

# Igor<sup>®</sup> Nexos<sup>™</sup> Intelligent Disinfection

## UVC Light Fixture (UVCLF-22)

The Igor UVC fixtures are at the heart of the Igor Nexos Intelligent Disinfection solution. Enabled with Igor PoE technology and packed with UVC LEDs, these fixtures are the first step towards providing your employees and customers a safe, sanitary environment. UVC fixtures and Intelligent Disinfection controls can be installed for one room, multiple rooms, or even added to an existing Igor Nexos installation.

### Features

Since UVC lighting can be harmful to humans, it's important the fixtures are used in a safe manner to prevent improper exposure. When paired with the Igor Nexos Intelligent Disinfection solution, the UVC light fixtures are only enabled when the room is unoccupied and safe for disinfection. Additionally, since UVC light is invisible to the human eye, Igor has integrated purple illumination into the fixtures to indicate when disinfection is in process:

- **Fixture Size:** 2ft x 2ft Troffer
- **LED Driver:** Igor PoE Lighting Node
- **Power draw:** 52W per fixture
- **Fixture coverage area:** 17' diameter at floor when fixture is mounted at 9'
- **Wavelength:** LEDs emit in the peak germicidal range of 260 nm to 270 nm, providing effective and consistent anti-microbial performance across a range of pathogenic organisms.
- **Recommended disinfection time:** One 90-minute continuous disinfection cycle per day (for 9' fixture mounting height), with additional bursts of disinfection for heavily used spaces when unoccupied



Fig. 1: UVC LED



Fig. 2: Igor UVC Light Fixture

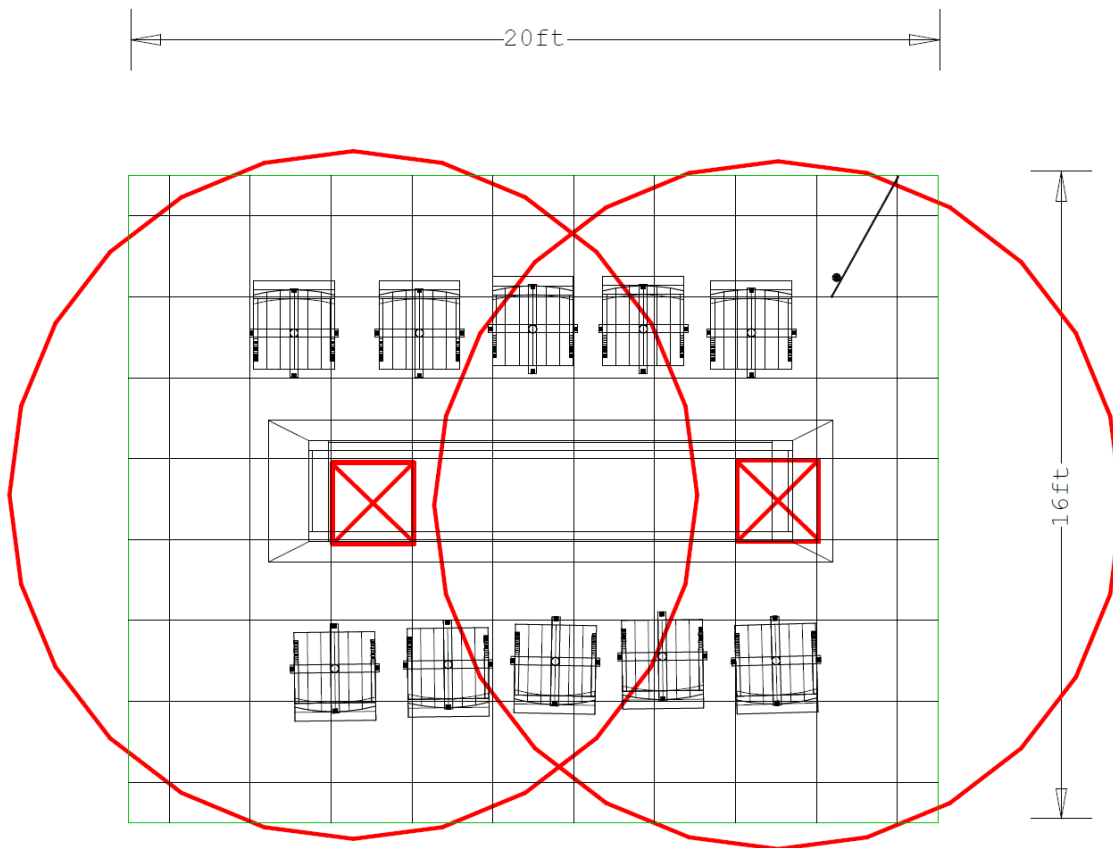
## Disinfection Rate Table

The following table correlates the fixture mounting height (ft) vs. the amount of time (minutes) the UV-C fixtures are turned on in the room to achieve the corresponding disinfection rates of 90%, 99% and 99.9%.

Disinfection Rates Based on Fixture Mounting Height vs. Exposure Time					
UVC Fixture Mounting Height (ft)	Coverage Diameter(ft) at Floor Level	Intensity (mW/cm <sup>2</sup> )	~90% Disinfection (D <sub>90</sub> ) (1.5mJ/cm <sup>2</sup> ) Time (min)	~99% Disinfection (3.0mJ/cm <sup>2</sup> ) Time (min)	~99.9% Disinfection (6.0mJ/cm <sup>2</sup> ) Time (min)
9	17	0.0012	21	42	83
12	24	0.0011	23	45	91
15	28	0.0010	25	50	100

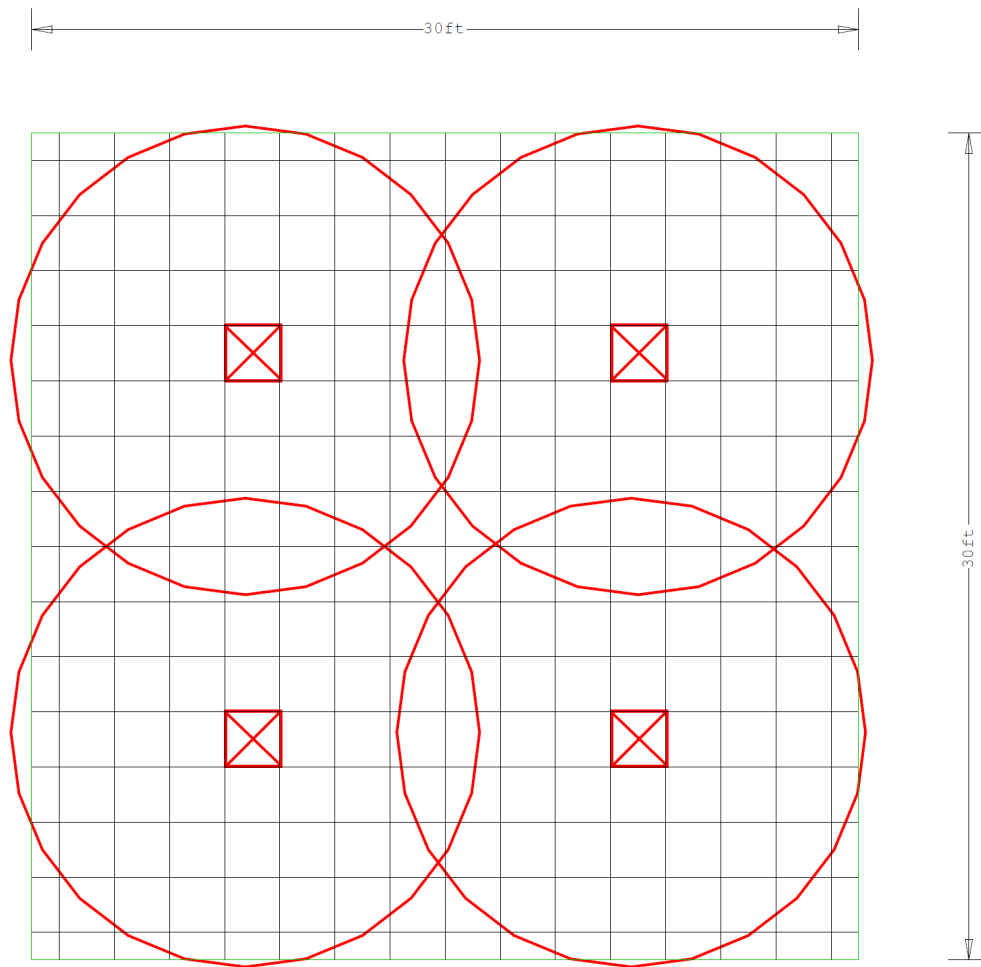
## Fixture Spacing

The following diagrams show fixture space examples based on a 9' fixture mounting height:



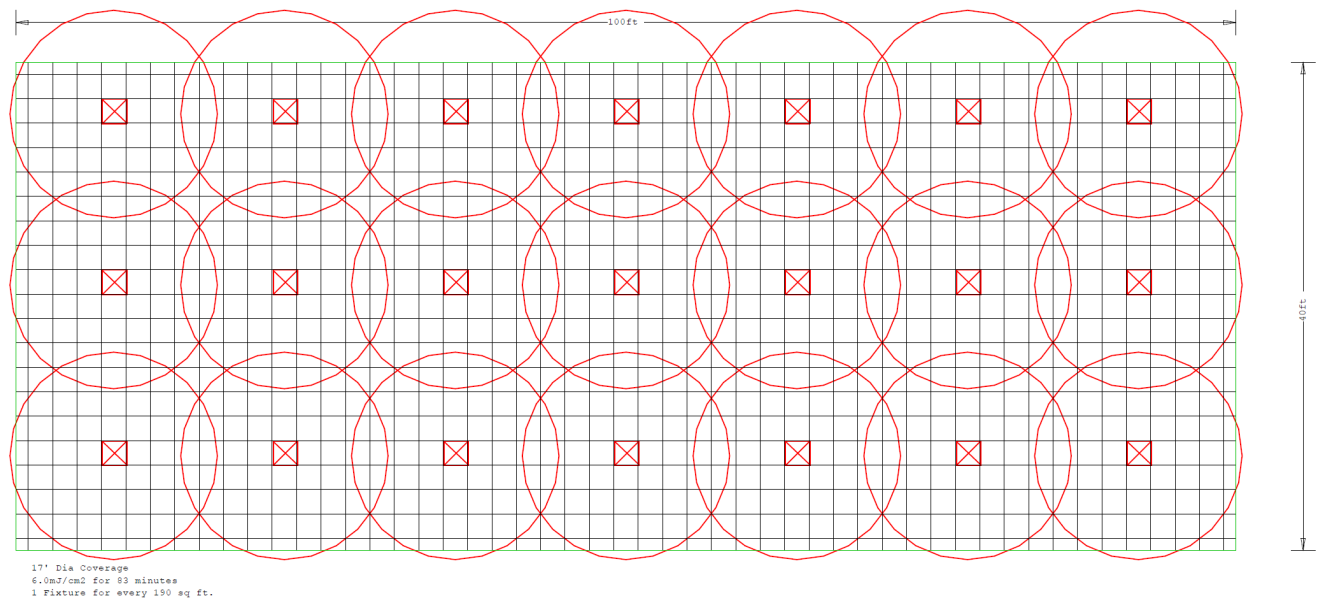
17' Dia Coverage  
6.0mJ/cm<sup>2</sup> for 83 minutes

Fig. 3: Medium Conference Room Example: 16ft x 20ft



17' Dia Coverage  
6.0mJ/cm2 for 83 minutes

Fig. 4: Classroom Example: 30ft x 30ft



17' Dia Coverage  
6.0mJ/cm2 for 83 minutes  
1 Fixture for every 190 sq ft.

Fig. 5: Open Office Example: 40ft x 100ft