

BOAT Name KALEVALA II Sail Nr USA-52439	GPH 613.0	HULL Length Overall 11.310m Maximum Beam 3.672m Displacement 7,383kg Draft 2.334m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.224% Fwd Accommodation Yes Hull Construction Carbon Rudder Yes Crew Arm Extension 0.00
GENERAL Class GRAND SOLEIL 37 BC Designer BOTIN/CARKEEK Builder DEL PARDO Series 05/2005 Age 07/2005 Age Allowance 0.422% Offset File GS37BC.OFF - 17/05/2005 13:06:46 Measurement by - 04/04/2017		IMSLS 10.403m VCGD 0.214m Sink 22.65kg/mm RL 9.175m VCGM 0.118m WS 28.98m² LSM0 10.193m Displacement/Length ratio 6.9715



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SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	594.1			660.1		
Time on Time	1.0099			1.0226		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	705.6	542.0	482.8	907.7	664.8	572.1
Time on Time	0.9566	1.2454	1.3980	0.7436	1.0153	1.1799

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1034.3	857.4	754.9	697.1	675.6	666.4	654.5
52°	684.7	576.7	517.0	492.8	482.9	478.9	475.2
60°	651.2	550.8	502.2	481.8	471.6	466.8	463.2
75°	626.4	532.7	492.0	472.7	459.6	450.0	440.8
90°	624.5	521.4	481.4	463.0	455.0	443.5	421.6
110°	625.6	518.8	477.6	455.6	436.0	418.7	400.2
120°	643.8	531.6	483.4	459.1	437.6	417.4	383.8
135°	711.0	580.0	507.4	475.1	453.6	432.1	390.7
150°	838.4	668.0	567.4	505.7	475.9	455.5	415.4
Run VMG	968.1	771.4	654.4	576.7	522.7	486.2	445.2

Certificate

Number **US6129**
ORC Ref **USAX0154FRV**
Issued On **26/03/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight

Default **707kg**
Maximum **707kg**
Minimum* **530kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

ToD	ToT
Non Spin GPH 647.5	0.9266
Non Spin OSN 626.0	0.9585

Selected Courses							
Windward / Leeward	1001.2	814.4	704.7	636.9	599.2	576.3	549.8
Circular Random	846.3	682.4	594.5	543.6	512.4	492.1	466.4
Coastal / Long Distance	997.9	765.1	635.6	558.9	521.6	493.6	447.6
Non Spinnaker	908.9	726.6	627.1	568.4	532.1	508.6	479.4

Sails Limitations

Headsails	Spinnakers
5	3

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°	40.7°	40.3°	38.9°	38.0°	37.6°	37.4°
Beat VMG	3.48	4.20	4.77	5.16	5.33	5.40	5.50
52°	5.26	6.24	6.96	7.31	7.45	7.52	7.58
60°	5.53	6.54	7.17	7.47	7.63	7.71	7.77
75°	5.75	6.76	7.32	7.62	7.83	8.00	8.17
90°	5.76	6.90	7.48	7.78	7.91	8.12	8.54
110°	5.75	6.94	7.54	7.90	8.26	8.60	9.00
120°	5.59	6.77	7.45	7.84	8.23	8.62	9.38
135°	5.06	6.21	7.10	7.58	7.94	8.33	9.21
150°	4.29	5.39	6.34	7.12	7.57	7.90	8.67
Run VMG	3.72	4.67	5.50	6.24	6.89	7.40	8.09
Gybe Angles	144.9°	149.6°	151.6°	156.6°	174.0°	180.0°	180.0°

Class Division Length

CDL = **9.790**

Storm Sails Areas

Heavy Weather Jib **31.62**
Storm Jib (JL=9.95) **11.71**
Storm Trysail **13.58**

Owner

BOAT	
Name KALEVALA II	Sail Nr USA-52439
File US6129	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 10/05/2017		SG 1.0030	
FFM 1.397	FF 1.425	SFFP 0.254	
FAM 1.031	FA 1.028	SAFP 10.708	
W1 98.0	PD1 550.0	WD 11.895	
W2 98.0	PD2 550.0	GSA 1.0	
W3 98.0	PD3 550.0	RSA 1.0	
W4 98.0	PD4 550.0	PLM 9000.0	
LCF from stem on CL / on sheer		6.426 / 6.678	
Maximum beam station from stem		7.326	
RM Measured		166.9kg-m	
RM Default		180.1kg-m	
Limit of positive stability / Stab.Index		111.1° / 115.0	
Freeboard at mast at 4.347		1.192	



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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 15.194	E 5.105	MDT1 0.113	MW 0.201	
IG 15.209	J 4.102	MDL1 0.201	GO 0.226	
ISP 16.584	SFJ 0.245	MDT2 0.108	BD 0.167	
BAS 1.615	SPL 4.117	MDL2 0.164	MWT 184.00	
FSP 0.068	TPS 4.920	TL 0.750	MCG 5.600	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.435		
Type Folding 2 blades	PBW 0.110		
Twin Screw No	PIPA 0.0038		
ST1 0.065	ST3 0.175	ST5 0.295	
ST2 0.180	ST4 0.105	EDL 2.465	

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VPP Ver. 2018 1.00	
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COMMENTS

MOVABLE BALLAST	
N/A	

BILGEBOARD		
BS	BT	BA
BF	BX	
BC	BY	



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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.180	1.09	1.92	3.28	4.24	45.97	46.82	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	Area	Area (r)	Formula	
	16.39	16.39	16.39	7.41	7.29	100.88		SL · (SFL + 4·SHW) / 6	
Asymmetric	SLU	SLE	SL	SHW	SFL	Area	Area (r)	Formula	
	16.04	15.30	15.67	5.46	7.16	75.74	85.17	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
0.10	0.66	1.25	2.34	3.38	4.30	14.70	33.47					light medium Jib re-measured 2018

MEASUREMENT INVENTORY				
Measurer	Date	Comment		
Id	Item	Weight	Distance	VCG Description
a	Ancher	0.0	0.00	
Id	Item	Weight	Distance	VCG Description

MEASUREMENT INVENTORY									
Id	Item	Tank	Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description
	Tank					0.00	0.00	00.0	
Id	Item	Weight	Distance	VCG Description					

