

# PIVOT

TRACK - PENDANT

# LUMENWERX



Project: \_\_\_\_\_

Type: \_\_\_\_\_

## DESCRIPTION

Pivot is an architectural 48V linear magnetic track lighting system for pendant mounting. The Pendant Track is low voltage and accommodates the Pivot Track Modules. It possesses infinite run capabilities in segments of up to 8 feet with smooth transitions at the joint. It can also be branched out horizontally and vertically to create a multitude of shapes, patterns, and effects for various architectural applications. The Track is offered in different circuit and control channel variations.





Project: \_\_\_\_\_  
 Type: \_\_\_\_\_

## Track

Example: PIVP-CR-9FT6IN(2X3FT-1X3FT6IN)-WIO2(SW-80-750-350)-2FT3IN-NA-120V-D1-USC-1C1CCUDI-NA-ACS-TMB-B-NA

A drawing of your pattern is required - anything from a line drawing to an architectural drawing. You can also use the grid on page 3 to sketch your layout.

LUMINAIRE ID	TRACK TYPE	LUMINAIRE LENGTH <sup>3</sup>	INDIRECT OPTIC <sup>4</sup>	LINX <sup>7</sup>
<b>PIVP</b>				
<b>PIVP</b> - Pivot Pendant	<b>CR</b> <sup>1</sup> - Continuous run <b>PAT</b> <sup>2</sup> - Pattern  <sup>1</sup> A straight linear shape with no Linx. Two end caps are provided. <sup>2</sup> A shape or pattern containing at least 1 Linx. End caps are provided as required based on your drawing.	<b>##FT##IN</b> (#X#FT#IN-#X#FT#IN-...) -  <b>##FT##IN</b> : total nominal length of continuous run or pattern in feet or inches (3' or longer) <b>#X</b> : quantity of each section <b>#FT#IN</b> : nominal length of each section in feet, specify between 3' and 8'  <sup>3</sup> Consult the Maximum Track Wattage table on page 3 to determine the maximum load allowed per section.	<b>WIO2</b> <sup>5,6</sup> - Widespread Indirect Optic <b>BLA</b> - Blank cover <b>NA</b> - None  <sup>4</sup> By default, the track comes with no cover. If either light and/or a blank cover is required for the indirect side, select WIO2 and/or BLA. Specify the total length for each required indirect optic, and provide a drawing detailing the length and positioning of each indirect optic section. Or else select NA when nothing is required on the indirect side. <sup>5</sup> Minimum 2', specify in 4" increments. <sup>6</sup> To specify see the indirect optic code and example below.	<b>#LNH2</b> - 2-way horizontal Linx <b>#LNH3</b> - 3-way horizontal Linx <b>#LNH4</b> - 4-way horizontal Linx <b>#LNV2</b> - 2-way vertical Linx <b>NA</b> - None  <sup>7</sup> Specify quantity (#) for each required Linx.

VOLTAGE	DIMMING	TRACK CHANNEL	CONTROL CHANNEL <sup>11</sup>
<b>120V</b> - 120V <b>277V</b> - 277V <b>UNV</b> - 120V-277V	<b>ND</b> - Non-dimming <b>D1</b> - 1% 0-10V <b>DA</b> <sup>8</sup> - DALI <b>LECS</b> <sup>8,9,10</sup> - Lutron EcoSystem  <sup>8</sup> On-site commissioning is required. <sup>9</sup> Only available with USC, 1 circuit, and 1 control channel options (1C1CCUD, 1C1CCUDI). <sup>10</sup> Comes with a control box that must be installed remotely.	<b>USC</b> - Unified single channel <b>DUC</b> - Dual channel	<b>DIRECT</b> <b>1C1CCUD</b> - 1 circuit, 1 control channel (USC) <b>1C2CCDD</b> - 1 circuit, 2 control channels (DUC channel 1 - DUC channel 2) <b>2C2CCDD</b> - 2 circuits, 2 control channels (DUC channel 1 - DUC channel 2)  <sup>11</sup> For more details, please see page 5.
			<b>DIRECT/INDIRECT</b> <b>1C1CCUDI</b> - 1 circuit, 1 control channel (USC with indirect light) <b>2C2CCUDI</b> - 2 circuits, 2 control channels (USC - indirect light) <b>2C2CCDDI</b> - 2 circuits, 2 control channels (DUC channel 1 with indirect light - DUC channel 2) <b>2C3CCDDI</b> - 2 circuits (DUC - indirect light), 3 control channels (DUC channel 1 - DUC channel 2 - indirect light)

EMERGENCY SECTION	MOUNTING	OUTSIDE FINISH <sup>16</sup>	INSIDE FINISH	OPTIONS
<b>EC</b> <sup>12</sup> - Emergency light section <b>NA</b> - None  <sup>12</sup> Consult factory.	<b>ACS</b> <sup>13</sup> - Aircraft cable, standard <b>ACC</b> <sup>14</sup> - Aircraft cable, custom <b>THR</b> <sup>15</sup> - Threaded rod  <sup>13</sup> Standard aircraft cable option: canopies are white, Ø5" for power canopy, Ø3" for non-power. Power cord is black for black fixtures, and white for all other fixture finishes. Aircraft cable length is 36". <sup>14</sup> To specify a custom mounting, please refer to the mounting code on page 4 to see all available options. <sup>15</sup> Threaded rods provided by others.	<b>TMB</b> - Textured matte black <b>TMW</b> - Textured matte white <b>CF#</b> - Custom finish, specify RAL# See page 6 for more finish options.  <sup>16</sup> Linx finish will match outside finish.	<b>B</b> - Black <b>W</b> - White	<b>FU120</b> - Fuse 120V <b>FU277</b> - Fuse 277V <b>CTB9</b> - T-bar caddy clip, 9/16" <b>CTB15</b> - T-bar caddy clip, 15/16" <b>CTC9</b> - Tegular caddy clip, 9/16" <b>CTG15</b> - Tegular caddy clip, 15/16" <b>CST</b> - Screw slots caddy clip <b>NA</b> - None

## Indirect optic

Example: WIO2(SW-80CRI-750LMF-35K)

INDIRECT OPTIC	INDIRECT LIGHT SOURCE	INDIRECT CRI	INDIRECT LUMEN PACKAGE	INDIRECT COLOR TEMP
<b>WIO2</b>				
<b>WIO2</b> - Widespread Indirect Optic	<b>SW</b> - Static white <b>FS</b> - Full spectrum	<b>80CRI</b> <sup>17</sup> - 80 CRI <b>90CRI</b> <sup>17</sup> - 90 CRI <b>95CRI</b> - 95 CRI  <sup>17</sup> Not available with full spectrum.	<b>500LMF</b> - Low output 500lm/ft <b>750LMF</b> - Medium output 750lm/ft <b>1000LMF</b> <sup>18</sup> - High output 1000lm/ft  <sup>18</sup> Not available with 95 CRI.	<b>27K</b> - 2700K <b>30K</b> - 3000K <b>35K</b> - 3500K <b>40K</b> - 4000K

### CURRENT LIMITER

The Pivot Track system is based on a low-voltage (48VDC) design that integrates the AC/DC conversion inside the body of the track (expect for Surface). The AC/DC 48V power supplies inside the fixture are inherently limited to specific wattages intended to provide at least 12W/ft. Accordingly, if a track section is overloaded with modules, the system can never draw more than the rating of the power supply inside. In situations where the wattage of the modules installed exceeds the rated wattage of the integral power supply, flashing will typically occur to indicate an overload event.

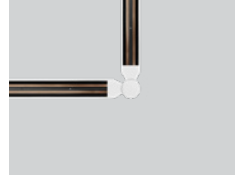
Project: \_\_\_\_\_

Type: \_\_\_\_\_

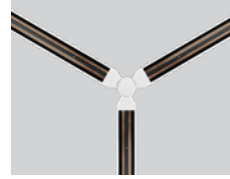
### Track Details

Use the grid below to sketch and label the layout of your Pivot Track.

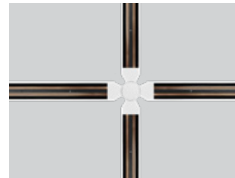
- Build your continuous run or pattern using track sections of 3' to 8'.
- The total wattage of all the modules installed in a track section must not exceed the maximum track wattage per section length (see table). Consult the Pivot Module spec sheet for the wattages of each module.
- Minimum length for the WIO2 indirect optic is 2', specify in 4" increments.
- Minimum angle for the rotation of the Linx is 60°.
- Track length is not field adjustable.



LNH2 - 2-way horizontal Linx



LNH3 - 3-way horizontal Linx



LNH4 - 4-way horizontal Linx



LNV2 - 2-way vertical Linx

#### Maximum Track Wattage \*

at 35K at 80 CRI

**! Do not exceed the maximum wattage allowed per section of track.**

LENGTH	USC	DUC	
		Channel 1	Channel 2
3FT	36 W	18 W	18 W
4FT	48 W	24 W	24 W
5FT	60 W	30 W	30 W
6FT	72 W	36 W	36 W
7FT	84 W	42 W	42 W
8FT	96 W	48 W	48 W

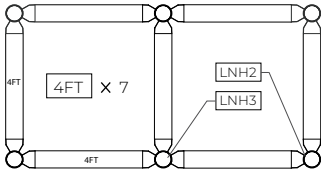
\* To determine the maximum wattage allowed per section of track, multiply the length of your section by 12 W/ft.

#### Maximum Track Length Per Power Feed \*

VOLTAGE	LENGTH
120V	60FT
277V	140FT

\* Assuming 12W/ft, direct-only track with 1 circuit (IC1CCUD or IC2CCUD). For other scenarios, consult factory.

#### Pattern example

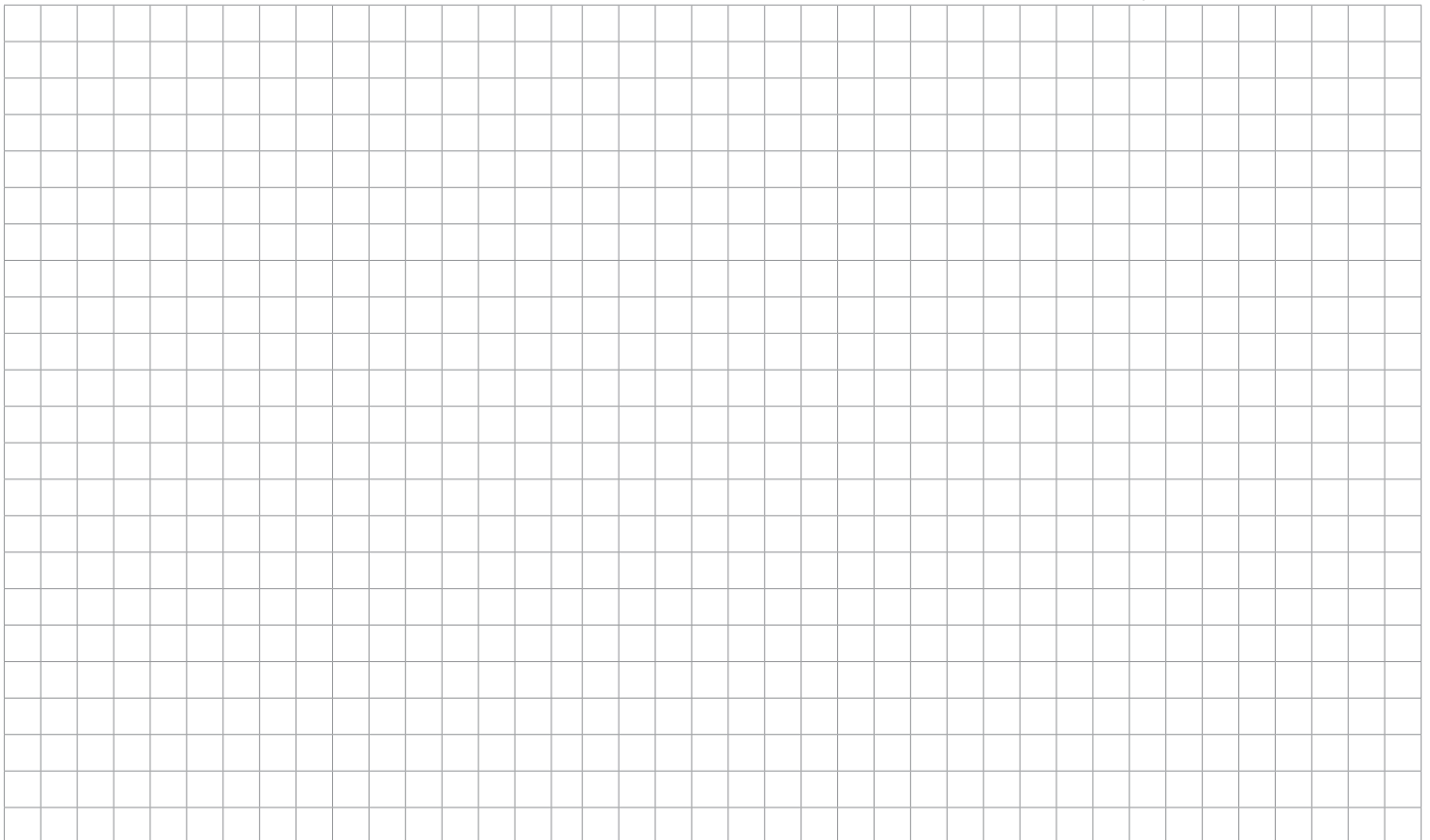


1. Specify the **TOTAL LUMINAIRE LENGTH** in feet or inches.

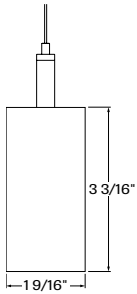
Example: 28FT(7X4FT)

2. Specify the quantity of each type of **LINX**.

Example: 4LNH2-2LNH3

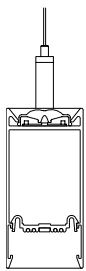


## Dimensions

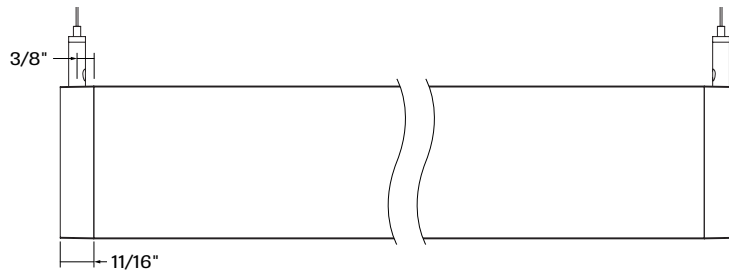


**PIVP** - Pivot Pendant

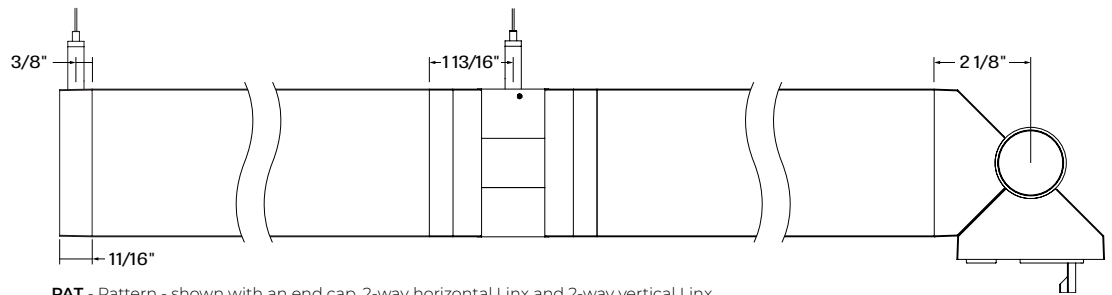
### Cross section



**PIVP** - Pivot Pendant  
- WIO2

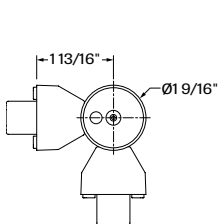


**CR** - Continuous run - with two end caps

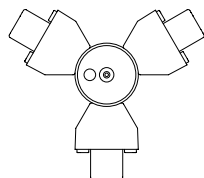


**PAT** - Pattern - shown with an end cap, 2-way horizontal Linx and 2-way vertical Linx

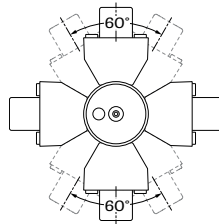
## Linx



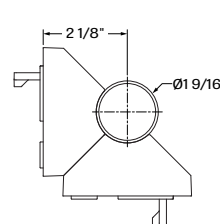
**LNH2** - 2-way horizontal Linx



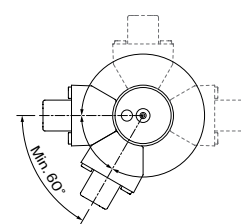
**LNH3** - 3-way horizontal Linx



**LNH4**<sup>1</sup> - 4-way horizontal Linx  
12 fixed and 2 movable.



**LNV2** - 2-way vertical Linx



## Custom Pendant Mounting Code

For a custom mounting, specify the options in the parentheses.

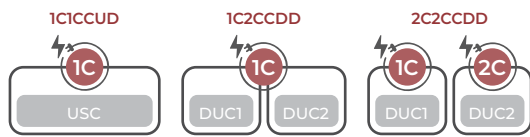
Example: ACC(3NPC-72IN-W-PCB-SLC)

MOUNTING - AIRCRAFT CABLE, CUSTOM				
ACC()				
NON-POWER CANOPY SIZE	AIRCRAFT CABLE LENGTH	CANOPY FINISH	POWER CORD COLOR	OPTIONS
<b>ACC</b> <b>3NPC</b> - Ø3" non-power canopy <b>5NPC</b> - Ø5" non-power canopy	<b>36IN</b> - 36" <b>72IN</b> - 72" <b>120IN</b> - 120" <b>#IN</b> <sup>1</sup> - Other lengths, specify in inches <sup>1</sup> Maximum length is 288". For longer lengths, please consult factory.	<b>W</b> - White <b>AL</b> - Aluminum <b>B</b> - Black <b>CF#</b> - Custom finish, specify RAL#	<b>PCW</b> - White <b>PCB</b> - Black	<b>SEM</b> - Seismic mounting <b>SLC</b> - Sloped ceiling for aircraft cable <b>NA</b> - None

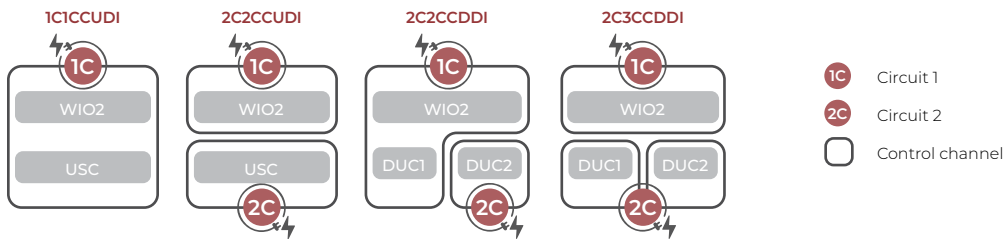
### Circuit and channel specification

TRACK CHANNEL	CONTROL CHANNEL	
<b>USC</b> - Unified single channel <b>DUC</b> - Dual channel	<b>DIRECT</b> <b>1C1CCUD</b> - 1 circuit, 1 control channel (USC) <b>1C2CCDD</b> - 1 circuit, 2 control channels (DUC channel 1 - DUC channel 2) <b>2C2CCDD</b> - 2 circuits, 2 control channels (DUC channel 1 - DUC channel 2)	<b>DIRECT/INDIRECT</b> <b>1C1CCUDI</b> - 1 circuit, 1 control channel (USC with indirect light) <b>2C2CCUDI</b> - 2 circuits, 2 control channels (USC - indirect light) <b>2C2CCDDI</b> - 2 circuits, 2 control channels (DUC channel 1 with indirect light - DUC channel 2) <b>2C3CCDDI</b> - 2 circuits (DUC - indirect light), 3 control channels (DUC channel 1 - DUC channel 2 - indirect light)

#### Direct

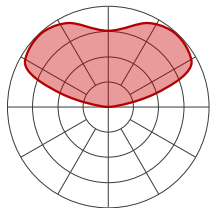


#### Direct/Indirect



### Photometrics

#### INDIRECT OPTIC



WIO2- Delivered Lumens at 35K at 80 CRI

LUMENS PER FOOT	TOTAL LUMENS PER 4FT	INPUT WATTAGES	LPW
500	2000	14.2	140
750	3000	22.3	135
1000	4000	30.8	130

Multiplier - CCT/CRI

CCT (K)	Watts		LPW	
	CRI 80	CRI 90	CRI 80	CRI 90
2700	1.05	1.27	0.95	0.79
3000	1.02	1.23	0.98	0.81
3500	1.00	1.19	1.00	0.84
4000	1.00	1.19	1.00	0.84

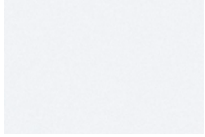
# PIVOT

TRACK - PENDANT

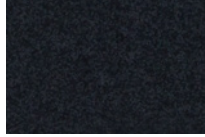
# LUMENWERX

## Finishes

### Standard



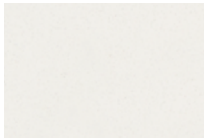
**TMW** - Textured Matte White



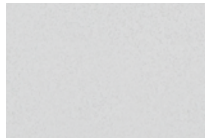
**TMB** - Textured Matte Black

### Custom

#### Neutrals



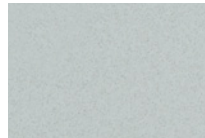
**CRM** - Cream



**GRY** - Gray



**STG** - Steel Gray



**SAG** - Sage Gray

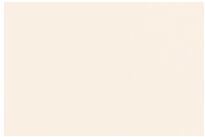


**MOG** - Moss Gray



**BLB** - Black Blue

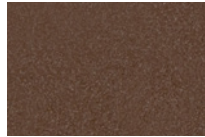
#### Designer



**ALM** - Almond



**QRZ** - Quartzite Texture



**RST** - Rust Fine Texture



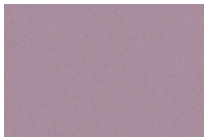
**GRB** - Green Beige



**YLW** - Yellow



**SLM** - Salmon Pink



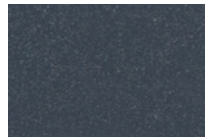
**VIO** - Pastel Violet



**RED** - Red



**PRR** - Purple Red



**SMB** - Storm Blue



**DPB** - Deep Blue



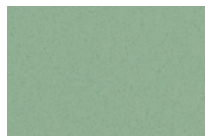
**OCB** - Ocean Blue



**BLG** - Blue Green



**GNS** - Green Smoke

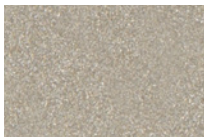


**MNG** - Mint Green

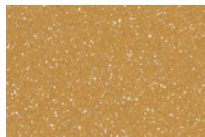


**LMG** - Lime Green

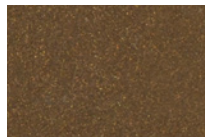
#### Metallics



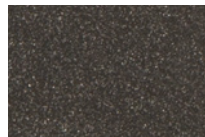
**SND** - Sand



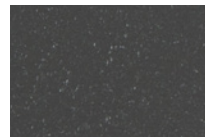
**GLD** - Gold



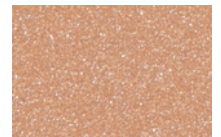
**DGD** - Dark Gold



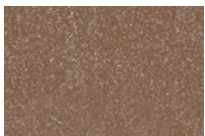
**IRN** - Iron Ore



**CNY** - Canyon



**SBP** - Sandblast Copper



**SWD** - Sandalwood

Some colors may have longer lead time.

## Technical Specifications

### INDIRECT OPTIC

#### Widespread Indirect Optics (WIO2)

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

#### Blank (BLA)

Blank covers can be specified to cover unlit sections of the indirect portion of the Pivot track. By default, the track comes with no cover. Blank covers are finished to match the outside color of the track.

#### LIGHT SOURCE - STATIC WHITE

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.

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.

#### 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.

#### LUMINAIRE LENGTH

Pivot track is available as either as a continuous run (straight linear shape with no Linx) or as a pattern (shape or pattern containing at least 1 Linx). It is built using track sections of 3' to 8'. The total nominal length must be specified in the product code, as well as the quantity and nominal length of each section. Lengths can be ordered in 1 foot increments. The track length is not field adjustable.

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 - DIRECT

The Pivot Track is powered by an integral (except for Surface) 48VDC, Class 2, SELV power supply with universal (120-277VAC) input. Rated lifetime of 50,000 hours at 50°C max. ambient (and 70°C max. case) temperature. At maximum driver load: Efficiency>90%, PF>0.9, THD<20%. The power supply is coupled to a proprietary dimming interface which allows one or both track channels to be controlled together or independently using a 0-10V or DALI signal. Both the power supply and the dimming interface can be serviced from below. For applications requiring Lutron Ecosystem control, a separate, remote interface can be provided to translate Ecosystem to 0-10V.

#### ELECTRICAL - INDIRECT

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 non-dimming, Lutron 5-Series EcoSystem, and DALI protocol drivers. All of our standard 0-10V drivers are NEMA 410 compliant.

#### MOUNTING OPTIONS

Track can be pendant-mounted, using aircraft cables. Unless otherwise specified, Lumenwerx provides the following hardware:

**Standard aircraft cable option (ACS)** - Canopies are white, Ø5" for power canopy, Ø3" for non-power. Power cord is black for black fixtures, and white for all other fixture finishes. Aircraft cable length is 36".

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

For all other options, see the custom mounting code on page 4.

# PIVOT

## TRACK - PENDANT

LUMENWERX

### FINISH

**Outside** - Standard powder-coat paint available in textured matte white and black. Custom colors are also available in over 30 colors.

**Inside** - White or black



### CONSTRUCTION

**Track housing** - Extruded aluminum, up to 90% recycled content

**Joining system** - Die cast zinc

**WIO2 reflector** - Cold rolled steel die formed, 95% reflective matte white painted

**WIO2 diffuser** - Extruded acrylic

**Blank cover** - Extruded aluminum

**End caps** - Die cast aluminum

**Hanger** - Chromed griplock securely attached with spring steel hardware in end caps and/or joiners

**Aircraft cable suspension** - 7x7 braids aluminum aircraft cable 0.06" thick

### WEIGHT

**3ft** - 4.6 lbs - 2.1 kg

**4ft** - 5.9 lbs - 2.7 kg

**6ft** - 8.4 lbs - 3.8 kg

**8ft** - 11 lbs - 5.0 kg

### CERTIFICATIONS

**ETL** - Rated for Indoor Dry locations. Conforms to UL Standard 1574 and certified to CAN/CSA Standard C22.2 No. 250.0.

### 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.