



PERFORMANCE PREDICTION



**DESIGN #496
43' Fast Cruiser/Racer
Racing Version
for
Chantiers Beneteau S.A.**

FARR YACHT DESIGN LTD
613 Third Street Suite 20 P. O. Box 4964 Annapolis MD 21403 U.S.A.
T. 410 267 0780 F. 410 268 0553 info@farrdesign.com www.farrdesign.com

DESCRIPTION OF SYMBOLS IN VPP OUTPUT

The accompanying document contains a large amount information about the predicted performance of your boat. To allow this document to be used as a valuable racing tool we have prepared the following explanation of the important terms it contains.

General Terms:

Vt or TWS	True Wind Speed
Bt or TWA	True Wind Angle
V or Vs	Boat Speed
VMG	Boat Velocity Made Good
HEEL	Heel Angle
REEF	Measure of Reduction in Sail Area
FLAT	Measure of Reduction in Sail Lift
Va, AWS	Apparent Wind Speed
Ba, AWA	Apparent Wind Angle
Lee	Leeway Angle
Sail	Sail Combination Designator (Upwind or Downwind)
Flot	Flotation Designator (Varies Only For Water Ballasted Boats)

VPP Polar diagram

This is a graphical representation of the boats performance across a range of windspeeds and true wind directions. Optimal upwind and downwind conditions are marked as small rectangles on the boat speed contours for each windspeed.

Best Boatspeeds

The upper portion of this page gives a numerical representation of the polar diagram. Boatspeeds in knots are given for a series of true windspeeds at masthead height, across a range of true wind angles. All boatspeeds and windspeeds are given in knots. The shaded cells lie beyond the upwind and downwind optimum points. The two tables on the lower portion of the page provide a ready reference of useful details about the optimum upwind and downwind sailing conditions as a function of the true windspeeds (Vt's) across the top of the page. In addition to indicating the optimum upwind and downwind boat speeds in knots, they are also expressed in seconds/mile and in seconds/boat length. VMG is also expressed in seconds/mile.

Course Times

This page shows the predicted boat performance over a series of 1.0 nautical mile courses in various windspeeds. Times around the course are expressed as seconds. The courses reflect five different course conditions: - LEEWARD, LINEAR RANDOM (LR), WINDWARD-LEEWARD (WL), WINDWARD and CIRCULAR-RANDOM (CR).

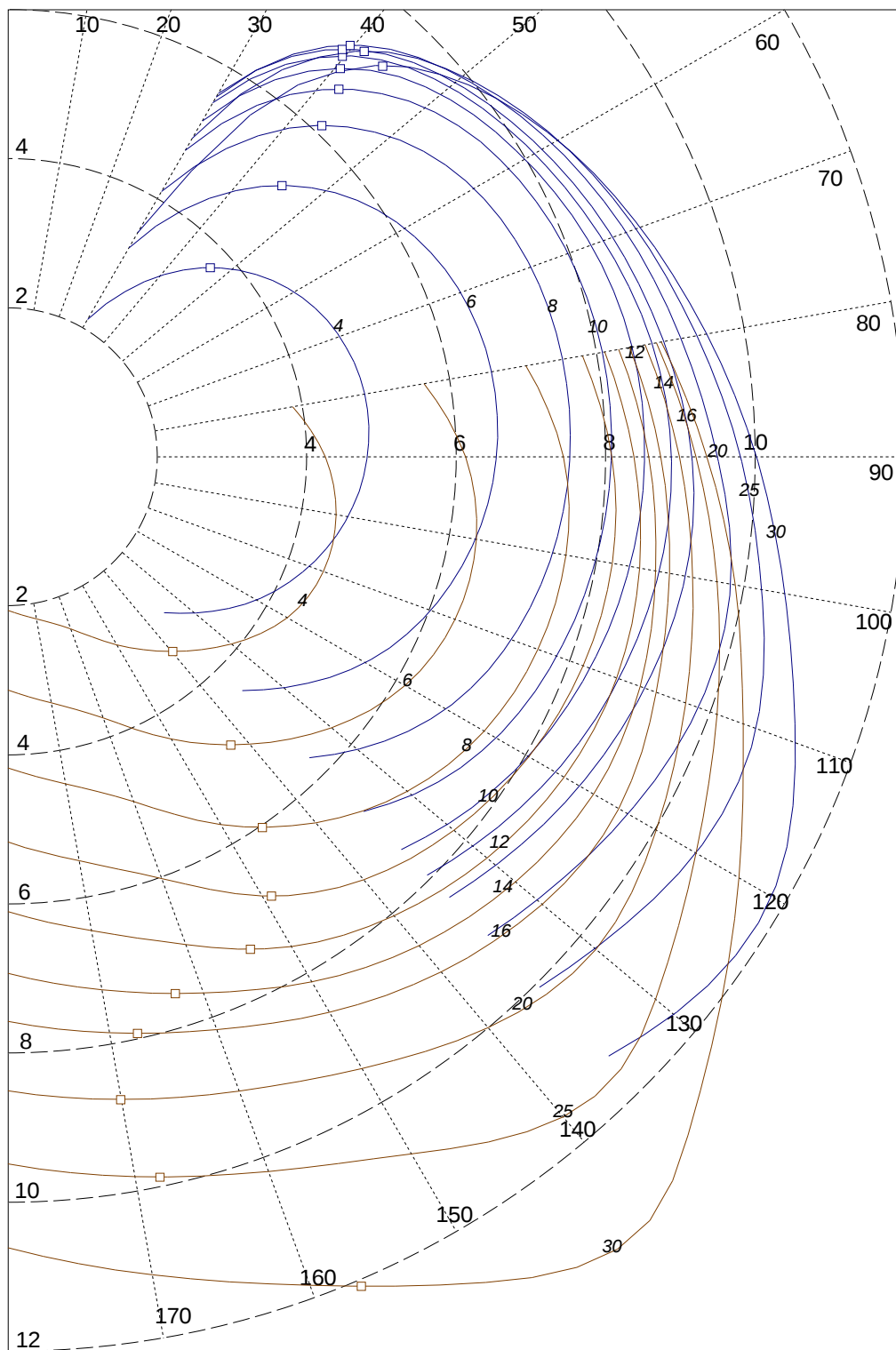
Times for 1 nm (secs)

This page is similar to the Best Boatspeeds page in that it represents the boatspeeds for a series of true windspeeds and true wind angles. Boatspeeds are expressed as seconds/nautical mile. Shaded areas again depict the off optimum conditions. Optimum upwind and downwind values, in terms of VMG, are presented underneath the table.

Best Performance

This page is a detailed representation of the polar diagram showing a list of predicted performance variables for each windspeed over the range of true wind angles. All of those items listed in the "General Terms" section are listed and optimum upwind and downwind settings are included in bold type.

**D496 - 43 Foot Fast Cruiser/Racer - Race Version
For Chantiers Beneteau**



Best Boatspeeds (kt)

	4	6	8	10	12	14	16	20	25	30
30.0	2.13	3.24	4.11	4.75	5.20	5.48	5.63	5.57	4.93	3.47
33.0	2.48	3.73	4.69	5.38	5.82	6.09	6.23	6.23	5.88	4.72
36.0	2.79	4.15	5.18	5.89	6.30	6.55	6.68	6.72	6.49	5.87
39.0	3.08	4.52	5.61	6.30	6.69	6.92	7.04	7.10	6.96	6.53
42.0	3.34	4.85	5.97	6.64	7.00	7.21	7.31	7.40	7.33	7.03
45.0	3.58	5.15	6.28	6.92	7.25	7.43	7.53	7.62	7.60	7.42
50.0	3.92	5.56	6.68	7.29	7.56	7.72	7.81	7.92	7.95	7.85
60.0	4.42	6.13	7.20	7.74	7.99	8.14	8.25	8.41	8.50	8.49
70.0	4.72	6.44	7.44	7.98	8.30	8.48	8.61	8.80	8.94	9.00
80.0	4.85	6.57	7.54	8.08	8.48	8.75	8.91	9.15	9.36	9.49
90.0	4.81	6.54	7.52	8.08	8.52	8.88	9.15	9.49	9.81	10.02
100.0	4.62	6.36	7.58	8.21	8.58	8.85	9.21	9.82	10.24	10.55
110.0	4.49	6.37	7.55	8.19	8.67	9.00	9.23	9.83	10.65	11.21
120.0	4.31	6.13	7.36	8.05	8.59	9.05	9.44	10.01	10.63	11.80
130.0	3.90	5.65	6.98	7.79	8.37	8.86	9.33	10.27	11.31	12.29
135.0	3.66	5.35	6.71	7.62	8.21	8.72	9.19	10.19	11.61	12.87
140.0	3.41	5.03	6.41	7.40	8.04	8.56	9.02	9.99	11.55	13.37
150.0	2.91	4.37	5.69	6.80	7.58	8.13	8.60	9.47	10.79	12.78
160.0	2.46	3.73	4.92	6.02	6.96	7.65	8.17	9.05	10.20	11.82
170.0	2.21	3.35	4.45	5.50	6.45	7.26	7.84	8.75	9.80	11.14
180.0	2.06	3.13	4.17	5.17	6.10	6.92	7.57	8.50	9.48	10.60
Up.Vs(kts)	3.71	5.16	6.11	6.63	6.85	6.99	7.06	7.17	7.23	7.25
Up.Vs(s/m)	970.1	697.2	588.7	543.2	525.8	514.8	509.7	502.2	497.8	496.3
Up.Vs(s/L)	7.0	5.0	4.2	3.9	3.8	3.7	3.7	3.6	3.6	3.6
Up.Bt	46.8	45.2	43.4	41.9	40.5	39.8	39.3	39.7	41.2	43.7
Up.Vmg(kts)	2.54	3.64	4.45	4.93	5.21	5.38	5.47	5.52	5.44	5.24
Up.Vmg(s/m)	1418.3	989.4	809.8	729.9	691.2	669.7	658.5	652.4	661.9	687.0
Up.Heel	3.0	6.5	11.4	17.0	19.6	21.6	23.1	23.7	24.1	24.5
Up.Reef	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.77	0.67
Up.Flat	1.00	1.00	1.00	0.94	0.80	0.68	0.59	0.59	0.64	0.70
Up.Va	7.07	10.30	13.09	15.45	17.58	19.61	21.56	25.41	30.07	34.54
Up.Ba	24.3	24.2	24.3	24.4	24.7	25.1	25.6	27.4	30.0	33.1
Up.Leewy	2.35	2.54	2.92	3.35	3.50	3.62	3.77	4.08	4.53	5.03
Dn.Vs(kts)	3.42	4.88	6.02	6.86	7.36	7.54	7.92	8.75	9.87	12.08
Dn.Vs(s/m)	1053.9	738.0	598.0	524.7	489.3	477.7	454.5	411.5	364.7	297.9
Dn.Vs(s/L)	7.6	5.3	4.3	3.8	3.5	3.4	3.3	3.0	2.6	2.1
Dn.Bt	139.8	142.3	145.6	149.1	153.8	162.7	167.4	170.1	168.1	157.0
Dn.Vmg(kts)	2.61	3.86	4.97	5.89	6.60	7.20	7.73	8.62	9.66	11.12
Dn.Vmg(s/m)	1379.8	932.4	724.8	611.5	545.2	500.2	465.8	417.8	372.7	323.7
Dn.Heel	0.6	1.1	1.4	1.6	1.4	1.0	0.9	1.2	2.4	8.3
Dn.Reef	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Dn.Flat	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Dn.Va	2.61	3.67	4.56	5.41	6.30	7.16	8.45	11.48	15.47	19.39
Dn.Ba	82.1	88.0	97.3	108.5	122.8	144.5	155.5	162.5	160.6	143.2
Dn.Leewy	0.46	0.41	0.35	0.29	0.22	0.15	0.12	0.12	0.19	0.35

Shaded cells lie outside upwind and downwind optimum sailing angles.

Times for 1 nm (secs)

	4	6	8	10	12	14	16	20	25	30
30.0	1692.1	1111.0	875.8	758.4	691.9	656.4	639.6	646.3	730.1	1037.0
33.0	1452.9	964.6	767.6	668.9	618.1	591.5	578.3	577.9	612.6	763.4
36.0	1288.7	866.5	694.8	611.1	571.5	549.8	538.8	535.6	554.8	613.7
39.0	1168.2	795.7	641.6	571.6	538.4	520.5	511.5	506.8	517.2	551.3
42.0	1076.9	741.8	602.8	542.2	514.3	499.5	492.1	486.7	491.4	511.8
45.0	1005.9	699.5	573.7	520.2	496.4	484.3	478.0	472.2	473.8	485.5
50.0	918.5	647.4	538.8	493.9	476.0	466.5	460.8	454.4	453.1	458.4
60.0	814.2	587.2	500.0	465.2	450.7	442.5	436.4	428.3	423.7	423.8
70.0	762.3	558.6	483.6	451.4	433.6	424.7	418.1	409.0	402.5	400.0
80.0	742.8	547.9	477.7	445.8	424.5	411.3	404.1	393.6	384.7	379.2
90.0	748.7	550.8	478.8	445.5	422.6	405.5	393.3	379.2	367.2	359.4
100.0	779.4	565.8	474.9	438.5	419.5	406.9	391.1	366.6	351.6	341.1
110.0	801.5	565.4	477.0	439.6	415.3	400.0	390.0	366.3	337.9	321.1
120.0	834.4	586.9	489.4	447.4	419.0	398.0	381.4	359.5	338.7	305.1
130.0	922.2	637.1	516.0	462.2	430.2	406.1	385.7	350.5	318.2	292.9
135.0	984.3	672.9	536.1	472.7	438.2	412.6	391.8	353.3	310.2	279.8
140.0	1057.0	715.6	562.0	486.2	448.0	420.8	399.3	360.3	311.6	269.3
150.0	1237.5	823.9	632.5	529.7	474.8	442.9	418.6	380.1	333.5	281.6
160.0	1465.6	966.3	731.8	598.2	517.4	470.6	440.6	397.8	353.0	304.5
170.0	1632.0	1075.1	808.5	654.6	558.0	496.1	459.1	411.5	367.3	323.3
180.0	1749.2	1151.7	863.4	697.0	590.4	519.9	475.4	423.5	379.8	339.5
Up	1418.3	989.4	809.8	729.9	691.2	669.7	658.5	652.4	661.9	687.0
Dn	1379.8	932.4	724.8	611.5	545.2	500.2	465.8	417.8	372.7	323.7

Equivalent ILC Average (using IMS formula): 649.75

 Shaded cells lie outside upwind and downwind optimum sailing angles.

Best Performance

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	4.0	30.0	2.127	1.842	2.0	1.000	1.000	5.94	19.7	4.71	Up	49in
	4.0	33.0	2.478	2.078	2.2	1.000	1.000	6.23	20.5	3.89	Up	49in
	4.0	36.0	2.794	2.260	2.4	1.000	1.000	6.47	21.3	3.35	Up	49in
	4.0	39.0	3.082	2.395	2.6	1.000	1.000	6.68	22.1	2.98	Up	49in
	4.0	42.0	3.343	2.484	2.8	1.000	1.000	6.86	22.9	2.69	Up	49in
	4.0	45.0	3.579	2.531	2.9	1.000	1.000	7.00	23.8	2.47	Up	49in
OptUp >	4.0	46.8	3.711	2.538	3.0	1.000	1.000	7.07	24.3	2.35	Up	49in
	4.0	50.0	3.920	2.519	3.1	1.000	1.000	7.18	25.2	2.18	Up	49in
	4.0	60.0	4.422	2.211	3.3	1.000	1.000	7.29	28.3	1.78	Up	49in
	4.0	70.0	4.722	1.615	3.1	1.000	1.000	7.15	31.6	1.50	Up	49in
	4.0	80.0	4.847	0.842	2.8	1.000	1.000	6.80	35.4	1.27	Up	49in
	4.0	90.0	4.808	-0.000	2.3	1.000	1.000	6.25	39.7	1.07	Up	49in
	4.0	100.0	4.619	-0.802	1.7	1.000	1.000	5.56	45.1	0.89	Up	49in
	4.0	110.0	4.492	-1.536	2.1	1.000	1.000	4.89	50.3	0.94	Dn	49in
	4.0	120.0	4.315	-2.157	1.6	1.000	1.000	4.17	56.2	0.80	Dn	49in
	4.0	130.0	3.904	-2.509	1.1	1.000	1.000	3.34	66.5	0.64	Dn	49in
OptDn >	4.0	139.8	3.416	2.609	0.6	1.000	1.000	2.95	73.7	0.55	Dn	49in
	4.0	140.0	3.406	-2.609	0.6	1.000	1.000	2.59	82.4	0.45	Dn	49in
	4.0	150.0	2.909	-2.519	0.2	1.000	1.000	2.08	105.5	0.28	Dn	49in
	4.0	160.0	2.456	-2.308	0.1	1.000	1.000	1.89	133.6	0.15	Dn	49in
	4.0	170.0	2.206	-2.172	0.0	1.000	1.000	1.87	158.2	0.08	Dn	49in
	4.0	180.0	2.058	-2.058	-0.0	1.000	1.000	1.94	180.0	-0.00	Dn	49in
	6.0	30.0	3.240	2.806	4.5	1.000	1.000	8.95	19.5	4.60	Up	49in
	6.0	33.0	3.732	3.130	5.0	1.000	1.000	9.35	20.4	3.85	Up	49in
	6.0	36.0	4.154	3.361	5.5	1.000	1.000	9.67	21.3	3.37	Up	49in
	6.0	39.0	4.524	3.516	5.9	1.000	1.000	9.93	22.2	3.03	Up	49in
	6.0	42.0	4.853	3.606	6.2	1.000	1.000	10.13	23.2	2.76	Up	49in
	6.0	45.0	5.146	3.639	6.5	1.000	1.000	10.29	24.2	2.55	Up	49in
OptUp >	6.0	45.2	5.164	3.639	6.5	1.000	1.000	10.30	24.2	2.54	Up	49in
	6.0	50.0	5.561	3.575	6.8	1.000	1.000	10.47	25.9	2.27	Up	49in
	6.0	60.0	6.130	3.065	6.9	1.000	1.000	10.49	29.5	1.86	Up	49in
	6.0	70.0	6.445	2.204	6.4	1.000	1.000	10.18	33.4	1.56	Up	49in
	6.0	80.0	6.570	1.141	5.6	1.000	1.000	9.62	37.7	1.31	Up	49in
	6.0	90.0	6.536	-0.000	4.6	1.000	1.000	8.86	42.5	1.09	Up	49in
	6.0	100.0	6.363	-1.105	5.3	1.000	1.000	7.93	47.9	1.13	Dn	49in
	6.0	110.0	6.368	-2.178	4.6	1.000	1.000	7.09	52.5	0.98	Dn	49in
	6.0	120.0	6.134	-3.067	3.5	1.000	1.000	6.06	58.9	0.82	Dn	49in
	6.0	130.0	5.651	-3.632	2.3	1.000	1.000	4.93	68.7	0.63	Dn	49in
	6.0	135.0	5.350	-3.783	1.7	1.000	1.000	4.38	75.4	0.54	Dn	49in
	6.0	140.0	5.030	-3.854	1.3	1.000	1.000	3.88	83.6	0.45	Dn	49in
OptDn >	6.0	142.3	4.878	3.861	1.1	1.000	1.000	3.67	88.0	0.41	Dn	49in
	6.0	150.0	4.370	-3.784	0.6	1.000	1.000	3.11	105.4	0.27	Dn	49in
	6.0	160.0	3.725	-3.501	0.2	1.000	1.000	2.81	133.0	0.14	Dn	49in
	6.0	170.0	3.349	-3.298	0.1	1.000	1.000	2.76	157.9	0.07	Dn	49in
	6.0	180.0	3.126	-3.126	-0.0	1.000	1.000	2.87	180.0	-0.00	Dn	49in

Best Performance (cont)

	<i>TWS</i>	<i>TWA</i>	<i>V</i>	<i>VMG</i>	<i>Heel</i>	<i>Reef</i>	<i>Flat</i>	<i>AWS</i>	<i>AWA</i>	<i>Lee</i>	<i>Sail</i>	<i>Flot</i>
OptUp >	8.0	30.0	4.110	3.560	7.8	1.000	0.975	11.73	19.7	4.81	Up	49in
	8.0	33.0	4.690	3.933	9.0	1.000	1.000	12.18	20.7	4.17	Up	49in
	8.0	36.0	5.181	4.192	9.9	1.000	1.000	12.54	21.7	3.67	Up	49in
	8.0	39.0	5.611	4.360	10.6	1.000	1.000	12.82	22.7	3.30	Up	49in
	8.0	42.0	5.972	4.438	11.2	1.000	1.000	13.02	23.8	3.02	Up	49in
	8.0	43.4	6.115	4.446	11.4	1.000	1.000	13.09	24.3	2.92	Up	49in
	8.0	45.0	6.275	4.437	11.6	1.000	1.000	13.16	24.9	2.80	Up	49in
	8.0	50.0	6.682	4.295	12.0	1.000	1.000	13.26	26.9	2.51	Up	49in
	8.0	60.0	7.200	3.600	11.6	1.000	1.000	13.10	31.2	2.07	Up	49in
	8.0	70.0	7.444	2.546	10.2	1.000	1.000	12.59	36.0	1.72	Up	49in
OptDn >	8.0	80.0	7.536	1.309	8.5	1.000	1.000	11.85	41.1	1.43	Up	49in
	8.0	90.0	7.519	-0.000	6.8	1.000	1.000	10.94	46.6	1.18	Up	49in
	8.0	100.0	7.580	-1.316	9.5	1.000	1.000	9.93	51.5	1.31	Dn	49in
	8.0	110.0	7.547	-2.581	7.8	1.000	1.000	8.87	57.1	1.10	Dn	49in
	8.0	120.0	7.356	-3.678	5.7	1.000	1.000	7.67	64.0	0.87	Dn	49in
	8.0	130.0	6.977	-4.485	3.7	1.000	1.000	6.38	73.3	0.65	Dn	49in
	8.0	135.0	6.715	-4.748	2.9	1.000	1.000	5.75	79.4	0.55	Dn	49in
	8.0	140.0	6.405	-4.907	2.1	1.000	1.000	5.15	86.9	0.45	Dn	49in
	8.0	145.6	6.020	4.967	1.4	1.000	1.000	4.56	97.3	0.35	Dn	49in
	8.0	150.0	5.692	-4.929	0.9	1.000	1.000	4.19	107.2	0.27	Dn	49in
OptUp >	8.0	160.0	4.919	-4.623	0.3	1.000	1.000	3.77	133.5	0.14	Dn	49in
	8.0	170.0	4.453	-4.385	0.1	1.000	1.000	3.70	157.9	0.07	Dn	49in
	8.0	180.0	4.170	-4.170	-0.0	1.000	1.000	3.83	180.0	-0.00	Dn	49in
	10.0	30.0	4.747	4.111	11.7	1.000	0.914	14.27	20.1	5.09	Up	49in
	10.0	33.0	5.382	4.514	13.4	1.000	0.927	14.75	21.0	4.38	Up	49in
	10.0	36.0	5.891	4.766	14.8	1.000	0.929	15.09	22.1	3.90	Up	49in
	10.0	39.0	6.298	4.894	16.0	1.000	0.934	15.31	23.3	3.58	Up	49in
	10.0	41.9	6.627	4.932	17.0	1.000	0.942	15.45	24.4	3.35	Up	49in
	10.0	42.0	6.639	4.934	17.0	1.000	0.942	15.46	24.5	3.34	Up	49in
	10.0	45.0	6.921	4.894	17.9	1.000	0.954	15.53	25.7	3.17	Up	49in
OptDn >	10.0	50.0	7.289	4.685	19.0	1.000	0.984	15.51	27.8	2.97	Up	49in
	10.0	60.0	7.738	3.869	17.9	1.000	1.000	15.17	32.9	2.46	Up	49in
	10.0	70.0	7.975	2.728	14.8	1.000	1.000	14.57	38.6	2.00	Up	49in
	10.0	80.0	8.076	1.402	11.8	1.000	1.000	13.76	44.5	1.63	Up	49in
	10.0	90.0	8.081	-0.000	17.8	1.000	1.000	12.49	49.7	1.87	Dn	49in
	10.0	100.0	8.210	-1.426	15.2	1.000	1.000	11.50	55.7	1.60	Dn	49in
	10.0	110.0	8.189	-2.801	11.4	1.000	1.000	10.37	62.6	1.28	Dn	49in
	10.0	120.0	8.047	-4.023	8.0	1.000	1.000	9.10	70.4	0.98	Dn	49in
	10.0	130.0	7.789	-5.007	5.3	1.000	1.000	7.75	79.9	0.71	Dn	49in
	10.0	135.0	7.617	-5.386	4.1	1.000	1.000	7.07	85.6	0.58	Dn	49in
OptDn >	10.0	140.0	7.404	-5.672	3.1	1.000	1.000	6.42	92.3	0.47	Dn	49in
	10.0	149.1	6.861	5.888	1.6	1.000	1.000	5.41	108.5	0.29	Dn	49in
	10.0	150.0	6.797	-5.886	1.3	1.000	1.000	5.34	110.4	0.27	Dn	49in
	10.0	160.0	6.019	-5.656	0.5	1.000	1.000	4.81	134.6	0.15	Dn	49in
	10.0	170.0	5.500	-5.416	0.2	1.000	1.000	4.68	158.2	0.07	Dn	49in
	10.0	180.0	5.165	-5.165	-0.0	1.000	1.000	4.83	180.0	-0.00	Dn	49in

Best Performance (cont)

	<i>TWS</i>	<i>TWA</i>	<i>V</i>	<i>VMG</i>	<i>Heel</i>	<i>Reef</i>	<i>Flat</i>	<i>AWS</i>	<i>AWA</i>	<i>Lee</i>	<i>Sail</i>	<i>Flot</i>
OptUp >	12.0	30.0	5.203	4.506	14.9	1.000	0.796	16.64	20.4	5.11	Up	49in
	12.0	33.0	5.824	4.884	16.7	1.000	0.795	17.08	21.5	4.39	Up	49in
	12.0	36.0	6.300	5.097	18.1	1.000	0.794	17.36	22.7	3.94	Up	49in
	12.0	39.0	6.687	5.197	19.2	1.000	0.796	17.53	24.0	3.61	Up	49in
	12.0	40.5	6.847	5.208	19.6	1.000	0.799	17.58	24.7	3.50	Up	49in
	12.0	42.0	7.000	5.202	20.1	1.000	0.803	17.61	25.4	3.39	Up	49in
	12.0	45.0	7.252	5.128	20.8	1.000	0.813	17.62	26.8	3.22	Up	49in
	12.0	50.0	7.563	4.862	21.6	1.000	0.841	17.51	29.2	3.03	Up	49in
	12.0	60.0	7.987	3.993	22.5	1.000	0.926	16.97	34.5	2.78	Up	49in
	12.0	70.0	8.303	2.840	21.1	1.000	1.000	16.27	40.3	2.41	Up	49in
OptDn >	12.0	80.0	8.480	1.473	16.3	1.000	1.000	15.50	47.0	1.87	Up	49in
	12.0	90.0	8.519	-0.000	12.0	1.000	1.000	14.50	54.0	1.47	Up	49in
	12.0	100.0	8.581	-1.490	22.4	1.000	1.000	12.71	59.3	1.96	Dn	49in
	12.0	110.0	8.669	-2.965	16.3	1.000	1.000	11.75	67.1	1.48	Dn	49in
	12.0	120.0	8.591	-4.296	10.9	1.000	1.000	10.53	75.8	1.10	Dn	49in
	12.0	130.0	8.368	-5.379	7.0	1.000	1.000	9.15	85.9	0.78	Dn	49in
	12.0	135.0	8.215	-5.809	5.4	1.000	1.000	8.45	91.8	0.64	Dn	49in
	12.0	140.0	8.035	-6.155	4.0	1.000	1.000	7.78	98.6	0.51	Dn	49in
	12.0	150.0	7.582	-6.566	1.9	1.000	1.000	6.62	115.1	0.29	Dn	49in
	12.0	153.8	7.357	6.603	1.4	1.000	1.000	6.30	122.8	0.22	Dn	49in
OptUp >	12.0	160.0	6.958	-6.538	0.8	1.000	1.000	5.96	136.5	0.16	Dn	49in
	12.0	170.0	6.452	-6.354	0.3	1.000	1.000	5.76	158.8	0.08	Dn	49in
	12.0	180.0	6.098	-6.098	-0.0	1.000	1.000	5.90	180.0	-0.00	Dn	49in
	14.0	30.0	5.484	4.750	17.6	1.000	0.687	18.83	20.7	5.19	Up	49in
	14.0	33.0	6.086	5.104	19.3	1.000	0.683	19.23	22.0	4.47	Up	49in
	14.0	36.0	6.548	5.297	20.4	1.000	0.679	19.47	23.3	4.00	Up	49in
	14.0	39.0	6.916	5.375	21.4	1.000	0.681	19.60	24.7	3.69	Up	49in
	14.0	39.8	6.994	5.376	21.6	1.000	0.683	19.61	25.1	3.62	Up	49in
	14.0	42.0	7.207	5.356	22.2	1.000	0.687	19.63	26.2	3.46	Up	49in
	14.0	45.0	7.433	5.256	22.7	1.000	0.698	19.59	27.8	3.30	Up	49in
OptDn >	14.0	50.0	7.717	4.960	23.4	1.000	0.725	19.40	30.5	3.11	Up	49in
	14.0	60.0	8.136	4.068	23.5	0.962	0.875	18.78	36.3	2.85	Up	49in
	14.0	70.0	8.477	2.899	23.4	0.956	1.000	17.94	42.3	2.60	Up	49in
	14.0	80.0	8.753	1.520	21.8	1.000	1.000	17.00	48.9	2.20	Up	49in
	14.0	90.0	8.877	-0.000	15.8	1.000	1.000	16.13	56.6	1.65	Up	49in
	14.0	100.0	8.847	-1.536	10.9	1.000	1.000	14.98	64.6	1.25	Up	49in
	14.0	110.0	9.000	-3.078	22.4	1.000	1.000	12.87	70.9	1.75	Dn	49in
	14.0	120.0	9.046	-4.523	14.7	1.000	1.000	11.90	80.1	1.24	Dn	49in
	14.0	130.0	8.865	-5.698	9.0	1.000	1.000	10.59	90.7	0.87	Dn	49in
	14.0	135.0	8.724	-6.169	6.9	1.000	1.000	9.90	96.8	0.71	Dn	49in
OptDn >	14.0	140.0	8.555	-6.554	5.1	1.000	1.000	9.22	103.6	0.56	Dn	49in
	14.0	150.0	8.128	-7.039	2.5	1.000	1.000	8.05	119.7	0.32	Dn	49in
	14.0	160.0	7.650	-7.189	1.1	1.000	1.000	7.30	139.0	0.18	Dn	49in
	14.0	162.7	7.536	7.197	1.0	1.000	1.000	7.16	144.5	0.15	Dn	49in
	14.0	170.0	7.256	-7.146	0.5	1.000	1.000	6.97	159.6	0.08	Dn	49in
	14.0	180.0	6.924	-6.924	-0.0	1.000	1.000	7.08	180.0	-0.00	Dn	49in

Best Performance (cont)

	<i>TWS</i>	<i>TWA</i>	<i>V</i>	<i>VMG</i>	<i>Heel</i>	<i>Reef</i>	<i>Flat</i>	<i>AWS</i>	<i>AWA</i>	<i>Lee</i>	<i>Sail</i>	<i>Flot</i>
OptUp >	16.0	30.0	5.629	4.875	19.6	1.000	0.594	20.89	21.1	5.37	Up	49in
	16.0	33.0	6.225	5.221	21.1	1.000	0.588	21.26	22.5	4.59	Up	49in
	16.0	36.0	6.682	5.406	22.1	1.000	0.585	21.47	23.9	4.10	Up	49in
	16.0	39.0	7.038	5.470	23.1	1.000	0.588	21.56	25.4	3.79	Up	49in
	16.0	39.3	7.063	5.467	23.1	1.000	0.589	21.56	25.6	3.77	Up	49in
	16.0	42.0	7.315	5.436	23.4	0.984	0.617	21.57	27.1	3.57	Up	49in
	16.0	45.0	7.531	5.326	23.6	0.961	0.661	21.51	28.8	3.41	Up	49in
	16.0	50.0	7.812	5.022	23.6	0.930	0.742	21.30	31.8	3.23	Up	49in
	16.0	60.0	8.250	4.125	23.6	0.893	0.900	20.62	38.0	2.94	Up	49in
	16.0	70.0	8.611	2.945	23.7	0.900	1.000	19.70	44.4	2.65	Up	49in
	16.0	80.0	8.909	1.547	23.8	0.960	1.000	18.56	51.0	2.36	Up	49in
	16.0	90.0	9.152	-0.000	20.4	1.000	1.000	17.57	58.6	1.89	Up	49in
	16.0	100.0	9.205	-1.598	13.7	1.000	1.000	16.60	67.2	1.38	Up	49in
OptDn >	16.0	110.0	9.230	-3.157	23.9	0.946	1.000	14.25	74.7	1.83	Dn	49in
	16.0	120.0	9.438	-4.719	19.8	1.000	1.000	13.12	83.7	1.41	Dn	49in
	16.0	130.0	9.334	-6.000	11.5	1.000	1.000	12.05	94.5	0.95	Dn	49in
	16.0	135.0	9.189	-6.498	8.7	1.000	1.000	11.38	100.8	0.77	Dn	49in
	16.0	140.0	9.016	-6.906	6.4	1.000	1.000	10.72	107.6	0.61	Dn	49in
	16.0	150.0	8.600	-7.448	3.2	1.000	1.000	9.56	123.3	0.35	Dn	49in
	16.0	160.0	8.171	-7.678	1.5	1.000	1.000	8.78	141.4	0.20	Dn	49in
	16.0	167.4	7.921	7.729	0.9	1.000	1.000	8.45	155.5	0.12	Dn	49in
	16.0	170.0	7.842	-7.722	0.6	1.000	1.000	8.39	160.7	0.09	Dn	49in
	16.0	180.0	7.572	-7.572	-0.0	1.000	1.000	8.43	180.0	-0.00	Dn	49in
OptUp >	20.0	30.0	5.570	4.824	21.9	0.981	0.475	24.70	22.1	6.12	Up	49in
	20.0	33.0	6.229	5.224	22.5	0.942	0.513	25.11	23.6	5.09	Up	49in
	20.0	36.0	6.722	5.438	23.2	0.914	0.551	25.32	25.3	4.52	Up	49in
	20.0	39.0	7.103	5.520	23.7	0.895	0.582	25.41	27.0	4.14	Up	49in
	20.0	39.7	7.169	5.518	23.7	0.889	0.592	25.41	27.4	4.08	Up	49in
	20.0	42.0	7.397	5.497	23.8	0.869	0.630	25.40	28.8	3.88	Up	49in
	20.0	45.0	7.623	5.391	23.9	0.847	0.682	25.32	30.7	3.71	Up	49in
	20.0	50.0	7.922	5.092	23.9	0.816	0.773	25.06	34.0	3.49	Up	49in
	20.0	60.0	8.406	4.203	23.8	0.783	0.941	24.29	40.7	3.12	Up	49in
	20.0	70.0	8.803	3.011	24.0	0.805	1.000	23.22	47.7	2.78	Up	49in
	20.0	80.0	9.145	1.588	24.3	0.862	1.000	21.95	54.9	2.45	Up	49in
	20.0	90.0	9.494	-0.000	24.4	0.937	1.000	20.54	62.5	2.13	Up	49in
	20.0	100.0	9.819	-1.705	21.6	1.000	1.000	19.38	70.9	1.68	Up	49in
	20.0	110.0	9.829	-3.362	13.8	1.000	1.000	18.49	80.7	1.19	Up	49in
OptDn >	20.0	120.0	10.015	-5.007	25.4	0.940	1.000	15.65	89.9	1.60	Dn	49in
	20.0	130.0	10.271	-6.602	19.0	1.000	1.000	14.71	100.1	1.11	Dn	49in
	20.0	135.0	10.191	-7.206	13.6	1.000	1.000	14.30	106.0	0.87	Dn	49in
	20.0	140.0	9.993	-7.655	9.6	1.000	1.000	13.75	112.8	0.69	Dn	49in
	20.0	150.0	9.471	-8.202	5.0	1.000	1.000	12.68	128.2	0.43	Dn	49in
	20.0	160.0	9.050	-8.504	2.8	1.000	1.000	11.90	145.0	0.27	Dn	49in
	20.0	170.0	8.749	-8.617	1.1	1.000	1.000	11.48	162.4	0.12	Dn	49in
	20.0	170.1	8.748	8.617	1.2	1.000	1.000	11.48	162.5	0.12	Dn	49in
	20.0	180.0	8.500	-8.500	-0.0	1.000	1.000	11.50	180.0	-0.00	Dn	49in

Best Performance (cont)

	<i>TWS</i>	<i>TWA</i>	<i>V</i>	<i>VMG</i>	<i>Heel</i>	<i>Reef</i>	<i>Flat</i>	<i>AWS</i>	<i>AWA</i>	<i>Lee</i>	<i>Sail</i>	<i>Flot</i>
	25.0	30.0	4.931	4.270	21.7	0.888	0.447	29.01	23.6	8.51	Up	49in
	25.0	33.0	5.877	4.929	23.1	0.847	0.497	29.62	25.0	6.41	Up	49in
	25.0	36.0	6.489	5.250	23.6	0.813	0.545	29.91	26.7	5.43	Up	49in
	25.0	39.0	6.960	5.409	23.9	0.784	0.595	30.05	28.6	4.82	Up	49in
OptUp >	25.0	41.2	7.232	5.439	24.1	0.765	0.636	30.07	30.0	4.53	Up	49in
	25.0	42.0	7.327	5.445	24.1	0.759	0.650	30.07	30.5	4.43	Up	49in
	25.0	45.0	7.598	5.373	24.2	0.738	0.707	29.98	32.5	4.17	Up	49in
	25.0	50.0	7.945	5.107	24.2	0.710	0.803	29.69	36.0	3.87	Up	49in
	25.0	60.0	8.497	4.249	24.3	0.686	0.959	28.82	43.2	3.40	Up	49in
	25.0	70.0	8.944	3.059	24.6	0.713	1.000	27.61	50.7	2.99	Up	49in
	25.0	80.0	9.358	1.625	24.8	0.764	1.000	26.21	58.5	2.60	Up	49in
	25.0	90.0	9.805	-0.000	25.3	0.835	1.000	24.64	66.6	2.23	Up	49in
	25.0	100.0	10.238	-1.778	25.7	0.927	1.000	22.96	75.1	1.90	Up	49in
	25.0	110.0	10.654	-3.644	22.6	1.000	1.000	21.79	84.5	1.45	Up	49in
	25.0	120.0	10.629	-5.315	26.7	0.828	1.000	19.43	95.5	1.61	Dn	49in
	25.0	130.0	11.312	-7.271	28.0	0.972	1.000	17.56	105.7	1.25	Dn	49in
	25.0	135.0	11.607	-8.208	23.1	1.000	1.000	17.36	110.5	0.94	Dn	49in
	25.0	140.0	11.553	-8.850	16.1	1.000	1.000	17.21	116.2	0.71	Dn	49in
	25.0	150.0	10.794	-9.348	8.1	1.000	1.000	16.46	131.3	0.48	Dn	49in
	25.0	160.0	10.197	-9.582	4.6	1.000	1.000	15.79	147.3	0.32	Dn	49in
OptDn >	25.0	168.1	9.871	9.659	2.4	1.000	1.000	15.47	160.6	0.19	Dn	49in
	25.0	170.0	9.802	-9.653	1.8	1.000	1.000	15.44	163.7	0.16	Dn	49in
	25.0	180.0	9.479	-9.479	-0.0	1.000	1.000	15.52	180.0	-0.00	Dn	49in
	30.0	30.0	3.472	3.006	35.0	0.692	0.433	31.91	22.6	15.00	Up	49in
	30.0	33.0	4.715	3.955	22.4	0.772	0.486	33.48	26.8	10.62	Up	49in
	30.0	36.0	5.866	4.746	23.7	0.732	0.549	34.19	28.2	7.32	Up	49in
	30.0	39.0	6.530	5.075	24.1	0.703	0.604	34.46	30.0	6.05	Up	49in
	30.0	42.0	7.034	5.227	24.4	0.679	0.661	34.56	31.9	5.30	Up	49in
OptUp >	30.0	43.7	7.253	5.241	24.5	0.666	0.696	34.54	33.1	5.03	Up	49in
	30.0	45.0	7.416	5.244	24.5	0.658	0.720	34.53	34.0	4.83	Up	49in
	30.0	50.0	7.854	5.048	24.6	0.633	0.817	34.25	37.6	4.36	Up	49in
	30.0	60.0	8.494	4.247	24.8	0.614	0.964	33.28	45.1	3.75	Up	49in
	30.0	70.0	9.001	3.078	25.2	0.639	1.000	31.96	52.9	3.25	Up	49in
	30.0	80.0	9.493	1.648	25.6	0.687	1.000	30.43	61.1	2.80	Up	49in
	30.0	90.0	10.016	-0.000	26.2	0.752	1.000	28.72	69.6	2.38	Up	49in
	30.0	100.0	10.554	-1.833	26.8	0.837	1.000	26.91	78.5	1.99	Up	49in
	30.0	110.0	11.211	-3.835	27.3	0.941	1.000	25.07	87.8	1.60	Up	49in
	30.0	120.0	11.798	-5.899	22.5	1.000	1.000	24.21	97.6	1.10	Up	49in
	30.0	130.0	12.292	-7.901	29.5	0.876	1.000	21.18	109.3	1.14	Dn	49in
	30.0	135.0	12.865	-9.097	30.5	0.966	1.000	20.10	114.5	0.95	Dn	49in
	30.0	140.0	13.366	-10.239	25.3	1.000	1.000	19.91	118.9	0.67	Dn	49in
	30.0	150.0	12.783	-11.070	12.4	1.000	1.000	19.72	132.0	0.43	Dn	49in
OptDn >	30.0	157.0	12.084	11.121	8.3	1.000	1.000	19.39	143.2	0.35	Dn	49in
	30.0	160.0	11.823	-11.110	6.9	1.000	1.000	19.28	148.1	0.31	Dn	49in
	30.0	170.0	11.137	-10.967	3.0	1.000	1.000	19.13	164.2	0.16	Dn	49in
	30.0	180.0	10.605	-10.605	-0.0	1.000	1.000	19.40	180.0	-0.00	Dn	49in

Best Performance (cont)
