

**TOWN OF RIDGEFIELD
Office of the Facilities Director**

RIDGEFIELD, CONNECTICUT

***Energy Conservation & Building
Maintenance***

Town Hall LED Lighting Upgrade

January 2022

DETAILED SPECIFICATIONS:

**BIDDING REQUIREMENTS
PROJECT DESCRIPTION**



**RUDY MARCONI
FIRST SELECTMAN**

LEGAL NOTICE

INVITATION to BID

The **Town of Ridgefield** invites all interested parties to submit sealed bids on the following:

Bid Due Date: Thursday, February 17, 2022

Bid Due Time: 11:00 AM

Bid Item: Town Hall LED Lighting Upgrade

Bid Number: 22-06

Terms and conditions as well as the description of items being bid are stated in the specifications. **Specifications may be obtained at the following address:**

**Town of Ridgefield
Jacob Muller
400 Main Street
Ridgefield, CT. 06877
203-431-2720**

Or downloaded from www.ridgefieldct.org in “Governments” “View All Departments” – “Purchasing” – “Bid Notices”

The return bid must be sent via FAX or email to the following listed below:

**TOWN OF RIDGEFIELD
DIRECTOR OF PURCHASING
BID NUMBER: 2022-06
400 MAIN STREET
RIDGEFIELD, CT. 06877**

Bids must be received no later than the date and time stated above at the Purchasing Director's via FAX or email only. If you do not have fax or email access, please hand deliver the bid to the contact information above (the bid shall be in sealed envelope and clearly marked). **For further information**, please call **Jacob Muller at (203) 431-2720 or E-Mail at purchasing@ridgefieldct.org**

Bid Documents available at www.ridgefieldct.org in “Governments” “View All Departments” – “Purchasing” – “Bid Notices”

Bid Results may be viewed at www.ridgefieldct.org in “Governments” – “View All Departments” – “Purchasing” – “Bid Results”

TOWN OF RIDGEFIELD CONNECTICUT

BOARD OF SELECTMEN

INSTRUCTIONS TO BIDDERS

1. Please note; due to The Town of Ridgefield COVID-19 protocols all bids will be submitted electronically or by fax, email purchasing@ridgefieldct.org or fax 203-431-2723. If the bidder does not have access fax or email, the bid shall be hand delivered to the address listed in the legal notice.
2. Withdrawals of or amendments to bids received later than the time and date specified for bid opening will not be considered.
3. The Board of Selectman of the Town of Ridgefield reserves the right to accept or reject any or all options, bids or proposals; to waive any technicality in any bid or part thereof, and to accept any bid deemed to be in the best interest of the Town of Ridgefield, Connecticut.
4. Bids may be held by the Town of Ridgefield for a period not to exceed sixty (60) days from the opening of bids for the purpose of reviewing the bids and investigating the qualifications of bidders prior to the awarding of the contract.
5. Insurance requirements, if any, must be submitted with the bid. This includes any Hold Harmless requirements as well as Certificates of Insurance for the full amounts specified. **Unauthorized changes** to these forms, i.e. adding, striking out and/or changing any words, language or limits **will cause the bidder to be disqualified**.

Please Note: Certificates of Insurance, if required, MUST name the Town of Ridgefield as **Additional Insured**. Failure to do so will mean disqualification from the Bid. There will no exceptions.

6. **Permits:** It is the Contractor's responsibility to obtain any necessary permits prior to the start of construction. All work shall be completed in compliance with the latest edition of the prevailing fire prevention and building codes in effect in the State of Connecticut, the latest edition of the State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Town of

Ridgefield Road Construction Standards, or as set forth in these specifications.

7. **Emergency Work:** The Contractor shall file with the Engineer a telephone number of a person authorized by him who may be contacted regarding emergency work at the job site that may be required during non-working hours for reasons of public safety. The person shall be readily available and have full authority to deal with any emergency that may occur.
8. **Sales Tax:** In accordance with the provisions of Special Act No. 77-98, as amended, and Section 12-412(a) of the Connecticut General Statutes, sales of tangible personal property and services to the Town are not subject to the Connecticut Sales and Use Tax, and such tax shall not be included as part of the bid.
9. **Contractor's Qualification Statement:** The Contractor's Qualification Statement must be filled out as part of the bid package and the experience and references listed therein will be one of the determining factors in the awarding of the bid.
10. **Hold Harmless Agreement:** In order for the bid to be considered valid, the Contractor **must** sign the enclosed hold harmless agreement. Bids submitted without the signed hold harmless agreement will be rejected.
11. **Prevailing Wage Rates:** This project **IS NOT** subject to the State of Connecticut's prevailing wage rates. This project is anticipated to cost less than the thresholds of the State of Connecticut's prevailing wage rates requirements.
12. **SBE/MBE and Contract Compliance Requirements:** This project **is not** subject to the State of Connecticut SBE/MBE set aside and contract compliance requirements.
13. **Time of Completion:** All work must be completed within **90 days** from receipt of the notice to proceed. Please note; the working hours for this project as follows; Monday thru Friday with a 4:30 PM start time (building ready to open by 8:00 AM next working day) and Saturday & Sunday 7:00 AM to 5 PM.
14. **Bonds:** A Payment and Performance bond are not required.
15. **Bid Bond:** A Bid Bond is not required.

16. **Site Visits:** A site visit can be requested by the bidding Contractor; please contact Brian Hubbard at (203) 994-0347 and send an email acknowledging the visit to: bldgmaint@ridgefieldct.org.
17. **Project Locations:** The project is located at Ridgefield Town Hall, 400 Main Street, Ridgefield, Connecticut.
18. **Bid Submissions:** The following items shall be submitted for a bid to be considered complete:
 - (a) Executed proposal sheets, P-1 to P-4
 - (b) Executed Hold Harmless Agreement
 - (c) Certificates of Insurance in conformance to Item 5 above
 - (d) Executed Anti-Fracking Waste Ordinance Acknowledgement Form
 - (e) Contractor's List of Subcontractor's (if none, state none)
 - (f) Contractor's Qualification Statement
 - (g) Valid E-1 Connecticut Electrical Contractor's License (copy)

Town of Ridgefield
Office of the Facilities Director

Bid 22-06
Energy Conservation and Building Maintenance
Town Hall LED Lighting Project
January 2022

Project Description

In general, the work to be performed shall include removing and replacing all interior lighting within the Town of Ridgefield's Town Hall as noted within Appendix A. It is the Contractor's responsibility to provide any additional labor, materials, tools, or equipment necessary to provide a fully functional lighting systems for the Town Hall. The work is further described as follows:

1. Furnish all labor, tools, materials, and equipment as required to complete all work as required herein.
2. Remove and dispose of all lighting related materials noted within this bid document as being replaced. All materials shall be disposed of in a legal manner consistent with all laws of the State of Connecticut and the United States. The Contractor shall provide a signed and notarized statement indicating that all materials from this project have been legally disposed of.
3. Clean all new lighting surfaces after replacement and testing. Caution shall be exercised while removing all materials so as to not contaminate the underlying surfaces. The contractor shall employ any and all methods necessary to prevent contamination of any underlying surfaces and shall immediately clean any and all contamination as soon as it occurs.
4. Materials: The Contractor is to replace the existing lighting fixture with the proposed materials in Appendix A. All materials used shall be energy star rated and UL approved. Prior to installation, the Contractor shall submit for approval four sets of shop drawings of all materials intended to be installed.
5. Substitutions of brand names listed may be made on an "or-equal" basis. Complete specifications of substituted materials must be submitted at the time of the bid. The Town of Ridgefield retains the right to reject any substituted materials.
6. Warranties: The Contractor shall guarantee at a minimum the following warranties:
 - a. Workmanship: One (1) year

b. LED light fixtures: Five (5) years

7. The Contractor shall install all lamps, lights, fixtures, ballasts, and sensors as described within Appendix A. He shall supply all labor, materials, tools, and equipment necessary to complete the installation and to provide a fully functional lighting system in a workmanlike manner. All work shall be done in compliance with all applicable building codes and manufacturer's specifications.
8. The contractor shall complete all work and forms necessary at the beginning of the project and upon completion of the project for the Town of Ridgefield to obtain Connecticut Light and Power's incentives under the Energy Opportunities program. All eligible incentives will be paid directly to the Town of Ridgefield from Connecticut Light and Power and are not subject to this bid. The Contractor will cooperate with the utility in obtaining the incentives on behalf of the Town of Ridgefield.
9. The Contractor will provide supporting documentation (number of fixtures installed) of all work completed on a room by room basis.
10. Upon completion of the project, all work areas are to be returned to their original conditions.
11. The Contractor must specify the required lead time necessary to begin work.
12. The working hours for this project will be Monday thru Friday at 4:30 PM with the shift ending to include clean up by 8:00 AM the next morning, Saturday and Sundays are available 7:00 AM to 5:00 PM. All schedules shall be approved by the owner.

The Contractor shall obtain all necessary permits and pay all associated fees.

The Contractor is responsible to familiarize himself with all aspects of the project's existing conditions prior to submitting a bid. The facilities shall be open for inspection on June 22, 2011 during normal business hours. Appointments to view the Town Hall may be made by contacting Brian Hubbard, Building Maintainer, at 203-994-0347. Questions shall be directed to Brian Hubbard, Building Maintainer, at 203-994-0347 during normal business hours.

It is the Contractor's responsibility to determine the exact amount of effort required to meet the project's intent and reflect that effort in his submitted lump sum bid for each building. By submitting a bid, the Contractor acknowledges that he has visited the site and is aware of the conditions involved in meeting the project's intent.

The Contractor shall submit on the attached forms the total cost per fixture for completing the above-described installation and any other costs as noted on the forms

necessary to provide for a complete project. The project will be awarded based on the lowest reasonable cost for the combined lump sum cost of all buildings. The Contractor shall include with his bid all attached forms completely filled out and a copy of his valid E-1 Connecticut Electrical Contractor's License.

APPENDIX - INSURANCE REQUIREMENTS

Each bidder shall carry and maintain the following insurance coverage during the period of the contract : The Certificate of Insurance for the Limits of Liability stated below should be submitted with your bid to the Purchasing Department at Town Hall. **Bidders may not perform any work until all insurance requirements are met.**

1. **Comprehensive General Liability Insurance** as will protect him, the Town, and any subcontractor performing work covered by this Contract, from claims for damages for personal injury, including accidental or wrongful death, as well as claims for property damages, which may arise from operations under this Contract whether such operations be by himself or by any subcontractor or by anyone directly or indirectly employed by either of them. Liability insurance shall include premises and operations, products, contractual, owners, and contractors protective. The minimum amounts of such insurance shall be as follows:
 - Bodily Injury Liability and Property Damage Liability:
\$1,000,000 each occurrence.
 - **The Town shall be named as an Additional Insured**
This **MUST** be stated explicitly on the Certificate or you will be **disqualified**
2. **Worker's Compensation Insurance and Employer's Liability** for all of his employees, employed at the site and in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance for all employees of the later unless such employees are covered by the protection afforded by the Contractor.
 - Worker's Compensation and Employer Liability:
Statutory Limits
3. **Comprehensive Auto Liability Insurance:**
 - **Bodily Injury Insurance and Property Damage Insurance** covering the operation of all Motor Vehicles owned, hired and/or non-owned by the Contractor, or used by the Contractor in the Prosecution of the work under the Contract, shall be in the minimum of **\$1,000,000 each occurrence.**

All policies relating to this Contract shall be so written so that the Town shall be notified of cancellation or change at least thirty (30) days prior to the effective date for each policy and type of coverage except for nonpayment which shall be ten (10) days prior to the cancellation. Renewal certificate covering the renewal of all policies expiring during the life of the Contract shall be filed with the Town not less than ten (10) days before the expiration of such policies. Failure to do so will result in work stoppage and possible contract cancellation.

HOLD HARMLESS AGREEMENT

The undersigned covenants and agrees to and shall at all times indemnify, protect and save harmless the Town of Ridgefield from and against all costs or expenses resulting from any and all losses, damages, detriments, claims, demands, cost and charges including attorneys fees the Town of Ridgefield may directly or indirectly suffer, sustain or be subjected to by reason or on account of the work to be performed pursuant to this Contract or any activities in connection with said Contract whether such losses and damages be suffered or sustained by the Town of Ridgefield directly or by its employees, licenses or invitees or be suffered or sustained by other persons or corporations who may seek to hold the Town of Ridgefield liable therefore.

The Contractor shall comply with the Provisions of the Immigration Reform and Control Act of 1986 effective and enforceable as of June 6, 1987 which Act makes unlawful the hiring for employment or subcontracting individuals failing to provide documentation of legal eligibility to work in the United States. The Contractor shall hold the Town of Ridgefield harmless for the failure of the Contractor to comply with the provisions of said Act.

IN WITNESS WHEREOF, the parties hereto have set their hand and seal this on the _____ day of _____

Signed, Seated and Delivered in the
Presence of:

Signed:

Notary Public

FRACKING WASTE ORDINANCE NOTICE

On January 9, 2019, The Town of Ridgefield approved and adopted an Ordinance prohibiting the storage, disposal or use of fracking waste on Town of Ridgefield land and/or projects. The complete Ordinance can be viewed at the Town Clerk's Office located at 400 Main Street, Ridgefield, CT or on the town website at the following link;

<https://ecode360.com/RI2176/laws/LF1067113.pdf#search=fracking>

Bidders shall follow this Ordinance in preparation and submission of their bid.

- 1.) No materials containing natural gas or oil waste shall be utilized in providing and retaining services to construct or maintain publicly owned and/or maintained road or real property with the Town of Ridgefield.
- 2.) No materials containing natural gas or oil waste shall be utilized in the purchase or acquisition of materials to construct or maintain publicly owned and/or maintained road or real property with the Town of Ridgefield.
- 3.) We _____ hereby submit a bid for materials, equipment and/or labor for the Town of Ridgefield. The bid is for bid documents titled _____. We hereby certify under penalty of perjury that no natural gas waste or oil waste will be used by the undersigned bidder or any contractor, sub-contractor, agent or vendor agent in connection with the bid; nor will the undersigned bidder or any sub-contractor, agent or vendor agent thereof apply any natural gas waste or oil waste to any road or real property within the Town of Ridgefield as a result of the submittal of this bid if selected.

4.) The successful bidder shall submit certificates of origin for project materials, fill and other.

Signed and sealed in
the presence of:

Contractor

By_____

Date_____

IN WITNESS WHEREOF, the parties hereto have set their hand and seal this
day on the_____ day of_____

Signed, Seated and Delivered in the
Presence of:

Signed:

Notary Public

References

List below references for similar projects, including all information requested. This page must be completed and submitted with the bid.

1. Client: _____

Project Address: _____

Approximate Value: _____ Date: Started _____ Completed _____

Contact: Name _____ Telephone _____

2. Client: _____

Project Address: _____

Approximate Value: _____ Date: Started _____ Completed _____

Contact: Name _____ Telephone _____

3. Client: _____

Project Address: _____

Approximate Value: _____ Date: Started _____ Completed _____

Contact: Name _____ Telephone _____

4. Client: _____

Project Address: _____

Approximate Value: _____ Date: Started _____ Completed _____

Contact: Name _____ Telephone _____

Company: _____

Bid Title: _____

Street: _____

Bid No.: _____

City, State: _____

Telephone No.: _____

CONTRACTOR'S LIST OF SUBCONTRACTORS

List below the subcontractors intended to be utilized for this project. This page must be completed and submitted with the bid.

1. Firm: _____

Firm's Address: _____

Contact: Name _____ Telephone _____

Type of Work to be Performed: _____

2. Firm: _____

Firm's Address: _____

Contact: Name _____ Telephone _____

Type of Work to be Performed: _____

3. Firm: _____

Firm's Address: _____

Contact: Name _____ Telephone _____

Type of Work to be Performed: _____

4. Firm: _____

Firm's Address: _____

Contact: Name _____ Telephone _____

Type of Work to be Performed: _____

Company: _____

Bid Title: _____

Street: _____

Bid No.: _____

City, State: _____

Telephone No.: _____

Information for Bidders and General Contract Provisions

1. PREPARATION OF PROPOSALS

Proposals must be made upon forms contained herein or as directed elsewhere. The blank spaces in the Proposal must be filled in correctly where indicated. The Bidder must state the prices for which he proposes to do each item of the work contemplated. In case of discrepancy where both words and the numerals are requested, the words shall govern. Ditto marks are not considered writing or printing and shall not be used. The Bidder shall sign his Proposal correctly. If the Proposal is made by an individual, his name, post office addresses and telephone number must be shown. If made by a firm, partnership, or corporation, the Proposal must be signed by an official of the firm, partnership, or corporation authorized to sign contracts, and must show the post office address and telephone number of the firm, partnership, or corporation. Failure to do so may disqualify the bid.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the Bidder, post office address, bid number, and name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to: The Purchasing Agent, Town Hall, and 400 Main Street, Ridgefield, CT 06877.

All information shall be entered in ink or by typewriter. Mistakes may be crossed out and corrections inserted before submission of your bid. The person signing the bid shall initial corrections in ink.

Corrections and/or modifications received after the closing time specified will not be accepted.

2. SUBMISSION OF PROPOSALS

Descriptive literature containing complete specifications must accompany each bid. If a bidder wishes to furnish additional information, more sheets may be added.

3. INCURRING COSTS

The Town of Ridgefield is not liable for any cost incurred for the preparation of proposals or submission of samples by the firms submitting proposals for the work requested in this bid document or request for proposals.

4. FAMILIARITY WITH THE WORK

Each bidder is considered to have examined the work to fully acquaint him with the exact existing conditions relating to the work and has fully informed himself as to the work involved and the difficulties and restrictions attending the performance of this bid. The submission of a bid will be considered as conclusive evidence that the bidder has made such examination.

5. CONSIDERATION OF PRIOR SERVICE

Previous performance, quality of service and merchandise will be considered.

6. ADDENDA AND INTERPRETATIONS & ALTERNATE PROPOSALS

At the time of the opening of bids each bidder will be presumed to have inspected the work and to have read and to be thoroughly familiar with all of the Contract Documents (including all addenda). The failure or omission of any bidder to receive or examine any form, instruction or document shall in no way relieve any bidder from any obligation in respect to his bid.

If any person contemplating submitting a proposal is in doubt as to the true meaning of any part of these specifications, he may submit a written request for an interpretation to the Purchasing Agent. No interpretations as to the meaning of the plans, specifications or other Contract Documents will be made to any bidder orally. Every request for such interpretation should be in writing addressed to the Town of Ridgefield, Purchasing Agent, 400 Main Street, Ridgefield, Connecticut 06877, and to be given consideration, must be received at least five (5) days prior to the date fixed for the opening of Bids. Any and all such interpretations and any supplementary instructions will be in the form of written Addenda to the Specifications which, if issued, will be mailed by Registered Mail with Return Receipt Requested to all prospective bidders at the respective addresses furnished for such purposes, not later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such Addendum or interpretations shall not relieve any bidder from any obligations under his bid as submitted. All Addenda so issued shall become part of the Contract Documents. Oral explanations will not be binding on the Town.

The specifications listed are to be interpreted as meaning the minimum acceptable by the Town of Ridgefield. Bidders are requested to submit quotations on the basis of these specifications. Alternative bids providing a broader scope and/or services than requested in these specifications may receive consideration providing such equipment and/or service is clearly explained. Any exceptions to the specifications requested herein must be clearly noted in writing and are to be included as a part of your bid proposal. If none are included it will be assumed that there are none.

Definition of the word "complete" means that each unit of the equipment proposed shall include all appurtenances, fasteners, parts, accessories, and services ordinarily catalogued.

An item equal to that named or described in the specifications may be furnished by the Bidder, except where expressly noted as "no substitutions." The naming of any commercial name, trademark, or other identification shall not be construed to exclude any item of any manufacturer not mentioned by name, nor limit competition, but shall

establish a standard of equality only. An item shall be considered equal to the item so named or described if:

- a. It is at least equal in quality, durability, appearance, strength and design.
- b. It will perform at least equally the function imposed by the design for the work being contracted for or the material being purchased.
- c. It conforms substantially, even with deviations, to the detailed requirements for the item in the specifications.

The Bidder shall hold the Town of Ridgefield, its officers, agents, servants, and employees, harmless from liability of any nature or kind because of use of any copyrighted or uncopyrighted compositions, secret process, patented or unpatented inventions, articles or appliances furnished or used under this bid, and agrees to defend, at his own expense, any and all actions brought against the Town of Ridgefield or himself because of the unauthorized use of such articles.

7. QUOTATION LIMITATION

Bidders shall offer only **ONE ITEM AND PRICE** for each line item bid. If an or-equal item is to be bid, the bidder is to select the brand and model that meets or exceeds the specified item, and submit his bid for that item.

8. ESTIMATE OF WORK

For bidding purposes, the work has been subdivided into unit price items. The quantities shown are to be considered as approximate only. The Purchasing Agent does not expressly or by implication agree that the actual quantity will correspond therewith, but reserves the right to increase or decrease the amount of any item or portion of the work as deemed necessary.

9. SAMPLES

Samples of articles, when required shall be furnished free of cost of any sort to the Town of Ridgefield. Samples received may be retained by the Town for future comparison. Samples which are not destroyed by testing, or which are not retained for future comparison will be returned upon request at the bidder's expense.

10. WITHDRAWAL OF BID

Bidders may withdraw their proposals at any time prior to the bid date. No agent/broker shall withdraw or cancel their proposal for a period of sixty (60) days after the bid closing date. The successful agent/broker shall not withdraw, cancel or modify their proposal.

11. POWER OF ATTORNEY

Attorneys-in-fact who sign contract bonds must file, with each bond, a certified and

effectively dated copy of their power of attorney.

12. SUBCONTRACTORS

Each bidder contemplating the use of any subcontractor shall submit a list of subcontractors as listed on the Bid Form. The apparent low bidder shall file with the Town of Ridgefield, within five (5) days after the date of bid opening, a complete list of the names and addresses of competent, responsible and qualified subcontractors who are actually to perform major portions of the work. This in no way restricts or limits the requirement that all subcontractors must be approved by the Town. Subcontractors listed on the Bid Form or those previously approved may not be changed without the approval of the Town of Ridgefield. Local subcontractors, material suppliers, and labor in the Town of Ridgefield should be considered and sought insofar, as is practical in the performance of this project.

13. QUALIFICATION OF BIDDER

In determining the qualifications of a bidder, the Town may consider his record in the performance of any contracts for similar work into which he may have previously entered; and the Town expressly reserves the right to reject the bid of such bidder if such record discloses that such bidder, in the opinion of the Town, has not properly performed such contracts or has habitually, and without just cause, neglected the payment of bills or has otherwise disregarded his obligations to subcontractors, suppliers, state or local codes, men or employees of subcontractors. The Town may make such investigation as he deems necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to the Town all such information and data for this purpose as the Town may request. The Town reserves the right to reject any bid if the evidence submitted by or the investigation of such bidder fails to satisfy the Town that such bidder is properly qualified, or that such bidder misrepresented material facts in the bid documents.

14. DISQUALIFICATION OF BIDDERS

More than one proposal from an individual, firm, partnership, corporation, or an association under the same or different names will not be considered. Reasonable grounds for believing that any Bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such Bidder is interested. Any or all proposals in which such Bidder is interested will be rejected if there is reason for believing that collusion exists among the Bidders and all participants in such collusion will not be considered in future proposals for the same work. Proposals in which the prices are obviously unbalanced may be rejected. No Contract will be awarded except to competent Bidders capable of performing the class of work contemplated.

15. DELIVERY

Inasmuch as this work concerns a needed public improvement, the provisions of this bid

relating to the time of delivery, performance and completion of the work are of the essence of this bid. Accordingly, the successful bidder shall commence work **upon receipt of the signed Purchase Order** unless the Town shall authorize or direct a further delay. Time of delivery shall be stated as the number of calendar days following receipt of the Purchase Order by the Bidder to receipt of the goods or services by the Town of Ridgefield. Prices quoted must include delivery to the Town of Ridgefield as specified on the Purchase Order. No charges will be allowed for parking, crating, freight, express or cartage unless specifically stated and included in this bid.

Time of delivery may be considered in the award.

16. PAYMENT

The Town, after inspection and acceptance of workmanship, and in consideration of the faithful performance by the Bidder of all and singular his covenants, promises, and agreements contained herein, agrees to pay the Bidder for the full completion by him of the work embraced in this Contract, within (30) Thirty Days of the receipt of the final invoice. When subcontractors or suppliers are utilized, the successful Bidder for this project shall be required to submit a Mechanics Lien Waiver, acceptable to the Town, with each progress payment and/or at time of final payment prior to any payment being made.

Time, in connection with any discount offered, will be computed from the date of delivery to the Town or from the date a correct invoice is received by the Town's Finance Department, if the latter date is later than the date of delivery. Prices will be considered as **NET**, if no cash or payment discount is shown.

The successful bidder shall submit invoices to the following address:

Town of Ridgefield
Office of the Town Engineer
66 Prospect Street
Ridgefield, CT 06877

IT IS UNDERSTOOD AND AGREED THAT SHOULD A BID BE ACCEPTED, IT WILL AUTOMATICALLY BECOME THE CONTRACT OR AN ADDENDUM TO ANY CONTRACT AGREED UPON.

Notification of the bid award will be made by issuance of a purchase order. Bidders are to list their bids on the appropriate attached sheets. Bidders may attach a letter of explanation. A clear notification should be made on the standard bid sheets at the appropriate point of explanation that there is a letter of explanation attached. All bids must be NET prices.

The successful bidder shall submit an itemized invoice to the Town of Ridgefield for the work as described herein.

The bidder shall be required to submit a Mechanics Lien Waiver, acceptable to the Town of Ridgefield, with each progress payment and at time of final payment prior to any payment being made.

At the time of award the successful bidder shall be required to supply the Town of Ridgefield a Certificate of Good Standing, certifying that the corporation is in fact a valid corporation and presently licensed to conduct business in the State of Connecticut.

17. SALES TAX

Certain materials and supplies incorporated in the work of this project are exempt from Connecticut Sales Tax. The Bidder shall familiarize himself with current regulations of the State Tax Department. The tax on materials or supplies exempted by such regulations shall not be included as part of the bid. The Town will furnish the successful Bidder sales tax exemption authorization.

18. CARE AND PROTECTION OF PROPERTY

The Bidder shall take particular care to avoid damages to all private and public property and to private or public improvements within the Town's right of way. He shall make good any damages to the satisfaction of the Town. There shall be no additional compensation for the repair or restoration of private or public property improvements.

19. COMPLIANCE WITH FEDERAL, STATE AND LOCAL CODES

The Bidder shall be responsible for full compliance with any Federal, State and/or Local codes, laws, regulations and standards, as applicable.

20. AWARD

The Town of Ridgefield reserves the right to accept or reject any bid to best serve its interests, or to hold the bids for sixty (60) days before decision.

The Town reserves the right to reject any and all bids (or any part thereof), to waive defects in proposals, or to accept any proposal deemed to be in its best interest.

Exceptions will be considered to the specification provided, providing they are listed and fully explained on a separate page entitled "EXCEPTIONS TO SPECIFICATIONS"

Each exception will be considered as to its degree of impact and total effect on the bid. The purchaser shall determine which (if any taken) exceptions are acceptable, and this determination shall be final.

The Town of Ridgefield reserves the right:

- a. To award bids received on the basis of individual items, or groups of items, or on the entire list of items.
- b. To reject any or all bids, or any part thereof.
- c. To waive any informality in the bids.
- d. To accept the bid that is in the best interest of the Town of Ridgefield. The Purchasing Agent's decision shall be final.

21. INSURANCE

Insurance requirements are detailed under the attached “Appendix - Insurance Requirements.”

22. GUARANTEE

The bidder shall unconditionally guarantee for a period of one (1) year, except as specifically noted within these documents, from the date of acceptance, all materials, supplies, equipment, and services; including but not limited to its workmanship, delivery and installation. If within the guarantee period there are any defects or signs of deterioration the bidder shall repair, adjust or replace the item(s) to the complete satisfaction of the Town. These repairs, adjustments, or replacements are at the sole expense of the bidder and shall be made at such times that are agreeable to the Purchasing Agent so that it is least detrimental to instructional programs.

23. PERMITS

When required all licenses and permits for complying with any applicable Federal, State, and Municipal laws, codes, regulations in connection with the prosecution of the work shall be obtained by the Bidder, at no additional cost to the Town.

24. NONDISCRIMINATION IN EMPLOYMENT

The successful bidder shall agree and warrant that, in the performance of this contract, he will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, sex, religion, or national origin in any manner prohibited by State, Federal, County, or Municipal law. A certification of Non-segregated Facilities and a Certification Regarding Equal Employment Opportunity shall be considered a part of this contract.

25. MECHANICS LIEN WAIVERS

The successful Bidder shall be required to submit a Mechanics Lien Waiver, acceptable to the Town of Ridgefield, with each progress payment, and/or at time of final payment, prior to any payment made.

PROPOSAL

Proposal of: _____
to furnish and deliver all materials and to do and perform all works in accordance with the Contract Documents for **Town Hall LED Lighting Replacements**, the plans and specifications prepared by Jacob Muller, Director of Facilities, the works being situated within the Town of Ridgefield, Connecticut.

The undersigned bidder has carefully examined the Contract Documents referred to in the "Information for Bidders", and also the site of the work, and will provide all necessary labor, machinery, tools, apparatus, and other means of construction, and do all the work and furnish all material called for by the Contract Documents in the manner prescribed therein and in said Contract, and in accordance with the requirements of the Engineer under them for the following sums:

Estimated Quantities

<u>Item</u>	<u>Estimated Quantity</u>	<u>Computed Total</u>
<u>Item 1A: 2'x2' Ceiling Mounted Fixtures (with trim kits)</u> the unit price of:		
_____dollars		
and _____cents		
(\$_____) per EA	8 EA	\$_____
<u>Item 1B: 2'x2' Drop-in Fixtures</u> the unit price of:		
_____dollars		
and _____cents		
(\$_____) per EA	8 EA	\$_____
<u>Item 1C: 1'x4' Ceiling Mounted Fixtures (with trim kits)</u> the unit price of:		
_____dollars		
and _____cents		
(\$_____) per EA	108 EA	\$_____
<u>Item 1D: 2'x4' Ceiling Mounted Fixtures (with trim kits)</u> the unit price of:		
_____dollars		
and _____cents		
(\$_____) per EA	8 EA	\$_____

Item 1F: 2'x4' Drop-in Fixtures

the unit price of:

_____ dollars

and _____ cents

(\$ _____) per EA 92 EA \$ _____

Item 2: Ceiling Tile Replacement

the unit price of:

_____ dollars

and _____ cents

(\$ _____) per EA 25 EA \$ _____

Grand Total, Items 1A through Item 2, Inclusive

\$ _____

For purposes of comparison, the computed Grand Total, All Items will serve as the basis of comparison of all bids. The computed total is not an official part of this proposal.

The Town reserves the right to eliminate any item or portion of the work that it deems to be in the best interest of the Town.

All costs of excavation of unsuitable material as shown on the plans or specified in the field are to be carried under each specific item.

Any inconsistencies between the plans and specifications shall be reported to the Town Engineer. The Town Engineer shall make the final decision on any inconsistencies and their intent.

This is a unit price bid. As noted within these specifications, the Town of Ridgefield does not guarantee the estimated quantities shown for each item within the proposal. By submitting a bid, the bidder acknowledges that the project's final quantities may vary from the estimated quantities shown on the proposal sheets and that final payment will be made based on the project's final measured quantities, not the estimated quantities.

The Undersigned Also Agrees as Follows:

First: To do any extra work not covered by the above schedule of prices, which may be ordered by the Engineer and to accept as full compensation therefor such prices as may be agreed upon in writing by the Engineer and the Contractor in accordance with Article 5, "General Conditions".

Second: Within **seven (7)** days from the date of the "Notice to Proceed", to execute the Contract and to furnish to the Owner a satisfactory performance and payment bond in the sum of the full amount of the contract.

Dated: _____

Signature of Bidder: _____

By: _____

Title: _____

Business Address: _____

Town of Ridgefield
Office of the Facilities Director
Energy Conservation & Building Maintenance
Town Hall LED Lighting Replacement

Appendix A

LED Light Specifications

Day-Brite

CFI

by Signify

Recessed

EvoGrid 2x4

2EVG up to 7400 lumens



Day-Brite / CFI EvoGrid recessed utilizes highly reliable and efficient Philips LED platform boards and dimmable driver enabling market leading performance in its category. Its soft opal diffuser with large luminous area minimizes apparent brightness compared to other basket luminaires and provides general lighting perfect for a wide variety of applications.

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

Ordering guide

example: 2EVG38L840-4-D-UNV-DIM

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G			—	4	—	—	—	
2 2'	EV EvoGrid	5 Grid	blank Static H Air Return	Standard efficacy 38L 3800 43L 4300 48L 4800 54L 5400 74L 7400 High efficacy 38LH 3800 43LH 4300 48LH 4800 54LH 5400 74LH 7400	830 ¹ 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 ¹ 80 CRI, 5000K	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	UNV Universal Voltage, 120-277 volt 120 ² 120V 277 ² 277V 347 347V	DIM ^{3,8} Dimming SDIM ⁴ Step dimming to 40% input power XDIM ² MarkX phase dimming LDE Lutron LDE5, 5% dimming DALI DALI	AG Antimicrobial finish F1 3/8" flex, 3 wire 18 gauge 6' F2 3/8" flex, 4 wire 18 gauge 6' F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/5W 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires F2/6W 3/8" single flex, 6 wire 18 gauge 6' for dimmable and emergency luminaires GLR Fusing, fast blow GTD/E ⁹ UL924 listed Bodine GTD factory installed on driver input GTD/SNSR ¹⁰ UL924 listed Bodine GTD installed between driver & sensor EMLED Integral emergency battery pack, 1100lm nominal (ballast enclosure on top of luminaire) DSC Quick driver disconnect IAP ⁵ Integral Interact Pro RF sensor, enables wireless connect lighting control IAO ⁶ Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control SWZG2 ^{6,7} Integral sensor, daylighting and occupancy, advanced grouping with dwell time and zoning SWZDT ⁶ Integral sensor, daylighting and occupancy, advanced grouping with dwell time CHIC Chicago Plenum rated CRM ⁸ Continuous row mount TAP Top access plate

- 3000K and 5000K color temperatures available only on high efficacy configurations
- XDIM requires 120V or 277V specification.
- Integral controls options dimmable to 5% via wireless all switch. See page 2.
- Consult factory for SDIM on 74L and 74LH packages.
- Specify only with -DIM driver option

- Must order SWZ-REMOTE SpaceWise handheld remote with each system order.
- CRM includes side cover with top access plate and additional end cover. 7/8" gap between fixtures.
- Non-controls and SWZG2 configurations are 0-10v dimmable to 1%
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral controls option. Not available with SWZG2 controls option.

SpaceWise accessories (order separately)

- SWZ-REMOTE** – SpaceWise handheld remote for grouping and configuration (at least one remote required for any SpaceWise installation)
- UID8451/10** – Wireless Dimmer Switch Selector
- UID8461/10** – Wireless Scene Selector

Other accessories (order separately)

- FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting
- EVD4L** – EvoGrid 2'x4' rectangular ribbed replacement lens
- EVDS4L** – EvoGrid 2'x4' rectangular smooth replacement lens
- EVR4L** – EvoGrid 2'x4' round ribbed replacement lens
- EVR54L** – EvoGrid 2'x4' round smooth replacement lens
- FSK24** – 2'x4' surface mount field installation kit (factory welded seams), order with -TAP (top access plate) option (SWZG2 and EMLED option not available)
- FSF24** – 2'x4' surface mount field assembly kit, order with -TAP (top access plate) option (SWZG2 and EMLED option not available)



interact
ready.

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Ordering guide – PoE controls (Static & Tunable White)

example: 2EVG43L8TW-4-D-LV-POE-IAO

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G			—	4 —	—	LV —	POE —	
2 2'	EV EvoGrid	G Grid	Blank Static H Air return	38L 3800 43L 4300 48L 4800	Static White 830 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K Color Tuning 8TW 80CRI, 2700K thru 6500K tunable white	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	LV Low voltage	POE Power over ethernet	AG Antimicrobial finish EMPOE ¹ 600lm integral emergency driver and battery pack IAO Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control

1 Indicator light and test switch located on housing side panel.

Ordering guide – DALI Controls (Tunable White)

example: 2EVG43L8TW-4-D-UNV-DTW-IAO

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G			—	4 —	—	UNV —	DTW —	
2 2'	EV EvoGrid	G Grid	Blank Static H Air return	39L 3900 43L 4300 49L 4900 56L 5600 65L 6500	8TW 80CRI, 2700K thru 6500K tunable white	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	UNV Universal Voltage, 120-277 volt	DTW Dual channel tunable white	AG Antimicrobial finish F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/7W 3/8" single flex, 7 wire 18 gauge 6' for emergency Factory wired Bodine BSL310 integral emergency pack. Nominal 1100lm EMLED Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control IAO Fusing, fast blow GLR Quick driver disconnect DSC

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Application

- A highly efficient, visually comfortable, architecturally styled recessed LED luminaire designed with a minimalist strategy to achieve sustainable objectives.
- Low profile configuration is only 2-3/4" deep, requiring minimal plenum space.
- Soft opal diffuser with large luminous area minimizes apparent brightness and provides high visual comfort perfect for a wide variety of general lighting applications like offices, schools, retail, or healthcare.
- Multiple lumen packages over a wide range to provide significant application flexibility over light levels and/or luminaire spacing.
- Directs a controlled amount of light to the higher angles in the room to balance the brightness of the surfaces and eliminate "cave effect" while creating the impression of a larger, brighter space without glare.
- Excellent color rendering with a CRI of 80.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source. Integral or external sensors are available for use.
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-bars. Drywall or plaster requirements can be accommodated by using an FMA24 "F" mounting frame (sold separately.)
- Continuous row mount option (CRM) includes wireway covers on each end and on one side of housing.

Construction/Finish

- Uncomplicated design is 2-3/4" in depth and only requires a few parts outside of the electrical system and hardware, creating several benefits:
 - Less material required
 - Less packaging required
 - Reduced weight
 - Less energy required for construction and assembly
 - More luminaires can be shipped per truck to reduce fuel use and emissions

- Luminaire finish is matte white polyester for a high quality, durable finish.
- T-bar grid clips are integral to body.
- Access plate located on end provides easy field wiring. TAP option provides top mounted access plate.

Electrical

- Integral sensor options for occupancy sensing and/or daylight harvesting are available for additional energy savings with no reduction of life or increase in installation labor.
- Total luminaire efficacy exceeding 139 LPW (lumens per Watt) with high efficiency packages.
- LED board is easily accessible from below without tools. Single LED board is replaceable if needed via plug-in connectors to ensure long service life.
- LED driver is accessible from above.
- Emergency driver is accessible from above. To estimate lumen output in emergency mode, multiply emergency pack wattage by efficacy, then by 1.10. Typical lumen output is 1300lm for EMLED.
- The GTD/E option is used to bypass wall switches and allow luminaire operation on auxiliary power. Generator transfer requires installation in conjunction with a UL1008 listed device.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Step dim 100/40% and additional dimming options available.
- 5 year manufacturer's limited warranty. Visit signify.com/warranties for complete warranty information.
- TM-21 predicted L70 lumen maintenance up to 80,000 hours for high efficacy and 50,000 hours for standard efficacy configurations.
- cETLus listed to UL and CSA standards, suitable for damp locations.
- EvoGrid luminaires are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers, www.designlights.org/QPL.

Enclosure

- Opal diffuser provides soft, comfortable lighting while maintaining high efficiency.
- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

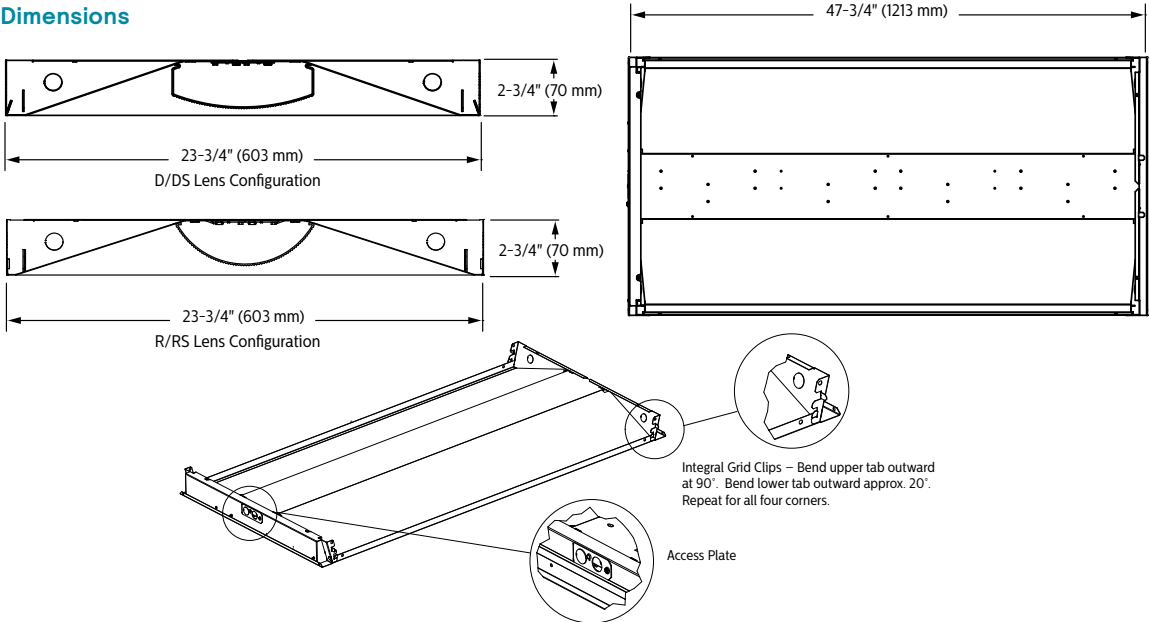
General Notes

- All options factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4	2EVG38L840-4-D	37	110
	2EVG43L840-4-D	41	108
	2EVG48L840-4-D	48	105
	2EVG54L840-4-D	55	103
	2EVG74L840-4-D	83	93
	2EVG38L840-4-R	31	124
	2EVG43L840-4-R	35	124
	2EVG48L840-4-R	40	122
	2EVG54L840-4-R	46	120
	2EVG74L840-4-R	67	111
2x4 High Efficacy	2EVG38LH840-4-D	27	139
	2EVG43LH840-4-D	32	139
	2EVG48LH840-4-D	36	138
	2EVG54LH840-4-D	39	137
	2EVG74LH840-4-D	56	134
	2EVG38LH840-4-R	26	142
	2EVG43LH840-4-R	30	142
	2EVG48LH840-4-R	34	143
	2EVG54LH840-4-R	39	143
	2EVG74LH840-4-R	53	140

Dimensions



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Wireless Controls Options

SpaceWise DT (SWZDT)

- Standalone daylight and occupancy sensing with advanced grouping and dwell time
- Commissioning via compatible Android phone and Philips Field App
- Dimming via compatible Zigbee wireless wall switch only (see link below for details)
- Register for the commissioning app at <http://registration.componentcloud.philips.com/appregistration/>
- Integral sensing options may not be combined
- For more information including recommended switches, refer to the following: –
SWZDT – www.usa.lighting.philips.com/systems/lighting-systems/spacewise

SpaceWise (SWZG2)

- Commissioning via SWZ-REMOTE handheld remote, must order a minimum of one per installation
- Integral sensing options may not be combined
- 0-10V dimmable to 1%
- For more information on the sensor, please refer to www.lightingproducts.signify.com/documents/webdb2/DayBrite/pdf/SWZG2_sensor.pdf
- Visit www.usa.lighting.philips.com/systems/lighting-systems/spacewise for more information about SpaceWise Technology (SWZG2)

Interact Pro (IAP)

- Interact Pro brings the power of connected lighting to **small and medium businesses** without the complexity usually associated with connected lighting.
- Interact Pro includes an app, a portal and a broad portfolio of wireless Luminaires, lamps and retrofit kits all working on the same system.
- Commissioning via Interact Pro App (Android or iPhone)
- Prepare commissioning remotely via Interact Pro portal
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1)
- For more information on Interact Pro visit: www.interact-lighting.com/pro
- For more information on Interact Ready visit: www.philips.com/interact-ready

EvoGrid shown with integral sensor



SWZG2 sensor shown.

All other controls options have the sensor centrally located centered on one end flange.

Interact Office (IAO)

- A wireless IoT connected lighting solution for **large enterprises** that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Wired Controls Options

Interact Office Wired (PoE), Static White & Tunable White

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Human centric lighting through tunable white technology – Dynamic behaviors via scheduled lighting recipes mimicking daylight patterns or supporting biorhythms.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.
- Optional integral emergency controller and battery pack provides 600lm nominal output. Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (–4F to 86F) ambient, and 45–85% relative humidity.
- For more information on Interact Office Wired, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Tunable White with DALI

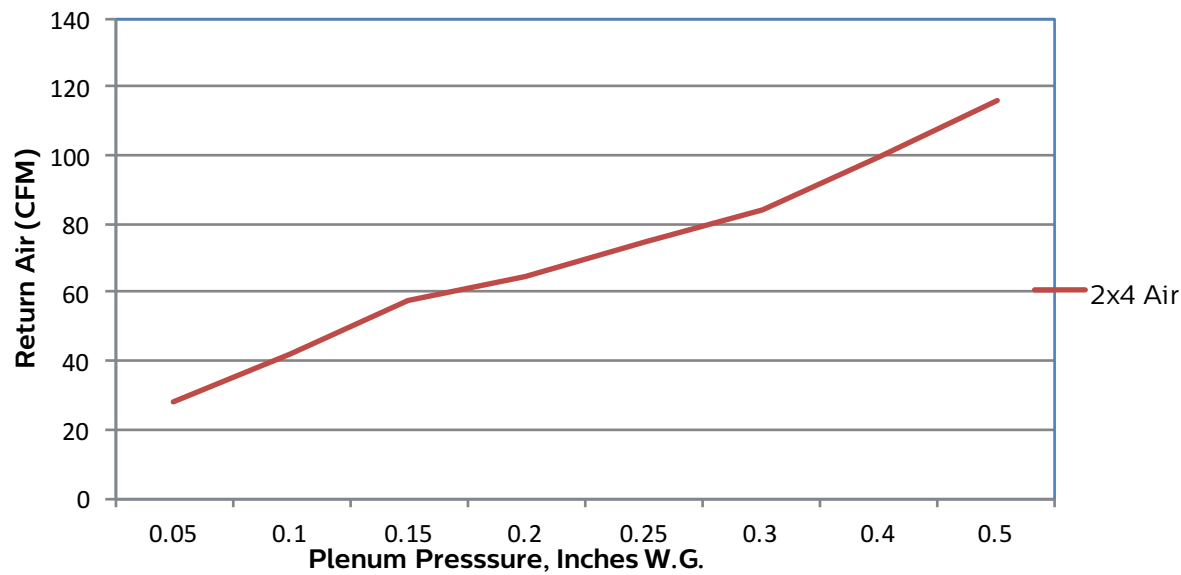
- Signify tunable white solutions are designed to help maximize the influence of lighting on your daily life.
- Dynamic behaviors via scheduled lighting recipes mimicking daylight patterns or supporting biorhythms.
- Scene setting via lighting pre-sets based on various combinations of lighting color temperature and intensity.

www.usa.lighting.philips.com/products/product-highlights/tunable-white-technology

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Air return data



Pressure	0.05	0.1	0.15	0.2	0.25	0.3	0.4	0.5
CFM	28	42	58	65	75	84	100	116
Noise	<15	24	34	37	41	45	47	49



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Photometry

2x4 EvoGrid recessed LED, high efficacy, 4800 nominal delivered lumens

LER – 138

Catalog No.	2EVG48LH840-4-D-UNV-DIM
Test No.	34935
S/MH	1.2
Lamp Type	LED
Lumens	4897
Input Watts	36

Comparative yearly lighting energy cost per 1000 lumens – **\$1.74** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1778	1778	1778	1778
5	1749	1771	1782	1771
15	1669	1701	1714	1701
25	1509	1545	1566	1545
35	1283	1333	1364	1333
45	1022	1087	1134	1087
55	751	838	913	838
65	494	613	704	613
75	264	393	465	393
85	74	114	119	114

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1358	27.7
0-40	2189	44.7
0-60	3775	77.1
0-90	4899	100.0
0-180	4899	100.0

Average Luminance

Zone	End	45°	Cross
45	7532	8012	8362
55	6828	7614	8295
65	6090	7566	8686
75	5319	7922	9360
85	4450	6795	7112

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	
1	108	103	98	106	101	96	96	93	
2	97	90	82	95	88	81	83	79	
3	90	79	69	86	77	68	73	68	
4	81	69	60	80	68	59	66	58	
5	75	61	53	72	60	53	58	52	
6	69	56	46	68	55	46	53	46	
7	65	51	41	63	50	41	48	40	
8	59	46	38	58	46	38	45	36	
9	56	42	34	55	41	34	40	34	
10	53	40	32	52	39	30	38	30	

2x4 EvoGrid recessed LED, 4800 nominal delivered lumens

LER – 105

Catalog No.	2EVG48L840-4-D-UNV-DIM
Test No.	34090
S/MH	1.2
Lamp Type	LED
Lumens	5015
Input Watts	48

Comparative yearly lighting energy cost per 1000 lumens – **\$1.29** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1830	1830	1830	1777
5	1813	1820	1825	1770
15	1725	1739	1746	1700
25	1554	1571	1582	1541
35	1317	1347	1365	1330
45	1048	1096	1132	1086
55	771	851	930	838
65	510	642	733	614
75	279	417	485	394
85	81	123	132	111

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1387	27.6
0-40	2228	44.4
0-60	3836	76.4
0-90	5019	100.0
0-180	5020	100.0

Average Luminance

Zone	End	45°	Cross
45	7725	8080	8349
55	7009	7732	8457
65	6290	7919	9045
75	5613	8389	9769
85	4870	7342	7903

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	
1	108	103	98	105	101	96	96	93	
2	97	90	82	94	88	81	83	79	
3	89	79	69	86	77	68	73	67	
4	81	69	60	79	68	59	66	57	
5	75	61	53	72	60	52	58	51	
6	69	56	46	68	55	46	53	46	
7	65	51	41	63	50	41	47	40	
8	59	46	38	58	46	38	44	36	
9	56	42	34	55	41	34	40	34	
10	53	39	32	51	39	30	38	30	

2EVG EvoGrid recessed 2x4

up to 7400 lumens

2x4 EvoGrid recessed LED, high efficacy, 4800 nominal delivered lumens

LER – 144

Catalog No.	2EVG48LH840-4-R-UNV-DIM
Test No.	38774
S/MH	1.3
Lamp Type	LED
Lumens	4927
Input Watts	34

Comparative yearly lighting energy cost per 1000 lumens – **\$1.67** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1666	1666	1666	1666
5	1634	1661	1671	1661
15	1560	1599	1619	1599
25	1420	1475	1513	1475
35	1227	1304	1363	1304
45	998	1101	1186	1101
55	752	886	998	886
65	468	674	780	674
75	238	408	502	408
85	54	132	128	132

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1286	26.1
0-40	2100	42.6
0-60	3736	75.8
0-90	4932	100.0
0-180	4932	100.0

Average Luminance

Zone	End	45°	Cross
45	7359	8120	8741
55	6833	8050	9071
65	5772	8313	9621
75	4800	8216	10115
85	3218	7919	7650

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	30
RCR									
0	118	118	118	115	115	115	111	111	111
1	108	103	97	105	101	95	95	95	93
2	97	89	81	94	86	81	83	78	78
3	89	78	68	85	76	68	72	67	67
4	81	68	59	79	68	58	65	57	57
5	75	60	52	72	59	52	57	50	50
6	68	55	46	67	54	46	52	45	45
7	64	50	40	61	48	40	47	40	40
8	58	46	36	57	45	36	44	35	35
9	56	41	34	54	40	33	40	33	33
10	52	39	30	51	38	29	36	29	29

2x4 EvoGrid recessed LED, 4800 nominal delivered lumens

LER – 122

Catalog No.	2EVG48L840-4-R-UNV-DIM
Test No.	38786
S/MH	1.3
Lamp Type	LED
Lumens	4903
Input Watts	40

Comparative yearly lighting energy cost per 1000 lumens – **\$1.97** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1658	1658	1658	1658
5	1623	1653	1664	1653
15	1550	1591	1612	1591
25	1411	1468	1506	1468
35	1219	1299	1357	1299
45	991	1097	1179	1097
55	747	882	992	882
65	465	673	775	673
75	236	405	480	405
85	54	127	126	127

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1280	26.1
0-40	2090	42.6
0-60	3719	75.8
0-90	4902	100.0
0-180	4903	100.0

Average Luminance

Zone	End	45°	Cross
45	7307	8088	8690
55	6785	8019	9012
65	5735	8297	9556
75	4761	8153	9672
85	3206	7578	7524

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	30
RCR									
0	118	118	118	115	115	115	111	111	111
1	108	103	97	105	101	96	95	95	93
2	97	89	81	94	86	81	83	78	78
3	89	78	69	85	76	68	72	67	67
4	81	68	59	79	68	58	65	57	57
5	75	60	52	72	59	52	57	50	50
6	68	55	46	67	54	46	52	45	45
7	64	50	40	61	48	40	47	40	40
8	58	46	36	57	45	36	44	35	35
9	56	41	34	54	40	33	40	33	33
10	52	39	30	51	38	29	36	29	29

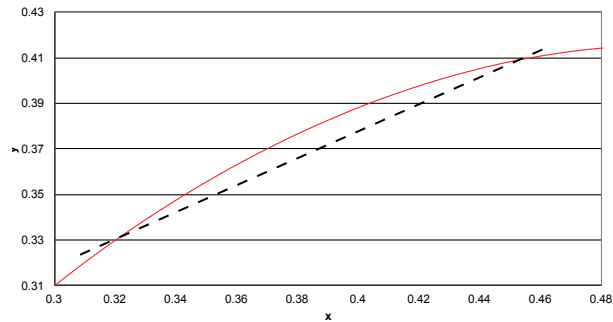
2EVG EvoGrid recessed 2x4

up to 7400 lumens

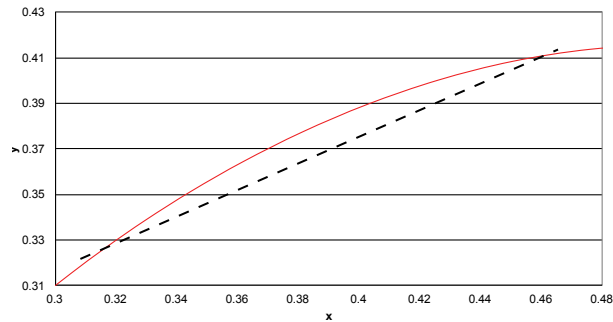
Tunable White with PoE

Color Information

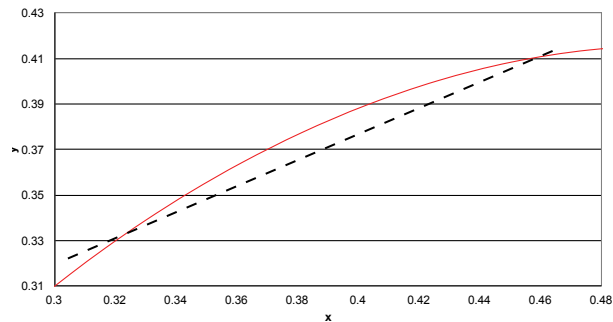
2x4 EvoGrid 3800lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	3833	3836	3840	3843	3848	3854
Power	27	27	27	27	26	26
Efficacy	140	141	143	145	147	149
CCT	82	84	86	87	87	85
CRI	15	23	32	37	35	22
R9	18	23	31	34	31	11



2x4 EvoGrid 4300lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4327	4330	4334	4338	4343	4349
Power	33	31	31	30	30	30
Efficacy	132	138	141	143	147	147
CCT	82	84	86	87	87	85
CRI	14	23	32	36	35	23
R9	18	23	31	34	31	11



2x4 EvoGrid 4800lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4815	4817	4819	4821	4824	4827
Power	39	36	35	34	33	34
Efficacy	125	134	138	141	146	144
CCT	82	84	86	87	87	85
CRI	14	22	31	36	35	23
R9	18	23	31	34	31	11



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Tunable White with DALI

Electrical Specifications

Input Voltage	120V				277V			
Nominal CCT	2700K				2700K			
Nominal Lumens	3900	4300	4900	5600	3900	4300	4900	5600
Commissioned State								
Power (W)	41.8	47.0	55.9	65.7	41.5	46.4	55.0	64.3
Current (A)	0.4	0.4	0.5	0.6	0.2	0.2	0.2	0.3
Power Factor	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9
THD (%)	14.0	13.0	11.0	10.0	17.0	16.5	16.0	14.5
Off State Power (W)	0.6	0.6	0.6	0.6	0.9	0.9	0.9	0.9
Non-Commissioned State								
Power (W)	78.0	87.0	102.0	116.0	77.0	86.0	101.0	113.0
Current (A)	0.7	0.7	0.9	1.0	0.3	0.3	0.4	0.4

Photometry

2x4 EvoGrid recessed LED with tunable white, 4300 nominal delivered lumens, 2700K CCT

LER – 110

Catalog No.	2EVG43L8TW-4-D-UNV-DTW	Candlepower				Light Distribution			Average Luminance			
Test No.	36529	Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Zone	End	45'	Cross
S/MH	1.2	0	1602	1602	1602	0-30	1221	27.0	45	6988	7435	7754
Lamp Type	LED	5	1576	1594	1600	0-40	1977	43.7	55	6474	7266	7886
Lumens	4527	15	1502	1525	1538	0-60	3465	76.5	65	5501	7420	8357
Input Watts	39	25	1361	1392	1412	0-90	4526	100.0	75	4621	7358	8453
CCT	2700K	35	1168	1209	1238	0-180	4527	100.0	85	3074	6753	7255
		45	948	1009	1052							
		55	712	800	868							
		65	446	602	678							
		75	229	365	420							
		85	51	113	121							

Comparative yearly lighting energy cost per 1000 lumens – **\$2.18** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	111
1	108	103	98	105	101	96	96	96	93
2	97	90	81	94	88	81	83	79	79
3	89	78	69	86	77	68	73	67	67
4	81	68	59	79	68	59	66	57	57
5	75	61	53	72	60	52	58	51	51
6	68	56	46	67	55	46	53	45	45
7	64	51	41	63	50	40	47	40	40
8	59	46	38	57	45	36	44	36	36
9	56	41	34	55	41	34	40	33	33
10	52	39	30	51	39	30	38	30	30

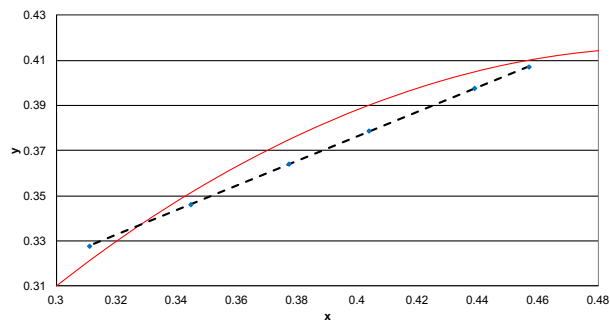
2EVG EvoGrid recessed 2x4

up to 7400 lumens

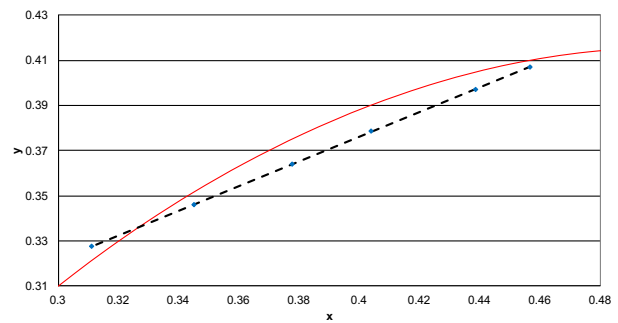
Tunable White with DALI

Color information

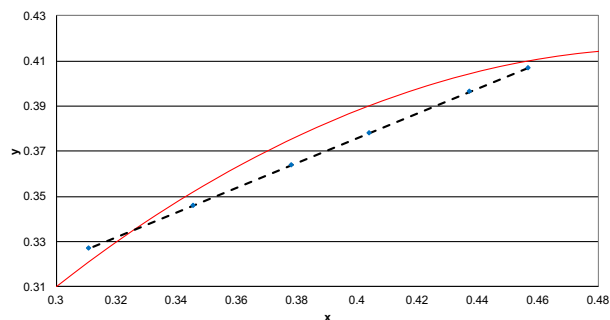
2x4 EvoGrid 3900lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	3790	3798	3805	3885	3811	3919
Power	41.4	42.9	40.7	40.2	38.2	35.4
Efficacy	91.5	88.6	93.5	96.8	99.8	110.7
CCT	2716	2915	3431	3990	5000	6606
CRI	83	84	87	87	87	84
R9	18	23	33	37	32	16
x	0.4568	0.4387	0.4037	0.3774	0.3446	0.3110
y	0.4071	0.3974	0.3784	0.3641	0.3462	0.3278
Duv	-0.0010	-0.0029	-0.0051	-0.0051	-0.0026	0.0034



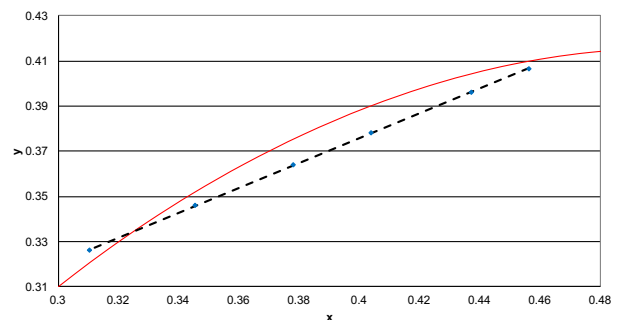
2x4 EvoGrid 4300lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4247	4257	4259	4346	4254	4349
Power	46.5	47.8	45.2	44.4	42.2	39.4
Efficacy	91.2	89.0	94.3	97.9	100.8	110.3
CCT	2717	2916	3427	3980	4984	6610
CRI	83	84	86	87	87	84
R9	18	23	33	37	34	16
x	0.4567	0.4386	0.4039	0.3777	0.3450	0.3110
y	0.4070	0.3973	0.3784	0.3642	0.3462	0.3275
Duv	-0.0011	-0.0029	-0.0052	-0.0052	-0.0027	0.0033



2x4 EvoGrid 4900lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4969	5017	4983	5079	4955	5030
Power	55.0	56.2	52.4	51.3	48.7	45.8
Efficacy	90.3	89.3	95.1	99.1	101.9	109.8
CCT	2719	2932	3424	3972	4971	6625
CRI	83	84	86	87	87	84
R9	18	23	32	37	34	16
x	0.4564	0.4372	0.4040	0.3780	0.3454	0.3108
y	0.4068	0.3965	0.3784	0.3641	0.3461	0.3271
Duv	-0.0011	-0.0031	-0.0052	-0.0053	-0.0029	0.0032



2x4 EvoGrid 5600lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	5805	5877	5833	5936	5780	5813
Power	65.6	66.2	61.2	59.7	56.2	53.7
Efficacy	88.5	88.8	95.4	99.5	102.9	108.3
CCT	2722	2934	3423	3965	4962	6654
CRI	83	84	86	87	87	84
R9	17	23	32	36	34	16
x	0.4561	0.4370	0.4039	0.3781	0.3456	0.3104
y	0.4066	0.3962	0.3781	0.3639	0.3459	0.3264
Duv	-0.0012	-0.0032	-0.0053	-0.0055	-0.0031	0.0030



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Day-Brite / CFI EvoGrid recessed utilizes highly reliable and efficient Philips LED platform boards and dimmable driver enabling market leading performance in its category. Its soft opal diffuser with large luminous area minimizes apparent brightness compared to other basket luminaires and provides general lighting perfect for a wide variety of applications.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lamps: _____ Qty: _____

Notes: _____

Ordering guide

example: 2EVG38L840-4-D-UNV-DIM

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G			—	4	—	—	—	
2 2'	EV EvoGrid	5 Grid	blank Static H Air Return	Standard efficacy 38L 3800 43L 4300 48L 4800 54L 5400 74L 7400 High efficacy 38LH 3800 43LH 4300 48LH 4800 54LH 5400 74LH 7400	830 ¹ 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 ¹ 80 CRI, 5000K	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	UNV Universal Voltage, 120-277 volt 120 ² 120V 277 ² 277V 347 347V	DIM ^{3,8} Dimming SDIM ⁴ Step dimming to 40% input power XDIM ² MarkX phase dimming LDE Lutron LDE5, 5% dimming DALI DALI	AG Antimicrobial finish F1 3/8" flex, 3 wire 18 gauge 6' F2 3/8" flex, 4 wire 18 gauge 6' F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/5W 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires F2/6W 3/8" single flex, 6 wire 18 gauge 6' for dimmable and emergency luminaires GLR Fusing, fast blow GTD/E ⁹ UL924 listed Bodine GTD factory installed on driver input GTD/SNSR ¹⁰ UL924 listed Bodine GTD installed between driver & sensor EMLED Integral emergency battery pack, 1100lm nominal (ballast enclosure on top of luminaire) DSC Quick driver disconnect IAP ⁵ Integral Interact Pro RF sensor, enables wireless connect lighting control IAO ⁶ Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control SWZG2 ^{6,7} Integral sensor, daylighting and occupancy, advanced grouping with dwell time and zoning SWZDT ⁶ Integral sensor, daylighting and occupancy, advanced grouping with dwell time CHIC Chicago Plenum rated CRM ⁸ Continuous row mount TAP Top access plate

- 3000K and 5000K color temperatures available only on high efficacy configurations
- XDIM requires 120V or 277V specification.
- Integral controls options dimmable to 5% via wireless all switch. See page 2.
- Consult factory for SDIM on 74L and 74LH packages.
- Specify only with -DIM driver option

- Must order SWZ-REMOTE SpaceWise handheld remote with each system order.
- CRM includes side cover with top access plate and additional end cover. 7/8" gap between fixtures.
- Non-controls and SWZG2 configurations are 0-10v dimmable to 1%
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral controls option. Not available with SWZG2 controls option.

SpaceWise accessories (order separately)

- SWZ-REMOTE** – SpaceWise handheld remote for grouping and configuration (at least one remote required for any SpaceWise installation)
- UID8451/10** – Wireless Dimmer Switch Selector
- UID8461/10** – Wireless Scene Selector

Other accessories (order separately)

- FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting
- EVD4L** – EvoGrid 2'x4' rectangular ribbed replacement lens
- EVDS4L** – EvoGrid 2'x4' rectangular smooth replacement lens
- EVR4L** – EvoGrid 2'x4' round ribbed replacement lens
- EVR54L** – EvoGrid 2'x4' round smooth replacement lens
- FSK24** – 2'x4' surface mount field installation kit (factory welded seams), order with -TAP (top access plate) option (SWZG2 and EMLED option not available)
- FSF24** – 2'x4' surface mount field assembly kit, order with -TAP (top access plate) option (SWZG2 and EMLED option not available)

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Ordering guide – PoE controls (Static & Tunable White)

example: 2EVG43L8TW-4-D-LV-POE-IAO

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G			—	4 —	—	LV —	POE —	
2 2'	EV EvoGrid	G Grid	Blank Static H Air return	38L 3800 43L 4300 48L 4800	Static White 830 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K Color Tuning 8TW 80CRI, 2700K thru 6500K tunable white	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	LV Low voltage	POE Power over ethernet	AG Antimicrobial finish EMPOE ¹ 600lm integral emergency driver and battery pack IAO Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control

1 Indicator light and test switch located on housing side panel.

Ordering guide – DALI Controls (Tunable White)

example: 2EVG43L8TW-4-D-UNV-DTW-IAO

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G			—	4 —	—	UNV —	DTW —	
2 2'	EV EvoGrid	G Grid	Blank Static H Air return	39L 3900 43L 4300 49L 4900 56L 5600 65L 6500	8TW 80CRI, 2700K thru 6500K tunable white	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	UNV Universal Voltage, 120-277 volt	DTW Dual channel tunable white	AG Antimicrobial finish F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/7W 3/8" single flex, 7 wire 18 gauge 6' for emergency Factory wired Bodine BSL310 integral emergency pack. Nominal 1100lm EMLED Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control IAO Fusing, fast blow GLR Quick driver disconnect DSC

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Application

- A highly efficient, visually comfortable, architecturally styled recessed LED luminaire designed with a minimalist strategy to achieve sustainable objectives.
- Low profile configuration is only 2-3/4" deep, requiring minimal plenum space.
- Soft opal diffuser with large luminous area minimizes apparent brightness and provides high visual comfort perfect for a wide variety of general lighting applications like offices, schools, retail, or healthcare.
- Multiple lumen packages over a wide range to provide significant application flexibility over light levels and/or luminaire spacing.
- Directs a controlled amount of light to the higher angles in the room to balance the brightness of the surfaces and eliminate "cave effect" while creating the impression of a larger, brighter space without glare.
- Excellent color rendering with a CRI of 80.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source. Integral or external sensors are available for use.
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-bars. Drywall or plaster requirements can be accommodated by using an FMA24 "F" mounting frame (sold separately.)
- Continuous row mount option (CRM) includes wireway covers on each end and on one side of housing.

Construction/Finish

- Uncomplicated design is 2-3/4" in depth and only requires a few parts outside of the electrical system and hardware, creating several benefits:
 - Less material required
 - Less packaging required
 - Reduced weight
 - Less energy required for construction and assembly
 - More luminaires can be shipped per truck to reduce fuel use and emissions

- Luminaire finish is matte white polyester for a high quality, durable finish.
- T-bar grid clips are integral to body.
- Access plate located on end provides easy field wiring. TAP option provides top mounted access plate.

Electrical

- Integral sensor options for occupancy sensing and/or daylight harvesting are available for additional energy savings with no reduction of life or increase in installation labor.
- Total luminaire efficacy exceeding 139 LPW (lumens per Watt) with high efficiency packages.
- LED board is easily accessible from below without tools. Single LED board is replaceable if needed via plug-in connectors to ensure long service life.
- LED driver is accessible from above.
- Emergency driver is accessible from above. To estimate lumen output in emergency mode, multiply emergency pack wattage by efficacy, then by 1.10. Typical lumen output is 1300lm for EMLED.
- The GTD/E option is used to bypass wall switches and allow luminaire operation on auxiliary power. Generator transfer requires installation in conjunction with a UL1008 listed device.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Step dim 100/40% and additional dimming options available.
- 5 year manufacturer's limited warranty. Visit signify.com/warranties for complete warranty information.
- TM-21 predicted L70 lumen maintenance up to 80,000 hours for high efficacy and 50,000 hours for standard efficacy configurations.
- cETLus listed to UL and CSA standards, suitable for damp locations.
- EvoGrid luminaires are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers, www.designlights.org/QPL.

Enclosure

- Opal diffuser provides soft, comfortable lighting while maintaining high efficiency.
- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

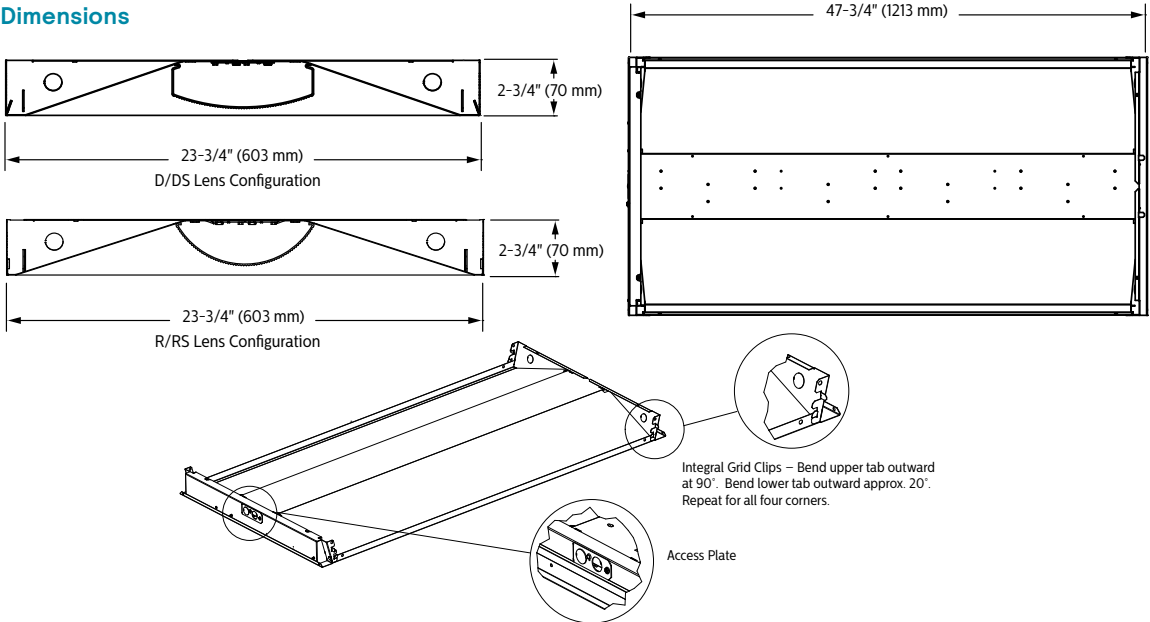
General Notes

- All options factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4	2EVG38L840-4-D	37	110
	2EVG43L840-4-D	41	108
	2EVG48L840-4-D	48	105
	2EVG54L840-4-D	55	103
	2EVG74L840-4-D	83	93
	2EVG38L840-4-R	31	124
	2EVG43L840-4-R	35	124
	2EVG48L840-4-R	40	122
	2EVG54L840-4-R	46	120
	2EVG74L840-4-R	67	111
2x4 High Efficacy	2EVG38LH840-4-D	27	139
	2EVG43LH840-4-D	32	139
	2EVG48LH840-4-D	36	138
	2EVG54LH840-4-D	39	137
	2EVG74LH840-4-D	56	134
	2EVG38LH840-4-R	26	142
	2EVG43LH840-4-R	30	142
	2EVG48LH840-4-R	34	143

Dimensions



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Wireless Controls Options

SpaceWise DT (SWZDT)

- Standalone daylight and occupancy sensing with advanced grouping and dwell time
- Commissioning via compatible Android phone and Philips Field App
- Dimming via compatible Zigbee wireless wall switch only (see link below for details)
- Register for the commissioning app at <http://registration.componentcloud.philips.com/appregistration/>
- Integral sensing options may not be combined
- For more information including recommended switches, refer to the following: –
SWZDT – www.usa.lighting.philips.com/systems/lighting-systems/spacewise

SpaceWise (SWZG2)

- Commissioning via SWZ-REMOTE handheld remote, must order a minimum of one per installation
- Integral sensing options may not be combined
- 0-10V dimmable to 1%
- For more information on the sensor, please refer to www.lightingproducts.signify.com/documents/webdb2/DayBrite/pdf/SWZG2_sensor.pdf
- Visit www.usa.lighting.philips.com/systems/lighting-systems/spacewise for more information about SpaceWise Technology (SWZG2)

Interact Pro (IAP)

- Interact Pro brings the power of connected lighting to **small and medium businesses** without the complexity usually associated with connected lighting.
- Interact Pro includes an app, a portal and a broad portfolio of wireless Luminaires, lamps and retrofit kits all working on the same system.
- Commissioning via Interact Pro App (Android or iPhone)
- Prepare commissioning remotely via Interact Pro portal
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1)
- For more information on Interact Pro visit: www.interact-lighting.com/pro
- For more information on Interact Ready visit: www.philips.com/interact-ready

EvoGrid shown with integral sensor



SWZG2 sensor shown.

All other controls options have the sensor centrally located centered on one end flange.

Interact Office (IAO)

- A wireless IoT connected lighting solution for **large enterprises** that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Wired Controls Options

Interact Office Wired (PoE), Static White & Tunable White

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Human centric lighting through tunable white technology – Dynamic behaviors via scheduled lighting recipes mimicking daylight patterns or supporting biorhythms.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.
- Optional integral emergency controller and battery pack provides 600lm nominal output. Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (–4F to 86F) ambient, and 45–85% relative humidity.
- For more information on Interact Office Wired, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Tunable White with DALI

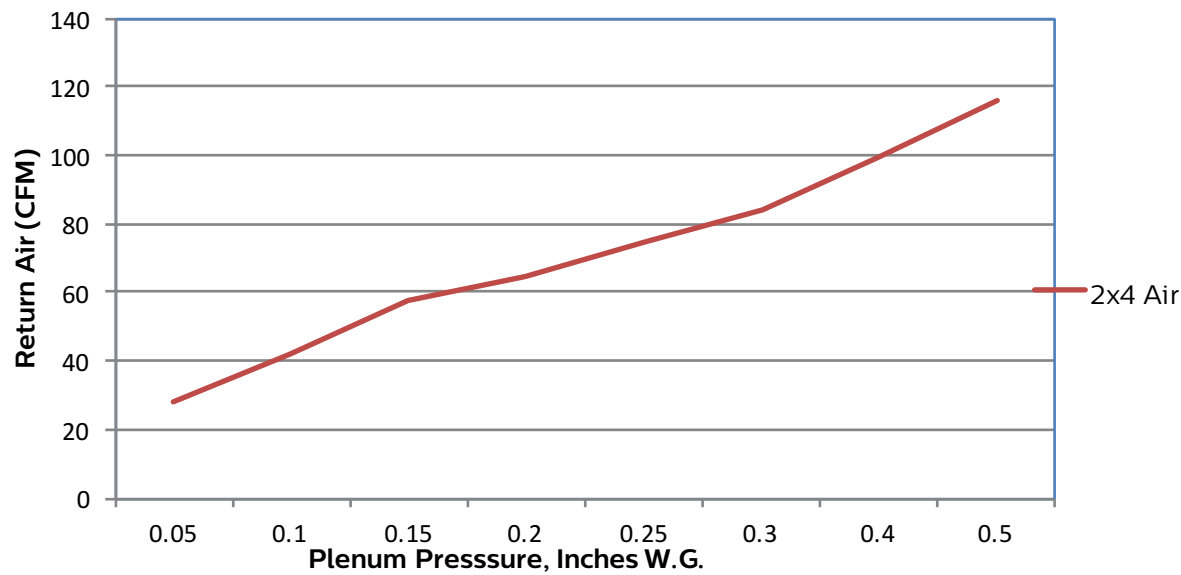
- Signify tunable white solutions are designed to help maximize the influence of lighting on your daily life.
- Dynamic behaviors via scheduled lighting recipes mimicking daylight patterns or supporting biorhythms.
- Scene setting via lighting pre-sets based on various combinations of lighting color temperature and intensity.

www.usa.lighting.philips.com/products/product-highlights/tunable-white-technology

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Air return data



Pressure	0.05	0.1	0.15	0.2	0.25	0.3	0.4	0.5
CFM	28	42	58	65	75	84	100	116
Noise	<15	24	34	37	41	45	47	49



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Photometry

2x4 EvoGrid recessed LED, high efficacy, 4800 nominal delivered lumens

LER – 138

Catalog No.	2EVG48LH840-4-D-UNV-DIM
Test No.	34935
S/MH	1.2
Lamp Type	LED
Lumens	4897
Input Watts	36

Comparative yearly lighting energy cost per 1000 lumens – **\$1.74** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1778	1778	1778	1778
5	1749	1771	1782	1771
15	1669	1701	1714	1701
25	1509	1545	1566	1545
35	1283	1333	1364	1333
45	1022	1087	1134	1087
55	751	838	913	838
65	494	613	704	613
75	264	393	465	393
85	74	114	119	114

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1358	27.7
0-40	2189	44.7
0-60	3775	77.1
0-90	4899	100.0
0-180	4899	100.0

Average Luminance

Zone	End	45°	Cross
45	7532	8012	8362
55	6828	7614	8295
65	6090	7566	8686
75	5319	7922	9360
85	4450	6795	7112

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	
1	108	103	98	106	101	96	96	93	
2	97	90	82	95	88	81	83	79	
3	90	79	69	86	77	68	73	68	
4	81	69	60	80	68	59	66	58	
5	75	61	53	72	60	53	58	52	
6	69	56	46	68	55	46	53	46	
7	65	51	41	63	50	41	48	40	
8	59	46	38	58	46	38	45	36	
9	56	42	34	55	41	34	40	34	
10	53	40	32	52	39	30	38	30	

2x4 EvoGrid recessed LED, 4800 nominal delivered lumens

LER – 105

Catalog No.	2EVG48L840-4-D-UNV-DIM
Test No.	34090
S/MH	1.2
Lamp Type	LED
Lumens	5015
Input Watts	48

Comparative yearly lighting energy cost per 1000 lumens – **\$1.29** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1830	1830	1830	1777
5	1813	1820	1825	1770
15	1725	1739	1746	1700
25	1554	1571	1582	1541
35	1317	1347	1365	1330
45	1048	1096	1132	1086
55	771	851	930	838
65	510	642	733	614
75	279	417	485	394
85	81	123	132	111

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1387	27.6
0-40	2228	44.4
0-60	3836	76.4
0-90	5019	100.0
0-180	5020	100.0

Average Luminance

Zone	End	45°	Cross
45	7725	8080	8349
55	7009	7732	8457
65	6290	7919	9045
75	5613	8389	9769
85	4870	7342	7903

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	
1	108	103	98	105	101	96	96	93	
2	97	90	82	94	88	81	83	79	
3	89	79	69	86	77	68	73	67	
4	81	69	60	79	68	59	66	57	
5	75	61	53	72	60	52	58	51	
6	69	56	46	68	55	46	53	46	
7	65	51	41	63	50	41	47	40	
8	59	46	38	58	46	38	44	36	
9	56	42	34	55	41	34	40	34	
10	53	39	32	51	39	30	38	30	

2EVG EvoGrid recessed 2x4

up to 7400 lumens

2x4 EvoGrid recessed LED, high efficacy, 4800 nominal delivered lumens

LER – 144

Catalog No.	2EVG48LH840-4-R-UNV-DIM	Candlepower					Light Distribution			Average Luminance			
Test No.	38774	Angle	End	45	Cross	Back-45	Degrees	Lumens	% Luminaire	Zone	End	45°	Cross
S/MH	1.3	0	1666	1666	1666	1666	0-30	1286	26.1	45	7359	8120	8741
Lamp Type	LED	5	1634	1661	1671	1661	0-40	2100	42.6	55	6833	8050	9071
Lumens	4927	15	1560	1599	1619	1599	0-60	3736	75.8	65	5772	8313	9621
Input Watts	34	25	1420	1475	1513	1475	0-90	4932	100.0	75	4800	8216	10115
		35	1227	1304	1363	1304	0-180	4932	100.0	85	3218	7919	7650
		45	998	1101	1186	1101							
		55	752	886	998	886							
		65	468	674	780	674							
		75	238	408	502	408							
		85	54	132	128	132							
Comparative yearly lighting energy cost per 1000 lumens – \$1.67 based on 3000 hrs. and \$.08 pwr KWH.													
The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.													
Photometric values based on test performed in compliance with LM-79.													

2x4 EvoGrid recessed LED, 4800 nominal delivered lumens

LER – 122

Catalog No.	2EVG48L840-4-R-UNV-DIM	Candlepower					Light Distribution			Average Luminance					
Test No.	38786	Angle	End	45	Cross	Back-45	Degrees	Lumens	% Luminaire	Zone	End	45°	Cross		
S/MH	1.3	0	1658	1658	1658	1658	0-30	1280	26.1	45	7307	8088	8690		
Lamp Type	LED	5	1623	1653	1664	1653	0-40	2090	42.6	55	6785	8019	9012		
Lumens	4903	15	1550	1591	1612	1591	0-60	3719	75.8	65	5735	8297	9556		
Input Watts	40	25	1411	1468	1506	1468	0-90	4902	100.0	75	4761	8153	9672		
		35	1219	1299	1357	1299	0-180	4903	100.0	85	3206	7578	7524		
		45	991	1097	1179	1097									
		55	747	882	992	882									
		65	465	673	775	673									
		75	236	405	480	405									
		85	54	127	126	127									
Comparative yearly lighting energy cost per 1000 lumens – \$1.97 based on 3000 hrs. and \$0.08 pwr KWH.															
The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.															
Photometric values based on test performed in compliance with LM-79.															
							Coefficients of Utilization								
							EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)								
							pcc	80			70			50	
							pw	70	50	30	70	50	30	50	30
							RCR								
							0	118	118	118	115	115	115	111	111
							1	108	103	97	105	101	96	95	93
							2	97	89	81	94	86	81	83	78
							3	89	78	69	85	76	68	72	67
							4	81	68	59	79	68	58	65	57
							5	75	60	52	72	59	52	57	50
							6	68	55	46	67	54	46	52	45
							7	64	50	40	61	48	40	47	40
							8	58	46	36	57	45	36	44	35
							9	56	41	34	54	40	33	40	33
							10	52	39	30	51	38	29	36	29

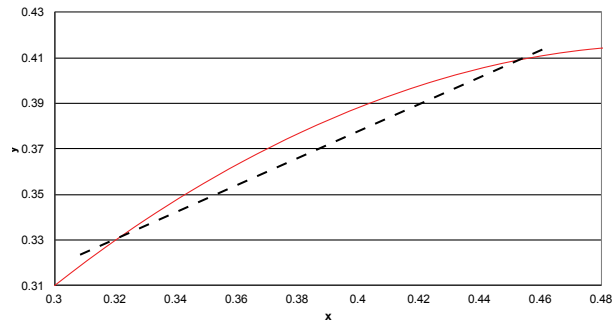
2EVG EvoGrid recessed 2x4

up to 7400 lumens

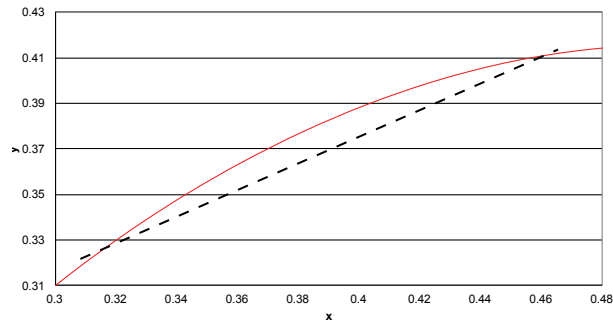
Tunable White with PoE

Color Information

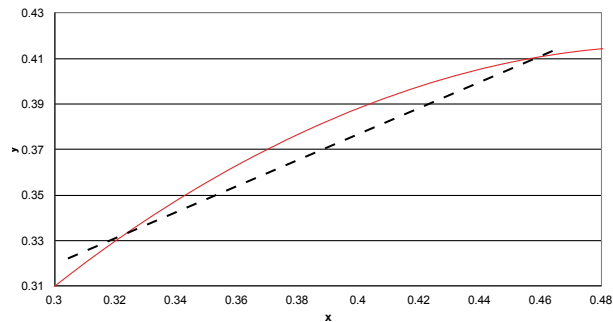
2x4 EvoGrid 3800lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	3833	3836	3840	3843	3848	3854
Power	27	27	27	27	26	26
Efficacy	140	141	143	145	147	149
CCT	82	84	86	87	87	85
CRI	15	23	32	37	35	22
R9	18	23	31	34	31	11



2x4 EvoGrid 4300lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4327	4330	4334	4338	4343	4349
Power	33	31	31	30	30	30
Efficacy	132	138	141	143	147	147
CCT	82	84	86	87	87	85
CRI	14	23	32	36	35	23
R9	18	23	31	34	31	11



2x4 EvoGrid 4800lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4815	4817	4819	4821	4824	4827
Power	39	36	35	34	33	34
Efficacy	125	134	138	141	146	144
CCT	82	84	86	87	87	85
CRI	14	22	31	36	35	23
R9	18	23	31	34	31	11



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Tunable White with DALI

Electrical Specifications

Input Voltage	120V				277V			
Nominal CCT	2700K				2700K			
Nominal Lumens	3900	4300	4900	5600	3900	4300	4900	5600
Commissioned State								
Power (W)	41.8	47.0	55.9	65.7	41.5	46.4	55.0	64.3
Current (A)	0.4	0.4	0.5	0.6	0.2	0.2	0.2	0.3
Power Factor	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9
THD (%)	14.0	13.0	11.0	10.0	17.0	16.5	16.0	14.5
Off State Power (W)	0.6	0.6	0.6	0.6	0.9	0.9	0.9	0.9
Non-Commissioned State								
Power (W)	78.0	87.0	102.0	116.0	77.0	86.0	101.0	113.0
Current (A)	0.7	0.7	0.9	1.0	0.3	0.3	0.4	0.4

Photometry

2x4 EvoGrid recessed LED with tunable white, 4300 nominal delivered lumens, 2700K CCT

LER – 110

Catalog No.	2EVG43L8TW-4-D-UNV-DTW	Candlepower				Light Distribution			Average Luminance			
Test No.	36529	Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Zone	End	45'	Cross
S/MH	1.2	0	1602	1602	1602	0-30	1221	27.0	45	6988	7435	7754
Lamp Type	LED	5	1576	1594	1600	0-40	1977	43.7	55	6474	7266	7886
Lumens	4527	15	1502	1525	1538	0-60	3465	76.5	65	5501	7420	8357
Input Watts	39	25	1361	1392	1412	0-90	4526	100.0	75	4621	7358	8453
CCT	2700K	35	1168	1209	1238	0-180	4527	100.0	85	3074	6753	7255
		45	948	1009	1052							
		55	712	800	868							
		65	446	602	678							
		75	229	365	420							
		85	51	113	121							

Comparative yearly lighting energy cost per 1000 lumens – **\$2.18** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	111
1	108	103	98	105	101	96	96	96	93
2	97	90	81	94	88	81	83	79	79
3	89	78	69	86	77	68	73	67	67
4	81	68	59	79	68	59	66	57	57
5	75	61	53	72	60	52	58	51	51
6	68	56	46	67	55	46	53	45	45
7	64	51	41	63	50	40	47	40	40
8	59	46	38	57	45	36	44	36	36
9	56	41	34	55	41	34	40	33	33
10	52	39	30	51	39	30	38	30	30

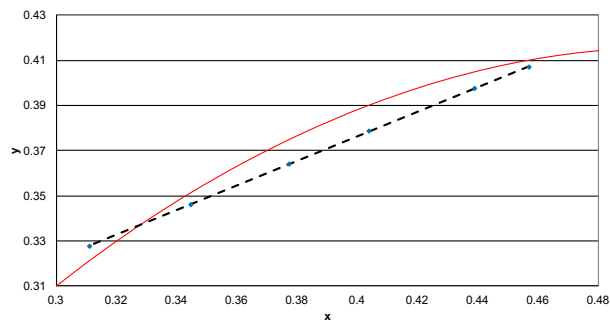
2EVG EvoGrid recessed 2x4

up to 7400 lumens

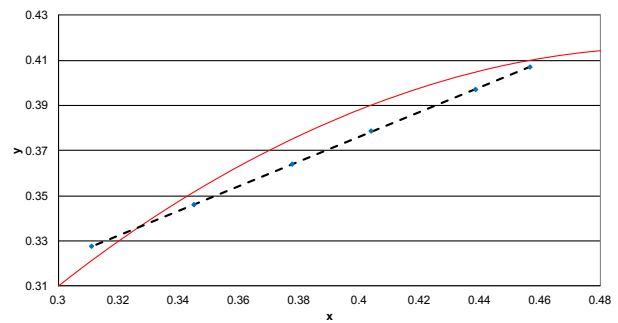
Tunable White with DALI

Color information

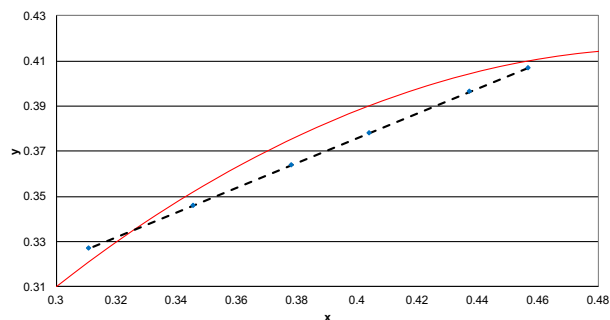
2x4 EvoGrid 3900lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	3790	3798	3805	3885	3811	3919
Power	41.4	42.9	40.7	40.2	38.2	35.4
Efficacy	91.5	88.6	93.5	96.8	99.8	110.7
CCT	2716	2915	3431	3990	5000	6606
CRI	83	84	87	87	87	84
R9	18	23	33	37	32	16
x	0.4568	0.4387	0.4037	0.3774	0.3446	0.3110
y	0.4071	0.3974	0.3784	0.3641	0.3462	0.3278
Duv	-0.0010	-0.0029	-0.0051	-0.0051	-0.0026	0.0034



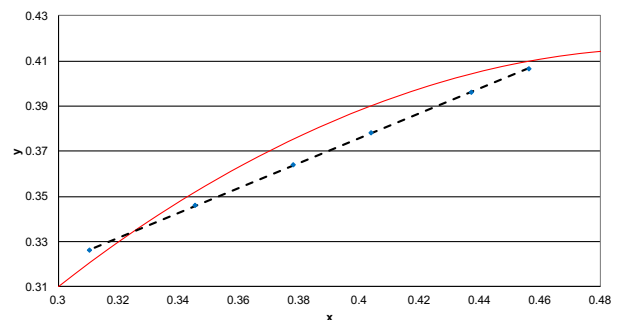
2x4 EvoGrid 4300lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4247	4257	4259	4346	4254	4349
Power	46.5	47.8	45.2	44.4	42.2	39.4
Efficacy	91.2	89.0	94.3	97.9	100.8	110.3
CCT	2717	2916	3427	3980	4984	6610
CRI	83	84	86	87	87	84
R9	18	23	33	37	34	16
x	0.4567	0.4386	0.4039	0.3777	0.3450	0.3110
y	0.4070	0.3973	0.3784	0.3642	0.3462	0.3275
Duv	-0.0011	-0.0029	-0.0052	-0.0052	-0.0027	0.0033



2x4 EvoGrid 4900lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4969	5017	4983	5079	4955	5030
Power	55.0	56.2	52.4	51.3	48.7	45.8
Efficacy	90.3	89.3	95.1	99.1	101.9	109.8
CCT	2719	2932	3424	3972	4971	6625
CRI	83	84	86	87	87	84
R9	18	23	32	37	34	16
x	0.4564	0.4372	0.4040	0.3780	0.3454	0.3108
y	0.4068	0.3965	0.3784	0.3641	0.3461	0.3271
Duv	-0.0011	-0.0031	-0.0052	-0.0053	-0.0029	0.0032

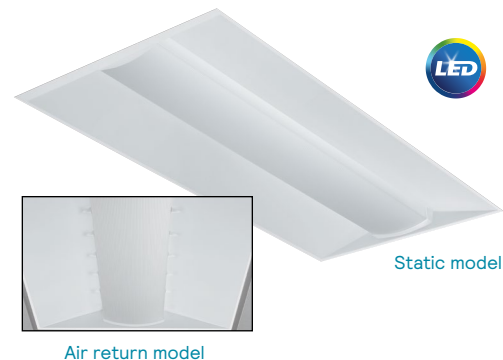


2x4 EvoGrid 5600lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	5805	5877	5833	5936	5780	5813
Power	65.6	66.2	61.2	59.7	56.2	53.7
Efficacy	88.5	88.8	95.4	99.5	102.9	108.3
CCT	2722	2934	3423	3965	4962	6654
CRI	83	84	86	87	87	84
R9	17	23	32	36	34	16
x	0.4561	0.4370	0.4039	0.3781	0.3456	0.3104
y	0.4066	0.3962	0.3781	0.3639	0.3459	0.3264
Duv	-0.0012	-0.0032	-0.0053	-0.0055	-0.0031	0.0030



The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.





Day-Brite / CFI EvoGrid recessed utilizes highly reliable and efficient Philips LED platform boards and dimmable driver enabling market leading performance in its category. Its soft opal diffuser with large luminous area minimizes apparent brightness compared to other basket luminaires and provides general lighting perfect for a wide variety of applications.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lamps: _____ Qty: _____

Notes: _____

Ordering guide

example: 2EVG38L840-4-D-UNV-DIM

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G			—	4	—	—	—	
2 2'	EV EvoGrid	5 Grid	blank Static H Air Return	Standard efficacy 38L 3800 43L 4300 48L 4800 54L 5400 74L 7400 High efficacy 38LH 3800 43LH 4300 48LH 4800 54LH 5400 74LH 7400	830 ¹ 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 ¹ 80 CRI, 5000K	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	UNV Universal Voltage, 120-277 volt 120 ² 120V 277 ² 277V 347 347V	DIM ^{3,8} Dimming SDIM ⁴ Step dimming to 40% input power XDIM ² MarkX phase dimming LDE Lutron LDE5, 5% dimming DALI DALI	AG Antimicrobial finish F1 3/8" flex, 3 wire 18 gauge 6' F2 3/8" flex, 4 wire 18 gauge 6' F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/5W 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires F2/6W 3/8" single flex, 6 wire 18 gauge 6' for dimmable and emergency luminaires GLR Fusing, fast blow GTD/E ⁹ UL924 listed Bodine GTD factory installed on driver input GTD/SNSR ¹⁰ UL924 listed Bodine GTD installed between driver & sensor EMLED Integral emergency battery pack, 1100lm nominal (ballast enclosure on top of luminaire) DSC Quick driver disconnect IAP ⁵ Integral Interact Pro RF sensor, enables wireless connect lighting control IAO ⁶ Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control SWZG2 ^{6,7} Integral sensor, daylighting and occupancy, advanced grouping with dwell time and zoning SWZDT ⁶ Integral sensor, daylighting and occupancy, advanced grouping with dwell time CHIC Chicago Plenum rated CRM ⁸ Continuous row mount TAP Top access plate

- 3000K and 5000K color temperatures available only on high efficacy configurations
- XDIM requires 120V or 277V specification.
- Integral controls options dimmable to 5% via wireless all switch. See page 2.
- Consult factory for SDIM on 74L and 74LH packages.
- Specify only with -DIM driver option

- Must order SWZ-REMOTE SpaceWise handheld remote with each system order.
- CRM includes side cover with top access plate and additional end cover. 7/8" gap between fixtures.
- Non-controls and SWZG2 configurations are 0-10v dimmable to 1%
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral controls option. Not available with SWZG2 controls option.

SpaceWise accessories (order separately)

- SWZ-REMOTE** – SpaceWise handheld remote for grouping and configuration (at least one remote required for any SpaceWise installation)
- UID8451/10** – Wireless Dimmer Switch Selector
- UID8461/10** – Wireless Scene Selector

Other accessories (order separately)

- FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting
- EVD4L** – EvoGrid 2'x4' rectangular ribbed replacement lens
- EVD54L** – EvoGrid 2'x4' rectangular smooth replacement lens
- EVR4L** – EvoGrid 2'x4' round ribbed replacement lens
- EVR54L** – EvoGrid 2'x4' round smooth replacement lens
- FSK24** – 2'x4' surface mount field installation kit (factory welded seams), order with -TAP (top access plate) option (SWZG2 and EMLED option not available)
- FSF24** – 2'x4' surface mount field assembly kit, order with -TAP (top access plate) option (SWZG2 and EMLED option not available)

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Ordering guide – PoE controls (Static & Tunable White)

example: 2EVG43L8TW-4-D-LV-POE-IAO

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G			—	4 —	—	LV —	POE —	
2 2'	EV EvoGrid	G Grid	Blank Static H Air return	38L 3800 43L 4300 48L 4800	Static White 830 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K Color Tuning 8TW 80CRI, 2700K thru 6500K tunable white	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	LV Low voltage	POE Power over ethernet	AG Antimicrobial finish EMPOE ¹ 600lm integral emergency driver and battery pack IAO Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control

1 Indicator light and test switch located on housing side panel.

Ordering guide – DALI Controls (Tunable White)

example: 2EVG43L8TW-4-D-UNV-DTW-IAO

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G			—	4 —	—	UNV —	DTW —	
2 2'	EV EvoGrid	G Grid	Blank Static H Air return	39L 3900 43L 4300 49L 4900 56L 5600 65L 6500	8TW 80CRI, 2700K thru 6500K tunable white	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	UNV Universal Voltage, 120-277 volt	DTW Dual channel tunable white	AG Antimicrobial finish F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/7W 3/8" single flex, 7 wire 18 gauge 6' for emergency Factory wired Bodine BSL310 integral emergency pack. Nominal 1100lm EMLED Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control IAO Fusing, fast blow GLR Quick driver disconnect DSC

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Application

- A highly efficient, visually comfortable, architecturally styled recessed LED luminaire designed with a minimalist strategy to achieve sustainable objectives.
- Low profile configuration is only 2-3/4" deep, requiring minimal plenum space.
- Soft opal diffuser with large luminous area minimizes apparent brightness and provides high visual comfort perfect for a wide variety of general lighting applications like offices, schools, retail, or healthcare.
- Multiple lumen packages over a wide range to provide significant application flexibility over light levels and/or luminaire spacing.
- Directs a controlled amount of light to the higher angles in the room to balance the brightness of the surfaces and eliminate "cave effect" while creating the impression of a larger, brighter space without glare.
- Excellent color rendering with a CRI of 80.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source. Integral or external sensors are available for use.
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-bars. Drywall or plaster requirements can be accommodated by using an FMA24 "F" mounting frame (sold separately.)
- Continuous row mount option (CRM) includes wireway covers on each end and on one side of housing.

Construction/Finish

- Uncomplicated design is 2-3/4" in depth and only requires a few parts outside of the electrical system and hardware, creating several benefits:
 - Less material required
 - Less packaging required
 - Reduced weight
 - Less energy required for construction and assembly
 - More luminaires can be shipped per truck to reduce fuel use and emissions

- Luminaire finish is matte white polyester for a high quality, durable finish.
- T-bar grid clips are integral to body.
- Access plate located on end provides easy field wiring. TAP option provides top mounted access plate.

Electrical

- Integral sensor options for occupancy sensing and/or daylight harvesting are available for additional energy savings with no reduction of life or increase in installation labor.
- Total luminaire efficacy exceeding 139 LPW (lumens per Watt) with high efficiency packages.
- LED board is easily accessible from below without tools. Single LED board is replaceable if needed via plug-in connectors to ensure long service life.
- LED driver is accessible from above.
- Emergency driver is accessible from above. To estimate lumen output in emergency mode, multiply emergency pack wattage by efficacy, then by 1.10. Typical lumen output is 1300lm for EMLED.
- The GTD/E option is used to bypass wall switches and allow luminaire operation on auxiliary power. Generator transfer requires installation in conjunction with a UL1008 listed device.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Step dim 100/40% and additional dimming options available.
- 5 year manufacturer's limited warranty. Visit signify.com/warranties for complete warranty information.
- TM-21 predicted L70 lumen maintenance up to 80,000 hours for high efficacy and 50,000 hours for standard efficacy configurations.
- cETLus listed to UL and CSA standards, suitable for damp locations.
- EvoGrid luminaires are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers, www.designlights.org/QPL.

Enclosure

- Opal diffuser provides soft, comfortable lighting while maintaining high efficiency.
- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

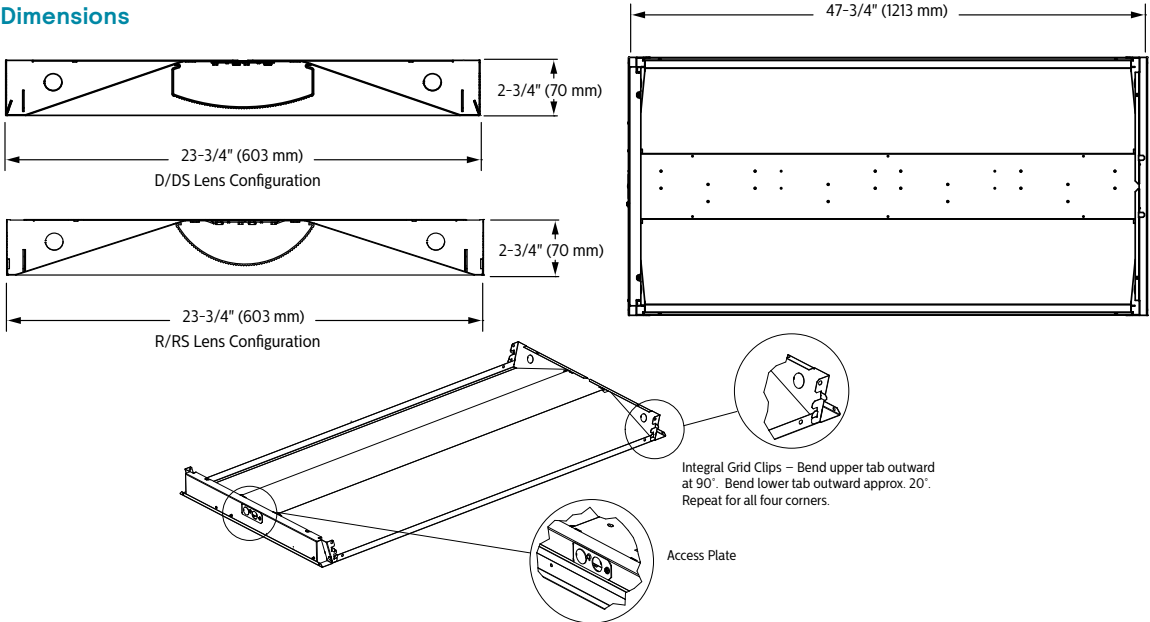
General Notes

- All options factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4	2EVG38L840-4-D	37	110
	2EVG43L840-4-D	41	108
	2EVG48L840-4-D	48	105
	2EVG54L840-4-D	55	103
	2EVG74L840-4-D	83	93
	2EVG38L840-4-R	31	124
	2EVG43L840-4-R	35	124
	2EVG48L840-4-R	40	122
	2EVG54L840-4-R	46	120
	2EVG74L840-4-R	67	111
2x4 High Efficacy	2EVG38LH840-4-D	27	139
	2EVG43LH840-4-D	32	139
	2EVG48LH840-4-D	36	138
	2EVG54LH840-4-D	39	137
	2EVG74LH840-4-D	56	134
	2EVG38LH840-4-R	26	142
	2EVG43LH840-4-R	30	142
	2EVG48LH840-4-R	34	143

Dimensions



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Wireless Controls Options

SpaceWise DT (SWZDT)

- Standalone daylight and occupancy sensing with advanced grouping and dwell time
- Commissioning via compatible Android phone and Philips Field App
- Dimming via compatible Zigbee wireless wall switch only (see link below for details)
- Register for the commissioning app at <http://registration.componentcloud.philips.com/appregistration/>
- Integral sensing options may not be combined
- For more information including recommended switches, refer to the following: –

SWZDT – www.usa.lighting.philips.com/systems/lighting-systems/spacewise

SpaceWise (SWZG2)

- Commissioning via SWZ-REMOTE handheld remote, must order a minimum of one per installation
- Integral sensing options may not be combined
- 0-10V dimmable to 1%
- For more information on the sensor, please refer to www.lightingproducts.signify.com/documents/webdb2/DayBrite/pdf/SWZG2_sensor.pdf
- Visit www.usa.lighting.philips.com/systems/lighting-systems/spacewise for more information about SpaceWise Technology (SWZG2)

Interact Pro (IAP)

- Interact Pro brings the power of connected lighting to **small and medium businesses** without the complexity usually associated with connected lighting.
- Interact Pro includes an app, a portal and a broad portfolio of wireless Luminaires, lamps and retrofit kits all working on the same system.
- Commissioning via Interact Pro App (Android or iPhone)
- Prepare commissioning remotely via Interact Pro portal
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1)
- For more information on Interact Pro visit: www.interact-lighting.com/pro
- For more information on Interact Ready visit: www.philips.com/interact-ready

EvoGrid shown with integral sensor



SWZG2 sensor shown.

All other controls options have the sensor centrally located centered on one end flange.

Interact Office (IAO)

- A wireless IoT connected lighting solution for **large enterprises** that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Wired Controls Options

Interact Office Wired (PoE), Static White & Tunable White

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Human centric lighting through tunable white technology – Dynamic behaviors via scheduled lighting recipes mimicking daylight patterns or supporting biorhythms.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.
- Optional integral emergency controller and battery pack provides 600lm nominal output. Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (–4F to 86F) ambient, and 45–85% relative humidity.
- For more information on Interact Office Wired, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Tunable White with DALI

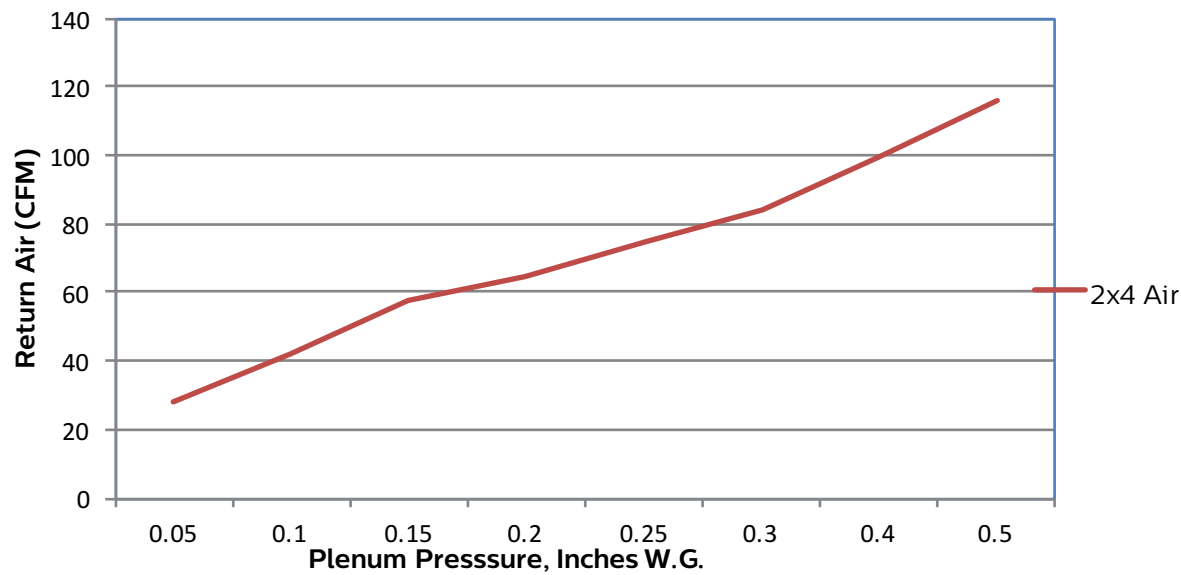
- Signify tunable white solutions are designed to help maximize the influence of lighting on your daily life.
- Dynamic behaviors via scheduled lighting recipes mimicking daylight patterns or supporting biorhythms.
- Scene setting via lighting pre-sets based on various combinations of lighting color temperature and intensity.

www.usa.lighting.philips.com/products/product-highlights/tunable-white-technology

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Air return data



Pressure	0.05	0.1	0.15	0.2	0.25	0.3	0.4	0.5
CFM	28	42	58	65	75	84	100	116
Noise	<15	24	34	37	41	45	47	49



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Photometry

2x4 EvoGrid recessed LED, high efficacy, 4800 nominal delivered lumens

LER – 138

Catalog No.	2EVG48LH840-4-D-UNV-DIM
Test No.	34935
S/MH	1.2
Lamp Type	LED
Lumens	4897
Input Watts	36

Comparative yearly lighting energy cost per 1000 lumens – **\$1.74** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1778	1778	1778	1778
5	1749	1771	1782	1771
15	1669	1701	1714	1701
25	1509	1545	1566	1545
35	1283	1333	1364	1333
45	1022	1087	1134	1087
55	751	838	913	838
65	494	613	704	613
75	264	393	465	393
85	74	114	119	114

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1358	27.7
0-40	2189	44.7
0-60	3775	77.1
0-90	4899	100.0
0-180	4899	100.0

Average Luminance

Zone	End	45°	Cross
45	7532	8012	8362
55	6828	7614	8295
65	6090	7566	8686
75	5319	7922	9360
85	4450	6795	7112

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	
1	108	103	98	106	101	96	96	93	
2	97	90	82	95	88	81	83	79	
3	90	79	69	86	77	68	73	68	
4	81	69	60	80	68	59	66	58	
5	75	61	53	72	60	53	58	52	
6	69	56	46	68	55	46	53	46	
7	65	51	41	63	50	41	48	40	
8	59	46	38	58	46	38	45	36	
9	56	42	34	55	41	34	40	34	
10	53	40	32	52	39	30	38	30	

2x4 EvoGrid recessed LED, 4800 nominal delivered lumens

LER – 105

Catalog No.	2EVG48L840-4-D-UNV-DIM
Test No.	34090
S/MH	1.2
Lamp Type	LED
Lumens	5015
Input Watts	48

Comparative yearly lighting energy cost per 1000 lumens – **\$1.29** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1830	1830	1830	1777
5	1813	1820	1825	1770
15	1725	1739	1746	1700
25	1554	1571	1582	1541
35	1317	1347	1365	1330
45	1048	1096	1132	1086
55	771	851	930	838
65	510	642	733	614
75	279	417	485	394
85	81	123	132	111

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1387	27.6
0-40	2228	44.4
0-60	3836	76.4
0-90	5019	100.0
0-180	5020	100.0

Average Luminance

Zone	End	45°	Cross
45	7725	8080	8349
55	7009	7732	8457
65	6290	7919	9045
75	5613	8389	9769
85	4870	7342	7903

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	
1	108	103	98	105	101	96	96	93	
2	97	90	82	94	88	81	83	79	
3	89	79	69	86	77	68	73	67	
4	81	69	60	79	68	59	66	57	
5	75	61	53	72	60	52	58	51	
6	69	56	46	68	55	46	53	46	
7	65	51	41	63	50	41	47	40	
8	59	46	38	58	46	38	44	36	
9	56	42	34	55	41	34	40	34	
10	53	39	32	51	39	30	38	30	

2EVG EvoGrid recessed 2x4

up to 7400 lumens

2x4 EvoGrid recessed LED, high efficacy, 4800 nominal delivered lumens

LER – 144

Catalog No.	2EVG48LH840-4-R-UNV-DIM
Test No.	38774
S/MH	1.3
Lamp Type	LED
Lumens	4927
Input Watts	34

Comparative yearly lighting energy cost per 1000 lumens – **\$1.67** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1666	1666	1666	1666
5	1634	1661	1671	1661
15	1560	1599	1619	1599
25	1420	1475	1513	1475
35	1227	1304	1363	1304
45	998	1101	1186	1101
55	752	886	998	886
65	468	674	780	674
75	238	408	502	408
85	54	132	128	132

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1286	26.1
0-40	2100	42.6
0-60	3736	75.8
0-90	4932	100.0
0-180	4932	100.0

Average Luminance

Zone	End	45°	Cross
45	7359	8120	8741
55	6833	8050	9071
65	5772	8313	9621
75	4800	8216	10115
85	3218	7919	7650

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	30
RCR									
0	118	118	118	115	115	115	111	111	111
1	108	103	97	105	101	95	95	93	93
2	97	89	81	94	86	81	83	78	78
3	89	78	68	85	76	68	72	67	67
4	81	68	59	79	68	58	65	57	57
5	75	60	52	72	59	52	57	50	50
6	68	55	46	67	54	46	52	45	45
7	64	50	40	61	48	40	47	40	40
8	58	46	36	57	45	36	44	35	35
9	56	41	34	54	40	33	40	33	33
10	52	39	30	51	38	29	36	29	29

2x4 EvoGrid recessed LED, 4800 nominal delivered lumens

LER – 122

Catalog No.	2EVG48L840-4-R-UNV-DIM
Test No.	38786
S/MH	1.3
Lamp Type	LED
Lumens	4903
Input Watts	40

Comparative yearly lighting energy cost per 1000 lumens – **\$1.97** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1658	1658	1658	1658
5	1623	1653	1664	1653
15	1550	1591	1612	1591
25	1411	1468	1506	1468
35	1219	1299	1357	1299
45	991	1097	1179	1097
55	747	882	992	882
65	465	673	775	673
75	236	405	480	405
85	54	127	126	127

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1280	26.1
0-40	2090	42.6
0-60	3719	75.8
0-90	4902	100.0
0-180	4903	100.0

Average Luminance

Zone	End	45°	Cross
45	7307	8088	8690
55	6785	8019	9012
65	5735	8297	9556
75	4761	8153	9672
85	3206	7578	7524

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	30
RCR									
0	118	118	118	115	115	115	111	111	111
1	108	103	97	105	101	96	95	93	93
2	97	89	81	94	86	81	83	78	78
3	89	78	69	85	76	68	72	67	67
4	81	68	59	79	68	58	65	57	57
5	75	60	52	72	59	52	57	50	50
6	68	55	46	67	54	46	52	45	45
7	64	50	40	61	48	40	47	40	40
8	58	46	36	57	45	36	44	35	35
9	56	41	34	54	40	33	40	33	33
10	52	39	30	51	38	29	36	29	29

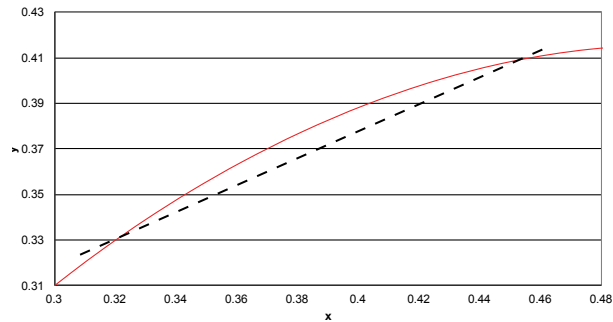
2EVG EvoGrid recessed 2x4

up to 7400 lumens

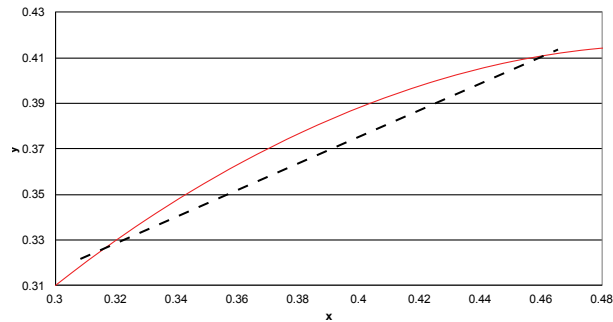
Tunable White with PoE

Color Information

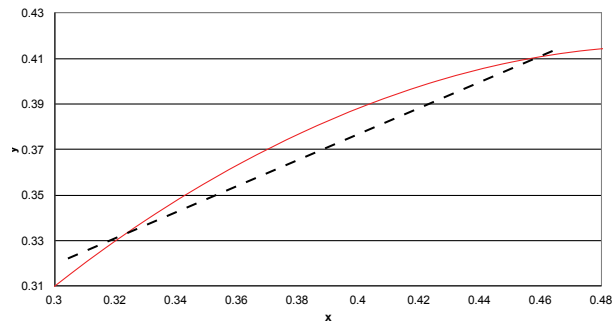
2x4 EvoGrid 3800lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	3833	3836	3840	3843	3848	3854
Power	27	27	27	27	26	26
Efficacy	140	141	143	145	147	149
CCT	82	84	86	87	87	85
CRI	15	23	32	37	35	22
R9	18	23	31	34	31	11



2x4 EvoGrid 4300lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4327	4330	4334	4338	4343	4349
Power	33	31	31	30	30	30
Efficacy	132	138	141	143	147	147
CCT	82	84	86	87	87	85
CRI	14	23	32	36	35	23
R9	18	23	31	34	31	11



2x4 EvoGrid 4800lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4815	4817	4819	4821	4824	4827
Power	39	36	35	34	33	34
Efficacy	125	134	138	141	146	144
CCT	82	84	86	87	87	85
CRI	14	22	31	36	35	23
R9	18	23	31	34	31	11



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Tunable White with DALI

Electrical Specifications

Input Voltage	120V				277V			
Nominal CCT	2700K				2700K			
Nominal Lumens	3900	4300	4900	5600	3900	4300	4900	5600
Commissioned State								
Power (W)	41.8	47.0	55.9	65.7	41.5	46.4	55.0	64.3
Current (A)	0.4	0.4	0.5	0.6	0.2	0.2	0.2	0.3
Power Factor	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9
THD (%)	14.0	13.0	11.0	10.0	17.0	16.5	16.0	14.5
Off State Power (W)	0.6	0.6	0.6	0.6	0.9	0.9	0.9	0.9
Non-Commissioned State								
Power (W)	78.0	87.0	102.0	116.0	77.0	86.0	101.0	113.0
Current (A)	0.7	0.7	0.9	1.0	0.3	0.3	0.4	0.4

Photometry

2x4 EvoGrid recessed LED with tunable white, 4300 nominal delivered lumens, 2700K CCT

LER – 110

Catalog No.	2EVG43L8TW-4-D-UNV-DTW	Candlepower				Light Distribution			Average Luminance			
Test No.	36529	Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Zone	End	45'	Cross
S/MH	1.2	0	1602	1602	1602	0-30	1221	27.0	45	6988	7435	7754
Lamp Type	LED	5	1576	1594	1600	0-40	1977	43.7	55	6474	7266	7886
Lumens	4527	15	1502	1525	1538	0-60	3465	76.5	65	5501	7420	8357
Input Watts	39	25	1361	1392	1412	0-90	4526	100.0	75	4621	7358	8453
CCT	2700K	35	1168	1209	1238	0-180	4527	100.0	85	3074	6753	7255
		45	948	1009	1052							
		55	712	800	868							
		65	446	602	678							
		75	229	365	420							
		85	51	113	121							
Comparative yearly lighting energy cost per 1000 lumens – \$2.18 based on 3000 hrs. and \$.08 pwr KWH.												
The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.												
Photometric values based on test performed in compliance with LM-79.												

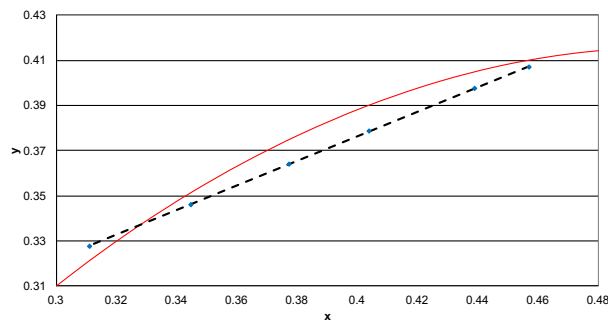
2EVG EvoGrid recessed 2x4

up to 7400 lumens

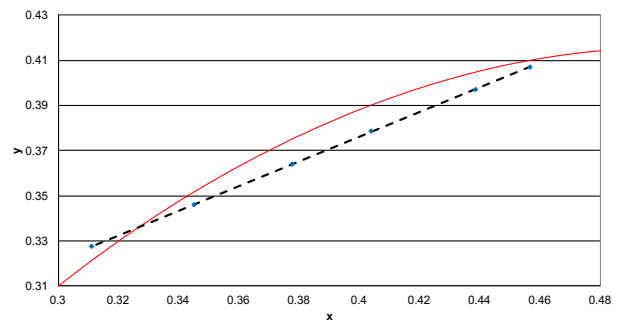
Tunable White with DALI

Color information

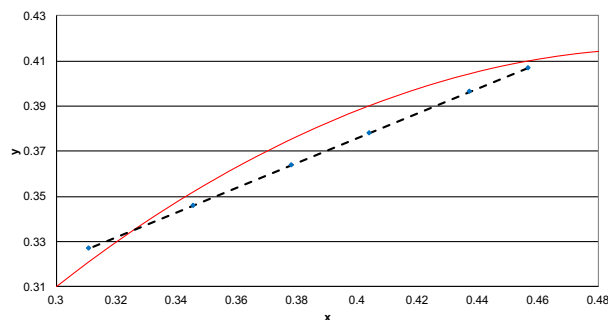
2x4 EvoGrid 3900lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	3790	3798	3805	3885	3811	3919
Power	41.4	42.9	40.7	40.2	38.2	35.4
Efficacy	91.5	88.6	93.5	96.8	99.8	110.7
CCT	2716	2915	3431	3990	5000	6606
CRI	83	84	87	87	87	84
R9	18	23	33	37	32	16
x	0.4568	0.4387	0.4037	0.3774	0.3446	0.3110
y	0.4071	0.3974	0.3784	0.3641	0.3462	0.3278
Duv	-0.0010	-0.0029	-0.0051	-0.0051	-0.0026	0.0034



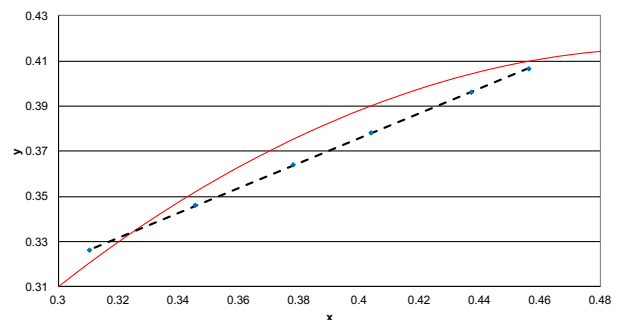
2x4 EvoGrid 4300lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4247	4257	4259	4346	4254	4349
Power	46.5	47.8	45.2	44.4	42.2	39.4
Efficacy	91.2	89.0	94.3	97.9	100.8	110.3
CCT	2717	2916	3427	3980	4984	6610
CRI	83	84	86	87	87	84
R9	18	23	33	37	34	16
x	0.4567	0.4386	0.4039	0.3777	0.3450	0.3110
y	0.4070	0.3973	0.3784	0.3642	0.3462	0.3275
Duv	-0.0011	-0.0029	-0.0052	-0.0052	-0.0027	0.0033



2x4 EvoGrid 4900lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4969	5017	4983	5079	4955	5030
Power	55.0	56.2	52.4	51.3	48.7	45.8
Efficacy	90.3	89.3	95.1	99.1	101.9	109.8
CCT	2719	2932	3424	3972	4971	6625
CRI	83	84	86	87	87	84
R9	18	23	32	37	34	16
x	0.4564	0.4372	0.4040	0.3780	0.3454	0.3108
y	0.4068	0.3965	0.3784	0.3641	0.3461	0.3271
Duv	-0.0011	-0.0031	-0.0052	-0.0053	-0.0029	0.0032



2x4 EvoGrid 5600lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	5805	5877	5833	5936	5780	5813
Power	65.6	66.2	61.2	59.7	56.2	53.7
Efficacy	88.5	88.8	95.4	99.5	102.9	108.3
CCT	2722	2934	3423	3965	4962	6654
CRI	83	84	86	87	87	84
R9	17	23	32	36	34	16
x	0.4561	0.4370	0.4039	0.3781	0.3456	0.3104
y	0.4066	0.3962	0.3781	0.3639	0.3459	0.3264
Duv	-0.0012	-0.0032	-0.0053	-0.0055	-0.0031	0.0030



The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.



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Day-Brite/CFI FluxPanel LED recessed is a highly versatile luminaire designed to provide smooth lighting gradient on the lens surface and ease of installation. Available for use in recessed, suspended, and surface mount orientation, FluxPanel is ideal for general lighting applications such as open office, schools, healthcare, and retail.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lamps: _____ Qty: _____

Notes: _____

Ordering guide – Standard configurations available with all choices, unless otherwise noted.
Base configurations selections indicated by blue.

Example: 2FXP38L840-2-DS-UNV-DIM-EMLED7

Width	Family	Lumens	Colour	Length	Diffuser	Voltage	Driver	Options ²
2	FXP		–	2	DS	–	–	
2' 2'	FXP FluxPanel	<u>Base configuration⁵</u> 38B 3800 nominal delivered lumens <u>Standard configurations⁴</u> 30L 3000 nominal delivered lumens 38L 3800 nominal delivered lumens 45L 4500 nominal delivered lumens	835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K	2' 2'	DS Diffuse (smooth)	<u>UNV Universal Voltage, 120-277 volt</u> 120³ 120V 277³ 277V 347 347V	DIM^{1,7} 0-10V dimming SDIM Step dimming to 40% input power XDIM ⁸ MarkX phase dimming	F1 3/8" flex, 3 wire 18 gauge 6' F2 3/8" flex, 4 wire 18 gauge 6' F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/5W 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires F2/6W 3/8" single flex, 6 wire 18 gauge 6' or dimmable and emergency luminaires GLR Fusing, fast blow GTD/SNSR^{9,10} UL924 listed Bodine GTD installed between driver & sensor EMLED¹⁰ Bodine BSL310 10W battery pack EMLED7¹⁰ Bodine BSL17 7W battery pack DSC Quick driver disconnect CHIC Chicago Plenum rated IAP⁶ Integral Interact Pro RF sensor, enables network lighting control

- 0-10v dimming to 1% for Standard, and 10% for Base configurations
- All options available with Standard configurations only
- XDIM requires 120V or 277V specification
- Standard configurations are packaged one unit per carton
- UNV base configurations are packaged two units per carton, and sold in even quantities only
- Specify DIM driver option only
- Integral IAP option dimmable to 5% via wireless wall switch. See page 2.
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral controls option.
- Not available with 347V option.

Accessories (order separately)

- FMA22** – 2'x2' "F" mounting frame for NEMA "F" mounting
- FSK22** – 2'x2' surface mount field installation kit (factory welded seams)
- FSF22** – 2'x2' surface mount field assembly kit (field assembled)
- 2PCH48-1-SC** – adjustable cable hanger kit for 2x2 with straight white 18/3 cord (two-1 powered, 1 non-powered)
- 2PCH48-1D-SC** – adjustable cable hanger kit for 2x2 with straight white 18/5 cord for dimming (two-1 powered, 1 non-powered)

2FXP FluxPanel LED recessed 2x2

Up to 4500 lumens

Application

- 7/16" ultra shallow light guide profile.
- Overall 1-15/16" deep luminaire, including driver box, provides minimal intrusion into the plenum space.
- Even distribution of light on the lens provides exceptionally low glare gradient minimizing distractions at the ceiling plane.
- General light distribution creates uniform horizontal and vertical illuminance on the work plane and limits scalloping on the walls.
- Excellent consistency of correlated color temperature (CCT) per ANSI C78.377.
- CRI 80 minimum color rendering with balanced spectrum.
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-bars. Drywall or plaster application require use with the FMA22 "F" mounting frame accessory (sold and shipped separately).
- Accessory field install kits available for surface (FSK22) and suspended (2PCH48) mounting.

Construction/Finish

- Extruded aluminum frame post painted with gloss white enamel finish. Corners are precision welded for seamless aesthetic.
- Emergency options available with factory installed battery pack and remote field installed test switch/light with cover plate.
- Die formed driver box with standard access plate for ease of wiring, provides tool-free access to driver(s) from above.
- Edge lit LED arrays provide highly efficient and unipilated transfer of light to the light guide panel.
- Integral clips accommodate definitive attachment to T-bar grid for recessed applications.
- Die formed surface box accessory kit post painted gloss white enamel.
- Suspended accessory kits available, include cables, luminaire mounting clips, and adjustable connectors.
- All Base configurations are shipped two luminaires per master carton. Standard configurations are one luminaire per master carton.

Enclosure

- Acrylic diffuser provides visual comfort and high efficiency.
- Flat opal lens is easy to clean and provides a uniform aesthetic on the ceiling plane.
- Tight enclosure assembly impedes ingress of dust and insects.

Electrical

- Up to 112 lm/W efficacy.
- High efficiency Advance driver featuring high power factor (>0.90), 120-277V 60/50Hz, and less than 15% THD.
- Minimum start temperature -20°C (-4°F).
- Standard configurations are 0-10V dimming to 1%. Base configurations are to 5%.
- To predict lumen output in emergency mode, multiply emergency pack wattage by luminaire efficacy, then by 1.10. Typical lumen output is 1200lm for EMLED, and 850lm for EMLED7.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Electromagnetic interference (EMI) compliant to FCC Title 47 Part 15 class A.
- Flicker and stroboscopic effect compliant to NEMA 77-2017.
- TM-21 predicted L70 lumen maintenance up to 67,000 hours per LED manufacturer LM-80 report.
- cULus (Base) or cETLus (Standard) listed to UL and CSA standards, suitable for damp locations.
- Base configurations are non-IC rated. Standard configurations are IC rated.
- FluxPanel luminaires are Designlights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers (www.designlights.org/QPL).

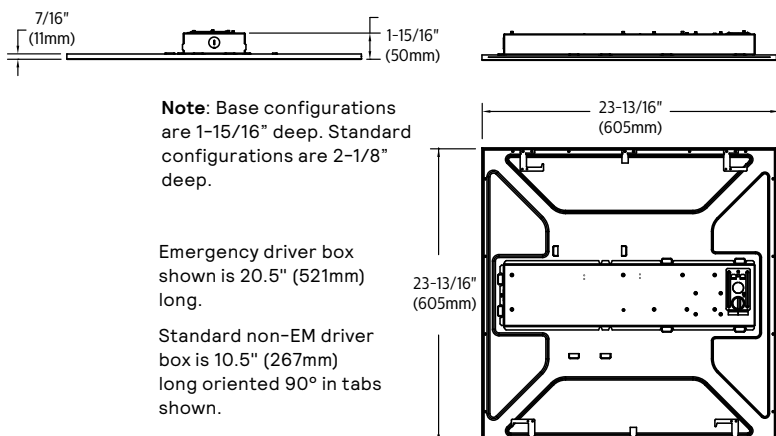
General Notes

- All options factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.
- Five year limited luminaire warranty includes LED boards and driver. Visit www.signify.com/warranties for complete warranty information.

Interact Pro (IAP)

- Interact Pro brings the power of connected lighting to small and medium businesses without the complexity usually associated with connected lighting.
- Interact Pro includes an app, a portal and a broad portfolio of wireless Luminaires, lamps and retrofit kits all working on the same system.
- Commissioning via Interact Pro App (Android or iPhone)
- Prepare commissioning remotely via Interact Pro portal
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1)
- Interact Pro sensor attaches to adjacent t-bar, signal propagation from above ceiling
- For more information on Interact Pro visit: www.interact-lighting.com/pro
- For more information on Interact Ready visit: www.philips.com/interact-ready

Dimensions



Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x2 Standard	2FXP30L840	27	108
	2FXP38L840	36	105
	2FXP45L840	42	104
2x2 Base	2FXP38B840	32	113

2FXP FluxPanel LED recessed 2x2

Up to 4500 lumens

Photometry

2x2 FluxPanel LED, 3800 nominal delivered lumens 3500K

LER – 110

Catalog No.		Candlepower				Light Distribution			Average Luminance			
Test No.		Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
S/MH		0	1253	1250	1254	0-30	975	27.0	45	3841	3745	3722
Lamp Type		5	1246	1241	1243	0-40	1600	44.3	55	3692	3558	3514
Lumens/Lamp		15	1203	1193	1193	0-60	2839	78.7	65	3214	3029	2955
Input Watts		25	1117	1103	1101	0-90	3574	99.1	75	2760	2445	2309
		35	992	975	971	0-180	3607	100.0	85	2248	1581	1230
		45	836	815	810							
		55	652	628	620							
		65	418	394	384							
		75	220	195	184							
		85	60	42	33							
		95	5	5	5							
		05	5	5	5							
		115	5	5	5							
		125	5	5	5							
		135	6	6	6							
		145	6	6	6							
		155	6	6	6							
		165	6	6	6							
		175	6	6	6							

Coefficients of Utilization												
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)												
pcc	80			70			50					
pw	70	50	30	70	50	30	50	30				
RCR												
0	118	118	118	115	115	115	111	111				
1	109	104	98	106	101	96	96	93				
2	98	90	83	95	88	81	84	79				
3	90	79	70	86	78	69	75	68				
4	81	69	60	80	68	60	66	58				
5	76	63	54	72	61	53	58	52				
6	69	56	46	68	55	46	54	46				
7	65	51	41	63	50	41	48	40				
8	59	46	38	58	46	38	45	36				
9	56	42	34	55	41	34	40	34				
10	53	39	32	51	39	30	38	30				

2x2 FluxPanel LED, 3800 nominal delivered lumens 4000K

LER – 113

Catalog No.		Candlepower				Light Distribution			Average Luminance			
Test No.		Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
S/MH		0	1265	1265	1265	0-30	984	27.2	45	3880	3791	3762
Lamp Type		5	1260	1256	1254	0-40	1613	44.6	55	3718	3601	3564
Lumens/Lamp		15	1217	1207	1207	0-60	2864	79.2	65	3222	3076	3025
Input Watts		25	1129	1115	1111	0-90	3617	100.0	75	2722	2511	2455
		35	1003	985	981	0-180	3618	100.0	85	1782	1607	1544
		45	844	825	819							
		55	656	636	629							
		65	419	400	393							
		75	217	200	196							
		85	48	43	41							

Coefficients of Utilization												
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)												
pcc	80			70			50					
pw	70	50	30	70	50	30	50	30				
RCR												
0	118	118	118	115	115	115	111	111				
1	109	104	100	106	102	97	96	93				
2	98	91	83	95	89	81	84	80				
3	90	79	70	88	78	69	75	68				
4	81	69	60	80	68	60	66	58				
5	76	63	54	73	61	53	59	52				
6	69	56	47	68	56	46	54	46				
7	65	51	41	63	50	41	48	40				
8	59	46	38	58	46	38	45	36				
9	56	42	34	55	41	34	40	34				
10	53	40	32	51	39	30	38	30				

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.



Day-Brite

CFI

by @signify

Recessed

FluxPanel LED 2x4

Up to 6000 lumens



Day-Brite/CFI FluxPanel LED recessed is a highly versatile luminaire designed to provide smooth lighting gradient on the lens surface and ease of installation. Available for use in recessed, suspended, and surface mount orientation, FluxPanel is ideal for general lighting applications such as open office, schools, healthcare, and retail.

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

Ordering guide – Standard configurations available with all choices, unless otherwise noted.
Base configurations selections indicated by blue.

Example: 2FXP43L840-4-DS-UNV-DIM-EMLED7

Width	Family	Lumens	Colour	Length	Diffuser	Voltage	Driver	Options ²
2	FXP	38L	-	4	DS	-	-	
2 2'	FXP FluxPanel	Base configuration⁵ 42B 4200 nominal delivered lumens Standard configurations⁴ 38L 3800 nominal delivered lumens 43L 4300 nominal delivered lumens 48L 4800 nominal delivered lumens 54L 5400 nominal delivered lumens 60L 6000 nominal delivered lumens	835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K	4 4'	DS Diffuse (smooth)	UNV Universal Voltage, 120-277 volt 120 ³ 120V 277 ³ 277V 347 347V	DIM^{1,7} 0-10V dimming SDIM⁴ Step dimming to 40% input power XDIM^{3,4} MarkX phase dimming	F1 3/8" flex, 3 wire 18 gauge 6' F2 3/8" flex, 4 wire 18 gauge 6' F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/5W 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires F2/6W 3/8" single flex, 6 wire 18 gauge 6' or dimmable and emergency luminaires GLR Fusing, fast blow GTD/SNSR^{9,10,11} UL924 listed Bodine GTD installed between driver & sensor EMLED¹¹ Bodine BSL310 10W battery pack EMLED7¹¹ Bodine BSL17 7W battery pack DSC Quick driver disconnect CHIC Chicago Plenum rated IAP⁷ Integral Interact Pro RF sensor, enables network lighting control

- 0-10v dimming to 1% for Standard, and 10% for Base configurations
- All options available with Standard configurations only
- XDIM requires 120V or 277V specification
- Available with 54L package or lower
- Standard configurations are packaged one unit per carton
- UNV base configurations are packaged two units per carton, and sold in even quantities only
- Specify DIM driver option only
- Integral IAP option dimmable to 5% via wireless wall switch. See page 2
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral controls options.
- Not available with 347V option.

Accessories (order separately)

- FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting
- FSK24** – 2'x4' surface mount field installation kit (factory welded seams)
- FSF24** – 2'x4' surface mount field assembly kit (field assembled)
- 4PCH48-1-SC** – adjustable cable hanger kit for 2x4 with straight white 18/3 cord (two-1 powered, 1 non-powered)
- 4PCH48-1D-SC** – adjustable cable hanger kit for 2x4 with straight white 18/5 cord for dimming (two-1 powered, 1 non-powered)



interact
ready.

2FXP FluxPanel LED recessed 2x4

Up to 6000 lumens

Application

- 7/16" ultra shallow light guide profile.
- Overall 1-15/16" deep luminaire, including driver box, provides minimal intrusion into the plenum space.
- Even distribution of light on the lens provides exceptionally low glare gradient minimizing distractions at the ceiling plane.
- General light distribution creates uniform horizontal and vertical illuminance on the work plane and limits scalloping on the walls.
- Excellent consistency of correlated color temperature (CCT) per ANSI C78.377.
- CRI 80 minimum color rendering with balanced spectrum.
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-bars. Drywall or plaster application require use with the FMA24 "F" mounting frame accessory (sold and shipped separately).
- Accessory field install kits available for surface (FSK24) and suspended (4PCH48) mounting.

Construction/Finish

- Extruded aluminum frame post painted with gloss white enamel finish. Corners are precision welded for seamless aesthetic.
- Emergency options available with factory installed battery pack and remote field installed test switch/light with cover plate.
- Die formed driver box with standard access plate for ease of wiring, provides tool-free access to driver(s) from above.
- Edge lit LED arrays provide highly efficient and unpiloted transfer of light to the light guide panel.
- Integral clips accommodate definitive attachment to T-bar grid for recessed applications.
- Die formed surface box accessory kit post painted gloss white enamel.

- Suspended accessory kits available, include cables, luminaire mounting clips, and adjustable connectors.
- All Base configurations are shipped two luminaires per master carton. Standard configurations are one luminaire per master carton.

Enclosure

- Acrylic diffuser provides visual comfort and high efficiency.
- Flat opal lens is easy to clean and provides a uniform aesthetic on the ceiling plane.
- Tight enclosure assembly impedes ingress of dust and insects.

Electrical

- Up to 111 lm/W efficacy.
- High efficiency Advance driver featuring high power factor (>0.90), 120-277V 60/50Hz, and less than 15% THD.
- Minimum start temperature -20°C (-4°F).
- Standard configurations are 0-10V dimming to 1%. Base configurations are to 5%.
- To predict lumen output in emergency mode, multiply emergency pack wattage by luminaire efficacy, then by 1.10. Typical lumen output is 1200lm for EMLD7, and 850lm for EMLD7.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Electromagnetic interference (EMI) compliant to FCC Title 47 Part 15 class A.
- Flicker and stroboscopic effect compliant to NEMA 77-2017.
- TM-21 predicted L70 lumen maintenance up to 84,000 hours per LED manufacturer LM-80 report.
- cULus (Base) or cETLus (Standard) listed to UL and CSA standards, suitable for damp locations.
- Base configurations are non-IC rated. Standard configurations are IC rated.

- FluxPanel luminaires are Designlights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers (www.designlights.org/QPL).

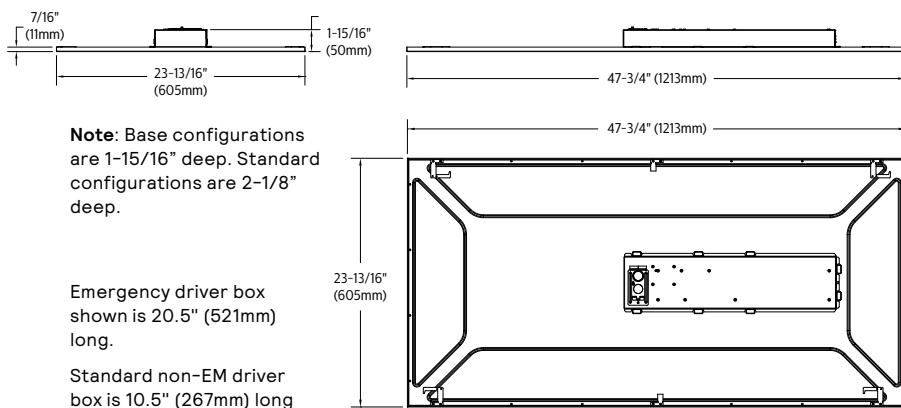
General Notes

- All options factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.
- Five year limited luminaire warranty includes LED boards and driver. Visit www.signify.com/warranties for complete warranty information.

Interact Pro (IAP)

- Interact Pro brings the power of connected lighting to small and medium businesses without the complexity usually associated with connected lighting.
- Interact Pro includes an app, a portal and a broad portfolio of wireless Luminaires, lamps and retrofit kits all working on the same system.
- Commissioning via Interact Pro App (Android or iPhone)
- Prepare commissioning remotely via Interact Pro portal
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1)
- Interact Pro sensor attaches to adjacent t-bar, signal propagation from above ceiling
- For more information on Interact Pro visit: www.interact-lighting.com/pro
- For more information on Interact Ready visit: www.philips.com/interact-ready

Dimensions



Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4 Standard	2FXP38L840	33	109
	2FXP43L840	39	107
	2FXP48L840	47	105
	2FXP54L840	51	104
	2FXP60L840	58	101
2x4 Base	2FXP42B840	38	112

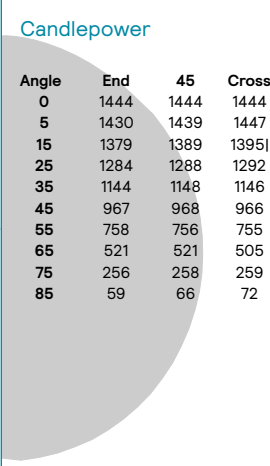
2FXP FluxPanel LED recessed 2x4

Up to 6000 lumens

Photometry

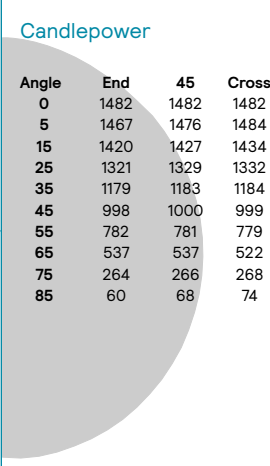
2x4 FluxPanel LED, 4200 nominal delivered lumens 3500K

LER - 108

Catalog No. 2FXP42B835-4-DS-UNV-DIM		<div>Candlepower</div> 				<div>Light Distribution</div>			<div>Average Luminance</div>			
Test No. 38280						Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
S/MH 1.3						0-30	1122	27.2	45	2135	2137	2132
Lamp Type LED						0-40	1839	44.7	55	2062	2058	2054
Lumens/Lamp 4116						0-60	3260	79.2	65	1925	1923	1864
Input Watts 38						0-90	4115	100.0	75	1544	1555	1563
						0-180	4116	100.0	85	1048	1187	1288
</												

2x4 FluxPanel LED, 4200 nominal delivered lumens 4000K

LER - 112

Catalog No. 2FXP42B840-4-DS-UNV-DIM		<div>Candlepower</div> 				<div>Light Distribution</div> <table><tr><th>Degrees</th><th>Lumens</th><th>% Luminaire</th></tr><tr><td>0-30</td><td>1154</td><td>27.2</td></tr><tr><td>0-40</td><td>1894</td><td>44.6</td></tr><tr><td>0-60</td><td>3361</td><td>79.2</td></tr><tr><td>0-90</td><td>4243</td><td>100.0</td></tr><tr><td>0-180</td><td>4245</td><td>100.0</td></tr></table>			Degrees	Lumens	% Luminaire	0-30	1154	27.2	0-40	1894	44.6	0-60	3361	79.2	0-90	4243	100.0	0-180	4245	100.0	<div>Average Luminance</div> <table><tr><th>Angle</th><th>End</th><th>45°</th><th>Cross</th></tr><tr><td>45</td><td>2178</td><td>2183</td><td>2181</td></tr><tr><td>55</td><td>2105</td><td>2103</td><td>2096</td></tr><tr><td>65</td><td>1961</td><td>1961</td><td>1908</td></tr><tr><td>75</td><td>1572</td><td>1586</td><td>1596</td></tr><tr><td>85</td><td>1070</td><td>1208</td><td>1309</td></tr></table>				Angle	End	45°	Cross	45	2178	2183	2181	55	2105	2103	2096	65	1961	1961	1908	75	1572	1586	1596	85	1070	1208	1309																																																																																															
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Lamp Type	LED																																																																																																																																																				
Lumens/Lamp	4245																																																																																																																																																				
Input Watts	38																																																																																																																																																				
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<div>Coefficients of Utilization</div> <div>EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)</div> <table><tr><th>pcc</th><th colspan="3">80</th><th colspan="3">70</th><th colspan="3">50</th></tr><tr><th>pw</th><th>70</th><th>50</th><th>30</th><th>70</th><th>50</th><th>30</th><th>50</th><th>30</th><th></th></tr><tr><th>RCR</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr><tr><td>0</td><td>118</td><td>118</td><td>118</td><td>115</td><td>115</td><td>115</td><td>111</td><td>111</td><td></td></tr><tr><td>1</td><td>109</td><td>104</td><td>100</td><td>106</td><td>102</td><td>97</td><td>96</td><td>93</td><td></td></tr><tr><td>2</td><td>98</td><td>91</td><td>83</td><td>95</td><td>89</td><td>81</td><td>84</td><td>80</td><td></td></tr><tr><td>3</td><td>90</td><td>79</td><td>70</td><td>88</td><td>78</td><td>69</td><td>75</td><td>68</td><td></td></tr><tr><td>4</td><td>81</td><td>69</td><td>61</td><td>80</td><td>68</td><td>60</td><td>66</td><td>58</td><td></td></tr><tr><td>5</td><td>76</td><td>63</td><td>54</td><td>73</td><td>61</td><td>53</td><td>59</td><td>52</td><td></td></tr><tr><td>6</td><td>69</td><td>56</td><td>47</td><td>68</td><td>56</td><td>46</td><td>54</td><td>46</td><td></td></tr><tr><td>7</td><td>65</td><td>51</td><td>41</td><td>63</td><td>50</td><td>41</td><td>48</td><td>40</td><td></td></tr><tr><td>8</td><td>59</td><td>46</td><td>38</td><td>58</td><td>46</td><td>38</td><td>45</td><td>36</td><td></td></tr><tr><td>9</td><td>56</td><td>42</td><td>34</td><td>55</td><td>41</td><td>34</td><td>40</td><td>34</td><td></td></tr><tr><td>10</td><td>53</td><td>40</td><td>32</td><td>51</td><td>39</td><td>30</td><td>38</td><td>30</td><td></td></tr></table>										pcc	80			70			50			pw	70	50	30	70	50	30	50	30		RCR										0	118	118	118	115	115	115	111	111		1	109	104	100	106	102	97	96	93		2	98	91	83	95	89	81	84	80		3	90	79	70	88	78	69	75	68		4	81	69	61	80	68	60	66	58		5	76	63	54	73	61	53	59	52		6	69	56	47	68	56	46	54	46		7	65	51	41	63	50	41	48	40		8	59	46	38	58	46	38	45	36		9	56	42	34	55	41	34	40	34		10	53	40	32	51	39	30	38	30	
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Day-Brite/CFI FluxPanel LED recessed is a highly versatile luminaire designed to provide smooth lighting gradient on the lens surface and ease of installation. Available for use in recessed, suspended, and surface mount orientation, FluxPanel is ideal for general lighting applications such as open office, schools, healthcare, and retail.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lamps: _____ Qty: _____

Notes: _____

Ordering guide – Standard configurations available with all choices, unless otherwise noted. Base configurations selections indicated by blue.

Example: 2FXP43L840-4-DS-UNV-DIM-EMLED7

Width	Family	Lumens	Colour	Length	Diffuser	Voltage	Driver	Options ²
2	FXP	43L	-	4	DS	-	-	
2 2'	FXP FluxPanel	Base configuration⁵ 42B 4200 nominal delivered lumens Standard configurations⁴ 38L 3800 nominal delivered lumens 43L 4300 nominal delivered lumens 48L 4800 nominal delivered lumens 54L 5400 nominal delivered lumens 60L 6000 nominal delivered lumens	835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K	4 4'	DS Diffuse (smooth)	UNV Universal Voltage, 120-277 volt 120 ³ 120V 277 ³ 277V 347 347V	DIM^{1,7} 0-10V dimming SDIM⁴ Step dimming to 40% input power XDIM^{3,4} MarkX phase dimming	F1 3/8" flex, 3 wire 18 gauge 6' F2 3/8" flex, 4 wire 18 gauge 6' F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/5W 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires F2/6W 3/8" single flex, 6 wire 18 gauge 6' or dimmable and emergency luminaires GLR Fusing, fast blow GTD/SNSR^{9,10,11} UL924 listed Bodine GTD installed between driver & sensor EMLED¹¹ Bodine BSL310 10W battery pack EMLED7¹¹ Bodine BSL17 7W battery pack DSC Quick driver disconnect CHIC Chicago Plenum rated IAP⁷ Integral Interact Pro RF sensor, enables network lighting control

- 0-10v dimming to 1% for Standard, and 10% for Base configurations
- All options available with Standard configurations only
- XDIM requires 120V or 277V specification
- Available with 54L package or lower
- Standard configurations are packaged one unit per carton
- UNV base configurations are packaged two units per carton, and sold in even quantities only
- Specify DIM driver option only
- Integral IAP option dimmable to 5% via wireless wall switch. See page 2
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral controls options.
- Not available with 347V option.

Accessories (order separately)

- FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting
- FSK24** – 2'x4' surface mount field installation kit (factory welded seams)
- FSF24** – 2'x4' surface mount field assembly kit (field assembled)
- 4PCH48-1-SC** – adjustable cable hanger kit for 2x4 with straight white 18/3 cord (two-1 powered, 1 non-powered)
- 4PCH48-1D-SC** – adjustable cable hanger kit for 2x4 with straight white 18/5 cord for dimming (two-1 powered, 1 non-powered)

2FXP FluxPanel LED recessed 2x4

Up to 6000 lumens

Application

- 7/16" ultra shallow light guide profile.
- Overall 1-15/16" deep luminaire, including driver box, provides minimal intrusion into the plenum space.
- Even distribution of light on the lens provides exceptionally low glare gradient minimizing distractions at the ceiling plane.
- General light distribution creates uniform horizontal and vertical illuminance on the work plane and limits scalloping on the walls.
- Excellent consistency of correlated color temperature (CCT) per ANSI C78.377.
- CRI 80 minimum color rendering with balanced spectrum.
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-bars. Drywall or plaster application require use with the FMA24 "F" mounting frame accessory (sold and shipped separately).
- Accessory field install kits available for surface (FSK24) and suspended (4PCH48) mounting.

Construction/Finish

- Extruded aluminum frame post painted with gloss white enamel finish. Corners are precision welded for seamless aesthetic.
- Emergency options available with factory installed battery pack and remote field installed test switch/light with cover plate.
- Die formed driver box with standard access plate for ease of wiring, provides tool-free access to driver(s) from above.
- Edge lit LED arrays provide highly efficient and unpiloted transfer of light to the light guide panel.
- Integral clips accommodate definitive attachment to T-bar grid for recessed applications.
- Die formed surface box accessory kit post painted gloss white enamel.

- Suspended accessory kits available, include cables, luminaire mounting clips, and adjustable connectors.
- All Base configurations are shipped two luminaires per master carton. Standard configurations are one luminaire per master carton.

Enclosure

- Acrylic diffuser provides visual comfort and high efficiency.
- Flat opal lens is easy to clean and provides a uniform aesthetic on the ceiling plane.
- Tight enclosure assembly impedes ingress of dust and insects.

Electrical

- Up to 111 lm/W efficacy.
- High efficiency Advance driver featuring high power factor (>0.90), 120-277V 60/50Hz, and less than 15% THD.
- Minimum start temperature -20°C (-4°F).
- Standard configurations are 0-10V dimming to 1%. Base configurations are to 5%.
- To predict lumen output in emergency mode, multiply emergency pack wattage by luminaire efficacy, then by 1.10. Typical lumen output is 1200lm for EMLD, and 850lm for EMLD7.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Electromagnetic interference (EMI) compliant to FCC Title 47 Part 15 class A.
- Flicker and stroboscopic effect compliant to NEMA 77-2017.
- TM-21 predicted L70 lumen maintenance up to 84,000 hours per LED manufacturer LM-80 report.
- cULus (Base) or cETLus (Standard) listed to UL and CSA standards, suitable for damp locations.
- Base configurations are non-IC rated. Standard configurations are IC rated.

- FluxPanel luminaires are Designlights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers (www.designlights.org/QPL).

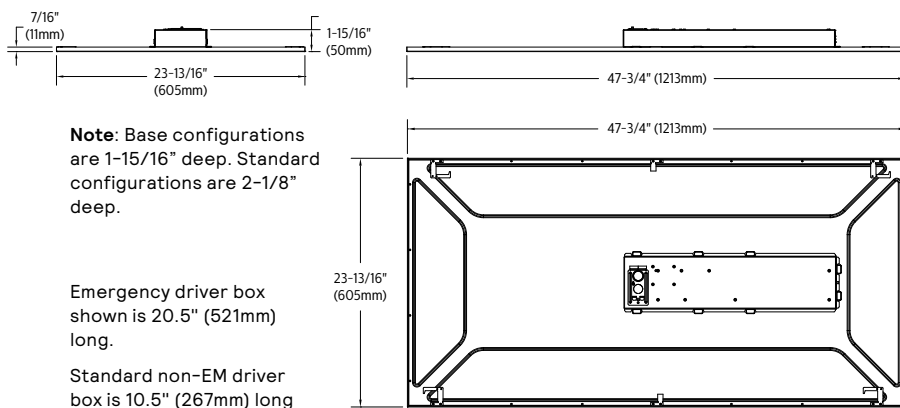
General Notes

- All options factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.
- Five year limited luminaire warranty includes LED boards and driver. Visit www.signify.com/warranties for complete warranty information.

Interact Pro (IAP)

- Interact Pro brings the power of connected lighting to small and medium businesses without the complexity usually associated with connected lighting.
- Interact Pro includes an app, a portal and a broad portfolio of wireless Luminaires, lamps and retrofit kits all working on the same system.
- Commissioning via Interact Pro App (Android or iPhone)
- Prepare commissioning remotely via Interact Pro portal
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1)
- Interact Pro sensor attaches to adjacent t-bar, signal propagation from above ceiling
- For more information on Interact Pro visit: www.interact-lighting.com/pro
- For more information on Interact Ready visit: www.philips.com/interact-ready

Dimensions



Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4 Standard	2FXP38L840	33	109
	2FXP43L840	39	107
	2FXP48L840	47	105
	2FXP54L840	51	104
	2FXP60L840	58	101
2x4 Base	2FXP42B840	38	112

2FXP FluxPanel LED recessed 2x4

Up to 6000 lumens

Photometry

2x4 FluxPanel LED, 4200 nominal delivered lumens 3500K

LER - 108

Catalog No.		Candlepower				Light Distribution			Average Luminance			
Test No.		Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
S/MH		0	1444	1444	1444	0-30	1122	27.2	45	2135	2137	2132
Lamp Type		5	1430	1439	1447	0-40	1839	44.7	55	2062	2058	2054
Lumens/Lamp		15	1379	1389	1395	0-60	3260	79.2	65	1925	1923	1864
Input Watts		25	1284	1288	1292	0-90	4115	100.0	75	1544	1555	1563
		35	1144	1148	1146	0-180	4116	100.0	85	1048	1187	1288
		45	967	968	966							
		55	758	756	755							
		65	521	521	505							
		75	256	258	259							
		85	59	66	72							

Coefficients of Utilization												
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)												
pcc	80			70			50					
pw	70	50	30	70	50	30	70	50	30	70	50	30
RCR	0	1	2	3	4	5	6	7	8	9	10	
0	118	118	118	115	115	115	111	111	111	111	111	111
1	109	104	100	106	102	97	96	93	96	93	96	93
2	98	91	83	95	89	81	84	80	84	80	84	80
3	90	79	70	88	78	69	75	68	75	68	75	68
4	81	69	61	80	68	60	67	58	67	58	67	58
5	76	63	54	73	61	53	59	52	59	52	59	52
6	69	56	47	68	56	46	54	46	54	46	54	46
7	65	51	41	63	50	41	48	40	48	40	48	40
8	59	46	38	58	46	38	45	36	45	36	45	36
9	56	42	34	55	41	34	40	34	40	34	40	34
10	53	40	32	52	39	30	38	30	38	30	38	30

2x4 FluxPanel LED, 4200 nominal delivered lumens 4000K

LER - 112

Catalog No.		Candlepower				Light Distribution			Average Luminance			
Test No.		Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
S/MH		0	1482	1482	1482	0-30	1154	27.2	45	2178	2183	2181
Lamp Type		5	1467	1476	1484	0-40	1894	44.6	55	2105	2103	2096
Lumens/Lamp		15	1420	1427	1434	0-60	3361	79.2	65	1961	1961	1908
Input Watts		25	1321	1329	1332	0-90	4243	100.0	75	1572	1586	1596
		35	1179	1183	1184	0-180	4245	100.0	85	1070	1208	1309
		45	998	1000	999							
		55	782	781	779							
		65	537	537	522							
		75	264	266	268							
		85	60	68	74							

Coefficients of Utilization												
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)												
pcc	80			70			50					
pw	70	50	30	70	50	30	70	50	30	70	50	30
RCR	0	1	2	3	4	5	6	7	8	9	10	
0	118	118	118	115	115	115	111	111	111	111	111	111
1	109	104	100	106	102	97	96	93	96	93	96	93
2	98	91	83	95	89	81	84	80	84	80	84	80
3	90	79	70	88	78	69	75	68	75	68	75	68
4	81	69	61	80	68	60	66	58	66	58	66	58
5	76	63	54	73	61	53	59	52	59	52	59	52
6	69	56	47	68	56	46	54	46	54	46	54	46
7	65	51	41	63	50	41	48	40	48	40	48	40
8	59	46	38	58	46	38	45	36	45	36	45	36
9	56	42	34	55	41	34	40	34	40	34	40	34
10	53	40	32	51	39	30	38	30	38	30	38	30

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Day-Brite

CFI

by @signify

Recessed

FluxPanel LED 2x4

Up to 6000 lumens



Day-Brite/CFI FluxPanel LED recessed is a highly versatile luminaire designed to provide smooth lighting gradient on the lens surface and ease of installation. Available for use in recessed, suspended, and surface mount orientation, FluxPanel is ideal for general lighting applications such as open office, schools, healthcare, and retail.

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

Ordering guide – Standard configurations available with all choices, unless otherwise noted.

Base configurations selections indicated by blue.

Example: 2FXP43L840-4-DS-UNV-DIM-EMLED7

Width	Family	Lumens	Colour	Length	Diffuser	Voltage	Driver	Options ²
2	FXP	48L	-	4	DS	-	-	
2 2'	FXP FluxPanel	<p>Base configuration⁵</p> <p>42B 4200 nominal delivered lumens</p> <p>Standard configurations⁴</p> <p>38L 3800 nominal delivered lumens</p> <p>43L 4300 nominal delivered lumens</p> <p>48L 4800 nominal delivered lumens</p> <p>54L 5400 nominal delivered lumens</p> <p>60L 6000 nominal delivered lumens</p>	<p>835 80 CRI, 3500K</p> <p>840 80 CRI, 4000K</p> <p>850 80 CRI, 5000K</p>	4 4'	DS Diffuse (smooth)	<p>UNV Universal Voltage, 120-277 volt</p> <p>120³ 120V</p> <p>277³ 277V</p> <p>347 347V</p>	<p>DIM^{1,7} 0-10V dimming</p> <p>SDIM⁴ Step dimming to 40% input power</p> <p>XDIM^{3,4} MarkX phase dimming</p>	<p>F1 3/8" flex, 3 wire 18 gauge 6'</p> <p>F2 3/8" flex, 4 wire 18 gauge 6'</p> <p>F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires</p> <p>F2/5W 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires</p> <p>F2/6W 3/8" single flex, 6 wire 18 gauge 6' or dimmable and emergency luminaires</p> <p>GLR Fusing, fast blow</p> <p>GTD/SNSR^{9,10,11} UL924 listed Bodine GTD installed between driver & sensor</p> <p>EMLED¹¹ Bodine BSL310 10W battery pack</p> <p>EMLED7¹¹ Bodine BSL17 7W battery pack</p> <p>DSC Quick driver disconnect</p> <p>CHIC Chicago Plenum rated</p> <p>IAP⁷ Integral Interact Pro RF sensor, enables network lighting control</p>

- 0-10v dimming to 1% for Standard, and 10% for Base configurations
- All options available with Standard configurations only
- XDIM requires 120V or 277V specification
- Available with 54L package or lower
- Standard configurations are packaged one unit per carton
- UNV base configurations are packaged two units per carton, and sold in even quantities only
- Specify DIM driver option only
- Integral IAP option dimmable to 5% via wireless wall switch. See page 2
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral controls options.
- Not available with 347V option.

Accessories (order separately)

- FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting
- FSK24** – 2'x4' surface mount field installation kit (factory welded seams)
- FSF24** – 2'x4' surface mount field assembly kit (field assembled)
- 4PCH48-1-SC** – adjustable cable hanger kit for 2x4 with straight white 18/3 cord (two-1 powered, 1 non-powered)
- 4PCH48-1D-SC** – adjustable cable hanger kit for 2x4 with straight white 18/5 cord for dimming (two-1 powered, 1 non-powered)



interact
ready.

2FXP FluxPanel LED recessed 2x4

Up to 6000 lumens

Application

- 7/16" ultra shallow light guide profile.
- Overall 1-15/16" deep luminaire, including driver box, provides minimal intrusion into the plenum space.
- Even distribution of light on the lens provides exceptionally low glare gradient minimizing distractions at the ceiling plane.
- General light distribution creates uniform horizontal and vertical illuminance on the work plane and limits scalloping on the walls.
- Excellent consistency of correlated color temperature (CCT) per ANSI C78.377.
- CRI 80 minimum color rendering with balanced spectrum.
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-bars. Drywall or plaster application require use with the FMA24 "F" mounting frame accessory (sold and shipped separately).
- Accessory field install kits available for surface (FSK24) and suspended (4PCH48) mounting.

Construction/Finish

- Extruded aluminum frame post painted with gloss white enamel finish. Corners are precision welded for seamless aesthetic.
- Emergency options available with factory installed battery pack and remote field installed test switch/light with cover plate.
- Die formed driver box with standard access plate for ease of wiring, provides tool-free access to driver(s) from above.
- Edge lit LED arrays provide highly efficient and unpiloted transfer of light to the light guide panel.
- Integral clips accommodate definitive attachment to T-bar grid for recessed applications.
- Die formed surface box accessory kit post painted gloss white enamel.

- Suspended accessory kits available, include cables, luminaire mounting clips, and adjustable connectors.
- All Base configurations are shipped two luminaires per master carton. Standard configurations are one luminaire per master carton.

Enclosure

- Acrylic diffuser provides visual comfort and high efficiency.
- Flat opal lens is easy to clean and provides a uniform aesthetic on the ceiling plane.
- Tight enclosure assembly impedes ingress of dust and insects.

Electrical

- Up to 111 lm/W efficacy.
- High efficiency Advance driver featuring high power factor (>0.90), 120-277V 60/50Hz, and less than 15% THD.
- Minimum start temperature -20°C (-4°F).
- Standard configurations are 0-10V dimming to 1%. Base configurations are to 5%.
- To predict lumen output in emergency mode, multiply emergency pack wattage by luminaire efficacy, then by 1.10. Typical lumen output is 1200lm for EMLD, and 850lm for EMLD7.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Electromagnetic interference (EMI) compliant to FCC Title 47 Part 15 class A.
- Flicker and stroboscopic effect compliant to NEMA 77-2017.
- TM-21 predicted L70 lumen maintenance up to 84,000 hours per LED manufacturer LM-80 report.
- cULus (Base) or cETLus (Standard) listed to UL and CSA standards, suitable for damp locations.
- Base configurations are non-IC rated. Standard configurations are IC rated.

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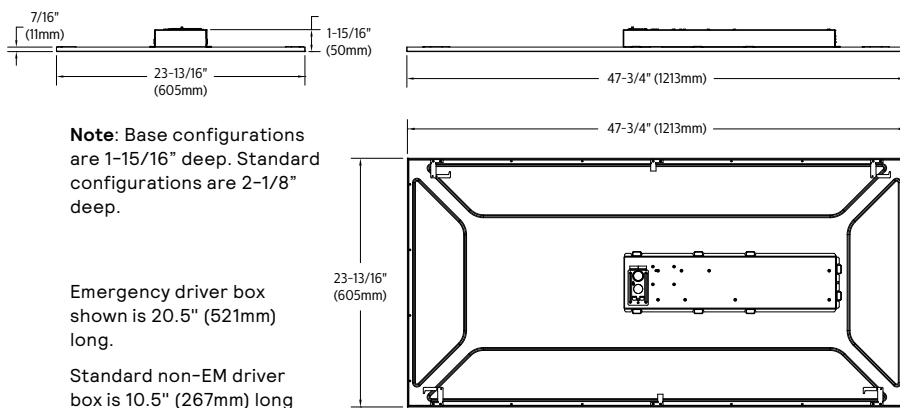
General Notes

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- Prepare commissioning remotely via Interact Pro portal
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1)
- Interact Pro sensor attaches to adjacent t-bar, signal propagation from above ceiling
- For more information on Interact Pro visit: www.interact-lighting.com/pro
- For more information on Interact Ready visit: www.philips.com/interact-ready

Dimensions



Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4 Standard	2FXP38L840	33	109
	2FXP43L840	39	107
	2FXP48L840	47	105
	2FXP54L840	51	104
	2FXP60L840	58	101
2x4 Base	2FXP42B840	38	112

2FXP FluxPanel LED recessed 2x4

Up to 6000 lumens

Photometry

2x4 FluxPanel LED, 4200 nominal delivered lumens 3500K

LER - 108

Catalog No.		Candlepower				Light Distribution			Average Luminance			
Test No.		Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
S/MH		0	1444	1444	1444	0-30	1122	27.2	45	2135	2137	2132
Lamp Type		5	1430	1439	1447	0-40	1839	44.7	55	2062	2058	2054
Lumens/Lamp		15	1379	1389	1395	0-60	3260	79.2	65	1925	1923	1864
Input Watts		25	1284	1288	1292	0-90	4115	100.0	75	1544	1555	1563
		35	1144	1148	1146	0-180	4116	100.0	85	1048	1187	1288
		45	967	968	966							
		55	758	756	755							
		65	521	521	505							
		75	256	258	259							
		85	59	66	72							

Coefficients of Utilization												
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)												
pcc	80			70			50					
pw	70	50	30	70	50	30	70	50	30	70	50	30
RCR	70	50	30	70	50	30	70	50	30	70	50	30
0	118	118	118	115	115	115	111	111	111	111	111	111
1	109	104	100	106	102	97	96	93	93	93	93	93
2	98	91	83	95	89	81	84	80	80	80	80	80
3	90	79	70	88	78	69	75	68	68	68	68	68
4	81	69	61	80	68	60	67	58	58	58	58	58
5	76	63	54	73	61	53	59	52	52	52	52	52
6	69	56	47	68	56	46	54	46	46	46	46	46
7	65	51	41	63	50	41	48	40	40	40	40	40
8	59	46	38	58	46	38	45	36	36	36	36	36
9	56	42	34	55	41	34	40	34	34	34	34	34
10	53	40	32	52	39	30	38	30	30	30	30	30

2x4 FluxPanel LED, 4200 nominal delivered lumens 4000K

LER - 112

Catalog No.		Candlepower				Light Distribution			Average Luminance			
Test No.		Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Angle	End	45°	Cross
S/MH		0	1482	1482	1482	0-30	1154	27.2	45	2178	2183	2181
Lamp Type		5	1467	1476	1484	0-40	1894	44.6	55	2105	2103	2096
Lumens/Lamp		15	1420	1427	1434	0-60	3361	79.2	65	1961	1961	1908
Input Watts		25	1321	1329	1332	0-90	4243	100.0	75	1572	1586	1596
		35	1179	1183	1184	0-180	4245	100.0	85	1070	1208	1309
		45	998	1000	999							
		55	782	781	779							
		65	537	537	522							
		75	264	266	268							
		85	60	68	74							

Coefficients of Utilization												
EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)												
pcc	80			70			50					
pw	70	50	30	70	50	30	70	50	30	70	50	30
RCR	70	50	30	70	50	30	70	50	30	70	50	30
0	118	118	118	115	115	115	111	111	111	111	111	111
1	109	104	100	106	102	97	96	93	93	93	93	93
2	98	91	83	95	89	81	84	80	80	80	80	80
3	90	79	70	88	78	69	75	68	68	68	68	68
4	81	69	61	80	68	60	66	58	58	58	58	58
5	76	63	54	73	61	53	59	52	52	52	52	52
6	69	56	47	68	56	46	54	46	46	46	46	46
7	65	51	41	63	50	41	48	40	40	40	40	40
8	59	46	38	58	46	38	45	36	36	36	36	36
9	56	42	34	55	41	34	40	34	34	34	34	34
10	53	40	32	51	39	30	38	30	30	30	30	30

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.



Day-Brite

CFI

by Signify

Recessed

EvoGrid 2x4

2EVG up to 7400 lumens



Day-Brite / CFI EvoGrid recessed utilizes highly reliable and efficient Philips LED platform boards and dimmable driver enabling market leading performance in its category. Its soft opal diffuser with large luminous area minimizes apparent brightness compared to other basket luminaires and provides general lighting perfect for a wide variety of applications.

Project: _____

Location: _____

Cat.No: _____

Type: _____

Lamps: _____ Qty: _____

Notes: _____

Ordering guide

example: 2EVG38L840-4-D-UNV-DIM

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
2	EV	G			—	4	—	—	—	
2 2'	EV EvoGrid	5 Grid	blank Static H Air Return	Standard efficacy 38L 3800 43L 4300 48L 4800 54L 5400 74L 7400 High efficacy 38LH 3800 43LH 4300 48LH 4800 54LH 5400 74LH 7400	830 ¹ 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 ¹ 80 CRI, 5000K	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	UNV Universal Voltage, 120-277 volt 120 ² 120V 277 ² 277V 347 347V	DIM^{3,8} Dimming SDIM⁴ Step dimming to 40% input power XDIM² MarkX phase dimming LDE Lutron LDE5, 5% dimming DALI DALI	AG F1 Antimicrobial finish F2 3/8" flex, 3 wire 18 gauge 6' F1/D 3/8" flex, 4 wire 18 gauge 6' 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/5W 3/8" single flex, 5 wire 18 gauge 6' for dimmable luminaires F2/6W 3/8" single flex, 6 wire 18 gauge 6' for dimmable and emergency luminaires GLR Fusing, fast blow GTD/E⁹ UL924 listed Bodine GTD factory installed on driver input GTD/SNSR¹⁰ UL924 listed Bodine GTD installed between driver & sensor EMLED Integral emergency battery pack, 1100lm nominal (ballast enclosure on top of luminaire) DSC Quick driver disconnect IAP⁵ Integral Interact Pro RF sensor, enables wireless connect lighting control IAO⁶ Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control SWZG2^{6,7} Integral sensor, daylighting and occupancy, advanced grouping with dwell time and zoning SWZDT⁶ Integral sensor, daylighting and occupancy, advanced grouping with dwell time CHIC Chicago Plenum rated CRM⁸ Continuous row mount TAP Top access plate

- 3000K and 5000K color temperatures available only on high efficacy configurations
- XDIM requires 120V or 277V specification.
- Integral controls options dimmable to 5% via wireless all switch. See page 2.
- Consult factory for SDIM on 74L and 74LH packages.
- Specify only with -DIM driver option

- Must order SWZ-REMOTE SpaceWise handheld remote with each system order.
- CRM includes side cover with top access plate and additional end cover. 7/8" gap between fixtures.
- Non-controls and SWZG2 configurations are 0-10v dimmable to 1%
- Must be installed in conjunction with a UL1008 device.
- Must be ordered with an integral controls option. Not available with SWZG2 controls option.

SpaceWise accessories (order separately)

- SWZ-REMOTE** – SpaceWise handheld remote for grouping and configuration (at least one remote required for any SpaceWise installation)
- UID8451/10** – Wireless Dimmer Switch Selector
- UID8461/10** – Wireless Scene Selector

Other accessories (order separately)

- FMA24** – 2'x4' "F" mounting frame for NEMA "F" mounting
- EVD4L** – EvoGrid 2'x4' rectangular ribbed replacement lens
- EVDS4L** – EvoGrid 2'x4' rectangular smooth replacement lens
- EVR4L** – EvoGrid 2'x4' round ribbed replacement lens
- EVR54L** – EvoGrid 2'x4' round smooth replacement lens
- FSK24** – 2'x4' surface mount field installation kit (factory welded seams), order with -TAP (top access plate) option (SWZG2 and EMLED option not available)
- FSF24** – 2'x4' surface mount field assembly kit, order with -TAP (top access plate) option (SWZG2 and EMLED option not available)



interact
ready.

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Ordering guide – PoE controls (Static & Tunable White)

example: 2EVG43L8TW-4-D-LV-POE-IAO

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
<input type="text" value="2"/>	<input type="text" value="EV"/>	<input type="text" value="G"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> –	<input type="text" value="4"/> –	<input type="text"/> –	<input type="text" value="LV"/> –	<input type="text" value="POE"/> –	<input type="text"/>
2 2'	EV EvoGrid	G Grid	Blank Static H Air return	38L 3800 43L 4300 48L 4800	Static White 830 80 CRI, 3000K 835 80 CRI, 3500K 840 80 CRI, 4000K 850 80 CRI, 5000K Color Tuning 8TW 80CRI, 2700K thru 6500K tunable white	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	LV Low voltage	POE Power over ethernet	AG Antimicrobial finish EMPOE ¹ 600lm integral emergency driver and battery pack IAO Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control

1 Indicator light and test switch located on housing side panel.

Ordering guide – DALI Controls (Tunable White)

example: 2EVG43L8TW-4-D-UNV-DTW-IAO

Width	Family	Ceiling Type	Air Function	Lumens (nominal delivered)	Color	Length	Center Diffuser	Voltage	Driver	Options
<input type="text" value="2"/>	<input type="text" value="EV"/>	<input type="text" value="G"/>	<input type="text"/>	<input type="text"/>	<input type="text"/> –	<input type="text" value="4"/> –	<input type="text"/> –	<input type="text" value="UNV"/> –	<input type="text" value="DTW"/> –	<input type="text"/>
2 2'	EV EvoGrid	G Grid	Blank Static H Air return	39L 3900 43L 4300 49L 4900 56L 5600 65L 6500	8TW 80CRI, 2700K thru 6500K tunable white	4 4'	D Diffuse (opal) DS Diffuse smooth (opal) R Diffuse round ribbed (opal) RS Diffuse round smooth (opal)	UNV Universal Voltage, 120-277 volt	DTW Dual channel tunable white	AG Antimicrobial finish F1/D 3/8" twin flex, 3 wire 18 gauge 6' for dimmable luminaires F2/7W 3/8" single flex, 7 wire 18 gauge 6' for emergency Factory wired Bodine BSL310 integral emergency pack. Nominal 1100lm EMLED Integral Interact Office daylighting and occupancy sensor, enables wireless connected lighting control IAO Fusing, fast blow GLR Quick driver disconnect DSC

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Application

- A highly efficient, visually comfortable, architecturally styled recessed LED luminaire designed with a minimalist strategy to achieve sustainable objectives.
- Low profile configuration is only 2-3/4" deep, requiring minimal plenum space.
- Soft opal diffuser with large luminous area minimizes apparent brightness and provides high visual comfort perfect for a wide variety of general lighting applications like offices, schools, retail, or healthcare.
- Multiple lumen packages over a wide range to provide significant application flexibility over light levels and/or luminaire spacing.
- Directs a controlled amount of light to the higher angles in the room to balance the brightness of the surfaces and eliminate "cave effect" while creating the impression of a larger, brighter space without glare.
- Excellent color rendering with a CRI of 80.
- LEDs are an excellent source for use with controls since dimming or frequent switching does not degrade the performance or life of the source. Integral or external sensors are available for use.
- Designed for use with standard Grid (NEMA "G") or Narrow Grid (NEMA "NFG") ceiling T-bars. Drywall or plaster requirements can be accommodated by using an FMA24 "F" mounting frame (sold separately.)
- Continuous row mount option (CRM) includes wireway covers on each end and on one side of housing.

Construction/Finish

- Uncomplicated design is 2-3/4" in depth and only requires a few parts outside of the electrical system and hardware, creating several benefits:
 - Less material required
 - Less packaging required
 - Reduced weight
 - Less energy required for construction and assembly
 - More luminaires can be shipped per truck to reduce fuel use and emissions

- Luminaire finish is matte white polyester for a high quality, durable finish.
- T-bar grid clips are integral to body.
- Access plate located on end provides easy field wiring. TAP option provides top mounted access plate.

Electrical

- Integral sensor options for occupancy sensing and/or daylight harvesting are available for additional energy savings with no reduction of life or increase in installation labor.
- Total luminaire efficacy exceeding 139 LPW (lumens per Watt) with high efficiency packages.
- LED board is easily accessible from below without tools. Single LED board is replaceable if needed via plug-in connectors to ensure long service life.
- LED driver is accessible from above.
- Emergency driver is accessible from above. To estimate lumen output in emergency mode, multiply emergency pack wattage by efficacy, then by 1.10. Typical lumen output is 1300lm for EMLED.
- The GTD/E option is used to bypass wall switches and allow luminaire operation on auxiliary power. Generator transfer requires installation in conjunction with a UL1008 listed device.
- The GTD/SNSR option is used to bypass integrated sensor control in the event of utility power loss. Generator transfer requires installation in conjunction with a UL1008 listed device.
- Step dim 100/40% and additional dimming options available.
- 5 year manufacturer's limited warranty. Visit signify.com/warranties for complete warranty information.
- TM-21 predicted L70 lumen maintenance up to 80,000 hours for high efficacy and 50,000 hours for standard efficacy configurations.
- cETLus listed to UL and CSA standards, suitable for damp locations.
- EvoGrid luminaires are DesignLights Consortium® qualified. Please see the DLC QPL list for exact catalog numbers, www.designlights.org/QPL.

Enclosure

- Opal diffuser provides soft, comfortable lighting while maintaining high efficiency.
- Diffuser requires no frames or fasteners and can be easily removed from below without tools if needed.

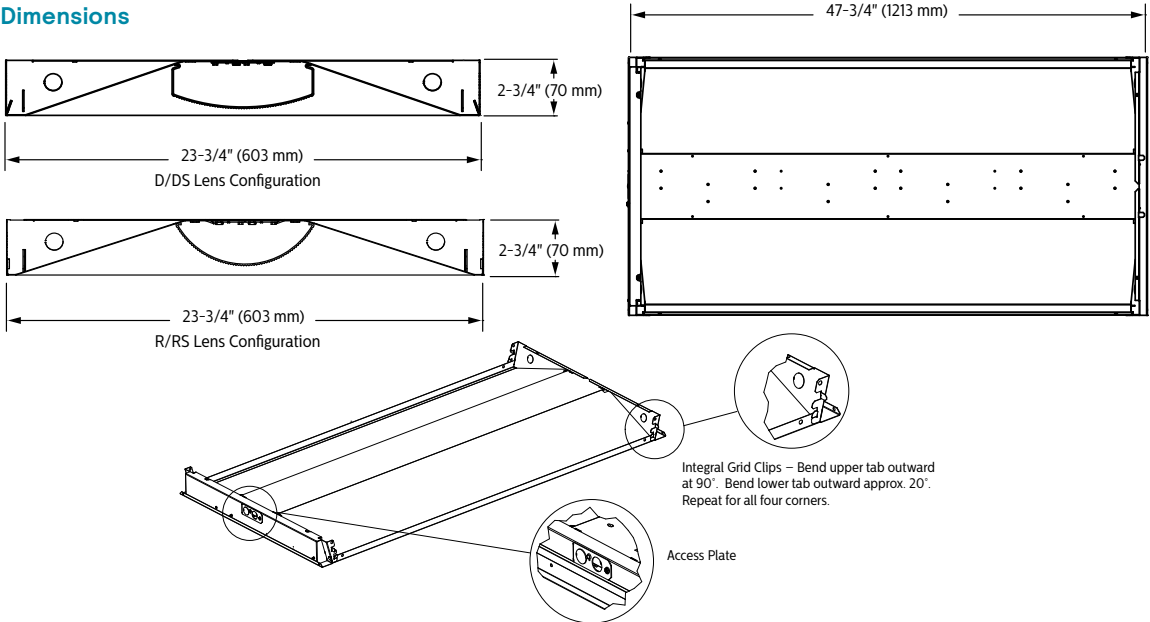
General Notes

- All options factory installed.
- All accessories are field installed.
- Many luminaire components, such as reflectors, refractors, lenses, sockets, lampholders, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility.

Energy data

Luminaire	Catalog Number	Input Power	Efficacy
2x4	2EVG38L840-4-D	37	110
	2EVG43L840-4-D	41	108
	2EVG48L840-4-D	48	105
	2EVG54L840-4-D	55	103
	2EVG74L840-4-D	83	93
	2EVG38L840-4-R	31	124
	2EVG43L840-4-R	35	124
	2EVG48L840-4-R	40	122
	2EVG54L840-4-R	46	120
	2EVG74L840-4-R	67	111
2x4 High Efficacy	2EVG38LH840-4-D	27	139
	2EVG43LH840-4-D	32	139
	2EVG48LH840-4-D	36	138
	2EVG54LH840-4-D	39	137
	2EVG74LH840-4-D	56	134
	2EVG38LH840-4-R	26	142
	2EVG43LH840-4-R	30	142
	2EVG48LH840-4-R	34	143

Dimensions



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Wireless Controls Options

SpaceWise DT (SWZDT)

- Standalone daylight and occupancy sensing with advanced grouping and dwell time
- Commissioning via compatible Android phone and Philips Field App
- Dimming via compatible Zigbee wireless wall switch only (see link below for details)
- Register for the commissioning app at <http://registration.componentcloud.philips.com/appregistration/>
- Integral sensing options may not be combined
- For more information including recommended switches, refer to the following: –
SWZDT – www.usa.lighting.philips.com/systems/lighting-systems/spacewise

SpaceWise (SWZG2)

- Commissioning via SWZ-REMOTE handheld remote, must order a minimum of one per installation
- Integral sensing options may not be combined
- 0-10V dimmable to 1%
- For more information on the sensor, please refer to www.lightingproducts.signify.com/documents/webdb2/DayBrite/pdf/SWZG2_sensor.pdf
- Visit www.usa.lighting.philips.com/systems/lighting-systems/spacewise for more information about SpaceWise Technology (SWZG2)

Interact Pro (IAP)

- Interact Pro brings the power of connected lighting to **small and medium businesses** without the complexity usually associated with connected lighting.
- Interact Pro includes an app, a portal and a broad portfolio of wireless Luminaires, lamps and retrofit kits all working on the same system.
- Commissioning via Interact Pro App (Android or iPhone)
- Prepare commissioning remotely via Interact Pro portal
- Requires compatible Interact Pro Gateway and internet connectivity for commissioning
- Compatible with UID8451/10 ZigBee Greenpower wireless dimmer switch
- Compatible with wireless Occ sensor (OCC SENSOR IA CM IP42 WH 10/1) or wireless Day/Occ sensor (OCC MULTI SENSOR IA CM WH 10/1)
- For more information on Interact Pro visit: www.interact-lighting.com/pro
- For more information on Interact Ready visit: www.philips.com/interact-ready

EvoGrid shown with integral sensor



SWZG2 sensor shown.

All other controls options have the sensor centrally located centered on one end flange.

Interact Office (IAO)

- A wireless IoT connected lighting solution for **large enterprises** that span across multiple floors, buildings and require multiple gateways.
- View all your projects under one dashboard and easily compare insights from multiple projects in one view.
- Compatible Zigbee Green Power wall dimmer and wireless Occupancy or Daylight & Occupancy sensors available.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Supports advanced IoT Apps on wayfinding, room/desk reservation and offers open APIs
- Requires compatible Interact Office Gateway and internet connectivity for commissioning.
- For more information on Interact Office Wireless, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Wired Controls Options

Interact Office Wired (PoE), Static White & Tunable White

- PoE based IoT connected lighting solution for large enterprises that span across multiple floors, buildings and require multiple gateways.
- Use Interact Office software and insights to increase building efficiency, achieve building wide integration and optimize space through occupancy analytics.
- Human centric lighting through tunable white technology – Dynamic behaviors via scheduled lighting recipes mimicking daylight patterns or supporting biorhythms.
- Supports advanced IoT Apps on Personal Control, Space Management, wayfinding, room/desk reservation and offers open APIs for light control and data exchange.
- PoE lighting controller is accessible from below.
- Integral sensor option for occupancy sensing (PIR) and/or daylight harvesting available for additional energy savings.
- Optional integral emergency controller and battery pack provides 600lm nominal output. Test switch and indicator light mounted on side of chassis on one end.
- Emergency battery has a 3 month pre-installed shelf life, and must be stored and installed in environments of 20C to 30C (–4F to 86F) ambient, and 45–85% relative humidity.
- For more information on Interact Office Wired, visit: www.interact-lighting.com/office or www.usa.lighting.philips.com/systems/system-areas/offices

Tunable White with DALI

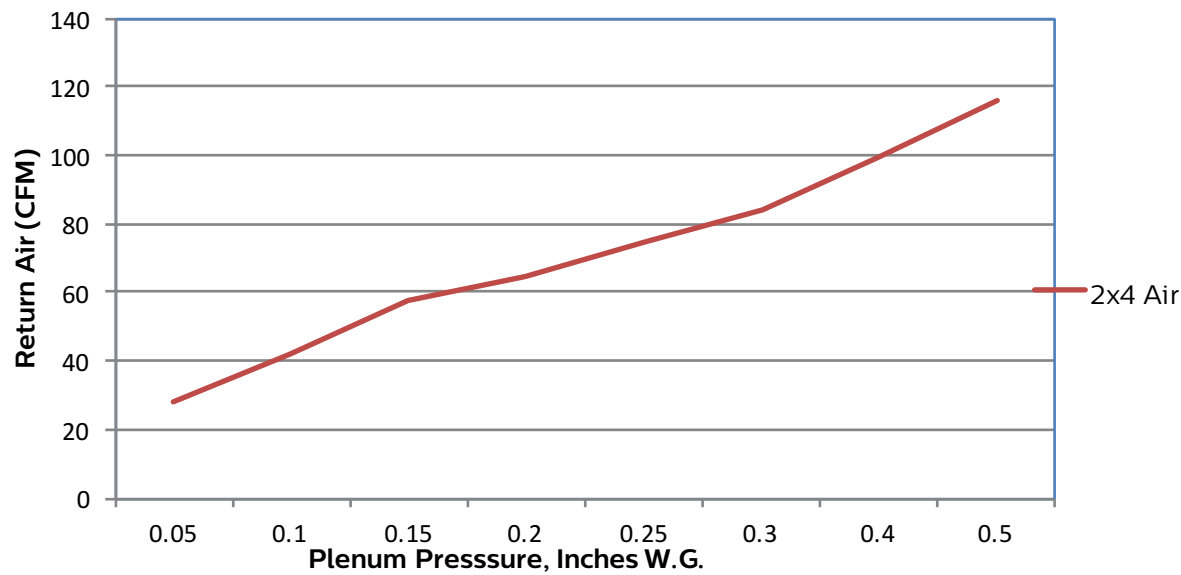
- Signify tunable white solutions are designed to help maximize the influence of lighting on your daily life.
- Dynamic behaviors via scheduled lighting recipes mimicking daylight patterns or supporting biorhythms.
- Scene setting via lighting pre-sets based on various combinations of lighting color temperature and intensity.

www.usa.lighting.philips.com/products/product-highlights/tunable-white-technology

2EVG EvoGrid recessed 2x4

up to 7400 lumens

Air return data



Pressure	0.05	0.1	0.15	0.2	0.25	0.3	0.4	0.5
CFM	28	42	58	65	75	84	100	116
Noise	<15	24	34	37	41	45	47	49



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Photometry

2x4 EvoGrid recessed LED, high efficacy, 4800 nominal delivered lumens

LER – 138

Catalog No.	2EVG48LH840-4-D-UNV-DIM
Test No.	34935
S/MH	1.2
Lamp Type	LED
Lumens	4897
Input Watts	36

Comparative yearly lighting energy cost per 1000 lumens – **\$1.74** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1778	1778	1778	1778
5	1749	1771	1782	1771
15	1669	1701	1714	1701
25	1509	1545	1566	1545
35	1283	1333	1364	1333
45	1022	1087	1134	1087
55	751	838	913	838
65	494	613	704	613
75	264	393	465	393
85	74	114	119	114

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1358	27.7
0-40	2189	44.7
0-60	3775	77.1
0-90	4899	100.0
0-180	4899	100.0

Average Luminance

Zone	End	45°	Cross
45	7532	8012	8362
55	6828	7614	8295
65	6090	7566	8686
75	5319	7922	9360
85	4450	6795	7112

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	
1	108	103	98	106	101	96	96	93	
2	97	90	82	95	88	81	83	79	
3	90	79	69	86	77	68	73	68	
4	81	69	60	80	68	59	66	58	
5	75	61	53	72	60	53	58	52	
6	69	56	46	68	55	46	53	46	
7	65	51	41	63	50	41	48	40	
8	59	46	38	58	46	38	45	36	
9	56	42	34	55	41	34	40	34	
10	53	40	32	52	39	30	38	30	

2x4 EvoGrid recessed LED, 4800 nominal delivered lumens

LER – 105

Catalog No.	2EVG48L840-4-D-UNV-DIM
Test No.	34090
S/MH	1.2
Lamp Type	LED
Lumens	5015
Input Watts	48

Comparative yearly lighting energy cost per 1000 lumens – **\$1.29** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

Candlepower

Angle	End	45	Cross	Back-45
0	1830	1830	1830	1777
5	1813	1820	1825	1770
15	1725	1739	1746	1700
25	1554	1571	1582	1541
35	1317	1347	1365	1330
45	1048	1096	1132	1086
55	771	851	930	838
65	510	642	733	614
75	279	417	485	394
85	81	123	132	111

Light Distribution

Degrees	Lumens	% Luminaire
0-30	1387	27.6
0-40	2228	44.4
0-60	3836	76.4
0-90	5019	100.0
0-180	5020	100.0

Average Luminance

Zone	End	45°	Cross
45	7725	8080	8349
55	7009	7732	8457
65	6290	7919	9045
75	5613	8389	9769
85	4870	7342	7903

Coefficients of Utilization

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	
1	108	103	98	105	101	96	96	93	
2	97	90	82	94	88	81	83	79	
3	89	79	69	86	77	68	73	67	
4	81	69	60	79	68	59	66	57	
5	75	61	53	72	60	52	58	51	
6	69	56	46	68	55	46	53	46	
7	65	51	41	63	50	41	47	40	
8	59	46	38	58	46	38	44	36	
9	56	42	34	55	41	34	40	34	
10	53	39	32	51	39	30	38	30	

2EVG EvoGrid recessed 2x4

up to 7400 lumens

2x4 EvoGrid recessed LED, high efficacy, 4800 nominal delivered lumens

LER – 144

Catalog No.	2EVG48LH840-4-R-UNV-DIM	Candlepower					Light Distribution			Average Luminance			
Test No.	38774	Angle	End	45	Cross	Back-45	Degrees	Lumens	% Luminaire	Zone	End	45°	Cross
S/MH	1.3	0	1666	1666	1666	1666	0-30	1286	26.1	45	7359	8120	8741
Lamp Type	LED	5	1634	1661	1671	1661	0-40	2100	42.6	55	6833	8050	9071
Lumens	4927	15	1560	1599	1619	1599	0-60	3736	75.8	65	5772	8313	9621
Input Watts	34	25	1420	1475	1513	1475	0-90	4932	100.0	75	4800	8216	10115
		35	1227	1304	1363	1304	0-180	4932	100.0	85	3218	7919	7650
		45	998	1101	1186	1101							
		55	752	886	998	886							
		65	468	674	780	674							
		75	238	408	502	408							
		85	54	132	128	132							
Comparative yearly lighting energy cost per 1000 lumens – \$1.67 based on 3000 hrs. and \$.08 pwr KWH.													
The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.													
Photometric values based on test performed in compliance with LM-79.													

2x4 EvoGrid recessed LED, 4800 nominal delivered lumens

LER – 122

Catalog No.	2EVG48L840-4-R-UNV-DIM	Candlepower					Light Distribution			Average Luminance			
Test No.	38786	Angle	End	45	Cross	Back-45	Degrees	Lumens	% Luminaire	Zone	End	45°	Cross
S/MH	1.3	0	1658	1658	1658	1658	0-30	1280	26.1	45	7307	8088	8690
Lamp Type	LED	5	1623	1653	1664	1653	0-40	2090	42.6	55	6785	8019	9012
Lumens	4903	15	1550	1591	1612	1591	0-60	3719	75.8	65	5735	8297	9556
Input Watts	40	25	1411	1468	1506	1468	0-90	4902	100.0	75	4761	8153	9672
		35	1219	1299	1357	1299	0-180	4903	100.0	85	3206	7578	7524
		45	991	1097	1179	1097							
		55	747	882	992	882							
		65	465	673	775	673							
		75	236	405	480	405							
		85	54	127	126	127							
Comparative yearly lighting energy cost per 1000 lumens – \$1.97 based on 3000 hrs. and \$0.08 pwr KWH.													
The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.													
Photometric values based on test performed in compliance with LM-79.													

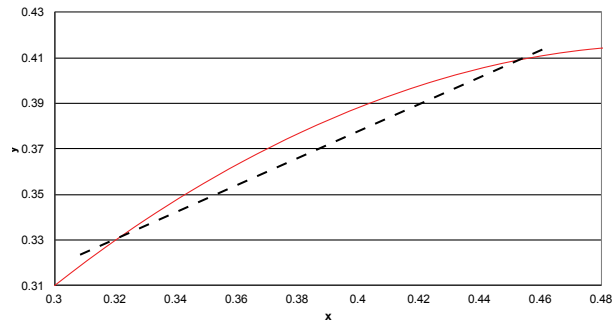
2EVG EvoGrid recessed 2x4

up to 7400 lumens

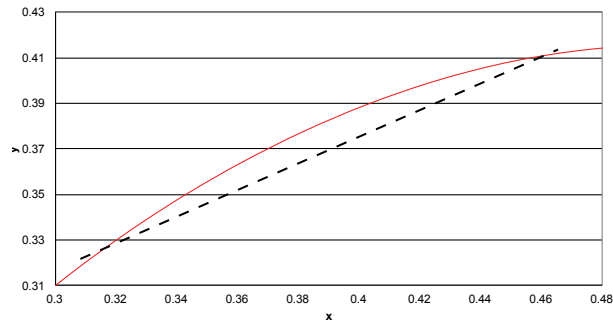
Tunable White with PoE

Color Information

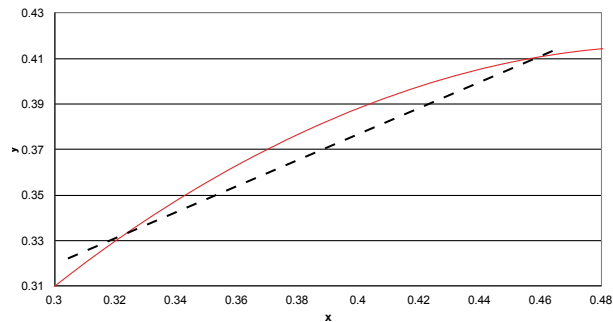
2x4 EvoGrid 3800lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	3833	3836	3840	3843	3848	3854
Power	27	27	27	27	26	26
Efficacy	140	141	143	145	147	149
CCT	82	84	86	87	87	85
CRI	15	23	32	37	35	22
R9	18	23	31	34	31	11



2x4 EvoGrid 4300lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4327	4330	4334	4338	4343	4349
Power	33	31	31	30	30	30
Efficacy	132	138	141	143	147	147
CCT	82	84	86	87	87	85
CRI	14	23	32	36	35	23
R9	18	23	31	34	31	11



2x4 EvoGrid 4800lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4815	4817	4819	4821	4824	4827
Power	39	36	35	34	33	34
Efficacy	125	134	138	141	146	144
CCT	82	84	86	87	87	85
CRI	14	22	31	36	35	23
R9	18	23	31	34	31	11



2EVG EvoGrid recessed 2x4

up to 7400 lumens

Tunable White with DALI

Electrical Specifications

Input Voltage	120V				277V			
Nominal CCT	2700K				2700K			
Nominal Lumens	3900	4300	4900	5600	3900	4300	4900	5600
Commissioned State								
Power (W)	41.8	47.0	55.9	65.7	41.5	46.4	55.0	64.3
Current (A)	0.4	0.4	0.5	0.6	0.2	0.2	0.2	0.3
Power Factor	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.9
THD (%)	14.0	13.0	11.0	10.0	17.0	16.5	16.0	14.5
Off State Power (W)	0.6	0.6	0.6	0.6	0.9	0.9	0.9	0.9
Non-Commissioned State								
Power (W)	78.0	87.0	102.0	116.0	77.0	86.0	101.0	113.0
Current (A)	0.7	0.7	0.9	1.0	0.3	0.3	0.4	0.4

Photometry

2x4 EvoGrid recessed LED with tunable white, 4300 nominal delivered lumens, 2700K CCT

LER – 110

Catalog No.	2EVG43L8TW-4-D-UNV-DTW	Candlepower				Light Distribution				Average Luminance			
Test No.	36529	Angle	End	45	Cross	Degrees	Lumens	% Luminaire	Zone	End	45'	Cross	
S/MH	1.2	0	1602	1602	1602	0-30	1221	27.0	45	6988	7435	7754	
Lamp Type	LED	5	1576	1594	1600	0-40	1977	43.7	55	6474	7266	7886	
Lumens	4527	15	1502	1525	1538	0-60	3465	76.5	65	5501	7420	8357	
Input Watts	39	25	1361	1392	1412	0-90	4526	100.0	75	4621	7358	8453	
CCT	2700K	35	1168	1209	1238	0-180	4527	100.0	85	3074	6753	7255	
		45	948	1009	1052								
		55	712	800	868								
		65	446	602	678								
		75	229	365	420								
		85	51	113	121								

Comparative yearly lighting energy cost per 1000 lumens – **\$2.18** based on 3000 hrs. and \$.08 pwr KWH.

The photometric results were obtained in the Philips Day-Brite laboratory which is NVLAP accredited by the National Institute of Standards and Technology.

Photometric values based on test performed in compliance with LM-79.

EFFECTIVE FLOOR CAVITY REFLECTANCE 20 PER (pfc=0.20)									
pcc	80			70			50		
pw	70	50	30	70	50	30	50	30	
RCR									
0	118	118	118	115	115	115	111	111	111
1	108	103	98	105	101	96	96	96	93
2	97	90	81	94	88	81	83	79	79
3	89	78	69	86	77	68	73	67	67
4	81	68	59	79	68	59	66	57	57
5	75	61	53	72	60	52	58	51	51
6	68	56	46	67	55	46	53	45	45
7	64	51	41	63	50	40	47	40	40
8	59	46	38	57	45	36	44	36	36
9	56	41	34	55	41	34	40	33	33
10	52	39	30	51	39	30	38	30	30

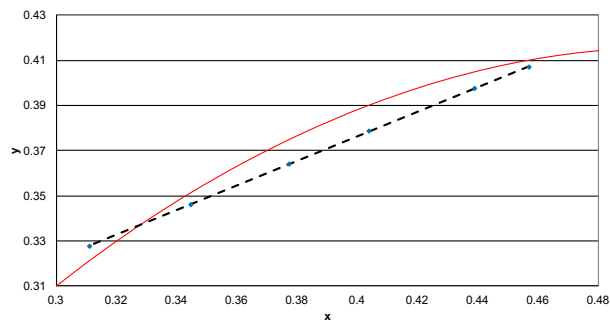
2EVG EvoGrid recessed 2x4

up to 7400 lumens

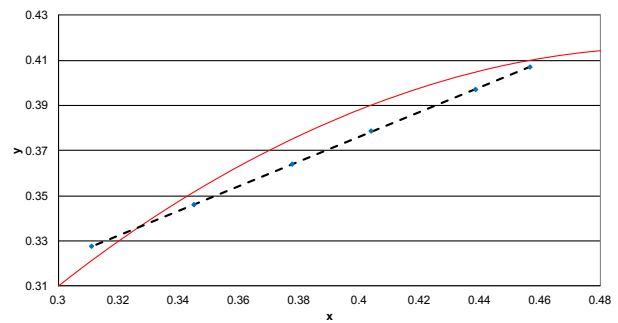
Tunable White with DALI

Color information

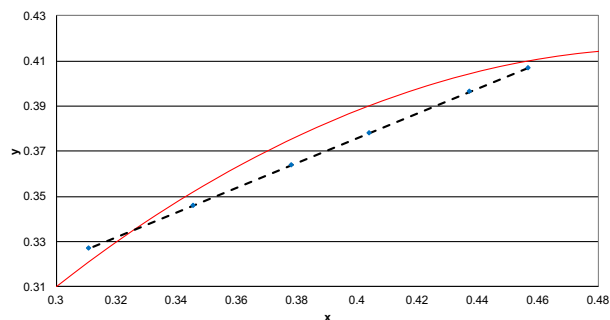
2x4 EvoGrid 3900lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	3790	3798	3805	3885	3811	3919
Power	41.4	42.9	40.7	40.2	38.2	35.4
Efficacy	91.5	88.6	93.5	96.8	99.8	110.7
CCT	2716	2915	3431	3990	5000	6606
CRI	83	84	87	87	87	84
R9	18	23	33	37	32	16
x	0.4568	0.4387	0.4037	0.3774	0.3446	0.3110
y	0.4071	0.3974	0.3784	0.3641	0.3462	0.3278
Duv	-0.0010	-0.0029	-0.0051	-0.0051	-0.0026	0.0034



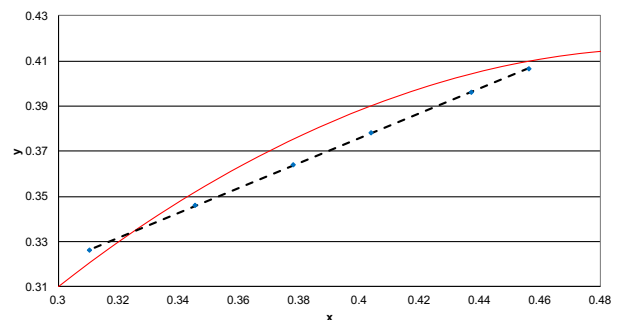
2x4 EvoGrid 4300lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4247	4257	4259	4346	4254	4349
Power	46.5	47.8	45.2	44.4	42.2	39.4
Efficacy	91.2	89.0	94.3	97.9	100.8	110.3
CCT	2717	2916	3427	3980	4984	6610
CRI	83	84	86	87	87	84
R9	18	23	33	37	34	16
x	0.4567	0.4386	0.4039	0.3777	0.3450	0.3110
y	0.4070	0.3973	0.3784	0.3642	0.3462	0.3275
Duv	-0.0011	-0.0029	-0.0052	-0.0052	-0.0027	0.0033



2x4 EvoGrid 4900lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	4969	5017	4983	5079	4955	5030
Power	55.0	56.2	52.4	51.3	48.7	45.8
Efficacy	90.3	89.3	95.1	99.1	101.9	109.8
CCT	2719	2932	3424	3972	4971	6625
CRI	83	84	86	87	87	84
R9	18	23	32	37	34	16
x	0.4564	0.4372	0.4040	0.3780	0.3454	0.3108
y	0.4068	0.3965	0.3784	0.3641	0.3461	0.3271
Duv	-0.0011	-0.0031	-0.0052	-0.0053	-0.0029	0.0032



2x4 EvoGrid 5600lm	2700K	3000K	3500K	4000K	5000K	6500K
Flux	5805	5877	5833	5936	5780	5813
Power	65.6	66.2	61.2	59.7	56.2	53.7
Efficacy	88.5	88.8	95.4	99.5	102.9	108.3
CCT	2722	2934	3423	3965	4962	6654
CRI	83	84	86	87	87	84
R9	17	23	32	36	34	16
x	0.4561	0.4370	0.4039	0.3781	0.3456	0.3104
y	0.4066	0.3962	0.3781	0.3639	0.3459	0.3264
Duv	-0.0012	-0.0032	-0.0053	-0.0055	-0.0031	0.0030



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