

Project:	Catalog #:	Туре:	
Prepared by:	Notes:	Date:	

#### **E5T**

LED Recessed Troffer Lay-In Selectable CCT & Wattage 2x2, 2x4 options •10-yr Warranty



#### **OVERVIEW**

Energetic Lighting's E5T series LED recessed troffer kit is a superior choice for new construction or an alternative to existing fluorescent luminaires with today's innovative and energy saving LED solutions. With our integral EZCCT field-selectable CCT along with EZWATT field-selectable wattage, these troffers extend use to a broad range of commercial and industrial applications Available in standard 2x2 and 2x4 troffer profiles to suit any office application and layout. With a carefully tuned diffused lens found on the center basket design, light output is a soft and uniform beam pattern. We utilize the latest performance LEDs with drivers rated for 54,000 hours of use, backed by a 10-year warranty. Installation is quick and simple when mounting into standard 15/16" T-grid suspended ceiling systems. Our EST series LED troffer kit provides the perfect blend of design, performance and reliability at a superior value that is ideal when upgrading the lighting in commercial office & retail spaces, schools & universities, hospitals and more.

#### **KEY FEATURES**

- EZCCT field-selectable CCT 3500K (std), 4000K & 5000K @ >80 CRI
- EZWATT field-selectable Wattage 3 steps, varied by models (see stock ordering information)
- 2x2 and 2x4 configurations available for design flexibility
- All configurations are DLC 5.0 Premium listed
- 125+ LPW provides 40-60% in energy savings vs. fluorescent
- Ribbed polymer diffusing lens for even illumination
- Emergency battery backup systems available
- Integrated occupancy sensor options available
- 120-277V drivers with 0-10v dimming standard
- 90% lumen maintenance @ 54,000 hours L90/54,000 (per IES TM21)
- Projected L70 @ 190,000 hours = maintenance free illumination (per IES TM21)















#### **Highlights**



Field-selectable CCT and Wattage control provides flexibility to installation and stocking



Various knockouts (standard 1/2" trade size) available for wiring compartment



Integrated fold-out seismic hooks with suspension cable mounting hole



Ribbed polymer diffusion

#### **Load Information**

Input Voltage	120-	277Vac			
Power Factor	0.9				
THD	10% -45°C (-49°F)				
Low Temp Start					
Max Temp	45°C (113°F)				
Unit Waight	2x2	7.9 LBS			
Unit Weight	4x4	12.5 LBS			

#### **Shipping Information**

ltem	Weight	Box Qty.
2x2 profile	10 lbs	1 per
2x4 profile	17 lbs	1 per

#### Lumen Maintenance

,	Ambient	TM-21 Lumen Maintenance	Theoretical L70
	Temperature	(54,000 hours)	(hours)
	25°C	>90%	190,000

# **Dimensions**

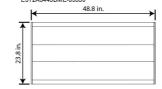
# 2x2 models:

E5T2A2030D-83550 E5T2A2030DM-83550 F5T2A2030DF-83550 E5T2A2030DME-83550



#### 2x4 models:

E5T4A2534D-83550 E5T4A2534DM-83550 F5T4A2534DF-83550 E5T2A2534DME-83550 E5T4A3445D-83550 E5T4A3445DM-83550 E5T4A3445DE-83550 E5T2A3445DME-83550



# **Specific Lumen Output**

		Color Te	mperatur	e Setting
Profile	Wattage Setting	3500K	4000K	5000K
30W)	20W	2660	2680	2700
2x2 I, 25W, 30W)	25W	3250	3275	3300
(20W,	30W	3780	3810	3840
34W)	25W	3350	3375	3400
2x4 (25W, 30W, 34W)	30W	3930	3960	3990
(25W	34W	4318	4352	4386
2x4 38W, 45W)	34W	4590	4624	4658
	38W	5016	5054	5092
(34W,	45W	5805	5850	5895



#### STOCK ORDERING INFORMATION

#### 2x2 Profile

Catalog Logic	Order#	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
E5T2A2030D-83550	60067	3840	30W, 25W, 20W	104	3500K, 4000K, 5000K	82	120-277	0-10v	DLC 5.0	80
E312A2030D-63330	60067	maximum	Selectable	126	Selectable 82 120	82	120-2//	0-100	Premium	80

### 2x2 Profile with Integrated Occupancy Sensor

Catalog Logic	Order#	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
E5T2A2030DM-83550	60073	3840 maximum	30W, 25W, 20W	126	3500K, 4000K, 5000K	82	120-277	0-10v	ТВΑ	ТВА

#### 2x2 Profile with Emergency Battery Backup System

Catalog Logic	Order#	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
E5T2A2030DE-83550	60070	3840 maximum	30W, 25W, 20W Selectable	126	3500K, 4000K, 5000K Selectable	82	120-277	0-10v	ТВА	ТВА

#### 2x2 Profile with Integrated Occupancy Sensor & Emergency Battery Backup System

Catalog Logic	Order#	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
E5T2A2030DME-83550	60076	3840	30W, 25W, 20W	126	3500K, 4000K, 5000K	82	120-277	0-10v	ТВА	TBA
L312A2030DIVIL-03030	00070	maximum	Selectable	120	Selectable	02	120-2//	0-104	I IDA	100

#### 2x4 Profile

Catalog Logic	Order#	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
E5T4A2534D-83550	60068	4386	34W, 30W, 25W	127	3500K, 4000K, 5000K	82	120-277	0-10v	DLC 5.0	40
E314A2334D-63330	00000	maximum	Selectable	12/	Selectable	02	120-2//	0-104	Premium	40
EETAA 2 44ED 92EE0	60069	5895	45W, 38W, 34W	129	3500K, 4000K, 5000K	82	100.077	0-10v	DLC 5.0	40
E5T4A3445D-83550	00009	maximum	Selectable	129	Selectable	02	120-277	0-100	Premium	40

2x4 Profile with Integrated Occupancy Sensor

Catalog Logic	Order#	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
E5T4A2534DM-83550	60074	4386 maximum	34W, 30W, 25W	127	3500K, 4000K, 5000K Selectable	82	120-277	0-10v	TBA	TBA
E5T4A3445DM-83550	60075	5895 maximum	45W, 38W, 34W	129	3500K, 4000K, 5000K Selectable	82	120-277	0-10v	TBA	30

2x4 Profile with Emergency Battery Backup System

2X4 Frome with Efficiency Burlety Buckey Cystem										
Catalog Logic	Order#	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty
E5T4A2534DE-83550	60071	4386	34W, 30W, 25W	127	3500K, 4000K, 5000K	82	120-277	0-10v	TBΑ	ТВА
E514A2534DE-83550	00071	maximum	Selectable	12/	Selectable	02	120-2//	0-100	IBA	IBA
EETAA 244EDE 92EE0	60072	5895	45W, 38W, 34W	129	3500K, 4000K, 5000K	82	120-277	0-10v	TBA	ТВА
E5T4A3445DE-83550	00072	maximum	Selectable	129	Selectable	02	120-2//	0-100	IDA	IDA

#### 2x4 Profile with Integrated Occupancy Sensor & Emergency Battery Backup System

Catalog Logic	Order#	Lumens	Wattage	LPW	Color Temp	CRI	Voltage	Dimming	DLC	Pallet Qty	
E5T4A2534DME-83550	60077	4386 maximum	34W, 30W, 25W Selectable	127	3500K, 4000K, 5000K Selectable	82	120-277	0-10v	TBA	ТВА	
E5T4A3445DME-83550	60078	5895 maximum	45W, 38W, 34W Selectable	129	3500K, 4000K, 5000K Selectable	82	120-277	0-10v	TBA	ТВА	





#### **PHOTOMETRIC DATA**

E5T2A2030D-83550\* Cat Logic: Applicable E5T2A2030DM-83550 Models:

E5T2A2030DE-83550 E5T2A2030DME-83550

Test Report: E5T2A2030D-83550(4000K).ies set at 4000K for test CCT:

Lamp Type: LED

3869.6 LM Lumens: Input Watts: 30.27 W 128 LM/W Efficacy:

Spacing Criteria: [0°: 1.20] [90°: 1.30]

# Polar Candela Plot 983 cd 1311 cd

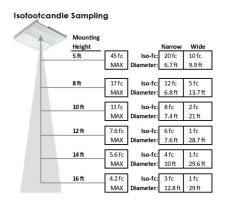
#### **Zonal Lumen Summary**

Lumens	%Luminaire				
477.63	12.3				
1010.65	26.1				
1649.67	42.6				
2927.01	75.6				
3767.47	97.4				
3868.35	100				
3869.58	100				
	477.63 1010.65 1649.67 2927.01 3767.47 3868.35				

#### **Coefficients of Utilization**

<u>Effective</u>	Hoor (			пест	arı	ce u			
rc		80	)%		70%				
rw	70	50	30	10		70	50	30	10
RCR									
0	119	119	119	119		116	116	116	116
1	108	103	98	94		105	101	97	93
2	98	89	82	76		95	87	81	75
3	89	78	69	63		86	76	68	62
4	81	69	60	53		79	68	59	52
5	75	61	52	45		73	60	52	45
6	69	55	46	39		67	54	46	39
7	64	50	41	35		62	49	41	35
8	59	46	37	31		58	45	37	31
9	56	42	34	28		54	41	33	28
10	52	39	31	25		51	38	30	25

	50%	9		30%				10%		0%
50	30	10	50	30	10		50	30	10	0
111	111	111	106	106	106		102	102	102	100
96	93	90	92	90	87		89	87	84	82
84	78	73	80	76	72		77	73	70	68
73	67	61	71	65	60	-	68	63	59	57
65	58	52	63	56	51		60	55	50	48
58	50	45	56	49	44		54	48	44	41
52	45	39	51	44	39		49	43	38	36
48	40	34	46	39	34		45	39	34	32
44	36	31	42	36	31		41	35	30	28
40	33	28	39	32	28		38	32	27	25
37	30	25	36	30	25		35	29	25	23
			-			_				



# **PHOTOMETRIC DATA**

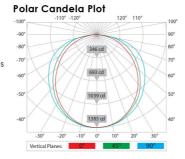
E5T4A2534D-83550\* Cat Logic: E5T4A2534DM-83550 Applicable E5T4A2534DE-83550 Models: E5T4A2534DME-83550

Test Report: E5T4A2534D-83550(4000K).ies 4000K

CCT: Lamp Type: LED 4211 I M Lumens: Input Watts: 32.6 W 129 LM/W Efficacy:

Spacing Criteria: [0°:1.24] [90°:1.34]

Effective Floor Cavity Reflectance 0.20



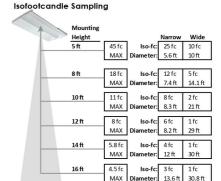
#### **Zonal Lumen Summary**

Zone	Lumens	%Luminaire
0-20	505.78	12
0-30	1072.8	25.5
0-40	1756.94	41.7
0-60	3144.68	74.7
0-80	4087.75	97.1
0-90	4210.85	100
0-180	4210.99	100

# **Coefficients of Utilization**

LITECTIVE	1001	Juvi	I y INC	IIICCI	ui	ce o	.20		
rc		80	)%				70	)%	
rw	70	50	30	10		70	50	30	10
RCR									
0	119	119	119	119		116	116	116	116
1	108	103	98	94		105	100	96	92
2	97	89	81	75		95	87	80	74
3	89	77	69	62		86	76	68	61
4	81	68	59	52		79	67	58	52
5	74	61	52	45		72	60	51	44
6	68	55	46	39		67	54	45	39
7	63	50	41	34		62	49	40	34
8	59	45	36	30		57	44	36	30
9	55	41	33	27		54	41	33	27
10	52	38	30	25		50	38	30	25

0%		10%			30%			50%	
0	10	30	50	10	30	50	10	30	50
100	102	102	102	106	106	106	111	111	111
82	84	86	88	87	89	92	89	93	96
67	69	73	77	71	75	80	73	78	83
56	58	62	67	59	64	70	60	66	73
47	50	54	60	50	56	62	51	57	64
41	43	48	54	43	49	56	44	50	58
35	38	42	49	38	43	50	38	44	52
31	33	38	44	34	39	46	34	39	47
28	30	34	41	30	35	42	30	36	43
25	27	31	38	27	32	39	27	32	40
23	24	29	35	24	29	36	25	30	37



<sup>NOTE: Data produced from 4000K CCT setting where:
- 3500K values can be estimated by reduction of 0.992 factor from 4000K
- 5000K values can be estimated by increasing by a factor of 1.007 from 4000K
Data produced from highest wattage settlen where lower wattage data values may be estimated by an equivalent proportional reduction as the wattage reduction factor (example: 45W to 38W use 0.844 reduction factor)</sup> 



#### PHOTOMETRIC DATA

E5T4A3445D-83550\* Cat Logic: Applicable E5T4A3445DM-83550 Models: E5T4A3445DE-83550

F5T4A3445DMF-83550

Test Report: E5T4A3445D-83550(4000K).ies 4000K CCT: Lamp Type: LED

6030 LM Lumens: Input Watts: 44.58 W Efficacy: 135 LM/W

Spacing Criteria: [0°:1.24] [90°:1.34]

# Polar Candela Plot

#### **Zonal Lumen Summary**

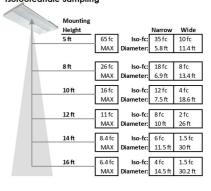
Zone	Lumens	%Luminaire
0-20	724.31	12
0-30	1536.16	25.5
0-40	2514.88	41.7
0-60	4499.79	74.6
0-80	5853.9	97.1
0-90	6028.7	100
0-180	6030.42	100

# **Coefficients of Utilization**

Effective Floor Cavity Reflectance 0.20

LITECTIVE	11001	Cuvi	I y INC	Heck	al ice c	.20												
rc		80	)%			70	0%			50%			30%			10%		0%
rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR															4-			
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	79	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	52	45	72	60	51	44	58	50	44	56	49	43	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	30	25	36	29	24	35	29	24	23

# Isofootcandle Sampling



NOTE: Data produced from 4000K CCT setting where:
 -3500K values can be estimated by reduction of 0.992 factor from 4000K
 -5000K values can be estimated by increasing by a factor of 1.007 from 4000K
 Data produced from highest waltage settling where lower wantage data values may be estimated by an equivalent proportional reduction as the wattage reduction factor (example: 45W to 38W use 0.844 reduction factor)







NOTES:	







NOTES:		

