

Specifications																	
Model Name	CLA1S-□			CLA2S-□			CLA3S-□			CLA6S-□		CLA9S-□		CLA12S-□		CLA15S-□	
Color Code	CD	CN	Y	CD	CN	CD	CN	Y	CD	CN	CD	CN	CD	CN	CD	CN	
Luminous Color	Daylight	Natural White	Yellow	Daylight	Natural White	Daylight	Natural White	Yellow	Daylight	Natural White	Daylight	Natural White	Daylight	Natural White	Daylight	Natural White	
Color Temperature	6800K	4800K	—	6800K	4800K	6800K	4800K	—	6800K	4800K	6800K	4800K	6800K	4800K	6800K	4800K	
Wavelength (nm)	—	—	590	—	—	—	—	590	—	—	—	—	—	—	—	—	
Center Radiation (lc:50cm at DC24V)	0.3m	—	—	—	—	—	—	—	1,425	1,425	1,525	1,525	1,600	1,600	1,625	1,625	
	0.5m	140	140	78	270	270	400	400	220	650	650	810	810	890	890	945	945
	1.0m	35	35	20	70	70	105	105	60	200	200	280	280	340	340	385	385
Lumens (lm)	125	125	60	240	240	360	360	195	690	690	980	980	1,375	1,375	1,725	1,725	
Rated Voltage	DC 24V (Polarized)																
Operating Voltage Range	DC 24V ±10%																
Rated Current Consumption (mA±10%)	104			208			240			480		720		960		1,200	
Rated Power Consumption (W)	2.5			5.0			5.7			11.6		17.3		23.0		28.8	
Operating Temperature Range	-40℃ to +60℃ (RH 90% or less, no condensation)																
Main Body Material	Polycarbonate Resin (Waterproof Packing/Screw Cap*: Silicon)																
Protection Rating	IP66/67 (IEC 60529)/69K (DIN 40 050-9) (Cable Terminal not included)																
Mounting Direction	Indoor Use Any Direction																
Insulation Resistance	5MΩ or more with a DC 500V Megohmmeter																
Withstanding Voltage	AC 500V for 1 minute																
Vibration Resistance	30Hz 19.6 m/s² Up and Down/Left to Right/ Back and Forth, each for 2 hours																
Mass	80g ±10%			130g ±10%			180g ±10%			340g ±10%		500g ±10%		660g ±10%		820g ±10%	

* The screw caps are removable. Please remove them in advance when using high-pressure water applications.

Outer Dimensions (Unit : mm)

Dim. A
Dim. B
Dim. D
Dim. E
Bracket (Standard)
Case
3-φ4.2 (Beveled)
25
34
30
22.5
19.5
φ4.9
Wh (+)
Br (-)
Length from exit hole ab.500 or 3000

【Wire Flexibility】
Maximum Bending Radius:24mm
Screw Cap
Cable Exit Hole
170AWG32/UL508 Conformity

●SZ-310ARM
●SZ-310AS (CLB-N1/N2 Compatible)
●SZ-310ASB (CLB-N Exclusive Compatibility)
Total Length
Mounting Pitch
Neodymium Magnet
34
30
22.5
19.5

●Option Bracket Compatibility Table

	SZ-310ARM		SZ-310AS		SZ-310ASB		
	Compatible Model	Compatible Model	Total Length	Mounting Pitch	Compatible Model	Total Length	Mounting Pitch
	○	○	149	135	×	—	—
	○	○	249	235	×	—	—
	○	○	349	335	○	381	367
	○	○	649	635	×	—	—
	○	○	949	935	×	—	—
	○	○	1249	1235	×	—	—
	○	○	1549	1535	×	—	—

Model Name	Dim. A Maximum	Dim. B Lighting	Dim. D Mounting Pitch	Dim. E Recommended Pitch	SZ-310AR Standard Bracket
CLA1S-□	124	100	74	—	2 pcs.
CLA2S-□	224	200	174	—	2 pcs.
CLA3S-□	324	300	274	—	2 pcs.
CLA6S-□	624	600	574	—	2 pcs.
CLA9S-□	924	900	874	290	4 pcs.
CLA12S-□	1224	1200	1174	390	4 pcs.
CLA15S-□	1524	1500	1474	490	4 pcs.

Model Code

Light Bar Length
1:100mm 2:200mm 3:300mm 6:600mm
9:900mm 12:1200mm 15:1500mm

Model

CLA□S-24-□-□

Cable Length
No Code : 0.5m、30 : 3.0m

LED Color
C D : Daylight, C N : Natural White, Y : Yellow

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1221A	1007 B(B)/B(SM)A
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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.



PATLITE ECO PROJECT

For the benefit of mankind and the earth, Patlite is committed to developing environmentally friendly products.

PATLITE®

New Frontiers in Safety, Security and Comfort.

PATLED's®

IP69K Conformity

Ultra-bright Uniform LED Illumination
Seven Different Sizes
Waterproof



Slim Waterproof Type
LED Bar Light

CLA

IP69K Conformity

CLA15S-CD

CLA9S-CD

Waterproof performance which applies a jet-stream of pressurized water at a temperature of 80°C

CONCEPT

"The LED bar light can be used in every possible environment" is a long-time idea behind the PATLITE Engineer's mind when designing the slim type LED bar light model CLA with the concept of it enduring the most severe conditions for use...and now the waiting for LED lighting technology and craftsmanship has finally arrived.

High waterproof performance was already achieved but without having the energy saving ability, the environment-resistant performance not offered by the fluorescent light in any variety of production sites, nor any public or commercial establishments, etc., without impairing the general illumination performance. Performance to which a high temperature of 80°C and high pressure washing in severe environments (like the meat and food industry), demonstrates that it can be used for a variety of scenes with a peaceful easy feeling.

IP6X	IPX6	IPX7	IPX9K
Typical Environment	Dusty Environment	Water-splash Environments	Environment Exposed to Water
● Control/Switchboard Panels Lighting ● Machinery and Equipment Lighting	● Machining/Factory Sites ● Farmsteads	● Signboards/Working Lights ● Commercial/Public Furnishings	● Meat and Food Packaging/ Processing Industry ● Beverage/Medicine Manufacturing Industry

Protection Rating Explanation

(Standard Number / IEC 60529)

- IP6X= The product is placed in a dust chamber with a negative pressure state so that dust is made to float, and there is no invasion inside.
- IPX6= A water nozzle with a diameter of 12.0mm is placed at a range from 2.5 to 3.0 meters with a water velocity of 100 litres per minute injected towards the test piece in an omni direction for three minutes or more without being affected by any harmful influences.
- IPX7= With the distance of 0.15 m from the top of the product to the water surface and a distance from the bottom of the product to the bottom of the tank at a distance of 1 m, it is submerged for 30 minutes with no harmful penetration.

*Since testing is performed under a controlled environment within provisions including a designated time, it does not consider conditions for continuous use.

IP66

IP67

IP69K



Image

■ IP69K (80°C Jet-stream Steam Examination)

(Standard Number / DIN 40 050-9)

Steam jet injection (80-100 bar at a temperature of 80°C) is applied at angles of 0, 30, 60, and 90 degrees at a distance from 100-150mm repeated 5 times at a duration of 30 seconds without being affected by any harmful influences.

DESIGN

■ With all translucent material, it implements equal light distribution with a seamless design



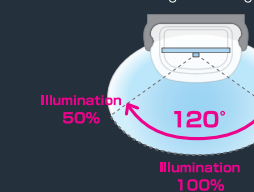
Seamless Shaped Body

By removing the surface unevenness, the light distribution balance can spread more uniformly. And with an all translucent material construction, it raises the uniformity of the luminous intensity more. The illumination angle fills a large 120 degree area and illuminates it uniformly from a fixed position.



Backlight Illumination Example (CLA12S-CD)

□ Illumination Range Drawing



□ Lighting Distribution Diagram

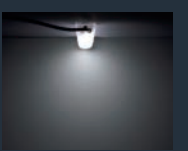
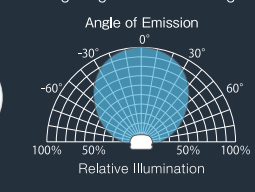
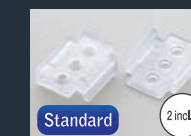


Image of wall reflection

■ Slide rail enables easy attachment and detachment



■ Attachment bracket for various scenes



SZ-310AR
Rear Attachment Type
(Screw Mount)

Material: Polycarbonate Resin

* Necessary Quantity
CLA1S~ 6S/2 pcs.
CLA9S~ 15S/4 pcs.

Shining from end to end,
the mounting position can
be placed anywhere for the
body to snap in.

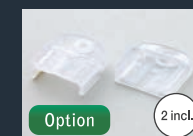


SZ-310ARM
Rear Attachment Type
(Magnetic Mount)

Material: Polycarbonate Resin

* Necessary Quantity
CLA1S~ 6S/2 pcs.
CLA9S~ 15S/4 pcs.

With a powerful magnet,
fastening onto surfaces
such as steel can be
attached easily.

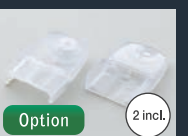


SZ-310AS
Side Attachment Type
(Screw Mount)

Material: Polycarbonate Resin

* Necessary Quantity
CLA1S~ 6S/2 pcs.
CLA9S~ 15S/4 pcs.

The side attachment bracket,
designed to match the pitch
to our "CLB" Models "N1"
and "N2".

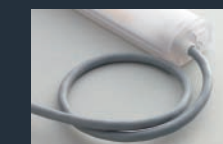


SZ-310ASB
Side Attachment Type
(Screw Mount)

Material: Polycarbonate Resin

* Necessary Quantity
CLA1S~ 6S/2 pcs.
CLA9S~ 15S/4 pcs.

The pitch is designed to
match the "CLB-N", so
replacing it with a new
"CLA-3S" can be easier.



■ Durable Cord can withstand environment conditions from -40°C to +60°C

The polyurethane sheath was used for the wire housing so that it could endure the operating temperature environmental range, the same as the housing. (It also has chemical resistance)



Cost Saving

Earth Freindly

Long Life

Low Heat

TECHNOLOGY

Highly reliable LED chips are used.

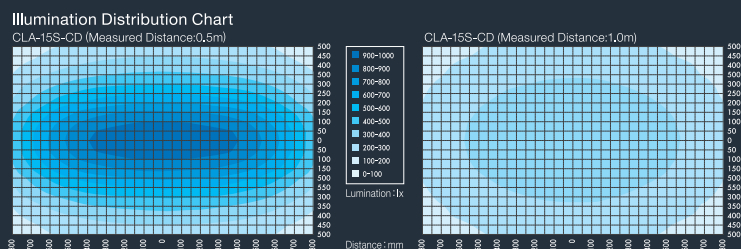


High-definition LED chip

The highly reliable LED chip, which is the core of LED lighting, has nearly 10 times (about 40,000 hours) the lifespan (based on LED brightness of 70%) in comparison to the common fluorescent light, it also does not contain any mercury.

Uniform light which subdues the glaring brightness

In comparison to an LED luminous source, we take advantage of the straight beam optical characteristic of the LED and translucent material without dropping brightness or overdoing it, but reproducing a natural light.



Housing: Polycarbonate Resin

Shock-proof polycarbonate resin

Polycarbonate resin construction, which is a hard to break material, was adopted to endure all operating environments. In addition, the most difficult thing has been accomplished; for the body to acquire the IP69K conformity. And, unlike other LED lighting products which uses glass material, etc., we've reduced the danger of body cover breakage or from fragments mixing in goods (for the food industry, etc).

Cost Saving

Energy ab. **52.3%** Less

Based on 10 hrs. per day for 365 days

Annual Power Consumption

100V20W Fluorescent: 88kWh

CLA6S LED Bar Light: 42kWh

Earth Freindly

CO2 Emissions ab. **51.7%** Less

Based on 10 hrs. per day for 365 days

CO2 Annual Power Consumption

100V20W Fluorescent: 31kg

CLA6S LED Bar Light: 15kg

Long Life

Lifespan ab. **10 times more**

4,000 Hrs. vs. 40,000Hrs.

Conventional Fluorescent vs. CLA LED Bar Light

Low Heat

In Comparison ab. **34%** Less

Measured 1 hr. after lighting

Heat Radiation: 60°C vs. 39.5°C

At Room Temperature: Fluorescent (FL20SS) vs. CLA LED Bar Light

※ Based on 2008 data accumulated from the Japanese Electric Company (CO₂ Emissions per kWh at 0.355kg)

6800K DAYLIGHT COLOR(-CD)



NATURAL WHITE COLOR(-CN) 4800K

Amber AMBER COLOR(-Y)



SCENE

Factory · Plant Facilities



Food Processing



Beverage Processing

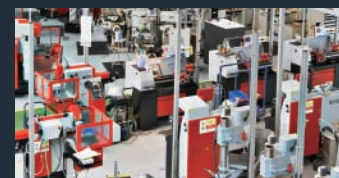


Panel Box



Pharmaceutical Production Line

Equipment Manufacturer



Various Automation Machinery



Automotive Assembly Line



Printing Press Machinery

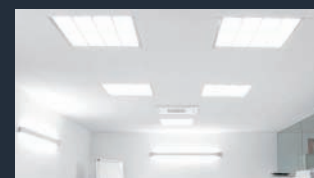


Semiconductor Production (Amber Lighting)

Other



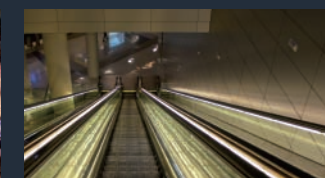
Freezer · Refrigerator Showcase



Indoor Lighting



Billboard · Sign Backlighting



Escalator · Various Facilities

PATLED's LINEUP

Oil-resistant Light Diffused type LED Bar Light CLT



Water-resistant Machine Integrated Type LED Bar Light CLF



Oil-resistant Spotlight Type LED Work Light CLM

