# Line Lights
## LNLP Series

## 1,000,000 lx or more in illuminance
## High-illuminance fan-less (natural air-cooling) Line Lights

LED color
Custom orders accepted

Size
Custom orders accepted

LNLP-400SW

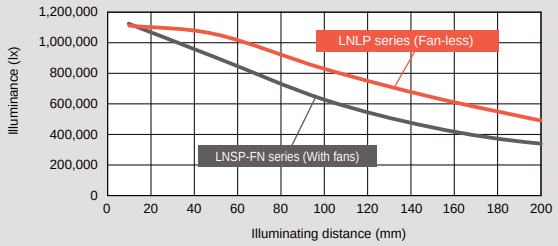
We will accept special orders for 100 to 3,000 mm length units in steps of 100 mm.

**Applications** Inspection for scratches on plate glass, inspection for scratches and dents on sheet metal, inspection for scratches and foreign materials on transparent films, inspection of printing on paper, inspection of the appearance of plastic components, etc.

## 1,000,000 lx or More in Illuminance

The high-illuminance Line Lights brighter than the conventional fan-type units, despite being fan-less.

### Graph of the change in illuminance




Actual measurement values at the center of the emitting surface, at each illuminating distance, 100% intensity. Results for individual products may vary.

### Controlling each Light Unit circuit

The light intensity value for each Light Unit circuit can be set through the external control. Also, burn-out errors in LED circuits can be detected.

- The light intensity value can be set for each Light Unit circuit.
- Burn-out in LED circuits and other errors can be detected.

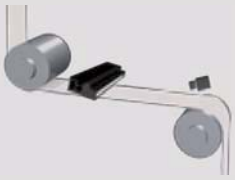
Control Units for LED Lights PSCC series

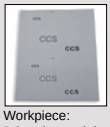
For detailed information on the applicable Control Units PSCC series, refer to the product page (P.293).

## Optimum Light Unit Shape for Use at the Inspection Sites

For use at the site of inspection, the Light Unit shape is optimized with its light emitting tip shifted to one side of the Light Unit body. As a result, the camera view is not blocked during illumination, and the Light Unit can be installed close to the workpiece.

Close-up illumination from a low angle

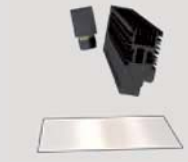




Workpiece: Printed material


When you configure the system at a shallow angle to the horizontal plane, you can emphasize and take advantage of the marginal difference in reflectivity between the white paper and the ink.

Semi-coaxial illumination from a high angle

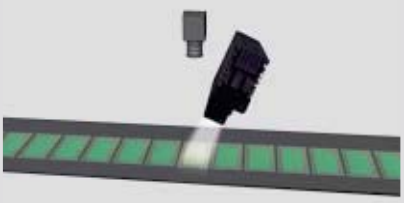


Workpiece: Clear file

It is possible to take advantage of surface reflection of a clear file; scratches and finger prints, which have a low reflectivity, can be imaged as black.

## Applications

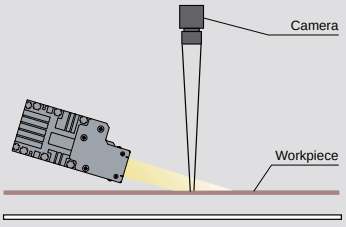
### Inspecting the appearance of film substrates



## Example Configuration

Achieves high-illuminance despite being fan-less. The constant-current drive system allows for even imaging with a high degree of uniformity.

### LNLP series



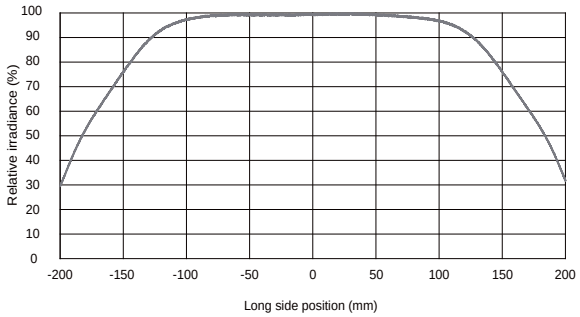

Various technical documents available. PDF Drawings | DXF Drawings | Product Brochures | Instruction Guides | 3D CAD | Data Sheets | Imaging Examples | Digital Catalogs

## Data (Representative Example)

The graph included is for reference only. Actual values may vary.

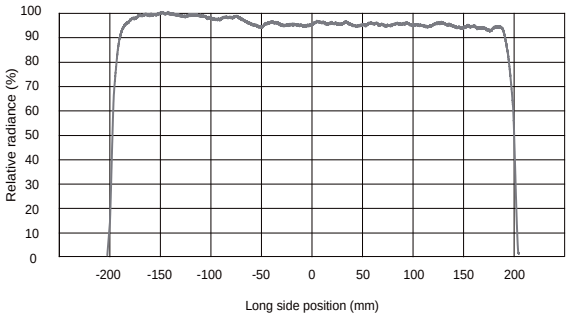
### LNLP-400SW

#### Relative irradiance distribution



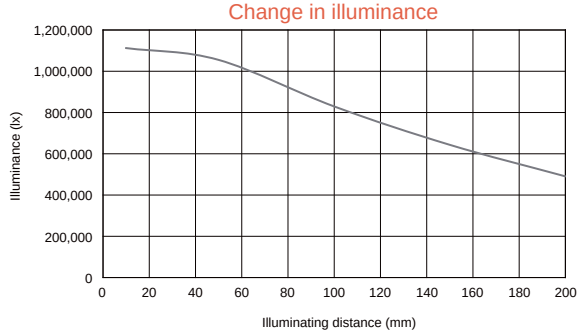

Actual measurement values at 100% intensity in 100 mm illuminating distance.
Results for individual products may vary.

#### Relative radiance distribution



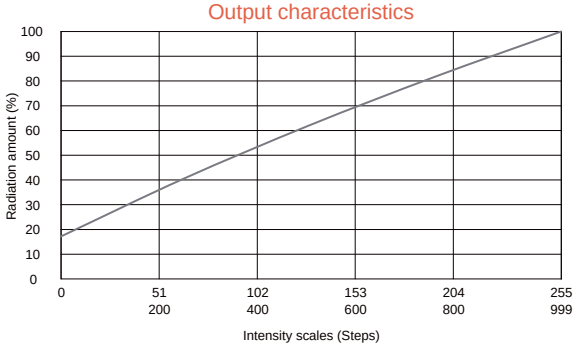

The graph included is for reference only. Actual values may vary.

#### Change in illuminance




Actual measurement values at 100% intensity in each illuminating distance.
Results for individual products may vary.

#### Output characteristics

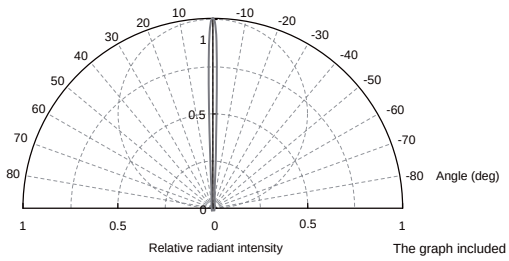



Actual measurement values when using Analog Control Unit, PSCC-30048(A).
Results for individual products may vary.

#### Illumination distribution characteristics

Measuring direction: short side

Short side

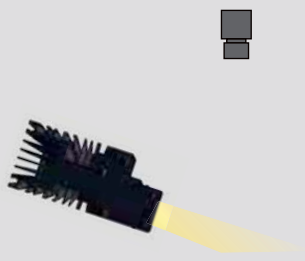


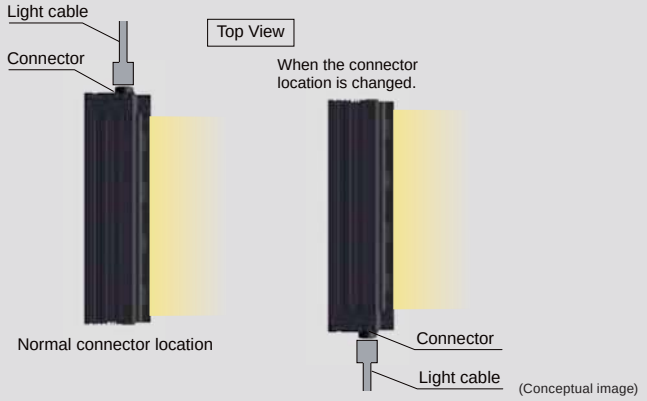

The graph included is for reference only. Actual values may vary.

## Custom Orders

E.g.: Changes the location of the connector on the Light Unit case.

The location of the light cable can be changed to match your environment.





# LNLP Series

## Lineup

| | Model name | LED color | Power consumption | Correlated color temperature | Extension cables | Recommended Control Units | Weight |
|---|---|---|---|---|---|---|---|
| Standard products | LNLP-100SW | White | 36 W | 5,800 K | | | 1,400 g |
| | LNLP-200SW | | 72 W | | | | 2,200 g |
| | LNLP-300SW | | 108 W | | QCBM-DA | PSCC-30048(A) | 3,000 g |
| | LNLP-400SW | | 144 W | | QCB-DA | PSCC-60048(A) | 3,800 g |
| | LNLP-500SW | | 180 W | | | | 4,600 g |
| | LNLP-600SW | | 216 W | | | | 5,400 g |
| | LNLP-700SW | | 252 W | | | | 6,200 g |
| | LNLP-800SW | | 288 W | | | | 7,000 g |
| | LNLP-900SW | | 324 W | | QCB-DA | PSCC-60048(A) | 7,800 g |
| | LNLP-1000SW | | 360 W | | | | 8,600 g |
| Special orders | LNLP-1100SW | | 396 W | | | | 9,400 g |
| | LNLP-1200SW | | 432 W | | | | 10,200 g |
| | LNLP-1300SW | | 468 W | | QCB-DA | PSCC-60048(A) | 11,000 g |
| | LNLP-1400SW | | 504 W | | | | 11,800 g |
| | LNLP-1500SW | | 540 W | | | | 12,600 g |
| | LNLP-1600SW | | 576 W | | | | 13,800 g |
| | LNLP-1700SW | | 612 W | | | | 14,800 g |
| | LNLP-1800SW | | 648 W | | | | 15,800 g |
| | LNLP-1900SW | | 684 W | | | | 16,800 g |
| | LNLP-2000SW | | 720 W | | | | 17,800 g |
| | LNLP-2100SW | | 756 W | | | | 18,800 g |
| | LNLP-2200SW | | 792 W | | | | 19,800 g |
| | LNLP-2300SW | | 828 W | | QCB-DA x 2 * | PSCC-60048(A) x 2 * | 20,800 g |
| | LNLP-2400SW | | 864 W | | | | 21,800 g |
| | LNLP-2500SW | | 900 W | | | | 22,800 g |
| | LNLP-2600SW | | 936 W | | | | 23,800 g |
| | LNLP-2700SW | | 972 W | | | | 24,800 g |
| | LNLP-2800SW | | 1008 W | | | | 25,800 g |
| | LNLP-2900SW | | 1044 W | | | | 26,800 g |
| | LNLP-3000SW | | 1080 W | | | | 27,800 g |

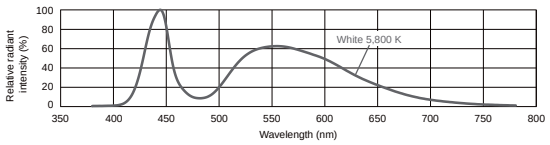
* For sizes 1,600 mm (emitting surface) or longer, a cable connector is located at each end of the Light Unit.

PSCC series Product Page ▶ P.293

We accept custom orders, such as changes to the LED color (red/blue/IR/UV, etc.) and size changes. Inquire at your sales representative for details.

## LED Properties

Spectral distribution




Be sure to read the "Instruction Guide" included with the product before use and follow the safety precautions upon use.
The data included is for reference only. Actual values may vary.

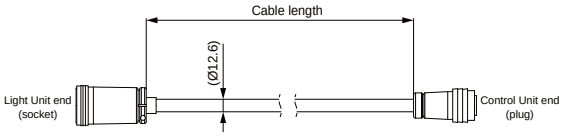
## Extension Cables

Necessary when connecting the Light Unit to the recommended Control Unit, PSCC series.

### QCBM-DA

| Model name | Cable length | Weight | Applicable Control Unit |
|---|---|---|---|
| QCBM-2-DA | 2 m | 800 g | PSCC-30048(A) |
| QCBM-3-DA | 3 m | 1,000 g | |
| QCBM-5-DA | 5 m | 1,500 g | |
| QCBM-10-DA | 10 m | 2,700 g | |
| QCBM-20-DA | 20 m | 5,000 g | |

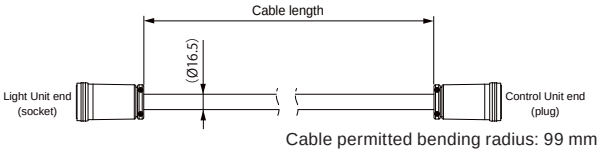
(mm)




Cable permitted bending radius: 75.6 mm

### QCB-DA

| Model name | Cable length | Weight | Applicable Control Unit |
|---|---|---|---|
| QCB-2-DA | 2 m | 1,100 g | PSCC-60048(A) |
| QCB-3-DA | 3 m | 1,500 g | |
| QCB-5-DA | 5 m | 2,400 g | |
| QCB-10-DA | 10 m | 4,600 g | |
| QCB-20-DA | 20 m | 8,900 g | |

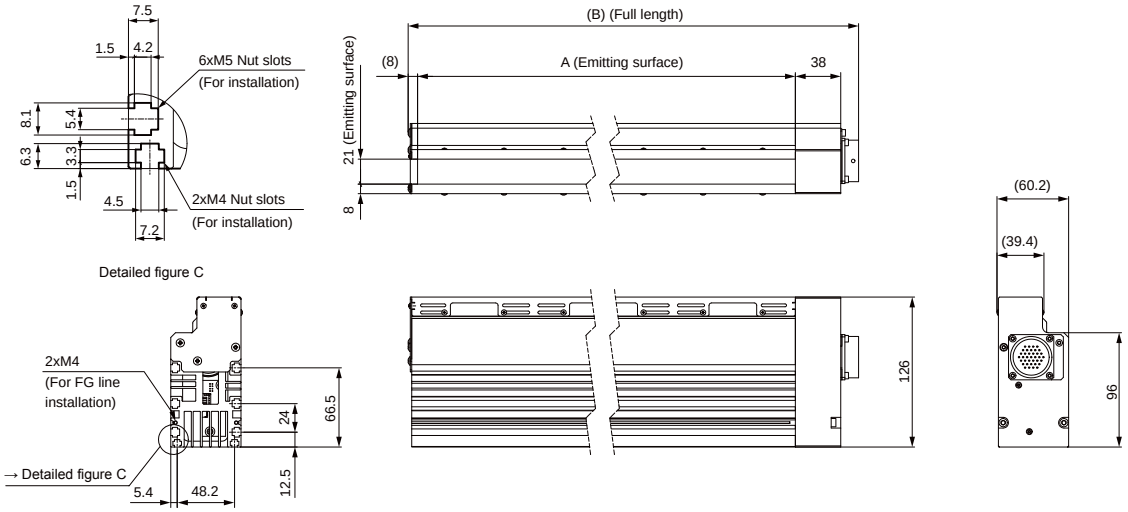



Cable permitted bending radius: 99 mm

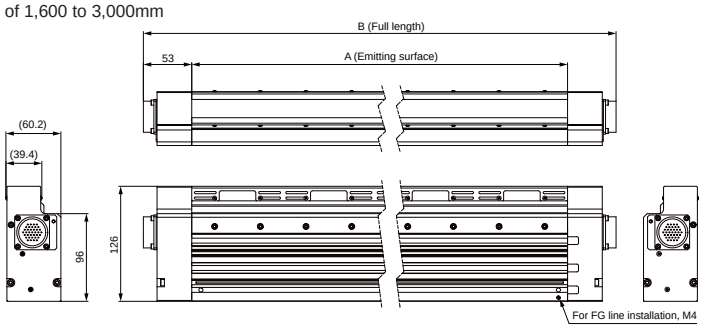
The above cable permitted bending radii are reference values. Actual values may vary.

## Dimensions (mm)

● For the emitting surface length of 100 to 1,500mm




● For the emitting surface length of 1,600 to 3,000mm




| | Model name | A (Emitting surface) | B (Full length) | | Model name | A (Emitting surface) | B (Full length) |
|---|---|---|---|---|---|---|---|
| Standard products | LNLP-100SW | 100 | 161 | Special orders | LNLP-1600SW | 1,600 | 1,706 |
| | LNLP-200SW | 200 | 261 | | LNLP-1700SW | 1,700 | 1,806 |
| | LNLP-300SW | 300 | 361 | | LNLP-1800SW | 1,800 | 1,906 |
| | LNLP-400SW | 400 | 461 | | LNLP-1900SW | 1,900 | 2,006 |
| | LNLP-500SW | 500 | 561 | | LNLP-2000SW | 2,000 | 2,106 |
| | LNLP-600SW | 600 | 661 | | LNLP-2100SW | 2,100 | 2,206 |
| | LNLP-700SW | 700 | 761 | | LNLP-2200SW | 2,200 | 2,306 |
| | LNLP-800SW | 800 | 861 | | LNLP-2300SW | 2,300 | 2,406 |
| | LNLP-900SW | 900 | 961 | | LNLP-2400SW | 2,400 | 2,506 |
| | LNLP-1000SW | 1,000 | 1,061 | | LNLP-2500SW | 2,500 | 2,606 |
| Special orders | LNLP-1100SW | 1,100 | 1,161 | | LNLP-2600SW | 2,600 | 2,706 |
| | LNLP-1200SW | 1,200 | 1,261 | | LNLP-2700SW | 2,700 | 2,806 |
| | LNLP-1300SW | 1,300 | 1,361 | | LNLP-2800SW | 2,800 | 2,906 |
| | LNLP-1400SW | 1,400 | 1,461 | | LNLP-2900SW | 2,900 | 3,006 |
| | LNLP-1500SW | 1,500 | 1,561 | | LNLP-3000SW | 3,000 | 3,106 |

Direct Lighting: LDR2, LDR2-LA, LDR-LA1, SQR, SQR-TP
Diffused Lighting: HPR2, LFR, LKR, FPR, FPQ2
Direct Lighting: LDL2, LDLB, HLDL2, HL
Diffused Lighting: TH2 (5 types), TH, LFL, HPD2, LDM2, LAV, PDM, LFX3, LFX3-PT, LFV3
Collimated Lighting: MSU, MFU
Strobe Lighting: PF
Water-proof: HLDR-IP/HSL-PCL
Ultraviolet Lighting: UV2, UV, LNSP-UV-FN
Infrared Lighting: IR2
Intensity Control: IU
Spot Lighting, Etc.: HLV3, HLV2, LV, LSP, HFS/HFR, HLV3-NR, HLV3-3M-RGB-4, HLV2-NR, HLV2-3M-RGB-3W, PFBR, PFB3, PFB2
Convergent Lighting: LNLP, LNSP2, LNSP, Coaxial Units, LNSP-FN, LN/LN-HK
Diffused Lighting: LNSD, LND2, HLND, LT, LNV
Oblique Angled Lighting: LNDG, LNIS2, LNIS, LNIS-FN
Lenses: Telecentric Lens, Macro Lens