

# Test report

## Light Reflectance Value

### What is Light Reflectance Value (LRV)?

Light Reflectance Value (LRV) is the total quantity of visible light reflected by a surface, e.g. floorings, ceilings, walls and furniture, at all wavelengths and directions when illuminated by a light source.

The LRV scale runs from 0, which is a perfectly absorbing surface that could be assumed to be totally black, up to 100, which is a perfectly reflective surface that could be considered to be the perfect white. Because of practical influences in any application, black is always greater than 0 and white never equals 100. Additional to colour, the structure and gloss of the product or surface are determining factors for LRV.

The LRV value is directly measured according to British Standard 8493:2008 'Light Reflectance Value (LRV) of a surface'.

The L\*-value (colour depth) is sometimes being used to calculate visual contrast, but should not be mixed up with the LRV as it is significantly higher. However, the L\*-value can be used to calculate the LRV of a surface (also referred to as the 'ρ-value' (rho)), as a close approximation of the directly measured LRV according to BS 8493.

Formula:  $\rho (\rho) = 100 \times ((L+16)/116)^3$

Product name: **Essence Structure**

Results:

| Colour | L*    | LRV   | Colour | L*    | LRV   |
|--------|-------|-------|--------|-------|-------|
| 1908   | 52.21 | 20.33 | 9094   | 44.10 | 13.91 |
| 2051   | 30.97 | 6.64  | 9096   | 33.08 | 7.57  |
| 2924   | 53.08 | 21.12 | 9501   | 19.68 | 2.91  |
| 5011   | 37.40 | 9.76  | 9503   | 32.69 | 7.40  |
| 7074   | 39.18 | 10.77 | 9506   | 40.33 | 11.45 |
| 8802   | 25.91 | 4.72  | 9920   | 53.64 | 21.63 |

Measurements tool/equipment/conditions

- standard illuminant CIE D65
- 10° standard colorimetric observer
- 100% UV
- specular component included
- aperture: large

For more information on LRV in general and test results per product, visit [www.desso.com](http://www.desso.com)