

## Bonair Catalina 27 TM IB 37867

<b>Spinnaker</b>	<b>GPH: 0.683 / 775.7</b>	<b>IR#: 0.696 / 770.7</b>	<b>PHRF BM: 234.5</b>
<b>Non-Spin</b>	<b>GPH: 0.658 / 805.5</b>	<b>IR#: 0.687 / 780.1</b>	<b>PHRF BM: 243.9</b>

<p>Class: Catalina 27 TM IB          Configuration:          Sail Number: 37867          Year Built: 1973          Builder: Catalina Yachts          Owner(s): Chambers, Rich</p>	
<p>Certificate #: EZ11902-1          Valid Year: 2024          Type: Mid Seas Change          Issue Date: 2024-05-14          Exp. Date: 2024-12-31          Offsets_file: US270.OFF          Cert Group: ORR-Ez SOCAL          Comment:</p>	
<p>Rig Type: Sloop          Forestay: Masthead          Keel Type: Fin          Prop Type: Folding          Prop Install: Exposed          Prop Blades: 2</p>	
<p>LOA: 26.78 ft          LWL: 21.75 ft          Rated Length: 22.59 ft          Beam Max: 8.87 ft          Draft: 4.24 ft          Disp Empty: 6356 lbs          Disp Sailing: 7465 lbs          Crew: 965 lbs          Water Ballast: 0 lbs          Wetted Area: 168.3 ft<sup>2</sup>          LPS: 120.8 °          RM20: 321.4 ft·lbs          Stab Index: 121 °</p>	
<p>Spinnaker: Symmetrical flown with spinnaker pole          Genoa/Jib Leech: No Roach - Leech is straight          Large Roach Headsail: No          Jib Furler: Yes Above Deck          Main Roller Furling: No</p>	

<p><b>Rig Dimensions</b>          IG: 36.00 ft          ISP: 36.00 ft          J: 12.20 ft          P: 29.66 ft          E: 9.66 ft          SPL: 12.20 ft</p>	<p><b>Mainsail Meas.</b>          HB: 0.50 ft          MGT: 2.12 ft          MGU: 4.01 ft          MGM: 6.64 ft          MGL: 8.35 ft          Area: 181.9 ft<sup>2</sup></p>	<p><b>Jib/Genoa Meas.</b>          LP: 18.91 ft          LPG %: 155.0 %          J Luff: 36.00 ft          J Leech: 34.00 ft          Area: 340.4 ft<sup>2</sup></p>	<p><b>Symmetric Spin. Meas.</b>          SL: 33.70 ft          SMW: 19.60 ft          SF: 19.60 ft          Area: 550.5 ft<sup>2</sup></p>
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### Spinnaker

#### Polar Time Allowances

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	49.6	48.3	46.5	44.9	43.0	41.1	40.8	41.9
Beat VMG	1,925.24	1,390.23	1,137.23	1,017.44	955.97	902.96	889.83	904.93
52°	1,187.61	864.74	714.43	659.35	635.21	613.39	606.91	610.18
60°	1,062.64	786.76	663.45	624.01	605.06	586.62	580.35	579.23
75°	936.60	713.58	624.35	588.58	569.69	548.42	537.72	533.13
90°	901.42	687.38	602.13	565.64	546.56	524.43	511.82	505.42
110°	913.75	697.54	611.93	574.45	547.56	506.53	486.08	475.32
120°	1,001.53	747.24	636.23	592.85	562.44	516.39	479.43	460.25
135°	1,265.91	896.57	717.15	634.18	592.62	538.45	497.13	459.58
150°	1,614.21	1,090.18	829.97	700.14	629.47	561.44	517.15	479.43
165°	1,800.42	1,215.94	923.99	772.37	670.77	582.35	533.93	494.68
Run VMG	1,863.93	1,258.83	956.58	797.06	688.22	591.29	540.65	501.41
Opt Run Angle	135.6	142.4	153.3	171.9	172.0	173.2	173.4	172.9

#### Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.683	775.7
IR#	0.696	770.7

#### Performance Metrics

SA/D Dnwind:	30.680
SA/D Average:	26.28
SA/D Upwind:	21.880
D/Length:	289.2
Ave Perf Screen:	9.100
DnWind Perf	10.6
Screen:	

#### PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,496.9	1,068.2	861.9	753.6	691.4	630.9	604.5	593.3
W50/L50	1,918.5	1,346.9	1,066.7	920.0	834.2	755.2	722.6	710.4
W60/L40	1,927.8	1,361.5	1,085.5	942.8	861.1	786.7	757.9	751.2
MOSTLY WW	2,005.4	1,430.6	1,153.8	1,008.4	926.6	853.1	832.4	840.0
MOSTLY LW	1,636.2	1,145.1	903.9	772.7	691.3	604.6	559.9	533.8
MOSTLY REACH	1,353.1	973.1	792.2	698.6	645.6	593.6	569.2	556.2

### Non-Spinnaker

#### Polar Time Allowances

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	49.6	48.3	46.5	44.9	43.0	41.1	40.8	41.9
Beat VMG	1,925.24	1,390.23	1,137.23	1,017.44	955.97	902.96	889.83	904.93
52°	1,187.61	864.74	714.43	659.35	635.21	613.39	606.91	610.18
60°	1,062.64	786.76	663.45	624.01	605.06	586.62	580.35	581.64
75°	936.60	713.58	624.35	589.12	570.40	553.15	545.95	544.82
90°	921.38	705.16	620.75	585.54	561.68	534.93	525.79	522.47
110°	1,080.53	795.93	666.93	617.77	587.14	544.24	513.82	503.67
120°	1,261.83	903.84	732.39	648.75	608.89	558.09	522.21	498.45
135°	1,664.89	1,124.96	855.29	722.38	645.45	575.76	532.58	498.99
150°	1,898.63	1,261.87	943.50	779.59	676.83	587.98	539.95	502.84
165°	1,919.69	1,289.17	974.03	797.15	686.51	587.05	534.97	494.68
Run VMG	1,933.82	1,298.75	981.33	803.55	692.37	593.07	541.26	501.41
Opt Run Angle	171.6	171.7	171.7	171.9	172.0	173.2	173.4	172.9

#### Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.658	805.5
IR#	0.687	780.1

#### Performance Metrics

SA/D:	21.88
D/Length:	289.2
Perf Screen:	7.6

#### PCS Ratings

	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,587.4	1,125.0	900.5	781.4	712.2	645.2	617.4	607.1
W50/L50	1,953.4	1,366.4	1,077.9	924.3	836.4	756.1	722.9	710.4
W60/L40	1,955.6	1,377.1	1,094.5	946.3	862.9	787.4	758.2	751.2
MOSTLY WW	2,013.6	1,436.0	1,157.7	1,011.2	928.8	854.6	833.9	841.7
MOSTLY LW	1,750.1	1,215.4	951.2	804.8	716.3	623.4	576.9	548.2
MOSTLY REACH	1,459.9	1,039.5	836.5	730.6	669.7	611.1	585.4	574.7

*Bonair Catalina 27 TM IB 37867*

**Spinnaker**

**Standard 5 Winds**

	TOT (Spin)					TOD (Spin)				
	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	0.348	0.456	0.582	0.701	0.854	1,496.9	1,142.3	894.6	742.0	609.6
W50/L50	0.331	0.440	0.571	0.702	0.870	1,918.5	1,444.0	1,111.2	903.9	729.4
W60/L40	0.336	0.444	0.573	0.698	0.846	1,927.8	1,458.3	1,129.9	928.3	765.3
MOSTLY WW	0.343	0.449	0.574	0.691	0.816	2,005.3	1,529.9	1,197.6	994.7	841.9
MOSTLY LW	0.323	0.430	0.562	0.701	0.934	1,636.2	1,228.4	940.6	754.0	566.1
MOSTLY REACH	0.359	0.467	0.591	0.705	0.847	1,353.1	1,039.5	821.3	689.0	573.0

**Standard Single Wind**

	TOT (Spin) Single	TOD (Spin) Single
RANDOM LEG	0.677	768.4
W50/L50	0.675	940.9
W60/L40	0.671	965.9
MOSTLY WW	0.664	1,034.2
MOSTLY LW	0.678	779.6
MOSTLY REACH	0.682	712.1

**Legacy 4 Winds**

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.321	0.512	0.687	0.790	1,496.9	938.0	699.3	608.3
W50/L50	0.307	0.503	0.695	0.808	1,918.5	1,170.1	845.8	727.7
W60/L40	0.312	0.506	0.689	0.787	1,927.8	1,187.8	872.2	763.4
MOSTLY WW	0.314	0.501	0.671	0.750	2,005.3	1,255.9	937.8	839.5
MOSTLY LW	0.297	0.490	0.694	0.861	1,636.2	991.7	700.8	564.6
MOSTLY REACH	0.333	0.524	0.691	0.787	1,353.1	859.3	652.4	572.1

**Non-Spinnaker**

**Standard 5 Winds**

	TOT (Non-Spin)					TOD (Non-Spin)				
	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	0.328	0.432	0.556	0.677	0.835	1,587.4	1,204.3	935.6	768.2	623.2
W50/L50	0.325	0.433	0.565	0.698	0.870	1,953.3	1,465.9	1,122.9	908.7	729.8
W60/L40	0.331	0.439	0.569	0.695	0.846	1,955.6	1,475.7	1,139.3	932.2	765.6
MOSTLY WW	0.341	0.447	0.572	0.689	0.815	2,013.5	1,535.8	1,201.7	997.4	843.4
MOSTLY LW	0.302	0.405	0.534	0.673	0.907	1,750.1	1,305.6	990.4	785.5	582.8
MOSTLY REACH	0.333	0.437	0.559	0.675	0.822	1,459.9	1,112.0	868.8	719.3	590.4

**Standard Single Wind**

	TOT (Non-Spin) Single	TOD (Non-Spin) Single
RANDOM LEG	0.653	797.0
W50/L50	0.670	947.3
W60/L40	0.667	971.1
MOSTLY WW	0.663	1,037.1
MOSTLY LW	0.649	814.7
MOSTLY REACH	0.651	745.5

**Legacy 4 Winds**

	TOT (Non-Spin)				TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.303	0.489	0.667	0.773	1,587.4	983.0	721.1	621.8
W50/L50	0.301	0.497	0.693	0.808	1,953.3	1,183.8	848.3	728.1
W60/L40	0.307	0.501	0.687	0.786	1,955.6	1,198.8	874.3	763.7
MOSTLY WW	0.313	0.499	0.669	0.748	2,013.5	1,260.3	940.1	841.0
MOSTLY LW	0.278	0.464	0.669	0.836	1,750.1	1,046.7	726.8	581.3
MOSTLY REACH	0.309	0.494	0.665	0.765	1,459.9	911.5	677.6	589.2

**Bonair Catalina 27 TM IB 37867**

**Spinnaker**

**PHRF Benchmark**

234.5

Aligned Ratings are based on the Farr  
 40 MH as Scratch Boat.

**PHRF Single Wind**

RANDOM LEG	248.0
W50/L50	306.2
W60/L40	318.1
MOSTLY WW	347.1
MOSTLY LW	250.8
MOSTLY REACH	226.6

**PHRF 5 Winds**

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	508.1	380.1	289.9	234.4	206.6
W50/L50	711.0	515.4	374.8	284.3	241.5
W60/L40	708.3	519.8	384.4	297.4	255.2
MOSTLY WW	698.7	527.9	407.0	330.7	287.6
MOSTLY LW	574.4	417.4	306.1	235.1	195.1
MOSTLY REACH	446.3	337.5	260.8	214.9	191.4

**Non-Spinnaker**

**PHRF Benchmark**

243.9

Aligned Ratings are based on the Farr  
 40 MH as Scratch Boat.

**PHRF Single Wind**

RANDOM LEG	276.6
W50/L50	312.6
W60/L40	323.3
MOSTLY WW	350.0
MOSTLY LW	285.9
MOSTLY REACH	260.0

**PHRF 5 Winds**

	V.Light <5	Light 5-7	Lt/Med 7-9	Medium 9-15	Heavy >15
RANDOM LEG	598.6	442.1	330.9	260.6	220.2
W50/L50	745.8	537.3	386.5	289.1	241.9
W60/L40	736.1	537.2	393.8	301.3	255.5
MOSTLY WW	706.9	533.8	411.1	333.4	289.1
MOSTLY LW	688.3	494.6	355.9	266.6	211.8
MOSTLY REACH	553.1	410.0	308.3	245.2	208.8