

1. Transmitter Conducted Power Output

1.1 Test Result

1.1.1 B26a_1.4MHz_ERP

Band: 26a / Bandwidth: 1.4MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)		Verdict
		Size	Offset	Result	Limit	
QPSK	814.7	1	0	22.98	<=50	Pass
			2	22.93	<=50	Pass
			5	22.89	<=50	Pass
		3	0	22.95	<=50	Pass
			2	22.55	<=50	Pass
			3	22.52	<=50	Pass
		6	0	21.76	<=50	Pass
	819	1	0	23.07	<=50	Pass
			2	23.26	<=50	Pass
			5	23.02	<=50	Pass
		3	0	22.89	<=50	Pass
			2	22.47	<=50	Pass
			3	22.96	<=50	Pass
		6	0	21.83	<=50	Pass
	823.3	1	0	22.99	<=50	Pass
			2	23.22	<=50	Pass
			5	22.83	<=50	Pass
		3	0	22.70	<=50	Pass
			2	22.75	<=50	Pass
			3	22.87	<=50	Pass
		6	0	21.84	<=50	Pass
16QAM	814.7	1	0	21.55	<=50	Pass
			2	21.68	<=50	Pass
			5	21.70	<=50	Pass
		3	0	21.73	<=50	Pass
			2	21.73	<=50	Pass
			3	21.91	<=50	Pass
		6	0	20.84	<=50	Pass
	819	1	0	21.42	<=50	Pass
			2	21.58	<=50	Pass
			5	21.60	<=50	Pass
		3	0	21.70	<=50	Pass
			2	21.64	<=50	Pass
			3	22.14	<=50	Pass
		6	0	20.79	<=50	Pass
	823.3	1	0	21.87	<=50	Pass
			2	21.75	<=50	Pass
			5	21.67	<=50	Pass
		3	0	21.36	<=50	Pass
			2	21.61	<=50	Pass
			3	21.19	<=50	Pass
		6	0	20.79	<=50	Pass

1.1.2 B26a_3MHz_ERP

Band: 26a / Bandwidth: 3MHz / NTNV				
Modulation	Frequency	RB Allocation	Conducted Power (dBm)	Verdict

	(MHz)	Size	Offset	Result	Limit	
QPSK	815.5	1	0	23.02	<=50	Pass
			7	23.04	<=50	Pass
			14	23.02	<=50	Pass
		8	0	21.78	<=50	Pass
			4	21.90	<=50	Pass
			7	21.86	<=50	Pass
		15	0	21.91	<=50	Pass
	819	1	0	23.01	<=50	Pass
			7	23.10	<=50	Pass
			14	22.86	<=50	Pass
		8	0	21.96	<=50	Pass
			4	21.81	<=50	Pass
			7	21.96	<=50	Pass
		15	0	21.82	<=50	Pass
	822.5	1	0	22.97	<=50	Pass
			7	23.12	<=50	Pass
			14	22.52	<=50	Pass
		8	0	21.95	<=50	Pass
			4	21.84	<=50	Pass
			7	21.79	<=50	Pass
		15	0	21.87	<=50	Pass
16QAM	815.5	1	0	22.07	<=50	Pass
			7	21.92	<=50	Pass
			14	21.70	<=50	Pass
		8	0	20.68	<=50	Pass
			4	20.91	<=50	Pass
			7	20.91	<=50	Pass
		15	0	20.59	<=50	Pass
	819	1	0	21.53	<=50	Pass
			7	21.97	<=50	Pass
			14	22.05	<=50	Pass
		8	0	20.68	<=50	Pass
			4	20.89	<=50	Pass
			7	20.68	<=50	Pass
		15	0	20.87	<=50	Pass
	822.5	1	0	21.76	<=50	Pass
			7	21.55	<=50	Pass
			14	21.67	<=50	Pass
		8	0	21.06	<=50	Pass
			4	20.92	<=50	Pass
			7	21.07	<=50	Pass
		15	0	20.95	<=50	Pass

1.1.3 B26a_5MHz_ERP

Band: 26a / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)		Verdict
		Size	Offset	Result	Limit	
QPSK	816.5	1	0	22.94	<=50	Pass
			13	22.80	<=50	Pass
			24	22.98	<=50	Pass
		12	0	21.85	<=50	Pass
			6	21.86	<=50	Pass
			13	21.45	<=50	Pass
		25	0	21.92	<=50	Pass
	819	1	0	22.99	<=50	Pass

			13	23.13	<=50	Pass
			24	22.75	<=50	Pass
		12	0	21.81	<=50	Pass
			6	21.34	<=50	Pass
			13	21.81	<=50	Pass
		25	0	21.95	<=50	Pass
	821.5	1	0	23.10	<=50	Pass
			13	22.73	<=50	Pass
			24	22.96	<=50	Pass
		12	0	21.90	<=50	Pass
			6	21.81	<=50	Pass
			13	21.75	<=50	Pass
	25	0	21.81	<=50	Pass	
	16QAM	816.5	1	0	21.89	<=50
13				21.50	<=50	Pass
24				21.44	<=50	Pass
12			0	20.71	<=50	Pass
			6	20.89	<=50	Pass
			13	20.73	<=50	Pass
25		0	20.63	<=50	Pass	
819		1	0	21.52	<=50	Pass
			13	21.76	<=50	Pass
			24	21.59	<=50	Pass
		12	0	20.65	<=50	Pass
			6	21.06	<=50	Pass
			13	20.93	<=50	Pass
25		0	20.63	<=50	Pass	
821.5		1	0	21.59	<=50	Pass
			13	21.88	<=50	Pass
			24	21.28	<=50	Pass
		12	0	20.91	<=50	Pass
			6	20.83	<=50	Pass
			13	21.00	<=50	Pass
25		0	21.10	<=50	Pass	

1.1.4 B26a_10MHz_ERP

Band: 26a / Bandwidth: 10MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)		Verdict
		Size	Offset	Result	Limit	
QPSK	819	1	0	23.08	<=50	Pass
			25	23.08	<=50	Pass
			49	23.18	<=50	Pass
		25	0	21.86	<=50	Pass
			13	21.96	<=50	Pass
			25	21.82	<=50	Pass
		50	0	21.84	<=50	Pass
16QAM	819	1	0	21.17	<=50	Pass
			25	21.83	<=50	Pass
			49	21.52	<=50	Pass
		25	0	21.04	<=50	Pass
			13	20.97	<=50	Pass
			25	21.14	<=50	Pass
		50	0	21.02	<=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	3.5	-1.500	-0.0018	-2.5 to 2.5	Pass
					3.87	0.000	0.0000	-2.5 to 2.5	Pass
					4.4	-1.500	-0.0018	-2.5 to 2.5	Pass
				-30	3.87	-0.500	-0.0006	-2.5 to 2.5	Pass
				-20	3.87	-0.800	-0.0010	-2.5 to 2.5	Pass
				-10	3.87	-0.100	-0.0001	-2.5 to 2.5	Pass
				0	3.87	-0.900	-0.0011	-2.5 to 2.5	Pass
				10	3.87	-1.100	-0.0013	-2.5 to 2.5	Pass
				30	3.87	-0.900	-0.0011	-2.5 to 2.5	Pass
				40	3.87	0.100	0.0001	-2.5 to 2.5	Pass
				50	3.87	0.200	0.0002	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band26a_OBW

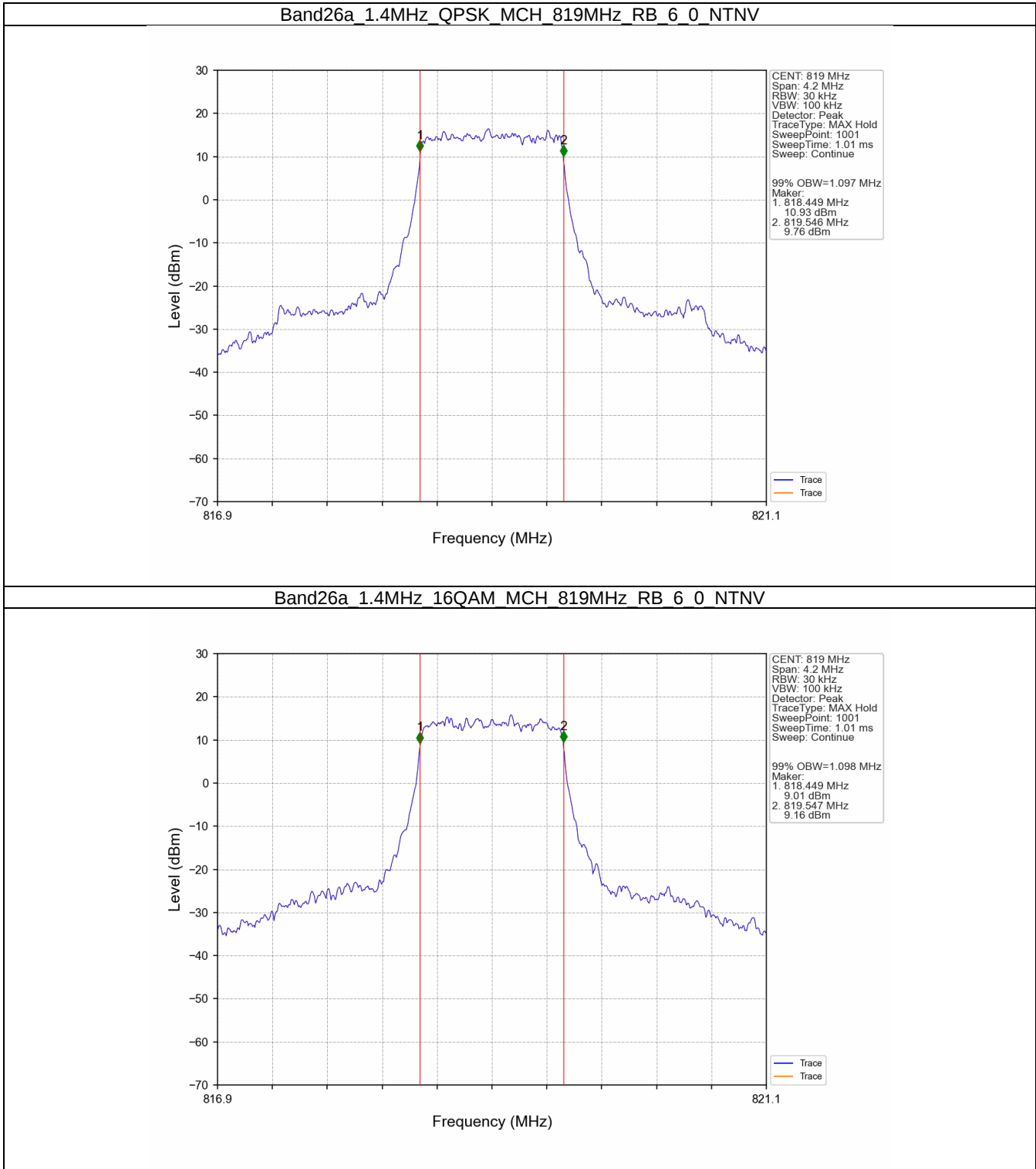
Band: 26a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	819	6	0	1.097	/	Pass
	16QAM	819	6	0	1.098	/	Pass
3	QPSK	819	15	0	2.738	/	Pass
	16QAM	819	15	0	2.732	/	Pass
5	QPSK	819	25	0	4.506	/	Pass
	16QAM	819	25	0	4.494	/	Pass
10	QPSK	819	50	0	8.999	/	Pass
	16QAM	819	50	0	8.972	/	Pass

3.1.2 Band26a_XDB

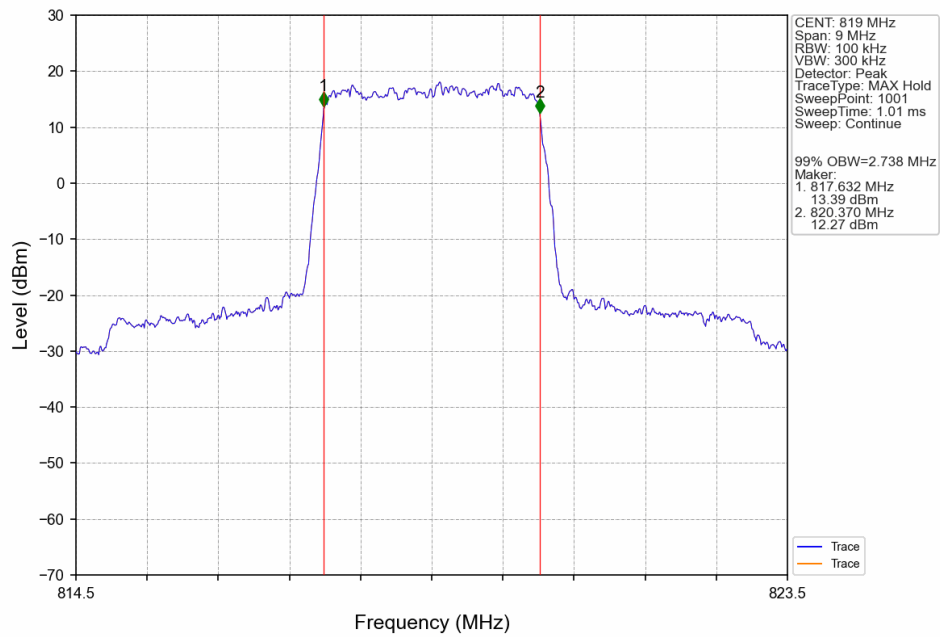
Band: 26a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	819	6	0	1.329	/	Pass
	16QAM	819	6	0	1.300	/	Pass
3	QPSK	819	15	0	3.067	/	Pass
	16QAM	819	15	0	3.056	/	Pass
5	QPSK	819	25	0	5.032	/	Pass
	16QAM	819	25	0	5.024	/	Pass
10	QPSK	819	50	0	9.874	/	Pass
	16QAM	819	50	0	9.816	/	Pass

3.2 Test Graph

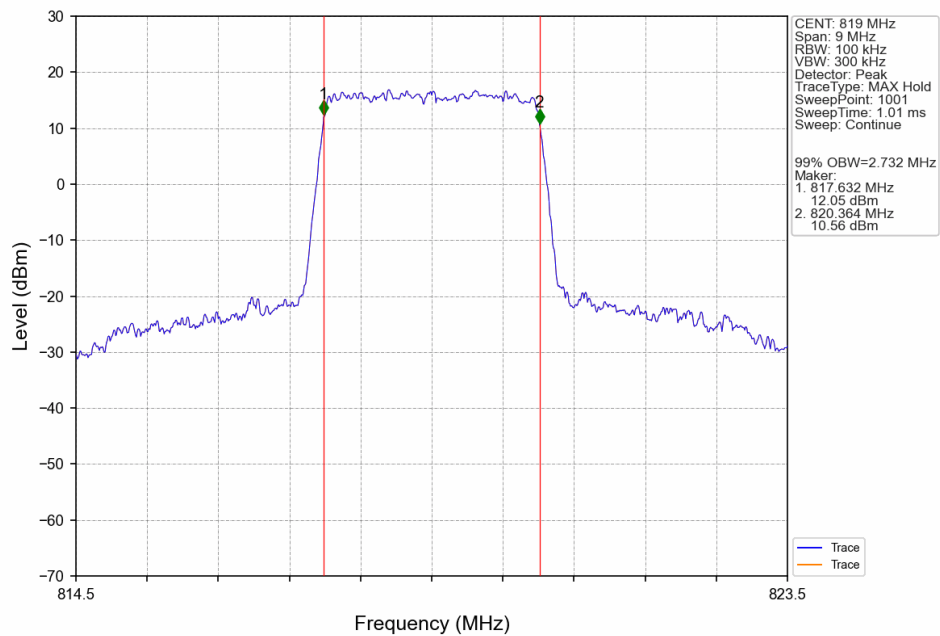
3.2.1 Band26a_OBW



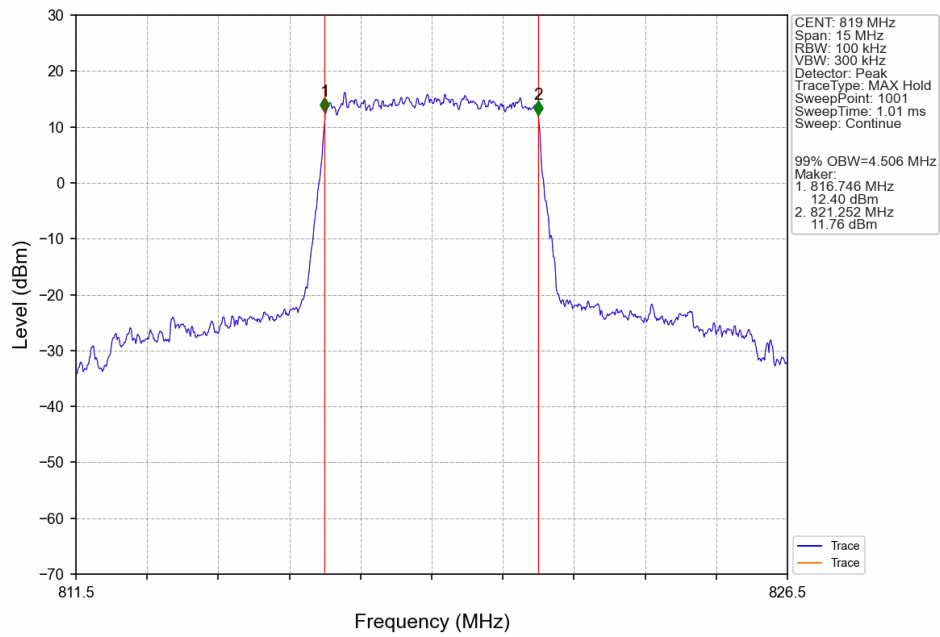
Band26a_3MHz_QPSK_MCH_819MHz_RB_15_0_NTNV



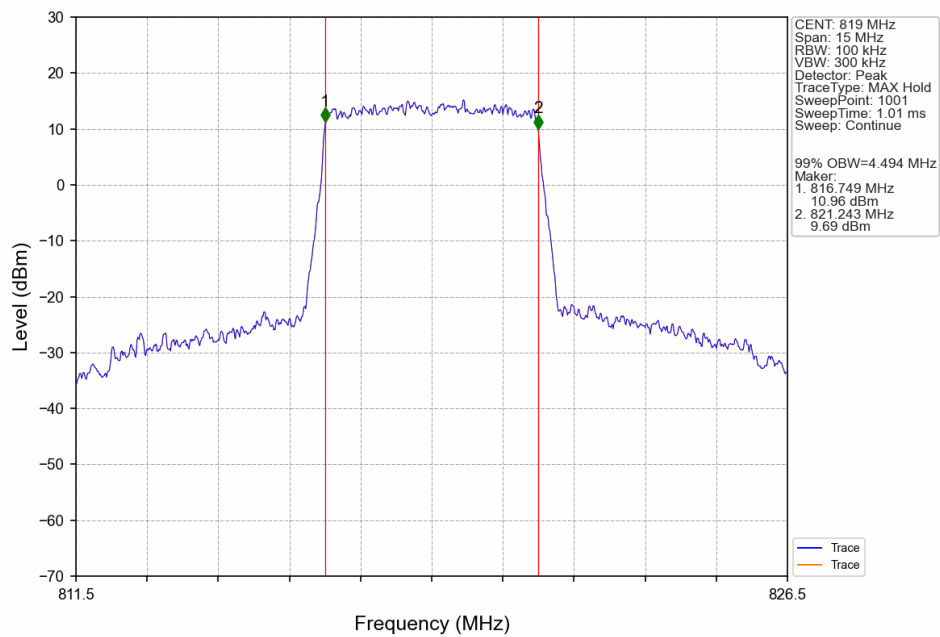
Band26a_3MHz_16QAM_MCH_819MHz_RB_15_0_NTNV



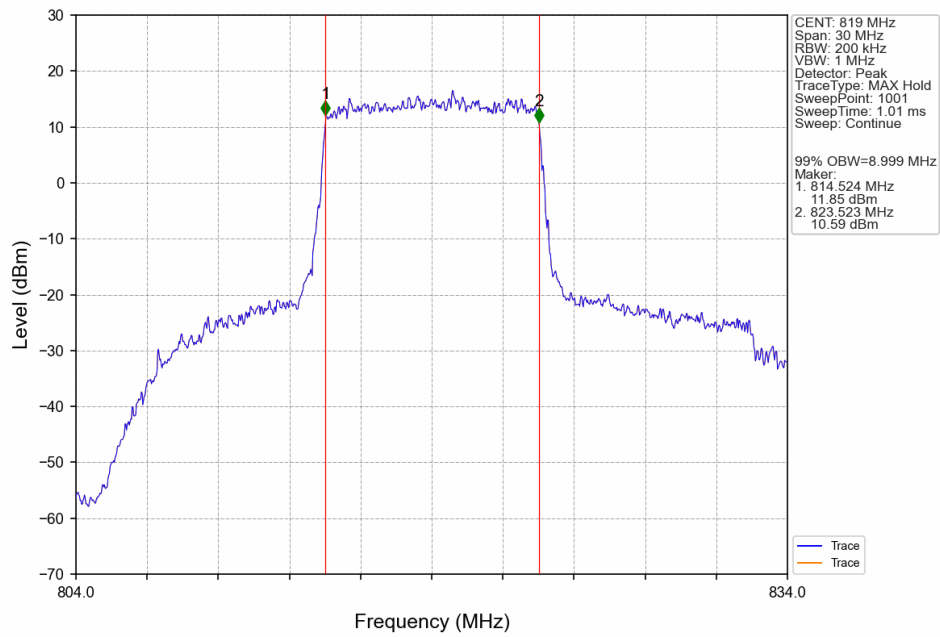
Band26a_5MHz_QPSK_MCH_819MHz_RB_25_0_NTNV



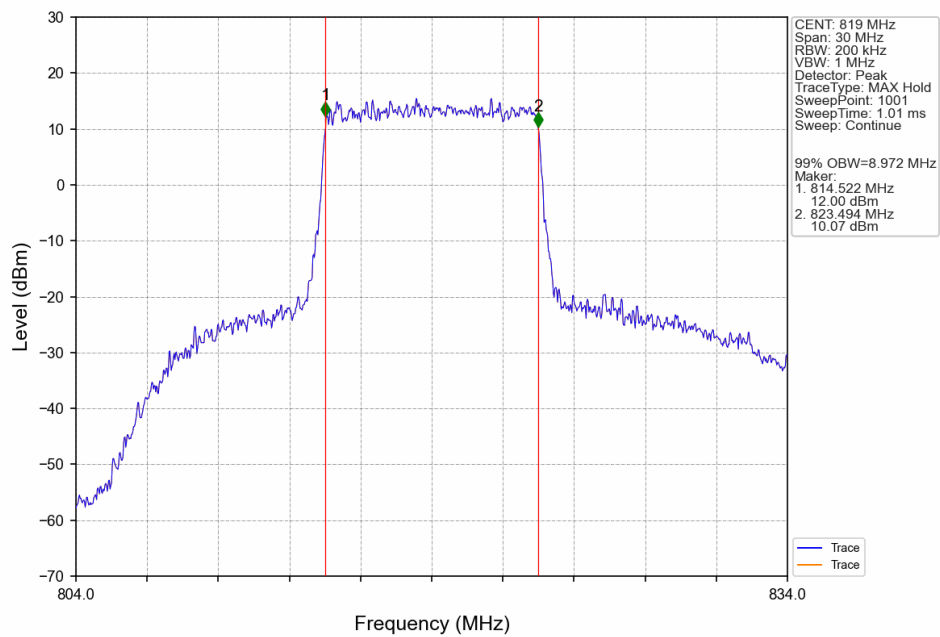
Band26a_5MHz_16QAM_MCH_819MHz_RB_25_0_NTNV



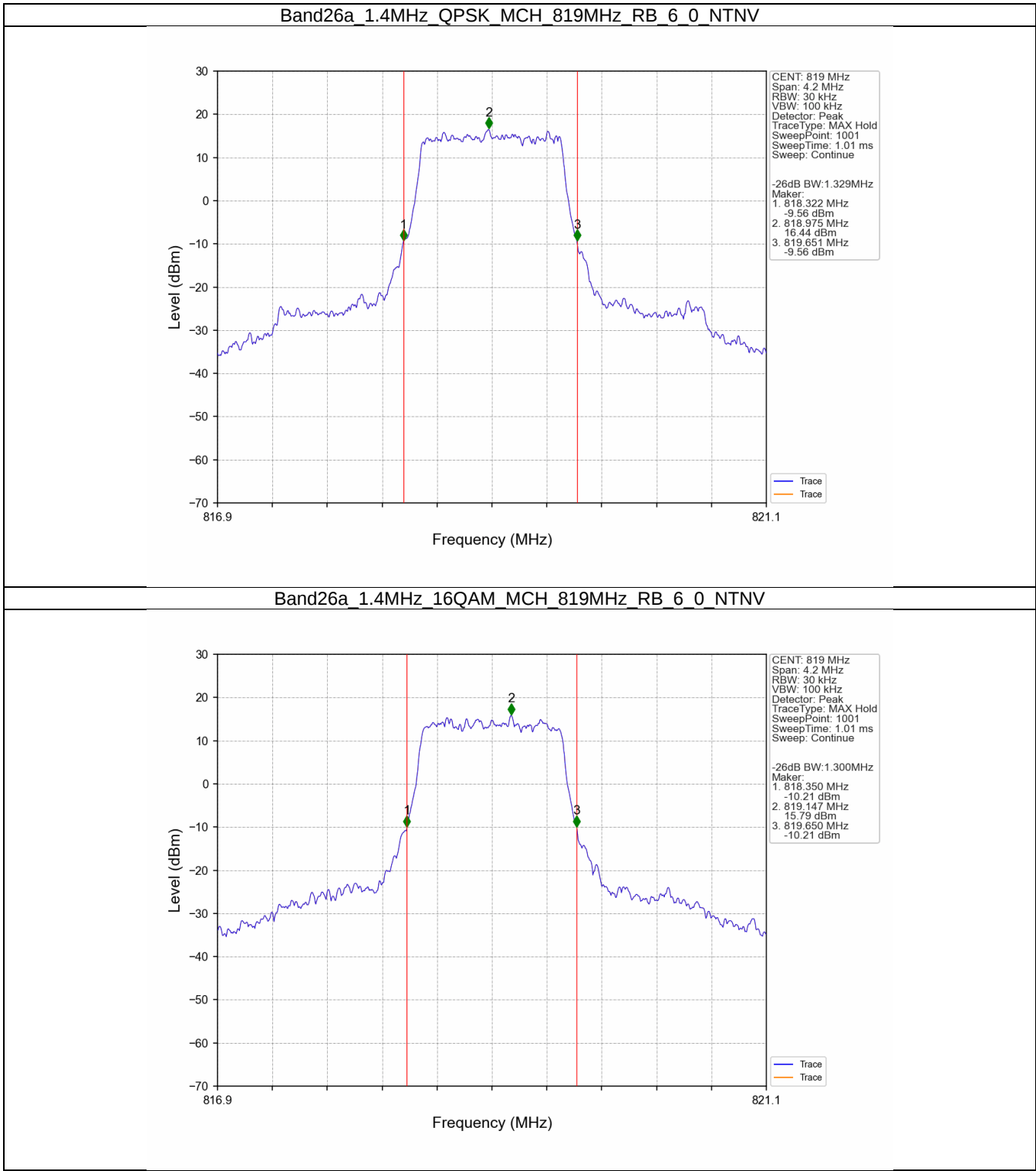
Band26a_10MHz_QPSK_MCH_819MHz_RB_50_0_NTNV



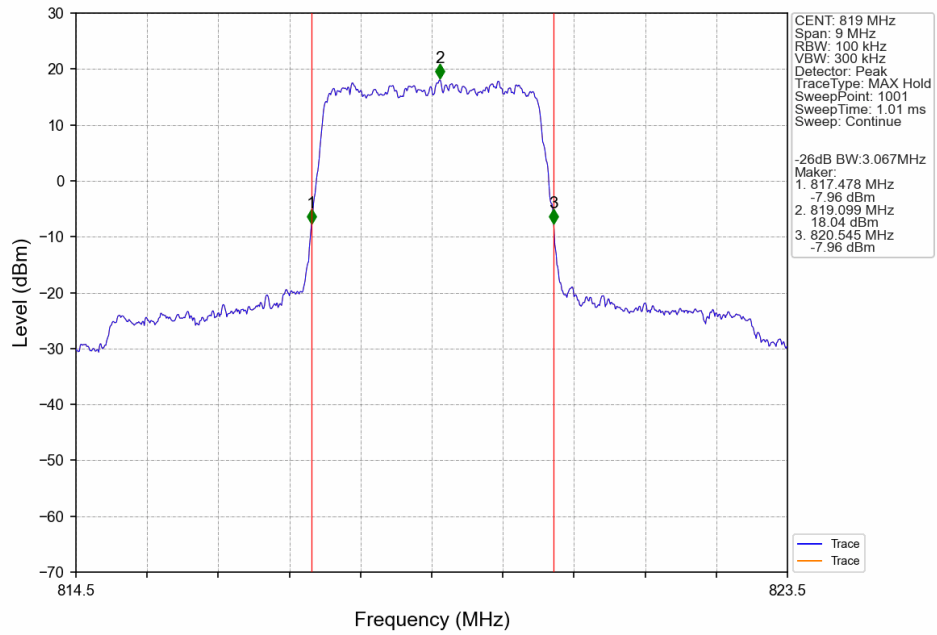
Band26a_10MHz_16QAM_MCH_819MHz_RB_50_0_NTNV



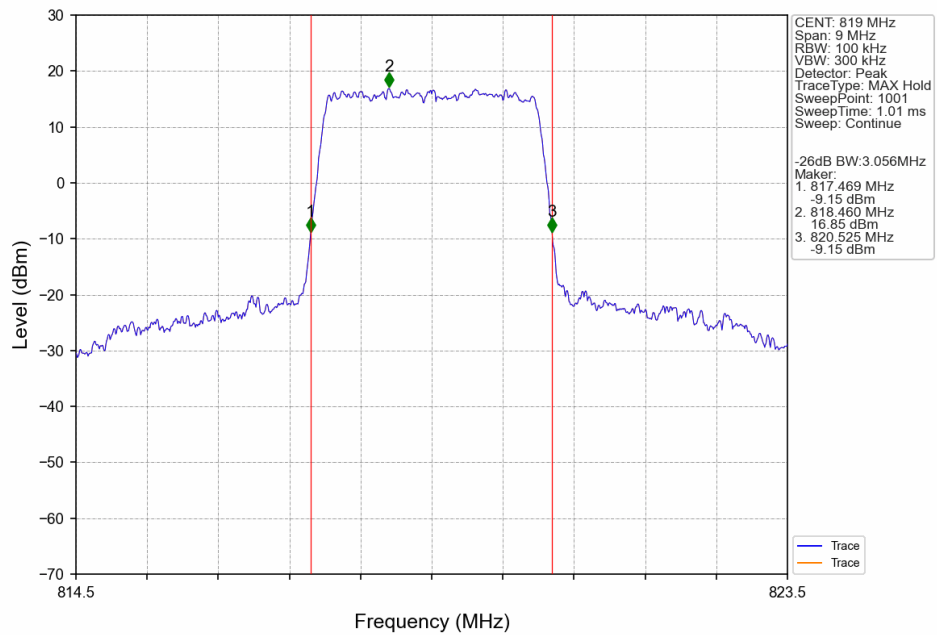
3.2.2 Band26a_XDB



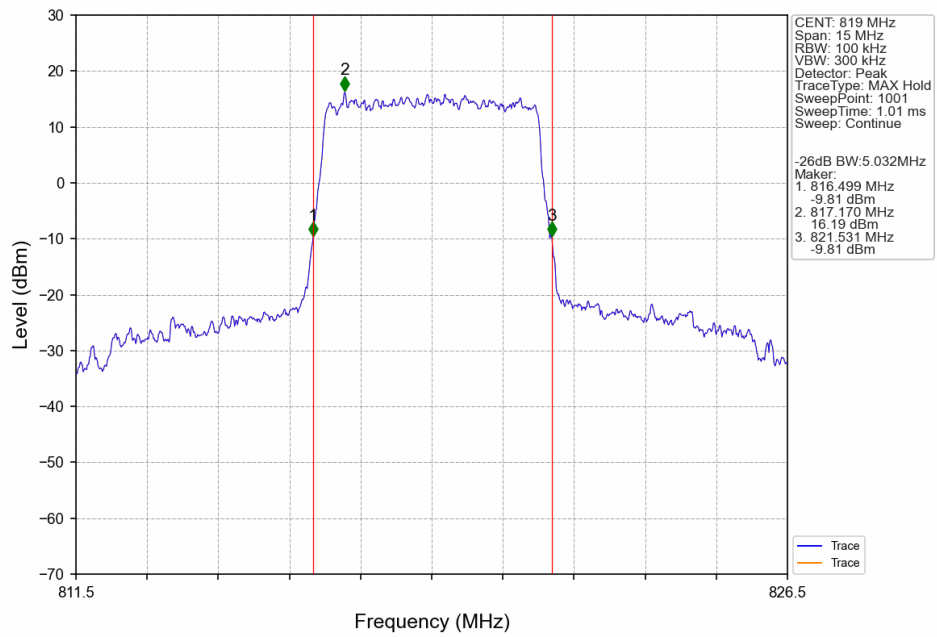
Band26a_3MHz_QPSK_MCH_819MHz_RB_15_0_NTNV



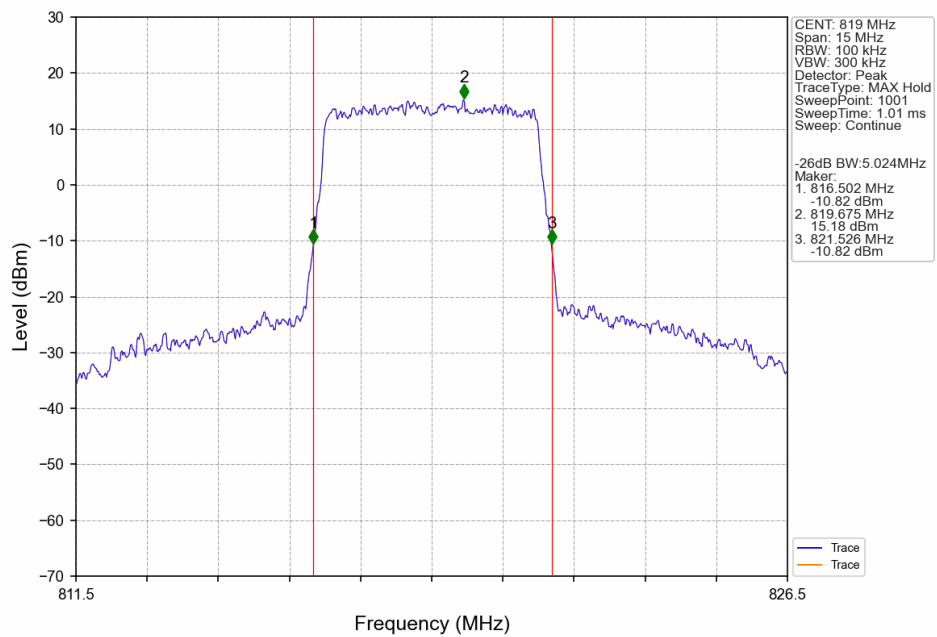
Band26a_3MHz_16QAM_MCH_819MHz_RB_15_0_NTNV



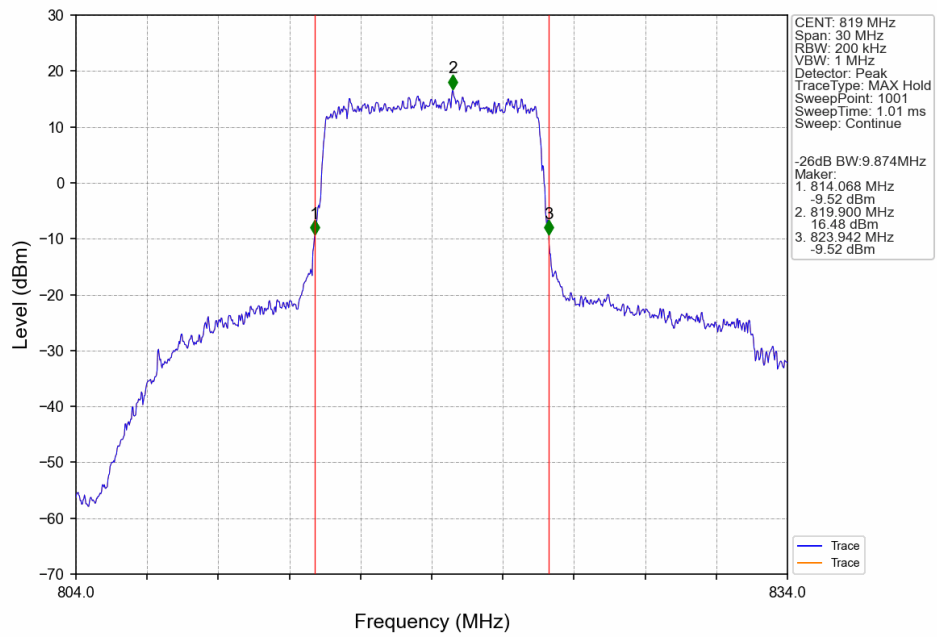
Band26a_5MHz_QPSK_MCH_819MHz_RB_25_0_NTNV



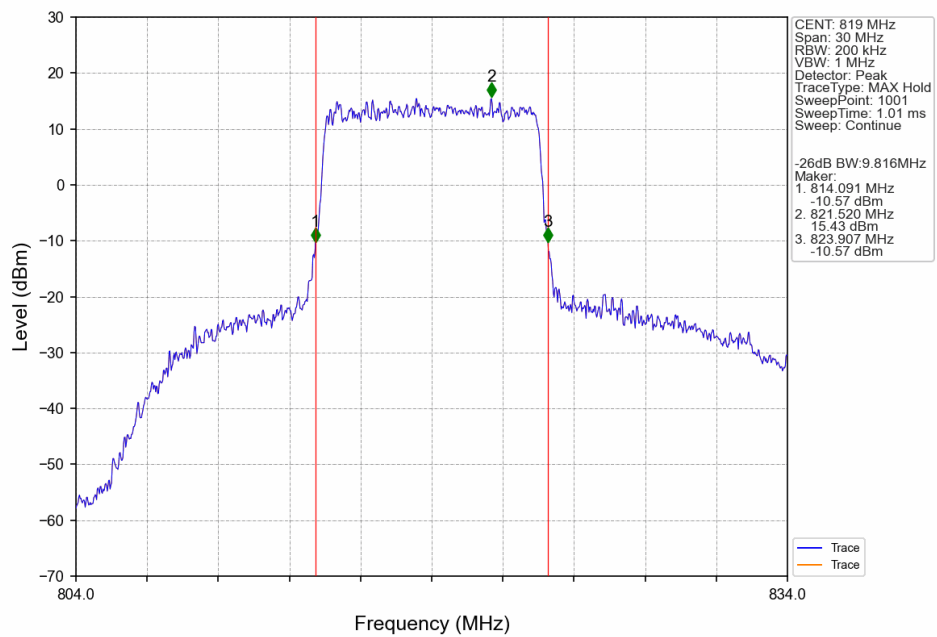
Band26a_5MHz_16QAM_MCH_819MHz_RB_25_0_NTNV



Band26a_10MHz_QPSK_MCH_819MHz_RB_50_0_NTNV



Band26a_10MHz_16QAM_MCH_819MHz_RB_50_0_NTNV



4. Peak-Average Ratio

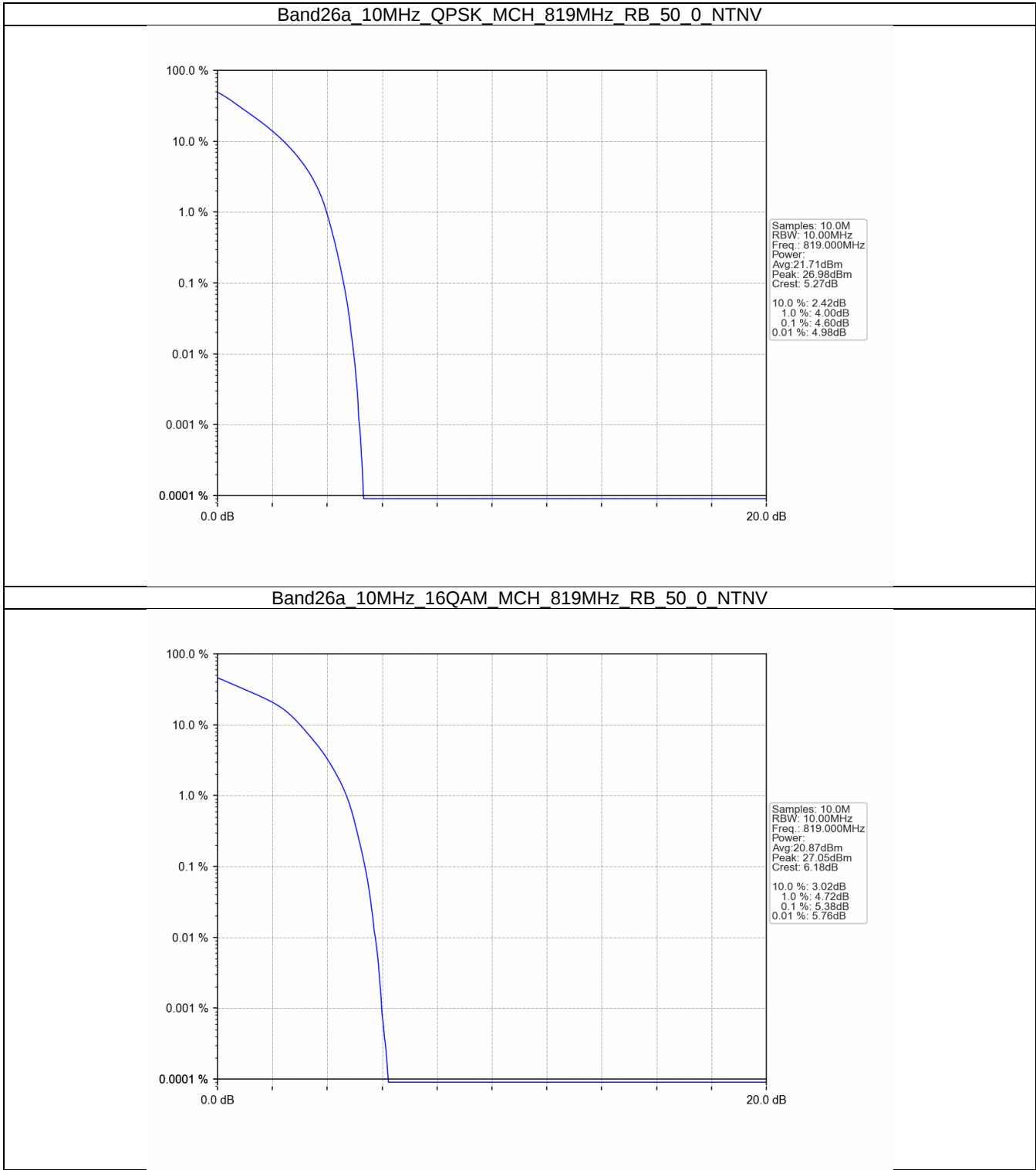
4.1 Test Result

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	4.60	<=13	Pass
16QAM	819	50	0	5.38	<=13	Pass

4.2 Test Graph

4.2.1 B26a_10MHz



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

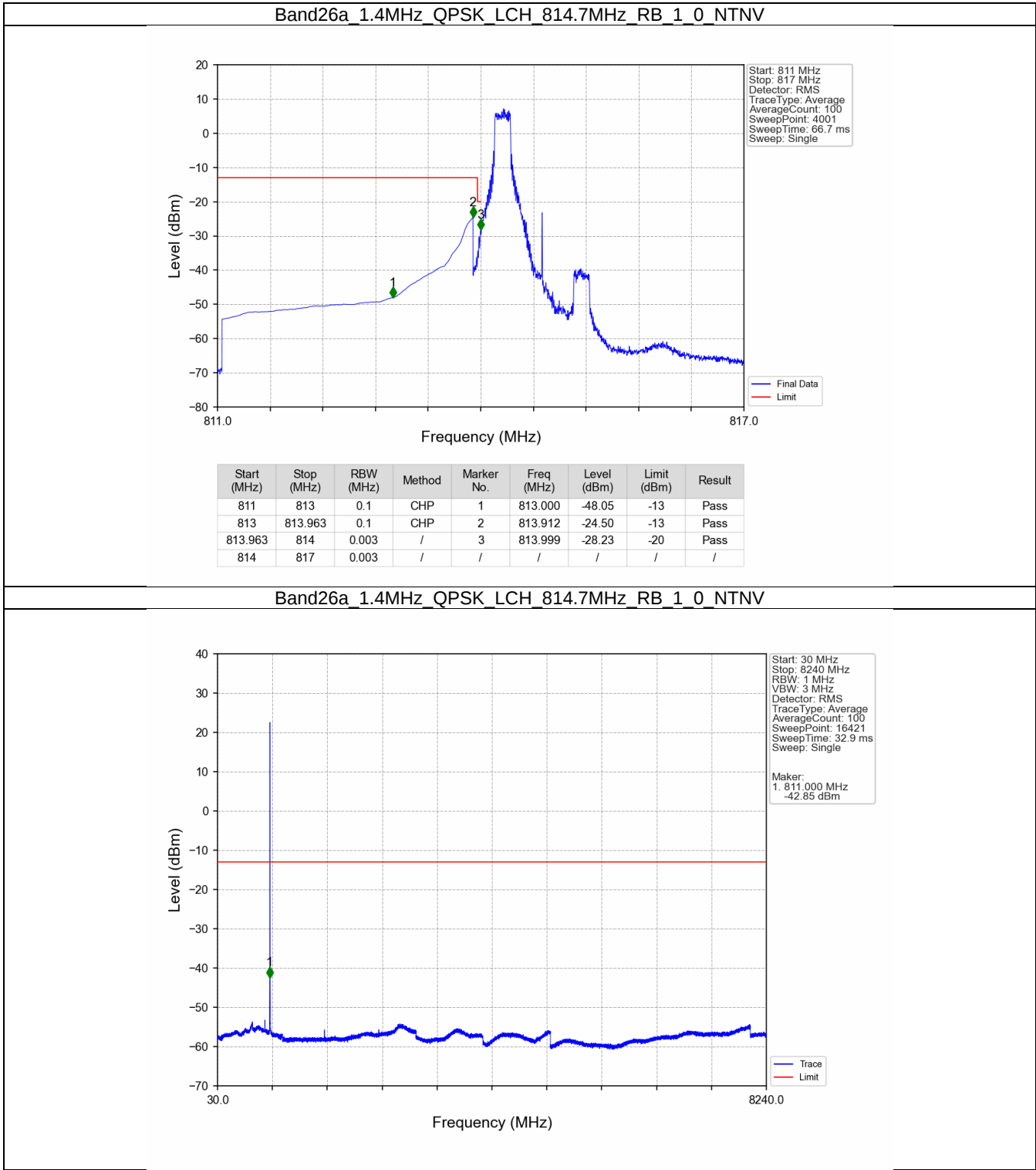
Band: 26a / Bandwidth: 5MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	816.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	819	1	0	Refer To Test Graph		Pass
	821.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.4 B26a_10MHz

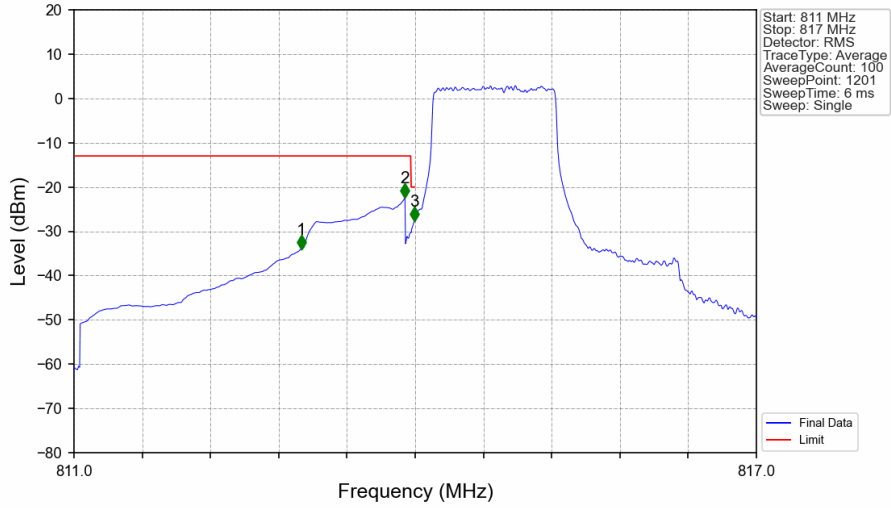
Band: 26a / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	819	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	819	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B26a_1.4MHz

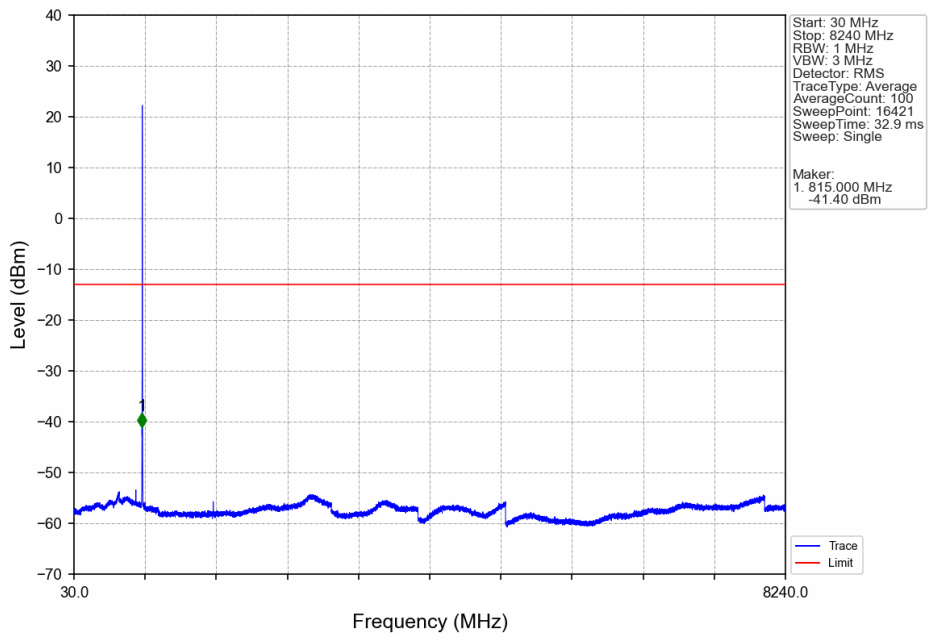


Band26a 1.4MHz QPSK LCH 814.7MHz RB 6 0 NTNV

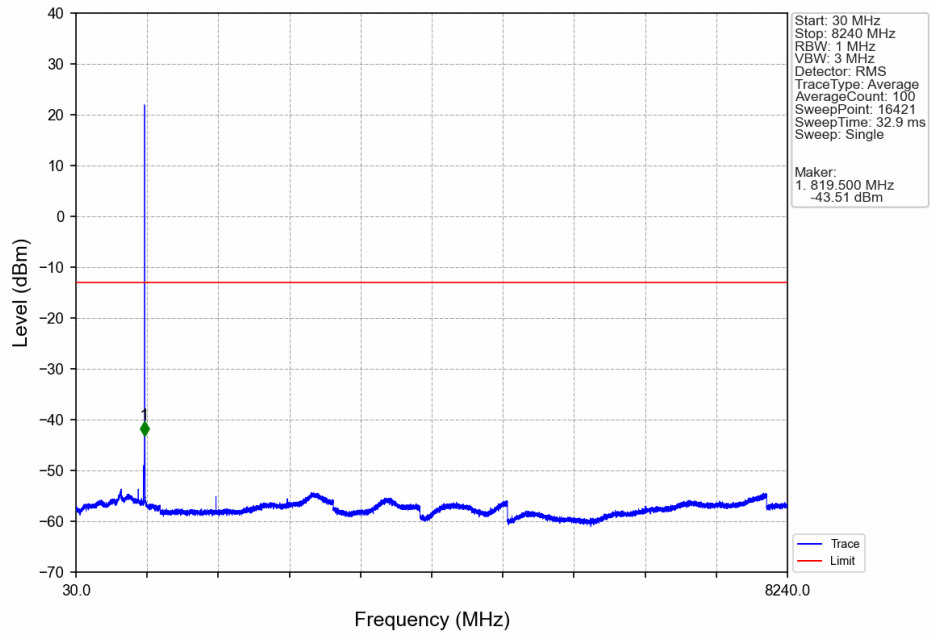


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
811	813	0.1	CHP	1	813.000	-34.02	-13	Pass
813	813.963	0.1	CHP	2	813.910	-22.46	-13	Pass
813.963	814	0.013	CHP	3	813.995	-27.60	-20	Pass
814	817	0.013	CHP	/	/	/	/	/

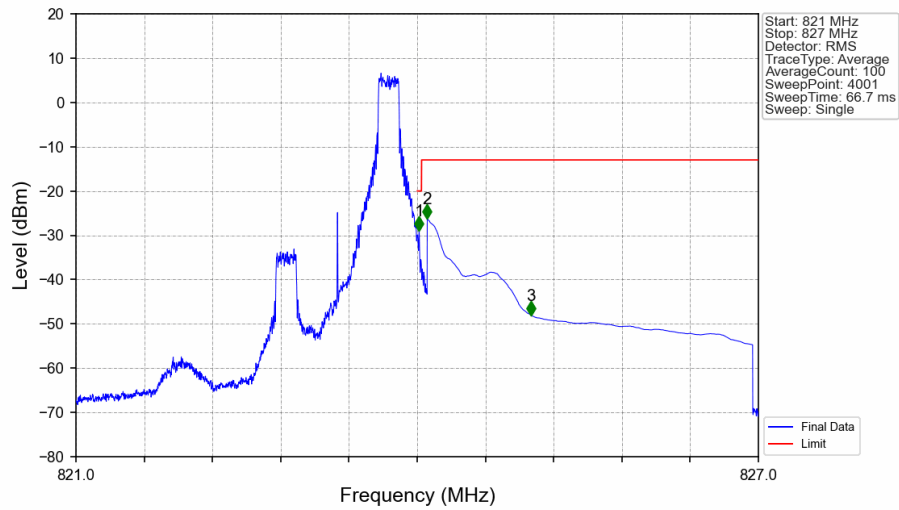
Band26a 1.4MHz QPSK MCH 819MHz RB 1 0 NTNV



Band26a 1.4MHz QPSK HCH 823.3MHz RB_1_0 NTN

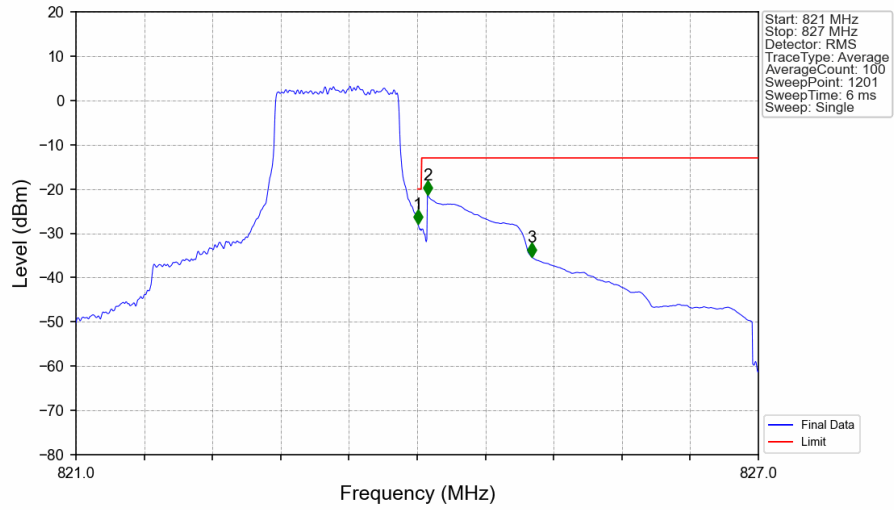


Band26a 1.4MHz QPSK HCH 823.3MHz RB_1_5 NTN



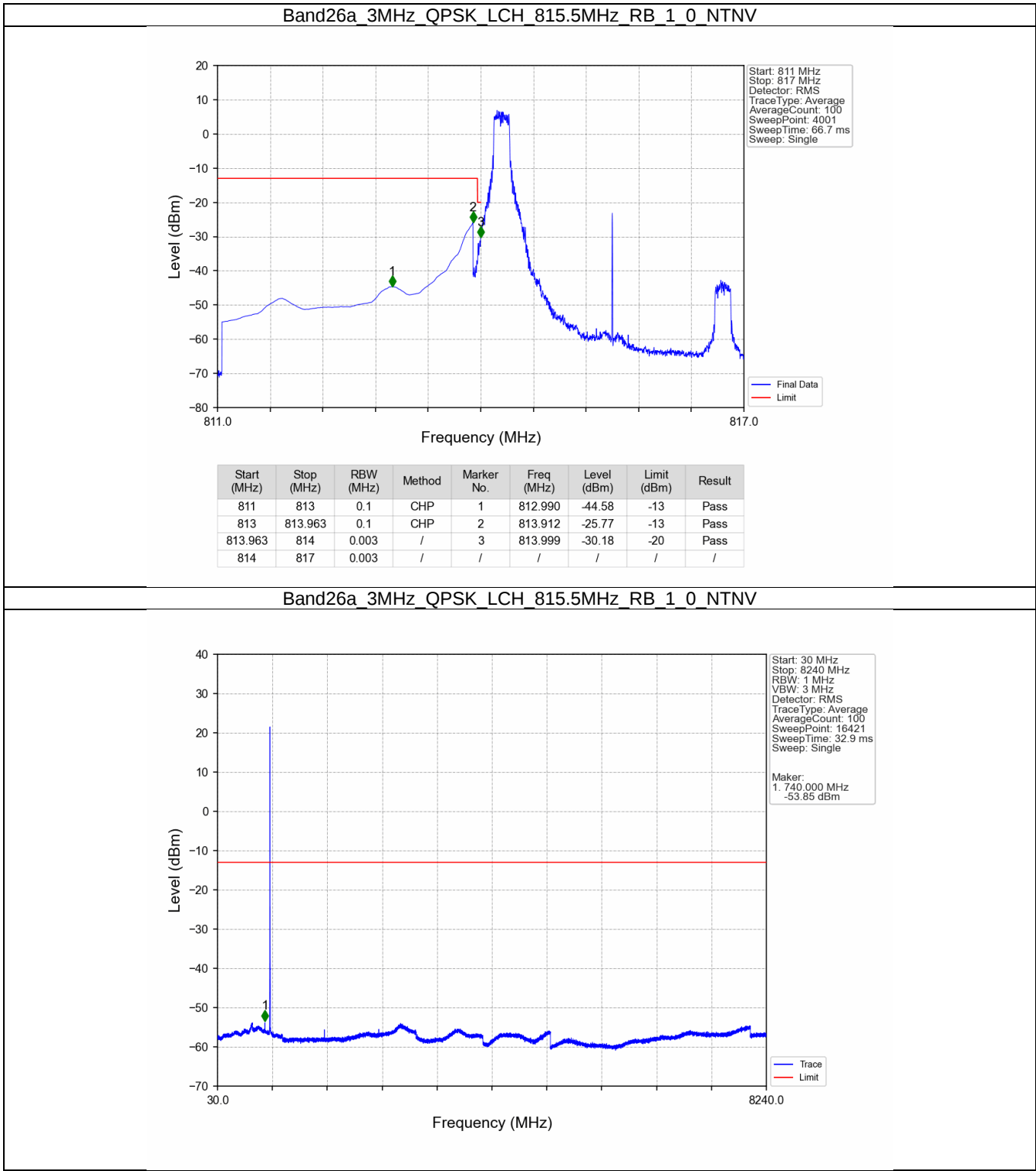
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.016	-29.00	-20	Pass
824.038	825	0.1	CHP	2	824.088	-26.13	-13	Pass
825	827	0.1	CHP	3	825.000	-48.01	-13	Pass

Band26a 1.4MHz QPSK HCH 823.3MHz RB_6_0 NTN

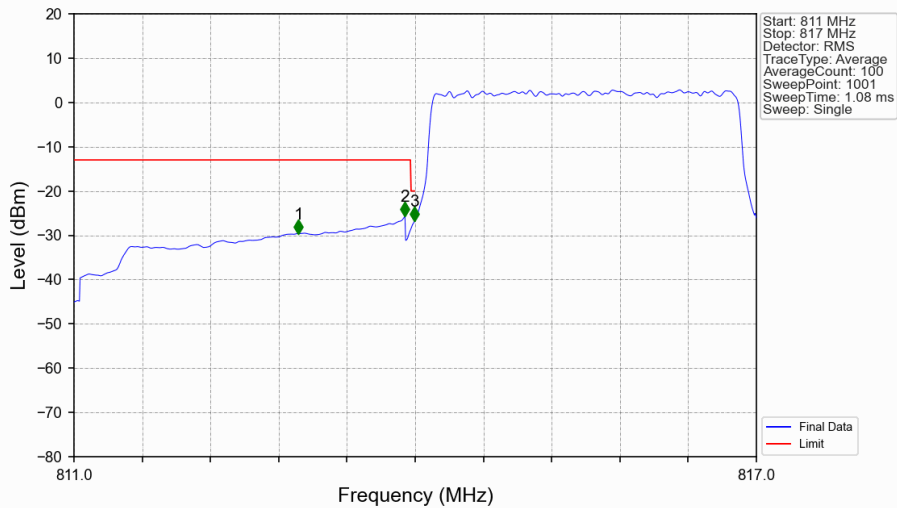


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.013	CHP	/	/	/	/	/
824	824.038	0.013	CHP	1	824.005	-27.78	-20	Pass
824.038	825	0.1	CHP	2	824.090	-21.35	-13	Pass
825	827	0.1	CHP	3	825.005	-35.32	-13	Pass

5.2.2 B26a_3MHz

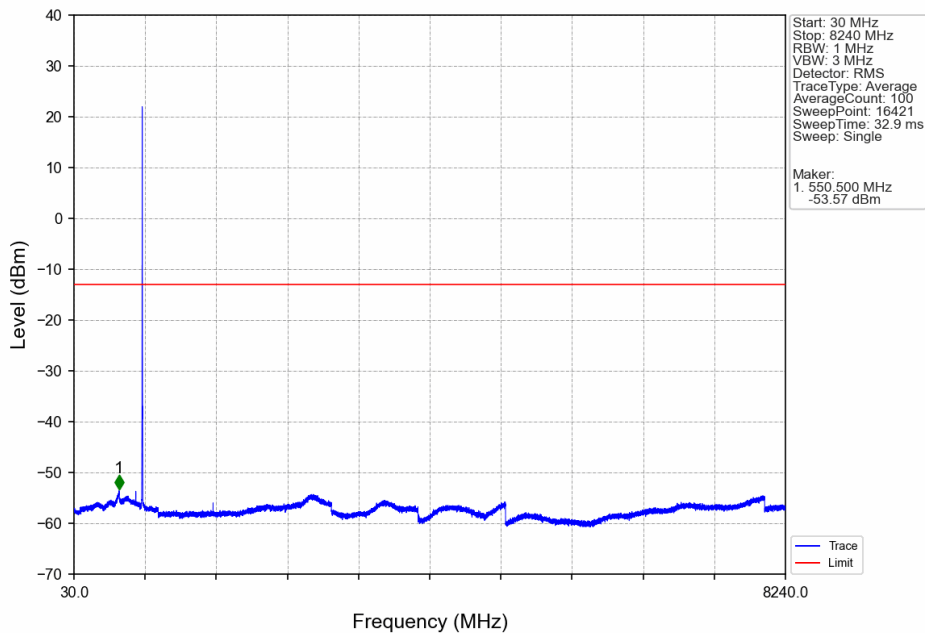


Band26a_3MHz_QPSK_LCH_815.5MHz_RB_15_0_NTNV

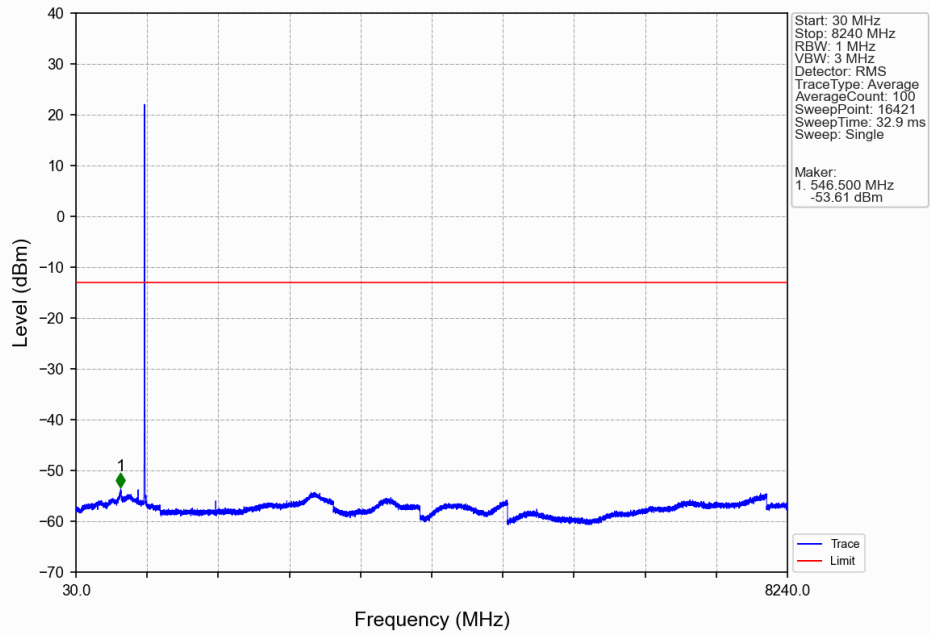


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
811	813	0.1	CHP	1	812.974	-29.61	-13	Pass
813	813.963	0.1	CHP	2	813.910	-25.70	-13	Pass
813.963	814	0.031	CHP	3	813.994	-26.76	-20	Pass
814	817	0.031	CHP	/	/	/	/	/

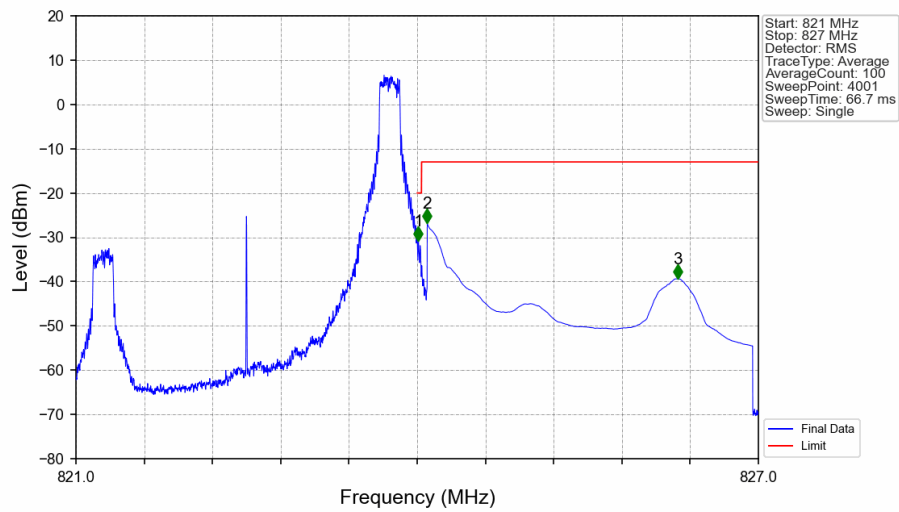
Band26a_3MHz_QPSK_MCH_819MHz_RB_1_0_NTNV



Band26a_3MHz_QPSK_HCH_822.5MHz_RB_1_0_NTNV

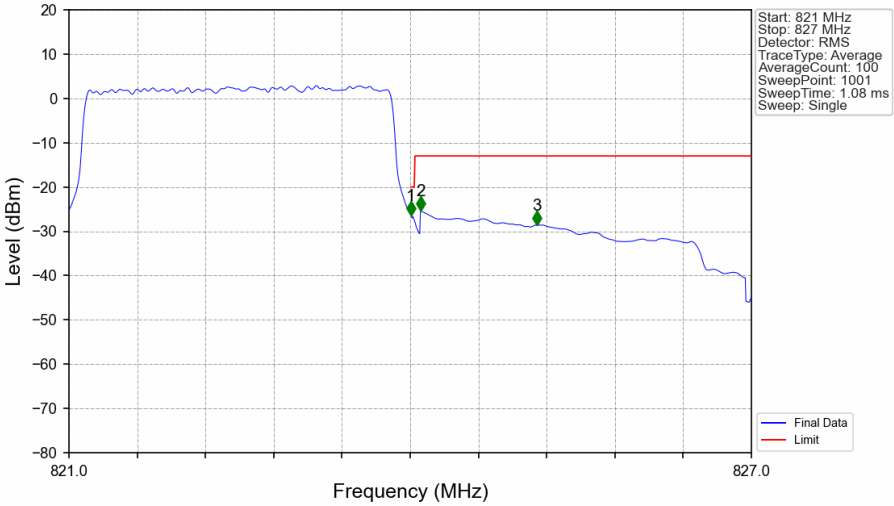


Band26a_3MHz_QPSK_HCH_822.5MHz_RB_1_14_NTNV



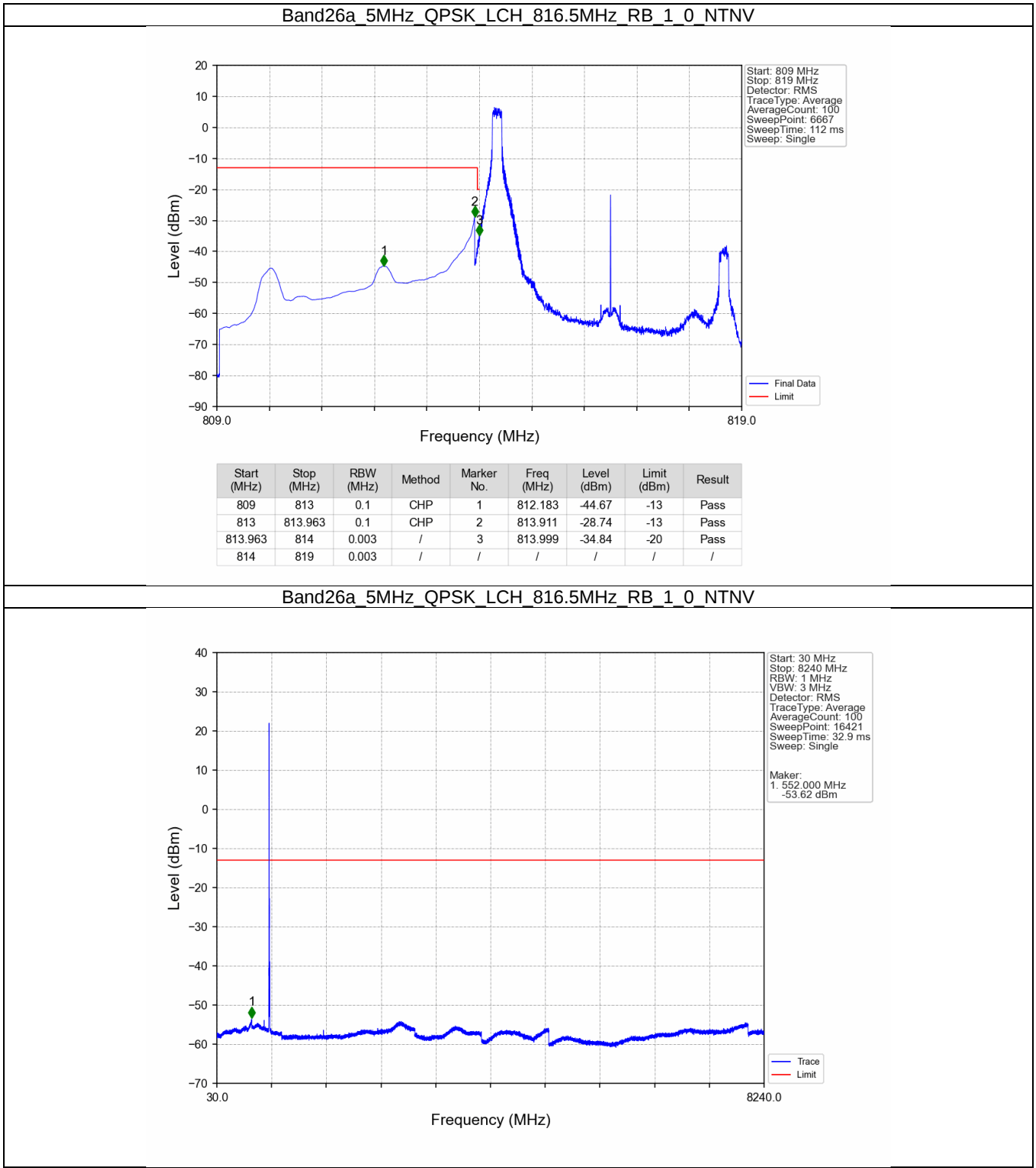
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.010	-30.70	-20	Pass
824.038	825	0.1	CHP	2	824.088	-26.77	-13	Pass
825	827	0.1	CHP	3	826.290	-39.33	-13	Pass

Band26a_3MHz_QPSK_HCH_822.5MHz_RB_15_0_NTNV

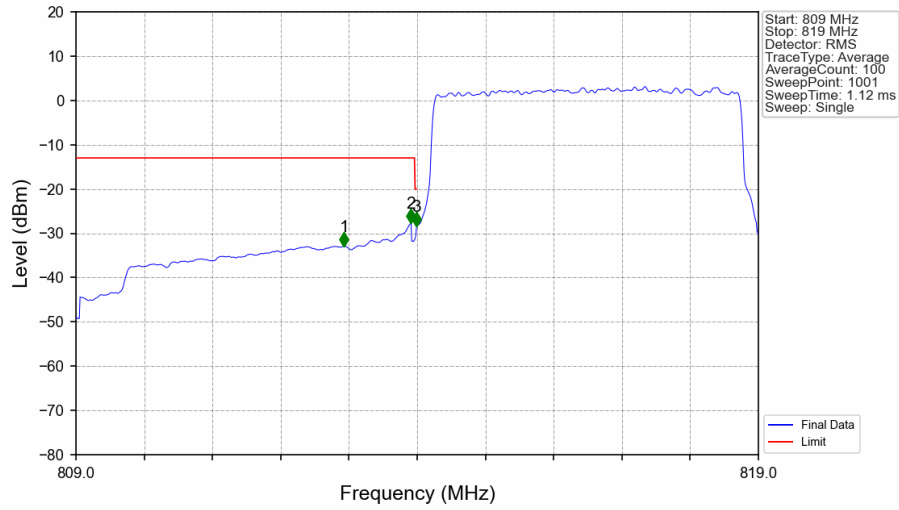


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.031	CHP	/	/	/	/	/
824	824.038	0.031	CHP	1	824.006	-26.39	-20	Pass
824.038	825	0.1	CHP	2	824.090	-25.30	-13	Pass
825	827	0.1	CHP	3	825.116	-28.59	-13	Pass

5.2.3 B26a_5MHz

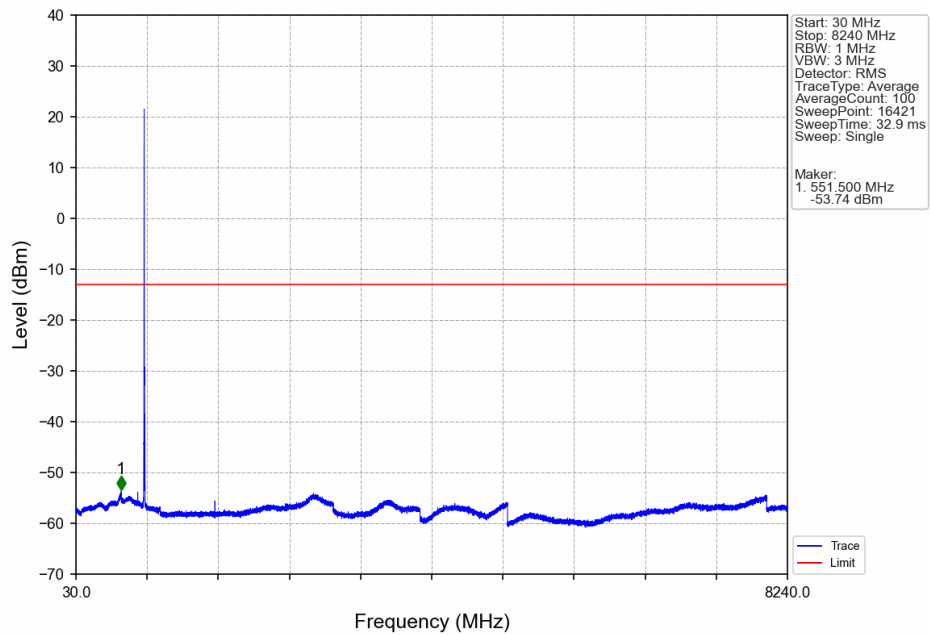


Band26a_5MHz_QPSK_LCH_816.5MHz_RB_25_0_NTNV

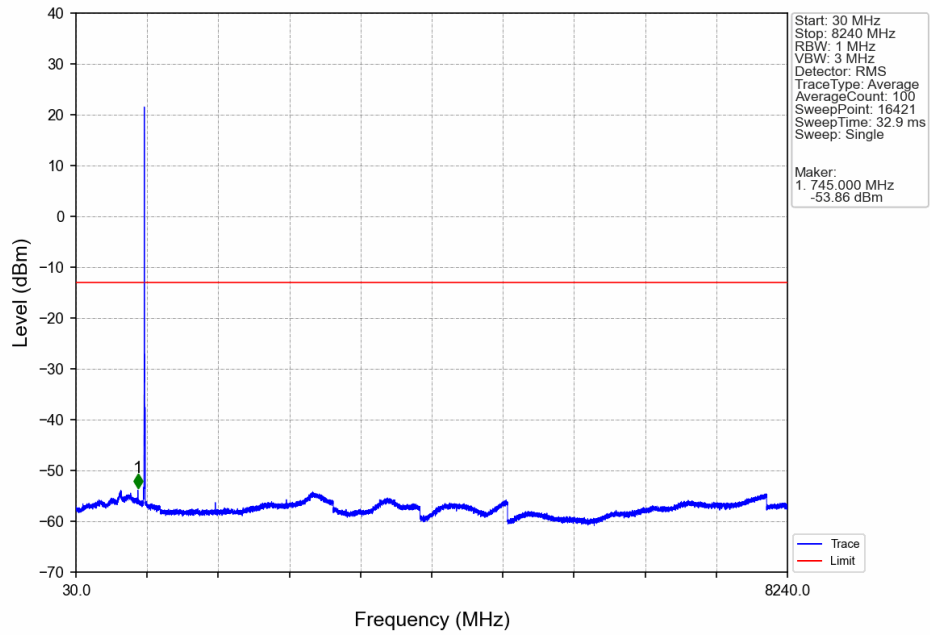


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	CHP	1	812.930	-32.89	-13	Pass
813	813.963	0.1	CHP	2	813.910	-27.59	-13	Pass
813.963	814	0.05	CHP	3	813.990	-28.44	-20	Pass
814	819	0.05	CHP	/	/	/	/	/

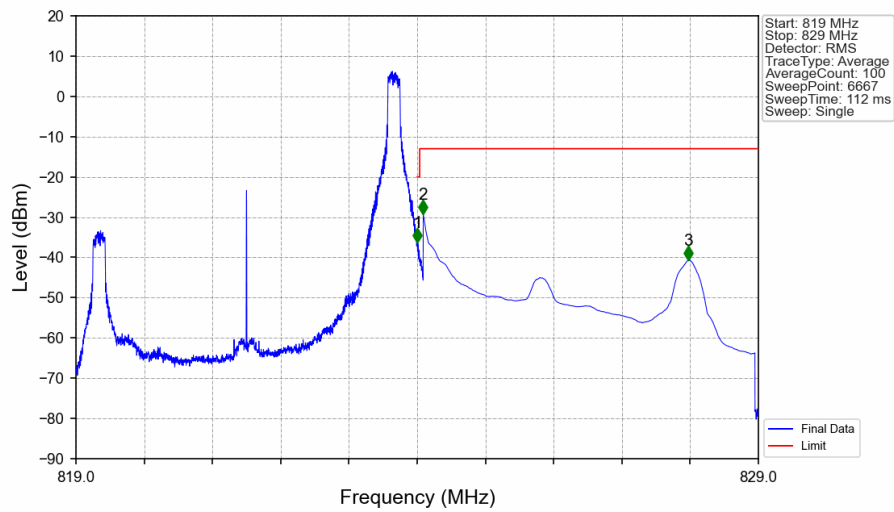
Band26a_5MHz_QPSK_MCH_819MHz_RB_1_0_NTNV



Band26a_5MHz_QPSK_HCH_821.5MHz_RB_1_0_NTNV

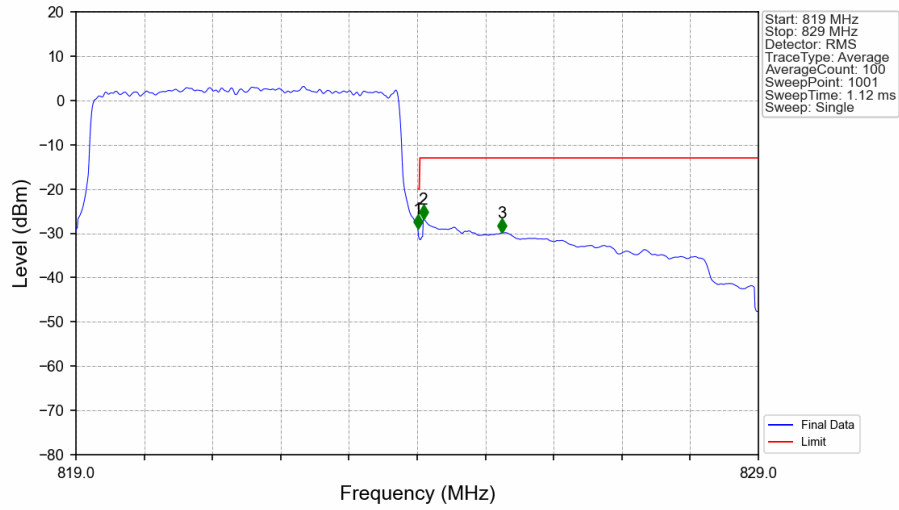


Band26a_5MHz_QPSK_HCH_821.5MHz_RB_1_24_NTNV



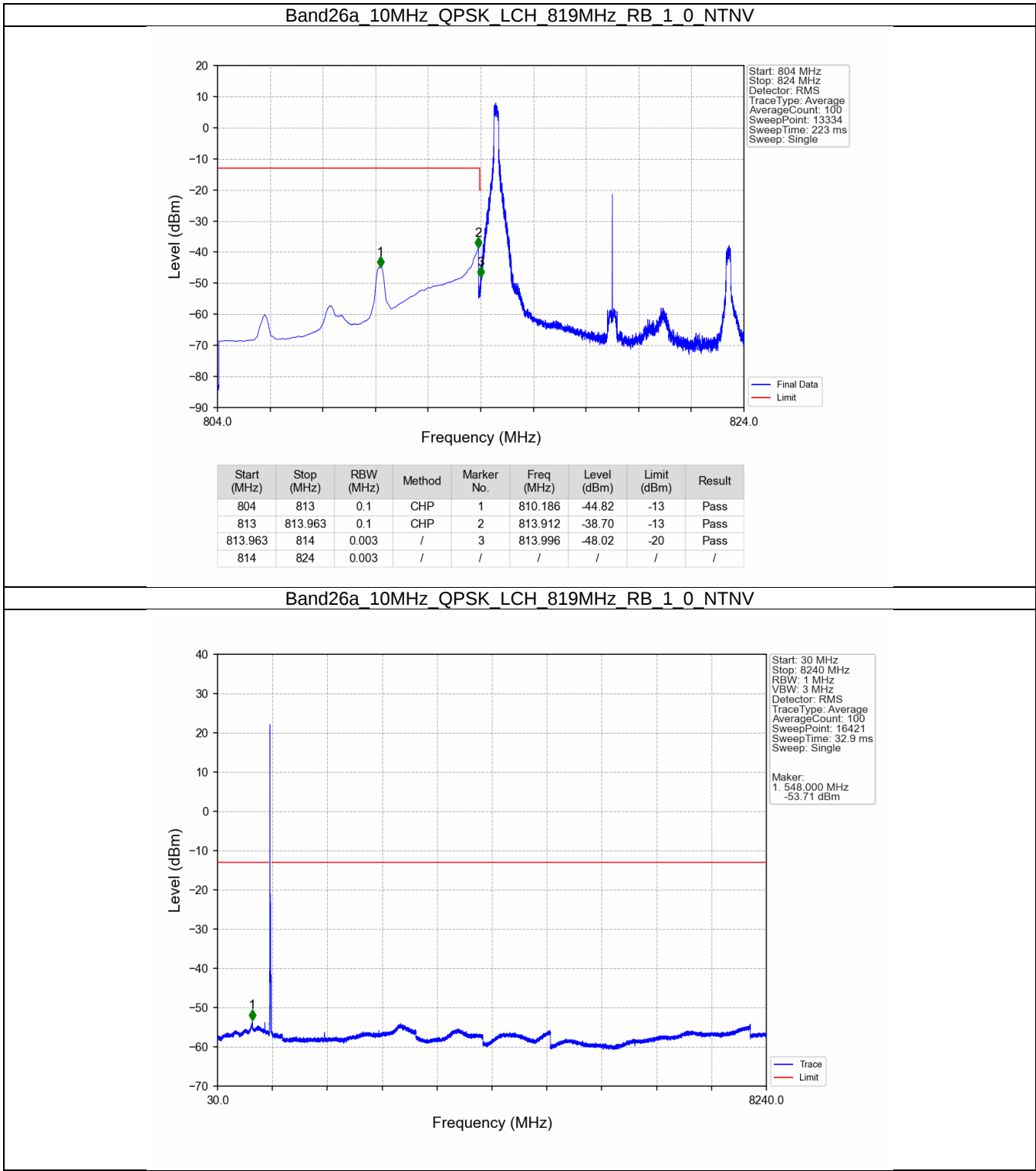
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.001	-36.18	-20	Pass
824.038	825	0.1	CHP	2	824.089	-29.26	-13	Pass
825	829	0.1	CHP	3	827.974	-40.73	-13	Pass

Band26a_5MHz_QPSK_HCH_821.5MHz_RB_25_0_NTNV

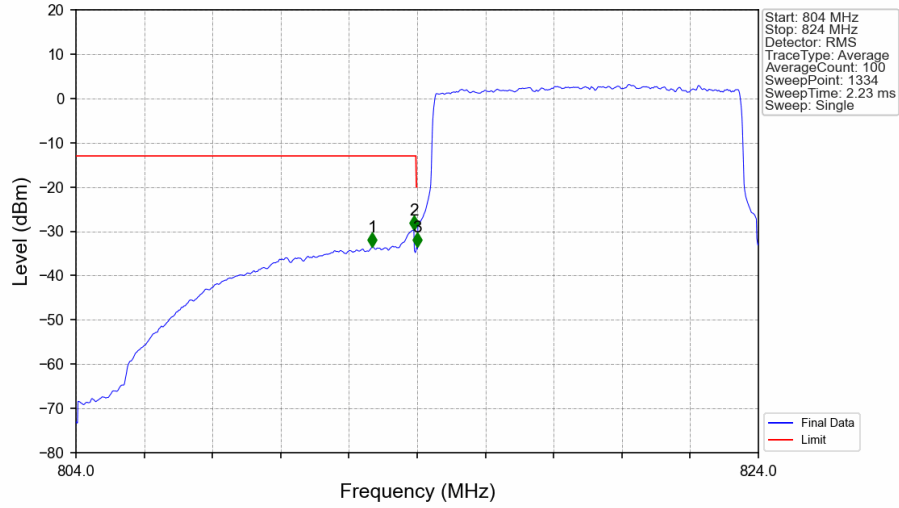


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.05	CHP	/	/	/	/	/
824	824.038	0.05	CHP	1	824.010	-28.88	-20	Pass
824.038	825	0.1	CHP	2	824.090	-26.75	-13	Pass
825	829	0.1	CHP	3	825.240	-29.85	-13	Pass

5.2.4 B26a_10MHz

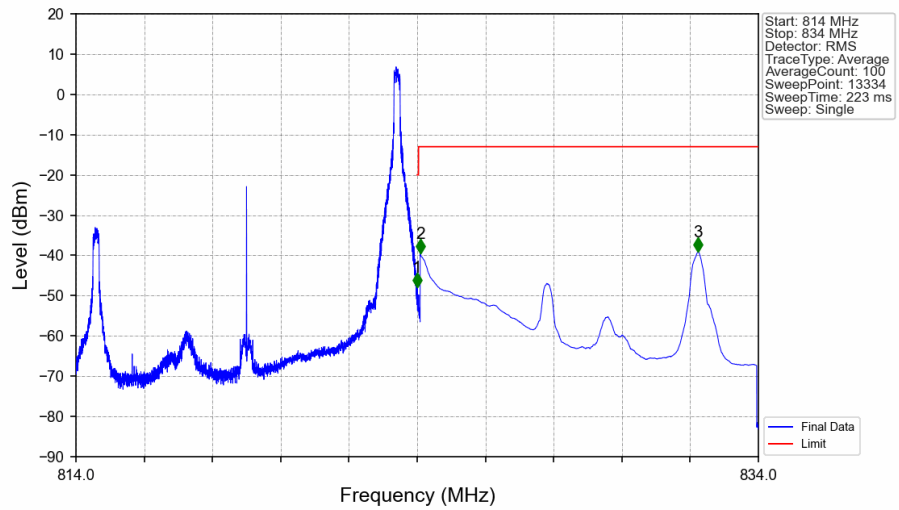


Band26a_10MHz_QPSK_LCH_819MHz_RB_50_0_NTNV



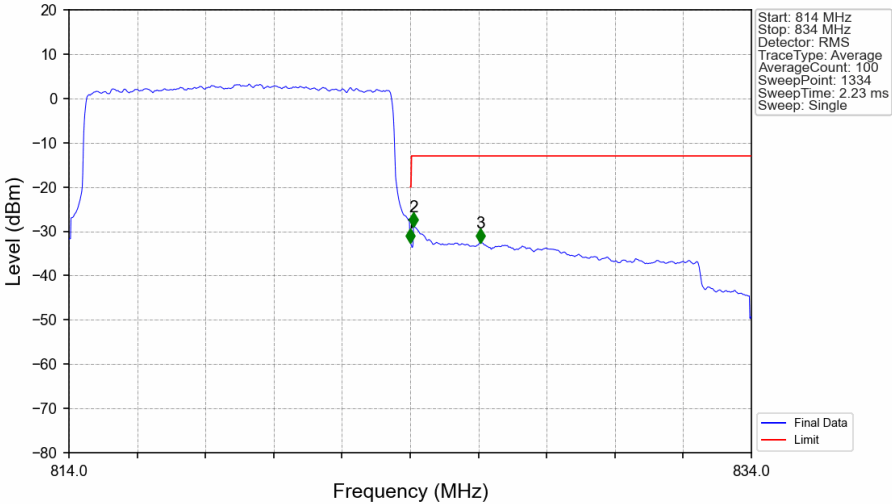
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
804	813	0.1	CHP	1	812.687	-33.44	-13	Pass
813	813.963	0.1	CHP	2	813.902	-29.74	-13	Pass
813.963	814	0.099	CHP	3	813.992	-33.56	-20	Pass
814	824	0.099	CHP	/	/	/	/	/

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	824.001	-47.90	-20	Pass
824.038	825	0.1	CHP	2	824.088	-39.37	-13	Pass
825	834	0.1	CHP	3	832.237	-39.14	-13	Pass

Band26a_10MHz_QPSK_HCH_819MHz_RB_50_0_NTNV



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
814	824	0.099	CHP	/	/	/	/	/
824	824.038	0.099	CHP	1	824.008	-32.67	-20	Pass
824.038	825	0.1	CHP	2	824.098	-28.94	-13	Pass
825	834	0.1	CHP	3	826.048	-32.56	-13	Pass

6. Field Strength of Spurious Radiation

Test Band = LTE Band 26_Part 90S TM1

Test Channel = Mid Channel

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1629.18	48.72	-49.87	25.54	-70.86	-13.00	57.86	Horizontal
2	2443.77	49.62	-49.22	27.10	-67.77	-13.00	54.77	Horizontal
3	3258.36	49.09	-48.63	28.31	-66.49	-13.00	53.49	Horizontal
4	4072.95	48.57	-48.28	29.42	-65.56	-13.00	52.56	Horizontal
5	4887.54	49.16	-48.15	30.95	-63.30	-13.00	50.30	Horizontal
6	5702.13	51.22	-47.50	32.68	-58.86	-13.00	45.86	Horizontal

Final Data List								
NO.	Frequency [MHz]	Reading [dBμV]	Factor [dB]	AF[dB/m]	Level [dBm]	Limit [dBm]	Margin [dB]	Polarity
1	1629.18	49.12	-49.87	25.54	-70.46	-13.00	57.46	Vertical
2	2443.77	50.12	-49.22	27.10	-67.27	-13.00	54.27	Vertical
3	3258.36	49.05	-48.63	28.31	-66.53	-13.00	53.53	Vertical
4	4072.95	48.81	-48.28	29.42	-65.32	-13.00	52.32	Vertical
5	4887.54	49.71	-48.15	30.95	-62.75	-13.00	49.75	Vertical
6	5702.13	51.42	-47.50	32.68	-58.66	-13.00	45.66	Vertical