





Ecana Family (Refer to other spec sheets)

Certifications

IP44 :::













20 W

Light Source Static White

DUO - Tunable White

ECANA 3" DOWNLIGHT **Z**Lumenwerx



			\sim
1 11 11 1		1) ⊢ (⊢	$\sim \sim \sim \sim 1.1$
RUU	\square	RLVL	SSED

Project:		
-		
Type:		

Order Guide

8 <u>OUO</u> **19W** - 19 W output,

up to 1355 lm

1 - Housing (Fxample: EC3RR-TRM-SW-OF-ASB-120V-10W-D1-NA)

LUMINAIRE	ID ¹	TRIM STYL	.E	LIGHT SOURCE	INSTALLATION TYPE	MOUNTING OPTION 4	
EC3RR							
EC3RR - Ecan Recessed 1 Recessed Adjus Recessed Wall Vavailable. Consus sheets.	table and Wash also	mudplate TLMW ² - Tr ² For remodel TLMW adapt	inless drywall imless millwork (RM) installation type, er must be installed he ceiling or before	SW - Static white 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 FMB 5 - Flush mount bars ACB 5 - Adjustable commercial AHC 5 - Adjustable hat channel NA - None 4 See page 4 for more details. 5 Not available with RM installation typ	bar hangers bars
VOLTAGE	WATTAGE		DIMMING 9				OPTION
120V - 120V 277V - 277V UNV - 120V-277V 347V ⁶ - 347V ⁶ Available with RD1 driver only. Please consult factory.	7 Not available with 95 CRI when specified with RM. PLOT available with IC/CP/AT		0.1% SOLOdrive 0-10V Hi-lume Premier 0.1% EcoSyster ernet) compatible. Consult factory for nly. I installation type. ng is required.	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 0-10' RELD0 - eldoLED 0.1% SOLOdrive C RPEQ0 16 - Lutron Hi-lume Premier +EB 7 - Emergency battery 14 A remote driver box is provided, see pag 8 Available with 120V only. 16 On-site commissioning is required. 17 For emergency battery, code will be like	0-10V r 0.1% EcoSystem e 3 for details.	PMP ¹⁸ - Pre- mounting plate NA - None **Available with RM installation type only.	

<u>SOLA</u>

input

RSD1 - Single 0-10V

RSELV 15 - ELV 120V RSTRI 15 - TRIAC 120V RDMX 16 - DMX

RDDA 16 - DALI DT6 RDDA8 16 - DALI DT8

RDD1 - Dual 0-10V input for CCT/intensity RPSQ0 16 - Lutron T-Series 1% tunable white

2 - Light & Baffle (Example: EC3RRB-SW-10W-15DEG-2STP-90CRI-27K-LSDL+LS-TRM-CL-FTMW-FTMW-NA)

SD1 - Single 0-10V input

SELV 10 - ELV 120V

STRI 10 - TRIAC 120V

LUMINAIRE ID	LIGHT SOURCE Specify same as Housing	WATTAGE Specify same as Housing				COLOR	QUALITY	CRI	COLOR TEMP.	
EC3RRB										
EC3RRB - Ecana 3" Round Recessed	SW - Static white	10W - 10 W output, up to 1132 Im 14W - 14 W output, up to 1545 Im 20W ^{19, 20} - 20 W output, up to 2135 ¹⁹ Not available with 95 CRI when specific RM. ²⁰ Not available with IC/CP/AT.		50DEG - 50°	Spot Narrow flood Wide flood Very wide flood	2STP - 2 Step MacAdam Ellipse 3STP - 3 Step MacAdam Ellipse		90CRI - 90 CRI 95CRI - 95 CRI 80CRI - 80 CRI	27K - 27 30K - 30 35K - 35 40K - 4	000K 600K
	SOLA - Dim-to-warm single channel control DUO - Tunable white 2-channel control	SOLA ²⁰ 19W - 19 W output, up to 1205 lm DUO ²⁰ 19W - 19 W output, up to 1355 lm	60DEG - 60°	Narrow flood Wide flood Very wide flood	3STP - 3 Step MacAdam Ellipse		90CRI - 90 CRI	27K18K	- 3000K to 1800K - 2700K to 1800K - 6500K to 2700K	
ACCESSORIES * See page 5 for details		TRIM STYLE Specify same as Housing	LENS See pa	S * age 5 for details	BAFFLE FINIS	Н		ANGE FINI for Trimless	SH	OPTION
LSDL - Soft diffused LFDL - Frosted diffu LS - Linear spread HEX ²³ - Hex louver NA - None	for SW and 1 option for SOLA/ lens, Solite sed lens ified, separate codes with a "+ t be combined. combined.	mudplate TLMW 24 - Trimless millwork 24 For remodel (RM) installation type, TLMW adapter must be installed from above the ceiling	SDL - lens, S FDL - diffus CL - C	se 1 option) Soft diffused	FTMW - Texture white FTMB - Texture black CF# - Custom f specify RAL#	d matte	FTMB - Te CF# - Cus RAL#	extured ma extured mat stom finish, applicable	te black	WET 25 - Wet location NA - None 25 Must be specified with the flanged trim (TRM), and either SDL, FDL, or CL lens options.

 $[\]ensuremath{^*}\xspace$ LSDL or LFDL at light element cannot be combined with SDL or FDL at baffle.

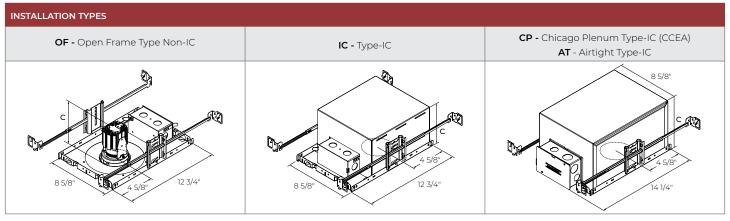


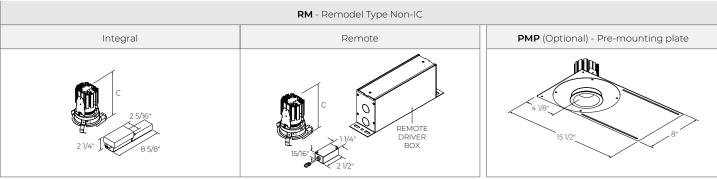


Lumenwerx reserves the right to modify



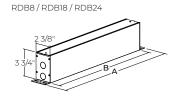
Housing

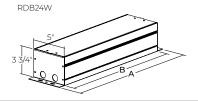




- For height dimension C, see the PLENUM CLEARANCE & CUT-OUT DIMENSIONS table below.
- For OF, IC, CP and AT installation types with remote dimming, a remote driver box is provided.

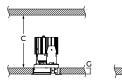
REMOTE DRIVER BOX





	RDB8	RDB18	RDB24	RDB24W
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	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 RPEQ0+EB - Lutron Hi-lume Premier 0.1% EcoSytem	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
	SOLA RSD1 - Single 0-10V input RSELV - ELV 120V RSTRI - 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	0.1% SOLOdrive 0-10V

PLENUM CLEARANCE & CUT-OUT DIMENSIONS







		PLENUM CLEARANCE HEIGHT
		REMOTE & INTEGRAL
	OF	4" (10 W/14 W) 4 1/2" (20 W)
С	IC	6 1/2"
C	CP/AT	7"
	RM	4" (10 W/14 W) 4 1/2" (20 W)

CUT-OUT DIMENSIONS										
TRM/ TLMP	Ø 3 1/2"									
TLMW	Ø 3 1/2"									
	Ø 3 1/16" with 1/8" lip									

	MAXIMUM CEILING THICKNESS										
	TRM/TLMP	13/8"									
G	TLMW	5/8"									

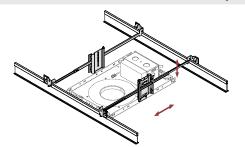




Housing

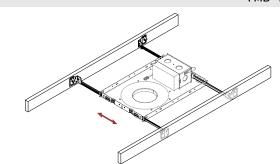
MOUNTING OPTIONS

ASB - Adjustable Standard Bar Hangers



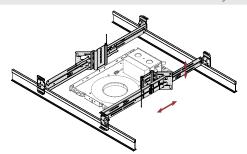
Adjustable Standard Bar hangers can be used in both commercial and residential applications and are adjustable to various heights in both Grid Ceiling and Drywall mounting. ASB hangers are less rigid and versatile than ACB hangers.

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.

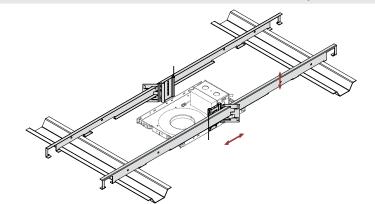
ACB - Adjustable Commercial Bar Hangers



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

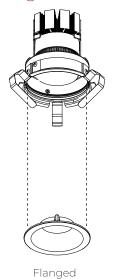


Adjustable Hat Channel bars can be used in both commercial and residential applications and come with a butterfly clip to adjust to various heights. AHC bars can be hung downward by 90 degrees in vertical position, and once wired, can be shifted onto the horizontal mounting plane. AHC bars are suitable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

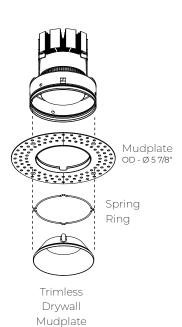


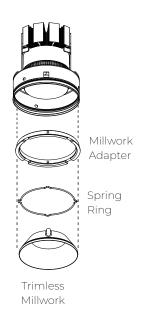


Light & Baffle



Trim







TRM Flanged Trim	TLMP/TLMW Trimless Drywall Mudplate /Trimless Millwork
Baffle finish Trim flange finish	
Ø 3 13/16"	Ø 3 1/16° Ø 113/16° Lens
20° Cut-off 7/8" Shielding 7/16"	20° Cut-off Shielding



Color Quality

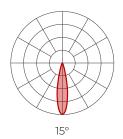
COLOR QUALITY - 3500K TM-30 R_f 92 TM-30 R_a 100 90 R9 > 50

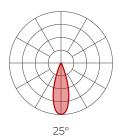


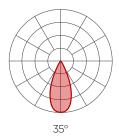
Photometrics

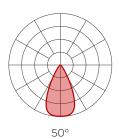
STATIC WHITE

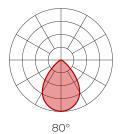
Values calculated based on 3500K, bevel baffle, and SDL lens option.

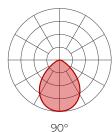












Delivered Lumens

CRI	90 CRI						95 CRI					80 CRI						
BEAM	15°	25°	35°	50°	80°	90°	15°	25°	35°	50°	80°	90°	15°	25°	35°	50°	80°	90°
10 W	987	1053	1058	937	843	843	760	811	815	721	649	649	1056	1127	1132	1003	902	902
14 W	1347	1438	1444	1280	1152	1152	1037	1107	1112	986	887	887	1441	1539	1545	1370	1233	1233
20 W	1861	1986	1995	1768	1591	1591	1433	1529	1536	1361	1225	1225	1991	2125	2135	1892	1703	1703

Efficacy

CRI	90 CRI					95 CRI					80 CRI							
BEAM	15°	25°	35°	50°	80°	90°	15°	25°	35°	50°	80°	90°	15°	25°	35°	50°	80°	90°
10 W	99	105	106	94	84	84	76	81	81	72	65	65	106	113	113	100	90	90
14 W	96	103	103	91	82	82	74	79	79	70	63	63	103	110	110	98	88	88
20 W	93	99	100	88	80	80	72	76	77	68	61	61	100	106	107	95	85	85

MULTIPLIERS

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

сст		TRIM STYLE AND BAFFLE FINISH					
2700K	0.9	Flanged trim	1		S		
3000K	0.95	Trimless	1		F		
3500K	1	White	1		C		
4000K	1.05	Black	1		١		

LENS * (At baffle)		ACCESSORIES * (At light element)			
SDL - Soft diffused lens, Solite	1	LSDL - Soft diffused lens, Solite	1		
FDL - Frosted lens	0.8	LFDL - Frosted lens	0.8		
CL - Clear lens	1.1	LS - Linear spread	0.84		
NOL - No lens	1.1	HEX - Hex louver	0.86		

^{*} When more than one lens or accessory is specified, multiply together the value of each lens and/or accessory. e.g. NOL + LSDL + LS = 1.1 x 1 x 0.84 = 0.924



T (514) 225-4304

© Lumenwerx, ULC. All rights reserved.

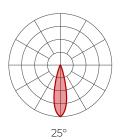


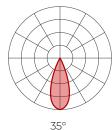


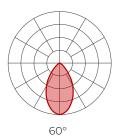
Photometrics

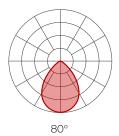
SOLA/DUO

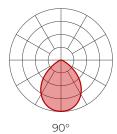
Values calculated based on bevel baffle and SDL lens option.











SOLA

BEAM		25°		3.	35°		0°	80°		90°	
		lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W
19 W	3000K	1150	61	1205	63	1100	58	945	50	870	46
) vv	2700K	1150	61	1205	63	1100	58	945	50	870	46

DUO

BEAM		25°		35° 6		0°	8	80°		90°	
		lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W
	6500K	1285	68	1355	71	1190	63	1025	54	940	49
19 W	5000K	1285	68	1355	71	1190	63	1025	54	940	49
	2700K	1050	55	1090	57	960	51	760	40	760	40

MULTIPLIERS

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

TRIM STYLE AND BAFFLE FINISH						
Flanged trim	1					
Trimless	1					
White	1					
Black	1					

LENS * (At baffle)						
SDL - Soft diffused lens, Solite	1					
FDL - Frosted lens	0.8					
CL - Clear lens	1.1					
NOL - No lens	1.1					

ACCESSORIES * (At light element)						
LSDL - Soft diffused lens, Solite	1					
LFDL - Frosted lens	0.8					
LS - Linear spread	0.84					
HEX - Hex louver	0.86					

^{*} When more than one lens or accessory is specified, multiply together the value of each lens and/or accessory. e.g. NOL + LSDL = 1.1 x 1 = 1.1

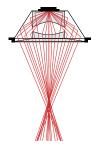




Technical Specifications

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. Optional full spectrum LEDs can be incorporated in the fixture to increase Cyanosis Observation Index (COI) and assist in regulating circadian rhythms.

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 1% EcoSystem, DALI, eldoLED 0.1% SOLOdrive 0-10V, eldoLED 1% ECOdrive 0-10V

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, 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 1/2" 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: Die-cast aluminum mounted with retaining spring 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

LENS AND ACCESSORIES











Soft diffused

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. **IP44**: IP44 rated for bathrooms, showers, outdoor canopies, and marquees when specified with the wet location (WET) option. 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.

