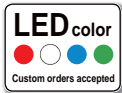


Uses original converging technology to achieve illumination with reduced diffusion

High output Line Lights with forced air cooling (fan cooling)



LNSP-400SW-FN

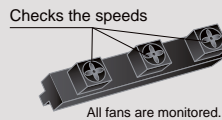
Applications

Inspection of parts mounted on circuit boards, inspection for scratches on clear film, inspecting sheet alignment, inspection for unevenness in sheet metal, visual inspection of plastic products, etc.

➤ Avoid Trouble with Error Detection

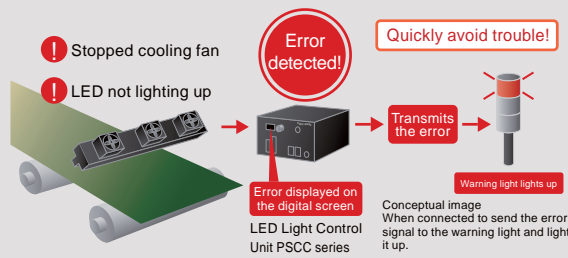
1) Error detection for cooling fans

An error is detected should a fault occur, such as insufficient speed or a stop in the cooling fans.



2) Error detection for the LEDs

Detects dead LEDs due to an open in the Light Unit circuit or a shorted LED.



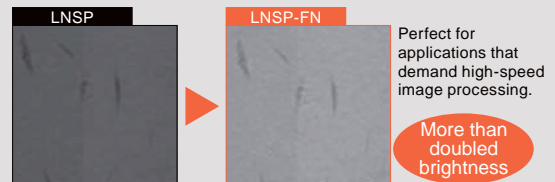
Error detection is a function included with the PSCC series, the recommended Control Units.

➤ Illuminance of 900,000 lx with Forced Air Cooling (Fan)

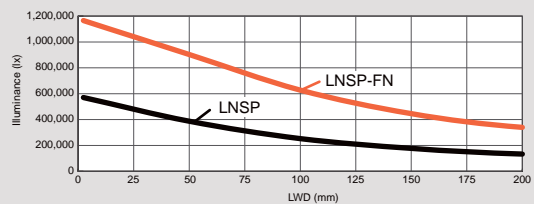
Perfect for applications that demand high-speed image processing. Also allows for even imaging with a high degree of uniformity.

Comparison of illuminance for the LNSP and LNSP-FN

Comparison of imaging of paper (Japanese paper)



Brightness varies based on the camera's spectral sensitivity.

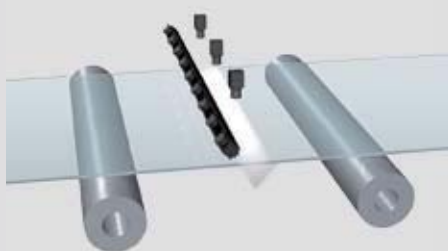


Actual measurement values at 100% intensity in each illuminating distance. Results for individual products may vary. LWD is the distance from the Light Unit to the workpiece.

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

➤ Applications

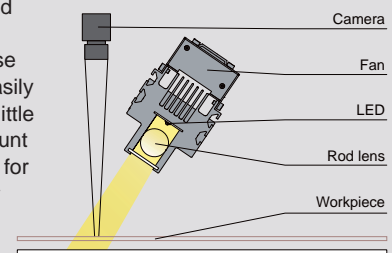
Inspection for damage on glass



➤ Example Configuration

High-output Line Lights with forced air cooling (fan cooling). Because light does not easily diffuse, there is little loss for the amount of light, allowing for illumination over long distances.

LNSP-FN series

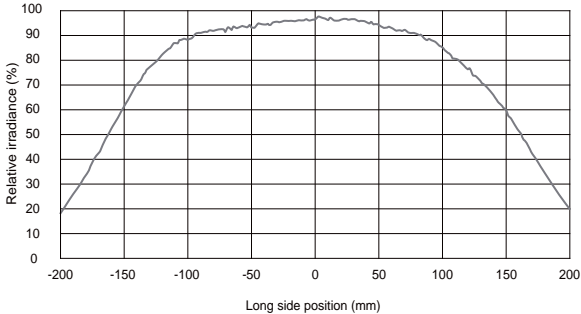


## Data (Representative Example)

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

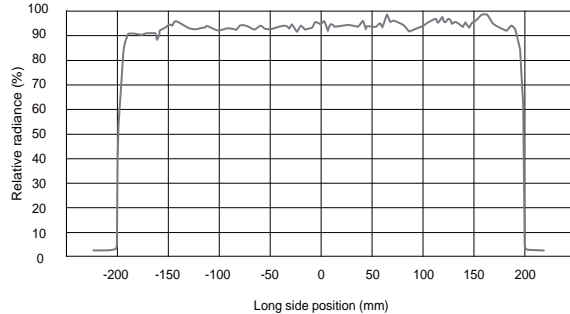
### LN5P-400SW-FN

Relative irradiance distribution



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

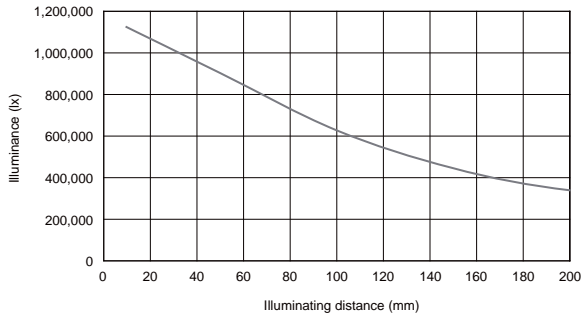
Relative radiance distribution



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

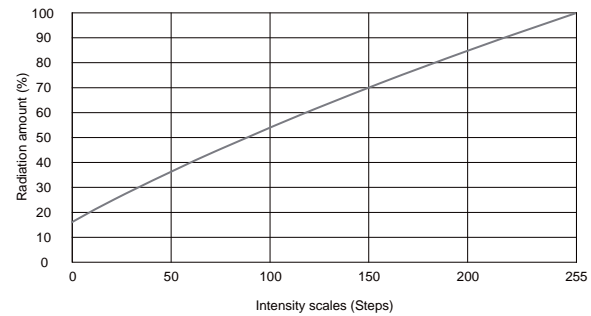
### LN5P-1500SW-FN

Change in illuminance



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

Output characteristics



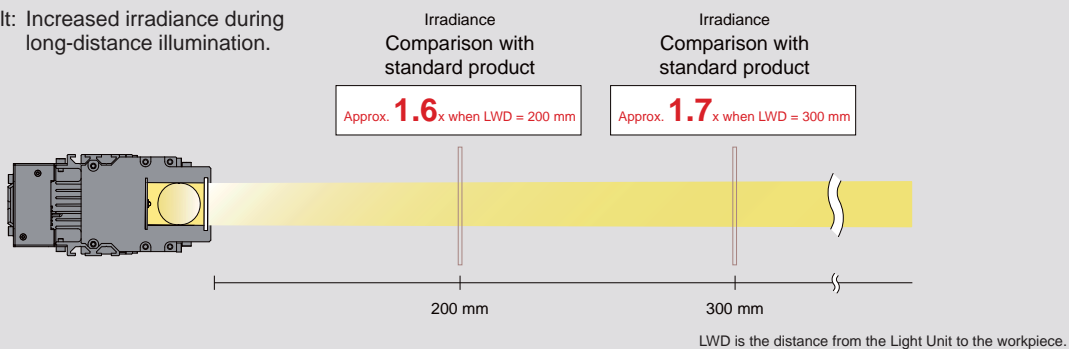
Actual measurement values using the Analog Control Unit PSSC-60048(A). Results for individual products may vary.

## Custom Orders

Please contact your sales representative.

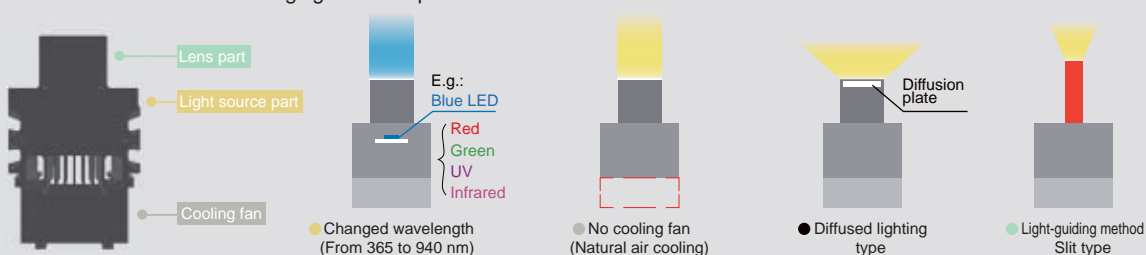
Example 1: Changes specifications for the rod lens diameter

Result: Increased irradiance during long-distance illumination.



Example 2: Changes specifications to match application

Allows for customization including light source part



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
Coaxial Lighting	MSU MFU
Strobe Lighting	PF
Water-proof Lighting	HLDR-IP/ HSL-PCL
Ultraviolet Lighting	UV2 UV LN5P-UV-FN
Infrared Lighting	IR2
Intensity Control Lighting	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 LN5P2 LN5P Coaxial Units LN5P-FN LN/LN-HK
Diffused Lighting	LN5D LN5D2 HLND LT LNV
Oblique-Angled Lighting	LN5DG LN5S2 LN5S LN5S-FN
Lenses	Telecentric Lens Macro Lens

# LNSP-FN Series



## Lineup

Model name	LED color	Power consumption*1 (Including the fan)		Correlated color temperature	Extension cables	Recommended Control Units	Weight	
		June 2017 or earlier	July 2017 or later					
Standard products	White	5,800 K	LNSP-100SW-FN	41 W	41 W	QCBM QCB	PSCC-30048(A) PSCC-60048(A)	900 g
			LNSP-200SW-FN	81 W	82 W			1,400 g
			LNSP-300SW-FN	117 W	118 W			1,900 g
			LNSP-400SW-FN	157 W	158 W			2,400 g
			LNSP-500SW-FN	192 W	194 W			2,900 g
			LNSP-600SW-FN	233 W	235 W			3,400 g
			LNSP-700SW-FN	268 W	270 W			3,900 g
			LNSP-800SW-FN	309 W	311 W			4,400 g
			LNSP-900SW-FN	345 W	348 W			4,900 g
			LNSP-1000SW-FN	384 W	387 W			5,500 g
			LNSP-1100SW-FN	425 W	428 W			6,000 g
			LNSP-1200SW-FN	460 W	464 W			6,500 g
			LNSP-1300SW-FN	501 W	504 W			7,000 g
			LNSP-1400SW-FN	536 W	540 W			7,500 g
			Special orders	White	5,800 K			LNSP-1500SW-FN
LNSP-1600SW-FN	613 W	618 W				8,800 g		
LNSP-1700SW-FN	652 W	658 W				9,300 g		
LNSP-1800SW-FN	689 W	695 W				9,800 g		
LNSP-1900SW-FN	728 W	734 W				10,300 g		
LNSP-2000SW-FN	768 W	775 W				10,900 g		
LNSP-2100SW-FN	804 W	811 W				11,400 g		
LNSP-2200SW-FN	844 W	851 W				11,900 g		
LNSP-2300SW-FN	881 W	888 W				12,400 g		
LNSP-2400SW-FN	920 W	928 W				12,900 g		
LNSP-2500SW-FN	956 W	964 W				13,400 g		
LNSP-2600SW-FN	996 W	1,004 W				13,900 g		
LNSP-2700SW-FN	1,032 W	1,041 W				14,400 g		
LNSP-2800SW-FN	1,071 W	1,080 W				14,900 g		
LNSP-2900SW-FN	1,108 W	1,117 W				15,400 g		
LNSP-3000SW-FN	1,148 W	1,158 W	15,900 g					

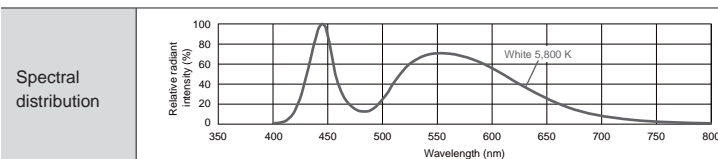
\*1 The power consumption varies according to the production data. Refer to the power consumption given by the label tag of the product.

\*2 For sizes 1,600 mm (emitting surface) or longer, a cable comes out of 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



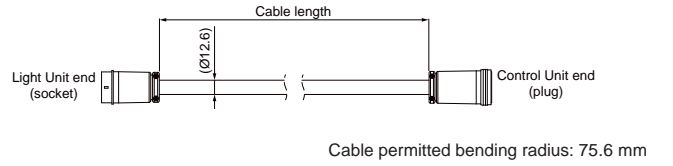
Be sure to read the "Instruction Guide" included with the product before use and follow the safety precautions upon use. The data included is for reference only. Actual values may vary.

## Extension Cables

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

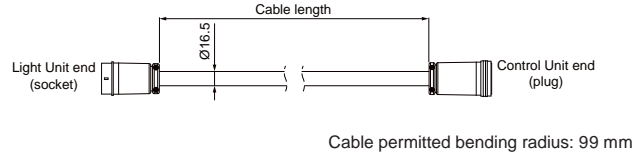
### QCBM

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



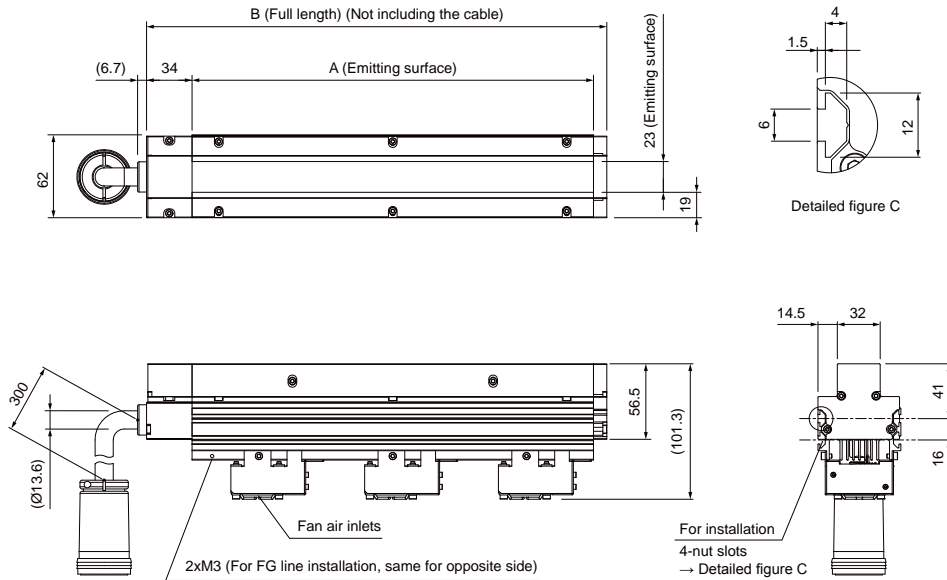
### QCB

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



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

## Dimensions (mm)



For sizes 1,600 mm (emitting surface) or longer, a cable comes out of each end of the Light Unit.

Model name	A (Emitting surface)	B (Full length)	Model name	A (Emitting surface)	B (Full length)
LNSP-100SW-FN	100	144	LNSP-1600SW-FN	1,600	1,668
LNSP-200SW-FN	200	244	LNSP-1700SW-FN	1,700	1,768
LNSP-300SW-FN	300	344	LNSP-1800SW-FN	1,800	1,868
LNSP-400SW-FN	400	444	LNSP-1900SW-FN	1,900	1,968
LNSP-500SW-FN	500	544	LNSP-2000SW-FN	2,000	2,068
LNSP-600SW-FN	600	644	LNSP-2100SW-FN	2,100	2,168
LNSP-700SW-FN	700	744	LNSP-2200SW-FN	2,200	2,268
LNSP-800SW-FN	800	844	LNSP-2300SW-FN	2,300	2,368
LNSP-900SW-FN	900	944	LNSP-2400SW-FN	2,400	2,468
LNSP-1000SW-FN	1,000	1,044	LNSP-2500SW-FN	2,500	2,568
LNSP-1100SW-FN	1,100	1,144	LNSP-2600SW-FN	2,600	2,668
LNSP-1200SW-FN	1,200	1,244	LNSP-2700SW-FN	2,700	2,768
LNSP-1300SW-FN	1,300	1,344	LNSP-2800SW-FN	2,800	2,868
LNSP-1400SW-FN	1,400	1,444	LNSP-2900SW-FN	2,900	2,968
LNSP-1500SW-FN	1,500	1,544	LNSP-3000SW-FN	3,000	3,068

- Direct Lighting
  - LDR2
  - LDR2-LA
  - LDR-LA1
  - SQR
  - SQR-TP
- Diffused Lighting
  - HPR2
  - LFR
  - LKR
  - FPR
  - FPQ2
- Direct Lighting
  - LDL2
  - LDLB
  - HLDL2
  - HL
  - TH2 (5 types)
  - TH
- Diffused Lighting
  - LFL
  - HPD2
  - LDM2
  - LAV
  - PDM
  - LFX3
  - LFX3-PT
  - LFV3
- Coaxial Lighting
  - MSU
  - MFU
- Strobe Lighting
  - PF
- Water-proof
  - HLDR-IP/ HSL-PCL
- Ultraviolet Lighting
  - UV2
  - UV
  - LNSP-UV-FN
- Infrared Lighting
  - IR2
- Intensify 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
  - LNL
  - LNSP2
  - LNSP
  - Coaxial Units
  - LNSP-FN
  - LN/LN-HK
- Diffused Lighting
  - LNSD
  - LND2
  - HLND
  - LT
  - LVN
- Oblique-Angled Lighting
  - LNDG
  - LNS2
  - LNIS
  - LNIS-FN
- Lenses
  - Telecentric Lens
  - Macro Lens