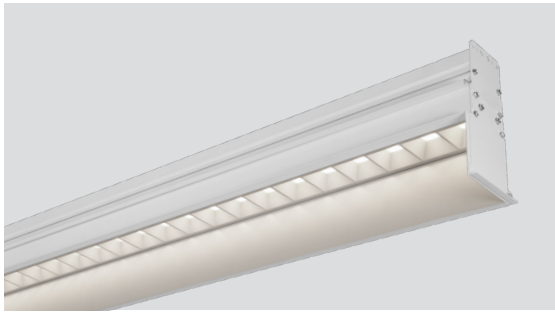# UBIK SEAL PERIMETER

RECESSED
CHROMAWERX - SOLA AND DUO

LUMENWERX

Project: _____

_____

Type: _____

DESCRIPTION

Sleek square form meets superb function in Ubik, a lighting family designed to provide a multitude of creative options. Designed with a 2.5" aperture, Ubik Seal Perimeter offers subtle, low-glare illumination in level, shallow, and deep recessed arrangements with parabolic louver option for direct illumination. Ubik Seal Perimeter comes in Chromawerx Sola and Duo. For static white and full spectrum solutions, consult other spec sheets.

IC RATED   5 YEAR WARRANTY   IP54

Order Guide

LUMINAIRE ID	DISTRIBUTION	OPTIC	LIGHT SOURCE [2]	CRI
	D			
UBISEALPERL [1] - Ubik Seal Perimeter Level **UBISEALPERS** [1] - Ubik Seal Perimeter Shallow **UBISEALPERD** [1] - Ubik Seal Perimeter Deep [1] IP54 rated gasketed construction with an additional clear polycarbonate lens.	**D** - Direct	**MWPL** - Matte White Parabolic Louver **MSPL** - Matte Silver Parabolic Louver **MBPL** - Matte Black Parabolic Louver	**SOLA** - Dim-to-warm single channel control 35K to 22K **DUO** - Tunable white 2-channel control 65K to 27K [2] Static white and full spectrum also available. Consult other spec sheet.	**80** - 80 CRI **90** - 90 CRI

LUMEN PACKAGE	LUMINAIRE LENGTH	VOLTAGE	DRIVER [5]
350 - Low output 350 lm/ft **500** - Medium output 500 lm/ft **750** [3] - High output 750 lm/ft [3] Available for non-IC applications only.	**#FT#IN** [4] - Specify nominal length (#) **Standard nominal lengths:** Single units: 4' to 12' Continuous runs: lengths over 12' [4] Parabolic louvers are only available in 6" increments. If the fixture length is not a multiple of 6", blanks of equal length will be added at both ends of the fixture.	**120** - 120V **277** - 277V **UNV** - 120V-277V	<u>SOLA</u> **SD1** - Single 0-10V input <u>DUO</u> **DMX** [6, 7] - DMX **DDA** [7] - DALI DT6 **DDA8** [7] - DALI DT8 **DD1** - Dual 0-10V input for CCT/intensity **PSQ0** [7] - Lutron T-Series 1% Tunable White [5] PoE (Power-over-Ethernet) compatible. Consult factory for details. [6] For more information, see pages 7 to 12. [7] On-site commissioning is required.

ELECTRICAL	MOUNTING	FINISH	OPTIONS
1C			
1C - 1 circuit	**TG9** - Tegular 9/16" **TG15** - Tegular 15/16" **TB9** - T-bar 9/16" **TB15** - T-bar 15/16" **ST** - Screw slot T-bar **DTR** - Drywall trim **DTL** - Drywall trimless **DMF** - Drywall mud flange	**W** - Matte white **AL** - Aluminum **B** - Matte black **WA** - White antimicrobial Silverwerx **CF#** - Custom finish, specify RAL#	**FU120** - Fuse 120V **FU277** - Fuse 277V **CP** - Chicago Plenum **GGK** - Grid gasket **NATA** - Natatorium finish **CRF** - Corrosion-resistant finish **NA** - None

Accessories
Optional, order separately

DMX WALL CONTROLLER [8]
WCW - Wall controller white **WBW** - Wall controller black [8] Available with DMX only. For more information, see pages 7 to 12, or consult factory.

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UBIK-SEAL-PERIMETER-TW-SPEC-REV1   September 8, 2022
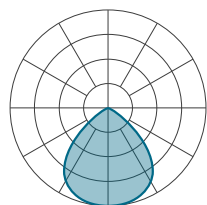
PoE Power over Ethernet   WELL   WELL

UBIK SEAL PERIMETER
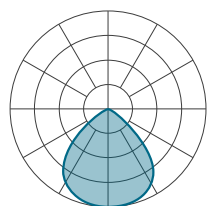
LUMENWERX

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CHROMAWERX - SOLA AND DUO

Photometrics

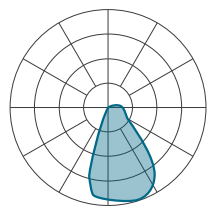Watts and lumens per watt may vary based on the type of driver selected.

MWPL - Level - Delivered Lumens at 35K at 80 CRI

LUMENS PER FOOT	TOTAL LUMENS PER 4FT	INPUT WATTAGE	LPW
350	1400	10.4	135
500	2000	15.1	133
750	3000	23.4	128

MWPL - Shallow - Delivered Lumens at 35K at 80 CRI

LUMENS PER FOOT	TOTAL LUMENS PER 4FT	INPUT WATTAGE	LPW
350	1400	10.9	129
500	2000	15.8	127
750	3000	24.6	122

MWPL - Deep - Delivered Lumens at 35K at 80 CRI

LUMENS PER FOOT	TOTAL LUMENS PER 4FT	INPUT WATTAGE	LPW
350	1400	11.2	125
500	2000	16.2	123
750	3000	25.2	119

cETLus LISTED
Intertek

PoE
Power over Ethernet

WELL   WELL

UBIK SEAL PERIMETER
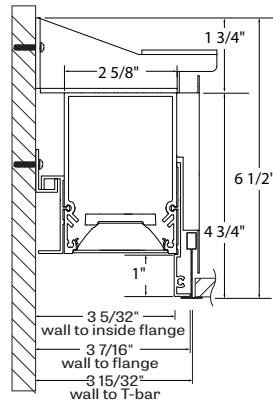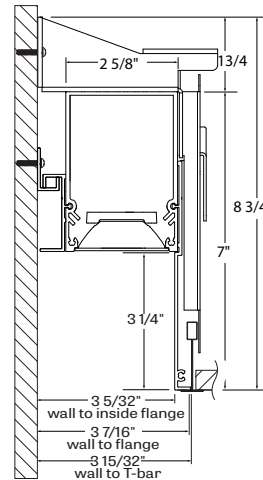
RECESSED
CHROMAWERX - SOLA AND DUO

Cross sections
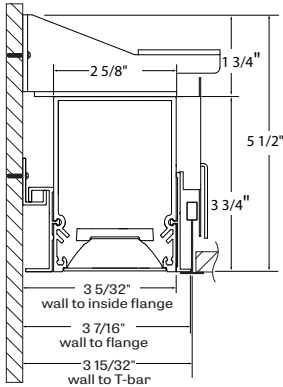
Ubik Seal Perimeter - Level   Ubik Seal Perimeter - Shallow   Ubik Seal Perimeter - Deep

Technical Specifications

OPTICS

Parabolic Louvers

Parabolic louvers provide excellent shielding and a pleasing crisp visual texture. The precisely molded louvers consist of 1" deep blades and is 2"x2" in size. The LED array is secured in the direct position, with the light transmitting through a beam-forming lens creating a conical distribution. Three matte (MPL) finishes are available in black, white and silver, offering a soft appearance, a wide beam spread of up 85-91 degrees, gentle brightness transition at cut-off, and exceptional UGR.

LIGHT SOURCE

Custom linear 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 are 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.

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.

ANSI C78.377-2015
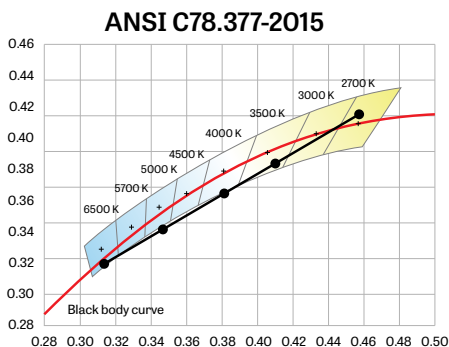
WELL for Light - The WELL building standard focuses on light quality in several features. There are three categories that are fully attributed to the construction and features of a luminaire. In WELL V1, it's Feature 54 Circadian Lighting, Feature 55 Glare Control, and Feature 58 Color Quality. In WELL 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 58 or L07 when 90 CRI 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.

LUMINAIRE LENGTH
Ubik Perimeter is made up of standard 4 to 12 foot sections that may be joined together to create longer continuous run lengths. Exact run lengths must be noted in the product code. The minimum length is 4 feet. Parabolic louvers available in 6" increments.

All individual sections are joined together onsite using the joiner kits provided. Lumenwerx offers joiner kits that are extremely simple to work with in the field and result in a fixture that appears virtually seamless with no light leak at any connection.

ELECTRICAL
SOLA
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%.

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UBIK SEAL PERIMETER

LUMENWERX

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CHROMAWERX - SOLA AND DUO

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 high-performance 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.

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.
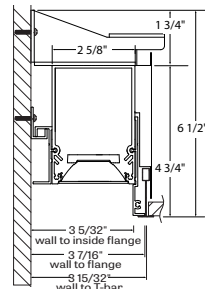
MOUNTING OPTIONS
Recessed fixtures can be mounted into exposed or concealed T-bar or tegular grid ceilings.
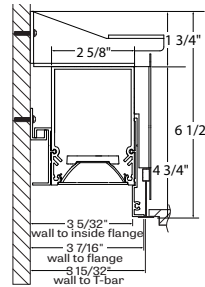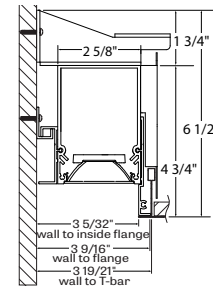

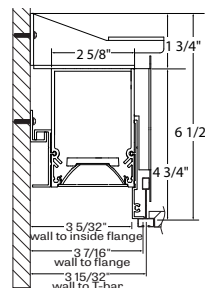TG9 - Tegular 9/16"
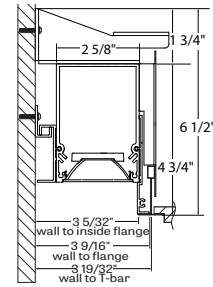
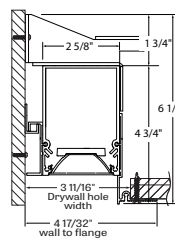TG15 - Tegular 15/16"

TB9 - T-bar 9/16"
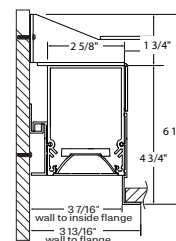

TB15 - T-bar 15/16"

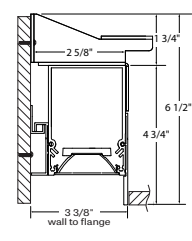

ST - Screw slot T-bar

Mounting for drywall ceilings are available with visible trim, trimless or mud flange.

DMF - Drywall mud flange

DTR - Drywall trim

DTL - Drywall trimless

UBIK SEAL PERIMETER

LUMENWERX

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CONSTRUCTION

Housing - Extruded aluminum (0.070" nominal) up to 90% recycled content
Joiner bracket (DTL-DTR) - Cold drawn steel 8 gauge thick
Joiner bracket (other) - Galvanised steel 16 gauge thick
Louvers - Injection molded optical grade polycarbonate up to 95% reflective
Parabolic heatsink - Extruded aluminum (0.10" nominal) up to 90% recycled content
Recessed flanges - Extruded aluminum (0.075" nominal) up to 90% recycled content
End plate - Aluminum sheet 0.19" thick
Gasket - Closed-cell silicone foam gasket.
Grid gasket (GGK option) - 1/16" closed-cell silicone foam, assures a better seal between the fixture and the grid.

FINISH

Interior - 95%, reflective matte powder coated white paint
Exterior - Powder-coat paint in standard white, aluminum, or black. Optional antimicrobial finish, as well as custom finishes, also available.

WEIGHT

Ubik Seal Perimeter 4ft - 16.5 lbs - 7.5 kg
Ubik Seal Perimeter 8ft - 32.9 lbs - 14.9 kg
Ubik Seal Perimeter 12ft - 49.4 lbs - 22.4 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.

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UBIK SEAL PERIMETER

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DUO DMX SPECIFICATION

A qualified DMX integrator is required to assure proper installation and commissioning of the DMX network. **When placing the PO, please provide the <u>contact information of your DMX integrator.</u>**

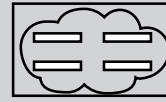Please answer the following questions to help us identify your DMX network requirements.

(YES) ...... Do you require a wall controller provided by Lumenwerx? ...... (NO)

DMX controller supplied by Lumenwerx

DMX control system supplied by others. Lumenwerx will supply DMX-enabled fixtures with default DMX addressing.
See following pages for technical DMX informations. ✓

How many zones do you have?
A zone consists of one or more luminaires behaving identically.

1 Zone   **2 Zones**

How to calculate the required number of drivers:

per 4' fixture	per 4' fixture
Driver	Driver Driver
1x driver	2x driver
Direct only	Direct high output
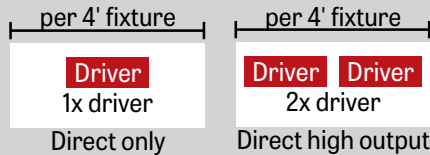
To Calculate # of drivers

1 - 4 Zones   **5 or more Zones**

Do you have more than 32 drivers in total?

(NO)   (YES)

Order a standard Lumenwerx wall controller.

WALL CONTROLLER
WCW - wall controller white
WCB - wall controller black

Add the control code at the end of your order code.
Please provide a fixture layout or RCP (Reflected Ceiling Plan) showing the locations of the DMX fixtures, zones and the DMX wall controller.
Refer to your DMX integrator for the installation. ✓

Subject to factory evaluation. Please contact our controls specialist at controls@lumenwerx.com Additional cost and equipment will be required. ✓

Subject to factory evaluation ans approval. Please contact our controls specialist at controls@lumenwerx.com Additional cost and equipment will be required. ✓

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UBIK SEAL PERIMETER

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GENERIC DMX NETWORK ARCHITECTURE

Lumenwerx supplied DMX controller **(1)**

Network & control by others
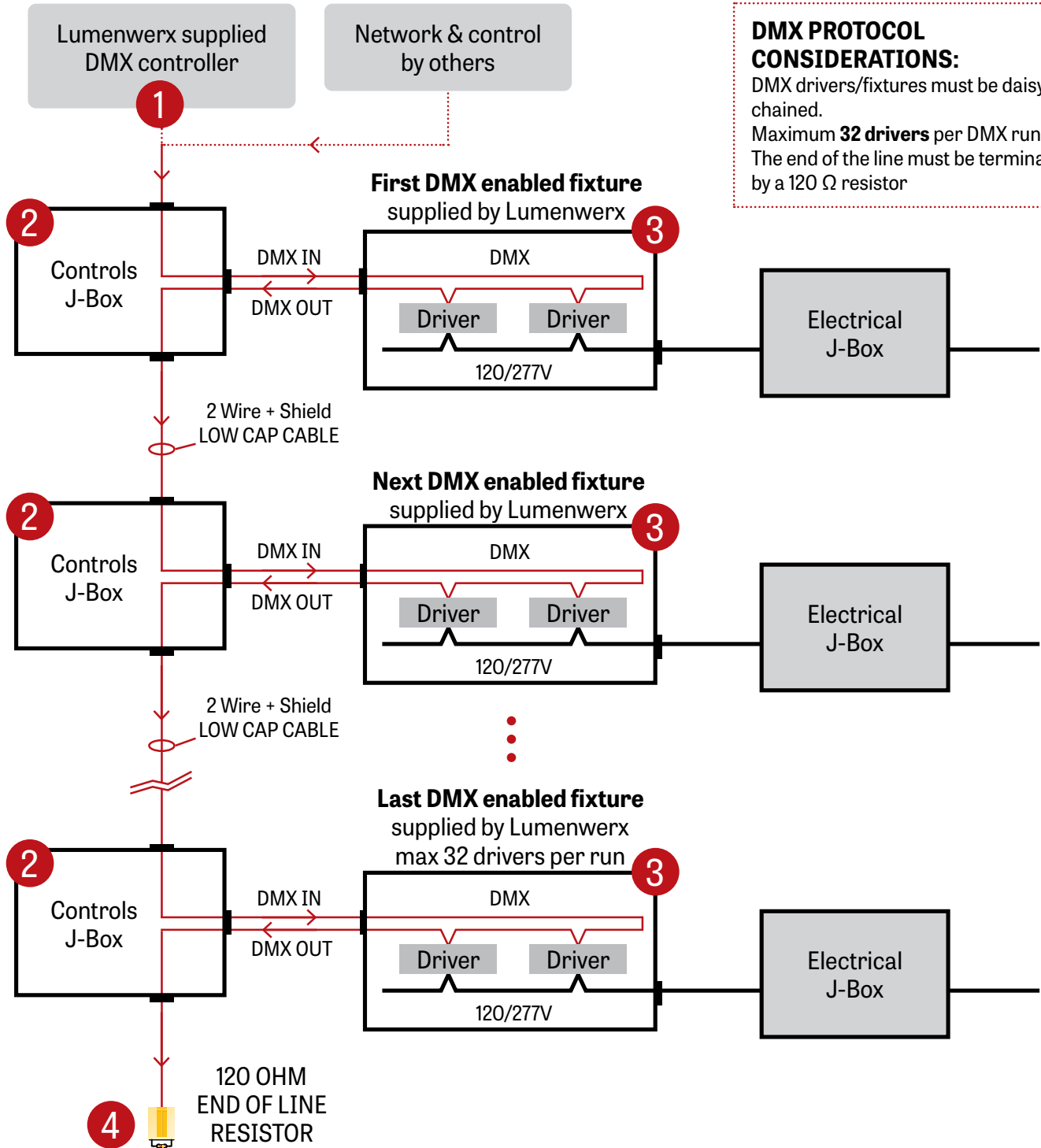
DMX PROTOCOL CONSIDERATIONS:
DMX drivers/fixtures must be daisy chained.
Maximum **32 drivers** per DMX run.
The end of the line must be terminated by a 120 Ω resistor

(2) Controls J-Box

First DMX enabled fixture
supplied by Lumenwerx **(3)**

DMX IN
DMX OUT

DMX

Driver   Driver

120/277V

Electrical J-Box

2 Wire + Shield
LOW CAP CABLE

(2) Controls J-Box

Next DMX enabled fixture
supplied by Lumenwerx **(3)**

DMX IN
DMX OUT

DMX

Driver   Driver

120/277V

Electrical J-Box

2 Wire + Shield
LOW CAP CABLE

(2) Controls J-Box

Last DMX enabled fixture
supplied by Lumenwerx
max 32 drivers per run **(3)**

DMX IN
DMX OUT

DMX

Driver   Driver

120/277V

Electrical J-Box

(4) 120 OHM
END OF LINE
RESISTOR

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UBIK SEAL PERIMETER

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1   LUMENWERX SUPPLIED DMX CONTROLLER

To the first fixture

WALL BOX SUPPLIED BY OTHERS

2 Wire +
Shield Low Cap Cable

Back Panel

V- 12-24 Vdc	V+ 12-24 Vdc	DMX-	DMX+	SHIELD
BLACK	RED	WHT-BLUE	BLUE	BARE

Front Panel

⏻   Z1

◐   Z2

S1   Z3

S2   Z4

Controller image may differ

I.E.: Cerco Cable 7539-10
Belden 9841
Belden 8241

DC out

Power Supply
120-277VAC / 24VDC

N   BLUE   Neutral

DC in

L   BROWN   Line

Ground

**Electrical
J-Box**

ETL Listed US
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UBIK SEAL PERIMETER

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2   J-BOX DMX DAISY CHAIN DETAIL

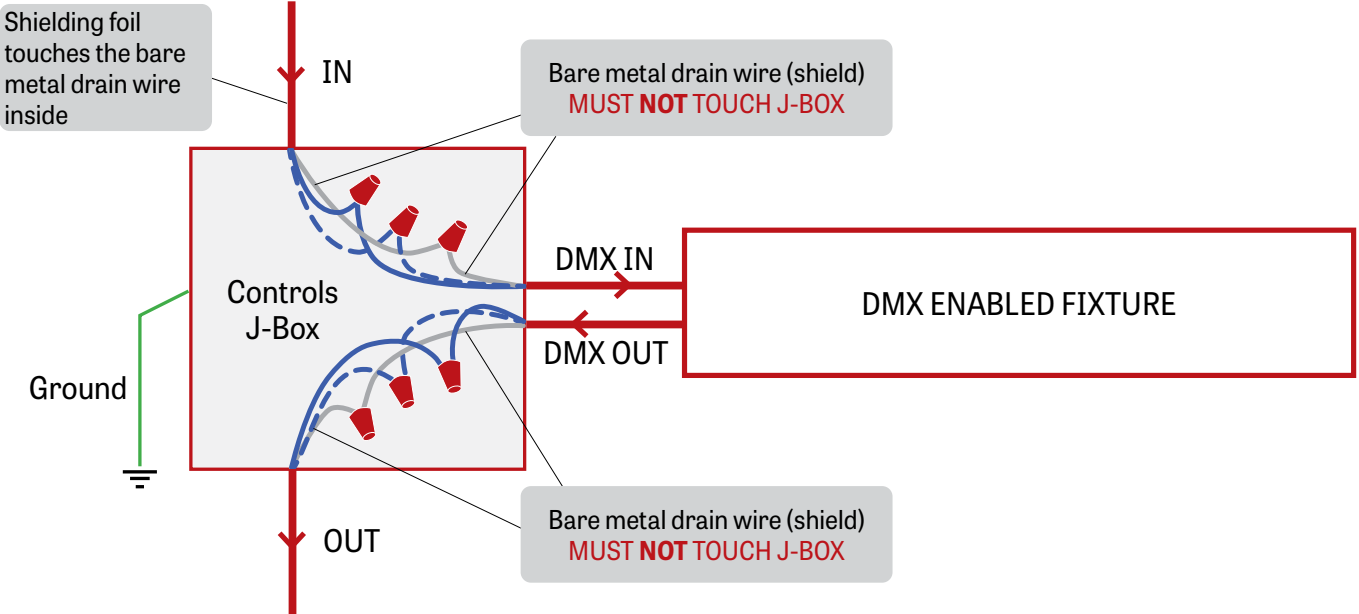Low capacitance DMX Cable from Previous Fixture

Shielding foil touches the bare metal drain wire inside

IN

Bare metal drain wire (shield) MUST **NOT** TOUCH J-BOX

Controls J-Box

DMX IN

DMX ENABLED FIXTURE

DMX OUT

Ground

Bare metal drain wire (shield) MUST **NOT** TOUCH J-BOX

OUT

Low capacitance DMX cable to next fixture

---

3   DMX CONNECTION RECESSED & SURFACE

DMX

IN   OUT

Shield / DMX - / DMX +

Shield / DMX - / DMX +

POWER

LINE VOLTAGE

green
black
white

N   L   G

DMX

DMX ENABLED FIXTURE

PWR

---

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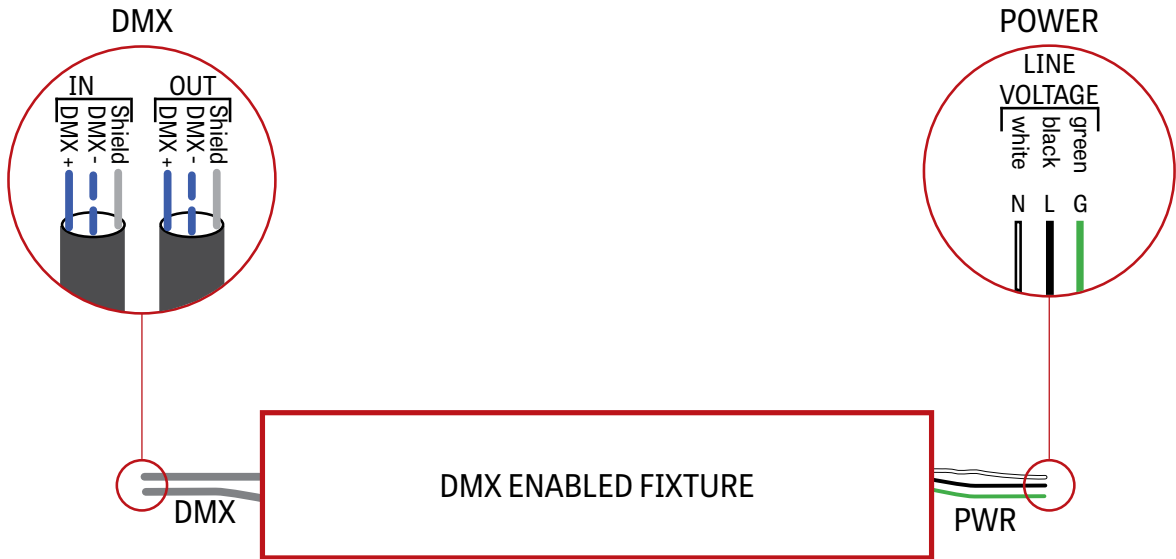
UBIK SEAL PERIMETER

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4 DMX LAST FIXTURE DETAIL

120 OHM
END OF LINE
RESISTOR

+

-

S

Last DMX OUT

DMX IN
From other fixtures

+
-
S

CAP
OFF SHIELD

DMX + = Blue
DMX - = White-Blue
Shield = Bare metal

DMX
Driver

DMX +
DMX -
SHIELD

LED output

LAST FIXTURE OF THE DMX NETWORK
MAX 32 DRIVERS PER DMX RUN

DMX ENABLED FIXTURE

c ETL us
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UBIK-SEAL-PERIMETER-TW-SPEC-REV1   September 8, 2022

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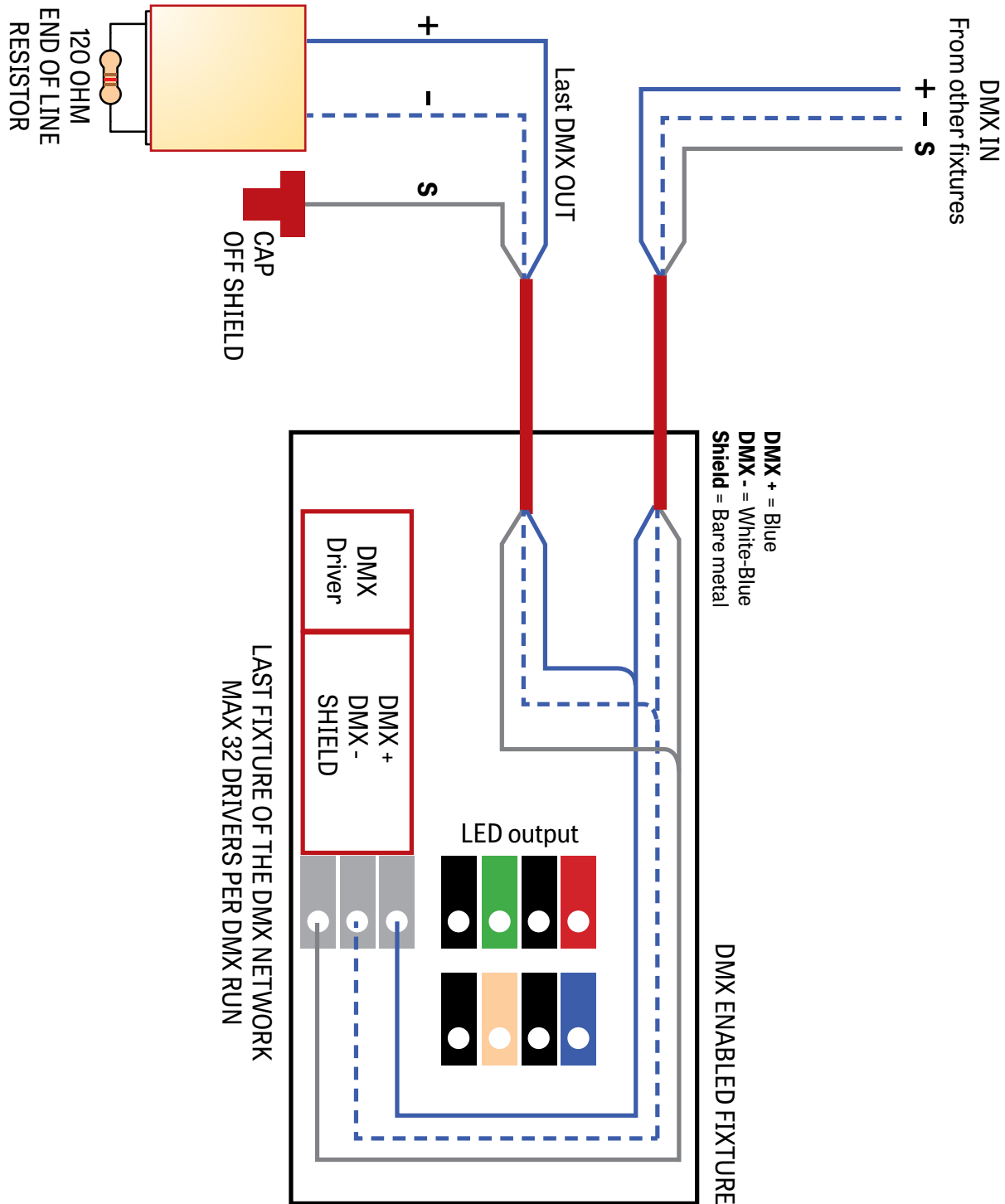
UBIK SEAL PERIMETER

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LUMENWERX

DMX WALL CONTROLLER

DUO 1-4 ZONE

Default DMX Addresses:
1 Warm
2 Cool
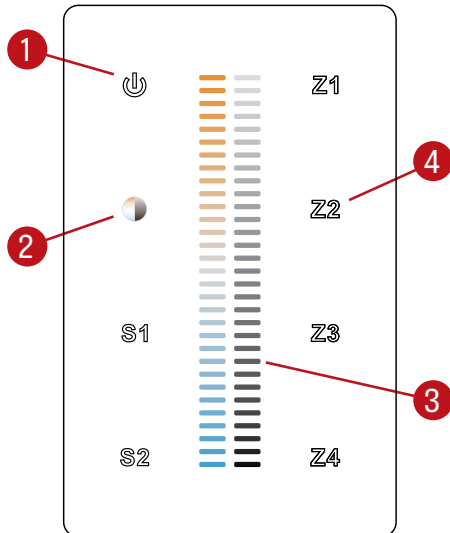
(1) Power: Use this button to turn ON or OFF the fixture.

(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.

Intertek

PoE
Power over Ethernet

WELL   WELL