Raised pavement markers have been proven to improve lane delineation and increase preview time by up to four seconds. Raised pavement markers are the best wet weather lane delineator and have been shown to decrease crash rates on highways with RPM center lines by approximately 0.5 crashes per million vehicle-miles.

Since creating the first pavement marker more than 45 years ago, Stimsonite markers have led the industry in product innovation, quality, value and service. The new snow plowable casting, Lens Cradle, accomplishes those goals again.

The Lens Cradle casting is made from polycarbonate plastic and features a replaceable C40 lens inside the casting bed. The casting is placed in a recessed cutout that allows the marker lens and casting to rest below the road surface for protection against snow plows.
The recommended tandem application increases total reflective area and features better wet-night reflectivity than traditional recessed markers. The groove dimensions pictured below allow both the casting and lens to fit below the surface through the use of two tabs that rest comfortably on the road surface.

### Lens Cradle 201

**Product Type:** The Lens Cradle  
**Design:** 5.00" x 3.00" x 0.70" (12.70 cm x 7.62 cm x 1.78 cm)  
**Installed Height:** 0.10" (0.25 cm)  
**Weight:** 2.12 oz. (60 grams)  
**Material:** Polycarbonate plastic

### Specifications for Lens Cradle Casting with C40 Lens

Reflective intensity is measured by the height of reflective area observed by an approaching driver (maximum height of a single reflector is 0.25”).

<table>
<thead>
<tr>
<th>Distance from Headlights to Reflectors (FT.)</th>
<th>Distance from Beginning of Groove to Reflector (FT.)</th>
<th>Surface Applied Markers</th>
<th>Surface Markers Applied in Groove</th>
<th>Lens Cradle with C40 Lens</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>1 Reflector</td>
<td>.20</td>
<td>.03</td>
<td>.03 + .07 = .10</td>
</tr>
<tr>
<td>500</td>
<td>1 Reflector</td>
<td>.20</td>
<td>.06</td>
<td>.06 + .09 = .15</td>
</tr>
<tr>
<td>400</td>
<td>1 Reflector</td>
<td>.20</td>
<td>.10</td>
<td>.10 + .15 = .25</td>
</tr>
<tr>
<td>300</td>
<td>1 Reflector</td>
<td>.20</td>
<td>.17</td>
<td>.17 + .18 = .35</td>
</tr>
<tr>
<td>200</td>
<td>1 Reflector</td>
<td>.20</td>
<td>.25</td>
<td>.25 + .25 = .50</td>
</tr>
</tbody>
</table>

### Physical Characteristics of C40 Lens

- **Slope of Lens:** 35 degrees to base  
- **Lens Face:** 1.93 sq. in. (12.48 sq. cm.)  
- **Compressive Strength Requirement:** > 6,000 lbs. (2,722 kg.)  
- **Coefficient of Luminous Intensity** (mcd/lx):
  - **0 Degrees**  
    - White: 279  
    - Yellow: 167  
    - Red: 70  
    - Green: 93  
    - Blue: 26  
  - **20 Degrees**  
    - White: 112  
    - Yellow: 67  
    - Red: 28  
    - Green: 37  
    - Blue: 10

- **Specific Intensity** (cd/lux):
  - **0 Degrees**  
    - White: 3.0  
    - Yellow: 1.8  
    - Red: 0.75  
    - Green: 1.0  
    - Blue: 0.28  
  - **20 Degrees**  
    - White: 1.2  
    - Yellow: 0.72  
    - Red: 0.30  
    - Green: 0.4  
    - Blue: 0.11

- **Coefficient of Luminous Intensity After Abrasion Resistance Testing** (mcd/lx):
  - **0 Degrees**  
    - White: 140  
    - Yellow: 84  
    - Red: 35  
    - Green: 47  
    - Blue: 13  
  - **20 Degrees**  
    - White: 56  
    - Yellow: 34  
    - Red: 14  
    - Green: 19  
    - Blue: 5

- **Specific Intensity After Abrasion Resistance Testing** (cd/lux):
  - **0 Degrees**  
    - White: 1.5  
    - Yellow: 0.90  
    - Red: 0.38  
    - Green: 0.50  
    - Blue: 0.14  
  - **20 Degrees**  
    - White: 0.60  
    - Yellow: 0.36  
    - Red: 0.15  
    - Green: 0.20  
    - Blue: 0.06

* ASTM D 4280