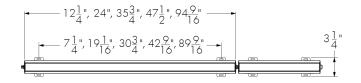
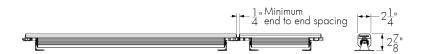
**Project Name** Qty

Catalog / Part Number Type





Top view



Front and side views

# **Photometric Summary**

# RO - Regular output

ССТ	Delivered Output [lm]	Power [W]	Efficacy [lm/W]
2200K <sup>[3]</sup>	1346	19	<i>7</i> 1
2700K [3]	1912	19	101
3000K [3]	195 <i>7</i>	19	103
3500K [3]	2045	19	108
4000K	2174	19	114

HO - High output

ССТ	Delivered Output [lm]	Power [W]	Efficacy [lm/W]
2200K <sup>[3]</sup>	2745	39	<i>7</i> 0
2700K [3]	3896	39	100
3000K [3]	3984	39	102
3500K [3]	4161	39	107
4000K	4427	39	114

Photometric performance is measured in compliance with IESNA LM-79-08.

- [1] Use 0.25 multiplier for each 12in [305mm] section.
- [2] Frosted lens option ratio = x0.85.
- [3] Estimated. Consult website for the latest photometric files.

# Optic



# **Description**

Optimized for size, Lumencove 2.0 offers excellent performance and a complete toolbox of options for interior indirect general lighting and cove lighting applications. The system is available in 12 in, 24 in, 36 in, 48 in and 96 in sections enabling both curved and linear layouts. The longer 96 in sections help decrease installation costs by reducing the number of connections. Options include a choice of ouputs, with regular (RO 5 W/ft) and high-output (HO 12 W/ft) versions.

# **Features**

Color and Color Temperature	2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue
Length (Nominal)	12 in, 24 in, 36 in, 48 in, 96 in
Optics	110° x 110°
Power Consumption	5 W/ft (RO version), 12 W/ft (HO version)
Adjustability	+/- 90° tilt angle
Warranty	5-year limited warranty

# **Performance**

Maximum Delivered Output	4427 lm (HO 4000K, 48 in fixture, Clear Lens)
Color Consistency	2 SDCM
Color Rendering	Minimum CRI 80
Lumen Maintenance	L70 126,000 hrs (Ta 25 °C and Ta 40 °C) L95 19,000 hrs (Ta 25 °C and Ta 40 °C)

# **Physical**

Housing Material	Low copper content extruded aluminum
Lens Material	Extruded polycarbonate, clear or frosted
Finish	White



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# **Colors and Color Temperatures**







# <u>Control</u>

ON/OFF	0-10V	DALI	DMX/RDM

lumen	talk*
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# Rating

IP20

# Certifications









Surface Finish	Electrostatically applied polyester powder coat	
Weight	12 in: 1.25 lbs, 24 in: 2.5 lbs, 36 in: 3.75 lbs, 48 in: 5 lbs, 96 in: 10 lbs	
Floatrical and Control		

# Electrical and Control

Voltage	120-277V
Fixture Cable	Power and data in one cable
Leader Cable Conductor	5C #16-5
Connector Type	Thumb latch connectors, breakable under load
Fixture Cable and Connector Color	White
Maximum Cable and Fixture Run Length	Up to 350 ft (On/Off, DALI, DMX/RDM, 277V, RO version)
Control	On/Off Control, Lumentalk, 0-10V Dimming, DALI Dimming, DMX/RDM Enabled
Resolution (DMX/RDM)	Per foot or per fixture (configured with LumenID V3 software), 8-bit or 16-bit

### **Environmental**

Storage Temperature	-40 °F to 122 °F (device must reach start-up temperature value before operating)
Start-up Temperature	-13 °F to 122 °F
Operating Temperature	-13 °F to 122 °F
Environment	Indoor applications only
Ingress Protection Rating	IP20

# **Accessories (Order Separately)**

Cables	Leader Cable, Jumper Cable
Control Boxes	DMX/RDM enabled (Daisy Chain or Star Configuration), Ethernet enabled (Daisy Chain or Star Configuration), Lumentalk Data Bridge
Control Systems	Pharos® Lighting Control Kit (PHAROS), Lumenscene™ (LSC)
Diagnostic and Addressing Tools	LumenID (LID), LumentalkID (LIDLT)
Important	

# Virtual Patent Marking Notice

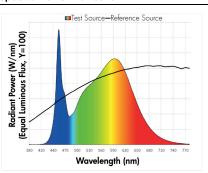
This website (https://www.lmpg.com/patents-trademarks) is provided to satisfy the virtual patent marking provisions of applicable jurisdictions. Some products listed may be covered by additional patents not referenced here.

# **Chromaticity Data**

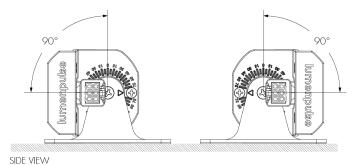
### TM-30 - 4000K

# CCT CIE TM-30 4000K R<sub>o</sub> 83 83 R<sub>f</sub> R<sub>o</sub> 4 93 R<sub>g</sub> 93 83 93 4071 K 0.0004

### Spectral Power Distribution

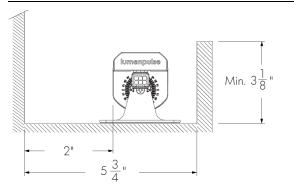


# **Maximum Pivot Limits**



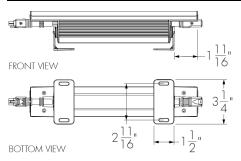
**Mounting Details** 

# Suggested Cove Dimensions



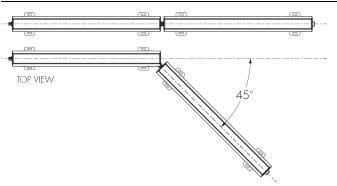
Minimum cove height depends on sight line.

# **Mounting Bracket Dimensions**



12 in fixture shown.

### Maximum Angle Adjustment



A jumper cable is required for angles greater than 45°.

# Cables (Order Separately)

### LCS2LC - Leader Cable For Lumencove 2.0



### LCS2LC-CERTIFICATION-CONTROL-LENGTH-WH

Please specify:

CERTIFICATION: UL or CE; CONTROL: NO, DATA or DMX/RDM; LENGTH: 10 ft or 25 ft.

- For NO and LT fixture control options: specify the NO control option for the leader cable.
- For DIM, DIM/DTW, DALI and ES fixture control options: specify the DATA control option for the leader cable.
- For DMX/RDM and DMX/RDM1 fixture control options: specify the DMX/RDM control option for the leader cable.
- DMX terminator is mandatory for any unused connector. One (1) included with every DMX/RDM leader cable.
- Consult Lumencove 2.0 leader cable specification sheet for details.

### LCS2JC - Jumper Cable For Lumencove 2.0



### LCS2JC-CERTIFICATION-CONTROL-LENGTH-WH

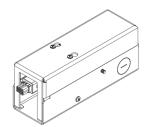
Please specify:

CERTIFICATION: UL or CE; CONTROL: NO or DATA; LENGTH: 2 ft or 4 ft.

- For NO and LT fixture control options: specify the NO control option for the jumper cable.
- For DIM, DIM/DTW, DALI, ES, DMX/RDM and DMX/RDM1 fixture control options: specify the DATA control option for the jumper cable.
- Consult Lumencove 2.0 jumper cable specification sheet for details.

# Wiring Compartment (Order Separately)

# WC-120/277-LC\$2-WH - Wiring Compartment



The Wiring Compartment is pre-wired with a leader cable, allowing the quick connection of conduits. Consult WC specification sheet for details.

# Control Boxes (Order Separately)

### CBX-DMX/RDM - DMX/RDM Enabled (Daisy Chain or Star Configuration)





DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Consult CBX specification sheet and installation instructions for details. Lumenterminators provided with CBX (2x for Daisy Chain configuration, 6x for Star configuration), consult factory to order spares.

### CBX-ENET - Ethernet Enabled (Daisy Chain or Star Configuration)





Ethernet control box. Up to four power and data outputs to fixture or fixture runs. Consult Ethernet CBX specification sheet and installation instructions for details.

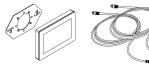
# LDB - Lumentalk Data Bridge



The Lumentalk Data Bridge is a digital interface that connects non-Lumentalk luminaires to the Lumentalk network, 0-10V or DMX output. Consult LDB specification sheet for details.

# **Control Systems (Order Separately)**

### PHAROS - Pharos® Designer Lighting Control Kit







The Pharos Designer Lighting Contol Kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations.

# Diagnostic And Addressing Tools (Order Separately)

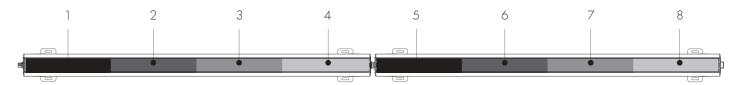
### LID - LumenID



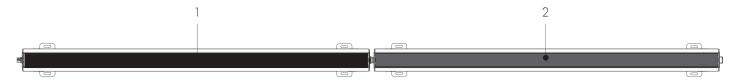
LumenID is a diagnostic and addressing DMX/RDM tool. It must be specified on all DMX applications. Consult LID specification sheet for details.

# **Resolution Details**

# DMX/RDM Control, Resolution Per Foot: Each 12 in Section is Addressed Independently **DMX Addresses:**



DMX/RDM Control, Resolution Per Fixture: Each Fixture is Addressed Independently DMX Addresses:



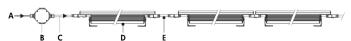
- 48 in fixtures shown.
- Applicable for DMX/RDM control option only. Fixture resolution can be configured on-site within the LumenID V3 software. A DMX/RDM enabled CBX is required.

# **Typical Wiring Diagrams**

# Wiring Color Code

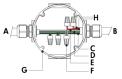
UL Color Code	USE
Green	Ground
Black	Line
White	Line/Neutral
Red or Purple	0-10V / Data +
Orange	0-10V / Data -

# On/Off Control (NO)



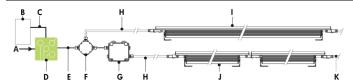
- A Power input (120-277V, wiring by others)
- **B** Junction box (by others)
- C Leader cable (LCS2LC)
- **D** Lumencove 2.0
- E Jumper cable (LCS2JC) (optional)

# On/Off Control (NO) - Wiring Detail



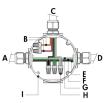
- A Power input
- B To fixture
- C Line
- **D** Ground
- **E** Line/Neutral
- F Wire-nuts (by others)
- **G** Junction box (by others)
- H Not required
- Consult factory for specific applications and maximum fixture count cable length recommendations.
- Regular Output version: 5 W/ft, High Output version: 12 W/ft.

### Lumentalk (LT)



- A Power input (100-277V AC, wiring by others)
- **B** Dimmer/controller (order separately from lumenpulse, or by others)
- C Data wiring (by others)
- **D** Lumentranslator 2 (LTL2-010, -DMX, -TRIAC, -DALI)
- **E** Power wiring (by others)
- F Junction box (by others)
- G Lumentalk Data Bridge (LDB-DIM or LDB-DMX)
- H Leader cable (LCS2LC)
- I Lumencove 2.0 (24 in, 36 in, 48 in or 96 in fixture lengths)
- **J** Lumencove 2.0 (12 in)
- K Jumper cable (LCS2JC) (optional)

### Lumentalk (LT) - Wiring Detail



- A Power input (control over power line via Lumentalk system)
- **B** Not required
- C To fixture
- **D** To Lumentalk Data Bridge (for run lengths with 12 in fixtures)
- E Line
- F Ground
- G Line/Neutral
- H Wire-nuts (by others)
- I Junction box (by others)
- · Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk Data Bridge required for 12 in fixture lengths, see LDB installation instructions for details.
- For applications with all fixtures controlled as 1 zone: fixtures and Lumentalk Data Bridge must be specified as DIM. Maximum of 10 fixtures per LDB-DIM, consult factory for applications that require additional capabilities.
- For applications with fixtures controlled individually: fixtures and Lumentalk Data Bridge must be specified as DMX, 2-step commissioning process: 1 DMX/RDM system using Lumental software and a LID, 2 Lumentalk system using LumentalkID software and a LID-LT. Maximum of 32 fixtures per LDB-DMX. Consult factory for details.
- For DMX applications: 1 DMX controller per Lumentalk network, maximum of 48 DMX channels per Lumentalk network (minimum step transition update rate is 1 second, minimum fade time between two colors is 1 minute). Consult factory for applications that require additional capabilities.
- Maximum of 1 transmitter (Lumentranslator or Lumenlink) per system.
- No third party fixtures allowed on the same circuit.
- Consult factory for DALI Lumentalk applications.
- 1% minimum dimming value.

A - Power input (120-277V, wiring by others)

G - Jumper cable (LCS2JC) (optional)

**B** - Junction box (by others)

C - Data wiring (by others)

E - Leader cable (LCS2LC)

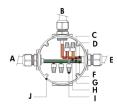
**D** - Dimmer (by others)

F - Lumencove 2.0

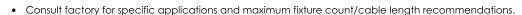
0-10V Dimming (DIM)

• Regular Output version: 5 W/ft, High Output version: 12 W/ft.

### 0-10V Dimming (DIM) - Wiring Detail



- A Power input
- **B** From dimmer (by others)
- C 0-10V +
- **D** 0-10V -
- **E** To fixture
- F Line
- G Ground
- **H** Neutral
- I Wire-nuts (by others)
- J Junction box (by others)



- Run length cannot exceed 8A per linear run <u>OR</u> maximum amperage capacity of the specified dimmer.
- 0-10V mA ratings: passive dimmer (Current Sink): 3mA per fixture, active dimmer (Current Source): 0.5mA per fixture.
- 1% minimum dimming value.
- Regular Output version : 5 W/ft, High Output version : 12 W/ft.

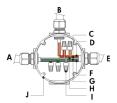
lumenpulse\*

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# **DALI Dimming (DALI)**

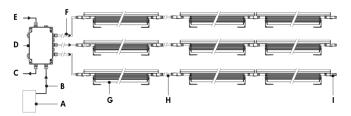
- A DALI bus power supply (by others)
- **B** Power input for DALI bus power supply (wiring by others)
- C Data output to DALI controller (by others)
- **D** DALI controller (by others)
- E Power input for DALI controller (wiring by others)
- **F** Data output to fixture (wiring by others)
- G Power input (120-277V, wiring by others)
- **H** Junction box (by others)
- I Leader cable (LCS2LC)
- J Lumencove 2.0
- K Jumper cable (LCS2JC) (optional)

# DALI Dimming (DALI) - Wiring Detail



- A Power input
- B From DALI controller (by others)
- C DA +
- **D** DA -
- E To fixture
- F Line
- **G** Ground
- **H** Neutral
- I Wire-nuts (by others)
- J Junction box (by others)
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Maximum of 64 DALI fixtures per DALI loop.
- 1% minimum dimming value.
- Regular Output version: 5 W/ft, High Output version: 12 W/ft.
- Commissioning may be required based on the selection of 3rd party DALI controller. Controller and commissioning provided by others.

### Star Layout (DMX/RDM)



- A DMX/RDM controller (order separately from Lumenpulse, or by others)
- **B** Data input (Belden 9841 or equivalent, by others)
- C Data output to next CBX (optional, not isolated/not boosted)
- D CBX-ST
- E Power input (120-277V, wiring by others)
- **F** Leader cable (LCS2LC)
- **G** Lumencove 2.0
- H Jumper cable (LCS2JC) (optional)
- I DMX Terminator (last fixture in DMX/RDM run only)

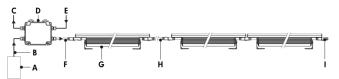
### um Run of Fixtures, Lumencove® 2.0 White & Static Colors RO 5W/ft

Maximon Ron of Fixiores, contencoves 2.0 while a signic colors Ro 547 ii								
Voltage	120V	240V	277V					
Maximum Run of Fixtures*	1 28ft							
Maximum Run of Fixtures, Lumencove® 2.0	White & Static Co	olors HO 12W/ft						
Voltage	120V	240V	277V					
Maximum Run of Fixtures*	71ft	1 28ft	128ft					

- Based on 8A maximum, 50ft leader cable.

  \*Example: 120V = 128ft maximum run of end to end fixtures (32 fixtures maximum for 4ft LCS2 RO).
- Refer to CBX installation instructions for additional wiring details.
- Consult factory for specific applications and maximum fixture count/cable length recommendations. Maximum run length calculations are typically based on 48 in fixtures.
- The DMX/RDM protocol states a maximum of 32 DMX/RDM enabled fixtures on any single run.
- Maximum of 4 DMX/RDM repeaters/CBX cascading in line.
- Maximum of 6 outputs per CBX-ST, maximum of 1 output per CBX-DS.
- DMX terminator is required at the end of each run to maintain data integrity. One (1x) DMX terminator included with each leader cable. See installation instructions for details.
- Each fixture requires 1 DMX address.
- 1% minimum dimming value.
- Regular Output version: 5 W/ft, High Output version: 12 W/ft.

# Daisy Chain Layout (DMX/RDM)



- A DMX/RDM controller (order separately from Lumenpulse, or by others)
- B Data input (Belden 9841 or equivalent, by others)
- C Data output to next CBX (optional, not isolated/not boosted)
- D CBX-DS
- E Power input (120-277V, wiring by others)
- F Leader cable (LCS2LC)
- G Lumencove 2.0
- H Jumper cable (LCS2JC) (optional)
- I DMX Terminator (last fixture in DMX/RDM run only)



# **How to Order**

Housing	Voltage	Length	Color and Color Temperature <sup>(3)</sup>	Lens	Finish	Control
LCS2 RO Lumencove® 2.0 Regular Output 5 W/ft (1) LCS2 HO Lumencove® 2.0 High Output 12 W/ft (1)	120 120 Volts 208 208 Volts 220 220 Volts 240 240 Volts 277 277 Volts	12 12 1/4 in (1.25 lbs) (2) 24 24 in (2.5 lbs) 36 35 3/4 in (3.75 lbs) 48 47 1/2 in (5 lbs) 96 94 9/16 in (10 lbs)	22K 2200K 27K 2700K 30K 3000K 35K 3500K 40K 4000K RD Red (4) (5) GR Green (5) BL Blue (5)	CL Clear Lens FR Frosted Lens	WH Smooth White CC Custom Color & Finish (6) (7) (8)	NO On/Off Control LT Lumentalk (2) (9) DIM 0-10V Dimming DALI Dimming DALI Dimming DMX/RDM DMX/RDM DMX/RDM DMX/RDM Dimming (10)

# Notes:

- 1. Consult factory for products that are BAA-approved (Buy America.n Act).
- 2. To connect 12 in fixture lengths to the Lumentalk system, DIM or DMX/RDM must be specified as the control option, and a Lumentalk Data Bridge (LDB) is required. See the typical wiring diagrams in the specification sheet for details.
- Consult factory for availability of static Royal Blue, 6500K and 90+ CRI.
   Consult factory for HO static red configuration.
- 5. Static colors made to order 8-10 weeks.

- 6. Lumenpulse offers a wide selection of RAL CLASSIC (K7) colors with a smooth texture and high-gloss finish. Please consult factory for a list of available K7 colors, other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary.
- 7. Setup charges apply for RAL colors. Consult factory for details.8. Longer lead times can be expected for custom RAL color finishes.
- 9. A Lumentranslator 2 (LTL2) and LumenID (LID) must be specified for Lumentalk applications. Consult Lumentranslator 2 and Lumentalk pages and specification sheets for details.
- 10. A control box (CBX) and LumenID (LID) must be specified.