



PERFORMANCE PREDICTION

A red wireframe model of a sailboat hull and keel, showing the structural lines of the vessel. The hull is curved, and the keel is deep and straight, ending in a small fin. The model is positioned behind the main title text.

**DESIGN #608
FIRST 40 w/JIB & DEEP KEEL
FOR
BENETEAU**



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.

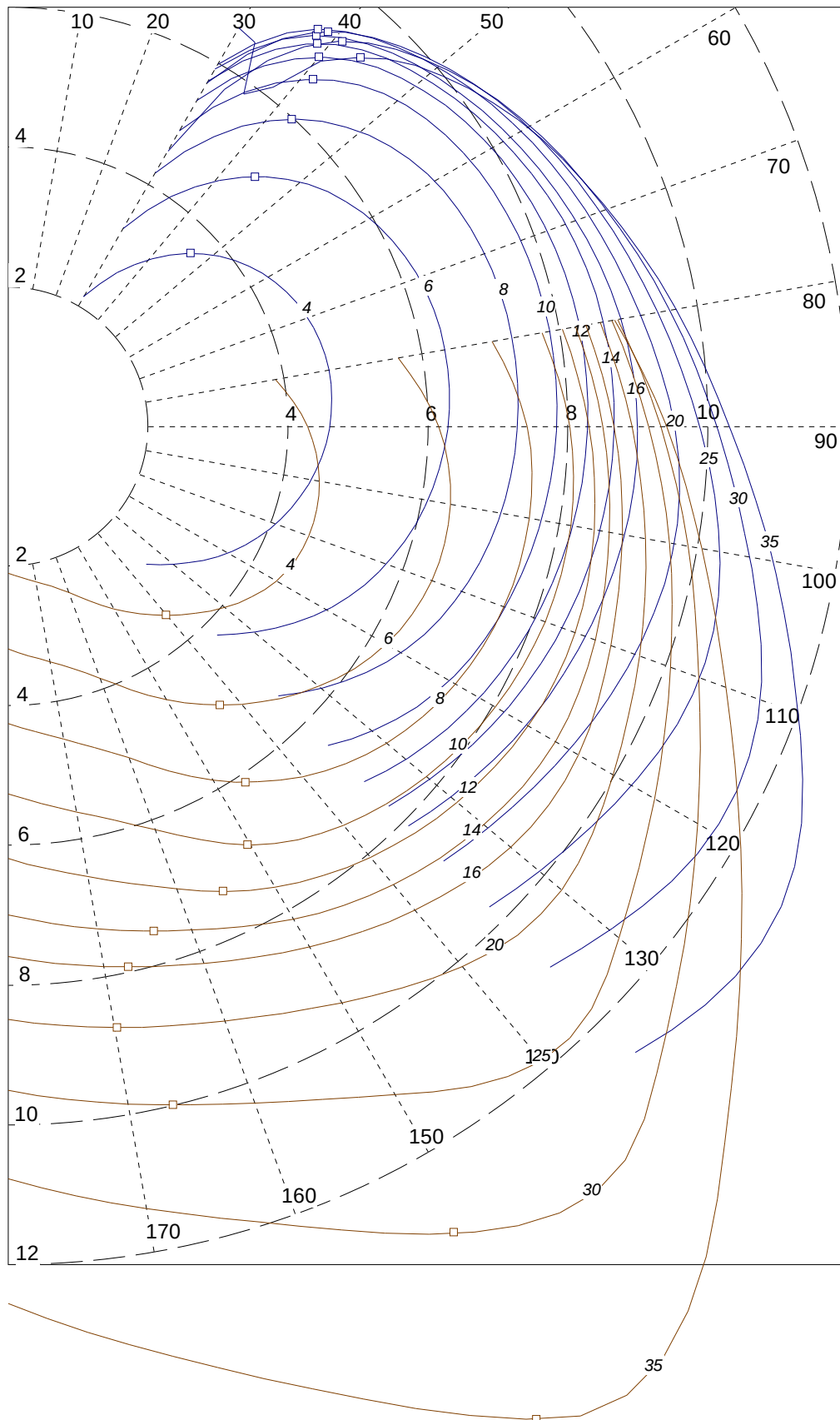
FARR YACHT DESIGN LTD

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

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.

**Design 608 - First 40
For Chantiers Beneteau**



Best Boatspeeds (kt)

	4	6	8	10	12	14	16	20	25	30	35
30.0	2.15	3.28	4.20	4.89	5.39	5.72	5.91	5.99	5.68	4.55	6.59
33.0	2.47	3.73	4.73	5.49	5.98	6.27	6.46	6.56	6.40	5.87	6.46
36.0	2.76	4.13	5.19	5.97	6.43	6.71	6.88	7.00	6.90	6.56	5.75
39.0	3.03	4.48	5.59	6.37	6.80	7.05	7.20	7.31	7.28	7.06	6.54
42.0	3.28	4.78	5.92	6.69	7.09	7.31	7.43	7.54	7.54	7.41	7.09
45.0	3.50	5.06	6.20	6.95	7.31	7.50	7.62	7.73	7.76	7.68	7.46
50.0	3.82	5.44	6.57	7.26	7.59	7.76	7.87	8.00	8.06	8.03	7.90
60.0	4.28	5.96	7.03	7.62	7.97	8.16	8.29	8.46	8.58	8.61	8.57
70.0	4.55	6.24	7.24	7.79	8.19	8.47	8.63	8.83	9.00	9.09	9.11
80.0	4.65	6.33	7.31	7.85	8.28	8.63	8.89	9.17	9.42	9.59	9.69
90.0	4.59	6.28	7.41	8.02	8.30	8.66	8.99	9.52	9.87	10.13	10.30
100.0	4.51	6.41	7.56	8.16	8.50	8.72	8.94	9.66	10.32	10.75	11.09
110.0	4.57	6.44	7.53	8.16	8.62	8.92	9.16	9.60	10.51	11.43	12.01
120.0	4.42	6.23	7.37	8.03	8.57	9.02	9.40	9.97	10.66	11.63	12.92
130.0	4.03	5.78	7.05	7.79	8.37	8.86	9.36	10.32	11.39	12.46	13.58
135.0	3.78	5.50	6.82	7.63	8.22	8.72	9.22	10.29	11.78	13.10	14.48
140.0	3.53	5.18	6.54	7.44	8.05	8.56	9.03	10.09	11.85	13.71	15.50
150.0	3.01	4.51	5.85	6.91	7.61	8.14	8.60	9.52	11.04	13.31	16.35
160.0	2.53	3.83	5.04	6.14	7.04	7.67	8.17	9.05	10.30	12.17	14.81
170.0	2.25	3.42	4.54	5.60	6.54	7.30	7.84	8.73	9.84	11.36	13.51
180.0	2.10	3.19	4.25	5.25	6.18	6.98	7.58	8.48	9.50	10.76	12.55
Up.Vs(fts)	3.60	5.02	5.98	6.61	6.90	7.04	7.12	7.20	7.26	7.29	7.29
Up.Vs(s/m)	1001.1	716.7	602.0	544.8	521.6	511.5	505.6	499.8	495.6	493.9	493.6
Up.Vs(s/L)	6.6	4.7	4.0	3.6	3.5	3.4	3.3	3.3	3.3	3.3	3.3
Up.Bt	46.4	44.6	42.7	41.2	40.0	38.9	38.2	37.9	38.9	40.9	43.6
Up.Vmg(fts)	2.48	3.58	4.40	4.97	5.29	5.48	5.60	5.68	5.65	5.51	5.28
Up.Vmg(s/m)	1451.9	1006.6	818.5	724.2	681.0	657.1	643.3	633.5	637.2	653.4	681.7
Up.Heel	2.5	5.5	9.3	14.7	19.3	21.4	22.9	24.1	24.8	25.2	25.6
Up.Reef	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.81	0.72	0.63
Up.Flat	1.00	1.00	1.00	1.00	0.92	0.79	0.68	0.63	0.64	0.69	0.75
Up.Va	6.98	10.20	13.01	15.50	17.66	19.72	21.70	25.57	30.28	34.84	39.23
Up.Ba	24.5	24.3	24.3	24.3	24.3	24.5	24.8	26.0	28.1	30.7	33.7
Up.Leewy	2.42	2.60	2.96	3.49	3.95	4.12	4.29	4.67	5.18	5.73	6.33
Dn.Vs(fts)	3.52	5.00	6.11	6.90	7.33	7.51	7.92	8.74	9.99	13.17	16.09
Dn.Vs(s/m)	1022.9	720.0	588.7	522.1	491.4	479.3	454.7	411.8	360.4	273.4	223.8
Dn.Vs(s/L)	6.8	4.8	3.9	3.5	3.3	3.2	3.0	2.7	2.4	1.8	1.5
Dn.Bt	140.1	142.8	146.3	150.2	155.2	163.9	167.5	169.8	166.4	151.1	152.0
Dn.Vmg(fts)	2.70	3.98	5.09	5.99	6.65	7.22	7.73	8.60	9.71	11.53	14.21
Dn.Vmg(s/m)	1333.1	904.0	707.4	601.5	541.3	498.8	465.7	418.5	370.8	312.3	253.4
Dn.Heel	0.7	1.2	1.6	1.6	1.4	1.0	1.0	1.4	3.2	13.1	18.2
Dn.Reef	1.00	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	1.00
Dn.Va	2.60	3.63	4.47	5.27	6.17	7.09	8.44	11.50	15.47	19.26	21.52
Dn.Ba	80.0	86.5	97.0	109.8	125.4	146.9	155.8	162.0	157.6	132.8	133.6
Dn.Leewy	0.55	0.48	0.41	0.33	0.25	0.17	0.15	0.16	0.26	0.44	0.29

Best Performance

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
OptUp >	4.0	30.0	2.147	1.859	1.7	1.000	1.000	5.96	19.6	4.63	Up	60el
	4.0	33.0	2.470	2.071	1.9	1.000	1.000	6.22	20.5	3.89	Up	60el
	4.0	36.0	2.764	2.236	2.1	1.000	1.000	6.44	21.4	3.38	Up	60el
	4.0	39.0	3.033	2.357	2.2	1.000	1.000	6.64	22.3	3.02	Up	60el
	4.0	42.0	3.279	2.436	2.4	1.000	1.000	6.80	23.2	2.74	Up	60el
	4.0	45.0	3.500	2.475	2.5	1.000	1.000	6.93	24.1	2.51	Up	60el
	4.0	46.4	3.596	2.479	2.5	1.000	1.000	6.98	24.5	2.42	Up	60el
	4.0	50.0	3.820	2.456	2.6	1.000	1.000	7.09	25.6	2.22	Up	60el
	4.0	60.0	4.284	2.142	2.7	1.000	1.000	7.17	28.8	1.82	Up	60el
	4.0	70.0	4.551	1.557	2.6	1.000	1.000	7.01	32.4	1.53	Up	60el
	4.0	80.0	4.649	0.807	2.3	1.000	1.000	6.64	36.4	1.29	Up	60el
	4.0	90.0	4.592	-0.000	1.8	1.000	1.000	6.09	41.0	1.09	Up	60el
OptDn >	4.0	100.0	4.510	-0.783	2.5	1.000	1.000	5.48	45.9	1.24	Dn	60el
	4.0	110.0	4.568	-1.562	2.3	1.000	1.000	4.93	49.6	1.10	Dn	60el
	4.0	120.0	4.418	-2.209	1.8	1.000	1.000	4.22	55.1	0.94	Dn	60el
	4.0	130.0	4.028	-2.589	1.2	1.000	1.000	3.39	64.6	0.76	Dn	60el
	4.0	135.0	3.781	-2.673	0.9	1.000	1.000	2.98	71.4	0.66	Dn	60el
	4.0	140.0	3.525	-2.700	0.7	1.000	1.000	2.61	79.8	0.55	Dn	60el
	4.0	140.1	3.519	2.700	0.7	1.000	1.000	2.60	80.0	0.55	Dn	60el
	4.0	150.0	3.014	-2.610	0.3	1.000	1.000	2.05	102.7	0.34	Dn	60el
	4.0	160.0	2.527	-2.374	0.1	1.000	1.000	1.84	132.0	0.17	Dn	60el
	4.0	170.0	2.253	-2.219	0.0	1.000	1.000	1.82	157.6	0.09	Dn	60el
	4.0	180.0	2.098	-2.098	0.0	1.000	1.000	1.90	180.0	-0.00	Dn	60el
OptUp >	6.0	30.0	3.278	2.839	3.9	1.000	1.000	8.99	19.5	4.50	Up	60el
	6.0	33.0	3.734	3.132	4.3	1.000	1.000	9.35	20.4	3.82	Up	60el
	6.0	36.0	4.130	3.341	4.7	1.000	1.000	9.65	21.4	3.37	Up	60el
	6.0	39.0	4.477	3.480	5.0	1.000	1.000	9.88	22.4	3.04	Up	60el
	6.0	42.0	4.785	3.556	5.3	1.000	1.000	10.07	23.4	2.78	Up	60el
	6.0	44.6	5.023	3.576	5.5	1.000	1.000	10.20	24.3	2.60	Up	60el
	6.0	45.0	5.058	3.577	5.5	1.000	1.000	10.21	24.4	2.57	Up	60el
	6.0	50.0	5.443	3.498	5.7	1.000	1.000	10.36	26.2	2.29	Up	60el
	6.0	60.0	5.961	2.981	5.7	1.000	1.000	10.35	30.0	1.89	Up	60el
	6.0	70.0	6.237	2.133	5.3	1.000	1.000	10.01	34.1	1.59	Up	60el
	6.0	80.0	6.334	1.100	4.5	1.000	1.000	9.44	38.6	1.33	Up	60el
	6.0	90.0	6.279	-0.000	3.7	1.000	1.000	8.68	43.6	1.11	Up	60el
OptDn >	6.0	100.0	6.409	-1.113	5.7	1.000	1.000	7.96	47.6	1.33	Dn	60el
	6.0	110.0	6.437	-2.202	5.1	1.000	1.000	7.12	52.0	1.16	Dn	60el
	6.0	120.0	6.232	-3.116	4.0	1.000	1.000	6.11	58.1	0.97	Dn	60el
	6.0	130.0	5.785	-3.718	2.6	1.000	1.000	4.98	67.2	0.76	Dn	60el
	6.0	135.0	5.499	-3.888	2.0	1.000	1.000	4.42	73.5	0.65	Dn	60el
	6.0	140.0	5.184	-3.971	1.5	1.000	1.000	3.90	81.3	0.54	Dn	60el
	6.0	142.8	5.000	3.983	1.2	1.000	1.000	3.63	86.5	0.48	Dn	60el
	6.0	150.0	4.514	-3.909	0.7	1.000	1.000	3.08	102.8	0.33	Dn	60el
	6.0	160.0	3.829	-3.598	0.2	1.000	1.000	2.74	131.4	0.17	Dn	60el
	6.0	170.0	3.419	-3.367	0.1	1.000	1.000	2.70	157.3	0.08	Dn	60el
	6.0	180.0	3.185	-3.185	0.0	1.000	1.000	2.81	180.0	-0.00	Dn	60el

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	4.196	3.634	7.0	1.000	1.000	11.81	19.6	4.75	Up	60el
	8.0	33.0	4.733	3.969	7.7	1.000	1.000	12.23	20.7	4.07	Up	60el
	8.0	36.0	5.191	4.200	8.3	1.000	1.000	12.56	21.7	3.61	Up	60el
	8.0	39.0	5.586	4.341	8.8	1.000	1.000	12.81	22.9	3.27	Up	60el
	8.0	42.0	5.917	4.397	9.2	1.000	1.000	12.99	24.0	3.01	Up	60el
	8.0	42.7	5.980	4.398	9.3	1.000	1.000	13.01	24.3	2.96	Up	60el
	8.0	45.0	6.195	4.381	9.5	1.000	1.000	13.10	25.2	2.79	Up	60el
	8.0	50.0	6.566	4.221	9.7	1.000	1.000	13.17	27.3	2.51	Up	60el
	8.0	60.0	7.027	3.514	9.3	1.000	1.000	12.97	31.8	2.08	Up	60el
	8.0	70.0	7.239	2.476	8.2	1.000	1.000	12.44	36.7	1.74	Up	60el
	8.0	80.0	7.307	1.269	6.9	1.000	1.000	11.70	42.0	1.45	Up	60el
	8.0	90.0	7.408	-0.000	11.1	1.000	1.000	10.79	46.7	1.76	Dn	60el
	8.0	100.0	7.557	-1.312	10.5	1.000	1.000	9.90	51.5	1.59	Dn	60el
	8.0	110.0	7.535	-2.577	8.7	1.000	1.000	8.85	57.2	1.34	Dn	60el
OptDn >	8.0	120.0	7.370	-3.685	6.4	1.000	1.000	7.67	63.9	1.06	Dn	60el
	8.0	130.0	7.050	-4.531	4.3	1.000	1.000	6.40	72.7	0.79	Dn	60el
	8.0	135.0	6.820	-4.822	3.3	1.000	1.000	5.77	78.4	0.67	Dn	60el
	8.0	140.0	6.538	-5.008	2.5	1.000	1.000	5.15	85.4	0.55	Dn	60el
	8.0	146.3	6.115	5.089	1.6	1.000	1.000	4.47	97.0	0.41	Dn	60el
	8.0	150.0	5.845	-5.062	1.1	1.000	1.000	4.14	105.2	0.33	Dn	60el
	8.0	160.0	5.045	-4.740	0.0	1.000	1.000	3.69	132.1	0.17	Dn	60el
	8.0	170.0	4.542	-4.473	0.0	1.000	1.000	3.61	157.4	0.08	Dn	60el
	8.0	180.0	4.246	-4.246	0.0	1.000	1.000	3.75	180.0	-0.00	Dn	60el
	10.0	30.0	4.885	4.231	11.1	1.000	1.000	14.41	19.9	5.29	Up	60el
	10.0	33.0	5.493	4.607	12.4	1.000	1.000	14.86	21.0	4.53	Up	60el
	10.0	36.0	5.975	4.834	13.4	1.000	1.000	15.18	22.1	4.04	Up	60el
	10.0	39.0	6.365	4.947	14.2	1.000	1.000	15.40	23.3	3.70	Up	60el
	10.0	41.2	6.608	4.971	14.7	1.000	1.000	15.50	24.3	3.49	Up	60el
	10.0	42.0	6.687	4.970	14.8	1.000	1.000	15.53	24.6	3.42	Up	60el
OptDn >	10.0	45.0	6.947	4.912	15.1	1.000	1.000	15.59	26.0	3.20	Up	60el
	10.0	50.0	7.260	4.667	15.1	1.000	1.000	15.56	28.4	2.89	Up	60el
	10.0	60.0	7.615	3.808	13.6	1.000	1.000	15.17	33.7	2.40	Up	60el
	10.0	70.0	7.788	2.664	11.5	1.000	1.000	14.51	39.4	1.99	Up	60el
	10.0	80.0	7.851	1.363	9.4	1.000	1.000	13.65	45.4	1.64	Up	60el
	10.0	90.0	8.017	-0.000	19.4	1.000	1.000	12.38	49.6	2.29	Dn	60el
	10.0	100.0	8.159	-1.417	17.0	1.000	1.000	11.40	55.7	1.97	Dn	60el
	10.0	110.0	8.159	-2.791	12.9	1.000	1.000	10.31	62.6	1.57	Dn	60el
	10.0	120.0	8.032	-4.016	9.1	1.000	1.000	9.07	70.5	1.21	Dn	60el
	10.0	130.0	7.791	-5.008	6.0	1.000	1.000	7.74	79.9	0.88	Dn	60el
	10.0	135.0	7.633	-5.398	4.7	1.000	1.000	7.07	85.4	0.72	Dn	60el
	10.0	140.0	7.445	-5.703	3.5	1.000	1.000	6.42	91.9	0.58	Dn	60el
	10.0	150.0	6.911	-5.985	1.7	1.000	1.000	5.30	109.3	0.34	Dn	60el
	10.0	150.2	6.895	5.985	1.6	1.000	1.000	5.27	109.8	0.33	Dn	60el
	10.0	160.0	6.138	-5.768	0.0	1.000	1.000	4.72	133.6	0.17	Dn	60el
	10.0	170.0	5.599	-5.514	0.0	1.000	1.000	4.59	157.8	0.08	Dn	60el
	10.0	180.0	5.254	-5.254	0.0	1.000	1.000	4.75	180.0	-0.00	Dn	60el

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>
	12.0	30.0	5.393	4.670	14.8	1.000	0.901	16.82	20.2	5.43	Up	60el
	12.0	33.0	5.976	5.012	16.5	1.000	0.905	17.22	21.3	4.76	Up	60el
	12.0	36.0	6.430	5.202	17.9	1.000	0.909	17.48	22.6	4.33	Up	60el
	12.0	39.0	6.796	5.282	19.0	1.000	0.916	17.63	23.9	4.03	Up	60el
OptUp >	12.0	40.0	6.901	5.286	19.3	1.000	0.920	17.66	24.3	3.95	Up	60el
	12.0	42.0	7.090	5.269	20.0	1.000	0.930	17.70	25.2	3.82	Up	60el
	12.0	45.0	7.313	5.171	20.7	1.000	0.948	17.68	26.7	3.68	Up	60el
	12.0	50.0	7.593	4.881	21.6	1.000	0.987	17.53	29.2	3.51	Up	60el
	12.0	60.0	7.973	3.986	19.5	1.000	1.000	17.07	35.0	2.87	Up	60el
	12.0	70.0	8.191	2.802	15.9	1.000	1.000	16.39	41.4	2.30	Up	60el
	12.0	80.0	8.283	1.438	12.4	1.000	1.000	15.51	48.1	1.85	Up	60el
	12.0	90.0	8.296	-0.000	23.4	0.941	1.000	13.79	53.0	2.63	Dn	60el
	12.0	100.0	8.497	-1.475	23.7	0.989	1.000	12.58	59.3	2.40	Dn	60el
	12.0	110.0	8.617	-2.947	18.6	1.000	1.000	11.60	67.1	1.85	Dn	60el
	12.0	120.0	8.571	-4.286	12.5	1.000	1.000	10.47	75.8	1.37	Dn	60el
	12.0	130.0	8.365	-5.377	8.0	1.000	1.000	9.13	85.9	0.98	Dn	60el
	12.0	135.0	8.219	-5.812	6.2	1.000	1.000	8.44	91.8	0.80	Dn	60el
	12.0	140.0	8.046	-6.164	4.6	1.000	1.000	7.77	98.5	0.64	Dn	60el
OptDn >	12.0	155.2	7.325	6.650	1.4	1.000	1.000	6.17	125.4	0.25	Dn	60el
	12.0	160.0	7.038	-6.614	1.0	1.000	1.000	5.90	135.9	0.19	Dn	60el
	12.0	170.0	6.542	-6.443	0.0	1.000	1.000	5.67	158.4	0.09	Dn	60el
	12.0	180.0	6.182	-6.182	0.0	1.000	1.000	5.82	180.0	-0.00	Dn	60el
	14.0	30.0	5.719	4.953	17.6	1.000	0.784	19.05	20.5	5.51	Up	60el
	14.0	33.0	6.275	5.262	19.2	0.999	0.786	19.40	21.8	4.85	Up	60el
	14.0	36.0	6.711	5.429	20.4	1.000	0.785	19.62	23.2	4.41	Up	60el
OptUp >	14.0	38.9	7.039	5.479	21.4	1.000	0.791	19.72	24.5	4.12	Up	60el
	14.0	39.0	7.052	5.481	21.4	1.000	0.791	19.72	24.6	4.11	Up	60el
	14.0	42.0	7.307	5.430	22.2	1.000	0.804	19.72	26.1	3.93	Up	60el
	14.0	45.0	7.504	5.306	22.8	1.000	0.821	19.65	27.7	3.79	Up	60el
	14.0	50.0	7.762	4.989	23.5	1.000	0.856	19.43	30.4	3.61	Up	60el
	14.0	60.0	8.165	4.082	24.3	1.000	0.953	18.76	36.1	3.32	Up	60el
	14.0	70.0	8.472	2.898	21.4	1.000	1.000	18.05	42.7	2.72	Up	60el
	14.0	80.0	8.630	1.499	16.5	1.000	1.000	17.24	50.1	2.10	Up	60el
	14.0	90.0	8.656	-0.000	12.1	1.000	1.000	16.20	57.7	1.64	Up	60el
	14.0	100.0	8.716	-1.513	24.0	0.913	1.000	14.08	63.5	2.44	Dn	60el
	14.0	110.0	8.921	-3.051	24.3	0.991	1.000	12.68	71.0	2.18	Dn	60el
	14.0	120.0	9.020	-4.510	17.2	1.000	1.000	11.76	80.1	1.56	Dn	60el
	14.0	130.0	8.864	-5.698	10.4	1.000	1.000	10.55	90.7	1.08	Dn	60el
	14.0	135.0	8.725	-6.169	7.9	1.000	1.000	9.87	96.8	0.88	Dn	60el
	14.0	140.0	8.558	-6.556	5.9	1.000	1.000	9.21	103.6	0.70	Dn	60el
	14.0	150.0	8.138	-7.048	2.8	1.000	1.000	8.05	119.7	0.39	Dn	60el
	14.0	160.0	7.666	-7.204	1.3	1.000	1.000	7.28	138.9	0.21	Dn	60el
OptDn >	14.0	163.9	7.511	7.218	1.0	1.000	1.000	7.09	146.9	0.17	Dn	60el
	14.0	170.0	7.296	-7.185	0.0	1.000	1.000	6.93	159.5	0.10	Dn	60el
	14.0	180.0	6.984	-6.984	0.0	1.000	1.000	7.02	180.0	-0.00	Dn	60el

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	5.911	5.119	19.8	1.000	0.683	21.15	20.9	5.66	Up	60el
	16.0	33.0	6.458	5.416	21.2	1.000	0.679	21.47	22.2	4.96	Up	60el
	16.0	36.0	6.879	5.565	22.3	1.000	0.681	21.65	23.7	4.51	Up	60el
	16.0	38.2	7.120	5.596	22.9	1.000	0.685	21.70	24.8	4.29	Up	60el
	16.0	39.0	7.199	5.594	23.2	1.000	0.689	21.70	25.2	4.24	Up	60el
	16.0	42.0	7.431	5.523	23.9	1.000	0.700	21.66	26.9	4.05	Up	60el
	16.0	45.0	7.616	5.385	24.3	0.997	0.721	21.55	28.6	3.91	Up	60el
	16.0	50.0	7.869	5.058	24.4	0.967	0.807	21.31	31.6	3.73	Up	60el
	16.0	60.0	8.287	4.143	24.4	0.926	0.988	20.60	37.8	3.41	Up	60el
	16.0	70.0	8.626	2.950	24.7	0.973	1.000	19.63	44.1	3.04	Up	60el
OptDn >	16.0	80.0	8.885	1.543	21.3	1.000	1.000	18.75	51.5	2.43	Up	60el
	16.0	90.0	8.991	-0.000	15.4	1.000	1.000	17.85	59.8	1.83	Up	60el
	16.0	100.0	8.940	-1.553	10.7	1.000	1.000	16.66	68.3	1.39	Up	60el
	16.0	110.0	9.157	-3.132	24.7	0.924	1.000	14.15	74.9	2.20	Dn	60el
	16.0	120.0	9.405	-4.702	22.7	1.000	1.000	12.86	83.7	1.78	Dn	60el
	16.0	130.0	9.365	-6.020	13.5	1.000	1.000	11.95	94.4	1.18	Dn	60el
	16.0	135.0	9.220	-6.519	10.1	1.000	1.000	11.33	100.6	0.96	Dn	60el
	16.0	140.0	9.032	-6.919	7.3	1.000	1.000	10.70	107.5	0.76	Dn	60el
	16.0	150.0	8.598	-7.446	3.6	1.000	1.000	9.56	123.4	0.44	Dn	60el
	16.0	160.0	8.172	-7.679	1.8	1.000	1.000	8.78	141.4	0.25	Dn	60el
OptUp >	16.0	167.5	7.918	7.731	1.0	1.000	1.000	8.44	155.8	0.15	Dn	60el
	16.0	170.0	7.844	-7.725	0.0	1.000	1.000	8.39	160.7	0.12	Dn	60el
	16.0	180.0	7.580	-7.580	0.0	1.000	1.000	8.42	180.0	-0.00	Dn	60el
	20.0	30.0	5.986	5.184	22.6	1.000	0.527	25.07	21.6	6.23	Up	60el
	20.0	33.0	6.558	5.500	23.2	0.967	0.563	25.39	23.2	5.37	Up	60el
	20.0	36.0	6.996	5.660	23.8	0.938	0.605	25.55	24.9	4.86	Up	60el
	20.0	37.9	7.202	5.682	24.1	0.924	0.633	25.57	26.0	4.67	Up	60el
	20.0	39.0	7.309	5.680	24.2	0.915	0.651	25.57	26.7	4.58	Up	60el
	20.0	42.0	7.542	5.605	24.7	0.903	0.683	25.49	28.5	4.38	Up	60el
	20.0	45.0	7.732	5.467	24.8	0.883	0.737	25.37	30.4	4.22	Up	60el
OptDn >	20.0	50.0	8.003	5.144	24.8	0.853	0.834	25.07	33.7	4.00	Up	60el
	20.0	60.0	8.459	4.230	24.8	0.826	1.000	24.25	40.4	3.60	Up	60el
	20.0	70.0	8.830	3.020	25.1	0.874	1.000	23.13	47.4	3.18	Up	60el
	20.0	80.0	9.170	1.592	25.3	0.936	1.000	21.84	54.6	2.79	Up	60el
	20.0	90.0	9.520	-0.000	23.8	1.000	1.000	20.63	62.5	2.30	Up	60el
	20.0	100.0	9.660	-1.677	16.5	1.000	1.000	19.88	71.9	1.63	Up	60el
	20.0	110.0	9.597	-3.282	25.4	0.816	1.000	17.19	80.8	2.24	Dn	60el
	20.0	120.0	9.972	-4.986	26.2	0.916	1.000	15.54	90.1	1.91	Dn	60el
	20.0	130.0	10.317	-6.632	22.1	1.000	1.000	14.42	100.1	1.38	Dn	60el
	20.0	135.0	10.286	-7.274	16.1	1.000	1.000	14.12	105.8	1.07	Dn	60el
OptDn >	20.0	140.0	10.086	-7.726	11.2	1.000	1.000	13.66	112.5	0.84	Dn	60el
	20.0	150.0	9.520	-8.244	5.6	1.000	1.000	12.64	128.1	0.52	Dn	60el
	20.0	160.0	9.052	-8.506	3.1	1.000	1.000	11.90	145.0	0.33	Dn	60el
	20.0	169.8	8.741	8.602	1.4	1.000	1.000	11.50	162.0	0.16	Dn	60el
	20.0	170.0	8.734	-8.601	0.0	1.000	1.000	11.50	162.4	0.15	Dn	60el
	20.0	180.0	8.481	-8.481	0.0	1.000	1.000	11.52	180.0	-0.00	Dn	60el

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
OptUp >	25.0	30.0	5.677	4.917	23.1	0.904	0.499	29.65	22.8	7.70	Up	60el
	25.0	33.0	6.395	5.364	23.8	0.870	0.541	30.07	24.5	6.31	Up	60el
	25.0	36.0	6.905	5.586	24.5	0.841	0.589	30.25	26.2	5.60	Up	60el
	25.0	38.9	7.264	5.649	24.8	0.814	0.643	30.28	28.1	5.18	Up	60el
	25.0	39.0	7.276	5.654	24.8	0.814	0.644	30.28	28.1	5.16	Up	60el
	25.0	42.0	7.544	5.606	24.9	0.790	0.702	30.21	30.1	4.88	Up	60el
	25.0	45.0	7.759	5.487	25.0	0.770	0.764	30.06	32.2	4.68	Up	60el
	25.0	50.0	8.065	5.184	25.1	0.743	0.868	29.72	35.7	4.39	Up	60el
	25.0	60.0	8.575	4.288	25.2	0.732	1.000	28.77	42.9	3.88	Up	60el
	25.0	70.0	8.997	3.077	25.6	0.776	1.000	27.51	50.4	3.40	Up	60el
	25.0	80.0	9.421	1.636	25.8	0.833	1.000	26.09	58.2	2.94	Up	60el
	25.0	90.0	9.873	-0.000	26.1	0.910	1.000	24.52	66.3	2.50	Up	60el
	25.0	100.0	10.322	-1.792	25.7	1.000	1.000	22.98	74.9	2.05	Up	60el
	25.0	110.0	10.513	-3.596	17.5	1.000	1.000	22.49	85.0	1.40	Up	60el
	25.0	120.0	10.656	-5.328	27.6	0.807	1.000	19.28	95.5	1.89	Dn	60el
OptDn >	25.0	130.0	11.388	-7.320	29.1	0.948	1.000	17.38	105.6	1.46	Dn	60el
	25.0	135.0	11.783	-8.332	26.4	1.000	1.000	16.90	110.4	1.14	Dn	60el
	25.0	140.0	11.849	-9.077	19.0	1.000	1.000	16.86	115.7	0.83	Dn	60el
	25.0	150.0	11.040	-9.561	9.1	1.000	1.000	16.28	130.7	0.55	Dn	60el
	25.0	160.0	10.302	-9.680	5.1	1.000	1.000	15.70	147.2	0.38	Dn	60el
	25.0	166.4	9.990	9.708	3.2	1.000	1.000	15.47	157.6	0.26	Dn	60el
	25.0	170.0	9.842	-9.693	0.0	1.000	1.000	15.40	163.6	0.19	Dn	60el
	25.0	180.0	9.498	-9.498	0.0	1.000	1.000	15.50	180.0	-0.00	Dn	60el
	30.0	30.0	4.554	3.944	22.0	0.835	0.467	33.55	24.5	12.51	Up	60el
	30.0	33.0	5.867	4.920	24.0	0.790	0.534	34.43	25.7	8.24	Up	60el
	30.0	36.0	6.556	5.304	24.7	0.758	0.592	34.74	27.5	6.85	Up	60el
	30.0	39.0	7.061	5.487	25.0	0.730	0.650	34.86	29.4	6.03	Up	60el
	30.0	40.9	7.288	5.510	25.2	0.715	0.690	34.84	30.7	5.73	Up	60el
	30.0	42.0	7.414	5.510	25.3	0.707	0.714	34.82	31.4	5.57	Up	60el
	30.0	45.0	7.677	5.429	25.3	0.687	0.778	34.67	33.6	5.26	Up	60el
	30.0	50.0	8.033	5.163	25.4	0.663	0.883	34.31	37.2	4.87	Up	60el
	30.0	60.0	8.609	4.305	25.7	0.658	1.000	33.24	44.7	4.23	Up	60el
	30.0	70.0	9.086	3.108	26.2	0.698	1.000	31.84	52.6	3.67	Up	60el
	30.0	80.0	9.594	1.666	26.5	0.751	1.000	30.29	60.7	3.13	Up	60el
	30.0	90.0	10.125	-0.000	27.1	0.824	1.000	28.56	69.2	2.64	Up	60el
	30.0	100.0	10.752	-1.867	27.5	0.914	1.000	26.78	78.1	2.15	Up	60el
	30.0	110.0	11.432	-3.910	26.0	1.000	1.000	25.37	87.4	1.60	Up	60el
	30.0	120.0	11.628	-5.814	17.8	1.000	1.000	24.97	97.8	1.08	Up	60el
	30.0	130.0	12.458	-8.008	30.8	0.857	1.000	20.89	109.1	1.31	Dn	60el
	30.0	135.0	13.097	-9.261	31.8	0.947	1.000	19.77	114.2	1.07	Dn	60el
	30.0	140.0	13.707	-10.500	28.4	1.000	1.000	19.33	118.7	0.78	Dn	60el
	30.0	150.0	13.308	-11.525	14.1	1.000	1.000	19.29	131.1	0.46	Dn	60el
OptDn >	30.0	151.1	13.170	11.529	13.1	1.000	1.000	19.26	132.8	0.44	Dn	60el
	30.0	160.0	12.174	-11.440	7.6	1.000	1.000	18.97	147.6	0.34	Dn	60el
	30.0	170.0	11.365	-11.192	0.0	1.000	1.000	18.91	164.0	0.18	Dn	60el
	30.0	180.0	10.762	-10.762	0.0	1.000	1.000	19.24	180.0	-0.00	Dn	60el

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	35.0	30.0	6.586	5.703	35.0	0.969	0.971	39.58	21.2	0.60	Up	60el
	35.0	33.0	6.457	5.415	35.0	0.947	0.946	39.07	23.6	0.74	Up	60el
	35.0	36.0	5.752	4.653	24.4	0.694	0.588	38.88	28.8	9.59	Up	60el
	35.0	39.0	6.538	5.081	25.1	0.666	0.650	39.20	30.6	7.64	Up	60el
	35.0	42.0	7.087	5.267	25.5	0.643	0.717	39.27	32.6	6.65	Up	60el
OptUp >	35.0	43.6	7.293	5.281	25.6	0.632	0.753	39.23	33.7	6.33	Up	60el
	35.0	45.0	7.465	5.278	25.7	0.624	0.783	39.18	34.7	6.07	Up	60el
	35.0	50.0	7.905	5.081	25.9	0.602	0.886	38.81	38.4	5.48	Up	60el
	35.0	60.0	8.570	4.285	26.3	0.597	1.000	37.65	46.2	4.66	Up	60el
	35.0	70.0	9.106	3.114	26.9	0.634	1.000	36.11	54.3	4.02	Up	60el
	35.0	80.0	9.688	1.682	27.5	0.684	1.000	34.41	62.7	3.39	Up	60el
	35.0	90.0	10.304	-0.000	28.2	0.752	1.000	32.53	71.5	2.83	Up	60el
	35.0	100.0	11.094	-1.927	28.9	0.836	1.000	30.60	80.6	2.24	Up	60el
	35.0	110.0	12.008	-4.107	29.3	0.938	1.000	28.67	89.9	1.69	Up	60el
	35.0	120.0	12.920	-6.460	25.4	1.000	1.000	27.75	99.5	1.10	Up	60el
	35.0	130.0	13.578	-8.728	32.4	0.784	1.000	24.33	111.5	1.15	Dn	60el
	35.0	135.0	14.480	-10.239	33.5	0.869	1.000	23.04	116.5	0.90	Dn	60el
	35.0	140.0	15.505	-11.877	34.4	0.965	1.000	21.73	121.4	0.67	Dn	60el
	35.0	150.0	16.347	-14.157	21.0	1.000	1.000	21.49	130.5	0.31	Dn	60el
OptDn >	35.0	152.0	16.086	14.207	18.2	1.000	1.000	21.52	133.6	0.29	Dn	60el
	35.0	160.0	14.809	-13.916	10.5	1.000	1.000	21.57	146.9	0.25	Dn	60el
	35.0	170.0	13.514	-13.309	4.5	1.000	1.000	21.81	163.9	0.15	Dn	60el
	35.0	180.0	12.552	-12.552	0.0	1.000	1.000	22.45	180.0	-0.00	Dn	60el