



# Theorylight

## *Down Light(VA)*

Up to 115Lm/W | 20W/30W/50W/70W



ZigBee Mesh  
Network Control



Motion Sensor



Zoning & Grouping



Theorylight  
Remote Control



Daylight Sensor



On/Off Control

# CE RoHS

## Applications

- Station
- Shopping Mall
- Airport
- Office

## Features

- ZigBee mesh network smart controls
- Default with Daylight and Motion sensors
- Easy Grouping without Gateway via Theorylight Remote Control.
- Automatic ON/OFF or Dimming Functions with smart sensing
- (Daylight, Motion) for maximum energy saving
- Daylight harvesting automatically regulates
- Color Temperature options with 4000K, 5000K or 6500K
- PowerField available with power between 20W, 30W, 50W and 70W
- Efficiency up to 115 lm/W
- 50% less power consumption than traditional light sources.
- Lowest maintain cost



## Smart Modules



ZigBee Module

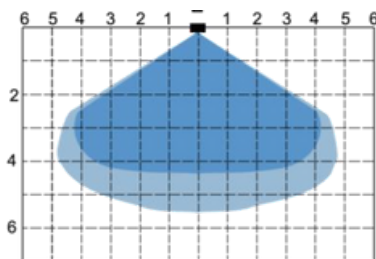


Microwave or PIR Motion Sensor Module

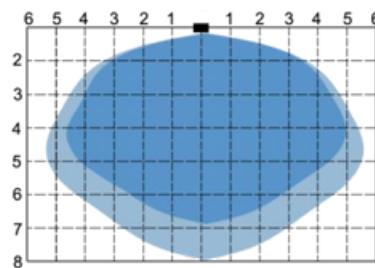


Infrared Daylight Sensor Module

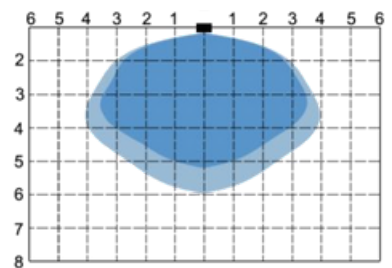
## Sensing Angle



Micro-motion      Motion

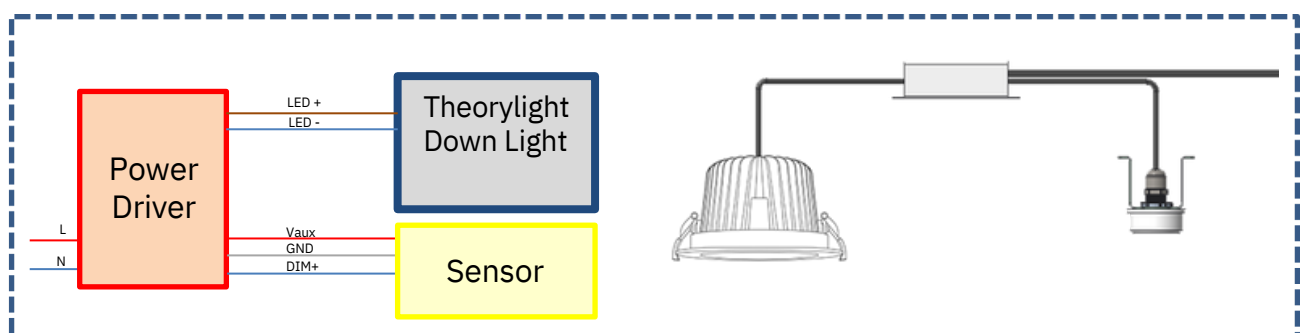


Low sensitivity area      High sensitivity area



Low sensitivity area      High sensitivity area

## Wiring Diagram



## Product Data

|                   |                  |                   |         |
|-------------------|------------------|-------------------|---------|
| LED Type          | Light efficiency | Lumileds          | 120lm/W |
| CCT               |                  | 4000K/5000K/6500K |         |
| CRI               |                  | 80                |         |
| LED Life span     |                  | >50,000h          |         |
| Power Supply      |                  | HOMA              |         |
| Type of Driver    |                  | Isolated          |         |
| Driver efficiency |                  | 87%               |         |
| Protection class  | IEC              | IP20              |         |
| Warranty          |                  | 5 Years Warranty  |         |
| Certificate       |                  | CE ROHS           |         |

## Application Conditions

Operating Temperature -30°C to +50°C

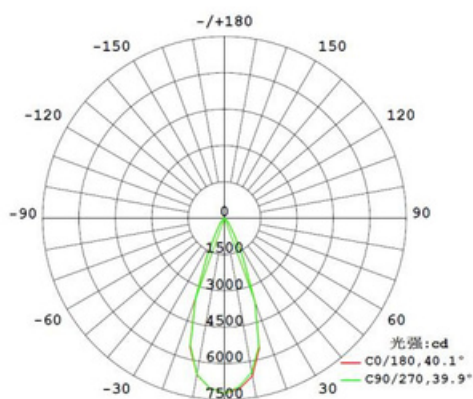
## Approval and Application

|                         |      |
|-------------------------|------|
| Ingress protection code | IP20 |
| Surge protection        | 4KV  |

## Draw ing



## Light Distribution Curve



AVERAGE BEAM ANGLE(50%): 40 DEG

## Operating and Electrical

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

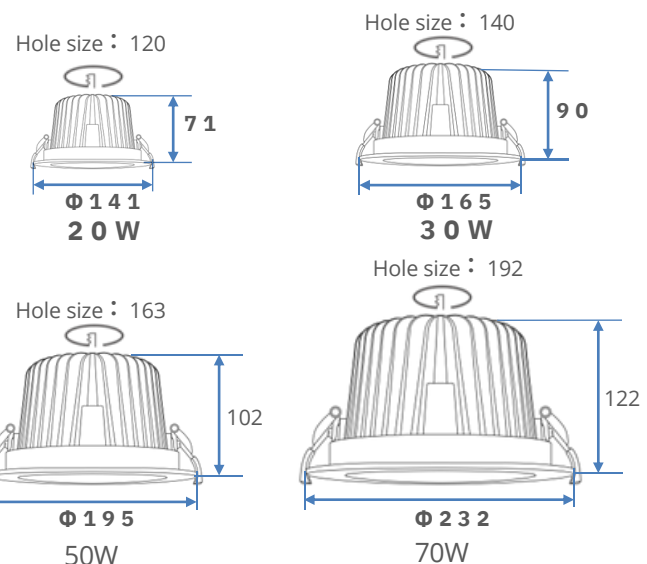
## Mechanical and Housing

|                        |                      |
|------------------------|----------------------|
| Structure Material     | Die-Casting Aluminum |
| Finish Material Lens   | Powdercoated         |
| Material Glass         | Polycarbonate        |
| Material Fixture Color | Matte Gray           |
| Mounting Option        | Recessed Mounting    |

## Controls and Dimming

|                     |                                                                                                   |
|---------------------|---------------------------------------------------------------------------------------------------|
| Dimmable            | Dimmable                                                                                          |
| Intelligent Control | ZigBee / Dimming/<br>Infrared Daylight Sensor /<br>Microwave Motion Sensor /<br>PIR Motion Sensor |

## Draw ing



| Model Number | Diameter (mm) | Height (mm) | Cut-out size (mm) |
|--------------|---------------|-------------|-------------------|
| 20W          | Φ141          | 71          | 120               |
| 30W          | Φ165          | 90          | 140               |
| 50W          | Φ195          | 102         | 163               |
| 70W          | Φ232          | 122         | 192               |

## Product Parameter

| Model Number                                                                            | Power Consumption (±10%) | Ra | Input voltage | Light Efficiency | LuminousFlux (lm) (±10%) @6500K | Beam Angle | Correlated Color Temperature | Driver Type |
|-----------------------------------------------------------------------------------------|--------------------------|----|---------------|------------------|---------------------------------|------------|------------------------------|-------------|
| TLDL16-DN-VA-D141-XXX <sup>①</sup> -20W-E115-A040- <b>EU</b> -XXX <sup>③</sup> -OTA-3.0 | 20W                      | 80 | 200~240Vac    | 115 lm/W         | 2300 lm                         | 40 Deg     | 4000K<br>5000K<br>6500K      | isolated    |
| TLDL16-DN-VA-D165-XXX <sup>①</sup> -30W-E115-A040- <b>EU</b> -XXX <sup>③</sup> -OTA-3.0 | 30W                      |    |               |                  | 3450 lm                         |            |                              |             |
| TLDL16-DN-VA-D195-XXX <sup>①</sup> -50W-E115-A040- <b>EU</b> -XXX <sup>③</sup> -OTA-3.0 | 50W                      |    |               |                  | 5750 lm                         |            |                              |             |
| TLDL16-DN-VA-D232-XXX <sup>①</sup> -70W-E115-A040- <b>EU</b> -XXX <sup>③</sup> -OTA-3.0 | 70W                      |    |               |                  | 8050 lm                         |            |                              |             |

Remark : -XXX <sup>①</sup> designates different Correlated Color Temperature, 40K = 4000K, 50K= 5000K, 65K = 6500K.  
 -XXX <sup>②</sup> designates different Smart Modules, MID = Microwave motion sensor + Infrared Daylight Sensor.  
 -PID= PIR motion sensor + Infrared Daylight Sensor, OID= Occupancy Sensor + Infrared Daylight Sensor.  
 -For the US version, the input voltage is 100~277Vac.  
 please contact us to get the other version information!

## Package

| Item. | Luminaire Net Weight | Packing Info | Dimmension (inner box) (mm) | Dimmension (outercarton) (mm) | GW (Outer carton) | 20ft GP     | 40ft GP     | 40HQ        |
|-------|----------------------|--------------|-----------------------------|-------------------------------|-------------------|-------------|-------------|-------------|
| 20W   | 0.69kg               | 12pcs/ctn    | 205x205x142                 | <b>630x425x315</b>            | <b>12.40</b>      | <b>3240</b> | <b>6480</b> | <b>8640</b> |
| 30W   | 0.85 kg              | 12pcs/ctn    | 215x215x142                 | <b>665x445x315</b>            | <b>14.70</b>      | <b>2304</b> | <b>4896</b> | <b>6528</b> |
| 50W   | 1.17 kg              | 12pcs/ctn    | 242x242x142                 | <b>740x505x315</b>            | <b>19.65</b>      | <b>2016</b> | <b>4320</b> | <b>5760</b> |
| 70W   | 1.68 kg              | 8pcs/ctn     | 275x275x142                 | <b>565x565x304</b>            | <b>19.05</b>      | <b>1680</b> | <b>3360</b> | <b>3840</b> |

## 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 lampson/off accordingto the ambient brightness.

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