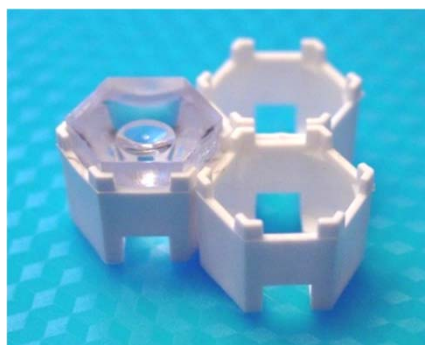
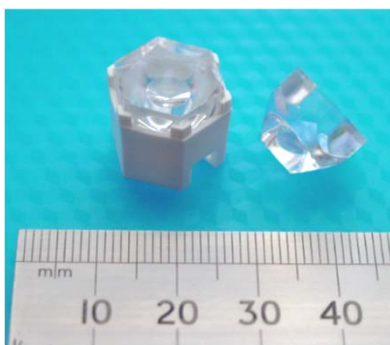


Polymer Optics “Modular LED Optics”® design, based on a patented hexagonal format, allows maximum packing density and assembly flexibility for a wide range of applications.

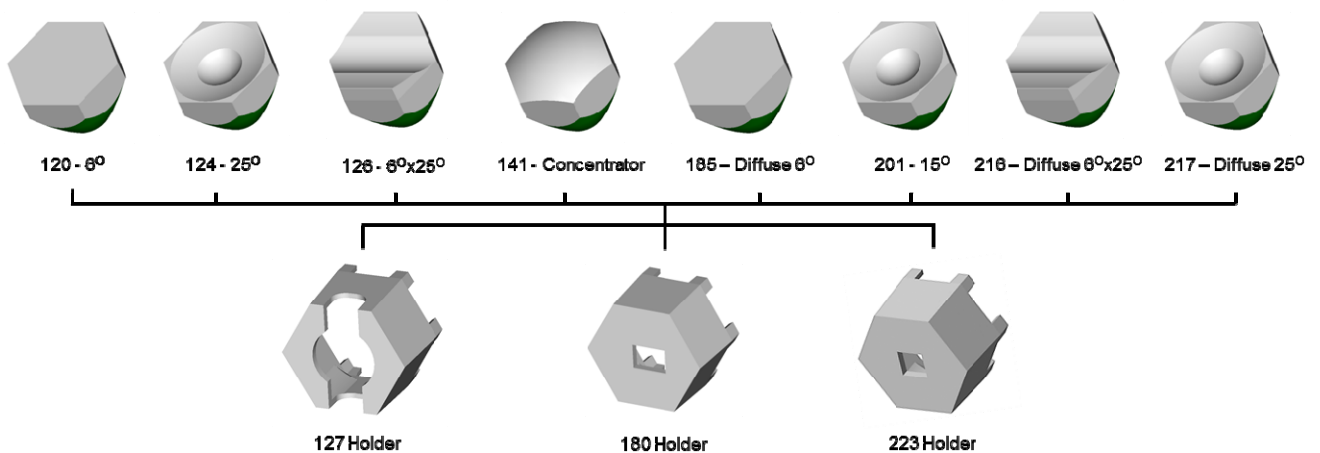
The optical components are made from modular tooling sets, so that by simply changing inserts in the production tooling, different optical functions can be produced. This also allows custom beam shapes to be quickly and cost effectively produced for customers’ specific beam characteristics requirements.

Typically, the POL optics are supplied pre-assembled into a holder component to mount the optic correctly to the chosen LED package, to take care of focal position and alignment to the source. Similarly, the holder components are produced from modular tooling sets to cover a wide range of current LED package shapes and sizes. But, if we don’t have a particular holder for your chosen LED type, we can tool a suitable part quickly and cost effectively to enable your product designs.

To see the full range of POL’s standard **LED optics** for each LED type, please follow the link.

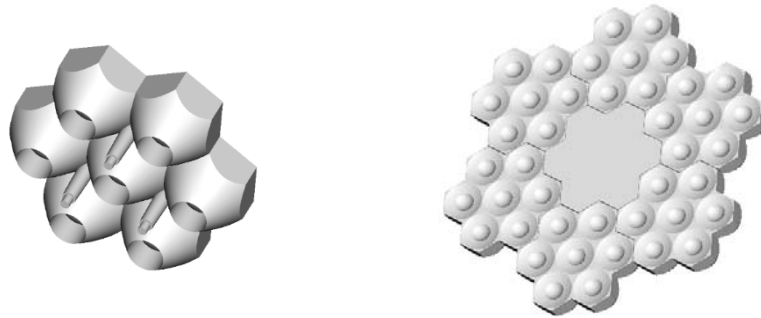


Small 12.9mm AF hexagon optic format in 15.2mm AF Holder enables optics to be close-packed in arrays

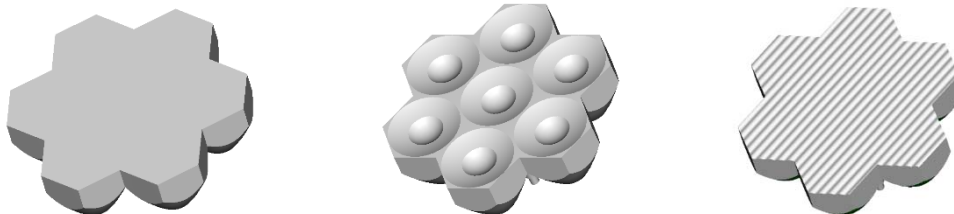


Polymer Optics “Cluster Optic”[®] arrays have been developed to be used as single multi-LED optics or to easily assemble into high power luminaire arrays.

The POL patented hexagonal format allows the “Cluster Optics”[®] to be assembled together to give a uniform, aesthetic large area of light output. The different optical functions can be mixed in the assembly and combined with other POL custom designs to meet the needs of a wide range of illumination applications. The simple three-legged mounting to the PCB eases the assembly time and cost.



Similar to the POL single cell hexagonal optics, the “Cluster Optics”[®] are produced from modular tooling sets, so custom beam shapes can be quickly and cost effectively produced for customers’ specific beam characteristics requirements.



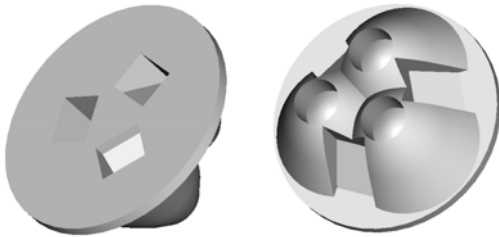
However, in applications where only a single POL “Cluster Optic”[®] is required for spot-lights, etc., we supply a bezel component to convert the hexagonal outline of the optic into a simple round format for easy integration to round luminaire bodies. POL can also manufacture custom bezel parts to suit your final luminaire design.



To see the full range of POL’s standard **LED optics** for each LED type, please follow the link.

Polymer Optics Limited can also provide custom designed LED optics solutions, based on its existing modular product designs or completely newly designed and tooled products. POL's very wide range of product and process know-how means that new product solutions can be quickly formulated and tooled for specific product applications.

Typical examples of POL custom produced products, based on POL standard LED optic techniques.



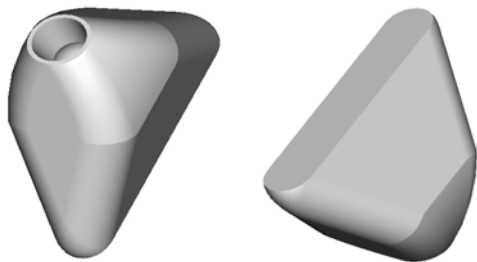
RGB Colour Mixer shower optic
for Hansa, GmbH



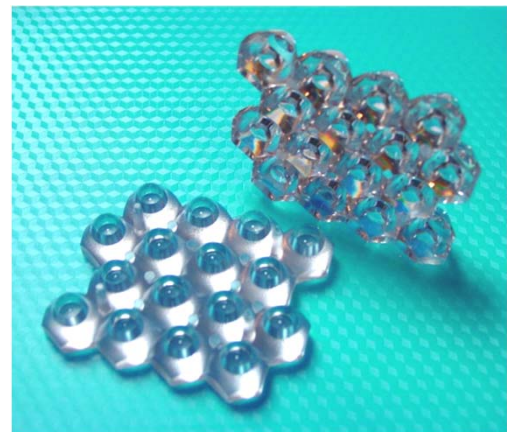
Custom reflector for MR16
type product



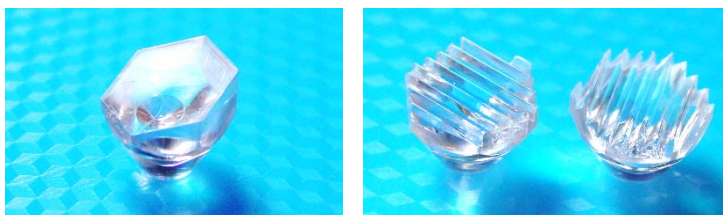
Street Light LED
optic module



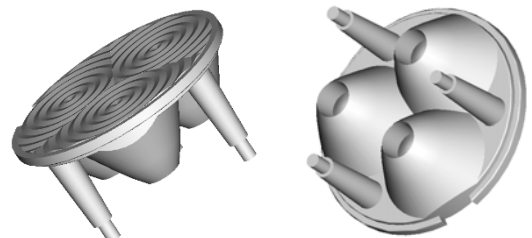
Light-input optic for large area
backlighting



Optic array for medical
phototherapy application



Custom LED optics from POL
modular production tooling



Custom MR16/GU10 light fitting optic