PATLITE®

Durable Industrial LED Lighting
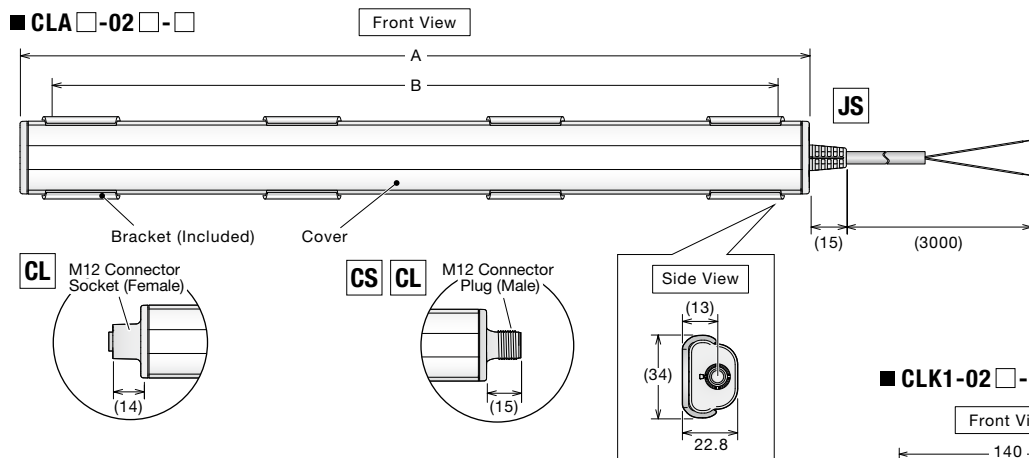## Efficient and IP Rated for Harsh Environments

Specifications

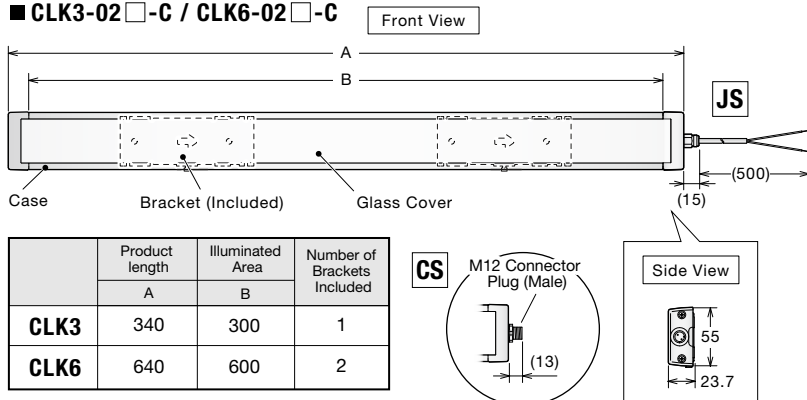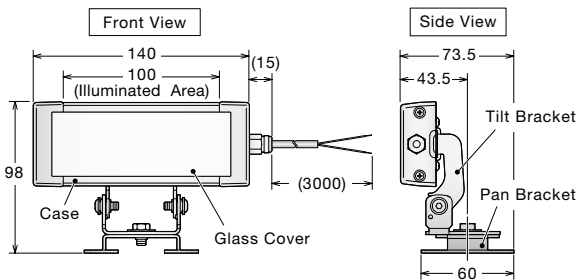| Model	CLA□-02□-□	CLK□-02□-C□	CWA□S-24-CD
Rated Voltage	24V DC (Polarized)		
Operating Ambient Temperature / Humidity	-40°C - +60°C / Less than 90% (No condensation)		-30°C - +60°C / Less than 90% (No condensation)
Mounting Location	Indoors (All Directions)		
Protection Rating	IP66, IP67 / IP69K (Excluding Cable Terminal)	IP66G, IP67G / IP69K (Excluding Cable Terminal)	IP65 (Excluding Cable Terminal)

Dimensions (Unit : mm)

■ CLA□-02□-□

Front View

A
B

JS

Bracket (Included)   Cover

CL M12 Connector Socket (Female)
(14)

CS CL M12 Connector Plug (Male)
(15)

(15) (3000)

Side View
(13)
(34)
22.8

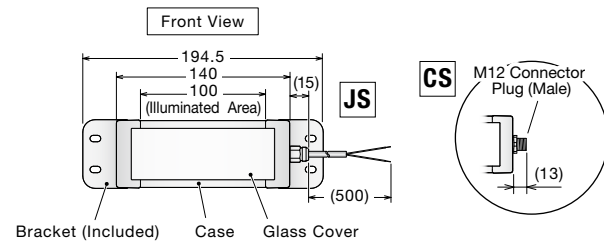|	Product length	Illuminated Area	Number of Brackets Included
	A	B	
CLA1	125	100	2
CLA2	225	200	2
CLA3	325	300	2
CLA6	625	600	2
CLA9	925	900	4

■ CLK3-02□-C / CLK6-02□-C

Front View

A
B

JS

Case   Bracket (Included)   Glass Cover

(15) (500)

CS M12 Connector Plug (Male)
(13)

Side View
55
23.7

	Product length	Illuminated Area	Number of Brackets Included
	A	B	
CLK3	340	300	1
CLK6	640	600	2

■ CLK1-02□-CP

Front View
140
100
(Illuminated Area)
98
Case   Glass Cover
(15)
(3000)

Side View
73.5
43.5
Tilt Bracket
Pan Bracket
60

■ CLK1-02□-C

Front View
194.5
140
100
(Illuminated Area)
Bracket (Included)   Case   Glass Cover
(15)
(500)

JS

CS M12 Connector Plug (Male)
(13)

■ CWA□S-24-CD

Front View

A
B

Bracket(included)   Cover

(1000)

Side View
(17.9)
38.4
27.4

	Dimension		Number of Brackets Included
	A	B	
CWA3	315.5	300	2
CWA6	621.0	600	2
CWA9	916.5	900	2
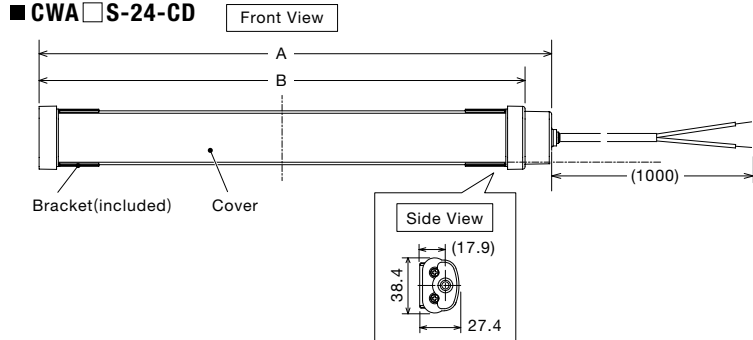
PATLITE Corporation

PATLITE (U.S.A.) Corporation	PATLITE TAIWAN CO., LTD.
PATLITE Europe GmbH	PATLITE (THAILAND) CO., LTD.
PATLITE UK LTD	PATLITE (SINGAPORE) PTE LTD
PATLITE (CHINA) Corporation	PT. PATLITE INDONESIA
PATLITE KOREA CO., LTD.	

⚠ CAUTION

To ensure correct use of these products, read the "Instruction Manual" prior to use. Failure to follow all safeguards can result in fire, electric shock, or other accidents. Specifications are subject to change without notice.

O-BE08A EN 2511

RoHS 10   c ⓤ us   CE   UK CA   KC

www.patlite.com

LED Work Light
CLA
Series

ECOLAB®

| Indoor | ALL Directions | +60℃ / -40℃ | Daylight 6,500K | Amber 590nm | LED 75,000h |

| CE / RoHS10 | UL | IP66 | IP67 | IP69K |

Hygiene-Critical LED Lighting Solutions
Durability Certified for Food, Beverage & Pharma

- Impact-resistant polycarbonate housing with milky-white body for bright, uniform illumination
- IP67/69K compliant; suitable for high-pressure, high-temperature washdown processes
- ECOLAB-tested for resistance to cleaning agents, supporting strict hygiene management
- Amber model optimized for semiconductor tools and cleanroom applications

Model Code

C L A 3 - 0 2 J S N - C

■ Length of Illumination Area

1	100mm
2	200mm
3	300mm
6	600mm
9	900mm

■ Rated Voltage

| 02 | DC24V |

■ Wiring Type

JS	Cable
CS	M12 Connector
CL	M12 Connector Daisy chain

■ Luminous Color

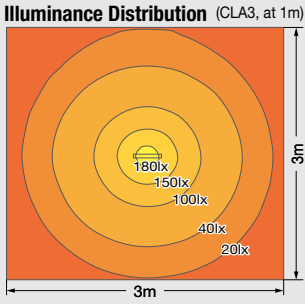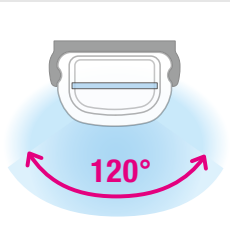| C | Daylight |
| Y | Amber |

Product List

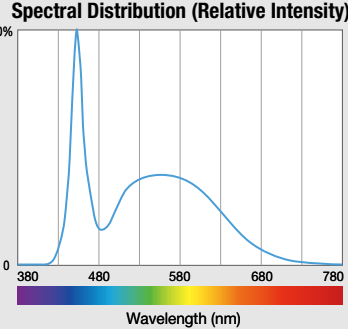| Model Code	Length	Luminous Color	Total Luminous Flux	Illuminance (at 1 m)	Wiring Type	Rated Voltage	Power Consumption (typ.)
CLA1-02JSN-C	100mm	Daylight (6,500K)	235lm	72lx	Cable	24V DC	1.9W
CLA1-02CSN-C					M12 Connector (4pin)		
CLA2-02JSN-C	200mm		480lm	145lx	Cable		3.8W
CLA2-02CSN-C					M12 Connector (4pin)		
CLA3-02JSN-C	300mm		595lm	180lx	Cable		4.5W
CLA3-02CSN-C					M12 Connector (4pin)		
CLA3-02CLN-C					M12 Connector Daisy chain		
CLA3-02JSN-Y		Amber	140lm	43lx	Cable		3.8W
CLA6-02JSN-C	600mm	Daylight (6,500K)	1,190lm	350lx	Cable		9.0W
CLA6-02CSN-C					M12 Connector (4pin)		
CLA6-02JSN-Y		Amber	280lm	82lx	Cable		7.6W
CLA9-02JSN-C	900mm	Daylight (6,500K)	1,785lm	480lx	Cable		13.5W
CLA9-02CSN-C					M12 Connector (4pin)		

Outstanding Brightness with Improved Energy Efficiency

Robust light distribution and superior luminous efficacy

Compared to previous models, total luminous flux has increased by 65% and illuminance by 71%.* The seamless, milky-white housing delivers uniform brightness across a wide 120° beam angle. Luminous efficacy has been significantly enhanced, providing exceptional brightness while reducing energy consumption.

*For 300mm length, daylight color

120°

Illuminance Distribution (CLA3, at 1m)
180lx / 150lx / 100lx / 40lx / 20lx
3m × 3m

* Illuminance values are calculated and may differ from actual measurements.

Spectral Distribution (Relative Intensity)
Wavelength (nm) 380 480 580 680 780

Highly Durable and Hygienic Design

Built for rigorous washdowns, chemical sanitization, and sterilization

Impact-resistant polycarbonate housing prevents breakage and protects against foreign object contamination. With an operating temperature range of −40°C to +60°C and IP69K compliance, this lighting solution delivers exceptional durability. It is ideal for demanding applications such as low-temperature warehouses and equipment that require high-temperature washdowns, while supporting chemical sanitization and sterilization processes.

IP67/IP69K

-40°C - +60°C
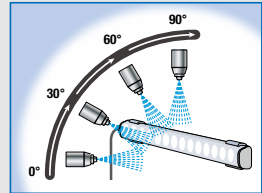
| ECOLAB* | H2O2 Resistance |

Compatible with cleaning agents and hydrogen peroxide sterilization

*Tested and passed for the listed types (using SUS bracket:SZW-304)

Characteristics	Item	Concentration
Alkaline Cleaning	Topaz MD6	5%
Acidic Cleaning	Topactive 500	6%
Chlorinated Alkaline Cleaning	P3-Topax 66	3%
Acidic, Oxidative Disinfection	Topactive OKTO	3%
Neutral Cleaning	P3-Topax 990	3%

## Reduced Wiring and Simplified Installation

In addition to conventional cable connections (JS type), M12 connector (CS type) and M12 connector Daisy chain (CL type) options are available, reducing wiring errors and labor for a faster, more reliable setup.
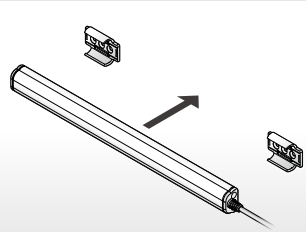
The slim housing can be easily mounted using the included rear bracket (SZW-301), with magnetic mounts and optional SUS stainless steel brackets providing additional flexibility.

Amber LED Optimized for Semiconductor Manufacturing

The CLA-Y amber model is designed for lithography and exposure processes in semiconductor fabs. With a dominant wavelength of 590nm and minimal blue light (430–490nm), it provides safe, cleanroom-compatible illumination ideal for sensitive manufacturing environments.

Wavelength 590nm

Spectral Distribution (Relative Intensity)
Wavelength (nm) 380 480 580 680 780
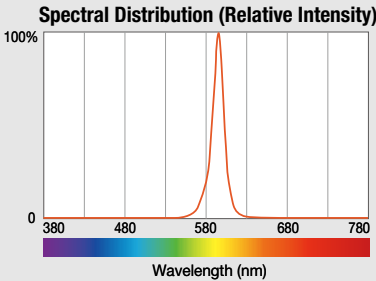
Optional Brackets

Rear Screw Mount *Bracket included with light bar	Rear Magnet Mount	Rear Screw Mount	Rear Screw Mount
Material : PC SZW-301	Material : PC SZW-302	Material : PC SZW-303	Material : SUS SZW-304

LED Work Light
CLK Series
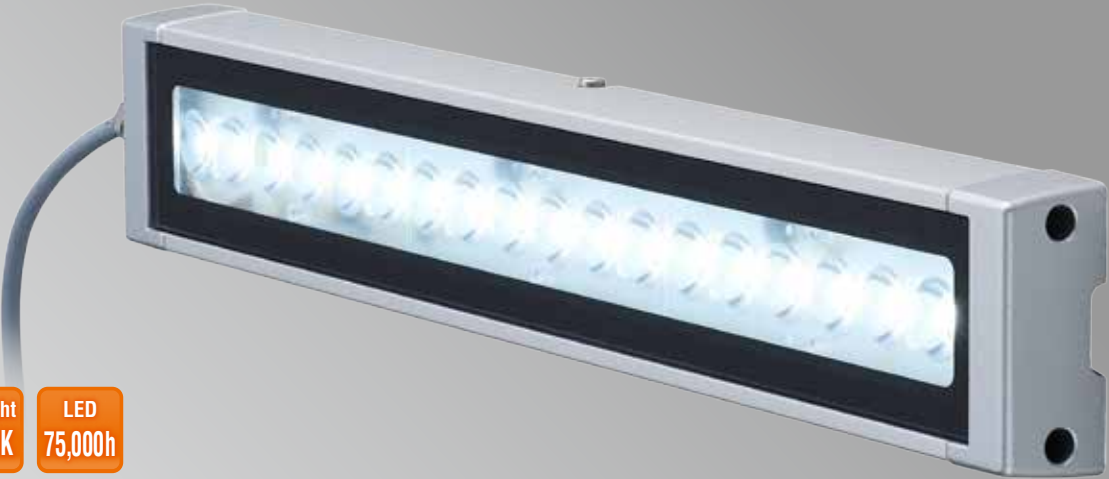
Indoor | **ALL Directions** | **+60℃ / -40℃** | **Daylight 6,500K** | **LED 75,000h**

CE / RoHS10 | **UL** | **IP66G** | **IP67G** | **IP69K**

Watertight and Oil-Resistant Design for Machine Tool Interiors

- Rugged and refined LED lighting with aluminum housing and tempered glass
- Proprietary lens design ensures uniform brightness for clear illumination inside equipment
- Oil-resistant construction with IP66G/67G protection for use in harsh environments
- Spotlight model features collimating lens with adjustable pan-tilt angles

Model Code

C L K 1 - 0 2 J S N - C P

■ Lens

No Symbol	Standard
P	Spot

■ Luminous Color

C	Daylight

■ Length of Illumination Area

1	100mm
3	300mm
6	600mm

■ Rated Voltage

02	DC24V

■ Wiring Type

JS	Cable
CS	M12 Connector

Product List

Model Code	Length	Luminous Color	Total Luminous Flux	Illuminance (at 1 m)	Wiring Type	Rated Voltage	Power Consumption (typ.)
CLK1-02JSN-C	100mm	Daylight (6,500K)	450lm	550lx	Cable	24V DC	3.6W
CLK1-02CSN-C					M12 Connector (2pin)		
CLK1-02JSN-CP				1,150lx	Cable		
CLK3-02JSN-C	300mm		1,300lm	1,600lx	Cable		10.7W
CLK3-02CSN-C					M12 Connector (2pin)		
CLK6-02JSN-C	600mm		2,600lm	2,500lx	Cable		21.5W
CLK6-02CSN-C					M12 Connector (2pin)		

Excellent Light Distribution Characteristics

Two lens types are available: standard and spot. Choose the standard lens model for wide-area lighting inside machines, or the spot lens model for detailed illumination of specific targets. Natural light with a color rendering index of Ra80 brightly illuminates both surroundings and workpieces.

CLK1-C (Standard Lens)　CLK1-CP (Spot Lens)

Illuminance Distribution (CLK3, at 1m)

1400lx / 1000lx / 800lx / 500lx / 200lx / 100lx

2.1m × 2.1m

* Illuminance values are calculated and may differ from actual measurements.
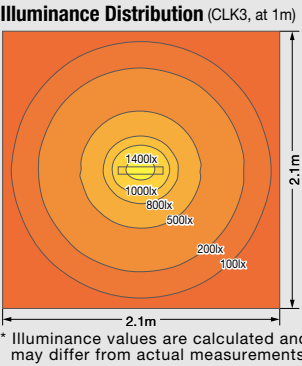
Watertight, Dust tight, and Oil-Resistant LED Lights

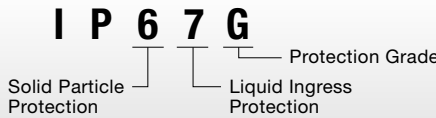### These LED lights prevent ingress of coolant and chips

In addition to IP66/67 ratings, auxiliary oil protection grades are provided. Protection grade "G" ensures that oil droplets and mist from any direction will not enter the interior, making them ideal for harsh industrial environments.

IP66G/67G (JIS C0920)

I P 6 7 G

Solid Particle Protection — Liquid Ingress Protection — Protection Grade

The oils used for testing were diluted 20× and immersion was performed at room temperature for 240 hours (10 days).

Name of Company	Name of Oil
Hangsterfer's	HANGSTERFER S500
Yushiro Chemical Industry Co., Ltd.	Yushiroken Synthetic #663
Castrol	Syntilo 9954
Blaser Swisslube	Blasocut BC35LFSW
	Grindex 10 CO

Oil Resistance Testing
Proven Oil-Resistance

In addition to standard IP testing, we perform proprietary oil-resistance tests in-house. Products are immersed in water-soluble oil for 240 hours (10 days) to verify their oil resistance, supporting our ongoing commitment to high-quality, durable products.

Spotlight for Machine Tools

A spotlight model is available with a spot lens and a pan-tilt bracket (included with the main unit). It provides bright illumination even for the fine details of the target, ensuring precise visibility during machine operations.
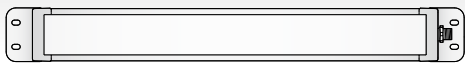
CLK1-02JSN-CP

Pan-tilt Angle

0° / 90° / 90°　0° / 60° / 60°

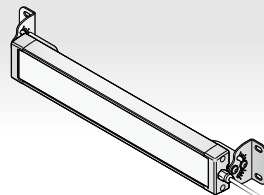Adjustment Range : 180°　Adjustment Range : 120°
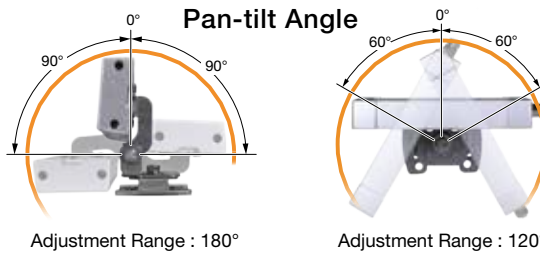
Mounting Examples (ex: CLK3)
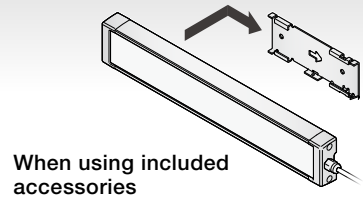
When using included accessories

When using SZW-305 (optional)

When using SZW-306 (optional)

Optional Brackets

Rear Mount
Material : SUS
SZW-305

Angle Adjustment
Material : SUS
SZW-306

Pan-tilt (Compatible model: CLK1)
Material : SUS
SZW-307

LED Work Light
CWA
Series

Highly-reliable LED chips are used

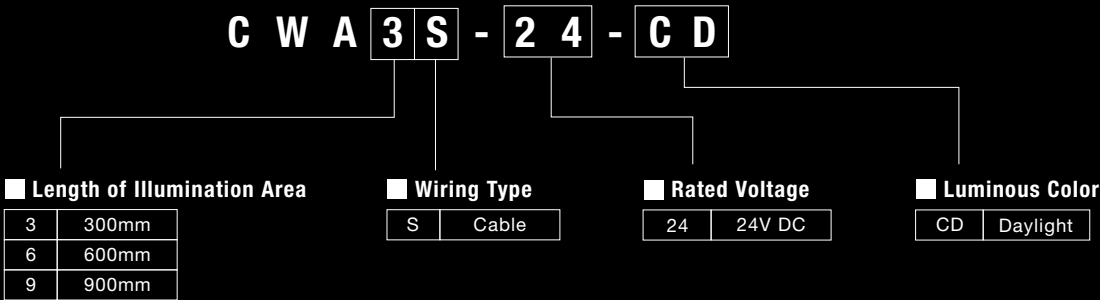| Indoor	ALL Directions	+60℃ / -30℃	Daylight 6,500K	LED 40,000h
CE / RoHS10	UL	IP65		

Equipped with Essential Features, This LED Light Delivers Versatile Performance for Many Applications

Model Code

C W A [3] [S] - [2 4] - [C D]

■ **Length of Illumination Area**

3	300mm
6	600mm
9	900mm

■ **Wiring Type**

S	Cable

■ **Rated Voltage**

24	24V DC

■ **Luminous Color**

CD	Daylight

Product List

Model Code	Length	Luminous Color	Total Luminous Flux	Illuminance (at 1 m)	Wiring Type	Rated Voltage	Power Consumption (typ.)
CWA3S-24-CD	300mm	Daylight (6,500K)	385lm	110lx	Cable	24V DC	4.32W
CWA6S-24-CD	600mm		770lm	220lx	Cable		8.64W
CWA9S-24-CD	900mm		1,155lm	330lx	Cable		12.96W

Brackets

Mounting Brackets
Material : SUS

Holding Brackets
Material : SUS

Control Panel

Uniform, even illumination enhances work efficiency.

Machining Center

Clear visibility for easier monitoring of machining.

Food Processing Line

Durable LED lighting for strict hygiene management.

*Alkaline detergents: ensure compatibility before application.

Electrical Discharge Machine

Designed for harsh environments with splashing coolant and flying debris.

Semiconductor Manufacturing Plant

Minimizes photoresist exposure in lithography processes.

Cutting Machine

Illuminates fine details to enhance productivity.