

Luminance Contrast Report

Product: Duratac Eco Directional Tactiles
Product Code: TGS1-FD3060/ - Various
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 Eco Directional Tactiles

Product Description:
 Intergrated Directional Tactile 600 x 300mm - Fibreglass Construction



Test Results

Overall view of test results per colour - Please see table of results on next page

Colour	Dry LRV Average	Wet LRV Average
Black	4.265	3.925
White	72.282	77.468
Yellow	52.925	52.417

Table of LRV Results

Dry Measurements		Wet Measurements		Dry Measurements		Wet Measurements	
Colour	Black			Colour	White		
4.323	4.408	4.045	4	71.111	72.39	76.863	77.105
4.313	4.33	3.788	3.679	72.46	71.966	77.709	77.815
4.437	4.506	3.841	4.329	72.339	72.101	76.53	77.044
4.423	4.02	3.712	3.865	71.95	72.415	78.824	77.545
4.066	4.566	4.112	3.848	72.544	71.741	77.443	77.372
4.257	4.323	3.879	3.91	73.47	72.18	77.103	76.296
3.831	4.137	3.879	3.903	72.054	71.783	78.514	76.895
4.285	4.266	4.006	3.911	73.132	72.11	77.425	78.592
4.18	4.216	3.889	4.041	72.096	72.159	78.245	77.169
4.226	4.191	3.955	3.905	72.961	72.682	78.095	76.771
Mean Dry LRV	4.265	Mean Wet LRV	3.925	Mean Dry LRV	72.282	Mean Wet LRV	77.468
Colour	Yellow						
51.969	52.727	51.891	53.324				
53.862	52.852	52.451	52.002				
52.214	52.893	53.26	52.392				
53.283	52.343	52.612	52.582				
53.882	52.729	52.36	51.833				
52.59	53.027	53.554	52.07				
51.821	52.493	51.809	52.352				
53.119	53.952	52.413	53.076				
53.349	53.476	51.86	52.312				
52.181	52.591	51.57	52.625				
Mean Dry LRV	52.925	Mean Wet LRV	52.417				



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-Sapolinski equation	To determine the luminance contrast between the samples tested, the LRVs are entered into the Bowman-Sapolinski 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.

