

A red wireframe model of a yacht hull, showing the complex structure of the hull and keel. The hull is curved and tapers towards the stern. The keel is a deep, straight line extending downwards from the hull, ending in a bulbous keel bulb. The entire model is rendered in a red wireframe style.

PERFORMANCE PREDICTION

**Design #622
Beneteau 35
For
Chantiers Beneteau
Deep Keel**



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.

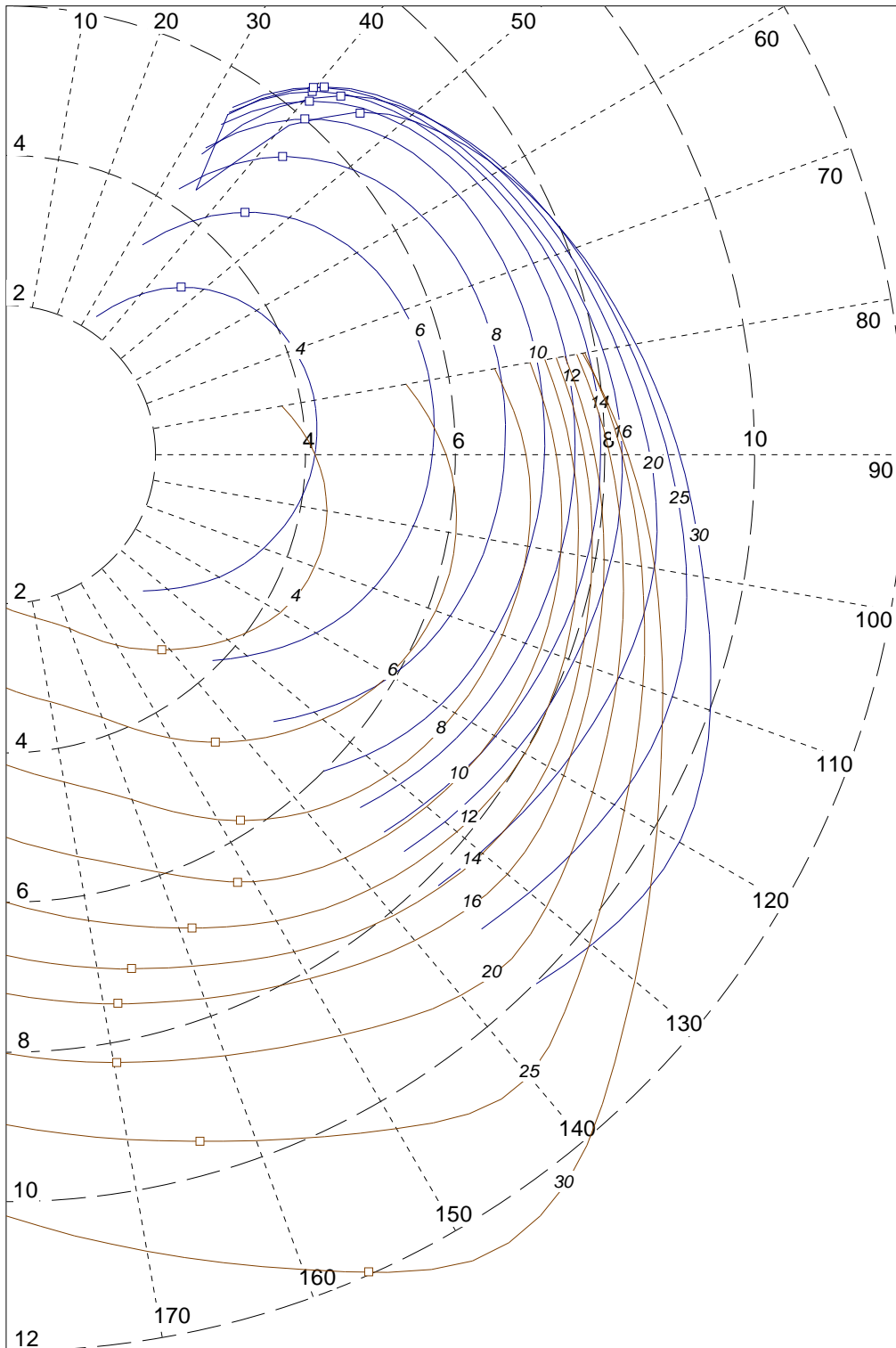
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Best Performance

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.

**D622 - Beneteau 35 - Deep Keel - Spinnaker on Pole
For Chantiers Beneteau**



Best Boatspeeds (kt)

	4	6	8	10	12	14	16	20	25	30
33.0	2.20	3.34	4.23	4.89	5.26	5.46	5.54	5.42	4.79	5.43
36.0	2.48	3.72	4.67	5.36	5.71	5.89	5.98	5.92	5.53	4.33
39.0	2.73	4.04	5.05	5.74	6.07	6.24	6.32	6.30	6.05	5.39
42.0	2.96	4.33	5.36	6.04	6.36	6.52	6.59	6.61	6.46	6.00
45.0	3.16	4.58	5.62	6.29	6.59	6.73	6.80	6.85	6.76	6.46
50.0	3.45	4.93	5.96	6.61	6.88	7.00	7.07	7.15	7.13	6.98
60.0	3.86	5.41	6.40	6.96	7.27	7.40	7.49	7.61	7.66	7.62
70.0	4.10	5.66	6.61	7.13	7.49	7.71	7.82	7.97	8.08	8.10
80.0	4.18	5.74	6.68	7.20	7.59	7.89	8.09	8.28	8.45	8.53
90.0	4.13	5.87	6.94	7.34	7.59	7.94	8.22	8.60	8.84	8.99
100.0	4.35	6.10	7.07	7.52	7.75	7.94	8.20	8.78	9.22	9.45
110.0	4.38	6.10	7.05	7.59	7.93	8.15	8.34	8.71	9.47	10.01
120.0	4.22	5.90	6.92	7.52	8.00	8.34	8.59	9.04	9.53	10.38
130.0	3.86	5.51	6.66	7.33	7.85	8.30	8.73	9.41	10.17	10.95
135.0	3.64	5.27	6.48	7.20	7.73	8.19	8.65	9.54	10.54	11.49
140.0	3.41	4.99	6.25	7.04	7.58	8.05	8.49	9.45	10.86	12.06
150.0	2.94	4.38	5.64	6.60	7.20	7.68	8.10	8.97	10.42	12.45
160.0	2.48	3.74	4.92	5.94	6.74	7.28	7.74	8.56	9.77	11.60
170.0	2.22	3.36	4.45	5.46	6.33	6.97	7.46	8.26	9.30	10.82
180.0	2.06	3.12	4.15	5.12	5.99	6.70	7.21	8.01	8.96	10.18
Up.Vs(kts)	3.24	4.55	5.43	6.01	6.22	6.35	6.40	6.50	6.55	6.57
Up.Vs(s/m)	1112.5	792.0	662.4	599.2	578.5	567.2	562.5	554.1	549.5	547.8
Up.Vs(s/L)	6.4	4.5	3.8	3.4	3.3	3.3	3.2	3.2	3.2	3.1
Up.Bt	46.3	44.6	42.8	41.6	40.6	40.1	39.9	40.9	43.0	46.0
Up.Vmg(kts)	2.24	3.24	3.99	4.49	4.73	4.85	4.91	4.91	4.79	4.56
Up.Vmg(s/m)	1609.7	1111.6	903.2	801.8	761.7	742.0	733.4	732.7	751.1	788.8
Up.Heel	2.4	5.3	9.2	15.1	19.7	21.7	23.1	23.3	23.7	24.1
Up.Reef	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.86	0.74	0.64
Up.Flat	1.00	1.00	1.00	1.00	0.90	0.76	0.66	0.70	0.76	0.84
Up.Va	6.66	9.77	12.51	14.93	17.01	19.00	20.92	24.74	29.34	33.75
Up.Ba	25.7	25.4	25.4	25.4	25.6	26.2	26.8	29.1	32.1	35.7
Up.Leewy	2.46	2.64	3.01	3.58	4.03	4.17	4.35	4.73	5.27	5.86
Dn.Vs(kts)	3.34	4.76	5.81	6.50	6.80	7.08	7.50	8.27	9.55	11.96
Dn.Vs(s/m)	1077.7	756.9	619.4	553.5	529.3	508.4	480.2	435.5	377.1	301.0
Dn.Vs(s/L)	6.2	4.3	3.6	3.2	3.0	2.9	2.8	2.5	2.2	1.7
Dn.Bt	141.5	144.0	147.4	151.6	158.6	166.3	168.5	169.7	164.2	156.1
Dn.Vmg(kts)	2.61	3.85	4.90	5.72	6.33	6.88	7.35	8.13	9.19	10.94
Dn.Vmg(s/m)	1376.8	935.8	735.2	629.2	568.4	523.3	490.1	442.6	391.8	329.2
Dn.Heel	0.7	1.3	1.6	1.6	1.3	1.0	1.1	1.6	4.6	12.1
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	2.50	3.53	4.41	5.28	6.19	7.32	8.78	11.96	16.01	19.50
Dn.Ba	85.2	91.6	102.2	115.7	135.0	153.0	158.7	162.6	155.0	142.5
Dn.Leewy	0.53	0.47	0.39	0.31	0.22	0.16	0.15	0.18	0.33	0.43

Course Times

	<u>Leeward</u> <u>1.00 nm.</u>	<u>LR</u> <u>1.00 nm.</u>	<u>WL</u> <u>1.00 nm.</u>	<u>Windward</u> <u>1.00 nm.</u>	<u>OLYMPIC</u> <u>1.00 nm.</u>	<u>CR</u> <u>1.00 nm.</u>
4.0	1376.8	1063.1	1493.3	1609.7	1404.7	1119.1
6.0	935.8	745.7	1023.7	1111.6	967.4	779.2
8.0	735.2	617.5	819.2	903.2	781.4	639.2
10.0	629.2	557.5	715.5	801.8	691.1	573.0
12.0	568.4	525.5	665.1	761.7	648.7	539.8
14.0	523.3	504.0	632.7	742.0	622.6	518.6
16.0	490.1	488.1	611.7	733.4	605.6	503.9
20.0	442.6	464.1	587.7	732.7	586.3	484.3
25.0	391.8	438.8	571.4	751.1	577.7	468.3
30.0	329.2	413.4	559.0	788.8	579.7	458.7

Times for 1 nm (secs)

	4	6	8	10	12	14	16	20	25	30
33.0	1633.7	1076.4	850.4	736.2	684.3	659.8	650.3	664.0	751.7	663.0
36.0	1452.2	968.0	770.7	671.2	630.8	610.9	602.4	608.6	651.1	831.1
39.0	1319.0	890.1	713.5	627.5	593.4	577.0	569.9	571.1	595.1	668.4
42.0	1218.1	831.4	671.6	595.6	566.5	552.5	546.4	544.3	557.7	600.1
45.0	1139.8	785.8	640.8	572.0	546.3	534.8	529.3	525.5	532.2	556.9
50.0	1044.9	730.2	603.6	544.7	523.3	514.2	508.9	503.5	504.8	515.4
60.0	932.4	665.8	562.1	516.9	495.4	486.6	480.6	473.0	469.8	472.1
70.0	878.9	636.5	544.3	504.7	480.6	467.0	460.4	451.5	445.8	444.5
80.0	861.8	626.9	538.6	500.1	474.4	456.1	445.1	434.6	426.2	421.8
90.0	872.6	612.9	518.6	490.3	474.2	453.6	437.8	418.8	407.3	400.3
100.0	828.4	590.5	509.4	478.7	464.3	453.1	439.2	409.8	390.3	380.8
110.0	821.4	590.1	510.7	474.2	453.8	441.6	431.4	413.5	380.1	359.8
120.0	852.9	609.9	520.4	478.6	450.2	431.5	419.0	398.2	377.7	347.0
130.0	933.7	653.4	540.4	491.2	458.5	433.6	412.2	382.5	354.0	328.7
135.0	989.7	683.7	555.7	500.3	465.6	439.6	416.4	377.3	341.5	313.3
140.0	1055.6	721.2	576.5	511.6	474.7	447.4	424.2	381.1	331.5	298.5
150.0	1223.7	821.4	638.4	545.6	499.8	468.7	444.6	401.6	345.6	289.1
160.0	1451.9	961.5	732.4	605.8	534.3	494.2	465.0	420.8	368.6	310.3
170.0	1624.2	1072.1	809.7	659.7	568.8	516.3	482.8	436.0	387.0	332.7
180.0	1751.0	1154.0	868.2	703.5	601.2	537.4	499.4	449.2	401.8	353.6
Up	1609.7	1111.6	903.2	801.8	761.7	742.0	733.4	732.7	751.1	788.8
Dn	1376.8	935.8	735.2	629.2	568.4	523.3	490.1	442.6	391.8	329.2

Equivalent ILC Average (using IMS formula): 706.19

Best Performance

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	4.0	33.0	2.204	1.848	1.9	1.000	1.000	5.97	21.4	4.10	Up	62ep
	4.0	36.0	2.479	2.006	2.0	1.000	1.000	6.18	22.3	3.52	Up	62ep
	4.0	39.0	2.729	2.121	2.2	1.000	1.000	6.36	23.3	3.11	Up	62ep
	4.0	42.0	2.955	2.196	2.3	1.000	1.000	6.50	24.3	2.80	Up	62ep
	4.0	45.0	3.158	2.233	2.4	1.000	1.000	6.62	25.3	2.55	Up	62ep
OptUp >	4.0	46.3	3.236	2.236	2.4	1.000	1.000	6.66	25.7	2.46	Up	62ep
	4.0	50.0	3.445	2.215	2.5	1.000	1.000	6.75	27.0	2.24	Up	62ep
	4.0	60.0	3.861	1.931	2.6	1.000	1.000	6.81	30.6	1.81	Up	62ep
	4.0	70.0	4.096	1.401	2.4	1.000	1.000	6.63	34.5	1.51	Up	62ep
	4.0	80.0	4.177	0.725	2.1	1.000	1.000	6.26	38.9	1.26	Up	62ep
	4.0	90.0	4.126	-0.000	2.9	1.000	1.000	5.74	44.1	1.47	Dn	62ep
	4.0	100.0	4.346	-0.755	2.9	1.000	1.000	5.37	47.1	1.31	Dn	62ep
	4.0	110.0	4.383	-1.499	2.6	1.000	1.000	4.82	51.2	1.15	Dn	62ep
	4.0	120.0	4.221	-2.111	2.1	1.000	1.000	4.11	57.3	0.98	Dn	62ep
	4.0	130.0	3.855	-2.478	1.4	1.000	1.000	3.32	67.3	0.78	Dn	62ep
	4.0	135.0	3.638	-2.572	1.0	1.000	1.000	2.94	74.0	0.67	Dn	62ep
	4.0	140.0	3.410	-2.612	0.8	1.000	1.000	2.59	82.3	0.56	Dn	62ep
OptDn >	4.0	141.5	3.340	2.615	0.7	1.000	1.000	2.50	85.2	0.53	Dn	62ep
	4.0	150.0	2.942	-2.548	0.3	1.000	1.000	2.07	104.6	0.34	Dn	62ep
	4.0	160.0	2.479	-2.330	0.1	1.000	1.000	1.87	133.1	0.18	Dn	62ep
	4.0	170.0	2.216	-2.183	0.0	1.000	1.000	1.86	158.0	0.09	Dn	62ep
	4.0	180.0	2.056	-2.056	0.0	1.000	1.000	1.94	180.0	-0.00	Dn	62ep
	6.0	33.0	3.344	2.805	4.3	1.000	1.000	8.99	21.3	4.02	Up	62ep
	6.0	36.0	3.719	3.009	4.6	1.000	1.000	9.27	22.3	3.49	Up	62ep
	6.0	39.0	4.044	3.143	4.9	1.000	1.000	9.49	23.4	3.12	Up	62ep
	6.0	42.0	4.330	3.218	5.2	1.000	1.000	9.66	24.5	2.84	Up	62ep
OptUp >	6.0	44.6	4.545	3.239	5.3	1.000	1.000	9.77	25.4	2.64	Up	62ep
	6.0	45.0	4.581	3.239	5.4	1.000	1.000	9.78	25.6	2.61	Up	62ep
	6.0	50.0	4.930	3.169	5.5	1.000	1.000	9.91	27.5	2.31	Up	62ep
	6.0	60.0	5.407	2.703	5.5	1.000	1.000	9.87	31.6	1.88	Up	62ep
	6.0	70.0	5.656	1.934	5.0	1.000	1.000	9.54	36.1	1.56	Up	62ep
	6.0	80.0	5.742	0.997	4.3	1.000	1.000	8.99	41.0	1.30	Up	62ep
	6.0	90.0	5.873	-0.000	6.8	1.000	1.000	8.37	45.4	1.59	Dn	62ep
	6.0	100.0	6.097	-1.059	6.7	1.000	1.000	7.75	49.3	1.42	Dn	62ep
	6.0	110.0	6.101	-2.087	5.8	1.000	1.000	6.92	54.2	1.23	Dn	62ep
	6.0	120.0	5.903	-2.951	4.4	1.000	1.000	5.94	60.7	1.01	Dn	62ep
	6.0	130.0	5.510	-3.542	2.9	1.000	1.000	4.88	70.2	0.78	Dn	62ep
	6.0	135.0	5.266	-3.723	2.2	1.000	1.000	4.36	76.4	0.67	Dn	62ep
	6.0	140.0	4.991	-3.824	1.7	1.000	1.000	3.88	84.1	0.56	Dn	62ep
OptDn >	6.0	144.0	4.757	3.847	1.3	1.000	1.000	3.53	91.6	0.47	Dn	62ep
	6.0	150.0	4.383	-3.796	0.8	1.000	1.000	3.11	105.2	0.34	Dn	62ep
	6.0	160.0	3.744	-3.518	0.3	1.000	1.000	2.79	132.7	0.17	Dn	62ep
	6.0	170.0	3.358	-3.307	0.1	1.000	1.000	2.76	157.8	0.09	Dn	62ep
	6.0	180.0	3.119	-3.119	0.0	1.000	1.000	2.88	180.0	-0.00	Dn	62ep

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>
	8.0	33.0	4.233	3.550	7.7	1.000	1.000	11.76	21.5	4.30	Up	62ep
	8.0	36.0	4.671	3.779	8.3	1.000	1.000	12.08	22.7	3.76	Up	62ep
	8.0	39.0	5.046	3.921	8.8	1.000	1.000	12.31	23.8	3.37	Up	62ep
	8.0	42.0	5.360	3.983	9.2	1.000	1.000	12.48	25.1	3.07	Up	62ep
OptUp >	8.0	42.8	5.434	3.986	9.2	1.000	1.000	12.51	25.4	3.01	Up	62ep
	8.0	45.0	5.618	3.973	9.4	1.000	1.000	12.58	26.3	2.84	Up	62ep
	8.0	50.0	5.964	3.834	9.5	1.000	1.000	12.64	28.6	2.53	Up	62ep
	8.0	60.0	6.404	3.202	9.0	1.000	1.000	12.45	33.3	2.07	Up	62ep
	8.0	70.0	6.613	2.262	7.9	1.000	1.000	11.95	38.5	1.72	Up	62ep
	8.0	80.0	6.684	1.161	6.6	1.000	1.000	11.24	44.1	1.42	Up	62ep
	8.0	90.0	6.942	-0.000	13.7	1.000	1.000	10.42	48.2	1.97	Dn	62ep
	8.0	100.0	7.067	-1.227	12.5	1.000	1.000	9.56	53.6	1.74	Dn	62ep
	8.0	110.0	7.049	-2.411	9.9	1.000	1.000	8.57	59.8	1.44	Dn	62ep
	8.0	120.0	6.918	-3.459	7.1	1.000	1.000	7.47	67.0	1.12	Dn	62ep
	8.0	130.0	6.662	-4.282	4.7	1.000	1.000	6.29	76.0	0.83	Dn	62ep
	8.0	135.0	6.478	-4.580	3.7	1.000	1.000	5.70	81.7	0.69	Dn	62ep
	8.0	140.0	6.245	-4.784	2.8	1.000	1.000	5.14	88.7	0.57	Dn	62ep
OptDn >	8.0	147.4	5.812	4.896	1.6	1.000	1.000	4.41	102.2	0.39	Dn	62ep
	8.0	150.0	5.639	-4.884	1.3	1.000	1.000	4.20	107.9	0.34	Dn	62ep
	8.0	160.0	4.916	-4.619	0.0	1.000	1.000	3.78	133.6	0.17	Dn	62ep
	8.0	170.0	4.446	-4.379	0.0	1.000	1.000	3.70	158.0	0.09	Dn	62ep
	8.0	180.0	4.147	-4.147	0.0	1.000	1.000	3.85	180.0	-0.00	Dn	62ep
	10.0	33.0	4.890	4.101	12.5	1.000	1.000	14.30	21.8	4.85	Up	62ep
	10.0	36.0	5.364	4.339	13.7	1.000	1.000	14.62	23.0	4.26	Up	62ep
	10.0	39.0	5.737	4.458	14.6	1.000	1.000	14.82	24.3	3.86	Up	62ep
OptUp >	10.0	41.6	6.008	4.490	15.1	1.000	1.000	14.93	25.4	3.58	Up	62ep
	10.0	42.0	6.044	4.492	15.2	1.000	1.000	14.94	25.6	3.54	Up	62ep
	10.0	45.0	6.293	4.450	15.5	1.000	1.000	15.00	27.0	3.29	Up	62ep
	10.0	50.0	6.609	4.248	15.4	1.000	1.000	14.98	29.5	2.94	Up	62ep
	10.0	60.0	6.965	3.482	13.6	1.000	1.000	14.63	35.1	2.40	Up	62ep
	10.0	70.0	7.133	2.440	11.3	1.000	1.000	14.01	41.1	1.98	Up	62ep
	10.0	80.0	7.198	1.250	9.1	1.000	1.000	13.20	47.4	1.62	Up	62ep
	10.0	90.0	7.342	-0.000	22.1	0.970	1.000	11.82	51.6	2.51	Dn	62ep
	10.0	100.0	7.520	-1.306	21.2	1.000	1.000	10.85	57.8	2.23	Dn	62ep
	10.0	110.0	7.592	-2.597	15.5	1.000	1.000	9.97	65.3	1.72	Dn	62ep
	10.0	120.0	7.522	-3.761	10.4	1.000	1.000	8.88	73.5	1.30	Dn	62ep
	10.0	130.0	7.329	-4.711	6.7	1.000	1.000	7.66	83.2	0.93	Dn	62ep
	10.0	135.0	7.196	-5.088	5.2	1.000	1.000	7.04	89.0	0.77	Dn	62ep
	10.0	140.0	7.037	-5.391	3.9	1.000	1.000	6.44	95.5	0.61	Dn	62ep
	10.0	150.0	6.598	-5.714	1.9	1.000	1.000	5.41	112.4	0.35	Dn	62ep
OptDn >	10.0	151.6	6.504	5.722	1.6	1.000	1.000	5.28	115.7	0.31	Dn	62ep
	10.0	160.0	5.942	-5.584	0.0	1.000	1.000	4.86	135.3	0.18	Dn	62ep
	10.0	170.0	5.457	-5.374	0.0	1.000	1.000	4.72	158.4	0.09	Dn	62ep
	10.0	180.0	5.117	-5.117	0.0	1.000	1.000	4.88	180.0	-0.00	Dn	62ep

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	12.0	33.0	5.261	4.412	16.8	1.000	0.891	16.55	22.2	5.15	Up	62ep
	12.0	36.0	5.707	4.617	18.2	1.000	0.891	16.81	23.5	4.58	Up	62ep
	12.0	39.0	6.067	4.715	19.2	1.000	0.893	16.96	24.9	4.18	Up	62ep
OptUp >	12.0	40.6	6.223	4.726	19.7	1.000	0.898	17.01	25.6	4.03	Up	62ep
	12.0	42.0	6.355	4.723	20.1	1.000	0.902	17.03	26.3	3.90	Up	62ep
	12.0	45.0	6.590	4.660	20.8	1.000	0.916	17.04	27.8	3.70	Up	62ep
	12.0	50.0	6.880	4.422	21.6	1.000	0.950	16.91	30.4	3.46	Up	62ep
	12.0	60.0	7.267	3.633	20.4	1.000	1.000	16.46	36.3	2.94	Up	62ep
	12.0	70.0	7.490	2.562	16.3	1.000	1.000	15.86	43.0	2.32	Up	62ep
	12.0	80.0	7.589	1.318	12.4	1.000	1.000	15.06	50.0	1.85	Up	62ep
	12.0	90.0	7.592	-0.000	9.3	1.000	1.000	14.07	57.3	1.47	Up	62ep
	12.0	100.0	7.754	-1.346	22.6	0.920	1.000	12.30	62.5	2.35	Dn	62ep
	12.0	110.0	7.932	-2.713	22.9	0.997	1.000	11.07	69.8	2.10	Dn	62ep
	12.0	120.0	7.996	-3.998	15.2	1.000	1.000	10.23	78.7	1.50	Dn	62ep
	12.0	130.0	7.852	-5.047	9.2	1.000	1.000	9.08	89.1	1.05	Dn	62ep
	12.0	135.0	7.732	-5.467	7.0	1.000	1.000	8.46	95.1	0.86	Dn	62ep
	12.0	140.0	7.584	-5.810	5.2	1.000	1.000	7.85	101.8	0.68	Dn	62ep
OptDn >	12.0	158.6	6.802	6.333	1.3	1.000	1.000	6.19	135.0	0.22	Dn	62ep
	12.0	160.0	6.738	-6.332	1.1	1.000	1.000	6.12	137.9	0.20	Dn	62ep
	12.0	170.0	6.329	-6.233	0.0	1.000	1.000	5.87	159.2	0.10	Dn	62ep
	12.0	180.0	5.988	-5.988	0.0	1.000	1.000	6.01	180.0	-0.00	Dn	62ep
	14.0	33.0	5.456	4.576	19.2	1.000	0.759	18.64	22.7	5.28	Up	62ep
	14.0	36.0	5.893	4.768	20.4	1.000	0.757	18.87	24.1	4.69	Up	62ep
	14.0	39.0	6.239	4.849	21.4	1.000	0.760	18.98	25.6	4.29	Up	62ep
OptUp >	14.0	40.1	6.347	4.852	21.7	1.000	0.763	19.00	26.2	4.17	Up	62ep
	14.0	42.0	6.515	4.842	22.1	1.000	0.768	19.02	27.2	4.00	Up	62ep
	14.0	45.0	6.731	4.760	22.7	1.000	0.781	18.97	28.8	3.80	Up	62ep
	14.0	50.0	7.001	4.500	23.3	0.998	0.817	18.79	31.6	3.56	Up	62ep
	14.0	60.0	7.398	3.699	23.2	0.955	0.999	18.21	37.7	3.24	Up	62ep
	14.0	70.0	7.709	2.637	22.8	1.000	1.000	17.42	44.1	2.81	Up	62ep
	14.0	80.0	7.892	1.370	17.0	1.000	1.000	16.75	51.9	2.14	Up	62ep
	14.0	90.0	7.937	-0.000	12.1	1.000	1.000	15.83	59.9	1.65	Up	62ep
	14.0	100.0	7.945	-1.380	22.9	0.845	1.000	13.85	66.5	2.40	Dn	62ep
	14.0	110.0	8.152	-2.788	23.3	0.919	1.000	12.54	74.4	2.14	Dn	62ep
	14.0	120.0	8.343	-4.171	21.6	0.999	1.000	11.36	83.2	1.77	Dn	62ep
	14.0	130.0	8.302	-5.336	12.3	1.000	1.000	10.50	93.8	1.18	Dn	62ep
	14.0	135.0	8.190	-5.791	9.2	1.000	1.000	9.92	99.9	0.96	Dn	62ep
	14.0	140.0	8.047	-6.165	6.7	1.000	1.000	9.33	106.7	0.75	Dn	62ep
	14.0	150.0	7.680	-6.651	3.3	1.000	1.000	8.28	122.5	0.43	Dn	62ep
OptDn >	14.0	166.3	7.081	6.879	1.0	1.000	1.000	7.32	153.0	0.16	Dn	62ep
	14.0	170.0	6.973	-6.867	0.0	1.000	1.000	7.24	160.4	0.11	Dn	62ep
	14.0	180.0	6.698	-6.698	0.0	1.000	1.000	7.30	180.0	-0.00	Dn	62ep

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	16.0	33.0	5.536	4.643	21.0	1.000	0.651	20.63	23.2	5.49	Up	62ep
	16.0	36.0	5.976	4.835	22.0	1.000	0.648	20.83	24.7	4.84	Up	62ep
	16.0	39.0	6.316	4.909	23.0	1.000	0.653	20.92	26.3	4.44	Up	62ep
OptUp >	16.0	39.9	6.400	4.909	23.1	0.995	0.662	20.92	26.8	4.35	Up	62ep
	16.0	42.0	6.589	4.896	23.2	0.977	0.697	20.94	28.0	4.15	Up	62ep
	16.0	45.0	6.802	4.810	23.3	0.953	0.750	20.88	29.8	3.95	Up	62ep
	16.0	50.0	7.075	4.548	23.4	0.920	0.846	20.69	33.0	3.71	Up	62ep
	16.0	60.0	7.491	3.745	23.4	0.895	1.000	20.04	39.4	3.33	Up	62ep
	16.0	70.0	7.819	2.674	23.7	0.945	1.000	19.14	46.0	2.95	Up	62ep
	16.0	80.0	8.088	1.404	22.6	1.000	1.000	18.15	53.2	2.53	Up	62ep
	16.0	90.0	8.223	-0.000	15.8	1.000	1.000	17.45	61.9	1.86	Up	62ep
	16.0	100.0	8.197	-1.423	10.7	1.000	1.000	16.40	70.7	1.41	Up	62ep
	16.0	110.0	8.344	-2.854	23.7	0.853	1.000	14.07	78.2	2.19	Dn	62ep
	16.0	120.0	8.593	-4.296	24.3	0.955	1.000	12.64	87.3	1.90	Dn	62ep
	16.0	130.0	8.734	-5.614	16.9	1.000	1.000	11.83	97.5	1.32	Dn	62ep
	16.0	135.0	8.646	-6.114	11.9	1.000	1.000	11.39	103.5	1.05	Dn	62ep
	16.0	140.0	8.486	-6.501	8.5	1.000	1.000	10.85	110.3	0.82	Dn	62ep
	16.0	150.0	8.097	-7.012	4.2	1.000	1.000	9.84	125.8	0.48	Dn	62ep
	16.0	160.0	7.742	-7.275	2.2	1.000	1.000	9.12	143.1	0.28	Dn	62ep
OptDn >	16.0	168.5	7.496	7.346	1.1	1.000	1.000	8.78	158.7	0.15	Dn	62ep
	16.0	170.0	7.456	-7.343	0.0	1.000	1.000	8.75	161.5	0.13	Dn	62ep
	16.0	180.0	7.209	-7.209	0.0	1.000	1.000	8.79	180.0	-0.00	Dn	62ep
	20.0	33.0	5.422	4.547	22.4	0.942	0.565	24.37	24.4	6.36	Up	62ep
	20.0	36.0	5.915	4.786	23.0	0.910	0.613	24.60	26.1	5.52	Up	62ep
	20.0	39.0	6.304	4.899	23.2	0.880	0.665	24.72	27.9	4.96	Up	62ep
OptUp >	20.0	40.9	6.497	4.913	23.3	0.863	0.700	24.74	29.1	4.73	Up	62ep
	20.0	42.0	6.615	4.916	23.4	0.854	0.722	24.74	29.8	4.59	Up	62ep
	20.0	45.0	6.851	4.844	23.5	0.832	0.783	24.67	31.7	4.34	Up	62ep
	20.0	50.0	7.150	4.596	23.6	0.802	0.887	24.44	35.1	4.04	Up	62ep
	20.0	60.0	7.611	3.805	23.7	0.796	1.000	23.70	42.0	3.56	Up	62ep
	20.0	70.0	7.973	2.727	24.0	0.843	1.000	22.67	49.2	3.12	Up	62ep
	20.0	80.0	8.283	1.438	24.2	0.905	1.000	21.47	56.8	2.75	Up	62ep
	20.0	90.0	8.595	-0.000	24.5	0.989	1.000	20.13	64.7	2.40	Up	62ep
	20.0	100.0	8.785	-1.525	17.2	1.000	1.000	19.55	74.2	1.71	Up	62ep
	20.0	110.0	8.707	-2.978	11.1	1.000	1.000	18.54	84.2	1.28	Up	62ep
	20.0	120.0	9.041	-4.521	25.3	0.842	1.000	15.69	93.5	1.94	Dn	62ep
	20.0	130.0	9.412	-6.050	26.6	0.986	1.000	14.13	104.1	1.61	Dn	62ep
	20.0	135.0	9.540	-6.746	20.3	1.000	1.000	14.04	109.1	1.21	Dn	62ep
	20.0	140.0	9.446	-7.236	13.5	1.000	1.000	13.81	115.2	0.93	Dn	62ep
	20.0	150.0	8.965	-7.764	6.7	1.000	1.000	12.98	130.1	0.58	Dn	62ep
	20.0	160.0	8.556	-8.040	3.7	1.000	1.000	12.31	146.3	0.37	Dn	62ep
OptDn >	20.0	169.7	8.266	8.133	1.6	1.000	1.000	11.96	162.6	0.18	Dn	62ep
	20.0	170.0	8.257	-8.132	0.0	1.000	1.000	11.95	163.1	0.17	Dn	62ep
	20.0	180.0	8.014	-8.014	0.0	1.000	1.000	11.99	180.0	-0.00	Dn	62ep

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	25.0	33.0	4.789	4.016	22.3	0.838	0.558	28.67	26.1	9.04	Up	62ep
	25.0	36.0	5.530	4.473	23.1	0.800	0.620	29.09	27.7	7.08	Up	62ep
	25.0	39.0	6.049	4.701	23.5	0.769	0.681	29.28	29.5	6.06	Up	62ep
	25.0	42.0	6.455	4.797	23.7	0.745	0.742	29.35	31.5	5.40	Up	62ep
OptUp >	25.0	43.0	6.552	4.793	23.7	0.737	0.763	29.34	32.1	5.27	Up	62ep
	25.0	45.0	6.765	4.783	23.8	0.723	0.807	29.31	33.5	4.98	Up	62ep
	25.0	50.0	7.131	4.584	23.9	0.697	0.913	29.07	37.1	4.54	Up	62ep
	25.0	60.0	7.664	3.832	24.2	0.701	1.000	28.22	44.4	3.91	Up	62ep
	25.0	70.0	8.075	2.762	24.6	0.743	1.000	27.07	52.1	3.41	Up	62ep
	25.0	80.0	8.447	1.467	24.8	0.799	1.000	25.75	60.2	2.97	Up	62ep
	25.0	90.0	8.838	-0.000	25.3	0.876	1.000	24.27	68.6	2.56	Up	62ep
	25.0	100.0	9.223	-1.602	25.7	0.976	1.000	22.71	77.6	2.19	Up	62ep
	25.0	110.0	9.470	-3.239	18.8	1.000	1.000	22.26	87.6	1.56	Up	62ep
	25.0	120.0	9.530	-4.765	26.6	0.737	1.000	19.58	98.7	1.99	Dn	62ep
	25.0	130.0	10.170	-6.537	28.2	0.872	1.000	17.88	109.3	1.55	Dn	62ep
	25.0	135.0	10.543	-7.455	29.2	0.964	1.000	17.01	114.8	1.33	Dn	62ep
	25.0	140.0	10.859	-8.318	23.8	0.999	1.000	16.88	119.4	0.98	Dn	62ep
	25.0	150.0	10.416	-9.021	11.2	1.000	1.000	16.63	132.5	0.61	Dn	62ep
OptDn >	25.0	164.2	9.548	9.189	4.6	1.000	1.000	16.01	155.0	0.33	Dn	62ep
	25.0	170.0	9.303	-9.162	0.0	1.000	1.000	15.92	164.2	0.21	Dn	62ep
	25.0	180.0	8.960	-8.960	0.0	1.000	1.000	16.04	180.0	-0.00	Dn	62ep
	30.0	33.0	5.430	4.554	35.0	0.946	0.946	33.39	23.6	0.80	Up	62ep
	30.0	36.0	4.332	3.505	22.2	0.725	0.614	32.93	29.7	12.34	Up	62ep
	30.0	39.0	5.386	4.186	23.3	0.690	0.687	33.53	31.1	8.39	Up	62ep
	30.0	42.0	5.999	4.458	23.9	0.665	0.753	33.73	33.0	6.92	Up	62ep
	30.0	45.0	6.464	4.571	24.0	0.645	0.817	33.78	35.0	6.03	Up	62ep
OptUp >	30.0	46.0	6.572	4.564	24.1	0.639	0.840	33.75	35.7	5.86	Up	62ep
	30.0	50.0	6.984	4.489	24.3	0.621	0.921	33.60	38.6	5.23	Up	62ep
	30.0	60.0	7.625	3.812	24.8	0.626	1.000	32.68	46.2	4.37	Up	62ep
	30.0	70.0	8.099	2.770	25.3	0.663	1.000	31.42	54.2	3.77	Up	62ep
	30.0	80.0	8.534	1.482	25.7	0.715	1.000	29.96	62.7	3.26	Up	62ep
	30.0	90.0	8.993	-0.000	26.2	0.785	1.000	28.37	71.5	2.78	Up	62ep
	30.0	100.0	9.453	-1.641	26.8	0.875	1.000	26.71	80.9	2.36	Up	62ep
	30.0	110.0	10.007	-3.423	27.4	0.986	1.000	25.02	90.6	1.92	Up	62ep
	30.0	120.0	10.375	-5.188	19.7	1.000	1.000	24.90	100.7	1.28	Up	62ep
	30.0	130.0	10.952	-7.040	29.9	0.784	1.000	21.60	112.7	1.46	Dn	62ep
	30.0	135.0	11.490	-8.125	30.8	0.867	1.000	20.66	118.1	1.20	Dn	62ep
	30.0	140.0	12.061	-9.239	31.7	0.963	1.000	19.71	123.6	0.98	Dn	62ep
OptDn >	30.0	156.1	11.959	10.936	12.1	1.000	1.000	19.50	142.5	0.43	Dn	62ep
	30.0	160.0	11.603	-10.903	9.3	1.000	1.000	19.43	148.6	0.37	Dn	62ep
	30.0	170.0	10.819	-10.655	3.9	1.000	1.000	19.43	164.5	0.20	Dn	62ep
	30.0	180.0	10.181	-10.181	0.0	1.000	1.000	19.82	180.0	-0.00	Dn	62ep

Best Performance (cont)
