

Luminance Contrast Report

Product: Duratac Polymeric Individual Tactile
Product Code: TGSI-P/ - 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 Polymeric Individual Tactile

Product Description:
 Discrete Hazard Tactile - Polymer Construction



*Blue, Grey & White not pictured

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	3.710	2.475
Blue	10.862	10.287
Grey	14.268	14.045
White	91.879	91.801
Yellow	47.811	47.105

Table of LRV Results

Dry Measurements		Wet Measurements		Dry Measurements		Wet Measurements	
Colour Black				Colour Blue			
3.719	3.733	2.43	3.015	11.057	10.685	10.212	10.683
3.711	3.74	2.523	1.74	10.875	10.487	10.652	10.374
3.743	3.585	1.769	2.491	11.178	10.83	10.038	10.614
3.794	3.691	2.3	2.795	10.993	10.89	10.24	10.092
3.862	3.614	2.623	2.77	10.763	10.955	10.49	10.429
3.559	3.698	2.377	2.447	11.037	10.689	9.865	9.889
3.794	3.665	1.877	1.748	10.74	10.958	10.16	10.161
3.74	3.703	2.674	2.996	10.994	10.331	10.249	10.089
3.829	3.651	2.768	2.642	11.225	10.93	10.156	9.91
3.788	3.674	2.764	2.743	10.907	10.72	10.918	10.525
Mean Dry LRV	3.71	Mean Wet LRV	2.475	Mean Dry LRV	10.862	Mean Wet LRV	10.287
Colour Grey				Colour White			
14.983	14.593	14.296	14.018	91.58	91.573	91.574	91.317
14.268	13.817	13.753	13.788	91.822	91.771	90.766	90.872
14.154	14.155	14.16	14.225	93.377	93.472	93.29	93.191
14.583	14.46	13.769	13.769	91.214	90.919	92.139	92.08
14.135	14.15	14.043	13.964	91.821	91.616	91.452	91.52
14.986	14.576	13.956	14.003	91.753	91.724	91.324	91.48
14.012	13.982	13.992	13.97	90.968	90.73	91.88	91.96
15.033	14.805	14.49	14.184	93.282	93.306	93.085	93.21
14.236	13.844	14.053	14.452	91.782	91.736	91.065	90.489
13.825	13.799	13.649	14.371	91.698	91.43	91.771	91.563
Mean Dry LRV	14.268	Mean Wet LRV	14.045	Mean Dry LRV	91.879	Mean Wet LRV	91.801
Colour Yellow							
48.25	48.135	46.31	46.513				
48.134	48.705	47.495	47.545				
47.581	48.201	46.9	46.973				
48.299	48.27	45.88	47.469				
48.188	48.32	46.778	47.72				
48.804	48.037	47.401	47.402				
48.036	48.274	47.362	47.29				
48.134	48.127	47.148	46.682				
48.162	48.19	47.196	47.042				
48.236	48.279	47.51	47.478				
Mean Dry LRV	47.811	Mean Wet LRV	47.105				



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.

