

URBAN DESIGN COMMISSION APPLICATION

UDC

City of Madison
Planning Division
Madison Municipal Building, Suite 017
215 Martin Luther King, Jr. Blvd.
P.O. Box 2985
Madison, WI 53701-2985
(608) 266-4635



FOR OFFICE USE ONLY:

Paid _____ Receipt # _____

Date received _____

Received by _____

Aldermanic District _____

Zoning District _____

Urban Design District _____

Submittal reviewed by _____

Legistar # _____

Complete all sections of this application, including the desired meeting date and the action requested.

If you need an interpreter, translator, materials in alternate formats or other accommodations to access these forms, please call the phone number above immediately.

1. Project Information

Address: 636 West Washington Avenue

Title: West Washington Place

2. Application Type (check all that apply) and Requested Date

UDC meeting date requested November 20, 2019

- ☒ New development ☐ Alteration to an existing or previously-approved development
☐ Informational ☒ Initial approval ☒ Final approval

3. Project Type

- ☐ Project in an Urban Design District
☒ Project in the Downtown Core District (DC), Urban Mixed-Use District (UMX), or Mixed-Use Center District (MXC)
☐ Project in the Suburban Employment Center District (SEC), Campus Institutional District (CI), or Employment Campus District (EC)
☐ Planned Development (PD)
 ☐ General Development Plan (GDP)
 ☐ Specific Implementation Plan (SIP)
☐ Planned Multi-Use Site or Residential Building Complex

Signage

- ☐ Comprehensive Design Review (CDR)
☐ Signage Variance (i.e. modification of signage height, area, and setback)

Other

- ☐ Please specify _____

4. Applicant, Agent, and Property Owner Information

Applicant name Kirk Keller
Street address 2310 Crossroads Drive, Suite 2000
Telephone 608-240-9900

Company Plunkett Raysich Architects, LLP
City/State/Zip Madison, WI 53718
Email kkeller@prarch.com

Project contact person Kirk Keller
Street address 2310 Crossroads Drive, Suite 2000
Telephone 608-240-9900

Company Plunkett Raysich Architects, LLP
City/State/Zip Madison, WI 53718
Email kkeller@prarch.com

Property owner (if not applicant) Greenway Real Estate LLC
Street address 2292 County Hwy. AB
Telephone 608-516-4313

City/State/Zip McFarland, WI 53558
Email garyshmerler@gmail.com

5. Required Submittal Materials

- ☒ **Application Form**
- ☒ **Letter of Intent**
 - If the project is within an Urban Design District, a summary of how the development proposal addresses the district criteria is required
 - For signage applications, a summary of how the proposed signage is consistent with the applicable CDR or Signage Variance review criteria is required.
- ☒ **Development plans** (Refer to checklist on Page 4 for plan details)
- ☒ **Filing fee**
- ☒ **Electronic Submittal***

Each submittal must include fourteen (14) 11" x 17" **collated** paper copies. Landscape and Lighting plans (if required) must be **full-sized and legible**. Please refrain from using plastic covers or spiral binding.

Both the paper copies and electronic copies must be submitted prior to the application deadline before an application will be scheduled for a UDC meeting. Late materials will not be accepted. A completed application form is required for each UDC appearance.

For projects also requiring Plan Commission approval, applicants must also have submitted an accepted application for Plan Commission consideration prior to obtaining any formal action (initial or final approval) from the UDC. All plans must be legible when reduced.

**Electronic copies of all items submitted in hard copy are required. Individual PDF files of each item submitted should be compiled on a CD or flash drive, or submitted via email to udcapplications@cityofmadison.com. The email must include the project address, project name, and applicant name. Electronic submittals via file hosting services (such as Dropbox.com) are not allowed. Applicants who are unable to provide the materials electronically should contact the Planning Division at (608) 266-4635 for assistance.*

6. Applicant Declarations

1. Prior to submitting this application, the applicant is required to discuss the proposed project with Urban Design Commission staff. This application was discussed with Matt Tucker and others on April 15, 2019 UDC Informational Presentation on Wednesday, October 2
2. The applicant attests that all required materials are included in this submittal and understands that if any required information is not provided by the application deadline, the application will not be placed on an Urban Design Commission agenda for consideration.

Name of applicant Kirk Keller Relationship to property Architect

Authorizing signature of property owner  Date 09 Oct. 19

7. Application Filing Fees

Fees are required to be paid with the first application for either initial or final approval of a project, unless the project is part of the combined application process involving the Urban Design Commission in conjunction with Plan Commission and/or Common Council consideration. Make checks payable to City Treasurer. Credit cards may be used for application fees of less than \$1,000.

Please consult the schedule below for the appropriate fee for your request:

- ☐ Urban Design Districts: \$350 (per §35.24(6) MGO).
- ☒ Minor Alteration in the Downtown Core District (DC) or Urban Mixed-Use District (UMX) : \$150 (per §33.24(6)(b) MGO)
- ☐ Comprehensive Design Review: \$500 (per §31.041(3)(d)(1)(a) MGO)
- ☐ Minor Alteration to a Comprehensive Sign Plan: \$100 (per §31.041(3)(d)(1)(c) MGO)
- ☐ All other sign requests to the Urban Design Commission, including, but not limited to: appeals from the decisions of the Zoning Administrator, requests for signage variances (i.e. modifications of signage height, area, and setback), and additional sign code approvals: \$300 (per §31.041(3)(d)(2) MGO)

A filing fee is not required for the following project applications if part of the combined application process involving both Urban Design Commission and Plan Commission:

- Project in the Downtown Core District (DC), Urban Mixed-Use District (UMX), or Mixed-Use Center District (MXC)
- Project in the Suburban Employment Center District (SEC), Campus Institutional District (CI), or Employment Campus District (EC)
- Planned Development (PD): General Development Plan (GDP) and/or Specific Implementation Plan (SIP)
- Planned Multi-Use Site or Residential Building Complex

URBAN DESIGN COMMISSION APPROVAL PROCESS



Introduction

The City of Madison's Urban Design Commission (UDC) has been created to:

- Encourage and promote high quality in the design of new buildings, developments, remodeling, and additions so as to maintain and improve the established standards of property values within the City.
- Foster civic pride in the beauty and nobler assets of the City, and in all other ways possible assure a functionally efficient and visually attractive City in the future.

Types of Approvals

There are three types of requests considered by the UDC:

- Informational Presentation. Applicants may, at their discretion, request to make an Informational Presentation to the UDC prior to seeking any approvals to obtain early feedback and direction before undertaking detailed design. Applicants should provide details on the context of the site, design concept, site and building plans, and other relevant information to help the UDC understand the proposal and provide feedback. (Does not apply to CDR's or Signage Variance requests)
- Initial Approval. Applicants may, at their discretion, request initial approval of a proposal by presenting preliminary design information. As part of their review, the Commission will provide feedback on the design information that should be addressed at Final Approval stage.
- Final Approval. Applicants may request Final Approval of a proposal by presenting all final project details. Recommendations or concerns expressed by the UDC in the initial approval must be addressed at this time.

Presentations to the Commission

Primarily, the UDC is interested in the appearance and design quality of projects. Emphasis should be given to the site plan, landscape plan, lighting plan, building elevations, exterior building materials, color scheme, and graphics.

When presenting projects to the UDC, applicants must fill out a registration slip provided in the meeting room and present it to the Secretary. Presentations should generally be limited to 5 minutes or as extended by motion by consent of the Commission. The Commission will withhold questions until the end of the presentation.

Applicants are encouraged to consider the use of various graphic presentation material including a locator map, photographs, renderings/model, scale drawings of the proposal in context with adjacent buildings/uses/signs, etc., as may be deemed appropriate to describe the project and its surroundings. Graphics should be mounted on rigid boards so that they may be easily displayed. **Applicants/presenters are responsible for all presentation materials, AV equipment and easels.**

URBAN DESIGN DEVELOPMENT PLANS CHECKLIST

The items listed below are minimal application requirements for the type of approval indicated. Please note that the UDC and/or staff may require additional information in order to have a complete understanding of the project.

1. Informational Presentation

- ☐ Locator Map
- ☐ Letter of Intent (If the project is within an Urban Design District, a summary of how the development proposal addresses the district criteria is required)
- ☐ Contextual site information, including photographs and layout of adjacent buildings/structures
- ☐ Site Plan
- ☐ Two-dimensional (2D) images of proposed buildings or structures.

Providing additional information beyond these minimums may generate a greater level of feedback from the Commission.

Requirements for All Plan Sheets

1. Title block
2. Sheet number
3. North arrow
4. Scale, both written and graphic
5. Date
6. Fully dimensioned plans, scaled at 1" = 40' or larger

**** All plans must be legible, including the full-sized landscape and lighting plans (if required)**

2. Initial Approval

- ☒ Locator Map
- ☒ Letter of Intent (If the project is within a Urban Design District, a summary of how the development proposal addresses the district criteria is required)
- ☒ Contextual site information, including photographs and layout of adjacent buildings/structures
- ☒ Site Plan showing location of existing and proposed buildings, walks, drives, bike lanes, bike parking, and existing trees over 18" diameter
- ☒ Landscape Plan and Plant List (*must be legible*)
- ☒ Building Elevations in both black & white and color for all building sides (include material callouts)
- ☒ PD text and Letter of Intent (if applicable)

Providing additional information beyond these minimums may generate a greater level of feedback from the Commission.

3. Final Approval

All the requirements of the Initial Approval (see above), **plus:**

- ☒ Grading Plan
- ☐ Proposed Signage (if applicable)
- ☒ Lighting Plan, including fixture cut sheets and photometrics plan (*must be legible*)
- ☒ Utility/HVAC equipment location and screening details (with a rooftop plan if roof-mounted)
- ☒ PD text and Letter of Intent (if applicable)
- ☒ Samples of the exterior building materials (presented at the UDC meeting)

4. Comprehensive Design Review (CDR) and Variance Requests (Signage applications only)

- ☐ Locator Map
- ☐ Letter of Intent (a summary of how the proposed signage is consistent with the CDR or Signage Variance criteria is required)
- ☐ Contextual site information, including photographs of existing signage both on site and within proximity to the project site
- ☐ Site Plan showing the location of existing signage and proposed signage, dimensioned signage setbacks, sidewalks, driveways, and right-of-ways
- ☐ Proposed signage graphics (fully dimensioned, scaled drawings, including materials and colors, and night view)
- ☐ Perspective renderings (emphasis on pedestrian/automobile scale viewsheds)
- ☐ Illustration of the proposed signage that meets Ch. 31, MGO compared to what is being requested.
- ☐ Graphic of the proposed signage as it relates to what the Ch. 31, MGO would permit

October 9, 2019

**City of Madison Plan Commission
City of Madison Urban Design Commission
215 Martin Luther King, Jr. Blvd
Madison, WI 53703**

LETTER OF INTENT – 636 W. Washington Avenue

Commission Members:

The owner of 636 West Washington Ave is proposing the demolition of existing improvements and construction of a new mixed-use project. The 33,100 square foot site is currently improved with a gas station and 2nd floor office space. The proposed 5-story redevelopment will include 51 apartment units, approximately 7,500 square feet of commercial space, and two-levels of underground parking containing 70 parking stalls. The proposed project is in full compliance with the existing zoning of Urban Mixed-Use and all applicable Design Standards, including compliance with the Downtown Stepback Map. A concurrently submitted application for a Certified Survey Map will combine the existing, underlying lots into a single mapped lot.

The mix of apartment types will be as follows:

Studios:	7 (14%)
One-Bedroom:	25 (49%)
Two-Bedroom:	15 (29%)
Three-Bedroom:	4 (8%)

Five of the 5th floor units will have lofts and private roof top patios.

Building amenities will include:

- 5th floor community room and outdoor patio space
- Tenant exercise room
- Ample tenant storage
- Interior bike storage and maintenance area
- Interior trash room and garbage chute
- Tenant lobby with large package storage and refrigerated storage for grocery delivery
- In-building pet wash area and exterior dog-walk area

Building Details:

- 5-stories (exterior will include a combination of brick, stone, and cementitious siding)
- 110,000 gross square feet (including underground parking area)
- 70 underground parking stalls
- 13 exterior parking stalls
- Energy efficient HVAC equipment, LED lighting, solar ready construction

Project Schedule:

- Demolition: Spring of 2020
- Construction: Late Spring of 2020 (12-month duration)
- Opening: May 1, 2021

From: jlee.res@gmail.com
Sent: Friday, August 30, 2019 3:40 PM
To: 'Tim Kamps'; 'Jonathan Cooper'; 'Verveer, Mike'
Cc: 'Firchow, Kevin'; 'Kirk Keller'; garyshmerler@gmail.com
Subject: 636 W. Washington

Gentlemen – in accordance with the Pre-Application Notification provision of the City of Madison Land Use Application, I am following up with you in writing, reiterating that the owner of 636 W. Washington Ave intends to submit in early October, a Land Use Application, including a request for demolition of the existing gas station, for the construction of a new mixed-use building in this location. The new building will include approximately 52 apartment units plus ground floor commercial. Surface parking will be included behind the building and in two levels of underground parking. The anticipated timeline is for demolition to occur in the spring of 2020, a 12-month construction process, and building opening in the late spring of 2021. You can contact me with any questions.

Additionally, for the record, I want to memorialize that our development team presented this concept to the Bassett Neighborhood at its monthly meeting July 8, 2019; to the Mifflin Neighborhood at its August 7, 2019 meeting; and to the greater area at a publicly noticed meeting on August 26, 2019.

Thank you -- Jeff

Jeffrey Lee
Lee Real Estate Services LLC
608-347-5338

jlee.res@gmail.com

From: jlee.res@gmail.com
Sent: Friday, August 30, 2019 4:12 PM
To: tkenney@visitdowntownmadison.com
Cc: 'Firchow, Kevin'; 'Verveer, Mike'; garyshmerler@gmail.com
Subject: 636 W. Washington

Tiffany – good afternoon! It has come to my attention that the property located at 636 W. Washington is located within Madison's Central Business Improvement District. The site is currently improved with a gas station. In accordance with the Pre-Application Notification provision of the City of Madison Land Use Application, I am reaching out to let you know of the property owner's intention to submit in early October, a Land Use Application, including a request for demolition of the existing gas station, for the construction of a new mixed-use building in this location. The anticipated 5 story building will include approximately 52 apartment units plus ground floor commercial space. In addition to surface parking behind the building, there will be two levels of under-building parking. The anticipated timeline is for demolition to occur in the spring of 2020, a 12-month construction process, and building opening in the late spring of 2021. You can contact me with any questions.

Thank you -- Jeff

Jeffrey Lee
Lee Real Estate Services LLC
608-347-5338

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Sent: Friday, August 30, 2019 3:40 PM
To: 'Tim Kamps' <tk.kamps@gmail.com>; 'Jonathan Cooper' <natelyp@gmail.com>; 'Verveer, Mike' <district4@cityofmadison.com>
Cc: 'Firchow, Kevin' <KFirchow@cityofmadison.com>; 'Kirk Keller' <kkeller@prarch.com>; garyshmerler@gmail.com
Subject: 636 W. Washington

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Jeffrey Lee
Lee Real Estate Services LLC
608-347-5338

West Washington Place

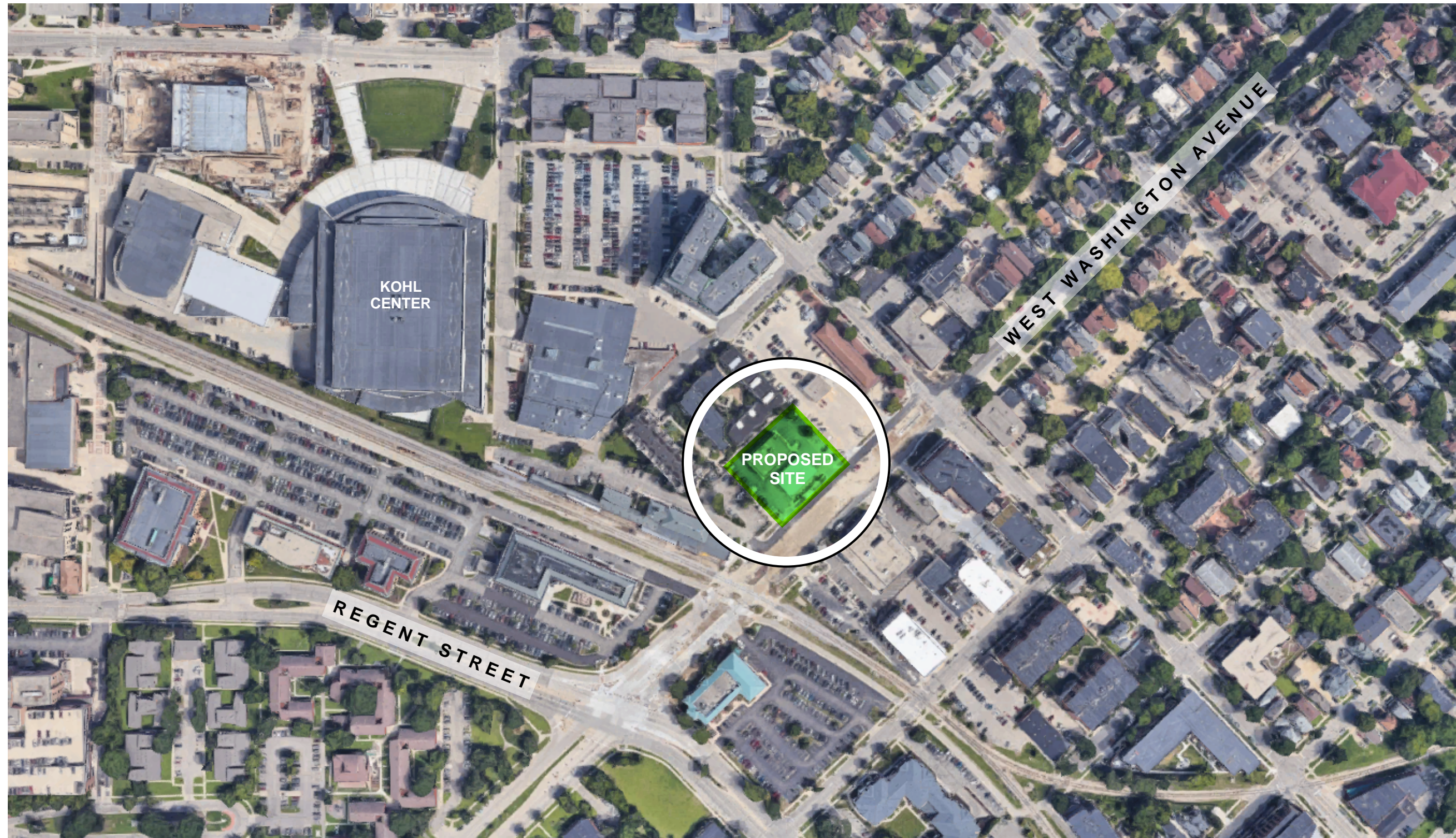
636 West Washington Ave

Madison Wisconsin 53703

**West Washington Place
UDC Initial / Final Submittal**

October 9, 2019





West Washington Place - Madison, WI



View of building directly adjacent and Southwest of Site.



View of Site from West Washington, looking Northeast.



View of Site from West Corner, looking Northeast.



View of Site from West Washington, looking West.



View of West Corner of Site.



View of canopy, Southern portion of site.

West Washington Place - Madison, WI



View of building directly across West Washington.



View of buildings across West Washington to the Northeast.



View of building directly Northeast of Site.



View of building at Corner of Washington and Bedford.



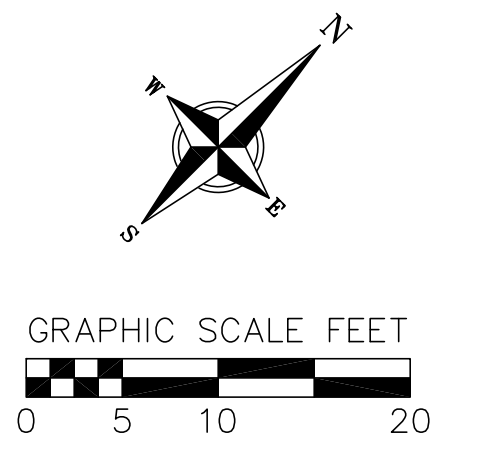
View of building directly behind site to Northeast.




View of building and bike path directly Southwest of Site.



ADJACENT BRICK BUILDING



GRAPHIC SCALE FEET



A horizontal scale bar with alternating black and white segments. Below the bar are numerical markings at 0, 5, 10, and 20.



verbicher
planners | engineers | advisors

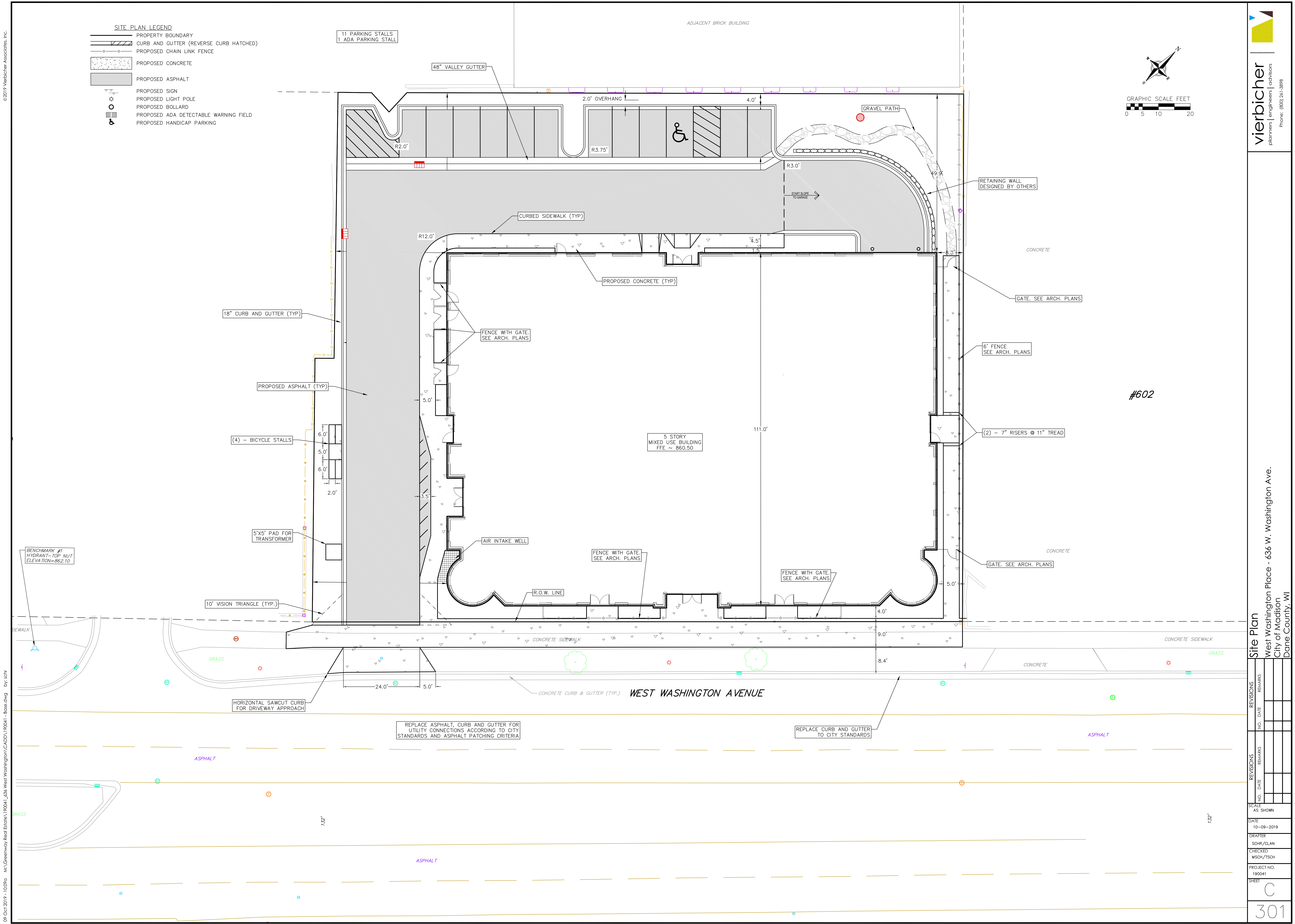
Phone: (800) 261-3898

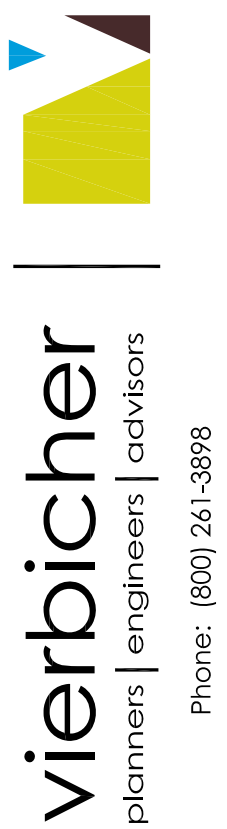
West Washington Place - 636 W. Washington Ave.
City of Madison
Dane County, WI

DATE	NO. DATE		REMARKS	
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AFTER				
CHCR/CLAN				
ECKED				
SCH/TSCH				
OBJECT NO.				
90041				
HEET				

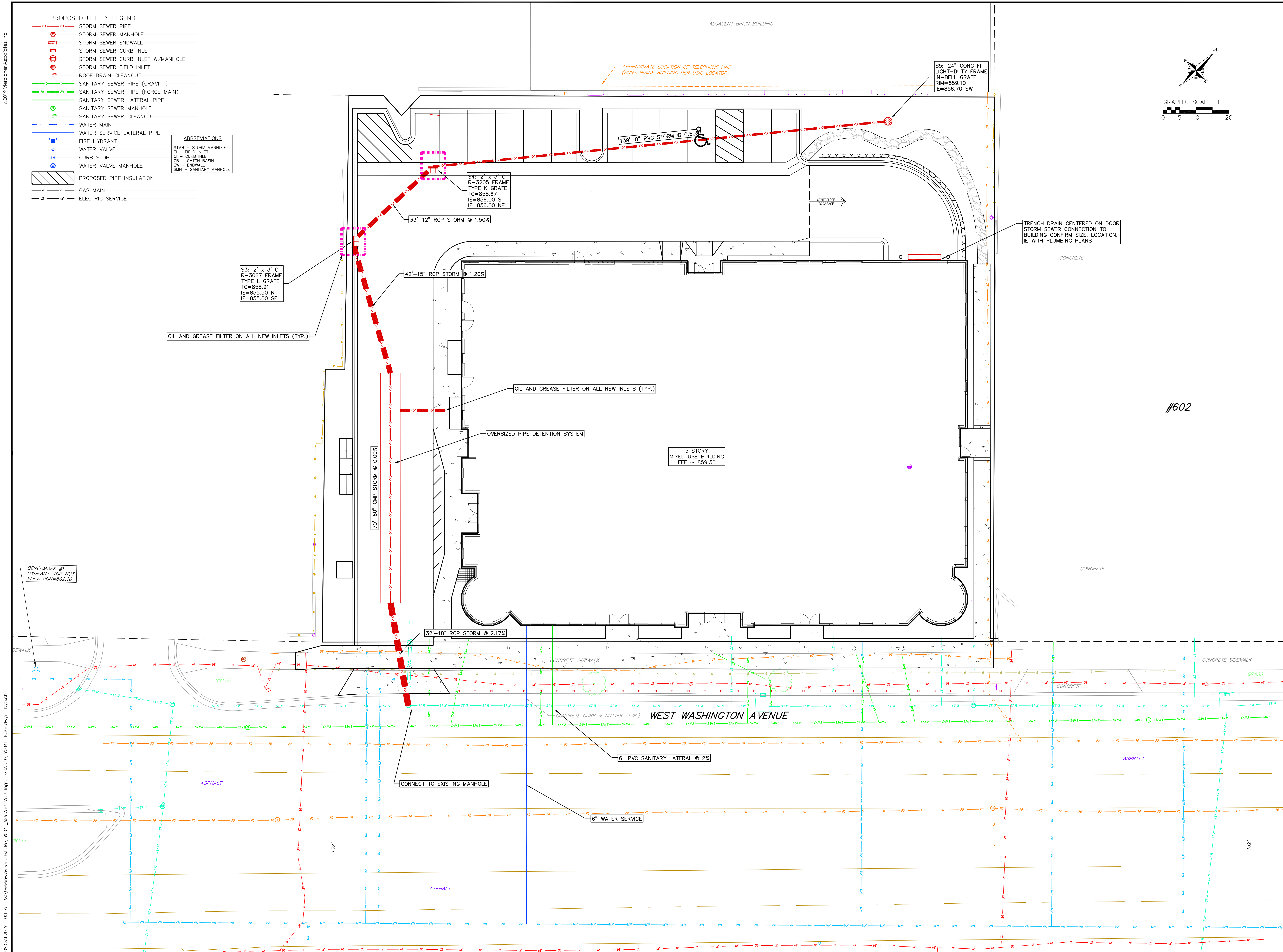
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REVISIONS		REVISIONS		SCALE AS SHOWN	
NO.	DATE	NO.	DATE	DATE	10-09-2019
REMARKS		REMARKS		DRAFTER	SCH/R/CLAN
				CHECKED	MSCH/TSCH
				PROJECT NO.	190041
				SHEET	C
					401



vierbicher
planners | engineers | architects
Phone: (608) 261-3898

Utility Plan
West Washington Place - 636 W. Washington Ave.
City of Madison
Dane County, WI

REVISIONS	
NO.	DATE

SCALE AS SHOWN

DATE 10-09-2019

DRAFTER SCHR/CLAN

CHECKED MSCH/TSCB

PROJECT NO. 190041

SHEET **C**

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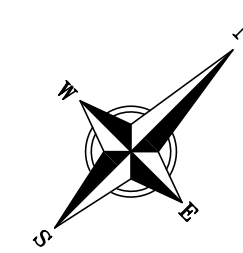


DECIDUOUS TREES		BOTANICAL / COMMON NAME	CONT	CAL	QTY
GT		Gleditsia triacanthos Inermis 'Shademaster' TM / Shademaster Locust	B & B	2.5' Cal	2
SR		Syringa reticulata 'Ivory Silk' / Ivory Silk Japanese Tree Lilac	B & B	1.5' Cal	1
UF		Ulmus x 'Frontier' / American Elm	B & B	1.5' Cal	2
		40-50" h x 25-35" w			
		Upright vase shaped			
DECIDUOUS SHRUBS		BOTANICAL / COMMON NAME	SIZE	FIELD2	QTY
DI		Diervilla lonicera / Dwarf Bush Honeyloose	3 gal		6
		3-4' h x 4-5' w			
RB		Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	3 gal		20
		2-3' h x 6-8' w			
Sa		Spirea betulifolia 'COURISIP01' TM / Pink Sparlet Birchleaf Spirea	5 gal	Cont	5
		3-4' x 3-4'			
Sj		Spirea japonica 'Magic Carpet' / Magic Carpet Spirea	3 gal		6
Sm		Syringa meyeri 'Pallini' / Dwarf Korean Lilac	5 gal		6
EVERGREEN SHRUBS		BOTANICAL / COMMON NAME	SIZE	FIELD2	QTY
		Juniperus horizontalis plumosa 'Youngstown' / Creeping Juniper	5 gal		15
Thm		Thuja occidentalis 'Heiz Midgett' / Heiz Midgett Arborvitae	5 gal	Cont	4
		2-3' x 2-3'			
To		Thuja occidentalis 'Holmstrup' / Holmstrup Cedar	10 gal	Cont	7
PERENNIALS		BOTANICAL / COMMON NAME	SIZE	FIELD2	QTY
pkf		Calamagrostis x acutiflora 'Kar Foerster' / Feather Reed Grass	1 gal		59
		35" h x 2' w			
pv		Panicum virgatum 'Heavy Metal' / Blue Switch Grass	1 gal	Cont	57
ss		Schizachyrium scoparium / Little Bluestem Grass	4" pot		73
sh		Sporobolus heterolepis / Prairie Droopseed	4" pot		11

	<u>3/4" WASHED STONE</u> -	50 sf
	<u>TURF GRASS</u> -	810 sf
	<u>ANNUALS</u> -	348 sf
	<u>BARK MULCH</u> -	2,506 sf
	<u>GRAVEL PATH</u> -	261 sf

City of Madison Landscape Worksheet									
Address:		636 W. Washington Ave		Date:		10.09.2019			
Total Square Footage of Developed Area:		(Site Area)	33,291	-	(Building Footprint at Grade)		16796	=	16495 sf
Total Landscape Points Required (<5 ac):		(16,495	/ 300 =	55	x 5 =	275	275		
Landscape Points Required >5 ac:		0	/ 100 =	0	x 1 =	-			
		Credits/ Existing Landscaping			New/ Proposed Landscaping				
Plant Type/ Element	Min. Size at Installation	Points	Quantity	Points Achieved	Quantity	Points Achieved			
Oversitory deciduous tree	2.5" cal	35		0	4	140			
Tall Evergreen Tree	5-6 feet tall	35		0		0			
Ornamental tree	1.5" cal	15		0	1	15			
Upright evergreen shrub	3-4 feet tall	10		0	7	70			
Shrub, deciduous	#3 gallon container size, Min. 12-24"	3		0	43	129			
Shrub, evergreen	#3 gallon container size, Min. 12-24"	4		0	19	76			
Ornamental grasses/perennials	#1 gallon container size, Min. 8-18"	2		0	116	232			
Ornamental/Decorative fencing or wall	n/a	4 per 10 LF		0		0			
Existing significant specimen tree	Min. Size 2.5" cal. Trees must be within developed area and cannot comprise more than 30% of total required points.			14 per caliper inch. Max. points per tree: 200	0	0			
Landscape Furniture for public seating and/or transit connections	Furniture must be within developed area, publicly accessible, and cannot comprise more than 5% of total required points	5 points per "seat"		0		0			
Sub Totals				0		662			
Total Points Provided:				662					

1. All plantings shall conform to quality requirements as per ANSI Z60.1.
2. All plant material shall be true to the species, variety and size specified, nursery grown in accordance with good horticultural practices, and under climatic conditions similar to those of the project site. Consideration shall be given to the use of plant material substitutions due to availability issues.
3. All plant material shall be healthy and free of pests and diseases.
4. All plants shall be guaranteed to be in healthy and flourishing condition during the growing season following installation. All plant material shall be guaranteed for one year from the time of installation.
5. Contractor shall provide a suitable amended topsoil blend for all planting areas where soil conditions are unsuitable for plant growth. Topsoil shall conform to quality requirements as per Section 625.21(1) of the Standard Specifications for Highway Construction. Provide a minimum of 12" of topsoil in all planting areas and 6" of topsoil in areas to be seeded/sodded.
6. Sodded areas shall be prepared with a 2" deep bed of well-sieved shredded hardwood bark mulch to 3" depth min. Foundation areas without plantings to be mulched with $\frac{3}{4}$ " washed stone over weed barrier fabric. Place stone areas to 3" depth min.
7. Areas shown as turf grass to be sodded with turf sod not grown in peat. All sodded areas are to be watered daily to maintain adequate soil moisture for proper establishment. After vigorous growth is established, apply $\frac{1}{2}$ " water twice weekly until final acceptance.

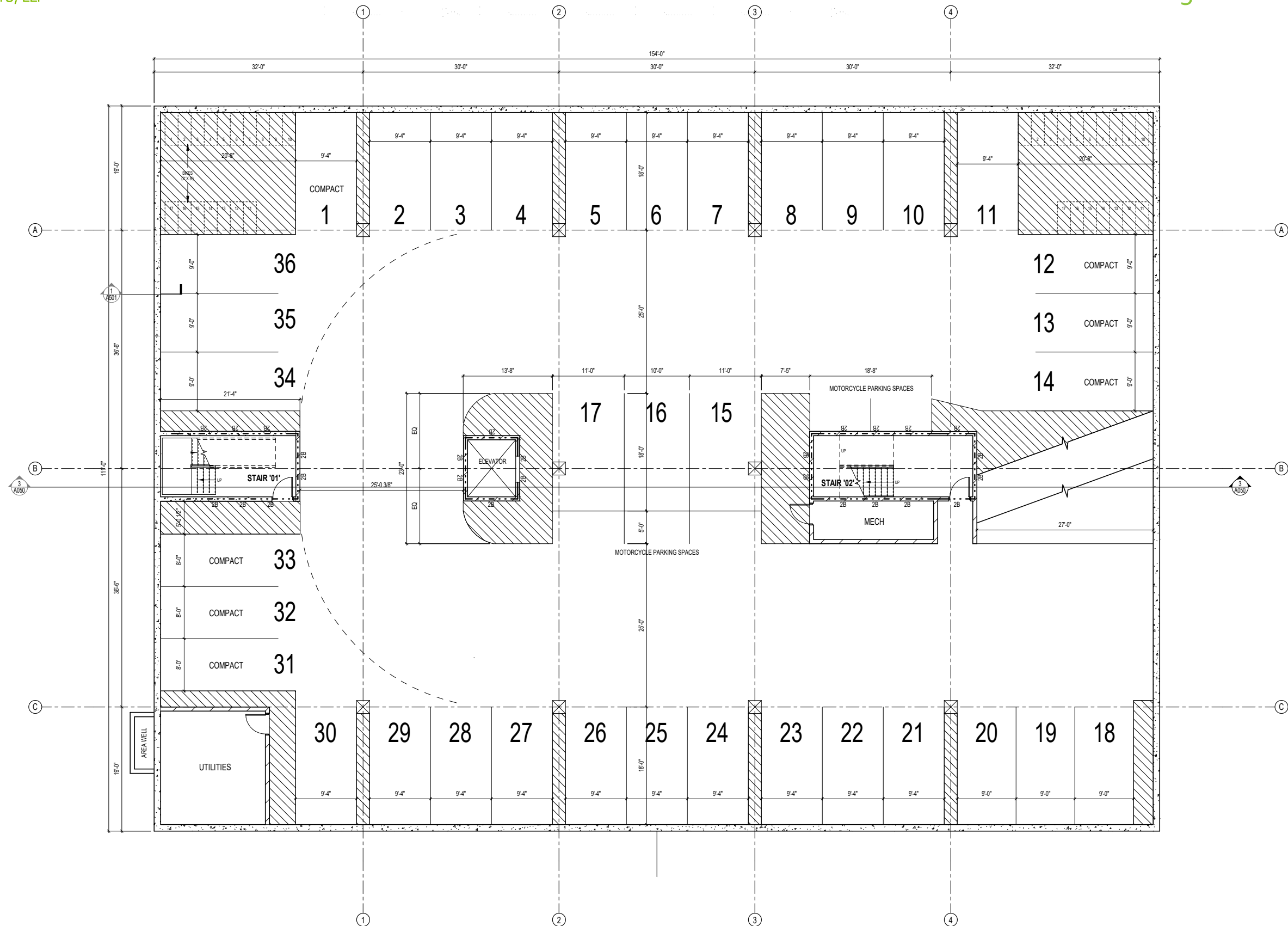


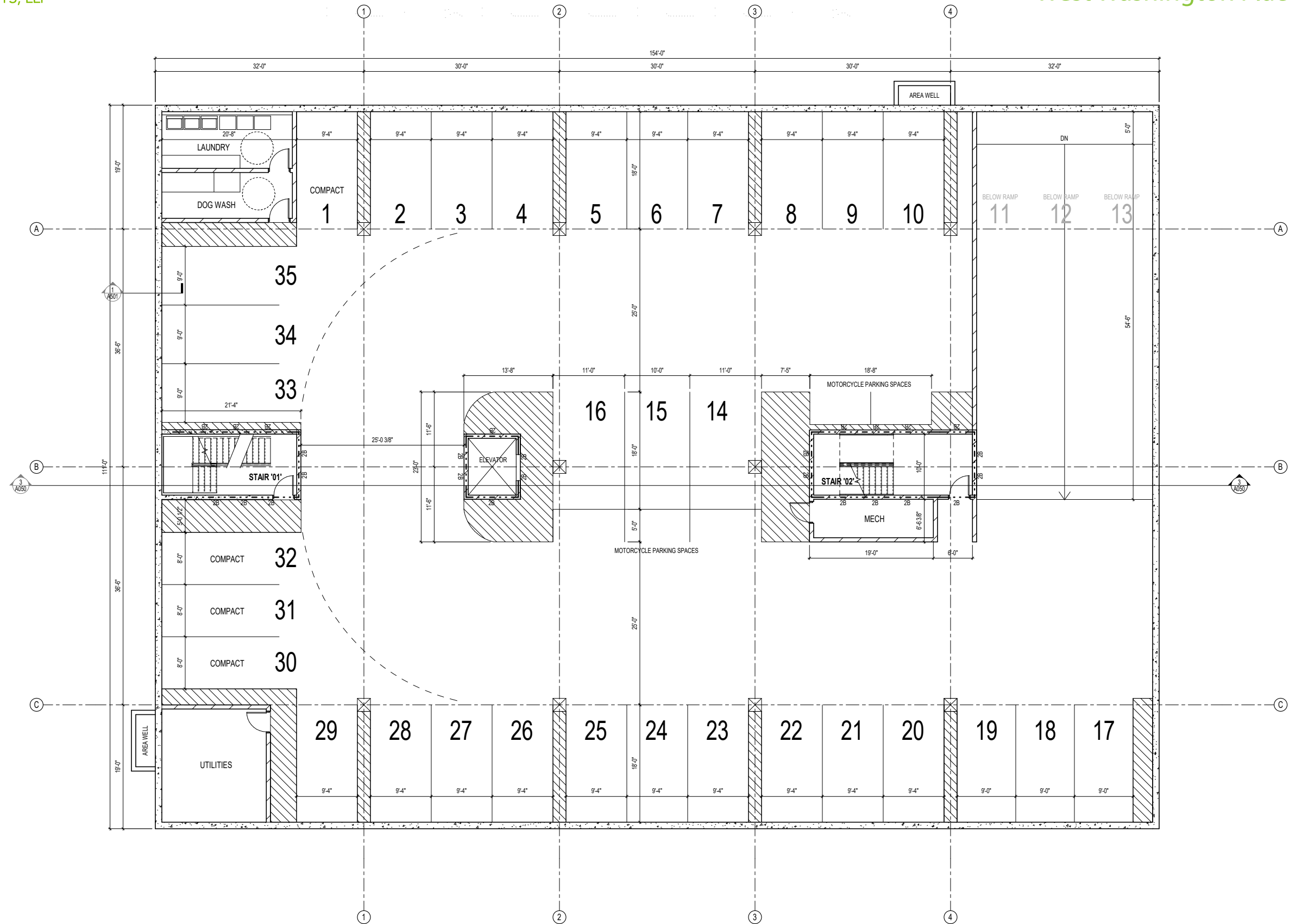
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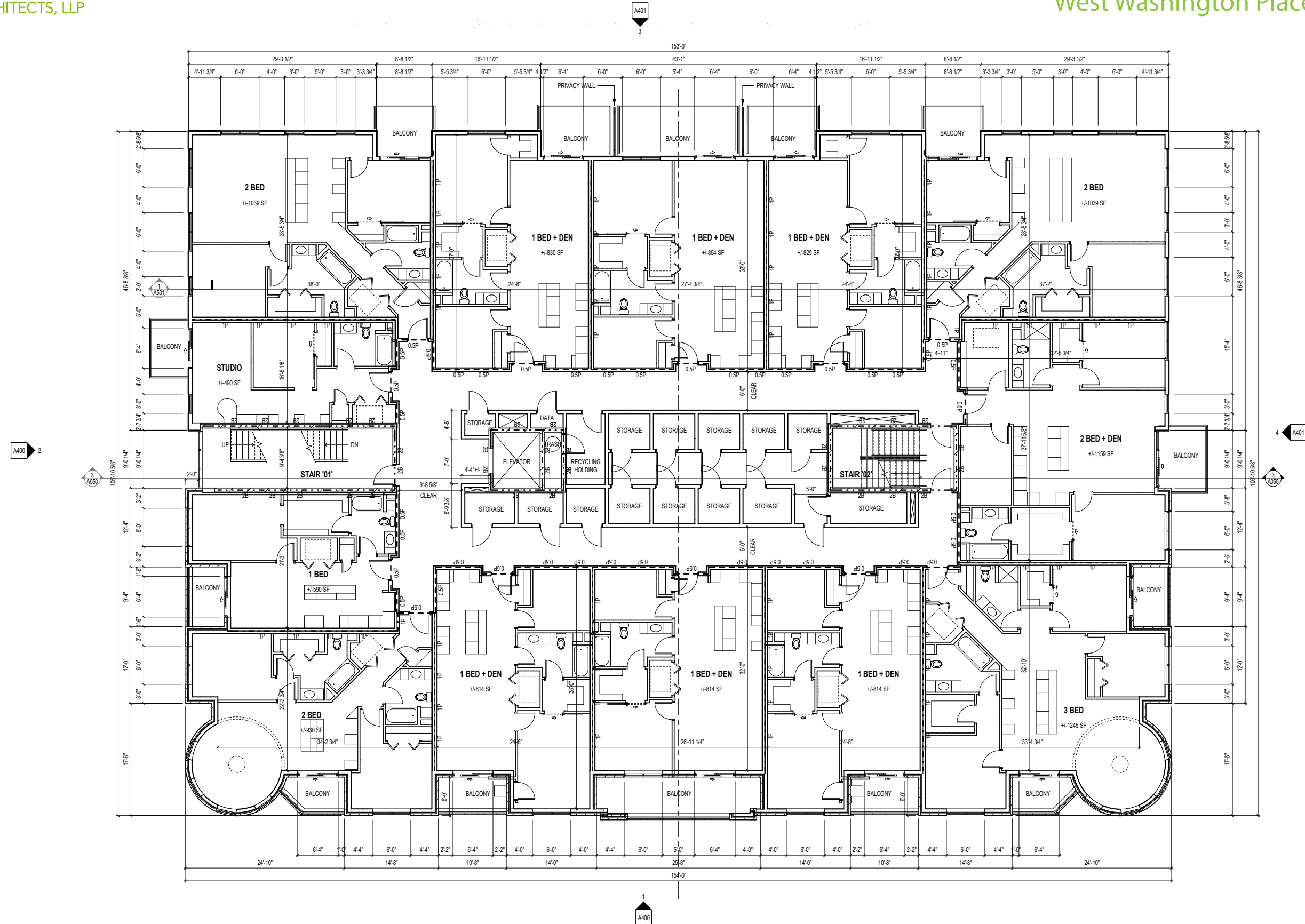
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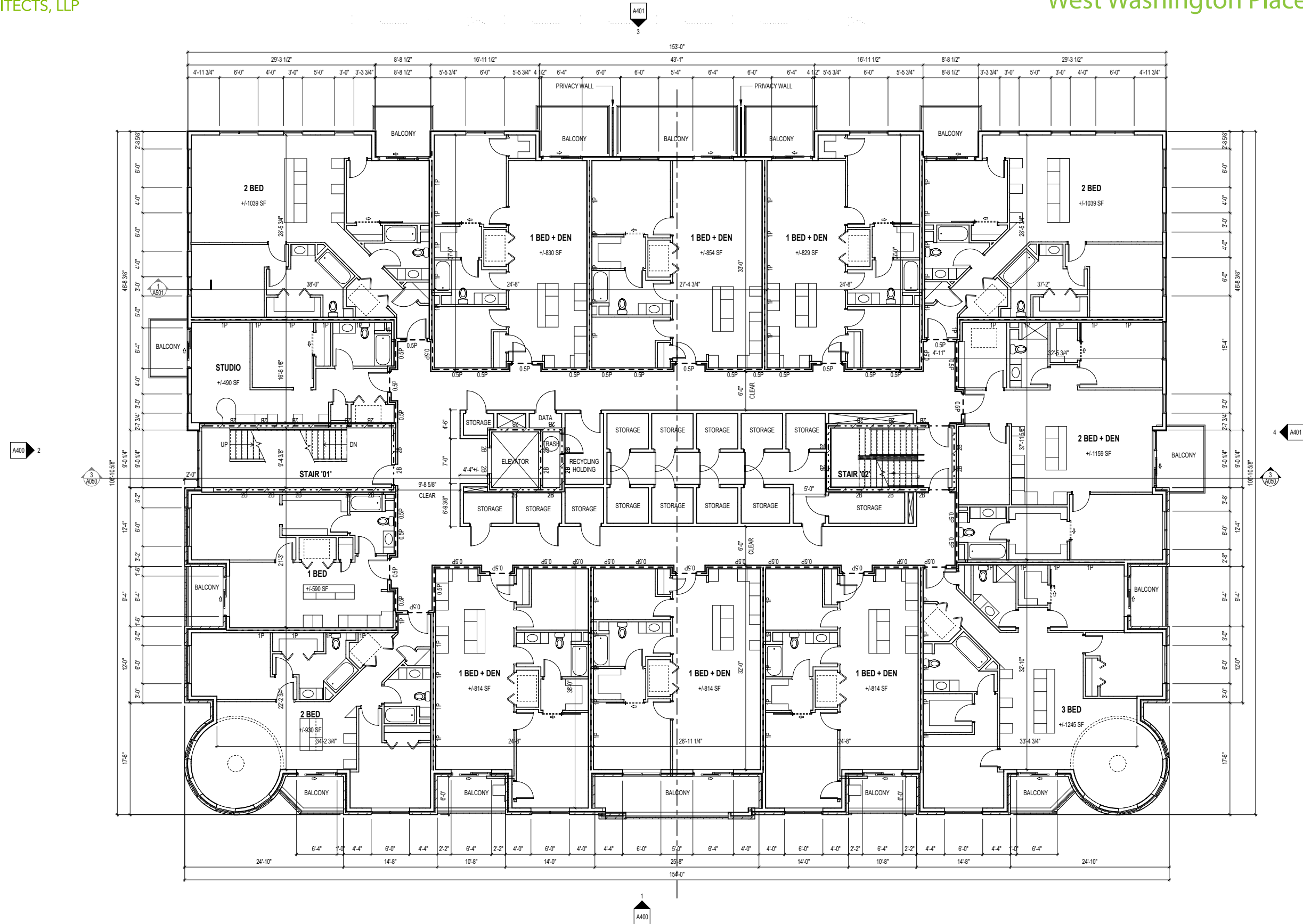
NOT FOR CONSTRUCTION

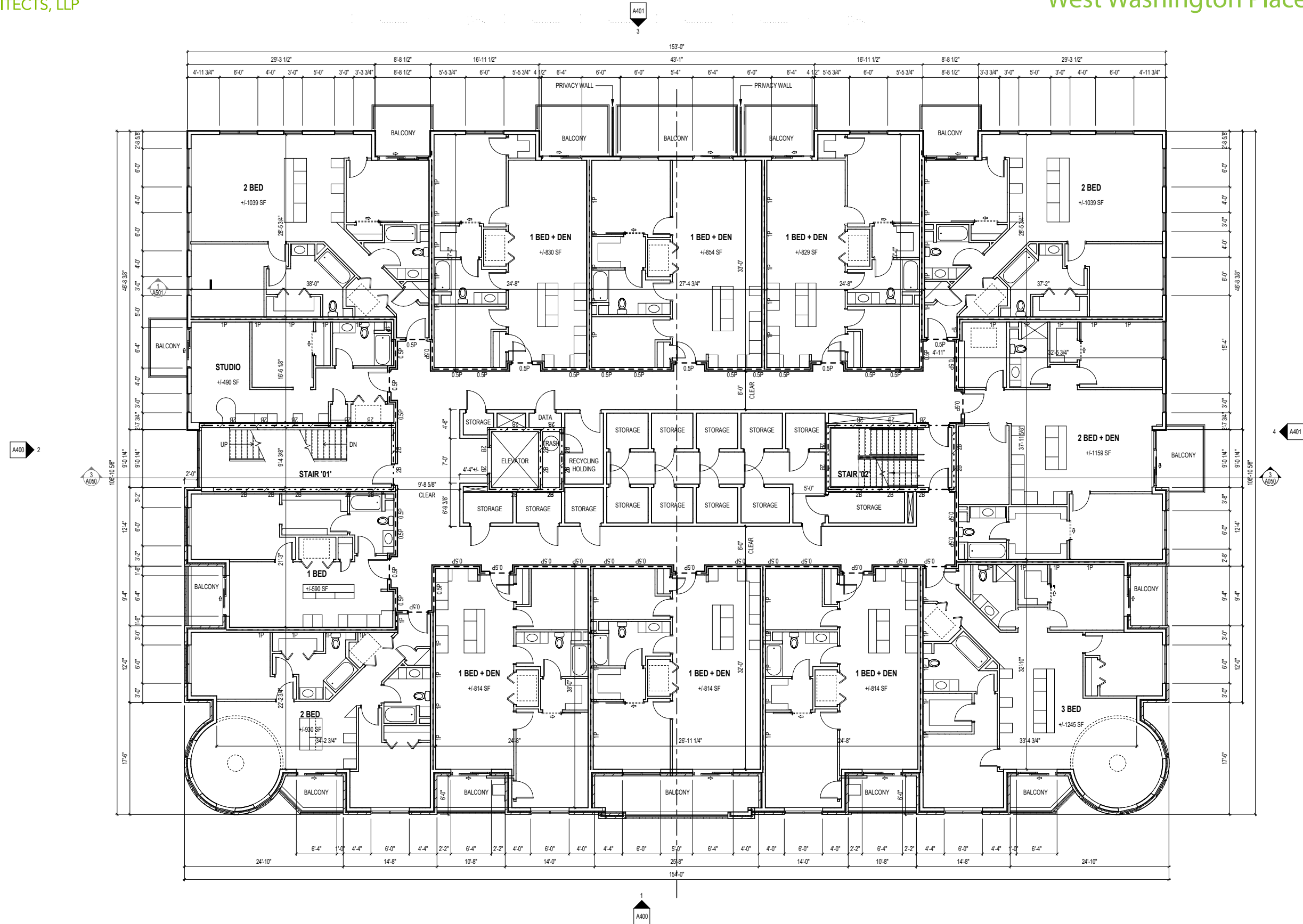


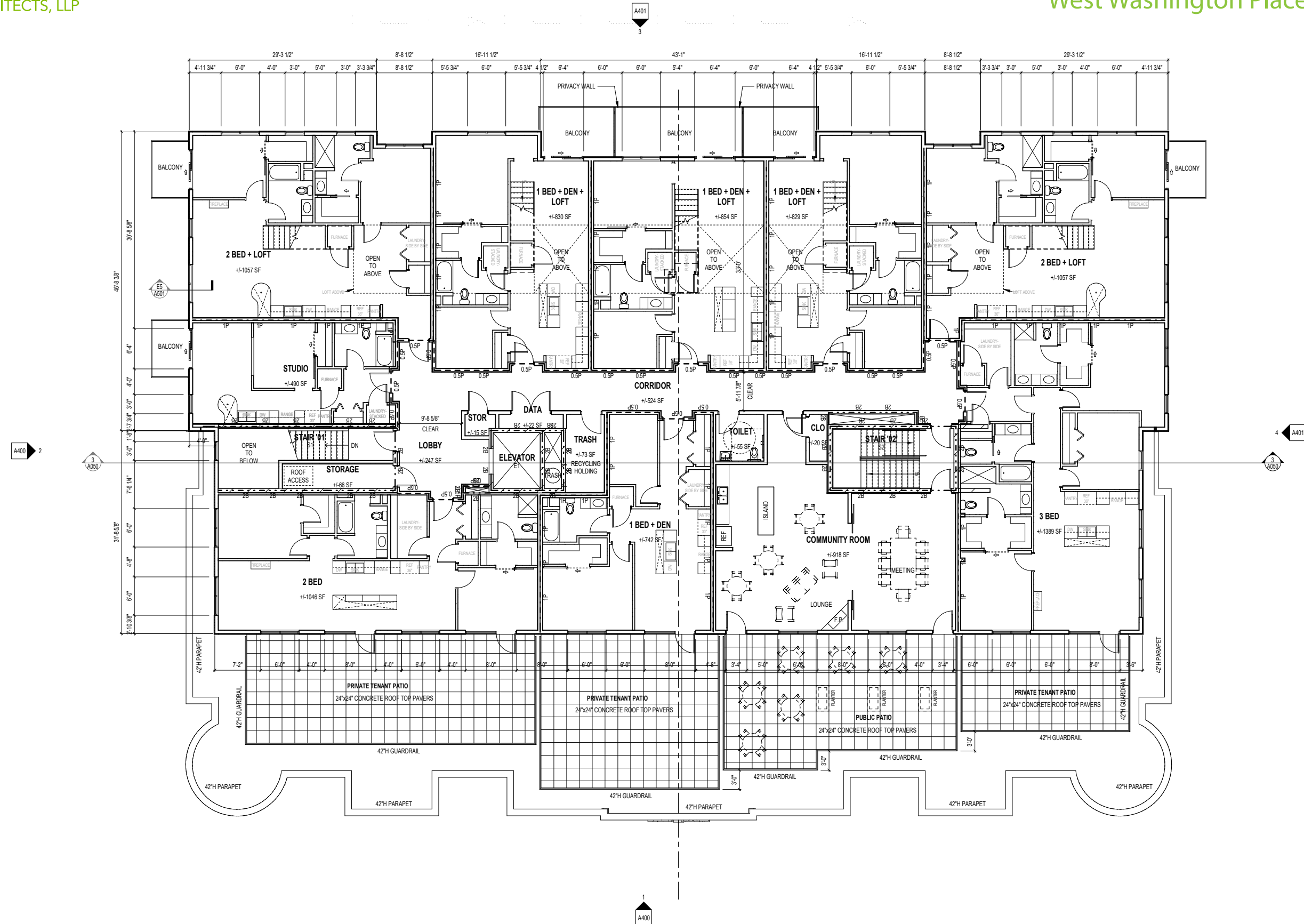


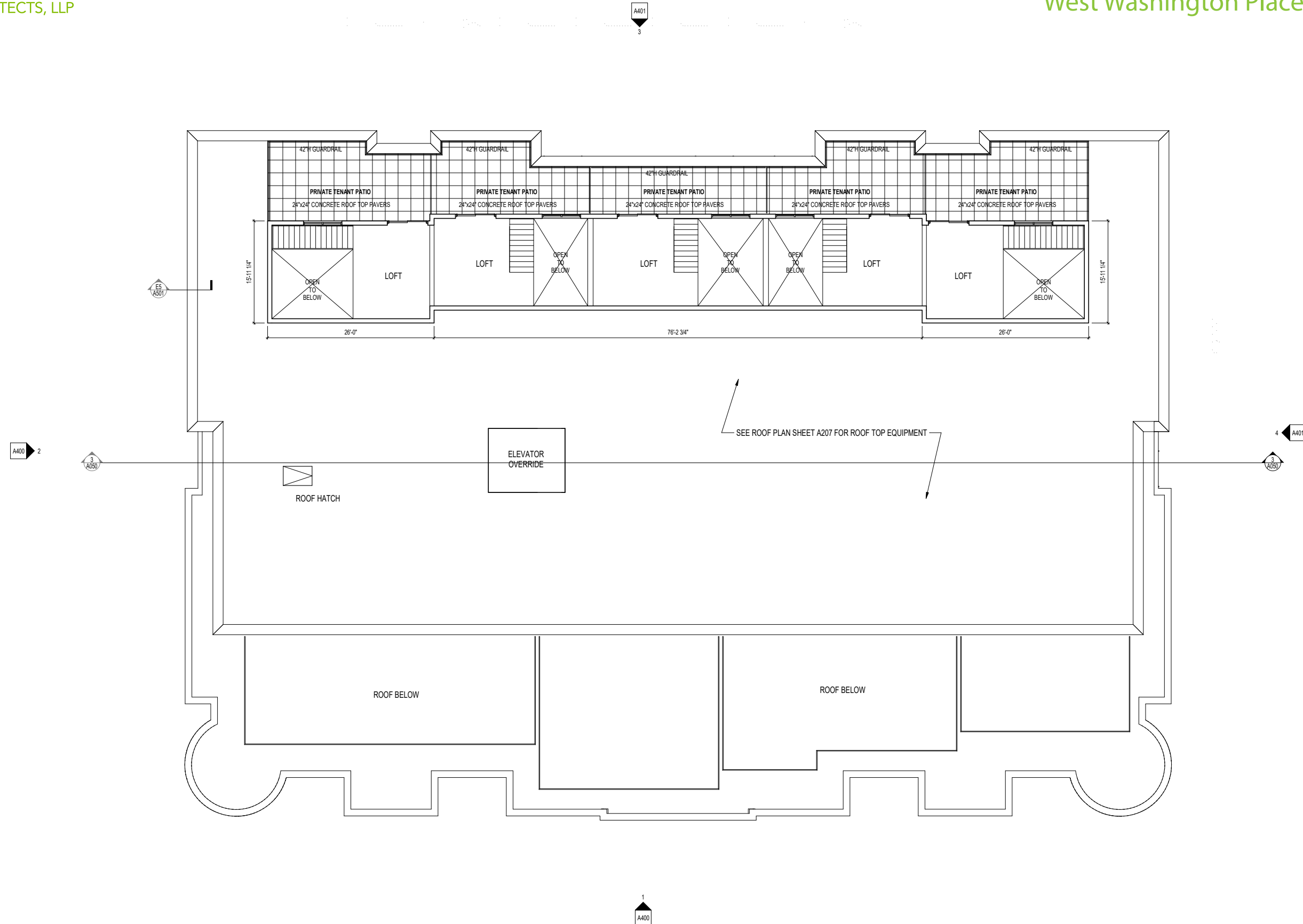


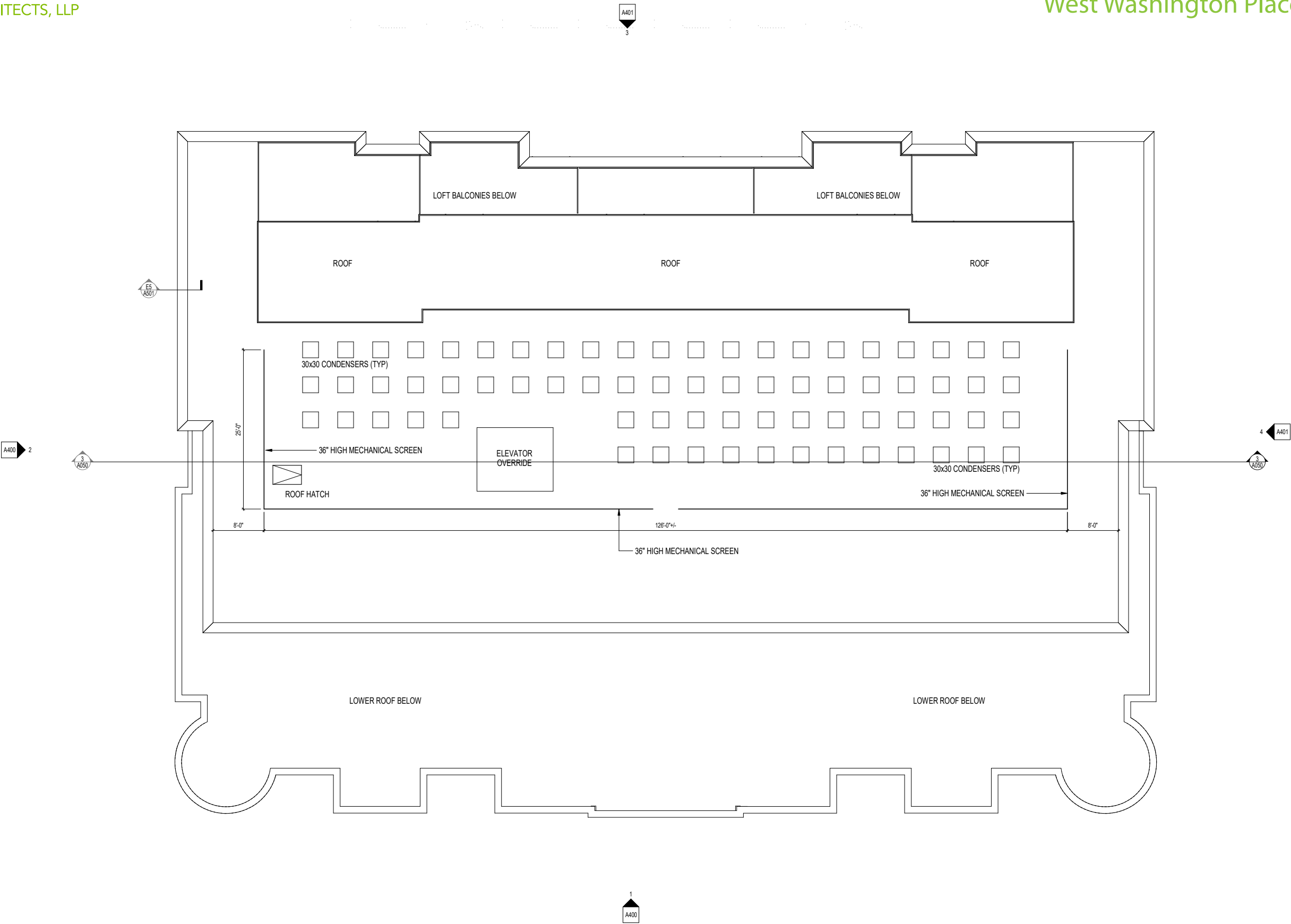




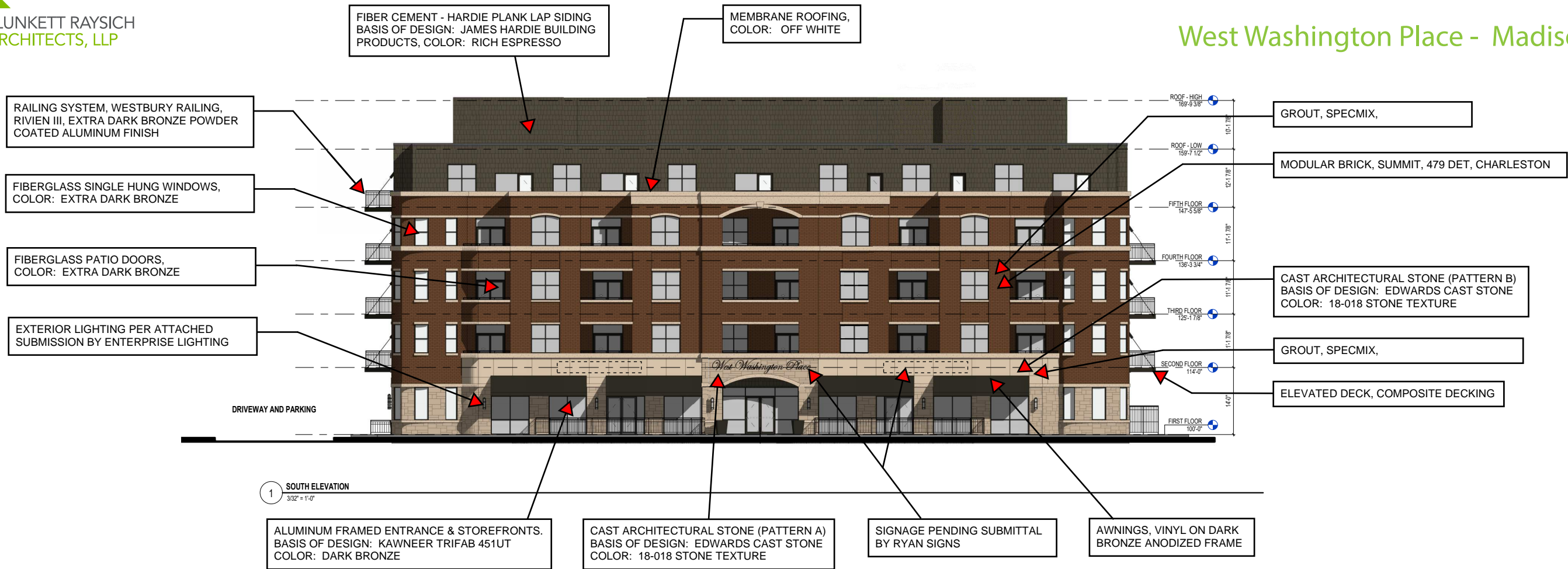


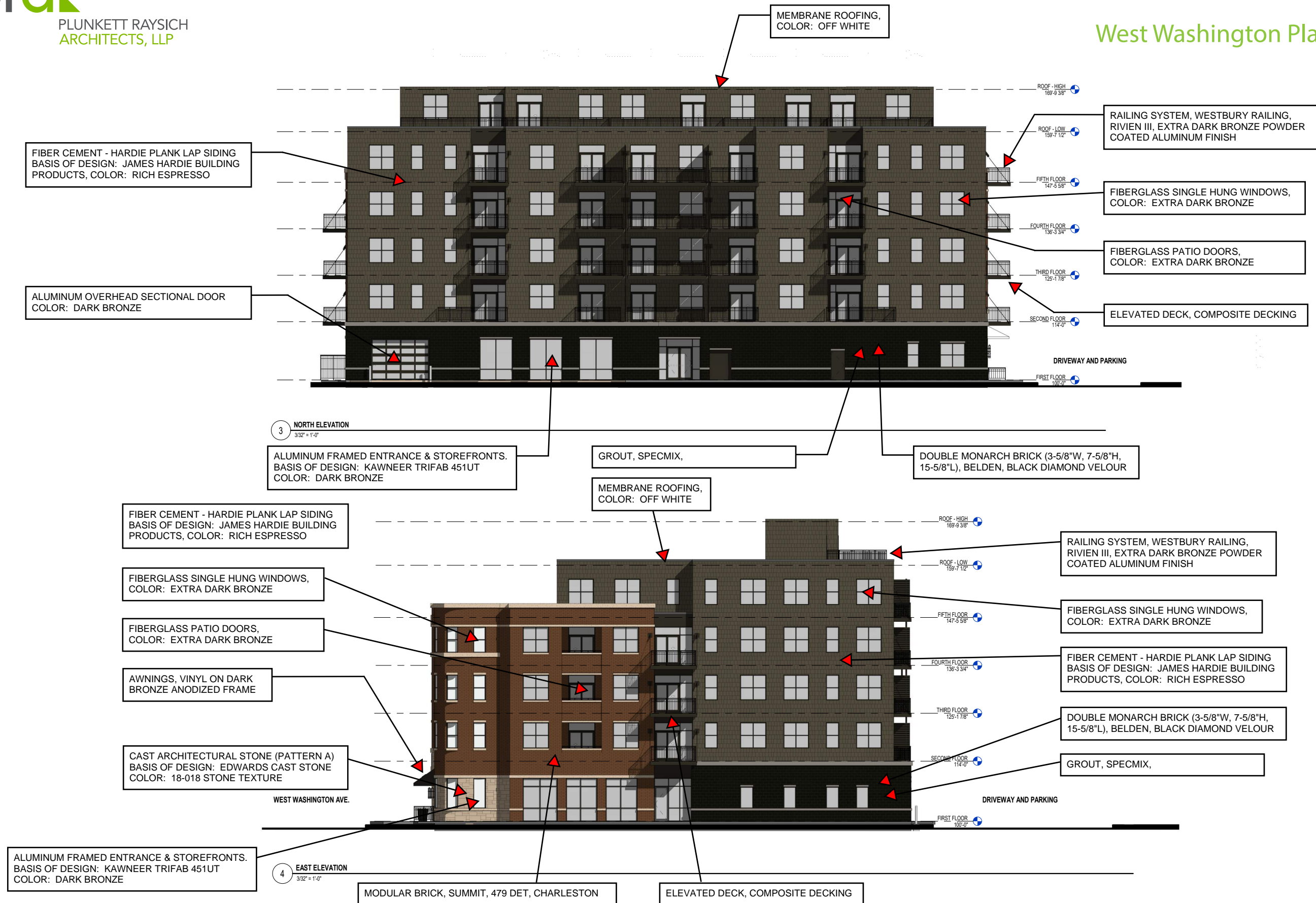


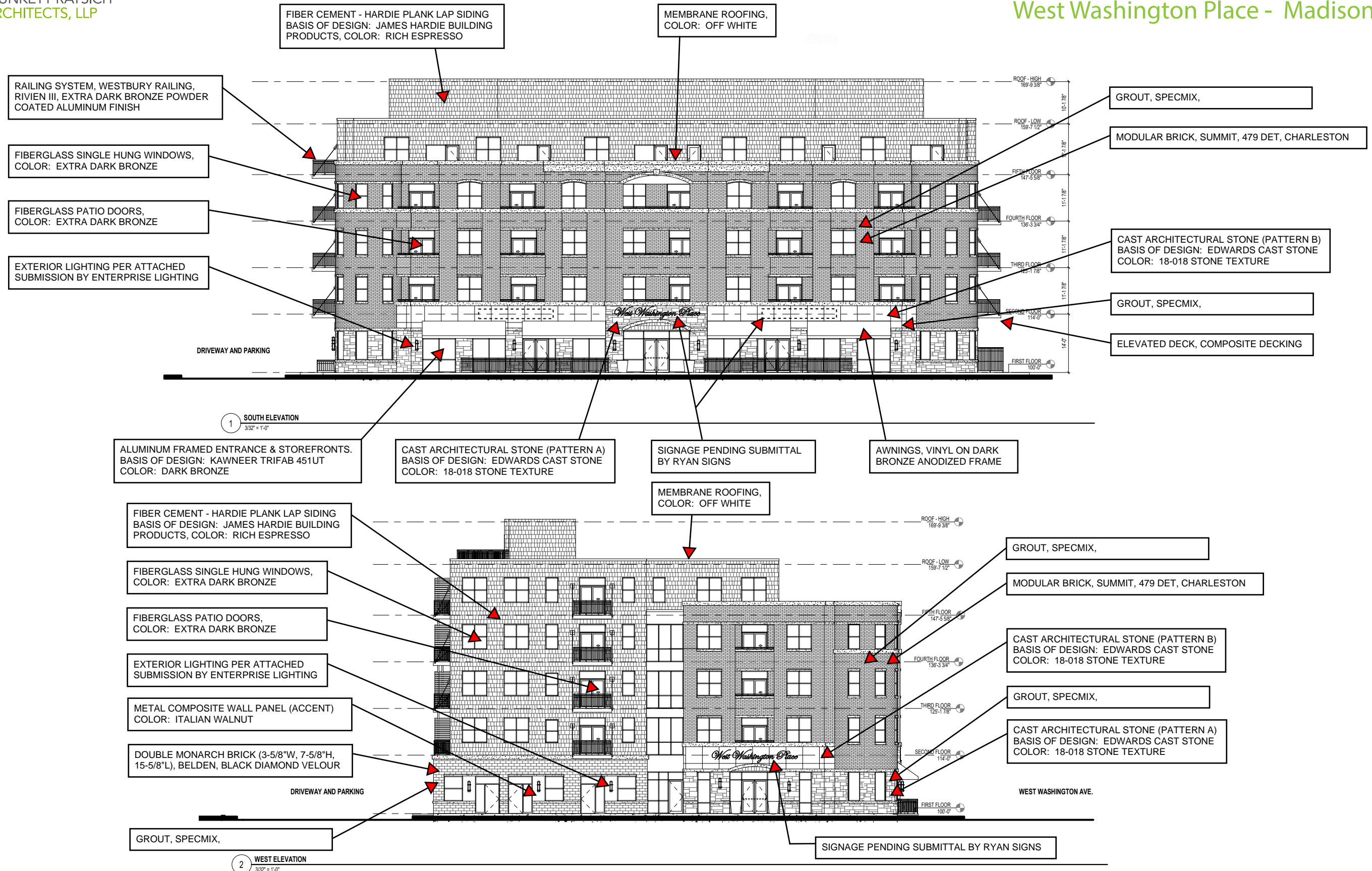


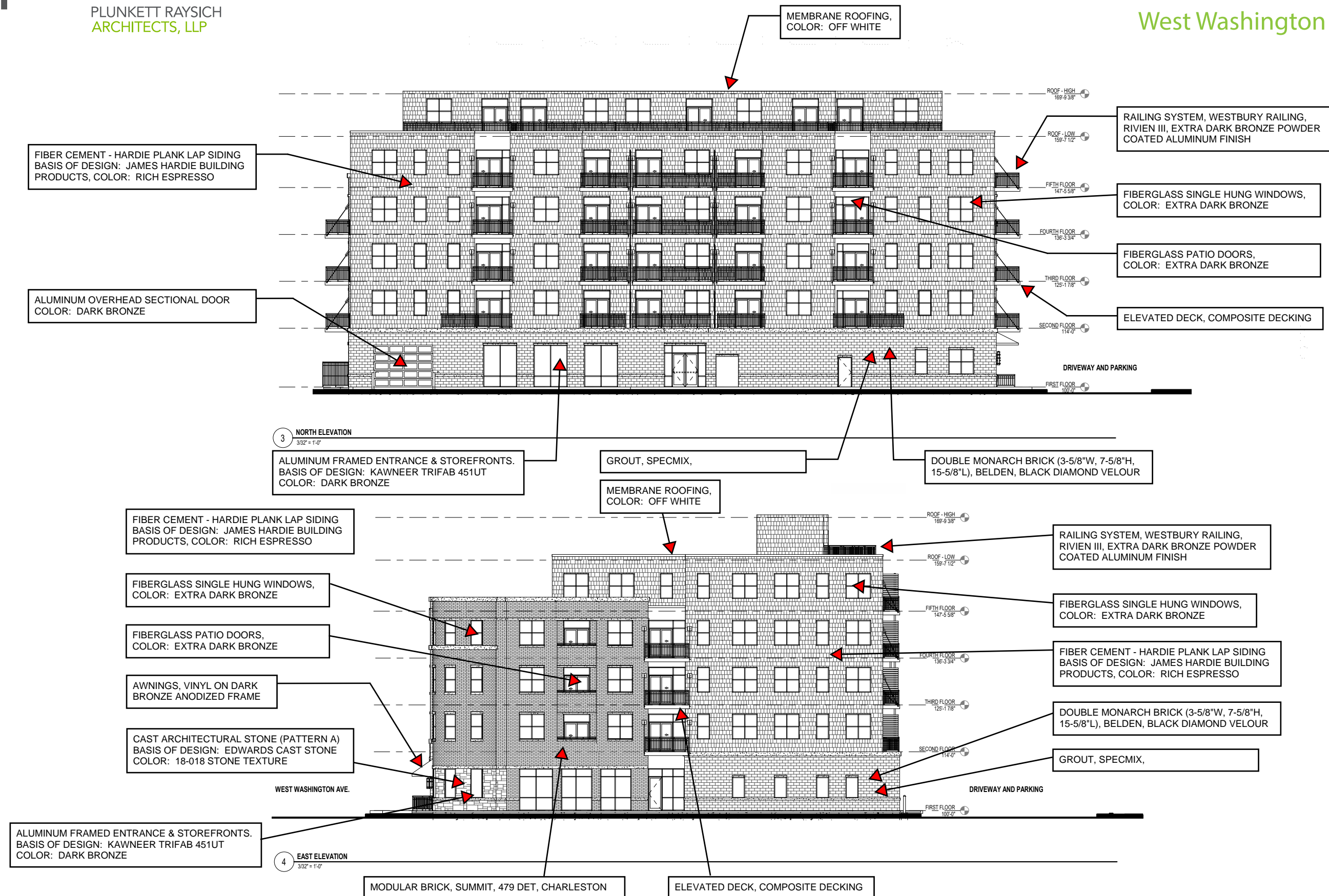


West Washington Place - Madison, WI



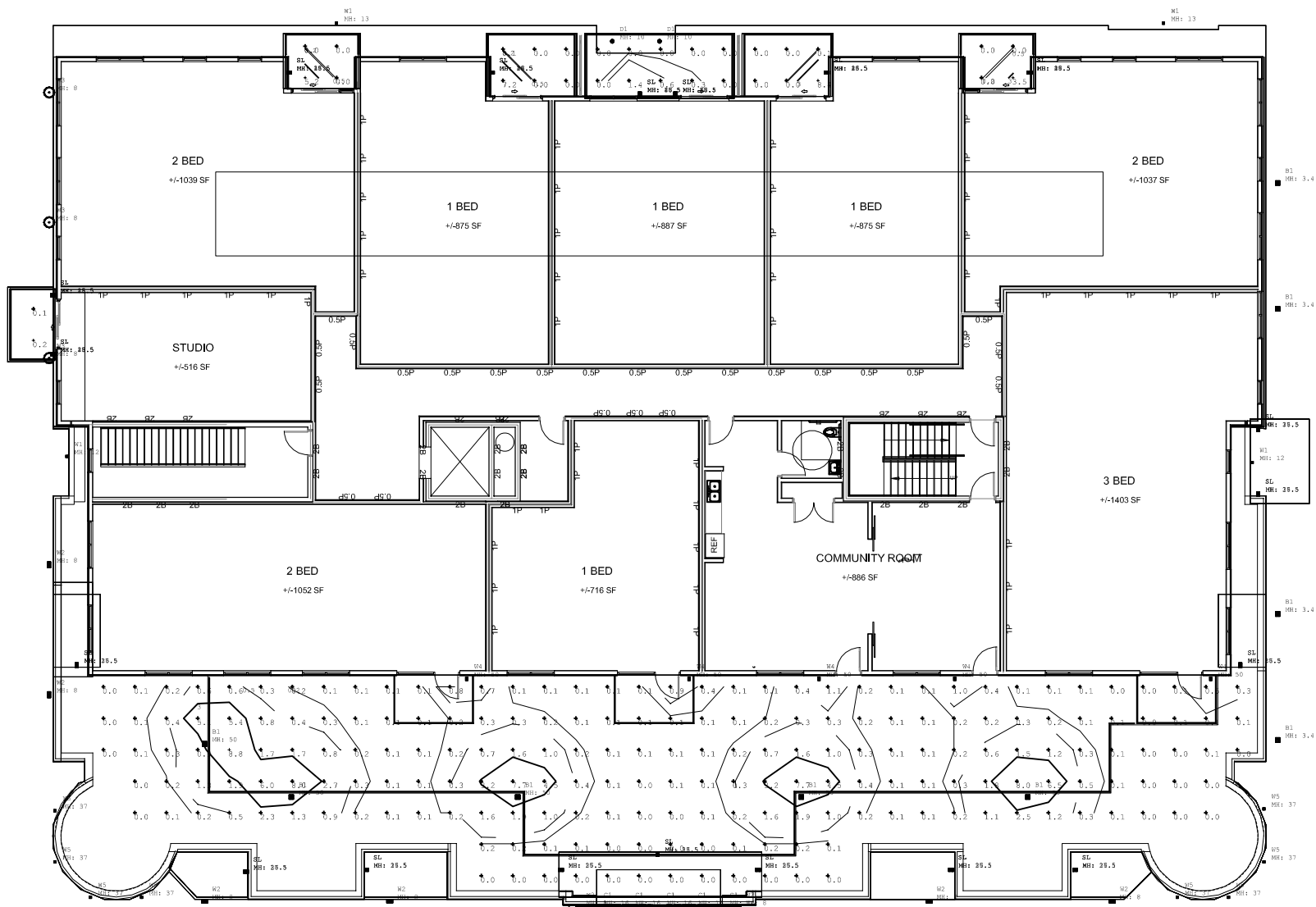






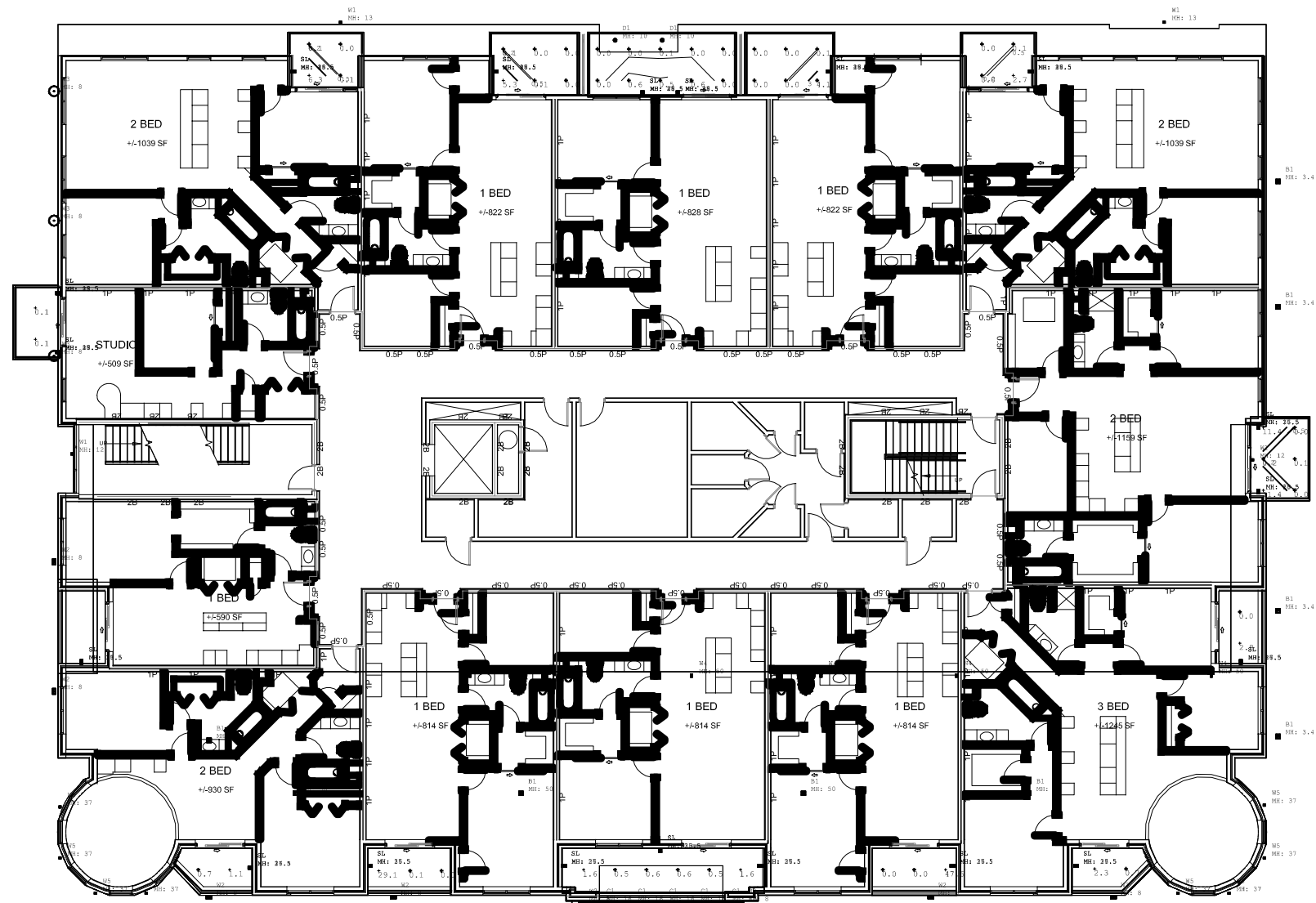






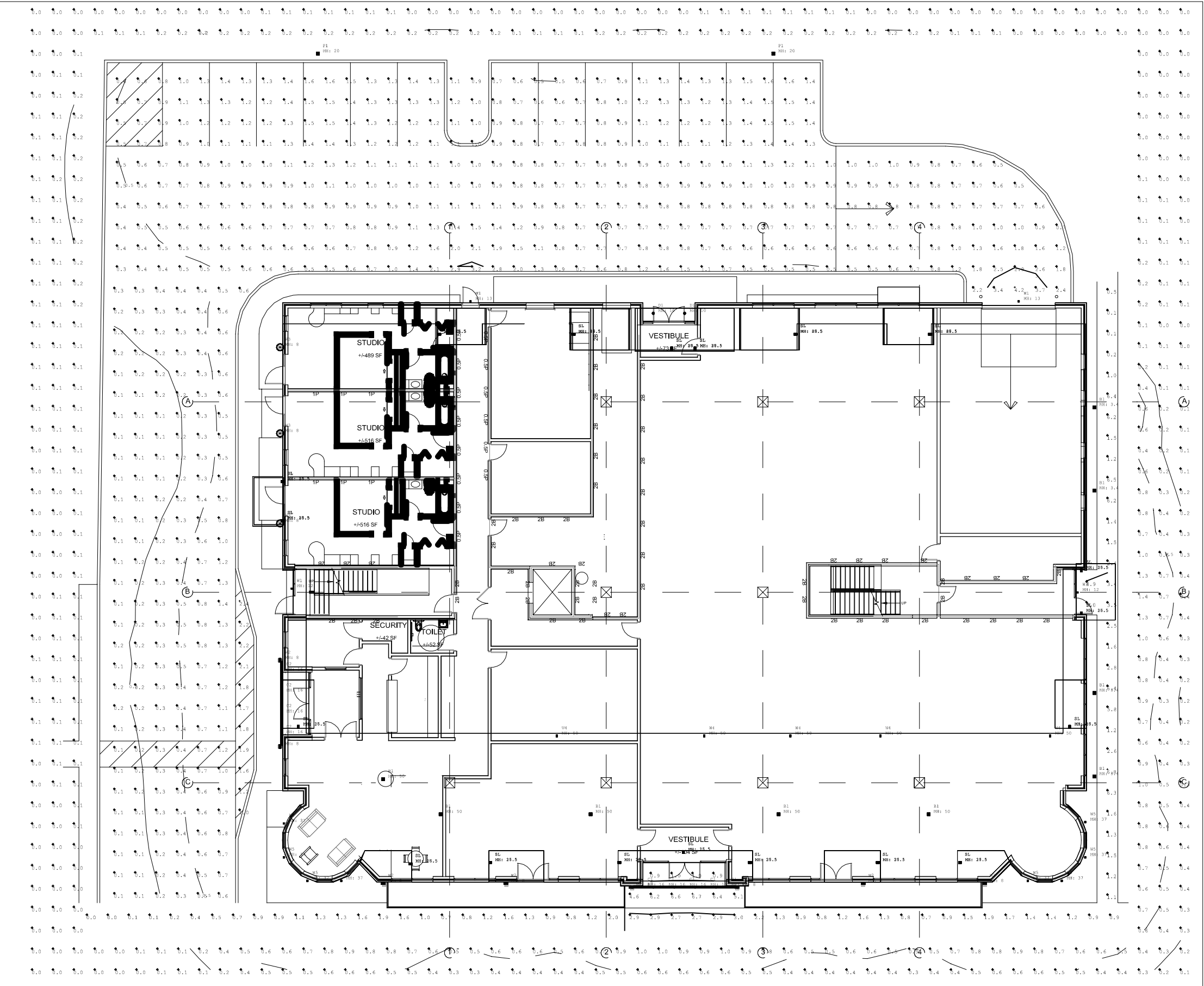
Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
5th floor deck	Illuminance	Fc	0.72	8.8	0.0	N.A.	N.A.
5th floor deck 1	Illuminance	Fc	0.15	0.2	0.1	1.50	2.00
5th floor deck 2	Illuminance	Fc	1.30	5.2	0.0	N.A.	N.A.
5th floor deck 3	Illuminance	Fc	0.82	8.4	0.0	N.A.	N.A.
5th floor deck 4	Illuminance	Fc	0.88	3.5	0.0	N.A.	N.A.

EXTERIOR LIGHTING PHOTOMETRICS
5TH FLOOR



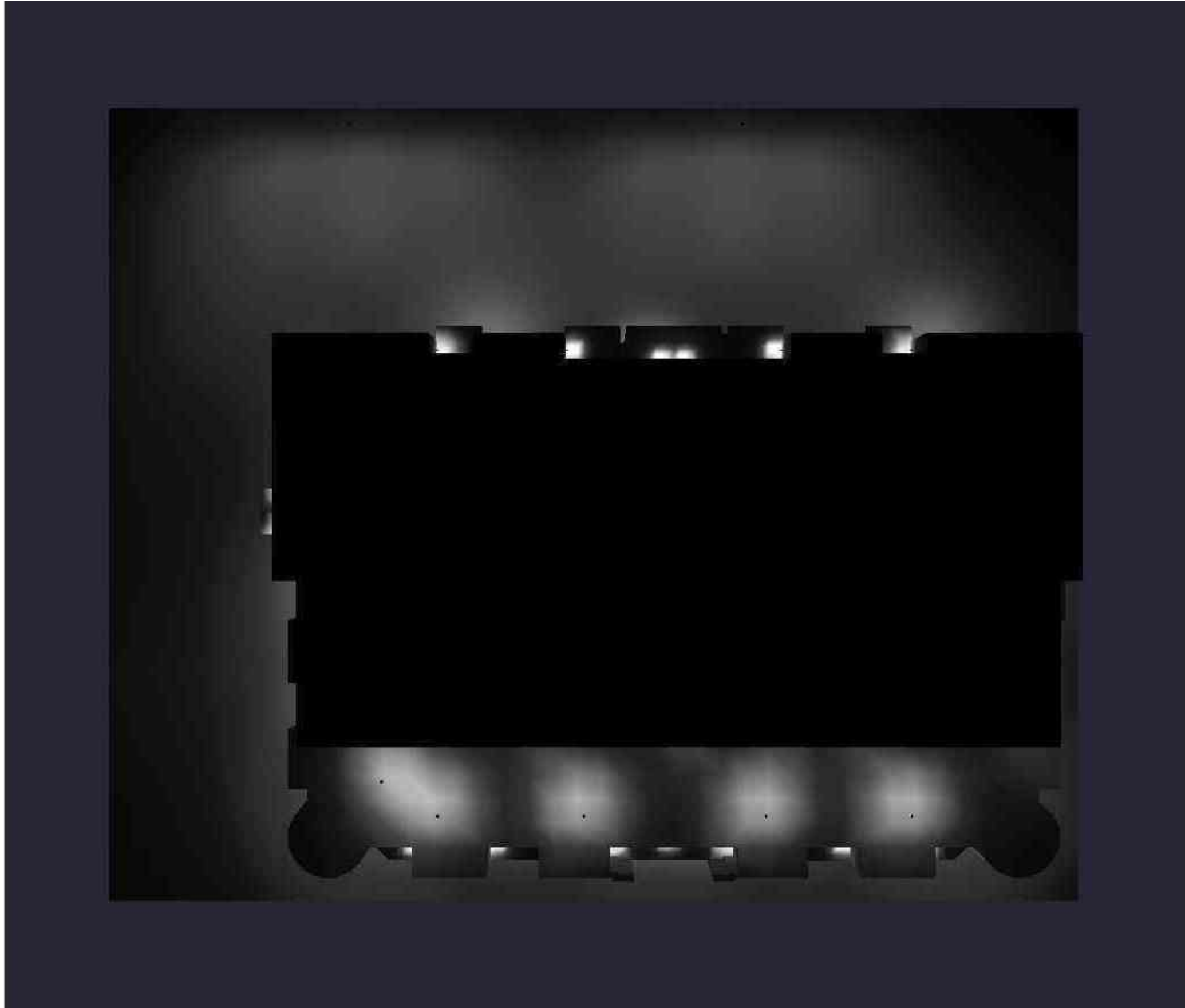
Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Balconies	Illuminance	Fc	1.63	6.3	0.0	N.A.	N.A.
Balconies 1	Illuminance	Fc	0.52	5.3	0.0	N.A.	N.A.
Balconies 2	Illuminance	Fc	0.70	2.7	0.0	N.A.	N.A.
Balconies 3	Illuminance	Fc	3.85	11.4	0.0	N.A.	N.A.
Balconies 4	Illuminance	Fc	1.40	2.8	0.0	N.A.	N.A.
Balconies 5	Illuminance	Fc	1.50	2.3	0.7	2.14	3.29
Balconies 6	Illuminance	Fc	0.90	1.1	0.7	1.29	1.57
Balconies 7	Illuminance	Fc	9.73	29.1	0.0	N.A.	N.A.
Balconies 8	Illuminance	Fc	0.90	1.6	0.5	1.80	3.20
Balconies 9	Illuminance	Fc	15.87	47.6	0.0	N.A.	N.A.

EXTERIOR LIGHTING PHOTOMETRICS
2ND / 3RD / 4TH FLOORS



Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
East Sidewalk	Illuminance	Fc	2.96	6.8	0.1	29.60	68.00
Entry Drive	Illuminance	Fc	0.46	2.4	0.1	4.60	24.00
Parking Area	Illuminance	Fc	1.00	4.2	0.3	3.33	14.00
Property Line	Illuminance	Fc	0.24	1.4	0.0	N.A.	N.A.
South Sidewalk	Illuminance	Fc	1.72	6.7	0.0	N.A.	N.A.

EXTERIOR LIGHTING PHOTOMETRICS
1ST FLOOR / SITE



EXTERIOR LIGHTING PHOTOMETRICS
1ST FLOOR / SITE



FCB6C-36N02



Date:

Type:

Fixture:

Project:

Approved:

FCB6C-36N02 Exterior die-cast aluminum, 6" nominal diameter bollard with a 360°, 1" high window.

SPECIFICATIONS

PHYSICAL

dimensions [H x Ø]	fixture: 39.55" H x 6.299" Ø
weight	18 lbs
housing	marine grade, corrosion resistant, heavy gauge extruded aluminum
lens	impact resistant, UV stabilized, opal, polycarbonate diffuser
mounting	heavy gauge base bracketing for bollard installation provides a unique mounting solution, so the tower body anchors flush to the ground without the appearance of a base plate, anchor bolts included (j-box by others)
ingress protection	IP66: dry, damp, or wet locations with extruded silicone gasket to seal out contaminants
finish	six stage chemical iron phosphate substrate pre-treatment process for a UV stable, super durable standard polyester powder coat

PERFORMANCE

color temperature	2700K	3000K	3500K	4000K	
lumen output	447	471	495	522	
lifetime	> 70,000 hours / L70 or better				
color consistency	3-Step MacAdam Ellipse / standard: CRI ≥ 85				
temperature	operating: -13°F to 104°F (-25°C to 40°C) start up: -13°F to 104°F (-25°C to 40°C) storage: -40°F to 176°F (-40°C to 80°C)				
junction temperature	73°C @ T ^A 25°C				
warranty	5 year limited warranty (refer to website for details)				

ELECTRICAL

input voltage	Universal 120-277VAC optional: 347 VAC (integral) 480 VAC (integral)
power supply	Integral Class II, electronic, high power factor > 94% @120V
certification	ETL/cETL Listed
standards	UL1598/CSA C22.2 No. 250.0; UI 8750/CSA C22.2 No. 250.13/IES LM-79/LM-80
power consumption	22W @ 120V - 277V (maximum)
dimming interface	standard: 0-10V (10%) optional: ELV (120V only)/DMX (integral)/DALI (integral)

Expanded Disclaimer: Due to continuous development and improvements, specifications are subject to change without notice. FC Lighting and Solid State Luminares reserves the right to change lab test details or specifications without notice. Product use certifies agreement to Solid State Luminares terms and conditions. FCB Series and FCBT Series fixtures are engineered and produced in our Illinois manufacturing facility.



Ordering Information



ORDERING INFORMATION

ORDERING INFORMATION									
FCB6C-36N02									
SERIES	VOLTAGE		HEIGHT		SOURCE/TEMPERATURE		LED LUMENS	FINISH	ACCESSORIES
FCB6C-36N02	UNV	UNV 120V-277V	39	39.5"	LED	27K	522 Lumens (22W)	BK	LD LED Dimming (0-10V) standard
	347V*	347V* AC (integral)				3K		BZ	ELV* ELV Dimming (120 only)
	480V*	480V* AC (integral)				35K		SL	DMX* DMX Dimming* (integral)
						4K		WH	DALI* DALI Dimming* (integral)
								CC	PE Photo Eye
									SP20 20kv Surge Protection
									BBU Battery Backup, Integral
* consult factory for lead time									

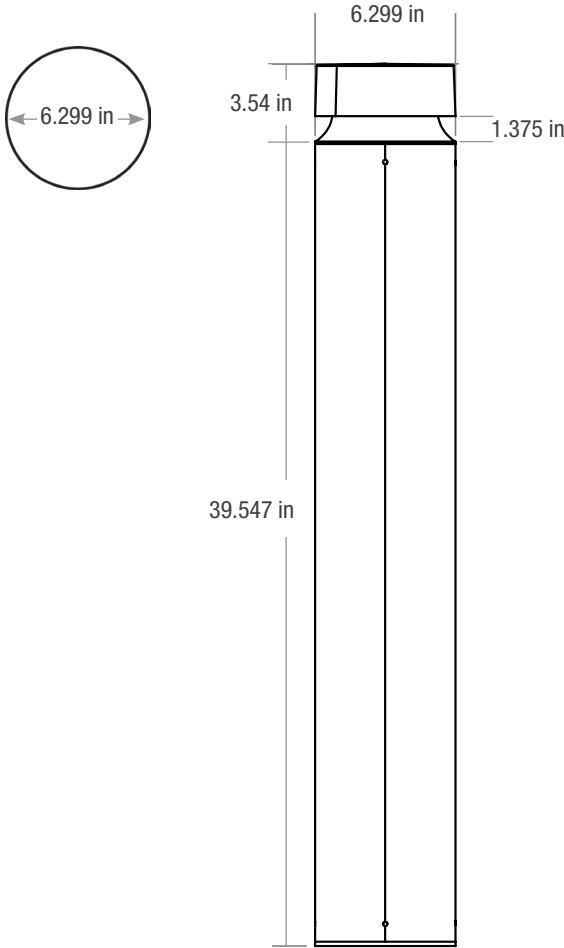




Physical

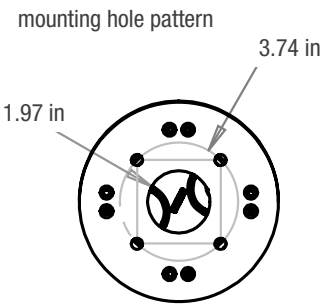
PRODUCT DIMENSIONS - STANDARD PRODUCT

height	39.547" H
diameter	6.299" Ø

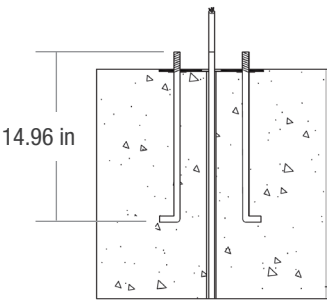


MOUNTING - *j-box sold by others*

mounting plate diameter	6.299" Ø
-------------------------	----------



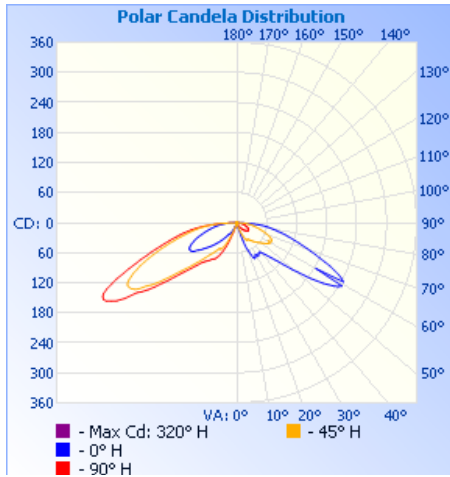
concrete minimum depth 12";
14.96" anchor bolts are above
cement, see installation instructions
for detailed information



Photometry



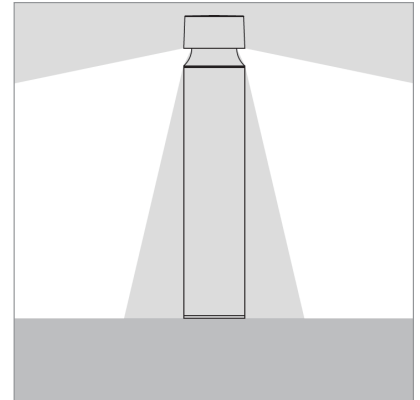
OPTICAL DISTRIBUTION



Illuminance at a Distance

	Center Beam fc	Beam Width
1.7ft	0.03 fc	0.8 ft 2.2 ft
3.3ft	0.01 fc	1.6 ft 4.3 ft
5.0ft	0.00 fc	2.4 ft 6.5 ft
6.7ft	0.00 fc	3.3 ft 8.7 ft
8.3ft	0.00 fc	4.0 ft 10.7 ft
10.0ft	0.00 fc	4.9 ft 12.9 ft

■ Vert. Spread: 27.3°
■ Horiz. Spread: 65.7°





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since 1984



sample banner copyright 2013 Lighting Analysts, Inc.

Photometric Report (Type C)

Filename: B1_FCB6C-36N02-3K-522 Lumens.IES

[TEST] 3495

[MANUFAC] FC Lighting

[LUMCAT] FCB6C-36N02-3K-522 Lumens

Maximum Candela = 352.69 at 50 H 60 V

Classification:

Road Classification: Type IV, Short, N.A. (deprecated)

Upward Wast Light Ratio: 0.01

Luminaire Efficacy Rating (LER): 24

Indoor Classification: Direct

BUG Rating : B0-U1-G1

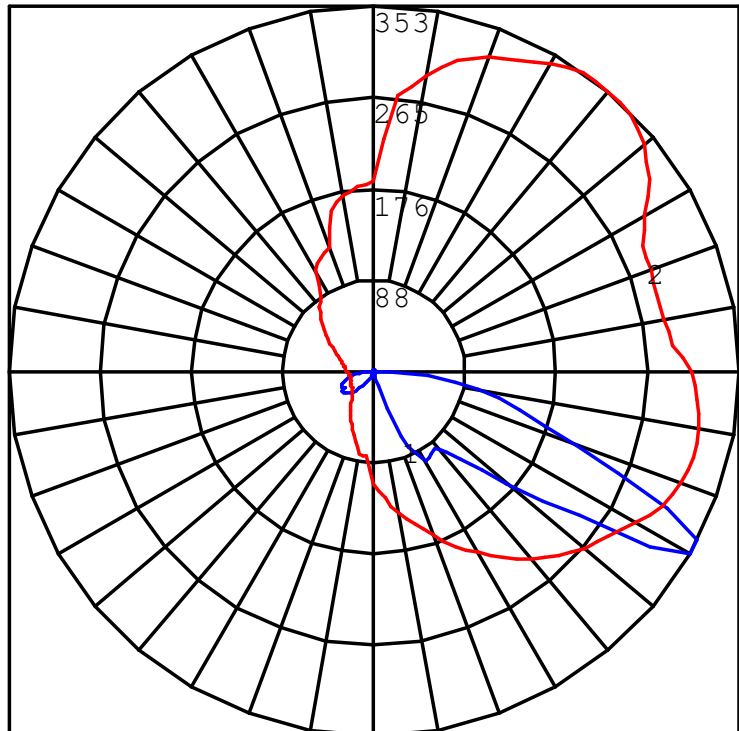
Polar Candela Curves:

Vertical Plane Through:

1) 50 - 230 Horizontal

Horizontal Cone Through:

2) 60 Vertical





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since 1984



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Photometric Report (Type C)

Filename: B1_FCB6C-36N02-3K-522 Lumens.IES

[TEST] 3495

[MANUFAC] FC Lighting

[LUMCAT] FCB6C-36N02-3K-522 Lumens

Maximum Candela = 352.69 at 50 H 60 V

Classification:

Road Classification: Type IV, Short, N.A. (deprecated)

Upward Waste Light Ratio: 0.01

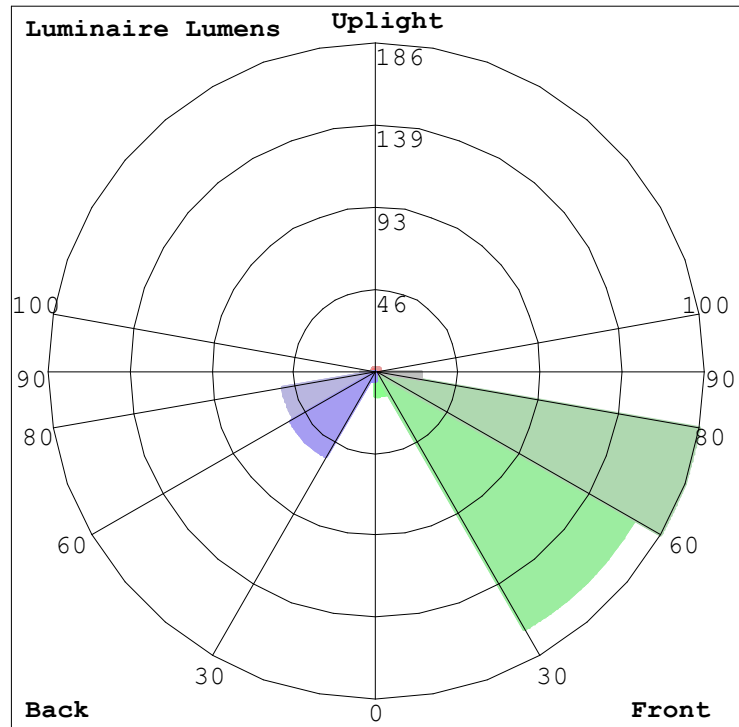
Luminaire Efficacy Rating (LER): 24

Indoor Classification: Direct

BUG Rating : B0-U1-G1

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	13.9	N.A.	2.7
FM (30-60)	168.7	N.A.	32.4
FH (60-80)	185.9	N.A.	35.7
FVH (80-90)	25.4	N.A.	4.9
BL (0-30)	5.3	N.A.	1.0
BM (30-60)	55.9	N.A.	10.7
BH (60-80)	53.5	N.A.	10.3
BVH (80-90)	8.7	N.A.	1.7
UL (90-100)	1.1	N.A.	0.2
UH (100-180)	1.8	N.A.	0.4
Total	520.2	N.A.	100.0
BUG Rating	B0-U1-G1		



eCOVELINE WET 1.5

ECVLWET-1.5



Date:

Type:

Fixture:


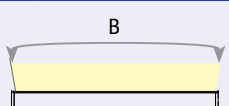
Project:

Approved:

The **ECVLWET** is similar in use to the other Wet Cove series but with a lower lumen output for a lower placement above the ground, approximately 10-15 feet high. **ECVLWET** comes in 1 ft, 4 ft or 6 ft nominal lengths and 2700K, 3000K, 3500K, 4000K or 5000K color temperatures. The housing is constructed of extruded aluminum with tooled end caps and is IP66 rated for interior & exterior use. Features IP68 line voltage Plug N' Play connectors for easy installation. Power supply is integral, no remote driver required. Universal orientation fixture; up, down, horizontal or vertical positioning with 9 optic choices. Flicker free dimmable to 5% full brightness with ELV trailing edge dimming.

SPECIFICATIONS

PHYSICAL

beam spread (a), (axb)		 		30° x 80° 120°	
LEDs per foot		14			
lengths/dimensions [LxDxH]		12.25" x 1.77" x 1.9"	47" x 1.77" x 1.9"	70.25" x 1.77" x 1.9"	
weight		1.3 lbs			
housing		extruded aluminum housing with moulded end caps			
lens		clear, tempered glass with a frosted edge			
mounting		ADBW2 surface mount with standard adjustable bracket (+/- 45°), ADBW2-90 optional adj. bracket (+/- 90°)			
ingress protection		IP66 rated for wet, exterior location (Connectors IP68)			
vibration resistance		compliant with 3G ANSI C136.31			
fixture connections		Twist-lock IP68 rated, CCC			

PERFORMANCE

color temperature*	2700K	3000K	3500K	4000K	5000K
lumen output (per foot)	276 lm	288 lm	295 lm	313 lm	326 lm
lifetime	> 70,000 hours / L70 or better				
color consistency	Step 3 McAdams Ellipse / CRI ≥ 80; 90 CRI optional				
temperature	operating: -13°F to 104°F (-25°C to 40°C) start up: -13°F to 104°F (-25°C to 40°C) storage: -40°F to 176°F (-40°C to 80°C)				
junction temperature	69°C @ T ^a 25°C				
warranty	5 year limited warranty (refer to website for details)				

ELECTRICAL

input voltage	Universal 120–277V AC
power supply	integral Class II, electronic high-power factor > 94% @120V
certification	ETL / cETL listed, CEC Title 24 - JA8 Compliant
standards	UL1598/CSA C22.2 No. 250.0; IESLM-79/LM-80; FCC Part 15
power consumption	3.5W/ft @ 120V
dimming interface	ELV (reverse phase/trailing edge) ≤ 5%

* consult factory for additional CCT LED's

Expanded Disclaimer: Due to continuous development and improvements, specifications are subject to change without notice. FC Lighting and Solid State Luminaires reserves the right to change lab test details or specifications without notice. Product use certifies agreement to Solid State Luminaires terms and conditions. FCF1100 Series Flood Lights are engineered and produced in our Illinois manufacturing facility.

eCVL Wet 1.5



ORDERING INFORMATION

ECVLWET-1.5													
model		length		CCT		CRI		optics		options			
ECVLWET1.5	eCOVELINE WET	1	12 in. [305 mm]	WHITE LIGHT		MONO COLOR		80CRI	80 CRI	3080	30°x80° beam	WCL	Black Louvre
		4	46.8 in. [1189 mm]	27K	2700K	RED	Red	CR80 Standard		120	120°x120° beam	WCHS	Black Louvre w/House Shield
		6	70 in. [1778 mm]	3K	3000K	GRN	Green	90CRI 90 CRI					
				35K	3500K	BLU	Blue						
				4K	4000K	AMB	Amber						
				5K	5000K	PINK	Pink						
						VIOL	Violet						
						LTBLU	Light Blue						
						SPGRN	Spring Green						
						YELLW	Yellow						
				GLDYW	Golden Yellow								

Accessories (Indicate the quantity needed for each item.) **REQUIRED:** Starter Cable (SC10W2) and Terminator Cap (TCAPW2) for every run. **Maximum Run Length** = 100 feet (120V)

SC10W 10 ft. Starter Connection Cord	EC12W 12 in. Extension Cord	10VELVDIM 0-10V ELV (<i>Interior Rated Only</i>) Dim Module (1 module per run)
TCAPW Terminator Cap	EC24W 24 in. Extension Cord	MC-10VELDIM 0-10V ELV Dim Module w/Interior Rated Enclosure (1 module per run)
	EC60W 60 in. Extension Cord	

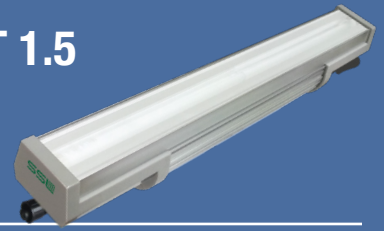
ADBW2 Included With Fixture

Mounting Accessories (*requirements vary for each fixture ordered - see mounting pages for details*)

ADBW2 Adjustable Bracket (Bi-directional)	CA2/6 Cantilever Arm - 6"	CWLS6 Heavy Duty Landscape Spike - 6"	LS6 Landscape Spike - 6"
ADBW2-90 90° Adjustable Bracket (Bi-directional)	CA2/12 Cantilever Arm - 12"	CWLS12 Heavy Duty Landscape Spike - 12"	LS12 Landscape Spike - 12"
	CA2/18 Cantilever Arm - 18"	CWLS18 Heavy Duty Landscape Spike - 18"	LS18 Landscape Spike - 18"

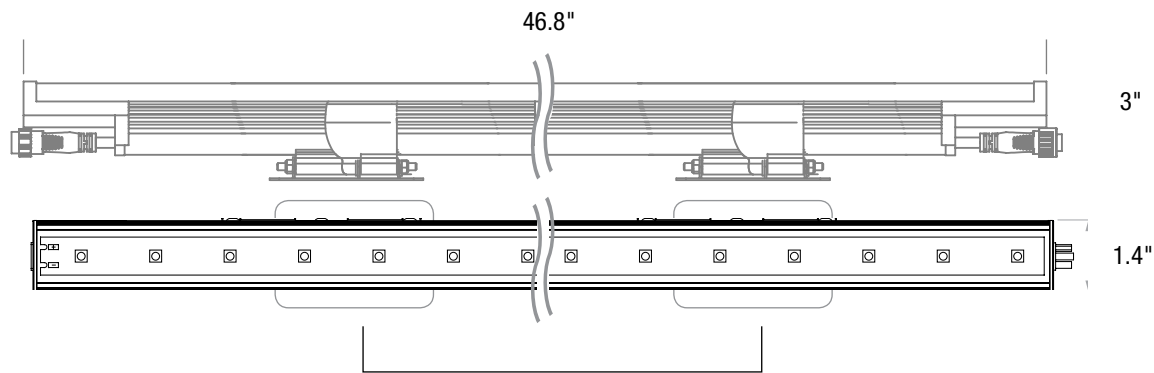
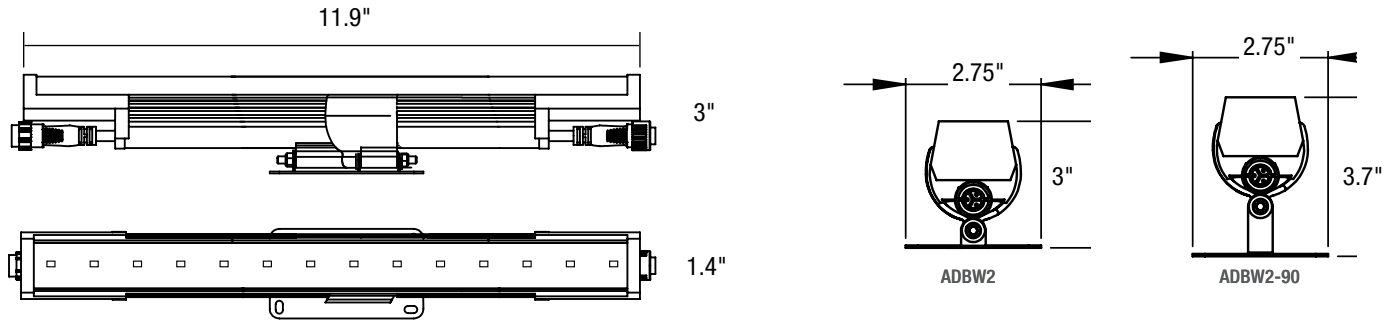
Due to continuous development and improvements, specifications are subject to change without notice. FC Lighting and Solid State Luminaires reserve the right to change lab test details or specifications without notice. Product use certifies agreement to FC Lighting and Solid State Luminaires terms and conditions.

Standard Dimensions

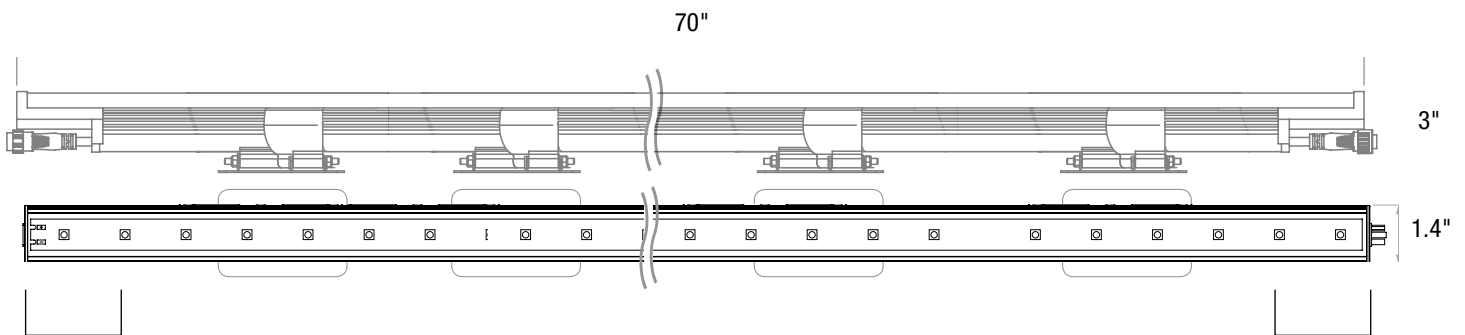


DIMENSIONS WITH STANDARD BRACKET

305 mm [12 in] / 1189 mm [46.8 in] / 1778 mm [70 in]



Optimal spacing for bracket installation is 16" apart.

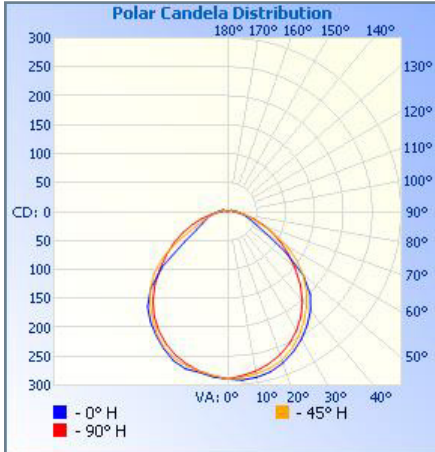


TO PREVENT VOIDING THE WARRANTY, DO NOT INSTALL BRACKETS WITHIN 2" OF THE ENDS OF FIXTURE.



Photometry

ECVLWET1.5-1-120-4K-785-120°



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	224.8	28.6%
0-40	367.4	46.8%
0-60	626.8	79.8%
60-90	135.7	17.3%
70-100	75.3	9.6%
90-120	22.4	2.9%
0-90	762.6	97.1%
90-180	22.4	2.9%
0-180	785.0	100%

Efficiency Total: 99%

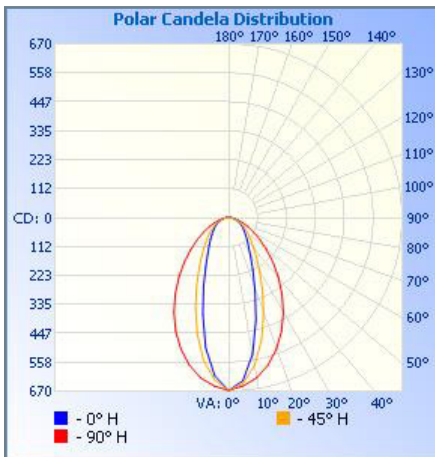
Illuminance at a Distance

Illuminance at a Distance

	Center Beam fc	Beam Width
1.7R	100 fc	4.2 ft 4.3 ft
3.3R	26.5 fc	8.2 ft 8.3 ft
5.0R	11.6 fc	12.5 ft 12.5 ft
6.7R	6.44 fc	16.7 ft 16.8 ft
8.3R	4.20 fc	20.7 ft 20.8 ft
10.0R	2.89 fc	25.0 ft 25.1 ft

■ Vert. Spread: 102.6°
■ Horiz. Spread: 102.8°

ECVLWET1.5-1-120-4K-785-30°x 80°



Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	342.3	43.7%
0-40	477.6	61%
0-60	673.2	86%
60-90	104.8	13.4%
70-100	50.7	6.5%
90-120	5.1	.6%
0-90	778.0	99.4%
90-180	5.1	.6%
0-180	783.0	100%

Efficiency Total: 99%

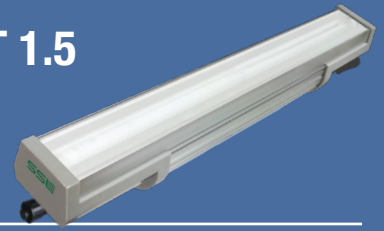
Illuminance at a Distance

Illuminance at a Distance

	Center Beam fc	Beam Width
1.7R	231 fc	1.1 ft 2.6 ft
3.3R	61.2 fc	2.1 ft 5.0 ft
5.0R	26.7 fc	3.2 ft 7.6 ft
6.7R	14.8 fc	4.3 ft 10.1 ft
8.3R	9.67 fc	5.4 ft 12.5 ft
10.0R	6.66 fc	6.5 ft 15.1 ft

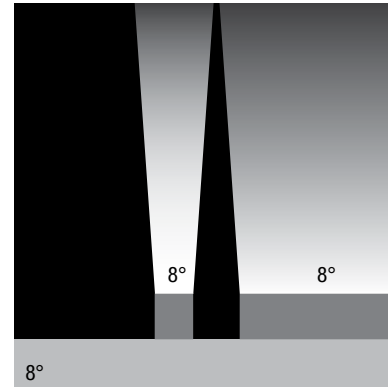
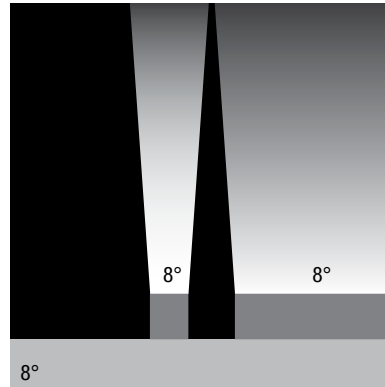
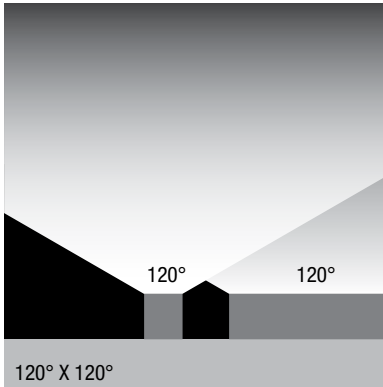
■ Vert. Spread: 35.9°
■ Horiz. Spread: 74.2°

Photometry



eCVL WET AVAILABLE OPTICS

FIND IES FILES ON SOLIDSTATELUMINAIRE.COM



PERFORMANCE

DIMMING

Model	Connected Wattage	Delivered Lumens				
		2400K	2700K	3000K	3500K	4000K
ECVLWET1.5-1	3.5	255	273	282	295	300
ECVLWET1.5-4	14	1020	1092	1128	1180	1200
ECVLWET1.5-6	21	1530	1638	1692	1770	1800

TRIAC, REVERSE PHASE DIMMING

Model	Description
DELV	Lutron Diva Dimmer 300P
SELV	Lutron Skylark Dimmer 153P
SCL	Lutron Skylark Dimmer 300P



DELV



SELV



SCL

Dimmers sold by others.

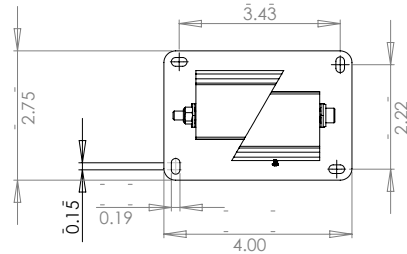
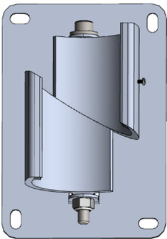


Mounting Options

STANDARD ADJUSTABLE BRACKET REQUIREMENTS

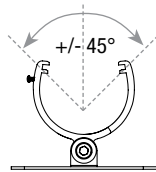
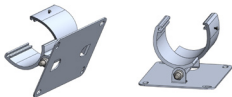
Minimum Bracket Requirement					
ECVLWet-1	1	ECVLWet-4	2	ECVLWet-6	3

STANDARD ADJUSTABLE BRACKET (ADBW2)



Universal Orientation

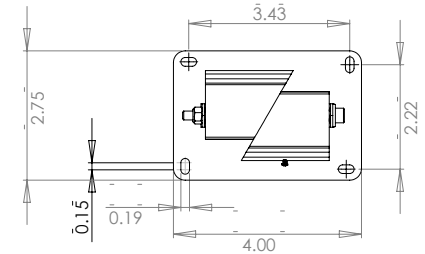
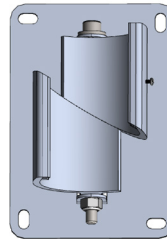
- Mounts to horizontal or vertical surfaces
- Easy installation w/fixture in position
- +/- 45° to surface



90° ADJUSTABLE BRACKET REQUIREMENTS

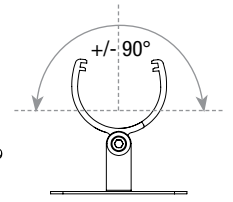
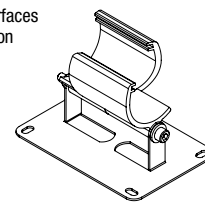
Minimum Bracket Requirement					
ECVLWet-1	1	ECVLWet-4	2	ECVLWet-6	3

90° ADJUSTABLE BRACKET (ADBW2-90)



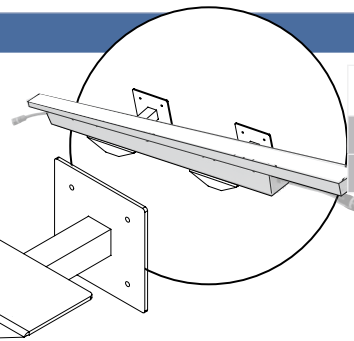
Universal Orientation

- Mounts to horizontal or vertical surfaces
- Easy installation w/fixture in position
- +/- 90° to surface

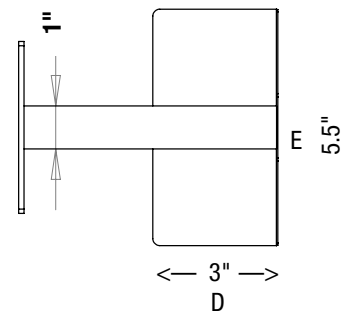
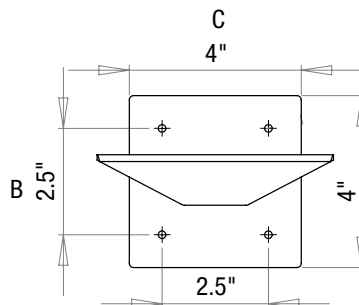
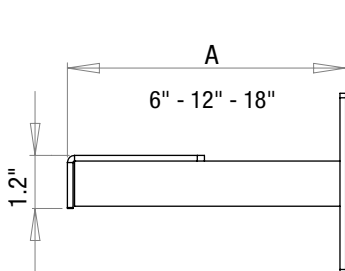


CANTILEVER ARM (CA2)

CA2	(A) arm length	mounting height (B)	mounting width (C)	bracket plate length (D)	bracket plate width (E)
CA2/6	6"	4"	4"	3"	5.5"
CA2/12	12"				
CA2/18	18"				



CVL Wet	CA2 Requirement
1'	1
4'	2

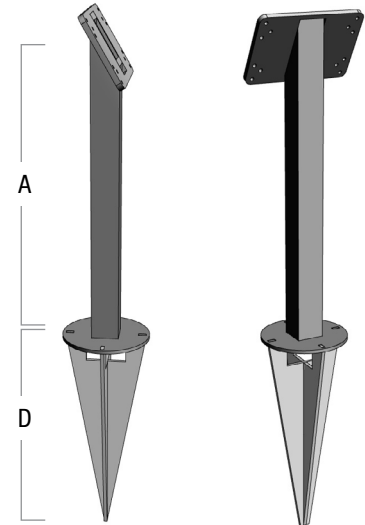
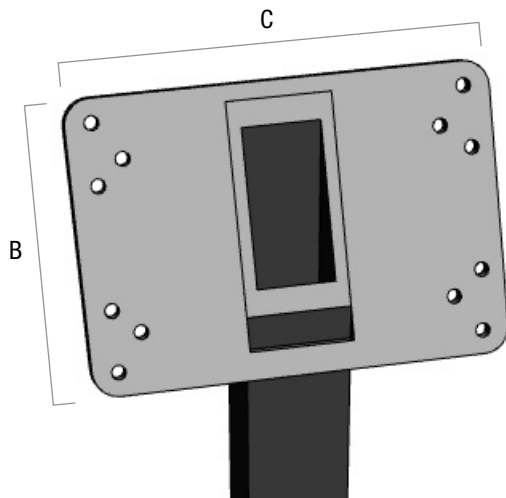




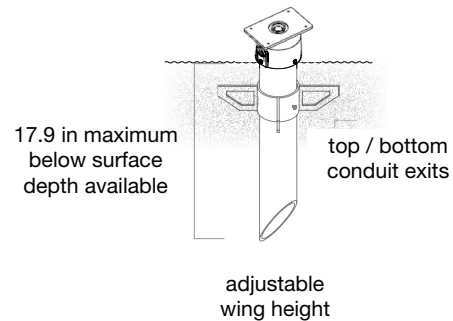
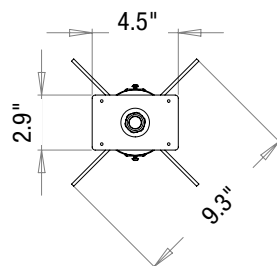
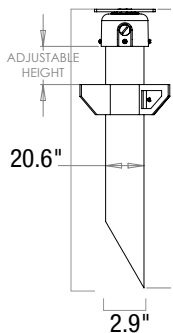
Mounting Option Accessories

LANDSCAPE SPIKE - LS

LS	(A) arm length	bracket plate length (B)	bracket plate width (C)	spike depth (D)
LS/6	6"	3"	5.5"	6"
LS/12	12"			
LS/18	18"			



HEAVE DUTY LANDSCAPE SPIKE - CWLS





Accessories

LOUVRE - WCL

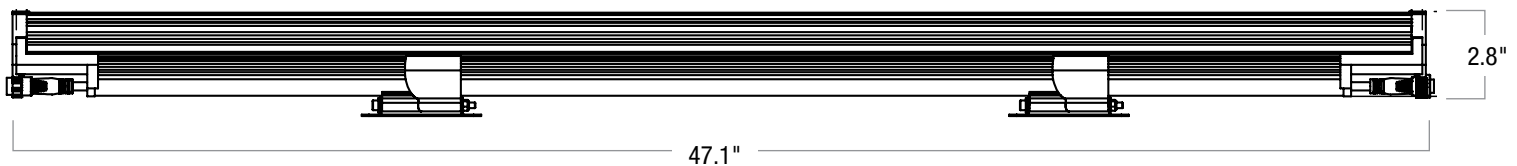
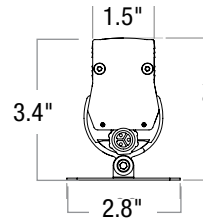
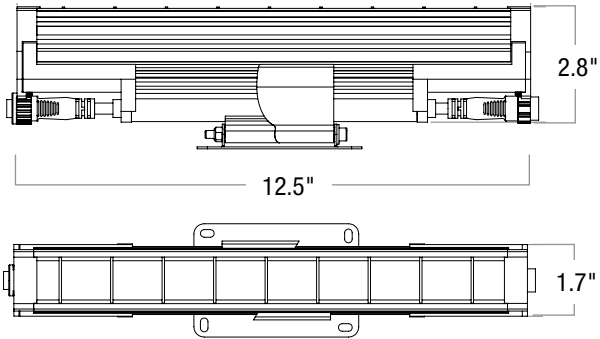
louvre height	.25"
overall height w/bracket	3.4"

1FT

louvre length	12.5"
louvre width	1.5"

4FT

louvre length	47.1"
louvre width	1.5"



HOUSE SHIELD - WCHS

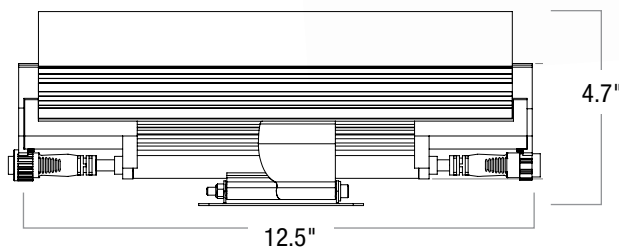
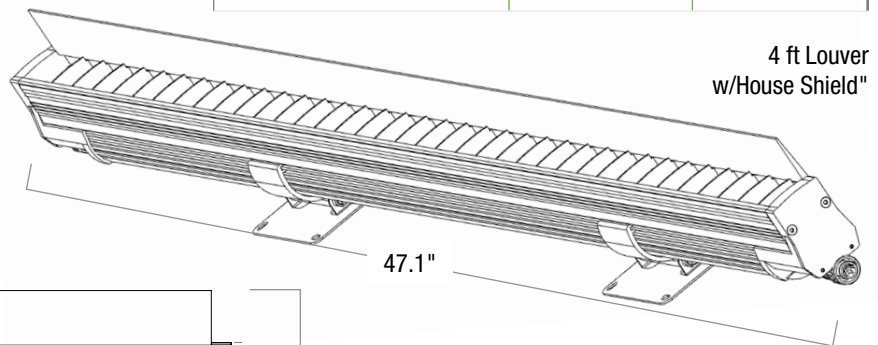
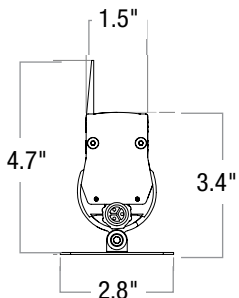
shield height	1.3"
overall height w/bracket	4.7"

1FT

louvre length	12.5"
louvre width	1.5"

4FT

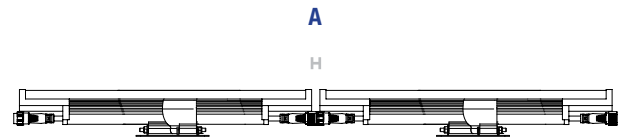
louvre length	47.1"
louvre width	1.5"



Connectivity Options



CONNECTIONS & CABLES



Daisy Chain Fixtures (1')

A: MIN/0" - MAX/.38" between fixtures

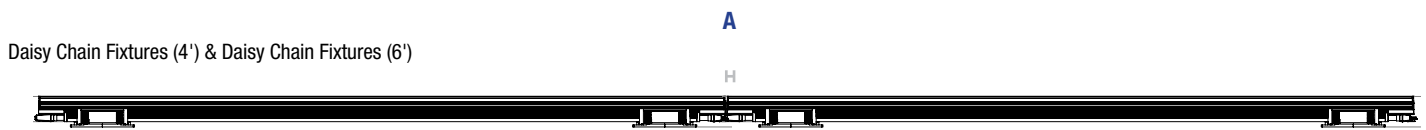
B: SC10W - 10ft Starter Cord

C: EC12W 12 in. Extension Cord

C: EC24W 24 in. Extension Cord

C: EC60W 60 in. Extension Cord

D: TCAPW 1.13" Terminator Cap



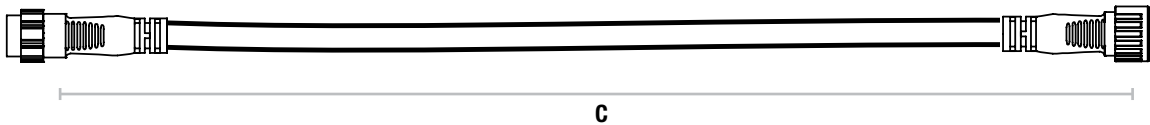
Daisy Chain Fixtures (4') & Daisy Chain Fixtures (6')

B: STARTER CABLES

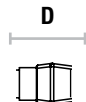
INSURE FIRST FIXTURE IS ORIENTED TO ACCEPT MALE CONNECTOR STARTER CABLE

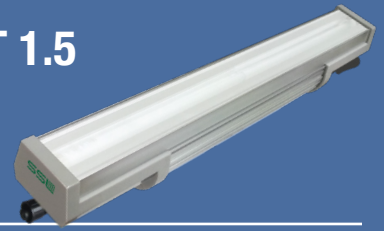


C: EXTENSION CABLES



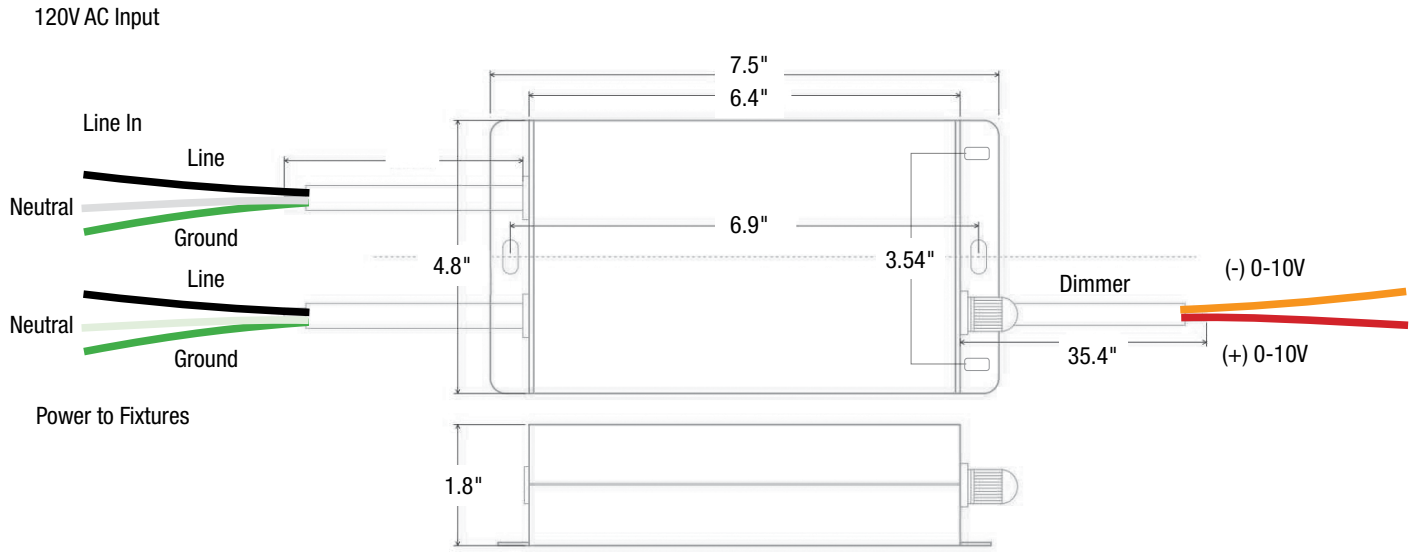
D: TERMINATOR CAP TCAP





Control Components

0-10V ELV DIMMING MODULE (10VELV DIM)



CONTROLS

0-10V DIMMING

Model	Description
IP710-LFZ	Leviton 0-10V Dimmer
DVSTV	Lutron Diva 0-10V Dimmer

Dimmers are sold by others. FC|SSL does not recommend dimmers that have not been tested with their fixtures.



IP710-LFZ



DVSTV

Use of exterior rated, IP66, IP67, or IP68 enclosure for Dimming Module is recommended. Recommended controls are interior rated only.

TRIAC, REVERSE PHASE DIMMING

Model	Description
DELV	Lutron Diva Dimmer 300P
SELV	Lutron Skylark Dimmer 153P
SCL	Lutron Skylark Dimmer 300P

Dimmers are sold by others. FC|SSL does not recommend dimmers that have not been tested with their fixtures.



DELV



SELV



SCL



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since 1984



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Photometric Report (Type C)

Filename: C1_Photometric test Report#2982 ECVLXWET1.5-4-UNV-35K-30x80.IES

[TEST] 2982

[MANUFAC] FC Lighting

[LUMCAT] ECVLXWET1.5-4-UNV-35K-30x80

Maximum Candela = 2324.22 at 60 H 1 V

Classification:

Road Classification: Type I, Very Short, N.A. (deprecated)

Upward Wast Light Ratio: 0.00

Luminaire Efficacy Rating (LER): 91

Indoor Classification: Direct

BUG Rating : B1-U1-G0

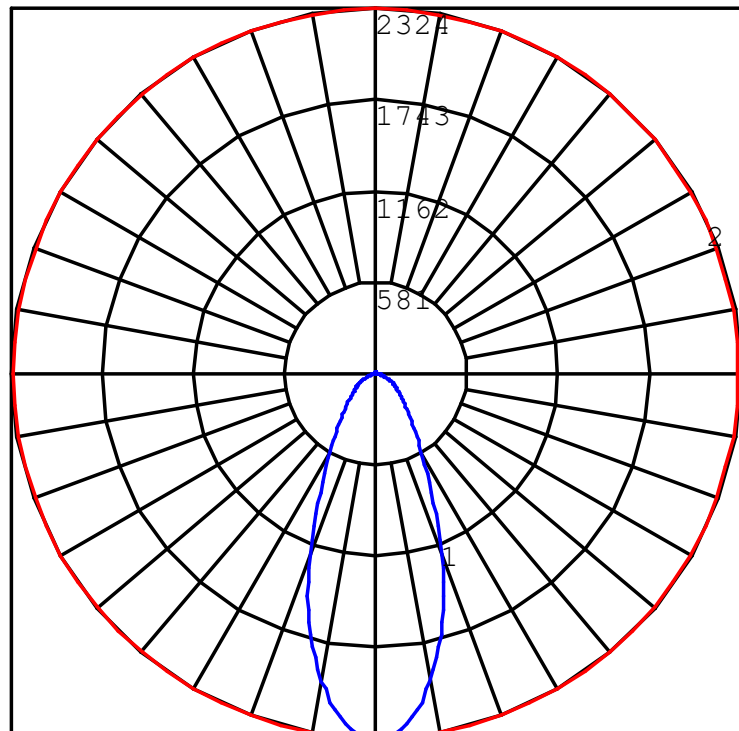
Polar Candela Curves:

Vertical Plane Through:

1) 60 - 240 Horizontal

Horizontal Cone Through:

2) 1 Vertical





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Photometric Report (Type C)

Filename: C1_Photometric test Report#2982 ECVLXWET1.5-4-UNV-35K-30x80.IES

[TEST] 2982

[MANUFAC] FC Lighting

[LUMCAT] ECVLXWET1.5-4-UNV-35K-30x80

Maximum Candela = 2324.22 at 60 H 1 V

Classification:

Road Classification: Type I, Very Short, N.A. (deprecated)

Upward Waste Light Ratio: 0.00

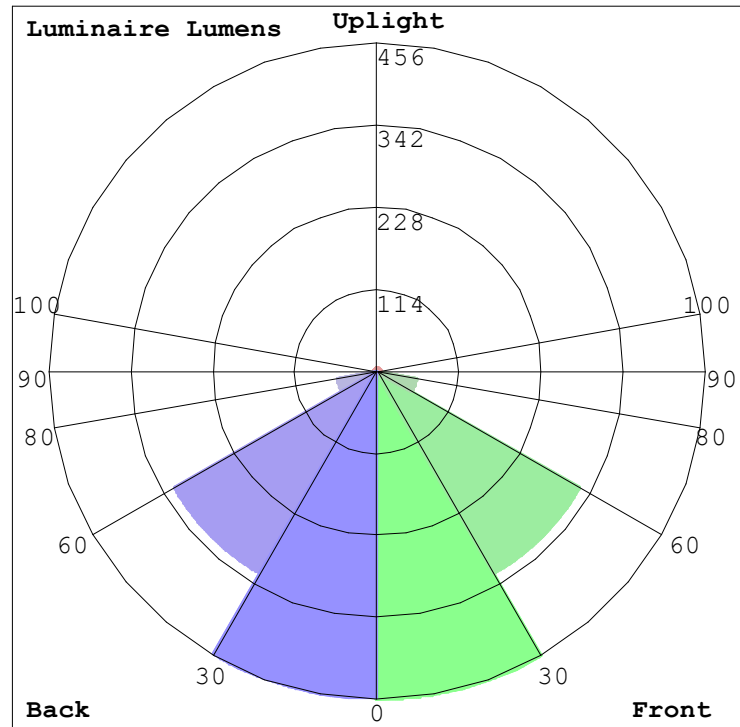
Luminaire Efficacy Rating (LER): 91

Indoor Classification: Direct

BUG Rating : B1-U1-G0

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	455.9	N.A.	27.2
FM (30-60)	324.4	N.A.	19.4
FH (60-80)	55.4	N.A.	3.3
FVH (80-90)	1.8	N.A.	0.1
BL (0-30)	454.1	N.A.	27.1
BM (30-60)	324.4	N.A.	19.4
BH (60-80)	55.4	N.A.	3.3
BVH (80-90)	1.8	N.A.	0.1
UL (90-100)	< 0.05	N.A.	0.0
UH (100-180)	3.1	N.A.	0.2
Total	1676.3	N.A.	100.0
BUG Rating	B1-U1-G0		



DESCRIPTION

Recessed 4-inch LED downlight provides narrow, medium or wide distribution patterns ideal for general area lighting. Lumen packages range from 1000 to 4000 lumens in color temperatures of 2700K, 3000K, 3500K, and 4000K; in 80 or 90CRI. Luminaire is airtight and can be installed in new construction or below the finished ceiling in remodeling applications. Intended applications include office spaces, healthcare, hospitality, schools, house of worship and other institutional uses.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Housing Frame

- Boat shaped galvanized steel plaster frame with adjustable plaster lip accommodates 1/2" to 1-1/2" thick ceilings
- May be installed in new construction; or from below the finished (non-accessible) ceiling in remodeling.
- Provided with (2) old work remodel clips to secure the frame to the ceiling

Universal Mounting Bracket

- Mounting bracket adjusts 2" vertically from above the ceiling or thru the aperture
- Use with the included mounting bars or with 1/2" EMT
- Removable to facilitate installation from below the finished ceiling

Mounting Bars

- Captive preinstalled No Fuss™ mounting bars lock to tee grid with screwdriver or pliers
- Centering mechanism allows for consistent positioning of fixtures

LED Module

- Proximity phosphors over chip on board LEDs provide a uniform source with high efficiency and no pixilation
- Available in 80 or 90 CRI minimum, accuracy within 3 SDCM provides color uniformity
- 90 CRI, R9>50 (refer to chromaticity tech sheet online for details www.eaton.com/lighting)
- Correlated color temperature options
 - 2700K
 - 3000K
 - 3500K
 - 4000K
- Passive thermal management achieves L70 at 50,000 hours in IC and non IC applications
- Integral diffuse lens provides visual shielding
- Integral connector allows quick connection to housing flex

Lumen Options

- Nominal lumen values
 - 1000 lm
 - 1500 lm
 - 2000 lm
 - 3000 lm
 - 4000 lm

Reflector

- Self-flanged aluminum reflectors are available in narrow, medium or wide distribution patterns
- Medium distribution polymer non-conductive reflector may be used to meet local codes for 'dead front' applications
- Wall wash reflector features a rotatable insert assembly with integral linear spread lens for alignment of vertical illumination.
- Reflectors attach to LED module with (3) speed clamps
- Multiple painted or plated finishes are available

Reflector / Module Retention

- Reflector / module assembly is securely retained in the housing with (2) torsion springs

Driver

- Field replaceable constant current driver provides low noise operation
- UNV 120-277VAC 50/60Hz input standard
- 347VAC 50/60Hz input option (Canada only)
- Continuous, flicker-free 1% - 100% dimming with 0-10V analog control
- Optional low voltage DC driver for use with Eaton's DLVP distributed low voltage power system combines power and control

Emergency Option

- Provides 90 minutes of standby lighting meeting most life safety codes for egress lighting
- Available with integral or remote charge indicator and test switch

Connected Lighting System Options

- WaveLinX tile mount daylight sensor includes control module, sensor and cable providing comprehensive lighting control
- LumaWatt Pro (powered by Enlighted) wireless tile mount sensor and control kit

Junction Box

- Galvanized steel junction box
- 20in³ internal volume excluding voltage barrier
- 25 in³ internal total volume
- Voltage barrier for 0-10V dimming wires [occupies (1) 1/2" pry-out space]
- Listed for (8) #12 AWG (four in, four out) 90° C conductors and feed-thru branch wiring
- (3) 1/2" and (2) 3/4" trade size pry-outs available
- (3) 4-port push wire nuts for mains voltage, with 1-port for fixture connection

Compliance

- cULus damp and wet location listed in protected ceilings; and IP20 - Above finished ceiling; IP64 - Below finished ceiling
- Non-IC rated for 2000, 3000 and 4000 lumen models. Insulation must be kept 3" from top and sides.
- IC rated for 1000 and 1500 lumen models, and suitable for direct contact to air permeable insulation
- Not for use in direct contact with spray foam insulation, consult NEMA LSD57-2013
- Airtight per ASTM-E283-04
- Suitable for use in clothes closets when installed in accordance with the NEC 410.16 spacing requirements
- EMI/RFI emissions FCC CFR Title 47 Part 15 Class A at 120/277V & Class B at 120V
- Contains no mercury or lead and RoHS compliant
- Photometric testing in accordance of IES LM-79-08
- Lumen maintenance projection in accordance of IES LM-80-08 and TM-21-11
- 1000 and 1500 lumen 90CRI ICAT models may be used to comply with State of California Title 24 residential code, with JA8-2016-E database certification
- May be used to comply with State of California Title 24 non-residential code, as a dimmable LED luminaire
- ENERGY STAR certified, reference certified light fixtures database

Warranty

- Five year limited warranty, consult website for details. www.eaton.com/lighting/legal



HC4
Housing Frame

HM4
LED Module

41
41PS
Series Reflectors

4-inch Lens Downlight
and Lens Wall Wash

1000/1500/2000/
3000/4000 Lumen



ENERGY DATA

Series	1000 lumen	
Input Voltage (VAC)	120V	277V
Input Current (A)	0.085	0.042
Input Power (W)	10.1	10.9
In-rush Current (A)	0.644	1.95
In-rush Duration (ms)	0.125	0.24
THDi (%)	8.6	15.6
PF:	≥ 0.90	
(Nominal input 120-277VAC & 100% of rated output power)		
Minimum starting temperature -40°C (-40°F)		
Sound Rating: Class A standards		

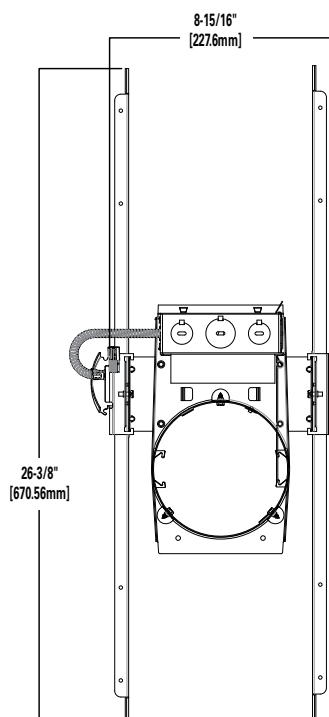
Series	1500 lumen	
Input Voltage (VAC)	120V	277V
Input Current (A)	0.119	0.055
Input Power (W)	14.2	14.9
In-rush Current (A)	0.212	0.85
In-rush Duration (ms)	0.28	0.32
THDi (%)	7.8	16.3
PF:	≥ 0.90	
(Nominal input 120-277VAC & 100% of rated output power)		
Minimum starting temperature -40°C (-40°F)		
Sound Rating: Class A standards		

Series	2000 lumen	
Input Voltage (VAC)	120V	277V
Input Current (A)	0.176	0.082
Input Power (W)	21.1	21.4
In-rush Current (A)	0.588	0.624
In-rush Duration (ms)	0.3	0.38
THDi (%)	8.8	11.2
PF:	≥ 0.90	
(Nominal input 120-277VAC & 100% of rated output power)		
Minimum starting temperature -40°C (-40°F)		
Sound Rating: Class A standards		

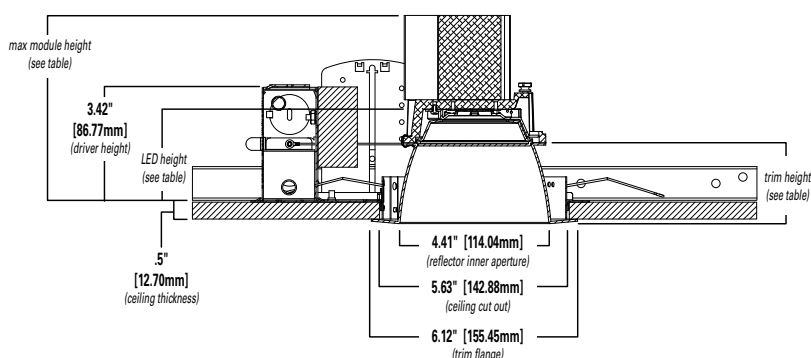
Series	3000 lumen	
Input Voltage (VAC)	120V	277V
Input Current (A)	0.228	0.102
Input Power (W)	27.2	27
In-rush Current (A)	0.898	1.7
In-rush Duration (ms)	0.36	0.38
THDi (%)	9.7	9.3
PF:	≥ 0.90	
(Nominal input 120-277VAC & 100% of rated output power)		
Minimum starting temperature -40°C (-40°F)		
Sound Rating: Class A standards		

Series	4000 lumen	
Input Voltage (VAC)	120V	277V
Input Current (A)	0.345	0.15
Input Power (W)	41.3	40.7
In-rush Current (A)	1.05	2.23
In-rush Duration (ms)	0.32	0.34
THDi (%)	10.06	14.01
PF:	≥ 0.90	
(Nominal input 120-277VAC & 100% of rated output power)		
Minimum starting temperature -40°C (-40°F)		
Sound Rating: Class A standards		

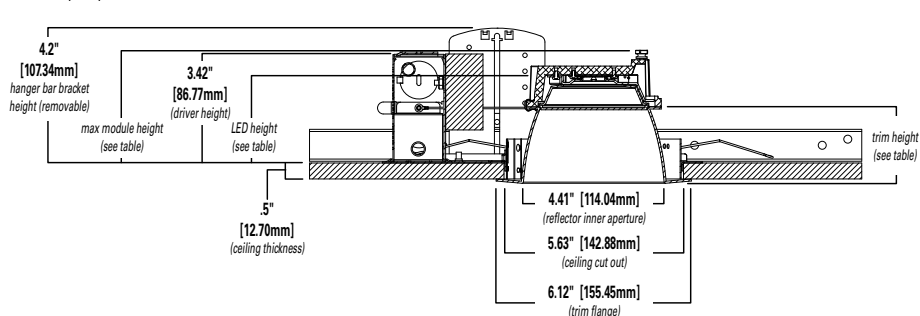
DIMENSIONS



NEW CONSTRUCTION - HIGH LUMEN
3000 AND 4000 LUMEN



NEW CONSTRUCTION - LOW LUMEN
1000, 1500, AND 2000 LUMENS



High Lumen (3000 & 4000 Lumens)

Distribution	Max. Module Height	Trim Height	LED Height
Narrow	5.6"	2.5"	2.9"
Medium	5.7"	2.6"	3.0"
Wide	5.5"	2.4"	2.8"
Baffle	5.5"	2.4"	2.8"

Low Lumen (1000, 1500 & 2000 Lumens)*

Max. Module Height	Trim Height	LED Height
3.6"	2.5"	2.7"
3.7"	2.6"	2.8"
3.5"	2.4"	2.6"
3.1"	2.4"	2.6"

*Max. height w/hanger bar bracket 4.2"

Ordering Information

Sample Number: HC420D010REM7 - HM412835 - 41MDC

A complete luminaire consists of a housing frame, LED module, and reflector (ordered separately)

Mounting Frame	Lumens	Input / Control
HC4 = 4" new construction and remodeler housing HC4CP = 4" new construction and remodeler housing, CCEA Chicago Plenum rated	10 = 1000 lumens (nominal) 15 = 1500 lumens (nominal) 20 = 2000 lumens (nominal) 30 = 3000 lumens (nominal) 40 = 4000 lumens (nominal)	D010 = 120-277VAC 50/60Hz 0-10V analog 1%-100% dimming D010347 = 347VAC 50/60Hz 0-10V analog 1%-100% dimming (Canada only) ¹ DLV = Distributed Low Voltage driver, 1%-100% dimming DLV for use with Eaton's DLVP system only. Refer to DLVP low-voltage power module and DLVP specifications for details. ¹
Options	Accessories	
REM7 = 7 watt emergency module with remote test / indicator light, use with D010 only ¹ REM14 = 14 watt emergency module with remote test / indicator light, use with D010 only ¹ REMV7 = 7 watt emergency module with remote test / indicator light, use with DLV only ^{1, 2} REMV14 = 14 watt emergency module with remote test / indicator light, use with DLV only ^{1, 2} IEM7 = integral 7 watt emergency module with integral test / indicator light, use with D010 only ¹ IEM14 = integral 14 watt emergency module with integral test / indicator light, use with D010 only ¹ IEMV7 = integral 7 watt emergency module with integral test / indicator light, use with DLV only ^{1, 2} IEMV14 = integral 14 watt emergency module with integral test / indicator light, use with DLV only ^{1, 2} LWTPD1 = factory installed LumaWatt Pro wireless tile mount sensor kit, use with D010 only ¹ SWPD1 = factory installed WaveLinX tile mount daylight sensor, includes control module, sensor, and cable, use with D010 only ¹	HB128APK = L channel hanger bar, 26", pair (replacement) RMB22 = Adjustable wood joist mounting bars, pair, extend to 22" long H347 = 347 to 120V step down transformer, 75VA H347200 = 347 to 120V step down transformer, 200VA PORLWTPD1 = LumaWatt Pro wireless sensor kit, field installed, use with D010 only ¹ TMSWPD1 = WaveLinX wireless sensor kit, field installed, use with D010 only ¹	

LED Module	Lumens	CRI/CCT
HM4 = 4" LED module	12 = 1000, 1500 and 2000 lumens (nominal), use with HC410*, HC415*, HC420* housings 34 = 3000 and 4000 lumens (nominal), use with HC430*, HC440* housings	827 = 80 CRI (minimum), 2700K CCT 830 = 80 CRI (minimum), 3000K CCT 835 = 80 CRI (minimum), 3500K CCT 840 = 80 CRI (minimum), 4000K CCT 927 = 90 CRI (minimum), 2700K CCT 930 = 90 CRI (minimum), 3000K CCT 935 = 90 CRI (minimum), 3500K CCT 940 = 90 CRI (minimum), 4000K CCT

Reflector	Distribution ³	Finish	Flange	Accessories
41 = 4" conical reflector	ND = narrow 50° beam angle 0.84 SC (nominal) MD = medium 60° beam angle 1.00 SC (nominal) WD = wide 75° beam angle 1.24 SC (nominal) RWW = rotatable wall wash with linear spread lens	C = Specular clear H = Semi-specular clear W = White (white flange)	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	41RWWPK = rotatable wall wash insert for 4" reflector –replacement part kit

Baffle	Distribution ³	Finish	Flange	Accessories
41 = 4" baffle reflector	WD = wide 75° beam angle 1.24 SC (nominal) RWW = rotatable wall wash with linear spread lens	BB = Black baffle (white flange) WB = White baffle (white flange)	Blank = White flange standard with BB, & WB	41RWWPK = rotatable wall wash insert for 4" reflector –replacement part kit

IEM Reflector	Distribution ³	Finish	Flange	Integral Emergency
41 = 4" conical reflector for integral emergency only	ND = narrow 50° beam angle 0.84 SC (nominal) MD = medium 60° beam angle 1.00 SC (nominal) WD = wide 75° beam angle 1.24 SC (nominal)	C = Specular clear H = Semi-specular clear W = White (white flange)	Blank = Polished flange standard with C & H reflectors Blank = White flange standard with W reflector WF = White flange option available with C & H reflectors	IEM = Reflector for integral emergency only

IEM Baffle	Distribution ³	Finish	Flange	Integral Emergency
41 = 4" baffle reflector for integral emergency only	WD = wide 75° beam angle 1.24 SC (nominal)	BB = Black baffle (white flange) WB = White baffle (white flange)	Blank = White flange standard with BB, & WB	IEM = Reflector for integral emergency only

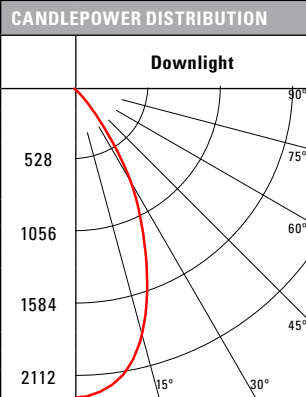
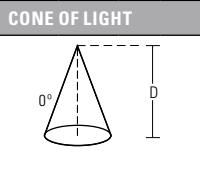
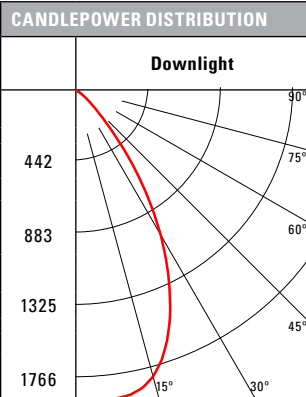
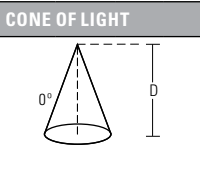
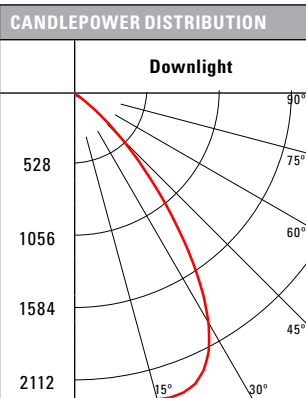
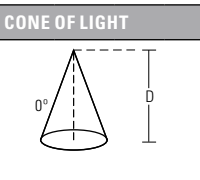
Reflector	Distribution ³	Finish	Flange
41PS = 4" non-conductive polymer 'dead front' conical reflector ⁴	MD = medium 60° beam angle 1.00 SC (nominal)	W = White (white flange)	Blank = White flange standard with W reflector

Notes:

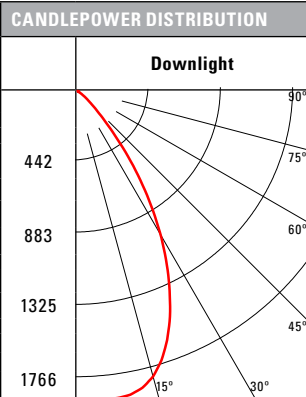
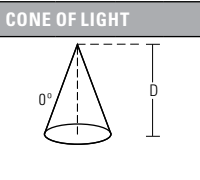
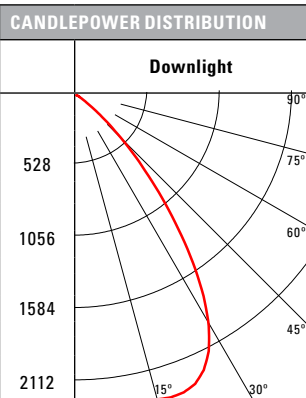
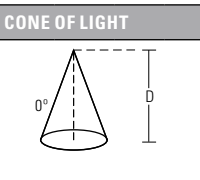
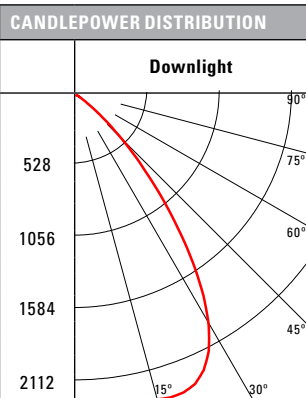
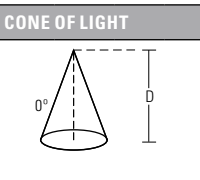
- Not available with CP version
- ULus for U.S. only
- Values are nominal for white reflector, others may vary.
- 41PS reflector only available in NON-IC environments and up to 3000 lumens.

PHOTOMETRY

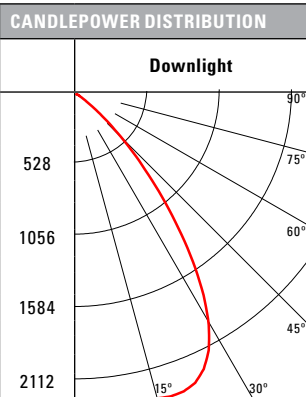
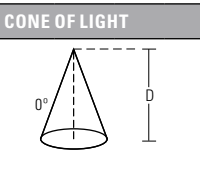
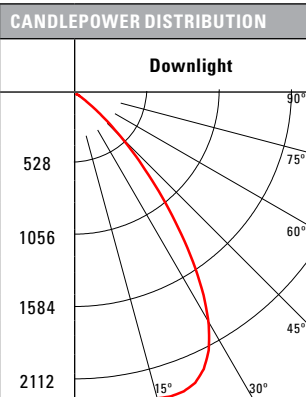
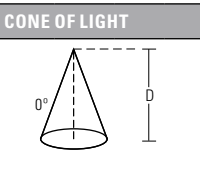
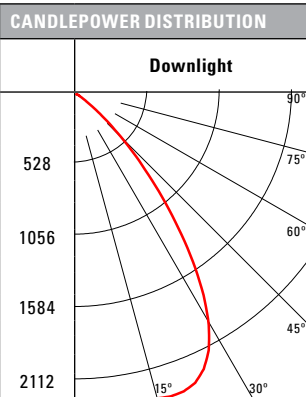
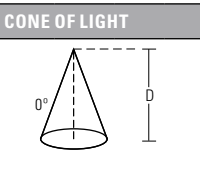
NARROW DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

NARROW (50° BEAM*)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	P255618					Degrees Vertical	Canдела	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance
Housing	HC420D010					0	2112	0-30	1219	73.1	45	15974
Module	HM412835					5	2079	0-40	1553	93.1	55	2141
Reflector	41NDC					15	1784	0-60	1666	99.9	65	0
Lumens	1667 Lm					25	1157	0-90	1667	100	75	0
Efficacy	83.4 Lm/W					35	534	90-180	0	0	85	0
SC	0.84					45	116	0-180	1667	100		
UGR	12.2					55	13					
						65	0					
						75	0					
						85	0					
						90	0					

MEDIUM DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

MEDIUM (60° BEAM*)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	P255818					Degrees Vertical	Canдела	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance
Housing	HC420D010					0	1761	0-30	1209	67.4	45	22576
Module	HM412835					5	1764	0-40	1615	90.1	55	4707
Reflector	41MDC					15	1686	0-60	1784	99.5	65	1753
Lumens	1793 Lm					25	1257	0-90	1793	100	75	941
Efficacy	89.7 Lm/W					35	655	90-180	0	0	85	0
SC	1.0					45	164	0-180	1793	100		
UGR	13.6					55	28					
						65	8					
						75	2					
						85	0					
						90	0					

WIDE DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K

WIDE (75° BEAM*)		CANDLEPOWER DISTRIBUTION		CONE OF LIGHT		CANDELA TABLE		ZONAL LUMEN SUMMARY			LUMINANCE	
Test Number	P256018					Degrees Vertical	Canдела	Zone	Lumens	% Fixture	Average Candela Degrees	Average 0° Luminance
Housing	HC420D010					0	1257	0-30	1054	55.8	45	43057
Module	HM412835					5	1265	0-40	1571	83.2	55	8564
Reflector	41WDC					15	1295	0-60	1871	99.1	65	2906
Lumens	1889 Lm					25	1247	0-90	1889	100	75	1883
Efficacy	94.4 Lm/W					35	841	90-180	0	0	85	0
SC	1.24					45	312	0-180	1889	100		
UGR	15.7					55	50					
						65	13					
						75	5					
						85	0					
						90	0					

*Value are nominal for specular clear reflectors, others may vary.

SC = Spacing Criteria

UGR = Unified Glare Rating

Photometric Multipliers (nominal lumen values)

1000 Lumen	1500 Lumen	2000 Lumen	3000 Lumen	4000 Lumen
0.53	0.72	1.00	1.38	1.87

Multipliers for relative lumen values with other series models.

CCT Multipliers – 80CRI

2700K	3000K	3500K	4000K
0.91	0.94	1.00	1.01

Multipliers for relative lumen values with other series color temperatures.

Color Finish Multipliers

Finish code	C	H	W/WB	BB
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.95	0.97	0.82

Multipliers for relative lumen values with other color finishes.

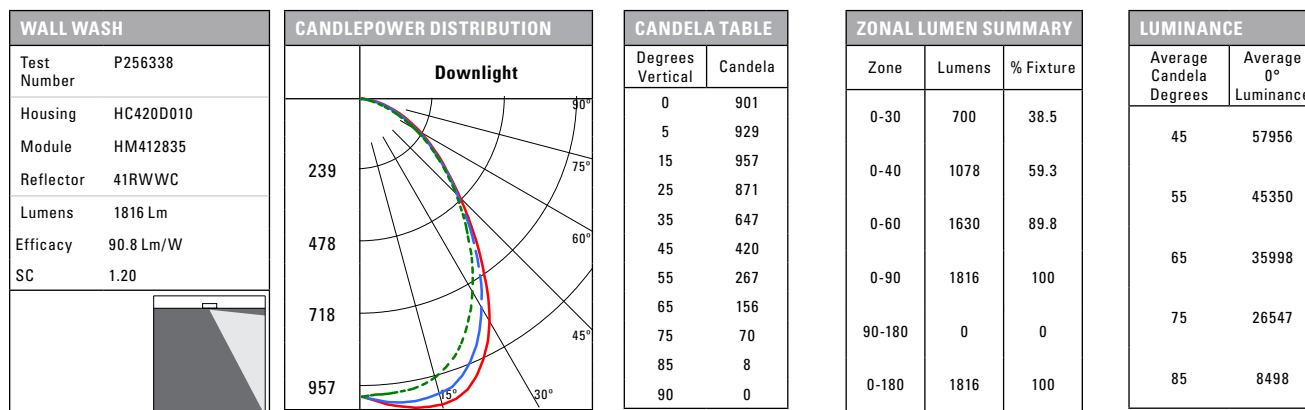
CCT Multipliers – 90CRI

2700K	3000K	3500K	4000K
0.75	0.82	0.89	0.89

Multipliers for relative lumen values with other series color temperatures.

PHOTOMETRY

WALL WASH DISTRIBUTION - SPECULAR CLEAR FINISH, 2000 LUMEN MODEL, 80 CRI, 3500K



SC = Spacing Criteria, nominal for specular clear reflector, others may vary.

SINGLE UNIT FOOTCANDLES							
2.5' from wall (distance from fixture along wall)							
1	9.4	6.9	3.2	1.1	0.3	0.1	0
2	12.4	9.5	5.2	2.4	0.9	0.3	0.1
3	13.7	11.1	5.9	2.5	1.1	0.4	0.2
4	10.7	9.4	6.1	3	1.2	0.5	0.2
5	7.7	7	5.4	3.1	1.5	0.6	0.2
6	5.5	5.2	4.3	3	1.6	0.8	0.3
7	4	3.9	3.4	2.6	1.6	0.9	0.4
8	3	2.9	2.6	2.1	1.5	0.9	0.5
9	2.3	2.2	2.1	1.8	1.4	1	0.6
10	1.8	1.8	1.6	1.4	1.2	0.9	0.6

MULTIPLE UNIT FOOTCANDLES						
2.5' from wall (distance from fixture along wall)				2.5' from wall (distance from fixture along wall)		
1	10.5	9.8	10.5	10.5	9.8	10.5
2	14.8	14.5	14.8	14.8	14.5	14.8
3	16.2	17	16.2	16.2	17	16.2
4	13.7	15.8	13.7	13.7	15.8	13.7
5	10.8	12.6	10.8	10.8	12.6	10.8
6	8.5	9.6	8.5	8.5	9.6	8.5
7	6.6	7.3	6.6	6.6	7.3	6.6
8	5.2	5.6	5.2	5.2	5.6	5.2
9	4.1	4.4	4.1	4.1	4.4	4.1
10	3.2	3.4	3.2	3.2	3.4	3.2

Photometric Multipliers (nominal lumen values)

1000 Lumen	1500 Lumen	2000 Lumen	3000 Lumen	4000 Lumen
0.53	0.72	1.00	1.38	1.87

Multipliers for relative lumen values with other series models.

Color Finish Multipliers

Finish code	C	H	W/WB	BB
Finish	Specular Clear	Semi-Specular	Matte White White Baffle	Black Baffle
Multiplier	1.00	0.95	0.97	0.82

Multipliers for relative lumen values with other color finishes.

CCT Multipliers – 80CRI

2700K	3000K	3500K	4000K
0.91	0.94	1.00	1.01

Multipliers for relative lumen values with other series color temperatures.

CCT Multipliers – 90CRI

2700K	3000K	3500K	4000K
0.75	0.82	0.89	0.89

Multipliers for relative lumen values with other series color temperatures.



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Photometric Report (Type C)

Filename: D1_HC410D010-HM412830-41MDH.ies
[TEST] P255881 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (G1-1805-779-8)
[TESTLAB] INNOVATIONS CENTER(G1)
[ISSUEDATE] 7/17/2018
[MANUFAC] COOPER LIGHTING - HALO
[LUMCAT] HC410D010-HM412830-41MDH
[LUMINAIRE] HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION
FRAME, WITH 4" MEDIUM DISTRIBUTION, HAZE TRIM
[LAMP] (1) HIGH LUMEN LED 80CRI / 3000K CCT

Maximum Candela = 754.4 at 0 H 0 V

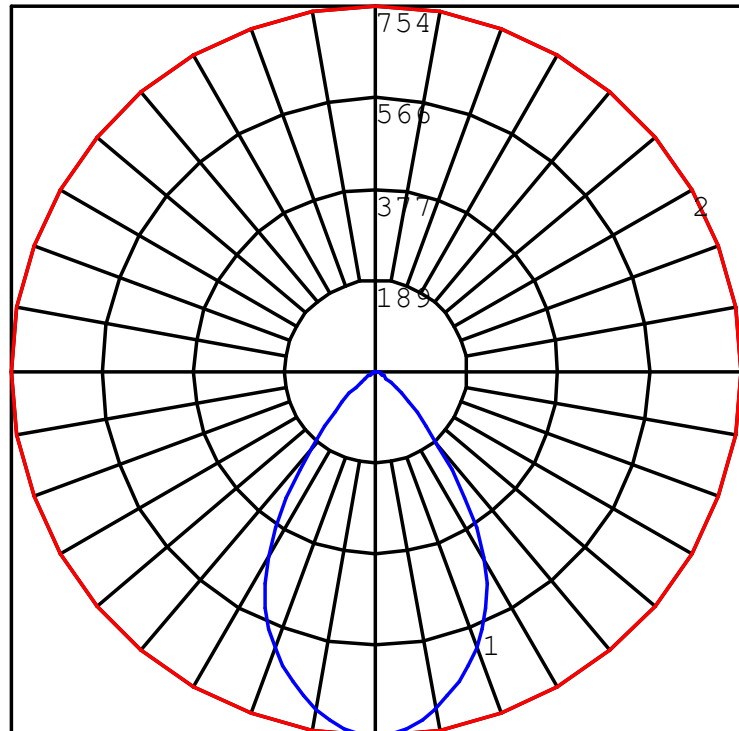
Classification:

Road Classification: Type V, Very Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 85
Indoor Classification: Direct
BUG Rating : B1-U0-G0

Polar Candela Curves:

Vertical Plane Through:
1) 0 - 180 Horizontal

Horizontal Cone Through:
2) 0 Vertical





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Photometric Report (Type C)

Filename: D1_HC410D010-HM412830-41MDH.ies
[TEST] P255881 TEST IS SCALED FROM IESNA LM-79-08 TEST
DATA (G1-1805-779-8)
[TESTLAB] INNOVATIONS CENTER(G1)
[ISSUEDATE] 7/17/2018
[MANUFAC] COOPER LIGHTING - HALO
[LUMCAT] HC410D010-HM412830-41MDH
[LUMINAIRE] HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION
FRAME, WITH 4" MEDIUM DISTRIBUTION, HAZE TRIM
[LAMP] (1) HIGH LUMEN LED 80CRI / 3000K CCT

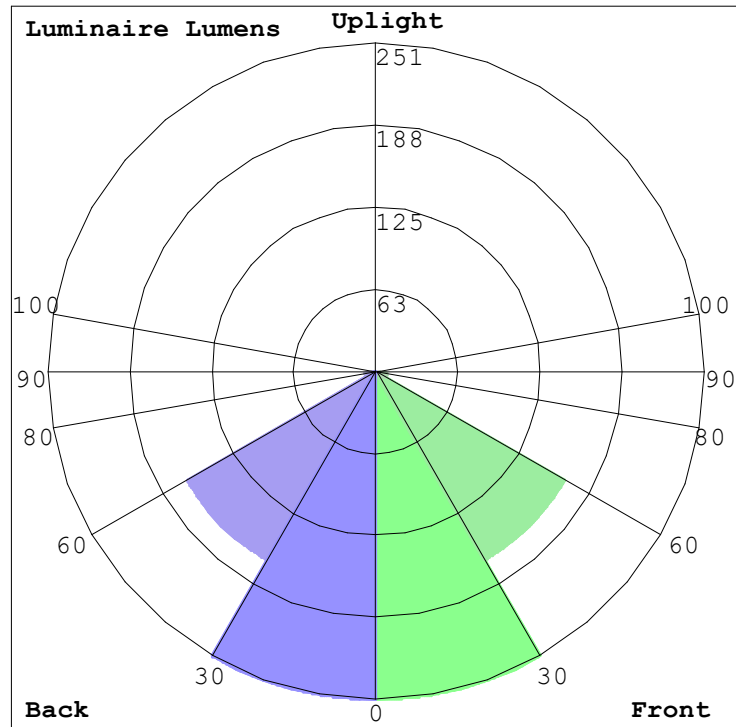
Maximum Candela = 754.4 at 0 H 0 V

Classification:

Road Classification: Type V, Very Short, N.A. (deprecated)
Upward Waste Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 85
Indoor Classification: Direct
BUG Rating : B1-U0-G0

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	250.7	N.A.	29.5
FM (30-60)	166.1	N.A.	19.5
FH (60-80)	8.0	N.A.	0.9
FVH (80-90)	0.3	N.A.	0.0
BL (0-30)	250.7	N.A.	29.5
BM (30-60)	166.1	N.A.	19.5
BH (60-80)	8.0	N.A.	0.9
BVH (80-90)	0.3	N.A.	0.0
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	850.2	N.A.	100.0
BUG Rating	B1-U0-G0		



DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT 70 CRI. Optional 3000K, 5000K and 6000K CCT.

Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

Mounting

STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the

arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. **QUICK MOUNT ARM:** Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty

Five-year warranty.



GLEON GALLEON LED

1-10 Light Squares

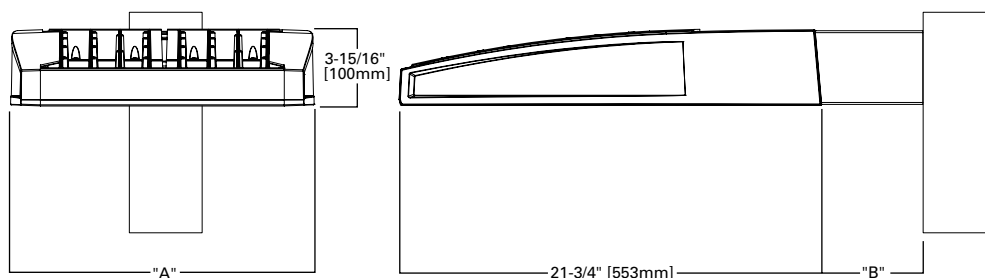
Solid State LED

AREA/SITE LUMINAIRE



WaveLinx

DIMENSIONS

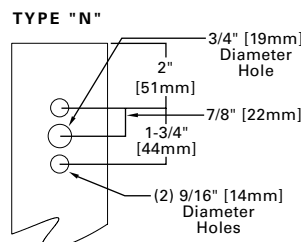


DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length ¹	Weight with Arm (lbs.)	EPA with Arm ² (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN



CERTIFICATION DATA

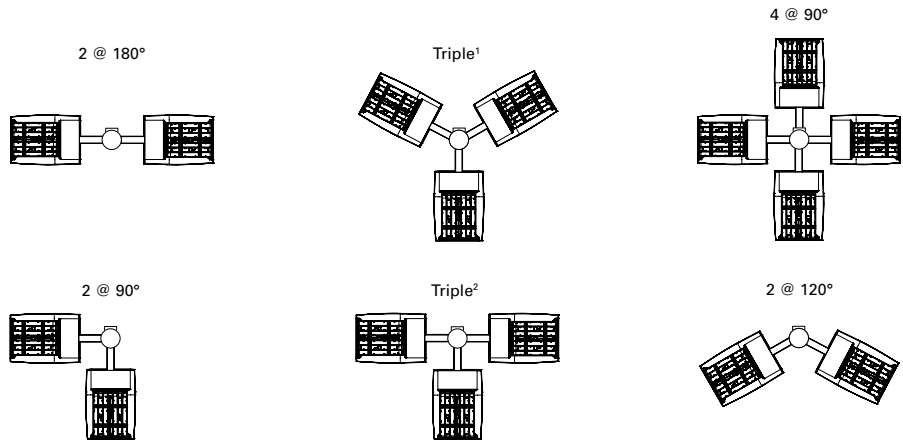
3G Vibration Rated
DesignLights Consortium® Qualified*
IP66 Rated
ISO 9001
LM79 / LM80 Compliant
UL/cUL Wet Location Listed

ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V, 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

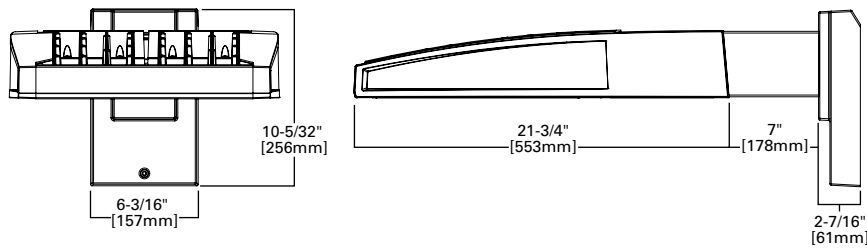
ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AF-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AF-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AF-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AF-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AF-10	16" Extended Arm (Required)	16" Extended Arm (Required)

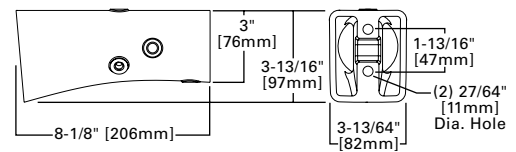


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2 Round poles are 3 @ 90°.

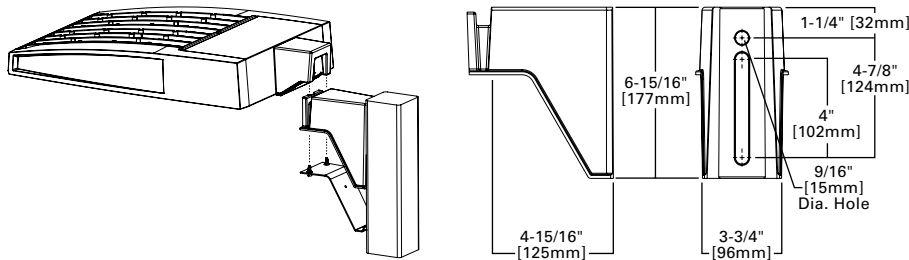
STANDARD WALL MOUNT



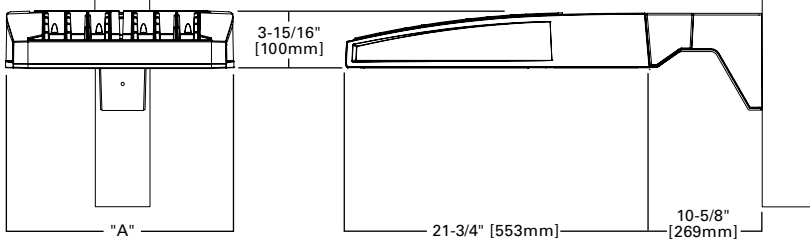
MAST ARM MOUNT



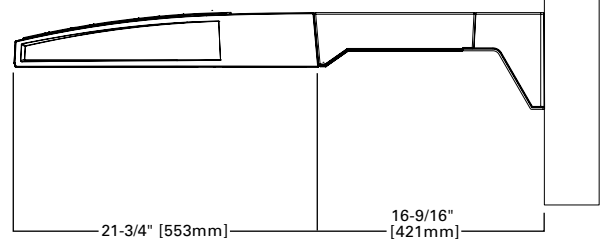
QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)



QM Quick Mount Arm (Standard)



QMEA Quick Mount Arm (Extended)

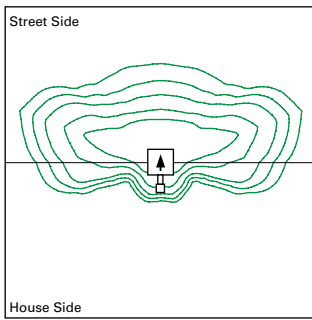


QUICK MOUNT ARM DATA

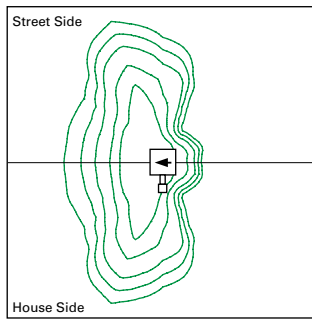
Number of Light Squares ^{1,2}	"A" Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)
1-4	15-1/2" (394mm)	35 (15.91 kgs.)	38 (17.27 kgs.)	1.11
5-6 ³	21-5/8" (549mm)	46 (20.91 kgs.)	49 (22.27 kgs.)	
7-8	27-5/8" (702mm)	56 (25.45 kgs.)	N/A	

NOTES: 1 QM option available with 1-8 light square configurations. 2 QMEA option available with 1-6 light square configurations. 3 QMEA arm to be used when mounting two fixtures at 90° on a single pole.

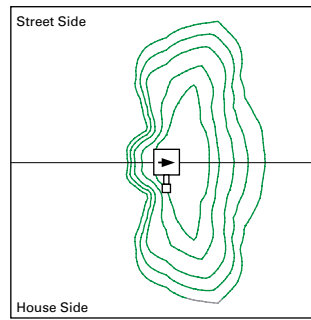
OPTIC ORIENTATION



Standard



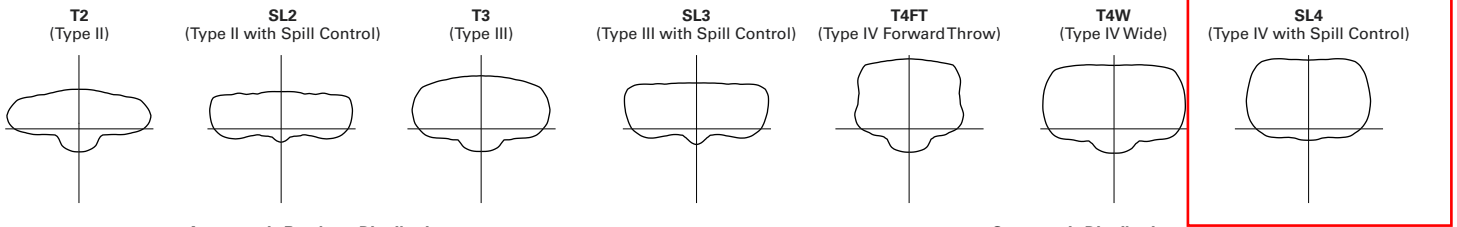
Optics Rotated Left @ 90° [L90]



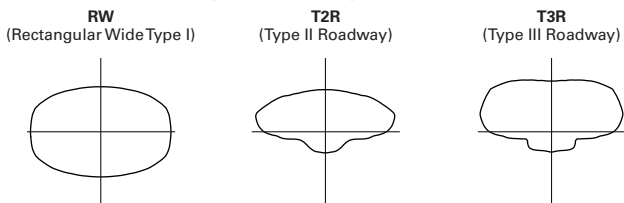
Optics Rotated Right @ 90° [R90]

OPTICAL DISTRIBUTIONS

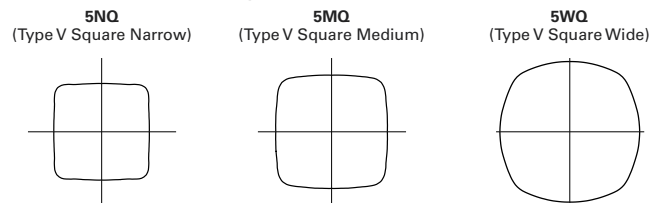
Asymmetric Area Distributions



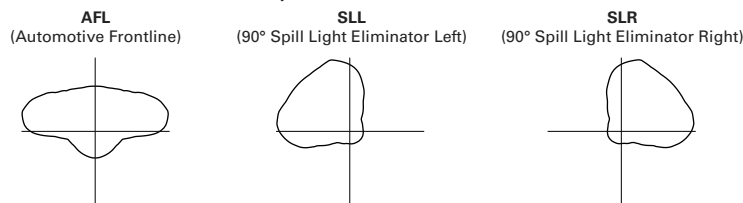
Asymmetric Roadway Distributions



Symmetric Distributions



Specialized Distributions

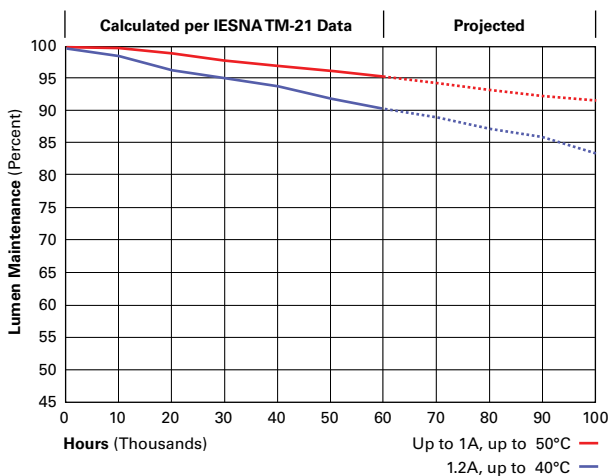


LUMEN MAINTENANCE

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 1A	Up to 50°C	> 95%	416,000
1.2A	Up to 40°C	> 90%	205,000

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97



NOMINAL POWER LUMENS (1A)

Number of Light Squares		1	2	3	4	5	6	7	8	9	10
Nominal Power (Watts)		59	113	166	225	279	333	391	445	501	558
Input Current @ 120V (A)		0.51	1.02	1.53	2.03	2.55	3.06	3.56	4.08	4.60	5.07
Input Current @ 208V (A)		0.29	0.56	0.82	1.11	1.37	1.64	1.93	2.19	2.46	2.75
Input Current @ 240V (A)		0.26	0.48	0.71	0.96	1.19	0.41	1.67	1.89	2.12	2.39
Input Current @ 277V (A)		0.23	0.42	0.61	0.83	1.03	1.23	1.45	1.65	1.84	2.09
Input Current @ 347V (A)		0.17	0.32	0.50	0.64	0.82	1.00	1.14	1.32	1.50	1.68
Input Current @ 480V (A)		0.14	0.24	0.37	0.48	0.61	0.75	0.91	0.99	1.12	1.28
Optics											
T2	4000K/5000K Lumens	6,256	12,225	18,242	24,104	29,865	35,739	42,265	47,888	53,420	59,144
	3000K Lumens	5,915	11,559	17,248	22,789	28,236	33,790	39,960	45,277	50,506	55,919
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	6,642	12,979	19,366	25,589	31,705	37,941	44,870	50,840	56,711	62,789
	3000K Lumens	6,280	12,271	18,311	24,193	29,976	35,872	42,423	48,068	53,619	59,365
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,377	12,461	18,593	24,568	30,439	36,426	43,077	48,810	54,447	60,282
	3000K Lumens	6,029	11,781	17,580	23,229	28,781	34,441	40,731	46,150	51,480	56,997
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	6,518	12,739	19,006	25,113	31,116	37,235	44,036	49,895	55,658	61,622
	3000K Lumens	6,029	11,781	17,579	23,229	28,779	34,440	40,729	46,148	51,478	56,995
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	6,414	12,533	18,702	24,710	30,616	36,637	43,328	49,093	54,763	60,631
	3000K Lumens	6,064	11,849	17,681	23,363	28,946	34,638	40,966	46,417	51,776	57,325
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4W	4000K/5000K Lumens	6,331	12,372	18,459	24,391	30,221	36,163	42,769	48,459	54,056	59,849
	3000K Lumens	5,986	11,697	17,452	23,061	28,572	34,192	40,436	45,817	51,108	56,585
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	6,245	12,205	18,212	24,062	29,813	35,677	42,192	47,807	53,326	59,042
	3000K Lumens	5,904	11,539	17,218	22,750	28,187	33,732	39,891	45,199	50,418	55,822
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,376	12,460	18,591	24,564	30,436	36,421	43,072	48,803	54,439	60,273
	3000K Lumens	6,028	11,780	17,578	23,224	28,776	34,435	40,723	46,141	51,471	56,986
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	6,058	11,838	17,664	23,340	28,918	34,605	40,924	46,370	51,727	57,269
	3000K Lumens	5,727	11,193	16,701	22,067	27,341	32,718	38,692	43,841	48,906	54,146
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	6,577	12,851	19,176	25,336	31,392	37,566	44,426	50,337	56,151	62,170
	3000K Lumens	6,218	12,151	18,131	23,955	29,680	35,517	42,003	47,592	53,089	58,779
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	6,697	13,088	19,528	25,803	31,970	38,258	45,243	51,264	57,185	63,313
	3000K Lumens	6,332	12,374	18,463	24,395	30,227	36,171	42,776	48,468	54,066	59,861
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
5WQ	4000K/5000K Lumens	6,715	13,122	19,580	25,871	32,055	38,360	45,365	51,401	57,337	63,482
	3000K Lumens	6,348	12,406	18,513	24,461	30,307	36,268	42,891	48,599	54,210	60,021
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	5,604	10,949	16,337	21,586	26,745	32,004	37,850	42,886	47,838	52,965
	3000K Lumens	5,298	10,351	15,446	20,409	25,287	30,258	35,786	40,547	45,229	50,077
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	6,517	12,735	19,002	25,107	31,109	37,227	44,025	49,883	55,644	61,607
	3000K Lumens	6,162	12,040	17,965	23,738	29,413	35,197	41,623	47,163	52,609	58,247
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
AFL	4000K/5000K Lumens	6,541	12,781	19,072	25,199	31,221	37,362	44,185	50,065	55,846	61,831
	3000K Lumens	6,184	12,084	18,032	23,825	29,519	35,325	41,775	47,334	52,801	58,459
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

CONTROL OPTIONS

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (P, R and PER7)

Optional button-type photocontrol (P) and photocontrol receptacles (R and PER7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PER7 receptacle.

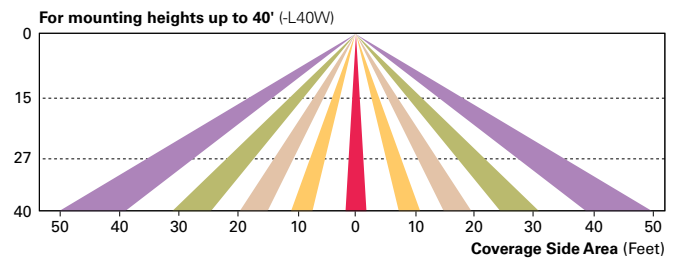
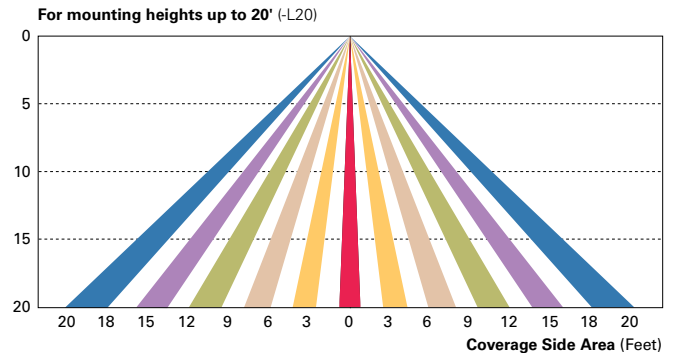
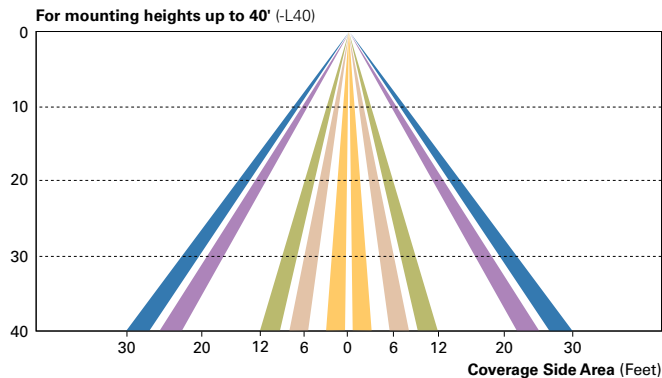
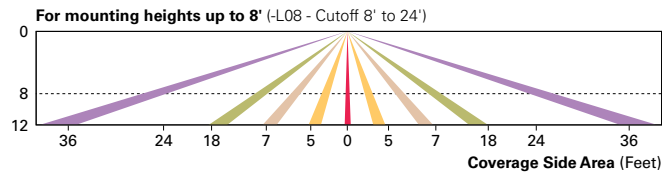
After Hours Dim (AHD)

This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a “dusk-to-dawn” period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (MS/DIM-LXX, MS/X-LXX and MS-LXX)

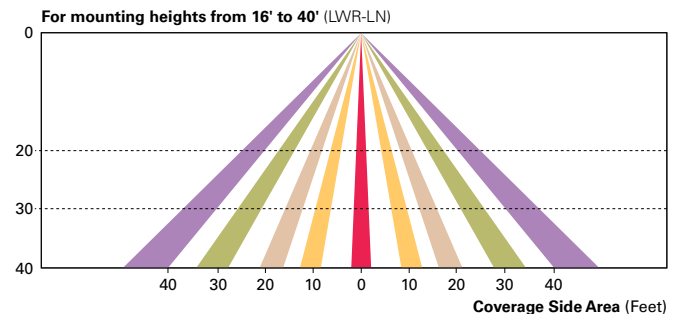
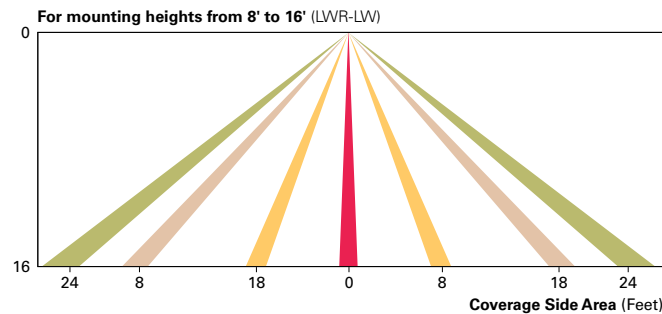
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for “dusk-to-dawn” control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage. pattern for mounting heights from 8'-40'.



LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)

The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building resources, beyond lighting.



WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A)

The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

LumenSafe Integrated Network Security Camera (LD)

Eaton brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

ORDERING INFORMATION


Sample Number: GLEON-AF-04-LED-E1-T3-GM-QM

Product Family ^{1,2}	Light Engine	Number of Light Squares ³	Lamp Type	Voltage	Distribution	Color	Mounting					
GLEON =Galleon	AF =1A Drive Current	01 =1 02 =2 03 =3 04 =4 05 =4 ⁴ 06 =6 07 =5 ⁵ 08 =5 ⁵ 09 =6 ⁶ 10 =10 ⁶	LED =Solid State Light Emitting Diodes	E1 =120-277V 347 =347V ⁷ 480 =480V ^{7,8}	T2 =Type II T2R =Type II Roadway T3 =Type III T3R =Type III Roadway T4FT =Type IV Forward Throw T4W =Type IV Wide 5NQ =Type V Narrow 5MQ =Type V Square Medium 5WQ =Type V Square Wide SL2 =Type II w/Spill Control SL3 =Type III w/Spill Control SL4 =Type IV w/Spill Control SLL =90° Spill Light Eliminator Left SLR =90° Spill Light Eliminator Right RW =Rectangular Wide Type I AFL =Automotive Frontline	AP =Grey BZ =Bronze BK =Black DP =Dark Platinum GM =Graphite Metallic WH =White	[Blank] =Arm for Round or Square Pole EA =Extended Arm ⁹ MA =Mast Arm Adapter ¹⁰ WM =Wall Mount QM =Quick Mount Arm (Standard Length) ¹¹ QMEA =Quick Mount Arm (Extended Length) ¹²					
Options (Add as Suffix)					Accessories (Order Separately)							
<p>7027=70 CRI 2700K ¹³ 7030=70 CRI 3000K ¹³ 8030=80 CRI 3000K ¹³ 7050=70 CRI 5000K ¹³ 7060=70 CRI 6000K ¹³ 600=Drive Current Set to Nominal 600mA ¹⁵ 800=Drive Current Set to Nominal 800mA ¹⁵ 1200=Drive Current Set to Nominal 1200mA ^{15,16} F=Single Fuse (120, 277 or 347V. Specify Voltage) FF=Double Fuse (208, 240 or 480V. Specify Voltage) 2L=Two Circuits ^{17,18} DIM=External 0-10V Dimming Leads ^{19,20} AHD145=After Hours Dim, 5 Hours ²² AHD245=After Hours Dim, 6 Hours ²² AHD255=After Hours Dim, 7 Hours ²² AHD355=After Hours Dim, 8 Hours ²² HA=50°C High Ambient ²³ L90=Optics Rotated 90° Left R90=Optics Rotated 90° Right MT=Installed Mesh Top TH=Tool-less Door Hardware HSS=Installed House Side Shield ²⁸ CE=CE Marking ²⁹ LCF=Light Square Trim Painted to Match Housing ²⁷</p>					<p>P=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) ²¹ PER7=NEMA 7-PIN Photocontrol Receptacle ²¹ R=NEMA Photocontrol Receptacle ²¹ MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height ²⁴ MS-L40W=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height ²⁴ MS/DIM-L08= Motion Sensor for Dimming Operation, Maximum 8' Mounting Height ²⁴ MS/DIM-L20= Motion Sensor for Dimming Operation, 9' - 20' Mounting Height ²⁴ MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height ²⁴ MS/X-L08=Bi-Level Motion Sensor, Maximum 8' Mounting Height ^{24,25} MS/X-L20=Bi-Level Motion Sensor, 9' - 20' Mounting Height ^{24,25} MS/X-L40W=Bi-Level Motion Sensor, 21' - 40' Mounting Height ^{24,25} LWR-L08=Motion Sensor for ON/OFF Operation, Maximum 8' Mounting Height ²⁴ LWR-LW=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height ²⁶ LWR-LN=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height ²⁶ ZW =WaveLinx-enabled 4-PIN Twistlock Receptacle ^{19,33} ZW-SWPD4WH=Wavelinx Wireless Sensor, 7' - 15' Mounting Height, White ^{19,33} ZW-SWPD4BZ=Wavelinx Wireless Sensor, 7' - 15' Mounting Height, Bronze ^{19,33} ZW-SWPD5WH=Wavelinx Wireless Sensor, 15' - 40' Mounting Height, White ^{19,33} ZW-SWPD5BZ=Wavelinx Wireless Sensor, 15' - 40' Mounting Height, Bronze ^{19,33}</p>					<p>OA/RA1016=NEMA Photocontrol Multi-Tap - 105-285V OA/RA1027=NEMA Photocontrol - 480V OA/RA1201=NEMA Photocontrol - 347V OA/RA1013=Photocontrol Shorting Cap OA/RA1014=120V Photocontrol MA1252=10kV Surge Module Replacement MA1036-XX=Single Tenon Adapter for 2-3/8" O.D. Tenon MA1037-XX-2@180° Tenon Adapter for 2-3/8" O.D. Tenon MA1197-XX-3@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1188-XX-4@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1189-XX-2@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1190-XX-3@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1191-XX-2@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1038-XX=Single Tenon Adapter for 3-1/2" O.D. Tenon MA1039-XX-2@180° Tenon Adapter for 3-1/2" O.D. Tenon MA1192-XX-3@120° Tenon Adapter for 3-1/2" O.D. Tenon MA1193-XX-4@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1194-XX-2@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1195-XX-3@90° Tenon Adapter for 3-1/2" O.D. Tenon FSIR-100=Wireless Configuration Tool for Occupancy Sensor ²⁴ GLEON-MT1=Field Installed Mesh Top for 1-4 Light Squares GLEON-MT2=Field Installed Mesh Top for 5-6 Light Squares GLEON-MT3=Field Installed Mesh Top for 7-8 Light Squares GLEON-MT4=Field Installed Mesh Top for 9-10 Light Squares GLEON-QM=Quick Mount Arm Kit ¹¹ GLEON-QMEA=Quick Mount Extended Arm Kit ¹² LS/HSS=Field Installed House Side Shield ^{28,30} WOLC-7P-10A=WaveLinX Outdoor Control Module ^{19,31} SWPD4-WH=Wavelinx Wireless Sensor, 7' - 15' Mounting Height, White ^{19,33,34} SWPD4-BZ=Wavelinx Wireless Sensor, 7' - 15' Mounting Height, Bronze ^{19,33,34} SWPD5-WH=Wavelinx Wireless Sensor, 15' - 40' Mounting Height, White ^{19,33,34} SWPD5-BZ=Wavelinx Wireless Sensor, 15' - 40' Mounting Height, Bronze ^{19,33,34}</p>		

NOTES:

1 Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. 2 DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3 Standard 4000K CCT and minimum 70 CRI. 4 Not compatible with MS/4-LXX or MS/1-LXX sensors. 5 Not compatible with extended quick mount arm (QMEA). 6 Not compatible with standard quick mount arm (QM) or extended quick mount arm (QMEA). 7 Requires the use of an internal step down transformer when combined with sensor options. Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A. 8 Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). 9 May be required when two or more luminaires are oriented on a 90° or 120° drilling pattern. Refer to arm mounting requirement table. 10 Factory installed. 11 Maximum 8 light squares. 12 Maximum 6 light squares. 13 Extended lead times apply. Use dedicated IES files for 2700K, 3000K, 5000K and 6000K when performing layouts. 14 Reserved 15 1 Amp standard. Use dedicated IES files for 600mA, 800mA and 1200mA when performing layouts. 16 Not available with HA option. 17 2L is not available with MS, MS/X or MS/DIM at 347V or 480V. 2L in AF-02 through AF-04 requires a larger housing, normally used for AF-05 or AF-06. Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table. 18 Not available with LumaWatt Pro wireless sensors. 19 Cannot be used with other control options. 20 Low voltage control lead brought out 18" outside fixture. 21 Not available if any "MS" sensor is selected. Motion sensor has an integral photocell. 22 Requires the use of P photocontrol or the PER7 or R photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information. 23 50°C lumen maintenance data applies to 600mA, 800mA and 1A drive currents. 24 The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information. 25 Replace X with number of Light Squares operating in low output mode. 26 LumaWatt Pro wireless sensors are factory installed only requiring network components LWP-EM-1, LWP-GW-1 and LWP-PoE8 in appropriate quantities. See www.eaton.com/lighting for LumaWatt Pro application information. 27 Not available with house side shield (HSS). 28 Only for use with SL2, SL3, SL4 and AFL distributions. The Light Square trim plate is painted black when the HSS option is selected. 29 CE is not available with the LWR, MS, MS/X, MS/DIM, P, R or PER7 options. Available in 120-277V only. 30 One required for each Light Square. 31 Requires PER7. 32 Reserved. 33 WAC Gateway required to enable field-configurability: Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. 34 Requires ZW. 35 Reserved.

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

Product Family	Camera Type	Data Backhaul
L =LumenSafe Technology* 	D =Dome Camera, Standard H =Dome Camera, Hi-Res Z =Dome Camera, Remote PTZ	C =Cellular, Customer Installed SIM Card A =Cellular, Factory Installed AT&T SIM Card V =Cellular, Factory Installed Verizon SIM Card S =Cellular, Factory Installed Sprint SIM Card W =Wi-Fi Networking w/ Omni-Directional Antenna E =Ethernet Networking

*Consult LumenSafe system pages for additional details and compatibility.



Date:

Type:

Fixture:

Project:

Approved:

SL

FCSL550 IP65 rated exterior recessed cut-off 6" tall mini step light for masonry applications. Corrosion resistant, die-cast aluminum construction, this fixture provides illumination for damp, dry or wet areas.

This product has Quick Ship options available. See fclighting.com Quick Ship.

SPECIFICATIONS

PHYSICAL

dimensions	fixture: 3.6" W x 5.9" H x 5.5" D
weight	1 lbs
housing	marine grade, corrosion resistant, heavy gauge aluminum faceplate
lens	clear, tempered, glass lens
mounting	concrete pour, masonry applications
ingress protection	IP65 : dry, damp or wet locations with extruded silicone gasket to seal out contaminants
finish	six stage chemical iron phosphate substrate pre-treatment process for a UV stable, super durable standard polyester powder coat

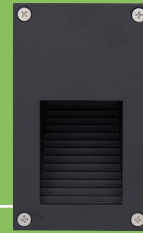
PERFORMANCE

color temperature	2700K	3000K	3500K	4000K	
lumen output	157 lm				
lifetime	> 70,000 hours / L70 or better				
color consistency	3-Step McAdams Ellipse / standard: CRI ≥ 85 optional: 90CRI				
temperature	operating: -13°F to 104°F (-25°C to 40°C) start up: -13°F to 104°F (-25°C to 40°C) storage: -40°F to 176°F (-40°C to 80°C)				
junction temperature	73°C @ T ^A 25°C				
warranty	5 year limited warranty (refer to website for details)				

ELECTRICAL

input voltage	Universal 120–277V AC
power supply	integral Class II, electronic high-power factor > 94% @120V
certifications	ETL / cETL Listed
standards	UL1598/CSA C22.2 No. 250.0; UL 8750/CSA C22.2 No. 250.13/IES LM-79/LM-80
power consumption	10W @ 120V - 277V
dimming interface	optional: 0-10V (integral)

Due to continuous development and improvements, specifications are subject to change without notice. FC Lighting reserves the right to change lab test details or specifications without notice. Product use certifies agreement to FC Lighting terms and conditions.



Ordering Information

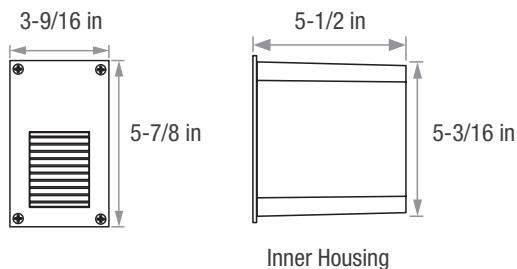
ORDERING INFORMATION

This product has Quick Ship options available. See fclighting.com Quick Ship.

FCSL550											
SERIES	VOLTAGE		SOURCE/TEMPERATURE/LED LUMENS			CRI		FINISH		OPTIONS & ACCESSORIES	
FCSL550	120V	120V	LED	27K	157 Lumens (10W)	CRI85	85 CRI	BK	Black	LD	Dimming 0-10V
	277V	277V		3K		CRI90	90 CRI	BZ	Bronze		
	UNV	120V-277V		35K				CC	Custom Color		
				4K				SL	Silver		
								WH	White		

PRODUCT DIMENSIONS - STANDARD PRODUCT

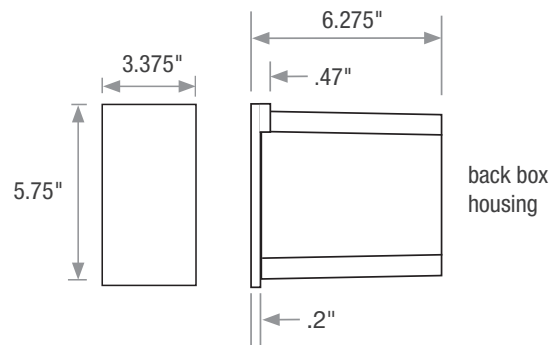
width	3-9/16"
height	5-7/8"
depth	5-1/2"



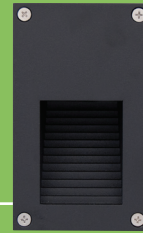
MOUNTING -

back box width	3.375"
back box height	5.75"
back box depth	6.275"

Back Box mounts inside brick masonry: faceplate in front of surface - see installation instructions for proper mounting directions.



Due to continuous development and improvements, specifications are subject to change without notice. FC Lighting reserves the right to change lab test details or specifications without notice. Product use certifies agreement to FC Lighting terms and conditions.



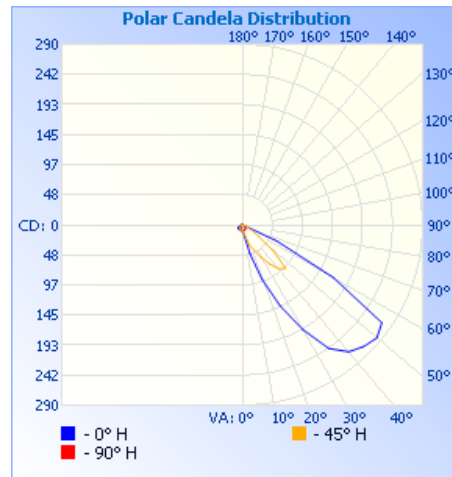
Photometry

OPTICAL DISTRIBUTION

lumen output	157 Lm @ 4000K
power consumption	10W

Illuminance at a Distance			
	Center Beam fc	Beam Width	
1.7ft	3.61 fc	1.1 ft	1.3 ft
3.3ft	0.96 fc	2.2 ft	2.5 ft
5.0ft	0.42 fc	3.3 ft	3.8 ft
6.7ft	0.23 fc	4.4 ft	5.1 ft
8.3ft	0.15 fc	5.5 ft	6.3 ft
10.0ft	0.10 fc	6.6 ft	7.6 ft

■ Vert. Spread: 36.5°
■ Horiz. Spread: 41.6°



illuminations testing labroatory : Report #1023

Due to continuous development and improvements, specifications are subject to change without notice. FC Lighting reserves the right to change lab test details or specifications without notice. Product use certifies agreement to FC Lighting terms and conditions.



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Photometric Report (Type C)

Filename: SL_FCSSL-550-120V-4K-160LM.ies

[TEST] TypeC Intensity

[TESTLAB] FC/SSL Lab

[MANUFAC] FC/SSL Lighting

[LUMINAIRE] Exterior Die-Cast 6" Tall Mini Step Light
with Die-Cast or 316 Stainless Steel Faceplate

[LAMP] LED

Maximum Candela = 282.313494147062 at 0 H 50 V

Classification:

Road Classification: Type III, Very Short, N.A. (deprecated)

Upward Wast Light Ratio: 0.00

Luminaire Efficacy Rating (LER): 16

Indoor Classification: Direct

BUG Rating : B0-U1-G0

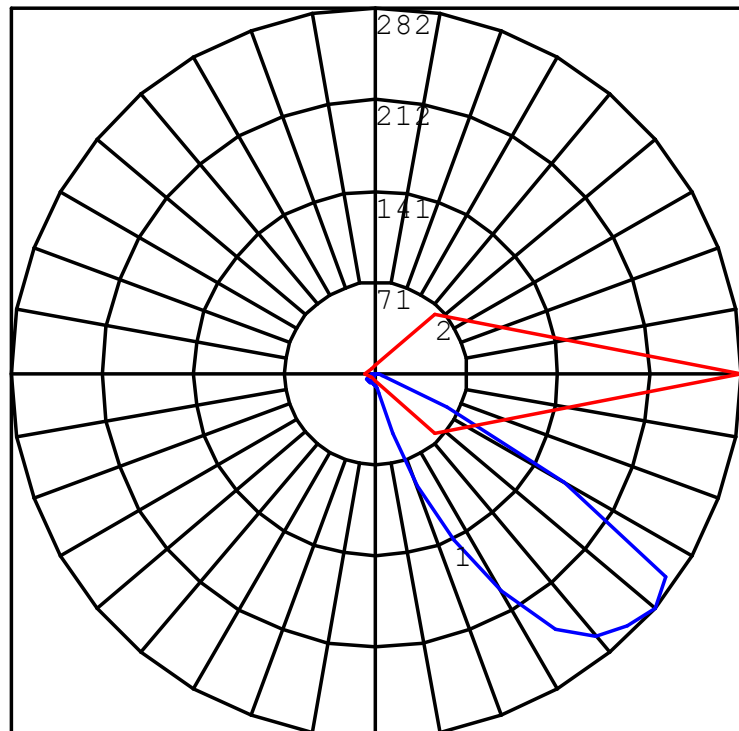
Polar Candela Curves:

Vertical Plane Through:

1) 0 - 180 Horizontal

Horizontal Cone Through:

2) 50 Vertical





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Photometric Report (Type C)

Filename: SL_FCSSL-550-120V-4K-160LM.ies

[TEST] TypeC Intensity

[TESTLAB] FC/SSL Lab

[MANUFAC] FC/SSL Lighting

[LUMINAIRE] Exterior Die-Cast 6" Tall Mini Step Light
with Die-Cast or 316 Stainless Steel Faceplate

[LAMP] LED

Maximum Candela = 282.313494147062 at 0 H 50 V

Classification:

Road Classification: Type III, Very Short, N.A. (deprecated)

Upward Waste Light Ratio: 0.00

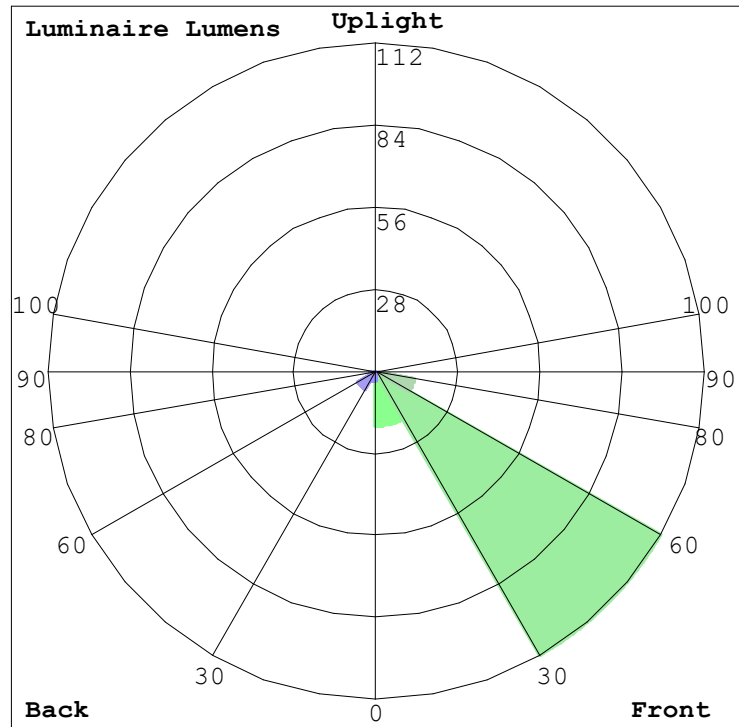
Luminaire Efficacy Rating (LER): 16

Indoor Classification: Direct

BUG Rating : B0-U1-G0

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	18.7	N.A.	11.9
FM (30-60)	112.5	N.A.	71.5
FH (60-80)	13.3	N.A.	8.5
FVH (80-90)	0.2	N.A.	0.1
BL (0-30)	3.4	N.A.	2.1
BM (30-60)	7.1	N.A.	4.5
BH (60-80)	2.1	N.A.	1.3
BVH (80-90)	0.1	N.A.	0.1
UL (90-100)	0.1	N.A.	0.0
UH (100-180)	< 0.05	N.A.	0.0
Total	157.5	N.A.	100.0
BUG Rating	B0-U1-G0		



DESCRIPTION

TRACE*LITE's third generation TLED110P series LED wallpack features an updated SSL light engine that provides 0-10V dimming as well as improvements in efficacy, lumen output, and thermal management while still maintaining the consistent look of our proven decorative trapezoid housing. The TLED110P housing is constructed of die-cast aluminum with a UV resistant, thermoset polyester powder coated finish that provides durable protection against environmental conditions, corrosion and the elements. The SSL light engine's LEDs are protected by a high-impact, tempered glass lens.

SPECIFICATIONS**Construction:**

The TLED110P series has a precision designed aluminum housing with stainless steel hardware, tempered glass lens, silicone gaskets and a UV resistant, thermoset polyester powder coat finish. The interior wiring space is easily accessible with a side hinged front frame/lens assembly and offers durable performance with clean, architectural aesthetics. The TLED110P is completely sealed with silicone gaskets. There are a total of four (4) ½" threaded hubs, one located on either side, the top and the back of the housing allowing for the installation of switching/control accessories or the capability of wiring the TLED110P with surface mounted conduit.

Optics:

Our TLED110P series wallpack delivers exceptional light quality with available correlated color temperatures options of 3000K, 4000K, or 5000K, a CRI of ≥85 and a projected color shift of less than 1%. The TLED110P LED light engine is specifically designed to distribute light forward and to the sides, providing ideal wallpack distribution that maximizes fixture spacing while delivering light where it is needed in the most efficient way possible. Producing up to 3050 delivered lumens, the TLED110P has an L70 of 50,000 hours.

Electrical:

The TLED110P includes 0-10V dimming as a standard option with LEDs powered by constant current, high efficiency Class 2 LED driver with active power factor correction (0.90 typical), an IP66 rating, all around protection against over-voltage, over-temperature, short circuit conditions, and lightning. The TLED110P driver has a standard voltage sensing input of 120 ~ 277VAC 50/60Hz, a Class A EMI rating, complies with UL8750 safety regulations and with ANSI/IEEE C62.41 Class A Operation. The TLED110P is suitable for operation in -31°F to 104°F (-35°C to 40°C) ambient conditions.

Thermal Management:

Our LED light engine is mounted directly to a dedicated, custom designed LEDLITE^{logic} thermal heat sink. The configuration of the heat sink is unique and has been sized to maximize the thermal dissipation of the traditional wallpack housing. This configuration optimizes the heat removal for the LEDs, which in turn, makes possible the high efficacy, lumen output and longevity of the TLED110P.

Environmentally Friendly Design:

TLED110P luminaires consume very little energy and provide long life in comparison to traditional lamp technologies. The TLED110P-66-VS consumes only 40W, however the light output can be conservatively compared to a 150W HID luminaire of similar design. The TLED110P provides a significant reduction in KW load and carbon emissions.

Installation:

The TLED110P series wallpack features a back box design that can be mounted to any vertical surface and is easily wired either to a recessed J-box or by using surface mounted conduit. Optional tamper-resistant hardware, wire guard, and polycarbonate guard are available for applications where there is a high rate of vandalism or theft, or in high traffic, public spaces.

Battery Back-Up (Option: BB):

TRACE*LITE's battery back-up option provides approximately 1400 lumens for 90 minutes in the event of a primary power failure. The battery back-up option includes a battery pack along with a charging/transfer device that keeps the battery pack charged during normal AC operation and transfers battery power to a portion of the LED modules when the device senses that the primary AC power has failed. Suitable for operation in 32°F to 104°F (0°C to 40°C) ambient conditions.

Transient Protection System (Option: TP):

The LEDLITE^{logic} optional transient protection device is designed to be used in conjunction with our LED drivers. The "-TP" option utilizes a 3-leaded device that protects Line-Ground, Line-Neutral, and Neutral-Ground in accordance with IEEE/ANSI C62.41.2 guidelines. The surge current rating of the "-TP" option is 10,000 amps.

Model: _____ Date: _____

Accessories: _____

Job Name: _____ Type: _____



Specs at a Glance*		
# of LEDs	42 LEDs	66 LEDs
Wattage (w)	27	40
Lumens (lm)	1,866	3,050
Efficacy (LPW)	99	76
Equivalency	70w HID	150w HID
CCT	3000K, 4000K, 5000K	
CRI	≥85	
Optics	Type II Very Short	
Input Voltage	120~277 Voltage Sensing	
Warranty	5 Years	
Certifications	ARRA	
Ambient Temp	-35°C to 40°C (-31°F to 104°F)	

* 5000K CCT tested

Photocontrol (Accessory: PC):

Optional field installed photocontrol provides dusk-till-dawn security. Input voltage must be specified to match fixture input voltage.

Testing & Compliance:

The reliability and performance of the TLED110P is evaluated in accordance with the parameters outlined and reported by LM-79 and LM-80 documents. Photometric data is tested to IESNA LM-79-08 standard by an independent testing laboratory. Lumen maintenance, or L70, a measure of long term reliability, is determined for the light source, which consists of the LED and PSB sub-assembly as installed in the luminaire, using LM-80 in-situ thermal and reliability data as provided by the LED manufacturer in accordance with DOE/EPA standards.

Warranty:

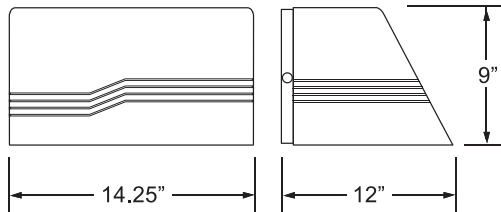
Any component that fails due to manufacturer's defect is guaranteed for 5 years. The warranty does not cover physical damage, abuse or acts of God. Manufacturer reserves the right to charge for such repairs if deemed necessary.

Fixture Performance

Part Number	Total System Watts	L70 Hours @ 25°C	3000K CCT		4000K CCT		5000K CCT	
			Lumens (lm)	Efficacy (LPW)	Lumens (lm)	Efficacy (LPW)	Lumens (lm)	Efficacy (LPW)
TLED110P-42-VS	27W	50,000	1833	69	1850	68	1866	70
TLED110P-66-VS	40W	50,000	N/A	N/A	2906	68	3050	76

NOTE: Lumen maintenance and life (part of LM-80 data) are per published information from primary LED suppliers and is based on design operation at their specified thermal management and electrical design parameters.

Dimensions



Approximate Weight: 16.5 lbs.

Sample Photometrics

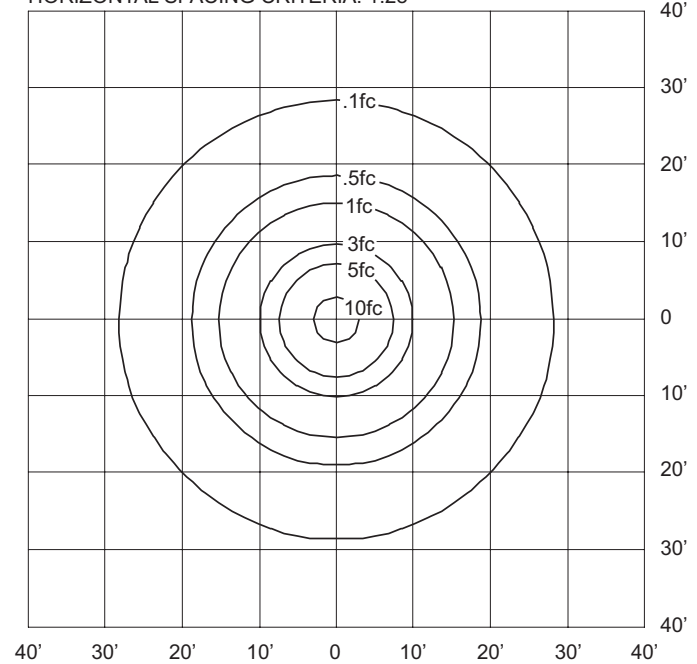
TLED110P-66-VS-4K

IES: TYPE II VERY SHORT

MOUNTING HEIGHT: **10 FEET**

TILT: ZERO

HORIZONTAL SPACING CRITERIA: 1.28



Ordering Information

Example: TLED110P-42-VS-5K-TRH

Series	Number of LEDs	Input Voltage	CCT	Options (Factory Installed)
TLED110P	42 = 42 LEDs (27 Watts)	VS = 120~277VAC Voltage Sensing	3K ² = 3000K	BB = Battery Backup
	66 ¹ = 66 LEDs (40 Watts)		4K = 4000K	CC ³ = Custom Color
			5K = 5000K	SZXXX ⁴ = Single Line Side Fuse (120V or 277V)
Notes				TP = 10KVA Transient/Surge Protection
				TRH = Tamper Resistant Hardware
				Accessories⁵ (Field Installed)
				PCU = 120-277VAC Photocontrol
				WG110 = Wire Guard

Specifications are subject to change without notice.
Installation must be performed in accordance with
Barron Lighting Group installation instructions.

10810293 Rev 9 09/19



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Photometric Report (Type C)

Filename: TLED110P-42-VS-5K.IES
[TEST] 33185
[TESTLAB] UNDERWRITERS LABORATORIES INC.
[ISSUEDATE] 7/ 8/2014
[MANUFAC] Barron Lighting Group
[LUMCAT] TLED110P-42-VS-5K
[LUMINAIRE] LED Medium Wallpack, clear glass lens
[LAMP] 42 LEDs. LUMINAIRE OUTPUT: 1866 Lms.

Maximum Candela = 746.1 at 90 H 2.5 V

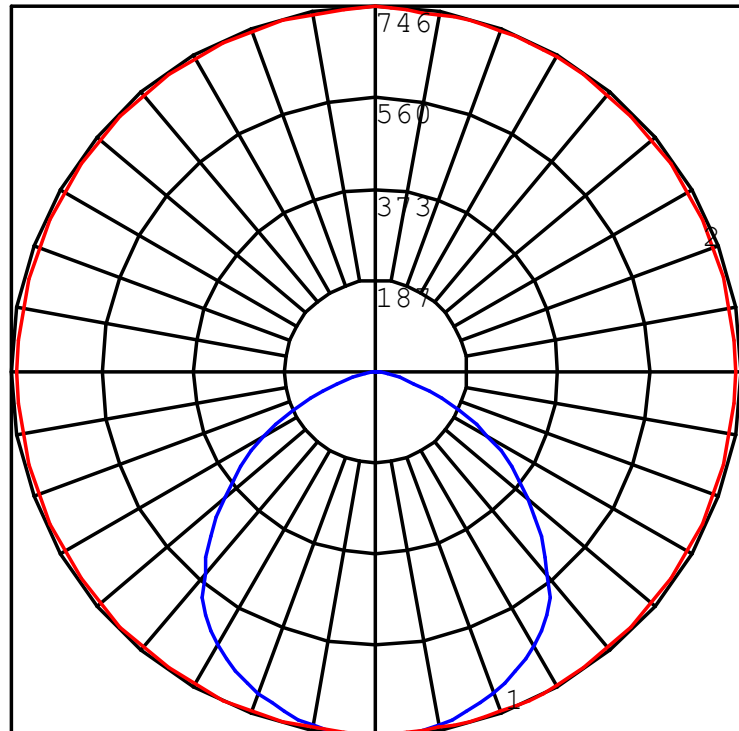
Classification:

Road Classification: Type VS, Very Short, N.A. (deprecated)
Upward Wast Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 70
Indoor Classification: Direct
BUG Rating : B1-U0-G0

Polar Candela Curves:

Vertical Plane Through:
1) 90 - 270 Horizontal

Horizontal Cone Through:
2) 2.5 Vertical





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Photometric Report (Type C)

Filename: TLED110P-42-VS-5K.IES
[TEST] 33185
[TESTLAB] UNDERWRITERS LABORATORIES INC.
[ISSUEDATE] 7/ 8/2014
[MANUFAC] Barron Lighting Group
[LUMCAT] TLED110P-42-VS-5K
[LUMINAIRE] LED Medium Wallpack, clear glass lens
[LAMP] 42 LEDs. LUMINAIRE OUTPUT: 1866 Lms.

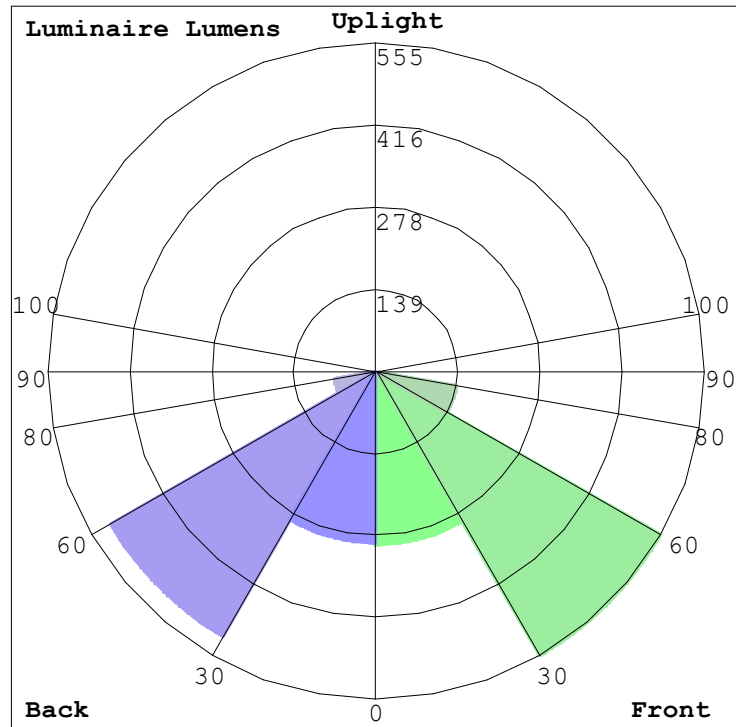
Maximum Candela = 746.1 at 90 H 2.5 V

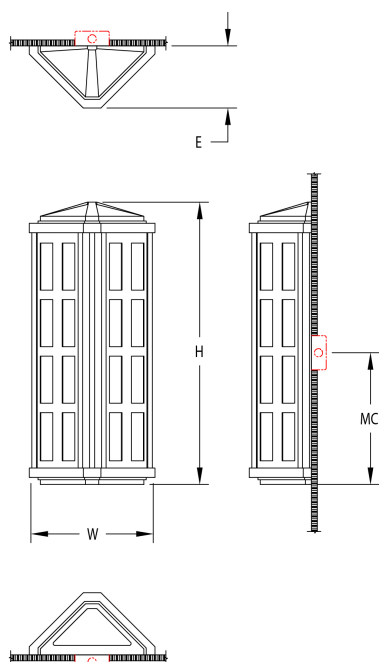
Classification:

Road Classification: Type VS, Very Short, N.A. (deprecated)
Upward Waste Light Ratio: 0.00
Luminaire Efficacy Rating (LER): 70
Indoor Classification: Direct
BUG Rating : B1-U0-G0

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	292.6	N.A.	15.7
FM (30-60)	555.0	N.A.	29.8
FH (60-80)	138.3	N.A.	7.4
FVH (80-90)	1.0	N.A.	0.1
BL (0-30)	289.6	N.A.	15.5
BM (30-60)	516.9	N.A.	27.7
BH (60-80)	71.3	N.A.	3.8
BVH (80-90)	0.6	N.A.	0.0
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	1865.3	N.A.	100.0
BUG Rating	B1-U0-G0		





Notes

- **FINISH:** Finish is low VOC thermo-cure powdercoat paint. Specify three digit color suffix with "PT" finish options.
- **HOUSING:** Consists of heavy gauge extruded aluminum corner posts, solid cast aluminum end caps and laser-cut aluminum trim panels.
- **MOUNTING:** Fixture supplied with gasketed mounting plate, and visible hardware. Fixture requires additional support by wall anchors or studs attached to structural blocking provided by installing electrician. Standard octagonal junction box required.
- UL and C-UL listed for wet locations.
- Fluorescent and metal halide ballasts rated to - 22-degree F
- All MH lamp options include integral electronic ballast.

1 Fixture Number

DE-215 13.25"W x 30"H x 6.5" Ext.

DE-216 19.75"W x 45"H x 9.75" Ext.

2 Finish

Frame

Standard Painted Finishes (PT)

Panels

Standard Painted Finishes (PT)

Raw Copper (CU)

Optional Bar Trim on R1 Panel

No bar trim on R1 panel (NA)

Brushed Stainless Steel (BS)

Powder coat paint (PP)

Polished stainless steel (PS)

3 Lamping

Includes integral wet location rated 120-277v 1-100% dimming driver compatible with 0-10v controls. All LEDs are 80+ CRI, 50,000 hr. L70. Wattage listed includes driver efficiency.

DE-215

LED Options	Lumens	Wattage
E23	1636 (initial)	23

Non-LED Lamps

3N60: (3) 60 watt incandescent

2F40: (2) 40 watt compact fluorescent

1MH70: (1) 70 watt ED-17 metal halide

DE-216

LED Options	Lumens	Wattage
E34	2452 (initial)	34
E34/1QP75		

Non-LED Lamps

4N60: (4) 60 watt incandescent

2F40: (2) 40 watt compact fluorescent

2F40 / 1QP75: (2) 40 watt compact fluorescent & (1) 75 watt PAR30 halogen med. base

1MH100: (1) 100 watt ED-17 metal halide

4 LED Color Temp

27: 2700K

30: 3000K

35: 3500K

40: 4000K

5 LED Dimming

D0: 0-10v

6 Voltage Options

120: 120 volt

277: 277 volt (Not available with incandescent lamp options)

7 Diffuser Options

WH: Opal White Acrylic

FX: Faux Alabaster Acrylic

8 Panel Options



R1



R2



R3



R4



R5



R6

9 Fixture Options

FU: Fusing

PC: Photo Cell

TL: Top Lens

1

2

2

2

3

4

5

6

7

8

9

Fixture #

Frame
(Finish)

Panels
(Finish)

Optional Bar T
(Finish)

Lamping

Color Temp

Dimming

Voltage

Diffuser

Panel

Fixture Option



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Photometric Report (Type C)

Filename: W2_DE E22.ies

[TEST] ITL82813

[TESTLAB] INDEPENDENT TESTING LABORATORIES, INC.

[MANUFAC] MANNING LIGHTING INC

[LUMCAT] LBI

[LUMINAIRE] FABRICATED WHITE PAINTED METAL WALL

MOUNTING PLATE, FORMED WHITE PAINTED METAL CIRCUIT

BOARD MOUNT, 2 WHITE CIRCUIT BOARDS MOUNTED OBLIQUELY ACROSS CIRCUIT BOARD MOUNT EACH WITH 24 LE

[LAMP] FORTY-EIGHT WHITE MULTI-CHIP LIGHT EMITTING

DIODES (LEDs), AIMED AT THE HORIZON.

Maximum Candela = 240.349995017052 at 0 H 92.5 V

Classification:

Road Classification: N.A., N.A., N.A. (deprecated)

Upward Wast Light Ratio: 0.50

Luminaire Efficacy Rating (LER): 47

Indoor Classification: General Diffuse

BUG Rating : B0-U3-G1

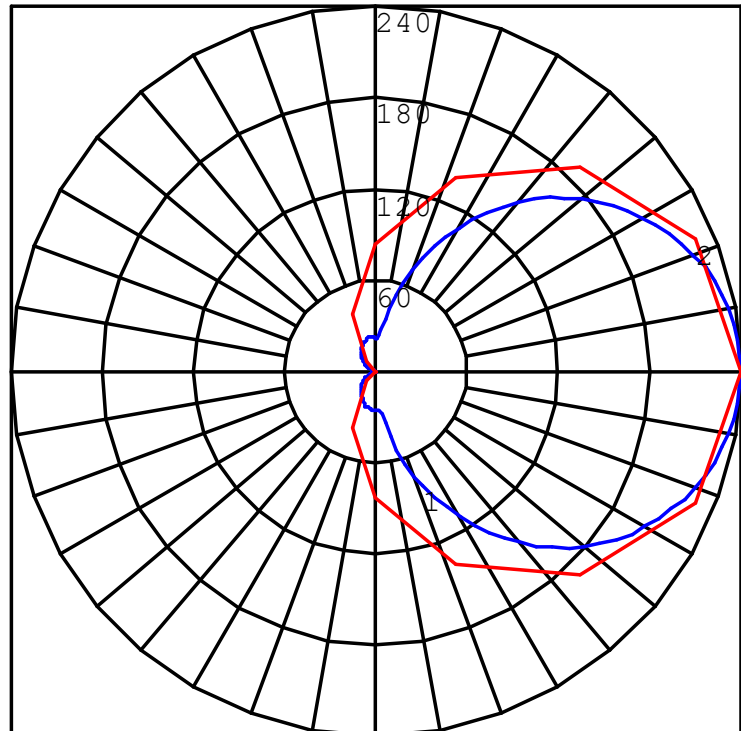
Polar Candela Curves:

Vertical Plane Through:

1) 0 - 180 Horizontal

Horizontal Cone Through:

2) 92.5 Vertical





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Photometric Report (Type C)

Filename: W2_DE E22.ies

[TEST] ITL82813

[TESTLAB] INDEPENDENT TESTING LABORATORIES, INC.

[MANUFAC] MANNING LIGHTING INC

[LUMCAT] LBI

[LUMINAIRE] FABRICATED WHITE PAINTED METAL WALL

MOUNTING PLATE, FORMED WHITE PAINTED METAL CIRCUIT

BOARD MOUNT, 2 WHITE CIRCUIT BOARDS MOUNTED OBLIQUELY ACROSS CIRCUIT BOARD MOUNT EACH WITH 24 LE

[LAMP] FORTY-EIGHT WHITE MULTI-CHIP LIGHT EMITTING

DIODES (LEDs), AIMED AT THE HORIZON.

Maximum Candela = 240.349995017052 at 0 H 92.5 V

Classification:

Road Classification: N.A., N.A., N.A. (deprecated)

Upward Waste Light Ratio: 0.50

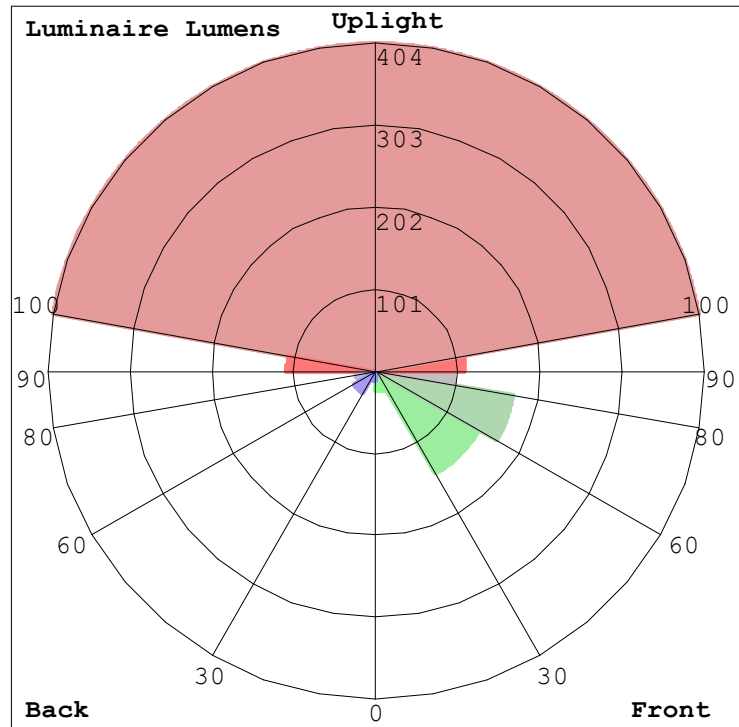
Luminaire Efficacy Rating (LER): 47

Indoor Classification: General Diffuse

BUG Rating : B0-U3-G1

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	25.1	N.A.	2.4
FM (30-60)	146.1	N.A.	14.1
FH (60-80)	171.6	N.A.	16.6
FVH (80-90)	97.2	N.A.	9.4
BL (0-30)	11.2	N.A.	1.1
BM (30-60)	30.9	N.A.	3.0
BH (60-80)	24.6	N.A.	2.4
BVH (80-90)	12.2	N.A.	1.2
UL (90-100)	109.9	N.A.	10.6
UH (100-180)	404.1	N.A.	39.1
Total	1032.9	N.A.	100.0
BUG Rating	B0-U3-G1		



MARCELLA

Outdoor Light

part # IOL322BK

CANARM LTD.

PO Box 367, 2157 Parkedale Avenue, Brockville, Ontario K6V5V6

Tel: 613-342-5424 | Fax: 1-800-263-4598

2555 Rue Bernard Lefebvre, Laval, Quebec H7C 0A5

Tel: 1-450-665-2535 | Fax: 1-450-665-0910

808 Commerce Park Drive, Ogdensburg, New York, USA 13669

Tel: 1-800-267-4427 | Fax: 1-800-263-4598

www.canarm.com

General

Size of fixture: 9" W x 7 1/4" H x 10" D

Finish: matte black

Glass: glass diffuser

Glass size: 8 1/2" diameter

Canopy size: 5" diameter

Lamping: 1 x 60W A bulbs (not included)

Mounting: wall mount

Packaging

Colour box: 11.82" x 10.63" x 9.06" (300 x 270 x 230mm)

Colour box weight: 3.31 lbs

Master box: 22.05" x 12.21" x 18.90" (560 x 310 x 480mm)

Pieces per master: 4

Master box weight: 15.43 lbs

**Warranty & Safety Standards**

Warranty - one year

cCSAus

Suitable for wet locations



WARNING: The use of this product can expose you to chemicals including Cadmium, which is known to the State of California to cause cancer, and Lead, which is known to the State of California to cause birth defects and/or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Prepared for

Contact

Date

Presented by

Remarks



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Photometric Report (Type C)

Filename: W3_11328494-1260980.ies

[TEST] 1260980

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 6/23/2016

[MANUFAC] Baselite Corp

[LUMCAT] W516/ 12W LED/ 5K

[LUMINAIRE] Black aluminum hood, white reflector, and
frosted lens

[LAMP] One (1) white LED

[BALLAST] Inventronics LUC-012S035DSM

Maximum Candela = 381.4 at 0 H .5 V

Classification:

Road Classification: Type V, Very Short, N.A. (deprecated)

Upward Wast Light Ratio: 0.00

Luminaire Efficacy Rating (LER): 111

Indoor Classification: Direct

BUG Rating : B1-U0-G0

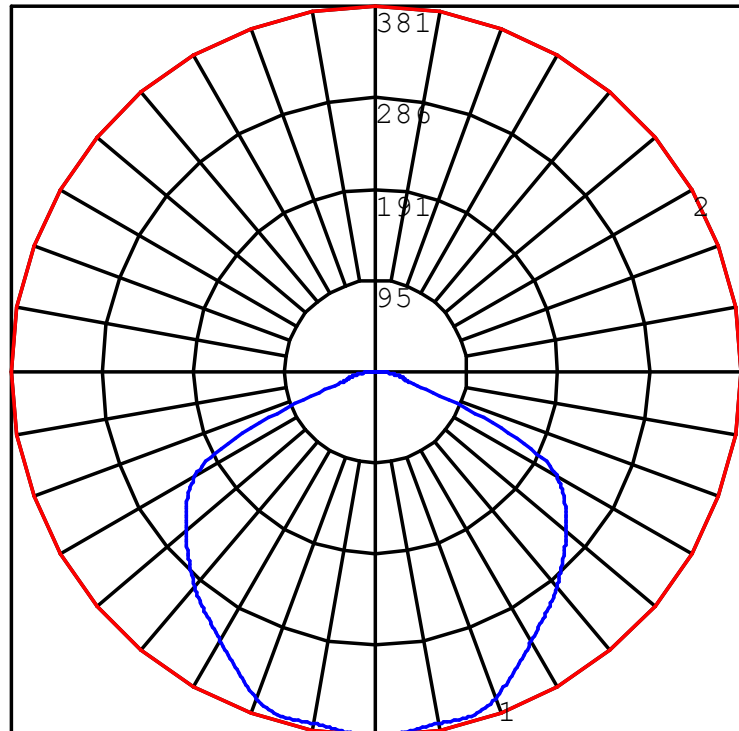
Polar Candela Curves:

Vertical Plane Through:

1) 0 - 180 Horizontal

Horizontal Cone Through:

2) 0.5 Vertical





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Photometric Report (Type C)

Filename: W3_11328494-1260980.ies

[TEST] 1260980

[TESTLAB] UL Verification Services Inc.

[ISSUEDATE] 6/23/2016

[MANUFAC] Baselite Corp

[LUMCAT] W516/ 12W LED/ 5K

[LUMINAIRE] Black aluminum hood, white reflector, and
frosted lens

[LAMP] One (1) white LED

[BALLAST] Inventronics LUC-012S035DSM

Maximum Candela = 381.4 at 0 H .5 V

Classification:

Road Classification: Type V, Very Short, N.A. (deprecated)

Upward Waste Light Ratio: 0.00

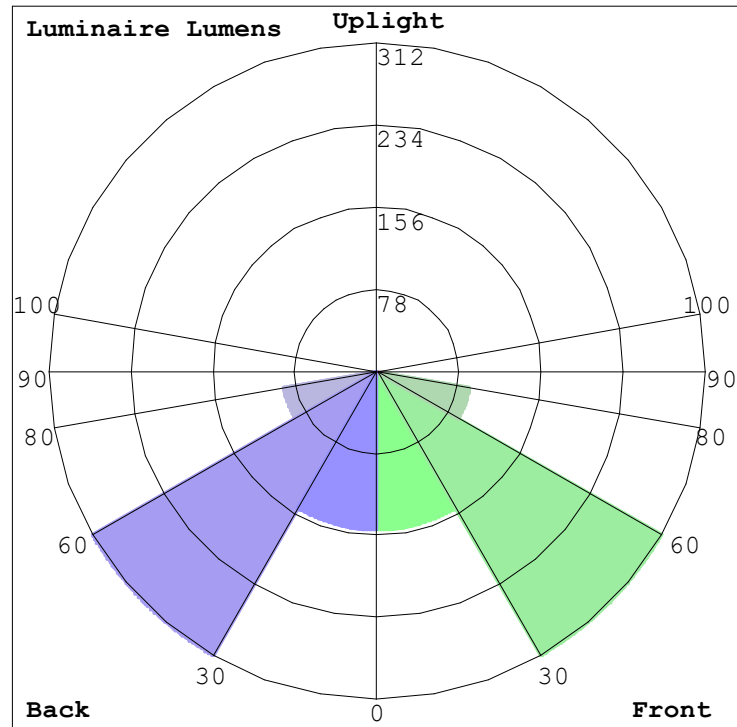
Luminaire Efficacy Rating (LER): 111

Indoor Classification: Direct

BUG Rating : B1-U0-G0

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	150.3	N.A.	13.5
FM (30-60)	312.1	N.A.	28.0
FH (60-80)	89.6	N.A.	8.0
FVH (80-90)	5.2	N.A.	0.5
BL (0-30)	150.3	N.A.	13.5
BM (30-60)	312.1	N.A.	28.0
BH (60-80)	89.6	N.A.	8.0
BVH (80-90)	5.2	N.A.	0.5
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	1114.4	N.A.	100.0
BUG Rating	B1-U0-G0		



EW53908

SPECIFICATION SHEET

Sophisticated LED technology meets modern outdoor wall sconces

- Square down light with stone texture
- Black, grey or espresso metal details
- Dimmable with ELV dimmer (Not included)
- 120V

Color Temp 3000K
CRI (Ra) >80
Dimming 100% - 10%
Rated Life 50,000 hours

Distribution	Voltage	Watt	LED Lumens	Delivered Lumens	Finish(es)
Down	120V	10W	600lm*	169lm*	BK / ES / GY

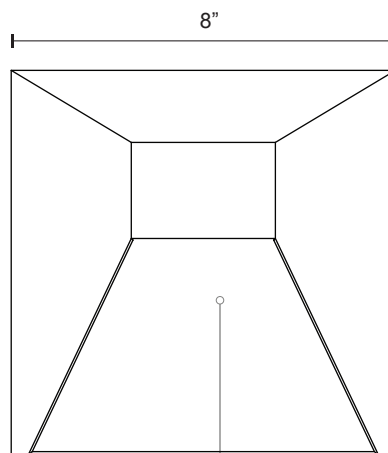
PROJECT

DATE

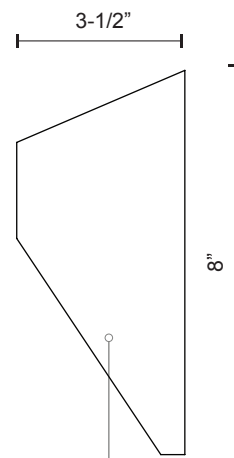
TYPE



EW53908-BK

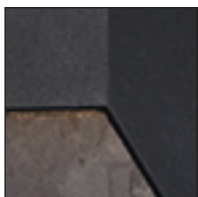


Stone Texture



Finish
BK - Black
ES - Espresso
GY - Gray

*Subject to testing confirmation



EW53908-BK



EW53908-ES



EW53908-GY

KUZCO
LIGHTING

20160715

19054 28th Avenue
Surrey, BC, Canada
V3Z 6M3

T: 604 538 7162
F: 604 538 7196
W: Kuzcolighting.com





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Photometric Report (Type C)

Filename: W4_EW53908.IES
[TEST] 260_16
[TESTLAB] Kuzco Lighting
[ISSUEDATE] 2016-01-28 12:30:48
[MANUFAC] Kuzco Lighting
[LUMCAT] EW53908
[LUMINAIRE] Wall Mounted
[LAMPCAT] DIS 01-600-830-120-S1 (Shielded)
[LAMP] 120V LED

Maximum Candela = 191.16 at 190 H 85 V

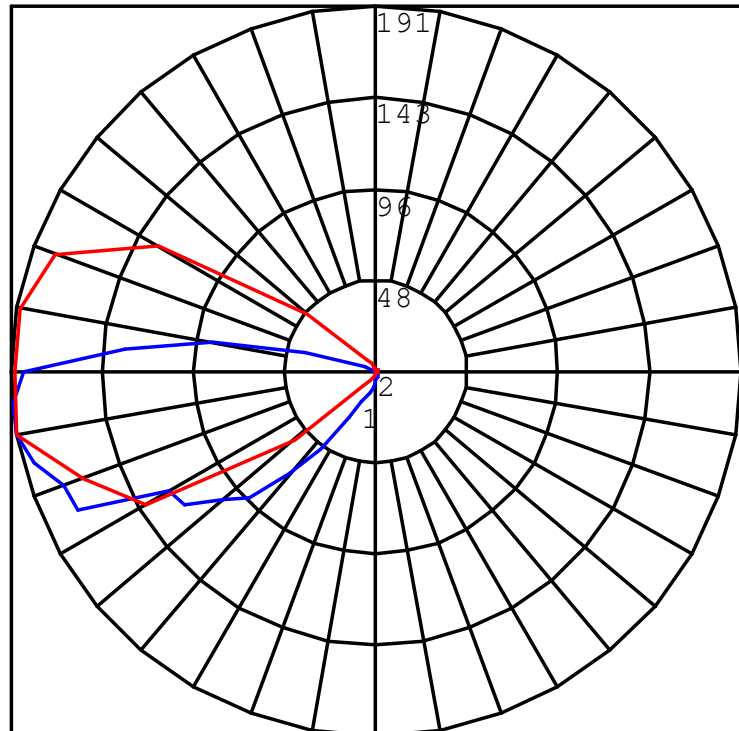
Classification:

Road Classification: N.A., N.A., Non-Cutoff (deprecated)
Upward Wast Light Ratio: 0.18
Luminaire Efficacy Rating (LER): 27
Indoor Classification: Semi-Direct
BUG Rating : B0-U2-G1

Polar Candela Curves:

Vertical Plane Through:
1) 190 - 10 Horizontal

Horizontal Cone Through:
2) 85 Vertical





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Photometric Report (Type C)

Filename: W4_EW53908.IES
[TEST] 260_16
[TESTLAB] Kuzco Lighting
[ISSUEDATE] 2016-01-28 12:30:48
[MANUFAC] Kuzco Lighting
[LUMCAT] EW53908
[LUMINAIRE] Wall Mounted
[LAMPCAT] DIS 01-600-830-120-S1 (Shielded)
[LAMP] 120V LED

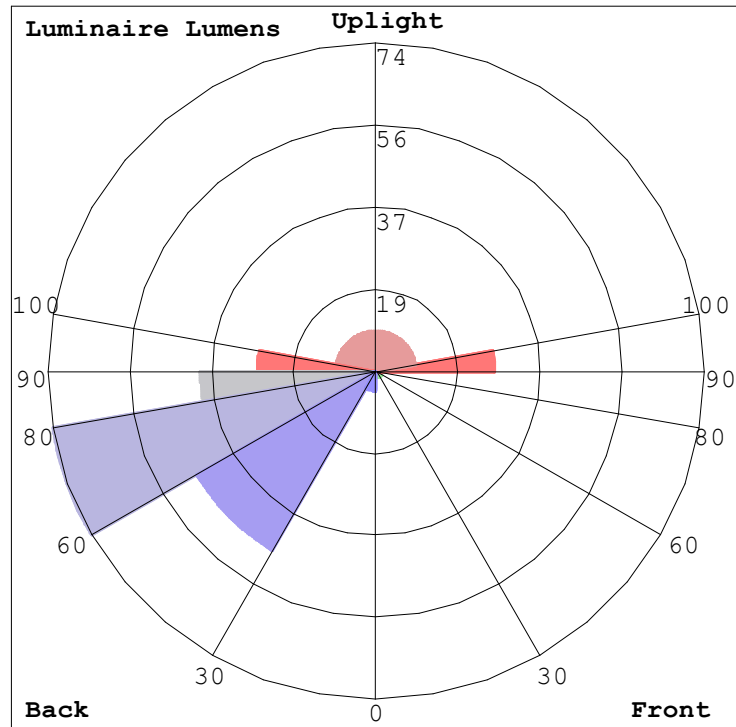
Maximum Candela = 191.16 at 190 H 85 V

Classification:

Road Classification: N.A., N.A., Non-Cutoff (deprecated)
Upward Waste Light Ratio: 0.18
Luminaire Efficacy Rating (LER): 27
Indoor Classification: Semi-Direct
BUG Rating : B0-U2-G1

LCS Summary:

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	1.1	0.5	0.5
FM (30-60)	1.4	0.7	0.7
FH (60-80)	0.7	0.3	0.3
FVH (80-90)	0.3	0.1	0.1
BL (0-30)	4.3	2.1	2.1
BM (30-60)	46.7	22.8	22.9
BH (60-80)	74.3	36.2	36.4
BVH (80-90)	39.7	19.4	19.4
UL (90-100)	26.7	13.0	13.1
UH (100-180)	9.0	4.4	4.4
Total	204.2	99.5	100.0
BUG Rating	B0-U2-G1		





FCC400 Series

Exterior LED Cylinder Lighting To The Next Level

Design & Construction: FC Lighting has developed the latest durable, high output exterior cylinder line on the market. Engineered with a revolutionary heat dissipation component, these fixtures come available with style, optics choices, mounting options and accessories that create limitless possibilities for any lighting specifier's dream application. These Cylinders provide an unmatched flexibility for specifying powerful lighting with an equally sophisticated style.

Style & Accessories: Add to your dream specification with an **Angle Cut Visor** or **Up / Down Lighting** solution. With design flexibility only limited by the imagination, specifiers can create an environment with contemporary style and mood enhancing control features that complement any application. **FCC Series Cylinders** come in 4", 6", 8" and 10" diameters that are available from 10" up to 20" long.

Output and Optics Flexibility: American engineered performance features create high lumen output with a high efficacy. The engineers at FC Lighting have designed optics options that hand over control of beam and field angle effects. **FCC Series Cylinders** are the ultimate solution that allow designers the ability to customize lighting for their clients specific needs.

Power Dimming & EMR Flexibility: The latest development in the **FCC Series Cylinder** line created the widest variety of integral power, dimming and control solutions possible. EMR and wireless controls all compatible with Dali, DMX, ELV and 0-10% dimming protocols. Lutron Ecosystem® compatibility and eidoLED drivers are also available. **FCC Series Cylinders** are the most comprehensive cylinder lighting solutions available on the market today!

DELIVERING UP TO 3500 LUMENS!

FCC400 Series



Date:

Type:

Fixture:

Project:

Approved:

FCC400 Series Cylinders are the most versatile high output exterior cylinders in the market. These Cylinders are designed with outdoor applications in mind. Dry, damp or wet conditions and developed with the highest variety of mounting capabilities, power and output levels, optical distributions, and many featured options.

SPECIFICATIONS

PHYSICAL

beam spread	10° 15° 25° 35° 40° 60° 72° 90°
diameter/height	diameter: 4.5" height: 9.92" 13.92" 21.86"
weight	8 lb
housing	heavy-walled, extruded aluminum housing with die-cast lens ring and cap with stainless steel hardware
lens	IK05 impact compliant, clear anti-glare tempered glass
mounting	mounts directly to standard recessed junction box additional holes allow unit to be attached directly to mounting surface
ingress protection	continuous silicone gasket to seal out contaminants, IP65 rated for dry, damp or wet locations
vibration resistance	compliant with 1G ANSI C136.31, Seismic rated AC-156
finish	7-stage chemical stage pre-treatment process that includes iron phosphate, to prepare the substrate for a UV stable, super durable standard polyester powder coat

PERFORMANCE

color temperature	2700K 3000K 3500K 4000K 5700K
delivered lumens	3000 Lm max - Selectable in 500 Lm increments
lifetime	> 70,000 hours / L70 or better
color consistency	2-step MacAdam Ellipse 83 CRI standard optional 93 and 97 CRI
temperature	operating: -4°F to 104°F (-20°C to 40°C) start up: -4°F to 104°F (-20°C to 40°C) storage: -40°F to 176°F (-40°C to 80°C)
warranty	5 year limited warranty (refer to website for details)

NON-LED

CFL	13Q, 18T, 26T socket: PL: four pin plug-in type compact fluorescent lamp holder (lamp by others)
ballast	fluorescent electronic, UL listed ballast standard
HID	20W MH G12, 30W MH G12 socket: G12 base porcelain socket (lamp by others)
ballast	electronic ballast standard: ballast has a manufacturer issued 5 year warranty

ELECTRICAL

input voltage	Universal 120–277V AC standard 347V optional
power supply	integral Class II, electronic high-power factor > 94% EldoLED & Lutron optional
certification	CEC Title 24 - JA8 Compliant
standards	ETL / cETL or CE, tested to UL 1598 and UL 8750 standards / UL-Class I / IES LM-79 / LM-80 / FCC Part 15
power consumption	up to 35W max @ 120V
dimming interface	standard: LED dimming: 0-10V, 1% optional: ELV TRIAC dim to off DMX DALI

Expanded Disclaimer: Due to continuous development and improvements, specifications are subject to change without notice. FC Lighting and Solid State Luminaires reserves the right to change lab test details or specifications without notice. Product use certifies agreement to FC Lighting terms and conditions. FCC Series Cylinder Lights are engineered and produced in our Illinois manufacturing facility.



FCC400 Series

ORDERING INFORMATION

FCC400													
model	height	mounting	voltage	source	CCT	CRI	lumen output		finish	optics			
FCC400 Ø4.25"	10	SF Surface	UNV 120V-277V	LED	27K 2700K	CR83 83 CRI	Down	Up	BK black	Down			Up
	12	WM Wall	347V 347V		3K 3000K	CR93 Standard 93 CRI	5L 500 Lm (5W)	5L	BZ bronze	D 10° 10° Narrow Spot			U 10
	14	PD Pendant			35K 3500K	CR93 93 CRI	10L 1000 Lm (10W)	10L	WH white	D 10° – 1500 Lm max – U 10°			
	16	CM Cord			No 97 CRI on 35K		15L 1500 Lm (15W)	15L	SL silver	D 15 15° Spot			U 15
	18	SM Slope			4K 4000K	CR97 97 CRI	20L 2000 Lm (21W)	20L	CC custom color	D 15° – 2500 Lm max – U 15°			
	20				57K 5700K		25L 2500 Lm (27W)	25L		D 25 25° Mid-Spot			U 25
					No 97 CRI on 57K		Total fixture lumens cannot exceed 3000 Lm - additional driver required for unequal output selections. 3000 Lm only available in one direction.				D 30 30° Narrow Flood		U 30
					R Red						D 50 50° Flood		U 50
					G Green						D 90 90° Flat		U 90
					B Blue								
					Contact the Factory for Non-LED source options		30L 3000 Lm (34W)	30L					
							83 CRI only on 30L						

Standard Driver Included: LED dimming: 0-10V, 1%

Driver Options (all drivers are 120V-277V unless otherwise specified)

MATCH SELECTION FROM CCT COLUMN ABOVE TO ONE CHOICE OF DRIVER FROM TABLE BELOW - review Driver Table on Pg 10 for driver specifications

STANDARD CCT (UNV) DRIVER OPTIONS	LUTRON DRIVER OPTIONS	eldoLED DRIVER OPTIONS	STANDARD CCT (347V) DRIVER OPTIONS
ET ELV or TRIAC	L2 Lutron 1%, 2-Wire, Forward Phase	E1 eldoLED 0-10V, Dim-to-Off	A3 347V 0-10V, Dim to 10%
LD 0-10V Dimming (1%)	L5 Lutron Ecosystem, 0.1%, Soft-on, Dim-to-Off	E2 eldoLED DALI, Dim-to-Off	
DMX DMX Dim to 0.1%,		E5 eldoLED 0-10, Dim to 1%	
DL DALI Dim to 0.1%,		E6 eldoLED DALI, Dim to 1%	
		E7 eldoLED DMX, Dim-to-Off	

Options (choose one per fixture)

SF Soft Field (solite)	BBU Battery Backup (Remote)
CPLX Custom Length Pendant (X=inches)	
CBLX Custom Length Cable (X=inches)	
OPC Opal Polycarbonate Lens	
CV Cut-Off Visor	



PHYSICAL

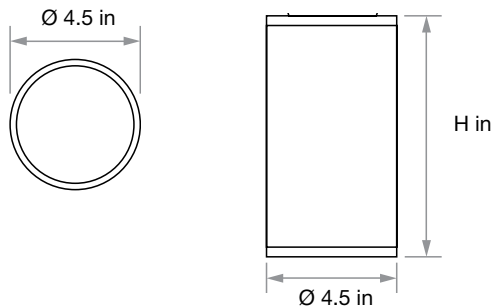
DIMENSIONS

diameter/height	diameter: 6.3" height: 6" 8" 10" 12" 14" 16" 18" 20"
weight	5-10 lb (length dependent)

mounting	twist-lock surface mount twist-lock pendant wall mount slope mount twist-lock cord surface mount conduit adapter yoke
-----------------	---

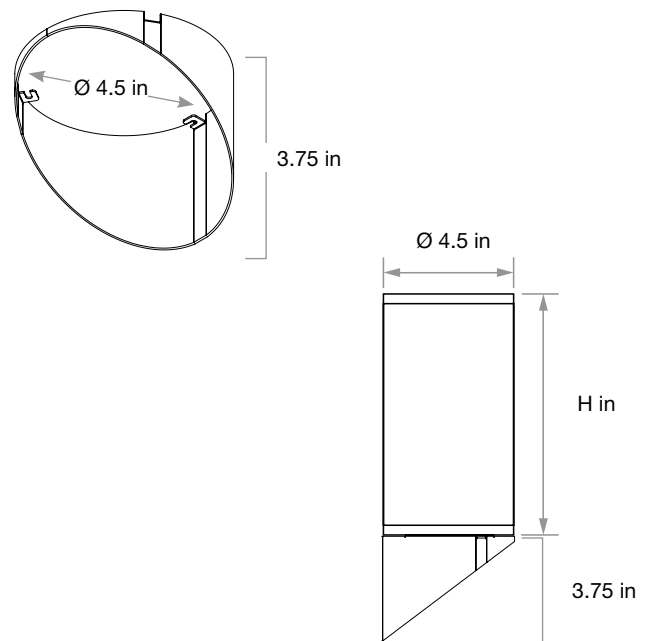
PRODUCT DIMENSIONS

diameter	Ø 4.5"
height	9.92" 13.92" 21.86"



CUT OFF VISOR

CV - cut-off visor	3.75" D
total fixture height	H + 3.75" D



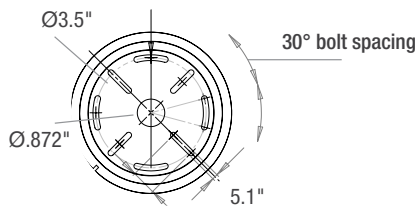
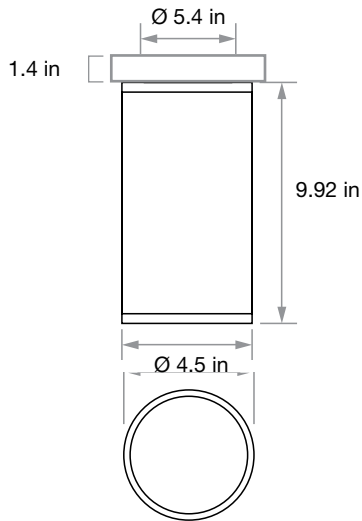
CONSTRUCTION & FINISH

housing	no visible seams or fasteners, marine grade, corrosion resistant, solid aluminum extrusion, die-cast aluminum components
lens	IK05 impact compliant, clear anti-glare tempered glass
finish	7-stage UV stable polyester powder coat

MOUNTING OPTIONS

SURFACE MOUNT

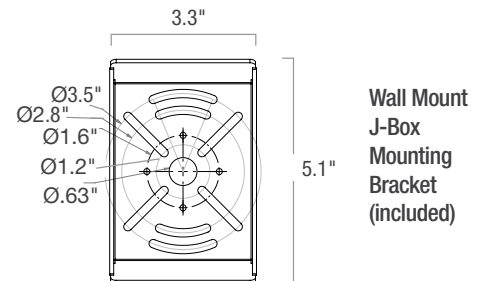
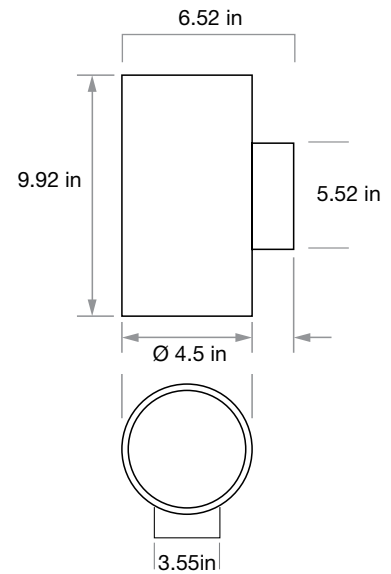
SF - surface mount	4.25" W
add to fixture height	1.4"



PENDANT MOUNT

WALL MOUNT

WM - wall mount	2.05" D
total fixture depth	8.36" D





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Photometric Report (Type C)

Filename: W5_FCC410W-D-18.IES

[TEST] TypeC Intensity

[TESTLAB] FC/SSL Lab

[MANUFAC] FC/SSL Lighting

[LUMINAIRE] 4" Round Wall, Pendant or Surface Mounted

Die-Cast Aluminum Cylinder.

[LAMP] LED

Maximum Candela = 4929.4 at 0 H 0 V

Classification:

Road Classification: Type V, Very Short, N.A. (deprecated)

Luminaire Efficacy Rating (LER): 183

Indoor Classification: Direct

BUG Rating : B0-U2-G1

Polar Candela Curves:

Vertical Plane Through:

1) 0 - 180 Horizontal

Horizontal Cone Through:

2) 0 Vertical

