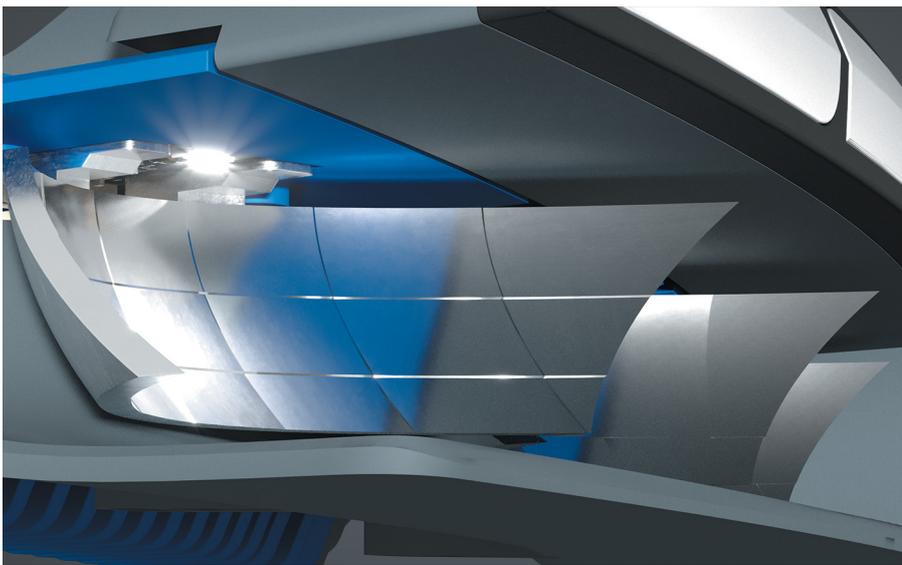




LUXEON Altilon TopContact Intense

Unprecedented Luminance with Optimal Thermal Performance



Pairing “TopContact” with our highest-luminance “Intense” technology creates the ultimate performance emitters for style-driven headlighting applications. LUXEON Altilon TopContact Intense is designed to be mounted directly onto the heatsink. Providing unprecedented luminance, it makes distinctively stylish, compact headlamps possible. Plug-and-Play (PnP) and LUXEON Go solutions simplify the design-in process.

FEATURES AND BENEFITS

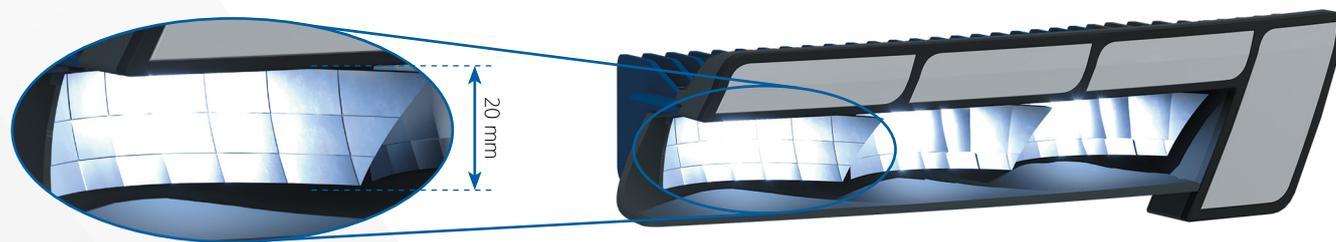
- Highest luminance (>200 cd/mm² in hot applications) with superior contrast
- Small light-emitting area with tight mechanical tolerances enables miniaturized, efficient optics
- Dual- and triple-chip portfolio offers a flux of minimum 350 lm/chip at 1.5 A and $T_c = 85\text{ }^\circ\text{C}$
- Direct mounting on heatsink optimizes thermal performance and minimizes system cost with no need for high-specification printed circuit boards
- Portfolio offerings:
 - Multichip emitters
 - Plug-and-Play (PnP) modules with customization options
 - LUXEON Go standardized modules with fully integrated heatsink

PRIMARY APPLICATIONS

- Low beam and high beam
- Adaptive front-lighting system (AFS)
- Adaptive driving beam (ADB)

Highest Luminance and Optimal Thermal Performance for Efficient, Slim Headlamp Design

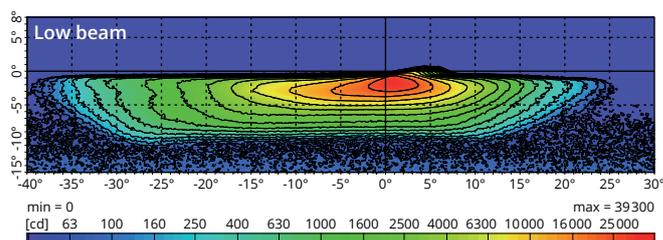
Three-Cavity Low-Beam/High-Beam Reflector System with LUXEON Altilon TopContact Intense PnP



Optical Performance

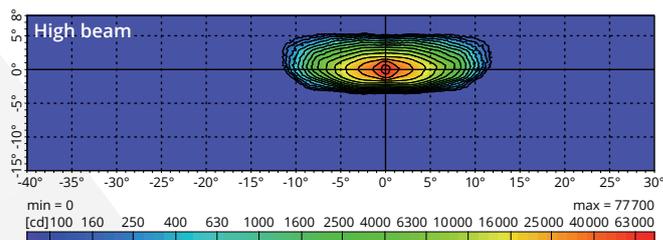
Low beam:

- 2 × LUXEON Altilon TopContact Intense PnP 1x2: 1200 lm at 1.2 A, $T_a = 50\text{ °C}$
- Flux in beam*: 557 lm
- $I_{\text{max}}^* = 39\,300\text{ cd}$
- Optical efficiency*: 46%



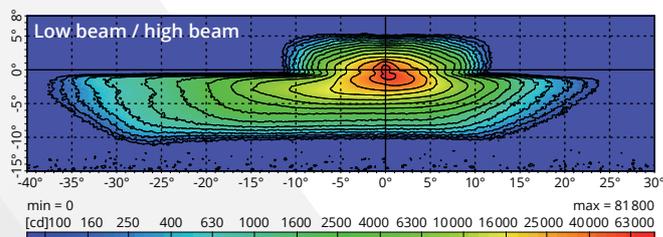
High beam:

- 1 × LUXEON Altilon TopContact Intense PnP 1x3: 870 lm at 1.2 A, $T_a = 50\text{ °C}$
- Flux in beam*: 401 lm
- $I_{\text{max}}^* = 77\,700\text{ cd}$
- Optical efficiency*: 46%



Combined low beam / high beam:

- Flux in beam*: 958 lm
- $I_{\text{max}}^* = 81\,800\text{ cd}$
- Optical efficiency*: 46%



* including losses at the cover glass

LED Portfolio

LUXEON Altilon TopContact Intense	1x2	1x3
Light-emitting area (mm × mm)	0.68 × 1.70	0.68 × 2.72
Typ. lum. flux at 1.5 A, $T_c = 85\text{ °C}$ (lm)	750	1125
Luminance (cd/mm ²)	205	195
$T_{c,\text{max}}$ (°C) / $T_{j,\text{max}}$ (°C)	145 / 150	145 / 150
$R_{\text{thj-c,el}}$ (K/W)	3.8	2.4

Integrated Modular-Solution Options

LUXEON Altilon TopContact Intense PnP



Standard and customized options (with a choice of connector types, bin code resistors, thermistors, board types and sizes)

LUXEON Go Intense



Standardized modules including heatsink

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