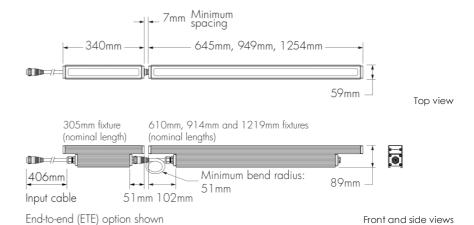
**Project Name** \_\_\_ Qty \_\_\_

Type \_\_\_\_\_ Catalog / Part Number



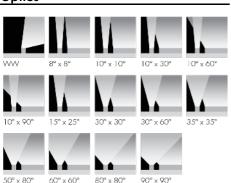


## **Photometric Summary**

	Delivered output (lm)	Intensity (peak cd)
ww	3,592	5,159
8°x8°	4,045	77,896
10°x10°	3,830	38,346
10°x30°	3,885	30,056
10°x60°	3,984	17,736
10°x90°	3,576	7,897
15°x25°	3,880	24,730
30°x30°	3,765	14,726
30°x60°	3,848	5,106
35°x35°	3,921	9,999
50°x80°	3,767	3,449
60°x60°	3,435	3,007
80°x80°	3,881	2,530
90°x90°	3,588	1,886

Based on HO 4000K, 4ft [1219mm] configuration. Photometric performance is measured in compliance with IESNA LM-79-08.

# **Optics**



## **Description**

The Lumenfacade is a high-performance linear LED luminaire for grazing or floodlighting exterior walls and facades. Featuring second generation LED technology, the luminaire is available in 305 mm, 610 mm, 914 mm or 1219 mm sections, and can be configured with a wide number of options, including: optics for grazing or flood lighting; a choice of outputs (ASHRAE 16.4 W/m, RO 27.89 W/m or HO 50.03 W/m); various colour temperatures or static colours; various mounting options, finishes, accessories and controls. The Lumenfacade is also available with a unique asymmetric wallwash distribution, providing exceptional uniformity and brightness for walls and signage.

## **Features**

i edibles				
Colour and Colour Temperature	2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue			
Length (nominal)	305 mm, 610 mm, 914 mm, 1219 mm			
Optics	Asymmetric Wallwash, 8° x 8°, 10° x 10°, 10° x 30°, 10° x 60°, 10° x 90°, 15° x 25°, 30° x 30°, 30° x 60°, 35° x 35°, 50° x 80°, 60° x 60°, 80° x 80°, 90° x 90°			
Options	End-to-end configuration (factory installed 16 in black input cable included), Corrosion-resistant coating for hostile environments, 3G ANSI C136.31-2010 Vibration Rating for bridge applications, CE (certification covers European Economic Area)			
Power Consumption	16.4 W/m (meets ASHRAE standards for linear lighting on building facades - not available for 305 mm fixture lengths), 27.89 W/m (RO version), 50.03 W/m (HO version), Typically 20% higher for 305 mm fixture lengths			
Warranty	5-year limited warranty			
Performance				
Illuminance at Distance	Minimum 1 lx at 133 m (HO 4000K, 1219 mm fixture, 10° x 60°, DMX/RDM)			
Colour Consistency	2 SDCM, 3 SDCM (2200K)			
Colour Rendering	Minimum CRI 80			
Lumen Maintenance	L80 B10 100,000 hrs, L80 B50 160,000 hrs			

# **Colours and Colour Temperatures**



























ON/OFF

1-10V

DALI







**Ratings** 

IP66

IK07\*

\*asymmetric wallwash lens is IK06 rated

# **Certifications**













## **Physical**

Housing Material	Low copper content extruded aluminium
Lens Material	Clear tempered glass
Hardware Material	Stainless steel
End Cap Material	Machined aluminium
Gasket Material	Silicone
Surface Finish	Electrostatically applied polyester powder coat
Weight	305 mm: 2.04 kg, 610 mm: 3.18 kg, 914 mm: 4.76 kg, 1219 mm: 6.35 kg

# **Electrical and control**

Voltage	100 to 277 volts
Fixture Cable	Power and data in one cable, End-to-end option (ETE): 406 mm black input cable (no jumper cable needed for minimum spacing between two fixtures)
Leader Cable Conductor	5C: 5 x 1,5 mm <sup>2</sup>
Maximum Cable and Fixture Run Length	76.8 m (On/Off, 277V, RO version), 50 m (On/Off, 277V, HO version)
Inrush Current (peak)	55A @230VAC
Control	On/Off control, Lumentalk, 1-10V dimming, DALI dimming, Lutron® EcoSystem® Enabled 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 °C to 85 °C (device must reach start-up temperature value

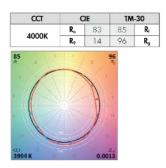
Storage Temperature	-40 °C to 85 °C (device must reach start-up temperature value before operating)
Start-up Temperature	-25 °C to 50 °C
Operating Temperature	-40 °C to 50 °C
Ingress Protection Rating	IP66
Impact Resistance Rating	IK07 (asymmetric wallwash lens is IK06 rated)

# Accessories (order separately)

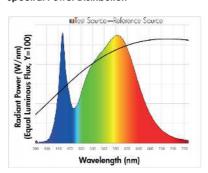
Optical Accessories	Lumenfacade Radial Louvre
Cables	Leader cable (standard), Jumper cable (standard), Leader cable (ETE), Jumper cable (ETE)
Control Boxes	DMX/RDM enabled (daisy chain or star configuration), Ethernet enabled (daisy chain or star configuration), Lumentalk Data Bridge
Control Systems	Pharos® kit
Diagnostic and Addressing Tools	LumenID, LumentalkID

# **Chromaticity Data**

TM-30 - 4000K

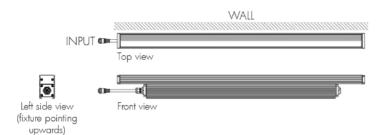


# **Spectral Power Distribution**

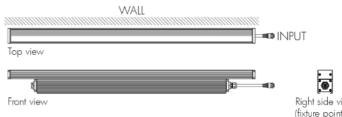


# Asymmetric wallwash optic details

WWLF - Asymmetric wallwash optic, left feed



## WWRF - Asymmetric wallwash optic, right feed



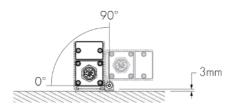
Right side view (fixture pointing upwards)

- Always position frosted side toward the wall.
- Fixture's feeding side is based on uplight installations. Feeding sides are reversed when fixture is used in a downlight application.
- Recommended setback from wall is 1/10 of the wall height. Example: 0.6 m setback for a 6 m wall.

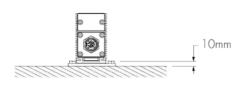
## Mounting options

# Surface Mount

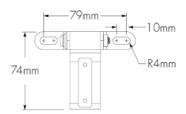
## SAM - Slim Adjustable Mounting



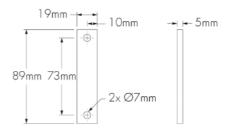
**UMP - Fixed Mounting** 



## SAM - Mounting hole pattern

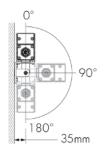


UMP - Mounting hole pattern

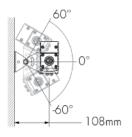


## **Wall Mount**

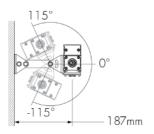
## **UMAS - Universal Adjustable Mounting**



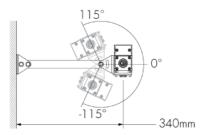
WAM2 - Adjustable Wall Mounting 51 mm



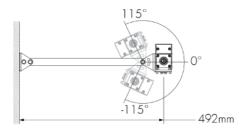
WAM6 - Adjustable Extended Arm Mounting 152 mm



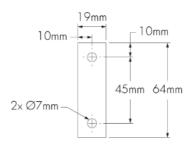
WAM12 - Adjustable Extended Arm Mounting 305 mm



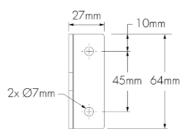
WAM18 - Adjustable Extended Arm Mounting 457 mm



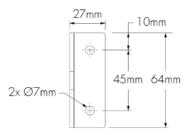
## **UMAS** - Mounting hole pattern



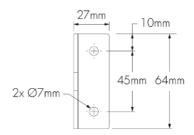
WAM2 - Mounting hole pattern



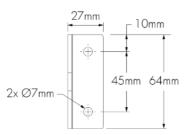
WAM6 - Mounting hole pattern



WAM12 - Mounting hole pattern



WAM18 - Mounting hole pattern



## End-to-end configuration option (ETE)

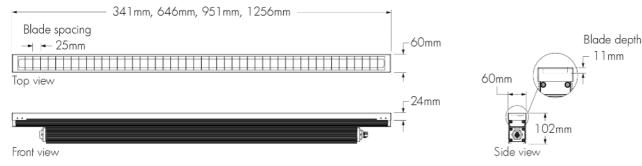


- A ETE leader cable (order separately)
- **B** Lumenfacade with ETE option
- C ETE 406 mm black input cable (minimum bend radius: 51 mm)
- D ETE jumper cable (order separately)

Includes a factory installed 406 mm black input cable. A jumper cable is not required for minimum spacing between two end-to-end (ETE) fixtures. An ETE jumper cable is required only if a longer distance between two adjacent ETE fixtures is needed, or to connect two continuous runs of ETE fixtures together.

## Optical accessories (order separately)

## LOGRD - Radial louvre for Lumenfacade



## LOGRD-LENGTH-FINISH-OPTIONS

Please specify:

LENGTH: 305 mm, 610 mm, 914 mm or 1219 mm; FINISH: BK - Black Sandtex®, BRZ - Bronze Sandtex®, SI - Silver Sandtex®, WH - Smooth white or CC - custom colour and finish (please specify RAL colour); OPTIONS: CRC - Corrosion-resistant coating for hostile environments

- · The addition of a louvre will affect beam distribution. Consult factory for application support.
- Not suitable for asymmetric wallwash optic.

# **EPA Guide**

# Fixture

	LOG 305 mm	LOG 610 mm	LOG 914 mm	LOG 1219 mm
EPA front (m²)	0.0255	0.0538	0.091	0.1288
EPA side (m²)	0.0037	0.0038	0.0041	0.0044

## Fixture with radial louvre accessory

	LOG 305 mm	LOG 610 mm	LOG 914 mm	LOG 1219 mm
EPA front (m²)	0.0299	0.0609	0.1056	0.1598
EPA side (m²)	0.0042	0.0043	0.0049	0.0051

1220 Marie-Victorin Blvd., Longueuil, QC, J4G 2H9 CA T 514 937 3003 | 1 877 937 3003 info@lumenpulse.com www.lmpg.com www.lumenpulse.com/products/2097

## Cables (order separately)

## LOGLC - Leader cable for Lumenfacade



Standard construction

LOGLC-CERTIFICATION-STD-LENGTH-CABLE COLOUR



End-to-end (ETE) option

LOGLC-CERTIFICATION-ETE-LENGTH-CABLE COLOUR

## Please specify:

**CERTIFICATION:** UL or CE; **LENGTH:** 3 m, 7.6 m, 15.2 m, 30 m, 45 m or 61 m; **CABLE COLOUR:** black or white (connectors are black as standard; ETE fixture input cables are black as standard)

- Suitable for dimming/data and non-dimming applications.
- Sealing end cap is mandatory for any unused connector. One (1) included with every leader cable.
- Consult Lumenfacade leader cable specification sheet for details.

#### LOGJC - Jumper cable for Lumenfacade



Standard construction

LOGJC-CERTIFICATION-STD-LENGTH-CABLE COLOUR



End-to-end (ETE) option

LOGJC-CERTIFICATION-ETE-LENGTH-CABLE COLOUR

#### Please specify:

**CERTIFICATION**: UL or CE; **LENGTH**: 0.3 m (available for ETE option only), 0.6 m to 10 m (available in 0.3 m increments) or 15 m; **CABLE COLOUR**: black or white (connectors are black as standard; ETE fixture input cables are black as standard)

- Suitable for dimming/data and non-dimming applications.
- Consult Lumenfacade jumper cable 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.

## LDB - Lumentalk Data Bridge



Lumentalk Data Bridge, 1-10V or DMX output. Consult LDB specification sheet for details.

# 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

# Control systems (order separately)

## PHAROS - Pharos® kit







The Pharos kit, available for 1 or 2 DMX universes, allows for complete control of large lighting installations. 2 DMX universes kit shown.

# Diagnostic and addressing tools (order separately)

# LID - LumenID



all DMX applications. Consult LID specification sheet for details.

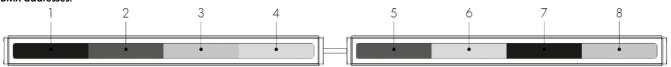
## LID-LT - LumentalkID



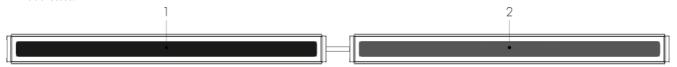
LumentalkID is a diagnostic and addressing tool. It must be specified for all Lumentalk (LT) applications. Consult LID-LT specification sheet for details.

# **Resolution details**

DMX/RDM control, resolution per foot: each 305 mm section is addressed independently DMX addresses:



DMX/RDM control, resolution per fixture: each fixture is addressed independently DMX addresses:



- 1219 mm 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 colour code

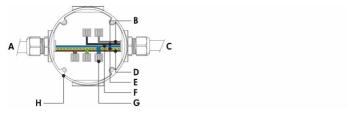
CE Colour Code	USE
Yellow/Green	Ground
Brown	Line
Blue	Line/Neutral
Black	1-10V / Data +
Grey	1-10V / Data -

## On/Off Control (NO)



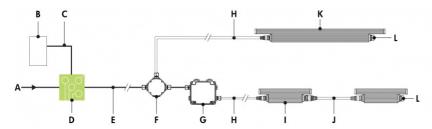
- A Power input (100-277V, wiring by others)
- **B** Junction box (by others)
- C Leader cable (LOGLC)
- D Lumenfacade
- E Jumper cable (LOGJC)
- F Sealing end cap

# On/Off Control (NO) - wiring detail

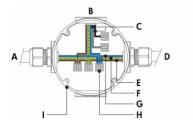


- A Power input
- B Not required
- C To fixture
- **D** Line
- **E** Ground
- **F** Line/Neutral
- **G** Terminal connector (by others)
- H Junction box (by others)
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- ASHRAE version (not available for 305 mm fixture lengths): 16.4 W/m; Regular Output version: 27.89 W/m; High Output version: 50.03 W/m.

#### Lumentalk (LT)

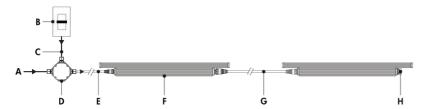


#### Lumentalk (LT) - wiring detail

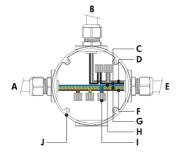


- A Power input (100-277V AC, wiring by others)
- **B** Dimmer/controller (order separately from Lumenpulse, or by others)
- C Data wiring (by others)
- D Lumentranslator 2 (LTL2-DIM, -DMX, -TRIAC, -
- E Power wiring (by others)
- F Junction box (by others)
- G Lumentalk Data Bridge (LDB-DIM or LDB-DMX)
- H Leader cable (LOGLC)
- I Lumenfacade 305 mm
- J Jumper cable (LOGJC)
- K Lumenfacade (610 mm, 914 mm or 1219 mm fixture lengths)
- L Sealing end cap
- A Power input (control over power line via Lumentalk system)
- **B** To fixture
- C Not required
- **D** To Lumentalk Data Bridge (for run lengths with 305 mm fixtures)
- E Line
- F Ground
- G Line/Neutral
- H Terminal connector (by others)
- I Junction box (by others)
- · Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk Data Bridge required for 305 mm 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 LumenID 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 colours 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.
- ASHRAE version (not available for 305 mm fixture lengths): 16.4 W/m; Regular Output version: 27.89 W/m; High Output version: 50.03 W/m.

## 1-10V dimming (DIM)

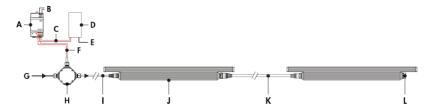


## 1-10V dimming (DIM) - wiring detail

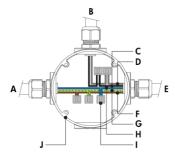


- A Power input (100-277V, wiring by others)
- **B** Dimmer (by others)
- C Data wiring (by others)
- **D** Junction box (by others)
- E Leader cable (LOGLC)
- F Lumenfacade
- G Jumper cable (LOGJC)
- H Sealing end cap
- A Power input
- **B** From dimmer (by others)
- **C** 1-10V +
- **D** 1-10V -
- E To fixture
- F Line
- G Ground
- H Neutral
- I Terminal connector (by others)
- J Junction box (by others)
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 1-10V mA ratings: passive dimmer (Current Sink): 3 mA per fixture, active dimmer (Current Source): 0.5 mA per fixture.
- 1% minimum dimming value.
- ASHRAE version (not available for 305 mm fixture lengths): 16.4 W/m; Regular Output version: 27.89 W/m; High Output version: 50.03 W/m.

## DALI dimming (DALI)

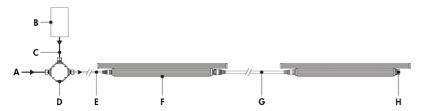


## DALI dimming (DALI) - wiring detail

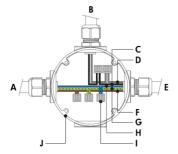


- A DALI bus power supply (by others)
- **B** Power input for DALI bus power supply (wiring by others)
- **C** Data output to DALI controller (wiring by others)
- **D** DALI controller (by others)
- **E** Power input for DALI controller (wiring by others)
- F Data output to fixture (wiring by others)
- G Power input (100-277V, wiring by others)
- H Junction box (by others)
- I Leader cable (LOGLC)
- J Lumenfacade
- K Jumper cable (LOGJC)
- L Sealing end cap
- A Power input
- **B** From DALI controller (by others)
- C DA +
- **D -** DA -
- E To fixture
- F Line
- G Ground
- H Neutral
- I Terminal connector (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.
- ASHRAE version (not available for 305 mm fixture lengths): 16.4 W/m; Regular Output version: 27.89 W/m; High Output version: 50.03 W/m.
- Commissioning may be required based on the selection of 3rd party DALI controller. Controller and commissioning provided by others.

## Lutron® EcoSystem® Enabled dimming (ES)

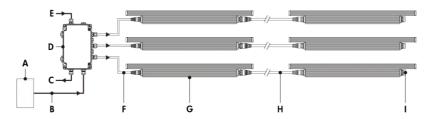


## Lutron® EcoSystem® Enabled dimming (ES) - wiring detail

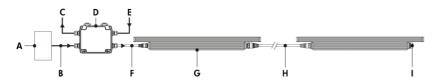


- A Power input (100-277V, wiring by others)
- **B** Lutron® EcoSystem® controller (by others)
- C Data wiring (by others)
- D Junction box (by others)
- E Leader cable (LOGLC)
- F Lumenfacade (610 mm, 914 mm or 1219 mm fixture lengths)
- G Jumper cable (LOGJC)
- H Sealing end cap
- A Power input
- **B** From Lutron® EcoSystem® controller (by others)
- C Data +
- **D** Data -
- E To fixture
- F Line
- **G** Ground
- H Neutral
- I Terminal connector (by others)
- J Junction box (by others)
- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Each Lutron® EcoSystem® enabled fixture has its own address; for the example shown, there are a total of 2 EcoSystem® addresses.
- 1% minimum dimming value.
- ASHRAE version (not available for 305 mm fixture lengths): 16.4 W/m; Regular Output version: 27.89 W/m; High Output version: 50.03 W/m.

## Star Layout (DMX/RDM)



## Daisy Chain Layout (DMX/RDM)



Maximum Run of Fixtures, Lumenfacade® LOG ASHRAE White & Static Colours 16.4 W/m						
Voltage	120V	240V	277V			
Maximum Run of Fixtures*	Maximum Run of Fixtures* 39m					
Maximum Run of Fixtures, Lumenfacade® LOG RO White & Static Colours 27.89 W/m						
Voltage	120V 240V 277V					
Maximum Run of Fixtures*	37m	39m	39m			
Maximum Run of Fixtures, Lumenfacade® LOG HO White & Static Colours 50.03 W/m						
Voltage	120V	240V	277V			
Maximum Run of Fixtures*	21m	24m	27m			

Based on 15A maximum, 15.2m leader cable.

Based on 16A maximum, 15 m leader cable.

- Consult 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 1219 mm fixtures.
- Run length calculations are based on a voltage drop of no more than 25V.
- 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.
- Each fixture requires 1 DMX address.
- 1% minimum dimming value.
- ASHRAE version (not available for 305 mm fixture lengths): 16.4 W/m; Regular Output version: 27.89 W/m; High Output version: 50.03 W/m.

- **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 (100-277V, wiring by others)
- F Leader cable (LOGLC)
- G Lumenfacade
- H Jumper cable (LOGJC)
- I Sealing end cap
- **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 (100-277V, wiring by others)
- F Leader cable (LOGLC)
- G Lumenfacade
- H Jumper cable (LOGJC)
- I Sealing end cap

<sup>\*</sup>Example: 120V = 37m maximum run of end to end fixtures (30 fixtures maximum for 1254mm LOG RO).

# How to order

Housing (2)	Voltage	Length	Colour and Colour Temperature	Optics	Mounting Options	Finish	Control	Options
LOG ASHRAE Lumenfacade™, 16.4 W/m ASHRAE compliant (i)  LOG RO Lumenfacade™ Regular Output, 27.89 W/m  LOG HO Lumenfacade™ High Output, 50.03 W/m	100 100 volts 120 120 volts 208 208 volts 220 volts 240 240 volts 277 volts	12 340 mm (2.04 kg) (2) 24 645 mm (3.18 kg) 36 949 mm (4.76 kg) 48 1254 mm (6.35 kg)	22K 2200K 27K 2700K 30K 3000K 35S00K 40K 4000K RD Red <sup>[5]</sup> GR Green <sup>[5]</sup> BL Blue <sup>[5]</sup>	WWLF Asymmetric Wallwash, ight feed  8x8 8° x 8° (6) 10x10 10° x 10° (6) 10° x 30° 10x 40 10° x 60° 10x 50 10x 90 10x 25 15x 25 15x 25 15x 25 30x 30 30° x 30° 30x 60 30° x 60° 35x 35° 50x 80 50y x 80° 60x 60° 80x 80° 90x 90	SAM Slim Adjustable Mounting UMP Fixed Mounting (7) UMAS Universal Adjustable Mounting (7) WAM2 Adjustable Wall Mounting 51 mm WAM6 Adjustable Extended Arm Mounting 152 mm WAM12 Adjustable Extended Arm Mounting 154 mm WAM12 Adjustable Extended Arm Mounting 157 mm WAM12 Adjustable Extended Arm Mounting 305 mm WAM12 Adjustable Extended Arm Mounting 3457 mm	BK Black Sandtex®  BRZ Bronze Sandtex® SI Silver Sandtex® WH Smooth white CC Custom colour and finish (please specify RAL colour) (®) (9) (10)	NO On/Off control LT Lumentalk (3) (11) (12) DIM 1-10V dimming DALI DALI dimming ES Lutron® EcoSystem® Enabled dimming (1) DMX/RDM DMX/RDM enabled (14)	ETE End-to-end configuration (factory installed 16 in black input cable included)  CRC Corrosion-resistant coating for hostile environments (15) (16)  3GV 3G ANSI C136.31-2010 Vibration Rating for bridge applications (17)  CE CE (certification covers European Economic Area)

## Notes:

- 1. ASHRAE version not available for 305 mm fixture lengths.
- Power consumption is typically 20% higher for 305 mm fixture lengths.
   To connect 305 mm 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.

- 4. Consulf factory for availability of static Royal Blue, 6500K and 90+ CRI.

  5. Static colours made to order 8-10 weeks.

  6. For best results use with HO fixtures at a 6 in setback from surface. Contact factory for application support.
- 7. Suitable to use when 3GV option is specified.

  8. Lumenpulse offers a wide selection of RAL CLASSIC (K7) colours with a smooth texture and high-gloss finish. Please consult factory for a list of available K7 colours, other RAL textures and glosses, or to match alternate colour charts. Final colour matching results may vary.
- 9. Setup charges apply for RAL colours. Consult factory for details.

- 10. Longer lead limes can be expected for custom RAL colour finishes.
   11. Available for 610 mm, 914 mm and 1219 mm fixture lengths only.
   12. A Lumentranslator 2 (LTL2) and LumentalkID (LIDLT) must be specified for Lumentalk applications. Consult Lumentranslator 2
- and Lumentalk pages and specification sheets for details.

  13. Available for 610 mm (ASHRAE and RO only), 914 mm and 1219 mm fixture lengths only.

  14. A control box (CBX) and LumenID (LID) must be specified.
- Setup only when exposed to salt spray. This option is not required for normal outdoor exposure.
   Setup charges apply. Consult factory for details.
   Available with UMP and UMAS mounting options only.