# SFI TEST REPORT FOR LIGHT ALLOY WHEEL

<table>
<thead>
<tr>
<th>Reference No.</th>
<th>120201</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>CF10 deep</td>
</tr>
<tr>
<td>Nominal designation of rim</td>
<td>19×10J</td>
</tr>
<tr>
<td>Offset (mm)</td>
<td>+48.3</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>Material</td>
<td>A356-T6</td>
</tr>
<tr>
<td>Structure</td>
<td>1-PC</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>255/40R19</td>
</tr>
</tbody>
</table>

PCD: Ø15.75*28.5

MAX LOADING: 1600LBS

## 2. Testing conditions and results

1. **Rotary bending fatigue test**
   - Date of test: (Month) 01 (Day) 12 (Year) 2012
   - Testing equipment approval number: A-238
   - Bending moment during test (kgf.m): 335
   - Rotational speed for test: 100,000 circles
   - Damage to disk wheel: None
   - Loosening of tightening section: OK
   - Evaluation: Qualified

   Used in calculation of bending moment [kN] (kgf) \( r \cdot 725.76 \) (m), \( d \cdot 0.0483 \) (m), \( W \cdot 0.3429 \) (kgs)

   Calculated bending moment value \( M \) [kNm] (kgfm) \( r \cdot 334.82 \) (m) \( d \) (m)

2. **Radial load endurance test**
   - Date of test: (Month) 01 (Day) 13 (Year) 2012
   - Testing equipment approval number: B-224
   - Pre-test air pressure [kpa] [kgf/cm²]: 460
   - Radial load during test [kN] [kgf]: 1633
   - Rotational speed for test: 500,000 circles
   - Damage to disk wheel: None
   - Loosening of fixture section etc.: OK
   - Evaluation: Qualified

   Used in calculation of Radial load [kN] [kgf] Calculated Radial load \( Q \cdot 725.76 \) (kgf), \( W \cdot 1632.95 \) (kgs)

3. **Impact test 13º**
   - Date of test: (Month) 01 (Day) 12 (Year) 2012
   - Testing equipment approval number: C-297
   - Pre-test air pressure [kpa] [kgf/cm²]: 200
   - Total width (mm): 259
   - Weight mass (kg): 616
   - Drop height (mm): 230
   - Impact position (º): 0º/180º
   - Damage to disk wheel: NONE
   - Air leakage: OK
   - Evaluation: Disqualified

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