

## LED Luminaires

### Controls Ready Troffer and Retrofit Kit

- 1'X4', 2'X2' and 2'X4' fixture sizes
- Standard 3.5mm receptacle for integrated fixture sensors
- Selectable CCT and Lumen Outputs
- Retrofit kits work with fluorescent troffer and panel housings

### Specifications

#### Description

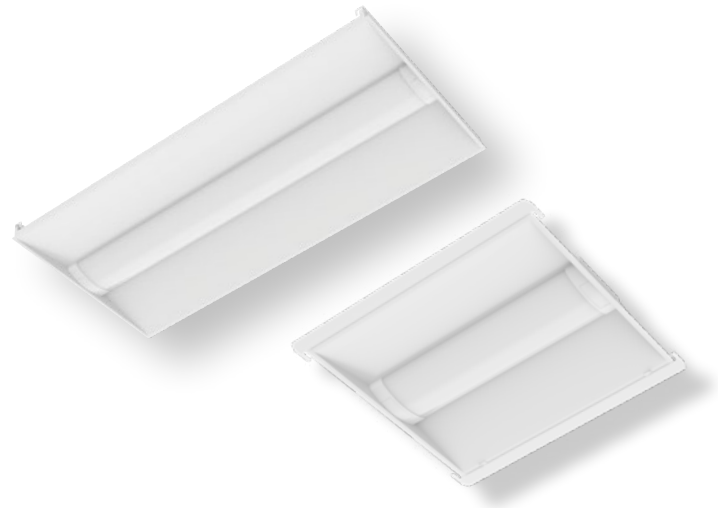
The Center Basket Troffer is a family of sleek, modern LED troffers and retrofit kits designed for new construction, remodel and retrofit recessed ceiling applications. The frosted acrylic center basket design can fully illuminate the floor and walls of a room while still minimizing fixture glare. Removeable end caps conceal a 3.5mm receptacle mounting location for integrated sensor fixture control at one end and an optional emergency battery pack test button on the other end. The retrofit kits can be used to easily and quickly convert most standard fluorescent parabolic, troffer and panel fixtures to an energy efficient, controls ready luminaire.

#### Performance

- Selectable Color Temperatures ( 3500K, 4000K, 5000K )
- Field selectable lumen output
- 125+ LPW
- 80+ CRI
- 0-10V Dimming
- L70 Lumen maintenance > 50,000 Hours
- 5 Year limited warranty

#### Construction

- Powdercoated steel fixture body
- Extruded frosted acrylic lens
- T-bar hinges and cam latches for retrofit kit
- Removeable end caps conceal locations for integral sensor and emergency test buttons



#### Certifications

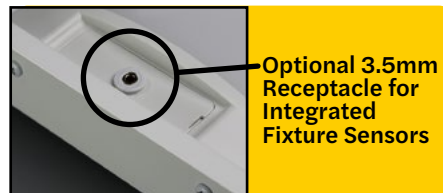
- DLC 5.1 Premium
- cULus listed for damp locations
- IC rated

#### Applications

- Commercial Buildings
- K-12 Schools, Colleges and Universities
- Healthcare Facilities
- Retailers

#### Controls

- 3.5mm receptacle for integrated fixture sensors
- Pre-wired for optional emergency battery pack



## Controls Ready Troffer and Retrofit Kit

Ordering Logic: Example: CBT-24-LS-CS-UNV-EM

Series	Product Size	Lumen Output	CRI/CCT	Dimming Driver	Options
CBT = Controls Ready Center Basket Troffer CBT-RK = Controls Ready Center Basket Troffer Retrofit Kit	14 = 1' x 4' 22 = 2' x 2' 24 = 2' x 4'	LS = Lumen Selectable 1x4 - 2500 / 3125 / 4000 2x2 - 2500 / 3125 / 4000 2x4 - 4000 / 4500 / 5000	CS = Color Selectable, 80 CRI, 3500K/4000K/5000K	UNV = Universal 120-277V, 50/60 Hz, 0-10V Dimming	EM = 8W Emergency Battery Backup

## Ordering Information

Product SKU	Product Code	Description	Replaces	DLC Product ID
81798	CBT-14-LS-CS-UNV	LED 1X4 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable (2500-4000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable	81779	S-74QQMQ
81799	CBT-22-LS-CS-UNV	LED 2X2 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable (2500-4000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable	81780	S-93P1NW
81800	CBT-24-LS-CS-UNV	LED 2X4 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable (4000-5000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable	81781	S-BMBTOY
81801	CBT-RK-14-LS-CS-UNV	LED 1X4 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable (2500-4000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable		S-N2T6WR
81802	CBT-RK-22-LS-CS-UNV	LED 2X2 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable (2500-4000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable		S-Y8SLHD
81803	CBT-RK-24-LS-CS-UNV	LED 2X4 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable (4000-5000Lum 3500K 4000K 5000K) UNV 120-277V 0-10V Dimmable		S-TR6807
<b>Accessories*</b>				
81810	SMK-CBT-14	Surface Mount Kit for 1X4 Center Basket Troffer		
81811	SMK-CBT-22	Surface Mount Kit for 2X2 Center Basket Troffer		
81812	SMK-CBT-24	Surface Mount Kit for 2X4 Center Basket Troffer		
81813	FMK-CBT-14	Flange Mount Kit for 1X4 Center Basket Troffer		
81814	FMK-CBT-22	Flange Mount Kit for 2X2 Center Basket Troffer		
81815	FMK-CBT-24	Flange Mount Kit for 2X4 Center Basket Troffer		
81816	CBT-ENDCAP-EMTS	Center Basket Troffer End Cap with Emergency Test Switch		
81817	CBT-ENDCAP-3.5MM	Center Basket Troffer End Cap with 3.5MM Receptacle		
81818	CBT-ENDCAP-BLANK	Center Basket Troffer End Cap Replacement Blank		
81819	BBU-8W-UNV-CBT-ENDCAP-EMTS	Emergency Battery Backup 8W 120-277V and CBT End Cap with Emergency Test Switch		
90550	HSN-SEN-PIR-DAY-010-3.5MM	PIR Sensor with Daylight Harvest 0-10V Dim 3.5mm Receptacle		
90552	HSN-SEN-MW-DAY-010-3.5MM	Microwave Sensor with Daylight Harvest 0-10V Dim 3.5mm Receptacle		

## Controls Ready Troffer and Retrofit Kit

### Product SKU List

SKU	Product Code	Description
81804	CBT-14-LS-CS-UNV-EM	LED 1X4 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup
81805	CBT-22-LS-CS-UNV-EM	LED 2X2 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup
81806	CBT-24-LS-CS-UNV-EM	LED 2X4 Center Basket Troffer Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup
81807	CBT-RK-14-LS-CS-UNV-EM	LED 1X4 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup
81808	CBT-RK-22-LS-CS-UNV-EM	LED 2X2 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup
81809	CBT-RK-24-LS-CS-UNV-EM	LED 2X4 Center Basket Troffer Retrofit Kit Controls Ready 3.5mm Receptacle Lumen & Color Selectable With 90 Min Emergency Battery Backup

## Performance Table

SKU	Product Code	Wattage	3500K		4000K		5000K	
			Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)	Lumen (lm)	Efficacy (lm/W)
81798	CBT-14-LS-CS-UNV	30W	3904	128	4100	139	3982	131
81799	CBT-22-LS-CS-UNV	30W	3792	126	4057	138	3905	129
81800	CBT-24-LS-CS-UNV	40W	5020	129	2571	140	5121	131
81801	CBT-RK-14-LS-CS-UNV	30W	3838	126	4068	139	3876	128
81802	CBT-RK-22-LS-CS-UNV	30W	3772	126	3961	137	3847	129
81803	CBT-RK-24-LS-CS-UNV	40W	4997	128	5196	139	5047	131

## 0-10V Tested Dimmer Compatibility List

Make	Dimmer Type	Model
LEVITRON	0-10V	DS710
LEVITRON	0-10V	IP710
LUTRON	0-10V	NTSTV-DV
LUTRON	0-10V	DVSTV
LUTRON	0-10V	DVTV-WH
LEGRAND	0-10V	RH4FBL3PW

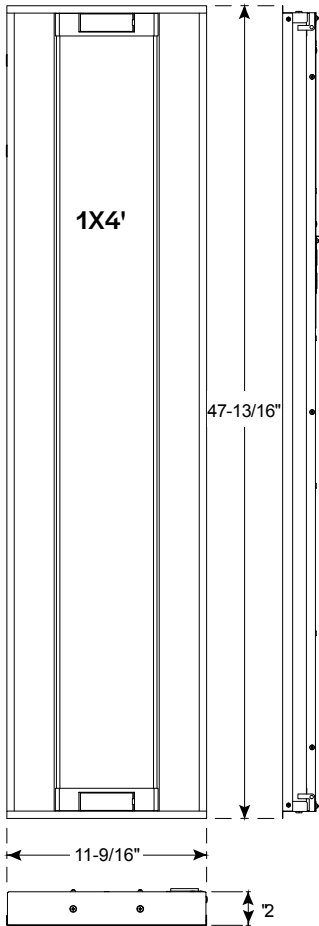
## Default Sensor Setting Information

1. Detection Area - 100%
2. Hold Time - 5 Seconds
3. Daylight Threshold - Disabled
4. Standby Period - 0 Seconds
5. Standby Dimming Level - 10%

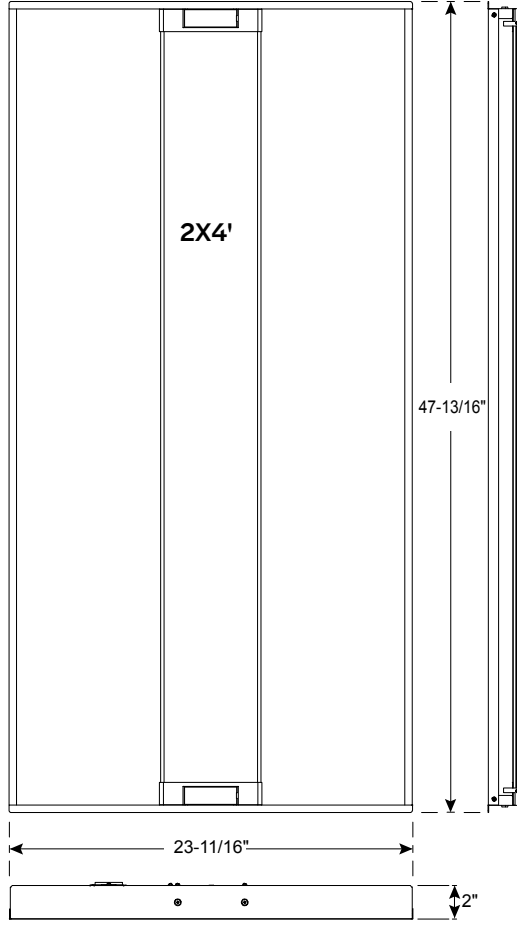
**Controls Ready Troffer and Retrofit Kit**

**Dimensions**

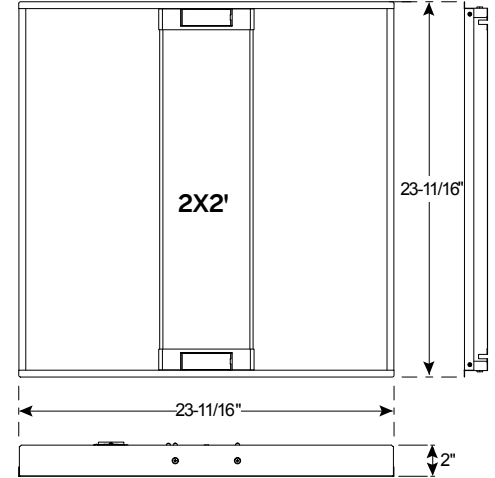
CBT-14-LS-CS-UNV



CBT-24-LS-CS-UNV



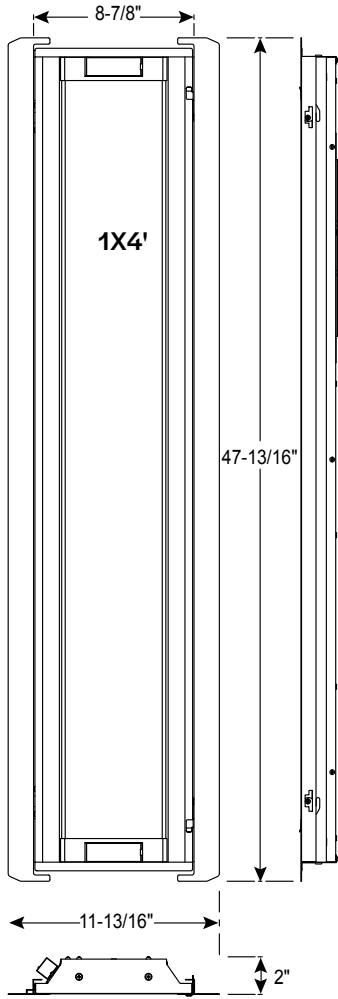
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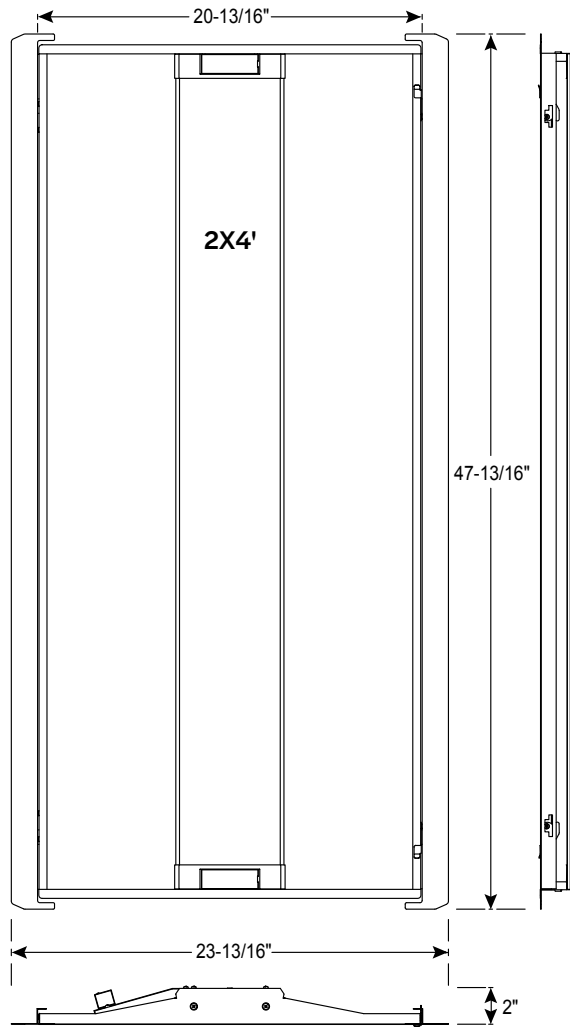
**Controls Ready Troffer and Retrofit Kit**

**Dimensions**

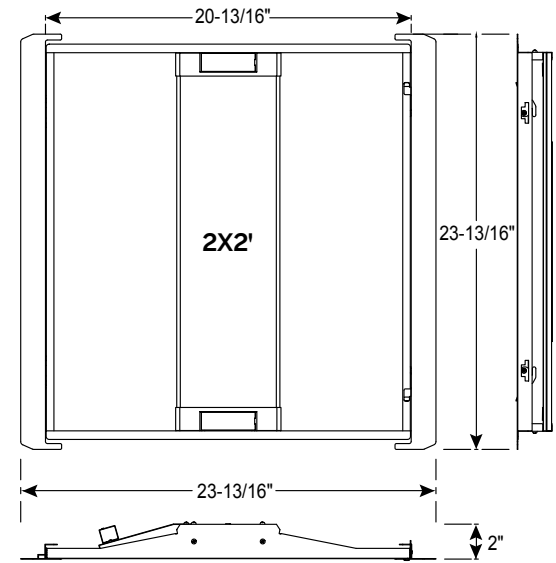
CBT-RK-14-LS-CS-UNV



CBT-RK-24-LS-CS-UNV



CBT-RK-22-LS-CS-UNV



## Controls Ready Troffer and Retrofit Kit Specifications Table

	CBT-14-LS-CS-UNV	CBT-22-LS-CS-UNV	CBT-24-LS-CS-UNV	CBT-RK-14-LS-CS-UNV	CBT-RK-22-LS-CS-UNV	CBT-RK-24-LS-CS-UNV
<b>Nominal Wattage</b>	Selectable 20/25/30W	Selectable 20/25/30W	Selectable 30/35/40W	Selectable 20/25/30W	Selectable 20/25/30W	Selectable 30/35/40W
<b>Delivered Lumens</b>	2500 - 4000	2500 - 4000	4000 - 5000	2500 - 4000	2500 - 4000	4000 - 5000
<b>Efficacy (lm/W)</b>	125					
<b>CCT</b>	Selectable 3500K, 4000K or 5000K					
<b>CRI</b>	80					
<b>L70 Lifetime (hrs)</b>	50,000					
<b>Voltage</b>	120-277V					
<b>Power Factor</b>	0.9					
<b>Dimming</b>	Yes (0-10V)					
<b>Housing Material</b>	Steel/Aluminum					
<b>Lens</b>	Frosted Acrylic					
<b>Operating Temperature Range</b>	-25°C to 45°C					
<b>Listings</b>	UL Listed - DLC 5.1 Premium					
<b>Warranty</b>	5 Years Standard					
<b>Environment</b>	Damp Location, IC Rated					

## Controls Ready Troffer and Retrofit Kit Accessories

81810-Surface Mount Kit for 1X4 Center Basket Troffer



81813-Flange Mount Kit for 1X4 Center Basket Troffer



81811-Surface Mount Kit for 2X2 Center Basket Troffer



81814-Flange Mount Kit for 2X2 Center Basket Troffer



81812-Surface Mount Kit for 2X4 Center Basket Troffer



81815-Flange Mount Kit for 2X4 Center Basket Troffer



81816-Center Basket Troffer End Cap with Emergency Test Switch



81817-Center Basket Troffer End Cap with 3.5MM Receptacle



81818-Center Basket Troffer End Cap Replacement Blank



81819-Emergency Battery Backup 8W 120-277V and CBT End Cap with Emergency Test Switch



90550-PIR Sensor with Daylight Harvest 0-10V Dim 3.5mm Receptacle



90552-Microwave Sensor with Daylight Harvest 0-10V Dim 3.5mm Receptacle



30292-Motion Control Sensor Remote



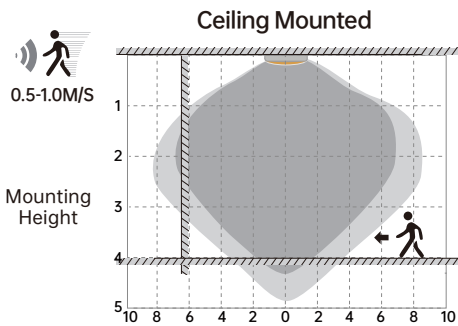
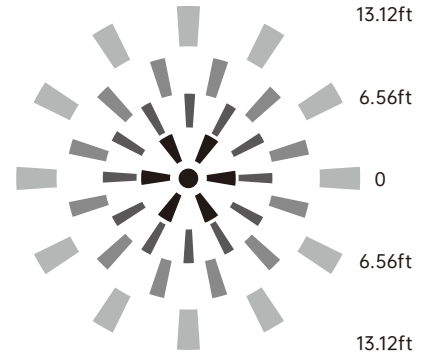
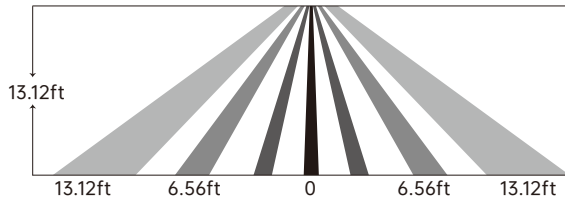
## Controls Ready Troffer and Retrofit Kit

### Detection Coverage

#### PIR Sensor

Mounting Height  
 <4m/13.12' Ceiling Mounted

Detection Distance  
 Radius 2-4m/6.56-13.12'



#### Microwave Sensor

Highest mounting height is 4m/13.12'.

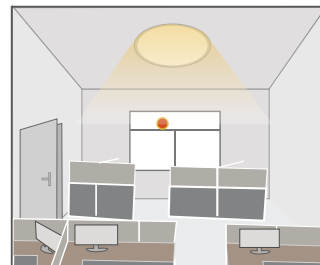
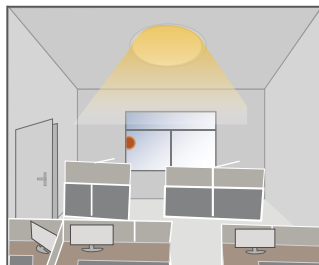
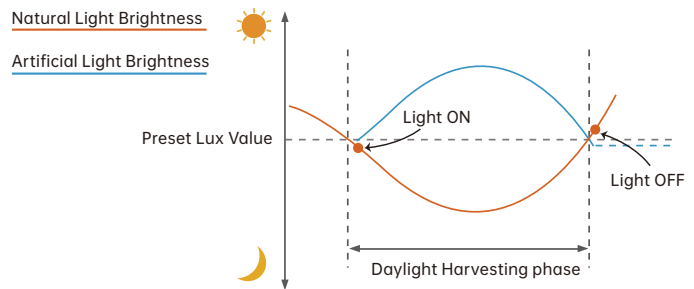
This figure indicates the maximum distance at the highest mounting height with 100% sensitivity.

Well Detected Area      Possibly Detected Area

## Performance

### 1. Daylight Harvesting

1. Adjust "daylight" value higher than 50lux
2. Preset "standby period" 0S
3. press MW/PIR button 3 times till MW/PIR icons both blinking on LCD screen, daylight harvesting function enabled.



When ambient brightness is lower than preset lux level, sensor will turn on light automatically and keep dimming according to the change of the ambient brightness; when outside is getting darker, the inside will be brighter, and brighter darker.

Light OFF when ambient brightness becomes higher than the preset lux level.

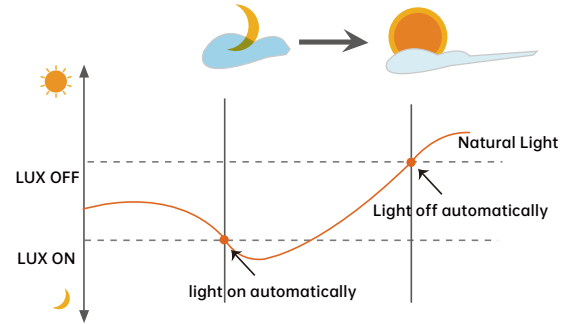
## Controls Ready Troffer and Retrofit Kit

### 2. Dusk/Dawn function

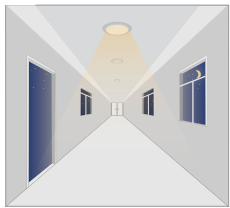
Sensor is able to differentiate artificial light brightness from natural light after installed inside the fixture, and automatically turn off light when ambient brightness exceeds preset lux level.

#### Precondition of Dusk/Dawn function:

1. Standby period is +∞;
2. Standby dimming level is on 10%, 20% or 30%;
3. Daylight threshold is on 30lux/ 50lux/ 80lux/ 120lux/ 200Lux/ 250Lux/300Lux/ 350Lux/ 400Lux



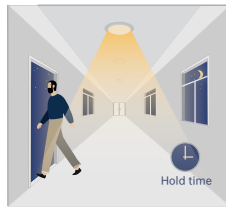
### 3. With Dusk/Dawn function



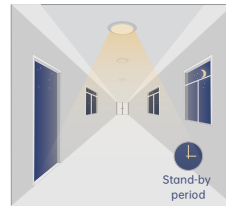
With insufficient ambient brightness, sensor turns on light and keeps it at standby dimming level even if there is no motion or presence.



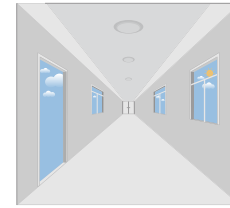
When sensor detects motion or presence it will bring the light level up to 100%.



After motion is no longer detected, fixture remains at 100% for hold time.

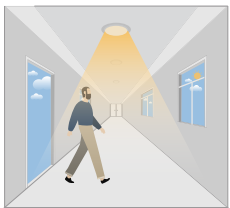


After pre-set hold time period it will dim light to standby dimming level again and always keep it.

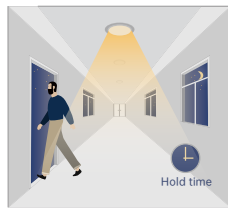


With sufficient ambient brightness, sensor will turn OFF light automatically.

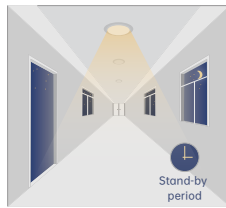
### 4. Without daylight disabled



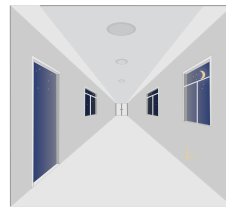
Sensor turns ON light when motion is detected.



Sensor keeps for a hold time period after motion leaves

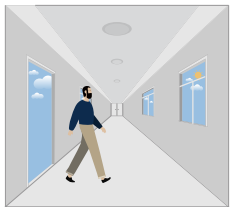


Sensor dims light to standby dimming level after hold time if there is still no motion

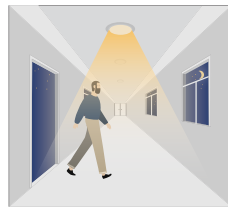


Sensor turns OFF light after standby period

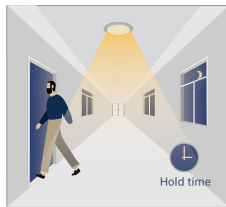
### 5. With Daylight Threshold



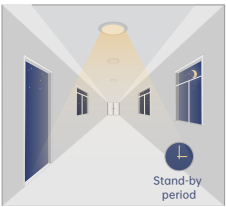
With sufficient daylight, the sensor keeps light OFF even motion gets detected



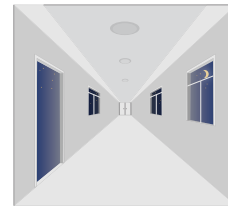
With insufficient daylight, the sensor turns light ON when motion gets detected



After there's no motion detected, the sensor keeps light ON 100% for holdtime.



After holdtime, sensor dims light to standby dimming level for standby period. if the standby period has been set as 0s, sensor turns light OFF automatically after holdtime.



The sensor turns OFF light automatically after the standby period when there's no motion detected.