

Luminance Contrast Report

Product: Duratac Directional Fastiles
Product Code: TGSI-DF3030/ - all Colours
Address: 8a Lara Road, 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 Directional Fastiles

Product Description:

Integrated Directional Tactiles 300mm x 300mm
- Polymer 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
Beige	38.420	37.959
Black	3.266	3.164
Grey	21.767	3.164
White	83.933	83.456
Yellow	48.95	48.615



Table of LRV Results

Dry Measurements		Wet Measurements		Dry Measurements		Wet Measurements	
Colour	Beige			Colour	Black		
38.454	38.088	38.222	37.974	3.364	3.577	3.08	3.222
38.618	38.827	37.319	38.866	3.163	3.24	3.197	3.179
38.866	37.78	38.224	37.515	3.35	3.293	2.813	3.393
37.539	37.716	36.907	37.836	3.58	3.194	2.941	3.123
37.981	38.988	38.223	37.66	3.312	3.325	3.262	3.207
38.973	38.625	37.458	38.343	3.328	3.191	3.119	3.244
38.722	38.451	38.107	37.485	3.363	3.569	3.151	3.185
38.528	38.653	38.257	37.513	3.398	3.32	3.129	3.067
38.945	38.981	38.035	38.195	3.505	3.055	3.237	3.382
37.966	37.707	38.334	38.708	3.339	3.31	3.283	3.061
Mean Dry LRV	38.42	Mean Wet LRV	37.959	Mean Dry LRV	3.266267	Mean Wet LRV	3.16375
Colour	Grey			Colour	White		
22.121	21.664	21.767	21.833	83.685	83.634	84.743	84.55
21.843	21.708	21.91	21.746	83.417	83.877	83.71	82.673
21.862	21.748	22.397	21.4	83.454	83.359	82.623	83.832
21.813	21.74	22.568	21.891	84.085	83.916	83.275	83.493
21.899	21.776	22.017	22.331	84.511	84.005	83.572	82.551
21.786	21.636	21.334	22.443	83.899	84.291	83.788	83.487
22.364	22.483	21.948	21.555	83.786	84.01	82.999	82.182
21.398	21.538	21.576	20.981	84.538	83.611	83.478	83.181
21.778	21.137	21.955	21.872	83.397	84.854	84.082	83.327
21.606	21.437	21.958	21.336	84.187	84.145	83.443	84.135
Mean Dry LRV	21.76685	Mean Wet LRV	21.8409	Mean Dry LRV	83.93305	Mean Wet LRV	83.4562
Colour	Yellow						
49.38	48.86	47.955	48.176				
48.99	48.65	48.343	48.471				
49.21	48.72	49.641	48.757				
49.26	48.95	49.097	49.679				
49.14	48.99	47.7	48.234				
49.04	49.10	47.88	48.309				
48.75	48.80	48.344	49.671				
48.92	48.71	49.416	48.323				
49.38	48.96	48.625	48.648				
48.21	48.91	48.231	48.806				
Mean Dry LRV	48.95	Mean Wet LRV	48.6153				



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; Ø 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.

