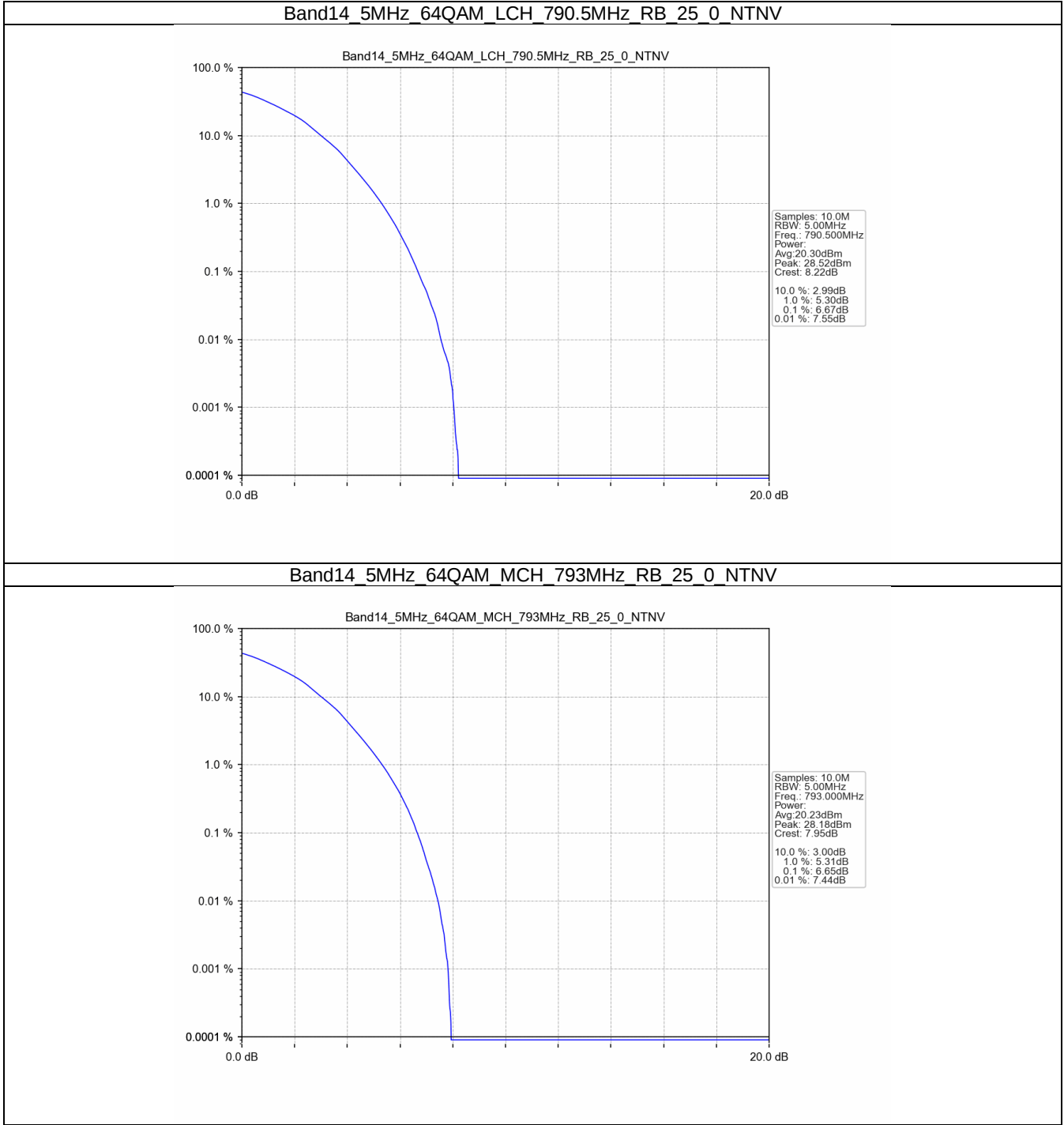
Band: 14 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
64QAM	790.5	25	0	6.67	<=13	Pass
	793	25	0	6.65	<=13	Pass
	795.5	25	0	6.67	<=13	Pass

4.1.2 B14_10MHz

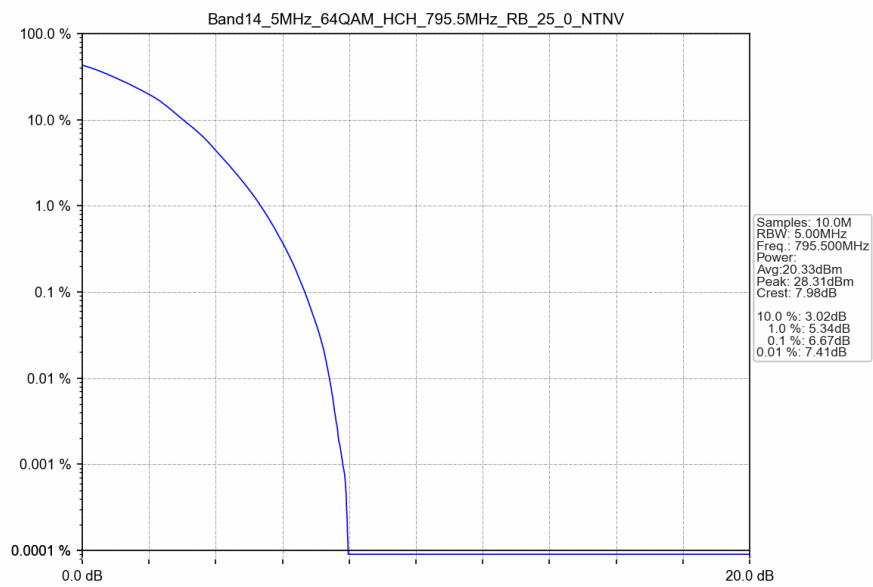
Band: 14 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
64QAM	793	50	0	6.62	<=13	Pass

4.2 Test Graph

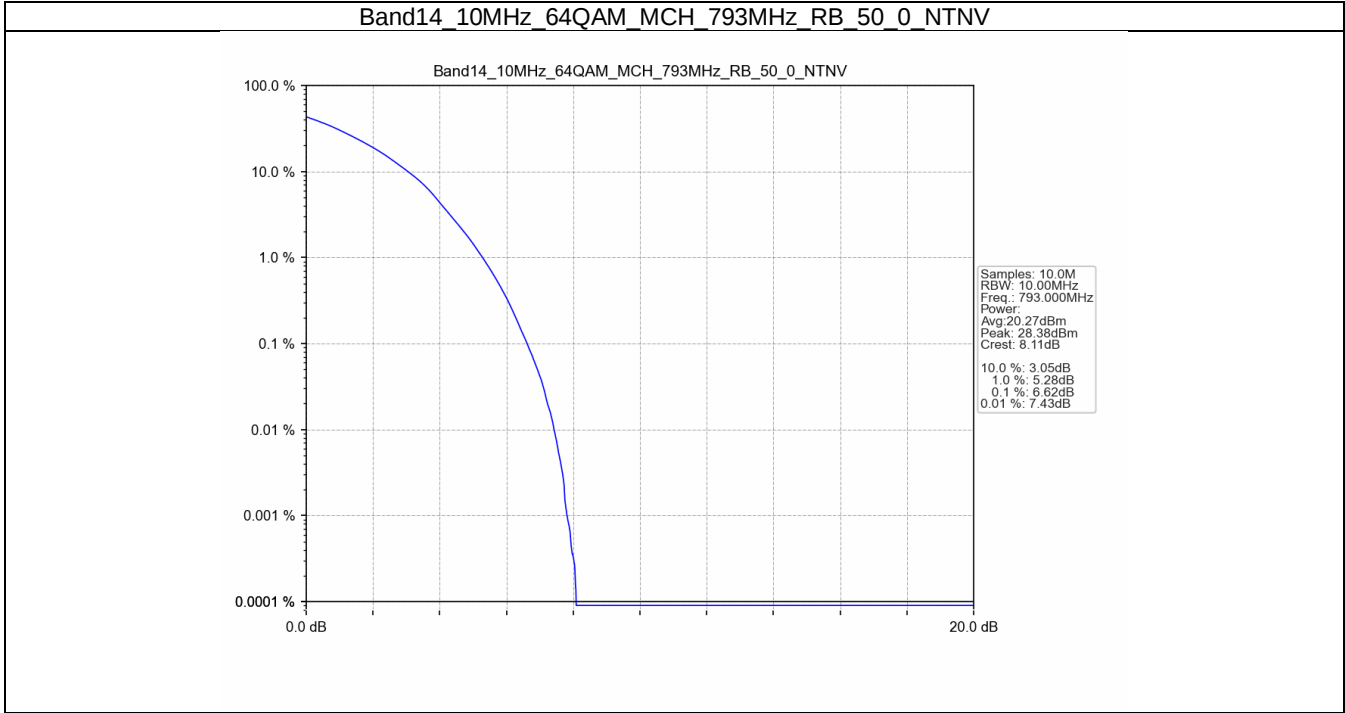
4.2.1 B14_5MHz



Band14 5MHz 64QAM HCH 795.5MHz RB 25 0 NTV



4.2.2 B14_10MHz



5. Spurious Emission

5.1 Test Result

5.1.1 B14_5MHz

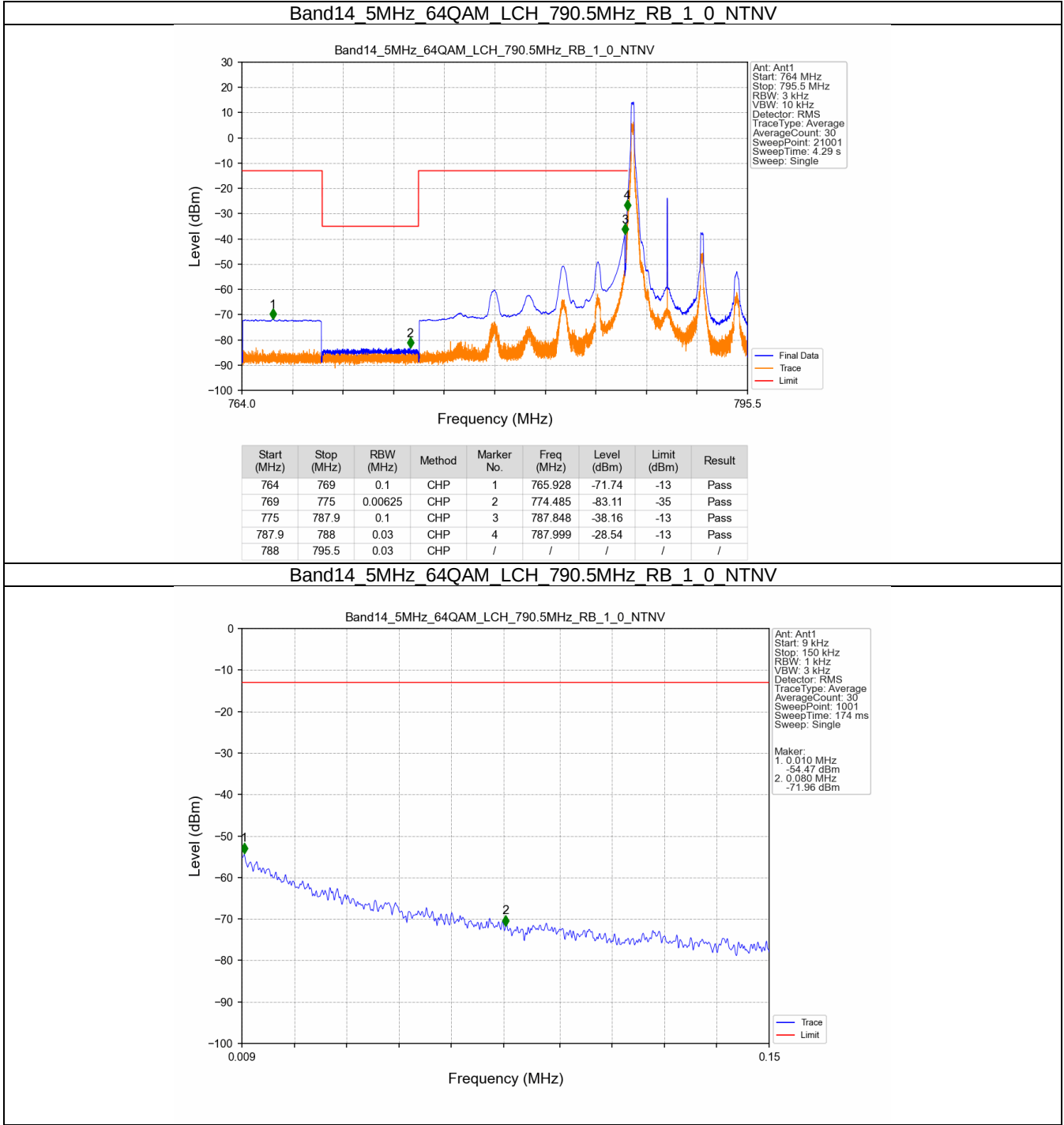
Band: 14 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
64QAM	790.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	793	1	0	Refer To Test Graph		Pass
		795.5	1	0	Refer To Test Graph	
	24			Refer To Test Graph		Pass
	25		0	Refer To Test Graph		Pass

5.1.2 B14_10MHz

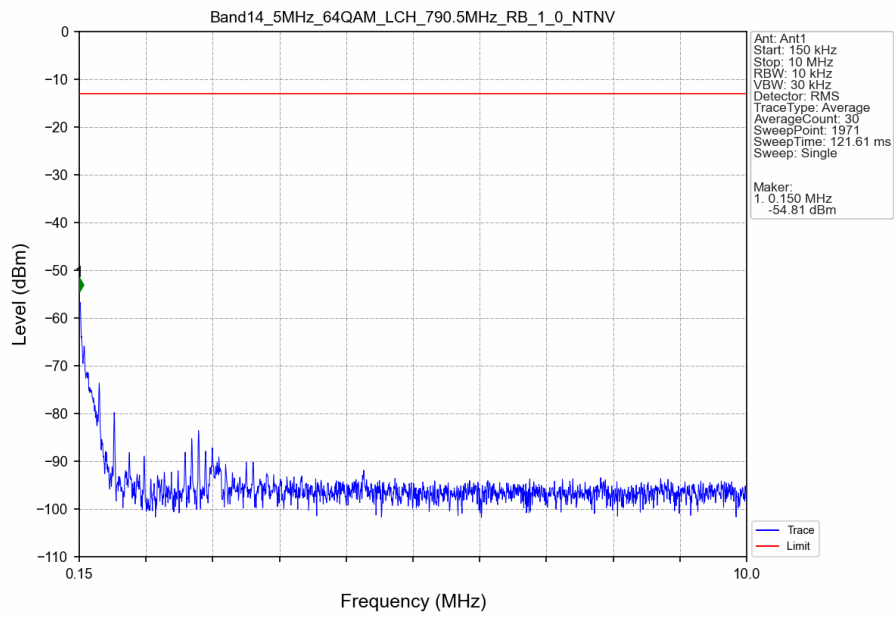
Band: 14 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
64QAM	793	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	793	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

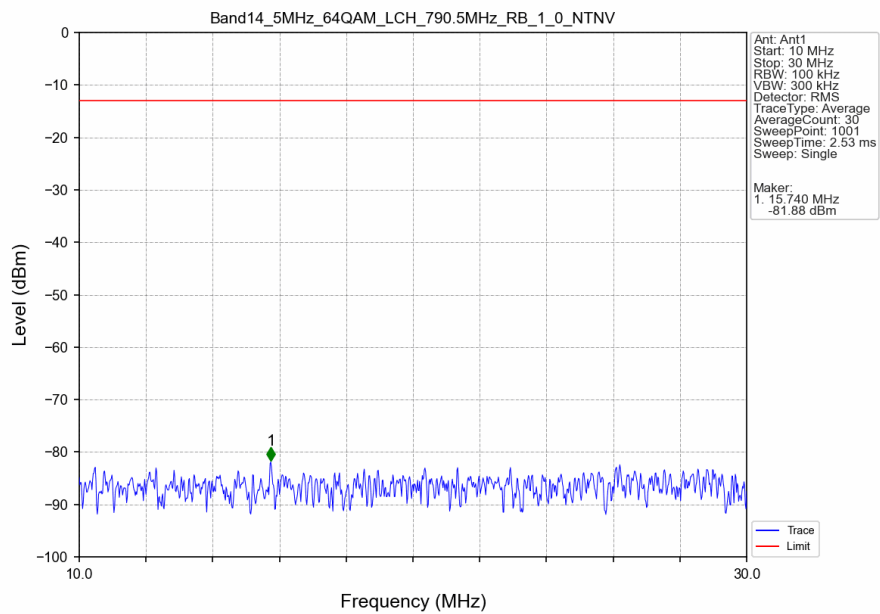
5.2.1 B14_5MHz



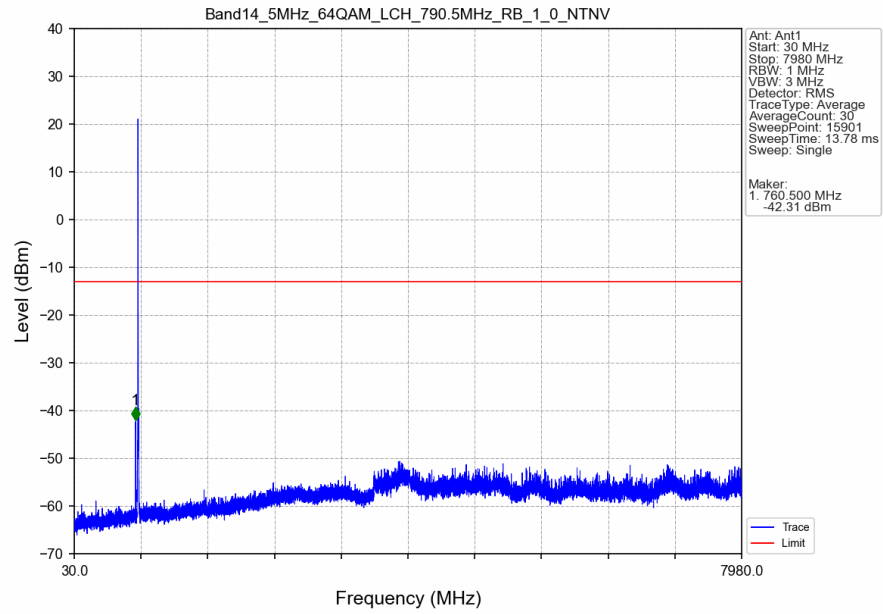
Band14_5MHz_64QAM_LCH_790.5MHz_RB_1_0_NTNV



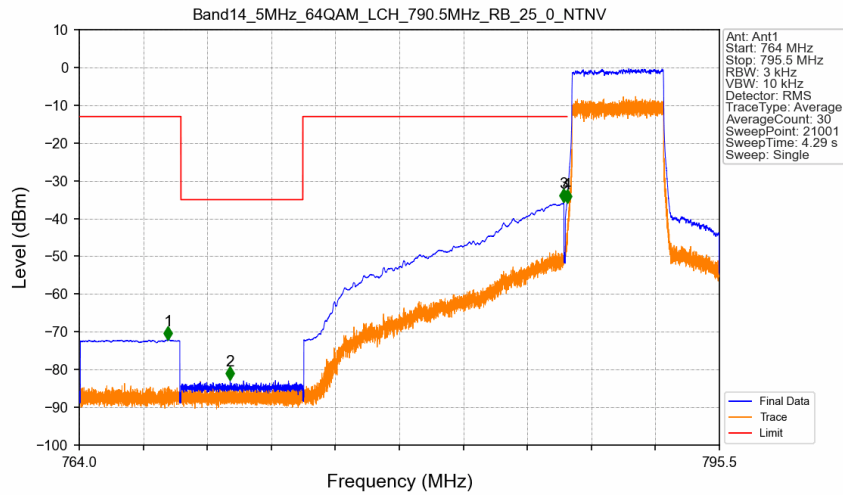
Band14_5MHz_64QAM_LCH_790.5MHz_RB_1_0_NTNV



Band14_5MHz_64QAM_LCH_790.5MHz_RB_1_0_NTNV

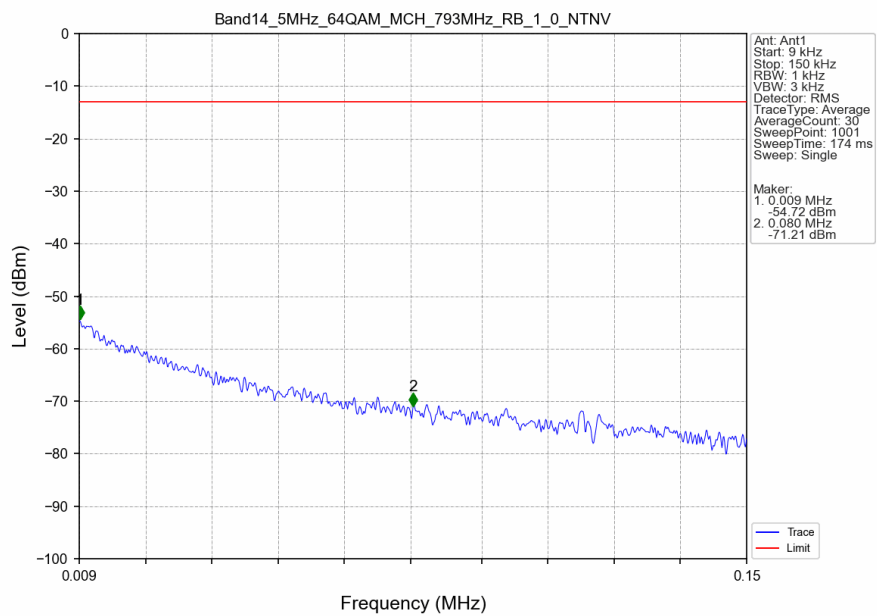


Band14_5MHz_64QAM_LCH_790.5MHz_RB_25_0_NTNV

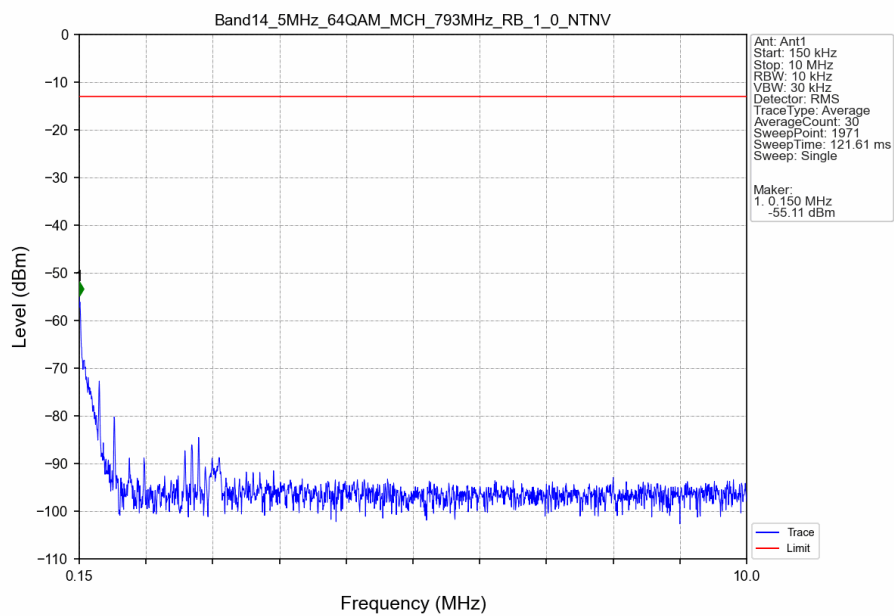


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
764	769	0.1	CHP	1	768.366	-72.10	-13	Pass
769	775	0.00625	CHP	2	771.423	-82.79	-35	Pass
775	787.9	0.1	CHP	3	787.842	-35.68	-13	Pass
787.9	788	0.03	CHP	4	787.999	-35.77	-13	Pass
788	795.5	0.03	CHP	/	/	/	/	/

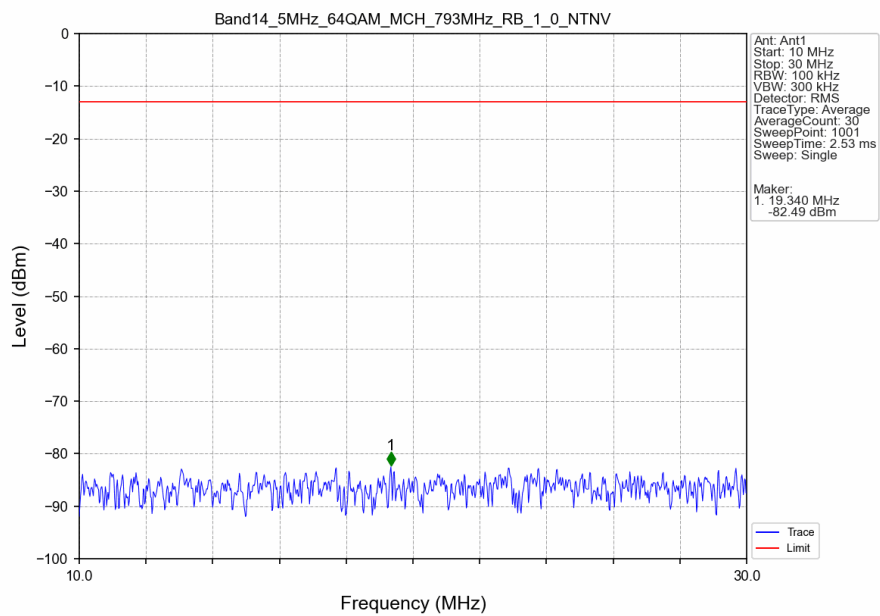
Band14_5MHz_64QAM_MCH_793MHz_RB_1_0_NTNV



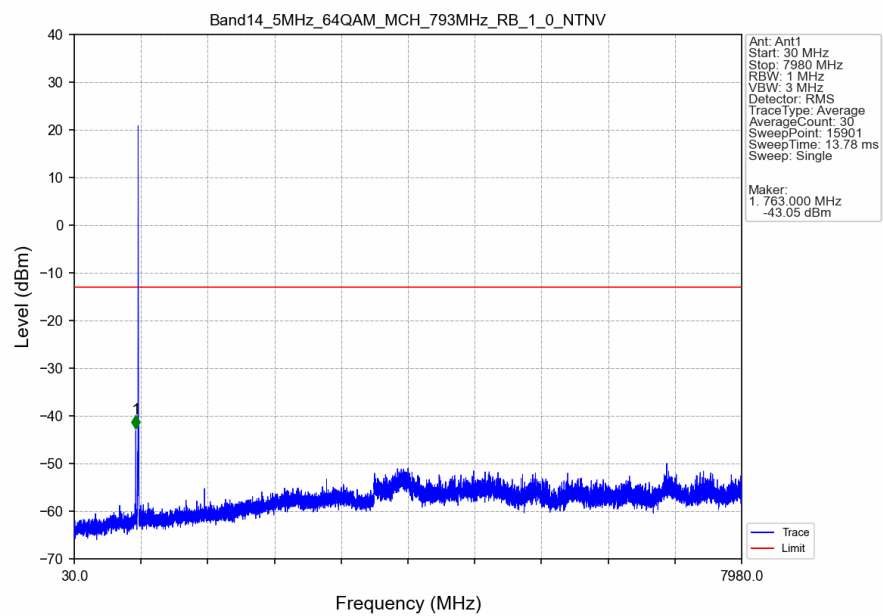
Band14_5MHz_64QAM_MCH_793MHz_RB_1_0_NTNV



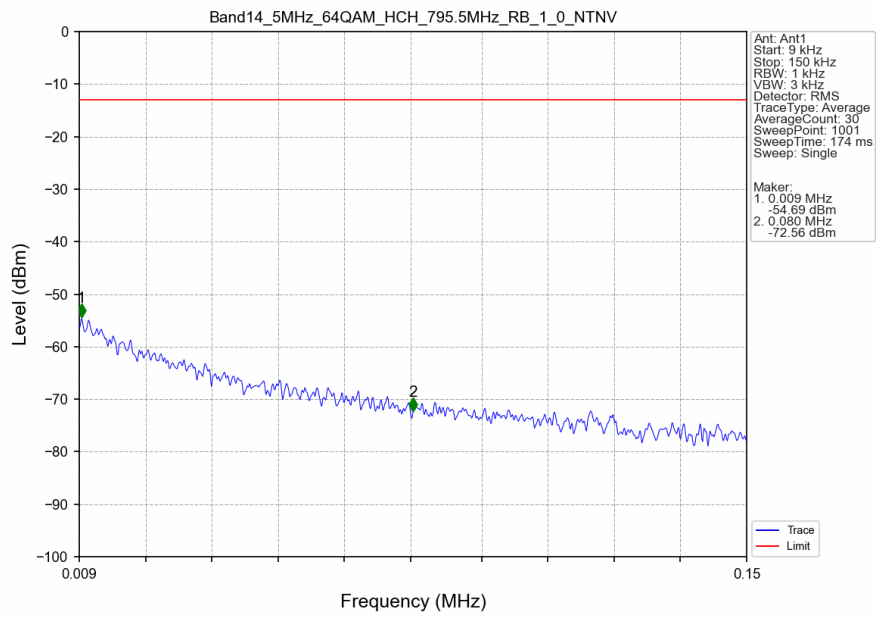
Band14_5MHz_64QAM_MCH_793MHz_RB_1_0_NTNV



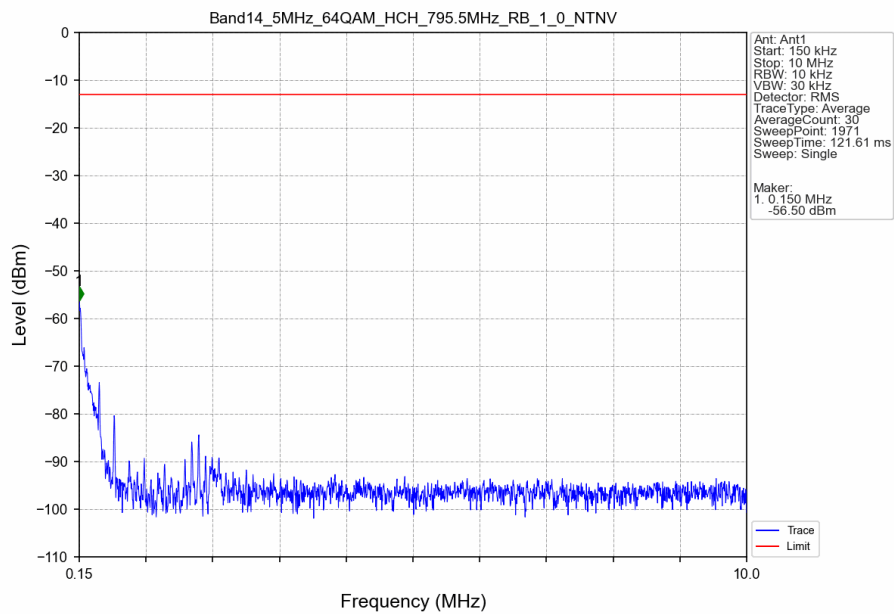
Band14_5MHz_64QAM_MCH_793MHz_RB_1_0_NTNV



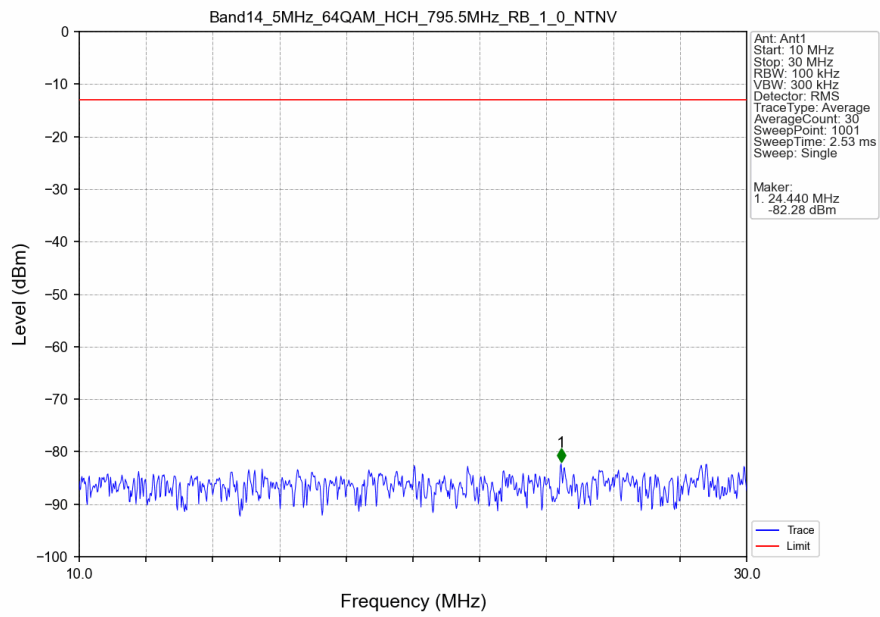
Band14_5MHz_64QAM_HCH_795.5MHz_RB_1_0_NTNV



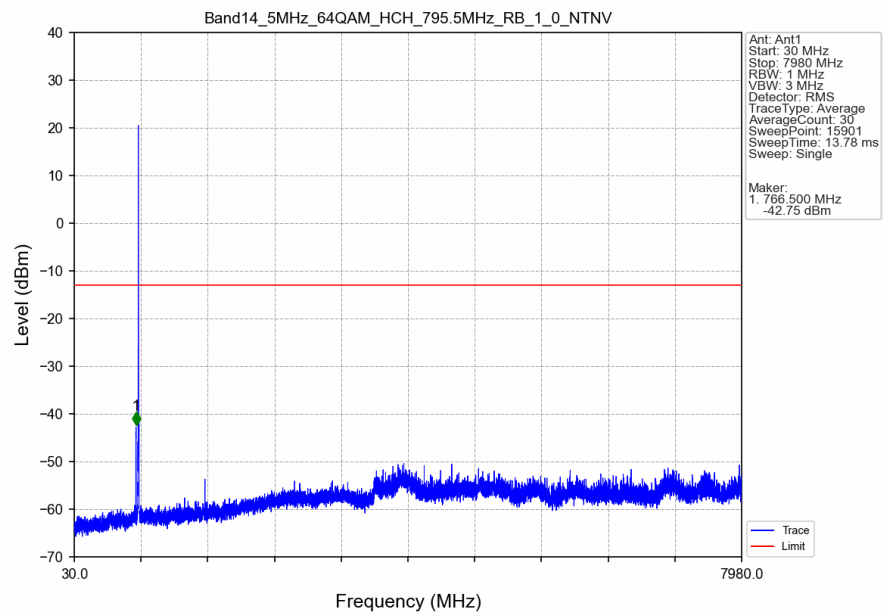
Band14_5MHz_64QAM_HCH_795.5MHz_RB_1_0_NTNV



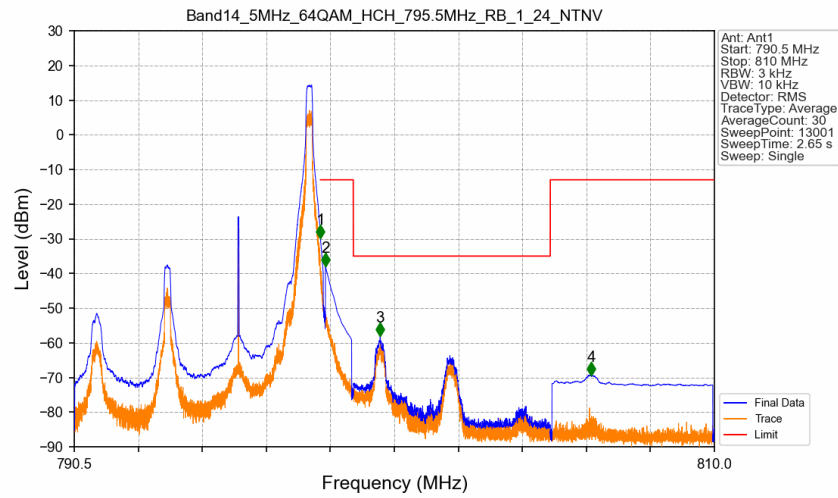
Band14_5MHz_64QAM_HCH_795.5MHz_RB_1_0_NTNV



Band14_5MHz_64QAM_HCH_795.5MHz_RB_1_0_NTNV

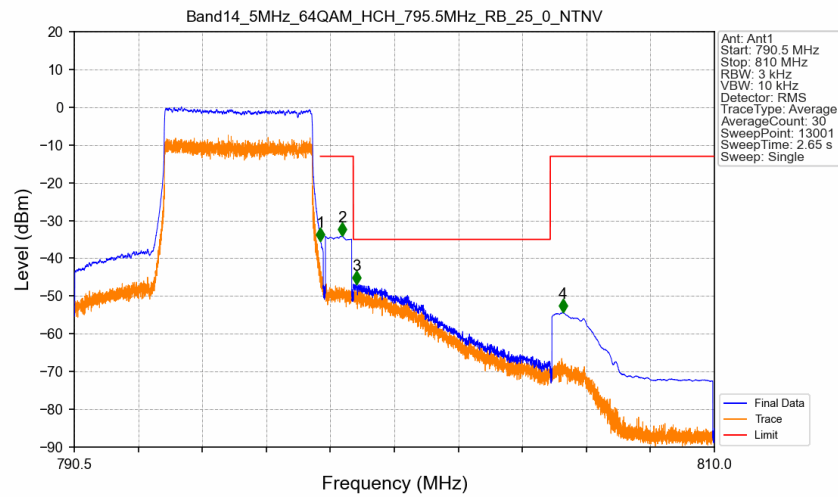


Band14 5MHz 64QAM HCH 795.5MHz RB 1 24 NTNV



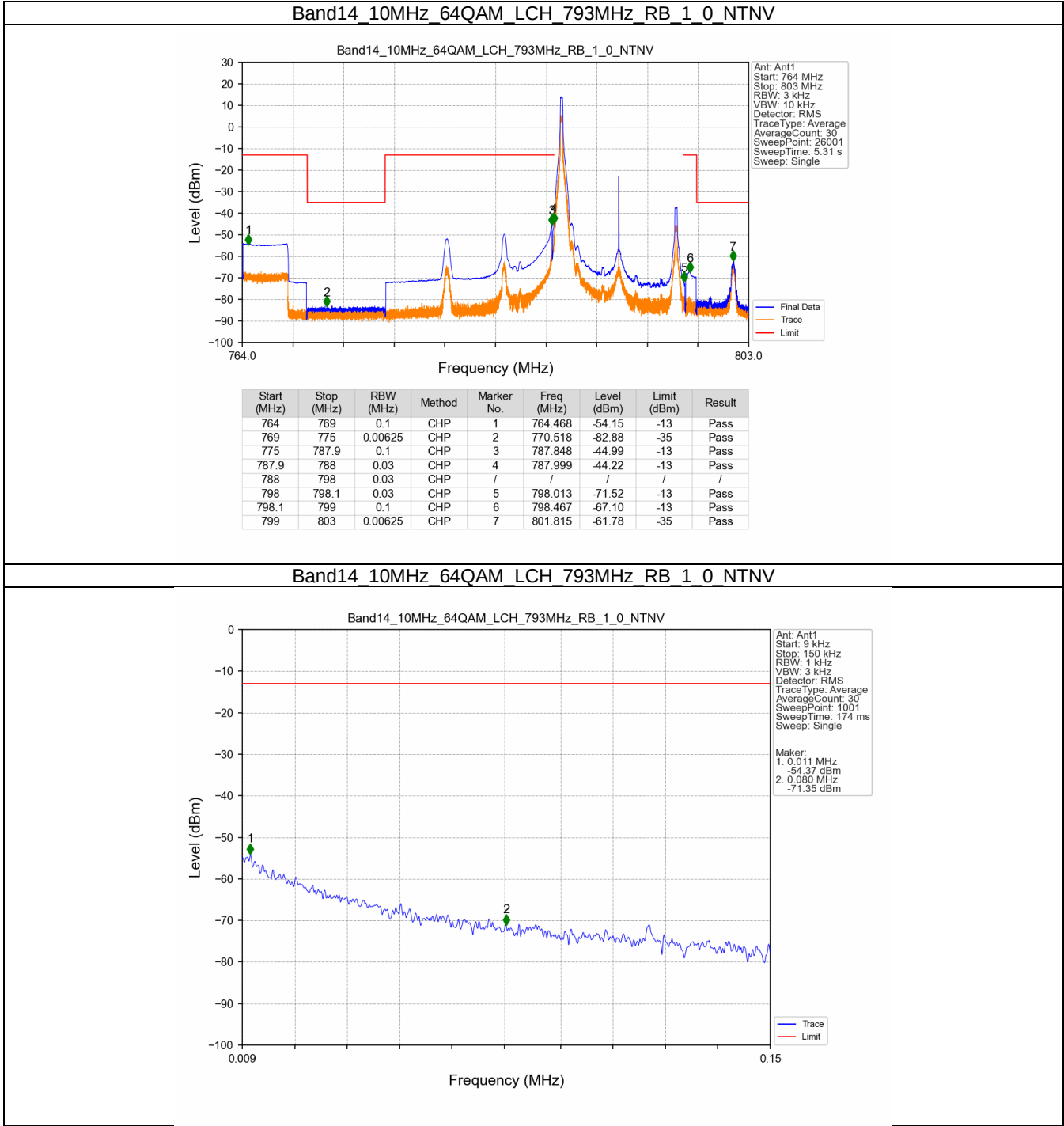
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
790.5	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	1	798.001	-29.83	-13	Pass
798.1	799	0.1	CHP	2	798.152	-37.93	-13	Pass
799	805	0.00625	CHP	3	799.818	-58.12	-35	Pass
805	810	0.1	CHP	4	806.245	-69.31	-13	Pass

Band14 5MHz 64QAM HCH 795.5MHz RB 25 0 NTNV

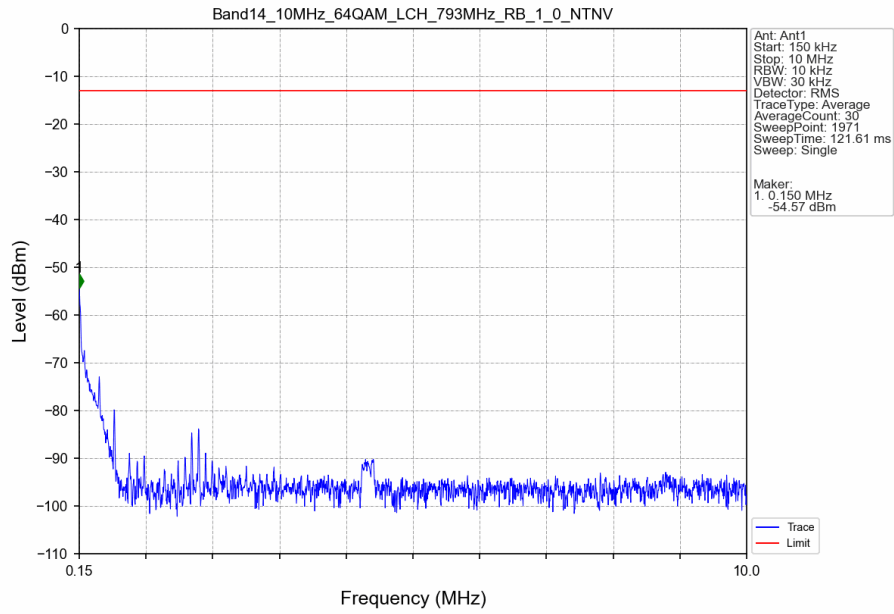


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
790.5	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	1	798.001	-35.36	-13	Pass
798.1	799	0.1	CHP	2	798.670	-34.08	-13	Pass
799	805	0.00625	CHP	3	799.089	-46.78	-35	Pass
805	810	0.1	CHP	4	805.380	-54.37	-13	Pass

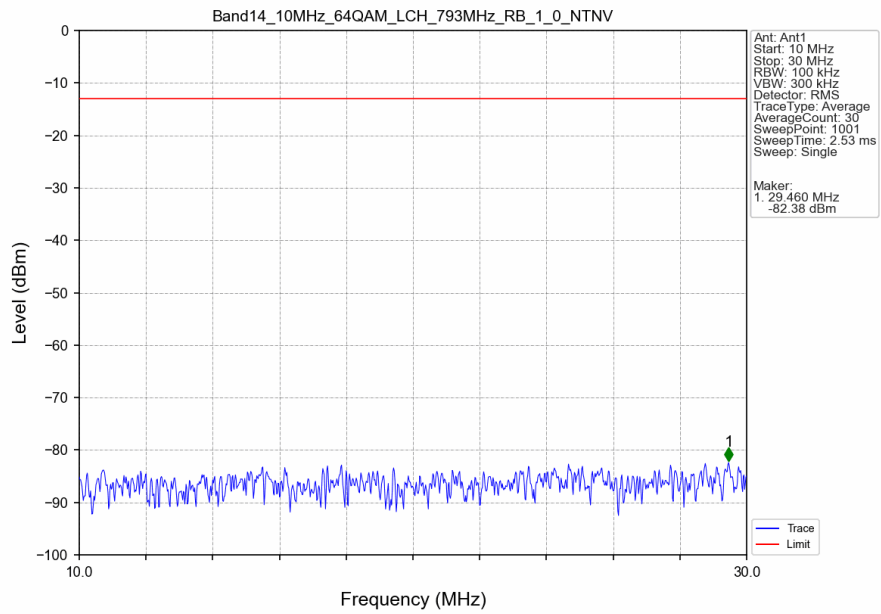
5.2.2 B14_10MHz



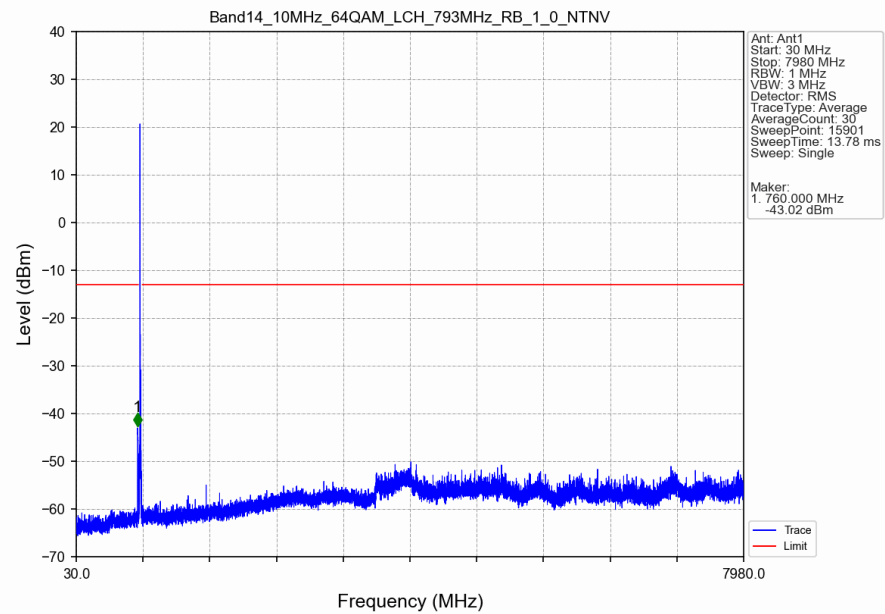
Band14_10MHz_64QAM_LCH_793MHz_RB_1_0_NTNV



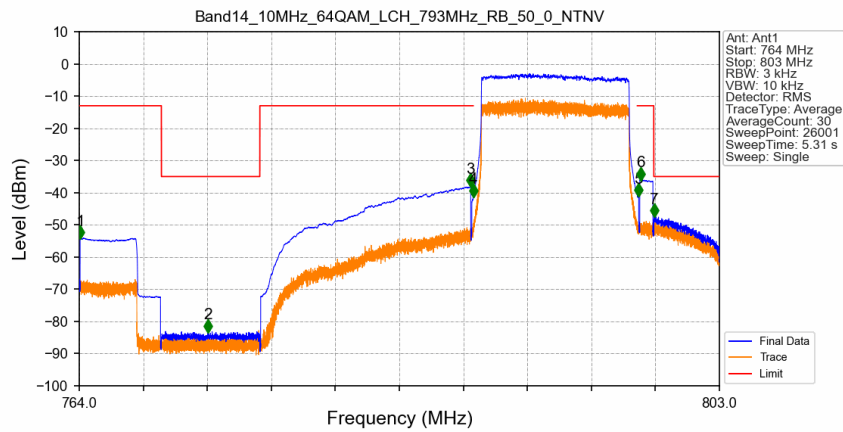
Band14_10MHz_64QAM_LCH_793MHz_RB_1_0_NTNV



Band14_10MHz_64QAM_LCH_793MHz_RB_1_0_NTNV

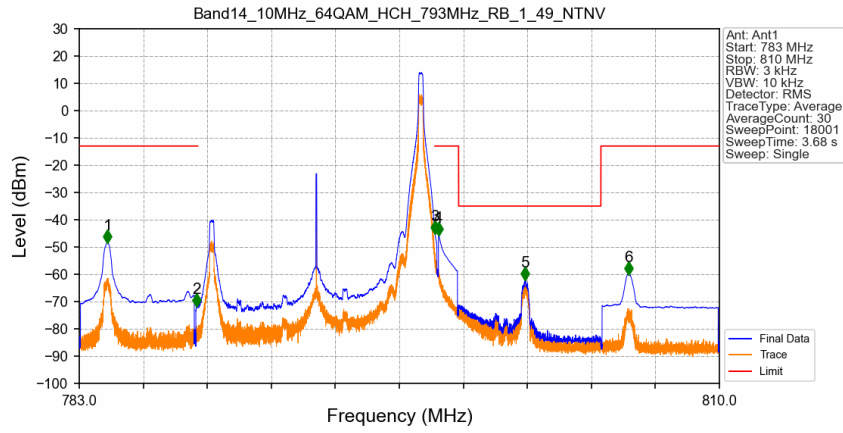


Band14_10MHz_64QAM_LCH_793MHz_RB_50_0_NTNV



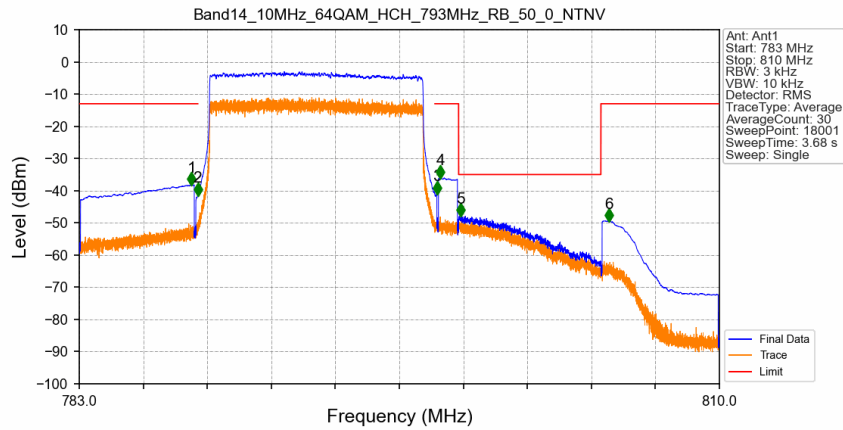
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
764	769	0.1	CHP	1	764.053	-54.00	-13	Pass
769	775	0.00625	CHP	2	771.837	-83.07	-35	Pass
775	787.9	0.1	CHP	3	787.848	-37.90	-13	Pass
787.9	788	0.03	CHP	4	787.999	-41.01	-13	Pass
788	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	5	798.085	-40.90	-13	Pass
798.1	799	0.1	CHP	6	798.226	-35.84	-13	Pass
799	803	0.00625	CHP	7	799.027	-47.24	-35	Pass

Band14 10MHz 64QAM HCH 793MHz RB 1 49 NTV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
783	787.9	0.1	CHP	1	784.192	-48.20	-13	Pass
787.9	788	0.03	CHP	2	787.956	-71.57	-13	Pass
788	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	3	798.001	-44.80	-13	Pass
798.1	799	0.1	CHP	4	798.152	-45.35	-13	Pass
799	805	0.00625	CHP	5	801.788	-61.91	-35	Pass
805	810	0.1	CHP	6	806.159	-59.91	-13	Pass

Band14 10MHz 64QAM HCH 793MHz RB 50 0 NTV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
783	787.9	0.1	CHP	1	787.739	-38.16	-13	Pass
787.9	788	0.03	CHP	2	788.000	-41.27	-13	Pass
788	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	3	798.084	-40.76	-13	Pass
798.1	799	0.1	CHP	4	798.226	-35.86	-13	Pass
799	805	0.00625	CHP	5	799.096	-47.73	-35	Pass
805	810	0.1	CHP	6	805.338	-49.30	-13	Pass

6. Emission Mask

6.1 Test Result

6.1.1 B14_5MHz

Band: 14 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Freq. (MHz)		Emission Mask (dBm)		Verdict
		Size	Offset	Start	Stop	Result	Limit	
64QAM	790.5	25	0	773	778	-55.21	-13	Pass
				778	785.5	-40.15	-29.77	Pass
				785.5	787.95	-33.02	-19.77	Pass
				787.95	793.05	5.23	5.23	Pass
				793.05	795.5	-32.14	-19.77	Pass
				795.5	803	-37.76	-29.77	Pass
	793	25	0	803	808	-60.76	-13	Pass
				775.5	780.5	-55.07	-13	Pass
				780.5	788	-38.66	-29.64	Pass
				788	790.45	-31.32	-19.64	Pass
				790.45	795.55	5.36	5.36	Pass
				795.55	798	-31.16	-19.64	Pass
	795.5	25	0	798	805.5	-37.78	-29.64	Pass
				805.5	810.5	-59.16	-13	Pass
				778	783	-53.15	-13	Pass
				783	790.5	-37.19	-29.28	Pass
				790.5	792.95	-29.09	-19.28	Pass
				792.95	798.05	5.72	5.72	Pass
				798.05	800.5	-29.69	-19.28	Pass
				800.5	808	-38.11	-29.28	Pass
				808	813	-73.42	-13	Pass

6.1.2 B14_10MHz

Band: 14 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Freq. (MHz)		Emission Mask (dBm)		Verdict
		Size	Offset	Start	Stop	Result	Limit	
64QAM	793	50	0	758	768	-52.10	-13	Pass
				768	783	-42.48	-32.57	Pass
				783	787.95	-36.61	-22.57	Pass
				787.95	798.05	2.43	2.43	Pass
				798.05	803	-35.14	-22.57	Pass
				803	818	-44.53	-32.57	Pass
				818	828	-73.65	-13	Pass

7. Field Strength of Spurious Radiation

LTE Band 14_10M- Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1577.0	-70.64	-13	-57.64	-73.73	2.6	5.69	Horizontal	Pass
2365.5	-69.52	-13	-56.52	-72.04	2.98	5.5	Horizontal	Pass
3154.0	-66.66	-13	-53.66	-70.73	3.23	7.3	Horizontal	Pass
1577.0	-70.56	-13	-57.56	-73.65	2.6	5.69	Vertical	Pass
2365.5	-69.9	-13	-56.9	-72.42	2.98	5.5	Vertical	Pass
3154.0	-66.95	-13	-53.95	-71.02	3.23	7.3	Vertical	Pass

LTE Band 14_5M -Low channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1576.5	-70.81	-13	-57.81	-73.9	2.6	5.69	Horizontal	Pass
2364.75	-68.79	-13	-55.79	-71.31	2.98	5.5	Horizontal	Pass
3153.0	-66.88	-13	-53.88	-70.95	3.23	7.3	Horizontal	Pass
1576.5	-70.72	-13	-57.72	-73.81	2.6	5.69	Vertical	Pass
2364.75	-69.15	-13	-56.15	-71.67	2.98	5.5	Vertical	Pass
3153.0	-67.0	-13	-54.0	-71.07	3.23	7.3	Vertical	Pass

LTE Band 14_5M -Middle channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1581.5	-70.0	-13	-57.0	-73.07	2.6	5.67	Horizontal	Pass
2372.25	-69.83	-13	-56.83	-72.35	2.99	5.51	Horizontal	Pass
3163.0	-66.22	-13	-53.22	-70.32	3.23	7.33	Horizontal	Pass
1581.5	-70.22	-13	-57.22	-73.29	2.6	5.67	Vertical	Pass
2372.25	-70.04	-13	-57.04	-72.56	2.99	5.51	Vertical	Pass
3163.0	-66.8	-13	-53.8	-70.9	3.23	7.33	Vertical	Pass

LTE Band 14_5M -High channel								
Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	Cable Loss (dB)	Antenna Gain (dBi)	Polarization (H/V)	Result
1586.5	-70.89	-13	-57.89	-73.95	2.6	5.66	Horizontal	Pass
2379.75	-69.34	-13	-56.34	-71.88	2.99	5.53	Horizontal	Pass
3173.0	-66.24	-13	-53.24	-70.35	3.24	7.35	Horizontal	Pass
1586.5	-70.59	-13	-57.59	-73.65	2.6	5.66	Vertical	Pass
2379.75	-69.75	-13	-56.75	-72.29	2.99	5.53	Vertical	Pass
3173.0	-67.08	-13	-54.08	-71.19	3.24	7.35	Vertical	Pass