

BOAT Name MODUL Sail Nr SUI 7227	GPH 568.7	HULL Length Overall 12.490m Maximum Beam 3.286m Displacement 6'944kg Draft 2.570m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.008% Fwd Accommodation Yes Hull Construction Cored Carbon Rudder No Crew Arm Extension
GENERAL Class IMS 42 Designer JUDEL/VROLIJK Builder Cia. de Barcos Series 03.2004 Age 03.2004 Age Allowance 0.487% Offset File W7227-2.off - 12.08.2015 19:45:00 Measurement by SPAIN - 06.04.2011		IMSLS 11.084m VCGD -0.205m Sink 23.19kg/mm RL 10.534m VCGM -0.215m WS 30.61m² LSMO 10.638m Displacement/Length ratio 5.7681



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Rating Office
Swiss ORC Rating Office
Bruno Frank
Haldengässli 76
CH-8706 Feldmeilen




ABC
Schweiz - Suisse - Switzerland

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	552.9			617.7		
Time on Time	1.0852			1.0927		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	650.7	503.9	449.6	841.6	620.2	539.4
Time on Time	1.0373	1.3395	1.5012	0.8020	1.0883	1.2515

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	937.9	769.7	681.5	650.6	637.5	629.9	618.1
52°	617.7	516.6	473.7	460.3	454.9	452.2	444.9
60°	585.1	496.7	462.1	448.5	442.6	439.3	432.1
75°	560.3	484.0	454.2	436.6	424.7	418.2	412.4
90°	565.7	485.6	452.4	434.6	416.9	401.6	384.1
110°	583.4	483.7	445.6	421.1	403.9	391.0	370.1
120°	601.4	494.2	451.3	425.0	399.1	376.1	350.8
135°	671.1	540.7	474.0	443.6	419.1	394.2	343.4
150°	800.0	636.9	536.0	475.8	446.1	423.0	377.1
Run VMG	923.8	735.4	619.0	544.2	495.7	459.4	413.6

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Number **SU7227**
ORC Ref **SUI00005060**
Issued On **11.02.2019**
VPP Ver. **2019 1.01**
Valid until **31.12.2019**

Crew Weight
Default **752kg**
Maximum **745kg**
Minimum* **559kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring

	ToD	ToT
Non Spin GPH	597.9	1.0035
Non Spin OSN	581.4	1.0320

Selected Courses							
Windward / Leeward	930.8	752.5	650.2	597.4	566.6	544.7	515.9
Circular Random	782.4	631.8	551.7	505.6	477.2	458.0	432.2
Coastal / Long Distance	930.1	707.7	587.6	522.6	487.6	458.7	413.4
Non Spinnaker	835.0	669.0	579.2	526.7	494.2	472.5	444.0

Sails Limitations

Headsails	6	Spinnakers	4
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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	42.5°	41.0°	39.6°	38.6°	38.1°	37.6°	37.6°
Beat VMG	3.84	4.68	5.28	5.53	5.65	5.72	5.82
52°	5.83	6.97	7.60	7.82	7.91	7.96	8.09
60°	6.15	7.25	7.79	8.03	8.13	8.19	8.33
75°	6.42	7.44	7.93	8.25	8.48	8.61	8.73
90°	6.36	7.41	7.96	8.28	8.64	8.97	9.37
110°	6.17	7.44	8.08	8.55	8.91	9.21	9.73
120°	5.99	7.28	7.98	8.47	9.02	9.57	10.26
135°	5.36	6.66	7.60	8.11	8.59	9.13	10.48
150°	4.50	5.65	6.72	7.57	8.07	8.51	9.55
Run VMG	3.90	4.90	5.82	6.62	7.26	7.84	8.70
Gybe Angles	141.7°	146.8°	149.1°	155.3°	168.1°	180.0°	180.0°

Class Division Length
CDL = **10.810**

Storm Sails Areas

Heavy Weather Jib	34.17
Storm Jib (JL=10.35)	12.66
Storm Trysail	16.16

Owner
VELUM LUCERNA
c/o STEPHENS MOORE
OBERGRUNDSTRASSE 61
CH-6003 LUZERN

I certify that I understand my responsibilities under ORC Rules and Regulations

Signature

BOAT	
Name MODUL	Sail Nr SUI 7227
File SUI7227	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 12.08.2015		SG 1.0250	
FFM 1.388	FF 1.393	SFFP 0.080	
FAM 1.080	FA 1.077	SAFP 12.280	
W1 114.3	PD1 471.4	WD 10.960	
W2 114.3	PD2 471.2	GSA 1.0	
W3 114.3	PD3 471.5	RSA 1.0	
W4 114.3	PD4 471.5	PLM 9000.0	
LCF from stem on CL / on sheer		6.909 / 7.086	
Maximum beam station from stem		8.650	
RM Measured		209.3kg·m	
RM Default		196.6kg·m	
Limit of positive stability / Stab.Index		133.5° / 140.5	
Freeboard at mast at 4.765		1.281	



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RIG			
Forestay Tension Aft	Spreaders 2		
Inner Stay None Fitted	Runners 0		
Carbon Mast Yes	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 16.110	E 5.730	MDT1 0.134	MW 0.250
IG 15.750	J 4.500	MDL1 0.250	GO 0.295
ISP 15.878	SFJ 0.265	MDT2 0.122	BD 0.300
BAS 1.700	SPL 4.800	MDL2 0.187	MWT 183.00
FSP 0.066	TPS	TL 1.880	MCG 6.470

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.425		
Type Folding 2 blades	PBW 0.000		
Twin Screw No	PIPA 0.0037		
ST1 0.042	ST3 0.180	ST5 0.330	
ST2 0.180	ST4 0.112	EDL 0.680	

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COMMENTS	
eELIMINADO 108K DE LA QUILLA ELIMINADO PASTA HELICE 03/2011 1000 KG. PLOMO SENTINA 08/15 ex ESP 7227	

MOVABLE BALLAST	
N/A	

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.210	1.32	2.27	3.74	4.89	56.02	57.34	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric	SLU	SLE	SL	SHW	SFL	112.00		SL · (SFL + 4·SHW) / 6	
	15.80	15.80	15.80	8.57	8.25				
Asymmetric									
Not Available									

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	0.67	1.30	2.59	3.68	4.80	15.82	39.41	Y		20.08.2015		
0.10	0.63	1.23	2.43	3.65	4.84	16.00	39.02	Y		24.08.2011	Carbon	MH
0.10	0.65	1.23	2.42	3.64	4.82	15.64	38.06	Y		18.03.2011	Carbon	N3

MEASUREMENT INVENTORY				
Measurer ESP 24				
Date 12.08.2015				
Comment				
Id	Item	Weight	Distance	VCG Description
Id	Item	Maker	Model	
001	Engine	yanmar	38 hp	
Id	Item	Weight Description		

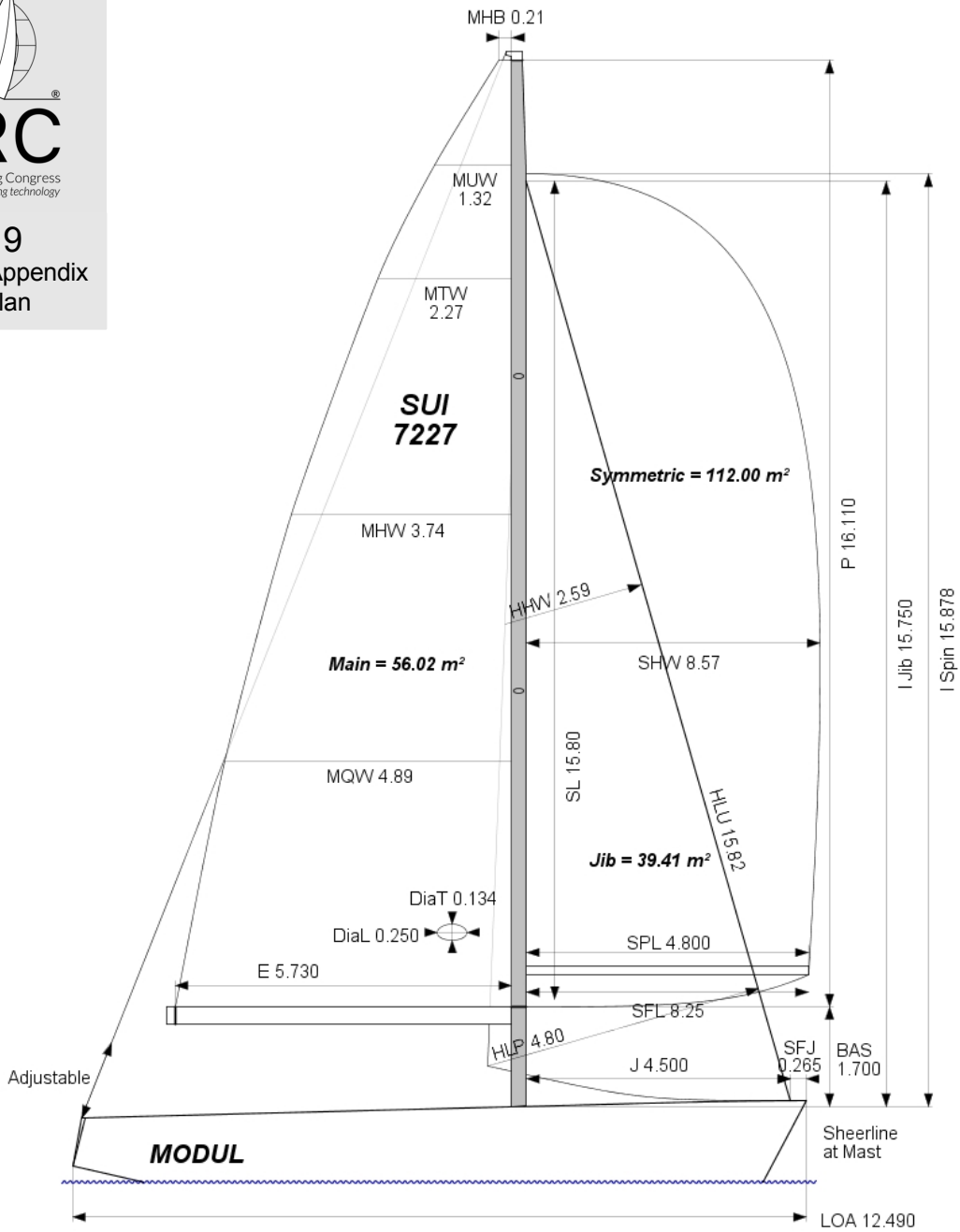
MEASUREMENT INVENTORY						
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG Condtn Description
1	Tank agua		PVC			0.0
2	Tank agua		PVC			0.0
3	Tank gasoil		PVC			15.0
Id	Item	Weight	Distance	VCG Description		
001	Ballast	480.0	9.50	18 lingotes de plomo		
002	Ballast	240.0	8.85	24 lingotes x 10 kg		
003	Ballast	280.0	6.95	8 lingotes x 35 kg.		
3	Battery		5.75			
1	Battery		9.00	210 a		



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Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
003	0.21	1.32	2.27	3.74	4.89	56.03		31.07.2017		Carbon	3DI

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
111	0.10	0.67	1.30	2.59	3.68	4.80	15.82	107%	39.41	Y			20.08.2015			
211	0.10	0.63	1.23	2.43	3.65	4.84	16.00	108%	39.02	Y			24.08.2011		Carbon	MH
311	0.10	0.65	1.23	2.42	3.64	4.82	15.64	107%	38.06	Y			18.03.2011		Carbon	N3

SYMMETRIC SPINNAKERS (2)

Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1	15.80	15.80	15.80	8.57	8.25	112.00		12.08.2015	north sails	Unknown	s4
sp1	15.85	15.85	15.85	8.45	8.10	110.69				Nylon	Ant IMX

ASYMMETRIC SPINNAKERS (0)

Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment
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