

DESCRIPTION

The Encounter™ redefines ambient lighting by being the first fixture to blend modern contemporary styling with the innovative WaveStream™ technology to deliver exceptional performance and superior energy savings. Encounter's highly efficient LED system with advance optical design delivers an unparalleled combination of optimal light uniformity for enhanced visual comfort and superior efficiency for greater energy savings.

Encounter is compatible with all of today's popular ceiling systems and available in a variety of configurations for application versatility. Its perfect balance of form and function make it an ideal choice for commercial office spaces, schools, hospitals, retail and other indoor ambient applications.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Shallow 3-1/4" deep housing is extruded aluminum frame and injected molded composite end plates. End plates are securely attached with screws for strength and rigidity and the elimination of gaps. End plates have accessory grid-lock feature for safety and convenience. Four auxiliary fixture end suspension points are provided. Large access plate for supply connection.

Controls

Equipped standard with a 0-10V continuous dimming driver that works with any standard 0-10V control/dimmer. Dimming range is 5% to 100%; varies by control device. Combine with energy-saving products like occupancy sensors, daylighting controls, and lighting relay panels from Cooper Controls (www.coopercontrol.com) to maximize energy savings.

Electrical

Long-life LED system coupled with electrical driver to deliver optimal performance. LED's available in 3000K, 3500K or 4000K with a typical CRI ≤ 85. Projected life is 60,000 hours at 85% lumen output. Electronic drivers are available for 120-277V applications.

Driver Access

Drivers can be accessed via plenum.

Finish

Durable frame has high reflectance baked matte white enamel finish for luminous uniformity.

Optics

Precision formed optical assembly with positively retained high optical grade acrylic lenses provide a directed optical distribution using WaveStream technology.

Compliance

Components are UL recognized. Indoor luminaires are cULus and CSA listed for 25° C ambient environments, RoHS compliant, and comply with IESNA LM-79. LED's comply with LM-80 standards. DesignLights™ Consortium Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details.

Warranty

Five year warranty.



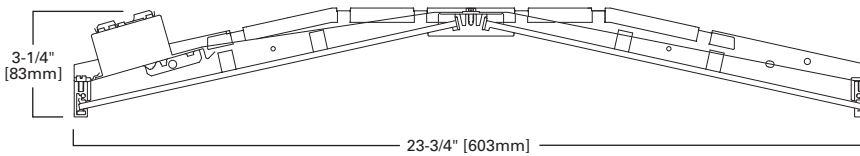
**22EN
LED**

**2' X 2' TROFFER
LED MODULE**

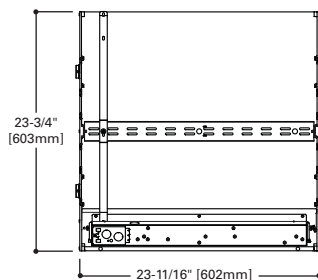
Specification Grade Troffer

DESIGNLIGHTS
CONSORTIUM 

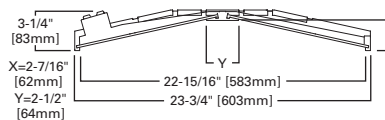
powered by 
fifthlight
technology



MOUNTING DATA



LAMP CONFIGURATIONS

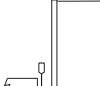



CERTIFICATION DATA

cULus - Damp Location
CSA
IC Rated
LM79/LM80 Compliant
ROHS Compliant
DesignLights™ Consortium Qualified
Title 24

*See Drywall Frame Kit Accessory in Ordering Information section.

CEILING COMPATIBILITY

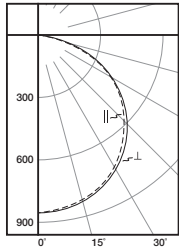
G Grid/Lay-in Standard	F Drywall Frame Kit	Ceiling Type	Trim Type
		Exposed Grid	G
		Concealed T	G or T
		Slot Grid	G or T
		Flange	*

LINEAR DISCONNECT

Safe and convenient means of disconnecting power.



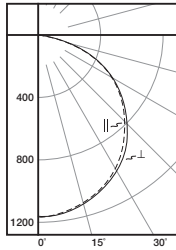
PHOTOMETRICS



22EN-LD1-25-UNV-L835-CD1-U
 Electronic Driver
 Linear LED 3500K
 Spacing criterion:
 (II) 1.2 x mounting
 height, (⊥) 1.3 x
 mounting height
 Lumens: 2537
 Input Watts: 25.5W
 Efficacy: 100 LPW
 Test Report:
 22EN-LD1-25-UNV-
 L835-CD1-U.IES

Candlepower

Angle	Along II	45°	Across ⊥
0	850	850	850
5	847	847	850
10	836	836	842
15	818	820	828
20	795	796	808
25	764	767	780
30	727	730	746
35	686	688	706
40	637	640	658
45	586	588	606
50	529	531	547
55	469	465	483
60	401	396	414
65	332	324	343
70	260	255	253
75	185	178	152
80	114	96	104
85	42	43	44
90	0	0	0



22EN-LD1-34-UNV-L835-CD1-U
 Electronic Driver
 Linear LED 3500K
 Spacing criterion:
 (II) 1.2 x mounting
 height, (⊥) 1.3 x
 mounting height
 Lumens: 3424
 Input Watts: 34.9W
 Efficacy: 98 LPW
 Test Report:
 22EN-LD1-34-UNV-
 L835-CD1-U.IES

Candlepower

Angle	Along II	45°	Across ⊥
0	1156	1156	1156
5	1152	1150	1156
10	1136	1137	1144
15	1111	1112	1123
20	1078	1079	1094
25	1035	1037	1055
30	984	986	1007
35	927	929	952
40	861	865	887
45	791	791	815
50	715	712	738
55	630	626	649
60	542	534	558
65	449	439	463
70	346	342	345
75	247	238	204
80	152	129	139
85	57	58	58
90	0	0	0

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance 20%																							
	80%				70%				50%				30%				10%				0%			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	106	102	102	102	100	100	100	100	100
1	109	104	99	95	106	101	97	94	97	94	91	88	93	90	88	88	90	87	85	83	83	83	83	83
2	98	90	83	77	96	88	82	76	85	79	74	71	81	77	73	73	78	74	71	69	69	69	69	69
3	90	79	71	64	87	77	70	63	74	68	62	58	71	66	61	61	69	64	60	58	58	58	58	58
4	82	70	61	54	80	68	60	54	66	59	53	49	63	57	52	52	61	56	51	49	49	49	49	49
5	75	62	53	46	73	61	52	46	59	51	45	42	57	50	45	45	55	49	44	42	42	42	42	42
6	69	56	47	40	67	55	46	40	53	45	40	37	51	45	39	39	50	44	39	37	37	37	37	37
7	64	51	42	35	63	50	41	35	48	41	35	32	47	40	35	35	45	39	34	32	32	32	32	32
8	60	46	37	32	58	45	37	31	44	37	31	29	43	36	31	31	42	35	31	29	29	29	29	29
9	56	42	34	28	54	42	34	28	40	33	28	26	39	33	28	28	38	32	28	26	26	26	26	26
10	52	39	31	26	51	38	31	26	37	30	25	23	36	30	25	25	36	30	25	23	23	23	23	23

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance 20%																							
	80%				70%				50%				30%				10%				0%			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	106	102	102	102	100	100	100	100	100
1	109	104	99	95	106	101	97	94	97	94	91	88	93	90	88	88	90	87	85	83	83	83	83	83
2	98	90	83	77	96	88	82	76	85	79	75	71	81	77	73	73	78	74	71	69	69	69	69	69
3	90	79	71	64	87	77	70	63	74	68	62	58	71	66	61	61	69	64	60	58	58	58	58	58
4	82	70	61	54	80	68	60	54	66	59	53	49	63	57	52	52	61	56	51	49	49	49	49	49
5	75	62	53	46	73	61	52	46	59	51	45	42	57	50	45	45	55	49	45	42	42	42	42	42
6	69	56	47	40	67	55	46	40	53	45	40	37	51	45	39	39	50	44	39	37	37	37	37	37
7	64	51	42	35	63	50	41	35	48	41	35	32	47	40	35	35	45	39	35	33	33	33	33	33
8	60	46	37	32	58	45	37	31	44	37	31	29	43	36	31	31	42	35	31	29	29	29	29	29
9	56	42	34	28	54	42	34	28	40	33	28	26	39	33	28	28	38	32	28	26	26	26	26	26
10	52	39	31	26	51	38	31	26	37	30	25	23	36	30	25	25	36	30	25	23	23	23	23	23

Zonal Lumen Summary

Zone	Lumens	%Fixture
0-30	667	26.3
0-40	1100	43.4
0-60	1976	77.9
0-90	2537	100.0
0-180	2537	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/s/m	Average 45-Deg cd/s/m	Average 90-Deg cd/s/m
45	2229	2237	2305
55	2200	2181	2265
65	2113	2062	2183
75	1923	1850	1580
85	1296	1327	1358

Zonal Lumen Summary

Zone	Lumens	%Fixture
0-30	904	26.4
0-40	1489	43.5
0-60	2669	77.9
0-90	3424	100.0
0-180	3424	100.0

Luminance Data

Angle in Deg	Average 0-Deg cd/s/m	Average 45-Deg cd/s/m	Average 90-Deg cd/s/m
45	3009	3009	3100
55	2955	2936	3044
65	2858	2794	2947
75	2567	2474	2120
85	1759	1790	1790

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (60,000 hours)	Theoretical L70 (Hours)
25°C	> 85%	>163,000

ENERGY AND PERFORMANCE DATA BY CATALOG NUMBER

Stock or MTO*	Catalog Logic	Delivered Lumens	Watts	Efficacy (LPW)
MTO	22EN-LD1-19-UNV-L830-CD1-U	1903	18.8	101
MTO	22EN-LD1-19-UNV-L835-CD1-U	1936	18.7	104
MTO	22EN-LD1-19-UNV-L840-CD1-U	1955	18.8	104
MTO	22EN-LD1-25-UNV-L830-CD1-U	2487	25.5	97
Stock	22EN-LD1-25-UNV-L835-CD1-U	2537	25.5	99
Stock	22EN-LD1-25-UNV-L840-CD1-U	2627	25.5	103
MTO	22EN-LD1-30-UNV-L830-CD1-U	2907	30.3	96
MTO	22EN-LD1-30-UNV-L835-CD1-U	3002	30.4	99
MTO	22EN-LD1-30-UNV-L840-CD1-U	3072	30.3	102
MTO	22EN-LD1-34-UNV-L830-CD1-U	3276	34.8	94
Stock	22EN-LD1-34-UNV-L835-CD1-U	3424	34.9	98
Stock	22EN-LD1-34-UNV-L840-CD1-U	3466	34.8	100
MTO	22EN-LD1-39-UNV-L830-CD1-U	3799	41.6	91
MTO	22EN-LD1-39-UNV-L835-CD1-U	3915	41.7	94
MTO	22EN-LD1-39-UNV-L840-CD1-U	4018	41.7	96
MTO	22EN-LD1-43-UNV-L830-CD1-U	4207	47.4	89
MTO	22EN-LD1-43-UNV-L835-CD1-U	4396	47.6	92
MTO	22EN-LD1-43-UNV-L840-CD1-U	4452	47.4	94

*Made to order (MTO) requires a four week lead time.

ORDERING INFORMATION

SAMPLE NUMBER: 22EN-LD1-34-UNV-L835-CD1-U

Rating Blank=Standard ATW-SW4=Chicago Rated ⁽¹⁰⁾	Lamp Type LD1=LED 1.0	Optics Blank=Standard	Driver Type ⁽⁶⁾ CD=0-10V Dimming Driver (Standard) SLTD=Fifth Light (DALI) Driver ⁽³⁾	Packaging U=Unit Pack PALC=Job Pack, in carton
Series ⁽⁹⁾ 22EN=2' x 2' Encounter Series	Stock Lumen Outputs 25=2500 Lumens ⁽⁴⁾ 34=3400 Lumens MTO Lumen Outputs ⁽⁸⁾ 19=1900 Lumens ⁽⁴⁾ 30=3000 Lumens 39=3900 Lumens 43=4300 Lumens	Voltage ⁽¹⁾ 347V=347 Volt ⁽⁷⁾ UNV=Universal Voltage 120-277	Number of Drivers 1=1 Driver	
		Options Emergency EL=Emergency Installed, 700 Lumens ⁽⁵⁾ EL14=Emergency Installed, 1400 Lumens ^{(2), (5)} CCT L830=3000K L835=3500K L840=4000K Flex Multiple Configurations Available	ACCESSORIES T3A END E.O. BRACKET PARTS BAG (Standard with fixture) DF-22-W=2' x 2' Drywall Frame Kit	

NOTES: ⁽¹⁾ Products also available in non-US voltages and frequencies for international markets. ⁽²⁾ Must specify voltage (120V or 277V) when selecting EL option. ⁽³⁾ For a complete listing of Fifth Light Technology products and other solutions from Cooper Controls, visit www.coopercontrol.com. ⁽⁴⁾ 1900 and 2500 lumen option is not available with a Fifth Light (DALI) driver. ⁽⁵⁾ EL options are non-integral, test switch and light must be remote mounted. EL700 option requires standard switch box. ⁽⁶⁾ Call factory for step-dimming options. ⁽⁷⁾ 347V emergency option not available. ⁽⁸⁾ Made-to-order (MTO) requires four week lead time. ⁽⁹⁾ DesignLights™ Consortium Qualified (all lumen packages). Refer to www.designlights.org Qualified Products List under Family Models for details. ⁽¹⁰⁾ Chicago rated version does not allow for row mounting.

Specifications & dimensions subject to change without notice. Consult your Cooper Lighting Representative for availability and ordering information.

SHIPPING INFORMATION

Catalog No.	Wt.
22EN-LD1-25	14 lbs.
22EN-LD1-34	14 lbs.