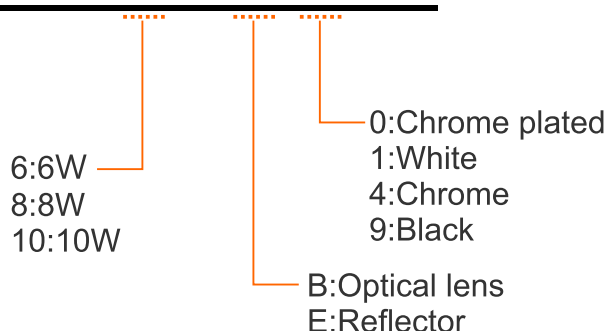


# COB LED FIRE RATED DOWNLIGHT PRODUCT SPECIFICATION

**Product Name:** LED FIRE RATED DOWNLIGHT

**Model NO.:** MLRAV8FHE21



## Customer Approval

Tested by	Checked by	Approved by

## M-Light Approval

Worked by	Checked by	Approved by

M-Light Int. Photoelectric are specialists in manufacturing SMD and COB LED downlight, LED oyster light, LED track light, LED high bay light and other LED commercial lighting. The products have SAA, C-tick, CE, RoHS, CB, CUL, UL certificates, and strictly follow EU electrical safety standards.

With SMT production lines, six power driver production lines and lamp production assemble lines, 24 hours aging testing workshop, more than 30 professional LED engineers and technicians, We can supply more than one million energy-saving LED products to all over the world each year.



#### 1. Features of M-Light LED FIRE RATED DOWNLIGHT :

- Energy saving: Our LED downlight saves more than 90% power compared with the incandescent light bulb meanwhile it can provide the perfect luminance.
- Long lifespan: Our LED downlight has more than 50,000 hours lighting life which is equal even more than 5 to 10 times of the lifespan of the energy saving lamp.
- Good heat dissipation: epoxy encapsulation, lower calorific value
- Green health environmental protection: No Hg, Pb and UV
- High CRI: Ra>80, makes colors look like the things really do
- Test standard: BS 476:Part 21:1987

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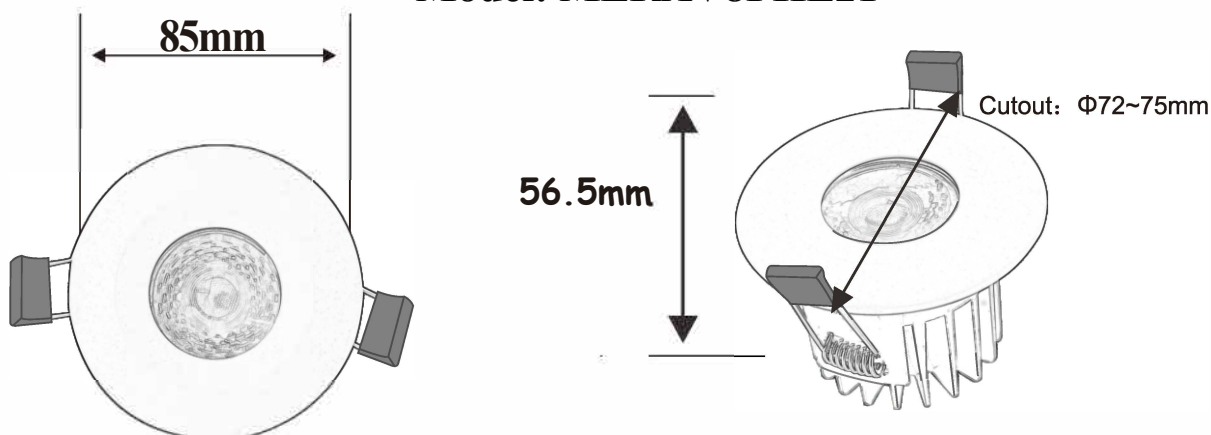
SGS 90min

#### 2. Application:

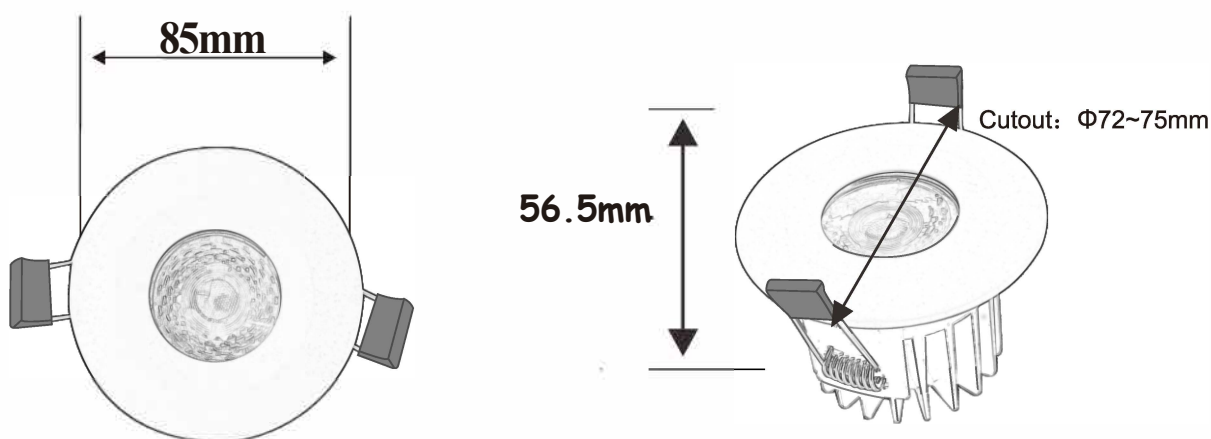
Applications: LED FIRE RATED DOWNLIGHT is widely applied to which traditional fluorescent lamps would normally be used. It appears in any place that needs light, such as , banks, hotels, stores, commercial buildings, shopping malls, supermarket, underground garage & etc.

### 3.Physical Dimensions:

**Model: MLRAV8FHE21**



**Model: MLRAV8FHE21**



### 4. Typical Technical Parameters:

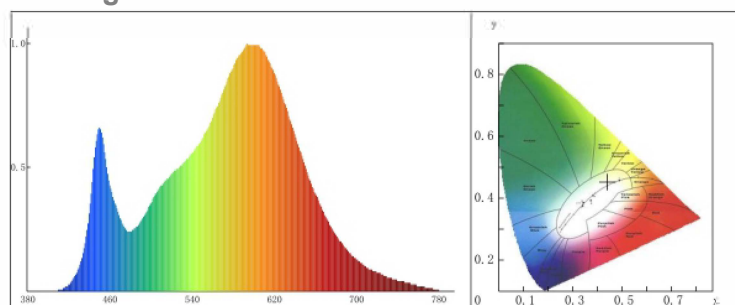
Model	Voltage	Lumens	Power	Cutout	Beam Angle	Size
MLRAV6F	AC110-265V	420-490lm	6W	C.>72-75mm	24° / 40° / 60°	85x56.5mm
MLRAV8F	AC110-265V	580-650lm	8W	C.>72-75mm	24° / 40° / 60°	85x56.5mm
MLRAV10F	AC110-265V	720-800lm	10W	C.>72-75mm	24° / 40° / 60°	85x56.5mm

#### 4.1 Face finishing available



## 5.Color Parameters:

### 5.1 WarmWhite:BW EPISTAR 5%-100% Dimmable Range Available



#### Chroma Parameters

Chro. Coord.:  $x = 0.4192$   $y = 0.3910$   $u = 0.2447$   $v = 0.3423$   $duv = -0.0027$   
CCT:  $T_c = 3212K$  Dominant Wave.:  $584.0nm$  Purity:  $43.2\%$   
R ratio:  $R = 21.5$  Peak Wavelength:  $594.1nm$  Half Width:  $123.3nm$

#### Rending Index

$R_a = 80.8$

$R_1 = 78$   $R_2 = 90$   $R_3 = 95$   $R_4 = 80$   $R_5 = 82$   
 $R_6 = 89$   $R_7 = 79$   $R_8 = 54$   $R_9 = -2$   $R_{10} = 79$   
 $R_{11} = 78$   $R_{12} = 73$   $R_{13} = 81$   $R_{14} = 98$   $R_{15} = 71$

#### Photo Parameters

Flux:  $609.5lm$  Effi.:  $73.8lm/W$  RadiantPower:  $1639.7mW$

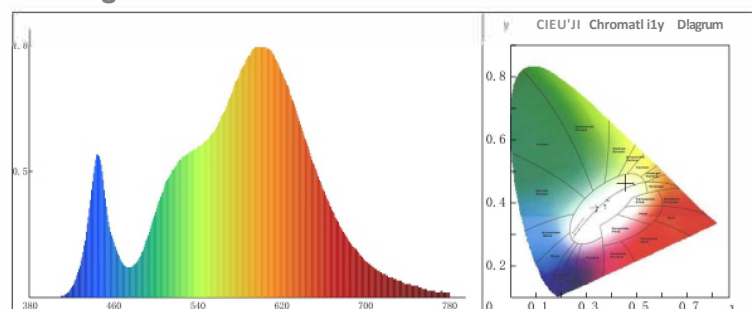
#### Ele. Parameters

Voltage:  $U = 241.2V$  Current:  $I = 0.086A$   
Power:  $P = 8.3W$  Power Factor:  $PF = 0.932$

#### Instrument state

IntegTime:  $118.546ms$  Peak:  $1571.8$  VDark:  $1114$   
Scan Range:  $380-780nm$

### 5.2 WarmWhite:10W CITIZEN 5%-100% Dimmable Range Available



#### Chroma Parameters

Chro. Coord.:  $x = 0.4306$   $y = 0.4082$   $u = 0.2448$   $v = 0.3480$   $duv = 0.0025$   
CCT:  $T_c = 3142K$  Dominant Wave.:  $582.3nm$  Purity:  $51.8\%$   
R ratio:  $R = 21.7$  Peak Wavelength:  $598.5nm$  Half Width:  $138.7nm$

#### Rending Index

$R_a = 81.4$

$R_1 = 79$   $R_2 = 87$   $R_3 = 96$   $R_4 = 82$   $R_5 = 80$   
 $R_6 = 85$   $R_7 = 84$   $R_8 = 58$   $R_9 = 0$   $R_{10} = 72$   
 $R_{11} = 88$   $R_{12} = 68$   $R_{13} = 81$   $R_{14} = 98$   $R_{15} = 71$

#### Photo Parameters

Flux:  $732.5lm$  Effi.:  $68.0lm/W$  RadiantPower:  $1932.3mW$

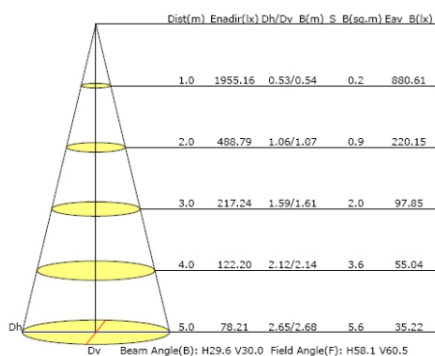
#### Ele. Parameters

Voltage:  $U = 241.1V$  Current:  $I = 0.045A$   
Power:  $P = 10.8W$  Power Factor:  $PF = 0.978$

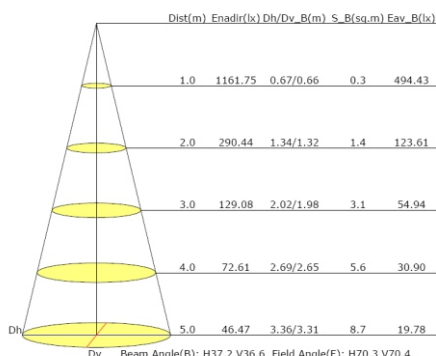
## 6. Illuminance:

8W

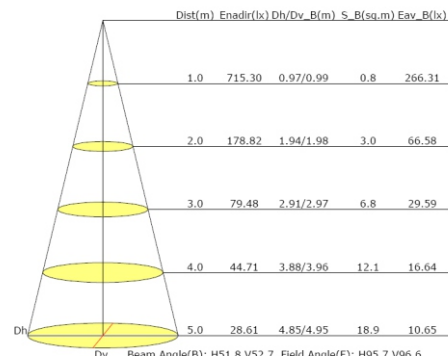
24°



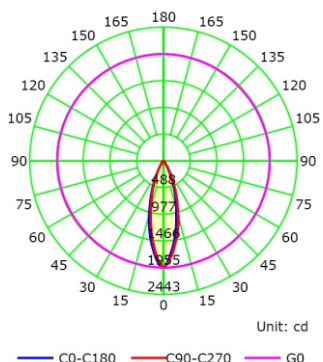
40°



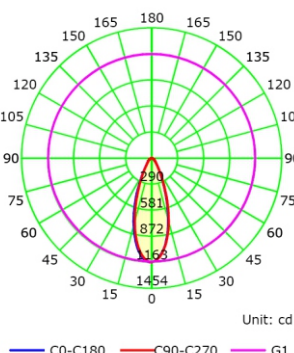
60°



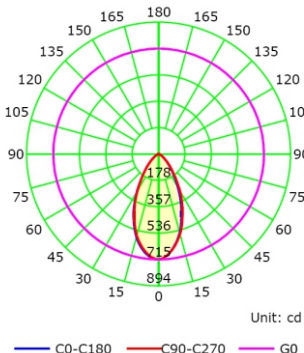
Luminous Intensity Distribution Curve



Luminous Intensity Distribution Curve

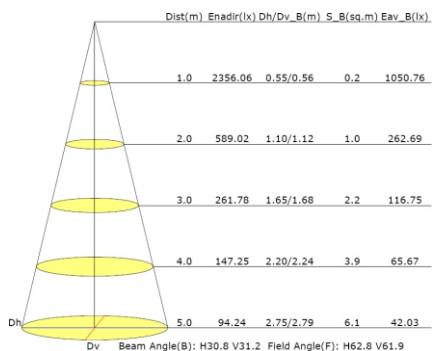


Luminous Intensity Distribution Curve

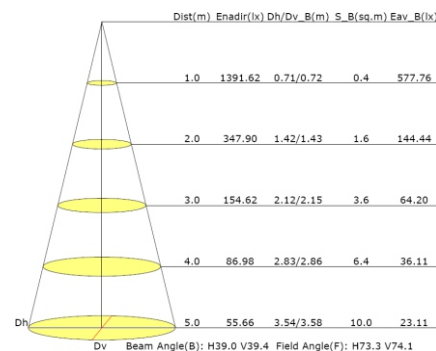


10W

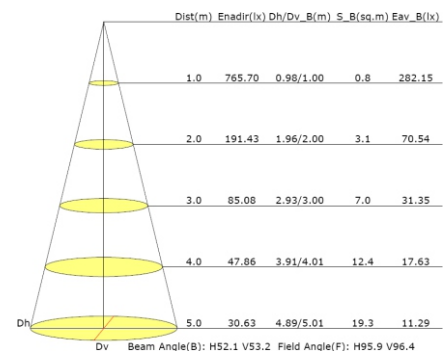
24°



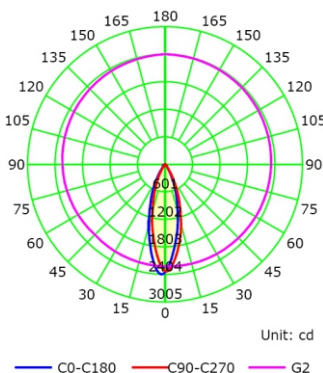
40°



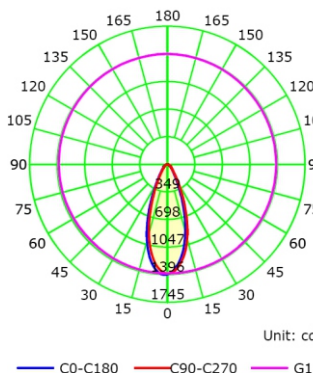
60°



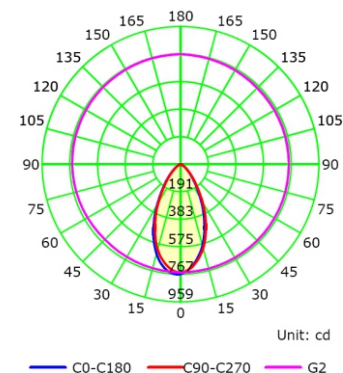
Luminous Intensity Distribution Curve



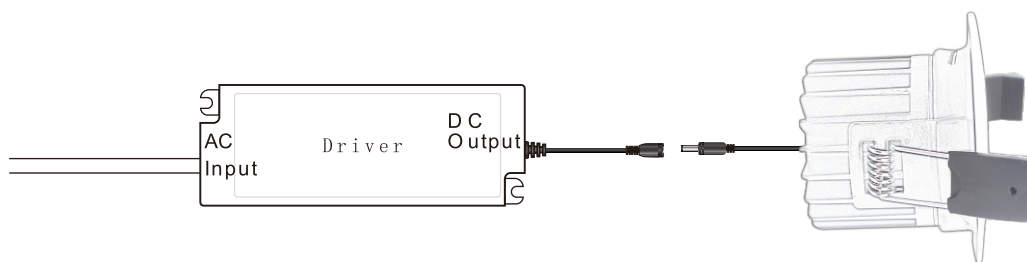
Luminous Intensity Distribution Curve



Luminous Intensity Distribution Curve

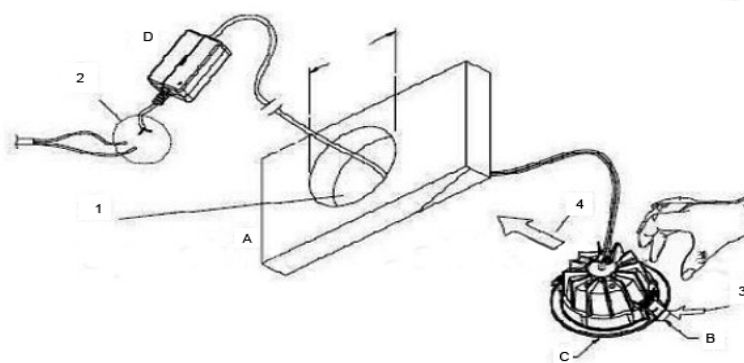
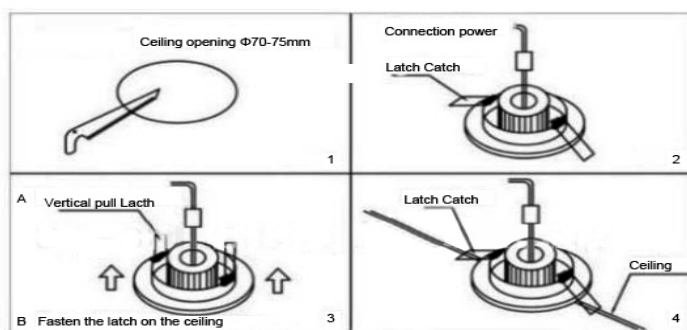


## 7.Connection Road :



**Attention :** Before Installation please make sure the power is turn off .

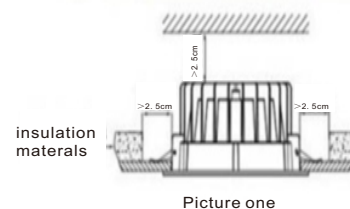
## 8.Installation :



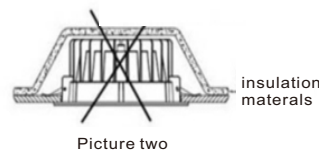
A: Wall  
B. Spring  
C.LED Downlight  
D. Driver

Step 1: Make a hole  
Step 2: Connect the powerwire  
Step 3: Push Spring  
Step 4: Put the downlight into the hole

As shown in above figure,the luminaire mounted in the mounting hole,and ensure strong



Picture one



Picture two

**1.Please turn off the power when installing.**

**2.Do not touch or grasp the downlight when it is hot.**

**3.Working environmenttem perature:-20~45℃**

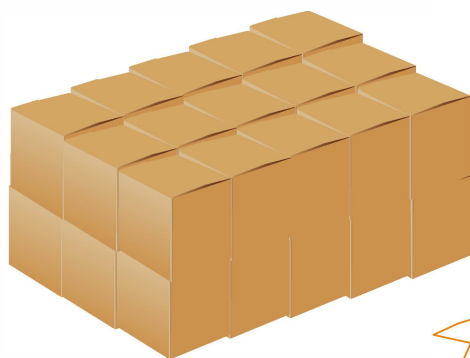
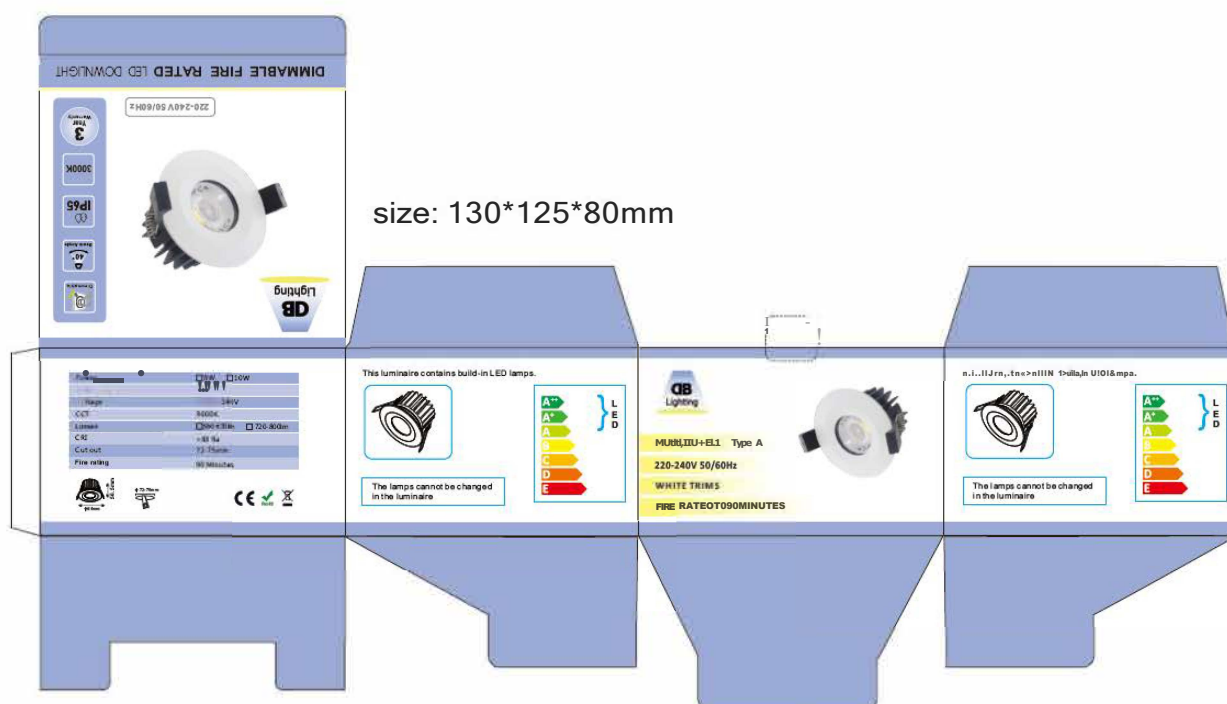
**4.Only for indoor application.**

**MUST BE INSTALLED BY LICENSED ELECTRICIAN**



## 9. Packaging information

Model	Inner Carton size (L*W*H) mm	outer Carton size (L*W*H) mm	Q'ty/CTN
MLRAV6F	130*110*129mm	56*41*29cm	30/pcs/Carton
MLRAV8F	130*110*129mm	56*41*29cm	30/pcs/Carton
MLRAV10F	130*110*129mm	56*41*29cm	30/pcs/Carton



30pcs



Size: 56\*41\*29cm