

INTERNATIONAL FIVE POINT FIVE METRE CLASS
CERTIFICATE OF RATING



Yacht's name:	LADY in REI ex FOOTLOOSE	Club: RSF
Sail number:	NOR-54	
Designer:	Ben Lexcen & Warren Muir	
Builder:	Melges Boat Works, USA	Building year: 12.8.1989
Owner:	Dag Olav Hødnebo	
Owners address:		
Veritas R class certificate (number or date)	American Bureau of Shipping (ABS)	

RATING CERTIFICATE

This yacht has been measured by measurer(s) approved by this authority and has been found to rate not more than 5.5m

This certificate is dated **26.6.2008** Confirmed by **Matti Muoniovaara, measurer FIN-0039**

Valid until **26.6.2010** Signature *Matti Muoniovaara*

Supersedes **12.8.1989**

for **Norwegian Sailing Federation**

Signature _____ Stamp of Authority _____

Rule 33, Definition of boat **EVOLUTION**

Date of first certificate **12.8.1989**

Condition of water when marks were sighted: **SALT** (fresh or salt)

Difference in immersion (Class Rule 23): **0.007** (metres)

Measurements or partial re-measurements by National Authority Measurer, signature and date and Item No:

Signature *Matti Muoniovaara* Date **14.5.2008** Risör Item No **Owner, 5-7, 40-52**

Item No.	Rule No.	Measurement	Min	Actual	Max
HULL					
1	23(e)	Immersion checked in fresh/salt water date 14.5.08		salt	
2	13	Weight of inside ballast placed at		no	
3	5	Beam tarkista	1.90m	1.907	
4	2	Max. Draft		1.350	1.35m
5	4	Freeboard at bow girth station		0.766	
6	4	Freeboard at stern girth station		0.564	
7	4	Freeboard at midship mark		0.612	
8	4	Freeboard average (Item 5+6+7)/3	0.628m	0.647	
9	14iii	Keel and ballast materials (lead or iron)		LEAD	
10	14iv	Keel height of round at bottom	75mm	NA	
11	14iv	Maximum section width down 1m from LWL	150mm	160mm	
12	8	Stern angle	1 in 5.5	1 IN 5.5	
13	9	Round of beams, max 7mm in 305mm		3mm	7mm
14	10	Tumblehome		0.000	
15	10	Deduct 2% of max. beam		0.038	
16	10	Excess tumblehome (Item 14-15)		-0.038	
17	11	Area of deck openings		2.246	2.25m ²
18	12	Cockpit forward of L1 mark		2.302	
19	11	Breadth of side decks	35cm	37.5cm	

Item No.	Rule No.	Measurement	Min	Actual	Max
SAILS AND RIGGING					
20	16	Height of sailplan above covering board level		11.100	11.10m
21	18	Height of boom (black band) above covering board level	0.5m	0.675	0.85m
22	17	Height of fore triangle above covering board level (I)		8.880	8.88m
23	16	Base of fore triangle (J) (Deck black band to be checked)		2.692	$0.5x^2\sqrt{S}$
24	16	Min. Headsail for measurement purposes = $0.5 \times I \times J \times 80\%$		9.564	
25	19	Spinnaker halliard above forestay		9cm	10cm
26	19	Spinnaker halliard out from mast		3cm	3cm
27	19	Spinnaker, breadth of half the foot		3.366	$1.25 \times J$
28	19	Storm spinnaker, breadth of half the foot		2.692	J
29	20	Spinnaker boom length		2.692	J
30	21	Mast diameter at 1/2 ht. of fore triangle, round mast	11.5cm	10.4x14.1	
31	21	Mast diameter at deck, round mast	10.9cm	10.4x14.2	
32	21	Mast diameter at jib halliards, round mast	9.2cm	9.6x13.9	
33	21	Mast diameter at top, round mast	5.8cm	6.2x10.7	
(The athwartships diameter of oval masts may be reduced by 10% of the above, but the sectional areas shall not be less)					
34	21	Tip weight of mast	16kgs	22kg	
35	22	Boom depth		11.1cm	15.2cm
36	22	Boom width	3.8cm	7.2cm	
MISCELLANEOUS					
37	29	Weight of anchor	11kg	12kg	13kg
38	29	Length of warp (min. diameter 9mm)	30m	31	
39	23	Top of I marks above water with yacht in racing trim			
LENGTH L FOR RATING					
40	3	Overall length LOA		9.511	
41	3	Bow Overhang L_1		0.969	
42	3	Stern overhang L_2		1.127	
43	3	Total Overhang (Item 41+42)		2.096	
44	3	Measured length L_1 (Item 40-43)		7.415	
45	3	Girth at bow		0.662	
46	3	Twice vertical height at bow (= 0.55m)		0.550	
47	3	Bow girth difference (Item 45-46)	0.165	0.112	
48	3	Girth at stern		1.659	
49	3	Twice vertical height at stern		0.963	
50	3	Stern girth difference (Item 48-49)		0.696	
51	3	1/3 stern girth difference (50 divided by 3)	0.234	0.232	
52	3	Length L for rating formula (Item 44+47+51)		7.814	
SAIL AREA FOR RATING					
53	17	Largest headsail=0.5x 8.140 (luff)x 2.399 (perp)	Item 24	9.764	
54	18	Mainsail=0.5x 10.425 (H) x 3.690 (B)		19.234	
55	2	Total sail area S (53+54)	$26.5m^2$	28.998	$29.0m^2$
56		$^2\sqrt{S}$		5.385	
DISPLACEMENT					
57	13	Weight of yacht (date when weighed)		2001	
58	13	Displacement $D = \text{weight} / 1025 \text{ kg/m}^3$	$1.7m^3$	1.952	$2.0m^3$
59	13	$^3\sqrt{D}$		1.250	
RATING					
60	2	Rating calculated according to formula		5.495	
61	10	3xtumblehome excess (add to Item 60 for final rating)		0.000	
62	2	FINAL RATING		5.495	5.520m

Yacht's name:	LADY in RED	Sail number:	NOR-54
This certificate is dated	26.6.2008		
Signature:		Stamp of Authority	