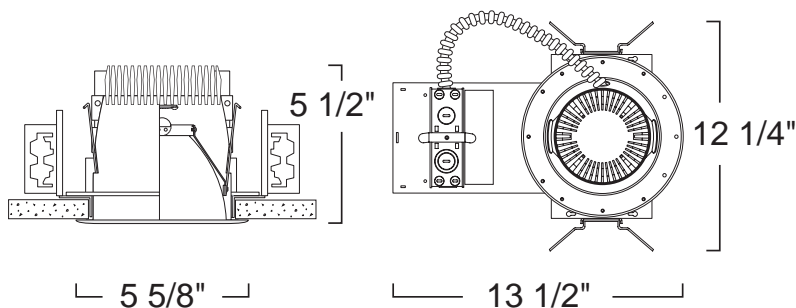


LHALD413 - 4" ARCHITECTURAL L.E.D. (900 lumen LED) 4" LED HOUSING AND TRIM



SPECIFICATION

120V/277V 13W L.E.D.

Ceiling cut-out: 5 1/16"

Application: Architectural-grade recessed downlight housing for low to medium height ceilings and commercial installations. A variety of trims, compatible styles and finishes are available to achieve the proper decor and illumination. Reflector designed for minimal glare from lamp without sacrificing lumen output.

Housing Frame: 16 gauge galvanized plaster ring with powder coat finish, six friction clips secure trim to housing for ceilings up to 1 3/4" thick. Triple slot bat-wing hanger brackets accommodate multiple bar hanger systems.

Mounting: Housing suitable for new construction installations only, Bat-Wing bar hanger brackets adjust vertically 3 1/4" for multiple ceiling types and accepts 1/2" EMT. 26" C-Channel Strut for T-bar ceilings and 27" adjustable linear hanger bars for plaster ceilings or wood/metal joists. Heavy duty 16-gauge, die-formed galvanized steel. Bar hangers optional. Steel V-Spring allow for easy installation of Heat-Sinked Reflector trim.

Driver: 120V/277V AC 50/60Hz Electronic Direct Current Class 2 driver integrally mounted on large access Junction Box. Input current 0.50 Amps at 115VAC. Power Factor > 0.90 Operating Temperature: -30°C to +80°C. Accessible from above or below ceiling. Consult factory for compatible dimmers. See ordering guide for dimming options.

Junction Box: 16 gauge pre-wired galvanized steel double Junction Box, 64 cubic-inch for a maximum of (8) #12 AWG wires. Furnished with (10) 3/4", (2) 1" and (8) Romex knock-outs. Strain clamps to install or remove covers for easy access and ground wire. Equipped with safety standard die-cast aluminum fitting for flex-conduit.

Insulation Contact: Non IC rated housing must be kept 3" from insulation.

FEATURE(S):



Reflector Construction: One piece self-flanged design enables a clean trim finish, without the need for a secondary trim ring. Heavy-gauge aluminum reflector prevents ugly dents during shipping and installation. Provides 50° visual cut-off for a glare free appearance. Held in place with 6 steel pressure springs housing frame.

Power Connection: LED lamp array is replaceable via on board quick disconnect terminal. Meets CA Title 24 requirements and other standards restricting the use of Medium Base or Bi-Pin sockets.

Color Temperature: LED Diodes comes standard in warm white 3,000K +/- 100K. Available in 2,700K, 4,000K, 5,000K as special order. Consult factory, extended lead times apply.

Thermal Management: Heat dissipation facilitated by exposed integral aluminum heat sink to maximize heat rejection in an open air environment. Recommended ambient temperature is below 35 degree celsius.

Warranty: Covered by a 5 Year Warranty to be free of defects in materials and craftsmanship. Fixture should not be installed in applications with ambient temperature above 40 degrees C. Doing so will result in reduced lamp life and voided warranty.

Trims: Available in Satin Haze Reflector/White Flange and White Reflector/White Flange.

Safety Labels: ETL/cETL listed. Suitable for dry, damp and wet locations. NYC approved: Calendar #41937.

ARCHITECTURAL HOUSING LHALD413

LHALD413	Dimming	Options
LHALD413	C105UE :Non-Dimming	Blank :None
	C105UE-D10 :0-10V 10% Dimming	-EM :Emergency battery Pack w/Remote Test Switch
	C105UE-DHL :Hi-Lume 1% Dimming	/L270 :Linear Hanger Bars
		/C260 :C-Channel Hanger

TRIM LRALD4

LRALD4	Reflector/Flange Finish
LRALD4	SWF060 :Satin Reflector/White Flange
	WWF060 :White Reflector/White Flange

► Ordering Example: LHALD413C105UE-D10 / LRALD4SWF060

4" LED Downlight Luminaire

Lamp: (1)LED

Total Rated Fixture Lumen :937

Total Luminaire Efficacy :39.9 Lm/W

Luminous Diameter :4.125"

Report File#

27120

By:

Lighting Sciences Inc.

LHALD4/LRALD4

LED DETAILS**Light Source Specification**

Color Rendering Index (CRI): 80+

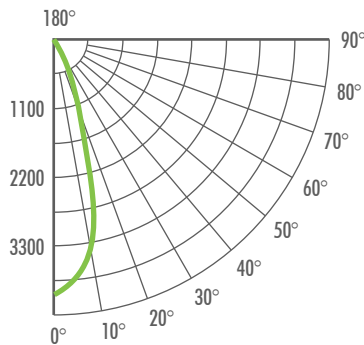
Color Temperature: 3,000K

Estimated Life: 45,000 hr. L70

Lamp Equivalents: 100W PAR 38, 1x32W CFL

INTENSITY (CANDLEPOWER) SUMMARY**IN 2.5 DEGREE STEPS**

Angle	Mean CP	Lumens
0	3940	
5	3067	256
10	1929	
15	1332	369
20	907	
25	582	258
30	250	
35	45	45
40	19	
45	9	7
50	3	
55	2	2
60	1	
65	0	0
70	0	
75	0	0
80	0	
85	0	0
90	0	

**ZONAL LUMENS SUMMARY**

Zone	Lumens	% Luminaire
0 - 30	882	94.15
0 - 40	928	98.99
0 - 60	937	99.95
0 - 90	937	100.00
40 - 90	9	1.01
60 - 90	0	0.05
90 - 180	0	0.00
0 - 180	937	100.00

MULTIPLIERS**FINISHES**

Clear	1.2
Satin Haze	1.0
White	0.9

LED LUMENS

2000 lumen LED	1.43
1400 lumen LED	1.00
1100 lumen LED	0.78
900 lumen LED	0.64

AVERAGE LUMINANCE DATA**CD./SQ.M (FOOTLAMBERTS)**

Angle	Luminance
0	456987 (133378)
30	33469 (9768)
40	2918 (851)
45	1526 (445)
50	532 (155)
55	470 (137)
60	293 (85)
65	87 (25)
70	0 (0)
75	0 (0)
80	105 (30)
85	0 (0)

LUMINANCE SUMMARY CD./SQ.M.**CD./SQ.M (FOOTLAMBERTS)**

Angle	Mean CD/Sq. M.
45	1526
55	470
65	87
75	0
85	0