

Diffusion film for LED lighting

OptSaver™

L-series

Energy efficient
light diffusion

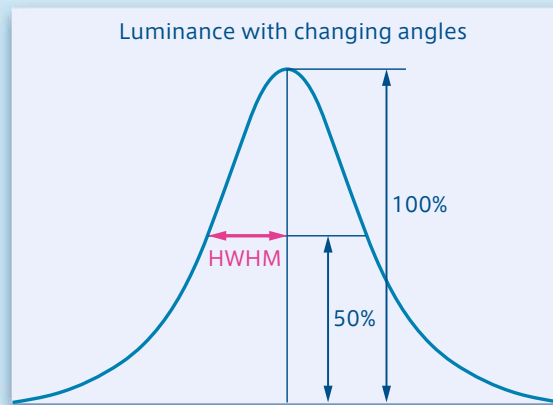
Wide range of illumination
angles and hiding ratios
for accurate light output

Thin and flexible roll material
enables creative design
and allows efficient
production process.

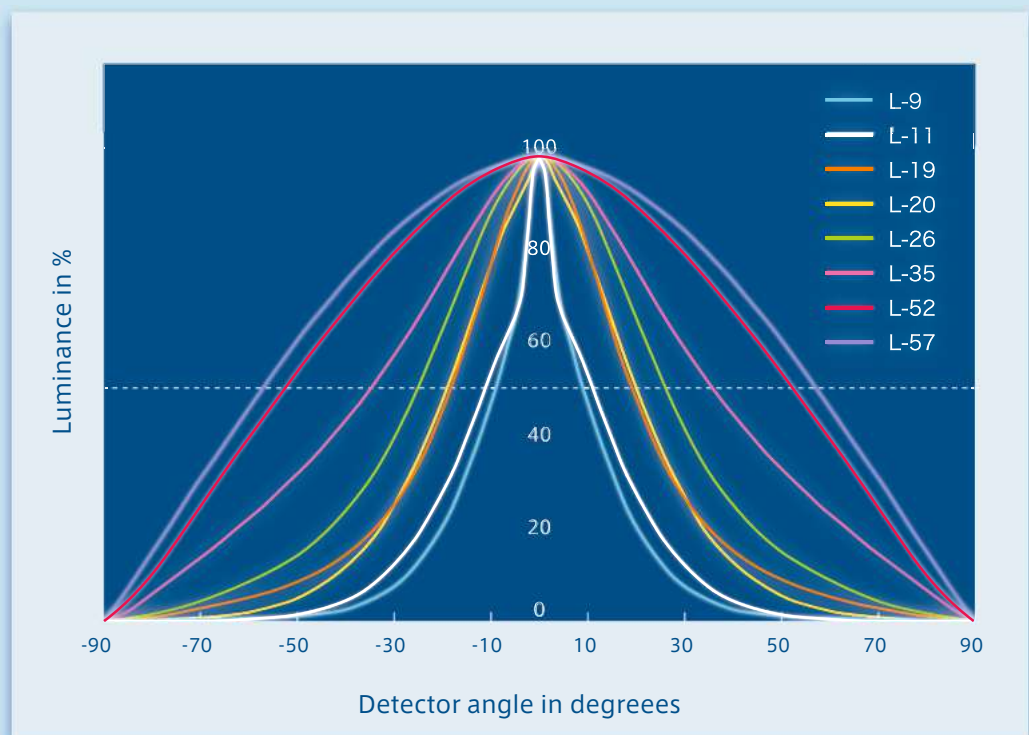
Physical Properties

Grade	Base film thickness	Half width at half maximum * (HWHM)	Total light transmittance (Tt)	Haze	Gloss
L-9	100 μm	9°	99.0%	93.5 %	11.0
L-11	100 μm	11°	99.0 %	92.8 %	9.2
L-19	75 μm	19°	87.1 %	96.0 %	3.1
L-20	100 μm	20°	99.0 %	95.2 %	6.4
L-35	100 μm	35°	67.6 %	95.6 %	3.1
PCL-52	250 μm	52°	67.6 %	93.4 %	1.4
L-52	100 μm	52°	67.6 %	93.4 %	1.4
L-57	100 μm	57°	60.0 %	93.1 %	1.5

* HWHM: Illumination angle measured according to DIN5036



Diffusion Angle

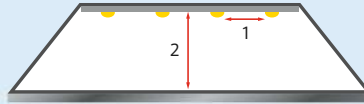


Hiding Ratio

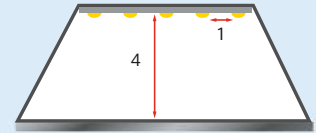
A low hiding ratio indicates efficient hot spot prevention and high diffusion. This allows to design compact luminaires without quality compromises. The wide range of our diffusion films allows you to fine tune the output characteristics.



1:1 Ratio
Strong diffusion



1:2 Ratio
Medium diffusion



1:4 Ratio
Low diffusion

Hiding Ratio Examples

Grade	L-9	L-11	L-19	L-20	L-35	PCL-52	L-52	L-57
Hiding ratio	1:12	1:12	1:3	1:7	1:2	1:3	1:3	1:1.2

Grade L-9 Hiding ratio 1:12



LED Light Source

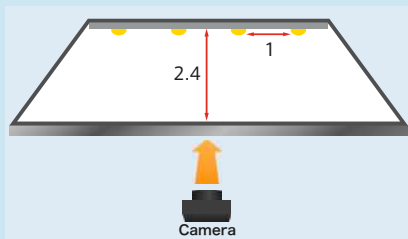
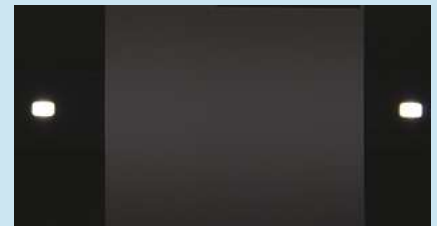
Grade L-35 Hiding ratio 1:2



Grade L-11 Hiding ratio 1:12

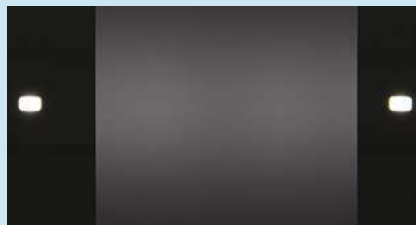


Grade PCL-52 Hiding ratio 1:3

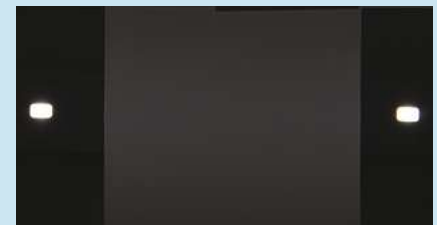


Test configuration

Grade L-19 Hiding ratio 1:3



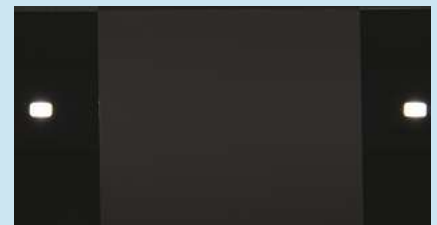
Grade L-52 Hiding ratio 1:3



Grade L-20 Hiding ratio 1:7



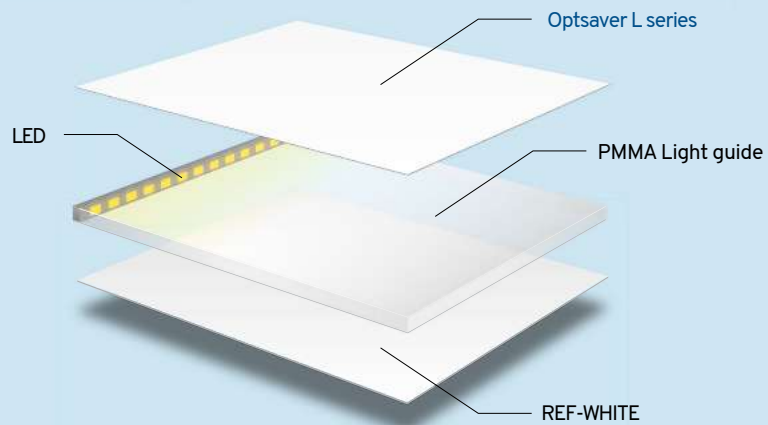
Grade L-57 Hiding ratio 1:1.2



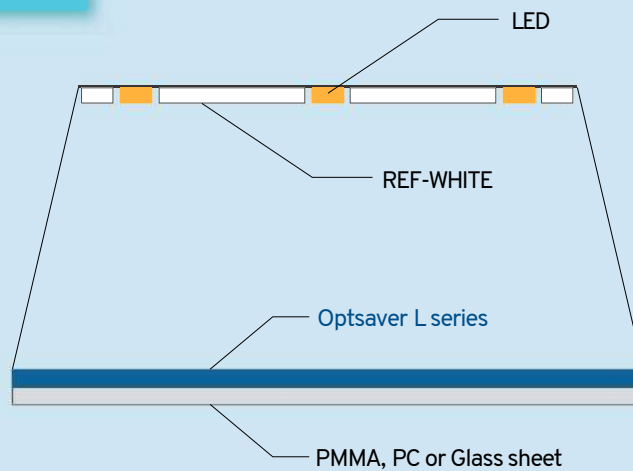
REF-WHITE

Product Type	Thickness (Total Thickness)	Spectral Reflection Factor			Gloss
		450nm	550nm	650nm	
RW125	125	94%	93%	92%	69.3
RW188N	188	97%	96%	95%	23.5

Edge lighting



Direct illumination



*The values listed in this catalog are measured values and not guaranteed values.
Note that the contents listed herein are subject to modification without prior notice.*

KIMOTO

<http://www.kimoto.ch>

Kimoto LTD
Thurgauerstrasse 117
CH-8152 Opfikon
Switzerland
Tel: +41 44 817 99 99

Inquiries