

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)	Gain (dBi)	Conducted power (dBm)	Verdict
		Size	Offset			Limit	
QPSK	814.7	1	0	24.07	-4.73	<=50	Pass
			5	23.80	-4.73	<=50	Pass
		6	0	22.62	-4.73	<=50	Pass
	819	1	0	23.90	-4.73	<=50	Pass
			5	23.89	-4.73	<=50	Pass
		6	0	22.98	-4.73	<=50	Pass
	823.3	1	0	23.54	-4.73	<=50	Pass
			5	23.85	-4.73	<=50	Pass
		6	0	22.91	-4.73	<=50	Pass
16QAM	814.7	1	0	22.90	-4.73	<=50	Pass
			5	22.92	-4.73	<=50	Pass
		6	0	21.72	-4.73	<=50	Pass
	819	1	0	23.40	-4.73	<=50	Pass
			5	23.23	-4.73	<=50	Pass
		6	0	22.02	-4.73	<=50	Pass
	823.3	1	0	23.02	-4.73	<=50	Pass
			5	22.87	-4.73	<=50	Pass
		6	0	21.96	-4.73	<=50	Pass
64QAM	814.7	1	0	22.82	-4.73	<=50	Pass
			5	22.74	-4.73	<=50	Pass
		6	0	21.62	-4.73	<=50	Pass
	819	1	0	22.00	-4.73	<=50	Pass
			5	21.96	-4.73	<=50	Pass
		6	0	20.99	-4.73	<=50	Pass
	823.3	1	0	22.67	-4.73	<=50	Pass
			5	22.69	-4.73	<=50	Pass
		6	0	21.78	-4.73	<=50	Pass
256QAM	814.7	1	0	18.68	-4.73	<=50	Pass
			5	19.07	-4.73	<=50	Pass
		6	0	19.02	-4.73	<=50	Pass
	819	1	0	19.06	-4.73	<=50	Pass
			5	19.10	-4.73	<=50	Pass
		6	0	19.03	-4.73	<=50	Pass
	823.3	1	0	18.92	-4.73	<=50	Pass
			5	18.67	-4.73	<=50	Pass
		6	0	18.90	-4.73	<=50	Pass

1.1.2 B26a_3MHz

Band: 26a / Bandwidth: 3MHz / NTNV							
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	Conducted power (dBm)	Verdict
		Size	Offset			Limit	
QPSK	815.5	1	0	23.84	-4.73	<=50	Pass
			14	23.83	-4.73	<=50	Pass

	819	15	0	22.88	-4.73	<=50	Pass
		1	0	23.44	-4.73	<=50	Pass
			14	23.40	-4.73	<=50	Pass
	822.5	15	0	22.90	-4.73	<=50	Pass
		1	0	23.91	-4.73	<=50	Pass
			14	23.98	-4.73	<=50	Pass
16QAM	815.5	1	0	23.06	-4.73	<=50	Pass
			14	22.84	-4.73	<=50	Pass
		15	0	21.95	-4.73	<=50	Pass
	819	1	0	22.77	-4.73	<=50	Pass
			14	22.67	-4.73	<=50	Pass
		15	0	22.02	-4.73	<=50	Pass
	822.5	1	0	23.08	-4.73	<=50	Pass
			14	22.77	-4.73	<=50	Pass
		15	0	21.59	-4.73	<=50	Pass
64QAM	815.5	1	0	22.56	-4.73	<=50	Pass
			14	22.21	-4.73	<=50	Pass
		15	0	21.73	-4.73	<=50	Pass
	819	1	0	21.65	-4.73	<=50	Pass
			14	21.97	-4.73	<=50	Pass
		15	0	20.87	-4.73	<=50	Pass
	822.5	1	0	22.42	-4.73	<=50	Pass
			14	22.32	-4.73	<=50	Pass
		15	0	22.04	-4.73	<=50	Pass
256QAM	815.5	1	0	18.81	-4.73	<=50	Pass
			14	18.44	-4.73	<=50	Pass
		15	0	19.05	-4.73	<=50	Pass
	819	1	0	18.76	-4.73	<=50	Pass
			14	18.92	-4.73	<=50	Pass
		15	0	18.95	-4.73	<=50	Pass
	822.5	1	0	18.90	-4.73	<=50	Pass
			14	18.79	-4.73	<=50	Pass
		15	0	19.04	-4.73	<=50	Pass

1.1.3 B26a_5MHz_ERP

Band: 26a / Bandwidth: 5MHz / NTNV							
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	Conducted power (dBm)	Verdict
		Size	Offset			Limit	
QPSK	816.5	1	0	23.91	-4.73	<=50	Pass
			24	23.92	-4.73	<=50	Pass
		25	0	23.06	-4.73	<=50	Pass
	819	1	0	23.90	-4.73	<=50	Pass
			24	23.92	-4.73	<=50	Pass
		25	0	23.04	-4.73	<=50	Pass
	821.5	1	0	23.98	-4.73	<=50	Pass
			24	23.86	-4.73	<=50	Pass
		25	0	23.03	-4.73	<=50	Pass
16QAM	816.5	1	0	22.93	-4.73	<=50	Pass
			24	22.84	-4.73	<=50	Pass
		25	0	22.10	-4.73	<=50	Pass
	819	1	0	22.23	-4.73	<=50	Pass
			24	22.87	-4.73	<=50	Pass
		25	0	22.02	-4.73	<=50	Pass
	821.5	1	0	22.99	-4.73	<=50	Pass
			0				

			24	22.94	-4.73	<=50	Pass
		25	0	21.99	-4.73	<=50	Pass
64QAM	816.5	1	0	23.03	-4.73	<=50	Pass
			24	22.96	-4.73	<=50	Pass
		25	0	22.06	-4.73	<=50	Pass
	819	1	0	22.39	-4.73	<=50	Pass
			24	22.81	-4.73	<=50	Pass
		25	0	22.06	-4.73	<=50	Pass
	821.5	1	0	22.86	-4.73	<=50	Pass
			24	22.93	-4.73	<=50	Pass
		25	0	22.03	-4.73	<=50	Pass
256QAM	816.5	1	0	18.95	-4.73	<=50	Pass
			24	19.14	-4.73	<=50	Pass
		25	0	19.14	-4.73	<=50	Pass
	819	1	0	19.19	-4.73	<=50	Pass
			24	19.05	-4.73	<=50	Pass
		25	0	18.96	-4.73	<=50	Pass
	821.5	1	0	18.88	-4.73	<=50	Pass
			24	18.68	-4.73	<=50	Pass
		25	0	19.01	-4.73	<=50	Pass

1.1.4 B26a_10MHz_ERP

Band: 26a / Bandwidth: 10MHz / NTNv							
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)	Gain (dBi)	Conducted power (dBm)	Verdict
		Size	Offset			Limit	
QPSK	819	1	0	24.14	-4.73	<=50	Pass
			49	23.51	-4.73	<=50	Pass
		50	0	22.99	-4.73	<=50	Pass
16QAM	819	1	0	23.04	-4.73	<=50	Pass
			49	22.92	-4.73	<=50	Pass
		50	0	22.05	-4.73	<=50	Pass
64QAM	819	1	0	22.19	-4.73	<=50	Pass
			49	23.17	-4.73	<=50	Pass
		50	0	22.05	-4.73	<=50	Pass
256QAM	819	1	0	19.17	-4.73	<=50	Pass
			49	18.88	-4.73	<=50	Pass
		50	0	19.04	-4.73	<=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	3.6	-0.700	-0.0009	-2.5 to 2.5	Pass
					3.84	1.300	0.0016	-2.5 to 2.5	Pass
					4.3	0.800	0.0010	-2.5 to 2.5	Pass
				-30	3.84	2.200	0.0027	-2.5 to 2.5	Pass
				-20	3.84	1.900	0.0023	-2.5 to 2.5	Pass
				-10	3.84	0.200	0.0002	-2.5 to 2.5	Pass
				0	3.84	1.800	0.0022	-2.5 to 2.5	Pass
				10	3.84	-0.300	-0.0004	-2.5 to 2.5	Pass
				30	3.84	1.800	0.0022	-2.5 to 2.5	Pass
				40	3.84	1.600	0.0020	-2.5 to 2.5	Pass
				50	3.84	1.700	0.0021	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band26a_OBW

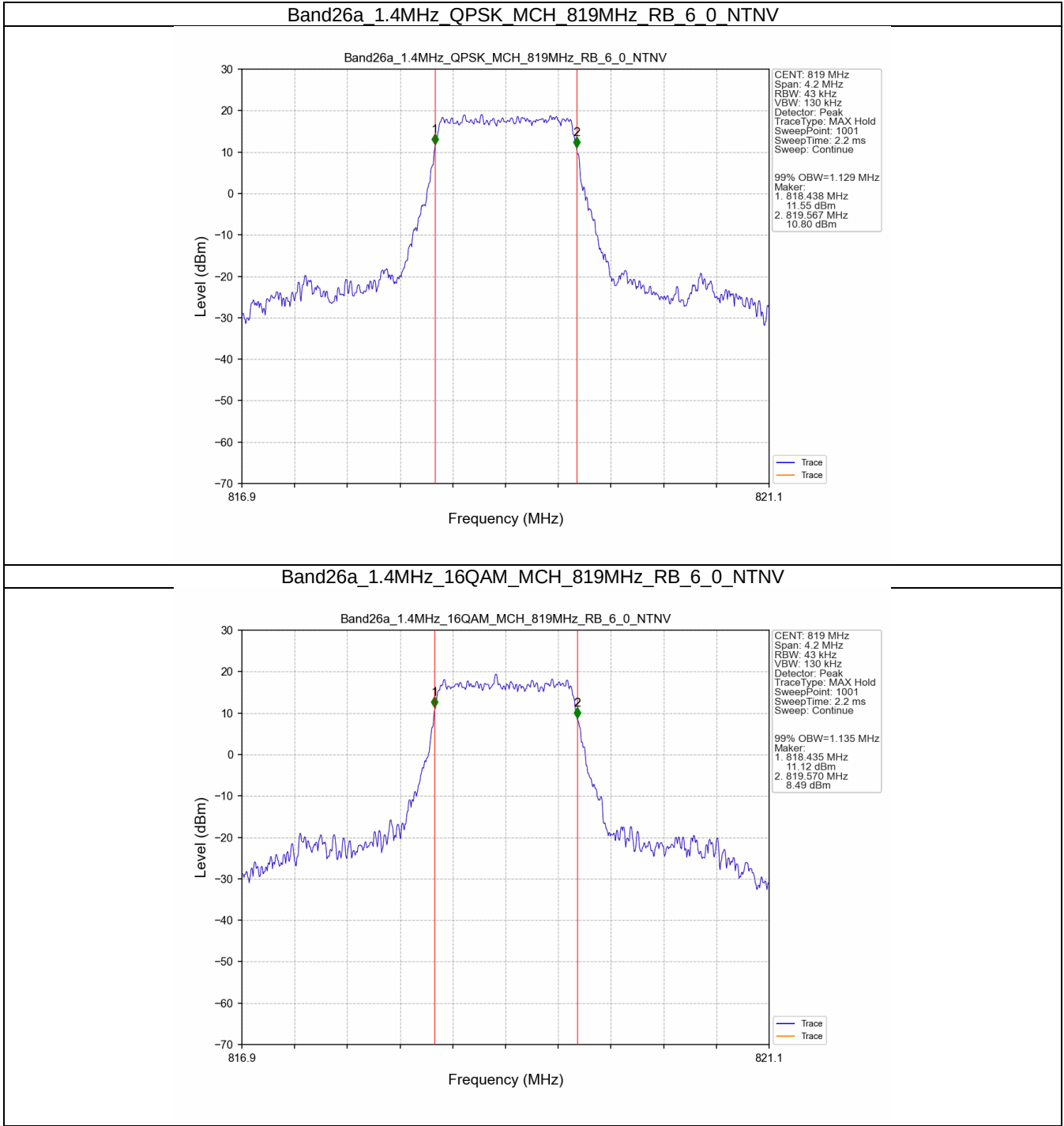
Band: 26a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	819	6	0	1.129	/	Pass
	16QAM	819	6	0	1.135	/	Pass
3	QPSK	819	15	0	2.744	/	Pass
	16QAM	819	15	0	2.756	/	Pass
5	QPSK	819	25	0	4.562	/	Pass
	16QAM	819	25	0	4.561	/	Pass
10	QPSK	819	50	0	9.076	/	Pass
	16QAM	819	50	0	9.065	/	Pass

3.1.2 Band26a_XDB

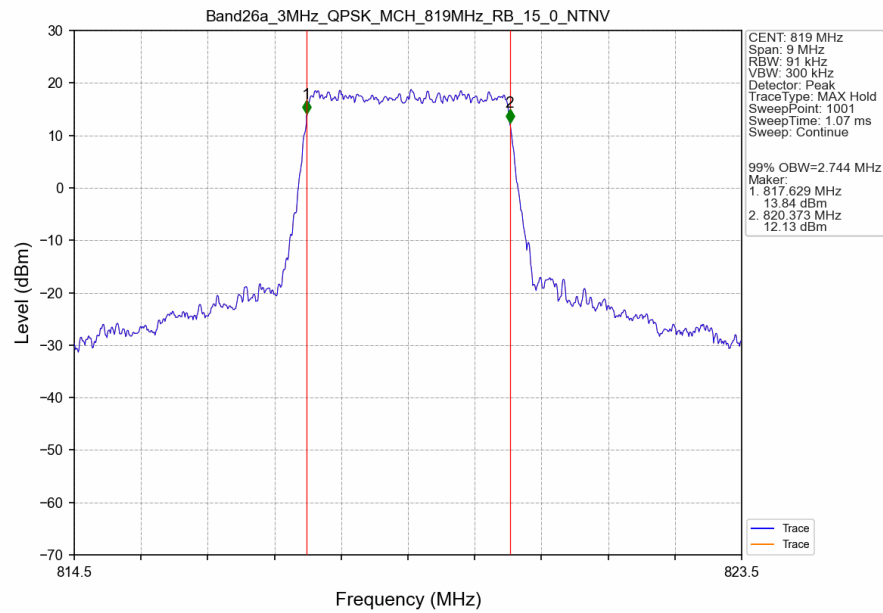
Band: 26a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	819	6	0	1.410	/	Pass
	16QAM	819	6	0	1.371	/	Pass
3	QPSK	819	15	0	3.109	/	Pass
	16QAM	819	15	0	3.126	/	Pass
5	QPSK	819	25	0	5.278	/	Pass
	16QAM	819	25	0	5.227	/	Pass
10	QPSK	819	50	0	10.239	/	Pass
	16QAM	819	50	0	10.223	/	Pass

3.2 Test Graph

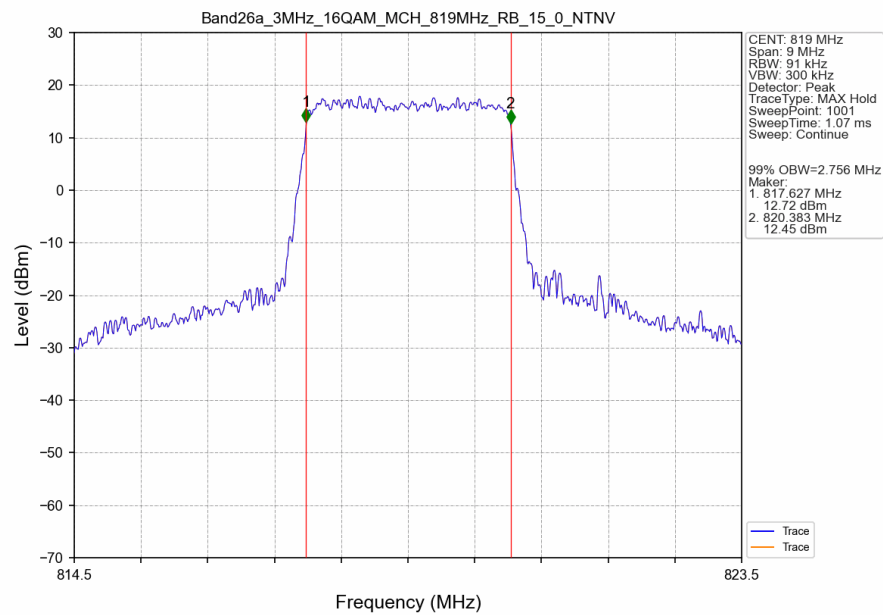
3.2.1 Band26a_OBW



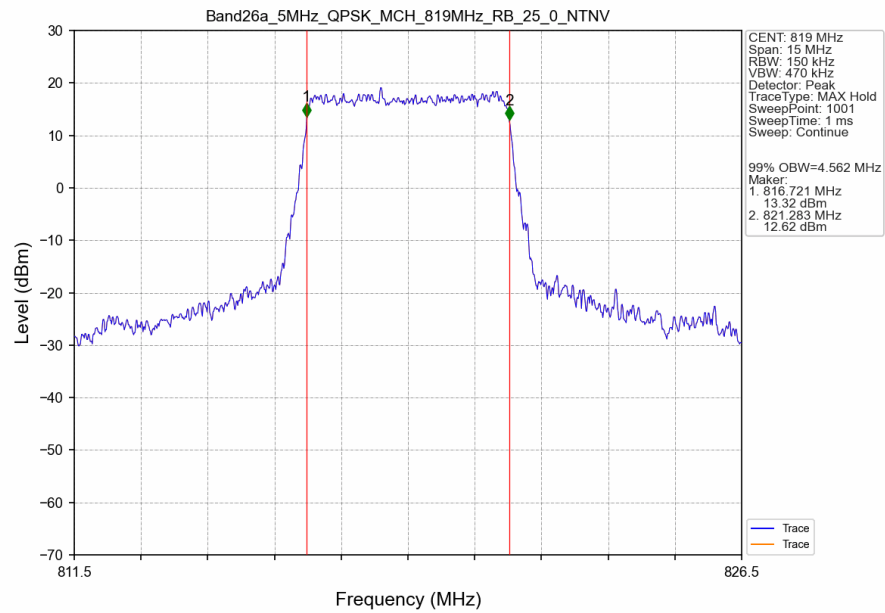
Band26a_3MHz_QPSK_MCH_819MHz_RB_15_0_NTNV



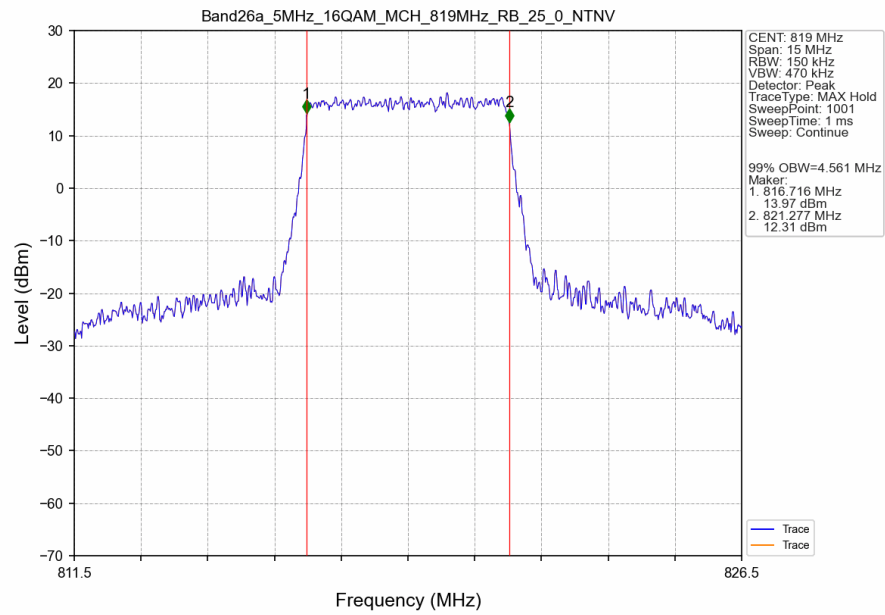
Band26a_3MHz_16QAM_MCH_819MHz_RB_15_0_NTNV



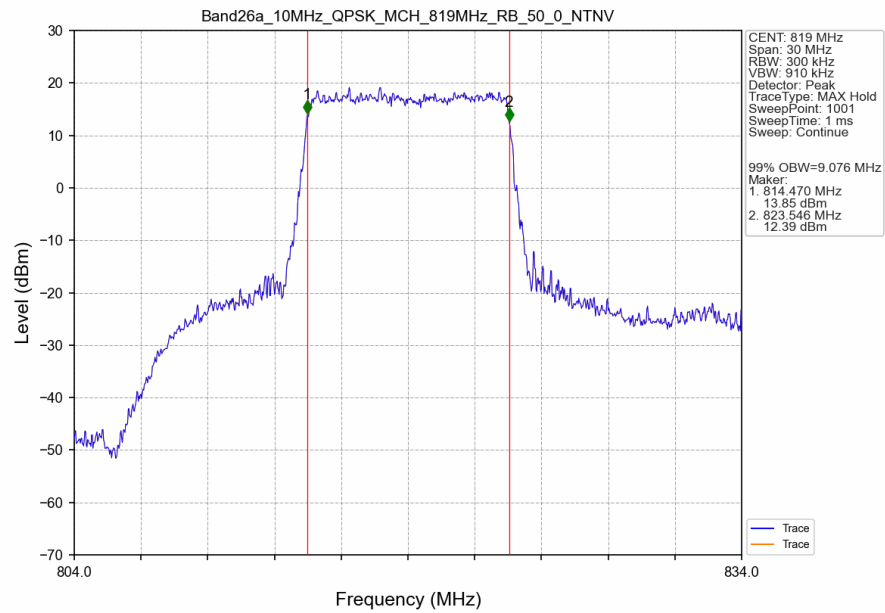
Band26a_5MHz_QPSK_MCH_819MHz_RB_25_0_NTNV



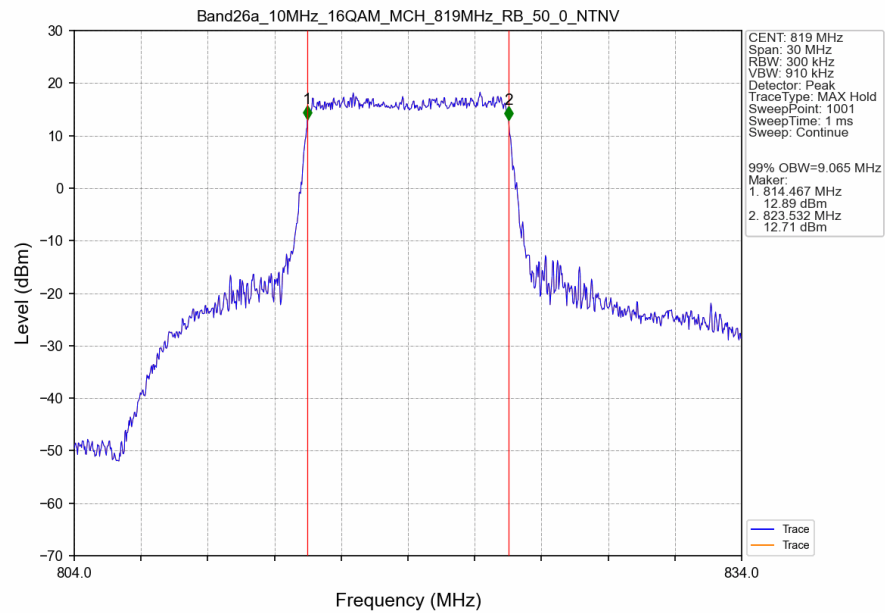
Band26a_5MHz_16QAM_MCH_819MHz_RB_25_0_NTNV



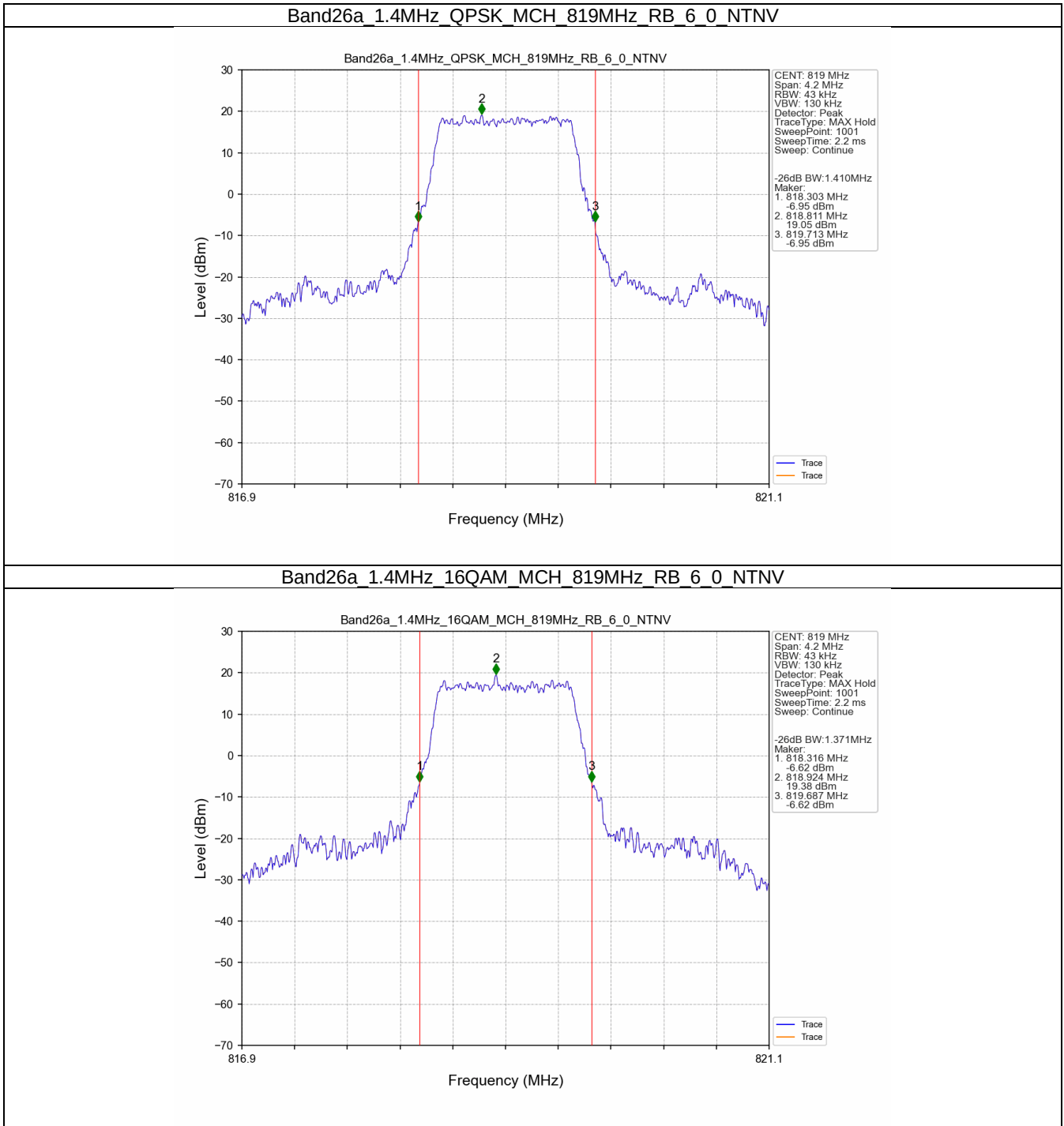
Band26a_10MHz_QPSK_MCH_819MHz_RB_50_0_NTNV



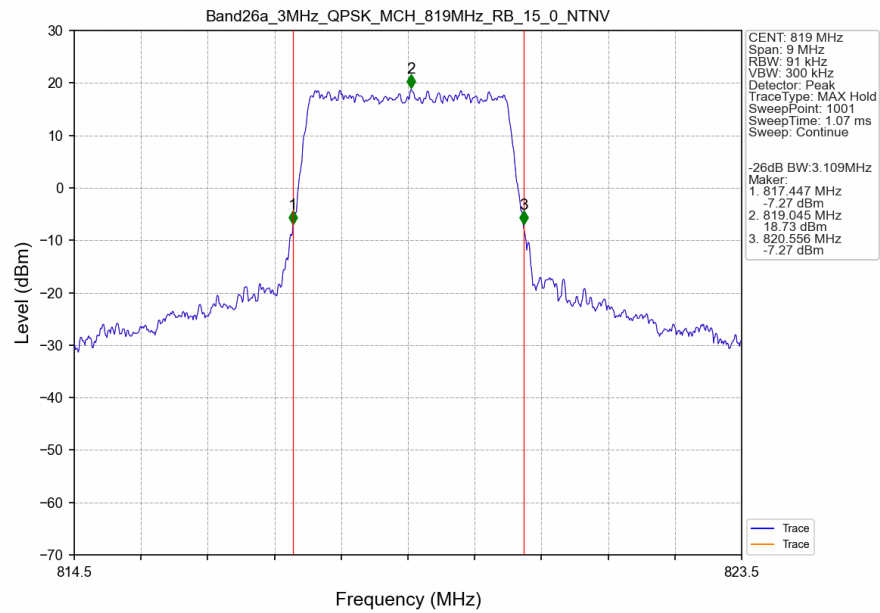
Band26a_10MHz_16QAM_MCH_819MHz_RB_50_0_NTNV



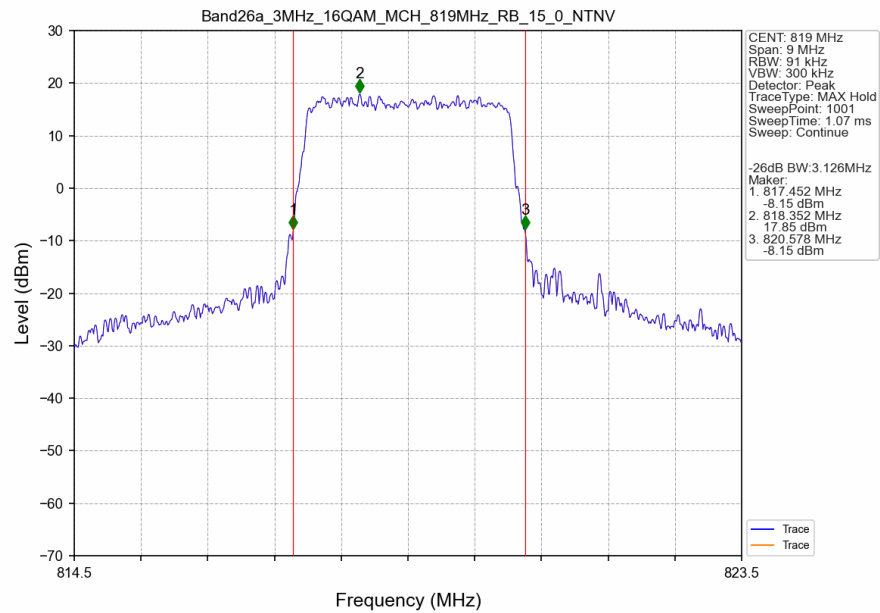
3.2.2 Band26a_XDB



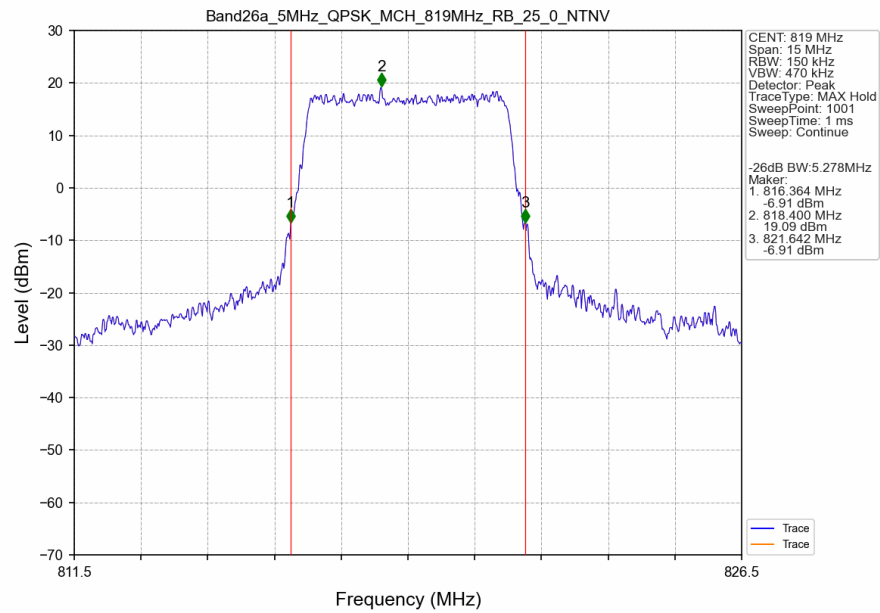
Band26a_3MHz_QPSK_MCH_819MHz_RB_15_0_NTNV



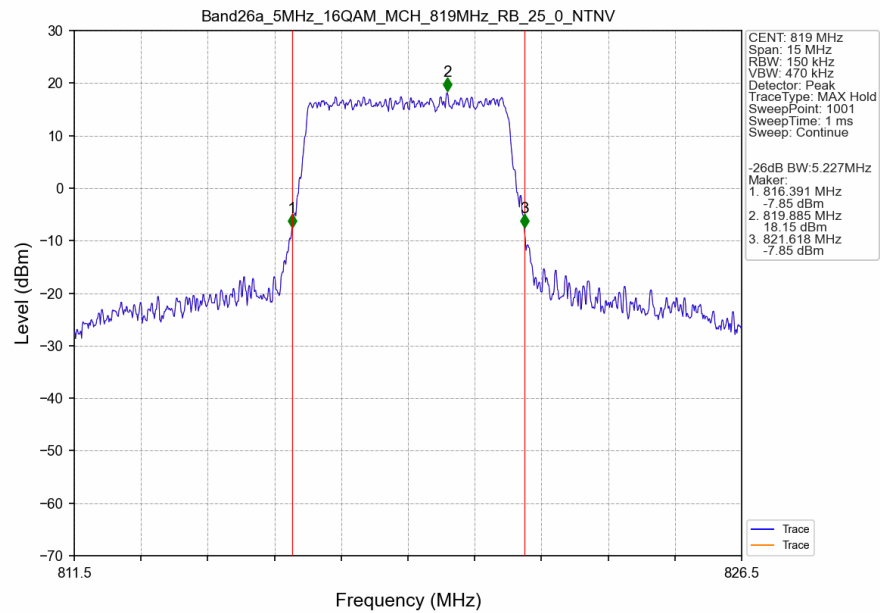
Band26a_3MHz_16QAM_MCH_819MHz_RB_15_0_NTNV



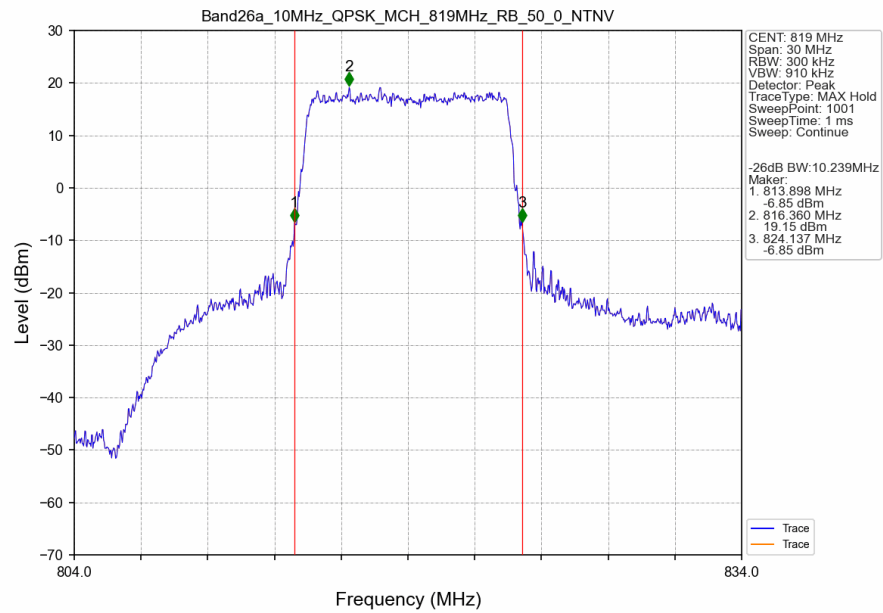
Band26a_5MHz_QPSK_MCH_819MHz_RB_25_0_NTNV



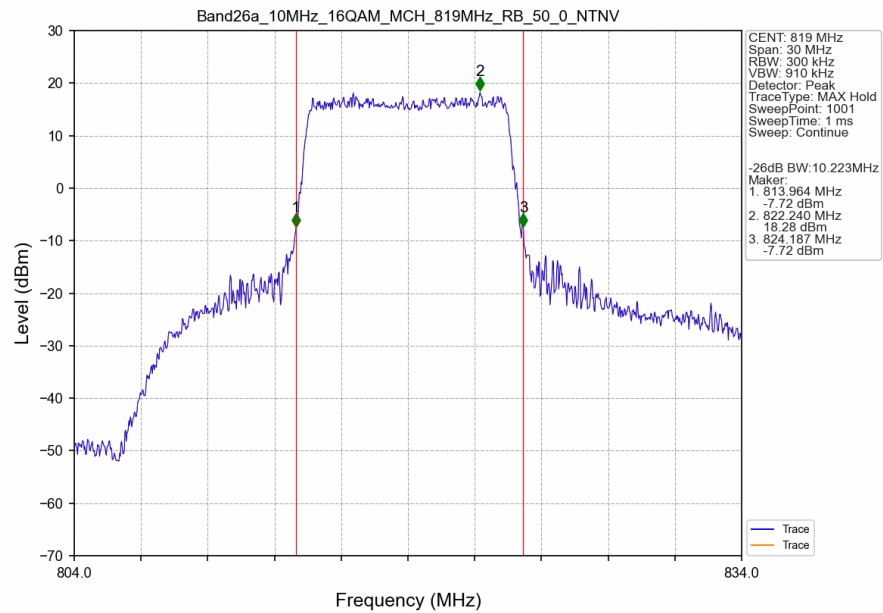
Band26a_5MHz_16QAM_MCH_819MHz_RB_25_0_NTNV



Band26a_10MHz_QPSK_MCH_819MHz_RB_50_0_NTNV



Band26a_10MHz_16QAM_MCH_819MHz_RB_50_0_NTNV



4. Peak-Average Ratio

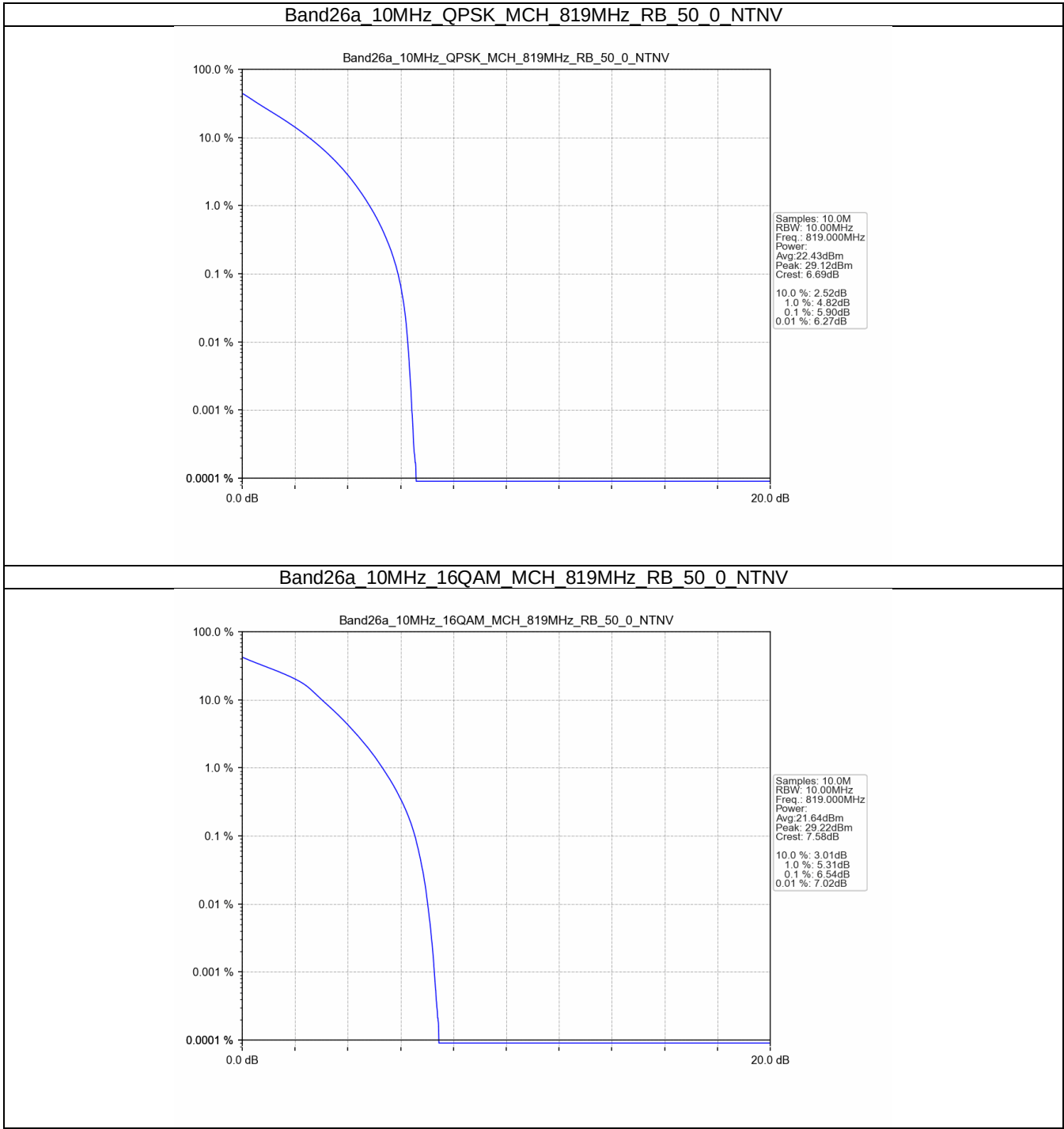
4.1 Test Result

4.1.1 B26a_10MHz

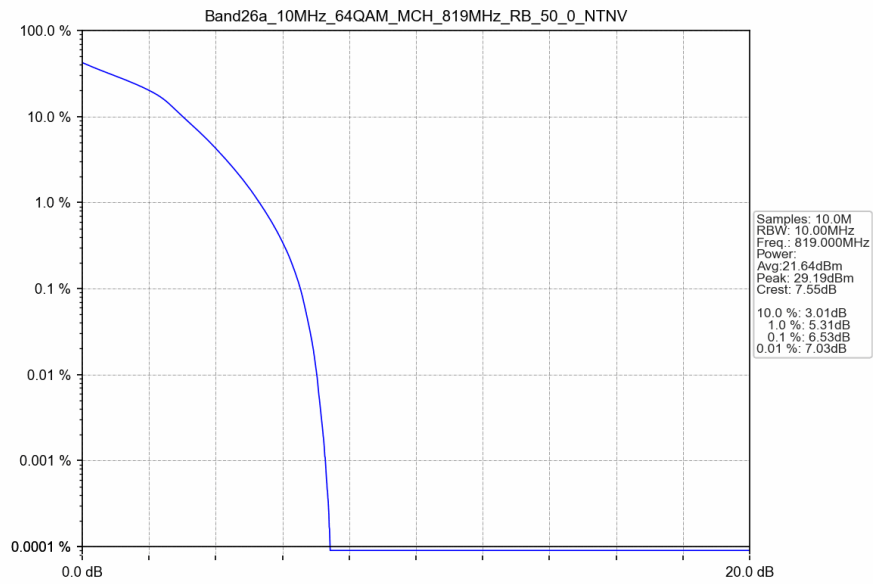
Band: 26a / Bandwidth: 10MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	819	50	0	5.90	<=13	Pass
16QAM	819	50	0	6.54	<=13	Pass
64QAM	819	50	0	6.53	<=13	Pass
256QAM	819	50	0	6.98	<=13	Pass

4.2 Test Graph

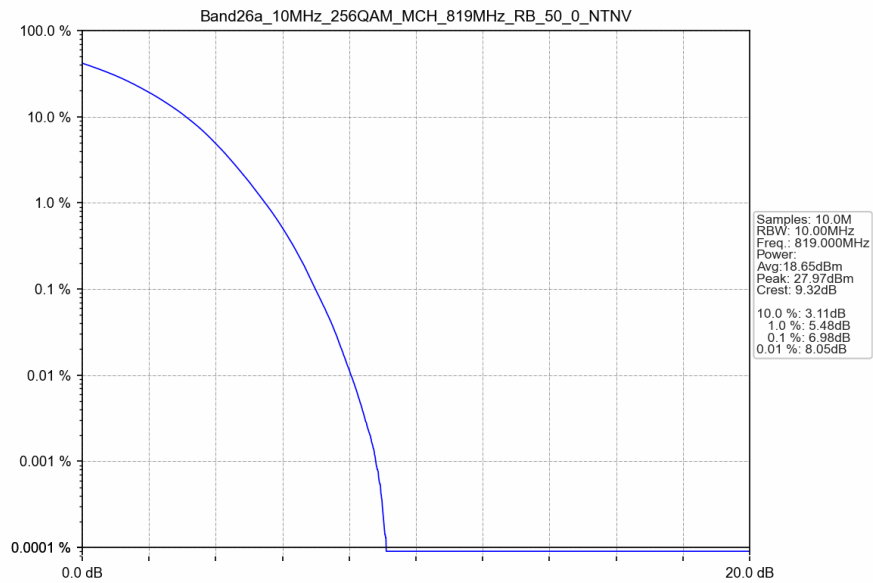
4.2.1 B26a_10MHz



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 / NTV						
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

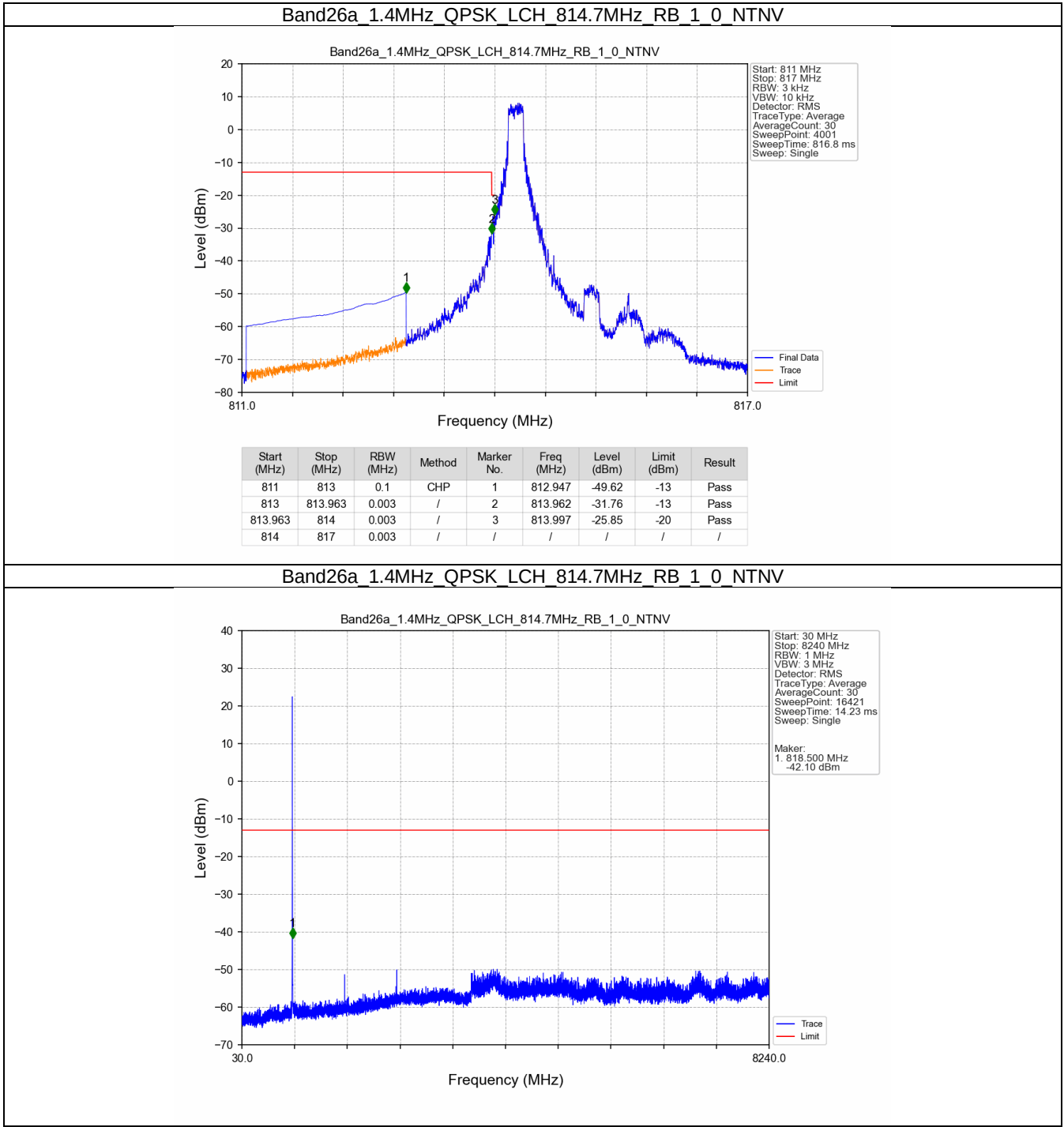
Band: 26a / Bandwidth: 5MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	816.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	819	1	0	Refer To Test Graph		Pass
	821.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.4 B26a_10MHz

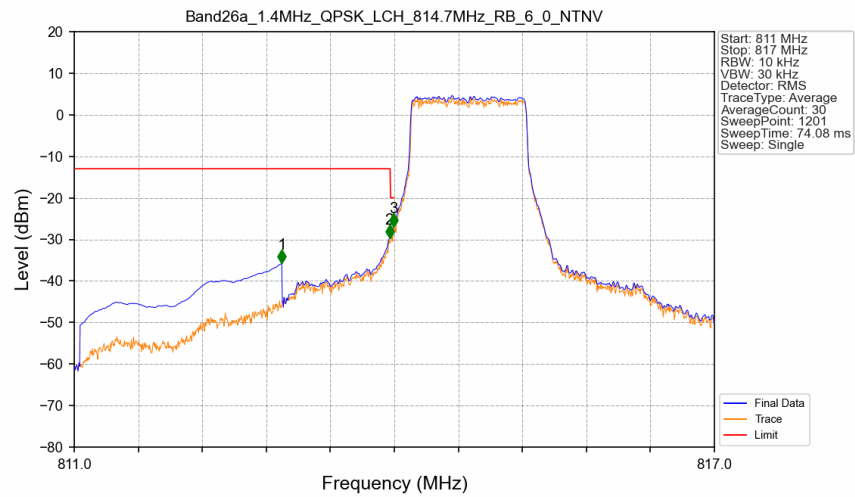
Band: 26a / Bandwidth: 10MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	819	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	819	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B26a_1.4MHz

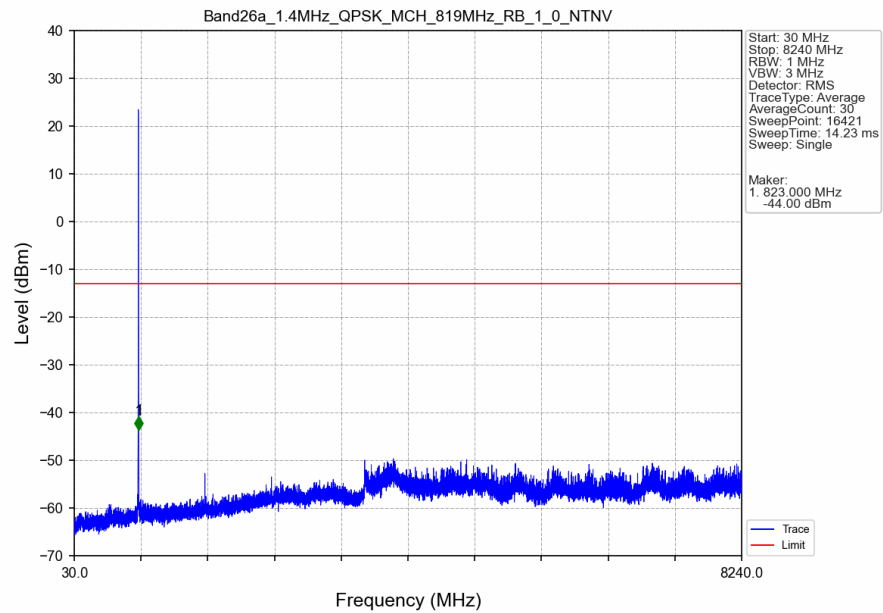


Band26a_1.4MHz_QPSK_LCH_814.7MHz_RB_6_0_NTNV

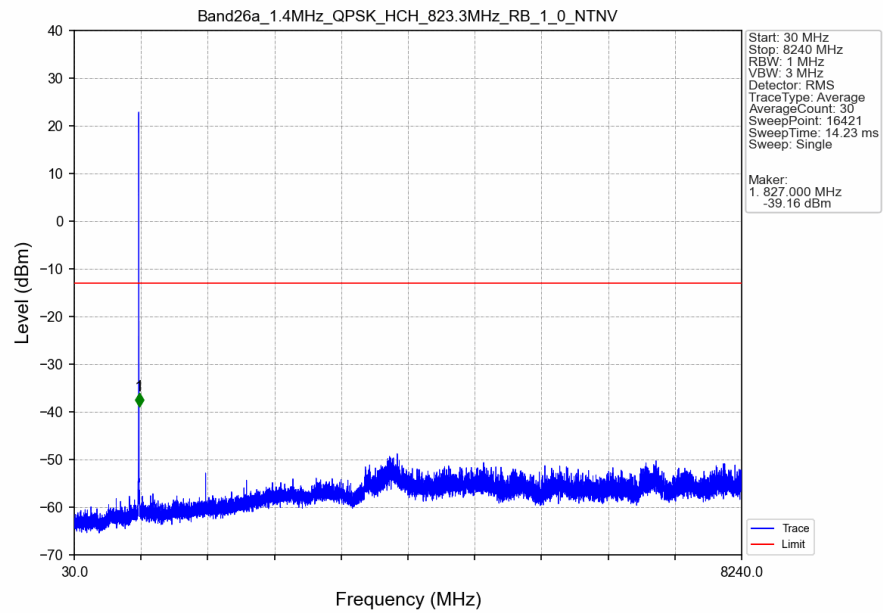


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
811	813	0.1	CHP	1	812.945	-35.76	-13	Pass
813	813.963	0.014	CHP	2	813.955	-29.75	-13	Pass
813.963	814	0.014	CHP	3	813.995	-26.87	-20	Pass
814	817	0.014	CHP	/	/	/	/	/

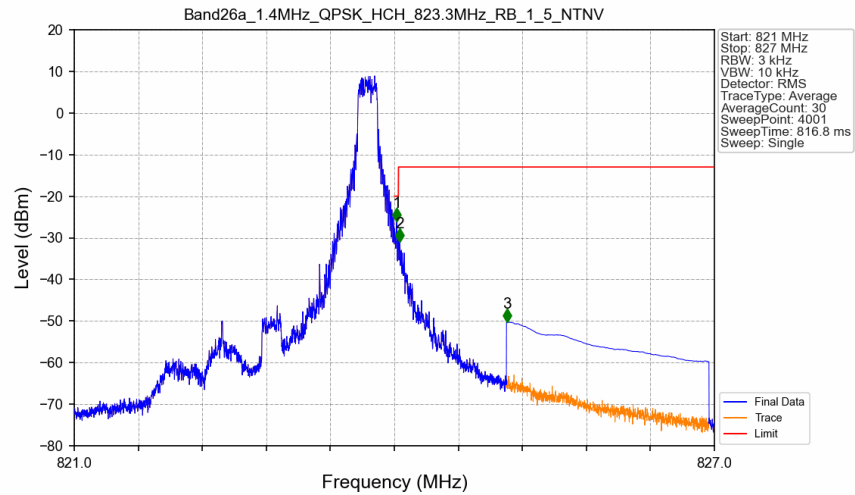
Band26a_1.4MHz_QPSK_MCH_819MHz_RB_1_0_NTNV



Band26a 1.4MHz QPSK HCH 823.3MHz RB 1 0 NTNV

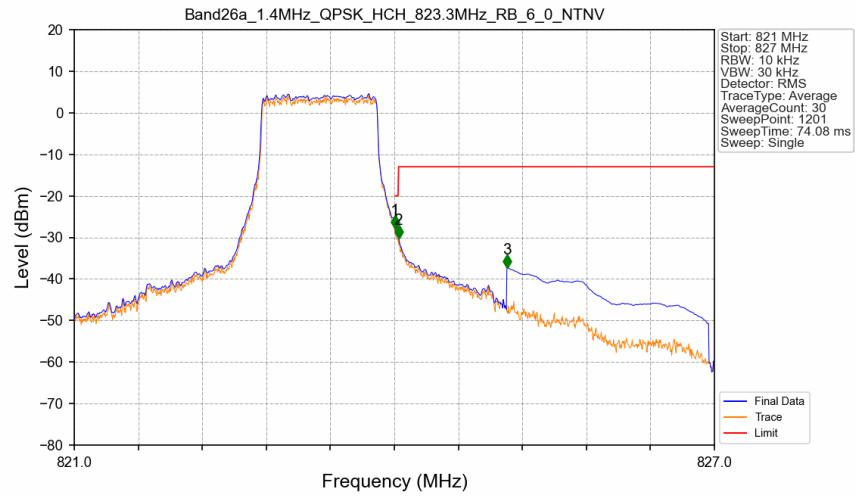


Band26a 1.4MHz QPSK HCH 823.3MHz RB 1 5 NTNV



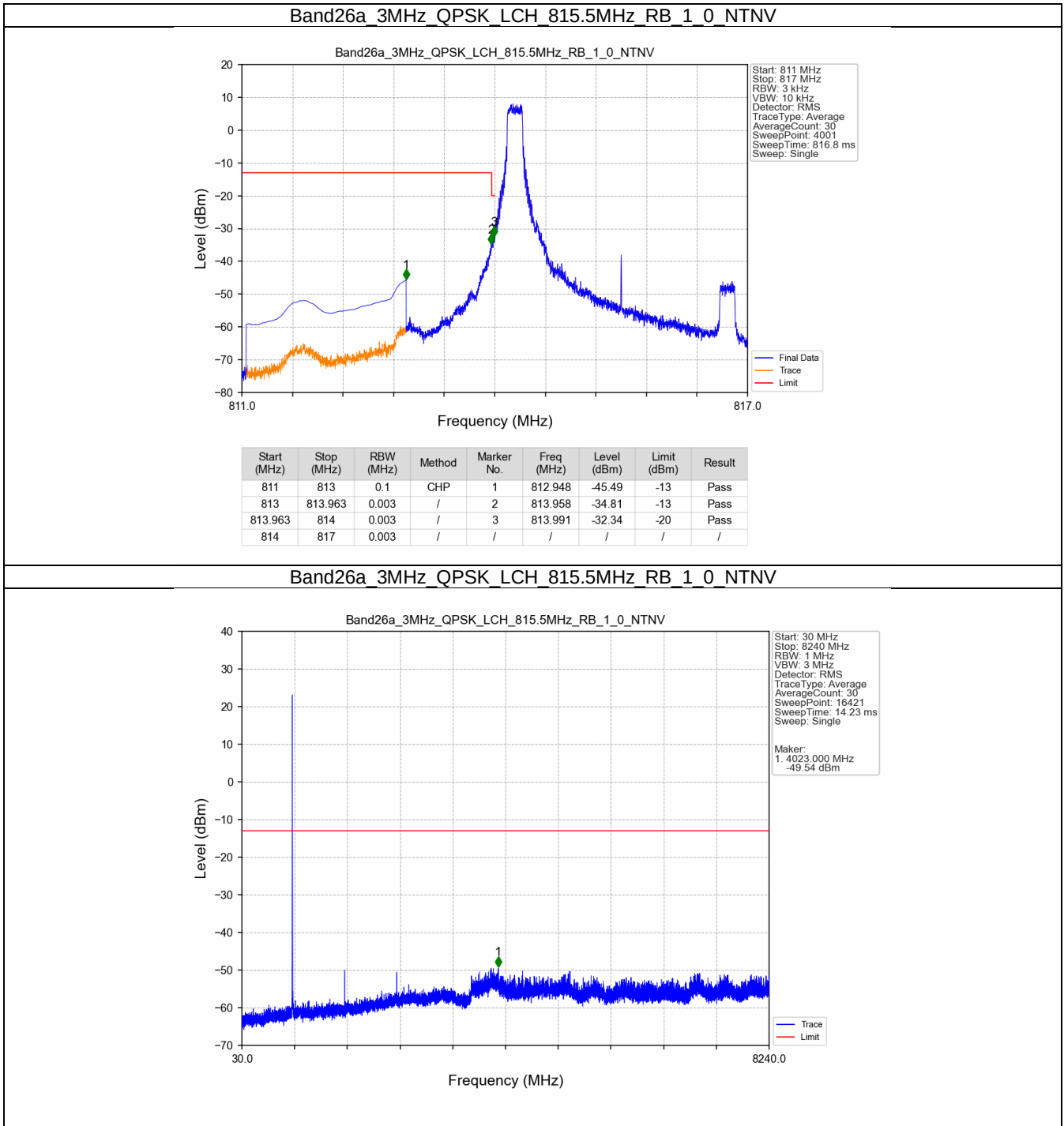
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.023	-26.08	-20	Pass
824.038	825	0.003	/	2	824.053	-30.86	-13	Pass
825	827	0.1	CHP	3	825.058	-50.24	-13	Pass

Band26a 1.4MHz QPSK HCH 823.3MHz RB 6 0 NTV

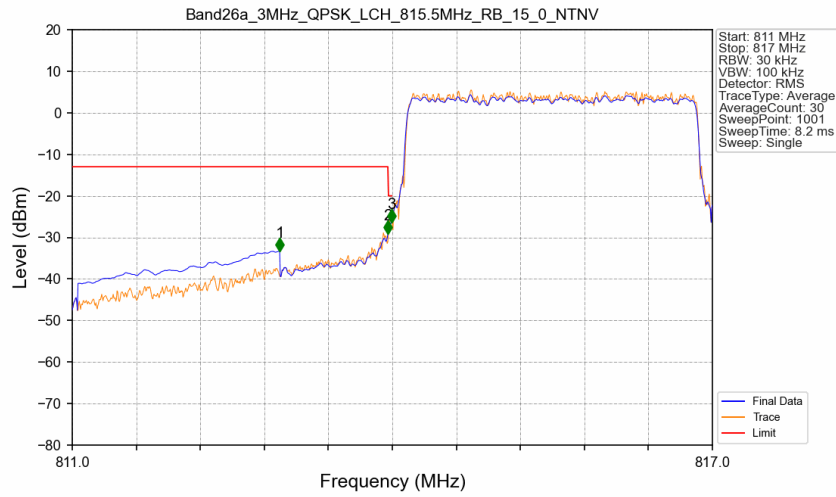


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.014	CHP	/	/	/	/	/
824	824.038	0.014	CHP	1	824.005	-27.88	-20	Pass
824.038	825	0.014	CHP	2	824.040	-30.22	-13	Pass
825	827	0.1	CHP	3	825.055	-37.25	-13	Pass

5.2.2 B26a_3MHz

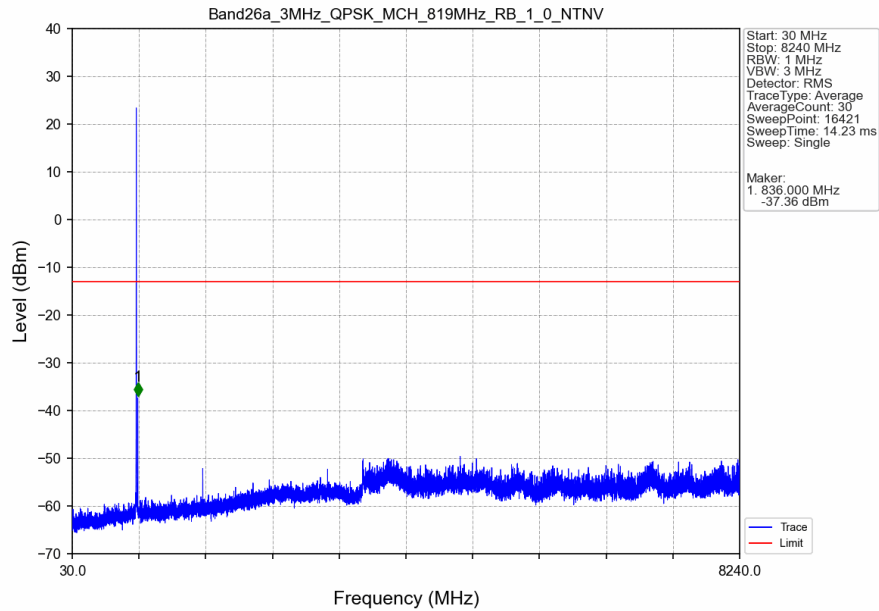


Band26a 3MHz QPSK LCH 815.5MHz RB 15 0 NTN

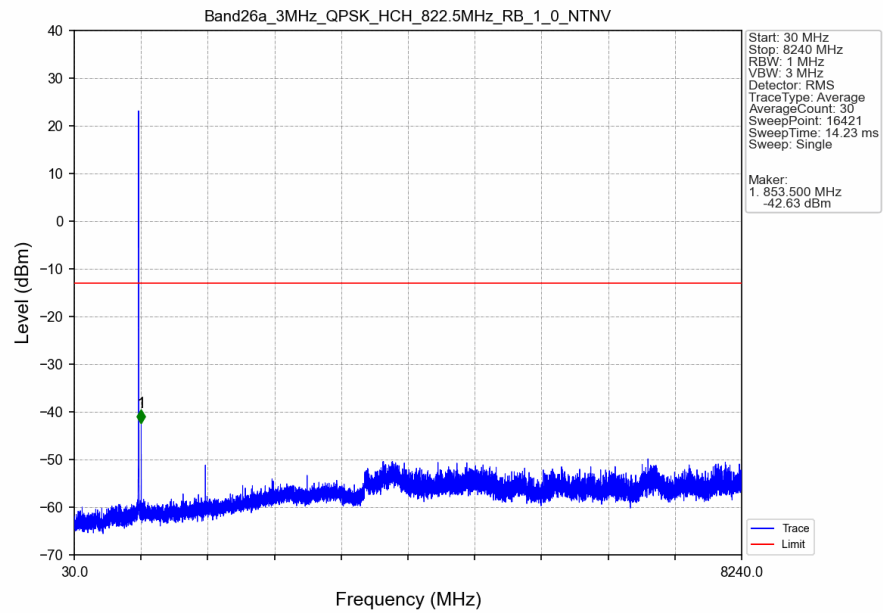


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
811	813	0.1	CHP	1	812.944	-33.28	-13	Pass
813	813.963	0.031	CHP	2	813.958	-29.21	-13	Pass
813.963	814	0.031	CHP	3	813.994	-26.34	-20	Pass
814	817	0.031	CHP	/	/	/	/	/

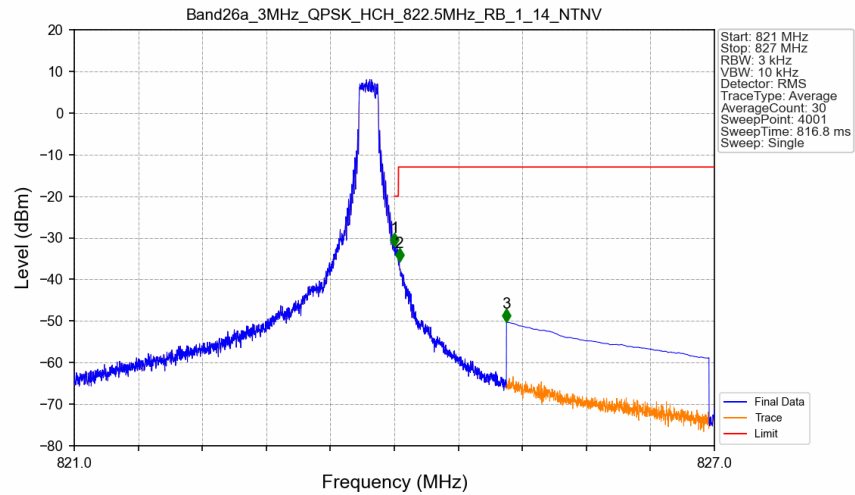
Band26a 3MHz QPSK MCH 819MHz RB 1 0 NTN



Band26a 3MHz QPSK HCH 822.5MHz RB 1 0 NTNV

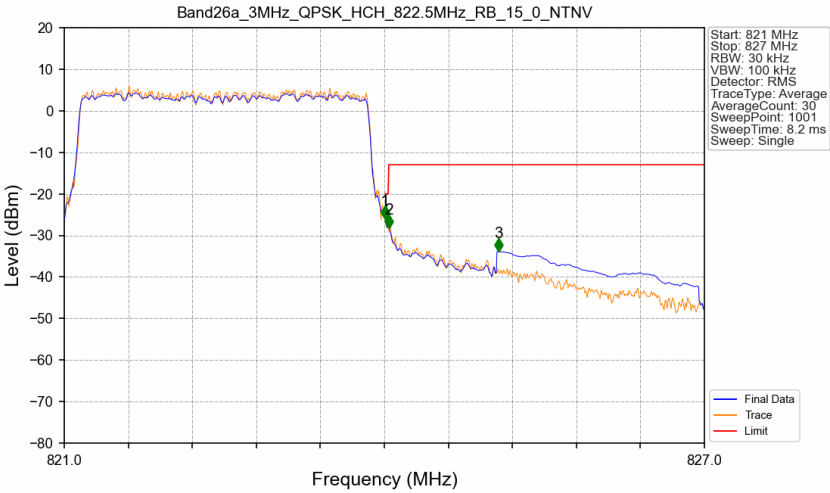


Band26a 3MHz QPSK HCH 822.5MHz RB 1 14 NTNV



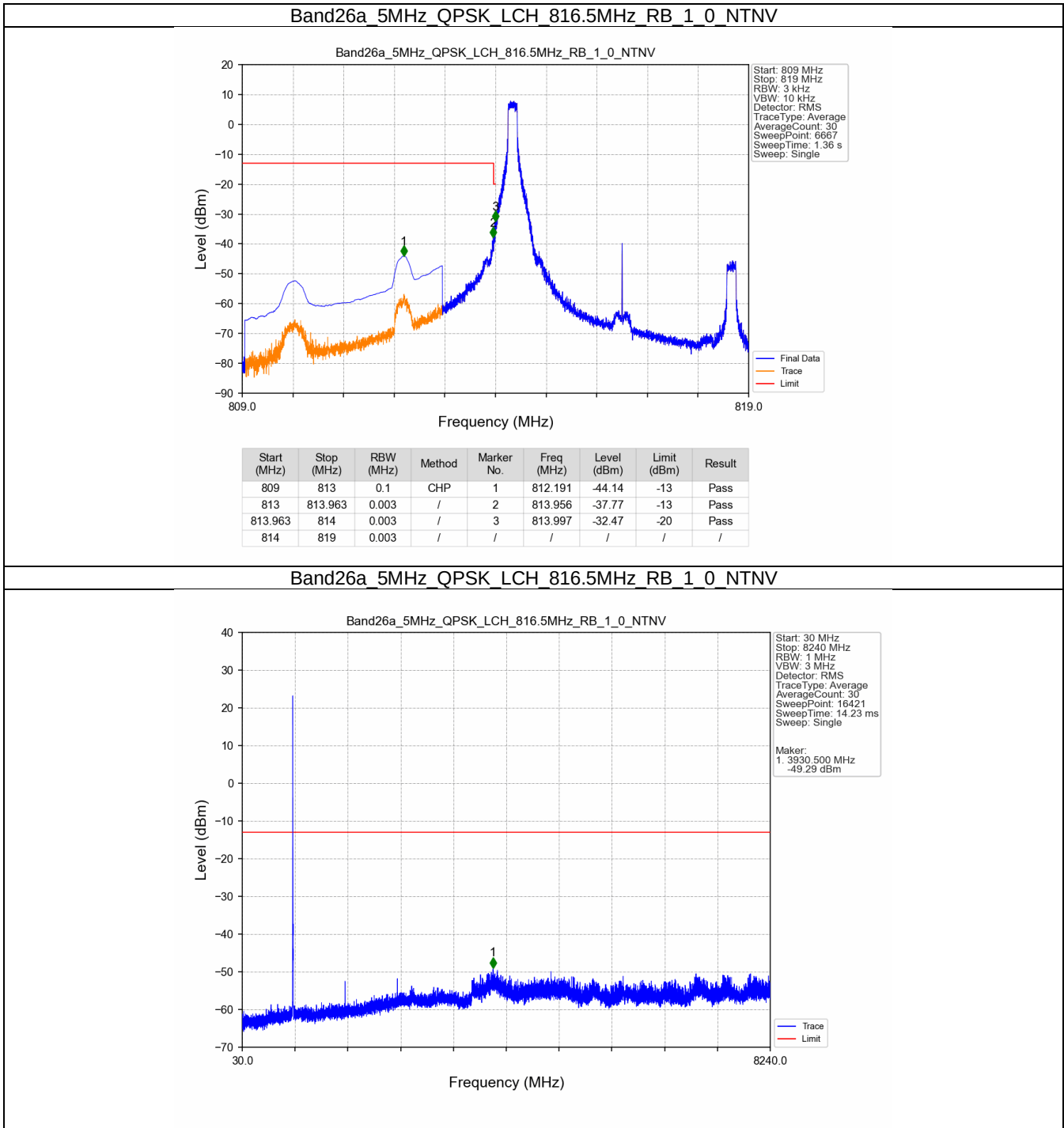
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.003	-32.10	-20	Pass
824.038	825	0.003	/	2	824.047	-35.69	-13	Pass
825	827	0.1	CHP	3	825.052	-50.27	-13	Pass

Band26a 3MHz QPSK HCH 822.5MHz RB 15 0 NTV

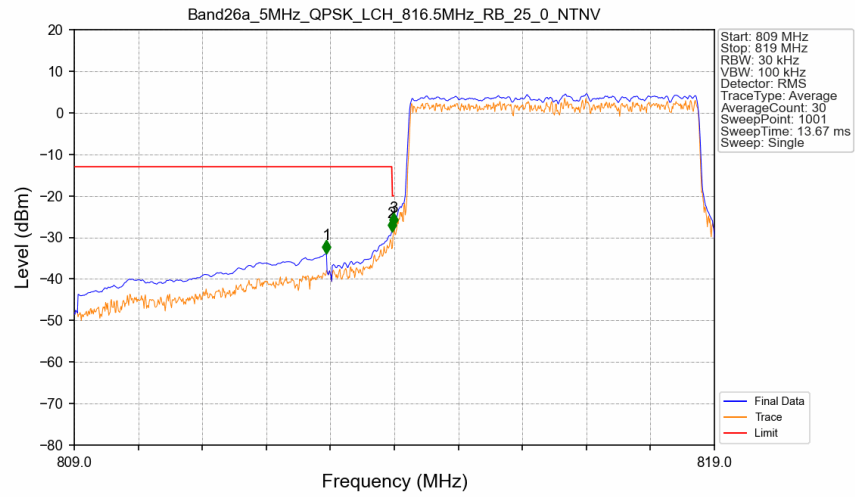


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.031	CHP	/	/	/	/	/
824	824.038	0.031	CHP	1	824.006	-26.01	-20	Pass
824.038	825	0.031	CHP	2	824.042	-28.18	-13	Pass
825	827	0.1	CHP	3	825.068	-33.84	-13	Pass

5.2.3 B26a_5MHz

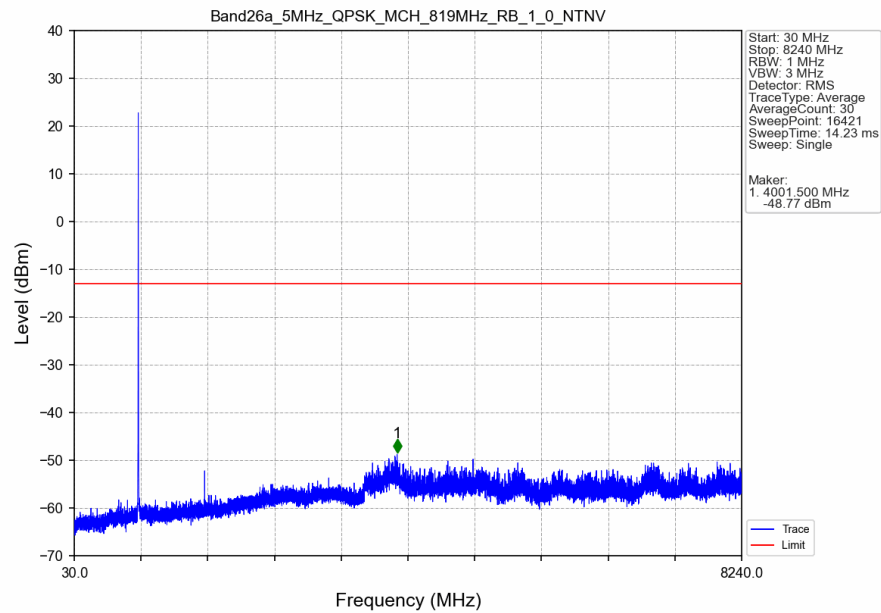


Band26a 5MHz QPSK LCH 816.5MHz RB 25 0 NTN

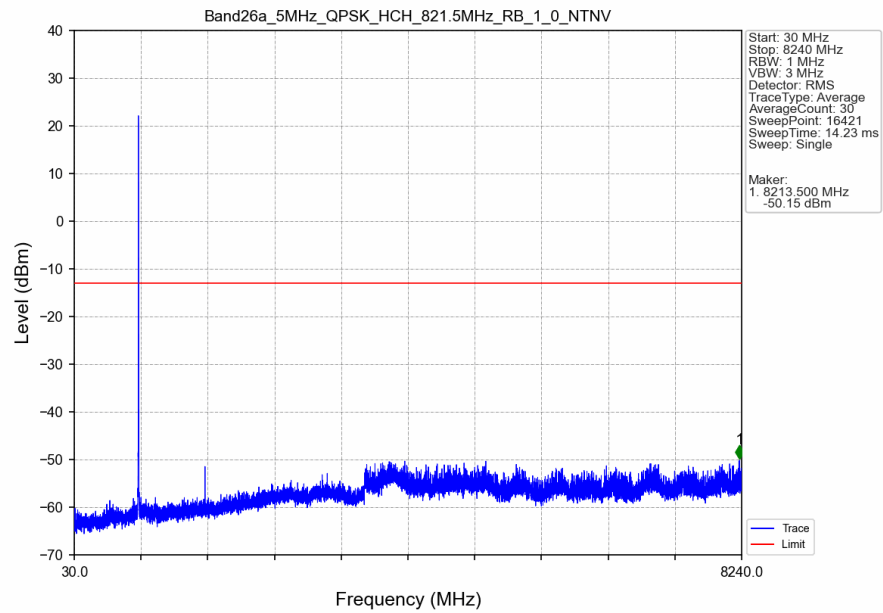


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	CHP	1	812.940	-33.89	-13	Pass
813	813.963	0.053	CHP	2	813.960	-28.58	-13	Pass
813.963	814	0.053	CHP	3	813.990	-27.24	-20	Pass
814	819	0.053	CHP	/	/	/	/	/

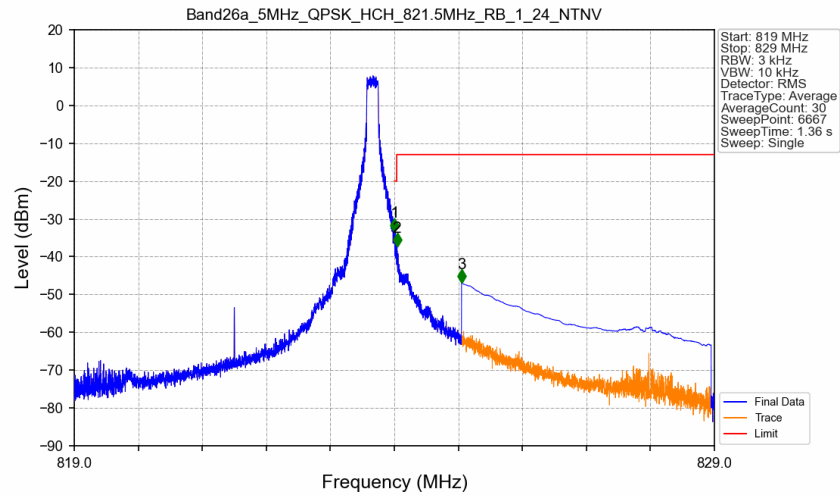
Band26a 5MHz QPSK MCH 819MHz RB 1 0 NTN



Band26a 5MHz QPSK HCH 821.5MHz RB 1 0 NTV

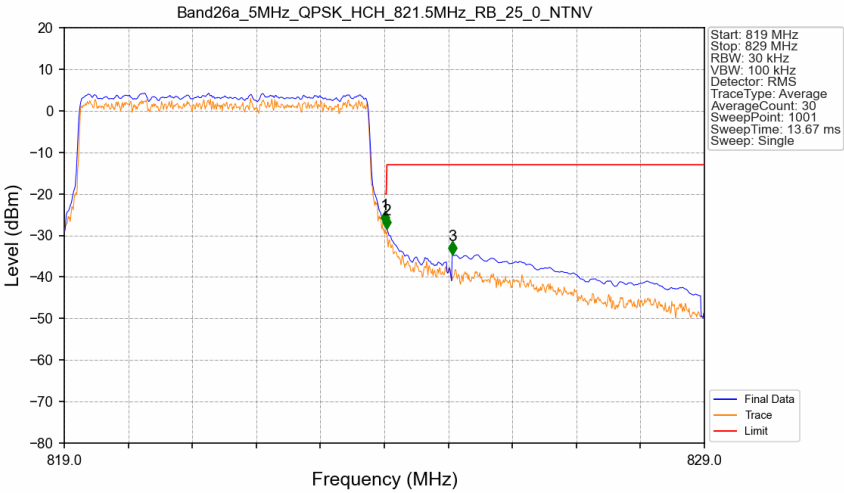


Band26a 5MHz QPSK HCH 821.5MHz RB 1 24 NTV



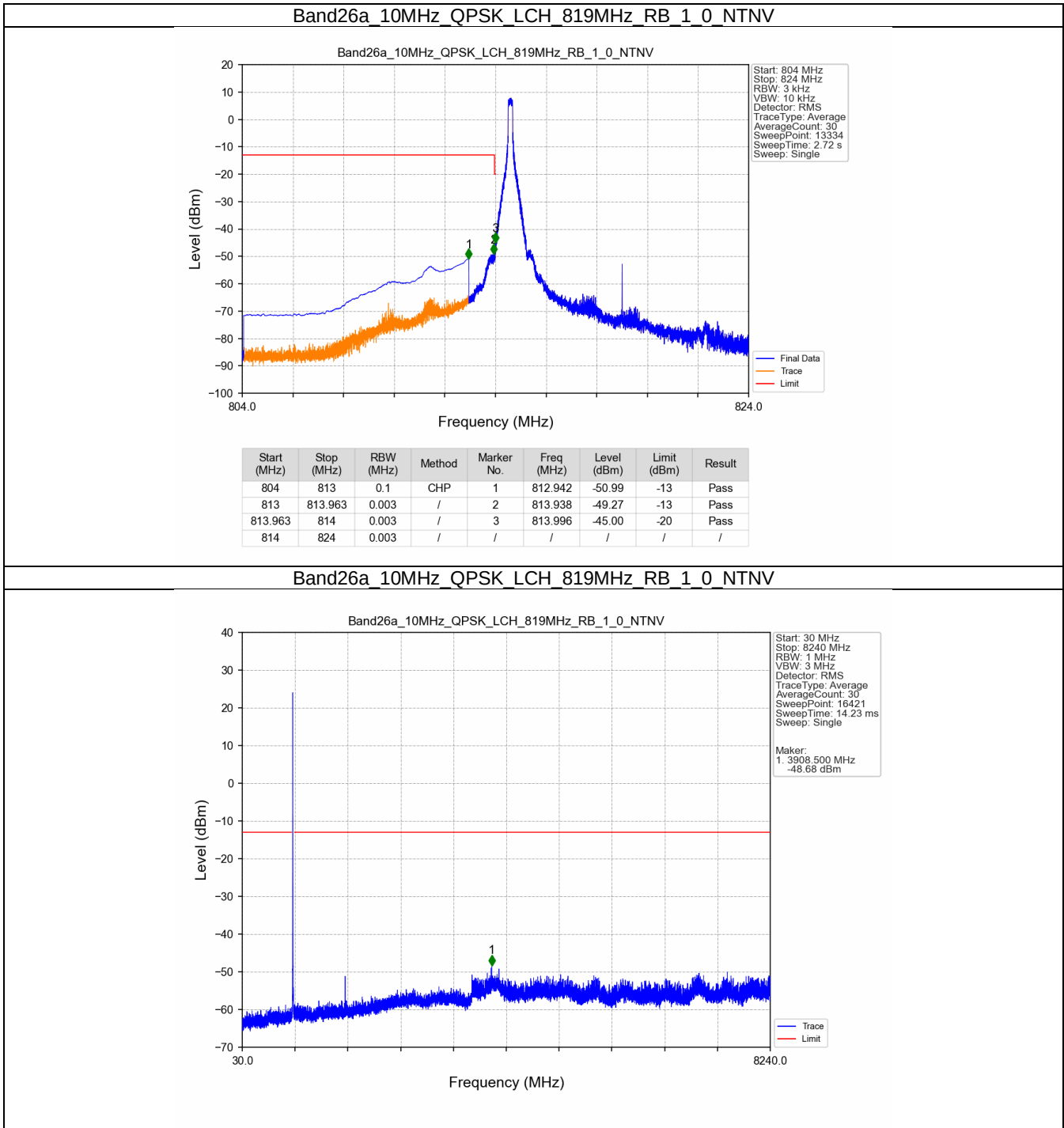
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.001	-33.33	-20	Pass
824.038	825	0.003	/	2	824.042	-37.32	-13	Pass
825	829	0.1	CHP	3	825.050	-46.85	-13	Pass

Band26a 5MHz QPSK HCH 821.5MHz RB 25 0 NTV

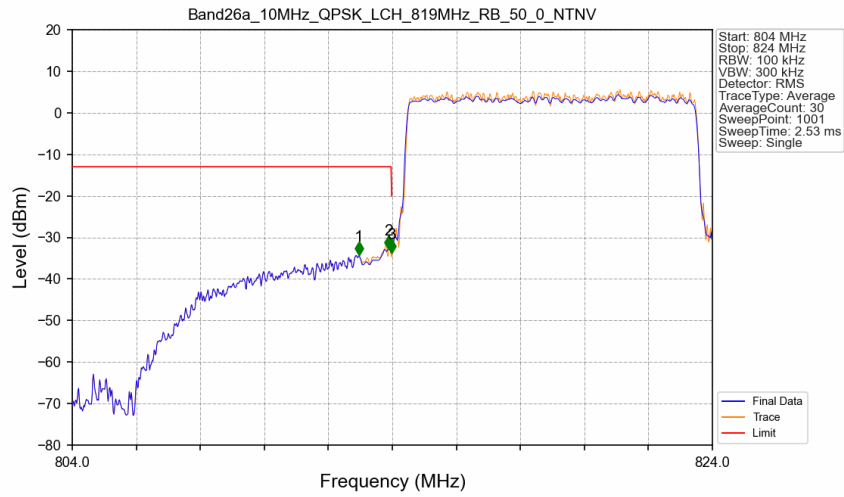


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.053	CHP	/	/	/	/	/
824	824.038	0.053	CHP	1	824.010	-27.21	-20	Pass
824.038	825	0.053	CHP	2	824.040	-28.42	-13	Pass
825	829	0.1	CHP	3	825.060	-34.63	-13	Pass

5.2.4 B26a_10MHz

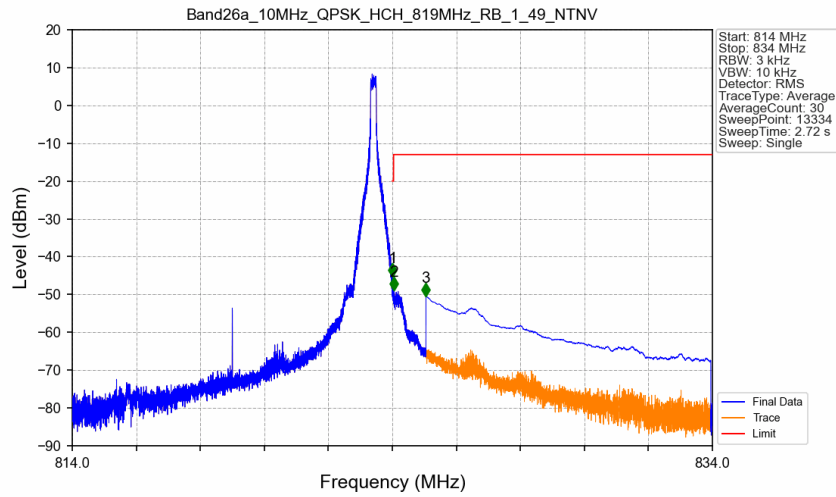


Band26a_10MHz_QPSK_LCH_819MHz_RB_50_0_NTNV



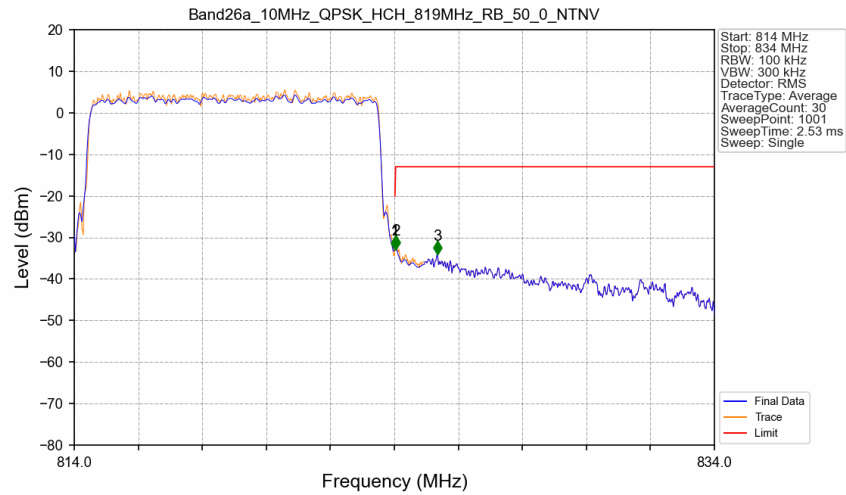
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
804	813	0.1	/	1	812.960	-34.16	-13	Pass
813	813.963	0.102	CHP	2	813.880	-32.78	-13	Pass
813.963	814	0.102	CHP	3	813.980	-33.75	-20	Pass
814	824	0.102	CHP	/	/	/	/	/

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	824.004	-45.30	-20	Pass
824.038	825	0.003	/	2	824.049	-48.93	-13	Pass
825	834	0.1	CHP	3	825.051	-50.54	-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	0.102	CHP	/	/	/	/	/
824	824.038	0.102	CHP	1	824.020	-32.91	-20	Pass
824.038	825	0.102	CHP	2	824.040	-32.84	-13	Pass
825	834	0.1	/	3	825.340	-33.96	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 26a(814-824MHz) ANT31-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	-56.85	-13	-43.85	-59.78	2.62	5.55	Horizontal	Pass
2443.5	-68.82	-13	-55.82	-71.46	3.04	5.68	Horizontal	Pass
3258.0	-67.35	-13	-54.35	-71.63	3.28	7.56	Horizontal	Pass
1629.0	-57.24	-13	-44.24	-60.17	2.62	5.55	Vertical	Pass
2443.5	-61.43	-13	-48.43	-64.07	3.04	5.68	Vertical	Pass
3258.0	-67.22	-13	-54.22	-71.5	3.28	7.56	Vertical	Pass