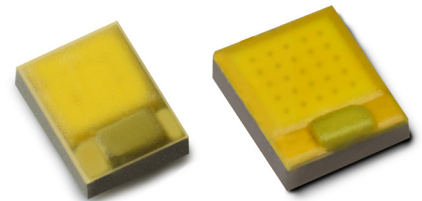




# LUXEON Z LUXEON Z ES

Breakthrough luminance, design flexibility  
and optical control for Illumination solutions



Philips Lumileds technology enables the new LUXEON® Z and LUXEON Z ES LEDs. The LUXEON Z is a family of micro sized Illumination grade emitters that is the first ever 1-step MacAdam Ellipse warm white LED that enables never before seen color consistency, luminance, flux density and design flexibility for next generation lighting solutions. LUXEON Z family is undomed, a feature that provides un-matched optical flexibility for precise beam angle control. Tested and binned at application conditions 85°C, the LUXEON Z and Z ES emitters are an ideal choice for indoor and outdoor light sources requiring superior beam angles, higher efficiency and lower costs.

## Features

- Micro sized: LUXEON Z, 1.3x1.7 mm and LUXEON Z ES, 1.6x2.0 mm
- Undomed device architecture
- Hot tested at 85°C
- Up to 1 A max drive current
- *Freedom from Binning*
- 1, 3, 5 step MCE options
- Lowest thermal resistance 3°C/W

## Benefits

- Highest luminance to deliver punch
- Ultimate design flexibility from micro form factor
- Precise optical control from an undomed architecture
- Enables small customizable and scalable light engines
- Leading system level lm/\$ proposition

## Key Applications

- Indoor area
- Lamps
  - MRI6, PAR, GU10 and Candles
- Outdoor area
  - High-flux street light modules
- Specialty lighting
- Architectural

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## LUXEON Z ES

Part Number	Normal CCT / CRI	Min Flux (lm)	Typical Flux (lm)	Typical $V_f$	Typical lm/W
LXZ2-2780-Y	2700 / 80	160	175	2.85	88
LXZ2-2790-Y	2700 / 90	110	135	2.85	68
LXZ2-3080-Y	3000 / 80	160	180	2.85	91
LXZ2-3090-Y	2700 / 90	120	145	2.85	73
LXZ2-3580-Y	3500 / 80	170	190	2.85	95
LXZ2-4080-Y	4000 / 80	180	195	2.85	98
LXZ2-4070	4000 / 70	190	210	2.85	106
LXZ2-5070	5000 / 70	200	215	2.85	108
LXZ2-5770	5700 / 70	200	215	2.85	108

1. All LUXEON Z ES emitters are tested and binned at 700 mA at 85°C.

2. Y in LXZ2-ABCD-Y designates color binning - 1 for 1-step MCE, 3 for 3-step MCE and 5 for 5-step MCE. 70 CRI parts are all within 5 step MCE.

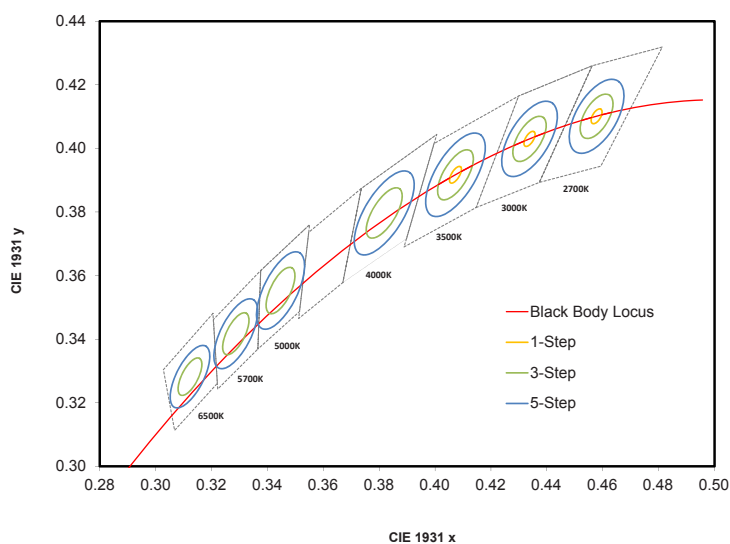
## LUXEON Z

Part Number	Normal CCT / CRI	Min Flux (lm)	Typical Flux (lm)	Typical $V_f$	Typical lm/W
LXZ1-2780-Y	2700 / 80	90	105	2.85	74
LXZ1-3080-Y	3000 / 80	100	110	2.85	78
LXZ1-4080-Y	4000 / 80	100	126	2.85	89
LXZ1-4070	4000 / 70	100	132	2.85	93
LXZ1-5070	5000 / 70	110	142	2.85	100
LXZ1-5770	5700 / 70	110	148	2.85	104
LXZ1-6565	6500 / 65	110	135	2.85	95

1. All LUXEON Z emitters are tested and binned at 500 mA at 85°C.

2. Y in LXZ1-ABCD-Y designates color binning - 1 for 1-step MCE, 3 for 3-step MCE and 5 for 5-step MCE. 70 CRI parts are all within 5 step MCE.

## Color Binning Diagram



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