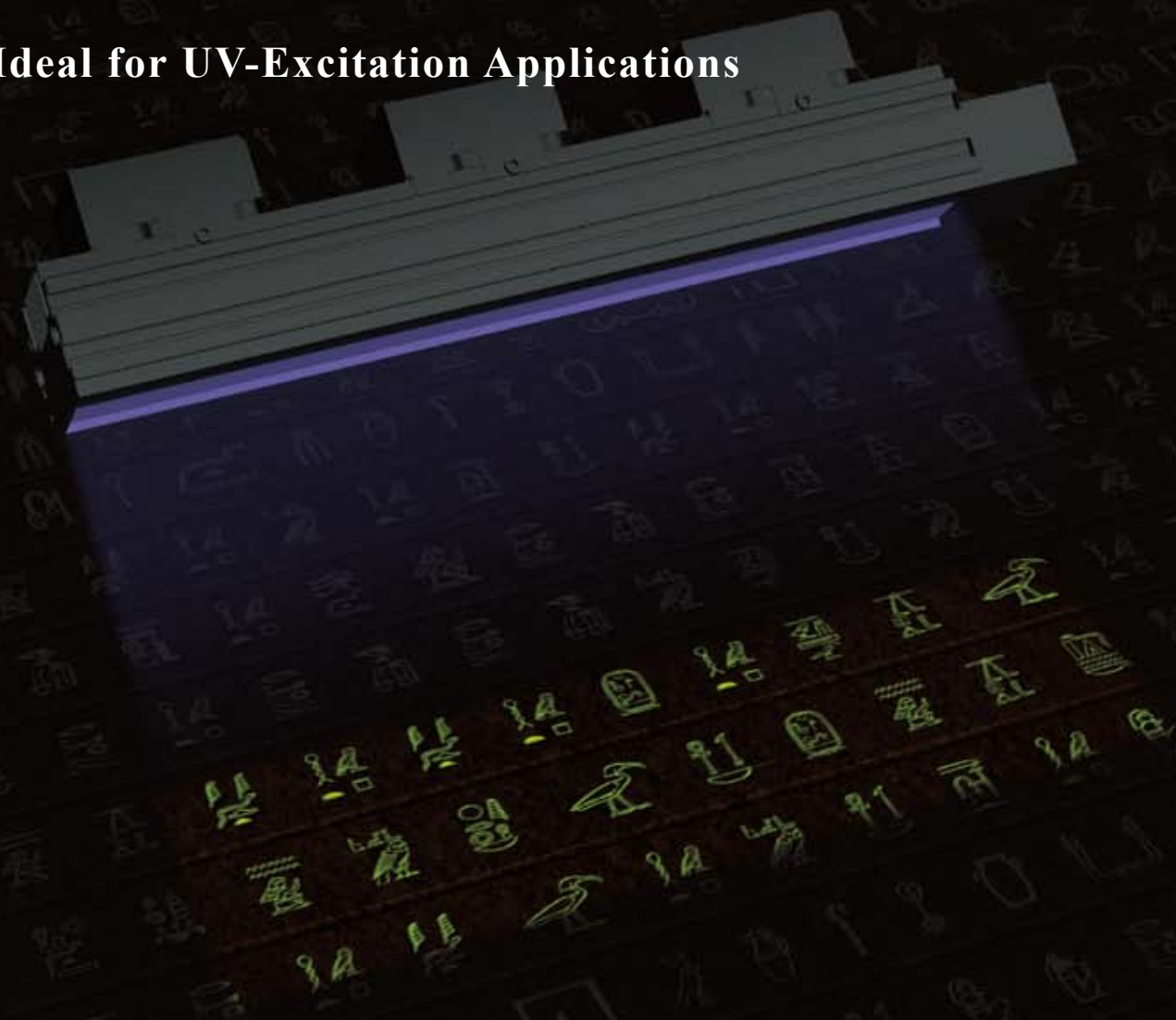


High-output UV-LED Light LNSP-UV-FN Series

Ideal for UV-Excitation Applications



Select the Best Directional Characteristics for the Application

LNSP-UV365-FNNR
Wide Models

LNSP-UV365-FN
Narrow Models

Emitting Surface Lengths of 100, 200, and 300 mm



Wide Range of Application with Both Wide Irradiation and Narrow Irradiation Models

LNSP-UV365-FNNR

Wide Models

► Provides diffused illumination over a wide area.



Output Comparison
 Previous model (LDL-74x27UV365)
 LNSP-UV365-FNNR **Approx. 40x**
*The brightness depends on the spectral sensitivity.

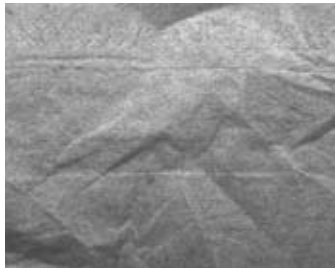
Application Examples

Image of Foreign Matter on Paper



White Tissue Paper

White Light



LNSP-300UV365-FNNR



Dust and other foreign matter on the paper can be captured. The paper absorbs ultraviolet lightwaves, so only the foreign matter disperses the light to provide high-contrast images.

Image of Contact Lenses



Packed Contact Lenses

Blue Light



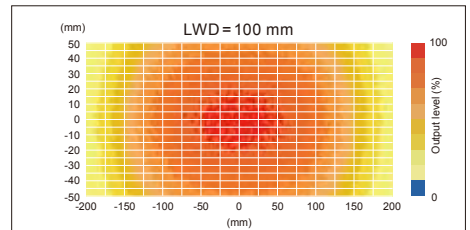
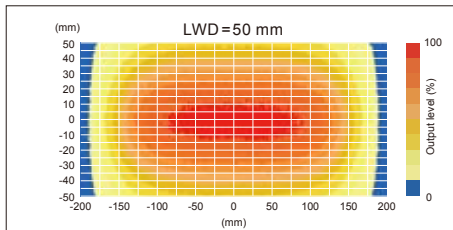
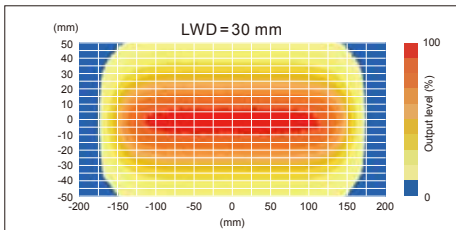
LNSP-300UV365-FNNR



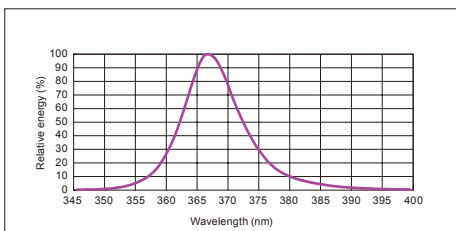
The presence of packaged contact lenses can be detected. Some types of contact lenses absorb ultraviolet lightwaves, which produces high-contrast images of the packed contact lenses.

Technical Data *Actual measurement values. (These values are for reference only.)

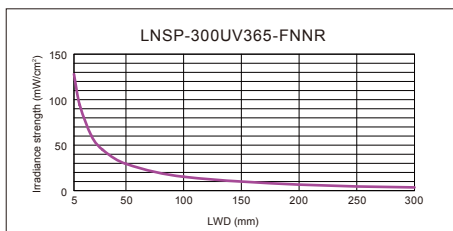
Brightness Distribution



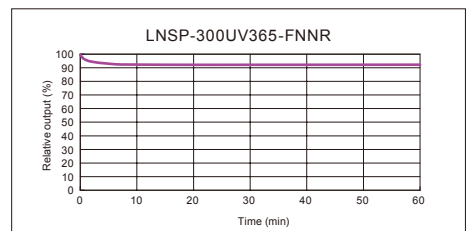
Spectral Distribution



Distance (LWD) Characteristic for Perpendicular Irradiation



Output Changes Over Time



LED illuminators with a 385 nm wavelength are also available as custom products.

*The data provided here is for reference only. Results for individual Units may vary.

LNSP-UV-FN Series of UV-LED Lights

LNSP-UV365-FN

Narrow Models

- ▶ Convergent irradiation in a narrow area.
Intensity loss is minimal, enabling long irradiation distances.



Output Comparison
 Previous model (LDL-74x27UV365)
LNSP-UV365-FN **Approx. 150x**

*Output will vary based on the camera's spectral response.

Application Examples

Image of Alignment of Transparent Film

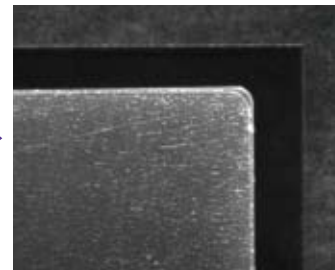


Transparent Board on Bottom with Film on Top

Blue Light



LNSP-300UV365-FN



The alignment of transparent film on a transparent board can be checked. Only the transparent film disperses the light, so the edges can be picked up in a high-contrast image of the transparent film.

Image of Invisible Codes

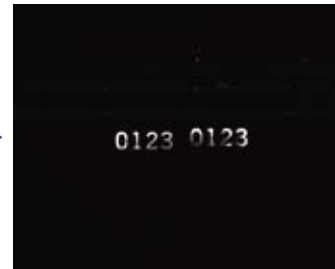


Plastic Plate with Code Printed in Invisible Ink

White Light



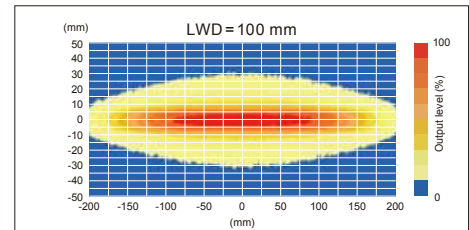
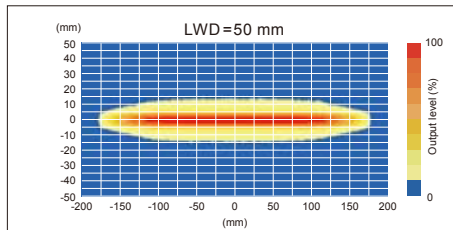
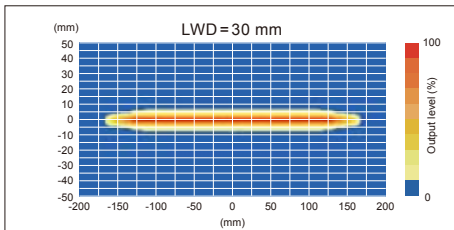
LNSP-300UV365-FN



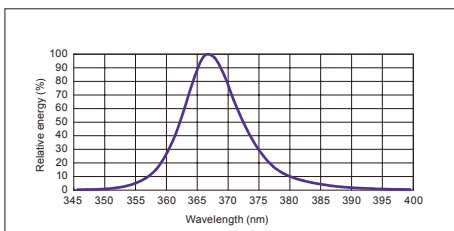
A code that is printed with invisible ink can be confirmed. The invisible ink reacts to wavelengths in the ultraviolet range. Irradiating the printed section produces a high-contrast image of the code.

Technical Data *Actual measurement values. (These values are for reference only.)

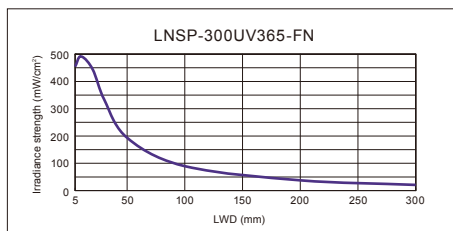
Brightness Distribution



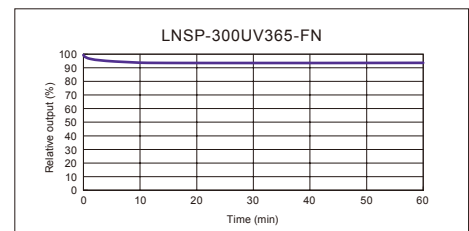
Spectral Distribution



Distance (LWD) Characteristic for Perpendicular Irradiation



Output Changes Over Time



LED illuminators with a 385 nm wavelength are also available as custom products.

*The data provided here is for reference only. Results for individual Irradiators may vary.

Specifications

Peak wavelength	Ultraviolet: 365 nm typical
Case material	Aluminum alloy, steel plate, and quartz glass (on Narrow Models only)
Cable length	300 mm
Connector	Metal Connector (PRC04-12A26S-37M18)
Operating environment	Temperature: 0 to 40°C, Humidity: 20% to 85% (with no condensation)
Storage environment	Temperature: -20 to 60°C, Humidity: 20% to 85% (with no condensation)
CE Marking	Safety standards: Conforms to EN 62471, EMC standard: Conforms to EN1000-6-2 and EN 61000-6-4.
Environmental regulation	RoHS compliant
Cooling method	Forced air cooling
Accessories	Frame nuts (4), 2-m FG line (1), M3 set screw (1)

Wide Models LNSP-UV365-FNNR

Direct number	Model	Light-emitting surface length	Power consumption (max. including fans)	Weight (max.)
1006253	LNSP-100UV365-FNNR	100 mm	31 W	800 g
1006254	LNSP-200UV365-FNNR	200 mm	61 W	1,100 g
1006244	LNSP-300UV365-FNNR	300 mm	92 W	1,400 g

Narrow Models LNSP-UV365-FN

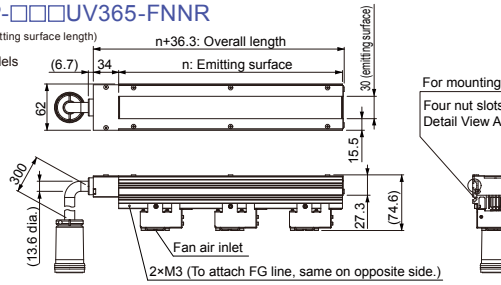
Direct number	Model	Light-emitting surface length	Power consumption (max. including fans)	Weight (max.)
1006251	LNSP-100UV365-FN	100 mm	31 W	1,000 g
1006252	LNSP-200UV365-FN	200 mm	61 W	1,400 g
1006167	LNSP-300UV365-FN	300 mm	92 W	1,800 g

Dimension Diagrams (mm)

LNSP-□□□UV365-FNNR

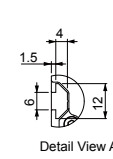
(□□□: Emitting surface length)

Wide Models



Wide Models LNSP-UV365-FNNR

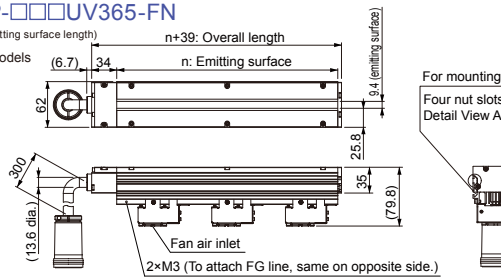
Model	n	No. of cooling fans
LNSP-100UV365-FNNR	100	1
LNSP-200UV365-FNNR	200	2
LNSP-300UV365-FNNR	300	3



LNSP-□□□UV365-FN

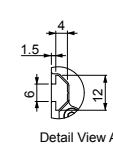
(□□□: Emitting surface length)

Narrow Models



Narrow Models LNSP-UV365-FN

Model	n	No. of cooling fans
LNSP-100UV365-FN	100	1
LNSP-200UV365-FN	200	2
LNSP-300UV365-FN	300	3

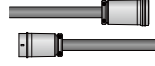


Options

LED Light Unit Cables

These cables are used to connect LED Light Units to Control Units. Use the Cable that is suitable for your installation site.

QCB Series



Cable diameter: 16.5 mm
Allowable cable bending radius: 99 mm

Direct number	3000815	3000816	3000817	3000818	3000819
Model	QCB-2	QCB-3	QCB-5	QCB-10	QCB-20
Cable length	2 m	3 m	5 m	10 m	20 m
Weight (max.)	1.1 kg	1.5 kg	2.4 kg	4.6 kg	8.9 kg

Ultraviolet Transmission Filters

U340 Series



Model	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

Ultraviolet Cutting Filters

L42 Series



Model	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

Control Units for LNSP-UV-FN Series

Analog Control Unit for LED Light Unit: PSCC-60048

Features

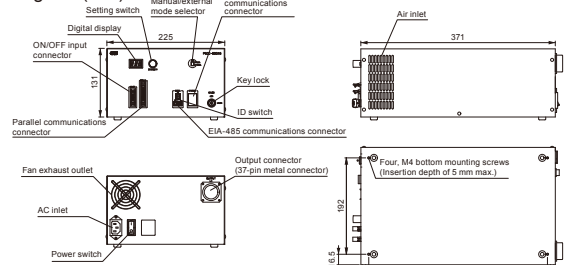
- Constant-current system, Control to 256 light intensities, 582-W output.
- 1 channel/1 connector (37-pin metal connector)
- Ethernet, parallel, or EIA-485 communications for external control.
- External controls (Dimming control and ON/OFF Control)
- Error detection for cooling fan error, LED open circuit, LED short circuit, etc.
- Interlock with key switch or external control via parallel communications



Specifications

Model	PSCC-60048	
Direct number	2000846	
Lighting method	Constant lighting	
Drive method	Constant-current system	
Lighting method	Variable current control	
The number of channels	1 channel	
Applicable Light Unit rating	43 VDC max., 582 W max. (including 30 W max. for fans)	
Light control	Manual control	Manual and external intensity control
	External	Front manual/external switch (MODE)
Lighting control	Parallel bit input	Set any of 256 levels via the setting switch. Press and hold the switch for 2 seconds to lock the intensity value.
	External	8-bit intensity value setting (B0 to B7) and write signal (WR)
Lighting control	Parallel bit input	Command input through EIA-485 communications
	External	Command input through TCP/IP or UDP/IP communications
Lighting control	Parallel bit input	External control mode can be selected by pushing the setting switch while turning ON the power to the Control Unit.
	External	OFF signal (ON/OFF)
Lighting control	Parallel bit input	Command input via EIA-485 communications
	External	Command input through TCP/IP/UDP/IP communications
EIA-485 communications settings	ID	Set via the front ID switch (00 to 03). Maximum of 4 connected Units.
	Terminating resistance	Set via the front ID switch. (Terminating resistance is connected only when ID is set to 00.)
Error detection display	LED burnout detection, open circuit	Front digital "E01" display
	LED burnout detection, short circuit	Front digital "E02" display
Error detection display	Light Unit fan slowdown or stoppage	Front-panel digital "F01" to "F15" display
	Communications error detection	Front digital "E04" display
Error detection display	Connector unconnected detection	Front digital "E04" display
	Internal Control Unit error detection	Front digital "E05" display
Error detection output	Parallel communications	Output to pins 19 and 20. Photocoupler isolation. Open-collector output. Closed for alarm (Load current: 10 mA max.)
	EIA-485 communications	Confirmed with status command via EIA-485 communications. (Command sent at error occurrence.)
Error detection output	Ethernet communications	Confirmed with status command via TCP/IP or UDP/IP communications. (Command sent at error occurrence.)
	Ethernet communications	Confirmed with status command via TCP/IP or UDP/IP communications. (Command sent at error occurrence.)
Input power	100 to 240 VAC (+10%, -15%), 50/60 Hz	
Power consumption (typ.)	750 VA	
Operating temperature and humidity	Temperature: 0 to 40°C, Humidity: 20% to 85% RH (with no condensation)	
Storage temperature and humidity	Temperature: -20 to 60°C, Humidity: 20% to 85% RH (with no condensation)	
Cooling method	Forced air cooling	
CE Marking	Safety standard: Conforms to EN 61010-1, EMC standard: Conforms to EN 61326-1, Class A.	
Environmental regulation	RoHS compliant	
Material, coating, and surface processing	Steel plate, thickness of cover: 1.0, thickness of chassis: 2.0, N3 leather tone finish	
Weight	7,000 g max.	
Accessories	2 meter long 3-prong power cord with ground terminal (1), keys (2)	

Dimension Diagram (mm)



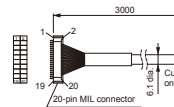
Optional External Control Cables

Dimension Diagrams (mm)

These Cables are used for parallel or EIA-485 communications. Select the right cable for the required control method.

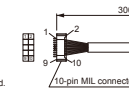
Parallel Communications Cable

Direct number: 3000683
Model name: EXCB2-M20-3



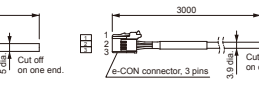
ON/OFF Input Cable

Direct number: 3000682
Model: EXCB2-M10-3



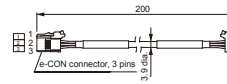
EIA-485 Communications Cable

Direct number: 3000685
Model: EXCB2-E3-3



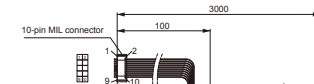
EIA-485 Communications Junction Cable

Direct number: 3000721
Model name: EXCB2-E3-E3-0-2



Parallel Communications and ON/OFF Input Branch Cable

Direct number: 3000684
Model name: EXCB2-M10M20-3



Relay Connector

Direct number: 3000720
Model: ECNR-E3CN4



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Caution

- To ensure proper and safe use of the product, please read the Instruction Guide completely before using the product.
- For product improvement, specifications and designs are subject to change without notice.



Headquarters

Shimodachiuri-agaru, Karasuma-dori, Kamigyo-ku, Kyoto 602-8011 Japan

Phone: +81-75-415-8284 / Fax: +81-75-415-8278

URL: <http://www.ccs-grp.com> E-mail: intlsales@ccs-inc.co.jp

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