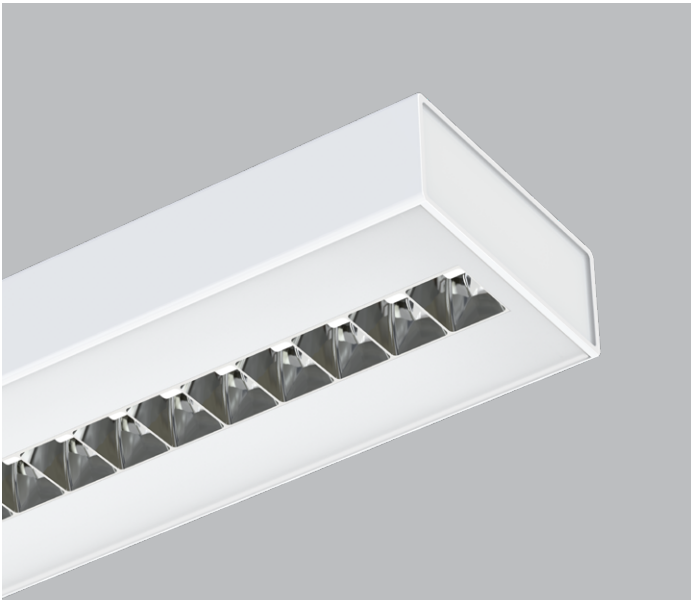
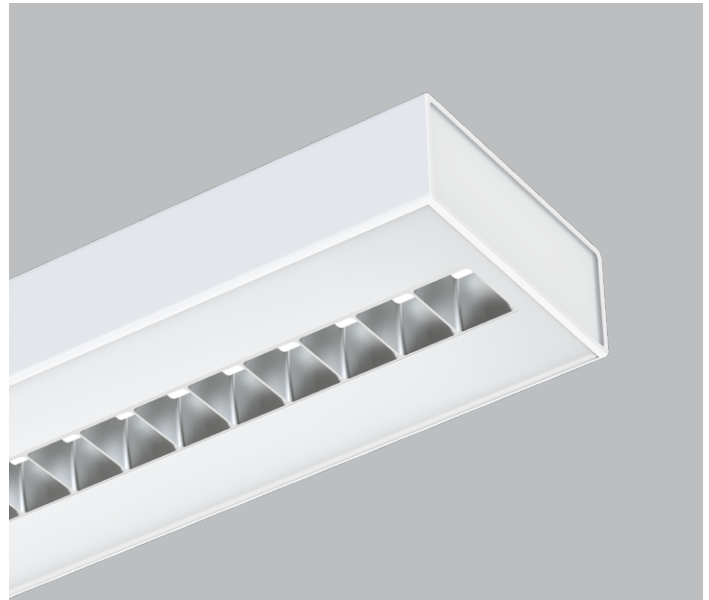
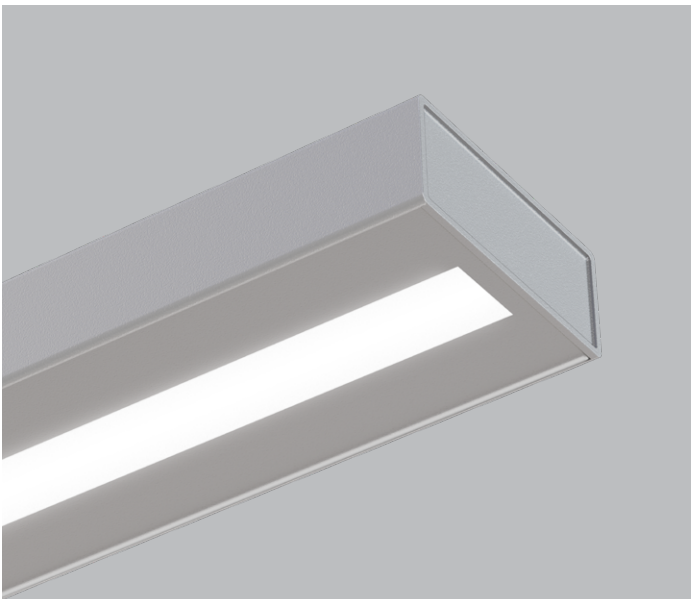


**CHROMAWERX TUNABLE WHITE AND DIM TO WARM****DESCRIPTION**

Within its compact 1 15/16" x 4 3/4" profile, Medius supports a choice of outstanding optics for high performance direct/indirect lighting. The result is excellent visual comfort with UGR better than 16, smooth ceiling uniformity, and efficacy up to 116 LPW. A new sliding cable arrangement simplifies installation in existing spaces. Medius configures as individual luminaires or continuous runs and features the full range of electrical and control options. For static white see separate specification sheet.

**SPL** - Specular parabolic louver**MPL** - Matte silver parabolic louver**HLO** - High-Efficiency Lambertian Optic



CHROMAWERX TUNABLE WHITE AND DIM TO WARM

IMPORTANT: a qualified DMX integration consultant is required to ensure proper installation and function of any DMX network

PROJECT: _____
 TYPE: _____
 NOTES: _____

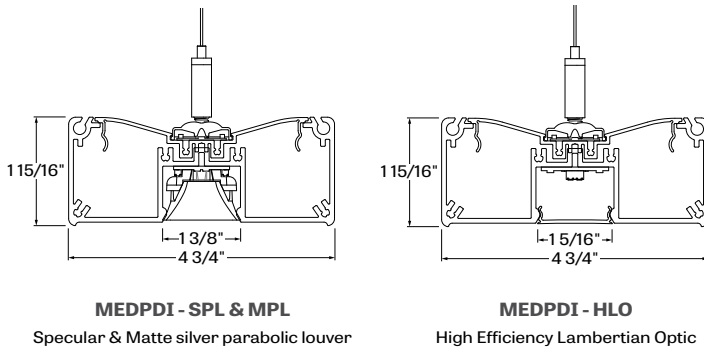
ORDER GUIDE

MEDPDI	WIO2	LED			
LUMINAIRE ID	DIRECT OPTICS	INDIRECT OPTICS	LIGHT SOURCE	CRI	DIRECT LUMEN PACKAGES
MEDPDI - Medius Pendant Direct/Indirect	SPL - Specular parabolic louver MPL - Matte silver parabolic louver HLO - High-Efficiency Lambertian Optic	WIO2 - Widespread Indirect Optics	LED - High performance LED	80 - 80CRI 90 - 90CRI	350 - Min. eco low output 350lm/ft 500 - Low output 500lm/ft 750 - Medium output 750lm/ft 1000 - Max. high output 1000lm/ft #### - Other required lm/ft
INDIRECT LUMEN PACKAGES	CHROMAWERX	LUMINAIRE LENGTH	VOLTAGE	DRIVER	
500 - Min. low output 500lm/ft 750 - Medium output 750lm/ft 1000 - Max. high output 1000lm/ft #### - Other required lm/ft	DUO - Tunable white 2-channel control 65k to 27k SOLA - Dim to warm single channel control 35k to 22k	Available sections - 4', 8' & 12' #FT - Nominal length in feet (2' increments only) Continuous Run - for luminaires over 12' Minimum Individual section 4'	120 - 120V 277 - 277V	SOLA SD1 - Single 0-10V input DUO DMX ^{1,2} - DMX DDA ² - DALI DT6 DDA8 ² - DALI DT8 DD1 - Dual 0-10V input for CCT/intensity LD2 ² - Lutron DALI-2 digital	
				¹ For more information, see pages 6 to 10. ² On-site commissioning is required.	

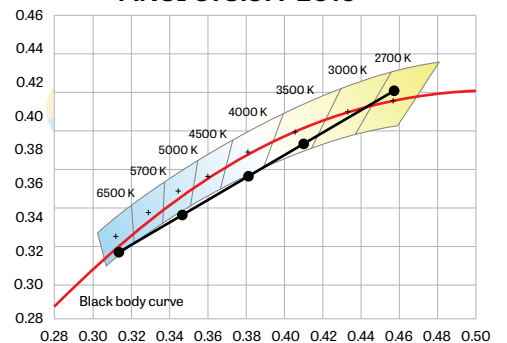
1				DMX WALL CONTROLS
ELECTRICAL	MOUNTING	FINISH	OPTIONS	To specify see pages 6 to 10
1 - 1 Circuit	53WAC36 - Fixed cables suspension power 5" + non power 3" white canopy (36" air craft cable) SC53WAC36 - Sliding cables suspension , power 5" + non power 3" white canopy (36" air craft cable) 55WSW18 - Power 5" + non power 5" white canopy & stem (18" stem) For all other options refer to our Pendant Mounting Guide	W - Matte white AL - Aluminum CF# - Custom finish specify RAL#	FU120 - Fuse 120V FU277 - Fuse 277V TB# - T-bar caddy clip specify grid size TG# - Tegular caddy clip specify grid size ST - Screw Slots caddy clip CU - Custom	

See page 2 for ordering code detailed information

CROSS SECTION



ANSI C78.377-2015





CHROMAWERX TUNABLE WHITE AND DIM TO WARM

DIRECT OPTICS

Parabolic Louvers (SPL and MPL)

Parabolic louvers provide excellent shielding and a pleasing crisp visual texture. The precisely molded louvers consist of 1" deep blades and side reflectors with shielding of 50° lengthwise and 45° cross wise.

Precise brightness control provides excellent UGR and satisfies the recommendations of ANSI IES RP1-12 for intensive VDT viewing with practical spacing criteria of 1.1. Choose from Specular (SPL) or Matte silver (MPL) louver finish.

HIGH EFFICIENCY LAMBERTIAN OPTIC (HLO) The High-Efficiency Lambertian Optic (HLO) shielding of diffusing 0.075" thick acrylic with up to 88% transmission and good source obscuration is combined with matte white side reflectors to create an efficient optical chamber with uniform luminosity. Luminaire brightness is controlled by the flux-to-shielding area ratio. For visual comfort, avoid high lumen output unless Medius is installed in a high ceiling application. Spacing criteria: 1.2 (longitudinal) x 1.1 (lateral).

INDIRECT OPTICS

WIDESPREAD INDIRECT OPTICS (WIO2)

The Widespread Indirect Optic (WIO2) is a horizontal LED array with a widespread indirect micro prismatic optic that offers an impressive 160° spread. WIO2 creates an even illumination for smooth brightness on the ceiling that can achieve uniformity ratios of up to 2:1. Uniformity [max/min]

Based on 18' continuous runs, in a 20' x 40' room, 10' wall height.

Mounting height from ceiling	Spacing (Center to center)		
	8'	10'	12'
12"	5.5	10.0	9.0
18"	3.5	6.0	6.0
24"	2.5	4.0	4.5

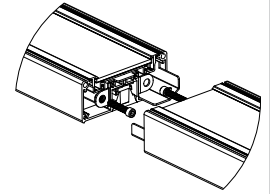
LIGHT SOURCE - LED

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

All LED's 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.

LUMINAIRE LENGTH

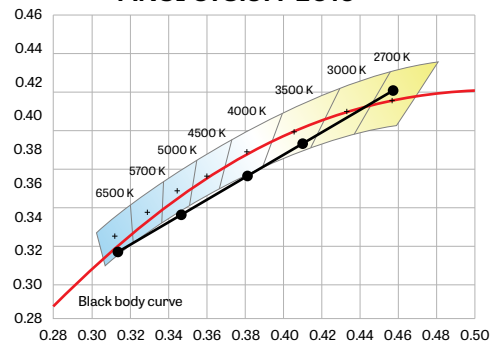
Medius is made up of standard 4, 8 and 12 foot sections that may be joined together to create longer continuous run lengths. Nominal run length must be noted in the product code. The minimum individual section available is 4 foot. All individual sections are joined together onsite using the joiner kits 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.



Jwwwweboining system for Medius Direct/Indirect

CHROMAWERX - TUNABLE WHITE

ANSI C78.377-2015



ChromaWerx Sola is single-channel control that dims output while warming the color temperature in a pre-determined relationship. A simple digital or 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 is two-channel control. It uses an analog (0-10V) protocol for separate control of luminaire CCT and intensity or a digital (DMX, DALI) 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 warm (2700K) to cool (6500K) 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.



CHROMAWERX TUNABLE WHITE AND DIM TO WARM

ELECTRICAL

SOLA

SD1

Factory-set, adjustable output current LED driver with universal (120-277 VAC) 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 120-277 VAC 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 120-277 VAC 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 (120-277 VAC) 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.

LD2

Lutron DALI-2 digital drivers provide a high-performance tunable white solution with single-address digital control. Guaranteed performance and compatibility when used with Lutron DALI-2 controls.

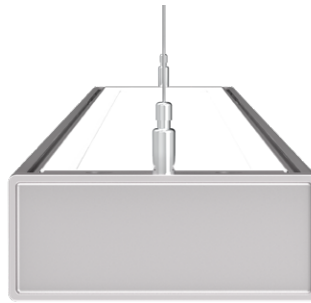
Access: Driver is accessible for field service by removing the upright LED and light guide cartridge

MOUNTING OPTIONS

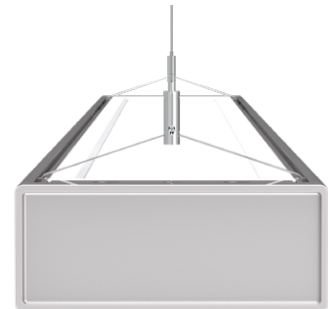
Fixtures can be pendant-mounted, using aircraft cables, or stem-mounted. Unless otherwise specified, LumenWerx provides the following hardware:

Fixed Cable Suspension: aircraft cable mounts at luminaire ends or between modules in continuous runs and is secured by Griplock fastener for leveling.

Sliding Cable Suspension: Two-part cable assembly slides horizontally for flexible mounting. Griplock fastener secures and levels suspension.



53WAC36 - Fixed Cables suspensions



HS53WAC36 - Sliding Cables suspensions

For cable-mounted fixtures - 53WAC36 (5" white canopy for all power mounting point, 3" white canopy for non power mounting point, and a 36" cable)

For stem mounted fixtures - 55WSW18 (5" white canopy for all power mounting point, and non power mounting point, and a 18" white stem)

Caddy clips, if required specify under **OPTIONS**

[For all other options, see our website for a detailed Pendant Mounting Guide](#)



CHROMAWERX TUNABLE WHITE AND DIM TO WARM

FINISH

Interior - 95%, reflective matte powder coated white paint

Exterior - matte white, matte black or aluminum powder coating

Side reflector - high reflective white coating
Custom finishes are also available.

CONSTRUCTION

Housing - Extruded aluminum 0.085" nominal, matte white or aluminum powder coating
Custom finishes are also available.

End cap - Die cast Aluminum (0.95" nominal)

Joiners - Die cast Aluminum (0.95" nominal)

Reflectors - High reflective white coated bent aluminum

Parabolic louvers - Injection Molded Optical Grade Polycarbonate Vacuum Metalized, up to 95% reflective

Light guide - Clear PMMA Laminated with microstructure film formed into optical TIR/extraction form

Hanger - Chromed Griplock securely attached in end caps and/or joiners with a hex nut

Air craft cable suspension - Fixed 7x7 braids Aluminum air craft cable 0.06" thick Cable
Suspension: aircraft cable mounts at luminaire ends or between modules in continuous runs and is secured by Griplock fastener for leveling.

Sliding Cable Suspension: Two-part cable assembly slides horizontally for flexible mounting. Griplock fastener secures and levels suspension.

Stem - 0.5" diameter threaded steel tube matte white or aluminum powder coating. Custom finishes are also available

WEIGHT

Medius 4 ft - 10.3 lbs, 4.7kg

Medius 8 ft - 19.4 lbs, 8.8kg

Medius 12 ft - 28.5 lbs, 12.9kg

CERTIFICATIONS

ETL - Rated for Indoor Dry/Damp locations.
Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

WARRANTY

For all ChromaWerx products, LumenWerx provides a three-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.



CHROMAWERX TUNABLE WHITE

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 contact information of your DMX integrator.**

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

YES

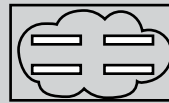
Do you require a wall controller provided by Lumenwerx?

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.

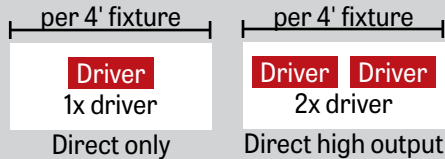


1 Zone



2 Zones

How to calculate the required number of drivers:



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. ✓

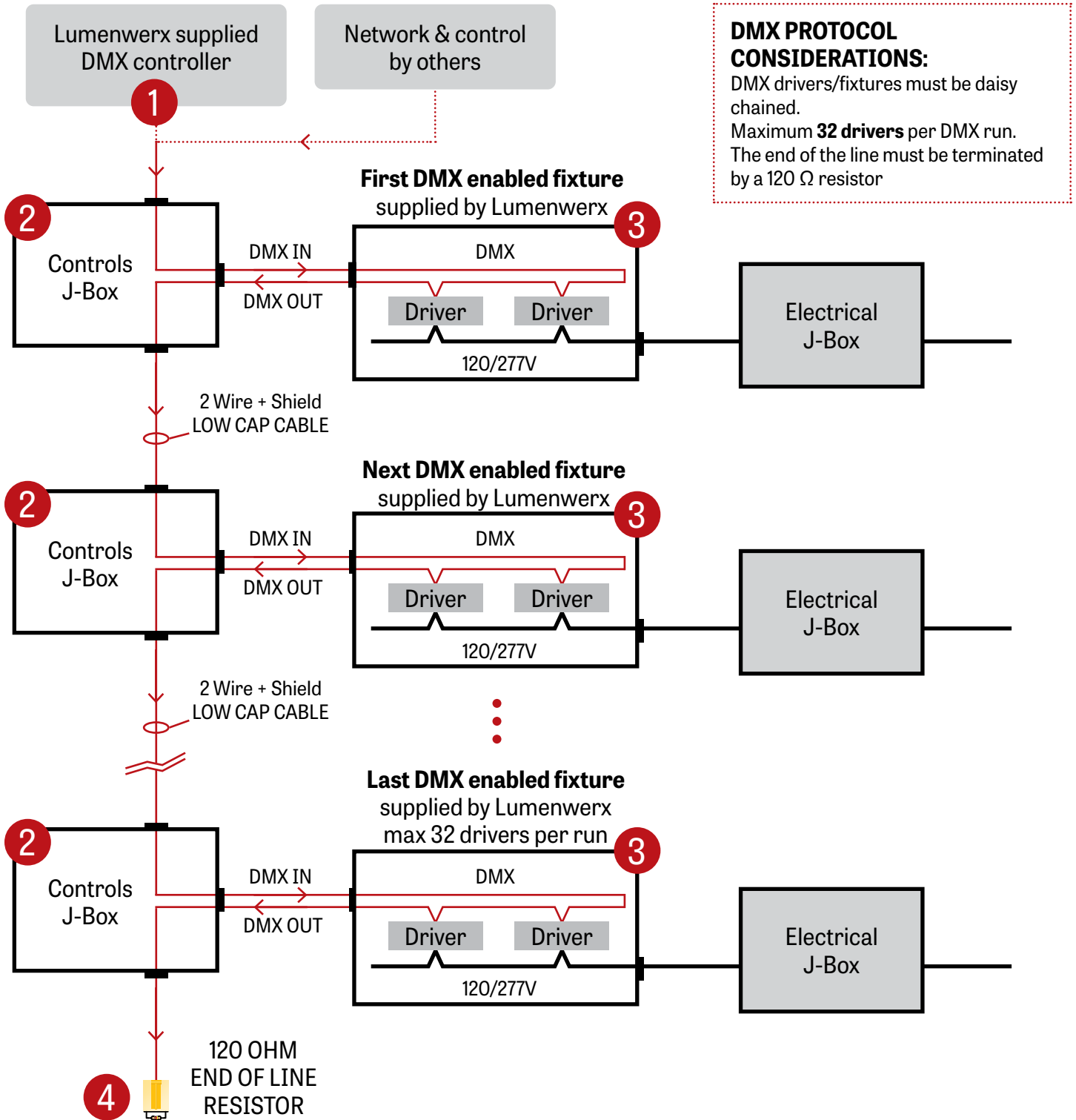
Subject to factory evaluation. Please contact our controls specialist at controls@lumenwerx.com Additional cost and equipment will be required. ✓

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



CHROMAWERX TUNABLE WHITE

GENERIC DMX NETWORK ARCHITECTURE



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



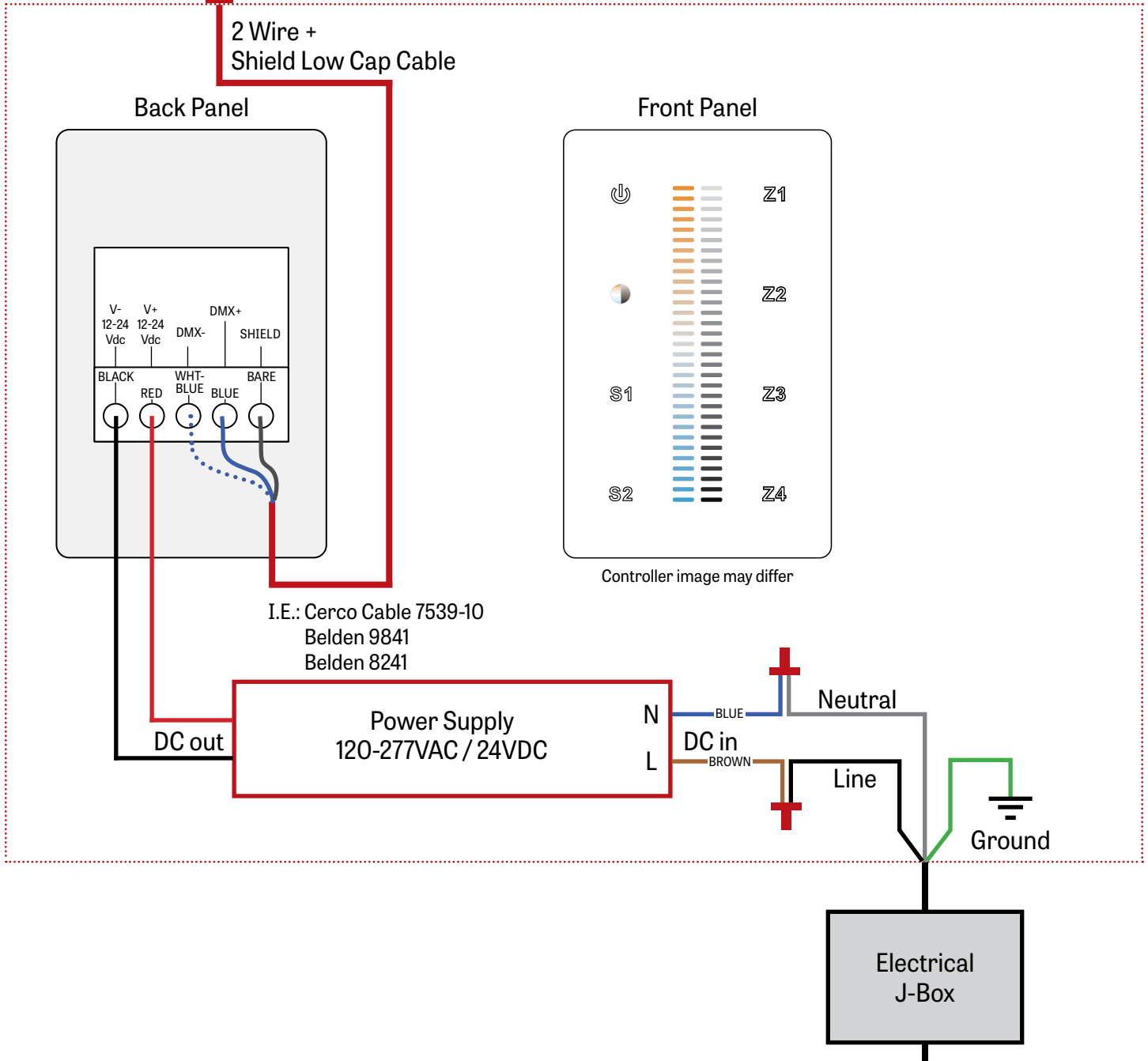
CHROMAWERX TUNABLE WHITE

1 LUMENWERX SUPPLIED DMX CONTROLLER

To the first fixture

2 Wire +
Shield Low Cap Cable

WALL BOX SUPPLIED BY OTHERS

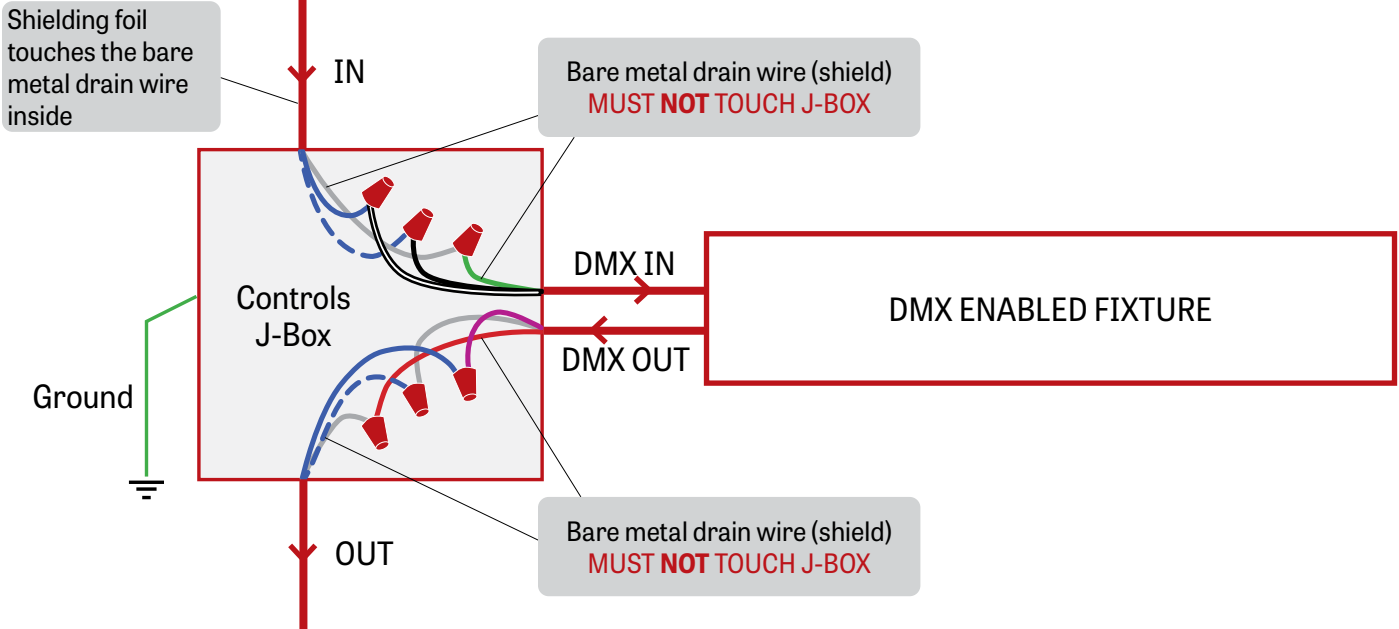




CHROMAWERX TUNABLE WHITE

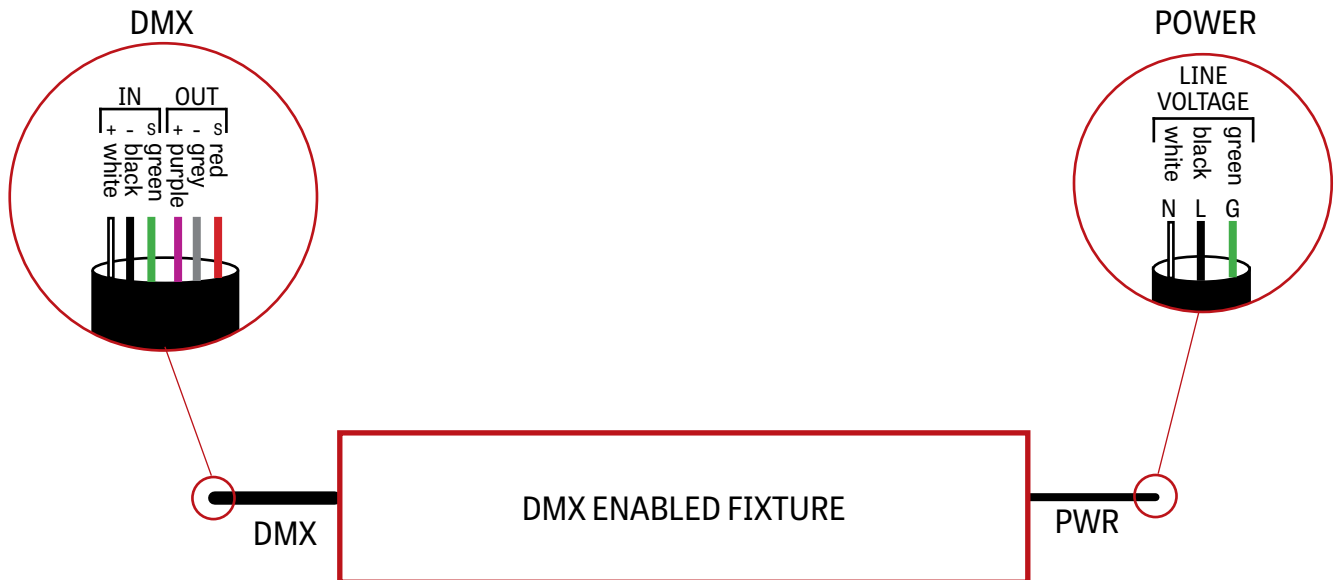
2 J-BOX DMX DAISY CHAIN DETAIL

Low capacitance DMX Cable from Previous Fixture



Low capacitance DMX cable to next fixture

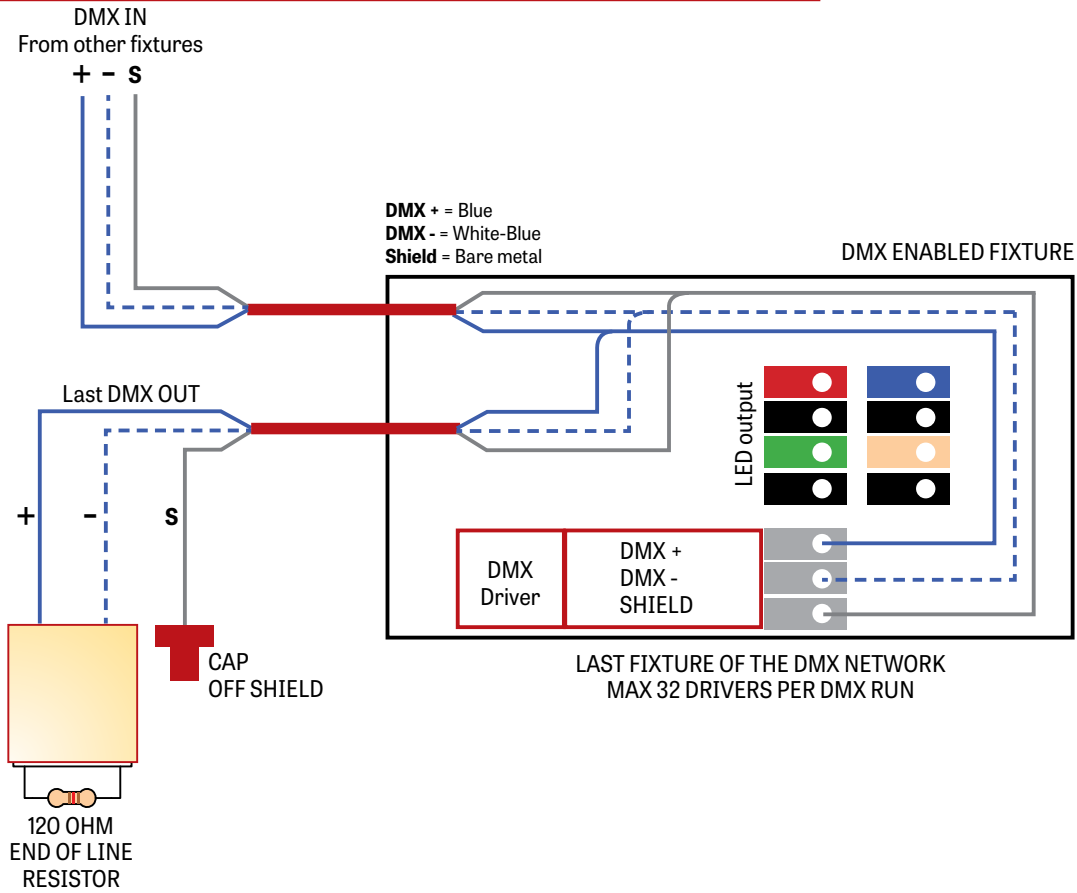
3 DMX CONNECTION PENDANT & WALL





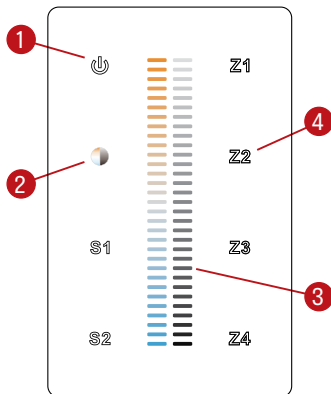
CHROMAWERX TUNABLE WHITE

4 DMX LAST FIXTURE DETAIL



DMX WALL CONTROLLER

DUO 1-4 ZONE



- (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