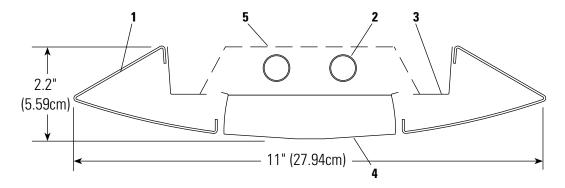
Page 1 of 5

Energos 2-Light T5 per 4' (121.92cm) (Nominal) Louver

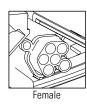


Feature Specifications

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.
- 2. Lamping: 2 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.

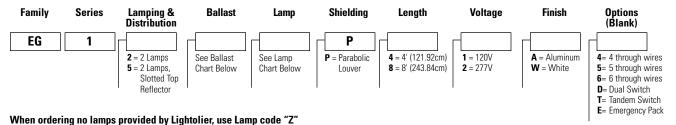
Job Information	Type:
Job Name:	
Cat. No.:	
Lamp(s):	
Notes:	



Page 2 of 5

Energos 2-Light T5 per 4' (121.92cm) (Nominal) Louver

Module Ordering Information



Module Ordering Specifications

Lamping and Distribution

2 = 2 Lamp

5 = 2 Lamp, Slotted Top Reflector

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Dui	iust	vμ		.ou	

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
4 = 4ft (48") (121.92cm)	1 = 120VAC	A = Aluminum
8 = 8ft (96") (243.84cm)	2 = 277VAC	W = 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.

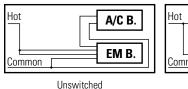
Lamping Specifications

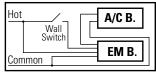
Code	Lamp Type	Wattage	Rated Output (Lumens)	Color (K)
M	T5	28	2600*	830
N	T5	28	2600*	835
0	T5	28	2600*	841
Р	T5	54	4450*	830
Q	T5	54	4450*	835
R	T5	54	4450*	841

^{* 25°}c Rating

Feature Options (continued)

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

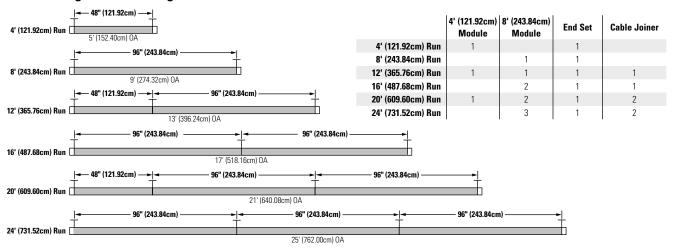
Type:



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Energos 2-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.







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



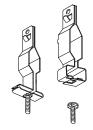
Cable/Cord Assembly Single Cable & Power Cord: Single Cable & 4 Wire Power Cord: Single Cable & 5 Wire Power Cord:







Cable Assembly Single Cable: EGC36



Ceiling Grid Kit: CGK

Because most ceilings are white, all canopies ship as white unless specifically ordered otherwise.

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

Job Information

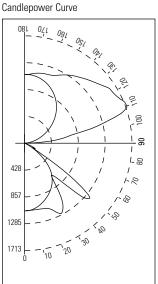
Type:



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Energos 2-Light T5 per 4' (121.92cm) (Nominal) Louver

Performance — Two Lamp Fixture With Open Top



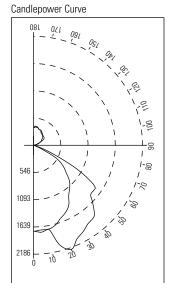
Report No.: EG1-5N-GQ.ies
Lamps: 2-FP54/835/H0
Lumens: 4450
Efficiency: 94.3
Cat. No.: EG12GQP
25°C Rating

		Candle	power		
Zone→	0	22	45	67	90
Degree					
1			Candelas		
180	1084	1084	1084	1084	1084
175	1082	1087	1089	1090	1094
165	1042	1064	1095	1122	1137
155	964	1009	1078	1140	1179
145	848	929	1072	1229	1301
135	704	821	1088	1315	1412
125	532	718	1094	1412	1554
115	348	621	1115	1496	1655
105	173	538	1125	1378	1354
95	34	331	382	473	434
90	0	0	0	0	0
85	0	2	2	2	2
75	3	4	4	5	4
65	54	70	56	97	161
55	247	417	648	773	733
45	559	722	687	773	965
35	756	817	1061	1041	955
25	889	923	995	1116	1202
15	991	1005	1032	1056	1068
5	1060	1061	1064	1061	1060
0	1066	1066	1066	1066	1066

	Coefficients Of Utilization									
	% Effective Ceiling Cavity Reflectance									
			80			70			50	
				%	Wal	Refle	ectano	се		
		50	30	10	50	30	10	50	30	10
	0	98	98	98	88	88	88	69	69	69
	1	86	83	80	77	75	72	62	60	58
9	2	76	70	66	68	64	60	55	52	49
Katio	3	67	60	55	60	55	51	49	45	42
Ĭ,	4	59	52	47	54	48	43	43	39	36
Room Cavity	5	53	46	40	48	42	37	39	34	31
E O	6	47	40	35	43	37	32	35	30	27
ž	7	42	35	30	39	32	28	31	27	23
	8	38	31	27	35	29	25	28	24	21
	9	35	28	23	32	26	22	26	22	18
	10	32	25	21	29	23	19	24	19	16
	20% Floor Cavity Reflectance									

Distribution							
Zone	Lumens	% Lamp	% Luminaire				
0-90	2964	30	31				
90-180	6466	65	69				
0-180	9430	94	100				

${\bf Performance-Two\ Lamp\ Fixture\ With\ Optional\ Slotted\ Top\ Reflector}$



 Report No.:
 EG1-5D-GQ.ies

 Lamps:
 2-FP54/835/HO

 Lumens:
 4450

 Efficiency:
 70.1

 Cat. No.:
 EG15GQP

 25°C Rating
 FG15GQP

	Candlepower					
Zone→ Degree	0	22	45	67	90	
↓		(Candelas			
180	345	345	345	345	345	
175	382	360	375	354	356	
165	355	371	379	376	353	
155	332	347	339	323	328	
145	297	304	290	287	279	
135	249	265	241	254	267	
125	192	193	203	247	256	
115	146	137	176	163	152	
105	79	97	66	32	27	
95	21	17	30	42	45	
90	1	6	7	8	6	
85	1	1	3	5	6	
75	9	11	8	11	8	
65	179	299	408	509	523	
55	711	997	1147	1392	1485	
45	1003	1341	1471	1605	1660	
35	1208	1534	1706	1808	1880	
25	1474	1618	1975	2018	2031	
15	1636	1629	1695	1931	2051	
5	1677	1713	1676	1664	1721	
0	1695	1695	1695	1695	1695	

		(% Eff	Coef ective		ts Of			tance	
			80	COLIVO		70	ivity i		50	
			00	%	Wal	Refle	ectano	:e	- 00	
		50	30	10	50	30	10	50	30	10
	0	80	80	80	77	77	77	71	71	71
	1	72	69	67	69	67	65	64	62	61
.0	2	64	59	56	61	58	54	57	54	51
Rai	3	56	51	47	54	50	46	50	47	44
Ĵέ	4	50	44	40	48	43	39	45	41	37
Ĉa	5	45	39	35	43	38	34	40	36	32
Room Cavity Ratio	6	40	34	30	39	33	29	36	32	28
B	7	36	30	26	35	30	26	33	28	25
	8	33	27	23	32	27	23	30	25	22
	9	30	25	21	29	24	20	27	23	20
	10	28	22	19	27	22	18	25	21	18
20% Floor Cavity Reflectance										
)istrib	ution				
		Zone		Lumer	าร	% La	mp	% I	Lumin	aire

Distribution							
Zone	Lumens	% Lamp	% Luminaire				
0-90	3336	58	82				
90-180	728	13	18				
0-180	4064	70	100				

Job Information	Туре:



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Energos 2-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	HO	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:



^{*25°}C Rating