



Holophane Industrial Troffer: HIT

Cleanrooms & Beyond

Ratings & Listings



USP 797 & USP 800 certification means HIT can be used in pharmaceutical compounding spaces where sterile protection is needed and people administering medicine are at risk of being affected.



Biosafety Levels 1, 2, 3, & 4 make HIT the right solution for labs containing infectious agents and toxins in the space where contamination control is critical.



Built with the highest level of quality to stand up to the most challenging environments... ISO 3-9 cleanroom certified, IP65, IP66, NEMA 4X, NSF P442, NSF splash zone 2, MIL-STD-461G.

NSF 2 (Splash Zone)

NSF certification is used to indicate an industrial light fixture meets guidelines for industrial applications including food processing facilities. Various industrial applications present many harsh conditions for light fixtures such as exposure to cold & high temperatures, and washdown with pressured water or chemicals. NSF 2 documents the minimum food protection and sanitation requirements for equipment in food spaces, which includes lighting. Lighting is classified into three zones – Non-Food Zone which includes kitchens, storage areas, dry process areas and damp process areas; Splash Zone which includes damp or wet process areas where high pressure cleaning and decontamination is done, and spaces using washdown hoses; Food Zone – areas where direct contact is made with food products and full sanitation is needed.

NSF P442 Pressurized Leakage

NSF certification specifies that light fixtures are built for use in demanding and controlled environments to protect from contamination due to the use of the lighting. This certification requires multiple tests including specifically developed pressure testing to prove there is no leakage. Other tests are for compliance with NSF 2 for food equipment and confirming the fixture has necessary high levels of ingress protection (IP65 & IP66) against dust and water.

NEMA 4X

This rating, established by the National Electrical Manufacturers Association, is a rating for an outdoor electrical enclosure that includes a gasketed design to protect against liquid and solid ingress, is suitable for indoor or outdoor use, and is resistant to corrosion.

BioSafety Levels 1, 2, 3, & 4

Fixture is suitable for the highest levels of biosafety precaution (level 4) where a dangerous agent could easily be transmitted in the air within the laboratory. Such agents could cause severe to fatal disease in humans for which there are no vaccines or treatments. Applications may include, but not limited to, labs used within the CDC, Biodefense and Biocontainment facilities, and other Biomedical research applications.

USP 797 & USP 800 Certified

U.S. Pharmacopeia Convention's general chapter 797 and 800 provide guidelines and standards to reduce the health hazards that could be caused by exposure to dangerous drugs within a compounding pharmacy or medical facilities where specific treatment with these drugs are administered.

ISO 3-9 Cleanroom Certified

(Fed Std 209E Class 1 – 100,000)

ISO 14644-1:2015 is the international standard that addresses the classification of air cleanliness by particle concentration in cleanrooms and clean zones. ISO 14644-1 replaced Fed Std 209E in 2001 as the international standard for cleanrooms to be designed to. The classes, from 1 to 9, are classified in order according to the number and size of particles permitted per volume of air (measured in cubic meters). The cleanroom classifications also provide how often air should change (using fan filter systems) per hour.

ISO 14644-1 Cleanroom Standards							
Classification	Maximum Particles/m ³						FED STD 209E Equivalent
	Particle Size						
	≥0.1µm	≥0.2µm	≥0.3µm	≥0.4µm	≥1µm	≥5µm	
ISO 1	10	2.37	1.02	0.35	0.083	0.0029	
ISO 2	100	23.7	10.2	3.5	0.83	0.029	
ISO 3	1,000	237	102	35	8.3	0.029	Class 1
ISO 4	10,000	2,370	1,020	352	83	2.9	Class 10
ISO 5	100,000	23,700	10,200	3,520	832	29	Class 100
ISO 6	1.0 x 10 ⁶	237,000	102,000	35,200	8,320	293	Class 1,000
ISO 7	1.0 x 10 ⁷	2.37 x 10 ⁶	1,020,000	352,000	83,200	2,930	Class 10,000
ISO 8	1.0 x 10 ⁸	2.37 x 10 ⁷	1.02 x 10 ⁷	3,520,000	832,000	29,300	Class 100,000
ISO 9	1.0 x 10 ⁹	2.37 x 10 ⁸	1.02 x 10 ⁸	35,200,000	8,320,000	293,000	Room Air

Cleanroom Classification	Recommended air changes per hour
ISO Class 1	The “cleanest” cleanroom is ISO 1, used in industries such as life sciences and electronics that require nanotechnology or ultra-fine particulate processing. The recommended air changes per hour for an ISO class 1 clean room is 500-750, and the ceiling coverage should be 80–100%.
ISO Class 2	500-750 air changes per hour, with a ceiling coverage of 80-100%
ISO Class 3	500-750 air changes per hour, with a ceiling coverage of 60-100%
ISO Class 4	400-750 air changes per hour, with a ceiling coverage of 50-90%
ISO Class 5	240-600 air changes per hour, with a ceiling coverage of 35-70%
ISO Class 6	150-240 air changes per hour, with a ceiling coverage of 25-40%
ISO Class 7	60-150 air changes per hour, with a ceiling coverage of 15-25%
ISO Class 8	5-60 air changes per hour, with a ceiling coverage of 5-15%



Holophane Industrial Troffer (HIT)

Mounting Details

Grid & flange mounting options
available for all sizes.



Acuity Brands Lighting, Inc.

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One Lithonia Way, Conyers GA 30012

Contact your local Holophane factory sales representative for application assistance, and computer-aided design and cost studies.

Warranty Five-year limited warranty. Full warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Visit our web site at www.holophane.com

Product specifications may change without notice. Please contact your local Holophane factory sales representative for the latest product information.