POP RECESSED

REGRESSED SQUARE AND RECTANGULAR CHROMAWERX - QUADRO - RGBW
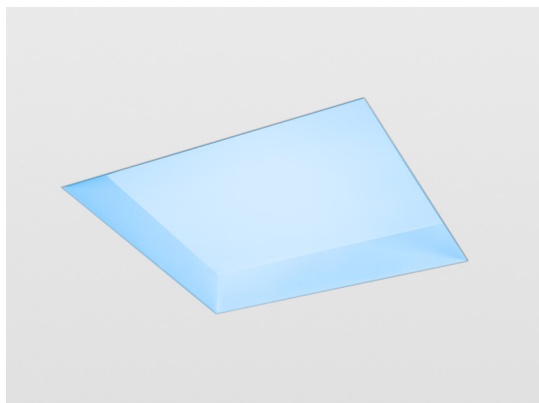
LUMENWERX

5 YEAR WARRANTY

DESCRIPTION

Pop Recessed Regressed Square is a flexible, elegant, low-glare luminaire available in 10 different sizes. Its innovative, precision-crafted Uniform Lambertian Optic (ULO) allows all models to have a Uniform Glare Rating (UGR) of <19, beneficial for creating well-balanced, low glare architectural spaces. The fixture can be integrated in various grid ceiling and gypsum board setups. Pop Regressed Square comes in Chromawerx Quadro. Consult web pages for Static White, BIOS LED, Chromawerx Sola and Duo solutions for Pop Regressed Square.

Order Guide

LUMINAIRE ID	SIZE	OPTIC	LIGHT SOURCE [1]	OUTPUT WATTAGE [2]		VOLTAGE
PORRGSQ		**ULO**				
PORRGSQ - Pop Recessed Regressed Square	**0505** - 6" X 6" **052** - 6" X 2' **054** - 6" X 4' **11** - 1' X 1' **12** - 1' X 2' **14** - 1' X 4' **22** - 2' X 2' **24** - 2' X 4' **44** - 4' X 4' **2060** - 20" X 60"	**ULO** - Uniform Lambertian Optic	**QUADRO** - Four-channel RGB with 3500K/80 CRI **RS** - Red solid **BS** - Blue solid **GS** - Green solid [1] Static white, BIOS, Chromawerx Sola and Duo also available. Consult other spec sheets.	6" X 6" 3 6" X 2' 3 6" X 4' 1' X 1' 3 1' X 2' 1' X 4' 2' X 2' 2' X 4' 4' X 4' 20" X 60"	**3W** - 3W output (60 white lumens) **26W** - 26W output (280 white lumens) **26W** - 26W output (670 white lumens) **13W** - 13W output (360 white lumens) **26W** - 26W output (750 white lumens) **51W** - 51W output (1410 white lumens) **51W** - 51W output (1510 white lumens) **102W** - 102W output (3310 white lumens) **204W** - 204W output (6650 white lumens) **106W** - 106W output (3450 white lumens)	**120** -120V **277** - 277V **UNV** - 120V-277V

[2] For solid colors, consult factory.
[3] Certain conditions apply. Remote driver boxes, or multiple fixtures per driver may be required. Consult factory.

DRIVER [4]	ELECTRICAL	MOUNTING				FINISH	OPTIONS
	1						
DMX [5][6] - DMX **DA** [5][7] - DALI **D1** [7] - 0-10V [4] PoE (Power-over-Ethernet) compatible. Consult factory for details. [5] On-site commissioning is required. [6] To specify, see pages 6 to 11. [7] Available for solid colors only.	1 - 1 circuit	On-grid [8] **GRD** - Grid ceiling	Off-grid [9] - centered in tile **GRDC** - Grid ceiling, centered in tile	Drywall **DF** - Drywall trim kit **DMF** - Drywall mud flange	Side-by-side [10] **SBS** - Side-by-side mounting	**W** - Matte white **CF#** - Custom finish, specify RAL#	**FU120** - Fuse 120V **FU277** - Fuse 277V **FWC** - Flexible whip cable (6' std) **CP** - Chicago Plenum **NA** - None

[8] Not available with 6" X 6", 6" X 2', 6" X 4', and 1' X 1'.
[9] Not available with 2' X 2', 2' X 4', 4' X 4', and 20" X 60".
[10] A drawing is required to show your side-by-side mounting configuration.
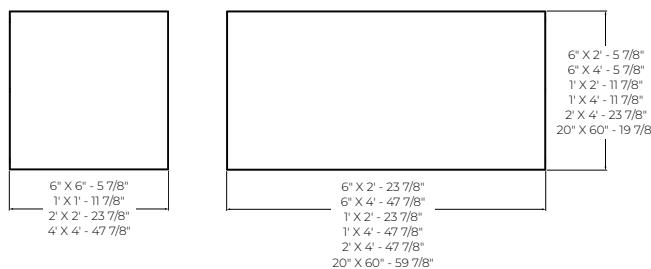
Accessories
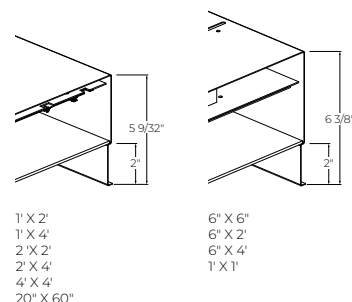### Optional, order separately

DMX WALL CONTROLLER [11]

WC1W - Single zone wall controller white
WC1B - Single zone wall controller black
WC2W - 3 zone wall controller white
WC2B - 3 zone wall controller black

[11] Available with DMX only. For more information, see pages 6 to 11, or consult factory.

Top View

6" X 6" - 5 7/8"
1' X 1' - 11 7/8"
2' X 2' - 23 7/8"
4' X 4' - 47 7/8"

6" X 2' - 5 7/8"
6" X 4' - 5 7/8"
1' X 2' - 11 7/8"
1' X 4' - 11 7/8"
2' X 4' - 23 7/8"
20" X 60" - 19 7/8"

6" X 2' - 23 7/8"
6" X 4' - 47 7/8"
1' X 2' - 23 7/8"
1' X 4' - 47 7/8"
2' X 4' - 47 7/8"
20" X 60" - 59 7/8"

3D Cross section

5 9/32"
2"

6 3/8"
2"

1' X 2'
1' X 4'
2' X 2'
2' X 4'
4' X 4'
20" X 60"

6" X 6"
6" X 2'
6" X 4'
1' X 1'

ETL LISTED Intertek

PoE

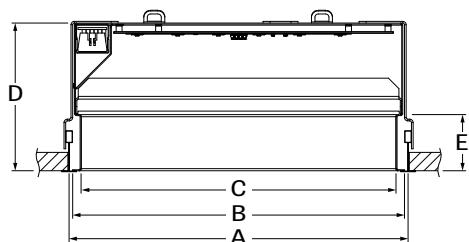# POP RECESSED

REGRESSED SQUARE AND RECTANGULAR
CHROMAWERX - QUADRO - RGBW

Dimensions (shown with 1' X 4')

GRD - Grid ceiling, on-grid mounting
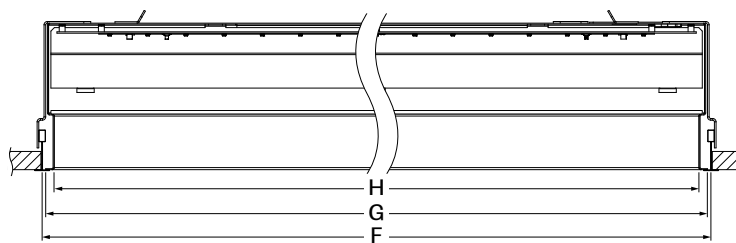
SIZE	A	B	C	D	E	F	G	H
1' X 2'	12"	11 7/8"	11 1/4"	5 9/32"	2"	24"	23 7/8"	23 1/4"
1' X 4'	12"	11 7/8"	11 1/4"	5 9/32"	2"	48"	47 7/8"	47 1/4"
2' X 2'	24"	23 7/8"	23 1/4"	5 9/32"	2"	24"	23 7/8"	23 1/4"
2' X 4'	24"	23 7/8"	23 1/4"	5 9/32"	2"	48"	47 7/8"	47 1/4"
4' X 4'	48"	47 7/8"	47 1/4"	5 9/32"	2"	48"	47 7/8"	47 1/4"
20" X 60"	20"	19 7/8"	19 1/4"	5 9/32"	2"	60"	59 7/8"	59 1/4"
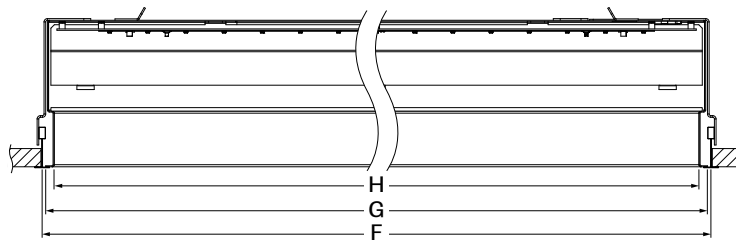
GRDC - Grid ceiling, off-grid mounting - centered in tile

SIZE	A	B	C	D	E	F	G	H
6" X 6"	N/A	6 3/8"	5 1/4"	6 3/8"	2"	N/A	6 3/8"	5 1/4"
6" X 2'	24"	6 3/8"	5 1/4"	6 3/8"	2"	24"	23 7/8"	23 1/4"
6" X 4'	24"	6 3/8"	5 1/4"	6 3/8"	2"	48"	47 7/8"	47 1/4"
1' X 1'	N/A	12 3/8"	11 1/4"	6 3/8"	2"	N/A	12 3/8"	11 1/4"
1' X 2'	24"	12 3/8"	11 1/4"	5 9/32"	2"	24"	23 7/8"	23 1/4"
1' X 4'	24"	12 3/8"	11 1/4"	5 9/32"	2"	48"	47 7/8"	47 1/4"
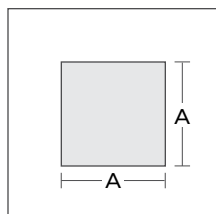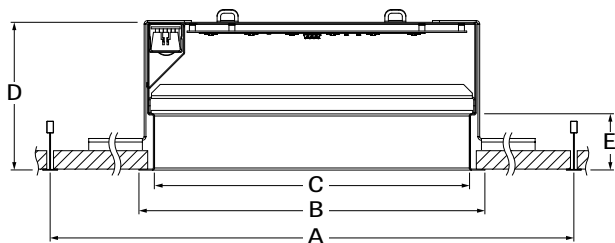
Cut-out dimensions

SIZE	A
6"X6"	5-3/4"
1'X1'	11-3/4"
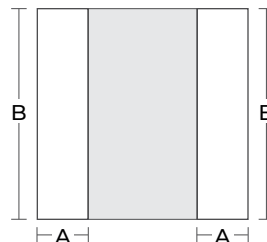
Tile cut dimensions

SIZE	A	B
6"X2'	9"	23-3/4"
6"X4'	9"	47-3/4"
1'X2'	6"	23-3/4"
1'X4'	6"	47-3/4"

POP RECESSED

## REGRESSED SQUARE AND RECTANGULAR
CHROMAWERX - QUADRO - RGBW

LUMENWERX
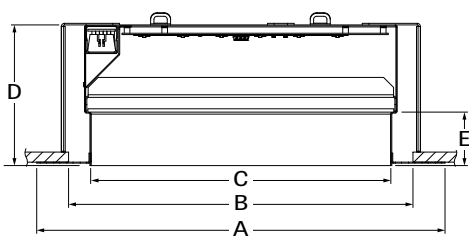
DF - Drywall trim kit

SIZE	A	B	C	D	E	F	G	H
6" X 6"	7 21/32"	7 1/4"	5 1/4"	6 3/8"	2"	7 21/32"	7 1/4"	5 1/4"
6" X 2'	7 21/32"	7 1/4"	5 1/4"	6 3/8"	2"	25 21/32"	25 1/4"	23 1/4"
6" X 4'	7 21/32"	7 1/4"	5 1/4"	6 3/8"	2"	49 21/32"	49 1/4"	47 1/4"
1' X 1'	13 21/32"	13 1/4"	11 1/4"	6 3/8"	2"	13 21/32"	13 1/4"	11 1/4"
1' X 2'	13 21/32"	13 1/4"	11 1/4"	5 9/32"	2"	25 21/32"	25 1/4"	23 1/4"
1' X 4'	13 21/32"	13 1/4"	11 1/4"	5 9/32"	2"	49 21/32"	49 1/4"	47 1/4"
2' X 2'	25 21/32"	25 1/4"	23 1/4"	5 9/32"	2"	25 21/32"	25 1/4"	23 1/4"
2' X 4'	25 21/32"	25 1/4"	23 1/4"	5 9/32"	2"	49 21/32"	49 1/4"	47 1/4"
4' X 4'	49 21/32"	49 1/4"	47 1/4"	5 9/32"	2"	49 21/32"	49 1/4"	47 1/4"
20" X 60"	21 21/32"	21 1/4"	19 1/4"	5 9/32"	2"	61 /21/32"	61 1/4"	59 1/4"
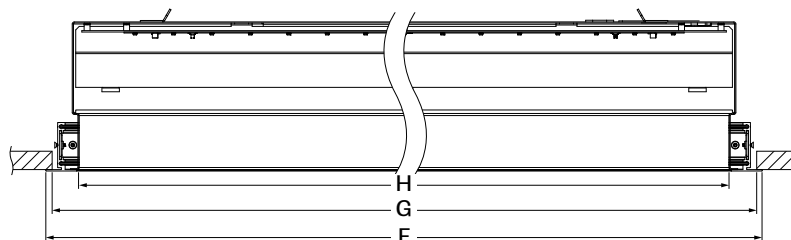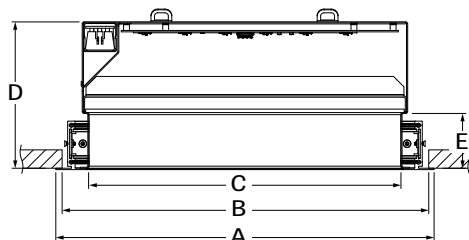
DMF - Drywall mud flange

SIZE	A	B	C	D	E	F	G	H
6" X 6"	9 11/32"	7 1/8"	5 1/4"	6 3/8"	2"	9 11/32"	7 1/8"	5 1/4"
6" X 2'	9 11/32"	6 3/4"	5 1/4"	6 3/8"	2"	27 11/32"	24 3/4"	23 1/4"
6" X 4'	9 11/32"	6 3/4"	5 1/4"	6 3/8"	2"	51 11/32"	48 3/4"	47 1/4"
1' X 1'	15 11/32"	12 3/4"	11 1/4"	6 3/8"	2"	15 11/32"	12 3/4"	11 1/4"
1' X 2'	15 11/32"	12 3/4"	11 1/4"	5 9/32"	2"	27 11/32"	24 3/4"	23 1/4"
1' X 4'	15 11/32"	12 3/4"	11 1/4"	5 9/32"	2"	51 11/32"	48 3/4"	47 1/4"
2' X 2'	27 11/32"	24 3/4"	23 1/4"	5 9/32"	2"	27 11/32"	24 3/4"	23 1/4"
2' X 4'	27 11/32"	24 3/4"	23 1/4"	5 9/32"	2"	51 11/32"	48 3/4"	47 1/4"
4' X 4'	51 11/32"	48 3/4"	47 1/4"	5 9/32"	2"	51 11/32"	48 3/4"	47 1/4"
20" X 60"	23 11/32"	20 3/4"	19 1/4"	5 9/32"	2"	63 11/32"	60 3/4"	59 1/4"

cETLus LISTED
Intertek

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product specifications without notification.
POP-RECESSED-REGRESSED-SQUARE-RGBW-SPEC-REV2   July 7, 2021

PoE
Power over Ethernet
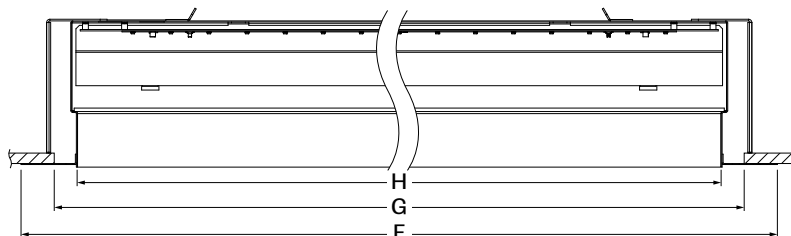
POP RECESSED

REGRESSED SQUARE AND RECTANGULAR
CHROMAWERX - QUADRO - RGBW

LUMENWERX

Technical Specifications

OPTIC

Uniform Lambertian Optic (ULO) - This optic provides a smooth homogenous glow with even illumination and consistent distribution. With Pop Regressed, ULO offers excellent visual comfort in all aperture sizes, from smallest to largest.

LIGHT SOURCE

Custom array of mid-flux LEDs, comprised of an alternation of an RGB and a dedicated white LED. The white LED is used for when a static white CCT is required in the space. RGB LEDs are tightly binned for excellent color control between fixtures. The white LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L90 lumen maintenance greater than 60,000 hours reported, 150,000 hours projected. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

CHROMAWERX

CHROMAWERX - QUADRO

Chromawerx Quadro is a four-channel control that operates an RGBW LED array and addresses the need for more expressive color in architectural applications. The DMX driver supports familiar programming tools for both dynamic multi-hued color and precise white color point control. While a typical user interface will be a DMX controller by others, Lumenwerx also offers a simple control station for stand-alone color changing applications.

ELECTRICAL:

DMX

Factory-set, adjustable output current, multi-channel LED driver with universal (120-277VAC) input. Using DMX wall controls (optionally supplied by Lumenwerx) or an existing DMX control system, four channels of LEDs (Red/Green/Blue/White) are independently adjustable. Each DMX driver has multiple output channels that can be independently addressed at the factory or on-site using built-in RDM (Remote Device Management) functionality. Dimming range from 100%-0%. At maximum driver load, efficiency<89%, PF>0.9, THD<20%.

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), Quadro (RGBW) emergency battery backup, and sensor integration. These must be addressed and evaluated on a case-by-case basis.
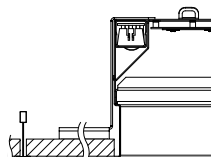
MOUNTING OPTIONS

On-grid
Recessed mount in a grid ceiling.
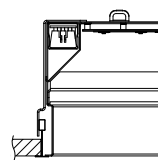
GRD - Grid ceiling

Off-grid - centered in tile
Recessed mount in the center of a tile in a grid ceiling.

GRDC - Grid ceiling, centered in tile

Drywall
Recessed mount in drywall ceilings with trim kit, or mud flange options.
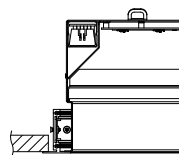
DF - Drywall trim kit   **DMF** - Drywall mud flange

Side-by-side
Recessed mount in a side-by-side group formation. To determine brackets, and mounting details, a drawing illustrating your side-by-side configuration, with ceiling details, is required.

SBS - Side-by-side mounting

POP RECESSED
REGRESSED SQUARE AND RECTANGULAR
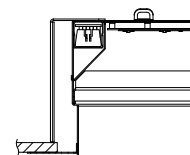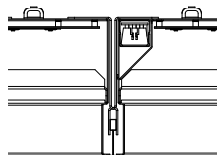## CHROMAWERX - QUADRO - RGBW

LUMENWERX

FINISH
Interior - 95% reflective, matte white powder coating.
Exterior - Matte white powder coating. Custom finishes are also available.

CONSTRUCTION
Housing - 20 gauge cold rolled steel.
Diffuser - 0.125" thick white acrylic.

WEIGHT
6" X 6" - 3.6 lbs - 1.7 kg
6" X 2' - 9.2 lbs - 4.2 kg
6" X 4' - 16 lbs - 7.3 kg
1' X 1' - 8.1 lbs - 3.7 kg
1' X 2' - 12.6 lbs - 5.7 kg
1' X 4' - 22.7 lbs - 10.3 kg
2' X 2' - 22.9 lbs - 10.4 kg
2' X 4' - 39.9 lbs - 18.1 kg
4' X 4' - 72.2 lbs - 32.7 kg
20" X 60" - 41.5 lbs - 18.8 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.
Chicago Plenum - City of Chicago Approved (CCEA)
IC rated - Suitable for direct contact with insulation.

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.
Wall controllers are covered by the manufacturer warranty.

ETL Listed c us
Intertek

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POP-RECESSED-REGRESSED-SQUARE-RGBW-SPEC-REV2   July 7, 2021

PoE Power over Ethernet

POP RECESSED

REGRESSED SQUARE AND RECTANGULAR
CHROMAWERX - QUADRO - RGBW

LUMENWERX

QUADRO 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 contact information of your DMX integrator.**

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

DMX controller supplied by Lumenwerx

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
Less than 12.5W/ft, direct only	Above 12.5W/ft or for all direct/indirect fixture

1 Zone	2 to 3 Zones	4 or more Zones

To Calculate # of drivers ←

Do you have more than 32 drivers in total?

(NO) **(YES)** | **(NO)** **(YES)**

Order a standard Lumenwerx wall controller <u>type 1</u>.

WALL CONTROLLER

WC1W - Single zone wall controller white
WC1B - Single zone 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. ✓

Order a standard Lumenwerx wall controller <u>type 2</u>.

WALL CONTROLLER

WC2W - 3 zone wall controller white
WC2B - 3 zone 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 ans approval. Please contact our controls specialist at controls@lumenwerx.com Additional cost and equipment will be required. ✓

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

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

PoE

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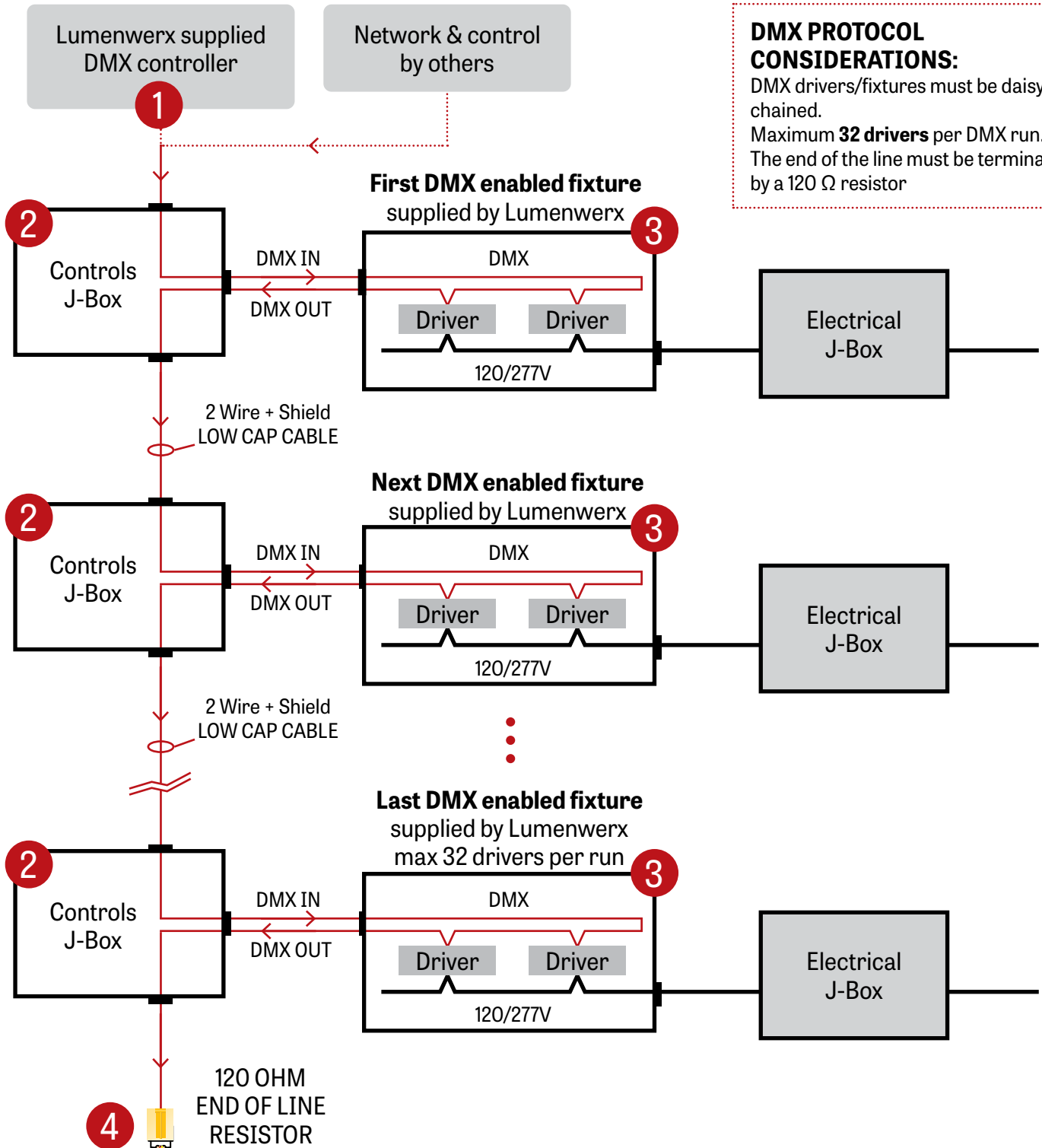## REGRESSED SQUARE AND RECTANGULAR
CHROMAWERX - QUADRO - RGBW

LUMENWERX

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

DMX OUT

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

DMX OUT

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

DMX OUT

Driver   Driver

120/277V

Electrical
J-Box

4

120 OHM
END OF LINE
RESISTOR

cETLus
Intertek

PoE

POP RECESSED
REGRESSED SQUARE AND RECTANGULAR
CHROMAWERX - QUADRO - RGBW

LUMENWERX

1 LUMENWERX SUPPLIED DMX CONTROLLER
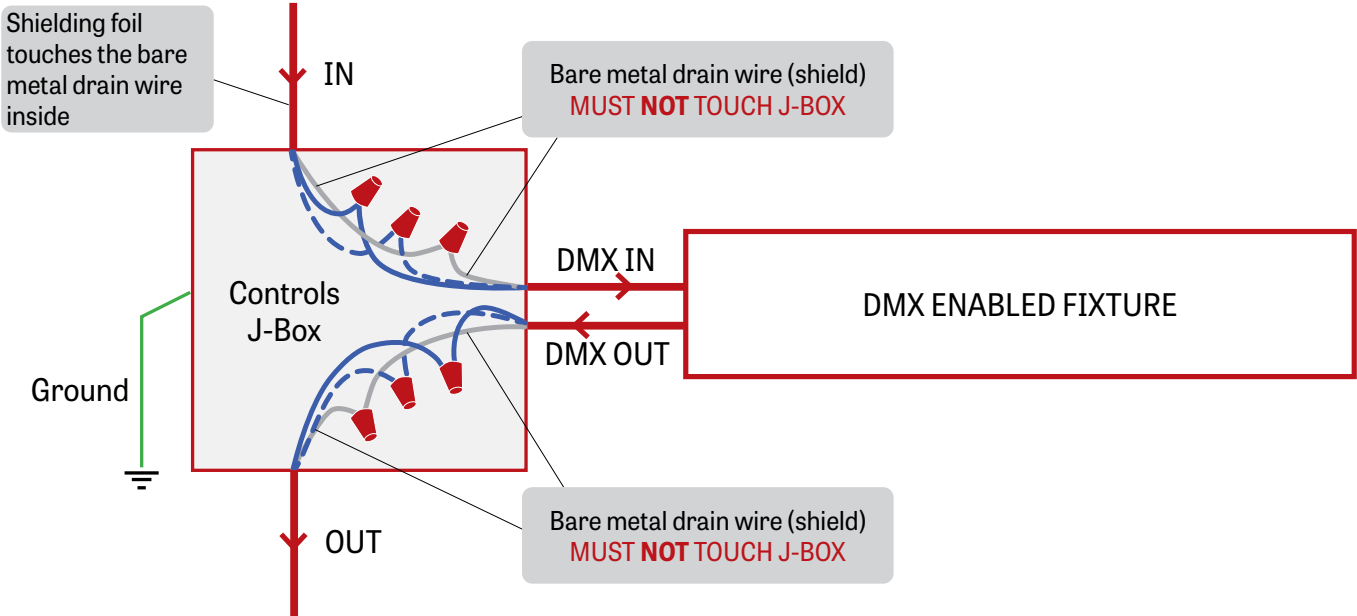
To the first fixture

WALL BOX SUPPLIED BY OTHERS
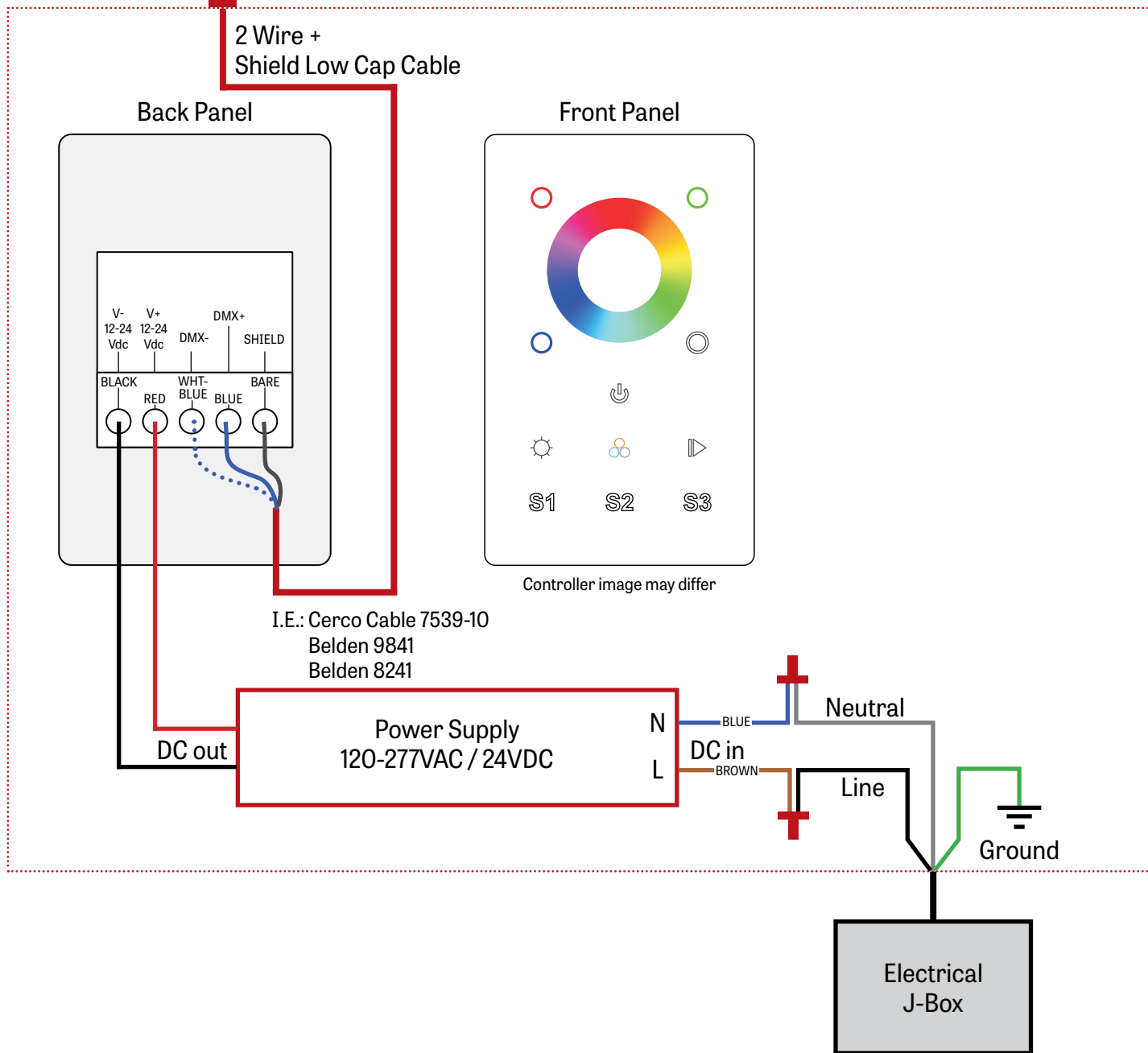
2 Wire +
Shield Low Cap Cable

Back Panel

Front Panel

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

S1   S2   S3

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

cETLus
LISTED
Intertek

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POP-RECESSED-REGRESSED-SQUARE-RGBW-SPEC-REV2   July 7, 2021

PoE

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 ENABLED FIXTURE

DMX

PWR

ETL LISTED cULus
Intertek

PoE
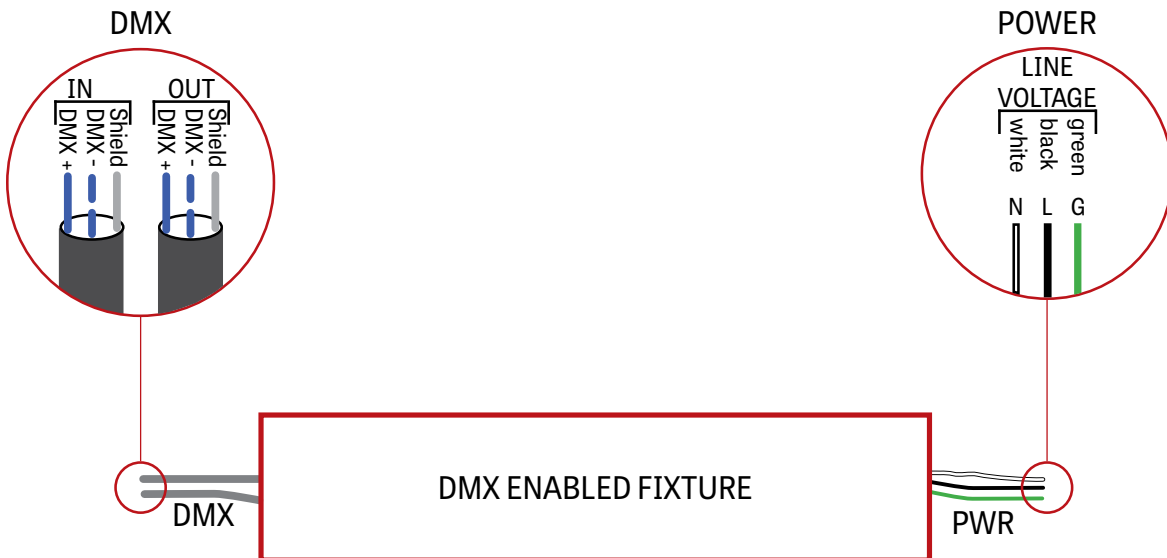
POP RECESSED

REGRESSED SQUARE AND RECTANGULAR
CHROMAWERX - QUADRO - RGBW

LUMENWERX

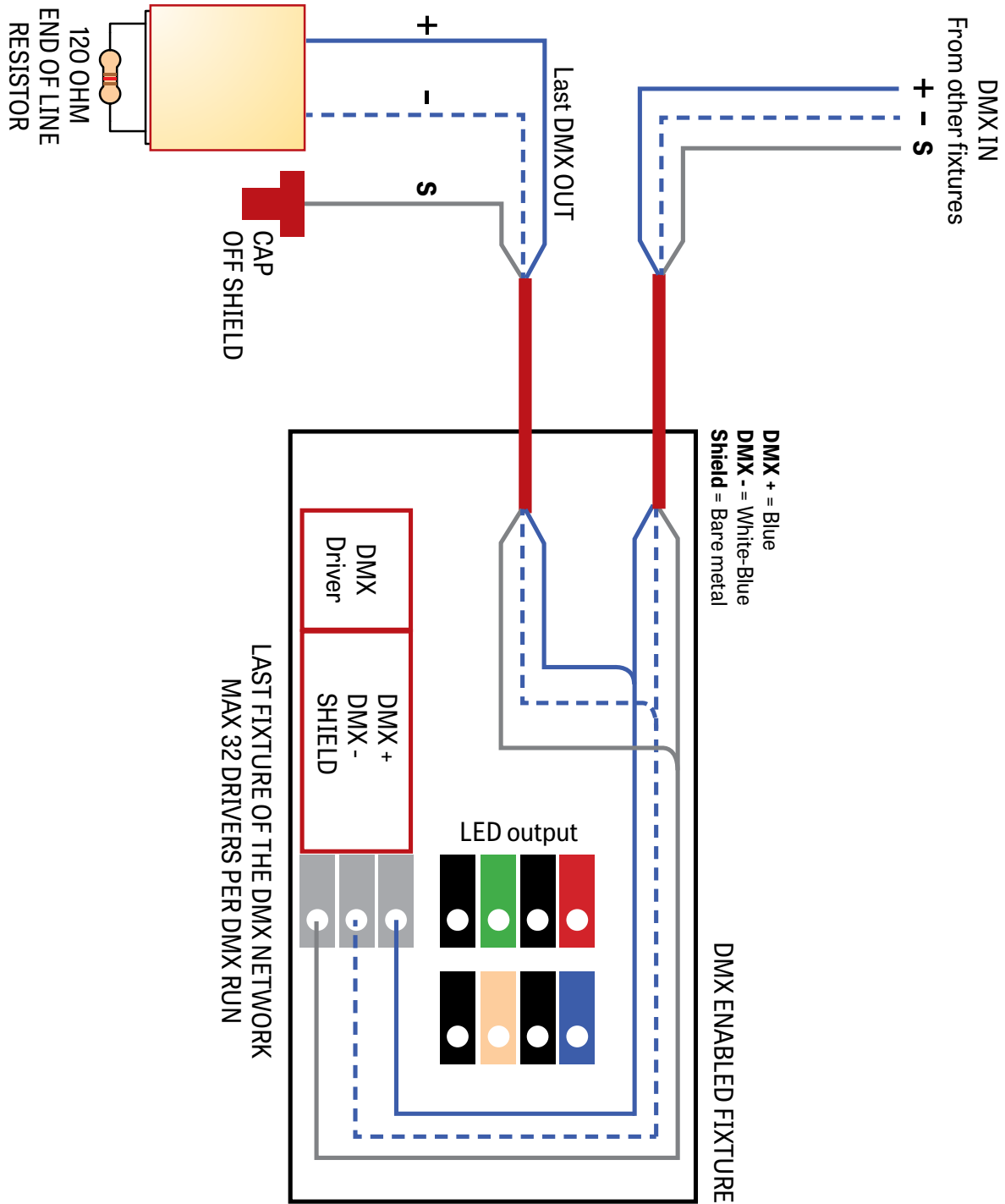## 4 DMX LAST FIXTURE DETAIL

120 OHM
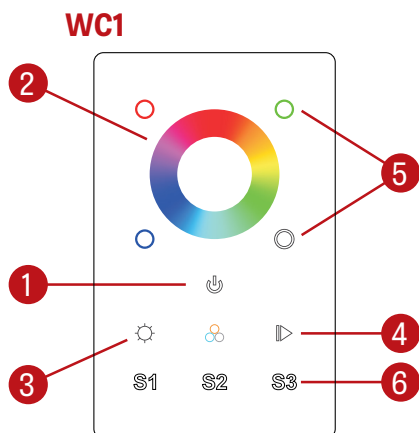END OF LINE
RESISTOR

CAP
OFF SHIELD

+

−

S

Last DMX OUT

DMX IN
From other fixtures

+
−
S

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

DMX
Driver

DMX +
DMX -
SHIELD

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

LED output

DMX ENABLED FIXTURE

ETL LISTED
c   us
Intertek

PoE
Power over Internet

POP RECESSED

REGRESSED SQUARE AND RECTANGULAR
CHROMAWERX - QUADRO - RGBW

LUMENWERX

DMX WALL CONTROLLER

WC1

(1) Power: Use this button to turn ON or OFF the RGBW fixture.

(2) Color Wheel: The wheel is used to rapidly select a color (RGB colors only).

(3) Brightness (RGB):   Hold down this button to either increase or decrease the brightness of the current RGB selection. White will not be affected by the RGB brightness button.

(4) Color Cycle: This button will start an animation, rotating between Reds Greens and Blues, the arrows allow the user to speed up or slow down the animation.

(5) Individual Colors: By pressing and holding a color it will be possible to brighten or dim it. Quickly pressing a color will turn it OFF or turn it ON to its previous dim level.
White: In order to activate or deactivate and dim the White channel, the White button needs to be used.

(6) Scenes: By holding down one of the scenes button, the current color selection is saved. It can be later accessed by quickly pressing on one of the Scene buttons.
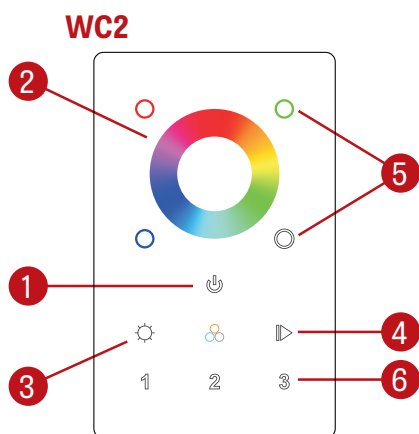
WC2

(1) Power: Use this button to turn ON or OFF the RGBW fixture.

(2) Color Wheel: The wheel is used to rapidly select a color (RGB colors only).

(3) Brightness: Hold down this button to either increase or decrease the brightness of the current RGB selection. White will not be affected by the RGB brightness button.

(4) Color Cycle: This button will start an animation, rotating between Reds Greens and Blues, the arrows allow the user to speed up or slow down the animation.

(5) Individual Colors: By pressing a color it will be possible to brighten or dim that specific color.
White: In order to activate or deactivate and dim the White channel, the White button needs to be used.

(6) Zone: By holding down one of the zone buttons, a zone can be selected and controlled.

Default DMX Addresses:
1 Red
2 Green
3 Blue
4 White

cETLus LISTED
Intertek

PoE