FARR®

PERFORMANCE PREDICTION

DESIGN #354—Benetau First 40.7
Cruising Version
for
Chantiers Beneteau

Farr Yacht Design, Ltd.

May 3, 2001

P.O. Box 4964, Annapolis, MD 21403 USA
Tel: (410) 267-0780 Fax: (410) 268-0553
E-mail: info@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)

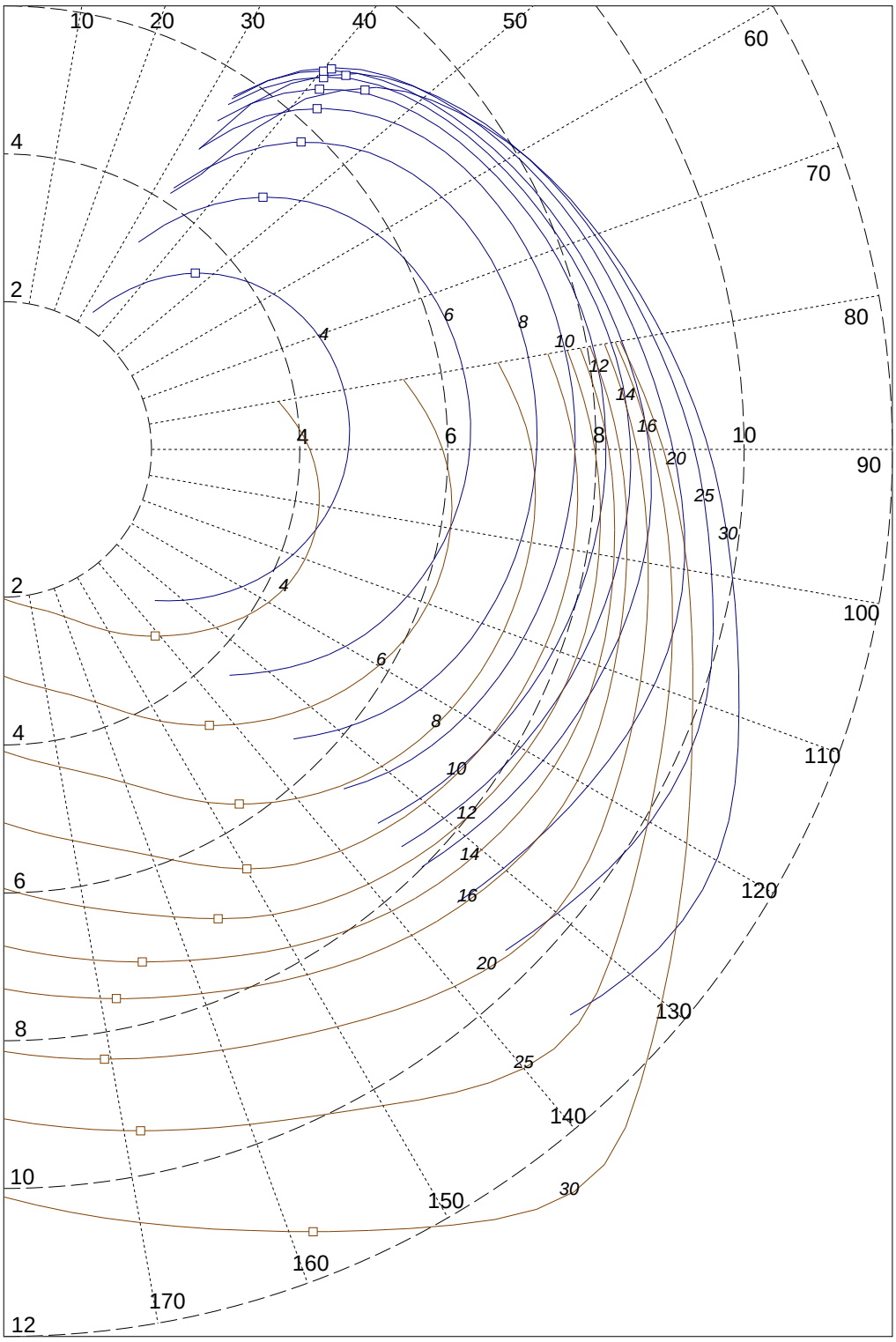
This page is similar to the Best Boatspeeds page in that it represents the boatspeeds for a series of true windspeeds and true wind angles. Boatspeeds are expressed as seconds/nautical mile. Shaded areas again depict the off optimum conditions. Optimum upwind and downwind values, in terms of VMG, are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

613 Third Street, Suite 20 • P. O. Box 1964 • Annapolis, MD 21403-0964 • U.S.A.
T. 410 267 0780 • F. 410 268 05[illegible]@farrdesign.com • www.farrdesign.com

D354 - Beneteau 40.7 - Cruising Version
for Chantiers Beneteau



10/22/02 16:05:15

Best Boatspeeds (kt)

	4	6	8	10	12	14	16	20	25	30
33.0	2.21	3.35	4.22	4.85	5.30	5.57	5.70	5.66	4.84	4.13
36.0	2.55	3.80	4.74	5.41	5.83	6.07	6.20	6.21	5.87	4.70
39.0	2.84	4.19	5.19	5.85	6.24	6.47	6.58	6.62	6.43	5.85
42.0	3.11	4.53	5.57	6.21	6.56	6.78	6.88	6.95	6.85	6.48
45.0	3.35	4.83	5.88	6.50	6.83	7.01	7.11	7.19	7.15	6.93
50.0	3.70	5.25	6.30	6.88	7.15	7.31	7.39	7.49	7.51	7.41
60.0	4.21	5.83	6.83	7.34	7.58	7.72	7.83	7.97	8.06	8.06
70.0	4.52	6.15	7.09	7.59	7.89	8.06	8.18	8.36	8.49	8.55
80.0	4.67	6.30	7.19	7.70	8.08	8.33	8.47	8.69	8.90	9.03
90.0	4.66	6.29	7.20	7.72	8.13	8.47	8.72	9.04	9.33	9.52
100.0	4.48	6.13	7.23	7.81	8.16	8.43	8.77	9.33	9.71	9.99
110.0	4.33	6.10	7.18	7.78	8.23	8.55	8.76	9.34	10.08	10.56
120.0	4.13	5.85	6.99	7.64	8.15	8.58	8.95	9.49	10.08	11.11
130.0	3.74	5.41	6.67	7.42	7.96	8.42	8.86	9.73	10.70	11.60
135.0	3.52	5.14	6.43	7.27	7.83	8.30	8.73	9.66	10.98	12.15
140.0	3.29	4.85	6.16	7.08	7.67	8.15	8.57	9.48	10.93	12.62
150.0	2.83	4.24	5.51	6.55	7.26	7.77	8.20	9.01	10.24	12.11
160.0	2.40	3.64	4.79	5.85	6.73	7.35	7.83	8.64	9.71	11.26
170.0	2.16	3.28	4.36	5.37	6.28	7.01	7.54	8.37	9.35	10.62
180.0	2.02	3.06	4.08	5.05	5.94	6.71	7.29	8.14	9.05	10.11
Up.Vs(kts)	3.52	4.89	5.78	6.26	6.48	6.63	6.70	6.79	6.85	6.89
Up.Vs(s/m)	1022.7	736.0	622.6	575.2	555.9	542.9	537.6	530.1	525.2	522.4
Up.Vs(s/L)	6.6	4.7	4.0	3.7	3.6	3.5	3.5	3.4	3.4	3.4
Up.Bt	47.3	45.7	44.0	42.6	41.2	40.7	40.2	40.7	42.4	45.1
Up.Vmg(kts)	2.39	3.41	4.16	4.61	4.87	5.03	5.12	5.15	5.06	4.86
Up.Vmg(s/m)	1508.7	1054.7	865.7	781.0	738.9	715.6	703.7	699.1	711.3	740.2
Up.Heel	2.9	6.2	10.8	15.4	18.1	20.3	21.9	22.5	23.0	23.2
Up.Reef	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.76	0.66
Up.Flat	1.00	1.00	1.00	0.92	0.78	0.67	0.58	0.58	0.63	0.69
Up.Va	6.89	10.03	12.76	15.10	17.23	19.26	21.21	25.04	29.69	34.20
Up.Ba	25.2	25.2	25.3	25.6	25.9	26.4	26.9	28.7	31.5	34.8
Up.Leewy	3.19	3.44	3.98	4.41	4.63	4.81	5.02	5.45	6.09	6.70
Dn.Vs(kts)	3.25	4.65	5.76	6.55	6.98	7.18	7.58	8.36	9.40	11.38
Dn.Vs(s/m)	1107.7	773.6	625.5	549.2	516.1	501.5	474.9	430.8	383.0	316.5
Dn.Vs(s/L)	7.1	5.0	4.0	3.5	3.3	3.2	3.1	2.8	2.5	2.0
Dn.Bt	140.9	143.3	146.4	149.9	155.5	164.9	168.4	170.6	168.6	158.4
Dn.Vmg(kts)	2.52	3.73	4.80	5.67	6.35	6.93	7.43	8.25	9.22	10.58
Dn.Vmg(s/m)	1427.3	964.8	750.7	634.7	567.3	519.5	484.8	436.6	390.7	340.3
Dn.Heel	0.5	0.9	1.3	1.4	1.2	0.8	0.8	1.1	2.3	7.6
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	2.53	3.59	4.52	5.43	6.35	7.31	8.71	11.83	15.89	19.81
Dn.Ba	86.7	92.5	101.6	112.7	128.3	150.1	158.3	164.0	162.0	146.5
Dn.Leewy	0.56	0.50	0.43	0.36	0.27	0.18	0.15	0.16	0.25	0.47

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
33.0	1628.7	1076.0	853.5	741.6	679.2	646.9	631.5	636.3	743.4	871.1
36.0	1414.4	947.1	759.4	665.0	617.7	592.6	580.2	580.2	612.8	765.8
39.0	1265.8	859.6	693.6	615.2	577.1	556.8	546.7	543.6	560.2	614.9
42.0	1156.6	795.4	646.2	580.0	548.4	531.3	523.0	518.2	525.9	555.9
45.0	1073.4	746.0	612.0	554.0	526.9	513.2	506.4	500.8	503.8	519.4
50.0	973.5	686.2	571.3	523.2	503.2	492.8	486.9	480.4	479.5	485.8
60.0	855.3	617.9	526.7	490.3	475.0	466.2	459.9	451.5	446.7	446.9
70.0	796.1	585.0	507.9	474.6	456.1	446.9	440.0	430.5	423.8	421.1
80.0	771.5	571.6	500.5	467.6	445.6	432.3	424.9	414.0	404.6	398.8
90.0	773.0	572.0	500.2	466.5	442.7	425.3	412.9	398.4	386.0	378.0
100.0	803.6	587.3	497.8	460.9	441.1	426.8	410.6	385.9	370.9	360.3
110.0	831.4	590.2	501.3	462.9	437.3	421.2	410.8	385.3	357.1	340.8
120.0	871.4	615.7	514.7	470.9	441.5	419.5	402.3	379.5	357.2	323.9
130.0	961.7	665.6	540.1	485.2	452.2	427.4	406.4	369.9	336.4	310.3
135.0	1022.5	699.9	559.4	495.2	459.9	433.7	412.3	372.7	327.9	296.3
140.0	1093.5	741.8	584.4	508.2	469.5	441.7	419.8	379.8	329.5	285.2
150.0	1271.8	848.8	653.4	549.6	495.7	463.6	438.9	399.4	351.4	297.3
160.0	1498.8	989.8	751.1	615.9	535.2	489.8	459.7	416.6	370.6	319.9
170.0	1663.4	1096.7	826.3	670.3	573.5	513.4	477.6	430.0	384.9	339.1
180.0	1784.0	1175.1	882.3	713.4	606.2	536.3	493.7	442.2	397.8	356.2
Up	1508.7	1054.7	865.7	781.0	738.9	715.6	703.7	699.1	711.3	740.2
Dn	1427.3	964.8	750.7	634.7	567.3	519.5	484.8	436.6	390.7	340.3

Equivalent ILC Average (using IMS formula): 687.54

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	33.0	2.210	1.854	2.0	1.000	1.000	5.98	21.4	5.81	Up	35CR
	4.0	36.0	2.545	2.059	2.2	1.000	1.000	6.24	22.1	4.84	Up	35CR
	4.0	39.0	2.844	2.210	2.4	1.000	1.000	6.46	22.9	4.21	Up	35CR
	4.0	42.0	3.113	2.313	2.6	1.000	1.000	6.65	23.7	3.75	Up	35CR
	4.0	45.0	3.354	2.372	2.8	1.000	1.000	6.80	24.6	3.40	Up	35CR
OptUp >	***4.0***	***47.3***	***3.520***	***2.386***	***2.9***	***1.000***	***1.000***	***6.89***	***25.2***	***3.19***	***Up***	***35CR***
	4.0	50.0	3.698	2.377	2.9	1.000	1.000	6.98	26.0	2.97	Up	35CR
	4.0	60.0	4.209	2.105	3.1	1.000	1.000	7.11	29.1	2.39	Up	35CR
	4.0	70.0	4.522	1.547	3.0	1.000	1.000	6.98	32.5	1.99	Up	35CR
	4.0	80.0	4.667	0.810	2.7	1.000	1.000	6.65	36.3	1.67	Up	35CR
	4.0	90.0	4.657	-0.000	2.2	1.000	1.000	6.14	40.6	1.40	Up	35CR
	4.0	100.0	4.480	-0.778	1.5	1.000	1.000	5.46	46.1	1.16	Up	35CR
	4.0	110.0	4.330	-1.481	2.0	1.000	1.000	4.78	51.7	1.23	Dn	35CR
	4.0	120.0	4.131	-2.066	1.4	1.000	1.000	4.07	58.4	1.03	Dn	35CR
	4.0	130.0	3.743	-2.406	0.9	1.000	1.000	3.28	69.1	0.81	Dn	35CR
	4.0	135.0	3.521	-2.490	0.7	1.000	1.000	2.91	76.2	0.70	Dn	35CR
	4.0	140.0	3.292	-2.522	0.5	1.000	1.000	2.58	84.9	0.58	Dn	35CR
OptDn >	***4.0***	***140.9***	***3.250***	***2.522***	***0.5***	***1.000***	***1.000***	***2.53***	***86.7***	***0.56***	***Dn***	***35CR***
	4.0	150.0	2.831	-2.451	0.2	1.000	1.000	2.10	107.6	0.35	Dn	35CR
	4.0	160.0	2.402	-2.257	0.1	1.000	1.000	1.93	134.8	0.19	Dn	35CR
	4.0	170.0	2.164	-2.131	0.0	1.000	1.000	1.91	158.6	0.10	Dn	35CR
	4.0	180.0	2.018	-2.018	-0.0	1.000	1.000	1.98	180.0	-0.00	Dn	35CR
	6.0	33.0	3.346	2.806	4.6	1.000	0.990	8.99	21.2	5.66	Up	35CR
	6.0	36.0	3.801	3.075	5.1	1.000	1.000	9.34	22.1	4.84	Up	35CR
	6.0	39.0	4.188	3.255	5.5	1.000	1.000	9.62	23.0	4.26	Up	35CR
	6.0	42.0	4.526	3.364	5.9	1.000	1.000	9.83	24.0	3.84	Up	35CR
	6.0	45.0	4.825	3.412	6.2	1.000	1.000	10.00	24.9	3.51	Up	35CR
OptUp >	***6.0***	***45.7***	***4.891***	***3.413***	***6.2***	***1.000***	***1.000***	***10.03***	***25.2***	***3.44***	***Up***	***35CR***
	6.0	50.0	5.246	3.372	6.5	1.000	1.000	10.18	26.6	3.09	Up	35CR
	6.0	60.0	5.826	2.913	6.6	1.000	1.000	10.22	30.3	2.50	Up	35CR
	6.0	70.0	6.154	2.105	6.1	1.000	1.000	9.94	34.3	2.08	Up	35CR
	6.0	80.0	6.298	1.094	5.3	1.000	1.000	9.41	38.7	1.73	Up	35CR
	6.0	90.0	6.294	-0.000	4.4	1.000	1.000	8.68	43.5	1.44	Up	35CR
	6.0	100.0	6.129	-1.064	5.1	1.000	1.000	7.78	49.2	1.48	Dn	35CR
	6.0	110.0	6.100	-2.086	4.4	1.000	1.000	6.93	54.2	1.28	Dn	35CR
	6.0	120.0	5.847	-2.923	3.3	1.000	1.000	5.92	61.2	1.06	Dn	35CR
	6.0	130.0	5.409	-3.477	2.1	1.000	1.000	4.85	71.3	0.82	Dn	35CR
	6.0	135.0	5.143	-3.637	1.5	1.000	1.000	4.34	78.0	0.69	Dn	35CR
	6.0	140.0	4.853	-3.717	1.1	1.000	1.000	3.87	86.2	0.58	Dn	35CR
OptDn >	***6.0***	***143.3***	***4.653***	***3.731***	***0.9***	***1.000***	***1.000***	***3.59***	***92.5***	***0.50***	***Dn***	***35CR***
	6.0	150.0	4.241	-3.673	0.5	1.000	1.000	3.15	107.7	0.35	Dn	35CR
	6.0	160.0	3.637	-3.418	0.2	1.000	1.000	2.87	134.3	0.19	Dn	35CR
	6.0	170.0	3.283	-3.233	0.1	1.000	1.000	2.83	158.4	0.10	Dn	35CR
	6.0	180.0	3.063	-3.063	-0.0	1.000	1.000	2.94	180.0	-0.00	Dn	35CR

10/22/02 16:05:15

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	8.0	33.0	4.218	3.538	7.8	1.000	0.943	11.75	21.6	5.80	Up	35CR
	8.0	36.0	4.740	3.835	9.0	1.000	0.984	12.14	22.5	5.18	Up	35CR
	8.0	39.0	5.190	4.033	9.9	1.000	1.000	12.44	23.5	4.66	Up	35CR
	8.0	42.0	5.571	4.140	10.5	1.000	1.000	12.66	24.6	4.21	Up	35CR
OptUp >	***8.0***	***44.0***	***5.782***	***4.158***	***10.8***	***1.000***	***1.000***	***12.76***	***25.3***	***3.98***	***Up***	***35CR***
	8.0	45.0	5.883	4.160	10.9	1.000	1.000	12.81	25.7	3.87	Up	35CR
	8.0	50.0	6.301	4.050	11.3	1.000	1.000	12.93	27.7	3.42	Up	35CR
	8.0	60.0	6.834	3.417	10.9	1.000	1.000	12.79	32.1	2.78	Up	35CR
	8.0	70.0	7.089	2.424	9.7	1.000	1.000	12.31	37.0	2.31	Up	35CR
	8.0	80.0	7.193	1.249	8.1	1.000	1.000	11.60	42.3	1.91	Up	35CR
	8.0	90.0	7.197	-0.000	6.5	1.000	1.000	10.72	47.8	1.57	Up	35CR
	8.0	100.0	7.232	-1.256	9.1	1.000	1.000	9.73	53.1	1.73	Dn	35CR
	8.0	110.0	7.181	-2.456	7.3	1.000	1.000	8.68	59.2	1.44	Dn	35CR
	8.0	120.0	6.994	-3.497	5.3	1.000	1.000	7.52	66.5	1.13	Dn	35CR
	8.0	130.0	6.665	-4.284	3.5	1.000	1.000	6.30	76.0	0.85	Dn	35CR
	8.0	135.0	6.435	-4.550	2.7	1.000	1.000	5.70	82.2	0.71	Dn	35CR
	8.0	140.0	6.160	-4.719	2.0	1.000	1.000	5.14	89.6	0.58	Dn	35CR
OptDn >	***8.0***	***146.4***	***5.755***	***4.795***	***1.3***	***1.000***	***1.000***	***4.52***	***101.6***	***0.43***	***Dn***	***35CR***
	8.0	150.0	5.509	-4.771	0.9	1.000	1.000	4.24	109.5	0.35	Dn	35CR
	8.0	160.0	4.793	-4.504	0.3	1.000	1.000	3.86	134.9	0.19	Dn	35CR
	8.0	170.0	4.357	-4.291	0.1	1.000	1.000	3.79	158.5	0.10	Dn	35CR
	8.0	180.0	4.080	-4.080	-0.0	1.000	1.000	3.92	180.0	-0.00	Dn	35CR
	10.0	33.0	4.854	4.071	11.5	1.000	0.875	14.28	22.0	6.06	Up	35CR
	10.0	36.0	5.414	4.380	13.0	1.000	0.894	14.67	23.0	5.33	Up	35CR
	10.0	39.0	5.852	4.548	14.2	1.000	0.903	14.93	24.1	4.82	Up	35CR
	10.0	42.0	6.207	4.612	15.2	1.000	0.912	15.09	25.3	4.46	Up	35CR
OptUp >	***10.0***	***42.6***	***6.259***	***4.610***	***15.4***	***1.000***	***0.915***	***15.10***	***25.6***	***4.41***	***Up***	***35CR***
	10.0	45.0	6.499	4.595	16.1	1.000	0.927	15.18	26.6	4.20	Up	35CR
	10.0	50.0	6.880	4.423	17.5	1.000	0.964	15.18	28.8	3.93	Up	35CR
	10.0	60.0	7.342	3.671	17.0	1.000	1.000	14.86	33.9	3.32	Up	35CR
	10.0	70.0	7.586	2.595	14.1	1.000	1.000	14.29	39.6	2.69	Up	35CR
	10.0	80.0	7.699	1.337	11.2	1.000	1.000	13.50	45.7	2.19	Up	35CR
	10.0	90.0	7.717	-0.000	8.8	1.000	1.000	12.54	52.0	1.76	Up	35CR
	10.0	100.0	7.810	-1.356	14.3	1.000	1.000	11.31	57.5	2.10	Dn	35CR
	10.0	110.0	7.778	-2.660	10.6	1.000	1.000	10.21	64.7	1.68	Dn	35CR
	10.0	120.0	7.644	-3.822	7.5	1.000	1.000	8.98	72.9	1.28	Dn	35CR
	10.0	130.0	7.420	-4.770	4.9	1.000	1.000	7.70	82.6	0.93	Dn	35CR
	10.0	135.0	7.270	-5.140	3.9	1.000	1.000	7.06	88.4	0.77	Dn	35CR
	10.0	140.0	7.084	-5.427	2.9	1.000	1.000	6.45	95.1	0.61	Dn	35CR
OptDn >	***10.0***	***149.9***	***6.555***	***5.672***	***1.4***	***1.000***	***1.000***	***5.43***	***112.7***	***0.36***	***Dn***	***35CR***
	10.0	150.0	6.550	-5.672	1.3	1.000	1.000	5.43	112.9	0.36	Dn	35CR
	10.0	160.0	5.846	-5.493	0.5	1.000	1.000	4.93	136.1	0.19	Dn	35CR
	10.0	170.0	5.370	-5.289	0.2	1.000	1.000	4.80	158.8	0.10	Dn	35CR
	10.0	180.0	5.046	-5.046	-0.0	1.000	1.000	4.95	180.0	-0.00	Dn	35CR

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	12.0	33.0	5.300	4.445	14.5	1.000	0.761	16.62	22.4	6.07	Up	35CR
	12.0	36.0	5.828	4.715	16.2	1.000	0.767	16.95	23.6	5.35	Up	35CR
	12.0	39.0	6.239	4.848	17.4	1.000	0.774	17.15	24.8	4.88	Up	35CR
OptUp >	***12.0***	***41.2***	***6.476***	***4.872***	***18.1***	***1.000***	***0.780***	***17.23***	***25.9***	***4.63***	***Up***	***35CR***
	12.0	42.0	6.565	4.878	18.3	1.000	0.783	17.26	26.2	4.54	Up	35CR
	12.0	45.0	6.832	4.831	19.2	1.000	0.796	17.29	27.6	4.30	Up	35CR
	12.0	50.0	7.154	4.599	20.2	1.000	0.827	17.19	30.1	4.03	Up	35CR
	12.0	60.0	7.579	3.789	21.3	1.000	0.917	16.68	35.5	3.70	Up	35CR
	12.0	70.0	7.892	2.699	20.3	1.000	1.000	15.99	41.4	3.25	Up	35CR
	12.0	80.0	8.078	1.403	15.6	1.000	1.000	15.26	48.2	2.53	Up	35CR
	12.0	90.0	8.133	-0.000	11.6	1.000	1.000	14.30	55.3	1.98	Up	35CR
	12.0	100.0	8.161	-1.417	21.3	1.000	1.000	12.57	61.1	2.58	Dn	35CR
	12.0	110.0	8.233	-2.816	15.3	1.000	1.000	11.63	69.2	1.95	Dn	35CR
	12.0	120.0	8.155	-4.077	10.3	1.000	1.000	10.45	78.1	1.46	Dn	35CR
	12.0	130.0	7.962	-5.118	6.6	1.000	1.000	9.14	88.4	1.04	Dn	35CR
	12.0	135.0	7.827	-5.535	5.1	1.000	1.000	8.48	94.5	0.85	Dn	35CR
	12.0	140.0	7.668	-5.874	3.8	1.000	1.000	7.85	101.2	0.68	Dn	35CR
	12.0	150.0	7.262	-6.289	1.7	1.000	1.000	6.77	117.6	0.38	Dn	35CR
OptDn >	***12.0***	***155.5***	***6.976***	***6.345***	***1.2***	***1.000***	***1.000***	***6.35***	***128.3***	***0.27***	***Dn***	***35CR***
	12.0	160.0	6.726	-6.321	0.8	1.000	1.000	6.13	137.9	0.21	Dn	35CR
	12.0	170.0	6.277	-6.182	0.3	1.000	1.000	5.92	159.4	0.10	Dn	35CR
	12.0	180.0	5.938	-5.938	-0.0	1.000	1.000	6.06	180.0	-0.00	Dn	35CR
	14.0	33.0	5.565	4.667	17.2	1.000	0.657	18.78	22.8	6.18	Up	35CR
	14.0	36.0	6.074	4.914	18.5	1.000	0.658	19.07	24.2	5.43	Up	35CR
	14.0	39.0	6.466	5.025	19.8	1.000	0.666	19.23	25.5	4.99	Up	35CR
OptUp >	***14.0***	***40.7***	***6.631***	***5.031***	***20.3***	***1.000***	***0.670***	***19.26***	***26.4***	***4.81***	***Up***	***35CR***
	14.0	42.0	6.776	5.035	20.6	1.000	0.674	19.29	27.0	4.65	Up	35CR
	14.0	45.0	7.014	4.960	21.3	1.000	0.686	19.26	28.6	4.42	Up	35CR
	14.0	50.0	7.305	4.696	22.1	1.000	0.715	19.09	31.4	4.16	Up	35CR
	14.0	60.0	7.721	3.861	22.5	0.972	0.845	18.50	37.3	3.80	Up	35CR
	14.0	70.0	8.056	2.755	22.5	0.961	0.980	17.68	43.4	3.48	Up	35CR
	14.0	80.0	8.328	1.446	21.3	1.000	1.000	16.76	50.1	2.99	Up	35CR
	14.0	90.0	8.466	-0.000	15.3	1.000	1.000	15.94	57.9	2.24	Up	35CR
	14.0	100.0	8.434	-1.465	10.6	1.000	1.000	14.82	66.1	1.70	Up	35CR
	14.0	110.0	8.548	-2.923	21.5	1.000	1.000	12.81	72.9	2.32	Dn	35CR
	14.0	120.0	8.581	-4.290	13.9	1.000	1.000	11.87	82.3	1.65	Dn	35CR
	14.0	130.0	8.423	-5.414	8.6	1.000	1.000	10.62	93.1	1.16	Dn	35CR
	14.0	135.0	8.300	-5.869	6.6	1.000	1.000	9.96	99.2	0.94	Dn	35CR
	14.0	140.0	8.150	-6.243	4.9	1.000	1.000	9.33	106.0	0.75	Dn	35CR
	14.0	150.0	7.766	-6.725	2.4	1.000	1.000	8.24	121.9	0.43	Dn	35CR
	14.0	160.0	7.350	-6.907	1.1	1.000	1.000	7.53	140.5	0.24	Dn	35CR
OptDn >	***14.0***	***164.9***	***7.179***	***6.930***	***0.8***	***1.000***	***1.000***	***7.31***	***150.1***	***0.18***	***Dn***	***35CR***
	14.0	170.0	7.012	-6.905	0.5	1.000	1.000	7.20	160.3	0.11	Dn	35CR
	14.0	180.0	6.712	-6.712	-0.0	1.000	1.000	7.29	180.0	-0.00	Dn	35CR

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	16.0	33.0	5.701	4.781	19.2	1.000	0.570	20.82	23.3	6.41	Up	35CR
	16.0	36.0	6.205	5.020	20.5	1.000	0.571	21.08	24.7	5.63	Up	35CR
	16.0	39.0	6.585	5.117	21.4	1.000	0.574	21.20	26.2	5.12	Up	35CR
OptUp >	***16.0***	***40.2***	***6.697***	***5.116***	***21.9***	***1.000***	***0.579***	***21.21***	***26.9***	***5.02***	***Up***	***35CR***
	16.0	42.0	6.884	5.116	22.4	1.000	0.584	21.22	27.8	4.81	Up	35CR
	16.0	45.0	7.109	5.027	22.5	0.977	0.627	21.18	29.6	4.58	Up	35CR
	16.0	50.0	7.394	4.753	22.6	0.942	0.710	20.99	32.6	4.32	Up	35CR
	16.0	60.0	7.828	3.914	22.6	0.900	0.872	20.35	38.9	3.92	Up	35CR
	16.0	70.0	8.181	2.798	22.7	0.895	1.000	19.47	45.5	3.57	Up	35CR
	16.0	80.0	8.473	1.471	22.9	0.955	1.000	18.36	52.2	3.17	Up	35CR
	16.0	90.0	8.720	-0.000	20.1	1.000	1.000	17.37	59.9	2.58	Up	35CR
	16.0	100.0	8.768	-1.523	13.4	1.000	1.000	16.46	68.7	1.89	Up	35CR
	16.0	110.0	8.763	-2.997	23.3	0.949	1.000	14.19	76.6	2.46	Dn	35CR
	16.0	120.0	8.950	-4.475	18.9	1.000	1.000	13.14	85.9	1.88	Dn	35CR
	16.0	130.0	8.858	-5.694	11.0	1.000	1.000	12.12	96.8	1.28	Dn	35CR
	16.0	135.0	8.731	-6.174	8.3	1.000	1.000	11.49	103.0	1.04	Dn	35CR
	16.0	140.0	8.575	-6.569	6.1	1.000	1.000	10.87	109.8	0.82	Dn	35CR
	16.0	150.0	8.202	-7.103	3.1	1.000	1.000	9.79	125.3	0.48	Dn	35CR
	16.0	160.0	7.831	-7.359	1.5	1.000	1.000	9.05	142.8	0.28	Dn	35CR
OptDn >	***16.0***	***168.4***	***7.581***	***7.426***	***0.8***	***1.000***	***1.000***	***8.71***	***158.3***	***0.15***	***Dn***	***35CR***
	16.0	170.0	7.538	-7.424	0.7	1.000	1.000	8.68	161.3	0.13	Dn	35CR
	16.0	180.0	7.292	-7.292	-0.0	1.000	1.000	8.71	180.0	-0.00	Dn	35CR
	20.0	33.0	5.658	4.745	21.1	0.972	0.465	24.63	24.4	7.23	Up	35CR
	20.0	36.0	6.205	5.020	22.0	0.937	0.510	24.90	26.0	6.30	Up	35CR
	20.0	39.0	6.622	5.146	22.4	0.909	0.548	25.03	27.7	5.66	Up	35CR
OptUp >	***20.0***	***40.7***	***6.791***	***5.150***	***22.5***	***0.893***	***0.577***	***25.04***	***28.7***	***5.45***	***Up***	***35CR***
	20.0	42.0	6.947	5.162	22.6	0.880	0.599	25.07	29.5	5.25	Up	35CR
	20.0	45.0	7.188	5.083	22.8	0.856	0.651	25.00	31.4	4.99	Up	35CR
	20.0	50.0	7.494	4.817	22.9	0.823	0.745	24.77	34.7	4.69	Up	35CR
	20.0	60.0	7.974	3.987	22.8	0.789	0.908	24.04	41.6	4.19	Up	35CR
	20.0	70.0	8.362	2.860	23.0	0.799	1.000	23.03	48.7	3.75	Up	35CR
	20.0	80.0	8.695	1.510	23.3	0.855	1.000	21.80	56.1	3.31	Up	35CR
	20.0	90.0	9.036	-0.000	23.6	0.930	1.000	20.43	63.7	2.88	Up	35CR
	20.0	100.0	9.330	-1.620	21.5	1.000	1.000	19.24	72.3	2.34	Up	35CR
	20.0	110.0	9.343	-3.196	13.7	1.000	1.000	18.43	82.2	1.66	Up	35CR
	20.0	120.0	9.485	-4.743	24.9	0.943	1.000	15.72	91.9	2.17	Dn	35CR
	20.0	130.0	9.733	-6.257	18.3	1.000	1.000	14.88	102.1	1.50	Dn	35CR
	20.0	135.0	9.659	-6.830	12.9	1.000	1.000	14.49	108.0	1.18	Dn	35CR
	20.0	140.0	9.478	-7.260	9.2	1.000	1.000	13.97	114.7	0.94	Dn	35CR
	20.0	150.0	9.013	-7.805	4.9	1.000	1.000	12.97	129.8	0.59	Dn	35CR
	20.0	160.0	8.642	-8.121	2.8	1.000	1.000	12.24	146.1	0.37	Dn	35CR
	20.0	170.0	8.371	-8.244	1.1	1.000	1.000	11.85	163.0	0.17	Dn	35CR
OptDn >	***20.0***	***170.6***	***8.357***	***8.245***	***1.1***	***1.000***	***1.000***	***11.83***	***164.0***	***0.16***	***Dn***	***35CR***
	20.0	180.0	8.141	-8.141	-0.0	1.000	1.000	11.86	180.0	-0.00	Dn	35CR

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	25.0	33.0	4.843	4.061	28.4	0.984	0.985	28.45	24.9	15.00	Up	35CR
	25.0	36.0	5.875	4.753	22.0	0.827	0.509	29.44	27.6	7.81	Up	35CR
	25.0	39.0	6.426	4.994	22.5	0.794	0.563	29.66	29.4	6.72	Up	35CR
	25.0	42.0	6.845	5.087	23.0	0.768	0.619	29.73	31.2	6.08	Up	35CR
OptUp >	***25.0***	***42.4***	***6.854***	***5.061***	***23.0***	***0.764***	***0.628***	***29.69***	***31.5***	***6.09***	***Up***	***35CR***
	25.0	45.0	7.146	5.053	23.0	0.744	0.677	29.68	33.2	5.66	Up	35CR
	25.0	50.0	7.508	4.826	23.1	0.715	0.773	29.43	36.8	5.21	Up	35CR
	25.0	60.0	8.059	4.029	23.3	0.690	0.927	28.60	44.0	4.58	Up	35CR
	25.0	70.0	8.494	2.905	23.6	0.705	1.000	27.46	51.6	4.05	Up	35CR
	25.0	80.0	8.898	1.545	23.9	0.756	1.000	26.11	59.5	3.52	Up	35CR
	25.0	90.0	9.327	-0.000	24.5	0.826	1.000	24.59	67.7	3.03	Up	35CR
	25.0	100.0	9.705	-1.685	25.0	0.917	1.000	22.95	76.5	2.61	Up	35CR
	25.0	110.0	10.080	-3.448	22.9	1.000	1.000	21.69	86.0	2.06	Up	35CR
	25.0	120.0	10.078	-5.039	14.6	1.000	1.000	21.09	96.6	1.45	Up	35CR
	25.0	130.0	10.703	-6.880	27.6	0.975	1.000	17.79	107.6	1.70	Dn	35CR
	25.0	135.0	10.980	-7.764	22.4	1.000	1.000	17.66	112.3	1.28	Dn	35CR
	25.0	140.0	10.925	-8.369	15.6	1.000	1.000	17.53	118.0	0.97	Dn	35CR
	25.0	150.0	10.244	-8.872	8.0	1.000	1.000	16.83	132.7	0.67	Dn	35CR
	25.0	160.0	9.714	-9.128	4.6	1.000	1.000	16.20	148.3	0.45	Dn	35CR
OptDn >	***25.0***	***168.6***	***9.399***	***9.215***	***2.3***	***1.000***	***1.000***	***15.89***	***162.0***	***0.25***	***Dn***	***35CR***
	25.0	170.0	9.353	-9.211	1.9	1.000	1.000	15.87	164.1	0.22	Dn	35CR
	25.0	180.0	9.050	-9.050	-0.0	1.000	1.000	15.95	180.0	-0.00	Dn	35CR
	30.0	33.0	4.133	3.466	10.9	0.500	0.996	33.40	28.7	13.98	Up	35CR
	30.0	36.0	4.701	3.803	20.7	0.746	0.506	33.34	29.6	12.90	Up	35CR
	30.0	39.0	5.855	4.550	22.1	0.693	0.607	34.01	30.9	8.95	Up	35CR
	30.0	42.0	6.476	4.812	22.9	0.685	0.629	34.20	32.7	7.45	Up	35CR
	30.0	45.0	6.931	4.901	23.2	0.662	0.690	34.24	34.7	6.61	Up	35CR
OptUp >	***30.0***	***45.1***	***6.891***	***4.863***	***23.2***	***0.662***	***0.692***	***34.20***	***34.8***	***6.70***	***Up***	***35CR***
	30.0	50.0	7.411	4.764	23.5	0.636	0.786	34.01	38.3	5.91	Up	35CR
	30.0	60.0	8.056	4.028	23.8	0.615	0.931	33.12	45.9	5.04	Up	35CR
	30.0	70.0	8.549	2.924	24.2	0.631	1.000	31.85	53.8	4.41	Up	35CR
	30.0	80.0	9.027	1.567	24.7	0.678	1.000	30.38	62.1	3.79	Up	35CR
	30.0	90.0	9.524	-0.000	25.4	0.741	1.000	28.73	70.6	3.23	Up	35CR
	30.0	100.0	9.992	-1.735	26.0	0.824	1.000	26.97	79.8	2.75	Up	35CR
	30.0	110.0	10.565	-3.613	26.7	0.927	1.000	25.18	89.3	2.25	Up	35CR
	30.0	120.0	11.115	-5.557	23.2	1.000	1.000	24.20	99.2	1.61	Up	35CR
	30.0	130.0	11.603	-7.458	29.1	0.878	1.000	21.49	110.9	1.57	Dn	35CR
	30.0	135.0	12.151	-8.592	30.1	0.968	1.000	20.47	116.3	1.30	Dn	35CR
	30.0	140.0	12.623	-9.670	24.9	1.000	1.000	20.33	120.6	0.93	Dn	35CR
	30.0	150.0	12.110	-10.487	12.4	1.000	1.000	20.18	133.4	0.60	Dn	35CR
OptDn >	***30.0***	***158.4***	***11.375***	***10.579***	***7.6***	***1.000***	***1.000***	***19.81***	***146.5***	***0.47***	***Dn***	***35CR***
	30.0	160.0	11.255	-10.576	6.9	1.000	1.000	19.76	149.0	0.44	Dn	35CR
	30.0	170.0	10.617	-10.455	3.0	1.000	1.000	19.63	164.6	0.23	Dn	35CR
	30.0	180.0	10.107	-10.107	-0.0	1.000	1.000	19.89	180.0	-0.00	Dn	35CR

Best Performance (cont)