

DESCRIPTION

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

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

Highly efficient one piece aluminum reflector provides for equal lamp and lamp image cutoff for a visually comfortable optic. 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 26/32/42W TTT 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 lamps.

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"

Catalog #		Type
Project		
Comments		Date
Prepared by		

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 damp locations.
- IP20 rated for open trims.
- NFPA Life Safety (Emergency Battery Pack)
- EMI/RFI per FCC Title 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**

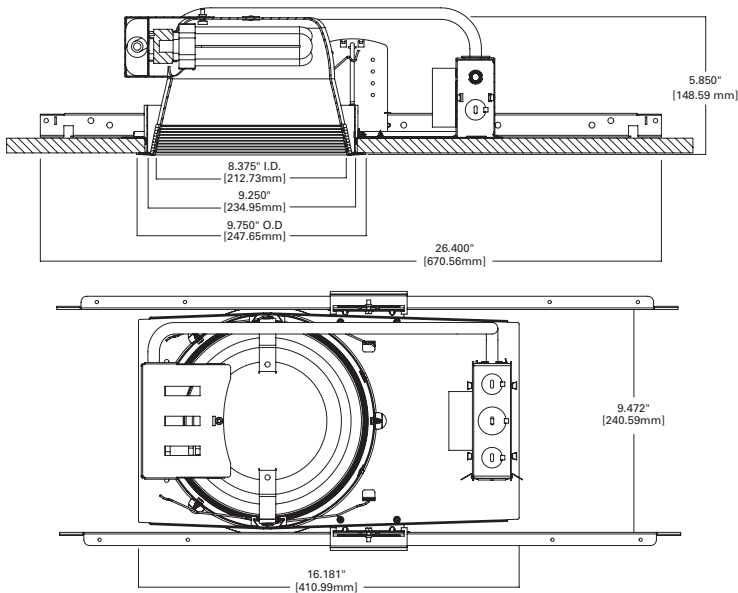
**(2) 26W DTT
(2) 26/32/42W TTT**

Compact Fluorescent

**8-Inch Aperture
Open 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 PART 18 NON-CONSUMER LIMITS	
INPUT FREQUENCY 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
(2) CFQ26W/G24Q	Input Power 54W
	Input Current 0.90A @ 120V
	Input Current 0.40A @ 277V
	Ballast factor 1.02
(2) CFTR26W/GX24Q	Input Power 54W
	Input Current 0.90A @ 120V
	Input Current 0.40A @ 277V
	Ballast factor 1.02
(2) CFTR32W/GX24Q	Input Power 69W
	Input Current 0.90A @ 120V
	Input Current 0.40A @ 277V
	Ballast factor 0.96
(2) CFTR42W/GX24Q	Input Power 94W
	Input Current 0.90A @ 120V
	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 PART 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
(2) CFQ26W/G24q	Input Power 44W
	Input Current 0.14A @ 347V
	Ballast factor 1.02
(2) CFTR26W/GX24Q	Input Power 44W
	Input Current 0.14A @ 347V
	Ballast factor 1.02
(2) CFTR32W/GX24q	Input Power 62W
	Input Current 0.19A @ 347V
	Ballast factor 1.00
(2) CFTR42W/GX24q	Input Power 80W
	Input Current 0.25A @ 347V
	Ballast factor 0.98

ORDERING INFORMATION

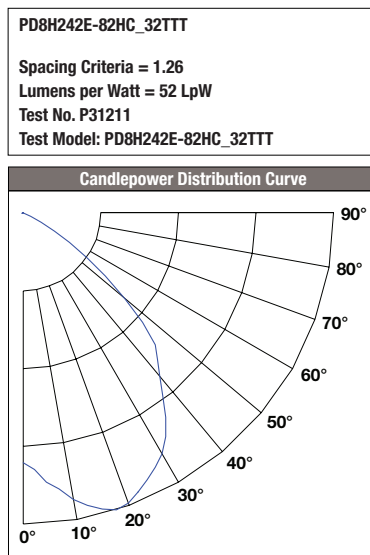
SAMPLE NUMBER: PD8H242E 82HC

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 CFL, CCEA listed (Chicago Plenum)	Reflector 82H = 8" horizontal 82HEM = 8" Horizontal, Emergency (required with IEM ballast option) Shielding Media [Blank] = none CB = Cross blade louvers (blade finish matches reflector, not available with baffle)	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
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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 option, 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 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 option, ordered separately REM = 120V-277V 60Hz dual-tap emergency battery ballast with remote test switch plate 3E = 347V, 50/60Hz 1DMARKX = 5% two-wire (26W or 32W DTT/TTT) dimming, 120V 2DMARKX = 5% two-wire (26W or 32W DTT/TTT) dimming, 277V EDMARK7 = 5% 0-10V (26W or 32W DTT/TTT) dimming, 120-277V 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



Candela Distribution	
Degrees Vertical	Candela
0*	1580
5	1508
15	1565
25	1381
35	1248
45	922
55	371
65	36
75	2
85	0
90	0

*CBCP

Luminance	
(Average Candela/M²)	
Degree	Avg. 0° Luminance
45	30998
55	14424
65	1721
75	129
85	0

Cone of Light Footcandles			
Distance to Illuminated Plane	Initial Nadir Footcandles	Beam (ft.)	
		L Length	W Width
5.5'	58	6.6	7.6
7'	36	8.3	9.7
8'	28	9.5	11.1
9'	22	10.7	12.5
10'	18	11.9	13.9
12'	12	14.3	16.7
14'	9	16.7	19.4

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	1462.02	30.50	40.50
0-40	2374.02	49.50	65.70
0-60	3546.41	73.90	98.20
0-90	3611.49	75.20	100.00