### **DESCRIPTION**

Recessed 8 inch aperture lens downlight for two horizontal 26W double twin tube or 26/32/42W triple twin tube compact fluorescent lamps. Fixture is suitable for commercial construction and wet location listed. Insulation must be kept 3" from top and sides of housing. Universal input electronic ballast with dimming and emergency options.

Catalog #	Type
Project	
Comments	Date
Prepared by	

### SPECIFICATION FEATURES

### **MECHANICAL**

### Frame

Boat shaped galvanized steel frame with a pre-set 1/2" plaster lip collar that adjusts from 1/2" to 2" to accommodate ceilings up to 2" thick. May be used for new construction or remodeling installations. Provided with (2) remodel clips to secure frame when installed from below the ceiling.

### Mounting Brackets

Bar hanger receivers adjust 2" vertically from above the ceiling or thru the aperture. Use with No Fuss™ bar hangers or with 1/2" EMT. Removable to facilitate installation from below the ceiling.

No Fuss™ Bar Hangers

Pre-installed and centered bar hanger locks to tee grid with a screwdriver or pliers. Centering marks on the bar hanger mechanism allows consistent positioning of fixtures.

### OPTICAL Reflector

One piece aluminum reflector secures lens in place with integrated spring clips for a visually comfortable optic and allows for tool-less lens exchange from below the ceiling. Available with clear, diffuse, prismatic, fresnel or drop opal glass lens. Optional cross blade louver provides sharper cutoff to lamp. Self flanged standard.

- Specular Reflectors Polished flange standard with white painted flange option.
- Baffles and White Reflector White painted flange standard.

### **Trim Retention**

Reflector is retained with two torsion springs and held tightly to the finished ceiling surface.

# ELECTRICAL Junction Box

(4) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight

conduit runs. Listed for (12) #12 AWG (six in, six out) 90°C conductors and feed thru branch wiring.

### Lamp Socket

4-pin G24q base accepts (2) 26W DTT or 26/32/42WTTT lamps.

### Socket Housing

Galvanized steel socket housing attached securely to reflector with captive thumbscrew. Vents provide effective lamp thermal management.

### **Control Gear**

Universal 120V - 277V UNV or 347V input electronic ballast for 26/32/42W compact fluorescent lamp.

**Emergency Battery Pack** 

REM - Remote emergency test switch. Housing includes 120V/277V, 60Hz dual-tap battery pack provides 90 minutes of emergency illumination. Long life maintenance free sealed nickel cadmium batteries recharge fully in 24 hours. REM configuration includes prewired and attached remote test switch plate and indicator light. REM option is the standard emergency configuration, and is compatible with all standard reflector options, ordered separately. Application Note: REM operates one lamp only in emergency mode.

IEM - Integral emergency test switch. Housing includes 120V/277V, 60Hz dual-tap battery pack provides 90 minutes of emergency illumination. Long life maintenance free sealed nickel cadmium batteries recharge fully in 24 hours. IEM configuration includes a prewired integral emergency test switch and indicator light that are both accessible inside the reflector. The IEM option requires "EM" designated reflectors only, ordered separately. Application Note: IEM operates one lamp only in emergency mode.

Emergency Battery Pack - Average Lamp Lumen Ratings

REM option: (1) 26W 425lm, (1) 32W 600lm, (1) 42W 750lm

IEM option: (1) 26W 810lm, (1) 32W 910lm, (1) 42W 1040lm

(Note: REM and IEM options operate one lamp only in emergency mode. Average lamp lumens are based upon REM and IEM manufacturer ratings. Delivered lumens depend upon trim; refer to trim photometry to factor delivered lumens).

### **Code Compliance**

- Thermally protected and cULus listed for wet locations.
- IP44 rated for lens trims.
- NFPA Life Safety (Emergency Battery Pack)
- EMI/RFI per FCCTitle 47 CFR, Part 18, non consumer limits
- Peel down wattage label from 42W to 32W and 26W.
   Allows de-rating to set max.
   relamp wattage per project specifications (multi-wattage housings only).
- DR De-rated label housings are wattage specific for 32W or 26W.
- High efficacy luminaire may be used to meet IECC, ASHRAE, and Title 24 commercial standards.



### PD8H242 82H

(2) 26W DTT (2) 26/32/42WTTT

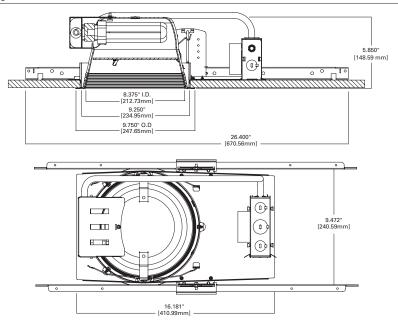
**Compact Fluorescent** 

8-Inch Aperture Lens Downlight

New Construction or Remodel Non-IC



### DIMENSIONS



### **ENERGY DATA**

	PD8H242E, PD8CPH242E
Min. Starting Temp -5°F / -20°C Sound Rating Class A	
EMI/RFI EMISSIONS FCC 47CFR PAR	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
INPUT ERFOUENCY 50/60 Hz	POWER FACTOR > 0.98
THD < 10%	INPUT VOLTAGE 120V - 277V ±10%
CREST FACTOR < 1.7	
OPERATING FREQUENCY > 40kHz	UL LISTED CLASS P, TYPE 1 OUTDOOR, CSA OR C/UL CERTIFIED
	Input Power 54W
	INPUT CURRENT 0.90A @ 120V
(2) CFQ26W/G24Q	Input Current 0.40A @ 277V
	Ballast factor 1.02
	Input Power 54W
(O) OFTDOOM(OVOAO	Input Current 0.90A @ 120V
(2) CFTR26W/GX24Q	Input Current 0.40A @ 277V
	Ballast factor 1.02
	Input Power 69W
(2) CFTR32W/GX24Q	Input Current 0.90A @ 120V
(2) CF1R32W/GX24Q	Input Current 0.40A @ 277V
	Ballast factor 0.96
	Input Power 94W
(2) CFTR42W/GX24Q	Input Current 0.90A @ 120V
(2) 01 1117244 0/1240	Input Current 0.40A @ 277V
	Ballast factor 0.95

PD8H2423E		
Min. Starting Temp 0°F / -18°C Sound Rating Class A		
EMI/RFI Emissions FCC 47CFR Pa	art 18 Non-Consumer Limits	
Input Frequency 50-60Hz Power Factor > 0.98		
THD < 10%	Input Voltage 347VAC ±10%	
Crest factor < 1.6		
Operating Frequency 50-60 kHz	cULus Certified	
	Input Power 44W	
(2) CFQ26W/G24q	Input Current 0.14A @ 347V	
	Ballast factor 1.02	
	Input Power 44W	
(2) CFTR26W/GX24Q	Input Current 0.14A @ 347V	
	Ballast factor 1.02	
(6) OFTDOOLUGYO 4	Input Power 62W	
(2) CFTR32W/GX24q	Input Current 0.19A @ 347V	
	Ballast factor 1.00	
	Input Power 80W	
(2) CFTR42W/GX24q	Input Current 0.25A @ 347V	
	Ballast factor 0.98	



### ORDERING INFORMATION

### SAMPLE NUMBER: PD8H242E 82H1GC

Order housing, reflector and lamp separately for a complete luminaire.

Housing Multi-Wattage

PD8H242 = 8 Inch horizontal (2) 26/32/42W DTT/TTT CFL PD8CPH242 = 8 Inch horizontal (2) 26/32/42W DTT/TTT CFL,

CCEA listed (Chicago Plenum) **Note:** Multi-wattage dimming options limited to 32/42W DTT/TTT.

De-Rated Label

PD8H226 = 8 Inch horizontal (2) 26W DTT/TTT CFL PD8CPH226 = 8 Inch horizontal (2) 26W DTT/TTT CFL, CCEA listed (Chicago Plenum)

PD8H232 = 8 Inch horizontal (2) 32W TTT CFL PD8CPH232 = 8 Inch horizontal (2) 32W TTT CFI

CCEA listed (Chicago Plenum)

Reflector

82H = 8" horizontal 82HEM = 8" Horizontal, Emergency (required with IEM ballast option)

Regressed **Lens Option** 

1G = Prismatic Glass 2G = Diffuse Glass

3G = Clear Glass 4G = Fresnel Glass **Finish Option** 

C=Specular Clear G=Specular Gold H=Semi Specular Clear W=White

(White Flange) BB=Black Baffle (White Flange) WB=White Baffle (White Flange) Flange Option

Blank=Polished Flange (C, G, H) Blank=White flange (W, BB, WB) WF=White Flange (C, G, H)

Accessories

HB128APK = L channel hanger bar, 26", 'No-Fuss',

pair (replacement)

RMB22 = 22" long wood joist mounting bars

### Ballast Option

### Multi-Wattage

**E** = 120V-277V, 50/60Hz UNV

IEM = 120V-277V, 60Hz dual-tap emergency battery ballast with integral test switch thru reflector, requires "EM" reflector optin, ordered separately REM = 120V-277V, 60Hz dual-tap emergency battery ballast with remote test switch plate

3E = 347V. 50/60Hz

1DMARKX = 5% two-wire (32/42W TTT) dimming, 120V

2DMARKX = 5% two-wire (32/42W TTT) dimming, 277V EDMARK7 = 5% 0-10V (32/42W TTT) dimming, 120-277V

1DMARKXIEM = 5% two-wire (32/42W TTT) dimming, 120V, with IEM emergency option

2DMARKXIEM = 5% two-wire (32/42W TTT) dimming, 277V, with IEM emergency option EDMARK7IEM = 5% 0-10V (32/42W TTT) dimming, 120-277V, with IEM emergency option 1DMARKXREM = 5% two-wire (32/42W TTT) dimming, 120V, with REM emergency option 1DMARKXREM = 5% two-wire (32/42W TTT) dimming, 120V, with REM emergency option 120 MARK 1 2DMARKXREM = 5% two-wire (32/42W TTT) dimming, 277V, with REM emergency option

EDMARK7REM = 5% 0-10V (32/42W TTT) dimming, 120-277V, with REM emergency option

### De-Rated Label

E = 120V-277V, 50/60Hz UNV

IEM = 120V-277V, 60Hz dual-tap emergency battery ballast with integral test switch thru reflector, requires "EM" reflector optin, ordered separately

REM = 120V-277V, 60Hz dual-tap emergency battery ballast with remote test switch plate 3E = 347V, 50/60Hz

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1DMARKXIEM = 5% two-wire (26W or 32W DTT/TTT) dimming, 120V, with IEM emergency option 2DMARKXIEM = 5% two-wire (26W or 32W DTT/TTT) dimming, 277V, with IEM emergency option

EDMARK7IEM = 5% 0-10V (26W or 32W DTT/TTT) dimming, 120-277V, with IEM emergency option 1DMARKXREM = 5% two-wire (26W or 32W DTT/TTT) dimming, 120V, with REM emergency option 2DMARKXREM = 5% two-wire (26W or 32W DTT/TTT) dimming, 277V, with REM emergency option

EDMARK7REM = 5% 0-10V (26W or 32W DTT/TTT) dimming, 120-277V, with REM emergency option

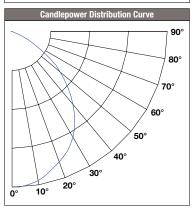
### **PHOTOMETRY**

PD8H242E-82H1GC\_32TTT

Spacing Criteria = 1.10

Lumens per Watt = 46 LpW
Test No. P31216

Test Model: PD8H242E-82H1GC\_32TTT



Candela Distribution		
Degrees Vertical	Candela	
0*	1729	
5	1711	
15	1571	
25	1351	
35	1089	
45	770	
55	433	
65	117	
75	2	
85	0	
90	0	
	*CBCP	

Luminance		
(Average Candela/M²)		
Degree Avg. 0° Luminance		
45	25888	
55	16835	
65	5594	
75	129	
85	0	

Cone of Light Footcandles			
Distance to	Initial Nadir	Beam (ft.)	
Illuminated Plane	Footcandles	L Length	<b>W</b> Width
5.5'	57	5.9	6.5
7'	35	7.6	8.3
8'	27	8.6	9.4
9'	21	9.7	10.6
10'	17	10.8	11.8
12'	12	13	14.2
14'	9	15.1	16.5

Beam diameter is to 50% of maximum footcandles, rounded to the nearest half-foot. Footcandle values are initial, apply appropriate light loss factors where necessary.

Zonal Lumen Summary				
Zone	Lumens	% Lamp	% Fixture	
0-30	1261.03	26.30	39.70	
0-40	1983.13	41.30	62.40	
0-60	3035.89	63.20	95.50	
0-90	3177.94	66.20	100.00	