OptiLUX
Anti-Reflective coating for light enhancement

Description
OptiLUX is a siloxane polymer solution designed as an Anti-Reflective (AR) easy-to-apply coating that enhance light transmittance and reduce back-reflection for a wide variety of lighting fixture materials, such as glass, polycarbonate, PMMA and polyester. OptiLUX allows Lighting and Luminaire manufacturers to achieve important energy savings through improved Lumen/Watt performance without sacrificing creative functional design. OptiLUX can be coated using spray or dip coating methods and requires low curing temperatures. OptiLUX coating enhances light transmittance over a broad wavelength range.

How to Apply
The Solution is applied as a single-layer coating by using roll-to-roll (R2R) or sheet coating process followed by thermal curing steps. Coating can be carried out using slot/die, gravure, reverse, gravure, bar or other means of coating. After final curing, a stable coating performance is achieved. R2R processing enables coating in high volumes whereas sheet processing is easily set up for small series production and R&D purposes.

Main Applications
- Lighting Fixtures / Luminaires

Key features of OptiLUX
- Increased Luminous efficacy 8-10%
- Improved lumen / watt performance
- Reduce energy consumption
- Cost savings through improved energy efficiency
- Easy to apply and requires low curing temperatures
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Transmittance (%)

PMMA substrate coated vs uncoated

PC substrate coated vs uncoated

Glass substrate coated vs uncoated

Lighting performance
Luminous efficacy (lm/W) improvement 8% with OptiLUX

<table>
<thead>
<tr>
<th>Parameters</th>
<th>without OptiLUX coating</th>
<th>with OptiLUX coating</th>
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</thead>
<tbody>
<tr>
<td>Lamp luminous flux</td>
<td>2588 lm</td>
<td>2803 lm</td>
</tr>
<tr>
<td>Luminaire luminous flux</td>
<td>2608 lm</td>
<td>2825 lm</td>
</tr>
<tr>
<td>Power</td>
<td>22 W</td>
<td>22 W</td>
</tr>
<tr>
<td>Luminous efficacy</td>
<td>118.5 lm/W</td>
<td>128.4 lm/W</td>
</tr>
<tr>
<td>Colourimetric data</td>
<td>1: CCT 3000K, CRI 100</td>
<td>1: CCT 3000K, CRI 100</td>
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</tbody>
</table>

Storage and handling
Solution should be stored below room temperature (+20°C) in a well-ventilated place. Keep containers tightly closed and protected from sources of heat and light. For working safety, consult product Material Safety Data Sheet.

The information given is based on our best knowledge at the date of issue, but carries no guarantee or acceptance of responsibility. For further data on coating materials toxicological, ecological and safety aspects, please consult the MSDS. It is the responsibility of the user of the product to ensure to satisfaction that the product is suitable for the intended purpose and methods of use. We do not accept responsibility for any harm caused by the use of this information.