

# LumiLab

## Luminance Reflectance Value (LRV) Test Report

Integrated Tactile Indicator Tile - Yellow

14<sup>th</sup> December 2020

LumiLab

LRV  
Tests

Luminance  
Contrast

14<sup>th</sup> December 2020

Tested for: Composite Materials Engineering Pty Ltd

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

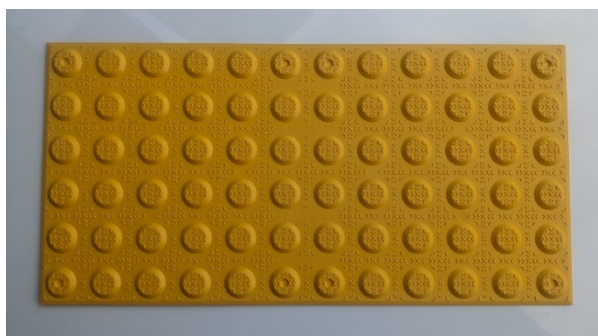
Thank you for the opportunity to undertake LRV testing of the sample provided to our office.

### Description of Sample

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

Colour: Yellow

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: 13<sup>th</sup> 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)					
52.21	52.81	52.90	53.71	53.89	
52.84	52.16	52.49	51.79	51.48	
52.73	51.73	51.49	52.54	52.90	<b>Yd 52.51</b>

Dry LRV mean average

The LRV mean dry average is: **52.51**

Wet LRV Measurements (Yw)					
52.48	52.19	52.28	52.02	51.31	
51.33	51.52	52.51	51.95	52.03	
52.44	51.65	52.30	52.86	53.45	<b>Yw 52.15</b>

Wet LRV mean average

The LRV mean wet average is: **52.15**

Yours sincerely,



**Lee Wilson, Director / Access Consultant**  
MAIBS C.Build E MCABE PEng(UK) MSPE MWOBO

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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.