

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.

SPECIFICATION FEATURES

Construction

Shallow 3-1/16" 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

The Encounter LED is Powered by Fifth Light, with a standard 0-10V continuous dimming driver that works with any 0-10V control/dimmer. Combine with energy saving products like occupancy sensors, daylighting controls and lighting relay panels to maximize energy savings. In addition, the Encounter can include a factory-installed integrated sensor system for occupancy and daylight dimming control and manual control from an optional handheld remote. Or, specify the Digital Addressable Lighting Interface (DALI) drivers, dimmable down to 1% with the HD option, for use with Fifth Light controls. See ordering information for details on all three options.

Electrical

Long-life LED system coupled with electrical driver to deliver optimal performance. LED's available in 3000K, 3500K, 4000K or 5000K with a typical CRI ≤ 85. Projected life is 100,000 hours at 92% lumen output. Electronic drivers are available for 120-277V applications.

Emergency Battery Pack Option

Optional 120V-277V integral emergency battery pack is available in 7-watts to meet critical life-safety lighting requirements. The 90-minute batteries provide constant power to the LED system, ensuring code-compliance. A test switch/indicator button can be tested safely from the ground using a laser pointer, while the patented EZ Key prevents accidental discharge of the battery during construction. See ordering information for details.

Driver Access

Drivers can be accessed via plenum.

Finish

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

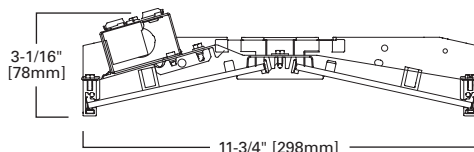
Catalog #		Type
Project		
Comments		Date
Prepared by		



**12EN
LED**

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

Specification Grade Troffer

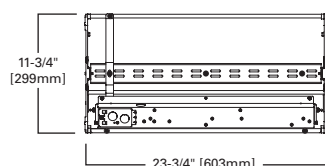


CERTIFICATION DATA

cULus - 1598 and 2043**
Damp Location Listed
IC Rated
LM79/LM80 Compliant
ROHS Compliant
NOM Compliant

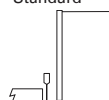
*See Drywall Frame Kit Accessory in Ordering Information section.
**Fixture construction is suitable for use in Air-handling and plenum rated spaces in accordance with Section 300.22 (C) of the National Electrical Code, Section 4.3.11.2.6.5 of NFPA 90A and Section 602.2.1.4 of ICC.

MOUNTING DATA

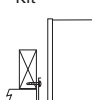


CEILING COMPATIBILITY

G
Grid/Lay-in
Standard



F
Drywall Frame
Kit



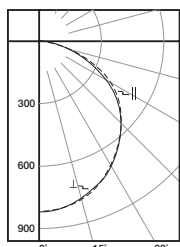
Ceiling Type	Trim Type
Exposed Grid	G
Concealed T	G or T
Slot Grid	G or T
Flange	*

LINEAR DISCONNECT

Safe and convenient means of disconnecting power



PHOTOMETRICS



12EN-LD2-23-UNV-L835-CD1-U

Electronic Driver
 Linear LED 3500K
 Spacing criterion:
 (||) 1.3 x mounting height, (⊥) 1.3 x mounting height
 Lumens: 2395
 Input Watts: 20.5W
 Efficacy: 116.8 lm/W
 Test Report:
 12EN-LD2-23-UNV-L835-CD1-U.IES

Candlepower

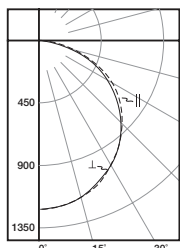
Angle	Along	45°	Across ⊥
0	822	822	822
5	814	820	823
10	802	808	811
15	785	789	792
20	761	764	767
25	731	733	736
30	698	697	698
35	656	655	657
40	613	608	608
45	565	556	554
50	512	498	497
55	452	438	435
60	389	370	371
65	319	299	300
70	247	232	212
75	173	158	141
80	104	94	110
85	42	47	47
90	0	0	0

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance																							
	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	106	106	106	102	102	102	100						
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83						
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69						
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58						
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49						
5	75	62	53	46	73	61	53	46	59	52	46	57	50	45	55	49	45	43						
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37						
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33						
8	60	46	38	32	58	46	37	32	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	26	38	31	26	37	30	26	36	30	25	24						

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	638	26.7
0-40	1049	43.8
0-60	1872	78.2
0-90	2395	100.0
0-180	2395	100.0



12EN-LD2-35-UNV-L835-CD1-U

Electronic Driver
 Linear LED 3500K
 Spacing criterion:
 (||) 1.3 x mounting height, (⊥) 1.3 x mounting height
 Lumens: 3560
 Input Watts: 31.5W
 Efficacy: 113.0 lm/W
 Test Report:
 12EN-LD2-35-UNV-L835-CD1-U.IES

Candlepower

Angle	Along	45°	Across ⊥
0	1223	1223	1223
5	1210	1219	1224
10	1193	1201	1206
15	1167	1173	1178
20	1131	1135	1139
25	1088	1090	1094
30	1037	1036	1037
35	977	974	974
40	913	904	904
45	840	826	824
50	762	741	737
55	673	648	644
60	576	549	550
65	476	446	445
70	366	346	312
75	259	232	209
80	153	141	166
85	63	71	71
90	0	0	0

Coefficients of Utilization

rc rw RCR	Effective floor cavity reflectance																							
	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	106	106	106	102	102	102	100						
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83						
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69						
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58						
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49						
5	75	62	53	46	73	61	53	46	59	52	46	57	50	45	55	49	45	43						
6	70	56	47	40	68	55	47	40	53	46	40	52	45	40	50	44	39	37						
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33						
8	60	46	38	32	58	46	37	32	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	26	38	31	26	37	30	26	36	30	25	24						

Zonal Lumen Summary

Zone	Lumens	% Fixture
0-30	949	26.7
0-40	1559	43.8
0-60	2783	78.2
0-90	3560	100.0
0-180	3560	100.0

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (100,000 hours)	Theoretical L70 (Hours)
25°C	> 92%	> 130,000

Non-IC data

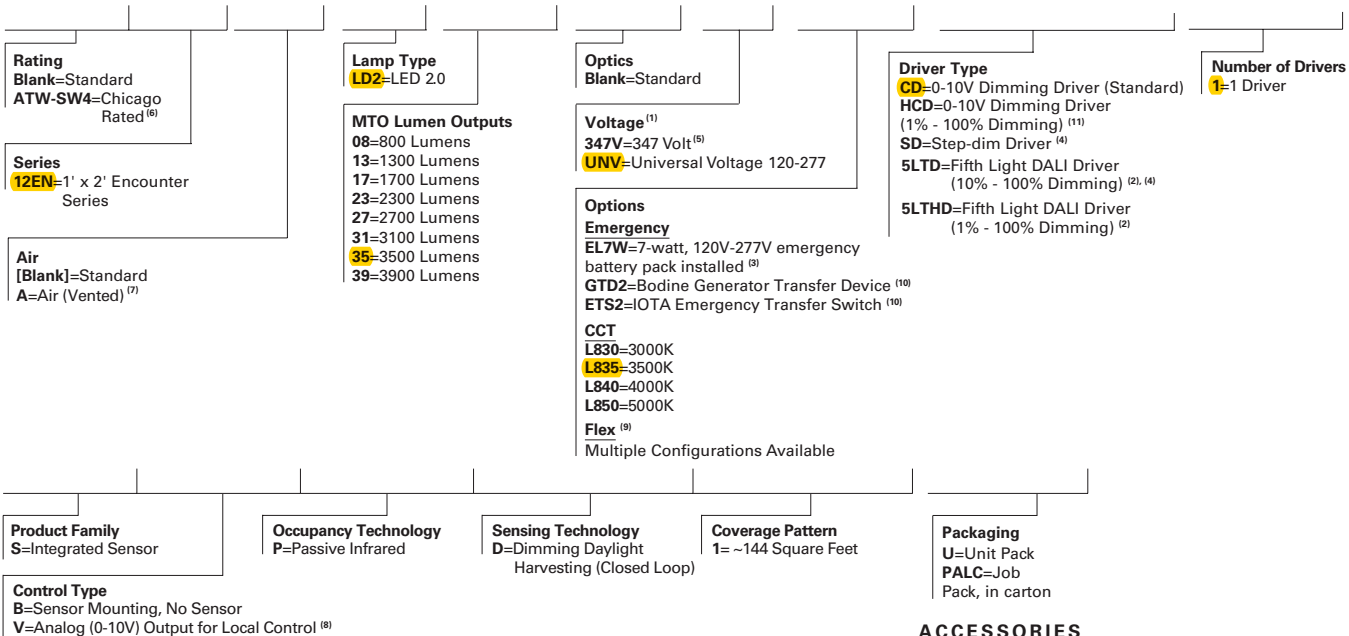
ENERGY AND PERFORMANCE DATA BY CATALOG NUMBER

Stock or MTO*	Catalog Logic (Curved)	Delivered Lumens	Watts	Efficacy (LPW)
MTO	12EN-LD2-08-UNV-L830-CD1-U	807	9.9	82
MTO	12EN-LD2-08-UNV-L835-CD1-U	832	9.9	84
MTO	12EN-LD2-08-UNV-L840-CD1-U	849	9.9	86
MTO	12EN-LD2-08-UNV-L850-CD1-U	924	9.9	93
MTO	12EN-LD2-13-UNV-L830-CD1-U	1305	12.2	107
MTO	12EN-LD2-13-UNV-L835-CD1-U	1345	12.2	110
MTO	12EN-LD2-13-UNV-L840-CD1-U	1372	12.2	112
MTO	12EN-LD2-13-UNV-L850-CD1-U	1493	12.2	122
MTO	12EN-LD2-17-UNV-L830-CD1-U	1719	15.7	109
MTO	12EN-LD2-17-UNV-L835-CD1-U	1772	15.7	113
MTO	12EN-LD2-17-UNV-L840-CD1-U	1807	15.7	115
MTO	12EN-LD2-17-UNV-L850-CD1-U	1967	15.7	125
MTO	12EN-LD2-23-UNV-L830-CD1-U	2323	20.5	113
MTO	12EN-LD2-23-UNV-L835-CD1-U	2395	20.5	117
MTO	12EN-LD2-23-UNV-L840-CD1-U	2443	20.5	119
MTO	12EN-LD2-23-UNV-L850-CD1-U	2658	20.5	130
MTO	12EN-LD2-27-UNV-L830-CD1-U	2706	24.0	113
MTO	12EN-LD2-27-UNV-L835-CD1-U	2790	24.0	116
MTO	12EN-LD2-27-UNV-L840-CD1-U	2846	24.0	119
MTO	12EN-LD2-27-UNV-L850-CD1-U	3097	24.0	129
MTO	12EN-LD2-31-UNV-L830-CD1-U	3084	27.7	111
MTO	12EN-LD2-31-UNV-L835-CD1-U	3179	27.7	115
MTO	12EN-LD2-31-UNV-L840-CD1-U	3243	27.7	117
MTO	12EN-LD2-31-UNV-L850-CD1-U	3529	27.7	127
MTO	12EN-LD2-35-UNV-L830-CD1-U	3453	31.4	110
MTO	12EN-LD2-35-UNV-L835-CD1-U	3560	31.4	113
MTO	12EN-LD2-35-UNV-L840-CD1-U	3631	31.4	116
MTO	12EN-LD2-35-UNV-L850-CD1-U	3952	31.4	126
MTO	12EN-LD2-39-UNV-L830-CD1-U	3856	35.4	109
MTO	12EN-LD2-39-UNV-L835-CD1-U	3975	35.4	112
MTO	12EN-LD2-39-UNV-L840-CD1-U	4055	35.4	115
MTO	12EN-LD2-39-UNV-L850-CD1-U	4412	35.4	125

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

ORDERING INFORMATION

SAMPLE NUMBER: 12EN-LD2-13-UNV-L835-CD1-SVPD1-U



ACCESSORIES

- T3A END E.Q. BRACKET PARTS BAG(Standard with fixture)
- DF-12-W=1' x 2' Drywall Frame Kit
- DF10P-C_=Decorator Dimmer, 0-10V
- SF10P-_=Decorator Slide Dimmer, 0-10V
- ISHH-01=Programming Remote for Integrated Sensor
- ISHH-02=Personal Control Remote for Integrated Sensor

NOTES: ⁽¹⁾ Products also available in non-US voltages and frequencies for international markets. ⁽²⁾ Must be used in conjunction with a DALI control system. For complete DALI solutions by Fifth Light, visit www.coopercontrol.com. ⁽³⁾ With integral test switch/indicator/laser test. For approximate delivered lumens multiply the lumens per watt of the desired fixture by the wattage of the emergency battery pack (100 lm/W x 7=700 lumens). IES-format photometry for luminaire under emergency operation available. ⁽⁴⁾ 800, 1300, 1700, 2300, 2700 and 3100 lumen packages not available with Step-dim or 5LTD option. ⁽⁵⁾ 347V emergency option not available. ⁽⁶⁾ Chicago rated version does not allow for row mounting. ⁽⁷⁾ Air version is vented but does not meet air handling requirements; a 6% reduction in delivered lumens is experienced with this option. ⁽⁸⁾ Integral sensor works only with "CD" driver and is factory prewired to the driver for stand-alone control. ⁽⁹⁾ Flex does not include dimming leads. Control leads provided by others. ⁽¹⁰⁾ Used to transfer fixture to secondary power source for life-safety operation. When used with a dimming fixture, two devices are required to ensure control is disabled while operating under emergency power. Add 120V, 277V, or 347V if ordering GTD2 or ETS2 emergencies. ⁽¹¹⁾ HCD driver not available in 800 lumen package.

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

SHIPPING DATA

Catalog No.	Wt.
12EN-LD2-13	8 lbs.

INTEGRATED SENSOR

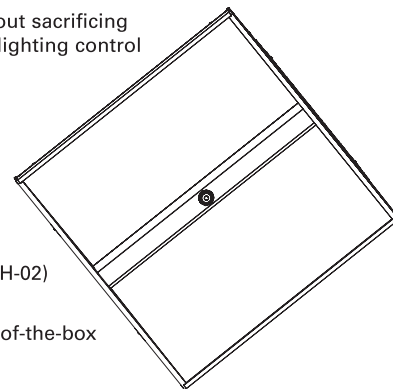
The Encounter and Encounter HP with Integrated Sensor technology provides automatic energy savings without sacrificing performance. Traditionally, these types of energy savings required coordination between the luminaire and a lighting control system. The Encounter delivers superior lighting with integrated occupancy and daylighting controls.

Capture the benefits of traditional lighting controls, without complicated coverage planning or special wiring. Ideal for new construction or retrofit, the Encounter delivers automatic ON to an energy saving light level, while ensuring lighting is turned OFF when the space is unoccupied.

The integral daylight sensor reduces the need for special daylight zone planning. Each luminaire will automatically adjust the light level based on reflected light beneath the sensor in a closed loop method.

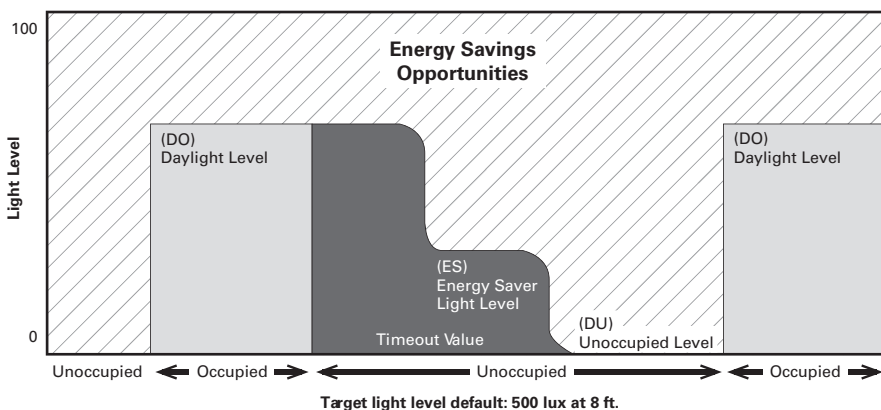
Occupied daylight light levels and unoccupied light levels can be adjusted using the integrated sensor programming remote (Catalog Number: ISHH-01). The integrated sensor personal remote (Catalog Number: ISHH-02) provides code compliant manual raise, lower, ON, OFF control.

The Encounter with Integrated Sensor is easy to install with no special wiring and ensures energy savings out-of-the-box with default control settings.

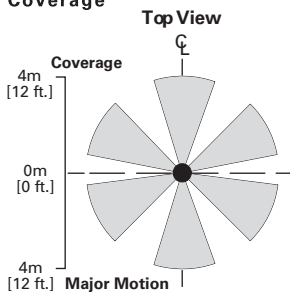


How it works:

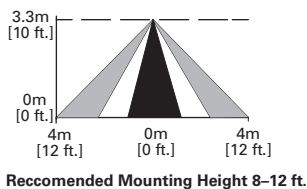
- As the user enters the space controlled by the integral sensor, the lighting turns ON to the default daylight level.
- Lighting will remain at that the daylight level until the space is unoccupied. This will start the occupancy timeout period (default 20 minutes).
- If the space remains unoccupied for half of the timeout period, the lighting will automatically reduce to the Energy Saver light level. This adjustable light level is typically half of the occupied daylight level.
- At the end of the timeout period the lighting will go to the unoccupied light level. This adjustable light level uses the OFF default setting.



Coverage



Side View



Optional Remote Controls



ISHH-01 Programming Remote



ISHH-02 Personal Control Remote