

DESCRIPTION

The CHF Series is designed to deliver highly efficient H.I.D. lighting to clean areas. These H.I.D. units are ideal for ceiling heights up to 18'. Lower wattages are also available for standard 8' to 9' ceilings. Units are enclosed and gasketed to protect against the chance of foreign matter entering high tech environments through the light fixture. The housing and one-piece flanged door are designed to work with conventional sheet rock or plaster ceilings. Door frames include a gasket which eliminates ledge or crevice exposure preventing the harboring of contaminants. These luminaires are U.L. listed and C.S.A. certified for wet locations.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Application

The CHF Series is suitable for use in I.E.S. Clas 100, 1000, 10,000 and 100,000 clean room environments. Fixtures are manufactured in accordance with U.S.D.A., F.D.A., N.S.F. and Federal Standard 209E. 200 PSI Hose Down Rating is standard. Applications include clean rooms, technical and bio-medical labs, food processing/testing centers and pharmaceutical labs.

A ... Lens

One-piece, clear prismatic, tempered Corning lens with internal prism pattern. Choice of clear polycarbonate or clear tempered glass on environmental side.

B ... Fasteners

Flush mounted, stainless steel machine screws secure through captive cage nuts in housing and are evenly spaced to compress gasketing on all sides.

C ... Housing

Die-formed, 18 ga. CRS with tightly butted and spot welded, sealed end caps. Contains no holes that would allow air passage. Standard white high reflectance polyester powder coat finish. Gloss: 85%; Reflectance: 93%; Hardness: 2H; Salt Spray: 500 Hours.

D ... Lamps

(By Others)

E ... Lens Retention

Unique, Particlock(TM) lens retention system utilizes continuous, 18 ga. media clampdowns to sandwich gasketing and integrate lens and door frame for even environmental seal.

F ... Hinge

Two braided, stainless steel cables on one side of door provide hinging.

G ... Door

One-piece, 18 ga. door with baked white polyester powder coat, fully gasketed, outside door with die-formed edges eliminates seams which could entrap microscopic contaminants. Optional doors available.

H ... Ballast

Copper wound, HPF ballast is standard.

I ... Gasket

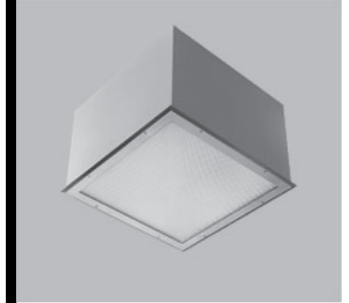
White, closed cell, Flexiseal(TM) gasketing surrounds perimeter of lens to seal lens to door frame and around perimeter of door to seal door to housing. Another layer seals fixture to ceiling system after installation.

J ... Access

A gasketed access plate on top of the housing with two flattened, 7/8" diameter knockouts allows connection of vapor tight conduit fitting. Optional, above ceiling, top access door for luminaire maintenance is available and ideal for food processing and cleanroom applications.

Labels

U.L. listed, C.S.A. certified, standard wet label.



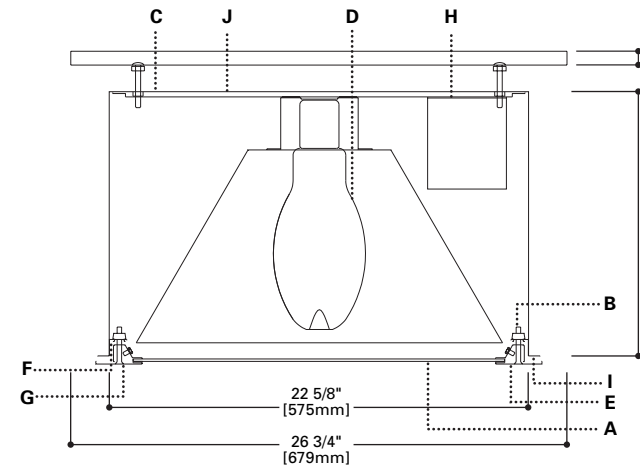
CHF

250W - 400W
Metal Halide

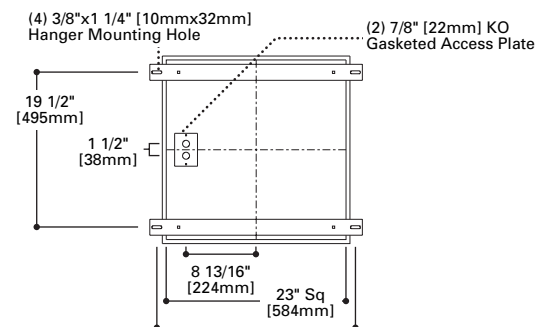
250W - 400W
High Pressure Sodium

165W
QL Induction

H.I.D. FLANGE
One-Piece Door

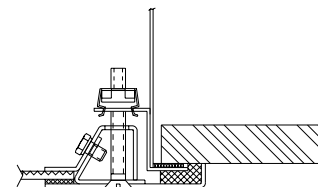


MOUNTING DIMENSIONS



DOOR FRAME

Flange Type-One-piece Door



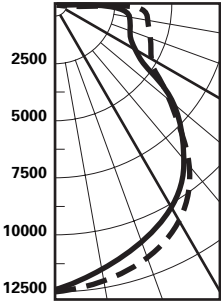
ENERGY DATA

Input Watts:

250W Metal Halide: 295W
400W Metal Halide: 458W
250W High Pressure Sodium: 295W
400W High Pressure Sodium: 457W

PHOTOMETRICS

Candlepower Distribution



Test No. 5911.2
CHF-400MH
 Lamp=400W
 Lumens=22115
 Spacing Criteria
 I=1.3 II=1.3
 Efficiency=61.4%

Average Luminance

Deg.	I	II
45	8230	8120
55	4758	4822
65	3241	3011
75	2539	2628
85	2021	2154

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	8404	23.3	38.0
0-40	13487	37.5	61.0
0-60	20037	55.7	90.6
0-90	22115	61.4	100.0
90-180	0	0.0	0.0
0-180	22115	61.4	100.0

Coefficient of Utilization

rc	80%				70%				50%				30%				10%				0%			
	70	50	30	10	50	30	10	50	50	10	50	10	50	10	50	10	50	10	50	10	50	10	50	10
RCR																								
0	73	73	73	73	71	71	71	71	68	68	65	65	63	63	63	63	61	61	61	61	61	61	61	61
1	68	66	64	62	65	63	61	61	62	59	60	58	58	56	55	55	55	55	55	55	55	55	55	55
2	64	60	57	54	59	56	53	53	57	52	55	51	53	50	49	49	49	49	49	49	49	49	49	49
3	59	54	50	47	53	50	47	47	52	46	50	45	49	44	43	43	43	43	43	43	43	43	43	43
4	55	49	45	41	48	44	41	41	47	40	46	40	44	39	38	38	38	38	38	38	38	38	38	38
5	51	44	40	36	44	39	36	36	42	36	41	35	40	35	34	34	34	34	34	34	34	34	34	34
6	47	40	36	32	40	35	32	32	39	32	38	32	37	31	30	30	30	30	30	30	30	30	30	30
7	44	37	32	29	36	32	28	28	35	28	34	28	34	28	27	27	27	27	27	27	27	27	27	27
8	41	33	28	25	33	28	25	25	32	25	31	25	30	25	24	24	24	24	24	24	24	24	24	24
9	38	30	25	22	29	25	22	22	29	22	28	22	28	22	21	21	21	21	21	21	21	21	21	21
10	35	27	23	20	27	23	20	20	26	19	26	19	25	19	18	18	18	18	18	18	18	18	18	18

rc=Ceiling reflectance, rw=W all reflectance, RCR=Room cavity ratio
 CU Data Based on 20% Effective Floor Cavity Reflectance.

ORDERING INFORMATION

SAMPLE NUMBER: CHF-250S-277-73-SSN-SHN

Product Family

CHF

CHF=H.I.D.
Flange Type

Lamp Type

Metal Halide
 250M=250W
 400M=400W
High Pressure Sodium
 250S=250W
 400S=400W

Induction
 165Q=165W QL⁽¹⁾

Voltage

120=120V
 277=277V

Lens Type

93=Prismatic Tempered Glass (standard)
 93/85=.156 Prismatic Tempered Glass with .187 Clear Polycarbonate Underlay

Door/Finish Options

Blank=Standard, CRS with baked white finish
 SSN=Stainless Steel Door/Brushed 304 Finish
 SSP=Stainless Steel Door/Polyester Powder Coat Finish
 ALP=Aluminum Door & Trim Polyester Powder Finish

Options

SF=Single Fuse
 DF=Double Fuse
 QS=Quartz Socket (DC bayonet base)
 QRS=Quartz Restrike System
 TAD=Top Access Door⁽²⁾
Housing Options
 SHN=Brushed 304 Finish
 SHP=Polyester Powder Finish
 ALH=Aluminum, Polyester Powder Finish

Notes:
 For additional options please consult Cooper Lighting Representative. Specifications and Dimensions subject to change without notice.

¹Available with 240V. For other voltages, consult your sales representative.

²Consult your Cooper Lighting Representative for dimensional details.