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

Ultraviolet Line Lights
LNSP-UV-FN series

UV Line Lights that use high-output UV-LEDs

LNSP-UV365-FN
(Narrow Type)

LNSP-UV365-FNNR
(Wide Type)

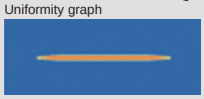
Applications Inspection for detecting seal material through fluorescent excitation, inspections using differences in spectral reflectivity, inspections using differences in scattering rates, etc.

Narrow Type for Convergent Illumination

By using a rod lens, the Light Unit concentrates illumination in a narrow range. There is little loss of radiation output, allowing for convergent illumination.

Characteristics of the narrow type

Uniformity graph



Imaging example	Imaging of invisible code
Workpiece	Plastic plate

White Bar Light

LNSP-300UV365-FN

Fluorescent observation is difficult with white light.

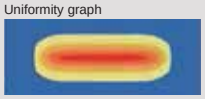
Fluorescent observation for the invisible code is possible.

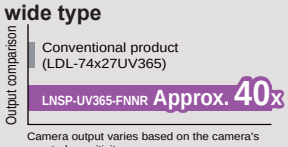
Wide Type for Diffused Illumination

The illuminated range is wide, allowing for a broad range to be illuminated.

Characteristics of the wide type

Uniformity graph





Imaging example	Imaging foreign material on paper
Workpiece	White paper (Tissue)

White Bar Light

LNSP-300UV365-FNNR

Fluorescent observation is difficult with white light.

Fluorescent observation for foreign material, such as dust, is possible.

Custom Orders

Please contact your sales representative.

E.g.: Different wavelength

Wavelength

Equipped with 385 nm LEDs

Customizable items

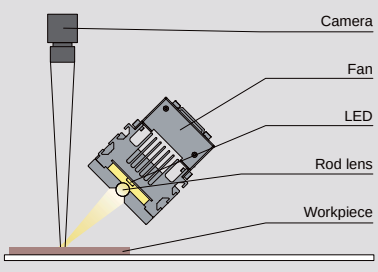
- External/internal diameter
- Wavelength/ color
- Increase output
- Cable length
- Illuminating angle
- Format/ material
- Connector format
- Installation/ mounting

Etc.

Example Configuration

By using a rod lens, the Light Unit concentrates illumination in a narrow range. High output UV Line Light perfect for UV excitation.

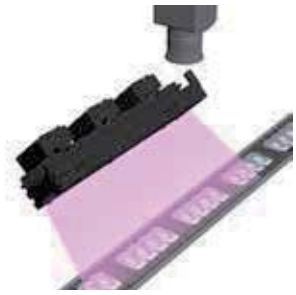
LNSP-UV365-FN (Narrow type)



Various technical documents available.

PDF Drawings | DXF Drawings | Product Brochures | Instruction Guides | 3D CAD | Data Sheets | Imaging Examples | Digital Catalogs

Imaging Example: Imaging for Detecting Contact Lenses inside Packaging



Description	Detection inspection
Workpiece	Contact lenses
Conventional lighting	LED visible light lighting
New lighting	LNSP-300UV365-FNNR
Result	Fluorescent excitation via ultraviolet lighting

Workpiece image

Contact lenses

LED visible light lighting

With visible light lighting, it is difficult to detect the contact lenses.

LNSP-300UV365-FNNR

Depending on the type of contact lens, they absorb the ultraviolet wavelength, allowing for the inside of the pack to be imaged.

Imaging Example: Imaging for the Alignment of Clear Films

Description	Visual inspection
Workpiece	Clear films
Conventional lighting	LED visible light lighting
New lighting	LNSP-300UV365-FN
Result	Fluorescent excitation via ultraviolet lighting

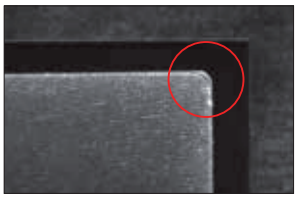
Workpiece image

Clear plate (bottom) and film (top)

LED visible light lighting

With visible light lighting, it is difficult to form an image of the clear film.

LNSP-300UV365-FN



Only the clear film causes scattering, emphasizing the edge.

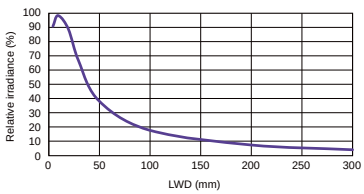
Data: Relative Irradiance Graph and Uniformity (Representative Example)

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

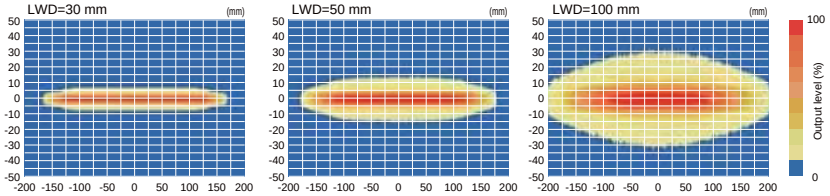
Narrow Type

Relative irradiance graph (LWD characteristics) *1 *2

*1 Irradiance on the optical axis
*2 Illuminating distance from the Light Unit to the workpiece



Uniformity (Relative irradiance)



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

LNSP-UV-FN Series

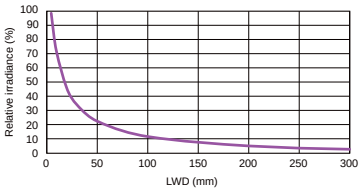
Data: Relative Irradiance Graph and Uniformity (Representative Example)

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

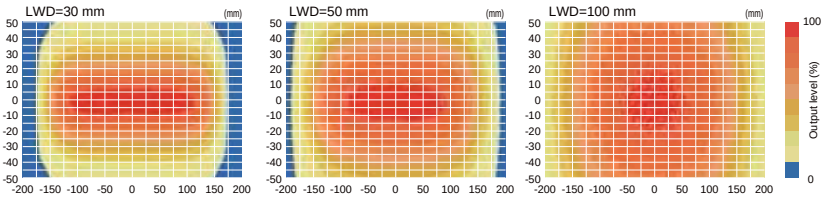
Wide Type

Relative irradiance graph*1
(LWD characteristics)*2

*1 Irradiance on the optical axis
*2 Illuminating distance from the Light Unit to the workpiece



Uniformity (Relative irradiance)



Lineup

"-FN" at the end of the model name: Narrow type, "-FNNR" at the end of the model name: Wide type

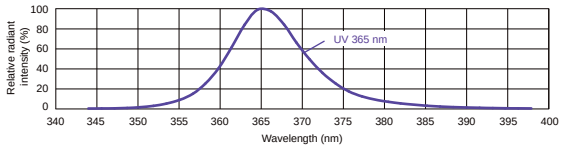
Model name	LED color	Power consumption* (including fans)		Peak wavelength	Options	Extension cables	Recommended Control Units	Weight
		June 2017 or earlier	July 2017 or later					
LNSP-100UV365-FN	Ultraviolet	31 W	31 W	365 nm	Band-pass filter Ultraviolet cutting filter Ultraviolet transmission filter	QCBM QCB	PSCC-30048(A) PSCC-60048(A)	1,000 g
LNSP-200UV365-FN		61 W	62 W					1,400 g
LNSP-300UV365-FN		92 W	93 W					1,800 g
LNSP-100UV365-FNNR		31 W	31 W					800 g
LNSP-200UV365-FNNR		61 W	62 W					1,100 g
LNSP-300UV365-FNNR		92 W	93 W					1,400 g

Extension Cables ▶ P.308
PSCC Series Product Page ▶ P.293

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

LED Properties

Spectral distribution



Offers you the most suitable lens filter for each wavelength. For details about the lens filter, refer to P.299.

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.

Options

Transmits light with wavelength range of 290 nm to 365 nm. (Transmission of 90% min.)

Band-pass filter
F-BP324

Model name	Size
F-BP324	25 sizes (Refer to the pages on optional products.)

▶ P.299

Other various band-pass filters used for different wavelengths are available. For details, refer to the pages on optional lens filters.

▶ P.299

Blocks light with a wavelength of 420 nm or lower, transmits light with a longer wavelength.

Ultraviolet cutting filter
L42 series

Model name	Size
L42-25	M25.5 P0.5
L42-27	M27.0 P0.5
L42-30	M30.5 P0.5
L42-40	M40.5 P0.5
L42-46	M46.0 P0.75

▶ P.301

Transmits light with wavelength range of approx. 280 nm to 380 nm, centered around 340 nm.

Ultraviolet transmission filter
U340 series

Model name	Size
U340-25	M25.5 P0.5
U340-27	M27.0 P0.5
U340-30	M30.5 P0.5
U340-40	M40.5 P0.5
U340-46	M46.0 P0.75

▶ P.301

Cautionary Information regarding UV Products

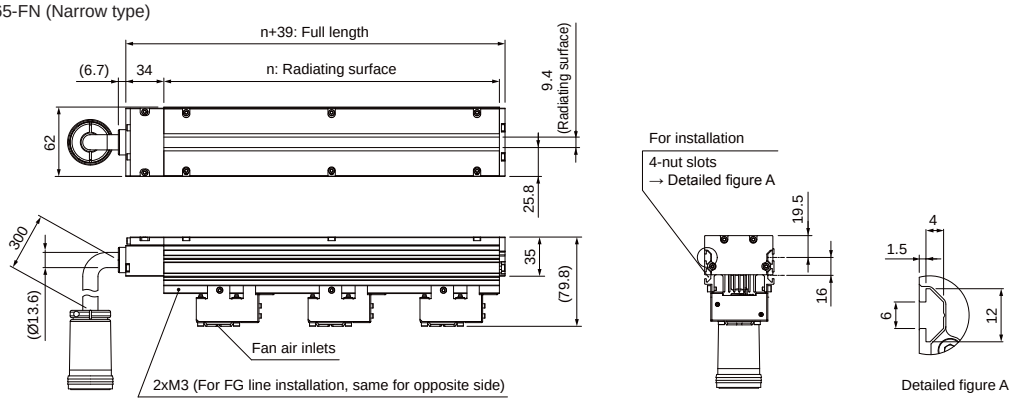
- Do not expose your eyes or skin to direct UV irradiation.
- When using an UV illumination, be sure to wear UV blocking eye wear and avoid looking at irradiating parts (emitting parts).
- Do not turn on UV-LED irradiation parts (emitting parts) if they are facing someone's eyes.
- Wear long sleeves and gloves to protect your skin from UV irradiation.
- Carefully inform all persons in the area around this product of the dangers of UV-LED.

(E.g.) UV blocking eye wear

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

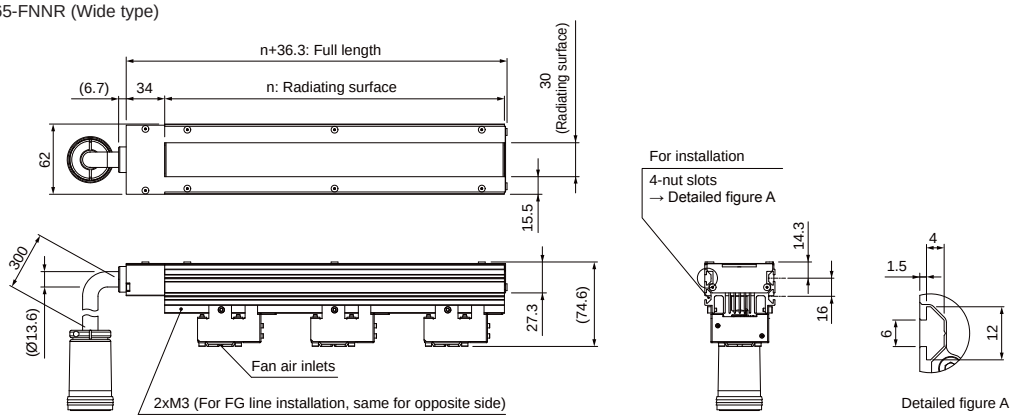
Dimensions (mm)

LNSP-□□□UV365-FN (Narrow type)



Model name	n	Number of cooling fans
LNSP-100UV365-FN	100	1
LNSP-200UV365-FN	200	2
LNSP-300UV365-FN	300	3

LNSP-□□□UV365-FNNR (Wide type)



Model name	n	Number of cooling fans
LNSP-100UV365-FNNR	100	1
LNSP-200UV365-FNNR	200	2
LNSP-300UV365-FNNR	300	3

Extension Cables

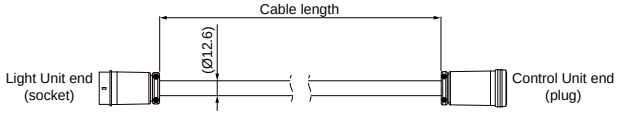
Necessary when connecting the Light Unit to the recommended Control Unit, the PSCC series.

QCBM

(mm)

Model name	Cable length	Weight	Applicable Control Unit
QCBM-2	2 m	800 g	PSCC-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	

PSCC series Product Page ▶ P.293

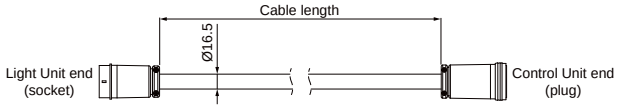


Cable permitted bending radius: 75.6 mm

QCB

Model name	Cable length	Weight	Applicable Control Unit
QCB-2	2 m	1,100 g	PSCC-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	

PSCC series Product Page ▶ P.293



Cable permitted bending radius: 99 mm

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