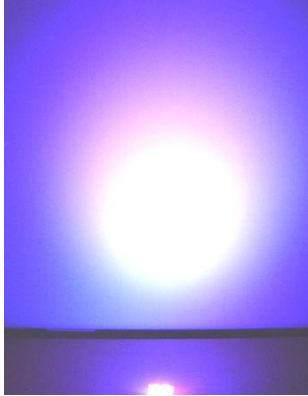
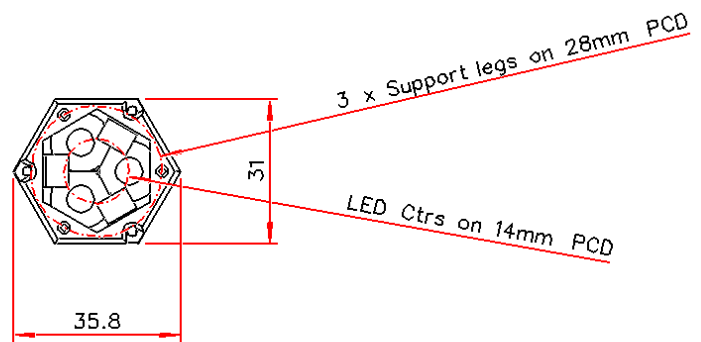
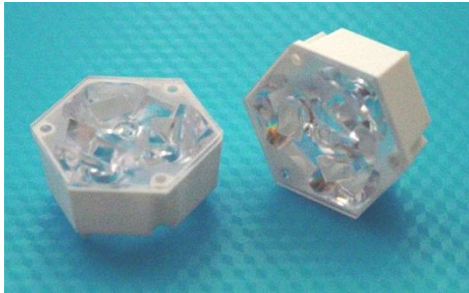


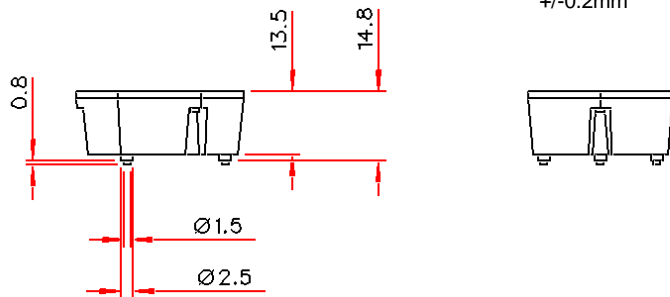
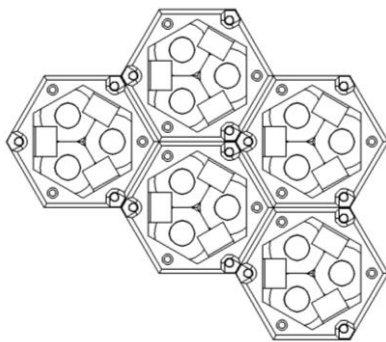
## Narrow Angle LED Colour Mixer Assembly - Part No. 158



- Designed for lower profile Lambertian LED packages, such as:  
Cree XR, XR-C, XR-E  
Osram Dragon types
- High light collection efficiency of >85%
- Precision moulded in optical grade Polycarbonate for thermal stability and system durability
- Part of the Polymer Optics “Modular LED Optics”® range



Typical dimensional tolerances to +/-0.2mm

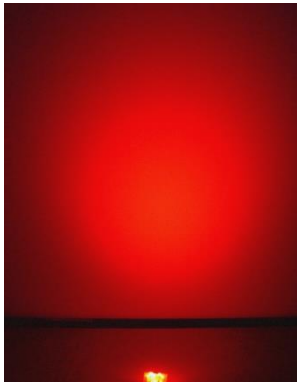


- POL’s novel hexagonal design allows the optics to be clustered together to make larger narrow angle colour mixing arrays

Due to continuous product improvement, POL reserve the right to change specifications without notice.

© Copyright Polymer Optics Limited 2016

## Narrow Angle LED Colour Mixer Assembly - Part No. 158



Red



Green



Blue



Red/Blue



Green/Blue



Red/Green



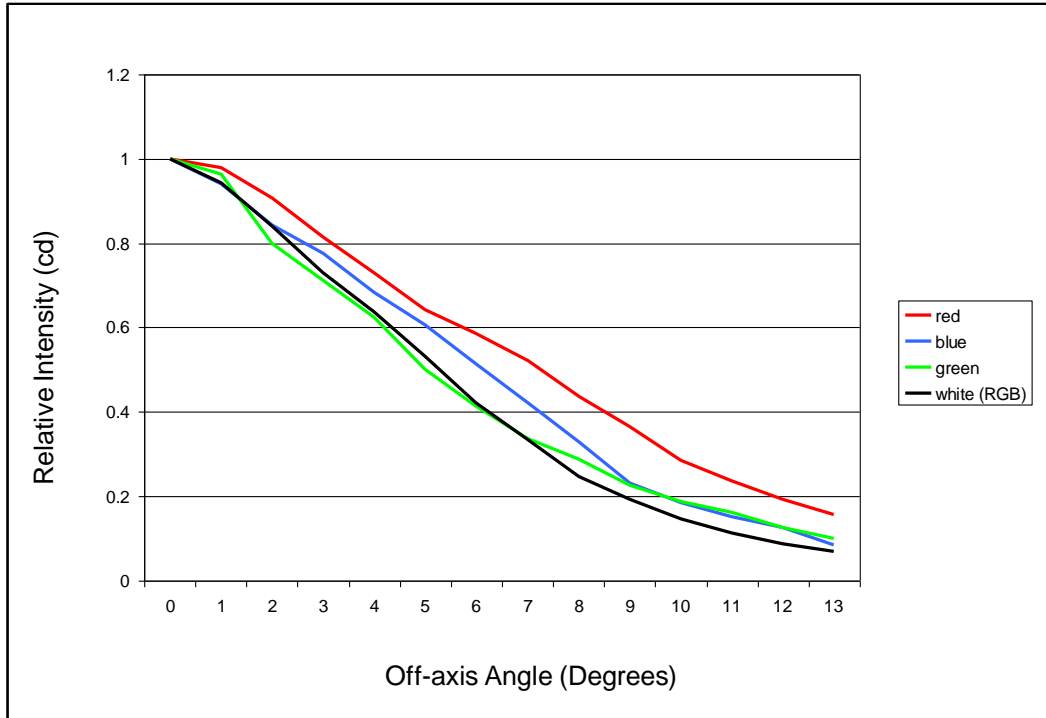
Red/Green/Blue

- Excellent colour mixing performance with combinations of single colour LEDs, even over short distances
- Narrow angle basic beam angle can be converted to wider beam angles or elliptical profiles with POL converter optics and filters
- Can also be used with White LED's to improve bin mixing and reduce colour temperature variations and provide variable colour temperature systems

Due to continuous product improvement, POL reserve the right to change specifications without notice.

© Copyright Polymer Optics Limited 2016

**Narrow Angle LED Colour Mixer Assembly - Part No. 158**



**Typical beam profiles with Red, Green and Blue 1mm<sup>2</sup> die LED's - Red, Green, Blue**

Other output beam angles can be provided using POL's standard Beam Converter optics or custom beam angles can be produced cost effectively from POL's modular production tooling sets.

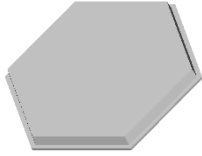
Please enquire for details

In order to determine if the particular beam properties and performance of this optic are suitable for your application with your chosen LED type, POL suggests that you obtain samples from POL or their distributors for your own product testing, as properties may vary with different LED types.

Due to continuous product improvement, POL reserve the right to change specifications without notice.

© Copyright Polymer Optics Limited 2016

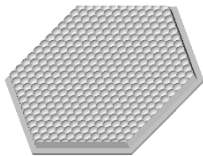
**Narrow Angle LED Colour Mixer Assembly - Part No. 158**



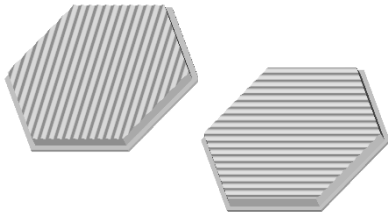
Plain Filter Holder - 160

Can be used with Luminix Light Shaping Diffuser films to produce a wide range of beam profiles - [www.luminixco.com](http://www.luminixco.com)

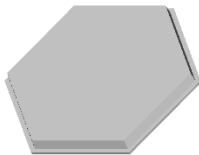
Can be used with colour filters to adjust colour temperature of output



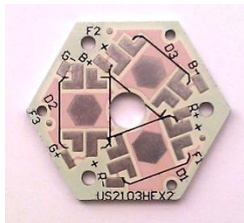
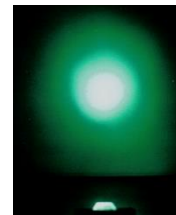
Wide Beam Diffuser - 161



Elliptical Beam Diffusers – 162 & 162B



Soft Beam Diffuser - 163



POL also supplies a number of MCPCBs designed to suit different LEDs for the Colour Mixer products range

Due to continuous product improvement, POL reserve the right to change specifications without notice.

© Copyright Polymer Optics Limited 2016