

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	24.33	<=50	Pass
			2	24.65	<=50	Pass
			5	24.44	<=50	Pass
		3	0	24.56	<=50	Pass
			2	24.67	<=50	Pass
			3	24.59	<=50	Pass
		6	0	23.67	<=50	Pass
	819	1	0	24.40	<=50	Pass
			2	24.49	<=50	Pass
			5	24.26	<=50	Pass
		3	0	24.38	<=50	Pass
			2	24.54	<=50	Pass
			3	24.45	<=50	Pass
		6	0	23.55	<=50	Pass
	823.3	1	0	24.19	<=50	Pass
			2	24.30	<=50	Pass
			5	24.07	<=50	Pass
		3	0	24.41	<=50	Pass
			2	24.31	<=50	Pass
			3	24.32	<=50	Pass
		6	0	23.38	<=50	Pass
16QAM	814.7	1	0	23.62	<=50	Pass
			2	23.92	<=50	Pass
			5	23.70	<=50	Pass
		3	0	23.62	<=50	Pass
			2	23.72	<=50	Pass
			3	23.67	<=50	Pass
		6	0	22.87	<=50	Pass
	819	1	0	23.37	<=50	Pass
			2	23.54	<=50	Pass
			5	23.30	<=50	Pass
		3	0	23.55	<=50	Pass
			2	23.55	<=50	Pass
			3	23.46	<=50	Pass
		6	0	22.58	<=50	Pass
	823.3	1	0	23.29	<=50	Pass
			2	23.39	<=50	Pass
			5	23.11	<=50	Pass
		3	0	23.55	<=50	Pass
			2	23.54	<=50	Pass
			3	23.45	<=50	Pass
		6	0	22.48	<=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	24.74	<=50	Pass
			7	24.77	<=50	Pass
			14	24.55	<=50	Pass
		8	0	23.85	<=50	Pass
			4	23.84	<=50	Pass
			7	23.78	<=50	Pass
		15	0	23.84	<=50	Pass
	819	1	0	24.72	<=50	Pass
			7	24.65	<=50	Pass
			14	24.44	<=50	Pass
		8	0	23.72	<=50	Pass
			4	23.70	<=50	Pass
			7	23.63	<=50	Pass
		15	0	23.72	<=50	Pass
	822.5	1	0	24.72	<=50	Pass
			7	24.69	<=50	Pass
			14	24.39	<=50	Pass
		8	0	23.69	<=50	Pass
			4	23.68	<=50	Pass
			7	23.54	<=50	Pass
		15	0	23.66	<=50	Pass
16QAM	815.5	1	0	24.25	<=50	Pass
			7	24.38	<=50	Pass
			14	24.04	<=50	Pass
		8	0	23.18	<=50	Pass
			4	23.21	<=50	Pass
			7	23.14	<=50	Pass
		15	0	23.09	<=50	Pass
	819	1	0	23.92	<=50	Pass
			7	23.82	<=50	Pass
			14	23.72	<=50	Pass
		8	0	22.88	<=50	Pass
			4	22.81	<=50	Pass
			7	22.75	<=50	Pass
		15	0	22.84	<=50	Pass
	822.5	1	0	23.70	<=50	Pass
			7	23.73	<=50	Pass
			14	23.41	<=50	Pass
		8	0	22.95	<=50	Pass
			4	22.85	<=50	Pass
			7	22.74	<=50	Pass
		15	0	22.79	<=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	24.72	<=50	Pass
			13	24.59	<=50	Pass
			24	24.40	<=50	Pass
		12	0	23.78	<=50	Pass
			6	23.73	<=50	Pass
			13	23.64	<=50	Pass
		25	0	23.73	<=50	Pass
	819	1	0	24.64	<=50	Pass

			13	24.54	<=50	Pass	
			24	24.44	<=50	Pass	
		12	0	23.66	<=50	Pass	
			6	23.60	<=50	Pass	
			13	23.57	<=50	Pass	
		25	0	23.63	<=50	Pass	
	821.5	1	0	24.51	<=50	Pass	
			13	24.64	<=50	Pass	
			24	24.23	<=50	Pass	
		12	0	23.60	<=50	Pass	
			6	23.61	<=50	Pass	
			13	23.47	<=50	Pass	
	25	0	23.59	<=50	Pass		
	16QAM	816.5	1	0	23.61	<=50	Pass
				13	23.50	<=50	Pass
				24	23.38	<=50	Pass
12			0	22.98	<=50	Pass	
			6	22.93	<=50	Pass	
			13	22.83	<=50	Pass	
25		0	22.96	<=50	Pass		
819		1	0	23.86	<=50	Pass	
			13	23.79	<=50	Pass	
			24	23.74	<=50	Pass	
		12	0	22.88	<=50	Pass	
			6	22.84	<=50	Pass	
			13	22.67	<=50	Pass	
25		0	22.76	<=50	Pass		
821.5		1	0	23.70	<=50	Pass	
			13	23.76	<=50	Pass	
			24	23.34	<=50	Pass	
		12	0	22.76	<=50	Pass	
			6	22.78	<=50	Pass	
			13	22.59	<=50	Pass	
25		0	22.80	<=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	24.80	<=50	Pass
			25	24.63	<=50	Pass
			49	24.03	<=50	Pass
		25	0	23.80	<=50	Pass
			13	23.72	<=50	Pass
			25	23.56	<=50	Pass
		50	0	23.71	<=50	Pass
16QAM	819	1	0	24.32	<=50	Pass
			25	24.09	<=50	Pass
			49	23.67	<=50	Pass
		12	0	23.88	<=50	Pass
			19	23.71	<=50	Pass
			38	23.43	<=50	Pass
		27	0	22.93	<=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	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	819	50	0	20	LV	1.917	0.0023	-2.5 to 2.5	Pass
					NV	2.747	0.0034	-2.5 to 2.5	Pass
					HV	-0.072	-0.0001	-2.5 to 2.5	Pass
				-30	NV	1.044	0.0013	-2.5 to 2.5	Pass
				-20	NV	0.858	0.0010	-2.5 to 2.5	Pass
				-10	NV	0.286	0.0003	-2.5 to 2.5	Pass
				0	NV	1.802	0.0022	-2.5 to 2.5	Pass
				10	NV	1.216	0.0015	-2.5 to 2.5	Pass
				30	NV	0.772	0.0009	-2.5 to 2.5	Pass
				40	NV	-0.815	-0.0010	-2.5 to 2.5	Pass
				50	NV	-0.157	-0.0002	-2.5 to 2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 Band26a_OBW

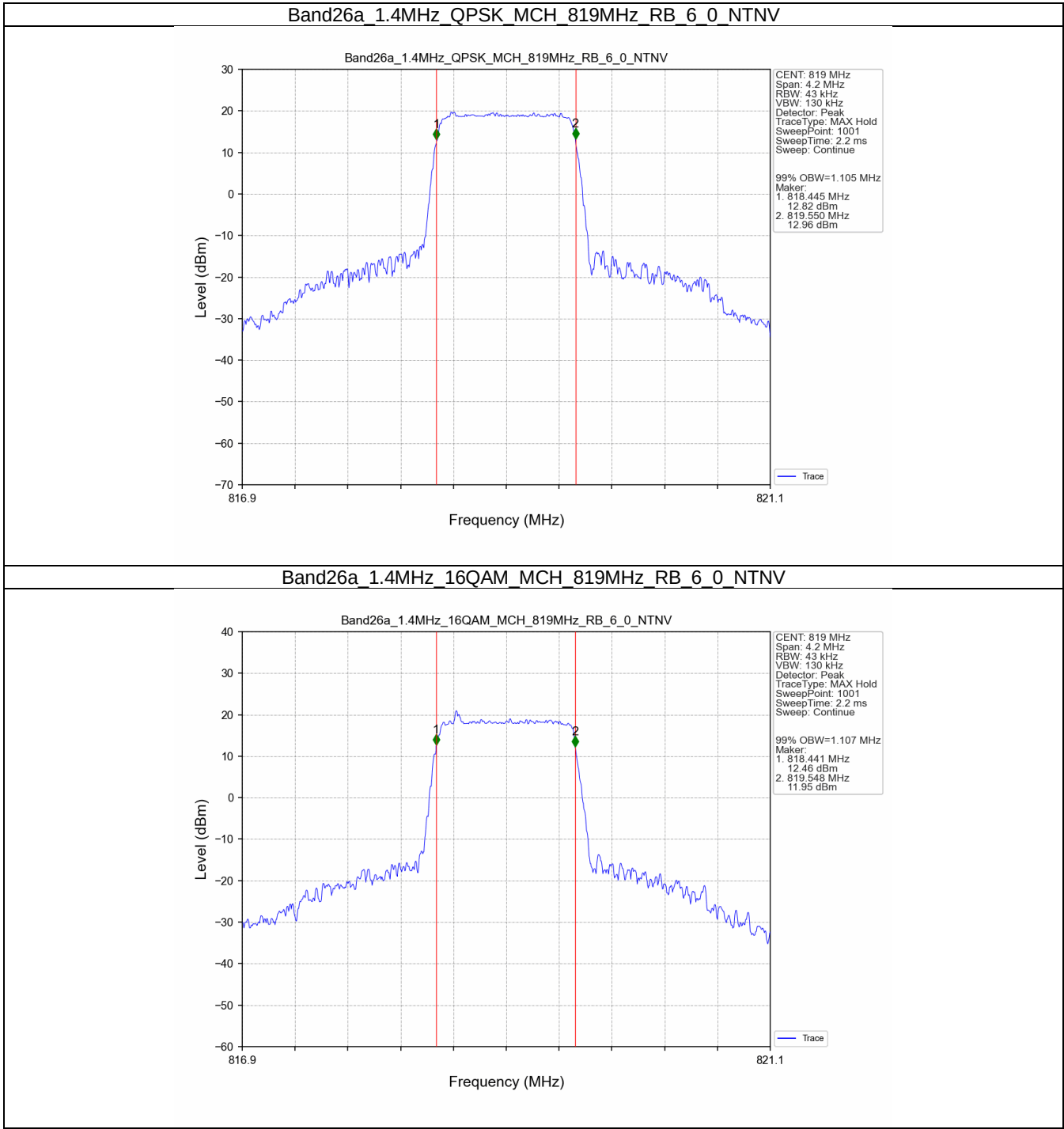
Band: 26a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		99% Occupied Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	819	6	0	1.105	/	Pass
	16QAM	819	6	0	1.107	/	Pass
3	QPSK	819	15	0	2.727	/	Pass
	16QAM	819	15	0	2.724	/	Pass
5	QPSK	819	25	0	4.564	/	Pass
	16QAM	819	25	0	4.541	/	Pass
10	QPSK	819	50	0	9.052	/	Pass
	16QAM	819	27	0	5.082	/	Pass

3.1.2 Band26a_XDB

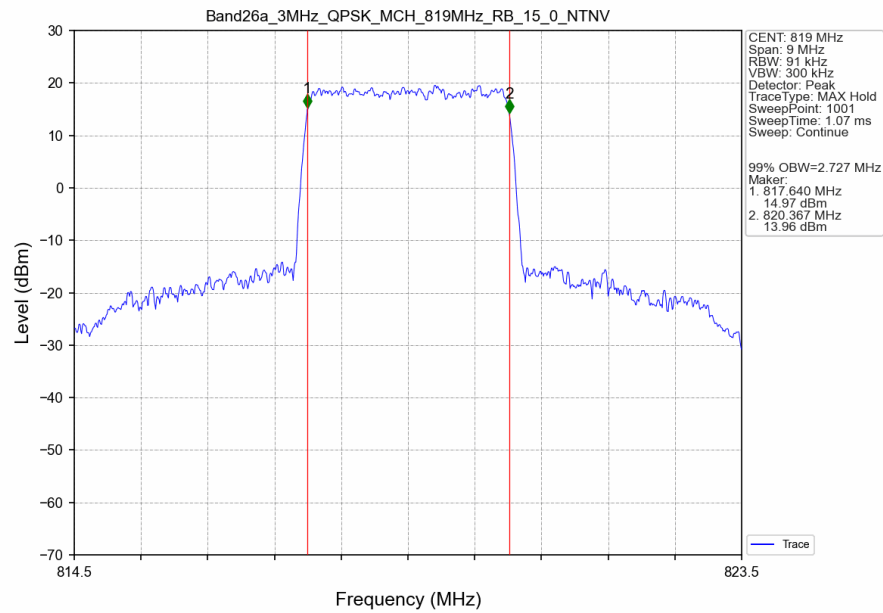
Band: 26a / NTNV							
Bandwidth (MHz)	Modulation	Frequency (MHz)	RB Allocation		26dB Bandwidth (MHz)		Verdict
			Size	Offset	Result	Limit	
1.4	QPSK	819	6	0	1.262	/	Pass
	16QAM	819	6	0	1.265	/	Pass
3	QPSK	819	15	0	2.983	/	Pass
	16QAM	819	15	0	2.966	/	Pass
5	QPSK	819	25	0	5.022	/	Pass
	16QAM	819	25	0	4.991	/	Pass
10	QPSK	819	50	0	9.907	/	Pass
	16QAM	819	27	0	5.946	/	Pass

3.2 Test Graph

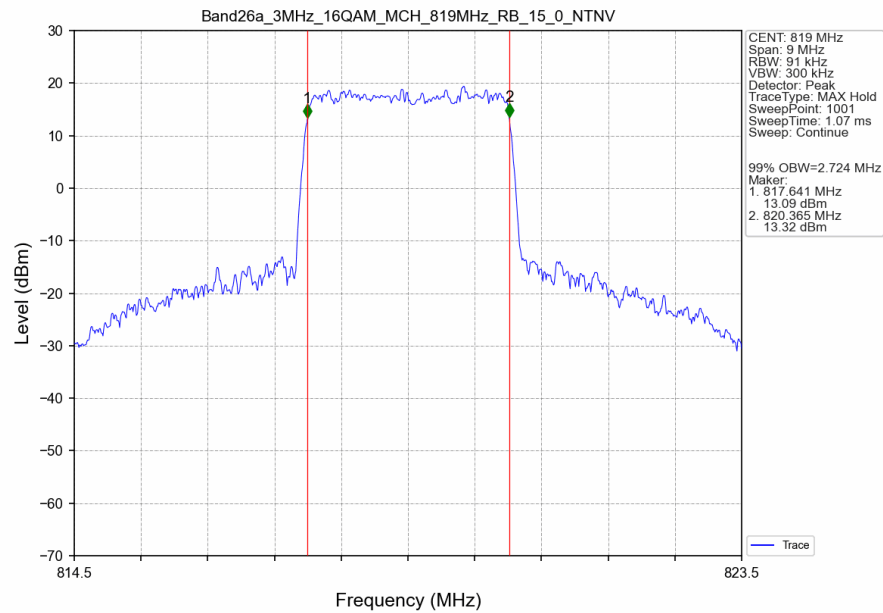
3.2.1 Band26a_OBW



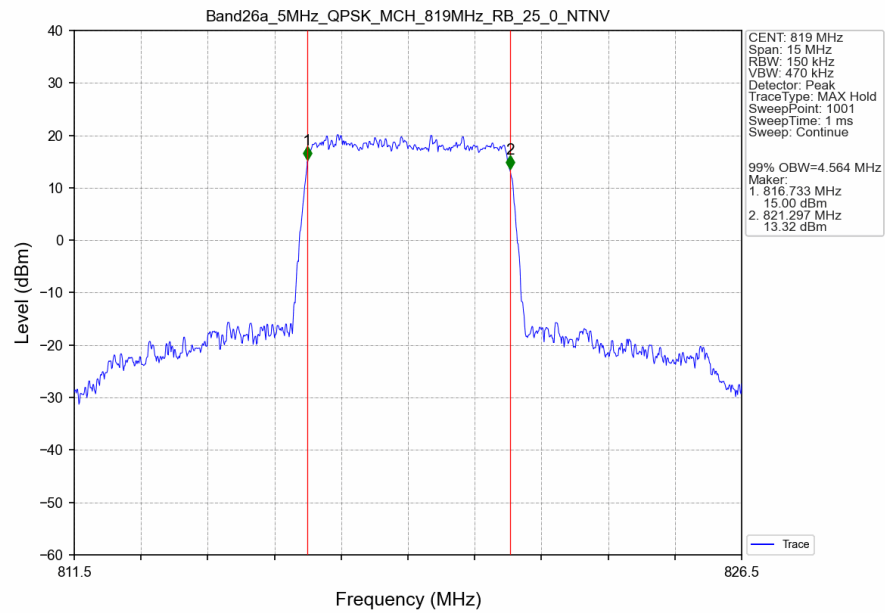
Band26a_3MHz_QPSK_MCH_819MHz_RB_15_0_NTNV



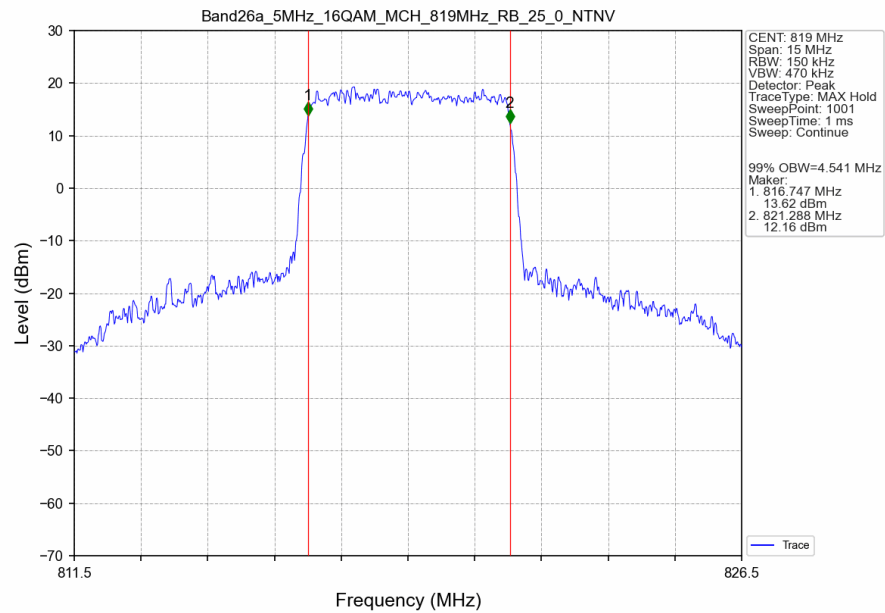
Band26a_3MHz_16QAM_MCH_819MHz_RB_15_0_NTNV



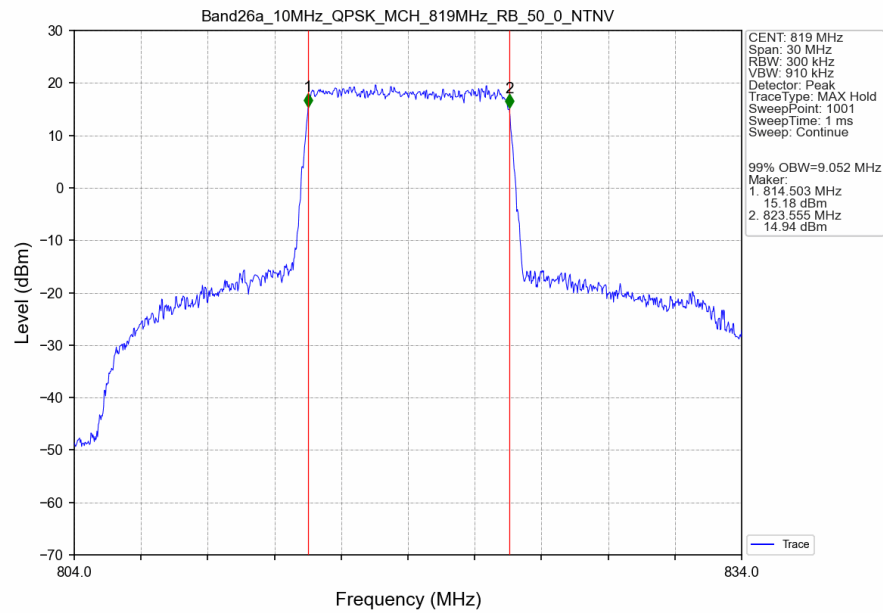
Band26a_5MHz_QPSK_MCH_819MHz_RB_25_0_NTNV



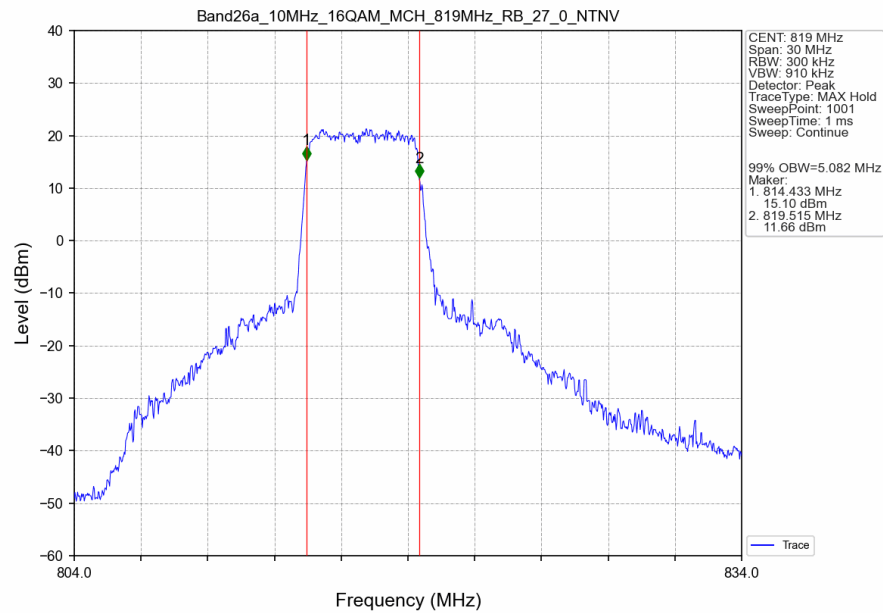
Band26a_5MHz_16QAM_MCH_819MHz_RB_25_0_NTNV



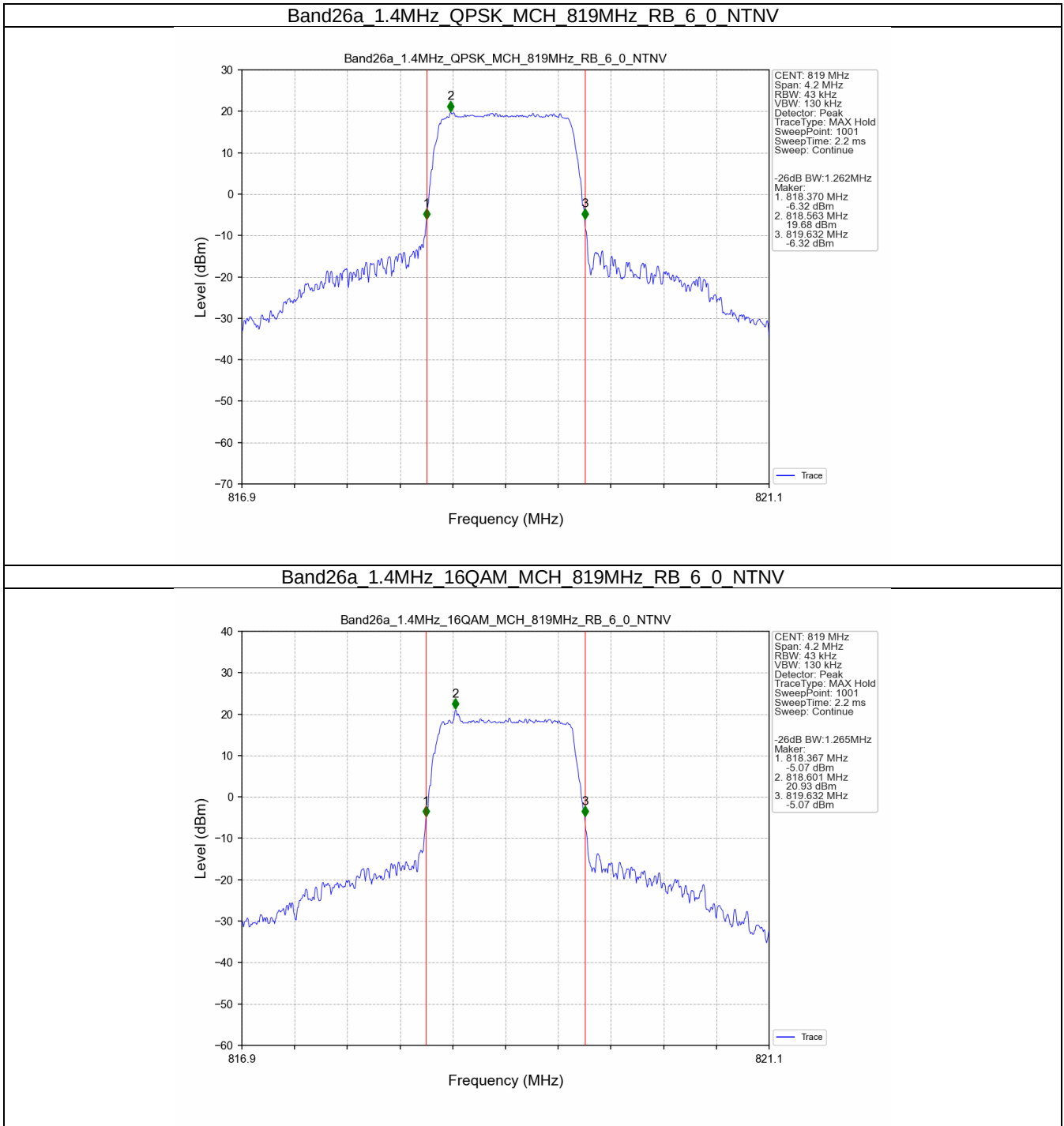
Band26a_10MHz_QPSK_MCH_819MHz_RB_50_0_NTNV



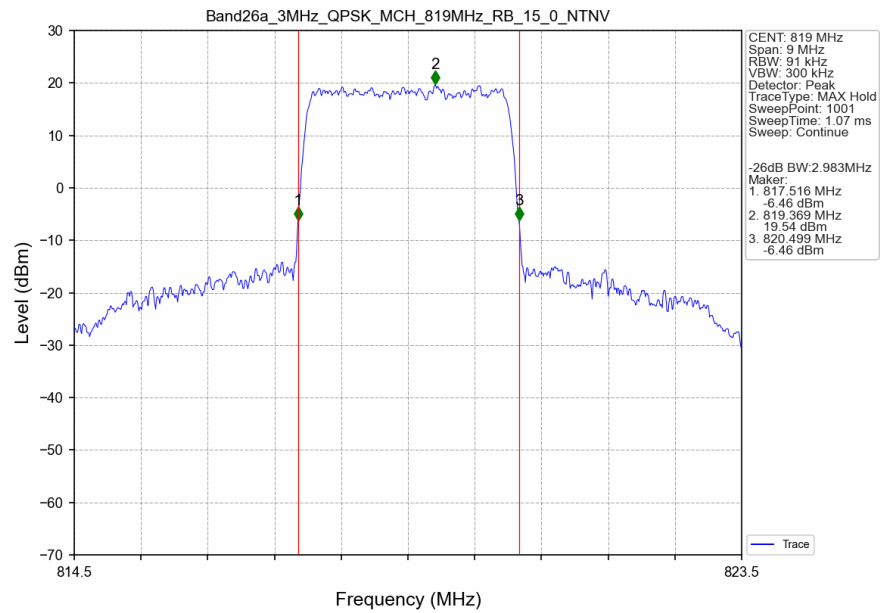
Band26a_10MHz_16QAM_MCH_819MHz_RB_27_0_NTNV



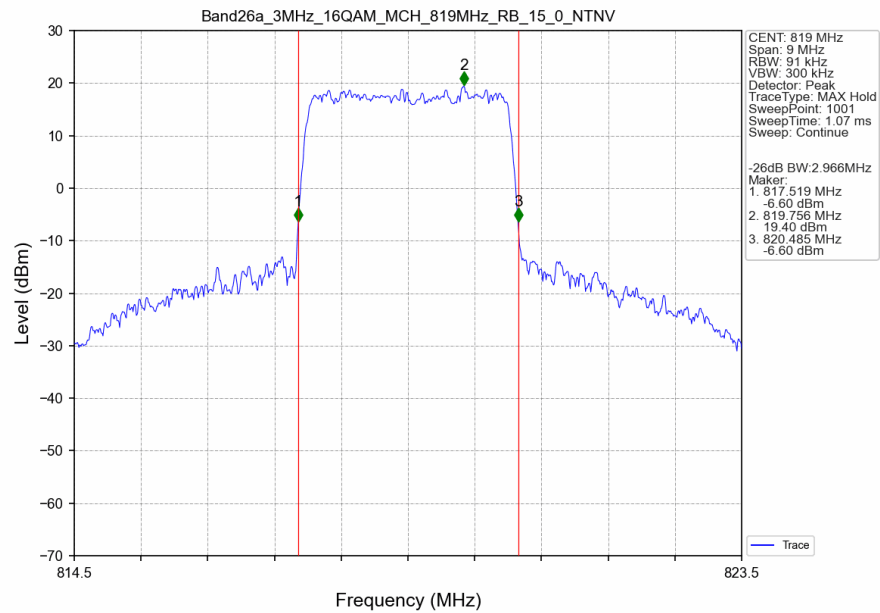
3.2.2 Band26a_XDB



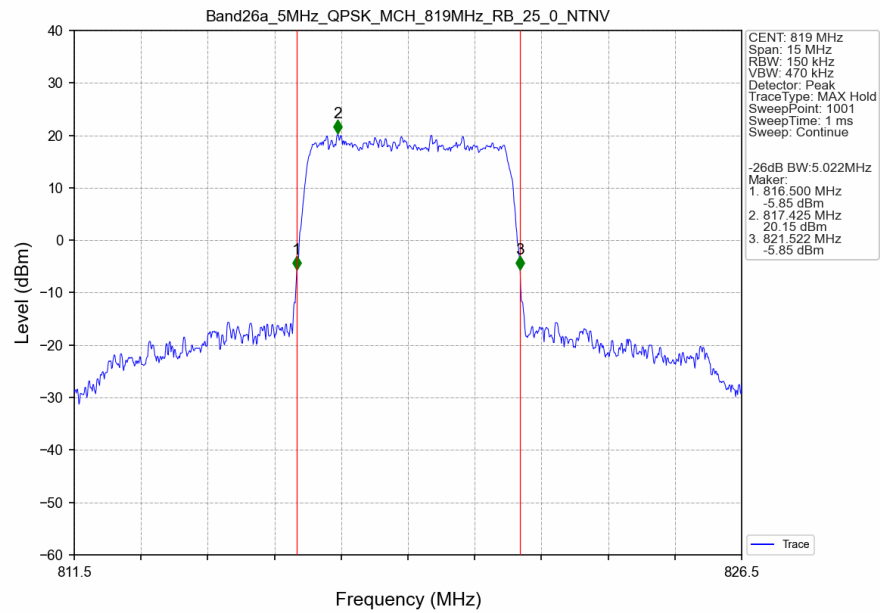
Band26a_3MHz_QPSK_MCH_819MHz_RB_15_0_NTNV



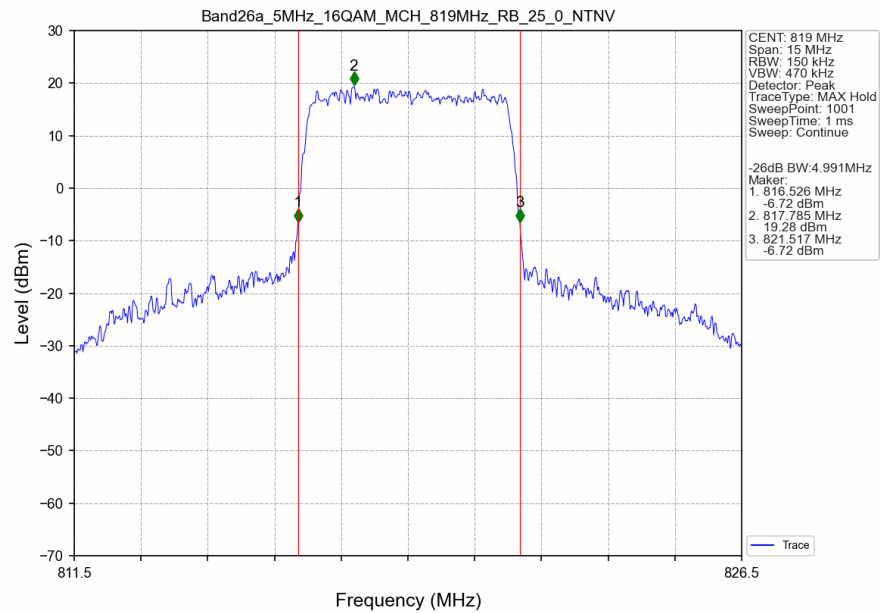
Band26a_3MHz_16QAM_MCH_819MHz_RB_15_0_NTNV



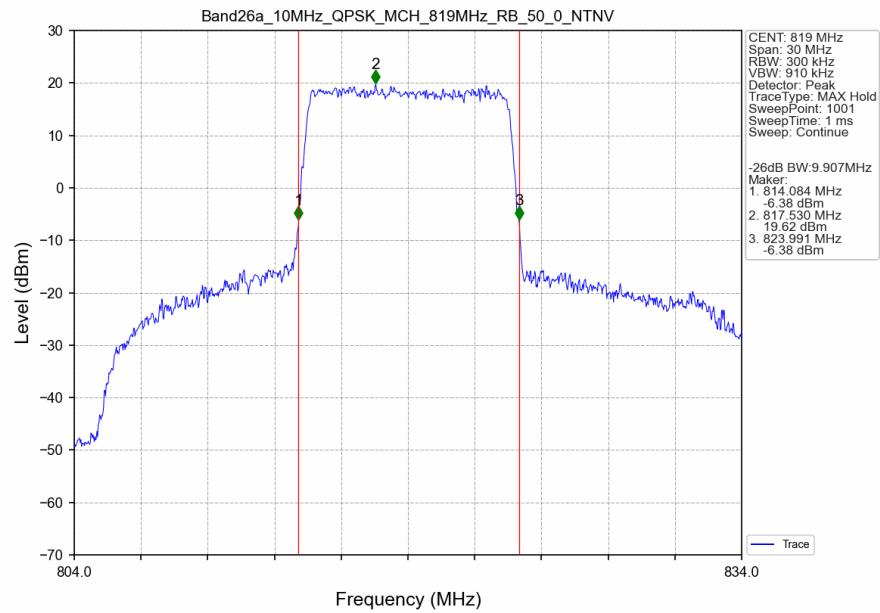
Band26a_5MHz_QPSK_MCH_819MHz_RB_25_0_NTNV



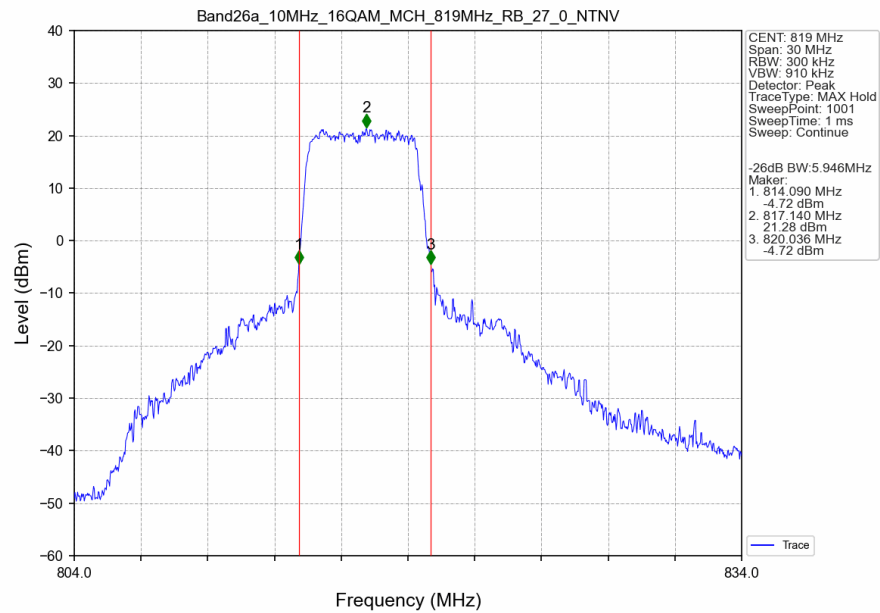
Band26a_5MHz_16QAM_MCH_819MHz_RB_25_0_NTNV



Band26a_10MHz_QPSK_MCH_819MHz_RB_50_0_NTNV



Band26a_10MHz_16QAM_MCH_819MHz_RB_27_0_NTNV



4. Peak-Average Ratio

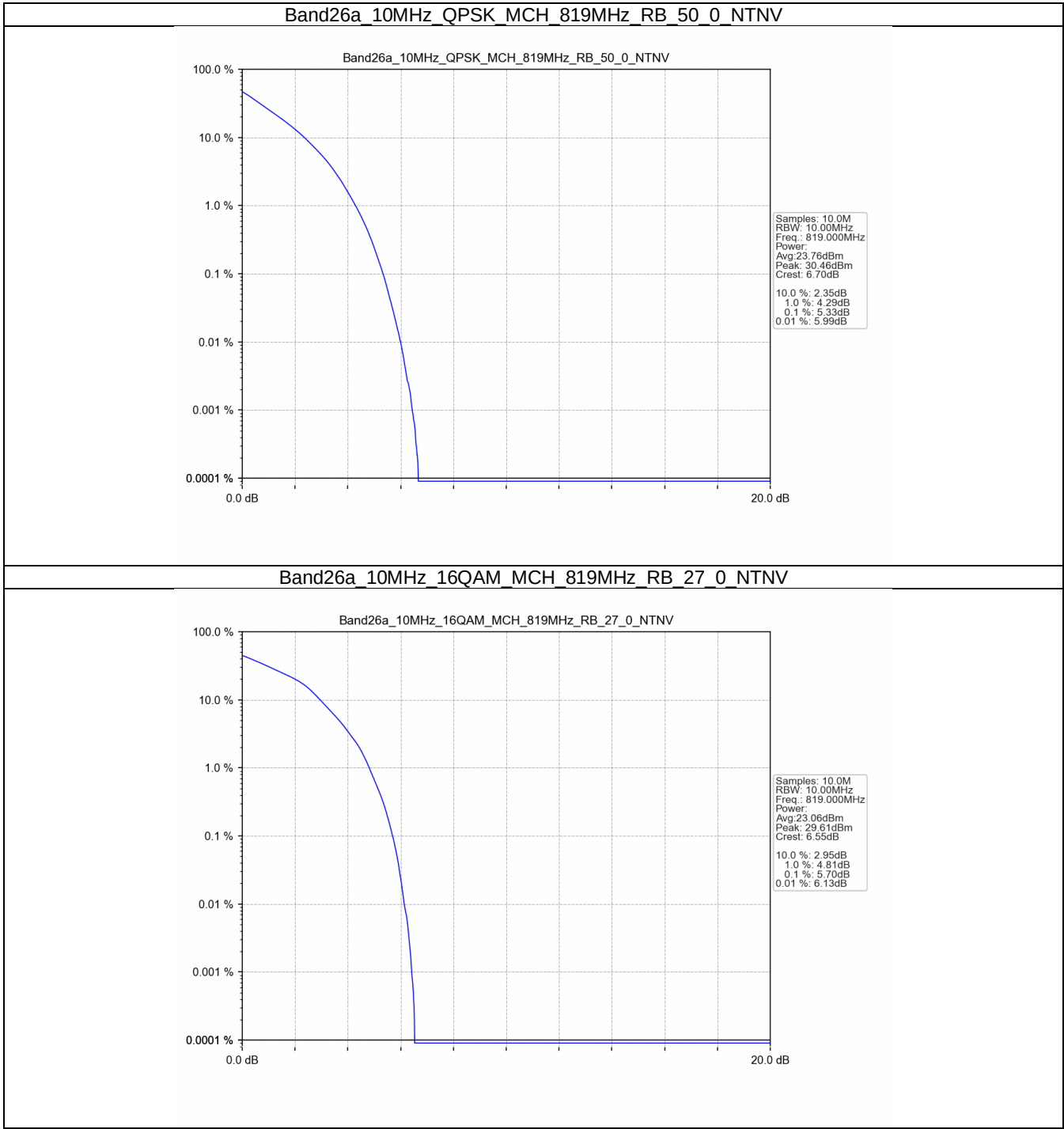
4.1 Test Result

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	5.33	<=13	Pass
16QAM	819	27	0	5.70	<=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 / NTVN						
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

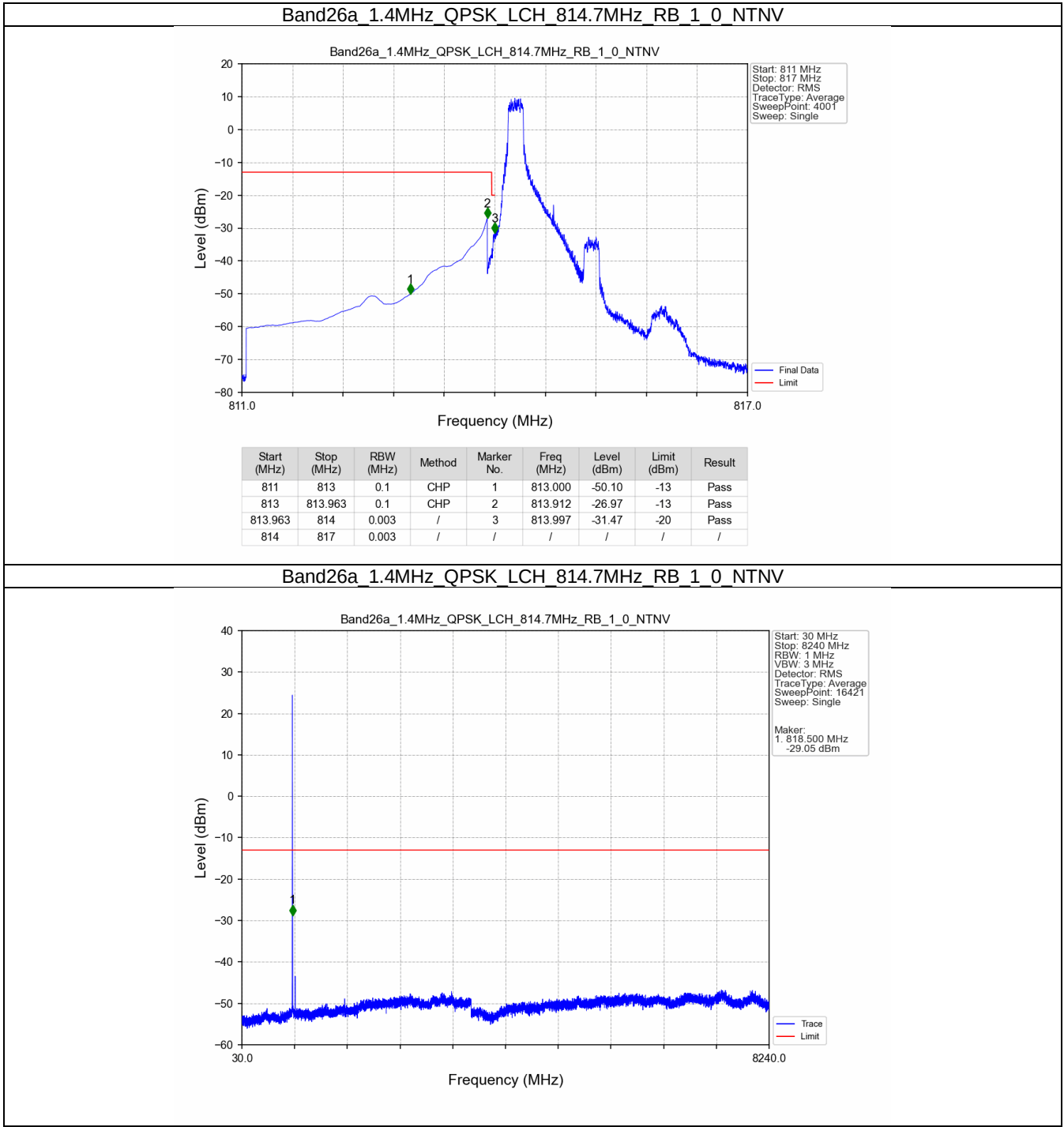
Band: 26a / Bandwidth: 5MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	816.5	1	0	Refer To Test Graph		Pass
		25	0	Refer To Test Graph		Pass
	819	1	0	Refer To Test Graph		Pass
	821.5	1	0	Refer To Test Graph		Pass
			24	Refer To Test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

5.1.4 B26a_10MHz

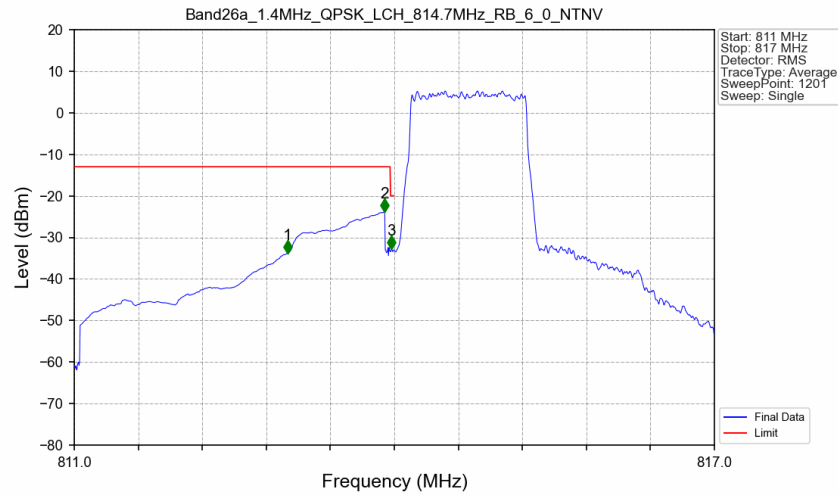
Band: 26a / Bandwidth: 10MHz / NTNV						
Modulation	Frequency (MHz)	RB Allocation		Spurious Emission		Verdict
		Size	Offset	Result	Limit	
QPSK	819	1	0	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass
	819	1	49	Refer To Test Graph		Pass
		50	0	Refer To Test Graph		Pass

5.2 Test Graph

5.2.1 B26a_1.4MHz

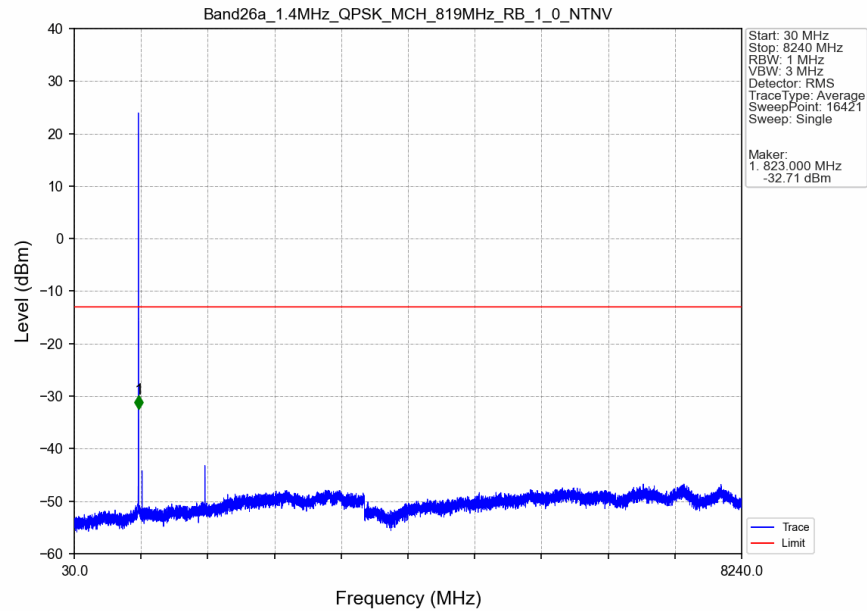


Band26a_1.4MHz_QPSK_LCH_814.7MHz_RB_6_0_NTNV

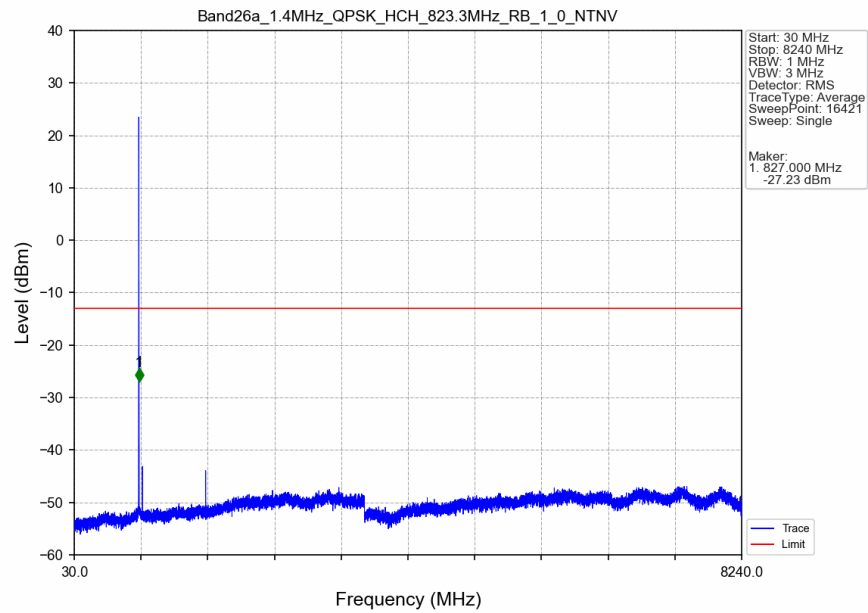


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
811	813	0.1	CHP	1	813.000	-33.86	-13	Pass
813	813.963	0.1	CHP	2	813.910	-23.86	-13	Pass
813.963	814	0.013	CHP	3	813.970	-32.73	-20	Pass
814	817	0.013	CHP	/	/	/	/	/

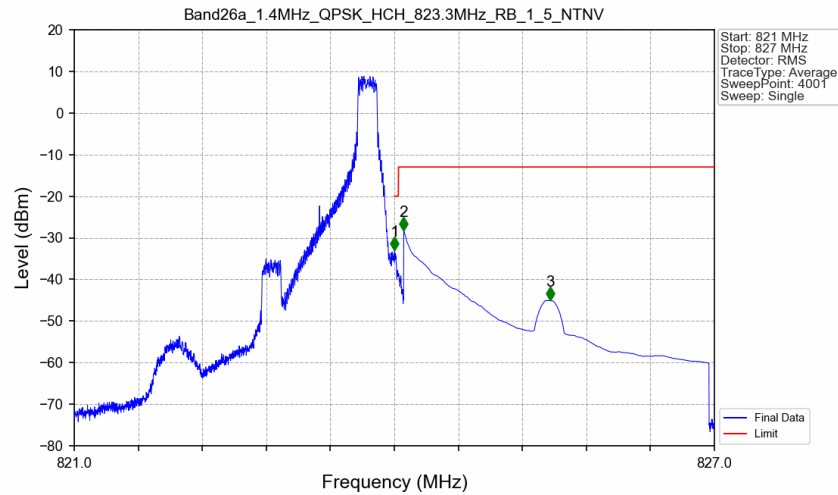
Band26a_1.4MHz_QPSK_MCH_819MHz_RB_1_0_NTNV



Band26a 1.4MHz QPSK HCH 823.3MHz RB 1 0 NTNV

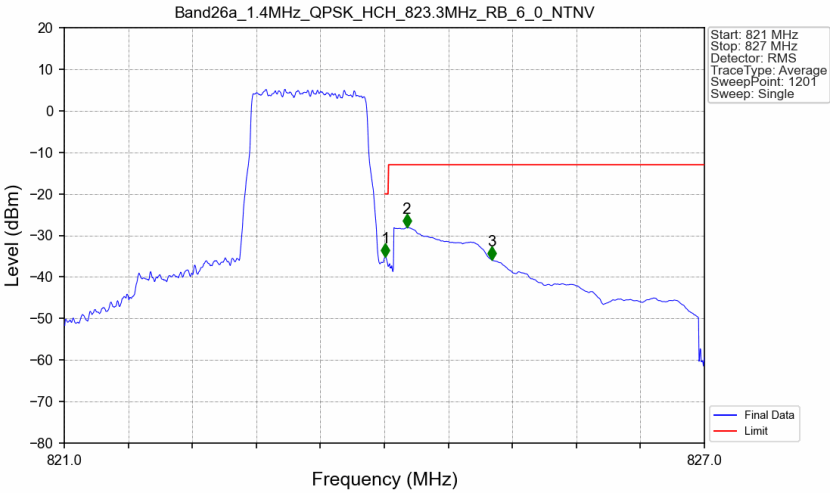


Band26a 1.4MHz QPSK HCH 823.3MHz RB 1 5 NTNV



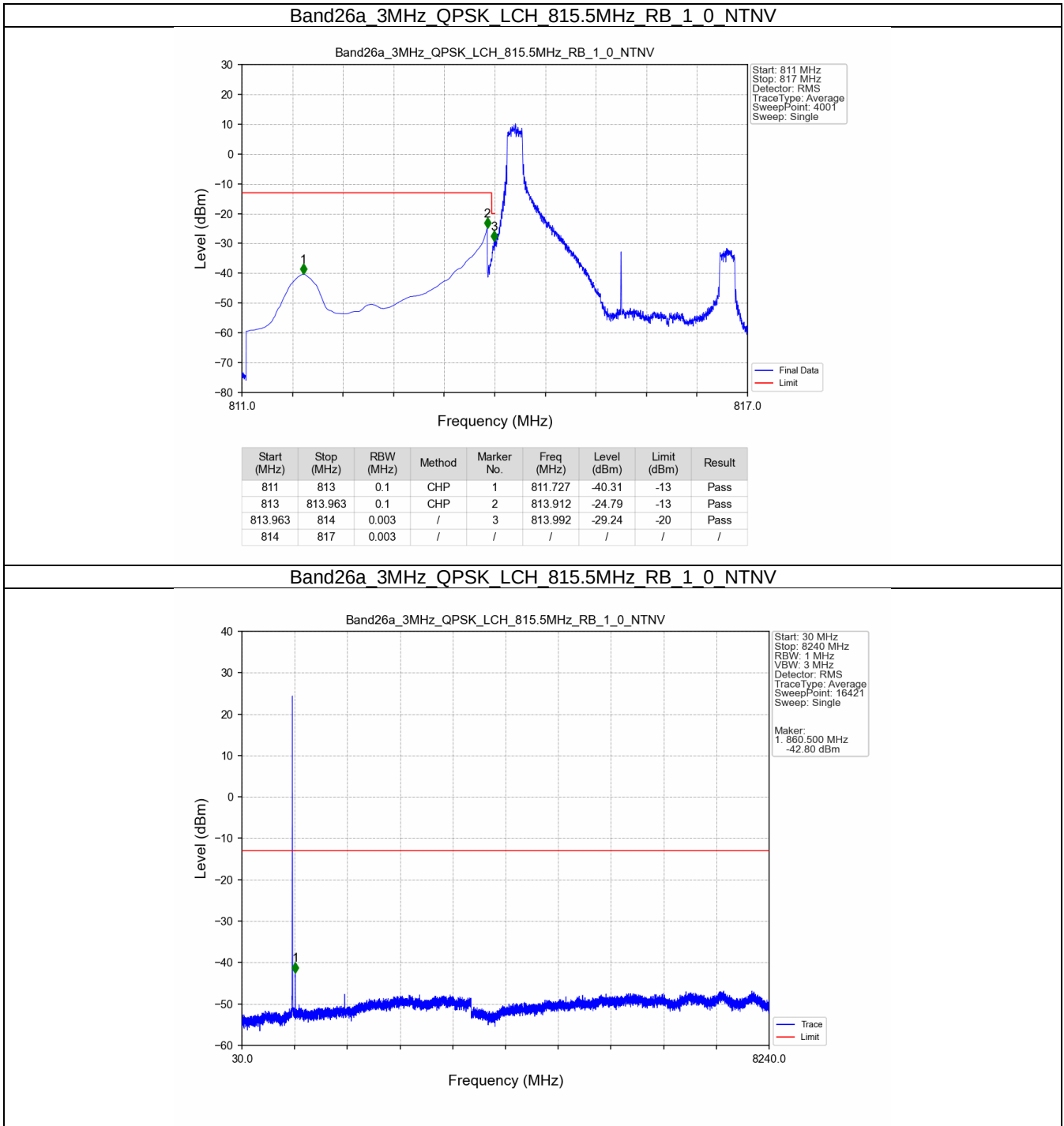
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.003	-32.90	-20	Pass
824.038	825	0.1	CHP	2	824.088	-28.15	-13	Pass
825	827	0.1	CHP	3	825.458	-45.04	-13	Pass

Band26a 1.4MHz QPSK HCH 823.3MHz RB 6 0 NTV

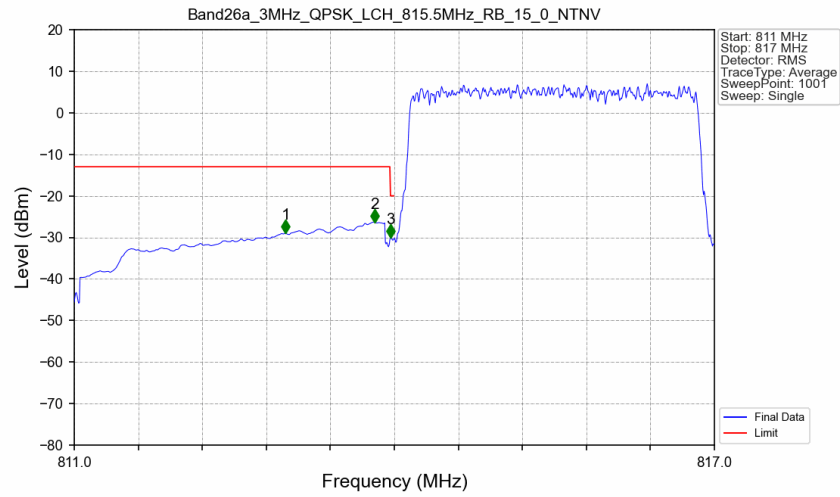


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.013	CHP	/	/	/	/	/
824	824.038	0.013	CHP	1	824.010	-35.12	-20	Pass
824.038	825	0.1	CHP	2	824.210	-28.09	-13	Pass
825	827	0.1	CHP	3	825.005	-35.81	-13	Pass

5.2.2 B26a_3MHz

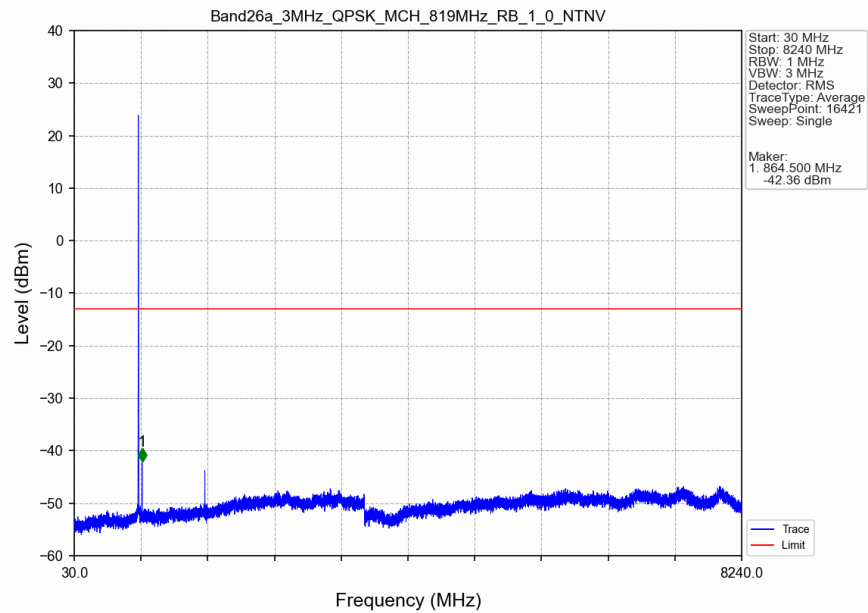


Band26a 3MHz QPSK LCH 815.5MHz RB 15 0 NTN

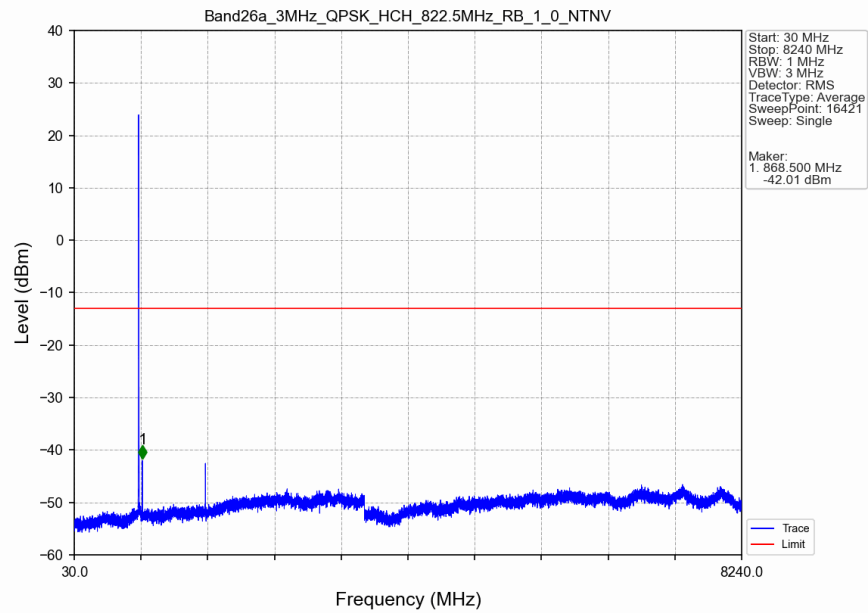


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
811	813	0.1	CHP	1	812.980	-29.02	-13	Pass
813	813.963	0.1	CHP	2	813.814	-26.32	-13	Pass
813.963	814	0.03	/	3	813.964	-30.04	-20	Pass
814	817	0.03	/	/	/	/	/	/

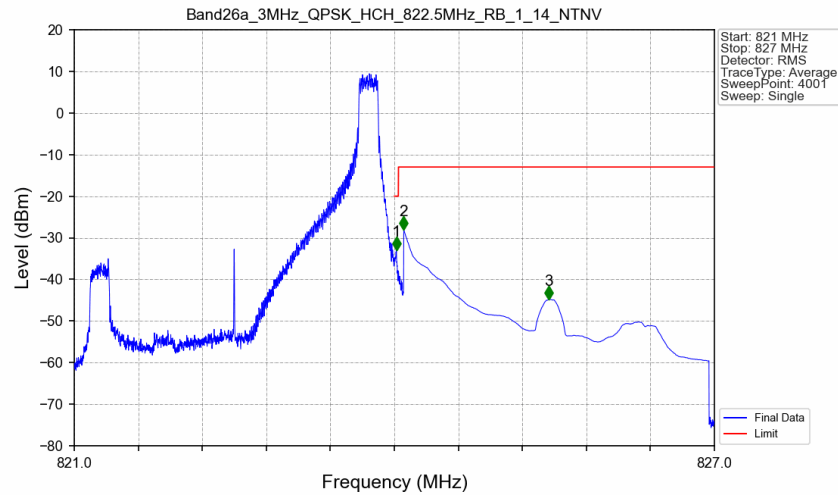
Band26a 3MHz QPSK MCH 819MHz RB 1 0 NTN



Band26a 3MHz QPSK HCH 822.5MHz RB 1 0 NTV

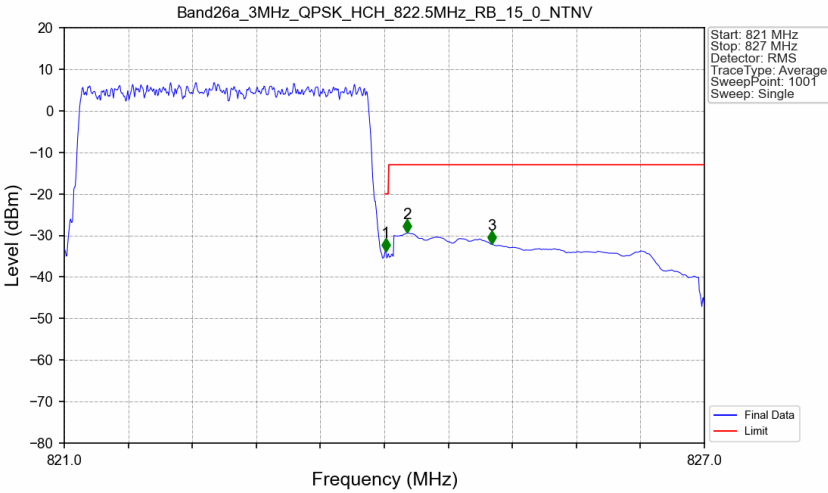


Band26a 3MHz QPSK HCH 822.5MHz RB 1 14 NTV



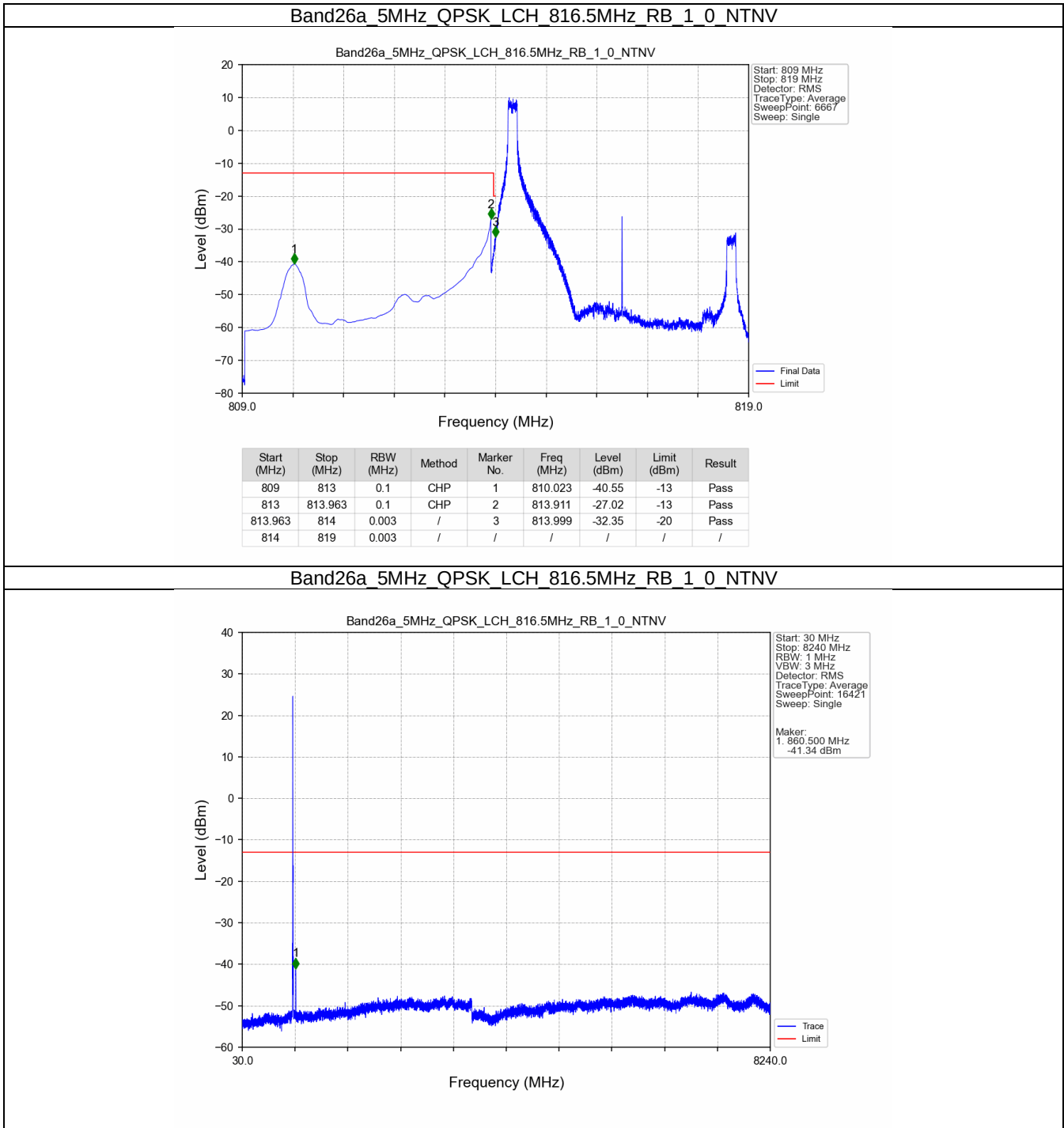
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.019	-32.99	-20	Pass
824.038	825	0.1	CHP	2	824.088	-27.97	-13	Pass
825	827	0.1	CHP	3	825.449	-44.82	-13	Pass

Band26a 3MHz QPSK HCH 822.5MHz RB 15 0 NTV

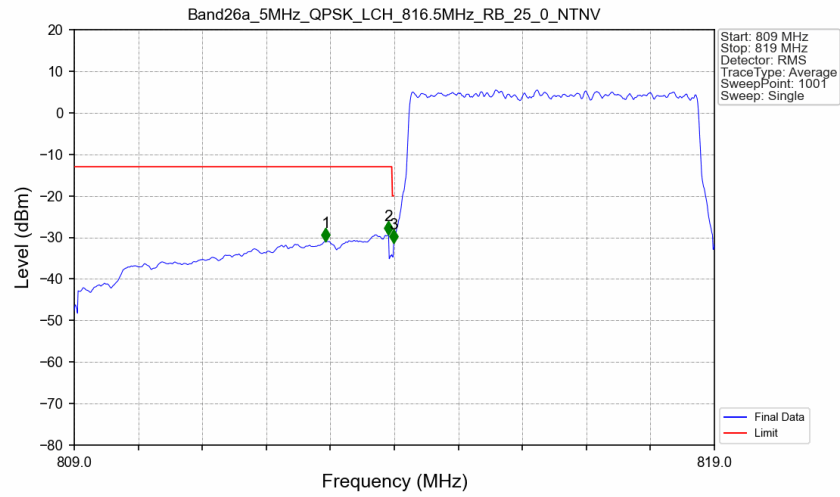


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
821	824	0.03	/	/	/	/	/	/
824	824.038	0.03	/	1	824.012	-33.85	-20	Pass
824.038	825	0.1	CHP	2	824.216	-29.36	-13	Pass
825	827	0.1	CHP	3	825.008	-32.10	-13	Pass

5.2.3 B26a_5MHz

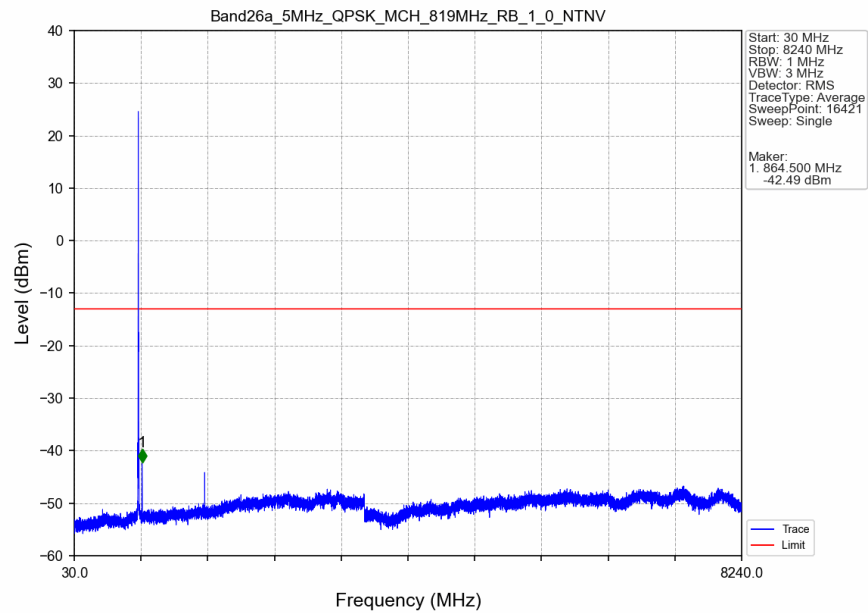


Band26a 5MHz QPSK LCH 816.5MHz RB 25 0 NTN

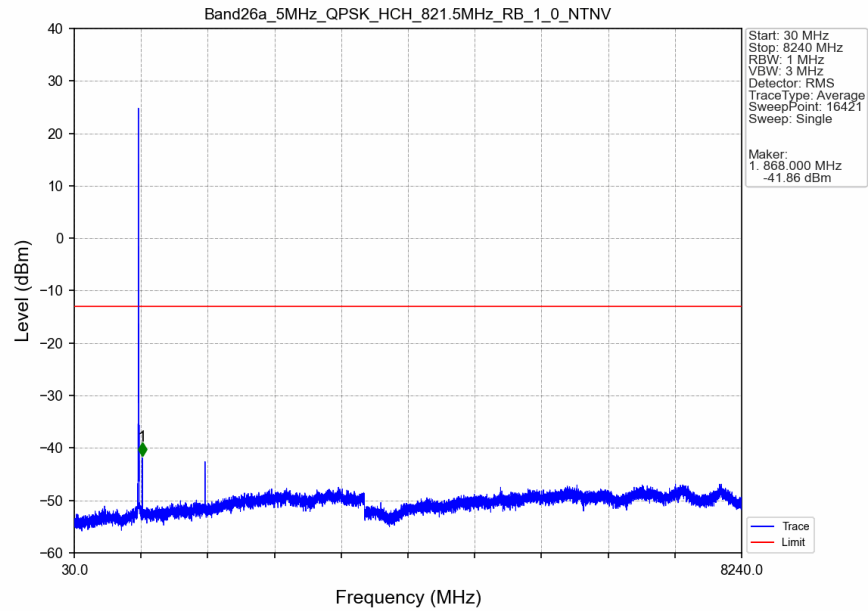


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	CHP	1	812.930	-30.96	-13	Pass
813	813.963	0.1	CHP	2	813.910	-29.33	-13	Pass
813.963	814	0.05	CHP	3	813.990	-31.34	-20	Pass
814	819	0.05	CHP	/	/	/	/	/

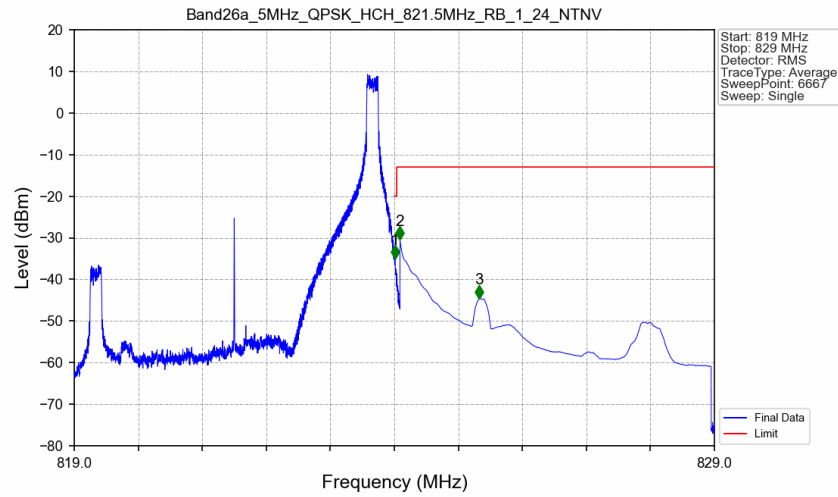
Band26a 5MHz QPSK MCH 819MHz RB 1 0 NTN



Band26a 5MHz QPSK HCH 821.5MHz RB 1 0 NTV

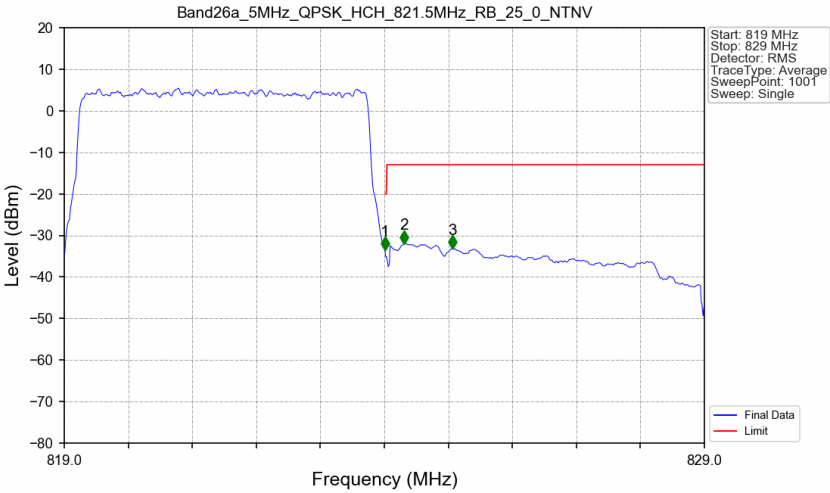


Band26a 5MHz QPSK HCH 821.5MHz RB 1 24 NTV



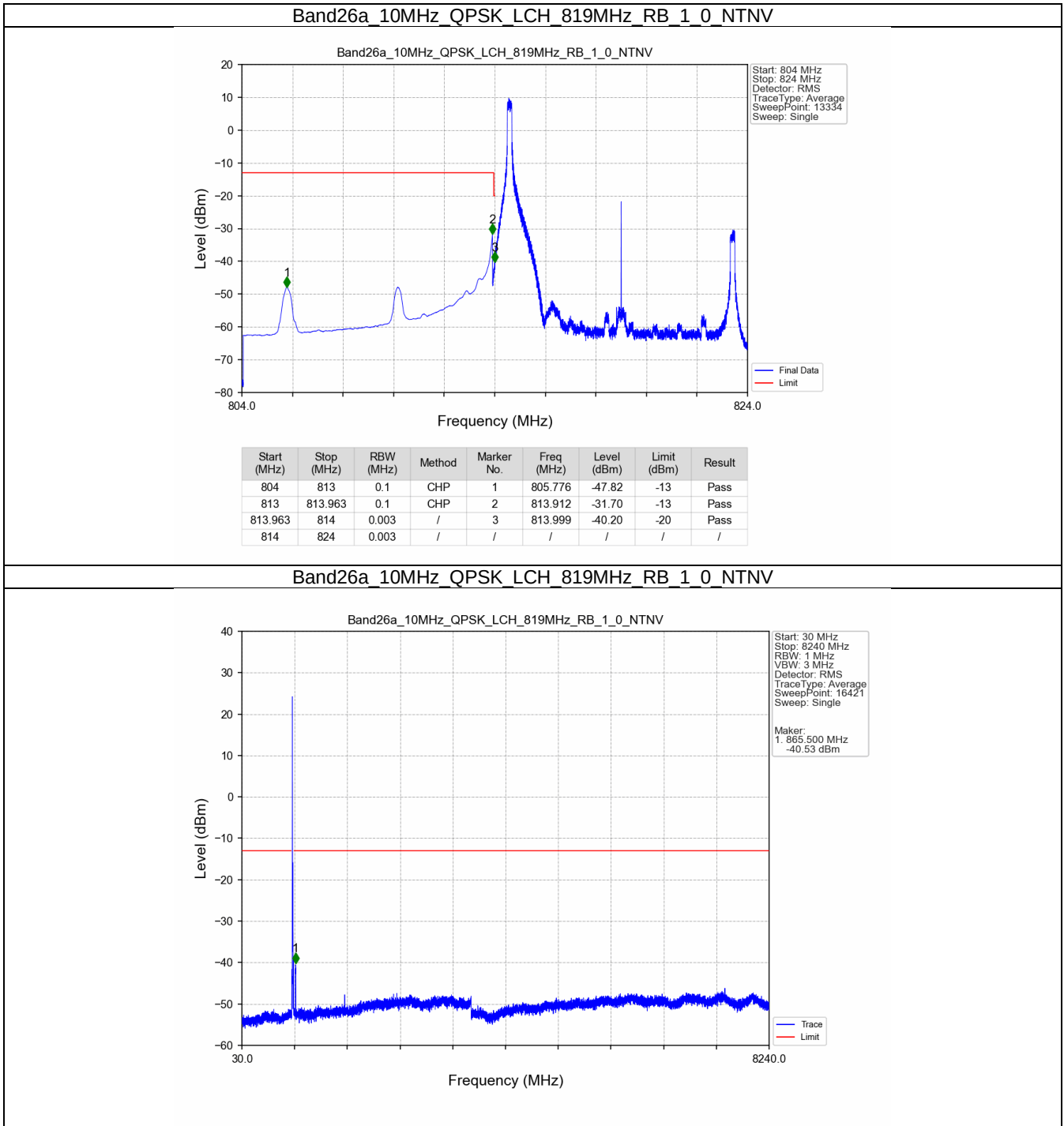
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.012	-35.00	-20	Pass
824.038	825	0.1	CHP	2	824.089	-30.37	-13	Pass
825	829	0.1	CHP	3	825.326	-44.52	-13	Pass

Band26a 5MHz QPSK HCH 821.5MHz RB 25 0 NTNV

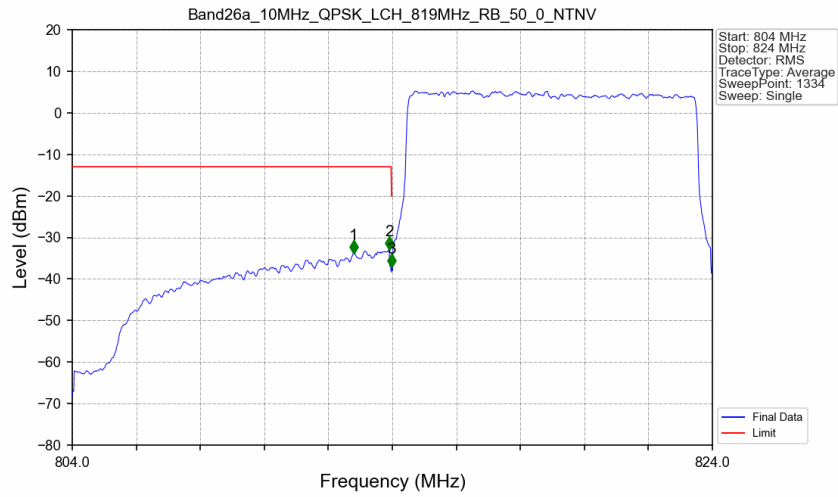


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.05	CHP	/	/	/	/	/
824	824.038	0.05	CHP	1	824.010	-33.54	-20	Pass
824.038	825	0.1	CHP	2	824.310	-31.95	-13	Pass
825	829	0.1	CHP	3	825.060	-33.19	-13	Pass

5.2.4 B26a_10MHz

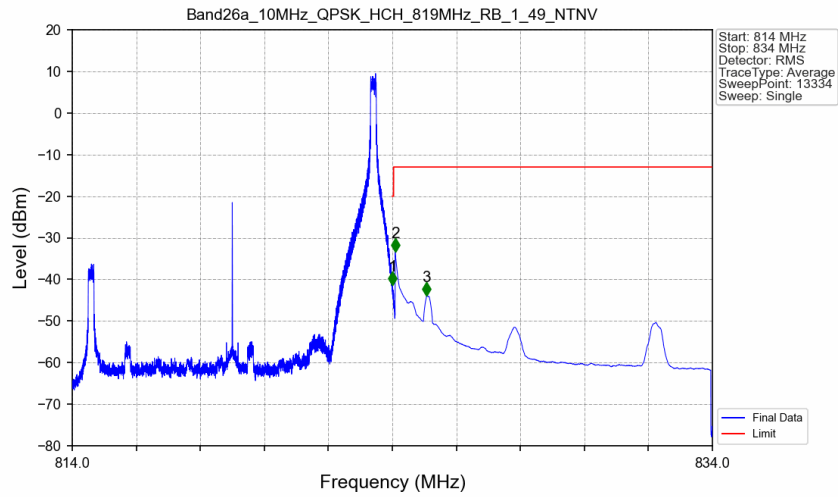


Band26a_10MHz_QPSK_LCH_819MHz_RB_50_0_NTNV



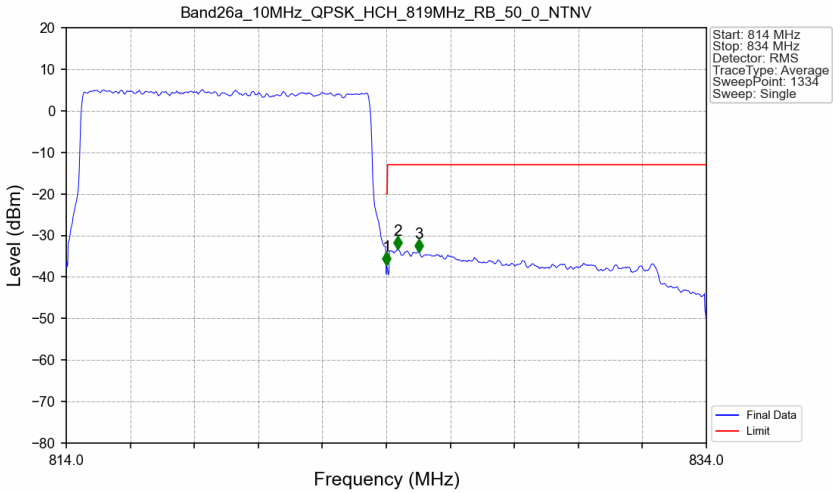
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
804	813	0.1	CHP	1	812.792	-33.79	-13	Pass
813	813.963	0.1	CHP	2	813.902	-32.96	-13	Pass
813.963	814	0.099	CHP	3	813.977	-37.17	-20	Pass
814	824	0.099	CHP	/	/	/	/	/

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	824.010	-41.41	-20	Pass
824.038	825	0.1	CHP	2	824.088	-33.36	-13	Pass
825	834	0.1	CHP	3	825.075	-43.90	-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	0.099	CHP	/	/	/	/	/
824	824.038	0.099	CHP	1	824.008	-37.20	-20	Pass
824.038	825	0.1	CHP	2	824.353	-33.23	-13	Pass
825	834	0.1	CHP	3	825.013	-34.01	-13	Pass

6. Field Strength of Spurious Radiation

LTE Band 26a(814-824MHz)-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	-62.78	-13	-49.78	-65.71	2.62	5.55	Horizontal	Pass
2443.5	-60.34	-13	-47.34	-62.98	3.04	5.68	Horizontal	Pass
3258.0	-58.04	-13	-45.04	-62.32	3.28	7.56	Horizontal	Pass
1629.0	-63.3	-13	-50.3	-66.23	2.62	5.55	Vertical	Pass
2443.5	-60.91	-13	-47.91	-63.55	3.04	5.68	Vertical	Pass
3258.0	-58.9	-13	-45.9	-63.18	3.28	7.56	Vertical	Pass