

# A downlight with modular design for optimized installation

## PHILIPS LIGHTOLIER MODULAR DOWNLIGHT CM8-H1CFL 8"



### PHILIPS LIGHTOLIER MODULAR DOWNLIGHT C1

The Philips Lightolier 8" Horizontal Compact Fluorescent Downlight offers a modular design that allows contractors to complete the ceiling with the frame before a lamp source or wattage has been determined.

Project: \_\_\_\_\_

Location: \_\_\_\_\_

Catalog No: \_\_\_\_\_

Fixture Type: \_\_\_\_\_

Mfg: \_\_\_\_\_ Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_

Notes: \_\_\_\_\_

**universal example:** CM8-F126/32/42U-H85  
**dimming example:** CM8-FV32DX1-V85

#### Ordering guide - UNIVERSAL

Plaster Frame	Electrical System	Ballast Options	Options	Trims (choose one)
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>CM8</b> 8" metal plaster frame <b>CM8R</b> 8" metal remodel frame	<b>F118</b> (1)CFQ18W/G24q <b>F126/32/42</b> (1)CFQ26W/G24q (1)CFM26W/GX24q (1)CFM32W/GX24q (1)CFM42W/GX24q	<b>U</b> 120-277V	<b>E<sup>1</sup></b> Integral Emergency	<b>H85</b> Clear Reflector <b>H85E</b> Clear Reflector, Emergency <b>HW85</b> Clear Reflector, Single Wall Wash <b>H86</b> White Reflector <b>H86E</b> White Reflector, Emergency <b>H86P</b> White Splay, C73 Prismatic Lens <sup>2</sup>
Ordering guide - DIMMING				
<b>CM8</b> 8" metal plaster frame <b>CM8R</b> 8" metal remodel frame	<b>F118</b> (1)CFQ18W/G24q <b>F126</b> (1)CFQ26W/G24q (1)CFM26W/GX24q <b>F132</b> (1)CFM32W/GX24q <b>F142</b> (1)CFM42W/GX24q	<b>DX1</b> 120V dimming <b>DX2</b> 277V dimming		

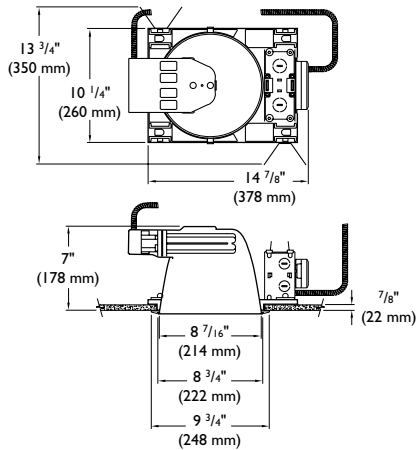
1. Integral Emergency option available with Emergency trims only.  
2. cULus Listed Wet Location.

Available lamps are listed under applicable electricals.  
DX1 and DX2 are standard Advance Mark X dimming.

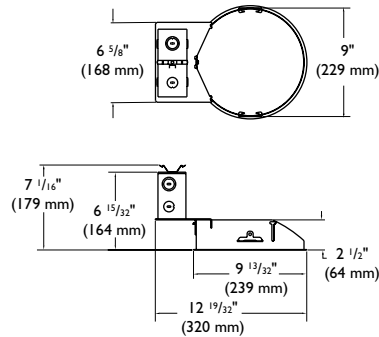
# PHILIPS LIGHTOLIER MODULAR DOWNLIGHT CM8-H1CFL 8"

## Dimensions

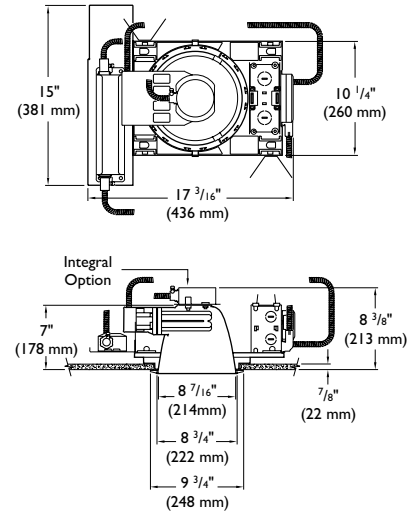
### CM8



### CM8R



### Integral Emergency



## Descriptions

Eight inch modular horizontal downlight rated for use with 26, 36 or 42 watt lamps. Wide variety of trims available. Optional emergency provides a self contained emergency battery which operates one lamp for a minimum of 90 minutes following power failure.

## Features

- 1 Frame:** 22 gauge die stamped metal frame with flanged edges to provide a smooth handling surface. Frames can be installed before the lamp source or wattage has been determined. Suitable for installation in environmental air handling ceilings.
- 2 Mounting:** Adjustable spring steel butterfly brackets accommodate CH24 channel bar hangers, BH3 flat bar hangers or 1/2" EMT conduit. L-brackets slide into place on any of the four corners to secure emergency option to the frame. Emergency tray rests on bar hangers or EMT for support. Frame can be supported with aircraft cable where required.
- 3 Ballast:** All ballasts are electronic high power factor and are attached directly to the junction box door at the factory. Available with optional dimming ballast for energy efficiency. Pre-installed quick connectors.
- 4 Socket cup:** The socket cup attaches directly to the trim without need for tools. All socket cups orient the lamp at the optical focal plane of the reflector for precise optics and optimum performance. Socket is adjustable.
- 5 Junction Box:** Plaster frame integrated 47 cubic inch junction box with four 1/2" and two 1" knockouts. Electrical connections are made through a single junction box door, which allows all electrical systems to snap into place on the frame
- 6 Integral emergency:** A special high temperature nickel cadmium battery charger and electronic circuitry contained in a compact case. Test switch and charging indicator are mounted inside the reflector. For use with Emergency trims only. Emergency illumination exceeds NEC, NFPA-LSC and UL 90 minute requirement.
- 7 Installation:** Trims attach directly to the frame via expandable torsion springs. When used in conjunction with the molded spring tabs on the plaster frame, the torsion springs allow for full rotation and adjustment from below fixture.
- 8 Reflector:** Reflector is precision spun .050 aluminum with Alzak finish. Separate injection molded, white polycarbonate ring.

## Labels

cULus Listed Approved for damp locations and through branch wiring with up to 8 #12 AWG conductors. All emergency units are cULus Listed for dry locations only.

## Options

Dimming ballasts dependent on lamp configuration.  
Emergency option available. Note: Integral must be used with emergency trim.

## Accessories

27" Flat Bar Hangers . . . . .BH3  
26" C-Channel Bar Hangers . . . . .CH24  
Emergency Remote Field Installable Kit . . .ERFK  
Accessories ordered separately.

# PHILIPS LIGHTOLIER MODULAR DOWNLIGHT CM8-H1CFL 8"

## Trims



**H85** Clear Reflector  
**H85E** Clear Reflector, Emergency



**H86** White Reflector  
**H86E** White Reflector, Emergency



**H86P** White Splay,  
C73 Prismatic Lens\*



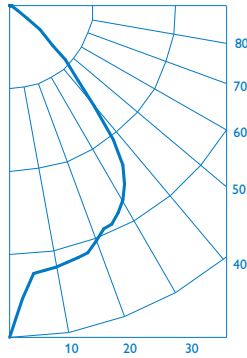
**HW85** Clear Reflector,  
Single Wall Wash

\*cULus Listed Wet Location.

## Photometric Data

**CM8 - F132-H85**  
8" Compact Fluorescent  
Horizontal Downlight, Clear Reflector

Lamp: (1) CFM32W/GX24q  
IES Spacing Criteria: Nor - 1.0, Par - 0.96  
Total Lumens: 2400  
Efficiency: 53%



### CANDLEPOWER SUMMARY

Zone Degree	0° Candelas	90° Candelas
90	0	0
85	0	0
80	0	0
75	0	1
70	0	1
65	0	1
60	2	3
55	29	42
50	119	192
45	236	374
40	399	535
35	593	659
30	683	690
25	731	689
20	763	709
15	792	730
10	806	760
5	820	842
0	1008	1008

### COEFFICIENTS OF UTILIZATION

Ceiling Cavity Reflectance		80			50			10		
Wall Reflectance		50			30			10		
Room Cavity Ratio		CU for Floor Cavity Reflectance = 20%								
0	63	63	63	59	59	59	54	54	54	
1	58	56	55	55	53	52	51	50	49	
2	53	50	48	50	48	47	47	46	45	
3	48	45	43	46	44	42	44	42	41	
4	44	41	38	43	40	38	40	38	37	
5	41	37	35	39	36	34	37	35	33	
6	38	34	31	36	33	31	35	32	30	
7	35	31	28	34	30	28	32	30	28	
8	32	28	26	31	28	26	30	27	25	
9	30	26	24	29	26	24	28	25	23	
10	28	24	22	27	24	22	26	23	22	

These coefficients were computed by the zonal-cavity method, I.E.S. recommended practice, and prepared from the candlepower distribution data in photometric test no. 2166



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CM8-H1CFL 03/30 page 3 of 3

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