

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 3-1/4" 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

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 or 14-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.

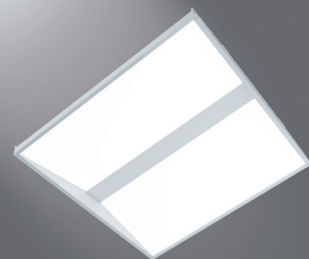
Driver Access

Drivers can be accessed via plenum.

Finish

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

| | | | |
|-------------|--|------|--|
| Catalog # | | Type | |
| Project | | Date | |
| Comments | | | |
| Prepared by | | | |



22EN LED

2' X 2' TROFFER LED MODULE

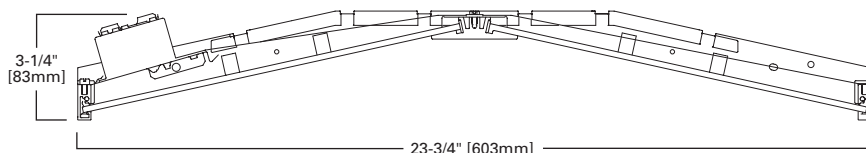
Specification Grade Troffer



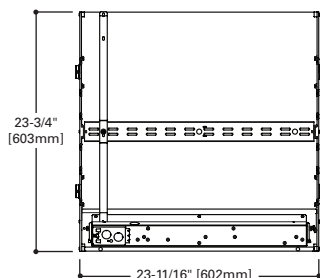
CERTIFICATION DATA

cULus - 1598 and 2043**
 Damp Location Listed
 CSA
 IC Rated
 LM79/LM80 Compliant
 ROHS Compliant
 DesignLights Consortium™ Qualified
 NOM Compliant

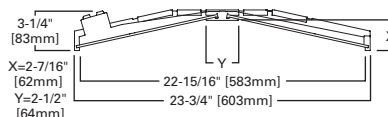
*See Drywall Frame Kit Accessory in Ordering Information section.
 **Fixture construction is suitable for use in Air-handling and plenum rated spaces in accordance with Section 300.22 (C) of the National Electrical Code, Section 4.3.11.2.6.5 of NFPA 90A and Section 602.2.1.4 of ICC.



MOUNTING DATA



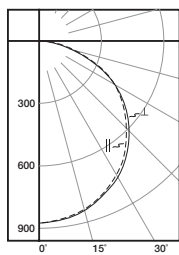
LAMP CONFIGURATIONS



CEILING COMPATIBILITY

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

PHOTOMETRICS



22EN-LD2-25-UNV-L835-CD1-U

Electronic Driver
 Linear LED 3500K
 Spacing criterion:
 (II) 1.3 x mounting
 height, () 1.3 x
 mounting height
 Lumens: 2571
 Input Watts: 20.9W
 Efficacy: 122.5 lm/W
 Test Report:
 22EN-LD2-25-UNV-
 L835-CD1-U.IES

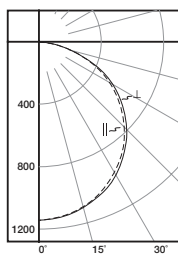
| Candlepower | | | |
|-------------|----------|-----|--------|
| Angle | Along II | 45° | Across |
| 0 | 873 | 873 | 873 |
| 5 | 869 | 868 | 871 |
| 10 | 856 | 856 | 861 |
| 15 | 837 | 837 | 844 |
| 20 | 811 | 811 | 819 |
| 25 | 780 | 779 | 790 |
| 30 | 741 | 741 | 753 |
| 35 | 700 | 698 | 711 |
| 40 | 650 | 649 | 662 |
| 45 | 598 | 595 | 608 |
| 50 | 539 | 535 | 549 |
| 55 | 474 | 472 | 486 |
| 60 | 405 | 402 | 421 |
| 65 | 335 | 328 | 348 |
| 70 | 259 | 255 | 257 |
| 75 | 185 | 178 | 157 |
| 80 | 111 | 97 | 103 |
| 85 | 41 | 43 | 43 |
| 90 | 0 | 0 | 0 |

Coefficients of Utilization

| rc rw RCR | Effective floor cavity reflectance 20% | | | | | | | | | | | | | | | | | |
|-----------------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0% | | |
| | 70 | 50 | 30 | 70 | 50 | 30 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| 0 | 119 | 119 | 119 | 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 | 91 | 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 | 68 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 |
| 6 | 69 | 56 | 47 | 40 | 68 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 45 | 39 | 50 | 44 | 39 | 37 |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 45 | 37 | 32 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 41 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 30 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 24 |

Zonal Lumen Summary

| Zone | Lumens | % Fixture |
|-------|--------|-----------|
| 0-30 | 680 | 26.4 |
| 0-40 | 1118 | 43.5 |
| 0-60 | 2005 | 78.0 |
| 0-90 | 2571 | 100.0 |
| 0-180 | 2571 | 100.0 |



22EN-LD2-34-UNV-L835-CD1-U

Electronic Driver
 Linear LED 3500K
 Spacing criterion:
 (II) 1.3 x mounting
 height, (L) 1.3 x
 mounting height
 Lumens: 3370
 Input Watts: 28.5W
 Efficacy: 118.2 lm/W
 Test Report:
 22EN-LD2-34-UNV-
 L835-CD1-U.IES

| Candlepower | | | |
|-------------|----------|------|----------|
| Angle | Along II | 45° | Across ⊥ |
| 0 | 1142 | 1142 | 1142 |
| 5 | 1137 | 1136 | 1141 |
| 10 | 1121 | 1120 | 1127 |
| 15 | 1098 | 1097 | 1106 |
| 20 | 1064 | 1064 | 1075 |
| 25 | 1023 | 1023 | 1037 |
| 30 | 974 | 971 | 988 |
| 35 | 918 | 917 | 933 |
| 40 | 854 | 852 | 869 |
| 45 | 784 | 780 | 800 |
| 50 | 708 | 702 | 722 |
| 55 | 624 | 618 | 638 |
| 60 | 534 | 526 | 553 |
| 65 | 440 | 431 | 457 |
| 70 | 339 | 334 | 340 |
| 75 | 241 | 232 | 205 |
| 80 | 145 | 126 | 135 |
| 85 | 54 | 56 | 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 | 70 | 50 | 30 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| 0 | 119 | 119 | 119 | 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 | 91 | 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 | 68 | 60 | 54 | 66 | 59 | 53 | 64 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 53 | 46 | 59 | 51 | 46 | 57 | 50 | 45 | 55 | 49 | 45 | 42 |
| 6 | 69 | 56 | 47 | 40 | 68 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 45 | 39 | 50 | 44 | 39 | 37 |
| 7 | 64 | 51 | 42 | 36 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 35 | 33 |
| 8 | 60 | 46 | 38 | 32 | 58 | 45 | 37 | 32 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 36 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 41 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 30 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 24 |

Zonal Lumen Summary

| Zone | Lumens | % Fixture |
|-------|--------|-----------|
| 0-30 | 891 | 26.4 |
| 0-40 | 1467 | 43.5 |
| 0-60 | 2630 | 78.0 |
| 0-90 | 3370 | 100.0 |
| 0-180 | 3370 | 100.0 |

LUMEN MAINTENANCE

| Ambient Temperature | TM-21 Lumen Maintenance (100,000 hours) | Theoretical L70 (Hours) |
|---------------------|---|-------------------------|
| 25°C | > 92% | > 448,000 |

Non-IC data

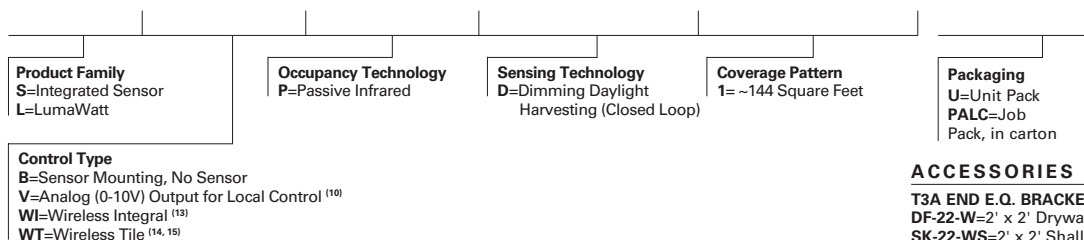
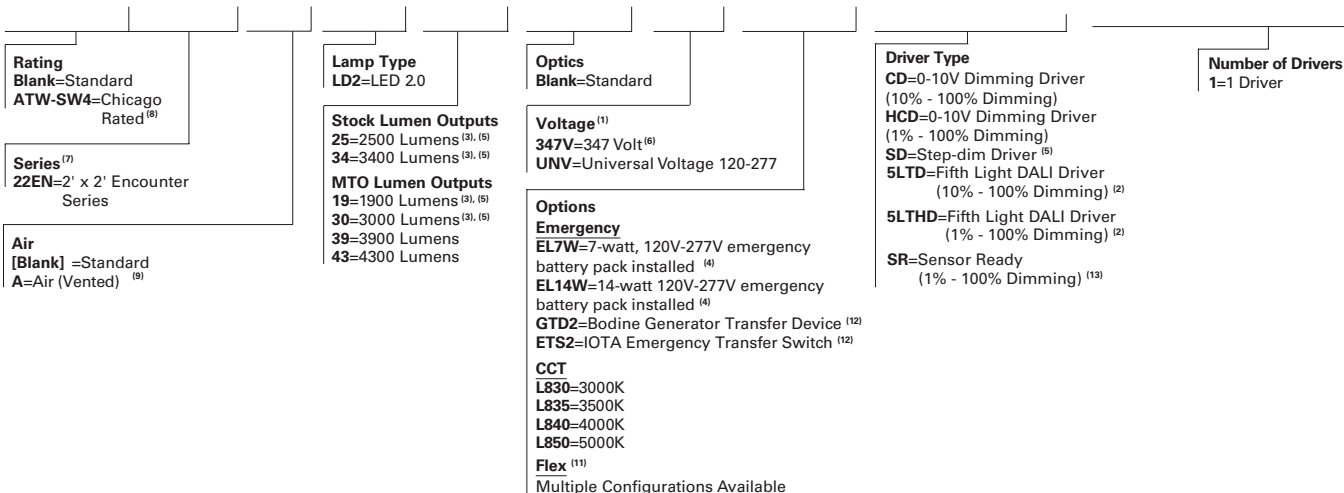
ENERGY AND PERFORMANCE DATA BY CATALOG NUMBER

| Stock or MTO* | Catalog Logic (Curved) | Delivered Lumens | Watts | Efficacy (LPW) |
|---------------|----------------------------|------------------|-------|----------------|
| MTO | 22EN-LD2-19-UNV-L830-CD1-U | 1969 | 16.5 | 119 |
| MTO | 22EN-LD2-19-UNV-L835-CD1-U | 2030 | 16.5 | 123 |
| MTO | 22EN-LD2-19-UNV-L840-CD1-U | 2071 | 16.5 | 126 |
| MTO | 22EN-LD2-19-UNV-L850-CD1-U | 2253 | 16.5 | 137 |
| MTO | 22EN-LD2-25-UNV-L830-CD1-U | 2494 | 20.0 | 119 |
| STOCK | 22EN-LD2-25-UNV-L835-CD1-U | 2571 | 20.9 | 123 |
| STOCK | 22EN-LD2-25-UNV-L840-CD1-U | 2622 | 20.9 | 125 |
| MTO | 22EN-LD2-25-UNV-L850-CD1-U | 2854 | 20.0 | 137 |
| MTO | 22EN-LD2-30-UNV-L830-CD1-U | 2898 | 24.9 | 116 |
| MTO | 22EN-LD2-30-UNV-L835-CD1-U | 2988 | 24.9 | 120 |
| MTO | 22EN-LD2-30-UNV-L840-CD1-U | 3048 | 24.9 | 122 |
| MTO | 22EN-LD2-30-UNV-L850-CD1-U | 3317 | 24.9 | 133 |
| MTO | 22EN-LD2-34-UNV-L830-CD1-U | 3269 | 28.5 | 115 |
| STOCK | 22EN-LD2-34-UNV-L835-CD1-U | 3370 | 28.5 | 118 |
| STOCK | 22EN-LD2-34-UNV-L840-CD1-U | 3437 | 28.5 | 121 |
| MTO | 22EN-LD2-34-UNV-L850-CD1-U | 3741 | 28.5 | 131 |
| MTO | 22EN-LD2-39-UNV-L830-CD1-U | 3747 | 33.3 | 113 |
| MTO | 22EN-LD2-39-UNV-L835-CD1-U | 3863 | 33.3 | 116 |
| MTO | 22EN-LD2-39-UNV-L840-CD1-U | 3940 | 33.3 | 118 |
| MTO | 22EN-LD2-39-UNV-L850-CD1-U | 4288 | 33.3 | 129 |
| MTO | 22EN-LD2-43-UNV-L830-CD1-U | 4218 | 38.3 | 110 |
| MTO | 22EN-LD2-43-UNV-L835-CD1-U | 4348 | 38.3 | 114 |
| MTO | 22EN-LD2-43-UNV-L840-CD1-U | 4435 | 38.3 | 116 |
| MTO | 22EN-LD2-43-UNV-L850-CD1-U | 4826 | 38.3 | 126 |

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

ORDERING INFORMATION

SAMPLE NUMBER: 22EN-LD2-34-UNV-L835-CD1-SVPD1-U



ACCESSORIES

- T3A END E.Q. BRACKET PARTS BAG (Standard with fixture)
- DF-22-W=2' x 2' Drywall Frame Kit
- SK-22-WS=2' x 2' Shallow Surface Mount Kit
- SK-22-WT=2' x 2' Tall Surface Mount 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.eaton.com/lightingsystems ⁽³⁾1900, 2500, 3000 and 3400 lumen option are not available with a Fifth Light DALI (5LTD) driver. ⁽⁴⁾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. ⁽⁵⁾Step-dim driver not available with 1900, 2500, 3000 and 3400 lumen option. ⁽⁶⁾347V emergency option not available. ⁽⁷⁾DesignLights Consortium™ Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details. ⁽⁸⁾Chicago rated version does not allow for row mounting. ⁽⁹⁾Air version is vented but does not meet air handling requirements; a 6% reduction in delivered lumens is experienced with this option. ⁽¹⁰⁾Integral sensor works only with "CD" driver and is factory prewired to the driver for stand-alone control. ⁽¹¹⁾Flex does not include dimming leads. Control leads provided by others. ⁽¹²⁾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. ⁽¹³⁾SR driver compatible with LWI option only. ⁽¹⁴⁾LWT compatible with CD and HCD drivers only. ⁽¹⁵⁾LWT sensor is external to luminaire, cable factory wired.

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

SHIPPING DATA

| Catalog No. | Wt. |
|-------------|---------|
| 22EN-LD2-25 | 14 lbs. |
| 22EN-LD2-34 | 14 lbs. |

INTEGRATED SENSOR

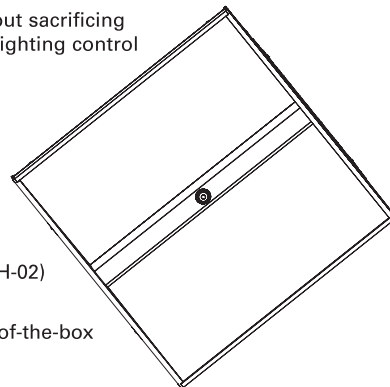
The Encounter and Encounter HP with Integrated Sensor technology provides automatic energy savings without sacrificing performance. Traditionally, these types of energy savings required coordination between the luminaire and a lighting control system. The Encounter delivers superior lighting with integrated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

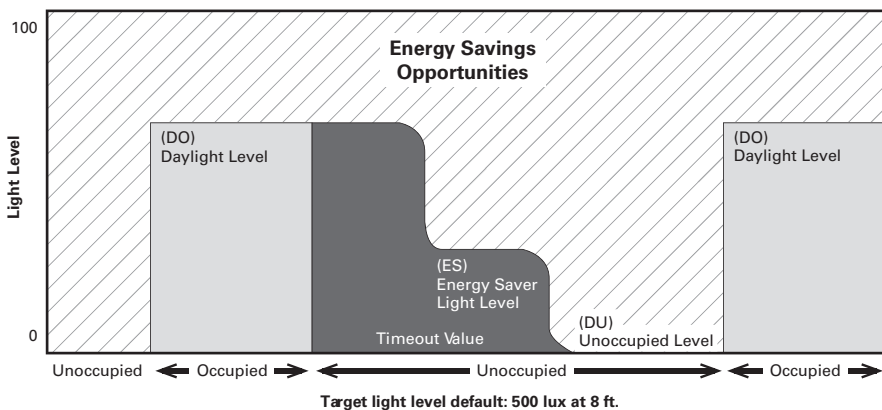
Occupied daylight light levels and unoccupied light levels can be adjusted using the integrated sensor programming remote (Catalog Number: ISHH-01). The integrated sensor personal remote (Catalog Number: ISHH-02) provides code compliant manual raise, lower, ON, OFF control.

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.

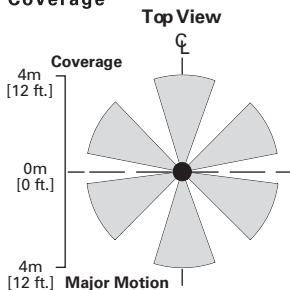


How it works:

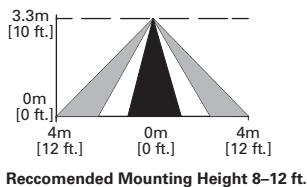
- As the user enters the space controlled by the integral sensor, the lighting turns ON to the default daylight level.
- Lighting will remain at that the daylight level until the space is unoccupied. This will start the occupancy timeout period (default 20 minutes).
- If the space remains unoccupied 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