# POP RECESSED

## LUMENWERX

ROUND 24 STATIC WHITE, FULL SPECTRUM

Project:	
T	
Type:	



Flush lens

#### DESCRIPTION

POP Recessed features a uniformly luminous diffuser that sits flush with the ceiling. The diffuser and light engine form a fully enclosed unit secured by a twist-and-lock mechanism for easy maintenance with no exposed hardware. POP Recessed delivers up to 109 LPW and installs in grid or gypsum board ceilings.





**IC RATED** 

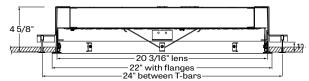
#### Up to 109 lm/W performance

#### ORDER GUIDE

LUMINAIRE ID	SIZE	OPTICS	LENS	LIGHT SOURCE	CRI	LUMEN PACKAGES
POROR	24	ULO	FH			
POROR - Pop Round Recessed	<b>24</b> - 24" diameter	ULO - Uniform	<b>FH</b> - Flush	<b>SW</b> - Static white	<b>80</b> - 80CRI	<b>2500</b> - Min. low output 2500lm
		Lambertian Optic		FS - Full spectrum	<b>90</b> - 90CRI	<b>3500</b> - Medium output 3500lm
						4500 1- Max. high output 4500lm (80CRI only)
						#### - Other required Im
						<sup>1</sup> Not available with full spectrum.

COLOR TEMP.	VOLTAGE	DRIVER <sup>2</sup>	ELECTRICAL	MOUNTING	FINISH	OPTIONS
27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K	120 - 120V 277 - 277V UNV - 120V-277V 347 - 347V	D1 - 1% dimming 0-10V DA 3 - DALI LTEAZW - Lutron 1% - 2 wire FP 120V LDE1 3 - Lutron Hi-lume 1% Eco LDE5 3 - Lutron 5% EcoSystem ELD1 - eldoLED 1% ECOdrive ELD0 - eldoLED 0.1% SOLOdrive	1 - 1 circuit +EB - Emergency battery pack +GTD - Generator transfer device	TG9 - tegular 9/16" TG15 - tegular 15/16" TB9 - t-bar 9/16" TB15 - t-bar 15/16" ST - Screw slot t-bar DF - Drywall kit	W - Matte white WA - White antimicrobial Silverwerx	FU - Fuse CP - Chicago Plenum  GATR <sup>4</sup> - Gasketed construction with acrylic lens and tamper-resistant screws GPTR <sup>45</sup> - Gasketed construction with polycarbonate lens and tamper-resistant screws PTR <sup>5</sup> - Polycarbonate lens with tamper-resistant screws
		<sup>2</sup> PoE (Power-over-Ethernet) compatible. Consult factory for details. <sup>3</sup> On-site commissioning is required.				NA- None  4IP54 rated when specified with gasketed construction and drywall ceiling mounting options.  5 IK10 rated when specified with polycarbonate lens.

#### **CROSS SECTION**



**POROR + FH** - Pop Round Recessed with flush lens





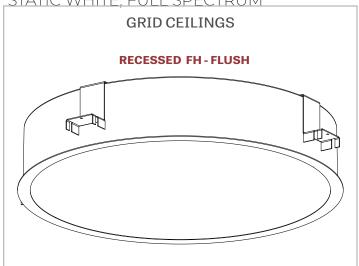


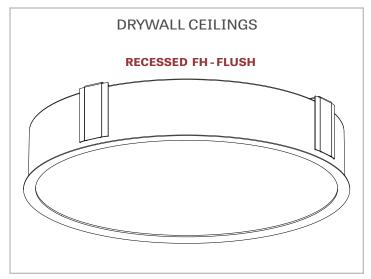
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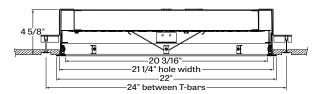
**ROUND 24** 



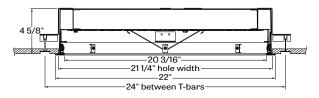




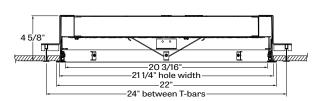
POROR-TG9 - tegular 9/16"



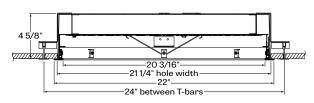
POROR - TG15 - tegular 15/16"



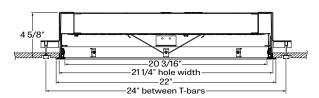
**POROR** - TB9 - t-bar 9/16"



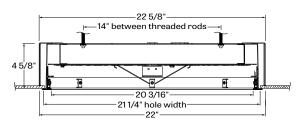
**POROR** - TB15 - t-bar 15/16"



POROR - ST- screw slot t-bar



POROR - DF - drywall kit









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## LUMENWERX

#### **ROUND 24**

### STATIC WHITE, FULL SPECTRUM

#### **OPTICS**

UNIFORM EFFICIENCY LAMBERTIAN OPTIC (ULO) - made of formed impact modified white PMMA, the optic provides an even light distribution with up to 88% transmission. Its unique enclosed shell design protects LEDs against Electrostatic Discharge and dust while its back surface project a soft glow on the mounting surface.

#### LIGHT SOURCE - STATIC WHITE

Custom array of mid-flux LEDs are mounted directly to the housing for optimal thermal performance. Available in 2700K, 3000K, 3500K and 4000K with a minimum 80 CRI and an option for 90 CRI with elevated R9 value. Color consistency maintained to within 3 SDCM. LEDs operated at reduced drive current to optimize efficacy and lumen maintenance.

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.

#### **PERFORMANCE AT 4000K**

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
Low output	4000K	23	2500	109
Medium output	4000K	33.5	3500	105
High output	4000K	44.5	4500	101

#### LIGHT SOURCE - FULL SPECTRUM

The full spectrum LED option offers improved color particularly in the cyan region that is beneficial in both healthcare and circadian lighting strategies. The cyan region in full spectrum LED is richer at the 480 nm range.

#### **ELECTRICAL**

Factory-set, adjustable output current LED driver with universal (120-277VAC) input. Dimmable from 100% to 1% with 0-10V dimming control. Rated life (90% survivorship) of 50,000 hours at 50°C max. ambient (and 70°C max. case) temperature. At maximum driver load: Efficiency>84%, PF>0.9, THD<20%. Other specifiable options include Lutron Hi-Lume 1% (specify 2-wire, or Ecosystem Dim-to-Off), Lutron 5-Series (5% Ecosystem), eldoLED 1% ECOdrive, eldoLED 0.1% SOLOdrive, and DALI protocol drivers. All of our standard 0-10V drivers are NEMA 410 compliant.

#### PoF

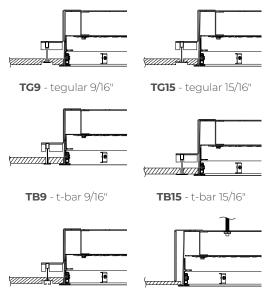
Depending on the PoE manufacturer selected, Lumenwerx will install the node in factory as either integral to the luminaire or as a remote module. Factory programming of the PoE node may or may not enable the following functionalities: lumen package, Duo (tunable white), emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.

#### **EMERGENCY**

Factory installed long life, high temperature, maintenance-free Lithium-Ion battery pack with self-test functionality, test switch and charge indicator. Minimum of 90 minutes operation, up to 10W (25°C) emergency lighting output and recharge time of 24 hours.

#### MOUNTING OPTIONS

Recess mount into exposed or concealed T-Bar or Tegular grid ceiling. A separate kit for mounting fixtures into drywall ceilings.



ST - screw slot t-bar

**DF** - drywall kit

#### FINISH

**Interior** - 95% reflective, matte white powder coating **Exterior** - matte white powder coating. Optional antimicrobial finish

#### GASKETED CONSTRUCTION OPTION

The lens is gasketed and sealed, making the fixture suitable for healthcare applications. IP54 rated when specified with the drywall ceiling mounting option.

#### CONSTRUCTION

**Housing** - 16 gauge spun aluminum, matte white powder coating **Diffuser** - Uniform Lambertian optic, thermoformed impact modified acrylic, completely enclosed

Gasket (GATR, GPTR options) - Closed-cell silicone foam gasket

#### WEIGHT

**RD 24 Flush** - 12.64lbs - 5.74kg

#### 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) **IC rated** - suitable for direct contact with insulation.

**NSF** - NSF2 Listed for Non-Food Zones.









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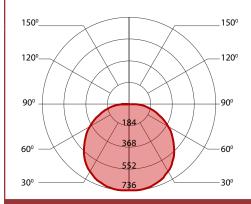
# ROUND 24

## STATIC WHITE, FULL SPECTRUM

#### WARRANTY

Lumenwerx provides a five-year limited warranty of 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.

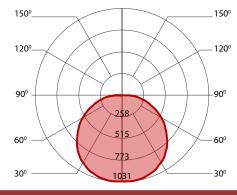
#### 2500 LUMEN AT 80CRI - LOW OUTPUT



#### **PERFORMANCE**

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
Low output	2700K	25	2500	100
Low output	3000K	24.5	2500	102
Low output	3500K	23.5	2500	106
Low output	4000K	23	2500	109

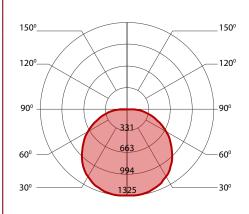
#### 3500 LUMEN AT 80CRI - MEDIUM OUTPUT



#### **PERFORMANCE**

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
Medium output	2700K	36.5	3500	96
Medium output	3000K	35.5	3500	98
Medium output	3500K	34.5	3500	102
Medium output	4000K	33.5	3500	105

#### 4500 LUMEN AT 80CRI - HIGH OUTPUT



#### PERFORMANCE

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
High output	2700K	48.5	4500	93
High output	3000K	47.5	4500	95
High output	3500K	46	4500	98
High output	4000K	44.5	4500	101





