



LUXEON HL2Z

High Flux Density in a Proven Package for Precise Optical Control



LUXEON HL2Z is a 2mm square CSP-based, high power, un-domed emitter designed to provide leading flux density, superior color consistency, high luminance, and extreme flexibility in lighting solutions.

LUXEON HL2Z emitters are an ideal choice for fast time-to-market due to their ease of design-in, and their ability to lower system costs through improved performance while delivering the quality of light that is desired by lighting system designers and users.

FEATURES AND BENEFITS

Undomed source makes it easier to increase optical efficiency and to realize narrow beam angles.

CSP die technology enables close packing of the LEDs, high efficacy, and high drive current capability, in unique applications

Reliable and proven color consistency support high quality illumination, inside and outside

DLC R9 enabled to offer best-in-class color quality for luminaires

PRIMARY APPLICATIONS

High Bay

Low Bay

Torch

Head Lamps

Wall Grazer

Wall Wash

[More...](#)

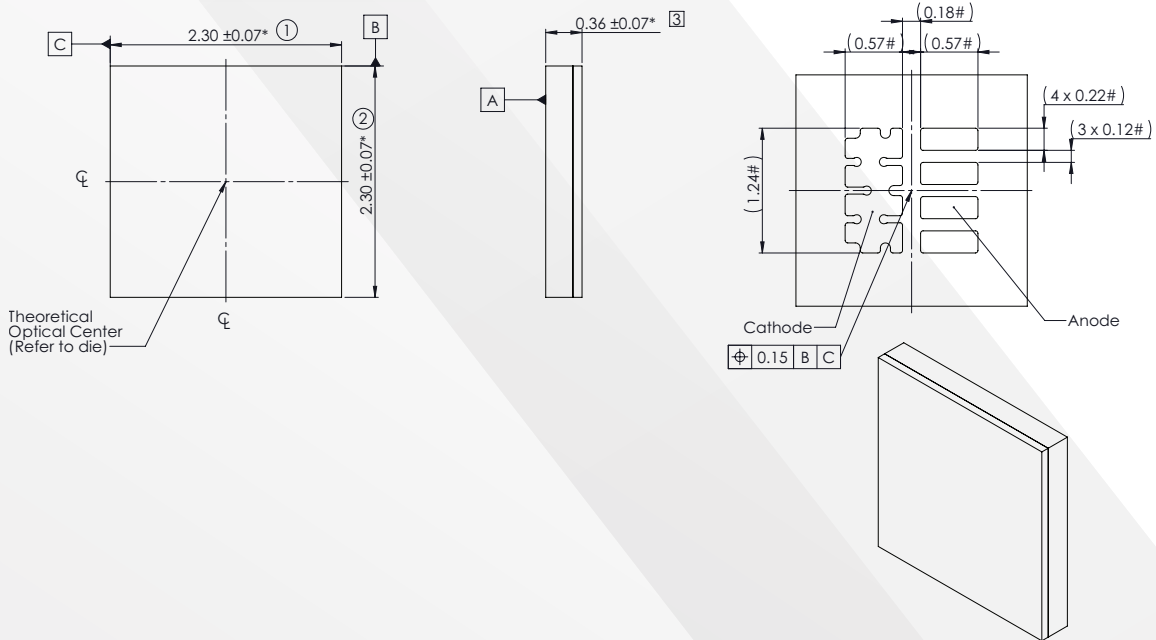
LUXEON HL2Z product performance at 700mA, T_j=85°C.

| NOMINAL CCT | MINIMUM R9 ^[3] | MINIMUM CRI ^[1] | LUMINOUS FLUX ^[2] (lm) | | TYPICAL LUMINOUS EFFICACY (lm/W) | PART NUMBER |
|-------------|---------------------------|----------------------------|-----------------------------------|---------|----------------------------------|--------------------|
| | | | MINIMUM | TYPICAL | | |
| | | | 700mA | | | |
| 2200K | -40 | 70 | 230 | 264 | 132 | L1HZ-2270200000000 |
| 2700K | -40 | 70 | 260 | 307 | 153 | L1HZ-2770200000000 |
| 3000K | -40 | 70 | 270 | 314 | 157 | L1HZ-3070200000000 |
| 4000K | -40 | 70 | 290 | 343 | 171 | L1HZ-4070200000000 |
| 5000K | -40 | 70 | 290 | 344 | 172 | L1HZ-5070200000000 |
| 5700K | -40 | 70 | 290 | 347 | 173 | L1HZ-5770200000000 |
| 6500K | -40 | 70 | 290 | 345 | 172 | L1HZ-6570200000000 |
| 2200K | 0 | 80 | 210 | 241 | 120 | L1HZ-2280200000000 |
| 2700K | 0 | 80 | 230 | 275 | 137 | L1HZ-2780200000000 |
| 3000K | 0 | 80 | 240 | 288 | 144 | L1HZ-3080200000000 |
| 3500K | 0 | 80 | 250 | 303 | 151 | L1HZ-3580200000000 |
| 4000K | 0 | 80 | 260 | 312 | 156 | L1HZ-4080200000000 |
| 5000K | 0 | 80 | 260 | 312 | 156 | L1HZ-5080200000000 |
| 5700K | 0 | 80 | 260 | 315 | 157 | L1HZ-5780200000000 |
| 2200K | 50 | 90 | 170 | 201 | 100 | L1HZ-2290200000000 |
| 2700K | 50 | 90 | 190 | 235 | 117 | L1HZ-2790200000000 |
| 3000K | 50 | 90 | 210 | 247 | 123 | L1HZ-3090200000000 |
| 3500K | 50 | 90 | 210 | 257 | 128 | L1HZ-3590200000000 |
| 4000K | 50 | 90 | 220 | 257 | 128 | L1HZ-4090200000000 |
| 5000K | 50 | 90 | 220 | 266 | 133 | L1HZ-5090200000000 |
| 5700K | 50 | 90 | 220 | 277 | 138 | L1HZ-3090200000000 |

Notes for Table 1::

1. Lumileds maintains a tolerance of ±2 on CRI.
2. Lumileds maintains a tester tolerance of ±6.5% on luminous flux measurements.
3. Lumileds maintains a tester tolerance of ±6.5 on R9 measurements.

Mechanical Dimensions.



Notes:

1. Drawings are not to scale.
2. All dimensions are in millimeters.
3. Do not handle the device by the dome. Excessive force on the dome may damage the dome itself or the interior of the device.

©2024 Lumileds Holding B.V. All rights reserved. LUXEON is a registered trademark of the Lumileds Holding B.V. in the United States and other countries.

lumileds.com

Neither Lumileds Holding B.V. nor its affiliates shall be liable for any kind of loss of data or any other damages, direct, indirect or consequential, resulting from the use of the provided information and data. Although Lumileds Holding B.V. and/or its affiliates have attempted to provide the most accurate information and data, the materials and services information and data are provided "as is," and neither Lumileds Holding B.V. nor its affiliates warrants or guarantees the contents and correctness of the provided information and data. Lumileds Holding B.V. and its affiliates reserve the right to make changes without notice. You as user agree to this disclaimer and user agreement with the download or use of the provided materials, information and data. A listing of Lumileds product/ patent coverage may be accessed at lumileds.com/patents.