PORTFOLIO™

DESCRIPTION

Low brightness 7-3/8-inch aperture lens downlight for use with a 26W, 32W or 42W Triple Tube 4-pin compact fluorescent lamp. The deeply regressed lens provides superb shielding in comparison to shallow lenses. Reflector trim eliminates brightness at higher angles. Choice of lens types for various aesthetics. Standard features include low iridescent finish on all reflectors, and one electronic ballast to operate 26W, 32W and 42W triple tube 4-pin lamps. Venting ensures maximum lamp life and lumen output. Open downlight, lensed, and open wall wash trims are interchangeable within the same housing.

Catalog #		**Type**
Project		
Comments		**Date**
Prepared by		

SPECIFICATION FEATURES

Reflector
Clear upper Alzak® reflector for maximum light output. Positive reflector mounting, without tools, pulls trim tight to ceiling. Lower spun parabolic reflector, .050 thick aluminum, available in a variety of Alzak® finishes. Also available with black or white baffle.

Lens
Choice of tempered fresnel, prismatic, diffuse or clear glass, molded prismatic acrylic, opal acrylic diffuser, or clear UV stabilized polycarbonate lens. Lens is fixed to lower reflector.

Trim Ring Options
Self flanged or molded white trim ring.

Socket Connector
One piece die cast aluminum connection allows venting for maximum thermal performance.

Housing Mounting Frame
One piece precision die cast aluminum 1-1/2" deep collar accommodates varying dimensions of ceiling materials.

Universal Mounting Bracket
One piece precision die cast aluminum 1-1/2" deep collar accomodates varying dimensions of ceiling materials.

Conduit Fittings
Die cast screw tight connectors.

Junction Box
Listed for eight #12AWG (four in, four out) 90°C conductors feed through branch wiring. 1/2" and two 3/4" pry outs. Positioned to allow straight conduit runs. Access to junction box by removing reflector.

Socket
4 pin GX24q3/4 base with fatigue free stainless steel lamp spring ensures positive lamp retention.

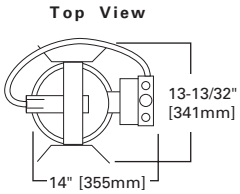
Electronic Ballast
Electronic ballast provides full light output and rated lamp life. Provides flicker free and noise free operation and starting. End of lamp life protection is standard.

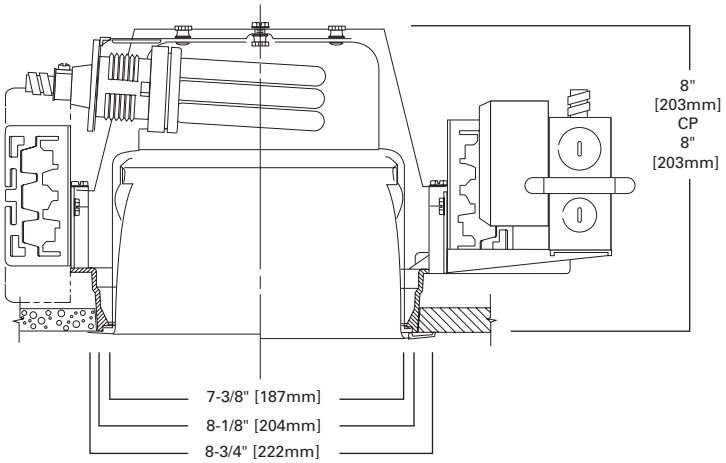
Labels
cULus listed, Wet label.

C7142
7181/7180

26W, 32W, 42W
TTT or PLT
Compact Fluorescent

7-Inch Lensed Downlight





ENERGY DATA	
26W TTT 4-pin	
Ballast: Electronic	
120V Input Watts: 29	Line Amps: 0.25
277V Input Watts: 29	Line Amps: 0.10
Power Factor: >0.99	THD: <10%
Min. Starting Temperature: -10°C (15°F)	
Sound Rating: Class A Standards	

32W TTT 4-pin	
Ballast: Electronic	
120V Input Watts: 34.5	Line Amps: 0.30
277V Input Watts: 34.5	Line Amps: 0.13
Power Factor: >0.99	THD: <10%
Min. Starting Temperature: -10°C (15°F)	
Sound Rating: Class A Standards	

42W TTT 4-pin	
Ballast: Electronic	
120V Input Watts: 48	Line Amps: 0.32
277V Input Watts: 48	Line Amps: 0.18
Power Factor: >0.99	THD: <10%
Min. Starting Temperature: -10°F (0°C)	
Sound Rating: Class A Standards	

NOTES: Accessories should be ordered separately. For additional options, please consult your Cooper Lighting Representative. Alzak is a registered trademark of Aluminum Company of America.

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ORDERING INFORMATION

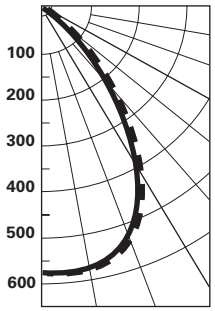
EXAMPLE: C7142E 7181LI1

Housing	Number of Lamps	Wattage	Ballast	Options	Trims	Finish	Lens	Options	Accessories
C7= 7" Horizontal Lamp	**1**=1 Lamp	**42**=26W, 32W, or 42W TTT or PLT Lamp	**E**=120/277V 50/60 Hz Electronic **3E**=347V 50/60 Hz Electronic **D5LT26**=26W 120-277V Fifth Light (DALI Dimming) **D5LT32**=32W 120-277V Fifth Light (DALI Dimming) **D5LT42**=42W 120-277V Fifth Light (DALI Dimming) **3D5LT26/32**=26 or 32W 347V Fifth Light (DALI Dimming) **3D5LT42**=42W 347V Fifth Light (DALI Dimming) **D26/32**=26 or 32W 120-277V Lutron Ecosystem Dimming **D42**=42W 120-277V Lutron Ecosystem Dimming **EDR26**=DeRated Wattage Label, 26W **EDR32**=DeRated Wattage Label, 32W	**CP**=Chicago Plenum **EM**= Emergency Module with RemoteTest Switch	**7181**=Lensed Self Flanged **7180**=Lens Molded Trim Ring	**LI**=Low Iridescent Clear **H**=Haze **WMH**=Warm Haze **G**=Gold **WH**= Wheat **W**=Gloss White **GP**=Graphite **GPH**=Graphite Haze **BB**=Black Baffle (7180 only) **WB**= White Baffle (7180 only)	**1**=Prismatic Lens **2**=Diffuse Lens **3**=Clear Lens **1G**=Prismatic Glass **2G**=Diffuse Glass **3G**=Clear Glass **4G**=Fresnel Glass	**WF**=White painted Flange (Self Flanged only)	**HB26**=C Channel Bar Hangers, 26" Long, Pair **HB50**=C Channel Bar Hangers, 50" Long, Pair **FK5**=5 Amp Field Installable Fuse Kit 300V Max **RMB-22**=Wood Joist Bar Hanger, 22" Long, Pair **HSA7**=Slope Adapter for 7" Aperture Housings, Specify Slope

PHOTOMETRICS

C7142 7181/7180

Candlepower Distribution



Test No. H23202

C7132 7181LI1

Open Reflector with Prismatic Lens

Lamp=32W TTT
Lumens=2400

Spacing Criteria= 0°=1.1, 90°=1.1

Efficiency=35.8%

Candlepower

Deg.	CD 0°	CD 90°
0	578	578
5	582	579
15	577	565
25	487	512
35	312	323
45	152	167
55	66	71
65	11	13
75	0	0
85	0	0
90	0	0

Average Luminance

Deg.	CD/SQ M 0°	CD/SQ M 90°
45	7781	8551
55	4167	4471
65	901	1124
75	0	0
85	0	0

Cone of Light

Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
5'6"	19	6'0"
6'6"	14	7'6"
8'0"	9	9'0"
10'0"	6	11'6"
12'0"	4	13'6"
14'0"	3	16'0"

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.

Lamp Multiplier:
26W TTT=.70

Reflector Multiplier:
Haze=.95
Straw=.9
Wheat=.9

EM Multiplier (in emergency mode)
EM=.27

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	442	18.4	51.4
0-40	640	26.7	74.5
0-60	829	34.6	96.5
0-90	860	35.8	100.0
90-180	0	0.0	0.0
0-180	860	35.8	100.0

Coefficient of Utilization

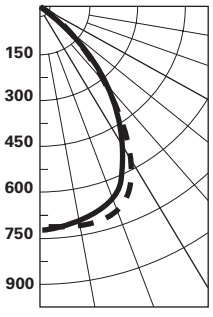
rc	80%				70%			50%		30%		10%		0%
rw	70	50	30	10	50	30	10	50	10	50	10	50	10	0
RCR														
0	43	43	43	43	42	42	42	40	40	38	38	37	37	36
1	41	39	39	38	39	38	37	37	36	36	35	35	34	33
2	38	37	35	34	36	35	33	35	33	34	32	33	31	31
3	36	34	32	30	33	32	30	32	30	32	29	31	29	28
4	34	31	29	28	31	29	28	30	27	30	27	29	27	26
5	32	29	27	25	29	27	25	28	25	27	25	27	24	24
6	30	27	25	23	27	25	23	26	23	26	23	25	23	22
7	29	25	23	21	25	22	21	24	21	24	21	23	21	20
8	27	23	21	19	23	21	19	23	19	22	19	22	19	18
9	25	21	19	18	21	19	18	21	17	21	17	20	17	17
10	24	20	18	16	20	18	16	19	16	19	16	19	16	15

rc=Ceiling reflectance, rw=Wall reflectance, RCR=Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.

C7142 7181/7180

Candlepower Distribution



Test No. H23204

C7132 7181LI1 Open Reflector with Prismatic Lens

Lamp=32W PLT
Lumens=2400

Spacing Criteria=
0°=1.1, 90°=1.2

Efficiency=48.4%

Candlepower

Deg.	CD 0°	90°
0	730	730
5	728	734
15	716	749
25	609	692
35	416	468
45	206	241
55	91	100
65	18	20
75	0	0
85	0	0
90	0	0

Average Luminance

Deg.	CD/SQ M 0°	90°
45	10562	12383
55	5736	6336
65	1502	1682
75	0	0
85	0	0

Cone of Light

Distance to Illuminated Plane	Initial Nadir Footcandles	Beam Diameter
5'6"	24	6'6"
6'6"	17	8'0"
8'0"	11	9'6"
10'0"	7	12'0"
12'0"	5	14'6"
14'0"	4	17'0"

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.

Lamp Multiplier:
26W PLT=.71

Reflector Multiplier:
Haze=.95
Straw=.9
Wheat=.9

EM Multiplier (in emergency mode)
EM=.27

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	576	24.0	49.6
0-40	853	35.5	73.5
0-60	1119	46.6	96.4
0-90	1162	48.4	100.0
90-180	0	0.0	0.0
0-180	1162	48.4	100.0

Coefficient of Utilization

rc	80%				70%			50%		30%		10%		0%
rw	70	50	30	10	50	30	10	50	10	50	10	50	10	0
RCR														
0	58	58	58	58	56	56	56	54	54	51	51	49	49	48
1	55	53	52	51	52	51	50	50	48	48	47	47	46	45
2	52	49	47	45	48	47	45	47	44	45	43	44	42	41
3	49	46	43	41	45	43	41	44	40	42	39	41	39	38
4	46	42	39	37	42	39	37	41	36	40	36	39	36	35
5	43	39	36	34	39	36	34	38	33	37	33	36	33	32
6	41	36	33	31	36	33	31	35	30	34	30	34	30	29
7	38	33	30	28	33	30	28	32	28	32	27	31	27	27
8	36	31	28	25	31	28	25	30	25	29	25	29	25	24
9	34	29	25	23	28	25	23	28	23	27	23	27	23	22
10	32	26	23	21	26	23	21	26	21	25	21	25	21	20

rc=Ceiling reflectance, rw=Wall reflectance, RCR=Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.