

1. Transmitter Conducted Power Output

1.1 Test Result

1.1.1 B26a_1.4MHz

Band: 26a / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)		Verdict
		Size	Offset	Result	Limit	
QPSK	814.7	1	0	23.94	<=50	Pass
			5	23.95	<=50	Pass
		6	0	23.09	<=50	Pass
	819	1	0	23.91	<=50	Pass
			5	23.93	<=50	Pass
		6	0	23.13	<=50	Pass
	823.3	1	0	23.92	<=50	Pass
			5	23.95	<=50	Pass
		6	0	23.15	<=50	Pass
16QAM	814.7	1	0	23.17	<=50	Pass
			5	23.29	<=50	Pass
		6	0	22.13	<=50	Pass
	819	1	0	23.29	<=50	Pass
			5	23.27	<=50	Pass
		6	0	22.11	<=50	Pass
	823.3	1	0	23.12	<=50	Pass
			5	23.28	<=50	Pass
		6	0	22.13	<=50	Pass
64QAM	814.7	1	0	21.93	<=50	Pass
			5	22.12	<=50	Pass
		6	0	21.09	<=50	Pass
	819	1	0	21.99	<=50	Pass
			5	22.02	<=50	Pass
		6	0	21.17	<=50	Pass
	823.3	1	0	22.01	<=50	Pass
			5	22.17	<=50	Pass
		6	0	21.11	<=50	Pass
256QAM	814.7	1	0	19.14	<=50	Pass
			5	18.94	<=50	Pass
		6	0	19.02	<=50	Pass
	819	1	0	19.15	<=50	Pass
			5	19.14	<=50	Pass
		6	0	19.14	<=50	Pass
	823.3	1	0	19.16	<=50	Pass
			5	18.93	<=50	Pass
		6	0	19.14	<=50	Pass

1.1.2 B26a_3MHz

Band: 26a / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)		Verdict
		Size	Offset	Result	Limit	
QPSK	815.5	1	0	24.11	<=50	Pass
			14	24.00	<=50	Pass
		15	0	23.14	<=50	Pass
	819	1	0	24.01	<=50	Pass
			14	23.96	<=50	Pass

	822.5	15	0	23.12	<=50	Pass
		1	0	23.99	<=50	Pass
			14	23.95	<=50	Pass
		15	0	23.15	<=50	Pass
16QAM	815.5	1	0	23.62	<=50	Pass
			14	23.13	<=50	Pass
		15	0	22.12	<=50	Pass
	819	1	0	23.65	<=50	Pass
			14	23.64	<=50	Pass
		15	0	22.19	<=50	Pass
	822.5	1	0	23.70	<=50	Pass
			14	23.16	<=50	Pass
		15	0	22.11	<=50	Pass
64QAM	815.5	1	0	22.38	<=50	Pass
			14	21.93	<=50	Pass
		15	0	21.26	<=50	Pass
	819	1	0	22.37	<=50	Pass
			14	22.34	<=50	Pass
		15	0	21.11	<=50	Pass
	822.5	1	0	22.37	<=50	Pass
			14	21.96	<=50	Pass
		15	0	21.25	<=50	Pass
256QAM	815.5	1	0	19.50	<=50	Pass
			14	19.12	<=50	Pass
		15	0	19.21	<=50	Pass
	819	1	0	19.47	<=50	Pass
			14	19.51	<=50	Pass
		15	0	19.12	<=50	Pass
	822.5	1	0	19.51	<=50	Pass
			14	18.91	<=50	Pass
		15	0	19.24	<=50	Pass

1.1.3 B26a_5MHz

Band: 26a / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)		Verdict
		Size	Offset	Result	Limit	
QPSK	816.5	1	0	24.27	<=50	Pass
			24	24.09	<=50	Pass
		25	0	23.21	<=50	Pass
	819	1	0	24.17	<=50	Pass
			24	24.13	<=50	Pass
		25	0	23.20	<=50	Pass
	821.5	1	0	24.08	<=50	Pass
			24	24.07	<=50	Pass
		25	0	23.24	<=50	Pass
16QAM	816.5	1	0	23.07	<=50	Pass
			24	23.27	<=50	Pass
		25	0	22.18	<=50	Pass
	819	1	0	23.03	<=50	Pass
			24	23.07	<=50	Pass
		25	0	22.21	<=50	Pass
	821.5	1	0	23.25	<=50	Pass
			24	23.41	<=50	Pass
		25	0	22.23	<=50	Pass
64QAM	816.5	1	0	22.14	<=50	Pass
			24	22.32	<=50	Pass

	819	25	0	21.19	<=50	Pass
		1	0	22.15	<=50	Pass
			24	22.17	<=50	Pass
	821.5	25	0	21.19	<=50	Pass
		1	0	22.33	<=50	Pass
			24	22.32	<=50	Pass
256QAM	816.5	1	0	18.93	<=50	Pass
			24	19.18	<=50	Pass
		25	0	19.18	<=50	Pass
	819	1	0	18.89	<=50	Pass
			24	18.94	<=50	Pass
		25	0	19.23	<=50	Pass
	821.5	1	0	19.17	<=50	Pass
			24	18.93	<=50	Pass
		25	0	19.22	<=50	Pass

1.1.4 B26a_10MHz

Band: 26a / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)		Verdict
		Size	Offset	Result	Limit	
QPSK	819	1	0	24.26	<=50	Pass
			49	24.08	<=50	Pass
		50	0	23.17	<=50	Pass
16QAM	819	1	0	23.67	<=50	Pass
			49	23.71	<=50	Pass
		50	0	22.17	<=50	Pass
64QAM	819	1	0	22.46	<=50	Pass
			49	22.40	<=50	Pass
		50	0	21.20	<=50	Pass
256QAM	819	1	0	19.59	<=50	Pass
			49	19.60	<=50	Pass
		50	0	19.18	<=50	Pass

2. Frequency Stability

2.1 Test Result

2.1.1 B26a_10MHz

Band: 26a / Bandwidth: 10MHz									
Modulation	Frequency (MHz)	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	819	50	0	20	3.7	-1.016	-0.0012	-2.5 to 2.5	Pass
					3.91	-3.791	-0.0046	-2.5 to 2.5	Pass
					4.3	-3.648	-0.0045	-2.5 to 2.5	Pass
				-30	3.91	-1.845	-0.0023	-2.5 to 2.5	Pass
				-20	3.91	-2.804	-0.0034	-2.5 to 2.5	Pass
				-10	3.91	-0.343	-0.0004	-2.5 to 2.5	Pass
				0	3.91	-2.832	-0.0035	-2.5 to 2.5	Pass
				10	3.91	-5.221	-0.0064	-2.5 to 2.5	Pass
				30	3.91	-3.519	-0.0043	-2.5 to 2.5	Pass
				40	3.91	-2.203	-0.0027	-2.5 to 2.5	Pass
				50	3.91	-1.960	-0.0024	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band26a_OBW

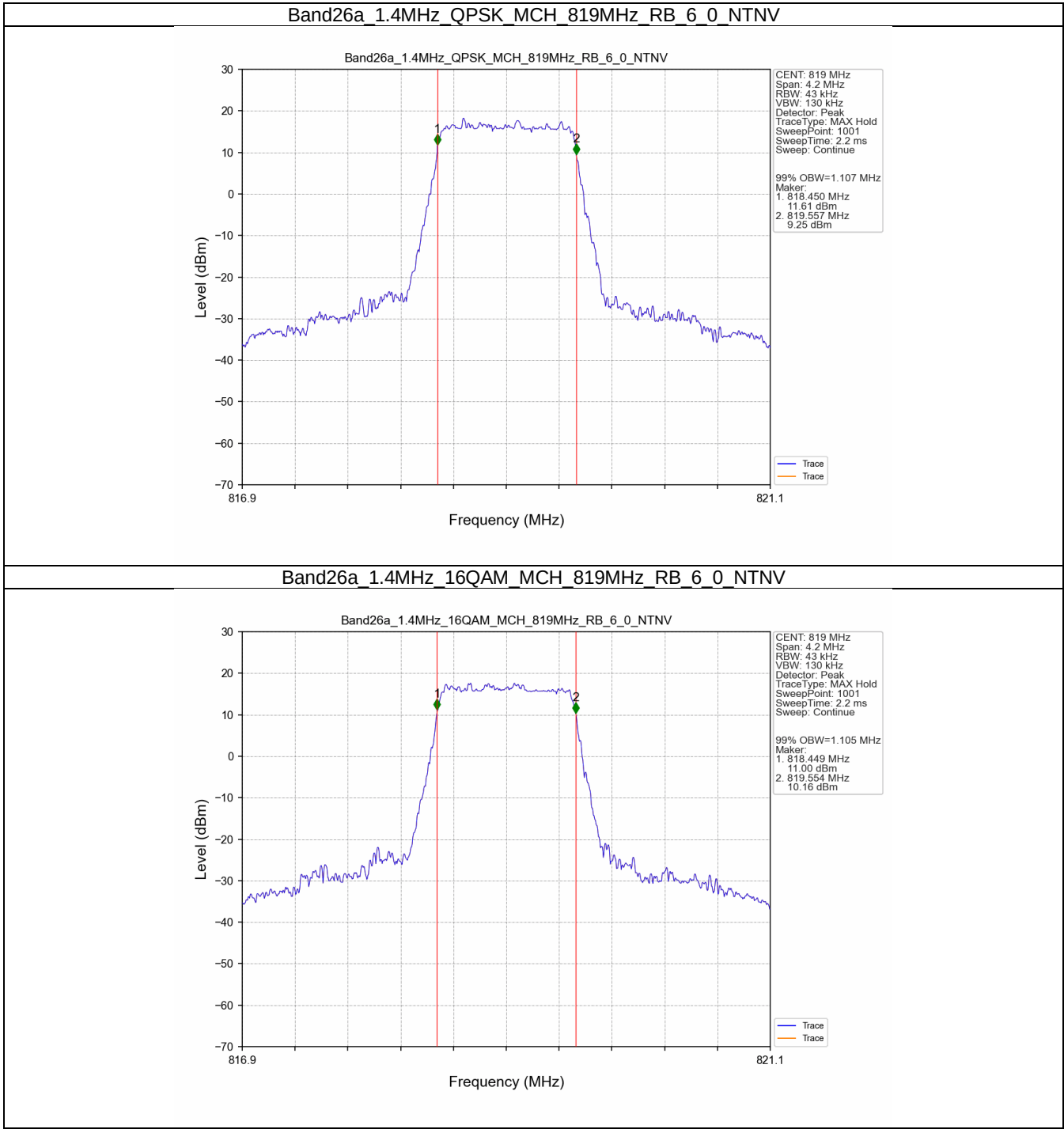
Band: 26a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	819	6	0	1.107	/	Pass
	16QAM	819	6	0	1.105	/	Pass
3	QPSK	819	15	0	2.747	/	Pass
	16QAM	819	15	0	2.722	/	Pass
5	QPSK	819	25	0	4.545	/	Pass
	16QAM	819	25	0	4.549	/	Pass
10	QPSK	819	50	0	9.037	/	Pass
	16QAM	819	50	0	9.037	/	Pass

3.1.2 Band26a_XDB

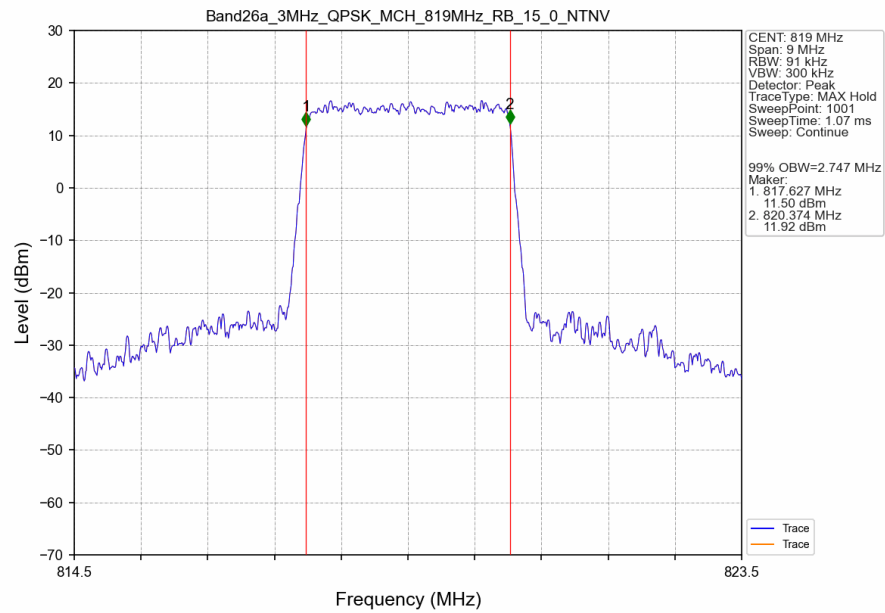
Band: 26a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	819	6	0	1.329	/	Pass
	16QAM	819	6	0	1.326	/	Pass
3	QPSK	819	15	0	3.021	/	Pass
	16QAM	819	15	0	3.003	/	Pass
5	QPSK	819	25	0	5.064	/	Pass
	16QAM	819	25	0	5.035	/	Pass
10	QPSK	819	50	0	9.992	/	Pass
	16QAM	819	50	0	9.970	/	Pass

3.2 Test Graph

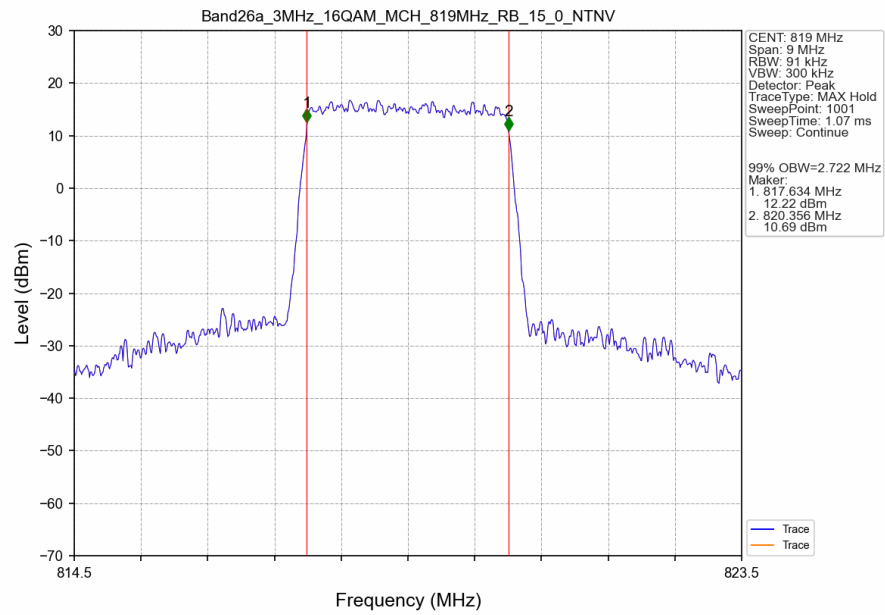
3.2.1 Band26a_OBW



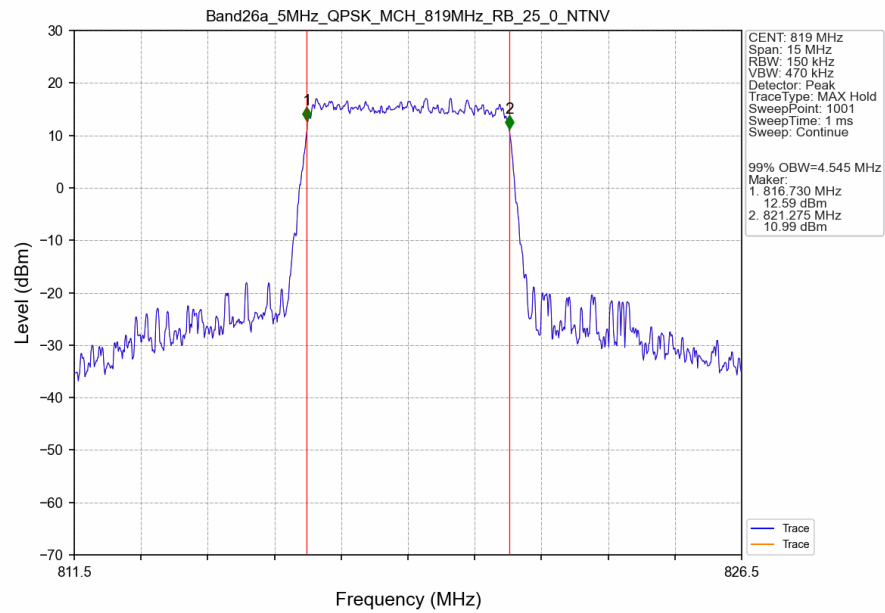
Band26a_3MHz_QPSK_MCH_819MHz_RB_15_0_NTNV



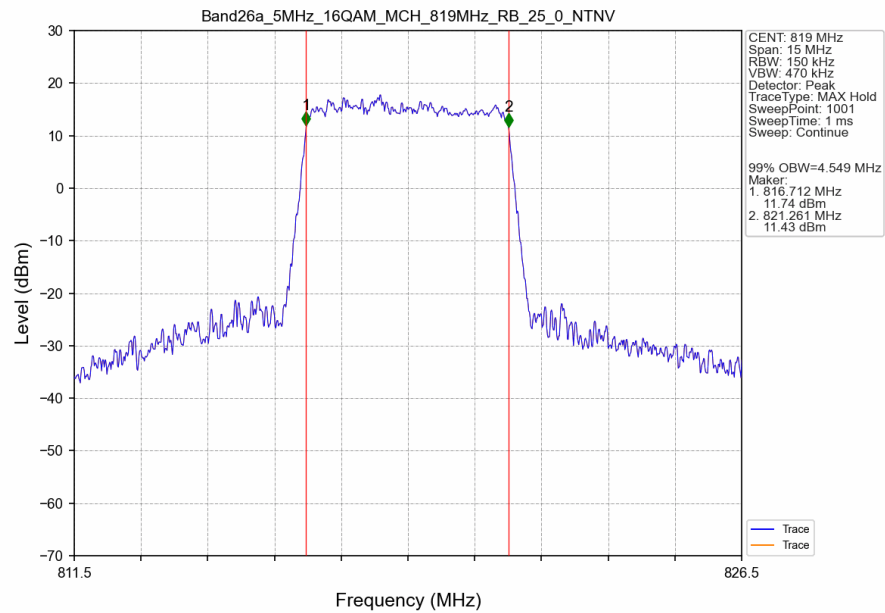
Band26a_3MHz_16QAM_MCH_819MHz_RB_15_0_NTNV



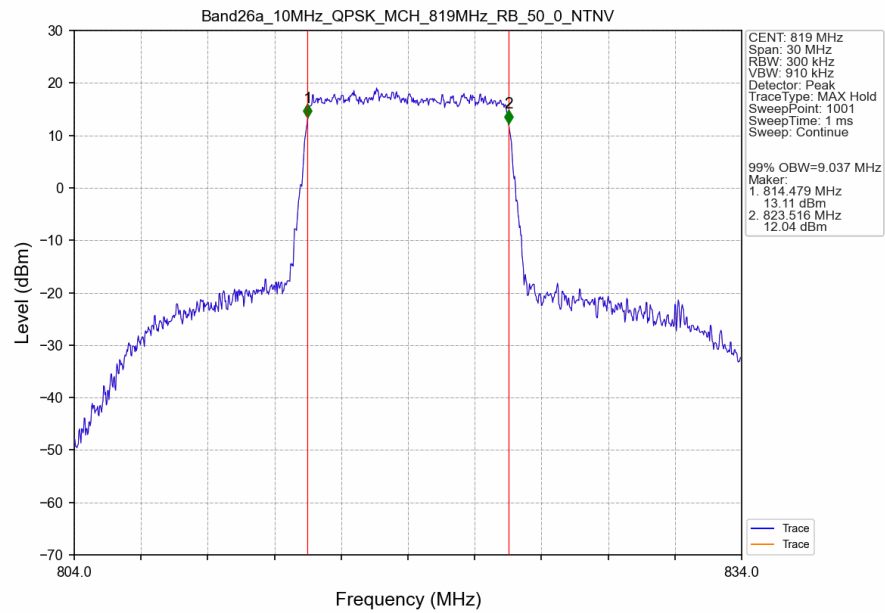
Band26a_5MHz_QPSK_MCH_819MHz_RB_25_0_NTNV



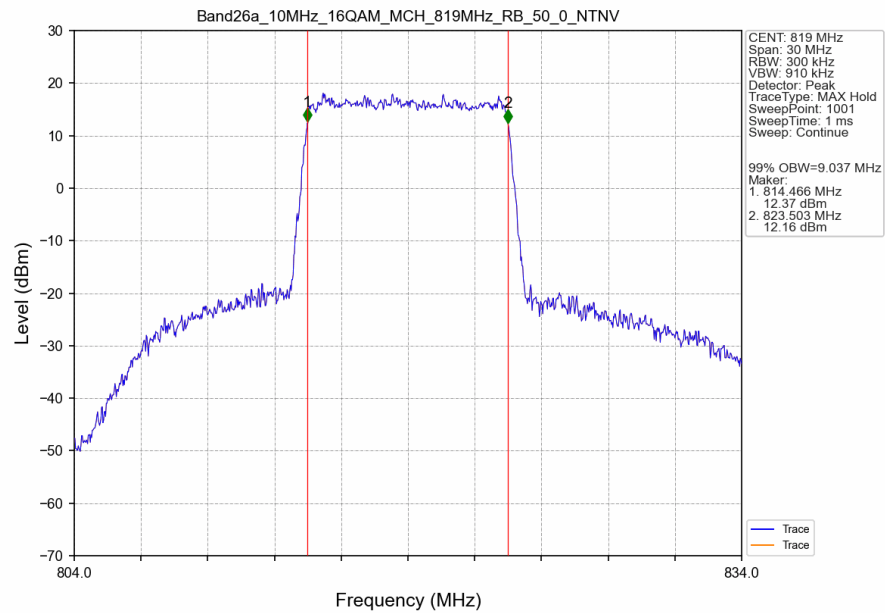
Band26a_5MHz_16QAM_MCH_819MHz_RB_25_0_NTNV



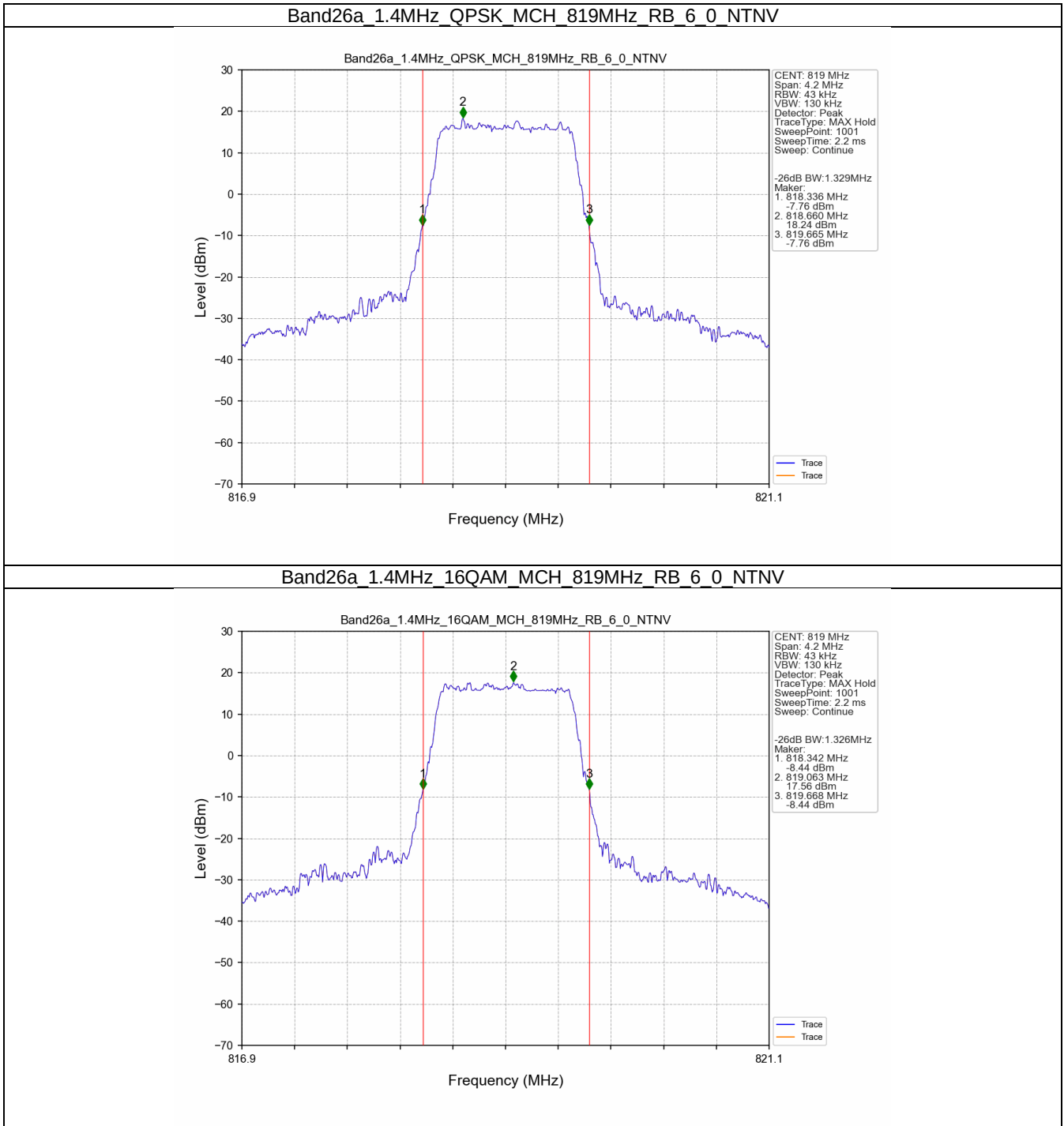
Band26a_10MHz_QPSK_MCH_819MHz_RB_50_0_NTNV



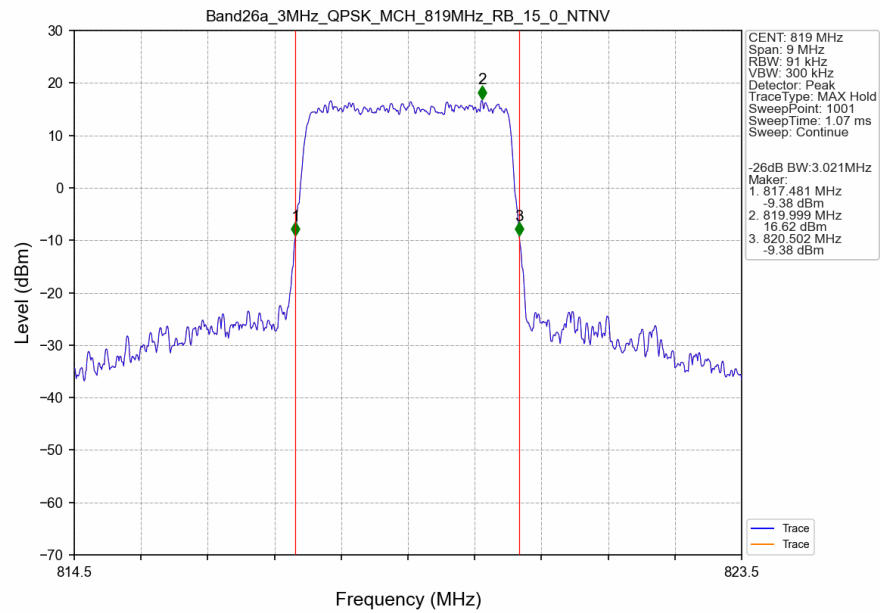
Band26a_10MHz_16QAM_MCH_819MHz_RB_50_0_NTNV



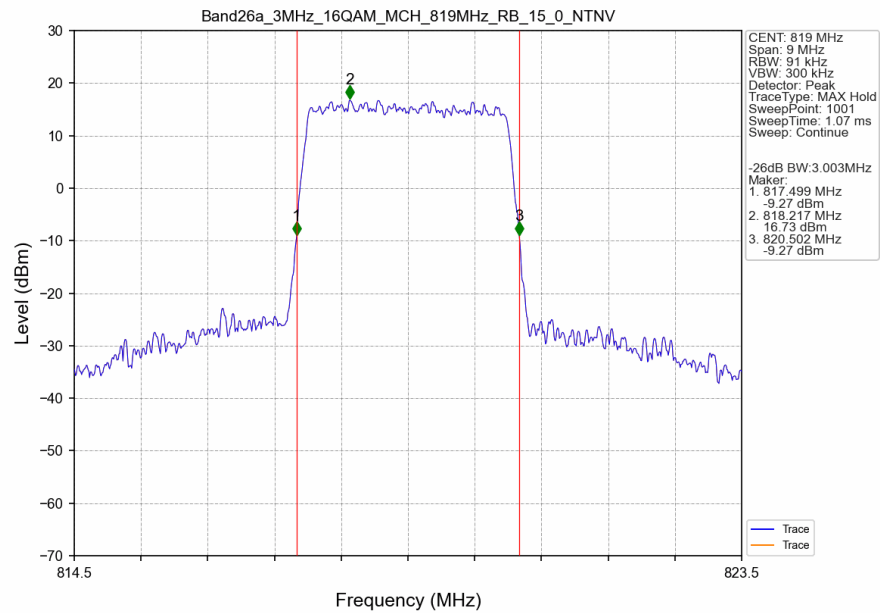
3.2.2 Band26a_XDB



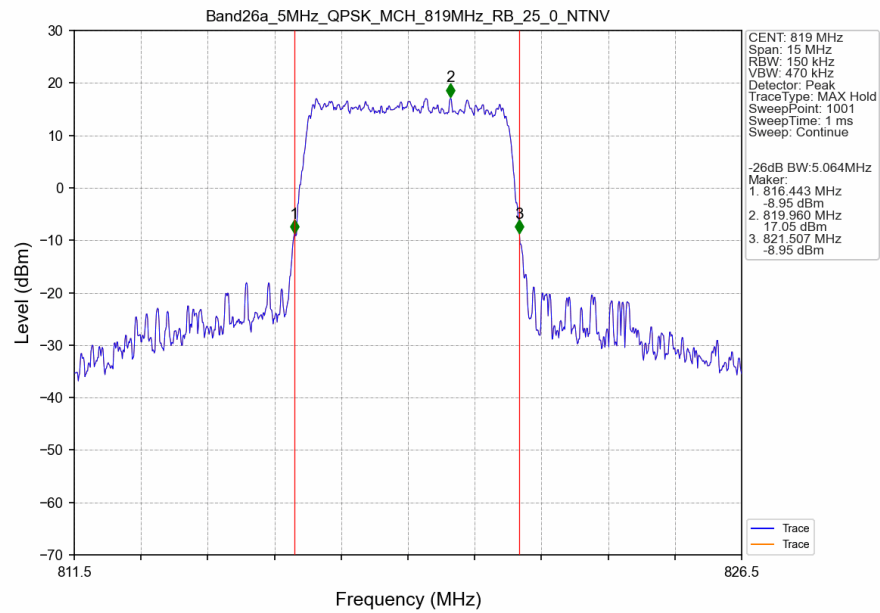
Band26a_3MHz_QPSK_MCH_819MHz_RB_15_0_NTNV



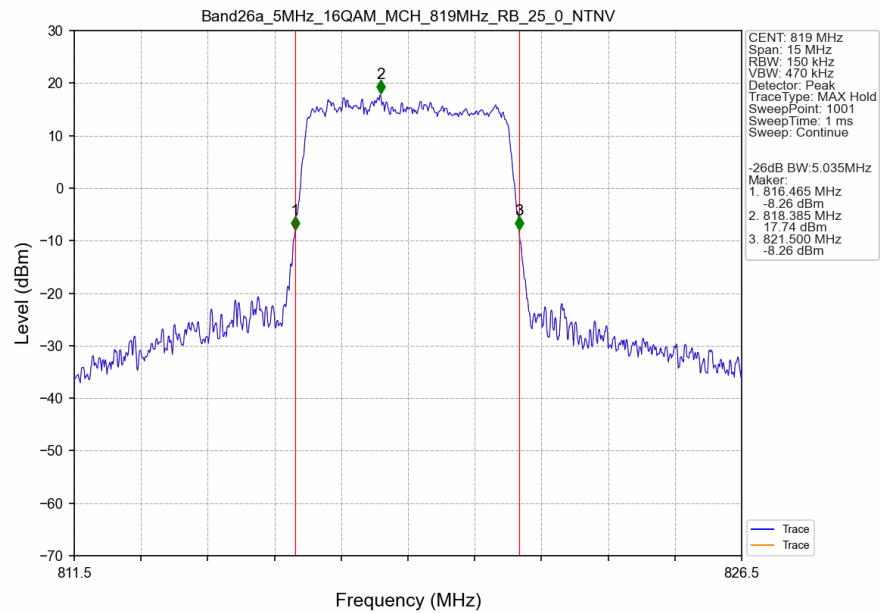
Band26a_3MHz_16QAM_MCH_819MHz_RB_15_0_NTNV



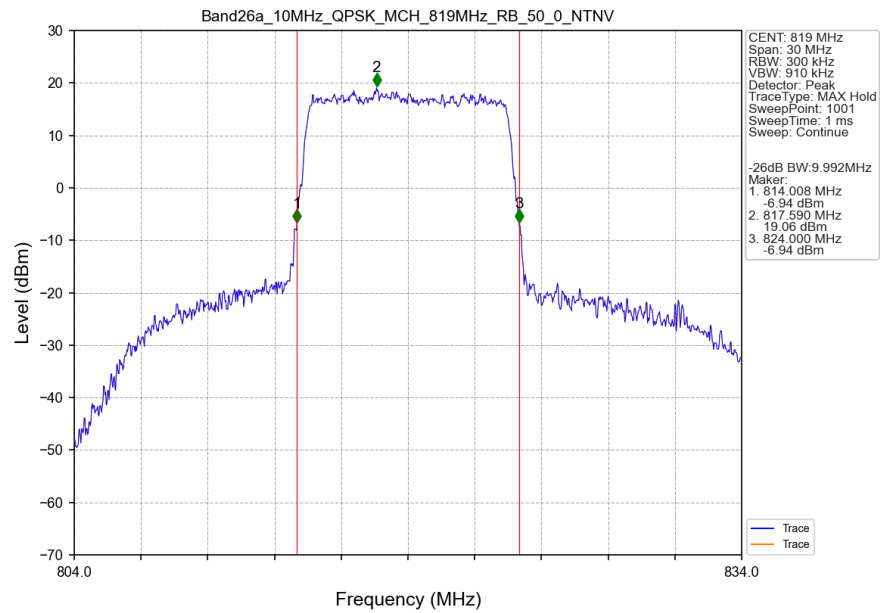
Band26a_5MHz_QPSK_MCH_819MHz_RB_25_0_NTNV



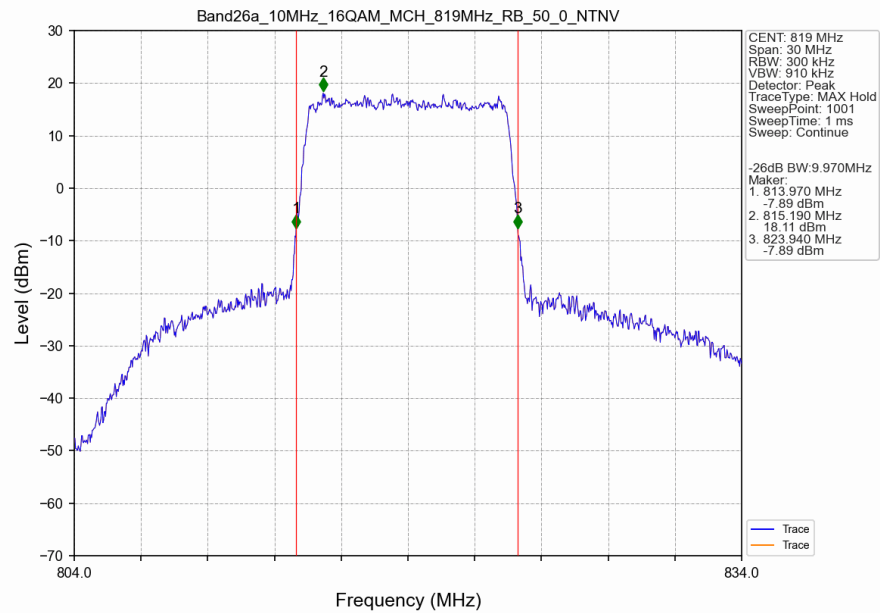
Band26a_5MHz_16QAM_MCH_819MHz_RB_25_0_NTNV



Band26a_10MHz_QPSK_MCH_819MHz_RB_50_0_NTNV



Band26a_10MHz_16QAM_MCH_819MHz_RB_50_0_NTNV



4. Peak-Average Ratio

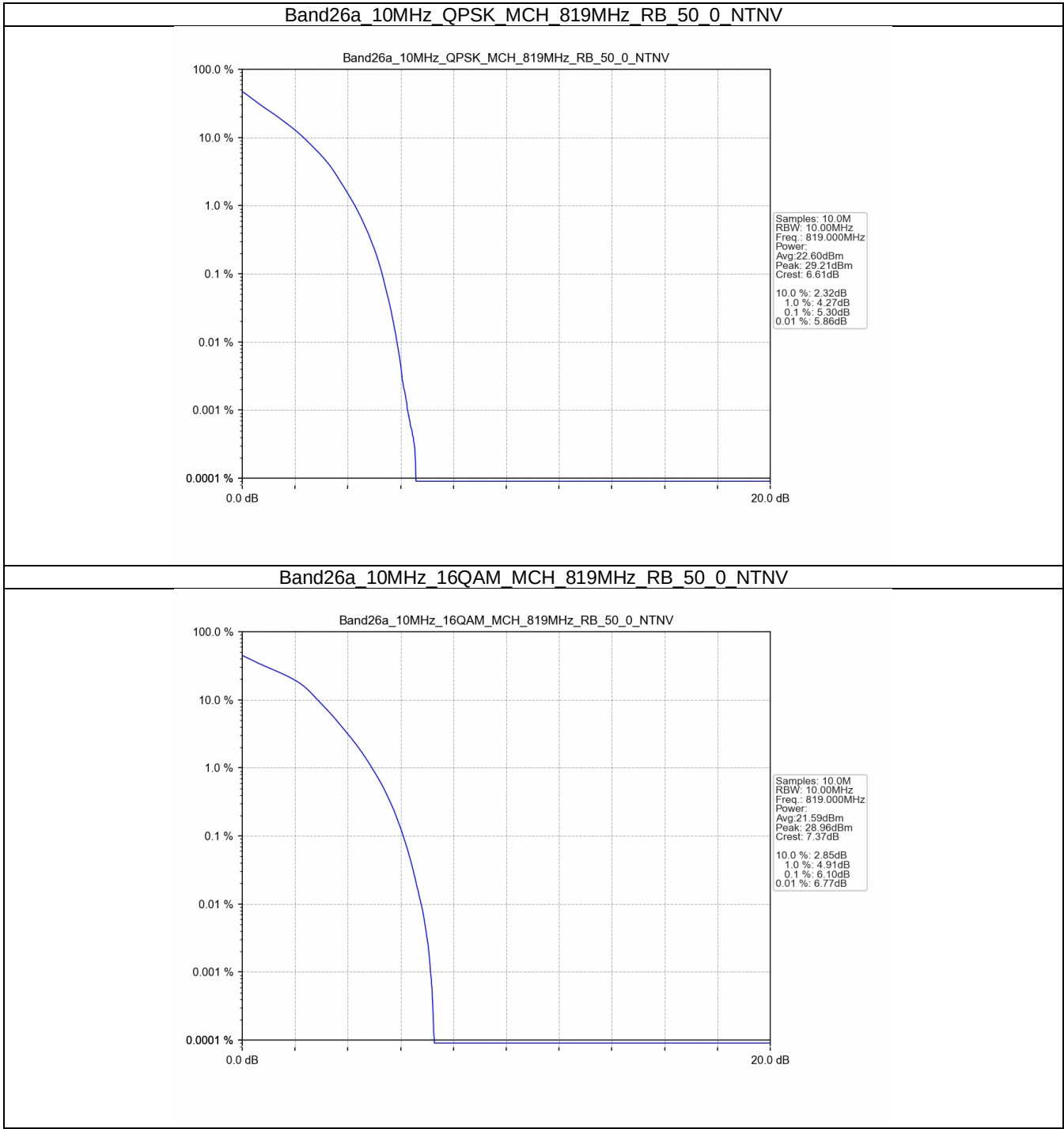
4.1 Test Result

4.1.1 B26a_10MHz

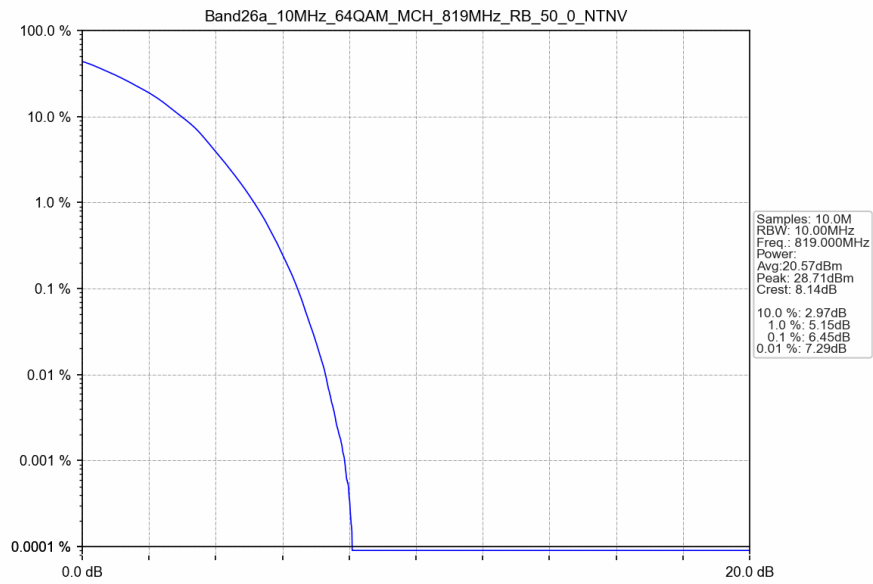
Band: 26a / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	819	50	0	5.30	<=13	Pass
16QAM	819	50	0	6.10	<=13	Pass
64QAM	819	50	0	6.45	<=13	Pass
256QAM	819	50	0	6.63	<=13	Pass

4.2 Test Graph

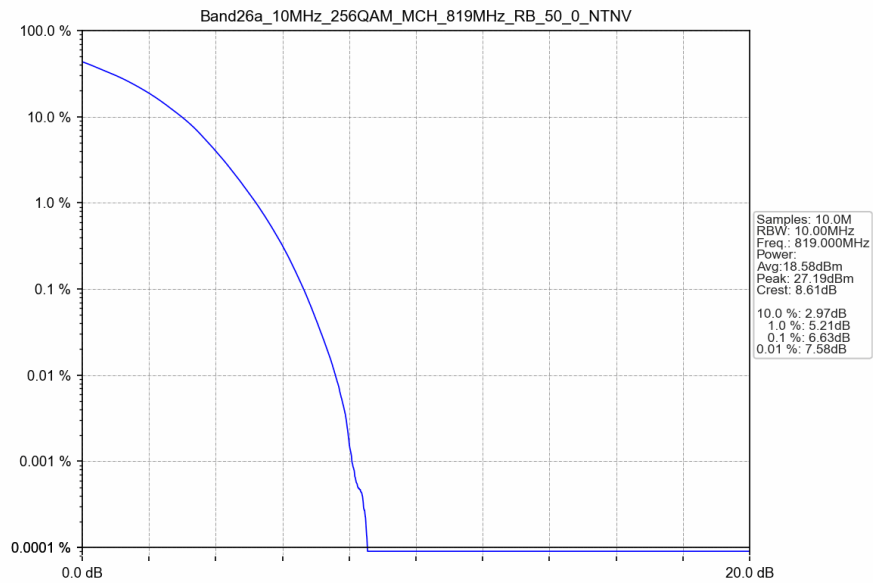
4.2.1 B26a_10MHz



Band26a_10MHz_64QAM_MCH_819MHz_RB_50_0_NTNV



Band26a_10MHz_256QAM_MCH_819MHz_RB_50_0_NTNV



5. Spurious Emission

5.1 Test Result

5.1.1 B26a_1.4MHz

Band: 26a / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	814.7	1	0	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass
	819	1	0	Refer To Test Graph		Pass
	823.3	1	0	Refer To Test Graph		Pass
			5	Refer To Test Graph		Pass
		6	0	Refer To Test Graph		Pass

5.1.2 B26a_3MHz

Band: 26a / Bandwidth: 3MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	815.5	1	0	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass
	819	1	0	Refer To Test Graph		Pass
	822.5	1	0	Refer To Test Graph		Pass
			14	Refer To Test Graph		Pass
		15	0	Refer To Test Graph		Pass

5.1.3 B26a_5MHz

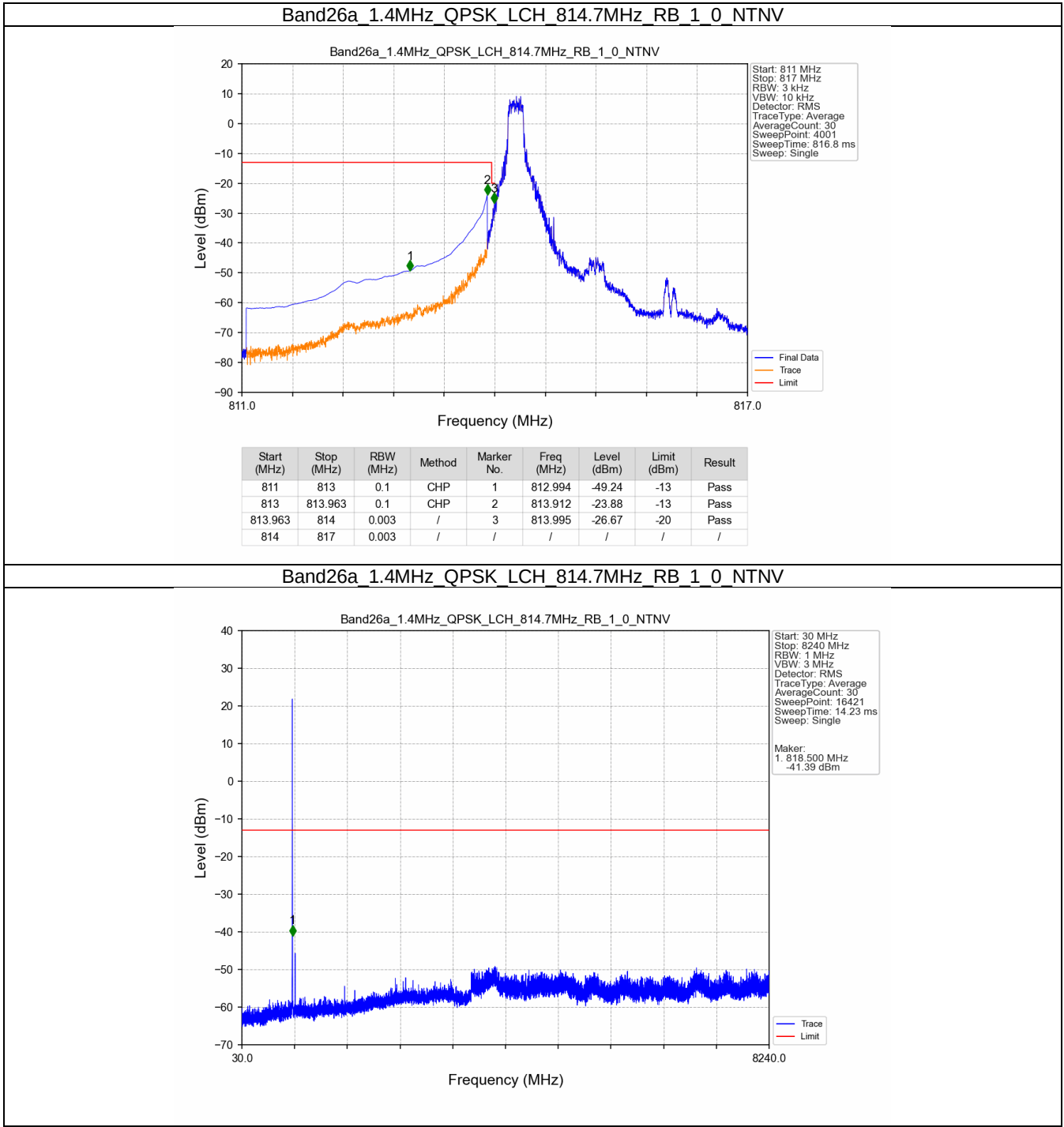
Band: 26a / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	816.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	819	1	0	Refer To Test Graph		Pass
	821.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass

5.1.4 B26a_10MHz

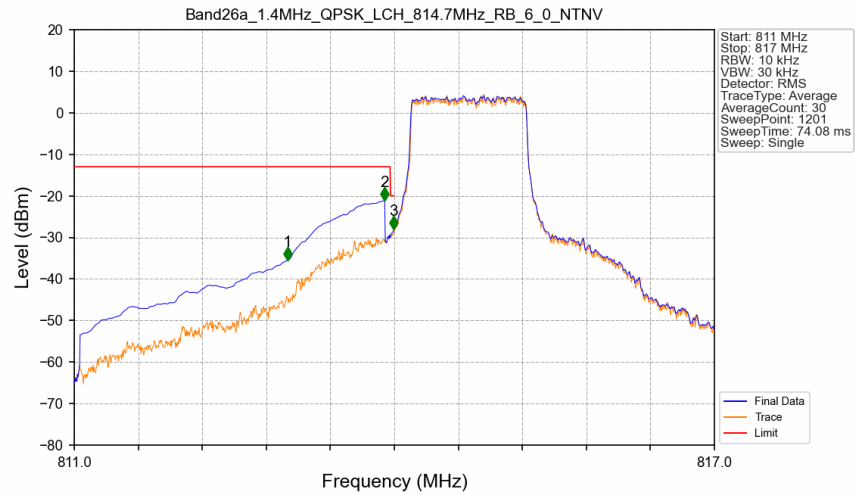
Band: 26a / Bandwidth: 10MHz / NTN/V						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	819	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	819	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B26a_1.4MHz

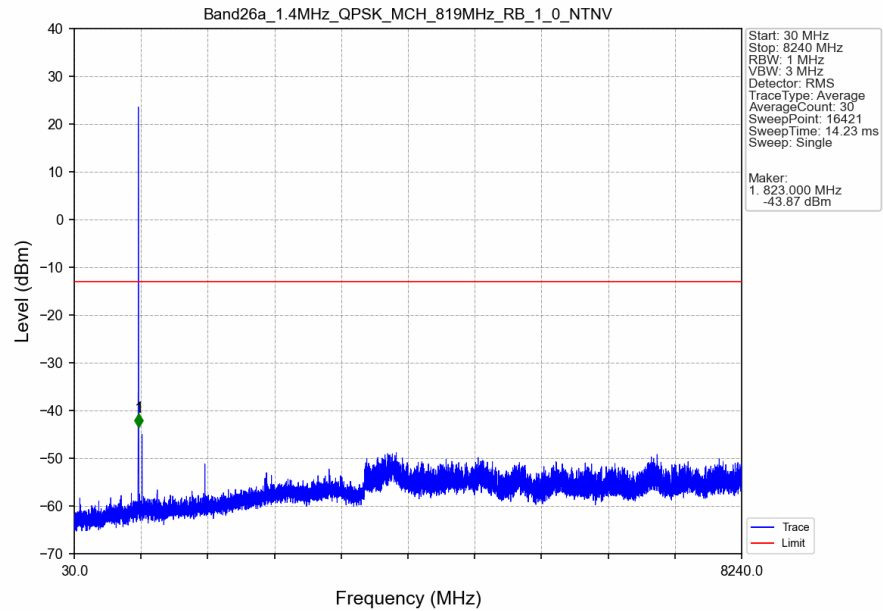


Band26a_1.4MHz_QPSK_LCH_814.7MHz_RB_6_0_NTNV

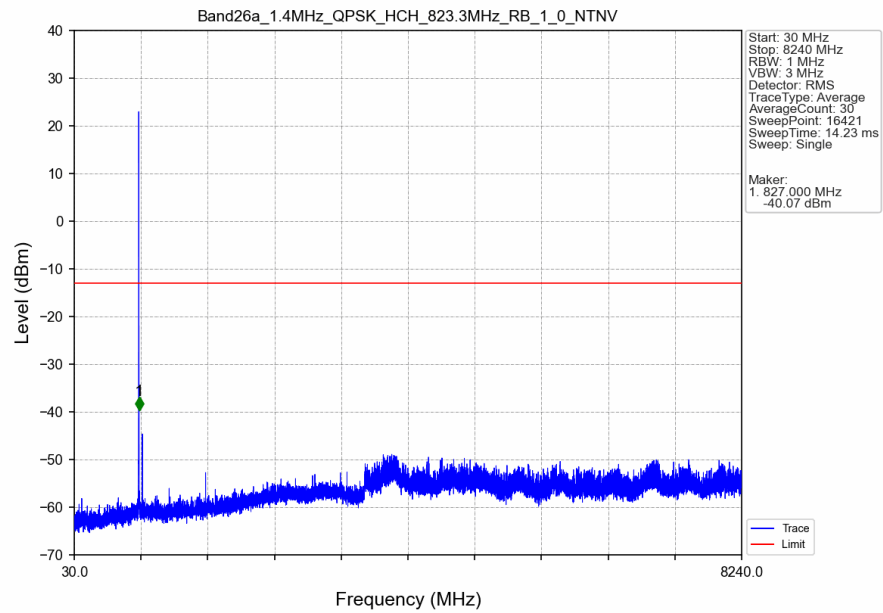


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
811	813	0.1	CHP	1	813.000	-35.56	-13	Pass
813	813.963	0.1	CHP	2	813.910	-21.04	-13	Pass
813.963	814	0.013	CHP	3	813.995	-28.03	-20	Pass
814	817	0.013	CHP	/	/	/	/	/

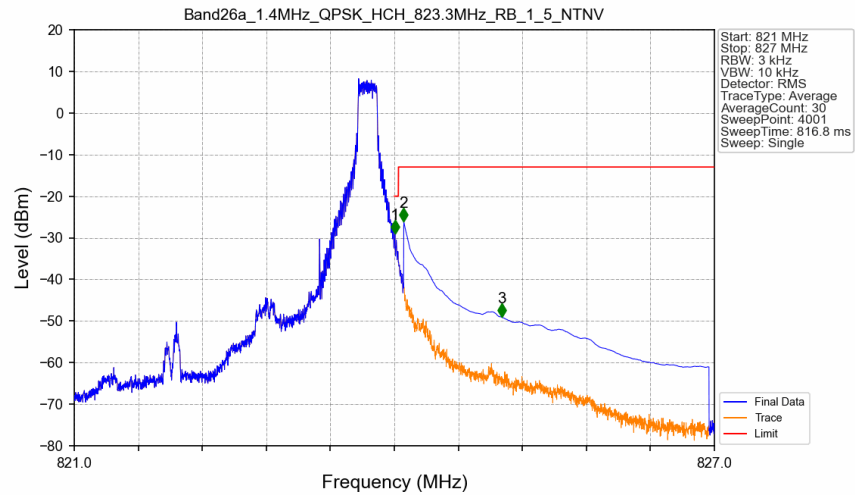
Band26a_1.4MHz_QPSK_MCH_819MHz_RB_1_0_NTNV



Band26a 1.4MHz QPSK HCH 823.3MHz RB 1 0 NTNV

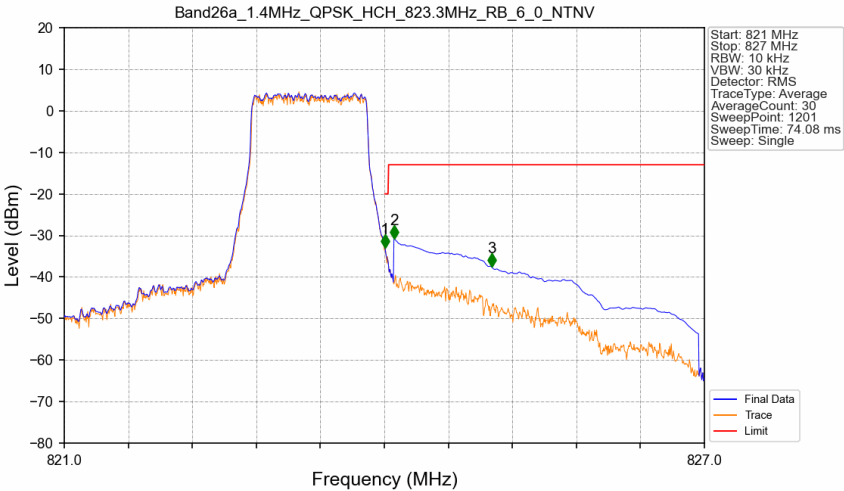


Band26a 1.4MHz QPSK HCH 823.3MHz RB 1 5 NTNV



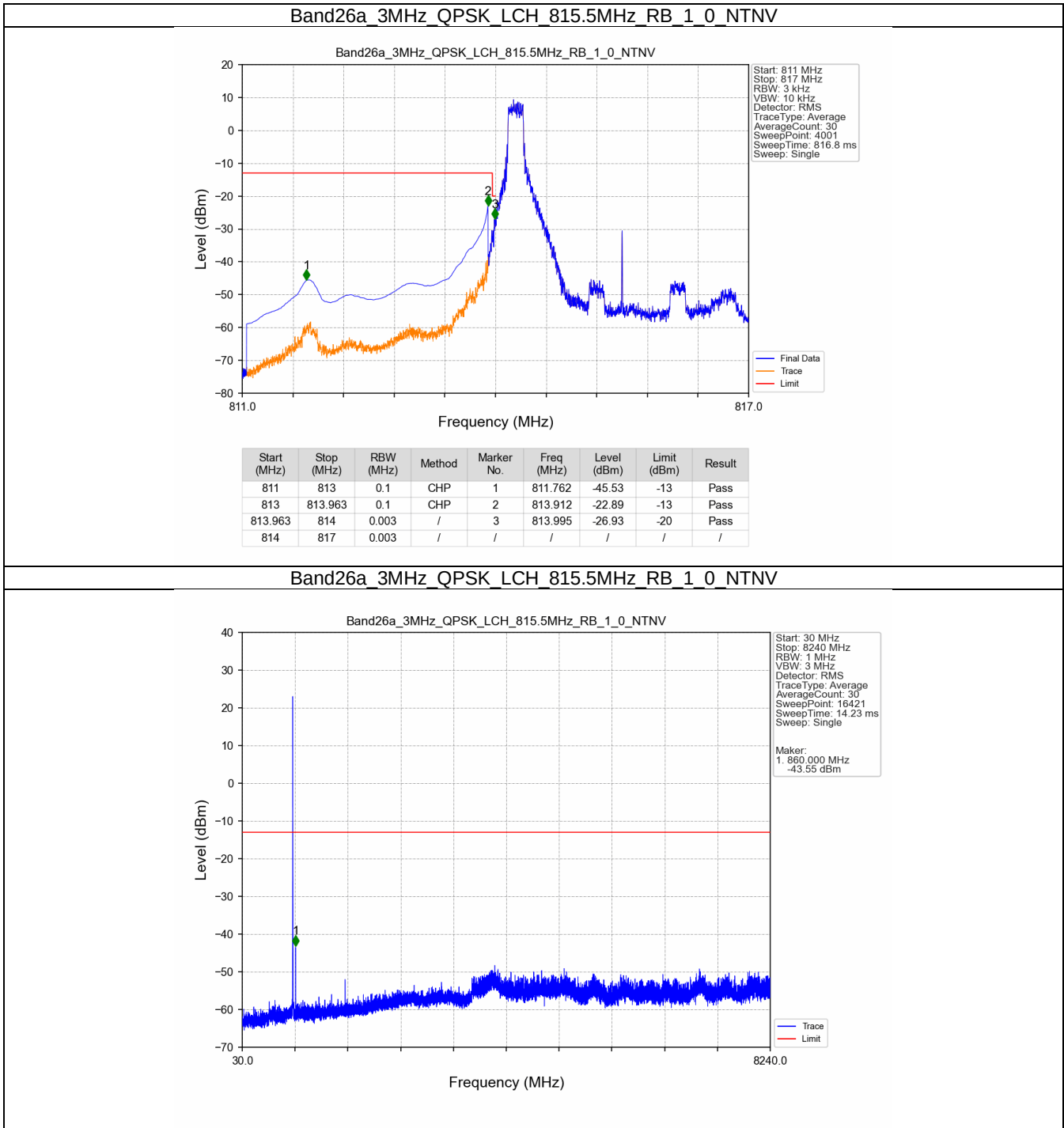
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.006	-29.02	-20	Pass
824.038	825	0.1	CHP	2	824.088	-26.08	-13	Pass
825	827	0.1	CHP	3	825.005	-49.02	-13	Pass

Band26a 1.4MHz QPSK HCH 823.3MHz RB 6 0 NTV

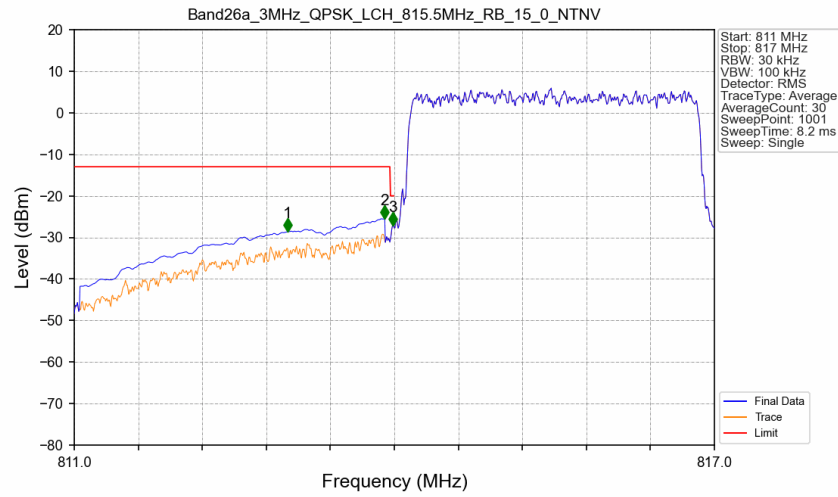


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.013	CHP	/	/	/	/	/
824	824.038	0.013	CHP	1	824.005	-32.99	-20	Pass
824.038	825	0.1	CHP	2	824.090	-30.68	-13	Pass
825	827	0.1	CHP	3	825.005	-37.58	-13	Pass

5.2.2 B26a_3MHz

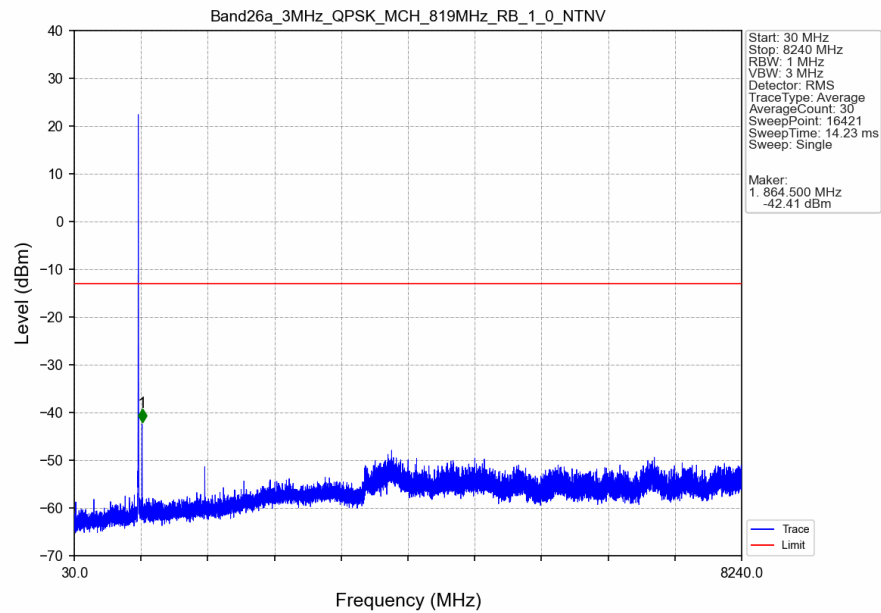


Band26a 3MHz QPSK LCH 815.5MHz RB 15 0 NTN

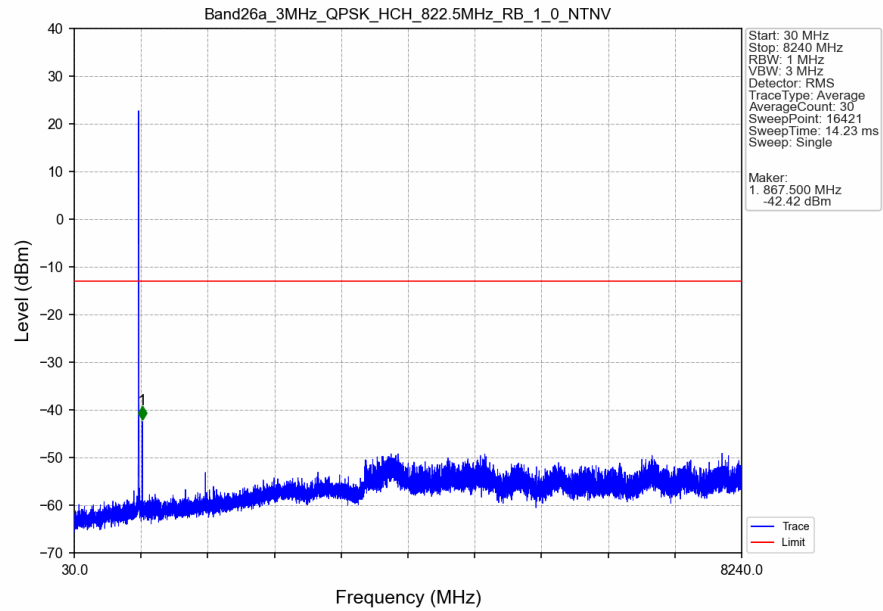


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
811	813	0.1	CHP	1	812.998	-28.65	-13	Pass
813	813.963	0.1	CHP	2	813.910	-25.50	-13	Pass
813.963	814	0.03	/	3	813.988	-27.16	-20	Pass
814	817	0.03	/	/	/	/	/	/

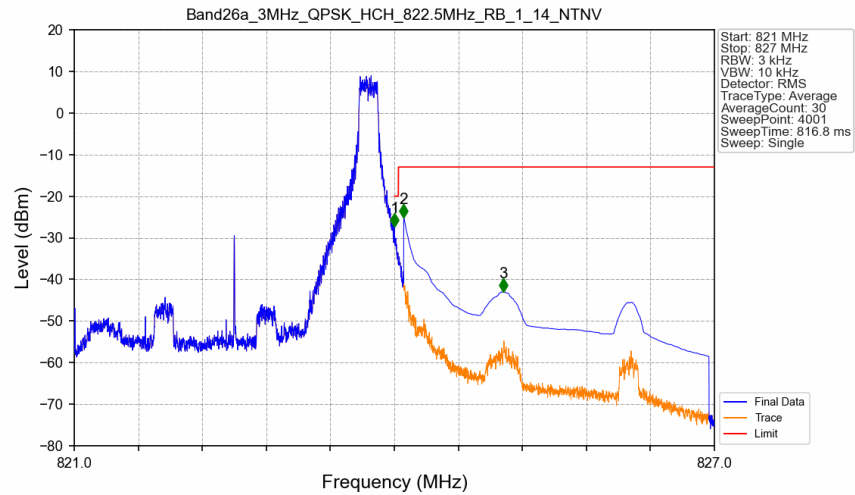
Band26a 3MHz QPSK MCH 819MHz RB 1 0 NTN



Band26a 3MHz QPSK HCH 822.5MHz RB 1 0 NTV

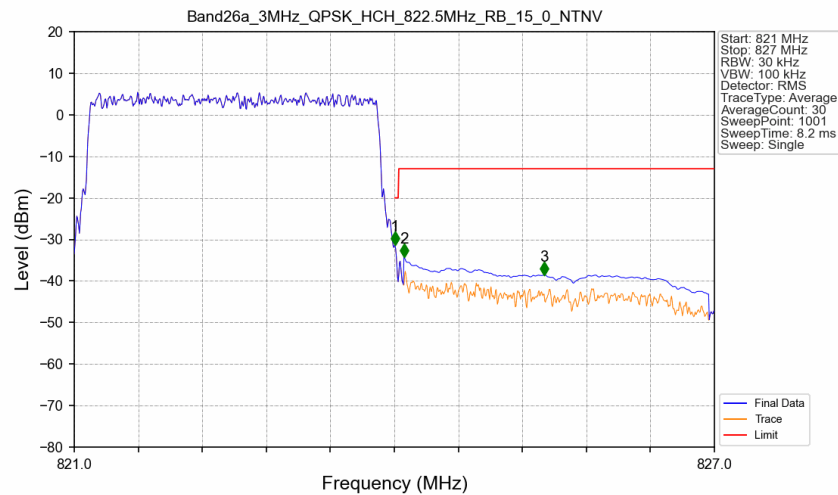


Band26a 3MHz QPSK HCH 822.5MHz RB 1 14 NTV



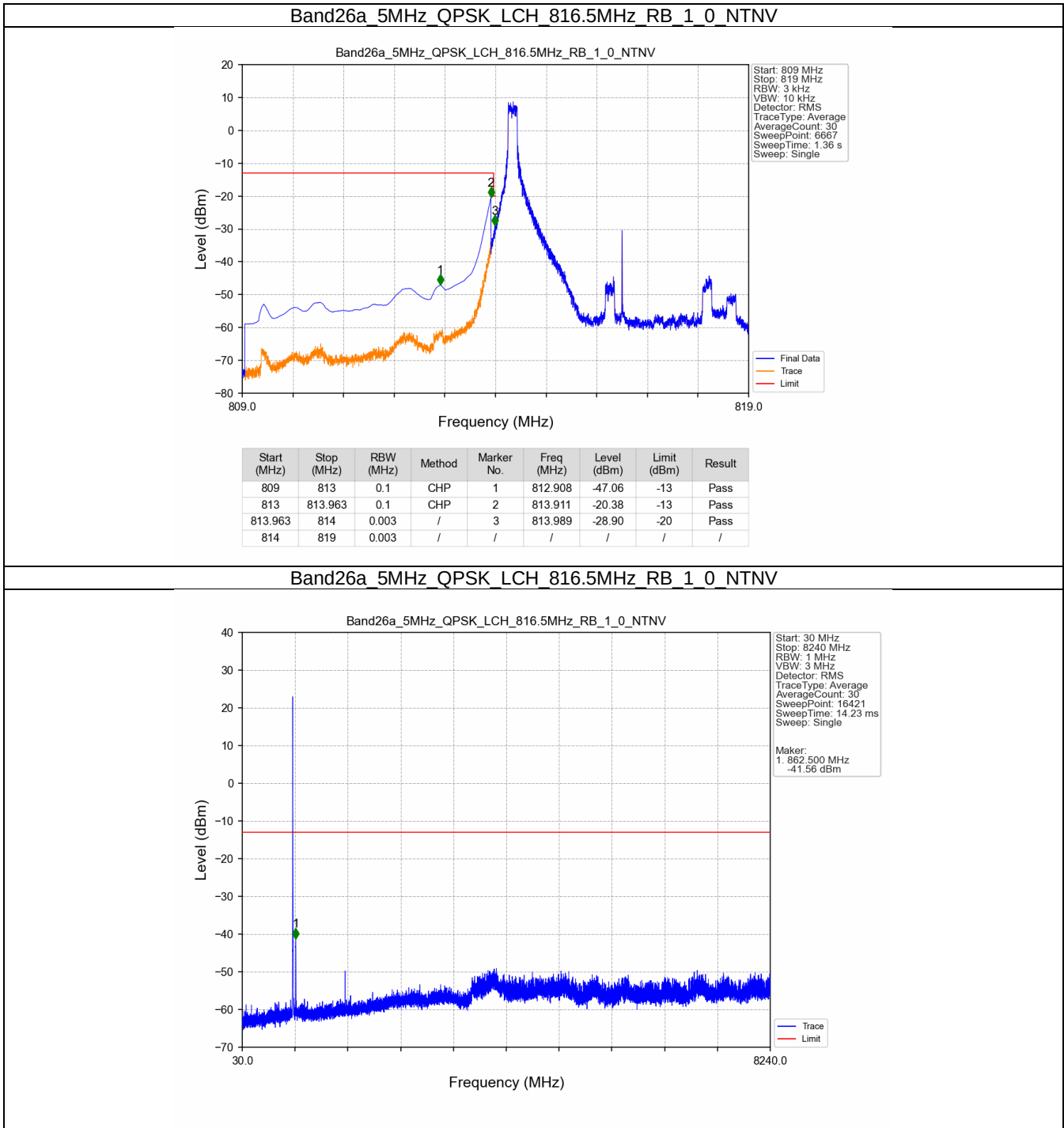
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.001	-27.27	-20	Pass
824.038	825	0.1	CHP	2	824.088	-25.05	-13	Pass
825	827	0.1	CHP	3	825.021	-42.97	-13	Pass

Band26a 3MHz QPSK HCH 822.5MHz RB 15 0 NTV

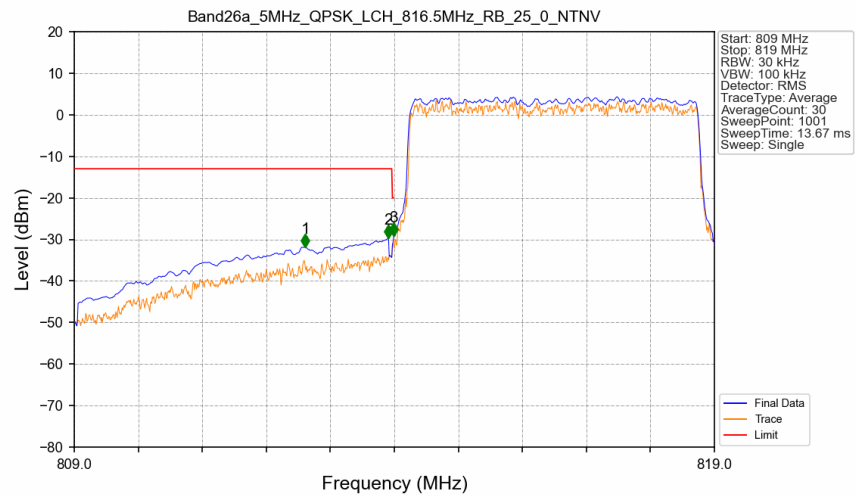


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.03	/	/	/	/	/	/
824	824.038	0.03	/	1	824.006	-31.37	-20	Pass
824.038	825	0.1	CHP	2	824.090	-34.22	-13	Pass
825	827	0.1	CHP	3	825.404	-38.53	-13	Pass

5.2.3 B26a_5MHz

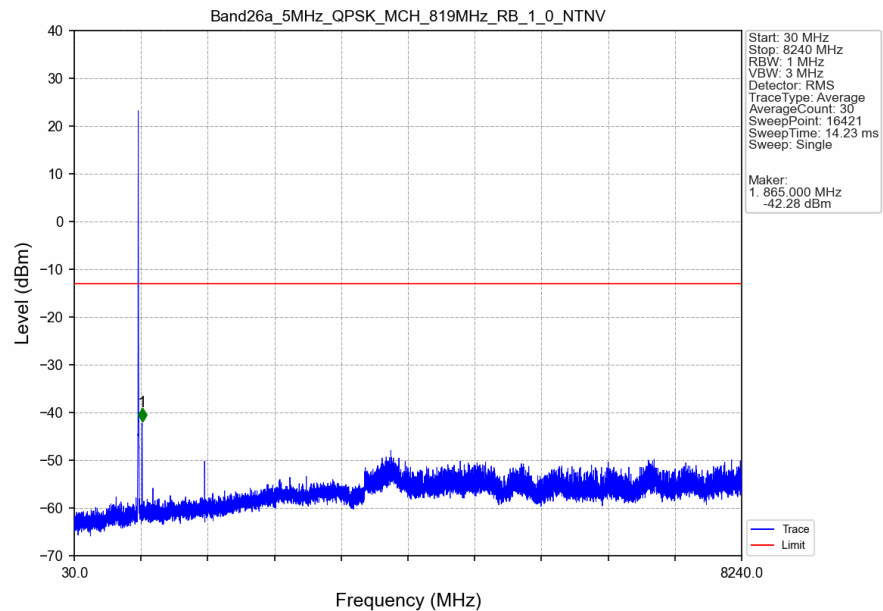


Band26a 5MHz QPSK LCH 816.5MHz RB 25 0 NTN

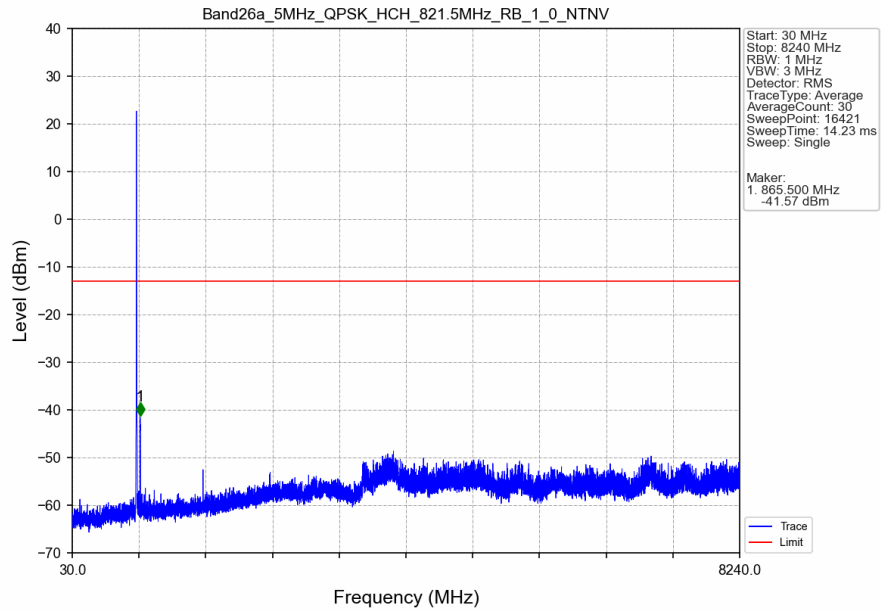


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	CHP	1	812.610	-31.82	-13	Pass
813	813.963	0.1	CHP	2	813.910	-29.75	-13	Pass
813.963	814	0.051	CHP	3	813.990	-29.15	-20	Pass
814	819	0.051	CHP	/	/	/	/	/

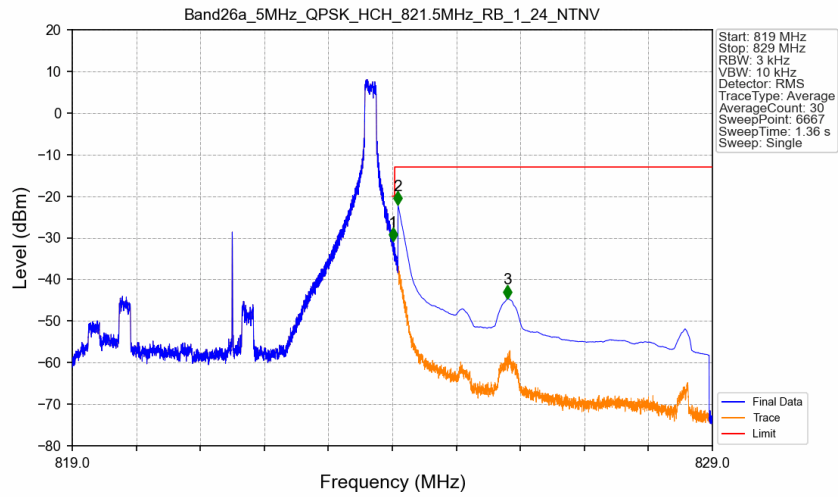
Band26a 5MHz QPSK MCH 819MHz RB 1 0 NTN



Band26a 5MHz QPSK HCH 821.5MHz RB 1 0 NTV

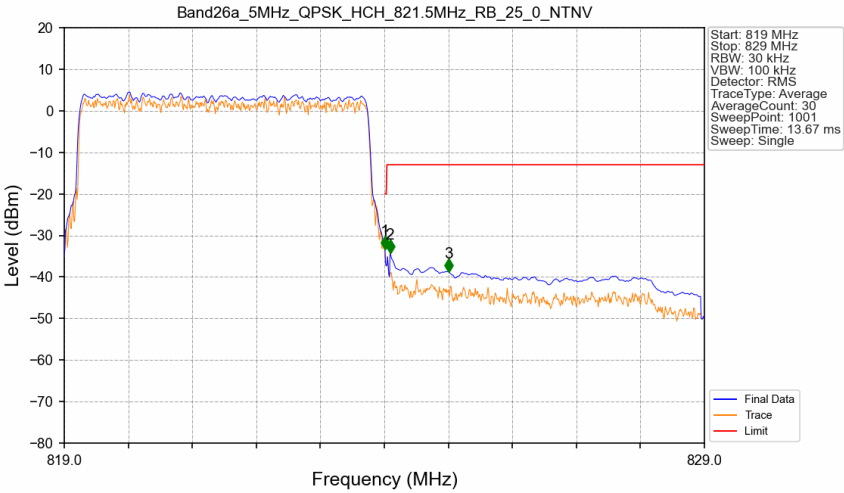


Band26a 5MHz QPSK HCH 821.5MHz RB 1 24 NTV



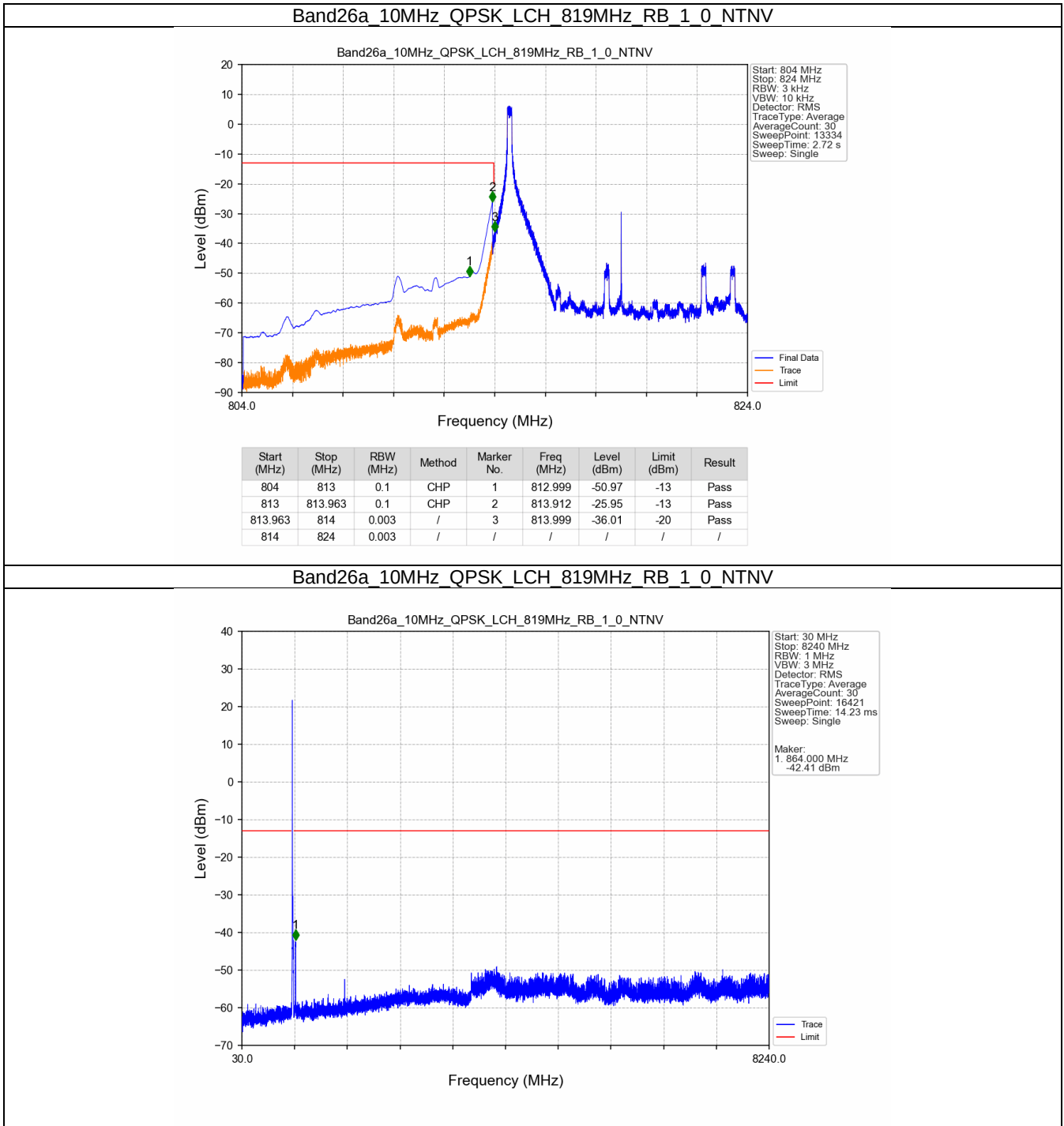
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.009	-30.85	-20	Pass
824.038	825	0.1	CHP	2	824.089	-22.00	-13	Pass
825	829	0.1	CHP	3	825.800	-44.52	-13	Pass

Band26a 5MHz QPSK HCH 821.5MHz RB 25 0 NTNV

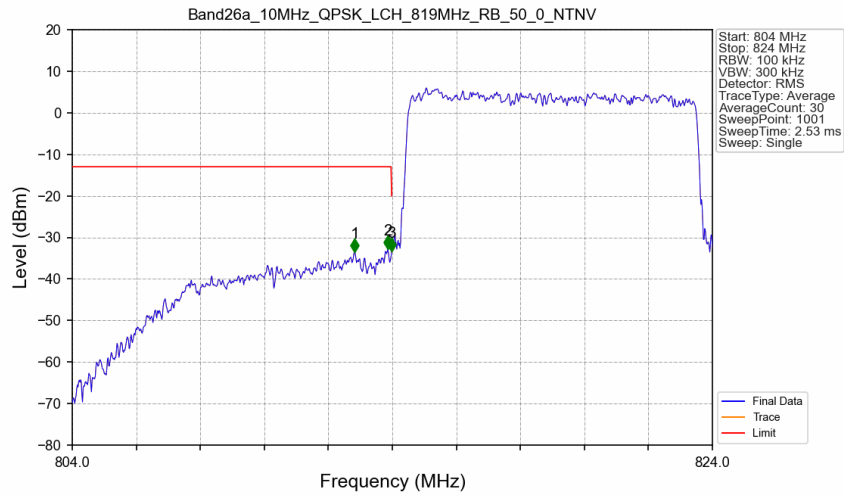


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.05	CHP	/	/	/	/	/
824	824.038	0.05	CHP	1	824.010	-33.24	-20	Pass
824.038	825	0.1	CHP	2	824.090	-34.21	-13	Pass
825	829	0.1	CHP	3	825.010	-38.78	-13	Pass

5.2.4 B26a_10MHz

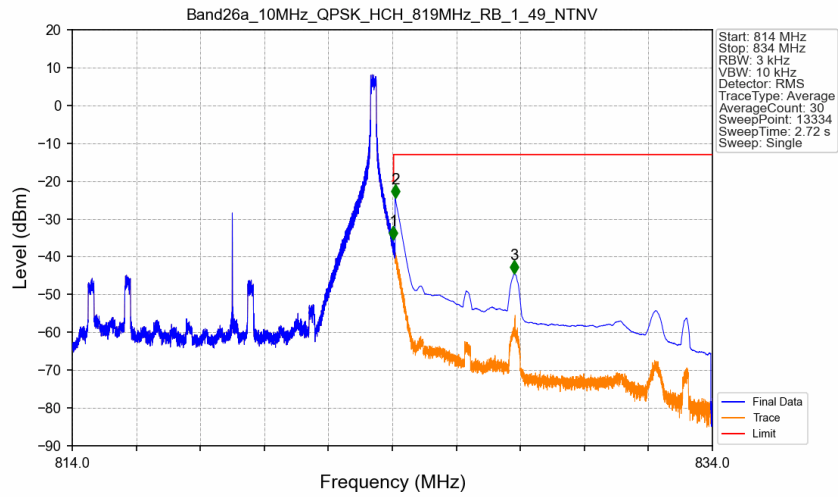


Band26a_10MHz_QPSK_LCH_819MHz_RB_50_0_NTNV



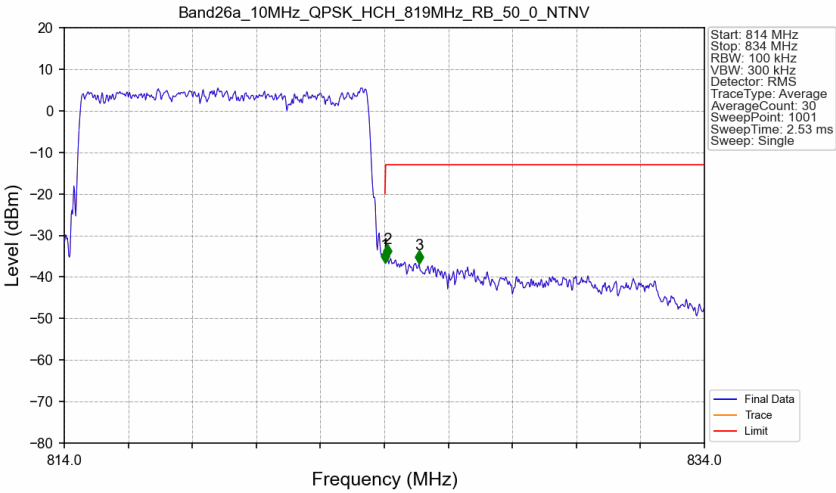
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
804	813	0.1	/	1	812.820	-33.52	-13	Pass
813	813.963	0.1	/	2	813.860	-32.82	-13	Pass
813.963	814	0.1	/	3	813.980	-33.25	-20	Pass
814	824	0.1	/	/	/	/	/	/

Band26a_10MHz_QPSK_HCH_819MHz_RB_1_49_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
814	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.026	-35.39	-20	Pass
824.038	825	0.1	CHP	2	824.088	-24.51	-13	Pass
825	834	0.1	CHP	3	827.800	-44.54	-13	Pass

Band26a 10MHz QPSK HCH 819MHz RB 50 0 NTV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
814	824	0.1	/	/	/	/	/	/
824	824.038	0.1	/	1	824.020	-36.61	-20	Pass
824.038	825	0.1	/	2	824.100	-35.28	-13	Pass
825	834	0.1	/	3	825.080	-36.86	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 26a(814-824MHz) ANT13-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
1629.0	-65.96	-13	-52.96	-68.89	2.62	5.55	Horizontal	Pass
2443.5	-64.14	-13	-51.14	-66.78	3.04	5.68	Horizontal	Pass
3258.0	-61.73	-13	-48.73	-66.01	3.28	7.56	Horizontal	Pass
1629.0	-65.78	-13	-52.78	-68.71	2.62	5.55	Vertical	Pass
2443.5	-64.72	-13	-51.72	-67.36	3.04	5.68	Vertical	Pass
3258.0	-61.83	-13	-48.83	-66.11	3.28	7.56	Vertical	Pass