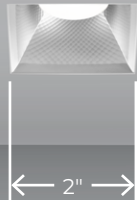


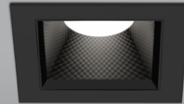
AERA 2" DEEP DOWNLIGHT SQUARE RECESSED



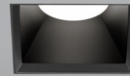
Aera Deep Prism Trimless



Aera Deep Prism Flanged Trim



Aera Deep Smooth Trimless



Aera Deep Smooth Flanged Trim



← 2" →

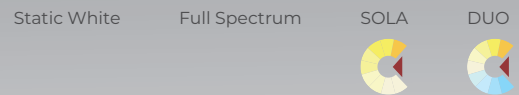
Aera Deep luminaires introduce a unique deep baffle feature to the Aera family, available with a prism or smooth texture. This depth allows for an exceptionally low glare quality of light and a visually quiet ceiling. Aera Deep comes in square or round models and 2" or 3" apertures. The high-performance 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

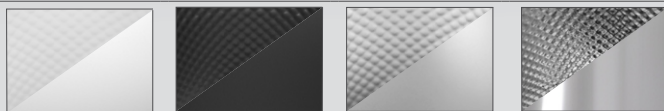


Performance

LUMEN OUTPUT ¹	WATTS	EFFICACY
714 lm	7 W	102 lm/W
961 lm	10 W	96 lm/W

¹ Lumen packages are assuming 3500K, 80 CRI, 25° beam, with LSDL lens option.

Baffle Finish



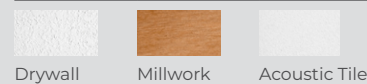
Matte White

Matte Black

Matte Silver

Precision Specular

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.

AERA2-DEEP-DOWNLIGHT-SQUARE-RECESSED-SPEC-REV0 February 19, 2024



AERA 2" DEEP DOWNLIGHT SQUARE RECESSED



Project: _____

Type: _____

Order Guide

1 - Housing (Example: AE2DPSSR-TRM-SW-OF-ASB-120V-7W-D1)

LUMINAIRE ID ¹	TRIM STYLE	LIGHT SOURCE	INSTALLATION TYPE	MOUNTING OPTION ⁴
AE2DPSSR - Aera 2" Deep Prism Square Recessed AE2DPSSR - Aera 2" Deep Smooth Square Recessed ¹ Round recessed also available. Consult other spec sheets.	TRM - Flanged trim TLMP - 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 8 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.	7W - 7 W output, up to 714 lm 10W ⁸ - 10 W output, up to 961 lm ⁷ Lumen outputs are reduced with full spectrum, consult factory. ⁸ Not available with IC/CP/AT.	INTEGRAL D1 - 1% 0-10V ELV ¹⁰ - ELV 120V TRI ¹⁰ - TRIAC 120V ⁹ PoE (Power-over-Ethernet) compatible. Consult factory for details. ¹⁰ Available with 120V only.	REMOTE ¹¹ RD1 - 1% 0-10V RELV ¹² - ELV 120V RTRI ¹² - TRIAC 120V RLDEI ¹³ - Lutron Hi-lume 1% Eco ¹¹ A remote driver box is provided, see page 3 for details. ¹² Available with 120V only. ¹³ On-site commissioning is required. ¹⁴ For emergency battery, code will be like the following example: RD1+EB
	SOLA ⁸ 10W - 10 W output, up to 525 lm DUO ⁸ 8W - 8 W output, up to 500 lm	SOLA SDI - Single 0-10V input SELV ¹⁰ - ELV 120V STRI ¹⁰ - TRIAC 120V	SOLA RSD1 - Single 0-10V input RSELV ¹² - ELV 120V RSTRI ¹² - TRIAC 120V DUO RD1 ¹³ - DALI RELD1 - eldoLED 1% ECOdrive 0-10V RELD0 - eldoLED 0.1% SOLOdrive 0-10V +EB ¹⁴ - Emergency battery DUO RD1 ¹³ - DALI RDDA ¹³ - DALI DT6 RDDA8 ¹³ - DALI DT8 RDD1 - Dual 0-10V input for CCT/intensity RPSQ0 ¹³ - Lutron T-Series 1% tunable white

2 - Light & Baffle (Example: AE2DPSSRB-SW-7W-15DEG-2STP-90CRI-27K-LSDL-TRM-FMWH-FMWH)

LUMINAIRE ID	LIGHT SOURCE Specify same as Housing	WATTAGE ¹⁵ Specify same as Housing	BEAM	COLOR QUALITY	CRI
AE2DPSSRB - Aera 2" Deep Prism Square Recessed AE2DPSSRB - Aera 2" Deep Smooth Square Recessed	SW - Static white FS - Full spectrum	7W - 7 W output, up to 714 lm 10W ¹⁶ - 10 W output, up to 961 lm ¹⁵ Lumen outputs are reduced with full spectrum, consult factory. ¹⁶ Not available with IC/CP/AT.	15DEG - 15° Narrow spot 25DEG - 25° Spot 35DEG - 35° Narrow flood 50DEG - 50° Wide flood	2STP ¹⁷ - 2 Step MacAdam Ellipse 3STP - 3 Step MacAdam Ellipse ¹⁷ Not available with full spectrum.	90CRI ¹⁸ - 90 CRI 95CRI - 95 CRI 80CRI ¹⁸ - 80 CRI ¹⁸ Not available with full spectrum.
	SOLA - Dim-to-warm single channel control DUO - Tunable white 2-channel control	SOLA ¹⁶ 10W - 10 W output, up to 525 lm DUO ¹⁶ 8W - 8 W output, up to 500 lm	25DEG - 25° Spot 35DEG - 35° Narrow flood 60DEG - 60° Wide flood	3STP - 3 Step MacAdam Ellipse	90CRI - 90 CRI

COLOR TEMP.	ACCESSORY See page 5 for details	TRIM STYLE Specify same as Housing	BAFFLE FINISH	TRIM FLANGE FINISH 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 TLMP - Trimless drywall mudplate TLMW ¹⁹ - Trimless millwork ¹⁹ 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 2" DEEP DOWNLIGHT SQUARE RECESSED



Housing

INSTALLATION TYPES

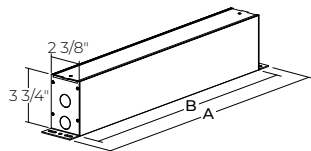
OF - Open Frame Type Non-IC	IC - Type-IC	CP - Chicago Plenum Type-IC (CEEA) AT - Airtight Type-IC

RM - Remodel Type Non-IC	
Integral	Remote

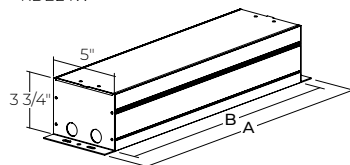
- For height dimension C, see the PLENUM CLEARANCE & CUT-OUT DIMENSIONS table below.
 - For OF, IC, CP, and AT installation types with remote dimming, a remote driver box is provided.

REMOTE DRIVER BOX

RDB8 / RDB18 / RDB24

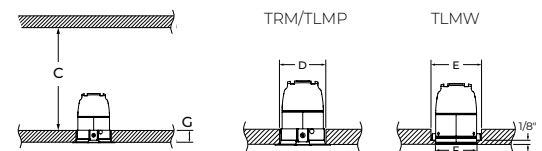


RDB24W



	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 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



C	PLENUM CLEARANCE HEIGHT				
	REMOTE & INTEGRAL			INTEGRAL	REMOTE
	OF	IC	CP/AT	RM	RM
	4"	4"	4"	4"	3 3/8"

D	CUT-OUT DIMENSIONS	
	TRM/TLMP	2 1/2" x 2 1/2"
	TLMW	2 1/2" x 2 1/2"
F		2 1/16" x 2 1/16" with 1/8" lip

G	MAXIMUM CEILING THICKNESS	
	TRM/TLMP	1"
	TLMW	5/8"



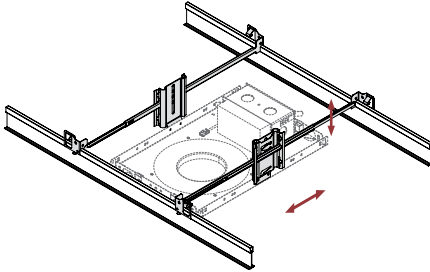
AERA 2" DEEP DOWNLIGHT SQUARE RECESSED



Housing

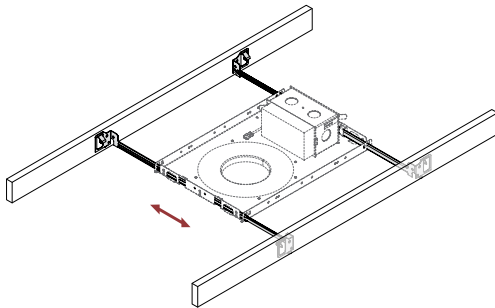
MOUNTING OPTIONS

ASB - Adjustable Standard Bar Hangers



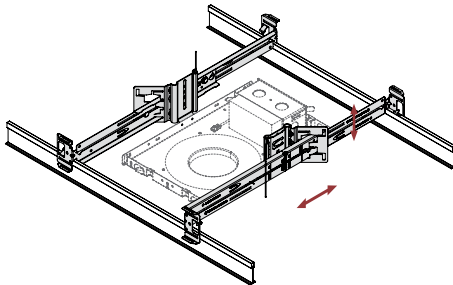
Adjustable Standard Bar hangers can be used in both commercial and residential applications and are adjustable to various heights in both Grid Ceiling and Drywall mounting. ASB hangers are less rigid and versatile than ACB hangers.

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.

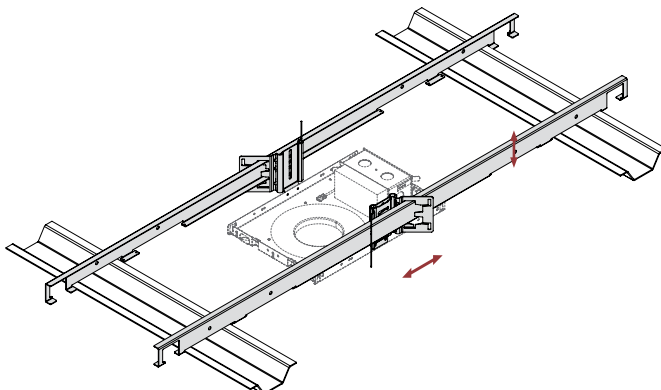
ACB - Adjustable Commercial Bar Hangers



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

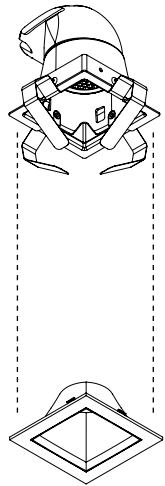


Adjustable Hat Channel bars can be used in both commercial and residential applications and come with a butterfly clip to adjust to various heights. AHC bars can be hung downward by 90 degrees in vertical position, and once wired, can be shifted onto the horizontal mounting plane. AHC bars are suitable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

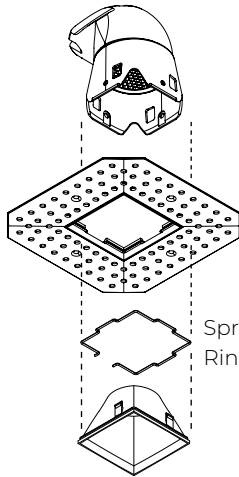
AERA 2" DEEP DOWNLIGHT SQUARE RECESSED



Light & Baffle



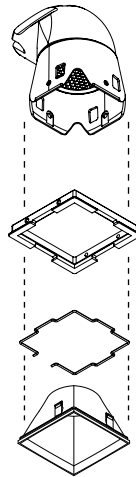
Flanged Trim



Trimless Drywall
Mudplate

Mudplate
OD - 5" x 5"

Spring
Ring

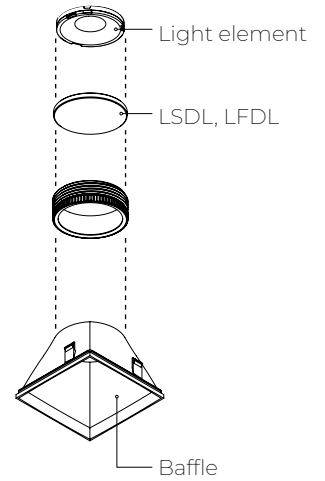


Trimless Millwork

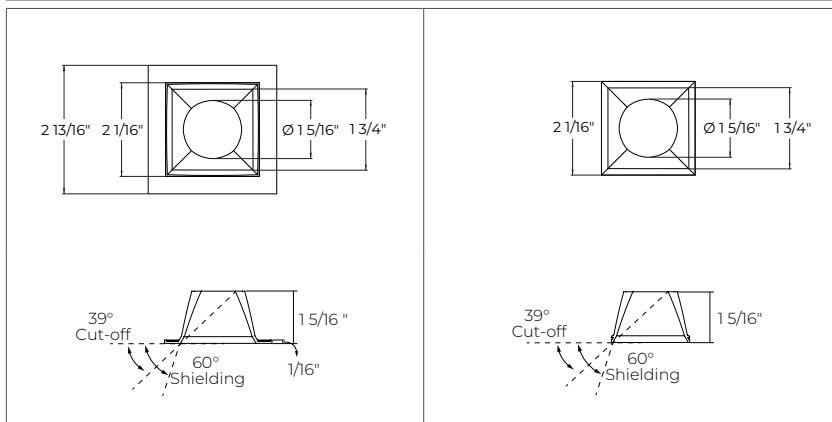
Millwork
Adapter

Spring
Ring

ACCESSORIES



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



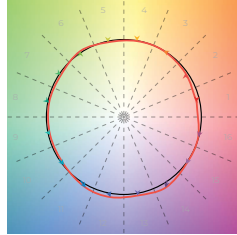
AERA 2" DEEP DOWNLIGHT SQUARE RECESSED



Color Quality

COLOR QUALITY - 3500K

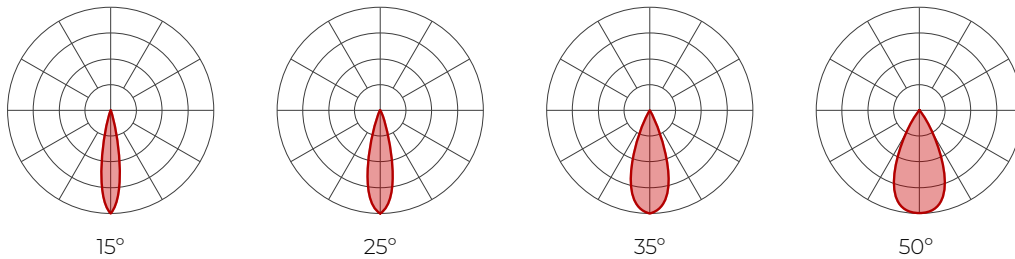
TM-30 Rr	91
TM-30 Ra	100
CRI	90
R9	> 50



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°
7 W	611	667	659	632	470	514	507	487	654	714	705	676
10 W	822	898	887	850	633	691	683	655	880	961	949	910

Efficacy

CRI	90 CRI				95 CRI				80 CRI			
	15°	25°	35°	50°	15°	25°	35°	50°	15°	25°	35°	50°
7 W	87	95	94	90	67	73	72	70	93	102	101	97
10 W	82	90	89	85	63	69	68	65	88	96	95	91

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	Multiplier
2700K	0.9
3000K	0.95
3500K	1
4000K	1.05

TRIM STYLE	Multiplier
Flanged trim	1
Trimless	1

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

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

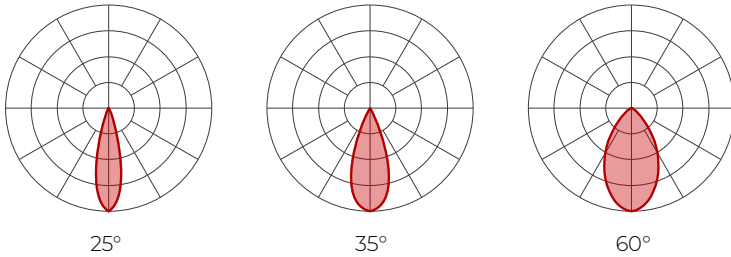
AERA 2" DEEP DOWNLIGHT SQUARE RECESSED



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
10 W	3000K	495	50	525	53	485	49
	2700K	495	50	525	53	485	49

DUO

BEAM		25°		35°		60°	
		lm	lm/W	lm	lm/W	lm	lm/W
8 W	6500K	500	63	485	61	440	55
	5000K	500	63	485	61	440	55
	2700K	430	54	420	53	355	44

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

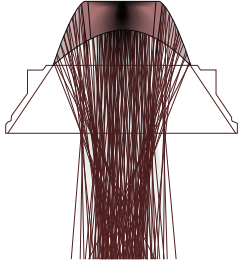
AERA 2" DEEP DOWNLIGHT SQUARE RECESSED



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

Remote: 0-10V, ELV, TRIAC, Lutron Hi-Lume 1% 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: 4.0 lbs - 1.8 kg

Type-IC: 6.5 lbs - 2.9 kg

Chicago Plenum: 6.5 lbs - 2.9 kg

Remodel: 2.25 lbs - 1.0 kg

AERA 2" 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.