



690 Chesterfield Pkwy W • Chesterfield MO 63017-0760 Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

Architectural Review Board Staff Report

Project type: Site Development Section Plan

Meeting Date: November 10, 2011

From: Kristian Corbin, Project Planner

Location: Chesterfield Commons Six, Lot 5A

Applicant: THF & Herschman Architects, Inc.

Description: Chesterfield Commons Six, Lot 5A (Hhgregg): A Site Development

Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architects Statement of Design for a 2.43 acre "C8" Planned Commercial District—zoned property located south of Interstate 40 and west of the intersection of Boone's Crossing and

Chesterfield Airport Road.

PROPOSAL SUMMARY

The request is for a forty-five (45) foot tall 24,567 square foot retail structure located on Lot 5A of the Chesterfield Commons Six subdivision. The subject site is 2.43 acres in size and is zoned "C8" Planned Commercial District governed under the terms and conditions of City of Chesterfield Ordinance 2096. The exterior building materials will be comprised of brick, arriscraft stone and E.I.F.S. The roof will be comprised of a sloped roof membrane with parapet walls.

HISTORY OF SUBJECT SITE

Lot 5A is part of the Chesterfield Commons Six subdivision which was zoned "C8" Planned Commercial District in 1988 via St. Louis County Ordinance 13,933. In May of 2004, City of Chesterfield Ordinance 2096 repealed St. Louis County Ordinance 13,933 to permit Drive-Through restaurants and to increase the total allowable height of light fixtures.



STAFF ANALYSIS

General Requirements for Site Design:

Α.	Site	Re	lati	ons	aih

Addressed as Written \blacksquare Addressed with Modification \square Not Applicable \square

The subject site has a similar layout to the surrounding structures. Parking is located on the south side of the site with access to said parking lot from Arnage Drive.

B. Circulation and Access

Addressed as Written Addressed with Modification \square Not Applicable \square

Access to the site is via southern entrances off of Arnage Road on the south portion of the site. Staff is working with the petitioner to utilize different materials, textures and/or colors to improve pedestrian safety from the main parking area to the building entrance.

C. Topography

Addressed as Written Addressed with Modification \square Not Applicable \square

The subject site is primarily flat. Minimal changes in elevations are proposed.

D. Retaining Walls

Addressed as Written \square Addressed with Modification \square Not Applicable

No retaining walls are proposed for the subject site.



General Requirements for Building Design:

A. Scale

Addressed as Written Addressed with Modification \square Not Applicable \square

Amini's to the east of the proposed building was approved at fifty-three (53) feet six (6) inches in height while the strip retail structure and Bentley Car dealership to the west of the subject site are respectively twenty-seven (27) feet and thirty-one (31) feet two (2) inches in height. The Hhgregg structure is proposed to be at forty-five (45) feet at its tallest point with the majority being at twenty-nine (29) feet. The majority of the proposed structure on the subject site sits slightly higher than the structures to the west but will be lower than Aimini's.

B. Design

Addressed as Written Addressed with Modification \square Not Applicable \square

The overall design of the building is in keeping with the surrounding properties in having a comparable color palette and materials.

C. Materials and Color

Addressed as Written Addressed with Modification \square Not Applicable \square

The overall design of the building is in keeping with the surrounding properties having a comparable palette of materials and colors.

D. Landscape Design and Screening

Addressed as Written Addressed with Modification \square Not Applicable \square

Chesterfield Commons Six, Lot 5A (Hhgregg) Architectural Review Board November 10, 2011

Landscaping will be used to screen the service access at the rear of the building. The site will have a trash compactor within the building which is accessed via a disposal door. This door is proposed to be painted to match the surrounding masonry to blend in with the structure for screening purposes. Parapets will be utilized to screen all roof top equipment from adjacent properties.

Ε.	Signage Addressed as Written □ Addressed with Modification □ Not Applicable ■
	Signage is not submitted for approval at this time. Signage will be reviewed against the Sign Package for the site and will be approved by Staff.
F.	Lighting Addressed as Written Addressed with Modification □ Not Applicable □
	Decorative wall mounted fixtures are proposed to be placed along all four elevations and commercial lighting in the parking area. Each of these fixtures will

be reviewed against the City of Chesterfield Lighting Ordinance for compliance.

Use Type: Commercial and Industrial Architecture

Access: Service and loading areas are located in the rear of the development along with a trash compactor.

Exterior Elements: Addressed above in the Requirements for Building Design.

Landscaping and Screening: Building equipment will be screened by parapets. Service and loading areas are located at the rear of the building screened by vegetation.

Scale: Addressed above in the Requirements for Building Design.

Site Design: Equipment and utilities are located in areas not visible from public streets, surface parking lots and neighboring properties.

DEPARTMENTAL INPUT

Staff is reviewing the Site Development Section Plan, Landscape Plan, Lighting Plan and Architectural Elevations for conformance with the City of Chesterfield Ordinance 2096, and all other applicable Zoning Ordinance Requirements. Staff requests action on the Site Development Section Plan for Chesterfield Commons Six, Lot 5A (Hhgregg).

MOTION

The following options are provided to the Architectural Review Board for consideration relative to this application:

1) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan and Architectural Elevations for Chesterfield Commons Six, Lot 5A (Hhgregg) as presented, with a recommendation for approval (or denial) to the Planning Commission."

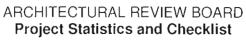
Chesterfield Commons Six, Lot 5A (Hhgregg) Architectural Review Board November 10, 2011

2) "I move to forward the Site Development Section Plan, Landscape Plan and Architectural Elevations for Chesterfield Commons Six, Lot 5A (Hhgregg) to the Planning Commission with the following recommendations..."

Attachments

1. Architectural Review Packet Submittal





10-26-11



Date of	First Comment Letter Received from the City of Chesterfield									
	Title: hhgregg Location: 17383 Chesterfield Airport Road									
	Summit Realty Leasing & Der: Management Corp. Architect: Herschman Architects, Inc. Engineer: CEDC									
	CT STATISTICS: 45'-0" Element cite (in acros): 2 43 Total Square Footage: 24.567 Ruilding Height: 22'-0" Wall									
Size of site (iii acres) Total Square rootage Building height										
Propos	ed Usage: Retail									
Exterio	r Building Materials: Brick, Arriscraft stone, E.I.F.S.									
Roof Ma	aterial & Design: Sloped roof membrane system to rear of building with parapet walls.									
	ng Material & Design: Parapet Walls									
	tion of art or architecturally significant features (if any): See Architectural write-up attached									
Descrip	mon of art of architecturally significant features (if any):									
	_									
ADDITIO	ONAL PROJECT INFORMATION:									
Checkli	st: Items to be provided in an 11" x 17" format									
	Color Site Plan with contours, site location map, and identification of adjacent uses.									
	Color elevations for all building faces.									
	Color rendering or model reflecting proposed topography.									
	Photos reflecting all views of adjacent uses and sites.									
	Details of screening, retaining walls, etc.									
	Section plans highlighting any building off-sets, etc. (as applicable)									
	Architect's Statement of Design which clearly identifies how each section in the Standards has been addressed and the intent of the project.									
	Landscape Plan.									
	Lighting cut sheets for any proposed building lighting fixtures. (as applicable)									
	Large exterior material samples. (to be brought to the ARB meeting)									
	Any other exhibits which would aid understanding of the design proposal. (as applicable)									
	Pdf files of each document required.									

October 19, 2011

Re: Chesterfield Commons Six - HH Gregg

Chesterfield, Missouri

ARCHITECTS STATEMENT

The following items identify how the City of Chesterfield Architectural Review Board guidelines are being addressed for the above mentioned project:

INTRODUCTION

The Chesterfield Commons development has provided the City of Chesterfield with quality business and commercial development in the Chesterfield Valley. Summit Realty brings you a new addition to the Chesterfield Commons development. HH Gregg will be located on Lot 5 of Chesterfield Commons Six which is located directly West of Amini's. The building will imitate the architectural style and scale of the surrounding Chesterfield Commons Six development. The site is located on the North side of Chesterfield Airport Road and backs up to the Highway 40 Right-of-way.

The new HH Gregg building will provide approximately 24,500 S.F. of new Retail space. Vehicular movement to and through the site to parking and building entries is convenient, expedited by the inner development drive, Arnage Road.

GENERAL REQUIREMENTS FOR SITE DESIGN

A. Site Relationships

The site consists of 2.43 acres and is a flat parcel of land. Finish grading will be required to prepare the building pad, but there will not be a significant change in the pad elevation. No retaining walls will be required to tie grades to adjacent properties. The building's general orientation is intended to make its frontage and entries plainly visible to the surrounding access roadways while using landscaping and screen walls to screen its service and trash enclosures from the neighboring roadways. Wide walkways are included to establish safe, recognizable and convenient pedestrian access to the building's entry doors.

B. <u>Circulation System & Access</u>

Vehicular and pedestrian patterns are simple and direct. Vehicular access is provided via the interior development drive Arnage Road and cross access with Amini's to the East. The building is centrally located in the parking lot and the parking field is kept as close as possible to the entry elements. This eliminates the need for pedestrians' path of travel to cross multiple vehicular drive aisles to access the building. Walkways are provided to separate pedestrians from vehicular movements whenever possible. The radii on the proposed pavement areas are such that emergency, delivery and waste hauling vehicles can easily access and circulate through the site. The development is not on the City Bikeway and we have not incorporated an internal bike circulation system. Bikes may be parked in non-handicap spaces at near the entrance to the building, which is highly visible. Landscaped areas are provided adjacent to the building as well as in the parking surface itself, establishing a visual landscape foreground for each of the building's elevations.

C. Topography

- Due to the flatness of the development it is not possible to incorporate berms or other forms of topography to screen each portion of the development. All surrounding areas are commercial and of similar use.
- 2. Minimal changes will be made to the existing topography of the site.
- 3. All grade changes will be soft, smooth, and pleasing to the eye. There will not be any abrupt changes in grade.

D. Retaining walls

- 1. There are not any retaining walls proposed for this project.
- 2. There are not any retaining walls proposed for this project.
- 3. There are not any retaining walls proposed for this project.
- There are not any retaining walls proposed for this project.
- 5. There are not any retaining walls proposed for this project.

GENERAL REQUIREMENTS FOR BUILDING DESIGN

A. Scale

Building elements are highly compatible in scale and general color appearance with the neighboring buildings. The main objective is to create an attractive and clear expression of the building through the use of inset glass and canopy projections that will attract favorable attention to itself with its unique design while creating through common materials continuity with the adjacent buildings.

B. Design

- 1. The building incorporates a combination of masonry, textured paint coatings, and glass materials to create variety in the design's composition, while maintaining a strong architectural rhythm horizontally and vertically across the building's elevations.
- Landscaping will be used in the landscape islands to break up the building façade to avoid linear repetitiveness.
- The building utilizing some of the corporate trade dress colors coupled with the traditional Chesterfield Commons materials to provide some identity but logos and other franchise designs have been avoided.
- 4. All building elevations will be architecturally enhanced to clearly define the architectural unity of the constituent building and so that each elevation is presentable to public view. Masonry wainscoting, horizontal banding and texture changes are utilized to articulate the facades particularly at street level.
- 5. There are not any sculptures or other art elements currently proposed.
- 6. This building is responsive to energy conservation by the use of insulating material throughout as well as the deep overhangs of the front façade protect the glass storefront.

- 7. The use of concrete and masonry which are recyclable materials are used as environmentally conscious building techniques and materials.
- 8. Deep entry recesses and roof overhangs are used to cover and articulate the building entry.
- 9. There are not any plans for temporary barrier walls.
- 10. Rooftop units will receive screening from parapet walls so they are not visible from adjacent rightof-ways or properties.

C. Materials and Colors

The design, general scale, and orientation of the buildings are intended to reinforce and create a cohesive visual relationship between the neighboring Chesterfield Commons development and this proposed development. The building incorporates a combination of masonry, textured paint, and glass materials to create variety in the design's composition, while maintaining a strong architectural rhythm horizontally and vertically across the building's elevations.

D. Landscape Design and Screening

The Landscape design has been prepared by Landscape Technologies to tie into the overall development landscaping. A mixture of deciduous and evergreen trees and shrubs has been used to provide color and interest all year round. All landscape beds are protected from motor vehicles by raised concrete curbs. Service access to the buildings is screened by landscaping and masonry screen walls and is located at the least visible corner of the building.

E. Signage

- 1. It is understood that signage will require a separate review. The building sign location has been integrated into the building design.
- It is understood that signage will require a separate review. The project consists of new construction.

F. Lighting

It is understood that the site lighting is not reviewed as part of the ARB process, however the lighting proposed complies with the City of Chesterfield requirements. There is minimal spill over onto adjacent right-of-ways and all exterior fixtures have fully cut-off lenses.

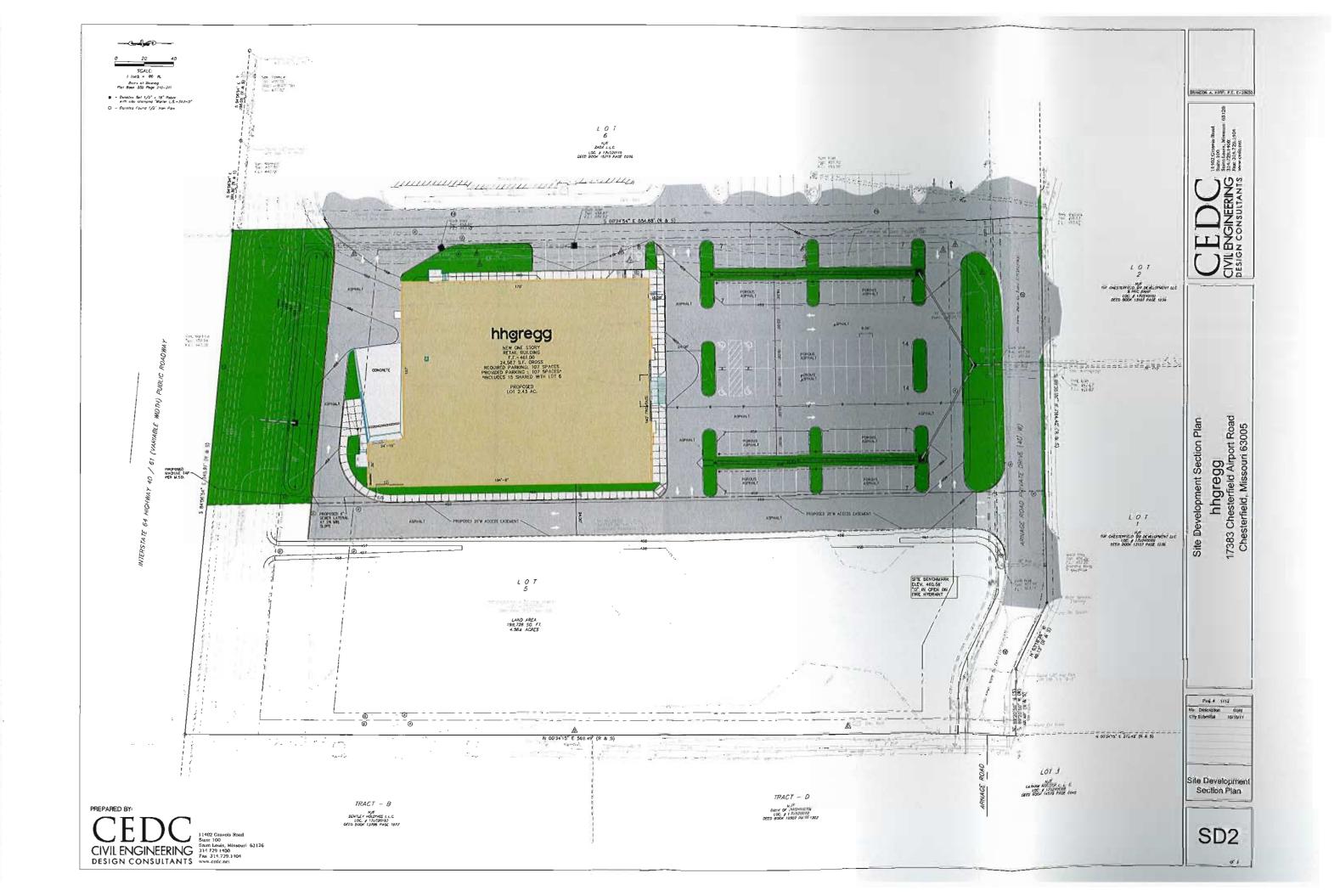
SPECIFIC REQUIREMENTS FOR THE CHESTERFIELD VALLEY

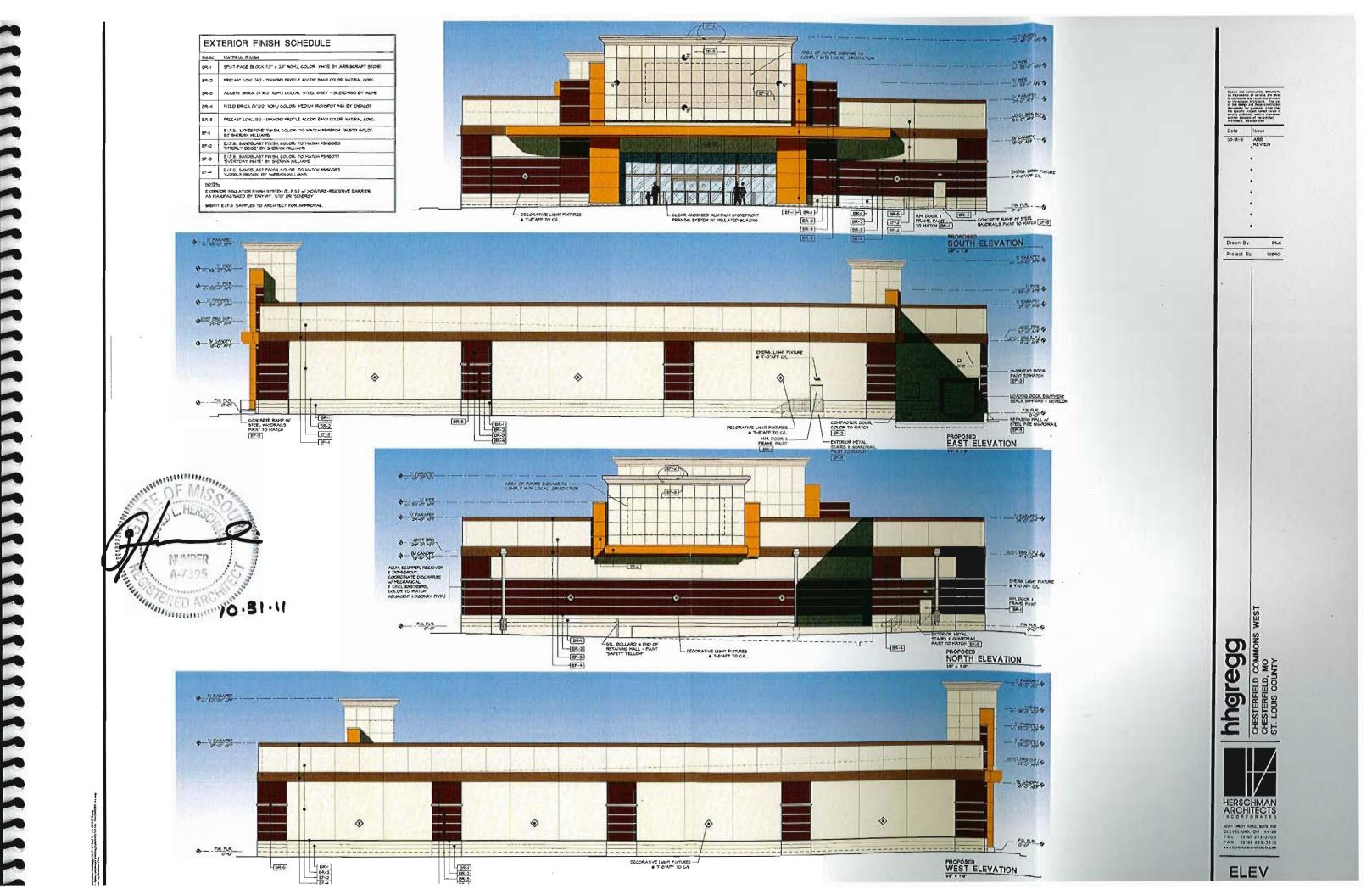
The materials and architectural treatments are utilized on all sides of the building. The building faces away from Highway 40 and the main parking field is located on the south side of the building away from the Highway 40 Right-of-way. Trash and storage will be in the rear of the building and will be screened with masonry screen walls to match the building. All new utilities will be installed underground.

CONCLUSION

In conclusion, we feel that this site and building design results in a wonderful addition to the development of Chesterfield Valley and is an exciting addition to the commercial environment in the City of Chesterfield.

Respectfully Submitted by: TR,i Architects





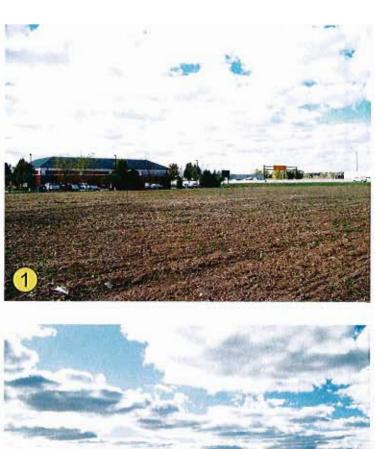




C Copyright

hhgregg at CHESTERFIELD COMMONS

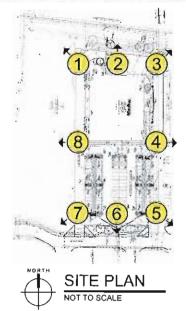
Architects of the Possible⁶ 9812 Manchester Road St. Louis, Missouri 63119 CHESTERFIELD, 11-073 MISSOURI 10-28-11











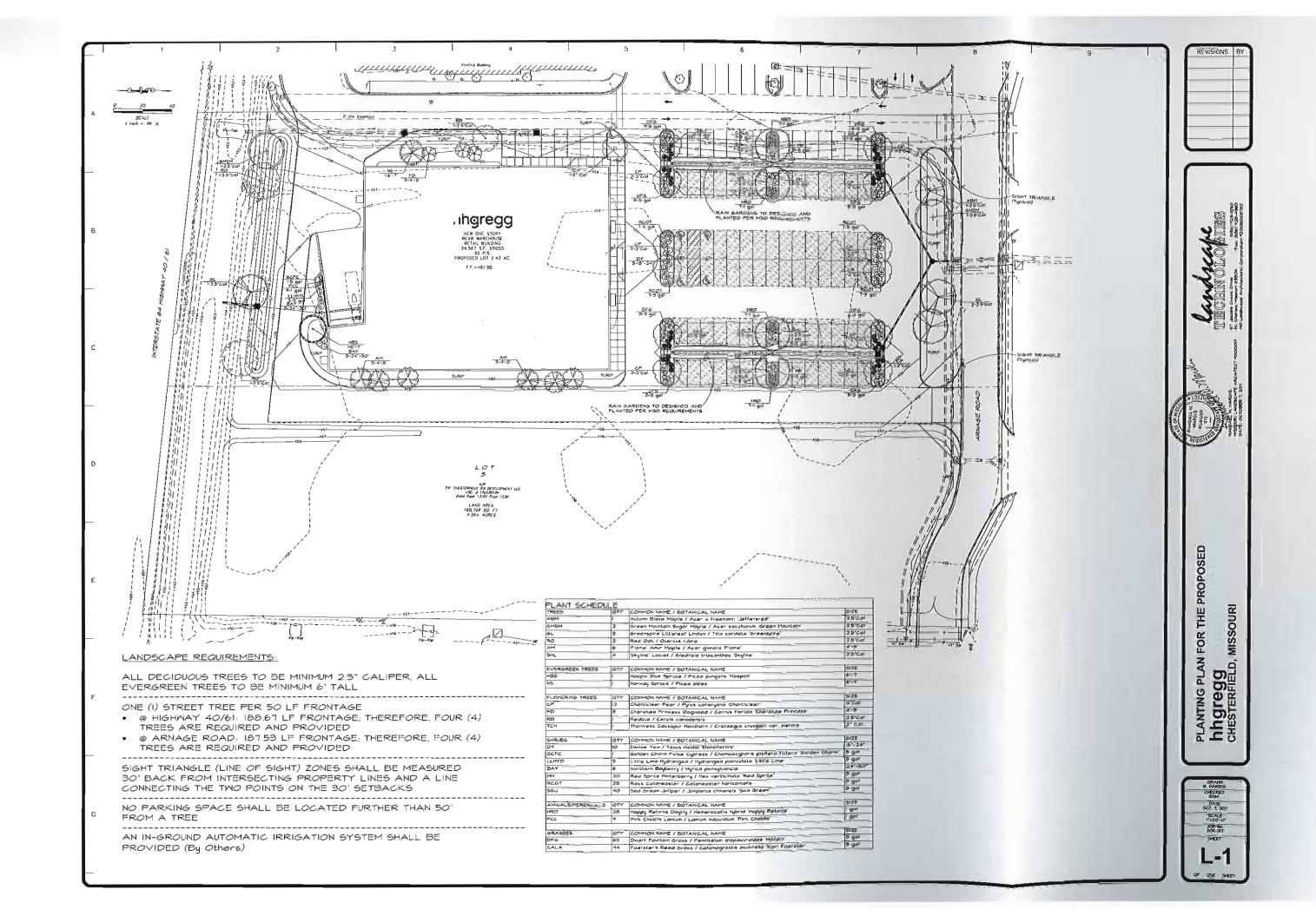


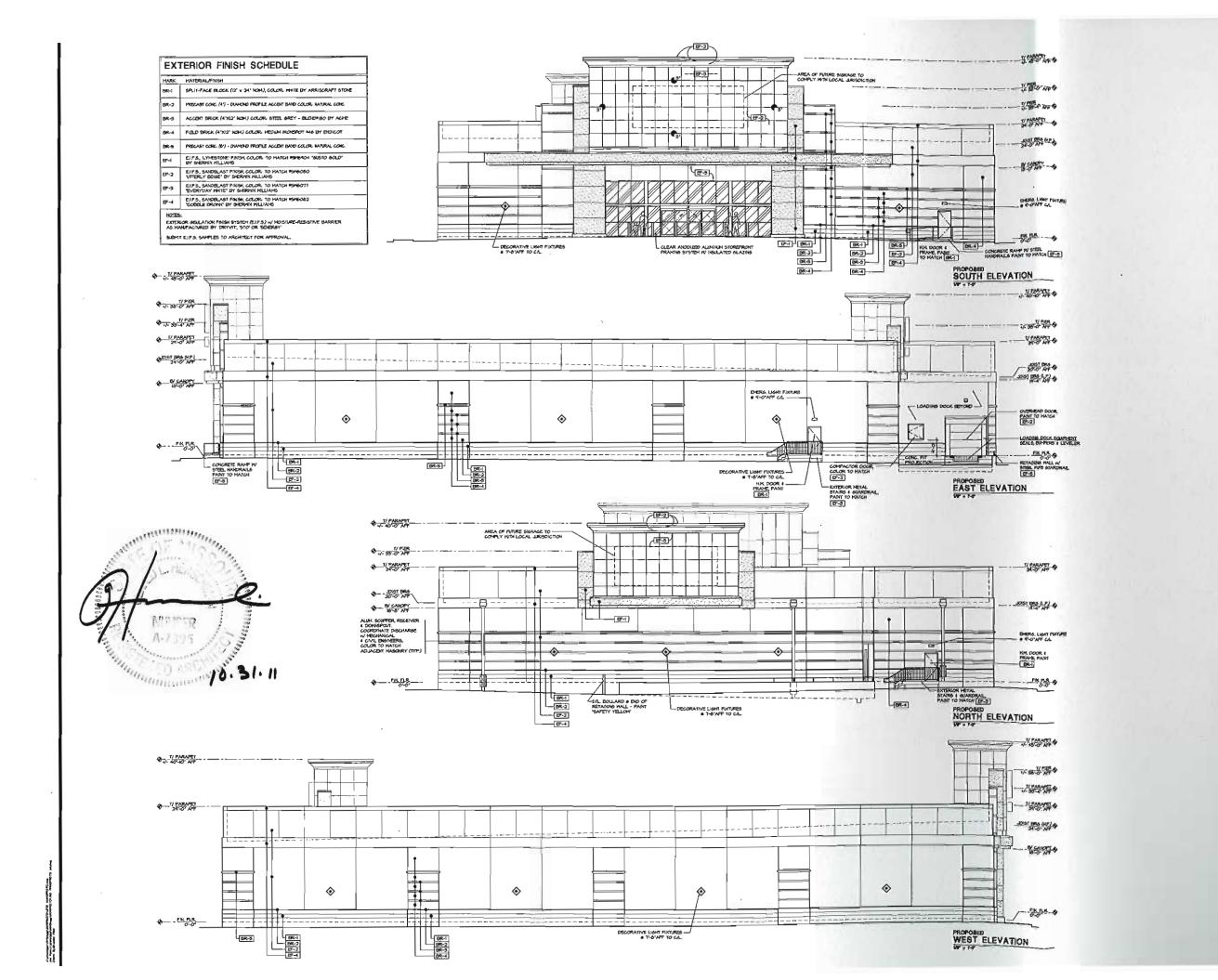






hhgregg at CHESTERFIELD COMMONS

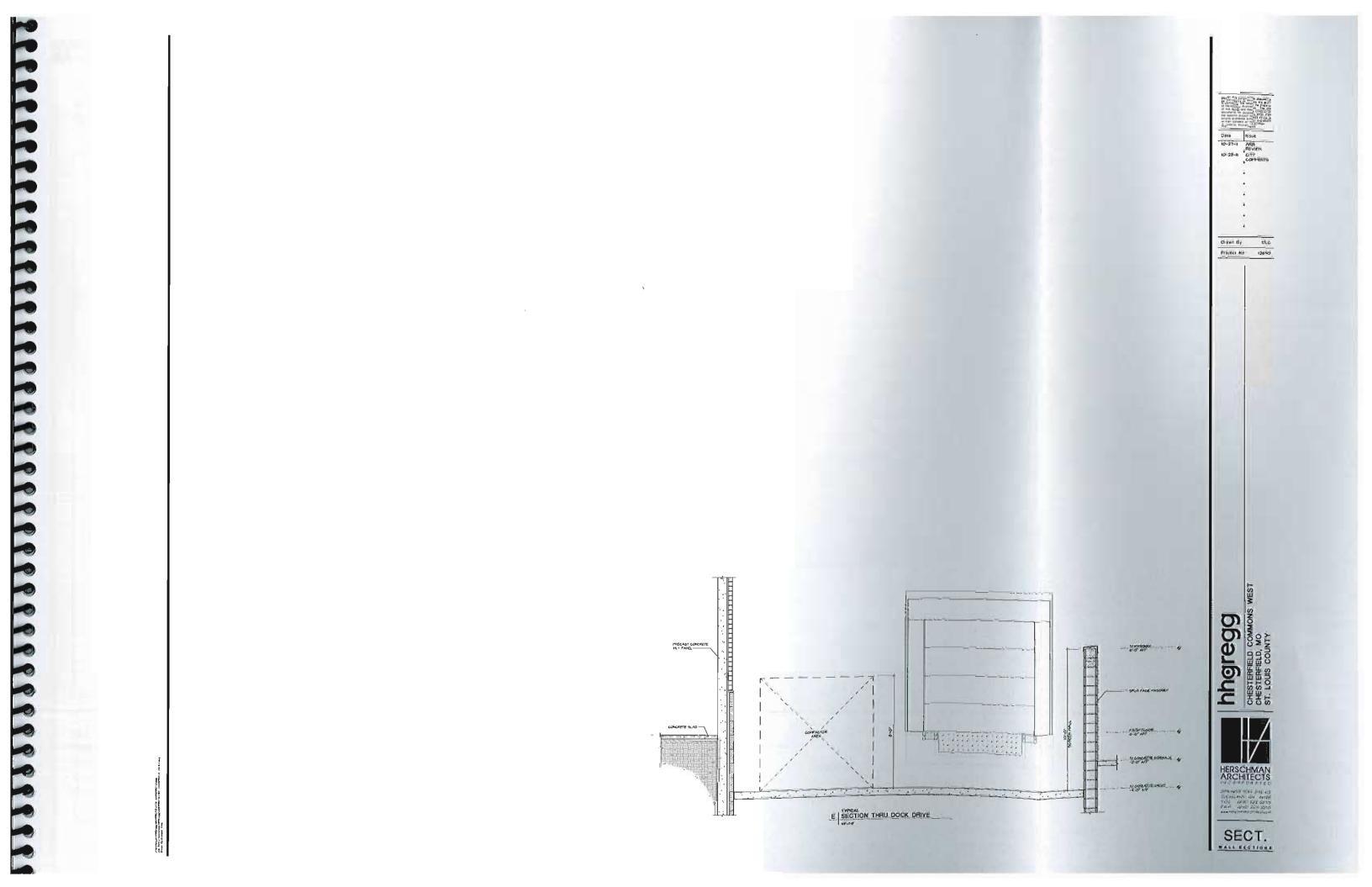




Orawn By: Project No.: 12640

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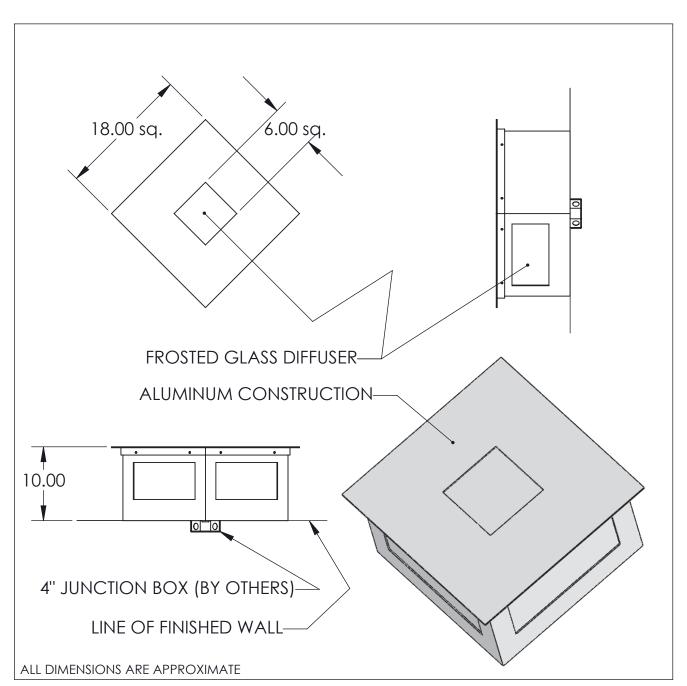




TMS LIGHTING TMSLIGHTING 247A SUMMERLEA ROAD BRAMPTON ONT. CANADA L6T4E1 www.tmslighting.com customerservice@tmslighting.com

TMS LIGHTING - LUMINAIRE APPROVAL DRAWING Q17088 CUSTOM WALL SCONCE

TYPE: REV.4



GENERAL SPECIFICATIONS

Body Assy: Aluminum Construction Finish: F31 Silver Metallic

Diffuser: Frosted Glass Lampholder: Medium Base

Ballast: Integral Electronic HPF 120/277V

Lamps: 1x70W MH (Supplied)

Mounting: Wall

Fixture for Outdoor Application

PROPRIETARY & CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF TMS LIGHTING LTD. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF TMS LIGHTING IS STRICTLY PROHIBITED.



INTENDED USE

For entrances, stairwells, corridors and other pedestrian areas.

CONSTRUCTION

Rear housing is rugged, corrosion-resistant, die-cast aluminum. Front cover is one-piece UV-resistant injection molded polycarbonate, internally painted. Captive external hardware is specially treated for corrosion resistance and includes slotted hex-head and tamperproof fasteners.

Dark bronze (DDB) corrosion-resistant polyester powder.

OPTICAL SYSTEM

One-piece die-formed reflector is diffused aluminum. Refractor is clear UV stabilized polycarbonate, providing IES cutoff distribution and maximum lateral light output. Front cover is sealed and gasketed to inhibit the entrance of outside contaminants.

Metal halide ballasts are high reactance, high power factor. HPS ballasts are reactor normal power factor. All HID ballasts are copper wound, 100% factory tested and UL listed. Porcelain, horizontally oriented medium-base socket with copper alloy, nickel-plated screw shell and center contact. UL listed 660W, 600V and 4kV pulse rated.

Compact fluorescent ballasts are magnetic normal power factor (22DTT, 28DTT) or multi-volt (120-277) electronic high power factor (26DTT, 26TRT, 32TRT and 42TRT) (Requires 4-pin lamp). UL Listed. Two-pin (22DTT and 28DTT) or four-pin (26DTT, 26TRT, 32TRT and 42TRT) positive latching thermo-

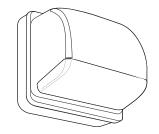
All components are heat-sinked directly to the cast housing for maximum heat dissipation (For 50 hertz availability, consult factory).

INSTALLATION

Mount to any vertical surface or to a 4" round square outlet box. Back access through gasketed slot. Top wiring access through 1/2" threaded conduit entry. (Through-wiring requires use of a conduit tee). Photocells are field-installable.

UL listed for wet locations. IP65 rated. UL Listed to US and Canadian safety standards (see Options). NOM Certified.

Catalog Number TWAC 100M 277 DMB LPI Notes Type M



Cutoff Mini Wall-Packs

TWAC

METAL HALIDE 50-100W

HIGH PRESSURE SODIUM 35-100W

COMPACT FLUORESCENT 22-28DTT, 26-42TRT



Consistent with LEED® goals & Green Globes™ criteria for light pollution reduction

LPI

Lamp

Lamp included

(standard)

Less lamp

Example: TWAC 50M 120 LPI

L/LP

Specifications

Height: 10" (25.4cm) 11-1/2" (29.2cm) Width: 8-15/16" (22.7cm) Depth: Weight: 10 lbs. (4.53kg)

DMB

ORDERING INFORMATION

Choose the boldface catalog nomenclature that best suits your needs and write it on the appropriate line. Order accessories as separate catalog numbers (shipped separately). 277

Voltage

120

2082

240²

277

347

TB3,4

MV0LT4

Wa	ttage
Metal halide	!
50M 70I	M 100M
<u>High pressu</u>	<u>re sodium</u>
35S	70S
50S	100S
Compact flu	orescent
22DTT1	26TRT ¹
26DTT1	32TRT ¹
28DTT1	42TRT ¹
	Metal halide 50M 70I High pressu 35S 50S Compact flu 22DTT' 26DTT'

	Options								
Shipped installed in fixture									
SF	Single fuse (120, 277, 347V) ⁵								
DF	Double fuse (208, 240V) ⁵								
GMF	Internal slow-blow fusing ⁴								
XHP High power factor ballast ⁴									
EC Emergency circuit ^{7,8}									
DC12	Emergency circuit 12 volt (35W lamp included std.)9								
DC2012	Emergency circuit 12 volt (20W lamp included)9								
2DC12	Emergency circuit 12 volt								

volt (2 35W lamps included std.)9 2DC2012 Emergency circuit 12 volt (2 20W lamps included)9 QRS Quartz restrike system7,8

CR Enhanced corrosion-resistance Non-stick protective coating10 CSA Listed and labeled to comply with Canadian Standards NOM NOM Certified (consult factory) PE Photocell Architectural colors (optional)

DNA Natural aluminum DRI Black DMB Medium bronze

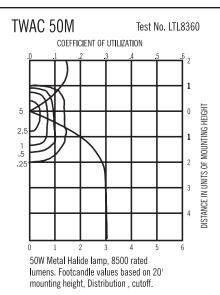
DWH White **DSS** Sandstone

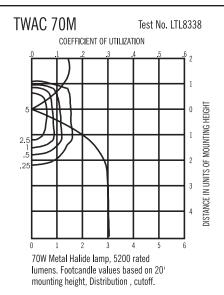
- 1 Compact fluorescent sources only available with 120, 277 or MVOLT.
- 2 Consult factory for availability in Canada.
- 3 Optional multi-tap ballast (120,208,240,277V) In Canada 120, 277, 347V; ships as 120/347.
- Only available with HID sources.
- Only available with compact fluroescent sources. Not available with MVOLT.
- 6 Not available with multi-tap ballast or compact fluorescent sources.
- 8 Quartz lamp wattage not to exceed ballast wattage rating
- Not available with QRS, EC or NOM.
- 10 Black finish on housing only.

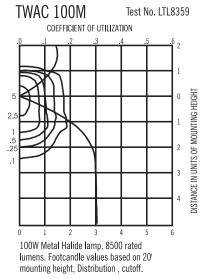
Accessories

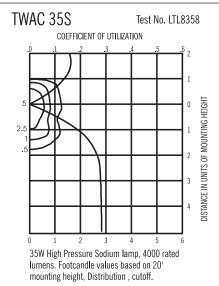
Order as separate catalog number **RK1 PEB1** Photocell kit (120V only) **RK1 PEB1 CSA** Photocell kit (120V only) **RK1 PEB2** Photocell kit (208, 240 or 277V) **RK1 PEB3 CSA** Photocell kit (347V) **TWAWG** Wireguard

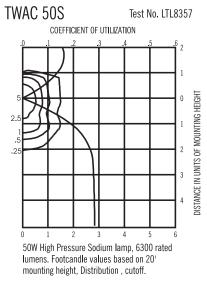
TWAC Cutoff Wall-Pack

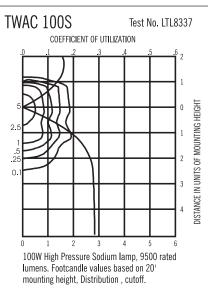


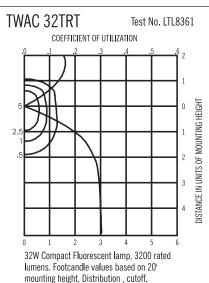


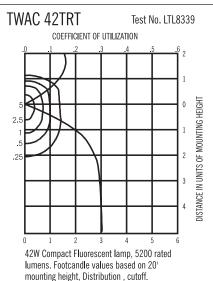












Mounting Height Correction Factor
(Multiply the fc level by the correction factor)

8 ft. = 6.25
10 ft.= 4.00
12 ft.= 2.78
15 ft.= 1.78



An**≪Acuity**Brands Company

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JUNO° lighting

8" METAL HALIDE DOWNLIGHT

Project: hhgregg
Fixture Type: N

Location: M8 100 8842WH

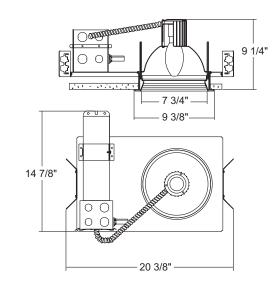
Contact/Phone:

IFNSFD APERTURE

Medium Base Metal Halide 50/70/100W ED17/BD17, Magnetic Ballast

M8-(50,70,100)-8840, -8842

DIMENSIONS



8 1/2" CEILING CUTOUT

PRODUCT SPECIFICATIONS

Lamp One 50W, 70W, or 100W ED17/BD17 medium base Metal Halide lamp.

Socket Housing Medium base, glazed porcelain, 4kV pulserated socket with nickel-plated copper screw shell • Extruded aluminum housing with heat dissipating fins.

Reflector .050" clear diffuse aluminum reflector.

Baffle Aluminum, stepped baffle in matte black.

Lens Prismatic or Fresnel glass lens.

Trim Ring White baked enamel, integral with baffle. • Trim fastens to reflector with two torsion springs.

Ballast Pre-wired, encased and potted 60 Hz ballast • Dual tap for 120V and 277V or 120V and 347V (50W 347V is single tap) • All ballasts are high power factor, high reactance circuits with integral ignitor and auto reset thermal protection • Minimum starting temperature is -20° F (-30° C) • Ballast can be replaced with removal of a single screw.

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

INSTALLATION

Mounting Bracket Housings are equipped with vertically adjustable mounting brackets that accept ½" conduit or "C" channels (HB-26 or HB-50) or linear flat bars (LB-27).

Junction Box Pre-wired, oversized junction box • U.L. listed/CSA certified for through-branch wiring, maximum 8 No. 12 AWG 90° C branch circuit conductors (4 in, 4 out) • Junction box provided with removable access plates, (5) ½" and (5)¾" knockouts and ground wire.

Mounting Frame 18-gauge, die-formed galvanized steel • 173/4" L x 11½" W, excluding mounting brackets • Rough-in section (ballast, junction box, mounting frame, socket housing) fully assembled for ease of installation.

Labels Product thermally protected against improper use of insulation • Union made, AFL-CIO • U.L. listed and CSA certified for damp locations.

PRODUCT CODES

Catalog Number	Trim	Wattage and Lamp				
M8-50-8840-WH	Prismatic w/Baffle	50W MH ED17/BD17				
M8-70-8840-WH	Prismatic w/Baffle	70W MH ED17/BD17				
M8-100-8840-WH	Prismatic w/Baffle	100W MH ED17/BD17				
M8-50-8842-WH	Fresnel w/Baffle	50W MH ED17/BD17				
M8-70-8842-WH	Fresnel w/Baffle	70W MH ED17/BD17				
M8-100-8842-WH	Fresnel w/Baffle	100W MH ED17/BD17				

ENGINEERING DATA

	50W	50W	70W	70W	100W	100W
	120/277	120/347	120/277	120/347	120/277	120/347
ANSI #	M-110	M-110	M-98	M-98	M-90	M-90
Input AMPS						
Operating	0.65/0.30	0.60/0.20	0.85/0.37	0.85/0.30	1.10/0.48	1.10/0.38
Starting	0.80/0.35	0.45/0.15	1.25/0.55	1.15/0.40	2.20/0.95	2.20/0.75
Open Circuit	1.15/0.50	1.60/0.55	1.60/0.75	1.70/0.70	2.40/1.05	2.40/0.85
Input Watts	72	67	94	94	125	125
Nominal Open						
Circuit Voltage	254	277	230	240	277	277
Fuse Rating Amps	3/2	4/2	4/2	5/2	6/3	6/2
Sound Rating	В	В	В	В	В	В

ACCESSORIES

/ 100-00 0 111-	
Catalog No.	Description
HB-26	26" C-Channel Bar Hangers w/ T-Bar Clips (set of 2)
HB-50	50" C-Channel Bar Hangers w/ T-Bar Clips (set of 2)
LB-27	27" Linear Flat Bars (set of 2)

To order, specify catalog number

OPTIONS

0	9
Catalog No.	Description
CN	120/347V (Except 50W)
F	Fusing
Q	Quartz Restrike (100W max)

To specify, add to catalog number.





PRISMATIC PHOTOMETRIC REPORT

Test Report #: FB96120 Catalog No: M8-100-8840-WH Total Luminaire Efficiency: 53.1% Luminaire Spacing Criterion: .9

Luminaire: Prismatic Lens with Baffle

Lamp: One MXR100/C/U/MED lamp rated @ 8500 lumens

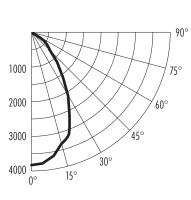
8" METAL HALIDE DOWNLIGHT

LENSED APERTURE

Medium Base Metal Halide 50/70/100W ED17/BD17, Magnetic Ballast

M8-(50,70,100)-8840, -8842

CANDLEPOWER DISTRIBUTION (Candelas)



Degrees Vertical	Average
0	3821
5	3789
10	3631
15	3354
20	3006
25	2597
30	2088
35	1576
40	1107
45	747
50	504
55	304
60	187
65	124
70	78
75	29
80	0
85	0
90	0
Multiplier: 50W	/39; 70W62

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	2514	29.6	55.8
0 - 40°	3505	41.2	77.7
0-60°	4356	51.2	96.6
0 - 90°	4510	53.1	100.0
90 -180°	0	_	_
0-180°	4510	53.1	100.0

COEFFICIENTS OF UTILIZATION – % (Zonal Cavity Method) Effective Floor Cavity Reflectance 20% (ρ fc)

	$ ho_{f cc}$		80			70			50			30			10		0
RCR	$ ho_{\mathbf{w}}$	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
0		63	63	63	62	62	62	59	59	59	56	56	56	54	54	54	53
1		58	57	55	57	56	54	55	54	53	53	52	51	51	50	50	49
2		53	51	49	52	50	48	50	49	47	49	47	46	47	46	45	44
3		49	46	43	48	45	43	47	44	42	45	43	41	44	42	44	40_
4		45	41	39	44	41	39	43	40	38	42	40	38	41	39	34	36
5		41	38	35	41	38	35	40	37	35	39	36	34	38	36	34	33
6		38	35	32	38	35	32	37	34	32	36	34	32	36	33	31	30
7		36	32	29	35	32	29	35	31	29	34	31	29	33	31	29	28
8		33	30	27	33	30	27	32	29	27	32	29	27	31	29	27	26
9		31	28	25	31	27	25	30	27	25	30	27	25	29	27	25	24
10		29	26	23	29	26	23	28	25	23	28	25	23	28	25	23	22

hocc – Ceiling Cavity Reflectance (%) how – Wall Reflectance (%)

INITIAL FOOTCANDLES

One Unit, 100 Watt, 63.5° Beam

Footcandles Beam Center	Beam Diameter	Distance to Illuminated Plane (Feet)
106.1	7.4′	6
59.7	9.9′	8
38.2	12.4′	10
26.5	14.8′	12
19.5	17.3′	14
14.9	19.8′	16
11.8	22.3′	18
9.6	24.9′	20
	106.1 59.7 38.2 26.5 19.5 14.9	Beam Center Diameter 106.1 7.4' 59.7 9.9' 38.2 12.4' 26.5 14.8' 19.5 17.3' 14.9 19.8' 11.8 22.3'

(Beam Edge defined as 50% of Maximum Nadir Candlepower)

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array)

Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR4	RCR8
5.0′	197	153	112
6.0′	137	106	78
7.0′	101	78	57
8.0′	77	60	44
9.0′	61	47	35
10.0′	49	38	28
12.0′	34	27	19



JUNO° lighting



INTENDED USE

For building- and wall-mounted applications.

CONSTRUCTION

Rugged, die-cast, single-piece aluminum housing. Die-cast doorframe has a 1/8" thick tempered glass lens. Doorframe is fully gasketed with one-piece solid silicone.

FINISH

Standard finish is **new** textured dark bronze (DDBT) corrosion-resistant polyester powder finish, with other architectural colors available.

OPTICAL SYSTEM

Segmented reflectors for superior uniformity and control. Medium throw (MD) full cutoff distribution available.

ELECTRICAL SYSTEM

Fluorescent ballast is Class P, electronic, high power factor, <10%THD, with starting temperature of 0°F (-18°C). Fluorescent socket is high temperature thermoplastic with an integral lamp retention clip.

INSTALLATION

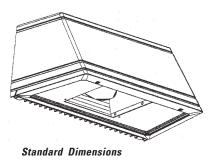
Universal mounting mechanism with integral mounting support allows fixture to hinge down. Bubble level provides correct alignment with each installation.

LISTING

UL Listed (standard). CSA Certified (see Options). Suitable for wet locations (damp location listed in lens-up orientation). WLU option offers wet location listing in up orientation (see Options). IP65 Rated.

TWAC 100M 277 DMB LPI Notes Type

Decorative Wall-Mounted Lighting



Length: 16.25 (41.2)

Overall Height: 7.25 (18.4)

Max. Weight: 30 lbs (13.6 kg)

Depth: 9.13 (23.2)

1101

COMPACT FLUORESCENT

26DTT 2/26DTT 26TRT 2/26TRT

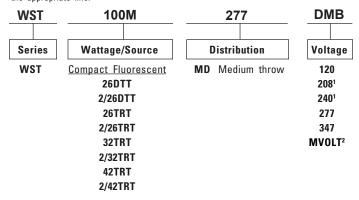
2/26TRT 32TRT 2/32TRT

42TRT 2/42TRT

All dimensions are inches (centimeters) unless otherwise specified.

ORDERING INFORMATION

Choose the boldface catalog nomenclature that best suits your needs and write it on the appropriate line.



Example: WST 42TRT MD 120 LPI DNAT

Coptions Shipped installed in fixture GMF Internal slow-blow fusing³ EC Emergency circuit (25W max 120V, incandescent lamp included) Shipped separately WSBBW Surface-mounted back box UT5 Uptilt 5 degrees WSTWG Wire guard³

DC12 Emergency circuit 12 volt (35W lamp included std.)⁴

2DC12 Emergency circuit 12 volt (2, 35W lamps included)⁴

WSTVG Vandal guard⁹

Architecutral colors¹⁰

Standard textured colors

35W lamp's included)⁴

DC2012 Emergency circuit 12 volt (20W lamp included)⁴

DDBT Dark bronze (std.)

DSST Sandstone

DSST Sandstone
DNAT Natural aluminum

DWHG White
DBLB Black

min. operating temp.)^{3,5} **ELDWC** Emergency battery pack (0° min. operating temp.)^{3,5,6} **DBNH** Bronze

ELDWR Fixture wired for Bodine® B30 remote battery pack (32° min. operating temp.)^{3,7} DSPD Dark gray DSPJ Light gray DSPE Green

ELDWRPS Fixture wired for PS1400 or PSDL3 remote battery pack (32° DSPF Rust

PSDL3 remote battery pack (32° DSPF Rust min. operating temp.)3.7.8 DSPH Red

CR Enhanced corrosion resistance Striping

(black only) **PE** Photoelectric cell-button type^{3,9}

PE Photoelectric cell-button type^{3,9}
WIII Wet location door for up

CRT Non-stick protective coating

WLU Wet location door for up orientation

DFL Diffusing lens

2DC2012 Emergency circuit 12 volt (2, 20W lamps included)⁴

ELDW Emergency battery pack (32°

DFL Diffusing lens

LPI Lamp included (std)

L/LP Less lamp
CSA CSA Certified

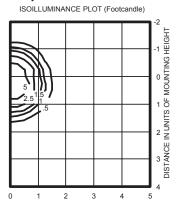
DSPH Red
Striping
SDDB Dark bronze
SDWH White
SDBL Black
SDNA Natural aluminum
SDTG Tennis green
SDBR Bright red
SDBUA Dark blue
SDGYM Gray
SDYLB Yellow

NOTES:

- 1 Consult factory for availability in Canada.
- 2 Optional multi-volt electronic ballast capable of operating on any line voltage from 120-277V.
- 3 Not available with MVOLT; must specify voltage.
- 4 Not available with GMF.
- 5 Not available with 2/32TRTor 2/42TRT.
- 6 Not available with 2/26DTT or 2/26TRT.
- 7 Not available with 2/42 TRT.
- 8 Pilot light/test switch mounting plate included. See lamp compatibility chart on back page.
- 9 Must be ordered with fixture; cannot be field installed.
- 10 Additional architectural colors available; see www.lithonia.com for more information.

Outdoor Sheet #: WST-CF BM - 135

WST 2/42TRT MD TEST NO: LTL11108



2/42TRT lamp, horizontal lamp orientation Footcandl e values based on 12' mounting height, 3200 rated lumens (per lamp). Luminaire Efficiency: 49.6%

Lamp	Initial Lumens	N	lounting	Height	
Compact Fluorescent		10'	12'	14'	16'
42W TRT	3,200	0.72	0.5	0.37	0.28
(2) 42W TRT	6.400	1.44	1.0	0.73	0.56

Emergency Battery Pack Lamp Compatibility								
Lamp Options								
(# of lamps/wattage)	ELDW	ELDWC	ELDWR	ELDWRPS				
26DTT (one lamp)				-				
2/26DTT								
26TRT (one lamp)								
2/26TRT								
32TRT (one lamp)								
2/32TRT								
42TRT (one lamp)								
2/42TRT								



INTENDED USE — Provides a minimum of 90 minutes illumination for the rated wattage upon loss of AC power. Ideal for applications requiring low-profile, attractive emergency lighting.

CONSTRUCTION — Compact, low-profile, architectural design with die-cast aluminum housing that has a contemporary brushed nickel-plated finish. Other available finishes are texturized polyester powder coat paint in white, black and dark bronze. All finishes can be painted in the field to match the wall color of choice.

U.S. Patent No. D468,046.

Standard optics provided with two 6W wedge-base xenon lamps offer 55 percent more light output than standard incandescent lamps. Patent-pending reflector/refractor design features superior vac-metalized, die-casted reflectors; and multi-faceted, highly transmissive refractor that significantly improve photometrics.

Forward throw (FWD) option optics provided with two high-brightness white LEDs, projecting an NFPA-101 compliant path 3' wide and 28' forward, when mounted 8-1/2' AFF.

All light sources meet requirements for NEC 700.16.

Dual-voltage input capability (120/277V).

Edge connectors on printed circuit board ensure long-term durability.

Universal J-box mounting pattern.

Low-profile, integrated test switch/pilot light located below the lens.

Easily visible green status indicator.

Rigid conduit entry provision on top of the unit.

BATTERY — Sealed, maintenance-free lead-calcium battery provides 12W rated capacity. Nickel-cadmium battery with Premium and Exterior option packages.

Automatic 48-hour recharge after a 90-minute discharge.

Low-voltage disconnect prevents excessively deep discharge that can permanently damage the battery. Single-circuit battery connection.

ELECTRONICS — Current-limiting charger maximizes battery life and minimizes energy consumption. Provides low operating costs.

Short-circuit protection — current-limiting charger circuitry protects printed circuit board from shorts.

Thermal protection senses circuitry temperature and adjusts charge current to prevent overheating and charger failure.

Thermal compensation adjusts charger output to provide optimum charge voltage relative to ambient temperature.

Regulated charge voltage maintains constant-charge voltage over a wide range of line voltages. Prevents over/undercharging that shortens battery life and reduces capacity.

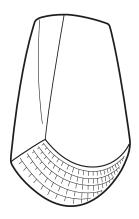
Filtered charger input minimizes charge voltage ripple and extends battery life.

AC/LVD reset allows battery connection before AC power is applied and prevents battery damage from deep discharge.

Catalog Number TWAC 100M 277 DMB LPI Notes Type M

AFFINIT

Die-Cast Architectural Emergency Light



Brownout protection is automatically switched to emergency mode when supply voltage drops below 80 percent of nominal.

EXT TD option package includes 20-minute time delay for supplemental lighting during HID startup.

SELF-DIAGNOSTICS (PREM and EXT TD option packages)

Patented Electronics - U.S. Patent No. 6,502,044.

Single multi-chromatic LED indicator to display two-state charging, test activation and three-state diagnostic status.

Test switch provides manual activation of 30-second diagnostic testing for on-demand visual inspection.

Self-diagnostic testing for five minutes every 30 days and 30 minutes every six months.

Diagnostic evaluation of lamp, AC to DC transfer, charging and battery condition. Continuously monitors AC functionality.

Postpone automatic test initiates eight hour delay of an automatic test by activating the manual test switch.

LISTING — UL listed. Wet location (EXT TD) listed. Damp location (PREM, EXT TD) listed. Cold weather (EXT TD) listed.

Meets UL 924, NFPA 101, NFPA 70-NEC and OSHA illumination standards. UL labeled.

WARRANTY — Three-year warranty.

ORDERING INFORMATION

For shortest lead times, configure product using standard options (shown in bold).

Example: AFN W EXT

100M **AFN** Family Finish AFN AFFINITY Series die-cast W White architectural emergency lighting B Black

BN Brushed nickel DB Dark bronze¹

277 Option packages

(blank) Features lead calcium battery

Features ni-cad battery, self-diagnostics and damp location 0° to PREM 50°C (32° to 122°F)

Features high-temperature ni-cad battery listed from -18° to 50°C (0° to 122°F), self-diagnostics, time delay; listed for cold weather, damp and wet location

FWD Forward throw optics2

Accessories

Order as separate item.

ELAAFNRDB Remote fixture (less batteries and electronics) to be powered by 6V battery equipment as part of an emergency lighting system (listed from 0°F to 122°F; -18°C to 50°C), W, B finishes available.2

NOTES:

- Dark bronze can only be ordered with EXT option. This finish is not available on other units.
- Only available in EXT option.

ARC-60 **Emergency** Sheet #: AFN

SPECIFICATIONS

ELECTRICAL Primary Circuit

AC Input		t	Output	ut Watts Output		
Type	Volts	Amps	Watts	Volts	1-1/2hrs.	
AFN	120	.11	1.1	6	12	
	277	.12	1.3	0	12	
A ENL DDENA	120	.15	1.4	6	10	
AFN PREM	277	.14	1.4	Ü	12	
A FNI FVT	120	.23	21	c	10	
AFN EXT	277	.25	35	6	12	

BATTERY

Sealed Lead-Calcium

Voltage	Shelf life ¹	Expected life ¹	Maintenance	Optimum temperature ²
6	6 mos.	5-8 yrs.	none ³	60-90°F (16-32°C)

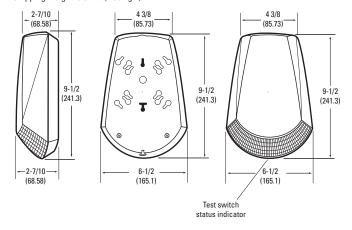
Nickel-Cadmium

Voltage	Shelf life ¹	Expected life ¹	Maintenance	Optimum temperature ²
6	3 yrs.	7-9 yrs.	none ³	32-122°F (0-50°C)

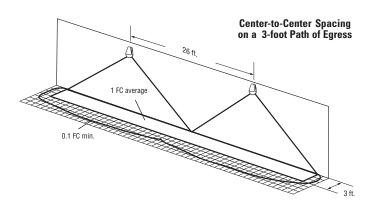
- 1 At 77°F (25°C).
- 2 Optimum ambient temperature range where unit will provide capacity for 90 minutes. Higher and lower temperatures affect life and capacity. See option packages for expanded temperature ranges. Consult factory for detailed information.
- 3 To ensure compliance with NFPA 101 requirements, we recommend testing all signage and emergency lighting systems for 30 seconds every 30 days, and for 90 minutes annually.

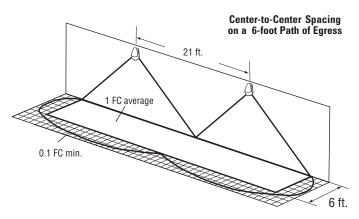
MOUNTING

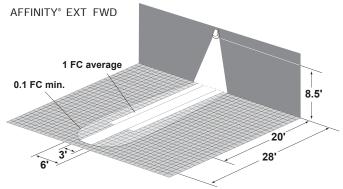
All dimensions are inches (millimeters). Shipping weight: 3.5 lbs. (1.59 kgs.)



FIXTURE PERFORMANCE







SPACING GUIDE

Xenon	Path of Egress	Path of Egress	
Lamp	3'-wide	6'-wide	
Center-to-Center Spacing	26'	21'	

NOTE: Meets Life Safety Code standard minimum illuminance of 0.1 FC and average illuminance of 1.0 FC. Assumes open space with no obstructions, mounting height: 8.5', ceiling height: 9', and reflectances: 80/50/20.





INTENDED USE — Use for parking lots, streets and surrounding areas.

CONSTRUCTION — Heavy gauge die-formed aluminum housing is fabricated using robotic continuous seam-weld process for weather-tight integrity. Integral structural support plate for mounting arm and electrical components ensures rigidity and strength. Hinged aluminum door frame incorporates stainless steel hardware. Continuous silicone gasketing surrounds lens for weather-tight seal. Optional tool-less hardware is available to maximize installation and maintenance ease.

Lens: Thermal shock resistant tempered glass lens. Choice of contoured drop lens or flat lens is available in standard product. Standard finish is dark bronze corrosion resistant electrostatically applied powder paint. Optional linear embossed accent reveals are available

OPTICS — Most flat lens configurations meet full-cutoff criteria. See www.lithonia.com for details. Vertical-lamp reflectors are 1-piece spun and formed anodized aluminum. Specialized distributions available for either drop lens or flat lens. Reflectors are independently designed to optimize light output for the lens type. Horizontal-lamp reflectors also available.

ELECTRICAL — All electrical components are mounted to a heavy-gauge plate to maximize heat dissipation and ensure structural integrity for optimal component life. Ballast: Constant wattage autotransformer. Metal Halide: Super CWA (pulse start ballast), 88% efficient and EISA legislation compliant, is required for 175-400W (SCWA option) for US shipments only. CSA, NOM or INTL required for probe start shipments outside of the US. Pulse-start ballast (SCWA) required for 200W, 320W, 350W, or 450W. Ballast is 100% factory-tested.

Socket: Mogul-base porcelain socket with copper alloy, nickel-plated screw shell and center contact. Vertically-oriented for types SYM, ASY, and VFA distributions. Horizontal position-oriented for types R2, R3 and R4. UL listed 1500W-600V, 4kV pulse rated. Reflectors are rotatable and interchangeable.

INSTALLATION — Extruded aluminum arm with integral splice compartment. Standard arm is 9" in length. Aluminum fitter for 4" to 6" OD noles

LISTINGS — UL Listed to US and Canadian safety standards (see Options). NOM Certified (see options). UL listed for 25°C ambient and wet locations. Optical chamber IP65 rated.

Note: Specifications subject to change without notice

Catalog KFL2 1000M SYMFL Number Notes Type



Square Area Lighting

KVF2

METAL HALIDE: 175-1000W HIGH PRESSURE SODIUM: 250-1000W 20' to 40' Mounting

Square: 21-1/2 (54.6) FH DH Flat lens height: 14 (35.5) Drop lens height: 17 (43.2) Post top Square EPA: 2.8 ft² (0.25 m²) Arm mount

EPA: 2.8 ft² (0.25 m²), incl. arm Weight: +2 lbs to * Mounting Option **Drilling Template** *Weight: 53 lbs (24 kg) Overall Height: 22-3/4 (57.8) SPxx. RPxx. WBxx 6 * Weight as configured in example below. WWxx

Dimensions in inches (centimeters)unless otherwise specified.

ORDERINGINFORMATION

For shortest lead times, configure products using **bolded options**.

Example: KVF2 400M SYMDL TB SCWA SP09 LPI

KVF2	1000M	SYMFL			
Series	Wattage	Distribution	Voltage	Ballast	Mounting
KVF2	Metal halide Pressure sodium 175M 250S 250M 400S 320M 2 1000S 400M 450M 2 1000M 4 1000	Vertical lamp: 7 High-performance horizontal lamp: 8 SR2FL Type II roadway	120 208° 240° 277 347 480° TB¹° 23050HZ¹¹	(blank) Magnetic ballast CWI Constant wattage isolated Pulse Start SCWA Super CWA ballast Note: For shipments to U.S. territories, SCWA must be specified to comply with EISA.	Type Size ¹² SP Square pole 06 6" arm RP Round pole 09 9" arm WB Wall bracket 12 12" arm WW Wood pole or wall bracket FT Post top; opentop pole 4 4" 0D 4.5 4.5" 0D 5 5" 0D 6 6" 0D 6" 0D

Options						Finish ¹⁹		Lamp	20
Shipped SF DF KW1 KW4 PER QRS QRSTD EA	installed in fixture Single fuse 120, 277, 347V ¹³ Double fuse 208, 240, 480V ¹³ KiloWatch® 120V control relay ^{13, 14} KiloWatch® 277V control relay ^{13, 14} NEMA twist-lock receptacle only (photocontrol not included) Quartz restrike system ¹⁵ QRS time delay ^{11, 15} Embossed accent	EHSB CSA NOM INTL REGC1	External houseside shield black (matches fixture finish) ^{16, 17, 18} External houseside shield black (painted black to maximize light control) ^{16, 18} Listed and labeled to comply with Canadian Standards NOM certified ¹¹ Available for 175M probe start shipping outside the U.S. California Title 20 effective 1/1/2010	Shipp VG PE1 PE3 PE4 PE7 SC	ped separately ¹⁶ Vandal guard ^{17, 18} NEMA twist-lock PE (120,208,240V) NEMA twist-lock PE (347V) NEMA twist-lock PE (480V) NEMA twist-lock PE (277V) Shorting cap	(blank) DBL DGC DMB DNA DWH CR	Dark bronze Black Charcoal gray Medium bronze Natural aluminum White Corrosion resistant	Carein 8 Ger	Lamp included Less lamp VG-HTIME FRIEDLY PORT OF USE LESS CONTROLLED CONTROLL

Accessories: Tenon Mounting Slipfitter ²¹ Order as separate catalog number.									
Tenon O.D.	0ne	Two@180°	Two@90°	Three@120°	Three@90°	Four@90°			
2-3/8 (6.0)	T20-190	T20-280	T20-290	T20-320	T20-390	T20-490			
2-7/8 (7.3)	T25-190	T25-280	T25-290	T25-320	T25-390	T25-490			
4 (10.2)	T35-190	T35-280	T35-290	T35-320	T35-390	T35-490			

- These wattages do not comply with California Title 20 regulations.
- Must be ordered with SCWA.
- These wattages require the REGC1 option to be chosen for shipments into California for Title 20 compliance. 250M REGC1 in not available in 347 or 480V. Use reduced jacketed lamp.

- Not available with SCWA.
 Available in ASYDL, SYMDL or VFADL. Standard ED25 lamp.
 For drop lens, specify DL For flat lens, specify FL. Example: SYMDL or R2FL.
 Not available with 1000W or post top.
 Must specify CWI for use in Canada.

- Optional multi-tap ballast (120, 208, 240, 277V; 120, 277, 347V in Canada).
- Consult factory for available wattages.

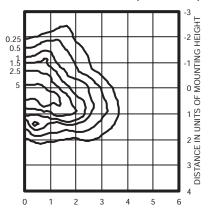
- 12 12" arm required when two or more luminaires are oriented on a
- 90° drilling pattern.

 13 Not available with TB. Must specify voltage.
- Available in vertical lamp orientation only for 200-400M SCWA Any orientation on 250S or 400S only.
- Maximum allowable wattage lamp included.
- May be ordered as an accessory.

 Specify finish when ordered as an accessory.
- Prefix with KVF2 when ordering as an accessory. Use KVF2EHSFL___ for high-performance reflectors.
- See www.lithonia.com/archcolors for additional color options.
- Must be specified.
- Arm mount only.

OUTDOOR KVF2-M-S KVF2 250M SR2FL TEST NO: LTL11250P

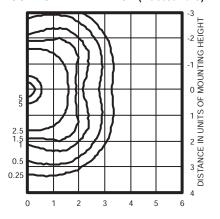
ISOILLUMINANCE PLOT (Footcandle)



250W pulse start metal halide lamp, rated 22500 lumens. Footcandle values based on 20' mounting height.

Classification: Type II, Short, Full Cutoff

KVF2 400M SYMFL TEST NO: LTL9432P ISOILLUMINANCE PLOT (Footcandle)



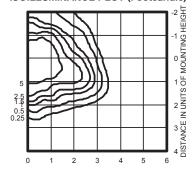
400W pulse start metal halide lamp, rated 42000 lumens. Footcandle values based on 20' mounting height.

Classification: Type IV, Short, Full Cutoff

KVF2 400S R3FL

TEST NO: LTL11324

ISOILLUMINANCE PLOT (Footcandle)



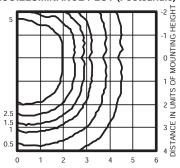
400W lamp, rated 50000

lumens. Footcandle values based on 20 mounting height.

Classification: Type II, Medium, Full Cutoff

KVF2 1000M ASYDL TEST NO: LTL11381

ISOILLUMINANCE PLOT (Footcandle)



1000W lamp, rated 110000 lumens. Footcandle values based on 20' mounting height.

Classification: Type IV, Short, Cutoff

Mounting Height Correction Factor

(Multiply the fc level by the correction factor)

25 ft.= 0.64

30 ft.= 0.45 40 ft= 0.25

 $\left(\frac{\text{Existing Mounting Height}}{\text{New Mounting Height}}\right)^2 =$

Correction factor

Notes

- $1\qquad \hbox{Photometric data for other distributions can be accessed from the Lithonia Lighting Web site (www.lithonia.com)}$
- $2\qquad \text{For electrical characteristics, consult outdoor technical data specification sheets on www.lithonia.com}.$
- 3 Tested to current IES and NEMA standards under stabilized laboratory conditions. Various operating factors can cause differences between laboratory and actual field measurements. Dimensions and specifications are based on the most current available data and are subject to change.



KVF2-M-S



INTENDED USE — Outdoor storage areas, warehouse and factory perimeters and loading docks.

CONSTRUCTION — Rugged, corrosion-resistant, die-cast aluminum. Corrosion-resistant external hardware includes slotted hex-head fasteners.

Finish: Standard finish is electrostatically-applied, oven-cured, dark bronze (DDB) corrosion-resistant polyester powder paint.

OPTICS — Reflector is specular anodized aluminum. Refractor is prismatic borosilicate glass which is sealed and gasketed to inhibit the entrance of outside contaminants.

ELECTRICAL — Electrical components are mounted in hinged front cover that includes primary and secondary

 $Ballast: Low \ pressure \ so dium: High \ reactance, high \ power \ factor. \ High \ pressure \ so dium: 70-150W \ is \ high \ reactance, high \ power \ factor. \ High \ pressure \ so dium: 70-150W \ is \ high \ reactance, high \ power \ factor. \ High \ pressure \ so dium: 70-150W \ is \ high \ reactance, high \ power \ factor. \ High \ pressure \ so dium: 70-150W \ is \ high \ reactance, high \ power \ factor. \ High \ pressure \ so dium: 70-150W \ is \ high \ reactance, high \ power \ factor. \ High \ pressure \ so dium: 70-150W \ is \ high \ reactance, high \ power \ factor. \ High \ pressure \ so dium: 70-150W \ is \ high \ reactance, high \ power \ factor. \ High \ pressure \ so dium: 70-150W \ is \ high \ reactance, high \ power \ factor. \ High \ pressure \ power \ powe$ high power factor. Constant wattage autotransformer for 200-400W. Metal halide: 70-150W is high reactance, high power factor and is standard with pulse-start ignitor technology. SCWA not required. Constant wattage autotransformer for 175-400W. Super CWA (pulse start ballast), 88% efficient and EISA legislation compliant, is required for metal halide 151-400W (SCWA option) for US shipments only. CSA, NOM or INTL required for probe start shipments outside of the US. Pulse-start ballast (SCWA) required for 200W, 320W, or 350W. Ballast is 100% factory-tested. Socket: Porcelain, horizontally oriented, single-ended bayonet base socket for 35W low pressure sodium; medium base socket for 70-150W; and mogul base socket for 175W and above, with copper alloy, nickel-plated screw shell and center contact. UL listed 1500W, 600V.

INSTALLATION — Back housing is separated from front housing, eliminating ballast weight and promoting easy $hand ling. Top \ 3/4" \ threaded \ wiring \ access. \ Back \ access \ through \ removable \ 3/4" \ knockout. \ Feed-thru \ wiring \ can$ be achieved by using a condulet tee. Mount on any vertical surface. Not recommended in applications where a sprayed stream of water can come in direct contact with glass lens.

LISTINGS — UL Listed (standard). CSA or NOM Certified (see Options). UL listed for 25°C ambient and suitable for wet locations. IP65 rated (250 watt and below) or IP54 rated (400 watt) in accordance with IEC Standard 529. Note: Specifications subject to change without notice.

Catalog Number KFL2 1000M SYMFL Notes Type



Wall Packs

TWH

METAL HALIDE: 70W - 400W HIGH PRESSURE SODIUM: 70W - 400W LOW PRESSURE SODIUM: 35W 8' to 25' Mounting

15-3/4 (40.0)16-1/4 (20.3)(41.3)

Specifications

Height: 15-3/4 (40.0) Width: 16-1/4 (41.3) Depth: 8 (20.3)

*Weight: 29.95 (13.59kg) All dimensions are inches (centimeters) unless otherwise indicated.

*Weight as configured in example below.

ORDERING INFORMATION

For shortest lead times, configure product using **standard options** (shown in bold).

Example: TWH 100M TB LPI

TWH	1000M					
Series	Wattage	Voltage	Ballast	Options	Finish ¹⁵	Lamp ¹⁷
тwн	Low pressure sodium	120 2088 2408 277 347 4808 TB ⁹ 2305HZ ¹⁰	(blank) Magnetic ballast CWI Constant wattage isolated E Pulse Start SCWA Super CWA pulse start ballast Note: For shipments to U.S. territories, SCWA must be specified to comply with EISA.	Shipped installed in fixture SF Single fuse (120, 277, 347V) DF Double fuse (208, 240, 480V) EC Emergency circuit ¹¹ QRS Quartz restrike ¹¹ QRSTD Quartz restrike system with time delay ^{10, 11} PE Photoelectric cell - button type ³ PER NEMA twist-lock receptacle ¹² FS Full shield TP Tamper proof screws CSA Listed and labeled to comply with Canadian Standards NOM NOM Certified ¹⁰ INTL Available for MH probe start shipping outside the U.S. REGC1 California Title 20 effective 1/1/2010 Shipped separately ¹³ PE1 NEMA twist-lock PE (120V/208V/240V) PE3 NEMA twist-lock PE (347V) PE4 NEMA twist-lock PE (480V) PE7 NEMA twist-lock PE (277V) SC Shooting cap for PER option VG Vandal guard ¹⁴ WG Wire guard ¹⁴	(blank) Dark bronze DNA Natural aluminum DBL Black DMB Medium bronze DWH White CR Enhanced corrosion resistant CRT Non-stick protective coating ¹⁶	LPI Lamp included L/LP Less lamp

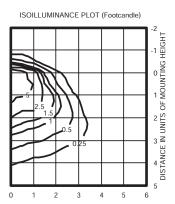
Notes

- Not available with SCWA.
- Operates 55V lamp.
- Not available with 480V.
- These wattages do not comply with California Title 20 regulations.
- Must be ordered with SCWA.
- These wattages require the REGC1 option to be chosen for shipments into California for Title 20 compliance. 250M REGC1 in not available in 347 or 480V.
- Requires T-15, ED or BT28 reduced jacket lamp.
- 8 Must specify CWI for use in Canada.

- Optional multi-tap ballast (120, 208, 240, 277V);
- in Canada (120, 277, 347V).
- 10 Consult factory for available wattages. 11 Max allowable wattage lamp included .
- 12 Photocell not included.
- 13 May be ordered as an accessory.
- 14 Prefix with TWH when ordered as an accessory. Requires field modification.
- 15 See www.lithonia.com/archcolors for additional color options.
- 16 Black finish only
- 17 Must be specified. L/LP N/A MHC.

OUTDOOR TWH-M-S-L Coefficient of Utilization Initial Footcandles

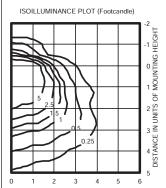
TWH 175M Test report no. 94121101P



175W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12'

mounting height, 12800 rated lumens. Luminaire Efficiency: 61%

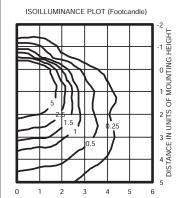
TWH 250M Test report no. 95011902P



250W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12'

mounting height, 25000 rated lumens. Luminaire Efficiency: 77%

TWH 400M Test report no. 94112102P



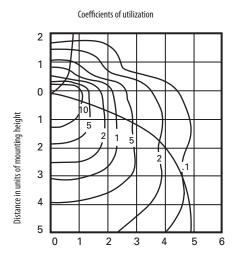
400W pulse start metal halide lamp, horizontal lamp orientation

Footcandle values based on 12'

mounting height, 38000 rated lumens.

Luminaire Efficiency: 70%

TWH 250S Test report no. 94121002

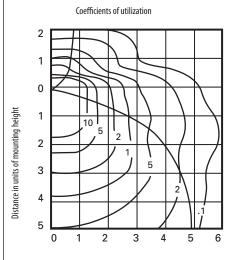


Distance in units of mounting height

250W, high pressure sodium lamp, horizontal lamp orientation, 12' mounting height, 27,500 rated lumens.

Total fixture efficiency: 70.9%

TWH 400S Test report no. 94121001

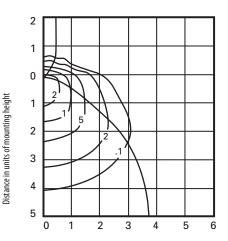


Distance in units of mounting height

400W, high pressure sodium lamp, horizontal lamp orientation, 12' mounting height, 50,000 rated lumens.

Total fixture efficiency: 70.9%

TWH 35L Test report no. 94121902



Distance in units of mounting height

35W, low pressure sodium lamp, horizontal lamp orientation, 12' mounting height, 4,800 rated lumens.

Total fixture efficiency: 54.6%

Mounting Height Correction Factor

(Multiply the fc level by the correction factor)

15 ft. = .64

20 ft. = .36

25 ft. = .23

 $\left(\frac{\text{Existing Mounting Height}}{\text{New Mounting Height}}\right)^2$ = Correction Factor

Notes

 $1\ \ Photometric \ data \ for \ other \ distributions \ can \ be \ accessed \ from \ the \ Lithonia \ Lighting \ Web \ site. \ (www.lithonia.com)$



INTENDED LISE

For entrances, stairwells, corridors and other pedestrian areas.

CONSTRUCTION

Rear housing is rugged, corrosion-resistant, die-cast aluminum. Front cover is one-piece UV-resistant injection molded polycarbonate, internally painted. Captive external hardware is specially treated for corrosion resistance and includes slotted hex-head and tamperproof fasteners.

Dark bronze (DDB) corrosion-resistant polyester powder.

OPTICAL SYSTEM

One-piece die-formed reflector is diffused aluminum. Refractor is clear UV stabilized polycarbonate, providing IES cutoff distribution and maximum lateral light output. Front cover is sealed and gasketed to inhibit the entrance of outside contaminants.

ELECTRICAL SYSTEM

Metal halide ballasts are high reactance, high power factor. HPS ballasts are reactor normal power factor. All HID ballasts are copper wound, 100% factory tested and UL listed. Porcelain, horizontally oriented medium-base socket with copper alloy, nickel-plated screw shell and center contact. UL listed 660W, 600V and 4kV pulse rated.

Compact fluorescent ballasts are magnetic normal power factor (22DTT, 28DTT) or multi-volt (120-277) electronic high power factor (26DTT, 26TRT, 32TRT and 42TRT) (Requires 4-pin lamp). UL Listed. Two-pin (22DTT and 28DTT) or four-pin (26DTT, 26TRT, 32TRT and 42TRT) positive latching thermo-

All components are heat-sinked directly to the cast housing for maximum heat dissipation (For 50 hertz availability, consult factory).

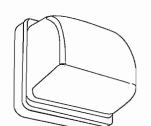
INSTALLATION

Mount to any vertical surface or to a 4" round square outlet box. Back access through gasketed slot. Top wiring access through 1/2" threaded conduit entry. (Through-wiring requires use of a conduit tee). Photocells are field-installable.

LISTING

UL listed for wet locations. IP65 rated, UL Listed to US and Canadian safety standards (see Options). NOM Certified.

Catalog Number **TWAC 100M 277 DMB LPI** Notes Type М



Cutoff Mini Wall-Packs

TWAC

METAL HALIDE

50-100W

HIGH PRESSURE SODIUM 35-100W

COMPACT FLUORESCENT 22-28DTT, 26-42TRT



stent with LEED® goals

Specifications

DMB

Height: 10" (25.4cm) Width: 11-1/2" (29.2cm) Depth: 8-15/16" (22.7cm) Weight: 10 lbs. (4.53kg)

ORDERING INFORMATION

Choose the boldface catalog nomenclature that best suits your needs and write it on the appropriate line. Order accessories as separate catalog numbers (shipped separately).

277 100M TWAC Series Wattage Voltage **TWAC** Metal halide 120 50M 70M 100M 208² High pressure sodium 240² 277 355 **70S** 347 508 100S TB3,4 Compact fluorescent 22DTT1 26TRT1 MVOLT4 26DTT1 32TRT1 28DTT1 42TRT1

Options Shipped installed in fixture SF Single fuse (120, 277, 347V)5 DF Double fuse (208, 240V)5 GMF Internal slow-blow fusing4 XHP High power factor ballast4 EC Emergency circuit^{7,8} DC12 Emergency circuit 12 volt (35W lamp included std.)9 DC2012 Emergency circuit 12 volt (20W lamp included)9 2DC12 Emergency circuit 12 volt (2 35W lamps included std.}3 2DC2012 Emergency circuit 12 volt (2 20W lamps included)9

QRS Quartz restrike system7,8

CR Enhanced corrosion-resistance CRT Non-stick protective coating10 CSA Listed and labeled to comply with Canadian Standards NOM NOM Certified (consult factory) PE Photocell Architectural colors (optional) DNA Natural aluminum **DBL** Black

DMB Medium bronze

DSS Sandstone

DWH White

LPI Lamp LPI Lamp included (standard) Less lamp

Example: TWAC 50M 120 LPI

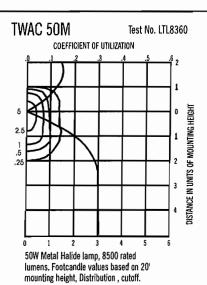
NOTES:

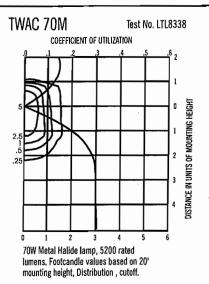
- 1 Compact fluorescent sources only available with 120, 277 or MVOLT.
- 2 Consult factory for availability in Canada.
- 3 Optional multi-tap ballast (120,208,240,277V) In Canada 120, 277, 347V; ships as 120/347.
- Only available with HID sources.
- Only available with compact fluroescent sources. Not available with MVOLT.
- Not available with multi-tap ballast or compact fluorescent sources
- 7 Lamp not included.
- Quartz lamp wattage not to exceed ballast wattage rating.
- Not available with QRS, EC or NOM.
- 10 Black finish on housing only.

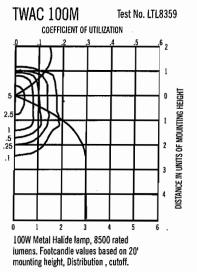
Accessories

Order as separate catalog number **RK1 PEB1** Photocell kit (120V only) **RK1 PEB1 CSA** Photocell kit (120V only) **RK1 PEB2** Photocell kit (208, 240 or 277V) **RK1 PEB3 CSA** Photocell kit (347V) **TWAWG** Wirequard

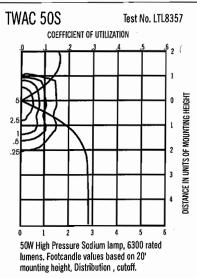
TWAC Cutoff Wall-Pack

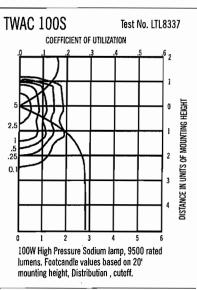


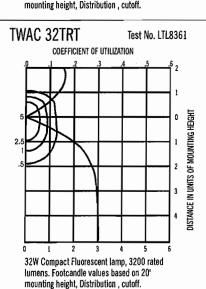


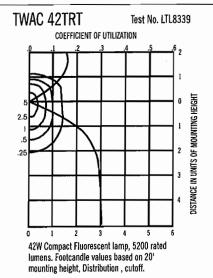


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Mounting Height Correction Factor (Multiply the fc level by the correction factor) $8 \ \text{ft.} = 6.25 \\ 10 \ \text{ft.} = 4.00 \\ 12 \ \text{ft.} = 2.78 \\ 15 \ \text{ft.} = 1.78$



An Sacuity Brands Company

Sheet #: TWAC-M-S-CF_0

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Lithonia Lighting Outdoor Lighting

One Lithonia Way, Conyers, GA 30012-3957 Phone: 770-922-9000 Fax: 770-918-1209 www.lithonia.com

JUNO° lighting

8" METAL HALIDE DOWNLIGHT

Project: hhgregg

Fixture Type: N

Location: M8 100 8842WH

Contact/Phone:

LENSED APERTURE Medium Base Metal Halide 50/70/100W

ED17/BD17, Magnetic Ballast

M8-(50,70,100)-8840, -8842

PRODUCT SPECIFICATIONS

 $\begin{tabular}{ll} \textbf{Lamp} & One 50W, 70W, or 100W ED17/BD17 medium base \\ \textbf{Metal Halide lamp}. \end{tabular}$

Socket Housing Medium base, glazed porcelain, 4kV pulserated socket with nickel-plated copper screw shell • Extruded aluminum housing with heat dissipating fins.

Reflector .050" clear diffuse aluminum reflector.

Baffle Aluminum, stepped baffle in matte black.

Lens Prismatic or Fresnel glass lens.

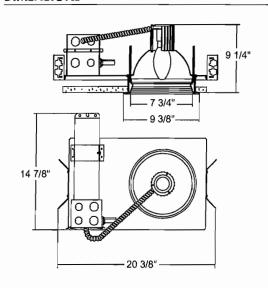
Trim Ring White baked enamel, integral with baffle. • Trim fastens to reflector with two torsion springs.

Ballast Pre-wired, encased and potted 60 Hz ballast • Dual tap for 120V and 277V or 120V and 347V (50W 347V is single tap) • All ballasts are high power factor, high reactance circuits with integral ignitor and auto reset thermal protection • Minimum starting temperature is -20° F (-30° C) • Ballast can be replaced with removal of a single screw.

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

DIMENSIONS



8 1/2" CEILING CUTOUT

INSTALLATION

Mounting Bracket Housings are equipped with vertically adjustable mounting brackets that accept ½" conduit or "C" channels (HB-26 or HB-50) or linear flat bars (LB-27).

Junction Box Pre-wired, oversized junction box • U.L. listed/CSA certified for through-branch wiring, maximum 8 No. 12 AWG 90° C branch circuit conductors {4 in, 4 out} • Junction box provided with removable access plates, {5}½" and {5}¾" knockouts and ground wire.

Mounting Frame 18-gauge, die-formed galvanized steel •17%" L x 11½" W, excluding mounting brackets • Rough-in section (ballast, junction box, mounting frame, socket housing) fully assembled for ease of installation.

Labels Product thermally protected against improper use of insulation • Union made, AFL-CIO • U.L. listed and CSA certified for damp locations.

ENGINEERING DATA

	50W	50W	70W	70W	100W	100W
	120/277	120/347	120/277	120/347	120/277	120/347
ANSI #	M-110	M-110	M-98	M-98	M-90	M-90
Input AMPS						
Operating	0.65/0.30	0.60/0.20	0.85/0.37	0.85/0.30	1.10/0.48	1.10/0.38
Starting	0.80/0.35	0.45/0.15	1.25/0.55	1.15/0.40	2.20/0.95	2.20/0.75
Open Circuit	1.15/0.50	1.60/0.55	1.60/0.75	1.70/0.70	2.40/1.05	2.40/0.85
Input Watts	72	67	94	94	125	125
Nominal Open					_	
Circuit Voltage	254	277	230	240	277	277
Fuse Roting Amps	3/2	4/2	4/2	5/2	6/3	6/2
Saund Rating	В	В	В	В	В	В

PRODUCT CODES

I WODGEL CODES	•	
Catalog Number	Trim	Waltage and Lamp
M8-50-8840-WH	Prismotic w/Boffle	50W MH E017/BD17
M8-70-8840-WH	Prismotic w/Baffle	70W MH ED17/BD17
M8-100-8840-WH	Prismatic w/Baffle	100W MH ED17/BD17
M8-50-8842-WH	Fresnel w/Baffle	50W MH ED17/BD17
M8-70-8842-WH	Fresnel w/Baffle	70W MH ED17/BD17
M8-100-8842-WH	Fresnel w/Boffle	100W MH FD17/BD17

ACCESSORIES

766500101	
Catalog No.	Description
HB-26	26" C-Channel Bor Hongers w/ T-Bor Clips (set of 2)
HB-50	50" C-Chonnel Bar Hangers w/ T-Bar Clips (set of 2)
LB-27	27" Linear Flat Bars (set of 2)

To order, specify cotalog number

OPTIONS

OFIIOI	.5
Catalog No.	Description
CN	120/347V (Except 50W)
F	Fusing
Q	Quartz Restrike (100W max)

To specify, add to catalog number



PRISMATIC PHOTOMETRIC REPORT

8" METAL HALIDE DOWNLIGHT

Test Report #: FB96120
Catalog No: M8-100-8840-WH
Total Luminaire Efficiency: 53.1%
Luminaire Spacing Criterion: .9
Luminaire: Prismatic Lens with Boffle

LENSED APERTURE Medium Base Metal Halide 50/70/100VV ED17/BD17, Magnetic Ballast

Lamp: One MXR100/C/U/MED lamp rated @ 8500 lumens

M8-(50,70,100)-8840, -8842

CANDLEPOWER DISTRIBUTION (Candelas) Degrees Vertical Average 3821 5 3789 10 3631 15 3354 1000 20 3006 25 2597 30 2088 2000 35 1576 40 1107 3000 45 747 50 504 55 304 4000 60 187 65 124 70 78 75 29 80 0 85 0 90 0 Multiplier: 50W - .39; 70W - .62

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp %	Fixture
0-30°	2514	29.6	55.8
0 · 40°	3505	41.2	77.7
0-60°	4356	51.2	96.6
0-90°	4510	53.1	100.0
90 -180°	0		_
0-180°	4510	53.1	100.0

COEFFICIENTS OF UTILIZATION - % (Zonal Cavity Method) Effective Floor Cavity Reflectance 20% (Pfc)

	$ ho_{ m cc}$		80			70			50			30			10		0
RCR	$ ho_{w}$	50_	30	10	50	30	. 10	50	30_	_10	50	30	10	50	30	10	0
0		63	63	63	62	62	62_	59	59	59	56	_56	56	54	54	54	53
1		58	57	55	57	56	54	55	54	_53	53	52	51	51	50	50	49
2		53	51	49	_ 52	50	48	50	49	47_	_49	47	46	47	46	45	44
3		49	46	43	48	45	43	47	44	42	45	43	41	44	42	44	40
4		45	41	39	44	41	39	43	40	_38	42	40_	38	41	39	34	36
5		41	38	35	41	38	35	40	37	35	39	36	34_	38	36	34	33
6		38	35	32	38	35	32	37	34	32_	36	34	32	36	33	31	30
7		36	32	29	35	32	29_	35	31_	29	34	_31_	29	33	31	29	28
8		33	30_	27	33	30	27	32	29	_27	32	29	27	31	_ 29	27	26
9		31	28	25	31	27	25	30	27	25	30	27	25	29	27	25	24
- 10		29	26	23	29	26	23	28	25	23	28	25	23	28	25	23	22

Pcc - Ceiling Cavity Reflectance (%) Pw - Wall Reflectance (%)

INITIAL FOOTCANDLES

One Unit, 100 Watt, 63.5° Beam

Footcandles Beam Edge	Footcandles Beam Center	Beam Diameter	Distance to Illuminated Plane (Feet)
32.6	106.1	7.4	A SA
18.4	59.7	9.9*	18
11.8	38.2	12.4	/#1A0 // \
8.2	26.5	14.8′	/\$2512L\$\cdot\
6.0	19.5	17.3′	A STATE OF THE STA
4.6	14.9	19.8′	/ 16
3.6	11.8	22.3*	/ 18 V 18
2.9	9.6	24.9′	/ 20 1

AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array)

Ceiling 80% Wall 50% Flaar 20%									
Spacing	RCR I	RCR4	RCR8						
5.0′	197	153	112						
6.0'	137	106	78						
7.0′	101	78	57						
8.0'	77	60	44						
9.0'	61	47	35						
10.0'	49	38	28						
12.0′	34	27	19						
12.0′	34	27							

(Beam Edge defined as 50% of Maximum Nadir Candlepower)



JUNO lighting



INTENDED USE

For building- and wall-mounted applications.

CONSTRUCTION

Rugged, die-cast, single-piece aluminum housing. Die-cast doorframe has a 1/8" thick tempered glass lens. Doorframe is fully gasketed with onepiece solid silicone.

FINISH

Standard finish is new textured dark bronze (DDBT) corrosion-resistant polyester powder finish, with other architectural colors available.

Segmented reflectors for superior uniformity and control. Medium throw (MD) full cutoff distribution available.

ELECTRICAL SYSTEM

Fluorescent ballast is Class P, electronic, high power factor, <10%THD, with starting temperature of 0°F (-18°C). Fluorescent socket is high temperature thermoplastic with an integral lamp retention clip.

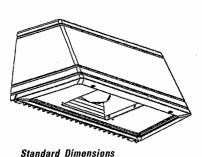
INSTALLATION

Universal mounting mechanism with integral mounting support allows fixture to hinge down. Bubble level provides correct alignment with each installation.

UL Listed (standard). CSA Certified (see Options). Suitable for wet locations (damp location listed in lens-up orientation). WLU option offers wet location listing in up orientation (see Options). IP65 Rated.

Catalog Number **TWAC 100M 277 DMB LPI** Notes Туре М

Decorative Wall-Mounted Lighting



Length: 16.25 (41.2)

Overall Height: 7.25 (18.4)

Max. Weight: 30 lbs (13.6 kg)

Depth: 9.13 (23.2)

COMPACTILUORESCENT

26DTT 2/26DTT 26TRT

2/26TRT

32TRT 2/32TRT

42TRT

2/42TRT

All dimensions are inches (centimeters) unless otherwise specified.

LPI

ORDERING INFORMATION

Choose the boldface catalog nomenclature that best suits your needs and write it on the appropriate line.

WST	100M	277	DMB
Series	Wattage/Source	Distribution	Voltage
WST	Compact Fluorescent	MD Medium throw	120
	26DTT		2081
	2/26DTT		240¹
	26TRT		277
	2/26TRT		347
	32TRT		MVOLT ²
	2/32TRT		
	42TRT		
	2/42TRT		

Example: WST 42TRT MD 120 LPI DNAT

back box

Options Shipped separately Shipped installed in fixture WSBBW Surface-mounted GMF Internal slow-blow fusing3 EC Emergency circuit (25W max UT5 Uptilt 5 degrees 120V, incandescent lamp included) WSTWG Wire guard9 DC12 Emergency circuit 12 volt (35W WSTVG Vandal guard9 lamp included std.)4 Architecutral colors¹⁰ 2DC12 Emergency circuit 12 volt (2, Standard textured colors 35W lamps included) DDBT Dark bronze (std.) DC2012 Emergency circuit 12 volt (20W lamp included)4 **DSST** Sandstone **DNAT** Natural aluminum 2DC2012 Emergency circuit 12 volt (2, DWHG White 20W lamps included)4 ELDW Emergency battery pack (32° **DBLB** Black min. operating temp.)3,5 Optional textured colors **ELDWC** Emergency battery pack (0° min. operating temp.)3,5,6 **DBNH** Bronze **DSPD** Dark gray ELDWR Fixture wired for Bodine® B30 **DSPJ** Light gray remote battery pack (32° min. DSPE Green operating temp.)3,7 DSPG Dark red ELDWRPS Fixture wired for PS1400 or PSDL3 remote battery pack (32° min. operating temp.)^{3,7,8} **DSPF** Rust **DSPH** Red CR Enhanced corrosion resis-Striping tance SDDB Dark bronze Non-stick protective coating SDWH White (black only) SDBL Black PE Photoelectric cell-button type3,9

WLU Wet location door for up

orientation

LPI Lamp included (std)

DFL Diffusing lens

L/LP Less lamp

CSA CSA Certified

NOTES:

- 1 Consult factory for availability in Canada.
- Optional multi-volt electronic ballast capable of operating on any line voltage from 120-277V.
- 3 Not available with MVOLT; must specify voltage.
- 4 Not available with GMF.
- 5 Not available with 2/32TRTor 2/42TRT.
- 6 Not available with 2/26DTT or 2/26TRT.
- 7 Not available with 2/42 TRT.
- 8 Pilot light/test switch mounting plate included. See lamp compatibility chart on back page.
- 9 Must be ordered with fixture; cannot be field installed.
- 10 Additional architectural colors available; see www.lithonia.com for more information.

SDNA Natural aluminum

SDTG Tennis green

SDBR Bright red

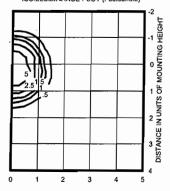
SDBUA Dark blue

SDGYM Gray

WST Fluorescent Building Mounted

WST 2/42TRT MD TEST NO: LTL11108

ISOILLUMINANCE PLOT (Footcandle)



2/42TRT lamp, horizontal lamp orientation Footcandle values based on 12' mounting height, 3200 rated lumens (per lamp). Luminaire Efficiency: 49.6%

 Lamp
 Initial Lumens
 Wount Height
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Emergency Battery Pack Lamp Compatibility										
Lamp Options										
(# of lamps/wattage)	ELDW	ELDWC	ELDWR	ELDWRPS						
26DTT (one lamp)										
2/26DTT										
26TRT (one lamp)										
2/26TRT										
32TRT (one lamp)										
2/32TRT										
42TRT (one lamp)										
2/42TRT			•							



INTENDED USE — Provides a minimum of 90 minutes illumination for the rated wattage upon loss of AC power. Ideal for applications requiring low-profile, attractive emergency lighting.

CONSTRUCTION — Compact, low-profile, architectural design with die-cast aluminum housing that has a contemporary brushed nickel-plated finish. Other available finishes are texturized polyester powder coat paint in white, black and dark bronze. All finishes can be painted in the field to match the wall color of choice.

U.S. Patent No. D468,046.

Standard optics provided with two 6W wedge-base xenon lamps offer 55 percent more light output than standard incandescent lamps. Patent-pending reflector/refractor design features superior vac-metalized, die-casted reflectors; and multi-faceted, highly transmissive refractor that significantly improve photometrics.

Forward throw (FWD) option optics provided with two high-brightness white LEDs, projecting an NFPA-101 compliant path 3' wide and 28' forward, when mounted 8-1/2' AFF.

All light sources meet requirements for NEC 700.16.

Dual-voltage input capability (120/277V).

Edge connectors on printed circuit board ensure long-term durability.

Universal J-box mounting pattern.

Low-profile, integrated test switch/pilot light located below the lens.

Easily visible green status indicator.

Rigid conduit entry provision on top of the unit.

BATTERY — Sealed, maintenance-free lead-calcium battery provides 12W rated capacity. Nickel-cadmium battery with Premium and Exterior option packages.

Automatic 48-hour recharge after a 90-minute discharge.

Low-voltage disconnect prevents excessively deep discharge that can permanently damage the battery. Single-circuit battery connection.

ELECTRONICS — Current-limiting charger maximizes battery life and minimizes energy consumption. Provides low operating costs.

Short-circuit protection — current-limiting charger circuitry protects printed circuit board from shorts.

Thermal protection senses circuitry temperature and adjusts charge current to prevent overheating and charger failure.

Thermal compensation adjusts charger output to provide optimum charge voltage relative to ambient temperature.

Regulated charge voltage maintains constant-charge voltage over a wide range of line voltages. Prevents over/undercharging that shortens battery life and reduces capacity.

Filtered charger input minimizes charge voltage ripple and extends battery life. AC/LVD reset allows battery connection before AC power is applied and prevents battery damage from deep discharge. TWAC 100M 277 DMB LPI

Notes

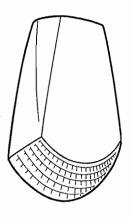
Type

M

AFFINITY®

Die-Cast Architectural Emergency Light

AFN



Brownout protection is automatically switched to emergency mode when supply voltage drops below 80 percent of nominal.

EXT TD option package includes 20-minute time delay for supplemental lighting during HID startup.

SELF-DIAGNOSTICS (PREM and EXT TD option packages)

Patented Electronics - U.S. Patent No. 6,502,044.

Single multi-chromatic LED indicator to display two-state charging, test activation and three-state diagnostic status.

Test switch provides manual activation of 30-second diagnostic testing for on-demand visual inspection.

Self-diagnostic testing for five minutes every 30 days and 30 minutes every six months.

Diagnostic evaluation of lamp, AC to DC transfer, charging and battery condition. Continuously monitors AC functionality.

LISTING — UL listed. Wet location (EXT TD) listed. Damp location (PREM, EXT TD) listed. Cold weather (EXT TD) listed.

Meets UL 924, NFPA 101, NFPA 70-NEC and OSHA illumination standards. UL labeled.

WARRANTY — Three-year warranty.

ORDERING INFORMATION

For shortest lead times, configure product using standard options (shown in bold).

Example: AFN W EXT

Family

AFN AFFINITY Series die-cast

architectural emergency lighting

100M Finish W White

B Black
BN Brushed nickel

DB Dark bronze¹

277
Option packages

(blank) Features lead calcium battery

PREM Features ni-cad battery, self-diagnostics and damp location 0° to 50°C (32° to 122°F)

EXT Features high-temperature ni-cad battery listed from -18° to 50°C (0° to 122°F), self-diagnostics, time delay; listed for cold weather, damp and wet location

FWD Forward throw optics²

Accessories

Order as separate item.

ELAAFNRDB

Remote fixture (less batteries and electronics) to be powered by 6V battery equipment as part of an emergency lighting system (listed from 0°F to 122°F; -18°C to 50°C), W, B finishes available.²

NOTES:

- Dark bronze can only be ordered with EXT option. This finish is not available on other units.
- Only available in EXT option.

SPECIFICATIONS

ELECTRICAL Primary Circuit

		AC Inpu		Output	Watts Output		
Туре	Volts	Amps	Watts	Volts	1-1/2 <u>h</u> rs.		
AFN	120	.11	1.1	- 6	12		
ALIV	277	.12	1.3		14		
AFN PREM	120	.15	1.4	- 6	12		
AFIN FREIN	277	.14	1.4	0			
A ENLEYT	120	.23	21	6	12		
AFN EXT	277	.25	35				

BATTERY

Sealed Lead-Calcium

Voltage	Shelf life ¹	Expected life ¹	Maintenance	Optimum temperature ²
6	6 mos.	5-8 yrs.	none ³	60-90°F (16-32°C)

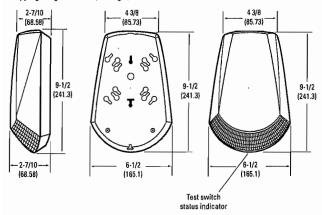
Nickel-Cadmium

Voltage	Shelf life ¹	Expected life ¹	Maintenance	Optimum temperature ²		
6	3 yrs.	7-9 yrs.	none ³	32-122°F (0-50°C)		

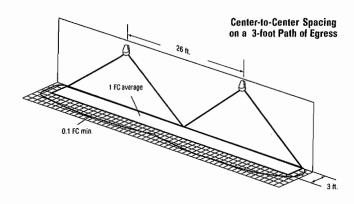
- 1 At 77°F (25°C).
- 2 Optimum ambient temperature range where unit will provide capacity for 90 minutes. Higher and lower temperatures affect life and capacity. See option packages for expanded temperature ranges. Consult factory for detailed information.
- 3 To ensure compliance with NFPA 101 requirements, we recommend testing all signage and emergency lighting systems for 30 seconds every 30 days, and for 90 minutes annually.

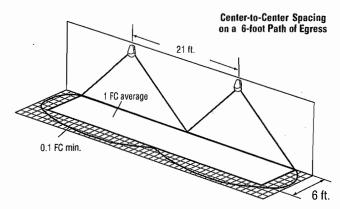
MOUNTING

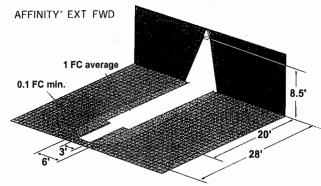
All dimensions are inches (millimeters). Shipping weight: 3.5 lbs. (1.59 kgs.)



FIXTURE PERFORMANCE







SPACING GUIDE

Xenon	Path of Egress	Path of Egress
Lamp	3'-wide	6'-wide
Center-to-Center Spacing	26'	21'

NOTE: Meets Life Safety Code standard minimum illuminance of 0.1 FC and average illuminance of 1.0 FC. Assumes open space with no obstructions, mounting height: 8.5°, ceiling height: 9°, and reflectances: 80/50/20.



An **SAcuity**Brands Company



INTENDED USE — Use for parking lots, streets and surrounding areas.

CONSTRUCTION — Heavy gauge die-formed aluminum housing is fabricated using robotic continuous seam-weld process for weather-tight integrity. Integral structural support plate for mounting arm and electrical components ensures rigidity and strength. Hinged aluminum door frame incorporates stainless steel hardware. Continuous silicone gasketing surrounds lens for weather-tight seal. Optional tool-less hardware is available to maximize installation and maintenance ease.

Lens: Thermal shock resistant tempered glass lens. Choice of contoured drop lens or flat lens is available in standard product. Standard finish is dark bronze corrosion resistant electrostatically applied powder paint, Optional linear embossed accent reveals are available.

OPTICS --- Most flat lens configurations meet full-cutoff criteria. See www.lithonia.com for details. Vertical-lamp reflectors are 1-piece spun and formed anodized aluminum. Specialized distributions available for either drop lens or flat lens. Reflectors are independently designed to optimize light output for the lens type. Horizontal-lamp reflectors also available. ELECTRICAL — All electrical components are mounted to a heavy-gauge plate to maximize heat dissipation and ensure structural integrity for optimal component life. Ballast: Constant wattage autotransformer. Metal Halide: Super CWA (pulse start ballast), 88% efficient and EISA legislation compliant, is required for 175-400W (SCWA option) for US shipments only. CSA, NOM or INTL required for probe start shipments outside of the US. Pulse-start ballast (SCWA) required for 200W, 320W, 350W, or 450W. Ballast is 100% factory-tested.

Socket: Mogul-base porcelain socket with copper alloy, nickel-plated screw shell and center contact. Vertically-oriented for types SYM, ASY, and VFA distributions. Horizontal position-oriented for types R2, R3 and R4. UL listed 1500W-600V, 4kV pulse rated. Reflectors are rotatable and interchangeable.

INSTALLATION — Extruded aluminum arm with integral splice compartment. Standard arm is 9" in length. Aluminum fitter for 4" to 6" OD poles.

LISTINGS — UL Listed to US and Canadian safety standards (see Options). NOM Certified (see options). UL listed for 25°C ambient and wet locations. Optical chamber IP65 rated.

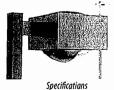
Note: Specifications subject to change without notice.

Catalog KFL2 1000M SYMFL Number Notes Туре



EPA: 2.8 ft2 (0.25 m2)

Square Area Lighting



METAL HALIDE: 175-1000W HIGH PRESSURE SODIUM: 250-1000W 20' to 40' Mounting

Square: 21-1/2 (54.6) Flat lens height: 14 (35.5)

Drop lens height: 17 (43.2) Post top

Arm mount EPA: 2.8 ft2 (0.25 m2), incl. arm

Weight: +2 lbs to * *Weight: 53 lbs (24 kg) Overall Height: 22-3/4 (57.8)

Weight as configured in example below.

FH DH Square

Mounting Option	Drilling Template
SPxx, RPxx,	5
W8xx	6
WWxx	7

Dimensions in inches (centimeters)unless otherwise specified.

ORDERINGINFORMATION

For shortest lead times, configure products using bolded options.

Example: KVF2 400M SYMDL TB SCWA SP09 LPI

KVF2	1000M	SYM	FL								
	Metal halide 175M¹ 200M² 250M³ 320M² 350M¹² 400M³ 450M¹² 1000M⁴	Vertical II SYM ASY VFA Horizonta R2 R3	Symmetric square Asymmetric Vertical forward throw automotive	 formance	120 208° 240° 277 347 480° 1810 23050HZ11	(blank) CWI Pulse SCWA Note: Forst	Magnetic ballast Constant wattage isolated Start	Mounting Iype SP RP WB WW PT	Square pole Round pole Wall bracket Wood pole or wall bracket Post top; opentop pole	Size 06 09 12 4 4.5 5	

Shipped installed in fixture SF Single fuse 120, 277, 347V ¹³ DF Double fuse 208, 240, 480V ¹³ KW1 KiloWatch® 120V control relay ^{13, 14} KW4 KiloWatch® 277V control relay ^{13, 14} PER NEMA twist-lock receptacle only (photocontrol not included) QRS Quartz restrike system ¹⁵	EHS External houseside shield black (matches fixture finish) ^{16, 17, 18} EHSB External houseside shield black (painted black to maximize light control) ^{16, 18} CSA Listed and labeled to comply with Canadian Standards NOM NOM certified ¹¹ INTL Available for 175M probe start shipping	Shipped separately ¹⁶ VG Vandal guard ^{17, 18} PE1 NEMA twist-lock PE (120,208,240V) PE3 NEMA twist-lock PE (347V) PE4 NEMA twist-lock PE (480V) PE7 NEMA twist-lock PE (277V) SC Shorting cap	(blank) Dark bronze DBL Black DGC Charcoal gray DMB Medium bronze DNA Natural aluminum DWH White CR Corrosion resistant	LPI Lamp included L/LP Less lamp
KW1 KiloWatch® 120V control relay ^{13, 14} KW4 KiloWatch® 277V control relay ^{13, 14} PER NEMA twist-lock receptacle only (photocontrol not included)	black to maximize light control) ^{14, 18} CSA Listed and labeled to comply with Canadian Standards NOM NOM certified ¹³	PE3 NEMA twist-lock PE (347V) PE4 NEMA twist-lock PE (480V) PE7 NEMA twist-lock PE (277V)	DMB Medium bronze DNA Natural aluminum DWH White	

	A A	ccessories:	lenon Mou	nting Slipfits		A. (1)
		Orderas	eparaterat	neg numbur		
Tenon O.D.	One	Two@180°	Two@90°	Three@120°	Three@90°	Four@9
2-3/8 (6.0)	T20-190	T20-28D	T20-290	T20-320	T20-390	T20-49
3 7/0 /7 31	T2S-19D	T25-2B0	T25-290	T25-320	T25-390	T25-49
2-7/8 (7.3)	123-170					

- These wattages do not comply with California Title 20 regulations.
- Must be ordered with SCWA.

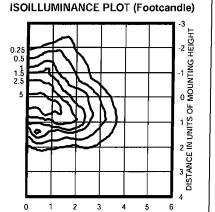
 These wattages require the REGC1 option to be chosen for shipments into California for Title 20 compliance. 250M REGC1 in not available in 347 or 480V.
- Use reduced jacketed lamp. Not available with SCWA.
- Available in ASYDL, SYA<u>DL or VFAOL, Standard ED</u>25 lamp.
 For drop lens, specify <u>PLI</u> For flat lens, specify <u>FLI</u> xample: SYMDL or R2FL.
 Not available with 1000W or post top.
 Must specify CWI for use in Canada.

- Optional multi-tap ballast (120, 208, 240, 277V; 120, 277, 347V in Canada).
- 11 Consult factory for available wattages.

- 12 12" arm required when two or more luminaires are oriented on a
- 90° drilling pattern. Not available with TB. Must specify voltage.
- Available in vertical lamp orientation only for 200-400M SCWA. Any orientation on 250S or 400S only.
- Maximum allowable wattage lamp included.
- May be ordered as an accessory.
- Specify finish when ordered as an accessory. 18
- Prefix with KVF2 when ordering as an accessory.

 Use KVF2EHSFL___ for high-performance reflectors.
- See www.lithonia.com/archcolors for additional color options.
- Must be specified.
- 21 Arm mount only

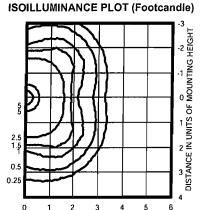
KVF2 250M SR2FL TEST NO: LTL11250P



250W pulse start metal halide lamp, rated 22500 lumens. Footcandle values based on 20' mounting height.

Classification: Type II, Short, Full Cutoff

TEST NO: LTL9432P KVF2 400M SYMFL



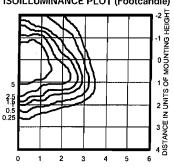
400W pulse start metal halide lamp, rated 42000 lumens. Footcandle values based on 20' mounting height.

Classification: Type IV, Short, Full Cutoff

KVF2 400S R3FL

TEST NO: LTL11324

ISOILLUMINANCE PLOT (Footcandle)



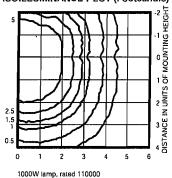
400W Jamp, rated 50000 lumens. Footcandle values based on 20°

Classification: Type II, Medium, Full Cutoff

KVF2 1000M ASYDL

TEST NO: LTL11381

ISOILLUMINANCE PLOT (Footcandle)



lumens. Footcandle values based on 20' Classification: Type IV, Short, Cutoff

Mounting Height Correction Factor

(Multiply the fc level by the correction factor)

25 ft.= 0.64

30 ft.= 0.45

40 ft= 0.25

Existing Mounting Height New Mounting Height

= Correction factor

www.lithonia.com

- Photometric data for other distributions can be accessed from the Lithonia Lighting Web site (www.lithonia.com)
- For electrical characteristics, consult outdoor technical data specification sheets on www.lithonia.com.
- Tested to current IES and NEMA standards under stabilized laboratory conditions. Various operating factors can cause differences between laboratory and actual field measurements. Dimensions and specifications are based on the most current available data and are subject to change.



KVF2-M-S



INTENDED USE — Outdoor storage areas, warehouse and factory perimeters and loading docks.

CONSTRUCTION — Rugged, corrosion-resistant, die-cast aluminum. Corrosion-resistant external hardware includes slotted hex-head fasteners.

Finish: Standard finish is electrostatically-applied, oven-cured, dark bronze (DDB) corrosion-resistant polyester powder paint.

OPTICS — Reflector is specular anodized aluminum. Refractor is prismatic borosilicate glass which is sealed and gasketed to inhibit the entrance of outside contaminants.

ELECTRICAL — Electrical components are mounted in hinged front cover that includes primary and secondary electrical disconnect.

Ballast: Low pressure sodium: High reactance, high power factor. High pressure sodium: 70-150W is high reactance, high power factor. Constant wattage autotransformer for 200-400W. Metal halide: 70-150W is high reactance, high power factor and is standard with pulse-start ignitor technology. SCWA not required. Constant wattage autotransformer for 175-400W. Super CWA (pulse start ballast), 88% efficient and EISA legislation compliant, is required for metal halide 151-400W (SCWA option) for US shipments only. CSA, NOM or INT. required for probe start shipments outside of the US. Pulse-start ballast (SCWA) required for 200W, 320W, or 350W. Ballast is 100% factory-tested. Socket: Porcelain, horizontally oriented, single-ended bayonet base socket for 35W low pressure sodium; medium base socket for 70-150W; and mogul base socket for 175W and above, with copper alloy, nickel-plated screw shell and center contact. UL listed 1500W, 600V.

INSTALLATION — Back housing is separated from front housing, eliminating ballast weight and promoting easy handling. Top 3/4" threaded wiring access. Back access through removable 3/4" knockout. Feed-thru wiring can be achieved by using a condulet tee. Mount on any vertical surface. Not recommended in applications where a sprayed stream of water can come in direct contact with glass lens.

LISTINGS — UL Listed (standard). CSA or NOM Certified (see Options). UL listed for 25°C ambient and suitable for wet locations. IP65 rated (250 watt and below) or IP54 rated (400 watt) in accordance with IEC Standard 529. Note: Specifications subject to change without notice.

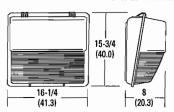
Number KFL2 1000M SYMFL
Notes
Туре



Wall Packs

TWH

METAL HALIDE: 70W - 400W HIGH PRESSURE SODIUM: 70W - 400W LOW PRESSURE SODIUM: 35W 8' to 25' Mounting



Specifications

Height: 15-3/4 (40.0) Width: 16-1/4 (41.3)

Depth: 8 (20.3)

*Weight: 29.95 (13.59kg)
All dimensions are inches (centimeters)
unless otherwise indicated.

*Weight as configured in example below.

ORDERING INFORMATION

For shortest lead times, configure product using standard options (shown in bold).

Example: TWH 100M TB LPI

TWH	1000M										
Series	Wattage		(Voltage	(Bajjast		ortion		(injsh)		Lamp	
TWH	Low pressure sodium' 35L High pressure sodium' 70S 100S 150S² 200S 250S 400S	Metal halide 70M ^{1,3} 100M ¹ 150M 175M ⁴ 200M ⁵ 250M ⁶ 320M ³ 350M ^{4,5} 400M ^{6,7} Ceramic metal halide 70MHC ^{1,3} 100MHC ¹ 150MHC	120 208 ⁸ 240 ⁹ 277 347 480 ⁸ TB ⁹ 2305HZ ¹⁰	CWI SCWA Note: For siterritories,	Magnetic ballast Constant wattage isolated Pulse Start Super CWA pulse start ballast hipments to U.S. SCWA must be o comply with EISA.	SF DF EC QRS QRSTD PE PER FS TP CSA NOM INTL REGC1	d installed in fixture Single fuse (120, 277, 347V) Double fuse (208, 240, 480V) Emergency circuit ¹¹ Quartz restrike ¹¹ Quartz restrike system with time delay ^{10, 11} Photoelectric cell - button type ³ NEMA twist-lock receptacle ¹² Full shield Tamper proof screws Listed and labeled to comply with Canadian Standards NOM Certified ¹⁰ Available for MH probe start shipping outside the U.S. California Title 20 effective 1/1/2010 d separately ¹³ NEMA twist-lock PE (120V/208V/240V) NEMA twist-lock PE (480V) NEMA twist-lock PE (277V) Shooting cap for PER option Vandal guard ¹⁴ Wire guard ¹⁴	(blank) DNA DBL DMB DWH CR CRT	Dark bronze Natural aluminum Black Medium bronze White Enhanced corrosion resistant Non-stick protective coating ¹⁶	L/LP	Lamp included Less lamp

Notes

- 1 Not available with SCWA.
- Operates 55V lamp.
- 3 Not available with 480V.
- 4 These wattages do not comply with California Title 20 regulations.
- 5 Must be ordered with SCWA.
- These wattages require the REGC1 option to be chosen for shipments into California for Title 20 compliance. 250M REGC1 in not available in 347 or 480V.
- 7 Requires T-15, EO or BT28 reduced jacket lamp.
- 8 Must specify CWI for use in Canada.

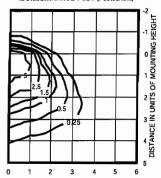
- 9 Optional multi-tap ballast (120, 208, 240, 277V);
- in Canada (120, 277, 347V).

 10 Consult factory for available wattages
- 11 Max allowable wattage lamp included .
- 12 Photocell not included.
- 13 May be ordered as an accessory.
- 14 Prefix with TWH when ordered as an accessory. Requires field modification.
- 15 See www.lithonia.com/archcolors for additional color options.
- 16 8lack finish only.
- 17 Must be specified. L/LP N/A MHC.

Coefficient of Utilization Initial Footcandles

TWH 175M Test report no. 94121101P

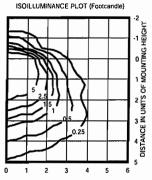
ISOILLUMINANCE PLOT (Footcandle)



175W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12'

mounting height, 12800 rated lumens. Luminaire Efficiency: 61%

TWH 250M Test report no. 95011902P

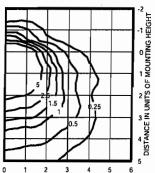


250W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12'

mounting height, 25000 rated lumens. Luminaire Efficiency: 77%

TWH 400M Test report no. 94112102P

ISOILLUMINANCE PLOT (Footcandle)

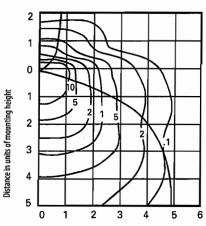


400W pulse start metal halide lamp, horizontal lamp orientation Footcandle values based on 12'

mounting height, 38000 rated lumens. Luminaire Efficiency: 70%

TWH 250S Test report no. 94121002

Coefficients of utilization



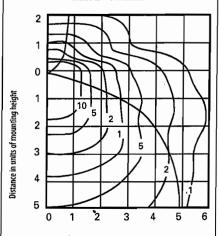
Distance in units of mounting height

250W, high pressure sodium lamp, horizontal lamp orientation, 12' mounting height, 27,500 rated lumens.

Total fixture efficiency: 70.9%

TWH 4005 Test report no. 94121001

Coefficients of utilization

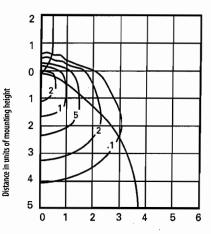


Distance in units of mounting height

400W, high pressure sodium lamp, horizontal lamp orientation, 12' mounting height, 50,000 rated lumens.

Total fixture efficiency: 70.9%

TWH 35L Test report no. 94121902



Distance in units of mounting height

35W, low pressure sodium lamp, horizontal lamp orientation, 12' mounting height, 4,800 rated lumens.

Total fixture efficiency: 54.6%

Mounting Height Correction Factor

(Multiply the fc level by the correction factor)

15 ft. = .64

20 ft. = .36 25 ft. = .23

 $\left(\frac{\text{Existing Mounting Height}}{\text{New Mounting Height}}\right)^2$ = Correction Factor

TWH-M-S-L

Notes

 $1. Photometric \ data \ for \ other \ distributions \ can \ be \ accessed \ from \ the \ Lithonia \ Lighting \ Web \ site. \ (www.lithonia.com)$

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