PERFORMANCE PREDICTION



DESIGN #330
ILC 40

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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)

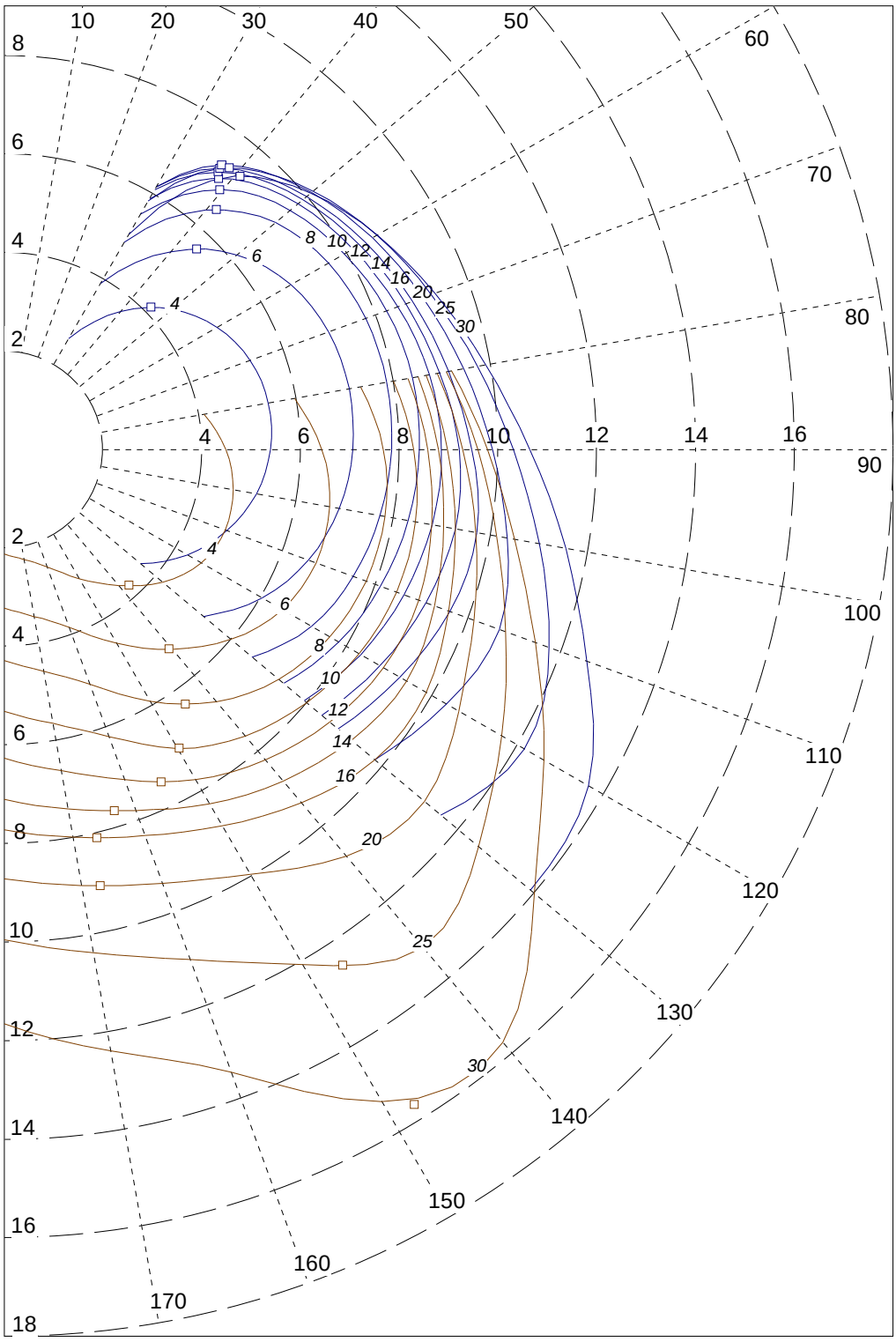
This page is similar to the Best Boatspeeds page in that it represents the boatspeeds for a series of true windspeeds and true wind angles. Boatspeeds are expressed as seconds/nautical mile. Shaded areas again depict the off optimum conditions. Optimum upwind and downwind values, in terms of VMG, are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

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Best Boatspeeds (kt)

	4	6	8	10	12	14	16	20	25	30
30.0	2.61	3.89	4.86	5.52	5.88	6.08	6.17	6.16	5.83	5.04
33.0	2.96	4.36	5.40	6.02	6.37	6.56	6.66	6.70	6.51	5.96
36.0	3.28	4.77	5.85	6.44	6.76	6.94	7.04	7.12	7.00	6.61
39.0	3.57	5.13	6.23	6.78	7.08	7.24	7.33	7.41	7.36	7.11
42.0	3.84	5.46	6.55	7.06	7.32	7.46	7.55	7.64	7.62	7.46
45.0	4.08	5.75	6.82	7.28	7.51	7.64	7.73	7.83	7.84	7.72
50.0	4.43	6.15	7.16	7.55	7.75	7.89	7.99	8.12	8.16	8.10
60.0	4.97	6.70	7.57	7.95	8.15	8.30	8.43	8.60	8.71	8.71
70.0	5.29	6.98	7.78	8.24	8.48	8.65	8.80	9.02	9.20	9.28
80.0	5.43	7.09	7.86	8.39	8.74	8.95	9.13	9.44	9.73	9.90
90.0	5.39	7.05	7.84	8.40	8.85	9.21	9.47	9.88	10.30	10.64
100.0	5.17	6.88	7.82	8.45	8.79	9.27	9.71	10.34	11.00	11.54
110.0	4.80	6.71	7.79	8.45	8.92	9.27	9.60	10.66	11.74	12.55
120.0	4.60	6.50	7.60	8.28	8.86	9.40	9.86	10.61	12.16	13.65
130.0	4.18	5.99	7.25	7.99	8.60	9.17	9.80	11.10	12.53	14.00
140.0	3.59	5.29	6.68	7.58	8.22	8.78	9.35	10.77	13.18	15.70
150.0	3.03	4.54	5.90	7.00	7.73	8.30	8.82	9.95	12.06	15.28
160.0	2.53	3.84	5.07	6.19	7.13	7.79	8.34	9.37	11.01	13.44
170.0	2.26	3.43	4.57	5.64	6.62	7.40	7.98	8.98	10.37	12.38
180.0	2.12	3.21	4.28	5.31	6.26	7.10	7.72	8.70	9.94	11.65
Up.Vs(kts)	4.14	5.64	6.49	6.84	7.01	7.10	7.18	7.26	7.31	7.32
Up.Vs(s/m)	869.5	638.6	554.3	526.1	513.6	507.0	501.3	495.8	492.4	492.0
Up.Vs(s/L)	5.8	4.3	3.7	3.5	3.5	3.4	3.4	3.3	3.3	3.3
Up.Bt	45.8	43.8	41.5	39.6	38.3	37.5	37.4	37.4	38.6	40.7
Up.Vmg(kts)	2.89	4.07	4.87	5.27	5.50	5.63	5.71	5.77	5.71	5.54
Up.Vmg(s/m)	1246.9	884.2	739.7	683.1	654.5	639.3	630.7	623.7	630.0	649.4
Up.Heel	3.8	8.2	15.0	19.2	21.4	23.1	23.3	23.9	24.5	25.0
Up.Reef	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.83	0.72	0.63
Up.Flat	1.00	1.00	1.00	0.85	0.71	0.60	0.61	0.61	0.64	0.69
Up.Va	7.50	10.78	13.50	15.74	17.83	19.82	21.81	25.68	30.37	34.90
Up.Ba	22.4	22.4	22.3	22.5	22.9	23.3	24.1	25.6	27.9	30.6
Up.Leewy	1.94	2.13	2.56	2.74	2.84	2.95	3.06	3.34	3.71	4.13
Dn.Vs(kts)	3.74	5.25	6.33	7.03	7.45	7.66	8.09	9.06	12.51	15.68
Dn.Vs(s/m)	962.4	685.7	568.7	512.5	483.1	470.2	444.8	397.5	287.7	229.7
Dn.Vs(s/L)	6.5	4.6	3.8	3.4	3.2	3.2	3.0	2.7	1.9	1.5
Dn.Bt	137.5	140.5	144.6	149.7	154.8	163.1	166.6	167.6	146.8	148.0
Dn.Vmg(kts)	2.76	4.05	5.16	6.06	6.74	7.32	7.87	8.85	10.47	13.29
Dn.Vmg(s/m)	1304.5	888.5	697.6	593.7	533.9	491.5	457.3	406.9	343.9	270.8
Dn.Heel	0.8	1.3	1.6	1.6	1.3	1.0	1.0	1.6	10.5	15.6
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	2.81	3.86	4.64	5.30	6.14	7.04	8.34	11.32	15.87	18.16
Dn.Ba	73.7	80.8	92.4	107.7	123.7	144.6	153.6	157.8	122.0	122.5
Dn.Leewy	0.42	0.37	0.30	0.23	0.17	0.12	0.11	0.13	0.32	0.21

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Course Times

	Leeward 1.00 nm.	WL 1.00 nm.	110 Reach 1.00 nm.	Windward 1.00 nm.
4.0	1304.5	1275.7	750.3	1246.9
6.0	888.5	886.3	536.5	884.2
8.0	697.6	718.7	462.1	739.7
10.0	593.7	638.4	426.1	683.1
12.0	533.9	594.2	403.4	654.5
14.0	491.5	565.4	388.5	639.3
16.0	457.3	544.0	375.1	630.7
20.0	406.9	515.3	337.8	623.7
25.0	343.9	486.9	306.7	630.0
30.0	270.8	460.1	286.8	649.4

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Times for 1 nm (secs)

	4	6	8	10	12	14	16	20	25	30
30.0	1381.9	924.5	740.4	652.8	612.2	591.8	583.0	584.8	617.8	714.1
33.0	1218.0	826.5	666.4	597.7	565.4	548.5	540.6	537.1	553.3	604.3
36.0	1098.6	755.4	615.0	559.2	532.4	518.4	511.1	505.5	514.0	544.3
39.0	1008.3	701.2	578.0	531.0	508.7	497.5	491.0	485.6	489.3	506.3
42.0	938.0	658.9	549.8	510.0	491.9	482.8	477.0	471.2	472.4	482.7
45.0	882.1	625.9	528.1	494.6	479.6	471.5	465.8	459.6	459.2	466.1
50.0	811.9	585.5	502.5	476.6	464.2	456.5	450.7	443.6	441.2	444.7
60.0	724.5	537.5	475.3	453.1	441.7	433.5	427.2	418.6	413.5	413.1
70.0	680.1	515.4	462.5	437.0	424.8	416.2	409.3	399.2	391.4	388.0
80.0	663.3	508.0	457.8	429.1	412.1	402.4	394.3	381.3	370.1	363.6
90.0	668.4	510.6	459.2	428.5	406.7	390.9	380.3	364.3	349.5	338.4
100.0	695.8	523.2	460.3	426.1	409.5	388.5	370.6	348.3	327.4	311.9
110.0	750.3	536.5	462.1	426.1	403.4	388.5	375.1	337.8	306.7	286.8
120.0	782.3	554.1	473.4	434.6	406.4	383.1	365.2	339.2	296.1	263.7
130.0	860.9	601.1	496.4	450.6	418.8	392.5	367.5	324.3	287.4	257.1
140.0	1001.6	680.7	539.3	474.7	438.0	410.1	384.8	334.4	273.1	229.3
150.0	1189.6	793.4	610.5	514.1	465.6	433.6	408.4	361.8	298.4	235.7
160.0	1421.0	937.6	710.1	581.4	505.0	462.3	431.8	384.3	326.9	267.8
170.0	1590.1	1048.1	788.3	638.0	544.1	486.5	450.9	401.0	347.2	290.7
180.0	1700.9	1120.5	840.3	678.0	574.7	507.4	466.5	413.7	362.2	309.1
Up	1246.9	884.2	739.7	683.1	654.5	639.3	630.7	623.7	630.0	649.4
Dn	1304.5	888.5	697.6	593.7	533.9	491.5	457.3	406.9	343.9	270.8

Equivalent ILC Average (using IMS formula): 612.11

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Best Performance

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	4.0	30.0	2.605	2.256	2.5	1.000	1.000	6.39	18.2	3.30	Up	RWip
	4.0	33.0	2.956	2.479	2.8	1.000	1.000	6.68	19.0	2.86	Up	RWip
	4.0	36.0	3.277	2.651	3.1	1.000	1.000	6.92	19.8	2.55	Up	RWip
	4.0	39.0	3.571	2.775	3.3	1.000	1.000	7.14	20.6	2.31	Up	RWip
	4.0	42.0	3.838	2.852	3.5	1.000	1.000	7.32	21.4	2.13	Up	RWip
	4.0	45.0	4.081	2.886	3.7	1.000	1.000	7.46	22.2	1.98	Up	RWip
OptUp >	***4.0***	***45.8***	***4.140***	***2.887***	***3.8***	***1.000***	***1.000***	***7.50***	***22.4***	***1.94***	***Up***	***RWip***
	4.0	50.0	4.434	2.850	4.0	1.000	1.000	7.64	23.6	1.78	Up	RWip
	4.0	60.0	4.969	2.484	4.2	1.000	1.000	7.78	26.4	1.48	Up	RWip
	4.0	70.0	5.293	1.810	4.1	1.000	1.000	7.64	29.4	1.26	Up	RWip
	4.0	80.0	5.427	0.942	3.7	1.000	1.000	7.28	32.7	1.08	Up	RWip
	4.0	90.0	5.386	-0.000	3.1	1.000	1.000	6.71	36.6	0.92	Up	RWip
	4.0	100.0	5.174	-0.898	2.4	1.000	1.000	5.96	41.3	0.77	Up	RWip
	4.0	110.0	4.798	-1.641	1.6	1.000	1.000	5.09	47.6	0.63	Up	RWip
	4.0	120.0	4.602	-2.301	1.8	1.000	1.000	4.33	53.1	0.66	Dn	RWip
	4.0	130.0	4.181	-2.688	1.2	1.000	1.000	3.46	62.3	0.53	Dn	RWip
OptDn >	***4.0***	***137.5***	***3.741***	***2.760***	***0.8***	***1.000***	***1.000***	***2.81***	***73.7***	***0.42***	***Dn***	***RWip***
	4.0	140.0	3.594	-2.753	0.6	1.000	1.000	2.63	78.3	0.38	Dn	RWip
	4.0	150.0	3.026	-2.621	0.3	1.000	1.000	2.05	102.3	0.23	Dn	RWip
	4.0	160.0	2.533	-2.381	0.1	1.000	1.000	1.84	131.9	0.12	Dn	RWip
	4.0	170.0	2.264	-2.230	0.0	1.000	1.000	1.81	157.5	0.06	Dn	RWip
	4.0	180.0	2.117	-2.117	0.0	1.000	1.000	1.88	180.0	-0.00	Dn	RWip
	6.0	30.0	3.894	3.372	5.8	1.000	1.000	9.57	18.2	3.30	Up	RWip
	6.0	33.0	4.356	3.653	6.4	1.000	1.000	9.93	19.1	2.90	Up	RWip
	6.0	36.0	4.766	3.856	7.0	1.000	1.000	10.24	20.0	2.62	Up	RWip
	6.0	39.0	5.134	3.990	7.6	1.000	1.000	10.49	20.9	2.40	Up	RWip
	6.0	42.0	5.464	4.061	8.0	1.000	1.000	10.69	21.8	2.22	Up	RWip
OptUp >	***6.0***	***43.8***	***5.637***	***4.072***	***8.2***	***1.000***	***1.000***	***10.78***	***22.4***	***2.13***	***Up***	***RWip***
	6.0	45.0	5.752	4.067	8.4	1.000	1.000	10.84	22.8	2.07	Up	RWip
	6.0	50.0	6.148	3.952	8.8	1.000	1.000	10.99	24.4	1.88	Up	RWip
	6.0	60.0	6.698	3.349	8.9	1.000	1.000	10.97	27.9	1.57	Up	RWip
	6.0	70.0	6.985	2.389	8.2	1.000	1.000	10.62	31.7	1.33	Up	RWip
	6.0	80.0	7.087	1.231	7.1	1.000	1.000	10.02	35.8	1.13	Up	RWip
	6.0	90.0	7.051	-0.000	5.8	1.000	1.000	9.24	40.3	0.94	Up	RWip
	6.0	100.0	6.881	-1.195	4.4	1.000	1.000	8.29	45.3	0.78	Up	RWip
	6.0	110.0	6.710	-2.295	5.1	1.000	1.000	7.30	50.3	0.80	Dn	RWip
	6.0	120.0	6.497	-3.248	3.9	1.000	1.000	6.25	56.0	0.67	Dn	RWip
	6.0	130.0	5.989	-3.850	2.6	1.000	1.000	5.06	65.1	0.53	Dn	RWip
	6.0	140.0	5.289	-4.051	1.4	1.000	1.000	3.92	79.8	0.37	Dn	RWip
OptDn >	***6.0***	***140.5***	***5.250***	***4.052***	***1.3***	***1.000***	***1.000***	***3.86***	***80.8***	***0.37***	***Dn***	***RWip***
	6.0	150.0	4.537	-3.929	0.6	1.000	1.000	3.07	102.4	0.23	Dn	RWip
	6.0	160.0	3.840	-3.608	0.2	1.000	1.000	2.73	131.2	0.12	Dn	RWip
	6.0	170.0	3.435	-3.383	0.1	1.000	1.000	2.68	157.2	0.06	Dn	RWip
	6.0	180.0	3.213	-3.213	0.0	1.000	1.000	2.79	180.0	-0.00	Dn	RWip

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Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	8.0	30.0	4.862	4.211	10.6	1.000	1.000	12.43	18.4	3.62	Up	RWip
	8.0	33.0	5.402	4.531	12.0	1.000	1.000	12.84	19.4	3.20	Up	RWip
	8.0	36.0	5.854	4.736	13.2	1.000	1.000	13.15	20.4	2.91	Up	RWip
	8.0	39.0	6.229	4.841	14.2	1.000	1.000	13.37	21.4	2.70	Up	RWip
OptUp >	***8.0***	***41.5***	***6.494***	***4.867***	***15.0***	***1.000***	***1.000***	***13.50***	***22.3***	***2.56***	***Up***	***RWip***
	8.0	42.0	6.548	4.866	15.1	1.000	1.000	13.52	22.5	2.53	Up	RWip
	8.0	45.0	6.817	4.820	15.8	1.000	1.000	13.61	23.6	2.38	Up	RWip
	8.0	50.0	7.164	4.605	16.3	1.000	1.000	13.64	25.6	2.18	Up	RWip
	8.0	60.0	7.574	3.787	15.2	1.000	1.000	13.37	30.0	1.83	Up	RWip
	8.0	70.0	7.784	2.662	12.9	1.000	1.000	12.82	34.9	1.52	Up	RWip
	8.0	80.0	7.863	1.365	10.5	1.000	1.000	12.07	39.9	1.26	Up	RWip
	8.0	90.0	7.840	-0.000	8.2	1.000	1.000	11.14	45.3	1.03	Up	RWip
	8.0	100.0	7.821	-1.358	10.5	1.000	1.000	10.07	50.3	1.10	Dn	RWip
	8.0	110.0	7.791	-2.665	8.5	1.000	1.000	8.99	55.8	0.92	Dn	RWip
	8.0	120.0	7.604	-3.802	6.2	1.000	1.000	7.77	62.4	0.73	Dn	RWip
	8.0	130.0	7.252	-4.661	4.1	1.000	1.000	6.47	71.0	0.54	Dn	RWip
	8.0	140.0	6.675	-5.113	2.3	1.000	1.000	5.17	83.9	0.37	Dn	RWip
OptDn >	***8.0***	***144.6***	***6.330***	***5.161***	***1.6***	***1.000***	***1.000***	***4.64***	***92.4***	***0.30***	***Dn***	***RWip***
	8.0	150.0	5.897	-5.107	0.0	1.000	1.000	4.13	104.5	0.22	Dn	RWip
	8.0	160.0	5.070	-4.764	0.0	1.000	1.000	3.67	131.8	0.12	Dn	RWip
	8.0	170.0	4.567	-4.497	0.0	1.000	1.000	3.59	157.2	0.06	Dn	RWip
	8.0	180.0	4.284	-4.284	0.0	1.000	1.000	3.72	180.0	-0.00	Dn	RWip
	10.0	30.0	5.515	4.776	15.2	1.000	0.876	14.97	18.8	3.67	Up	RWip
	10.0	33.0	6.023	5.051	16.8	1.000	0.866	15.32	19.9	3.27	Up	RWip
	10.0	36.0	6.437	5.208	18.1	1.000	0.858	15.57	21.0	2.99	Up	RWip
	10.0	39.0	6.780	5.269	19.0	1.000	0.854	15.72	22.2	2.77	Up	RWip
OptUp >	***10.0***	***39.6***	***6.842***	***5.270***	***19.2***	***1.000***	***0.854***	***15.74***	***22.5***	***2.74***	***Up***	***RWip***
	10.0	42.0	7.060	5.246	19.8	1.000	0.854	15.80	23.5	2.62	Up	RWip
	10.0	45.0	7.279	5.147	20.4	1.000	0.860	15.81	24.8	2.50	Up	RWip
	10.0	50.0	7.553	4.855	21.1	1.000	0.882	15.70	27.1	2.37	Up	RWip
	10.0	60.0	7.946	3.973	21.8	1.000	0.956	15.24	31.8	2.17	Up	RWip
	10.0	70.0	8.238	2.817	19.6	1.000	1.000	14.64	37.2	1.83	Up	RWip
	10.0	80.0	8.390	1.457	15.1	1.000	1.000	13.89	43.2	1.44	Up	RWip
	10.0	90.0	8.402	-0.000	11.2	1.000	1.000	12.92	49.4	1.14	Up	RWip
	10.0	100.0	8.448	-1.467	17.3	1.000	1.000	11.55	54.5	1.34	Dn	RWip
	10.0	110.0	8.448	-2.889	12.6	1.000	1.000	10.46	61.3	1.07	Dn	RWip
	10.0	120.0	8.284	-4.142	8.7	1.000	1.000	9.17	69.0	0.81	Dn	RWip
	10.0	130.0	7.989	-5.135	5.6	1.000	1.000	7.78	78.4	0.59	Dn	RWip
	10.0	140.0	7.584	-5.810	3.2	1.000	1.000	6.42	90.7	0.39	Dn	RWip
OptDn >	***10.0***	***149.7***	***7.025***	***6.064***	***1.6***	***1.000***	***1.000***	***5.30***	***107.7***	***0.23***	***Dn***	***RWip***
	10.0	150.0	7.002	-6.064	0.0	1.000	1.000	5.27	108.3	0.23	Dn	RWip
	10.0	160.0	6.192	-5.819	0.0	1.000	1.000	4.69	133.1	0.12	Dn	RWip
	10.0	170.0	5.643	-5.557	0.0	1.000	1.000	4.55	157.6	0.06	Dn	RWip
	10.0	180.0	5.310	-5.310	0.0	1.000	1.000	4.69	180.0	-0.00	Dn	RWip

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Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	12.0	30.0	5.880	5.093	18.6	1.000	0.739	17.24	19.3	3.71	Up	RWip
	12.0	33.0	6.368	5.340	19.9	1.000	0.725	17.54	20.5	3.30	Up	RWip
	12.0	36.0	6.762	5.470	20.8	1.000	0.716	17.74	21.8	3.01	Up	RWip
OptUp >	***12.0***	***38.3***	***7.010***	***5.500***	***21.4***	***1.000***	***0.714***	***17.83***	***22.9***	***2.84***	***Up***	***RWip***
	12.0	39.0	7.077	5.500	21.6	1.000	0.713	17.84	23.2	2.80	Up	RWip
	12.0	42.0	7.318	5.438	22.1	1.000	0.715	17.86	24.6	2.65	Up	RWip
	12.0	45.0	7.506	5.307	22.6	1.000	0.724	17.81	26.1	2.55	Up	RWip
	12.0	50.0	7.755	4.985	23.1	1.000	0.746	17.63	28.7	2.42	Up	RWip
	12.0	60.0	8.149	4.075	23.1	0.964	0.886	17.08	34.1	2.21	Up	RWip
	12.0	70.0	8.475	2.899	22.9	0.961	1.000	16.31	39.5	2.01	Up	RWip
	12.0	80.0	8.737	1.517	21.1	1.000	1.000	15.45	45.5	1.70	Up	RWip
	12.0	90.0	8.852	-0.000	15.2	1.000	1.000	14.58	52.6	1.28	Up	RWip
	12.0	100.0	8.792	-1.527	10.5	1.000	1.000	13.42	60.0	0.98	Up	RWip
	12.0	110.0	8.924	-3.052	18.4	1.000	1.000	11.73	65.8	1.23	Dn	RWip
	12.0	120.0	8.858	-4.429	11.8	1.000	1.000	10.56	74.3	0.90	Dn	RWip
	12.0	130.0	8.597	-5.526	7.4	1.000	1.000	9.16	84.5	0.64	Dn	RWip
	12.0	140.0	8.220	-6.297	4.2	1.000	1.000	7.75	97.2	0.42	Dn	RWip
	12.0	150.0	7.731	-6.695	2.0	1.000	1.000	6.56	113.9	0.24	Dn	RWip
OptDn >	***12.0***	***154.8***	***7.452***	***6.743***	***1.3***	***1.000***	***1.000***	***6.14***	***123.7***	***0.17***	***Dn***	***RWip***
	12.0	160.0	7.128	-6.698	0.0	1.000	1.000	5.84	135.3	0.13	Dn	RWip
	12.0	170.0	6.616	-6.515	0.0	1.000	1.000	5.60	158.2	0.06	Dn	RWip
	12.0	180.0	6.264	-6.264	0.0	1.000	1.000	5.74	180.0	-0.00	Dn	RWip
	14.0	30.0	6.083	5.268	20.9	1.000	0.625	19.35	19.8	3.79	Up	RWip
	14.0	33.0	6.564	5.505	21.9	1.000	0.612	19.62	21.1	3.36	Up	RWip
	14.0	36.0	6.945	5.618	22.8	1.000	0.605	19.78	22.6	3.06	Up	RWip
OptUp >	***14.0***	***37.5***	***7.101***	***5.631***	***23.1***	***1.000***	***0.604***	***19.82***	***23.3***	***2.95***	***Up***	***RWip***
	14.0	39.0	7.236	5.623	23.2	0.991	0.617	19.84	24.1	2.86	Up	RWip
	14.0	42.0	7.457	5.542	23.4	0.970	0.652	19.82	25.7	2.73	Up	RWip
	14.0	45.0	7.636	5.399	23.4	0.950	0.694	19.75	27.4	2.63	Up	RWip
	14.0	50.0	7.887	5.069	23.3	0.921	0.769	19.55	30.2	2.50	Up	RWip
	14.0	60.0	8.304	4.152	23.1	0.881	0.934	18.94	36.1	2.27	Up	RWip
	14.0	70.0	8.650	2.959	23.1	0.900	1.000	18.08	42.0	2.03	Up	RWip
	14.0	80.0	8.947	1.554	23.2	0.958	1.000	17.03	48.1	1.80	Up	RWip
	14.0	90.0	9.209	-0.000	20.4	1.000	1.000	16.03	54.9	1.46	Up	RWip
	14.0	100.0	9.267	-1.609	13.6	1.000	1.000	15.05	63.0	1.06	Up	RWip
	14.0	110.0	9.267	-3.170	23.1	0.979	1.000	12.91	69.7	1.38	Dn	RWip
	14.0	120.0	9.397	-4.698	16.5	1.000	1.000	11.87	78.4	1.00	Dn	RWip
	14.0	130.0	9.171	-5.895	9.6	1.000	1.000	10.58	89.1	0.70	Dn	RWip
	14.0	140.0	8.777	-6.724	5.4	1.000	1.000	9.17	102.3	0.46	Dn	RWip
	14.0	150.0	8.303	-7.191	2.6	1.000	1.000	7.97	118.7	0.26	Dn	RWip
	14.0	160.0	7.787	-7.317	0.0	1.000	1.000	7.19	138.3	0.15	Dn	RWip
OptDn >	***14.0***	***163.1***	***7.656***	***7.325***	***1.0***	***1.000***	***1.000***	***7.04***	***144.6***	***0.12***	***Dn***	***RWip***
	14.0	170.0	7.400	-7.287	0.0	1.000	1.000	6.83	159.2	0.07	Dn	RWip
	14.0	180.0	7.096	-7.096	0.0	1.000	1.000	6.90	180.0	-0.00	Dn	RWip

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Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	16.0	30.0	6.175	5.347	22.5	1.000	0.533	21.35	20.3	3.92	Up	RWip
	16.0	33.0	6.659	5.585	23.0	0.971	0.558	21.62	21.8	3.47	Up	RWip
	16.0	36.0	7.044	5.699	23.2	0.943	0.591	21.78	23.4	3.16	Up	RWip
OptUp >	***16.0***	***37.4***	***7.182***	***5.708***	***23.3***	***0.932***	***0.608***	***21.81***	***24.1***	***3.06***	***Up***	***RWip***
	16.0	39.0	7.332	5.698	23.5	0.920	0.627	21.82	25.0	2.97	Up	RWip
	16.0	42.0	7.548	5.609	23.5	0.898	0.669	21.78	26.8	2.84	Up	RWip
	16.0	45.0	7.728	5.465	23.5	0.879	0.715	21.68	28.6	2.73	Up	RWip
	16.0	50.0	7.988	5.135	23.5	0.851	0.798	21.46	31.6	2.58	Up	RWip
	16.0	60.0	8.428	4.214	23.3	0.818	0.962	20.78	37.8	2.33	Up	RWip
	16.0	70.0	8.795	3.008	23.3	0.846	1.000	19.86	44.1	2.06	Up	RWip
	16.0	80.0	9.129	1.585	23.5	0.903	1.000	18.73	50.5	1.81	Up	RWip
	16.0	90.0	9.466	-0.000	23.6	0.975	1.000	17.46	57.2	1.57	Up	RWip
	16.0	100.0	9.713	-1.687	17.8	1.000	1.000	16.53	65.2	1.15	Up	RWip
	16.0	110.0	9.597	-3.282	11.1	1.000	1.000	15.32	74.4	0.83	Up	RWip
	16.0	120.0	9.858	-4.929	21.9	0.999	1.000	12.99	81.8	1.11	Dn	RWip
	16.0	130.0	9.796	-6.297	12.5	1.000	1.000	11.97	92.3	0.74	Dn	RWip
	16.0	140.0	9.354	-7.166	6.7	1.000	1.000	10.62	105.9	0.49	Dn	RWip
	16.0	150.0	8.815	-7.634	3.3	1.000	1.000	9.44	122.3	0.29	Dn	RWip
	16.0	160.0	8.337	-7.834	0.0	1.000	1.000	8.65	140.8	0.17	Dn	RWip
OptDn >	***16.0***	***166.6***	***8.093***	***7.873***	***1.0***	***1.000***	***1.000***	***8.34***	***153.6***	***0.11***	***Dn***	***RWip***
	16.0	170.0	7.984	-7.863	0.0	1.000	1.000	8.25	160.3	0.08	Dn	RWip
	16.0	180.0	7.717	-7.717	0.0	1.000	1.000	8.28	180.0	-0.00	Dn	RWip
	20.0	30.0	6.156	5.332	22.8	0.887	0.529	25.22	21.4	4.39	Up	RWip
	20.0	33.0	6.702	5.621	23.3	0.858	0.563	25.52	23.1	3.81	Up	RWip
	20.0	36.0	7.121	5.761	23.7	0.836	0.595	25.67	24.8	3.44	Up	RWip
OptUp >	***20.0***	***37.4***	***7.261***	***5.772***	***23.9***	***0.829***	***0.609***	***25.68***	***25.6***	***3.34***	***Up***	***RWip***
	20.0	39.0	7.414	5.762	24.0	0.815	0.635	25.68	26.6	3.23	Up	RWip
	20.0	42.0	7.640	5.677	24.0	0.794	0.684	25.61	28.5	3.07	Up	RWip
	20.0	45.0	7.832	5.538	23.9	0.774	0.737	25.49	30.5	2.95	Up	RWip
	20.0	50.0	8.115	5.216	23.8	0.748	0.830	25.22	33.8	2.77	Up	RWip
	20.0	60.0	8.599	4.300	23.6	0.719	1.000	24.45	40.5	2.46	Up	RWip
	20.0	70.0	9.018	3.084	23.8	0.759	1.000	23.39	47.3	2.14	Up	RWip
	20.0	80.0	9.442	1.640	24.0	0.811	1.000	22.14	54.3	1.85	Up	RWip
	20.0	90.0	9.882	-0.000	24.1	0.878	1.000	20.76	61.6	1.57	Up	RWip
	20.0	100.0	10.336	-1.795	24.5	0.971	1.000	19.19	69.0	1.32	Up	RWip
	20.0	110.0	10.658	-3.645	17.9	1.000	1.000	18.29	77.9	0.91	Up	RWip
	20.0	120.0	10.614	-5.307	24.9	0.909	1.000	15.72	87.8	1.11	Dn	RWip
	20.0	130.0	11.102	-7.136	21.5	1.000	1.000	14.37	97.0	0.80	Dn	RWip
	20.0	140.0	10.765	-8.247	10.5	1.000	1.000	13.44	109.8	0.50	Dn	RWip
	20.0	150.0	9.950	-8.617	5.2	1.000	1.000	12.39	126.5	0.32	Dn	RWip
	20.0	160.0	9.367	-8.802	2.8	1.000	1.000	11.64	144.1	0.21	Dn	RWip
OptDn >	***20.0***	***167.6***	***9.058***	***8.847***	***1.6***	***1.000***	***1.000***	***11.32***	***157.8***	***0.13***	***Dn***	***RWip***
	20.0	170.0	8.978	-8.841	0.0	1.000	1.000	11.27	162.0	0.10	Dn	RWip
	20.0	180.0	8.702	-8.702	0.0	1.000	1.000	11.30	180.0	-0.00	Dn	RWip

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Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	25.0	30.0	5.827	5.046	23.2	0.795	0.510	29.78	22.7	5.45	Up	RWip
	25.0	33.0	6.506	5.456	23.8	0.764	0.551	30.17	24.4	4.51	Up	RWip
	25.0	36.0	7.004	5.667	24.3	0.740	0.596	30.34	26.2	3.99	Up	RWip
OptUp >	***25.0***	***38.6***	***7.311***	***5.714***	***24.5***	***0.719***	***0.640***	***30.37***	***27.9***	***3.71***	***Up***	***RWip***
	25.0	39.0	7.358	5.718	24.5	0.716	0.648	30.37	28.1	3.67	Up	RWip
	25.0	42.0	7.620	5.663	24.5	0.694	0.703	30.30	30.2	3.45	Up	RWip
	25.0	45.0	7.839	5.543	24.4	0.676	0.762	30.17	32.2	3.29	Up	RWip
	25.0	50.0	8.160	5.245	24.3	0.652	0.860	29.86	35.8	3.05	Up	RWip
	25.0	60.0	8.705	4.353	24.2	0.636	1.000	28.97	43.0	2.66	Up	RWip
	25.0	70.0	9.198	3.146	24.6	0.672	1.000	27.78	50.3	2.28	Up	RWip
	25.0	80.0	9.727	1.689	24.8	0.719	1.000	26.42	57.8	1.92	Up	RWip
	25.0	90.0	10.300	-0.000	25.2	0.784	1.000	24.86	65.5	1.60	Up	RWip
	25.0	100.0	10.996	-1.909	25.6	0.866	1.000	23.19	73.3	1.27	Up	RWip
	25.0	110.0	11.738	-4.015	26.0	0.972	1.000	21.35	81.4	0.99	Up	RWip
	25.0	120.0	12.157	-6.078	18.5	1.000	1.000	20.54	91.0	0.65	Up	RWip
	25.0	130.0	12.527	-8.053	27.4	0.931	1.000	17.37	101.8	0.75	Dn	RWip
	25.0	140.0	13.184	-10.099	18.9	1.000	1.000	16.34	111.4	0.43	Dn	RWip
OptDn >	***25.0***	***146.8***	***12.512***	***10.470***	***10.5***	***1.000***	***1.000***	***15.87***	***122.0***	***0.32***	***Dn***	***RWip***
	25.0	150.0	12.064	-10.448	8.3	1.000	1.000	15.65	127.8	0.30	Dn	RWip
	25.0	160.0	11.014	-10.350	4.7	1.000	1.000	15.11	145.7	0.22	Dn	RWip
	25.0	170.0	10.367	-10.210	0.0	1.000	1.000	14.90	163.1	0.11	Dn	RWip
	25.0	180.0	9.940	-9.940	0.0	1.000	1.000	15.06	180.0	-0.00	Dn	RWip
	30.0	30.0	5.042	4.366	23.0	0.724	0.496	33.96	24.0	7.86	Up	RWip
	30.0	33.0	5.957	4.996	23.9	0.671	0.586	34.52	25.6	5.95	Up	RWip
	30.0	36.0	6.614	5.351	24.7	0.667	0.597	34.79	27.4	4.94	Up	RWip
	30.0	39.0	7.111	5.526	25.0	0.643	0.652	34.91	29.4	4.34	Up	RWip
OptUp >	***30.0***	***40.7***	***7.317***	***5.543***	***25.0***	***0.630***	***0.687***	***34.90***	***30.6***	***4.13***	***Up***	***RWip***
	30.0	42.0	7.458	5.542	25.0	0.622	0.712	34.87	31.4	3.98	Up	RWip
	30.0	45.0	7.724	5.461	25.0	0.604	0.773	34.74	33.6	3.74	Up	RWip
	30.0	50.0	8.096	5.204	24.9	0.582	0.872	34.41	37.3	3.42	Up	RWip
	30.0	60.0	8.715	4.357	25.0	0.571	1.000	33.42	44.8	2.92	Up	RWip
	30.0	70.0	9.278	3.173	25.4	0.604	1.000	32.09	52.5	2.48	Up	RWip
	30.0	80.0	9.901	1.719	25.7	0.647	1.000	30.61	60.4	2.05	Up	RWip
	30.0	90.0	10.638	-0.000	26.4	0.708	1.000	28.89	68.4	1.66	Up	RWip
	30.0	100.0	11.542	-2.004	27.0	0.783	1.000	27.08	76.5	1.27	Up	RWip
	30.0	110.0	12.552	-4.293	27.4	0.877	1.000	25.14	84.8	0.93	Up	RWip
	30.0	120.0	13.652	-6.826	28.0	1.000	1.000	22.99	93.4	0.67	Up	RWip
	30.0	130.0	14.004	-9.001	29.2	0.838	1.000	20.75	104.7	0.62	Dn	RWip
	30.0	140.0	15.699	-12.026	29.2	1.000	1.000	18.35	113.4	0.36	Dn	RWip
OptDn >	***30.0***	***148.0***	***15.676***	***13.294***	***15.6***	***1.000***	***1.000***	***18.16***	***122.5***	***0.21***	***Dn***	***RWip***
	30.0	150.0	15.276	-13.230	13.0	1.000	1.000	18.12	126.2	0.20	Dn	RWip
	30.0	160.0	13.444	-12.633	6.8	1.000	1.000	17.92	145.4	0.17	Dn	RWip
	30.0	170.0	12.385	-12.197	3.0	1.000	1.000	17.93	163.1	0.10	Dn	RWip
	30.0	180.0	11.646	-11.646	0.0	1.000	1.000	18.35	180.0	-0.00	Dn	RWip

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