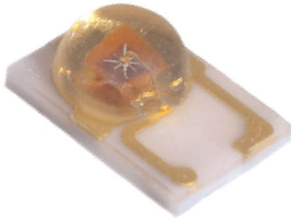


Our Focus is in Plastics

Polymer Optics Ltd.

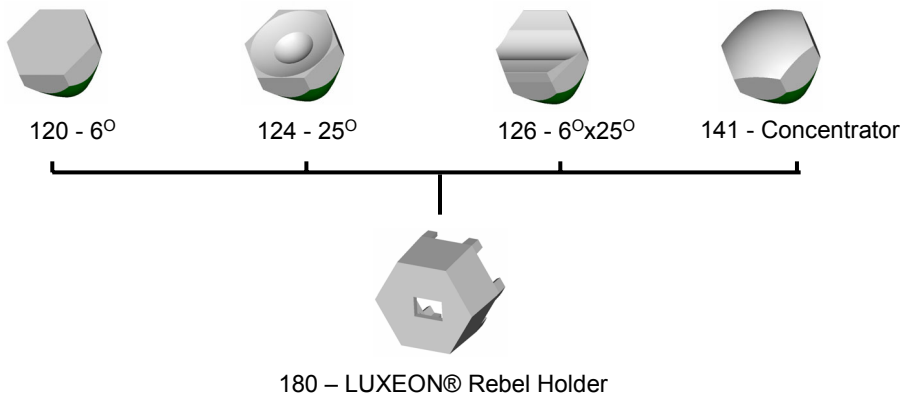
6 Kiln Ride, Wokingham,
Berks., RG40 3JL, England
Tel/Fax: +44 (0) 1189 893341
www.polymer-optics.co.uk

LED Optics Range for LUXEON® Rebel

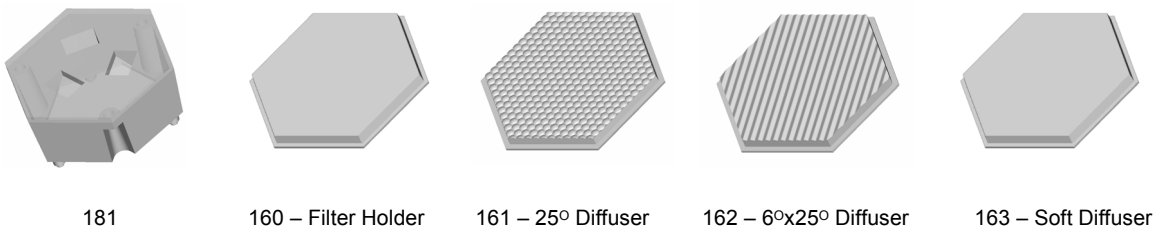


Polymer Optics “Modular LED Optics”® range now supports the revolutionary new LUXEON® Rebel LED. The ultra compact, surface mount, high power LED from Philips -Lumileds.

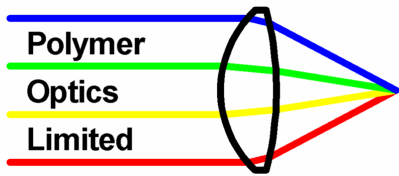
POL LED Optics range has been extended with the new 180 - Rebel Holder to enable the small Single Cell hexagonal optics range to be used with the LUXEON® Rebel LEDs.



Also, POL’s unique Colour Mixer optic range has been adapted to suit the LUXEON® Rebel package to provide compact colour mixing solutions for high power, miniature, low cost, luminaire products.



Polymer Optics Limited is a Certified Future Electronics LUXEON® Solution Partner

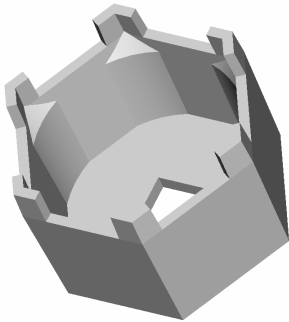


Our Focus is in Plastics

Polymer Optics Ltd.

6 Kiln Ride, Wokingham,
Berks., RG40 3JL, England
Tel/Fax: +44 (0) 1189 893341
www.polymer-optics.co.uk

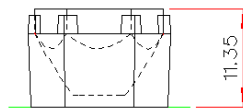
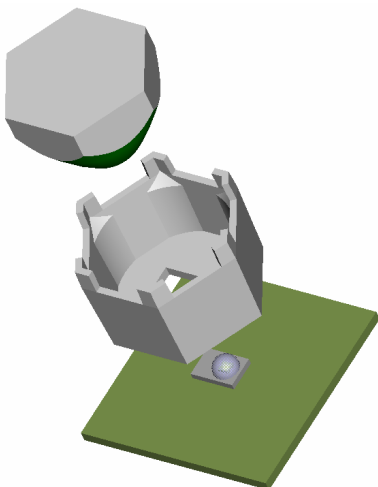
Holder for LUXEON® Rebel – Part No. 180



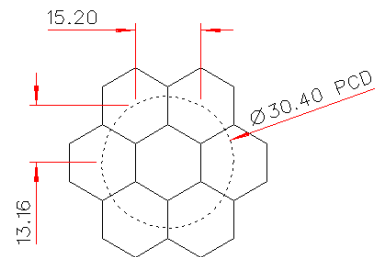
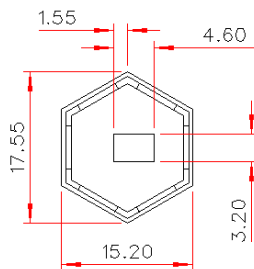
- Designed for use with Polymer Optics “Modular LED Optics”® and other custom Polymer Optics designs
- Designed for the LUXEON® Rebel LED
- Simply mounts onto PCB and self-aligns to LUXEON® Rebel
- Precision moulded in optical grade Polycarbonate for thermal stability and system durability
- Part of the Polymer Optics “Modular LED Optics”® range

Polymer Optics “Modular LED Optics”® design, based on a hexagonal format, allows maximum packing density and assembly flexibility

Other Holders are available for the POL Optics range to suit the LUXEON® I, III, V and K2 LEDs in Emitter and Star formats (part numbers 121, 128 and 151)



OPTIC AND HOLDER ASSY.

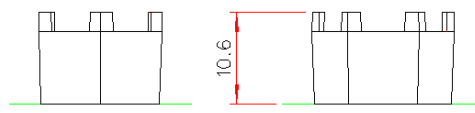


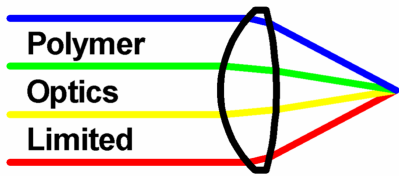
NESTED COMPONENTS ON 30.4MM PCD

Typical dimensional tolerances to +/-0.2mm



Polymer Optics Limited is a Certified Future Electronics LUXEON® Solution Partner



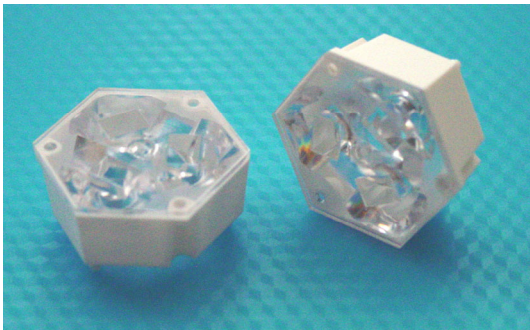


Our Focus is in Plastics

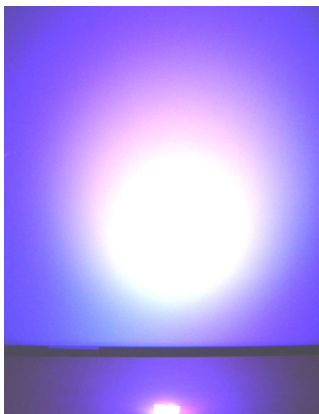
Polymer Optics Ltd.

6 Kiln Ride, Wokingham,
Berks., RG40 3JL, England
Tel/Fax: +44 (0) 1189 893341
www.polymer-optics.co.uk

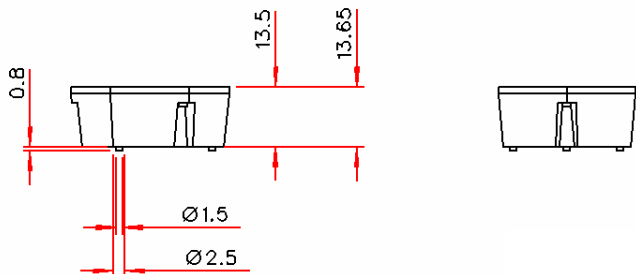
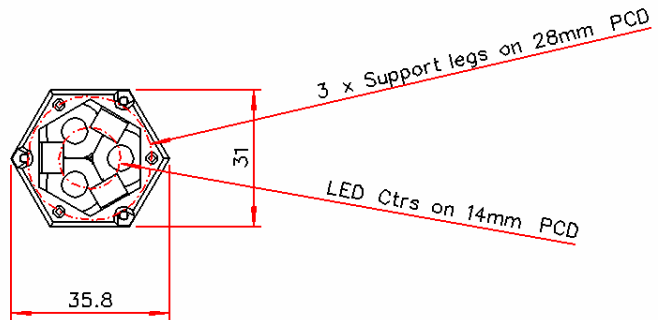
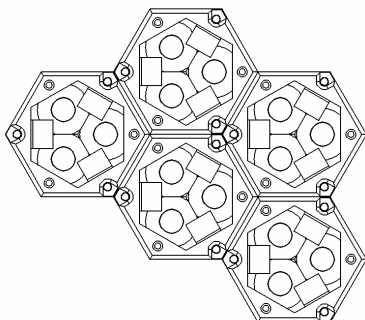
Narrow Angle Colour Mixer Assembly for LUXEON® Rebel LED - Part No. 181



- Designed for LUXEON® Rebel LED devices
- High collection efficiency and narrow angle beam output
- Precision moulded in optical grade Polycarbonate for thermal stability and system durability
- Part of the Polymer Optics “Modular LED Optics”® range



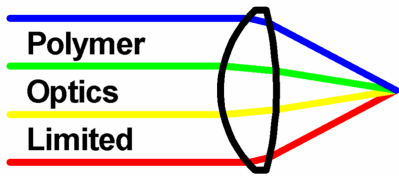
- POL's novel hexagonal design allows the optics to be clustered together to make larger narrow angle colour mixing arrays



Polymer Optics Limited is a Certified Future Electronics LUXEON® Solution Partner

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

© Copyright Polymer Optics Limited 2007

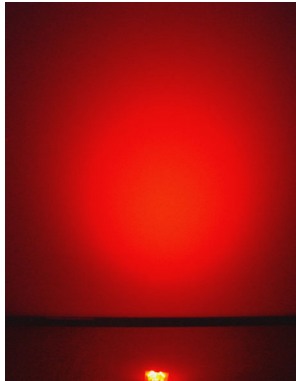


Our Focus is in Plastics

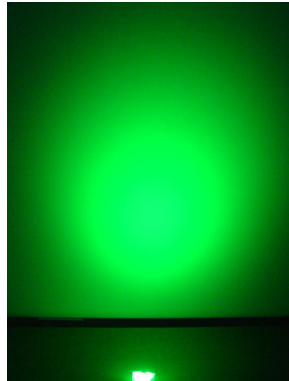
Polymer Optics Ltd.

6 Kiln Ride, Wokingham,
Berks., RG40 3JL, England
Tel/Fax: +44 (0) 1189 893341
www.polymer-optics.co.uk

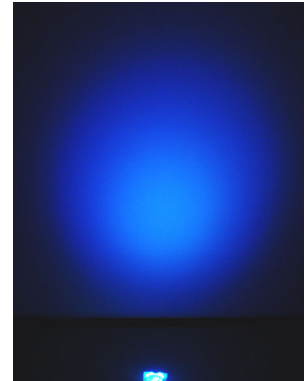
Narrow Angle Colour Mixer Assembly for LUXEON® Rebel LED - Part No. 181



Red



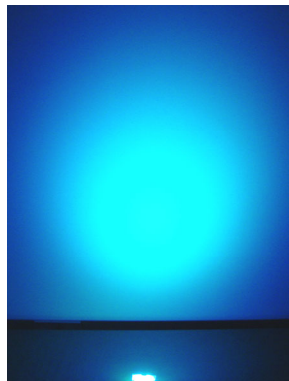
Green



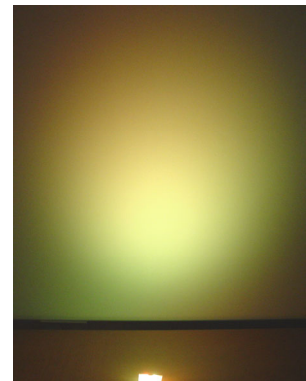
Blue



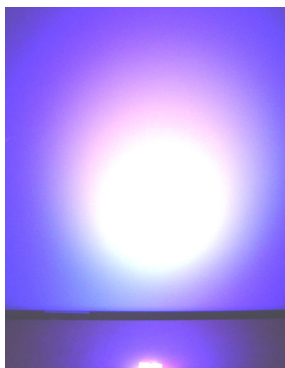
Red/Blue



Green/Blue

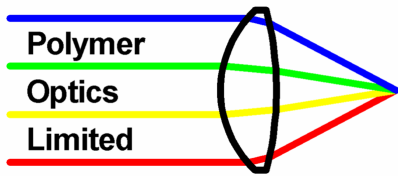


Red/Green



Red/Green/Blue

- Excellent colour mixing performance with single colour LED's even over short distances
- Narrow angle basic beam angle which 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

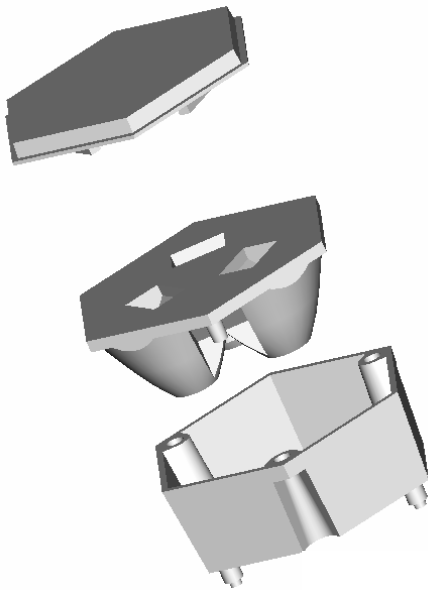


Our Focus is in Plastics

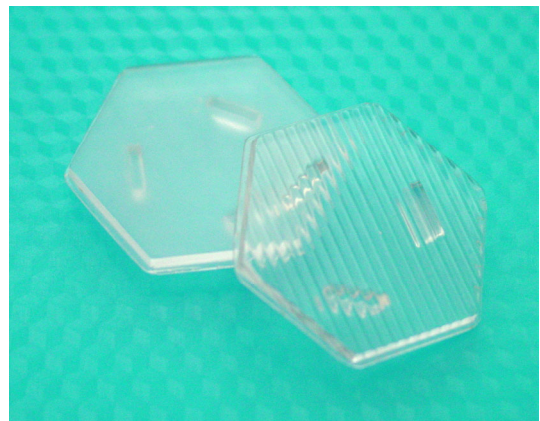
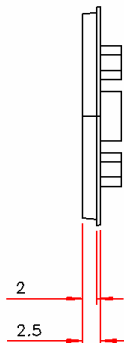
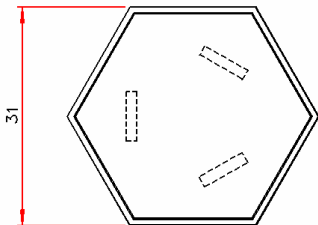
Polymer Optics Ltd.

6 Kiln Ride, Wokingham,
Berks., RG40 3JL, England
Tel/Fax: +44 (0) 1189 893341
www.polymer-optics.co.uk

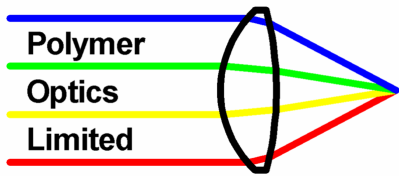
Converter Optics for Narrow Angle LED Colour Mixer Assembly



- Beam Converter Optics simply interference push fit onto the front of the 181 - Colour Mixer Optic.
- Precision moulded in optical grade PMMA acrylic for improved scratch resistance on the outside of the assembly.
- The Beam Converter Optics fit within the area of the 181- Colour Mixer Optic so the assemblies can still be arranged in close packed arrays.
- Flanged edge of the Beam Converter Optics allows bezels and cover plates to be located to the optical assembly for aesthetic product finishing.
- Part of the Polymer Optics “Modular LED Optics”® range



Polymer Optics Limited is a Certified
Future Electronics LUXEON® Solution Partner

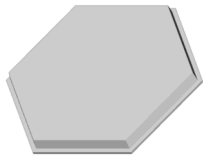


Our Focus is in Plastics

Polymer Optics Ltd.

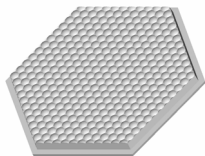
6 Kiln Ride, Wokingham,
Berks., RG40 3JL, England
Tel/Fax: +44 (0) 1189 893341
www.polymer-optics.co.uk

Converter Optics for Narrow Angle LED Colour Mixer Assembly

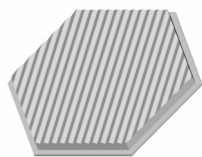
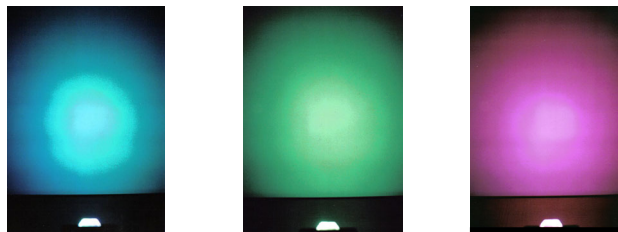


Plain Filter Holder - 160

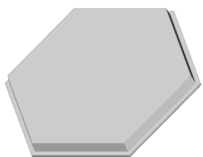
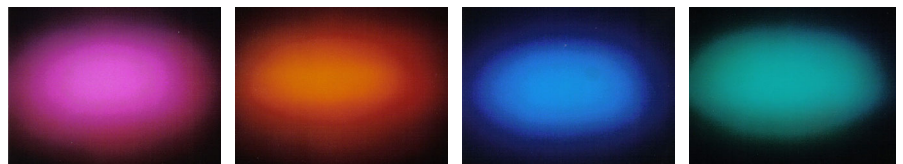
- 160 - Plain Filter Holder can be used with Physical Optics Corporation (POC) Light Shaping Diffuser films to produce a wide range of beam profiles, available from POL or direct from www.poc.com.
- Other custom beam angles can be produced cost effectively from POL's modular production tooling. Please enquire for details



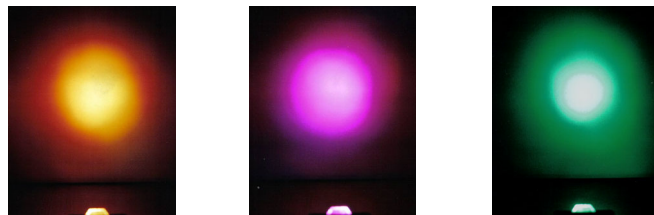
25 Deg Diffuser - 161

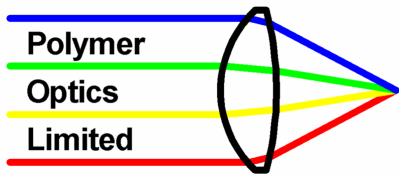


6 x 25 Deg Line Diffuser - 162



Soft Beam Diffuser - 163



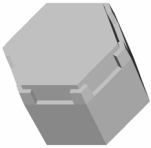
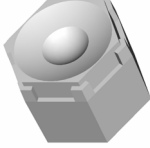
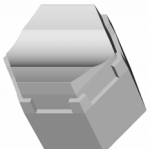
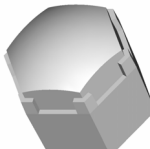


Our Focus is in Plastics

Polymer Optics Ltd.

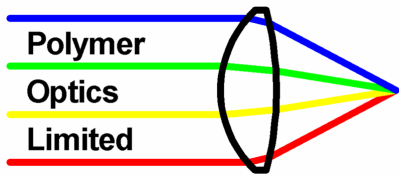
6 Kiln Ride, Wokingham,
Berks., RG40 3JL, England
Tel/Fax: +44 (0) 1189 893341
www.polymer-optics.co.uk

Price List for LED Optics Range for LUXEON® Rebel

Product Image	Description	Usage	100-1K Batches	1K-5K Batches	5K-10K Batches	10K+ Batches
 120/180	6° Collimator + Holder for LUXEON® Rebel	LUXEON® Rebel Emitters	£1.25	£0.98	£0.77	£0.72
 124/180	25° Collimator + Holder for LUXEON® Rebel	LUXEON® Rebel Emitters	£1.25	£0.98	£0.77	£0.72
 126/180	6°x25° Line + Holder for LUXEON® Rebel	LUXEON® Rebel Emitters	£1.25	£0.98	£0.77	£0.72
 141/180	Single Cell Concentrator Optic + Holder for LUXEON® Rebel	LUXEON® Rebel Emitters	£1.25	£0.98	£0.77	£0.72

* A minimum order value applies of £50+shipping - All prices “ex-works”

Please contact POL for quotations on higher volumes and custom variants

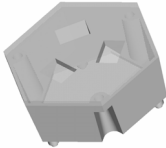

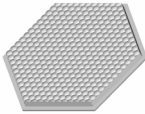
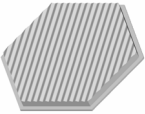
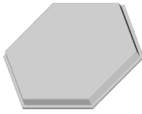


Our Focus is in Plastics

Polymer Optics Ltd.

6 Kiln Ride, Wokingham,
Berks., RG40 3JL, England
Tel/Fax: +44 (0) 1189 893341
www.polymer-optics.co.uk

Price List for LED Optics Range for LUXEON® Rebel

Product Image	Description	Usage	100-1K Batches	1K-5K Batches	5K-10K Batches	10K+ Batches
 181	6° Colour Mixer Collimator Assembly	LUXEON® Rebel Emitters	£3.80	£3.60	£3.20	£3.00
 160	Filter Holder	Fits to 181 Optic	£0.32	£0.30	£0.27	£0.25
 161	25° Beam Converter Optic	Fits to 181 Optic	£0.32	£0.30	£0.27	£0.25
 162	6°x25° Beam Converter Optic	Fits to 181 Optic	£0.32	£0.30	£0.27	£0.25
 163	Beam Diffuser Filter	Fits to 181 Optic	£0.32	£0.30	£0.27	£0.25

* A minimum order value applies of £50+shipping - All prices “ex-works”

Please contact POL for quotations on higher volumes and custom variants