

BOAT
Name U 47
Sail Nr ESP-3111-2

GPH
634.1

HULL	
Length Overall	12.200 m
Maximum Beam	3.902 m
Displacement	7,335 kg
Draft	2.495 m
IMS Reg. Division	Cruiser/Racer
Dynamic Allowance	0.279%
Fwd Accommodation	Yes
Hull Construction	Solid
Carbon Rudder	No
Crew Arm Extension	
IMS L	10.531
VCGD	0.203
VCGM	0.235
Sink	21.51 kg/mm
Wetted Area	29.47 m²

GENERAL
Class FIRST 41S5
Designer J. BERRET
Builder BENETEAU
Series 07/1988
Age 01/1989
Age Allowance 0.488%
Offset File EPEDRAS.OFF - 29/5/2013 09:16:28
Measurement by FRAS/GVALV/DMORENO - 30/04/2010




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SCORING OPTIONS						
	OFFSHORE			INSHORE		
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time On Distance	610.6			690.9		
Time On Time	0.9826			0.9770		
Performance Line	PLT	PLD		PLT	PLD	
	0.834	106.1		0.790	175.5	
Triple Number	Low	Medium	High	Low	Medium	High
	0.9224	1.2041	1.3588	0.7063	0.9660	1.1383

Rating Office

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Racing
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TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	1045.0	872.4	779.8	733.3	706.2	690.6	684.5
52°	681.0	575.7	519.2	499.2	489.6	484.1	479.3
60°	642.0	544.8	499.6	482.5	475.0	470.1	465.4
75°	611.6	523.1	486.4	468.7	456.6	450.2	443.1
90°	618.5	528.2	488.1	469.6	454.9	441.6	423.1
110°	651.9	539.6	488.5	464.3	445.1	429.2	414.5
120°	678.9	560.9	498.5	471.0	451.9	433.0	403.4
135°	770.5	627.5	541.2	493.9	469.7	450.5	412.3
150°	924.7	725.6	612.9	538.1	494.4	470.5	432.8
Run VMG	1067.7	837.8	703.7	611.1	543.3	499.5	455.1

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VPP Ver. 2013 1.01
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Selected Courses							
Windward / Leeward	1056.4	855.1	741.8	672.2	624.7	595.0	569.8
Circular Random	877.2	706.9	615.0	561.4	528.3	506.9	481.0
Ocean for PCS	935.6	738.6	628.6	561.5	517.6	486.8	444.2
Non Spinnaker	920.2	737.1	637.3	578.3	541.6	517.6	488.8

Crew Weight	
Declared	175 kg
Default*	723 kg
Non Manual Pwr	No

Special Scoring		
ToD	ToT	
D. Hand OSN	610.7	0.9825
Non Spin. OSN	632.8	0.9481
N/S Perf. Line	80.5	0.767

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	43.4°	41.9°	42.2°	41.0°	39.9°	39.1°	39.3°
Beat VMG	3.44	4.13	4.62	4.91	5.10	5.21	5.26
52°	5.29	6.25	6.93	7.21	7.35	7.44	7.51
60°	5.61	6.61	7.21	7.46	7.58	7.66	7.74
75°	5.89	6.88	7.40	7.68	7.88	8.00	8.13
90°	5.82	6.82	7.38	7.67	7.91	8.15	8.51
110°	5.52	6.67	7.37	7.75	8.09	8.39	8.69
120°	5.30	6.42	7.22	7.64	7.97	8.31	8.92
135°	4.67	5.74	6.65	7.29	7.66	7.99	8.73
150°	3.89	4.96	5.87	6.69	7.28	7.65	8.32
Run VMG	3.37	4.30	5.12	5.89	6.63	7.21	7.91
Gybe Angles	144.4°	150.4°	158.0°	170.9°	174.0°	178.4°	179.4°

Sails Limitations		
Genoas	Jibs	Spinnakers
3	2	3
Spinnaker configuration Symmetric		

Storm Sails Areas	
Heavy Weather Jib	30.83
Storm Jib (JL=9.82)	11.42
Storm Trysail	12.90

Owner

BOAT	
Name U 47	Sail Nr ESP-3111-2
File E3111_2.dxt	Data in meters/kilograms

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 14.800	E 4.980 MDT1 0.115 TL 1.230
IG 15.090	J 4.000 MDL1 0.215 MWT 226.00
ISP 15.090	SFJ 0.390 MDT2 0.115 MCG 6.520
SPS 4.074	SPL 3.990 MDL2 0.190 CPW
BAS 1.690	TPS 0.046 MW 0.215 BD 0.180
BAL 0.150	FSP 0.046 GO 0.221 BWT

MIZZEN RIG AND SAILS	
N/A	


COMMENTS
solo valido trip. reducida

INCLINING TEST AND FREEBOARDS			
Inclining Test Current Inclining			
Flotation date 18/07/2007	SG 1.0250		
FFM 1.400	FF 1.404	SFFP 0.520	
FAM 1.090	FA 1.092	SAFP 10.770	
W1 83.000	PD1 570.0	WD 11.660	
W2 83.000	PD2 565.4	GSA 1.0	
W3 83.000	PD3 568.6	RSA 1.0	
W4 83.000	PD4 572.3	PLM 9000.0	
LCF from stem on CL / on sheer		6.390 / 6.620	
Maximum beam station from stem		7.350	
RM Measured / Default		133.9 / 163.8	
Limit of positive stability / Stab.Index		107.0° / 108.7	
Freeboard at mast at 4.390		1.228	

PROPELLER			
Installation Shaft	PRD 0.457		
Type Folding	PBW		
Twin Screw No	PIPA 0.0065		
PSA 18.400	PHL 0.145	ST3 0.132	ESL 1.140
PSD 0.030	ST1 0.044	ST4 0.063	
PHD 0.078	ST2 0.132	ST5 0.207	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



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IMS Measurement
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SAILS (Maximum Areas)									
Mainsail	HB	MGT	MGU	MGM	MGL	Area	Area (r)	Formula	
	0.200	1.03	1.88	3.23	4.25	44.20	45.04	P/8 · (E + 2·MGL+ 2·MGM + 1.5·MGU + MGT + 0.5·HB)	
Jib/Genoa	JH	JGT	JGU	JGM	JGL	JL	LPG		
	0.08	0.68	1.32	2.68	4.09	14.97	5.66	0.1125·JL·(1.445·LPG+2·JGL+2·JGM+1.5·JGU+JGT+0.5·JH)	
Symmetric	SL	SMG	SF						
	14.60	7.14	6.80	86.04 SL · (SF + 4·SMG) / 6					
Asymmetric Not Av ailable									
Code Zero Not Av ailable									

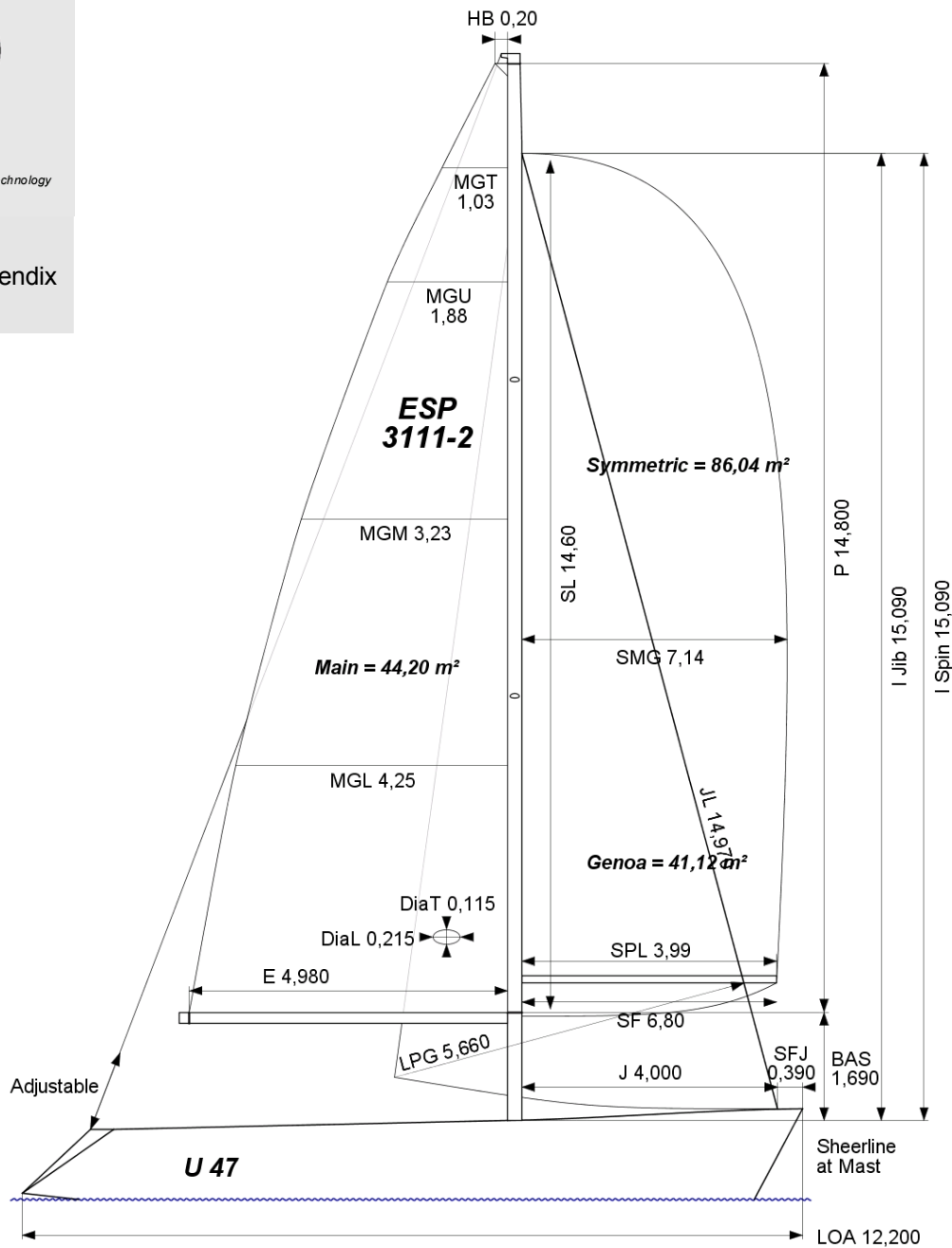
MEASUREMENT INVENTORY			
Measurer DAVID MORENO ROYAN 488			
Date 18/07/2007			
Comment			
Id	Item	Weight	Distance
1	Anchor	25.0	5.00
1	Tools	4.0	4.00
HERRAMIENTAS			
Id	Item	Maker	Model
1	Engine	PERKINS	50 CV
Id	Item	Weight	Description
1	Deck Gear	11.0	JUEGO DE

MEASUREMENT INVENTORY							
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn
1	Tank	GASOIL	RIGIDO	125.0	9.00	20.0	
1	Tank	AGUA	RIGIDO	180.0	4.50	0.0	
1	Tank	AGUA	RIGIDO	180.0	4.50	0.0	
1	Tank	AGUA	RIGIDO	120.0	2.35	0.0	
Id	Item	Weight	Distance	VCG	Description		
3	Battery	75.0	8.40		3 BATERIAS DE 95A		
1	Misc	0.0	8.00		BOTIQUIN		
1	Misc	2.0	3.30		EXTINTOR		
1	Misc	2.0	1.30		14 BENGALAS		
1	Misc	2.0	0.30		8 CHALECOS		



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Sail Plan



SAILS INVENTORY

MAINSAIL														
Id	HB	MGT	MGU	MGM	MGL	Area	Measurer	Meas.Date	Manufacture	Material	Comment			
002	0.200	1.03	1.88	3.23	4.25	44.20	ABOLIBAR							
JIBS / GENOAS														
Id	JH	JGT	JGU	JGM	JGL	LPG	JL	Ovrlp	Area	Measurer	Meas.Date	Manufacture	Material	Comment
001	0.08	0.68	1.32	2.68	4.09	5.66	14.97	142%	41.12	A.BOLIBA	30/04/2010			Unknown
g2	0.03	0.55	1.08	2.22	3.48	4.98	15.18	125%	35.49	G.VALVE	12/04/2010			Unknown
JIB1	0.00	0.59	1.14	2.19	3.22	4.22	15.10	106%	32.65	D.MORE	18/07/2007			Unknown
JIB2	0.00	0.60	1.13	2.16	3.17	4.23	15.10	106%	32.39	D.MORE	18/07/2007			Unknown
JIB3	0.00	0.54	1.03	2.03	3.09	4.22	14.90	106%	30.88	D.MORE	18/07/2007			Unknown
SYMMETRIC SPINNAKERS														
Id	SL	SMG	SF	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
0,6	14.60	7.14	6.80	86.04	G.VALVERDE	12/04/2010		Unknown						
ASYMMETRIC SPINNAKERS														
Id	SLU	SLE	ASL	AMG	ASF	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment		