

Table 6

Typical reflectance values for materials used in reflectors according to DIN 5036-3 or ASTM-E 1651.

Reflector type	Material	Reflectance
<i>Specular(1)</i>	Commercial grade aluminium	0.70 – 0.78
<i>Specular(1)</i>	Aluminium with super purity coating	0.80 – 0.95
<i>Specular(1)</i>	Aluminium with silver coating	0.90
<i>Specular(1)</i>	Glass or plastic with aluminium coating	0.85 – 0.90
<i>Spread(2)</i>	Peened aluminium	0.90 – 0.95
<i>Spread(2)</i>	Etched aluminium	0.82 – 0.87
<i>Spread(2)</i>	Brushed aluminium	0.84 – 0.94
<i>Spread(2)</i>	Satin chromium	0.60 – 0.78
<i>Spread(2)</i>	Aluminium painted steel	0.60 – 0.70
<i>Diffuse(3)</i>	White paint on steel	Up to 0.84
<i>Diffuse(3)</i>	Glossy white plastic	Up to 0.90

*NOTE 1 Specular reflection is used to provide efficient and controlled light distribution, depending on design of luminaire and reflector, glare control might be required, surface is polished or similar to a mirror.*

*NOTE 2 Spread surface means semi-specular or brushed surface, directional- or omni-directional properties. Light distribution is less controllable as with specular reflection, depending on design of luminaire and reflector, glare control might be less important.*

*NOTE 3 Diffuse reflection is based on 'lambertian surface' (lambert's law) and means the light distribution is only controlled by adjustment of the diffuse reflector in connection with the light source. This type is mainly used for semi-direct lighting effects. It is the less efficient way of light distribution control. The diffuse reflector may produce non-controllable glare, depending on placement, design and point of view.*