

LumiLab

Luminance Reflectance Value (LRV) Test Report

Integrated Tactile Indicator Tile - White

14th December 2020

LumiLab

LRV
Tests

Luminance
Contrast

14th December 2020

Tested for: Composite Materials Engineering Pty Ltd

Luminance Reflectance Value (LRV) Test Report: Integrated Tactile Indicator Tile - White

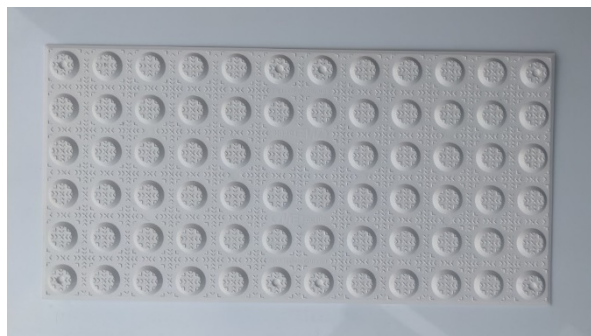
Thank you for the opportunity to undertake LRV testing of the sample provided to our office.

Description of Sample

The sample is a 600mm long x 300mm wide integrated tactile ground surface indicator (**TGSIs**) tile.

Colour: White

Type: Warning TGSIs



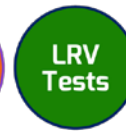
Technical Reference

This report references Appendix E of Australian Standard (AS) 1428.4.1-2009 '*Design for access and mobility, Part 4.1: Means to assist the orientation of people with vision impairment— Tactile ground surface indicators*' (**AS 1428.4.1**)

Laboratory Testing Equipment

LumiLab uses compliant testing apparatus meeting AS 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 laboratory 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 in fifteen (15) random locations in dry and wet conditions.

Testing Ambient Conditions

The testing was undertaken under the following conditions:

- Date tested: 13th December 2020
- Consultant: Lee Wilson
- Temperature: 26.9°C (at commencement of test)
- Humidity: 37% (at commencement of test)

LRV Test Results

The following are the test results of the tristimulus value Y (LRV):

Dry LRV Measurements (Yd)						
79.33	79.51	78.37	78.94	78.15		
77.93	79.43	79.32	79.99	79.28		
78.28	80.14	79.49	78.56	79.73	Yd	79.10

Dry LRV mean average

The LRV mean dry average is: **79.10**

Wet LRV Measurements (Yw)						
77.71	79.39	79.81	79.20	79.12		
78.73	79.28	78.11	79.85	77.62		
78.38	77.32	78.81	79.81	78.04	Yw	78.75

Wet LRV mean average

The LRV mean wet average is: **78.75**

Yours sincerely,

Lee Wilson, Director / Access Consultant
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Statement of Limitations

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It is important to note that the material tested is subject to surface variations and Egress Group Pty Ltd / LumiLab cannot be held accountable or responsible for any variations in LRVs across different samples of the same material tested.