# SFI TEST REPORT FOR LIGHT ALLOY WHEEL

<table>
<thead>
<tr>
<th>Reference No.</th>
<th>16021802</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>F14 deep</td>
</tr>
<tr>
<td>Nominal designation of rim</td>
<td>19×9.5J</td>
</tr>
<tr>
<td>Offset (mm)</td>
<td>36</td>
</tr>
<tr>
<td>P.C.D. (mm)</td>
<td>130</td>
</tr>
<tr>
<td>Number of bolt holes</td>
<td>5</td>
</tr>
<tr>
<td>Structure</td>
<td>1-PC</td>
</tr>
<tr>
<td>Material</td>
<td>A356-T6</td>
</tr>
<tr>
<td>Manufacturing method</td>
<td>FLOW FORMING</td>
</tr>
</tbody>
</table>

## 1. Tire used for test

<table>
<thead>
<tr>
<th>Item</th>
<th>Nominal designation of tire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radial load endurance test</td>
<td>285/35R19</td>
</tr>
<tr>
<td>Impact test</td>
<td>235/40R19</td>
</tr>
<tr>
<td>PCD</td>
<td>15.75*24.5</td>
</tr>
</tbody>
</table>

MAX LOADING: 1600LBS

## 2. Testing conditions and results

1. **Rotation bending fatigue test**
   - Date of test, (Month) 11, (Day) 29, (Year) 2014
   - Testing equipment approval number: A-238
   - Bending moment during test (kgf.m): 321
   - Rotational speed for test: 100,000 circles
   - Damage to disk wheel: None
   - Tightening section: OK
   - Evaluation: Qualified/Disqualified

   Used in calculation of bending moment (kN) \( r \times 725.76 (m) \times \frac{0.3429 (kgs)}{d (m)} \)

   Calculated bending moment value \( M \) (kN.m) \( r \times 320.53 (m) \times \frac{d (m)}{d (m)} \)

2. **Radial load endurance test**
   - Date of test, (Month) 11, (Day) 30, (Year) 2014
   - Testing equipment approval number: B-224
   - Pre-test air pressure \( [kpa] \times [kgf/cm^2] \): 460
   - Radial load during test \( [kN] \times [kgf] \): 1633
   - Rotational speed for test: 500,000 circles
   - Damage to disk wheel: None
   - Tightening section: OK
   - Evaluation: Qualified/Disqualified

   Used in calculation of Radial load \( Q \) \( 725.76 \times \frac{1632.95 (kgs)}{d (m)} \)

3. **Impact test 13°**
   - Date of test, (Month) 11, (Day) 28, (Year) 2014
   - Testing equipment approval number: C-297
   - Pre-test air pressure \( [kpa] \times [kgf/cm^2] \): 200
   - Total width (mm): 239
   - Weight mass (kg): 616
   - Drop height (mm): 230
   - Impact position (°): 0°/180°
   - Damage to disk wheel: NONE
   - Air leakage: OK
   - Evaluation: Qualified/Disqualified

4. **Overall evaluation**: Qualified/Disqualified