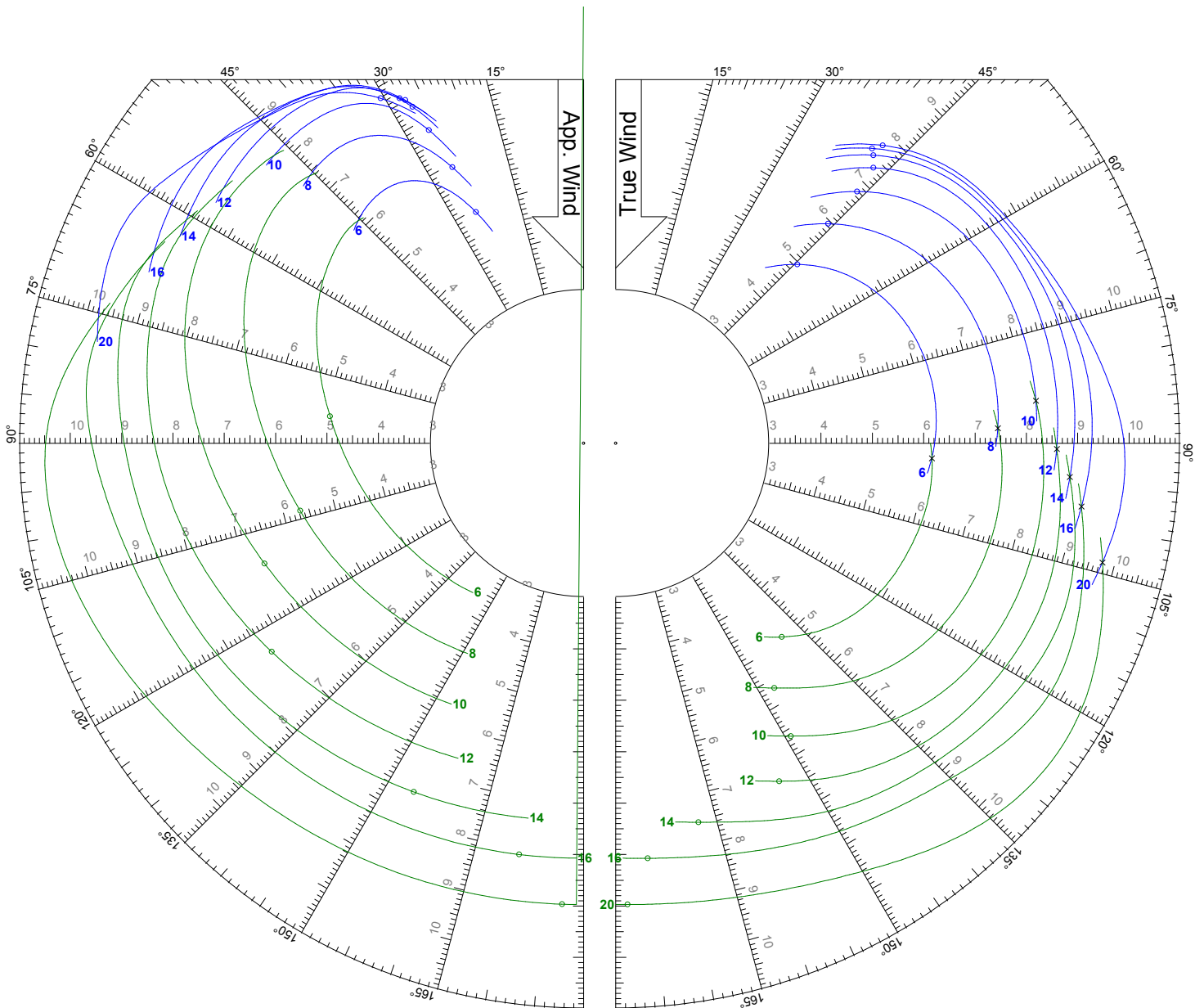


# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC



Polar Plot for Boat	
Name	D13A_02_01
Sail Number	
Class	
Designer	
Builder	
Issued On	24/03/2014 - VPP 2014 1.00

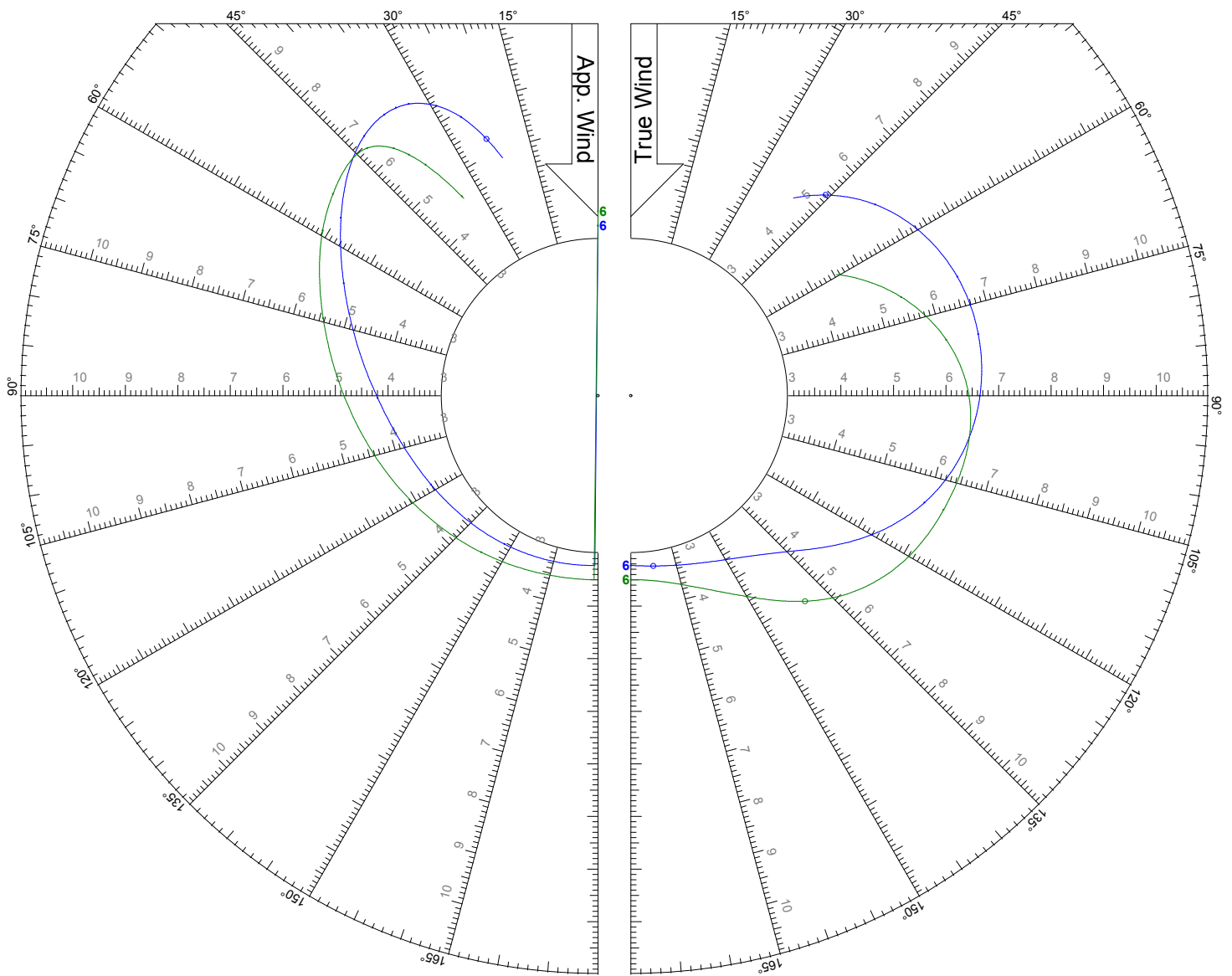
TWS: 6, 8, 10, 12, 14, 16, 20 kts

Jib

Symmetric Spinnaker

# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC



Polar Plot for Boat	
Name	D13A_11_05
Sail Number	
Class	
Designer	
Builder	
Issued On	24/03/2014 - VPP 2014 1.00

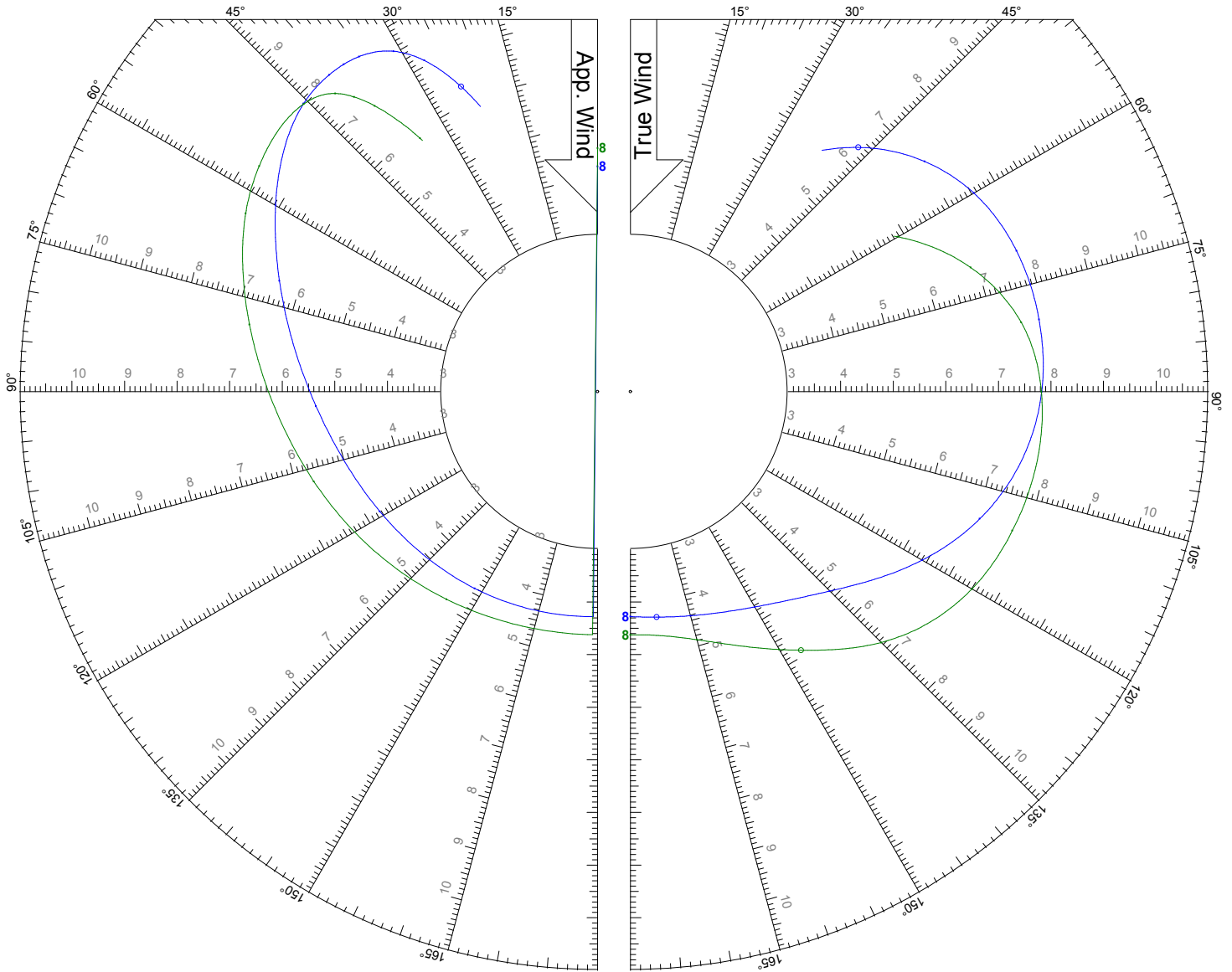
TWS: 6 kts

Jib

Symmetric Spinnaker

# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC

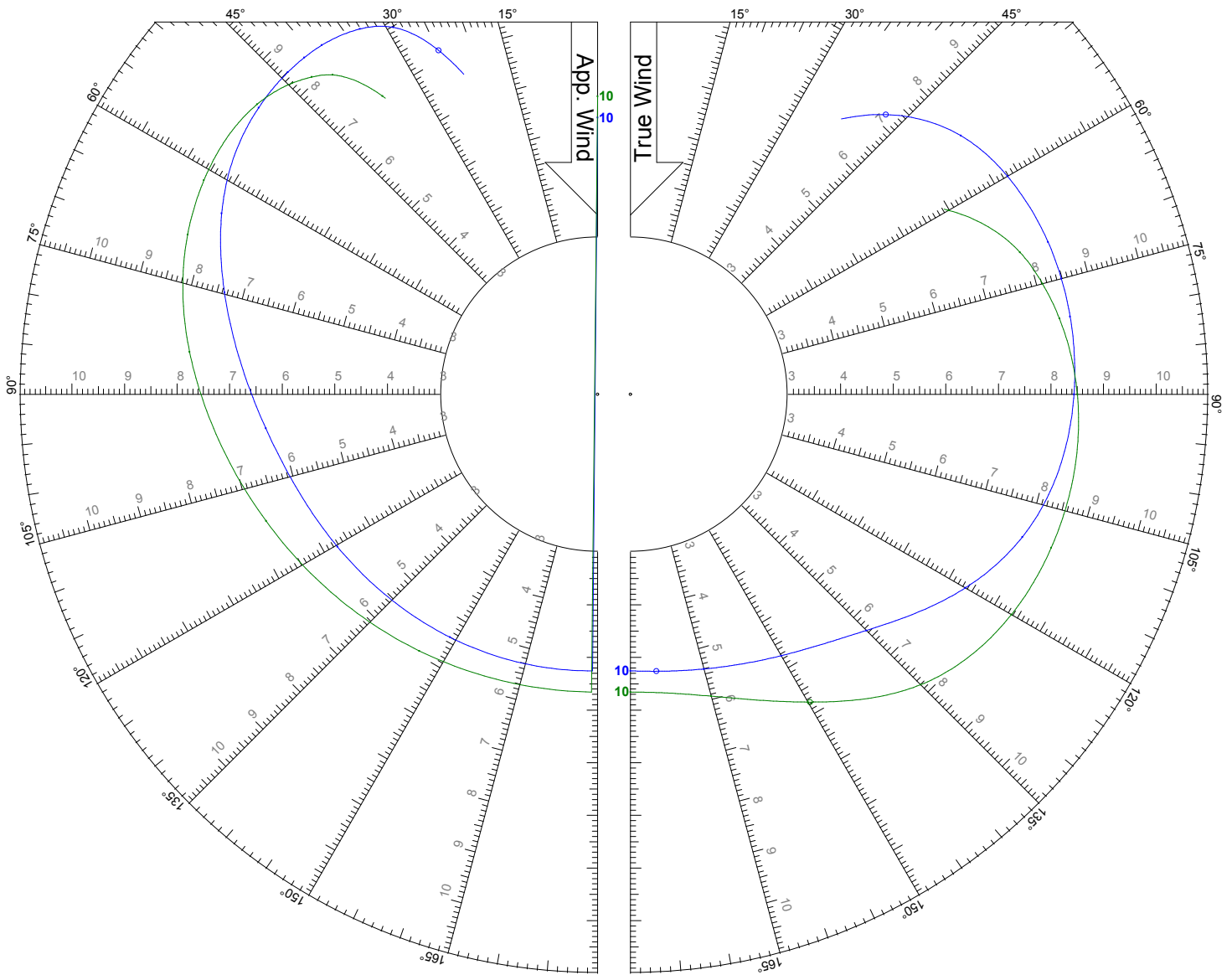


Polar Plot for Boat	
Name	D13A_11_05
Sail Number	
Class	
Designer	
Builder	
Issued On	24/03/2014 - VPP 2014 1.00

**TWS: 8 kts**  
**Jib**  
**Symmetric Spinnaker**

# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC



Polar Plot for Boat	
Name	D13A_11_05
Sail Number	
Class	
Designer	
Builder	
Issued On	24/03/2014 - VPP 2014 1.00

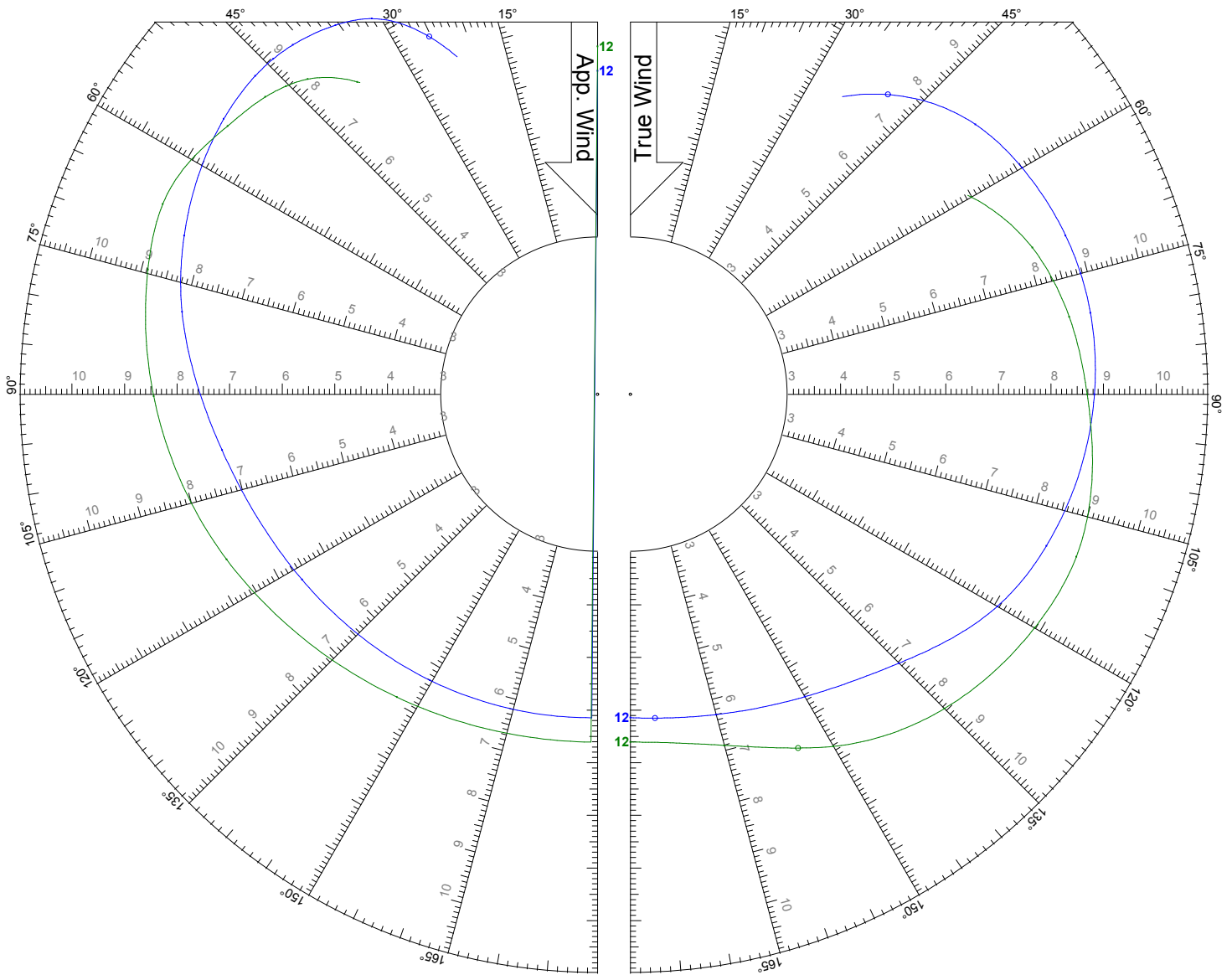
TWS: 10 kts

Jib

Symmetric Spinnaker

# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC



Polar Plot for Boat	
Name	D13A_11_05
Sail Number	
Class	
Designer	
Builder	
Issued On	24/03/2014 - VPP 2014 1.00

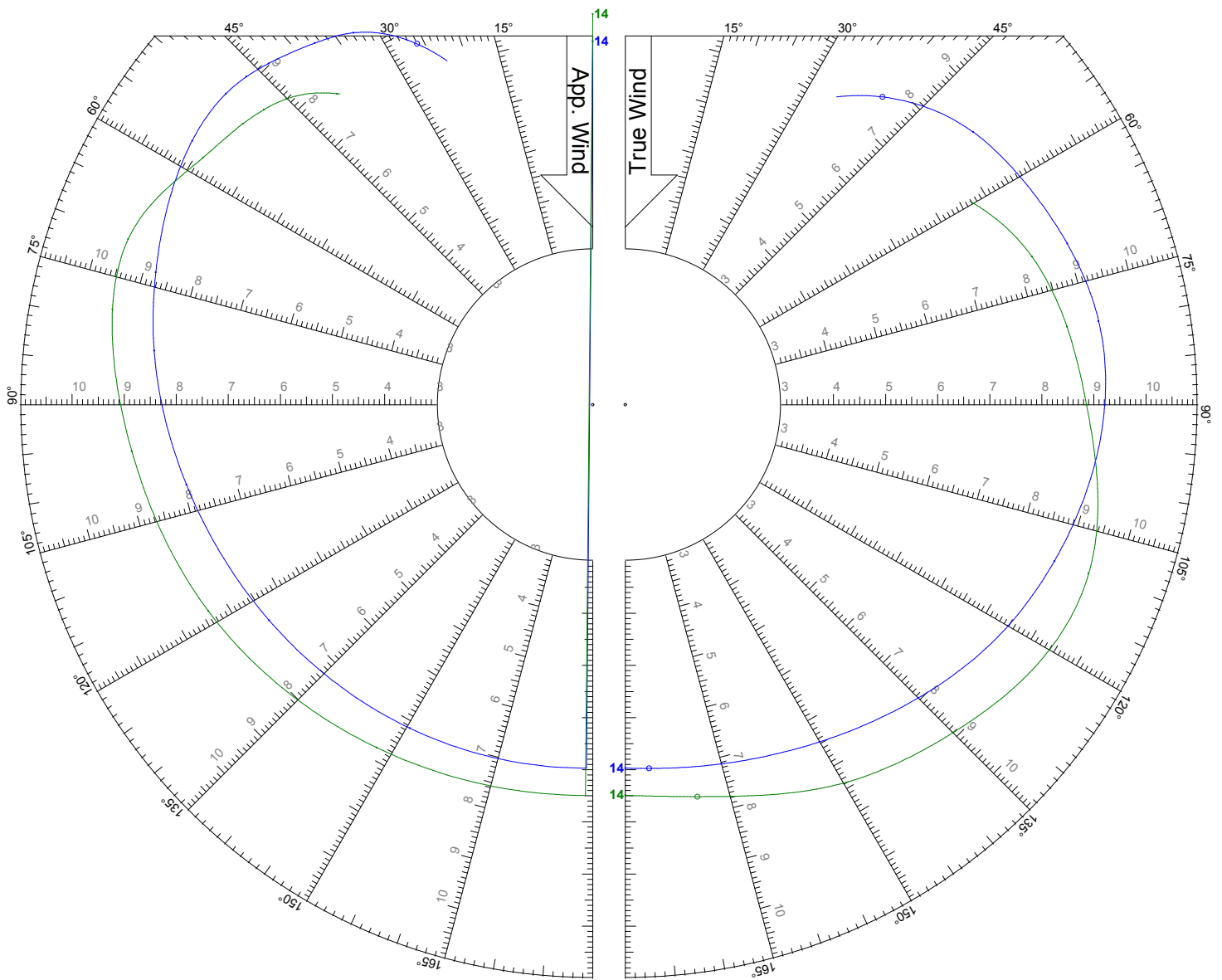
**TWS: 12 kts**

**Jib**

**Symmetric Spinnaker**

# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC



Polar Plot for Boat	
Name	D13A_11_05
Sail Number	
Class	
Designer	
Builder	
Issued On	24/03/2014 - VPP 2014 1.00

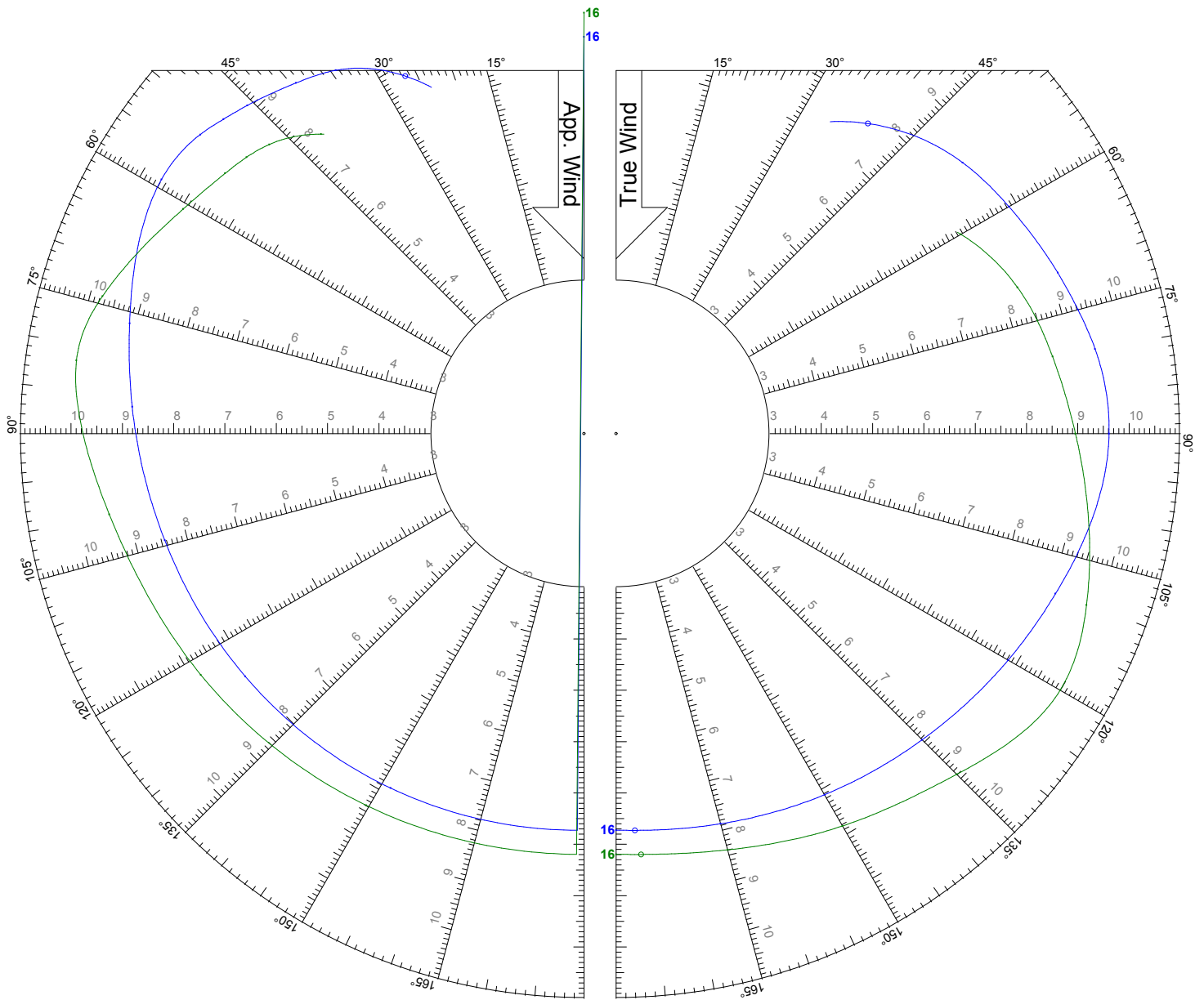
TWS: 14 kts

Jib

Symmetric Spinnaker

# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC



Polar Plot for Boat	
Name	D13A_11_05
Sail Number	
Class	
Designer	
Builder	
Issued On	24/03/2014 - VPP 2014 1.00

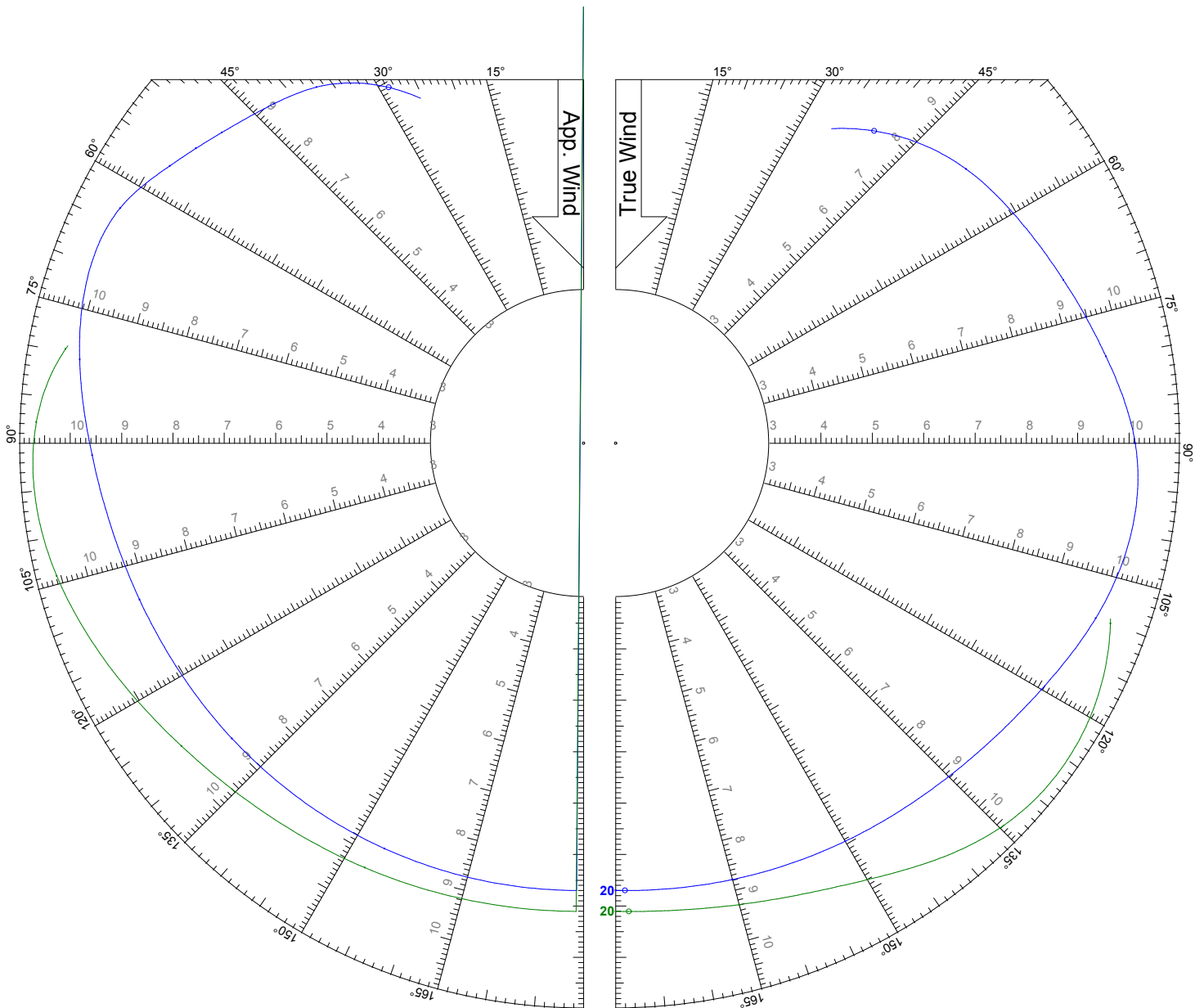
TWS: 16 kts

Jib

Symmetric Spinnaker

# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC



Polar Plot for Boat	
Name	D13A_11_05
Sail Number	
Class	
Designer	
Builder	
Issued On	24/03/2014 - VPP 2014 1.00

TWS: 20 kts

Jib

Symmetric Spinnaker



# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC



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### Polar Tables

Boat Name: **D13A\_11\_05**

Sail No:

Sail: **Best Performance**

Issued On: **24/03/2014 - VPP 2014 1.00**

### TWS = 8 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
43.1° (b)	6.35	4.64	13.36	24.1°	10.4°	1.00	0.95
52°	7.10	4.37	13.58	27.7°	11.5°	1.00	0.98
60°	7.54	3.77	13.46	31.0°	11.6°	1.00	1.00
70°	7.82	2.67	12.96	35.5°	9.8°	1.00	1.00
75°	7.87	2.04	12.59	37.8°	8.6°	1.00	1.00
80°	7.89	1.37	12.17	40.3°	7.3°	1.00	1.00
90°	7.82	0.00	11.19	45.6°	5.0°	1.00	1.00
110°	7.73	2.64	9.03	56.4°	13.8°	1.00	1.00
120°	7.50	3.75	7.76	63.2°	12.3°	1.00	1.00
135°	6.74	4.77	5.76	79.1°	10.5°	1.00	1.00
150°	5.66	4.90	4.20	107.6°	7.8°	1.00	1.00
165°	4.88	4.72	3.52	143.9°	6.8°	1.00	1.00
180°	4.62	4.62	3.38	0.0°	6.4°	1.00	1.00
146.5° (r)	5.89	4.92	4.48	100.1°	8.3°	1.00	1.00

### TWS = 12 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
40.7° (b)	7.51	5.69	18.36	25.2°	23.2°	1.00	0.82
52°	8.33	5.13	18.34	31.0°	25.7°	1.00	0.87
60°	8.60	4.30	17.92	35.4°	26.5°	1.00	0.93
70°	8.81	3.01	17.15	41.1°	23.9°	1.00	0.98
75°	8.87	2.30	16.67	44.1°	21.5°	1.00	1.00
80°	8.89	1.54	16.13	47.1°	18.2°	1.00	1.00
90°	8.83	0.00	14.90	53.7°	12.1°	1.00	1.00
110°	9.03	3.09	12.30	66.4°	18.3°	1.00	1.00
120°	8.88	4.44	10.78	74.5°	15.3°	1.00	1.00
135°	8.45	5.97	8.49	90.3°	11.8°	1.00	1.00
150°	7.72	6.69	6.57	114.0°	9.8°	1.00	1.00
165°	6.90	6.67	5.62	146.5°	7.6°	1.00	1.00
180°	6.61	6.61	5.39	0.0°	6.6°	1.00	1.00
154.6° (r)	7.44	6.72	6.17	123.4°	8.9°	1.00	1.00

### TWS = 16 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
39.1° (b)	7.78	6.04	22.58	26.6°	24.8°	1.00	0.59
52°	8.57	5.28	22.32	34.4°	27.6°	1.00	0.65
60°	8.84	4.42	21.81	39.4°	28.9°	1.00	0.70
70°	9.16	3.13	20.98	45.8°	30.1°	1.00	0.80
75°	9.32	2.41	20.50	48.9°	30.4°	1.00	0.86
80°	9.48	1.65	19.96	52.1°	30.5°	1.00	0.93
90°	9.61	0.00	18.66	59.0°	23.4°	1.00	1.00
110°	9.76	3.34	15.63	74.1°	22.3°	0.94	0.93
120°	10.00	5.00	14.00	81.8°	20.2°	1.00	1.00
135°	9.39	6.64	11.48	99.7°	13.6°	1.00	1.00
150°	8.83	7.64	9.45	122.2°	11.2°	1.00	1.00
165°	8.39	8.11	8.19	149.6°	8.9°	1.00	1.00
180°	8.19	8.19	7.81	0.0°	6.8°	1.00	1.00
176.6° (r)	8.21	8.20	7.82	173.0°	7.2°	1.00	1.00

### TWS = 6 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
44.2° (b)	5.32	3.81	10.49	23.5°	4.6°	1.00	0.95
52°	5.90	3.63	10.70	26.2°	4.9°	1.00	0.97
60°	6.31	3.15	10.66	29.2°	5.0°	1.00	0.99
70°	6.61	2.26	10.34	33.1°	4.6°	1.00	1.00
75°	6.69	1.73	10.07	35.1°	4.3°	1.00	1.00
80°	6.72	1.17	9.75	37.3°	4.0°	1.00	1.00
90°	6.65	0.00	8.95	42.1°	3.4°	1.00	1.00
110°	6.34	2.17	7.08	52.8°	11.8°	1.00	1.00
120°	6.11	3.06	6.06	59.1°	11.2°	1.00	1.00
135°	5.43	3.84	4.41	74.3°	9.0°	1.00	1.00
150°	4.41	3.82	3.10	104.7°	7.1°	1.00	1.00
165°	3.72	3.59	2.60	143.3°	6.5°	1.00	1.00
180°	3.50	3.50	2.50	0.0°	6.3°	1.00	1.00
139.7° (r)	5.13	3.91	3.92	81.9°	8.2°	1.00	1.00

### TWS = 10 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
42.5° (b)	7.20	5.31	16.06	24.9°	19.2°	1.00	0.94
52°	7.98	4.91	16.18	29.1°	20.3°	1.00	0.96
60°	8.28	4.14	15.86	33.1°	19.7°	1.00	0.99
70°	8.46	2.89	15.14	38.4°	16.5°	1.00	1.00
75°	8.49	2.20	14.70	41.1°	14.4°	1.00	1.00
80°	8.49	1.48	14.20	43.9°	12.3°	1.00	1.00
90°	8.50	0.00	13.13	49.6°	21.7°	1.00	0.97
110°	8.52	2.91	10.69	61.5°	16.1°	1.00	1.00
120°	8.37	4.18	9.29	68.7°	13.5°	1.00	1.00
135°	7.80	5.52	7.11	84.1°	11.2°	1.00	1.00
150°	6.75	5.85	5.35	110.9°	8.7°	1.00	1.00
165°	5.94	5.74	4.53	145.2°	7.2°	1.00	1.00
180°	5.66	5.66	4.34	0.0°	6.5°	1.00	1.00
149.7° (r)	6.77	5.85	5.38	110.2°	8.8°	1.00	1.00

### TWS = 14 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
40.0° (b)	7.70	5.90	20.50	26.0°	24.3°	1.00	0.69
52°	8.48	5.22	20.35	32.8°	27.1°	1.00	0.75
60°	8.75	4.38	19.88	37.6°	28.0°	1.00	0.81
70°	9.03	3.09	19.08	43.6°	29.3°	1.00	0.92
75°	9.15	2.37	18.61	46.6°	27.7°	1.00	0.95
80°	9.23	1.60	18.06	49.8°	26.2°	1.00	1.00
90°	9.21	0.00	16.76	56.7°	16.9°	1.00	1.00
110°	9.47	3.24	13.96	70.4°	22.1°	1.00	0.94
120°	9.40	4.70	12.36	78.8°	16.5°	1.00	1.00
135°	8.90	6.29	9.95	95.8°	12.5°	1.00	1.00
150°	8.38	7.26	7.94	118.2°	10.7°	1.00	1.00
165°	7.78	7.51	6.79	147.8°	8.2°	1.00	1.00
180°	7.49	7.49	6.51	0.0°	6.7°	1.00	1.00
169.5° (r)	7.64	7.52	6.63	157.4°	7.6°	1.00	1.00

### TWS = 20 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
39.7° (b)	7.89	6.07	26.55	28.7°	25.7°	0.60	0.57
52°	8.66	5.33	26.24	36.9°	27.8°	0.74	0.57
60°	8.94	4.47	25.67	42.4°	28.3°	0.87	0.57
70°	9.28	3.17	24.76	49.4°	30.9°	1.00	0.62
75°	9.48	2.45	24.25	52.8°	31.6°	1.00	0.67
80°	9.70	1.68	23.69	56.2°	32.3°	1.00	0.74
90°	10.12	0.00	22.42	63.2°	32.7°	1.00	0.90
110°	10.26	3.51	19.10	79.7°	22.3°	0.84	0.92
120°	10.67	5.33	17.33	87.8°	22.1°	0.93	0.95
135°	10.58	7.48	14.58	104.1°	16.4°	1.00	1.00
150°	9.80	8.49	12.51	126.9°	12.3°	1.00	1.00
165°	9.29	8.97	11.29	152.7°	10.5°	1.00	1.00
180°	9.11	9.11	10.89	0.0°	7.2°	1.00	1.00
178.4° (r)	9.11	9.11	10.90	177.1°	7.5°	1.00	1.00

# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC



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### Polar Tables

Boat Name: **D13A\_11\_05**

Sail No:

Sail: **Jib**

Issued On: **24/03/2014 - VPP 2014 1.00**

TWS = 8 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
43.1° (b)	6.35	4.64	13.26	23.7°	10.4°	1.00	0.95
52°	7.10	4.37	13.46	27.1°	11.5°	1.00	0.98
60°	7.54	3.77	13.33	30.3°	11.6°	1.00	1.00
70°	7.82	2.67	12.84	34.9°	9.8°	1.00	1.00
75°	7.87	2.04	12.49	37.4°	8.6°	1.00	1.00
80°	7.89	1.37	12.09	39.9°	7.3°	1.00	1.00
90°	7.82	0.00	11.13	45.3°	5.0°	1.00	1.00
110°	7.07	2.42	8.64	59.7°	2.7°	1.00	1.00
120°	6.41	3.20	7.30	70.5°	1.9°	1.00	1.00
135°	5.36	3.79	5.63	92.6°	1.1°	1.00	1.00
150°	4.73	4.09	4.52	118.5°	0.7°	1.00	1.00
165°	4.41	4.26	3.86	147.8°	0.4°	1.00	1.00
180°	4.28	4.28	3.67	180.0°	0.1°	1.00	1.00
173.4° (r)	4.32	4.29	3.70	165.6°	0.3°	1.00	1.00

TWS = 12 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
40.7° (b)	7.51	5.69	17.89	23.3°	23.2°	1.00	0.82
52°	8.33	5.13	17.65	28.2°	25.7°	1.00	0.87
60°	8.60	4.30	17.09	32.1°	26.5°	1.00	0.93
70°	8.81	3.01	16.34	38.2°	23.9°	1.00	0.98
75°	8.87	2.30	15.96	41.7°	21.5°	1.00	1.00
80°	8.89	1.54	15.57	45.3°	18.2°	1.00	1.00
90°	8.83	0.00	14.59	52.8°	12.1°	1.00	1.00
110°	8.42	2.88	11.99	68.7°	4.2°	1.00	1.00
120°	8.06	4.03	10.52	78.5°	3.0°	1.00	1.00
135°	7.22	5.11	8.51	98.2°	2.0°	1.00	1.00
150°	6.63	5.75	7.01	121.8°	1.4°	1.00	1.00
165°	6.30	6.08	6.06	149.4°	0.9°	1.00	1.00
180°	6.14	6.14	5.78	180.0°	0.2°	1.00	1.00
175.6° (r)	6.17	6.15	5.79	171.0°	0.4°	1.00	1.00

TWS = 16 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
39.1° (b)	7.78	6.04	21.88	24.3°	24.8°	1.00	0.59
52°	8.57	5.28	21.21	30.9°	27.6°	1.00	0.65
60°	8.84	4.42	20.42	35.4°	28.9°	1.00	0.70
70°	9.16	3.13	19.24	41.1°	30.1°	1.00	0.80
75°	9.32	2.41	18.62	44.2°	30.4°	1.00	0.86
80°	9.48	1.65	17.97	47.3°	30.5°	1.00	0.93
90°	9.61	0.00	17.33	56.3°	23.4°	1.00	1.00
110°	9.12	3.12	15.24	76.0°	7.7°	1.00	1.00
120°	8.82	4.41	13.75	86.3°	4.5°	1.00	1.00
135°	8.43	5.96	11.57	104.0°	3.2°	1.00	1.00
150°	8.12	7.03	9.74	125.4°	2.3°	1.00	1.00
165°	7.87	7.60	8.55	151.2°	1.5°	1.00	1.00
180°	7.72	7.72	8.18	180.0°	0.4°	1.00	1.00
177.3° (r)	7.74	7.73	8.18	174.7°	0.7°	1.00	1.00

TWS = 6 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
44.2° (b)	5.32	3.81	10.45	23.4°	4.6°	1.00	0.95
52°	5.90	3.63	10.65	26.1°	4.9°	1.00	0.97
60°	6.31	3.15	10.62	29.0°	5.0°	1.00	0.99
70°	6.61	2.26	10.30	32.8°	4.6°	1.00	1.00
75°	6.69	1.73	10.03	34.9°	4.3°	1.00	1.00
80°	6.72	1.17	9.71	37.1°	4.0°	1.00	1.00
90°	6.65	0.00	8.92	41.8°	3.4°	1.00	1.00
110°	5.95	2.03	6.83	55.1°	2.0°	1.00	1.00
120°	5.29	2.65	5.66	65.9°	1.3°	1.00	1.00
135°	4.20	2.97	4.22	90.3°	0.7°	1.00	1.00
150°	3.60	3.12	3.37	117.7°	0.4°	1.00	1.00
165°	3.34	3.22	2.87	147.5°	0.3°	1.00	1.00
180°	3.23	3.23	2.73	180.0°	0.1°	1.00	1.00
172.5° (r)	3.27	3.24	2.76	163.6°	0.2°	1.00	1.00

TWS = 10 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
42.5° (b)	7.20	5.31	15.77	23.5°	19.2°	1.00	0.94
52°	7.98	4.91	15.81	27.4°	20.3°	1.00	0.96
60°	8.28	4.14	15.46	31.3°	19.7°	1.00	0.99
70°	8.46	2.89	14.81	36.9°	16.5°	1.00	1.00
75°	8.49	2.20	14.41	39.9°	14.4°	1.00	1.00
80°	8.49	1.48	13.97	43.0°	12.3°	1.00	1.00
90°	8.44	0.00	12.95	49.3°	8.2°	1.00	1.00
110°	7.93	2.71	10.36	64.1°	3.4°	1.00	1.00
120°	7.36	3.68	8.92	74.5°	2.4°	1.00	1.00
135°	6.35	4.49	7.06	95.5°	1.5°	1.00	1.00
150°	5.73	4.97	5.74	120.0°	1.1°	1.00	1.00
165°	5.40	5.22	4.92	148.5°	0.7°	1.00	1.00
180°	5.25	5.25	4.68	180.0°	0.2°	1.00	1.00
174.6° (r)	5.29	5.26	4.70	168.6°	0.3°	1.00	1.00

TWS = 14 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
40.0° (b)	7.70	5.90	19.91	23.8°	24.3°	1.00	0.69
52°	8.48	5.22	19.44	29.6°	27.1°	1.00	0.75
60°	8.75	4.38	18.76	33.8°	28.0°	1.00	0.81
70°	9.03	3.09	17.68	39.2°	29.3°	1.00	0.92
75°	9.15	2.37	17.26	42.6°	27.7°	1.00	0.95
80°	9.23	1.60	16.77	46.2°	26.2°	1.00	1.00
90°	9.21	0.00	16.12	55.2°	16.9°	1.00	1.00
110°	8.77	3.00	13.62	72.9°	5.3°	1.00	1.00
120°	8.49	4.24	12.12	82.7°	3.7°	1.00	1.00
135°	7.95	5.62	10.01	100.8°	2.5°	1.00	1.00
150°	7.47	6.47	8.33	123.4°	1.9°	1.00	1.00
165°	7.13	6.89	7.26	150.3°	1.2°	1.00	1.00
180°	6.97	6.97	6.94	180.0°	0.3°	1.00	1.00
176.2° (r)	6.99	6.98	6.95	172.5°	0.6°	1.00	1.00

TWS = 20 Kts							
TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
39.7° (b)	7.89	6.07	24.54	25.7°	25.7°	0.60	0.57
52°	8.66	5.33	24.13	32.9°	27.8°	0.74	0.57
60°	8.94	4.47	23.60	38.3°	28.3°	0.87	0.57
70°	9.28	3.17	22.36	44.5°	30.9°	1.00	0.62
75°	9.48	2.45	21.59	47.8°	31.6°	1.00	0.67
80°	9.70	1.68	20.79	51.0°	32.3°	1.00	0.74
90°	10.12	0.00	19.21	58.2°	32.7°	1.00	0.90
110°	9.95	3.40	18.23	79.9°	15.0°	1.00	1.00
120°	9.58	4.79	16.97	91.2°	9.1°	1.00	1.00
135°	9.17	6.49	14.82	109.2°	5.0°	1.00	1.00
150°	8.94	7.74	12.91	129.8°	3.6°	1.00	1.00
165°	8.79	8.49	11.61	153.7°	2.3°	1.00	1.00
180°	8.70	8.70	11.18	180.0°	0.7°	1.00	1.00
178.8° (r)	8.70	8.70	11.18	177.9°	0.9°	1.00	1.00

# SPEED GUIDE

## DEEP KEEL CARBON SYMMETRIC



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### Polar Tables

Boat Name: **D13A\_11\_05**  
Sail No:  
Sail: **Symmetric Spinnaker**  
Issued On: **24/03/2014 - VPP 2014 1.00**

### TWS = 6 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	4.59	2.30	9.20	34.0°	11.9°	1.00	0.97
70°	5.48	1.87	9.39	36.4°	12.4°	1.00	0.98
75°	5.82	1.51	9.35	37.7°	12.7°	1.00	0.98
80°	6.10	1.06	9.23	39.2°	12.9°	1.00	0.98
90°	6.44	0.00	8.75	42.6°	12.9°	1.00	1.00
110°	6.34	2.17	7.03	52.7°	11.8°	1.00	1.00
120°	6.11	3.06	6.01	59.3°	11.2°	1.00	1.00
135°	5.43	3.84	4.40	75.1°	9.0°	1.00	1.00
150°	4.41	3.82	3.14	106.0°	7.1°	1.00	1.00
165°	3.72	3.59	2.67	144.1°	6.5°	1.00	1.00
180°	3.50	3.50	2.59	180.0°	6.3°	1.00	1.00
139.7° (r)	5.13	3.91	3.93	82.9°	8.2°	1.00	1.00

### TWS = 8 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	5.88	2.94	12.02	34.3°	14.7°	1.00	0.97
70°	6.89	2.36	12.10	37.1°	15.9°	1.00	0.98
75°	7.27	1.88	11.99	38.7°	16.3°	1.00	0.98
80°	7.55	1.31	11.76	40.4°	16.5°	1.00	0.98
90°	7.82	0.00	11.01	44.8°	16.2°	1.00	1.00
110°	7.73	2.64	8.90	56.1°	13.8°	1.00	1.00
120°	7.50	3.75	7.67	63.3°	12.3°	1.00	1.00
135°	6.74	4.77	5.73	79.8°	10.5°	1.00	1.00
150°	5.66	4.90	4.25	108.8°	7.8°	1.00	1.00
165°	4.88	4.72	3.62	144.8°	6.8°	1.00	1.00
180°	4.62	4.62	3.50	180.0°	6.4°	1.00	1.00
146.5° (r)	5.89	4.92	4.51	101.3°	8.3°	1.00	1.00

### TWS = 10 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	6.99	3.49	14.62	34.6°	18.0°	1.00	0.96
70°	7.89	2.70	14.29	37.6°	22.3°	0.99	0.92
75°	8.12	2.10	13.96	39.9°	22.2°	0.97	0.93
80°	8.29	1.44	13.56	42.3°	22.1°	0.98	0.94
90°	8.50	0.00	12.63	47.7°	21.7°	1.00	0.97
110°	8.52	2.91	10.43	60.9°	16.1°	1.00	1.00
120°	8.37	4.18	9.14	68.8°	13.5°	1.00	1.00
135°	7.80	5.52	7.06	84.8°	11.2°	1.00	1.00
150°	6.75	5.85	5.41	112.1°	8.7°	1.00	1.00
165°	5.94	5.74	4.66	146.0°	7.2°	1.00	1.00
180°	5.66	5.66	4.49	180.0°	6.5°	1.00	1.00
149.7° (r)	6.77	5.85	5.43	111.4°	8.8°	1.00	1.00

### TWS = 12 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	7.49	3.75	16.53	35.4°	22.5°	0.95	0.88
70°	8.14	2.78	16.02	40.3°	22.4°	0.93	0.81
75°	8.33	2.16	15.62	43.0°	22.4°	0.93	0.82
80°	8.48	1.47	15.16	45.9°	22.3°	0.93	0.83
90°	8.69	0.00	14.08	51.9°	22.3°	0.95	0.87
110°	9.03	3.09	11.85	65.6°	18.3°	1.00	1.00
120°	8.88	4.44	10.52	74.5°	15.3°	1.00	1.00
135°	8.45	5.97	8.41	91.0°	11.8°	1.00	1.00
150°	7.72	6.69	6.62	115.1°	9.8°	1.00	1.00
165°	6.90	6.67	5.77	147.3°	7.6°	1.00	1.00
180°	6.61	6.61	5.57	180.0°	6.6°	1.00	1.00
154.6° (r)	7.44	6.72	6.26	124.6°	8.9°	1.00	1.00

### TWS = 14 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	7.72	3.86	18.31	37.1°	22.4°	0.86	0.86
70°	8.31	2.84	17.67	42.6°	22.5°	0.84	0.83
75°	8.48	2.19	17.21	45.6°	22.4°	0.85	0.84
80°	8.61	1.50	16.69	48.7°	22.4°	0.85	0.86
90°	8.86	0.00	15.53	55.2°	22.1°	0.85	0.94
110°	9.47	3.24	13.10	69.2°	22.1°	1.00	0.94
120°	9.40	4.70	11.97	78.7°	16.5°	1.00	1.00
135°	8.90	6.29	9.85	96.6°	12.5°	1.00	1.00
150°	8.38	7.26	7.99	119.3°	10.7°	1.00	1.00
165°	7.78	7.51	6.97	148.5°	8.2°	1.00	1.00
180°	7.49	7.49	6.72	180.0°	6.7°	1.00	1.00
169.5° (r)	7.64	7.52	6.82	158.0°	7.6°	1.00	1.00

### TWS = 16 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	7.76	3.88	20.03	38.7°	22.9°	0.84	0.70
70°	8.33	2.85	19.32	44.8°	22.7°	0.84	0.67
75°	8.50	2.20	18.82	48.1°	22.7°	0.84	0.69
80°	8.64	1.50	18.26	51.5°	22.7°	0.84	0.71
90°	8.96	0.00	17.07	58.4°	22.4°	0.84	0.78
110°	9.76	3.34	14.53	72.8°	22.3°	0.94	0.93
120°	10.00	5.00	13.24	81.6°	20.2°	1.00	1.00
135°	9.39	6.64	11.32	100.5°	13.6°	1.00	1.00
150°	8.83	7.64	9.51	123.3°	11.2°	1.00	1.00
165°	8.39	8.11	8.38	150.3°	8.9°	1.00	1.00
180°	8.19	8.19	8.05	180.0°	6.8°	1.00	1.00
176.6° (r)	8.21	8.20	8.05	173.2°	7.2°	1.00	1.00

### TWS = 20 Kts

TWA	BTV	VMG	AWS	AWA	Heel	Reef	Flat
60°	-0.01	-0.01	18.15	57.4°	25.7°	0.84	0.60
70°	-0.01	0.00	17.89	68.0°	25.7°	0.84	0.60
75°	-0.01	0.00	17.79	73.5°	25.7°	0.84	0.60
80°	-0.01	0.00	17.71	79.0°	25.7°	0.84	0.60
90°	-0.01	0.00	17.65	90.0°	25.7°	0.84	0.60
110°	10.26	3.51	17.45	78.3°	22.3°	0.84	0.92
120°	10.67	5.33	15.99	87.4°	22.1°	0.93	0.95
135°	10.58	7.48	14.19	105.1°	16.4°	1.00	1.00
150°	9.80	8.49	12.56	128.0°	12.3°	1.00	1.00
165°	9.29	8.97	11.51	153.4°	10.5°	1.00	1.00
180°	9.11	9.11	11.19	180.0°	7.2°	1.00	1.00
178.4° (r)	9.11	9.11	11.19	177.1°	7.5°	1.00	1.00