



**ORC**  
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**2020**  
Club  
Double Handed

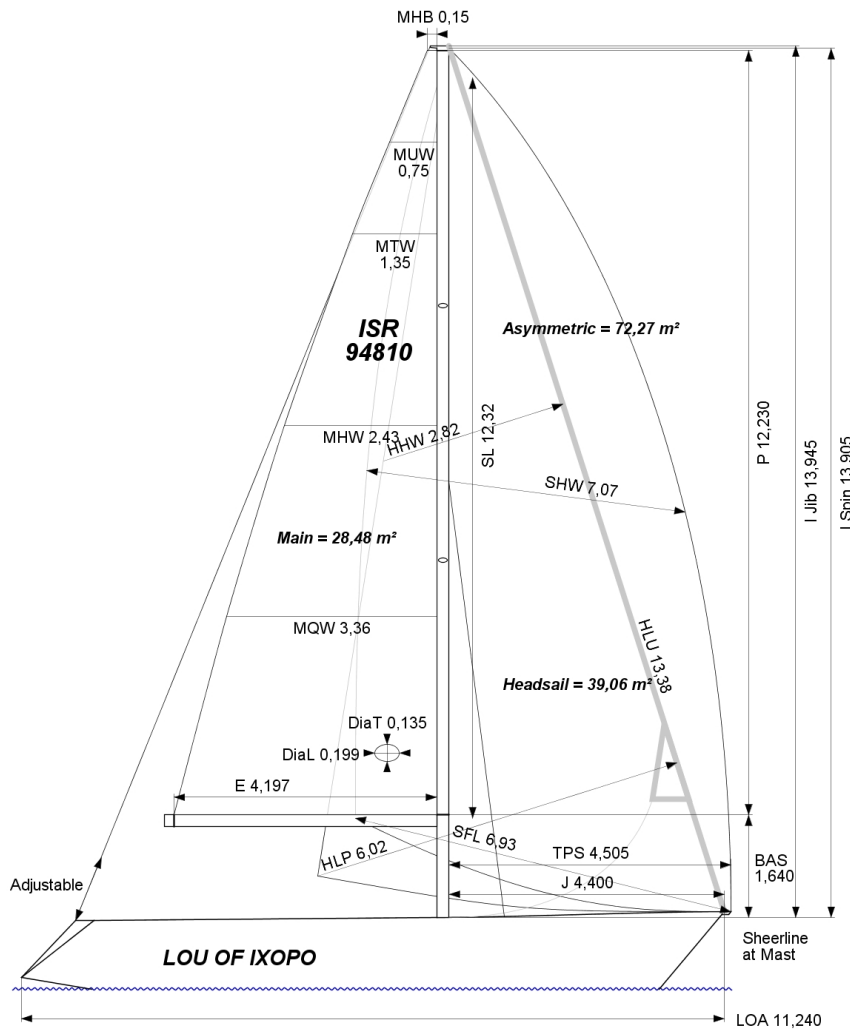
**Rating Office**

**Offshore  
Racing  
Congress**



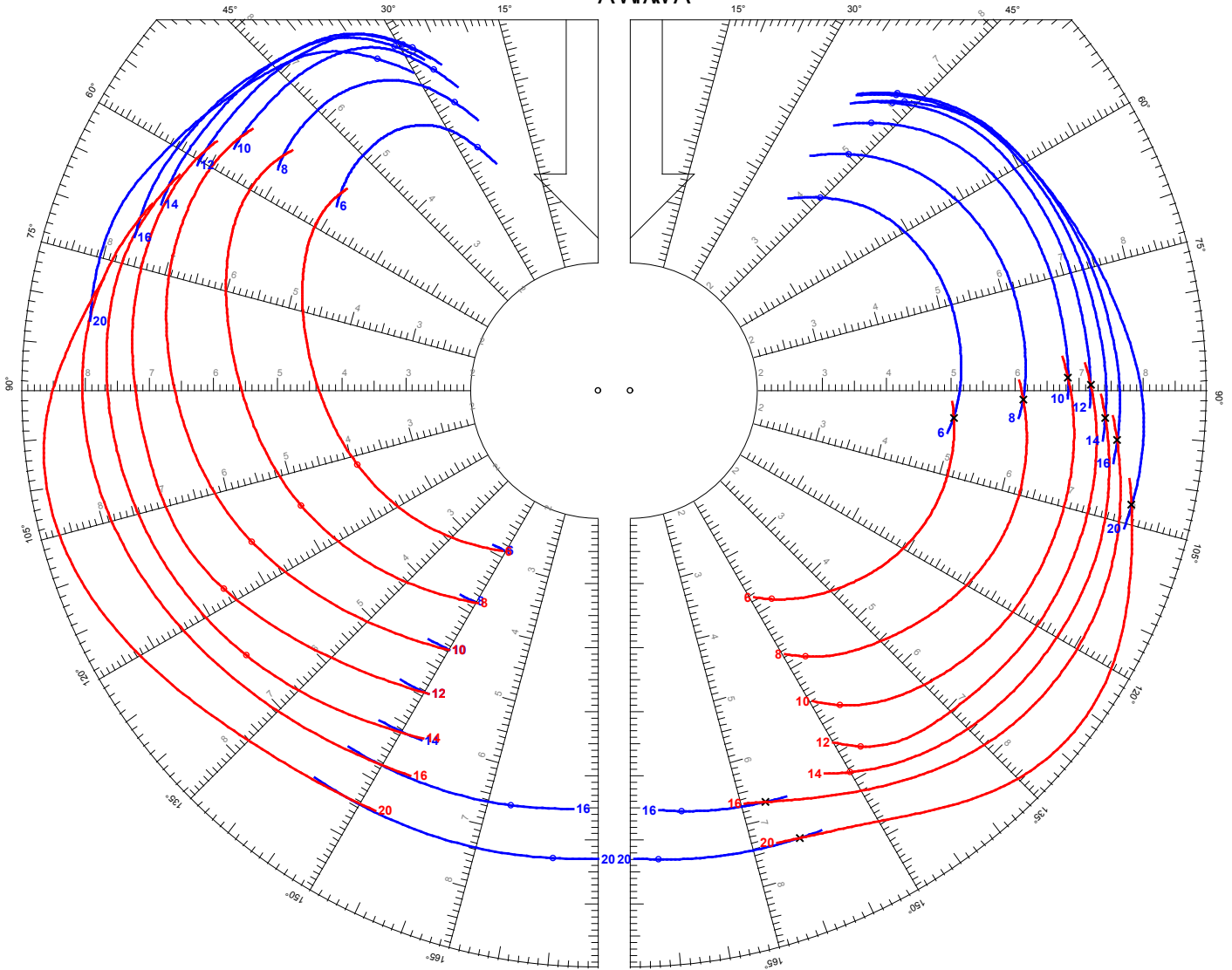
**Certificate**

Number **110120**  
Issued On **15/10/2020**  
ORC Ref **03540000S0T**  
VPP Ver. **2020 1.02**  
Valid until **31/12/2020**



<b>BOAT</b> Name <b>Lou of Ixopo</b> Sail Nr <b>ISR 94810</b>		<b>GPH</b> <b>691.2</b>	<b>HULL</b> Data File <b>ISR94810</b> LOA <b>11.240m</b> Offset File <b>G1086.BOF</b> MB <b>3.810m</b> Displacement <b>5,397kg</b> Draft <b>1.882m</b>		<b>Crew Weight</b> Default <b>170kg</b> Maximum <b>170kg</b> Non Manual Pwr <b>No</b>
<b>CLASS</b> Class <b>Sunshine 38</b> Designer <b>Tony Castro</b> Builder <b>Jeanneau</b> Series <b>01/1982</b> Age Date <b>07/1989</b> Age Allowance <b>0.487%</b>		<b>IMS Division</b> <b>Cruiser/Racer</b> Dynamic All. <b>0.311%</b> Fiber Rigging <b>No</b> Construction <b>Solid</b> Crew Arm Ex Aramid Core <b>No</b> Carbon Rudder <b>No</b> Light Stanchions <b>No</b>		<b>Sails Limitations</b> Headsails <b>1</b> Spinnakers <b>4</b> <b>Dacron Sails</b> <b>Asymmetric on centerline</b> <b>Spinnaker configuration</b> Symmetric: <b>No</b> Asymmetric: <b>Yes</b> <b>73.16</b> Flying H/S: <b>No</b> Spin. Pole: <b>Yes</b>	
<b>COMMENTS</b> 052-9240424		<b>IMSL</b> <b>9.095m</b> VCGD <b>-0.200m</b> Sink <b>17.74kg/mm</b> RL <b>6.794m</b> VCGM <b>0.041m</b> WS <b>25.11m²</b> <b>LSM0</b> <b>8.988m</b> Displacement/Length ratio <b>7.4330</b>		<b>Stability (Estimated)</b> Limit Positive Stab.: <b>117.5°</b> Stability Index: <b>114.8</b>	
<b>PROPELLER</b> Installation <b>Shaft exposed</b> PRD <b>0.400</b> Type <b>Solid 2 blades</b> PBW <b>0.145</b> PIPA <b>0.0181</b>		<b>CENTERBOARD</b> <b>N/A</b>		<b>Owner</b>	
<b>SCORING OPTIONS</b>					
	Time on Distance	Time on Time			
Coastal or Long Distance	<b>670.5</b>	<b>0.8949</b>			
Circular Random	<b>691.2</b>	<b>0.8681</b>			
Predominantly Upwind	<b>666.9</b>	<b>0.8997</b>			
Predominantly Downwind	<b>621.1</b>	<b>0.9660</b>			

**AVTAWA**



<b>Polar Plot for Boat</b>
Name <b>Lou of Ixopo</b>
Sail Number <b>ISR 94810</b>
Class <b>Sunshine 38</b>
Designer <b>Tony Castro</b>
Builder <b>Jeanneau</b>
Issued On <b>15/10/2020 - VPP 2020 1.02</b>

# 2020

## Double Handed Certificate Appendix

<b>BOAT</b>	
Name	<b>Lou of Ixopo</b>
Sail Nr	<b>ISR 94810</b>
Certificate Number	<b>110120</b>
Issued On	<b>15/10/2020</b>

<b>TIME ALLOWANCES</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat VMG	<b>1210.8</b>	<b>987.9</b>	<b>871.6</b>	<b>810.1</b>	<b>789.1</b>	<b>784.0</b>	<b>804.6</b>
52°	<b>780.9</b>	<b>649.8</b>	<b>574.9</b>	<b>542.2</b>	<b>531.3</b>	<b>527.4</b>	<b>530.2</b>
60°	<b>733.3</b>	<b>614.6</b>	<b>549.2</b>	<b>523.6</b>	<b>512.4</b>	<b>508.3</b>	<b>508.1</b>
75°	<b>697.5</b>	<b>585.7</b>	<b>531.4</b>	<b>508.3</b>	<b>494.6</b>	<b>485.5</b>	<b>478.9</b>
90°	<b>703.6</b>	<b>588.3</b>	<b>526.6</b>	<b>502.2</b>	<b>487.1</b>	<b>473.7</b>	<b>453.7</b>
110°	<b>711.2</b>	<b>579.3</b>	<b>518.0</b>	<b>490.2</b>	<b>469.3</b>	<b>453.1</b>	<b>435.8</b>
120°	<b>736.8</b>	<b>598.2</b>	<b>525.8</b>	<b>494.3</b>	<b>471.3</b>	<b>449.9</b>	<b>417.9</b>
135°	<b>821.1</b>	<b>656.6</b>	<b>559.4</b>	<b>512.7</b>	<b>486.5</b>	<b>464.1</b>	<b>423.6</b>
150°	<b>967.1</b>	<b>758.4</b>	<b>641.0</b>	<b>566.5</b>	<b>528.1</b>	<b>503.5</b>	<b>467.0</b>
Run VMG	<b>1116.7</b>	<b>875.7</b>	<b>740.2</b>	<b>654.1</b>	<b>609.8</b>	<b>553.9</b>	<b>496.8</b>
<b>Selected Courses</b>							
Windward / Leeward	<b>1163.8</b>	<b>931.8</b>	<b>805.9</b>	<b>732.1</b>	<b>699.5</b>	<b>668.9</b>	<b>650.7</b>
Circular Random	<b>964.0</b>	<b>772.3</b>	<b>669.2</b>	<b>610.2</b>	<b>575.4</b>	<b>554.6</b>	<b>533.8</b>
Coastal / Long Distance	<b>1159.1</b>	<b>873.4</b>	<b>719.7</b>	<b>629.0</b>	<b>585.8</b>	<b>550.4</b>	<b>499.1</b>
Non Spinnaker	<b>1014.3</b>	<b>806.4</b>	<b>692.9</b>	<b>626.4</b>	<b>586.5</b>	<b>562.1</b>	<b>537.0</b>

<b>Velocity Prediction in Knots for True Wind Speeds</b>							
Wind Velocity	6 kt	8 kt	10 kt	12 kt	14 kt	16 kt	20 kt
Beat Angles	<b>44.6°</b>	<b>42.8°</b>	<b>42.0°</b>	<b>42.4°</b>	<b>42.0°</b>	<b>42.0°</b>	<b>43.5°</b>
Beat VMG	<b>2.97</b>	<b>3.64</b>	<b>4.13</b>	<b>4.44</b>	<b>4.56</b>	<b>4.59</b>	<b>4.47</b>
52°	<b>4.61</b>	<b>5.54</b>	<b>6.26</b>	<b>6.64</b>	<b>6.78</b>	<b>6.83</b>	<b>6.79</b>
60°	<b>4.91</b>	<b>5.86</b>	<b>6.56</b>	<b>6.88</b>	<b>7.03</b>	<b>7.08</b>	<b>7.09</b>
75°	<b>5.16</b>	<b>6.15</b>	<b>6.77</b>	<b>7.08</b>	<b>7.28</b>	<b>7.42</b>	<b>7.52</b>
90°	<b>5.12</b>	<b>6.12</b>	<b>6.84</b>	<b>7.17</b>	<b>7.39</b>	<b>7.60</b>	<b>7.93</b>
110°	<b>5.06</b>	<b>6.21</b>	<b>6.95</b>	<b>7.34</b>	<b>7.67</b>	<b>7.95</b>	<b>8.26</b>
120°	<b>4.89</b>	<b>6.02</b>	<b>6.85</b>	<b>7.28</b>	<b>7.64</b>	<b>8.00</b>	<b>8.62</b>
135°	<b>4.38</b>	<b>5.48</b>	<b>6.44</b>	<b>7.02</b>	<b>7.40</b>	<b>7.76</b>	<b>8.50</b>
150°	<b>3.72</b>	<b>4.75</b>	<b>5.62</b>	<b>6.36</b>	<b>6.82</b>	<b>7.15</b>	<b>7.71</b>
Run VMG	<b>3.22</b>	<b>4.11</b>	<b>4.86</b>	<b>5.50</b>	<b>5.90</b>	<b>6.50</b>	<b>7.25</b>
Gybe Angles	<b>145.8°</b>	<b>146.5°</b>	<b>146.3°</b>	<b>147.0°</b>	<b>150.0°</b>	<b>173.0°</b>	<b>176.5°</b>