

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	21.77	-2.65	16.97	<=34.77	Pass
			13	21.68	-2.65	16.88	<=34.77	Pass
			24	21.54	-2.65	16.74	<=34.77	Pass
		12	0	20.82	-2.65	16.02	<=34.77	Pass
			6	20.73	-2.65	15.93	<=34.77	Pass
			13	20.68	-2.65	15.88	<=34.77	Pass
		25	0	20.76	-2.65	15.96	<=34.77	Pass
	793	1	0	21.74	-2.65	16.94	<=34.77	Pass
			13	21.51	-2.65	16.71	<=34.77	Pass
			24	21.66	-2.65	16.86	<=34.77	Pass
		12	0	20.80	-2.65	16.00	<=34.77	Pass
			6	20.76	-2.65	15.96	<=34.77	Pass
			13	20.73	-2.65	15.93	<=34.77	Pass
		25	0	20.78	-2.65	15.98	<=34.77	Pass
	795.5	1	0	21.62	-2.65	16.82	<=34.77	Pass
			13	21.67	-2.65	16.87	<=34.77	Pass
			24	21.53	-2.65	16.73	<=34.77	Pass
		12	0	20.77	-2.65	15.97	<=34.77	Pass
			6	20.72	-2.65	15.92	<=34.77	Pass
			13	20.80	-2.65	16.00	<=34.77	Pass
		25	0	20.84	-2.65	16.04	<=34.77	Pass
16QAM	790.5	1	0	21.06	-2.65	16.26	<=34.77	Pass
			13	20.93	-2.65	16.13	<=34.77	Pass
			24	20.90	-2.65	16.10	<=34.77	Pass
		12	0	19.83	-2.65	15.03	<=34.77	Pass
			6	19.78	-2.65	14.98	<=34.77	Pass
			13	19.70	-2.65	14.90	<=34.77	Pass
		25	0	19.76	-2.65	14.96	<=34.77	Pass
	793	1	0	20.87	-2.65	16.07	<=34.77	Pass
			13	21.02	-2.65	16.22	<=34.77	Pass
			24	20.70	-2.65	15.90	<=34.77	Pass
		12	0	19.84	-2.65	15.04	<=34.77	Pass
			6	19.77	-2.65	14.97	<=34.77	Pass
			13	19.74	-2.65	14.94	<=34.77	Pass
		25	0	19.71	-2.65	14.91	<=34.77	Pass
	795.5	1	0	21.02	-2.65	16.22	<=34.77	Pass
			13	20.99	-2.65	16.19	<=34.77	Pass
			24	21.01	-2.65	16.21	<=34.77	Pass
		12	0	19.80	-2.65	15.00	<=34.77	Pass
			6	19.74	-2.65	14.94	<=34.77	Pass
			13	19.77	-2.65	14.97	<=34.77	Pass
		25	0	19.81	-2.65	15.01	<=34.77	Pass
64QAM	790.5	1	0	19.84	-2.65	15.04	<=34.77	Pass
			13	19.88	-2.65	15.08	<=34.77	Pass
			24	19.67	-2.65	14.87	<=34.77	Pass
		12	0	18.79	-2.65	13.99	<=34.77	Pass
			6	18.79	-2.65	13.99	<=34.77	Pass
			13	18.76	-2.65	13.96	<=34.77	Pass
		25	0	18.71	-2.65	13.91	<=34.77	Pass

	793	1	0	19.47	-2.65	14.67	<=34.77	Pass	
			13	19.89	-2.65	15.09	<=34.77	Pass	
			24	19.87	-2.65	15.07	<=34.77	Pass	
		12	0	18.81	-2.65	14.01	<=34.77	Pass	
			6	18.83	-2.65	14.03	<=34.77	Pass	
			13	18.74	-2.65	13.94	<=34.77	Pass	
		25	0	18.74	-2.65	13.94	<=34.77	Pass	
		795.5	1	0	19.96	-2.65	15.16	<=34.77	Pass
				13	19.84	-2.65	15.04	<=34.77	Pass
	24			19.85	-2.65	15.05	<=34.77	Pass	
	12		0	18.86	-2.65	14.06	<=34.77	Pass	
			6	18.76	-2.65	13.96	<=34.77	Pass	
			13	18.80	-2.65	14.00	<=34.77	Pass	
	25	0	18.80	-2.65	14.00	<=34.77	Pass		
256QAM	790.5	1	0	16.57	-2.65	11.77	<=34.77	Pass	
			13	16.84	-2.65	12.04	<=34.77	Pass	
			24	16.79	-2.65	11.99	<=34.77	Pass	
		12	0	16.74	-2.65	11.94	<=34.77	Pass	
			6	16.77	-2.65	11.97	<=34.77	Pass	
			13	16.59	-2.65	11.79	<=34.77	Pass	
		25	0	16.73	-2.65	11.93	<=34.77	Pass	
	793	1	0	16.80	-2.65	12.00	<=34.77	Pass	
			13	16.77	-2.65	11.97	<=34.77	Pass	
			24	16.82	-2.65	12.02	<=34.77	Pass	
		12	0	16.78	-2.65	11.98	<=34.77	Pass	
			6	16.70	-2.65	11.90	<=34.77	Pass	
			13	16.70	-2.65	11.90	<=34.77	Pass	
	25	0	16.70	-2.65	11.90	<=34.77	Pass		
	795.5	1	0	16.81	-2.65	12.01	<=34.77	Pass	
			13	16.74	-2.65	11.94	<=34.77	Pass	
			24	16.79	-2.65	11.99	<=34.77	Pass	
		12	0	16.75	-2.65	11.95	<=34.77	Pass	
			6	16.74	-2.65	11.94	<=34.77	Pass	
			13	16.75	-2.65	11.95	<=34.77	Pass	
		25	0	16.78	-2.65	11.98	<=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	21.38	-2.65	16.58	<=34.77	Pass
			25	21.66	-2.65	16.86	<=34.77	Pass
			49	21.68	-2.65	16.88	<=34.77	Pass
		25	0	20.82	-2.65	16.02	<=34.77	Pass
			13	20.75	-2.65	15.95	<=34.77	Pass
			25	20.75	-2.65	15.95	<=34.77	Pass
		50	0	20.80	-2.65	16.00	<=34.77	Pass
16QAM	793	1	0	20.90	-2.65	16.10	<=34.77	Pass
			25	20.94	-2.65	16.14	<=34.77	Pass
			49	21.00	-2.65	16.20	<=34.77	Pass
		25	0	19.83	-2.65	15.03	<=34.77	Pass
			13	19.73	-2.65	14.93	<=34.77	Pass
			25	19.77	-2.65	14.97	<=34.77	Pass
		50	0	19.83	-2.65	15.03	<=34.77	Pass
64QAM	793	1	0	19.79	-2.65	14.99	<=34.77	Pass

		25	25	19.83	-2.65	15.03	<=34.77	Pass
			49	19.81	-2.65	15.01	<=34.77	Pass
			0	18.77	-2.65	13.97	<=34.77	Pass
			13	18.75	-2.65	13.95	<=34.77	Pass
			25	18.73	-2.65	13.93	<=34.77	Pass
		50	0	18.77	-2.65	13.97	<=34.77	Pass
		256QAM	793	1	0	16.62	-2.65	11.82
25	16.74				-2.65	11.94	<=34.77	Pass
49	16.74				-2.65	11.94	<=34.77	Pass
25	0			16.80	-2.65	12.00	<=34.77	Pass
	13			16.69	-2.65	11.89	<=34.77	Pass
	25			16.68	-2.65	11.88	<=34.77	Pass
50	0			16.74	-2.65	11.94	<=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	3.4	-1.900	-0.0024	-2.5 to 2.5	Pass
					3.8	-7.900	-0.0100	-2.5 to 2.5	Pass
					4.45	-3.200	-0.0040	-2.5 to 2.5	Pass
				-30	3.8	0.700	0.0009	-2.5 to 2.5	Pass
				-20	3.8	-6.600	-0.0083	-2.5 to 2.5	Pass
				-10	3.8	-3.200	-0.0040	-2.5 to 2.5	Pass
				0	3.8	-2.000	-0.0025	-2.5 to 2.5	Pass
				10	3.8	-2.700	-0.0034	-2.5 to 2.5	Pass
				30	3.8	-6.700	-0.0084	-2.5 to 2.5	Pass
				40	3.8	-4.100	-0.0052	-2.5 to 2.5	Pass
50	3.8	-6.700	-0.0084	-2.5 to 2.5	Pass				

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band14_OBW

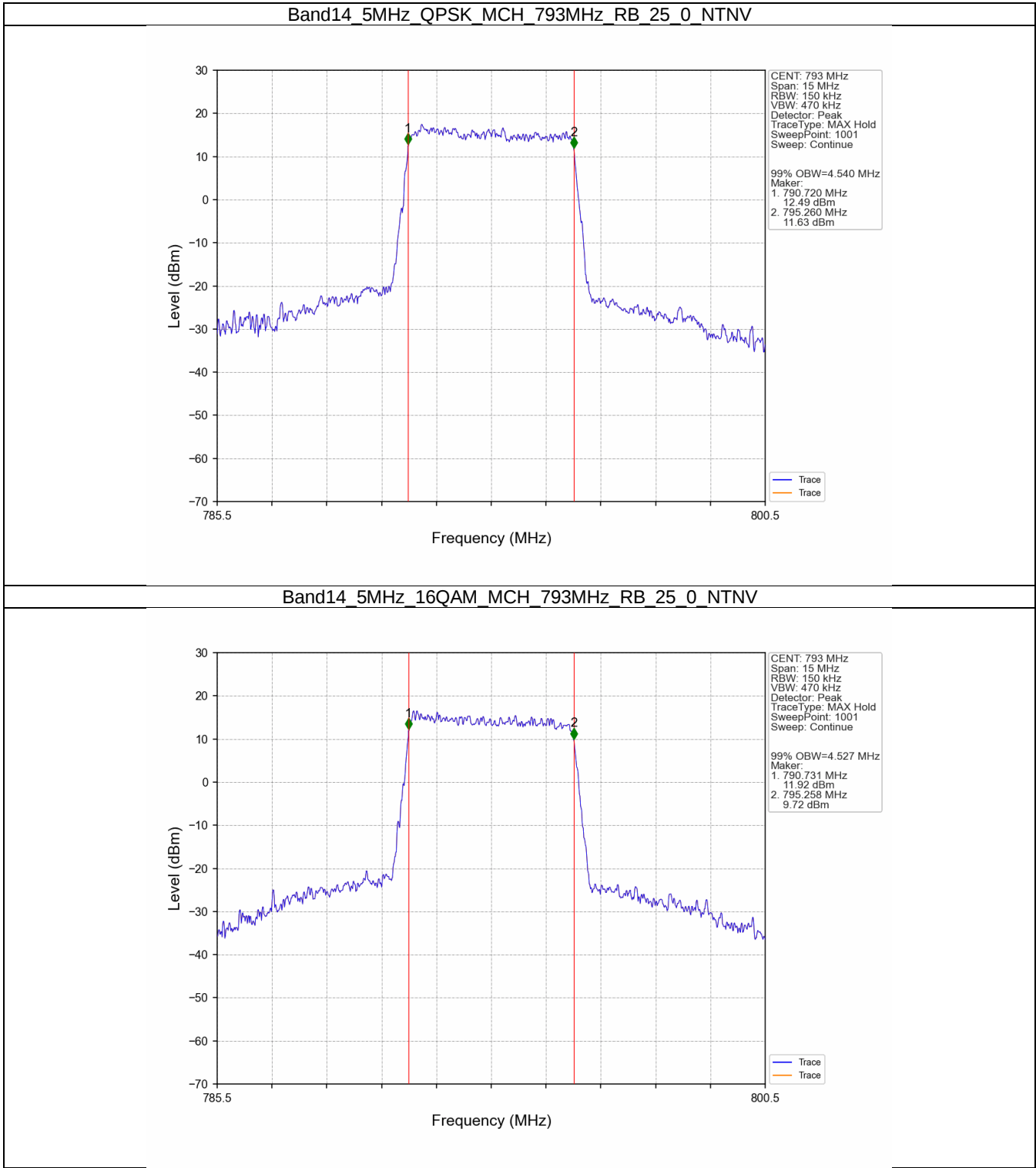
Band: 14 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	793	25	0	4.540	/	Pass
	16QAM	793	25	0	4.527	/	Pass
10	QPSK	793	50	0	9.089	/	Pass
	16QAM	793	50	0	9.037	/	Pass

3.1.2 Band14_XDB

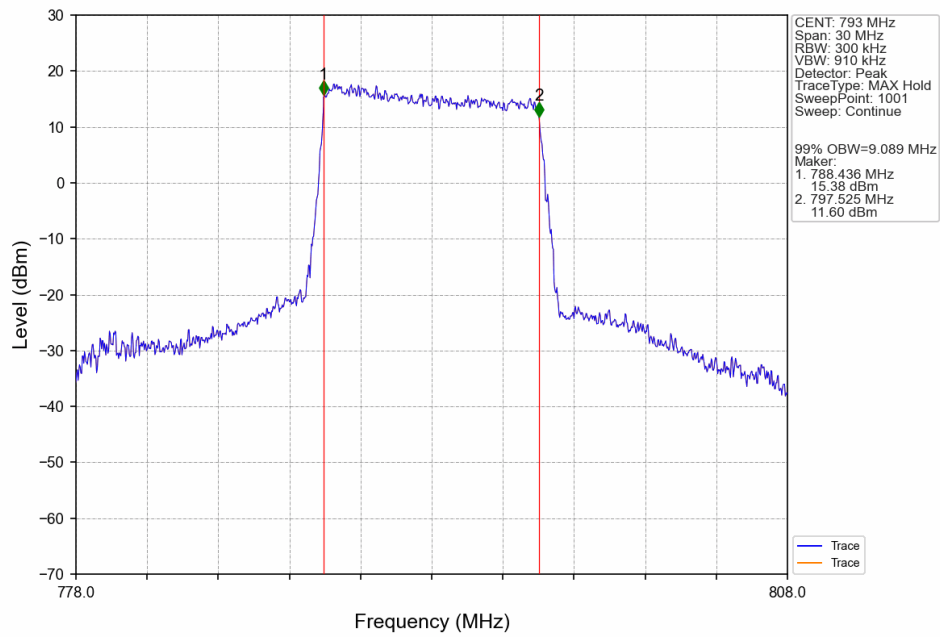
Band: 14 / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
5	QPSK	793	25	0	5.070	/	Pass
	16QAM	793	25	0	5.057	/	Pass
10	QPSK	793	50	0	9.944	/	Pass
	16QAM	793	50	0	9.826	/	Pass

3.2 Test Graph

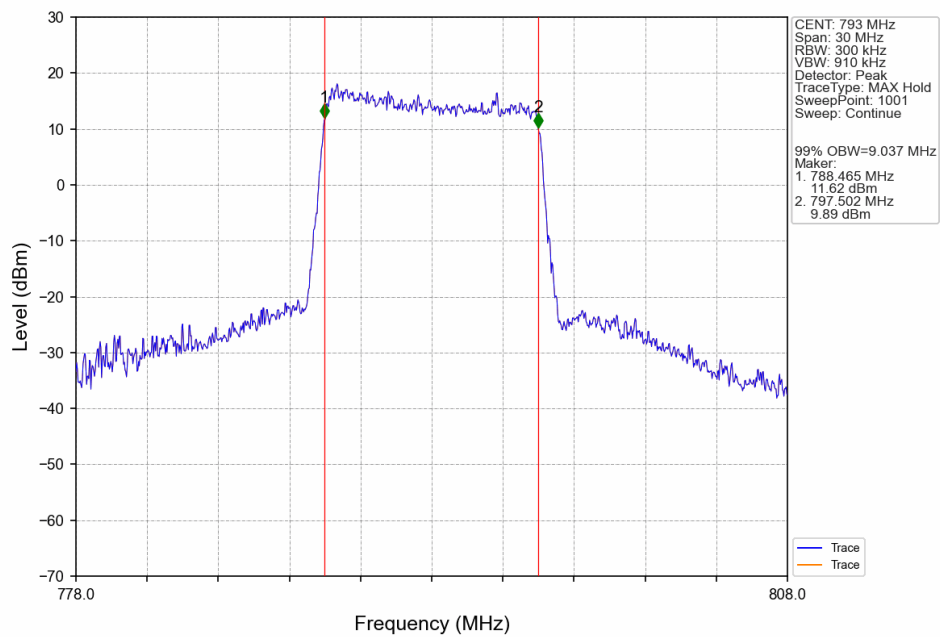
3.2.1 Band14_OBW



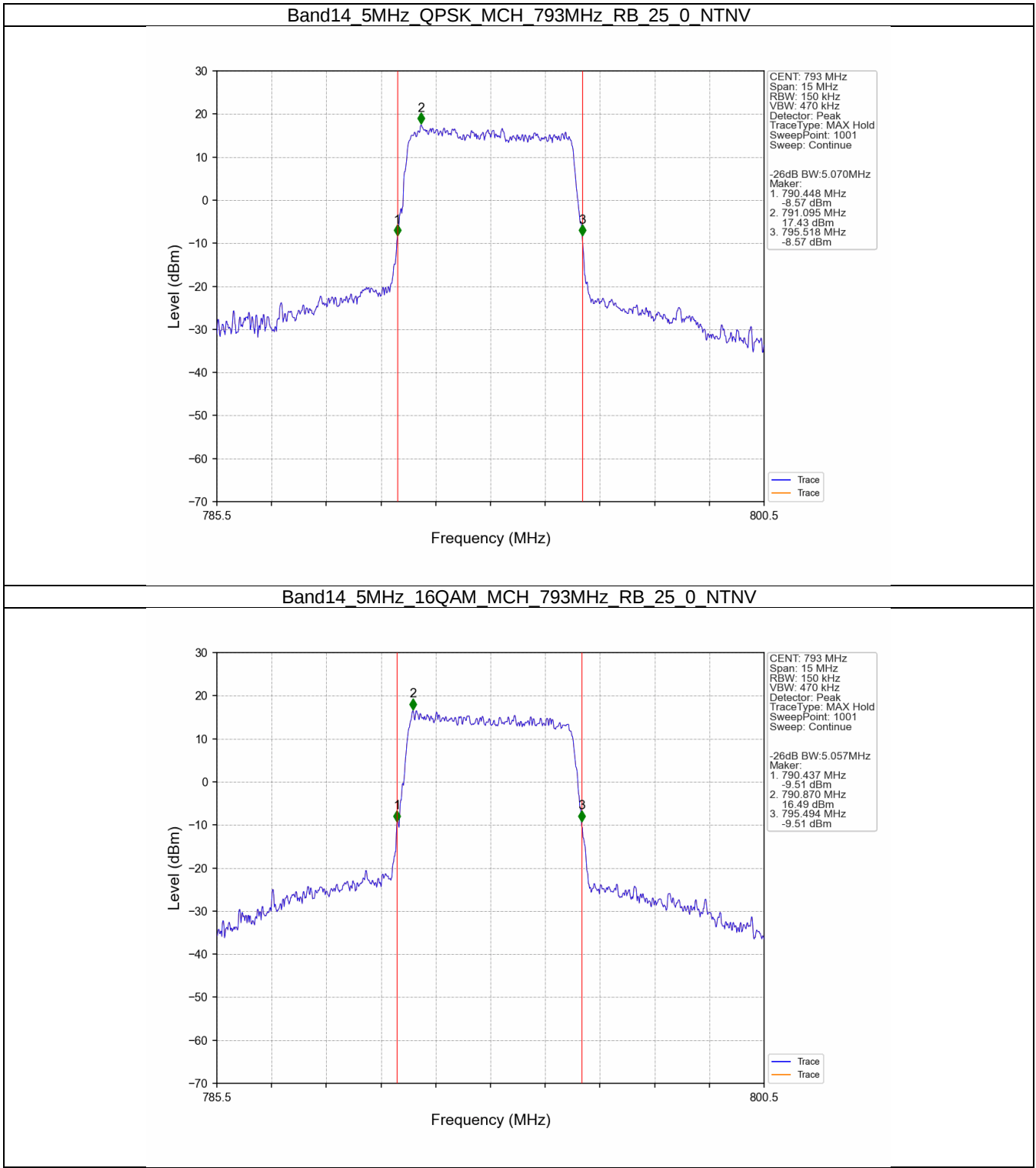
Band14 10MHz QPSK MCH 793MHz RB 50 0 NTNV



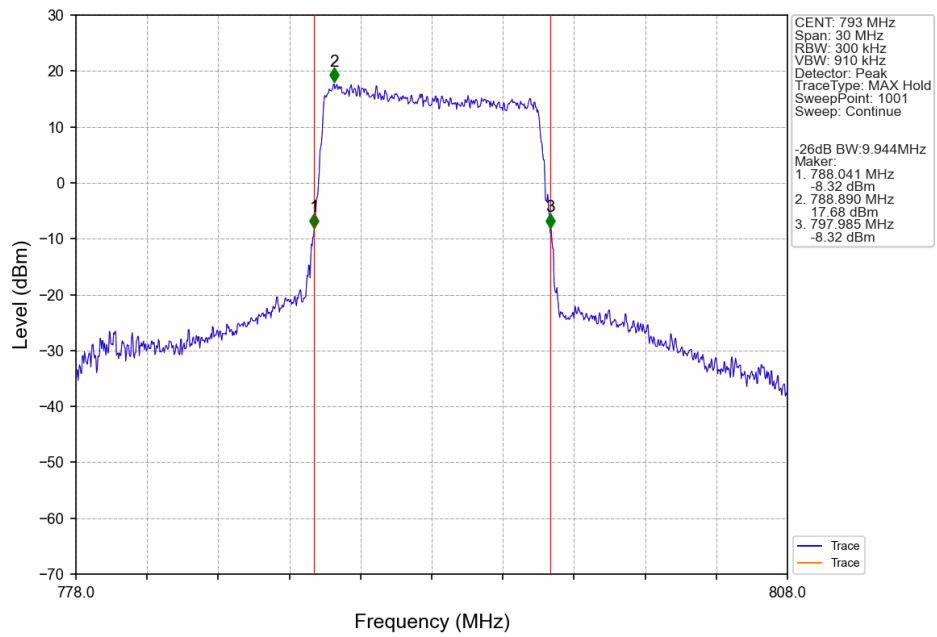
Band14 10MHz 16QAM MCH 793MHz RB 50 0 NTNV



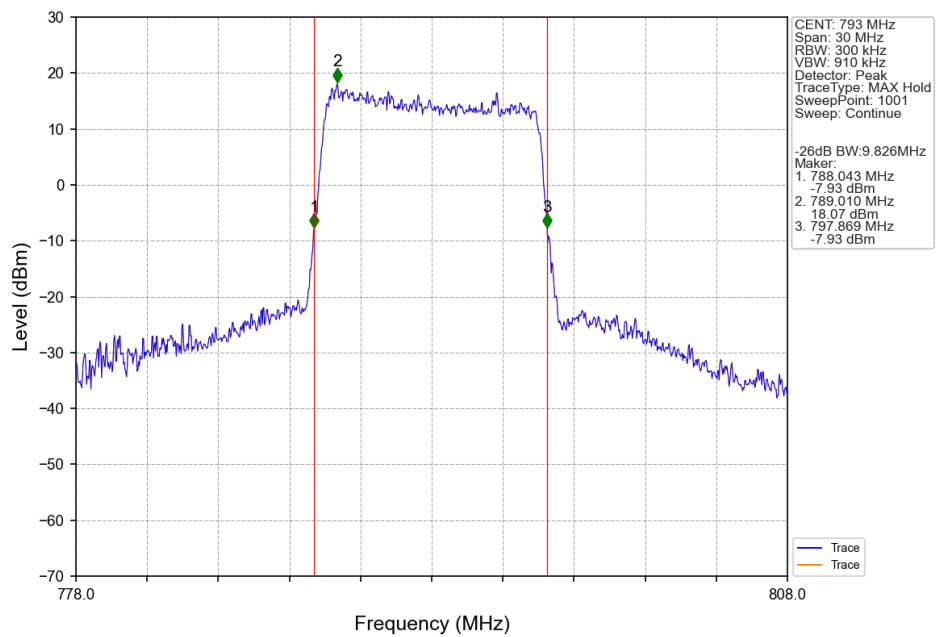
3.2.2 Band14_XDB



Band14 10MHz QPSK MCH 793MHz RB 50 0 NTNV



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



4. Peak-Average Ratio

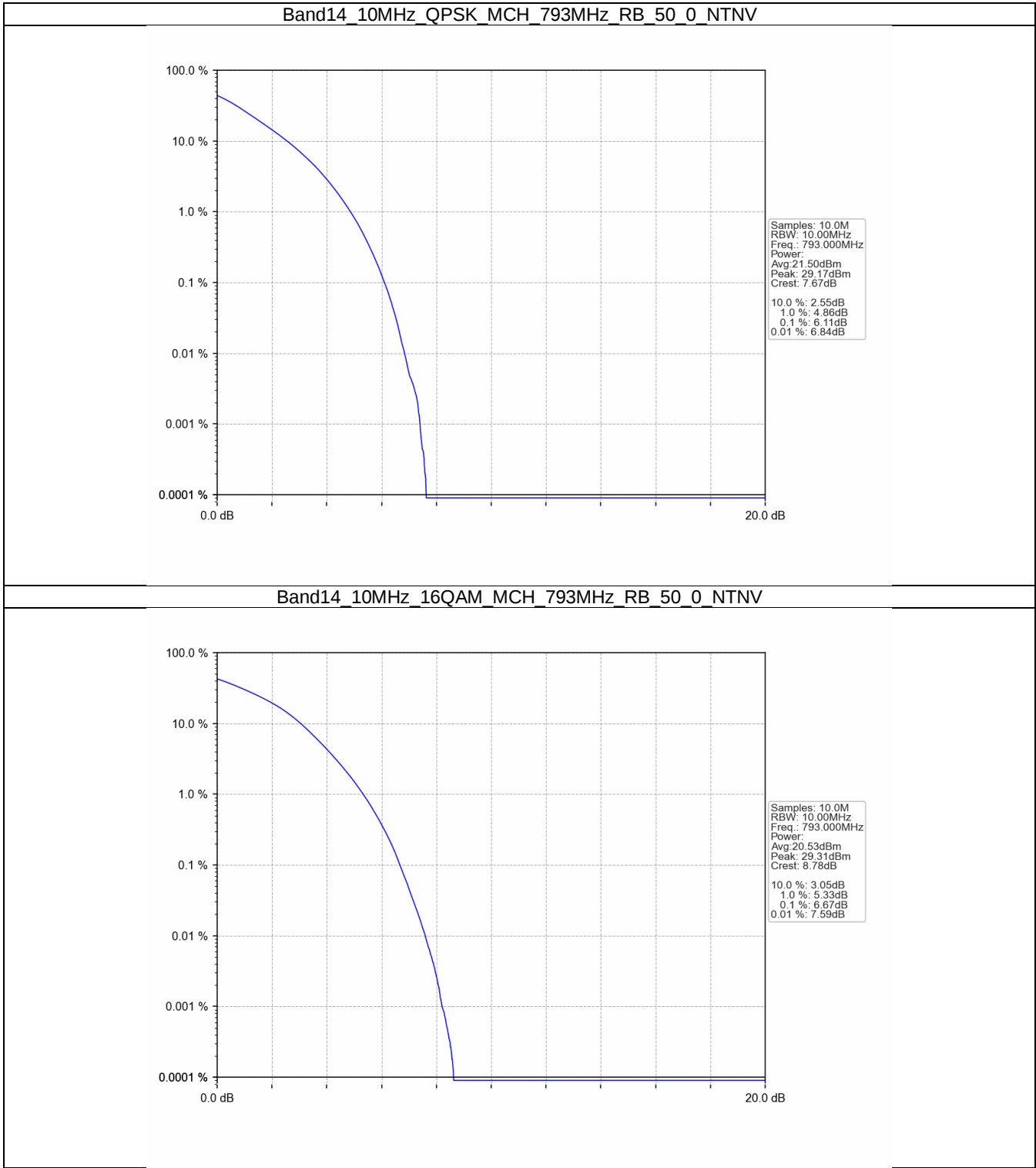
4.1 Test Result

4.1.1 B14_10MHz

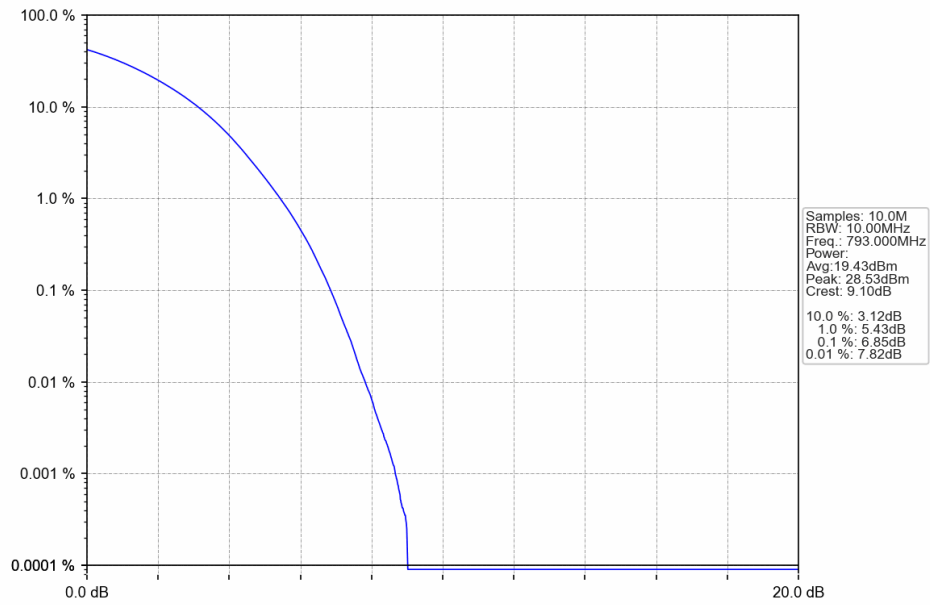
Band: 14 / Bandwidth: 10MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	793	50	0	6.11	<=13	Pass
16QAM	793	50	0	6.67	<=13	Pass
64QAM	793	50	0	6.85	<=13	Pass
256QAM	793	50	0	6.82	<=13	Pass

4.2 Test Graph

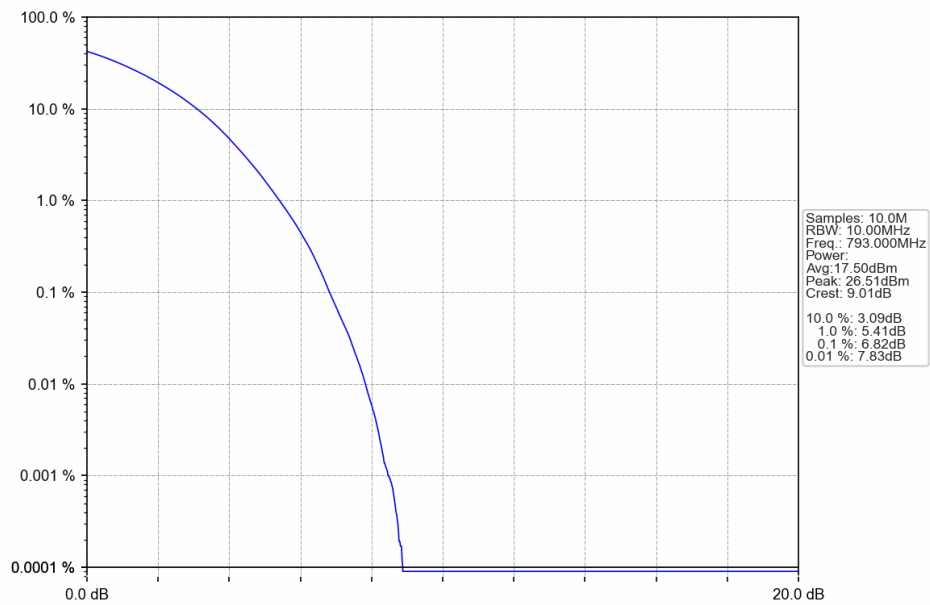
4.2.1 B14_10MHz



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

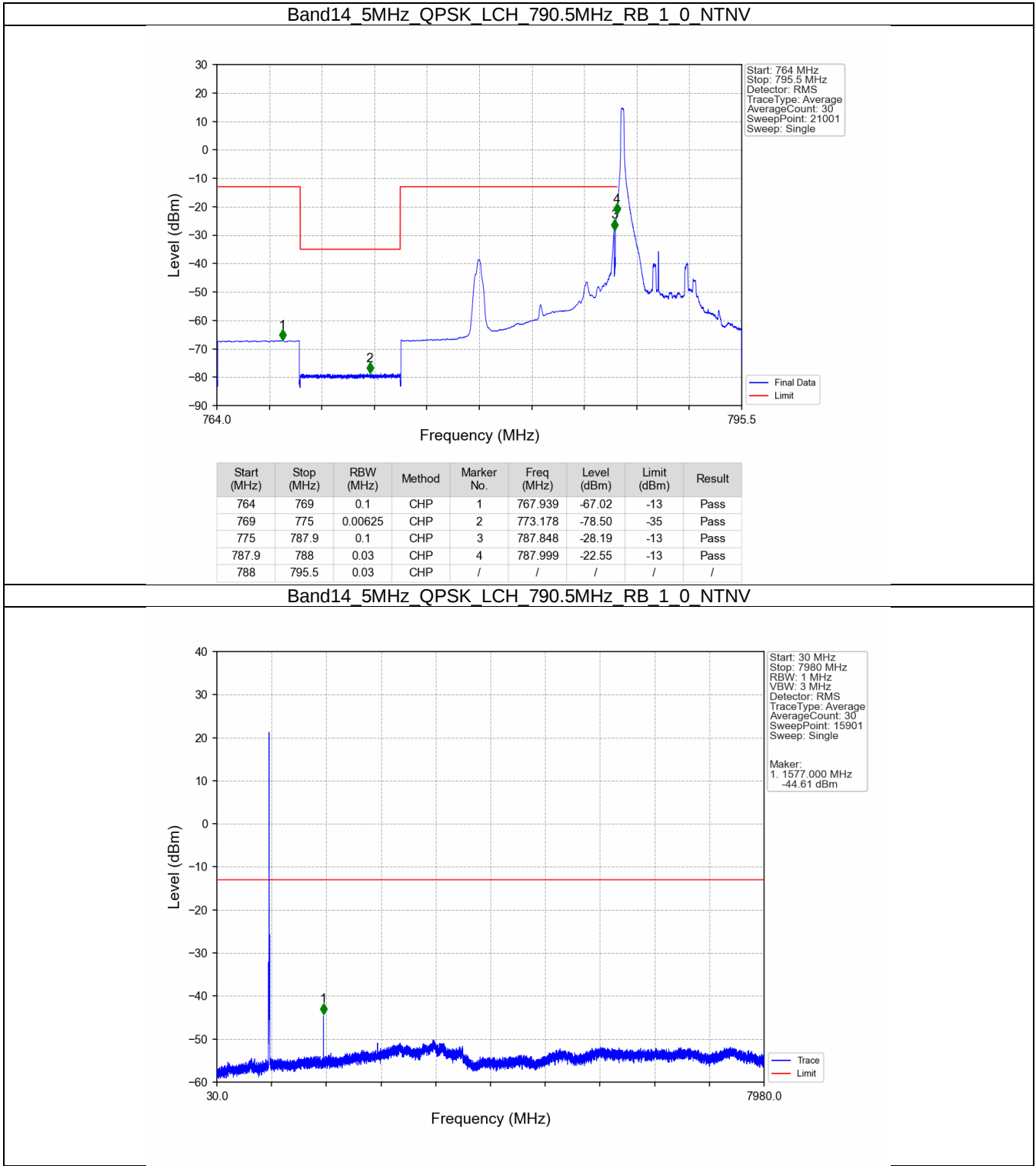
Band: 14 / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	790.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	793	1	0	Refer To Test Graph		Pass
	795.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.2 B14_10MHz

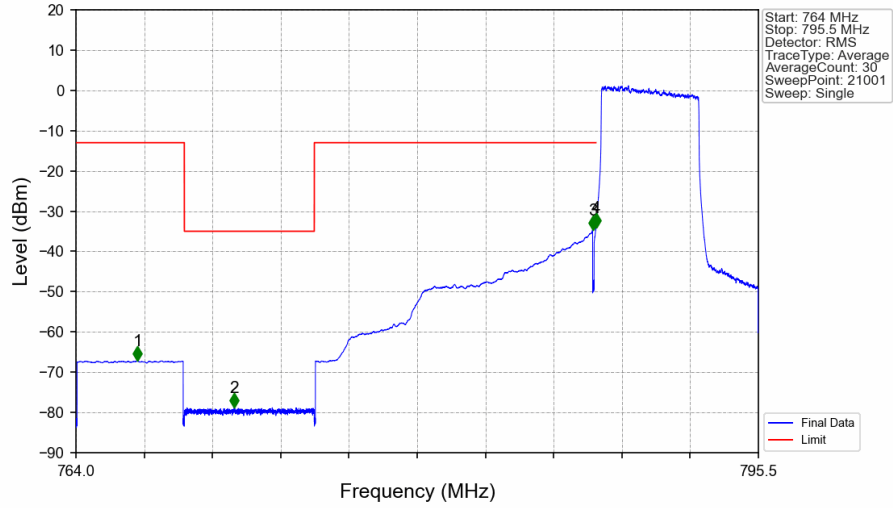
Band: 14 / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	793	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	793	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B14_5MHz

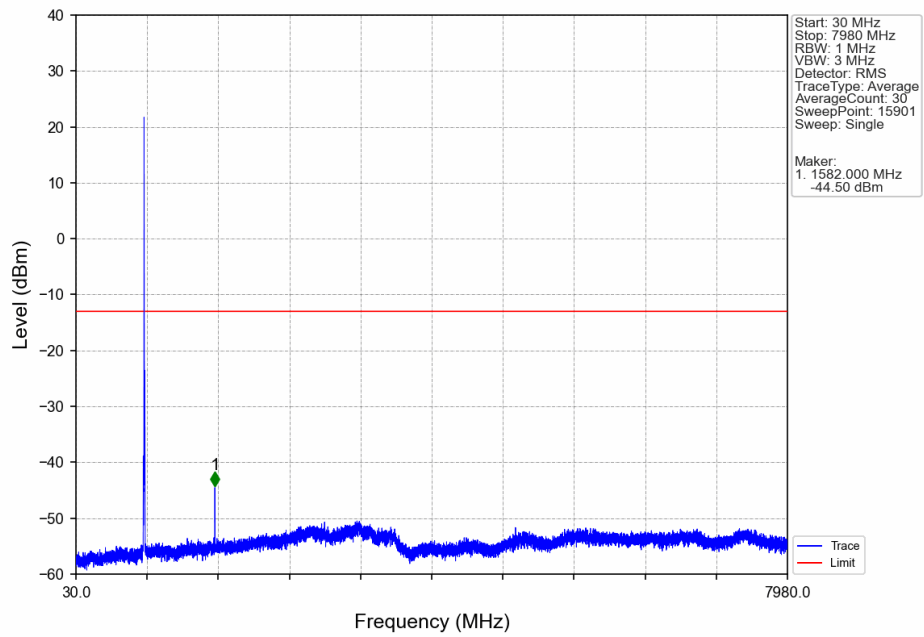


Band14 5MHz QPSK LCH 790.5MHz RB 25 0 NTV

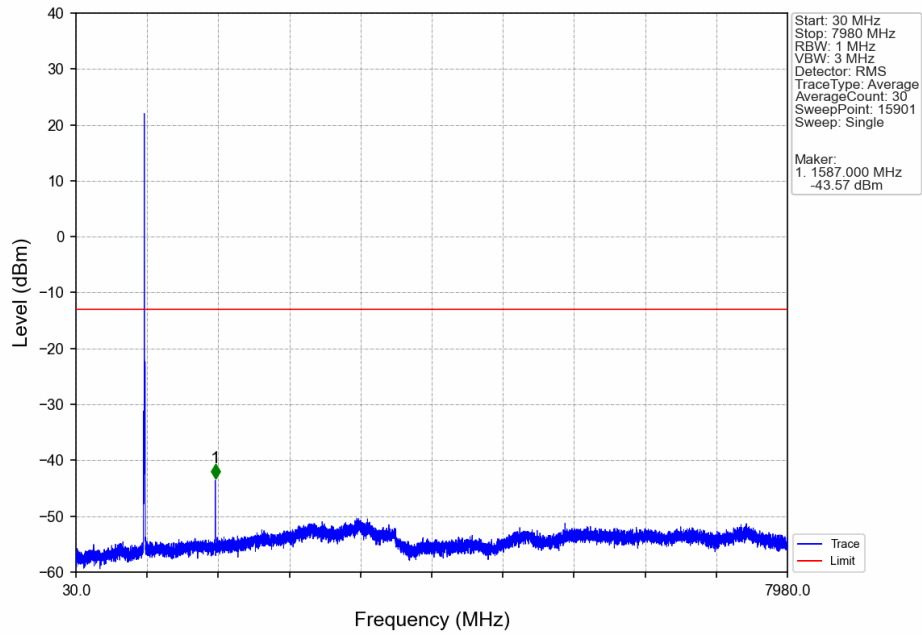


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
764	769	0.1	CHP	1	766.847	-67.18	-13	Pass
769	775	0.00625	CHP	2	771.305	-78.80	-35	Pass
775	787.9	0.1	CHP	3	787.848	-34.60	-13	Pass
787.9	788	0.03	CHP	4	787.999	-34.04	-13	Pass
788	795.5	0.03	CHP	/	/	/	/	/

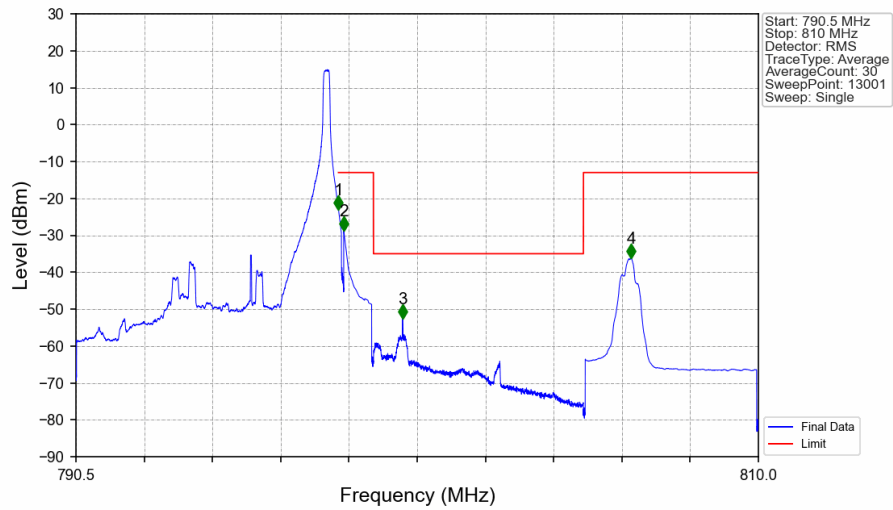
Band14_5MHz_QPSK_MCH_793MHz_RB_1_0_NTNV



Band14 5MHz QPSK HCH 795.5MHz RB 1 0 NTNV

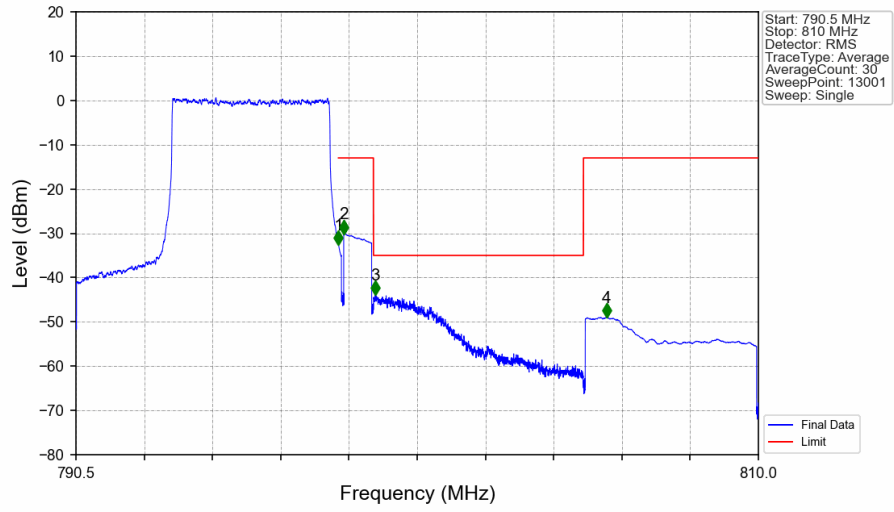


Band14_5MHz_QPSK_HCH_795.5MHz_RB_1_24_NTNV



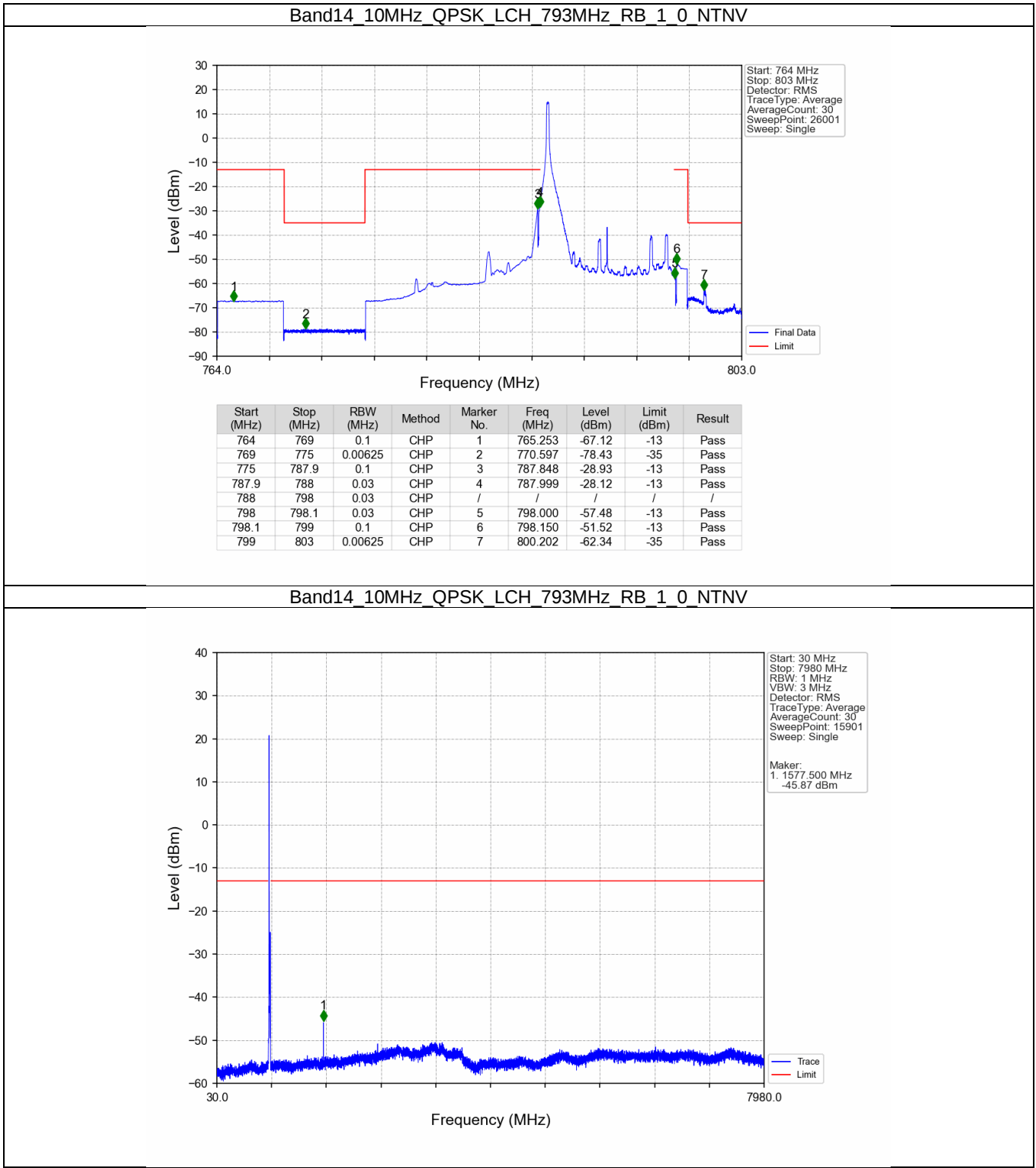
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
790.5	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	1	798.001	-22.97	-13	Pass
798.1	799	0.1	CHP	2	798.152	-28.82	-13	Pass
799	805	0.00625	CHP	3	799.833	-52.49	-35	Pass
805	810	0.1	CHP	4	806.361	-36.18	-13	Pass

Band14 5MHz QPSK HCH 795.5MHz RB 25 0 NTN

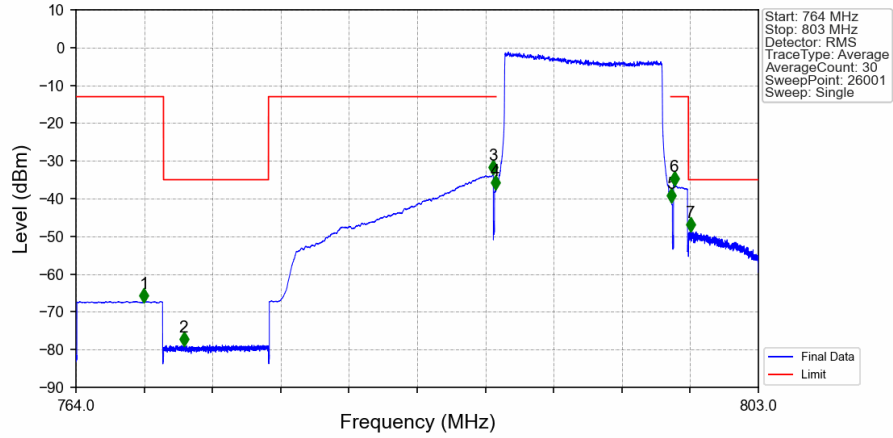


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
790.5	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	1	798.001	-32.53	-13	Pass
798.1	799	0.1	CHP	2	798.159	-30.13	-13	Pass
799	805	0.00625	CHP	3	799.061	-43.84	-35	Pass
805	810	0.1	CHP	4	805.658	-48.97	-13	Pass

5.2.2 B14_10MHz

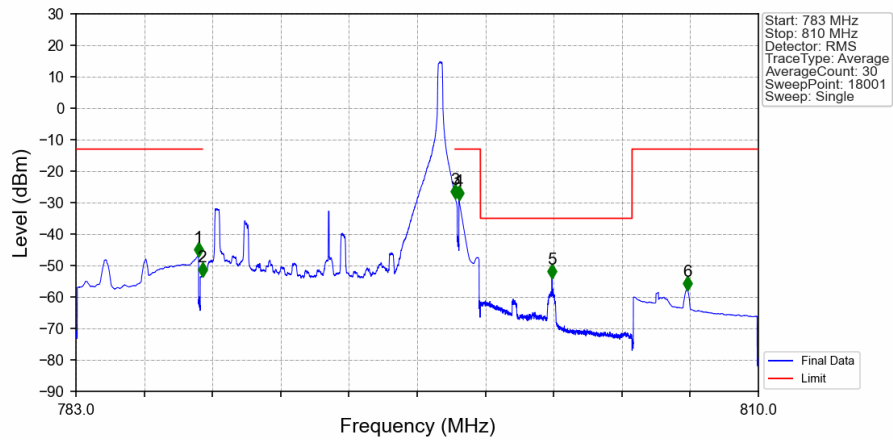


Band14 10MHz QPSK LCH 793MHz RB 50 0 NTNV



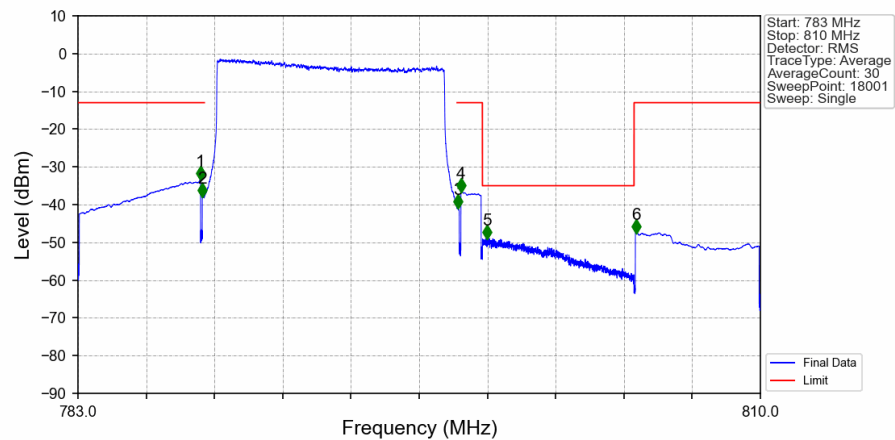
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
764	769	0.1	CHP	1	767.893	-67.22	-13	Pass
769	775	0.00625	CHP	2	770.154	-78.79	-35	Pass
775	787.9	0.1	CHP	3	787.846	-33.27	-13	Pass
787.9	788	0.03	CHP	4	787.960	-37.32	-13	Pass
788	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	5	798.021	-40.80	-13	Pass
798.1	799	0.1	CHP	6	798.185	-36.34	-13	Pass
799	803	0.00625	CHP	7	799.112	-48.42	-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	787.846	-46.72	-13	Pass
787.9	788	0.03	CHP	2	787.996	-53.06	-13	Pass
788	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	3	798.001	-28.32	-13	Pass
798.1	799	0.1	CHP	4	798.152	-28.95	-13	Pass
799	805	0.00625	CHP	5	801.832	-53.66	-35	Pass
805	810	0.1	CHP	6	807.184	-57.58	-13	Pass

Band14 10MHz QPSK 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	787.843	-33.29	-13	Pass
787.9	788	0.03	CHP	2	787.931	-37.82	-13	Pass
788	798	0.03	CHP	/	/	/	/	/
798	798.1	0.03	CHP	3	798.023	-40.81	-13	Pass
798.1	799	0.1	CHP	4	798.152	-36.49	-13	Pass
799	805	0.00625	CHP	5	799.187	-48.87	-35	Pass
805	810	0.1	CHP	6	805.098	-47.35	-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	-70.45	-40	-30.45	-73.54	2.6	5.69	Horizontal	Pass
2365.5	-69.73	-13	-56.73	-72.25	2.98	5.5	Horizontal	Pass
3154.0	-66.53	-13	-53.53	-70.6	3.23	7.3	Horizontal	Pass
1577.0	-70.36	-40	-30.36	-73.45	2.6	5.69	Vertical	Pass
2365.5	-69.64	-13	-56.64	-72.16	2.98	5.5	Vertical	Pass
3154.0	-67.17	-13	-54.17	-71.24	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	-71.09	-40	-31.09	-74.18	2.6	5.69	Horizontal	Pass
2364.75	-69.6	-13	-56.6	-72.12	2.98	5.5	Horizontal	Pass
3153.0	-67.52	-13	-54.52	-71.59	3.23	7.3	Horizontal	Pass
1576.5	-70.75	-40	-30.75	-73.84	2.6	5.69	Vertical	Pass
2364.75	-69.81	-13	-56.81	-72.33	2.98	5.5	Vertical	Pass
3153.0	-67.64	-13	-54.64	-71.71	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	-71.14	-40	-31.14	-74.21	2.6	5.67	Horizontal	Pass
2372.25	-70.02	-13	-57.02	-72.54	2.99	5.51	Horizontal	Pass
3163.0	-67.46	-13	-54.46	-71.56	3.23	7.33	Horizontal	Pass
1581.5	-70.91	-40	-30.91	-73.98	2.6	5.67	Vertical	Pass
2372.25	-70.12	-13	-57.12	-72.64	2.99	5.51	Vertical	Pass
3163.0	-67.54	-13	-54.54	-71.64	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	-71.03	-40	-31.03	-74.09	2.6	5.66	Horizontal	Pass
2379.75	-69.9	-13	-56.9	-72.44	2.99	5.53	Horizontal	Pass
3173.0	-67.34	-13	-54.34	-71.45	3.24	7.35	Horizontal	Pass
1586.5	-70.7	-40	-30.7	-73.76	2.6	5.66	Vertical	Pass
2379.75	-70.02	-13	-57.02	-72.56	2.99	5.53	Vertical	Pass
3173.0	-67.38	-13	-54.38	-71.49	3.24	7.35	Vertical	Pass