

Class: Beneteau First 40.7 Configuration: Sail Number: 56046 Year Built: 2002 Builder: BENETEAU Owner(s): Babcock, Tyler				
Certificate #: EZ11846 Valid Year: 2023 Type: New Cert Issue Date: 2023-10-05 Exp. Date: 2023-12-31 Offsets_file: FIRST407.OFF Cert Group: ORR-Ez SOCAL Comment:				
Rig Type: Sloop Forestay: Masthead Keel Type: Fixed Prop Type: Folding Prop Install: Strut Drive Prop Blades: 2				
LOA: 39.30 ft LWL: 34.90 ft Rated Length: 35.11 ft Beam Max: 12.36 ft Draft: 7.90 ft Disp Empty: 15260 lbs Disp Sailing: 17238 lbs Crew: 1799 lbs Water Ballast: 0 lbs Wetted Area: 332.4 ft ² LPS: 120.2 ° RM20: 1175.2 ft·lbs Stab Index: 122 °				
Spinnaker: Both Symmetrical & Asymmetrical flown with spin pole Code Zero: No Genoa/Jib Leech: No Roach - Leech is straight Large Roach Headsail: No Jib Furler: Yes Above Deck Main Roller Furling: No				
Rig Dimensions IG: 51.60 ft ISP: 51.90 ft J: 14.50 ft P: 48.90 ft E: 17.70 ft SPL: 14.47 ft	Mainsail Meas. HB: 0.71 ft MGT: 3.90 ft MGU: 6.76 ft MGM: 11.65 ft MGL: 15.40 ft Area: 539.5 ft ²	Jib/Genoa Meas. LP: 22.14 ft LPG %: 152.6 % J Luff: 51.18 ft J Leech: 49.30 ft Area: 566.5 ft ²	Asymmetric Spin. Meas. ASLU: 55.50 ft ASLE: 52.70 ft AMG: 26.00 ft ASF: 26.10 ft Area: 1173.1 ft ²	Symmetric Spin. Meas. SL: 50.90 ft SMW: 26.20 ft SF: 26.10 ft Area: 1110.5 ft ²

Playa Grande Beneteau First 40.7 56046

Table of Time Allowances (sec/mile)* (at True Wind Angles)

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	45.8	45.0	44.1	41.0	38.6	36.3	35.8	36.0
Beat VMG	1,368.87	988.52	808.70	720.27	679.07	643.09	630.37	625.97
52°	868.43	635.25	527.74	493.18	478.13	463.54	455.92	452.12
60°	788.02	589.75	504.10	475.66	462.62	449.14	441.63	437.19
75°	711.83	547.39	484.98	455.58	443.20	425.36	414.11	406.17
90°	697.44	533.01	468.29	441.19	425.30	403.92	389.97	379.66
110°	695.92	534.36	472.48	440.20	415.89	383.47	363.23	347.87
120°	736.77	559.71	487.85	454.80	430.36	387.67	351.39	331.99
135°	1,001.65	696.24	546.34	492.66	461.40	416.04	375.54	327.52
150°	1,226.76	852.71	668.03	564.03	502.37	442.88	402.26	363.75
165°	1,368.27	951.08	745.09	629.10	550.32	466.96	422.03	385.23
Run VMG	1,416.54	984.63	771.37	651.29	569.73	480.76	433.11	396.35
Opt Run Angle	129.9	132.7	136.2	146.8	159.8	172.0	173.7	172.5

Performance Metrics

SA/D Dnwind:	41.070
SA/D Average:	33.80
SA/D Upwind:	26.520
D/Length:	177.8
Ave Perf Screen:	19.000
DnWind Perf	23.1
Screen:	

* Sec/mile rating assume gybing downwind when target angles are deeper than best VMG angles.

Standard Ratings

	TOT (Spin)				TOD (Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.427	0.677	0.905	1.062	1,121.7	706.7	528.6	450.6
W50/L50	0.413	0.668	0.915	1.087	1,418.4	877.2	640.4	539.4
W60/L40	0.423	0.680	0.919	1.070	1,414.5	880.5	651.3	559.2
MOSTLY WW	0.462	0.721	0.929	1.024	1,305.6	835.4	648.5	588.6
MOSTLY LW	0.416	0.658	0.891	1.116	1,136.1	717.8	530.4	423.4

Benchmark Ratings

	TOT (Spin)	TOD (Spin)
GPH	0.899	586.8
IR#	0.912	586.2

ORR-Ez PHRF

TOD (Spin)
49.9

ORR-Ez PHRF are based on the Farr 40 MH as Scratch Boat.

Standard PCS Ratings

	TOD (Spin)							
	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,122.8	803.9	651.1	570.1	523.4	475.1	449.5	431.1
W50/L50	1,418.5	1,004.7	803.7	696.0	632.8	568.1	536.9	516.0
W60/L40	1,414.6	1,005.6	807.8	703.4	643.8	584.4	556.8	539.2
MOSTLY WW	1,305.5	942.6	770.9	685.5	642.8	602.9	586.6	578.4
MOSTLY LW	1,136.0	815.1	661.7	579.6	524.9	459.8	420.2	393.6
MOSTLY REACH								

ORR-Ez PHRF Time Allowance 4 Winds

	TOD (Spin)			
	V.Light	Light	Medium	Heavy
RANDOM LEG	131.3	73.4	46.7	47.0
W50/L50	211.5	108.8	53.7	53.0
W60/L40	198.4	105.9	55.2	53.7
MOSTLY WW	138.5	84.7	48.8	47.2
MOSTLY LW	191.6	97.9	52.6	49.3

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Table of Time Allowances (sec/mile)* (at True Wind Angles)

True Wind Speed	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
Opt Beat Angle	45.8	45.0	44.1	41.0	38.6	36.3	35.8	36.0
Beat VMG	1,368.87	988.52	808.70	720.27	679.07	643.09	630.37	625.97
52°	868.43	635.25	527.74	493.18	478.13	463.54	455.92	452.12
60°	788.02	589.75	504.10	475.66	462.62	449.14	441.63	437.50
75°	711.83	547.39	484.98	455.58	443.20	428.90	420.12	413.99
90°	701.84	541.83	482.64	451.82	430.70	413.17	401.92	393.33
110°	786.20	591.38	508.81	475.00	450.87	413.42	384.68	373.29
120°	896.04	656.16	545.84	497.97	469.58	428.78	394.62	367.41
135°	1,216.59	846.02	663.09	564.02	507.82	451.68	413.41	378.53
150°	1,525.04	1,024.74	774.69	639.02	551.56	470.08	426.57	391.27
165°	1,635.62	1,101.52	834.63	679.14	582.17	479.99	431.15	393.88
Run VMG	1,666.28	1,121.11	848.68	689.64	590.59	485.55	436.15	399.06
Opt Run Angle	171.9	172.0	172.1	172.1	172.1	173.3	173.6	173.0

* Sec/mile rating assume gybing downwind when target angles are deeper than best VMG angles.

Performance Metrics

SA/D:	26.52
D/Length:	177.8
Perf Screen:	14.9

Standard Ratings

	TOT (Non-Spin)				TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy	V.Light	Light	Medium	Heavy
RANDOM LEG	0.398	0.641	0.872	1.031	1,200.9	746.9	548.8	464.2
W50/L50	0.384	0.637	0.901	1.084	1,525.0	919.8	650.6	540.8
W60/L40	0.399	0.654	0.907	1.068	1,499.4	914.6	659.5	560.4
MOSTLY WW	0.454	0.713	0.925	1.021	1,327.0	845.0	651.1	590.1
MOSTLY LW	0.361	0.599	0.850	1.071	1,309.1	789.4	555.9	441.0

Benchmark Ratings

	TOT (Non-Spin)	TOD (Non-Spin)
GPH	0.858	615.4
IR#	0.893	599.8

ORR-Ez PHRF

TOD (Non-Spin)	63.5
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ORR-Ez PHRF are based on the Farr 40 MH as Scratch Boat.

Standard PCS Ratings

	TOD (Non-Spin)							
	4 kts	6 kts	8 kts	10 kts	12 kts	16 kts	20 kts	24 kts
RANDOM LEG	1,206.8	857.2	688.0	596.9	543.6	489.3	462.6	445.9
W50/L50	1,537.4	1,071.4	841.8	716.1	643.5	570.8	538.4	517.4
W60/L40	1,509.3	1,059.1	838.3	719.6	652.5	586.6	558.0	540.3
MOSTLY WW	1,329.6	957.1	780.1	690.4	645.4	604.3	588.1	580.0
MOSTLY LW	1,324.0	921.9	723.5	616.0	551.0	478.6	439.0	409.1
MOSTLY REACH								

ORR-Ez PHRF Allowance 4 Winds

	TOD (Non-Spin)			
	V.Light	Light	Medium	Heavy
RANDOM LEG	210.5	113.6	66.9	60.6
W50/L50	318.1	151.4	63.9	54.4
W60/L40	283.3	140.0	63.4	54.9
MOSTLY WW	159.9	94.3	51.4	48.7
MOSTLY LW	364.6	169.5	78.1	66.9