

Project		Catalog #		Type	
Prepared by		Notes		Date	



## Fail-Safe

### GLR Germicidal UV Louvered Recessed

Germicidal UV Disinfection  
2' x 2' and 2' x 4'

#### Typical Applications

Retail • Commercial • Education • Hospitality • Healthcare

#### Interactive Menu

- Order Information [page 2](#)
- Germicidal Energy Distributions [page 2](#)
- GUV Education [page 3](#)
- GUV Controls [page 4](#)
- Product Warranty

#### Product Certification



#### Product Features



#### Top Product Features

- Designed to use the latest in Germicidal UV source technology
- Available in 2x2 and 2x4 sizes
- Open design to maximize Germicidal UV disinfection distribution
- Louvered design for aesthetic appeal
- Compatible with standard grid ceilings, or sheetrock with available drywall kit accessory
- Drywall kit available
- UL 8802 Safety Certified GUV System

#### 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.

## Order Information

SAMPLE ORDER NUMBER: **24GLR-3GUV4-S36I-R1**

Size	Fixture Family	Source Quantity	Source Type	Louver	Ballast	Packaging
Size	Fixture Family	Source Quantity	Source Type <sup>(1)</sup>	Louver <sup>(2)</sup>	Ballast	Packaging
22=2' x 2' 24=2' x 4'	GLR=Germicidal UV Louvered Recessed	3=3 GUV Sources	GUV2=2ft Source GUV4=4ft Source	S33I=Silver semi-specular 9-cell louver S36I=Silver semi-specular 18-cell louver	R1=(1) Rapid Start Driver	[Blank]=Unit Pack
			<b>Notes</b> (1) GUV2 is for use with 2x2, GUV4 is for 2x4.	<b>Notes</b> (2) S33I is for use with 2x2, S36I is for use with 2x4.		

### Accessories

Accessories (order separately)
EQ-CLIP-U=T-BAR Safety Earthquake Clips <sup>(3)</sup> DF-22W-U=2' x 2' Drywall Frame Kit DF-24W-U=2' x 4' Drywall Frame Kit SK-22-WT=2' x 2' Surface Mount Kit SK-24-WT=2' x 4' Surface Mount Kit
<b>Notes</b> (3) An EQ Grid Clip is recommended for all 9/16" ceiling systems.

## 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 3 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
- 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
- Built-in grid retention feature for use where required by code

### Finish

- Code - gauge cold rolled steel
- Multistage, iron phosphate pretreatment ensures maximum bonding and rust inhibitor
- Baked enamel white finish on painted surfaces

### Optics

- Reflector made of electro polished aluminum specifically tuned to maximize the germicidal energy
- Louvers are made from semi-specular aluminum and engineered to control GUV energy in a more narrow focus area
- Distribution focuses 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

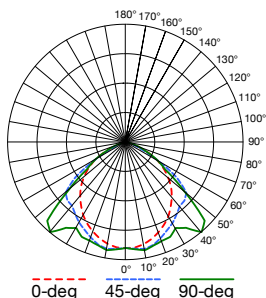
### Safeguards

- 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

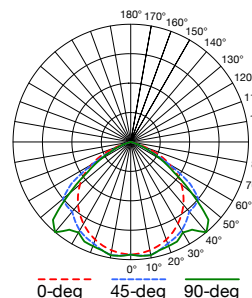
## Germicidal Energy Distribution

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.

[View IES files](#)

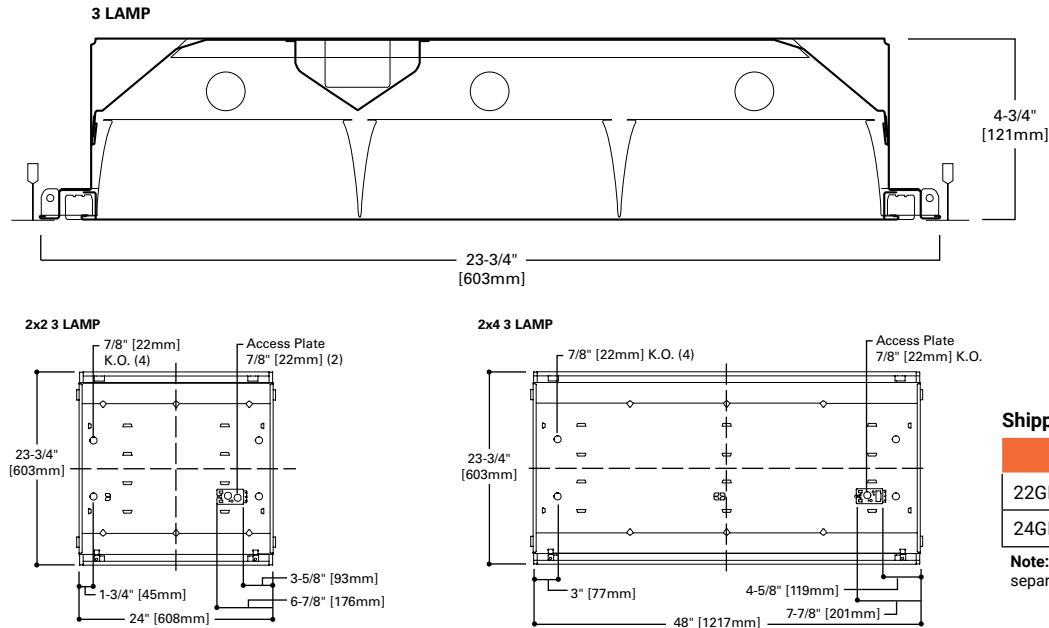


**22GLR-3GUV2-S33I-R1**  
Electronic Driver  
3 GUV Sources  
Spacing criterion: (II) 1.2 x mounting height, (⊥) 1.67 x mounting height  
Irradiance (mW): 7871  
Input Watts: 58W  
Test Report: 22GLR-3GUV2-S33I-R1.IES



**24GLR-3GUV4-S36I-R1**  
Electronic Driver  
3 GUV Sources  
Spacing criterion: (II) 1.25 x mounting height, (⊥) 1.53 x mounting height  
Irradiance (mW): 15309  
Input Watts: 91W  
Test Report: 24GLR-3GUV4-S36I-R1.IES

## Dimensional and Mounting Details



### Shipping and Electrical Data

Catalog No.	Wattage	Wt.
22GLR-3GUV2-S33I-R1	58W	28 lbs.
24GLR-3GUV4-S36I-R1	91W	42 lbs.

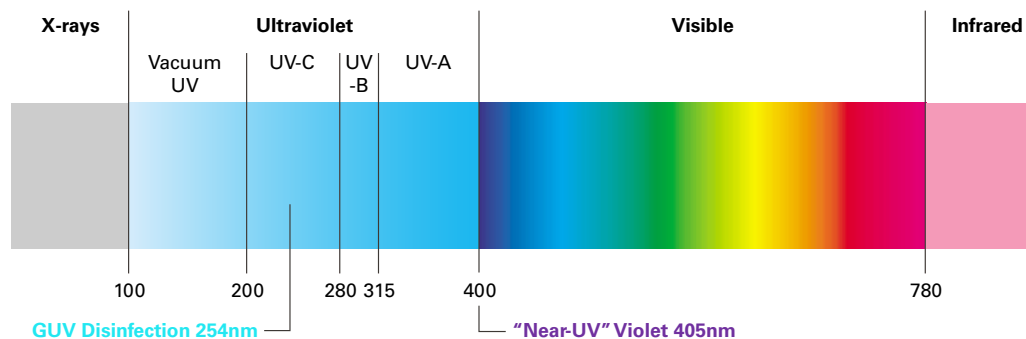
**Note:** Sources are sold with the fixture but ship separately for install at the site.

### Ceiling Compatibility

G	G	G	F	MZ	Ceiling Type	Trim Type
Grid/Lay-in Standard	Concealed T	Slot Grid	Aluminum Flange Trim With Supporting Swing Gates	Modular Trim With Supporting Swing Gates	Exposed Grid	G
					Concealed T	G
					Slot Grid	G
					Flange	F
					Concealed "T" or "Z"	MZ
					Metal Pan	MZ
					(Verify compatibility/ consult factory.)	

## 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.



**For more information on Fail-Safe GUV Disinfecting Solutions,**  
**please visit [www.cooperlighting.com/GUV](http://www.cooperlighting.com/GUV)**

## 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
<b>GUV-16-120-277</b>	Medium - GUV Control Panel with 16 Pushbutton Inputs
<b>GUV-24-120-277</b>	Large - GUV Control Panel with 24 Pushbutton Inputs
<b>GUV-USER-1</b>	GUV User Station
<b>GUV-MAG-SENSOR-1</b>	GUV Magnetic Access Sensor
<b>GUV-PB-1</b>	GUV Clearance Pushbutton

