



PERFORMANCE PREDICTION

A red wireframe model of a yacht's hull and fin, showing the structural grid lines. The hull is sleek and curved, tapering towards the stern. The fin is a deep, curved foil shape. The model is positioned behind the main title text.

**DESIGN #608
BENETEAU FIRST 40 WITH LEAD FIN AND CARBON
MAST**



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).

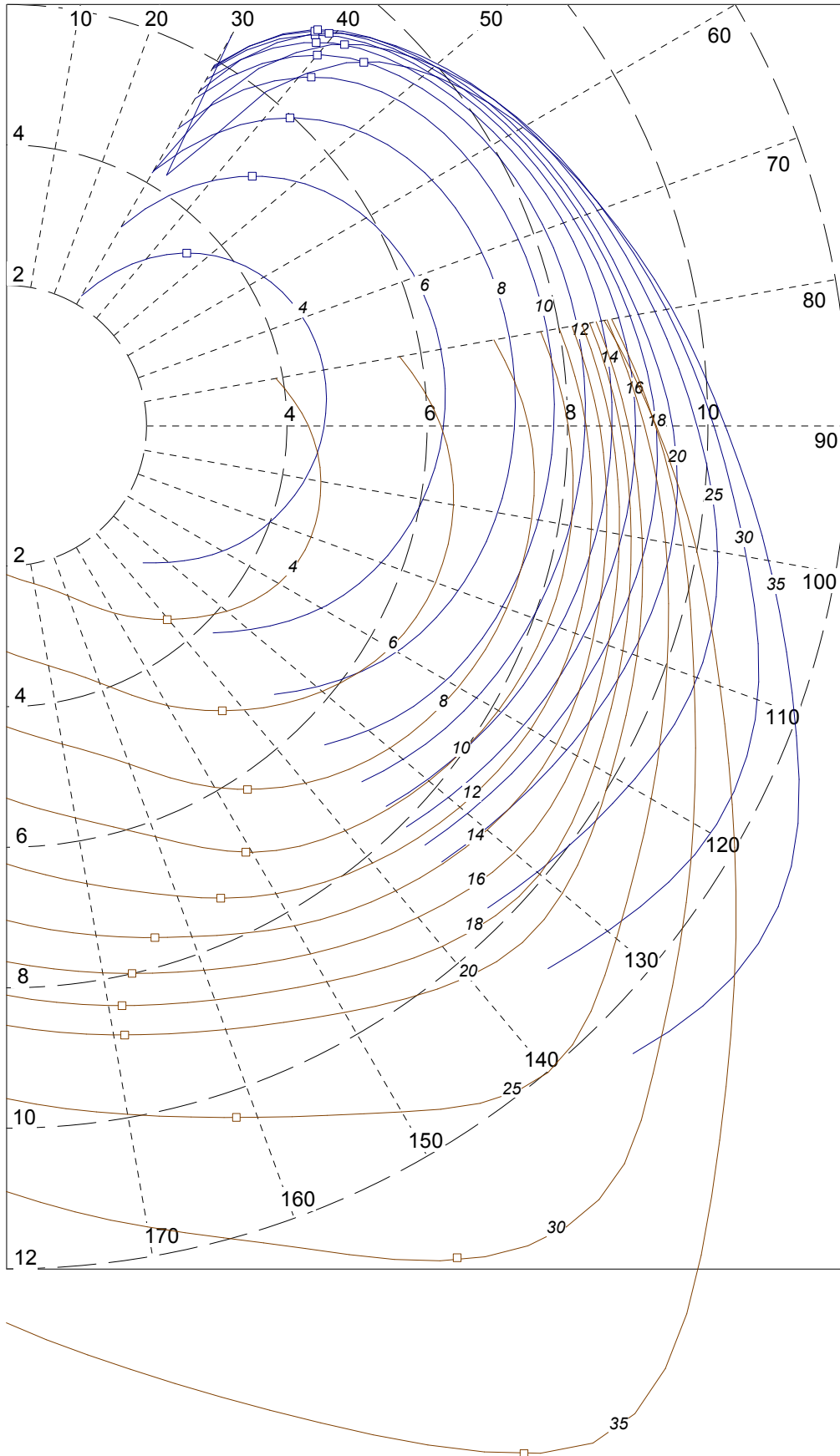
Times for 1 nm (secs)

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.

**Design 608 - First 40, fin keel, carbon rig
For Beneteau**



Best Boatspeeds (kt)

	4	6	8	10	12	14	16	18	20	25	30	35
30.0	2.14	3.27	4.19	4.89	5.38	5.69	5.86	5.93	5.89	5.50	4.16	6.42
33.0	2.46	3.72	4.72	5.49	5.97	6.25	6.41	6.48	6.48	6.27	5.62	4.15
36.0	2.75	4.11	5.18	5.97	6.42	6.69	6.84	6.91	6.93	6.80	6.38	5.35
39.0	3.02	4.45	5.57	6.36	6.79	7.03	7.16	7.23	7.26	7.20	6.92	6.28
42.0	3.26	4.76	5.90	6.68	7.08	7.29	7.40	7.46	7.50	7.48	7.32	6.90
45.0	3.47	5.03	6.18	6.94	7.30	7.48	7.59	7.65	7.69	7.71	7.60	7.34
50.0	3.79	5.41	6.55	7.25	7.58	7.74	7.84	7.92	7.97	8.02	7.97	7.82
60.0	4.24	5.93	7.00	7.60	7.96	8.15	8.27	8.36	8.43	8.54	8.56	8.50
70.0	4.50	6.20	7.21	7.77	8.17	8.45	8.61	8.71	8.80	8.96	9.04	9.05
80.0	4.59	6.29	7.28	7.83	8.26	8.61	8.87	9.02	9.14	9.39	9.55	9.63
90.0	4.53	6.23	7.45	8.01	8.26	8.63	8.97	9.26	9.50	9.84	10.08	10.25
100.0	4.55	6.47	7.60	8.17	8.47	8.68	8.91	9.28	9.63	10.29	10.71	11.03
110.0	4.62	6.51	7.59	8.21	8.63	8.89	9.13	9.35	9.56	10.48	11.39	11.95
120.0	4.48	6.32	7.44	8.10	8.63	9.06	9.39	9.68	9.94	10.61	11.59	12.87
130.0	4.10	5.88	7.13	7.86	8.44	8.94	9.45	9.92	10.34	11.35	12.39	13.48
135.0	3.85	5.59	6.91	7.70	8.29	8.80	9.32	9.86	10.40	11.78	13.03	14.37
140.0	3.59	5.27	6.64	7.52	8.12	8.64	9.13	9.67	10.23	12.01	13.70	15.40
150.0	3.07	4.59	5.94	7.00	7.69	8.21	8.67	9.13	9.64	11.27	13.65	16.72
160.0	2.57	3.89	5.12	6.22	7.12	7.73	8.24	8.69	9.14	10.47	12.46	15.28
170.0	2.28	3.46	4.59	5.66	6.61	7.36	7.90	8.37	8.80	9.95	11.57	13.84
180.0	2.11	3.21	4.28	5.29	6.23	7.03	7.62	8.10	8.53	9.57	10.89	12.76
Up.Vs(kt/s)	3.56	4.99	5.96	6.60	6.89	7.02	7.09	7.13	7.18	7.24	7.26	7.26
Up.Vs(s/m)	1011.7	721.1	603.8	545.6	522.4	512.7	507.4	504.7	501.7	497.5	495.8	495.6
Up.Vs(s/L)	6.7	4.8	4.0	3.6	3.5	3.4	3.4	3.3	3.3	3.3	3.3	3.3
Up.Bt	46.3	44.6	42.6	41.2	40.0	39.0	38.3	38.0	38.2	39.4	41.6	44.5
Up.Vmg(kt/s)	2.46	3.56	4.39	4.97	5.28	5.46	5.57	5.62	5.64	5.59	5.43	5.18
Up.Vmg(s/m)	1463.2	1012.3	820.9	725.0	682.0	659.3	646.6	640.8	638.4	644.2	663.0	695.1
Up.Heel	2.5	5.4	9.2	14.5	19.6	21.5	23.0	23.8	24.1	24.6	24.9	25.4
Up.Reef	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.92	0.80	0.70	0.62
Up.Flat	1.00	1.00	1.00	1.00	0.93	0.80	0.69	0.65	0.65	0.67	0.73	0.80
Up.Va	6.95	10.17	13.00	15.50	17.65	19.69	21.67	23.60	25.53	30.22	34.76	39.11
Up.Ba	24.5	24.3	24.3	24.3	24.3	24.6	24.9	25.5	26.2	28.5	31.3	34.5
Up.Leewy	2.02	2.16	2.45	2.88	3.32	3.45	3.58	3.75	3.91	4.33	4.79	5.29
Dn.Vs(kt/s)	3.58	5.09	6.21	6.96	7.38	7.58	7.99	8.41	8.83	10.37	13.46	16.38
Dn.Vs(s/m)	1005.4	707.7	580.0	517.2	487.7	474.9	450.4	428.0	407.8	347.2	267.4	219.8
Dn.Vs(s/L)	6.6	4.7	3.8	3.4	3.2	3.1	3.0	2.8	2.7	2.3	1.8	1.5
Dn.Bt	140.2	142.8	146.4	150.6	155.6	163.8	167.1	168.7	169.0	161.6	151.5	153.2
Dn.Vmg(kt/s)	2.75	4.05	5.17	6.07	6.72	7.28	7.79	8.25	8.67	9.84	11.83	14.63
Dn.Vmg(s/m)	1308.0	888.5	696.2	593.4	535.8	494.6	462.2	436.5	415.4	366.0	304.2	246.1
Dn.Heel	0.7	1.3	1.7	1.7	1.5	1.1	1.1	1.3	1.6	4.9	14.1	18.5
Dn.Reef	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Dn.Flat	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Dn.Va	2.61	3.64	4.45	5.21	6.10	7.05	8.40	9.89	11.46	15.50	18.95	21.08
Dn.Ba	78.8	85.1	95.9	109.7	125.5	146.3	154.8	159.1	160.5	149.5	132.9	134.9
Dn.Leewy	0.48	0.43	0.36	0.28	0.21	0.15	0.13	0.13	0.15	0.30	0.36	0.23

Best Performance

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	4.0	30.0	2.141	1.854	1.7	1.000	1.000	5.95	19.6	3.85	Up	605T
	4.0	33.0	2.459	2.063	1.9	1.000	1.000	6.21	20.5	3.23	Up	605T
	4.0	36.0	2.750	2.225	2.0	1.000	1.000	6.43	21.4	2.81	Up	605T
	4.0	39.0	3.016	2.344	2.2	1.000	1.000	6.62	22.3	2.51	Up	605T
	4.0	42.0	3.257	2.421	2.3	1.000	1.000	6.78	23.2	2.28	Up	605T
	4.0	45.0	3.475	2.457	2.4	1.000	1.000	6.91	24.1	2.09	Up	605T
OptUp >	4.0	46.3	3.558	2.460	2.5	1.000	1.000	6.95	24.5	2.02	Up	605T
	4.0	50.0	3.788	2.435	2.6	1.000	1.000	7.06	25.7	1.85	Up	605T
	4.0	60.0	4.241	2.121	2.6	1.000	1.000	7.14	29.0	1.52	Up	605T
	4.0	70.0	4.501	1.539	2.5	1.000	1.000	6.97	32.6	1.27	Up	605T
	4.0	80.0	4.592	0.797	2.2	1.000	1.000	6.59	36.7	1.07	Up	605T
	4.0	90.0	4.530	-0.000	1.8	1.000	1.000	6.04	41.4	0.90	Up	605T
	4.0	100.0	4.552	-0.790	2.6	1.000	1.000	5.51	45.6	1.08	Dn	605T
	4.0	110.0	4.620	-1.580	2.4	1.000	1.000	4.97	49.1	0.96	Dn	605T
	4.0	120.0	4.480	-2.240	2.0	1.000	1.000	4.26	54.4	0.83	Dn	605T
	4.0	130.0	4.100	-2.635	1.3	1.000	1.000	3.42	63.5	0.67	Dn	605T
	4.0	135.0	3.852	-2.723	1.0	1.000	1.000	3.01	70.1	0.58	Dn	605T
	4.0	140.0	3.593	-2.752	0.7	1.000	1.000	2.62	78.4	0.49	Dn	605T
OptDn >	4.0	140.2	3.581	2.752	0.7	1.000	1.000	2.61	78.8	0.48	Dn	605T
	4.0	150.0	3.073	-2.662	0.3	1.000	1.000	2.04	101.1	0.30	Dn	605T
	4.0	160.0	2.569	-2.414	0.1	1.000	1.000	1.81	131.0	0.15	Dn	605T
	4.0	170.0	2.281	-2.246	0.0	1.000	1.000	1.80	157.3	0.07	Dn	605T
	4.0	180.0	2.115	-2.115	0.0	1.000	1.000	1.89	180.0	-0.00	Dn	605T
	6.0	30.0	3.274	2.835	3.9	1.000	1.000	8.98	19.5	3.73	Up	605T
	6.0	33.0	3.722	3.121	4.3	1.000	1.000	9.34	20.4	3.17	Up	605T
	6.0	36.0	4.111	3.326	4.6	1.000	1.000	9.63	21.4	2.80	Up	605T
	6.0	39.0	4.454	3.462	4.9	1.000	1.000	9.86	22.4	2.53	Up	605T
	6.0	42.0	4.759	3.536	5.2	1.000	1.000	10.05	23.4	2.31	Up	605T
OptUp >	6.0	44.6	4.992	3.556	5.4	1.000	1.000	10.17	24.3	2.16	Up	605T
	6.0	45.0	5.030	3.557	5.4	1.000	1.000	10.19	24.5	2.14	Up	605T
	6.0	50.0	5.411	3.478	5.6	1.000	1.000	10.34	26.3	1.90	Up	605T
	6.0	60.0	5.926	2.963	5.6	1.000	1.000	10.32	30.1	1.57	Up	605T
	6.0	70.0	6.198	2.120	5.1	1.000	1.000	9.98	34.2	1.31	Up	605T
	6.0	80.0	6.290	1.092	4.4	1.000	1.000	9.41	38.8	1.10	Up	605T
	6.0	90.0	6.231	-0.000	3.6	1.000	1.000	8.64	43.9	0.92	Up	605T
	6.0	100.0	6.469	-1.123	6.2	1.000	1.000	8.00	47.3	1.16	Dn	605T
	6.0	110.0	6.510	-2.226	5.5	1.000	1.000	7.17	51.5	1.02	Dn	605T
	6.0	120.0	6.318	-3.159	4.3	1.000	1.000	6.15	57.4	0.86	Dn	605T
	6.0	130.0	5.877	-3.778	2.9	1.000	1.000	5.02	66.2	0.67	Dn	605T
	6.0	135.0	5.592	-3.954	2.2	1.000	1.000	4.45	72.3	0.58	Dn	605T
	6.0	140.0	5.274	-4.040	1.6	1.000	1.000	3.91	80.0	0.48	Dn	605T
OptDn >	6.0	142.8	5.087	4.052	1.3	1.000	1.000	3.64	85.1	0.43	Dn	605T
	6.0	150.0	4.592	-3.977	0.7	1.000	1.000	3.06	101.4	0.29	Dn	605T
	6.0	160.0	3.890	-3.655	0.3	1.000	1.000	2.70	130.4	0.14	Dn	605T
	6.0	170.0	3.460	-3.408	0.1	1.000	1.000	2.66	156.9	0.07	Dn	605T
	6.0	180.0	3.211	-3.211	0.0	1.000	1.000	2.79	180.0	-0.00	Dn	605T

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
OptUp >	8.0	30.0	4.191	3.630	6.9	1.000	1.000	11.81	19.7	3.94	Up	605T
	8.0	33.0	4.721	3.959	7.6	1.000	1.000	12.22	20.7	3.37	Up	605T
	8.0	36.0	5.177	4.188	8.2	1.000	1.000	12.54	21.8	2.99	Up	605T
	8.0	39.0	5.570	4.329	8.7	1.000	1.000	12.79	22.9	2.70	Up	605T
	8.0	42.0	5.900	4.384	9.1	1.000	1.000	12.97	24.0	2.49	Up	605T
	8.0	42.6	5.962	4.385	9.2	1.000	1.000	13.00	24.3	2.45	Up	605T
	8.0	45.0	6.177	4.368	9.4	1.000	1.000	13.08	25.3	2.31	Up	605T
	8.0	50.0	6.546	4.208	9.6	1.000	1.000	13.16	27.3	2.07	Up	605T
	8.0	60.0	7.005	3.502	9.1	1.000	1.000	12.96	31.9	1.72	Up	605T
	8.0	70.0	7.214	2.467	8.1	1.000	1.000	12.43	36.8	1.44	Up	605T
OptDn >	8.0	80.0	7.279	1.264	6.7	1.000	1.000	11.68	42.1	1.20	Up	605T
	8.0	90.0	7.447	-0.000	12.1	1.000	1.000	10.80	46.4	1.55	Dn	605T
	8.0	100.0	7.603	-1.320	11.5	1.000	1.000	9.91	51.2	1.41	Dn	605T
	8.0	110.0	7.591	-2.596	9.5	1.000	1.000	8.86	56.8	1.19	Dn	605T
	8.0	120.0	7.436	-3.718	7.0	1.000	1.000	7.69	63.4	0.94	Dn	605T
	8.0	130.0	7.131	-4.584	4.7	1.000	1.000	6.42	72.0	0.70	Dn	605T
	8.0	135.0	6.911	-4.887	3.6	1.000	1.000	5.78	77.5	0.59	Dn	605T
	8.0	140.0	6.635	-5.083	2.7	1.000	1.000	5.16	84.4	0.49	Dn	605T
	8.0	146.4	6.207	5.171	1.7	1.000	1.000	4.45	95.9	0.36	Dn	605T
	8.0	150.0	5.941	-5.145	1.3	1.000	1.000	4.12	103.9	0.29	Dn	605T
OptUp >	8.0	160.0	5.121	-4.812	0.0	1.000	1.000	3.64	131.2	0.14	Dn	605T
	8.0	170.0	4.594	-4.524	0.0	1.000	1.000	3.57	157.1	0.07	Dn	605T
	8.0	180.0	4.278	-4.278	0.0	1.000	1.000	3.72	180.0	-0.00	Dn	605T
	10.0	30.0	4.886	4.231	11.0	1.000	1.000	14.41	19.9	4.37	Up	605T
	10.0	33.0	5.490	4.605	12.2	1.000	1.000	14.86	21.0	3.74	Up	605T
	10.0	36.0	5.970	4.830	13.3	1.000	1.000	15.18	22.1	3.34	Up	605T
	10.0	39.0	6.359	4.942	14.1	1.000	1.000	15.39	23.4	3.05	Up	605T
	10.0	41.2	6.598	4.965	14.5	1.000	1.000	15.50	24.3	2.88	Up	605T
	10.0	42.0	6.680	4.964	14.6	1.000	1.000	15.53	24.6	2.83	Up	605T
	10.0	45.0	6.937	4.905	15.0	1.000	1.000	15.59	26.0	2.64	Up	605T
OptDn >	10.0	50.0	7.248	4.659	14.9	1.000	1.000	15.55	28.4	2.39	Up	605T
	10.0	60.0	7.598	3.799	13.4	1.000	1.000	15.16	33.8	1.98	Up	605T
	10.0	70.0	7.767	2.656	11.3	1.000	1.000	14.49	39.5	1.64	Up	605T
	10.0	80.0	7.827	1.359	9.2	1.000	1.000	13.64	45.5	1.35	Up	605T
	10.0	90.0	8.008	-0.000	21.5	1.000	1.000	12.28	49.3	2.06	Dn	605T
	10.0	100.0	8.173	-1.419	19.1	1.000	1.000	11.31	55.3	1.77	Dn	605T
	10.0	110.0	8.206	-2.807	14.4	1.000	1.000	10.28	62.3	1.41	Dn	605T
	10.0	120.0	8.095	-4.048	10.0	1.000	1.000	9.07	70.1	1.07	Dn	605T
	10.0	130.0	7.860	-5.052	6.6	1.000	1.000	7.74	79.3	0.78	Dn	605T
	10.0	135.0	7.704	-5.447	5.1	1.000	1.000	7.07	84.9	0.64	Dn	605T
OptDn >	10.0	140.0	7.518	-5.759	3.9	1.000	1.000	6.41	91.3	0.52	Dn	605T
	10.0	150.0	7.003	-6.065	1.8	1.000	1.000	5.26	108.3	0.30	Dn	605T
	10.0	150.6	6.960	6.066	1.7	1.000	1.000	5.21	109.7	0.28	Dn	605T
	10.0	160.0	6.224	-5.849	0.7	1.000	1.000	4.66	132.9	0.15	Dn	605T
	10.0	170.0	5.663	-5.577	0.0	1.000	1.000	4.53	157.5	0.07	Dn	605T
	10.0	180.0	5.295	-5.295	0.0	1.000	1.000	4.71	180.0	-0.00	Dn	605T

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
OptUp >	12.0	30.0	5.384	4.663	15.1	1.000	0.917	16.81	20.2	4.59	Up	605T
	12.0	33.0	5.966	5.004	16.8	1.000	0.920	17.21	21.3	4.02	Up	605T
	12.0	36.0	6.420	5.194	18.2	1.000	0.922	17.47	22.6	3.64	Up	605T
	12.0	39.0	6.786	5.274	19.2	1.000	0.927	17.62	23.9	3.38	Up	605T
	12.0	40.0	6.891	5.278	19.6	1.000	0.931	17.65	24.3	3.32	Up	605T
	12.0	42.0	7.080	5.261	20.2	1.000	0.940	17.68	25.2	3.21	Up	605T
	12.0	45.0	7.303	5.164	20.9	1.000	0.957	17.67	26.7	3.08	Up	605T
	12.0	50.0	7.582	4.874	21.8	1.000	0.994	17.52	29.2	2.92	Up	605T
	12.0	60.0	7.958	3.979	19.3	1.000	1.000	17.06	35.1	2.37	Up	605T
	12.0	70.0	8.172	2.795	15.7	1.000	1.000	16.39	41.5	1.89	Up	605T
OptDn >	12.0	80.0	8.259	1.434	12.2	1.000	1.000	15.51	48.2	1.52	Up	605T
	12.0	90.0	8.261	-0.000	23.1	0.908	1.000	13.78	53.2	2.21	Dn	605T
	12.0	100.0	8.466	-1.470	23.4	0.954	1.000	12.59	59.5	2.02	Dn	605T
	12.0	110.0	8.629	-2.951	21.0	1.000	1.000	11.46	66.7	1.68	Dn	605T
	12.0	120.0	8.628	-4.314	14.1	1.000	1.000	10.42	75.4	1.22	Dn	605T
	12.0	130.0	8.437	-5.423	8.8	1.000	1.000	9.11	85.4	0.87	Dn	605T
	12.0	135.0	8.293	-5.864	6.8	1.000	1.000	8.43	91.3	0.71	Dn	605T
	12.0	140.0	8.121	-6.221	5.1	1.000	1.000	7.76	97.9	0.57	Dn	605T
	12.0	150.0	7.686	-6.656	2.4	1.000	1.000	6.58	114.3	0.32	Dn	605T
	12.0	155.6	7.381	6.719	1.5	1.000	1.000	6.10	125.5	0.21	Dn	605T
OptUp >	12.0	160.0	7.117	-6.687	1.0	1.000	1.000	5.84	135.4	0.16	Dn	605T
	12.0	170.0	6.612	-6.512	0.0	1.000	1.000	5.61	158.2	0.08	Dn	605T
	12.0	180.0	6.230	-6.230	0.0	1.000	1.000	5.77	180.0	-0.00	Dn	605T
	14.0	30.0	5.692	4.929	17.9	1.000	0.797	19.02	20.5	4.67	Up	605T
	14.0	33.0	6.249	5.241	19.4	1.000	0.793	19.37	21.8	4.09	Up	605T
	14.0	36.0	6.685	5.408	20.6	1.000	0.791	19.59	23.2	3.70	Up	605T
	14.0	39.0	7.022	5.460	21.5	1.000	0.796	19.69	24.6	3.45	Up	605T
	14.0	39.0	7.029	5.462	21.5	1.000	0.796	19.70	24.6	3.44	Up	605T
	14.0	42.0	7.286	5.414	22.4	1.000	0.809	19.70	26.1	3.28	Up	605T
	14.0	45.0	7.484	5.292	22.9	1.000	0.825	19.63	27.7	3.16	Up	605T
OptDn >	14.0	50.0	7.742	4.977	23.6	1.000	0.859	19.41	30.4	3.01	Up	605T
	14.0	60.0	8.146	4.073	24.3	1.000	0.955	18.75	36.1	2.75	Up	605T
	14.0	70.0	8.453	2.891	21.2	1.000	1.000	18.05	42.8	2.24	Up	605T
	14.0	80.0	8.608	1.495	16.2	1.000	1.000	17.24	50.2	1.73	Up	605T
	14.0	90.0	8.631	-0.000	11.8	1.000	1.000	16.19	57.8	1.35	Up	605T
	14.0	100.0	8.684	-1.508	23.7	0.880	1.000	14.09	63.7	2.05	Dn	605T
	14.0	110.0	8.894	-3.042	24.0	0.954	1.000	12.70	71.1	1.83	Dn	605T
	14.0	120.0	9.056	-4.528	19.6	1.000	1.000	11.61	79.8	1.41	Dn	605T
	14.0	130.0	8.943	-5.748	11.6	1.000	1.000	10.50	90.3	0.96	Dn	605T
	14.0	135.0	8.804	-6.226	8.8	1.000	1.000	9.84	96.4	0.78	Dn	605T
OptDn >	14.0	140.0	8.636	-6.616	6.5	1.000	1.000	9.18	103.1	0.62	Dn	605T
	14.0	150.0	8.213	-7.112	3.1	1.000	1.000	8.01	119.2	0.35	Dn	605T
	14.0	160.0	7.732	-7.266	1.4	1.000	1.000	7.23	138.6	0.19	Dn	605T
	14.0	163.8	7.580	7.279	1.1	1.000	1.000	7.05	146.3	0.15	Dn	605T
	14.0	170.0	7.356	-7.245	0.0	1.000	1.000	6.87	159.3	0.09	Dn	605T
	14.0	180.0	7.032	-7.032	0.0	1.000	1.000	6.97	180.0	-0.00	Dn	605T

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
OptUp >	16.0	30.0	5.864	5.078	20.0	1.000	0.691	21.11	20.9	4.81	Up	605T
	16.0	33.0	6.414	5.379	21.3	1.000	0.685	21.43	22.3	4.19	Up	605T
	16.0	36.0	6.839	5.533	22.4	1.000	0.684	21.61	23.7	3.79	Up	605T
	16.0	38.3	7.095	5.567	23.0	1.000	0.688	21.67	24.9	3.58	Up	605T
	16.0	39.0	7.163	5.567	23.3	1.000	0.691	21.67	25.3	3.55	Up	605T
	16.0	42.0	7.400	5.499	23.9	1.000	0.702	21.63	26.9	3.38	Up	605T
	16.0	45.0	7.587	5.365	24.1	0.982	0.746	21.54	28.7	3.26	Up	605T
	16.0	50.0	7.844	5.042	24.2	0.952	0.836	21.30	31.7	3.10	Up	605T
	16.0	60.0	8.266	4.133	24.2	0.921	1.000	20.60	37.8	2.82	Up	605T
	16.0	70.0	8.605	2.943	24.5	0.973	1.000	19.63	44.2	2.50	Up	605T
	16.0	80.0	8.865	1.539	21.1	1.000	1.000	18.76	51.6	2.00	Up	605T
OptDn >	16.0	90.0	8.967	-0.000	15.1	1.000	1.000	17.86	59.9	1.50	Up	605T
	16.0	100.0	8.912	-1.548	10.5	1.000	1.000	16.66	68.4	1.14	Up	605T
	16.0	110.0	9.128	-3.122	24.4	0.889	1.000	14.18	75.1	1.85	Dn	605T
	16.0	120.0	9.393	-4.696	24.9	0.991	1.000	12.65	83.7	1.61	Dn	605T
	16.0	130.0	9.450	-6.075	15.5	1.000	1.000	11.84	94.0	1.05	Dn	605T
	16.0	135.0	9.320	-6.590	11.2	1.000	1.000	11.27	100.2	0.85	Dn	605T
	16.0	140.0	9.129	-6.993	8.1	1.000	1.000	10.65	107.1	0.67	Dn	605T
	16.0	150.0	8.675	-7.513	3.9	1.000	1.000	9.52	123.0	0.38	Dn	605T
	16.0	160.0	8.240	-7.743	2.0	1.000	1.000	8.72	141.2	0.22	Dn	605T
	16.0	167.1	7.993	7.790	1.1	1.000	1.000	8.40	154.8	0.13	Dn	605T
	16.0	170.0	7.901	-7.781	0.0	1.000	1.000	8.33	160.5	0.10	Dn	605T
	16.0	180.0	7.622	-7.622	0.0	1.000	1.000	8.38	180.0	-0.00	Dn	605T
OptUp >	18.0	30.0	5.927	5.133	21.5	1.000	0.603	23.09	21.3	5.01	Up	605T
	18.0	33.0	6.483	5.437	22.7	1.000	0.597	23.40	22.7	4.34	Up	605T
	18.0	36.0	6.909	5.590	23.4	0.982	0.621	23.57	24.3	3.92	Up	605T
	18.0	38.0	7.132	5.618	23.8	0.967	0.649	23.60	25.5	3.75	Up	605T
	18.0	39.0	7.228	5.617	23.9	0.959	0.664	23.61	26.0	3.68	Up	605T
	18.0	42.0	7.464	5.547	24.1	0.936	0.713	23.56	27.8	3.51	Up	605T
	18.0	45.0	7.654	5.412	24.3	0.919	0.759	23.45	29.7	3.38	Up	605T
	18.0	50.0	7.918	5.090	24.4	0.895	0.842	23.18	32.8	3.21	Up	605T
	18.0	60.0	8.359	4.180	24.5	0.870	1.000	22.42	39.3	2.90	Up	605T
	18.0	70.0	8.715	2.981	24.7	0.920	1.000	21.38	45.9	2.56	Up	605T
	18.0	80.0	9.025	1.567	24.9	0.985	1.000	20.16	52.9	2.26	Up	605T
OptDn >	18.0	90.0	9.263	-0.000	19.2	1.000	1.000	19.36	61.4	1.68	Up	605T
	18.0	100.0	9.276	-1.611	12.9	1.000	1.000	18.34	70.4	1.24	Up	605T
	18.0	110.0	9.351	-3.198	24.7	0.832	1.000	15.69	78.3	1.87	Dn	605T
	18.0	120.0	9.678	-4.839	25.4	0.931	1.000	14.10	87.2	1.60	Dn	605T
	18.0	130.0	9.924	-6.379	20.1	1.000	1.000	13.05	97.2	1.15	Dn	605T
	18.0	135.0	9.857	-6.970	14.4	1.000	1.000	12.66	103.1	0.90	Dn	605T
	18.0	140.0	9.666	-7.405	10.1	1.000	1.000	12.11	109.9	0.71	Dn	605T
	18.0	150.0	9.132	-7.909	4.9	1.000	1.000	11.05	125.8	0.42	Dn	605T
	18.0	160.0	8.691	-8.167	2.6	1.000	1.000	10.27	143.2	0.25	Dn	605T
	18.0	168.7	8.411	8.248	1.3	1.000	1.000	9.89	159.1	0.13	Dn	605T
	18.0	170.0	8.373	-8.245	0.0	1.000	1.000	9.86	161.5	0.12	Dn	605T
	18.0	180.0	8.100	-8.100	0.0	1.000	1.000	9.90	180.0	-0.00	Dn	605T

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
OptUp >	20.0	30.0	5.895	5.105	22.4	0.989	0.543	24.99	21.7	5.32	Up	605T
	20.0	33.0	6.482	5.436	23.1	0.954	0.584	25.32	23.3	4.56	Up	605T
	20.0	36.0	6.932	5.608	23.7	0.927	0.625	25.50	25.0	4.12	Up	605T
	20.0	38.2	7.175	5.640	24.1	0.917	0.646	25.53	26.2	3.91	Up	605T
	20.0	39.0	7.257	5.640	24.2	0.914	0.653	25.53	26.7	3.84	Up	605T
	20.0	42.0	7.499	5.573	24.4	0.891	0.705	25.47	28.6	3.66	Up	605T
	20.0	45.0	7.694	5.440	24.5	0.869	0.762	25.35	30.5	3.52	Up	605T
	20.0	50.0	7.969	5.123	24.5	0.840	0.863	25.06	33.8	3.33	Up	605T
	20.0	60.0	8.431	4.216	24.6	0.825	1.000	24.24	40.5	2.98	Up	605T
	20.0	70.0	8.804	3.011	24.9	0.873	1.000	23.13	47.4	2.63	Up	605T
	20.0	80.0	9.145	1.588	25.0	0.936	1.000	21.86	54.7	2.30	Up	605T
	20.0	90.0	9.496	-0.000	23.5	1.000	1.000	20.65	62.6	1.89	Up	605T
OptDn >	20.0	100.0	9.632	-1.673	16.1	1.000	1.000	19.90	72.0	1.34	Up	605T
	20.0	110.0	9.562	-3.270	25.1	0.783	1.000	17.24	80.9	1.89	Dn	605T
	20.0	120.0	9.943	-4.971	25.9	0.879	1.000	15.58	90.2	1.61	Dn	605T
	20.0	130.0	10.345	-6.650	25.1	1.000	1.000	14.10	100.3	1.26	Dn	605T
	20.0	135.0	10.400	-7.354	18.5	1.000	1.000	13.93	105.6	0.95	Dn	605T
	20.0	140.0	10.231	-7.838	12.6	1.000	1.000	13.54	112.1	0.74	Dn	605T
	20.0	150.0	9.637	-8.346	6.1	1.000	1.000	12.57	127.7	0.45	Dn	605T
	20.0	160.0	9.140	-8.588	3.3	1.000	1.000	11.83	144.7	0.28	Dn	605T
	20.0	169.0	8.829	8.666	1.6	1.000	1.000	11.46	160.5	0.15	Dn	605T
	20.0	170.0	8.798	-8.664	0.0	1.000	1.000	11.44	162.3	0.13	Dn	605T
	20.0	180.0	8.526	-8.526	0.0	1.000	1.000	11.47	180.0	-0.00	Dn	605T
OptUp >	25.0	30.0	5.504	4.767	22.7	0.896	0.510	29.50	23.0	6.75	Up	605T
	25.0	33.0	6.267	5.256	23.5	0.858	0.560	29.96	24.6	5.44	Up	605T
	25.0	36.0	6.798	5.500	24.2	0.829	0.609	30.16	26.4	4.78	Up	605T
	25.0	39.0	7.197	5.593	24.6	0.802	0.666	30.23	28.3	4.36	Up	605T
	25.0	39.4	7.236	5.589	24.6	0.799	0.675	30.22	28.5	4.33	Up	605T
	25.0	42.0	7.482	5.560	24.7	0.779	0.726	30.17	30.2	4.11	Up	605T
	25.0	45.0	7.706	5.449	24.8	0.758	0.789	30.03	32.3	3.92	Up	605T
	25.0	50.0	8.019	5.155	24.8	0.731	0.896	29.71	35.8	3.67	Up	605T
	25.0	60.0	8.539	4.269	25.1	0.730	1.000	28.76	43.0	3.21	Up	605T
	25.0	70.0	8.962	3.065	25.4	0.775	1.000	27.51	50.5	2.81	Up	605T
	25.0	80.0	9.388	1.630	25.6	0.832	1.000	26.10	58.3	2.43	Up	605T
	25.0	90.0	9.842	-0.000	26.0	0.911	1.000	24.53	66.3	2.07	Up	605T
OptDn >	25.0	100.0	10.293	-1.787	25.4	1.000	1.000	23.02	75.0	1.69	Up	605T
	25.0	110.0	10.480	-3.584	17.2	1.000	1.000	22.53	85.1	1.16	Up	605T
	25.0	120.0	10.611	-5.305	27.2	0.773	1.000	19.35	95.6	1.59	Dn	605T
	25.0	130.0	11.347	-7.294	28.7	0.908	1.000	17.45	105.7	1.23	Dn	605T
	25.0	135.0	11.779	-8.329	29.6	1.000	1.000	16.47	111.0	1.05	Dn	605T
	25.0	140.0	12.010	-9.200	21.6	1.000	1.000	16.56	115.5	0.73	Dn	605T
	25.0	150.0	11.272	-9.762	10.0	1.000	1.000	16.10	130.1	0.46	Dn	605T
	25.0	160.0	10.467	-9.836	5.5	1.000	1.000	15.56	146.8	0.32	Dn	605T
	25.0	161.6	10.369	9.837	4.9	1.000	1.000	15.50	149.5	0.30	Dn	605T
	25.0	170.0	9.947	-9.796	0.0	1.000	1.000	15.30	163.5	0.16	Dn	605T
	25.0	180.0	9.569	-9.569	0.0	1.000	1.000	15.43	180.0	-0.00	Dn	605T

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
OptUp >	30.0	30.0	4.159	3.602	20.7	0.845	0.457	33.24	25.0	12.08	Up	605T
	30.0	33.0	5.620	4.713	23.8	0.781	0.552	34.22	25.9	7.45	Up	605T
	30.0	36.0	6.377	5.159	24.4	0.747	0.612	34.60	27.7	5.98	Up	605T
	30.0	39.0	6.923	5.380	24.7	0.719	0.672	34.76	29.6	5.19	Up	605T
	30.0	41.6	7.260	5.430	24.9	0.699	0.728	34.76	31.3	4.79	Up	605T
	30.0	42.0	7.317	5.438	25.0	0.696	0.737	34.76	31.6	4.72	Up	605T
	30.0	45.0	7.600	5.374	25.1	0.677	0.803	34.63	33.7	4.44	Up	605T
	30.0	50.0	7.970	5.123	25.2	0.653	0.911	34.28	37.3	4.09	Up	605T
	30.0	60.0	8.560	4.280	25.6	0.656	1.000	33.23	44.8	3.52	Up	605T
	30.0	70.0	9.041	3.092	26.0	0.696	1.000	31.85	52.7	3.05	Up	605T
	30.0	80.0	9.550	1.658	26.4	0.750	1.000	30.31	60.9	2.60	Up	605T
	30.0	90.0	10.083	-0.000	26.9	0.823	1.000	28.59	69.3	2.19	Up	605T
	30.0	100.0	10.708	-1.859	27.4	0.915	1.000	26.79	78.2	1.78	Up	605T
	30.0	110.0	11.394	-3.897	25.7	1.000	1.000	25.42	87.4	1.33	Up	605T
	30.0	120.0	11.592	-5.796	17.5	1.000	1.000	25.02	97.8	0.90	Up	605T
OptDn >	30.0	130.0	12.392	-7.966	30.4	0.819	1.000	20.99	109.2	1.10	Dn	605T
	30.0	135.0	13.034	-9.216	31.4	0.907	1.000	19.86	114.3	0.91	Dn	605T
	30.0	140.0	13.705	-10.498	31.5	1.000	1.000	18.88	119.4	0.71	Dn	605T
	30.0	150.0	13.650	-11.821	15.8	1.000	1.000	18.98	130.5	0.38	Dn	605T
	30.0	151.5	13.464	11.834	14.1	1.000	1.000	18.95	132.9	0.36	Dn	605T
	30.0	160.0	12.458	-11.707	8.1	1.000	1.000	18.73	147.2	0.28	Dn	605T
	30.0	170.0	11.573	-11.397	0.0	1.000	1.000	18.71	163.8	0.15	Dn	605T
	30.0	180.0	10.894	-10.894	0.0	1.000	1.000	19.11	180.0	-0.00	Dn	605T
	35.0	30.0	6.416	5.557	35.0	0.976	0.981	39.43	21.3	0.56	Up	605T
	35.0	33.0	4.145	3.476	24.3	0.716	0.439	37.74	27.4	11.90	Up	605T
OptUp >	35.0	36.0	5.351	4.329	24.0	0.686	0.607	38.56	29.2	9.13	Up	605T
	35.0	39.0	6.283	4.883	24.8	0.657	0.675	39.00	30.8	6.87	Up	605T
	35.0	42.0	6.899	5.127	25.2	0.634	0.740	39.14	32.8	5.80	Up	605T
	35.0	44.5	7.264	5.179	25.4	0.617	0.797	39.11	34.5	5.29	Up	605T
	35.0	45.0	7.338	5.189	25.4	0.614	0.807	39.10	34.9	5.19	Up	605T
	35.0	50.0	7.817	5.024	25.6	0.593	0.912	38.77	38.6	4.63	Up	605T
	35.0	60.0	8.504	4.252	26.2	0.595	1.000	37.63	46.3	3.90	Up	605T
	35.0	70.0	9.048	3.094	26.8	0.632	1.000	36.11	54.4	3.35	Up	605T
	35.0	80.0	9.631	1.672	27.3	0.682	1.000	34.42	62.8	2.83	Up	605T
	35.0	90.0	10.246	-0.000	28.0	0.750	1.000	32.56	71.7	2.36	Up	605T
	35.0	100.0	11.032	-1.916	28.7	0.835	1.000	30.65	80.7	1.87	Up	605T
	35.0	110.0	11.950	-4.087	29.1	0.936	1.000	28.75	90.0	1.41	Up	605T
	35.0	120.0	12.869	-6.434	25.2	1.000	1.000	27.81	99.6	0.92	Up	605T
	35.0	130.0	13.480	-8.665	32.0	0.749	1.000	24.46	111.6	0.98	Dn	605T
	35.0	135.0	14.375	-10.164	33.1	0.830	1.000	23.18	116.6	0.76	Dn	605T
	35.0	140.0	15.402	-11.799	33.9	0.923	1.000	21.87	121.4	0.57	Dn	605T
OptDn >	35.0	150.0	16.716	-14.476	23.4	1.000	1.000	21.04	130.3	0.26	Dn	605T
	35.0	153.2	16.380	14.626	18.5	1.000	1.000	21.08	134.9	0.23	Dn	605T
	35.0	160.0	15.278	-14.357	11.3	1.000	1.000	21.17	146.3	0.19	Dn	605T
	35.0	170.0	13.836	-13.625	4.7	1.000	1.000	21.50	163.6	0.12	Dn	605T
	35.0	180.0	12.764	-12.764	0.0	1.000	1.000	22.24	180.0	-0.00	Dn	605T

Best Performance (cont)
