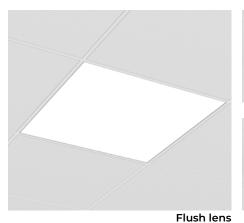
SQUARE 2x2 STATIC WHITE, FULL SPECTRUM

# LUMENWERX

Project:	
Type:	







## **DESCRIPTION**

POP Recessed features a uniformly luminous diffuser that sits flush with the ceiling or drops up to 4" below. 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 110 LPW and installs in grid or gypsum board ceilings.



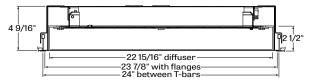


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# ORDER GUIDE

LUMINAIRE	בווי	SIZE	OPTICS	DROP	LENS	LIGHT SOUP	(CE	CRI	LUMEN PACKAGES
POSQR		22	ULO						
POSQR - Pol Recessed	p Square	<b>22</b> - 2'X2'	<b>ULO</b> - Unife Lambertia		Drop Drop Drop	SW - Static w FS - Full spec		<b>80</b> - 80CRI <b>90</b> - 90CRI	2500 - Min. low output 2500lm 3500 - Medium output 3500lm 4500 1- Max. high output 4500lm #### - Other required Im
COLOR TEMP.	VOLTAGE	DRIVER <sup>2</sup>		ELECTRICAL	мои	NTING	FINISH	OPTIONS	
<b>27</b> - 2700K <b>30</b> - 3000K	<b>120</b> - 120V <b>277</b> - 277V	<b>D1</b> - 1% dimming 0-10V <b>DA</b> <sup>3</sup> - DALI		1 - 1 circuit TC9 - Tegular 9/16" +EB - TG15 - Tegular 15/16"		<b>W</b> - Matte white	<b>FU</b> - Fuse <b>CP</b> - Chicago Pl	lenum	
35 - 3500K UNV - 40 - 4000K 120V-277V 347 - 347V		LTEA2W - 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  2 PoE (Power-over-Ethernet)		Emergency battery pack +GTD - Generator transfer device	TB9 - T-bar 9/16" TB15 - T-bar 15/16" ST - Screw slot t-bar DF - Drywall kit	antimicrobial Silverwerx	tamper-resistar GPTR <sup>456</sup> - Gask lens and tampe	eted construction with acrylic lens and int screws keted construction with polycarbonate er-resistant screws rbonate lens with tamper-resistant	
		compatible. Consult fac details. <sup>3</sup> On-site commissioning	tory for					<sup>5</sup> IP54 rated who and drywall ceil	with the flush lens option. en specified with gasketed construction ling mounting options. en specified with polycarbonate lens.

## **CROSS SECTION**



POSQR + FH - pop square recessed with flush lens

3737 Cote Vertu St-Laurent, Quebec, Canada H4R 2C9

T (514) 225-4304 F (514) 931 -4862

www.lumenwerx.com



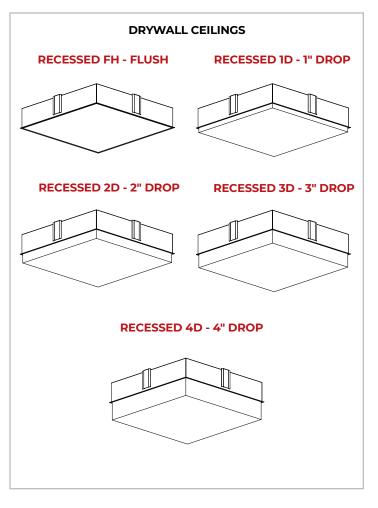


# LUMENWERX

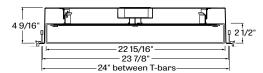
SQUARE 2x2

# STATIC WHITE. FULL SPECTRUM

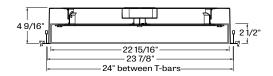
# **GRID CEILINGS RECESSED FH - FLUSH RECESSED 1D - 1" DROP RECESSED 2D - 2" DROP RECESSED 3D - 3" DROP RECESSED 4D - 4" DROP**



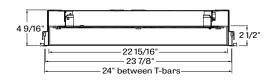
POSQR-TG9 - tegular 9/16"



**POSQR** - TG15 - tegular 15/16"



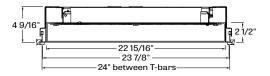
POSQR - TB9 - t-bar 9/16"



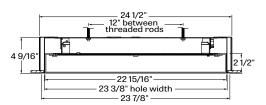
POSQR - TB15 - t-bar 15/16"



POSQR - ST- screw slot t-bar



POSQR - DF - drywall kit









# LUMENWERX

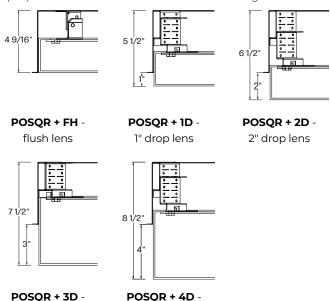
SQUARE 2x2 STATIC WHITE, FULL SPECTRUM

#### 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.

#### DROP LENS

Pop square 22 recessed is available in 5 lens configurations.



# LIGHT SOURCE - STATIC WHITE

3" drop lens

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.

4" drop lens

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	22.5	2500	110
Medium output	4000K	32.5	3500	107
High output	4000K	43.5	4500	104

# 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.

#### 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), 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.

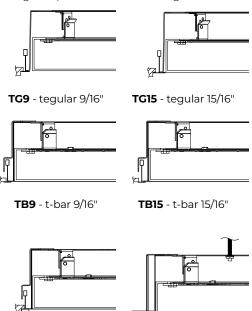




# SQUARE 2x2

# STATIC WHITE, FULL SPECTRUM MOUNTING OPTIONS

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



# FINISH

ST - screw slot t-bar

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

**DF** - drywall kit

# LUMENWERX

#### 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

**SQ 22 Flush, 1D, 2D** - 23.74lbs - 10.78kg **SQ 22 3D, 4D** - 24.94lbs - 11.33kg

# 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.

#### 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.



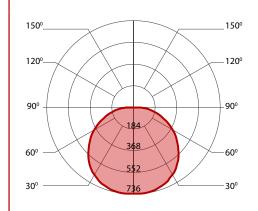


# LUMENWERX

SQUARE 2x2

# STATIC WHITE, FULL SPECTRUM

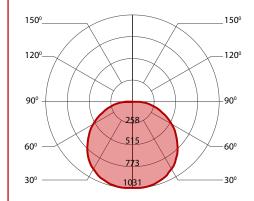
# 2500 LUMEN AT 80CRI - LOW OUTPUT



## **PERFORMANCE**

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
Low output	2700K	25	2500	101
Low output	3000K	24.5	2500	103
Low output	3500K	23.5	2500	106
Low output	4000K	22.5	2500	110

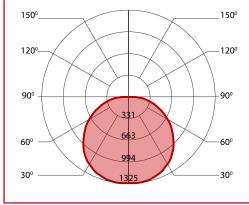
# 3500 LUMEN AT 80CRI - MEDIUM OUTPUT



## **PERFORMANCE**

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
Medium output	2700K	35.5	3500	98
Medium output	3000K	35	3500	100
Medium output	3500K	33.5	3500	104
Medium output	4000K	32.5	3500	107

# 4500 LUMEN AT 80CRI - HIGH OUTPUT



## **PERFORMANCE**

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
High output	2700K	47	4500	96
High output	3000K	46	4500	98
High output	3500K	44.5	4500	101
High output	4000K	43.5	4500	104



