

# Avery Dennison®

## Calibrated Comparison Panel Kit – Rail Cars

Issued: November 2018

Region: North America

Avery Dennison® Calibrated Comparison Panel Kit for Rail Cars is intended to assist rail car owners and repair shops in meeting their maintenance obligations for maintaining minimum reflectivity levels shown in the FRA-224 regulation.

The Calibrated Comparison Panel Kit contains the required panel individually calibrated and labeled to enable maintenance workers to conduct visual reflector assessment as being implemented under FRA-224.



**Performance:**  
150-170 cd/lux/m<sup>2</sup>



**Durability:** 1 Year



### Features:

- Calibrated panel engineered and certified with retroreflectivity of 150-170 cd/lux/m<sup>2</sup>, measured in accordance with ASTM E810.
- Kit enables use of calibrated panels for visual assessment in compliance with FRA-224.
- Magnetic backing
- Highly durable Pelican case™

### Applications:

Visual assessment and retroreflectivity comparison of reflectors on rail cars

### Kit Contents:

Quantity	Description
1	4" x 4" calibrated yellow panel in accordance with AAR standards
1	Protective Pelican™ Case
1	Micro Fiber Cloth
1	Cleaning/Maintenance

Product Data Sheet

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Graphics and Reflective Solutions

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[www.reflectives.averydennison.com](http://www.reflectives.averydennison.com)

### Retroreflectivity:

**Table A:**

Minimum and maximum coefficients of retroreflection ( $R_A$ )<sup>1</sup>

	Observation angle: 0.2° Entrance angle: -4.0°		Observation angle: 0.2° Entrance angle: -4.0°
	Min	Max	Min
Yellow	150	170	60

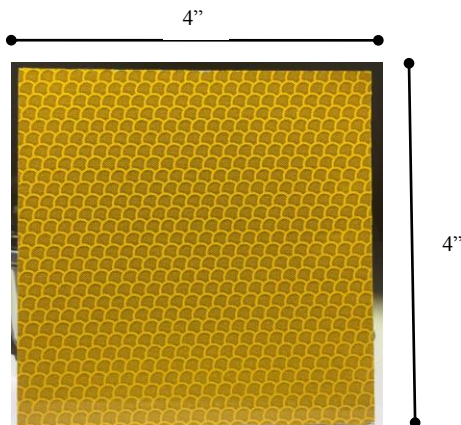
<sup>1</sup> $R_A$  = candelas per foot-candle per square foot (cd/ft<sup>2</sup>) OR Candelas per lux per square meter (cd/lx/m<sup>2</sup>)

### Caring for the Kit:

Avery Dennison Comparator Panel should be stored in the protective case as it was delivered and kept in a cool, dry area preferably at 65° - 75°F and 45%-55% RH.

If Comparator Panel needs to be cleaned, use only the micro fiber cloth included in the protective case. If needed, fully saturate the surface with water, use the micro cloth to wipe the surface and allow to air dry. If needed, a cleaning solution with a pH range of 4 to 10 can be used. The cleaning solution should be non-abrasive and free of strong solvents. Do not use anything other than the included micro cloth to clean the panel.

### Panel Dimensions:



### Warranty:

This Warranty applies to the Product listed in this Data Sheet. All statements, technical information (including physical and chemical characteristics) and recommendations about Avery Dennison products are based upon tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold subject to the Purchaser's assent and agreement that Purchaser is responsible for, and has independently determined, the suitability of such products for its purposes or its customer's purposes. Avery Dennison reflective products are warranted to be free from defects in material and workmanship for one (1) year from the date of manufacture, unless stated otherwise in the applicable product data sheet.

Such time periods are subject in either case to the proper storing, caring, and application of said product, and the failure to properly store or apply the product, including without limitation the failure to follow any applicable Instructional Bulletin, negates any warranty. It is expressly agreed and understood that Avery Dennison's sole obligation and Purchaser's exclusive remedy under this warranty, under any other warranty, express or implied, or otherwise, shall be limited exclusively to: (a) repair or replacement of defective product without charge at Avery Dennison's plant or at the location of the product (at Avery Dennison's election), or (b) in the event repair or replacement are not commercially practical, a credit amount up to the price of the product taking into account the defect in the product in Avery Dennison's sole discretion.

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### Definitions:

**Durability:** means that the Product-- when used in a finished graphic, panel or sign situated outdoors, subject to the limitations herein and Avery Dennison Product Data Sheets and Instructional Bulletins, and applied to recommended surfaces-- will not deteriorate excessively such that the finished sign, panel or graphic is ineffective for its identification when viewed under normal conditions from the intended viewing distance.

All sales and contracts for sale of Products are subject to Purchaser's assent and agreement to this Warranty. Avery Dennison hereby objects to and rejects any terms or conditions contained in any purchase order or other communication of any kind from the Purchaser that is conflicting, inconsistent or additional to this Agreement.