

Luminance Contrast Report

Product: Carpex Ribbed Stair Nosing
Product Code: SN-CAR - Various
Address: 12 Thrikell St, Cooe TAS 7320
Testing Date: 20/10/2022

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: Carpex Ribbed Stair Nosing

Product Description:

Aluminium Stair Nosing with Vinyl Ribbed Insert -
To suit 5mm Carpet Tiles



*Black only 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	3.890	3.712
Grey	19.302	18.895
Yellow	51.279	50.924



Table of LRV Results

Dry Measurements		Wet Measurements		Dry Measurements		Wet Measurements	
Colour	Black			Colour	Grey		
3.898	3.914	3.908	3.66	19.712	19.82	18.431	18.85
3.914	3.897	3.695	3.58	19.285	19.615	18.692	19.415
3.799	3.915	3.634	3.688	19.817	19.662	18.654	19.451
3.796	3.93	3.813	3.704	19.634	19.282	18.818	18.743
3.814	3.904	3.905	3.848	19.485	19.28	18.872	19.177
3.814	3.9	3.771	3.83	19.778	19.476	19.329	19.225
3.863	3.898	3.675	3.722	19.838	19.455	19.077	18.726
3.903	3.928	3.811	3.268	19.818	19.455	18.877	19.174
3.937	3.936	3.873	3.589	19.525	19.26	18.605	18.501
3.915	3.929	3.839	3.433	19.732	19.402	18.388	18.892
Mean Dry LRV	3.89	Mean Wet LRV	3.712	Mean Dry LRV	19.302	Mean Wet LRV	18.895
Colour	Yellow						
51.588	51.269	51.377	51.176				
50.954	51.174	50.938	50.582				
51.609	51.07	51.244	50.455				
50.987	51.195	51.26	50.897				
51.293	51.357	51.244	51.236				
51.225	51.614	49.831	50.838				
51.327	51.415	51.032	51.393				
51.22	51.373	50.603	51.131				
51.118	51.433	50.318	51.231				
51.217	51.141	50.609	51.083				
Mean Dry LRV	51.279	Mean Wet LRV	50.924				



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.

