BOAT

Name **CANDELA C2**
Sail Nr **ESP-4607**

GPH

673.1

GENERAL

Class	**BRENTA 24**
Designer	**L.BRENTA**
Builder	**I.COMPOSITES**
Series	**01/1996**
Age	**02/1996**
Age Allow ance	**0.487%**
Offset File	**E302.OFF - 01/02/1996 02:13:00**
Measurement by	**- 22/09/2017**

HULL

Length Overall	**7.489m**
Maximum Beam	**2.378m**
Displacement	**1,259kg**
Draft	**1.671m**
IMS Reg. Division	**Sportboat**
Dynamic Allow ance	**0.166%**
Fw d Accommodation	**Yes**
Hull Construction	**Solid**
Carbon Rudder	**Yes**
Crew Arm Extension	

IMSL	**7.084m**	VCGD	**-0.022m**	Sink	**8.12kg/mm**
RL	**6.856m**	VCGM	**-0.002m**	WS	**10.76m²**
LSM0	**6.729m**	Displacement/Length ratio			**4.1321**

SCORING OPTIONS

	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	**655.7**			**730.3**		
Time on Time	**0.9150**			**0.9243**		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	**749.8**	**603.9**	**541.0**	**958.3**	**732.4**	**651.2**
Time on Time	**0.9002**	**1.1177**	**1.2476**	**0.7044**	**0.9216**	**1.0365**

TIME ALLOWANCES

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	**1116.3**	**927.9**	**831.7**	**806.4**	**798.6**	**786.7**	**788.4**
52°	**737.3**	**632.1**	**593.2**	**581.4**	**576.6**	**573.3**	**566.4**
60°	**699.4**	**612.4**	**579.5**	**565.0**	**558.8**	**556.0**	**545.6**
75°	**673.3**	**597.9**	**567.0**	**542.9**	**527.8**	**520.6**	**510.9**
90°	**649.4**	**579.8**	**560.0**	**535.0**	**507.1**	**487.3**	**471.4**
110°	**641.5**	**569.4**	**529.0**	**502.6**	**483.9**	**466.2**	**434.0**
120°	**658.8**	**576.2**	**531.5**	**488.5**	**458.5**	**438.4**	**399.8**
135°	**731.1**	**605.2**	**556.2**	**511.5**	**467.0**	**423.8**	**349.2**
150°	**860.9**	**688.5**	**598.7**	**554.0**	**513.2**	**472.7**	**395.1**
Run VMG	**994.1**	**795.0**	**685.3**	**615.3**	**568.1**	**530.8**	**456.2**
Selected Courses							
Windward / Leeward	**1055.2**	**861.4**	**758.5**	**710.9**	**683.3**	**658.7**	**622.3**
Circular Random	**906.8**	**741.4**	**654.7**	**604.8**	**573.2**	**550.8**	**518.5**
Coastal / Long Distance	**1049.1**	**812.0**	**692.5**	**628.8**	**589.1**	**553.3**	**494.6**
Non Spinnaker	**990.1**	**798.6**	**696.3**	**637.2**	**600.6**	**575.7**	**541.1**

Velocity Prediction in Knots for True Wind Speeds

Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	**41.7°**	**40.3°**	**38.0°**	**37.0°**	**36.8°**	**36.4°**	**37.6°**
Beat VMG	**3.22**	**3.88**	**4.33**	**4.46**	**4.51**	**4.58**	**4.57**
52°	**4.88**	**5.70**	**6.07**	**6.19**	**6.24**	**6.28**	**6.36**
60°	**5.15**	**5.88**	**6.21**	**6.37**	**6.44**	**6.48**	**6.60**
75°	**5.35**	**6.02**	**6.35**	**6.63**	**6.82**	**6.92**	**7.05**
90°	**5.54**	**6.21**	**6.43**	**6.73**	**7.10**	**7.39**	**7.64**
110°	**5.61**	**6.32**	**6.81**	**7.16**	**7.44**	**7.72**	**8.30**
120°	**5.46**	**6.25**	**6.77**	**7.37**	**7.85**	**8.21**	**9.00**
135°	**4.92**	**5.95**	**6.47**	**7.04**	**7.71**	**8.49**	**10.31**
150°	**4.18**	**5.23**	**6.01**	**6.50**	**7.01**	**7.62**	**9.11**
Run VMG	**3.62**	**4.53**	**5.25**	**5.85**	**6.34**	**6.78**	**7.89**
Gybe Angles	**145.0°**	**147.9°**	**155.3°**	**171.7°**	**180.0°**	**180.0°**	**140.5°**

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2019
ORC International Certificate

Rating Office

Offshore Racing Congress

Invalid for Racing
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Certificate

Number **460701**
ORC Ref **ESP00003823**
Issued On **17/04/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

Crew Weight

Default	391kg
Maximum	**320kg**
Minimum*	**235kg**

**when applied by the NoR and SI*

Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	**689.3**	**0.8705**
Double H.OSN	**673.8**	**0.8904**
Non Spin GPH	**717.9**	**0.8358**
Non Spin OSN	**697.8**	**0.8598**

Sails Limitations

Headsails	Spinnakers
5	**3**

Class Division Length

CDL = **6.971**

Storm Sails Areas

Heavy Weather Jib	**10.81**
Storm Jib (JL=5.82)	**4.01**
Storm Trysail	**5.51**

Owner

BOAT

Name	**CANDELA C2**	Sail Nr	**ESP-4607**
File	**E4607**	Data in	**meters/kilograms**

RIG

Forestay Tension	**Aft**	Spreaders	**1**
Inner Stay	**None Fitted**	Runners	**0**
Carbon Mast	**No**	Jumper Struts	**Yes**
Taper Hollows	**No**	Jib Furler	**No**
Fiber Rigging	**No**	Main Furler	**No**
Lenticular Rigging	**No**	Without Backstay	**No**
Articulated Bowsprit	**No**		

P	**9.170**	E	**3.430**	MDT1	**0.080**	MW	**0.120**
IG	**8.885**	J	**2.900**	MDL1	**0.120**	GO	**0.140**
ISP	**10.470**	SFJ		MDT2	**0.080**	BD	**0.125**
BAS	**1.076**	SPL	**3.000**	MDL2	**0.065**	MWT	
FSP	**0.045**	TPS	**4.300**	TL	**1.480**	MCG	

INCLINING TEST AND FREEBOARDS

Inclining Test **Current Inclining**

Flotation date **22/09/2017** SG **1.0250**

FFM	**0.870**	FF	**0.871**	SFFP	**0.066**
FAM	**0.670**	FA	**0.672**	SAFP	**7.097**
W1	**19.2**	PD1	**622.7**	WD	**7.760**
W2	**19.2**	PD2	**528.5**	GSA	**1.0**
W3	**19.2**	PD3	**601.1**	RSA	**1.0**
W4	**19.2**	PD4	**606.2**	PLM	**9000.0**

LCF from stem on CL / on sheer	**4.056 / 4.220**
Maximum beam station from stem	**4.515**
RM Measured	**20.0kg·m**
RM Default	**24.9kg·m**
Limit of positive stability / Stab.Index	**112.8° / 105.7**
Freeboard at mast at 2.900	**0.784**

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IMS Measurement Certificate

MIZZEN RIG AND SAILS

N/A

PROPELLER

Type **No Propeller**

Certificate

Number **460701**
ORC Ref **ESP00003823**
Issued On **17/04/2019**
VPP Ver. **2019 1.01**
Valid until **31/12/2019**

COMMENTS

MOVABLE BALLAST

N/A

CENTERBOARD

N/A

Invalid for Racing
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SAILS (Maximum Areas)

Mainsail	**MHB**	**MUW**	**MTW**	**MHW**	**MQW**	**Area**	**Area (r)**	**Formula**
	0.150	0.81	1.38	2.32	2.98	19.47	20.02	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)
Symmetric	**SLU**	**SLE**	**SL**	**SHW**	**SFL**			
	10.04	10.04	10.04	6.24	6.00	51.81		SL · (SFL + 4·SHW) / 6
Asymmetric	**SLU**	**SLE**	**SL**	**SHW**	**SFL**		**Area (r)**	
on centerline	11.60	9.04	10.32	5.03	5.96	44.86	47.34	AS · (SFL + 4·SHW) / 6

HEADSAILS

Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)

HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.06	0.36	0.69	1.36	2.07	2.81	8.67	12.04	Y		19/09/2017	Unknow	

MEASUREMENT INVENTORY

Measurer **ESP 99**
Date **22/09/2017**
Comment

Id	*Item*	*Weight*	*Distance*	*VCG*	*Description*

Id	*Item*	*Maker*	*Model*
1	Engine	Mercury	4 HP

Id	*Item*	*Weight*	*Description*

MEASUREMENT INVENTORY

Id	*Item*	*Tank Use*	*Tank Type*	*Capcty*	*Dist.*	*VCG*	*Condtn*	*Description*
1	Tank	Gasolina	plastico	10.0	4.20		~~15.0~~	

Id	*Item*	*Weight*	*Distance*	*VCG*	*Description*
1	Battery	20.0	4.50		

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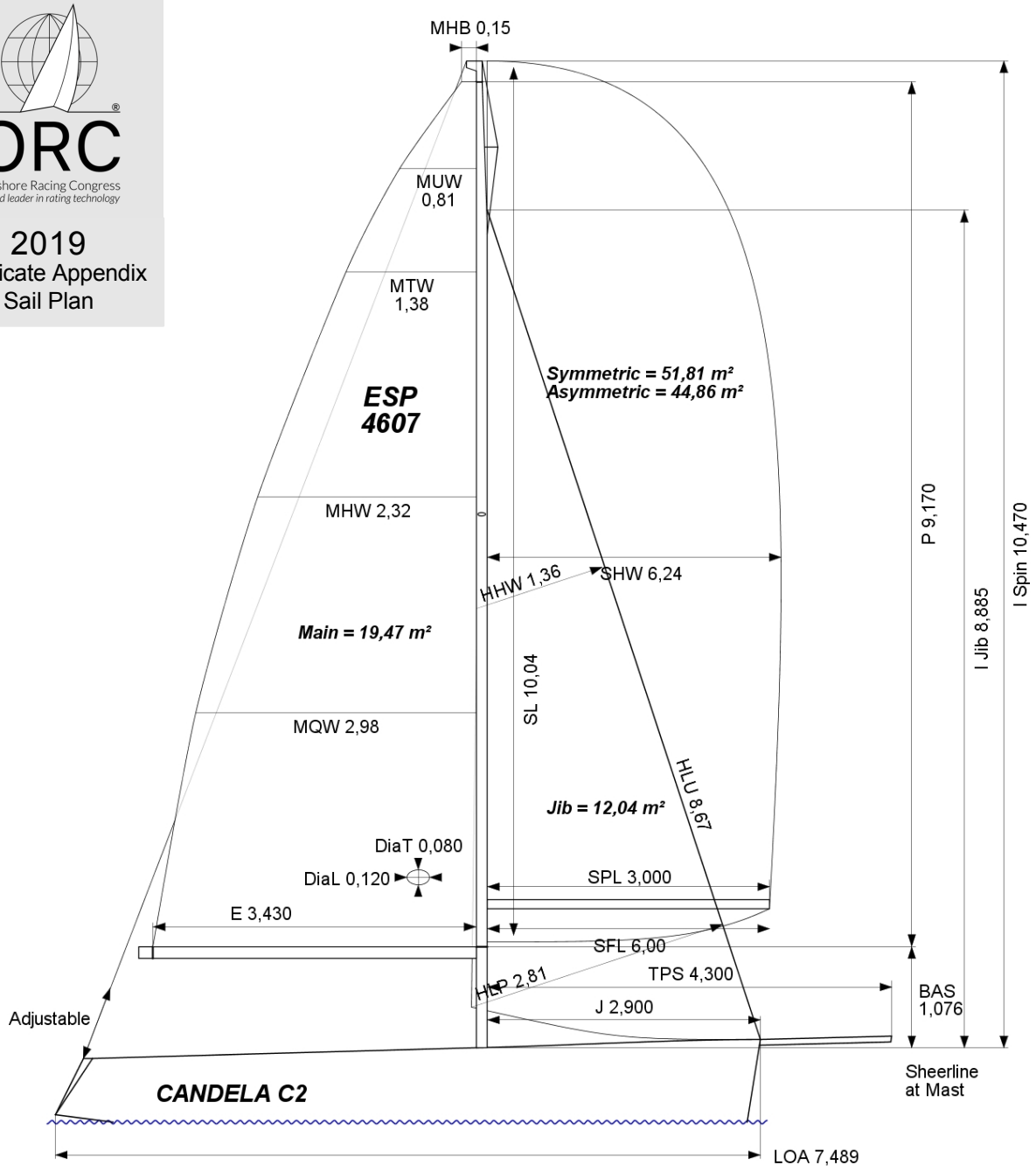
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.15	0.81	1.38	2.32	2.98	19.47		19/09/2017		Dacron	

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0.06	0.36	0.69	1.36	2.07	2.81	8.67	97%	12.04	Y			19/09/2017		Unknow	

SYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	10.04	10.04	10.04	6.24	6.00	51.81		19/09/2017		Nylon	
2	9.16	9.16	9.16	6.32	5.96	47.70		20/04/2018		Unknown	

ASYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
2	11.60	9.04	10.32	5.03	5.96	44.86	asym		19/09/2017		Unknown	
1	11.56	9.05	10.30	4.98	6.00	44.52	asym		19/09/2017		Unknown	