

x: 0.130  
y: 0.467

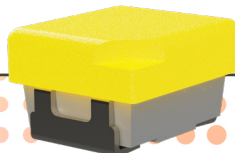
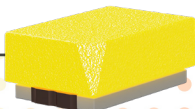
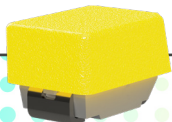


x: 0.440  
y: 0.405



# PrecisionLEDs

COLOR • INTENSITY • LONGEVITY



x: 0.570  
y: 0.369



x: 0.308  
y: 0.236



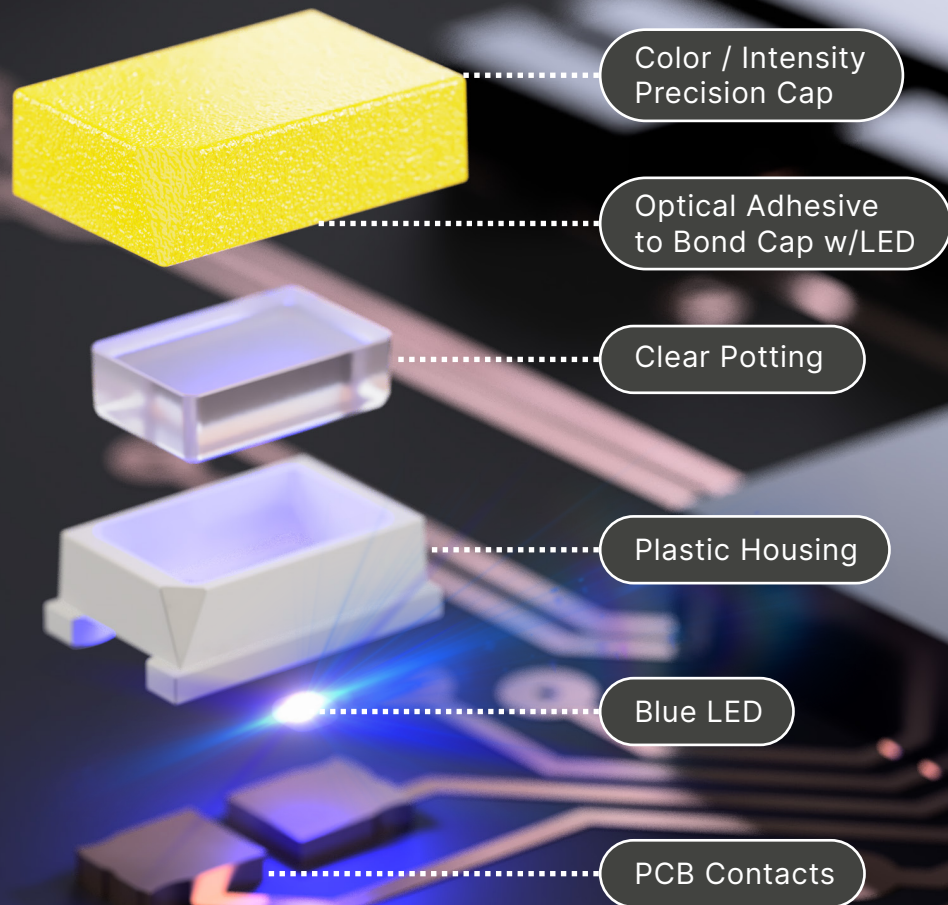
x: 0.482  
y: 0.229





# Precision LED

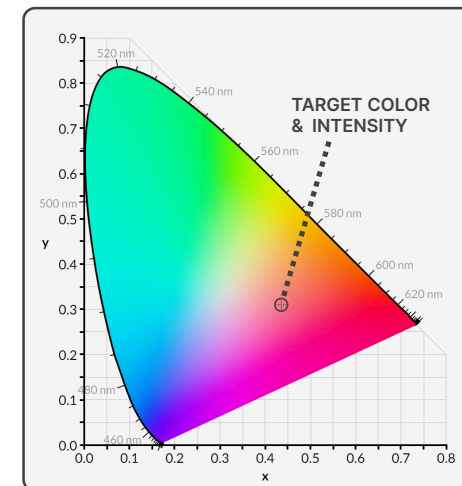
Package Composition / Exploded View



## How it Works

Precision LEDs from Wamco utilize advanced phosphor technology to tune SMT (surface mount technology) LEDs to the precise color and intensity that your application requires.

By meeting precise color coordinates and intensity, Wamco helps reduce labor costs associated with “fine-tuning” or “balancing” lighted panels, keyboards, switches and indicators. Stability coupled with the high reliability of LED technology in shock and vibration environments make Wamco’s precision LEDs an ideal choice for many applications.



PrecisionLEDs





# Color

Can achieve colors not normally available with traditional white or colored LEDs

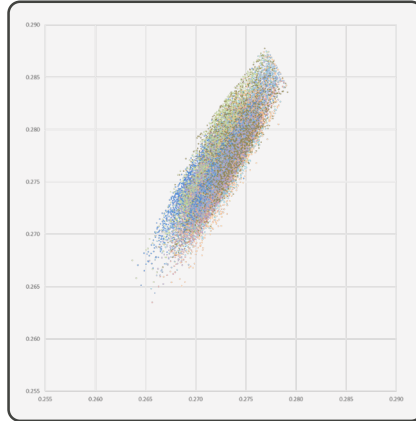
Tight color control; typically +/- .02 for x & y coordinates

Provided in a single color bin per part number

High CRI (95 typical) in white color space

Excellent color stability

Can render colors which have been rendered end-of-life or obsolete by other manufacturers



>97% within 3 Standard Deviation Color Matching  
.....  
>99.5% within 4 Standard Deviation Color Matching

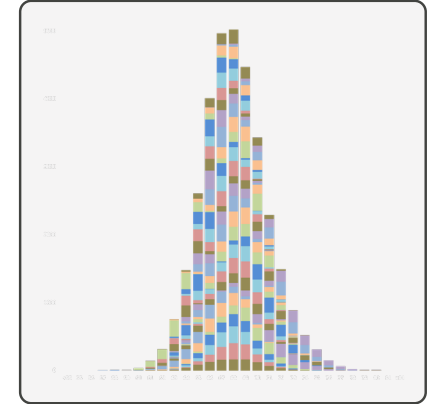
# Intensity

Tight brightness control (+/-18%) available for most package styles

Provided in a single intensity bin per part number

Excellent brightness stability

Can match intensity levels rendered obsolete by other manufacturers



>80% within ±5% mcd  
.....  
>98% within ±10% mcd

# Longevity

Solid state reliability, resistant to the effects of mechanical shock and vibration

Can support program lengths up to 20 years, depending upon LED maturity

Able to support the same color and intensity for the life of a program, intensity will not creep up over time due to manufacturer improvements or changes



x: 0.172  
y: 0.301



# Applications

## Automotive



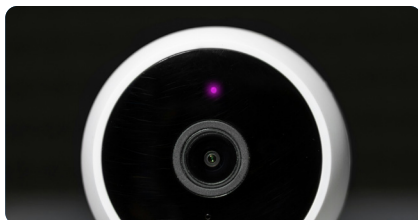
- Color shift can be tuned to account for diffuser/light pipe
- No binning required

## Aerospace/Defense



- Able to meet the strictest aerospace specifications
- High reliability and stability in harsh environments
- Small enough to backlight thin panels and switches

## Small Electronics



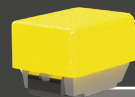
- Simplified schematic/BOM
- No dimming circuitry or resistor matching required
- Can support low/high volume
- Ideal for wearables

## Obsolescence



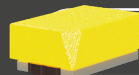
- Precisely match an LED that has been discontinued
- Can support long-term programs

# Specifications



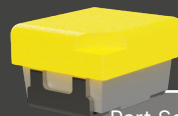
## Compact

Part Series	Size (mm)	Forward Current (I <sub>F</sub> )	Forward Voltage (V <sub>F</sub> )	Luminous Intensity (I <sub>v</sub> ) <sup>2</sup>
WL-L2021Bx	2.4 × 1.8 × 1.6	5mA	2.9V	170 mcd



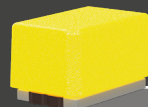
## Low Profile

Part Series	Size (mm)	Forward Current (I <sub>F</sub> )	Forward Voltage (V <sub>F</sub> )	Luminous Intensity (I <sub>v</sub> )
WL-L2031Bx	2.4 × 1.8 × 1.0	10mA	3.1V	270 mcd
WL-L2032Bx	2.4 × 1.8 × 1.0	20mA	3.2V	710 mcd
WL-L2033Bx	2.4 × 1.8 × 1.0	30mA	3.0V	1400 mcd
WL-L2040Bx	3.4 × 3.4 × 1.1	150mA	3.2V	33 Lumens



## Standard

Part Series	Size (mm)	Forward Current (I <sub>F</sub> )	Forward Voltage (V <sub>F</sub> )	Luminous Intensity (I <sub>v</sub> )
WL-L2030Bx	3.8 × 3.4 × 2.3	10mA	3.1V	350 mcd
WL-L2034Bx	3.8 × 3.4 × 2.3	30mA	3.4V	1400 mcd
WL-L2035Bx	3.8 × 3.4 × 2.3	50mA	2.9V	4500 mcd



## Wide Angle

Part Series	Size (mm)	Forward Current (I <sub>F</sub> )	Forward Voltage (V <sub>F</sub> )	Viewing Angle
WL-L2031Bx	2.4 × 1.8 × 1.5	10mA	3.1V	X: 156° Y: 200°
WL-L2032Bx	2.4 × 1.8 × 1.5	20mA	3.2V	X: 156° Y: 200°
WL-L2033Bx	2.4 × 1.8 × 1.5	30mA	3.0V	X: 156° Y: 200°

FOR DETAILED SPECS  
714-545-5560  
info@wamcoinc.com



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y: 0.467



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y: 0.405



**wamco**  
LIGHTING

TELEPHONE

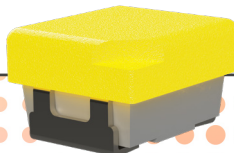
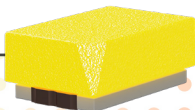
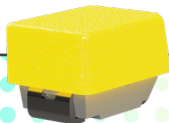
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WEB

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