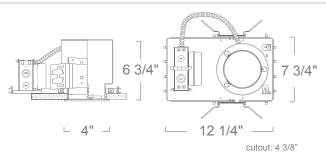
3.5" 19W Mini-Arc LED Housing w/ 3.5" LED 19W Reflector Downlight

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. ring constructed of heavy-duty die-cast aluminum.

 $\textbf{Housing:} \ \ \text{Pre-wired housing adjusts up to a 1 1/4"_ceiling_thickness.} \ \ \text{Integral thermal}$ 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

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

Dimming: 0-10V dimming option (-D10) works with most 0-10V dimmers. Factory qualified for use with Leviton IP710-DLX and Lutron NTFTV-WH. The Lutron Hi-Lume 1% dimming option (-DHL) works with compatible Lutron dimmers: NovaT NTF-10-277, Skylark SF-12P277 & Vierti VTF-6A. Uni-Dim[™] is a universal dimming system that works with most ELV, Incandescent and 0-10V fluorescent dimmers.

FEATURE:





Application: High-output miniature architectural-grade LED reflector trim for commercial and high-end residential installations. Designed for low to medium height ceilings. Trim

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

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

Made in USA

3.5" 19W MINI-ARC LED HOUSING LHJLD4 19W Max LED

WATTAGE OPTIONS LHJLD419C70 :19W Blank :120V Non-Dimming Blank : None -DIN :120V Triac/ELV Dimming -EM :Emergency (5W) -120V/277V UF UE-D10 :120V/277V 0-10V UE-DHL :Hi-Lume Dimming (120V/277V) UE-DUN: 120V-277V (ELV/0-10V Universal Dimming)

.5" LED 19W REFLECTOR DOWNLIGHT R4LH21 19W Max LED Ordering example: LHJLD419C70-DIN-EM/LR4LH21BB-L12-T17 LR4LH21 19W Max LED

REFLECTOR FINISH	BEAM SPREAD		LED	(OPTIONS
LR4LH21W-L12 :All White	Blank :45° Flood	Blank	:3000K	Blank	:None
LR4LH21BB-L12 : All Black	-B25 :Spot*	-C90	:3000K, 90CRI	-WL	:Wet Location
LR4LH21N-L12 :All Natural Metal	-B60 :60° Wide Flood	-C97	:3000K, 97CRI		
LR4LH21SW-L12:Satin Haze Reflector/White Ring		-T17	:1700K*		
		-T25	:2500K*		
		-T27	:2700K		
		-T27-C90	:2700K, 90 + CRI		
		-T27-C97	:2700K, 97CRI		
		-T35	:3500K		
		-T40	:4000K		

^{*} Extended Lead Time may apply. Consult Factory.



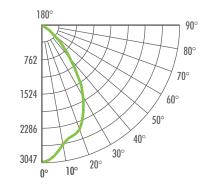
LR4LH: 3.5" 19W Mini-Arc LED

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

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
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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

MULTIPLIERS

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

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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