FARR

# PERFORMANCE PREDICTION

185/1 - VPP

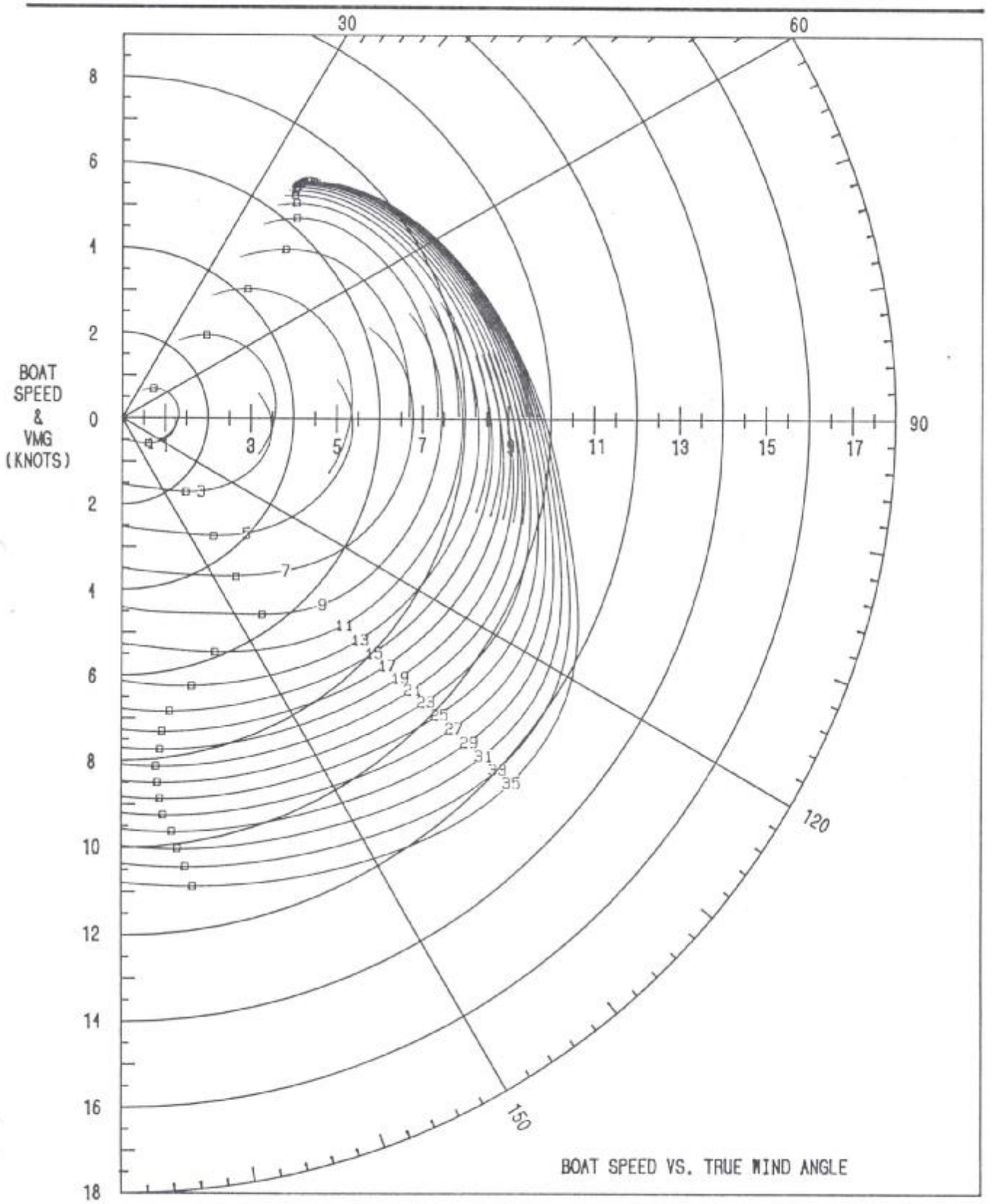
FOR

BRUCE FARR & ASSOCIATES, INC. YACHT DESIGNERS

121 EASTERN AVE.,P.O. BOX 3457, ANNAPOLIS, MD 21403 USA (301) 267-0780 TLX 140925 FARR UT FAX 301-268-0553

185/1 VPP

16 Feb 1988




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| | TRUE WIND SPEED | TRUE WIND ANGLE | APP. WIND SPEED | APP. WIND ANGLE | BOAT SPEED | VELOCITY MADE GOOD | HEEL ANGLE | LEEWAY ANGLE | FLAT COEFF. | REEF COEFF. |
|---|---|---|---|---|---|---|---|---|---|---|
| **1.0 knots** | | | | | | | | | | |
| | 36.0 | 1.7 | 20.0 | .767 | .620 | .3 | 3.7 | 1.00 | 1.00 |
| | 44.0 | 1.9 | 23.4 | .934 | .672 | .3 | 2.9 | 1.00 | 1.00 |
| OPT Tack | **46.3** | 1.9 | **24.2** | .976 | .675 | .3 | **2.8** | 1.00 | **1.00** |
| | 52.0 | 1.9 | 26.3 | 1.070 | .659 | .3 | 2.4 | 1.00 | 1.00 |
| | 60.0 | 1.9 | 29.1 | 1.174 | .587 | .3 | 2.1 | 1.00 | 1.00 |
| | 70.0 | 1.9 | 32.7 | 1.260 | .431 | .3 | 1.7 | 1.00 | 1.00 |
| | 80.0 | 1.8 | 36.6 | 1.297 | .225 | .3 | 1.5 | 1.00 | 1.00 |
| | 90.0 | 1.7 | 41.1 | 1.283 | 0.000 | .2 | 1.3 | 1.00 | 1.00 |
| | 100.4 | | ^ Genoa / Spinnaker v | | | | | | |
| | 105.0 | 1.4 | 49.2 | 1.210 | -.315 | .2 | .9 | 1.00 | 1.00 |
| | 120.0 | 1.1 | 62.1 | 1.059 | -.529 | .1 | .6 | 1.00 | 1.00 |
| OPT Gybe | **135.0** | .8 | **84.5** | .845 | -.598 | 0.0 | .4 | 1.00 | 1.00 |
| | 150.0 | .6 | 116.6 | .663 | -.574 | 0.0 | .1 | 1.00 | 1.00 |
| | 165.0 | .5 | 149.3 | .565 | -.546 | 0.0 | .1 | 1.00 | 1.00 |
| | 180.0 | .5 | 179.9 | .524 | -.524 | 0.0 | .1 | 1.00 | 1.00 |
| **3.0 knots** | | | | | | | | | | |
| | 36.0 | 5.1 | 20.2 | 2.204 | 1.783 | 1.4 | 3.9 | 1.00 | 1.00 |
| | 44.0 | 5.4 | 23.8 | 2.662 | 1.915 | 1.5 | 3.1 | 1.00 | 1.00 |
| PT Tack | **45.4** | 5.5 | **24.4** | 2.733 | 1.918 | 1.5 | **3.0** | 1.00 | **1.00** |
| | 52.0 | 5.6 | 27.0 | 3.018 | 1.858 | 1.6 | 2.6 | 1.00 | 1.00 |
| | 60.0 | 5.6 | 30.1 | 3.282 | 1.641 | 1.6 | 2.2 | 1.00 | 1.00 |
| | 70.0 | 5.5 | 34.1 | 3.490 | 1.194 | 1.5 | 1.8 | 1.00 | 1.00 |
| | 80.0 | 5.2 | 38.5 | 3.567 | .619 | 1.4 | 1.6 | 1.00 | 1.00 |
| | 90.0 | 4.8 | 43.5 | 3.521 | 0.000 | 1.3 | 1.3 | 1.00 | 1.00 |
| | 96.2 | | ^ Genoa / Spinnaker v | | | | | | |
| | 105.0 | 4.0 | 51.9 | 3.389 | -.877 | 1.1 | 1.0 | 1.00 | 1.00 |
| | 120.0 | 3.1 | 65.3 | 2.972 | -1.486 | .7 | .7 | 1.00 | 1.00 |
| 'T Gybe | 135.0 | 2.3 | 87.2 | 2.421 | -1.712 | .3 | .4 | 1.00 | 1.00 |
| | **139.5** | 2.1 | **95.8** | 2.261 | -1.719 | .2 | .3 | 1.00 | **1.00** |
| | 150.0 | 1.8 | 118.2 | 1.933 | -1.674 | .1 | .2 | 1.00 | 1.00 |
| | 165.0 | 1.6 | 149.8 | 1.666 | -1.609 | 0.0 | .1 | 1.00 | 1.00 |
| | 180.0 | 1.6 | 179.9 | 1.549 | -1.549 | 0.0 | .1 | 1.00 | 1.00 |

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| | TRUE WIND SPEED | TRUE WIND ANGLE | APP. WIND SPEED | APP. WIND ANGLE | BOAT SPEED | VELOCITY MADE GOOD | HEEL ANGLE | LEEWAY ANGLE | FLAT COEFF. | REEF COEFF. |
|---|---|---|---|---|---|---|---|---|---|---|
| **5.0 knots** | | | | | | | | | | |
| | 36.0 | 8.4 | 20.4 | 3.516 | 2.845 | 2.7 | 4.2 | 1.00 | 1.00 |
| | 44.0 | 8.8 | 24.2 | 4.178 | 3.005 | 3.0 | 3.3 | 1.00 | 1.00 |
| OPT Tack | **44.0** | **8.8** | **24.2** | **4.178** | **3.005** | **3.0** | **3.3** | **1.00** | **1.00** |
| | 52.0 | 9.0 | 27.8 | 4.662 | 2.870 | 3.1 | 2.8 | 1.00 | 1.00 |
| | 60.0 | 9.0 | 31.4 | 5.008 | 2.504 | 3.0 | 2.4 | 1.00 | 1.00 |
| | 70.0 | 8.7 | 35.9 | 5.276 | 1.804 | 2.9 | 2.0 | 1.00 | 1.00 |
| | 80.0 | 8.2 | 40.8 | 5.363 | .931 | 2.6 | 1.7 | 1.00 | 1.00 |
| | 88.7 | ---------- ^ Genoa / Spinnaker v ---------- | | | | | | | | |
| | 90.0 | 7.5 | 46.1 | 5.335 | 0.000 | 2.5 | 1.4 | 1.00 | 1.00 |
| | 105.0 | 6.4 | 55.3 | 5.137 | -1.330 | 2.0 | 1.0 | 1.00 | 1.00 |
| | 120.0 | 5.0 | 68.9 | 4.585 | -2.292 | 1.3 | .7 | 1.00 | 1.00 |
| | 135.0 | 3.8 | 90.0 | 3.847 | -2.720 | .6 | .4 | 1.00 | 1.00 |
| OPT Gybe | **142.7** | **3.3** | **104.3** | **3.469** | **-2.760** | **.4** | **.2** | **1.00** | **1.00** |
| | 150.0 | 3.0 | 119.5 | 3.138 | -2.717 | .2 | .2 | 1.00 | 1.00 |
| | 165.0 | 2.8 | 150.3 | 2.732 | -2.639 | .1 | .1 | 1.00 | 1.00 |
| | 180.0 | 2.8 | 179.9 | 2.546 | -2.546 | .1 | .1 | 1.00 | 1.00 |
| **7.0 knots** | | | | | | | | | | |
| | 36.0 | 11.5 | 20.5 | 4.656 | 3.767 | 4.6 | 4.5 | 1.00 | 1.00 |
| OPT Tack | **43.9** | **12.0** | **24.6** | **5.464** | **3.936** | **5.2** | **3.6** | **1.00** | **1.00** |
| | 44.0 | 12.0 | 24.7 | 5.471 | 3.936 | 5.2 | 3.6 | 1.00 | 1.00 |
| | 52.0 | 12.2 | 28.5 | 6.097 | 3.753 | 5.4 | 3.0 | 1.00 | 1.00 |
| | 60.0 | 12.0 | 32.5 | 6.444 | 3.222 | 5.2 | 2.6 | 1.00 | 1.00 |
| | 70.0 | 11.5 | 37.7 | 6.645 | 2.273 | 4.6 | 2.2 | 1.00 | 1.00 |
| | 80.0 | 10.8 | 43.3 | 6.696 | 1.163 | 4.0 | 1.9 | 1.00 | 1.00 |
| | 84.1 | ---------- ^ Genoa / Spinnaker v ---------- | | | | | | | | |
| | 90.0 | 10.0 | 48.8 | 6.748 | 0.000 | 3.9 | 1.5 | 1.00 | 1.00 |
| | 105.0 | 8.6 | 58.6 | 6.553 | -1.696 | 2.9 | 1.1 | 1.00 | 1.00 |
| | 120.0 | 6.9 | 71.9 | 6.013 | -3.006 | 1.9 | .7 | 1.00 | 1.00 |
| | 135.0 | 5.3 | 93.1 | 5.092 | -3.600 | 1.0 | .4 | 1.00 | 1.00 |
| OPT Gybe | **144.6** | **4.6** | **110.4** | **4.542** | **-3.704** | **.5** | **.2** | **1.00** | **1.00** |
| | 150.0 | 4.3 | 121.1 | 4.253 | -3.683 | .4 | .2 | 1.00 | 1.00 |
| | 165.0 | 4.0 | 150.8 | 3.751 | -3.623 | .2 | .1 | 1.00 | 1.00 |
| | 180.0 | 4.0 | 179.9 | 3.507 | -3.507 | .1 | .1 | 1.00 | 1.00 |

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| | TRUE WIND SPEED | TRUE WIND ANGLE | APP. WIND SPEED | APP. WIND ANGLE | BOAT SPEED | VELOCITY MADE GOOD | HEEL ANGLE | LEEWAY ANGLE | FLAT COEFF. | REEF COEFF. |
|---|---|---|---|---|---|---|---|---|---|---|
| **9.0 knots** | | | | | | | | | | |
| T Tack | 36.0 | 14.4 | 20.4 | 5.576 | 4.511 | 12.0 | 4.8 | 1.00 | 1.00 | |
| | 41.0 | 14.7 | 23.1 | 6.173 | 4.660 | 13.6 | 4.2 | 1.00 | 1.00 | |
| | 44.0 | 14.8 | 24.7 | 6.423 | 4.621 | 14.0 | 3.9 | 1.00 | 1.00 | |
| | 52.0 | 14.7 | 29.3 | 6.853 | 4.219 | 13.7 | 3.4 | 1.00 | 1.00 | |
| | 60.0 | 14.4 | 34.0 | 7.106 | 3.553 | 12.3 | 3.0 | 1.00 | 1.00 | |
| | 70.0 | 13.8 | 40.1 | 7.278 | 2.489 | 9.6 | 2.6 | 1.00 | 1.00 | |
| ------ | 78.3 | ---------- | ^ Genoa / Spinnaker v | | | | | | | |
| | 80.0 | 13.0 | 46.3 | 7.380 | 1.282 | 9.3 | 2.1 | 1.00 | 1.00 | |
| | 90.0 | 12.1 | 52.9 | 7.421 | 0.000 | 5.8 | 1.8 | 1.00 | 1.00 | |
| | 105.0 | 10.4 | 63.7 | 7.260 | -1.879 | 3.7 | 1.2 | 1.00 | 1.00 | |
| | 120.0 | 8.6 | 77.0 | 6.902 | -3.451 | 2.4 | .8 | 1.00 | 1.00 | |
| Gybe | 135.0 | 6.8 | 95.4 | 6.258 | -4.425 | 1.3 | .4 | 1.00 | 1.00 | |
| | 144.8 | 6.0 | 112.6 | 5.612 | -4.585 | .8 | .2 | 1.00 | 1.00 | |
| | 150.0 | 5.7 | 122.7 | 5.278 | -4.571 | .6 | .2 | 1.00 | 1.00 | |
| | 165.0 | 5.2 | 151.4 | 4.705 | -4.544 | .3 | .1 | 1.00 | 1.00 | |
| | 180.0 | 5.2 | 179.9 | 4.419 | -4.419 | .2 | .1 | 1.00 | 1.00 | |
| **11.0 knots** | | | | | | | | | | |
| Tack | 36.0 | 16.8 | 19.9 | 6.135 | 4.964 | 19.9 | 5.1 | .94 | 1.00 | |
| | 38.9 | 16.9 | 21.6 | 6.435 | 5.011 | 21.1 | 4.8 | .95 | 1.00 | |
| | 44.0 | 16.9 | 24.5 | 6.815 | 4.903 | 22.6 | 4.4 | .98 | 1.00 | |
| | 52.0 | 16.7 | 29.3 | 7.215 | 4.442 | 22.4 | 3.9 | 1.00 | 1.00 | |
| | 60.0 | 16.3 | 34.7 | 7.483 | 3.742 | 20.3 | 3.4 | 1.00 | 1.00 | |
| | 70.0 | 15.7 | 41.6 | 7.687 | 2.629 | 16.7 | 2.9 | 1.00 | 1.00 | |
| ------ | 77.3 | ---------- | ^ Genoa / Spinnaker v | | | | | | | |
| | 80.0 | 14.8 | 48.3 | 7.824 | 1.359 | 16.5 | 2.4 | 1.00 | 1.00 | |
| | 90.0 | 13.9 | 55.9 | 7.899 | 0.000 | 11.3 | 2.0 | 1.00 | 1.00 | |
| | 105.0 | 12.2 | 67.9 | 7.793 | -2.017 | 4.7 | 1.4 | 1.00 | 1.00 | |
| | 120.0 | 10.3 | 82.0 | 7.465 | -3.733 | 2.9 | .8 | 1.00 | 1.00 | |
| | 135.0 | 8.4 | 99.8 | 6.977 | -4.933 | 1.6 | .4 | 1.00 | 1.00 | |
| | 150.0 | 7.0 | 123.9 | 6.264 | -5.424 | .8 | .2 | 1.00 | 1.00 | |
| ybe | 158.6 | 6.6 | 139.8 | 5.866 | -5.461 | .6 | .2 | 1.00 | 1.00 | |
| | 165.0 | 6.5 | 151.9 | 5.627 | -5.435 | .5 | .1 | 1.00 | 1.00 | |
| | 180.0 | 6.4 | 179.9 | 5.285 | -5.285 | .3 | .1 | 1.00 | 1.00 | |

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|---|---|---|---|---|---|---|---|---|---|---|
| **13.0 knots** | | | | | | | | | | |
| PT Tack | 36.0 | 19.0 | 20.1 | 6.406 | 5.183 | 23.3 | 5.1 | .80 | 1.00 | |
| | 37.7 | 19.0 | 21.1 | 6.564 | 5.197 | 23.9 | 4.9 | .81 | 1.00 | |
| | 44.0 | 18.9 | 24.9 | 7.012 | 5.044 | 25.5 | 4.4 | .84 | 1.00 | |
| | 52.0 | 18.5 | 29.7 | 7.402 | 4.557 | 26.8 | 4.1 | .92 | .99 | |
| | 60.0 | 17.9 | 34.6 | 7.698 | 3.849 | 27.9 | 3.8 | 1.00 | 1.00 | |
| | 70.0 | 17.3 | 42.3 | 7.960 | 2.723 | 23.9 | 3.3 | 1.00 | 1.00 | |
| | 80.0 | 16.6 | 50.3 | 8.123 | 1.411 | 18.8 | 2.8 | 1.00 | 1.00 | |
| | 80.1 | ---------- ^ Genoa / Spinnaker v ---------- | | | | | | | | |
| | 90.0 | 15.5 | 58.1 | 8.270 | 0.000 | 17.1 | 2.2 | 1.00 | 1.00 | |
| | 105.0 | 14.1 | 71.2 | 8.253 | -2.136 | 7.1 | 1.5 | 1.00 | 1.00 | |
| | 120.0 | 12.0 | 85.9 | 7.945 | -3.972 | 3.4 | .9 | 1.00 | 1.00 | |
| | 135.0 | 10.1 | 103.9 | 7.494 | -5.299 | 1.9 | .5 | 1.00 | 1.00 | |
| | 150.0 | 8.6 | 126.4 | 6.930 | -6.002 | 1.0 | .2 | 1.00 | 1.00 | |
| T Gybe | 165.0 | 7.8 | 152.5 | 6.464 | -6.244 | .6 | .1 | 1.00 | 1.00 | |
| | 165.7 | 7.8 | 153.8 | 6.445 | -6.245 | .6 | .1 | 1.00 | 1.00 | |
| | 180.0 | 7.7 | 179.9 | 6.141 | -6.141 | .4 | .1 | 1.00 | 1.00 | |
| **15.0 knots** | | | | | | | | | | |
| Tack | 36.0 | 21.1 | 20.3 | 6.553 | 5.301 | 25.0 | 5.1 | .74 | .97 | |
| | 37.2 | 21.1 | 21.1 | 6.662 | 5.309 | 25.1 | 5.0 | .76 | .96 | |
| | 44.0 | 20.9 | 25.5 | 7.141 | 5.137 | 26.2 | 4.5 | .85 | .93 | |
| | 52.0 | 20.4 | 30.6 | 7.535 | 4.639 | 27.4 | 4.2 | .95 | .92 | |
| | 60.0 | 19.7 | 35.7 | 7.834 | 3.917 | 28.6 | 3.9 | 1.00 | .94 | |
| | 70.0 | 18.6 | 42.5 | 8.127 | 2.780 | 29.6 | 3.6 | 1.00 | .99 | |
| | 80.0 | 17.9 | 51.2 | 8.364 | 1.452 | 25.0 | 3.0 | 1.00 | 1.00 | |
| | 85.0 | ---------- ^ Genoa / Spinnaker v ---------- | | | | | | | | |
| | 90.0 | 16.9 | 59.6 | 8.556 | 0.000 | 22.7 | 2.4 | 1.00 | 1.00 | |
| | 105.0 | 15.8 | 73.7 | 8.654 | -2.240 | 11.3 | 1.7 | 1.00 | 1.00 | |
| | 120.0 | 13.8 | 88.9 | 8.388 | -4.194 | 3.9 | 1.0 | 1.00 | 1.00 | |
| | 135.0 | 11.8 | 107.1 | 7.944 | -5.617 | 2.2 | .5 | 1.00 | 1.00 | |
| | 150.0 | 10.3 | 128.9 | 7.430 | -6.435 | 1.3 | .3 | 1.00 | 1.00 | |
| Gy | 165.0 | 9.4 | 153.7 | 7.049 | -6.809 | .8 | .2 | 1.00 | 1.00 | |
| | 170.9 | 9.2 | 164.0 | 6.922 | -6.835 | .7 | .1 | 1.00 | 1.00 | |
| | 180.0 | 9.2 | 179.9 | 6.793 | -6.793 | .5 | .1 | 1.00 | 1.00 | |

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|---|---|---|---|---|---|---|---|---|---|---|
| **17.0 knots** | | | | | | | | | | |
| | 36.0 | 23.2 | 20.6 | 6.653 | 5.382 | 25.4 | 5.3 | .75 | .91 |
| PT Tack | 37.0 | 23.2 | 21.3 | 6.745 | 5.388 | 25.5 | 5.2 | .77 | .90 |
| | 44.0 | 22.9 | 26.0 | 7.242 | 5.209 | 26.8 | 4.7 | .86 | .88 |
| | 52.0 | 22.4 | 31.3 | 7.642 | 4.705 | 28.0 | 4.3 | .98 | .86 |
| | 60.0 | 21.5 | 36.7 | 7.946 | 3.973 | 29.3 | 4.0 | 1.00 | .89 |
| | 70.0 | 20.4 | 43.9 | 8.250 | 2.822 | 30.0 | 3.6 | 1.00 | .93 |
| | 80.0 | 19.1 | 51.7 | 8.527 | 1.481 | 30.0 | 3.2 | 1.00 | .99 |
| | 87.8 | ^ Genoa / Spinnaker v | | | | | | | |
| | 90.0 | 18.0 | 60.7 | 8.770 | 0.000 | 28.0 | 2.5 | 1.00 | 1.00 |
| | 105.0 | 17.3 | 75.7 | 9.007 | -2.331 | 15.6 | 1.8 | 1.00 | 1.00 |
| | 120.0 | 15.6 | 91.3 | 8.821 | -4.410 | 4.7 | 1.1 | 1.00 | 1.00 |
| | 135.0 | 13.6 | 109.5 | 8.362 | -5.913 | 2.5 | .5 | 1.00 | 1.00 |
| | 150.0 | 12.0 | 130.8 | 7.869 | -6.815 | 1.6 | .3 | 1.00 | 1.00 |
| | 165.0 | 11.0 | 154.7 | 7.518 | -7.262 | 1.0 | .2 | 1.00 | 1.00 |
| PT Gybe | 172.9 | 10.8 | 167.9 | 7.369 | -7.312 | .8 | .1 | 1.00 | 1.00 |
| | 180.0 | 10.8 | 179.9 | 7.285 | -7.285 | .7 | .1 | 1.00 | 1.00 |
| **19.0 knots** | | | | | | | | | | |
| | 36.0 | 25.2 | 20.9 | 6.724 | 5.440 | 25.7 | 5.4 | .76 | .85 |
| PT Tack | 37.0 | 25.2 | 21.6 | 6.815 | 5.445 | 25.9 | 5.3 | .78 | .84 |
| | 44.0 | 24.9 | 26.5 | 7.321 | 5.266 | 27.2 | 4.8 | .88 | .82 |
| | 52.0 | 24.3 | 31.9 | 7.729 | 4.758 | 28.5 | 4.4 | 1.00 | .81 |
| | 60.0 | 23.4 | 37.5 | 8.039 | 4.019 | 29.9 | 4.1 | 1.00 | .84 |
| | 70.0 | 22.1 | 45.1 | 8.356 | 2.858 | 30.3 | 3.7 | 1.00 | .89 |
| | 80.0 | 20.8 | 53.2 | 8.656 | 1.503 | 30.3 | 3.3 | 1.00 | .94 |
| | 90.0 | 19.6 | 62.2 | 8.937 | 0.000 | 28.8 | 2.9 | 1.00 | 1.00 |
| | 90.3 | ^ Genoa / Spinnaker v | | | | | | | |
| | 105.0 | 18.7 | 77.3 | 9.315 | -2.411 | 19.8 | 1.9 | 1.00 | 1.00 |
| | 120.0 | 17.4 | 93.1 | 9.248 | -4.624 | 6.2 | 1.2 | 1.00 | 1.00 |
| | 135.0 | 15.3 | 111.5 | 8.770 | -6.201 | 2.8 | .6 | 1.00 | 1.00 |
| | 150.0 | 13.7 | 132.4 | 8.279 | -7.169 | 1.9 | .4 | 1.00 | 1.00 |
| | 165.0 | 12.8 | 155.5 | 7.937 | -7.667 | 1.3 | .2 | 1.00 | 1.00 |
| T e | 173.7 | 12.6 | 169.6 | 7.781 | -7.733 | 1.0 | .2 | 1.00 | 1.00 |
| | 180.0 | 12.5 | 179.9 | 7.710 | -7.710 | .9 | .1 | 1.00 | 1.00 |

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|---|---|---|---|---|---|---|---|---|---|---|
| **21.0 knots** | | | | | | | | | | |
| | 36.0 | 27.2 | 21.1 | 6.773 | 5.480 | 26.1 | 5.6 | | .78 | .80 |
| OPT Tack | 37.1 | 27.2 | 21.9 | 6.876 | 5.486 | 26.3 | 5.5 | | .80 | .80 |
| | 44.0 | 26.9 | 26.8 | 7.383 | 5.311 | 27.6 | 4.9 | | .90 | .77 |
| | 52.0 | 26.2 | 32.4 | 7.800 | 4.802 | 29.2 | 4.6 | | 1.00 | .77 |
| | 60.0 | 25.2 | 38.2 | 8.117 | 4.059 | 30.3 | 4.2 | | 1.00 | .80 |
| | 70.0 | 23.9 | 46.1 | 8.449 | 2.890 | 30.6 | 3.7 | | 1.00 | .84 |
| | 80.0 | 22.5 | 54.5 | 8.769 | 1.523 | 30.6 | 3.3 | | 1.00 | .90 |
| | 88.6 | | | ^ Genoa / Spinnaker v | | | | | | |
| | 90.0 | 21.0 | 63.7 | 9.079 | 0.000 | 30.3 | 2.6 | | 1.00 | .93 |
| | 105.0 | 19.9 | 78.8 | 9.580 | -2.480 | 23.9 | 1.9 | | 1.00 | 1.00 |
| | 120.0 | 19.2 | 94.7 | 9.657 | -4.828 | 9.3 | 1.2 | | 1.00 | 1.00 |
| | 135.0 | 17.1 | 113.0 | 9.178 | -6.490 | 3.2 | .7 | | 1.00 | 1.00 |
| | 150.0 | 15.5 | 133.6 | 8.676 | -7.514 | 2.2 | .4 | | 1.00 | 1.00 |
| | 165.0 | 14.5 | 156.2 | 8.329 | -8.046 | 1.5 | .3 | | 1.00 | 1.00 |
| OPT Gybe | 174.6 | 14.3 | 171.3 | 8.159 | -8.123 | 1.2 | .2 | | 1.00 | 1.00 |
| | 180.0 | 14.3 | 179.8 | 8.100 | -8.100 | 1.0 | .2 | | 1.00 | 1.00 |
| **23.0 knots** | | | | | | | | | | |
| | 36.0 | 29.3 | 21.2 | 6.804 | 5.505 | 26.5 | 5.8 | | .79 | .76 |
| OPT Tack | 37.3 | 29.2 | 22.2 | 6.929 | 5.513 | 26.8 | 5.6 | | .81 | .75 |
| | 44.0 | 28.8 | 27.1 | 7.431 | 5.346 | 28.1 | 5.1 | | .91 | .74 |
| | 52.0 | 28.0 | 32.8 | 7.858 | 4.838 | 29.7 | 4.7 | | 1.00 | .73 |
| | 60.0 | 27.0 | 38.9 | 8.183 | 4.092 | 30.5 | 4.2 | | 1.00 | .76 |
| | 70.0 | 25.6 | 47.0 | 8.530 | 2.918 | 30.8 | 3.8 | | 1.00 | .80 |
| | 80.0 | 24.1 | 55.6 | 8.869 | 1.540 | 31.0 | 3.4 | | 1.00 | .86 |
| | 85.8 | | | ^ Genoa / Spinnaker v | | | | | | |
| | 90.0 | 22.6 | 65.1 | 9.212 | 0.000 | 30.7 | 2.6 | | 1.00 | .89 |
| | 105.0 | 21.0 | 80.0 | 9.809 | -2.539 | 27.6 | 2.0 | | 1.00 | 1.00 |
| | 120.0 | 20.8 | 96.0 | 10.056 | -5.028 | 12.5 | 1.3 | | 1.00 | 1.00 |
| | 135.0 | 18.9 | 114.1 | 9.596 | -6.785 | 3.7 | .7 | | 1.00 | 1.00 |
| | 150.0 | 17.3 | 134.6 | 9.073 | -7.857 | 2.5 | .5 | | 1.00 | 1.00 |
| | 165.0 | 16.3 | 156.8 | 8.711 | -8.415 | 1.7 | .3 | | 1.00 | 1.00 |
| Gybe | 174.6 | 16.0 | 171.5 | 8.534 | -8.496 | 1.4 | .2 | | 1.00 | 1.00 |
| | 180.0 | 16.0 | 179.8 | 8.473 | -8.473 | 1.2 | .2 | | 1.00 | 1.00 |

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185/1 VPP

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| | TRUE WIND SPEED | TRUE WIND ANGLE | APP. WIND SPEED | APP. WIND ANGLE | BOAT SPEED | VELOCITY MADE GOOD | HEEL ANGLE | LEEWAY ANGLE | FLAT COEFF. | REEF COEFF. |
|---|---|---|---|---|---|---|---|---|---|---|
| **25.0 knots** | | | | | | | | | | |
| | 36.0 | 31.2 | 21.3 | 6.819 | 5.517 | 27.0 | 6.0 | | .79 | .73 |
| OPT Tack | 37.5 | 31.2 | 22.5 | 6.973 | 5.530 | 27.3 | 5.8 | | .82 | .72 |
| | 44.0 | 30.8 | 27.3 | 7.468 | 5.372 | 28.6 | 5.2 | | .92 | .70 |
| | 52.0 | 29.9 | 33.1 | 7.904 | 4.866 | 30.3 | 4.8 | | 1.00 | .70 |
| | 60.0 | 28.8 | 39.4 | 8.239 | 4.120 | 30.9 | 4.3 | | 1.00 | .73 |
| | 70.0 | 27.4 | 47.8 | 8.602 | 2.942 | 31.0 | 3.8 | | 1.00 | .77 |
| | 80.0 | 25.8 | 56.6 | 8.958 | 1.556 | 31.3 | 3.4 | | 1.00 | .82 |
| | 83.7 | | | ^ Genoa / Spinnaker v | | | | | | |
| | 90.0 | 24.3 | 66.3 | 9.334 | 0.000 | 31.0 | 2.6 | | 1.00 | .85 |
| | 105.0 | 21.9 | 81.2 | 10.008 | -2.590 | 30.9 | 2.0 | | 1.00 | 1.00 |
| | 120.0 | 22.3 | 97.2 | 10.443 | -5.221 | 15.7 | 1.3 | | 1.00 | 1.00 |
| | 135.0 | 20.7 | 115.1 | 10.033 | -7.094 | 4.3 | .8 | | 1.00 | 1.00 |
| | 150.0 | 19.0 | 135.4 | 9.475 | -8.206 | 2.9 | .5 | | 1.00 | 1.00 |
| | 165.0 | 18.0 | 157.2 | 9.092 | -8.782 | 2.0 | .3 | | 1.00 | 1.00 |
| OPT Gybe | 174.5 | 17.8 | 171.5 | 8.907 | -8.865 | 1.6 | .3 | | 1.00 | 1.00 |
| | 180.0 | 17.8 | 179.8 | 8.839 | -8.839 | 1.4 | .2 | | 1.00 | 1.00 |
| **27.0 knots** | | | | | | | | | | |
| | 36.0 | 33.2 | 21.3 | 6.820 | 5.518 | 27.4 | 6.2 | | .80 | .69 |
| OPT Tack | 37.8 | 33.2 | 22.8 | 7.011 | 5.537 | 27.8 | 5.9 | | .83 | .69 |
| | 44.0 | 32.7 | 27.5 | 7.493 | 5.390 | 28.9 | 5.3 | | .91 | .67 |
| | 52.0 | 31.7 | 33.5 | 7.942 | 4.889 | 30.6 | 4.9 | | 1.00 | .67 |
| | 60.0 | 30.6 | 39.9 | 8.286 | 4.143 | 31.2 | 4.4 | | 1.00 | .70 |
| | 70.0 | 29.1 | 48.5 | 8.665 | 2.964 | 31.3 | 3.9 | | 1.00 | .74 |
| | 80.0 | 27.4 | 57.5 | 9.038 | 1.569 | 31.7 | 3.4 | | 1.00 | .79 |
| | 81.9 | | | ^ Genoa / Spinnaker v | | | | | | |
| | 90.0 | 25.9 | 67.4 | 9.445 | 0.000 | 31.4 | 2.6 | | 1.00 | .82 |
| | 105.0 | 23.2 | 82.5 | 10.177 | -2.634 | 32.2 | 2.0 | | 1.00 | .98 |
| | 120.0 | 23.7 | 98.3 | 10.813 | -5.407 | 18.9 | 1.3 | | 1.00 | 1.00 |
| | 135.0 | 22.5 | 115.8 | 10.498 | -7.423 | 5.0 | .8 | | 1.00 | 1.00 |
| | 150.0 | 20.8 | 136.0 | 9.892 | -8.567 | 3.3 | .6 | | 1.00 | 1.00 |
| | 165.0 | 19.8 | 157.5 | 9.477 | -9.154 | 2.3 | .4 | | 1.00 | 1.00 |
| T Gybe | 174.2 | 19.6 | 171.2 | 9.283 | -9.235 | 1.8 | .3 | | 1.00 | 1.00 |
| | 180.0 | 19.6 | 179.8 | 9.206 | -9.206 | 1.6 | .2 | | 1.00 | 1.00 |

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