

DESCRIPTION

The Fail-Safe SCH24 Series is designed for use in horizontal or non-laminar air flow clean rooms. The enclosed and gasketed housing and door protect against infiltration of airborne bacteria. Fixtures tested to 100 PSI hosedown. Higher ratings available (consult factory). The mitered edges on the door frame and the hole-free design of the housing prevent air exchange between the fixture and plenum, allowing relamping without contamination of the clean areas. These luminaires are manufactured in accordance with U.S.D.A., F.D.A., N.S.F. and Federal Standard 209E.

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Application

The SCH24 Series is suitable for use in I.E.S. Class 10 (M2.5), 100 (M 3.5), 1,000 (M 4.5), 10,000 (M 5.5) and 100,000 (M 6.5) clean room environments. Applications include cleanrooms, technical and bio-medical labs, food processing/ testing centers and pharmaceutical labs.

A ... Lens

Lens is clear extruded with prisms positioned inside fixture and smooth surface on the outside for easy cleaning.

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

Nominal 5" deep recessed one-piece housing made of 20 ga. CRS. Die-formed and seam welded to create a sealed chamber.

D ... Lamps

(By Others)

E ... Lens Retention

Unique, Particlock(TM) lens retention system utilizes continuous, 18 ga. media clamp-downs. Lens is hermetically sealed with silicone RTV to door frame for an airtight seal against the environment.

F ... Hinge

Reversible drop-link hinging system for easy maintenance.

G ... Door

Optional) Door can be extruded aluminum, fully gasketed, outside flanged door with mitered edges eliminates seams which could entrap microscopic contaminants. Not standard, must specify. One-piece, die-formed stainless steel door optional.

H ... Ballast

Standard Class P, CBM/ETL ballast.

I ... Gasket

MicroSeal(TM) gasketing system features silicone RTV sealant surrounding the perimeter of lens to seal lens to door frame and extruded silicone rubber gasketing around perimeter of door to seal door to ceiling. White, closed cell Flexiseal(TM) 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.

Labels

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



SCH24

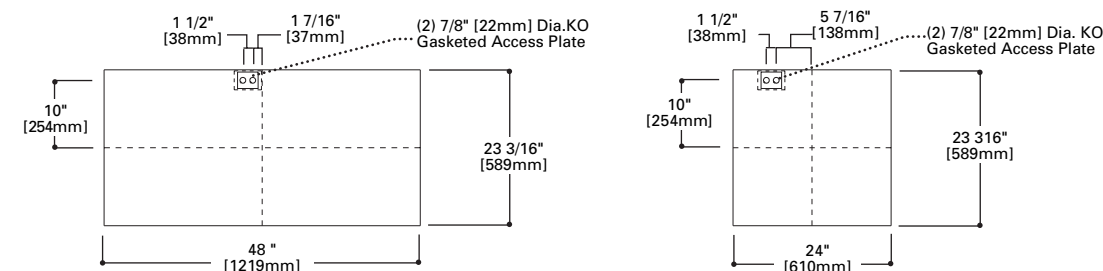
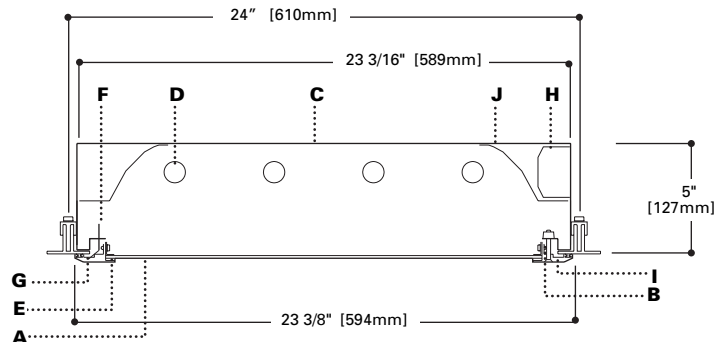
34W - 160W
Fluorescent

2' X 2'

2' X 4'

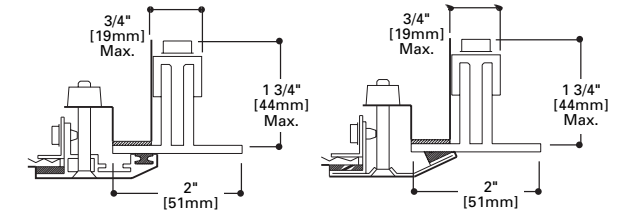
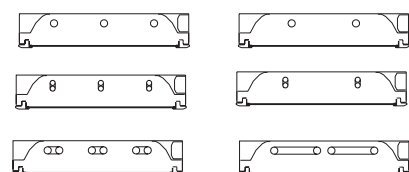
SPECIFICATION GRADE
FLUORESCENT GRID
2" GRID

MOUNTING DIMENSIONS



LAMP CONFIGURATIONS

DOOR FRAME



Extruded aluminum mitered door frame with extruded silicone rubber perimeter gasketing
One piece stainless steel door frame with extruded closed cell silicone perimeter gasketing
Specifications and Dimensions subject to change without notice.
Consult your representative for additional options and finishes.

ENERGY DATA

Input Watts:

STD Ballasts & STD Lamps
(2) 20W T12 Fluorescents: 53W
(3) 20W T12 Fluorescents: 85W
(4) 20W T12 Fluorescents: 106W
(2) 40W Bi axial Fluorescents: 82W
(3) 40W Bi axial Fluorescents: 127W

ES Ballasts & STD Lamps
(2) 17W T8 Fluorescents: 45W
(3) 17W T8 Fluorescents: 68W
(4) 17W T8 Fluorescents: 90W
(2) 31W U1/U6 Fluorescents: 71W
(3) 31W U1 Fluorescents: 108W
(2) 32W T8 Fluorescents: 71W
(3) 32W T8 Fluorescents: 108W
(4) 32W T8 Fluorescents: 142W
(2) 40W T12 Fluorescents: 86W
(3) 40W T12 Fluorescents: 136W
(4) 40W T12 Fluorescents: 172W
(2) 40W U6 Fluorescents: 86W

ES Ballasts & ES Lamps

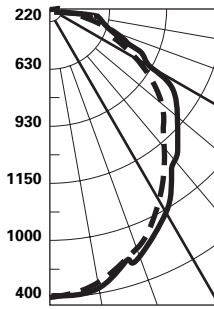
(2) 40W T12 Fluorescents: 76W
(3) 40W T12 Fluorescents: 120W
(4) 40W T12 Fluorescents: 152W
(2) 40W U6 Fluorescents: 76W

Electronic Ballast Data:

Consult Cooper Lighting Representative

PHOTOMETRICS

Candlepower Distribution



Test No. 8717
SCH-24-332-120-IK12-EB82-SSN
 Lamp=F32T8
 No. Lamps=3
 Lumens=2850
 Spacing Criteria
 $I=1.2$ $II=1.1$
 Efficiency=73.2%

--- I
 --- II

Average Luminance

Deg.	I	II
45	1499	1433
55	1128	1074
65	779	718
75	405	354
85	102	79

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	1782	20.8	28.5
0-40	2851	33.4	45.5
0-60	5016	58.7	80.1
0-90	6261	73.2	100.0
90-180	0	0.0	0.0
0-180	6261	73.2	100.0

Coefficient of Utilization

rc	80%				70%			50%		30%		10%		0%
rw	70	50	30	10	50	30	10	50	10	50	10	50	10	0
RCR														
0	87	87	87	87	85	85	85	81	81	78	78	75	75	73
1	80	77	74	72	76	73	71	72	68	70	66	67	64	63
2	74	68	63	60	67	62	59	64	57	62	56	60	55	53
3	68	60	55	50	59	54	50	57	49	55	48	53	47	46
4	62	54	48	43	53	47	43	51	42	49	42	48	41	40
5	57	48	41	36	47	41	36	45	36	44	35	42	35	34
6	52	43	36	32	42	36	31	41	31	39	31	38	31	29
7	48	38	32	26	38	32	27	37	27	35	27	34	27	25
8	44	34	28	24	34	28	24	33	24	32	23	31	23	22
9	41	31	25	21	30	25	21	29	20	29	20	28	20	19
10	38	28	22	18	28	22	18	27	18	26	18	25	18	17

rc=Ceiling reflectance, rw=W all reflectance, RCR=Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.

ORDERING INFORMATION

SAMPLE NUMBER: SCH-24-340-277-IK12-LE3-ALP-GLR

Product Family	Width	Lamp Type	Voltage	Lens Type	Ballast	Door/Finish Options	Options
SCH	24						
SCH=Specification Grade Cleanroom Heavy Grid Type	24=24"	2' Fixture Length T8 Fluorescents 217=(2) 17W Lamps 317=(3) 17W Lamps 417=(4) 17W Lamps T12 Fluorescents 220=(2) 20W Lamps 320=(3) 20W Lamps 420=(4) 20W Lamps U Lamps 2U15/8=(2) 31WT8 Lamps 3U15/8=(3) 31WT8 Lamps 2U6T8=(2) 32WT8 Lamps 2U6=(2) 40WT12Lamps Biaxial Fluorescents 240BX=(2) 40W Lamps 340BX=(3) 40W Lamps 4' Fixture Length T8 Fluorescents 232=(2) 32W Lamps 332=(3) 32W Lamps 432=(4) 32W Lamps T12 Fluorescents 240=(2) 40W Lamps 340=(3) 40W Lamps 440=(4) 40W Lamps	120=120V 277=277V 347=347V	IK12=K-12 Prismatic Acrylic IP12=K-12 Prismatic Polycarbonate KSH25 ¹ =Bat Wing Distribution 93=Prismatic Tempered Glass	LE3=Energy Saving Ballast Electronic Ballast² EB81=(1) Ballast for use with T8 Lamp EB82=(2) Ballasts for use with T8 Lamp EB21=(1) Ballast for use with T12 Lamp EB22=(2) Ballasts for use with T12Lamp EBX1=(1) Ballast for use with Biaxial Lamp EBX2=(2) Ballasts for use with Biaxial Lamp	ALP=Aluminum Door &Trim, Polyester Powder Finish ALX=Extruded Aluminum Door &Trim, Clear Anodized Finish ALXP=Extruded Aluminum Door & Trim, Polyester Powder Finish (Standard)	EBP=Emergency Battery Pack GLR=Fuse and Holder RIF=Radio Frequency Interference Filter Housing Options SHN=Stainless Steel, Brushed 304 Coat SHP=Stainless Steel, Polyester Powder Coat ALH=Aluminum, Polyester Powder Finish

Notes:

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

¹ The KSH25 provides improved visual performance and wide angle distribution. This lens has an integral prism pattern designed so that prisms face the lamp cavity and still supply superior photometrics. Highly recommended for all high tech manufacturing environments.

² For specific electronic ballast, specify brand and catalog number.

SHIPPING INFORMATION

Catalog Number	Weight	Catalog Number	Weight
SCH-24-217	29 lbs. [13 kg.]	SCH-24-232	46 lbs. [21 kg.]
SCH-24-317	29 lbs. [13 kg.]	SCH-24-332	46 lbs. [21 kg.]
SCH-24-417	32 lbs. [15 kg.]	SCH-24-432	50 lbs. [23 kg.]
SCH-24-220	29 lbs. [13 kg.]	SCH-24-240	46 lbs. [21 kg.]
SCH-24-320	29 lbs. [13 kg.]	SCH-24-340	46 lbs. [21 kg.]
SCH-24-420	32 lbs. [15 kg.]	SCH-24-440	50 lbs. [23 kg.]
SCH-24-231U1	29 lbs. [13 kg.]	SCH-24-240BX	29 lbs. [13 kg.]
SCH-24-331U1	32 lbs. [15 kg.]	SCH-24-340BX	32 lbs. [15 kg.]
SCH-24-231U6	29 lbs. [13 kg.]	SCH-24-240U6	29 lbs. [13 kg.]