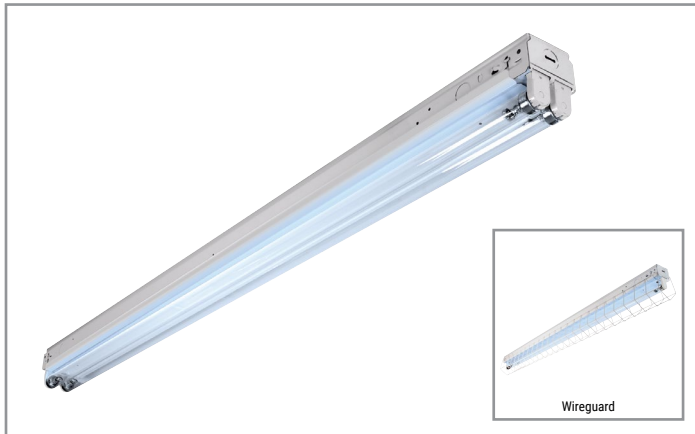| Project		Catalog #		Type	
Prepared by		Notes		Date	

Fail-Safe

GSL Germicidal UV Striplight

Germicidal UV Disinfection Striplight
1 or 2 sources, 4'

Typical Applications

Retail • Industrial • Commercial • Education

Wireguard

Interactive Menu

Product Certification

FC · UL CERTIFIED SAFETY — Germicidal UV System · ISO SYSTEMS CERTIFIED

Product Features

GERMICIDAL UV · CHEMICAL FREE DISINFECTION CYCLE · LINEAR DISCONNECT · BAA BUY AMERICAN ACT AVAILABLE

Top Product Features

- Designed to use the latest in Germicidal UV source technology
- Narrow Design, available in 1 or 2 source configurations
- Can be surface mounted or suspended
- Optional Wireguard to protect sources, optional symmetric and asymmetric reflectors for optical control
- UL 8802 Safety Certified GUV System for use in permanent installations
- Options to meet Buy American and other domestic preference requirements

Pure protection against bacteria and viruses using the power of light

Trusted

35 years experience in UV-C disinfection and strong application expertise.

Effective

Proven effectiveness against bacteria, mold, mildew, and viruses.

Fast

Can disinfect surfaces and objects in minutes.

Versatile

Can be used in numerous applications.

COOPER Lighting Solutions

Order Information

SAMPLE ORDER NUMBER: **GSL-2GUV4-R1**

Domestic Preferences	Fixture Family	Source Quantity	Source Type	Ballast	Packaging
Domestic Preferences [2]	**Fixture Family**	**Source Quantity**	**Source Type**	**Ballast**	**Packaging**
[Blank]=Standard **BAA**=Buy American Act **TAA**=Trade Agreements Act	**GSL**=Germicidal UV Strip	**1**=1 Sources **2**=2 Sources	**GUV4**=4ft GUV Source	**R1**=(1) Rapid Start Driver	**[Blank]**=Unit Pack
Notes (2) Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements					

Accessories

Accessories (order separately)[3]
AYC-Chain/Set=36" Chain Hanger (Use 1 set per fixture) **SCF**=Fixed Stem Set (Specify Length) **SCS**=Swivel Stem Set (Specify Length) **SCA**=Adjustable 48" Stem Set **EYE-CHAIN/SET-B**=Eye Bolt Chain (Use 1 set per fixture) **WG/SNF-4FT**=4ft Wire Guard [1] **A1B/Spacer-U**=Spacer 1-1/2" to 2-1/2" from ceiling (Use 2 per fixture) **TOGGLE**=Single Toggle No. 2 (Specify Length) **Y-TOGGLE**=Y Toggle No. 2 (Specify Length) **GSL-SYM-4**=4ft Symmetric Reflector [1] **GSL-ASY-4**=4ft Asymmetric Reflector [1]
Notes (1) Wireguard and accessory reflectors cannot be used together on the same fixture. (3) Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information.

Product Specifications

Germicidal UV
- Germicidal UV source technology using quartz enclosure and long-life igniter to maximize the run time and ensure optimal germicidal efficiency
- Utilizes 1 or 2 GUV sources operating at 254nm wavelength
- GUV is a proven disinfection technology effective on pathogens including mold, fungi, bacteria, and viruses
- GUV power is delivered up to 9000 hours while maintaining at least 80% of the initial GUV energy
- Rapid Start electronics extend the life to up to 25,000 start-up cycles

Construction
- Die-formed of cold rolled steel with numerous KOs for easy installation
- Groove for Tong Hanger
- End plate quickly converts to snap-in channel connector for continuous row alignment
- Source holder bracket flips in place
- Channel/wireway cover secured with quarter-turn fasteners
- GUV retention using roto-lock durable sockets with materials optimized for UVC integrity throughout the life of the product

Channel/Wireway Cover
- Die formed heavy gauge steel
- Tight fit for ease of maintenance
- Easily removed without use of tools
- Optional symmetric and asymmetric reflectors to direct germicidal energy distribution

Finish
- Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibitor
- Prepainted material is standard, PAF optional

Optics (optional)
- Reflectors made of electro polished aluminum specifically tuned to maximize the germicidal energy
- Reflectors are optically engineered control the GUV power
- Symmetric and Asymmetric distributions focus disinfection energy where it is needed, maximizing efficiency and reducing the time needed for disinfection

Compliance
- Product complies with FCC part 18 limits
- Integrates with GUV Controls for UL 8802 Safety Certified GUV System for use in permanent installations
- The device is not approved and/or certified as a medical device by the FDA or any other regulatory body. As such, the device is not intended for and cannot be used to disinfect the surfaces of medical devices or for any medical purposes.
- EPA Facility # 96488-MEX-1

Warnings and Safety
- DANGER: Risk Group 3 UV product. Sources emit high-power UV radiation that can cause severe injury to skin and eyes. Avoid eye and skin exposure to unshielded product. Use only in spaces without occupants.
- GUV may cause degradation and fading of paints, fabrics and other materials
- Plants and/or materials that are exposed to UV-C and/or ozone for a long time may become damaged and/or discolored
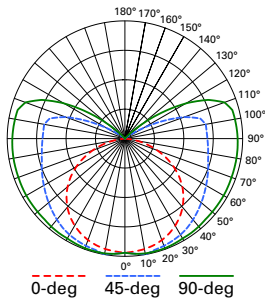
Safeguards
- Must be combined with GUV Controls safeguards for UL 8802 Safety Certified GUV System for use in permanent installations
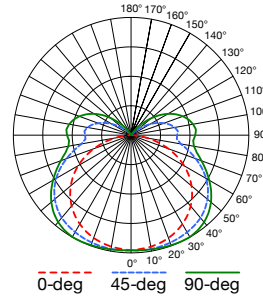- See page 4 for details on GUV Controls safeguards

Germicidal Energy Distribution

Spacing criteria is based on optical only. For GUV layouts, this will depend on dosing needed and the time desired to disinfect the desired area.
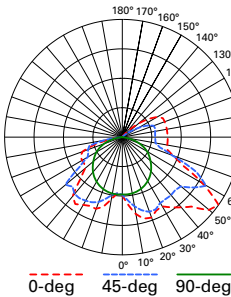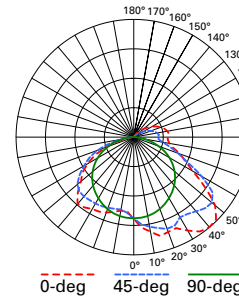
September 1, 2022 4:07 PM

GSL-1GUV4-R1

Electronic Driver

1 GUV Source

Spacing criterion: (II) 1.31 x mounting height, (⊥) 1.54 x mounting height

Irradiance (mW): 10242

Input Watts: 33W

Test Report: GSL-1GUV4-R1.IES

w/WG

Irradiance (mW): 9458
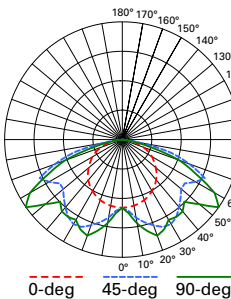
Input Watts: 33W

0-deg   45-deg   90-deg

GSL-2GUV4-R1

Electronic Driver

2 GUV Sources

Spacing criterion: (II) 1.32 x mounting height, (⊥) 1.53 x mounting height

Irradiance (mW): 16837

Input Watts: 61W

Test Report: GSL-2GUV4-R1.IES
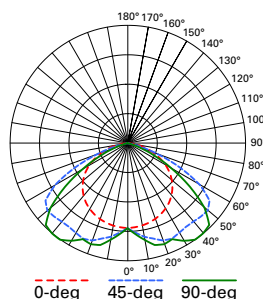
w/WG

Irradiance (mW): 15968

Input Watts: 61W

0-deg   45-deg   90-deg

GSL-1GUV4-R1-GSL-ASYM-4

Electronic Driver

1 GUV Source

Spacing criterion: (II) 1.96 x mounting height, (⊥) 1.32 x mounting height

Irradiance (mW): 7167

Input Watts: 33W

Test Report: GSL-1GUV4-R1-GSL-ASYM-4.IES

0-deg   45-deg   90-deg

GSL-2GUV4-R1-GSL-ASYM-4

Electronic Driver

2 GUV Sources

Spacing criterion: (II) 1.82 x mounting height, (⊥) 1.29 x mounting height

Irradiance (mW): 16535

Input Watts: 61W

Test Report: GSL-2GUV4-R1-GSL-ASYM-4.IES

0-deg   45-deg   90-deg

GSL-1GUV4-R1-GSL-SYM-4

Electronic Driver

1 GUV Source

Spacing criterion: (II) 1.3 x mounting height, (⊥) 1.9 x mounting height

Irradiance (mW): 7918

Input Watts: 33W

Test Report: GSL-1GUV4-R1-GSL-SYM-4.IES
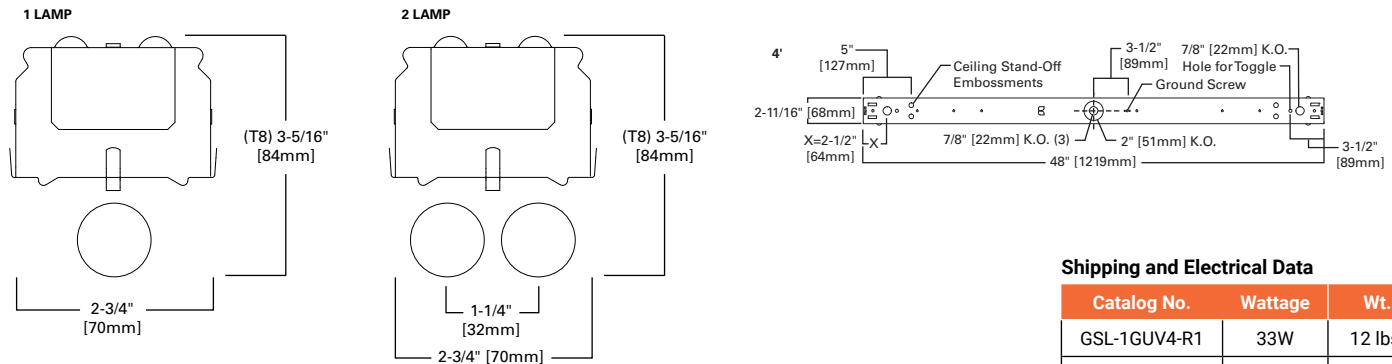
0-deg   45-deg   90-deg

GSL-2GUV4-R1-GSL-SYM-4

Electronic Driver

2 GUV Sources

Spacing criterion: (II) 1.33 x mounting height, (⊥) 1.95 x mounting height

Irradiance (mW): 16632

Input Watts: 61W
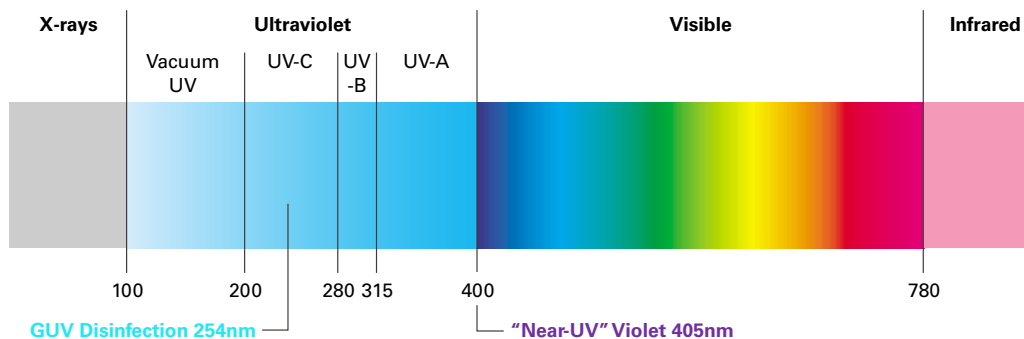
Test Report: GSL-2GUV4-R1-GSL-SYM-4.IES

0-deg   45-deg   90-deg

Dimensional and Mounting Details

1 LAMP

(T8) 3-5/16" [84mm]

2-3/4" [70mm]

2 LAMP

(T8) 3-5/16" [84mm]

1-1/4" [32mm]

2-3/4" [70mm]

4'

5" [127mm]

Ceiling Stand-Off Embossments

3-1/2" [89mm]

7/8" [22mm] K.O. Hole for Toggle

Ground Screw

2-11/16" [68mm]

X=2-1/2" [64mm]

7/8" [22mm] K.O. (3)

2" [51mm] K.O.

48" [1219mm]

3-1/2" [89mm]

Shipping and Electrical Data

Catalog No.	Wattage	Wt.
GSL-1GUV4-R1	33W	12 lbs.
GSL-2GUV4-R1	61W	12 lbs.

Note: Sources are sold with the fixture but ship separately for install at the site.

GUV Education

- GUV (germicidal ultraviolet) is a proven and effective disinfection technology.
- GUV refers to short-wavelength ultraviolet "light" outside of the visible spectrum that is proven to kill bacteria and inactivate viruses...FAST! These short wavelengths in the photobiological UV spectral band known as "UV-C" are centered at 254nm, which is the optimal source wavelength for eliminating pathogens.
- GUV is an excellent surface and air disinfectant due to its quick germicidal efficacy.
- Germicidal effectiveness is determined by the exposure dose irradiance (how much) and time (how long).
- GUV can pose a safety and health hazard to the eyes and skin if the product is improperly used or installed.
- Follow recommended practices for utilization and control of GUV fixtures.

X-rays

Ultraviolet

Visible

Infrared

Vacuum UV

UV-C

UV-B

UV-A

100   200   280 315   400   780

GUV Disinfection 254nm

"Near-UV" Violet 405nm

For more information on Fail-Safe GUV Disinfecting Solutions, please visit www.cooperlighting.com/GUV

COOPER
Lighting Solutions

Overview of the complete GUV Control System

The UL8802 Safety Certified GUV Control System is composed of one GUV Control Panel, one GUV User Station, GUV Clearance Pushbuttons and GUV Magnetic Access Sensors.

- **The GUV Control System –** Meets UL safeguard requirements as per UL8802. The safeguards ensure that the GUV Control system can be turned on and remains on if all safeguards are met. In the event someone enters the space, the system will automatically turn off and will not restart until the safeguards are met again and the user turns the system back on.
- **GUV Control Panel –** A control panel that manages the GUV Control System based on inputs received from the GUV Clearance Pushbuttons, GUV Magnetic Access Sensors installed at each door/windows and the GUV User Station installed outside the cleaning area. The GUV Control Panel includes a timer that allows the certified installer to configure the maximum activation time for the space disinfection.
- **GUV User Station with LED Indicators –** Contains the Off/On selector switch and a system activate keyed switch. The selector switch provides power to the GUV Clearance Pushbuttons while the keyed switch turns the GUV fixtures On. The LED indicators notifies the operator that:
  - START: Power has been supplied
  - READY: All safeguards are met
  - GO: The system is actively running
- **GUV Magnetic Access Sensors –** The GUV Magnetic Access Sensors are to be installed at the entrances and windows of the enclosed spaces. These sensors act as the primary safeguard within the GUV Control System. All doors/windows need to be closed for the GUV operator to activate the GUV Control System. Opening a door or window will stop the GUV session.
- **GUV Clearance Pushbuttons –** Clearance Pushbuttons are used to verify that no one is within the space prior to the GUV session. The GUV Clearance Pushbutton acts as the secondary safeguard. All GUV Clearance Pushbuttons installed within the space need to be pressed for the GUV operator to activate the GUV Control System. Inactivating a GUV Clearance Pushbutton during the GUV session will turn off the GUV Control System.

Control Components

GUV Control Panel	**GUV User Station**	**GUV Sensor**	**GUV Pushbutton**

Catalog Number	Description
GUV-16-120-277	Medium - GUV Control Panel with 16 Pushbutton Inputs
GUV-24-120-277	Large - GUV Control Panel with 24 Pushbutton Inputs
GUV-USER-1	GUV User Station
GUV-MAG-SENSOR-1	GUV Magnetic Access Sensor
GUV-PB-1	GUV Clearance Pushbutton

GUV Control Panel
with 16 or 24 Pushbutton Inputs

GUV User Station

GUV Magnetic Access Sensor

GUV Clearance Pushbutton

Control Panel to be mounted in electrical room

Pushbuttons are installed in each room to be sanitized

Fail-Safe GUV Fixtures

GERMICIDAL UV

For more information on Fail-Safe GUV Disinfecting Solutions, please visit **www.cooperlighting.com/GUV**

example of private offices