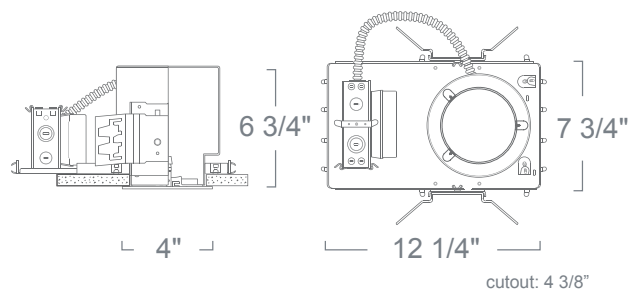


3.5" 12W LED Housing w/ 3.5" LED 12W Square Reflector Downlight 3.5" MINI-ARC LED LIGHTING



SPECIFICATION

Ceiling cut-out: 4 3/8"

Application: High-output architectural-grade miniature recessed LED downlight housing for low to medium height ceilings in commercial and architectural applications. Spacious housing allows generous adjustment of the trim. A variety of trims, styles and finishes are available to achieve desired decor and illumination.

Housing: Pre-wired housing adjusts up to a 1 1/4" ceiling thickness. Integral thermal protector to guard against improper lamping and installation. Trim is secured with torsion wing springs.

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.

Driver: Electronic Direct Current LED driver integrally mounted in electric junction box.

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.

Lumen Maintenance: Minimum 50,000 hours L70 life based on ANSI TM-21 calculations from LM80 standardized test results.

Thermal Management: Effective thermal dissipation facilitated by integral cast-aluminum, heat sink design for maximum heat rejection to provide long LED life.

Junction Box : 16 gauge pre-wired galvanized steel Junction Box, 32 cubic-inch for a maximum of (8) #12 AWG wires. Furnished with (7) 3/4" and (4) Romex knock-outs. Strain clamps to install or remove covers for easy access and ground wire. Equipped with safety standard fitting for flex-conduit.

Insulation Contact: Energy Efficient LED housing comes standard with IC rating for direct contact with loosefill blown and rolled insulation.

Dimming: 0-10V dimming option (-D10) works with most 5-Wire 0-10V dimmers. UniDim™ (-DUN) option is a universal dimming system that works with most 3-Wire ELV, 2-Wire Incandescent and 5-Wire 0-10V fluorescent dimmers.

FEATURE:



Application: High output miniature architectural-grade Square LED trim is designed for low to medium ceiling heights in retail, commercial and high-end residential applications that benefit from linearity and symmetry in design.

"Optics: Interchangeable optics allow polycarbonate lens to be changed in the field to modify beam spread. No tools required."

Warm Dimming: With this new technology, you can create the warm glow of traditional incandescent dimming while offering extraordinary energy efficiency and service life of LED Lighting. Allow for fixture start at a full 2700K when at full-brightness and smoothly dim down to 5% level with the warm glow of 1850K using dimming option the frame-in kit.

Lumen Maintenance: Minimum 50,000 hours L70 life based on ANSI TM-21 calculations from LM80 standardized test results.

Thermal Management: Effective thermal dissipation facilitated by integral cast-aluminum, heat sink design for maximum heat rejection to provide long LED life.

Mounting: Steel pressure springs mounted on trim to ensure positive retention inside housing.

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.

Safety Labels: Suitable for dry and damp locations. NYC approved: Calendar #41937

Warranty: Covered by a 5 Year Warranty to be free of defects in materials and craftsmanship. Recommended for applications where ambient temperatures do not exceed 35°C, installations exceeding this temperature will result in reduced LED lamp life and a voided warranty.

Label: cETL Listed

3.5" 12W LED HOUSING LHJLD4 12W Max LED

WATTAGE	OPTIONS	EMERGENCY
LHJLD412C35 :12W	Blank :120V Non-Dimming	Blank :None
	-DIN :120V Incandescent Dimming	-EM :Remote 5W Emergency*
	UE :120V/277V	
	UE-D10 :120V/277V 0-10V	
	UE-DHL :Hi-Lume Dimming (120V/277V)	
	UE-DUN :120V-277V (ELV/0-10V Universal Dimming)	
	-DMX :DMX Dimming	
	-347-D10 :0-10V 10% Dimming	

* Above ceiling access required for EM option.

3.5" LED 12W SQUARE REFLECTOR DOWNLIGHT LR4LHQ21 12W Max LED

Ordering example: LHJLD412C35UE-EM/LR4LHQ21BB-B60-T40

FINISH	BEAM SPREAD	LED	OPTIONS
LR4LHQ21BB :All Black	Blank :45° Narrow Flood	Blank :3000K	Blank :Damp Location
LR4LHQ21W :All White	-B25 :Spot*	-C90 :3000K, 90CRI	-WL :Wet Location
LR4LHQ21BC :Black Baffle/Chrome Ring	-B60 :60° Wide Flood	-C97 :3000K, 97CRI	
LR4LHQ21BW :Black Reflector/White Ring		-T17 :1700K*	
		-T25 :2500K*	
		-T27 :2700K	
		-T27-C90 :2700K 90+ CRI	
		-T27-C97 :2700K, 97CRI	
		-T35 :3500K	
		-T40 :4000K	
		-TWD :1850K-2700K Warm Dimming	

* Extended Lead Time may apply. Consult Factory.

LR4LH: 3.5" 19W Mini-Arc LED

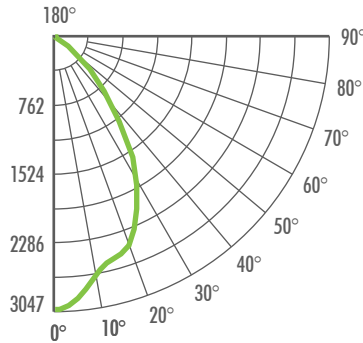
Lamp: (1) LED	Test Report File#
Total Rated Fixture Lumen : 1148 Lm	L08121604
Total Luminaire Efficacy : 60 Lm/W	Light Laboratory Inc.
Luminous Diameter : 2.04"	LHJLD4/LR4LH
Color Rendering Index (CRI) : 80+	
Color Temperature : 3050K	
Estimated Life : 50,000 hrs. L70	
Lamp Equivalents : 75W MR16, 50W PAR20/PAR30 26W CFL	

Fixture Data

	LED Module Lumen	Fixture Lumen	Input Wattage
@ 3000K	1400	1148.0	19W
@ 4000K	1484	1217.0	19W

ZONAL LUMENS SUMMARY

Zone	Lumens	% Fixt
0 - 20	734.55	64.00
0 - 30	1010.43	88.00
0 - 40	1103.30	96.10
0 - 60	1145.59	99.80
0 - 80	1148.21	100.00
0 - 90	1148.43	100.00
10 - 90	888.78	77.40
20 - 40	368.74	32.10
20 - 50	398.26	34.70
40 - 70	44.30	3.90
60 - 80	2.62	0.20
70 - 80	0.62	0.10
80 - 90	0.22	0.00



CANDELA TABULATION

CD./SQ.M (FOOTLAMBERTS)	
Angle	0
0.0	3047.350
2.0	3019.710
6.0	2805.178
12.0	2153.787
18.0	1339.944
24.0	661.342
30.0	287.984
36.0	121.291
42.0	49.885
52.0	19.660
62.0	2.771
72.0	0.744
80.0	0.353

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	20	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	112	110	108	112	110	108	106	106	104	103	102	101	100	99	98	97	95
2	110	106	102	100	108	104	101	98	101	98	96	98	96	94	95	94	92	91
3	106	100	96	93	104	99	95	92	96	93	91	94	91	89	92	90	88	86
4	102	95	91	87	100	94	90	87	92	89	86	90	87	85	88	86	84	82
5	98	91	86	82	96	90	85	82	88	84	81	87	83	81	85	82	80	79
6	94	87	82	78	93	86	81	78	85	81	78	83	80	77	82	79	77	75
7	91	83	78	75	89	82	78	74	81	77	74	80	76	74	79	76	73	72
8	87	80	75	71	86	79	74	71	78	74	71	77	73	71	76	73	70	69
9	84	76	72	68	83	76	71	68	75	71	68	74	71	68	74	70	68	67
10	82	74	69	66	81	73	69	66	72	68	65	72	68	65	71	68	65	64

MULTIPLIERS

COLOR TEMP

3,000K	1.00
4,000K	1.13
2,700K	0.90

LUMINANCE DATA

CD./SQ.M (FOOTLAMBERTS)			
Angle	Avg. 0-Deg	Avg. 45-Deg	Avg. 90-Deg
45	24264	24264	24264
55	12022	12022	12022
65	1751	1751	1751
75	1039	1039	1039
85	1112	1112	1112

ZONAL LUMINANCE SUMMARY

CD./SQ.M (FOOTLAMBERTS)	
Zone	Lumens
0-10	259.66
10-20	474.90
20-30	275.88
30-40	92.87
40-50	29.51
50-60	12.78
60-70	2.01
70-80	0.62
80-90	0.22
90-100	0.00