

1. Transmitter Conducted Power Output

1.1 Test Result

1.1.1 B26a_1.4MHz

Band: 26a / Bandwidth: 1.4MHz / NTV						
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)		Verdict
		Size	Offset	Result	Limit	
QPSK	814.7	1	0	24.05	<=50	Pass
			2	23.89	<=50	Pass
			5	24.05	<=50	Pass
		3	0	24.06	<=50	Pass
			2	24.00	<=50	Pass
			3	24.03	<=50	Pass
	819	1	0	23.13	<=50	Pass
			0	23.93	<=50	Pass
			2	24.10	<=50	Pass
		3	5	24.04	<=50	Pass
			0	24.16	<=50	Pass
			2	24.17	<=50	Pass
	823.3	1	3	24.10	<=50	Pass
			0	23.12	<=50	Pass
			2	23.63	<=50	Pass
		3	5	24.24	<=50	Pass
			0	24.22	<=50	Pass
			2	24.12	<=50	Pass
16QAM	814.7	3	2	24.14	<=50	Pass
			3	24.12	<=50	Pass
			6	23.16	<=50	Pass
	819	1	0	23.17	<=50	Pass
			2	23.60	<=50	Pass
			5	23.23	<=50	Pass
		3	0	22.98	<=50	Pass
			2	23.28	<=50	Pass
			3	23.27	<=50	Pass
	823.3	1	6	22.21	<=50	Pass
			0	23.30	<=50	Pass
			2	23.78	<=50	Pass
		3	5	22.92	<=50	Pass
			0	23.25	<=50	Pass
			2	23.19	<=50	Pass
64QAM	814.7	3	3	23.14	<=50	Pass
			6	22.26	<=50	Pass
			0	23.29	<=50	Pass
		1	2	23.43	<=50	Pass
			5	22.27	<=50	Pass
			0	23.20	<=50	Pass
64QAM	814.7	3	2	23.28	<=50	Pass
			3	22.77	<=50	Pass
			6	22.24	<=50	Pass
		1	0	23.27	<=50	Pass
			2	23.35	<=50	Pass
			5	22.91	<=50	Pass
64QAM	814.7	3	0	23.14	<=50	Pass
			2	23.08	<=50	Pass
			3	22.83	<=50	Pass
		6	0	22.16	<=50	Pass

	819	1	0	23.02	<=50	Pass
			2	23.21	<=50	Pass
			5	22.85	<=50	Pass
		3	0	22.57	<=50	Pass
			2	23.18	<=50	Pass
			3	23.19	<=50	Pass
			6	0	22.24	<=50
	823.3	1	0	23.06	<=50	Pass
			2	22.62	<=50	Pass
			5	22.56	<=50	Pass
		3	0	23.12	<=50	Pass
			2	23.25	<=50	Pass
			3	23.24	<=50	Pass
			6	0	22.30	<=50

1.1.2 B26a_3MHz

Band: 26a / Bandwidth: 3MHz / NTN						
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)		Verdict
		Size	Offset	Result	Limit	
QPSK	815.5	1	0	24.17	<=50	Pass
			7	24.42	<=50	Pass
			14	24.03	<=50	Pass
		8	0	23.21	<=50	Pass
			4	23.21	<=50	Pass
			7	23.17	<=50	Pass
			15	0	23.20	<=50
	819	1	0	24.02	<=50	Pass
			7	24.40	<=50	Pass
			14	24.01	<=50	Pass
		8	0	23.20	<=50	Pass
			4	23.13	<=50	Pass
			7	23.13	<=50	Pass
			15	0	23.20	<=50
	822.5	1	0	24.04	<=50	Pass
			7	24.40	<=50	Pass
			14	24.23	<=50	Pass
		8	0	23.14	<=50	Pass
			4	23.15	<=50	Pass
			7	23.20	<=50	Pass
			15	0	23.20	<=50
16QAM	815.5	1	0	23.17	<=50	Pass
			7	23.61	<=50	Pass
			14	23.01	<=50	Pass
		8	0	22.28	<=50	Pass
			4	22.34	<=50	Pass
			7	22.29	<=50	Pass
			15	0	22.23	<=50
	819	1	0	23.43	<=50	Pass
			7	23.38	<=50	Pass
			14	23.36	<=50	Pass
		8	0	22.19	<=50	Pass
			4	22.06	<=50	Pass
			7	22.18	<=50	Pass
			15	0	22.25	<=50
	822.5	1	0	23.37	<=50	Pass
			7	23.47	<=50	Pass

			14	23.29	<=50	Pass
8	815.5	0	22.27	<=50	Pass	
		4	22.32	<=50	Pass	
		7	22.30	<=50	Pass	
		15	0	22.25	<=50	Pass
64QAM	819	0	22.97	<=50	Pass	
		1	23.13	<=50	Pass	
		14	23.15	<=50	Pass	
		0	22.18	<=50	Pass	
		8	22.24	<=50	Pass	
		7	22.23	<=50	Pass	
	822.5	15	0	22.15	<=50	Pass
		0	22.96	<=50	Pass	
		1	23.32	<=50	Pass	
		14	22.83	<=50	Pass	
		8	22.24	<=50	Pass	
		7	22.28	<=50	Pass	
		15	0	22.24	<=50	Pass
		0	23.01	<=50	Pass	
		1	23.20	<=50	Pass	
		14	22.72	<=50	Pass	
		8	22.26	<=50	Pass	
		4	22.17	<=50	Pass	
		7	22.11	<=50	Pass	
		15	0	22.25	<=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	24.13	<=50	Pass
			13	24.18	<=50	Pass
			24	24.06	<=50	Pass
		12	0	23.20	<=50	Pass
			6	23.26	<=50	Pass
			13	23.19	<=50	Pass
	819	25	0	23.25	<=50	Pass
		1	0	24.10	<=50	Pass
			13	24.11	<=50	Pass
			24	24.15	<=50	Pass
		12	0	23.17	<=50	Pass
			6	23.19	<=50	Pass
			13	23.25	<=50	Pass
	821.5	25	0	23.20	<=50	Pass
		1	0	24.24	<=50	Pass
			13	24.17	<=50	Pass
			24	24.05	<=50	Pass
		12	0	23.24	<=50	Pass
			6	23.19	<=50	Pass
			13	23.20	<=50	Pass
		25	0	23.24	<=50	Pass
16QAM	816.5	0	23.24	<=50	Pass	
		1	13	23.31	<=50	Pass
			24	23.24	<=50	Pass
			12	0	22.25	<=50

			6	22.37	<=50	Pass
			13	22.28	<=50	Pass
		25	0	22.27	<=50	Pass
		819	0	23.47	<=50	Pass
			13	23.34	<=50	Pass
			24	23.58	<=50	Pass
			0	22.27	<=50	Pass
			12	22.30	<=50	Pass
			13	22.24	<=50	Pass
			25	0	<=50	Pass
		821.5	0	23.23	<=50	Pass
			13	23.18	<=50	Pass
			24	23.32	<=50	Pass
			0	22.24	<=50	Pass
			12	22.30	<=50	Pass
			13	22.29	<=50	Pass
			25	0	<=50	Pass
		816.5	0	22.56	<=50	Pass
			13	23.06	<=50	Pass
			24	23.16	<=50	Pass
			0	22.14	<=50	Pass
			12	22.20	<=50	Pass
			13	22.24	<=50	Pass
			25	0	<=50	Pass
		819	0	23.05	<=50	Pass
			13	23.08	<=50	Pass
			24	22.74	<=50	Pass
			0	22.18	<=50	Pass
			12	22.25	<=50	Pass
			13	22.28	<=50	Pass
			25	0	<=50	Pass
		821.5	0	22.06	<=50	Pass
			13	22.88	<=50	Pass
			24	22.80	<=50	Pass
			0	22.25	<=50	Pass
			12	22.31	<=50	Pass
			13	22.08	<=50	Pass
			25	0	<=50	Pass

1.1.4 B26a_10MHz

Band: 26a / Bandwidth: 10MHz / NTVN						
Modulation	Frequency (MHz)	RB Allocation		Conducted Power (dBm)		Verdict
		Size	Offset	Result	Limit	
QPSK	819	1	0	24.03	<=50	Pass
			25	24.28	<=50	Pass
			49	24.15	<=50	Pass
		25	0	23.17	<=50	Pass
			13	23.26	<=50	Pass
			25	23.21	<=50	Pass
		50	0	23.22	<=50	Pass
		1	0	22.60	<=50	Pass
			25	23.18	<=50	Pass
16QAM	819		49	22.92	<=50	Pass
	25	0	22.17	<=50	Pass	
		13	22.29	<=50	Pass	
		25	22.30	<=50	Pass	

		50	0	22.23	<=50	Pass
64QAM	819	1	0	22.86	<=50	Pass
			25	23.06	<=50	Pass
			49	22.95	<=50	Pass
			0	22.17	<=50	Pass
		25	13	22.21	<=50	Pass
			25	22.22	<=50	Pass
			50	0	<=50	Pass

2. Frequency Stability

2.1 Test Result

2.1.1 B26a_10MHz

Modulation	Frequency (MHz)	Band: 26a / Bandwidth: 10MHz							
		RB Allocation		Temp. (°C)	Voltage	Freq. Error (Hz)	Freq. vs. Rated (ppm)		
		Size	Offset				Result	Limit	
QPSK	819	50	0	20	LV	1.700	0.0021	-2.5 to 2.5	Pass
					NV	0.900	0.0011	-2.5 to 2.5	Pass
					HV	1.900	0.0023	-2.5 to 2.5	Pass
				-30	NV	-0.800	-0.0010	-2.5 to 2.5	Pass
				-20	NV	2.000	0.0024	-2.5 to 2.5	Pass
				-10	NV	-0.100	-0.0001	-2.5 to 2.5	Pass
				0	NV	0.100	0.0001	-2.5 to 2.5	Pass
				10	NV	0.700	0.0009	-2.5 to 2.5	Pass
				30	NV	0.200	0.0002	-2.5 to 2.5	Pass
				40	NV	0.700	0.0009	-2.5 to 2.5	Pass
				50	NV	0.600	0.0007	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band26a_OBW

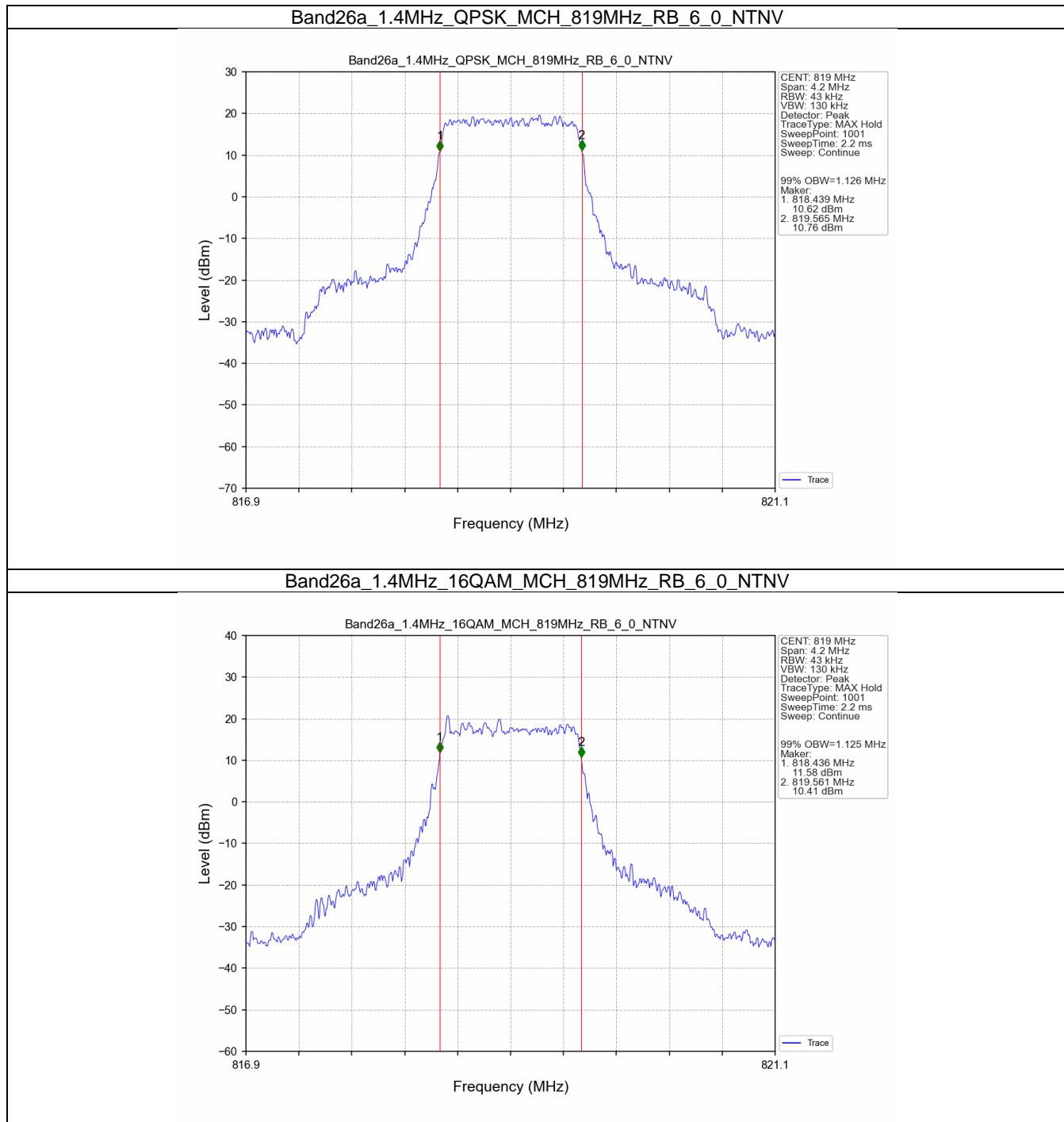
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	819	6	0	1.126	/	Pass
	16QAM	819	6	0	1.125	/	Pass
3	QPSK	819	15	0	2.742	/	Pass
	16QAM	819	15	0	2.747	/	Pass
5	QPSK	819	25	0	4.564	/	Pass
	16QAM	819	25	0	4.561	/	Pass
10	QPSK	819	50	0	9.103	/	Pass
	16QAM	819	50	0	9.076	/	Pass

3.1.2 Band26a_XDB

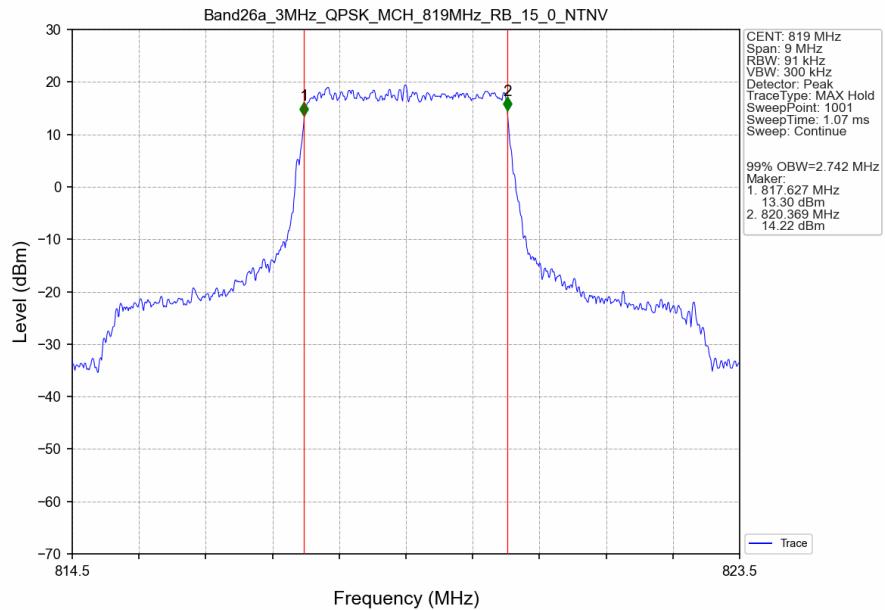
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	819	6	0	1.401	/	Pass
	16QAM	819	6	0	1.381	/	Pass
3	QPSK	819	15	0	3.118	/	Pass
	16QAM	819	15	0	3.126	/	Pass
5	QPSK	819	25	0	5.353	/	Pass
	16QAM	819	25	0	5.266	/	Pass
10	QPSK	819	50	0	10.249	/	Pass
	16QAM	819	50	0	10.699	/	Pass

3.2 Test Graph

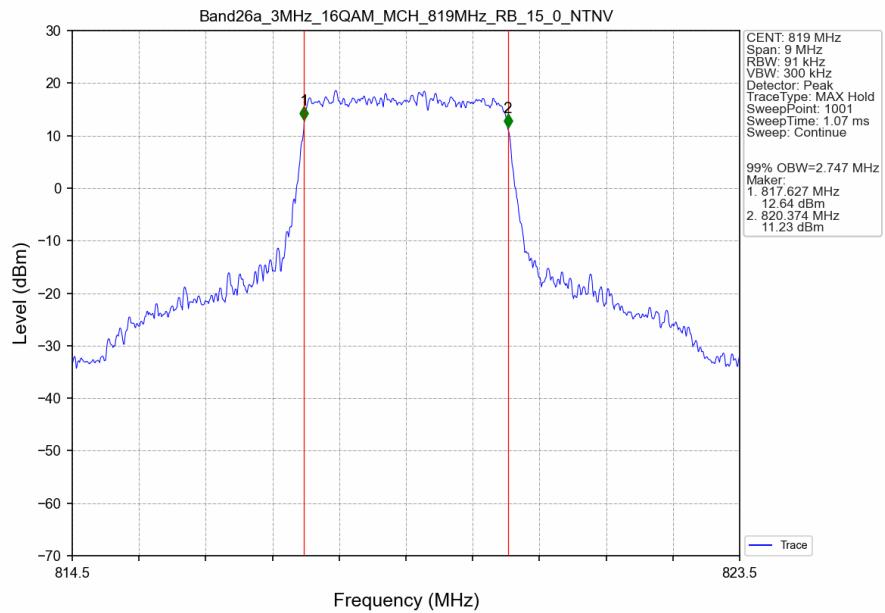
3.2.1 Band26a_OBW



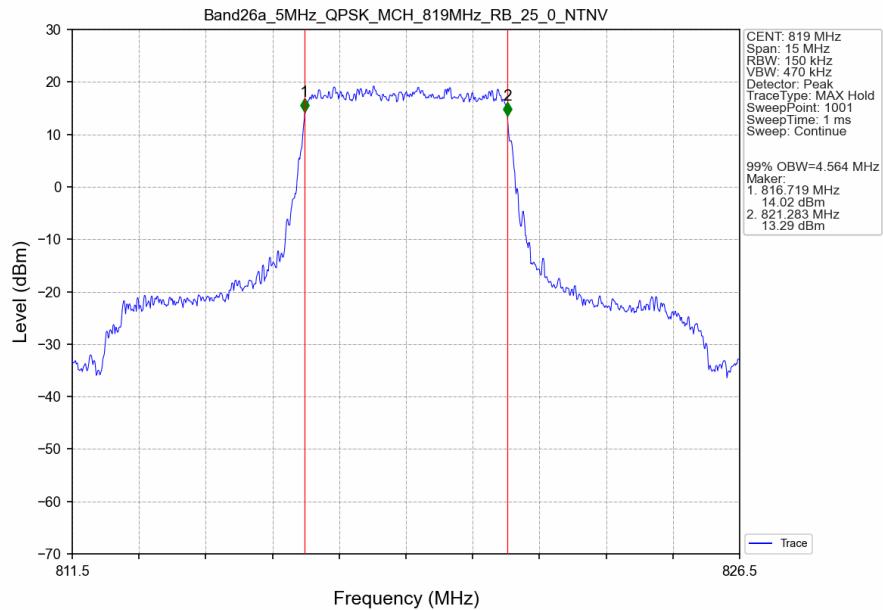
Band26a_3MHz_QPSK_MCH_819MHz_RB_15_0_NTNV



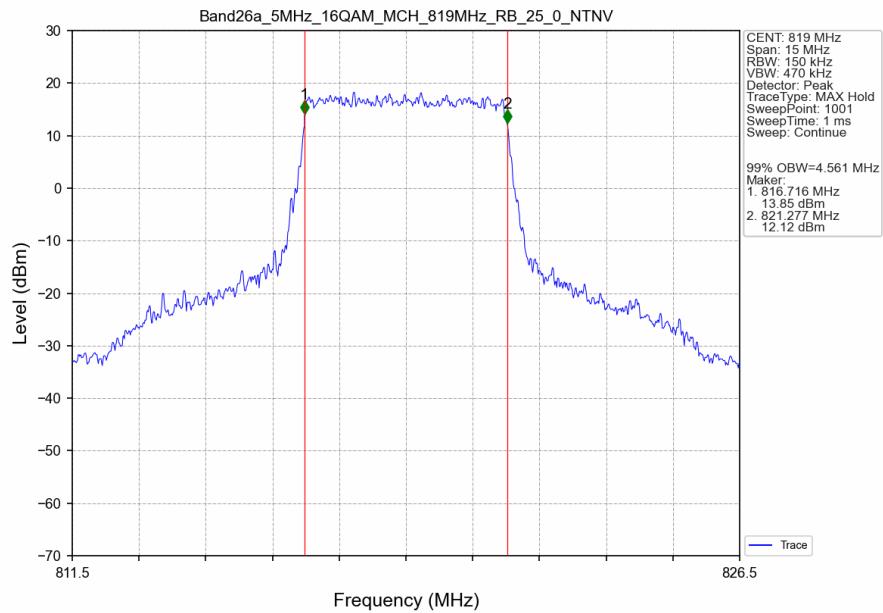
Band26a_3MHz_16QAM_MCH_819MHz_RB_15_0_NTNV



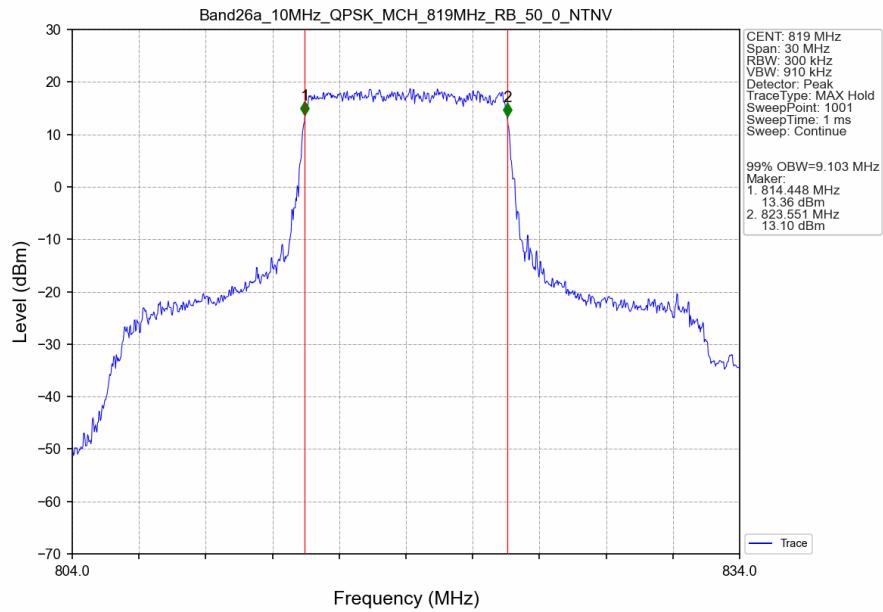
Band26a_5MHz_QPSK_MCH_819MHz_RB_25_0_NTNV



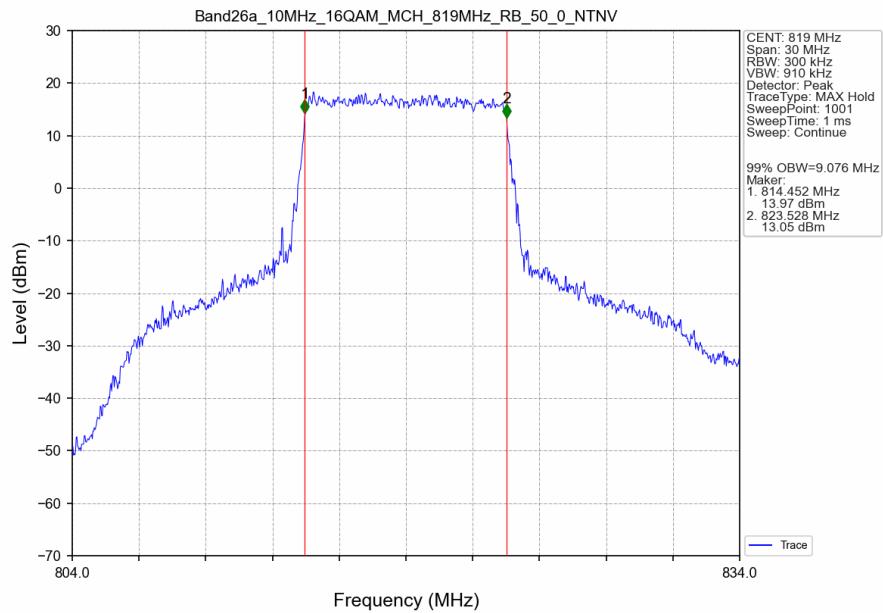
Band26a_5MHz_16QAM_MCH_819MHz_RB_25_0_NTNV



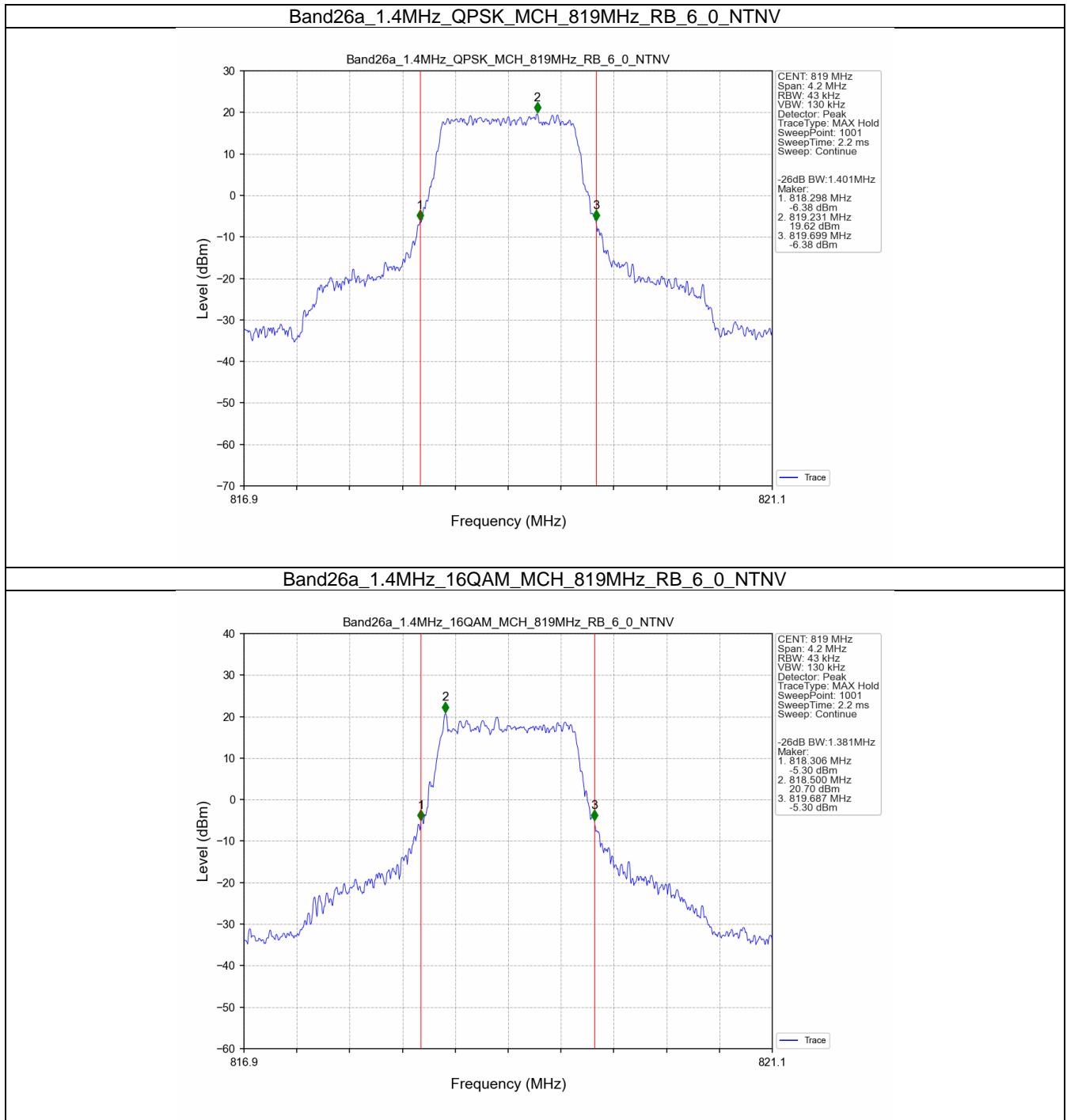
Band26a_10MHz_QPSK_MCH_819MHz_RB_50_0_NTNV



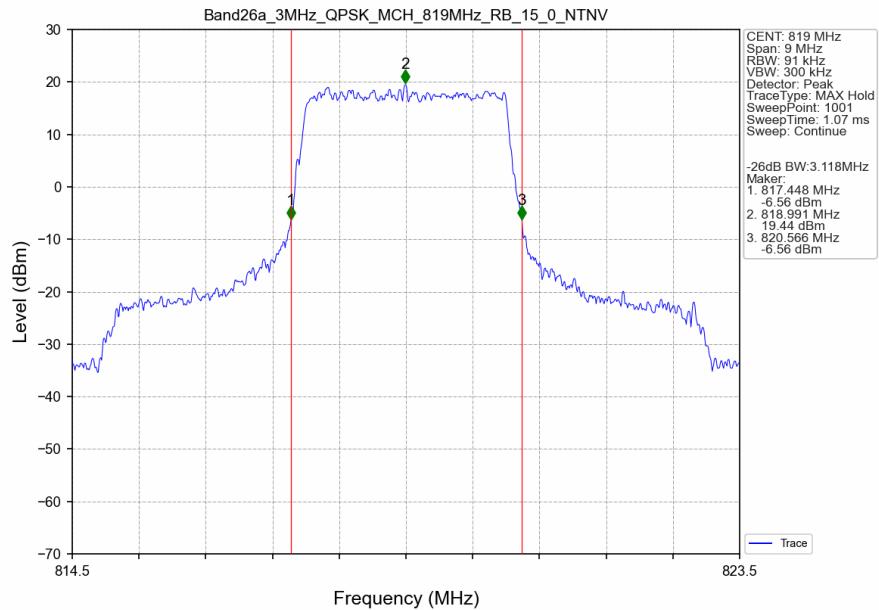
Band26a_10MHz_16QAM_MCH_819MHz_RB_50_0_NTNV



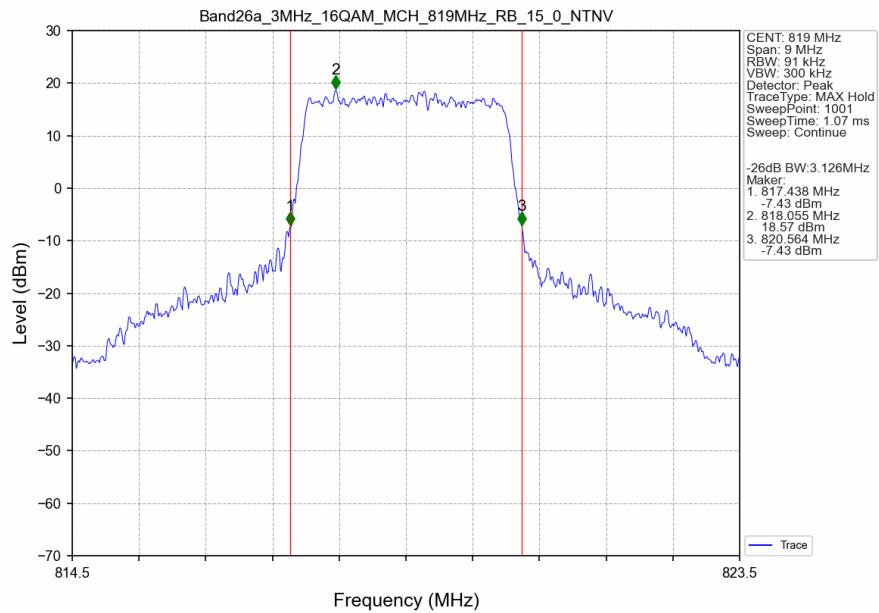
3.2.2 Band26a_XDB



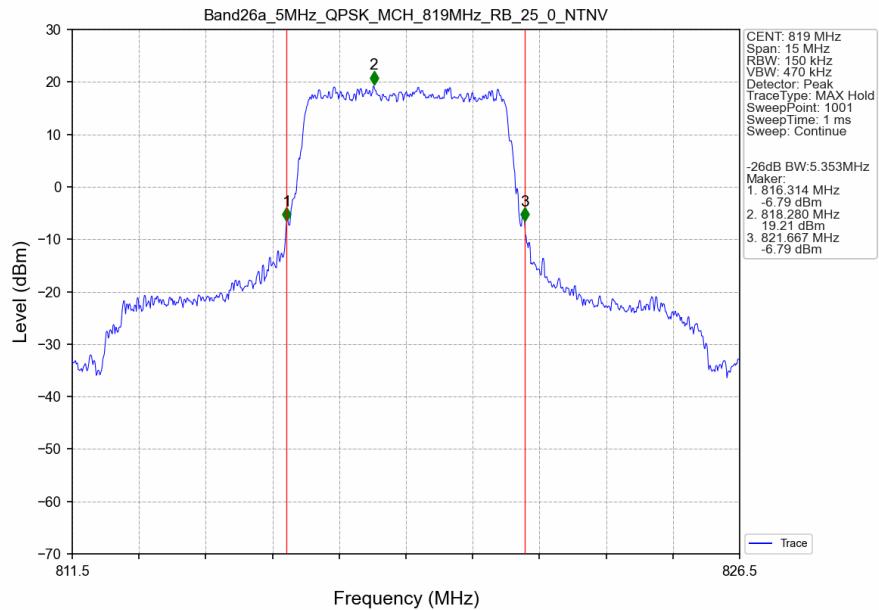
Band26a_3MHz_QPSK_MCH_819MHz_RB_15_0_NTNV



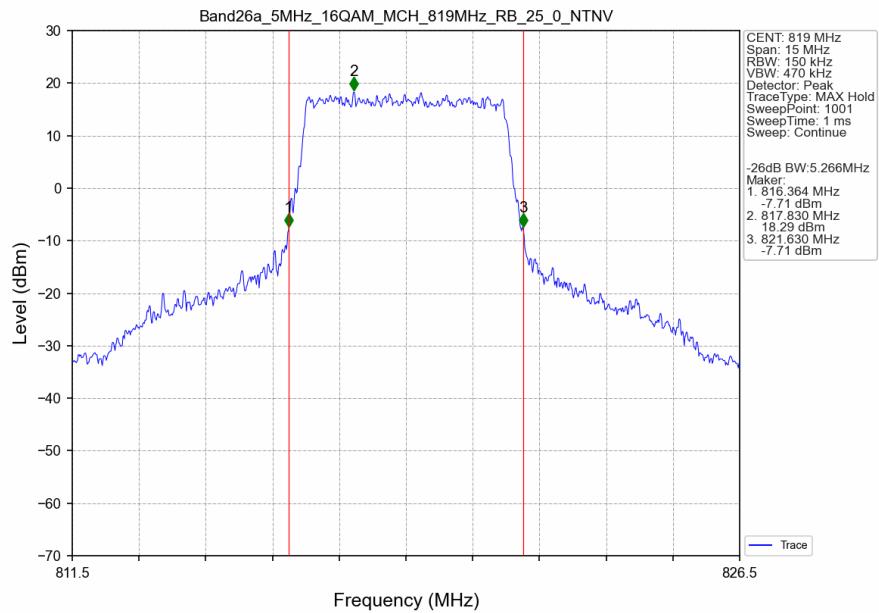
Band26a_3MHz_16QAM_MCH_819MHz_RB_15_0_NTNV



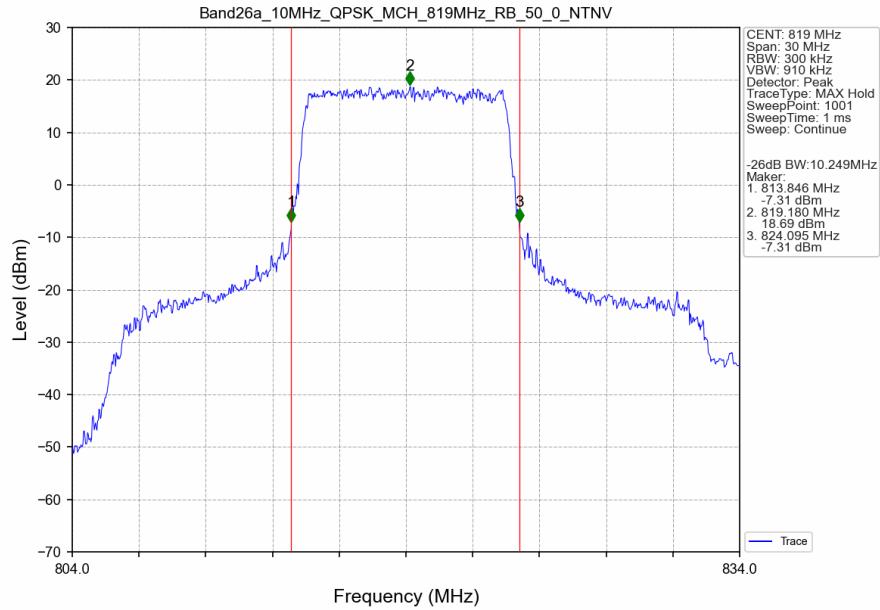
Band26a_5MHz_QPSK_MCH_819MHz_RB_25_0_NTNV



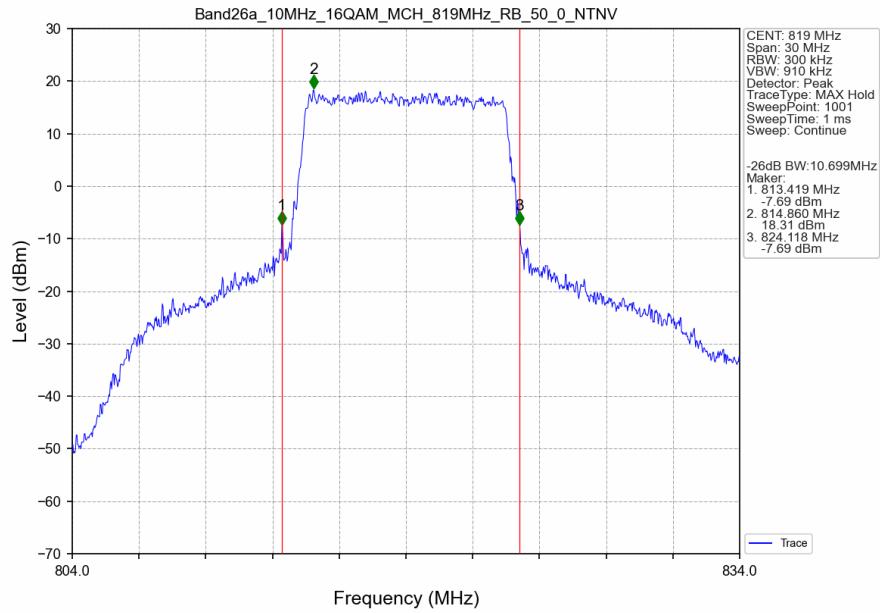
Band26a_5MHz_16QAM_MCH_819MHz_RB_25_0_NTNV



Band26a_10MHz_QPSK_MCH_819MHz_RB_50_0_NTNV



Band26a_10MHz_16QAM_MCH_819MHz_RB_50_0_NTNV



4. Peak-Average Ratio

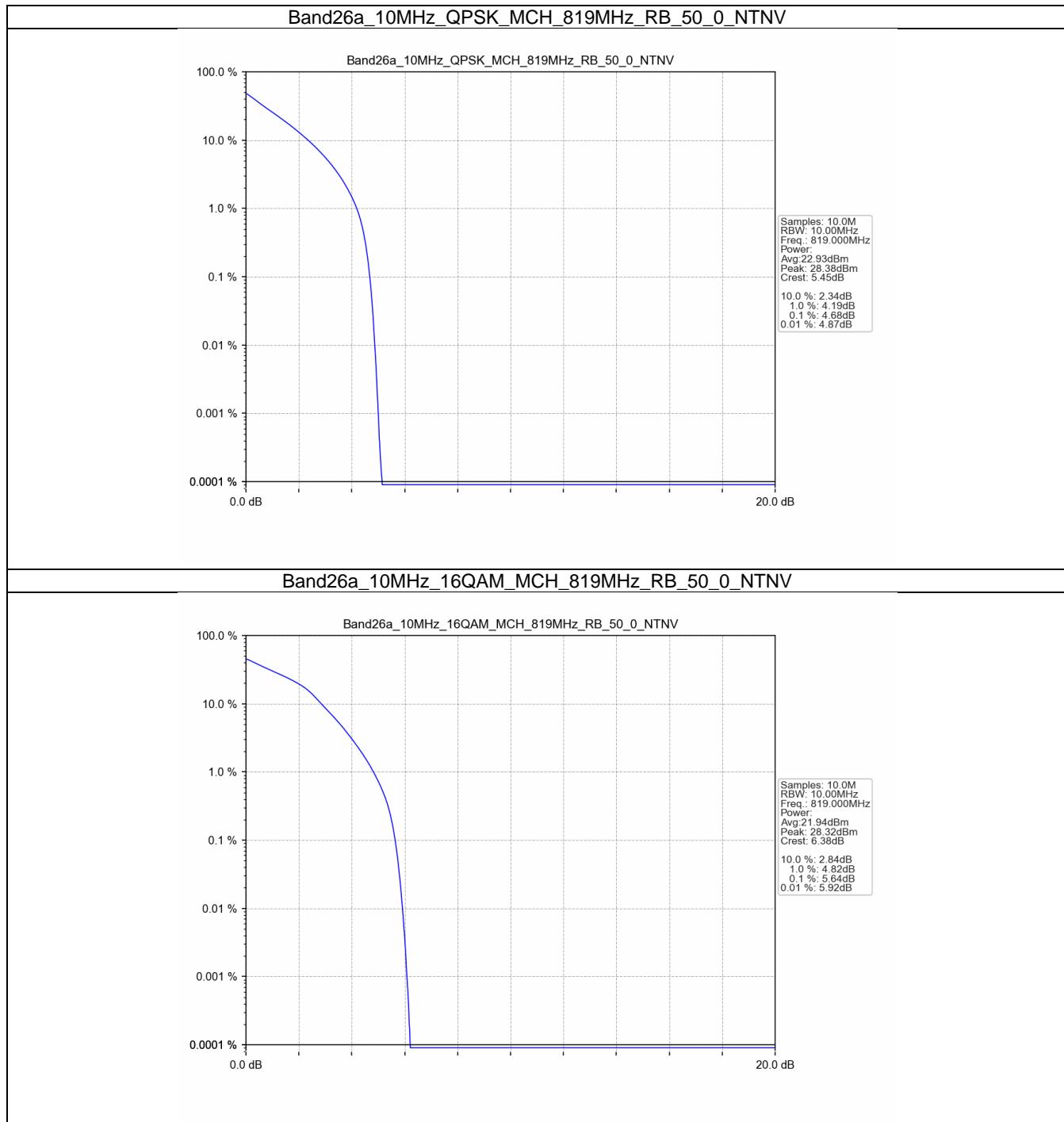
4.1 Test Result

4.1.1 B26a_10MHz

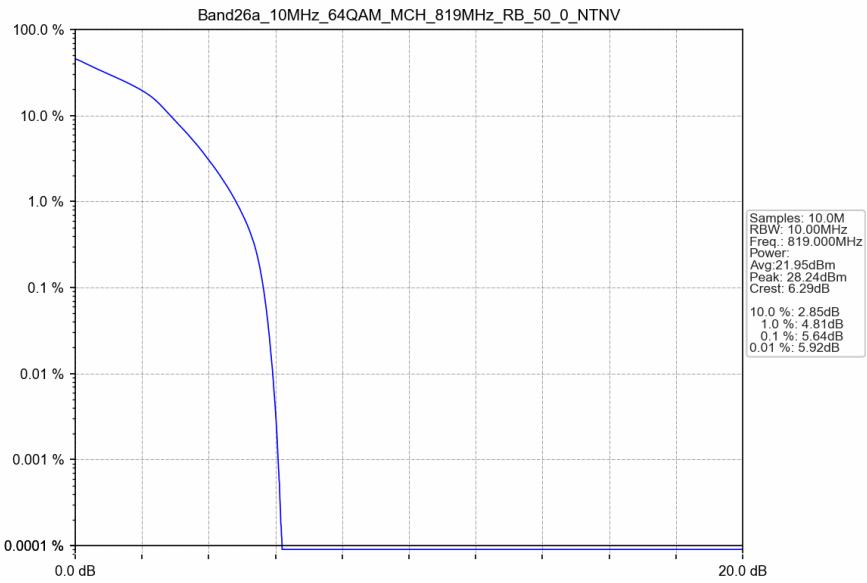
Band: 26a / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Peak-Average Ratio (dB)		Verdict
		Size	Offset	Result	Limit	
QPSK	819	50	0	4.68	<=13	Pass
16QAM	819	50	0	5.64	<=13	Pass
64QAM	819	50	0	5.64	<=13	Pass

4.2 Test Graph

4.2.1 B26a_10MHz



Band26a_10MHz_64QAM_MCH_819MHz_RB_50_0_NTNV



5. Spurious Emission

5.1 Test Result

5.1.1 B26a_1.4MHz

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	0	Refer To Test Graph		Pass	
	823.3		1	Refer To Test Graph		Pass	
			5	Refer To Test Graph		Pass	
		6	0	Refer To Test Graph		Pass	

5.1.2 B26a_3MHz

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	0	Refer To Test Graph		Pass	
	822.5		1	Refer To Test Graph		Pass	
			14	Refer To Test Graph		Pass	
		15	0	Refer To Test Graph		Pass	

5.1.3 B26a_5MHz

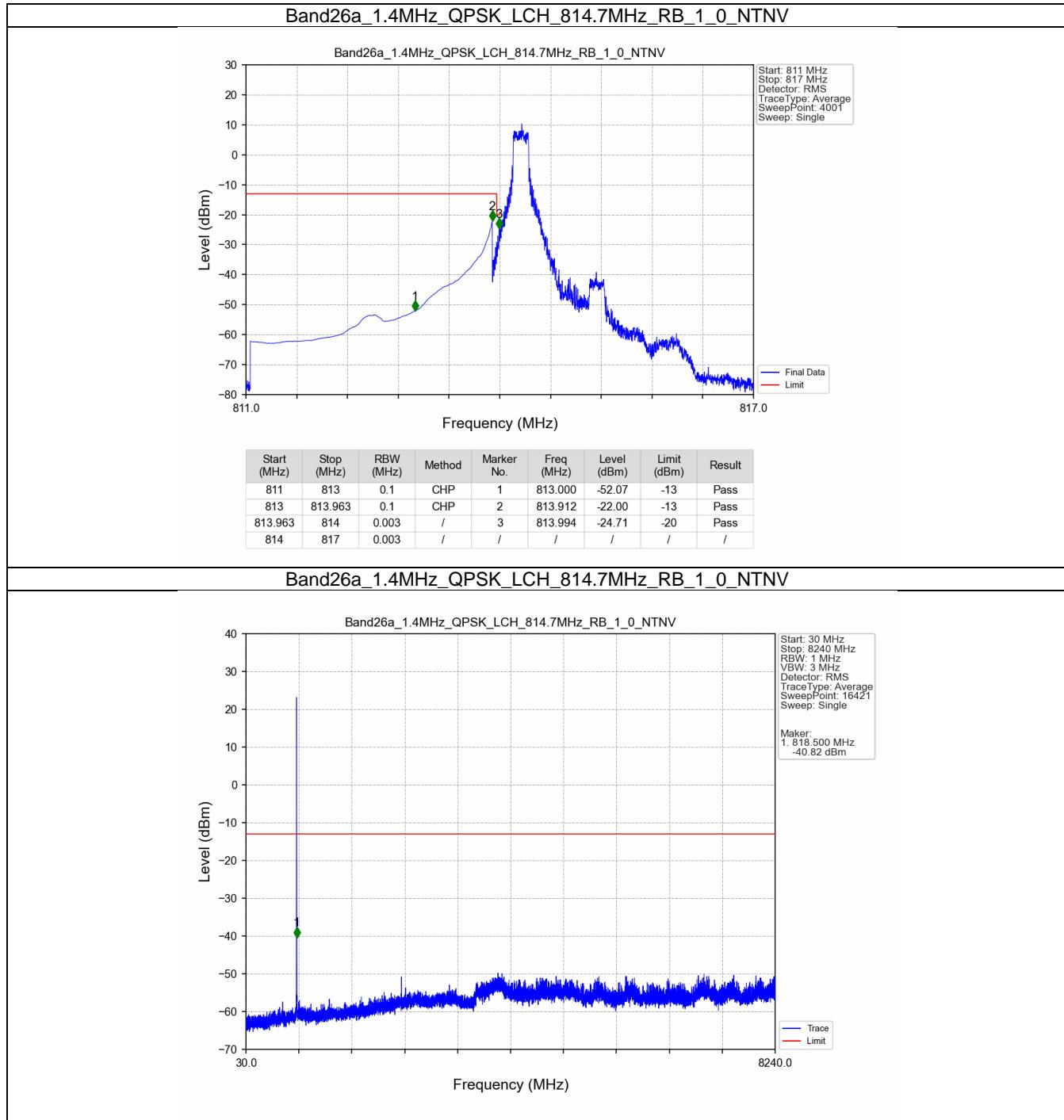
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict	
		Size	Offset	Result	Limit		
QPSK	816.5	1	0	Refer To Test Graph		Pass	
		25	0	Refer To Test Graph		Pass	
	819	1	0	Refer To Test Graph		Pass	
		821.5	0	Refer To Test Graph		Pass	
	821.5		24	Refer To Test Graph		Pass	
			25	Refer To Test Graph		Pass	

5.1.4 B26a_10MHz

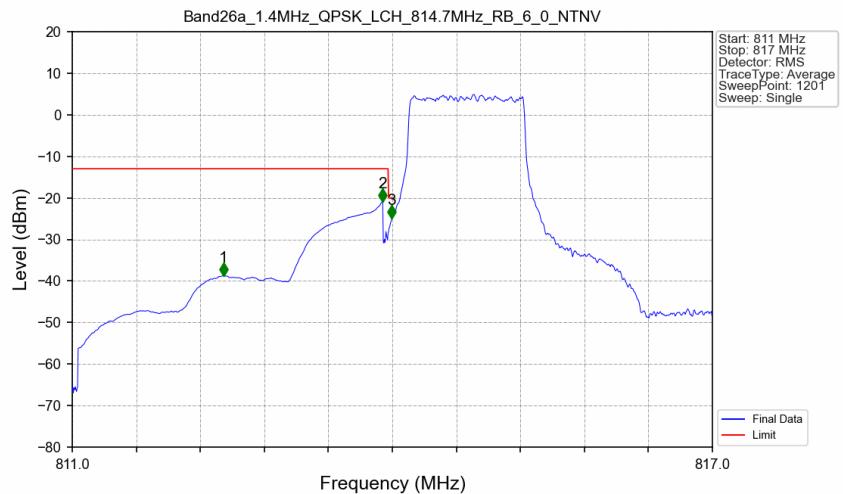
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	819	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	819	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

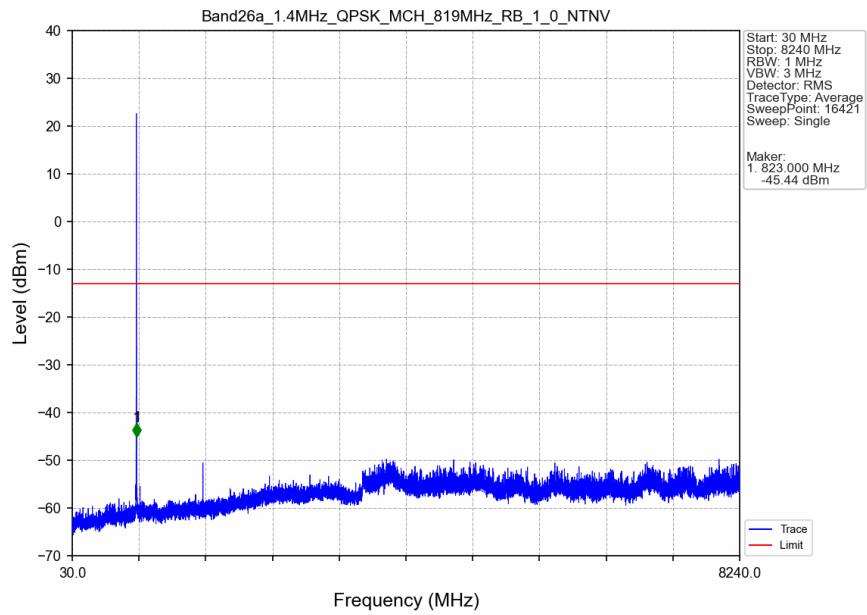
5.2.1 B26a_1.4MHz



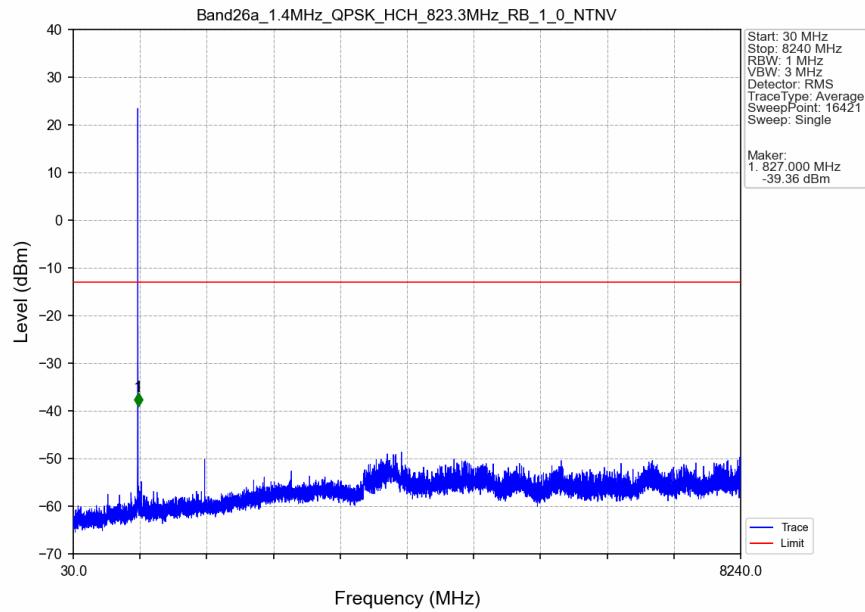
Band26a_1.4MHz_QPSK_LCH_814.7MHz_RB_6_0_NTNV



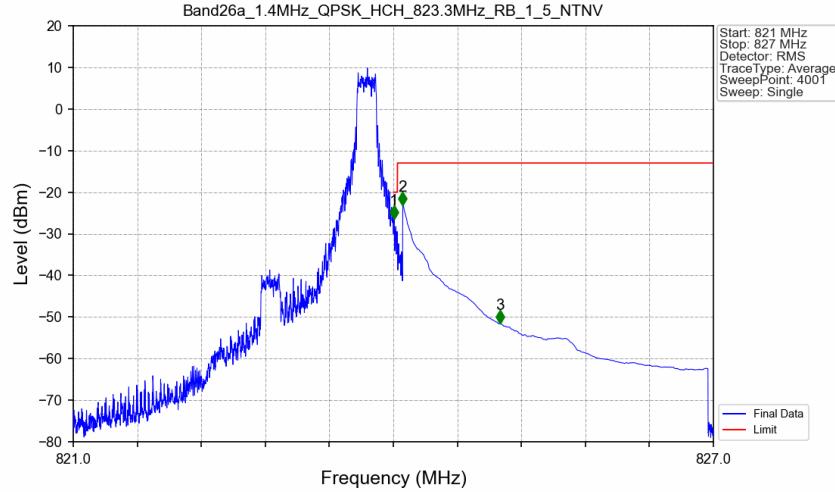
Band26a_1.4MHz_QPSK_MCH_819MHz_RB_1_0_NTNV



Band26a_1.4MHz_QPSK_HCH_823.3MHz_RB_1_0_NTNV

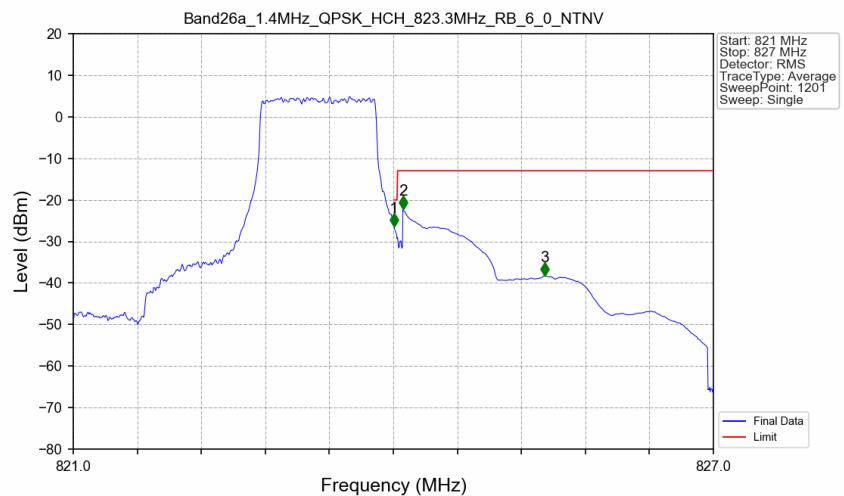


Band26a_1.4MHz_QPSK_HCH_823.3MHz_RB_1_5_NTNV



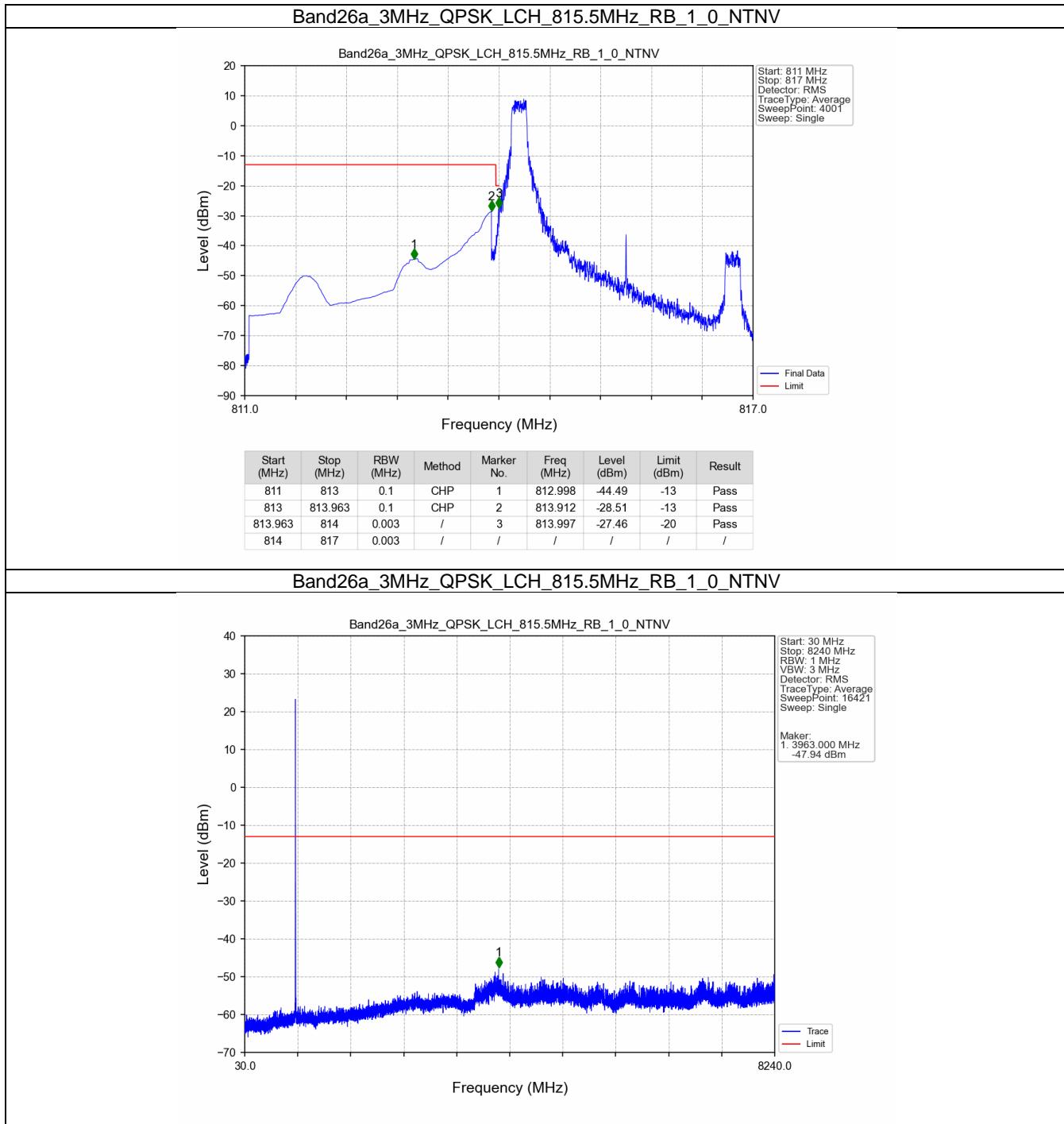
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.008	-26.38	-20	Pass
824.038	825	0.1	CHP	2	824.088	-23.03	-13	Pass
825	827	0.1	CHP	3	825.000	-51.59	-13	Pass

Band26a_1.4MHz_QPSK_HCH_823.3MHz_RB_6_0_NTNV

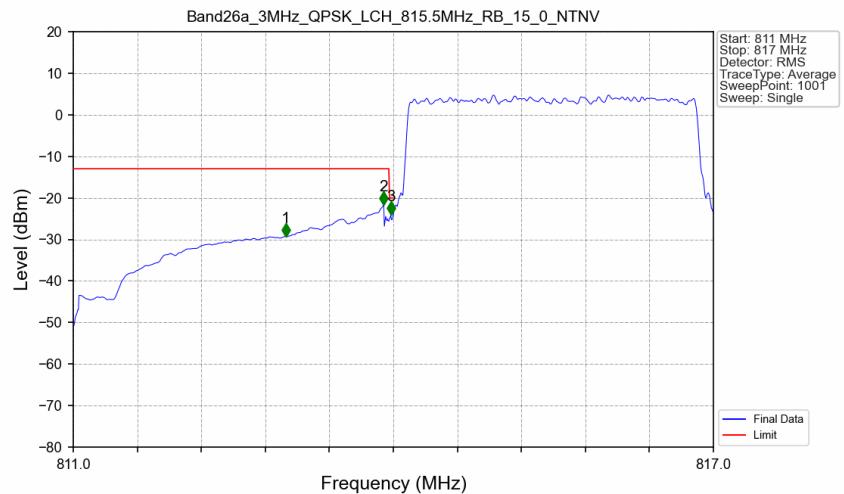


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.014	CHP	/	/	/	/	/
824	824.038	0.014	CHP	1	824.005	-26.38	-20	Pass
824.038	825	0.1	CHP	2	824.090	-22.26	-13	Pass
825	827	0.1	CHP	3	825.415	-38.29	-13	Pass

5.2.2 B26a_3MHz

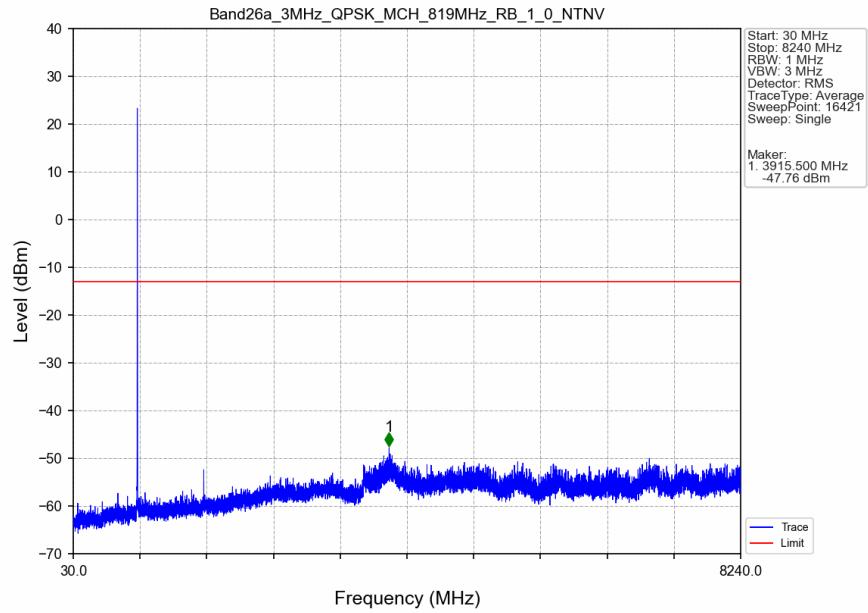


Band26a_3MHz_QPSK_LCH_815.5MHz_RB_15_0_NTNV

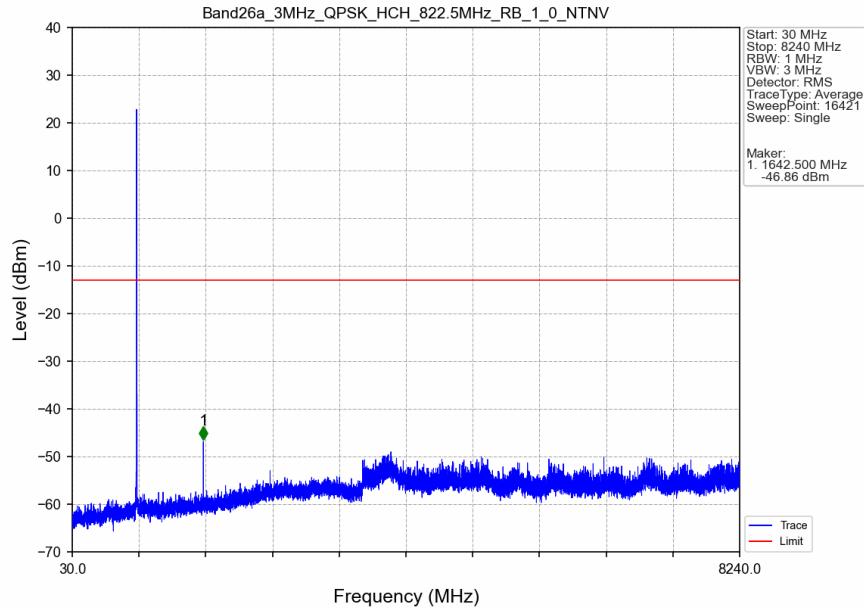


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
811	813	0.1	CHP	1	812.992	-29.24	-13	Pass
813	813.963	0.1	CHP	2	813.910	-21.72	-13	Pass
813.963	814	0.031	CHP	3	813.976	-24.11	-20	Pass
814	817	0.031	CHP	/	/	/	/	/

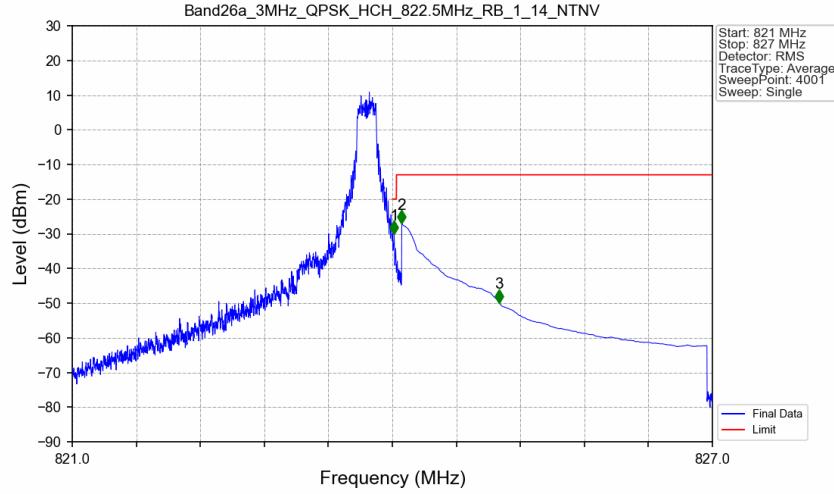
Band26a_3MHz_QPSK_MCH_819MHz_RB_1_0_NTNV



Band26a_3MHz_QPSK_HCH_822.5MHz_RB_1_0_NTNV

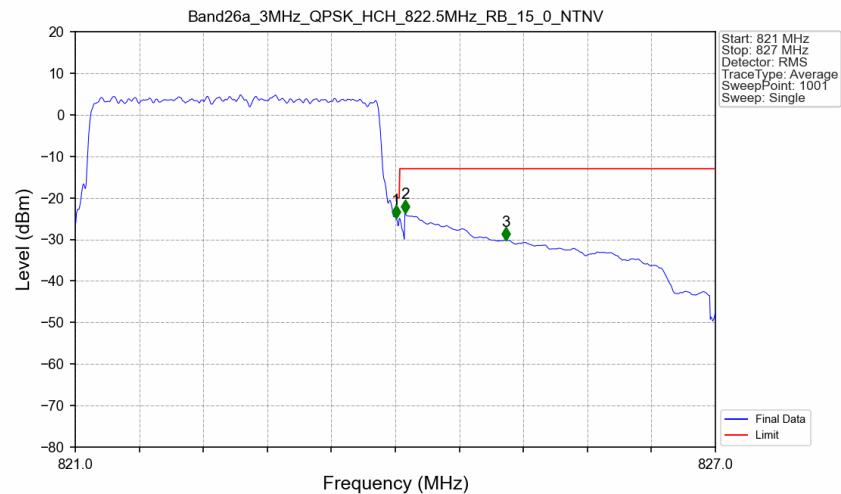


Band26a_3MHz_QPSK_HCH_822.5MHz_RB_1_14_NTNV



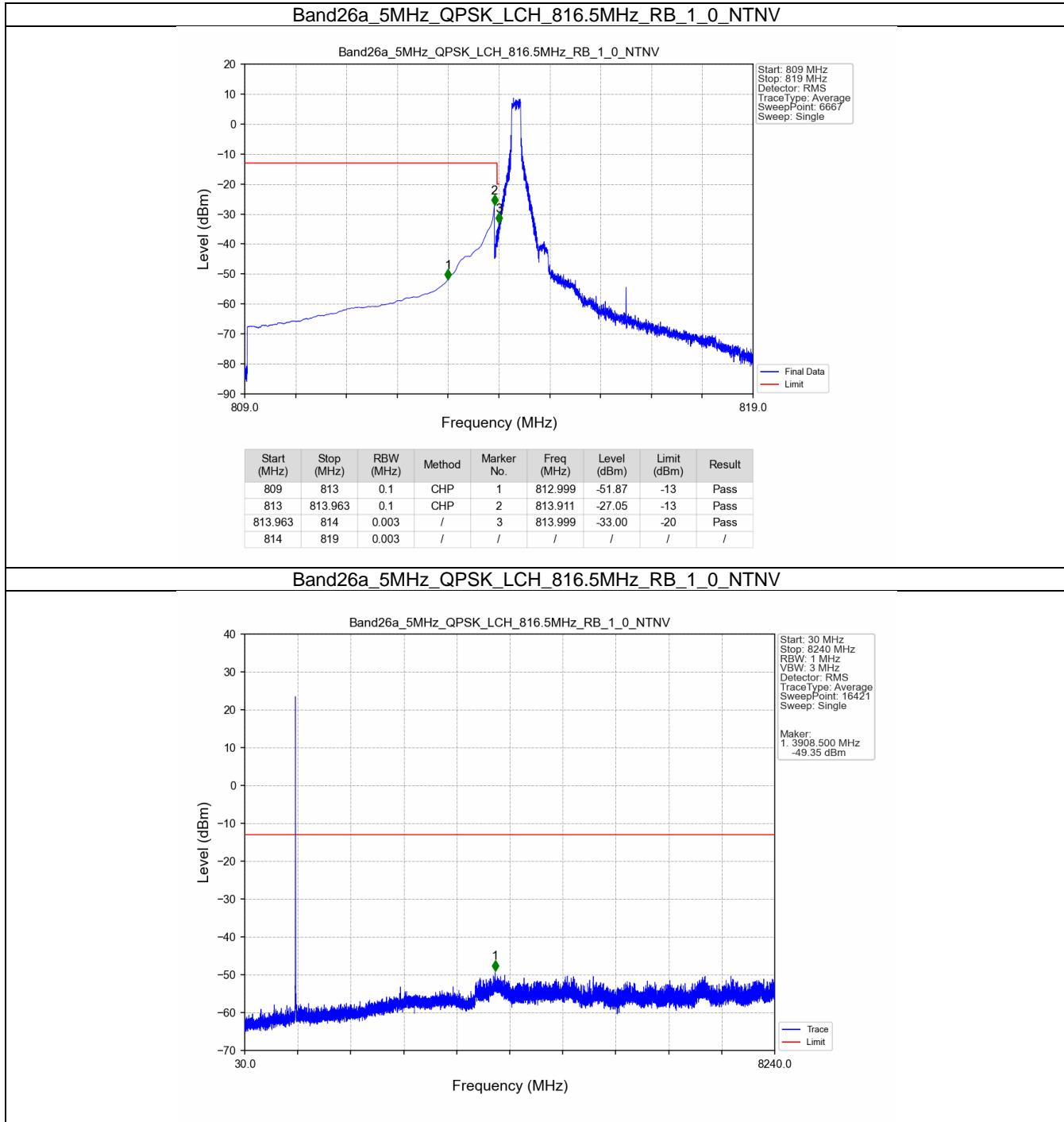
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.016	-30.04	-20	Pass
824.038	825	0.1	CHP	2	824.088	-26.99	-13	Pass
825	827	0.1	CHP	3	825.000	-49.83	-13	Pass

Band26a_3MHz_QPSK_HCH_822.5MHz_RB_15_0_NTNV

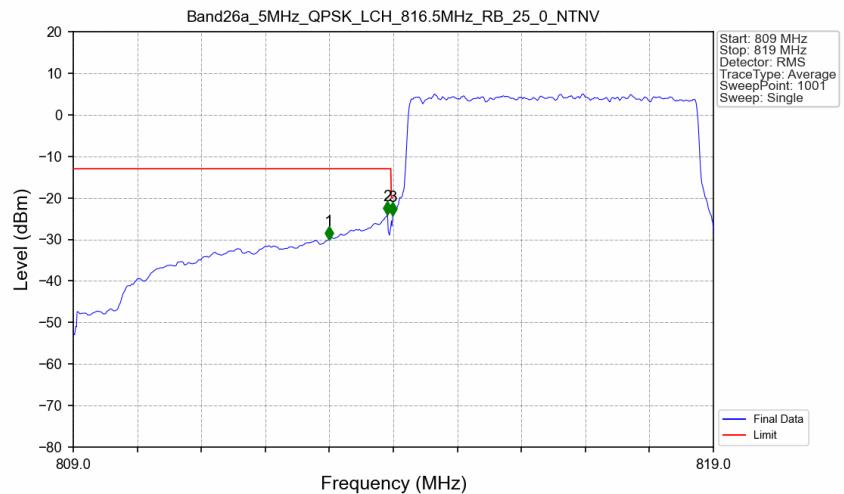


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.031	CHP	/	/	/	/	/
824	824.038	0.031	CHP	1	824.006	-24.91	-20	Pass
824.038	825	0.1	CHP	2	824.090	-23.57	-13	Pass
825	827	0.1	CHP	3	825.032	-30.18	-13	Pass

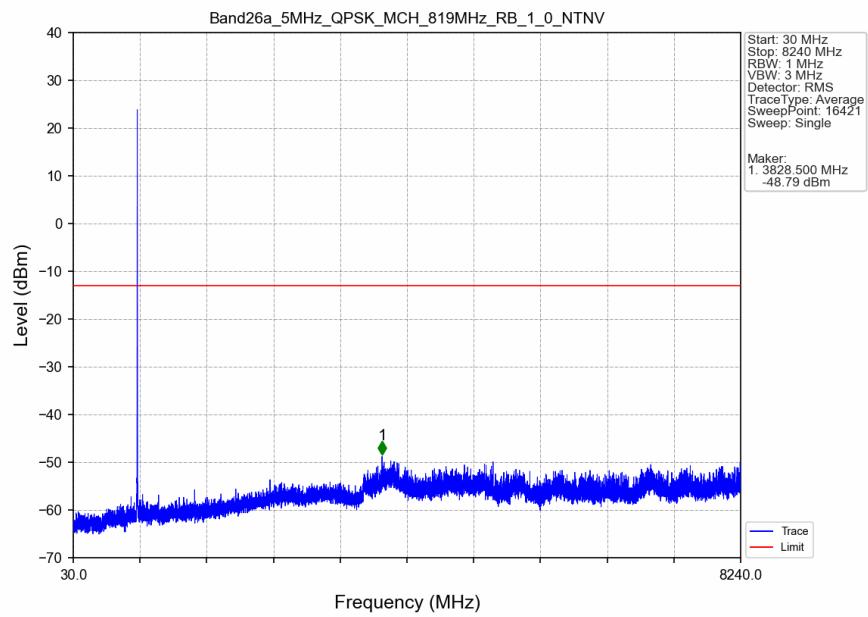
5.2.3 B26a_5MHz



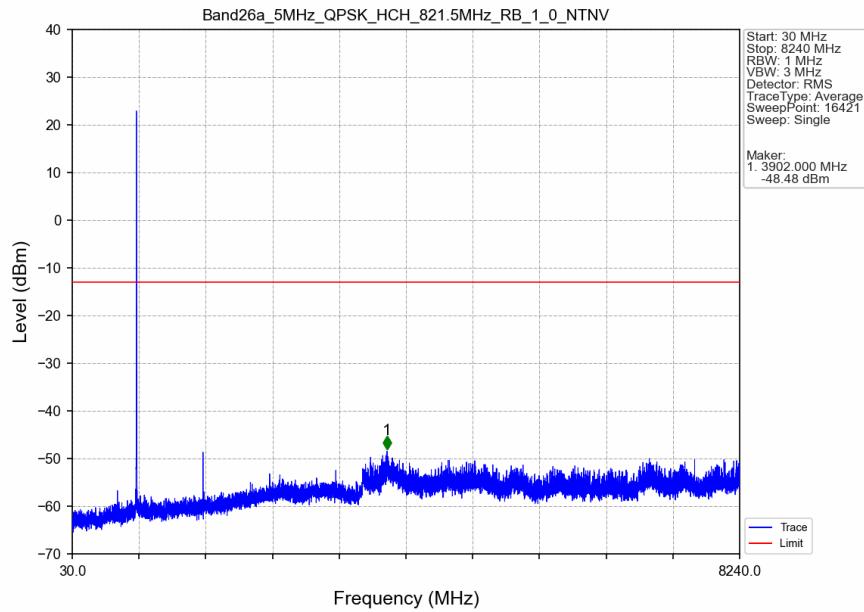
Band26a_5MHz_QPSK_LCH_816.5MHz_RB_25_0_NTNV



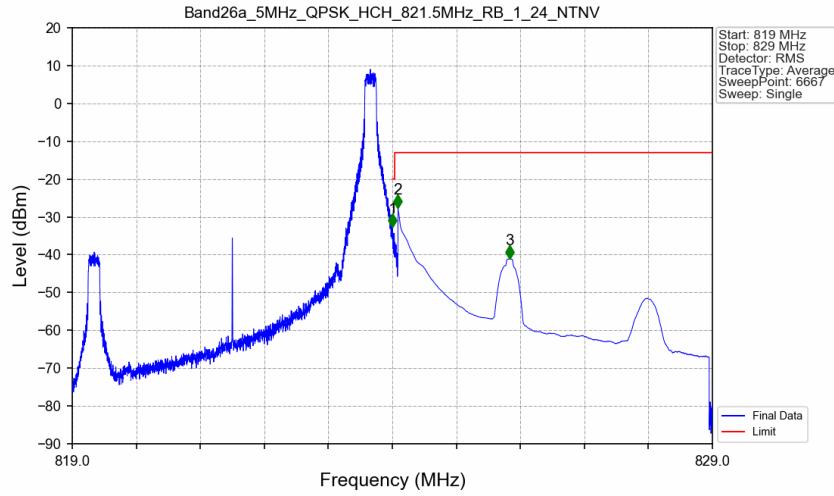
Band26a_5MHz_QPSK_MCH_819MHz_RB_1_0_NTNV



Band26a_5MHz_QPSK_HCH_821.5MHz_RB_1_0_NTNV

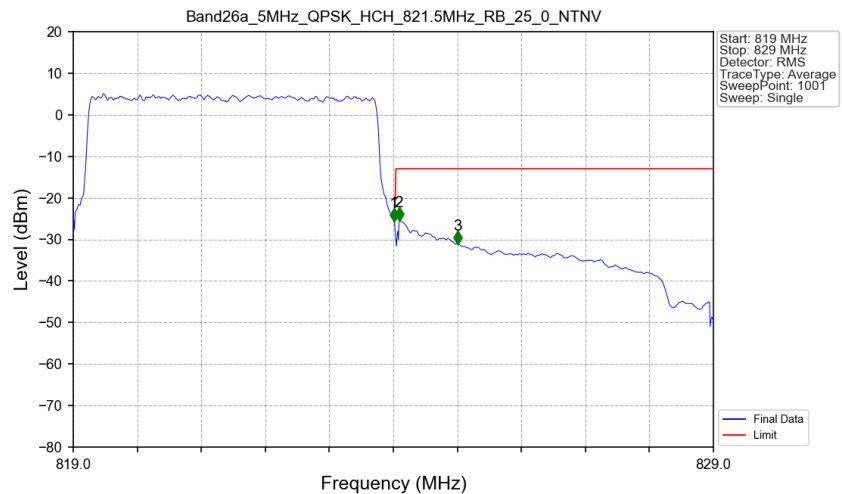


Band26a_5MHz_QPSK_HCH_821.5MHz_RB_1_24_NTNV



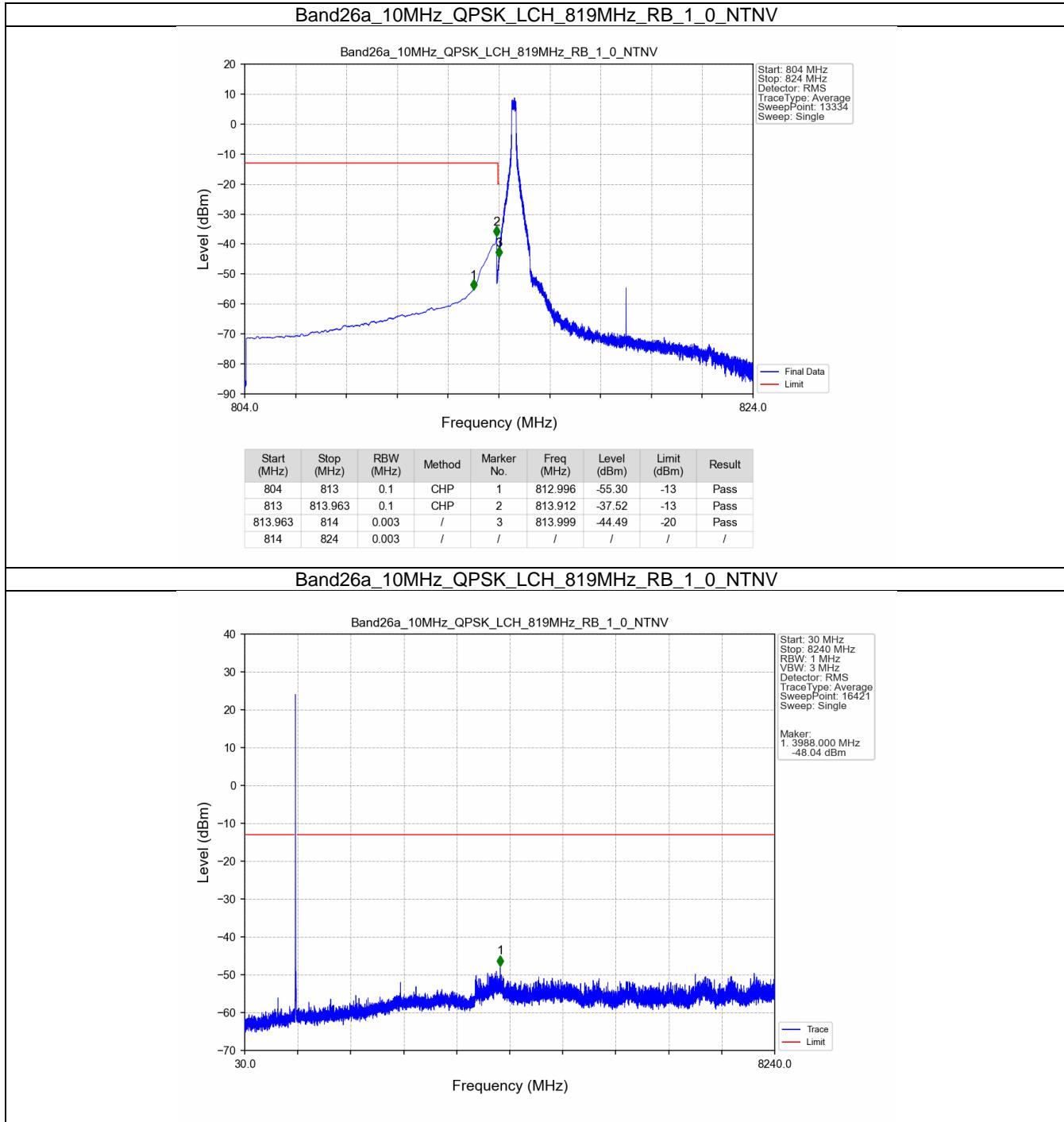
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.003	-32.65	-20	Pass
824.038	825	0.1	CHP	2	824.089	-27.60	-13	Pass
825	829	0.1	CHP	3	825.836	-41.10	-13	Pass

Band26a_5MHz_QPSK_HCH_821.5MHz_RB_25_0_NTNV

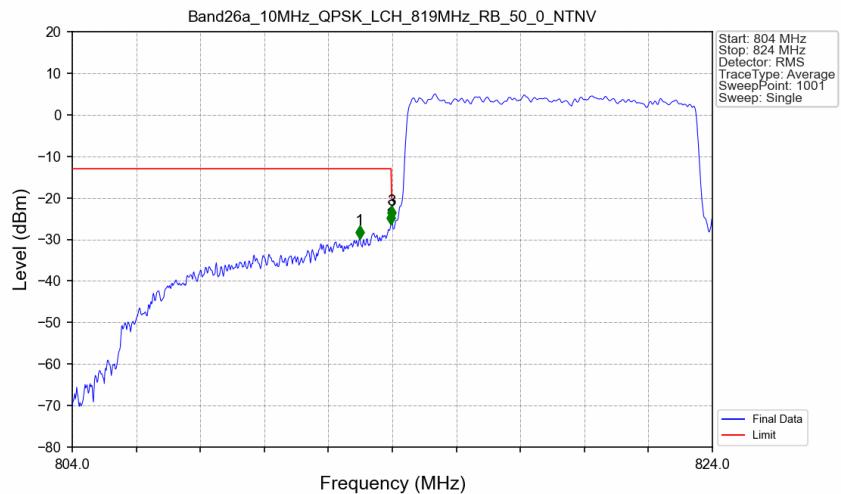


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.054	CHP	/	/	/	/	/
824	824.038	0.054	CHP	1	824.010	-25.58	-20	Pass
824.038	825	0.1	CHP	2	824.090	-25.50	-13	Pass
825	829	0.1	CHP	3	825.010	-31.07	-13	Pass

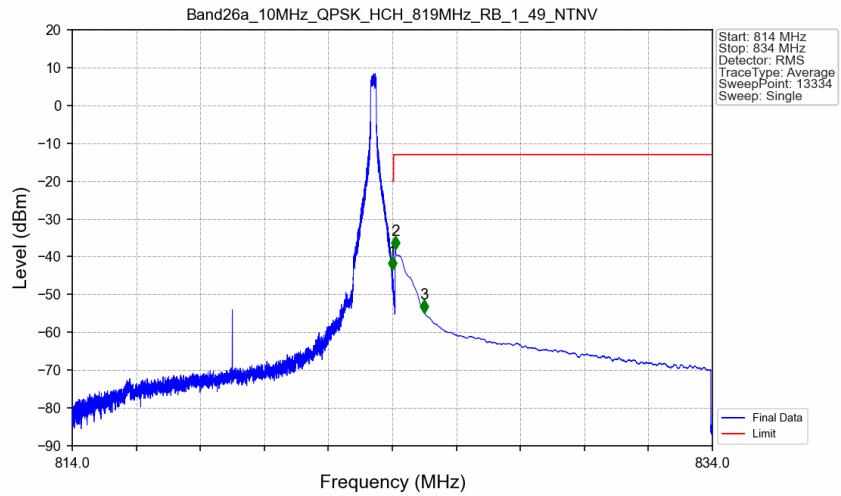
5.2.4 B26a_10MHz



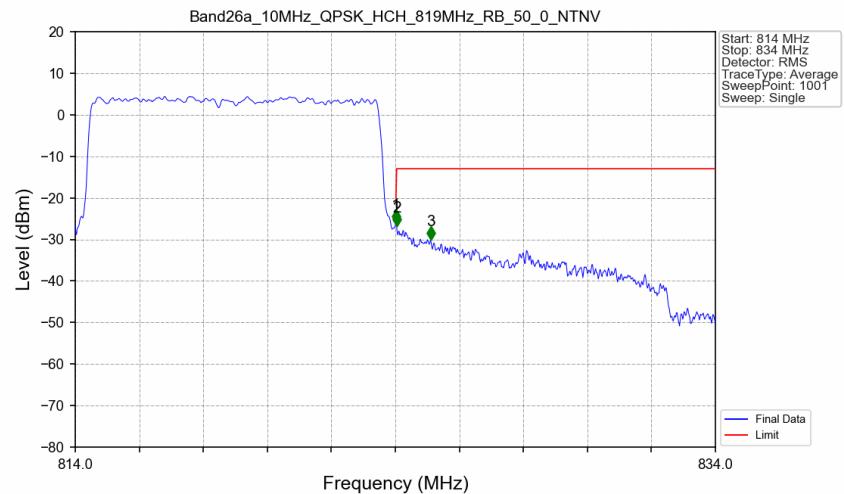
Band26a_10MHz_QPSK_LCH_819MHz_RB_50_0_NTNV



Band26a_10MHz_QPSK_HCH_819MHz_RB_1_49_NTNV



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	0.102	CHP	/	/	/	/	/
824	824.038	0.102	CHP	1	824.020	-26.04	-20	Pass
824.038	825	0.1	/	2	824.040	-26.70	-13	Pass
825	834	0.1	/	3	825.100	-30.12	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 26a(814-824MHz) ANT0-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	-71.02	-13	-58.02	-73.95	2.62	5.55	Horizontal	Pass
2443.5	-67.09	-13	-54.09	-69.73	3.04	5.68	Horizontal	Pass
3258.0	-64.83	-13	-51.83	-69.11	3.28	7.56	Horizontal	Pass
1629.0	-71.19	-13	-58.19	-74.12	2.62	5.55	Vertical	Pass
2443.5	-69.54	-13	-56.54	-72.18	3.04	5.68	Vertical	Pass
3258.0	-66.59	-13	-53.59	-70.87	3.28	7.56	Vertical	Pass