

DESCRIPTION

Recessed shallow lens wide beam downlight luminaire with 4 inch square aperture utilizing one horizontal 26W DTT or 26/32/42WTTT compact fluorescent lamp. Platform is suitable for commercial construction. Insulation must be kept 3" from top and sides of housing. Platform + optical element combination produces square distribution with excellent light control and low aperture brightness.

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Mechanical Frame

Pre-galvanized steel plaster frame with integral bar hanger receivers. Setscrews provide positive horizontal locking.

Collar

Matte black steel collar adjusts vertically for 1/2" - 2" thick ceilings and can be rotated ± 75° thru the aperture. Integral gun sights facilitate the use of guide strings or laser lines. Shipped with a paint overspray protector.

Housing

Steel housing painted matte black for a visually dark interior. Removable hinged top allow for top re-lamp. All fasteners are captive.

Gasket

Closed cell gaskets achieve restrictive airflow requirements without additional caulking.

Universal Mounting Bracket

Accepts 1/2" EMT, C channel and bar hangers and adjusts 3" vertically from above the ceiling.

Optical Primary Reflector

Miro® upper reflector yields a smooth square beam with wide distribution. Lamp orientation can be changed thru the aperture to 0°, 90°, 180° and 270°. Socket assembly is removable from above to facilitate top re-lamp. Accepts (1) 26W DTT or 26/32/42WTTT compact fluorescent lamp.

Lower Splay

Die cast aluminum splay with seamless corners provides cutoff to lens. Integral white optic mixing chamber provides full light output. Available in self-flanged or rimless versions. Available in painted or plated finishes.

Shielding

Glass lens provides additional light control and lamp shielding. Spring loaded to allow removal when installed rimless.

Optical Element Retention

Mousetrap springs pull flange tight to ceiling. Gasket eliminates spill light at edge of flange.

Electrical Junction Box

(8) 1/2" and (2) 3/4" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12 AWG 90°C conductors and feed thru branch wiring. Line and low voltage field wiring are separated to meet local codes.

Lamp Socket

4-pin GX24 q-3+q-4 base with rotary lock socket ensures positive lamp retention. Two positions accommodate different lamp lengths. In-line connector allows rapid socket replacement.

Ballast

Thermally protected universal input 120 - 277V or 347V electronic ballast provides program start for full light output and rated lamp life.

Emergency Option

Provides 90 minutes of standby lighting meeting most life safety codes for egress lighting. Integral charge indicator and test switch. Available with optional wireless test switch.

Code Compliance

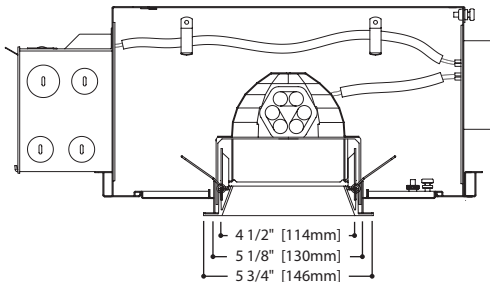
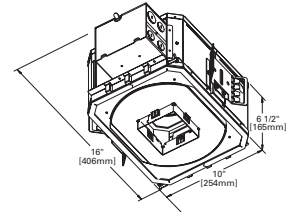
Thermally protected, cULus listed for wet locations and ASTM-E283 airtight. Peel down wattage labels for 26W and 32W for restricted LPD requirements. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 non consumer limits.



PN41H42 E4SL

(1) 26W DTT
26/32/42WTTT
Compact Fluorescent

4 Inch Square Aperture
Shallow Lens Downlight

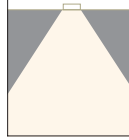


ORDERING INFORMATION EXAMPLE: PN41H42E + E4SL1GMB = 4" square, non IC, air tight housing platform, UNV 120/277V electronic ballast for (1) 26W DTT or 26/32/42WTTT lamp, self flanged prismatic acrylic shallow lens optical element with painted matte black finish.

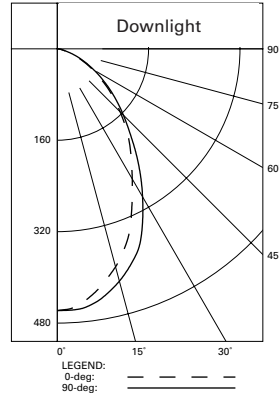
Lamp				Element	Media	Texture	Finish	Flange Style	Accessories
Platform	Type/Wattage	Ballast	Options						
PN4	1H42			E4SL					
PN4 = 4" square aperture, non-IC, AT	1H42 = (1) 26W DTT or 26/32/42WTTT GX24 q-3+q-4 CFL lamp		IEM = Emergency battery pack with integral test switch WRT = Wireless remote test switch	E4SL = 4" shallow lens downlight	1G = Prismatic glass 2G = Diffuse glass 5G = Opal white glass	[Blank] = Smooth		[Blank] = Metal trim ring, matte white RL = Rimless, use with rimless adapter	MB22 = No-Flex™ mounting bars with integral nail and tee grid clip RA4X4 = Rimless adapter for 4" elements WHRCT1 = Wireless remote control for WRT option, order 1 or more for each facility
PN4CP = 4" square aperture, non-IC, AT CCEA listed for City of Chicago plenum requirements	E = UNV 120 – 277V electronic, 50/60Hz 3E = 347V electronic, 50/60Hz ED26/32ES = 120 – 277V 26/32W electronic 5% 3-wire & EcoSystem® ED42ES = 120 – 277V 42W electronic 5% 3-wire & EcoSystem® 1D26HL = 120V 26W electronic 1% 3-wire dimming 1D32HL = 120V 32W electronic 1% 3-wire dimming 2D26HL = 277V 26W electronic 1% 3-wire dimming 2D32HL = 277V 32W electronic 1% 3-wire dimming						Painted Finishes MB = Matte black MW = Matte white W = Gloss white Plated Finishes SAL = Satin aluminum SN = Satin nickel		

Photometrics

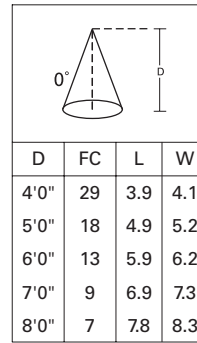
Photometric Results

Efficiency = 42.1%
Test No. P12958
Platform = PN4
Element = E4SL2GW
Lumens = 1800
Lamp = GX24Q-3/26WTTT
 26TTT

Candlepower Distribution



Cone of Light



Candelas

Vertical Angle	CD
90	0
85	4
75	17
65	52
55	101
45	164
35	249
25	351
15	421
5	457
0	458

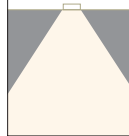
Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0- 30	318	17.7	42.0
0- 40	473	26.3	62.4
0- 60	685	38.0	90.4
0- 90	758	42.1	100.0
90- 180	0	0.0	0.0
0- 180	758	42.1	100.0

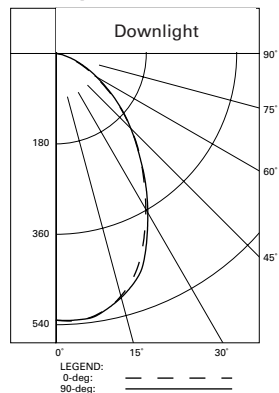
Coefficients of Utilization

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	50	50	50	50	49	49	49	49	47	47	47	45	45	45	43	43	43	42
1	47	45	44	42	46	44	43	42	42	41	40	41	40	39	39	39	38	37
2	43	40	38	36	42	40	38	36	38	36	35	37	35	34	36	35	33	33
3	40	36	34	31	39	36	33	31	35	32	31	34	32	30	32	31	30	29
4	37	33	30	27	36	32	30	27	31	29	27	31	28	27	30	28	26	25
5	35	30	27	24	34	30	26	24	29	26	24	28	26	24	27	25	23	23
6	32	27	24	22	32	27	24	22	26	24	22	26	23	21	25	23	21	20
7	30	25	22	20	30	25	22	20	24	22	19	24	21	19	23	21	19	18
8	28	23	20	18	28	23	20	18	22	20	18	22	19	18	22	19	18	17
9	27	22	18	16	26	21	18	16	21	18	16	20	18	16	20	18	16	15
10	25	20	17	15	25	20	17	15	20	17	15	19	17	15	19	17	15	14

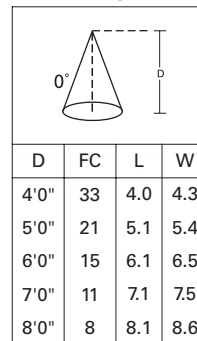
Photometric Results

Efficiency = 38.6%
Test No. P12954
Platform = PN4
Element = E4SL2GW
Lumens = 24 00
Lamp = GX24Q-3/32WTTT
 32TTT

Candlepower Distribution



Cone of Light



Candelas

Vertical Angle	CD
90	0
85	5
75	22
65	66
55	129
45	211
35	310
25	425
15	503
5	532
0	531

Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0- 30	380	15.8	41.0
0- 40	570	23.7	61.5
0- 60	835	34.8	90.1
0- 90	927	38.6	100.0
90- 180	0	0.0	0.0
0- 180	927	38.6	100.0

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	46	46	46	46	45	45	45	45	43	43	43	41	41	41	39	39	39	39
1	43	41	40	39	42	40	39	38	39	38	37	37	37	36	36	35	35	34
2	40	37	35	33	39	36	34	33	35	33	32	34	32	31	33	32	31	30
3	37	33	31	29	36	33	30	28	32	30	28	31	29	27	30	28	27	26
4	34	30	27	25	33	30	27	25	29	26	24	28	26	24	27	25	24	23
5	32	27	24	22	31	27	24	22	26	24	22	25	23	22	25	23	21	21
6	30	25	22	20	29	25	22	20	24	21	20	23	21	19	23	21	19	19
7	28	23	20	18	27	23	20	18	22	20	18	22	19	18	21	19	17	17
8	26	21	18	16	25	21	18	16	20	18	16	20	18	16	20	17	16	15
9	24	20	17	15	24	19	17	15	19	16	15	19	16	15	18	16	15	14
10	23	18	15	14	22	18	15	14	18	15	14	17	15	13	17	15	13	13