

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 B14_5MHz_ERP

Band: 14 / Bandwidth: 5MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	790.5	1	0	24.25	0.30	22.40	<=34.77	Pass
			24	24.13	0.30	22.28	<=34.77	Pass
		25	0	23.30	0.30	21.45	<=34.77	Pass
	793	1	0	24.34	0.30	22.49	<=34.77	Pass
			24	24.28	0.30	22.43	<=34.77	Pass
		25	0	23.28	0.30	21.43	<=34.77	Pass
	795.5	1	0	24.23	0.30	22.38	<=34.77	Pass
			24	24.16	0.30	22.31	<=34.77	Pass
		25	0	23.25	0.30	21.40	<=34.77	Pass
16QAM	790.5	1	0	23.16	0.30	21.31	<=34.77	Pass
			24	23.42	0.30	21.57	<=34.77	Pass
		25	0	22.27	0.30	20.42	<=34.77	Pass
	793	1	0	23.11	0.30	21.26	<=34.77	Pass
			24	23.07	0.30	21.22	<=34.77	Pass
		25	0	22.26	0.30	20.41	<=34.77	Pass
	795.5	1	0	23.10	0.30	21.25	<=34.77	Pass
			24	23.02	0.30	21.17	<=34.77	Pass
		25	0	22.24	0.30	20.39	<=34.77	Pass
64QAM	790.5	1	0	21.64	0.30	19.79	<=34.77	Pass
			24	22.21	0.30	20.36	<=34.77	Pass
		25	0	21.22	0.30	19.37	<=34.77	Pass
	793	1	0	22.39	0.30	20.54	<=34.77	Pass
			24	22.30	0.30	20.45	<=34.77	Pass
		25	0	21.29	0.30	19.44	<=34.77	Pass
	795.5	1	0	22.19	0.30	20.34	<=34.77	Pass
			24	22.35	0.30	20.50	<=34.77	Pass
		25	0	21.24	0.30	19.39	<=34.77	Pass
256QAM	790.5	1	0	19.32	0.30	17.47	<=34.77	Pass
			24	19.19	0.30	17.34	<=34.77	Pass
		25	0	19.25	0.30	17.40	<=34.77	Pass
	793	1	0	19.25	0.30	17.40	<=34.77	Pass
			24	19.31	0.30	17.46	<=34.77	Pass
		25	0	19.27	0.30	17.42	<=34.77	Pass
	795.5	1	0	19.36	0.30	17.51	<=34.77	Pass
			24	19.24	0.30	17.39	<=34.77	Pass
		25	0	19.24	0.30	17.39	<=34.77	Pass

Note1: ERP=Conducted Power+Antenna Gain-2.15

1.1.2 B14_10MHz_ERP

Band: 14 / Bandwidth: 10MHz / NTNV								
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	ERP (dBm)		Verdict
		Size	Offset			Result	Limit	
QPSK	793	1	0	24.29	0.30	22.44	<=34.77	Pass
			49	24.15	0.30	22.30	<=34.77	Pass
		50	0	23.07	0.30	21.22	<=34.77	Pass
16QAM	793	1	0	23.27	0.30	21.42	<=34.77	Pass

			49	23.16	0.30	21.31	<=34.77	Pass
		50	0	22.25	0.30	20.40	<=34.77	Pass
64QAM	793	1	0	22.32	0.30	20.47	<=34.77	Pass
			49	22.23	0.30	20.38	<=34.77	Pass
		50	0	21.27	0.30	19.42	<=34.77	Pass
256QAM	793	1	0	19.29	0.30	17.44	<=34.77	Pass
			49	19.34	0.30	17.49	<=34.77	Pass
		50	0	19.20	0.30	17.35	<=34.77	Pass
Note1: ERP=Conducted Power+Antenna Gain-2.15								

2. Frequency Stability

2.1 Test Result

2.1.1 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	
QPSK	793	50	0	20	LV	-0.600	-0.0008	-2.5 to 2.5	Pass
					NV	-1.900	-0.0024	-2.5 to 2.5	Pass
					HV	-0.500	-0.0006	-2.5 to 2.5	Pass
				-30	NV	-0.800	-0.0010	-2.5 to 2.5	Pass
				-20	NV	-3.900	-0.0049	-2.5 to 2.5	Pass
				-10	NV	-5.200	-0.0066	-2.5 to 2.5	Pass
				0	NV	-5.500	-0.0069	-2.5 to 2.5	Pass
				10	NV	-3.100	-0.0039	-2.5 to 2.5	Pass
				30	NV	-3.700	-0.0047	-2.5 to 2.5	Pass
				40	NV	-4.000	-0.0050	-2.5 to 2.5	Pass
				50	NV	-8.500	-0.0107	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band14_OBW

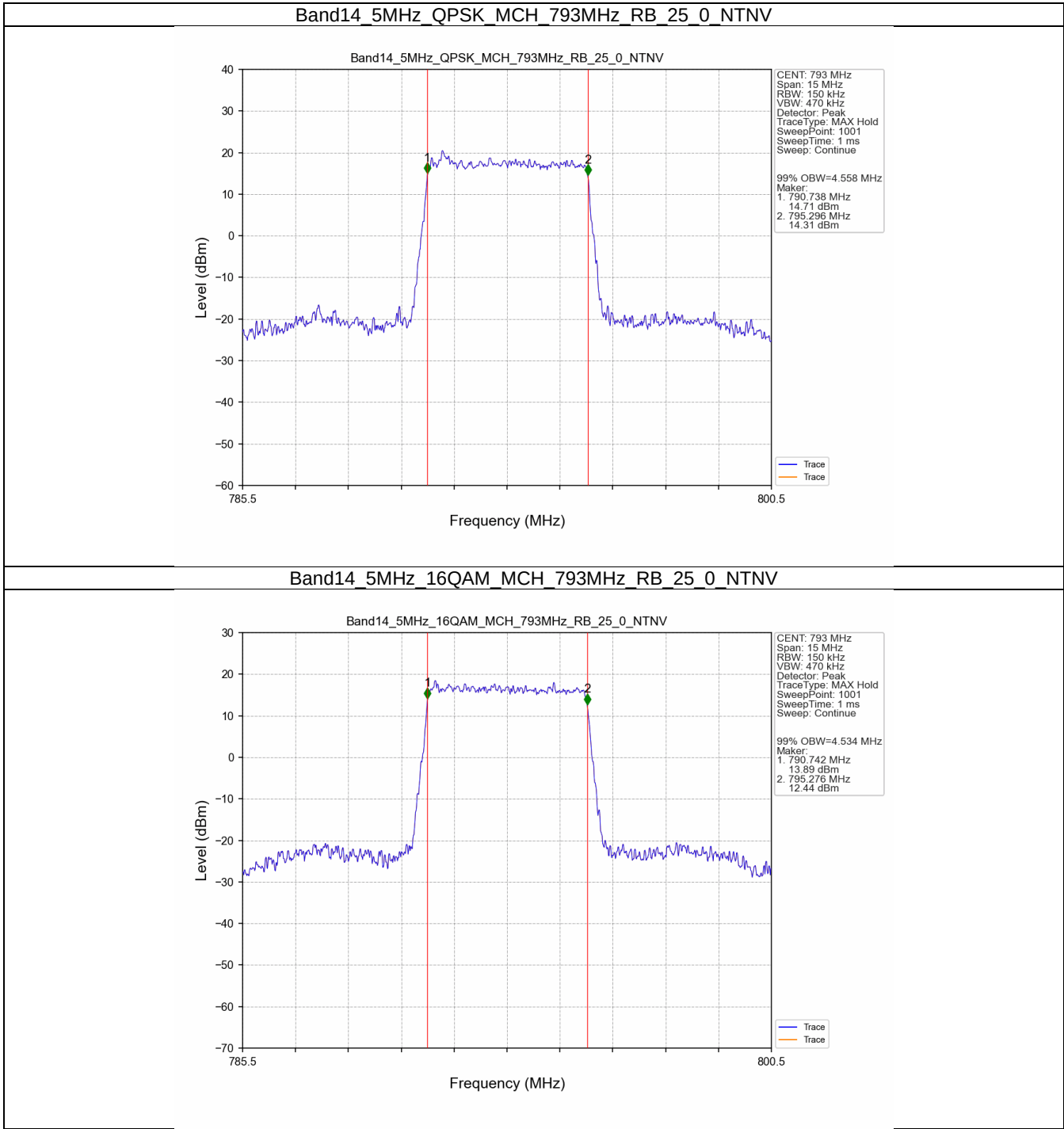
Band: 14 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	793	25	0	4.558	/	Pass
	16QAM	793	25	0	4.534	/	Pass
10	QPSK	793	50	0	9.048	/	Pass
	16QAM	793	50	0	9.038	/	Pass

3.1.2 Band14_XDB

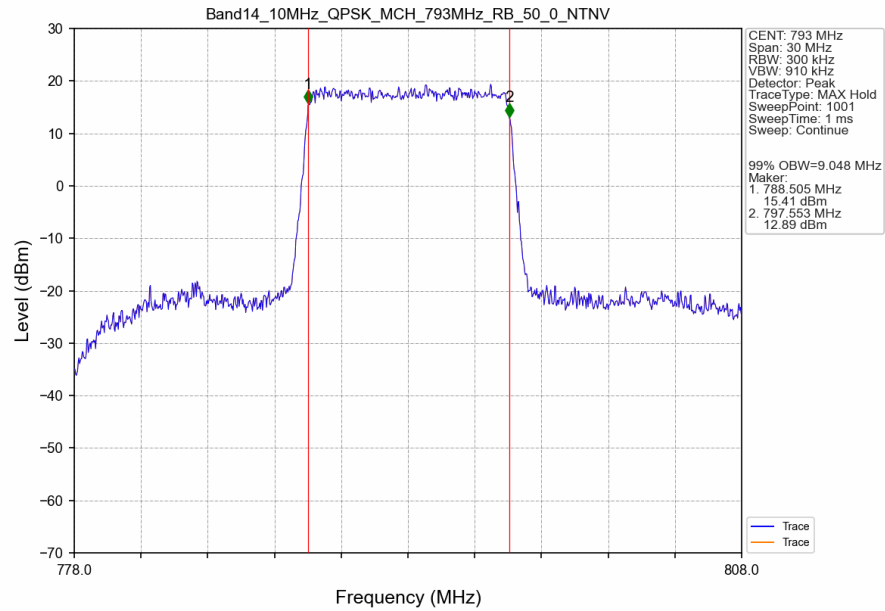
Band: 14 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	793	25	0	5.022	/	Pass
	16QAM	793	25	0	5.025	/	Pass
10	QPSK	793	50	0	9.951	/	Pass
	16QAM	793	50	0	9.913	/	Pass

3.2 Test Graph

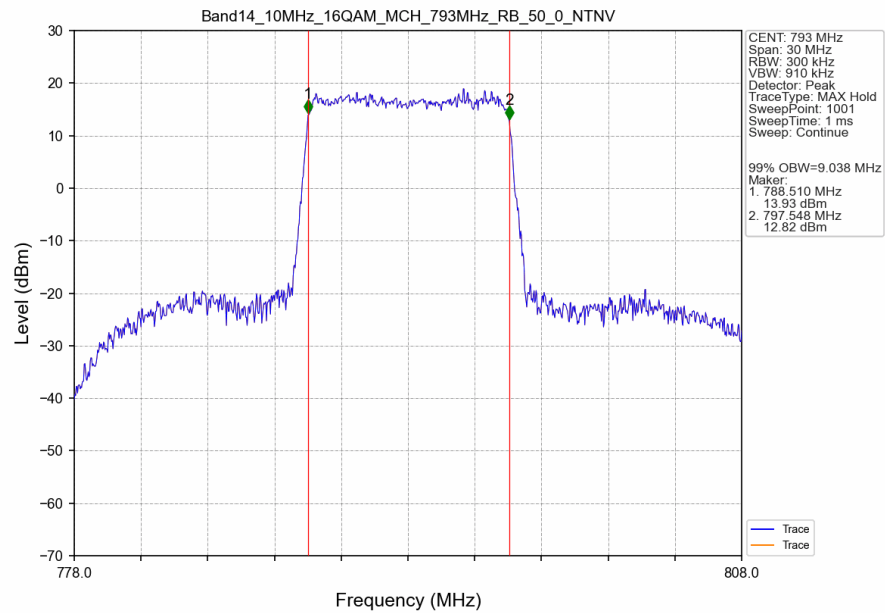
3.2.1 Band14_OBW



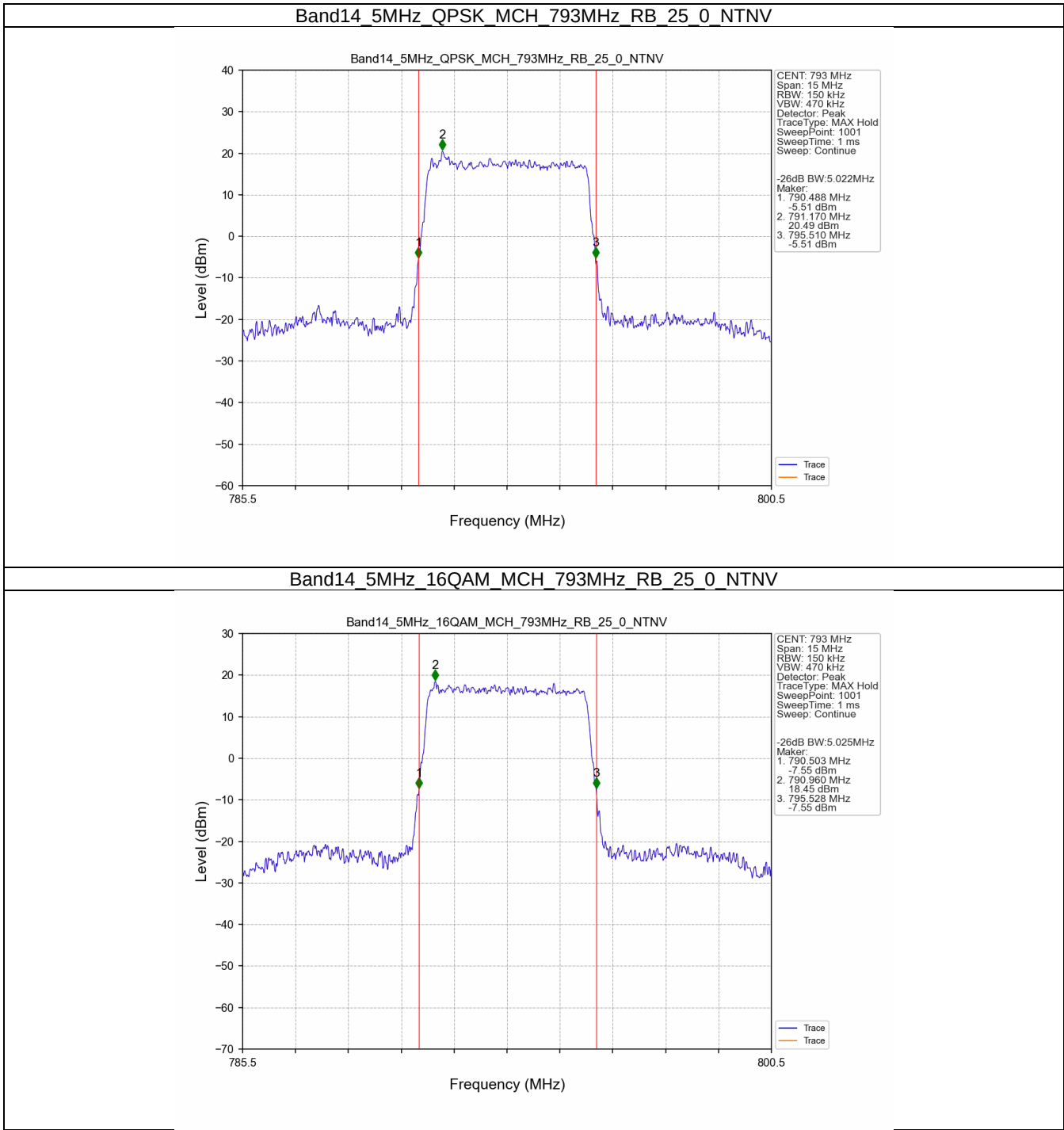
Band14 10MHz QPSK MCH 793MHz RB 50 0 NTNV



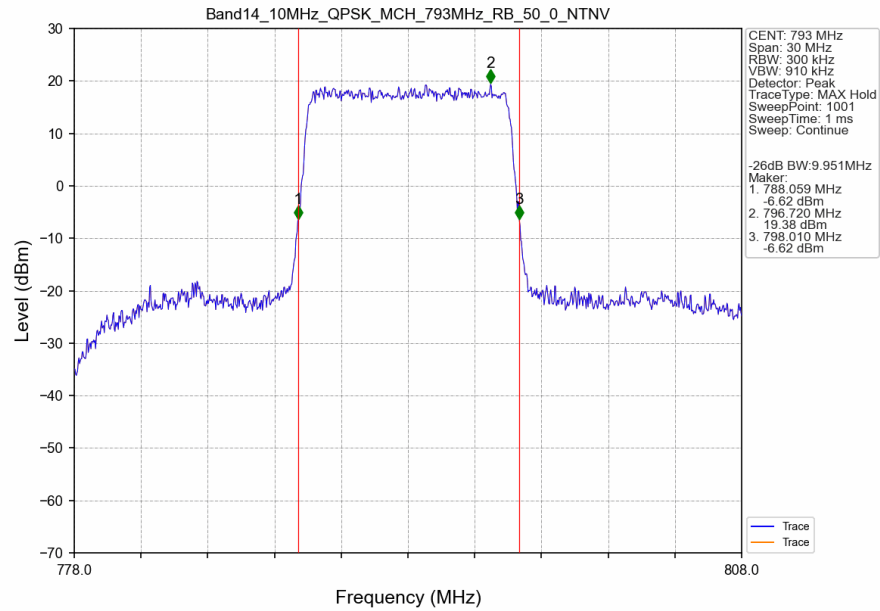
Band14 10MHz 16QAM MCH 793MHz RB 50 0 NTNV



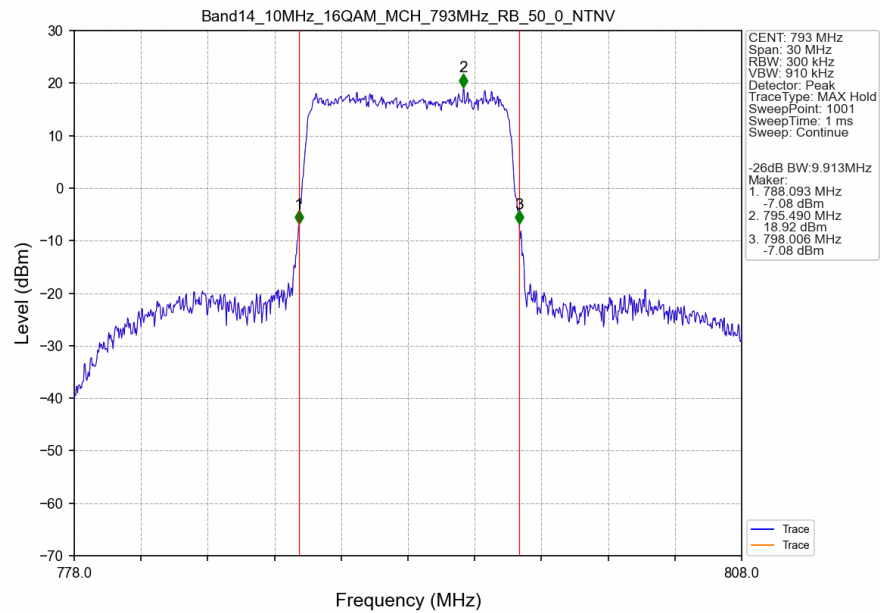
3.2.2 Band14_XDB



Band14 10MHz QPSK MCH 793MHz RB 50 0 NTV



Band14 10MHz 16QAM MCH 793MHz RB 50 0 NTV



4. Peak-Average Ratio

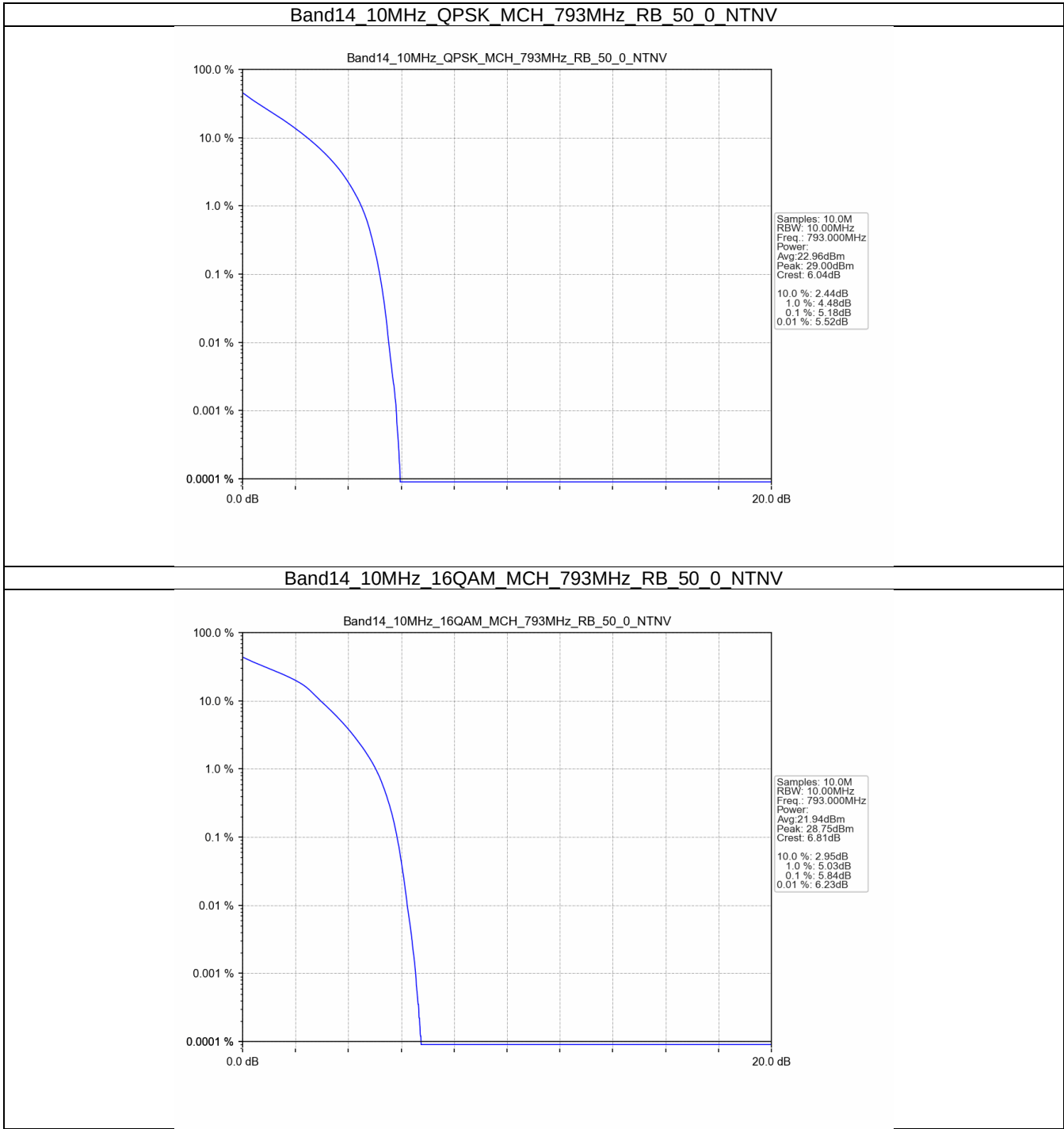
4.1 Test Result

4.1.1 B14_10MHz

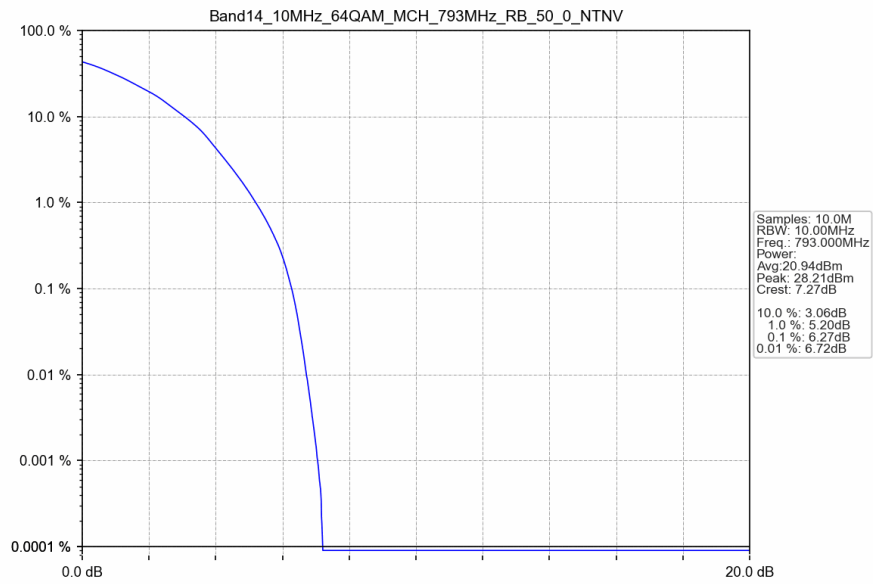
Band: 14 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	793	50	0	5.18	<=13	Pass
16QAM	793	50	0	5.84	<=13	Pass
64QAM	793	50	0	6.27	<=13	Pass
256QAM	793	50	0	6.58	<=13	Pass

4.2 Test Graph

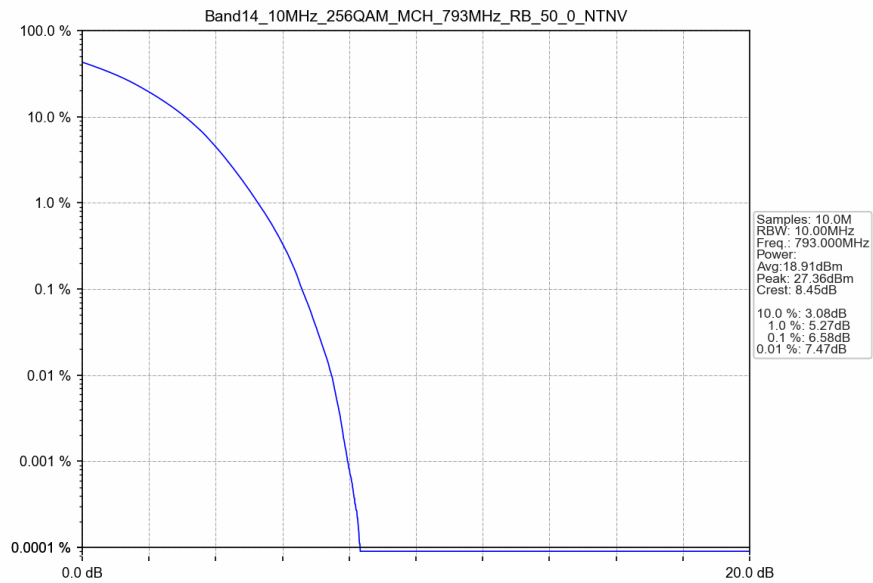
4.2.1 B14_10MHz



Band14 10MHz 64QAM MCH 793MHz RB 50 0 NTNV



Band14 10MHz 256QAM MCH 793MHz RB 50 0 NTNV



5. Spurious Emission

5.1 Test Result

5.1.1 B14_5MHz

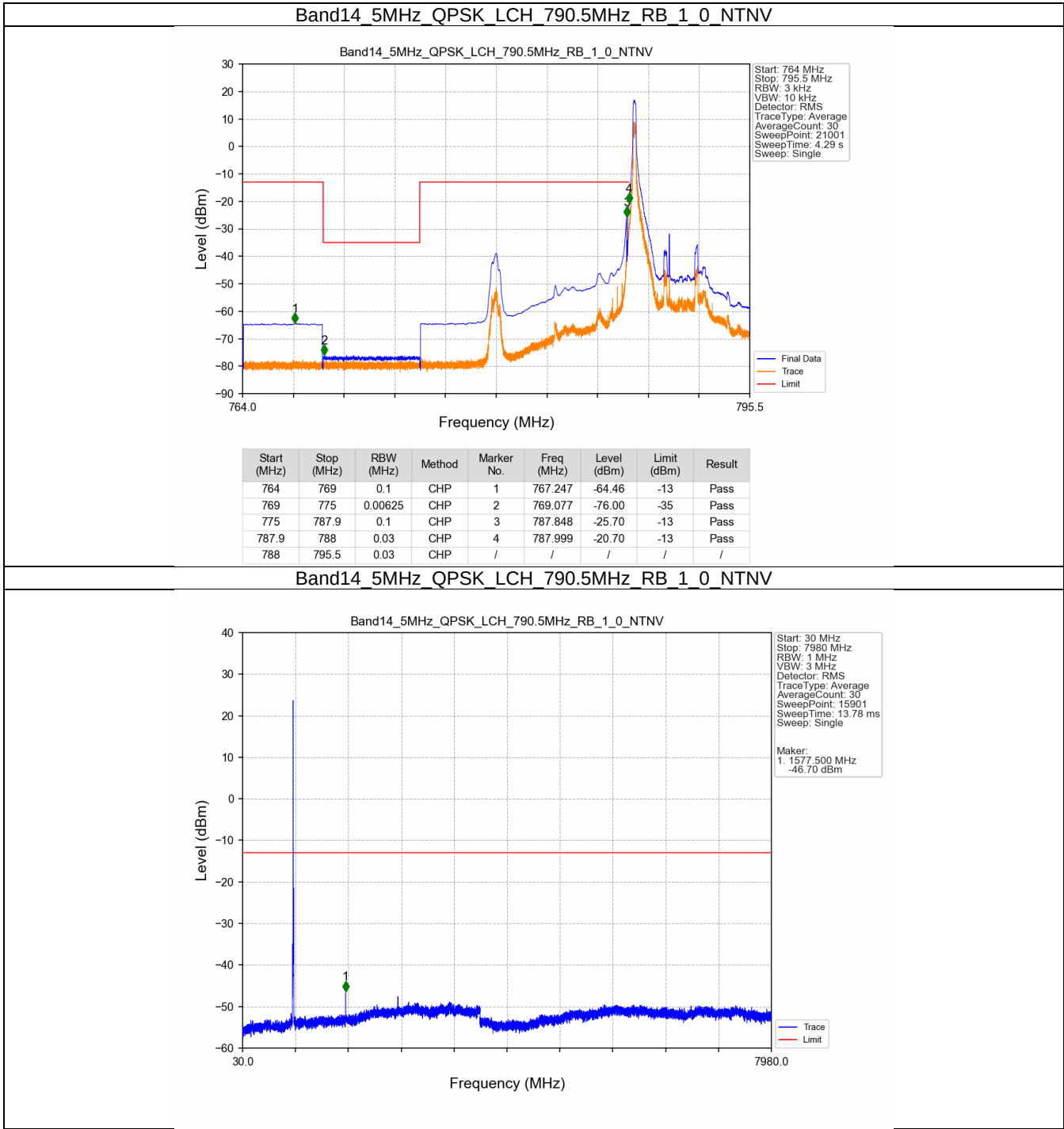
Band: 14 / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	790.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	793	1	0	Refer To Test Graph		Pass
	795.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B14_10MHz

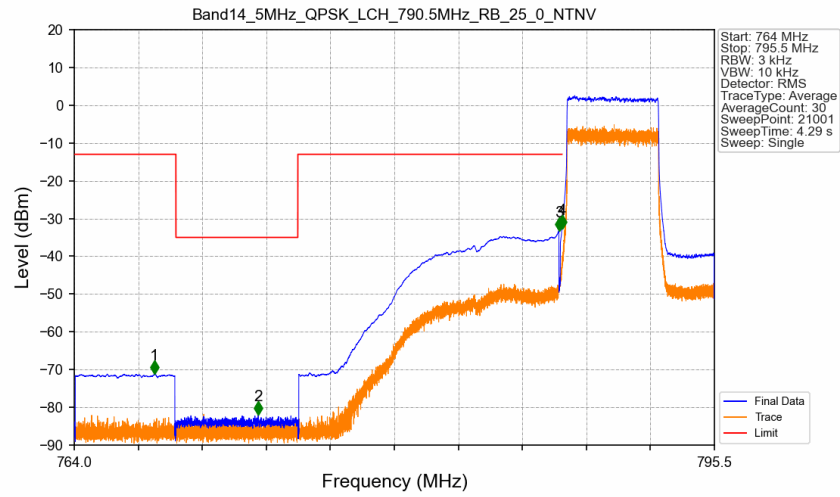
Band: 14 / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	793	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	793	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B14_5MHz

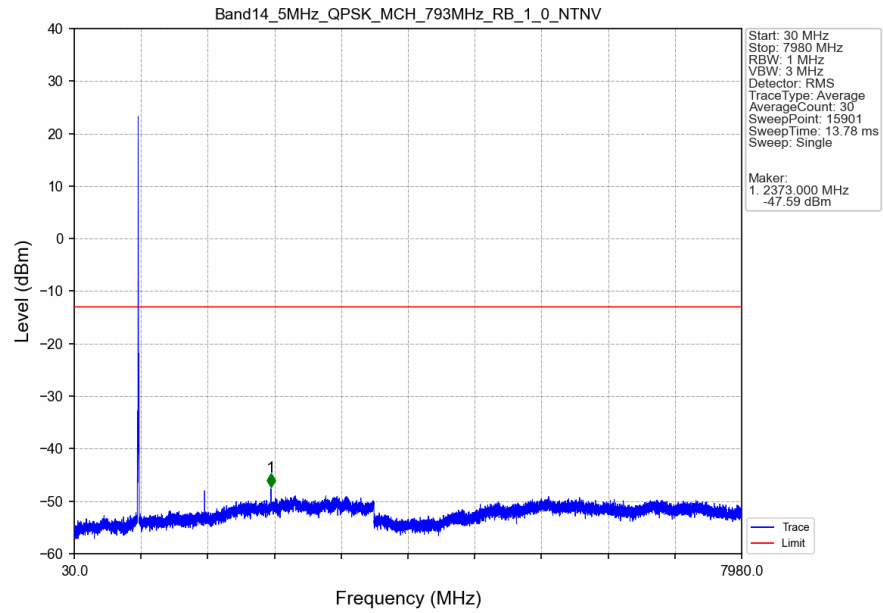


Band14 5MHz QPSK LCH 790.5MHz RB 25 0 NTNV

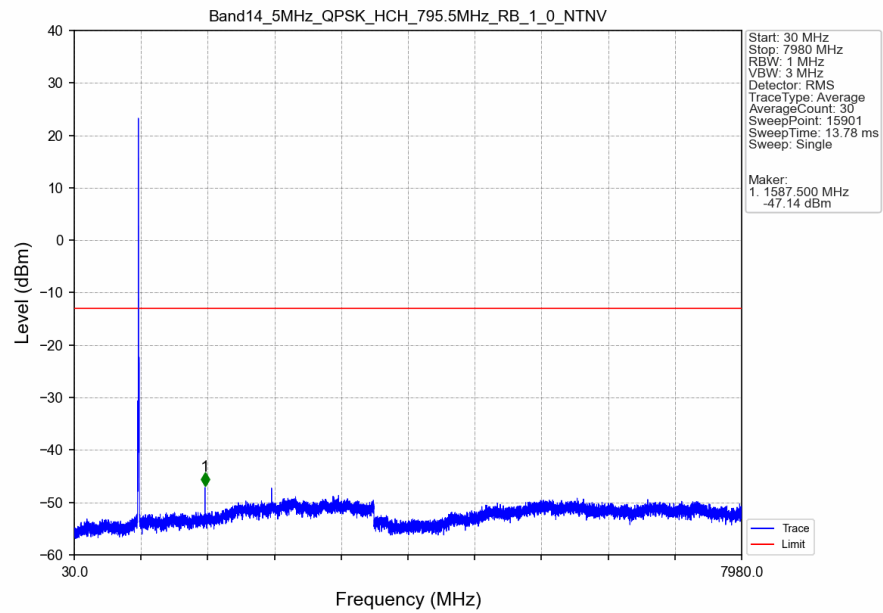


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
764	769	0.1	CHP	1	767.948	-71.10	-13	Pass
769	775	0.00625	CHP	2	773.056	-81.95	-35	Pass
775	787.9	0.1	CHP	3	787.848	-33.15	-13	Pass
787.9	788	0.03	CHP	4	787.999	-32.55	-13	Pass
788	795.5	0.03	CHP	/	/	/	/	/

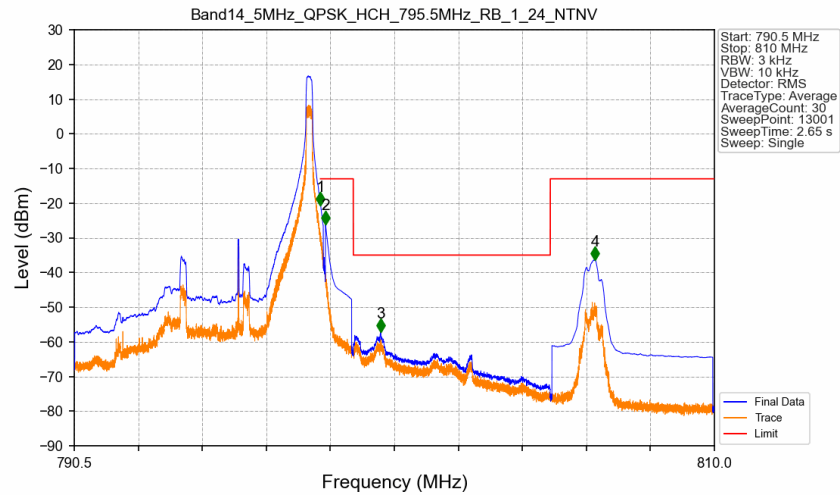
Band14 5MHz QPSK MCH 793MHz RB 1 0 NTNV



Band14 5MHz QPSK HCH 795.5MHz RB 1 0 NTV

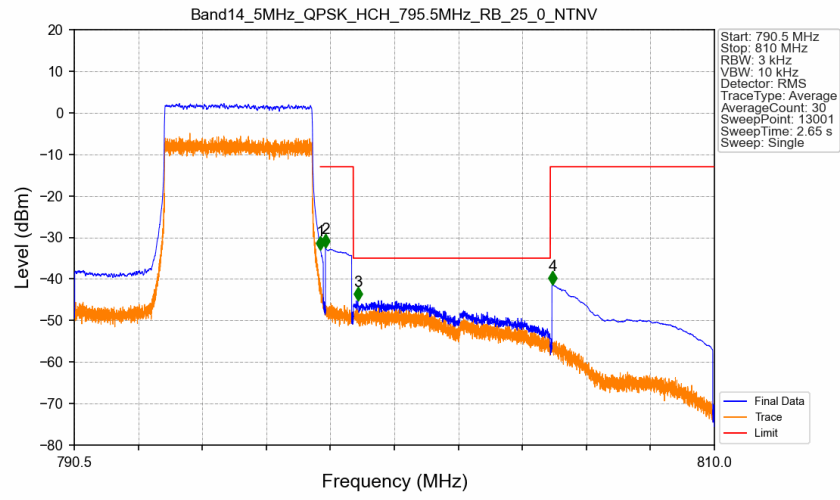


Band14 5MHz QPSK HCH 795.5MHz RB 1 24 NTV



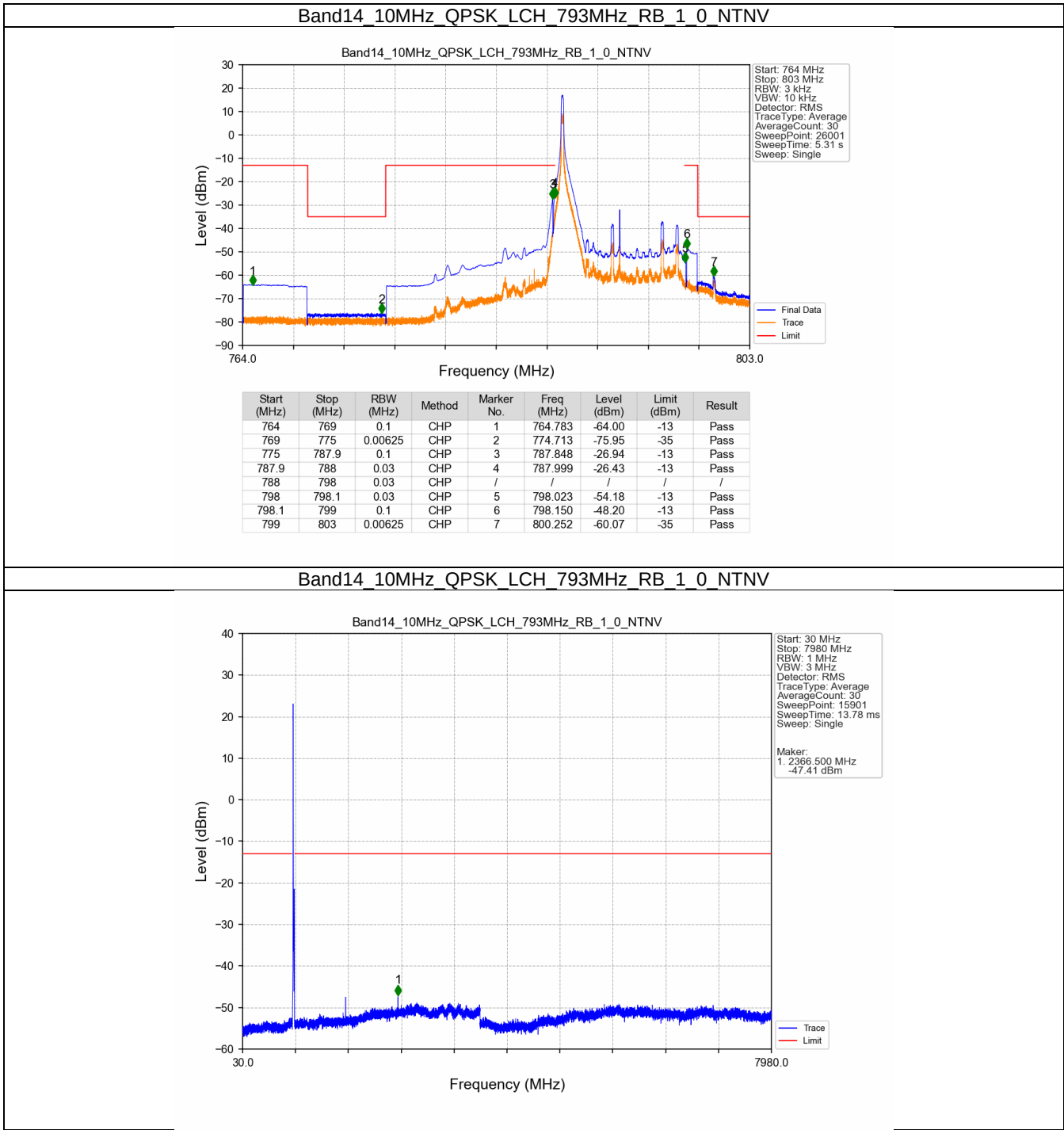
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
790.5	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	1	798.001	-20.62	-13	Pass
798.1	799	0.1	CHP	2	798.152	-26.00	-13	Pass
799	805	0.00625	CHP	3	799.833	-57.07	-35	Pass
805	810	0.1	CHP	4	806.369	-36.30	-13	Pass

Band14 5MHz QPSK HCH 795.5MHz RB 25 0 NTN

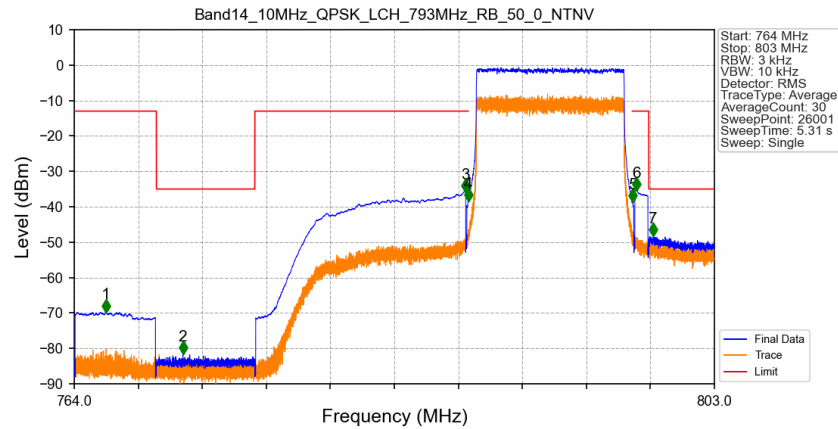


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
790.5	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	1	798.001	-32.99	-13	Pass
798.1	799	0.1	CHP	2	798.152	-32.48	-13	Pass
799	805	0.00625	CHP	3	799.139	-45.19	-35	Pass
805	810	0.1	CHP	4	805.072	-41.40	-13	Pass

5.2.2 B14_10MHz

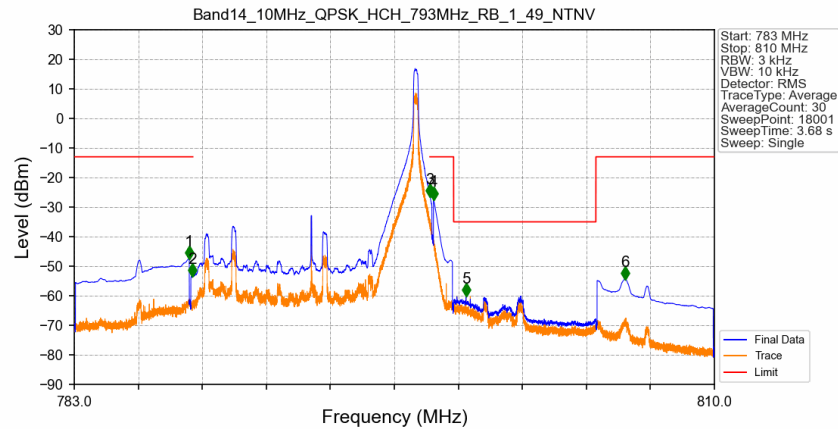


Band14 10MHz QPSK LCH 793MHz RB 50 0 NTNV



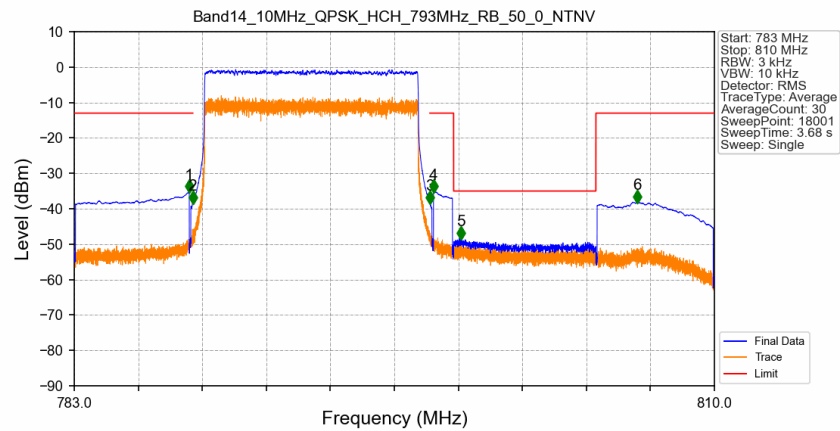
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
764	769	0.1	CHP	1	765.931	-69.51	-13	Pass
769	775	0.00625	CHP	2	770.621	-81.35	-35	Pass
775	787.9	0.1	CHP	3	787.846	-35.61	-13	Pass
787.9	788	0.03	CHP	4	787.999	-38.25	-13	Pass
788	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	5	798.005	-38.37	-13	Pass
798.1	799	0.1	CHP	6	798.245	-35.19	-13	Pass
799	803	0.00625	CHP	7	799.277	-47.97	-35	Pass

Band14 10MHz QPSK HCH 793MHz RB 1 49 NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
783	787.9	0.1	CHP	1	787.848	-47.34	-13	Pass
787.9	788	0.03	CHP	2	787.990	-53.13	-13	Pass
788	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	3	798.001	-26.35	-13	Pass
798.1	799	0.1	CHP	4	798.152	-27.19	-13	Pass
799	805	0.00625	CHP	5	799.521	-59.93	-35	Pass
805	810	0.1	CHP	6	806.241	-54.18	-13	Pass

Band14 10MHz QPSK HCH 793MHz RB 50 0 NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
783	787.9	0.1	CHP	1	787.848	-35.24	-13	Pass
787.9	788	0.03	CHP	2	787.996	-38.32	-13	Pass
788	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	3	798.009	-38.31	-13	Pass
798.1	799	0.1	CHP	4	798.153	-35.20	-13	Pass
799	805	0.00625	CHP	5	799.305	-48.33	-35	Pass
805	810	0.1	CHP	6	806.748	-38.10	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 14-Middle channel, Modulation: QPSK, Bandwidth:10MHz, 1RB#0								
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	-63.29	-40	-23.29	-66.38	2.6	5.69	Horizontal	Pass
2365.5	-49.74	-13	-36.74	-52.26	2.98	5.5	Horizontal	Pass
3154.0	-66.51	-13	-53.51	-70.58	3.23	7.3	Horizontal	Pass
1577.0	-64.42	-40	-24.42	-67.51	2.6	5.69	Vertical	Pass
2365.5	-50.12	-13	-37.12	-52.64	2.98	5.5	Vertical	Pass
3154.0	-66.85	-13	-53.85	-70.92	3.23	7.3	Vertical	Pass

LTE Band 14-Low channel, Modulation: QPSK, Bandwidth:5MHz, 1RB#0								
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	-62.33	-40	-22.33	-65.42	2.6	5.69	Horizontal	Pass
2364.75	-52.33	-13	-39.33	-54.85	2.98	5.5	Horizontal	Pass
3153.0	-66.94	-13	-53.94	-71.01	3.23	7.3	Horizontal	Pass
1576.5	-64.19	-40	-24.19	-67.28	2.6	5.69	Vertical	Pass
2364.75	-54.15	-13	-41.15	-56.67	2.98	5.5	Vertical	Pass
3153.0	-67.1	-13	-54.1	-71.17	3.23	7.3	Vertical	Pass

LTE Band 14-Middle channel, Modulation: QPSK, Bandwidth:5MHz, 1RB#0								
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	-62.49	-40	-22.49	-65.56	2.6	5.67	Horizontal	Pass
2372.25	-53.59	-13	-40.59	-56.11	2.99	5.51	Horizontal	Pass
3163.0	-66.91	-13	-53.91	-71.01	3.23	7.33	Horizontal	Pass
1581.5	-63.04	-40	-23.04	-66.11	2.6	5.67	Vertical	Pass
2372.25	-51.9	-13	-38.9	-54.42	2.99	5.51	Vertical	Pass
3163.0	-67.38	-13	-54.38	-71.48	3.23	7.33	Vertical	Pass

LTE Band 14-High channel, Modulation: QPSK, Bandwidth:5MHz, 1RB#0								
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	-63.42	-40	-23.42	-66.48	2.6	5.66	Horizontal	Pass
2379.75	-51.33	-13	-38.33	-53.87	2.99	5.53	Horizontal	Pass
3173.0	-66.97	-13	-53.97	-71.08	3.24	7.35	Horizontal	Pass
1586.5	-65.6	-40	-25.6	-68.66	2.6	5.66	Vertical	Pass
2379.75	-53.36	-13	-40.36	-55.9	2.99	5.53	Vertical	Pass
3173.0	-66.88	-13	-53.88	-70.99	3.24	7.35	Vertical	Pass