



City of
ALACHUA

THE GOOD LIFE COMMUNITY

FOR OFFICE USE ONLY

Case #: _____
Application Fee: \$ _____
Filing Date: _____
Completeness Date: _____
Review Type: P&Z or PZB & CCOM

Site Plan Application

Reference City of Alachua Land Development Regulations (LDRs), Section 2.4.9

A. PROJECT

1. Project Name: Tucker-Davis Building Addition
2. Pre-Application Conference Date: 2/1/22
3. Neighborhood Meeting Date: 3/29/22
4. Address of Subject Property: 11930 Research Circle
5. Parcel ID Number(s): 03956-010-011
6. Existing Use of Property: Light Industrial
7. Future Land Use Map Designation: Industrial
8. Zoning Designation: Planned Unit Development (PUD)
9. Acreage: 2.68 +/-
10. Total Existing Building Square Footage, if applicable: 15,130
11. Total Existing Impervious Area (not including existing building area), if applicable: 26,833
12. Total Building Square Footage Proposed: 6,630
13. Total New Impervious Area Proposed (not including building area): 7,325

B. APPLICANT

1. Applicant's Status ☐ Owner (title holder) ☒ Agent
2. Name of Applicant(s) or Contact Person(s): Sergio Reyes, P.E. Title: President
Company (if applicable): eda consultants, inc.
Mailing address: 720 SW 2nd Ave, South Tower, Ste 300
City: Gainesville State: FL ZIP: 32601
Telephone: 352-373-3541 FAX: _____ e-mail: sreyes@edafl.com
3. If the applicant is agent for the property owner*:
Name of Owner (title holder): Tucker-Davis Technologies, Inc.
Mailing Address: 11930 Research Circle
City: Alachua State: FL ZIP: 32615

** Must provide an executed Authorized Agent Affidavit or other acceptable documentation (as deemed acceptable by the City in its sole discretion) authorizing the agent to act on behalf of the property owner.*

C. ADDITIONAL INFORMATION

1. Is there any additional contact for sale of, or options to purchase, the subject property? ☐ Yes ☒ No
If yes, list names of all parties involved: _____
2. Has the applicant discussed possible utility/infrastructure fees with the Public Services Department?
If no, contact the Public Services Department at 386-418-6140. ☒ Yes ☐ No

D. ATTACHMENTS

1. Site Plan. Sheet size shall be 24" X 36" with a 3" left margin and ½" top, bottom, and right margin.

Site Plan shall include:

- a. Name and location of project.
- b. Name and contact information (address, telephone, and email address) of property owner, developer (if applicable), and all professional consultants (i.e., landscape architect, photometric, electrical engineer, architect, etc.) for the project.
- c. Zoning of the subject property.
- d. Vicinity map - indicating general location of the site and major adjacent streets and all adjacent properties.
- e. Boundary and topographic survey. Survey shall be signed and sealed by the surveyor, and shall be no older than two (2) years.
- f. Complete legal description of the subject property.
- g. Statement of proposed uses.
- h. Location of the subject property in relation to adjacent properties.
- i. Date, north arrow, and graphic scale (not to exceed one (1) inch equal to 50 feet.)
- j. Area and dimensions of the subject property.
- k. Structures and major features – fully dimensioned – including setbacks from property lines and right-of-ways, distances between structures (if structures are within 25 feet of one another), floor area of each building, floor area ratio, and property lines.
- l. Location of all property lines, existing and proposed adjacent right-of-ways, sidewalks, curbs, and gutters.
- m. Distance between ingress and egress connections for the project and the ingress / egress connections for all contiguous properties and for properties on the opposite side of the road, measured from the interior radius of all ingress/egress connections.
- n. Location of all existing and proposed utilities (electric, potable water, sanitary sewer, gas, etc.) on the subject property, and on adjacent properties if located within 50 feet of the subject property, and within adjacent rights-of-way.
- o. Location of all existing and proposed fire hydrants.
- p. Location of all existing easements on the property and on adjacent properties if located within 50 feet of the subject property, and recording information for such easements.
- q. Location of all proposed easements (legal descriptions and sketches of all proposed easements shall be provided by the applicant following a review of proposed utility locations by Public Services).
- r. Location and dimensions of all existing and proposed vehicular parking spaces, dimensions of all drive aisles, and the angle of parking spaces.
- s. Location of all bicycle parking areas and specifications of bicycle racks.
- t. Location, dimensions, and vertical clearance of all off-street loading spaces, if required by Section 6.1 of the LDRs.
- u. Location and dimensions of all vehicle stacking spaces, if required by Section 6.1 of the LDRs.
- v. Vehicular parking calculations, indicating the minimum and maximum number of required spaces and the number of parking spaces provided (regular and accessible spaces) in accordance with Section 6.1 of the LDRs.
- w. Bicycle parking calculations, if required by Section 6.1 of the LDRs.
- x. Striping and signage for all traffic control devices.
- y. Landscape Plan, indicating the location, size, and design of required and proposed landscaped areas. Landscape Plans shall identify the following with sufficient detail and calculations to demonstrate compliance with Section 6.2.2 of the LDRs:
 - i. Location, identification of the species, and size of all existing trees.
 - ii. Required perimeter buffer areas.
 - iii. Parking lot perimeter landscaping.
 - iv. Parking lot interior landscaping.
 - v. Building façade landscaping.
 - vi. Calculation of landscaped areas (see Policy 2.4.a of the Comprehensive Plan Future Land Use Element).
 - vii. Calculation of open space provided (see Section 6.7 of the LDRs).
 - viii. Calculation of tree credits, if applicable. Calculations shall be as set forth in Sections 6.2.1(D)(4) and 6.2.2(D)(6) of the LDRs and shall be shown on the plan in tabular format (if tree credits are utilized, the Landscape Plan must identify in the landscape calculations where credit is applied).
 - ix. Tree protection detail in accordance with Section 6.2.1(D)(2) of the LDRs.
 - x. If tree removal is proposed, a tree survey, showing:
 - (a) Each tree proposed for removal;
 - (b) Each tree proposed for retention;
 - (c) The size and species (both common and scientific names) of all trees proposed for removal/retention;
 - (d) Location, size, and species of all new trees proposed to meet mitigation requirements. Mitigation trees must be shown on the plans and a list of all mitigation trees and calculation of required mitigation must be provided on the plan in tabular format.

- z. Location of waste receptacles and detail of waste receptacle screening, demonstrating compliance with Section 6.2.3(B) and, if within the Gateway Overlay District, with Section 3.7.2(C)(5)(c)(ii).
 - aa. Photometric Plan, demonstrating compliance with the applicable provisions of Section 6.4 of the LDRs.
 - bb. Location and size of any lakes, ponds, canals, or other waters and waterways, and required setbacks dimensioned on the plans from such waterways.
 - cc. For development consisting of a nonresidential use, except for single tenant retail sales and services uses greater than or equal to 20,000 square feet in area and except for use types within the industrial services, manufacturing and production, warehouse freight and movement, waste-related services, and wholesale sales use categories **not** located within 500 feet of the right-of-way of US Highway 441: Architectural plans demonstrating compliance with the design standards for business uses as provided in Section 6.8.2 of the LDRs. Architectural plans shall include:
 - i. Calculation of glazing of:
 - (a) the front façade;
 - (b) any facade facing a street;
 - (c) any façade facing a publicly-accessible parking area which is a part of the development and consisting of 15 percent or more of the minimum off-street parking required by Section 6.1.4(B) of the LDRs; and,
 - (d) any façade facing vacant land classified as CSV, A, RSF-1, RSF-3, RSF-4, RSF-6, RMH-5, RMH-P, RMF-8 or RMF-15, or lands containing existing residential uses.
 - ii. Calculation of the area of all façades subject to glazing.
 - iii. Detail on the architectural plans depicting façade massing or a massing alternative as defined in Section 6.8.2(A)(2)(b).
 - iv. Identification of each material utilized in each façade and the percentage of the total area of the façade for each material used.
 - dd. For development consisting of a nonresidential use where a single retail services tenant is greater than or equal to 20,000 square feet in area: Architectural plans demonstrating compliance with the design standards for single tenant retail sales and service uses greater than or equal to 20,000 square feet in area as provided in Section 6.8.3 of the LDRs. Architectural plans shall include:
 - i. Color plans depicting the color of all materials used in the façade.
 - ii. Identification of each material utilized in each façade and the percentage of the total area of the façade for each material used.
 - iii. Calculation of glazing of:
 - (a) the front façade;
 - (b) any facade facing a street;
 - (c) any façade facing a publicly-accessible parking area which is a part of the development and consisting of 15 percent or more of the minimum off-street parking required by Section 6.1.4(B) of the LDRs; and,
 - (d) any façade facing vacant land classified as CSV, A, RSF-1, RSF-3, RSF-4, RSF-6, RMH-5, RMH-P, RMF-8 or RMF-15, or lands containing existing residential uses.
 - iv. Calculation of the area of all façades subject to glazing.
 - v. If a glazing alternative as defined in Section 6.8.3(A)(2)(a)(iv) is used, calculation of area of alternative materials used or identification of other architectural features meeting the requirements of Section 6.8.3 of the LDRs.
 - vi. Detail on the architectural plans depicting façade massing or a massing alternative as defined in Section 6.8.2(A)(2)(b) of the LDRs.
 - ee. For development consisting multi-family residential uses and/or a mobile home park:
 - i. Gross acreage.
 - ii. Number of dwelling units proposed.
 - iii. Density.
 - iv. Location and percentage of total open space and recreation areas.
 - v. Floor area of each dwelling unit.
 - vi. Number of proposed parking spaces.
 - vii. Street layout, if applicable.
 - viii. Layout of mobile home stands (for mobile home parks only).
 - ix. City of Alachua Public School Student Generation Form.
2. Stormwater management plan - including the following:
 - a. Plans showing existing contours at one (1) foot intervals based on U.S. Coastal and Geodetic Datum.
 - b. Proposed finished floor elevation of all buildings.
 - c. Existing and proposed stormwater management facilities with size and grades.
 - d. Proposed orderly disposal of surface water runoff.
 - e. Drainage calculations.
 3. Fire Department Access and Water Supply Plan. All fire protection plans are subject to review and approval by the Alachua County Fire Marshal and City of Alachua Public Services Department. Fire Department Access and Water Supply Plan shall include:
 - a. Plans prepared by a professional engineer licensed in the State of Florida.

- b. Fire flow calculations for each newly constructed building. Calculations shall be performed in accordance with Chapter 18, Section 18.4 of the Florida Fire Prevention Code.
 - c. Documentation from the water purveyor stating the available flow to the subject property.
4. Concurrency Impact Analysis showing the impact on public facilities, including potable water, sanitary sewer, transportation, solid waste, recreation, stormwater, and public schools (if applicable) in accordance with Section 2.4.14 of the LDRs.
 5. Analysis of Consistency with the City of Alachua Comprehensive Plan (analysis must identify specific Goals, Objectives, and Policies and describe in detail how the application complies with the noted Goal, Objective, or Policy).

For commercial/corporate park/industrial projects: In addition to submitting specific written information regarding the development's compliance with the relevant Goals, Objectives, and Policies of the City of Alachua Comprehensive Plan, a response to the design and performance standards as provided in Policy 1.3.d (for commercial projects), Policy 1.4.f (for corporate park projects), or Policy 1.5.d (for industrial projects) of the Future Land Use Element:

The following criteria shall apply when evaluating commercial/corporate park/industrial development proposals:

1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;
 2. Buffering from adjacent existing/potential uses;
 3. Open space provisions and balance of proportion between gross floor area and site size;
 4. Adequacy of pervious surface area in terms of drainage requirements;
 5. Placement of signage;
 6. Adequacy of site lighting and intrusiveness of lighting upon the surrounding area;
 7. Safety of on-site circulation patterns (patron, employee and delivery vehicles), including parking layout and drive aisles, and points of conflict;
 8. Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;
 9. Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and
 10. Performance based zoning requirements, which may serve as a substitute for or accompany land development regulations in attaining acceptable site design.
 11. Commercial/Corporate Park/Industrial uses shall be limited to an intensity of less than or equal to 0.50 floor area ratio for parcels 10 acres or greater, 0.50 floor area ratio for parcels less than 10 acres but 5 acres or greater, a 0.75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio to parcels 1 acre or less.
 12. Complementary residential uses (corporate park only).
6. For Site Plans for Buildings Less than 80,000 Square Feet in Area: One (1) set of mailing labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications (current list may be obtained from the Planning & Community Development Department).
 - For Site Plans for Buildings Greater than or Equal to 80,000 Square Feet in Area: Two (2) sets of mailing labels for all property owners within 400 feet of the subject property boundaries – even if property within 400 feet falls outside of City limits (obtain from the Alachua County Property Appraiser's web site) – and all persons/organizations registered to receive notice of development applications (current list may be obtained from the Planning & Community Development Department).
7. Neighborhood Meeting Materials, including:
 - i. Copy of the required published notice (advertisement) – must be published a newspaper of general circulation, as defined in Article 10 of the City's LDRs;
 - ii. Copy of written notice (letter) sent to all property owners within 400 feet and to all persons/organizations registered with the City to receive notice, and a copy of the mailing labels or a list of those who received written notice; and,
 - iii. Written summary of meeting – must include (1) those in attendance; (2) a summary of the issues related to the development proposal discussed; (3) comments by those in attendance about the development proposal; and, (4) any other information deemed appropriate.
 8. Legal description: (1) on 8.5" x 11" paper; and (2) electronic file in Word format.
 9. Proof of ownership (i.e., copy of deed.)

10. Proof of payment of taxes.
11. Traffic Impact Analysis or Statement, as deemed applicable to the project by the City of Alachua in its sole discretion.
12. Environmental Assessment or Study, as deemed applicable to the project by the City of Alachua in its sole discretion.
13. Environmental Resource Permit (or Letter of Exemption) from the Suwannee River Water Management District (SRWMD) or Self-Certification for a Stormwater Management System in Uplands Serving Less than 10 Acres of Total Project Area and Less than 2 Acres of Impervious Surfaces from the Florida Department of Environmental Protection (FDEP) pursuant to Section 403.814(12), Florida Statutes (or documentation which shows a permit application/exemption/self-certification has been submitted to SRWMD or FDEP).
14. If access is from a County Road, access management permit from Alachua County Public Works (or documentation which shows a permit application has been submitted).
15. If access is from a State Road, access management permit from Florida Department of Transportation (or documentation which shows a permit application has been submitted).
16. **Fee.** Please see fee schedule for fee determination. No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any costs associated with outside professional consulting services deemed necessary by the City in its sole discretion will be billed to the applicant at the rate of the consultant. The invoice for such services shall be paid in full prior to any public hearing(s) on the application.

All applicable attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

Under penalty of perjury, I/we certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge.

Sergio Reyes

Signature of Applicant

Sergio Reyes, P.E. - President

Typed or printed name and title of applicant

Signature of Co-applicant

Typed or printed name and title of co-applicant

STATE OF FLORIDA
COUNTY OF ALACHUA

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization, this 11th

day of April, 2022, by Sergio Reyes who executed the same

and has _____ produced _____ as identification or ☒ is personally known to me.

Audra Burrell

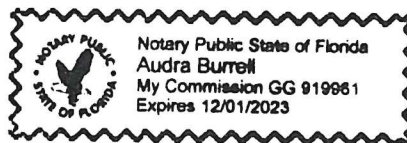
Signature of Notary

AUDRA BURRELL

Print Name: _____

Notary Public, State of Florida

My Commission Expires: 12/1/23





March 31, 2022

City of Alachua
Planning and Community Development Department
PO Box 9
Alachua, FL 32616

**Re: Tucker-Davis Building Addition
Site Plan Application**

The proposed project is a 6,630 SF building addition and associated parking located at 11930 Research Circle on Alachua County Tax Parcel 03956-010-011.

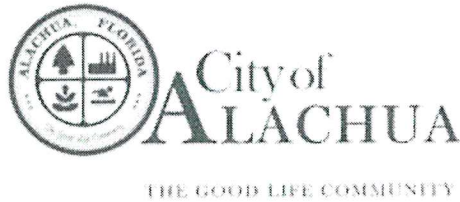
Included with this letter is all supporting information required for a development plan and civil plans showing the proposed facilities.

If you have any questions, please feel free to contact our office at any time.

Sincerely,

A handwritten signature in blue ink, appearing to read "Claudia Vega", is written over the printed name.

Claudia Vega, P.E.
Director of Engineering



Authorized Agent Affidavit

A. PROPERTY INFORMATION

Address of Subject Property: 11930 Research Circle
Parcel ID Number(s): 03956-010-011
Acreage: 2.66 +/-

B. PERSON PROVIDING AGENT AUTHORIZATION

Name: Timothy J. Tucker Title: President/Owner
Company (if applicable): Tucker-Davis Technologies, Inc.
Mailing Address: 11930 Research Circle
City: Alachua State: FL ZIP: 32615
Telephone: 386-462-9622 FAX: 386-518-5028 e-mail: ttucker@tdt.com

C. AUTHORIZED AGENT

Name: Sergio Reyes Title: President
Company (if applicable): eda consultants, inc.
Mailing address: 720 SW 2nd Ave, South Tower, Suite 300
City: Gainesville State: FL ZIP: 32601
Telephone: 352-373-3541 FAX: 352-373-7249 e-mail: sreyes@edafl.com

D. REQUESTED ACTION:

Site Plan

I hereby certify that I am the property owner of record, or I have received authorization from the property owner of record to file an application for a development permit related to the property identified above. I authorize the agent listed above to act on my behalf for purposes of this application.

[Signature]
Signature of Applicant

Signature of Co-applicant

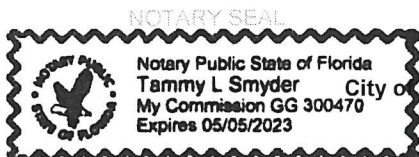
Timothy J. Tucker
Typed or printed name and title of applicant

Typed or printed name of co-applicant

State of Florida County of Alachua

The foregoing application is acknowledged before me this 22st day of March, 2022, by Timothy J. Tucker

_____, who is/are personally known to me, or who has/have produced _____
as identification.



[Signature]
Signature of Notary Public, State of Florida

City of Alachua ♦ Planning and Community Development Department
PO Box 9 ♦ Alachua, FL 32616 ♦ (386) 418-6121
Revised 9/30/2014

Tucker Davis Technologies – Building Addition

Statement of Proposed Uses

The proposed building expansion at Tucker Davis Technologies will help an existing business in the City of Alachua grow. This development plan proposes to construct additional office space and parking for the business to expand.

Comprehensive Plan Consistency

Vision Element:

III. GOALS TO IMPLEMENT THE VISION

GOAL 1: Economic Development: The City of Alachua has a unique business climate. The City is home to corporations, technology incubators, local businesses, and start-up companies. The City will maintain its focus on a welcoming business environment and encourage business development in the downtown area and along the U.S. 441 corridor. Alachua desires to continue to be a home to innovative businesses and an employment center where jobs are provided at every level. The City will continue to encourage the growth and development of established industries, such as biotechnology, and encourage the diversification and expansion of commercial businesses which provide integral services to the City's residents.

Consistency: The proposed building addition will support and contribute to continued commercial development in Progress Center along the US 441 corridor. The proposed facility will increase the number of job opportunities in the City and provide services to the city's residents.

Future Land Use Element:

Objective 1.5: Industrial

The City of Alachua shall establish one industrial district: Industrial. This district shall provide a broad range of clean industry, warehousing, research, and technology industries, to provide a variety of job opportunities to the citizens of Alachua and the North Central Florida Region.

Consistency: The proposed building addition will serve the intent of the Industrial Future Land Use designation, as it will provide an expansion of an existing business located within the Progress Center. In addition, the site is consistent with the policies outlined in Future Land Use Policy 1.5.d as indicated below:

Policy 1.5.d: The City shall develop performance standards for industrial uses in order to address the following:

- 1. Integration of vehicular and non-vehicular access into the site and access management features of site in terms of driveway cuts and cross access between adjacent sites, including use of frontage roads and/or shared access;*

Consistency: The site plan uses an existing access point to the property within the Progress Center development.

2. *Buffering from adjacent existing/potential uses;*

Consistency: The site plan complies with all required setbacks and buffers.

3. *Open space provisions and balance of proportion between gross floor area and site size;*

Consistency: The proposed project site exceeds the 10% required open space and the proposed building is less than the maximum 0.75 floor area ratio, as demonstrated on the Site Plan.

4. *Adequacy of pervious surface area in terms of drainage requirements;*

Consistency: The site plan is consistent with the existing stormwater permit for the Progress Center development.

5. *Placement of signage;*

Consistency: No signage is proposed at this time.

6. *Adequacy of site lighting and potential impacts of lighting upon the surrounding area. Lighting should be designed to minimize impacts and preserve the ambiance and quality of the nighttime sky by reducing light trespass and light pollution on adjacent properties by utilizing lighting at an appropriate intensity, direction and times to ensure light is not overused or impacting areas where it is not intended;*

Consistency: Site lighting proposed will meet all city regulations.

7. *Safety of on-site circulation patterns (patron, employee and delivery vehicles), including parking layout and drive aisles, and points of conflict;*

Consistency: The expansion to the parking area follows a logical pattern within the existing development site and does not create points of conflict.

8. *Landscaping, as it relates to the requirements of the Comprehensive Plan and Land Development Regulations;*

Consistency: The Site Plan includes a landscape plan prepared by a registered landscape architect that complies with all applicable elements of the Comprehensive Plan and Land Development Regulations.

9. *Unique features and resources which may constrain site development, such as soils, existing vegetation and historic significance; and*

Consistency: There are no unique features or resources that may constrain site development.

10. *Performance based zoning requirements, which may serve as a substitute for or accompany land development regulations in attaining acceptable site design.*

Consistency: No specific performance based zoning requirements apply to this project, other than the standard requirements found in the Land Development Code.

11. *Industrial uses shall be limited to an intensity of less than or equal to .50 floor area ratio for parcels 10 acres or greater, .50 floor area ratio for parcels less than 10 acres by 5 acres or greater, .75 floor area ratio for parcels less than 5 acres but greater than 1 acre, and 1.0 floor area ratio for parcels 1 acre or less.*

Consistency: The proposed development has less than a 0.75 floor area ratio, as demonstrated on the Site Plan.

Concurrency Impact Analysis Tucker Davis

The proposed project includes a building addition of 6,630 SF office space to expand the existing Tucker Davis Technologies business within the Progress Center.

Stormwater:

A detailed stormwater management plan is included with this submittal. This project is a part of the master stormwater system for the Progress Center and is in compliance with the existing Suwannee River Water Management District permit.

Potable Water:

Goal 4: Provide an adequate supply of high quality potable water to customers throughout the service area.

Objective 4.1 Achieve and maintain acceptable levels of service for potable water quality and quantity.

Project Impact:

Type	Requirement Per GRU/64E-6 (GPD)	Quantity	Total (GPD)
Office Building - Per 100 SF of floor space	15.0	66.3	994.5

Table 3a. Potable Water Impacts - Final Development Orders	
System Category	Gallons Per Day
Current Permitted Capacity ¹	2,300,000
Less Actual Potable Water Flows ¹	1,300,250
Tucker Davis Building Addition	995
Reserved Capacity ²	214,194
Residual Capacity	784,562
Percentage of Permitted Design Capacity Utilized	65.89%

Sanitary Sewer:

Goal 1: Plan for and provide adequate, high quality and economical wastewater service while protecting the environment, especially groundwater resources.

Objective 1.2 Wastewater service will be made available to new development in a manner to promote compact urban growth, promoting development where wastewater service is available, and discouraging urban sprawl.

Project Impact:

Type	Requirement Per GRU/64E-6 (GPD)	Quantity	Total (GPD)
Office Building - Per 100 SF of floor space	15.0	66.3	994.5

Table 4a. Sanitary Sewer Impacts - Final Development Orders	
System Category	Gallons Per Day
Treatment Plant Current Permitted Capacity	1,500,000
Less Actual Treatment Plant Flows ¹	677,000
Tucker Davis Building Addition	995
Reserved Capacity ²	193,280
Residual Capacity	628,726
Percentage of Permitted Design Capacity Utilized	58.08%

Solid Waste:

Goal 2: The City of Alachua will provide for solid waste disposal service in a sanitary, economic, and environmentally safe manner.

Project Impact: Commercial uses generate approximately 12 pounds per day of solid waste per 1,000 square feet (Environmental Engineering: A Design Approach, Cincero and Cincero, 1996). The proposed restaurant will generate approximately 80 pounds of solid waste per day 6,630 SF / 1,000 SF x 12 = 80 pounds per day).

As indicated in the following table, the proposed solid waste generated as part of this project will not reduce the level of service in the City of Alachua.

Table 6a. Solid Waste Impacts - Final Development Orders		
System Category	Lbs Per Day	Tons Per Year
Existing Demand ¹	42,296.00	7,719.02
Reserved Capacity ²	18,329.99	3,345.22
New River Solid Waste Facility Capacity³	50 years	

Traffic:

The proposed building addition for this existing business will not create a traffic impact that will exceed the approved level of service standards for the impacted roadway (US Highway 441).

TABLE 1 – PROJECT TRIP GENERATION

ITE LAND USE: 710 GENERAL OFFICE BUILDING							
PROPOSED: 6,630 S.F. OFFICE BUILDING ADDITION							
				TRIP DISTRIBUTION		PROJECTED TRIPS	
PERIOD	RATE	PER UNIT	TRIPS	ENTER	EXIT	IN	OUT
AM	1.52	6.63	10	88%	12%	9	1
PM	1.44	6.63	10	17%	83%	2	8
ADT	10.84	6.63	72	50%	50%	36	36
SOURCE: ITE TRIP GENERATION, 11TH EDITION							

TABLE 2: TRIP DISTRIBUTION

Segment ID	Distribution Share	Projected Trips
U.S. Hwy 441 (106,4)	100%	72

No other road segments will be impacted more than 5% of their maximum service volume.

TABLE 3: ROADWAY LEVEL OF SERVICE (LOS) ANALYSIS

			Comp Plan			Projected	
Segment ID:	Segment Limits:	MSV		Existing	Res'vd	Trips	Available
U.S. Hwy 441 (106,4)	CR 25A East Intersection to SR 235	AADT	45,700	20,435	5,690	72	19,503
		Peak Hour	4,110	1,941	452	10	1,707

Record 10.50
Doc. Stamps 1,228.50
Int. Tax
Total 1,239.00

RECORDED IN OFFICIAL RECORDS
INSTRUMENT # 1827012 2 PGS
2002 APR 04 04:40 PM BK 2433 PG 1287
J. K. "BUDDY" IRBY
CLERK OF CIRCUIT COURT
ALACHUA COUNTY, FLORIDA
CLERK1 Receipt#088811
Doc Stamp-Deed: 1,228.50
By: Andrea L. Copeland C.C.

This Document Prepared By and Return to:
Darryl J. Tompkins, Esquire
Darryl J. Tompkins, P.A.
14706 Main Street
P.O. Box 519
Alachua, FL 32616

Parcel ID Number: 03956-010-000

Warranty Deed

This Indenture, Made this 1st day of April, 2002 A.D., Between
Innovation Partners, Ltd., a Florida limited partnership

of the County of Alachua, State of Florida, grantor, and
Tucker-Davis Technologies, Inc, a corporation existing under the laws
of the State of Florida
whose address is: 4637 NW 6th Street, Gainesville, FL 32609

of the County of Alachua, State of Florida, grantee.

Witnesseth that the GRANTOR, for and in consideration of the sum of
-----TEN DOLLARS (\$10)----- DOLLARS,
and other good and valuable consideration to GRANTOR in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, has
granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate,
lying and being in the County of Alachua State of Florida to wit:
See Exhibit "A" attached hereto and made a part hereof.

SUBJECT TO THE FOLLOWING:

- A. Zoning restrictions, prohibitions and other requirements imposed by governmental authority;
- B. Restrictions and matters appearing on the plat and/or common to the subdivision;
- C. Taxes for the year 2002 and subsequent years.

and the grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

In Witness Whereof, the grantor has hereunto set its hand and seal the day and year first above written.

Signed, sealed and delivered in our presence: Innovation Partners, Ltd., a Florida limited partnership
By: Alachua Innovation, Inc., a Florida corporation, GENERAL PARTNER

Seana Pittman
Printed Name: Seana Pittman
Witness

By: James W. Shaw, Vice President (Seal)
P.O. Address: P.O. Box 19903, Alachua, FL 32616

Rebecca Fuller
Printed Name: Rebecca Fuller
Witness

STATE OF Florida
COUNTY OF Alachua

The foregoing instrument was acknowledged before me this 1st day of April, 2002 by
James W. Shaw, Vice President of Alachua Innovation, Inc., a Florida corporation and a general partner of Innovation Partners, Ltd., a Florida limited partnership, limited partnership, on behalf of the corporation and the partnership
he is personally known to me or he has produced his Florida driver's license as identification.

REBECCA FULLER
Notary Public, State of Florida
My comm. exp. Dec. 17, 2004
Comm. No. CC 988811

Rebecca Fuller
Printed Name: Rebecca Fuller
Notary Public
My Commission Expires:

Exhibit "A"

A portion of "Replat of Progress Center" as per plat thereof, recorded in Plat Book "P", pages 48 and 49 of the Public Records of Alachua County, Florida; also being a portion of Government Lots 2 and 3 of Section 24, Township 8 South, Range 18 East, City of Alachua, Alachua County, Florida; being more particularly described as follows:

Commence at the southeast corner of northeast 1/4 of northeast 1/4 of Section 23, Township 8 South, Range 18 East, Alachua County, Florida, and run thence South 01°24'48" East along the west boundary of Section 24, Township 8 South, Range 18 East, Alachua County, Florida, and the west line of "Replat of Progress Center", as per plat thereof recorded in Plat Book "P", pages 48 and 49 of the Public Records of Alachua County, Florida, a distance of 1651.01 feet to the southwest corner of said "Replat of Progress Center"; thence South 87°19'03" East, along the southerly line of said "Replat of Progress Center", 856.75 feet to the POINT OF BEGINNING; thence continue South 87°19'03" East, along said southerly line, 298.00 feet; thence North 02°40'57" East, 406.49 feet to a point on the southerly right-of-way line of Research Circle (80' R/W); thence North 87°04'08" West, along said southerly right-of-way line, 283.64 feet; thence South 01°24'48" East, 207.18 feet; thence North 88°04'45" West, 29.16 feet; thence South 02°40'57" West, 200.68 feet to the POINT OF BEGINNING.

Containing 2.68 acres (116,822 square feet), more or less.

ISO Needed Fire Flow (NFF) Worksheet

(Page references are to the appropriate sections in the ISO Guide for Determination of Needed Fire Flow)

Petition Number:		Date:	3/30/2022
Project:	Tucker Davis Technologies	Engineer:	DJM
		Checked By:	DJM
Location:	11930 Research Circle		
	Alachua, FL 32615		

Subject Building

Construction Class (p. 4): Noncombustible Construction ▼ **construction coefficient (F) (p. 2):** 0.8

Area of largest floor in the building (if modifications are made for division walls (p. 8), the division walls must be shown on the site plan.): 21671 sq.ft.

Total area of all other floors (if modifications are made for division walls (p. 8), the division walls must be shown on the site plan.): 0 sq. ft.

Effective Area (A_i) (p. 9) : 21,671 sq. ft. (Show calculations below)

Needed Fire Flow attributed to construction (C_i) (per formula (p. 2)): 2119.83456

(Round to the nearest 250 gpm. See p. 10 for maximum and minimum values of C_i)

Type of Occupancy: Limited-combustible (C-2) ▼ **Occupancy Factor (O_i) (p. 11):** 0.85

Exposures (p. 16)

Front: construction of facing wall of exposure building (p. 4): ▼

Distance (ft.) to the exposure building: ▼	Length of exposure wall:
Number of stories of exposure wall:	Length x number of stories: 0
Opening Protection in exposure wall: ▼	
Factor for exposure (X_i) from Table 330.A (p. 17):	0

Back: construction of facing wall of exposure building (p. 4): ▼

Distance (ft.) to the exposure building: ▼	Length of exposure wall:
Number of stories of exposure wall:	Length x number of stories: 0
Opening Protection in exposure wall: ▼	
Factor for exposure (X_i) from Table 330.A (p. 17):	0

Left: construction of facing wall of exposure building (p. 4): ▼

Distance (ft.) to the exposure building: ▼	Length of exposure wall:
Number of stories of exposure wall:	Length x number of stories: 0
Opening Protection in exposure wall: ▼	
Factor for exposure (X_i) from Table 330.A (p. 17):	0

Right: construction of facing wall of exposure building (p. 4): ▼

Distance (ft.) to the exposure building: ▼	Length of exposure wall:
Number of stories of exposure wall:	Length x number of stories: 0
Opening Protection in exposure wall: ▼	
Factor for exposure (X_i) from Table 330.A (p. 17):	0

Communications (p. 18)

Passageway Opening Protection:		▼
Construction class of communication (Table 330.B) :		▼
Is communication open or enclosed?		▼
Length of communication (in feet):		▼
Factor for Communications (P _i) from Table 330.B on p.19):	0	

Calculation of Needed Fire Flow (p. 1)

NFF=(C_i)(O_i)[1.0+(X+P)_i] (substitute values as determined above. For exposures and communications use the single side with the highest charge.)

$$\text{NFF} = 2000 \times 0.85 \times [1 + (0 + 0)]$$

$$\text{NFF} = 1700 \text{ gpm}$$

$$\text{NFF} = 1750 \text{ gpm (rounded to nearest 250 gpm per ISO requirements)}$$

Note: ISO evaluates hydrant distribution by examining the number and type of hydrants within 1,000 feet of each representative building. They also look at the distance from each such hydrant to the subject building, measured as apparatus can lay hose.

Hydrants with at least one large pumper outlet may receive credit for up to 1,000 gpm. Hydrants with at least two hose outlets, but no pumper outlet, may receive credit for up to 750 gpm. And hydrants with only one hose outlet may receive credit for up to 500 gpm.

Hydrants within 300 feet of the subject building may receive credit for up to 1,000 gpm (but not more than the credit that would apply based on the number and type of outlets). Hydrants from 301 feet to 600 feet from the subject building may receive credit for up to 670 gpm (but not more than the credit that would apply based on the number and type of outlets). And hydrants from 601 feet to 1,000 feet from the subject building receive credit for 250 gpm. Under certain circumstances, when all fire department pumpers carry sufficient large-diameter hose, ISO may allow maximum credit for hydrants up to 1,000 feet from the subject building.

More than one fire hydrant may be required for proper distribution of water per ISO requirements.



Worksheet for Needed Fire Flow

Project Name: Tucker Davis Technologies
Owner/Developer: Tucker Davis Technologies, inc.
Property Address: 11930 Research Circle, Alachua, FL 32615

NFPA Calculation

Fire Flow Area (SF)	=	21,671
Occupancy Class	=	C-2
Construction Type	=	II (000)
Sprinkler System	=	Yes
Required Fire Flow Per NFPA	=	3,000 gpm
Flow Duration (hours)	=	3
Sprinkler Reduction, per 18.4.5.2.1	=	75%
Reduction per 18.4.5.2.1		2,250 gpm
Needed Fire Flow	=	750 gpm
(Resulting Fire Flow shall not be less than 1,000 gpm)		

REQUIRED Needed Fire Flow	1,000	gpm
----------------------------------	--------------	------------

TALACHUA COUNTY TODAY

Serving the Heartland Communities

P.O. Box 2135
Alachua, FL 32616

INVOICE

Phone: 386.462.3355
Fax: 386.462.4569
Email: ads@alachuatoday.com

INVOICE

No.: 3/10/22-AT71379-001

EDA
Ashley Scannella
720 SW 2nd Ave
Suite 300
Gainesville, FL 32601

Page: 1

Customer No.		Salesperson	Invoice Period		Invoice Date	
5962			3/10/22 - 3/10/22		3/11/22	
Date	Reference	Description	Rate	Quantity	Charge	
3/10/22	AT71379-001 AT	Display Ad, Run of Paper Dis. ad 2x2.8 - Neighborhood Workshop - Tucker Davis	10.250		\$57.40	

Charges	\$57.40
Total Transactions	\$57.40

PAYMENT DUE 30 DAYS FROM INVOICE DATE

Please include reference number(s) with payment

ALACHUA COUNTY TODAY

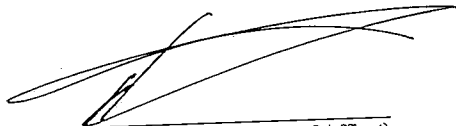
Published Weekly
Alachua, Alachua County, FLORIDA

STATE OF FLORIDA
COUNTY OF ALACHUA:

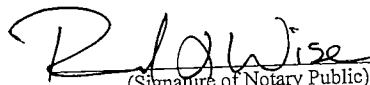
Before the undersigned authority personally appeared H. Bryan Boukari, who on oath and in my physical presence says that he is the Publisher of *Alachua County Today*, a weekly newspaper published at Alachua in Alachua County, Florida; that the attached copy of advertisement, being a Public Notice in the Matter set forth at the beginning of the attached notice, was published in said newspaper in the issue(s) date(s) as set forth at the end of the attached notice.

Affiant further says that *Alachua County Today* is a newspaper published at Alachua, in said Alachua County, Florida, and that the said newspaper has heretofore been continuously published in said Alachua County, Florida, each week and has been entered as periodicals matter at the post office in Alachua, in said Alachua County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he (she) has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sworn to and subscribed before me this 10th day of March 2022 by H. Bryan Boukari, who is personally known to me.



(Signature of Affiant)



(Signature of Notary Public)



RAYMOND L. WISE
Commission # HH 112741
Expires April 1, 2025
Bonded Thru Budget Notary Services

PUBLIC NOTICE

A neighborhood workshop will be held to discuss a development plan for a proposed 6,120 SF building addition and associated parking located 11930 Research Circle on Alachua County Tax Parcel 03956-010-011. This is not a public hearing. The purpose of this meeting is to inform neighboring property owners of the proposed development and to seek their comments. The meeting will be held at 5:00 pm on Tuesday, March 29, 2022 in the Meeting Room of the Alachua Library Branch, located at 14913 NW 140 Street, Alachua, Florida 32615.



Contact: Sergio Reyes of eda consultants inc.

Ph: 352-373-3541 E-mail: sreyes@edafl.com

(Published: Alachua County Today - March 10, 2022)

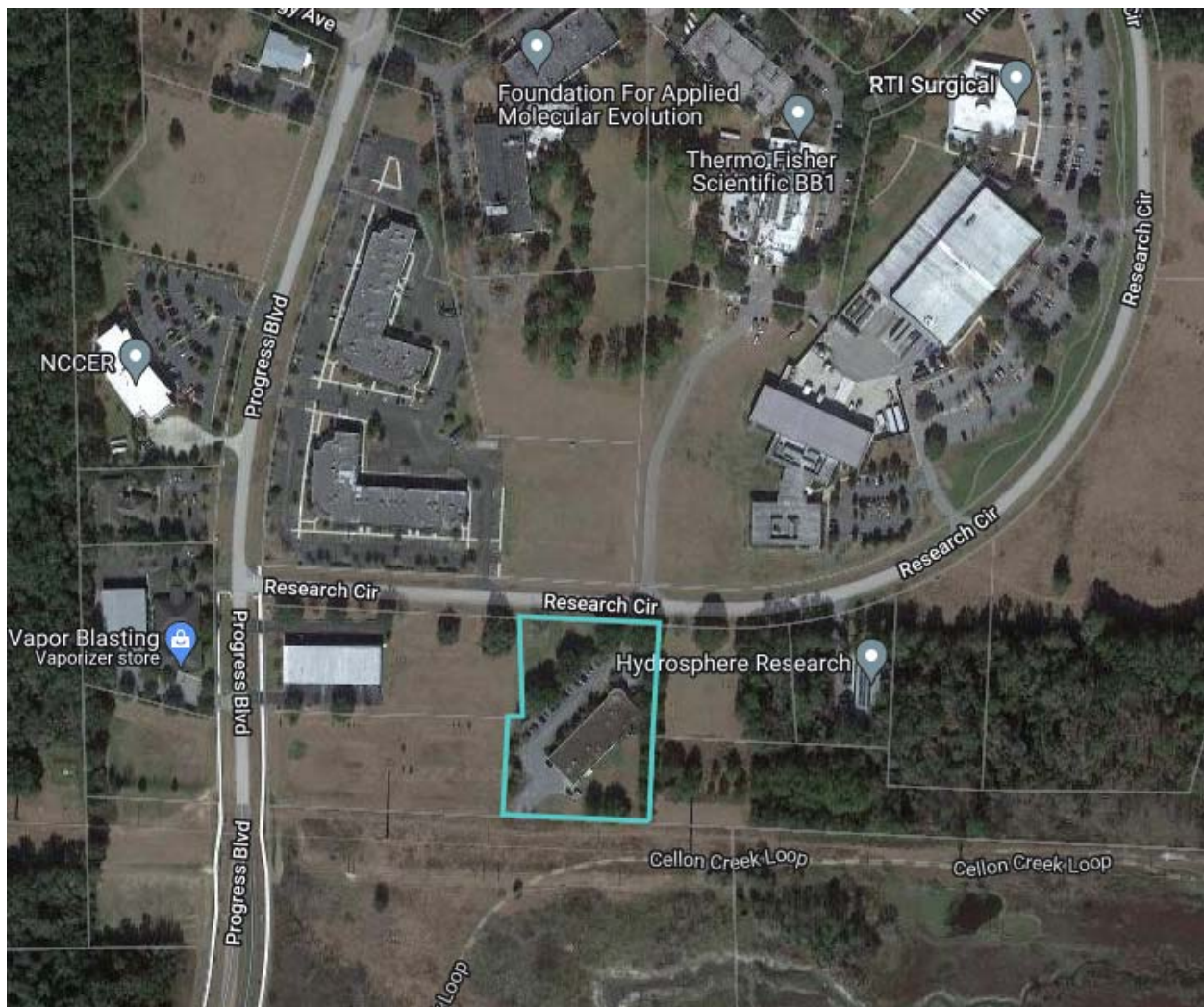
NEIGHBORHOOD WORKSHOP NOTICE

Date: Tuesday, March 29, 2022
Time: 5:00 p.m.
Place: Alachua Library Branch Meeting Room
14913 NW 140 Street, Alachua, Florida 32615

A neighborhood workshop will be held to discuss a development plan for a proposed 6,120 SF building addition and associated parking located at 11930 Research Circle on Alachua County Tax Parcel 03956-010-011. This is not a public hearing. The purpose of this meeting is to inform neighboring property owners of the proposal and to seek their comments.

Contact:

Sergio Reyes, P.E. eda consultants, inc.
sreyes@edafl.com (352) 373-3541



03956-010-008
RTI OEM LLC
11621 RESEARCH CIRCLE
ALACHUA, FL 32615

03956-010-013
HYDROSPHER RESEARCH
ENVIRONMENTAL SERVICES INC
11842 RESEARCH CIR
ALACHUA, FL 32615

03956-010-012
TUCKER-DAVIS TECHNOLOGIES INC
11930 RESEARCH CIR
ALACHUA, FL 32615-6826

03956-010-011
TUCKER-DAVIS TECHNOLOGIES INC
11930 RESEARCH CIRCLE
ALACHUA, FL 32615

03956-010-010
RD PROGRESS LLC
13301 US HIGHWAY 441
ALACHUA, FL 32615

03956-010-026
ALACHUA COPELAND PARK
INVESTMENTS LLC
1449 SW 74TH DR STE 200
GAINESVILLE, FL 32607

03956-010-031
CONCEPT DEVELOPMENT INC
1449 SW 74TH DR STE 200
GAINESVILLE, FL 32607

03956-000-000
STATE OF FLORIDA IIF
3900 COMMONWEALTH BLVD
TALLAHASSEE, FL 32399

03960-001-000
STATE OF FLA IIF
3900 COMMONWEALTH BLVD
TALLAHASSEE, FL 32399

03956-010-038
PROGRESS CENTER PROPERTY
OWNERS ASSOCIATION INC
PO BOX 969
ALACHUA, FL 32616

Antoinette Endelicato
5562 NW 93rd Avenue
Gainesville, FL 32653

Dan Rhine
288 Turkey Creek
Alachua, FL 32615

Tom Gorman
9210 NW 59th Street
Alachua, FL 32653

Richard Gorman
5716 NW 93rd Avenue
Alachua, FL 32653

Peggy Arnold
410 Turkey Creek
Alachua, FL 32615

David Forest
23 Turkey Creek
Alachua, FL 32615

President of TCMOA
1000 Turkey Creek
Alachua, FL 32615

Linda Dixon, AICP
Assistant Director of Planning
PO Box 115050
Gainesville, FL 32611

Craig Parenteau
FL Dept. of Environmental Protection
4801 Camp Ranch Road
Gainesville, FL 32641

Jeannette Hinsdale
P.O. Box 1156
Alachua, FL 32616

Lynn Coullias
7406 NW 126th Ave
Alachua, FL 32615

Lynda Coon
7216 NW 126 Avenue
Alachua, FL 32615

Tamara Robbins
PO Box 2317
Alachua, FL 32616

Michele L. Lieberman
County Manager
12 SE 1st Street
Gainesville, FL 32601

Bonnie Flynn
16801 NW 166th Drive
Alachua, FL 32615

Hugh & Jean Calderwood
P.O. Box 2307
Alachua, FL 32616

Lisia Jenkins
P.O. Box 1071
Alachua, FL 32616

Shasta Schoellhorn
15907 NW 188th St.
Alachua, FL 32615

Carrie Luke
16611 NW 138th Ave.
Alachua, FL 32615

Dena Courtney
PO Box 1215
High Springs, FL 32655



Neighborhood Meeting Minutes

Project: Tucker Davis Site Plan

Meeting Date & Time: March 29, 2022, 5 PM

Location: Alachua Branch Library

Community Participants: 0

Project Representatives: Sergio Reyes, eda
Ashley Scannella, eda

Meeting Minutes:

The project representatives waited until 5:15. No participants arrived. The meeting was dismissed.



by Signify

Wall Mount

LED Wall Sconce

101L



Gardco 101 LED wall sconces feature a low-profile design that provides wide flexibility in high performance exterior wall illumination. Full cutoff performance, usable illumination patterns, and powerful wattages combine into a compact and architecturally pleasing design. 101L sconces are available in Type 2, 3, and 4 distributions, and provide output of up to 12,000 lumens. Energy saving control options increase energy savings and offer California Title 24 compliance. Emergency Battery Backup option available for path of egress.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lamps: _____ Qty: _____

Notes: _____

Ordering guide

example: 101L-32L-700-NW-G2-3-120-BL-IMRI2-BZ

Prefix		Number of LEDs		Drive Current		LED Color - Generation		Distribution		Emergency		Voltage		
101L														
101L	101L LED Wall Sconce	16L	16 LEDs (1 module)	200	200mA	CW-G2	Cool White 5000K, 70CRI Generation 2	2	Type 2	EBPC	Emergency Battery Pack Cold Weather ^{1,3,12}	UNV	120-277V	
				400	400mA	NW-G2	Neutral White 4000K, 70CRI Generation 2	3	Type 3			HVU	347-480V	
				530	530mA	WW-G2	Warm White 3000K, 70CRI Generation 2	4	Type 4			120	120V	
				700	700mA		208		208V					
				1000	1000mA		240		240V					
				1200	1200mA	WY-G2	Warm Yellow 2700K, 80 CRI Generation 2 ²	Leave blank to omit an emergency option	277			277V		
		32L	32 LEDs (2 module)	530	530mA		BW-G2		Balanced White 3500K 80CRI Generation 2 ²			347	347V	
				700	700mA		AM-G2		Direct Amber (590nm) Generation 2 ²			480	480V	
				1000	1000mA									
		Options												
Dimming Controls				Motion Sensing lens		Photo-sensing		Electrical				Finish		
DD	0-10V External dimming (controls by others) ⁴			IMR12	Integral with #2 lens ¹⁰	PCB	Photocontrol Button ^{7,8}	Fusing				Textured		
DCC	Dual Circuit Control ^{4,5,6,9}			IMR13	Integral with #3 lens ¹⁰	TLRD5	Twist Lock Receptacle 5-Pin ¹⁴	F1	Single (120, 277, 347VAC) ⁸			BK	Black	
FAWS	Field Adjustable Wattage ^{4,5}					TLRD7	Twist Lock Receptacle 7-Pin ¹⁴	F2	Double (208, 240, 480VAC) ⁸			WH	White	
BL	Bi-level functionality with motion sensor ^{4,7,11}					TLRPC	Twist Lock Receptacle w/ Photocell ^{8,15}	F3	Canadian Double Pull (208, 240, 480VAC) ⁸			BZ	Bronze	
DynaDimmer: Automatic Profile Dimming ^{4,7,13}						Surge Protection (10kA standard)			MGY	Medium Gray				
CS50	Security 50% Dimming, 7 hours						SP2			Increased 20kA			Customer specified	
CM50	Median 50% Dimming, 8 hours												RAL	Specify optional color or RAL (ex: OC-LGP or OC-RAL7024)
CS30	Security 30% Dimming, 7 hours												CC	Custom color (Must supply color chip for required factory quote)
CM30	Median 30% Dimming, 8 hours													

- Only 16L up to 700mA can be used with battery backup (EBPC) configuration.
- Extended lead times apply. Contact factory for details.
- Available in 120 or 277V only.
- Not available with other dimming control options.
- Not available with motion sensor.
- Not available with photocontrol.
- Not available in 347 or 480V.
- Must specify input voltage.
- Available with two modules (32L) at 530mA.
- Not available with DD, DCC, and FAWS dimming control options.
- Must specify a motion sensor lens. Limited to 30°C ambient if combined with 32L-1000mA (107W).
- Not available with DCC and FAWS.
- Not available with DCC.
- Dimming will not be connected to NEMA receptacle if ordering with other control options.
- Not available in 480V. Order photocell separately with TLRD5/7.



101L LED wall sconce

Luminaire Accessories¹ (order separately)

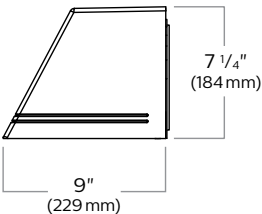
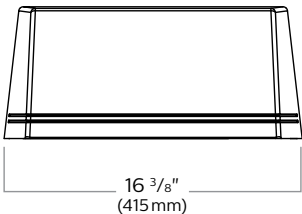
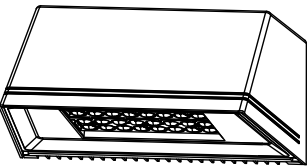
Mounting accessories

Wall Mount

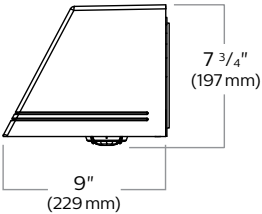
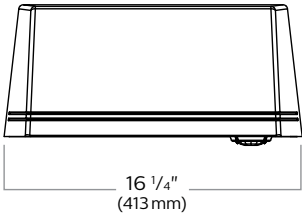
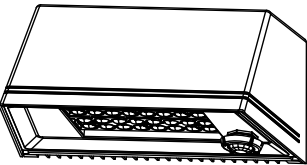
WS Wall Mounted Box for Surface Conduit

1. Consult Signify to confirm whether specific accessories are BAA-compliant.

Dimensions



Motion Response

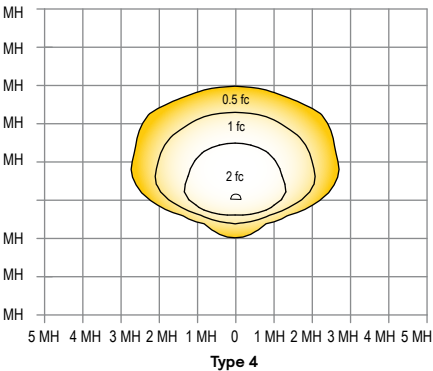
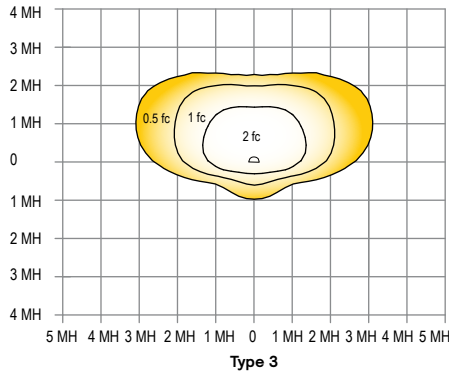
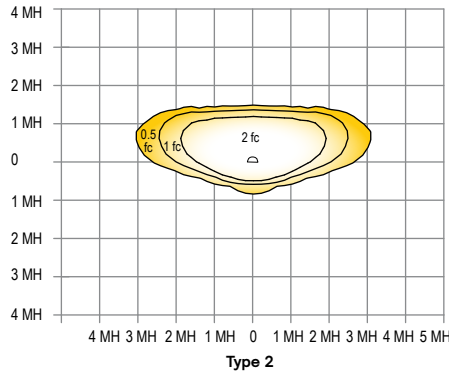


Luminaire Weights

LED Wall Sconce 101L	Weight
Luminaire	13.5 lbs
Luminaire - EBPC (EM battery pack)	17.0 lbs

Optical Distributions

Based on configuration 101L-32L-530-NW-G2 (52W) mounted at 15ft.



101L LED wall sconce

3000K LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts (W)	Type 2			Type 3			Type 4		
					Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
101L-16L-200-WW-G2-x	16	200	3000	12	1488	124	B1-U0-G0	1358	113	B0-U0-G0	1388	116	B0-U0-G0
101L-16L-400-WW-G2-x	16	400	3000	22	2840	129	B1-U0-G0	2592	118	B1-U0-G1	2650	120	B1-U0-G1
101L-16L-530-WW-G2-x	16	530	3000	28	3439	122	B1-U0-G0	3138	112	B1-U0-G1	3208	114	B1-U0-G1
101L-16L-700-WW-G2-x	16	700	3000	38	4425	115	B1-U0-G1	4038	105	B1-U0-G1	4129	108	B1-U0-G1
101L-16L-1000-WW-G2-x	16	1000	3000	55	5899	108	B2-U0-G1	5383	98	B1-U0-G2	5502	100	B1-U0-G2
101L-16L-1200-WW-G2-x	16	1200	3000	66	6709	102	B2-U0-G1	6123	93	B1-U0-G2	6259	95	B1-U0-G2
101L-32L-530-WW-G2-x	32	530	3000	52	6655	128	B2-U0-G1	6073	117	B1-U0-G2	6208	119	B1-U0-G2
101L-32L-700-WW-G2-x	32	700	3000	70	8458	120	B2-U0-G1	7719	110	B1-U0-G2	7892	112	B1-U0-G2
101L-32L-1000-WW-G2-x	32	1000	3000	107	11443	107	B3-U0-G2	10442	98	B2-U0-G2	10675	100	B2-U0-G2

4000K LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts (W)	Type 2			Type 3			Type 4		
					Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
101L-16L-200-NW-G2-x	16	200	4000	12	1567	131	B1-U0-G0	1429	119	B0-U0-G0	1461	122	B0-U0-G0
101L-16L-400-NW-G2-x	16	400	4000	22	2990	136	B1-U0-G0	2728	124	B1-U0-G1	2789	127	B1-U0-G1
101L-16L-530-NW-G2-x	16	530	4000	28	3620	129	B1-U0-G1	3303	118	B1-U0-G1	3377	120	B1-U0-G1
101L-16L-700-NW-G2-x	16	700	4000	38	4658	121	B1-U0-G1	4251	111	B1-U0-G1	4346	113	B1-U0-G1
101L-16L-1000-NW-G2-x	16	1000	4000	55	6209	113	B2-U0-G1	5666	103	B1-U0-G2	5792	106	B1-U0-G2
101L-16L-1200-NW-G2-x	16	1200	4000	66	7062	108	B2-U0-G1	6445	98	B1-U0-G2	6588	100	B1-U0-G2
101L-32L-530-NW-G2-x	32	530	4000	52	7005	135	B2-U0-G1	6393	123	B1-U0-G2	6535	126	B1-U0-G2
101L-32L-700-NW-G2-x	32	700	4000	70	8903	127	B2-U0-G1	8125	116	B1-U0-G2	8307	118	B2-U0-G2
101L-32L-1000-NW-G2-x	32	1000	4000	107	12045	113	B3-U0-G2	10992	103	B2-U0-G2	11237	105	B2-U0-G2

5000K LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Average System Watts (W)	Type 2			Type 3			Type 4		
					Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating	Lumen Output	Efficacy (LPW)	BUG Rating
101L-16L-200-CW-G2-x	16	200	5000	12	1567	131	B1-U0-G0	1429	119	B0-U0-G0	1461	122	B0-U0-G0
101L-16L-400-CW-G2-x	16	400	5000	22	2990	136	B1-U0-G0	2728	124	B1-U0-G1	2789	127	B1-U0-G1
101L-16L-530-CW-G2-x	16	530	5000	28	3620	129	B1-U0-G1	3303	118	B1-U0-G1	3377	120	B1-U0-G1
101L-16L-700-CW-G2-x	16	700	5000	38	4658	121	B1-U0-G1	4251	111	B1-U0-G1	4346	113	B1-U0-G1
101L-16L-1000-CW-G2-x	16	1000	5000	55	6209	113	B2-U0-G1	5666	103	B1-U0-G2	5792	106	B1-U0-G2
101L-16L-1200-CW-G2-x	16	1200	5000	66	7062	108	B2-U0-G1	6445	98	B1-U0-G2	6588	100	B1-U0-G2
101L-32L-530-CW-G2-x	32	530	5000	52	7005	135	B2-U0-G1	6393	123	B1-U0-G2	6535	126	B1-U0-G2
101L-32L-700-CW-G2-x	32	700	5000	70	8903	127	B2-U0-G1	8125	116	B1-U0-G2	8307	118	B2-U0-G2
101L-32L-1000-CW-G2-x	32	1000	5000	107	12045	113	B3-U0-G2	10992	103	B2-U0-G2	11237	105	B2-U0-G2

					Lumen Outputs by Optic Type							
LED Wattage and Lumen Values (Emergency Mode)				Avg. System Watts		Type 2		Type 3		Type 4		
Ordering Code	LED Qty	LED Current (mA)	Color Temp.	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Emergency Mode
101L-16L-200-NW-G2-x-EBPC	16	200	4000	12	14	1567	1654	1429	1510	1461	1543	
101L-16L-400-NW-G2-x-EBPC	16	400	4000	22	14	2990	1654	2728	1510	2789	1543	
101L-16L-530-NW-G2-x-EBPC	16	530	4000	28	14	3620	1654	3303	1510	3377	1543	
101L-16L-700-NW-G2-x-EBPC	16	700	4000	38	14	4658	1654	4251	1510	4346	1543	

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a photometric layout.

NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

For emergency EBPC option, published values are based on initial lumens.

Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L₇₀ is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L₇₀ hours limited to 6 times actual LED test hours

Ambient Temperature °C	Drive current	Calculated L ₇₀ Hours	L ₇₀ per TM-21	Lumen Maintenance % at 60,000 hrs
40°C	up to 1200 mA	>100,000 hours	>42,000 hours	>99%

101L LED wall sconce

Specifications

Housing

Main body cast housing and back plate made of a low copper die cast Aluminum alloy for a high resistance to corrosion, 0.100" (2.5mm) minimum thickness. Hinged door allows access to driver and LED compartment.

Light Engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 1 and 2 modules or 16 and 32 LEDs. Module is RoHS compliant. Standard color temperatures: 3000K +/-125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. Also available in 2700K, 3500K, and Amber (590nm) with extended lead times. Contact factory for details. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy Saving Benefits

System efficacy up to 130 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Mounting

Mounting is completed through integral back plate that features a separate recessed feature for hook and lock quick mount plate that secures with two set screws from bottom of luminaire. Mounting plate is located in the center of the luminaire width and 3.5" above the luminaire bottom (lens down position). Luminaire ships fully assembled, ready to install.

Optical System

Type 2, 3, and 4 distributions available. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Control Options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of 2 modules each at 530mA (32L models), controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

Automatic Profile Dimming (CS/CM): Standard dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic dimming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM – 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM – 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 2, or 3 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

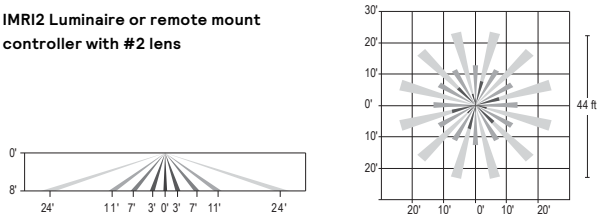
Emergency Battery Backup Cold Pack (EBPC): Emergency battery pack is cold weather rated down to -20°C (-4°F) and integral to the luminaire, allowing for a consistent look between emergency and non-emergency sconces. A separate surface mount accessory box is not required. Emergency battery pack is used with 16L configuration from 200mA to 700mA, operating in emergency mode to meet various redundancy requirements. Secondary driver with relay immediately detects AC power loss and powers luminaire for a minimum of 90 minutes from the time power is lost. Available in 120 or 277V only.

Motion Response Options

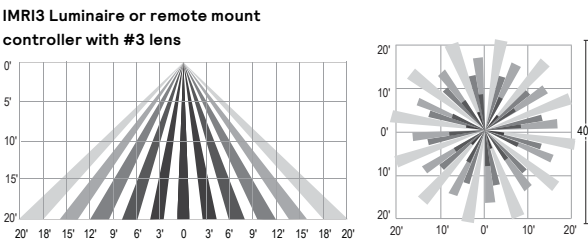
Bi-Level Infrared Motion Response (BL-IMRI3): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

Infrared Motion Response with Other Controls (IMRI3): When used in combination with other controls (Automatic Dimming Profile), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be reprogrammed via the controller. Infrared Motion Response Lenses (IMRI2/IMRI3): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #2 (IMRI2) is designed for lower mounting heights up to 8' with larger coverage areas up to 44' diameter coverage area. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. See charts for approximate detection patterns:

IMRI2 Luminaire or remote mount controller with #2 lens



IMRI3 Luminaire or remote mount controller with #3 lens



101L LED wall sconce

Specifications

Electrical

Driver: Driver efficiency (>90% standard). 120–480V available (restrictions apply). Open/short circuit protection. Optional 0–10V dimming to 10% power. RoHS compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208–277V with a load rating of 1000 VA. The photocell will turn on with 1–4Fc of ambient light.

Twist-Lock Receptacle (TLRD5/TLRD7/ TLRPC): Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering Twist-lock receptacle (TLRD5 or TLRD7), photocell or shorting cap is not included. TLRPC is shipped standard with 5 pin.

Surge protection (SP1/SP2): Each luminaire is provided as standard with surge protector tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid-State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA. Optional 20kV is available for additional protection.

Finish

Five standard colors offered in textured black, white, bronze, dark gray and medium gray. Color in accordance with the AAMA 2604 standard. Application of polyester powder coat paint 2.5 mils minimum. The thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. RAL and custom color matching available.

Listings

cULus Listed for Canada and USA suitable for wet locations when mounted downward facing. cULus Listed for Canada and USA suitable for damp locations when inverted upward facing when mounted in covered ceiling application. Emergency Battery Pack option is tested per UL924 and CSA C22.2 No. 141-10 DesignLights Consortium qualified on models as listed on DLC QPL. CCTs 3000K and warmer are Dark Sky Approved. Luminaire is rated for operation in ambient temperature of –40°C (–40°F) up to +40°C (+104°F).

Warranty

101L LED sconce luminaires feature a 5-year limited warranty. See signify.com/warranties for complete details and exclusions.

Buy American Act of 1933 (BAA):

This product is manufactured in one of our US factories and, as of the date of this document, this product was considered a commercially available off-the-shelf (COTS) item meeting the requirements of the BAA. This BAA designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the “Buy America” domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies. Prior to ordering, please visit www.signify.com/baa to view a current list of BAA-compliant products to confirm this product's current compliance.



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Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project: _____
 Location: _____
 Cat.No: _____
 Type: _____
 Lamps: _____ Qty: _____
 Notes: _____

Ordering guide

example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage
ECF-S						
ECF-S EcoForm site and area, small	32L 32 LEDs (2 modules)	365 365mA	WW-G2 Warm White 3000K, 70CRI Generation 2 NW-G2 Neutral White 4000K, 70CRI Generation 2 CW-G2 Cool White 5000K, 70CRI Generation 2	AR ² Arm Mount (standard)	Type 2 2 Type 2 2-90 Rotated left 90° 2-270 Rotated right 270°	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V
		530 530mA				
		700 700mA				
	48L 48 LEDs (3 modules)	1A 1050mA		The following mounting kits must be ordered separately (See accessories)	Type 3 3 Type 3 3-90 Rotated left 90° 3-270 Rotated right 270°	208 208V 240 240V 277 277V 347 347V 480 480V
		1.2A 1200mA				
		900 900mA				
	64L 64 LEDs (4 modules)	1A 1050mA		SF ³ Slip Fitter Mount (fits to 2 3/8" O.D. tenon)	Type 4 4 Type 4 4-90 Rotated left 90° 4-270 Rotated right 270°	277 277V 347 347V 480 480V
		1.2A ¹⁹ 1200mA				
		900 900mA				
				WS Wall mount with surface conduit rear entry permitted	Type 5 5 Type 5 5W Type 5W	
				RAM ² Retrofit arm mount kit		

Options					
Dimming controls	Motion sensing lens	Photo-sensing	Electrical	Luminaire	Finish
DD^{4,18} 0-10V External dimming (for controls by others) DCC^{4,5,6,18} Dual Circuit Control FAWS^{4,5,18} Field Adjustable Wattage Selector LLC^{4,6,7,8,18} Integral wireless module BL^{1,4,7,18} Bi-level functionality SRDR^{4,5,6,8,17} SR driver connected to Zhaga socket DynaDimmer: Automatic Profile Dimming CS50^{4,8} Safety 50% Dimming, 7 hours CM50^{4,8} Median 50% Dimming, 8 hours CS30^{4,8} Safety 30% Dimming, 7 hours CM30^{4,8} Median 30% Dimming, 8 hours	IMRI3¹⁵ Integral with #3 lens IMRI7¹⁶ Integral with #7 lens	PCB^{8,9} Photocontrol Button TLRD5^{10,17} Twist Lock Receptacle 5 Pin TLRD7^{10,17} Twist Lock Receptacle 7 Pin TLRPC^{9,10,11,17} Twist Lock Receptacle w/ Photocell	Fusing F1⁹ Single (120, 277, 347VAC) F2⁹ Double (208, 240, 480VAC) Pole Mount Fusing FP1⁹ Single (120, 277, 347VAC) FP2⁹ Double (208, 240, 480VAC) FP3⁹ Canadian Double Pull (208, 240, 480VAC) Surge Protection (10kA standard) SP2 Increased 20kA	Square Pole Adapter included in standard product TB¹² Terminal Block RPA¹³ Round Pole Adapter (fits to 3"- 3.9" O.D. pole) HIS¹⁴ Internal House Side Shield	Textured BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray Customer specified RAL Specify optional color or RAL (ex: RAL7024) CC Custom color (Must supply color chip for required factory quote)

- BL-IMRI3/7 equipped with out-boarded sensor housing when voltage is HVU (347-480V)
- Mounts to a 4" round pole with adapter included for square poles.
- Limited to a maximum of 45 degrees aiming above horizontal.
- Not available with other dimming control options.
- Not available with motion sensor.
- Not available with photocontrol.
- Must specify a motion sensor lens.
- Not available in 347 or 480V
- Must specify input voltage.
- TLRD5, TLRD7 and TLRPC receptacle pins 4 & 5 are capped off when ordered with any of the Dimming controls DD or FAWS or LLC.
- Not available in 480V. Order photocell separately with TLRD5/7.
- Not available with DCC.
- Not available with SF and WS. RPAs provided with black finish standard.
- HIS not available with Type 5, 5W, BLC, BLC-90, BLC-270, LCL or RCL optics.
- Not available with DD, DCC, and FAWS dimming control options.
- Not available with DD, DCC, FAWS and LLC dimming control options.
- When ordering SRDR, controller (by others) to be used on socket must be SR compatible (See specifications for more details). Consult factory for lead time. All 7 pins in NEMA receptacle are connected to SR driver. SRDR not available with TLRD5 or TLRPC.
- 0-10V dimming driver standard.
- LCL and RCL not available with 48L-1.2A or 64L-1A.

ECF-S EcoForm small

Area luminaire

EcoForm Accessories²¹ (ordered separately, field installed)

Shielding Accessories

House Side shield

Standard optic orientation:

HIS-32-H²⁰ Internal House Side Shield for 32 LEDs (2 modules)

HIS-48-H²⁰ Internal House Side Shield for 48 LEDs (3 modules)

HIS-64-H²⁰ Internal House Side Shield for 64 LEDs (4 modules)

Optic at 90 or 270 orientation:

HIS-32-V²⁰ Internal House Side Shield for 32 LEDs (2 modules)

HIS-48-V²⁰ Internal House Side Shield for 48 LEDs (3 modules)

HIS-64-V²⁰ Internal House Side Shield for 64 LEDs (4 modules)

Footnotes

20. Not available with Type 5 or 5W optics

21. Consult Signify to confirm whether specific accessories are BAA-compliant.

Luminaire Accessories

ECF-BD-G2

Bird deterrent

ECF-RAM-G2-(F)

Retrofit Arm mount kit

ECF-SF-G2-(F)

Slip Fitter Mount (fits to 2 3/8" O.D. tenon)

ECF-WS-G2-(F)

Wall mount with surface conduit rear entry permitted

EcoForm PTF2

(pole top fitter fits 23/8-21/2" OD x 4" depth tenon)

PTF2-ECF-S/L-1-90-(F)

1 luminaire at 90°

PTF2-ECF-S/L-2-90-(F)

2 luminaires at 90°

PTF2-ECF-S/L-2-180-(F)

2 luminaires at 180°

PTF2-ECF-S/L-3-90-(F)

3 luminaires at 90°

PTF2-ECF-S/L-4-90-(F)

4 luminaires at 90°

PTF2-ECF-S/L-3-120-(F)

3 luminaires at 120°

EcoForm PTF3

(pole top fitter fits 3-31/2" OD x 6" depth tenon)

PTF3-ECF-S/L-1-90-(F)

1 luminaire at 90°

PTF3-ECF-S/L-2-90-(F)

2 luminaires at 90°

PTF3-ECF-S/L-2-180-(F)

2 luminaires at 180°

PTF3-ECF-S/L-3-90-(F)

3 luminaires at 90°

PTF3-ECF-S/L-4-90-(F)

4 luminaires at 90°

PTF3-ECF-S/L-3-120-(F)

3 luminaires at 120°

EcoForm PTF4

(pole top fitter fits 31/2-4" OD x 6" depth tenon)

PTF4-ECF-S/L-1-90-(F)

1 luminaire at 90°

PTF4-ECF-S/L-2-90-(F)

2 luminaires at 90°

PTF4-ECF-S/L-2-180-(F)

2 luminaires at 180°

PTF4-ECF-S/L-3-90-(F)

3 luminaires at 90°

PTF4-ECF-S/L-4-90-(F)

4 luminaires at 90°

PTF4-ECF-S/L-3-120-(F)

3 luminaires at 120°

(F) = Specify finish

Ready to Go configurations (when ordered with the "RS-" catalog code, the following configurations will ship in 2 weeks):

Catalog Number	12NC	Catalog Number	12NC
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BZ	912401466002	RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BK	912401534560
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-MGY	912401466003	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BZ	912401466016
RS-ECF-S-32L-1A-NW-G2-AR-3-UNV-BK	912401534554	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-MGY	912401466017
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BZ	912401466004	RS-ECF-S-64L-1A-NW-G2-AR-4-UNV-BK	912401534561
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-MGY	912401466005	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BZ	912401466018
RS-ECF-S-32L-1A-NW-G2-AR-4-UNV-BK	912401534555	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-MGY	912401466019
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BZ	912401466006	RS-ECF-S-64L-1A-NW-G2-AR-5-UNV-BK	912401534562
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-MGY	912401466007	RS-ECF-RAM-G2-DGY	912401466487
RS-ECF-S-32L-1A-NW-G2-AR-5-UNV-BK	912401534556	RS-ECF-RAM-G2-MGY	912401466488
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BZ	912401466008	RS-ECF-RAM-G2-WH	912401466485
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-MGY	912401466009	RS-ECF-RAM-G2-BZ	912401466486
RS-ECF-S-48L-1A-NW-G2-AR-3-UNV-BK	912401534557	RS-ECF-RAM-G2-BK	912401466484
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BZ	912401466010	RS-HIS-32-H	912401466489
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-MGY	912401466011	RS-HIS-48-H	912401466491
RS-ECF-S-48L-1A-NW-G2-AR-4-UNV-BK	912401534558	RS-HIS-64-H	912401466493
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BZ	912401466012		
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-MGY	912401466013		
RS-ECF-S-48L-1A-NW-G2-AR-5-UNV-BK	912401534559		
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-BZ	912401466014		
RS-ECF-S-64L-1A-NW-G2-AR-3-UNV-MGY	912401466015		

ECF-S EcoForm small

Area lumineaire

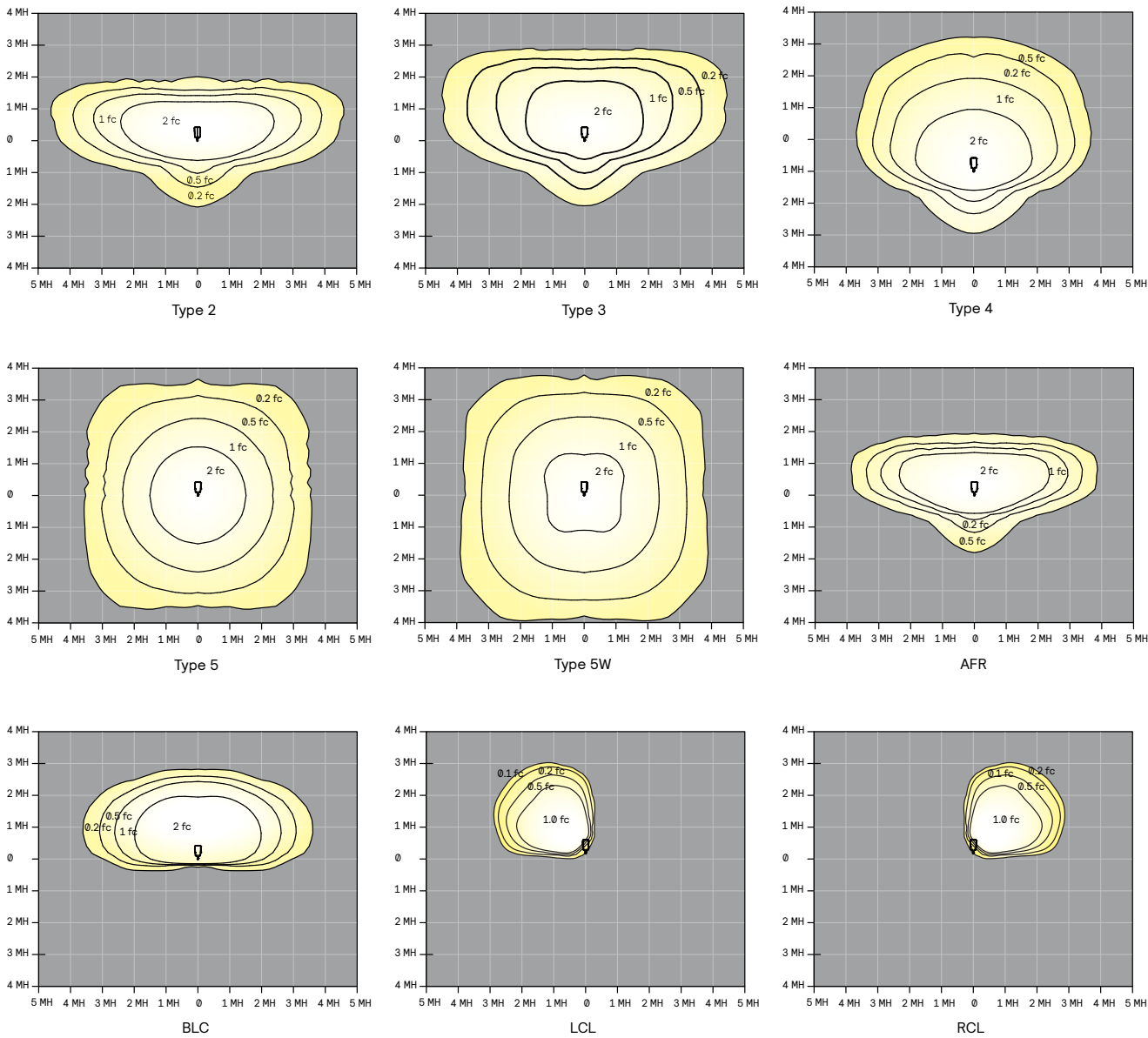
Predicted Lumen Depreciation Data

Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours

Ambient Temperature °C	Driver mA	Calculated L70 Hours	L70 per TM-21	Lumen Maintenance % at 60,000 hrs
25°C	up to 1200 mA	>100,000 hours	>120,000 hours	>99%

Optical Distributions

Based on configuration ECF-S-48L-1A-NW-G2 (159W) mounted at 20ft.



ECF-S EcoForm small

Area luminaire

3000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	40	5,508	B1-U0-G1	138	5,428	B1-U0-G2	136	5,637	B1-U0-G2	141	5,790	B3-U0-G1	145	5,604	B3-U0-G1	140
ECF-S-32L-530-WW-G2-x	32	530	3000	56	7,159	B2-U0-G2	129	7,055	B1-U0-G2	127	7,327	B1-U0-G2	132	7,526	B3-U0-G2	135	7,284	B3-U0-G2	131
ECF-S-32L-700-WW-G2-x	32	700	3000	73	9,234	B2-U0-G2	127	9,034	B2-U0-G2	124	9,452	B2-U0-G2	130	9,707	B4-U0-G2	133	9,395	B4-U0-G2	129
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,001	B3-U0-G2	123	12,719	B2-U0-G2	120	13,306	B2-U0-G3	126	13,665	B4-U0-G2	129	13,227	B4-U0-G2	125
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,421	B3-U0-G3	119	14,108	B2-U0-G3	116	14,760	B2-U0-G3	121	15,158	B4-U0-G2	125	14,671	B4-U0-G2	121
ECF-S-48L-900-WW-G2-x	48	900	3000	135	17,115	B3-U0-G3	127	16,744	B3-U0-G3	124	17,518	B2-U0-G3	130	17,990	B4-U0-G2	133	17,413	B5-U0-G3	129
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	19,381	B3-U0-G3	122	18,960	B3-U0-G3	119	19,836	B3-U0-G4	125	20,372	B5-U0-G3	128	19,717	B5-U0-G3	124
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	21,515	B3-U0-G3	118	21,048	B3-U0-G4	115	22,020	B3-U0-G4	121	22,616	B5-U0-G3	124	21,888	B5-U0-G3	120
ECF-S-64L-900-WW-G2-x	64	900	3000	178	22,652	B3-U0-G3	127	22,161	B3-U0-G4	125	23,185	B3-U0-G4	130	23,810	B5-U0-G3	134	23,045	B5-U0-G3	130
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	25,520	B3-U0-G3	124	24,966	B3-U0-G4	121	26,120	B3-U0-G4	127	26,150	B5-U0-G3	127	25,964	B5-U0-G4	126

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-WW-G2-x	32	365	3000	40	5,706	B2-U0-G1	143	3,691	B0-U0-G1	94	2,449	B0-U0-G1	62
ECF-S-32L-530-WW-G2-x	32	530	3000	56	7,417	B2-U0-G1	133	5,005	B0-U0-G2	91	3,183	B0-U0-G1	58
ECF-S-32L-700-WW-G2-x	32	700	3000	73	9,567	B2-U0-G2	131	6,409	B0-U0-G2	89	4,106	B0-U0-G1	57
ECF-S-32L-1A-WW-G2-x	32	1050	3000	106	13,467	B3-U0-G2	128	9,024	B1-U0-G2	87	5,793	B0-U0-G2	56
ECF-S-32L-1.2A-WW-G2-x	32	1200	3000	122	14,939	B3-U0-G2	123	10,010	B1-U0-G2	84	6,426	B0-U0-G2	54
ECF-S-48L-900-WW-G2-x	48	900	3000	135	17,731	B3-U0-G2	131	11,880	B1-U0-G2	89	7,626	B0-U0-G2	57
ECF-S-48L-1A-WW-G2-x	48	1050	3000	159	20,076	B3-U0-G2	127	13,453	B1-U0-G2	86	8,636	B0-U0-G2	55
ECF-S-48L-1.2A-WW-G2-x	48	1200	3000	183	22,288	B3-U0-G2	122	14,934	B1-U0-G3	83			
ECF-S-64L-900-WW-G2-x	64	900	3000	178	23,465	B3-U0-G2	132	15,723	B1-U0-G3	90	10,093	B0-U0-G2	58
ECF-S-64L-1A-WW-G2-x	64	1050	3000	206	26,437	B4-U0-G3	128	17,714	B1-U0-G3	87			

4000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	40	5,798	B1-U0-G1	145	5,713	B1-U0-G2	143	5,934	B1-U0-G2	148	6,094	B3-U0-G1	152	5,898	B3-U0-G2	147
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,536	B2-U0-G2	135	7,426	B1-U0-G2	133	7,713	B1-U0-G2	138	7,922	B3-U0-G2	142	7,667	B3-U0-G2	138
ECF-S-32L-700-NW-G2-x	32	700	4000	73	9,720	B2-U0-G2	133	9,509	B2-U0-G2	130	9,949	B2-U0-G2	136	10,218	B4-U0-G2	140	9,889	B4-U0-G2	136
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	13,685	B3-U0-G2	130	13,388	B2-U0-G3	127	14,006	B2-U0-G3	133	14,384	B4-U0-G2	136	13,923	B4-U0-G2	132
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,180	B3-U0-G3	125	14,851	B2-U0-G3	122	15,537	B2-U0-G3	128	15,956	B4-U0-G2	131	15,443	B4-U0-G2	127
ECF-S-48L-900-NW-G2-x	48	900	4000	135	18,016	B3-U0-G3	133	17,625	B3-U0-G3	130	18,440	B3-U0-G3	136	18,937	B4-U0-G3	140	18,329	B5-U0-G3	136
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	20,401	B3-U0-G3	129	19,958	B3-U0-G4	126	20,880	B3-U0-G4	132	21,444	B5-U0-G3	135	20,755	B5-U0-G3	131
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	22,647	B3-U0-G3	124	22,156	B3-U0-G4	121	23,179	B3-U0-G4	127	23,806	B5-U0-G3	130	23,040	B5-U0-G3	126
ECF-S-64L-900-NW-G2-x	64	900	4000	178	23,844	B3-U0-G3	134	23,327	B3-U0-G4	131	24,405	B3-U0-G4	137	25,063	B5-U0-G3	141	24,258	B5-U0-G4	136
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	26,863	B3-U0-G3	130	26,280	B3-U0-G4	128	27,495	B3-U0-G4	134	27,526	B5-U0-G3	134	27,330	B5-U0-G4	133

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-NW-G2-x	32	365	4000	40	6,006	B2-U0-G1	150	3,991	B0-U0-G1	101	2,633	B0-U0-G1	67
ECF-S-32L-530-NW-G2-x	32	530	4000	56	7,807	B2-U0-G1	140	5,412	B0-U0-G2	99	3,423	B0-U0-G1	62
ECF-S-32L-700-NW-G2-x	32	700	4000	73	10,070	B2-U0-G2	138	6,930	B0-U0-G2	96	4,415	B0-U0-G1	61
ECF-S-32L-1A-NW-G2-x	32	1050	4000	106	14,176	B3-U0-G2	134	9,756	B1-U0-G2	94	6,229	B0-U0-G2	60
ECF-S-32L-1.2A-NW-G2-x	32	1200	4000	122	15,725	B3-U0-G2	129	10,822	B1-U0-G2	90	6,910	B0-U0-G2	58
ECF-S-48L-900-NW-G2-x	48	900	4000	135	18,664	B3-U0-G2	138	12,843	B1-U0-G2	96	8,200	B0-U0-G2	62
ECF-S-48L-1A-NW-G2-x	48	1050	4000	159	21,133	B3-U0-G2	133	14,544	B1-U0-G3	93	9,286	B0-U0-G2	59
ECF-S-48L-1.2A-NW-G2-x	48	1200	4000	183	23,461	B3-U0-G2	128	16,145	B1-U0-G3	90			
ECF-S-64L-900-NW-G2-x	64	900	4000	178	24,700	B3-U0-G2	139	16,998	B1-U0-G3	97	10,853	B0-U0-G2	62
ECF-S-64L-1A-NW-G2-x	64	1050	4000	206	27,828	B4-U0-G3	135	19,150	B1-U0-G3	94			

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Area luminaire

5000K LED Wattage and Lumen Values

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type 2			Type 3			Type 4			Type 5			Type 5W		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	40	5,798	B1-U0-G1	145	5,713	B1-U0-G2	143	5,934	B1-U0-G2	148	6,094	B3-U0-G1	152	5,898	B3-U0-G2	147
ECF-S-32L-530-CW-G2-x	32	530	5000	56	7,536	B2-U0-G2	135	7,426	B1-U0-G2	133	7,713	B1-U0-G2	138	7,922	B3-U0-G2	142	7,667	B3-U0-G2	138
ECF-S-32L-700-CW-G2-x	32	700	5000	73	9,720	B2-U0-G2	133	9,509	B2-U0-G2	130	9,949	B2-U0-G2	136	10,218	B4-U0-G2	140	9,889	B4-U0-G2	136
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	13,685	B3-U0-G2	130	13,388	B2-U0-G3	127	14,006	B2-U0-G3	133	14,384	B4-U0-G2	136	13,923	B4-U0-G2	132
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,180	B3-U0-G3	125	14,851	B2-U0-G3	122	15,537	B2-U0-G3	128	15,956	B4-U0-G2	131	15,443	B4-U0-G2	127
ECF-S-48L-900-CW-G2-x	48	900	5000	135	18,016	B3-U0-G3	133	17,625	B3-U0-G3	130	18,440	B3-U0-G3	136	18,937	B4-U0-G3	140	18,329	B5-U0-G3	136
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	20,401	B3-U0-G3	129	19,958	B3-U0-G4	126	20,880	B3-U0-G4	132	21,444	B5-U0-G3	135	20,755	B5-U0-G3	131
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	22,647	B3-U0-G3	124	22,156	B3-U0-G4	121	23,179	B3-U0-G4	127	23,806	B5-U0-G3	130	23,040	B5-U0-G3	126
ECF-S-64L-900-CW-G2-x	64	900	5000	178	23,844	B3-U0-G3	134	23,327	B3-U0-G4	131	24,405	B3-U0-G4	137	25063	B5-U0-G3	141	24258	B5-U0-G4	136
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	26,863	B3-U0-G3	130	26,280	B3-U0-G4	128	27,495	B3-U0-G4	134	27526	B5-U0-G3	134	27330	B5-U0-G4	133

Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts	Type AFR			BLC			LCL or RCL		
					Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)	Lumen Output	BUG Rating	Efficacy (LPW)
ECF-S-32L-365-CW-G2-x	32	365	5000	40	6,006	B2-U0-G1	150	3,991	B0-U0-G1	101	2,633	B0-U0-G1	67
ECF-S-32L-530-CW-G2-x	32	530	5000	56	7,807	B2-U0-G1	140	5,412	B0-U0-G2	99	3,423	B0-U0-G1	62
ECF-S-32L-700-CW-G2-x	32	700	5000	73	10,070	B2-U0-G2	138	6,930	B0-U0-G2	96	4,415	B0-U0-G1	61
ECF-S-32L-1A-CW-G2-x	32	1050	5000	106	14,176	B3-U0-G2	134	9,756	B1-U0-G2	94	6,229	B0-U0-G2	60
ECF-S-32L-1.2A-CW-G2-x	32	1200	5000	122	15,725	B3-U0-G2	129	10,822	B1-U0-G2	90	6,910	B0-U0-G2	58
ECF-S-48L-900-CW-G2-x	48	900	5000	135	18,664	B3-U0-G2	138	12,843	B1-U0-G2	96	8,200	B0-U0-G2	62
ECF-S-48L-1A-CW-G2-x	48	1050	5000	159	21,133	B3-U0-G2	133	14,544	B1-U0-G3	93	9,286	B0-U0-G2	59
ECF-S-48L-1.2A-CW-G2-x	48	1200	5000	183	23,461	B3-U0-G2	128	16,145	B1-U0-G3	90			
ECF-S-64L-900-CW-G2-x	64	900	5000	178	24,700	B3-U0-G2	139	16,998	B1-U0-G3	97	10,853	B0-U0-G2	62
ECF-S-64L-1A-CW-G2-x	64	1050	5000	206	27,828	B4-U0-G3	135	19,150	B1-U0-G3	94			

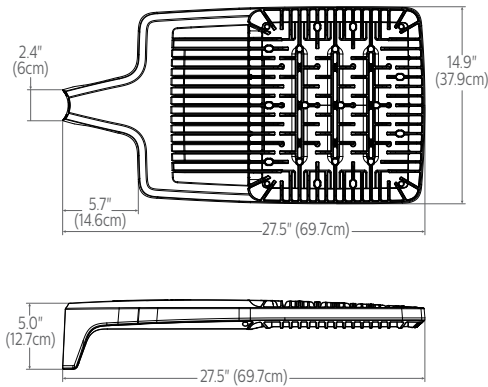
ECF-S EcoForm small

Area luminaire

Dimensions

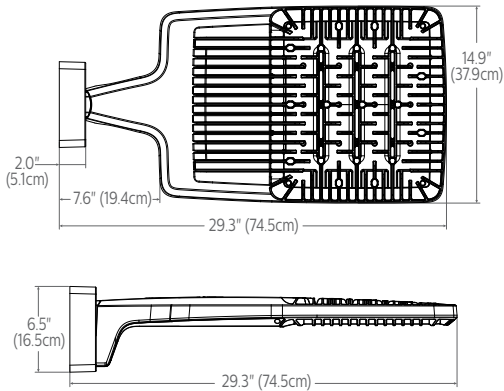
Standard Arm (AR)

Weight: 22 Lbs (9.9 Kg) EPA: 0.21ft² (.019m²)



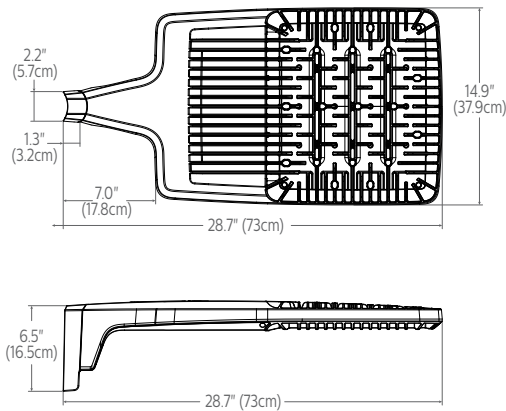
Wall (WS)

Weight: 27 Lbs. (12. 2Kg) EPA: 0.27ft² (.025m²)



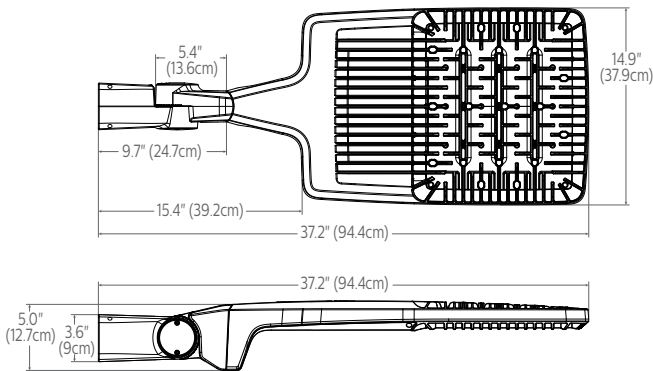
Retrofit Arm (RAM)

Weight: 24 Lbs (10.9 Kg) EPA: 0.24ft² (.022m²)

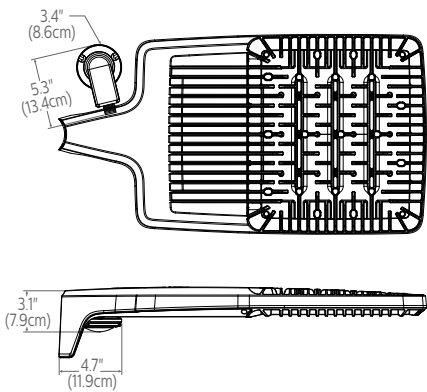


Slip fitter (SF)

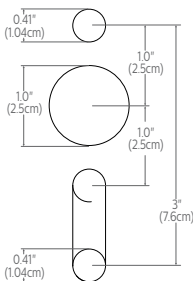
Weight: 27 Lbs (12.2 Kg) EPA: 0.33ft² (.031m²)



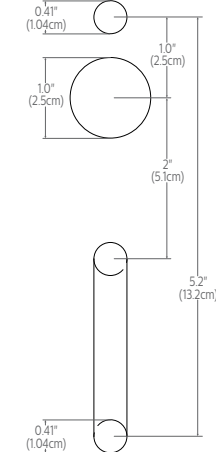
Outboard IMR-HVU sensor



Standard Arm (AR) drill pattern



Retrofit Arm (RAM) drill pattern



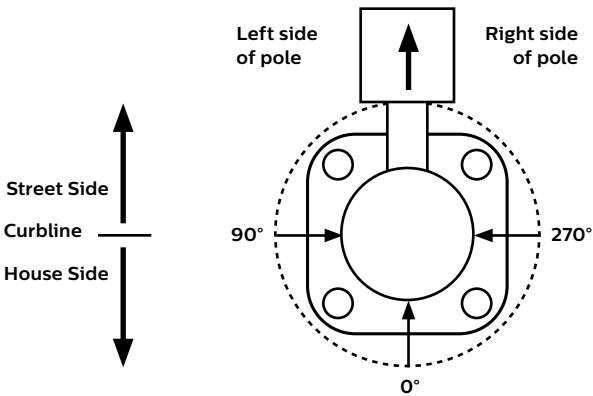
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Area luminaire

Optical Orientation Information

Standard Optic Position

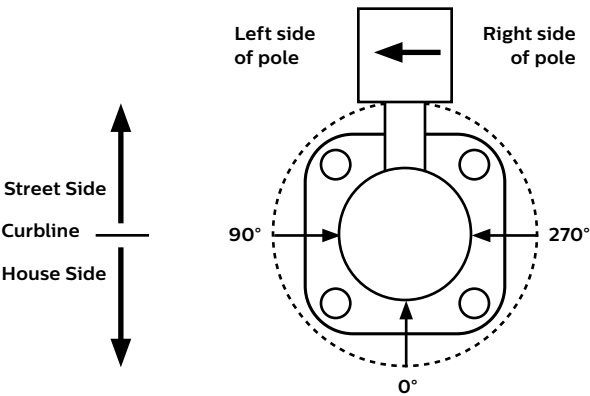
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Left (90°) Optic Position

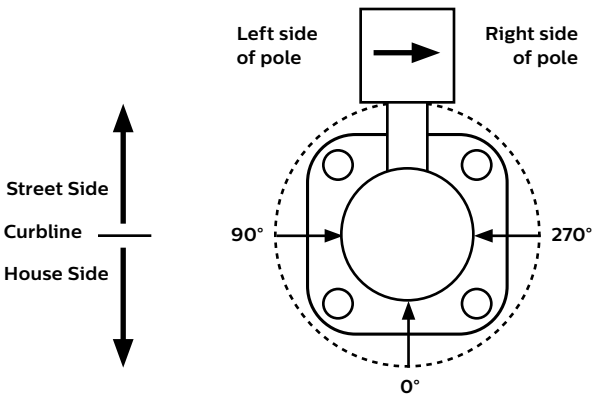
Luminaires ordered with optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Right (270°) Optic Position

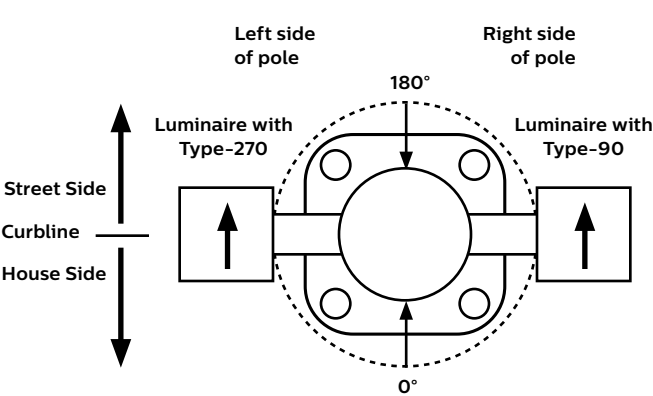
Luminaires ordered with optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below (Type 5 and 5W optics are not available with factory set rotatable optics):



Note: The hand hole will normally be located on the pole at the 0° point.

Twin Luminaire Assemblies with Type-90/Type-270 Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

ECF-S EcoForm small

Area luminaire

Specifications

Housing

One-piece die cast aluminum housing with integral arm and separate, self-retained hinged, one-piece die cast door frame. Luminaire housing rated to IP65, tested in accordance to Section 9 of IEC 60598-1.

Vibration resistance

Luminaire is tested and rated 3G over 100,000 cycles conforming to standards set forth by ANSI C136.31-2018. Testing includes vibration in three axes, all performed on the same luminaire.

Light engine

Light engine comprises of a module of 16-LED aluminum metal clad board fully sealed with optics offered in multiples of 2, 3, and 4 modules or 32, 48, and 64 LEDs. Module is RoHS compliant. Color temperatures: 3000K +/-125K, 4000K, 5000K +/- 200K. Minimum CRI of 70. LED light engine is rated IP66 in accordance to Section 9 of IEC 60598-1.

Energy saving benefits

System efficacy up to 152 lms/W with significant energy savings over Pulse Start Metal Halide luminaires. Optional control options provide added energy savings during unoccupied periods.

Optical systems

Type 2, 3, 4, 5, 5W, and AFR distributions available. Internal Shield option mounts to LED optics and is available with Type 2, 3, 4, and AFR distributions, including a dedicated BLC, LCL, and RCL optics to provide the best backlight control possible for those stringent requirements around property lines. Types 2, 3, 4, AFR, and BLC when specified and used as rotated, are factory set only. Performance tested per LM-79 and TM-15 (IESNA) certifying its photometric performance. Luminaire designed with 0% uplight (U0 per IESNA TM-15).

Mounting

Standard luminaire arm mounts to 4" O.D. round poles. Can also be used with 5" O.D. poles. Square pole adapter included with every luminaire. Round Pole Adapter (RPA) required for 3-3.9" poles. EcoForm features a retrofit arm kit. When specified with the retrofit arm (RAM) option, EcoForm seamlessly simplifies site conversions to LED by eliminating the need for additional pole drilling on most existing poles. RAM will be boxed separately. Also optional are slipfitter and wall mounting accessories. Note that only fixed mounts (AR, RAM, WS) are required to meet IDA compliance. SF mounting will not meet IDA.

Control options

0-10V dimming (DD): Access to 0-10V dimming leads supplied through back of luminaire (for secondary dimming controls by others). Cannot be used with other control options.

Dual Circuit Control (DCC): Luminaire equipped with the ability to have two separate circuits controlling drivers and light engines independently. Permits separate switching of separate modules controlled by use of two sets of leads, one for each circuit. Not recommended to be used with other control options, motion response, or photocells.

Sensor Ready Zhaga Socket Connector (SRDR): Product equipped with Sensor Ready drivers connected to 4-pin Zhaga Book 18 compliant receptacle designed for sensor and other control system applications. Receptacle is rated IP66 assembly in a compact design that provides a sealed electrical interface and rated UV resistance, mounted on underside of the luminaire, protective dust cap included. When a controller not provided by Signify is used with Sensor Ready Zhaga socket connector, the controller must be certified to work with the Xitanium SR LED drivers as part of the SR certified program. SRDR can be used with NEMA 7-pin twist lock receptacle, which is mounted on top of the luminaire.

Automatic Profile Dimming (CS/CM/CE/CA): Standard dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. Dimming profiles include two dimming settings including dim to 30% or 50% of the total lumen output. When used in combination with not programmed motion response it overrides the controller's schedule when motion is detected. After 5 minutes with no motion, it will return to the automatic dimming profile schedule. Automatic dimming profile scheduled with the following settings:

- **CS50/CS30:** Security for 7 hours night duration (Ex., 11 PM – 6 AM)
- **CM50/CM30:** Median for 8 hours night duration (Ex., 10 PM – 6 AM)

All above profiles are calculated from mid point of the night. Dimming is set for 6 hours after the mid point and 1 or 2 hours before depending of the duration of dimming. Cannot be used with other dimming control options.

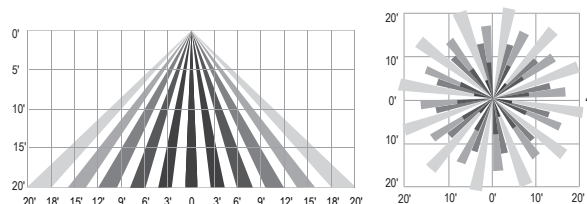
Field Adjustable Wattage Selector (FAWS): Luminaire equipped with the ability to manually adjust the wattage in the field to reduce total luminaire lumen output and light levels. Comes pre-set to the highest position at the lumen output selected. Use chart below to estimate reduction in lumen output desired. Cannot be used with other control options or motion response.

FAWS Position	Percent of Typical Lumen Output
1	25%
2	50%
3	55%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

Note: Typical value accuracy +/- 5%

Wireless system (LLC): Optional wireless controller integral to luminaire ready to be connected to a Limelight system (sold by others). The system allows you to wirelessly manage the entire site, independent lighting groups or individual luminaires while on-site or remotely. Based on a high-density mesh network with an easy to use web-based portal, you can conveniently access, monitor and manage your lighting network remotely. Wireless controls can be combined with site and area, pedestrian, and parking garage luminaires as well, for a completely connected outdoor solution. Equipped with motion response with #3 lens for 8-25' mounting heights. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall.

LLC wireless controller with #3 lens



Motion response options

Bi-Level Infrared Motion Response (BL-IMRI): Motion Response module is mounted integral to luminaire factory pre-programmed to 50% dimming when not ordered with other control options. BL-IMRI is set/operates in the following fashion: The motion sensor is set to a constant 50%. When motion is detected by the PIR sensor, the luminaire returns to full power/light output. Dimming on low is factory set to 50% with 5 minutes default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 50%, to 50% of the normal constant wattage reducing the light level. Other dimming settings can be provided if different dimming levels are required. This can also be done with FSIR-100 Wireless Remote Programming Tool (contact Technical Support for details).

Infrared Motion Response with Other Controls: When used in combination with other controls (Automatic Dimming Profile), motion response device will simply override controller's schedule with the added benefits of a combined dimming profile and sensor detection. In this configuration, the motion response device cannot be re-programmed with FSIR-100 Wireless Remote Programming Tool. The profile can only be re-programmed via the controller.

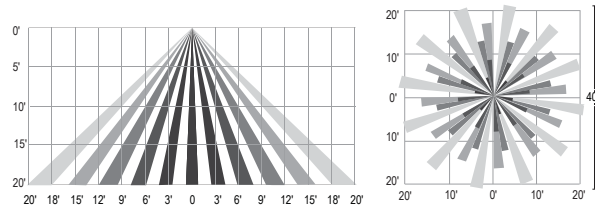
ECF-S EcoForm small

Area luminaire

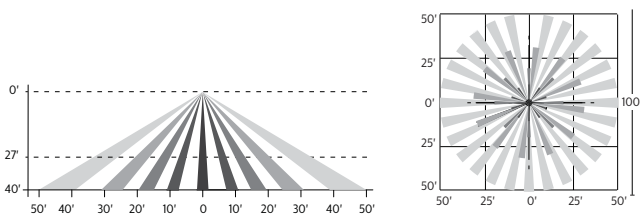
Specifications

Infrared Motion Response Lenses (IMRI3/IMRI7): Infrared Motion Response Integral module is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges. Lens #3 (IMRI3) is designed for mounting heights up to 20' with a 40' diameter coverage area. Lens #7 is designed for higher mounting heights up to 40' with larger coverage areas up to 100' diameter coverage area. See charts for approximate detection patterns:

IMRI3 Luminaire or remote mount controller with #3 lens



IMRI7 Luminaire or remote mount controller with #7 lens



Electrical

Twist-Lock Receptacle (TLRD5/TLRD7/ TLRPC): Twist Lock Receptacle with 5 pins enabling dimming or with 7 pins with additional functionality (by others) can be used with a twistlock photoelectric cell or a shorting cap. Dimming Receptacle Type B (5-pin) and Type D-24 (7-pin) in accordance to ANSI C136.41. Can be used with third-party control system. Receptacle located on top of luminaire housing. When specifying receptacle with twistlock photoelectric cell, voltage must be specified. When ordering 7-pin Twist-lock receptacle (TLRD7), all 7 pins are wired to respective pins with the Sensor Ready (SR) driver, and photocell or shorting cap is not included. When ordering a twist-lock receptacle with a photocell (TLRPC), the receptacle used is a 5-pin receptacle, so pins 6 and 7 are not available (no SR driver). 0-10V dimming leads (pins 4 and 5) are connected if not ordered with any other dimming option.

Buy American Act of 1933 (BAA):

This product is manufactured in one of our US factories and, as of the date of this document, this product was considered a commercially available off-the-shelf (COTS) item meeting the requirements of the BAA. This BAA designation hereunder does not address (i) the applicability of, or availability of a waiver under, the Trade Agreements Act, or (ii) the "Buy America" domestic content requirements imposed on states, localities, and other non-federal entities as a condition of receiving funds administered by the Department of Transportation or other federal agencies. Prior to ordering, please visit www.signify.com/baa to view a current list of BAA-compliant products to confirm this product's current compliance.

Driver: Driver efficiency (>90% standard). 120-480V available (restrictions apply). Open/short circuit protection. All drivers are 0-10V dimming to 10% power standard, except when using Sensor Ready (SR) drivers, which uses DALI protocol (options CS50/CM50/CS30/CM30, SRDR, and TR7). Drivers are RoHS and FCC Title 47 CFR Part 15 compliant.

Button Photocontrol (PCB): Button style design for internal luminaires mounting applications. The photocontrol is constructed of a high impact UV stabilized polycarbonate housing. Rated voltage of 120V or 208-277V with a load rating of 1000 VA. The photocell will turn on with 1-4Fc of ambient light.

Surge protection (SP1/SP2): Surge protection device tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-Neutral and Neutral-Ground, and in accordance with DOE MSSLC Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High test level 10kV/10kA. 20kV / 10kA surge protection device that provides extra protection beyond the SP1 10kV/10kA level.

Listings

UL/cUL wet location listed to the UL 1598 standard, suitable for use in ambient temperatures from -40° to 40°C (-40° to 104°F). Most EcoForm configurations are qualified under Premium and Standard DesignLights Consortium® categories. Consult DLC Qualified Products list to confirm your specific luminaire selection is approved. CCTs 3000K and warmer are Dark Sky Approved.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BZ), black (BK), white (WH), dark gray (DGY), and medium gray (MGY). Consult factory for specs on optional or custom colors.

Service Tag

Each individual luminaire is uniquely identifiable, thanks to the Service tag application. With a simple scan of a QR code, placed on the inside of the mast door, you gain instant access to the luminaire configuration, making installation and maintenance operations faster and easier, no matter what stage of the luminaire's lifetime. Just download the APP and register your product right away. For more details visit: signify.com

Warranty

EcoForm luminaires feature a 5-year limited warranty. See signify.com/warranties for complete details and exclusions.







[Search](#) > Account Summary

Real Estate Account #03956 010 011

Owner:
TUCKER-DAVIS TECHNOLOGIES INC


Situs:
11930 RESEARCH CIR
ALACHUA 32615

[Parcel details](#)
[Property Appraiser](#) 
 Installments




[Get bills by email](#)

Amount Due

Your account is **paid in full**. There is nothing due at this time.
Your last payment was made on **03/25/2022** for **\$13,150.92**.  [Print paid bill \(PDF\)](#)

Account History

BILL	AMOUNT DUE	STATUS			ACTION	
2021 						
2021 Installment Bill #4 	\$0.00	Paid \$13,150.92	03/25/2022	Receipt #21-0135335		Print (PDF)
2021 Installment Bill #3 	\$0.00	Paid \$12,756.40	12/22/2021	Receipt #21-0069656		Print (PDF)
2021 Installment Bill #2 	\$0.00	Paid \$6,627.87	09/20/2021	Receipt #20-0250348		Print (PDF)
2021 Installment Bill #1 	\$0.00	Paid \$6,523.77	06/21/2021	Receipt #20-0192895		Print (PDF)
Paid \$39,058.96						
2020 						
2020 Installment Bill #4 	\$0.00	Paid \$6,536.64	03/24/2021	Receipt #20-0134029		Print (PDF)
2020 Installment Bill #3 	\$0.00	Paid \$6,340.54	12/17/2020	Receipt #20-0064706		Print (PDF)
2020 Installment Bill #2 	\$0.00	Paid \$7,013.25	09/18/2020	Receipt #19-0240322		Print (PDF)
2020 Installment Bill #1 	\$0.00	Paid \$6,903.10	06/18/2020	Receipt #19-0184009		Print (PDF)
Paid \$26,793.53						
2019 						
2019 Installment Bill #4 	\$0.00	Paid \$7,812.10	03/20/2020	Receipt #19-0133846		Print (PDF)
2019 Installment Bill #3 	\$0.00	Paid \$7,577.75	12/17/2019	Receipt #19-0063511		Print (PDF)
2019 Installment Bill #2 	\$0.00	Paid \$6,875.33	11/01/2019	Receipt #19-0000427		Print (PDF)
2019 Installment Bill #1 	\$0.00	Paid \$6,462.81	06/17/2019	Receipt #18-0194045		Print (PDF)
Paid \$28,727.99						
2018 						
2018 Installment Bill #4 	\$0.00	Paid \$7,096.65	03/20/2019	Receipt #18-0132924		Print (PDF)
2018 Installment Bill #3 	\$0.00	Paid \$6,883.76	12/17/2018	Receipt #18-0061624		Print (PDF)
Total Amount Due	\$0.00					

BILL	AMOUNT DUE	STATUS				ACTION	
2018 Installment Bill #2 	\$0.00	Paid	\$6,354.58	09/18/2018	Receipt #17-0252552		Print (PDF)
2018 Installment Bill #1 	\$0.00	Paid	\$6,254.77	06/21/2018	Receipt #17-0197449		Print (PDF)
		Paid \$26,589.76					
2017 							
2017 Installment Bill #4 	\$0.00	Paid	\$7,686.04	03/21/2018	Receipt #17-0135016		Print (PDF)
2017 Installment Bill #3 	\$0.00	Paid	\$7,455.47	12/19/2017	Receipt #17-0065694		Print (PDF)
2017 Installment Bill #2 	\$0.00	Paid	\$5,368.98	09/22/2017	Receipt #16-0246953		Print (PDF)
2017 Installment Bill #1 	\$0.00	Paid	\$5,284.65	06/20/2017	Receipt #16-0188603		Print (PDF)
		Paid \$25,795.14					
2016 							
2016 Installment Bill #4 	\$0.00	Paid	\$5,466.51	03/20/2017	Receipt #16-0127372		Print (PDF)
2016 Installment Bill #3 	\$0.00	Paid	\$5,302.51	12/21/2016	Receipt #16-0064701		Print (PDF)
2016 Installment Bill #2 	\$0.00	Paid	\$5,517.45	09/21/2016	Receipt #15-0227914		Print (PDF)
2016 Installment Bill #1 	\$0.00	Paid	\$5,430.78	06/22/2016	Receipt #15-0175661		Print (PDF)
		Paid \$21,717.25					
2015 Annual Bill 	\$0.00	Paid	\$22,647.53	01/21/2016	Receipt #15-0078485		Print (PDF)
2014 Annual Bill 	\$0.00	Paid	\$22,431.96	12/31/2014	Receipt #14-0067556		Print (PDF)
2013 Annual Bill 	\$0.00	Paid	\$23,302.58	03/18/2014	Receipt #13-0112070		Print (PDF)
2012 Annual Bill 	\$0.00	Paid	\$22,528.09	11/26/2012	Receipt #12-0033375		Print (PDF)
2011 Annual Bill 	\$0.00	Paid	\$21,421.75	11/30/2011	Receipt #2011-3020839		Print (PDF)
2010 Annual Bill 	\$0.00	Paid	\$22,393.32	11/30/2010	Receipt #2010-3019008		Print (PDF)
2009 Annual Bill 	\$0.00	Paid	\$24,380.04	11/18/2009	Receipt #2009-1007445		Print (PDF)
2008 Annual Bill 	\$0.00	Paid	\$22,297.38	11/30/2008	Receipt #2008-9019304		Print (PDF)
2007 Annual Bill 	\$0.00	Paid	\$22,765.66	01/23/2008	Receipt #2007-9040622		Print (PDF)
2006 Annual Bill 	\$0.00	Paid	\$22,390.04	11/20/2006	Receipt #2006-9080695		Print (PDF)
2005 Annual Bill 	\$0.00	Paid	\$23,101.94	01/31/2006	Receipt #2005-9061152		Print (PDF)
2004 							
2004 Annual Bill	\$0.00	Paid	\$23,514.01	01/31/2005	Receipt #2004-4021094		Print (PDF)
Refund		Processed		02/22/2005	To TUCKER-DAVIS TECHNOLOGIES		
		Paid \$23,514.01					
2003 Annual Bill 	\$0.00	Paid	\$20,676.28	01/20/2004	Receipt #2003-3059487		Print (PDF)
Total Amount Due		\$0.00					



SUWANNEE RIVER

WATER MANAGEMENT DISTRICT

May 3, 2022

Timothy J. Tucker
Tucker-Davis Technologies, Inc.
11930 Research Circle
Alachua, FL, 32615

Subject: Environmental Resource Permit (ERP) No Permit Required, ERP-001-214387-2, Tucker-Davis Technologies Building Addition

Dear Timothy Tucker,

The above mentioned proposed activity does not require a permit from the Suwannee River Water Management District (District). This decision was based on the documentation submitted by Douglas McGrath, P.E., EDA on March 31, 2022. The development consists of the construction of approximately 0.3 acres of impervious area on a total project area of 2.68 acres. The activity is covered under the master permit ERP-001-205370-1 which allows up to 65% of the parcel to be impervious. The design engineer has certified that the proposed conditions do not exceed the allowable conditions of the master system. The project shall be constructed in a manner consistent with the application package submitted by Douglas McGrath, P.E. on or before May 2, 2022, and in accordance with ERP Applicant's Handbook Volume I (AHVI), Section 3.1.2(c), F.A.C.

Please ensure that turbidity, sedimentation, and erosion are controlled during and after construction of the exempt activity to prevent violations of state water quality standards, including any antidegradation provisions of paragraphs 62-4.242(1)(a) and (b), subsections 62-4.242(2) and (3) and Rule 62-302.300, F.A.C., and any special standards for Outstanding Florida Waters and Outstanding National Resource Waters. Erosion and sediment control best management practices shall be installed and maintained in accordance with the guidelines and specifications described in the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual* (Florida Department of Environmental Protection and Florida Department of Transportation, June 2007) (<https://www.flrules.org/Gateway/reference.asp?No=Ref-02530>), and the *Florida Stormwater Erosion and Sedimentation Control Inspector's Manual* (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008) (<https://www.flrules.org/Gateway/reference.asp?No=Ref-02531>).

In addition, construction, alteration, and operation shall not:

- Exceed any of the thresholds as found in 62-330.020(2), F.A.C.
- Adversely impound or obstruct existing water flow, cause adverse impacts to existing surface water storage and conveyance capabilities, or otherwise cause adverse water quantity or flooding impacts to receiving water and adjacent lands;
- Cause an adverse impact to the minimum flows and levels established pursuant to Section 373.042, F.S.

Water for Nature. Water for People.

- Cause adverse impacts to a Work of the District established pursuant to Section 373.086, F.S.;
- Adversely impede navigation or create a navigational hazard; or
- Cause or contribute to a violation of state water quality standards.

This authorization does not exempt you from obtaining permits from any other regulatory agency. Any modifications to the authorized plans shall require reconsideration by the District prior to commencement of construction.

If you have any questions, please contact the Division of Resource Management at 386.362.1001.
Sincerely,

A handwritten signature in black ink, appearing to read "Sara Zybell". The signature is written in a cursive, flowing style.

Sara Zybell, E.I.

Engineer III
Division of Resource Management



Countywide Stormwater Code Affidavit of Compliance.

Instructions: Complete and submit this form for all activities that involve the construction of a stormwater management system. Please submit this form, along with the other required documents as listed in Sec. 77.28 of the Alachua County Code.

Part 1. Applicant Information

Applicant or Owner Name: Claudia Vega, P.E.

Phone Number: 352-373-3541

Company Name: eda consultants inc.

Email Address: cvega@edafl.com

Company Address: 720 SW 2nd Ave, South Tower, Suite 300, Gainesville, FL 32601

Registered Professional Name: Claudia Vega, P.E.

Phone Number: 352-373-3541

Company Name: eda consultants inc.

Email Address: cvega@edafl.com

Company Address: 720 SW 2nd Ave, South Tower, Suite 300, Gainesville, FL 32601

Part 2. Project Location Information

Project Name: Tucker-Davis Building Addition

Tax Parcel: 03956-010-011

Project Location (Unincorporated Alachua County or Municipality): City of Alachua

Note: For projects located in Municipalities submittal of this form is a self-certification of compliance. An acknowledgement of receipt will be sent once all required documents are provided. This acknowledgement is not a review of the submitted materials. Projects in Unincorporated Alachua County will be reviewed pursuant to Sec. 77.27 of the Alachua County Code.

Part 3. Stormwater Discharge Information

Watershed Name:

Waterbody ID Number (WBID#):

Stormwater Discharge Locations Please Check all That Apply
<input checked="" type="checkbox"/> Project Discharges Offsite as Surface Flow
<input type="checkbox"/> Project Discharges Directly to Outstanding Florida Water
<input type="checkbox"/> Project is in the Watershed of a Waterbody Listed as Impaired for Nutrients or has a Nutrient TMDL
<input type="checkbox"/> Project Infiltrates to Groundwater
<input type="checkbox"/> Project is in the Sensitive Karst Area

Please briefly describe the Best Management Practices used:

There is an existing stormwater basin.

Part 4. Exemption and Waiver Information

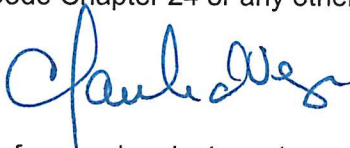
If applicable, Please list the exemption(s) this project qualifies for under Sec. 77.25 of the Alachua County Code. Supporting Documentation may be required:

If applicable, Please describe the waiver you are requesting under Sec. 77.26 of the Alachua County Code. Supporting documentation is required:

Part 5. Signatures

I authorize Alachua County, and its agents and contractors, to enter the property for the purpose of verifying compliance. If the property is sold and/or the entity responsible for operation and maintenance of the stormwater management system, the Property Owner will notify the Alachua County Environmental Protection Department within 30 calendar days of the sale or change in operation and maintenance entity. Failure to comply may result in enforcement action using the provisions of Alachua County Code Chapter 24 or any other remedy available by law or equity.

Applicant/Owner Signature:



Date: 3/31/22

I hereby certify that the above referenced project meets, or is exempt from, the requirements of the Alachua County Code Chapter 77, Article III Stormwater Treatment Code. I further certify that the Operation and Maintenance requirements have been provided to the owner and entity responsible for operation and maintenance of the stormwater management system.

Registered Professional Signature:



Date: 3/31/22

Florida Registration Number:



Memorandum

TO: Suwanee River WMD **DATE:** 3/31/2022
FROM: DJ McGrath, PE
SUBJECT: Tucker Davis Technologies Site Plan

The existing master stormwater system was originally permitted and approved under Permit Number ERP97-0031 on 2/6/1997. The proposed development includes the construction of a 6,630 SF building addition with associated pavement and sidewalk improvements for a total of 13,153 SF of additional impervious area. The proposed improvements bring the total impervious area on the project parcel to 55,117 SF. The existing master stormwater system allocated a total of 75,898 SF of impervious area for the project parcel therefore the proposed improvements are within the allowable amount per the approved design.

	Impervious Area (SF)			
	Existing	Proposed	Total Post-Development	Allowed
Impervious Area (SF)	41,964	13,153	55,117	75,898



Worksheet for Trip Generation

Project Name : Tucker Davis Technologies

Customer / Builder Name : The National Center For Construction Education
Research LTD

Property Address : 11930 Research Circle, Alachua, FL 32615

EXISTING

EXISTING: 15,130 S.F. OFFICE SPACE

ITE LAND USE: 710 GENERAL OFFICE BUILDING

SOURCE: ITE TRIP GENERATION, 11TH EDITION

15,130 SF

PERIOD	RATE	PER UNIT	TRIPS	TRIP DISTRIBUTION		PROJECT TRIPS	
				ENTER	EXIT	IN	OUT
AM	1.52	15.13	23.00	88%	12%	20.24	2.76
PM	1.44	15.13	21.79	17%	83%	3.70	18.08
ADT	10.84	15.13	164.01	50%	50%	82.00	82.00

PROPOSED

PROPOSED: 6,630 S.F. OFFICE BUILDING ADDITION

ITE LAND USE: 710 GENERAL OFFICE BUILDING

SOURCE: ITE TRIP GENERATION, 11TH EDITION

6,630 SF

PERIOD	RATE	PER UNIT	TRIPS	TRIP DISTRIBUTION		PROJECT TRIPS	
				ENTER	EXIT	IN	OUT
AM	1.52	6.63	10.08	88%	12%	8.87	1.21
PM	1.44	6.63	9.55	17%	83%	1.62	7.92
ADT	10.84	6.63	71.87	50%	50%	35.93	35.93

TOTAL

	AM	PM	AVG
Existing	23	22	164
Proposed	10	10	72
Total	33	31	236



Worksheet for Commercial Water Demand

Project Name : Tucker Davis Technologies
 Customer / Builder Name : The National Center For Construction Education Research LTD
 Property Address : 11930 Research Circle, Alachua, FL 32615

Type	Requirement Per GRU/64E-6 (GPD)	Quantity	Units	Total (GPD)
Office Building - Per 100 SF of floor space	15.00	66	100 SF	995
TOTAL DEMAND				995
Peaking Factor				2.5
Operating Period (hrs)				12
Peak Demand				3 gpm
TOTAL DEMAND				3 gpm