



# Low/high beam

## Product comparison



	<b>D5S</b>	<b>D3S NBV</b>	<b>HiR 2 LL</b>	<b>H18 LL</b>	<b>LUXEON Altilon H1K PnP</b>	<b>LUXEON Altilon SMD</b>	<b>LUXEON Altilon SMD PnP</b>	<b>LUXEON F Plus CW</b>	<b>LUXEON Neo</b>
Lumen output	2,000 + 300/ - 200 lm	3,200 ± 450 lm	1,875 lm ± 15% at 13.2V	1,700 lm ± 8% at 13.2V	1x4: 1,150 lm at 1A, MP Tc = 85°C	1x4: 1,160 lm at 1A, MP Tc = 85°C	1x4: 1,160 lm at 1A, MP Tc = 85°C	240 lm at 1A, DC, Tc = 85°C	125 lm at 0.5A, MP Tc = 85°C
Power	25W	35W	63W max at 13.2V	69W max at 13.2V	1x4: 12.4W at 1A, MP	1x4: 12W at 1A, MP	1x4: 12W at 1A, MP	2.9W at 1A, MP	1.5W at 0.5A
Lifetime	2,500/ 4,000 h	2,000/ 3,000 h	900/ 1,400 h at 13.2V	700/ 1,100 h at 13.2V	TBD	<b>B3L80C90</b> 15,000 h  <b>B50L80C90</b> 40,000 h (1A, Tc = 110°C)	TBD	<b>B3L80C90:</b> 14,000 h  <b>B50L80C90</b> 50,000 h (1A, Tc = 120°C)	TBD
Coil e/f values	LCL 18 mm	LCL 27.1 mm	e = 28.7 ± 0.35 mm f = 5.3 mm	e = 25 ± 0.2 mm f = 4.8 mm	-	-	-	-	-
Color temperature	4,500 K	4,800 K	3,250 K	3,200 K	5,800 K	5,800 K	5,800 K	5,800 K	5,800 K

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Styling	<ul style="list-style-type: none"> <li>■ Xenon performance with bright white light projection</li> </ul>	<ul style="list-style-type: none"> <li>■ Xenon natural BlueVision offers a perfect color match with LED based DRLs</li> <li>■ Best-in-class lighting with light color temperature close to daylight</li> </ul>	<ul style="list-style-type: none"> <li>■ Best halogen solution for low beam and bi-halogen projection systems</li> </ul>	<ul style="list-style-type: none"> <li>■ Optimized for single compact low or high beam conventional reflection and projection systems</li> </ul>	<ul style="list-style-type: none"> <li>■ Offers increased hot flux performance in an simple plug &amp; play solution, facilitating system integration and optimizing assembly costs</li> <li>■ Available in 1x2, 1x4 and 1x5 configurations</li> </ul>	<ul style="list-style-type: none"> <li>■ Ideal for cost-effective mainstream designs using multi-cavity and single reflector architectures</li> <li>■ Available in 1x2, 1x3, 1x4 and 1x5</li> </ul>	<ul style="list-style-type: none"> <li>■ Ideal for cost-effective mainstream designs using multi-cavity and single reflector architectures</li> <li>■ Simple plug &amp; play solution facilitating system integration and optimizing assembly costs</li> <li>■ Available in 1x2, 1x3, 1x4 and 1x5 configurations</li> </ul>	<ul style="list-style-type: none"> <li>■ Offers the most effective headlighting performance for distributed designs and allows for advanced front lighting solutions</li> </ul>	<ul style="list-style-type: none"> <li>■ A versatile solution which provides wide variety of solutions from advanced front lighting such as closely spaced matrices to distributed low-beam designs</li> </ul>
Design-in	<ul style="list-style-type: none"> <li>■ Most efficient xenon high/ low beam combination in minimum space</li> <li>■ Integrated and compact ballast. Halogen lamp simplicity and ease of mount with 1/4 turn installation</li> <li>■ EMI addressed at bulb level only 100 g system weight Wish-wash and automatic leveling can be saved</li> </ul>	<ul style="list-style-type: none"> <li>■ Powerful high/ low beam combination including AFS functionalities</li> </ul>	<ul style="list-style-type: none"> <li>■ Halogen lamp simplicity and ease of mount with 1/4 turn installation</li> <li>■ Optimized thermal load and high optical performance versus conventional halogen solutions</li> </ul>	<ul style="list-style-type: none"> <li>■ Ultimate halogen light engine in a compact design for improved beam performance</li> </ul>	<ul style="list-style-type: none"> <li>■ Provides solder-less mechanical bolt down interface, simple electrical connection and industry's best thermal performance in front LED lighting applications</li> <li>■ Offers custom flexibility, thermistor, flux-bin resistor and multiple connector solutions</li> <li>■ Maximum drive current of 1.5A provides maximum light output</li> </ul>	<ul style="list-style-type: none"> <li>■ Offers assembly-process flexibility for reflow soldering</li> </ul>	<ul style="list-style-type: none"> <li>■ Offers custom flexibility, thermistor, flux-bin resistor and multiple connector solutions</li> <li>■ Maximum drive current of 1.5 A provides maximum light output</li> </ul>	<ul style="list-style-type: none"> <li>■ High-source contrast through side coating provides sharp low-beam cutoff.</li> <li>■ Miniaturized footprint enables maximum design flexibility</li> <li>■ Low thermal resistance simplifies thermal management by reducing heat sink size</li> </ul>	<ul style="list-style-type: none"> <li>■ High-power LED with a small footprint provides high current density, resulting in high contrast and brightness</li> </ul>
Regulations	R99/DOT	R99/DOT	R37/DOT	R37/DOT	R112, R123	R112, R123	R112, R123	R112, R123	R112, R123

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