





#### Aera Downlight Family (Refer to other spec sheets)

Downlight





Round / Sauare Recessed



Round / Sauare Recessed Wall Wash



Round / Square









Round / Sauare







Project:	
Туре:	

## Order Guide

# 1 - Housing (Example: AE3DPPRR-TRM-SW-OF-ASB-120V-10W-D1)

LUMINAIRE ID 1	TRIM STYLE	LIGHT SOURCE	INSTALLATION TYPE	MOUNTING OPTION 4
AE3DPPRR - Aera 3" Deep Prism Round Recessed AE3DPSRR - Aera 3" Deep Smooth Round Recessed 1Square recessed also available. Consult other spec sheets.	TRM - Flanged trim TLMP - Trimless drywall mudplate TLMW <sup>2</sup> - Trimless millwork <sup>2</sup> 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 <sup>3</sup> - Type-IC RM - Remodel Type Non-IC CP <sup>3</sup> - Chicago Plenum Type-IC (CCEA) AT <sup>3</sup> - Airtight Type-IC <sup>3</sup> Not available with 19 W output and higher.	ASB <sup>5</sup> - Adjustable standard bar hangers FMB <sup>5</sup> - Flush mount bars ACB <sup>5</sup> - Adjustable commercial bar hangers AHC <sup>5</sup> - Adjustable hat channel bars NA - None <sup>4</sup> See page 4 for more details. <sup>5</sup> Not available with RM installation type.

VOLTAGE	WATTAGE 7	DIMMING 9						
120V - 120V 277V - 277V UNV - 120V-277V 347V <sup>6</sup> - 347V <sup>6</sup> 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 <sup>7</sup> Lumen outputs are reduced with full spectrum, consult factory. <sup>8</sup> Not available with IC/CP/AT.  SOLA 8 19W - 19 W output, up to 1205 lm	INTEGRAL  D1 - 1% 0-10V  ELV 10 - ELV 120V  TRI 10 - TRIAC 120V  DA 11, 12 - DALI  ELD1 11 - eldoLED 1% ECOdrive 0-10V  ELD0 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 Not available with 120V only. 19 Not available with RM installation type. 12 On-site commissioning is required.  13 Available with OF installation type only.	REMOTE 14  RD1 - 1% 0-10V RELV 15 - ELV 120V RTR1 5 - 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					
	<u>DUO</u> <sup>8</sup> <b>19W</b> - 19 W output, up to 1355 lm	SOLA SDI - Single 0-10V input SELV <sup>10</sup> - ELV 120V STRI <sup>10</sup> - TRIAC 120V	SOLA					

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

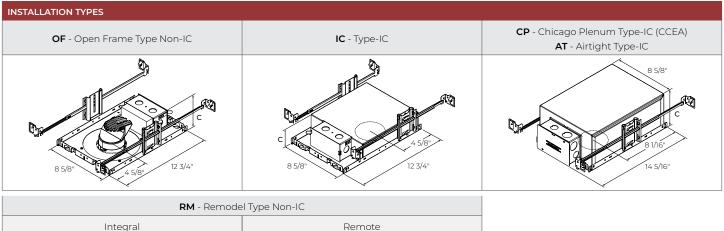
LUMINAIRE ID	LIGHT SOURCE Specify same as Housing	WATTAGE <sup>18</sup> BEAM Specify same as Housing		COLOR QUALITY	CRI	
AE3DPPRRB - Aera 3" Deep Prism Round Recessed AE3DPSRRB - Aera 3" Deep Smooth Round Recessed	SW - Static white FS - Full spectrum	10W - 10 W output, up to 1132 Im 14W - 14 W output, up to 1545 Im 20W <sup>19</sup> - 20 W output, up to 2135 Im  110 Lumen outputs are reduced with full spectrum, consult factory. 110 Not available with IC/CP/AT.	15DEG - 15° Narrow spot 25DEG - 25° Spot 35DEG - 35° Narrow flood 50DEG - 50° Wide flood	2STP <sup>20</sup> - 2 Step MacAdam Ellipse 3STP - 3 Step MacAdam Ellipse <sup>20</sup> Not available with full spectrum.	90CRI <sup>21</sup> - 90 CRI 95CRI - 95 CRI 80CRI <sup>21</sup> - 80 CRI <sup>21</sup> Not available with full spectrum.	
	SOLA - Dim-to-warm single channel control DUO - Tunable white 2-channel control	SOLA <sup>19</sup> <b>19W</b> - 19 W output, up to 1205 lm  DUO <sup>19</sup> <b>19W</b> - 19 W output, up to 1355 lm	25DEG - 25° Spot 35DEG - 35° Narrow flood 60DEG - 60° Wide flood	<b>3STP</b> - 3 Step MacAdam Ellipse	<b>90CRI</b> - 90 CRI	

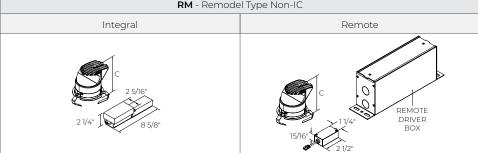
COLOR TEMP.	ACCESSORY See page 5 for details	TRIM STYLE Specify same as Housing	BAFFLE FINISH	TRIM FLANGE FINISH Specify NA for Trimless
27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K SOLA 30K18K - 3000K to 1800K 27K18K - 2700K to 1800K DUO 65K27K - 6500K to 2700K 50K27K - 5000K to 2700K	At light element  LSDL - Soft diffused lens, Solite  LFDL - Frosted diffused lens	TRM - Flanged trim TLMP - Trimless drywall mudplate TLMW <sup>22</sup> - Trimless millwork <sup>22</sup> 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





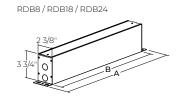
## Housing

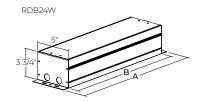




- For height dimension C, see the PLENUM CLEARANCE & CUT-OUT DIMENSIONS table below.
- $\hbox{- For OF, IC, CP, and AT installation types with remote dimming, a remote driver box is provided.}\\$

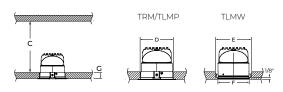
#### REMOTE DRIVER BOX





	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 DT6 RDDA8 - DALI OT0V 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



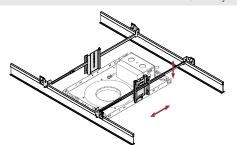
			PLENUM CLEARANCE HEIGHT									
			REMOTE & INTEGRAL									
			D1/ELV/TRI	LDE1/DA /ELD1/ELD0/PEQ0								
	OF		2 5/8" (FMB) 4 1/8"	6"								
С	IC	4" (10 \	/8" (10 W - FMB) W - ASB, ACB, AHC) 4" (14 W) 6 3/8" (20 W)	6 3/8"								
	CP /AT		4 7/8" (14 W) 6 7/8" (20 W)	6 7/8"								
	RM		4 1/8"	NA								
			CUT-OUT DIMI	ENSIONS								
D	TRM	TLMP		Ø 3 1/2"								
E	т.	мw		Ø 3 1/2"								
F	16	IVI VV	Ø 3 1/1	6" with 1/8" lip								
		MAXIMUM CEILING THICKNESS										
G	TRM	/TLMP		13/8"								
٦	TL	MW		5/8"								



## Housing

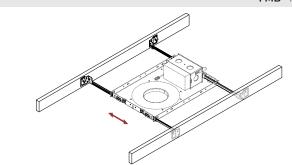
#### MOUNTING OPTIONS

#### ASB - Adjustable Standard Bar Hangers



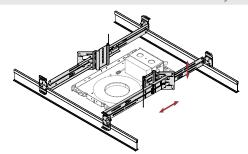
Adjustable Standard Bar hangers can be used in both commercial and residential applications and are adjustable to various heights in both Grid Ceiling and Drywall mounting. ASB hangers are less rigid and versatile than ACB hangers.

#### 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.

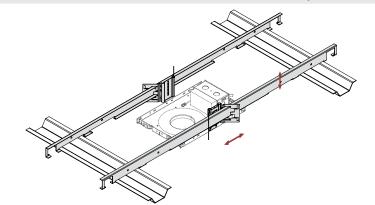
#### ACB - Adjustable Commercial Bar Hangers



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

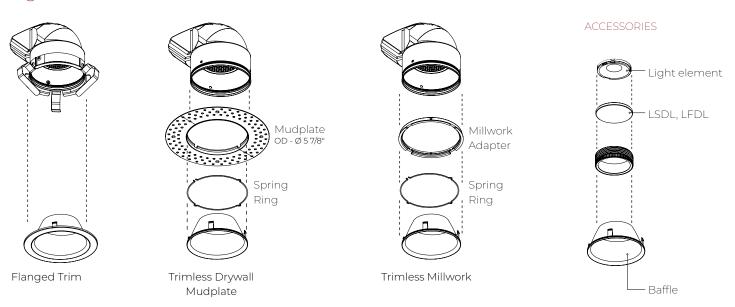


Adjustable Hat Channel bars can be used in both commercial and residential applications and come with a butterfly clip to adjust to various heights. AHC bars can be hung downward by 90 degrees in vertical position, and once wired, can be shifted onto the horizontal mounting plane. AHC bars are suitable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





## Light & Baffle

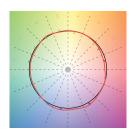


<b>TRM</b> Flanged Trim	<b>TLMP/TLMW</b> Trimless Drywall Mudplate /Trimless Millwork
Baffle finish Trim flange finish	
Ø 3 13/16" Ø 3 1/16" Ø 1 3/4"	Ø 31/16' Ø 1 3/4'
29° Cut-off 15/16"	Cut-off 15/16"



## Color Quality

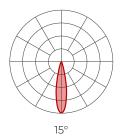
# COLOR QUALITY - 3500K TM-30 Rf 90 TM-30 Rg 100 CRI 90 R9 > 50

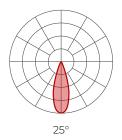


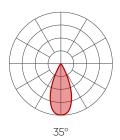
## Photometrics

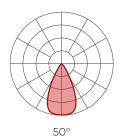
#### STATIC WHITE

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		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				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

1
1

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

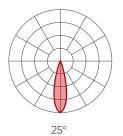
1	
0.8	
	0.8

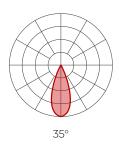


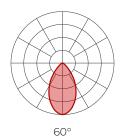
#### **Photometrics**

#### 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
	2700K	1150	61	1205	63	1100	58

#### DUO

BEAM		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.



#### 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.

#### FL FCTRICAL

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, hightemperature, 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





#### ACCESSORIES





Soft diffused lens, Solite

Frosted diffused lens

#### **ENVIRONMENT**

Ambient temperature at fixture location shall be within  $0^{\circ}\text{C}/32^{\circ}\text{F}$  -  $25^{\circ}\text{C}/77^{\circ}\text{F}$ , 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.

