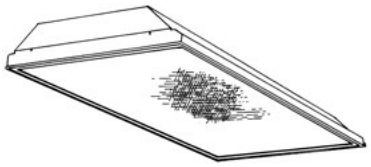
Day-Brite CFI by Signify

Special Application

Designer clean room troffer 2x4

T8, T5, or T5HO



Project:

Location:

Cat.No:

Type:

Lamps: Qty:

Notes:

The Day-Brite / CFI Designer clean room troffer is a recessed luminaire tested to federal standard 209E and desiged for use with 1-1/2" face width inverted "T" bar ceilings.

Ordering guide

Example: 2DCLG432-FA21-UNV-1/4-EBLHE-LPT835HL

Width	Family	Ceiling Type*	No. of Lamps (not included)	Lamp Type		Door Frame	Lens		Voltage		Options
2	DCL	G			–	FA		–		–	
2 2'	**DCL** Designer Clean Room	**G** Grid *Flange configuration can be manufactured but will not be Clean Room rated due to openings in housing to access swing-arm jack screws. The use of FMA "F" mounting kits (sealed to the luminaire and ceiling is recommended for NEMA "F" applications.	**2** **3** **4**	**28** 28WT5 (46") **32** 32WT8 (48") **54HO** 54WT5HO (46")		**FA** Flat Aluminum	**12** K-12, .125" nominal **19** K-19, .156" nominal **21** Pattern 12, .125" nominal		**120** **277** **347** **UNV** Universal Voltage 120-277V		**1/2** One 2-lamp ballast **1/3** One 3-lamp ballast **1/21** 2-lamp & 1-lamp ballasts **1/4** One 4-lamp ballast **2/2** Two 2-lamp ballasts **EB** Electronic ballast, <10% THD, std. ballast factor **EB10R** T8 electronic ballast, program rapid start, <10% THD **EBHE** T8 electronic ballast, high efficiency, std. ballast factor **EBLHE** T8 electronic ballast, high efficiency, low ballast factor **EBHHE** T8 electronic ballast, high efficiency, high ballast factor **EBSD** T8 electronic step dimming ballast, .88 ballast factor **EBD7** Advance Mark 7 dimming ballast, 0-10V (low voltage) control **EBDX** Advance Mark 10 dimming ballast, phase control **EBD** Electronic dimming ballast, customer specified **E1** B100 emerg. ballast, T8, 350-450 lumens, 120/277V **E1CAN** B100-CAN emerg. ballast, Canada market, T8, 350-450 lumens, 120/347V **E7** B60 emerg. ballast, T8, 600-700 lumens, 120/277V **E5** B50 emerg. ballast, U.S. or Canada market, T8, 1100-1400 lumens, UNV **E5CAN** B50-CAN emerg. ballast, Canada market, T8, 1100-1400 lumens, 120/347V **E5ST** B50ST emerg. ballast w/self test, T8, 1100-1400 lumens, UNV **E7LP** LP550 emerg. ballast T5/T5HO, 430-700 lumens, 120/277V **E6LP** LP600 emerg. ballast U.S. or Canada market, T5/T5HO, 750-1325 lumens, 120/277V **F1** 3/8" flex 3 wire, 18 gauge 6' **F2** 3/8" flex 4 wire, 18 gauge 6' **F2/5W** 3/8" flex, 5 wire 18 gauge 6' **GLR** Fusing, fast blow **LPT830** Installed T8/T5/T5HO lamps, 80+ CRI, 3000K **LPT835** Installed T8/T5/T5HO lamps, 80+ CRI, 3500K **LPT841** Installed T8/T5/T5HO lamps, 80+ CRI, 4100K **LPT830HL** Installed T8/T5 hi lumen lamps, 80+ CRI, 3000K **LPT835HL** Installed T8/T5 hi lumen lamps, 80+ CRI, 3500K **LPT841HL** Installed T8/T5 hi lumen lamps, 80+ CRI, 4100K 1W 1-way gasketing, between lens & door frame **2W** 2-way gasketing, 1W + gasketing between door frame & housing

Accessories (order separately)

- **FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting (Seal to luminaire and ceiling)

2DCL Designer clean room troffer 2x4

T8, T5, or T5HO

Application

- Premium quality recessed static troffer for use in:
  – Grid inverted T (NEMA "G") ceilings.

Construction/Finish

- Meets federal standard No. 209E for class 100,000, 10,000 and 1,000.
- Gasketed housing limits the passage of particle matter through the luminaire.
- Designer Clean Room is NOT designed for rigorous pharmaceutical grade clean room applications.
- Housing is gasketed to form a barrier between plenum and inside of luminaire. Door frame and lens are not sealed.
- Floating door (with black reveal) standard.
- Hinge and latch extruded aluminum door allows relamping and servicing from below the ceiling.
- Standard lens is DB-21, 1/8" nominal thickness prismatic acrylic.
- Designed for use with 1-1/2" max. face width inverted T-Bars, 1-1/2" max. height. Also suitable for use with standard (1" wide) T-bars. Not suitable for use with 2" wide T-bars.
- Installing contractor is responsible for sealing luminaire to "T" Bar with clear silicone sealant.
- Housing is painted after fabrication with white polyester powder finish.

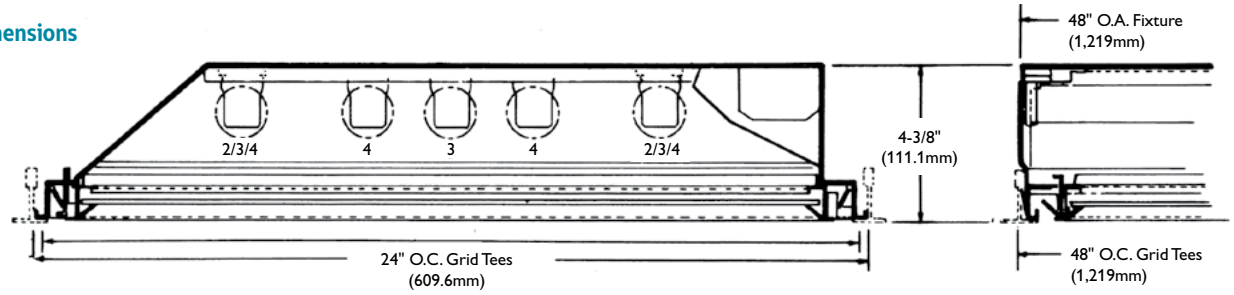
Electrical

- cULus listed for wet location for covered ceiling use only.

Side Mounted Ballasts

- Reduce ballast operating temperatures (two surface contact, away from lamps)
- Increase average ballast life.
- Increase luminaire efficiency.
- All lamps on the same plane for uniform lens illumination.

Dimensions



Photometry

2' x 4' 4 Lamp **Efficiency – 74.4%** **LER – 73** **TER – 67**

Catalog No.	2DCLG432-FA21-1/4-EB
Test No.	15565
S/MH	1.3
Lamp Type	F32T8
Lumens/Lamp	2900
Ballast Factor	0.91
Input Watts	107

Comparative yearly lighting energy cost per 1000 lumens – **$3.29** based on 3000 hrs. and **$.08** pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Candlepower

Angle	End	45	Cross
0	3753	3753	3753
5	3754	3736	3743
10	3709	3706	3729
15	3626	3653	3702
20	3505	3569	3654
25	3349	3463	3582
30	3135	3314	3457
35	2845	3116	3217
40	2487	2761	2849
45	2116	2184	2420
50	1711	1588	1906
55	1321	1062	1385
60	941	659	980
65	642	413	651
70	434	283	448
75	293	222	297
80	181	187	179
85	83	129	87

Light Distribution

Degrees	Lumens	% Lamp	% Luminaire
0-30	2984	25.7	34.6
0-40	4896	42.2	56.7
0-60	7681	66.2	88.9
0-90	8636	74.4	100.0

Average Luminance

Angle	End	45°	Cross
45	5100	5263	5832
55	3925	3155	4115
65	2589	1665	2625
75	1929	1462	1956
85	1623	2522	1701

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)

pcc	80			70			50	
pw	70	50	30	70	50	30	50	30
RCR								
0	89	89	89	86	86	86	82	82
1	81	79	76	80	77	75	73	71
2	76	69	66	73	68	65	66	63
3	69	63	57	68	61	56	59	55
4	65	56	51	63	56	50	54	48
5	59	51	45	57	50	45	48	44
6	55	46	40	54	46	40	44	39
7	52	41	35	50	41	35	40	34
8	47	39	33	46	38	33	36	32
9	45	35	29	44	34	29	34	28
10	41	33	27	40	33	27	32	27

Hg

Some luminaires use fluorescent or high intensity discharge (HID) lamps that contain small amounts of mercury. Such lamps are labeled, "Contain Mercury" and/or the symbol "HG". Lamps that contain mercury must be disposed of in accordance with local requirements. Information regarding lamp recycling and disposal can be found at www.lamprecycle.org

Signify

Signify North America Corporation
200 Franklin Square Drive,
Somerset, NJ 08873
Telephone 855-486-2216

Signify Canada Ltd.
281 Hillmount Road,
Markham, ON, Canada L6C 2S3
Telephone 800-668-9008