



# Your Partner in IR and UV Technology



## Excimer Lamp Cut Sheet





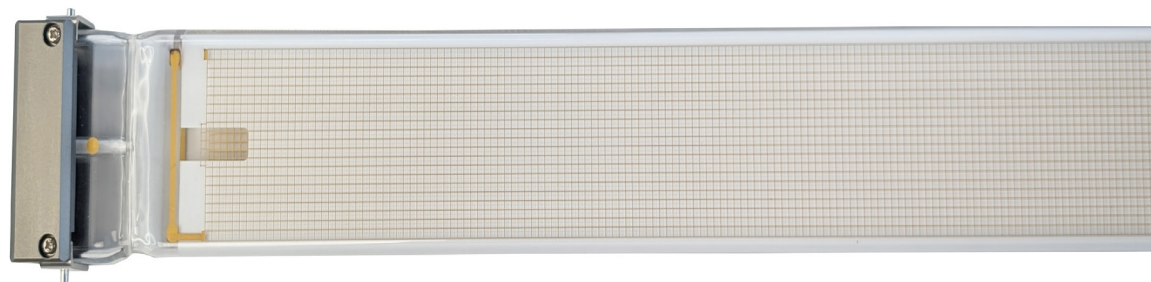
## Excimer Lamp Cut Sheet

Far-UVC (222 nm) & VUV (172 nm) Excimer Lamps

Excimer lamps are high-efficiency, mercury-free ultraviolet light sources that function by energising mixtures of noble gases and halogens. They emit narrowband UV radiation at specific wavelengths, making them well-suited for precision applications such as disinfection, semiconductor manufacturing, surface treatment and photochemical processes.

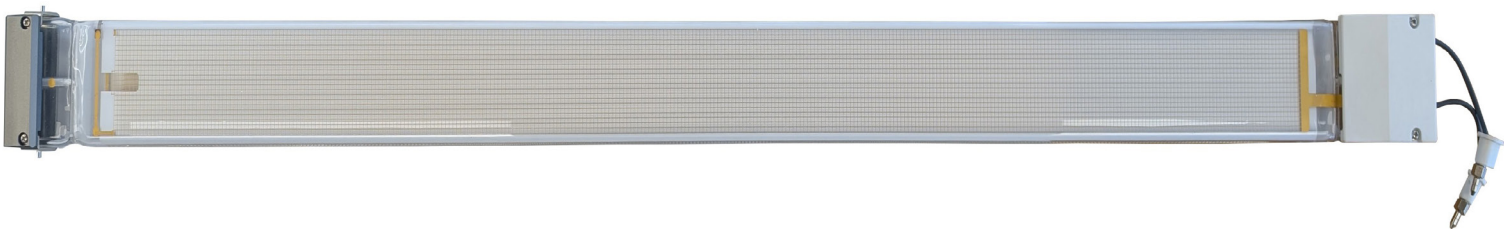
## Features and Benefits

- Mercury - Free Design
- Instant Start and Stable Output
- Customisable Dimensions and Power Levels
- High Disinfection Efficiency (222 nm)
- Surface Activation and Cleaning (172 nm)
- Low Heat Emission



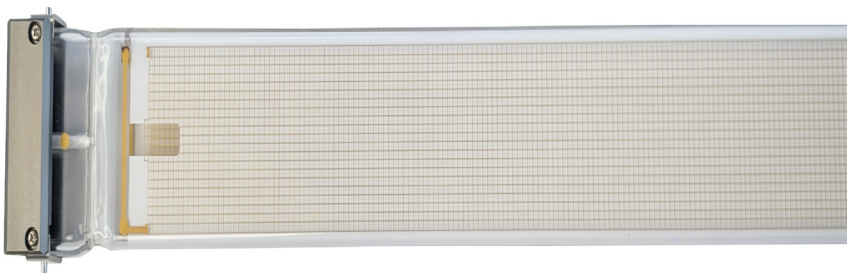
Available Wavelengths		
Model	Wavelength	Description
EXC - 222	222 nm	Far-UVC Ideal for microbial inactivation with low penetration into skin or eyes, suitable for occupied spaces.
EXC - 172	172 nm	Vacuum UV (VUV) - High - energy UV ideal for surface cleaning, ozone generation and photochemical reactions.

Technical Specifications		
Parameter	EXC - 222 (Far- UVC)	EXC - 172 (VUV)
Peak Wavelength	222 nm ± 2 nm	172 nm ± 2 nm
Emission Bandwidth	~5 nm (FWHM)	~10 nm (FWHM)
Typical Output Power	5–20 mW/cm² @ 10 cm	10–50 mW/cm² @ 10 cm
Lamp Type	Dielectric Barrier Discharge (DBD)	Dielectric Barrier Discharge (DBD)
Lamp Dimensions	Customisable (Typical: 100 mm–500 mm length)	Customisable (Typical: 100 mm–500 mm length)
Operating Voltage	1–5 kV (p-p)	1–5 kV (p-p)
Operating Frequency	20–100 kHz	20–100 kHz
Warm - Up Time	Instant On	Instant On
Lifetime	>10,000 hrs (depending on duty cycle)	>8,000 hrs
Cooling	Passive / Forced Air	Passive / Forced Air



Product Options			
Model	Power and Length	Cooling	Application
EXC-222-S10	10W 200mm	Passive	Small area disinfection
EXC-222-L20	20W 400mm	Forced Air	Room scale disinfection
EXC-172-S20	20W 300mm	Passive	Surface cleaning
EXC-172-L50	50W 500mm	Forced Air	Air Industrial processing

Custom configurations available on request.







## Applications

### 222 nm (Far-UVC):

- Air and surface disinfection (occupied or unoccupied spaces)
- Healthcare environments
- Transportation
- Food processing and packaging sanitation

### 172 nm (VUV):

- Semiconductor wafer cleaning
- Glass and polymer surface activation
- Ozone generation for water and air treatment
- Photoresist stripping and UV curing

## Safety Information

### 222 nm (Far-UVC):

Considered safe for human exposure when properly filtered (KrCl with optical filters)

### 172 nm (VUV):

To be used in enclosed or shielded systems due to ozone production and potential material degradation.

**Always follow local regulations and exposure guidelines.**



© Victory Lighting (UK) Ltd 2025

The information contained in this literature is for general information purposes only. Victory Lighting (UK) Ltd endeavours to keep the information up to date and correct, but makes no representations or warranties of any kind, express or implied, about the completeness, accuracy, reliability, suitability or availability with respect to the information, products, services, or related graphics contained in this literature.

Victory Lighting (UK) Ltd accepts no liability for any loss or damage including without limitation, indirect or consequential loss or damage, or any loss or damage whatsoever arising from loss of data or profits arising out of, or in connection with, the use of this literature.

# Contact us today

And learn more about our Ultraviolet technology solutions

+44 (0) 1525 487960

[sales@victorylighting.co.uk](mailto:sales@victorylighting.co.uk)

[victorylighting.co.uk](http://victorylighting.co.uk)

VICTORY  
ULTRAVIOLET

