





Aera Downlight Family (Refer to other spec sheets)

Downlight





Round / Sauare Recessed



Round / Sauare Recessed Wall Wash



Deep

Round / Square













Lumenwerx
Lumenwerk

Project:	
Туре:	

Order Guide

1 - Housing (Example: AE3DPRR-TRM-SW-OF-ASB-120V-10W-D1)

LUMINAIRE ID 1	TRIM STYLE	LIGHT SOURCE	INSTALLATION TYPE	MOUNTING OPTION 4
AE3DRR - Aera 3" Deep Round Recessed 'Square 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 ¹ 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 RDI 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. SOLA 8 19W - 19 W output, up to 1205 lm DUO 8 19W - 19 W output, up to 1355 lm	INTEGRAL D1 - 1% 0-10V ELV 10 - ELV 120V TRI 10 - TRIAC 120V DA 11,12 - DALI ELDI 11 - eldoLED 1% ECOdrive 0-10V ELDO 11 - eldoLED 0.1% SOLOdrive 0-10V PEQ0 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 SDI - 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 RPEQ0 16 - Lutron Hi-lume Premier 0.1% EcoSystem +EB 17 - Emergency battery 16 A remote driver box is provided, see page 5 for details. 16 Available with 120V only. 16 On-site commissioning is required. 17 For emergency battery, code will be like the following example: RD1+EB SOLA SOLA DUO RSD1 - Single 0-10V RDDA 16 - DALI DT6 RSELV 15 - ELV 120V RDDA 16 - DALI DT8 RSTRI 15 - TRIAC RDD1 - Dual 0-10V input for CCT/intensity RLD2 16 - Lutron DALI-2 digital

2 - Light & Baffle (Example: AE3DPPRRB-SW-10W-15DEG-2STP-90CRI-27K-LSDL-TRM-FMWH-FMWH)

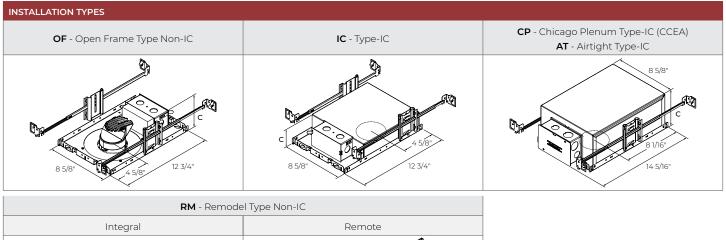
LUMINAIRE ID	LIGHT SOURCE Specify same as Housing	WATTAGE ¹⁸ Specify same as Housing	ВЕАМ	COLOR QUALITY	CRI
AE3DPRRB - Aera 3" Deep Prism Round Recessed AE3DSRRB - Aera 3" Deep Smooth Round Recessed	SW - Static white FS - Full spectrum	10W - 10 W output, up to 1132 Im 14W - 14 W output, up to 1545 Im 20W ¹⁹ - 20 W output, up to 2135 Im 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

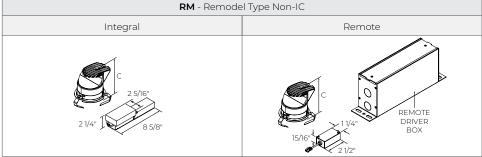
COLOR TEMP.	ACCESSORY See page 5 for details	TRIM STYLE Specify same as Housing	BAFFLE FINISH	TRIM FLANGE FINISH Specify NA for Trimless
27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K SOLA 30K18K - 3000K to 1800K 27K18K - 2700K to 1800K DUO 65K27K - 6500K to 2700K 50K27K - 5000K to 2700K	At light element LSDL - Soft diffused lens, Solite LFDL - Frosted diffused lens	TRM - Flanged trim TLMP - Trimless drywall mudplate TLMW 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





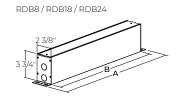
Housing

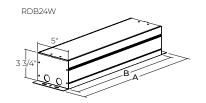




- For height dimension C, see the PLENUM CLEARANCE & CUT-OUT DIMENSIONS table below.
- $\hbox{- For OF, IC, CP, and AT installation types with remote dimming, a remote driver box is provided.}\\$

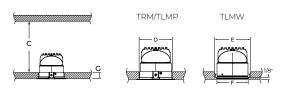
REMOTE DRIVER BOX





	RDB8	RDB18	RDB24	RDB24W
Α	10"	20"	26"	26"
В	8"	18"	24"	24"
DRIVER	RDI - 1% 0-10V RELV - ELV 120V RTRI - TRIAC 120V RPEQO - Lutron Hi-lume Premier 0.1% EcoSystem SOLA RSDI - 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. RDI+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 RLD2 - Lutron DALI-2 digital	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/ELD0/PEQ0							
	OF		2 5/8" (FMB) 4 1/8"	6"							
С	IC	4" (10 \	/8" (10 W - FMB) 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)	6 7/8"							
	RM		4 1/8"	NA							
			CUT-OUT DIMI	ENSIONS							
D	TRM	TLMP		Ø 3 1/2"							
E	т.	мw	Ø 3 1/2"								
F	16	IVI V V	Ø 3 1/1	Ø 3 1/16" with 1/8" lip							
			MAXIMUM CEILING	THICKNESS							
G	TRM	TLMP		13/8"							
٦	TL	MW		5/8"							

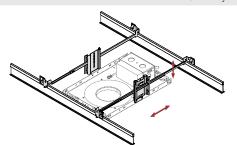




Housing

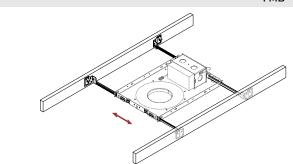
MOUNTING OPTIONS

ASB - Adjustable Standard Bar Hangers



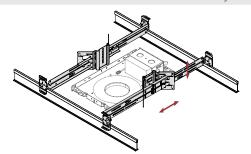
Adjustable Standard Bar hangers can be used in both commercial and residential applications and are adjustable to various heights in both Grid Ceiling and Drywall mounting. ASB hangers are less rigid and versatile than ACB hangers.

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.

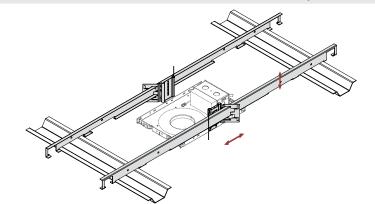
ACB - Adjustable Commercial Bar Hangers



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

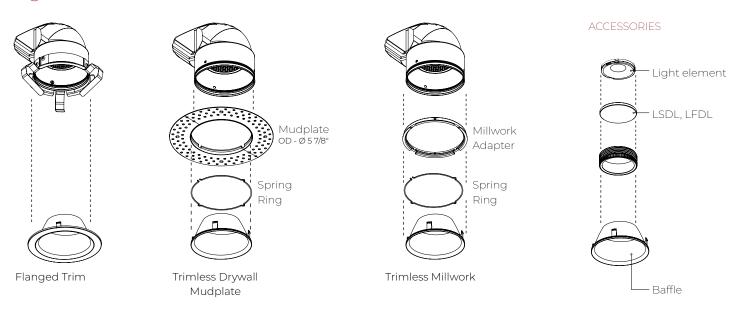
AHC - Adjustable Hat Channel Bars



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.



Light & Baffle

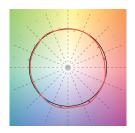


TRM Flanged Trim	TLMP/TLMW Trimless Drywall Mudplate /Trimless Millwork
Baffle finish Trim flange finish	
Ø 3 13/16" Ø 3 1/16" Ø 1 3/4"	Ø 3 1/16" Ø 1 3/4"
29° Cut-off 45° 1/16"	29° Cut-off 45° Shielding



Color Quality

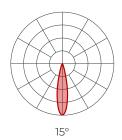
COLOR QUALITY - 3500K TM-30 Rf 90 TM-30 Rg 100 CRI 90 R9 > 50

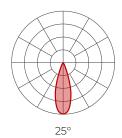


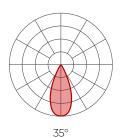
Photometrics

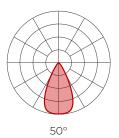
STATIC WHITE

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









Delivered lumens

CRI	90 CRI					90 CRI 95 CRI						80 CRI			
BEAM	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	Ш	1037	1107	1112	986		1441	1539	1545	1370	
20 W	1861	1986	1995	1768	Ш	1433	1529	1536	1361		1991	2125	2135	1892	

Efficacy

CRI	90 CRI					95 CRI					80 CRI			
BEAM	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.

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

TRIM STYLE	
Flanged trim	1
Trimless	1

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

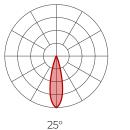
1
0.8

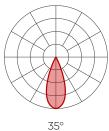


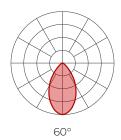
Photometrics

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
עע פו	2700K	1150	61	1205	63	1100	58

DUO

ВЕАМ		25°		35°		60°	
		lm	lm/W	lm	lm/W	lm	lm/W
	6500K	1285	68	1355	71	1190	63
19 W	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			

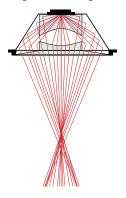
ACCESSORIES * (At light element)					
LSDL - Soft diffused lens, Solite	1				
LFDL - Frosted lens	0.8				



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 DALI-2 digital

Emergency battery options: Remotely-installed, long-life, high-temperature, maintenance-free, Bodine Lithium-lon 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

ACCESSORIES





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.

