

Planning Commission Staff Report

Project Type:	Amended Architectural Elevations
Meeting Date:	October 23, 2017
From:	Cecilia Dvorak, Project Planner
Location:	West of Schoettler Rd and south of Green Valley Drive
Description:	<u>Logan College of Chiropractic AAE (2017)</u> : Architectural Elevations for a 112 acre tract of land zoned “NU” Non-Urban District located west of Schoettler Rd, and south of Green Valley Drive (20R430046).

The request is for the addition of 12 color-changing LED lights on a Bell Tower Structure within the Logan College of Chiropractic development.

The applicant has submitted a statement of design explaining the request which is attached as a part of the submittal packet. There are no other changes proposed in this application.



Figure 1: Aerial & Surrounding areas

HISTORY OF SUBJECT SITE

According to St Louis County records, the first buildings were built in 1960. Over the years there have been many amendments to the site, including an Amended Site Plan approved in 2005 for the addition of the amphitheater.

LAND USE AND ZONING OF SURROUNDING PROPERTIES

Direction	Zoning	Land Use
North	“R2” Residence District	Baxter Lakes Addition 2 Subdivision
East	“R1A” Residence District	Chesterfield Trails Subdivision
South	“NU” Non-Urban District; and “R1A” Residence District	No Subdivision ward 4; and Brook Hill Estates Subdivision
West	“R2” Residence District	Claymont Manor Subdivision

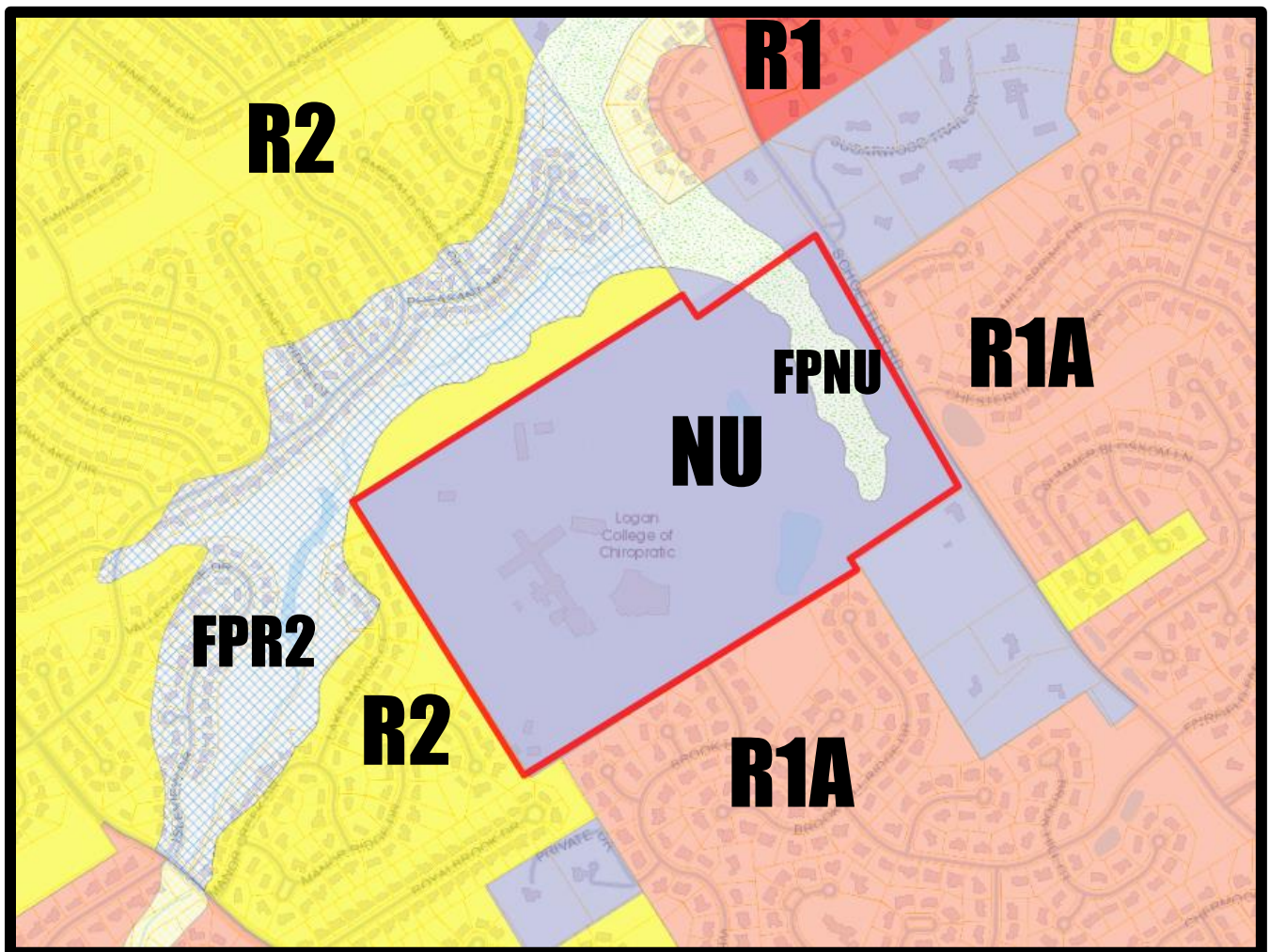


Figure 2: Zoning map

COMPREHENSIVE PLAN ANALYSIS

The City of Chesterfield Comprehensive Land Use Map delineates the subject site within the “College” land use designation.



Figure 3: Future Land Use Plan

STAFF ANALYSIS

The following analysis discusses the Unified Development Code requirements and the Architectural Review Board discussion for the Planning Commission’s consideration, along with staff’s input provided in italics.

Unified Development Code (UDC):

The Unified Development Code requires that all lighting be fully shielded, cut off optics; however, there is a provision in the UDC (Sec. 31-04-03L.2) which allows the Planning Commission to approve decorative lighting fixtures when it can be proven that there will be no off-site glare light trespass, and the proposed fixtures will improve the appearance of the site.

The initial application requested up-lighting the tower from the bottom and middle of the structure; however, because the applicant could not provide a rendering ensuring no glare would be provided into the sky, the applicant changed the request to down-lighting. As seen in the photometric rendering of the tower provided, the lights would be pointed downward to ensure no off-site glare, and would be shielded by the tower itself.

The UDC also requires that the exterior building lighting be architecturally integrated with the building style, material, and color, specifying that the color of exterior lamps should be consistent with that on surrounding buildings.

The proposed lighting is integrated with the architectural elements of the building by hiding the lights within the structure of the tower and illuminating downward. Additionally, as discussed in the applicants' statement of design, the lights would typically be lit with a white light from dusk-to-dawn unless a special event called for lighted color, such as pink during Breast Cancer Awareness Month or red for the St. Louis Cardinals, etc. The applicant is therefore requesting that the full color spectrum be permitted for the proposed lighting application, however, only 1 color would be permitted per 24 hour period, as specified in the conditions recommended by the ARB.

As illustrated in figure 4 below, the tower is no closer than 725 feet from adjacent residential properties, and is surrounded by buildings. Due to photometric submitted and distance between the requested lighting and the nearest adjacent property, staff believes the proposal will not have negative impacts on adjacent properties. This, in addition to the evidence that no off-site glare would be provided, ensures that staff has no concerns with this request.

The image below provides the height of the existing bell tower as well as surrounding structures, and the distances to the adjacent properties.



Figure 4: Structure heights and distance of the tower to the property line

Architectural Review Board (ARB):

The project was reviewed by the Architectural Review Board (ARB) on October 11th, 2017. The Board discussed how the lights would reveal and show the lattice work of the bell tower, and the need to ensure the lights are blended with the structure. The Board recognized the site's location among residential developments; however, understanding that the average distance of 800 feet from the nearest property line ensures it will not disturb those residents. A motion to forward the submittal to the Planning Commission with a recommendation for approval with two conditions was passed by a vote of 4-0. The conditions were as follows:

1. The lights remain static, with no flashing, moving, or changing for a period of no less than 24 hours.
2. All housing, attachments, and accessories match the color of the tower exactly.

As stated in the narrative attached, the applicant is amenable to the conditions as recommended by the ARB. Should the Planning Commission approve the request, staff would conduct a site visit once the lights are installed to ensure compliance.

STAFF RECOMMENDATION

Staff has reviewed the Amended Architectural Elevations for Logan College of Chiropractic and has found the proposal to be in compliance with all City Code requirements. Staff recommends approval of the Amended Architectural Elevations for Logan College of Chiropractic.

MOTION

The following options are provided to the Planning Commission for consideration relative to this application:

- 1) "I move to approve (or deny) the Amended Architectural Elevations for Logan College of Chiropractic."
- 2) "I move to approve the Amended Architectural Elevations for Logan College of Chiropractic, with the following conditions..." (Conditions may be added, eliminated, altered or modified)

Attachments

1. Architectural Review Packet Submittal

Tower lights

Logan University's bell tower was constructed in 1960 by its predecessor, MaryKnoll Seminary. The accent lights at the bottom of the Tower were upgraded in 2007 when new flood lights were also added. Logan is proposing to change these accent lights to LED lighting to be installed in the second phase of the restoration project. Upper lights are being installed during the current phase of the tower restoration.

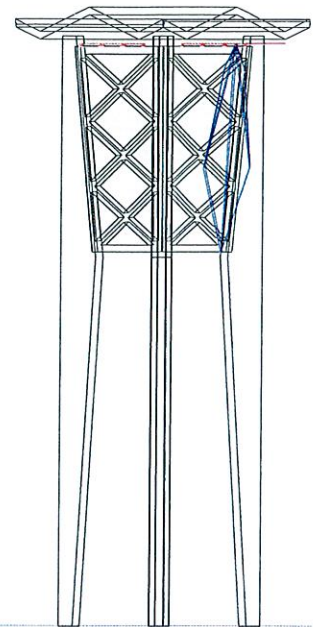
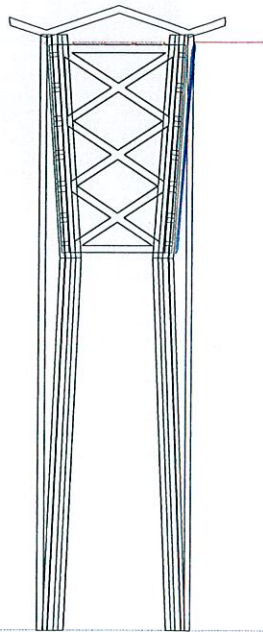
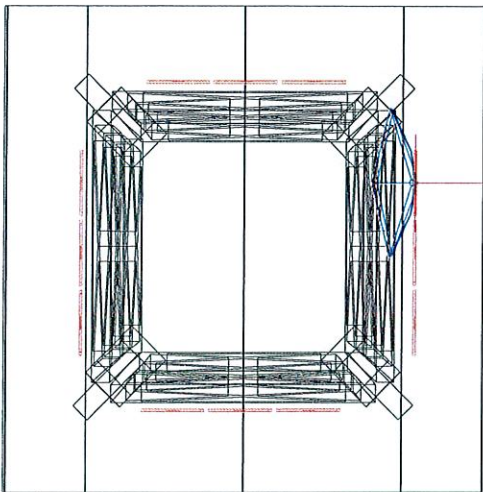
This proposed lighting will not only save energy, but will also act as a marketing tool for Logan. With the new LED lights encompassing the entire spectrum of colors, it gives Logan the opportunity to use different lighting for different events. For example, pink for breast cancer awareness month, blues for the St. Louis Blues or red for the St. Louis Cardinals rally days. These special events will be occasional and normally the lights will be white and on a dusk-to-dawn controller, as they are now.

It is agreed that the lights will remain static, with no flashing, moving, or changing for a period of no less than 24 hours. Also, all housing, attachments, and accessories match the tower exactly.

PHOTOMETRIC CALCULATION

Client : _____
 Project name : LP2017-33706-LOGAN UNIVERSITY BELL TOWER-CHESTERFIELD-MO

NOTE: These calculations are for guidance only. Results depend on provided information. Any change in dimensions, color, texture or other properties could affect results. Measured values may differ from calculated values due to calculation methods, component performance, field conditions, etc.

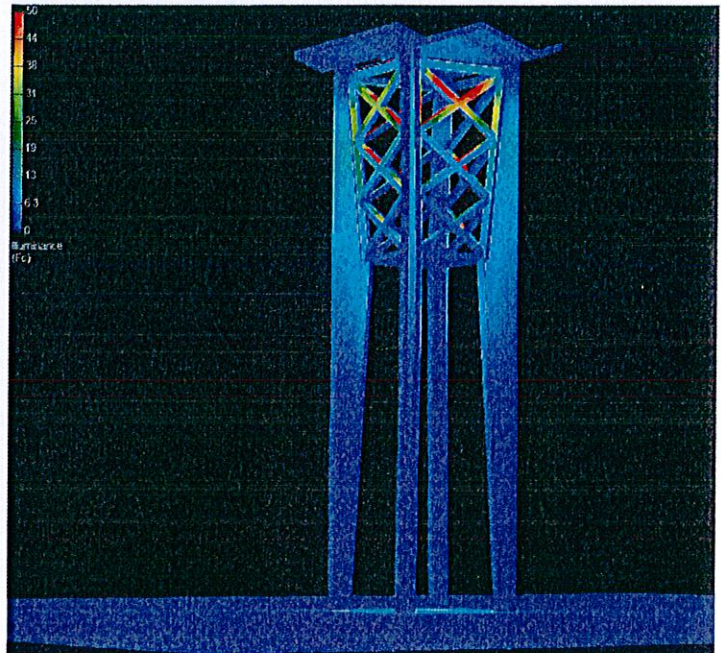


Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Lumens/Lamp	LLF	Description
	12	A	SINGLE	N.A.	0.950	LOG-HO-120-48-40R-10x30(XX)

PHOTOMETRIC CALCULATION

Client : _____
Project name : LP2017-33706-LOGAN UNIVERSITY BELL TOWER-CHESTERFIELD-MO

NOTE: These calculations are for guidance only. Results depend on provided information. Any change in dimensions, colors, textures or other properties could affect results. Measured values may differ from calculated values due to calculation methods, component performance, field condition, etc.







Client _____ Project name _____

Order# _____ Type _____ Qty _____

FEATURES AND BENEFITS

Physical :

- Low copper content extruded aluminum housing
- Available in 1', 2', 3' or 4' sections
- Electro-statically applied polyester powder coat finish
- Machined aluminum end caps and silicone gaskets
- Stainless steel hardware
- Clear tempered glass lens
- 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°, or 90° x 90° optics
- IP66
- IK07 rated (asymmetric wallwash lens is IK06 rated)
- Meets 3G ANSI C136.31 Vibration standard for bridge applications
- Corrosion-resistant coating for hostile environments²



Photometric Summary

4ft HO, 4000K	Delivered Output [lm]	Intensity [peak cd]
WW	3,592	5,159
8°x8°	4,045	77,896
10°x10°	3,768*	38,346*
10°x30°	3,830	30,056
10°x60°	3,692	19,654
10°x90°	3,576	7,897
30°x30°	3,765	14,726
30°x60°	3,862*	5,119*
60°x60°	3,447*	3,015*
90°x90°	3,592	1,886

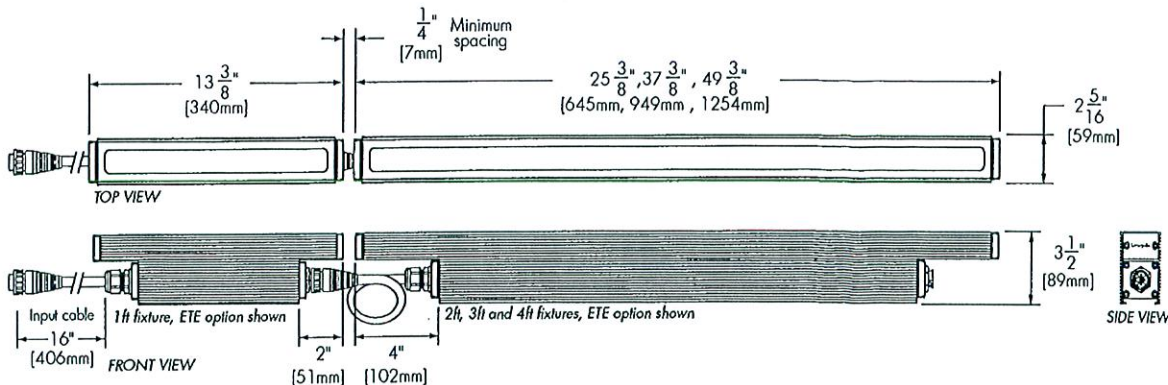
Photometric performance is measured in compliance with IESNA LM-79-08.
*Estimated. Consult lumenpulse website for the latest IES and LDT files.

Performance :

- 2200K, 2700K, 3000K, 3500K, 4000K, Red, Green, Blue static colors available
- CRI value: 80+
- Minimum 1fc (10.7 lux) @ 140ft (43m) distance (HO 4000K, 4' unit, 10° x 60° optic)
- Lumen maintenance: 120,000 hrs [L70 @ 25°C]
- Lumen measurements comply with LM - 79 - 08 standard
- Resolution per foot or per fixture (configured with lumenID V3 software & DMX/RDM)
- Operating temperatures: -25° C to 50° C [-13F to 122F]

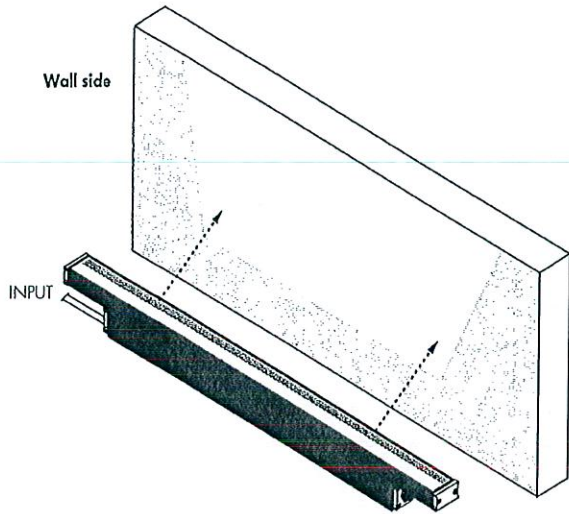
Electrical :

- Line voltage luminaire for 100 to 277V
- Power and data in 1 cable (#16-5)
- End-to-end option (ETE): 16' black input cable, no jumper cable needed
- 252ft [77m] maximum cable and fixture run length, non-dimming, 277V, RO version
- 164ft [50m] maximum cable and fixture run length, non-dimming, 277V, HO version
- 5W/ft version meets ASHRAE standards for linear lighting on building facades³
- 8.5W/ft Regular Output version³
- 15.25W/ft High Output version³
- Dimming options: lumentalk, 0-10 volt, DALI, Lutron® EcoSystem® or DMX/RDM enabled

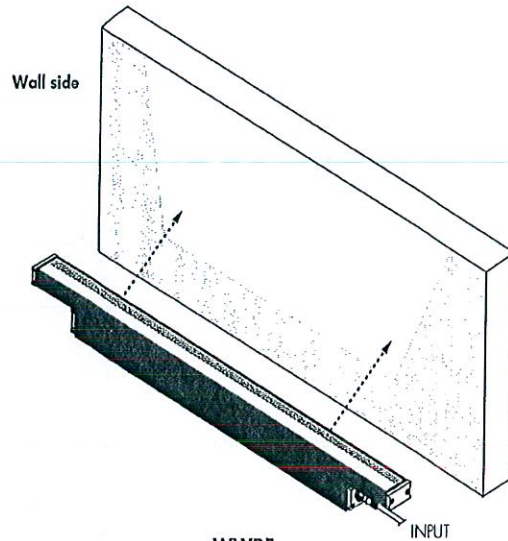


¹ Asymmetric wallwash lens is IK06 rated.
² Use only when exposed to salt spray and harsh chemicals. This option is not required for normal outdoor exposure!
³ ASHRAE version not available for 1' fixture lengths. Power consumption is typically 20% higher for 1' fixture lengths.

ASYMMETRIC WALLWASH OPTIC FEEDING SIDE DETAIL



WWLF
Asymmetric Wallwash Optic, Left Feed

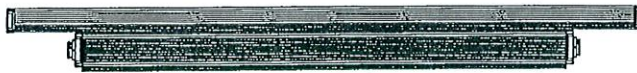


WWRF
Asymmetric Wallwash Optic, Right Feed

Always position frosted side toward the wall



TOP VIEW



FRONT VIEW



RIGHT SIDE VIEW
(Fixture pointing upwards)

*Fixture's feeding side is based on upright 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: 2ft (0.6m) setback for a 20ft (6m) wall.

Specification Sheet

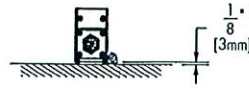
lumenfacade™

WHITE & STATIC COLORS

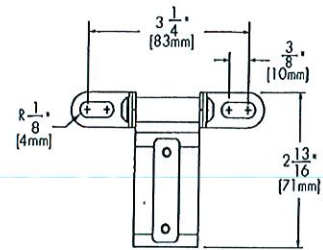
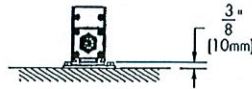
MOUNTING OPTIONS

Surface Mount

SAM
Slim Adjustable Mounting



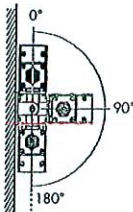
UMP
Fixed Mounting



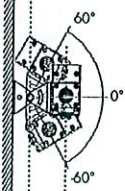
SAM
Mounting Hole Pattern

Wall Mount

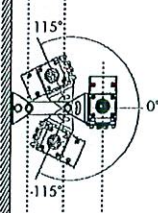
UMAS
Universal Adjustable Mounting



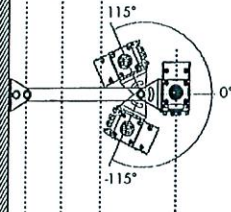
WAM2
Adjustable Wall Mounting 2"



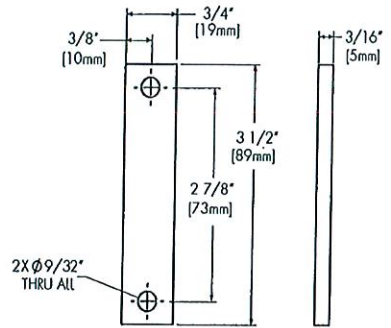
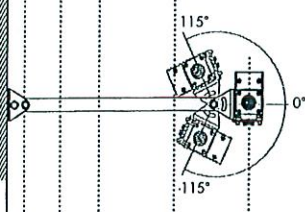
WAM6
Adjustable Extended Arm Mounting 6"



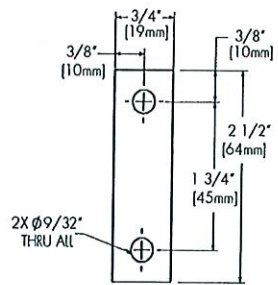
WAM12
Adjustable Extended Arm Mounting 12"



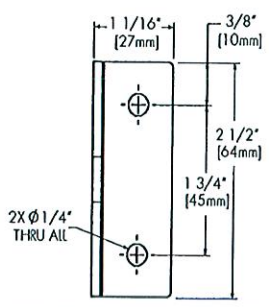
WAM18
Adjustable Extended Arm Mounting 18"



UMP
Mounting Hole Pattern



UMAS
Mounting Hole Pattern



WAM
Mounting Hole Pattern

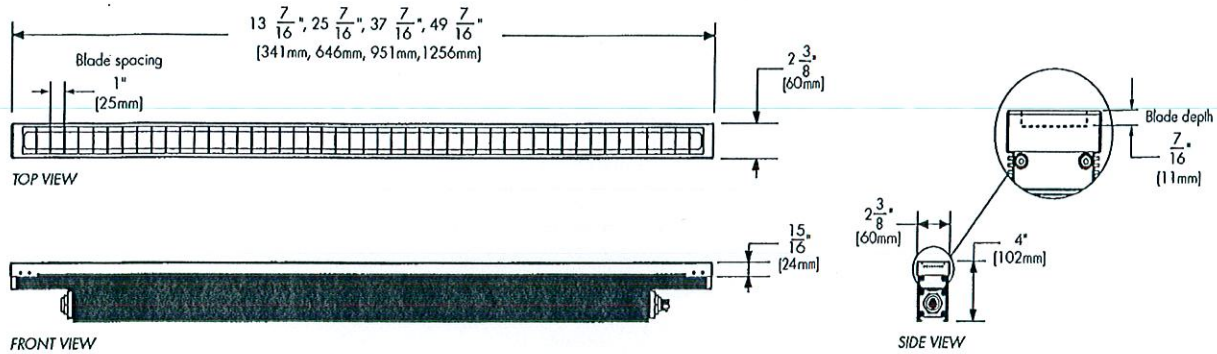
Specification Sheet

lumenfacade™

WHITE & STATIC COLORS

LOUVER ACCESSORY INSTALLATION DETAIL

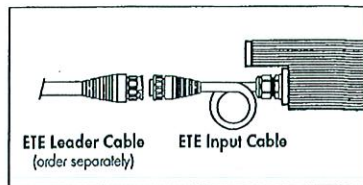
Not suitable for asymmetric wallwash optic



LOGRD
Radial Louver for lumenfacade
(See page 6 for ordering code)

OPTION

ETE - End-to-end configuration,
16" black input cable,
no jumper cable needed.



ACCESSORIES

Order separately

Control Systems:

- ITO2** lumentouch is a wall mount DMX 512 controller keypad.
- LCU** lumencue is a USB / mini SD DMX 512 controller.
- LID** lumenID is a diagnostic and addressing DMX 512 controller. It must be specified for all DMX applications. Refer to IID specification sheet for details.
- LID-LT** lumentalkID is a diagnostic and addressing controller. It must be specified for all Lumentalk (LT) applications. Refer to IID-LT specification sheet for details.
- LTN** lumentone is a simple pre-programmed DMX 512 controller with a push button rotary dial and live feedback.

Control Boxes:

- CBX** DMX/RDM control box. Up to six power and data outputs to fixtures or fixture runs. Ethernet enabled option. Refer to CBX specification sheet for details.
- LDB** lumentalk Data Bridge, 0-10V or DMX output. Refer to LDB specification sheet for details.

ACCESSORIES - continued
Order separately

Leader and Jumpers Cables for Standard Construction :

LOGLC-__-STD-__-__ Leader Cable for lumenfacade.
Please specify certification (UL or CE), cable length (10', 25', 50', 100', 150' or 200' [3m, 7.6m, 15.2m, 30m, 45m or 61m] standard) and cable color (BK-Black or WH-White, connectors are black as standard). Suitable for dimming/data and non-dimming applications.
Sealing endcap is mandatory for any unused connector. (1) included with every leader cable.
Consult lumenfacade leader cable specification sheet for details.

LOGJC-__-STD-__-__ Jumper Cable for lumenfacade.
Please specify certification (UL or CE), cable length (1', 2', 3', 4', 5' or 50' [0.3m, 0.6m, 0.9m, 1.2m, 1.5m or 15m] standard) and cable color (BK-Black or WH-White, connectors are black as standard). Lengths between 5' and 30' [1.5m and 10m] are also available, please specify desired length in 1' [0.3m] increments.
Suitable for dimming/data and non-dimming applications.
Consult lumenfacade jumper cable specification sheet for details.

Leader and Jumpers Cables for End-to-End (ETE) Option :

LOGLC-__-ETE-__-__ Leader Cable for lumenfacade, ETE option.
Please specify certification (UL or CE), cable length (10', 25', 50', 100', 150' or 200' [3m, 7.6m, 15.2m, 30m, 45m or 61m] standard) and cable color (BK-Black or WH-White, connectors and fixture input cables are black as standard). Suitable for dimming/data and non-dimming applications.
Sealing endcap is mandatory for any unused connector. (1) included with every leader cable.
Consult lumenfacade leader cable specification sheet for details.

LOGJC-__-ETE-__-__ Jumper Cable for lumenfacade, ETE option.
Please specify certification (UL or CE), cable length (1', 2', 3', 4', 5' or 50' [0.3m, 0.6m, 0.9m, 1.2m, 1.5m or 15m] standard) and cable color (BK-Black or WH-White, connectors and fixture input cables are black as standard). Lengths between 5' and 30' [1.5m and 10m] are also available, please specify desired length in 1' [0.3m] increments.
Suitable for dimming/data and non-dimming applications.
Consult lumenfacade jumper cable specification sheet for details.

Radial Louver :

Not suitable for asymmetric wallwash optic

LOGRD__-__ Radial louver for lumenfacade.
louver blade depth: 7/16" [11mm]; louver blade spacing: 1" [25mm]
Please specify nominal length (1', 2', 3' or 4' [0.3m, 0.6m, 0.9m or 1.2m]) and finish (BK-Black Sandtex, BRZ-Bronze Sandtex, SI-Silver Sandtex, or WH-Smooth white. Custom color available on request, please specify as CC together with RAL color : _____).



The addition of a louver will affect beam distribution, consult factory for application support.

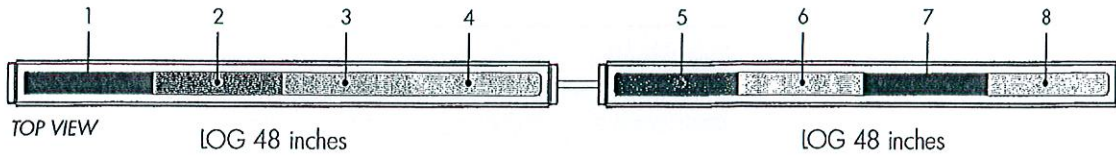
RESOLUTION DETAILS

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.

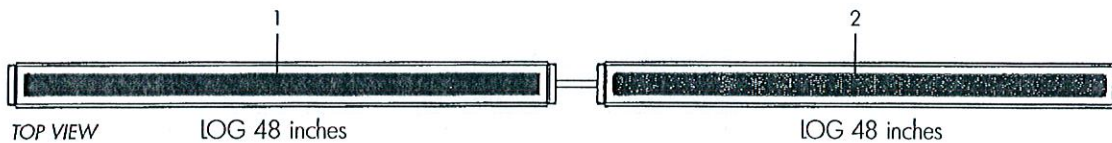
Resolution per foot: each foot is addressed independently

DMX ADDRESSES:



Resolution per fixture: each fixture is addressed independently

DMX ADDRESSES:



Specification Sheet

lumenfacade™

WHITE & STATIC COLORS

TYPICAL WIRING DIAGRAMS

Wiring Color Code

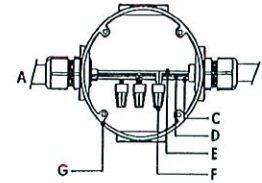
American Color Code	CE Color Code	USE
Green	Yellow/Green	Ground
Black	Brown	Live 100-277V
White	Blue	Neutral
Red/Purple	Black	0-10V / Data +
Orange	Grey	0-10V / Data -

Non-Dimming (NO)



- A - Power input (100-277V)
- B - Junction box (by others)
- C - leader cable (LOG/C)
- D - lumenfacade (LOG-NO)
- E - Jumper cable (LOG/C)
- F - Sealing end cap

Non-Dimming (NO) - Wiring detail



- A - Power input
- B - To fixture
- C - Line
- D - Ground
- E - Neutral
- F - Wire-nuts (by others)
- G - Junction box (by others)

Notes:

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- ASHRAE version: 5 watts per foot [0.3m], Regular Output version: 8.5 watts per foot [0.3m], High Output version: 15.25 watts per foot [0.3m].

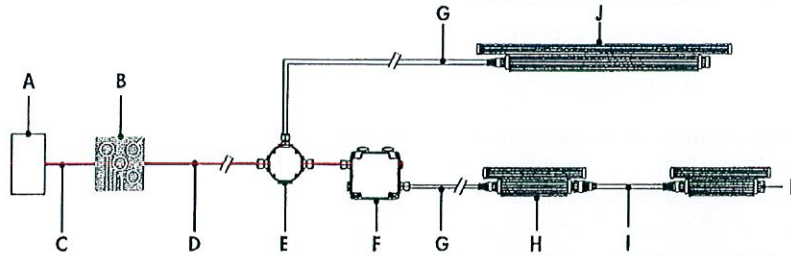
TYPICAL WIRING DIAGRAMS - continued

Wiring Color Code

American Color Code	CE Color Code	USE
Green	Yellow/Green	Ground
Black	Brown	Live 100-277V
White	Blue	Neutral
Red/Purple	Black	0-10V / Data +
Orange	Grey	0-10V / Data -

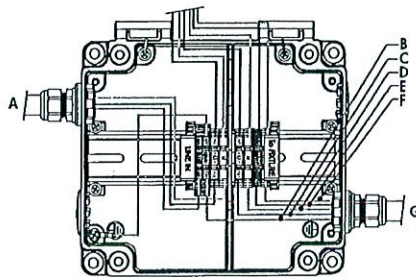
Lumentalk (LT)

1% minimum dimming value



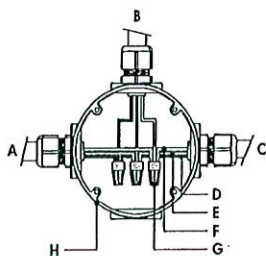
- A - Third party dimmer/controller
- B - lumentranslator (LL-010, DMX, TRIAC, DALI)
- C - Data wiring (by others)
- D - Power line (120-277V AC)
- E - Junction box (by others)
- F - lumentalk Data Bridge (LDB-DIM or LDB-DMX)
- G - leader cable (LOGIC)
- H - lumenfacade 1' [0.3m] (LOG-DIM or LOG-DMX/RDM)
- I - Jumper cable (LOGIC)
- J - lumenfacade (LOGIT) [2', 3', or 4' fixture lengths] [0.6, 0.9 or 1.2m]
- K - Sealing end cap

Wiring detail using LDB-DIM or LDB-DMX (for 1' fixtures [0.3 m])



- A - Power input (control over power line via lumentalk system)
- B - Ground
- C - line
- D - Neutral
- E - 0-10V+ / Data +
- F - 0-10V- / Data -
- G - To fixture

Lumentalk (LT) - Wiring detail (for 2, 3 or 4' fixture lengths [0.6, 0.9 or 1.2m])



- A - Power input (control over power line via lumentalk system)
- B - To fixture
- C - To lumentalk Data Bridge (for run lengths with 1' fixtures [0.3m])
- D - line
- E - Ground
- F - Neutral
- G - Wire-nuts (by others)
- H - Junction box (by others)

Notes:

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Lumentalk Data Bridge required for 1' [0.3m] fixture lengths.
- 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 application with fixtures controlled individually: fixtures and lumentalk Data Bridge must be specified as DMX, 2-step commissioning process: 1 - DMX/RDM system using lumentalk software and a UID, 2 - lumentalk system using lumentalkID software and a UID. 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 lumentalk) per system.
- No third party fixtures allowed on the same circuit.
- Consult factory for DALI lumentalk applications.
- ASHRAE version: 5 watts per foot [0.3m], Regular Output version: 8.5 watts per foot [0.3m], High Output version: 15.25 watts per foot [0.3m].

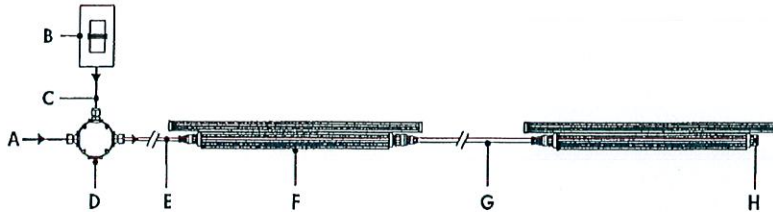
TYPICAL WIRING DIAGRAMS - continued

Wiring Color Code

American Color Code	CE Color Code	USE
Green	Yellow/Green	Ground
Black	Brown	Live 100-277V
White	Blue	Neutral
Red/Purple	Black	0-10V / Data +
Orange	Grey	0-10V / Data -

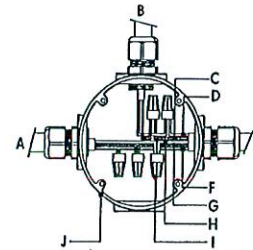
0-10V Dimming (DIM)

10% minimum dimming value



- A - Power input (100-277V)
- B - Third party dimmer
- C - Data wiring (by others)
- D - Junction box (by others)
- E - leader cable (LOG/C)
- F - lumenfacade (LOG-DIM)
- G - Jumper cable (LOG/C)
- H - Sealing end cap

0-10V Dimming (DIM) - Wiring detail



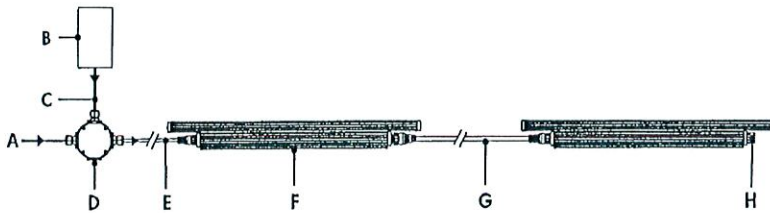
- A - Power input
- B - From third party dimmer
- C - 0-10V +
- D - 0-10V -
- E - To fixture
- F - Line
- G - Ground
- H - Neutral
- I - Wire-nuts (by others)
- J - Junction box (by others)

Notes:

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- 0-10V mA ratings: passive dimmer (Current Sink): 3mA per fixture, active dimmer (Current Source): 0.5mA per fixture.
- ASHRAE version: 5 watts per foot [0.3m], Regular Output version: 8.5 watts per foot [0.3m], High Output version: 15.25 watts per foot [0.3m].

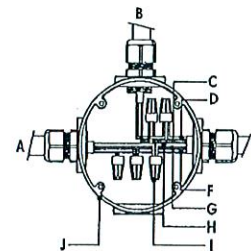
DALI Dimming (DALI)

1% dimming value



- A - Power input (100-277V)
- B - Third party DALI controller
- C - Data wiring (by others)
- D - Junction box (by others)
- E - leader cable (LOG/C)
- F - lumenfacade (LOG-DALI)
- G - Jumper cable (LOG/C)
- H - Sealing end cap

DALI Dimming (DALI) - Wiring detail



- A - Power input
- B - From DALI controller
- C - Data +
- D - Data -
- E - To fixture
- F - line
- G - Ground
- H - Neutral
- I - Wire-nuts (by others)
- J - Junction box (by others)

Notes:

- Consult factory for specific applications and maximum fixture count/cable length recommendations.
- Maximum of 64 DALI fixtures per DALI loop.
- ASHRAE version: 5 watts per foot [0.3m], Regular Output version: 8.5 watts per foot [0.3m], High Output version: 15.25 watts per foot [0.3m].

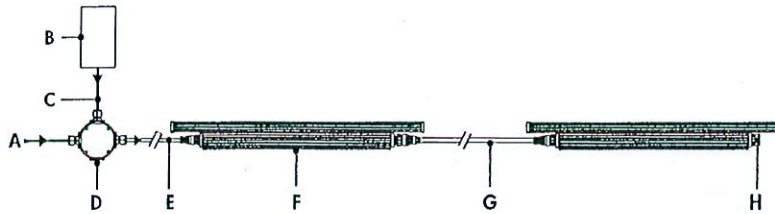
TYPICAL WIRING DIAGRAMS - continued

Wiring Color Code

American Color Code	CE Color Code	USE
Green	Yellow/Green	Ground
Black	Brown	Live 100-277V
White	Blue	Neutral
Red/Purple	Black	0-10V / Data +
Orange	Grey	0-10V / Data -

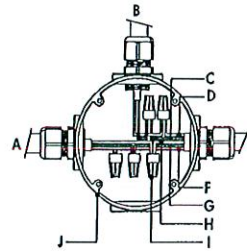
Lutron® EcoSystem® Enabled Dimming (ES)

1% minimum dimming value



- A - Power input (100-277V)
- B - Lutron® EcoSystem® controller
- C - Data wiring (by others)
- D - Junction box (by others)
- E - Leader cable (LOGC)
- F - lumenfacade (IOG-ES) [2, 3, or 4ft fixture lengths] [0.6, 0.9, 1 or 1.2m]
- G - Jumper cable (OCJ/C)
- H - Sealing end cap

Lutron® EcoSystem® Enabled Dimming (ES) - Wiring detail



- A - Power input
- B - From Lutron® EcoSystem® controller
- C - Data +
- D - Data -
- E - To fixture
- F - Line
- G - Ground
- H - Neutral
- I - Wire-nuts (by others)
- J - Junction box (by others)

Notes:

- 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.
- ASHRAE version: 5 watts per foot [0.3m], Regular Output version: 8.5 watts per foot [0.3m], High Output version: 15.25 watts per foot [0.3m].

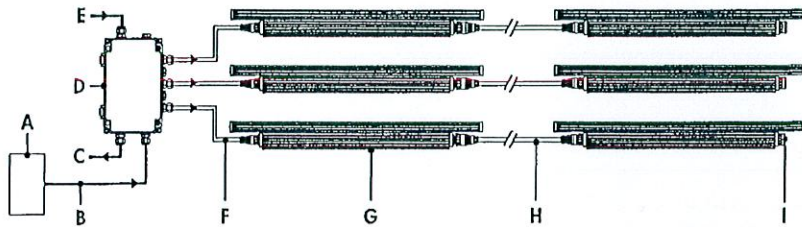
TYPICAL WIRING DIAGRAMS - continued

American Color Code	CE Color Code	USE
Green	Yellow/Green	Ground
Black	Brown	Live 100-277V
White	Blue	Neutral
Red/Purple	Black	0-10V / Data +
Orange	Grey	0-10V / Data -

Maximum run length by 15A circuit - Lumenfacade™ HO 15.25W/ft [0.3m]			
Cable length/Voltage	120V	240V	277V
50ft [15m] leader cable	68ft [21m]	76ft [23m]	84ft [26m]
Maximum run length by 15A circuit - Lumenfacade™ RO 8.5W/ft [0.3m]			
50ft [15m] leader cable	120ft [37m]	128ft [39m]	128ft [39m]
Maximum run length by 15A circuit - Lumenfacade™ ASHRAE 5W/ft [0.3m]			
50ft [15m] leader cable	128ft [39m]	128ft [39m]	128ft [39m]

Star Layout (DMX/RDM)

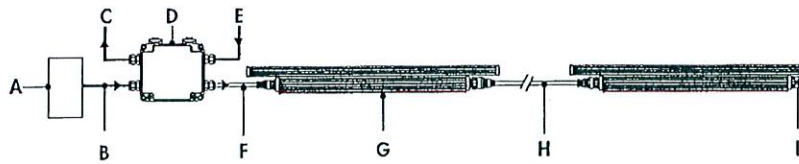
1% minimum dimming value



- A - Third party DMX/RDM controller
- 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)
- F - Leader cable (LOG/C)
- G - Lumenfacade (LOG-DMX/RDM)
- H - Jumper cable (LOG/C)
- I - Sealing end cap

Daisy Chain Layout (DMX/RDM)

1% minimum dimming value



- A - Third party DMX/RDM controller
- 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)
- F - Leader cable (LOG/C)
- G - Lumenfacade (LOG-DMX/RDM)
- H - Jumper cable (LOG/C)
- I - Sealing end cap

Notes:

- Consult factory for specific applications and maximum fixture count/cable length recommendations. Maximum run length calculations are typically based on 4' [1.2m] fixtures.
- Maximum of 32 DMX/RDM enabled fixtures per CBX output.
- 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.
- ASHRAE version: 5 watts per foot [0.3m], Regular Output version: 8.5 watts per foot [0.3m], High Output version: 15.25 watts per foot [0.3m].

Specification Sheet

lumenfacade™

WHITE & STATIC COLORS

HOW TO ORDER

LOG Select: | **Select:** | **Select:** | **Select:** | **Select:** | **Select:** | **Select:** | **Select:** | **Select:**
1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9

1

Housing:

LOG ASHRAE - lumenfacade™, 5W/ft ASHRAE compliant¹
LOG RO - lumenfacade™ Regular Output, 8.5W/ft
LOG HO - lumenfacade™ High Output, 15.25W/ft

Bi-symmetric

10x30 - 10° x 30° **15x25** - 15° x 25°
10x60 - 10° x 60° **30x60** - 30° x 60°
10x90 - 10° x 90° **50x80** - 50° x 80°

2

Voltage:

100 - 100 volts **220** - 220 volts
120 - 120 volts **240** - 240 volts
208 - 208 volts **277** - 277 volts

6

Mounting Option:

SAM - Slim Adjustable Mounting
UMP - Fixed Mounting⁴
UMAS - Universal Adjustable Mounting⁴
WAM2 - Adjustable Wall Mounting 2"
WAM6 - Adjustable Extended Arm Mounting 6"
WAM12 - Adjustable Extended Arm Mounting 12"
WAM18 - Adjustable Extended Arm Mounting 18"

3

Length:

12 - 13 3/8 inches (340mm) (2 kg/4.5 lbs)
24 - 25 3/8 inches (645mm) (3.17 kg/7 lbs)
36 - 37 3/8 inches (949mm) (4.75 kg/10.5 lbs)
48 - 49 3/8 inches (1254mm) (6.35 kg/14 lbs)

7

Finish:

BK - Black Sandtex
BRZ - Bronze Sandtex
SI - Silver Sandtex
WH - Smooth white
CC - Custom color and finish (please specify RAL color)⁵

4

Colors and Color temperatures:

22K - 2200K **40K** - 4000K
27K - 2700K **RD** - Red
30K - 3000K **GR** - Green
35K - 3500K **BL** - Blue

Consult factory for availability of static Royal Blue, 6500K and 90+ CRI.

8

Control:

NO - No Dimming
LT - Lumentalk Dimming⁶
DIM - 0-10V Dimming option⁷
DALI - DALI Dimming option⁸
ES - Lutron® EcoSystem® Enabled Dimming⁹
DMX/RDM - DMX/RDM enabled¹⁰

5

Optics:

Asymmetric

WWLF - Asymmetric Wallwash optic, left feed²
WWRF - Asymmetric Wallwash optic, right feed²

Symmetric

8x8 - 8° x 8°³ **60x60** - 60° x 60°
10x10 - 10° x 10°³ **80x80** - 80° x 80°
30x30 - 30° x 30° **90x90** - 90° x 90°
35x35 - 35° x 35°

9

Option:

ETE - End-to-end configuration, 16" black input cable, no jumper cable needed
CRC - Corrosion-resistant coating for hostile environments
3GV - 3G ANSI C136.31 Vibration Rating¹¹
CE - CE (certification covers European Economic Area)

Notes:

¹ Not available for 1' [0.3m] fixture lengths. ² Right feeding side is standard unless otherwise specified. ³ For best results use with HO fixtures at a 6-inch (1.5cm) setback from surface. Contact factory for application support. ⁴ Suitable to use when 3GV option is specified. ⁵ North American RAL colors specified with RAL number only are provided with a smooth/high-gloss finish. Please consult factory for other RAL textures and glosses, or to match alternate color charts. Final color matching results may vary. ⁶ Lumentalk system is enabled with IDB accessory for 1' [0.3m] fixture lengths, see Typical Wiring Diagrams pages for details. 1% minimum dimming value. ⁷ 10% minimum dimming value. Current Sink: 3mA/fixture, Current Source: 0.5mA/fixture. ⁸ 1% minimum dimming value. 1 DALI address per fixture. ⁹ Available for 2' RO [0.6m], 3' [0.9m] and 4' [1.2m] fixture lengths only. 1% minimum dimming value. 1 EcoSystem® address per fixture length. ¹⁰ 1% minimum dimming value. Fixtures set to by fixture resolution. 1 DMX address per fixture. ¹¹ Available with UMP and UMAS mounting options only.

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5-year limited warranty.

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lumenpulse™
GROUP

2017.03.30

GS - R64

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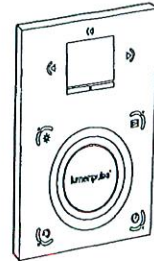
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Client _____ Project name _____

Order# _____ Type _____ Qty _____

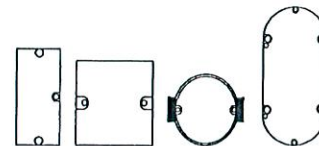
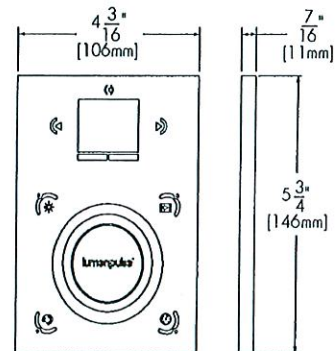
FEATURES AND BENEFITS

- Flat wall mounted lighting controller
- Can be used without a computer in stand alone mode
- Universal mounting plate compatible with most electrical backboxes
- MINI-USB connection for software programming
- Touch sensitive control panel
- 2 DMX universes (1024 channels)
- Unlimited memory via Micro SDCARD
- Integrated clock/calendar
- RS 232 serial and I/O ports
- Universal infrared receiver
- Standard with ETHERNET card



PACKAGE CONTENT

- lumentouch hardware (stand alone wall mounted DMX controller)
- Mini-USB cable
- Micro SDCARD and adapter
- UL listed 6-7V DC power supply (100-240V AC input voltage) with connector block for DMX connection
- Compatible with Windows (XP, VISTA and 7, 32-bit or 64-bit)
- PDF User manual available for download on the lumenpulse website
- Troubleshooting Tips document available for download on the lumenpulse website
- lumenstudio programming software available for download on the lumenpulse website (Hardware manager is part of the lumenstudio Software download)



Universal back mounting plate
Hole pattern to fit most standard junction boxes
*Extended back boxes are recommended for all installations.

HOW TO ORDER

LTO2

Housing

1

* Please remove protective film before use to ensure proper operation of the controller.

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2017.03.30
NK - R6

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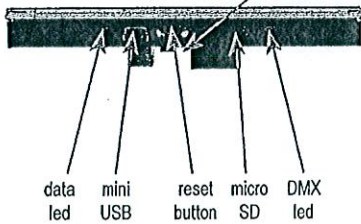
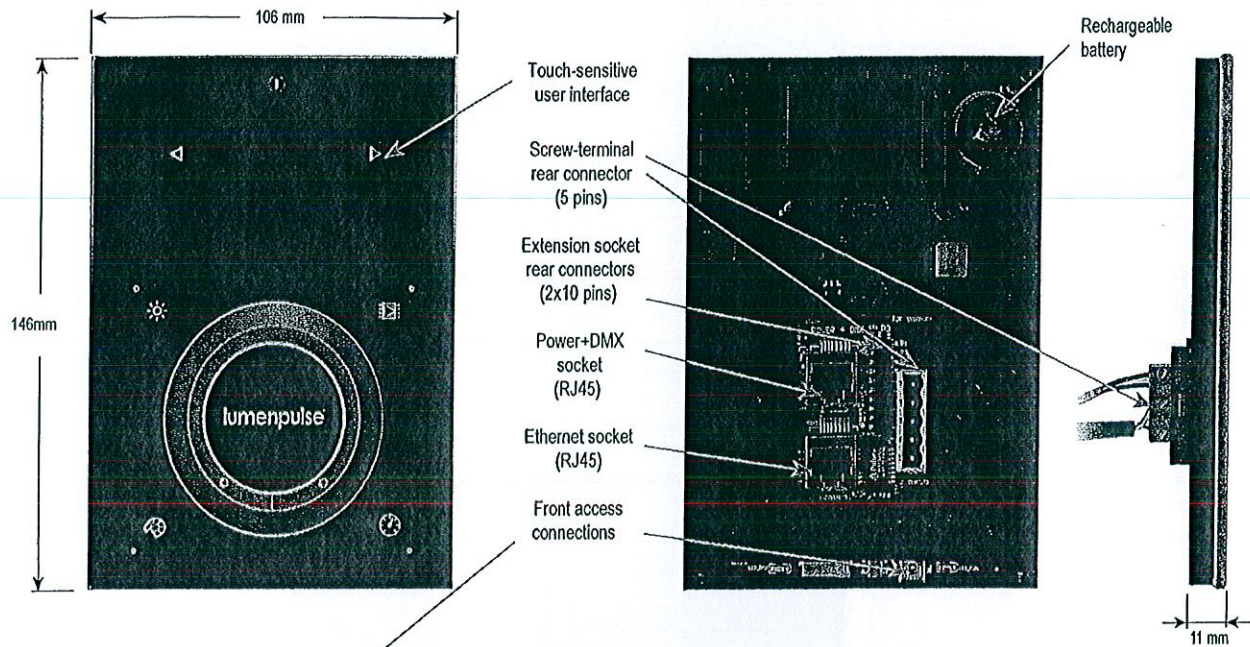
5-year limited warranty.

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and Conditions of Sales.

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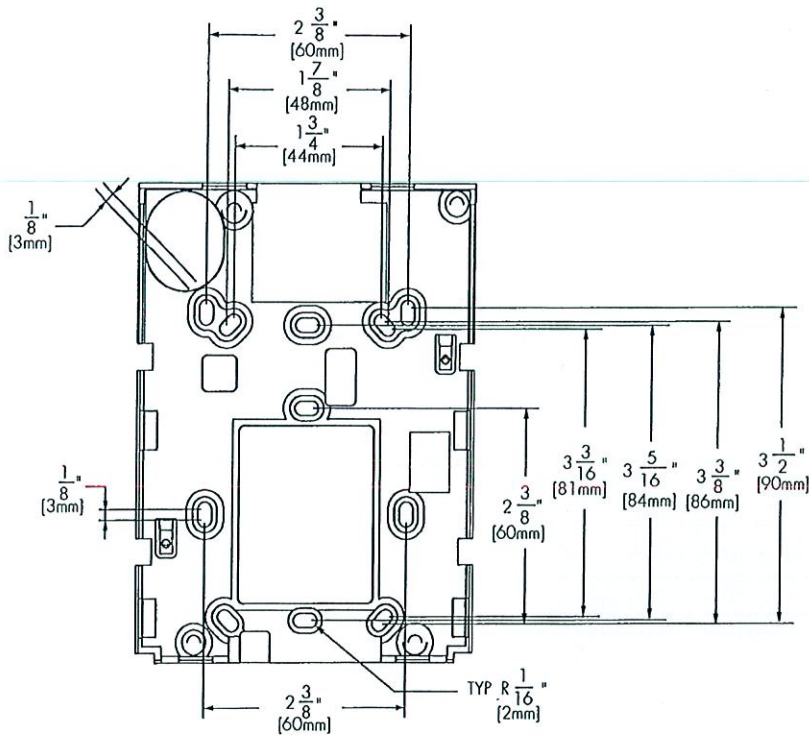
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CONNECTIONS



Input Power	6-7V DC 0.6A
Output Protocol	DMX512 (x2)
Programmability	PC, Mac, Tablet, Smartphone
Available colors	Black
Connections	USB, Ethernet, RS232, Clock, 8 dry contact ports, 5v Output Relay
Memory	microSD (32Gb Max)
Temperature	-10°C to 45°C
Mounting	Single or double gang wall socket
Dimensions	146 x 106 x 11mm
Weight	247g
Standards	EC, EMC, ROHS, ETL

MOUNTING PATTERN



MOUNTING HOLE PATTERN

*Extended electrical back boxes are recommended for all installations