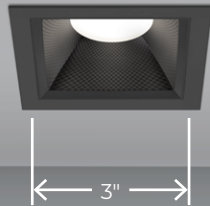


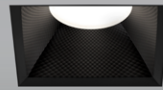
AERA 3" DEEP DOWNLIGHT SQUARE RECESSED



Aera Deep Prism Flanged Trim



Aera Deep Smooth Trimless



Aera Deep Smooth Flanged Trim



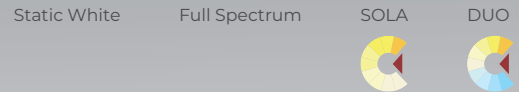
Aera Deep luminaires introduce a unique deep baffle feature to the Aera family, available with a prism or smooth texture. This depth allows for an exceptionally low glare quality of light and a visually quiet ceiling. Aera Deep comes in square or round models and 2" or 3" apertures. The high-performance family displays a precise coupling of optic and trim and can be installed as IC-rated, non-IC-rated, or Chicago Plenum-rated types.

Beam Angles



Low UGR < 10 in 15°, 25°, 35°, and 50° beams

Light Source

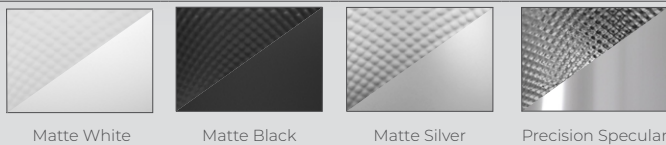


Performance

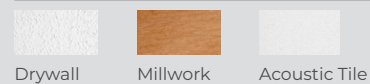
LUMEN OUTPUT ¹	WATTS	EFFICACY
1132 lm	10 W	113 lm/W
1545 lm	14 W	110 lm/W
2135 lm	20W	107 lm/W

¹ Lumen packages are assuming 3500K, 80 CRI, 35° beam, with LSDL lens option.

Baffle Finish



Ceiling Types



Plenum Clearance

As low as 3 3/8"



Aera Downlight Family (Refer to other spec sheets)

Downlight



2" / 3" / 4"
Round / Square
Recessed Adjustable



2" / 3" / 4"
Round / Square
Recessed



2" / 3" / 4"
Round / Square
Recessed Wall Wash

Deep



2" / 3"
Round / Square
Recessed

Multi-aperture



2" / 3" / 4"
Round / Square
Recessed Adjustable



2" / 3" / 4"
Round / Square
Recessed



2" / 3" / 4"
Round / Square
Recessed Wall Wash

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Lumenwerx reserves the right to modify product specifications without notification.

AERA3-DEEP-DOWNLIGHT-SQUARE-RECESSED-SPEC-REV0 February 19, 2024



AERA 3" DEEP DOWNLIGHT SQUARE RECESSED



Project: _____

Type: _____

Order Guide

1 - Housing (Example: AE3DPSPSR-TRM-SW-OF-ASB-120V-10W-D1)

LUMINAIRE ID ¹	TRIM STYLE	LIGHT SOURCE	INSTALLATION TYPE	MOUNTING OPTION ⁴
AE3DPSPSR - Aera 3" Deep Prism Square Recessed AE3DPSSR - Aera 3" Deep Smooth Square Recessed ¹ Round recessed also available. Consult other spec sheets.	TRM - Flanged trim TLMMP - Trimless drywall mudplate TLMW ² - Trimless millwork ² For remodel (RM) installation type, TLMW adapter must be installed from above the ceiling or before ceiling is installed.	SW - Static white FS - Full spectrum SOLA - Dim-to-warm single channel control DUO - Tunable white 2-channel control	OF - Open Frame Type Non-IC IC ³ - Type-IC RM - Remodel Type Non-IC CP ³ - Chicago Plenum Type-IC (CCEA) AT ³ - Airtight Type-IC ³ Not available with 19 W output and higher.	ASB ⁵ - Adjustable standard bar hangers FMB ⁵ - Flush mount bars ACB ⁵ - Adjustable commercial bar hangers AHC ⁵ - Adjustable hat channel bars NA - None ⁴ See page 4 for more details. ⁵ Not available with RM installation type.
VOLTAGE	WATTAGE ⁷	DIMMING ⁹		
120V - 120V 277V - 277V UNV - 120V-277V 347V ⁶ - 347V ⁶ Available with RD1 driver only. Please consult factory.	10W - 10 W output, up to 1132 lm 14W - 14 W output, up to 1545 lm 20W ⁸ - 20 W output, up to 2135 lm ⁷ Lumen outputs are reduced with full spectrum, consult factory. ⁸ Not available with IC/CP/AT.	INTEGRAL DI - 1% 0-10V ELV ¹⁰ - ELV 120V TRI ¹⁰ - TRIAC 120V DA ^{11,10} - DALI ELD1 ¹¹ - eldoLED 1% ECOdrive 0-10V ELDO ¹¹ - eldoLED 0.1% SOLOdrive 0-10V PEQO ^{12,13} - Lutron Hi-lume Premier 0.1% EcoSystem ⁹ PoE (Power-over-Ethernet) compatible. Consult factory for details. ¹⁰ Available with 120V only. ¹¹ Not available with RM installation type. ¹² On-site commissioning is required. ¹³ Available with OF installation type only.		
	SOLA ⁸ 19W - 19 W output, up to 1205 lm DUO ⁸ 19W - 19 W output, up to 1355 lm	SOLA SD1 - Single 0-10V input SELV ¹⁰ - ELV 120V STRI ¹⁰ - TRIAC 120V	REMOTE ¹⁴ RD1 - 1% 0-10V RELV ¹⁵ - ELV 120V RTRI ¹⁵ - TRIAC 120V RLDE1 ¹⁶ - Lutron Hi-lume 1% Eco RDA ¹⁶ - DALI RELD1 - eldoLED 1% ECOdrive 0-10V RELD0 - eldoLED 0.1% SOLOdrive 0-10V RPEQO ¹⁶ - Lutron Hi-lume Premier 0.1% EcoSystem +EB ¹⁷ - Emergency battery ¹⁴ A remote driver box is provided, see page 5 for details. ¹⁵ Available with 120V only. ¹⁶ On-site commissioning is required. ¹⁷ For emergency battery, code will be like the following example: RD1+EB	
		SOLA SD1 - Single 0-10V input SELV ¹⁰ - ELV 120V STRI ¹⁰ - TRIAC 120V	SOLA RSD1 - Single 0-10V input RSELV ¹⁵ - ELV 120V RSTRI ¹⁵ - TRIAC 120V DUO RDMX ¹⁶ - DMX RDDA ¹⁶ - DALI DT6 RDDA8 ¹⁶ - DALI DT8 RDD1 - Dual 0-10V input for CCT/intensity RPSQO ¹⁶ - Lutron T-Series 1% tunable white	

2 - Light & Baffle (Example: AE3DPSPSRB-SW-10W-15DEG-2STP-90CRI-27K-LSDL-TRM-FMWH-FMWH)

LUMINAIRE ID	LIGHT SOURCE	WATTAGE ¹⁸	BEAM	COLOR QUALITY	CRI
	Specify same as Housing	Specify same as Housing			
AE3DPSPSRB - Aera 3" Deep Prism Square Recessed AE3DPSSRB - Aera 3" Deep Smooth Square Recessed	SW - Static white FS - Full spectrum	10W - 10 W output, up to 1132 lm 14W - 14 W output, up to 1545 lm 20W ¹⁹ - 20 W output, up to 2135 lm ¹⁸ Lumen outputs are reduced with full spectrum, consult factory. ¹⁹ Not available with IC/CP/AT.	15DEG - 15° Narrow spot 25DEG - 25° Spot 35DEG - 35° Narrow flood 50DEG - 50° Wide flood	2STP ²⁰ - 2 Step MacAdam Ellipse 3STP - 3 Step MacAdam Ellipse ²⁰ Not available with full spectrum.	90CRI ²¹ - 90 CRI 95CRI - 95 CRI 80CRI ²¹ - 80 CRI ²¹ Not available with full spectrum
	SOLA - Dim-to-warm single channel control DUO - Tunable white 2-channel control	SOLA ¹⁹ 19W - 19 W output, up to 1205 lm DUO ¹⁹ 19W - 19 W output, up to 1355 lm	25DEG - 25° Spot 35DEG - 35° Narrow flood 60DEG - 60° Wide flood	3STP - 3 Step MacAdam Ellipse	90CRI - 90 CRI
COLOR TEMP.	ACCESSORY	TRIM STYLE	BAFFLE FINISH	TRIM FLANGE FINISH	
	See page 5 for details	Specify same as Housing		Specify NA for Trimless	
27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K SOLA 30K18K - 3000K to 1800K 27K18K - 2700K to 1800K DUO 65K27K - 6500K to 2700K 50K27K - 5000K to 2700K	At light element LSDL - Soft diffused lens, Solite LFDL - Frosted diffused lens	TRM - Flanged trim TLMMP - Trimless drywall mudplate TLMW ²² - Trimless millwork ²² For remodel (RM) installation type, TLMW adapter must be installed from above the ceiling or before ceiling is installed.	FMWH - Matte white FMBK - Matte black FMSL - Matte silver FPSPC - Precision specular	FMWH - Matte white FMBK - Matte black NA - Not applicable	



AERA 3" DEEP DOWNLIGHT SQUARE RECESSED



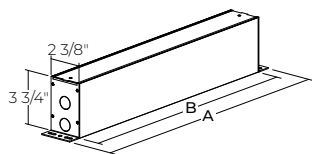
Housing

INSTALLATION TYPES	
OF - Open Frame Type Non-IC	IC - Type-IC
CP - Chicago Plenum Type-IC (CCEA) AT - Airtight Type-IC	
RM - Remodel Type Non-IC	
Integral	Remote

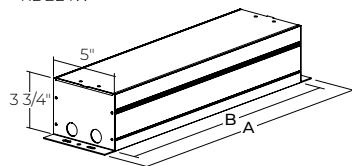
- For height dimension C, see the PLENUM CLEARANCE & CUT-OUT DIMENSIONS table below.
 - For OF, IC, CP, and AT installation types with remote dimming, a remote driver box is provided.

REMOTE DRIVER BOX

RDB8 / RDB18 / RDB24

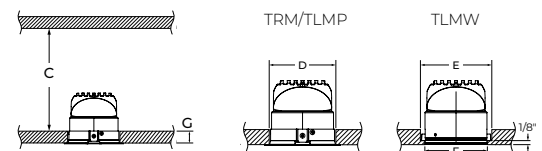


RDB24W



	RDB8	RDB18	RDB24	RDB24W
A	10"	20"	26"	26"
B	8"	18"	24"	24"
DRIVER	RD1 - 1% 0-10V RELV - ELV 120V RTRI - TRIAC 120V RPEQ0 - Lutron Hi-lume Premier 0.1% EcoSystem SOLA RSD1 - Single 0-10V input RSELV - ELV 120V RSTRI - TRIAC 120V	RLDE1 - Lutron Hi-lume 1% Eco RDA - DALI RELD1 - eldoLED 1% ECOdrive 0-10V RELD0 - eldoLED 0.1% SOLOdrive 0-10V	Emergency battery (+EB) with the following driver options. RD1+EB - 1% 0-10V RELV+EB - ELV 120V RTRI+EB - TRIAC 120V DUO RDMX - DMX RDDA - DALI DT6 RDDA8 - DALI DT8 RDD1 - Dual 0-10V input for CCT/intensity RPSQ0 - Lutron T-Series 1% tunable white	Emergency battery (+EB) with the following driver options. RLDE1+EB - Lutron Hi-lume 1% Eco RDA+EB - DALI RELD1+EB - eldoLED 1% ECOdrive 0-10V RELD0+EB - eldoLED 0.1% SOLOdrive 0-10V

PLENUM CLEARANCE & CUT-OUT DIMENSIONS



		PLENUM CLEARANCE HEIGHT	
		REMOTE & INTEGRAL	
		D1/ELV/TRI	LDE1/DA /ELD1/ELDO/PEQ0
C	OF	2 5/8" (FMB) 4 1/8"	6"
	IC	2 5/8" (10 W - FMB) 4" (10 W - ASB, ACB, AHC) 4" (14 W) 6 3/8" (20 W)	6 3/8"
		CP /AT	4 7/8" (14 W) 6 7/8" (20 W)
	RM	4 1/8"	NA
CUT-OUT DIMENSIONS			
D	TRM/ TLMP	3 1/2" x 3 1/2"	
E	TLMW	3 1/2" x 3 1/2"	
F		3 1/16" x 3 1/16" with 1/8" lip	
MAXIMUM CEILING THICKNESS			
G	TRM/ TLMP	1 3/8"	
	TLMW	5/8"	



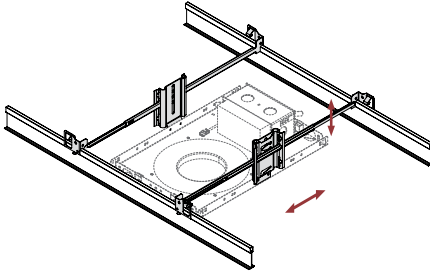
AERA 3" DEEP DOWNLIGHT SQUARE RECESSED



Housing

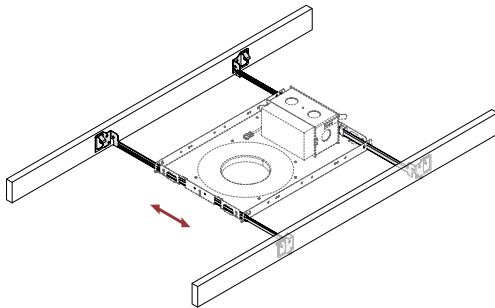
MOUNTING OPTIONS

ASB - Adjustable Standard Bar Hangers



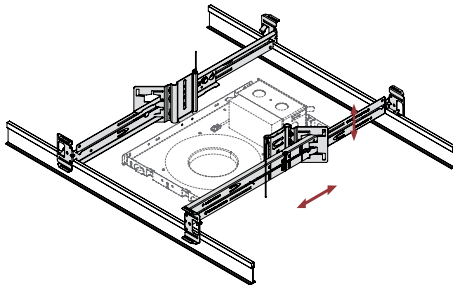
Adjustable Standard Bar hangers can be used in both commercial and residential applications and are adjustable to various heights in both Grid Ceiling and Drywall mounting. ASB hangers are less rigid and versatile than ACB hangers.

FMB - Flush Mount Bars



Flush Mount Bars are best used in residential applications, fitting snug to the surface and suitable for Wood, Metal, and Drywall mounting. The flush mounted bars are static and can't be adjusted.

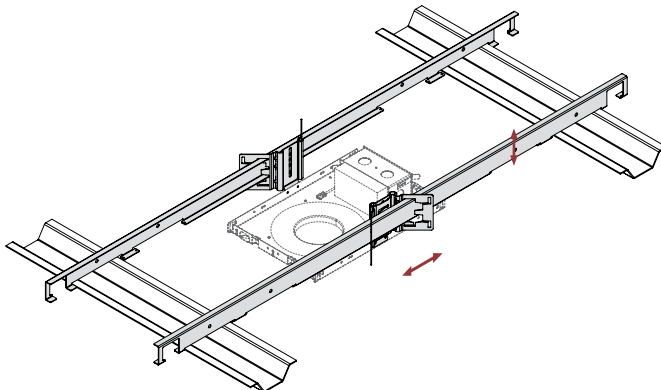
ACB - Adjustable Commercial Bar Hangers



Adjustable Commercial Bar hangers can be used in both commercial and residential applications and are by far the most versatile mounting bar we offer with its adjustability to various heights. ACB hangers are suitable for Grid Ceiling, Drywall, Metal, Wood and Frame mounting.

- Extremely rigid
- Fits into C-Channel notches in a Butterfly Bracket

AHC - Adjustable Hat Channel Bars

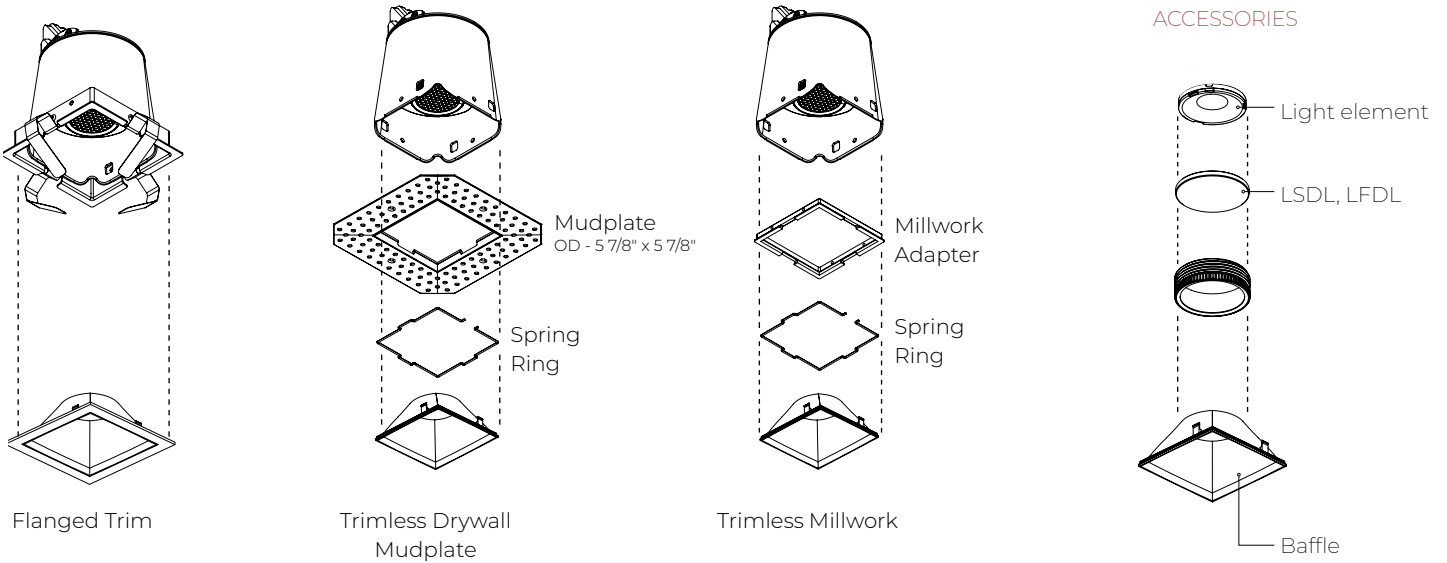


Adjustable Hat Channel bars can be used in both commercial and residential applications and come with a butterfly clip to adjust to various heights. AHC bars can be hung downward by 90 degrees in vertical position, and once wired, can be shifted onto the horizontal mounting plane. AHC bars are suitable for both Drywall and wood ceiling applications.

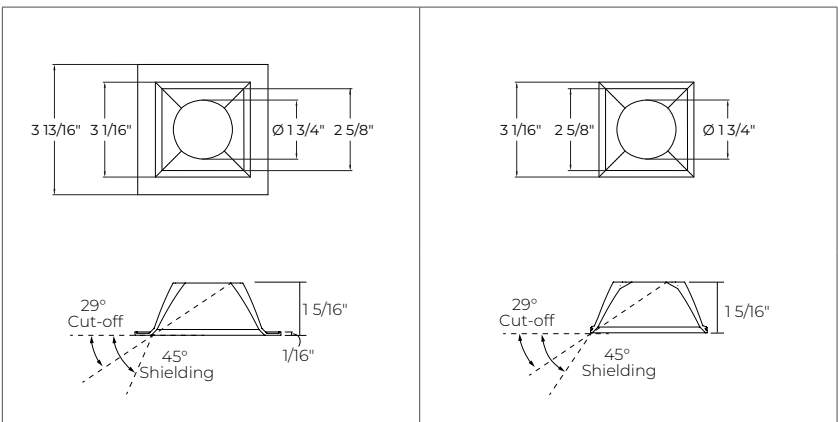
AERA 3" DEEP DOWNLIGHT SQUARE RECESSED



Light & Baffle



TRM Flanged Trim	TLMP/TLMW Trimless Drywall Mudplate /Trimless Millwork
<p>■ Baffle finish</p> <p>■ Trim flange finish</p>	

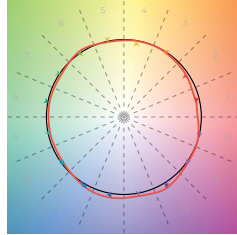


AERA 3" DEEP DOWNLIGHT SQUARE RECESSED



Color Quality

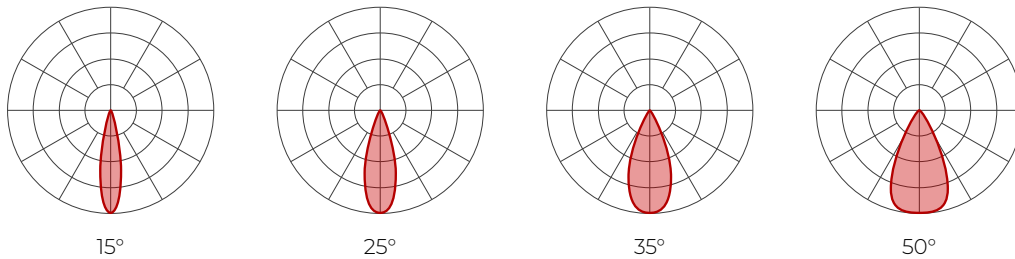
COLOR QUALITY - 3500K	
TM-30 R _r	90
TM-30 R _g	100
CRI	90
R9	> 50



Photometrics

STATIC WHITE

Values calculated based on 3500K, matte white baffle, and LSDL lens option.



Delivered lumens

CRI	90 CRI				95 CRI				80 CRI			
	15°	25°	35°	50°	15°	25°	35°	50°	15°	25°	35°	50°
10 W	987	1053	1058	937	760	811	815	721	1056	1127	1132	1003
14 W	1347	1438	1444	1280	1037	1107	1112	986	1441	1539	1545	1370
20 W	1861	1986	1995	1768	1433	1529	1536	1361	1991	2125	2135	1892

Efficacy

CRI	90 CRI				95 CRI				80 CRI			
	15°	25°	35°	50°	15°	25°	35°	50°	15°	25°	35°	50°
10 W	99	105	106	94	76	81	81	72	106	113	113	100
14 W	96	103	103	91	74	79	79	70	103	110	110	98
20 W	93	99	100	88	72	76	77	68	100	106	107	95

MULTIPLIERS

Please follow the multiplier tables to ensure correct lumen value. Beams, CCT, trim styles, baffle colors and accessories will change the lumen value.

CCT		TRIM STYLE		BAFFLE FINISH		ACCESSORIES * (At light element)	
2700K	0.9	Flanged trim	1	Matte White	1	LSDL - Soft diffused lens, Solite	1
3000K	0.95	Trimless	1	Matte Black	0.95	LFDL - Frosted lens	0.8
3500K	1			Matte Silver	0.98		
4000K	1.05			Precision Specular	1		

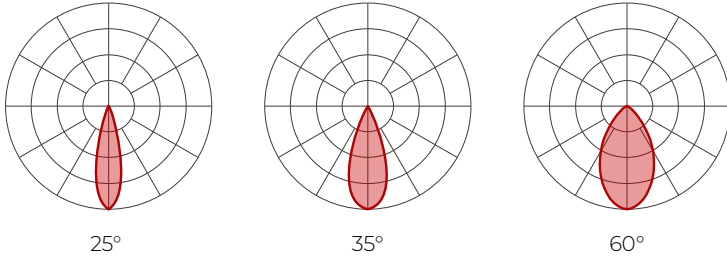
AERA 3" DEEP DOWNLIGHT SQUARE RECESSED



Photometrics

SOLA/DUO

Values calculated based on matte white baffle and LSDL lens option.



SOLA

BEAM		25°		35°		60°	
		lm	lm/W	lm	lm/W	lm	lm/W
19 W	3000K	1150	61	1205	63	1100	58
	2700K	1150	61	1205	63	1100	58

DUO

BEAM		25°		35°		60°	
		lm	lm/W	lm	lm/W	lm	lm/W
19 W	6500K	1285	68	1355	71	1190	63
	5000K	1285	68	1355	71	1190	63
	2700K	1050	55	1090	57	960	51

MULTIPLIERS

Please follow the multiplier tables to ensure correct lumen value. Beams, CCT, trim styles, baffle colors and accessories will change the lumen value.

TRIM STYLE	
Flanged trim	1
Trimless	1

BAFFLE FINISH	
Matte White	1
Matte Black	0.95
Matte Silver	0.98
Precision Specular	1

ACCESSORIES * (At light element)	
LSDL - Soft diffused lens, Solite	1
LFDL - Frosted lens	0.8

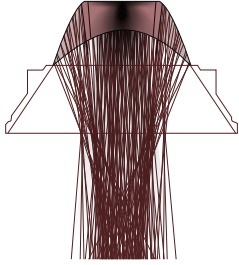
AERA 3" DEEP DOWNLIGHT SQUARE RECESSED



Technical Specifications

OPTIC

XPoint™ Refraction Technology optics provide precise optical control in a remarkably compact form. Micro optical paths from the chip on board converge and then disperse in precise beam angles, resulting in a crisp and exacting light quality.



LIGHT SOURCE

Static white

Compact COB (Chip-On-Board) LED module, available in 2700K, 3000K, 3500K and 4000K with a choice of 80 CRI, 90 CRI, or 95 CRI, with elevated R9 value for 90 CRI and above. Color consistency is maintained to within 2 SDCM. All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

Full spectrum

The full spectrum LED option offers improved color particularly in the cyan region which helps increase Cyanosis Observation Index (COI) and assist in regulating circadian rhythms. The cyan region in full spectrum LED is richer at the 480 nm range.

Chromawerx SOLA

Chromawerx SOLA is single-channel control that dims output while warming the color temperature in a pre-determined relationship. Two color temperature range options are offered: 3000K to 1800K, and 2700K to 1800K. A simple analog control adjusts a specially populated LED array to emulate the effect of dimming a filament source.

Chromawerx DUO

Chromawerx DUO offers a two-channel control system which uses analog or digital protocols for synchronous control of both cool to warm LED arrays - maintaining a CRI above 90. Two color temperature range options are offered: 6500K to 2700K, and 5000K to 2700K. The range of color DUO offers is useful for entraining circadian rhythms, stimulating alertness, and compensating for jet lag among other applications. The Chromawerx drivers are programmed to limit maximum light output and power usage across all color temperatures. When paired with DALI drivers (DDA/DDA8), color tuning follows a linear dimming curve.

ELECTRICAL

Unless otherwise specified, dimming down to 1%. At maximum driver load: efficiency>84%, PF>0.9, THD<20%.

Integral: 0-10V, ELV, TRIAC, Lutron Hi-Lume EcoSystem, DALI, eldoLED 0.1% SOLOdrive 0-10V, eldoLED 1% ECOdrive 0-10V

Remote: 0-10V, ELV, TRIAC, Lutron Hi-Lume EcoSystem, DALI, eldoLED 0.1% SOLOdrive 0-10V, eldoLED 1% ECOdrive 0-10V, DMX, Lutron T-series (tunable white)

Emergency battery options: Remotely-installed, long-life, high-temperature, maintenance-free, Bodine Lithium-Ion battery pack with self-test functionality, test switch and charge indicator. IOTA and Fulham options available upon request. Minimum of 90 minutes operation, and recharge time of 24 hours. For fixtures less than 10 W, the battery provides 6 W of emergency light output. For fixtures 10 W and over, the battery provides 10 W.

PoE

Depending on the PoE manufacturer selected, Lumenwerx will install the node in factory as either integral to the luminaire or as a remote module. Factory programming of the PoE node may or may not enable the following functionalities: lumen package, DUO (tunable white), QUADRO (RGBW), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

CONSTRUCTION

Housing

For new construction, 20 gauge powder coated steel. Open frame, type-IC, or Chicago Plenum (CCEA) rated. 18 gauge galvanized steel junction box with ½" trade size knockouts. Adjustable hanger bars and butterfly brackets are included. Adjustable commercial hat channel and flush mounted brackets are also available.

Light element

LED module: Integral COB module. 90 CRI and 2 SDCM, Standard with options of 80 CRI, or 95 CRI. L80 > 60,000 hours.

XPoint™ Refraction Technology optic: Micro optical paths from the chip on board converge and then disperse in precise beam angles, resulting in a crisp and exacting light quality.

Thermal management: Die-cast aluminum heat sink to maximize thermal dissipation.

Baffle: Polycarbonate plastic with integrated clips

Trim style: Trimmed and trimless with mudplate or millwork adapter

WEIGHT

Open frame: 4.3 lbs - 1.9 kg

Type-IC: 4.5 lbs - 2.0 kg

Chicago Plenum: 7.5 lbs - 3.4 kg

Remodel: 3.25 lbs - 1.5 kg

AERA 3" DEEP DOWNLIGHT SQUARE RECESSED



ACCESSORIES



Soft diffused
lens, Solite



Frosted
diffused lens

ENVIRONMENT

Ambient temperature at fixture location shall be within 0°C/32°F - 25°C/77°F, indoor dry or damp as well as outdoor damp use (canopies or marquees).

CERTIFICATIONS

ETL: Rated for indoor dry/damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

Chicago Plenum: City of Chicago approved (CCEA) when specified with CP installation type option.

IC rated: Suitable for direct contact with insulation when specified with IC, CP or AT installation type options.

WARRANTY

Lumenwerx provides a five-year limited warranty on electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. Lumenwerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated in accordance with our specifications. Other limitations apply, please refer to the full warranty on our website.