

**DESCRIPTION**

Recessed medium beam downlight luminaire with 4 inch square aperture utilizing horizontal 26W DTT or 26/32W TTT compact fluorescent lamp. Modular platform can be reconfigured from below the ceiling to accept a broad range of lamp modules and optical elements. Platform is suitable for direct contact with insulation and 2x8 residential construction. Platform + module + element combination produces square distribution with excellent light control and low aperture brightness.

<b>Catalog #</b>		<b>Type</b>
<b>Project</b>		
<b>Comments</b>		<b>Date</b>
<b>Prepared by</b>		

**SPECIFICATION FEATURES**

**Frame**

Galvanized steel plaster frame with integral bar hanger receivers. Setscrews provide positive horizontal locking.

**Collar**

Matte black steel collar adjusts vertically for 1/2" - 1" thick ceilings and can be rotated +/- 7.5° thru the aperture. Integral gun sights facilitate the use of guide strings or laser lines. Shipped with a paint overspray protector installed in the collar.

**Lamp Module**

Installed or removed thru the aperture or from the top and allows lamp orientation at 0°, 90°, 180° and 270° positions (except for 26DTT lamp).

**Housing**

Double wall aluminum housing painted matte black for a visually dark interior. Removable hinged top allows for top access. All fasteners are captive.

**Gaskets**

Closed cell gaskets achieve restrictive airflow requirements without additional caulking.

**Optical Element**

Mousetrap type springs pull flange tight to ceiling. Light trap eliminates spill light at edge of flange and reflector. Available in self-flanged or metal trim ring versions. May also be installed rimless using optional plastering lathing ring.

**Bar Hangers**

Captive preinstalled bar hangers adjusts from 8-1/2" to 24" wide; pass thru feature allows shortening without removal. Captive nail penetrates standard and engineered lumber. Mounting flange levels platform with ceiling. Integral clip attaches directly to t-bar.

**Primary Reflector**

Miro® Erotek segmented upper reflector yields a smooth square beam with medium distribution. Accepts 26W DTT, 26/32W TTT compact fluorescent lamp.

**Lower Reflector**

Aluminum parabolic shielding prismatoid provides for 55° cutoff and is available in a wide range of semi specular Alzak® finishes. Corrugated Baffle: An optional embossed pattern that extends through the flange adding a subtle design element and reduces aperture brightness.

**Junction Box**

(7) 1/2" trade size pry outs, (3) integral clamps for non-metallic cable. Rated for (4) #12 thru branch circuits. Wago® type push wire connectors for field connections

**Thermal Protector**

Self-resetting thermal protector protects against improper lamping.

**Ballast**

Universal input electronic ballast features multi-watt capability operating 26W DTT and 26/32W TTT lamps. Programmed rapid start allows use with occupancy sensors and building control systems.

**Lamp Socket**

4 pin Gx24q3/4 base with rotary lock socket ensures positive lamp retention. Lamp socket locks into one of two positions accommodating different lamp lengths.

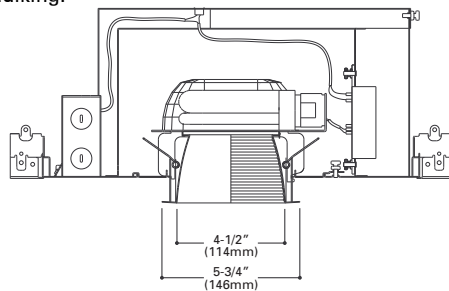
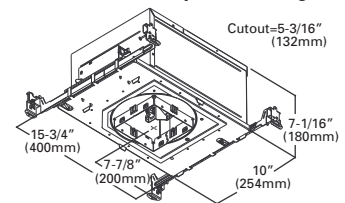
**Code Compliance**

Thermally protected, IP labeled, cULus listed for protected damp locations and ASTM-E283 AIRTITE (tm). Suitable for direct contact with insulation. Meets EMI/RFI requirements per FCC part 18 consumer limits.



**P408ICAT  
MH4CFL42E  
E4DL E4DLCB  
26W DTT, 26 or  
32W TTT  
Compact  
Fluorescent**

**4 Inch Square Downlight**



ENERGY DATA	
Min. Starting Temp -18°C	Sound Rating Class A
EMI/RFI Emissions FCC Part 18 Consumer Limits	Consumer Limits
Input Frequency 50/60 Hz	Power Factor > 0.98
THD < 10%	Input Voltage 120V
26W	Input Power 29W
	Input Current 0.24A
32W	Input Power 36W
	Input Current 0.31A
ENERGY DATA - DIMMING	
Min. Starting Temp 10°C	
Sound Rating Inaudible in a 27dBa Ambient	
EMI/RFI Emissions FCC Part 18 Consumer Limits	
Input Frequency 60 Hz	Power Factor > 0.95
Input Voltage 120V	THD < 20%
26W Input Current	0.27A
32W Input Current	0.33A

**ORDERING INFORMATION:** Complete unit consists of platform, lamp module and optical element.

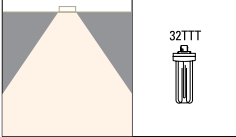
Platform	Lamp Module	Ballast Option	Optical Element	Finish	Flange	Accessories
<b>P408ICAT</b>	<b>MH4CFL</b>					
P408ICAT = 4" Square Aperture IC Housing	42E = 26W DTT 26/32W TTT 120-277V UNV 423E = 347V 26/32W TTT 1D26 = 26W DTT/TTT Lutron TuWire Dimming 120V 1D32 = 32W TTT Lutron TuWire Dimming 120V	E4DL = 4" Square Aperture Lower Shielding Prismatoid, Open E4DLCB = 4" Square Aperture Corrugated Lower Shielding Prismatoid, Open	Alzak® Finishes H = Clear Haze WMH = Warm Haze WHH = Wheat Haze KH = Cognac Haze GPH = Graphite Haze CTH = Cobalt Haze CCH = Chocolate Haze BH = Black Haze Painted Finishes MW = Matte White MB = Matte Black	[Blank] = Metal Trim Ring, Matte White SF = Self Flanged SFWF = Self Flanged, Matte White Flange (SFWF not available with corrugated baffle)	Accessories PLR4x4 = Plaster lathing ring for rimless RLA4x4 = Rimless adapter for solid ceiling surfaces EDC4x41 = Extended depth collar for 1" - 1-1/2" thick ceilings EDC4x42 = Extended depth collar for 1-1/2" - 2" thick ceilings L4X4HEX = Matte black hex cell louver MTR4MW = Metal trim ring, matte white MTR4MB = Metal trim ring, matte black MTR4SN = Metal trim ring, satin nickel MTR4AC = Metal trim ring, antique copper MTR4TBZ = Metal trim ring, tuscan bronze	

Photometrics

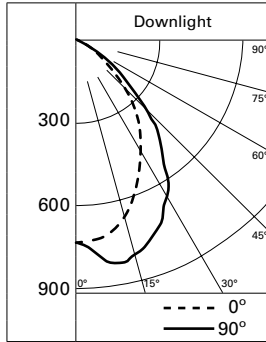
Photometric Results

Spacing Criterion = 1, 1.3  
Efficiency = 50.6%

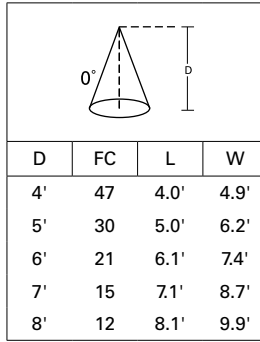
Test No. 254P232  
Platform = P4  
Element = E4DLH  
Lumens = 2400  
Lamp = CF32TTT/E/841



Candlepower Distribution



Cone of Light



Candelas

Vertical Angle	CD
90	0
85	2
75	15
65	44
55	113
45	248
35	396
25	525
15	650
5	704
0	711

Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0- 30	568	23.7	46.8
0- 40	856	35.7	70.5
0- 60	1162	48.4	95.7
0- 90	1214	50.6	100
90-180	0	0	0
0-180	1214	50.6	100

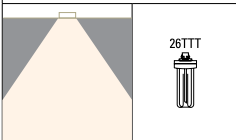
Coefficients of Utilization

Ceiling Wall % RCR	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
	Zonal cavity method -- floor reflectance = 20%					
0	60 60 60 60	59 59 59 59	56 56 56	54 54 54	52 52 52	51
1	57 55 53 52	55 54 52 51	52 51 50	50 49 48	48 47 47	46
2	53 50 47 45	52 49 47 45	47 45 44	46 44 43	44 43 42	41
3	49 45 42 40	48 45 42 39	43 41 39	42 40 38	41 39 37	37
4	46 41 38 35	45 41 37 35	40 37 35	38 36 34	37 35 34	33
5	43 38 34 31	42 37 34 31	36 33 31	35 33 31	35 32 30	30
6	40 35 31 28	39 34 31 28	33 30 28	33 30 28	32 30 28	27
7	38 32 28 26	37 32 28 26	31 28 26	30 27 25	30 27 25	24
8	35 30 26 24	35 29 26 23	29 26 23	28 25 23	28 25 23	22
9	33 28 24 22	33 27 24 22	27 24 21	26 23 21	26 23 21	20
10	31 26 22 20	31 25 22 20	25 22 20	25 22 20	24 22 20	19

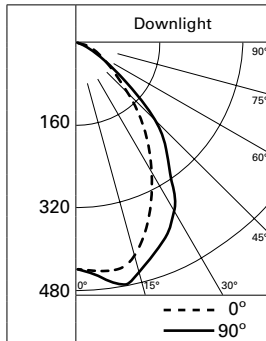
Photometric Results

Spacing Criterion = 1, 1.2  
Efficiency = 39.5%

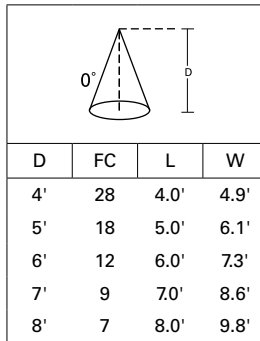
Test No. 254P229  
Platform = P4  
Element = E4DLH  
Lumens = 1800  
Lamp = CF26TTT/E/830



Candlepower Distribution



Cone of Light



Candelas

Vertical Angle	CD
90	0
85	1
75	8
65	24
55	61
45	140
35	239
25	338
15	427
5	442
0	438

Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0- 30	339	18.8	47.6
0- 40	507	28.2	71.3
0- 60	682	37.9	95.9
0- 90	711	39.5	100
90-180	0	0	0
0-180	711	39.5	100

Coefficients of Utilization

Ceiling Wall % RCR	70 50 30 10	70 50 30 10	50 30 10	50 30 10	50 30 10	0
	Zonal cavity method -- floor reflectance = 20%					
0	47 47 47 47	46 46 46 46	44 44 44	42 42 42	40 40 40	40
1	44 43 42 41	43 42 41 40	40 40 39	39 38 38	38 37 37	36
2	41 39 37 35	41 38 37 35	37 36 34	36 35 33	35 34 33	32
3	39 36 33 31	38 35 33 31	34 32 30	33 31 30	32 31 29	29
4	36 32 30 28	35 32 29 28	31 29 27	30 28 27	29 28 26	26
5	34 30 27 25	33 29 27 25	29 26 24	28 26 24	27 25 24	23
6	32 27 24 22	31 27 24 22	26 24 22	26 24 22	25 23 22	21
7	30 25 22 20	29 25 22 20	24 22 20	24 22 20	23 21 20	19
8	28 23 21 19	27 23 20 19	23 20 18	22 20 18	22 20 18	18
9	26 22 19 17	26 21 19 17	21 19 17	21 18 17	20 18 17	16
10	25 20 18 16	24 20 17 16	20 17 16	19 17 16	19 17 16	15