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Planning Commission Staff Report

Project Type: Amended Lighting Plan with Light Fixture Request

Meeting Date: May 14, 2018

From: Cassie Harashe, AICP, Project Planner

(CAD)

Location: North of Olive Street Rd., between Premium Way and Brasher St.

Description: Chesterfield Blue Valley, Lot 5B-2 (TownePlace Suites), Amended Lighting Plan

with Light Fixture Request: A request for a decorative light fixture for a 2.171 acre tract of land zoned "PC" Planned Commercial District located on the north side of

Olive Street Rd., between Premium Way and Brasher Street.

PROPOSAL SUMMARY

This project is a request for approval of an amended lighting plan with a decorative light fixture for use along the pedestrian pathway within the TownePlace Suites site. This request is before the Planning Commission as the proposal does not contain fully shielded fixtures.



Figure 1: Aerial Photo

HISTORY OF SUBJECT SITE

In 2006, the first planned district was approved for the site and in the years since, the site-specific governing ordinance has been amended several times to include additional land into the planned district and to consolidate several ordinances. The most recent ordinance amendment occurred in 2014, when the City of Chesterfield approved Ordinance 2805 to modify development criteria of the development. Ordinance 2805 is the current ordinance of record. In February 2017, the Site Development Section Plan for the subject property was approved by the Planning Commission. The site is currently under construction. The applicant is wanting to amend the lighting plan to change several lighting fixtures. One of these fixtures requires a design exemption.

STAFF ANALYSIS

The City's Unified Development Code requires that fully shielded light fixtures with full cut off optics be utilized within commercial developments. The Unified Development Code defines fully shielded as an "outdoor fixture shielded or constructed so that no light rays are emitted by the installed fixture at angles above the horizontal plane passing through the lowest point of the fixture from which the light is emitted as certified by a photometric test report." Due to the conical mirror element in the middle of the fixture, shown in Figure 2, light is reflected upward beyond the plane where the light is emitted from.

However, section <u>31-04-03.L.2</u> of the UDC includes a provision 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.

On January 9, 2017 the Planning Commission approved the Site Development Section Plan for TownePlace Suites within the Chesterfield Blue Valley Development. As a part of that application, the Planning Commission approved a decorative bollard that complied with the UDC requirement that all light fixtures be fully shielded with cut-off optics, as seen in Figure 2. This request is for utilization of 12 bollards, shown in Figures 2 and 3, in lieu of the approved fixture along pedestrian pathways located in front of the building. These decorative light fixtures would be mounted at a height of 3.5 feet and would not result in light trespass given the interior location of the proposed fixture, as shown in Figures 5 and 6. Based on this, the proposed fixture meets the first portion of the Unified Development Code requirement as there will be no off-site glare light trespass from these fixtures; therefore the location of the fixtures is appropriate for the pedestrian pathways.

The applicant has stated in their attached narrative that the reason for the change in fixture is that the original bollard approved is not a Marriot Hotel standard and the developer wishes to install a fixture from the Marriot Hotel catalog. The previously approved bollard does have a much more decorative and ornate appearance than the currently proposed bollard; further the original fixture was 30" versus the 42.7" for the proposed fixture.

Planning Commission TownePlace Suites
May 14, 2018 Light Fixture Request

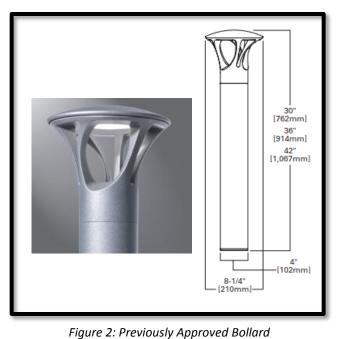




Figure 3: Reference Photo of Requested Bollard



Figure 4: Proposed bollard

Other Fixtures

The applicant is proposing several different light fixtures for the development, including decorative and utilitarian wall packs, parking lot, canopy, and wall washing lights. All of these fixtures comply with the UDC requirement to be fully shielded and have cut-off optics.

Amended Lighting Plan

The Amended Lighting Plan is in compliance with the Unified Development Code regulations with the exception of the bollard fixture proposed.

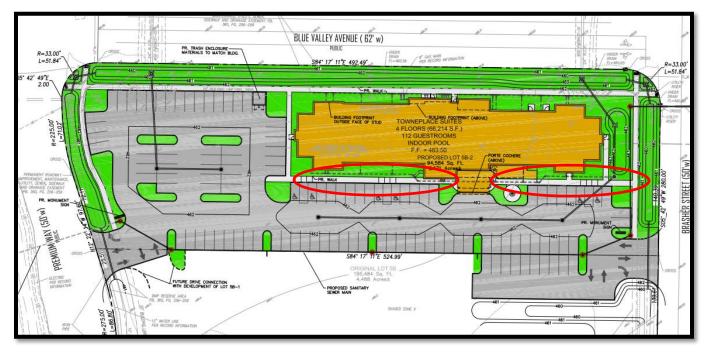


Figure 5: Location of Proposed Decorative Fixtures

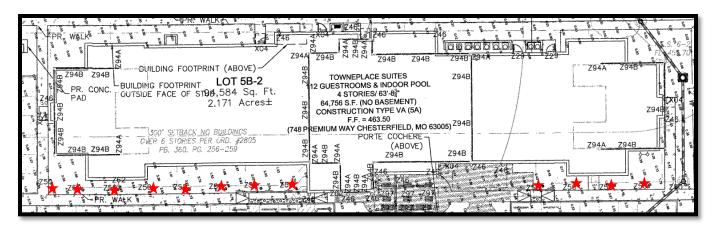


Figure 6: Detailed Location of Proposed Decorative Fixtures

STAFF RECOMMENDATION

Staff has reviewed the Amended Lighting Plan and light fixture request. Staff has determined the light levels are in compliance with the Unified Development Code and the requested fixture does not cause off-site light glare. The UDC states that the Planning Commission may approve decorative fixtures that do not cause off-site glare and improve the appearance of the site. If the Planning Commission determines that this criteria has been met, action should be taken to permit use of the proposed fixture at the TownePlace Suites site. Staff recommends that the Planning Commission take action on this item.

MOTION

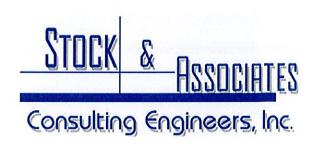
The following options are provided to the Planning Commission for consideration relative to this application:

- 1) "I move to approve (or deny) the Amended Lighting Plan and light fixture request for the Chesterfield Blue Valley, Lot 5B-2 (TownePlace Suites)."
- 2) "I move to approve the Amended Lighting Plan and light fixture request for the Chesterfield Blue Valley, Lot 5B-2 (TownePlace Suites)......" (Conditions may be added, eliminated, altered or modified)

Attachments: Project Narrative

Light Fixture Cutsheets

Lighting Plan



RECEIVED

MAY - 4 2018

City of Chesterfield

Department of Public Services

PHOTOMETRIC PLAN NARRATIVE FOR TOWNEPLACE SUITES

Date: May 3, 2018

(Stock Project No. 216-5750.1)

TownePlace Suites Hotel, is a 112 guestroom suite style hotel that is currently under construction at 748 Premium Way in Chesterfield Blue Valley and is expected to be completed November 2018. The Site Development Section Plan, Landscape Plan, and Photometric Plan were approved by the City of Chesterfield Planning Commission on January 9, 2017. When the project was going through the site development section plan review and approval process in the fall of 2016, the design/engineering team was not made aware of the Marriott Hotels design standards and preferred fixtures for site lighting. Construction began on the hotel in November of 2017, it was realized a few weeks into construction that the light fixtures shown on the approval Photometric Plan were not consistent with Marriott's fixtures. New cut sheets were sent to the City and direction on the next steps was requested. It was determined that the preferred bollard would warrant Planning Commission approval as it's shielding differed from the previously proposed and approved. The bollard currently being proposed is a fixture that is used amongst all Marriott hotel sites, and as a company they would like there to be uniformity in design across all hotel campuses. We respectfully request the Planning Commission's consideration in approving the revised Photometric Plan.





DESCRIPTION

LED Bollard is an economical and energy efficient choice for lighting walkways, plazas and other pedestrian areas in commercial and residential applications as well as any other location requiring a low mounting height light source with fully cutoff illumination.





ORDERING INFO	ORMAT	ION					
Model	Watts	Lumen	Optic	Color Temp.	CRI	Optional	Finish color
L1-BLDB025-C	25	2125	A = 360	1 = 3000K 2 = 4000K 3 = 5000K	82	1 = Dimmable	BR

Ordering Example: L1-BLDB025-C-25-A-1-BR

Project name:





BOLLARDS



• Material: Die-cast Aluminum housing. Corrosion-resistant polyester powder coat finished. The optic chamber surrounded and sealed with silicon gasket ensuring good performance.

· Led type: Cree chips.

• Electrical: 120~ 277Vac, 50/60Hz Driver included.

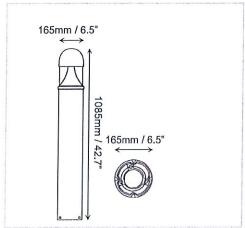
 Power factor: ≥95% · Led efficiency: 85 Im/W

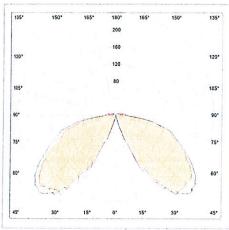
• Color temperature: 4000K, 5000K, 6000K

• Operation temperature: -20°C to 50°C

Color Rendering Index (CRI): ≥ 80

• THD%: < 20% • IP Rating: IP65







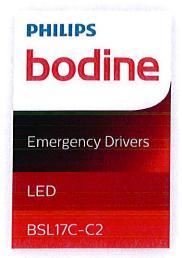






Project name:









Project: Towneplace Suites

Type: 728

Model.No: Qty:

Date:

Notes:

Emergency LED Driver Listed for field installation Class 2 output 7.5 Watts output power

Product order number: BSL17CC2T1U (metal case with conduit on both ends) See back page for additional model configurations and order numbers

Specifications

UL Listed

Listed to UL924 and CSA 22.2 No. 141 For Field or Factory Installation (Indoor and Damp)

Illumination Time 90 Minutes

Full Warranty

5 Years (NOT pro-rata)

Universal Input Voltage

120-277 VAC, 60 Hz

AC Input Power 3.0 (Maximum)

5.0 (Maximum)

Output Voltage

15.0 - 50.0 VDC

Output Power

7.5 W (Maximum),

Test Switch/Charging Indicator Light 2 W - ITS (2-Wire illuminated test switch)

Battery

High-Temperature, Maintenance-Free Nickel-Cadmium Battery

7- to 10-Year Life Expectancy

Recharge Time

24 Hours

Temperature Rating

Ambient : 0°C to +50°C (32°F to 122°F) Case: Tc (max): 65°C

Dimensions

12.0" x 2.4" x 1.5" (304 mm x 60 mm x 38 mm) Mounting Center 11.5" (292 mm)

Weight

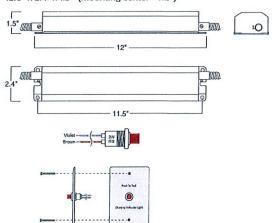
4.3 lbs. (1.95 kg)

Benefits:

- Listed for field or factory installation UL 924 and CSA C22.2 No. 141
 Emergency Lighting Compliant
- · Smart Charger Technology for low energy consumption
- · Meets CEC Title 20 (California Energy Commission) efficiency standards
- · Class 2 output UL 1310 Certified, CSA 22.2 No 223-M91 compliant
- · Controlled power for predictable discharge
- Emergency mode initial lumen output of up to 975 lumens
- 15-50 VDC for wide range of LED loads
- Universal input (120 through 277 VAC, 50/60 Hz)
- RoHS Compliant

Dimensions

12.0" x 2.4" x 1.5" (mounting center - 11.5")



A Test/Monitor Plate with an illuminated test switch/charging indicator light is provided.





BSL17C-C2

Emergency LED Driver, Class 2 Output, 7.5 Watts Output Power

APPLICATION

The BSL17C-C2 is UL Listed for factory or field installation and allows the same LED luminaire to be used for normal and emergency operation. The BSL17C-C2 emergency LED driver works in conjunction with an AC LED driver that has an output current not to exceed 3.0 A, to convert new or existing LED fixtures into emergency lighting. The emergency driver consists of a high-temperature nickel-cadmium battery, charger and electronic circuitry in one compact case. The BSL17C-C2 can be used with an LED lighting load of up to 7.5 Watts. If used in an emergency-only fixture, no AC driver is necessary. The BSL17C-C2 is suitable for indoor and damp locations and for sealed & gasketed fixtures, including fixtures rated for wet locations. Neither the BSL17-C2 nor the BSL17C-C2 is suitable for air handling heated air outlets and wet or hazardous locations. For more information about specific LED and AC driver compatibility, please call the factory.

OPERATION

When AC power fails, the BSL17C-C2 immediately switches to the emergency mode, operating the LEDs at a reduced lumen output for a minimum of 90 minutes. When AC power is restored, the emergency driver automatically returns to the charging mode.

INSTALLATION

The BSL17C-C2 does not affect normal fixture operation and may be used with either a switched or unswitched fixture. If a switched fixture is used, an unswitched hot lead must be connected to the emergency driver. The emergency driver must be fed from the same branch circuit as the AC driver. The BSL17C-C2 may be installed on top of the fixture and the BSL17-C2 may be installed on top of or inside the fixture. Installation is not recommended with fixtures where the ambient temperature may fall below 0°C.

CODE COMPLIANCE

For detailed information regarding standards and code compliance for emergency lighting see product page or the Codes and Standards section on the web site.

EMERGENCY ILLUMINATION

The BSL17C-C2 operates an LED load of up to 7.5 Watts.

SPECIFICATION

Emergency lighting shall be provided by using an LED fixture equipped with a Philips Bodine BSL17C-C2 emergency driver. This emergency driver shall consist of a high-temperature, maintenance-free nickel-cadmium battery, charger and electronic circuitry contained in

one 12" x 2 3/8" x 1 1/2" metal case. The BSL17C-C2 comes with an illuminated test switch (ITS) to monitor charger and battery and installation hardware shall be provided. The emergency driver shall be capable of delivering up to 7.5 Watts to an LED load (15-50VDC) for a minimum of 90 minutes. The BSL17C-C2 shall have a 15.0 Watt-hour battery capacity and shall comply with emergency standards set forth by the current NEC. This device complies with Part 15 of the FCC Rules and meets CEC Title 20 (California Energy Commission) efficiency standards. The emergency driver shall be UL Listed for field or factory installation.

INSTALLATION OPTIONS AND ORDERING CODES

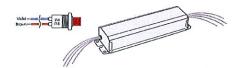
The BSL17C-C2 model can be ordered in several mounting configurations and test switch/LED kits. Please see the ordering codes below to determine which configuration best meet your requirements.

WARRANTY

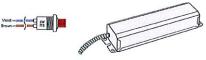
Model BSL17C-C2 is warranted for five (5) full years from date of manufacture. Please see detailed warranty information on our web site.

Optional Configurations (with order numbers)

BSL17-C2 (Order Number BSL17C2U) Includes Loose 2W-ITS Parts Kit



BSL17C-C2 Type 1 (Order Number BSL17CC2SF) Includes Loose 2W-ITS Parts Kit



BSL17C-C2 Type 1 Option 6 (Order Number BSL17CC2T106U4W) Includes 4W-ITS exiting through conduit



4 W-ITS exits through conduit adaptor. All other wires through the other conduit.

BSL17C-C2 Type 1 Option 7 (Order Number BSL17CC2T1O7)
Includes 2W-ITS through conduit adaptor



ITS exits unit through conduit adaptor, All other wires through the other conduit.

BSL17C-C2 Type 2 (Order Number BSL17CC2T2U) Includes 2W-ITS on Wall Plate



BSL17C-C2 Type 2 Option 7 (Order Number BSL17CC2T2O7) Includes 2W-ITS through conduit adaptor



2W-ITS exits through conduit adaptor. All other wires through lid. Studs are threaded so unit can be mounted on a J-box plate.

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Document order number: L2300261 17.1128



Philips Emergency Lighting 236 Mt. Pleasant Rd. Collierville, TN 38017 Tech Support: 888.263.4638 Sales: 800.223.5728

philips.com/bodine

NHM-612 (1250LM, 120/277V) NHM-620 (2000LM, 120/277V)

6" LED Marquise New Construction Housing

PRODUCT DESCRIPTION

Six inch thermally protected universal line voltage new construction housing.

CONSTRUCTION

Plaster Frame

High quality 0.032 steel die cut one piece frame. Bar hanger brackets on all four sides provide two possible position for installation.

0.040 steel housing with riveted cap adjusts to maximum ceiling thickness of 1-3/4" (45mm). Spring brackets accept torsion wing trim springs; slots on socket plate surface accept

Minimum Clearance

Non-IC housings require minimum clearance of 3" from thermal insulation and 1/2" from adjacent building components.

Bar Hangers

Two 13-3/4" to 24-1/2" adjustable bar hangers with captive nails are included on frame. Bar hangers are parallel to junction box, but can be repositioned 90° perpendicular to junction box if desired. "L" Shaped bar hanger foot to align to bottom of construction joist. A T-Bar notch allow for easy installation in a suspended ceiling. Frame may also be supported with aircraft structural cable for drop panel ceilings or any other application requiring direct support from a structural ceiling.

Junction Box

Prewired 25 cubic inch 0.064" thick galvanized steel, with five 1/2", two 3/4" knockouts, four Romex® pryouts, and snap on covers. All leads are #18AWG wire, the ground wire is connected to the bottom, and quick connectors are supplied on all leads. Through branch circuit wiring, (4-in, 4-out).

Dimming

- · 850 &1250 Lumen Triac dimming standard
- . Comfort Dim requires ELV dimmer
- · 2000 Lumen 0-10V dimming standard
- . Consult factory for optional 850 & 1250LM 0-10V and 2000LM triac dimming

Housing contains three UL approved quick connections that allow insertion of 1/4" stripped solid or tinned standard conductors to be inserted into the connector. Connectors are preattached to fixture power, common, and ground circuits.

Thermal Protector

External thermal device is located on the junction box.

Compatible with NRM-61 Series.

EMERGENCY

90-minute battery back up must be ordered separately and installed apart from the housing in an accessible location.

- CREE LMD125 for 120V 850/1250 Lumen. ERP ELM03W-0440-34 for 277V 850/1250 Lumen
- CREE LMD300 for 120/277 2000LM

Standard flex whip carries wire lead from junction box into housing. Wire leads extend from housing and thermal device to the luminary disconnect.

6" LED Marquise New Construction Housing

Catalog No.	Lumen	Driver	Voltage	Emergency
NHM-6	12=1250lm	(Blank)=Standard	LE1=120V (1250Lm), 0-10V (2000Lm)	EM=Emergency Pack
	20=2000lm	C=Comfort Dim*	LE2=277V, 0-10V	with Test Switch
			LE3= 120V Triac Dimming	
* Comfort Dim I	requires ELV dimmin	g	LE4= 120V, 0-10V Dimming	

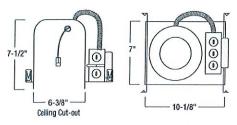
BNORALIGHTING.

Z28

Project Towneplace Suites

Catalog No. NHM-620-LE1-EM

Lamp/Wattage



Cut-out: 6-3/8"

Housing Length: 10-1/8" Housing Width: 7 Housing Height: 7-1/2"









- · 850 &1250 Lumen Triac dimming standard
- Comfort Dim requires ELV dimmer
- 2000 Lumen 0-10V dimming standard
- Consult factory for optional 850 & 1250LM 0-10V and 2000LM triac dimming

Bodine Emergency Lighting Equpment: BSL17-C2/BSL17C-C2 (850/1250lm)

- . Up to 7.0W max emergency illumination with LEDs.
- . Illumination Time: 90min
- Dual Input Voltage: 120/277 VAC, 60Hz
- . Output Voltage: 15.0-50.0 VDC
- · AC Input Current: 45 mA
- Output Current: 470mA max
- Dimension: 12" x 2.4" x 1.5"

Bodine Emergency Lighting Equpment: BSL17C-C2P (2000/3000im) • Up to 7.0W max emergency illumination with LEDs.

- Illumination Time: 90min
- . Dual Input Voltage: 120/277 VAC, 60Hz
- Output Voltage: 15.0-50.0 VDC
- · AC Input Current: 280 mA
- . Output Current: 270mA max
- Dimension: 12" x 2.4" x 1.5"

Labels and Listings

cULus Listed for Damp Location w/ Feed Through cULus Wet Listed (Only with designated trims) Meets or exceeds ASTM-283 Air-Tight Requirements

Energy Star

NHM-612LE1EM: 6" Marquise LED Marquise New Construction 1250 Lumen, 120V with Emergency Housing

ENORALIGHTING.

NHM-612 (1250LM, 120/277V) NHM-620 (2000LM, 120/277V) 6" LED Marquise New Construction Housing

Туре	
Project	
Catalog No.	
Lamp/Wattage	

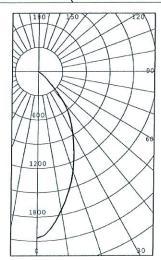
NHM-620LE1 / NRM-611L2030DW

Voltage: 120.0 VAC	Power: 25.21 W	Frequency: 60Hz	Test Temp: 24.8°C	Current: 0.2126 A	PF: 0.988	SC: 0.8
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COEFFICENTS OF UTILIZATION CONAL CAVITY METHOD EFFECTIVE FLOOR CAVITY REFLECTANCE = 0.20

CC		9)		1	8	10			7	0		Ι	50			30			10		0
WALL	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR					(continue towns																	
0	1.22	1.22	1.22	1.22	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.16	1.13	1.11	1.09	1.14	1.11	1.09	1.07	1.12	1.10	1.07	1.05	1.05	1.04	1.02	1.02	1.00	0.99	0.98	0.97	0.96	0.95
2	1.11	1.07	1.03	0.99	1.09	1.05	1.01	0.98	1.07	1.03	1.00	0.97	1.00	0.97	0.95	0.97	0.95	0.93	0.94	0.93	0.91	0.89
3	1.06	1.00	0.95	0.91	1.04	0.98	0.94	0.90	1.02	0.97	0.93	0.90	0.95	0.91	0.88	0.92	0.90	0.87	0.90	0.88	0.86	0.84
4	1.01	0.94	0.88	0.85	1.00	0.93	0.88	0.84	0.98	0.92	0.87	0.84	0.90	0.86	0.83	0.88	0.84	0.82	0.86	0.83	0.81	0.79
5	0.97	0.88	0.82	0.78	0.95	0.87	0.82	0.78	0.93	0.86	0.81	0.78	0.85	0.80	0.77	0.83	0.79	0.76	0.82	0.78	0.76	0.74
6	0.92	0.83	0.77	0.73	0.91	0.82	0.77	0.73	0.89	0.82	0.76	0.73	0.80	0.76	0.72	0.79	0.75	0.72	0.78	0.74	0.71	0.70
7	0.87	0.78	0.72	0.68	0.86	0.77	0.72	0.68	0.85	0.77	0.71	0.67	0.75	0.71	0.67	0.74	0.70	0.67	0.73	0.69	0.66	0.65
8	0.83	0.73	0.67	0.64	0.82	0.73	0.67	0.63	0.81	0.72	0.67	0.63	0.71	0.66	0.63	0.70	0.66	0.62	0.69	0.65	0.62	0.61
9	0.78	0.69	0.63	0.59	0.77	0.68	0.63	0.59	0.76	0.68	0.62	0.59	0.67	0.62	0.58	0.66	0.61	0.58	0.65	0.61	0.58	0.57
10	0.74	0.64	0.58	0.55	0.73	0.64	0.58	0.55	0.72	0.64	0.58	0.55	0.63	0.58	0.54	0.62	0.57	0.54	0.61	0.57	0.54	0.53

INTENSITY (CANDLEPOWER) SUMMARY



ANGLE	MEAN CP
0	2059
5	1957
10	1740
15	1529
20	1305
25	1078
30	877
35	700
40	485
45	244
50	105
55	32
60	2
65	1
70	0
75	0
80	0
85	0
90	0

ZONAL LUMENS & PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	1100	62.30
0-40	1530	86.66
0-60	1764	99.93
0-90	1766	100.00
40-90	236	13.34
60-90	1	0.07
90-180	0	0.00
0-180	1766	100.00

LUMINACE SUMMARY CD./SQ.M.

ANGLE	MEAN CD/SQ M				
45	20637				
55	3325				
65	142				
75	7				
85	0				

Marguise Series NRM-6

6" LED Recessed Downlight

Source: LED 11 Watts @ 850 Source Lumens = 663 Delivered Lumens LED 16 Watts @ 1250 Source Lumens = 1025 Delivered Lumens LED 25 Watts @ 2000 Source Lumen = 1882 Delivered Lumens

PRODUCT DESCRIPTION

Nora Lighting's 6" recessed downlight fixture solution with thermal management system combined in a single compact unit. Cree True White LED ceramic package and Unitized Thermal Management (UTM) system. Available in New construction and Remodel style. Outboard mounted driver allows for cooler operation and extends life.

- FEATURES

 5 Year Limited Warranty

- Cree platform
 90+ CRI True White (Registered)
 Dimmable (850 & 1250 Triac; 2000 0-10V)
 50,000 hour life

- Title 24 Compliant
 LED 11W @ 850 Source Lumens = 663 Delivered Lumens
 LED 16W @ 1250 Source Lumens = 1025 Delivered Lumens
 LED 25W @ 2000 Source Lumens = 1882 Delivered Lumens
 Available in 2700K, 3000K, 3500K, 4000K and Comfort Dim, 91CRI

<u>Trim</u>
Aluminum spun reflector with deep set diffused lens for excellent visual comfort while providing high lumen output. Available in 2700K, 3000K, 3500K, 4000K or Comfort Dim color temp. to accommodate different appearances.

Construction
Scientifically and specifiable "Unitized Thermal Management" (UTM) provides exceptional cool operation exceeding all industry standards.

Mounting
Trim includes torsion springs to mount trim securely to housing.

ELECTRICAL

Voltage: 120VAC Current: 91mA

Power Consumption: 850lm=11W / 250lm=16W / 2000lm=25W Light Source: Cree True White Ceramic LED package Platform

<u>Con.</u> 31 Con. <u>LED Driver:</u> CREE LMD125 for 120V / ERP for277V (non-dimmable) <u>Operating Temperature;</u> 0°C to 75°C ambient temperature <u>Life Expectancy:</u> 50,000 hours

<u>Bodine Emergency Lighting Equpment: BSL17-C2/BSL17C-C2 (850/1250lm)</u> • Up to 7.0W max emergency illumination with LEDs.

- Illumination Time: 90min
 Dual Input Voltage: 120/277 VAC, 60Hz
 Output Voltage: 15.0-50.0 VDC
 AC Input Current: 45 mA
 Output Current: 470mA max
 Dimension: 12" X 2.4" X 1.5"

Bodine Emergency Lighting Equpment: BSL17C-C2P (2000/3000lm) • Up to 7.0W max emergency illumination with LEDs. • Illumination Time: 90min

- Dual Input Voltage: 120/277 VAC, 60Hz
 Output Voltage: 15.0-50.0 VDC
 AC Input Current: 280 mA

- . Output Current: 270mA max
- Dimension: 12" x 2.4" x 1.5"

Catalog No.	Desctiption	Driver	Voltage	Emergency
□NHM-612	6" 1250lm New Const	☐(Blank)=Standard	□LE1=120V	☐EM=Emergency
□NHRM-612	6" 1250lm Remodel	☐C=Comfort Dim	□LE2=277V	
□NHM-620	6" 2000lm New Const			
□NHMICD-620	6" Marquise 2000 Lumen	IC New Construction Double	le Wall Housing	
□NHRM-620	6" 2000lm Remodel			
□NHMIC-685	6" 850lm IC New Const			
□NHRMIC-685	6" 850lm IC Remodel			
□NHMICD-612	6" 1250im IC Double Wa	II New		
■NFBIC-6L12AT	6" Marquise 1250 Lumen	IC Dedicated Fire Box		
□NFBIC-6L85AT	6" Marquise 850 Lumen K	Dedicated Fire Box		

BNORALIGHTING.

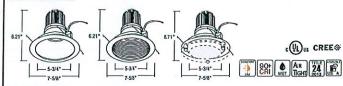
Type Z28

Project Towneplace Suites

Catalog No. NRM-618-L-20-30-EM-DW

Lamp/Wattage 25W

DIMENSIONS



- Optics
 Cree True White® Technology
 Flat frosted shatterproof acrylic composite lens
- 97 LPW LEDs producing high efficiency fixture performance
- · LM-80 data
- Dimmable

<u>Dimming</u>
Marquise Series Dimming: 850 and 1250 lumen units require triac style dimmers. 2000 Lumen require
0-10V dimming protocol. See Dimmer Compatibility Chart under Resource section in the Nora I
NSpec Lighting Website.

Comfort Dim
Comfort Dim color tunes the temperature from a bright 2700K, to a romantic and comfortable 1800K on a

Comfort Dim is available in 3 different lumen levels:

- 850 and 1250 Lumens for lower ceiling heights in commercial and residential applications. (Sapphire

and Marquise Series)

2000 Lumens for light scommercial and residential high veiling applications. 2000 Lumen available on 6" Marquise.

Labels and Listings Title 24 Compliant cULus Listed for Wet Location WSEC ASTM E283 for Air-Tight 5 Year Limited Warranty

6" LED with Reflector Trim

Catalog No.	Source	Lumen	Color Temp	
□NRM-611	L=LED	□85=850	□27=2700K	
□NRM-612		□12=1250	□30=3000K	
□NRM-618		□20=2000	□35-3500K	
			□ 40-4000K	
			□CD=Comfort Dim	

*EM: BSL17-C2/BSL17C-C2 Emergency LED Drive Class 2 Output Compatible with CREE LMH Module.

Deco Glass Options

□NTG-6B/120: 6" Tempered Clear Glass with Frosted Center and 3-1/8" Open Center

□NTG-6B/80: 6" Tempereed Blue Glass with 3-1/8" Open Center

□NTG-6CF: 6" Tempered Clear Glass with Frosted Center

□NTG-6FC: 6" Tempered Frosted Glass with Clear Center

□NTG-6HC: 6" Tempered Clear Glass with Frosted Center and 3-1/8" Open Center

Finish	
611/618 Refelctor & Flange	612 Baffle & Flange Finishes
☐ BW = Specular Black Reflector, White Flange	BW = Black Baffle / White Flange
☐ BZ = Bronze Reflector, Bronze Flange	☐BZ = Bronze Baffle and Flange
☐ CO = Copper Reflector, Copper Flange	☐ CO = Copper Baffle and Flange
DW = Diffused Clear Reflector, White Flange	☐NN = Natural Metal Baffle and Flange
☐ HZW = Haze Reflector, White Flange	☐WW = White Baffle and Flange
□ NN = Natural Metal Reflector & Flange	
☐ WW = White Reflector, White Flange	

Example: NRM-611L8527BZBZ / NHM-685LE1EM Create a complete trim / housing catalog numbers:

Marquise Series 6" Dedicated LED with Reflector Trim

Source: LED 10.6 Watts @ 850 Source Lumens = 663 Delivered Lumens LED 15.75 Watts @ 1250 Source Lumens = 1025 Delivered Lumens LED 24.32 Watts @ 2000 Source Lumen = 1744 Delivered Lumens

6	JOR	A	IGH	T	NG.
	A COLO			1 1	IVU

Type Project Catalog No. Lamp/Wattage

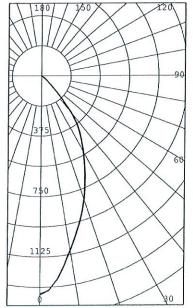
NHM-612LE1 / NRM-611L1230DW

Voltage: 120	0.1 VAC Pow	er: 15.52 W Frequency:	60Hz Test Te	mp: 24.8°C Current	t: 0.1317 A PF: 0.98	

COEFFICENTS OF UTILIZATION CONAL CAVITY METHOD EFFECTIVE FLOOR CAVITY REFLECTANCE = 0.20

CC		91	0			8	0			7	0			50			30			10		0
WALL	70	50	30	10	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																						
0	1.22	1.22	1.22	1.22	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.16	1.13	1.11	1.09	1.14	1.12	1.09	1.07	1.12	1.10	1.07	1.05	1.05	1.04	1.02	1.02	1.00	0.99	0.98	0.97	0.96	0.95
2	1.11	1.07	1.03	0.99	1.09	1.05	1.02	0.98	1.07	1.03	1.00	0.97	1.00	0.97	0.95	0.97	0.95	0.93	0.95	0.93	0.91	0.90
3	1.06	1.00	0.95	0.91	1.04	0.99	0.94	0.91	1.03	0.97	0.93	0.90	0.95	0.92	0.89	0.93	0.90	0.87	0.90	0.88	0.86	0.85
4	1.02	0.94	0.89	0.85	1.00	0.93	0.88	0.85	0.98	0.92	0.88	0.84	0.90	0.86	0.83	0.88	0.85	0.82	0.86	0.84	0.81	0.80
5	0.97	0.89	0.83	0.79	0.95	0.88	0.82	0.79	0.94	0.87	0.82	0.78	0.85	0.81	0.78	0.83	0.80	0.77	0.82	0.79	0.76	0.75
6	0.93	0.84	0.78	0.74	0.91	0.83	0.78	0.74	0.90	0.82	0.77	0.73	0.81	0.76	0.73	0.79	0.75	0.72	0.78	0.75	0.72	0.71
7	0.87	0.79	0.73	0.69	0.86	0.78	0.72	0.69	0.85	0.77	0.72	0.68	0.76	0.71	0.68	0.75	0.71	0.67	0.74	0.70	0.67	0.66
8	0.84	0.74	0.68	0.64	0.82	0.73	0.68	0.64	0.81	0.72	0.67	0.64	0.72	0.67	0.64	0.71	0.66	0.63	0.70	0.66	0.63	0.62
9	0.79	0.70	0.64	0.59	0.78	0.69	0.63	0.59	0.77	0.68	0.63	0.59	0.67	0.63	0.59	0.67	0.62	0.59	0.66	0.62	0.59	0.57
10	0.75	0.65	0.59	0.56	0.74	0.65	0.59	0.55	0.73	0.64	0.59	0.55	0.64	0.59	0.55	0.63	0.58	0.55	0.62	0.58	0.55	0.54

INTENSITY (CANDLEPOWER) SUMMARY



ANGLE	MEAN CP
0	1356
5	1267
10	1097
15	951
20	809
25	667
30	539
35	428
40	292
45	134
50	54
55	18
60	1
65	0
70	0
75	0
80	0
85	0
90	0

ZONAL LUMENS & PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	686	63.49
0-40	949	87.81
0-60	1081	99.99
0-90	1081	100.00
40-90	132	12.19
60-90	0	0.01
90-180	0	0.00
0-180	1080	100.00

LUMINACE SUMMARY CD./SQ.M.

ANGLE	MEAN CD/SQ M
45	11335
55	1924
65	2
75	0
85	0



THUNDER SERIES



LW360-25W-50K LW360-25W-30K

LW360 LED WALL PACK

Ideal for general site lighting, alleys, loading docks, doorway, pathway and parking areas.

ELECTRICAL SPECIFICATIONS:

Input Wattage: 25W

Input Voltage: 120-277VAC 50/60Hz

· Other wattages: 60W, 80W

Power factor: >0.9

Efficacy: 125LM/W~130LM/W

HOUSING SPECIFICATIONS:

- · Aluminum with (Black) powder coat finish
- Operating temperature: -4°F ~ 104°F
- · Lifespan: 50000 Hrs.
- IP rating: IP65, Wet Locations
- · LED panel swivels 180° each direction

CERTIFICATIONS: UL













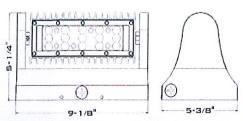
TPS - CHESTERFIELD, MO

TYPE: Z29

LW360 25W 50K

DIMENSIONS:

9-1/8"(W) x 5-1/4"(H) x 5-3/8"(D)







MODEL	WATTS	VOLTAGE	LUMENS	COLOR TEMP
LW360-25W-50K	25W	120~277V AC	3250LM	5000K
LW360-25W-30K	25W	120~277V AC	3125LM	3000K

LIGHTING SPECIFICATIONS:

- LED type/brand: CREE MHB-B
- Total lumens: 3125LM and 3250LM
- Color temperature: 3000K and 5000K
- Color rendering index: >70
- Beam angle: 60°

WARRANTY: 5 years



JOB NAME:	
DATE:	entantes en estilica en en en en estado en entre
TYPE:	

LW360-25W-50K LW360-25W-30K

LW360 LED WALL PACK

MODEL	WATTS	VOLTAGE	LUMENS	COLOR TEMP
LW360-25W-50K	25W	120~277V AC	3250LM	5000K
LW360-25W-30K	25W	120~277V AC	3125LM	3000K

CERTIFICATIONS: UL







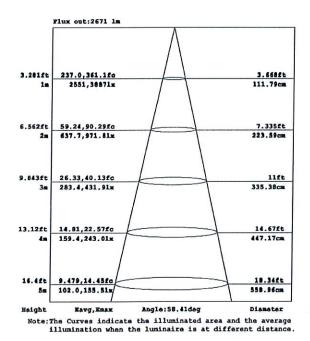


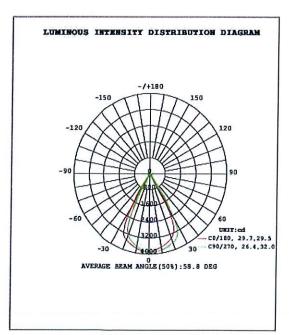




PHOTOMETRICS:

DATA OF	LAMP	PHOTOMETRIC DATA Eff: 129.66 lm/W						
MODEL		Imax (cd)	3900	S/MH(CO/180)	0.85			
NOMINAL POWER (1) 25	LOR(%)	100.0	S/MH (C90/270)	0.76			
RATED VOLTAGE (7) 120	TOTAL FLUX(lm)	3280.3	η UP, DN (CO-180)	0.1,55.6			
NOMINAL FLUX(1	a) 3280.33	CIE CLASS	DIRECT	η UP, DN (C180-360)	0.1,44.1			
LAMPS INSIDE	1	η υρ(%)	0.3	CIBSE SHR NOM	0.50			
TEST VOLTAGE (V	120.0	η down(%)	99.7	CIBSE SHR MAX	0.60			





Wall Sconce





Product Specifications

Material: Painted solid aluminum with a 1/8" matte white extruded acrylic panel. Open bottom and enclosed top. Luminous top and bottom for LED .

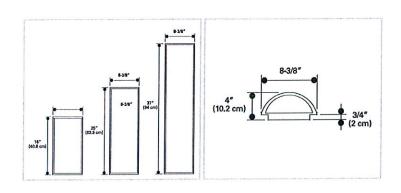
Wattage: 29W max.

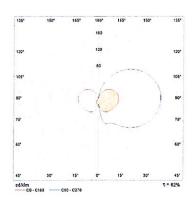
Electrical: 120 ~ 277Vac, 50/60Hz Driver.

Power factor: ≥90% Led efficiency: 110 lm/W

Color temperature: 4000K, 5000K Operation temperature: -20°C to 40°C Color Rendering Index (CRI): 80

THD%: < 20%

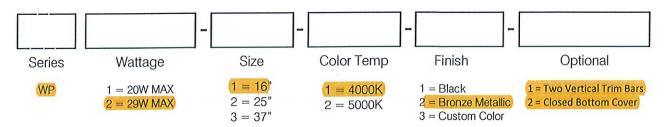




Ordering information



Ordering Example: WP-1-1-1-1-1





POLES

TPS - CHESTERFIELD, MO

TYPE: Z62

P251

TECHNICAL INFORMATION

FEATURES & SPECIFICATIONS

The pole shaft is fabricated from hot rolled carbon steel having a minimum yield of 45,000 PSI and conforms to ASTM A500 grade C requirements. The shaft construction is a single piece of formed steel welded longitudinally. The hand hole is located 1' 6" above the pole base. A ground lug is provided standard.

Anchor Base

The anchor base is fabricated from a structural quality hot rolled carbon steel plate that has a minimum yield strength of 36,000 PSI. The anchor base telescopes the pole shaft and has a circumferential weld on the top and bottom.

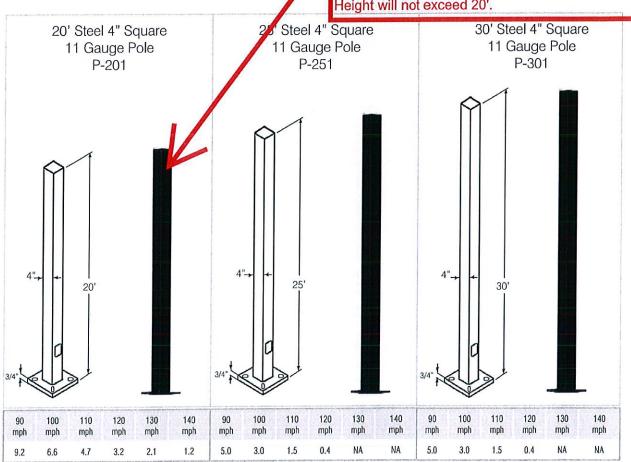
Base Cover

A full base cover is provided which encapsulates the base plate and anchor bolts to provide a clean transition from pier to pole.

Finish

The poles is finished with a Super Durable Powder coat Pairt.

Pole is to be less than 20' as per City Comments the pole height (including the concrete base) is not to exceed 20'. Per our vendor this is the intent. Height will not exceed 20'.



MAX EPA 1.3 GUST

MAX EPA 1.3 GUST

MAX EPA 1.3 GUST





POLE ACCESSORIES



Units/

Carton

12

Units/

Carton

4

Units/

Carton

4

Units/

Carton

4

Units/

Carton

4

Units/

Carton

6

Units/

Carton

15

SOLID STATE AREA LIGHTING

PROJECT NAME: Towne Place Suites

FIXTURE TYPE:

Z62

LUM SERIES-PLED

SPECIFICATIONS

HOUSING

Heavy cast low copper aluminum assembly (A360 alloy, <0.4% copper). Housing attaches to pole via a one piece, extruded aluminum arm with centering guides for internal draw bolts. Housing/pole junction is gasketed. All exposed hardware is stainless steel. Internal protected hardware is electro-zinc plated.

PLED" OPTICS

emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

LED DRIVERS

Drivers are UL and cUL recognized mounted on a single plate and factory prewired with quick-disconnect plugs. Constant current driver is electronic and has a power factor of >0.90 and a minimum operating temperature of -40°F. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

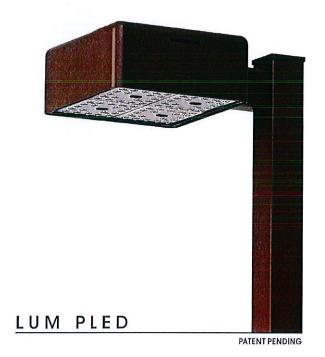
MOUNTINGS

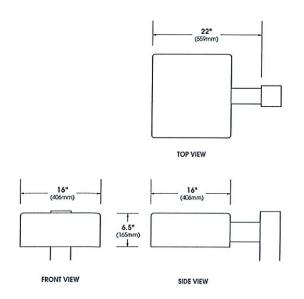
Arm - One piece heavy wall extruded aluminum with internal draw bolt guides. Arm is secured to housing and pole with stainless steel draw bolts.

Wall - Heavy wall extruded aluminum arm with draw bolts integrates with a cast aluminum wall plate and mounting bracket.

FINISH

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step sand blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.





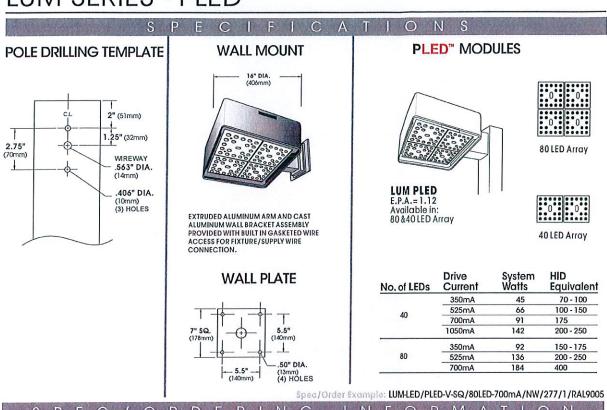




2017287



LUM SERIES - PLED



IN R M 0 MOUNTING **FINISH OPTIONS** MODEL OPTICS LED COLOR TEMP-CCT PLED" DISTRIBUTION No. LEDs DRIVE ARM MOUNT STANDARD TEXTURED FINISH ☐ HIGHLOW DIMMING FOR CURRENT HARDWIRED SWITCHING OR NONINTEGRATED MOTION □ BOLED1 □ 1050mA □ <u>11</u>..... **⊪**-LUM LED ☐ NW (4000K)* ☐ BLACK ☐ TYPE II SENSOR HLSW PLED-II **RAL-9005-T** □ 2-180 40LED ☐ 700mA ☐ INTERNAL □ CW (5000K) ☐ TYPE II FRONT ROW ☐ 2-90 I HOUSE SIDE SHIELD . . . HS-PLED PLED-II-FR ☐ WHITE 525mA ☐ WW (3000K) RAL-9003-T □ 3-120 PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) . . PC+V TYPE II MEDIAN ILLUMINATOR ☐ 350mA □ 3-90 PLED-II-ML GREY ☐ TWIST LOCK **RAL-7004-T** NOTE: 1 - 700mA MAXIMUM PHOTO CELL + VOLTAGE TYPE III PLED-III . . . □ 4-90 (EXAMPLE: PC120V) . . TPC+V OTHER LED COLORS VOLTAGE CONSULT FACTORY ADJUSTABLE DARK BRONZE TWIST LOCK RECEPTACLE ONLY . . . TPR ☐ TYPE IV KNUCKLE FITTER PLED-IV RAL-8019-T □ 120 ☐ NKLE27..... ☐ 7-PIN TWIST LOCK ☐ TYPE IV □208 RECEPTACLE ONLY ... TPR7 PLED-IV-FT .. GREEN RAL-6005-T TYPE V NARROW PLED-VSQ-N . . . **240** ☐ SINGLE FUSE (120V, 277V, 347V) . . SF FOR SMOOTH FINISH REPLACE SUFFIX "I" WITH SUFFIX "S" (EXAMPLE: RAL-9005-S) **277** ☐ TYPE V DOUBLE FUSE PLED-V-SQ-M . (208V, 240V, 480V) . . DF □347 WALL MOUNT ☐ TYPE V PLED-V-SQ-W STEP DIM MOTION SENSOR (PROGRAMMED 50/100) □ 480 □ wm...... SEE USALTG.COM FOR ADDITIONAL COLORS REMOTE MOTION SENSOR CONFIGURATOR MS-FC10

LED	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
40	LED	40 PLED Optical Module - 350mA	5,077 - 5,464	4,445 - 4,784	5,199 - 5,595	60,000+	-20°F	45	120 277	0.38 0.17
40	LED	40 PLED* Optical Module - 525mA	6,977 - 7,507	6,108 - 6,573	7,144 - 7,687	60,000+	-20°F	66	120 277	0.58 0.25
40	LED	40 PLED® Optical Module - 700mA	8,425 - 9,067	7,376 - 7,938	8,627 - 9,285	400 <mark>0</mark> ,00	-20°F	91	120 277	0.76 0.33
40	LED	40 PLED* Optical Module - 1050mA	10,956 - 11,792	9,592 - 10,324	11,219 - 12,075	60,000+	-20°F	142	120 277	1.19 0.52
80	LED	80 PLED® Optical Module - 350mA	10,153 - 10,926	8,889 - 9,566	10,397 - 11,188	60,000+	-20°F	92	120 277	0.77 0.34
30	(LED)	80 PLED* Optical Module - 525mA	13,952 - 15,015	12,215 - 13,146	14,287 - 15,376	(60,000+)	-20°F	136)	120 277	1.14 0.50
80	LED	80 PLED® Optical Module - 700mA	16,851 - 18,139	14,752 - 15,877	17,254 - 18,570	60,000+	-20°F	184	120 277	1.54 0.67

- NOTES:

 1. Max Input Amps is the highest of starting, operating, or open circuit currents
- 2. Lumen values for LED Modules vary according to the distribution type
- System Watts includes the source watts and all driver components.
- 4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV 20KV surge suppressors.
- 5. L70(9K) TM-21 6x rule applied

WARNING; All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.





SOLID STATE AREA LIGHTING

PROJECT NAME: Towne Place Suites

FIXTURE TYPE:

Z62 Wall

LUM SERIES-PLED

SPECIFICATIONS

HOUSING

Heavy cast low copper aluminum assembly (A360 alloy, <0.4% copper). Housing attaches to pole via a one piece, extruded aluminum arm with centering guides for internal draw bolts. Housing/pole junction is gasketed. All exposed hardware is stainless steel. Internal protected hardware is electro-zinc plated.

PLED" OPTICS

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

LED DRIVERS

Drivers are UL and cUL recognized mounted on a single plate and factory prewired with quick-disconnect plugs. Constant current driver is electronic and has a power factor of >0.90 and a minimum operating temperature of -40°F. In-line terminal blocks facilitate wiring between the driver and optical carrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

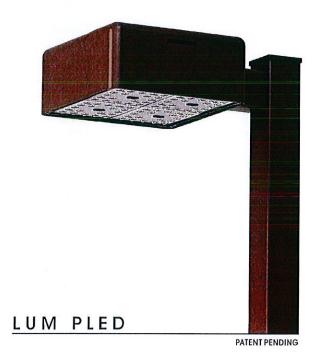
MOUNTINGS

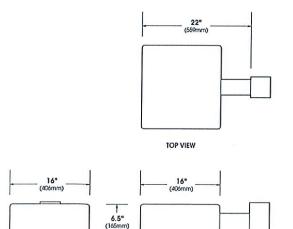
Arm - One piece heavy wall extruded aluminum with internal draw bolt guides. Arm is secured to housing and pole with stainless steel draw bolts.

Wall - Heavy wall extruded aluminum arm with draw bolts integrates with a cast aluminum wall plate and mounting bracket.

EINIICH

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step sand blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability. Texture finish is standard.







FRONT VIEW

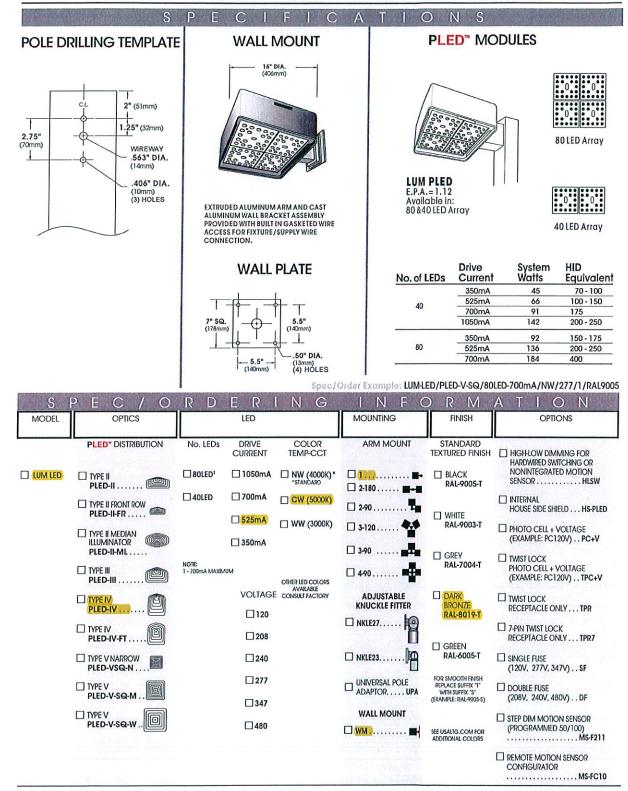


2017287



SIDE VIEW

LUM SERIES - PLED



LUM SERIES - PLED

LAMP/ELECTRICAL GUIDE

LED	SOURCE TYPE	SOURCE	INITIAL LUMENS - 4000K	INITIAL LUMENS - 3000K	INITIAL LUMENS - 5000K	L70 GREATER THAN (HR)	STARTING TEMP.	SYSTEM WATTS	VOLTS	MAX INPUT AMPS
40	LED	40 PLED Optical Module - 350mA	5,077 - 5,464	4,445 - 4,784	5,199 - 5,595	60,000+	-20°F	45	120 277	0.38 0.17
40	LED	40 PLED* Optical Module - 525mA	6,977 - 7,507	6,108 - 6,573	7,144 - 7,687	60,000+	-20°F	66	120 277	0.58 0.25
40	LED	40 PLED Optical Module - 700mA	8,425 - 9,067	7,376 - 7,938	8,627 - 9,285	60,000+	-20°F	91	120 277	0.76 0.33
40	LED	40 PLED® Optical Module - 1050mA	10,956 - 11,792	9,592 - 10,324	11,219 - 12,075	60,000+	-20°F	142	120 277	1.19 0.52
80	LED	80 PLED® Optical Module - 350mA	10,153 - 10,926	8,889 - 9,566	10,397 - 11,188	60,000+	-20°F	92	120 277	0.77 0.34
80	LED	80 PLED® Optical Module - 525mA	13,952 - 15,015	12,215 - 13,146	14,287 - 15,376	60,000+	-20°F	136	120 277	1.14 0.50
80	LED)	80 PLED* Optical Module - 700mA	16,851 - 18,139	14,752 - 15,877	17,254 - 18,570	60,000+	-20°F	184	120 277	1.54 0.67

- 1. Max Input Amps is the highest of starting, operating, or open circuit currents
 2. Lumen values for LED Modules vary according to the distribution type
 3. System Watts includes the source watts and all driver components.

- 4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use 10KV 20KV surge suppressors.
- 5. L70(9K) TM-21 6x rule applied

WARNING: All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.









IMPAL2

Product Specifications

Housing: Die-cast aluminum base, corrosion-resistant

polyester powder coat finished

Lens: The optic chamber is surrounded and sealed with

silicon gasket ensuring good performance

Mounting: Post Top Mounting

Electrical: AC 90-277v Wattage: 70W / 95W Finish: BRONZE

Certification: cETLus, IP66, CE

System Light Efficiency: > 100 lm/W AC90-277V

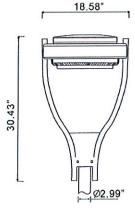
IP Grade: IP65

Color Temperature: 4000K, 5000K, 6000K

Applicable places: Business district, square, walking street,

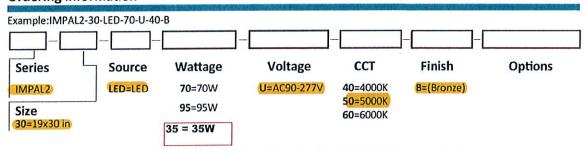
park, residence community etc.

Dimensional Drawings:





Ordering information



^{*}Consult Factory regarding availability.

Towneplace Suites

Type Z66 SP13081 Steel Poles



4" ROUND STRAIGHT

Item#	Description	Finish/ Color	Dimensions	Bolt Circle	Bolt Size	Weight (lbs)	Unit Per Master Carton
SP130161	Shaft Size 16' Gauge 11	Bronze	9.5"X9.5"X3/4"	7**	3/4"X30	(173)	200

For additional colors, heights, and gauges, please contact your sales associate.

Wind Specifications

Wind Data	Pole	80 MPH Max EPA	80 MPH Fixture Wt. (lbs)	90 MPH Max EPA	90 MPH Fixture Wt. (lbs)	100 MPH Max EPA	100 MPH Fixture Wt. (lbs)
1	16'4SQ 11Ga	12.1	110	10.2	110	7.8	110
2	20' 4SQ 11Ga	9.2	100	6.7	100	4.9	100
3	20' 4SQ Ga	14.8	135	10.2	135	6.9	135
4	24' 4SQ 7Ga.	8.9	110	5.8	110	3.2	110

Note - 8 Ft is a special order

Item #	Description	Finish/ Color	Dimensions	Bolt Circle		Weight (lbs)	Unit Per Master Carton
SP130202	Shaft Size 25' Gauge 11	Bronze	10.5"X10.5"X3/4"	12"-3/4	1"X36"	380	220

For additional colors, heights, and gauges, please contact your sales associate.

Wind Specifications

Wind Data	Pole	80 MPH Max EPA	80 MPH Fixture Wt. (lbs)	90 MPH Max EPA	90 MPH Fixture Wt. (lbs)	100 MPH Max EPA	100 MPH Fixture Wt. (lbs)
1	16' 5RD 11Ga	36.1	200	24.8	200	13.8	200
2	20' 5RD 11Ga	19.2	150	13.4	150	9.31	150
3	25' 5RD 7Ga	32.5	275	22.3	275	31.49	275
4	25 5RD 11Ga.	10.9	125	7.6	125	35.9	125
5	25" 5RD 7Ga	19.7	250	13.2	250	10.7	250

5" ROUND STRAIGHT

Standard Options



Customers may choose between a galvanized finish, powder coating finish, or our premier primer plus powder coating service.

For additional colors, heights and gauges, please contact your sales associate.

Z97 Towneplace Suites



T1-SLED Series

LED Strip



TI-SLED4

TI-SLED8

DESCRIPTION

The small size of the TI-SLED makes it an ideal choices for size restricted architectural applications. The TI-SLED series can be the illumination solution in commercial, industrial, retail and residential applications. Fixture can be used in storage / utility areas, coves, display cases, shops, task and general area lighting.



Specification Features

Construction

Durable post painted steel housing with white gloss finish and optional Frosted Polycarbonate lens.

Applications

Warehouses, Retail, Offices, etc.

Mounting

Surface mount or pendant mount with aircraft cable option.

Certification

DLC Premium, UL Listed. All components have UL certification.

Protection Grade IP20.

Warranty

7-year Limited Warranty. See warranty documentation for more information.

Input Voltage	120-277V
Input Frequency	50/60 Hz
Rated Wattage	See Performance Data
Delivered Lumens	See Performance Data
Efficacy	> 130 LPW
CRI	> 80
Available CCT	4000K, 5000K
Color Consistency	5-step MacAdam Ellipse
Rated Life	> 50,000 hours
Ambient Temp.	-20°C to 50°C
Power Factor	> 0.92
THD	< 20%
Dimming	0-10V Continuous (10-100%)



Ordering Options

Example: T1-SLED436-50

		CONTRACTOR OF THE CONTRACTOR O		Control of the Contro	
T1-SLED	4	36	- 50	[Blank]	[Blank]
Series TI-SLED	Form Factor (4) (4) 8 8'	Rated Wattage 4' 24 24W 36 36W 8' 48 48W 72 72W	Color Temp (40) (4000K) 50 5000K	Lens Difuser (Blank) Frosted	Dimming Blank 0-10V
	Optio	ons			
	EM ST Ste	ency Backup p-down Transformer 7-480V	OS Occup OSDL Occ. So Dayligh	ancy Sensor AC ensor w/ CI	ccessories C Aircraft cable suspension k RD Cord



T1-SLED Series

LED Strip

a

Performance Data

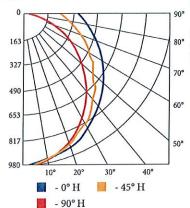
T1-SLED

				4000	OK	500	oK .
Lens Type	Form Factor	Catalog No.	Rated Wattage (W)	Delivered Lumens (lm)	Efficacy (Im/W)	Delivered Lumens (Im)	Efficacy (lm/W)
	4'	T1-SLED424	24	3,309.6	137.9	3,324	138.5
Frosted		T1-SLED436	36	4,712.4	130.9	4,741.2	131.7
Lens	8'	T1-SLED848	48	6,619.2	137.9	6,638.4	138.3
	3	T1-SLED872	72	9,424.8	130.9	9,475.2	131.6



Photometric Data

T1-SLED4/36-40



Coeffici	Coefficients of Utilization - Zonal Cavity Method						
	Effective Flo	oor Cavity Reflectan	ce: 20%				
RCC%	80	70	50				
RW%:	70 50 30 Q	70 50 30 Q	50 30 20				
RCR: 0	.90 .90 .90 .90	.88 .88 .88 .75	.84 .84 .84				
1	.80 .75 .71 .67	.77 .73 .69 .59	.70 .67 .64				
2	.72 .64 .58 .53	.69 .63 .57 .48	.60 .55 .51				
3	.65 .56 .49 .43	.63 .55 .48 .40	.52 .47 .42				
4	.59 .49 .42 .36	.57 .48 .41 .34	.46 .40 .35				
5	.54 .44 .36 .31	.53 .43 .36 .29	.41 .35 .30				
6	.50 .39 .32 .27	.49 .39 .32 .26	.37 .31 .26				
7	.46 .36 .29 .24	.45 .35 .28 .23	.34 .28 .23				
8	.43 .32 .26 .21	.42 .32 .25 .20	.31 .25 .21				
9	.40 .30 .23 .19	.39 .29 .23 .18	.28 .23 .19				
10	.38 .27 .21 .17	.37 .27 .21 .17	.26 .21 .17				

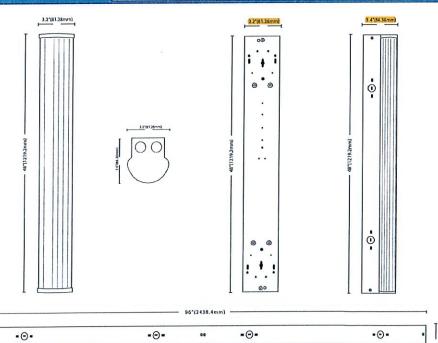
Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	748.0	17.2%	22.8%
0-40	1,230.4	28.3%	37.5%
0-60	2,237.2	51.4%	68.2%
60-90	1,043.9	24%	31.8%
0-90	3,281.1	75.4%	100%



Dimensions

T1-SLED4/SLED8





TPS - CHESTERFIELD, MO

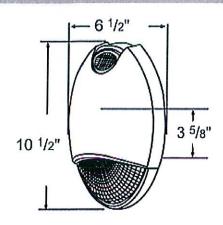
TYPE: X04

REL7LED OB

REL7LED

Outdoor LED Emergency Light w/ Sensor





DESCRIPTION

Shed safety and security around building exteriors without lifting a finger. The REL7LED Outdoor Emergency Light has a built-in photosensor, allowing for automatic operation at dusk and dawn. The compact, low-profile design and contemporary styling make it a great choice for any exterior decor.

DESIGN FEATURES

Construction

- · Durable, die-cast aluminum housing
- · Compact, low-profile design

Electrical

- 120V/277V
- · Photo sensor for automatic operation
- Long-life, maintenance-free, rechargeable high temperature Ni-Cad battery
- · 90 minutes operation during power failure
- Automatic low voltage disconnect protects agaisnt deep discharge
- · Long-life LEDs and electrical driver
- 50,000 hour projected life
- · Wet location rated
- 15W | 1300Lm | 5000K

Installation

 Simple one-person installation with included mouting hardware

Lens

· Gasketed UV resistant polycarbonate lens

Finish

Oil Rubbed Bronze or White finish

Available options

- Coldweather option: -17°C to 50°C (0°F to 122°F)
- Non-coldweather range: 0°C to 50°C (32°F to 122°F)

Certifications

CSA-us for wet location





TEL: 800.937.6925 | Fax: 800.207.9509 | www.rplighting.com



REL7LED 120V/277V

Specification & Ordering

Model #	Dimensions (H x W x D)	Watts	Lumens	Finish
REL7LED-OB	10.5" x 6.5" x 3.63"	15W	1,300 Lm	Oil Rubbed Bronze
REL7LED-OB-C Cold Weather Heatpad	10.5" x 6.5" x 3.63"	15W	1,300 Lm	Oil Rubbed Bronze
REL7LED-WH	10.5" x 6.5" x 3.63"	15W	1,300 Lm	White
REL7LED-WH-C Cold Weather Heatpad	10.5" x 6.5" x 3.63"	15W	1,300 Lm	White

	Example: REL7LED
Finish	Cold Weather Option
-OB : Oil Rubbed Bronze -WH : White	-C : Cold Weather Heatpad
	-OB : Oil Rubbed Bronze

