

## SECTION 1072 -- REFLECTORS

### 1072.01 -- Description

Authorized reflectors are described in this Section.

### 1072.02 -- Material Characteristics

1. The reflector shall consist of a round retroreflecting lens permanently bonded and hermetically sealed to its back.
2. The back may be either acrylic plastic or metal foil; however, the foil back reflectors must have a minimum 0.46 mm thick aluminum housing.
3. The aluminum housing is not required with the acrylic plastic back.
4. The reflector shall have a mounting hole in the center with a diameter of not less than 4.5 mm.
5. The reflector shall have a visible reflective area when mounted of not less than 4200 mm<sup>2</sup>.
6. The lens shall consist of a smooth front surface free from projections or indentations other than the central mounting hole and manufacturer's identification.
7. The rear surface shall be a prismatic configuration such that it will cause total internal reflection of light.
8. The prism arrangement in the lens shall be such that the lens will have a segmented appearance with at least 2 and not more than 6 segments in each unit.
9. The unit shall be permanently sealed against dust, water, and water vapor.
10. Fasteners for delineators shall be at least 5 mm diameter pan or round head machine screws (length shown in the plans) conforming to the requirements of ASTM F 568.
11. The reflectors shall meet specific intensity requirements shown in Table 1072.01.

**Table 1072.01**

<b>Reflector Requirements</b>					
<b>Observation Angle, (degrees)</b>	<b>Entrance Angle, (degrees)</b>	<b>Minimum Specific Intensity (Candela per lux)</b>			
		<b>White</b>	<b>Yellow</b>	<b>Red</b>	<b>Blue</b>
0.1	0	11.1	6.7	2.8	1.1
0.1	20	4.5	2.7	1.1	0.4
0.33	0	1.9	1.1	0.5	0.20
0.33	20	0.7	0.5	0.2	0.08

**1072.03 -- Acceptance Requirements**

1. Acceptable reflectors are shown on the NDR Approved Products List.
2. Fasteners for delineators shall be sampled and tested in accordance with the requirements shown in the NDR *Materials Sampling Guide*.