

KLEENSEAL™ HL WITH OPTIONAL "VISION+" OPTICS

Hazardous Location Sealed, Flush Door Frame and Sealed Housing



FEATURES

- Hazardous location listed
- Sealed housing, door & lens
- Flush finish lens door
- Smooth cleanable surface
- Optional flange mounting
- Fits 1" or 1 1/2" grid ceiling
- NSF International

BENEFITS

- Long life
- High efficiency
- Corrosion resistant

APPLICATIONS

- Electronic, biological, pharmaceutical cleanrooms
- Most hazardous locations

Specifications/Features

GENERAL

- Hazardous Location listed.
- Totally sealed recessed fluorescent with flush door frame.

HOUSING

- 20 ga. CRS or optional stainless steel.
- White epoxy polyester powder coat finish on CRS.
- All joints silicone sealed.
- Conduit entry provided by 1/2", die-cast zinc, gasketed conduit hub field installed into housing.
- Fits 1" or 1-1/2" grid ceiling.
- Flange mounting available. Swing arm brackets are standard on flanged units. Adjusts from 1-3/4" min. to 3-3/4" max.
- Optional plaster frames available for flange units.

DOOR FRAME/LENS

- Heavy aluminum extrusion, silicone sealed mitered joints.
- White epoxy polyester powder coat finish (anodized aluminum available).
- Optional stainless steel overlap door.
- Seals ceiling interface with closed cell, cross linked, polyethylene foam gasket.
- Lens .125" thick Acrylic Prismatic silicone sealed to door frame. Normally, prisms face up. Prisms down optional. Polycarbonate Prismatic, C73 lens, and .187 thick Acrylic Prismatic available.
- Frame supported by chains for ease of maintenance.



Stainless steel fasteners draw door frame tight for high integrity seal.



20 ga. CRS housing totally sealed.

- Optional sealed parabolic louver provides 90% Visual Comfort Probability (VCP). Meets ANSI/IES standards. Increases 0-60° efficiency 12% (See VPL data sheet).

LISTINGS

- U.L. Listed Class I, Div II, Groups A, B, C, D, T4A.
- Class II, Div II, Groups F, G, T4, Class III.
- NSF International.
- Wet Location — Covered Ceiling Only.
- Listed in U.S.A. and Canada.

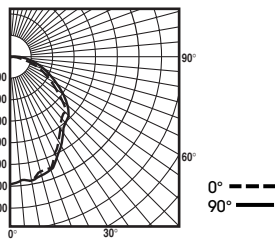
ELECTRICAL

- Ballasts are energy saving HPF.
- Ballasts mounted to housing with stake-in screws.
- Advance HL electronic ballast available.
- IEF Option — up to 2-13W PL emergency fluorescent sockets.
- All fixtures carry the IBEW Union label to ensure quality.

Photometrics

Coefficients of Utilization
4 Lamp, 32W TAK prisms up
HL-2443GF-1TAK/EB

Ceiling Refl.	80%			50%			10%		
	50	30	10	50	30	10	50	30	10
RCR 20% Effective Floor Cavity Reflectance									
1	.68	.66	.63	.64	.62	.60	.59	.58	.57
2	.60	.55	.52	.56	.53	.50	.52	.50	.48
3	.53	.47	.43	.50	.45	.42	.46	.43	.41
4	.47	.41	.37	.44	.40	.36	.41	.38	.35
5	.42	.36	.32	.40	.35	.31	.37	.34	.31
6	.38	.32	.28	.36	.31	.27	.34	.30	.27
7	.34	.29	.25	.33	.28	.24	.31	.27	.24
8	.31	.26	.22	.30	.25	.22	.28	.24	.22
9	.29	.23	.20	.28	.23	.20	.26	.22	.19
10	.27	.21	.18	.26	.21	.18	.24	.21	.18

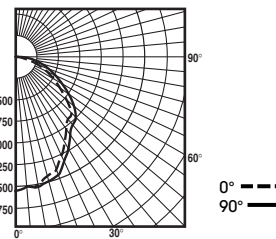


Report No. P11482

S/MH Ratio 1.2:1.0
Total Lamp Lumens 11800
Fixture Efficiency 65.4 %

Coefficients of Utilization
2 Lamp, 32W TAK prisms up
HL-2423FG-1TAK/EB

Ceiling Refl.	80%			50%			10%		
	50	30	10	50	30	10	50	30	10
RCR 20% Effective Floor Cavity Reflectance									
1	.64	.61	.59	.60	.58	.56	.57	.56	.54
2	.56	.51	.48	.52	.49	.46	.50	.47	.45
3	.49	.44	.40	.46	.42	.39	.44	.41	.38
4	.43	.38	.34	.41	.36	.33	.39	.36	.32
5	.39	.33	.29	.37	.32	.28	.35	.31	.28
6	.35	.29	.25	.33	.28	.25	.32	.28	.25
7	.32	.26	.22	.30	.25	.22	.29	.25	.22
8	.29	.24	.20	.28	.23	.20	.27	.23	.20
9	.27	.21	.18	.25	.21	.18	.25	.21	.18
10	.24	.20	.16	.24	.19	.16	.23	.19	.16

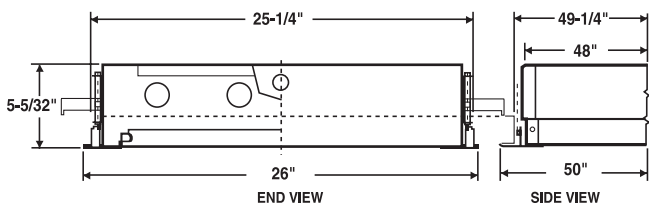


Report No. P11482

S/MH Ratio 1.2:1.0
Total Lamp Lumens 5900
Fixture Efficiency 70.0%

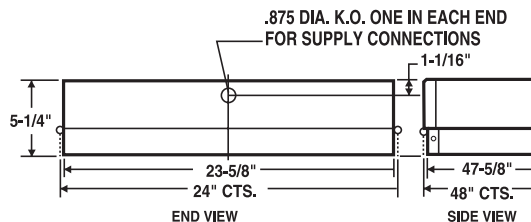
Dimensions

FLANGE



CEILING OPENING FLANGE TYPE	
1' x 4'	13-1/4" x 49-1/4"
2' x 2'	25-1/4" x 25-1/4"
2' x 4'	25-1/4" x 49-1/4"

GRID



Kleenseal™ HL Catalog Numbers

HL - 14 - 2 - 4 - G - 1TAK 1

SIZE

- 14 - 1 x 4
- 22 - 2 x 2
- 24 - 2 x 4

NUMBER OF LAMPS

- 1 - 1 Lamp
- 2 - 2 Lamp
- 3 - 3 Lamp
- 4 - 4 Lamp

LAMP TYPE

- 1 - T8 Octron 17w
- 2 - T12 Rapid Start 20w
- 3 - T8 Octron 32w
- 4 - T12 Rapid Start 40w

VOLTAGE

- 1 - 120
- 2 - 277

LENS TYPE

- TAK - .125 Acrylic Prismatic
- POK - Polycarbonate Prismatic
- C73 - Tempered Glass Prismatic
- XTK - .187 Acrylic Prismatic
- VPL - Sealed Louver

DOOR FRAME

- 1 - Aluminum Flush
- 5 - Stainless Steel Overlap

MOUNTING

- G - Grid
- F - Flange

Options

- "/FF" - Fast Acting Fixture Fuse, Buss GLR
- "/SFF" - Slow Blow (Fusetron) Fuse, Buss GMF
- "/0 Deg" - 0 Deg. on 430MA Ballast
- "/EB" - For Electronic Ballast
- "/2EB" - 2 Electronic Ballasts
- "/TP" - Tamper Proof Screws
- "/DN" - Lens furnished Prisms Down
- "/IEF" - Emergency Fluorescent Sockets
- "/SSH" - Stainless Steel Housing

FIXTURE SIZE	LAMP TYPE	NO. OF LAMPS
1 x 4	F40	1LT, 2LT, 3LT
1 x 4	F32	2LT, 3LT
2 x 4	F40	2LT, 3LT, 4LT
2 x 4	F32	2LT, 3LT, 4LT
2 x 2	F20	2LT, 3LT, 4LT
2 x 2	F40-U	2LT
2 x 2	F32-U	2LT, 3LT
2 x 2	F17	2LT, 3LT, 4LT

Flange Type Troffers Accessories

Plaster Frame Side Rails (Per Pair/w Spacers For Width Shown)

INDIVIDUAL MOUNT	
M5175	4' Plaster Frame Rails for 1' x 4'
M5176	2' Plaster Frame Rails for 2' x 2'
M5177	4' Plaster Frame Rails for 2' x 4'
PLASTER FRAME END PIECES (EACH)	
M5180	1' Wide Troffer
M5181	2' Wide Troffer

Guth utilized the services of U.L. and ETL for listing products. Specifications and data are subject to change without notice.



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