

SPEED GUIDE

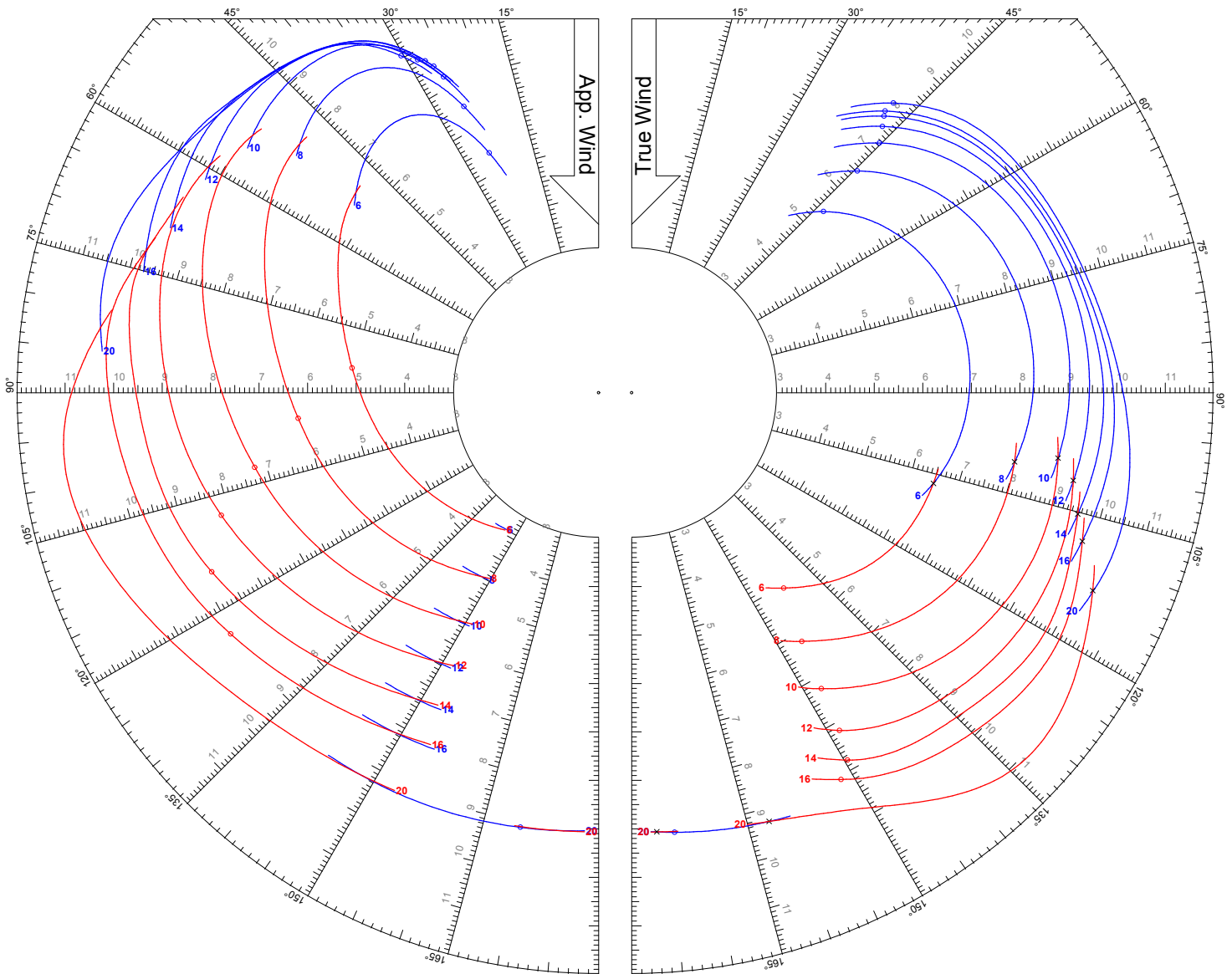
MEDIUM KEEL

HANSE

588



World Leader in Rating Technology



TWS: 6, 8, 10, 12, 14, 16, 20 kts

Jib

Asymmetric Spinnaker on Centerline

SPEED GUIDE

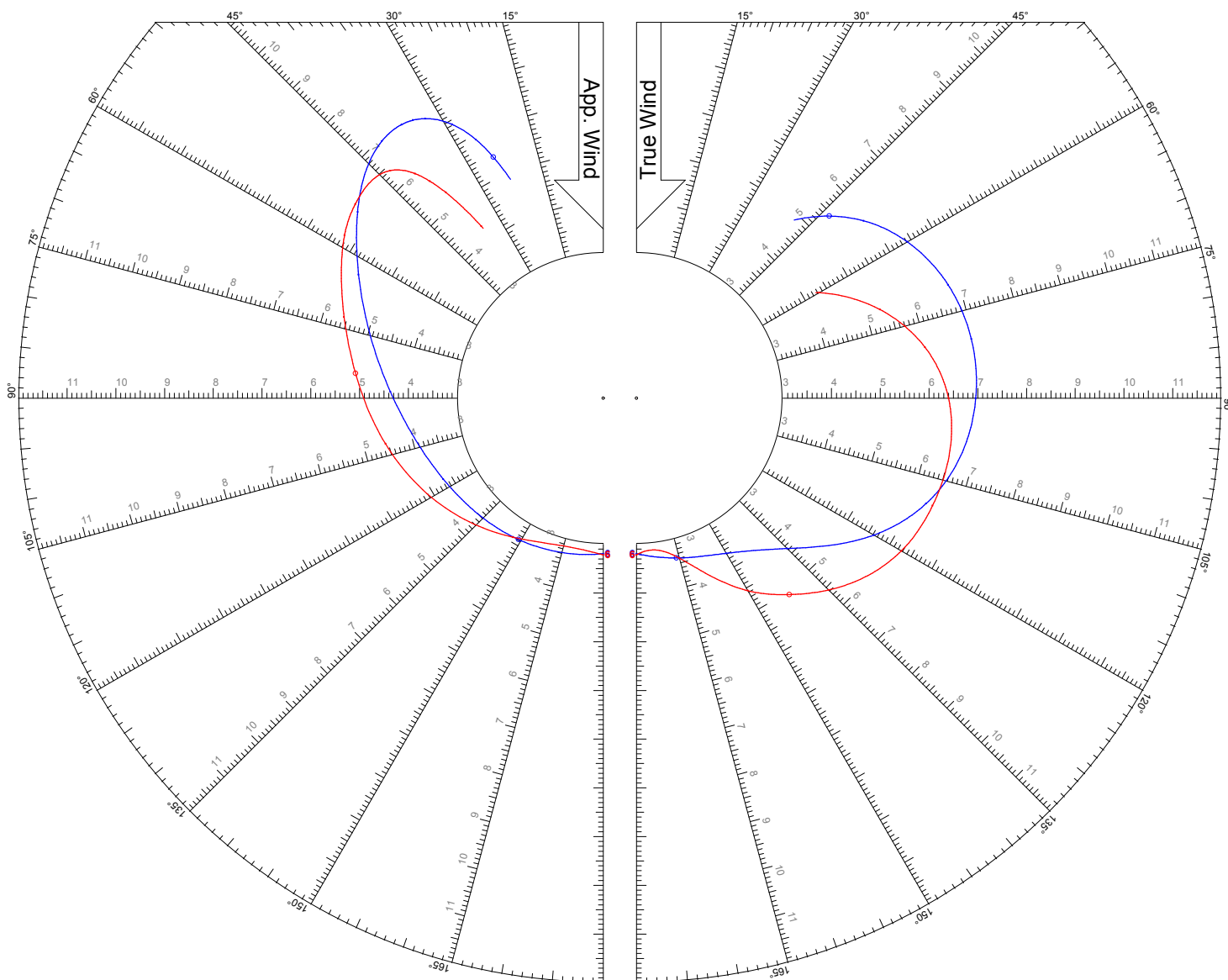
MEDIUM KEEL

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TWS: 6 kts

Jib

Asymmetric Spinnaker on Centerline

SPEED GUIDE

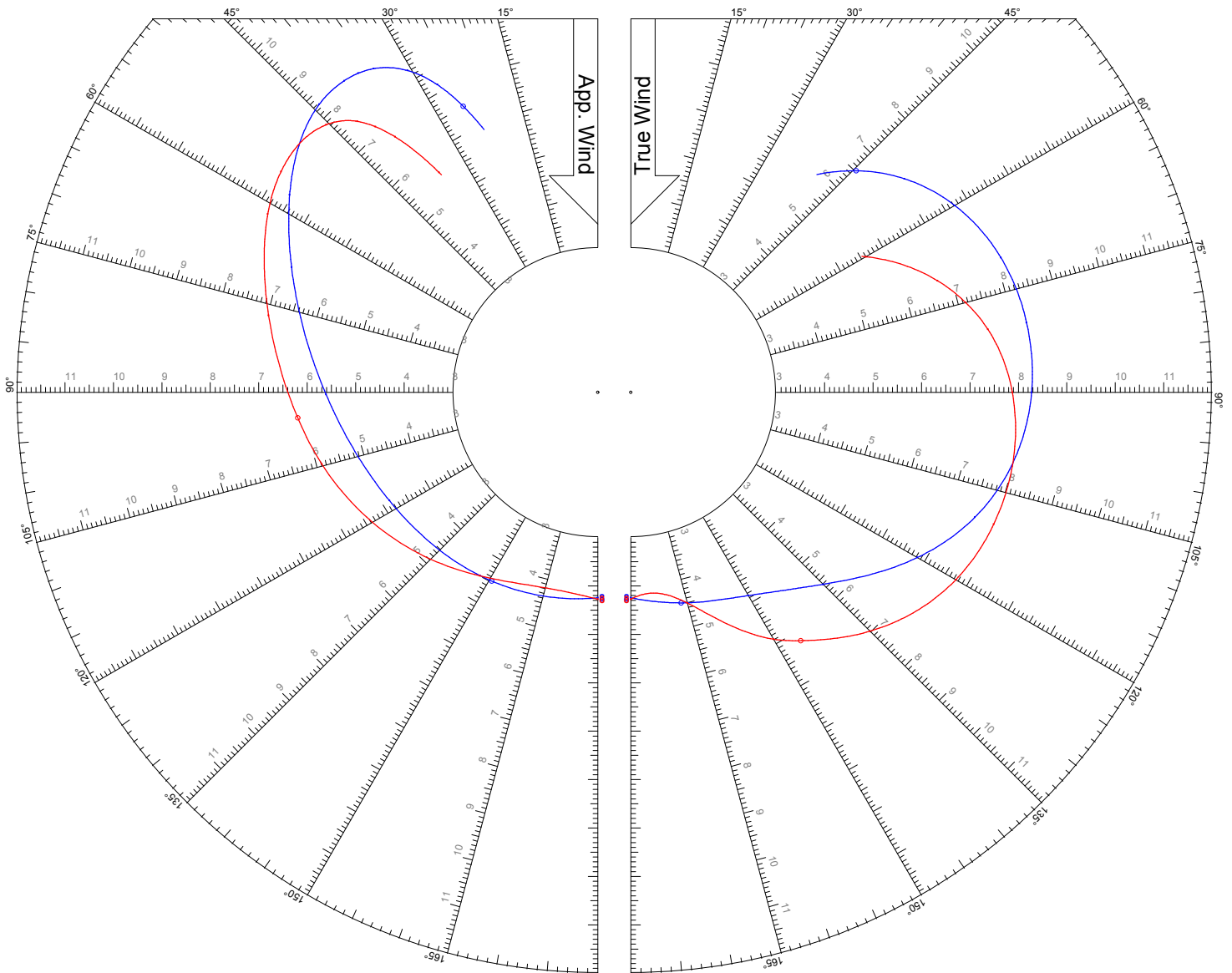
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TWS: 8 kts

Jib

Asymmetric Spinnaker on Centerline

SPEED GUIDE

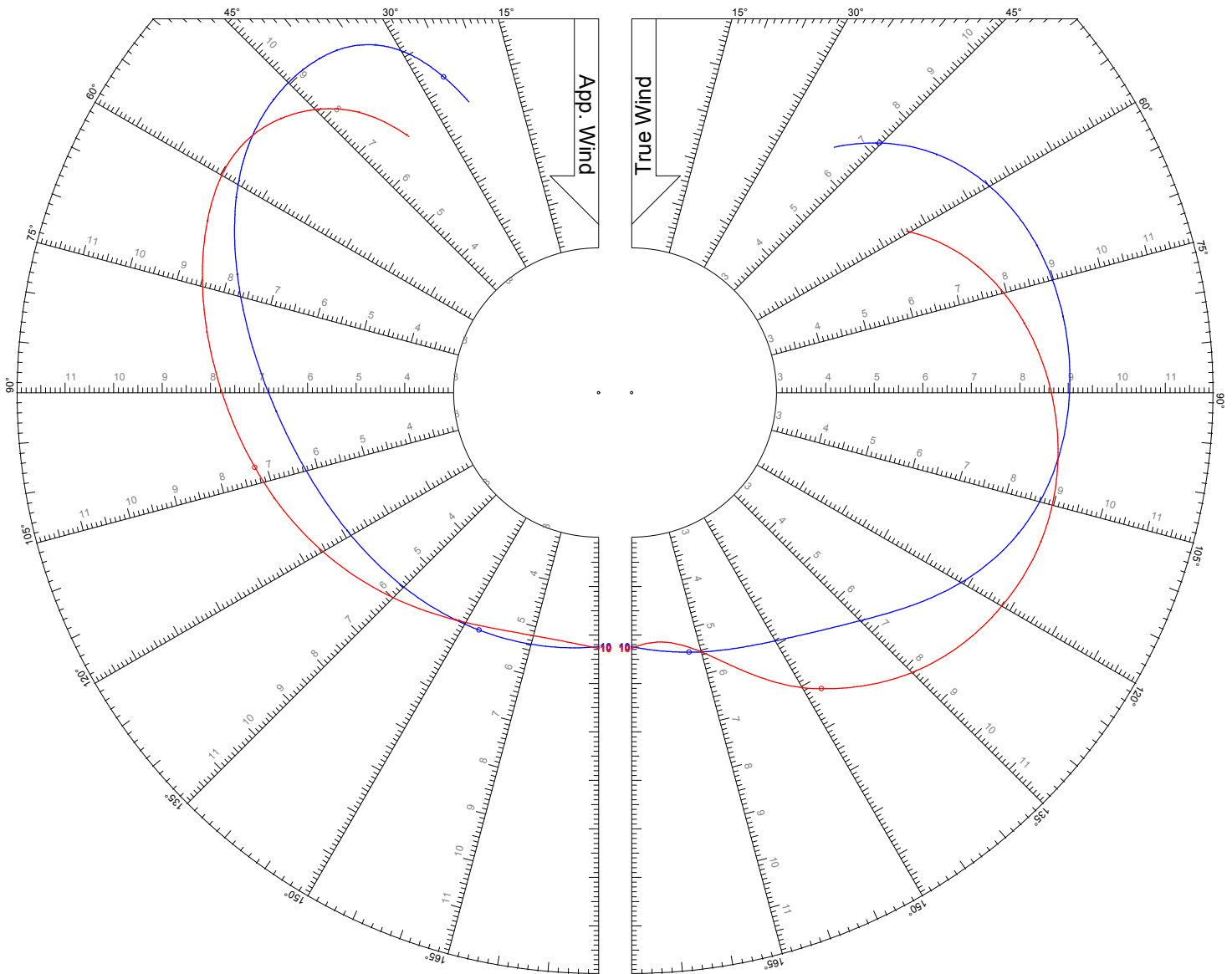
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TWS: 10 kts

Jib

Asymmetric Spinnaker on Centerline

SPEED GUIDE

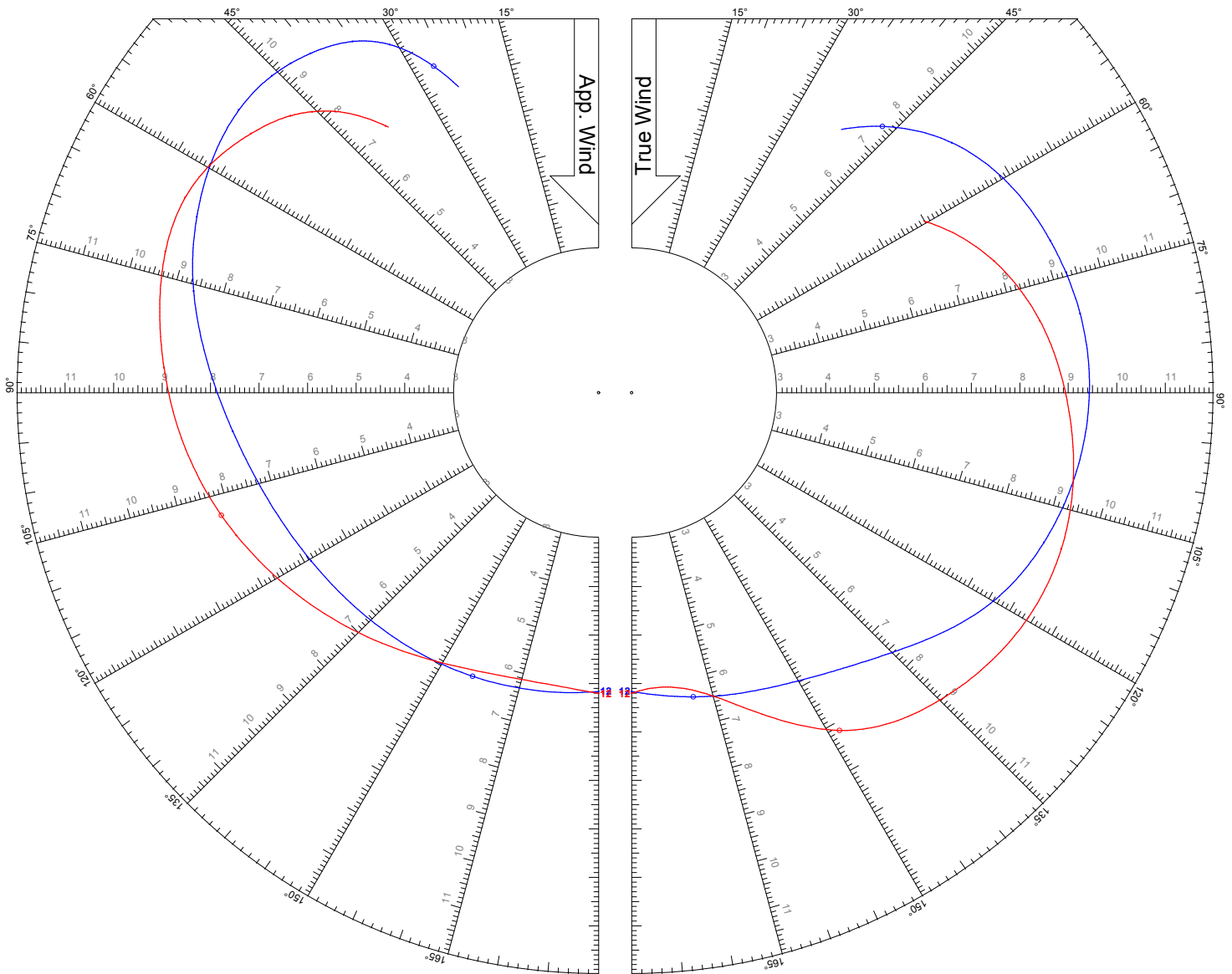
MEDIUM KEEL

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TWS: 12 kts

Jib

Asymmetric Spinnaker on Centerline

SPEED GUIDE

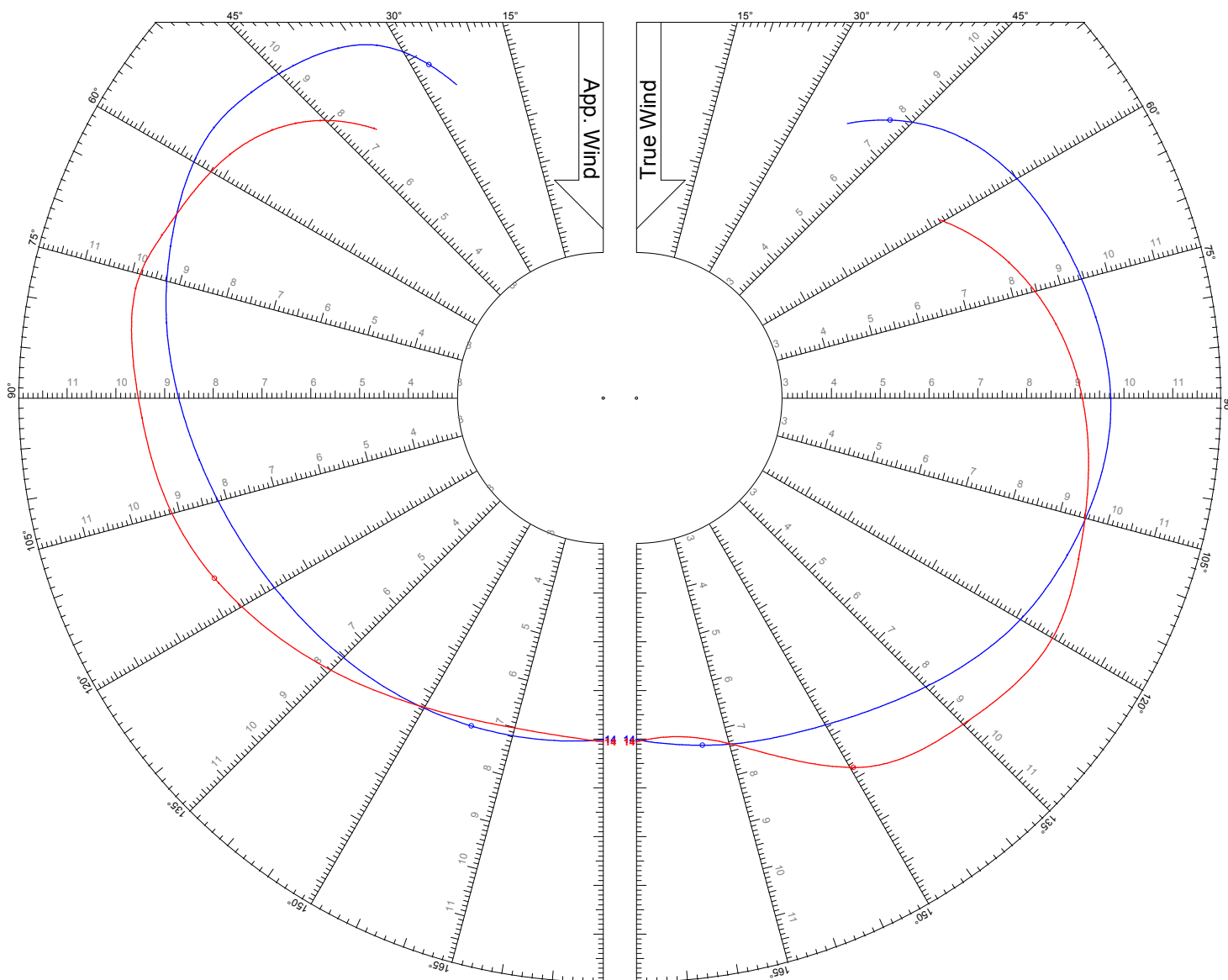
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TWS: 14 kts

Jib

Asymmetric Spinnaker on Centerline

SPEED GUIDE

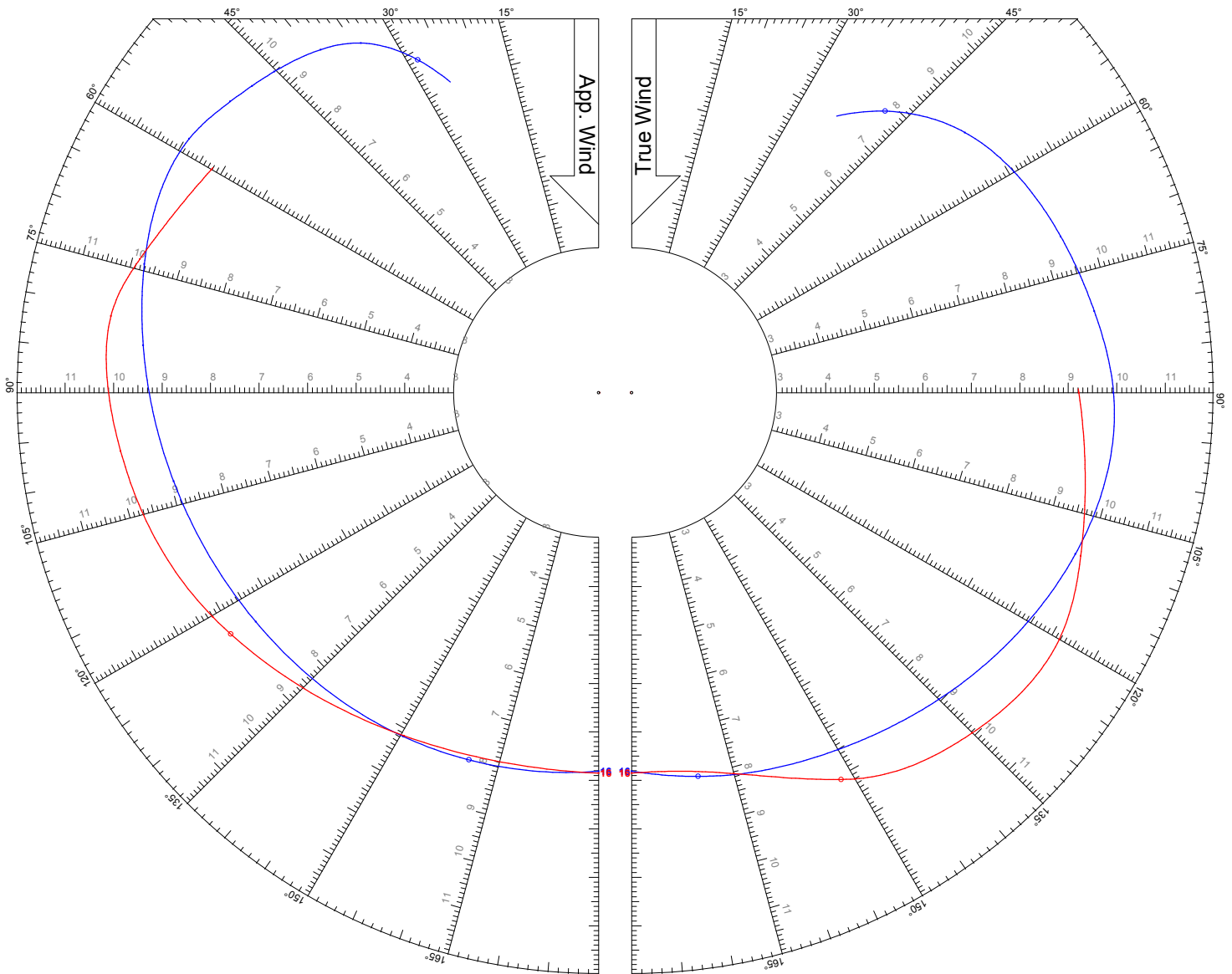
MEDIUM KEEL

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World Leader in Rating Technology



TWS: 16 kts

Jib

Asymmetric Spinnaker on Centerline

SPEED GUIDE

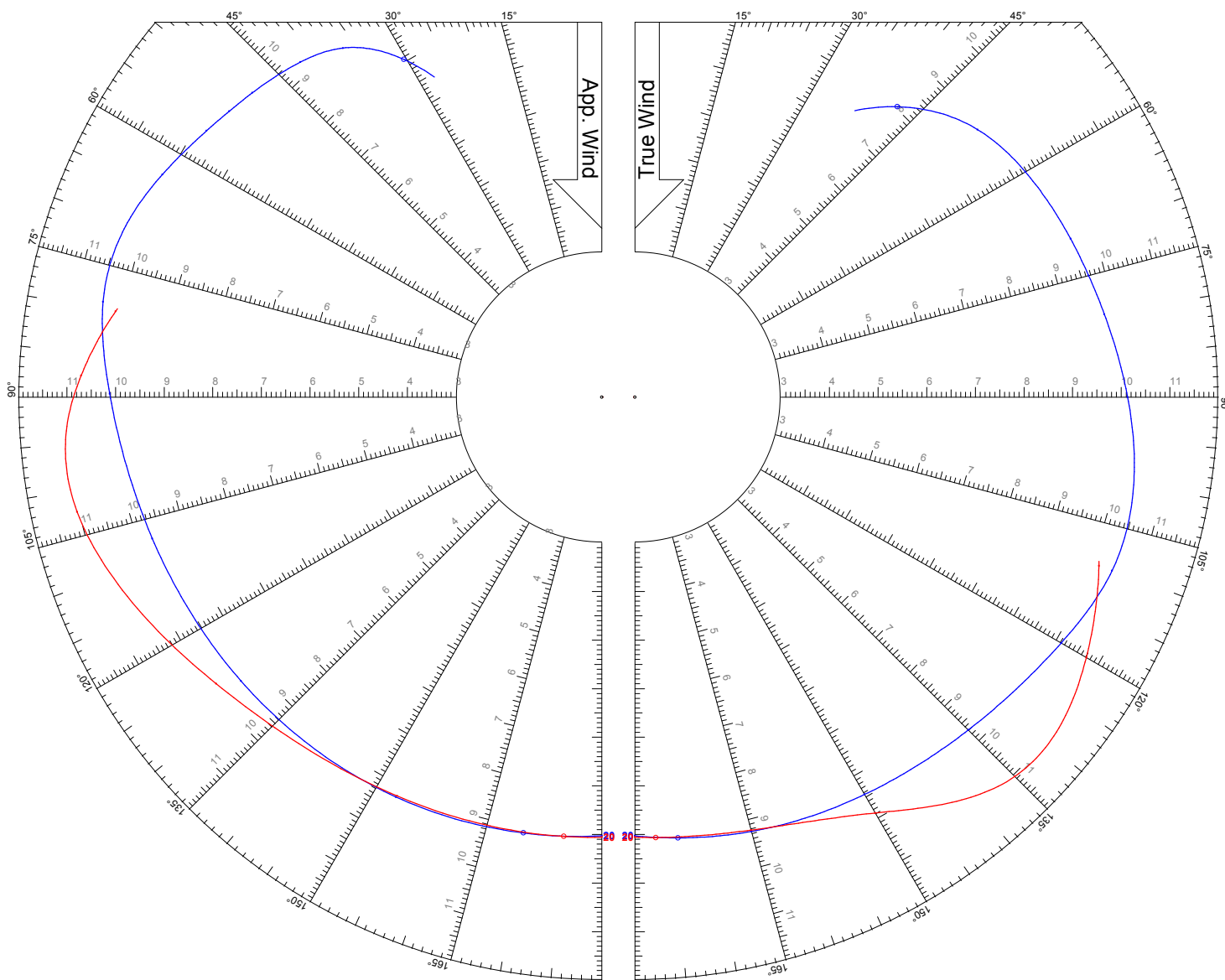
MEDIUM KEEL

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World Leader in Rating Technology



TWS: 20 kts

Jib

Asymmetric Spinnaker on Centerline

SPEED GUIDE

MEDIUM KEEL

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| TWS = 6 Kts | | | | | | | |
|-------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 46.6° (b) | 5.44 | 3.74 | 10.51 | 24.5° | 7.8° | 1.00 | 0.95 |
| 52° | 5.91 | 3.64 | 10.71 | 26.2° | 8.4° | 1.00 | 0.95 |
| 60° | 6.42 | 3.21 | 10.75 | 28.9° | 8.7° | 1.00 | 0.97 |
| 70° | 6.80 | 2.33 | 10.50 | 32.5° | 8.4° | 1.00 | 0.99 |
| 75° | 6.91 | 1.79 | 10.26 | 34.4° | 8.0° | 1.00 | 1.00 |
| 80° | 6.97 | 1.21 | 9.96 | 36.4° | 7.4° | 1.00 | 1.00 |
| 90° | 6.96 | 0.00 | 9.19 | 40.8° | 5.8° | 1.00 | 1.00 |
| 110° | 6.46 | 2.21 | 7.16 | 52.0° | 10.0° | 1.00 | 1.00 |
| 120° | 6.27 | 3.14 | 6.14 | 57.8° | 7.9° | 1.00 | 1.00 |
| 135° | 5.57 | 3.94 | 4.45 | 72.6° | 4.7° | 1.00 | 1.00 |
| 150° | 4.57 | 3.95 | 3.07 | 101.9° | 2.8° | 1.00 | 1.00 |
| 165° | 3.40 | 3.29 | 2.85 | 147.0° | 2.3° | 1.00 | 1.00 |
| 180° | 3.22 | 3.22 | 2.78 | 180.0° | 2.0° | 1.00 | 1.00 |
| 142.2° (r) | 5.11 | 4.03 | 3.70 | 84.3° | 3.6° | 1.00 | 1.00 |

| TWS = 8 Kts | | | | | | | |
|-------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 45.5° (b) | 6.52 | 4.57 | 13.41 | 25.2° | 14.8° | 1.00 | 0.94 |
| 52° | 7.16 | 4.41 | 13.63 | 27.5° | 15.8° | 1.00 | 0.95 |
| 60° | 7.72 | 3.86 | 13.61 | 30.6° | 16.2° | 1.00 | 0.97 |
| 70° | 8.13 | 2.78 | 13.21 | 34.7° | 15.6° | 1.00 | 0.99 |
| 75° | 8.24 | 2.13 | 12.88 | 36.9° | 14.6° | 1.00 | 1.00 |
| 80° | 8.29 | 1.44 | 12.48 | 39.1° | 13.4° | 1.00 | 1.00 |
| 90° | 8.27 | 0.00 | 11.51 | 44.0° | 10.5° | 1.00 | 1.00 |
| 110° | 7.97 | 2.73 | 9.16 | 55.1° | 13.7° | 1.00 | 1.00 |
| 120° | 7.74 | 3.87 | 7.88 | 61.6° | 11.4° | 1.00 | 1.00 |
| 135° | 6.98 | 4.94 | 5.81 | 76.8° | 6.5° | 1.00 | 1.00 |
| 150° | 5.89 | 5.10 | 4.13 | 104.6° | 3.3° | 1.00 | 1.00 |
| 165° | 4.51 | 4.35 | 3.83 | 147.3° | 2.5° | 1.00 | 1.00 |
| 180° | 4.27 | 4.27 | 3.73 | 180.0° | 2.1° | 1.00 | 1.00 |
| 145.6° (r) | 6.22 | 5.13 | 4.53 | 94.9° | 4.0° | 1.00 | 1.00 |

| TWS = 10 Kts | | | | | | | |
|--------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 44.8° (b) | 7.25 | 5.15 | 15.99 | 26.1° | 21.9° | 1.00 | 0.88 |
| 52° | 7.99 | 4.92 | 16.19 | 29.1° | 23.4° | 1.00 | 0.89 |
| 60° | 8.52 | 4.26 | 16.05 | 32.6° | 24.4° | 1.00 | 0.93 |
| 70° | 8.89 | 3.04 | 15.48 | 37.4° | 23.0° | 1.00 | 0.96 |
| 75° | 8.98 | 2.32 | 15.07 | 39.9° | 21.7° | 1.00 | 0.98 |
| 80° | 9.03 | 1.57 | 14.59 | 42.5° | 20.4° | 1.00 | 1.00 |
| 90° | 9.02 | 0.00 | 13.47 | 47.9° | 15.5° | 1.00 | 1.00 |
| 110° | 8.98 | 3.07 | 10.92 | 59.4° | 18.4° | 1.00 | 1.00 |
| 120° | 8.81 | 4.40 | 9.46 | 66.3° | 14.3° | 1.00 | 1.00 |
| 135° | 8.17 | 5.78 | 7.16 | 81.2° | 8.5° | 1.00 | 1.00 |
| 150° | 7.03 | 6.09 | 5.26 | 108.1° | 4.0° | 1.00 | 1.00 |
| 165° | 5.54 | 5.35 | 4.87 | 147.9° | 2.9° | 1.00 | 1.00 |
| 180° | 5.28 | 5.28 | 4.72 | 180.0° | 2.1° | 1.00 | 1.00 |
| 147.4° (r) | 7.25 | 6.11 | 5.51 | 102.3° | 4.5° | 1.00 | 1.00 |

| TWS = 12 Kts | | | | | | | |
|--------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 43.3° (b) | 7.54 | 5.49 | 18.24 | 26.8° | 23.6° | 1.00 | 0.73 |
| 52° | 8.38 | 5.16 | 18.38 | 31.0° | 25.2° | 1.00 | 0.75 |
| 60° | 8.84 | 4.42 | 18.12 | 35.0° | 26.6° | 1.00 | 0.79 |
| 70° | 9.18 | 3.14 | 17.42 | 40.3° | 27.4° | 1.00 | 0.87 |
| 75° | 9.30 | 2.41 | 16.98 | 43.1° | 27.8° | 1.00 | 0.92 |
| 80° | 9.39 | 1.63 | 16.47 | 45.9° | 26.2° | 1.00 | 0.95 |
| 90° | 9.43 | 0.00 | 15.26 | 51.8° | 21.1° | 1.00 | 1.00 |
| 110° | 9.42 | 3.22 | 12.47 | 64.7° | 22.3° | 0.99 | 0.94 |
| 120° | 9.39 | 4.70 | 10.93 | 71.9° | 16.9° | 1.00 | 1.00 |
| 135° | 8.97 | 6.35 | 8.50 | 86.7° | 10.5° | 1.00 | 1.00 |
| 150° | 8.03 | 6.95 | 6.45 | 111.5° | 4.8° | 1.00 | 1.00 |
| 165° | 6.48 | 6.26 | 5.98 | 148.7° | 1.0° | 1.00 | 1.00 |
| 180° | 6.20 | 6.20 | 5.80 | 180.0° | 2.2° | 1.00 | 1.00 |
| 148.4° (r) | 8.18 | 6.97 | 6.61 | 108.0° | 5.2° | 1.00 | 1.00 |

| TWS = 14 Kts | | | | | | | |
|--------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 42.4° (b) | 7.72 | 5.70 | 20.38 | 27.6° | 24.1° | 1.00 | 0.61 |
| 52° | 8.60 | 5.29 | 20.45 | 32.6° | 26.1° | 1.00 | 0.63 |
| 60° | 9.01 | 4.50 | 20.08 | 37.1° | 27.5° | 1.00 | 0.67 |
| 70° | 9.33 | 3.19 | 19.29 | 43.0° | 28.7° | 1.00 | 0.75 |
| 75° | 9.45 | 2.45 | 18.81 | 46.0° | 29.0° | 1.00 | 0.80 |
| 80° | 9.56 | 1.66 | 18.28 | 49.0° | 29.1° | 1.00 | 0.86 |
| 90° | 9.73 | 0.00 | 17.05 | 55.2° | 26.2° | 1.00 | 0.97 |
| 110° | 9.65 | 3.30 | 14.02 | 69.7° | 22.3° | 0.95 | 0.88 |
| 120° | 9.85 | 4.93 | 12.46 | 76.8° | 21.8° | 1.00 | 1.00 |
| 135° | 9.47 | 6.70 | 9.91 | 92.5° | 11.7° | 1.00 | 1.00 |
| 150° | 8.75 | 7.58 | 7.77 | 115.7° | 5.7° | 1.00 | 1.00 |
| 165° | 7.35 | 7.10 | 7.15 | 149.6° | 1.4° | 1.00 | 1.00 |
| 180° | 7.05 | 7.05 | 6.95 | 180.0° | 2.3° | 1.00 | 1.00 |
| 149.6° (r) | 8.79 | 7.58 | 7.81 | 114.9° | 5.8° | 1.00 | 1.00 |

| TWS = 16 Kts | | | | | | | |
|--------------|-------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 42.0° (b) | 7.81 | 5.81 | 22.43 | 28.5° | 25.4° | 0.73 | 0.58 |
| 52° | 8.72 | 5.37 | 22.45 | 34.2° | 27.1° | 0.82 | 0.58 |
| 60° | 9.11 | 4.55 | 22.02 | 39.0° | 28.2° | 0.99 | 0.58 |
| 70° | 9.41 | 3.22 | 21.16 | 45.3° | 29.0° | 1.00 | 0.65 |
| 75° | 9.55 | 2.47 | 20.64 | 48.5° | 29.8° | 1.00 | 0.70 |
| 80° | 9.68 | 1.68 | 20.09 | 51.7° | 30.3° | 1.00 | 0.76 |
| 90° | 9.93 | 0.00 | 18.83 | 58.2° | 30.7° | 1.00 | 0.92 |
| 110° | 9.85 | 3.37 | 15.66 | 73.8° | 22.4° | 0.91 | 0.84 |
| 120° | 10.18 | 5.09 | 14.03 | 81.1° | 22.2° | 0.98 | 0.94 |
| 135° | 9.93 | 7.02 | 11.40 | 97.0° | 13.1° | 1.00 | 1.00 |
| 150° | 9.20 | 7.97 | 9.26 | 120.2° | 6.6° | 1.00 | 1.00 |
| 165° | 8.16 | 7.88 | 8.39 | 150.4° | 1.8° | 1.00 | 1.00 |
| 180° | 7.85 | 7.85 | 8.15 | 180.0° | 2.4° | 1.00 | 1.00 |
| 151.6° (r) | 9.07 | 7.98 | 9.11 | 123.3° | 6.2° | 1.00 | 1.00 |

| TWS = 20 Kts | | | | | | | |
|--------------|-------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 42.1° (b) | 8.05 | 5.97 | 26.53 | 30.4° | 24.9° | 0.49 | 0.58 |
| 52° | 8.94 | 5.51 | 26.46 | 36.6° | 26.0° | 0.50 | 0.58 |
| 60° | 9.27 | 4.63 | 25.91 | 42.0° | 26.1° | 0.53 | 0.58 |
| 70° | 9.53 | 3.26 | 24.93 | 48.9° | 27.1° | 0.61 | 0.58 |
| 75° | 9.66 | 2.50 | 24.36 | 52.5° | 30.1° | 0.80 | 0.58 |
| 80° | 9.80 | 1.70 | 23.75 | 56.0° | 30.9° | 1.00 | 0.59 |
| 90° | 10.13 | 0.00 | 22.42 | 63.1° | 32.5° | 1.00 | 0.74 |
| 110° | 10.44 | 3.57 | 19.14 | 79.2° | 24.6° | 1.00 | 1.00 |
| 120° | 10.72 | 5.36 | 17.34 | 87.6° | 22.2° | 0.87 | 0.94 |
| 135° | 11.04 | 7.81 | 14.48 | 102.4° | 17.4° | 1.00 | 1.00 |
| 150° | 9.88 | 8.56 | 12.46 | 126.6° | 9.5° | 1.00 | 1.00 |
| 165° | 9.25 | 8.94 | 11.32 | 152.8° | 2.9° | 1.00 | 1.00 |
| 180° | 9.06 | 9.06 | 10.94 | 180.0° | 2.6° | 1.00 | 1.00 |
| 174.4° (r) | 9.11 | 9.07 | 10.97 | 169.8° | 1.5° | 1.00 | 1.00 |

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| TWS = 6 Kts | | | | | | | |
|-------------|------|------|-------|--------|------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 46.6° (b) | 5.44 | 3.74 | 10.53 | 24.4° | 7.8° | 1.00 | 0.95 |
| 52° | 5.91 | 3.64 | 10.72 | 26.1° | 8.4° | 1.00 | 0.95 |
| 60° | 6.42 | 3.21 | 10.76 | 28.7° | 8.7° | 1.00 | 0.97 |
| 70° | 6.80 | 2.33 | 10.50 | 32.4° | 8.4° | 1.00 | 0.99 |
| 75° | 6.91 | 1.79 | 10.26 | 34.3° | 8.0° | 1.00 | 1.00 |
| 80° | 6.97 | 1.21 | 9.96 | 36.4° | 7.4° | 1.00 | 1.00 |
| 90° | 6.96 | 0.00 | 9.20 | 40.9° | 5.8° | 1.00 | 1.00 |
| 110° | 6.32 | 2.16 | 7.10 | 53.2° | 3.1° | 1.00 | 1.00 |
| 120° | 5.62 | 2.81 | 5.85 | 63.8° | 2.0° | 1.00 | 1.00 |
| 135° | 4.37 | 3.09 | 4.31 | 89.2° | 0.9° | 1.00 | 1.00 |
| 150° | 3.68 | 3.19 | 3.44 | 117.7° | 0.5° | 1.00 | 1.00 |
| 165° | 3.40 | 3.28 | 2.93 | 147.6° | 0.3° | 1.00 | 1.00 |
| 180° | 3.19 | 3.19 | 2.89 | 180.0° | 0.1° | 1.00 | 1.00 |
| 165.9° (r) | 3.38 | 3.28 | 2.92 | 149.6° | 0.2° | 1.00 | 1.00 |

| TWS = 8 Kts | | | | | | | |
|-------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 45.5° (b) | 6.52 | 4.57 | 13.36 | 24.5° | 14.8° | 1.00 | 0.94 |
| 52° | 7.16 | 4.41 | 13.55 | 26.7° | 15.8° | 1.00 | 0.95 |
| 60° | 7.72 | 3.86 | 13.50 | 29.7° | 16.2° | 1.00 | 0.97 |
| 70° | 8.13 | 2.78 | 13.09 | 33.8° | 15.6° | 1.00 | 0.99 |
| 75° | 8.24 | 2.13 | 12.77 | 36.1° | 14.6° | 1.00 | 1.00 |
| 80° | 8.29 | 1.44 | 12.39 | 38.5° | 13.4° | 1.00 | 1.00 |
| 90° | 8.27 | 0.00 | 11.45 | 43.8° | 10.5° | 1.00 | 1.00 |
| 110° | 7.56 | 2.58 | 8.96 | 57.6° | 4.6° | 1.00 | 1.00 |
| 120° | 6.83 | 3.41 | 7.53 | 68.3° | 2.9° | 1.00 | 1.00 |
| 135° | 5.61 | 3.97 | 5.75 | 91.4° | 1.4° | 1.00 | 1.00 |
| 150° | 4.85 | 4.20 | 4.62 | 118.3° | 0.9° | 1.00 | 1.00 |
| 165° | 4.50 | 4.35 | 3.93 | 147.8° | 0.5° | 1.00 | 1.00 |
| 180° | 4.25 | 4.25 | 3.87 | 180.0° | 0.1° | 1.00 | 1.00 |
| 166.6° (r) | 4.47 | 4.35 | 3.90 | 151.1° | 0.4° | 1.00 | 1.00 |

| TWS = 10 Kts | | | | | | | |
|--------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 44.8° (b) | 7.25 | 5.15 | 15.76 | 24.5° | 21.9° | 1.00 | 0.88 |
| 52° | 7.99 | 4.92 | 15.87 | 27.1° | 23.4° | 1.00 | 0.89 |
| 60° | 8.52 | 4.26 | 15.63 | 30.2° | 24.4° | 1.00 | 0.93 |
| 70° | 8.89 | 3.04 | 15.04 | 35.1° | 23.0° | 1.00 | 0.96 |
| 75° | 8.98 | 2.32 | 14.64 | 37.8° | 21.7° | 1.00 | 0.98 |
| 80° | 9.03 | 1.57 | 14.20 | 40.7° | 20.4° | 1.00 | 1.00 |
| 90° | 9.02 | 0.00 | 13.24 | 47.0° | 15.5° | 1.00 | 1.00 |
| 110° | 8.49 | 2.90 | 10.69 | 61.9° | 6.7° | 1.00 | 1.00 |
| 120° | 7.84 | 3.92 | 9.18 | 72.4° | 3.9° | 1.00 | 1.00 |
| 135° | 6.66 | 4.71 | 7.20 | 94.2° | 2.1° | 1.00 | 1.00 |
| 150° | 5.91 | 5.12 | 5.84 | 119.6° | 1.3° | 1.00 | 1.00 |
| 165° | 5.54 | 5.35 | 4.99 | 148.3° | 0.7° | 1.00 | 1.00 |
| 180° | 5.24 | 5.24 | 4.90 | 180.0° | 0.1° | 1.00 | 1.00 |
| 167.5° (r) | 5.48 | 5.35 | 4.92 | 153.6° | 0.6° | 1.00 | 1.00 |

| TWS = 12 Kts | | | | | | | |
|--------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 43.3° (b) | 7.54 | 5.49 | 17.88 | 24.8° | 23.6° | 1.00 | 0.73 |
| 52° | 8.38 | 5.16 | 17.87 | 28.4° | 25.2° | 1.00 | 0.75 |
| 60° | 8.84 | 4.42 | 17.44 | 31.9° | 26.6° | 1.00 | 0.79 |
| 70° | 9.18 | 3.14 | 16.57 | 36.9° | 27.4° | 1.00 | 0.87 |
| 75° | 9.30 | 2.41 | 16.04 | 39.5° | 27.8° | 1.00 | 0.92 |
| 80° | 9.39 | 1.63 | 15.59 | 42.7° | 26.2° | 1.00 | 0.95 |
| 90° | 9.43 | 0.00 | 14.66 | 49.9° | 21.1° | 1.00 | 1.00 |
| 110° | 9.04 | 3.09 | 12.27 | 66.5° | 9.0° | 1.00 | 1.00 |
| 120° | 8.61 | 4.30 | 10.78 | 76.4° | 5.2° | 1.00 | 1.00 |
| 135° | 7.58 | 5.36 | 8.68 | 96.9° | 2.9° | 1.00 | 1.00 |
| 150° | 6.87 | 5.95 | 7.12 | 121.2° | 1.9° | 1.00 | 1.00 |
| 165° | 6.48 | 6.26 | 6.13 | 149.1° | 1.0° | 1.00 | 1.00 |
| 180° | 6.16 | 6.16 | 6.01 | 180.0° | 0.2° | 1.00 | 1.00 |
| 168.6° (r) | 6.40 | 6.28 | 6.02 | 156.4° | 0.8° | 1.00 | 1.00 |

| TWS = 14 Kts | | | | | | | |
|--------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 42.4° (b) | 7.72 | 5.70 | 19.90 | 25.4° | 24.1° | 1.00 | 0.61 |
| 52° | 8.60 | 5.29 | 19.74 | 29.8° | 26.1° | 1.00 | 0.63 |
| 60° | 9.01 | 4.50 | 19.17 | 33.7° | 27.5° | 1.00 | 0.67 |
| 70° | 9.33 | 3.19 | 18.12 | 39.1° | 28.7° | 1.00 | 0.75 |
| 75° | 9.45 | 2.45 | 17.54 | 41.9° | 29.0° | 1.00 | 0.80 |
| 80° | 9.56 | 1.66 | 16.92 | 44.9° | 29.1° | 1.00 | 0.86 |
| 90° | 9.73 | 0.00 | 15.86 | 52.2° | 26.2° | 1.00 | 0.97 |
| 110° | 9.41 | 3.22 | 13.80 | 70.7° | 11.6° | 1.00 | 1.00 |
| 120° | 9.09 | 4.55 | 12.35 | 80.7° | 7.1° | 1.00 | 1.00 |
| 135° | 8.38 | 5.93 | 10.18 | 99.5° | 3.8° | 1.00 | 1.00 |
| 150° | 7.75 | 6.71 | 8.45 | 122.8° | 2.5° | 1.00 | 1.00 |
| 165° | 7.35 | 7.10 | 7.33 | 150.0° | 1.4° | 1.00 | 1.00 |
| 180° | 7.01 | 7.01 | 7.19 | 180.0° | 0.3° | 1.00 | 1.00 |
| 169.2° (r) | 7.25 | 7.13 | 7.19 | 158.4° | 1.1° | 1.00 | 1.00 |

| TWS = 16 Kts | | | | | | | |
|--------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 42.0° (b) | 7.81 | 5.81 | 21.81 | 26.0° | 25.4° | 0.73 | 0.58 |
| 52° | 8.72 | 5.37 | 21.54 | 31.0° | 27.1° | 0.82 | 0.58 |
| 60° | 9.11 | 4.55 | 20.85 | 35.3° | 28.2° | 0.99 | 0.58 |
| 70° | 9.41 | 3.22 | 19.70 | 41.2° | 29.0° | 1.00 | 0.65 |
| 75° | 9.55 | 2.47 | 19.01 | 44.2° | 29.8° | 1.00 | 0.70 |
| 80° | 9.68 | 1.68 | 18.32 | 47.3° | 30.3° | 1.00 | 0.76 |
| 90° | 9.93 | 0.00 | 16.88 | 53.9° | 30.7° | 1.00 | 0.92 |
| 110° | 9.73 | 3.33 | 15.26 | 74.0° | 14.8° | 1.00 | 1.00 |
| 120° | 9.44 | 4.72 | 13.92 | 84.5° | 9.4° | 1.00 | 1.00 |
| 135° | 8.95 | 6.33 | 11.74 | 102.6° | 5.1° | 1.00 | 1.00 |
| 150° | 8.50 | 7.36 | 9.84 | 124.5° | 3.3° | 1.00 | 1.00 |
| 165° | 8.16 | 7.88 | 8.59 | 150.8° | 1.8° | 1.00 | 1.00 |
| 180° | 7.81 | 7.81 | 8.42 | 180.0° | 0.4° | 1.00 | 1.00 |
| 170.2° (r) | 8.04 | 7.92 | 8.40 | 160.8° | 1.3° | 1.00 | 1.00 |

| TWS = 20 Kts | | | | | | | |
|--------------|-------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 42.1° (b) | 8.05 | 5.97 | 25.41 | 27.7° | 24.9° | 0.49 | 0.58 |
| 52° | 8.94 | 5.51 | 25.06 | 33.4° | 26.0° | 0.50 | 0.58 |
| 60° | 9.27 | 4.63 | 24.36 | 38.6° | 26.1° | 0.53 | 0.58 |
| 70° | 9.53 | 3.26 | 23.16 | 45.4° | 27.1° | 0.61 | 0.58 |
| 75° | 9.66 | 2.50 | 22.12 | 48.1° | 30.1° | 0.80 | 0.58 |
| 80° | 9.80 | 1.70 | 21.26 | 51.5° | 30.9° | 1.00 | 0.59 |
| 90° | 10.13 | 0.00 | 19.50 | 58.7° | 32.5° | 1.00 | 0.74 |
| 110° | 10.44 | 3.57 | 17.52 | 78.2° | 24.6° | 1.00 | 1.00 |
| 120° | 10.12 | 5.06 | 16.86 | 90.0° | 15.9° | 1.00 | 1.00 |
| 135° | 9.69 | 6.85 | 14.91 | 108.3° | 9.6° | 1.00 | 1.00 |
| 150° | 9.44 | 8.18 | 12.96 | 128.8° | 5.5° | 1.00 | 1.00 |
| 165° | 9.25 | 8.94 | 11.57 | 153.1° | 2.9° | 1.00 | 1.00 |
| 180° | 9.03 | 9.03 | 11.26 | 180.0° | 0.7° | 1.00 | 1.00 |
| 174.4° (r) | 9.11 | 9.07 | 11.23 | 169.9° | 1.5° | 1.00 | 1.00 |

SPEED GUIDE

MEDIUM KEEL

HANSE

588



| TWS = 6 Kts | | | | | | | |
|-------------|------|------|------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 60° | 4.33 | 2.16 | 9.13 | 35.5° | 9.5° | 1.00 | 0.95 |
| 70° | 5.31 | 1.82 | 9.39 | 37.6° | 11.1° | 1.00 | 0.96 |
| 75° | 5.70 | 1.47 | 9.38 | 38.8° | 11.6° | 1.00 | 0.96 |
| 80° | 6.01 | 1.04 | 9.28 | 40.2° | 11.9° | 1.00 | 0.96 |
| 90° | 6.40 | 0.00 | 8.83 | 43.6° | 11.9° | 1.00 | 0.97 |
| 110° | 6.46 | 2.21 | 7.21 | 53.1° | 10.0° | 1.00 | 1.00 |
| 120° | 6.27 | 3.14 | 6.21 | 59.5° | 7.9° | 1.00 | 1.00 |
| 135° | 5.57 | 3.94 | 4.55 | 75.3° | 4.7° | 1.00 | 1.00 |
| 150° | 4.57 | 3.95 | 3.23 | 105.1° | 2.8° | 1.00 | 1.00 |
| 165° | 3.40 | 3.29 | 3.05 | 148.2° | 2.3° | 1.00 | 1.00 |
| 180° | 3.22 | 3.22 | 2.97 | 180.0° | 2.0° | 1.00 | 1.00 |
| 142.2° (r) | 5.11 | 4.03 | 3.83 | 87.4° | 3.6° | 1.00 | 1.00 |

| TWS = 8 Kts | | | | | | | |
|-------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 60° | 5.60 | 2.80 | 11.96 | 35.5° | 13.8° | 1.00 | 0.95 |
| 70° | 6.74 | 2.30 | 12.13 | 37.9° | 16.4° | 1.00 | 0.96 |
| 75° | 7.16 | 1.85 | 12.03 | 39.4° | 17.2° | 1.00 | 0.96 |
| 80° | 7.48 | 1.30 | 11.82 | 41.0° | 17.7° | 1.00 | 0.96 |
| 90° | 7.87 | 0.00 | 11.16 | 45.1° | 17.2° | 1.00 | 0.97 |
| 110° | 7.97 | 2.73 | 9.15 | 55.9° | 13.7° | 1.00 | 1.00 |
| 120° | 7.74 | 3.87 | 7.91 | 63.0° | 11.4° | 1.00 | 1.00 |
| 135° | 6.98 | 4.94 | 5.95 | 79.4° | 6.5° | 1.00 | 1.00 |
| 150° | 5.89 | 5.10 | 4.36 | 107.6° | 3.3° | 1.00 | 1.00 |
| 165° | 4.51 | 4.35 | 4.09 | 148.5° | 2.5° | 1.00 | 1.00 |
| 180° | 4.27 | 4.27 | 3.98 | 180.0° | 2.1° | 1.00 | 1.00 |
| 145.6° (r) | 6.22 | 5.13 | 4.74 | 97.9° | 4.0° | 1.00 | 1.00 |

| TWS = 10 Kts | | | | | | | |
|--------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 60° | 6.63 | 3.32 | 14.42 | 35.2° | 21.1° | 1.00 | 0.94 |
| 70° | 7.60 | 2.60 | 14.23 | 38.7° | 22.6° | 0.96 | 0.90 |
| 75° | 7.94 | 2.06 | 14.00 | 40.8° | 22.5° | 0.95 | 0.88 |
| 80° | 8.22 | 1.43 | 13.68 | 43.0° | 22.5° | 0.95 | 0.88 |
| 90° | 8.65 | 0.00 | 12.85 | 47.7° | 22.5° | 0.97 | 0.92 |
| 110° | 8.98 | 3.07 | 10.71 | 59.5° | 18.4° | 1.00 | 1.00 |
| 120° | 8.81 | 4.40 | 9.43 | 67.4° | 14.3° | 1.00 | 1.00 |
| 135° | 8.17 | 5.78 | 7.31 | 83.6° | 8.5° | 1.00 | 1.00 |
| 150° | 7.03 | 6.09 | 5.55 | 110.8° | 4.0° | 1.00 | 1.00 |
| 165° | 5.54 | 5.35 | 5.19 | 149.0° | 2.9° | 1.00 | 1.00 |
| 180° | 5.28 | 5.28 | 5.04 | 180.0° | 2.1° | 1.00 | 1.00 |
| 147.4° (r) | 7.25 | 6.11 | 5.78 | 105.1° | 4.5° | 1.00 | 1.00 |

| TWS = 12 Kts | | | | | | | |
|--------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 60° | 7.04 | 3.52 | 16.41 | 36.7° | 22.6° | 0.92 | 0.85 |
| 70° | 7.95 | 2.72 | 16.12 | 41.2° | 22.7° | 0.89 | 0.78 |
| 75° | 8.27 | 2.14 | 15.80 | 43.6° | 22.8° | 0.89 | 0.78 |
| 80° | 8.54 | 1.48 | 15.44 | 46.3° | 22.4° | 0.90 | 0.79 |
| 90° | 8.94 | 0.00 | 14.44 | 51.8° | 22.6° | 0.92 | 0.80 |
| 110° | 9.42 | 3.22 | 11.95 | 64.3° | 22.3° | 0.99 | 0.94 |
| 120° | 9.39 | 4.70 | 10.78 | 72.9° | 16.9° | 1.00 | 1.00 |
| 135° | 8.97 | 6.35 | 8.67 | 88.9° | 10.5° | 1.00 | 1.00 |
| 150° | 8.03 | 6.95 | 6.80 | 114.0° | 4.8° | 1.00 | 1.00 |
| 165° | 6.48 | 6.26 | 6.37 | 149.8° | 3.3° | 1.00 | 1.00 |
| 180° | 6.20 | 6.20 | 6.17 | 180.0° | 2.2° | 1.00 | 1.00 |
| 148.4° (r) | 8.18 | 6.97 | 6.94 | 110.6° | 5.2° | 1.00 | 1.00 |

| TWS = 14 Kts | | | | | | | |
|--------------|------|------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 60° | 7.26 | 3.63 | 18.28 | 38.2° | 23.2° | 0.85 | 0.78 |
| 70° | 8.13 | 2.78 | 17.88 | 43.4° | 23.1° | 0.85 | 0.70 |
| 75° | 8.46 | 2.19 | 17.53 | 46.2° | 23.0° | 0.85 | 0.71 |
| 80° | 8.74 | 1.52 | 17.09 | 49.0° | 22.9° | 0.85 | 0.73 |
| 90° | 9.15 | 0.00 | 16.01 | 55.2° | 22.6° | 0.85 | 0.79 |
| 110° | 9.65 | 3.30 | 13.37 | 69.3° | 22.3° | 0.95 | 0.88 |
| 120° | 9.85 | 4.93 | 11.92 | 77.3° | 21.8° | 1.00 | 1.00 |
| 135° | 9.47 | 6.70 | 10.09 | 94.6° | 11.7° | 1.00 | 1.00 |
| 150° | 8.75 | 7.58 | 8.18 | 117.9° | 5.7° | 1.00 | 1.00 |
| 165° | 7.34 | 7.09 | 7.61 | 150.6° | 3.8° | 1.00 | 1.00 |
| 180° | 7.05 | 7.05 | 7.39 | 180.0° | 2.3° | 1.00 | 1.00 |
| 149.6° (r) | 8.79 | 7.58 | 8.22 | 117.1° | 5.8° | 1.00 | 1.00 |

| TWS = 16 Kts | | | | | | | |
|--------------|-------|-------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 60° | -0.01 | -0.01 | 15.10 | 57.5° | 25.0° | 0.85 | 0.62 |
| 70° | -0.01 | 0.00 | 14.89 | 68.2° | 25.0° | 0.85 | 0.62 |
| 75° | -0.01 | 0.00 | 14.81 | 73.6° | 25.0° | 0.85 | 0.62 |
| 80° | -0.01 | 0.00 | 14.75 | 79.0° | 25.0° | 0.85 | 0.62 |
| 90° | 9.22 | 0.00 | 17.61 | 58.4° | 22.7° | 0.85 | 0.64 |
| 110° | 9.85 | 3.37 | 14.84 | 73.3° | 22.4° | 0.91 | 0.84 |
| 120° | 10.18 | 5.09 | 13.36 | 81.7° | 22.2° | 0.98 | 0.94 |
| 135° | 9.93 | 7.02 | 11.57 | 99.0° | 13.1° | 1.00 | 1.00 |
| 150° | 9.20 | 7.97 | 9.73 | 122.1° | 6.6° | 1.00 | 1.00 |
| 165° | 8.14 | 7.86 | 8.92 | 151.4° | 4.4° | 1.00 | 1.00 |
| 180° | 7.85 | 7.85 | 8.65 | 180.0° | 2.4° | 1.00 | 1.00 |
| 151.6° (r) | 9.07 | 7.98 | 9.59 | 125.1° | 6.2° | 1.00 | 1.00 |

| TWS = 20 Kts | | | | | | | |
|--------------|-------|-------|-------|--------|-------|------|------|
| TWA | BTV | VMG | AWS | AWA | Heel | Reef | Flat |
| 60° | -0.01 | -0.01 | 17.55 | 55.1° | 34.2° | 0.85 | 0.62 |
| 70° | -0.01 | 0.00 | 17.06 | 66.3° | 34.2° | 0.85 | 0.62 |
| 75° | -0.01 | 0.00 | 16.87 | 72.1° | 34.2° | 0.85 | 0.62 |
| 80° | -0.01 | 0.00 | 16.73 | 78.0° | 34.2° | 0.85 | 0.62 |
| 90° | -0.01 | 0.00 | 16.62 | 90.0° | 34.2° | 0.85 | 0.62 |
| 110° | 10.15 | 3.47 | 17.92 | 79.7° | 22.6° | 0.85 | 0.72 |
| 120° | 10.72 | 5.36 | 16.36 | 88.2° | 22.2° | 0.87 | 0.94 |
| 135° | 11.04 | 7.81 | 14.42 | 104.4° | 17.4° | 1.00 | 1.00 |
| 150° | 9.88 | 8.56 | 13.00 | 128.2° | 9.5° | 1.00 | 1.00 |
| 165° | 9.22 | 8.91 | 11.97 | 153.6° | 6.2° | 1.00 | 1.00 |
| 180° | 9.06 | 9.06 | 11.57 | 180.0° | 2.6° | 1.00 | 1.00 |
| 177.3° (r) | 9.07 | 9.06 | 11.58 | 175.2° | 3.2° | 1.00 | 1.00 |