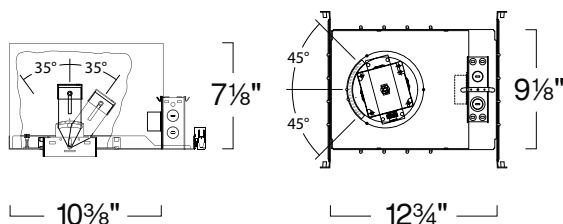


3" 12W IC Rated /600Lm & 19W Non IC Rated /1200Lm Mini-Arc Square LED Housing (Dimmable) w/ Square Trimless Open 3" MINI-ARC SQUARE LED LIGHTING



SPECIFICATION

Ceiling cut-out: 3 1/2" Square

Application: Mini-Arc² Phantom 3" Square LED Downlight Housings are designed for low to medium ceiling heights in retail, hospitality, commercial and high-end residential applications. Advanced 'hot-aiming' mechanism allows precise and lockable positioning of the square trim prior to drywall or ceiling panel installation. Post installation adjustment of the beam tilt is possible from below the fixture. Housing works with standard 3" Square trims and 3" Square 'Trimless' trims.

Adjustability: Collar bracket provides 90° of rotation, marked in 5° increments for positioning before drywall installation. Lamp holder assembly allows 35° tilt and 1-1/2" vertical lamp source adjustment.

Housing: Collar bracket adjusts for 1/2" to 1" ceiling thickness. Integral thermal protector guards against improper installation. Trim is secured with 4 torsion spring clips.

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.

Mounting: Housing suitable for new construction installations only, supplied with (2) 24" adjustable hanger bars with 90 degrees repositioning ability. Hanger bars equipped with nail-less install 3/4" serrated barbed studs and with captive nails, for faster and easier secure mounting in wood joists. Set-screws lock into position and prevent shifting after installation. Earthquake structural cable compatible for drop panel ceiling or any other mounting that requires direct support from structural ceilings.

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

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.

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.

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.

FEATURE:



Application: Mini-Arc² Phantom 3" Square LED Trims feature LITON's exclusive Phantom 'Trimless' design that allows the trims to sit flush to the ceiling with no visible trim ring. They are designed for low to medium ceiling heights in retail, hospitality, commercial and high-end residential applications that benefit from zero sight line linearity and symmetry in modern interior lighting designs. Fully die-cast construction insures long lasting beauty and durability.

Trim Construction: Trim is die-cast and includes a perforated mesh flange for installation in drywall or plaster ceilings. Mudding may be applied right up to the edge of the trim producing a clean, flat 'Trimless' look.

Mounting: Steel pressure springs mounted on trim to ensure positive retention inside housing. Cable tether secures trim to housing for easy maintenance. For trimless applications mud flange provided with LRX style reflector can be attached to bottom of ceilings up to 2" thick. "

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.

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

Color Temperature: Comes standard with 3000K Warm White LEDs mounted on housing. Binned to within 3-Step MacAdam Ellipses (SDCM) and surpasses the ANSI C78 377A standard for color deviation.

Lumen Maintenance: Minimum 50,000 hours L70 life based on ANSI TM-21 calculations from LM80 standardized test results. Effective thermal dissipation facilitated by integral cast-aluminum, finned heat sink installed on LHQLD housing for maximum heat rejection to provide long LED life."

3" 12W IC Rated/600LM & 19W Non IC Rated /1200LM MINI-ARC SQUARE LED HOUSING LHQLD3 12W/19W

WATTAGE	OPTIONS		BEAM SPREAD	LED
LHQLD312C35: 12W IC Rated	Blank	:120V Non-Dimming	Blank :45° Narrow Flood	Blank :3000K
LHQLD319C70: 19W Non IC Rated ^	UE	:120V/277V	-B25 :Spot*	-C90 :3000K, 90CRI
	UE-D10	:120V/277V 0-10V	-B60 :60° Wide Flood	-C97 :3000K, 97CRI
	UE-DUN	:120V-277V UniDim™ + +		-T17 :1700K*
	-DIN	:120V Incandescent Dimming		-T25 :2500K*
	-EM	:Remote 5W Emergency +		-T27 :2700K
	-347-D10	:0-10V 10% Dimming		-T27-C90 :2700K 90 + CRI
	UE-DEC	:Lutron Ecosystem 5% Dimming		-T27-C97 :2700K 97CRI
				-T35 :3500K
				-T40 :4000K
				-TWD :1850K-2700K Warm Dimming**

SQUARE TRIMLESS OPEN REFLECTOR LRXQ321

LRXQ321	FINISH	RATING
LRXQ321	W :White	Blank:Damp Location
	B :Black	

Ordering example: LHQLD312C35UE-DUN-B25-TWD/LRXQ321W

* Extended lead time may apply. Consult factory. **Only for 12W.

^ Not rated for Insulation Contact. + Above ceiling access required for EM option. + + Extended lead may apply for quantities over 100.

3" LED Square Downlight

Lamp: (1) LED

Total Rated Fixture Lumen :617.44

Total Luminaire Efficacy :51.20 Lm/W

Luminous Diameter :3.5" Sq.

CRI :80 Standard, 90+ CRI option

LM79 Report File

#L08121604

By:

Lighting Sciences Inc.

LHQLD312

LED DETAILS**Light Source Specification**

Color Rendering Index (CRI): 84.19

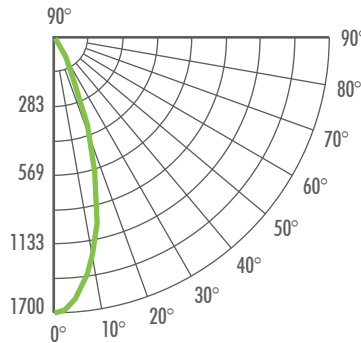
Color Temperature: 3,072K

Estimated Life: 50,000+ hrs. - L70

Lamp Equivalents: 50W MR16, PAR20, PAR30, 75W A19

ZONAL LUMENS SUMMARY

Zone	Lumens	% Fixt
0 - 30	541.9	88.0
0 - 40	591.7	96.1
0 - 60	614.4	99.8
60 - 90	1.5	0.2
70 - 100	0.5	0.1
90 - 120	0.0	0.0
0 - 90	616.0	100.0
90 - 180	0.0	0.0
0 - 180	616.0	100.0

**CANDELA TABLE - TYPE C****CD./SQ.M (FOOTLAMBERTS)**

Angle	0
0	1638
10	1295
20	577
30	155
40	35
50	12
60	3
70	0
80	0
90	0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20**

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

MULTIPLIERS**COLOR TEMP**

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

WATTAGE

12W	1.00
19W	1.86

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

Angle	Mean CD/Sq. M.
0-10	139.3
10-20	254.7
20-30	148.0
30-40	49.8
40-50	15.9
50-60	6.9
60-70	1.1
70-80	0.3
80-90	0.1
90-100	0.0