



# Theorylight

## *Down Light(VC)*

Upto 120 lm/W | 18W/30W



ZigBee Mesh  
Network Control



Motion Sensor



Zoning & Grouping



Theorylight  
Remote Control



Constant  
Daylight Sensor



On/Off Control

CE

RoHS

## Applications

- Station
- Shopping Mall
- Airport
- Office

## Features

- ZigBee mesh network smart controls.
- Default with Constant Daylight and Motion sensors.
- Easy Grouping without Gateway via Theorylight Remote Control.
- Automatic ON/OFF or Dimming Functions with smart sensing (Constant Daylight, Motion) for maximum energy saving.
- Color Temperature options with 4000K, 5000K, 5700K or 6500K.
- Power Field available with power between 18W, 30W.
- Efficiency up to 110 lm/W 50%
- less power consumption than traditional light sources.
- Lowest maintain cost

## Smart Modules



ZigBeeModule



PIR Motion Sensor Module



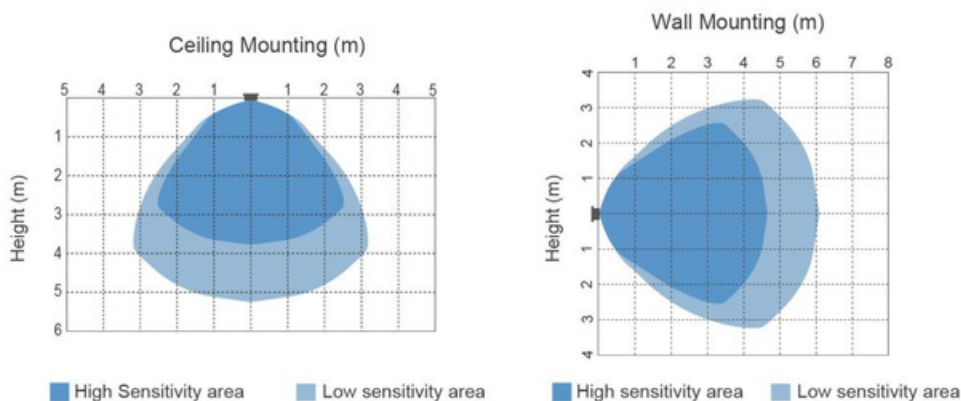
Constant Daylight Sensor Module



## Sensing Angle

|                         |                               |
|-------------------------|-------------------------------|
| Sensing Angle           | 60°                           |
| Sensing Distance        | 3 m                           |
| Light Sensing Range     | 0~8,000Lux(Constant Daylight) |
| Remote Control Distance | 10 m                          |

## Sensing Angle



## Product Data

|                   |                            |
|-------------------|----------------------------|
| Light efficiency  | 110 lm/W / 120 lm/W        |
| CCT               | 4000K / 5000K 5700K/ 6500K |
| CRI               | 80                         |
| LED Lifespan      | >50000H                    |
| Power Supply Type | of HOMA/EAGLCRISE          |
| Driver            | Isolated                   |
| Driver efficiency | 87%                        |
| Warranty          | 5 Years Warranty           |
| Certificate       | CE ROHS                    |

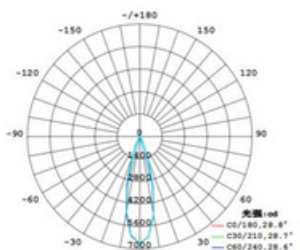
## Application Conditions

Operating Temperature -30°C to +50

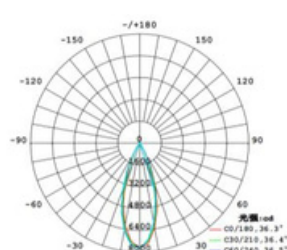
## Approval and Application

|                         |      |
|-------------------------|------|
| Ingress protection code | IP40 |
| Surge protection        | 4KV  |

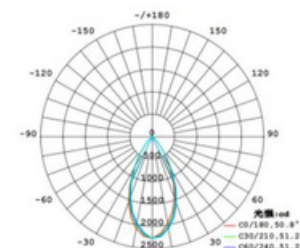
## Light Distribution Curve



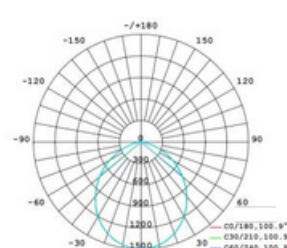
AVERAGE BEAM ANGLE(50%): 24 DEG



AVERAGE BEAM ANGLE(50%): 36 DEG



AVERAGE BEAM ANGLE(50%): 55 Deg



AVERAGE BEAM ANGLE(50%): 100 Deg

## Operating and Electrical

|                |            |
|----------------|------------|
| Input voltage  | 200-240Vac |
| Frequency      | 50/60Hz    |
| Inrush current | 12A ≥0.95  |
| Power Factor   | <10%       |
| THD            |            |

## Mechanical and Housing

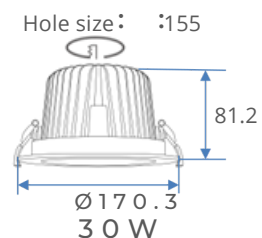
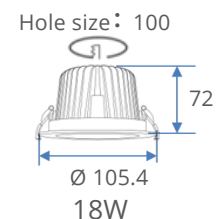
|                        |                      |
|------------------------|----------------------|
| Structure Material     | Die-Casting Aluminum |
| Finish Material Lens   | Powder coated        |
| Material Glass         | PC                   |
| Material Fixture Color | W hite               |
| Mounting Option        | Recessed Mounting    |

## Controls and Dimming

|                     |                                                              |
|---------------------|--------------------------------------------------------------|
| Dimmable            | Dimmable                                                     |
| Intelligent Control | ZigBee / Dimming/Constant Daylight Sensor/ PIR Motion sensor |

## Draw ing

Unit: mm



| Model Number | Diameter (mm) | Height (mm) | Cut-out size (mm) |
|--------------|---------------|-------------|-------------------|
| 18W          | Ø 105.4       | 72          | 100               |
| 30W          | Ø 170.3       | 81.2        | 155               |

## Product Parameter

| Model Number                                           | Power Consumption (±10%) | Ra | Input voltage | Light Efficiency | Luminous Flux (lm) (±10%) | Beam Angle   | CCT                              | Sensor                                          |
|--------------------------------------------------------|--------------------------|----|---------------|------------------|---------------------------|--------------|----------------------------------|-------------------------------------------------|
| TLDL16-DN-VC-D106-XXX<br>①-18W-E110-XXX②-EU-PD-OTA-3.0 | 18W                      | 80 | 200-240Vac    | 110 lm/W         | 1980 lm                   | 24/36/50 Deg | 4000K<br>5700K<br>5000K<br>6500K | PD=PIR Motion sensor + Constant Daylight Sensor |
| TLDL16-DN-VC-D106-XXX<br>①-18W-E120-XXX②-EU-PD-OTA-3.0 | 18W                      |    |               | 120lm/W          | 2160 lm                   | 100 Deg      |                                  |                                                 |
| TLDL16-DN-VC-D171-XXX<br>①-30W-E110-XXX②-EU-PD-OTA-3.0 | 30W                      |    |               | 110 lm/W         | 3300 lm                   | 24/36/55 Deg |                                  |                                                 |
| TLDL16-DN-VC-D171-XXX<br>①-30W-E120-XXX②-EU-PD-OTA-3.0 | 30W                      |    |               | 120 lm/W         | 3600 lm                   | 100 Deg      |                                  |                                                 |

Remark: -XXX①designates different Correlated Color Temperature, 40K = 4000K, 50K= 5000K, 57K=5700K, 65K = 6500K.  
 -XXX②designates different Beam Angle, A024=24 Deg, A036=36 Deg, A050=50 Deg, A055=55 Deg, A100=100Deg.  
 -For the US version, the input voltage is 100~277Vac.  
 please contact us to get the other version information!

## Package

| Model Number | Luminaire Weight (kg) | Net Packing Info | Dimmension (inner box) (mm) | Dimension (outercarton) (mm) | GW (Outer carton) | 20ft GP | 40ft GP | 40HQ  |
|--------------|-----------------------|------------------|-----------------------------|------------------------------|-------------------|---------|---------|-------|
| 18W          | 0.58                  | 18pcs/ctn        | 132x132x135                 | 410x280x435                  | 13.5              | 8190    | 17640   | 21168 |
| 30W          | 1.1                   | 18pcs/ctn        | 185x185x155                 | 570x385x500                  | 26.85             | 4200    | 8172    | 10233 |

## Typical Working Scenarios



The “Theorylight” smart lamps of HOMA are embedded with motion sensor and daylight sensor, using a “Theorylight” remote control, users can set grouping and parameters very fast and convenient. By adopting the standard ZigBee technology, “Theorylight” has the inborn advantages like long transmission distance, multiple channels and mesh network.



Users can set the sensor parameters of one group or individual lamp with one button, and change lamp brightness. In one group, the motion sensors work together to control these grouped lamps, and the daylight sensors control the individual lamps on/off according to the ambient brightness.

The Theorylight series include panel, linear light, tri-proof light, highbay, LED tube. This kind of smart lamps can be used for industrial and commercial area, example offices, warehouses, factories, parking and others.