

BOAT Name Cool Breeze Sail Nr USA 60432	GPH 535.9	HULL Length Overall 13.160m Maximum Beam 3.721m Displacement 8,295kg Draft 2.820m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.000% Fwd Accommodation Hull Construction Cored Carbon Rudder Crew Arm Extension IMSL 11.896m VCGD -1.129m Sink 22.69kg/mm RL 11.804m VCGM -1.085m WS 34.49m² LSMO 11.363m Displacement/Length ratio 5.6538
GENERAL Class Mills 43 Custom Designer Mark Mills Builder Vision Yachts Series 02/2008 Age 02/2008 Age Allowance 0.292% Offset File US42510.OFF - 22/10/2015 15:02:14 Measurement by Willaims - 22/10/2015		




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SCORING OPTIONS	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
	Low	Medium	High	Low	Medium	High
Time On Distance	520.8			585.2		
Time On Time	1.1521			1.1534		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	614.2	475.4	418.1	799.4	586.9	509.9
Time on Time	1.0990	1.4200	1.6144	0.8444	1.1502	1.3239

TIME ALLOWANCES	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	917.1	752.1	657.9	614.6	592.2	579.2	561.9
52°	597.5	496.0	453.1	435.7	426.6	420.7	412.6
60°	560.4	473.4	441.3	424.2	412.5	405.1	396.7
75°	529.1	458.7	432.2	412.6	393.8	378.8	364.5
90°	530.5	452.5	431.4	411.9	391.4	369.9	335.7
110°	532.0	448.6	417.1	400.5	385.9	370.8	335.9
120°	547.9	455.3	421.9	393.3	372.5	356.7	322.7
135°	618.6	491.3	440.9	414.4	387.0	357.5	298.5
150°	737.4	586.2	493.1	444.3	423.8	403.7	348.5
Run VMG	851.5	676.9	569.4	512.4	487.2	456.3	402.4

Certificate

Number **US6111**
ORC Ref **USA00000724**
Issued On **14/02/2017**
VPP Ver. **2017 1.00**
Valid until **28/02/2018**

Crew Weight

Declared **826kg**
Default* **826kg**
Non Manual Pwr

Special Scoring

	ToD	ToT
Non Spin GPH	573.6	1.0460
Non Spin OSN	558.8	1.0737

Selected Courses	884.3	714.5	613.7	563.5	539.7	517.7	482.1
Windward / Leeward	884.3	714.5	613.7	563.5	539.7	517.7	482.1
Circular Random	738.7	596.3	520.1	475.6	447.1	426.4	394.5
Ocean for PCS	907.5	700.1	583.3	511.8	464.5	430.0	377.9
Non Spinnaker	807.2	645.0	555.8	502.2	467.5	443.4	409.8

Sails Limitations

Headsails	Spinnakers
7	5

Velocity Prediction in Knots for True Wind Speeds	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	43.1°	42.5°	40.7°	38.6°	37.2°	36.2°	35.1°
Beat VMG	3.93	4.79	5.47	5.86	6.08	6.22	6.41
52°	6.03	7.26	7.94	8.26	8.44	8.56	8.72
60°	6.42	7.61	8.16	8.49	8.73	8.89	9.08
75°	6.80	7.85	8.33	8.73	9.14	9.50	9.88
90°	6.79	7.96	8.34	8.74	9.20	9.73	10.72
110°	6.77	8.03	8.63	8.99	9.33	9.71	10.72
120°	6.57	7.91	8.53	9.15	9.66	10.09	11.16
135°	5.82	7.33	8.16	8.69	9.30	10.07	12.06
150°	4.88	6.14	7.30	8.10	8.49	8.92	10.33
Run VMG	4.23	5.32	6.32	7.03	7.39	7.89	8.95
Gybe Angles	142.6°	144.9°	148.0°	151.7°	152.3°	176.1°	142.5°

Class Division Length

CDL = 11.851

Storm Sails Areas

Heavy Weather Jib **42.52**
Storm Jib (JL=11.54) **15.75**
Storm Triesail **18.81**

Owner

BOAT	
Name Cool Breeze	Sail Nr USA60432
File US6111	Data in meters/kilograms

INCLINING TEST AND FREEBOARDS		
Inclining Test Current Inclining		
Flotation date 22/10/2015	SG 1.0220	
FFM 1.357	FF 1.359	SFFP 0.500
FAM 1.138	FA 1.139	SAFP 12.967
W1 109.3	PD1 500.2	WD 16.100
W2 109.3	PD2 500.2	GSA 1.0
W3 109.3	PD3 500.2	RSA 1.0
W4 109.3	PD4 500.2	PLM 9000.0
LCF from stem on CL / on sheer		7.040 / 7.251
Maximum beam station from stem		8.486
RM Measured		277.0kg·m
RM Default		204.2kg·m
Limit of positive stability / Stab.Index		158.9° / 164.6
Freeboard at mast at 5.200		1.218

RIG				
Forestay Tension Aft	Spreaders 2			
Inner Stay None Fitted	Runners 1			
Carbon Mast Yes	Jumper Struts None			
Taper Hollows	Jib Furler			
Fiber Rigging	Main Furler			
Lenticular Rigging	Without Backstay			
Articulated Bowsprit No				
P 17.480	E 6.150	MDT1 0.130	MW 0.262	
IG 17.748	J 5.080	MDL1 0.262	GO 0.262	
ISP 19.610	SFJ 0.120	MDT2 0.085	BD 0.350	
BAS 1.875	SPL 0.000	MDL2 0.230	MWT 164.00	
FSP 0.076	TPS 6.970	TL 1.800	MCG 6.020	



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IMS Measurement Certificate

Certificate	
Number US6111	ORC Ref USA00000724
Issued On 14/02/2017	VPP Ver. 2017 1.00
Valid until 28/02/2018	

MIZZEN RIG AND SAILS	
N/A	

PROPELLER		
Installation Strut	PRD 0.522	
Type Folding 2 blades	PBW 0.115	
Twin Screw	PIPA 0.0040	
ST1 0.068	ST3 0.182	ST5 0.273
ST2 0.182	ST4 0.115	EDL 1.460

COMMENTS	

MOVEABLE BALLAST	
N/A	

CENTERBOARD	
N/A	



Invalid for Racing

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SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.170	1.55	2.54	3.99	5.15	65.28	66.86	P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric Not Available									
Asymmetric	SLU	SLE	SL	SHW	SFL	Area	Formula		
	21.46	18.32	19.89	12.10	11.27	197.81	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
	1.50	2.73	3.96	5.19	17.51	47.12					Unknow	

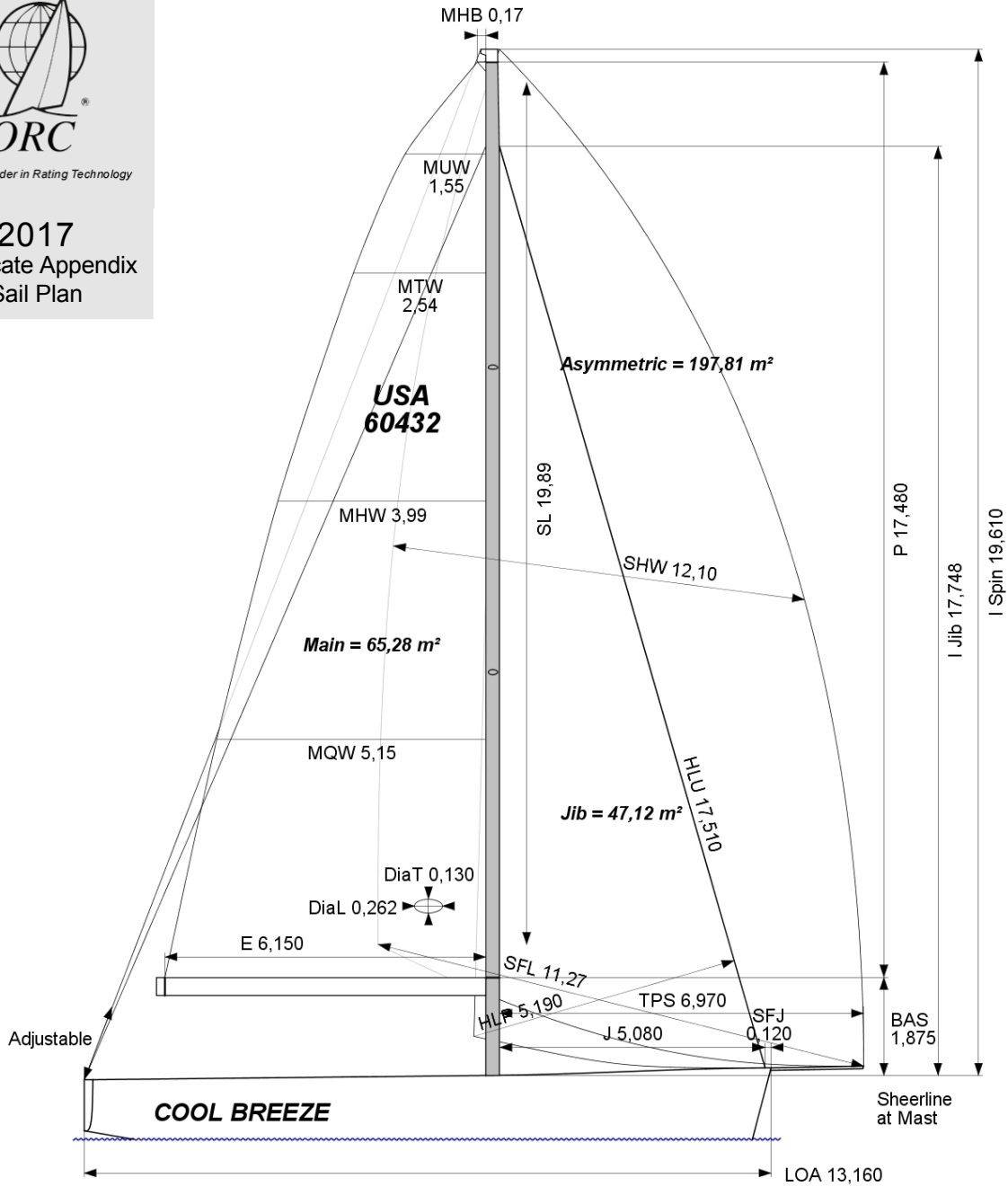
MEASUREMENT INVENTORY				
Measurer				
Date 28/09/2015				
Comment				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>
<i>Id</i>	<i>Item</i>	<i>Weight Description</i>		

MEASUREMENT INVENTORY				
<i>Id</i>	<i>Item</i>	<i>Weight</i>	<i>Distance</i>	<i>VCG Description</i>



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Certificate Appendix
Sail Plan



SAILS INVENTORY																
MAINSAIL (1)																
Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
2016	0.170	1.55	2.54	3.99	5.15	65.28				Unknown						
HEADSAILS (1)																
Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
headsail			1.50	2.73	3.96	5.19	17.51	102%	47.12							Unknow
SYMMETRIC SPINNAKERS (0)																
Id	SLU	SLE	SL	SHW	SFL	Area	Measurer	Meas.Date	Manufacture	Material	Comment					
ASYMMETRIC SPINNAKERS (1)																
Id	SLU	SLE	SL	SHW	SFL	Area	Kind	Measurer	Meas.Date	Manufacture	Material	Comment				
5.03	21.46	18.32	19.89	12.10	11.27	197.81	asym				Unknown					