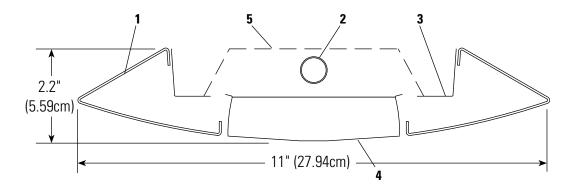
Page 1 of 5

Energos 1-Light T5 per 4' (121.92cm) (Nominal) Louver

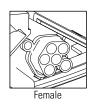


# **Feature Specifications**

#### **Electrical**

**Connections:** Wiring is via 18 gauge wire. All electrical connections for standard configurations are plug-and-play via 6-wire cannon plug connections. Connections are seated in end castings of fixtures, allowing for simultaneous mechanical/ electrical coupling. Connectors are male/female therefore modules must be installed male to female, starting from the power feed end set.





All static ballasts have the following features:

- Electronic
- High Power Factor
- · Class A sound rating
- Metal can

Emergency Battery Pack: Emergency Battery packs are designed to operate when normal building power is interrupted. The battery packs operate for a minimum of 90 minutes without any power via a rechargeable battery source. The pack does not utilize the standard static ballast for any of its operation since the pack carries its own pseudo ballast. For this reason, Lightolier does not recommend remote mounting EM Packs because all of the socket wiring would need to carry throughout the powerfeed end set. The EM batteries, even in their largest, most expensive form, operate the fluorescent lamps at only half the lamp rated output. Emergency battery packs are available in the following outputs:

- 450 Lumens (Standard)
- 635 Lumens
- 1100 Lumens
- 1375 Lumens

Emergency battery packs can be used for emergency egress lighting since all listed packs operate for a minimum of 90 minutes, or can be used as momentary lighting for emergency circuit power transitions. Smaller packs are recommended for this purpose.

**Dimming:** T8 and T5HO lamps are dimmed with two wire ballasts. T8 lamps can be dimmed down to 5% and T5HO lamps can be dimmed down to 1%. T5 lamps require 5-wire dimming ballasts and can be dimmed down to 1%. A 5-wire power feed will be required for T5 (non-HO) dimming.

Factory installed ballast disconnect allows the ballast to be disconnected from and reconnected to incoming power under load without turning the entire circuit off.

#### Labels Included

UL, cUL, and IBEW

#### **Features**

- Housing: 18 gauge steel. 6" (15.24cm) cast aluminum end caps. No exposed fasteners or hardware.
- Lamping: 1 T5 fluorescent lamps per 4' (121.92cm) section. Lamps by Lightolier as an option, see ordering information.
- 3. Reflector: Precision die-formed premium anti-iridescent, highly reflective aluminum
- 4. Louver: Parabolic louver, low-iridescent semi-specular anodized aluminum, 25 degree shielding lengthwise. Blades are spaced 2.3" (5.84cm) 0.C with a radius that matches the housing. 1" (2.54cm) tall louver attaches to housing.
- Optional Slotted Top Reflector: Precision die-formed anti-iridescent, highly reflective aluminum

## **Mountings**

Cable suspension is on 48" (121.92cm) and 96" (243.84cm) centers and consists of a 4 1/2" (11.43cm) diameter canopy finished white enamel. A 1/16" (0.16cm) diameter stainless steel aircraft cable accomplishes suspension and is adjustable from 12" (30.48cm) to 36" (91.44cm). Power feed is 18-gauge SJT silver braided cord with a clear jacket. For special circuiting consult factory.

#### **Finish**

Powder coated, baked enamel, white or aluminum, as specified. Custom colors available, consult factory.

#### **Ordering Instructions**

#### Individual Fixtures:

- 1. Order number of MODULES required.
- 2. Order one POWER FEED END SET per MODULE.

#### **Continuous Rows:**

- 1. Determine run length.
- 2. Order the appropriate number of MODULES for the complete run.
- 3. Order one POWER FEED END SET for each run.
- 4. Order one CABLE ASSEMBLY per MODULE minus one per run.
- For runs that exceed conductor ampacity ratings order the appropriate number of SINGLE CABLE & CORD SETS.

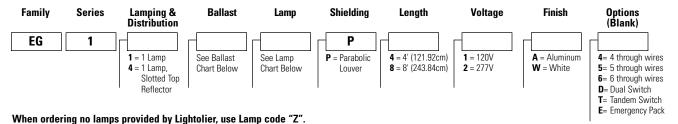
Job Information	Type:
Job Name:	
Cat. No.:	
Lamp(s):	
Notes:	



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Energos 1-Light T5 per 4' (121.92cm) (Nominal) Louver

# **Module Ordering Information**



# **Module Ordering Specifications**

### **Lamping and Distribution**

- 1 = 1 Lamp
- 4 = 1 Lamp, Slotted Top Reflector

### **Ballast Specifications**

Code	Lamp Type	Ballast Factor	Start Type	THD %
F	T5	1.00	Program	<10
G	T5H0	1.00	Program	<10
1	Dim T5	1.00/.01	Program	<10
J	Dim T5H0	1.00/.03	Program	<10

**Dimming:** Advance Mark-10 standard (no additional wires required) for T8 and T5HO fixtures. 5-wire dimming required for T5 (non-H0) fixtures. Optional dimming systems: Lutron ECO-10 and Hi-Lume (by others) require 4-wire modules and end sets. Mark-7, ULT, DALI and Lightolier HDF require 5-wire modules and end sets. Energos can accept ballasts not to exceed 1.7" (4.32cm) wide by 1.2" (3.05cm) high.

#### **Shielding**

P = Parabolic Louver

Length	Voltage	Finish
<b>4</b> = 4ft (48") (121.92cm)	<b>1</b> = 120VAC	A = Aluminum
8 = 8ft (96") (243.84cm)	<b>2</b> = 277VAC	<b>W</b> = White

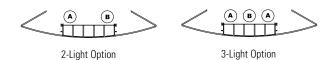
#### Wiring Options

**Blank** = Leave blank if ordering standard fixture.

- **4** = 4 through wires
- 5 = 5 through wires
- 6 = 6 through wires

## **Feature Options**

D = Dual Switching (AKA A/B switching)



T = Tandem Switching (also available in 1-lamp configuration)



Both Dual Switch and Tandem Switch fixtures ship with a 4th wire. Be sure to order the appropriate quantity of wires in the power feed.

#### **Lamping Specifications**

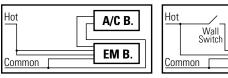
Code Lamp Type Wattage (Lumens)	
M T5 28 2600* 83	30
N T5 28 2600* 83	35
0 T5 28 2600* 84	41
P T5 54 4450* 83	30
Q T5 54 4450* 83	35
R T5 54 4450* 84	41

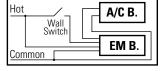
\* 25°c Rating

# **Feature Options (continued)**

Unswitched

**E = Emergency Battery Pack (E):** Battery packs provide 90 minutes of operation. Available lamp outputs: 450 Lumens (standard). Optional: 635, 1100 and 1375 Lumens. Standard Emergency wiring is to have Battery Pack operating a single lamp. All EM fixtures are wired as "switched" and include 4th through wire for the wall switch (see diagrams). All fixtures and power feeds in that run should be ordered to include a dedicated 4th through wire to carry the hot power all the way through the run to the EM pack.





Switched

# **Job Information**

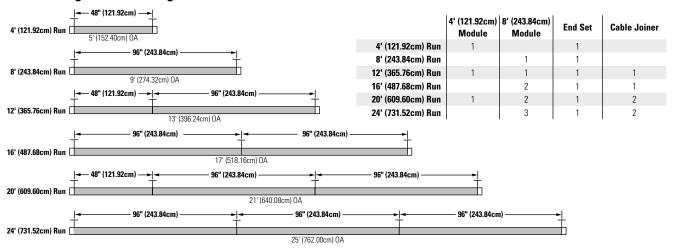
Type:



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# Energos 1-Light T5 per 4' (121.92cm) (Nominal) Louver

# **Fixture Lengths & Mounting Locations**



# **Suspension and End Set Ordering Illustrations**

#### **Power Feeds**

Consult Lamp and Ballast System data to determine input watt requirements for ballast used on project to determine loading for each run. Multiply the total number of ballasts by the input wattage per ballast, and to determine ampacity divide the total watts by the system voltage. 10 Amps for 3-wire end sets, 7 Amps for 4-wire and 5-wire end sets, maximum.

#### Control

Consult appropriate ECS (Energos Control Systems) specification sheet for ordering product utilizing occupancy controls. ECS specification sheet numbers directly correlate to standard Energos specification sheet numbers.





#### **Power Feed End Set**

White, 3 Wire Cord: EG1EC36W
White, 4 Wire Cord: EG1EC36W4
White, 5 Wire Cord: EG1EC36W5
Aluminum, 3 Wire Cord: EG1EC36A
Aluminum, 4 Wire Cord: EG1EC36A4
Aluminum, 5 Wire Cord: EG1EC36A5



Cable/Cord Assembly

Single Cable & Power Cord: Single Cable & 4 Wire Power Cord: Single Cable & 5 Wire Power Cord:



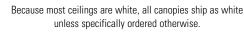
Sir

EGCC36

EGCC36X4

EGCC36X5

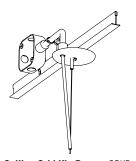
Cable Assembly Single Cable: EGC36



Both CGK and CGKP ship with two types of clips (standard and slot T).

For mounting fixtures directly to the T grid, order one CGK per non-power suspension point and one CGKP per powered suspension point.

The CGKP will include a special canopy with flex coupler, grid clips and additional clips to mount the junction box to the top of the grid nearby. J-Box and flex conduit provided by others.



Ceiling Grid Kit, Power: CGKP

Ceiling Grid Kit: CGK

# **Job Information**

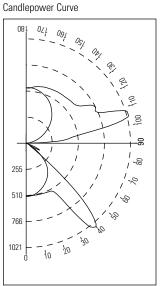
Type:



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# Energos 1-Light T5 per 4' (121.92cm) (Nominal) Louver

# Performance — One Lamp Fixture With Open Top



EG1-4N-GQ.ies Report No.: 1-FP54/835/HO Lamps: 4450 Lumens: 93.4 Efficiency: EG11GQP Cat. No.:

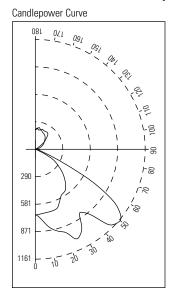
25°C Rating

Candlepower									
Zone→	0	22	45	67	90				
Degree									
<b>1</b>		C	andelas						
180	520	520	520	520	520				
175	522	522	524	523	523				
165	502	511	528	541	548				
155	465	487	520	546	558				
145	409	449	504	546	566				
135	339	398	473	541	574				
125	255	333	436	546	611				
115	167	263	449	670	716				
105	82	211	562	925	995				
95	14	234	264	357	374				
90	0	0	0	0	0				
85	0	0	0	0	0				
75	2	3	3	4	4				
65	25	52	18	59	125				
55	115	271	206	69	50				
45	258	320	738	825	745				
35	352	378	440	619	821				
25	417	431	459	489	503				
15	466	470	481	492	497				
5	498	498	498	496	495				
0	498	498	498	498	498				

	Coefficients Of Utilization										
			% Eff	fective	e Ceil	ing Ca	avity F	Reflec	tance		
			80			70		50			
		% Wall Reflectance									
		50	30	10	50	30	10	50	30	10	
	0	97	97	97	88	88	88	70	70	70	
	1	86	82	80	78	75	72	62	60	59	
.≘	2	76	70	66	68	64	60	55	52	49	
Room Cavity Ratio	3	67	60	55	61	55	51	49	45	42	
λį	4	59	52	47	54	48	43	44	39	36	
Ca	5	53	46	40	48	42	37	39	35	31	
mo	6	47	40	35	43	37	32	35	30	27	
8	7	42	35	30	39	32	28	32	27	24	
	8	38	31	27	35	29	25	29	24	21	
	9	35	28	23	32	26	22	26	22	18	
	10	32	25	21	29	23	19	24	19	16	
			2	20% F	loor C	avity	Refle	ctanc	е		

Distribution									
Zone	Lumens	% Lamp	% Luminaire						
0-90	1534	31	33						
90-180	3134	63	67						
0-180	4668	93	100						

# Performance — One Lamp Fixture With Optional Slotted Top Reflector



EG1-4D-GQ.ies Report No.: 1-FP54/835/HO Lamps: Lumens: 4450 Efficiency: 73.5 EG14GQP Cat. No.: 25°C Rating

Candlepower								
Zone→	0	22	45	67	90			
Degree								
1		(	Candelas					
180	204	204	204	204	204			
175	224	211	232	218	214			
165	210	211	220	220	214			
155	190	203	208	216	214			
145	174	180	202	206	216			
135	140	157	177	171	164			
125	108	130	123	83	68			
115	74	90	42	8	6			
105	39	29	11	26	27			
95	7	5	10	10	14			
90	0	3	5	4	3			
85	0	5	24	38	41			
75	4	8	15	36	38			
65	76	175	218	268	257			
55	285	460	807	981	1047			
45	433	616	664	960	1123			
35	538	682	848	813	811			
25	602	756	850	967	1035			
15	671	749	831	901	886			
5	680	708	703	750	737			
0	687	687	687	687	687			

	Coefficients Of Utilization										
% Effective Ceiling Cavity Reflectance											
			80			70			50		
				%	Wal	l Refle	ectano	е			
		50	30	10	50	30	10	50	30	10	
	0	84	84	84	80	80	80	74	74	74	
	1	74	72	69	71	69	67	66	64	62	
.≘	2	65	61	57	63	59	56	58	55	52	
Ва	3	58	52	48	55	51	46	51	47	44	
<u></u>	4	51	45	40	49	44	39	46	41	37	
Ö	5	45	39	34	44	38	34	41	36	32	
Room Cavity Ratio	6	40	34	30	39	33	29	36	31	28	
8	7	36	30	26	35	29	25	33	28	24	
	8	33	27	23	32	26	22	30	25	21	
	9	30	24	20	29	23	20	27	22	19	
	10	27	22	18	27	21	18	25	20	17	
			2	20% F	loor C	avity	Refle	ctance	Э		
				г	Ni atrib	ution					
	Distribution										

Distribution									
Zone	Lumens	% Lamp	% Luminaire						
0-90	1739	60	82						
90-180	393	14	18						
0-180	2132	74	100						

Job Information	Туре:
JON IIII OI III GICIOII	. J P C .



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Energos 1-Light T5 per 4' (121.92cm) (Nominal) Louver

# **Ballast and Lamp Ordering Combinations**

Desgn.	Lamp Type (T8 or T5)	Ballast Factor (BF)	Ballast THD (%)	Lamp Rated Wattage	Lamp Rated Output	Lamp Color (Kelvin)	IES Output (Lumens)	System Input Watts	System Efficiency (lum/watt)	System Lamp Life (Hours)	Start Type
FM	T5	1	<10	28	2600	830	2600	31.0	83.9	20000	Program
FN	T5	1	<10	28	2600	835	2600	31.0	83.9	20000	Program
FO	T5	1	<10	28	2600	841	2600	31.0	83.9	20000	Program
GP	H0	1	<10	54	4450	830	4450	58.5	76.1	20000	Program
GQ	H0	1	<10	54	4450	835	4450	58.5	76.1	20000	Program
GR	H0	1	<10	54	4450	841	4450	58.5	76.1	20000	Program
IM	T5 DIM	1.0 / .01	<10	28	2600	830	2600 /26	33.5 / 8	77.6	NA	Program
IN	T5 DIM	1.0 / .01	<10	28	2600	835	2600 /26	33.5 / 8	77.6	NA	Program
10	T5 DIM	1.0 / .01	<10	28	2600	841	2600 /26	33.5 / 8	77.6	NA	Program
JP	T5H0 DIM	1.0 / .03	<10	54	4450	830	4450 /134	63 /12.5	70.6	NA	Program
JQ	T5H0 DIM	1.0 / .03	<10	54	4450	835	4450 /134	63 /12.5	70.6	NA	Program
JR	T5H0 DIM	1.0 / .03	<10	54	4450	841	4450 /134	63 /12.5	70.6	NA	Program

#### Notes:

All data is per 1 lamp on a two lamp system at 277 VAC. Data is based on Osram Sylvania Specifications When ordering no lamps provided by Lightolier, use Lamp code "Z".

Do not alter lumen values or ballast factor light losses when completing calculations using Energos IES files. Files have already been adjusted. The lumen value for the lamp (within a Lighting Design program) will be the IES Output value shown on this table.

**Job Information** 

Type:



<sup>\*25°</sup>C Rating