

AURA[®] 188R Reflex Reflectors

Product Code: 0188R

Product Data Bulletin

Product Overview

Aura Optical Systems' AURA[®] 188R Reflex Reflectors are made from a metalized prismatic reflective sheeting with up to 7-years durability. The reflectors meet or exceed the requirements for SAE J594 reflex reflectors and contain the "SAE A DOT" marking.

Key Features

- Metalized, single-ply construction to prevent edge-lifting and water ingress. Edge-sealing is not required.
- Low profile to minimize the possibility that reflectors may be damaged or knocked loose.
- Reflectors continue to function even if damaged.
- Easy to apply. No drilling or mounting fasteners required.
- Incorporates proprietary Hybrid Polymer™ technology for a strong and impact-resistant reflector

Physical Characteristics & Properties

Durability	Up to 7-years when properly installed. Vertical exposure only.
Retroreflective Elements	Microprisms, metalized with vacuum-deposited aluminum
Product Thickness	13 mils, excluding release liner
Release Liner	HDPE Film Release Liner
Adhesive	Aggressive high-tack adhesive for bonding to aluminum and many paint surfaces and plastics [†] .
Application Temperature	15°C (60°F) minimum

[†] Suitability of the product for a specific substrate should always be tested prior to application. Aura Optical Systems offers a variety of testing services to assist with such testing.

Covered by one or more patents / pending applications. Refer to www.auraopticalsystems.com/images/patents.pdf for more information.

Color Availability

Product Code	Color
0188R-02	Red
0188R-03	Amber

Other colors available upon request.

Reflector Size and Availability

- Standard reflector sizes:
 - 2" x 3.5" Rectangular
 - 3" Diameter CircularOther sizes available upon request.
- Supplied in kiss-cut rolls

Photometric Performance

Typical performance when tested according to SAE J594 test methods (millicandelas per incident lux)

Color	Entrance Angle	Observation Angle	
		0.2°	1.5°
Red	0°	600	40
	10° Up	460	25
	10° Down	460	25
	20° Left	360	18
	20° Right	360	18
Amber	0°	1500	100
	10° Up	1200	60
	10° Down	1200	60
	20° Left	900	40
	20° Right	900	40



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Typical Nighttime Color

The nighttime color of AURA® 188R is listed below as defined by the chromaticity coordinates of the CIE 1931 Standard Colorimetric System. Measured according to SAE J578.

Color	Typical chromaticity coordinates	
	x	y
Red	0.675	0.320
Amber	0.585	0.410

These color values are representative of typical product colors. Actual color may vary.

Application Guidelines

AURA® 188R should be conditioned above 15°C (60°F) for at least 24-hours prior to application. Application should occur using a squeeze roll applicator or by hand using a firm rubber roller or plastic squeegee. Substrates should be cleaned prior to application. Wipe surfaces with rubbing alcohol (or similar solvent cleaner) and allow the surface to completely dry prior to application. Wet application method is NOT recommended.

For application to painted surfaces, the paint must be fully cured and dried prior to application. For application to plastic substrates, especially low surface energy plastics, it is important to flame treat (or otherwise surface treat) the plastic substrate prior to application. Although AURA® 188R is supplied with an aggressive high-tack adhesive suitable for many plastics, it should be noted that all plastics are different. Many plastics, including fiberglass laminates, may contain ingredients or components that may migrate to the surface and adversely affect the adhesion or performance of the reflective sheeting. The user should always test the performance of AURA® 188R on their specific substrate.

Storage


Store in a cool, dry area. Use within 1-year of receipt of the product.

Warranty Information

The information, technical data, and statements made herein are believed to be reliable, but the accuracy or completeness thereof is not guaranteed and should not be construed as a warranty or representation for which Aura Optical Systems assumes legal responsibility. All Aura Optical Systems products are sold with the understanding that the Purchaser has independently determined the suitability of such products for its purposes.

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Trademarks

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