FARR®



PERFORMANCE PREDICTION

DESIGN #294
Beneteau First 42s7
Deep Keel with Short Rig Version

Farr Yacht Design, Ltd.
Copyright December 12, 2006

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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)

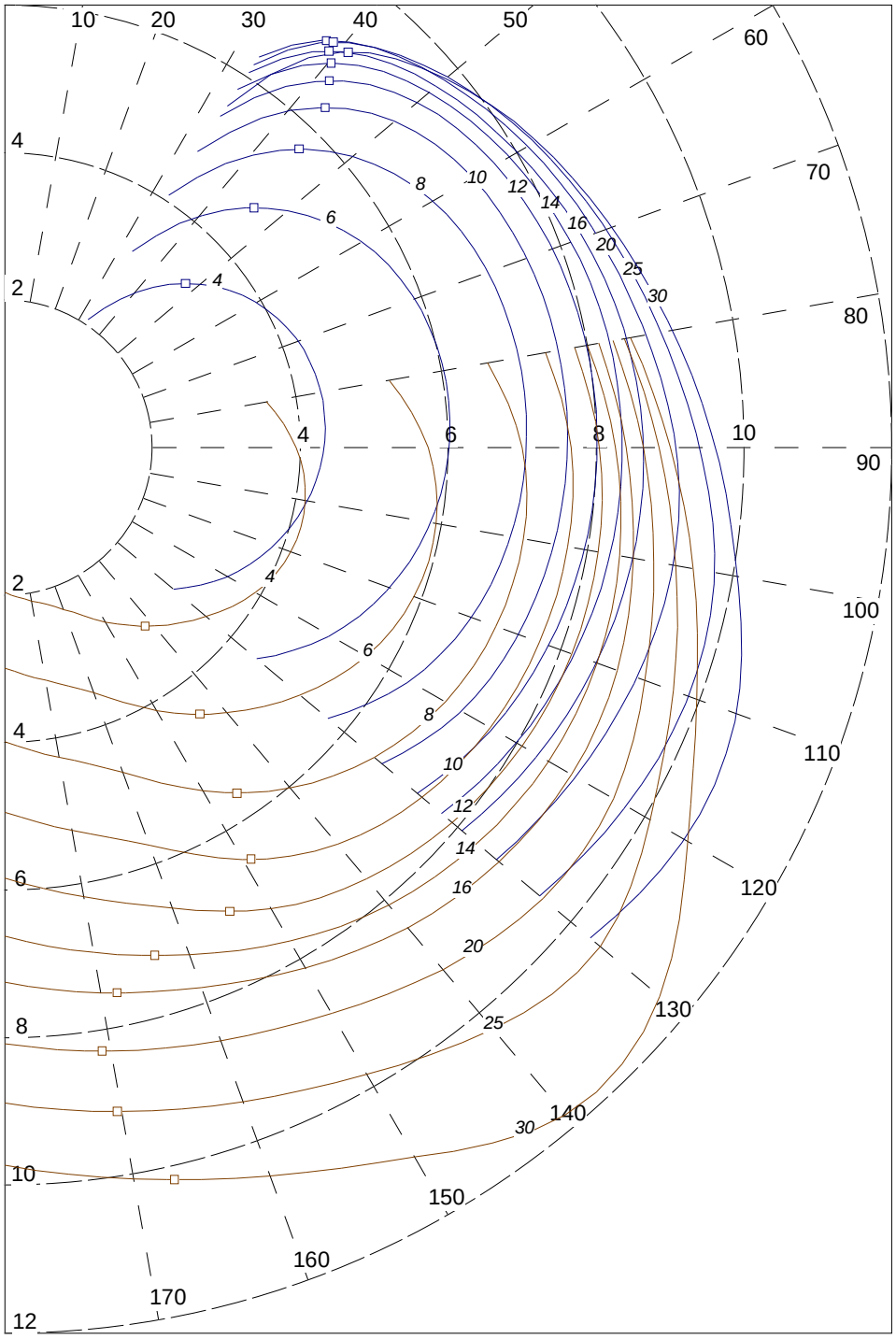
This page is similar to the Best Boatspeeds page in that it represents the boatspeeds for a series of true windspeeds and true wind angles. Boatspeeds are expressed as seconds/nautical mile. Shaded areas again depict the off optimum conditions. Optimum upwind and downwind values, in terms of VMG, are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

294 Short Rig, Deep keel
Beneteau 42s7



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Best Boatspeeds (kt)

	4	6	8	10	12	14	16	20	25	30
33.0	2.07	3.17	4.08	4.79	5.36	5.79	6.06	6.31	6.19	5.53
36.0	2.38	3.61	4.59	5.35	5.92	6.31	6.56	6.78	6.71	6.35
39.0	2.66	3.98	5.03	5.82	6.35	6.70	6.92	7.10	7.08	6.86
42.0	2.91	4.31	5.41	6.19	6.69	7.00	7.18	7.33	7.33	7.21
45.0	3.13	4.60	5.73	6.50	6.96	7.22	7.37	7.51	7.54	7.46
50.0	3.45	5.00	6.14	6.88	7.28	7.49	7.62	7.76	7.81	7.79
60.0	3.93	5.58	6.69	7.31	7.67	7.88	8.01	8.17	8.28	8.31
70.0	4.22	5.90	6.96	7.51	7.88	8.15	8.32	8.51	8.66	8.74
80.0	4.34	6.03	7.06	7.60	7.99	8.30	8.54	8.81	9.02	9.17
90.0	4.32	6.01	7.05	7.66	8.04	8.35	8.64	9.08	9.40	9.62
100.0	4.16	5.92	7.12	7.73	8.15	8.45	8.63	9.18	9.75	10.07
110.0	4.12	5.89	7.07	7.70	8.16	8.53	8.82	9.22	9.84	10.53
120.0	3.92	5.64	6.88	7.58	8.08	8.50	8.85	9.50	10.08	10.67
130.0	3.56	5.21	6.53	7.37	7.90	8.34	8.73	9.50	10.51	11.56
140.0	3.15	4.69	6.02	7.01	7.62	8.09	8.49	9.22	10.28	11.80
150.0	2.73	4.11	5.37	6.44	7.21	7.72	8.14	8.85	9.80	11.10
160.0	2.33	3.54	4.68	5.74	6.64	7.31	7.78	8.55	9.43	10.51
170.0	2.11	3.20	4.26	5.26	6.18	6.95	7.50	8.30	9.13	10.06
180.0	1.96	2.98	3.98	4.94	5.83	6.62	7.24	8.07	8.88	9.72
Up.Vs(kts)	3.31	4.68	5.68	6.33	6.64	6.83	6.93	7.03	7.07	7.09
Up.Vs(s/m)	1088.6	768.4	633.9	569.0	542.4	526.9	519.1	512.3	509.3	507.5
Up.Vs(s/L)	7.4	5.2	4.3	3.9	3.7	3.6	3.5	3.5	3.5	3.4
Up.Bt	47.6	46.0	44.5	43.2	41.5	40.3	39.2	38.2	39.0	40.9
Up.Vmg(kts)	2.23	3.25	4.05	4.61	4.97	5.21	5.37	5.52	5.49	5.36
Up.Vmg(s/m)	1615.6	1106.7	888.9	781.0	723.9	690.7	670.0	652.3	655.3	671.7
Up.Heel	2.1	4.6	7.8	11.9	15.2	17.6	19.4	22.2	23.6	24.0
Up.Reef	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.81
Up.Flat	1.00	1.00	1.00	1.00	0.92	0.81	0.72	0.57	0.53	0.57
Up.Va	6.69	9.84	12.67	15.17	17.41	19.52	21.56	25.46	30.17	34.76
Up.Ba	26.2	25.9	26.0	26.2	26.1	26.2	26.3	26.8	28.5	31.1
Up.Leewy	2.65	2.81	3.13	3.63	4.03	4.26	4.49	4.98	5.57	6.20
Dn.Vs(kts)	3.07	4.47	5.64	6.50	6.98	7.18	7.54	8.28	9.12	10.18
Dn.Vs(s/m)	1170.7	804.8	638.6	554.0	515.6	501.7	477.4	434.7	394.6	353.6
Dn.Vs(s/L)	7.9	5.5	4.3	3.8	3.5	3.4	3.2	2.9	2.7	2.4
Dn.Bt	141.8	143.8	146.1	149.1	154.1	163.6	168.4	170.8	170.4	167.0
Dn.Vmg(kts)	2.42	3.61	4.68	5.58	6.28	6.88	7.39	8.18	8.99	9.92
Dn.Vmg(s/m)	1489.4	997.3	769.1	645.5	573.0	523.1	487.4	440.3	400.3	363.0
Dn.Heel	0.4	0.7	1.0	1.2	1.1	0.8	0.7	0.9	1.5	3.3
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	2.47	3.56	4.57	5.54	6.48	7.40	8.75	11.90	16.08	20.21
Dn.Ba	91.6	95.9	102.7	112.1	126.1	147.6	158.4	164.5	164.9	160.5
Dn.Leewy	0.44	0.40	0.36	0.31	0.24	0.16	0.12	0.13	0.18	0.28

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Course Times

	Leeward 1.00 nm.	WL 1.00 nm.	LR 1.00 nm.	Windward 1.00 nm.	CR 1.00 nm.
4.0	1489.4	1552.5	1090.4	1615.6	1152.3
6.0	997.3	1052.0	755.7	1106.7	792.2
8.0	769.1	829.0	614.7	888.9	638.1
10.0	645.5	713.2	547.1	781.0	563.3
12.0	573.0	648.5	509.2	723.9	522.2
14.0	523.1	606.9	484.3	690.7	496.1
16.0	487.4	578.7	466.7	670.0	478.2
20.0	440.3	546.3	442.3	652.3	455.2
25.0	400.3	527.8	420.3	655.3	437.8
30.0	363.0	517.4	400.2	671.7	425.4

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Times for 1 nm (secs)

	4	6	8	10	12	14	16	20	25	30
33.0	1737.0	1134.3	882.7	752.3	671.8	622.2	593.7	570.1	581.9	651.5
36.0	1512.5	997.3	783.5	672.7	608.1	570.9	548.8	531.3	536.7	566.9
39.0	1355.5	903.5	715.0	618.4	566.6	537.4	520.5	506.9	508.7	524.6
42.0	1238.9	835.1	665.1	581.2	537.9	514.6	501.6	491.0	490.8	499.1
45.0	1150.1	783.3	628.5	553.6	517.3	498.7	488.2	479.3	477.7	482.5
50.0	1042.5	720.0	586.2	523.0	494.5	480.6	472.2	464.1	460.8	462.3
60.0	915.3	645.2	538.5	492.5	469.6	456.8	449.4	440.8	435.0	433.1
70.0	852.8	610.1	517.6	479.2	456.7	441.6	432.5	423.1	415.9	412.1
80.0	828.8	596.9	509.8	473.5	450.5	433.5	421.6	408.7	399.3	392.8
90.0	833.8	599.1	510.4	470.0	447.5	431.0	416.7	396.4	382.9	374.4
100.0	866.1	607.7	505.4	465.5	441.6	426.2	417.1	392.1	369.3	357.7
110.0	873.5	611.0	509.0	467.5	441.1	422.0	408.3	390.6	365.8	341.8
120.0	918.6	637.9	523.1	474.6	445.6	423.8	406.6	378.8	357.1	337.4
130.0	1011.5	690.9	551.5	488.8	455.8	431.6	412.5	378.9	342.4	311.3
140.0	1142.3	768.1	598.5	513.5	472.3	445.2	424.2	390.3	350.1	305.1
150.0	1320.8	875.9	670.3	559.1	499.1	466.3	442.4	406.7	367.3	324.3
160.0	1546.3	1018.2	769.5	627.7	542.2	492.6	462.5	421.0	381.7	342.7
170.0	1709.4	1125.0	845.0	683.9	582.8	518.3	480.1	433.7	394.2	357.8
180.0	1834.7	1207.0	903.7	729.1	617.2	543.7	497.2	445.9	405.4	370.4
Up	1615.6	1106.7	888.9	781.0	723.9	690.7	670.0	652.3	655.3	671.7
Dn	1489.4	997.3	769.1	645.5	573.0	523.1	487.4	440.3	400.3	363.0

Equivalent ILC Average (using IMS formula): 689.60

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Best Performance

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	4.0	33.0	2.073	1.738	1.5	1.000	1.000	5.85	21.9	4.93	Up	29l2
	4.0	36.0	2.380	1.926	1.7	1.000	1.000	6.09	22.7	4.11	Up	29l2
	4.0	39.0	2.656	2.064	1.8	1.000	1.000	6.29	23.6	3.56	Up	29l2
	4.0	42.0	2.906	2.159	1.9	1.000	1.000	6.46	24.5	3.17	Up	29l2
	4.0	45.0	3.130	2.213	2.0	1.000	1.000	6.60	25.4	2.87	Up	29l2
OptUp >	***4.0***	***47.6***	***3.307***	***2.228***	***2.1***	***1.000***	***1.000***	***6.69***	***26.2***	***2.65***	***Up***	***29l2***
	4.0	50.0	3.453	2.220	2.2	1.000	1.000	6.76	26.9	2.49	Up	29l2
	4.0	60.0	3.933	1.967	2.2	1.000	1.000	6.87	30.3	1.99	Up	29l2
	4.0	70.0	4.221	1.444	2.1	1.000	1.000	6.73	33.9	1.65	Up	29l2
	4.0	80.0	4.344	0.754	1.9	1.000	1.000	6.39	38.0	1.38	Up	29l2
	4.0	90.0	4.318	-0.000	1.6	1.000	1.000	5.88	42.8	1.16	Up	29l2
	4.0	100.0	4.156	-0.722	1.2	1.000	1.000	5.24	48.7	0.96	Up	29l2
	4.0	110.0	4.121	-1.410	1.5	1.000	1.000	4.66	53.8	1.03	Dn	29l2
	4.0	120.0	3.919	-1.960	1.2	1.000	1.000	3.96	61.0	0.86	Dn	29l2
	4.0	130.0	3.559	-2.288	0.7	1.000	1.000	3.22	72.1	0.67	Dn	29l2
	4.0	140.0	3.151	-2.414	0.4	1.000	1.000	2.57	88.1	0.48	Dn	29l2
OptDn >	***4.0***	***141.8***	***3.075***	***2.417***	***0.4***	***1.000***	***1.000***	***2.47***	***91.6***	***0.44***	***Dn***	***29l2***
	4.0	150.0	2.726	-2.360	0.2	1.000	1.000	2.13	110.3	0.29	Dn	29l2
	4.0	160.0	2.328	-2.188	0.1	1.000	1.000	1.98	136.3	0.16	Dn	29l2
	4.0	170.0	2.106	-2.074	0.0	1.000	1.000	1.96	159.2	0.08	Dn	29l2
	4.0	180.0	1.962	-1.962	-0.0	1.000	1.000	2.04	180.0	-0.00	Dn	29l2
	6.0	33.0	3.174	2.662	3.5	1.000	0.998	8.83	21.7	4.76	Up	29l2
	6.0	36.0	3.610	2.920	3.8	1.000	1.000	9.17	22.6	4.02	Up	29l2
	6.0	39.0	3.984	3.096	4.1	1.000	1.000	9.43	23.5	3.53	Up	29l2
	6.0	42.0	4.311	3.204	4.4	1.000	1.000	9.64	24.5	3.17	Up	29l2
	6.0	45.0	4.596	3.250	4.6	1.000	1.000	9.80	25.6	2.90	Up	29l2
OptUp >	***6.0***	***46.0***	***4.685***	***3.253***	***4.6***	***1.000***	***1.000***	***9.84***	***25.9***	***2.81***	***Up***	***29l2***
	6.0	50.0	5.000	3.214	4.8	1.000	1.000	9.97	27.3	2.54	Up	29l2
	6.0	60.0	5.580	2.790	4.8	1.000	1.000	10.02	31.1	2.04	Up	29l2
	6.0	70.0	5.900	2.018	4.5	1.000	1.000	9.74	35.3	1.69	Up	29l2
	6.0	80.0	6.031	1.047	3.9	1.000	1.000	9.21	39.8	1.42	Up	29l2
	6.0	90.0	6.009	-0.000	3.2	1.000	1.000	8.49	44.9	1.18	Up	29l2
	6.0	100.0	5.924	-1.029	4.0	1.000	1.000	7.65	50.4	1.23	Dn	29l2
	6.0	110.0	5.892	-2.015	3.4	1.000	1.000	6.81	55.7	1.06	Dn	29l2
	6.0	120.0	5.643	-2.822	2.5	1.000	1.000	5.83	63.0	0.86	Dn	29l2
	6.0	130.0	5.211	-3.349	1.6	1.000	1.000	4.79	73.6	0.67	Dn	29l2
	6.0	140.0	4.687	-3.591	0.9	1.000	1.000	3.86	88.7	0.47	Dn	29l2
OptDn >	***6.0***	***143.8***	***4.473***	***3.610***	***0.7***	***1.000***	***1.000***	***3.56***	***95.9***	***0.40***	***Dn***	***29l2***
	6.0	150.0	4.110	-3.559	0.4	1.000	1.000	3.19	109.9	0.29	Dn	29l2
	6.0	160.0	3.536	-3.322	0.2	1.000	1.000	2.94	135.7	0.16	Dn	29l2
	6.0	170.0	3.200	-3.151	0.1	1.000	1.000	2.90	159.0	0.08	Dn	29l2
	6.0	180.0	2.983	-2.983	-0.0	1.000	1.000	3.02	180.0	-0.00	Dn	29l2

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Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	8.0	33.0	4.078	3.420	6.0	1.000	0.967	11.63	21.9	4.84	Up	29I2
	8.0	36.0	4.595	3.717	6.8	1.000	1.000	12.01	22.9	4.26	Up	29I2
	8.0	39.0	5.035	3.913	7.2	1.000	1.000	12.31	23.9	3.75	Up	29I2
	8.0	42.0	5.413	4.022	7.6	1.000	1.000	12.54	25.0	3.37	Up	29I2
OptUp >	***8.0***	***44.5***	***5.680***	***4.050***	***7.8***	***1.000***	***1.000***	***12.67***	***26.0***	***3.13***	***Up***	***29I2***
	8.0	45.0	5.728	4.050	7.9	1.000	1.000	12.69	26.2	3.09	Up	29I2
	8.0	50.0	6.142	3.948	8.1	1.000	1.000	12.81	28.3	2.73	Up	29I2
	8.0	60.0	6.686	3.343	7.9	1.000	1.000	12.70	32.7	2.21	Up	29I2
	8.0	70.0	6.956	2.379	7.1	1.000	1.000	12.23	37.6	1.84	Up	29I2
	8.0	80.0	7.061	1.226	6.1	1.000	1.000	11.52	42.8	1.53	Up	29I2
	8.0	90.0	7.054	-0.000	4.9	1.000	1.000	10.64	48.5	1.26	Up	29I2
	8.0	100.0	7.123	-1.237	6.9	1.000	1.000	9.70	53.8	1.39	Dn	29I2
	8.0	110.0	7.073	-2.419	5.6	1.000	1.000	8.65	59.9	1.16	Dn	29I2
	8.0	120.0	6.882	-3.441	4.1	1.000	1.000	7.49	67.4	0.91	Dn	29I2
	8.0	130.0	6.527	-4.196	2.7	1.000	1.000	6.28	77.3	0.69	Dn	29I2
	8.0	140.0	6.015	-4.608	1.6	1.000	1.000	5.14	91.3	0.48	Dn	29I2
OptDn >	***8.0***	***146.1***	***5.638***	***4.680***	***1.0***	***1.000***	***1.000***	***4.57***	***102.7***	***0.36***	***Dn***	***29I2***
	8.0	150.0	5.370	-4.651	0.7	1.000	1.000	4.29	111.3	0.29	Dn	29I2
	8.0	160.0	4.678	-4.396	0.3	1.000	1.000	3.94	136.1	0.16	Dn	29I2
	8.0	170.0	4.260	-4.196	0.1	1.000	1.000	3.88	159.0	0.08	Dn	29I2
	8.0	180.0	3.984	-3.984	-0.0	1.000	1.000	4.02	180.0	-0.00	Dn	29I2
	10.0	33.0	4.785	4.013	8.8	1.000	0.918	14.23	22.2	5.00	Up	29I2
	10.0	36.0	5.351	4.329	10.2	1.000	0.968	14.63	23.3	4.52	Up	29I2
	10.0	39.0	5.821	4.524	11.3	1.000	1.000	14.93	24.4	4.14	Up	29I2
	10.0	42.0	6.194	4.603	11.7	1.000	1.000	15.12	25.7	3.76	Up	29I2
OptUp >	***10.0***	***43.2***	***6.327***	***4.610***	***11.9***	***1.000***	***1.000***	***15.17***	***26.2***	***3.63***	***Up***	***29I2***
	10.0	45.0	6.503	4.598	12.1	1.000	1.000	15.23	27.0	3.46	Up	29I2
	10.0	50.0	6.883	4.425	12.2	1.000	1.000	15.27	29.4	3.08	Up	29I2
	10.0	60.0	7.310	3.655	11.3	1.000	1.000	14.95	34.6	2.53	Up	29I2
	10.0	70.0	7.513	2.570	9.9	1.000	1.000	14.33	40.3	2.11	Up	29I2
	10.0	80.0	7.604	1.320	8.2	1.000	1.000	13.50	46.2	1.74	Up	29I2
	10.0	90.0	7.659	-0.000	11.8	1.000	1.000	12.43	52.0	1.95	Dn	29I2
	10.0	100.0	7.734	-1.343	10.2	1.000	1.000	11.40	58.3	1.66	Dn	29I2
	10.0	110.0	7.700	-2.634	8.0	1.000	1.000	10.24	65.3	1.34	Dn	29I2
	10.0	120.0	7.585	-3.792	5.8	1.000	1.000	9.00	73.3	1.03	Dn	29I2
	10.0	130.0	7.365	-4.734	3.9	1.000	1.000	7.70	83.0	0.75	Dn	29I2
	10.0	140.0	7.010	-5.370	2.3	1.000	1.000	6.46	95.8	0.50	Dn	29I2
OptDn >	***10.0***	***149.1***	***6.498***	***5.577***	***1.2***	***1.000***	***1.000***	***5.54***	***112.1***	***0.31***	***Dn***	***29I2***
	10.0	150.0	6.438	-5.576	1.0	1.000	1.000	5.47	114.0	0.29	Dn	29I2
	10.0	160.0	5.735	-5.389	0.4	1.000	1.000	5.01	137.0	0.16	Dn	29I2
	10.0	170.0	5.264	-5.184	0.2	1.000	1.000	4.90	159.3	0.08	Dn	29I2
	10.0	180.0	4.938	-4.938	-0.0	1.000	1.000	5.06	180.0	-0.00	Dn	29I2

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Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	12.0	33.0	5.359	4.494	11.9	1.000	0.859	16.70	22.5	5.18	Up	29I2
	12.0	36.0	5.920	4.790	13.3	1.000	0.885	17.07	23.7	4.62	Up	29I2
	12.0	39.0	6.353	4.937	14.5	1.000	0.904	17.30	25.0	4.25	Up	29I2
OptUp >	***12.0***	***41.5***	***6.637***	***4.973***	***15.2***	***1.000***	***0.919***	***17.41***	***26.1***	***4.03***	***Up***	***29I2***
	12.0	42.0	6.693	4.974	15.4	1.000	0.923	17.42	26.4	3.99	Up	29I2
	12.0	45.0	6.960	4.921	16.3	1.000	0.949	17.46	27.8	3.82	Up	29I2
	12.0	50.0	7.281	4.680	17.3	1.000	0.998	17.37	30.3	3.65	Up	29I2
	12.0	60.0	7.667	3.833	15.6	1.000	1.000	16.94	36.2	2.98	Up	29I2
	12.0	70.0	7.883	2.696	13.2	1.000	1.000	16.26	42.5	2.44	Up	29I2
	12.0	80.0	7.990	1.388	10.7	1.000	1.000	15.37	49.1	1.99	Up	29I2
	12.0	90.0	8.044	-0.000	17.4	1.000	1.000	13.99	54.9	2.40	Dn	29I2
	12.0	100.0	8.152	-1.416	14.2	1.000	1.000	12.96	62.1	1.97	Dn	29I2
	12.0	110.0	8.161	-2.791	10.8	1.000	1.000	11.80	69.9	1.55	Dn	29I2
	12.0	120.0	8.080	-4.040	7.8	1.000	1.000	10.50	78.6	1.18	Dn	29I2
	12.0	130.0	7.898	-5.077	5.2	1.000	1.000	9.16	88.8	0.84	Dn	29I2
	12.0	140.0	7.622	-5.839	3.0	1.000	1.000	7.86	101.5	0.55	Dn	29I2
	12.0	150.0	7.213	-6.246	1.4	1.000	1.000	6.79	117.9	0.31	Dn	29I2
OptDn >	***12.0***	***154.1***	***6.982***	***6.282***	***1.1***	***1.000***	***1.000***	***6.48***	***126.1***	***0.24***	***Dn***	***29I2***
	12.0	160.0	6.639	-6.239	0.6	1.000	1.000	6.19	138.5	0.17	Dn	29I2
	12.0	170.0	6.177	-6.084	0.3	1.000	1.000	6.01	159.7	0.08	Dn	29I2
	12.0	180.0	5.833	-5.833	-0.0	1.000	1.000	6.17	180.0	-0.00	Dn	29I2
	14.0	33.0	5.786	4.853	14.5	1.000	0.771	19.02	22.8	5.22	Up	29I2
	14.0	36.0	6.306	5.102	15.9	1.000	0.785	19.33	24.2	4.68	Up	29I2
	14.0	39.0	6.699	5.206	17.2	1.000	0.804	19.49	25.6	4.36	Up	29I2
OptUp >	***14.0***	***40.3***	***6.833***	***5.212***	***17.6***	***1.000***	***0.812***	***19.52***	***26.2***	***4.26***	***Up***	***29I2***
	14.0	42.0	6.996	5.199	18.1	1.000	0.823	19.55	27.1	4.14	Up	29I2
	14.0	45.0	7.219	5.105	18.8	1.000	0.845	19.52	28.7	4.00	Up	29I2
	14.0	50.0	7.491	4.815	19.6	1.000	0.888	19.34	31.5	3.83	Up	29I2
	14.0	60.0	7.881	3.941	20.6	1.000	0.994	18.71	37.3	3.57	Up	29I2
	14.0	70.0	8.152	2.788	17.4	1.000	1.000	18.03	44.1	2.85	Up	29I2
	14.0	80.0	8.304	1.442	13.9	1.000	1.000	17.16	51.3	2.27	Up	29I2
	14.0	90.0	8.353	-0.000	10.7	1.000	1.000	16.10	58.7	1.79	Up	29I2
	14.0	100.0	8.446	-1.467	19.4	1.000	1.000	14.33	65.2	2.36	Dn	29I2
	14.0	110.0	8.530	-2.918	14.5	1.000	1.000	13.28	73.6	1.80	Dn	29I2
	14.0	120.0	8.495	-4.248	10.1	1.000	1.000	12.03	82.9	1.34	Dn	29I2
	14.0	130.0	8.342	-5.362	6.6	1.000	1.000	10.67	93.5	0.94	Dn	29I2
	14.0	140.0	8.085	-6.194	3.9	1.000	1.000	9.36	106.4	0.61	Dn	29I2
	14.0	150.0	7.721	-6.686	1.8	1.000	1.000	8.27	122.2	0.34	Dn	29I2
	14.0	160.0	7.309	-6.868	0.9	1.000	1.000	7.56	140.7	0.19	Dn	29I2
OptDn >	***14.0***	***163.6***	***7.175***	***6.882***	***0.8***	***1.000***	***1.000***	***7.40***	***147.6***	***0.16***	***Dn***	***29I2***
	14.0	170.0	6.946	-6.841	0.4	1.000	1.000	7.26	160.4	0.09	Dn	29I2
	14.0	180.0	6.622	-6.622	-0.0	1.000	1.000	7.38	180.0	-0.00	Dn	29I2

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Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	16.0	33.0	6.064	5.086	16.9	1.000	0.689	21.19	23.2	5.35	Up	29I2
	16.0	36.0	6.560	5.307	18.3	1.000	0.701	21.45	24.6	4.83	Up	29I2
	16.0	39.0	6.916	5.375	19.3	1.000	0.714	21.56	26.2	4.51	Up	29I2
OptUp >	***16.0***	***39.2***	***6.935***	***5.373***	***19.4***	***1.000***	***0.716***	***21.56***	***26.3***	***4.49***	***Up***	***29I2***
	16.0	42.0	7.177	5.334	20.1	1.000	0.731	21.56	27.8	4.30	Up	29I2
	16.0	45.0	7.373	5.214	20.7	1.000	0.752	21.47	29.5	4.17	Up	29I2
	16.0	50.0	7.624	4.901	21.4	1.000	0.790	21.23	32.5	3.99	Up	29I2
	16.0	60.0	8.011	4.005	22.2	1.000	0.885	20.51	38.7	3.70	Up	29I2
	16.0	70.0	8.324	2.847	22.2	1.000	1.000	19.60	45.3	3.39	Up	29I2
	16.0	80.0	8.540	1.483	17.7	1.000	1.000	18.80	53.0	2.61	Up	29I2
	16.0	90.0	8.639	-0.000	13.3	1.000	1.000	17.81	61.0	2.01	Up	29I2
	16.0	100.0	8.632	-1.499	22.8	0.974	1.000	15.66	68.0	2.67	Dn	29I2
	16.0	110.0	8.816	-3.015	19.0	1.000	1.000	14.61	76.8	2.09	Dn	29I2
	16.0	120.0	8.855	-4.427	13.0	1.000	1.000	13.53	86.4	1.51	Dn	29I2
	16.0	130.0	8.727	-5.610	8.3	1.000	1.000	12.23	97.3	1.05	Dn	29I2
	16.0	140.0	8.486	-6.501	4.8	1.000	1.000	10.92	110.2	0.67	Dn	29I2
	16.0	150.0	8.138	-7.048	2.5	1.000	1.000	9.83	125.6	0.39	Dn	29I2
	16.0	160.0	7.784	-7.315	1.2	1.000	1.000	9.08	143.0	0.23	Dn	29I2
OptDn >	***16.0***	***168.4***	***7.541***	***7.387***	***0.7***	***1.000***	***1.000***	***8.75***	***158.4***	***0.12***	***Dn***	***29I2***
	16.0	170.0	7.498	-7.384	0.5	1.000	1.000	8.71	161.4	0.10	Dn	29I2
	16.0	180.0	7.240	-7.240	-0.0	1.000	1.000	8.76	180.0	-0.00	Dn	29I2
	20.0	33.0	6.314	5.296	20.3	1.000	0.551	25.25	23.9	5.78	Up	29I2
	20.0	36.0	6.776	5.482	21.5	1.000	0.560	25.43	25.5	5.24	Up	29I2
OptUp >	***20.0***	***38.2***	***7.027***	***5.519***	***22.2***	***1.000***	***0.567***	***25.46***	***26.8***	***4.98***	***Up***	***29I2***
	20.0	39.0	7.102	5.520	22.4	1.000	0.570	25.46	27.2	4.90	Up	29I2
	20.0	42.0	7.332	5.449	23.0	1.000	0.583	25.38	29.0	4.69	Up	29I2
	20.0	45.0	7.510	5.311	23.3	0.987	0.616	25.25	31.0	4.54	Up	29I2
	20.0	50.0	7.757	4.986	23.2	0.950	0.702	24.96	34.3	4.33	Up	29I2
	20.0	60.0	8.168	4.084	23.1	0.909	0.862	24.16	41.2	3.96	Up	29I2
	20.0	70.0	8.509	2.910	23.1	0.905	0.989	23.12	48.4	3.61	Up	29I2
	20.0	80.0	8.807	1.529	23.3	0.964	1.000	21.86	55.8	3.24	Up	29I2
	20.0	90.0	9.082	-0.000	20.1	1.000	1.000	20.86	64.2	2.56	Up	29I2
	20.0	100.0	9.181	-1.594	14.3	1.000	1.000	19.92	73.3	1.87	Up	29I2
	20.0	110.0	9.217	-3.152	24.3	0.944	1.000	17.29	82.1	2.51	Dn	29I2
	20.0	120.0	9.505	-4.752	20.7	1.000	1.000	16.21	91.8	1.90	Dn	29I2
	20.0	130.0	9.501	-6.107	12.6	1.000	1.000	15.32	102.6	1.25	Dn	29I2
	20.0	140.0	9.223	-7.065	7.1	1.000	1.000	14.14	115.5	0.80	Dn	29I2
	20.0	150.0	8.852	-7.666	3.9	1.000	1.000	13.09	130.3	0.49	Dn	29I2
	20.0	160.0	8.550	-8.035	2.2	1.000	1.000	12.31	146.3	0.30	Dn	29I2
	20.0	170.0	8.300	-8.174	0.9	1.000	1.000	11.91	163.1	0.14	Dn	29I2
OptDn >	***20.0***	***170.8***	***8.281***	***8.175***	***0.9***	***1.000***	***1.000***	***11.90***	***164.5***	***0.13***	***Dn***	***29I2***
	20.0	180.0	8.073	-8.073	-0.0	1.000	1.000	11.93	180.0	-0.00	Dn	29I2

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Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	25.0	33.0	6.187	5.189	23.1	1.000	0.429	29.90	24.8	6.88	Up	29I2
	25.0	36.0	6.708	5.427	23.4	0.956	0.478	30.12	26.6	6.04	Up	29I2
OptUp >	***25.0***	***39.0***	***7.068***	***5.494***	***23.6***	***0.920***	***0.528***	***30.17***	***28.5***	***5.57***	***Up***	***29I2***
	25.0	39.0	7.076	5.499	23.6	0.920	0.528	30.17	28.5	5.56	Up	29I2
	25.0	42.0	7.335	5.451	23.7	0.889	0.582	30.10	30.6	5.27	Up	29I2
	25.0	45.0	7.535	5.328	23.6	0.862	0.638	29.97	32.7	5.06	Up	29I2
	25.0	50.0	7.813	5.022	23.5	0.827	0.731	29.65	36.3	4.78	Up	29I2
	25.0	60.0	8.276	4.138	23.4	0.797	0.882	28.74	43.7	4.30	Up	29I2
	25.0	70.0	8.656	2.961	23.5	0.798	1.000	27.57	51.4	3.90	Up	29I2
	25.0	80.0	9.016	1.566	24.0	0.857	1.000	26.16	59.3	3.45	Up	29I2
	25.0	90.0	9.401	-0.000	24.7	0.938	1.000	24.59	67.5	3.03	Up	29I2
	25.0	100.0	9.749	-1.693	22.3	1.000	1.000	23.42	76.6	2.40	Up	29I2
	25.0	110.0	9.842	-3.366	15.5	1.000	1.000	22.67	86.7	1.71	Up	29I2
	25.0	120.0	10.080	-5.040	26.7	0.944	1.000	19.49	97.1	2.24	Dn	29I2
	25.0	130.0	10.514	-6.758	20.4	1.000	1.000	18.79	107.2	1.46	Dn	29I2
	25.0	140.0	10.284	-7.878	11.0	1.000	1.000	18.10	119.3	0.91	Dn	29I2
	25.0	150.0	9.802	-8.489	6.3	1.000	1.000	17.17	133.6	0.61	Dn	29I2
	25.0	160.0	9.432	-8.863	3.7	1.000	1.000	16.45	148.7	0.39	Dn	29I2
	25.0	170.0	9.132	-8.993	1.5	1.000	1.000	16.09	164.3	0.19	Dn	29I2
OptDn >	***25.0***	***170.4***	***9.123***	***8.994***	***1.5***	***1.000***	***1.000***	***16.08***	***164.9***	***0.18***	***Dn***	***29I2***
	25.0	180.0	8.880	-8.880	-0.0	1.000	1.000	16.12	180.0	-0.00	Dn	29I2
	30.0	33.0	5.526	4.634	22.5	0.900	0.427	34.20	26.2	9.31	Up	29I2
	30.0	36.0	6.350	5.137	23.4	0.859	0.480	34.63	27.9	7.40	Up	29I2
	30.0	39.0	6.863	5.333	24.0	0.826	0.534	34.76	29.8	6.55	Up	29I2
OptUp >	***30.0***	***40.9***	***7.093***	***5.359***	***24.0***	***0.806***	***0.571***	***34.76***	***31.1***	***6.20***	***Up***	***29I2***
	30.0	42.0	7.213	5.360	24.0	0.795	0.592	34.74	31.9	6.03	Up	29I2
	30.0	45.0	7.462	5.276	23.9	0.769	0.651	34.62	34.1	5.70	Up	29I2
	30.0	50.0	7.788	5.006	23.9	0.738	0.746	34.27	37.8	5.31	Up	29I2
	30.0	60.0	8.312	4.156	23.9	0.713	0.890	33.28	45.5	4.70	Up	29I2
	30.0	70.0	8.737	2.988	24.1	0.717	1.000	31.99	53.6	4.22	Up	29I2
	30.0	80.0	9.165	1.592	24.7	0.772	1.000	30.44	61.8	3.71	Up	29I2
	30.0	90.0	9.616	-0.000	25.4	0.847	1.000	28.75	70.5	3.22	Up	29I2
	30.0	100.0	10.065	-1.748	26.3	0.943	1.000	26.92	79.6	2.77	Up	29I2
	30.0	110.0	10.533	-3.602	22.8	1.000	1.000	25.98	89.4	2.05	Up	29I2
	30.0	120.0	10.669	-5.335	28.3	0.853	1.000	23.28	100.7	2.25	Dn	29I2
	30.0	130.0	11.564	-7.434	29.2	1.000	1.000	21.49	111.0	1.63	Dn	29I2
	30.0	140.0	11.798	-9.038	16.9	1.000	1.000	21.58	121.2	0.89	Dn	29I2
	30.0	150.0	11.100	-9.613	9.4	1.000	1.000	20.99	135.2	0.64	Dn	29I2
	30.0	160.0	10.505	-9.872	5.5	1.000	1.000	20.42	150.0	0.44	Dn	29I2
OptDn >	***30.0***	***167.0***	***10.180***	***9.918***	***3.3***	***1.000***	***1.000***	***20.21***	***160.5***	***0.28***	***Dn***	***29I2***
	30.0	170.0	10.062	-9.909	2.4	1.000	1.000	20.17	165.0	0.22	Dn	29I2
	30.0	180.0	9.719	-9.719	-0.0	1.000	1.000	20.28	180.0	-0.00	Dn	29I2

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Best Performance (cont)

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