

UVA solutions can help reduce bacteria and fungi on surfaces. Our in vitro testing with 8 hours of exposure has shown significant reductions in common pathogens associated with hospital-acquired infections (HAIs), such as MRSA, *Staphylococcus aureus*, *Enterococcus faecalis*, *Escherichia coli*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Candida albicans* and *auris*.¹

Integrated into light fixture for wide range of applications.

Patented UVA technology reduces surface bacteria, including *Staphylococcus* (99%) and *Salmonella enterica* (95%), over 24 hours.¹

Meets human exposure guidelines set by IEC 62471 and the ACGIH® TLVs® for continuous operation in occupied spaces.

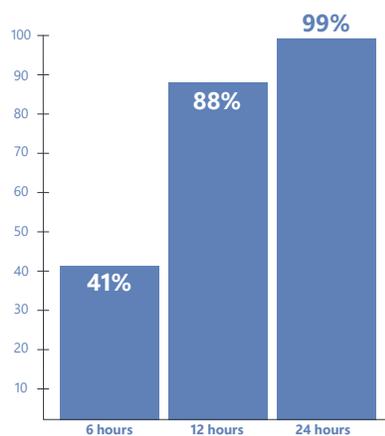
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Continuous Inactivation

Photoactivation helps render pathogen inactive

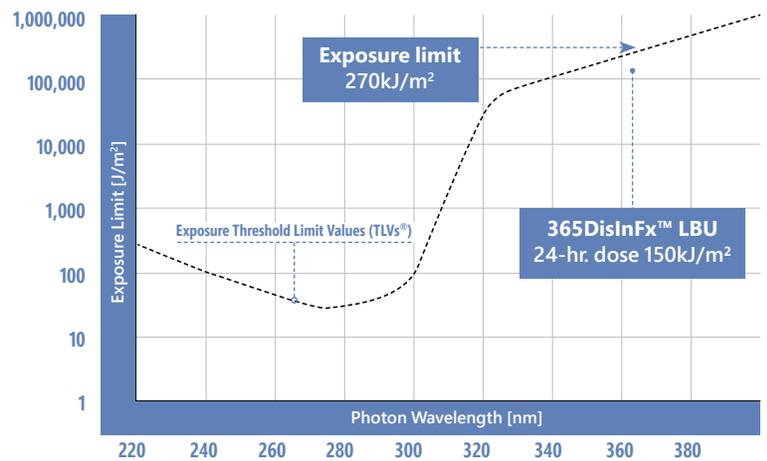


Inactivation Over 24 Hours*
Staphylococcus aureus



*0.5/m² and 24-hour exposure, predicted inactivation
Based on photobiological science and mathematical modeling

ACGIH® Exposure Threshold Limit Value (TLVs®) vs. Wavelength



Continuous low dosage at 365 nm inactivates surface bacteria and fungi below ACGIH® TLVs®

¹365DisInFx™ UVA disinfection technology was tested using in vitro methods (as described in Livingston¹ and Kvam²), which resulted in 99.7% reduction in MRSA on surfaces exposed to 3W/m² of 365 nm UVA over a single 8-hour period. Results of this testing also showed significant reduction over a similar exposure period of certain common pathogens, including *Staphylococcus aureus*, *Enterococcus faecalis*, *Escherichia coli*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa*, and *Candida albicans* and *auris*, associated with hospital-acquired infections (HAIs). Photobiological science and mathematical modeling enables us to calculate expected inactivation rates for 24-hour continuous operation of the 365DisInFx™ UVA technology.

Notes and Citations:

- Livingston SH, Cadnum JL, Benner KJ, Donsky CJ (2020) "Efficacy of an ultraviolet-A lighting system for continuous decontamination of health care-associated pathogens on surfaces." *Am. J. Infect. Control* 48: 337-339. <https://doi.org/10.1016/j.ajic.2019.08.003>. • inoculated steel disk carriers, modification of ASTM E-2197-02 • using a benchtop device that delivered the 3W/m² irradiance
 - Kvam E, Benner K (2017) Disinfection via LED Lighting: summary of mechanism and results for 365 nm-mediated inactivation of microbes. GE Global Research Technical Information Series 2017GRC0545, GE Confidential (Class 3)
- Kvam E, Benner K. "Mechanistic insights into UV-A mediated bacterial disinfection via endogenous photosensitizers." *Journal of Photochemistry and Photobiology B: Biology*. 2020;209:111899. doi:10.1016/j.jphotobiol.2020.111899. • inoculated steel disk carriers, modification of ASTM E-2197-02 • using a benchtop device that delivered the 3W/m² irradiance