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A new epoch has dawned in indoor lighting, characterized by clean lines, full light distribution, low contrast luminance, and heightened attention to energy reduction and sustainability. The e.poc° Full Distribution Luminaire embodies these qualities in a 2-lamp lensed package. Available in both T5 and T8, e-poc incorporates a multitude of lamp/ballast combinations and controls compatibility into a stylish linear design. e-poc also offers a choice of optical aesthetics and an ease of serviceability that is unmatched.

**FEATURES** 

#### **ENERGY SAVINGS VERSUS LIGHT LEVELS**

A focus on sustainable design need not sacrifice light levels to achieve energy reduction. e-poc places delivered footcandles at the forefront of performance without driving up energy consumption.





Delta

Shield

#### **SERVICEABILITY**

e-poc's serviceability was designed with the end user in mind. While some fixtures require partial disassembly to re-lamp or above-the-ceiling access to change out a ballast, e·poc has a hinged optical system that allows hands-free, below-theceiling access to the fixture's lamps and electrical components

### **T5 AND T8 ENERGY SAVINGS**

Expanding on the tuned systems approach incorporated into other Columbia Lighting createchange® products, e-poc takes advantage of T5 lamp and ballast thermals to gain efficiency and save energy without sacrificing light levels. Our T8 configuration uses a tuned ballast to provide the best possible balance between light output and energy savings. These approaches give energy savings of 29% for T5 and up to 34% for T8 over traditional 3-lamp T8 luminaires.

#### **CONTROLS**

The best way to save energy is to turn the lights off when no one is in the room. The second best way is to reduce the light levels of a room when possible. e-poc's compatibility with control systems, including full dimming, step dimming, occupancy sensors, and daylight harvesting sensors, provide that flexibility.

### CODE COMPLIANCE, REBATES, EPACT

e-poc's energy footprint is small enough to comply with the most stringent energy codes. Its low watts per square foot energy usage qualifies it for many local rebate programs and EPAct tax deductions.

### LIGHTING POWER DENSITY

With e-poc's extraordinary efficiency, Columbia has simplified the challenge of meeting Lighting Power Density codes including but not limited to ASHRAE 90.1-2010. Specific examples of education, health care, office and retail are provided on pages 6-13. In addition, tables on page 14 illustrate the use of ballast/lamp options to provide aggressive energy reduction.

## A TUNED SYSTEM FOR OPTIMUM PERFORMANCE

Createchange<sup>®</sup> energy saving luminaires are tuned to balance performance and energy savings. By using this approach, Columbia Lighting has proven that performance does not have to suffer in order to provide substantial energy savings.

## FIXTURE EFFICIENCY 100% 90% 87.3% 80% 87 9% 70% 70% 60% 50% 40% 30% 20% 10% 0% 3-lamp 3-lamp e·poc e·poc e·poc Parabolic 32W T8 28W T5 28W T8

Traditional 3-lamp parabolics produce efficiencies in the low 70% range. e·poc boosts efficiencies to 90.3% for 28W T5 and up to 87.3% for T8 luminaires.





At 60 watts for the 28W T5 configuration, 65 watts for the 32W T8 configuration, and 56 watts for the 28W T8 configuration, e-poc uses 23-34% less energy than standard parabolics.

# **ENERGY REGULATIONS**

Exceed expectations with e-poc. Using a typical installation with the fixture on  $8' \times 10'$  centers, e·poc with 28W T5 lamps uses 0.75W/ft<sup>2</sup>, with 32W T8 lamps uses 0.81W/ft<sup>2</sup>, and with 28W T8 lamps uses 0.70W/ft<sup>2</sup>. e·poc exceeds the code requirements, and frees up additional watts to use elsewhere in the building.

## **TAX DEDUCTIONS AND REBATES**

The Energy Policy Act (EPAct) of 2005 provides tax deductions for energy savings in lighting. By exceeding ASHRAE 90.1-2001 energy standards, you can earn up to \$0.60 per square foot in tax deductions. For EPAct, the most restrictive requirement is 1.3W/ft<sup>2</sup> for offices. e-poc T5 configurations with 28W lamps exceed the requirement by 42% earning the maximum \$0.60/ft<sup>2</sup> deduction. e·poc T8 configurations with 32W lamps exceed the requirement by 37% earning a deduction of \$0.54/ft<sup>2</sup> and with 28W T8 energy savings lamps exceed the requirement by 46% earning a maximum of \$0.60/ft<sup>2</sup>.





## **EDUCATIONAL**

Providing high quality lighting for educational institutions helps stimulate learning, e-poc's soft light and full distribution create an ideal room ambience for classrooms. It can be combined with daylight harvesting to take full advantage of outside light and provide even more energy savings.

Footcandle calculations were based on EPC24-232G-DL-E104U-PLUS835 using 28W T8 lamps and a tuned 1.04 ballast factor ballast. Luminaires were placed on 8'  $\times$  10' mounting centers in a30'  $\times$  30' room with 9' ceilings, a 2.5' workplane height, and 80/50/20 reflectances.



#### Maintained average footcandles Watts per square foot

BF = 1.04, LDD = .90, and LLD = .95 ASHRAE 90.1-2010 School, Building Area Method, LPD Maximum: 0.99

42 0.75

## OFFICE

Studies have shown that productivity can be improved with proper lighting. e-poc, with its full distribution, puts the right amount of light on the work surface while gently illuminating the walls. Its stylish linear design will dress up any office environment. Its low energy footprint can help provide the foundation for code compliance or LEED certification.

Footcandle calculations were based on EPC24-228G-DL-EP95U-F5835 on 8' imes 10' mounting centers in a  $90' \times 120'$  room with 12' ceilings, a 2.5' workplane height, and 80/50/20 reflectances.



#### Maintained average footcandles 48 Watts per square foot 0.75

BF = .95, LDD = .90, and LLD = .95 ASHRAE 90.1-2010 Office, Building Area Method, LPD Maximum: 0.90



Creating a restful yet well-lit environment, e.poc's full light distribution is perfect for medical facilities. Used in conjunction with utility luminaires, e-poc puts the finishing touch on any medical lighting application. Its low profiled recessed configuration or surface mount option fits most crowded plenum spaces, while its sleek look is easy to keep clean. Optional antimicrobial paint (AM option) resists bacterial growth on exposed painted surfaces.

Footcandle calculations were based on EPC24-228G-DL-EP95U-F5835 on 8' mounting centers in a  $8' \times 96'$  hallway with 9' ceilings, a 0' workplane height, and 80/50/20 reflectances.



#### Maintained average footcandles 31 Watts per square foot 0.94

BF = .95, LDD = .90, and LLD = .95 ASHRAE 90.1-2010 Hospital, Building Area Method, LPD Maximum: 1.21

## RETAIL

Spice up your retail space with e.poc. Its stylish linear design and full light distribution help you put your best foot forward. Its low energy footprint allows the use of accent lighting in other parts of the retail environment while still meeting energy codes.

Footcandle calculations were based on EPC24-228G-DL-EP115U-F5835 on 8'  $\times$  10' mounting centers in a  $300' \times 300'$  room with 12' ceilings, a 0' workplane height, and 80/50/20 reflectances.



#### Maintained average footcandles 57 Watts per square foot 0.85

BF = 1.15, LDD = .90, and LLD = .95 ASHRAE 90.1-2010 Retail, Building Area Method, LPD Maximum: 1.40

## LAMP AND BALLAST COMBINATIONS

Test Watts, Delivered Maintained Lumens per Watt, Maintained Footcandles, and Watts per sq. ft.<sup>1</sup>

		28W T8* 2750 Lumens 2585 Maintained (PLUS8xx)		32W T8 2800 Lumens 2660 Maintained (FO7xx)		32W T8 2950 Lumens 2800 Maintained (FO8xx)		32W T8 HL 3100 Lumens 2950 Maintained (FOH8xx)		
	EnergyMax® Tuned System 1.04 BF (E104) <b>NEMA</b> Premium	56W 84 lpw	53.2 fc 0.70W/ft <sup>2</sup>	65W 71 lpw	52 fc 0.81W/ft²	67W 70 lpw	53.1 fc 0.84W/ft <sup>2</sup>	67W 74 lpw	55.8 fc 0.84W/ft <sup>2</sup>	
<b>BALLAST FACTOR</b>	0.77 BF (ELW)	43W 79 lpw	38.4 fc 0.54W/ft <sup>2</sup>	49W 69 lpw	38.6 fc 0.61W/ft <sup>2</sup>	49W 70 lpw	39.1 fc 0.61W/ft <sup>2</sup>	51W <b>HIGH PERFO</b> 72 lpw	41.7 fc <b>RMANCE-T8</b> 0.64W/ft <sup>2</sup>	
	0.88 BF (E)	50W 73 lpw	41 fc 0.63W/ft <sup>2</sup>	59W 62 lpw	41.3 fc 0.74W/ft <sup>2</sup>	59W 63 lpw	42.3 fc 0.74W/ft <sup>2</sup>	61W 64 lpw	43.9 fc 0.76W/ft <sup>2</sup>	
	1.18 BF (EHL)	63W	56.7 fc	73W	57.5 fc	73W	57.7 fc	75W	61.1 fc	
		80 lpw	0.79W/ft <sup>2</sup>	69 lpw	0.91W/ft <sup>2</sup>	70 lpw	0.91W/ft <sup>2</sup>	72 lpw	0.94W/ft <sup>2</sup>	

\* 28W T8 lamps not available with step or full dimming ballasts.

**T5 LAMPS** 28W T5 28W T5 HL 2600 Lumens 2770 Lumens 2418 Maintained 2550 Maintained (F58xx) (F5H8xx) 60W 46.8 fc 57W 45.5 fc 0.95 BF (EP95) 69 lpw 0.75W/ft<sup>2</sup> 71 lpw 0.71W/ft<sup>2</sup> **BALLAST FACTOR** 65W 46.5 fc 61W 46.8 fc 1.0 BF (EP) 0.81W/ft<sup>2</sup> 63 lpw 68 lpw 0.76W/ft<sup>2</sup> 54.7 fc 52.7 fc 72W 68W 1.15 BF (EP115) 67 lpw 0.90W/ft<sup>2</sup> 68 lpw 0.85W/ft<sup>2</sup>

## **ORDERING GUIDE**

MODEL	N0.	OF LAN	IPS	CEILING	ТҮРЕ	SHIE
EPC e-poc <sup>®</sup> Full	<b>1</b> One	(1' × 4' or	ıly)	<b>G</b> Grid <sup>1</sup>	DL	. Delta l
Luminaire	2 Iwo only	(1' × 4' av with T5)	ailable	SM Surface	Mount Mount <sup>2</sup> SH	Shield
				CM Cable N	lount	
	SIZE		LAMP	ТҮРЕ		
14	1'×4'	14	2', T5: 14	4 Watt	E	Electro
22	2'×2'	17	2', T8: 1	7 Watt	ESD	Electro Start <sup>3</sup>
24	2'×4'	24	2', 15H0	): 24 Watt 8 Wott	ED	Electr
		20	4, 15. 20 1' TR· 3'	0 VVdll 7 30 78	ELW	Electr
		32	or 25 W	2, 50, 28, 'att	EHL	Electr
		40TT	40 Watt	t Twin Tube	NEMA E104	Electr
			$(2' \times 2')$	t, 2G11 Base only)	NEMA ESD104	Electr
		54	4', T5HC	): 54 or 51 Watt	ED	Start
		For LED,	refer to L	EPC product.	Lr	0.88 B
	CCODIFC				NEMA EP104	Electr
ACCI FK14	$1' \times 4'$ Single	e Flange Ki	it		EP95	Electro
FK22	$2' \times 2'$ Single	e Flange K	it		FSD95	Flectro
FK24	$2' \times 4'$ Singl	e Flange K	it			Start (
FKCR	Flange Kit Ro	w Adapto	r		EP115	Electro
CM48Y1SC3F-KIT	48" Cable Mount Kit for 1'				FSD115	Flectro
	3 Wire Feed	Cord				Start (
CM48Y2SC3F-KIT	48" Cable M	ount Kit fo	r 2'		ESD80	Electro
	3 Wire Feed	ing type, Cord				(2-lan
)amn Lahel – standarr	4		ETT	Electro		
	1				FDTT	Electri
For drywall, order Fla	inge Kit access	ories sepa	rately		EFII	Liectio
Order hanger accesso	ries separately	/				
Where available with	18 25, 28 or 31	J watt ene	rgy saving	g lamps		
Not recommended for	or use with ste	p or full dii	mminq			
<sup>i</sup> Not available with "A	" air function					

<sup>1</sup> Footcandle calculations were based on 8'  $\times$  10' mounting centers in a 60'  $\times$  56' room with 9' ceilings, a 2.5' workplane height and 80/50/20 reflectances. LDD = 0.90 and LLD = 0.95.

#### EXAMPLE EPC22-224G-SH-EPU-F5835





ALERA LIGHTING

ARCHITECTURAL AREA LIGHTING

**BEACON PRODUCTS** 

COLUMBIA LIGHTING

COMPASS

**DEVINE LIGHTING** 

HUBBELL BUILDING AUTOMATION

HUBBELL INDUSTRIAL LIGHTING

HUBBELL OUTDOOR LIGHTING

**KIM LIGHTING** 

KURT VERSEN

LITECONTROL

PRESCOLITE

**PROGRESS LIGHTING** 

SPAULDING LIGHTING

SPORTSLITER SOLUTIONS

STERNER

WHITEWAY



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