

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: **DESSO Fields EcoBase**

Results:

Colour	L*	LRV
1101	55.38	23.30
1510	53.55	21.55
2056	35.05	8.52
2087	26.71	4.99
2093	30.32	6.37
2127	17.01	2.30
2912	37.36	9.73
2915	46.75	15.83
2934	40.26	11.41

Colour	L*	LRV
3913	34.12	8.06
4202	27.22	5.17
4301	28.10	5.49
4438	39.77	11.11
5012	38.76	10.52
6011	45.86	15.16
6218	51.64	19.82
7072	43.24	13.32
7231	31.09	6.69

Colour	L*	LRV
7814	38.46	10.35
7831	24.89	4.38
7944	41.42	12.13
8224	35.19	8.59
8332	30.63	6.50
8812	24.08	4.12
8822	36.27	9.15
8834	46.76	15.84
8841	22.25	3.58

Colour	L*	LRV
8901	23.58	3.97
8904	41.98	12.48
9021	20.61	3.14
9024	36.32	9.17
9098	58.60	26.60
9111	25.63	4.62
9515	52.04	20.18
9522	28.20	5.53
9945	43.08	13.21

Colour	L*	LRV
9980	31.61	6.91

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.tarkett.com