



# INDOOR LIGHTING

---

- **GREEN**
- **QUALITY**
- **INNOVATION**

# CONTENTS

## Technology

- Innovation
- MacAdam Binning
- CRI Chart

## LED for Indoor Lighting

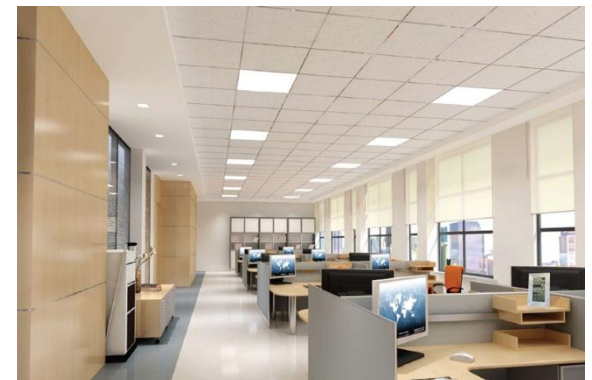
- PLCC SMD Range
- Mid-Power Package
- Ceramic High Power

## Light Engine

- COB (Chip-on-Board)
- LED Filament
- Double-sided COB
- IC-Embedded COB

## LED Modules / OEM

## IC Driver



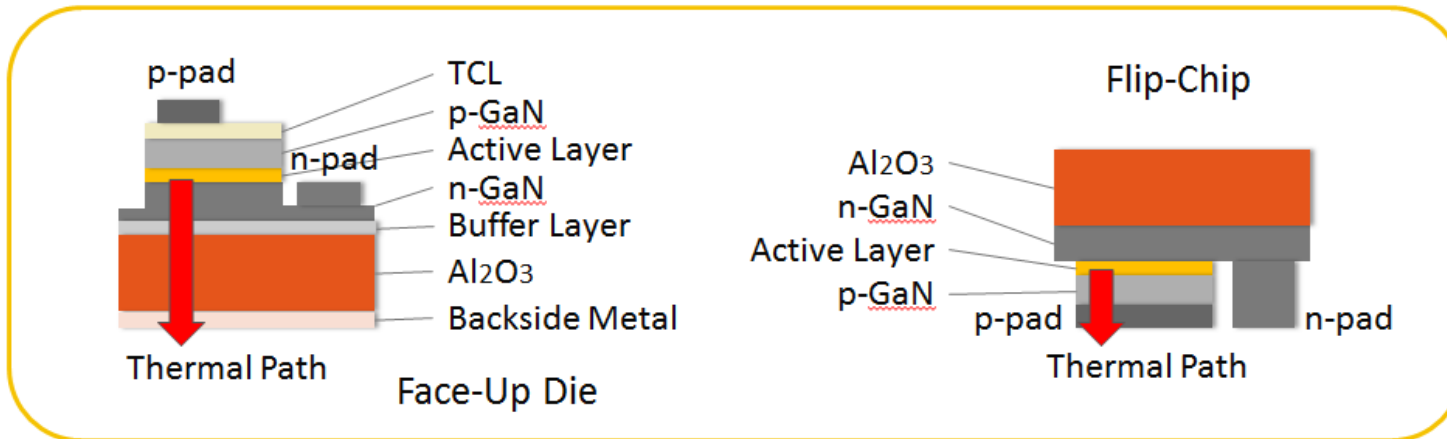
# TECHNOLOGY



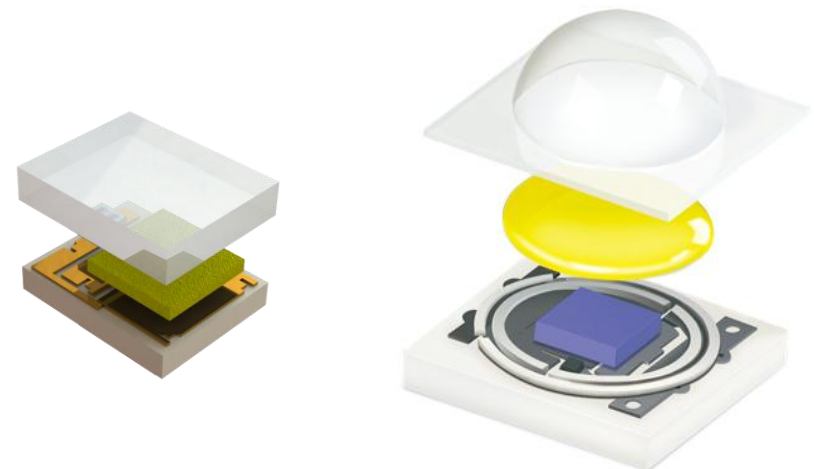
# INNOVATION

\* in selected range

- Flip-Chip (Wire-Bond Free)



- Eutectic Die-Bonding
- Energy Star Binning / MacAdam Binning
- Various Colour Temperature Range
- High CRI 80-95+
- Phosphor Coating on Die
- Tight Bin Selection

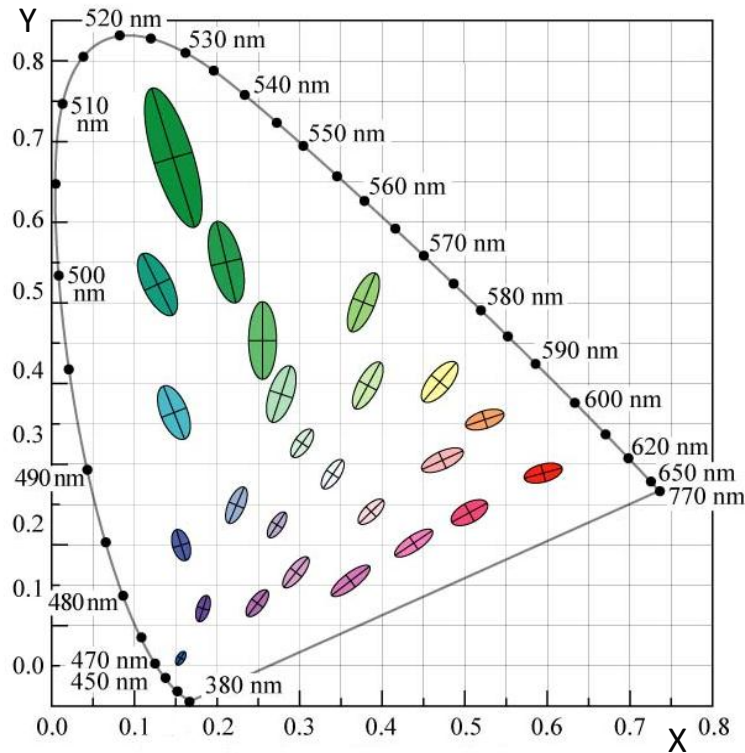




# MACADAM BINNING

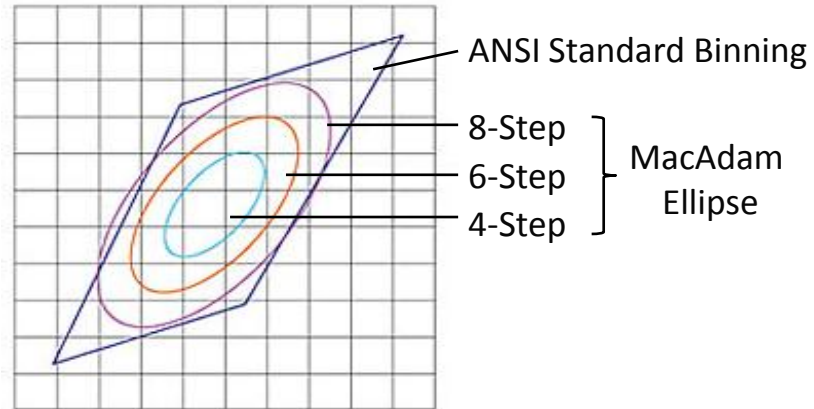
\* 4-Steps or 6-Steps are available in selected range

## MacAdam Ellipse - Colour:



CIE 1931 Chromaticity Diagram

## MacAdam Ellipse - White:



### MacAdam Ellipse

### Human Eyes Observation

1 Step

Indistinguishable

2-4 Steps

Barely distinguishable

5-7 Steps

Readily distinguishable

8+ Steps

Distinguishable



# CRI CHART

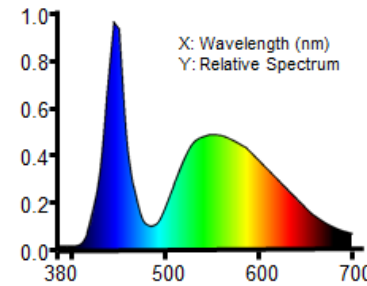
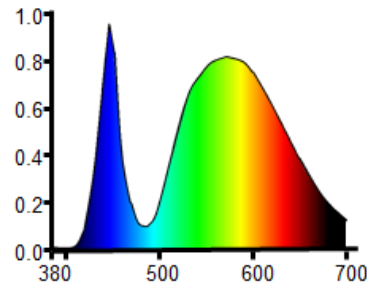
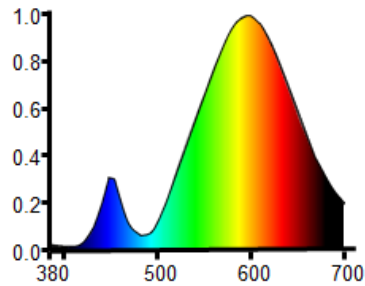
\* in selected range



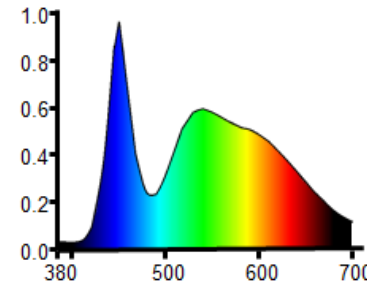
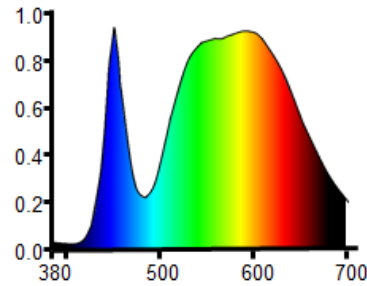
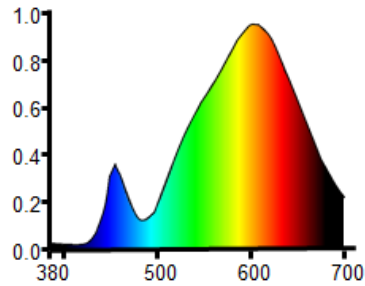
**Warm White**

**Natural White**

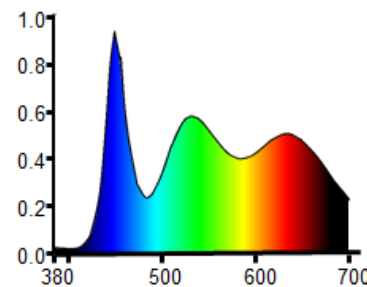
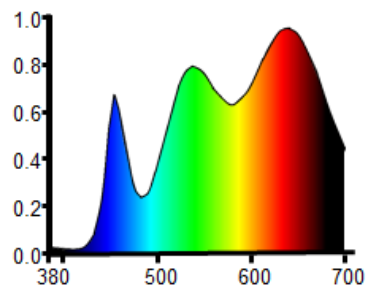
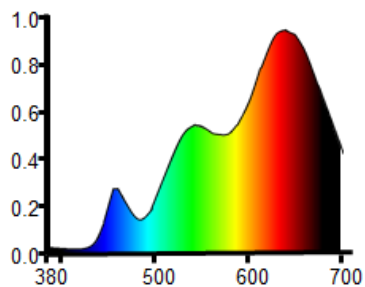
**Cool White**



**CRI=70**



**CRI=80**

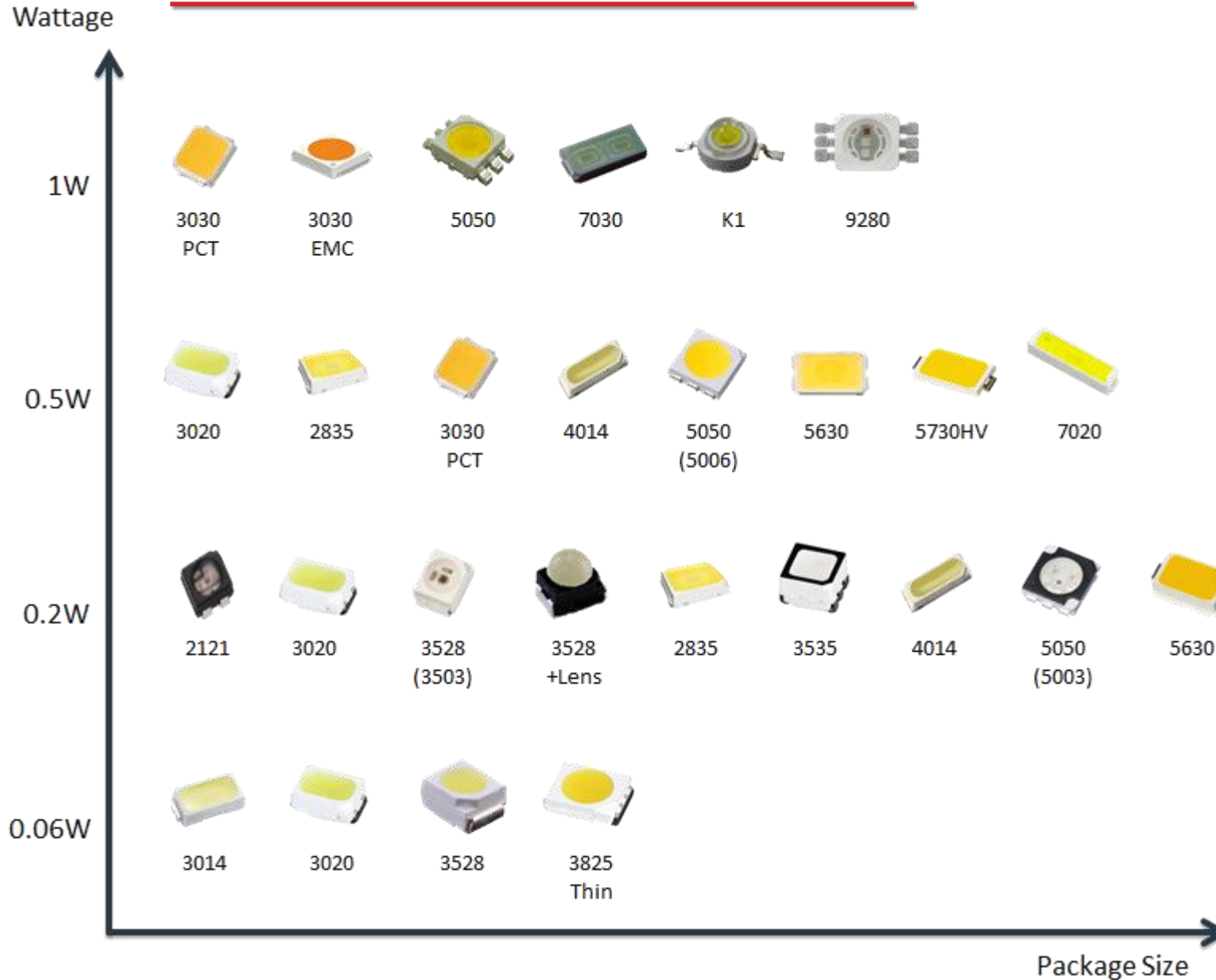


**CRI=90**

# LED FOR INDOOR LIGHTING



# PLCC SMD RANGE







# MID-POWER PACKAGE



## **3020 Series**

- 0.2/0.5W
- 60/150mA
- White & Colour



## **2835 Series**

- 0.2/0.5/1W
- 60/150/350mA
- White & Colour



## **3030 Series**

- 0.2/0.5/1W
- 120/150/350mA
- White & Colour



## **5630 Series**

- 0.2/0.5W
- 60/150mA
- White



## **4014 Series**

- 0.2W
- 60mA
- Sky White



## **7020 Series**

- 0.5W
- 150mA
- Sky White



# CERAMIC HIGH POWER



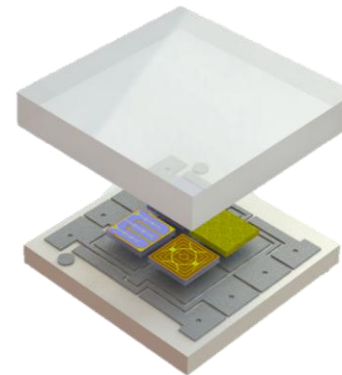
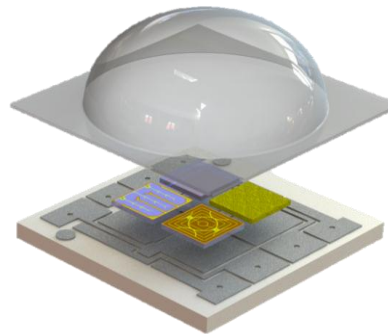
## 3535 Series

- 1-3W
- 350-700mA
- White & Colour



## 5252 WRGB Series

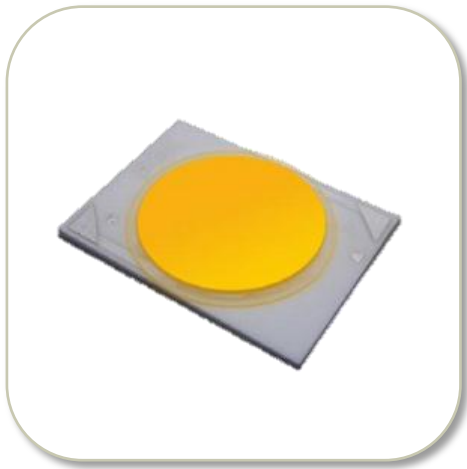
- 4W
- 350mA each Colour



**Secondary Optics  
Available**



# LIGHT ENGINE



COB Holder



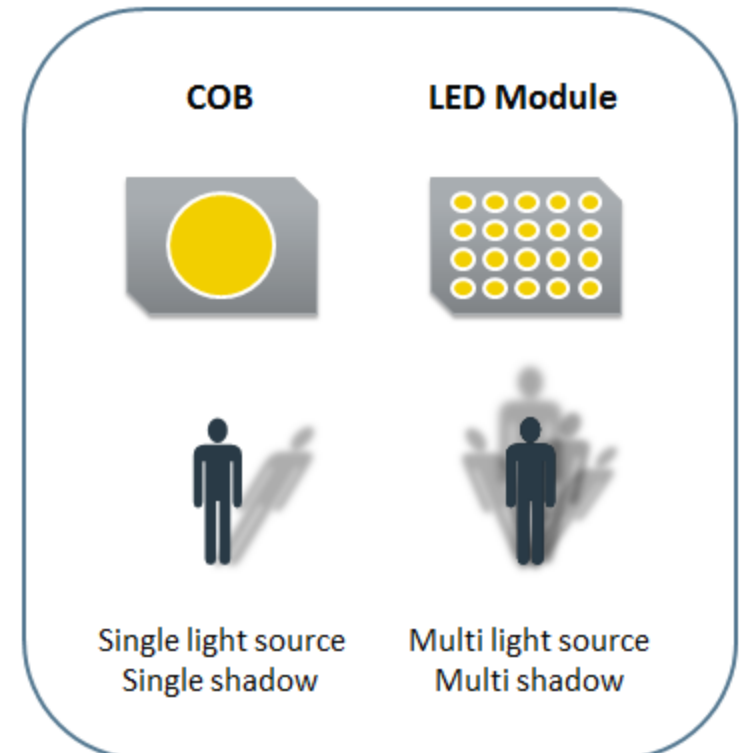
Reflector

# COB (CHIP-ON-BOARD)

## Features:

- Available in Aluminium and Ceramic Solution
- Compatible Holder and Reflector
- High CRI, High Efficiency

	Aluminium	Ceramic
Thermal Resistance	Low	Very Low
Material Cost	Low	High
Base Structure	Strong	Frangible
Decay	Mid-Low	Very Low
Installation	Screw or Holder	Holder





# LED FILAMENT

## Features:

- 38mm and 67.4mm Available
- Linear COB (22S/27S/45S)
- High Voltage (65V/75V/130V)
- Various Wattage 0.65W/0.75W/1.3W
- 360° Emitting Angle
- High CRI 80+
- Factory OEM / White Label Lighting Products



\* cooling gas need to be filled



## **DOUBLE-SIDED COB**

### Features:

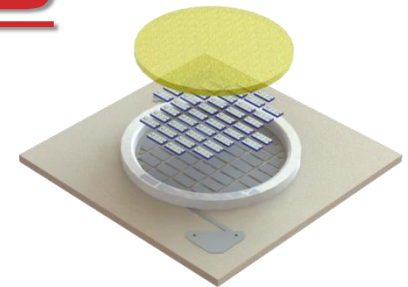
- Double-Sided Emitting (Omni-Directional)
- Heat Sink Not Required \*
- Available in Components or Modules
- Installation: Solder on 3D PCB or Insert in PCB Slot
- High CRI 80+
- High Efficiency (up to 180lm/W)



\* please refer to datasheet for non-heat sink wattage condition

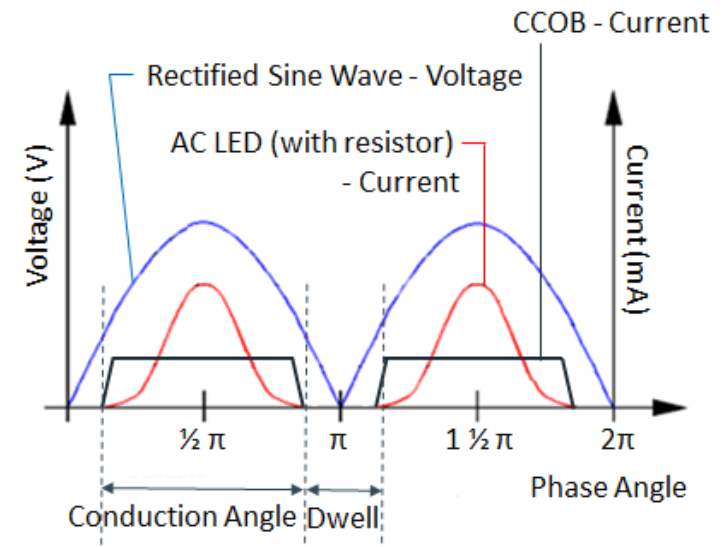


# IC-EMBEDDED COB



## Features:

- Direct Connect to AC 110V or 220V
- No Transformer Required
- Minimise Circuit Design
- Saving Components Cost
- High CRI and Performance



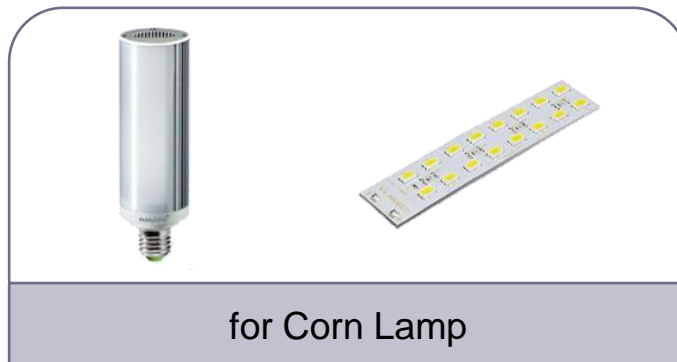
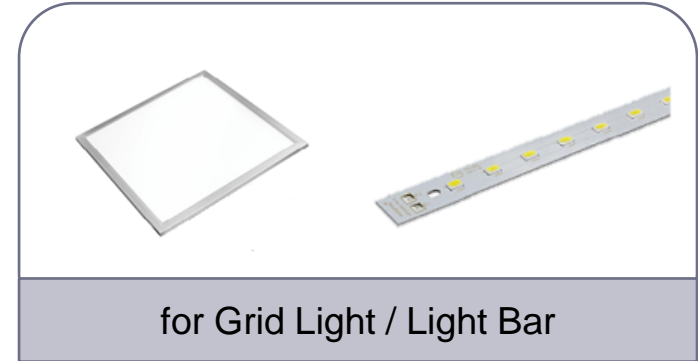
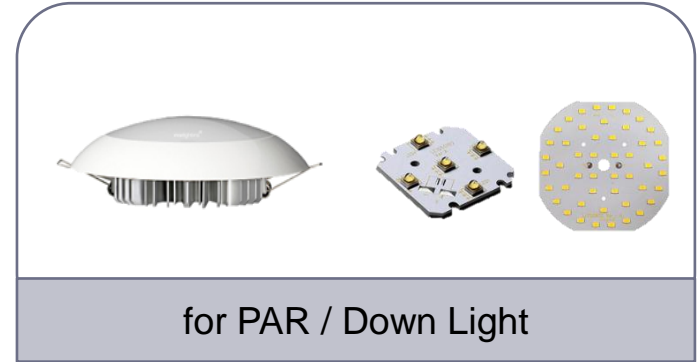
\* EMI Reduction Circuit, Surge Protection Circuit, and Heat Control Circuit is recommended to add into the design

# **LED MODULES**





**LED MODULES / OEM**



# IC DRIVER



# IC DRIVER



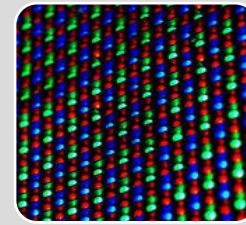
Lighting



Backlighting



High Power



RGB Display



VMS

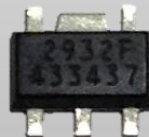
SCT2001  
SCT2004  
SCT2007  
SCT2008  
SCT2016  
SCT2301  
SCT2508  
SCT2514  
SCT2518  
SCT2932

SCT2001  
SCT2004  
SCT2008  
SCT2016  
SCT2508  
SCT2514  
SCT2518

SCT2301



SCT2932



SCT2007  
SCT2010  
SCT2024  
SCT2026  
SCT2027  
SCT2110  
SCT2167  
SCT2168  
SCT2180

SCT2024  
SCT2026  
SCT2027  
SCT2110  
SCT2167  
SCT2168

# BRIGHTTEK

---

Brightek (Europe) LIMITED

5 Cochrane House  
Admirals Way  
London E14 9UD  
United Kingdom

[www.brightekeurope.com](http://www.brightekeurope.com)

For distributors in your region,  
please visit our web page [here](#).

