


BOAT Name LA SIRENA I Sail Nr ESP-4900	GPH 705,3	HULL Length Overall 7,493m Maximum Beam 2,504m Displacement 1.491kg Draft 1,778m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0,094% Fwd Accommodation No Hull Construction Solid Carbon Rudder No Crew Arm Extension
GENERAL Class REVULL 75 Designer I.TOLEDO Builder REVULL Series 01/1996 Age 11/1998 Age Allowance 0,488% Offset File esp4900.off - 22/01/2015 12:35:06 Measurement by JUAN BELTRAN - 25/09/2013		IMSL 6,881m VCGD 0,040m Sink 8,57kg/mm RL 6,303m VCGM 0,079m WS 11,09m² LSM0 6,689m Displacement/Length ratio 4,9819



2016
ORC International
Certificate

Rating Office
R.F.E.V.
Luis de salazar,9
28002 Madrid



SCORING OPTIONS	OFFSHORE COASTAL / LONG DISTANCE			INSHORE WINDWARD / LEEWARD		
	PLT	PLD		PLT	PLD	
Time On Distance	688,3			765,4		
Time On Time	0,8717			0,8818		
Performance Line	0,935	212,7		0,887	313,5	
Triple Number	Low 0,8551	Medium 1,0704	High 1,1883	Low 0,6639	Medium 0,8781	High 0,9936

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1157,8	963,2	872,9	841,1	826,0	808,8	807,6
52°	760,2	642,8	603,4	591,6	585,9	580,7	573,8
60°	716,1	618,1	586,4	574,5	568,4	565,8	554,4
75°	680,1	601,6	570,8	551,1	539,8	533,6	525,0
90°	684,5	595,8	568,1	545,9	522,5	505,9	495,2
110°	689,7	596,2	558,0	523,5	505,0	488,9	467,9
120°	716,0	608,0	566,8	531,0	494,2	467,9	437,8
135°	798,2	651,5	589,9	555,8	521,0	486,4	410,2
150°	937,3	747,9	639,6	586,4	554,7	522,5	456,9
Run VMG	1082,4	863,6	731,6	645,9	592,6	560,8	500,0

Selected Courses							
Windward / Leeward	1120,0	913,4	802,3	743,5	709,3	684,8	653,8
Circular Random	954,8	778,0	685,4	632,6	600,1	577,9	547,9
Ocean for PCS	960,9	772,7	672,5	613,9	575,9	548,1	506,6
Non Spinnaker	1007,6	814,7	712,4	653,7	617,9	594,3	563,4

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	42,4°	41,6°	40,1°	38,9°	38,2°	37,8°	38,7°
Beat VMG	3,11	3,74	4,12	4,28	4,36	4,45	4,46
52°	4,74	5,60	5,97	6,08	6,14	6,20	6,27
60°	5,03	5,82	6,14	6,27	6,33	6,36	6,49
75°	5,29	5,98	6,31	6,53	6,67	6,75	6,86
90°	5,26	6,04	6,34	6,59	6,89	7,12	7,27
110°	5,22	6,04	6,45	6,88	7,13	7,36	7,69
120°	5,03	5,92	6,35	6,78	7,28	7,69	8,22
135°	4,51	5,53	6,10	6,48	6,91	7,40	8,78
150°	3,84	4,81	5,63	6,14	6,49	6,89	7,88
Run VMG	3,33	4,17	4,92	5,57	6,07	6,42	7,20
Gybe Angles	146,4°	147,9°	154,7°	173,9°	180,0°	180,0°	180,0°

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Number **490001**
ORC Ref **ESP00016030**
Issued On **10/02/2016**
VPP Ver. **2016 1.00**
Valid until **31/12/2016**

Crew Weight
Declared **210kg**
Default* **388kg**
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Double H.GPH	707,9	0,8475
Double H.OSN	691,3	0,8680
Non Spin GPH	734,2	0,8172
Non Spin OSN	714,2	0,8401
N/S Perf. Line	125,3	0,753

Sails Limitations

Headsails	Spinnakers
5	3

Class Division Length
CDL = **6,593**

Storm Sails Areas

Heavy Weather Jib	11,60
Storm Jib (JL=6,03)	4,30
Storm Trysail	5,40

Owner

BOAT	
Name LASIRENA I	Sail Nr ESP-4900
File E4900.dxt	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 25/09/2013	SG 1,0270	
FFM 0,922	FF 0,922	SFFP 0,214
FAM 0,762	FA 0,763	SAFP 6,939
W1 25,000	PD1 647,5	WD 7,130
W2 25,000	PD2 650,2	GSA 1,0
W3 25,000	PD3 643,8	RSA 1,0
W4 25,000	PD4 648,4	PLM 9000,0
LCF from stem on CL / on sheer		4,125 / 4,286
Maximum beam station from stem		5,199
RM Measured		21,7kg·m
RM Default		26,9kg·m
Limit of positive stability / Stab.Index		110,5° / 103,8
Freeboard at mast at 2,810		0,831

RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 0		
Carbon Mast No	Jumper Struts None		
Taper Hollows No	Jib Furler No		
Fiber Rigging No	Main Furler No		
Lenticular Rigging No	Without Backstay No		
Articulated Bowsprit No			
P 8,900	E 3,470	MDT1 0,081	MW 0,120
IG 9,270	J 2,500	MDL1 0,120	GO 0,120
ISP 9,330	SFJ 0,310	MDT2 0,081	BD 0,118
BAS 1,350	SPL 2,850	MDL2 0,120	MWT 41,00
FSP 0,050	TPS 3,500	TL	MCG 3,050



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2016 Measurements Datasheet

MIZZEN RIG AND SAILS	
N/A	

PROPELLER	
Type No Propeller	

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COMMENTS	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0,155	0,83	1,49	2,38	3,02	19,37	20,02	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL			SL · (SFL + 4·SHW) / 6	
	8,98	8,98	8,98	5,00	5,03	37,46			
Asymmetric	SLU	SLE	SL	SHW	SFL	Area (r)	AS · (SFL + 4·SHW) / 6		
	10,05	8,77	9,41	4,07	4,29	32,26	34,26		

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
0,08	0,51	0,97	1,55	2,15	2,70	9,18	13,74	Y		06/11/2013	Unknow	
0,06	0,21	0,37	0,72	1,43	2,90	8,80	9,19			25/09/2013		

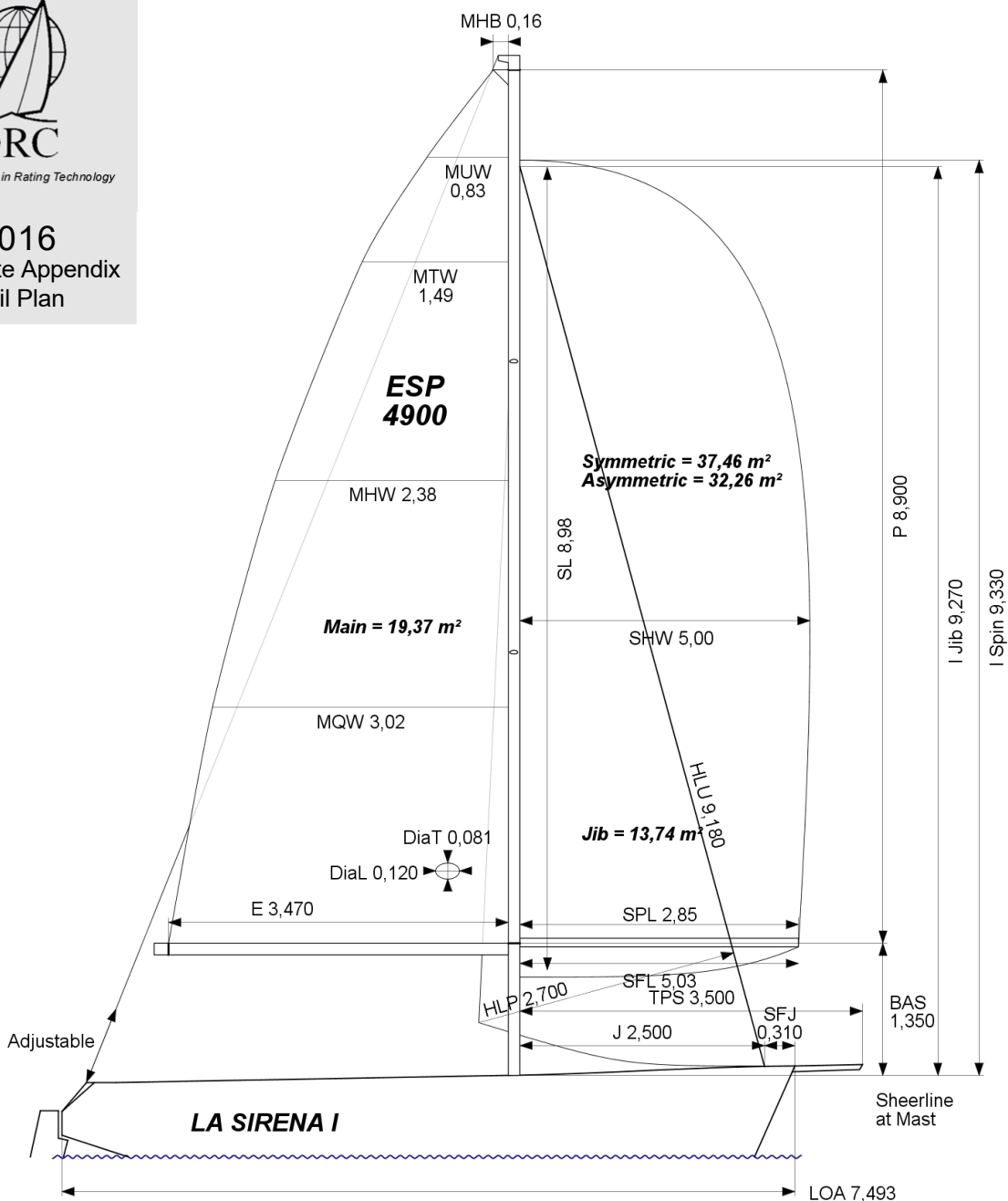
MEASUREMENT INVENTORY				
Measurer JUANJO BELTRAN ESP493				
Date 25/09/2013				
Comment				
Id	Item	Weight	Distance	VCG Description
QR	Anchor	5,0	4,75	ANCLA-MAS-
Id	Item	Weight Description		

MEASUREMENT INVENTORY				
Id	Item	Weight	Distance	VCG Description
1	Battery		4,30	1 BATERIA 90 AH



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Sail Plan



SAILS INVENTORY

MAINSAIL

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
m14	0,155	0,83	1,49	2,38	3,02	19,37	tacha	03/10/2014		Unknown	

HEADSAILS

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1	0,08	0,51	0,97	1,55	2,15	2,70	9,18	108%	13,74	Y		tacha	06/11/2013		Unknown	
ORC	0,06	0,21	0,37	0,72	1,43	2,90	8,80	116%	9,19			493	25/09/2013			

SYMMETRIC SPINNAKERS

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
S1	8,98	8,98	8,98	5,00	5,03	37,46	tacha	27/11/2013		Nylon	S1

ASYMMETRIC SPINNAKERS

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
001	10,05	8,77	9,41	4,07	4,29	32,26	asym	E222	07/10/2015		Unknown	07101503