



# INTERNATIONAL TWELVE METRE CLASS Appendix E Measurement Certificate

# 12

Yacht's Name	<b>Vanity V</b>	National letters and Sail Number	<b>K5</b>
Designer	<b>W. Fife</b>	Builder	<b>Fairlie</b>
Owner	<b>Partsrederi Vanity V c/- Patrick Howaldt</b>		Year built
Owner's Address	<b>Esplanaden 7.3.tv DK-1263 Copenhagen, Denmark</b>		
Classification certificate (Number or Date)	<b>Lloyds</b>		

**This yacht has been measured by approved measurer(s) and has been found to rate not more than 12.000 metres**

This certificate is dated **12-Jul-14** **Barcelona** Valid until **11-Jul-16**

Measurer **McAlpine/Sironi** Measurer signature ITMA Technical Director

Supersedes **13-Jun-07**

### PROVISIONAL CERTIFICATE REVALIDATION

This yacht has been declared by the Owner to be unchanged from her previous revalidated certificate dated July 12, 2014.

Accordingly this certificate is revalidated and remains valid until March 30, 2020 subject to a successful flotation being carried out by a class measurer prior to racing.

Signature March 21, 2018  
ITMA Technical Director

## RATING CALCULATIONS

<b>OVERALL LENGTH</b>		<b>21.572</b>
Overhang Forward to L1	2.967	
Overhang Aft to L1	3.286	
Total Overhang (Subtract)	6.253	
<b>MEASURED LENGTH (L1 L1)</b>		<b>15.319</b>
Girth at Bow	1.655	
Twice vertical Height at Bow (Subtract)	1.200	
O at Bow	0.455	
Add 1 1/2 O at Bow (min 0.540 m)	<b>0.683</b>	
Girth at Stern	3.296	
Twice vertical Height at Stern (Subtract)	0.866	
O at Stern	1.564	
Add 1/3 O at Stern (min 0.400 m)	<b>0.521</b>	
Add any penalty (Displ.)	<b>0.000</b>	
Sum of length, girth correction and penalty	<b>16.523</b>	
Age and date allowance	1936	Allowance 0.958
<b>CORRECT LENGTH L</b>		<b>15.829</b>
Skin d to d1 Port	3.185	
Chain d to d1 Port	3.170	
d Port	0.015	
Skin d to d1 Starboard	3.186	
Chain d to d1 Starboard	3.170	
d Starboard	0.016	
Add d	0.031	
<b>Add GIRTH 2 d</b>		<b>0.062</b>
Mean Freeboard Bow O	Actual 1.301	1.301
Mean Freeboard Midship d	Actual 1.011	1.011
Mean Freeboard Stern O	Actual 1.046	1.046
Sum of Freeboards		3.358
<b>Subtract FREEBOARD, F</b>		<b>1.119</b>
<b>Add SAIL AREAS (Square root)</b>		<b>13.669</b>
<b>TOTAL OF MEASUREMENTS</b>		<b>28.441</b>
PENALTY (Draught)	0.000	
		<b>12.000</b>

## PENALTIES

Overhang Forward to L	3.554
Overhang Aft to L	3.938
Subtract from overall length	7.492

## WATERLINE LENGTH

14.080

Minimum Displacement for Zero Penalty [m3]	26.092
Minimum Weight for Zero Penalty [ton] (Water of sg 1.025)	26.745

DISPLACEMENT *(by weighing)*

26.800

Equivalent LWL (for Displ. < min.)	
DISPLACEMENT PENALTY (add to L)	0.000

## DRAUGHT (actual)

2.701

Max. Draught for Zero Penalty	2.753
Difference (if positive)	
DRAUGHT PENALTY (add to Rating)	0.000

## BEAM (Min)

3.600

Max Beam at 1/3 of Midship Freeboard	3.721
Difference (if positive)	
BEAM PENALTY (add to L)	0.000
Tumblehome Max. (2 x 2% of Extr. Beam)	0.149
Extreme Beam	3.721
Beam at deck	3.600
Difference (if positive)	
TUMBLEHOME PENALTY (add to Rating)	0.000

## SAIL PLAN

Height of Sail Plan	25.000	J=	6.180	A=	23.910	I =	18.300
Spi pole	7.270	Boom Height	1.090	B=	10.900		
Rated Mainsail Area	130.310	Rated Foretriangle Area=	56.542	TOTAL RATED SAIL AREA =	186.852		
Propeller allowance	0.975	Corrected sail area	182.181	S=	13.669		

## SAIL LIMITS

max girth at 1/2 height (68%)	7.548	Genoa max. foot length (J + 4.8m)	10.980
max girth at 3/4 height (41%)	4.551	Spinnaker max. luff length [m]	18.500
		1/2 foot max width (125% J) [m]	9.125

## SPARS MEASUREMENTS

MAST (material)	Wood	Mast Weight [kg]	0	Mast CG position (from meas. point)	0.000
Mast dimensions	Deck 300x265	Half-Height	300x265	Jib-Halyard	224x250
				Head	131x139

## Flotation

Water salinity	1.025	Difference of immersion [m] from standard salt water [1.025 kg/dm3]	0.000
		Internal Ballast [kg]	250kg
		Loc. from bow [m]	7.900

## Measurer's Notes