

BOAT Name BANA BIOLETTA 4 Sail Nr GRE-48	GPH 533.7	HULL Length Overall 12.490m Maximum Beam 3.964m Displacement 5,846kg Draft 2.576m IMS Reg. Division Performance Dynamic Allowance 0.000% Fwd Accommodation No Hull Construction Light Carbon Rudder Yes Crew Arm Extension IMSL 11.119m VCGD -0.619m Sink 21.70kg/mm RL 11.365m VCGM -0.320m WS 29.35m² LSM0 10.845m Displacement/Length ratio 4.5832
GENERAL Class ILC 40 Designer B. FARR Builder COOKSON Series 05/1995 Age 05/1995 Age Allowance 0.487% Offset File ATALNT92.OFF - 18/06/1996 13:40:00 Measurement by - 26/04/2001		



ORC
Offshore Racing Congress
World leader in rating technology

2019
ORC International
Certificate

Rating Office

Offshore
Racing
Congress



SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	521.4			584.3		
Time on Time	1.1508			1.1553		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	594.7	478.8	427.4	765.0	588.1	518.5
Time on Time	1.1351	1.4097	1.5793	0.8823	1.1477	1.3019

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	834.3	697.3	648.0	626.4	614.8	607.3	600.0
52°	550.9	477.9	458.2	449.7	444.8	442.0	433.6
60°	522.2	464.6	445.8	436.4	430.3	426.2	416.1
75°	502.4	455.5	432.5	415.9	406.2	399.8	393.2
90°	506.8	456.7	431.2	407.7	389.4	377.0	364.4
110°	538.4	459.8	426.5	398.1	381.2	366.3	340.5
120°	555.3	466.1	430.5	398.8	372.4	350.4	322.1
135°	617.9	499.9	451.1	420.2	389.2	358.7	299.5
150°	735.2	588.6	500.1	454.0	425.0	396.2	339.9
Run VMG	849.0	679.6	577.5	515.8	474.4	442.5	389.2

Certificate
Number **01003P**
ORC Ref **GRE01016209**
Issued On **29/07/2019**
VPP Ver. **2019 1.01**
Valid until **28/02/2020**

Crew Weight
Default **773kg**
Maximum **870kg**
Minimum* **653kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD	ToT
Non Spin GPH 561.4	1.0688
Non Spin OSN 549.7	1.0914

Selected Courses							
Windward / Leeward	841.6	688.4	612.8	571.1	544.6	524.9	494.6
Circular Random	720.0	588.3	519.1	479.1	453.5	435.3	408.3
Coastal / Long Distance	842.3	649.6	555.6	499.4	465.9	437.0	390.4
Non Spinnaker	768.7	623.1	545.3	499.6	470.6	450.4	422.2

Sails Limitations

Headsails	Spinnakers
6	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	42.1°	40.3°	38.6°	37.4°	36.8°	36.3°	36.6°
Beat VMG	4.32	5.16	5.56	5.75	5.86	5.93	6.00
52°	6.53	7.53	7.86	8.00	8.09	8.15	8.30
60°	6.89	7.75	8.08	8.25	8.37	8.45	8.65
75°	7.16	7.90	8.32	8.66	8.86	9.00	9.15
90°	7.10	7.88	8.35	8.83	9.24	9.55	9.88
110°	6.69	7.83	8.44	9.04	9.44	9.83	10.57
120°	6.48	7.72	8.36	9.03	9.67	10.27	11.18
135°	5.83	7.20	7.98	8.57	9.25	10.04	12.02
150°	4.90	6.12	7.20	7.93	8.47	9.09	10.59
Run VMG	4.24	5.30	6.23	6.98	7.59	8.14	9.25
Gybe Angles	142.2°	142.7°	149.7°	156.8°	172.1°	180.0°	180.0°

Class Division Length
CDL = **11.243**

Storm Sails Areas
Heavy Weather Jib **36.07**
Storm Jib (JL=10.63) **13.36**
Storm Trysail **19.06**

Owner

BOAT			
Name	BANA BIOLETTA 4	Sail Nr	GRE-48
File	GR48	Data in	meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date		16/03/2014	SG 1.0280
FFM	1.368	FF	1.367
FAM	1.092	FA	1.091
SFFP	0.038	SAFP	11.941
W1	113.8	PD1	580.5
W2	113.8	PD2	581.7
W3	113.8	PD3	581.7
W4	113.8	PD4	581.4
WD	12.180	GSA	1.0
RSA	1.0	PLM	9000.0
LCF from stem on CL / on sheer		6.807 / 7.051	
Maximum beam station from stem		7.684	
RM Measured		187.8kg-m	
RM Default		183.1kg-m	
Limit of positive stability / Stab.Index		130.3° / 128.0	
Freeboard at mast at 4.570		1.177	



ORC
Offshore Racing Congress
World leader in rating technology

2019
IMS Measurement
Certificate

RIG			
Forestay Tension	Aft	Spreaders	3
Inner Stay	None Fitted	Runners	2
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	17.560	E	6.200
IG	16.310	J	4.570
ISP	17.670	SFJ	0.000
BAS	1.867	SPL	5.230
FSP	0.065	TPS	
MDT1	0.120	MW	0.240
MDL1	0.240	GO	0.250
MDT2	0.073	BD	0.278
MDL2	0.089	MWT	223.80
TL	3.020	MCG	5.620

MIZZEN RIG AND SAILS			
N/A			

PROPELLER			
Installation	Strut	PRD	0.410
Type	Folding 2 blades	PBW	0.110
Twin Screw	No	PIPA	0.0035
ST1	0.042	ST3	0.181
ST2	0.181	ST4	0.114
ST5	0.270	EDL	0.680

Certificate	
Number	01003P
ORC Ref	GRE01016209
Issued On	29/07/2019
VPP Ver.	2019 1.01
Valid until	28/02/2020

COMMENTS	
ex "ATALANTI IX"	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

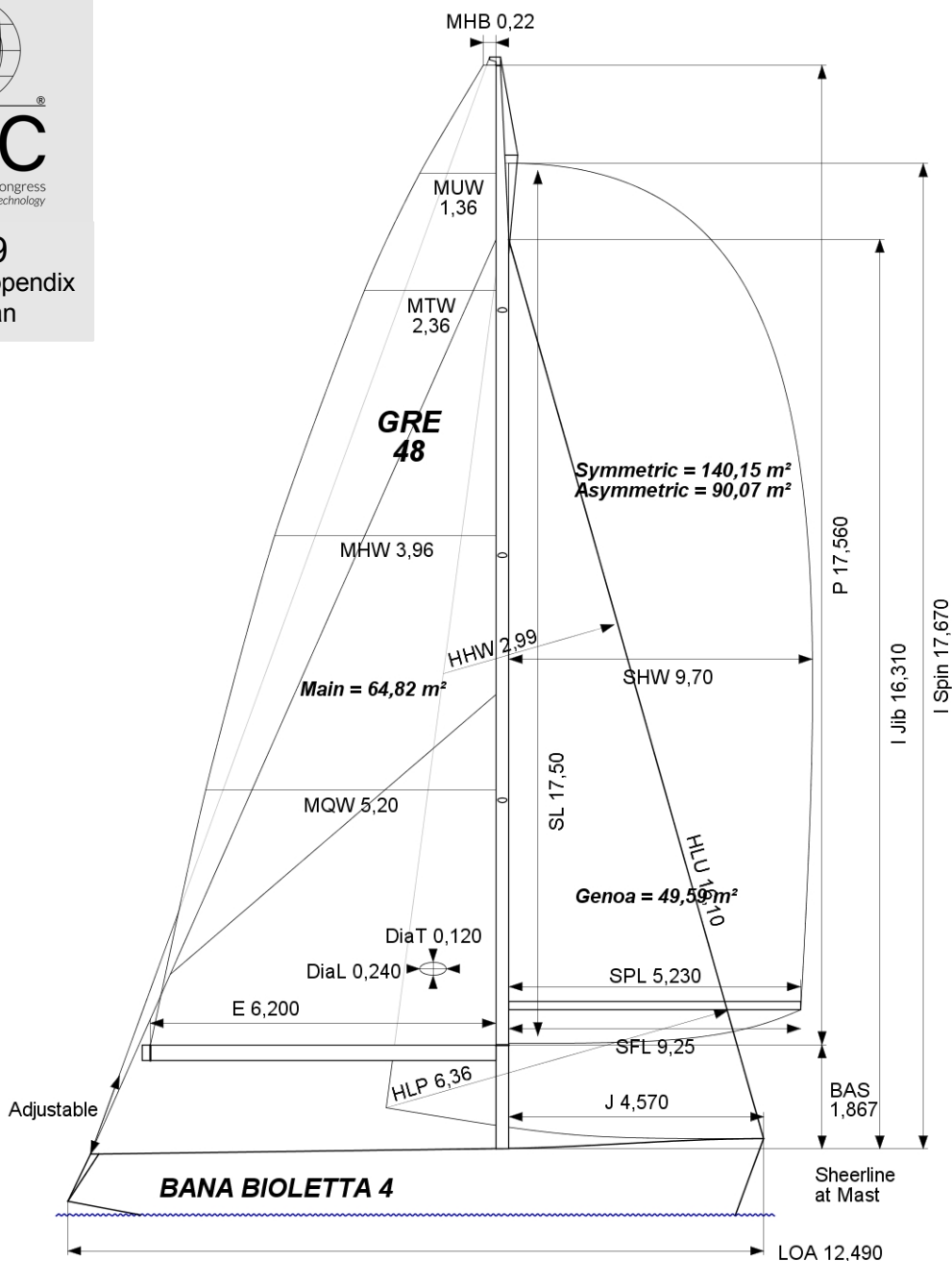


SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.220	1.36	2.36	3.96	5.20	64.82	66.17	P/8 · (E + 2 · MQW + 2 · MHW + 1.5 · MTW + MUW + 0.5 · MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL			SL · (SFL + 4 · SHW) / 6	
	17.50	17.50	17.50	9.70	9.25	140.15			
Asymmetric	SLU	SLE	SL	SHW	SFL	Area (r)		AS · (SFL + 4 · SHW) / 6	
	16.30	14.45	15.38	6.60	8.75	90.07 108.82			

HEADSAILS												
Area = 0.1125 · HLU · (1.445 · HLP + 2 · HQW + 2 · HHW + 1.5 · HTW + HUW + 0.5 · HHB)												
HBB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.08	0.76	1.46	2.99	4.61	6.36	16.10	49.59			26/06/2016	Carbon	#50
0.05	0.73	1.44	2.96	4.60	6.26	16.00	48.74			26/06/2016	Polyest	#51
0.06	0.70	1.26	2.39	3.48	4.45	16.20	37.89	Y		09/07/2019	Kevlar	

MEASUREMENT INVENTORY				
Measurer	GRE-21			
Date	16/03/2014			
Comment				
Id	Item	Weight	Distance	VCG Description
1	Engine			YANMAR GM30 (27)
Id	Item	Weight Description		

MEASUREMENT INVENTORY									
Id	Item	Tank	Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
1	Tank	FUEL		INOX	70.0	8.50		0-0	(C)
2	Tank	WATER		Soft PVC bag	100.0	5.90		0-0	(P)
3	Tank	WATER		Soft PCV bag	100.0	5.90		0-0	(S)
Id	Item	Weight	Distance	VCG Description					
1	Ballast	132.0	6.80	Lead pigs 5 x 25-28 kg approx. each (P)					
2	Ballast	132.0	6.80	Lead pigs 5 x 25-28 kg approx. each (S)					
3	Ballast	70.0	6.30	Lead pigs 2 x 30 kg + 1 x 10 kg (P)					
4	Ballast	70.0	6.30	Lead pigs 2 x 30 kg + 1 x 10 kg (S)					
1	Battery		7.10	2 x 110 Ah (C)					
2	Battery		6.90	1 x 80 Ah (C)					



SAILS INVENTORY

MAINSAIL (2)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
#11	0.22	1.36	2.36	3.96	5.20	64.82		21/03/2015	QUANTUM	Polyester	#11
#10	0.23	1.35	2.36	3.97	5.19	64.81		21/03/2015	QUANTUM	Carbon	#10

HEADSAILS (3)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
#50	0.08	0.76	1.46	2.99	4.61	6.36	16.10	139%	49.59				26/06/2016	QUANTUM	Carbon	#50
#51	0.05	0.73	1.44	2.96	4.60	6.26	16.00	137%	48.74				26/06/2016	KAKITSIS	Polyest	#51
J1	0.06	0.70	1.26	2.39	3.48	4.45	16.20	97%	37.89	Y			09/07/2019	ARROW	Kevlar	

SYMMETRIC SPINNAKERS (9)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
RE	17.50	17.50	17.50	9.70	9.25	140.15		26/06/2016	ARROW	Nylon	0.5
DB	17.95	17.95	17.95	9.39	9.22	139.96		09/06/2017	ARROW	Nylon	DARK BLUE
#81	17.48	17.48	17.48	9.60	9.23	138.77		26/06/2016		Nylon	RUNNER
#77	17.13	17.13	17.13	9.57	9.65	136.85		26/06/2016	NORTH	Nylon	0.5(46)
#80	17.30	17.33	17.31	9.42	9.25	135.44		20/06/2016		Nylon	RED

ASYMMETRIC SPINNAKERS (1)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
A3	16.30	14.45	15.38	6.60	8.75	90.08	asym		09/07/2019	ARROW	Nylon	