<u>Appendix: Sample Product Data</u>

Philips Fluorescent T8 Lamps

AltoII TCLP Compliant*

ALTO II means 50% less mercury than the original ALTO T8 lamps†

* The EPA's TCLP test is used to determine if an item can be managed as hazardous or non-hazardous waste. Philips ALTO and ALTO II lamps are TCLP Compliant and can be managed as non-hazardous waste.

† This lamp is better for the environment because of its reduced mercury content. All Philips ALTO lamps give you end-of-life options, which can simplify and reduce your lamp disposal costs, depending on your state and local regulations. ALTO II Lamps have only 1.7mg of mercury.

Extra low mercury

Philips T8 Lamps are energy-efficient lighting solutions.

Extended life
• Reduce maintenance costs by extending the relamping cycle
• Limited warranty period based on usage⁺

Outstanding lumen performance
• 95% lumen maintenance and reduced lamp-end blackening

Better for the environment
• Only 1.7mg of mercury with ALTO II Technology
• Reduced impact on the environment without sacrificing performance

⁺ See your Philips Sales Representative for details

PHILIPS

Ordering, Electrical and Technical Data

	Product Number	Ordering Code	Watts	Pack. Qty.	Color Temp. (Kelvin)	Nom. Length (In.)	Rated Average Life (Hrs)[1]		Approx. Initial Lumens[2]	Design Lumens[3]	CRI	Lumen Maint.
							12-hr on Ins. Start	12-hr on Prog. Start				
●	28188-1	F17T8/TL835/ALTO	17	30	3500	24	30,000	36,000	1350	1280	85	95%
●	28189-9	F17T8/TL841/ALTO	17	30	4100	24	30,000	36,000	1350	1280	84	95%
●	28090-9	F17T8/TL850/ALTO	17	30	5000	24	30,000	36,000	1300	1235	82	95%
●	28190-7	F25T8/TL835/ALTO	25	30	3500	36	30,000	36,000	2150	2040	85	95%
●	28191-5	F25T8/TL841/ALTO	25	30	4100	36	30,000	36,000	2150	2040	84	95%
●	28092-5	F25T8/TL850/ALTO	25	30	5000	36	30,000	36,000	2150	2040	82	95%
Ⓔ●	28151-9	F32T8/TL830/ALTO	32	30	3000	48	30,000	36,000	2850	2710	85	95%
Ⓔ●	28153-5	F32T8/TL835/ALTO	32	30	3500	48	30,000	36,000	2850	2710	84	95%
Ⓔ●	28155-0	F32T8/TL841/ALTO	32	30	4100	48	30,000	36,000	2850	2710	82	95%
Ⓔ●	28156-8	F32T8/TL850/ALTO	32	30	5000	48	30,000	36,000	2850	2710	82	95%
Ⓔ●	28162-6	F32T8/TL730/ALTO	32	30	3000	48	30,000	36,000	2700	2565	78	95%
Ⓔ●	28161-8	F32T8/TL735/ALTO	32	30	3500	48	30,000	36,000	2700	2565	78	95%
Ⓔ●	28157-6	F32T8/TL741/ALTO	32	30	4100	48	30,000	36,000	2700	2565	78	95%
Ⓔ●	38351-3	F32T8/TL741/ALTO	32	10	4100	48	30,000	36,000	2700	2565	78	95%
Ⓔ●	28163-4	F32T8/TL750/ALTO	32	30	5000	48	30,000	36,000	2600	2470	78	95%

1) Average life under engineering data with lamps turned off and restarted once every 12 operating hours.

2) Approximate initial lumens. The lamp lumen output is based upon lamp performance after 100 hours of operating life, when the output is measured during operation on a reference ballast under standard laboratory conditions. For expected lamp lumen output, commercial ballast manufacturers can advise the appropriate ballast factor for each of their ballasts when they are informed of the designated lamp. The ballast factor is a multiplier applied to the designated lamp lumen output.

3) Design lumens are the approximate lamp lumen output at 40% of the lamp's rated average life. This output is based upon measurements obtained during lamp operation on a reference ballast under standard laboratory conditions. Design lumens rated at 3 hours per start on instant start ballast.

4) Average life under specified test conditions with lamps turned off and restarted no more frequently than once every 3 operating hours. Lamp life is appreciably longer if lamps are started less frequently.

Ⓔ Lamp meets US Federal Minimum Efficiency Standards.

● This lamp is better for the environment because of its reduced mercury content. All Philips ALTO II lamps give you end-of-life options which can simplify and reduce your lamp disposal costs depending on your state and local regulations.

95% Lumen Maintenance
Philips T8 Lamps
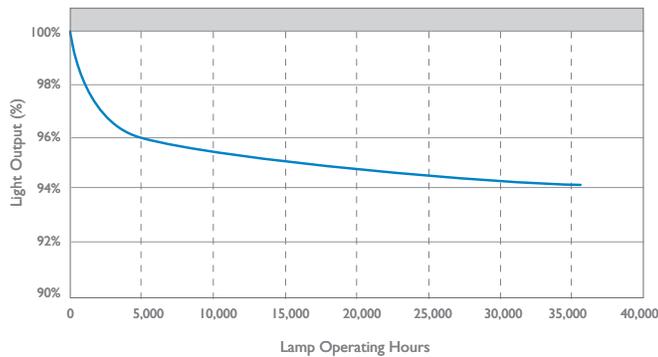
Rated Average Life
Philips T8 Lamps
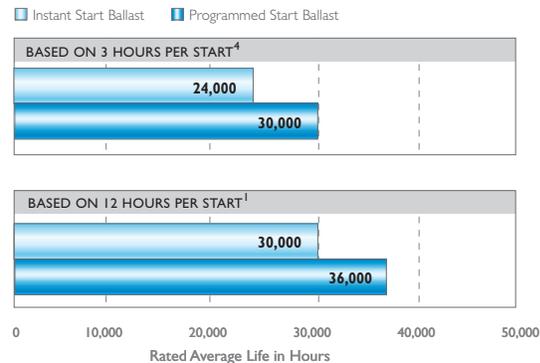
☐ Instant Start Ballast   ◼ Programmed Start Ballast

Acuity 2GT8 Luminaire

LITHONIA LIGHTING®

FEATURES & SPECIFICATIONS

INTENDED USE — Low-profile static luminaire provides general illumination for recessed applications; Ideal for restricted plenum spaces.

Certain airborne contaminants can diminish integrity of acrylic. Click here for Acrylic Environmental Compatibility table for suitable uses.

ATTRIBUTES — Designed exclusively for use with T8 lamps, electronic ballasts and sockets.

CONSTRUCTION — Smooth hemmed sides and smooth, inward formed end flanges for safe handling. Lighter weight fixture allows for safe, easy installation.

Standard steel door frame has superior structural integrity with premium extruded appearance and precision flush mitered corners. Steel door allows easy lens replacement without frame disassembly (for lenses up to .156" think). Powder painted, steel latches provide easy, secure door closure.

Superior mechanical light seal requires no foam gasketing. Integral T-bar clips secure fixture to T-bar system. Housing formed from cold-rolled steel. Acrylic shielding material 100% UV stabilized. No asbestos is used in this product.

FINISH — Five-stage iron-phosphate pretreatment ensures superior paint adhesion and rust resistance. Painted parts finished with high-gloss, baked white enamel.

ELECTRICAL — Standard ballast is electronic, thermally protected, resetting, Class P, HPF, non-PCB, UL Listed, CSA certified ballast, universal voltage and sound rated A.

Luminaire is suitable for damp locations. AWM, TFN or THHN wire used throughout, rated for required temperatures.

LISTING — Standard: UL. Optional: Canada — CSA or cUL; Mexico — NOM.

WARRANTY — 1-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms__and__conditions.aspx

US patents: 6,210,025; 6,231,213; 2,288,471.

Note: Specifications subject to change without notice.

Catalog Number	
Notes	
Type	

General Purpose T8 Troffer

GT8 2'x4'

2, 3 or 4 Lamps
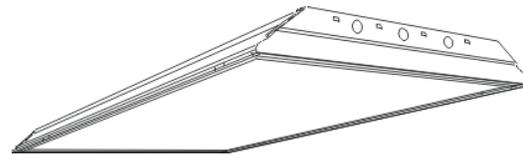
Specifications

- Length: 48 (1218)
- Width: 24 (609)
- Depth: 3-3/16 (81)
- Weight: 22 lbs (9.9 kg)

48 (1218)
3-3/16 (81)
24 (609)
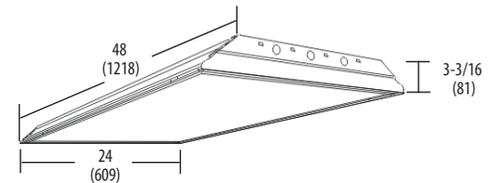
All dimensions are inches (millimeters).

ORDERING INFORMATION

For shortest lead times, configure products using **bolded options**.

Example: 2GT8 2 32 A12 MVOLT GEB10IS

2GT8

Series	Trim type		Number of lamps	Lamp type		Door frame		Diffuser type		Voltage	Options	
2GT8 2' wide	**(blank)**	Grid	**2**	**32**	32W T8 (48")	**(blank)**	Flush steel, white	**A12**	#12 pattern acrylic	**120**	**1/4**	One 4-lamp ballast
	F	Overlapping flanged	**3**			FN	Flush aluminum, natural	**A12125**	#12 pattern acrylic, .125" thick	277	**1/3**	One 3-lamp ballast
			4			FM	Flush aluminum, matte black	**A19**	#19 pattern acrylic, .156" thick	347	**GEB10IS**	Electronic ballast, <10% THD, instant start
			Not included			**FW**	Flush aluminum, white	A15	#15 pattern acrylic, .2" thick	MVOLT[2]	GEB10PS	Electronic ballast, <10% THD, programmed start
						RN	Regressed aluminum, natural	PC1S	1/2" x 1/2" x 1/2" plastic cube louver, silver	Others available	GEB10RS	Electronic ballast, <10% THD, rapid start
						RM	Regressed aluminum, matte black	PC2S	1-1/2" x 1-1/2" x 1" plastic cube louver, silver w/ flange[1]		**EL**	Emergency battery pack (nominal 300 lumens)
						RW	Regressed aluminum, white	PC3S	3/4" x 3/4" x 1/2" plastic cube louver, silver		**EL14**	Emergency battery pack (nominal 1400 lumens)
											GLR	Internal fast-blow fuse[3]
											GMF	Internal slow-blow fuse[3]
											LST	Tandem-wired fixture pairs (shared ballasts)
											PWS1836	6' prewire, 3/8" dia., 18-gauge, 1 circuit
											LP_	Lamped, specify lamp type and color
											LP735	Lamped, 700-series, 3500K
											LP741	Lamped, 700-series, 4100K
											JP	Palletized and stretch-wrapped without individual cartons; grid trim only
											CSA	CSA Certified
											NOM	NOM Certified

NOTES:
1. Available with flush door frames only.
2. MVOLT standard for 120-277V applications, 50-60 hz operation. Some options require voltage specified.
3. Must specify voltage 120V or 277V.

MOUNTING DATA

Continuous row mounting of flanged units requires CRE and CRM trim options (see Options).

G

Lay-in Grid
(exposed or concealed grid)

F[1]

Overlapping Flanged Trim
with swing-gate hangers
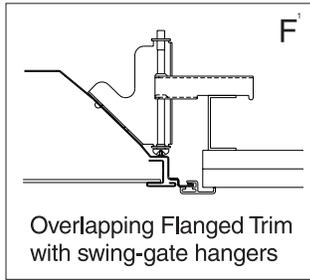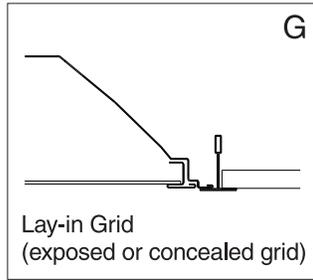
NOTE:

1 Recommended rough-in dimensions for F-trim fixtures 24"x48" (Tolerance is +1/4"-0"). Swing-gate range 1-3/16" to 3-15/16". Swing-gate span 23-3/8" to 26-11/16". Fixture swing-gate points require additional 1-1/16" over nominal fixture height.

DIMENSIONS

4-7/8 (12.4)

3-3/16 (8.1)

24 (60.9)

6-15/16 (17.8)   6-15/16 (17.8)

3-3/16 (8.1)

24 (60.9)

6-15/16 (17.8)   2-9/16 (6.5)

3-3/16 (8.1)

24 (60.9)
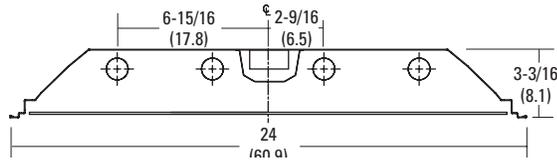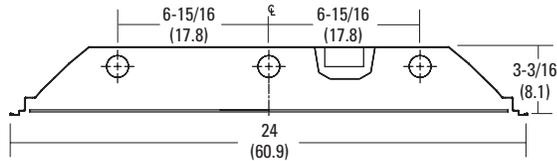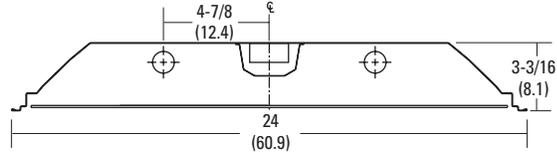
PHOTOMETRICS

Calculated using the zonal cavity method in accordance with IESNA LM41 procedure. Floor reflectances are 20%.
Lamp configurations shown are typical. Full photometric data on these and other configurations available upon request.

2GT8 2 32 A12

Report LTL 7424

Lumens per lamp - 2850 – Lum. eff. - 81.7%

S/MH (along) 1.2 (across) 1.4

Coefficient of Utilization

Ceiling	80%			70%			50%		
Wall	70%	50%	30%	70%	50%	30%	50%	30%	10%
0	97	97	97	95	95	95	91	91	91
1	89	86	82	87	84	81	80	78	76
2	82	75	70	80	74	69	71	67	63
3	75	67	60	73	65	59	63	58	54
4	69	59	52	67	58	52	56	51	46
5	63	53	46	62	52	46	51	45	40
6	59	48	41	47	47	40	46	40	35
7	54	44	37	53	43	36	42	36	31
8	51	40	33	49	39	33	38	32	28
9	47	37	30	46	36	30	35	29	25
10	44	34	27	43	33	27	32	27	23

Zonal Lumens Summary

Zone	Lumens	L	%Lamp	%Fixture
0-30		1372	24.1	29.4
0-40		2277	39.9	48.9
0-60		3907	68.5	83.9
0-90		4658	81.7	100.0
90-180		0	0	0
0-180		4658	81.7	100.0

2GT8 3 32 A12 1/3

Report LTL 7421

Lumens per lamp - 2850 – Lum. eff. - 80.1%

S/MH (along) 1.2 (across) 1.4

Coefficient of Utilization

Ceiling	80%			70%			50%		
Wall	70%	50%	30%	70%	50%	30%	50%	30%	10%
0	95	95	95	93	93	93	89	89	89
1	88	84	81	85	82	79	79	76	74
2	80	74	69	78	72	68	70	66	62
3	74	66	59	72	64	58	62	57	53
4	68	58	52	66	57	51	55	50	46
5	62	52	45	61	52	45	50	44	40
6	58	47	40	56	47	40	45	39	35
7	54	43	36	52	42	36	41	35	31
8	50	39	33	49	39	32	38	32	28
9	47	36	30	45	36	29	35	29	25
10	44	33	27	43	33	27	32	27	23

Zonal Lumens Summary

Zone	Lumens	L	%Lamp	%Fixture
0-30		2066	24.2	30.2
0-40		3412	39.9	49.8
0-60		5768	67.5	84.2
0-90		6851	80.1	100.0
90-180		0	0	0
0-180		6851	80.1	100.0

2GT8 4 32 A12 1/4

Report LTL 7425

Lumens per lamp - 2850 – Lum. eff. - 78.6%

S/MH (along) 1.2 (across) 1.4

Coefficient of Utilization

Ceiling	80%			70%			50%		
Wall	70%	50%	30%	70%	50%	30%	50%	30%	10%
0	94	94	94	91	91	91	87	87	87
1	86	82	79	84	81	78	77	75	73
2	79	73	68	77	71	67	68	64	61
3	72	64	58	70	63	57	61	56	52
4	66	57	51	65	56	50	54	49	45
5	61	51	45	60	51	44	49	43	39
6	57	47	40	55	46	39	44	39	34
7	53	42	36	51	42	35	40	35	31
8	49	39	32	48	38	32	37	31	27
9	46	35	29	45	35	29	34	29	25
10	43	33	27	42	32	27	32	26	22

Zonal Lumens Summary

Zone	Lumens	L	%Lamp	%Fixture
0-30		2718	23.8	30.3
0-40		4481	39.3	50.0
0-60		7553	66.3	84.2
0-90		8965	78.6	100.0
90-180		0	0	0
0-180		8965	78.6	100.0

LITHONIA LIGHTING®

An *Acuity*Brands Company

Mark Architectural Lighting "Veil" Luminaire

INDOOR PHOTOMETRIC REPORT
CATALOG: VL 24 2T5HO

|	
TEST #:	13322.0
TEST LAB:	BUILDING ACOUSTICS AND LIGHTING LABORATORIES, INC.
TEST DATE:	4/6/2010
CATALOG:	VL 24 2T5HO
DESCRIPTION:	VEIL 2'X4' RECESSED SKYLIGHT LUMINAIRE WITH FLEXIBLE AND TRANSLUCENT PVC MEMBRANE DIFFUSER MOUNTED IN ALUMINUM DOOR FRAME
SERIES:	VEIL
LAMP CATALOG:	FP54T5/HO/835
LAMP:	TWO 54-WATT T5 HIGH OUTPUT LINEAR FLUORESCENT
LAMP OUTPUT:	2 LAMPS, RATED LUMENS/LAMP: 5000
BALLAST / DRIVER:	(1) ADVANCE BALLAST #ICN-2S54, TESTED INPUT WATT 119 (BF1.0). LISTED INPUT WATT AS OF ADVANCE ICN-2S54 277V - BF1.0, 120/117
INPUT WATTAGE:	117
LUMINOUS OPENING:	RECTANGLE (L: 46.8", W: 21.84")
CIE CLASS:	DIRECT
MAX CD:	1,828.0 AT HORIZONTAL: 0°, VERTICAL: 0°
SPACING CRITERION:	@ 0 = 1.25 / @ 90 = 1.24
EFFICIENCY:	51.9%

Polar Candela Distribution

- 0° H
- 90° H

Isofootcandle Plot

- 20 fc
- 10 fc
- 5 fc
- 1 fc
- 0.5 fc
- 0.1 fc

Distance in units of mount height (20ft)

13322.0
VISUAL PHOTOMETRIC TOOL

PUBLISH
PAGE 1 OF 3

INDOOR PHOTOMETRIC REPORT
CATALOG: VL 24 2T5HO

*Acuity*Brands.

ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	1,429.7	14.3%	27.6%
0-40	2,321.0	23.2%	44.7%
0-60	4,100.1	41%	79%
60-90	1,087.1	10.9%	21%
70-100	461.0	4.6%	8.9%
90-120	0.000	0%	0%
0-90	5,187.2	51.9%	100%
90-180	0.000	0%	0%
0-180	5,187.2	51.9%	100%

LUMENS PER ZONE

ZONE	LUMENS	% TOTAL	ZONE	LUMENS	% TOTAL
0-10	172.9	3.3%	90-100	0.000	0%
10-20	502.2	9.7%	100-110	0.000	0%
20-30	754.6	14.5%	110-120	0.000	0%
30-40	891.3	17.2%	120-130	0.000	0%
40-50	947.5	18.3%	130-140	0.000	0%
50-60	831.5	16.0%	140-150	0.000	0%
60-70	626.1	12.1%	150-160	0.000	0%
70-80	358.0	6.9%	160-170	0.000	0%
80-90	103.0	2.0%	170-180	0.000	0%

AVERAGE LUMINANCE (CD/M2)

	0	22.5	45	67.5	90
0	2772	2772	2772	2772	2772
45	2704	2702	2698	2696	2696
55	2485	2485	2480	2475	2480
65	2296	2293	2289	2286	2286
75	1957	1957	1957	1963	1963
85	1514	1531	1531	1531	1549

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%

RCC %:	80			70			50			30			10			0
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR: 0	.62	.62	.62	.62	.60	.60	.60	.52	.58	.58	.58	.55	.55	.55	.53	.53	.53	.52
1	.56	.54	.52	.50	.55	.53	.51	.44	.50	.49	.47	.48	.47	.46	.47	.45	.44	.43
2	.51	.47	.43	.40	.50	.46	.43	.37	.44	.41	.39	.42	.40	.38	.41	.39	.37	.36
3	.47	.41	.37	.34	.45	.40	.36	.31	.39	.35	.33	.37	.35	.32	.36	.34	.32	.30
4	.43	.37	.32	.28	.42	.36	.32	.27	.35	.31	.28	.33	.30	.27	.32	.29	.27	.26
5	.39	.33	.28	.24	.38	.32	.28	.23	.31	.27	.24	.30	.26	.24	.29	.26	.24	.22
6	.36	.29	.25	.21	.35	.29	.24	.21	.28	.24	.21	.27	.24	.21	.26	.23	.21	.20
7	.34	.27	.22	.19	.33	.26	.22	.18	.25	.21	.19	.25	.21	.19	.24	.21	.18	.17
8	.31	.24	.20	.17	.31	.24	.20	.16	.23	.19	.17	.23	.19	.17	.22	.19	.16	.15
9	.29	.22	.18	.15	.29	.22	.18	.15	.21	.18	.15	.21	.17	.15	.20	.17	.15	.14
10	.27	.21	.16	.14	.27	.20	.16	.13	.20	.16	.14	.19	.16	.14	.19	.16	.13	.13

13322.0
VISUAL PHOTOMETRIC TOOL

INDOOR PHOTOMETRIC REPORT
CATALOG: VL 24 2T5HO

AcuityBrands.

CANDELA TABLE - TYPE C

	0	22.5	45	67.5	90
0	1828	1828	1828	1828	1828
5	1807	1806	1806	1806	1806
10	1816	1816	1815	1815	1813
15	1770	1770	1770	1768	1768
20	1752	1750	1749	1748	1748
25	1636	1635	1634	1633	1633
30	1536	1534	1534	1533	1531
35	1426	1425	1424	1421	1421
40	1318	1317	1316	1313	1315
45	1261	1260	1258	1257	1257
50	1080	1077	1077	1075	1076
55	940	940	938	936	938
60	771	770	769	766	766
65	640	639	638	637	637
70	487	487	487	487	487
75	334	334	334	335	335
80	201	201	202	205	205
85	87	88	88	88	89
90	0	0	0	0	0

13322.0
VISUAL PHOTOMETRIC TOOL

MARK
ARCHITECTURAL LIGHTING™
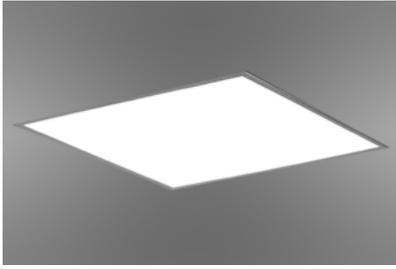
The **Veil** Series

Like a thin and delicate piece of fabric, Veil softens, warms and enhances light. A flexible, translucent PVC membrane provides the shielding that gently scatters light to give Veil its superior diffusing qualities.

The almost sky-like light warms the appearance of interior environments, and with its wide range of standard and custom sizes, Veil is able to provide soft volumetric illumination for almost any room.

Type:

Project:

Catalog Number:
DO NOT TYPE HERE. Autopopulated field.

Specification Features

Housing
Nominal 1'x4', 2'x2', 2'x4', 4'x4', or 5'x5' housing fabricated from 20-gauge, cold-rolled steel. Consult factory for other sizes.

Finish
Painted high reflectance white powder coat.

Reflector
Precision-formed steel; painted white, 89% reflectivity.

Shielding
Consists of (2) stretch PVC membranes, (1) translucent white layer and (1) clear overlay. These (2) PVC membrane layers are stretched over an extruded aluminum frame which is secured to the housing via torsion springs.

Lamps
T5, T5HO, T8, 40W BX, or 50W BX lamps. See chart for lamp quantities.

Ballast
Thermally protected Class P energy-saving electronic ballast.

Mounting
Ceiling trims designed to accommodate: 9/16" slot grid, 15/16" grid, 15/16" concealed tee and drywall installations. Consult factory for other ceiling types. 4'x4' and 5'x5' units require support to structure.

Certification
cULus Listed.

Warranty
1-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com
CustomerResources/Terms_and_conditions.aspx

Note: Actual Actual performance may differ as a result of end-user environment and application.

Specifications subject to change without notice.

Technical Drawings

VEIL 4X4 OR 5X5
¾"   48" x 48" or 60" x 60"

VEIL 1X4, 2X2, & 2X4
¾"   12"X24", 24"X24" or 24"X48"
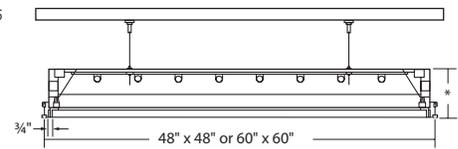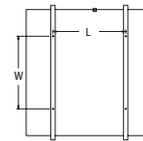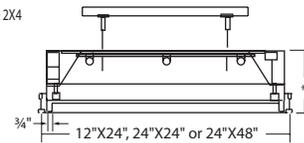
MOUNTING HOLE LOCATIONS

	WIDTH	LENGTH
VL22	12	12
VL24	12	27
VL44	27	27
VL55	36	36
VL66	48	48

(See Configurations Chart below for fixture depth.)

Ordering

Example: VL 22 DF 1T5 GEB10PS 120 EMPK

Series	**Size**		**Ceiling Trim**		**Number of lamps/Lamp type**[1]		**Ballast**		**Voltage**	**Options**	
VL Veil	**14**	1' x 4'	**DF**	15/16" grid, 9/16" slot grid	Number of lamps	Lamp type[3]	**GEB10IS**[4]	Standard instant start	**120**	**EMPK**	Emergency battery pack
	22	2' x 2'	**FL**[2]	15/16" concealed tee (sheetrock)	**1**	**T5**	**GEB10PS**	Programmed rapid start	**277**	**CP**	Chicago plenum
	24	2' x 4'			**2**	**T5HO**	**GEB10DIM**	Dimming, 0 - 10v	**347**[2]	**GB**	Flanged door for drywall application
	44[1]	4' x 4'			**3**	**T8**	**DMHL3D**	Lutron Hi-Lume® 3D			
	55[1]	5' x 5'			**4**	**40BX**	**ECOS**	Lutron Eco System®			
					6	**50BX**	**ECOSH**	Lutron Eco System® H-Series			
					8		**ADZT**	Advance Mark 7			

Notes
1. 4'x 4' and 5'x 5' units require support to structure.
2. Not intended for post sheetrock installation.
3. Specify number of lamps and lamp type. See configurations table.
4. Available with T8 lamping ONLY.

CONFIGURATIONS

| SIZE	LAMP TYPE	6" DEPTH	8" DEPTH	10" DEPTH
1' x 4'	T5, T5HO, T8	2, 3 lamps	--	1 lamp
2' x 2'	BX, T5, T5HO	--	3, 4 lamps	2 lamps
2' x 4'	T5, T5HO, T8	3, 4 lamps	--	2 lamps
4' x 4'	T5, T5HO, T8	6, 8 lamps	--	4 lamps
5' x 5'	T5, T5HO, T8	6, 8 lamps	--	4 lamps

Photometric Information

Catalog Number
VL 44 4T5

Report Number
13341.0

Lamps
(4) T5, rated 2900 lumens per lamp

Total Efficiency
55.9%
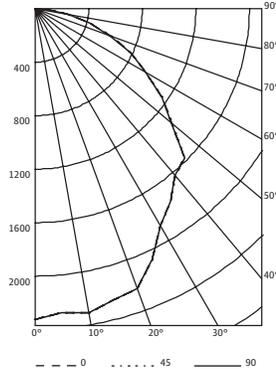
Floor	20%									
Ceiling	80%				50%			30%		
Walls	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%
0	67	67	67	67	62	62	62	59	59	59
1	61	58	56	53	54	53	51	52	51	49
2	55	51	47	43	48	45	42	46	43	41
3	50	44	40	36	42	38	35	40	37	35
4	46	39	34	31	37	33	30	36	32	30
5	42	35	30	26	33	29	26	32	29	26
6	39	32	27	23	30	26	23	29	25	23
7	36	29	24	20	27	23	20	27	23	20
8	34	26	21	18	25	21	18	24	21	18
9	32	24	19	16	23	19	16	22	19	16
10	30	22	18	15	21	17	15	21	17	15

Run Information

Lithonia Lighting "Envex" Luminaire

INDOOR PHOTOMETRIC REPORT
CATALOG: ENVX 2X4 HRG 4800LM 80CRI 35K

AcuityBrands.
LITHONIA LIGHTING®

|	
TEST #:	ISF 20964P50
TEST LAB:	SCALED PHOTOMETRY
CATALOG:	ENVX 2X4 HRG 4800LM 80CRI 35K
DESCRIPTION:	SPEC AMBIENT LED TROFFER, 2X4, HOURGLASS, 4800 NOMINAL LUMENS, 80 CRI, 3500K
SERIES:	ENVEX™
LAMP OUTPUT:	TOTAL LUMINAIRE LUMENS: 4748.9, ABSOLUTE PHOTOMETRY *
INPUT WATTAGE:	40.48
LUMINOUS OPENING:	RECTANGLE (L: 48", W: 24")
CIE CLASS:	DIRECT
MAX CD:	1,615.5 AT HORIZONTAL: 67.5°, VERTICAL: 2.5°
SPACING CRITERION:	@ 0 = 1.28 / @ 90 = 1.27

Polar Candela Distribution

■ - 0° H
■ - 90° H

Isofootcandle Plot

■ 20 fc   ■ 1 fc
■ 10 fc   ■ 0.5 fc
■ 5 fc   ■ 0.1 fc
Distance in units of mount height (20ft)
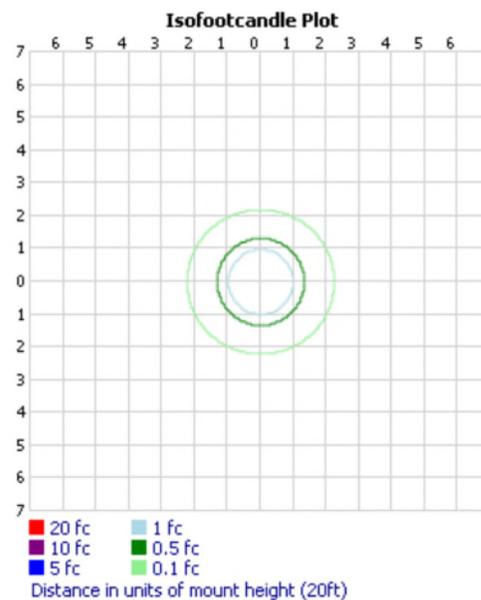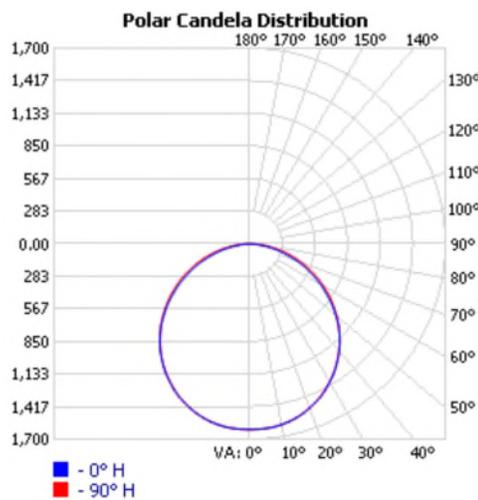
*TEST BASED ON ABSOLUTE PHOTOMETRY WHERE LAMP LUMENS=LUMENS TOTAL.
*CUTOFF CLASSIFICATION AND EFFICIENCY CANNOT BE PROPERLY CALCULATED FOR ABSOLUTE PHOTOMETRY.

ISF 20964P50
VISUAL PHOTOMETRIC TOOL

PUBLISH
PAGE 1 OF 3

INDOOR PHOTOMETRIC REPORT
CATALOG: ENVX 2X4 HRG 4800LM 80CRI 35K

AcuityBrands.

ZONAL LUMEN SUMMARY

ZONE	LUMENS	% LUMINAIRE
0-30	1,267.2	26.7%
0-40	2,082.9	43.9%
0-60	3,708.5	78.1%
60-90	1,040.4	21.9%
0-90	4,748.9	100%

LUMENS PER ZONE

ZONE	LUMENS	% TOTAL
0-10	153.3	3.2%
10-20	441.4	9.3%
20-30	672.6	14.2%
30-40	815.7	17.2%
40-50	852.2	17.9%
50-60	773.4	16.3%
60-70	592.9	12.5%
70-80	349.1	7.4%
80-90	98.4	2.1%

AVERAGE LUMINANCE (CD/M2)

	0	22.5	45	67.5	90
0	2172	2172	2172	2172	2172
45	2096	2111	2106	2101	2098
55	1991	2025	2044	2041	2037
65	1824	1874	1912	1953	1957
75	1571	1639	1707	1802	1850
85	868	1050	1292	1555	1716

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%

RCC %:	80				70				50			30			10			0
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1.00
1	1.09	1.04	.99	.95	1.06	1.01	.97	.84	.97	.94	.91	.93	.90	.88	.90	.87	.85	.83
2	.99	.90	.83	.77	.96	.88	.82	.70	.85	.79	.75	.81	.77	.73	.78	.75	.71	.69
3	.90	.79	.71	.64	.87	.77	.70	.60	.74	.68	.62	.72	.66	.61	.69	.64	.60	.58
4	.82	.70	.61	.54	.80	.69	.60	.51	.66	.59	.53	.64	.57	.52	.61	.56	.52	.49
5	.75	.62	.53	.46	.73	.61	.53	.44	.59	.51	.46	.57	.50	.45	.55	.49	.45	.43
6	.70	.56	.47	.40	.68	.55	.47	.39	.53	.46	.40	.52	.45	.40	.50	.44	.39	.37
7	.64	.51	.42	.36	.63	.50	.42	.35	.48	.41	.35	.47	.40	.35	.46	.39	.35	.33
8	.60	.46	.38	.32	.58	.46	.37	.31	.44	.37	.31	.43	.36	.31	.42	.36	.31	.29
9	.56	.42	.34	.29	.55	.42	.34	.28	.41	.33	.28	.40	.33	.28	.39	.32	.28	.26
10	.52	.39	.31	.26	.51	.39	.31	.25	.38	.31	.26	.37	.30	.26	.36	.30	.25	.24

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VISUAL PHOTOMETRIC TOOL

PUBLISH
PAGE 2 OF 3

INDOOR PHOTOMETRIC REPORT
CATALOG: ENVX 2X4 HRG 4800LM 80CRI 35K

AcuityBrands.

CANDELA TABLE - TYPE C

	0	22.5	45	67.5	90
0	1614	1614	1614	1614	1614
5	1612	1612	1612	1612	1612
10	1596	1595	1593	1595	1596
15	1566	1563	1564	1563	1566
20	1520	1519	1517	1519	1519
25	1464	1461	1460	1457	1460
30	1388	1389	1388	1385	1387
35	1305	1305	1303	1303	1303
40	1211	1214	1209	1206	1209
45	1101	1109	1107	1104	1103
50	978	993	994	992	990
55	849	863	871	870	869
60	714	727	738	743	742
65	573	589	600	613	615
70	437	451	462	481	487
75	302	315	328	347	356
80	170	187	200	218	228
85	56	68	84	101	111
90	3	3	3	3	0

ISF 20964P50
VISUAL PHOTOMETRIC TOOL

LITHONIA LIGHTING®

Catalog Number
Notes
Type

ENVEX™

1'x4' LED, 2'x2' LED and 2'x4' LED

FEATURES & SPECIFICATIONS

INTENDED USE — ENVEX is a high-performance recessed ambient solution suitable for all application types. Designed to improve quality of light, ENVEX provides performance, configurability, delivery, value and style. Both designs, Hourglass and Hourglass with Center Spine, are created to elevate the space with a unique, undisruptive, calm and soothing illumination. Its 5-day lead time and entire North American manufacturing permit for all consumers of ENVEX to have the quality, delivery and reliability they deserve.

CONSTRUCTION — ENVEX is engineered to have a curved luminous surface to reduce glare while increasing its volumetric class. Its smooth lens, and direct-lit over optic technology, allow for no individual LED images to be visible to the occupants in the space. ENVEX seamless transition zones permit for the uniform illumination across the lens to be visually comfortable to look into. Built with non-exposed corners and seamless flanges within the T-Grid, ENVEX is a single, self-contained fixture, not requiring onsite assembly for installation outside of additional accessories. The power supply and circuit board of the luminaire is integral to the unit. ENVEX allows for design flexibility by incorporating a center element, if chosen, without compromising its fully luminous aperture.

ENVEX has IP5X rated sealed optics to prevent dust and bugs from protruding inside of the fixture. All the painted components within the luminaire have paint particles of 31um or larger, painted to a thickness of no less than 3 mils for even coverage. Before delivery, ENVEX undergoes component verification by means of visual scanning equipment to ensure proper CCT, Lumens, and CRI; in addition to the optical scanning to detect visual defects for the most optimal quality assurance.

ELECTRICAL — ENVEX delivers performance superiority with long-life LEDs and unique over optics that when coupled with high-efficiency drivers, provide superior quantity of illumination for extended service life. ENVEX offers 80% LED lumen maintenance at 60,000 hours and color variation within 3-step MacAdam ellipse ranging from 3000K-5000K.

ENVEX offers 8 different lumen packages ranging from 1500 to 7200 lumen with certifications in DLC Standard and/or DLC Premium allowing for rebates and energy savings solutions.

This fixture offers flicker free dimming with capability to dim to either 10%, 1% or .1%.

Driver disconnect provided where required to comply with US and Canadian codes.

SENSOR — ENVEX features multiple integral sensor types without compromising the range and aesthetic of the fixture. Integrated sensor (individual control): Sensor Switch MSD7ADCX ((Passive infrared (PIR)) or MSDPDT7ADCX ((PIR/Microphonics Dual Tech (PDT)) integrated occupancy sensor/automatic dimming photocell allows the luminaire to power off when the space is unoccupied or enough ambient light is entering the space. See page 4 for more details on the integrated sensor.

Integrated Sensor (nLight Wired Networking): This sensor is nLight-enabled, Integrated Smart Sensor (nLight Air Wireless Platform): The RES7 sensor is has the ability to communicate over the wireless nLight control platform. It is. See page 4 for more details on the Integrated Smart Sensor.

INSTALLATION — ENVEX fits into standard 15/16" and narrow 9/16" T-grid ceiling systems. Suitable for damp location. For recessed mounting in hard ceiling applications, Drywall Grid Adapters (DGA) are available as an accessory. See Accessories section.

LISTINGS — CSA certified to meet US and Canadian standards. Intended for indoor use only. Damp location listed. IC rated. IP5X rated. DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

WARRANTY — 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

NOTE: Actual Performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.
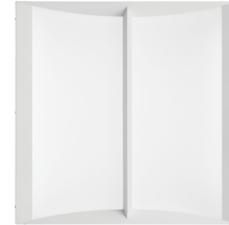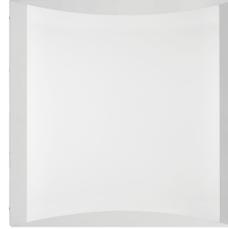
Specifications			Weights	
Length:	23-3/4 (60.3), 47-3/4 (121.4), 47-3/4 (121.4)		2X2:	15 lbs
Width:	23-3/4 (60.3), 23-3/4 (60.3), 11-3/4 (29.7)		2X4:	22 lbs
Depth:	3-5/8 (9.6), 3-5/8 (9.6), 3-1/8 (7.8)		1X4:	17 lbs

All dimensions are inches (centimeters) unless otherwise specified.

Embed nLight controls today. Prepare for tomorrow.

Now
- User-friendly install
- Enhanced energy savings
- Code compliance

Tomorrow
- Scalability
- Space configuration
- Future-ready

ᴄᴬ⁺ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency

- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*

- This luminaire is part of an A+ Certified solution for nLight control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

ENVEX™ elegantly integrates with every ceiling type to allow structure and style to take the lead. The seamless transition zones from both of the hourglass designs, combined with low lumen density, create the high quality of light only ENVEX™ can provide.

HRG: Hourglass Design

- Clean appearance in the ceiling plane provides design flexibility.
- Low lumen density delivers visually comfortable experience.
- Seamless transition zones & uniform illumination enables universal application.
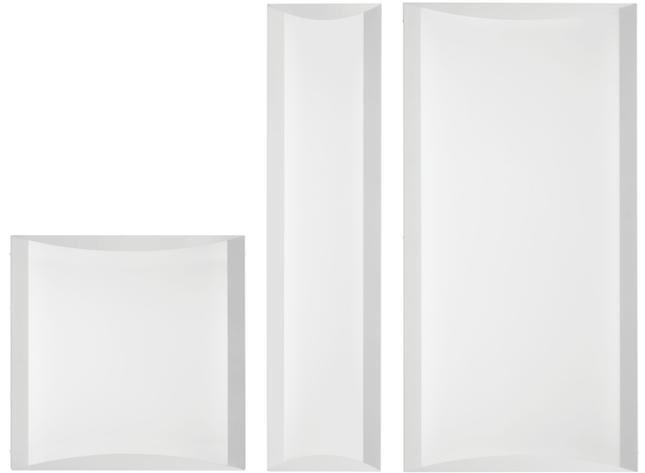
HRGC: Hourglass with Center Spine Design

- Center Spine design allows for further design optimization on a fully luminous surface.
- Spine's geometrically perfected angle preserves uniformity across the fixture surface.
- Unified transition zones on spine and side bezels grant ease of transition between lighter and darker areas.

LITHONIA LIGHTING®

ENVEX Spec Ambient

 A+ Capable options indicated by this color background.

Example: ENVX 2X2 HRG 3300LM 80CRI 40K MIN1 EZT MVOLT

Series	Fixture Dimension	Fixture Style	Lumens Output	CRI	Color Temperature	Minimum Dimming Level
ENVX — Spec Ambient LED Troffer	1x4 — 1'x4'	HRG — Hourglass HRGC — Hourglass with Center Spine ‡	1500LM — Nominal 1500 lumens 2000LM — Nominal 2000 lumens 3000LM — Nominal 3000 lumens 4000LM — Nominal 4000 lumens 4800LM — Nominal 4800 lumens 6000LM — Nominal 6000 lumens 7200LM — Nominal 7200 lumens	80CRI — 80 CRI 90CRI — 90 CRI	30K — 3000K 35K — 3500K 40K — 4000K 50K — 5000K	DARK — Constant current, dimming to <1% MIN1 — Constant current, dimming to 1% MIN10 — Constant current, dimming to 10%
	2x2 — 2'x2'		2000LM — Nominal 2000 lumens 3300LM — Nominal 3300 lumens 4000LM — Nominal 4000 lumens 4800LM — Nominal 4800 lumens			
	2x4 — 2'x4'		3000LM — Nominal 3000 lumens 4000LM — Nominal 4000 lumens 4800LM — Nominal 4800 lumens 6000LM — Nominal 6000 lumens 7200LM — Nominal 7200 lumens			

| Control Input	Voltage	Step Level Dimming	Emergency Option
EZT — eldoLED 0-10V Dimming ‡ ZT — Generic 0-10V ‡ ECO — Lutron Ecosystem interface ‡ DALI — DALI ‡	MVOLT — MVOLT, 120-277V 120 — 120V 277 — 277V 347 — 347V ‡	(blank) — no step level dimming SLD — Step-level dimming ‡	E7W — Emergency Battery Pack, 7W, CA Title 20 Noncompliant ‡ E10WLCP — EM Self-Diagnostic battery pack, 10W Constant Power, Certified in CA Title 20 MAEDBS ‡ E15WLCP — EM Self-Diagnostic battery pack, 15W Constant Power, Certified in CA Title 20 MAEDBS ‡ EMG — nLight emergency option ‡ GTD — Generator Transfer Device ‡

Networked Controls ‡

Wireless

Code	Description
NLTAIR2 RIO	nLight AIR Generation 2 enabled, radio module without sensor
NLTAIR2 RES7	nLight AIR Generation 2 enabled, integral occupancy sensor with automatic dimming photocell for Networking Capabilites
NLTAIR2 RES7PDT	nLight AIR Generation 2 enabled, microphonics dual technology occupancy sensor with automatic dimming photocell
NLTAIR2 RVTX8FOCC	nlight AIR Generation 2 enabled, Vertex low-profile on/off occupancy PIR occupancy sensor

Wired

Code	Description
NIO	nLight no constant lument management
NES7	nLight no constant lumen management, nLight nES7 PIR integral occupancy sensor
NESPDT7	nLight no constant lumen management, nLight nES PDT 7 dual technology integral occupancy sensor
NES7ADCX	nLight no constant lumen management, nLight nES7 ADCX PIR integral occupancy sensor with automatic dimming photocell
NES7PDT7ADCX	nLight no constant lumen management, nLight nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell
CL80	nLight 80% constant lumen management
CL80 NES7	nLight 80% constant lumen management, nLight nES7 PIR integral occupancy sensor
CL80 NESPDT7	nLight 80% constant lumen management, nLight nES PDT 7 dual technology integral occupancy sensor
CL80 NES7ADCX	80% constant lumen management, nLight nES7 ADCX PIR integral occupancy sensor with automatic dimming photocell
CL80 NES7PDT7ADCX	nLight 80% constant lumen management, nLight nES PDT 7 dual technology integral occupancy sensor with automatic dimming photocell
NVTX8FOCC	nLight enabled, Vertex low-profile on/off occupancy PIR occupany sensor

Stand Alone Controls ‡

Individual control

Code	Description
MSD7ADCX	PIR Integral occupancy sensor with automatic dimming photocell
MSDPDT7ADCX	PDT Integral occupancy sensor with automatic dimming photocell
VTX8FOCC	Vertex low-profile on/off occupancy PIR occupany sensor with VLP programming at 8ft mounting height
VTX8FADC	Vertex low-profile on/off PIR occupancy sensor with auto dimming photocell with VLP programming at 8ft mounting height
VTX15FOCC	Vertex low-profile on/off occupancy PIR occupancy sensor with VLP programming at 15ft mounting height
VTX15FADC	Vertex low-profile on/off PIR occupancy sensor with auto dimming photocell with VLP programming at 15ft mounting height

Standby Mode	Options		
NOC — NOC Occupancy sensor disabled ‡	GLR — Fast-blowing fuse ‡ GMF — Slow-blowing fuse ‡ PWS1836 — 6' pre-wire, 18 gauge, 3/8" dia., 3 wire - 1 circuit PWS1846 — 6' pre-wire, 18 gauge, 3/8" dia., 4 wire - 2 circuit PWS1846 PWSLV — Two cables: one 6' pre-wire, 3/8" diameter, 18 gauge, 2 circuits; one 6' pre-wire, 3/8" diameter, 18 gauge, purple and gray PWS1856LV — 6' pre-wire, 18 gauge, 3/8" dia., 5 wire - 1 circuit w/ low voltage wires	CP — Chicago plenum approved ‡ RRLA — RELOC®-Ready Luminaire (RRL) connectors. Driver wired to pin position #1 (120V, 277V, 347V - Phase A) RRLAB — RELOC®-Ready Luminaire (RRL) connectors. Driver wired to pin position #2 (120V, 277V, 347V - Phase A) RRLAE — RELOC®-Ready Luminaire (RRL) connectors. Driver wired to pin position #1 (120V, 277V, 347V - Phase A). Emergency driver wired to pin postion #2 (120V, 277V, 347V - Phase B) DWAM — Anti-microbial paint LATC — T-bar clips	

NOTE: ‡ indicates option value has ordering restrictions. Please reference the Option Value Ordering Restrictions chart on the next page. Options are sorted alphanumerically.

ENVEX

Option Value Ordering Restrictions ‡	
Option Value	**Restriction**
HRGC	Temporary extended lead time. Consult Factory.
EZT	Not available with MIN10
ZT	Not available with DARK
ECO	Not available with MIN10 or with networked or wired controls
DALI	Not available with: MIN10 or MIN1 or with an networked or wired controls
347V	Not available with: E7W, E10WLCP, E15WLCP, SLD, GTD, GLR, GMF, ECO
SLD	Not available with 7200LM or with networked or wired controls. Must select MIN10. Leave Control Input section blank
E7W	Not available with 347V
E10WLCP	Not available with 347V
E15WLCP	Not available with: 2X2 or 347V
EMG	Not available with: 1500LM, 2000LM. Leave Control Input section blank. Must select a Networked Control
GTD	Must select 120 OR 277, Not available with 347V or MVOLT
NETWORKED CONTROLS	Must select MIN1. Leave Control Input section blank. Not available with STAND ALONE CONTROLS or SLD. Solutions with Integrated sensor will have a temporary extended lead time. Consult Factory.
STAND ALONE CONTROLS	Must select MIN1. Leave Control Input section blank. Not available with NETWORK CONTROLS or SLD. Solutions with Integrated sensor will have a temporary extended lead time. Consult Factory.
NOC	Must select a Wireless Network Control
GLR	Must select 120 or 277
GMF	Must select 120 or 277
CP	Not available with Wired Network Controls
PS1055LCP	Field installable only on the 1X4 and 2X4 version of the ENVX

MOUNTING DATA	
Ceiling Type	**Appropriate Trim Type**
Exposed grid tee (1' and 9/16")	G
Concealed grid tee	G
Plaster or plasterboard	G*

9/16   15/16   Screw Slot
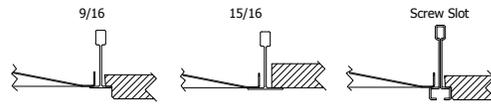
*DGA accessory available to provide ceiling trim flange and fixture support for plaster or plasterboard ceiling. Recommended rough-in dimensions for DGA installation is 24-3/4" x 24-3/4" (Tolerance is +1/8", -0").

UL924 Sequence of Operation

For 90 minutes following any complete AC power interruption >200 ms:
- Digital dimming is commanded to high end trim level.
- Device ignores wireless lighting control commands.

Accessories

Accessories: *Order as separate catalog number.*	
DGA14	Drywall grid adapter for 1x4 recessed fixture.
DGA22	Drywall grid adapter for 2x2 recessed fixture.
DGA24	Drywall grid adapter for 2x4 recessed fixture.
ENVX TGRID CLIP J4	Pack of 4 grid clips for 9/16" T grid compatibility.
ENVX TGRID CLIP J50	Pack of 50 grid clips for 9/16" T grid compatibility.
PS1055LCP M5	Field installable, not available with 347V. See restriction note above. ‡

Constant Lumen Management

Enabled by the embedded nLight control, the ENVX actively tracks its run-time and manages its light source such that constant lumen output is maintained over the system life. Referred to as lumen management, this feature eliminates the energy waste created by the traditional practice of over-lighting.

Without Lumen Management
Energy is wasted and light level is inconsistent.

POWER INPUT
LIGHT OUTPUT
LIGHT OUTPUT
POWER INPUT
Wasted Energy
100% — 34W
80% — 27W
0 10 20 30 40 50
THOUSAND OPERATING HOURS

With Lumen Management
Energy is saved and light level remains consistent.

Saved Energy
POWER INPUT
LIGHT OUTPUT
LIGHT OUTPUT
POWER INPUT
100% — 34W
80% — 27W
0 10 20 30 40 50
THOUSAND OPERATING HOURS

nLight Platform

nLight embedded fixtures offer:	Customers get:
Manual Dimming	Convenience and visual comfort for occupants
Motion Sensing and/or Daylight Harvesting	Energy savings and code compliance
Fixture or Group Level Control	Ability to configure lighting to the space requirements
Flexibility	Ease of fixture moves, adds and changes
Wireless Wall Switch (nLight AIR Only)	Ease and flexibility of placement
Astronomical and Time of Day Scheduling	Energy savings and building security
Scalable Solution	nLight controls to grow with your business
Future-Ready	nLight platform to set foundation for future upgrades and capabilities

nLight Air Wireless

ENVX Series

Simple as 1,2,3

1. Install the nLight® AIR fixtures with embedded smart sensor
2. Install the wireless battery-powered wall switch
3. With CL**AIR**ITY app, pair the fixtures with the wall switch and if desired, customize the sensor settings for the desired outcome

nLight AIR rPODBA

Mobile Device

nLight Wired Networking

ENVX Series
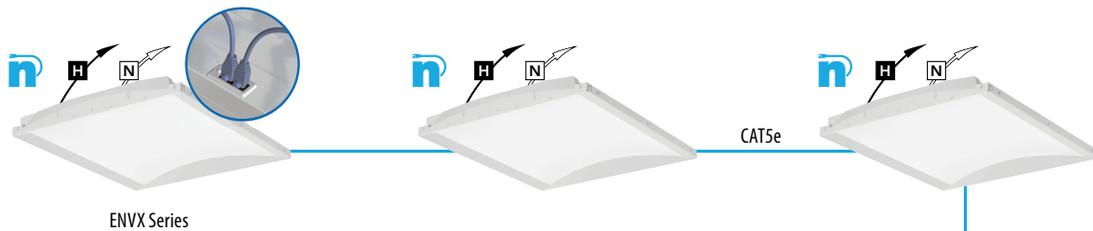
CAT5e

Simple as 1,2,3

1. Install the nLight® Wired fixtures with embedded control
2. Install the nLight Wired wall switch
3. Connect the fixtures using standard CAT5e cables and the devices will automatically discover each other and work (plug and play)

nLight Wired nPODMA

LITHONIA LIGHTING®

Sensor Options					
Option	**Automatic Dimming Photocell**	**Occupancy Sensing**		**nLight Wired Networking**	**nLight AIR Networking**
		PIR	**PDT**		
MSD7ADCX	X	X			
MSDPDT7ADCX	X		X		
NES7		X		X	
NES7ADCX	X	X		X	
NESPDT7			X	X	
NESPDT7ADCX	X		X	X	
RES7	X	X			X
RESPDT7	X	X	X		X

Sensor Coverage Pattern
Mini 360° Lens

- Recommended for walking motion detection from mounting heights between 8 ft (2.44 m) and 20 ft (6.10 m)
- Initial detection of walking motion along sensor axes at distances of 2x the mounting height up to 15 ft (4.57 m) and
- 1.75x up to 20 ft (6.10 m).
- Provides 12 ft (3.66 m) radial detection of small motion when mounted at 9 ft (2.74 m)
- Initial detection will occur earlier when walking across sensor's field of view than when walking directly at sensor

9 FT Mounting

5.5	18
4.6	15
3.7	12
2.7	9
1.8	6
0.9	3
0 m	0 ft
0.9	3
1.8	6
2.7	9
3.7	12
4.6	15
5.5	18

Lens rotates 15° to enable adjustment
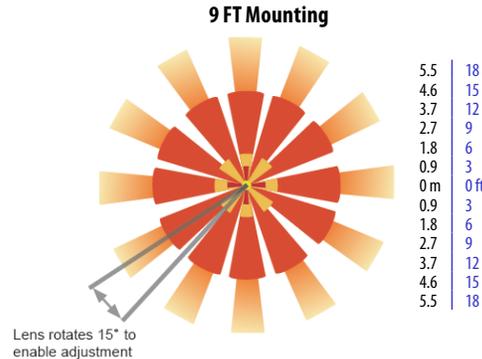
Integrated Sensor with Individual Control

The MSD7ADCX PIR occupancy sensor/automatic dimming photocell is ideal for areas without obstructions and where daylight harvesting may be desired. Suggested applications include, but not limited to, hallways, corridors, storage rooms, and breakrooms or other areas where people are typically moving.

The MSDPDT7ADCX PIR/Microphonics Dual Tech occupancy sensor/automatic dimming photocell is ideal for areas with obstructions and where daylight harvesting is desired. Suggested applications include, but not limited to, open offices, private offices, classrooms, public restrooms, and conference rooms.

nLight AIR Wireless

nLight AIR is the ideal solution for retrofit or new construction spaces where adding additional wiring can be labor intensive and nLight AIR is available with or without an integral sensor. The integrated rES7 or rES7PDT smart sensors are part of each luminaire in the nLight AIR network, which can be grouped to control multiple luminaires. The granularity of control with the digital PIR occupancy detection and daylight sensing makes a great solution for any application.

nLight Wired Networking

The nES 7 is ideal for small rooms without obstructions or areas with primarily walking motion. Ideal areas include hallways, corridors, storage rooms, and breakrooms. Additionally, the nES7ADCX includes an integrated photocell, which enables daylight harvesting controls.

For areas like restrooms, private offices, open offices, conference rooms or any space with obstructions, the nES PDT 7 dual technology sensor is recommended. The nES PDT 7 utilizes both PIR (passive infrared) and Microphonics technologies to detect occupancy. Additionally, the nESPDT7ADCX includes an integrated photocell, which enables daylight harvesting controls which is ideal for areas where windows are present.

Sequence of Operation (MSD7 Sensor)
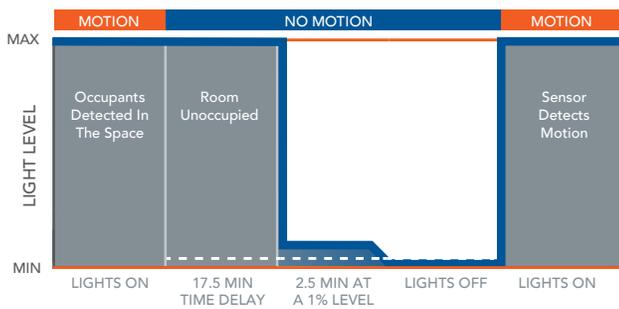
*The presetting on the automatic dimming photocell is 5fc.

Sequence of Operation (nES7 and rES7 and Sensor)
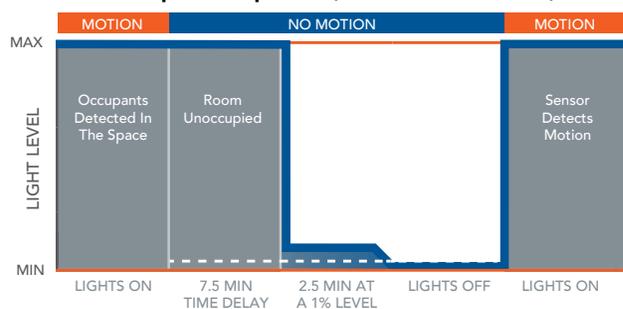
*The presetting on the automatic dimming photocell is 5fc (NES7) and 10fc (RES7).

LITHONIA LIGHTING®

Controls Accessories

nLight® Wired Control Accessories:
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlight.

WallPod stations	Model number	Occupancy sensors	Model number
On/Off	nPODMA [Color]	Small motion 360°, ceiling (PIR / dual tech)	nCM 9 RJB / nCM PDT 9 RJB
On/Off & raise/lower	nPODMA DX [Color]	Large motion 360°, ceiling (PIR / dual tech)	nCM10 RJB / nCM PDT 10 RJB
Graphic touchscreen	nPOD TOUCH [Color]	Wall switch with raise/lower	nWSX PDT LV DX [color]
Photocell controls	**Model number**	**Cat-5 cable (plenum rated)**	**Model number**
Full range dimming	nCM ADCX RJB	10' cable	CAT5 10FT J1
		30' cable	CAT5 30FT J1

nLight® AIR Control Accessories:
Order as separate catalog number. Visit www.acuitybrands.com/products/controls/nlightair.

Wall switches	Model number
On/Off single pole	rPODBA [color] G2
On/Off two pole	rPODBA 2P [color] G2
On/Off & raise/lower single pole	rPODBA DX [color] G2
On/Off & raise/lower two pole	rPODBA 2P DX [color] G2
Occupancy/Daylighting Sensor	**Model number**
Small Motion 360, Ceiling	rCMSB 7 G2

ENVEX fixtures with integrated rIO devices complement any small office space. Pair them with an rCMS occupancy sensor and the space now has wireless occupancy sensing and dimming capability. For additional configuration options please consult with Tech Support.
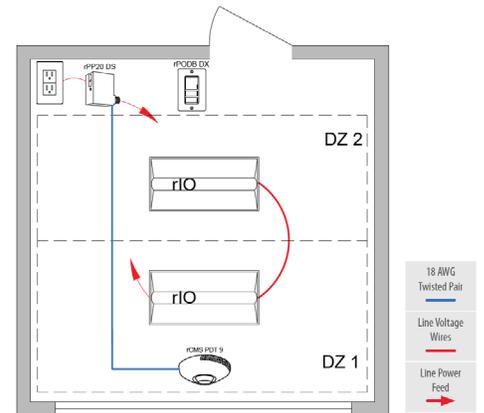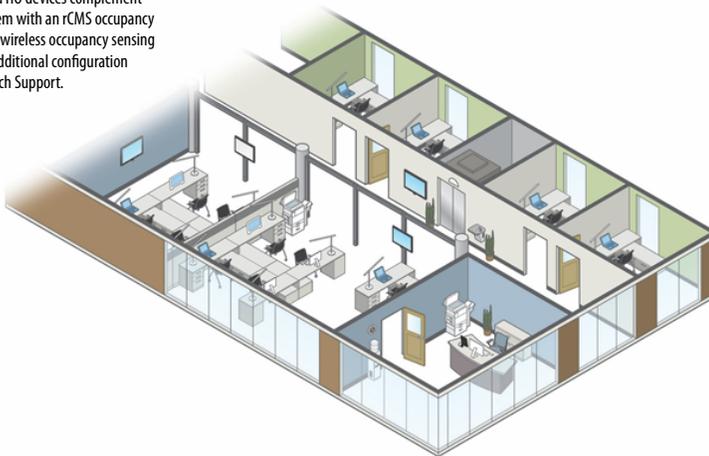
| rCMS			Example: RCMSB 7 G2
Series / Detection	**Detection**	**Lens**	**Generation**
RCMSB nLight AIR occupancy and daylight sensor	[blank] PIR Detection	7 Low Mount 360 45 High Mount 360° 45A High Mount Aisleway	G2 Generation 2 compatibility

Sensor Switch WSX   **nLight WIRED NPOD UNITOUCH**   **nLight WIRED nPODMA DX**   **nLight AIR rPODBA**   ENVX   rPODBA   RCMSB

PHOTOMETRICS

ENVX 1X4 HRG 3000LM 80CRI 35K
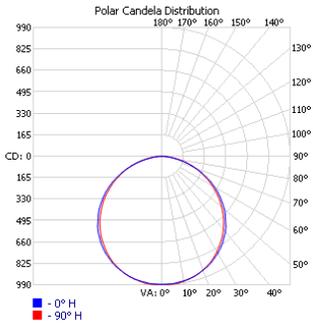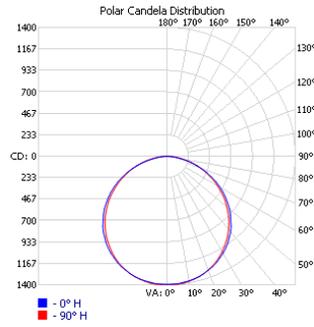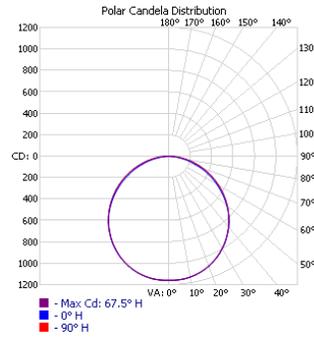
Polar Candela Distribution

ENVX 1X4 HRG 4000LM 80CRI 35K

Polar Candela Distribution

ENVX 2X2 HRG 3300LM 80CRI 35K

Polar Candela Distribution

ENVX 2X2 HRG 4000LM 80CRI 35K

Polar Candela Distribution

ENVX 2X4 HRG 4000LM 80CRI 35K

Polar Candela Distribution

ENVX 2X4 HRG 4800LM 80CRI 35K

Polar Candela Distribution

DIMENSIONS

1X4

23.9
2.7
11.7
47.8
3.1
.21

2X2

11.9
23.7
2.7
23.8
3.7
.25

LITHONIA LIGHTING®
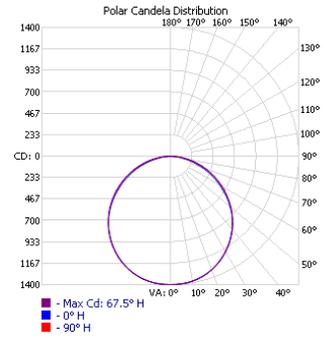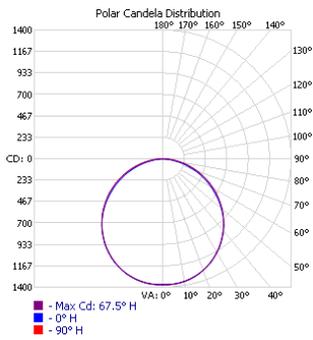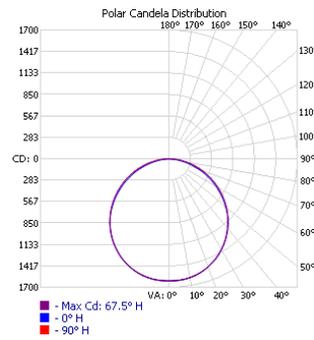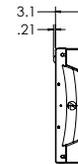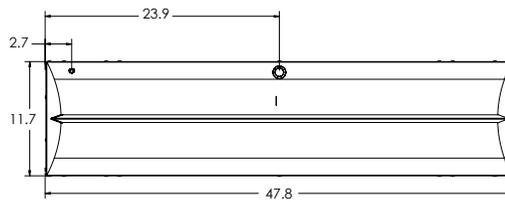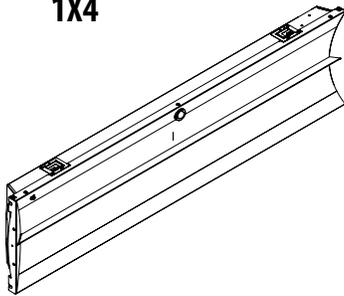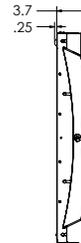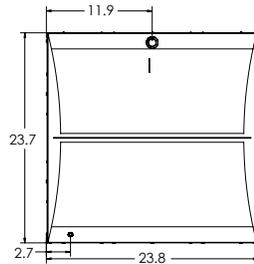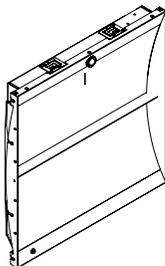
DIMENSIONS

2X4
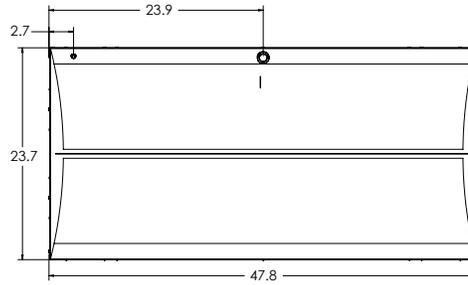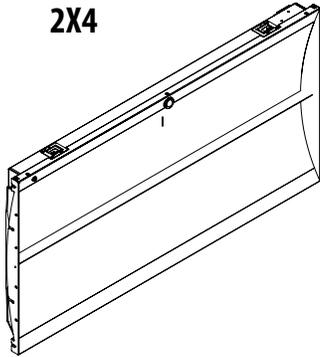
Performance Data			
Catalog Number	**Delivered Lumens**	**Input Watts**	**Lumens/ Watt**
ENVX 1X4 HRG 1500LM 80CRI 35K	1516	12	125
ENVX 1X4 HRG 1500LM 90CRI 35K	1308	12	107
ENVX 1X4 HRG 2000LM 80CRI 35K	2097	17	127
ENVX 1X4 HRG 2000LM 90CRI 35K	1809	17	109
ENVX 1X4 HRG 3000LM 80CRI 35K	2948	24	125
ENVX 1X4 HRG 3000LM 90CRI 35K	2543	24	108
ENVX 1X4 HRG 4000LM 80CRI 35K	4169	33	125
ENVX 1X4 HRG 4000LM 90CRI 35K	3596	33	108
ENVX 1X4 HRG 4800LM 80CRI 35K	5019	41	123
ENVX 1X4 HRG 4800LM 90CRI 35K	4329	41	106
ENVX 1X4 HRG 6000LM 80CRI 35K	5785	51	114
ENVX 1X4 HRG 6000LM 90CRI 35K	4990	51	98
ENVX 1X4 HRGC 1500LM 80CRI 35K	1448	12	119
ENVX 1X4 HRGC 1500LM 90CRI 35K	1249	12	103
ENVX 1X4 HRGC 2000LM 80CRI 35K	1937	18	109
ENVX 1X4 HRGC 2000LM 90CRI 35K	1671	18	94
ENVX 1X4 HRGC 3000LM 80CRI 35K	2878	24	122
ENVX 1X4 HRGC 3000LM 90CRI 35K	2483	24	105
ENVX 1X4 HRGC 4000LM 80CRI 35K	3891	33	116
ENVX 1X4 HRGC 4000LM 90CRI 35K	3357	33	100
ENVX 1X4 HRGC 4800LM 80CRI 35K	4626	41	113
ENVX 1X4 HRGC 4800LM 90CRI 35K	3991	41	98
ENVX 1X4 HRGC 6000LM 80CRI 35K	6085	53	114
ENVX 1X4 HRGC 6000LM 90CRI 35K	5250	53	98
ENVX 1X4 HRG 7200LM 80CRI 35K	6788	60	113
ENVX 1X4 HRG 7200LM 90CRI 35K	5855	60	98
ENVX 1X4 HRGC 7200LM 80CRI 35K	7302	65	113
ENVX 1X4 HRGC 7200LM 90CRI 35K	6299	65	97
ENVX 2X2 HRG 2000LM 80CRI 35K	1994	17	115
ENVX 2X2 HRG 2000LM 90CRI 35K	1720	17	99
ENVX 2X2 HRG 3300LM 80CRI 35K	3411	30	114
ENVX 2X2 HRG 3300LM 90CRI 35K	2943	30	99

Performance Data			
Catalog Number	**Delivered Lumens**	**Input Watts**	**Lumens/ Watt**
ENVX 2X2 HRG 4000LM 80CRI 35K	4112	36	113
ENVX 2X2 HRG 4000LM 90CRI 35K	3547	36	98
ENVX 2X2 HRG 4800LM 80CRI 35K	4943	45	109
ENVX 2X2 HRG 4800LM 90CRI 35K	4264	45	94
ENVX 2X2 HRGC 2000LM 80CRI 35K	1914	17	110
ENVX 2X2 HRGC 2000LM 90CRI 35K	1651	17	95
ENVX 2X2 HRGC 3300LM 80CRI 35K	3319	30	110
ENVX 2X2 HRGC 3300LM 90CRI 35K	2863	30	95
ENVX 2X2 HRGC 4000LM 80CRI 35K	3946	36	109
ENVX 2X2 HRGC 4000LM 90CRI 35K	3404	36	94
ENVX 2X2 HRGC 4800LM 80CRI 35K	4766	45	105
ENVX 2X2 HRGC 4800LM 90CRI 35K	4111	45	91
ENVX 2X4 HRG 3000LM 80CRI 35K	2933	23	126
ENVX 2X4 HRG 3000LM 90CRI 35K	2530	23	108
ENVX 2X4 HRG 4000LM 80CRI 35K	4036	33	122
ENVX 2X4 HRG 4000LM 90CRI 35K	3481	33	105
ENVX 2X4 HRG 4800LM 80CRI 35K	4748	40	117
ENVX 2X4 HRG 4800LM 90CRI 35K	4096	40	101
ENVX 2X4 HRG 6000LM 80CRI 35K	5908	50	117
ENVX 2X4 HRG 6000LM 90CRI 35K	5097	50	101
ENVX 2X4 HRG 7200LM 80CRI 35K	6831	58	118
ENVX 2X4 HRG 7200LM 90CRI 35K	5893	58	102
ENVX 2X4 HRGC 3000LM 80CRI 35K	2834	23	121
ENVX 2X4 HRGC 3000LM 90CRI 35K	2445	23	104
ENVX 2X4 HRGC 4000LM 80CRI 35K	4168	36	117
ENVX 2X4 HRGC 4000LM 90CRI 35K	3596	36	101
ENVX 2X4 HRGC 4800LM 80CRI 35K	4693	41	116
ENVX 2X4 HRGC 4800LM 90CRI 35K	4049	41	100
ENVX 2X4 HRGC 6000LM 80CRI 35K	5739	51	113
ENVX 2X4 HRGC 6000LM 90CRI 35K	4951	51	98
ENVX 2X4 HRGC 7200LM 80CRI 35K	7223	64	112
ENVX 2X4 HRGC 7200LM 90CRI 35K	6231	64	97

Emergency Battery Estimated Lumens
Use the formula below to estimate the delivered lumens in emergency mode

Estimated Lumens = 1.25 x P x LPW

P = Output power of emergency driver (10W for PS1055CP)

LPW = Lumen per watt rating of the luminaire.