

LF1E Series


Key features:


The LF1E illumination lights are designed to be used in freezers or refrigerated display cases where the ambient temperature is as low as -40°C. These energy saving units, with a long service life, compact size and low heat generation make them perfect for illuminating areas with very low temperatures.

- Three types of light distribution: no-lens, condensing lens and dual lens
- Life: 70% of initial luminance at 40,000 Hrs
- Available in 4 lengths
- Plastic lenses suitable for food industry
- IP54 protection against dust and water
- CE marked, UL Listed (damp locations)

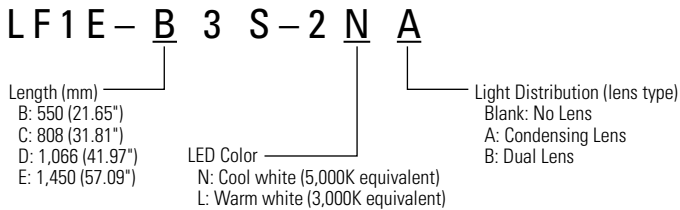


Part Numbers

LF1E-B3S-2*† (550mm)	LF1E-C3S-2*† (808mm)	LF1E-D3S-2*† (1066mm)	LF1E-E3S-2*† (1450mm)
 warm white shown	 cool white shown	 cool white shown	 cool white shown

 * N = Cool white, L: Warm white. † Blank = No lens, A = Condensing Lens, B = Dual Lens.


Part Number Structure (use for interpreting part numbers only)



Note: Mounting brackets included


Specifications

Model (length)	LF1E-B (550mm)	LF1E-C (808mm)	LF1E-D (1066mm)	LF1E-E (1450mm)
Rated Voltage	24V DC (Voltage range: 21.6 - 26.4VDC)			
Input Current (at rated voltage)	24V DC	350mA (404mA max)	525mA (606mA max)	700mA (807mA max) 950mA (1004mA max)
Power Consumption (typ. at rated input)	24V DC	8.4W (9.7W max)	12.6W (14.6W max)	16.8W (19.4W max) 22.8W (26.3W max)
Insulation Resistance	100 MΩ minimum (500V DC megger) between input and housing			
Dielectric Strength	500V AC, 1 minute			
Vibration Resistance (damage limits)	Frequency 5 to 55Hz, amplitude 0.17mm			
Shock Resistance (damage limits)	300m/s ²			
Operating Temperature	-40 to +40°C (no freezing)			
Operating Humidity	45 to 85% RH (no condensation)			
Storage Temperature	-40 to +70°C (no freezing)			
Operating Environment	No corrosive gases			
Life	40,000 hours (The illumination duration in which the illuminance maintains a minimum of 70% of the initial value at 25°C.)			
Weight (approx.) ¹	275g	390g	515g	690g
Degree of protection	IP54			
Material	End cover, conduit: polyamide, Cover: polycarbonate, Cable: PVC, Mounting bracket: stainless steel			

 1. Dual lens type.

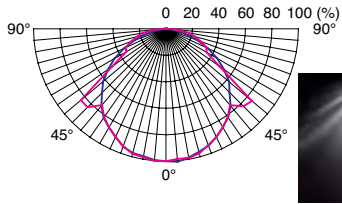
LED Optical Specifications

Color Temperature	Cool White	Warm White
Color Temperature	5000K	3000K
Lens Type	Unit Length	Reference Illumination
No Lens ¹	550mm	950lx 750lx
	808mm	1,100lx 900lx
	1066mm	1,200lx 950lx
	1450mm	1,250lx 1,000lx
Condensing Lens ²	550mm	1,950lx 1,500lx
	808mm	2,000lx 1,550lx
	1066mm	2,000lx 1,550lx
	1450mm	2,000lx 1,550lx
Dual Lens	See Illumination Distribution Chart	

 1. LED life depends on the operating environment.
 2. Measured at 0.3m directly below unit.

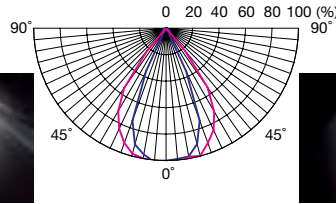
Illuminance Distribution Charts

No-lens



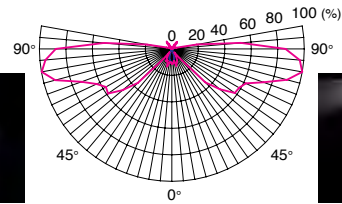
Y (short side) image

Condensing Lens



Y (short side) image

Dual Lens

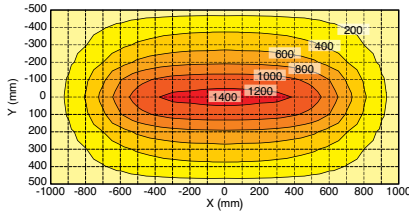


Y (short side) image

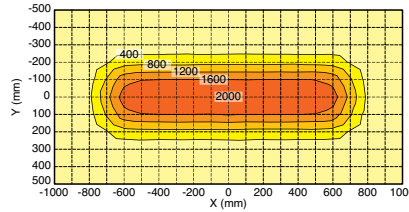
— X: long side
— Y: short side

Illuminance Charts

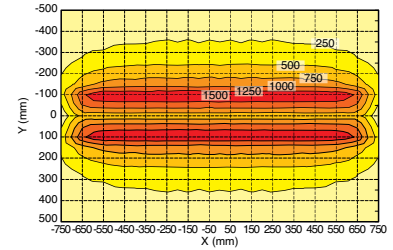
No-lens (LF1E-E3S-2N)



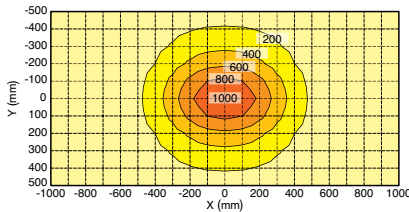
Condensing Lens (LF1E-E3S-2NA)



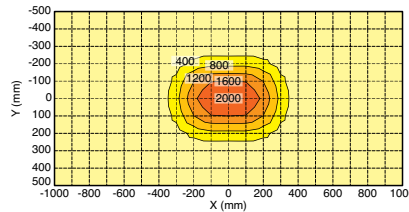
Dual Lens (LF1E-E3S-2NB)



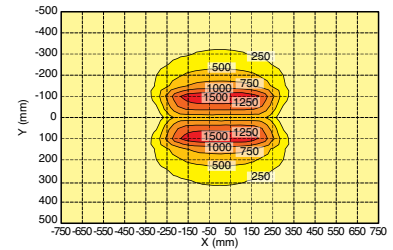
No-lens (LF1E-B3S-2N)



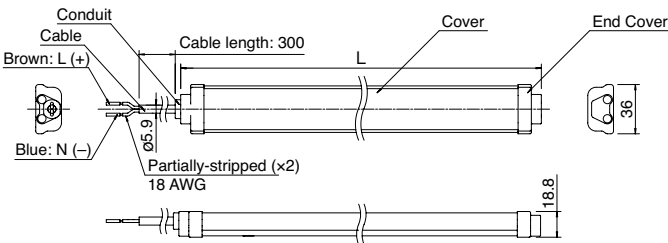
Condensing Lens (LF1E-B3S-2NA)



Dual Lens (LF1E-B3S-2NB)



Dimensions (mm)



Dimension Table

Part No.	L		A		B		C		D		Mounting Bracket Quantity Included
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
LF1E-B3	550	21.65	585	23.03	30	1.18	490	19.29	490	19.29	2
LF1E-C3	808	31.81	843	33.19	29	1.14	750	29.53	375	14.76	3
LF1E-D3	1,066	41.97	1,101	43.35	30.5	1.20	1,005	39.57	335	13.19	4
LF1E-E3	1,450	57.09	1,485	48.46	32	1.26	1,386	54.57	462	18.19	4