

Examination light



SKYLLIX[®] YAMADA SHADOWLESS LAMP CO., LTD.

https://www.skylux.co.jp

HEAD OFFICE Address: 2-3-16, Nishikanda, Chiyoda-ku, Tokyo 101-0065 Japan

SAITAMA FACTORY Address: 1526-1 Osone, Yashio-city, Saitama 340-0834 Japan

Marketing authorization number in Japan:11B2X10036 Generic name in Japan: Mobile Examination light / Classification in Japan: Class I Country of Origin: Japan

Fifth edition, 2024.6



Providing an Optimal Light

Environment to

Every Medical Practice



EXPERIENCE. for Medical Environment. Yamada Shadowless Lamp found one light. "LEDs suited for Medical." This light is close to natural light. "An accurate but gentle light."

A doctor's eyes are just as important to them as their hands. They are always looking at the patient's ever-changing condition. In the operation room, their eyes are continually strained under operation lights, brighter than sunlight.

We don't want doctors to just accept that harsh environment and daily stress as unavoidable.

We don't want doctors to pretend they don't feel it.

The CLOVER Series is not only an operation light, but is fully equipped with "LEDs suited for Medical" for all lights that envelop the entire space.

We're on a mission.

We want to provide an optimal light environment to every medical practice. To help doctors do their best. To help save lives.

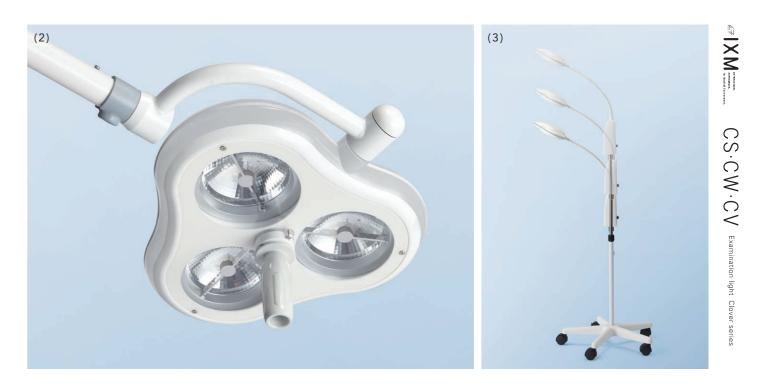
 $CS \cdot CW \cdot CV$ Examination light Clover series

Bringing gentle and reliable illumination to your examination.

This examination light combines a design made to put the patient at ease with "LEDs suited for Medical" that ensure both accurate color visibility and distinguishability. Three types are available: the mobile stand type, the ceiling-mounted type, and the wall-mounted type. Choose the size, design and brightness that you need.







(1) Cute and compact

This examination LED light has a natural and soft design that easily fits into your environment and puts patients at ease.



(2) Sterilizable handle

The sterilizable handle for the 03 series is detachable and replaceable.

$CS \cdot CW \cdot CV$ Examination light Clover series

We achieve a light environment optimal for medical practices.

"Ultra-high color rendering LEDs" achieve reliable visibility and distinguishability

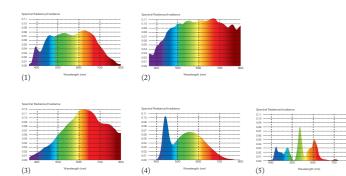
We used "Ultra-high color rendering LEDs" to achieve a high index of 95 for the R9 value. This corresponds to red (blood) in the special color rendering index (Ri), an index that includes colors close to the human body. This makes the colors of blood, organs, and tissue in the operative field more visible and distinguishable, helping improve the precision of operations.

Light which brings out an object's true color and quality

Compared to ordinary LEDs, LEDs suited for Medical have a spectrum closer to that of sunlight, and can bring out an object's true color and quality. Human eyes see the light reflected off an object to recognize that object. LEDs suited for Medical can express that reflection more accurately and illuminate more true.

Spectral wavelength range close to sunlight

For example, you can't draw a colorful picture with only one or two colored crayons. If you don't have a skin-colored crayon, you have to use the next closest color, yellow, and the picture ends up different from what you imagined. In the same way, by illuminating light with a spectrum that covers all wavelengths onto an object, that object's true, natural colors become visible.



Average color rendering index (No.1 to 8) No.1 No.2 No.3 No.4 No.5 No.6 No.7 No.8 Special color rendering index (No.9 to 15) No 9 No.10 No.11 No.12 No.13 No.14 No.15

Comparison of ordinary and LEDs suited for Medical

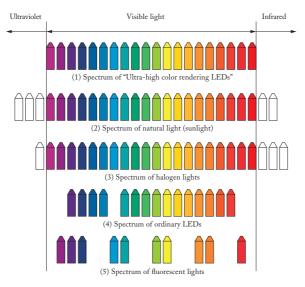


With ordinary LEDs



With LEDs suited for Medical

If we imagine the spectrum of light as crayons...



Light that is gentle on your eyes with reduced risk of blue light

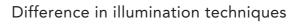
Doctors who continue to look at an operation site under an abnormally bright light experience tired eyes due to blue light. "LEDs suited for Medical" reduce the blue light risk and achieve a spectrum that does not strain the eyes.

Light unit which reduces brightness

The light unit is designed to have a structure that prevents the LEDs from interfering with your work. This structure prevents the physician and support staff from feeling uncomfortable brightness.

Light with "zero flickering" reduces strain on your eyes

Commonly-used lights adjust their brightness by repeatedly turning on and off in an extremely short interval (AC lighting, PWM control). However, the minute "flickering" strains your eyes, even if you're not aware of it. This also applies to the light environment of the operation room. With our DC lighting, the light can be constantly "ON", providing a light that does not flicker and is easy on your eyes.



The unique structure of the light unit prevents "chromatic aberration" (that is, blurring or shifts in color) so you can accurately see the operation site.

- Lens method (Competitors)

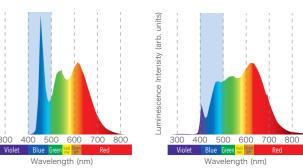
Because refraction indexes vary by wavelength, chromatic aberration occurs, shifting or blurring the color in the edges of the light field.

- Reflection method

Luminescent method of the Clover Series. Chromatic aberration does not occur in the edges of the light field.

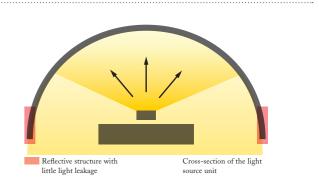
The unique optical design prevents glare when illuminated on the operation site.

The unique optical design prevents glare when shined on the peration site. This significantly reduces eye strain and discomfort for doctors, who must continue to look at the operation site over a long period of time.



Radiant spectrum of ordinary white LEDs

Radiant ctrum of the "Ultra-high color renderin LEDs" used in the Clover Series



If looking at a moving object





Afterimage occurs easily



Lens method (Competitors) Has chromatic aberration



Reflection method (Clover Series) No chromatic aberration

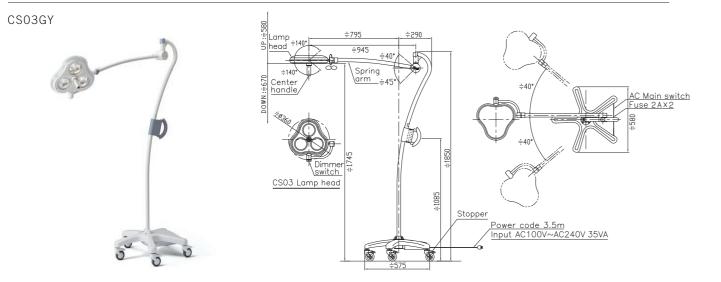


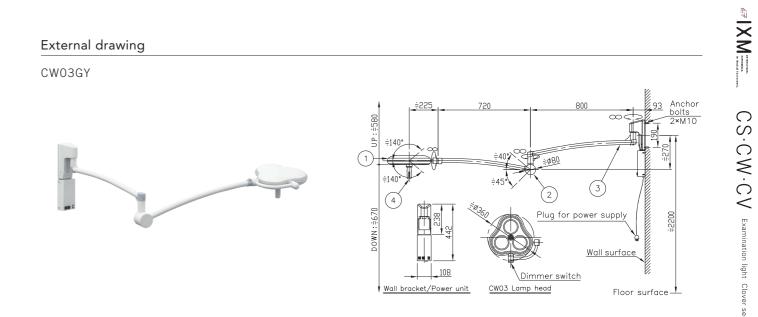
Ordinary white LEDs: Light with "glare"

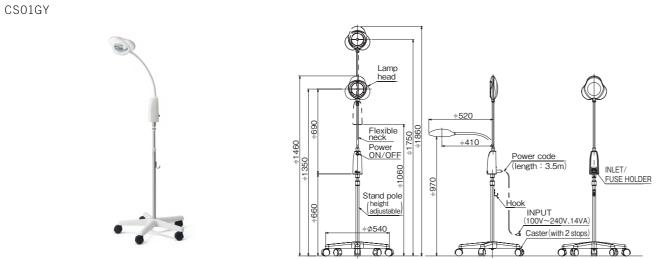


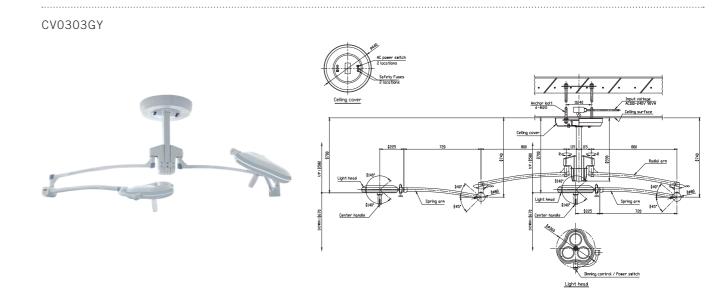
Clover Series: Light with reduced "glare"

External drawing









Specifications

| ltem / Model | CS01GY | CS03GY | CW03GY | CV03GY | CV0303GY |
|---|--|---|----------------|-----------------|----------------|
| Product type | Mobile stand | | Wall-mounted | Ceiling-mounted | |
| LED technology | Ultra-high color rendering LEDs | | | | |
| Light head diameter | Approx. Ø210mm | Approx. ¢360mm | | | |
| LED service life | 40,000hours(up to 70% light intensity) | | | | |
| Rated input voltage | AC100 - 240V 50/60Hz | | | | |
| Power consumption | 20 - 30VA | 35 - 45VA | | | |
| Central illuminance(at 80cm) | Approx. 30,000Lux | Approx. 75,000Lux | | | |
| Irradiance(at 80cm) | Approx. 110W/m ² | Approx. 280W/m ² | | | |
| Color temperature(K) | Approx. 4250K | | | | |
| Color rendering index | Ra : 99 R9 : 95 | | | | |
| Light field diameter / Brightness adjustment | Approx. ϕ 160mm | Approx. ϕ 160mm / Dimmer switch(30~100%) | | | |
| Net weight | Approx. 4Kgs. | Approx. 21Kgs. | Approx. 15Kgs. | Approx. 21Kgs. | Approx. 45Kgs. |

*When the initial illuminance is lower than 70%. It is the life of the LED used and not the life of the product. *Please note in advance that partial changes in the design and specifications may be made without prior notice for reason such as improvements.

CV03GY



