LUMILEDS

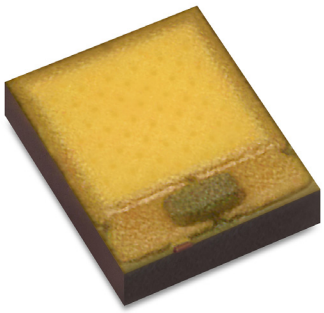
ILLUMINATION





# LUXEON Z ES

## Extreme flux density in a micro footprint package for precise optical control



LUXEON Z ES is a high power 1.6mm x 2.0mm LED that enables never before seen color consistency, luminance, flux density and design flexibility for lighting solutions. LUXEON Z ES is undomed, a feature that provides unmatched optical flexibility for precise beam angle control. Tested and binned at application conditions, 85°C, LUXEON Z ES emitters are an ideal choice for indoor and outdoor light sources requiring superior beam angles, higher efficacy and lower costs.

### FEATURES AND BENEFITS

- Micro footprint enables close packaging
- Undomed design allows precise optical control
- 3- and 5-step MacAdam ellipse: *Freedom from Binning* enabling color consistency
- LM-80 test report available

### PRIMARY APPLICATIONS

- Architectural
- Downlights
- Lamps
- Outdoor
- Spotlights

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LUXEON Z ES White product performance at 700mA and 350mA, $T_j$=85°C.

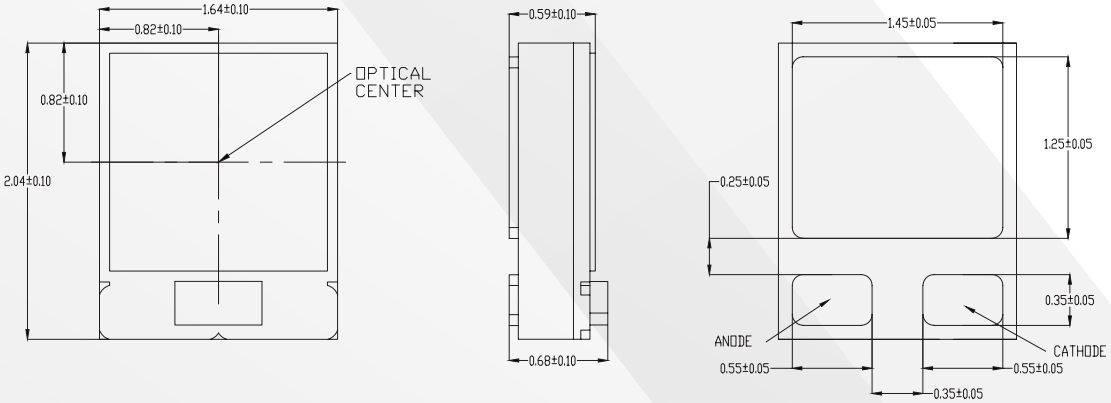
| NOMINAL CCT | MINIMUM CRI [1] | LUMINOUS FLUX [1] (lm) | | TYPICAL LUMINOUS EFFICACY (lm/W) | TYPICAL LUMINOUS FLUX (lm) | TYPICAL LUMINOUS EFFICACY (lm/W) | PART NUMBER [2] |
|---|---|---|---|---|---|---|---|
| | | MINIMUM | TYPICAL | | | | |
| | | 700mA | | | 350mA | | |
| 4000K | 70 | 220 | 260 | 133 | 143 | 150 | LXZ2-4070 |
| 5000K | 70 | 220 | 260 | 133 | 143 | 150 | LXZ2-5070 |
| 5700K | 70 | 220 | 270 | 138 | 149 | 156 | LXZ2-5770 |
| 5700K | 70 [3] | 250 | 270 | 138 | 149 | 156 | LXZ2-577T |
| 6500K | 70 | 220 | 270 | 138 | 149 | 156 | LXZ2-6570 |
| 6500K | 70 [3] | 250 | 270 | 138 | 149 | 156 | LXZ2-657T |
| 2200K | 80 | 140 | 188 | 96 | 103 | 109 | LXZ2-2280-x |
| 2700K | 80 | 170 | 216 | 110 | 119 | 125 | LXZ2-2780-x |
| 3000K | 80 | 180 | 230 | 117 | 127 | 133 | LXZ2-3080-x |
| 3500K | 80 | 190 | 240 | 122 | 132 | 139 | LXZ2-3580-x |
| 4000K | 80 | 190 | 248 | 127 | 136 | 144 | LXZ2-4080-x |
| 5000K | 80 | 190 | 250 | 128 | 138 | 145 | LXZ2-5080-x |
| 2700K | 90 | 140 | 180 | 92 | 99 | 104 | LXZ2-2790-x |
| 3000K | 90 | 150 | 190 | 97 | 105 | 110 | LXZ2-3090-x |
| 3500K | 90 | 150 | 197 | 101 | 108 | 114 | LXZ2-3590-x |
| 4000K | 90 | 150 | 205 | 105 | 113 | 119 | LXZ2-4090-x |
| 5700K | 90 | 170 | 215 | 110 | 118 | 124 | LXZ2-5790-x |

LUXEON Z ES Royal Blue product performance at 700mA, $T_j$=85°C.

| NOMINAL CCT | RADIOMETRIC POWER [1] (mW) | | TYPICAL RADIANT EFFICACY (%) | PART NUMBER |
|---|---|---|---|---|
| | MINIMUM | TYPICAL | | |
| Royal Blue | 800 | 850 | 45% | LXZ2-PR02 |

Notes for tables:
1. Lumileds maintains a tolerance of ±6.5% on both luminous flux and radiometric power and ±2 on CRI measurements.
2. In the part number the -x is the designation for the white color space requirement. On 80CRI and 90CRI versions 3 designates 3 SDCM and 5 designates 5 SDCM. For 70 CRI parts or lower, they will not have an SDCM designation and all parts are binned within a 5-step SDCM.
3. Typical CRI.

## Mechanical Dimensions.




Notes:
1. Drawings are not to scale.
2. All dimensions are in millimeters.

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