

INTENDED USE

The 3-Inch Mini Recessed Downlights feature a low-profile, small-aperture design that delivers high-quality lighting with broad compatibility, ensuring quick and tool-free installation or replacement of the light and trim.

Its high-efficiency lens provides exceptional illumination with precise chromaticity specifications and consistent color binning.

The downlight also includes thermal management housing and an optional IC-Rated housing, making it ideal for retrofit or new construction applications in residential, retail, and hospitality settings.

FEATURES

Construction: Aluminum

Mounting: Recessed with twist and lock feature and durable tension clips for convenient installation

Housing: Non-IC and IC-Rated

Finish: White powder coat finish provides long term performance and superior aesthetic

Lens: High efficiency lens delivers excellent light transmittance.

CRI: 90+

Voltage: 120-277V (0-10V Dim), 120V (TRIAC Dim)

Dimming Driver: 0-10V and TRIAC in one package (Dim to 1%)

Thermal management: The aluminum housing serves as a heat sink to extend the lifespan of the device, maintaining heat sinks at a controlled temperature of 60-70°C

Light Distribution: Direct downlight or adjustable downlight with 360° rotation and a maximum 30° tilt angle

Operating Temperature: -4°F to +104°F

THD: <20%

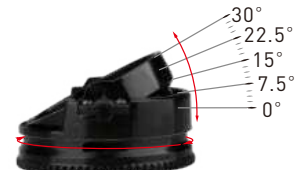
Power Factor: >0.9

Warranty: 5 years carefree for parts & components (Labor not included)

Listings: cULus listed for damp locations, IC-Rated, RoHS Compliant



Horizontal Adjustment



Tilt Angle And 360° Horizontal Adjustment



ORDERING INFORMATION Example:

Model	Shape	Trim	Beam Spread	Color Temperature	Wattage	Housing	Adjustable Holder	Finish	Accessories	Options
14119	R Round S Square	TFWH Trimmed With White Flange TFBK Trimmed With Black Flange TL Trimless	B15 15° Beam B24 24° Beam B36 36° Beam B60 60° Beam L18 18° Beam L24 24° Beam L38 38° Beam L60 60° Beam	27K 2700K 30K 3000K 35K 3500K 40K 4000K WD¹ Warm Dimming (2000K-3000K)	5 5W 8 8W 10 10W 13 13W 16 16W 19 19W	R² Retrofit NC³ New Construction IC-Rated NIC³ New Construction Non-IC rated	TA⁴ Tilt Angle And 360° Horizontal Adjustment HA Horizontal Adjustment	Code See options on page 2	Blank None HB⁴ Honeycomb WR Wet Rated plate	EM8X 8W External Emergency Battery

¹ Available in 13W max and in 97 CRI
² Non-IC rated

³ Includes housing with integrated driver
⁴ For round shape only

PERFORMANCE DATA

Wattage	Round, 24° Beam @ 3000K		Square 24° Beam @ 3000K		Dim to Warm 3000K~2000K 95+ CRI
	Efficacy	Delivered Lumens	Efficacy	Delivered Lumens	
5W	95LM/W	475LM	95LM/W	475LM	Up to 13W 1200LM 95LM/W
8W	100LM/W	800LM	96LM/W	768LM	
10W	99LM/W	990LM	95LM/W	950LM	
13W	95LM/W	1235LM	91LM/W	1183LM	
16W	91LM/W	1456LM	87LM/W	1390LM	
19W	89LM/W	1690LM	85LM/W	1615LM	

Remark: The lumens are subject to 3000K, 90+ CRI, 24° beam angle, white round trim with 360° horizontal adjustable holder. Lumen output may vary ± 5% base on different CCT, beam angle, adjustable holder, trim shape and shade.

FINISH OPTIONS

		SW White		SB Black		SG Gold		SC Chrome
Square								
		RW White		RB Black		RG Gold		RC Chrome
Round								
		PWW Inside White Outside White		PBW Inside Black Outside White		PGW Inside Gold Outside White		PCW Inside Chrome Outside White
Pinhole Round								
		PWB Inside White Outside Black		PBB Inside Black Outside Black		PGB Inside Gold Outside Black		PCB Inside Chrome Outside Black
Pinhole Oval								
		OWW Inside White Outside White		OBW Inside Black Outside White		OGW Inside Gold Outside White		OCW Inside Chrome Outside White
Round Wall Wash								
		OWB Inside White Outside Black		OBB Inside Black Outside Black		OGB Inside Gold Outside Black		OCB Inside Chrome Outside Black
Square Wall Wash								
		WRW Round White		WRB Round Black				
		WSW Round White		WSB Round Black				

TRIM FINISH

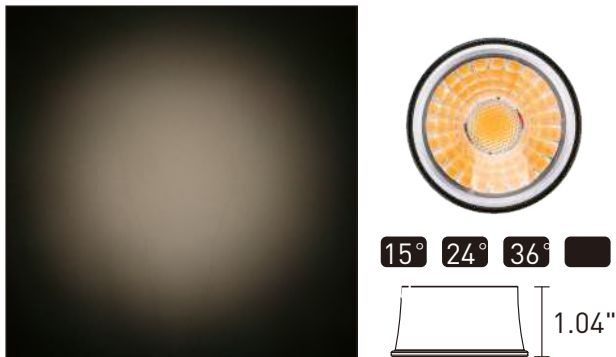
Powder coat white and black finishes offer uniform finish providing long term performance and superior aesthetic, compatible for multiple trim shades.



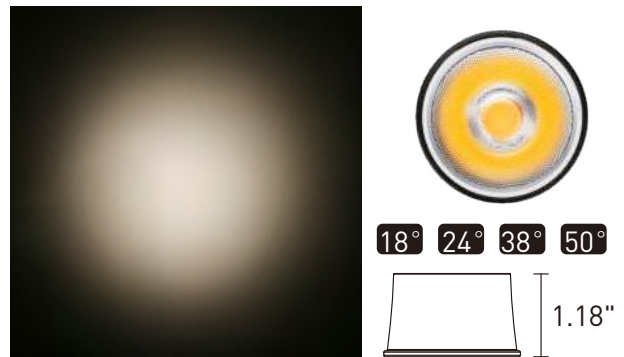
LENS

Classic reflector-like design provides high lighting transmittance. It effect in light control and anti-glare with side facula and fade-out facula. The MR16 standard size (diameter 1.96") design make them widely practical. Available in 15°~60° beam angles, beam spreads are interchangeable which can be easily swapped out in the field without

Standard Lens



Low Glare Lens Lens

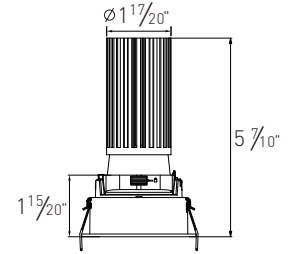
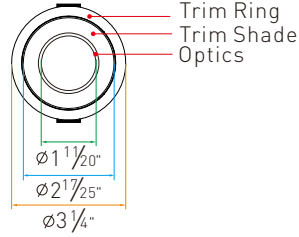


DIMENSIONS

3" Round Trim



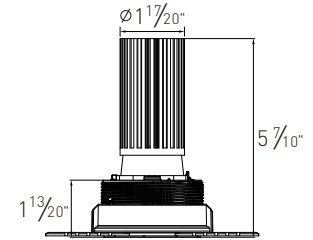
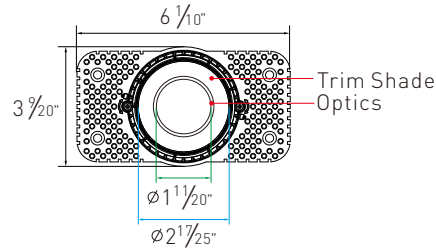
Mounting Diameters: $2\frac{19}{20}" - 3\frac{1}{10}"$



3" Round Trimless



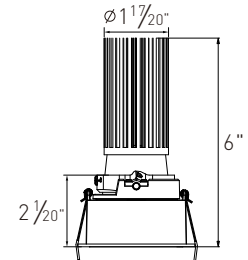
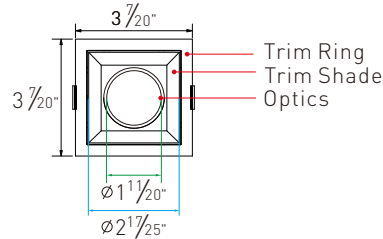
Mounting Diameters: $3\frac{1}{2}" - 3\frac{7}{10}"$



3" Square Trim



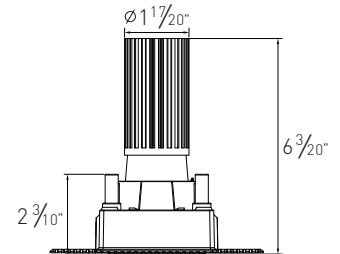
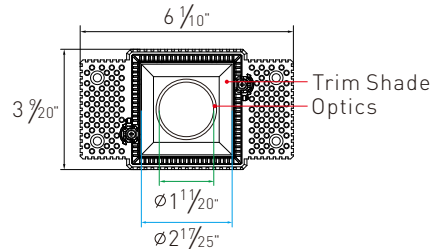
Mounting Diameters: $(2\frac{19}{20}" - 3\frac{1}{10}") \times (3\frac{1}{10}" - 3\frac{1}{5}")$



3" Square Trimless

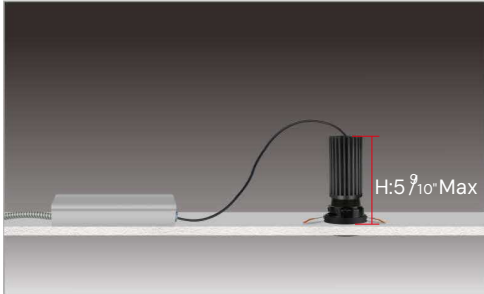


Mounting Diameters: $3\frac{1}{2}" - 3\frac{7}{10}"$

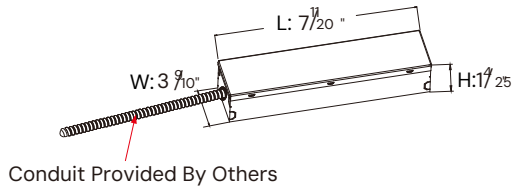


APPLICATIONS

Remodel (NON-IC)- LED Driver Box



It can be installed in existing ceilings for remodel application. Simple cut a hole in existing drywall ceilings.



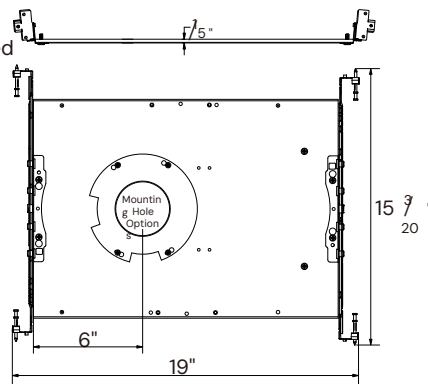
Conduit Provided By Others

New Construction-Frame Kit (NON-IC)

A rough-in frame option is available for all new constructions and a variety of ceiling types. LED driver box rests on the frame kit by magnet when installed as shown below.

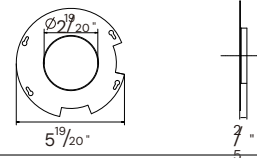


Pre-install LED
Emergency Driver
Available.

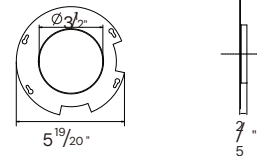


Mounting Hole Options

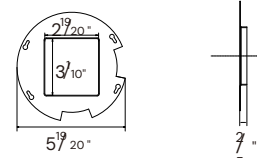
3" Round Trim



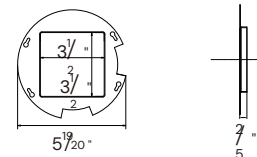
3" Round Trimless



3" Square Trim



3" Square Trimless

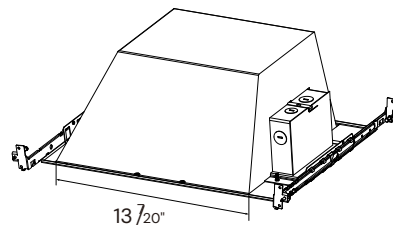
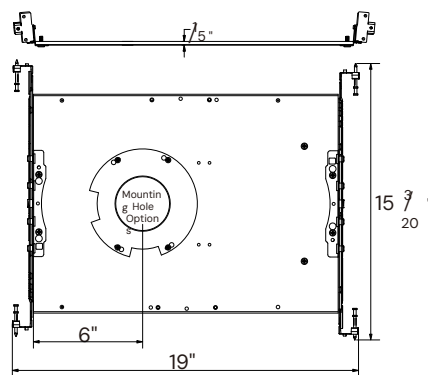


New Construction-Housing Insulation Kit (IC)

An IC-rated housing frame kit allows placement of 3inch LED downlight in direct contact with insulation.

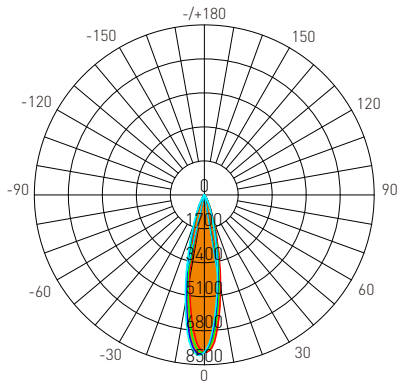


Pre-install LED
Emergency Driver
Available.



PHOTOMETRY

3" Round / 19W / 3000K / 24°



Lumens: 1687.3 Lm
Watts: 19 W
LPW: 89.60 Lm/W
CCT: 3000K

UNIT: cd
C0/180,22.6°
C30/210,22.5°
C60/240,22.6°
C90/270,22.5°

Zonal Flux Diagram

T	C0	C45	C90	C135	C180
10	4692	4157	3789	3903	4333
20	1363	1157	1005	1035	1168
30	307.5	269.5	220.7	207.2	240.7
40	14.08	14.54	14.73	14.24	13.66
50	4.167	4.152	4.343	4.449	4.585
60	2.910	3.014	3.282	3.277	3.334
70	1.667	1.879	2.086	2.094	1.894
80	0.4451	0.4716	0.6493	0.5151	0.4606
90	0.0311	0.0135	0.0317	0.0091	0.0223
100	0.0266	0.0450	0.0227	0.0453	0.0444
110	0.2036	0.2749	0.3032	0.3265	0.0979
120	1.077	1.306	1.511	1.500	0.5293
130	3.854	4.383	4.893	4.808	2.099
140	8.471	9.035	9.516	9.460	6.040
150	11.99	12.27	12.49	12.45	10.65
160	13.21	13.05	13.10	12.98	12.59
170	11.69	11.24	11.06	10.99	11.16
180	9.987	10.21	10.16	10.30	10.01
DEG	LUMINOUS INTENSITY:cd				

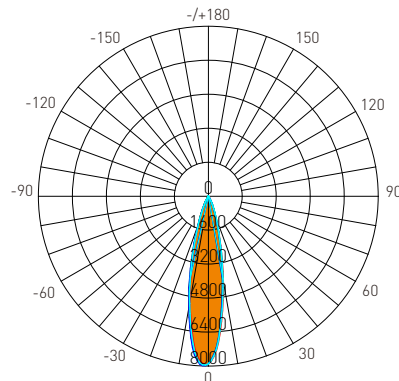
Zonal Lumens

T	φ total
0-10	576.8
10-20	1287
20-30	1588
30-40	1652
40-50	1658
50-60	1661
60-70	1664
70-80	1665
80-90	1665
90-100	1665
100-110	1665
110-120	1666
120-130	1667
130-140	1671
140-150	1677
150-160	1683
160-170	1686
170-180	1687
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	180	638
80	744	1063
75	1112	1426
70	1414	1735
65	1711	1995
60	1689	1866
55	1756	1832
50	1881	1921
45	2314	2250

3" Square / 19W / 3000K / 24°



Lumens: 1609.3 Lm
Watts: 19 W
LPW: 85.64 Lm/W
CCT: 3000K

UNIT: cd
C0/180,22.5°
C30/210,22.5°
C60/240,22.8°
C90/270,22.5°

Zonal Flux Diagram

T	C0	C45	C90	C135	C180
10	4048	3864	3957	4441	5003
20	990.0	983.0	1048	1205	1367
30	188.4	199.2	211.4	234.7	273.7
40	11.87	15.51	12.83	17.25	14.22
50	7.034	7.424	7.276	7.575	7.011
60	6.750	7.004	7.307	8.800	6.668
70	1.541	2.531	1.626	3.081	1.640
80	0.4825	0.4814	0.6059	0.4547	0.4580
90	0.0315	0.0225	0.0454	0.0226	0.0270
100	0.0270	0.0496	0.0316	0.0406	0.0540
110	0.2110	0.2483	0.2026	0.1987	0.0990
120	1.222	1.277	1.199	1.043	0.3785
130	4.310	4.431	4.330	3.869	1.564
140	8.860	8.974	8.882	8.419	5.014
150	11.92	11.94	11.92	11.68	9.680
160	12.72	12.49	12.62	12.55	12.14
170	10.70	10.46	10.70	10.82	11.03
180	9.356	9.628	9.623	9.696	9.401
DEG	LUMINOUS INTENSITY:cd				

Zonal Lumens

T	φ total
0-10	198.8
10-20	656.9
20-30	1051
30-40	1188
40-50	1209
50-60	1215
60-70	1219
70-80	1221
80-90	1221
90-100	1221
100-110	1221
110-120	1222
120-130	1224
130-140	1227
140-150	1230
150-160	1234
160-170	1236
170-180	1237
UNIT: lm	

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	140	554
80	619	774
75	849	911
70	1004	1055
65	2826	2900
60	3007	3243
55	2626	2749
50	2437	2512
45	2299	2348

	ALCON LIGHTING	LUTRON	LEVITON®
0-10 V	2100 2101 2102	Diva DDTV	IP-710-DL

COLOR TEMPERATURE GUIDE

