

FARR[®]

PERFORMANCE PREDICTION



**DESIGN #374
Farr 40
With Masthead Spinnakers**

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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.

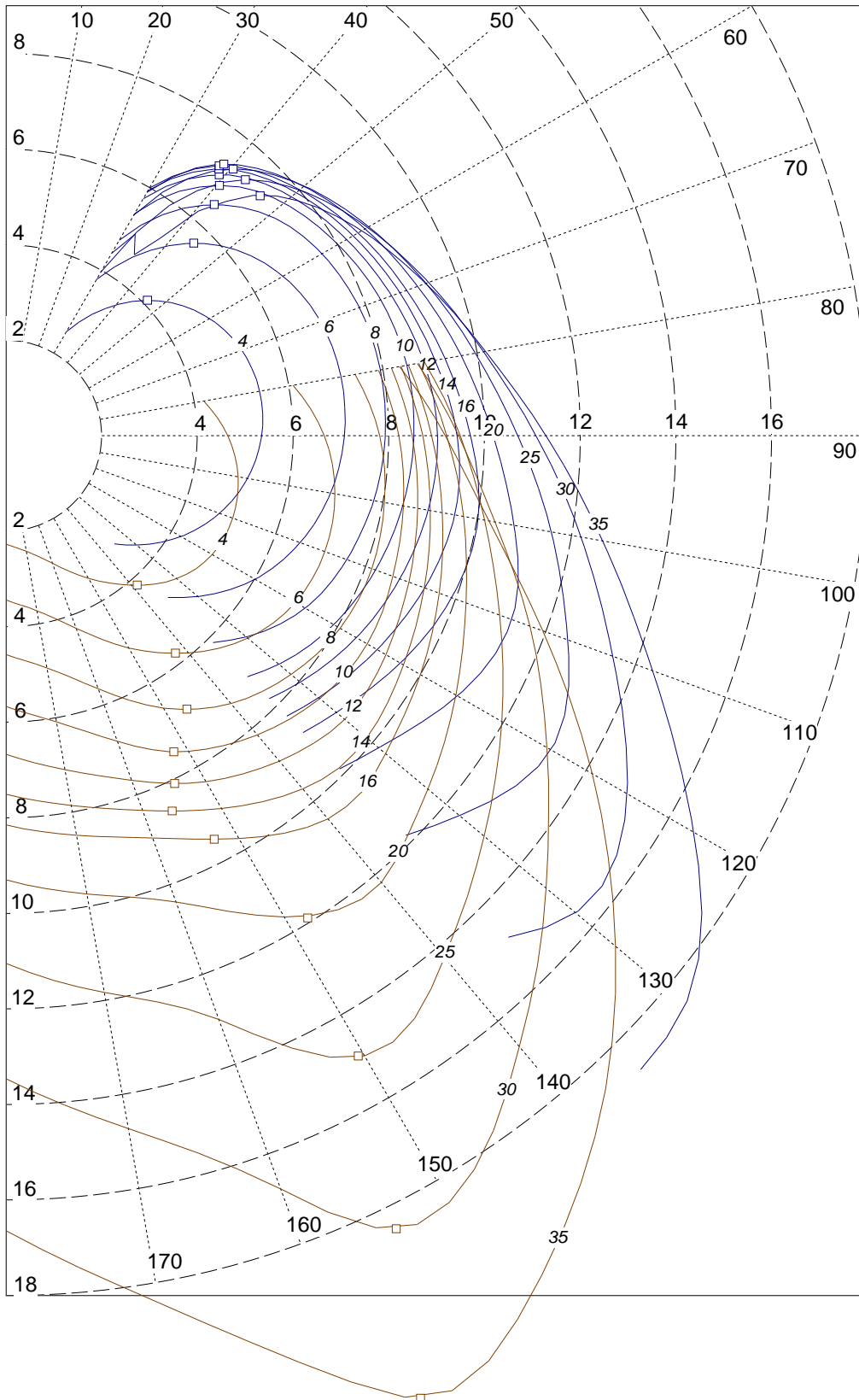
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Best Performance

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.

**Design 374 - 40 Foot One Design
with Masthead Spinnakers**



Best Boatspeeds (kt)

	4	6	8	10	12	14	16	20	25	30	35
30.0	2.51	3.77	4.73	5.38	5.73	5.92	5.99	5.88	5.33	3.95	4.42
33.0	2.86	4.25	5.30	5.93	6.26	6.44	6.51	6.49	6.14	5.21	5.01
36.0	3.19	4.68	5.78	6.37	6.68	6.86	6.94	6.97	6.72	6.09	4.63
39.0	3.49	5.06	6.17	6.73	7.03	7.19	7.28	7.32	7.17	6.72	5.73
42.0	3.76	5.40	6.51	7.04	7.30	7.44	7.52	7.59	7.50	7.21	6.50
45.0	4.01	5.70	6.80	7.28	7.51	7.64	7.73	7.81	7.76	7.56	7.09
50.0	4.37	6.11	7.17	7.58	7.78	7.92	8.01	8.12	8.13	8.01	7.73
60.0	4.91	6.68	7.62	8.01	8.22	8.38	8.50	8.66	8.75	8.72	8.59
70.0	5.24	6.99	7.85	8.33	8.57	8.76	8.91	9.15	9.34	9.39	9.33
75.0	5.34	7.07	7.91	8.44	8.73	8.93	9.11	9.40	9.64	9.75	9.74
80.0	5.38	7.11	7.94	8.50	8.87	9.10	9.31	9.66	9.96	10.13	10.17
90.0	5.34	7.07	7.92	8.52	9.02	9.43	9.71	10.18	10.70	11.08	11.28
100.0	5.12	6.98	8.03	8.43	8.96	9.52	10.02	10.78	11.57	12.20	12.66
110.0	5.04	7.09	8.13	8.60	8.96	9.31	9.91	11.25	12.49	13.49	14.38
120.0	4.97	6.98	8.06	8.71	9.16	9.59	10.00	10.89	13.15	14.98	16.59
130.0	4.65	6.59	7.77	8.55	9.23	9.84	10.35	11.51	13.04	15.53	18.53
135.0	4.39	6.29	7.57	8.38	9.10	9.83	10.52	11.85	13.63	15.70	18.75
140.0	4.08	5.93	7.31	8.17	8.88	9.64	10.46	12.20	14.25	16.68	19.14
150.0	3.44	5.13	6.58	7.62	8.35	9.01	9.73	11.62	14.99	18.52	21.36
160.0	2.84	4.29	5.63	6.80	7.67	8.34	8.96	10.38	13.00	16.77	21.08
170.0	2.45	3.72	4.93	6.08	7.09	7.85	8.49	9.74	11.83	14.72	18.43
180.0	2.27	3.43	4.57	5.67	6.67	7.50	8.14	9.29	11.05	13.46	16.64
Up.Vs(kts)	4.10	5.63	6.51	6.88	7.05	7.14	7.20	7.28	7.33	7.33	7.31
Up.Vs(s/m)	878.4	639.5	553.2	523.0	510.6	504.2	500.2	494.2	491.3	491.2	492.5
Up.Vs(s/L)	5.9	4.3	3.7	3.5	3.4	3.4	3.3	3.3	3.3	3.3	3.3
Up.Bt	46.2	44.3	42.0	40.4	39.2	38.5	38.2	38.7	40.4	43.1	46.6
Up.Vmg(kts)	2.84	4.03	4.84	5.24	5.46	5.59	5.65	5.68	5.58	5.36	5.02
Up.Vmg(s/m)	1269.1	893.0	744.2	687.1	658.9	644.6	636.9	633.3	645.0	672.2	717.0
Up.Heel	3.7	8.1	14.6	19.0	21.2	22.7	23.0	23.5	24.0	24.6	25.3
Up.Reef	1.00	1.00	1.00	1.00	1.00	1.00	0.93	0.82	0.71	0.62	0.54
Up.Flat	1.00	1.00	1.00	0.86	0.72	0.61	0.62	0.63	0.67	0.73	0.81
Up.Va	7.45	10.76	13.49	15.74	17.81	19.80	21.77	25.60	30.24	34.68	38.88
Up.Ba	22.8	22.7	22.6	22.9	23.4	24.0	24.8	26.6	29.3	32.5	36.3
Up.Leewy	2.40	2.60	3.10	3.33	3.44	3.57	3.75	4.08	4.57	5.11	5.71
Dn.Vs(kts)	4.16	5.77	6.86	7.49	8.09	8.59	9.50	11.90	14.92	18.50	21.93
Dn.Vs(s/m)	866.0	624.2	524.7	480.8	445.2	419.2	379.1	302.4	241.2	194.6	164.1
Dn.Vs(s/L)	5.8	4.2	3.5	3.2	3.0	2.8	2.5	2.0	1.6	1.3	1.1
Dn.Bt	138.8	142.1	146.6	152.0	154.1	156.1	152.7	148.0	150.4	153.8	156.7
Dn.Vmg(kts)	3.13	4.55	5.72	6.61	7.28	7.85	8.44	10.10	12.98	16.60	20.15
Dn.Vmg(s/m)	1151.6	791.0	628.8	544.4	494.7	458.4	426.5	356.6	277.3	216.9	178.7
Dn.Heel	1.3	2.3	2.8	2.4	2.5	2.7	4.7	11.6	16.6	19.2	20.8
Dn.Reef	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
Dn.Va	2.88	3.82	4.41	4.87	5.89	7.06	8.70	11.55	13.65	15.07	16.48
Dn.Ba	66.4	74.3	87.6	106.0	117.4	126.7	122.9	116.0	120.0	124.0	128.3
Dn.Leewy	0.70	0.60	0.48	0.35	0.31	0.29	0.38	0.47	0.30	0.15	0.08

Times for 1 nm (secs)

	4	6	8	10	12	14	16	20	25	30	35
30.0	1434.3	953.7	761.1	669.3	627.8	608.1	601.4	612.2	675.9	911.7	814.7
33.0	1256.6	846.3	679.5	607.4	575.0	559.1	552.7	554.6	586.4	691.2	719.0
36.0	1128.5	769.6	623.1	565.4	538.7	525.1	518.6	516.7	536.1	590.8	777.5
39.0	1032.2	711.7	583.0	534.8	511.9	500.7	494.8	491.7	501.8	536.0	627.9
42.0	957.5	666.7	553.0	511.5	492.8	484.0	478.6	474.5	479.8	499.3	553.9
45.0	898.4	631.6	529.8	494.3	479.3	471.3	466.0	461.2	463.7	476.2	507.9
50.0	824.3	588.9	501.8	474.9	462.4	454.8	449.2	443.1	442.6	449.5	465.9
60.0	733.0	538.8	472.3	449.4	438.1	429.8	423.6	415.5	411.3	412.6	419.3
70.0	686.6	514.8	458.4	432.1	419.9	411.1	404.0	393.4	385.6	383.3	385.9
75.0	674.8	509.1	454.9	426.7	412.5	403.1	395.2	382.8	373.3	369.2	369.7
80.0	669.0	506.6	453.3	423.4	405.9	395.6	386.6	372.7	361.6	355.4	353.9
90.0	674.3	509.2	454.5	422.4	399.3	381.9	370.8	353.7	336.5	325.0	319.0
100.0	702.6	516.0	448.5	427.1	402.0	378.2	359.4	333.9	311.2	295.1	284.3
110.0	714.2	508.0	442.8	418.6	402.0	386.8	363.3	320.1	288.3	266.8	250.4
120.0	724.4	516.0	446.8	413.2	393.0	375.3	360.2	330.6	273.8	240.3	217.0
130.0	774.2	546.1	463.1	420.8	389.9	366.0	347.8	312.9	276.1	231.8	194.3
135.0	820.1	572.6	475.7	429.5	395.8	366.1	342.1	303.7	264.1	229.3	192.0
140.0	882.8	607.1	492.4	440.7	405.2	373.3	344.2	295.0	252.6	215.8	188.0
150.0	1045.3	702.4	547.4	472.3	430.9	399.7	370.0	309.7	240.2	194.4	168.5
160.0	1267.7	840.0	639.1	529.2	469.2	431.6	402.0	346.7	276.9	214.6	170.8
170.0	1467.0	968.8	729.7	592.1	507.6	458.3	424.2	369.7	304.3	244.5	195.3
180.0	1588.9	1048.2	787.1	635.2	539.9	480.0	442.1	387.4	325.9	267.5	216.4
Up	1269.1	893.0	744.2	687.1	658.9	644.6	636.9	633.3	645.0	672.2	717.0
Dn	1151.6	791.0	628.8	544.4	494.7	458.4	426.5	356.6	277.3	216.9	178.7

Equivalent ILC Average (using IMS formula): 594.10

Best Performance

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	4.0	30.0	2.510	2.174	2.4	1.000	1.000	6.30	18.5	4.27	Up	FIAL
	4.0	33.0	2.865	2.403	2.7	1.000	1.000	6.59	19.3	3.65	Up	FIAL
	4.0	36.0	3.190	2.581	3.0	1.000	1.000	6.84	20.1	3.23	Up	FIAL
	4.0	39.0	3.488	2.710	3.2	1.000	1.000	7.06	20.9	2.91	Up	FIAL
	4.0	42.0	3.760	2.794	3.4	1.000	1.000	7.24	21.6	2.66	Up	FIAL
	4.0	45.0	4.007	2.833	3.6	1.000	1.000	7.40	22.4	2.46	Up	FIAL
OptUp >	4.0	46.2	4.099	2.837	3.7	1.000	1.000	7.45	22.8	2.40	Up	FIAL
	4.0	50.0	4.367	2.807	3.9	1.000	1.000	7.58	23.8	2.20	Up	FIAL
	4.0	60.0	4.912	2.456	4.1	1.000	1.000	7.73	26.6	1.83	Up	FIAL
	4.0	70.0	5.243	1.793	4.0	1.000	1.000	7.60	29.6	1.55	Up	FIAL
	4.0	75.0	5.335	1.381	3.8	1.000	1.000	7.45	31.2	1.43	Up	FIAL
	4.0	80.0	5.381	0.934	3.6	1.000	1.000	7.24	32.9	1.32	Up	FIAL
	4.0	90.0	5.339	-0.000	3.0	1.000	1.000	6.67	36.8	1.12	Up	FIAL
	4.0	100.0	5.124	-0.890	2.3	1.000	1.000	5.93	41.6	0.94	Up	FIAL
	4.0	110.0	5.040	-1.724	3.4	1.000	1.000	5.25	45.6	1.17	Dn	FIAL
	4.0	120.0	4.969	-2.485	2.9	1.000	1.000	4.56	49.4	1.04	Dn	FIAL
	4.0	130.0	4.650	-2.989	2.2	1.000	1.000	3.70	55.8	0.88	Dn	FIAL
	4.0	135.0	4.390	-3.104	1.7	1.000	1.000	3.23	61.1	0.78	Dn	FIAL
OptDn >	4.0	138.8	4.157	3.126	1.3	1.000	1.000	2.88	66.4	0.70	Dn	FIAL
	4.0	140.0	4.078	-3.124	1.2	1.000	1.000	2.76	68.5	0.67	Dn	FIAL
	4.0	150.0	3.444	-2.983	0.5	1.000	1.000	2.00	90.6	0.41	Dn	FIAL
	4.0	160.0	2.840	-2.669	0.2	1.000	1.000	1.65	123.9	0.19	Dn	FIAL
	4.0	170.0	2.454	-2.417	0.1	1.000	1.000	1.64	154.9	0.09	Dn	FIAL
	4.0	180.0	2.266	-2.266	-0.0	1.000	1.000	1.73	180.0	-0.00	Dn	FIAL
	6.0	30.0	3.775	3.269	5.6	1.000	1.000	9.45	18.4	4.24	Up	FIAL
	6.0	33.0	4.254	3.567	6.3	1.000	1.000	9.84	19.3	3.68	Up	FIAL
	6.0	36.0	4.678	3.784	6.8	1.000	1.000	10.15	20.2	3.28	Up	FIAL
	6.0	39.0	5.058	3.931	7.4	1.000	1.000	10.42	21.1	2.99	Up	FIAL
	6.0	42.0	5.400	4.013	7.8	1.000	1.000	10.63	22.0	2.75	Up	FIAL
OptUp >	6.0	44.3	5.629	4.031	8.1	1.000	1.000	10.76	22.7	2.60	Up	FIAL
	6.0	45.0	5.700	4.030	8.2	1.000	1.000	10.79	22.9	2.56	Up	FIAL
	6.0	50.0	6.113	3.929	8.6	1.000	1.000	10.96	24.5	2.30	Up	FIAL
	6.0	60.0	6.682	3.341	8.7	1.000	1.000	10.96	27.9	1.92	Up	FIAL
	6.0	70.0	6.993	2.392	8.1	1.000	1.000	10.63	31.7	1.62	Up	FIAL
	6.0	75.0	7.071	1.830	7.6	1.000	1.000	10.36	33.7	1.49	Up	FIAL
	6.0	80.0	7.107	1.234	7.0	1.000	1.000	10.04	35.7	1.37	Up	FIAL
	6.0	90.0	7.070	-0.000	5.7	1.000	1.000	9.25	40.2	1.14	Up	FIAL
	6.0	100.0	6.977	-1.212	8.6	1.000	1.000	8.33	44.5	1.42	Dn	FIAL
	6.0	110.0	7.087	-2.424	8.0	1.000	1.000	7.52	48.0	1.28	Dn	FIAL
	6.0	120.0	6.977	-3.488	6.6	1.000	1.000	6.52	52.4	1.10	Dn	FIAL
	6.0	130.0	6.592	-4.237	4.7	1.000	1.000	5.34	59.2	0.89	Dn	FIAL
	6.0	135.0	6.288	-4.446	3.6	1.000	1.000	4.70	64.2	0.78	Dn	FIAL
	6.0	140.0	5.930	-4.542	2.7	1.000	1.000	4.08	70.9	0.65	Dn	FIAL
OptDn >	6.0	142.1	5.767	4.551	2.3	1.000	1.000	3.82	74.3	0.60	Dn	FIAL
	6.0	150.0	5.125	-4.439	1.1	1.000	1.000	3.00	91.4	0.40	Dn	FIAL
	6.0	160.0	4.286	-4.027	0.3	1.000	1.000	2.46	123.4	0.18	Dn	FIAL
	6.0	170.0	3.716	-3.659	0.1	1.000	1.000	2.43	154.6	0.08	Dn	FIAL
	6.0	180.0	3.435	-3.435	-0.0	1.000	1.000	2.57	180.0	-0.00	Dn	FIAL

Best Performance (cont)

	<i>TWS</i>	<i>TWA</i>	<i>V</i>	<i>VMG</i>	<i>Heel</i>	<i>Reef</i>	<i>Flat</i>	<i>AWS</i>	<i>AWA</i>	<i>Lee</i>	<i>Sail</i>	<i>Flot</i>
	8.0	30.0	4.730	4.096	10.3	1.000	1.000	12.30	18.7	4.63	Up	FIAL
	8.0	33.0	5.298	4.444	11.6	1.000	1.000	12.74	19.6	4.03	Up	FIAL
	8.0	36.0	5.777	4.674	12.8	1.000	1.000	13.08	20.5	3.62	Up	FIAL
	8.0	39.0	6.175	4.799	13.8	1.000	1.000	13.32	21.5	3.33	Up	FIAL
OptUp >	8.0	42.0	6.508	4.837	14.6	1.000	1.000	13.49	22.6	3.10	Up	FIAL
	8.0	42.0	6.510	4.838	14.7	1.000	1.000	13.49	22.6	3.10	Up	FIAL
	8.0	45.0	6.795	4.805	15.3	1.000	1.000	13.60	23.7	2.91	Up	FIAL
	8.0	50.0	7.174	4.611	15.8	1.000	1.000	13.65	25.6	2.64	Up	FIAL
	8.0	60.0	7.622	3.811	14.9	1.000	1.000	13.41	29.9	2.21	Up	FIAL
	8.0	70.0	7.853	2.686	12.7	1.000	1.000	12.88	34.7	1.83	Up	FIAL
	8.0	75.0	7.914	2.048	11.6	1.000	1.000	12.53	37.2	1.67	Up	FIAL
	8.0	80.0	7.943	1.379	10.4	1.000	1.000	12.13	39.7	1.52	Up	FIAL
	8.0	90.0	7.921	-0.000	8.2	1.000	1.000	11.20	45.0	1.24	Up	FIAL
	8.0	100.0	8.027	-1.394	18.8	1.000	1.000	9.99	48.3	1.89	Dn	FIAL
	8.0	110.0	8.130	-2.781	15.9	1.000	1.000	9.02	53.3	1.61	Dn	FIAL
	8.0	120.0	8.058	-4.029	11.4	1.000	1.000	7.91	59.1	1.27	Dn	FIAL
	8.0	130.0	7.773	-4.996	7.5	1.000	1.000	6.62	66.6	0.95	Dn	FIAL
	8.0	135.0	7.568	-5.351	5.8	1.000	1.000	5.94	71.2	0.80	Dn	FIAL
OptDn >	8.0	146.6	6.861	5.725	2.8	1.000	1.000	4.41	87.6	0.48	Dn	FIAL
	8.0	150.0	6.576	-5.695	2.1	1.000	1.000	4.01	95.0	0.40	Dn	FIAL
	8.0	160.0	5.633	-5.293	0.6	1.000	1.000	3.32	124.6	0.18	Dn	FIAL
	8.0	170.0	4.934	-4.859	0.2	1.000	1.000	3.26	154.7	0.08	Dn	FIAL
	8.0	180.0	4.574	-4.574	-0.0	1.000	1.000	3.43	180.0	-0.00	Dn	FIAL
	10.0	30.0	5.379	4.658	14.9	1.000	0.885	14.85	19.0	4.72	Up	FIAL
	10.0	33.0	5.927	4.971	16.5	1.000	0.874	15.24	20.0	4.13	Up	FIAL
	10.0	36.0	6.367	5.151	17.7	1.000	0.866	15.50	21.2	3.74	Up	FIAL
	10.0	39.0	6.731	5.231	18.6	1.000	0.860	15.68	22.4	3.44	Up	FIAL
OptUp >	10.0	40.4	6.883	5.239	19.0	1.000	0.859	15.74	22.9	3.33	Up	FIAL
	10.0	42.0	7.038	5.231	19.4	1.000	0.858	15.79	23.6	3.21	Up	FIAL
	10.0	45.0	7.282	5.149	20.0	1.000	0.863	15.82	24.8	3.05	Up	FIAL
	10.0	50.0	7.581	4.873	20.6	1.000	0.881	15.74	27.1	2.85	Up	FIAL
	10.0	60.0	8.010	4.005	21.2	1.000	0.950	15.31	31.8	2.58	Up	FIAL
	10.0	70.0	8.331	2.849	19.4	1.000	1.000	14.72	37.0	2.18	Up	FIAL
	10.0	75.0	8.437	2.184	17.2	1.000	1.000	14.38	39.9	1.94	Up	FIAL
	10.0	80.0	8.503	1.477	14.9	1.000	1.000	13.98	42.9	1.72	Up	FIAL
	10.0	90.0	8.522	-0.000	11.1	1.000	1.000	13.00	49.0	1.36	Up	FIAL
	10.0	100.0	8.430	-1.464	20.8	0.888	1.000	11.38	54.0	2.00	Dn	FIAL
	10.0	110.0	8.601	-2.942	20.9	0.947	1.000	10.19	59.5	1.81	Dn	FIAL
	10.0	120.0	8.713	-4.357	17.9	1.000	1.000	9.04	65.7	1.48	Dn	FIAL
	10.0	130.0	8.554	-5.499	10.7	1.000	1.000	7.82	74.2	1.04	Dn	FIAL
	10.0	135.0	8.383	-5.928	8.2	1.000	1.000	7.12	79.4	0.87	Dn	FIAL
	10.0	140.0	8.169	-6.258	6.1	1.000	1.000	6.41	85.5	0.70	Dn	FIAL
OptDn >	10.0	152.0	7.487	6.613	2.4	1.000	1.000	4.87	106.0	0.35	Dn	FIAL
	10.0	160.0	6.802	-6.392	0.9	1.000	1.000	4.29	127.2	0.18	Dn	FIAL
	10.0	170.0	6.080	-5.988	0.3	1.000	1.000	4.15	155.3	0.08	Dn	FIAL
	10.0	180.0	5.667	-5.667	-0.0	1.000	1.000	4.33	180.0	-0.00	Dn	FIAL

Best Performance (cont)

	<i>TWS</i>	<i>TWA</i>	<i>V</i>	<i>VMG</i>	<i>Heel</i>	<i>Reef</i>	<i>Flat</i>	<i>AWS</i>	<i>AWA</i>	<i>Lee</i>	<i>Sail</i>	<i>Flot</i>
	12.0	30.0	5.735	4.966	18.1	1.000	0.746	17.11	19.5	4.77	Up	FIAL
	12.0	33.0	6.261	5.251	19.4	1.000	0.731	17.45	20.7	4.17	Up	FIAL
	12.0	36.0	6.683	5.407	20.3	1.000	0.721	17.68	22.0	3.76	Up	FIAL
	12.0	39.0	7.033	5.465	21.1	1.000	0.717	17.81	23.3	3.46	Up	FIAL
OptUp >	12.0	39.2	7.051	5.463	21.2	1.000	0.717	17.81	23.4	3.44	Up	FIAL
	12.0	42.0	7.304	5.428	21.7	1.000	0.717	17.86	24.7	3.25	Up	FIAL
	12.0	45.0	7.511	5.311	22.1	1.000	0.724	17.82	26.2	3.10	Up	FIAL
	12.0	50.0	7.785	5.004	22.5	1.000	0.744	17.67	28.7	2.90	Up	FIAL
	12.0	60.0	8.218	4.109	22.3	0.958	0.892	17.16	34.1	2.63	Up	FIAL
	12.0	70.0	8.573	2.932	22.2	0.956	1.000	16.42	39.5	2.37	Up	FIAL
	12.0	75.0	8.727	2.259	22.2	0.983	1.000	15.97	42.2	2.23	Up	FIAL
	12.0	80.0	8.868	1.540	20.9	1.000	1.000	15.55	45.2	2.02	Up	FIAL
	12.0	90.0	9.016	-0.000	15.1	1.000	1.000	14.68	52.1	1.52	Up	FIAL
	12.0	100.0	8.956	-1.555	10.4	1.000	1.000	13.50	59.4	1.16	Up	FIAL
	12.0	110.0	8.956	-3.063	21.2	0.865	1.000	11.58	65.2	1.79	Dn	FIAL
	12.0	120.0	9.161	-4.581	21.5	0.955	1.000	10.17	71.9	1.58	Dn	FIAL
	12.0	130.0	9.233	-5.935	15.4	1.000	1.000	8.99	80.3	1.15	Dn	FIAL
	12.0	135.0	9.096	-6.432	11.2	1.000	1.000	8.35	85.8	0.93	Dn	FIAL
	12.0	140.0	8.884	-6.806	8.1	1.000	1.000	7.64	92.3	0.75	Dn	FIAL
	12.0	150.0	8.354	-7.235	3.8	1.000	1.000	6.32	108.8	0.42	Dn	FIAL
OptDn >	12.0	154.1	8.086	7.276	2.5	1.000	1.000	5.89	117.4	0.31	Dn	FIAL
	12.0	160.0	7.673	-7.211	1.3	1.000	1.000	5.46	131.3	0.20	Dn	FIAL
	12.0	170.0	7.092	-6.984	0.5	1.000	1.000	5.16	156.2	0.09	Dn	FIAL
	12.0	180.0	6.668	-6.668	-0.0	1.000	1.000	5.33	180.0	-0.00	Dn	FIAL
	14.0	30.0	5.920	5.127	20.3	1.000	0.631	19.20	20.0	4.89	Up	FIAL
	14.0	33.0	6.439	5.401	21.4	1.000	0.617	19.52	21.3	4.26	Up	FIAL
	14.0	36.0	6.856	5.547	22.2	1.000	0.609	19.71	22.7	3.82	Up	FIAL
OptUp >	14.0	38.5	7.139	5.585	22.7	0.996	0.611	19.80	24.0	3.57	Up	FIAL
	14.0	39.0	7.190	5.588	22.7	0.992	0.617	19.81	24.2	3.52	Up	FIAL
	14.0	42.0	7.438	5.528	22.8	0.969	0.654	19.82	25.8	3.34	Up	FIAL
	14.0	45.0	7.638	5.401	22.8	0.948	0.697	19.77	27.5	3.20	Up	FIAL
	14.0	50.0	7.916	5.088	22.7	0.917	0.774	19.60	30.3	3.00	Up	FIAL
	14.0	60.0	8.375	4.188	22.4	0.878	0.936	19.03	36.1	2.70	Up	FIAL
	14.0	70.0	8.757	2.995	22.4	0.895	1.000	18.21	41.9	2.39	Up	FIAL
	14.0	75.0	8.930	2.311	22.5	0.922	1.000	17.71	44.9	2.24	Up	FIAL
	14.0	80.0	9.101	1.580	22.5	0.952	1.000	17.18	47.8	2.10	Up	FIAL
	14.0	90.0	9.426	-0.000	20.4	1.000	1.000	16.16	54.3	1.71	Up	FIAL
	14.0	100.0	9.518	-1.653	13.6	1.000	1.000	15.16	62.1	1.24	Up	FIAL
	14.0	110.0	9.308	-3.184	8.9	1.000	1.000	13.76	70.8	0.92	Up	FIAL
	14.0	120.0	9.592	-4.796	22.0	0.883	1.000	11.54	77.0	1.53	Dn	FIAL
	14.0	130.0	9.837	-6.323	21.7	1.000	1.000	10.00	85.2	1.28	Dn	FIAL
	14.0	135.0	9.834	-6.953	15.7	1.000	1.000	9.53	90.4	0.99	Dn	FIAL
	14.0	140.0	9.645	-7.388	10.8	1.000	1.000	8.91	97.0	0.78	Dn	FIAL
	14.0	150.0	9.006	-7.799	4.8	1.000	1.000	7.64	114.1	0.44	Dn	FIAL
OptDn >	14.0	156.1	8.588	7.853	2.7	1.000	1.000	7.06	126.7	0.29	Dn	FIAL
	14.0	160.0	8.342	-7.839	1.8	1.000	1.000	6.79	135.2	0.22	Dn	FIAL
	14.0	170.0	7.854	-7.735	0.7	1.000	1.000	6.41	157.7	0.10	Dn	FIAL
	14.0	180.0	7.500	-7.500	-0.0	1.000	1.000	6.50	180.0	-0.00	Dn	FIAL

Best Performance (cont)

	<i>TWS</i>	<i>TWA</i>	<i>V</i>	<i>VMG</i>	<i>Heel</i>	<i>Reef</i>	<i>Flat</i>	<i>AWS</i>	<i>AWA</i>	<i>Lee</i>	<i>Sail</i>	<i>Flot</i>
	16.0	30.0	5.986	5.184	21.9	1.000	0.539	21.19	20.5	5.09	Up	FIAL
	16.0	33.0	6.513	5.462	22.5	0.976	0.557	21.50	22.0	4.42	Up	FIAL
	16.0	36.0	6.942	5.616	22.7	0.947	0.590	21.70	23.6	3.96	Up	FIAL
OptUp >	16.0	38.2	7.197	5.653	23.0	0.929	0.618	21.77	24.8	3.75	Up	FIAL
	16.0	39.0	7.275	5.654	23.0	0.922	0.628	21.78	25.2	3.68	Up	FIAL
	16.0	42.0	7.522	5.590	22.9	0.898	0.671	21.77	26.9	3.47	Up	FIAL
	16.0	45.0	7.726	5.463	23.0	0.879	0.715	21.70	28.7	3.32	Up	FIAL
	16.0	50.0	8.014	5.151	22.9	0.853	0.792	21.50	31.7	3.11	Up	FIAL
	16.0	60.0	8.499	4.249	22.6	0.813	0.968	20.88	37.8	2.77	Up	FIAL
	16.0	70.0	8.911	3.048	22.7	0.843	1.000	19.98	44.0	2.43	Up	FIAL
	16.0	75.0	9.109	2.358	22.8	0.869	1.000	19.46	47.1	2.26	Up	FIAL
	16.0	80.0	9.311	1.617	22.8	0.898	1.000	18.90	50.2	2.10	Up	FIAL
	16.0	90.0	9.708	-0.000	22.9	0.967	1.000	17.65	56.6	1.80	Up	FIAL
	16.0	100.0	10.017	-1.739	17.9	1.000	1.000	16.65	64.2	1.33	Up	FIAL
	16.0	110.0	9.908	-3.389	11.1	1.000	1.000	15.40	73.3	0.96	Up	FIAL
	16.0	120.0	9.996	-4.998	22.6	0.823	1.000	12.95	81.1	1.48	Dn	FIAL
	16.0	130.0	10.349	-6.652	23.3	0.945	1.000	11.26	89.7	1.24	Dn	FIAL
	16.0	135.0	10.524	-7.442	21.4	1.000	1.000	10.56	94.3	1.05	Dn	FIAL
	16.0	140.0	10.460	-8.013	14.4	1.000	1.000	10.12	100.2	0.79	Dn	FIAL
	16.0	150.0	9.730	-8.426	6.0	1.000	1.000	8.96	117.4	0.45	Dn	FIAL
OptDn >	16.0	152.7	9.497	8.441	4.7	1.000	1.000	8.70	122.9	0.38	Dn	FIAL
	16.0	160.0	8.955	-8.415	2.6	1.000	1.000	8.18	138.0	0.25	Dn	FIAL
	16.0	170.0	8.487	-8.358	1.0	1.000	1.000	7.78	159.1	0.11	Dn	FIAL
	16.0	180.0	8.144	-8.144	-0.0	1.000	1.000	7.86	180.0	-0.00	Dn	FIAL
	20.0	30.0	5.880	5.092	22.3	0.895	0.526	24.98	21.7	5.87	Up	FIAL
	20.0	33.0	6.491	5.443	23.0	0.873	0.548	25.33	23.3	4.96	Up	FIAL
	20.0	36.0	6.967	5.636	23.5	0.846	0.586	25.54	25.0	4.41	Up	FIAL
OptUp >	20.0	38.7	7.285	5.685	23.5	0.822	0.629	25.60	26.6	4.08	Up	FIAL
	20.0	39.0	7.321	5.690	23.5	0.819	0.633	25.61	26.8	4.04	Up	FIAL
	20.0	42.0	7.586	5.638	23.4	0.795	0.685	25.59	28.7	3.80	Up	FIAL
	20.0	45.0	7.806	5.520	23.4	0.774	0.739	25.50	30.6	3.61	Up	FIAL
	20.0	50.0	8.125	5.223	23.2	0.746	0.834	25.27	33.9	3.36	Up	FIAL
	20.0	60.0	8.665	4.332	23.0	0.717	1.000	24.55	40.5	2.94	Up	FIAL
	20.0	70.0	9.151	3.130	23.2	0.756	1.000	23.54	47.2	2.52	Up	FIAL
	20.0	75.0	9.404	2.434	23.4	0.779	1.000	22.96	50.6	2.32	Up	FIAL
	20.0	80.0	9.658	1.677	23.4	0.806	1.000	22.34	54.0	2.13	Up	FIAL
	20.0	90.0	10.177	-0.000	23.6	0.872	1.000	20.97	61.0	1.78	Up	FIAL
	20.0	100.0	10.781	-1.872	23.9	0.960	1.000	19.43	67.9	1.44	Up	FIAL
	20.0	110.0	11.246	-3.846	18.4	1.000	1.000	18.37	76.1	1.00	Up	FIAL
	20.0	120.0	10.888	-5.444	10.7	1.000	1.000	17.04	87.0	0.73	Up	FIAL
	20.0	130.0	11.506	-7.396	24.6	0.838	1.000	13.99	95.5	1.08	Dn	FIAL
	20.0	135.0	11.852	-8.381	25.1	0.913	1.000	13.01	100.1	0.94	Dn	FIAL
	20.0	140.0	12.202	-9.348	24.9	1.000	1.000	12.07	105.0	0.79	Dn	FIAL
OptDn >	20.0	148.0	11.905	10.096	11.6	1.000	1.000	11.55	116.0	0.47	Dn	FIAL
	20.0	150.0	11.624	-10.067	9.5	1.000	1.000	11.39	120.0	0.42	Dn	FIAL
	20.0	160.0	10.383	-9.757	4.3	1.000	1.000	10.83	141.0	0.27	Dn	FIAL
	20.0	170.0	9.737	-9.589	1.6	1.000	1.000	10.55	160.8	0.14	Dn	FIAL
	20.0	180.0	9.294	-9.294	-0.0	1.000	1.000	10.71	180.0	-0.00	Dn	FIAL

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	25.0	30.0	5.327	4.613	22.6	0.808	0.502	29.34	23.2	7.95	Up	FIAL
	25.0	33.0	6.139	5.149	23.6	0.776	0.546	29.84	24.7	6.25	Up	FIAL
	25.0	36.0	6.715	5.433	23.9	0.746	0.593	30.11	26.5	5.33	Up	FIAL
	25.0	39.0	7.174	5.575	24.1	0.720	0.647	30.23	28.4	4.75	Up	FIAL
OptUp >	25.0	40.4	7.327	5.582	24.0	0.709	0.673	30.24	29.3	4.57	Up	FIAL
	25.0	42.0	7.504	5.576	24.0	0.696	0.704	30.23	30.4	4.37	Up	FIAL
	25.0	45.0	7.764	5.490	23.9	0.677	0.764	30.14	32.4	4.10	Up	FIAL
	25.0	50.0	8.133	5.228	23.7	0.651	0.864	29.89	35.9	3.76	Up	FIAL
	25.0	60.0	8.752	4.376	23.7	0.635	1.000	29.07	43.0	3.20	Up	FIAL
	25.0	70.0	9.336	3.193	24.0	0.670	1.000	27.93	50.2	2.70	Up	FIAL
	25.0	75.0	9.644	2.496	24.2	0.691	1.000	27.30	53.8	2.45	Up	FIAL
	25.0	80.0	9.956	1.729	24.2	0.715	1.000	26.62	57.5	2.22	Up	FIAL
	25.0	90.0	10.697	-0.000	24.7	0.778	1.000	25.10	64.8	1.78	Up	FIAL
	25.0	100.0	11.566	-2.008	25.1	0.856	1.000	23.43	72.0	1.37	Up	FIAL
	25.0	110.0	12.488	-4.271	25.4	0.956	1.000	21.58	79.5	1.02	Up	FIAL
	25.0	120.0	13.148	-6.574	19.1	1.000	1.000	20.47	88.2	0.66	Up	FIAL
	25.0	130.0	13.039	-8.382	26.2	0.735	1.000	17.45	100.0	0.88	Dn	FIAL
	25.0	135.0	13.630	-9.638	26.8	0.805	1.000	16.29	104.4	0.72	Dn	FIAL
	25.0	140.0	14.252	-10.918	27.6	0.892	1.000	15.06	109.0	0.59	Dn	FIAL
	25.0	150.0	14.985	-12.977	17.5	1.000	1.000	13.66	119.2	0.30	Dn	FIAL
OptDn >	25.0	150.4	14.924	12.983	16.6	1.000	1.000	13.65	120.0	0.30	Dn	FIAL
	25.0	160.0	13.002	-12.218	6.8	1.000	1.000	13.50	141.0	0.22	Dn	FIAL
	25.0	170.0	11.825	-11.649	2.8	1.000	1.000	13.51	161.3	0.13	Dn	FIAL
	25.0	180.0	11.045	-11.045	-0.0	1.000	1.000	13.95	180.0	-0.00	Dn	FIAL
	30.0	30.0	3.949	3.420	35.0	0.500	0.864	32.35	22.3	15.00	Up	FIAL
	30.0	33.0	5.209	4.368	23.4	0.704	0.542	33.87	26.3	9.46	Up	FIAL
	30.0	36.0	6.094	4.930	24.2	0.674	0.598	34.36	27.9	7.18	Up	FIAL
	30.0	39.0	6.716	5.220	24.5	0.648	0.653	34.60	29.8	6.02	Up	FIAL
	30.0	42.0	7.210	5.358	24.6	0.625	0.713	34.69	31.7	5.27	Up	FIAL
OptUp >	30.0	43.1	7.330	5.356	24.6	0.618	0.735	34.68	32.5	5.11	Up	FIAL
	30.0	45.0	7.560	5.346	24.6	0.606	0.775	34.64	33.8	4.82	Up	FIAL
	30.0	50.0	8.008	5.148	24.4	0.582	0.876	34.39	37.5	4.30	Up	FIAL
	30.0	60.0	8.724	4.362	24.5	0.570	1.000	33.50	44.9	3.57	Up	FIAL
	30.0	70.0	9.393	3.213	25.0	0.602	1.000	32.24	52.4	2.96	Up	FIAL
	30.0	75.0	9.751	2.524	25.1	0.621	1.000	31.55	56.3	2.66	Up	FIAL
	30.0	80.0	10.129	1.759	25.3	0.644	1.000	30.80	60.1	2.39	Up	FIAL
	30.0	90.0	11.076	-0.000	26.0	0.702	1.000	29.15	67.7	1.83	Up	FIAL
	30.0	100.0	12.201	-2.119	26.5	0.773	1.000	27.35	75.2	1.34	Up	FIAL
	30.0	110.0	13.493	-4.615	26.9	0.864	1.000	25.34	82.7	0.92	Up	FIAL
	30.0	120.0	14.982	-7.491	27.2	0.978	1.000	23.10	90.0	0.60	Up	FIAL
	30.0	130.0	15.533	-9.984	18.0	1.000	1.000	22.18	99.7	0.36	Up	FIAL
	30.0	135.0	15.695	-11.101	28.5	0.720	1.000	19.44	106.5	0.52	Dn	FIAL
	30.0	140.0	16.682	-12.779	29.2	0.798	1.000	17.97	110.5	0.40	Dn	FIAL
	30.0	150.0	18.521	-16.040	28.5	1.000	1.000	15.14	119.5	0.21	Dn	FIAL
OptDn >	30.0	153.8	18.497	16.601	19.2	1.000	1.000	15.07	124.0	0.15	Dn	FIAL
	30.0	160.0	16.775	-15.763	9.8	1.000	1.000	15.25	138.5	0.13	Dn	FIAL
	30.0	170.0	14.722	-14.499	4.0	1.000	1.000	15.71	160.7	0.09	Dn	FIAL
	30.0	180.0	13.455	-13.459	-0.0	1.000	1.000	16.54	180.0	-0.00	Dn	FIAL

Best Performance (cont)

	TWS	TWA	V	VMG	Heel	Reef	Flat	AWS	AWA	Lee	Sail	Flot
	35.0	30.0	4.419	3.827	18.8	0.500	1.000	38.48	25.5	15.00	Up	FIAL
	35.0	33.0	5.007	4.199	35.0	0.500	0.979	37.74	24.4	15.00	Up	FIAL
	35.0	36.0	4.630	3.746	32.4	0.927	0.928	37.25	27.8	15.00	Up	FIAL
	35.0	39.0	5.733	4.455	24.5	0.593	0.658	38.55	31.3	9.03	Up	FIAL
	35.0	42.0	6.499	4.830	25.1	0.571	0.718	38.82	33.1	7.17	Up	FIAL
	35.0	45.0	7.088	5.012	25.3	0.553	0.777	38.91	35.1	6.07	Up	FIAL
OptUp >	35.0	46.6	7.310	5.021	25.3	0.545	0.810	38.88	36.3	5.71	Up	FIAL
	35.0	50.0	7.727	4.967	25.3	0.531	0.874	38.75	38.7	5.10	Up	FIAL
	35.0	60.0	8.586	4.293	25.4	0.518	1.000	37.81	46.4	4.07	Up	FIAL
	35.0	70.0	9.328	3.190	26.1	0.546	1.000	36.42	54.2	3.33	Up	FIAL
	35.0	75.0	9.738	2.520	26.3	0.564	1.000	35.67	58.2	2.97	Up	FIAL
	35.0	80.0	10.172	1.766	26.7	0.586	1.000	34.83	62.2	2.64	Up	FIAL
	35.0	90.0	11.284	-0.000	27.5	0.640	1.000	33.03	70.0	1.97	Up	FIAL
	35.0	100.0	12.662	-2.199	28.1	0.707	1.000	31.10	77.8	1.36	Up	FIAL
	35.0	110.0	14.375	-4.917	28.7	0.790	1.000	28.96	85.2	0.87	Up	FIAL
	35.0	120.0	16.594	-8.297	28.8	0.888	1.000	26.59	92.0	0.48	Up	FIAL
	35.0	130.0	18.530	-11.911	27.1	1.000	1.000	24.20	99.4	0.27	Up	FIAL
	35.0	135.0	18.752	-13.259	20.8	1.000	1.000	23.91	104.5	0.20	Up	FIAL
	35.0	140.0	19.144	-14.665	30.7	0.724	1.000	20.81	111.6	0.27	Dn	FIAL
	35.0	150.0	21.361	-18.500	32.4	0.938	1.000	17.27	121.2	0.15	Dn	FIAL
OptDn >	35.0	156.7	21.933	20.150	20.8	1.000	1.000	16.48	128.3	0.08	Dn	FIAL
	35.0	160.0	21.075	-19.804	13.9	1.000	1.000	16.57	135.5	0.07	Dn	FIAL
	35.0	170.0	18.432	-18.152	5.2	1.000	1.000	17.14	159.3	0.05	Dn	FIAL
	35.0	180.0	16.636	-16.636	-0.0	1.000	1.000	18.36	180.0	-0.00	Dn	FIAL