

# Luminance Contrast Report

**Product:** Duratac Stainless Steel Tactile Plate with Carborundum Insert  
**Product Code:** TGS1-3030/SS  
**Address:** 8a Lara Way, Campbellfield VIC 3061  
**Testing Date:** 16/08/2022

As requested, we have determined the luminance contrast of the sample provided. These test results and report should be used as a good guidance only with the test method specified in the standards AS/NZS 1428.4.1.2009 Paragraph E3, Appendix E.

## Product

**Product Name:** Duratac Stainless Steel Tactile Plate with Carborundum Insert

**Product Description:**  
 Intergrated Hazard Tactile Plate With Caarborundum Insert 600mm x 300mm - Stainless Steel Construction



## Test Results

Dry Measurements		Mean Dry LRV	Wet Measurements		Mean Wet LRV
4.78	4.66		4.689	4.362	
4.74	5.14	4.492		4.229	
4.56	4.48	4.344		4.355	
4.72	4.56	4.275		4.14	
5.14	4.59	4.368		4.181	
4.47	4.81	4.483		4.254	
4.37	4.85	4.402		4.6	
4.56	4.44	4.16		4.473	
4.56	4.60	4.406		4.347	
4.64	5.10	4.124		4.444	

Term	Definition
Luminance contrast	The light reflected from one surface or component, compared to the light reflected from another surface or component.
LRV	Luminance reflective value
Bowman-Sapolski equation	To determine the luminance contrast between the samples tested, the LRVs are entered into the Bowman-Sapolski equation: $C = 125 (Y2 - Y1) / (Y1 + Y2 + 25)$ , where: C = luminance contrast Y1 and Y2 = LRV of each surface
TGSI	Tactile Ground Surface Indicator
Integrated TGSI	Tactile ground surface indicators that are in a defined pattern and which are of the same luminance and material as the base surface.
Discrete TGSI	Individually installed TGSIs, which provide the same luminance for the sloping sides and upper surface of the truncated cone.
Composite Discrete TGSI	Tactile ground surface indicators that are individually installed and which provide a differing luminance for the sloping sides and upper surface of the truncated cone.
Stair Nosing	A strip not less than 50 mm and not more than 75 mm deep across the full width of the path of travel.

## Onsite Laboratory Testing Equipment

Sterling Supplies uses compliant testing apparatus meeting AS/NZS 1428.4.1 Appendix E requirements:

- Model: Konica Minolta CR-400 tristimulus colorimeter
- Illuminating and viewing system: Diffuse illumination/0° (d/0) viewing angle, specular component included.
- Conforms to JIS Z 8722 condition c standard
- Light source: Pulsed xenon lamp
- Measurement time: 1 second
- Minimum measurement interval: 3 seconds
- Measurement / illumination area; ∅ 8mm
- Observer: 2° Closely matches CIE 1931 Standard Observer
- Illuminant used: CIE Standard Illuminant D65
- Colour space and colorimetric data: CIE for Yxy

## Testing Methodology

The following is a summary of the testing methodology, conducted in accordance with requirements of AS 1428.4.1, Clause E3.3:

- The apparatus was firstly calibrated in accordance with the manufacturer’s instructions.
- The tristimulus value ‘Y’ (LRV measurements) were taken of the surface in random locations in dry & wet conditions.
- 20 measurements were taken. See table of results.
- Surface area was swept with a rag to remove dust particles and soiling prior to testing
- Wet Measurements were determined after 5 minutes of water ponding on the surface.

