



How to determine UV Dosage for disinfection using The Aurora

Get to know the UV basics:

Radiant Exposure – mJ/cm^2 or $\mu\text{W}/\text{cm}^2$ ($1 \text{ mJ}/\text{cm}^2 = 1,000 \mu\text{W}/\text{cm}^2$)

UV Intensity – Energy per unit surface area

Exposure time – Measured in seconds

UV Dose (Fluence) – $\text{INTENSITY} \times \text{TIME} = \text{mJ}/\text{cm}^2$ or $\mu\text{W}/\text{cm}^2$

LOG REDUCTION

Log reduction	Percent Inactivated
1	90%
2	99%
3	99.9%
4	99.99%
5	99.999%
6	99.9999%

What microorganisms are you targeting and what UV dose is needed to inactivate them?

Pathogen	2 Log Reduction
Influenza	$6,600 \mu\text{W}/\text{cm}^2$ or $6.6 \text{ mJ}/\text{cm}^2$
Staphylococcus aureus	$6,600 \mu\text{W}/\text{cm}^2$ or $6.6 \text{ mJ}/\text{cm}^2$
Infectious Hepatitis	$8,000 \mu\text{W}/\text{cm}^2$ or $8.0 \text{ mJ}/\text{cm}^2$

**Targeting a different microorganism? Contact us for a full list.



What UV dose does the Aurora produce?



Distance from surface

4"

8"

12"

UV Dose produced

22,004 $\mu\text{W}/\text{cm}^2$ or 22 mJ/cm^2

10,875 $\mu\text{W}/\text{cm}^2$ or 10.8 mJ/cm^2

6,862 $\mu\text{W}/\text{cm}^2$ or 6.8 mJ/cm^2

Always follow safety guidelines!

* Wear PPE (glasses, face shield, no exposed skin)

* Use hazard warnings when in use

* Do not allow anyone in area without PPE

* Only operate if trained

* Do not expose eyes or skin to UVC

* Do not touch lamps while operating