

|  |                            |   |
|--|----------------------------|---|
| <b>BOAT</b><br>Name <b>Wind Walker</b><br>Sail Nr <b>GBR-111L</b>  | <b>GPH</b><br><b>534.5</b> | <b>HULL</b><br>Length Overall <b>13.829m</b><br>Maximum Beam <b>3.888m</b><br>Displacement <b>9,850kg</b><br>Draft <b>2.834m</b><br>IMS Reg. Division <b>Cruiser/Racer</b><br>Dynamic Allowance <b>0.000%</b><br>Fwd Accommodation <b>Yes</b><br>Hull Construction <b>Cored</b><br>Carbon Rudder <b>Yes</b><br>Crew Arm Extension |
| <b>GENERAL</b><br>Class <b>Swan 45</b><br>Designer <b>Frers</b><br>Builder <b>Nautor</b><br>Series <b>11/2001</b><br>Age <b>06/2005</b><br>Age Allowance <b>0.487%</b><br>Offset File <b>SWAN45.OD.OFF - 16/04/2018 10:41:32</b><br>Measurement by - <b>28/05/2016</b> |                            | IMSL <b>12.631m</b> VCGD <b>-0.293m</b> Sink <b>26.78kg/mm</b><br>RL <b>11.721m</b> VCGM <b>-0.348m</b> WS <b>36.62m<sup>2</sup></b><br>LSM0 <b>12.420m</b> Displacement/Length ratio <b>5.1413</b>   |



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| <b>SCORING OPTIONS</b> |                                |               |               |                           |               |               |
|------------------------|--------------------------------|---------------|---------------|---------------------------|---------------|---------------|
|                        | <b>COASTAL / LONG DISTANCE</b> |               |               | <b>WINDWARD / LEEWARD</b> |               |               |
| Time on Distance       | <b>521.7</b>                   |               |               | <b>581.2</b>              |               |               |
| Time on Time           | <b>1.1501</b>                  |               |               | <b>1.1615</b>             |               |               |
| Triple Number          | Low                            | Medium        | High          | Low                       | Medium        | High          |
| Time on Distance       | <b>600.5</b>                   | <b>477.4</b>  | <b>428.0</b>  | <b>774.5</b>              | <b>585.3</b>  | <b>510.8</b>  |
| Time on Time           | <b>1.1241</b>                  | <b>1.4138</b> | <b>1.5771</b> | <b>0.8715</b>             | <b>1.1532</b> | <b>1.3214</b> |

| <b>TIME ALLOWANCES</b> |              |              |              |              |              |              |              |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wind Velocity          | 6 kt         | 8 kt         | 10 kt        | 12 kt        | 14 kt        | 16 kt        | 20 kt        |
| Beat VMG               | <b>849.2</b> | <b>709.1</b> | <b>643.6</b> | <b>616.8</b> | <b>603.5</b> | <b>592.3</b> | <b>579.8</b> |
| 52°                    | <b>562.5</b> | <b>479.8</b> | <b>450.3</b> | <b>439.8</b> | <b>434.4</b> | <b>431.3</b> | <b>423.3</b> |
| 60°                    | <b>533.4</b> | <b>463.4</b> | <b>439.4</b> | <b>428.8</b> | <b>423.2</b> | <b>419.7</b> | <b>412.1</b> |
| 75°                    | <b>511.1</b> | <b>452.8</b> | <b>430.4</b> | <b>416.6</b> | <b>406.5</b> | <b>400.2</b> | <b>393.4</b> |
| 90°                    | <b>514.5</b> | <b>453.1</b> | <b>428.9</b> | <b>412.4</b> | <b>397.5</b> | <b>384.4</b> | <b>368.1</b> |
| 110°                   | <b>542.3</b> | <b>456.8</b> | <b>424.9</b> | <b>403.9</b> | <b>388.2</b> | <b>376.4</b> | <b>356.8</b> |
| 120°                   | <b>560.8</b> | <b>465.5</b> | <b>429.1</b> | <b>406.0</b> | <b>383.2</b> | <b>364.2</b> | <b>338.7</b> |
| 135°                   | <b>622.5</b> | <b>504.6</b> | <b>447.7</b> | <b>421.6</b> | <b>399.1</b> | <b>375.3</b> | <b>328.1</b> |
| 150°                   | <b>739.5</b> | <b>594.0</b> | <b>503.2</b> | <b>450.7</b> | <b>424.7</b> | <b>403.5</b> | <b>358.9</b> |
| Run VMG                | <b>853.9</b> | <b>685.9</b> | <b>581.0</b> | <b>515.0</b> | <b>472.3</b> | <b>438.8</b> | <b>396.3</b> |

**Certificate**  
Number **057/19**  
ORC Ref **BUL10026125**  
Issued On **06/08/2019**  
VPP Ver. **2019 1.01**  
Valid until **31/12/2019**

**Crew Weight**  
Default **938kg**  
Maximum **900kg**  
Minimum\* **675kg**  
*\*when applied by the NoR and SI*  
Non Manual Pwr **No**

**Special Scoring**

|              |              |               |
|--------------|--------------|---------------|
|              | ToD          | ToT           |
| Double H.GPH | <b>541.9</b> | <b>1.1072</b> |
| Double H.OSN | <b>530.2</b> | <b>1.1317</b> |
| Non Spin GPH | <b>560.3</b> | <b>1.0709</b> |
| Non Spin OSN | <b>547.8</b> | <b>1.0953</b> |

| <b>Selected Courses</b> |              |              |              |              |              |              |              |
|-------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Windward / Leeward      | <b>851.5</b> | <b>697.5</b> | <b>612.3</b> | <b>565.9</b> | <b>537.9</b> | <b>515.5</b> | <b>488.0</b> |
| Circular Random         | <b>725.1</b> | <b>590.3</b> | <b>519.4</b> | <b>478.6</b> | <b>453.2</b> | <b>435.6</b> | <b>411.2</b> |
| Coastal / Long Distance | <b>851.8</b> | <b>656.8</b> | <b>554.4</b> | <b>496.3</b> | <b>464.4</b> | <b>437.3</b> | <b>394.8</b> |
| Non Spinnaker           | <b>771.2</b> | <b>623.2</b> | <b>543.8</b> | <b>497.4</b> | <b>468.3</b> | <b>448.6</b> | <b>422.3</b> |

**Sails Limitations**

|           |            |
|-----------|------------|
| Headsails | Spinnakers |
| <b>7</b>  | <b>5</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>41.8°</b>  | <b>40.4°</b>  | <b>39.1°</b>  | <b>37.7°</b>  | <b>37.1°</b>  | <b>36.4°</b>  | <b>36.4°</b>  |
| Beat VMG   | <b>4.24</b>   | <b>5.08</b>   | <b>5.59</b>   | <b>5.84</b>   | <b>5.97</b>   | <b>6.08</b>   | <b>6.21</b>   |
| 52°  | <b>6.40</b>   | <b>7.50</b>   | <b>8.00</b>   | <b>8.19</b>   | <b>8.29</b>   | <b>8.35</b>   | <b>8.51</b>   |
| 60°  | <b>6.75</b>   | <b>7.77</b>   | <b>8.19</b>   | <b>8.40</b>   | <b>8.51</b>   | <b>8.58</b>   | <b>8.74</b>   |
| 75°  | <b>7.04</b>   | <b>7.95</b>   | <b>8.36</b>   | <b>8.64</b>   | <b>8.86</b>   | <b>9.00</b>   | <b>9.15</b>   |
| 90°  | <b>7.00</b>   | <b>7.95</b>   | <b>8.39</b>   | <b>8.73</b>   | <b>9.06</b>   | <b>9.37</b>   | <b>9.78</b>   |
| 110°   | <b>6.64</b>   | <b>7.88</b>   | <b>8.47</b>   | <b>8.91</b>   | <b>9.27</b>   | <b>9.56</b>   | <b>10.09</b>  |
| 120°   | <b>6.42</b>   | <b>7.73</b>   | <b>8.39</b>   | <b>8.87</b>   | <b>9.39</b>   | <b>9.88</b>   | <b>10.63</b>  |
| 135°   | <b>5.78</b>   | <b>7.13</b>   | <b>8.04</b>   | <b>8.54</b>   | <b>9.02</b>   | <b>9.59</b>   | <b>10.97</b>  |
| 150°   | <b>4.87</b>   | <b>6.06</b>   | <b>7.15</b>   | <b>7.99</b>   | <b>8.48</b>   | <b>8.92</b>   | <b>10.03</b>  |
| Run VMG  | <b>4.22</b>   | <b>5.25</b>   | <b>6.20</b>   | <b>6.99</b>   | <b>7.62</b>   | <b>8.20</b>   | <b>9.09</b>   |
| Gybe Angles  | <b>142.1°</b> | <b>146.1°</b> | <b>148.9°</b> | <b>155.3°</b> | <b>165.9°</b> | <b>180.0°</b> | <b>180.0°</b> |

**Class Division Length**  
CDL = **12.177**

**Storm Sails Areas**  
Heavy Weather Jib **48.01**  
Storm Jib (JL=12.26) **17.78**  
Storm Trysail **21.75**

**Owner**

|             |             |                          |
|-------------|-------------|--------------------------|
| <b>BOAT</b> |             |                          |
| Name        | Wind Walker | Sail Nr GBR-111L         |
| File        | GBR111L     | Data in meters/kilograms |

|                      |             |                       |
|----------------------|-------------|-----------------------|
| <b>RIG</b>           |             |                       |
| Forestay Tension     | Aft         | Spreaders 2           |
| Inner Stay           | None Fitted | Runners 0             |
| Carbon Mast          | Yes         | 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 18.660             | E 6.660     | MDT1 0.133 MW 0.260   |
| IG 18.735            | J 5.400     | MDL1 0.272 GO 0.295   |
| ISP 18.900           | SFJ 0.035   | MDT2 0.106 BD 0.303   |
| BAS 1.860            | SPL 5.480   | MDL2 0.142 MWT 285.00 |
| FSP 0.092            | TPS 5.400   | TL 1.500 MCG 6.800    |

|  |                |                      |
|--|----------------|----------------------|
| <b>INCLINING TEST AND FREEBOARDS</b>     |                |                      |
| Inclining Test Current Inclining         |                |                      |
| Flotation date                           | 26/04/2013     | SG 1.0230            |
| FFM                                      | 1.489          | FF 1.490 SFFP 0.295  |
| FAM                                      | 1.188          | FA 1.189 SAFF 13.301 |
| W1                                       | 103.0          | PD1 427.0 WD 14.100  |
| W2                                       | 103.0          | PD2 427.0 GSA 1.0    |
| W3                                       | 103.0          | PD3 427.0 RSA 1.0    |
| W4                                       | 103.0          | PD4 427.0 PLM 9000.0 |
| LCF from stem on CL / on sheer           | 7.686 / 7.918  |                      |
| Maximum beam station from stem           | 8.935          |                      |
| RM Measured                              | 267.8kg-m      |                      |
| RM Default                               | 269.8kg-m      |                      |
| Limit of positive stability / Stab.Index | 135.8° / 142.7 |                      |
| Freeboard at mast at 5.435               | 1.267          |                      |



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|                             |  |  |
|-----------------------------|--|--|
| <b>MIZZEN RIG AND SAILS</b> |  |  |
| N/A                         |  |  |

|                  |                  |                     |
|------------------|------------------|---------------------|
| <b>PROPELLER</b> |                  |                     |
| Installation     | Strut            | PRD 0.425           |
| Type             | Folding 2 blades | PBW 0.108           |
| Twin Screw       | No               | PIPA 0.0033         |
| ST1              | 0.048            | ST3 0.170 ST5 0.330 |
| ST2              | 0.170            | ST4 0.098 EDL 2.770 |

|                    |             |
|--------------------|-------------|
| <b>Certificate</b> |             |
| Number             | 057/19      |
| ORC Ref            | BUL10026125 |
| Issued On          | 06/08/2019  |
| VPP Ver.           | 2019 1.01   |
| Valid until        | 31/12/2019  |

|                 |  |  |
|-----------------|--|--|
| <b>COMMENTS</b> |  |  |
|                 |  |  |

|                        |  |  |
|------------------------|--|--|
| <b>MOVABLE BALLAST</b> |  |  |
| N/A                    |  |  |

|                    |  |  |
|--------------------|--|--|
| <b>CENTERBOARD</b> |  |  |
| N/A                |  |  |



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| <b>SAILS (Maximum Areas)</b> |       |       |       |       |      |        |          |   |  |
|------------------------------|-------|-------|-------|-------|------|--------|----------|---|--|
| Mainsail                     | MHB   | MUW   | MTW   | MHW   | MQW  | Area   | Area (r) | Formula   |  |
|                              | 0.270 | 1.56  | 2.75  | 4.48  | 5.64 | 76.32  | 78.26    | P/8 · (E + 2·MQW + 2·MHW + 1.5·MTW + MUW + 0.5·MHB) |  |
| Symmetric                    | SLU   | SLE   | SL    | SHW   | SFL  |        |          |   |  |
|                              | 18.59 | 18.59 | 18.59 | 10.07 | 9.78 | 155.10 |          | SL · (SFL + 4·SHW) / 6                              |  |
| Asymmetric                   | SLU   | SLE   | SL    | SHW   | SFL  |        |          |   |  |
|                              | 18.96 | 17.96 | 18.46 | 8.56  | 9.75 | 135.34 |          | AS · (SFL + 4·SHW) / 6                              |  |

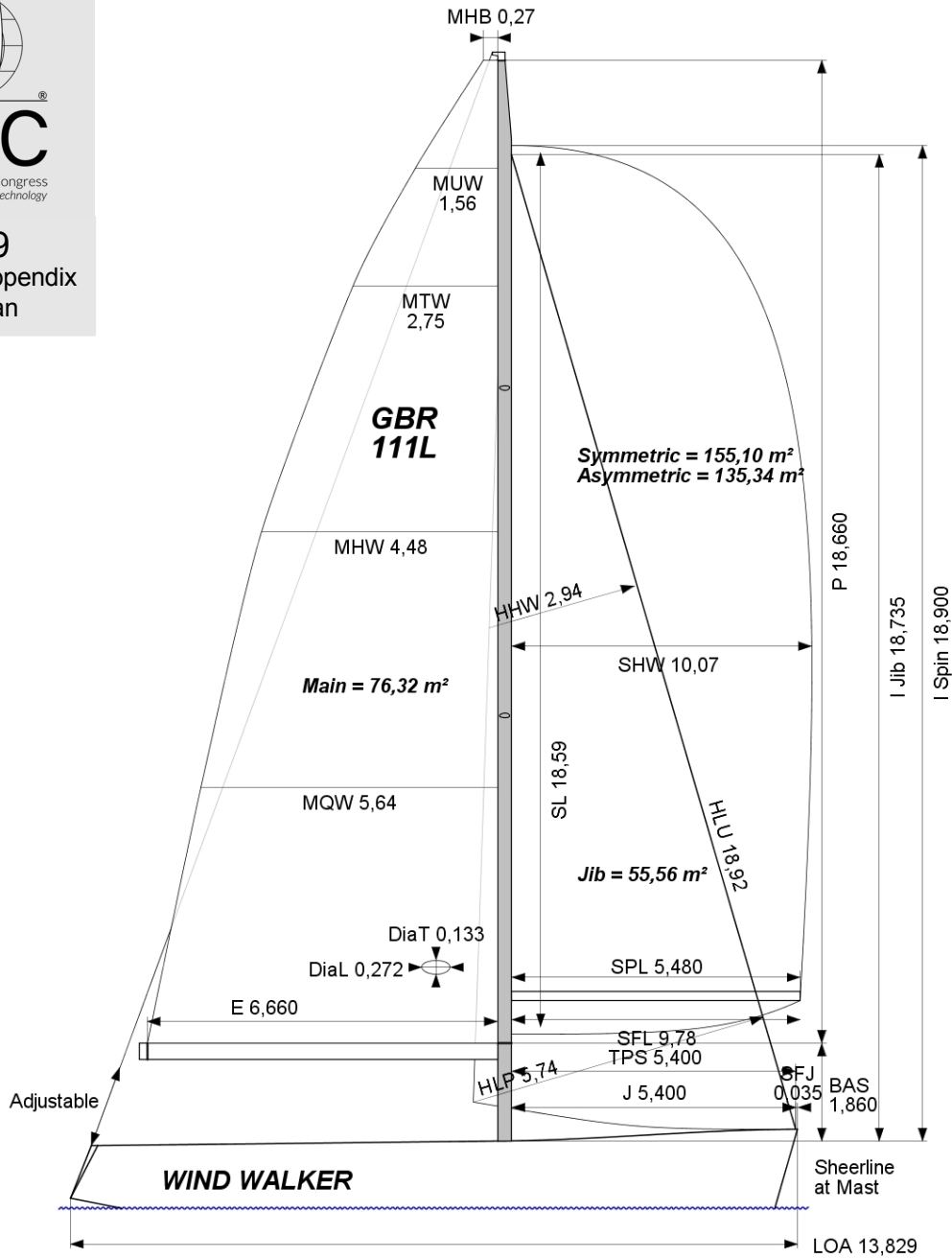
| <b>HEADSAILS</b>  |      |      |      |      |      |       |       |     |     |            |          |         |
|---|------|------|------|------|------|-------|-------|-----|-----|------------|----------|---------|
| Area = 0.1125·HLU · (1.445·HLP + 2·HQW + 2·HHW + 1.5·HTW + HUW + 0.5·HNB) |      |      |      |      |      |       |       |     |     |            |          |         |
| HHB   | HUW  | HTW  | HHW  | HQW  | HLP  | HLU   | Area  | Btn | Fly | Meas.Date  | Material | Comment |
| 0.14  | 0.87 | 1.58 | 2.94 | 4.31 | 5.74 | 18.92 | 55.56 | Y   |     | 07/09/2018 | Carbon   |         |
| 0.10  | 0.85 | 1.60 | 2.93 | 4.25 | 5.69 | 18.77 | 54.65 | Y   |     | 04/07/2016 | Carbon   |         |
| 0.11  | 0.82 | 1.58 | 2.91 | 4.23 | 5.74 | 18.63 | 54.11 |     |     | 28/05/2016 | Kevlar   |         |
| 0.10  | 0.81 | 1.58 | 2.93 | 4.28 | 5.70 | 18.58 | 54.11 | N   |     | 28/05/2016 | Kevlar   |         |
| 0.10  | 0.72 | 1.37 | 2.64 | 4.05 | 5.60 | 18.63 | 50.92 |     |     | 28/05/2016 | Kevlar   |         |



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Sail Plan



**SAILS INVENTORY**

**MAINSAIL (2)**

| Id  | MHB  | MUW  | MTW  | MHW  | MQW  | Area  | Measurer | Meas.Date  | Manufacture | Material | Comment |
|-----|------|------|------|------|------|-------|----------|------------|-------------|----------|---------|
| ms2 | 0.27 | 1.56 | 2.75 | 4.48 | 5.64 | 76.32 |          | 28/05/2016 | ns          | Kevlar   |         |
| ms1 | 0.24 | 1.60 | 2.75 | 4.46 | 5.61 | 76.15 |          | 28/05/2016 | ns          | Kevlar   |         |

**HEADSAILS (5)**

| Id | HHB  | HUW  | HTW  | HHW  | HQW  | HLP  | HLU   | Ovrlp | Area  | Btn | Fly | Measurer | Meas.Date  | Manufacture | Material | Comment |
|----|------|------|------|------|------|------|-------|-------|-------|-----|-----|----------|------------|-------------|----------|---------|
| A  | 0.14 | 0.87 | 1.58 | 2.94 | 4.31 | 5.74 | 18.92 | 106%  | 55.56 | Y   |     |          | 07/09/2018 | NS          | Carbon   |         |
| j5 | 0.10 | 0.85 | 1.60 | 2.93 | 4.25 | 5.69 | 18.77 | 105%  | 54.65 | Y   |     |          | 04/07/2016 |             | Carbon   |         |
| j2 | 0.11 | 0.82 | 1.58 | 2.91 | 4.23 | 5.74 | 18.63 | 106%  | 54.11 |     |     |          | 28/05/2016 | ns          | Kevlar   |         |
| j1 | 0.10 | 0.81 | 1.58 | 2.93 | 4.28 | 5.70 | 18.58 | 106%  | 54.11 | N   |     |          | 28/05/2016 | ns          | Kevlar   |         |
| j3 | 0.10 | 0.72 | 1.37 | 2.64 | 4.05 | 5.60 | 18.63 | 104%  | 50.92 |     |     |          | 28/05/2016 | ns          | Kevlar   |         |

**SYMMETRIC SPINNAKERS (2)**

| Id | SLU   | SLE   | SL    | SHW   | SFL  | Area   | Measurer | Meas.Date  | Manufacture | Material | Comment |
|----|-------|-------|-------|-------|------|--------|----------|------------|-------------|----------|---------|
| s2 | 18.59 | 18.59 | 18.59 | 10.07 | 9.78 | 155.11 |          | 05/06/2006 | ns          | Nylon    |         |
| s1 | 18.40 | 18.40 | 18.40 | 10.18 | 9.68 | 154.56 |          | 05/06/2006 | ns          | Nylon    |         |

**ASYMMETRIC SPINNAKERS (1)**

| Id | SLU   | SLE   | SL    | SHW  | SFL  | Area   | Kind | Measurer | Meas.Date  | Manufacture | Material | Comment |
|----|-------|-------|-------|------|------|--------|------|----------|------------|-------------|----------|---------|
| a1 | 18.96 | 17.96 | 18.46 | 8.56 | 9.75 | 135.35 | asym |          | 18/02/2005 | ns          | Nylon    |         |