

1. Effective (Isotropic) Radiated Power Output Data

1.1 Test Result

1.1.1 15_S_5M_NTNV_ERP

5G NR n26a SCS=15kHz SISO 5MHz NTN										
Modulation	Frequency (MHz)	RB Allocation	Conducted Power(dBm)			ERP(dBm)				Verdict
			Ant0	Ant2	Sum	Ant0	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	816.5	Edge 1RB Left	21.90	/	/	22.75	/	/	<=50	Pass
		Edge 1RB Right	22.15	/	/	23.00	/	/	<=50	Pass
		Outer Full	22.07	/	/	22.92	/	/	<=50	Pass
		Inner Full	22.04	/	/	22.89	/	/	<=50	Pass
		Inner 1RB Left	21.96	/	/	22.81	/	/	<=50	Pass
		Inner 1RB Right	22.16	/	/	23.01	/	/	<=50	Pass
	819	Edge 1RB Left	21.91	/	/	22.76	/	/	<=50	Pass
		Edge 1RB Right	22.05	/	/	22.90	/	/	<=50	Pass
		Outer Full	22.14	/	/	22.99	/	/	<=50	Pass
		Inner Full	22.07	/	/	22.92	/	/	<=50	Pass
		Inner 1RB Left	22.01	/	/	22.86	/	/	<=50	Pass
		Inner 1RB Right	22.09	/	/	22.94	/	/	<=50	Pass
	821.5	Edge 1RB Left	22.04	/	/	22.89	/	/	<=50	Pass
		Edge 1RB Right	22.05	/	/	22.90	/	/	<=50	Pass
		Outer Full	22.05	/	/	22.90	/	/	<=50	Pass
		Inner Full	22.00	/	/	22.85	/	/	<=50	Pass
		Inner 1RB Left	21.98	/	/	22.83	/	/	<=50	Pass
		Inner 1RB Right	22.00	/	/	22.85	/	/	<=50	Pass
DFT-s-OFDM QPSK	816.5	Edge 1RB Left	21.96	/	/	22.81	/	/	<=50	Pass
		Edge 1RB Right	22.14	/	/	22.99	/	/	<=50	Pass
		Outer Full	22.01	/	/	22.86	/	/	<=50	Pass
		Inner Full	21.96	/	/	22.81	/	/	<=50	Pass
		Inner 1RB Left	21.93	/	/	22.78	/	/	<=50	Pass
		Inner 1RB Right	22.12	/	/	22.97	/	/	<=50	Pass
	819	Edge 1RB Left	21.93	/	/	22.78	/	/	<=50	Pass
		Edge 1RB Right	22.00	/	/	22.85	/	/	<=50	Pass
		Outer Full	22.05	/	/	22.90	/	/	<=50	Pass
		Inner Full	22.04	/	/	22.89	/	/	<=50	Pass
		Inner 1RB Left	21.97	/	/	22.82	/	/	<=50	Pass
		Inner 1RB Right	22.04	/	/	22.89	/	/	<=50	Pass
	821.5	Edge 1RB Left	22.01	/	/	22.86	/	/	<=50	Pass
		Edge 1RB Right	22.10	/	/	22.95	/	/	<=50	Pass
		Outer Full	22.05	/	/	22.90	/	/	<=50	Pass
		Inner Full	21.85	/	/	22.70	/	/	<=50	Pass
		Inner 1RB Left	21.95	/	/	22.80	/	/	<=50	Pass
		Inner 1RB Right	21.96	/	/	22.81	/	/	<=50	Pass
DFT-s-OFDM 16 QAM	816.5	Edge 1RB Left	20.93	/	/	21.78	/	/	<=50	Pass
		Edge 1RB Right	20.92	/	/	21.77	/	/	<=50	Pass
		Outer Full	21.05	/	/	21.90	/	/	<=50	Pass
		Inner Full	22.02	/	/	22.87	/	/	<=50	Pass
		Inner 1RB Left	21.82	/	/	22.67	/	/	<=50	Pass
		Inner 1RB Right	21.90	/	/	22.75	/	/	<=50	Pass
	819	Edge 1RB Left	20.88	/	/	21.73	/	/	<=50	Pass
		Edge 1RB Right	20.91	/	/	21.76	/	/	<=50	Pass
		Outer Full	21.17	/	/	22.02	/	/	<=50	Pass
		Inner Full	22.21	/	/	23.06	/	/	<=50	Pass

		Inner_1RB_Left	21.78	/	/	22.63	/	/	<=50	Pass
		Inner_1RB_Right	21.81	/	/	22.66	/	/	<=50	Pass
	821.5	Edge_1RB_Left	20.71	/	/	21.56	/	/	<=50	Pass
		Edge_1RB_Right	20.88	/	/	21.73	/	/	<=50	Pass
		Outer_Full	20.90	/	/	21.75	/	/	<=50	Pass
		Inner_Full	21.97	/	/	22.82	/	/	<=50	Pass
		Inner_1RB_Left	21.58	/	/	22.43	/	/	<=50	Pass
		Inner_1RB_Right	21.71	/	/	22.56	/	/	<=50	Pass
DFT-s-OFDM 64 QAM	816.5	Edge_1RB_Left	20.72	/	/	21.57	/	/	<=50	Pass
		Edge_1RB_Right	20.84	/	/	21.69	/	/	<=50	Pass
		Outer_Full	20.51	/	/	21.36	/	/	<=50	Pass
		Inner_Full	20.54	/	/	21.39	/	/	<=50	Pass
		Inner_1RB_Left	20.73	/	/	21.58	/	/	<=50	Pass
		Inner_1RB_Right	20.86	/	/	21.71	/	/	<=50	Pass
	819	Edge_1RB_Left	20.67	/	/	21.52	/	/	<=50	Pass
		Edge_1RB_Right	20.78	/	/	21.63	/	/	<=50	Pass
		Outer_Full	20.66	/	/	21.51	/	/	<=50	Pass
		Inner_Full	20.69	/	/	21.54	/	/	<=50	Pass
		Inner_1RB_Left	20.73	/	/	21.58	/	/	<=50	Pass
		Inner_1RB_Right	20.84	/	/	21.69	/	/	<=50	Pass
	821.5	Edge_1RB_Left	20.76	/	/	21.61	/	/	<=50	Pass
		Edge_1RB_Right	20.75	/	/	21.60	/	/	<=50	Pass
		Outer_Full	20.48	/	/	21.33	/	/	<=50	Pass
		Inner_Full	20.58	/	/	21.43	/	/	<=50	Pass
		Inner_1RB_Left	20.80	/	/	21.65	/	/	<=50	Pass
		Inner_1RB_Right	20.76	/	/	21.61	/	/	<=50	Pass
DFT-s-OFDM 256 QAM	816.5	Edge_1RB_Left	17.92	/	/	18.77	/	/	<=50	Pass
		Edge_1RB_Right	18.13	/	/	18.98	/	/	<=50	Pass
		Outer_Full	18.43	/	/	19.28	/	/	<=50	Pass
		Inner_Full	18.55	/	/	19.40	/	/	<=50	Pass
		Inner_1RB_Left	17.92	/	/	18.77	/	/	<=50	Pass
		Inner_1RB_Right	18.18	/	/	19.03	/	/	<=50	Pass
	819	Edge_1RB_Left	17.92	/	/	18.77	/	/	<=50	Pass
		Edge_1RB_Right	18.08	/	/	18.93	/	/	<=50	Pass
		Outer_Full	18.63	/	/	19.48	/	/	<=50	Pass
		Inner_Full	18.65	/	/	19.50	/	/	<=50	Pass
		Inner_1RB_Left	18.00	/	/	18.85	/	/	<=50	Pass
		Inner_1RB_Right	18.08	/	/	18.93	/	/	<=50	Pass
	821.5	Edge_1RB_Left	18.00	/	/	18.85	/	/	<=50	Pass
		Edge_1RB_Right	17.96	/	/	18.81	/	/	<=50	Pass
		Outer_Full	18.47	/	/	19.32	/	/	<=50	Pass
		Inner_Full	18.53	/	/	19.38	/	/	<=50	Pass
		Inner_1RB_Left	17.98	/	/	18.83	/	/	<=50	Pass
		Inner_1RB_Right	18.02	/	/	18.87	/	/	<=50	Pass
CP-OFDM QPSK	816.5	Edge_1RB_Left	19.82	/	/	20.67	/	/	<=50	Pass
		Edge_1RB_Right	20.10	/	/	20.95	/	/	<=50	Pass
		Outer_Full	20.18	/	/	21.03	/	/	<=50	Pass
		Inner_Full	21.52	/	/	22.37	/	/	<=50	Pass
		Inner_1RB_Left	21.43	/	/	22.28	/	/	<=50	Pass
		Inner_1RB_Right	21.61	/	/	22.46	/	/	<=50	Pass
	819	Edge_1RB_Left	20.01	/	/	20.86	/	/	<=50	Pass
		Edge_1RB_Right	20.00	/	/	20.85	/	/	<=50	Pass
		Outer_Full	20.19	/	/	21.04	/	/	<=50	Pass
		Inner_Full	21.62	/	/	22.47	/	/	<=50	Pass
		Inner_1RB_Left	21.36	/	/	22.21	/	/	<=50	Pass
		Inner_1RB_Right	21.62	/	/	22.47	/	/	<=50	Pass

	821.5	Edge_1RB_Left	19.94	/	/	20.79	/	/	<=50	Pass
		Edge_1RB_Right	19.99	/	/	20.84	/	/	<=50	Pass
		Outer_Full	20.05	/	/	20.90	/	/	<=50	Pass
		Inner_Full	21.57	/	/	22.42	/	/	<=50	Pass
		Inner_1RB_Left	21.56	/	/	22.41	/	/	<=50	Pass
		Inner_1RB_Right	21.55	/	/	22.40	/	/	<=50	Pass
CP-OFDM 16 QAM	816.5	Edge_1RB_Left	20.03	/	/	20.88	/	/	<=50	Pass
		Edge_1RB_Right	20.32	/	/	21.17	/	/	<=50	Pass
		Outer_Full	20.05	/	/	20.90	/	/	<=50	Pass
		Inner_Full	20.95	/	/	21.80	/	/	<=50	Pass
		Inner_1RB_Left	21.16	/	/	22.01	/	/	<=50	Pass
		Inner_1RB_Right	21.37	/	/	22.22	/	/	<=50	Pass
	819	Edge_1RB_Left	20.18	/	/	21.03	/	/	<=50	Pass
		Edge_1RB_Right	20.26	/	/	21.11	/	/	<=50	Pass
		Outer_Full	20.08	/	/	20.93	/	/	<=50	Pass
		Inner_Full	21.08	/	/	21.93	/	/	<=50	Pass
		Inner_1RB_Left	21.24	/	/	22.09	/	/	<=50	Pass
		Inner_1RB_Right	21.32	/	/	22.17	/	/	<=50	Pass
	821.5	Edge_1RB_Left	20.28	/	/	21.13	/	/	<=50	Pass
		Edge_1RB_Right	20.23	/	/	21.08	/	/	<=50	Pass
		Outer_Full	20.17	/	/	21.02	/	/	<=50	Pass
		Inner_Full	21.01	/	/	21.86	/	/	<=50	Pass
		Inner_1RB_Left	21.27	/	/	22.12	/	/	<=50	Pass
		Inner_1RB_Right	21.35	/	/	22.20	/	/	<=50	Pass
CP-OFDM 64 QAM	816.5	Edge_1RB_Left	19.51	/	/	20.36	/	/	<=50	Pass
		Edge_1RB_Right	19.86	/	/	20.71	/	/	<=50	Pass
		Outer_Full	19.50	/	/	20.35	/	/	<=50	Pass
		Inner_Full	19.57	/	/	20.42	/	/	<=50	Pass
		Inner_1RB_Left	19.61	/	/	20.46	/	/	<=50	Pass
		Inner_1RB_Right	19.87	/	/	20.72	/	/	<=50	Pass
	819	Edge_1RB_Left	19.64	/	/	20.49	/	/	<=50	Pass
		Edge_1RB_Right	19.82	/	/	20.67	/	/	<=50	Pass
		Outer_Full	19.65	/	/	20.50	/	/	<=50	Pass
		Inner_Full	19.70	/	/	20.55	/	/	<=50	Pass
		Inner_1RB_Left	19.66	/	/	20.51	/	/	<=50	Pass
		Inner_1RB_Right	19.89	/	/	20.74	/	/	<=50	Pass
	821.5	Edge_1RB_Left	19.82	/	/	20.67	/	/	<=50	Pass
		Edge_1RB_Right	19.77	/	/	20.62	/	/	<=50	Pass
		Outer_Full	19.63	/	/	20.48	/	/	<=50	Pass
		Inner_Full	19.60	/	/	20.45	/	/	<=50	Pass
		Inner_1RB_Left	19.83	/	/	20.68	/	/	<=50	Pass
		Inner_1RB_Right	19.80	/	/	20.65	/	/	<=50	Pass
CP-OFDM 256 QAM	816.5	Edge_1RB_Left	16.09	/	/	16.94	/	/	<=50	Pass
		Edge_1RB_Right	16.17	/	/	17.02	/	/	<=50	Pass
		Outer_Full	16.50	/	/	17.35	/	/	<=50	Pass
		Inner_Full	16.61	/	/	17.46	/	/	<=50	Pass
		Inner_1RB_Left	16.08	/	/	16.93	/	/	<=50	Pass
		Inner_1RB_Right	16.20	/	/	17.05	/	/	<=50	Pass
	819	Edge_1RB_Left	16.14	/	/	16.99	/	/	<=50	Pass
		Edge_1RB_Right	16.18	/	/	17.03	/	/	<=50	Pass
		Outer_Full	16.64	/	/	17.49	/	/	<=50	Pass
		Inner_Full	16.73	/	/	17.58	/	/	<=50	Pass
		Inner_1RB_Left	16.10	/	/	16.95	/	/	<=50	Pass
		Inner_1RB_Right	16.20	/	/	17.05	/	/	<=50	Pass
	821.5	Edge_1RB_Left	16.13	/	/	16.98	/	/	<=50	Pass
		Edge_1RB_Right	16.15	/	/	17.00	/	/	<=50	Pass

		Outer_Full	16.56	/	/	17.41	/	/	<=50	Pass
		Inner_Full	16.67	/	/	17.52	/	/	<=50	Pass
		Inner_1RB_Left	16.11	/	/	16.96	/	/	<=50	Pass
		Inner_1RB_Right	16.21	/	/	17.06	/	/	<=50	Pass
Note1: Antenna Gain: Ant0: 3.00dBi; Note2: ERP=Conducted Power+Antenna Gain-2.15										

1.1.2 15_S_10M_NTNV_ERP

5G NR n26a SCS=15kHz SISO 10MHz NTN										
Modulation	Frequency (MHz)	RB Allocation	Conducted Power(dBm)			ERP(dBm)				Verdict
			Ant0	Ant2	Sum	Ant0	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	819	Edge_1RB_Left	21.91	/	/	22.76	/	/	<=50	Pass
		Edge_1RB_Right	22.13	/	/	22.98	/	/	<=50	Pass
		Outer_Full	22.09	/	/	22.94	/	/	<=50	Pass
		Inner_Full	22.15	/	/	23.00	/	/	<=50	Pass
		Inner_1RB_Left	21.86	/	/	22.71	/	/	<=50	Pass
		Inner_1RB_Right	22.10	/	/	22.95	/	/	<=50	Pass
DFT-s-OFDM QPSK	819	Edge_1RB_Left	21.86	/	/	22.71	/	/	<=50	Pass
		Edge_1RB_Right	22.15	/	/	23.00	/	/	<=50	Pass
		Outer_Full	22.11	/	/	22.96	/	/	<=50	Pass
		Inner_Full	22.12	/	/	22.97	/	/	<=50	Pass
		Inner_1RB_Left	21.95	/	/	22.80	/	/	<=50	Pass
		Inner_1RB_Right	22.15	/	/	23.00	/	/	<=50	Pass
DFT-s-OFDM 16 QAM	819	Edge_1RB_Left	20.85	/	/	21.70	/	/	<=50	Pass
		Edge_1RB_Right	21.03	/	/	21.88	/	/	<=50	Pass
		Outer_Full	21.19	/	/	22.04	/	/	<=50	Pass
		Inner_Full	22.16	/	/	23.01	/	/	<=50	Pass
		Inner_1RB_Left	21.83	/	/	22.68	/	/	<=50	Pass
		Inner_1RB_Right	21.90	/	/	22.75	/	/	<=50	Pass
DFT-s-OFDM 64 QAM	819	Edge_1RB_Left	20.64	/	/	21.49	/	/	<=50	Pass
		Edge_1RB_Right	20.87	/	/	21.72	/	/	<=50	Pass
		Outer_Full	20.73	/	/	21.58	/	/	<=50	Pass
		Inner_Full	20.63	/	/	21.48	/	/	<=50	Pass
		Inner_1RB_Left	20.66	/	/	21.51	/	/	<=50	Pass
		Inner_1RB_Right	20.90	/	/	21.75	/	/	<=50	Pass
DFT-s-OFDM 256 QAM	819	Edge_1RB_Left	17.90	/	/	18.75	/	/	<=50	Pass
		Edge_1RB_Right	18.09	/	/	18.94	/	/	<=50	Pass
		Outer_Full	18.55	/	/	19.40	/	/	<=50	Pass
		Inner_Full	18.57	/	/	19.42	/	/	<=50	Pass
		Inner_1RB_Left	17.87	/	/	18.72	/	/	<=50	Pass
		Inner_1RB_Right	18.17	/	/	19.02	/	/	<=50	Pass
CP-OFDM QPSK	819	Edge_1RB_Left	19.96	/	/	20.81	/	/	<=50	Pass
		Edge_1RB_Right	20.13	/	/	20.98	/	/	<=50	Pass
		Outer_Full	20.19	/	/	21.04	/	/	<=50	Pass
		Inner_Full	21.60	/	/	22.45	/	/	<=50	Pass
		Inner_1RB_Left	21.36	/	/	22.21	/	/	<=50	Pass
		Inner_1RB_Right	21.57	/	/	22.42	/	/	<=50	Pass
CP-OFDM 16 QAM	819	Edge_1RB_Left	20.04	/	/	20.89	/	/	<=50	Pass
		Edge_1RB_Right	20.28	/	/	21.13	/	/	<=50	Pass
		Outer_Full	20.17	/	/	21.02	/	/	<=50	Pass
		Inner_Full	21.17	/	/	22.02	/	/	<=50	Pass
		Inner_1RB_Left	21.10	/	/	21.95	/	/	<=50	Pass
		Inner_1RB_Right	21.38	/	/	22.23	/	/	<=50	Pass

CP-OFDM 64 QAM	819	Edge_1RB_Left	19.51	/	/	20.36	/	/	<=50	Pass
		Edge_1RB_Right	19.85	/	/	20.70	/	/	<=50	Pass
		Outer_Full	19.68	/	/	20.53	/	/	<=50	Pass
		Inner_Full	19.71	/	/	20.56	/	/	<=50	Pass
		Inner_1RB_Left	19.61	/	/	20.46	/	/	<=50	Pass
		Inner_1RB_Right	19.87	/	/	20.72	/	/	<=50	Pass
CP-OFDM 256 QAM	819	Edge_1RB_Left	16.00	/	/	16.85	/	/	<=50	Pass
		Edge_1RB_Right	16.22	/	/	17.07	/	/	<=50	Pass
		Outer_Full	16.58	/	/	17.43	/	/	<=50	Pass
		Inner_Full	16.60	/	/	17.45	/	/	<=50	Pass
		Inner_1RB_Left	16.04	/	/	16.89	/	/	<=50	Pass
		Inner_1RB_Right	16.31	/	/	17.16	/	/	<=50	Pass
Note1: Antenna Gain: Ant0: 3.00dBi; Note2: ERP=Conducted Power+Antenna Gain-2.15										

2. Frequency Stability

2.1 Test Result

2.1.1 15_S_10M

5G NR n26a SCS=15kHz SISO 10MHz								
Modulation	Frequency (MHz)	RB Allocation	Temp. (°C)	Volt.	Freq. Error (Hz)	Freq. vs. rated (ppm)		Verdict
						Result	Limit	
DFT-s-OFDM QPSK	819	Outer_Full	20	LV	-8.10	-0.0099	>=-2.5 & <=2.5	Pass
				HV	-6.30	-0.0077	>=-2.5 & <=2.5	Pass
			0	NV	-4.40	-0.0054	>=-2.5 & <=2.5	Pass
			10	NV	-6.00	-0.0073	>=-2.5 & <=2.5	Pass
			20	NV	-4.30	-0.0053	>=-2.5 & <=2.5	Pass
			30	NV	-1.80	-0.0022	>=-2.5 & <=2.5	Pass
			40	NV	-3.90	-0.0048	>=-2.5 & <=2.5	Pass

3. 99% & 26dB Bandwidth

3.1 Test Result

3.1.1 15_S_5M_NTNV

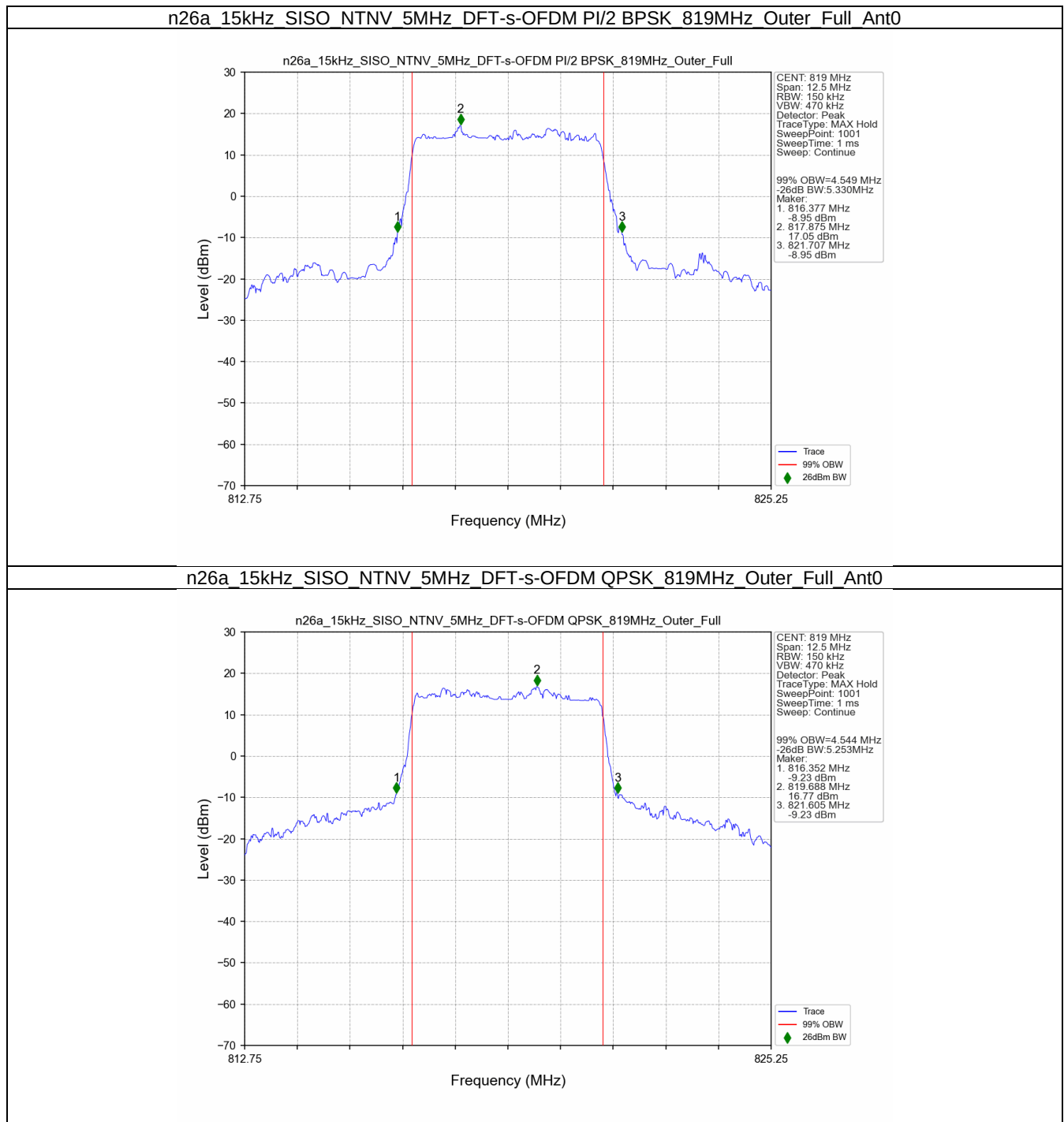
5G NR n26a SCS=15kHz SISO 5MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	819	Outer_Full	4.55	5.33	/	Pass
DFT-s-OFDM QPSK	819	Outer_Full	4.54	5.25	/	Pass
DFT-s-OFDM 16 QAM	819	Outer_Full	4.61	5.43	/	Pass
DFT-s-OFDM 64 QAM	819	Outer_Full	4.57	5.28	/	Pass
DFT-s-OFDM 256 QAM	819	Outer_Full	4.53	5.23	/	Pass
CP-OFDM QPSK	819	Outer_Full	4.60	5.54	/	Pass
CP-OFDM 16 QAM	819	Outer_Full	4.60	7.07	/	Pass
CP-OFDM 64 QAM	819	Outer_Full	4.59	5.64	/	Pass
CP-OFDM 256 QAM	819	Outer_Full	4.55	5.39	/	Pass

3.1.2 15_S_10M_NTNV

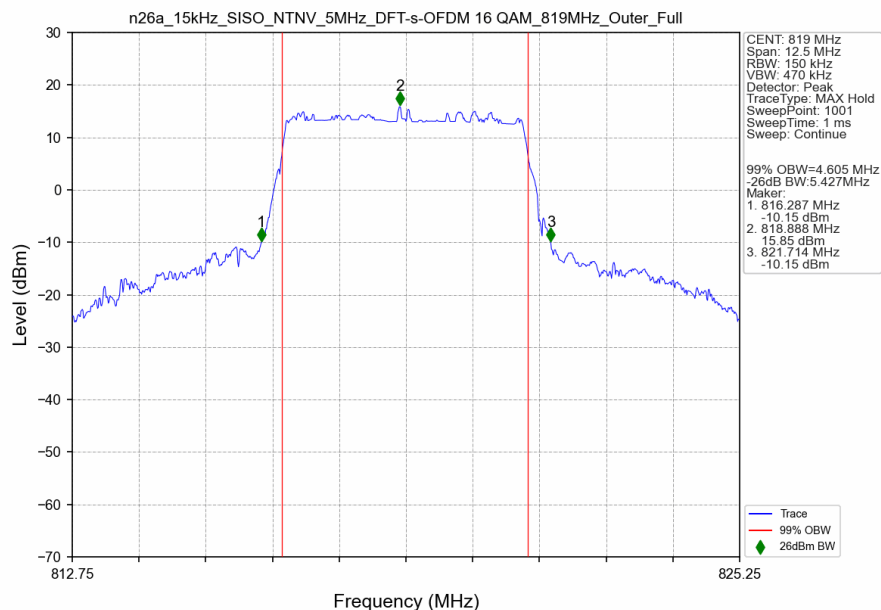
5G NR n26a SCS=15kHz SISO 10MHz NTN						
Modulation	Frequency (MHz)	RB Allocation	99% Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit (MHz)	Verdict
DFT-s-OFDM PI/2 BPSK	819	Outer_Full	9.00	9.87	/	Pass
DFT-s-OFDM QPSK	819	Outer_Full	9.05	9.96	/	Pass
DFT-s-OFDM 16 QAM	819	Outer_Full	9.05	9.91	/	Pass
DFT-s-OFDM 64 QAM	819	Outer_Full	9.01	9.95	/	Pass
DFT-s-OFDM 256 QAM	819	Outer_Full	9.01	9.90	/	Pass
CP-OFDM QPSK	819	Outer_Full	9.40	12.19	/	Pass
CP-OFDM 16 QAM	819	Outer_Full	9.41	11.79	/	Pass
CP-OFDM 64 QAM	819	Outer_Full	9.37	10.50	/	Pass
CP-OFDM 256 QAM	819	Outer_Full	9.36	10.38	/	Pass

3.2 Test Graph

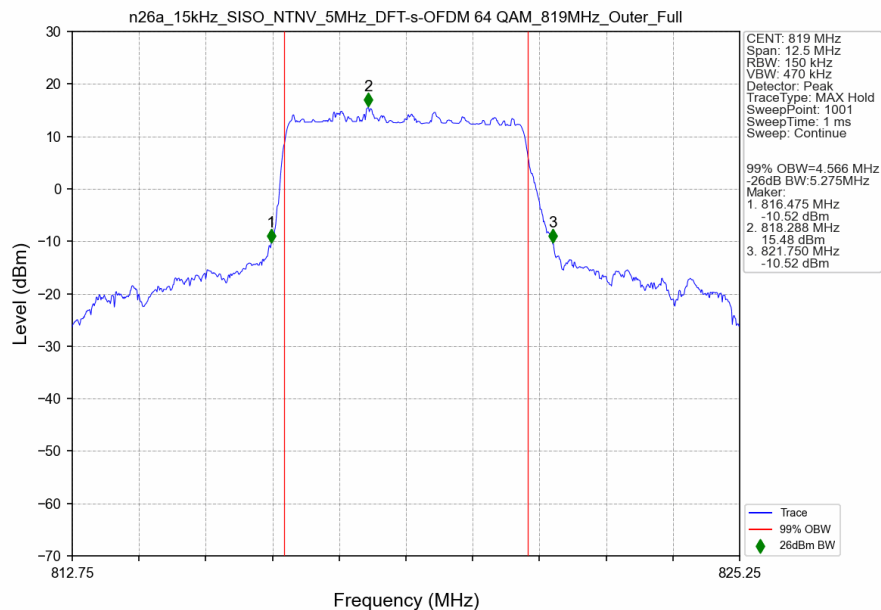
3.2.1 15_S_5M_NTNV



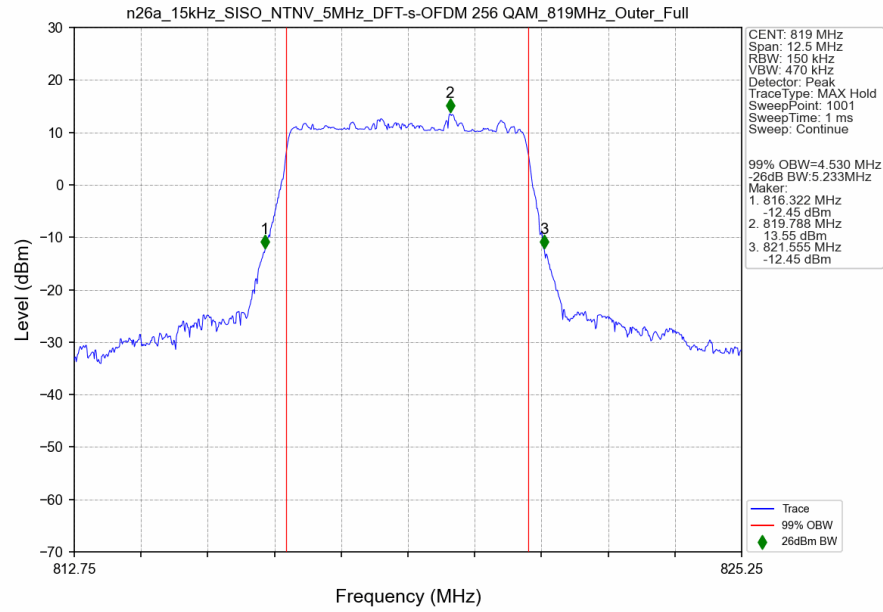
n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 16 QAM_819MHz_Outer_Full_Ant0



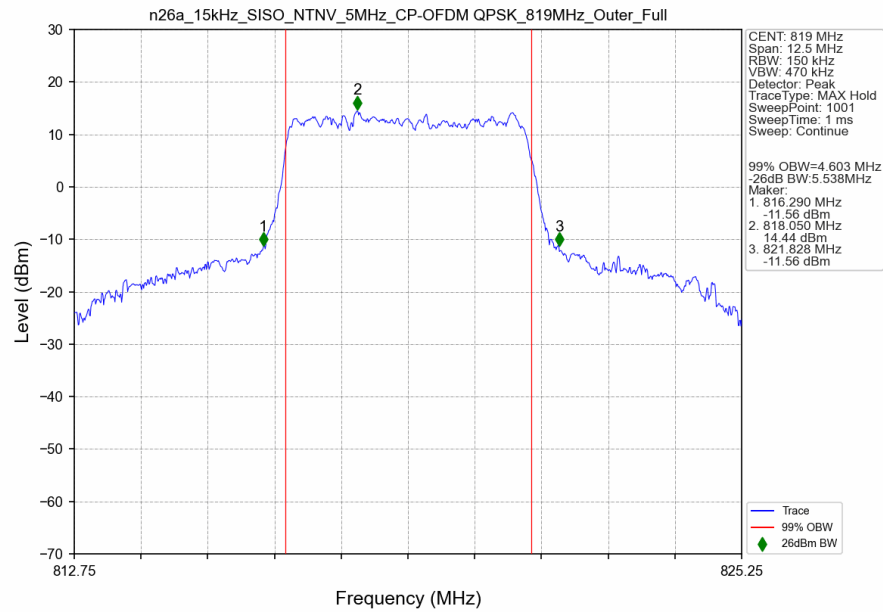
n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 64 QAM_819MHz_Outer_Full_Ant0



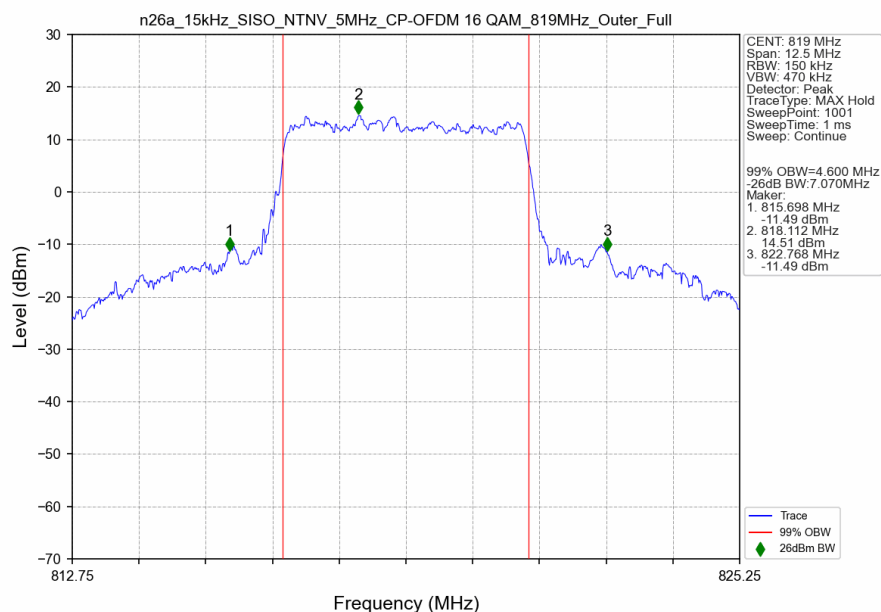
n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM 256 QAM 819MHz_Outer_Full_Ant0



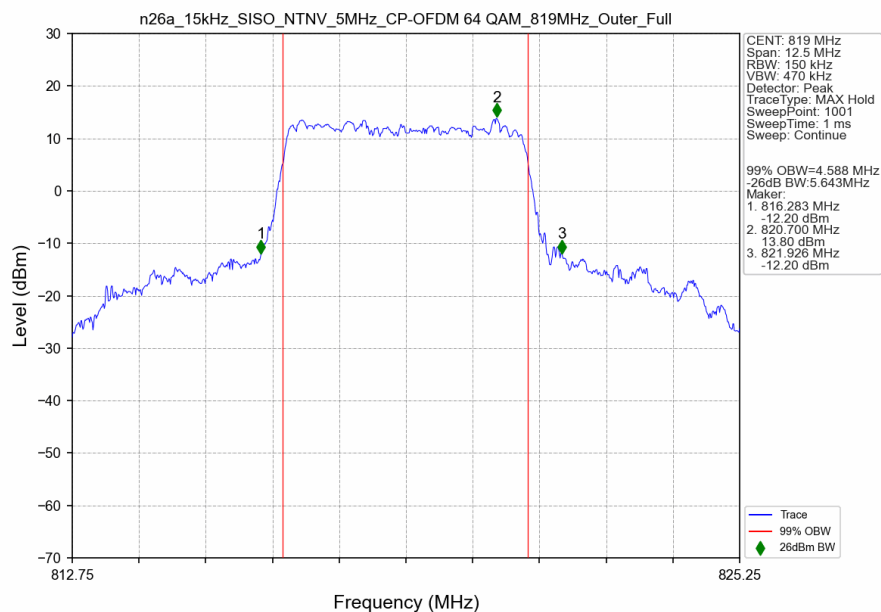
n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM QPSK 819MHz_Outer_Full_Ant0



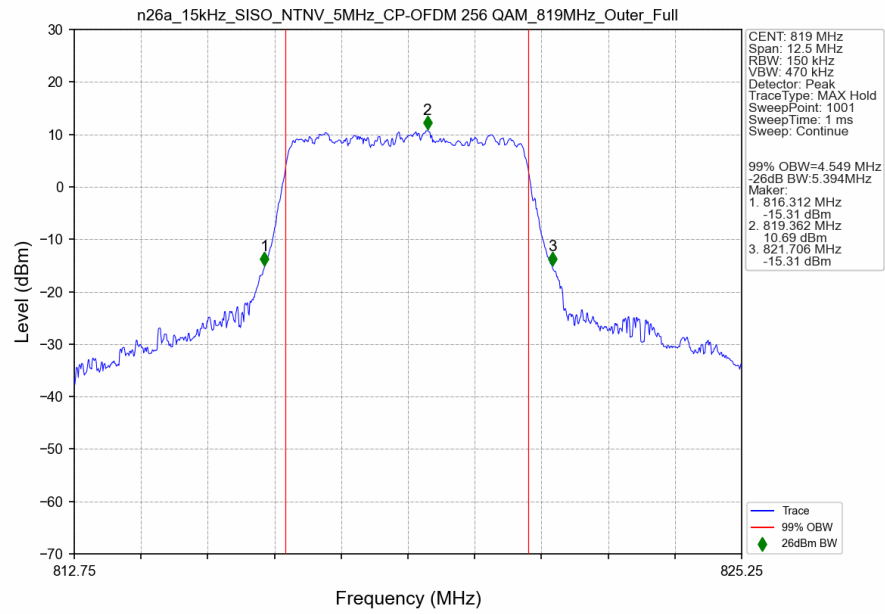
n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM 16 QAM 819MHz_Outer_Full_Ant0



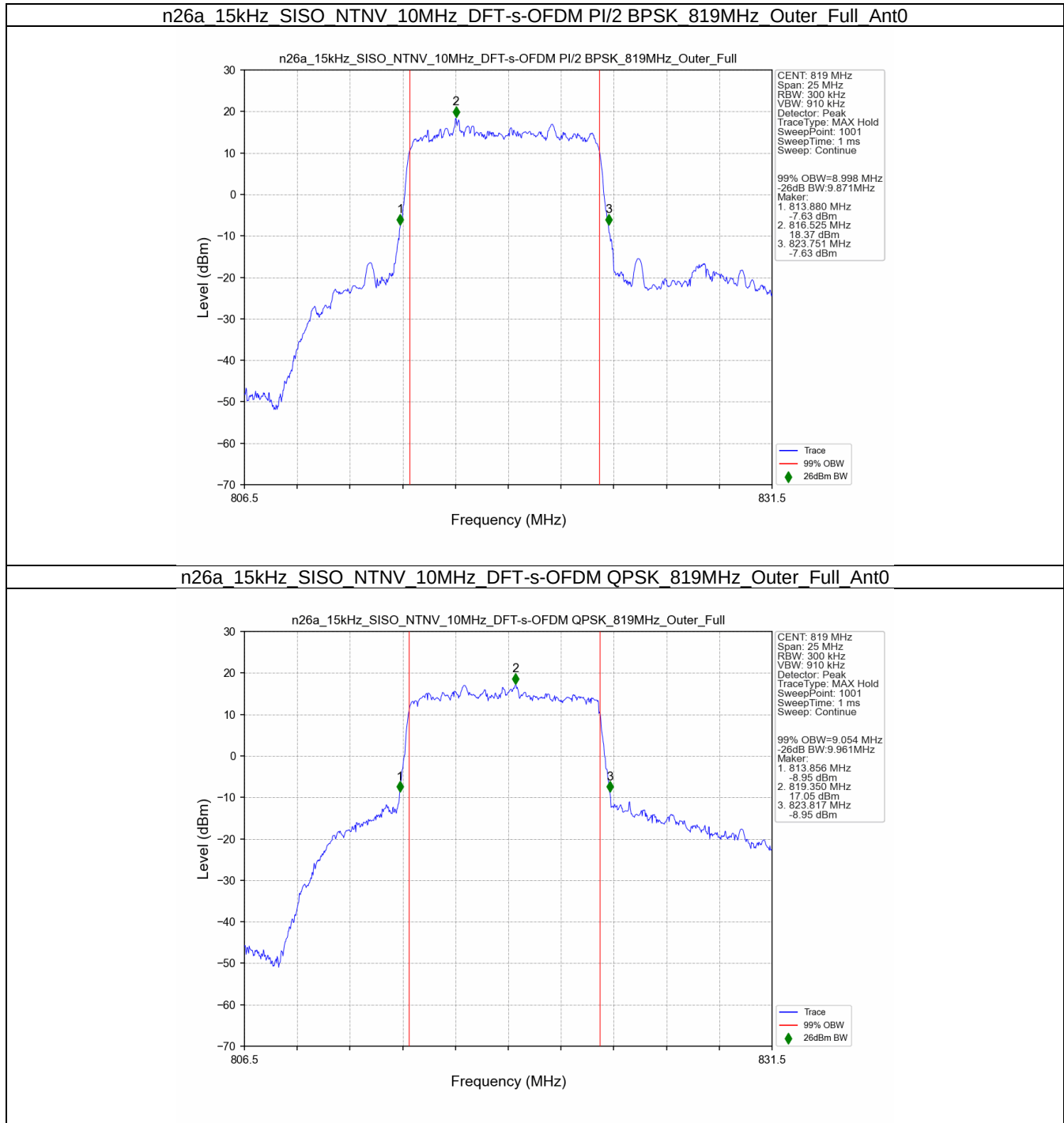
n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM 64 QAM 819MHz_Outer_Full_Ant0



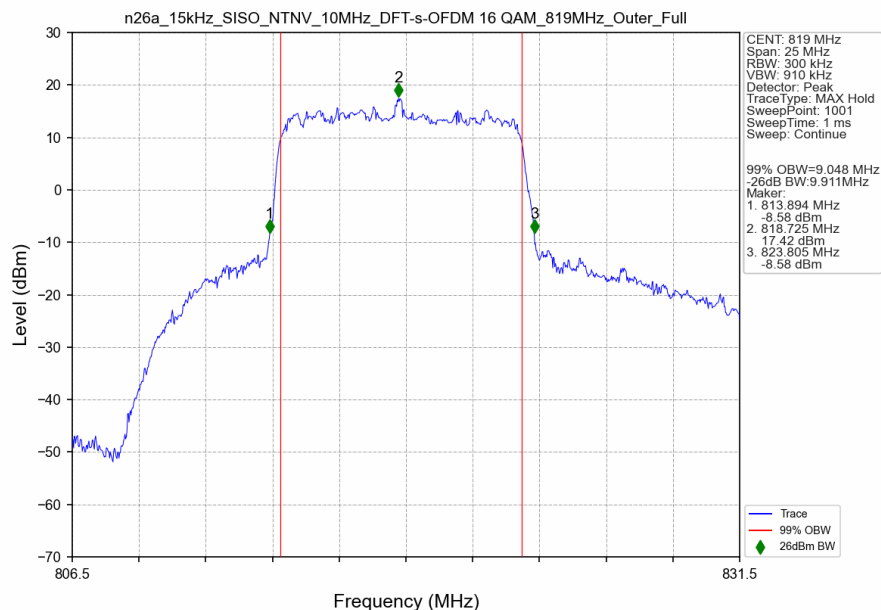
n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM 256 QAM 819MHz_Outer_Full_Ant0



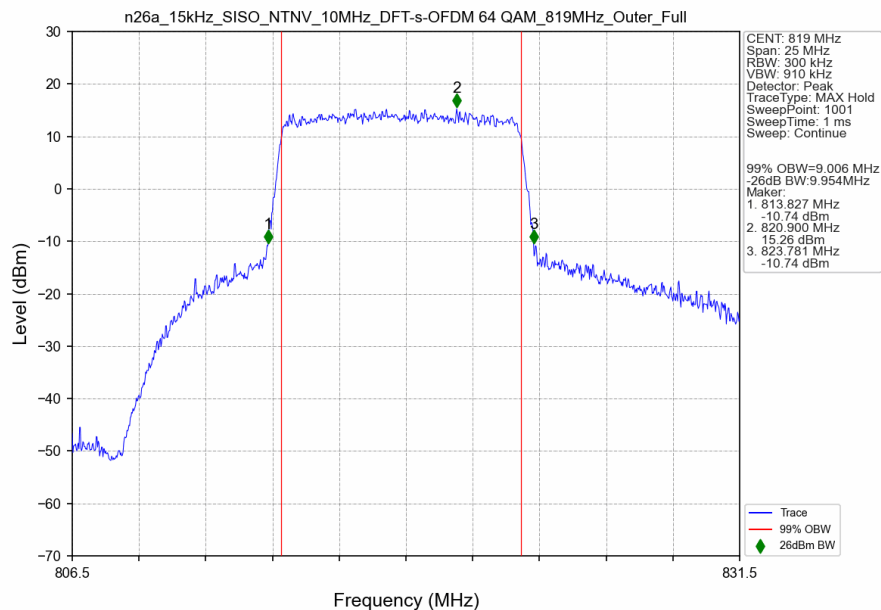
3.2.2 15_S_10M_NTNV



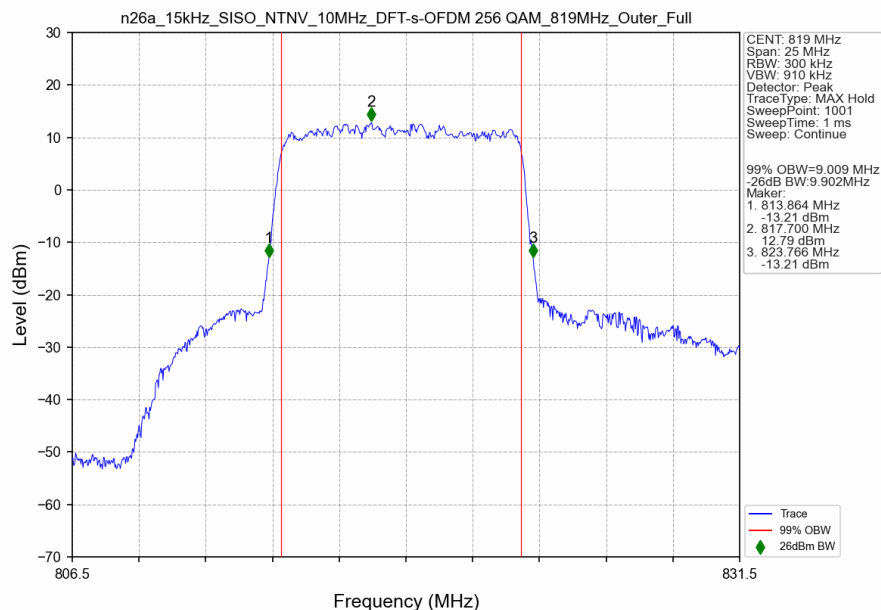
n26a_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 16 QAM_819MHz_Outer_Full_Ant0



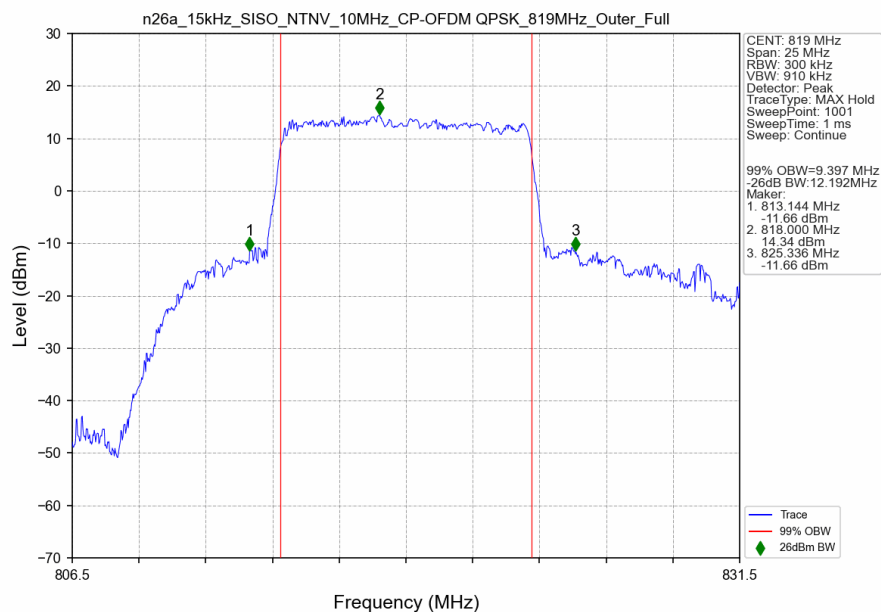
n26a_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 64 QAM_819MHz_Outer_Full_Ant0



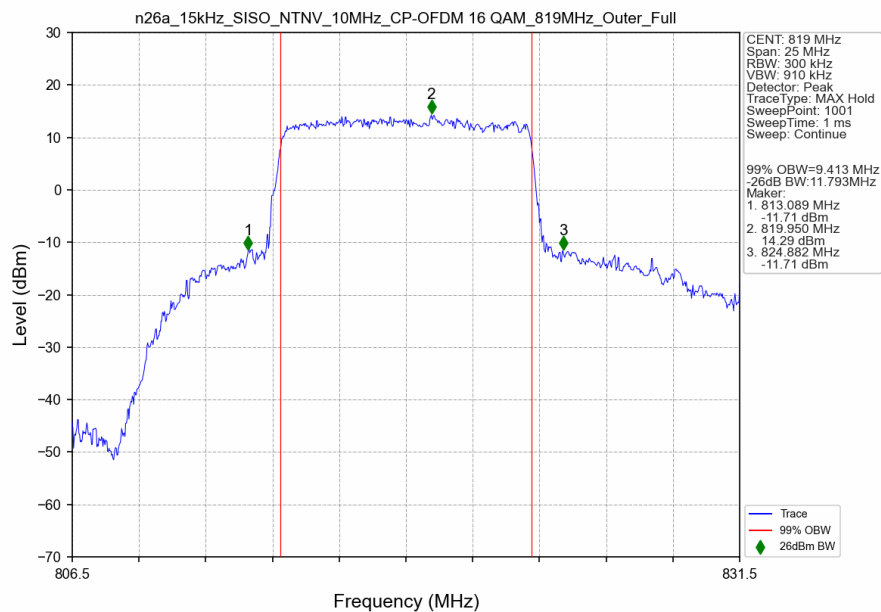
n26a_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM 256 QAM 819MHz_Outer_Full_Ant0



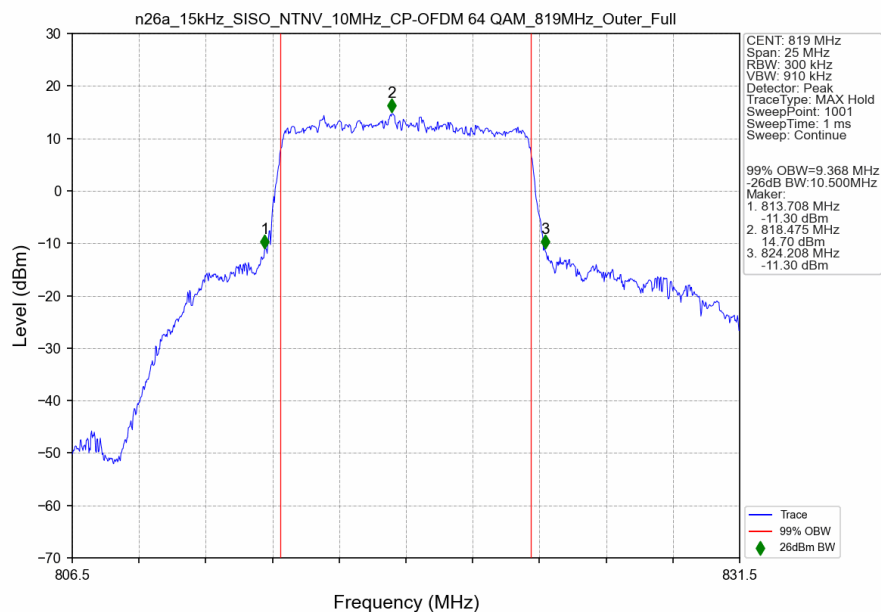
n26a_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK 819MHz_Outer_Full_Ant0



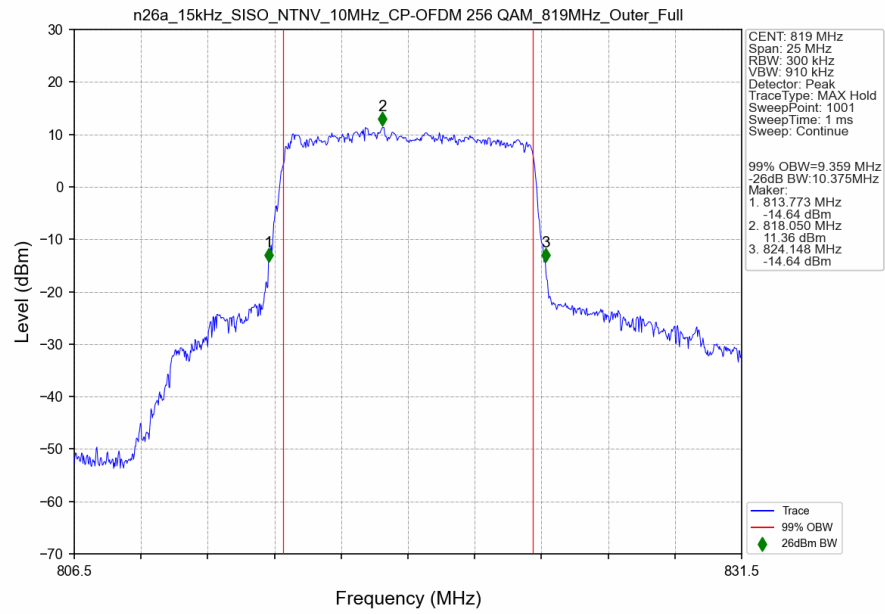
n26a_15kHz_SISO_NTNV_10MHz_CP-OFDM 16 QAM 819MHz_Outer_Full_Ant0



n26a_15kHz_SISO_NTNV_10MHz_CP-OFDM 64 QAM 819MHz_Outer_Full_Ant0



n26a_15kHz_SISO_NTNV_10MHz_CP-OFDM 256 QAM 819MHz_Outer_Full_Ant0





4. Peak-Average Ratio

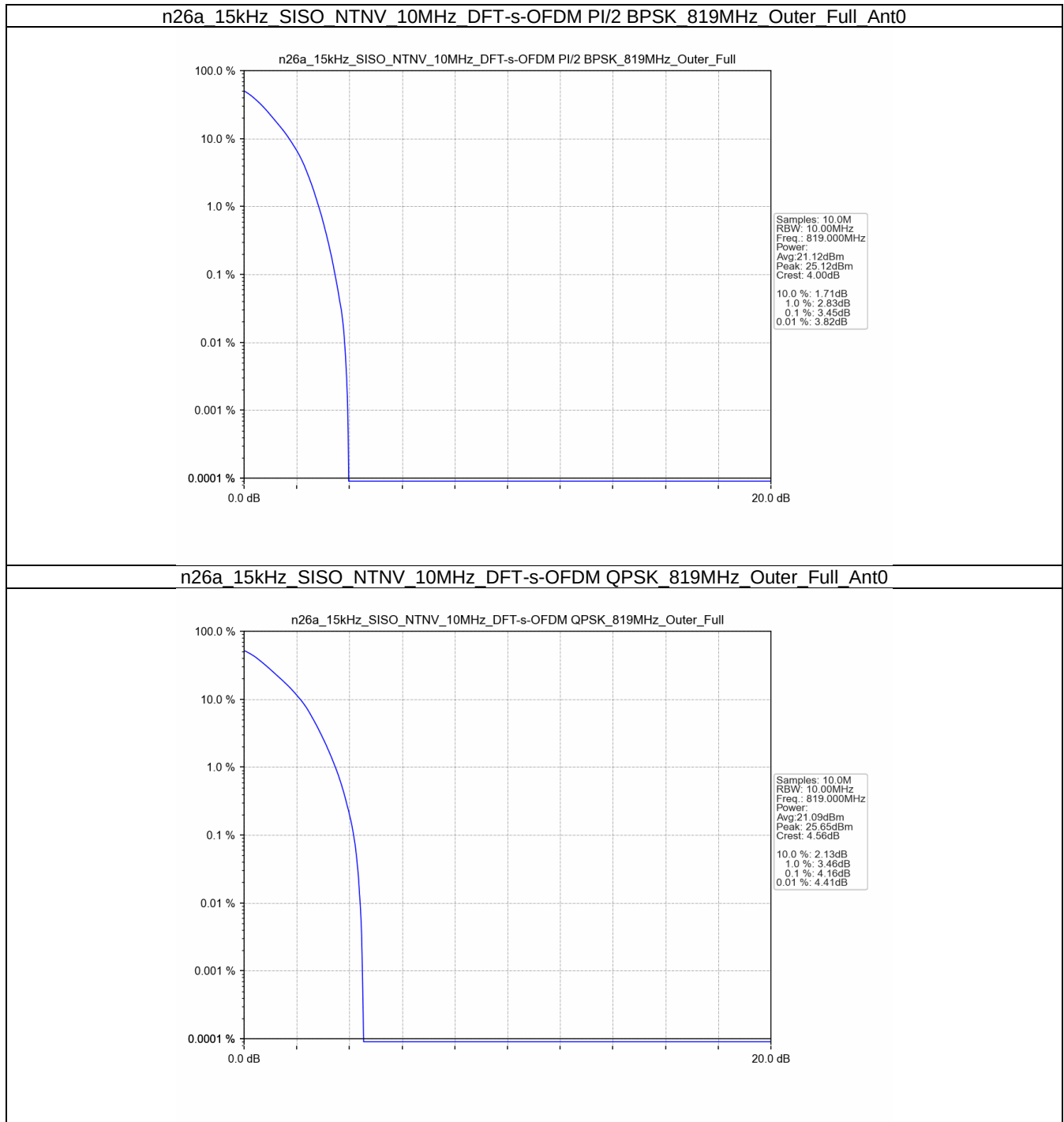
4.1 Test Result

4.1.1 15_S_10M_NTNV

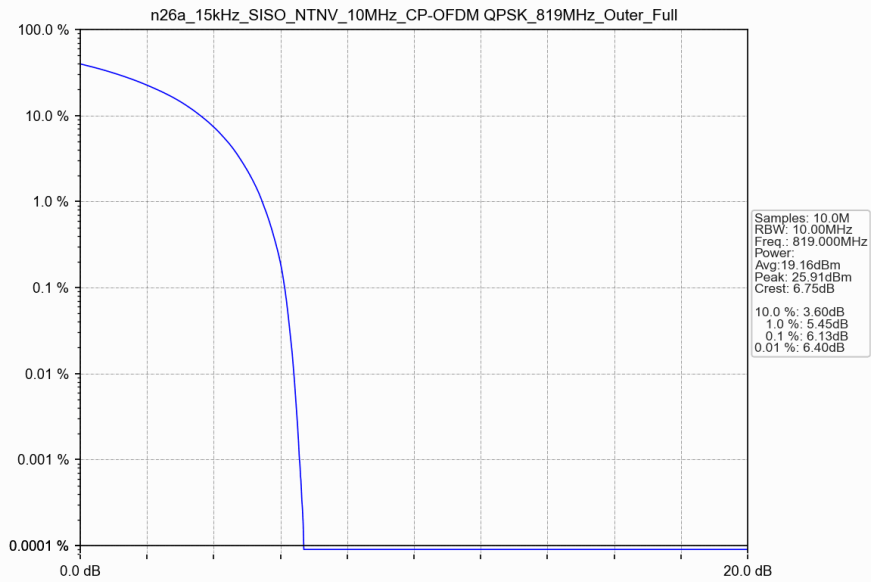
5G NR n26a SCS=15kHz SISO 10MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Peak-Average Ratio (dB)				Verdict
			Ant0	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	819	Outer_Full	3.45	/	/	<=13	Pass
DFT-s-OFDM QPSK	819	Outer_Full	4.16	/	/	<=13	Pass
CP-OFDM QPSK	819	Outer_Full	6.13	/	/	<=13	Pass

4.2 Test Graph

4.2.1 15_S_10M_NTNV



n26a_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_819MHz_Outer_Full_Ant0



5. Spurious Emission

5.1 Test Result

5.1.1 15_S_5M_NTNV

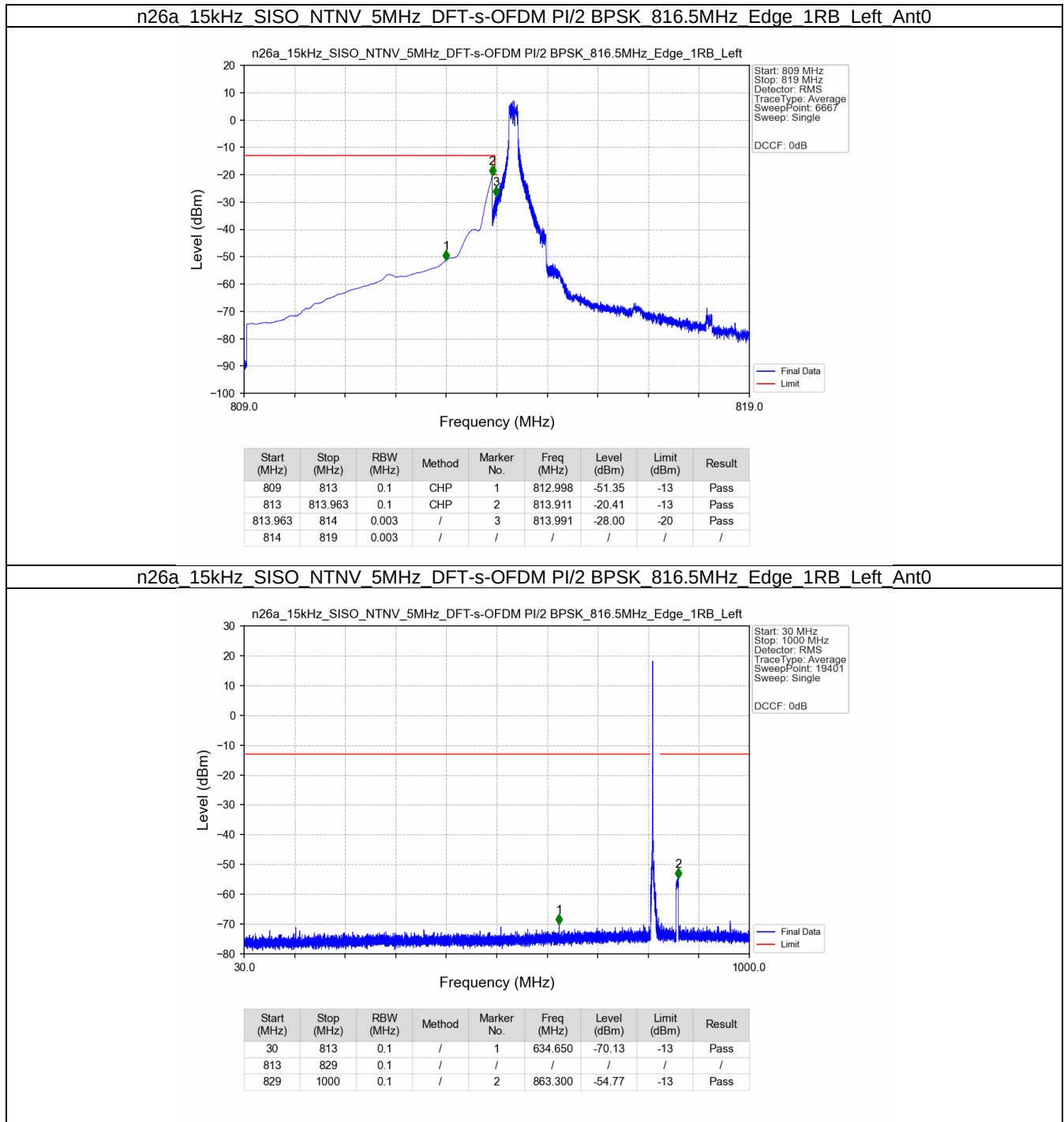
5G NR n26a SCS=15kHz SISO 5MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Spurious Emission				Verdict
			Ant0	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	816.5	Edge_1RB_Left	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
	819	Edge_1RB_Left	Refer To Test Graph				Pass
		Edge_1RB_Right	Refer To Test Graph				Pass
	821.5	Edge_1RB_Right	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
DFT-s-OFDM QPSK	816.5	Edge_1RB_Left	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
	819	Edge_1RB_Left	Refer To Test Graph				Pass
		Edge_1RB_Right	Refer To Test Graph				Pass
	821.5	Edge_1RB_Right	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
CP-OFDM QPSK	816.5	Edge_1RB_Left	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
	819	Edge_1RB_Left	Refer To Test Graph				Pass
		Edge_1RB_Right	Refer To Test Graph				Pass
	821.5	Edge_1RB_Right	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass

5.1.2 15_S_10M_NTNV

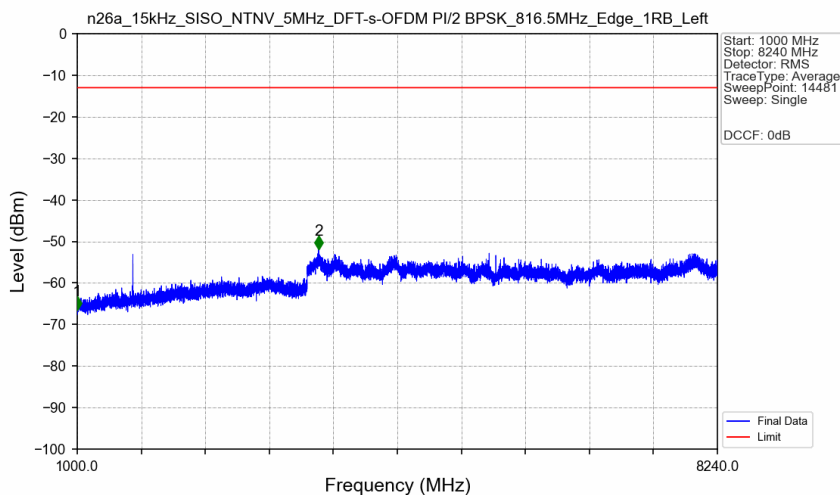
5G NR n26a SCS=15kHz SISO 10MHz NTN							
Modulation	Frequency (MHz)	RB Allocation	Spurious Emission				Verdict
			Ant0	Ant2	Sum	Limit	
DFT-s-OFDM PI/2 BPSK	819	Edge_1RB_Left	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
DFT-s-OFDM QPSK	819	Edge_1RB_Left	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass
CP-OFDM QPSK	819	Edge_1RB_Left	Refer To Test Graph				Pass
		Outer_Full	Refer To Test Graph				Pass

5.2 Test Graph

5.2.1 15_S_5M_NTNV

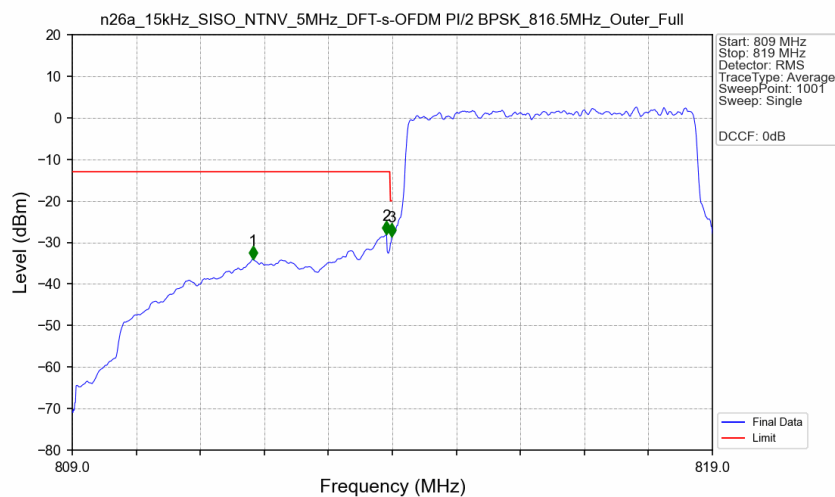


n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_PI/2_BPSK_816.5MHz_Edge_1RB_Left_Ant0



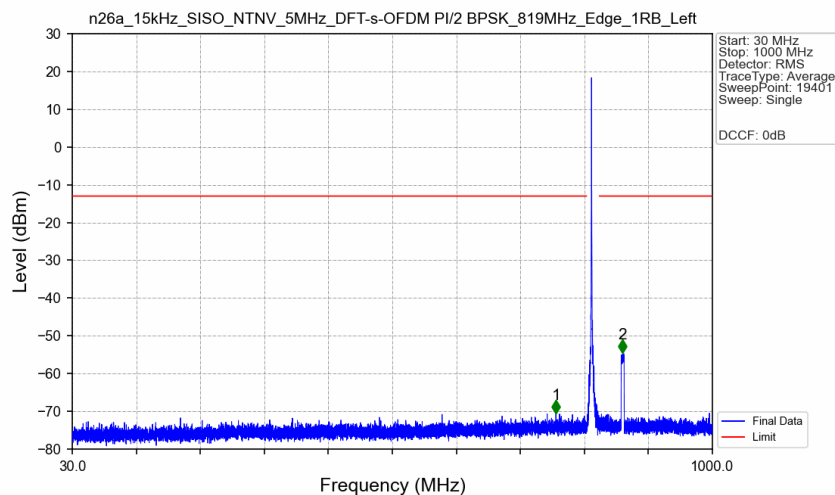
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	1000	1	/	1	1000.000	-66.43	-13	Pass
1000	8240	1	/	2	3730.000	-51.80	-13	Pass

n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_PI/2_BPSK_816.5MHz_Outer_Full_Ant0

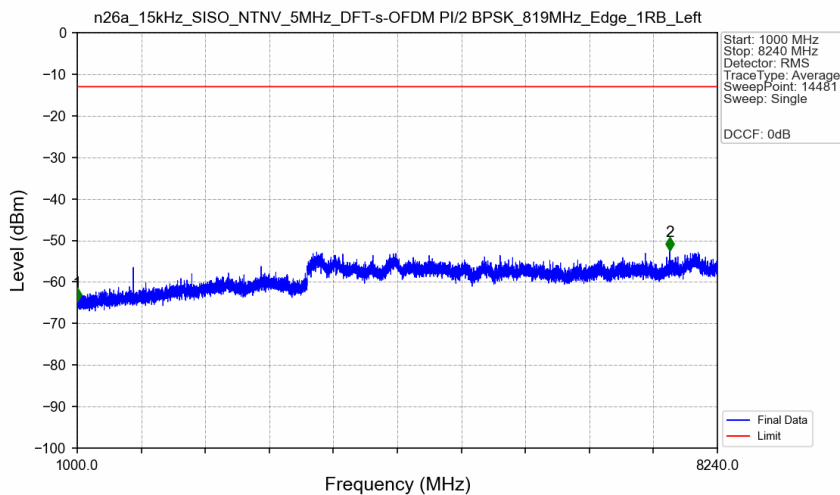


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	CHP	1	811.820	-34.09	-13	Pass
813	813.963	0.1	CHP	2	813.910	-28.09	-13	Pass
813.963	814	0.05253	CHP	3	813.990	-28.49	-20	Pass
814	819	0.05253	CHP	/	/	/	/	/

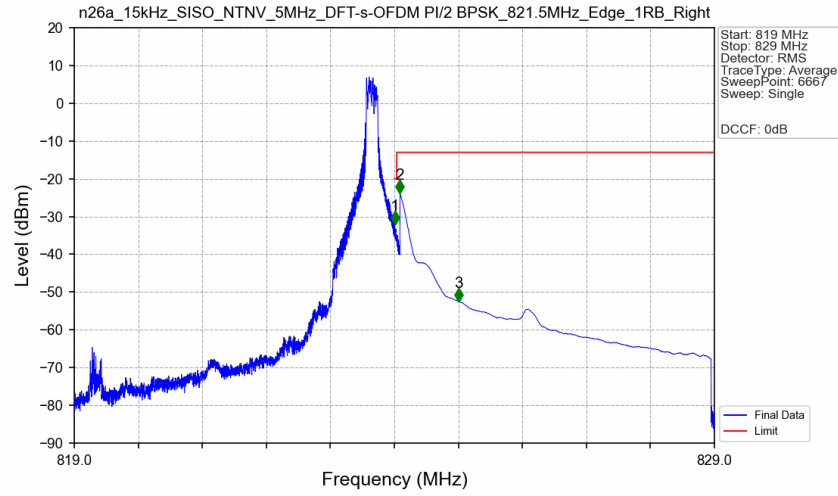
n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM PI/2 BPSK_819MHz_Edge_1RB_Left_Ant0



n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM PI/2 BPSK_819MHz_Edge_1RB_Left_Ant0

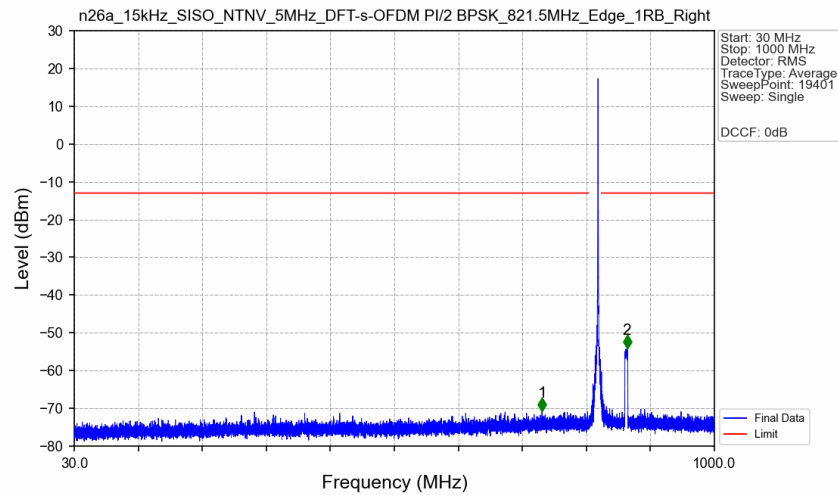


n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM PI/2 BPSK_821.5MHz_Edge_1RB_Right_Ant0



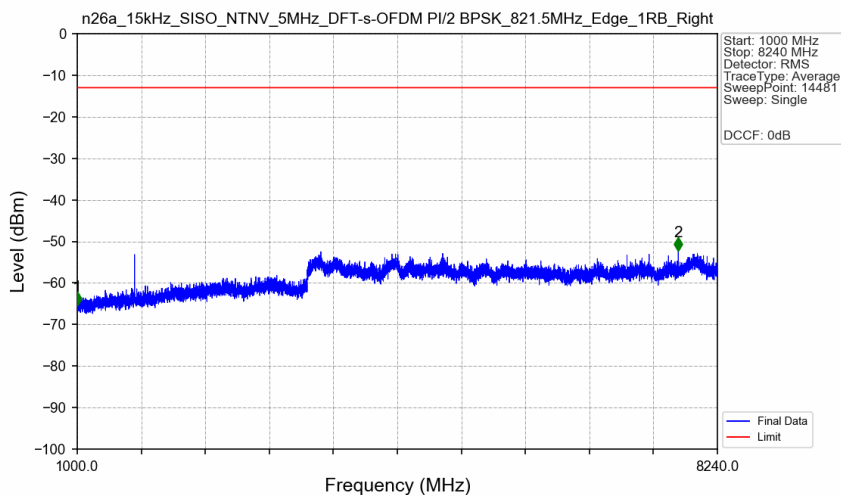
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.009	-32.01	-20	Pass
824.038	825	0.1	CHP	2	824.089	-23.80	-13	Pass
825	829	0.1	CHP	3	825.001	-52.49	-13	Pass

n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM PI/2 BPSK_821.5MHz_Edge_1RB_Right_Ant0



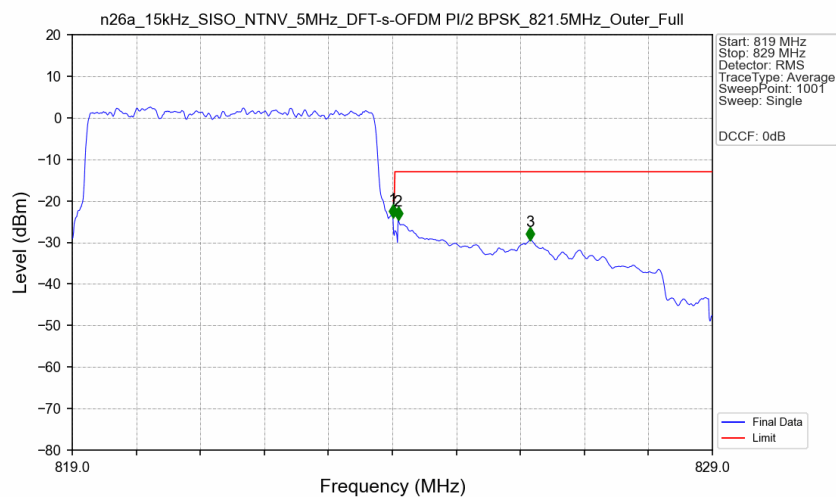
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	814	0.1	/	1	738.750	-70.69	-13	Pass
814	829	0.1	/	/	/	/	/	/
829	1000	0.1	/	2	867.750	-54.02	-13	Pass

n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM PI/2 BPSK_821.5MHz_Edge_1RB_Right_Ant0



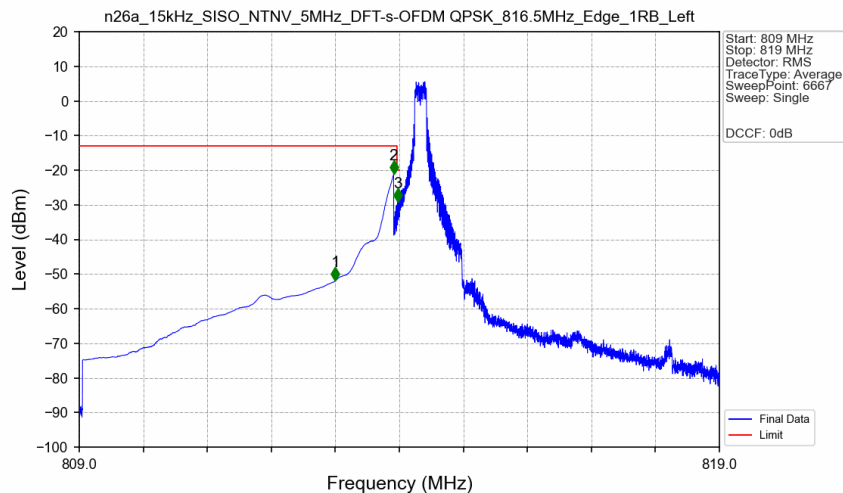
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	1000	1	/	1	1000.000	-65.28	-13	Pass
1000	8240	1	/	2	7797.500	-52.19	-13	Pass

n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM PI/2 BPSK_821.5MHz_Outer_Full_Ant0

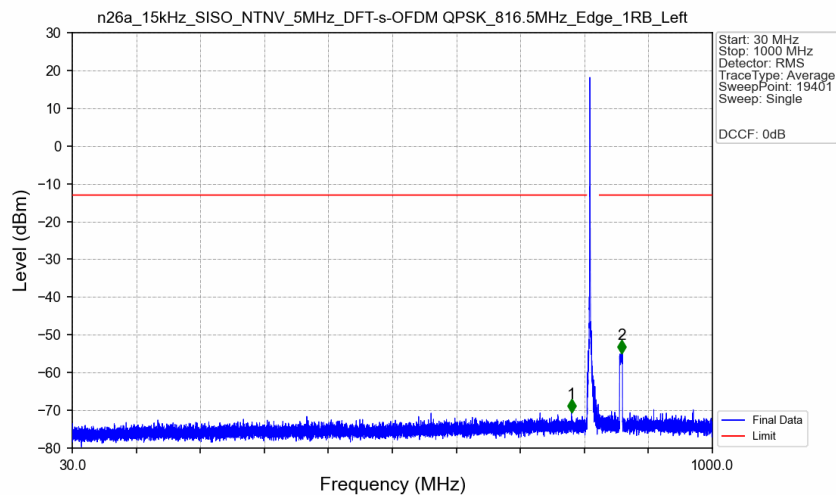


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.05253	CHP	/	/	/	/	/
824	824.038	0.05253	CHP	1	824.010	-24.09	-20	Pass
824.038	825	0.1	CHP	2	824.090	-24.59	-13	Pass
825	829	0.1	CHP	3	826.150	-29.55	-13	Pass

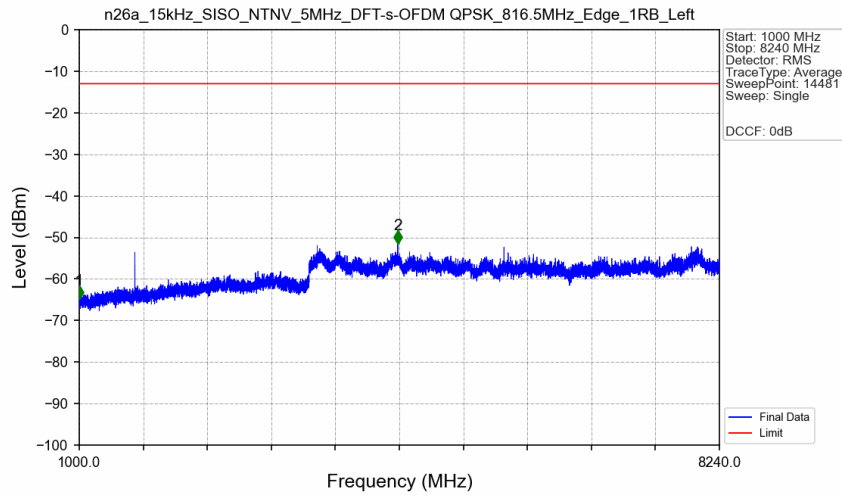
n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_QPSK_816.5MHz_Edge_1RB_Left_Ant0



n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_QPSK_816.5MHz_Edge_1RB_Left_Ant0

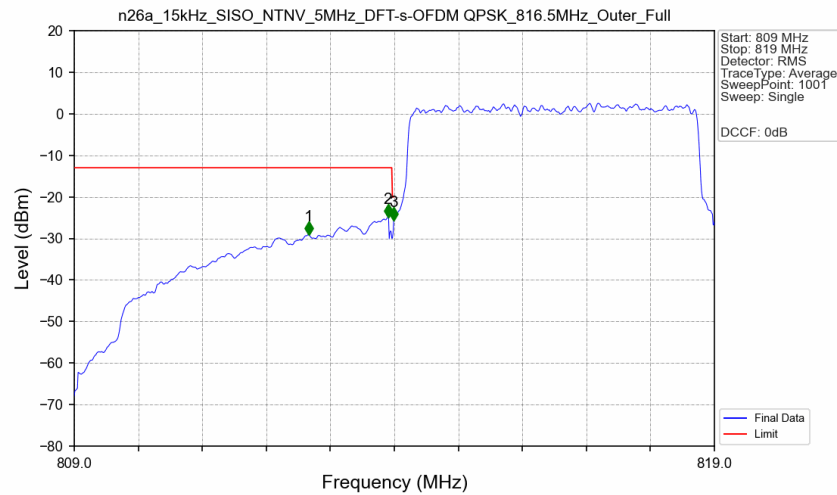


n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_QPSK_816.5MHz_Edge_1RB_Left_Ant0



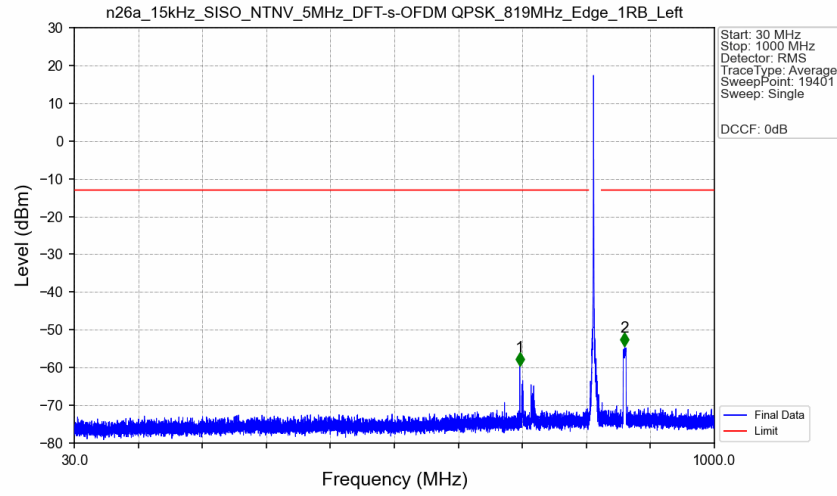
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	1000	1	/	1	1000.000	-64.81	-13	Pass
1000	8240	1	/	2	4602.000	-51.55	-13	Pass

n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_QPSK_816.5MHz_Outer_Full_Ant0

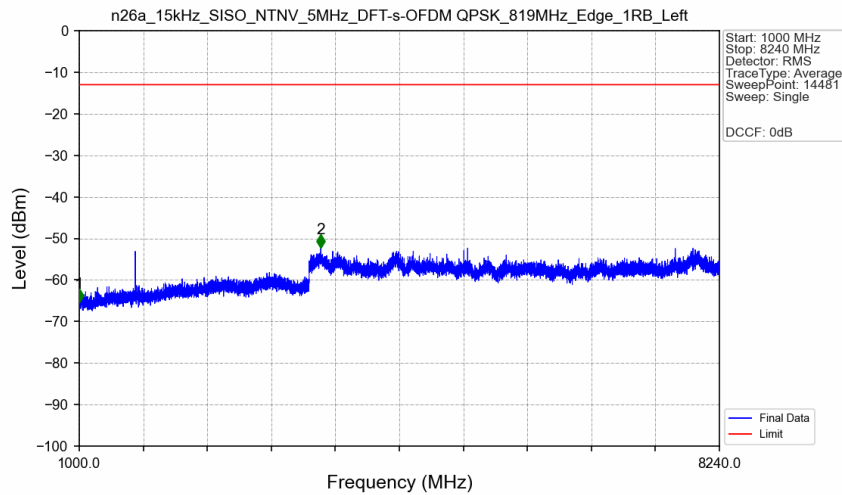


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	CHP	1	812.660	-29.08	-13	Pass
813	813.963	0.1	CHP	2	813.900	-24.93	-13	Pass
813.963	814	0.05253	CHP	3	813.990	-25.72	-20	Pass
814	819	0.05253	CHP	/	/	/	/	/

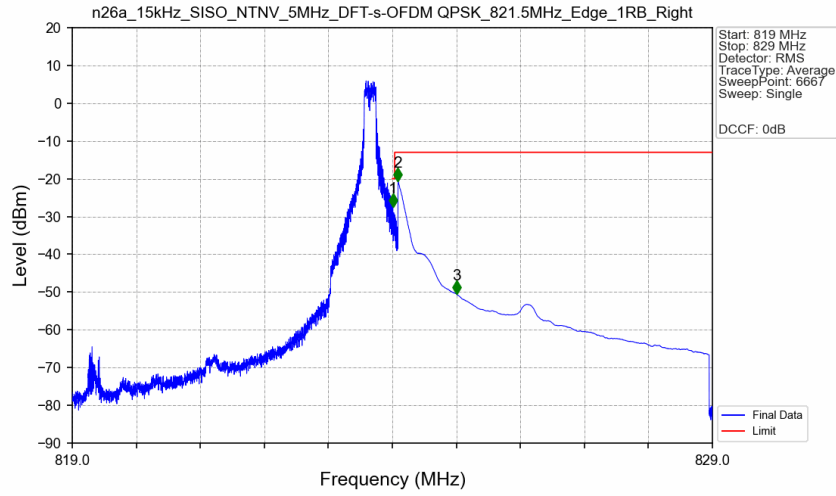
n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_QPSK_819MHz_Edge_1RB_Left_Ant0



n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_QPSK_819MHz_Edge_1RB_Left_Ant0

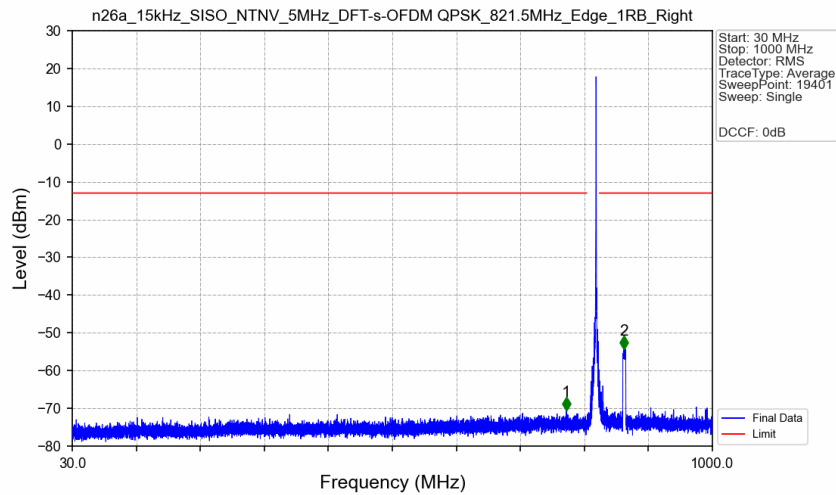


n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_QPSK_821.5MHz_Edge_1RB_Right_Ant0



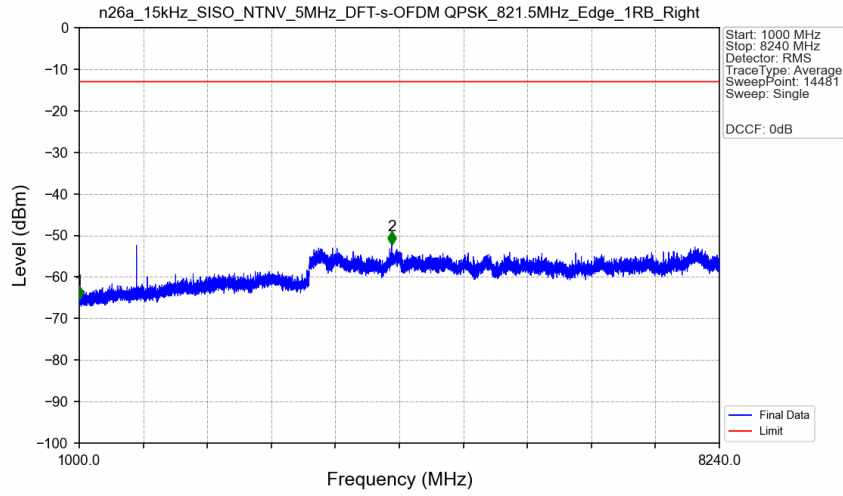
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.008	-27.39	-20	Pass
824.038	825	0.1	CHP	2	824.089	-20.59	-13	Pass
825	829	0.1	CHP	3	825.001	-50.55	-13	Pass

n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_QPSK_821.5MHz_Edge_1RB_Right_Ant0

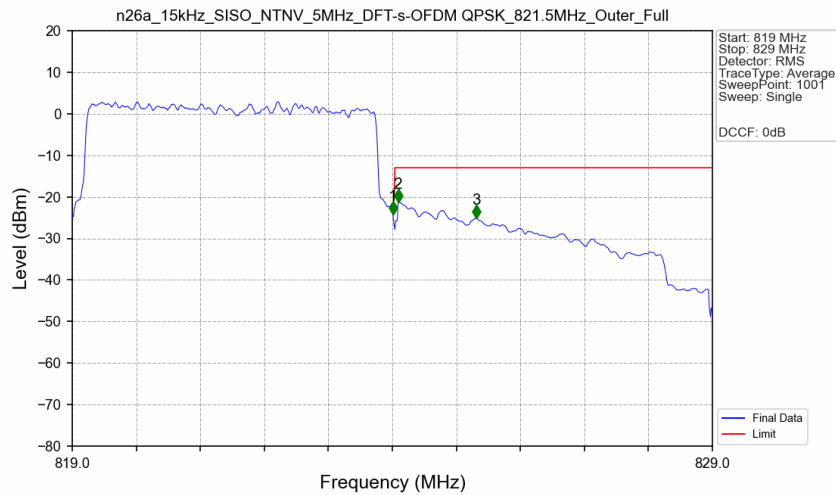


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	814	0.1	/	1	778.750	-70.56	-13	Pass
814	829	0.1	/	/	/	/	/	/
829	1000	0.1	/	2	865.850	-54.27	-13	Pass

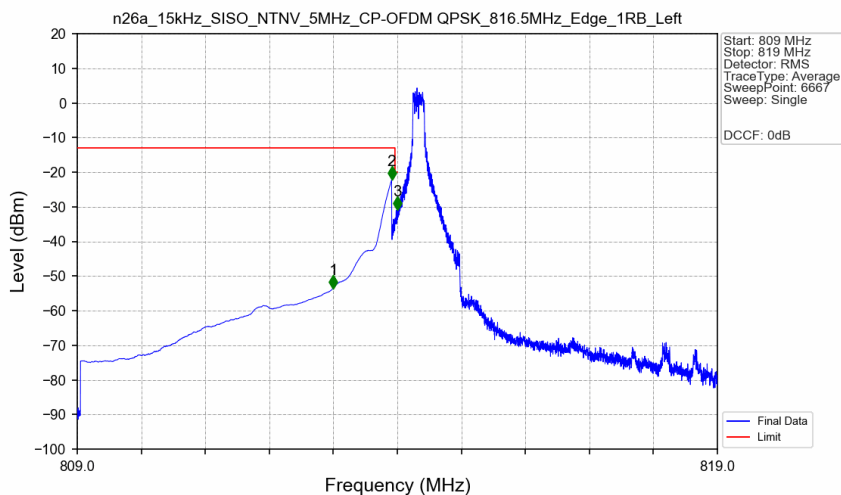
n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_QPSK_821.5MHz_Edge_1RB_Right_Ant0



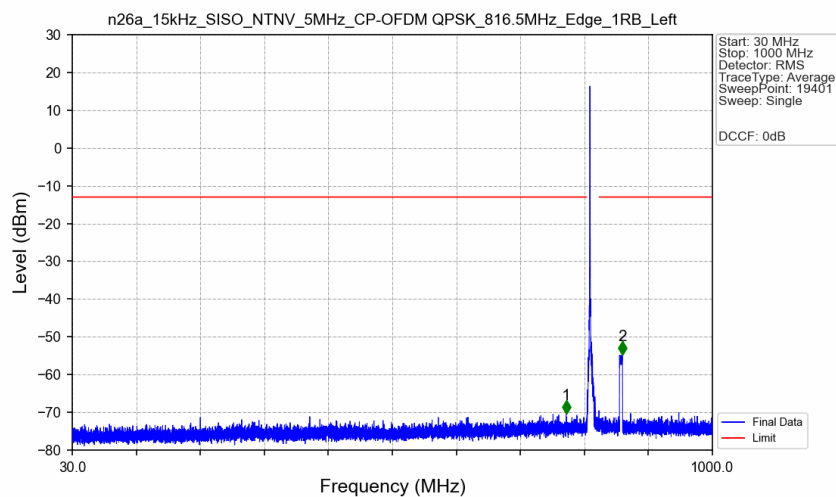
n26a_15kHz_SISO_NTNV_5MHz_DFT-s-OFDM_QPSK_821.5MHz_Outer_Full_Ant0



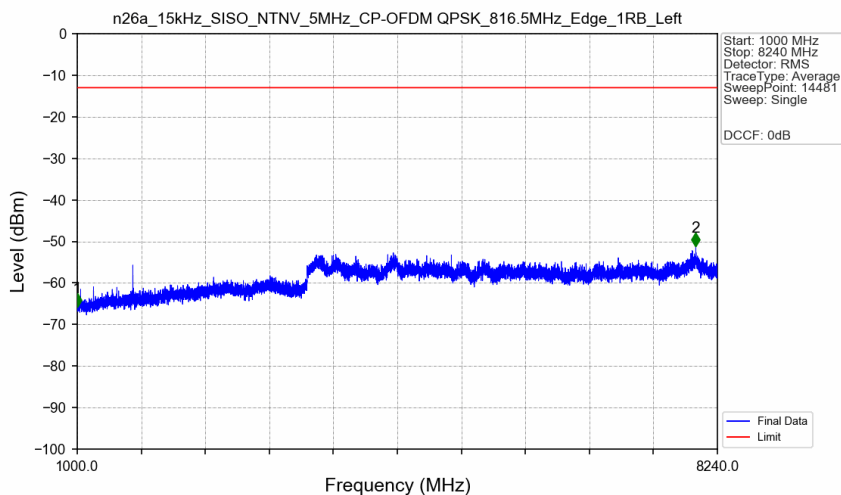
n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM_QPSK_816.5MHz_Edge_1RB_Ant0



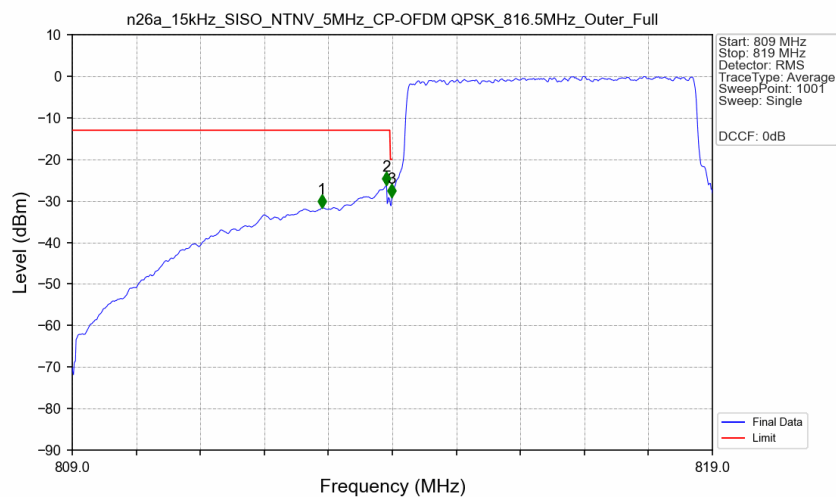
n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM_QPSK_816.5MHz_Edge_1RB_Left_Ant0



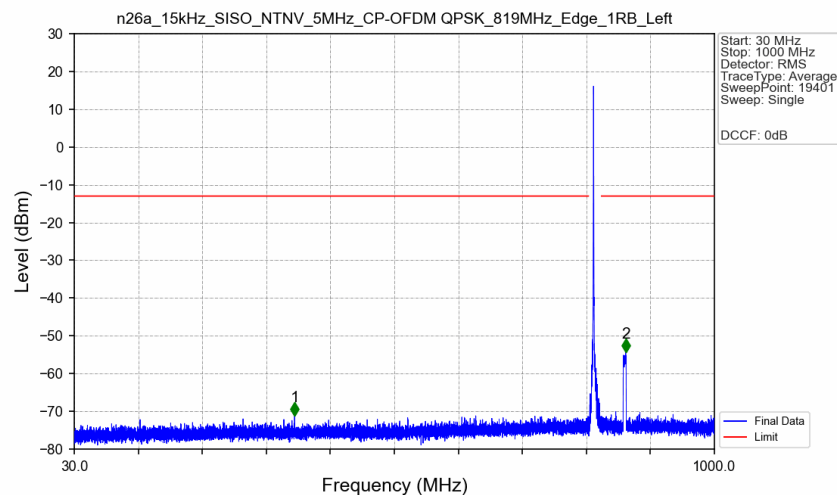
n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM QPSK_816.5MHz_Edge_1RB_Left_Ant0



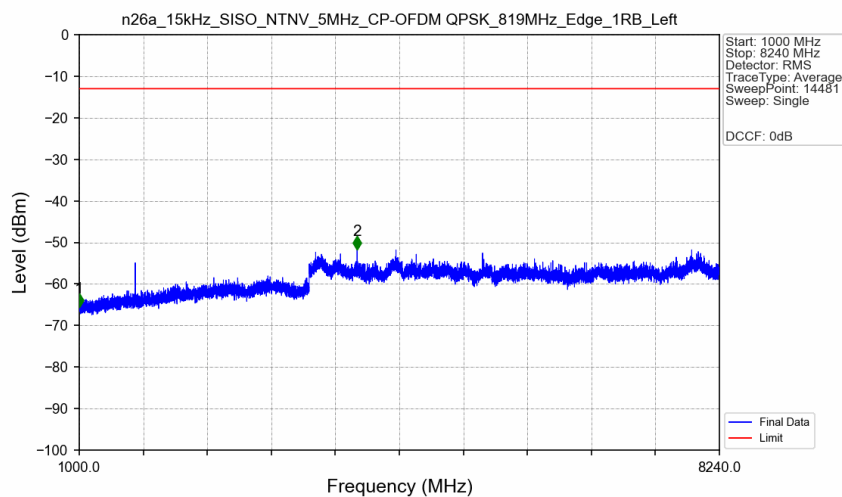
n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM QPSK_816.5MHz_Outer_Full_Ant0



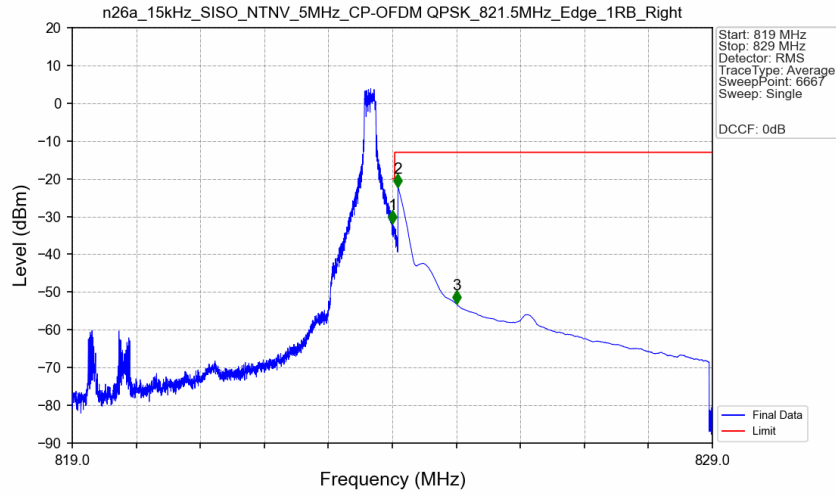
n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM_QPSK_819MHz_Edge_1RB_Left_Ant0



n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM_QPSK_819MHz_Edge_1RB_Left_Ant0

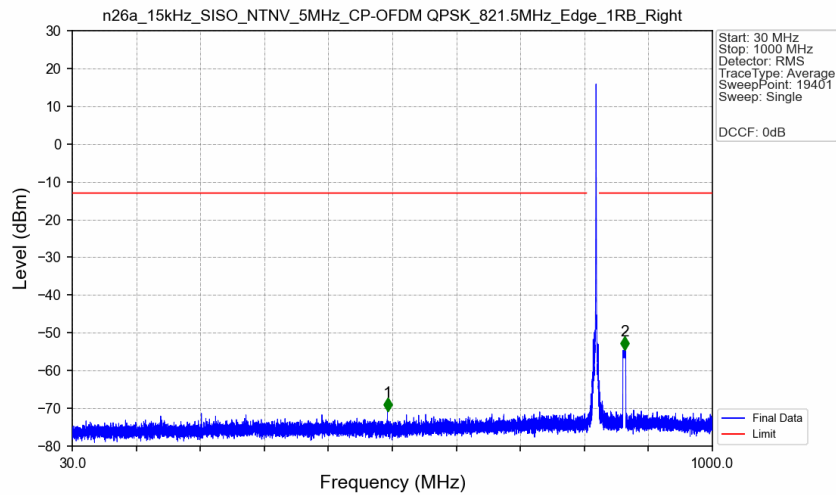


n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM_QPSK_821.5MHz_Edge_1RB_Right_Ant0



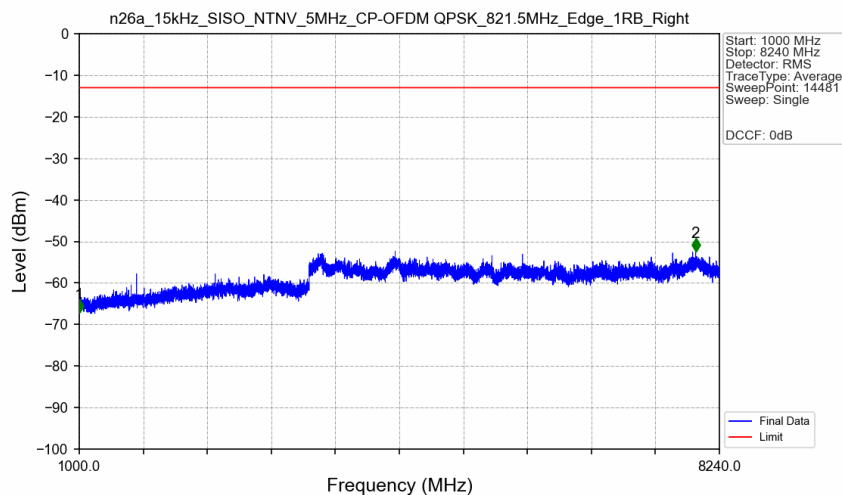
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.003	/	/	/	/	/	/
824	824.038	0.003	/	1	824.003	-31.83	-20	Pass
824.038	825	0.1	CHP	2	824.089	-22.13	-13	Pass
825	829	0.1	CHP	3	825.001	-53.16	-13	Pass

n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM_QPSK_821.5MHz_Edge_1RB_Right_Ant0



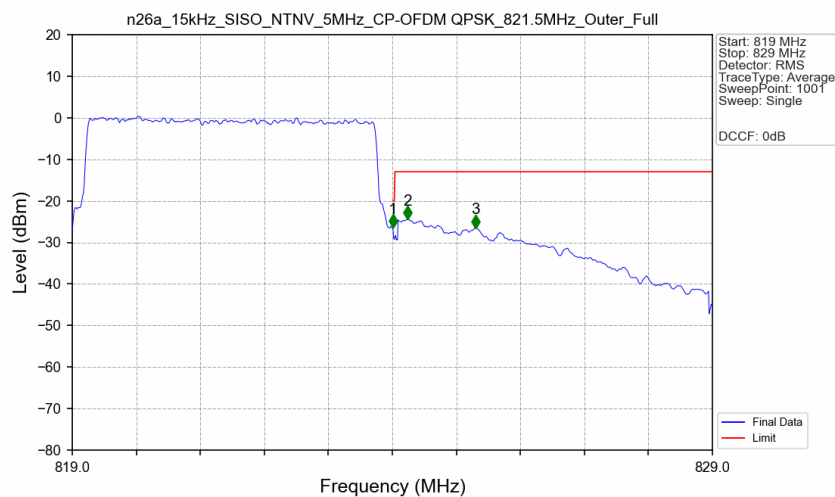
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	814	0.1	/	1	507.550	-70.77	-13	Pass
814	829	0.1	/	/	/	/	/	/
829	1000	0.1	/	2	866.700	-54.56	-13	Pass

n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM_QPSK_821.5MHz_Edge_1RB_Right_Ant0



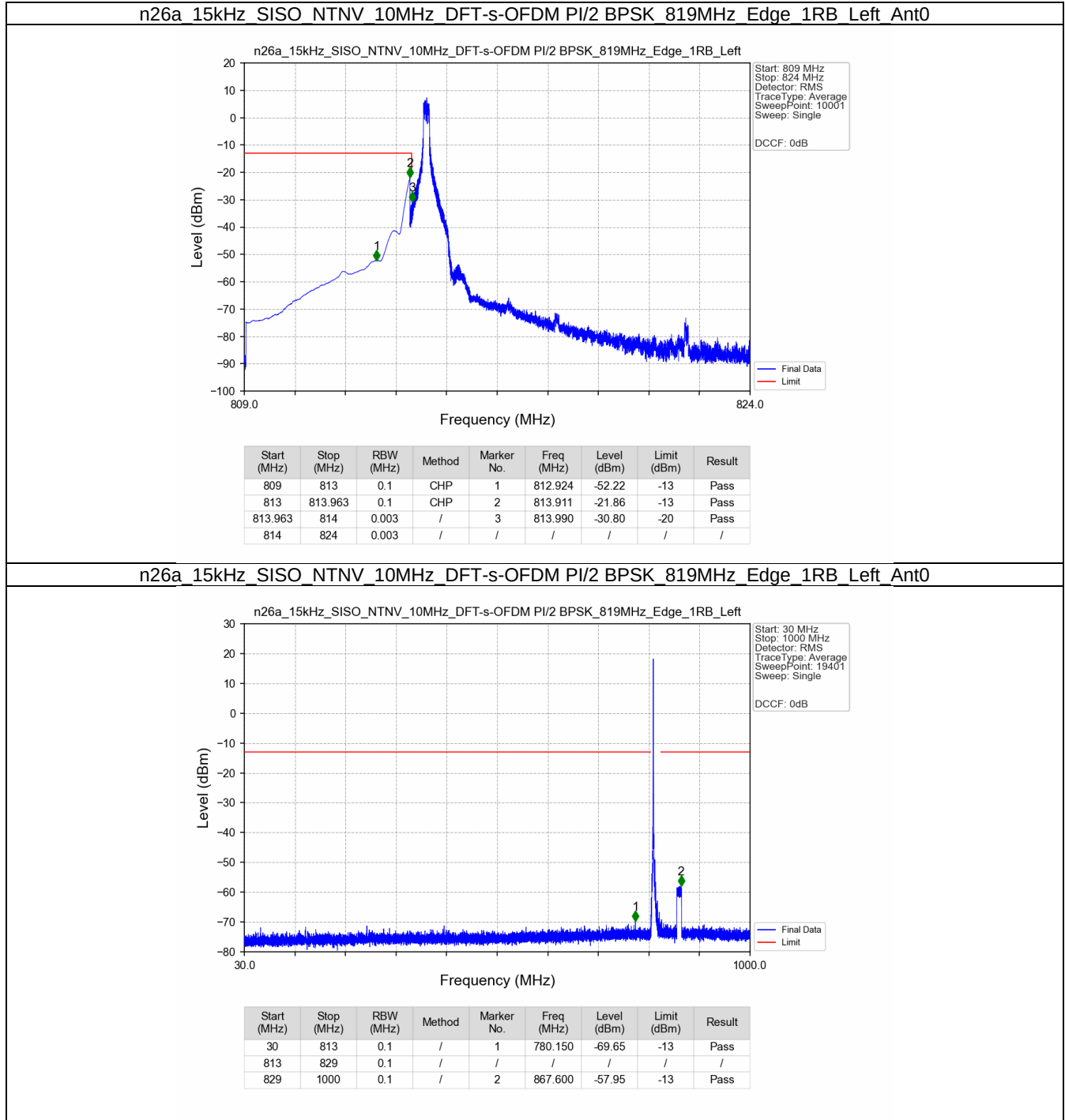
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	1000	1	/	1	1000.000	-67.10	-13	Pass
1000	8240	1	/	2	7971.500	-52.32	-13	Pass

n26a_15kHz_SISO_NTNV_5MHz_CP-OFDM_QPSK_821.5MHz_Outer_Full_Ant0

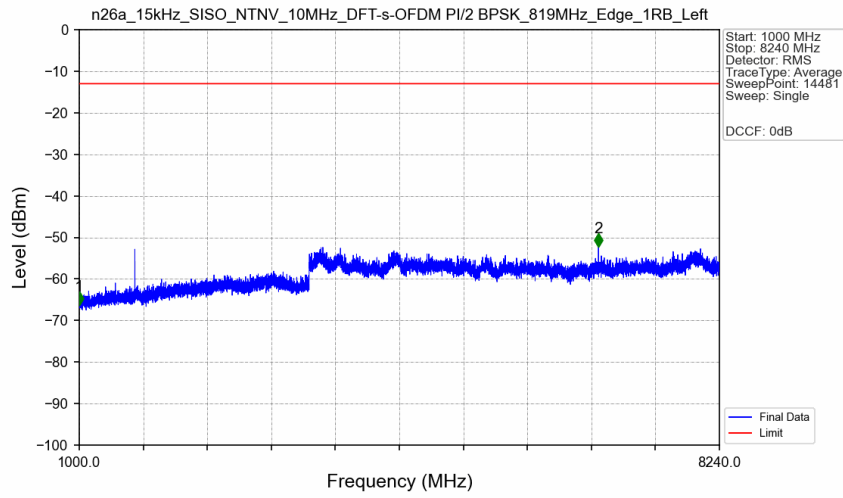


Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
819	824	0.05253	CHP	/	/	/	/	/
824	824.038	0.05253	CHP	1	824.010	-26.46	-20	Pass
824.038	825	0.1	CHP	2	824.240	-24.36	-13	Pass
825	829	0.1	CHP	3	825.300	-26.48	-13	Pass

5.2.2 15_S_10M_NTNV

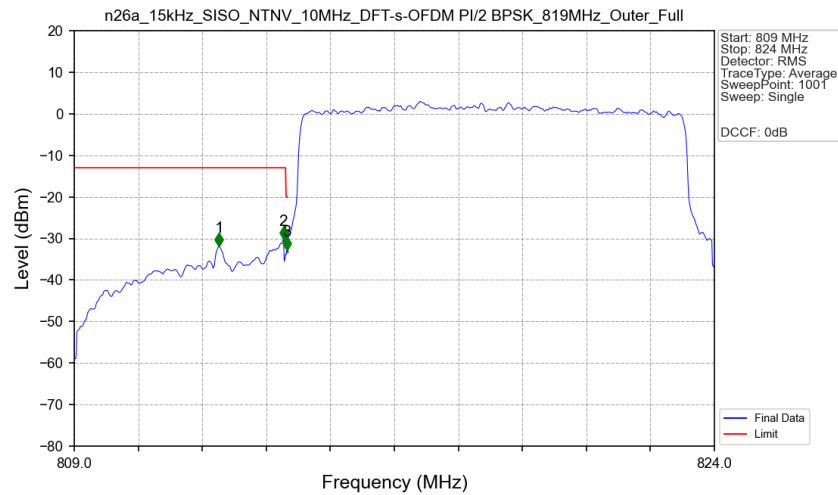


n26a_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM PI/2 BPSK_819MHz_Edge_1RB_Left_Ant0



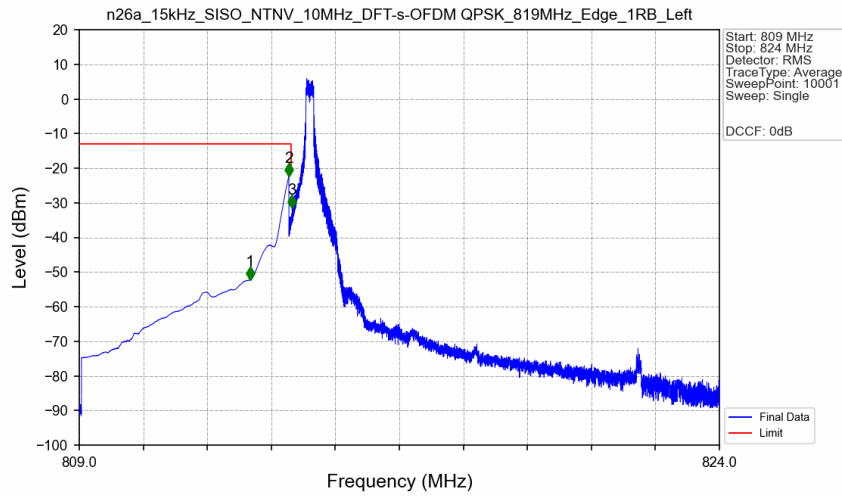
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	1000	1	/	1	1000.000	-66.28	-13	Pass
1000	8240	1	/	2	6872.000	-52.18	-13	Pass

n26a_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM PI/2 BPSK_819MHz_Outer_Full_Ant0



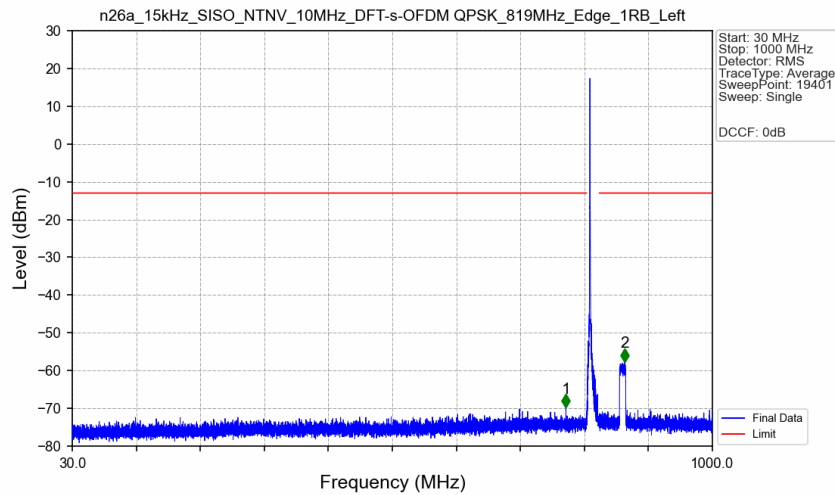
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	CHP	1	812.390	-31.84	-13	Pass
813	813.963	0.1	CHP	2	813.905	-30.19	-13	Pass
813.963	814	0.09871	CHP	3	813.980	-32.71	-20	Pass
814	824	0.09871	CHP	/	/	/	/	/

n26a_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM QPSK_819MHz_Edge_1RB_Left_Ant0



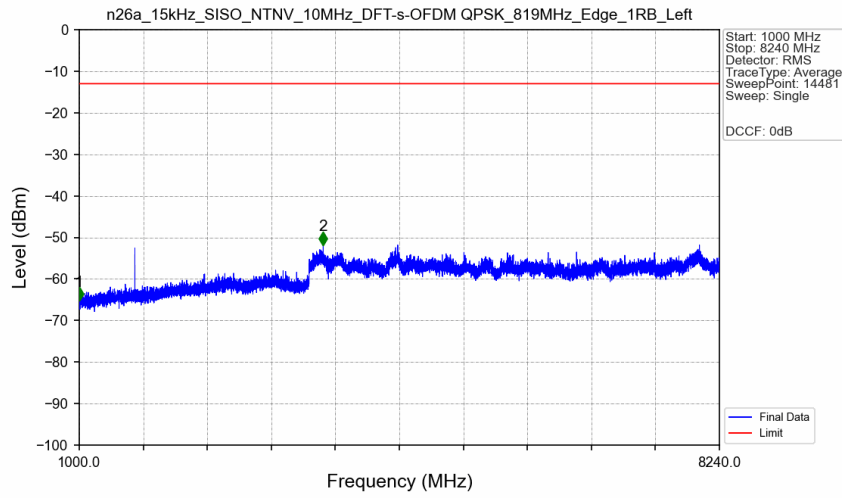
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	CHP	1	812.999	-52.23	-13	Pass
813	813.963	0.1	CHP	2	813.911	-22.30	-13	Pass
813.963	814	0.003	/	3	813.989	-31.60	-20	Pass
814	824	0.003	/	/	/	/	/	/

n26a_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM QPSK_819MHz_Edge_1RB_Left_Ant0



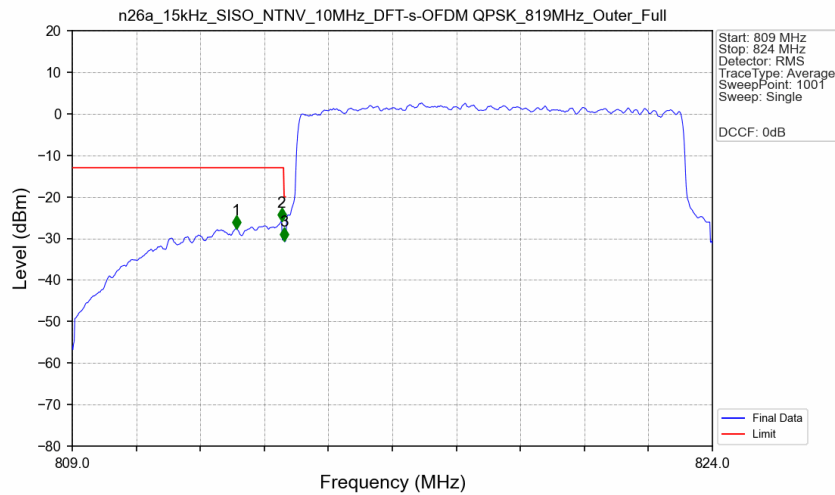
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	813	0.1	/	1	778.050	-69.71	-13	Pass
813	829	0.1	/	/	/	/	/	/
829	1000	0.1	/	2	867.100	-57.60	-13	Pass

n26a_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM QPSK_819MHz_Edge_1RB_Left_Ant0



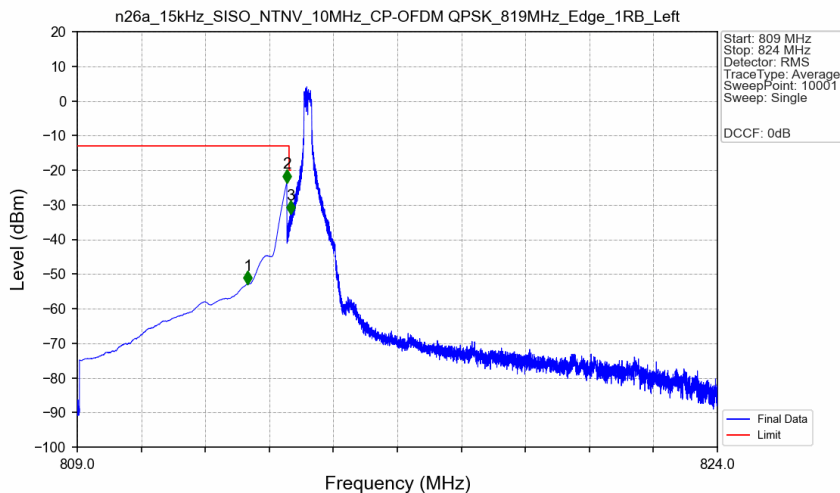
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	1000	1	/	1	1000.000	-65.22	-13	Pass
1000	8240	1	/	2	3759.000	-51.77	-13	Pass

n26a_15kHz_SISO_NTNV_10MHz_DFT-s-OFDM QPSK_819MHz_Outer_Full_Ant0



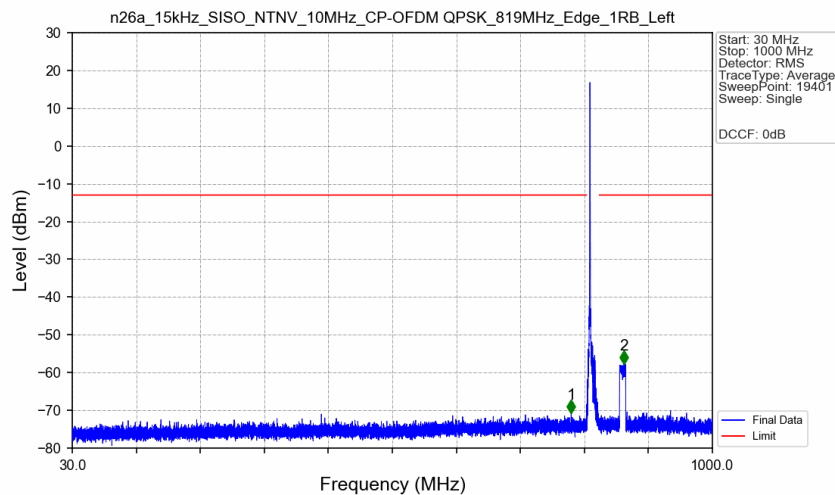
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	CHP	1	812.840	-27.64	-13	Pass
813	813.963	0.1	CHP	2	813.905	-25.81	-13	Pass
813.963	814	0.09961	CHP	3	813.965	-30.49	-20	Pass
814	824	0.09961	CHP	/	/	/	/	/

n26a_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_819MHz_Edge_1RB_Left_Ant0



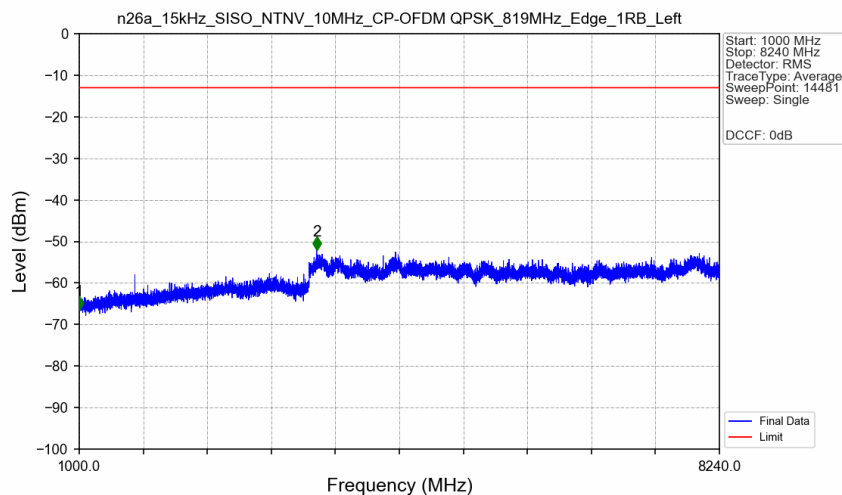
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	CHP	1	812.997	-52.98	-13	Pass
813	813.963	0.1	CHP	2	813.911	-23.54	-13	Pass
813.963	814	0.003	/	3	813.996	-32.67	-20	Pass
814	824	0.003	/	/	/	/	/	/

n26a_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_819MHz_Edge_1RB_Left_Ant0



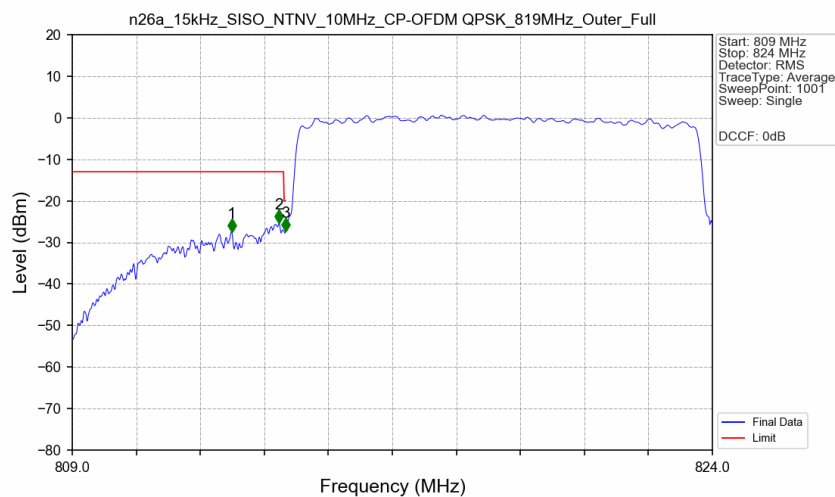
Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
30	813	0.1	/	1	786.000	-70.79	-13	Pass
813	829	0.1	/	/	/	/	/	/
829	1000	0.1	/	2	866.050	-57.69	-13	Pass

n26a_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_819MHz_Edge_1RB_Left_Ant0



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
1000	1000	1	/	1	1000.000	-66.46	-13	Pass
1000	8240	1	/	2	3685.000	-52.01	-13	Pass

n26a_15kHz_SISO_NTNV_10MHz_CP-OFDM QPSK_819MHz_Outer_Full_Ant0



Start (MHz)	Stop (MHz)	RBW (MHz)	Method	Marker No.	Freq (MHz)	Level (dBm)	Limit (dBm)	Result
809	813	0.1	/	1	812.735	-27.41	-13	Pass
813	813.963	0.1	/	2	813.845	-25.31	-13	Pass
813.963	814	0.12192	/	3	813.995	-27.35	-20	Pass
814	824	0.12192	CHP	/	/	/	/	/