

ECANA 4" DOWNLIGHT

SQUARE RECESSED



Declare.

Trimless
with lens

Flanged Trim
with lens

Trimless

Flanged Trim
with hex louver

The Ecana downlight family is designed as round or square fixtures with simple detailing, available in 3", 4", and 6" sizes. The family includes fixed, adjustable, and wall wash configurations and blends effortlessly into various settings, enriching small and large-scale projects with practical, cost-effective, and finely tuned lighting.

Beam Angles

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

Performance

LUMEN OUTPUT ¹	WATTS	EFFICACY
1538 lm	14 W	110 lm/W
2146 lm	20 W	107 lm/W
2882 lm	28 W	103 lm/W

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

Light Source

Static White
SOLA - Dim-to-Warm
DUO - Tunable White

Ceiling Types

Drywall Millwork Acoustic Tile

Plenum Clearance

As low as 4 1/8"

Ecana Family (Refer to other spec sheets)

3" / 4" / 6"
Round / Square
Recessed Adjustable

3" / 4" / 6"
Round / Square
Recessed

3" / 4" / 6"
Round / Square
Recessed Wall Wash



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Project: _____

Type: _____

Order Guide

1 - Housing (Example: EC4SR-TRM-SW-OF-ASB-120V-14W-D1-NA)

LUMINAIRE ID ¹	TRIM STYLE	LIGHT SOURCE	INSTALLATION TYPE	MOUNTING OPTION ⁴
EC4SR				
EC4SR - Ecana 4" Square Recessed ¹ Recessed Adjustable and Recessed Wall Wash 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 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 See Wattage section for limitations.	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	DIMMING ¹⁰	OPTION	
120V - 120V 277V - 277V UNV - 120V-277V 347V ⁶ - 347V ⁶ Available with RD1 driver only. Please consult factory.	14W ⁷ - 14 W output, up to 1538 lm 20W ^{8,9} - 20 W output, up to 2146 lm 28W ^{8,9} - 28 W output, up to 2882 lm ⁷ Not available with 95 CRI when specified with IC/CP/AT. ⁸ Not available with 95 CRI when specified with RM. ⁹ Not available with IC/CP/AT. SOLA ⁹ 28W - 28 W output, up to 1945 lm DUO ⁹ 28W - 28 W output, up to 2055 lm	INTEGRAL DI - 1% 0-10V 20W ¹¹ - ELV 120V TRI ¹¹ - TRIAC 120V LDE1 ^{12,13} - Lutron Hi-lume 1% Eco DA ^{12,13} - DALI ELD1 ¹² - eldoLED 1% ECOdrive 0-10V ELD0 ¹² - eldoLED 0.1% SOLOdrive 0-10V PEQ0 ^{13,14,15} - Lutron Hi-lume Premier 0.1% EcoSystem DEB ¹⁵ - 0-10V with onboard emergency battery backup ¹⁰ PoE (Power-over-Ethernet) compatible. Consult factory for details. ¹¹ Available with 120V only. ¹² Not available with RM installation type. ¹³ On-site commissioning is required. ¹⁴ Not available with 28 W output. ¹⁵ Available with OF housing only.	REMOTE ¹⁶ RD1 - 1% 0-10V RELV ¹⁷ - ELV 120V RTRI ¹⁷ - TRIAC 120V RLDE1 ¹⁸ - Lutron Hi-lume 1% Eco DA ^{12,13} - DALI RELD1 ¹² - eldoLED 1% ECOdrive 0-10V RELD0 ¹² - eldoLED 0.1% SOLOdrive 0-10V RPEQ0 ^{18,19} - Lutron Hi-lume Premier 0.1% EcoSystem +EB ²⁰ - Emergency battery ¹⁶ A remote driver box is provided, see page 3 for details. ¹⁷ Available with 120V only. ¹⁸ On-site commissioning is required. ¹⁹ Not available with 28 W output. ²⁰ For emergency battery, code will be like the following example: RD1+EB	PMP ²¹ - Pre-mounting plate NA - None ²¹ Available with RM installation type only.
		SOLA - Single 0-10V input SELV ¹¹ - ELV 120V STRI ¹¹ - TRIAC 120V DUO DMX ¹³ - DMX DDA ¹³ - DALI DT6 DDA8 ¹³ - DALI DT8 DD1 - Dual 0-10V input for CCT/intensity LD2 ¹³ - Lutron DALI-2 digital	SOLA RSDI - Single 0-10V input RELV ¹⁷ - ELV 120V RSTRI ¹⁷ - TRIAC 120V DUO RDMX ¹⁸ - DMX RDDA ¹⁸ - DALI DT6 RDDA8 ¹⁸ - DALI DT8 RDD1 - Dual 0-10V input for CCT/intensity RLD2 ¹⁸ - Lutron DALI-2 digital +EB ²⁰ - Emergency battery	

2 - Light & Baffle (Example: EC4SRB-SW-14W-25DEG-2STP-90CRI-27K-LSDL-LS-TRM-CL-FTMW-FTMW-NA)

LUMINAIRE ID	LIGHT SOURCE	WATTAGE	BEAM	COLOR QUALITY	CRI	COLOR TEMP.
	Specify same as Housing	Specify same as Housing				
EC4SRB						
EC4SRB - Ecana 4" Square Recessed	SW - Static white SOLA - Dim-to-warm single channel control DUO - Tunable white 2-channel control	14W ²² - 14 W output, up to 1538 lm 20W ^{23,24} - 20 W output, up to 2146 lm 28W ^{23,24} - 28 W output, up to 2882 lm ²² Not available with 95 CRI when specified with IC/CP/AT. ²³ Not available with 95 CRI when specified with RM. ²⁴ Not available with IC/CP/AT.	15DEG - 15° Narrow spot 25DEG - 25° Spot 35DEG - 35° Narrow flood 50DEG - 50° Wide flood 80DEG - 80° Very wide flood 90DEG - 90° Open flood	2STP - 2 Step MacAdam Ellipse 3STP - 3 Step MacAdam Ellipse	90CRI - 90 CRI 95CRI - 95 CRI 80CRI - 80 CRI	24K ²⁵ - 2400K 27K - 2700K 30K - 3000K 35K - 3500K 40K - 4000K 50K ²⁵ - 5000K ²⁵ Not available with 95 CRI.
		SOLA ²⁴ 28W - 28 W output, up to 1945 lm DUO ²⁴ 28W - 28 W output, up to 2055 lm	25DEG - 25° Spot 35DEG - 35° Narrow flood 60DEG - 60° Wide flood 80DEG - 80° Very wide flood 90DEG - 90° Open flood	3STP - 3 Step MacAdam Ellipse	90CRI - 90 CRI	SOLA 30K18K - 3000K to 1800K 27K18K - 2700K to 1800K DUO 65K27K - 6500K to 2700K 50K27K - 5000K to 2700K

ACCESSORIES *	TRIM STYLE	LENS *	BAFFLE FINISH	TRIM FLANGE FINISH	OPTION
See page 5 for details	Specify same as Housing	See page 5 for details		Specify NA for Trimless	
At light element ^{26,27} (choose up to 2 options for SW and 1 option for SOLA/DUO) LSDL - Soft diffused lens, Solite LFDL - Frosted diffused lens LS - Linear spread HEX ²⁸ - Hex louver NA - None ²⁶ If two options are specified, separate codes with a "+", e.g. LSDL+LS. ²⁷ LSDL and LFDL cannot be combined. LS and HEX cannot be combined. ²⁸ Not available with 80°/90° beam options.	TRM - Flanged trim TLMP - Trimless drywall mudplate TLMW ²⁹ - Trimless millwork ²⁹ For remodel (RM) installation type, TLMW adapter must be installed from above the ceiling or before ceiling is installed.	At baffle (choose 1 option) SDL - Soft diffused lens, Solite FDL - Frosted diffused lens CL - Clear lens NOL - No lens	FTMW - Textured matte white FTMB - Textured matte black CF# - Custom finish, specify RAL#	FTMW - Textured matte white FTMB - Textured matte black CF# - Custom finish, specify RAL# NA - Not applicable	WET ³⁰ - Wet location NA - None ³⁰ Must be specified with the flanged trim (TRM), and either SDL, FDL, or CL lens options.

* LSDL or LFDL at light element cannot be combined with SDL or FDL at baffle.



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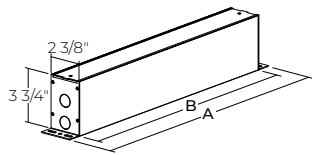
Housing

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	PMP (Optional) - Pre-mounting plate

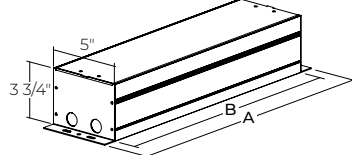
- For height dimension C, see the PLENUM CLEARANCE & CUT-OUT DIMENSIONS table below.
 - For OF, IC, CP, and AT installation types with remote dimming, a remote driver box is provided.

REMOTE DRIVER BOX

RDB8 / RDB18 / RDB24

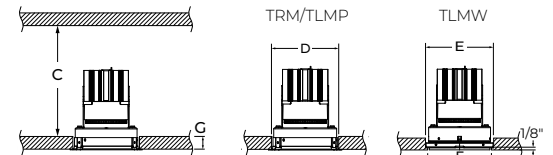


RDB24W



	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 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. RD1+EB - 1% 0-10V RELV+EB - ELV 120V RTRI+EB - TRIAC 120V RPEQ0+EB - Lutron Hi-lume Premier 0.1% EcoSystem DJ0 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
C	OF	4 1/8" (14 W/20 W) 5 1/2" (28 W)
	IC	6 1/2"
	CP/AT	7"
	RM	4 1/8" (14 W/20 W) 5 1/2" (28 W)
		CUT-OUT DIMENSIONS
D	TRM/ TLMP	4 1/2" x 4 1/2"
E	TLMW	4 1/2" x 4 1/2"
F		4 1/16" x 4 1/16" with 1/8" lip
		MAXIMUM CEILING THICKNESS
G	TRM/ TLMP	1 3/8"
	TLMW	5/8"

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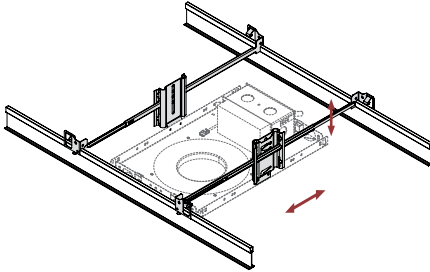
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Housing

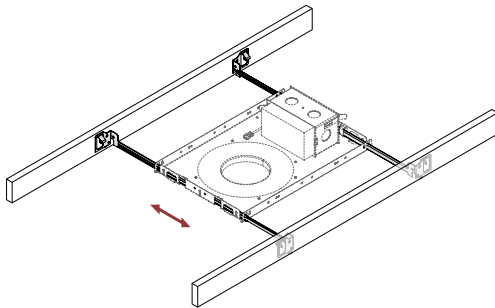
MOUNTING OPTIONS

ASB - Adjustable Standard Bar Hangers



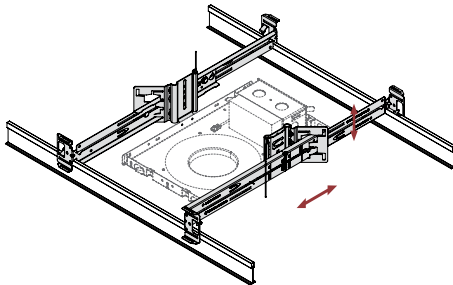
Adjustable Standard Bar hangers can be used in both commercial and residential applications and are adjustable to various heights in both Grid Ceiling and Drywall mounting. ASB hangers are less rigid and versatile than ACB hangers.

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.

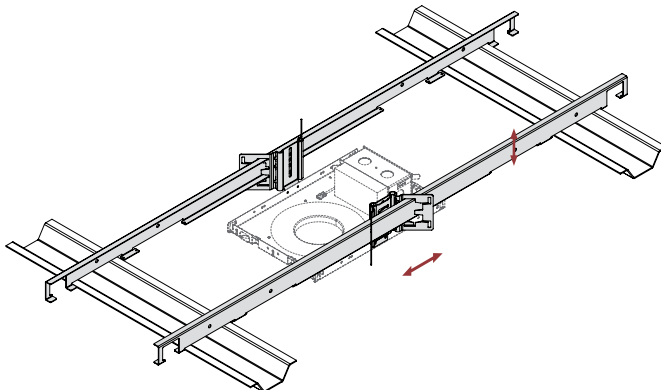
ACB - Adjustable Commercial Bar Hangers



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



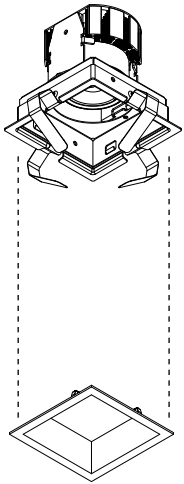
Adjustable Hat Channel bars can be used in both commercial and residential applications and come with a butterfly clip to adjust to various heights. AHC bars can be hung downward by 90 degrees in vertical position, and once wired, can be shifted onto the horizontal mounting plane. AHC bars are suitable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

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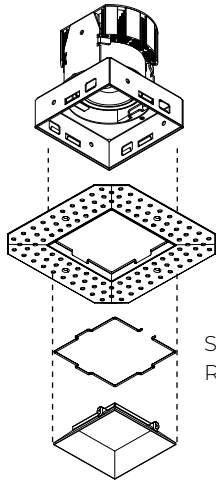
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Light & Baffle



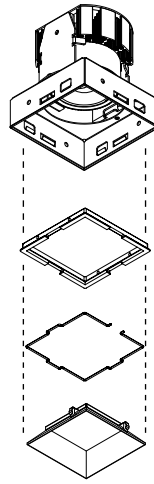
Flanged Trim



Trimless Drywall Mudplate

Mudplate
OD - 6 7/8" x 6 7/8"

Spring Ring

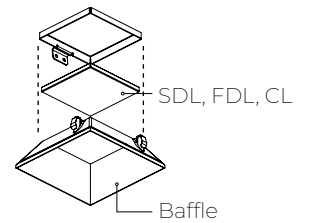
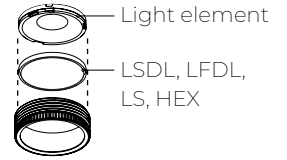


Trimless Millwork

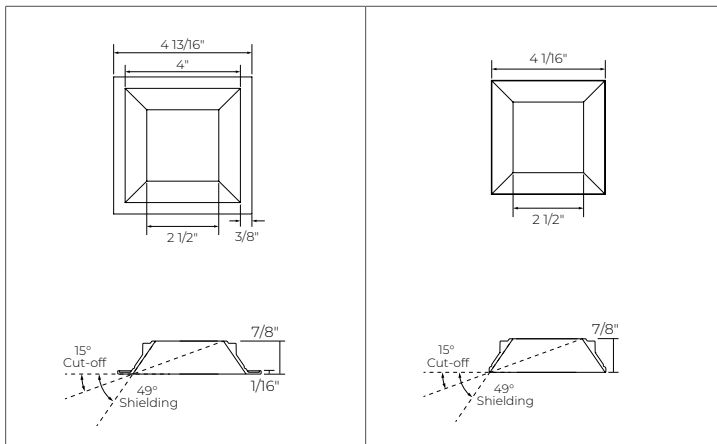
Millwork Adapter

Spring Ring

LENS AND ACCESSORIES



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



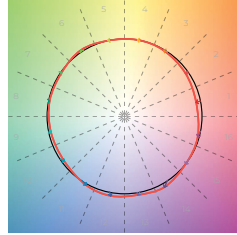
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Color Quality

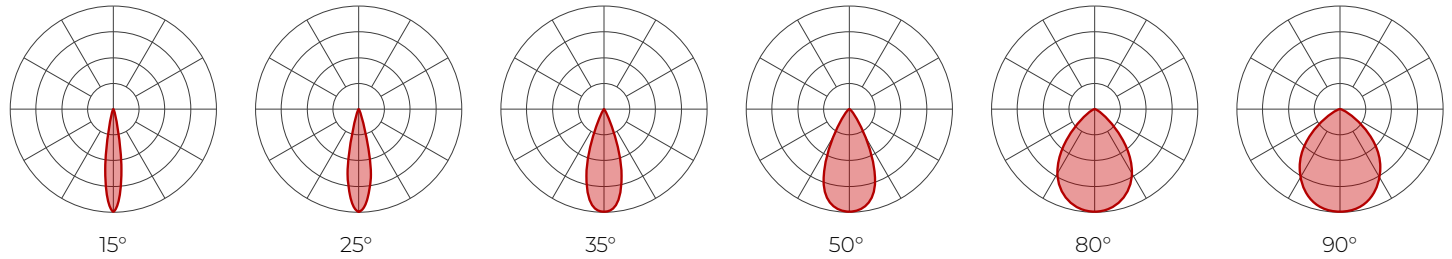
COLOR QUALITY - 3500K	
TM-30 R _f	92
TM-30 R _a	100
CRI	90
R9	> 50



Photometrics

STATIC WHITE

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



Delivered lumens

CRI	90 CRI						95 CRI						80 CRI					
	15°	25°	35°	50°	80°	90°	15°	25°	35°	50°	80°	90°	15°	25°	35°	50°	80°	90°
14 W	1399	1437	1384	1356	1220	1220	1077	1106	1066	1044	940	940	1497	1538	1481	1451	1306	1306
20 W	1952	2006	1931	1893	1704	1704	1503	1545	1487	1458	1312	1312	2089	2146	2066	2026	1823	1823
28 W	2621	2693	2593	2541	2287	2287	2018	2074	1997	1957	1761	1761	2804	2882	2775	2719	2447	2447

Efficacy

CRI	90 CRI						95 CRI						80 CRI					
	15°	25°	35°	50°	80°	90°	15°	25°	35°	50°	80°	90°	15°	25°	35°	50°	80°	90°
14 W	100	103	99	97	87	87	77	79	76	75	67	67	107	110	106	104	93	93
20 W	98	100	97	95	85	85	75	77	74	73	66	66	104	107	103	101	91	91
28 W	94	96	93	91	82	82	72	74	71	70	63	63	100	103	99	97	87	87

MULTIPLIERS

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

CCT		TRIM STYLE AND BAFFLE FINISH		LENS * (At baffle)		ACCESSORIES * (At light element)	
2400K	0.87	Flanged trim	1	SDL - Soft diffused lens, Solite	1	LSDL - Soft diffused lens, Solite	1
2700K	0.94	Trimless	1	FDL - Frosted lens	0.8	LFDL - Frosted lens	0.8
3000K	0.98	White	1	CL - Clear lens	1.1	LS - Linear spread	0.84
3500K	1	Black	1	NOL - No lens	1.1	Hex louver	0.86
4000K	1.05						
5000K	1.05						

* 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

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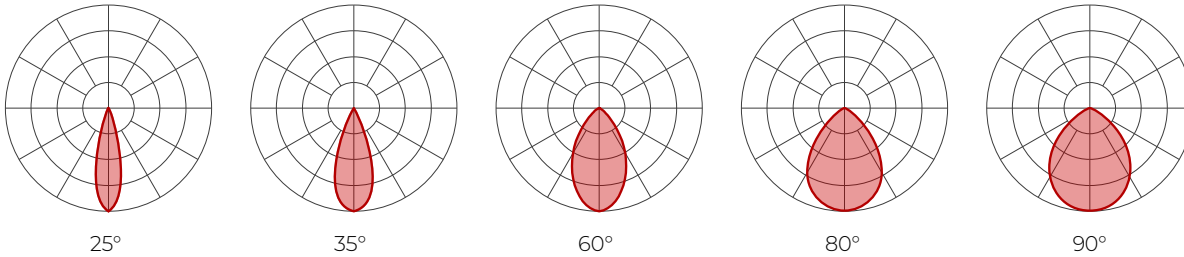
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Photometrics

SOLA/DUO

Values calculated based on bevel baffle and SDL lens option.



SOLA

BEAM		25°		35°		60°		80°		90°	
		lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W
28 W	3000K	1920	69	1945	69	1850	66	1590	57	1460	52
	2700K	1920	69	1945	69	1850	66	1590	57	1460	52

DUO

BEAM		25°		35°		60°		80°		90°	
		lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W	lm	lm/W
28 W	6500K	2005	72	2055	73	1980	71	1700	61	1565	56
	5000K	2005	72	2055	73	1980	71	1700	61	1565	56
	2700K	1780	64	1820	65	1740	62	1495	53	1375	49

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

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

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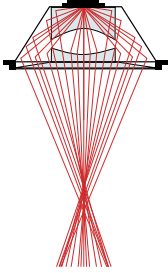
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Technical Specifications

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 2400K, 2700K, 3000K, 3500K, 4000K, and 5000K 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.

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 1% EcoSystem, DALI, eldoLED 0.1% SOLOdrive 0-10V, eldoLED 1% ECOdrive 0-10V, DMX, Lutron DALI-2 digital

Remote: 0-10V, ELV, TRIAC, Lutron Hi-Lume 1% EcoSystem, DALI, eldoLED 0.1% SOLOdrive 0-10V, eldoLED 1% ECOdrive 0-10V, DMX, Lutron DALI-2 digital

Emergency battery options - Integral: Factory installed, long-life, high-temperature, LED driver with integrated emergency backup using a recyclable LiFePO4 battery pack. Features a remote test switch with charge indicator, minimum of 90 minutes operation and 10 W per downlight emergency lighting output. Recharge time of 12 hours.

Emergency battery options - Remote: 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.

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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 standard, flush mount, adjustable commercial, and adjustable hat channel bar hangers are available as mounting options.

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

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.

WEIGHT

Open frame: 4.5 lbs - 2 kg

Type-IC/Chicago Plenum: 8 lbs - 3.6 kg

Remodel: 3.5 lbs - 1.6 kg

LENS AND ACCESSORIES



Soft diffused lens, Solite



Frosted diffused lens



Clear lens



Linear spread



Hex louver

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.

Declare: [LBC Red List Approved](#)