

# Line Lights

## LND2 series

Refer to our website for product details.

CCS LND2

Search



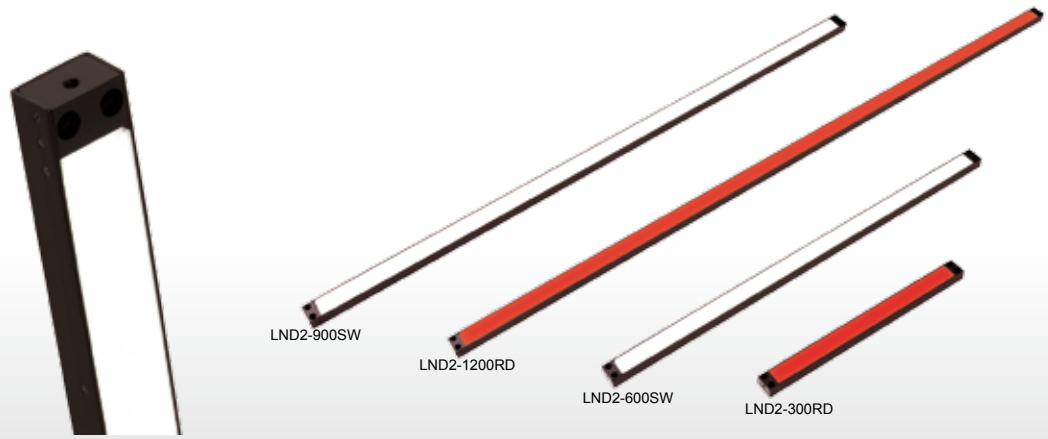
You can also use your smartphone or cell phone.

Use a search engine.

Provides diffused light from an emitting surface equipped with LEDs in straight lines

**LED color**  
Custom orders accepted

**Size**  
Custom orders accepted



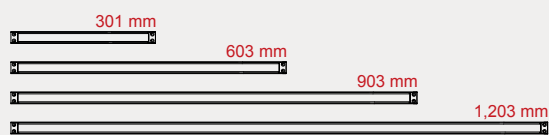
**Applications** Inspection for damage or dents in metal cylindrical parts, inspection for damage or dents in motor shafts, inspection for foreign material on clear film, dimension measuring for resin molded parts, and dimension measuring for sheet steel, etc.

### Suitable for all types of line sensor inspections

This Line Light achieves brightness equivalent to a fluorescent lamp while keeping the price down.

#### Emitting surface length

You can select from 301 mm, 603 mm, 903 mm, and 1,203 mm.



For a custom order, we can create an emitting surface with a length with a 100 mm pitch.

#### LED color

For emitted LED color, we have a lineup consisting of:

Red and White

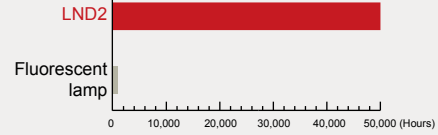
Select your Light Unit based on the details of your inspections.

For a custom order, we can create LEDs that emit blue, green, IR, or UV.

### Also perfect for replacing fluorescent lamps

LEDs have a long service life, so the bulbs don't burn out like fluorescent lamps, thus reducing costs for lamp replacement and work hours.

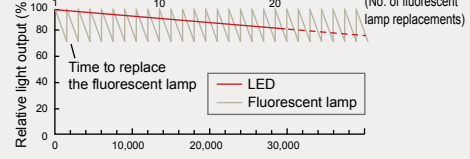
#### Comparison of service life between the LND2 (red) and a fluorescent lamp



\* Calculated values with an intensity of 100%, ambient temperature of 25°C and a light output drop of up to 50%. (This does not guarantee product quality.)

\* Assuming the service life of a fluorescent lamp is 1,500 hours.

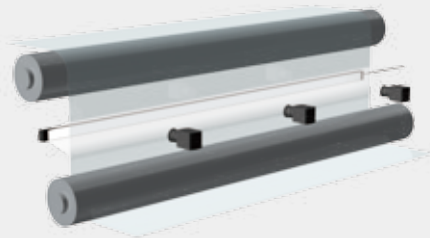
#### Change in the amount of light from the LEDs and work hours for replacing fluorescent lamps



\* Imaging comparing the change in LED light and a fluorescent lamp that is replaced every 1,500 hours.

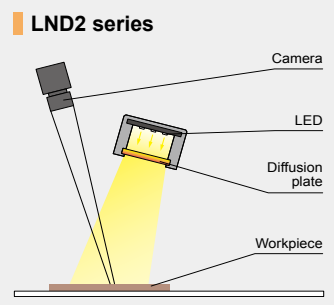
### Applications

#### Foreign material inspection for clear film



### Example configuration

Provides diffused light with a high degree of uniformity by mounting LEDs with high density.



LDR2	Direct Lighting
LDR2-LA	Direct Lighting
LDR-LA1	Direct Lighting
SQR	Direct Lighting
SQR-TP	Direct Lighting
HLDR-IP	Convergent Lighting
HPR2	Diffused Lighting
HPR	Diffused Lighting
LFR	Diffused Lighting
LKR	Diffused Lighting
FPR	Diffused Lighting
FPQ2	Direct Lighting
LDL2	Direct Lighting
LDLB	Direct Lighting
HLDL2	Direct Lighting
TH	Diffused Lighting
LFL	Diffused Lighting
HPD2	Diffused Lighting
HPD	Diffused Lighting
LDM2	Diffused Lighting
LAV	Diffused Lighting
PDM	Diffused Lighting
LFX2	Diffused Lighting
LFV3	Diffused Lighting
LFV2	Diffused Lighting
MSU	Collimated Lighting
MFU	Collimated Lighting
UV2	Ultraviolet Lighting
UV	Ultraviolet Lighting
LNSP-UV-FN	Ultraviolet Lighting
IR2	Infrared Lighting
HLV2	Spot Lighting, Etc.
LV	Spot Lighting, Etc.
LSP	Spot Lighting, Etc.
HFS/HFR	Spot Lighting, Etc.
HLV2-NR	Spot Lighting, Etc.
HLV2-3M-RGB-3W	Spot Lighting, Etc.
PFB2	Convergent Lighting
PFBR	Convergent Lighting
LNSP	Convergent Lighting
CU-LNSP	Convergent Lighting
LNSP-FN	Convergent Lighting
LN/LN-HK	Convergent Lighting
LNSD	Diffused Lighting
LND2	Diffused Lighting
HLND	Diffused Lighting
LT	Diffused Lighting
LNW/HLDN	Diffused Lighting
LNIS	Oblique Angled Lighting
LNIS-FN	Oblique Angled Lighting
Telecentric Lens	Lenses
Macro Lens	Lenses

We have various materials.

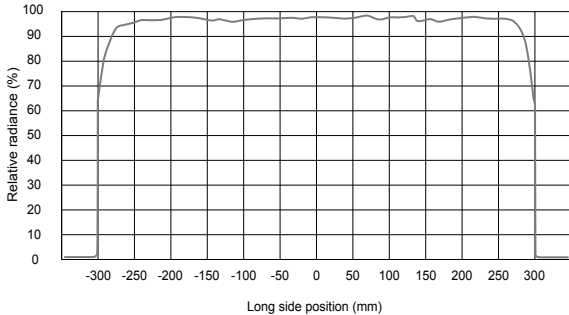
- PDF Drawings
- DXF Drawings
- 3D CAD
- Instruction Guides
- Product Filers
- Imaging Samples
- Data Sheets
- Examples of Custom Ordered Products

Download here. <http://www.ccs-grp.com/dl/>

## Data (Representative example) \*The graph included is for reference only and does not guarantee the quality of this product.

### LND2-600SW

#### Relative radiance distribution

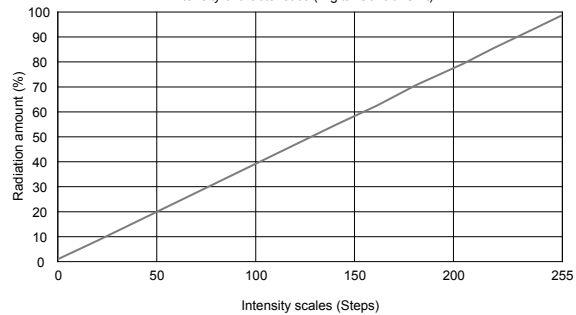


\* The graph included is for reference only and does not guarantee the quality of this product.

### LND2-300SW

#### Output characteristics

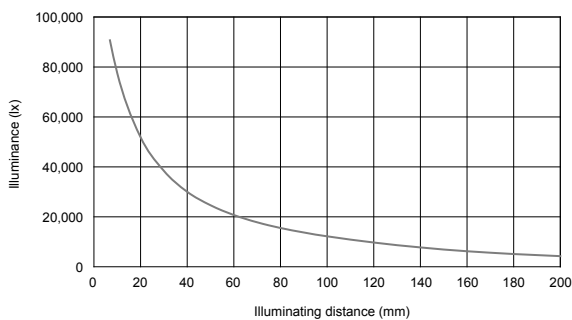
Intensity characteristics (Digital Control Unit)



\* Actual measurement values using the Digital Control Unit PD3 series. (This does not guarantee product quality.)

### LND2-300SW

#### Change in illuminance

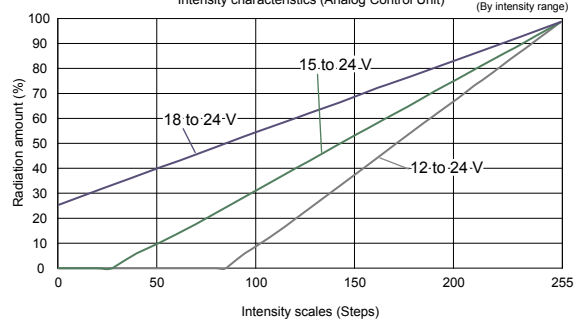


\* Actual measurement values at 100% intensity in each illuminating distance. (This does not guarantee product quality.)

### LND2-900SW

#### Output characteristics

Intensity characteristics (Analog Control Unit) (By intensity range)



\* Actual measurement values using the Analog Control Unit PSB3-30024. (This does not guarantee product quality.)

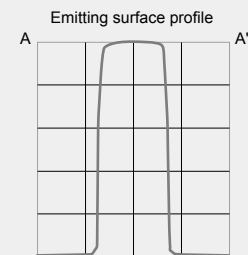
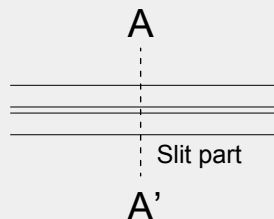
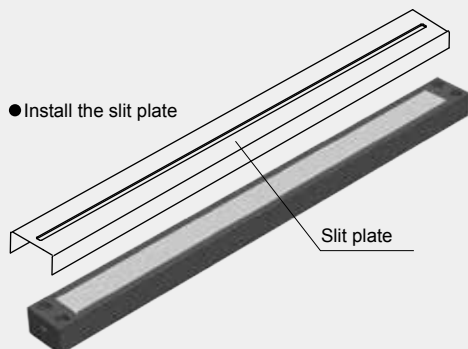
\* Measured in each voltage range because the Analog Control Unit PSB3-30024 has a switching function for the lower limit of output voltage.

## Custom order

Please contact your CCS sales representative.

E.g.: Slit specifications (Install a slit plate on the emitting surface)

Result: Uses the edge of the emitting surface, effective for inspections for dents and fish eyes where the change in the surface shape is slight.



\* Conceptual image

Sharpens the line between light and dark for the Light Unit, allowing for inspection using the emitting surface's edge.

You can inquire using  
our website.

Requests for  
Light Unit  
Selection

Requests for  
Loan  
Products

Requests for  
Estimates

Requests for  
a Catalog

Product  
Inquiries

Other  
Inquiries

Inquire on our website here.  
<http://www.ccs-grp.com/contact/>

Direct Lighting	LDR2
	LDR2-LA
	LDR-LA1
	SQR
	SQR-TP
Convergent Lighting	HHDR-IP
Diffused Lighting	HPR2
	HPR
	LFR
	LKR
	FPR
	FPQ2
Direct Lighting	LDL2
	LDLB
	HLDL2
Diffused Lighting	TH
	LFL
	HPD2
	HPD
	LDM2
	LAV
	PDM
	LFX2
	LFX3
	LFX2
Collimated Lighting	MSU
	MFU
Ultraviolet Lighting	UV2
	UV
	LNSP-UV-FN
Infrared Lighting	IR2
Spot Lighting, Etc.	HLV2
	LV
	LSP
	HFS/HFR
	HLV2-NR
	HLV2-3M-RGB-3W
	PFB2
	PFBR
Convergent Lighting	LNSP
	CU-LNSP
	LNSP-FN
	LN/LN-HK
Diffused Lighting	LNSD
	LND2
	HLND
	LT
	LVN/HLDN
Oblique Angled Lighting	LNIS
	LNIS-FN
Lenses	Telecentric Lens
	Macro Lens

# LND2 series



Refer to our website for product details.

CCS LND2

Search



You can also use your smartphone or cell phone.

Use a search engine.

## Lineup

Model name	LED color	Power consumption	Peak wavelength/ correlated color temperature	Connector	Recommended Control Units	Weight
LND2-300SW	White	24 V / 18 W	5,500 K	SM Connector	PD3/PSB    PTU2	200 g
LND2-600SW		24 V / 35 W			PD3	360 g
LND2-900SW		24 V / 53 W		EL Connector	PD3	505 g
LND2-1200SW		24 V / 70 W			PSB3-30024	670 g
LND2-300RD	Red	24 V / 23 W	630 nm	SM Connector	PD3/PSB    PTU2	200 g
LND2-600RD		24 V / 46 W			PD3	360 g
LND2-900RD		24 V / 69 W		EL Connector	PD3	505 g
LND2-1200RD		24 V / 91 W			PSB3-30024	670 g

Extension Cables ▶ P.222

Control Unit Selection Guide ▶ P.181

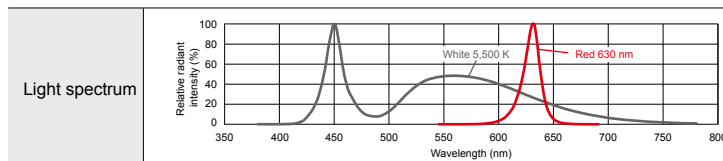
Control Unit Page ▶ P.185

\* Custom products with a PWM frequency of 500 kHz are available for Digital Control Unit PD3 series. Please contact your CCS sales representative for details.

The emitting surface is available in sizes of 100 mm units. For details about other sizes, inquire with your CCS sales representative.

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

## LED properties

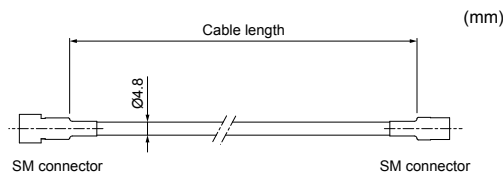


Be sure to read the "Instruction Guide" included with the product before use and observe cautionary information. The data included is for reference only and does not guarantee the quality of this product.

## Extension cables

### SM connector type

Model name	Cable length
FCB-1	1 m
FCB-2	2 m
FCB-3	3 m
FCB-5	5 m

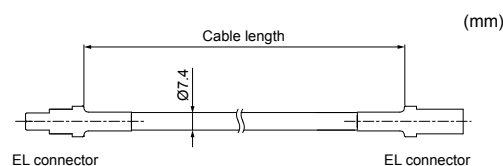


Extension Cables Page ▶ P.222

Cable permitted bending radius: 28.8 mm

### EL connector type

Model name	Cable length
FCB-1-EL2	1 m
FCB-2-EL2	2 m
FCB-3-EL2	3 m
FCB-5-EL2	5 m
FCB-10-EL2	10 m
FCB-15-EL2	15 m



Extension Cables Page ▶ P.222

Cable permitted bending radius: 55.5 mm

- LDR2
- LDR2-LA
- LDR-LA1
- SQR
- SQR-TP
- HLDR-IP
- HPR2
- HPR
- LFR
- LKR
- FPR
- FPQ2
- LDL2
- LDLB
- HLDL2
- TH
- LFL
- HPD2
- HPD
- LDM2
- LAV
- PDM
- LFX2
- LFX3
- LFV2
- MSU
- MFU
- UV2
- UV
- LNSP-UV-FN
- IR2
- HLV2
- LV
- LSP
- HFS/HFR
- HLV2-NR
- HLV2-3M-RGB-3W
- PFB2
- PFBR
- LNSP
- CU-LNSP
- LNSP-FN
- LN/LN-HK
- LNSD
- LND2
- HLND
- LT
- LNW/HLDN
- LNIS
- LNIS-FN
- Telecentric Lens
- Macro Lens

We have various materials.

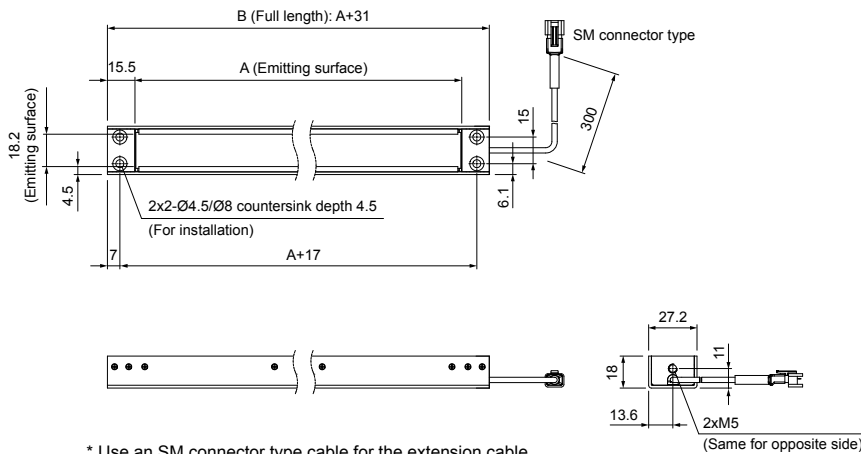
- PDF Drawings
- DXF Drawings
- 3D CAD
- Instruction Guides
- Product Filers
- Imaging Samples
- Data Sheets
- Examples of Custom Ordered Products

Download here. <http://www.ccs-grp.com/dl/>

## Dimensions (mm)

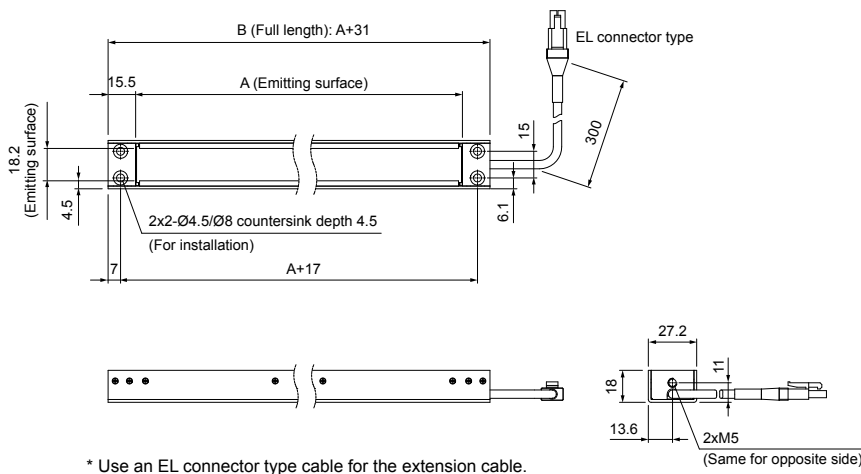
Emitting surface: 301 mm, 603 mm

Model name
LND2-300
LND2-600



Emitting surface: 903 mm, 1,203 mm

Model name
LND2-900
LND2-1200



Model name		A (Emitting surface)	B (Full length)	Model name		A (Emitting surface)	B (Full length)
White	LND2-300SW	301	332	Red	LND2-300RD	301	332
	LND2-600SW	603	634		LND2-600RD	603	634
	LND2-900SW	903	934		LND2-900RD	903	934
	LND2-1200SW	1,203	1,234		LND2-1200RD	1,203	1,234

You can change the connectors of the Light Unit cable. Choose between M12 connectors and flying leads. Refer to P.125 for details.

You can inquire using our website.

Requests for Light Unit Selection

Requests for Loan Products

Requests for Estimates

Requests for a Catalog

Product Inquiries

Other Inquiries

Inquire on our website here.  
<http://www.ccs-grp.com/contact/>

Direct Lighting  
 LDR2  
 LDR2-LA  
 LDR-LA1  
 SQR  
 SQR-TP

Convergent Lighting  
 HLDR-IP

Diffused Lighting  
 HPR2  
 HPR  
 LFR  
 LKR  
 FPR  
 FPQ2

Direct Lighting  
 LDL2  
 LDLB  
 HDL2

Diffused Lighting  
 TH  
 LFL  
 HPD2  
 HPD  
 LDM2  
 LAV  
 PDM  
 LFX2  
 LFX3  
 LFX2

Colimated Lighting  
 MSU  
 MFU

Ultraviolet Lighting  
 UV2  
 UV  
 LN-SP-UV-FN

Infrared Lighting  
 IR2

Spot Lighting, Etc.  
 HL2  
 LV  
 LSP  
 HFS/HFR  
 HL2-NR  
 HL2-3M-RGB-3W  
 PFB2  
 PFBR

Convergent Lighting  
 LN-SP  
 CU-LN-SP  
 LN-SP-FN  
 LN/LN-HK

Diffused Lighting  
 LN-SD  
 LND2  
 HLND  
 LT  
 LN/HLDN

Oblique Angled Lighting  
 LN-IS

Lenses  
 LN-IS-FN  
 Telecentric Lens  
 Macro Lens