



Q&A #3

Date: February 4, 2015

Project: Lighting Retrofit – Lighting Fixtures Replacement (Metric)

Bidders must make sure that their bids are based on the latest version of the tender documents published and take into consideration the following amendments and information, including any information provided on amendments or Q&As previously published for this project.

Bidders that do not comply with this requirement will be discarded.

Question 11: Section 2.5.1 of the Specifications indicates the dimensions of the existing fixtures, 1192mm x 292mm. The GE luminaire data sheet in reference ET14-D-A3-A-V-WHTE-CE-SP indicates dimensions 1184mm x 284mm for the metric size corresponding to the European Standards (CE). Between the dimensions of the 2 references, there is an 8mm difference for both the width and the length.

Which one of the two dimensions should we retain to submit and produce the replacement fixtures?

Could you please confirm what are the exact required dimensions of the replacement fixtures within Solicitation 01B46-14-0178, Agriculture and Food Canada, St-Hyacinthe, Québec, Retrofit Lighting Fixture Replacement (Metric)?

Answer 11: The existing fixtures dimensions are 1192mmx292mm. The desired replacement fixtures shall be installed and fixed to the existing ceiling grid. The new fixture's dimensions must not exceed 1192mmx292mm. The proposed Peerless Electric fixture, model LACH3-312G is accepted as an equal.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED

Lumination™ LED Luminaires

1' x 4' Recessed Troffer
ET14 Series Powered by Intrinsx™



Project name _____

Date _____

Type _____

Product Description:

The Lumination ET Series recessed LED troffer with Intrinsx technology is a commercial luminaire utilizing an advanced LED optical system to achieve superior performance. It provides high uniformity, excellent efficiency, improved spacing criteria, and reduced glare. The ultra thin profile, and improved lumen maintenance of 85% of initial lumens at 50,000 hours of operation, allows for ease of installation and lower maintenance costs over time. It is suitable for indoor general lighting.

Performance Summary:

Features GE Intrinsx™ technology

Distribution: Medium

Delivered Light Output: 3800-4000 Lm

System Input Power: 38 W

Efficacy: 100-105 LPW

Input Voltage: 120-277V, 347V

Standard Dimming Control: 0-10V

Dimming Compatibility: refer to Lutron.com, Leviton.com

CCT: 3000K, 3500K, 4000K

CRI: 80, R9: >0

Color Consistency: 4 Step MacAdam Ellipse

Lifetime Rating: 50,000 Hours @ L85

Input Frequency (Hz): 50/60Hz

Power Factor: >0.9

Unified Glare Rating: <19/22 depending on beam pattern for office applications in compliance of EN 12464

Mounting: Fits standard T-Bar grid (drop ceilings)

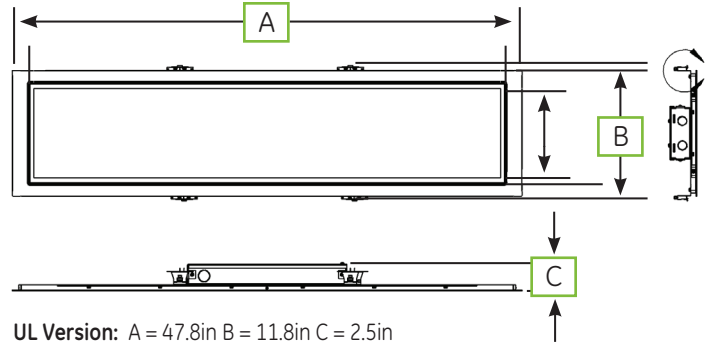
Weight: <18 lbs

IC rating: Non-IC Rated

Warranty: 5 Years standard

Files Available: LM79, LM80, IES

Product Dimensions:



UL Version: A = 47.8in B = 11.8in C = 2.5in

CE Version: A = 1184mm B = 284mm C = 63mm

Awards:



Certified by:

a product of
ecomagination™



Ordering Information:

E T - 14 - - - - A - V - WHITE - - - -

INTERNAL CODE	FIXTURE TYPE (NOMINAL)	VOLTAGE	OPTICAL CODE	MOUNTING	CONTROLLER	FINISH	OPTIONS
E = Edge Lighting T = Troffer	14 = 1' X 4' (300x1200mm)	O = 120-277V (UL Version) D = 347V		A = Lay-in T-Grid	V = 0-10V	WHITE = White	Blank if no options E = Lutron Ecosystem Module (integrated into luminaire) H = Chicago Plenum, CCEA EH = Lutron Ecosystem Module & Chicago Plenum, CCEA EL = Emergency battery backup (2000 Lm) Contact your local GE representative for special orders and product modifications.

OPTICAL CODE	TYPE	CRI	COLOR TEMP (K)	TYPICAL LUMENS	SYSTEM WATTAGE
A1	Medium	80	3000	3800	38
A2	Medium	80	3500	3800	38
A3	Medium	80	4000	4000	38

ACCESSORIES	DESCRIPTION CODE	PRODUCT CODE
Drywall Mount Kit (Imperial)	GESK09	69068
Surface Mount Kit	GESK08	69067

*Higher lumen package available - Contact GE for additional information



Photometric Data: Lumination™ 1' x 4' Recessed Troffer ET 14 Series

Medium: ET14XA3-4000K.IES

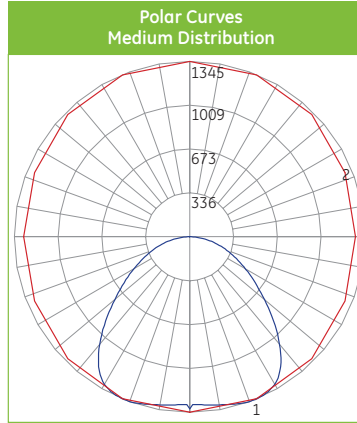
CANDLEPOWER SUMMARY			
Angle	0°	45°	90°
45°	3895	3423	3262
55°	3376	2846	2746
65°	2866	2479	2425
75°	2380	2238	2252
85°	1637	1980	2179

ZONAL LUMEN SUMMARY	
Zone	Lumens
0-10	147.30
10-20	429.72
20-30	662.02
30-40	770.96
40-50	711.60
50-60	566.95
60-70	400.08
70-80	232.49
80-90	72.74
90-100	0.99
100-110	0.42
110-120	0.44
120-130	0.56
130-140	0.80
140-150	0.99
150-160	0.98
160-170	0.73
170-180	0.27

COEFFICIENTS OF UTILIZATION																			
RC	80%				70%				50%				30%			10%			0%
RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	
1	109	105	100	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85	
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72	
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61	
4	84	73	64	58	82	71	63	57	69	62	56	66	60	56	64	59	55	53	
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46	
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41	
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	38	36	
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32	
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29	
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27	

NOTE: Floor Reflectance : 20%

ZONAL LUMEN SUMMARY			
Zone	Lumens	% of Lamp	% of Fixture
0-20°	577.02	NA	14.40%
0-30°	1239.03	NA	31.00%
0-40°	2009.99	NA	50.20%
0-60°	3288.54	NA	82.20%
0-80°	3921.11	NA	98.00%
0-90°	3993.85	NA	99.80%



Product Specifications:

Optical System:

Lumination LED Luminaires use Intrinsic™ technology to deliver superior performance and greater control of how the light is distributed. This allows for better spacing of fixtures while still providing good uniformity on the task plane and face of the luminaire. Intrinsic™ helps to create a space that feels brighter, cleaner and more modern with improved efficiency and reducing the "cave effect" associated with recessed luminaires.

- Precision formed optical assembly comprised of injection molded high specular reflectors, and an injection molded conformal transmissive lens.
- High optical grade acrylic providing good efficiency and impact resistance
- LED light engine consists of a precision die-cast aluminum heat sink, a Metal Core Printed Circuit Board Assembly (MCPCB)
- Beam Uniformity: Du'v' = 0.0008
- Luminance Uniformity: 2:1 max to min
- No visible diodes

Construction:

- Durable, long lasting bezel construction. Steel, Electrogalvanized, Cold-rolled, Commercial quality coated with Electrostatic Powder Coat Paint
- IP Rating: IP30
- Impact Resistance: IK=3

Electrical System:

- Class 1, replaceable, high efficiency LED driver rated for 100,000 hours when used within operating conditions.
- Audible Noise - Per 29CFR 1910 sub part G: <24 dba (1 foot)
- Thermal overload protection shuts down the luminaire when system temperatures exceed designed operating conditions
- THD: <20%
- Transient Protection: 100 kHz ring wave, 2.5 kV level
- Environmental Testing: High Temperature High Humidity: 60°C /90% (non-condensing)
- Electronic Vibration Testing: Multi Axis, Random Vibration Profile: 2-2000 Hz, 5Gs on electronics
- Input Current: 120V/47W - 317mA
230V/47W - 165mA
277V/47W - 137mA

Installation:

- Drivers and internal components accessed via plenum. Driver box may be removed from fixture during service.
- T-grid mounting brackets provided with luminaire. Mounting holes provided for hanging wire.
- Integrated galvanized PSU enclosure delivers low profile and ease of installation
- Seismic Rating: Earthquake/Hurricane clips provided standard. Bracket security test per UL1598 Fixture mounted to grid and inverted for 60 sec.
- Luminaire Vibration Testing: Luminaire test to 1.5 G, 100,000 cycles per axis, 2 axis

For more information and access to all of our resources, including our design tool visit: www.gelighting.com



www.gelighting.com

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IND023 (Rev 09/17/14)

PROJECT:	DATE:
CAT. NO.:	TYPE:
NOTES	VOLTS:

GENERAL DESCRIPTION:

Peerless LACH3 312G LED is an efficient shallow, lensed troffer, applying the most up-to-date LED technologies. Designed for metric "T"-bar, this luminaire is well-suited for commercial office spaces, schools, hospitals or retail spaces.

CONSTRUCTION:

Rigid one-piece body constructed from code gauge steel. Clear acrylic prismatic diffuser (supplied as standard) is held within a hinged steel frame. Cam latch release opens frame for easy servicing; positive action, no springs. Retaining hook prevents the hinged frame from disengaging accidentally when open. No visible hardware. 3 1/4" shallow profile. Frame kit available for drywall applications.

SHIELDING:

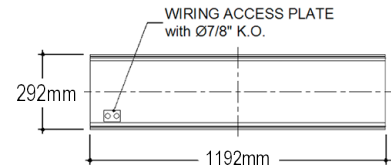
Durable Shielding #12 clear acrylic prismatic diffuser supplied as standard. Other options are available.

ELECTRICAL:

Long-life LEDs and high efficiency drivers deliver L70 performance at 50,000 hrs. 120-277V, 347V. ✓

CERTIFICATIONS:

Approved to UL1598 and CSA C22.2 No. 250 standards. Rated for damp locations.



Ordering Information

LACH3	312G					
SERIES	MODULE SIZE	LED LUMENS OUTPUT*	COLOUR (KELVIN)	SHIELDING	VOLTAGE	BALLAST/DRIVER
	312G = 300mm x 1200mm t-bar ceiling	30 = 3000lm 32 = 3200lm 40 = 4000lm ✓ 46 = 4600lm	30K = 3000K 35K = 3500K 40K = 4000K ✓ 50K = 5000K	12 = #12 lens ✓ 19 = #19 lens FA = Frosted acrylic	MV (120-277V) 347V ✓	OMIT for no dimming D1 = LED dimming driver (down to 1%) D10 = LED dimming driver (down to 10%) ✓ SD = Step-dimming driver (100-50%)

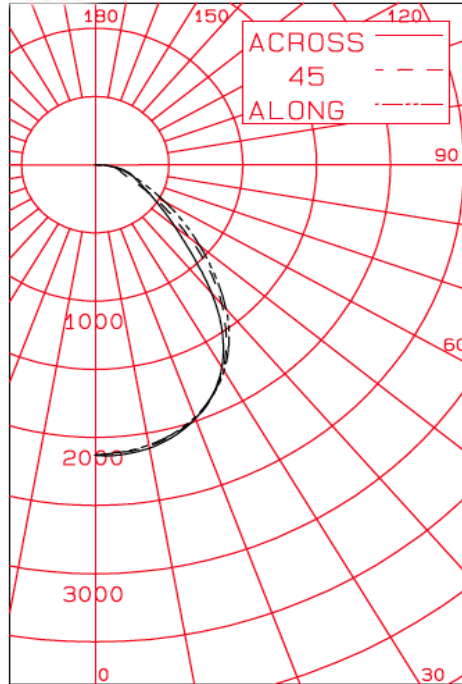
* Other lumen options available. Consult Factory.

Efficacy Chart*

Module	Wattage	Lumens Delivered	Lumens Per Watt
292mm x 1192mm	33	3000	92
	34	3200	92
	42	4000	97 ✓
	52	4600	88

* Specifications are subject to change.

Photometry

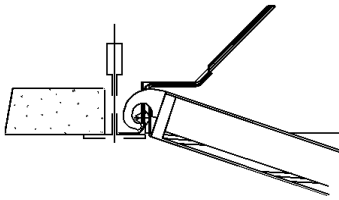


LACH3-312G-46-35K-12 EFFICACY = 88.1 LMS/WATT

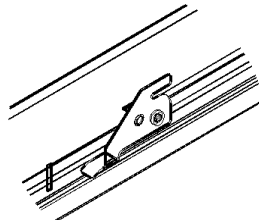
CANDLEPOWER SUMMARY					OUTPUT LUMENS
ANGLE	ALONG	22.5	45	67.5	ACROSS
0	2130	2130	2130	2130	2130
5	2113	2122	2117	2127	2133
15	2042	2052	2050	2055	2061
25	1874	1882	1875	1870	1872
35	1582	1575	1549	1519	1503
45	1148	1147	1099	971	925
55	728	692	612	555	544
65	402	347	290	328	339
75	224	197	175	213	241
85	80	75	71	85	86
90	1	2	2	3	3
95	0	0	0	0	0
105	0	0	0	0	0
115	0	0	0	0	0
125	0	0	0	0	0
135	0	0	0	0	0
145	0	0	0	0	0
155	0	0	0	0	0
165	0	0	0	0	0
175	0	0	0	0	0
180	0	0	0	0	0
ZONE	LUMENS	% LAMP	%LUMINAIRE		
0-30	1641	35.55	35.55		
0-40	2601	56.33	56.33		
0-60	3981	86.21	86.21		
0-90	4617	99.99	99.99		
40-90	2016	43.67	43.67		
60-90	636	13.78	13.78		
90-180	0	.01	.01		
0-180	4618	100.00	100.00		

Accessories & Details

HINGE DETAIL



LATCH DETAIL



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Specifications are subject to change. Please confirm latest specifications prior to placing order.