### LUMENWERX



### DESCRIPTION

Sleek square form meets superb function in Ubik, a lighting family designed to provide a multitude of creative options. Ubik Troffer creates visual comfort with its low-glare dual optical chamber performance. The center channel features parabolic louvers, available in matte white or matte silver, that deliver a soft conical distribution. Side lenses provide indirect, reflected, soft diffused distribution using Tri-Flect technology. The fixture offers 60/40 and 40/60 light distribution options and meets the WELL Building Standard™ guidelines for UGR values. Ubik Troffer comes in Chromawerx Sola and Duo. For Static White solution, consult other spec sheet.

Project:

Type:



### Order Guide

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- 11 :	RA	

LUMINAIRE ID	SIZE	CENTER OPTIC	SIDE OPTIC	LIGHT SOURCE <sup>1</sup>	CRI	LUMEN	PACKAGE	(lm)	
UBIT	22		TFO						
<b>UBIT</b> - Ubik Troffer	<b>22</b> - 2' X 2'	MWPL - Matte White	TFO - Tri-Flect Optic	SOLA - Dim-to-warm single	<b>80</b> - 80 CRI		Low	Med	High
		Parabolic Louver		channel control 35K to 22K	<b>90</b> - 90 CRI	2' X 2'	2000	3000	4000 <sup>2, 3</sup>
		MSPL - Matte Silver Parabolic Louver		DUO - Tunable white 2-channel control 65K to 27K		<sup>2</sup> Not available with 90 CRI. <sup>3</sup> Not available with 40/60.		I	
				<sup>1</sup> Static white also available. Consult other spec sheet.					

LIGHT DISTRIBUTION	VOLTAGE	DRIVER <sup>4</sup>	ELECTRICAL	MOUNTING	FINISH	OPTIONS
			1C			
<b>40/60</b> - 40%PL - 60% TFO	<b>120</b> - 120V	SOLA	1C - 1 circuit	GRD - Grid ceiling	<b>W</b> - Matte white	FU120 - Fuse 120V
<b>60/40</b> - 60% PL - 40% TFO	<b>277</b> - 277∨	<b>SD1</b> - Single 0-10V input		<b>DF</b> - Drywall trim kit	CF# - Custom finish,	FU277 - Fuse 277V
	UNV -				specify RAL#	FWC - Flexible whip
	120V-277V	DUO				cable (6' std)
		<b>DMX</b> <sup>5, 6</sup> - DMX				<b>CP</b> - Chicago Plenum
		DDA <sup>6</sup> - DALI DT6				NA - None
		DDA8 <sup>6</sup> - DALI DT8				
		DDI - Dual 0-10V input for CCT/intensity				
		PSQ0 <sup>6</sup> - Lutron T-Series 1% Tunable White				
		<sup>4</sup> PoE (Power-over-Ethernet) compatible. Consult factory for details. <sup>5</sup> For more information, see pages 7 to 12. <sup>6</sup> On-site commissioning is required.				

### Accessories

Optional, order separately

DMX WALL CONTROLLER 7

WCW - Wall controller white WBW - Wall controller black

<sup>7</sup> Available with DMX only. For more information, see pages 7 to 12, or consult factory.

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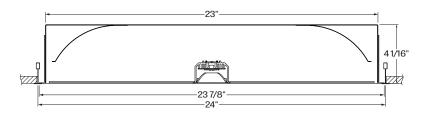
# UBIK TROFFER

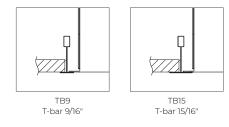


CHROMAWERX - SOLA AND DUO

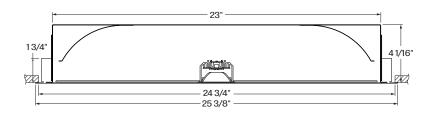
### Dimensions

GRID





DRYWALL



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### Photometrics

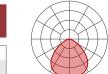
### 2' X 2' - SOLA

Delivered lumens at 80 CRI.

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K	

40/60	- 40%	MWPL	- 60%	TFO

LUMEN	сст	LUM	IENS	INPUT	LPW	
OUTPUT	CCI	MWPL TFO		WATTS	LPVV	
2000	3500	800	1200	19.6	102	
3000	3500	1200	1800	31.6	95	



### **60/40** - 60% MWPL - 40% TFO

LUMEN OUTPUT	сст	LUM MWPL	IENS TFO	INPUT WATTS	LPW
2000	3500	1200	800	18.9	106
3000	3500	1800	1200	30.4	99
4000	3500	2400	1600	43.3	92

LUMENWERX

### **40/60** - 40% MSPL - 60% TFO

LUMEN	COT	LUMENS CCT MSPL TFO		INPUT	LPW
OUTPUT	CCI			WATTS	LPVV
2000	3500	800	1200	21.2	95
3000	3500	1200	1800	32.9	91

### 60/40 - 60% MSPL - 40% TFO

LUMEN	сст	LUM	IENS	INPUT	LPW
OUTPUT		MSPL	TFO	WATTS	
2000	3500	1200	800	20.1	99
3000	3500	1800	1200	32.4	92
4000	3500	2400	1600	46.3	86

### 2' X 2' - DUO

Delivered lumens at 80 CRI.

### 40/60 - 40% MWPL - 60% TFO

	LUMEN	сст	LUM	INPUT		
$\sum$	OUTPUT		MWPL	TFO	WATTS	
$\langle \rangle \rangle$						_
211	2000	2700	800	1200	20.5	
$\nabla \Pi$		6500	800	1200	19.5	
	7000	2700	1200	1800	33.0	
	3000	6500	1200	1800	31.6	

### **40/60** - 40% MSPL - 60% TFO

LUMEN	сст	LUM	IENS	INPUT	LPW
OUTPUT	CCI	MSPL	TFO	WATTS	LPVV
2000	2700	800	1200	22.3	90
	6500	800	1200	20.9	96
3000	2700	1200	1800	34.3	87
	6500	1200	1800	32.9	91



### **60/40** - 60% MWPL - 40% TFO

	LUMEN OUTPUT	сст	LUM MWPL	ENS TFO	INPUT WATTS	LPW
	2000	2700	1200	800	19.7	102
		6500	1200	800	18.6	108
	3000	2700	1800	1200	31.8	94
		6500	1800	1200	30.1	100
	4000	2700	2400	1600	45.3	88
		6500	2400	1600	42.9	93

### 60/40 - 60% MSPL - 40% TFO

LUMEN OUTPUT	сст	LUM MSPL	IENS TFO	INPUT WATTS	LPW
2000	2700	1200	800	21.0	95
2000	6500	1200	800	19.8	101
3000	2700	1800	1200	33.9	89
3000	6500	1800	1200	32.0	94
4000	2700	2400	1600	48.5	82
4000	6500	2400	1600	45.8	87





LPW

# LUMENWERX

### Technical Specifications

#### OPTICS

#### Tri-Flect Optic (TFO)

Tri-Flect Optic (TFO) is the technology used in the Ubik Troffer where indirect light is sent off internal reflectors and then diffused through the dual side lenses to create visual comfort with low-glare.

#### **Parabolic Louvers**

Parabolic louvers emit soft brightness at the critical viewing angle delivering low-glare environments. They are the ideal solution for task lighting. UGR can change slightly based on the color of the louvers. Two matte finishes are available in white and silver. Parabolic louvers feature a low-glare conical distribution, thereby limiting ceiling brightness.



#### LIGHT SOURCE

Custom array of alternating color temperature mid-flux LEDs are mounted directly to the housing for optimal thermal performance. For the Duo products, a color temperature range from 6500K-2700K is achievable with color points on or below the black body curve. For the Sola products, a color temperature range from 3500K-2200K is controlled synchronously with intensity. Color consistency between fixtures is maintained to within 3 SDCM. LEDs operate at reduced drive current to optimize efficacy and lumen maintenance.

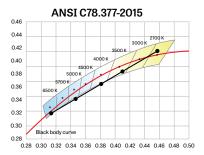
All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

#### CHROMAWERX - TUNABLE WHITE Chromawerx Sola

It is a single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple analog control sends a common signal to dual output digital drivers, which are programmed to adjust a specially populated LED array to emulate the effect of dimming a filament source. Dimming range is programmable but the default option runs from 3500K at 100% of full power to 2200K at 5% of full power. CRI is maintained above 80 throughout the dimming range.

#### Chromawerx Duo

It is a two-channel control. It uses an analog (0-10V) protocol for separate control of luminaire CCT and intensity or a digital (DMX, DALI and PSQ0) protocol for synchronous control of both warm and cool LED arrays to enable the user to set color temperature and light output. Commonly called "tunable white", Chromawerx two-channel control provides the range of cool (6500K) to warm (2700K) color that can be useful for helping to entrain circadian rhythms, stimulate alertness for improved educational and work productivity, and compensate for jet lag, among other applications. The Chromawerx drivers are programmed to limit maximum light output and power usage across all color temperatures. CRI is maintained above 80.





# UBIK TROFFER

# LUMENWERX

CHROMAWERX - SOLA AND DUO



WELL for Light - The WELL building standard focuses on light quality in several features. There are three categories that are fully attributed to the construction and features of a luminaire. In WELL V1, it's Feature 54 Circadian Lighting, Feature 55 Glare Control, and Feature 58 Color Quality. In WELL V2, it's Feature L03 Circadian Lighting, Feature L04 Glare Control, and Feature L07 Electric Light Quality.

This fixture meets Features:

- Feature 54 or L03 when Duo is selected
- Feature 55 or L04 meets WELL glare category (b-c-d)
- Feature 58 or L07 when 90CRI is selected

All LED drivers used at Lumenwerx are deemed to have a low risk level of flicker, of 5 % or less below 90Hz operational as defined by IEEE standard 1789-2015 LED.



WELL for Mind -This luminaire meets WELL for mind as it is a human centric luminaire offering quality light, excellent color, and smooth optics. If any of these features are incorporated in a luminaire, it can improve the ability to focus, concentrate, and persist longer on a given task. This fixture harmoniously operates in a space to assist the mind.

#### For more information, please contact well@lumenwerx.com

#### ELECTRICAL

#### <u>SOLA</u>

SD1

Factory-set, adjustable output current LED driver with universal (120-277VAC) input. Using a single 0-10V control signal, the light output warms in color temperature as it dims down to 1% and 2200K. At maximum driver load, efficiency<86%, PF>0.9, THD<20%.

#### DUO DMX

Factory-set adjustable output current electronic driver with 120-277V AC line input. Using DMX wall controls (optionally supplied by Lumenwerx) or an existing DMX control system, both channels of LEDs are independently adjustable. Each DMX driver can be independently addressed using the built-in RDM (Remote Device Management) in the field. Dimming down to 1% is attainable. Rated life (90% survivorship) of 50,000 hours at 50°C maximum ambient temperature. At maximum driver load, efficiency<84%, PF>0.9, THD<20%.

### DALI

Factory-set adjustable output current electronic driver with 120-277V AC line input. Using an existing DALI control system (supplied by others), one control channel adjusts the fixture color temperature, and the other control channel adjusts fixture brightness. With DALI Type 6, two DALI addresses are required to control both channels. With DALI Type 8, one DALI address is required to control both channels. Dimming down to 1% is attainable. Rated life (90% survivorship) of 50,000 hours at 50°C maximum ambient temperature. At maximum driver load, efficiency<84%, PF>0.9, THD<20%.

### DD1

Factory-set adjustable output current LED driver with universal (120-277VAC) input. Controlled via two individual 0-10V signals, one for setting light output down to a minimum of 1% and the other for adjusting the CCT (default range of 6500K-2700K). Rated life of 50,000 hours at 70°C maximum driver case temperature and 100% load conditions. Typical efficiency of 86%, PF>0.9, THD<20% at 100% load conditions.

### PSQ0

Lutron T-Series 2-Channel tunable white drivers enable highperformance human centric lighting (HCL) applications. Digital control of color temperature (CCT) and intensity are achieved when used with the ESN T-Series tunable white controller as a part of a Lutron Quantum System.

#### <u>PoE</u>

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 caseby-case basis.

#### MOUNTING OPTIONS

Recessed fixtures can be mounted into exposed T-bar ceiling, as well as in drywall ceilings with trim kit.



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## UBIK TROFFER recessed chromawerx - sola and duo

# LUMENWERX

### CONSTRUCTION

**Housing** - Die formed cold rolled sheet steel 20 gauge thick, matte white powder coating.

**Reflectors** - Cold rolled steel 0.030" thick precisely die formed, 95% reflective matte white painted.

**Interior brackets** - Die formed cold rolled sheet steel 20 gauge thick.

**Center basket** - Extruded aluminum 0.07" nominal, matte white and lens made in clear PMMA precisely formed into optical micro-structures forms.

Side lenses - Frost impact acrylic lens 88% transmissive. Drywall kit - Extruded aluminum 0.07" nominal, matte white powder coating.

#### FINISH

**Interior** - 95%, reflective matte powder coated white paint **Exterior** - Powder-coat paint in standard white. Custom colors are also available.

#### WEIGHT

Ubik Troffer 2' X 2' - 23.1 lbs - 10.5 kg

### CERTIFICATIONS

**ETL** - Rated for Indoor Dry/Damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0. **IC rated** - Suitable for direct contact with insulation **Chicago Plenum** - City of Chicago approved (CCEA)

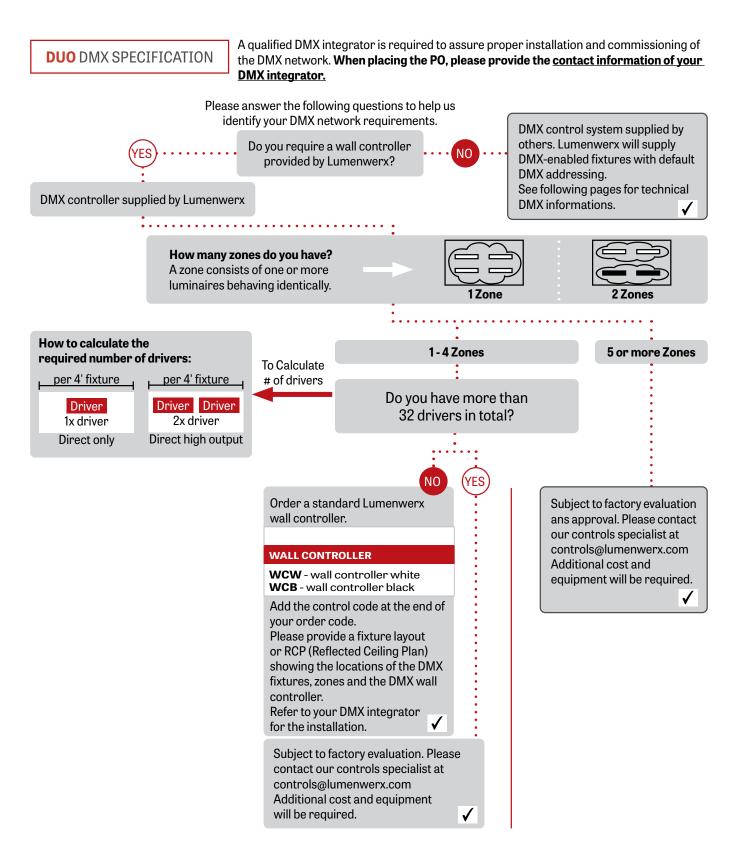
#### WARRANTY

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.





## UBIK TROFFER recessed chromawerx - sola and duo





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### LUMENWERX

GENERIC DMX NETWORK ARCHITECTURE Lumenwerx supplied Network & control DMX PROTOCOL **CONSIDERATIONS:** DMX controller by others DMX drivers/fixtures must be daisy chained. Maximum 32 drivers per DMX run. ..... The end of the line must be terminated **First DMX enabled fixture** by a 120  $\Omega$  resistor supplied by Lumenwerx DMX IN DMX Controls J-Box DMX OUT Electrical Driver Driver J-Box 120/277V 2 Wire + Shield LOW CAP CABLE Next DMX enabled fixture supplied by Lumenwerx DMX IN DMX Controls J-Box DMX OUT Driver Driver Electrical J-Box 120/277V 2 Wire + Shield LOW CAP CABLE Last DMX enabled fixture supplied by Lumenwerx max 32 drivers per run DMX IN DMX Controls J-Box DMX OUT Driver Driver Electrical J-Box 120/277V 120 OHM END OF LINE Δ RESISTOR

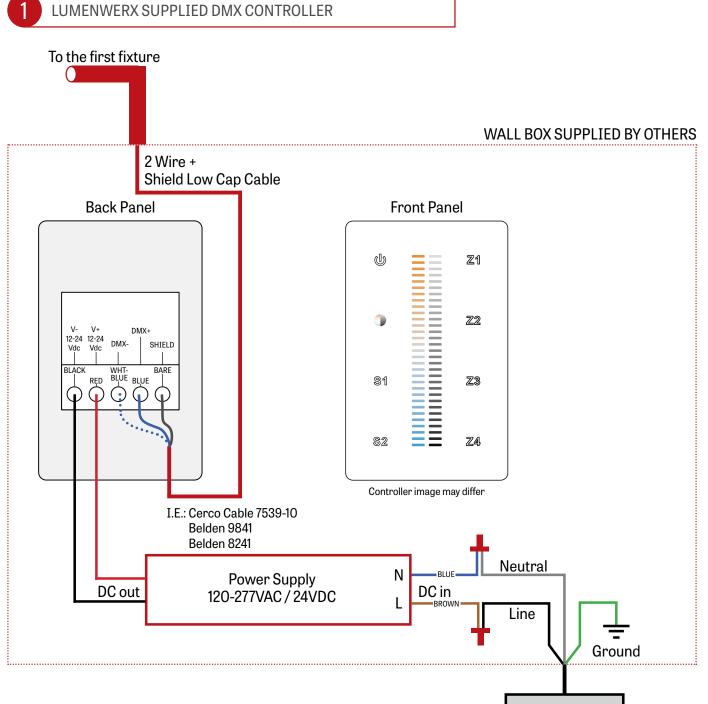




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Electrical J-Box



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## UBIK TROFFER recessed chromawerx - sola and duo

J-BOX DMX DAISY CHAIN DETAIL

2



Low capacitance DMX Cable from Previous Fixture Shielding foil touches the bare IN Bare metal drain wire (shield) metal drain wire MUST NOT TOUCH J-BOX inside DMX IN Controls DMX ENABLED FIXTURE J-Box DMX OUT Ground Ξ Bare metal drain wire (shield) OUT MUST NOT TOUCH J-BOX Low capacitance DMX cable to next fixture







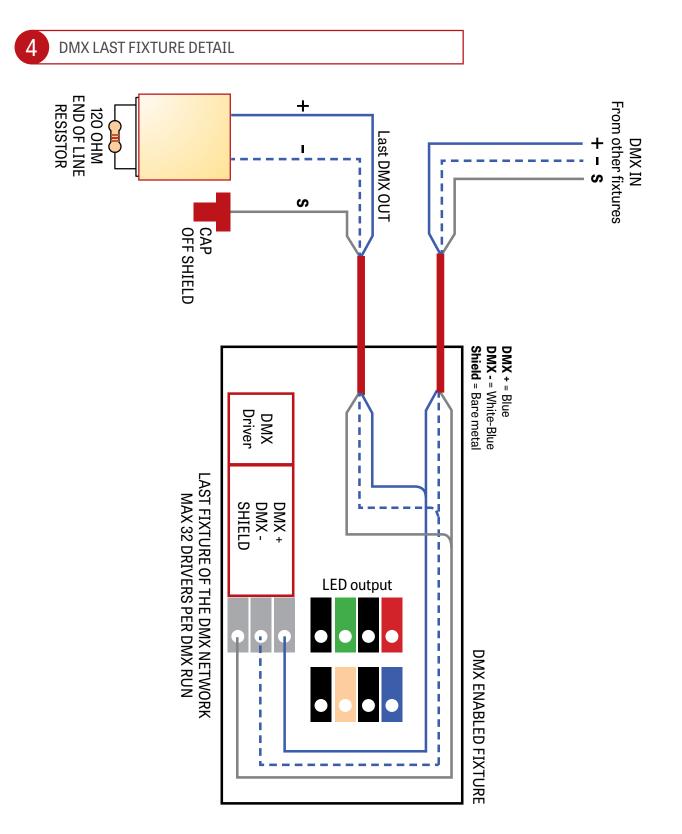
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# UBIK TROFFER Recessed

LUMENWERX

CHROMAWERX - SOLA AND DUO







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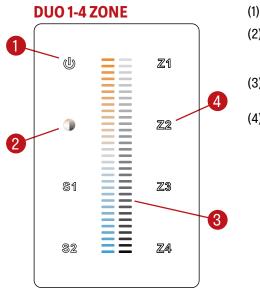
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December 1, 2022

### LUMENWERX

DMX WALL CONTROLLER



(1) Power:	Use this button to turn ON or OFF the fixture.
(2) Brightness/CCT:	Use the color/brightness toggle button to choose between color/brightness. When Blue: brightness is selected, when Yellow: color is selected.
(3) Slider:	Depending on the mode chosen in step 2, the slider will allow the user to set desired color or brightness.
(4) Zone select:	Up to 4 zones can be selected either independently or together. Once selected, the commands will be sent to the zone identified by a Blue LED.

**Default DMX Addresses:** 1 Warm

2 Cool

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