

Mainsail: 7000513 Carl-1 Mainsail.des

Design Info
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Design File:
\\NAS\Engineering files\Queenie-Customer Order\Fareast Sails\2023 Order\Need to be Confirmed\7000513 Carl 比赛

Initial Design Date: 22/9/2023
Boat:

Comments:

Client:

Design Data
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Main

Measurements

Luff geodesic: 14.720m
Leech geodesic: 15.357m
Foot geodesic: 4.800m
Head geodesic: 0.135m
Upper width (MUW): 0.886m
Three-quarter width (MTW): 1.617m
Half width (MHW): 2.893m
Quarter width (MQW): 3.951m
Foot median: 15.026m
ORC Mainsail area: 40.234m?
Surface area: 41.112m?
Clew height: 0.100m
Mast rake: 0.000m

Battens

Position	Length	Roach	Angle	Luff	Leech	Full
80.000%	1.381m	0.214m	72.321?	11.799m	12.252m	Full
60.000%	2.462m	0.301m	72.321?	8.881m	9.189m	Full
40.000%	3.377m	0.266m	72.321?	5.962m	6.126m	Full
20.000%	4.153m	0.153m	72.321?	3.044m	3.063m	Full

Reefing Points

1, Luff: 1.987m ; Leech: 2.054m ; Offset: 0.000m ; Number Eyelets: 3
2, Luff: 4.047m ; Leech: 4.182m ; Offset: 0.000m ; Number Eyelets: 3
3, Luff: 6.402m ; Leech: 6.616m ; Offset: 0.000m ; Number Eyelets: 2

Draft Stripes

1, Luff: 3.679m ; Leech: 3.696m ;
2, Luff: 7.358m ; Leech: 7.534m ;
3, Luff: 11.038m ; Leech: 11.404m ;

Luff Slides

1, Position: 1.468m
2, Position: 4.562m
3, Position: 7.352m
4, Position: 10.296m
5, Position: 13.244m

Luff Curve

		Fanned Luff (@ 5.00% [0.239m])	Before BSeam
14.719m,	0.000m	100% (14.720m) :	0.000m
12.885m,	-0.034m	90% (13.248m) :	0.053m
11.040m,	-0.058m	80% (11.776m) :	0.099m
9.189m,	-0.069m	70% (10.304m) :	0.129m
7.360m,	-0.070m	60% (8.832m) :	0.147m
5.485m,	-0.065m	50% (7.360m) :	0.153m
3.680m,	-0.052m	40% (5.888m) :	0.149m
1.834m,	-0.029m	30% (4.416m) :	0.132m
0.000m,	0.000m	20% (2.944m) :	0.100m
		10% (1.472m) :	0.053m
		0% (0.000m) :	0.000m

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Seam Allowances

Zone:	Split	Radial	Cross
Zone: 1/a	0.030m	0.015m	0.038m
Zone: 1/b	0.030m	0.015m	0.038m
Zone: 2/a	0.030m	0.015m	0.038m
Zone: 2/b	0.030m	0.015m	0.038m
Zone: 3/a	0.030m	0.015m	0.038m
Zone: 3/b	0.030m	0.015m	0.038m
Zone: 4	0.030m	0.015m	0.038m

Edge Excesses

Sail:	Luff	Leech	Foot
Sail:	0.000m	0.000m	0.000m

Total Seam Lengths (m)

Horizontal	8.88
Radial/Vertical	116.77
Bi-Radial Split	11.50

Materials

Material	Area (m ²)	Panels
Material 1	41.15	1\1,1\2,1\3,1\4,1\5 1\6,1\7,1\8,1\9,1\10 1\11,1b\1,1b\2,1b\3,1b\4 1b\5,1b\6,1b\7,1b\8,1b\9 1b\10,1b\11,2\1,2\2,2\3 2\4,2b\1,2b\2,2b\3,2b\4 3\1,3\2,3\3,3b\1,3b\2 3b\3,4\1,4\2,4\3,4\4 4\5

