

# LUMIFA LF2D

## LF2D Series (IP67, IP67f)

LF2D LED units are the brightest in their class with the ability to target illumination with accuracy and making them ideal for machine tools. Offered as a wide or slim-type, these LED units provide high brilliance at the center and periphery.

- Brightness: Slim: 66.6 Lumens/Watt  
Wide: 67.2 Lumens/Watt
- Life: 70% of initial luminance at 50,000 Hrs
- IP67 (Polycarbonate lens) or IP67f (Reinforced glass lens)
- UL rated for wet locations
- RoHS Compliant



## General Specifications

Type	Slim	Wide
Rated Voltage	24V DC	
Voltage Range	21.6 to 26.4V DC	
Rated Power (typ.)	9W	12.5W
Insulation Resistance	1MΩ minimum (500V DC megger)	
Dielectric Strength	1000V AC, 50/60Hz, 1 minute	
Vibration Resistance (damage limits)	Frequency 5 to 55Hz, amplitude 0.5mm	
Shock Resistance (damage limits)	1000m/s <sup>2</sup> (100G)	
Operating Temperature	-30 to +55°C (no freezing)	
Operating Humidity	45 to 85% RH (no condensation)	
Storage Temperature	-35 to +70°C (no freezing)	
Operating Atmosphere	No corrosive gas	
Life <sup>Note 1</sup>	50,000 hours (The illumination duration in which the illuminance maintains a minimum of 70% of the initial value at 25°C.)	
Degree of Protection <sup>Note 2</sup>	IP67f (reinforced glass), IP67 (polycarbonate)	
Material <sup>Note 3</sup>	Housing: Diecast aluminum Front cover: Stainless steel Lens: Reinforced glass or polycarbonate	
Weight (approx)	LF2D-E**-2W*: 850g LF2D-E**-2W-A*: 1000g	LF2D-F**-2W*: 900g LF2D-F**-2W-A*: 1050g

Note 1: LED life depends on the operating environment.

Note 2: Waterproof or oil-proof characteristics specified by IEC 60529 and JEM1030.

For illumination units without accessories, use a cable gland and cable that satisfy IP67 or IP67 degree of protection.

Note 3: The reinforced glass and polycarbonate lenses have the same appearance, but have the different degrees of protection (IP67f or IP67).

## LED Optical Specifications

Type	Slim		Wide	
Illumination Surface	Clear	Diffused	Clear	Diffused
Illumination Color	Cool White			
Total Luminous Flux	600lm		840lm	
Color Temperature	5700K			
Reference Illuminance at 1.0m	1100lx	1000lx	1100lx	1000lx

LED modules and illumination units may vary in illumination colors and illuminance. Luminous flux, color temperature, and illuminance shown in the above are typical values.

### Brightest in its class

The optical design ensures very high brightness. Achieves illuminance specified by EN1837: 1999, 4.2.

### Heat Dissipation

Heat is dissipated by the aluminum housing.



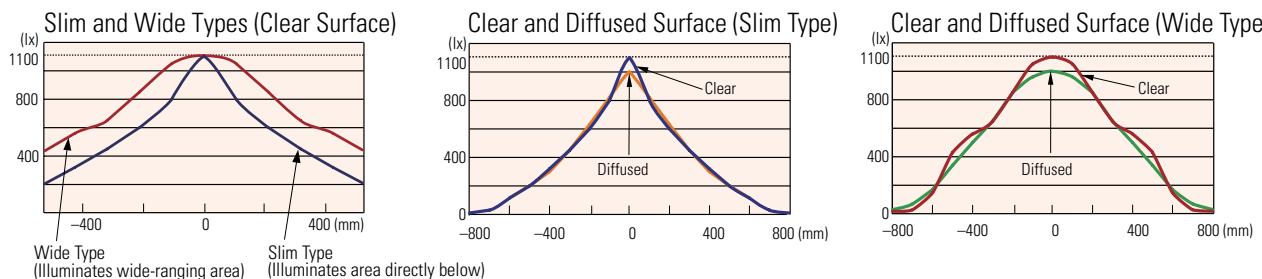
### Efficient power circuit

Highly efficient, low-heat power circuit.

### Glare prevention

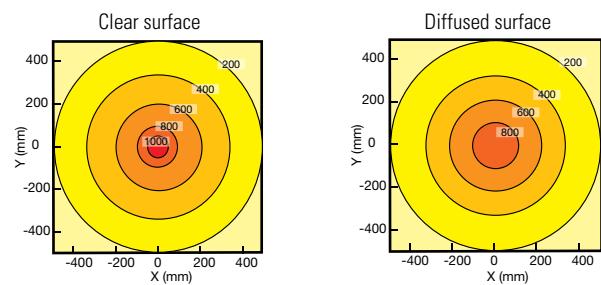
Diffused type available to prevent glaring light and reflection.  
(EN1837: 1999, 4.3.)

## Distribution Characteristics (reference value at 1.0m)

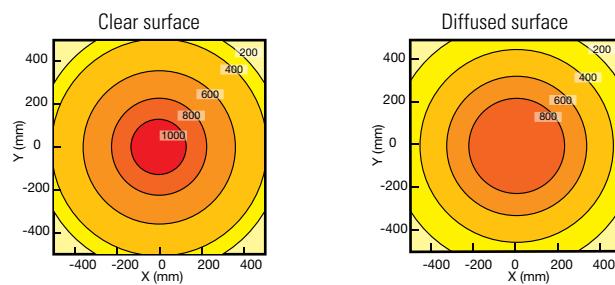


## Illuminance Charts

### Slim Type



### Wide Type



LF2D - E 2 F - 2W - 300

Size (LED arrangement)  
E: Slim Type (10 LEDs x 1 row)  
F: Wide Type (7 LEDs x 2 rows)

Illumination Surface  
2: Clear, Reinforced glass  
3: Clear, Polycarbonate  
5: Diffused, Polycarbonate  
9: Diffused, Reinforced glass

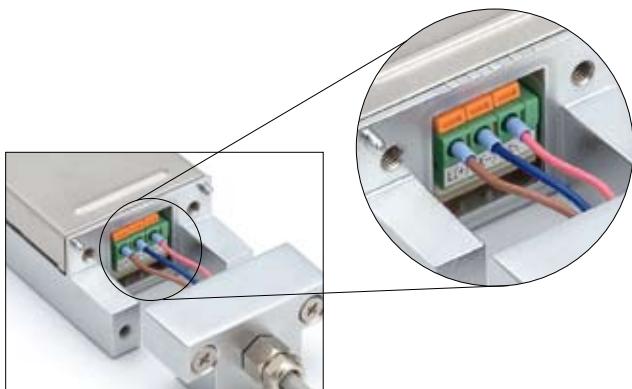
Cable Gland  
Blank: Without accessories. Cable gland hole on the side.  
A: With cable gland (standard) and cable.  
200: Without cable gland. Cable gland hole in the back.  
300: With cable gland (standard) on the side.  
400: With cable gland (standard) in the back.  
450: With cable gland (standard) in the back and cable.

Degree of Protection  
F: IP67f  
G: IP67

## Easy Maintenance

### Spring-clamp Terminal Blocks

Removable direct plug-in terminal block and spring clamp connections ensure a high quality connection, making it easy to install or replace the LED illumination unit.



### Connection Example

