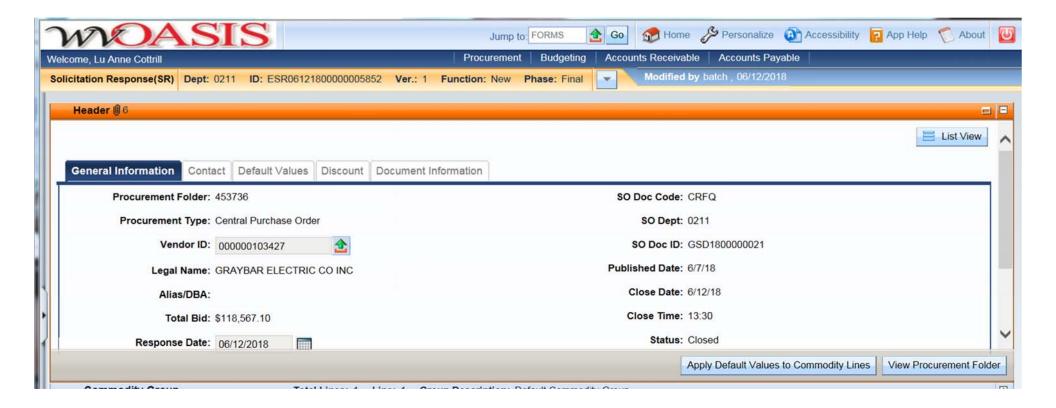
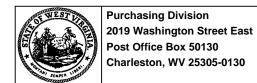


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





# State of West Virginia Solicitation Response

Proc Folder: 453736

Solicitation Description: Addendum 1 - LED Light Fixtures and Accessories

Proc Type: Central Purchase Order

Date issued	Solicitation Closes	Solicitation Response	Version
	2018-06-12 13:30:00	SR 0211 ESR06121800000005852	1

VENDOR

000000103427

GRAYBAR ELECTRIC CO INC

Solicitation Number: CRFQ 0211 GSD1800000021

**Total Bid:** \$118,567.10 **Response Date:** 2018-06-12 **Response Time:** 12:19:19

Comments:

FOR INFORMATION CONTACT THE BUYER

Linda B Harper (304) 558-0468 linda.b.harper@wv.gov

Signature on File FEIN # DATE

All offers subject to all terms and conditions contained in this solicitation

Page: 1 FORM ID: WV-PRC-SR-001

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Light emitting diode LED fixture	1380.00000	EA	\$66.670000	\$92,004.60

Comm Code	Manufacturer	Specification	Model #	
39111544				

HOLOPHANE /ACUITY TROFFER LIGHT FIXTURE LED **Extended Description:** 

Part No. HVT 2x4 DOP 3900LM 35K MVOLT MIN10 80CRI ZT JP10, or equal

Comments: ALTERNATE HE WILLIAMS LT-24-L40/835-AF-DIM-UNV

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Light emitting diode LED fixture	35.00000	EA	\$244.790000	\$8,567.65

Comm Code	Manufacturer	Specification	Model #	
39111544				

HOLOPHANE/ ACUITY TROFFER LIGHT FIXTURE LED- EMERGENCY w/ BATTERY Part No. HVT 2x4 DOP 3900LM 35K MVOLT MIN10 80CRI ZT BR JP10, or equal **Extended Description:** 

Comments: ALTERNATE HE WILLIAMS LT-24-L40/835-AF-EM/10W-DIM-UNV

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Light emitting diode LED fixture	65.00000	EA	\$57.290000	\$3,723.85

Comm Code	Manufacturer	Specification	Model #	
39111544				

**Extended Description:** 

HOLOPHANE/ACUITY TROFFER LIGHT FIXTURE LED Part No. HVT 2x2 DOP 3900LM 35K MVOLT MIN10 80CRI ZT JP 10, or equal

Comments: ALTERNATE HE WILLIAMS LT-22-L39/835-AF-DIM-UNV

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Interior lighting fixtures and accessories	350.00000	EA	\$4.170000	\$1,459.50

Comm Code	Manufacturer	Specification	Model #
39111500			

**Extended Description:** 

HOLOPHANE FIXTURE EARTH QUAKE STABILITY CLIPS Part No. 2x4 EC EARTHQUAKE CLIPS (PACKAGE OF 4), or equal

Comments: ALTERNATE HE WILLIAMS EQCLIPS

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Interior lighting fixtures and accessories	150.00000	EA	\$85.410000	\$12,811.50

Comm Code	Manufacturer	Specification	Model #	
39111500				
<u> </u>				

HOLOPHANE / ACUITY dimming and OCUPANCY SENSOR WALL SWITCH Part No. WSX PDT D WH (120/277V) with matching wall plate included, or equal **Extended Description:** 

Comments: ALTERNATE WATTSTOPPER DW-311-(COLOR)



**Purchasing Divison** 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

#### State of West Virginia Request for Quotation 27 - Miscellaneous

Proc Folder: 453736

Doc Description: LED Light Fixtures and Accessories for Bldg 32 & 34

Proc Type: Central Purchase Order

Date Issued Solicitation Closes		Solicitati	on No	Version	
2018-05-31	2018-06-12 13:30:00	CRFQ	0211 GSD1800000021	1	

**BID RECEIVING LOCATION** 

**BID CLERK** 

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON

WV

25305

US

	D	

Vendor Name, Address and Telephone Number:

304-206-3600 OFFICE

FOR INFORMATION CONTACT THE BUYER

Linda B Harper (304) 558-0468 linda.b.harper@wv.gov

Signature X All offers subject to all terms and conditions contained in this solicitation

Page: 1

FORM ID: WV-PRC-CRFQ-001

#### ADDITIONAL INFORMATION:

The West Virginia Purchasing Division for the Agency, The West Virginia Department of Administration's, General Services Division is soliciting bids from qualified vendors to establish a "One-Time" contract for the purchase of LED Light Fixtures and Accessories per the Specifications, Terms & Conditions and bid requirements as attached.

INVOICE TO		SHIP TO		
DEPARTMENT OF ADMINISTRATION GENERAL SERVICES DIVISION		STATE OF WEST VIRGINIA JOBSITE - SEE SPECIFICATIONS		
112 CALIFORNIA AVENUE, 5TH FLOOR				
CHARLESTON	WV25305	No City	WV 99999	
US		US		

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	Light emitting diode LED fixture	1380.00000	EA	66.67	92,004.60

Comm Code	Manufacturer	Specification	Model #
39111544	HE WILLAMS	LT-24-	-1/40/835-AF-DIM-UNV

#### **Extended Description:**

HOLOPHANE /ACUITY TROFFER LIGHT FIXTURE LED Part No. HVT 2x4 DOP 3900LM 35K MVOLT MIN10 80CRI ZT JP10, or equal

INVOICE TO		SHIP TO	
DEPARTMENT OF ADMIN GENERAL SERVICES DIV 112 CALIFORNIA AVENU	/ISION	STATE OF WEST VIRO JOBSITE - SEE SPECI	~ ~
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
2	Light emitting diode LED fixture	35.00000	EA	244.79	8,567,65

Comm Code	Manufacturer	Specification	Model #
39111544	ItB Williams	LT-24-	140/835-AF-EM/10N-DIM-UNV

**Extended Description:** 

HOLOPHANE/ ACUITY TROFFER LIGHT FIXTURE LED- EMERGENCY w/ BATTERY Part No. HVT 2x4 DOP 3900LM 35K MVOLT MIN10 80CRI ZT BR JP10, or equal

INVOICE TO		SHIP TO	
ia.			
DEPARTMENT OF ADMINI	STRATION	STATE OF WEST VIR	GINIA
GENERAL SERVICES DIVI	SION	JOBSITE - SEE SPEC	IFICATIONS
112 CALIFORNIA AVENUE, 5TH FLOOR			
CHARLESTON	WV25305	No City	WV 99999
US		us	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
3	Light emitting diode LED fixture	65.00000	EA	57.29	3,723.85

Comm Code	Manufacturer	Specification	Model #
39111544	HE Williams	LT.	-22-139/835-AF-DIM-UNV

**Extended Description:** 

HOLOPHANE/ACUITY TROFFER LIGHT FIXTURE LED Part No. HVT 2x2 DOP 3900LM 35K MVOLT MIN10 80CRI ZT JP 10, or equal

INVOICE TO		SHIP TO			
DEPARTMENT OF ADMINISTRATION GENERAL SERVICES DIVISION			STATE OF WEST VIRGINIA JOBSITE - SEE SPECIFICATIONS		
112 CALIFORNIA AVENUE	5TH FLOOR				
CHARLESTON	WV25305	No City	WV 99999		
US		US			

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
4	Interior lighting fixtures and accessories	350.00000	EA	4,17	1,459.50

Comm Code	Manufacturer	Specification	Model #	
39111500	HE WillrAMS		EQCUPS	

**Extended Description:** 

HOLOPHANE FIXTURE EARTH QUAKE STABILITY CLIPS Part No. 2x4 EC EARTHQUAKE CLIPS (PACKAGE OF 4), or equal

INVOICE TO		SHIP TO			
DEPARTMENT OF ADMINISTR GENERAL SERVICES DIVISIO		STATE OF WEST VIRGINIA JOBSITE - SEE SPECIFICATIONS			
112 CALIFORNIA AVENUE, 5T	H FLOOR				
CHARLESTON	WV25305	No City	WV 99999		
US	а	US			

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
5	Interior lighting fixtures and accessories	150.00000	EA	85.41	12,811.50

Comm Code	Manufacturer	Specification	Model #	
39111500	WATTENDPER		DW-311-(Color)	

**Extended Description:** 

HOLOPHANE / ACUITY dimming and OCUPANCY SENSOR WALL SWITCH Part No. WSX PDT D WH (120/277V) with matching wall plate included, or equal

SCHEDULE OF EVENTS

 Line
 Event
 Event Date

 1
 Question Deadline 4:00 p.m.
 2018-06-06

	Document Phase	<b>Document Description</b>	Page 5
GSD1800000021	Final	LED Light Fixtures and Accessories for Bldg	of 5
		32 & 34	

#### ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

	Document Phase	<b>Document Description</b>	Page 5
GSD1800000021	Final	LED Light Fixtures and Accessories for Bldg	of 5
		32 & 34	

### ADDITIONAL TERMS AND CONDITIONS

See attached document(s) for additional Terms and Conditions

## EXHIBIT A - PRICING PAGE GSD453736 BUILDING 32 & 34 LIGHTING PROJECT

		Alternative Bid Item Manufacturer and			
Item #	Item Description	Item Number	Unit Price	Qty	<b>Extended Price</b>
3.1.1	Holophane Troffer LED Light Fixture, Part No. HVT 2X4 DOP 3900LM 35K MVOLT MIN 10 80CRI ZT JP10, or equal.	HE Williams#LT-24-L/40/835-AF-DIM- UNV	\$ 66.67	1380	\$ 92,004.60
	Holophane Troffer LED Light Fixture, Part No. HVT 2X4 DOP 3900LM 35K MVOLT MIN 10 80CRI ZT BR JP10, or equal.	HE Williams #LT-24-L40/835-AF-	\$ 244.79	35	\$ 8,567.65
3.1.3	Holophane Troffer LED Light Fixture, Part No. HVT 2X2 DOP 3900LM 35K MVOLT MIN 10 80CRI ZT JP10, or equal.	HE Williams #LT-22-L39/835-AF-DIM- UNV	\$ 57.29	65	\$ 3,723.85
3.1.4	Seismic Lighting Fixture Clamp	HE Williams # EQCLIPS	\$ 4.17	350	\$ 1,459.50
3.1.5	Acuity Controls, Dimming and Occupancy Sensor Wall Switch, Part No. WSX PDT D WH, or equal.	Wattstopper # DW-311-(color)	\$ 85.41	150	\$ 12,811.50
Total Bid Amount (includes shipping charges)					\$ 118,567.10

<b>DESIGNATED CONTACT:</b> Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.
Keni Hyps Outside Sales
(Name, Title) Kevin Hypes Outside SACES Rep
(Printed Name and Title)  1010 Young Street, Charleston, UV 2530/ (Address)  (Address)
(Address) (MATIES TOS), WIV X330 (Address) (MATIES TOS), WIV X330 (Phone Number) / (Fax Number)
(mone Humber), (rax Humber) (EV, N. Hypes @ Graybar, Com (email address)
(**************************************
CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that
product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute
and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that  I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require
registration.
(Company)   Company)
Low Mit Gustations Condinator
(Authorized Signature) (Representative Name, Title)
GEORGE MCHAIL, QUOTATIONS (BORDINATION
(Printed Name and Title of Authorized Representative)
6/11/18
(Date)
304-206-3426 304-344-0324 (Phone Number) (Fax Number)

WV-10 Approved / Revised 08/01/15

## State of West Virginia

## **VENDOR PREFERENCE CERTIFICATE**

Certification and application is hereby made for Preference in accordance with **West Virginia Code**, §5A-3-37. (Does not apply to construction contracts). **West Virginia Code**, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the **West Virginia Code**. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

Application is made for 2.5% vendor preference for the reason checked:  Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preced-						
ing the date of this certification; or, Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or, Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents						
and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; <b>or</b> ,						
2. Application is made for 2.5% vendor preference for the reason checked:  Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,						
Application is made for 2.5% vendor preference for the reason checked:  Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,						
Application is made for 5% vendor preference for the reason checked:  Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,						
5. Application is made for 3.5% vendor preference who is a veteran for the reason checked:  Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,						
Application is made for 3.5% vendor preference who is a veteran for the reason checked:  Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.						
7. Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with West Virginia Code §5A-3-59 and West Virginia Code of State Rules.  Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.						
Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.						
By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.						
Under penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.						
Bidder: Graybar Electro Signed: Hory Mill						
Date: 6/11/18 Title: QUOTATIONS COORNATOR						

# ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: GSD1800000021

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

(Che	ck th	e bo	x next to each addendum re-	ceive	i)	
	À	0	Addendum No. 1	[	]	Addendum No. 6
	[	]	Addendum No. 2	[	]	Addendum No. 7
	[	]	Addendum No. 3	[	]	Addendum No. 8
	[	]	Addendum No. 4	[	]	Addendum No. 9
	[	]	Addendum No. 5	[	]	Addendum No. 10

Addendum Numbers Received:

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Company
Authorized Signature

6/11/18

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012

# West Virginia Ethics Commission Disclosure of Interested Parties to Contracts

(Required by W. Va. Code § 6D-1-2)

Contracting Business Entity: Graybar Electric Address: 1010 Your Street
Authorized Agent: George Milhail Address: 1010 Your Street  Charleston W 2530/  Address: SAUE  Address: SAUE
Contract Number: GSD180000021 Contract Description: LED Light Fixtures & Acces 32.
Governmental agency awarding contract: WY Dept of Abruin - General Services Division
☐ Check here if this is a Supplemental Disclosure
List the Names of Interested Parties to the contract which are known or reasonably anticipated by the contracting business entity for each category below (attach additional pages if necessary):
1. Subcontractors or other entities performing work or service under the Contract  Check here if none, otherwise list entity/individual names below.
2. Any person or entity who owns 25% or more of contracting entity (not applicable to publicly traded entities)  Check here if none, otherwise list entity/individual names below.
3. Any person or entity that facilitated, or negotiated the terms of, the applicable contract (excluding legal services related to the negotiation or drafting of the applicable contract)  Check here if none, otherwise list entity/individual names below.  Signature:   Date Signed:   Date Signed:
Notary Verification
State of
Taken, sworn to and subscribed before me this
To be completed by State Agency:  Date Received by State Agency:  Date submitted to Ethics Commission:  Governmental agency submitting Disclosure:  Graybar Electric  1010 Young Street  Chapteron, WV 25301  The viscolistic Class Fand (1702)

# STATE OF WEST VIRGINIA Purchasing Division

### **PURCHASING AFFIDAVIT**

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL OTHER CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

#### **DEFINITIONS:**

MITNESS THE FOLLOWING SIGNATURE.

Graybar Electric 1010 Young Street Charleston, WV 25301 My Commission Expires Feb 01, 2021

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITHESS THE PULLOWING SIGNATURE:		
Vendor's Name: Graybar Electr	C	
Authorized Signature:		Date: 6/12/2018
State of West Virginia		
County of <u>Kanawha</u> , to-wit:		
Taken, subscribed, and sworn to before me this $\underline{b}'$	day of June	, 20 <u>18</u> .
My Commission expires Feb 1 <sup>5+</sup>	, 20 <u>21</u> .	
AFFIX SEAL HERE  OFFICIAL SEAL STATE OF WEST VIRGINIA NOTARY PUBLIC	NOTARY PUBLIC	Purchasing Affidavit (Revised 07/07/2017)



PRODUCER Lockton Companies

#### **CERTIFICATE OF LIABILITY INSURANCE**

6/1/2019

DATE (MM/DD/YYYY) 5/22/2018

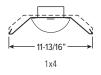
THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

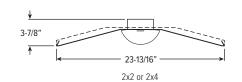
IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s). CONTACT NAME:

	Three City Place Drive, Suite 90	10		L <i>u</i>	A/C, No. Ext):		(A/C. No):	
	St. Louis MO 63141-7081			Lā	E-MAIL ADDRESS:			
	(314) 432-0500					INSURER(S) AFFOR	RDING COVERAGE	NAIC#
					SURER A . Tra	velers Indemn		25682
INSU	RED C. L. Disti C.						sualty Co of America	25674
	7657 Graybar Electric Company, Inc.			F		Ci		25017
	P. O. Box 7231				NSURER C :			
	St. Louis MO 63177			Tana	NSURER D :		Hirothus en son zontom et es cóm com	
	St. Louis WO 05177			11	NSURER E :			
					NSURER F :			
				NUMBER: 14073178				XXXXXX
IN	IIS IS TO CERTIFY THAT THE POLICIES DICATED. NOTWITHSTANDING ANY RE ERTIFICATE MAY BE ISSUED OR MAY ICLUSIONS AND CONDITIONS OF SUCH	QUIF	AIN,	NT, TERM OR CONDITION OF THE INSURANCE AFFORDED	F ANY CONTE BY THE POL	RACT OR OTHER LICIES DESCRIBE	DOCUMENT WITH RESPECT TO D HEREIN IS SUBJECT TO ALI	O WHICH THIS
INSR LTR	TYPE OF INSURANCE	ADDL	SUBR	POLICY NUMBER	POLICY (MM/DD/Y	EFF POLICY EXP YYY) (MM/DD/YYYY)	LIMITS	
	X COMMERCIAL GENERAL LIABILITY	Y	Y	HC2EGLSA474M6932TCT1			EACH OCCURRENCE \$ 1	.000,000
Α	CLAIMS-MADE X OCCUR	1	1	HCZEGLSA474WI0932TCTT	0/1/2016	0/1/2019	DAMAGE TO DENTED	.000,000
	ODAMO-MADE A GOOM							0,000
								.000.000
					9			,000,000
	X POLICY PRO-							
							PRODUCTS - COMP/OP AGG \$ 2	,000,000
	OTHER: AUTOMOBILE LIABILITY	-		HOOD A DATA ACOCOMOTO	6/1/0016	6/10010		000 000
Α		N	Y	HC2ECAP474M6920TCT18	6/1/2018	6/1/2019	(Ea accident) 3	,000,000
Α	X ANY AUTO OWNED SCHEDULED			PHYSICAL DAMAGE-			Control of the Contro	XXXXXX
A	AUTOS ONLY AUTOS			SELF INSURED				XXXXXX
	HIRED AUTOS ONLY NON-OWNED AUTOS ONLY						(Per accident)	XXXXXX
							\$ X	XXXXXX
	UMBRELLA LIAB OCCUR			NOT APPLICABLE	Å		EACH OCCURRENCE \$ X	XXXXXX
	EXCESS LIAB CLAIMS-MADE					-	AGGREGATE \$ X	XXXXXX
	DED RETENTION\$						s X	XXXXXX
В	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY		Y	HC2NUB474M586718 (AOS	6/1/2018	6/1/2019	X PER OTH-	
	ANY PROPRIETOR/PARTNER/EXECUTIVE			10 10 10 10 10 10 10 10 10 10 10 10 10 1	355 35 3		E.L. EACH ACCIDENT \$ 1	.000,000
B	OFFICER/MEMBER EXCLUDED? N (Mandatory in NH)	N/A		HRJUB474M587918 (AZ, MA, WI)	6/1/2018	6/1/2019	E.L. DISEASE - EA EMPLOYEE \$ 1	
	If yes, describe under DESCRIPTION OF OPERATIONS below							.000,000
В	EXCESS OHIO WORKERS'	N	N	HWXJUB474M588018	6/1/2018	8 6/1/2019	Workers' Comp. Statutory	1000,000
_	COMPENSATION	24	- '		0, 1,201	9,1,201	Employers' Liab. \$1,000,000 SIR - Each Accident \$350,000	
DES	CRIPTION OF OPERATIONS / LOCATIONS / VEHIC	FS (	CORD	101 Additional Remarks Schodule	may be attached	If more space is requir	ed)	
DE31	MIN TO TO TENATIONS / LOCATIONS / VERIC	(*	Unu	101, Additional nemarks schedule,	ay be attached	ore apace is requir	ou,	
	<b>1</b>							
CEI	CERTIFICATE HOLDER CANCELLATION See Attachment							
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FOR INFORMATIONAL PURPOSES							DESCRIBED POLICIES BE CANCI EREOF, NOTICE WILL BE	
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#### **LED TROFFER** CATALOG # TYPE: PROJECT: NOTES: EXAMPLE LT - 2 4 - L52/835 - AF -**OPTIONS - DIM - UNV** NOM. NOM. HIMEN CRI & CHIELDING OPTIONS/ DRIVER VOLTAGE SERIES ACCESSORIES PACKAGE W. L. CCT

#### **CROSS SECTIONS**





#### **FEATURES**

- ► Efficacies up to 140 lm/W
- Shallow housing depth
- ► Diffuse lens provides smooth illumination
- Proudly made in the USA

#### ORDERING INFORMATION

#### **SERIES**

LT

LED Troffer

#### **NOMINAL WIDTH**



1' (4' length only)

#### **NOMINAL LENGTH**



2' (2' width only)

#### **LED PACKAGE**

	EXAMPLE	: L52/835	
LUMEN PACKAGE	NOMINAL LUMENS	MINIMUM CRI & CCT	WATTAGE
1	x4		
L28	2,800		21
L47	4,700		34
L63	6,300		49
2	x2	827 = 82 CRI, 2700K	
L27	2,700	830 = 82 CRI, 3000K	21
L39	3,900	<b>835</b> = 82 CRI, 3500K	33
L49	4,900	<b>840</b> = 82 CRI, 4000K	38
2	x4	<b>850</b> = 82 CRI, 5000K	
L40	4,000		32
L52	5,200		37
L64	6,400		49
L82	8,200		64

Nominal lumen output based on 3500 CCT. Actual lumens may vary +/-5%, see fixture performance data. Additional LED lumen packages available, see options.

#### SHIELDING



Frosted acrylic

#### **OPTIONS**

For flexible whip options, see Technical Info.

EM/10W **EQCLIPS** 

10-watt emergency battery (120-277V only)

Earthquake clips (4 per fixture; LT is compatible with Williams earthquake clips

only)

OCC\_\_ Integral occupancy sensor and power pack: OCCLV OSF10-IUW-PP-UNV

Additional lower lumen packages available. Specify in increments of 100 nominal (L\_\_)

lumens. Option must be specified with next higher lumen package. **Example:** 5,800 nominal lumens = LT-24-L64/840-**(L58)** 

CP Chicago Plenum (CCEA)

#### **ACCE**SSORIES

See Technical Info for Drywall Kit and Cord Location details. See page 3 for Surface Mount details.

LT-14-SMK-W LT-22-SMK-W LT-24-SMK-W DFK-1248W DFK-2424W DFK-2448W

Surface mount kit for LT, 1'x4', white Surface mount kit for LT, 2'x2', white Surface mount kit for LT, 2'x4', white Drywall kit, 12" x 48", white Drywall kit, 24" x 24", white

Drywall kit, 24" x 48", white

#### **DRIVER**

Additional dimming drivers available, see Technical Info.

DRV Driver prewired for non-dimming

10% dimming driver prewired for 0-10V low voltage applications

#### **VOLTAGE**

DIM

120V 120 277 277V UNV

347 347V (not available with EM batteries)







LED

#### **SPECIFICATIONS**

Housing/Reflector - Precision die-formed 22-gauge C.R.S.

Shielding — Frosted acrylic.
Finish — Highly reflective non-glare matte white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.

Electrical – High quality mid-power LED boards. L70 >50,000 hours.

Mounting – NEMA Type "G". Surface mount

and drywall kit accessories available, ordered separately.

#### Listings -

- cCSAus certified as luminaire suitable for dry or damp locations.
- DesignLights Consortium Premium qualified product. Not all versions of this product may be DLC Premium qualified, see the DLC Qualified Products List at www.designlights.org/QPL.
- City of Chicago Environmental Air approved when specified with CP option.

Warranty - 5-year limited warranty, see hew.com/warranty.

#### **IMPORTANT**:

Electrostatic sensitive unit. Observe precautions when handling.

#### **FIXTURE PERFORMANCE DATA**

LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (Im/W)					
	1x4							
L28	2814	21.4	131.6					
L47	4677	33.7	138.7					
L63	6261	48.5	129.1					
	2:	x2						
L27	2722	21.3	127.8					
L39	3934	33.1	118.7					
L49	4869	38.1	127.7					
	2:	x4						
L40	3972	32.0	124.1					
L52	5202	37.2	140.0					
L64	6396	48.5	131.9					
L82	8214	64.3	127.7					

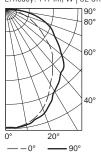
- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
   Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
   Use multiplier table to calculate additional options.

#### **MULTIPLIER TABLE**

COLOR TEMPERATURE					
CCT/CRI	CONVERSION FACTOR				
2700K/80CRI	0.97				
3000K/80CRI	0.99				
3500K/80CRI	1.00				
4000K/80CRI	1.03				
5000K/80CRI	1.06				

#### **PHOTOMETRY**

LT-24-L52/835-AF-DIM-UNV Total Luminaire Output: 5202 lumens; 37 Watts Efficacy: 141 lm/W | 82 CRI; 3043K CCT | IES Spacing Criteria: End: 1.1, Across: 1.2, Diagonal: 1.2

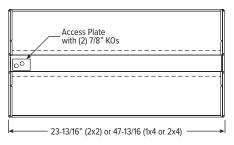


	Vertical	Ho	Zonal		
	Angle	0°	45°	90°	Lumens
CANDLEPOWER DISTRIBUTION	0	1851	1851	1851	
5	5	1843	1844	1846	175
뿙	15	1745	1761	1779	499
달	25	1544	1589	1636	730
몵	35	1276	1359	1440	848
፮▮	45	1055	1193	1315	902
ᇳ	55	741	902	1044	802
ᆿ	65	480	667	817	647
ই	75	241	429	544	438
	85	70	174	159	161
	90	0	0	0	

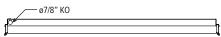
SUMMARY	Zone	Lumens	% Fixture
	0 - 30	1404	27
ਡ	0 - 40	2252	43
LUMEN	0 - 60	3955	76
	0 - 90	5202	100
	0 - 180	5202	100

#### **FIXTURE DETAILS**

#### **BACK VIEW**

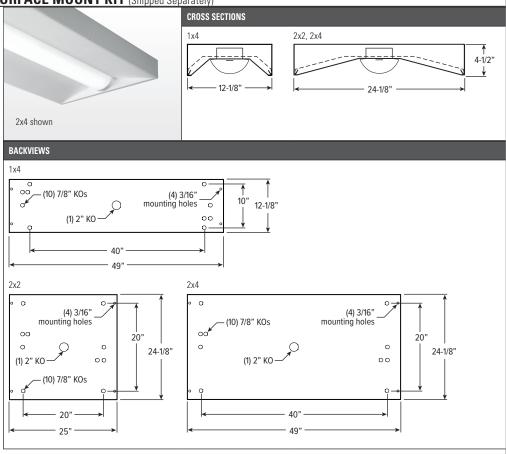








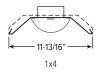
#### SURFACE MOUNT KIT (Shipped Separately)

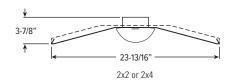




#### **LED TROFFER** CATALOG # TYPE: PROJECT: NOTES: EXAMPLE LT - 2 4 - L52/835 - AF -**OPTIONS - DIM - UNV** NOM. NOM. HIMEN CRI & CHIELDING OPTIONS/ DRIVER VOLTAGE SERIES ACCESSORIES PACKAGE W. L. CCT

#### **CROSS SECTIONS**





#### **FEATURES**

- ► Efficacies up to 140 lm/W
- Shallow housing depth
- ► Diffuse lens provides smooth illumination
- Proudly made in the USA

#### ORDERING INFORMATION

#### **SERIES**

LT

LED Troffer

#### **NOMINAL WIDTH**

1' (4' length only)

#### **NOMINAL LENGTH**



2' (2' width only)

#### **LED PACKAGE**

	EXAMPLE	: L52/835	
LUMEN PACKAGE	NOMINAL LUMENS	MINIMUM CRI & CCT	WATTAGE
1	x4		
L28	2,800		21
L47	4,700		34
L63	6,300		49
2	x2	827 = 82 CRI, 2700K	
L27	2,700	830 = 82 CRI, 3000K	21
L39	3,900	<b>835</b> = 82 CRI, 3500K	33
L49	4,900	<b>840</b> = 82 CRI, 4000K	38
2	x4	<b>850</b> = 82 CRI, 5000K	
L40	4,000		32
L52	5,200		37
L64	6,400		49
L82	8,200		64

Nominal lumen output based on 3500 CCT. Actual lumens may vary +/-5%, see fixture performance data. Additional LED lumen packages available, see options.

#### SHIELDING



Frosted acrylic

#### **OPTIONS**

For flexible whip options, see Technical Info.

**EM/10W** 10-watt emergency battery (120-277V only) **EQCLIPS** 

Earthquake clips (4 per fixture; LT is compatible with Williams earthquake clips

OCC\_\_ Integral occupancy sensor and power pack: OCCLV OSF10-IUW-PP-UNV

(L\_\_)

Additional lower lumen packages available. Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package. **Example:** 5,800 nominal lumens = LT-24-L64/840-**(L58)** 

CP Chicago Plenum (CCEA)

#### **ACCE**SSORIES

See Technical Info for Drywall Kit and Cord Location details. See page 3 for Surface Mount details.

LT-14-SMK-W LT-22-SMK-W LT-24-SMK-W DFK-1248W DFK-2424W DFK-2448W

Surface mount kit for LT, 1'x4', white Surface mount kit for LT, 2'x2', white Surface mount kit for LT, 2'x4', white Drywall kit, 12" x 48", white Drywall kit, 24" x 24", white Drywall kit, 24" x 48", white

#### **DRIVER**

DIM

Additional dimming drivers available, see Technical Info.

DRV Driver prewired for non-dimming

10% dimming driver prewired for 0-10V low voltage applications

#### **VOLTAGE**

120V 120 277 277V UNV

347 347V (not available with EM batteries)







LED

#### **SPECIFICATIONS**

Housing/Reflector - Precision die-formed 22-gauge C.R.S.

Shielding — Frosted acrylic.
Finish — Highly reflective non-glare matte white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.

Electrical – High quality mid-power LED boards. L70 >50,000 hours.

Mounting – NEMA Type "G". Surface mount

and drywall kit accessories available, ordered separately.

#### Listings -

- cCSAus certified as luminaire suitable for dry or damp locations.
- DesignLights Consortium Premium qualified product. Not all versions of this product may be DLC Premium qualified, see the DLC Qualified Products List at www.designlights.org/QPL.
- City of Chicago Environmental Air approved when specified with CP option.

Warranty - 5-year limited warranty, see hew.com/warranty.

#### **IMPORTANT**:

Electrostatic sensitive unit. Observe precautions when handling.

#### **FIXTURE PERFORMANCE DATA**

LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (Im/W)					
	1x4							
L28	2814	21.4	131.6					
L47	4677	33.7	138.7					
L63	6261	48.5	129.1					
	2:	x2						
L27	2722	21.3	127.8					
L39	3934	33.1	118.7					
L49	4869	38.1	127.7					
	2:	x4						
L40	3972	32.0	124.1					
L52	5202	37.2	140.0					
L64	6396	48.5	131.9					
L82	8214	64.3	127.7					

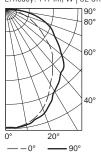
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- Wattage shown is average for 120V through 277V input.
   Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
   Use multiplier table to calculate additional options.

#### **MULTIPLIER TABLE**

COLOR TEMPERATURE					
CCT/CRI	CONVERSION FACTOR				
2700K/80CRI	0.97				
3000K/80CRI	0.99				
3500K/80CRI	1.00				
4000K/80CRI	1.03				
5000K/80CRI	1.06				

#### **PHOTOMETRY**

LT-24-L52/835-AF-DIM-UNV Total Luminaire Output: 5202 lumens; 37 Watts Efficacy: 141 lm/W | 82 CRI; 3043K CCT | IES Spacing Criteria: End: 1.1, Across: 1.2, Diagonal: 1.2

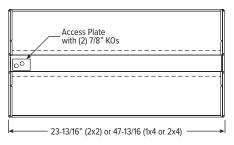


	Vertical	Ho	Zonal		
	Angle	0°	45°	90°	Lumens
CANDLEPOWER DISTRIBUTION	0	1851	1851	1851	
5	5	1843	1844	1846	175
뿙	15	1745	1761	1779	499
달	25	1544	1589	1636	730
몵	35	1276	1359	1440	848
፮▮	45	1055	1193	1315	902
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ᆿ	65	480	667	817	647
ই	75	241	429	544	438
	85	70	174	159	161
	90	0	0	0	

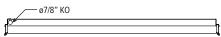
SUMMARY	Zone	Lumens	% Fixture
	0 - 30	1404	27
ਡ	0 - 40	2252	43
LUMEN	0 - 60	3955	76
	0 - 90	5202	100
	0 - 180	5202	100

#### **FIXTURE DETAILS**

#### **BACK VIEW**

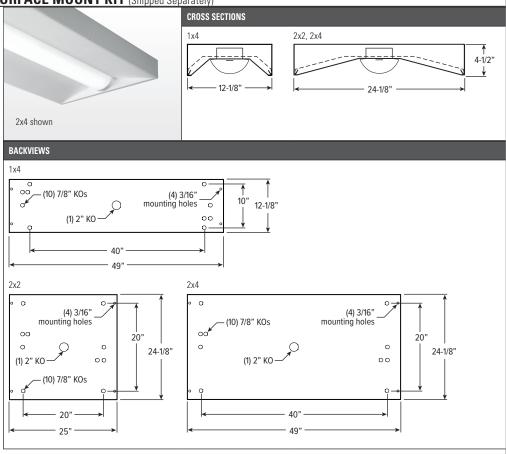








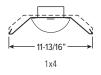
#### SURFACE MOUNT KIT (Shipped Separately)

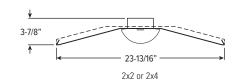




#### **LED TROFFER** CATALOG # TYPE: PROJECT: NOTES: EXAMPLE LT - 2 4 - L52/835 - AF -**OPTIONS - DIM - UNV** NOM. NOM. HIMEN CRI & CHIELDING OPTIONS/ DRIVER VOLTAGE SERIES ACCESSORIES PACKAGE W. L. CCT

#### **CROSS SECTIONS**





#### **FEATURES**

- ► Efficacies up to 140 lm/W
- Shallow housing depth
- ► Diffuse lens provides smooth illumination
- Proudly made in the USA

#### ORDERING INFORMATION

#### **SERIES**

LT

LED Troffer

#### **NOMINAL WIDTH**



1' (4' length only)

#### **NOMINAL LENGTH**



2' (2' width only)

#### **LED PACKAGE**

	EXAMPLE	: L52/835	
LUMEN PACKAGE	NOMINAL LUMENS	MINIMUM CRI & CCT	WATTAGE
	1x4		
L28	2,800		21
L47	4,700		34
L63	6,300		49
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L39	3,900	<b>835</b> = 82 CRI, 3500K	33
L49	4,900	<b>840</b> = 82 CRI, 4000K	38
	2x4	<b>850</b> = 82 CRI, 5000K	
L40	4,000		32
L52	5,200		37
L64	6,400		49
L82	8,200		64

Nominal lumen output based on 3500 CCT. Actual lumens may vary +/-5%, see fixture performance data. Additional LED lumen packages available, see options.

#### SHIELDING



Frosted acrylic

#### **OPTIONS**

For flexible whip options, see Technical Info.

EM/10W 10-watt emergency battery (120-277V only) **EQCLIPS** 

Earthquake clips (4 per fixture; LT is compatible with Williams earthquake clips

only)

OCC\_\_ Integral occupancy sensor and power pack: OCCLV OSF10-IUW-PP-UNV

Additional lower lumen packages available. Specify in increments of 100 nominal (L\_\_)

lumens. Option must be specified with next higher lumen package. **Example:** 5,800 nominal lumens = LT-24-L64/840-**(L58)** 

CP Chicago Plenum (CCEA)

#### **ACCE**SSORIES

See Technical Info for Drywall Kit and Cord Location details. See page 3 for Surface Mount details.

LT-14-SMK-W LT-22-SMK-W LT-24-SMK-W DFK-1248W DFK-2424W DFK-2448W Drywall kit, 24" x 48", white

Surface mount kit for LT, 1'x4', white Surface mount kit for LT, 2'x2', white Surface mount kit for LT, 2'x4', white Drywall kit, 12" x 48", white Drywall kit, 24" x 24", white

#### **DRIVER**

Additional dimming drivers available, see Technical Info.

DRV Driver prewired for non-dimming

DIM

10% dimming driver prewired for 0-10V low voltage applications

#### **VOLTAGE**

120V 120 277 277V UNV

347 347V (not available with EM batteries)







LED

#### **SPECIFICATIONS**

Housing/Reflector - Precision die-formed 22-gauge C.R.S.

Shielding — Frosted acrylic.
Finish — Highly reflective non-glare matte white polyester powder coat bonded to phosphate-free, multi-stage pretreated metal. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.

Electrical – High quality mid-power LED boards. L70 >50,000 hours.

Mounting – NEMA Type "G". Surface mount

and drywall kit accessories available, ordered separately.

#### Listings -

- cCSAus certified as luminaire suitable for dry or damp locations.
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- City of Chicago Environmental Air approved when specified with CP option.

Warranty - 5-year limited warranty, see hew.com/warranty.

#### **IMPORTANT**:

Electrostatic sensitive unit. Observe precautions when handling.

#### **FIXTURE PERFORMANCE DATA**

LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (Im/W)
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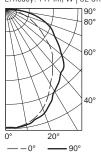
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- Wattage shown is average for 120V through 277V input.
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#### **MULTIPLIER TABLE**

COLOR TEMPERATURE					
CCT/CRI	CONVERSION FACTOR				
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4000K/80CRI	1.03				
5000K/80CRI	1.06				

#### **PHOTOMETRY**

LT-24-L52/835-AF-DIM-UNV Total Luminaire Output: 5202 lumens; 37 Watts Efficacy: 141 lm/W | 82 CRI; 3043K CCT | IES Spacing Criteria: End: 1.1, Across: 1.2, Diagonal: 1.2

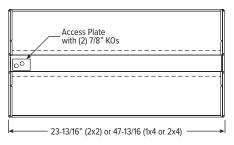


	Vertical	Ho	Zonal		
	Angle	0°	45°	90°	Lumens
CANDLEPOWER DISTRIBUTION	0	1851	1851	1851	
5	5	1843	1844	1846	175
뿙	15	1745	1761	1779	499
달	25	1544	1589	1636	730
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₹	75	241	429	544	438
	85	70	174	159	161
	90	0	0	0	

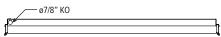
SUMMARY	Zone	Lumens	% Fixture
	0 - 30	1404	27
ਡ	0 - 40	2252	43
LUMEN	0 - 60	3955	76
	0 - 90	5202	100
	0 - 180	5202	100

#### **FIXTURE DETAILS**

#### **BACK VIEW**

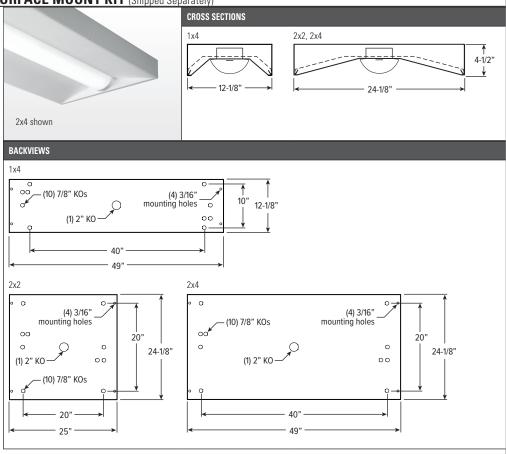








#### **SURFACE MOUNT KIT** (Shipped Separately)

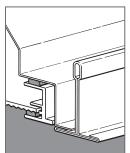




## **Ceiling Compatibility**

#### **GASKETING OPTIONS**

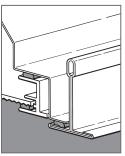
Fixtures must be equipped with flat aluminum door frame for gasketing options.



#### DG

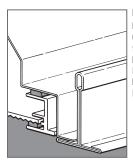
#### Double Gasketing -

Open-cell foam gasketing is factory-installed continuously between door frame and luminaire housing and between door frame and



#### Triple Gasketing -

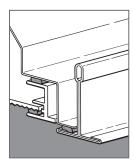
Open-cell foam gasketing is factory-installed continuously between door frame and luminaire housing, between door frame and lens, and on bottom perimeter of unit (adjacent to T-bar). NEMA Type "F" units feature gasketing attached to top surface of flange trim (adjacent to ceiling surface).



#### DG/CCF

#### Double Gasketing -

Closed-cell PVC gasketing is factory-installed continuously between door frame and luminaire housing and between door frame and

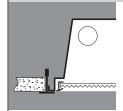


#### TG/CCF

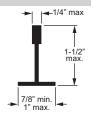
#### Triple Gasketing -

Closed-cell PVC gasketing is factory-installed continuously between door frame and luminaire housing, between door frame and lens, and on bottom perimeter of unit (adjacent to T-bar). NEMA Type "F" units feature gasketing attached to top surface of flange trim (adjacent to ceiling surface).

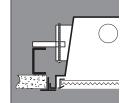
#### **NEMA TYPE "G"**



All Williams grid fixtures (NEMA Type "G") are designed to fit securely into a standard NEMA Type "G", 1" nominal T-bar system. Center the fixture in the opening and use earthquake clips or integral T-bar clips to secure the fixture to the ceiling structure.



#### NEMA TYPE "F" (Flange installation)

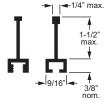


NEMA Type "F" fixtures ship with the side trims, end trims, and swing-out brackets assembled to the fixture. See specification sheets for exact dimensions of swingout bracket vertical adjustment and ceiling cut-out.

#### NEMA STYLE "SS" SCREW SLOT GRID (Williams' SG)

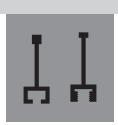


Williams' NEMA Type "SS" troffers are designed to position the bottom of the louver door frame flush with the ceiling tile. Center the fixture in the opening and use earthquake clips (standard when SG is specified) to secure the fixture to the ceiling structure. Available on specific styles of parabolic louvers and recessed architectural only.



#### **SPECIALTY CEILING TEE**







NEMA "NFG" Narrow-Faced Grid

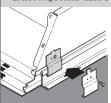
NEMA "NFSG" Narrow-Faced Slotted Grid

NEMA "SS" Screw Slot Grid

NEMA "Z" Z Spline

Please contact the factory before ordering troffers to be fitted with specialty T-bar systems to assure proper compatibility. Dimensions and specifications are subject to change without notice.

#### **EARTHQUAKE CLIPS**



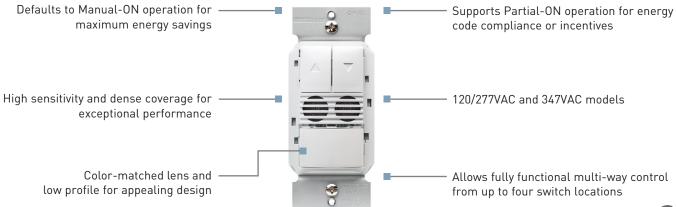
Earthquake Clips - Combination earthquake and N.E.C. T-bar clip secures luminaire to T-bar and prevents T-system separation. Clips are factory-installed; four clips per fixture. Earthquake clips are provided standard when SG ceiling type is specified.





# DUAL TECHNOLOGY 0-10 VOLT DIMMING WALL SWITCH OCCUPANCY SENSOR

DW-31



# RoHS

#### Description

The DW-311 dual technology dimming wall switch sensor can turn lights OFF and ON based on occupancy and allow the user to increase or decrease the lighting level. It combines the benefits of passive infrared (PIR) and ultrasonic occupancy detection technologies and works with 0-10 VDC dimming drivers and ballasts to control lighting loads including LEDs.

#### Operation

The DW-311 installs in a single gang junction box. Factory default operation is for Manual-ON, so that users turn lights on only when needed. Once the space is vacated and the time delay elapses, lights automatically turn OFF. DIP switch settings enable a variety of control options such as Auto-ON operation, high and low trim, ramp up and fade down times, power loss mode, smart light level, walk-through and test modes. Additonal DIP switch settings allow the user to choose which sensing technologies turn ON, hold ON or retrigger the lighting.

#### Partial-ON Option

When set for Automatic-ON operation, the DW-311 typically comes ON to the last non-zero light level for occupant comfort and convenience. However, this default setting may be changed to a fixed light level value of 50%, 75% or 100%. The dimmed level options (Preset On Level) support new state and federal energy code requirements.

#### **Applications**

This dual technology sensor has the flexibility to work in a variety of applications including spaces that benefit from enhanced small motion detection. Common applications include small and executive offices, small and medium conference rooms and lunch/break rooms. Multiple DW-311 sensors may be used to control a lighting load in spaces with up to four switch locations; each device provides fully functional dimming control. When additional sensors are used for multi-way control, each connected sensor expands the coverage area.

#### **Features**

- Vandal resistant lens combines precise coverage with durability
- Presentation mode may be deactivated to allow Auto-ON operation after 15 second time delay for spaces with transient occupancy
- Optional smart light level adapts ambient light hold off threshold to meet user needs
- Selectable walk-through mode turns lights off three minutes after the room is initially occupied if no motion is detected after the first 30 seconds
- Test mode allows quick and easy verification of coverage

- Selectable audible and/or visual alerts for impending shutoff
- LED indicates occupancy detection
- Service mode allows sensor to operate as a service switch in the unlikely event of a failure
- Zero-crossing for long relay life
- No derating required for multi-gang applications
- Sensor coverage tested to NEMA Guide Publication WD 7-2000
- Compatible with decorator wall plates
- This product meets the material restrictions of RoHS

PROJECT LOCATION/ TYPE



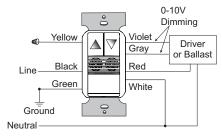
#### **Specifications**

- DW-311: 120/277VAC; 50/60Hz
- DW-311-347: 347VAC; 50/60Hz
- Dimming control signal: 0-10VDC, sinks up to 50mA for control of compatible ballasts (12 if each sources 2mA); Class 1 wiring
- Time delays: 3, 5, 15 or 30 minutes, walk-through, test-mode
- Power up after power loss: On, Off or last state

- Coverage: Major motion, PIR 35' x 30', Ultrasonic 20' x 20'
   Minor motion, PIR 20' x 15', Ultrasonic 15' x 15'
- Sensitivity adjustment: PIR (high/low), Ultrasonic (fully variable)
- Dimensions (L x W x D): 2.73" x 1.75" x 1.81" (69mm x 44mm x 46mm)
- UL and cUL listed (E101196)
- · Five year warranty

#### **Installation and Wiring**

#### Wiring Diagrams

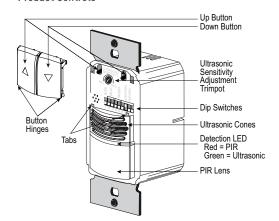


Note: Requires Class 1 wiring for 0-10V dimming.

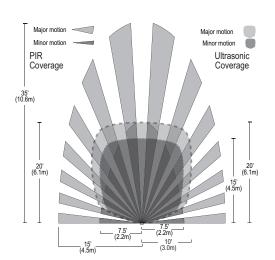
#### Connect 0-10V Line leads to dimming ballast from one DW-311 only Violet Yellow Yellow Violet V Driver traveler **€** Gray Gray or Ballast Black Red Red Black Green White Green White 00 Ground Ground Neutral

#### Multi-way wiring

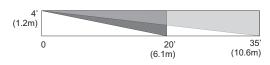
#### **Product Controls**



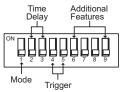
#### **Coverage Patterns**



For best performance, Legrand recommends using this sensor in spaces no larger than 18' x 15'.

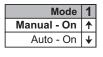






		33			
Trigger Mode	Initial Occupancy	Maintain Occupancy	Re-trigger	4	5
Standard	Both	Either	Either	<b>\</b>	<b>\</b>
Option A	PIR	Either	Either	+	<b>↑</b>
Option B	PIR	PIR	PIR	<b>^</b>	₩
Option C	Both	Both	Both	<b>^</b>	<b>↑</b>

Default	عمر راد/\	Shown	in	Rold
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Time Delay	2	3
Test/3 min	+	<b>*</b>
5 minutes	+	<b>^</b>
15 minutes	<b>↑</b>	+
30 minutes	<b>↑</b>	<b>^</b>

Additional Features	6	7	8	9	Green LED # of Blinks
Exit Programming Mode	+	₩	<b>\</b>	<b>\</b>	
Visual Alert	<b>\</b>	₩	<b>\</b>	<b>^</b>	<b>1=OFF</b> , 2=ON
Audio Alert	+	<b>*</b>	1	<b>\</b>	<b>1=ON</b> , 2=OFF
Walk-Thru	<b>\</b>	₩	<b>↑</b>	↑	<b>1=OFF</b> , 2=ON
PIR Sensitivity	+	<b>^</b>	+	+	<b>1=100%</b> , 2=50%
High Trim	+	<b>^</b>	<b>\</b>	<b>↑</b>	1=10V, 2=Manual Adjustment
Low Trim	+	<b>^</b>	<b>↑</b>	<b>\</b>	1=0V, 2=Manual Adjustment
Ramp Up Time	+	<b>^</b>	<b>↑</b>	<b>^</b>	<b>1=1</b> , 2=2.5, 3=5, 4=10s
Fade Down Time	1	₩	+	<b>\</b>	<b>1=2.5</b> , 2=5, 3=15, 4=30s
Light Level Adjust	^	+	+	<b>↑</b>	<b>1=Disable</b> , 2=Enable, 3=Smart Light Level
Power Loss Mode	^	+	1	+	<b>1=Keep Last State</b> , 2=Default On, 3=Default Off
Presentation Mode	↑	₩	↑	↑	1=ON, 2=OFF
Service Mode	<b>↑</b>	<b>^</b>	<b>\</b>	<b>\</b>	<b>1=OFF</b> , 2=ON
Preset On Level	^	<b>^</b>	+	<b>↑</b>	<b>1=Last Non-Zero Value</b> , 2=50%, 3=75%, 4=100%
Non-Dim Mode	<b>^</b>	<b>^</b>	<b>^</b>	₩	<b>1=OFF</b> , 2=ON
Reset To Default	^	<b>↑</b>	<b>↑</b>	<b>↑</b>	Press and Hold UP or DOWN for 5 seconds

## **Ordering Information**

Catalog #	Color	Voltage	Load Rating			
DW-311-W	White	120VAC; 50/60Hz	@ 120VAC: 0-1000W ballast, E-ballast, LED,			
DW-311-W-U	White	or	tungsten; 1/4hp motor			
☐ DW-311-LA	lvory		or			
DW-311-I	lvory	277VAC; 50/60Hz	@ 277VAC: 0-1200W ballast, E-ballast,			
☐ DW-311-I-U	lvory		LED; 1/4hp motor			
☐ DW-311-G	Grey					
☐ DW-311-B	Black					
☐ DW-311-R	Red					
☐ DW-311-R-U	Red					
DW-311-347-W	White	347VAC; 50/60Hz	0-1500W ballast, LED; 1/4hp motor			
DW-311-347-LA	Lt. Almond					
DW-311-347-I	lvory					
DW-311-347-G	Grey					
DW-311-347-B	Black					
DW-311-347-R	Red					

 $<sup>\</sup>hbox{-U = BAA/TAA compliant. Product is compliant with Buy American Act and Trade Agreement Act}$ 

Order wall plate separately.

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