

# LUMIFA LF1B-N

Industrial Machines • Semiconductor Equipment • Control Panels



## PRODUCT DESCRIPTION

The LF1B-N series is available in six lengths, two covers (transparent or white) and six distinct colors—cool white, warm white, yellow, red, blue and green—making it a flexible lighting solution for control panels, industrial machines, manufacturing lines, work stations and more. These compact, energy-efficient units are low-maintenance and last for years, contributing to overall cost savings.

## KEY FEATURES

- Compact size: 27.5 mm wide x 16 mm high
- Six lengths: 134, 210, 330, 580, 830 and 1,080 mm
- Vibration- and shock-resistant
- Yellow light ideal for photosensitive materials
- IP65-rated for use in wet environments

## GENERAL SPECIFICATIONS

Model		LF1B-NA (134mm)	LF1B-NB (210mm)	LF1B-NC (330mm)	LF1B-ND (580mm)	LF1B-NE (830mm)	LF1B-NF (1,080mm)
<b>Rated Voltage</b>		24V DC (operating voltage range: 21.6 to 26.4V)					
<b>Input Current (typ.)</b> (at the rated current), mA	cool white/warm white/blue	60	120	180	360	540	720
	red/yellow/green	40	80	120	240	360	480
<b>Power Consumption (typ.)</b> (at the rated current), W	cool white/warm white/blue	1.5	2.9	4.4	8.7	13.0	17.3
	red/yellow/green	1.0	2.0	2.9	5.8	8.7	11.6
<b>Insulation Resistance</b>		100MΩ minimum (500V DC megger)					
<b>Dielectric Strength</b>		1,000V AC, 1 minute (between live and dead parts)					
<b>Vibration Resistance</b> (damage limits)		Frequency: 5 to 55Hz, Amplitude 0.5mm Acceleration 60m/s <sup>2</sup> (6G), 2 hours each in 3 axes				Frequency: 5 to 55Hz, Amplitude 0.17mm Acceleration 20m/s <sup>2</sup> (2G), 2 hours each in 3 axes	
<b>Shock Resistance</b> (damage limits)		1,000m/s <sup>2</sup> (100G), 5 shocks each in 6 axes				300m/s <sup>2</sup> (30G), 5 shocks each in 6 axes	
<b>Operating Temperature</b>		-30 to +55°C (no freezing)					
<b>Operating Humidity</b>		45 to 85% RH (no condensation)					
<b>Storage Temperature</b>		-35 to +70°C (no freezing)					
<b>Operating Atmosphere</b>		No corrosive gases					
<b>Life<sup>1</sup></b>		40,000 hours (Ta = 25°C) (The total illumination life in which the brightness maintains a minimum of 70% of the initial value.)					
<b>Degree of Protection</b>		IP65 (IEC 60529)					
<b>Material</b>		Cover: Polycarbonate, End Cover/Cable Gland: Polyamide, Wire: PVC (24AWG)					
<b>Weight (approx.), g</b>		95	125	165	255	430	740

1. LED life depends on the operating environment.



## LED OPTICAL SPECIFICATIONS

Illumination Color		Cool White		Warm White		Yellow		Red		Blue		Green	
Cover		Clear	White	Clear	White	Clear	White	Clear	White	Clear	White	Clear	White
Color Temperature/Dominant Wavelength (typ.)		6500K		3000K		590nm		620nm		455nm		525nm	
Reference Brightness (typ.) at 0.5m, lx	LF1B-NA	95	85	90	80	20	18	20	18	10	9	30	27
	LF1B-NB	240	215	230	2100	40	36	40	36	20	18	60	55
	LF1B-NC	455	410	440	395	75	65	75	65	30	27	110	100
	LF1B-ND	840	750	815	725	125	110	125	110	50	45	190	170
	LF1B-NE	1100	995	1065	960	160	145	160	145	60	55	260	235
	LF1B-NF	1350	1210	1300	1170	180	160	180	160	80	70	300	270

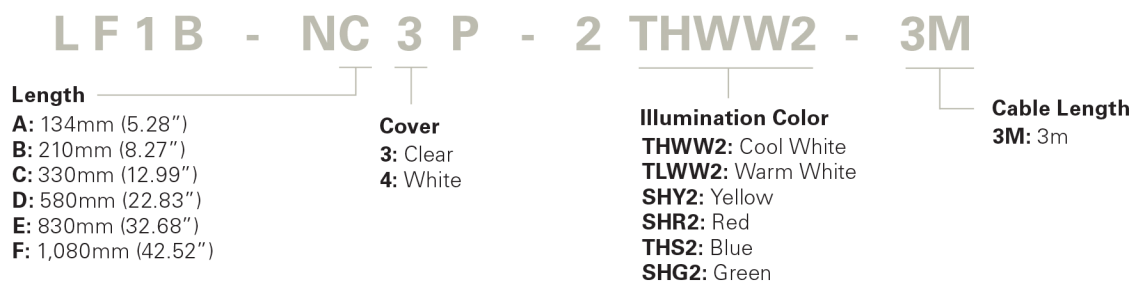
LED modules and illumination units may vary in illumination colors and brightness.

## PART NUMBERS

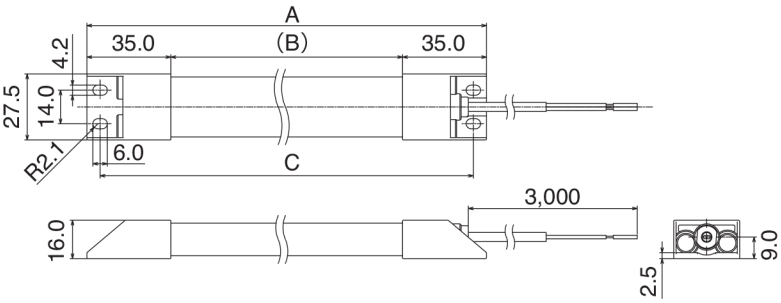
Illumination Color	Cool White	Warm White	Yellow	Red	Blue	Green
Appearance						
LF1B-NA (134mm)	LF1B-NA⊙P-2THWW2-3M	LF1B-NA⊙P-2TLWW2-3M	LF1B-NA⊙P-2SHY2-3M	LF1B-NA⊙P-2SHR2-3M	LF1B-NA⊙P-2THS2-3M	LF1B-NA⊙P-2SHG2-3M
LF1B-NB (210mm)	LF1B-NB⊙P-2THWW2-3M	LF1B-NB⊙P-2TLWW2-3M	LF1B-NB⊙P-2SHY2-3M	LF1B-NB⊙P-2SHR2-3M	LF1B-NB⊙P-2THS2-3M	LF1B-NB⊙P-2SHG2-3M
LF1B-NC (330mm)	LF1B-NC⊙P-2THWW2-3M	LF1B-NC⊙P-2TLWW2-3M	LF1B-NC⊙P-2SHY2-3M	LF1B-NC⊙P-2SHR2-3M	LF1B-NC⊙P-2THS2-3M	LF1B-NC⊙P-2SHG2-3M
LF1B-ND (580mm)	LF1B-ND⊙P-2THWW2-3M	LF1B-ND⊙P-2TLWW2-3M	LF1B-ND⊙P-2SHY2-3M	LF1B-ND⊙P-2SHR2-3M	LF1B-ND⊙P-2THS2-3M	LF1B-ND⊙P-2SHG2-3M
LF1B-NE (830mm)	LF1B-NE⊙P-2THWW2-3M	LF1B-NE⊙P-2TLWW2-3M	LF1B-NE⊙P-2SHY2-3M	LF1B-NE⊙P-2SHR2-3M	LF1B-NE⊙P-2THS2-3M	LF1B-NE⊙P-2SHG2-3M
LF1B-NF (1,080mm)	LF1B-NF⊙P-2THWW2-3M	LF1B-NF⊙P-2TLWW2-3M	LF1B-NF⊙P-2SHY2-3M	LF1B-NF⊙P-2SHR2-3M	LF1B-NF⊙P-2THS2-3M	LF1B-NF⊙P-2SHG2-3M

In place of ⊙ insert 3 for clear cover and 4 for white cover.

## PART NUMBER STRUCTURE (USE FOR INTERPRETING PART NUMBERS ONLY)



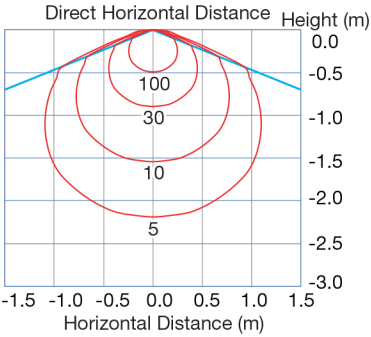
**DIMENSIONS (mm)**



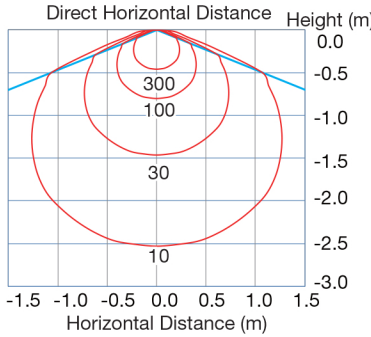
Model	A		B		C	
	mm	inch	mm	inch	mm	inch
LF1B-NA	134	5.28	64	2.52	123	4.84
LF1B-NB	210	8.27	140	5.51	199	7.83
LF1B-NC	330	12.99	260	10.24	319	12.56
LF1B-ND	580	22.83	510	20.08	569	22.40
LF1B-NE	830	32.68	760	29.92	819	32.24
LF1B-NF	1080	42.52	1010	39.76	1069	42.09

**ILLUMINANCE DISTRIBUTION (lm)**

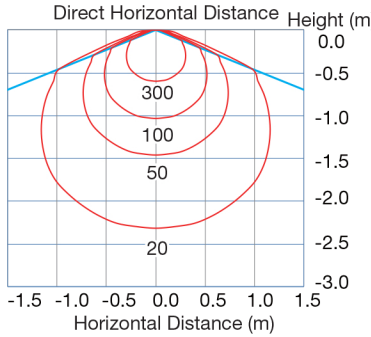
LF1B-NA3P-2THWW2-\*



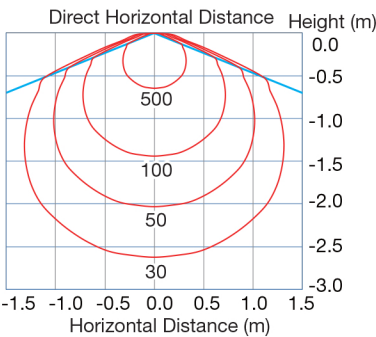
LF1B-NB3P-2THWW2-\*



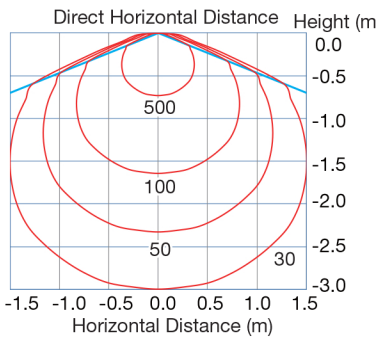
LF1B-NC3P-2THWW2-\*



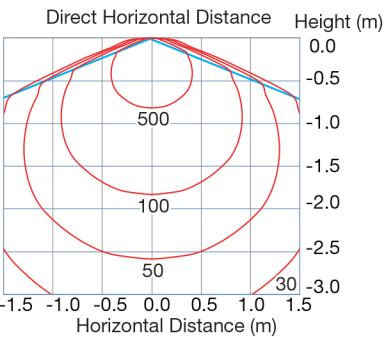
LF1B-ND3P-2THWW2-\*



LF1B-NE3P-2THWW2-\*



LF1B-NF3P-2THWW2-\*



**ACCESSORY**

Item	Mounting Bracket—Adjustable Angle	
Part No.	LF9Z-1MB1	
Material	Stainless Steel	

- 1. 1 pair, Left and Right.
- 2. Not applicable to LF1B-ND, NE, NF.