

BOAT Name KURRANULLA Sail Nr USA 38007	GPH 575.5	HULL Length Overall 11.795m Maximum Beam 3.706m Displacement 5,504kg Draft 2.609m IMS Reg. Division Cruiser/Racer Dynamic Allowance 0.008% Fwd Accommodation No Hull Construction Cored Carbon Rudder No Crew Arm Extension IMSL 10.744m VCGD -0.148m Sink 21.20kg/mm RL 10.230m VCGM -0.047m WS 28.12m² LSM0 10.623m Displacement/Length ratio 4.5913
GENERAL Class SYDNEY 38 Designer M B & D Builder SYDNEY YACHTS Series 03/2000 Age 01/2001 Age Allowance 0.487% Offset File SYD38.OFF - 17/11/2000 09:55:36 Measurement by - 18/04/2016		



ORC
Offshore Racing Congress
World leader in rating technology

2018
ORC International
Certificate

Rating Office

Offshore
Racing
Congress



**Invalid for
Racing**

ORC
World Leader In Rating Technology

SCORING OPTIONS						
	COASTAL / LONG DISTANCE			WINDWARD / LEEWARD		
Time on Distance	560.2			626.9		
Time on Time	1.0710			1.0768		
Triple Number	Low	Medium	High	Low	Medium	High
Time on Distance	655.9	511.0	454.6	849.7	630.4	548.8
Time on Time	1.0291	1.3210	1.4848	0.7944	1.0708	1.2300

TIME ALLOWANCES							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	928.1	763.4	684.3	660.2	650.2	638.7	631.7
52°	613.6	515.0	479.4	469.3	464.6	461.6	453.8
60°	583.1	497.4	467.9	456.7	451.3	448.3	437.9
75°	561.1	486.7	458.6	440.8	429.8	423.5	415.7
90°	568.3	488.1	455.5	436.4	416.3	401.2	387.0
110°	588.3	489.0	451.3	422.9	399.2	384.4	360.5
120°	609.8	502.0	459.4	429.9	400.6	374.1	339.1
135°	686.6	553.9	486.3	454.6	427.4	399.7	344.3
150°	824.9	653.6	549.7	487.5	456.2	430.6	379.8
Run VMG	952.5	754.7	634.7	556.9	505.1	468.0	418.2

Certificate
Number **US6046**
ORC Ref **USAX018K0SS**
Issued On **07/05/2018**
VPP Ver. **2018 1.00**
Valid until **31/12/2018**

Crew Weight
Default **750kg**
Maximum **750kg**
Minimum* **563kg**
**when applied by the NoR and SI*
Non Manual Pwr **No**

Special Scoring
ToD ToT
Non Spin GPH **601.0 0.9983**
Non Spin OSN **584.8 1.0261**

Selected Courses							
Windward / Leeward	940.3	759.1	659.5	608.6	577.6	553.3	524.9
Circular Random	790.2	638.9	558.5	512.1	483.1	463.2	436.2
Coastal / Long Distance	941.5	714.3	595.9	531.4	495.2	463.8	414.6
Non Spinnaker	835.8	671.1	582.5	530.8	498.5	476.7	447.7

Sails Limitations
Headsails **6** | Spinnakers **4**

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	42.2°	40.8°	39.0°	37.8°	37.9°	37.4°	37.7°
Beat VMG	3.88	4.72	5.26	5.45	5.54	5.64	5.70
52°	5.87	6.99	7.51	7.67	7.75	7.80	7.93
60°	6.17	7.24	7.69	7.88	7.98	8.03	8.22
75°	6.42	7.40	7.85	8.17	8.38	8.50	8.66
90°	6.33	7.37	7.90	8.25	8.65	8.97	9.30
110°	6.12	7.36	7.98	8.51	9.02	9.37	9.99
120°	5.90	7.17	7.84	8.37	8.99	9.62	10.62
135°	5.24	6.50	7.40	7.92	8.42	9.01	10.46
150°	4.36	5.51	6.55	7.38	7.89	8.36	9.48
Run VMG	3.78	4.77	5.67	6.46	7.13	7.69	8.61
Gybe Angles	140.1°	147.7°	150.8°	155.8°	170.8°	180.0°	180.0°

Class Division Length
CDL = **10.488**

Storm Sails Areas
Heavy Weather Jib **34.39**
Storm Jib (JL=10.38) **12.74**
Storm Trysail **14.84**

Owner

BOAT		
Name KURRANULLA	Sail Nr USA 38007	
File US6046	Data in meters/kilograms	

INCLINING TEST AND FREEBOARDS					
Inclining Test Current Inclining					
Flotation date 18/04/2016				SG 1.0050	
FFM 1.303	FF 1.306	SFFP 0.280			
FAM 1.073	FA 1.088	SAFP 11.350			
W1 105.4	PD1 612.4	WD 12.175			
W2 105.4	PD2 612.4	GSA 1.0			
W3 105.4	PD3 612.4	RSA 1.0			
W4 105.4	PD4 612.4	PLM 9000.0			
LCF from stem on CL / on sheer				6.482 / 6.717	
Maximum beam station from stem				7.499	
RM Measured				165.0kg-m	
RM Default				164.9kg-m	
Limit of positive stability / Stab.Index				119.5° / 118.9	
Freeboard at mast at 4.500				1.156	



ORC
Offshore Racing Congress
World leader in rating technology

2018
IMS Measurement
Certificate

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 15.400	E 5.506	MDT1 0.130	MW 0.200		
IG 15.870	J 4.500	MDL1 0.200	GO 0.225		
ISP 15.963	SFJ 0.000	MDT2 0.120	BD 0.190		
BAS 1.903	SPL 4.500	MDL2 0.160	MWT 225.50		
FSP 0.068	TPS 4.500	TL 1.180	MCG 5.083		

MIZZEN RIG AND SAILS	
N/A	

PROPELLER			
Installation Strut	PRD 0.410		
Type Folding 2 blades	PBW 0.105		
Twin Screw	PIPA 0.0035		
ST1 0.042	ST3 0.180	ST5 0.263	
ST2 0.180	ST4 0.112	EDL 0.885	

Certificate	
Number US6046	
ORC Ref USAX018K0SS	
Issued On 07/05/2018	
VPP Ver. 2018 1.00	
Valid until 31/12/2018	

COMMENTS

MOVABLE BALLAST	
N/A	



Invalid for Rating

ORC
World Leader In Rating Technology

CENTERBOARD	
N/A	

SAILS (Maximum Areas)									
Mainsail	MHB	MUW	MTW	MHW	MQW	Area	Area (r)	Formula	
	0.160	1.18	2.09	3.57	4.97	51.94	53.17	P/8 · (E + 2·MQW+ 2·MHW + 1.5·MTW + MUW + 0.5·MHB)	
Symmetric									
Not Available									
Asymmetric	SLU	SLE	SL	SHW	SFL	Area (r)			
	15.55	14.10	14.82	6.46	8.05	83.74	85.08	AS · (SFL + 4·SHW) / 6	

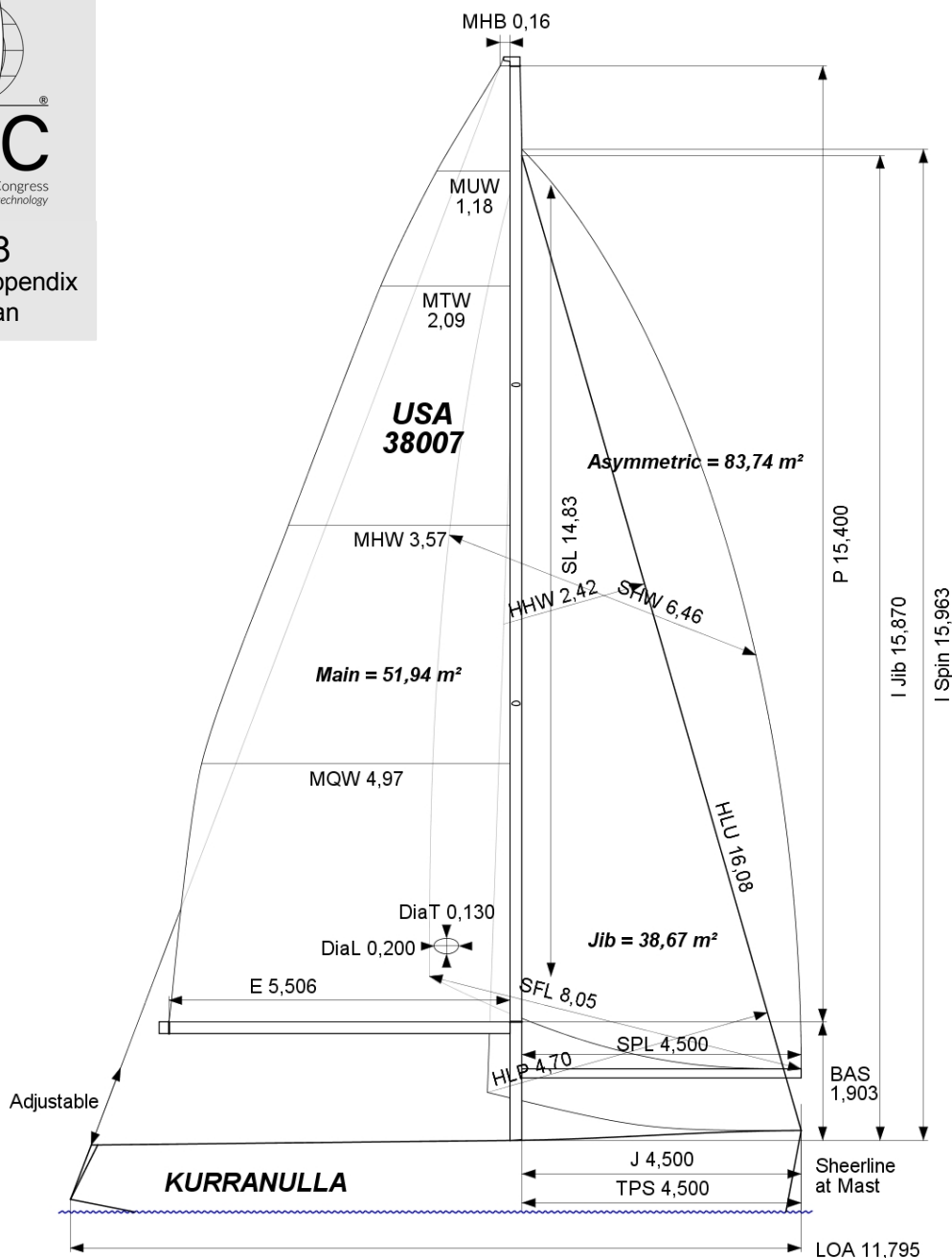
HEADSAILS												
Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HHB)												
HHB	HUW	HTW	HHW	HQW	HLP	HLU	Area	Btn	Fly	Meas.Date	Material	Comment
0.08	0.66	1.26	2.42	3.58	4.70	16.08	38.68			2017 J1		

MEASUREMENT INVENTORY				
Measurer				
Date				
Comment				
Id	Item	Weight	Distance	VCG Description
a	Ancher	0.0	0.00	
Id	Item	Weight Description		

MEASUREMENT INVENTORY									
Id	Item	Tank Use	Tank Type	Capcty	Dist.	VCG	Condtn	Description	
	Tank			8.40	0.00	94.7			
Id	Item	Weight	Distance	VCG Description					



2018
Certificate Appendix
Sail Plan



SAILS INVENTORY

MAINSAIL (1)

Id	MHB	MUW	MTW	MHW	MQW	Area	Measurer	Meas.Date	Manufacture	Material	Comment
1123699	0.16	1.18	2.09	3.57	4.97	51.94					2016 Mainsail

HEADSAILS (1)

Id	HHB	HUW	HTW	HHW	HQW	HLP	HLU	Ovrlp	Area	Btn	Fly	Measurer	Meas.Date	Manufacture	Material	Comment
1695461	0.08	0.66	1.26	2.42	3.58	4.70	16.08	104%	38.68					north sails		2017 J1

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
1123717	15.55	14.10	14.82	6.46	8.05	83.74	asym					2016 asym