## FINAL INSPECTION REPORT
### 1x4 Wideband Coupler

**Item #:** TWQ1064BHA  
**SN:** A001231

- **Center Wavelength:** 1064 nm  
- **Coupling Ratio Specification:**  
  - **Tap Output:** 21.50% - 28.50%  
  - **Bandwidth:** ±100 nm  
- **Maximum Optical Power**  
  - **With Connectors or Bare Fiber:** 1 W  
  - **Spliced:** 5 W  
- **Fiber Type:** Corning HI1060 Flex

<table>
<thead>
<tr>
<th>Test Data(^a)</th>
<th>Excess Loss(^c) ≤ 0.40 dB</th>
<th>Input-Output Path</th>
<th>White (Common) – Red (Port 1)</th>
<th>White (Common) – Red (Port 2)</th>
<th>White (Common) – Red (Port 3)</th>
<th>White (Common) – Red (Port 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wavelength</strong></td>
<td>952 nm 964 nm 1064 nm 1164 nm 1173 nm</td>
<td>964 nm 1064 nm 1164 nm 1173 nm</td>
<td>964 nm 1064 nm 1164 nm 1173 nm</td>
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<td>964 nm 1064 nm 1164 nm 1173 nm</td>
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<tr>
<td><strong>Coupling Ratio</strong></td>
<td>28.5% 27.1% 22.0% 27.0% 28.5%</td>
<td>27.1% 22.0% 27.0% 28.5%</td>
<td>24.2% 24.5% 25.2% 28.5%</td>
<td>24.2% 24.5% 25.2% 28.5%</td>
<td>24.2% 24.5% 25.2% 28.5%</td>
<td>24.2% 24.5% 25.2% 28.5%</td>
</tr>
<tr>
<td><strong>Uniformity</strong></td>
<td>1.06 dB 0.90 dB 0.00 dB 0.89 dB 1.01 dB</td>
<td>0.90 dB 0.00 dB 0.89 dB 1.01 dB</td>
<td>0.07 dB 0.20 dB 0.18 dB</td>
<td>0.00 dB 0.20 dB 0.18 dB</td>
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</tr>
</tbody>
</table>

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- **Excess Loss:** Ratio of the input optical power to the total optical power from all output ports. It is measured at the center wavelength.
- **Insertion Loss:** Specifies the maximum power allowed through the component. Performance and reliability under high power conditions must be determined within the user’s setup.
- **Uniformity:** All values are measured at room temperature without connectors through the white input port.
- **Wavelength:** These wavelengths indicate the range that meets the specified coupling ratio. It is shown by the gray shaded area on the accompanying graphs. Coupling ratio specification wavelength range may exceed measurement capabilities at the manufacturing station.
- **Fiber Type:** Includes both the split of the power between the two outputs, as well as any optical losses in the coupler.

Verified by: ____________________

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Sample
Insertion loss (dB) is the ratio of the input power to the output power from each leg of the coupler as a function of wavelength. It captures both the coupling ratio and the excess loss.

Uniformity (dB) is the variation of the insertion loss over the bandwidth. It is a measure of how evenly the insertion loss is distributed over the spectral range.