

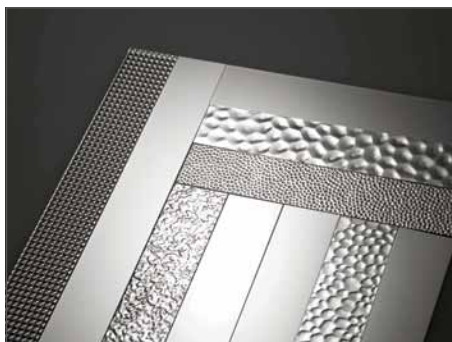


vegaLED



vegaLED LED lighting, with its high light output ratio, is growing fast and **Reflectors** lighting manufacturers are continually seeking new applications. With most of the light being emitted for the front of the LED, lenses have been the favoured medium used to project the light but, just as astronomical telescopes have adopted reflecting lens technology to increase their power and resolution, so the broad development of LED lighting applications can expand with reflecting optics complementing and replacing plastic lenses. **vegaLED98** reflectors, with over 98% reflectivity, offer you the same step change in technology to open up the possibilities of more controlled light distribution and higher efficiency achievement with LED sources. **vega** products are also available in a 95% reflective version. **vegaLED95** can be useful for installation in luminaires for outdoor use where more aggressive conditions are encountered.

Almeco's vegaLED High reflectance **vegaLED** aluminium reflector materials are available in a range of surface **Product Range** finishes from high quality mirrors to mechanically textured diffusing surfaces, offering the kind of range and performance you will not find with other types of reflector product. Combining these surfaces with inventive reflector designs adapted to small but high power LEDs open the possibility of creating new efficient lighting for the increasingly energy conscious world.



Surface finishes

The surfaces can be grouped into 3 basic types:

- ▶ Mirror finish for precise reflection without diffusion or scattering;
- ▶ Micro-textured or matt surfaces which can be used to soften reflection and increase diffusion;
- ▶ Embossed textured materials that can be used for extensive diffusion of light from integral multi-faceted surfaces.

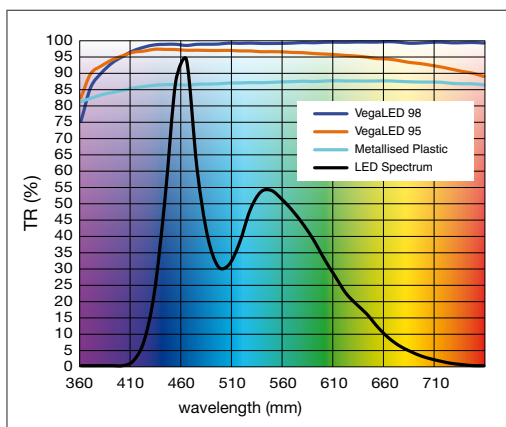
Maximised Reflectivity With over 98% reflectivity across the full output spectral range for all types of LED, **vegaLED98** is the ultimate lighting reflector material, giving 15% more light on every reflection compared to metallised reflectors. Considering that in a full reflector system a significant part of the light is reflected several times, this gives a clear efficiency advantage to LED systems employing **vegaLED98**.



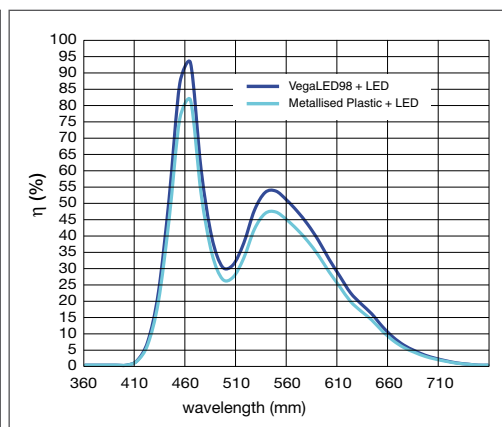
Silver reflects light almost equally across all the visible wavelengths and by incorporating silver as **vegaLED 98** the high reflectance layer in its PVD coated layer system, **vegaLED98** products have this same **spectral uniformity** characteristic. In addition, the optically enhancing and protecting layers applied to keep the silver in perfect condition and optimise its reflectance lead to a faint yellow hue in light which is reflected at a shallow angle from the surface. This helps to give a slightly warmer light, while maintaining the greatest efficiency, compared to unreflected LED output or other reflector materials such as aluminium coated products which tend to absorb more of the red light.

Almeco offers **vegaLED98** as a sheet or coil product for manufacturers who already have mature **Partnership from reflector conception** designs and need a reliable high performance material for their manufacture. Alternatively, Almeco **reflect+A** can, through its **reflect+A** concept, offer a service of partnership in design, development, **to full production** prototyping, tooling and full production for customers who prefer to work in partnership with an experienced company in the reflector manufacturing sector.

No matter how small your project, contact us to see how we can help you.



Spectral Data Graph



Spectral Data Graph System



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