

|                                                                                                                                                                                                                                                      |              |                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>BOAT</b>                                                                                                                                                                                                                                          | <b>GPH</b>   | <b>HULL</b>                                                                                                                                                                                                                                                                                     |
| Name <b>SAMPAIO UNO</b><br>Sail Nr <b>ESP-4024</b>                                                                                                                                                                                                   | <b>677.4</b> | Length Overall <b>9.147m</b><br>Maximum Beam <b>3.232m</b><br>Displacement <b>3,589kg</b><br>Draft <b>1.841m</b><br>Plan Review<br>IMS Reg. Division <b>Cruiser/Racer</b><br>Dynamic Allowance <b>0.264%</b><br>Hull Construction <b>Solid</b><br>Carbon Rudder <b>No</b><br>Crew Arm Extension |
| <b>GENERAL</b>                                                                                                                                                                                                                                       |              | IMSL <b>8.723m</b> VCGD <b>0.205m</b> Sink <b>15.44kg/mm</b><br>RL <b>7.184m</b> VCGM <b>0.244m</b> WS <b>20.36m<sup>2</sup></b><br>LSM0 <b>8.823m</b> Displacement/Length ratio <b>5.2255</b>                                                                                                  |
| Class <b>FIRST 310</b><br>Designer <b>FINNOT</b><br>Builder <b>BENETEAU</b><br>Series <b>01/1991</b><br>Age <b>04/1991</b><br>Age Allowance <b>0.487%</b><br>Offset File <b>E141.OFF - 22/01/2015 21:27:06</b><br>Measurement by - <b>08/06/2013</b> |              |                                                                                                                                                                                                                                                                                                 |



**ORC**  
Offshore Racing Congress  
World leader in rating technology

**2020**  
ORC International  
Certificate

**Rating Office**

Offshore  
Racing  
Congress

**COPY ONLY for Rating**

World Leader In Rating Technology

| <b>SCORING OPTIONS</b> |                                |               |               |                           |               |               |
|------------------------|--------------------------------|---------------|---------------|---------------------------|---------------|---------------|
|                        | <b>COASTAL / LONG DISTANCE</b> |               |               | <b>WINDWARD / LEEWARD</b> |               |               |
| Time on Distance       | <b>658.3</b>                   |               |               | <b>735.7</b>              |               |               |
| Time on Time           | <b>0.9115</b>                  |               |               | <b>0.9175</b>             |               |               |
| Triple Number          | Low                            | Medium        | High          | Low                       | Medium        | High          |
| Time on Distance       | <b>775.3</b>                   | <b>599.4</b>  | <b>539.3</b>  | <b>1001.0</b>             | <b>737.5</b>  | <b>647.8</b>  |
| Time on Time           | <b>0.8706</b>                  | <b>1.1262</b> | <b>1.2517</b> | <b>0.6743</b>             | <b>0.9153</b> | <b>1.0420</b> |

| <b>TIME ALLOWANCES</b>  |               |              |              |              |              |              |              |
|-------------------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity           | 6 kt          | 8 kt         | 10 kt        | 12 kt        | 14 kt        | 16 kt        | 20 kt        |
| Beat VMG                | <b>1139.0</b> | <b>945.6</b> | <b>837.4</b> | <b>787.8</b> | <b>775.8</b> | <b>774.5</b> | <b>774.5</b> |
| 52°                     | <b>743.4</b>  | <b>631.2</b> | <b>571.0</b> | <b>548.4</b> | <b>541.6</b> | <b>539.3</b> | <b>537.2</b> |
| 60°                     | <b>703.5</b>  | <b>601.2</b> | <b>554.0</b> | <b>534.1</b> | <b>525.8</b> | <b>522.8</b> | <b>521.6</b> |
| 75°                     | <b>677.1</b>  | <b>580.5</b> | <b>541.6</b> | <b>521.1</b> | <b>507.0</b> | <b>498.2</b> | <b>493.7</b> |
| 90°                     | <b>683.8</b>  | <b>573.9</b> | <b>530.6</b> | <b>512.9</b> | <b>499.5</b> | <b>482.4</b> | <b>460.5</b> |
| 110°                    | <b>682.8</b>  | <b>568.3</b> | <b>524.9</b> | <b>498.0</b> | <b>473.5</b> | <b>456.9</b> | <b>436.5</b> |
| 120°                    | <b>707.0</b>  | <b>583.2</b> | <b>531.4</b> | <b>503.4</b> | <b>476.4</b> | <b>451.1</b> | <b>415.7</b> |
| 135°                    | <b>786.6</b>  | <b>640.8</b> | <b>559.3</b> | <b>523.1</b> | <b>496.8</b> | <b>469.4</b> | <b>417.6</b> |
| 150°                    | <b>928.5</b>  | <b>733.8</b> | <b>622.5</b> | <b>555.1</b> | <b>522.6</b> | <b>497.8</b> | <b>447.7</b> |
| Run VMG                 | <b>1072.1</b> | <b>847.3</b> | <b>716.4</b> | <b>628.6</b> | <b>566.1</b> | <b>530.0</b> | <b>481.2</b> |
| <b>Selected Courses</b> |               |              |              |              |              |              |              |
| Windward / Leeward      | <b>1105.6</b> | <b>896.5</b> | <b>776.9</b> | <b>708.2</b> | <b>670.9</b> | <b>652.3</b> | <b>627.9</b> |
| Circular Random         | <b>931.3</b>  | <b>752.3</b> | <b>656.9</b> | <b>602.4</b> | <b>569.8</b> | <b>549.0</b> | <b>522.9</b> |
| Coastal / Long Distance | <b>1102.2</b> | <b>841.8</b> | <b>700.7</b> | <b>620.8</b> | <b>580.9</b> | <b>549.7</b> | <b>496.7</b> |
| Non Spinnaker           | <b>987.8</b>  | <b>791.9</b> | <b>686.3</b> | <b>625.1</b> | <b>588.3</b> | <b>565.1</b> | <b>537.2</b> |

**Certificate**

Number **402401**  
ORC Ref **03510000D29**  
Issued On **12/02/2020**  
VPP Ver. **2020 1.01**  
Valid until **31/12/2020**

**Crew Weight**

Default **576kg**  
Maximum **490kg**  
Minimum\* **368kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

ToD ToT  
Non Spin GPH **708.5 0.8469**  
Non Spin OSN **686.0 0.8747**

**Sails Limitations**

|           |            |
|-----------|------------|
| Headsails | Spinnakers |
| <b>5</b>  | <b>4</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>43.5°</b>  | <b>41.3°</b>  | <b>40.5°</b>  | <b>39.8°</b>  | <b>39.6°</b>  | <b>39.8°</b>  | <b>40.3°</b>  |
| Beat VMG                                                 | <b>3.16</b>   | <b>3.81</b>   | <b>4.30</b>   | <b>4.57</b>   | <b>4.64</b>   | <b>4.65</b>   | <b>4.65</b>   |
| 52°                                                      | <b>4.84</b>   | <b>5.70</b>   | <b>6.30</b>   | <b>6.57</b>   | <b>6.65</b>   | <b>6.68</b>   | <b>6.70</b>   |
| 60°                                                      | <b>5.12</b>   | <b>5.99</b>   | <b>6.50</b>   | <b>6.74</b>   | <b>6.85</b>   | <b>6.89</b>   | <b>6.90</b>   |
| 75°                                                      | <b>5.32</b>   | <b>6.20</b>   | <b>6.65</b>   | <b>6.91</b>   | <b>7.10</b>   | <b>7.23</b>   | <b>7.29</b>   |
| 90°                                                      | <b>5.26</b>   | <b>6.27</b>   | <b>6.78</b>   | <b>7.02</b>   | <b>7.21</b>   | <b>7.46</b>   | <b>7.82</b>   |
| 110°                                                     | <b>5.27</b>   | <b>6.33</b>   | <b>6.86</b>   | <b>7.23</b>   | <b>7.60</b>   | <b>7.88</b>   | <b>8.25</b>   |
| 120°                                                     | <b>5.09</b>   | <b>6.17</b>   | <b>6.77</b>   | <b>7.15</b>   | <b>7.56</b>   | <b>7.98</b>   | <b>8.66</b>   |
| 135°                                                     | <b>4.58</b>   | <b>5.62</b>   | <b>6.44</b>   | <b>6.88</b>   | <b>7.25</b>   | <b>7.67</b>   | <b>8.62</b>   |
| 150°                                                     | <b>3.88</b>   | <b>4.91</b>   | <b>5.78</b>   | <b>6.49</b>   | <b>6.89</b>   | <b>7.23</b>   | <b>8.04</b>   |
| Run VMG                                                  | <b>3.36</b>   | <b>4.25</b>   | <b>5.03</b>   | <b>5.73</b>   | <b>6.36</b>   | <b>6.79</b>   | <b>7.48</b>   |
| Gybe Angles                                              | <b>146.0°</b> | <b>151.0°</b> | <b>153.0°</b> | <b>160.0°</b> | <b>180.0°</b> | <b>180.0°</b> | <b>180.0°</b> |

**Class Division Length**

**CDL = 7.949**

**Storm Sails Areas**

Heavy Weather Jib **21.34**  
Storm Jib (JL=8.18) **7.91**  
Storm Trysail **8.52**

**Owner**



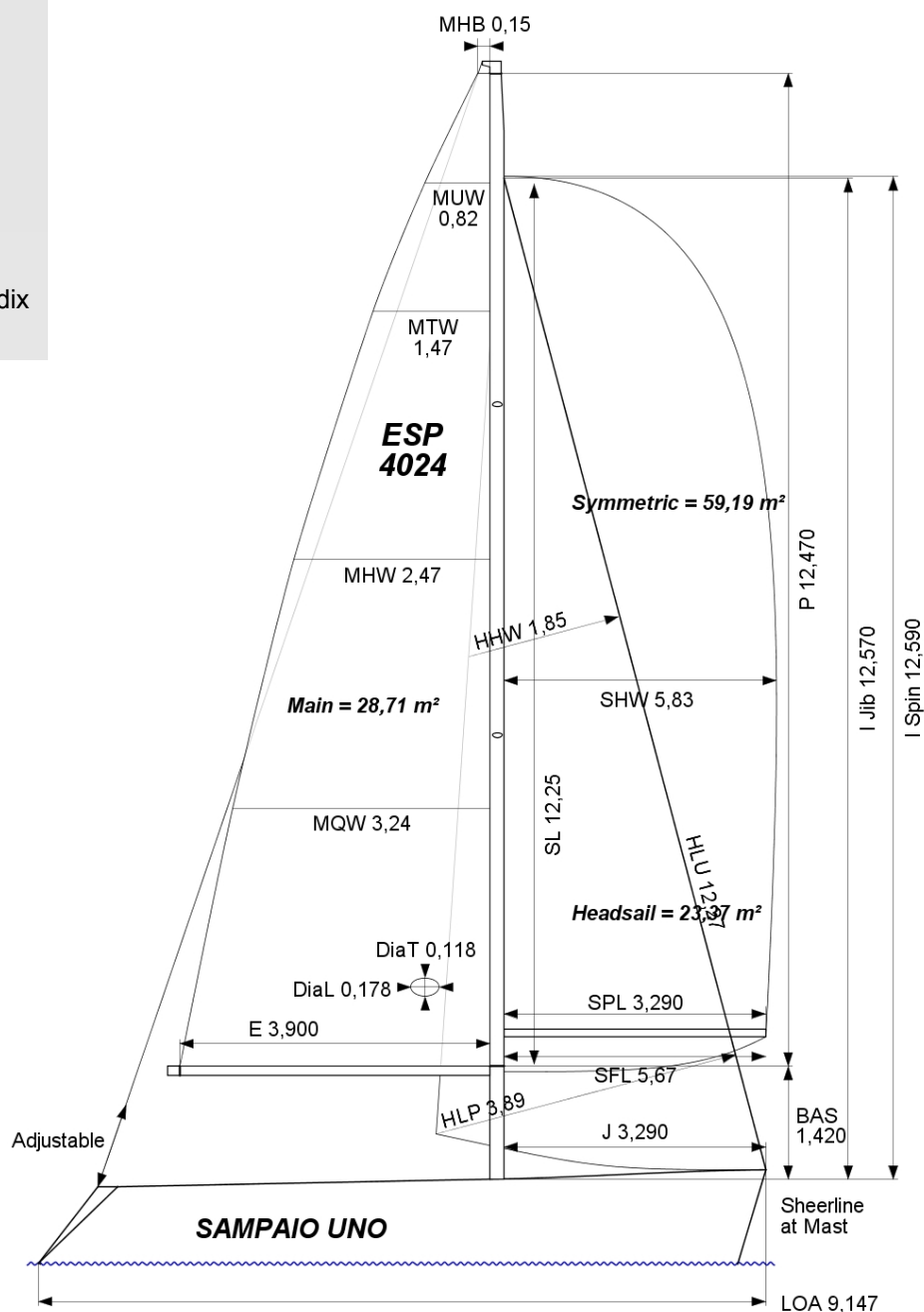


**ORC**

Offshore Racing Congress  
World leader in rating technology

**2020**

Certificate Appendix  
Sail Plan



#### SAILS INVENTORY

##### MAINSAIL (1)

| Id          | MHB  | MUW  | MTW  | MHW  | MQW  | Area  | Measurer | Meas.Date  | Manufacture | Material | Comment |
|-------------|------|------|------|------|------|-------|----------|------------|-------------|----------|---------|
| mayor nueva | 0.15 | 0.82 | 1.47 | 2.47 | 3.24 | 28.72 |          | 12/05/2012 | NSAILS      | Carbon   |         |

##### HEADSAILS (1)

| Id    | HHB  | HUW  | HTW  | HHW  | HQW  | HLP  | HLU   | Ovrlp | Area  | Btn | Flying | Measurer | Meas.Date  | Manufacture | Material | Comment |
|-------|------|------|------|------|------|------|-------|-------|-------|-----|--------|----------|------------|-------------|----------|---------|
| GENOV | 0.08 | 0.50 | 0.94 | 1.85 | 2.83 | 3.89 | 12.27 | 118%  | 23.37 | No  |        |          | 09/06/2013 |             | Pentex   |         |

##### SYMMETRIC SPINNAKERS (1)

| Id  | SLU   | SLE   | SL    | SHW  | SFL  | Area  | Measurer | Meas.Date  | Manufacture | Material | Comment |
|-----|-------|-------|-------|------|------|-------|----------|------------|-------------|----------|---------|
| SPI | 12.25 | 12.25 | 12.25 | 5.83 | 5.67 | 59.19 |          | 12/05/2012 |             | Unknown  |         |

##### ASYMMETRIC SPINNAKERS (0)

| Id | SLU | SLE | SL | SHW | SFL | Area | Kind | Measurer | Meas.Date | Manufacture | Material | Comment |
|----|-----|-----|----|-----|-----|------|------|----------|-----------|-------------|----------|---------|
|----|-----|-----|----|-----|-----|------|------|----------|-----------|-------------|----------|---------|