

# Luminance Contrast Report

**Product:** Appular Flat Carborundum Stair Nosing  
**Product Code:** SN-ACGF - Various  
**Address:** 8a Lara Way, Campbellfield VIC 3061  
**Testing Date:** 29/09/2022

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:** Appular Flat Carborundum Stair Nosing



**Product Description:**  
 Aluminium Stair Nosing with Carborundum Tape Insert - Either Comes in Black, Brass, Clear Anosided Product

\*Only Black 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	2.959	1.972
Grey	15.474	15.475
White	74.151	73.081
Yellow	40.717	40.070



## Table of LRV Results

Dry Measurements		Wet Measurements		Dry Measurements		Wet Measurements	
<b>Colour</b>	Black			<b>Colour</b>	Grey		
2.918	2.924	2.295	2.031	15.432	15.019	16.213	15.538
2.926	2.926	2.179	1.893	15.622	15.48	15.322	15.59
2.9	3.032	2.185	1.846	15.35	15.433	15.455	15.597
3.067	2.965	2.115	1.875	15.912	15.114	15.204	15.325
2.926	2.979	1.897	1.778	15.554	15.668	15.647	15.092
3.041	2.91	1.918	1.863	15.469	15.846	15.401	15.353
3.015	2.948	1.891	1.906	15.334	15.411	15.323	15.501
2.914	2.953	2.007	1.952	15.499	15.639	15.391	15.635
3.039	2.92	2.029	1.904	15.668	15.356	15.224	15.804
3.037	2.845	2.017	1.856	15.39	15.279	15.466	15.423
<b>Mean Dry LRV</b>	2.959	<b>Mean Wet LRV</b>	1.972	<b>Mean Dry LRV</b>	15.474	<b>Mean Wet LRV</b>	15.475
<b>Colour</b>	White			<b>Colour</b>	Yellow		
74.487	74.409	73.382	73.197	40.784	40.3	40.583	40.372
74.423	74.059	72.207	73.536	40.324	40.401	40.446	39.816
74.527	73.399	73.886	73.383	41.257	40.862	40.324	40.123
74.403	73.689	73.677	74.001	40.985	41.31	39.901	39.793
74.146	74.388	73.266	73.704	40.517	40.406	40.098	39.412
74.03	74.431	73.389	74.083	40.569	40.472	39.921	38.926
73.326	74.508	72.84	73.083	40.855	40.93	40.065	40.365
74.216	73.971	72.038	71.437	41.38	40.794	40.396	40.393
74.508	73.561	73.031	72.071	40.255	40.724	39.993	40.26
74.612	74.513	73.326	72.082	40.706	40.161	40.221	39.995
<b>Mean Dry LRV</b>	74.151	<b>Mean Wet LRV</b>	73.081	<b>Mean Dry LRV</b>	40.717	<b>Mean Wet LRV</b>	40.070



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.

