

AC-ALL™ 

# EggDrop™ COB

*Innovative AC driving engine  
for Down light & Spot light*



**Dimmable**



AC-ALL™, Lumens AC Driverless Modules/Engines, provides excellent solutions for lighting designers and manufacturers. It is designed to be run on AC direct current so as to bring you the most design flexibility. With its patented Dimming and Flicker solutions, AC-ALL™ enables you to enhance the value of your lighting products the most. Eggdrop™-COB of the AC-ALL series is specially designed for Downlight, Spot light, etc. Built on Lumens Flip-Chip COB and AC direct technology, Eggdrop™-COB can provide you a comprehensive solution to achieve an industry-leading combination of light quality and efficacy.

## Features

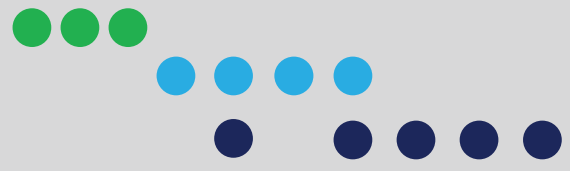
- Wide Power Selection : 4W ~ 40W
- Designs for both 120V and 230V
- Compatible with most TRIAC dimmers
- No Strobe, No Flicker as found in most AC modules
- High Power Conversion Efficiency (>0.85)
- Thermal Shutdown Circuit embedded (150°C)
- High Power Factor (>0.95)
- Low THD (<20%)
- Zhaga Standard Size

## Applications

- Down Light
- Spot Light

## Selection Guide

4W 6W 8W 9W 10W 12W 15W 20W 30W 40W



Outer size : Ø38 (Green) Ø47 (Light Blue) Ø57 (Dark Blue)

## Electro-Optical Characteristics

Ø38

230V

Ra80

Model No	SIZE [mm]	Power [W]	Lumen Output [lm]	Efficacy [lm/w]	CCT [K]	CRI [Ra]	Color Consistency [SDCM]	Input Voltage[V]
EDC/38C/4W/827/230V/A	Ø38(9.9)	4	348	87.0	2700	80+	3	230
EDC/38C/4W/830/230V/A	Ø38(9.9)	4	360	90.0	3000	80+	3	230
EDC/38C/4W/835/230V/A	Ø38(9.9)	4	372	93.0	3500	80+	3	230
EDC/38C/4W/840/230V/A	Ø38(9.9)	4	380	95.0	4000	80+	3	230
EDC/38C/4W/850/230V/A	Ø38(9.9)	4	388	97.0	5000	80+	3	230
EDC/38C/6W/827/230V/A	Ø38(9.9)	6	522	87.0	2700	80+	3	230
EDC/38C/6W/830/230V/A	Ø38(9.9)	6	540	90.0	3000	80+	3	230
EDC/38C/6W/835/230V/A	Ø38(9.9)	6	552	92.0	3500	80+	3	230
EDC/38C/6W/840/230V/A	Ø38(9.9)	6	570	95.0	4000	80+	3	230
EDC/38C/6W/850/230V/A	Ø38(9.9)	6	576	96.0	5000	80+	3	230
EDC/38C/8W/827/230V/A	Ø38(9.9)	8	680	85.0	2700	80+	3	230
EDC/38C/8W/830/230V/A	Ø38(9.9)	8	704	88.0	3000	80+	3	230
EDC/38C/8W/835/230V/A	Ø38(9.9)	8	720	90.0	3500	80+	3	230
EDC/38C/8W/840/230V/A	Ø38(9.9)	8	744	93.0	4000	80+	3	230
EDC/38C/8W/850/230V/A	Ø38(9.9)	8	752	94.0	5000	80+	3	230

- Note:
1. ( ) LES Size (Light Emitting Surface)
  2. Typical Luminous Flux value / Ta=25 °C
  3. Accuracy : CRI ( ±3), lm ( ±3%), , Dimension ( ±0.3mm)
  4. Specifications can be changed without advance notice.
  5. Installation shall follow cautions and guidance that Lumens provides.

## Electro-Optical Characteristics

Ø47

230V

Ra80

Model No	SIZE [mm]	Power [W]	Lumen Output [lm]	Efficacy [lm/w]	CCT [K]	CRI [Ra]	Color Consistency [SDCM]	Input Voltage[V]
EDC/47C/9W/827/230V/A	Ø47(11)	9	810	90.0	2700	80+	3	230
EDC/47C/9W/830/230V/A	Ø47(11)	9	855	95.0	3000	80+	3	230
EDC/47C/9W/835/230V/A	Ø47(11)	9	881	98.0	3500	80+	3	230
EDC/47C/9W/840/230V/A	Ø47(11)	9	898	100.0	4000	80+	3	230
EDC/47C/9W/850/230V/A	Ø47(11)	9	918	102.0	5000	80+	3	230
EDC/47C/10W/827/230V/A	Ø47(11)	10	900	90.0	2700	80+	3	230
EDC/47C/10W/830/230V/A	Ø47(11)	10	950	95.0	3000	80+	3	230
EDC/47C/10W/835/230V/A	Ø47(11)	10	980	98.0	3500	80+	3	230
EDC/47C/10W/840/230V/A	Ø47(11)	10	1000	100.0	4000	80+	3	230
EDC/47C/10W/850/230V/A	Ø47(11)	10	1020	102.0	5000	80+	3	230
EDC/47C/12W/827/230V/A	Ø47(11)	12	1080	90.0	2700	80+	3	230
EDC/47C/12W/830/230V/A	Ø47(11)	12	1140	95.0	3000	80+	3	230
EDC/47C/12W/835/230V/A	Ø47(11)	12	1196	98.0	3500	80+	3	230
EDC/47C/12W/840/230V/A	Ø47(11)	12	1200	100.0	4000	80+	3	230
EDC/47C/12W/850/230V/A	Ø47(11)	12	1224	102.0	5000	80+	3	230
EDC/47C/15W/827/230V/A	Ø47(11)	15	1350	90.0	2700	80+	3	230
EDC/47C/15W/830/230V/A	Ø47(11)	15	1425	95.0	3000	80+	3	230
EDC/47C/15W/835/230V/A	Ø47(11)	15	1468	98.0	3500	80+	3	230
EDC/47C/15W/840/230V/A	Ø47(11)	15	1496	100.0	4000	80+	3	230
EDC/47C/15W/850/230V/A	Ø47(11)	15	1530	102.0	5000	80+	3	230

- Note:
1. ( ) LES Size (Light Emitting Surface)
  2. Typical Luminous Flux value / Ta=25 °C
  3. Accuracy : CRI ( ±3), lm ( ±3%), , Dimension ( ±0.3mm)
  4. Specifications can be changed without advance notice.
  5. Installation shall follow cautions and guidance that Lumens provides.

**Electro-Optical Characteristics****Ø47****230V****Ra90**

Model No	SIZE [mm]	Power [W]	Lumen Output [lm]	Efficacy [lm/w]	CCT [K]	CRI [Ra]	Color Consistency [SDCM]	Input Voltage[V]
EDC/47C/9W/827/230V/A	Ø47(11)	9	673	75.0	2700	80+	3	230
EDC/47C/9W/830/230V/A	Ø47(11)	9	718	80.0	3000	80+	3	230
EDC/47C/9W/835/230V/A	Ø47(11)	9	740	82.0	3500	80+	3	230
EDC/47C/9W/840/230V/A	Ø47(11)	9	754	84.0	4000	80+	3	230
EDC/47C/9W/850/230V/A	Ø47(11)	9	786	87.0	5000	80+	3	230
EDC/47C/10W/827/230V/A	Ø47(11)	10	748	75.0	2700	80+	3	230
EDC/47C/10W/830/230V/A	Ø47(11)	10	798	80.0	3000	80+	3	230
EDC/47C/10W/835/230V/A	Ø47(11)	10	822	82.0	3500	80+	3	230
EDC/47C/10W/840/230V/A	Ø47(11)	10	838	84.0	4000	80+	3	230
EDC/47C/10W/850/230V/A	Ø47(11)	10	874	87.0	5000	80+	3	230
EDC/47C/12W/827/230V/A	Ø47(11)	12	898	75.0	2700	80+	3	230
EDC/47C/12W/830/230V/A	Ø47(11)	12	958	80.0	3000	80+	3	230
EDC/47C/12W/835/230V/A	Ø47(11)	12	986	82.0	3500	80+	3	230
EDC/47C/12W/840/230V/A	Ø47(11)	12	1005	84.0	4000	80+	3	230
EDC/47C/12W/850/230V/A	Ø47(11)	12	1049	87.0	5000	80+	3	230
EDC/47C/15W/827/230V/A	Ø47(11)	15	1122	75.0	2700	80+	3	230
EDC/47C/15W/830/230V/A	Ø47(11)	15	1197	80.0	3000	80+	3	230
EDC/47C/15W/835/230V/A	Ø47(11)	15	1233	82.0	3500	80+	3	230
EDC/47C/15W/840/230V/A	Ø47(11)	15	1257	84.0	4000	80+	3	230
EDC/47C/15W/850/230V/A	Ø47(11)	15	1311	87.0	5000	80+	3	230

- Note:
1. ( ) LES Size (Light Emitting Surface)
  2. Typical Luminous Flux value / Ta=25 °C
  3. Accuracy : CRI ( ±3), lm ( ±3%), , Dimension ( ±0.3mm)
  4. Specifications can be changed without advance notice.
  5. Installation shall follow cautions and guidance that Lumens provides.

**Electro-Optical Characteristics****Ø57****230V****Ra80**

Model No	SIZE [mm]	Power [W]	Lumen Output [lm]	Efficacy [lm/w]	CCT [K]	CRI [Ra]	Color Consistency [SDCM]	Input Voltage[V]
EDC/57C/10W/827/230V/A	Ø57(14)	10	910	91.0	2700	80+	3	230
EDC/57C/10W/830/230V/A	Ø57(14)	10	950	95.0	3000	80+	3	230
EDC/57C/10W/835/230V/A	Ø57(14)	10	980	98.0	3500	80+	3	230
EDC/57C/10W/840/230V/A	Ø57(14)	10	1005	101.0	4000	80+	3	230
EDC/57C/10W/850/230V/A	Ø57(14)	10	1035	104.0	5000	80+	3	230
EDC/57C/15W/827/230V/A	Ø57(14)	15	1385	92.0	2700	80+	3	230
EDC/57C/15W/830/230V/A	Ø57(14)	15	1445	96.0	3000	80+	3	230
EDC/57C/15W/835/230V/A	Ø57(14)	15	1485	99.0	3500	80+	3	230
EDC/57C/15W/840/230V/A	Ø57(14)	15	1530	102.0	4000	80+	3	230
EDC/57C/15W/850/230V/A	Ø57(14)	15	1575	105.0	5000	80+	3	230
EDC/57C/20W/827/230V/A	Ø57(14)	20	1790	90.0	2700	80+	3	230
EDC/57C/20W/830/230V/A	Ø57(14)	20	1865	93.0	3000	80+	3	230
EDC/57C/20W/835/230V/A	Ø57(14)	20	1920	96.0	3500	80+	3	230
EDC/57C/20W/840/230V/A	Ø57(14)	20	1975	99.0	4000	80+	3	230
EDC/57C/20W/850/230V/A	Ø57(14)	20	2030	102.0	5000	80+	3	230
EDC/57C/30W/827/230V/A	Ø57(21)	30	2730	91.0	2700	80+	3	230
EDC/57C/30W/830/230V/A	Ø57(21)	30	2850	95.0	3000	80+	3	230
EDC/57C/30W/835/230V/A	Ø57(21)	30	2840	98.0	3500	80+	3	230
EDC/57C/30W/840/230V/A	Ø57(21)	30	3030	101.0	4000	80+	3	230
EDC/57C/30W/850/230V/A	Ø57(21)	30	3120	104.0	5000	80+	3	230
EDC/57C/40W/827/230V/A	Ø57(21)	40	3648	91.0	2700	80+	3	230
EDC/57C/40W/830/230V/A	Ø57(21)	40	3800	95.0	3000	80+	3	230
EDC/57C/40W/835/230V/A	Ø57(21)	40	3914	98.0	3500	80+	3	230
EDC/57C/40W/840/230V/A	Ø57(21)	40	4028	101.0	4000	80+	3	230
EDC/57C/40W/850/230V/A	Ø57(21)	40	4142	104.0	5000	80+	3	230

- Note:
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  2. Typical Luminous Flux value / Ta=25 °C
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## Electro-Optical Characteristics

Ø57

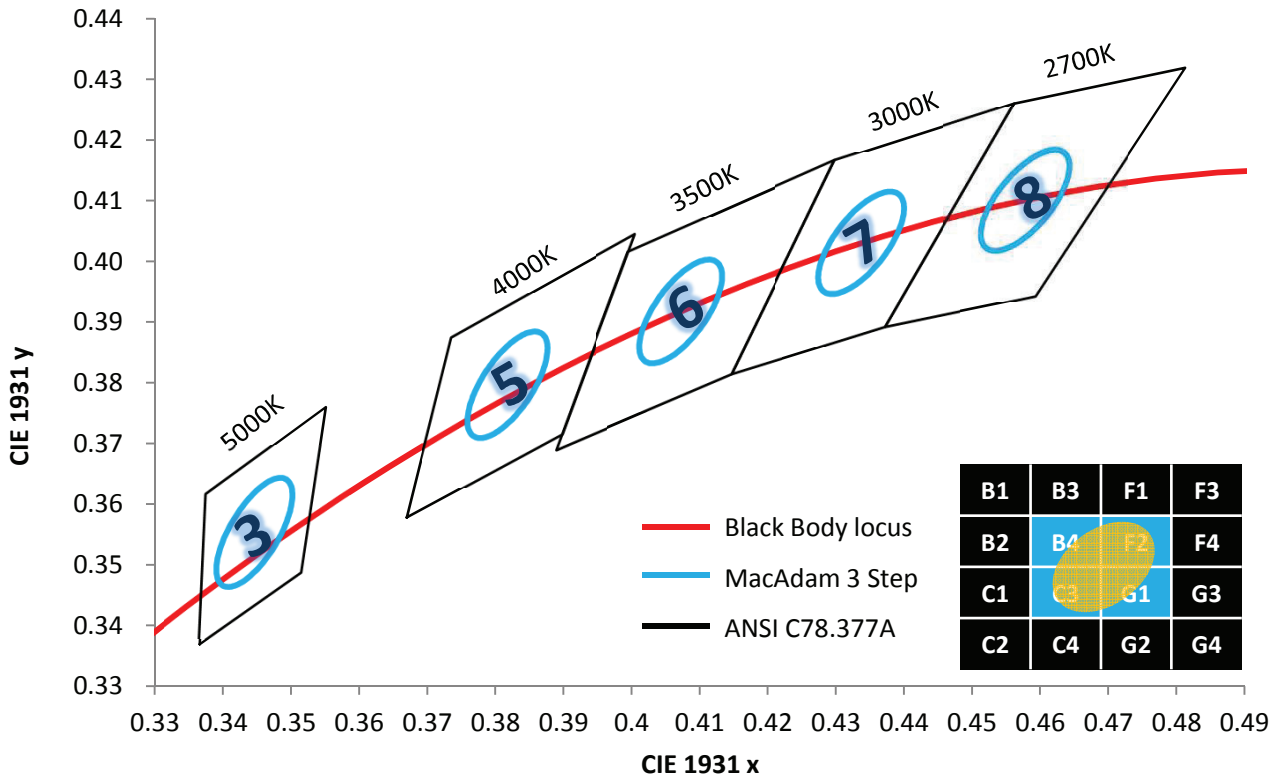
230V

Ra90

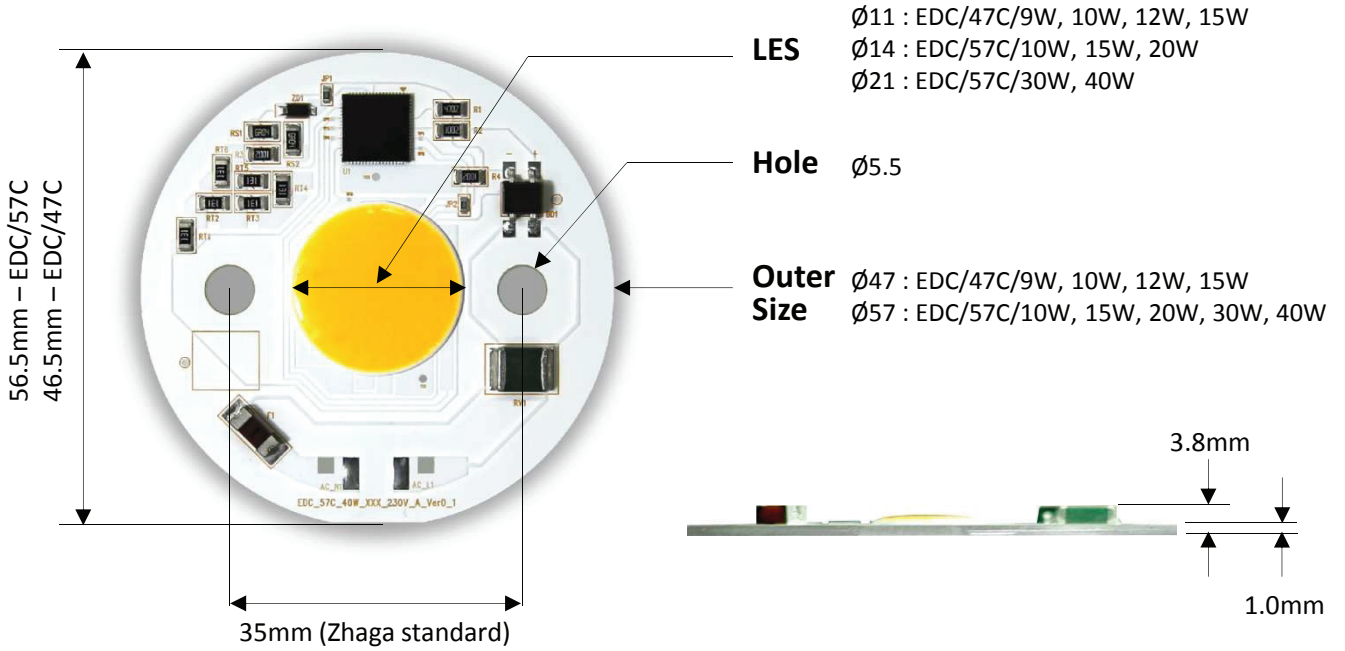
Model No	SIZE [mm]	Power [W]	Lumen Output [lm]	Efficacy [lm/w]	CCT [K]	CRI [Ra]	Color Consistency [SDCM]	Input Voltage[V]
EDC/57C/10W/927/230V/A	Ø57(14)	10	780	78.0	2700	90+	3	230
EDC/57C/10W/930/230V/A	Ø57(14)	10	810	81.0	3000	90+	3	230
EDC/57C/10W/935/230V/A	Ø57(14)	10	830	83.0	3500	90+	3	230
EDC/57C/10W/940/230V/A	Ø57(14)	10	850	85.0	4000	90+	3	230
EDC/57C/10W/950/230V/A	Ø57(14)	10	870	87.0	5000	90+	3	230
EDC/57C/15W/927/230V/A	Ø57(14)	15	1170	78.0	2700	90+	3	230
EDC/57C/15W/930/230V/A	Ø57(14)	15	1215	81.0	3000	90+	3	230
EDC/57C/15W/935/230V/A	Ø57(14)	15	1245	83.0	3500	90+	3	230
EDC/57C/15W/940/230V/A	Ø57(14)	15	1275	85.0	4000	90+	3	230
EDC/57C/15W/950/230V/A	Ø57(14)	15	1305	87.0	5000	90+	3	230
EDC/57C/20W/927/230V/A	Ø57(14)	20	1560	77.0	2700	90+	3	230
EDC/57C/20W/930/230V/A	Ø57(14)	20	1600	80.0	3000	90+	3	230
EDC/57C/20W/935/230V/A	Ø57(14)	20	1640	82.0	3500	90+	3	230
EDC/57C/20W/940/230V/A	Ø57(14)	20	1680	84.0	4000	90+	3	230
EDC/57C/20W/950/230V/A	Ø57(14)	20	1720	86.0	5000	90+	3	230
EDC/57C/30W/927/230V/A	Ø57(21)	30	2340	78.0	2700	90+	3	230
EDC/57C/30W/930/230V/A	Ø57(21)	30	2430	81.0	3000	90+	3	230
EDC/57C/30W/935/230V/A	Ø57(21)	30	2490	83.0	3500	90+	3	230
EDC/57C/30W/940/230V/A	Ø57(21)	30	2550	85.0	4000	90+	3	230
EDC/57C/30W/950/230V/A	Ø57(21)	30	2610	87.0	5000	90+	3	230
EDC/57C/40W/927/230V/A	Ø57(21)	40	3120	78.0	2700	90+	3	230
EDC/57C/40W/930/230V/A	Ø57(21)	40	3200	80.0	3000	90+	3	230
EDC/57C/40W/935/230V/A	Ø57(21)	40	3280	82.0	3500	90+	3	230
EDC/57C/40W/940/230V/A	Ø57(21)	40	3360	84.0	4000	90+	3	230
EDC/57C/40W/950/230V/A	Ø57(21)	40	3440	86.0	5000	90+	3	230

- Note:
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  4. Specifications can be changed without advance notice.
  5. Installation shall follow cautions and guidance that Lumens provides.

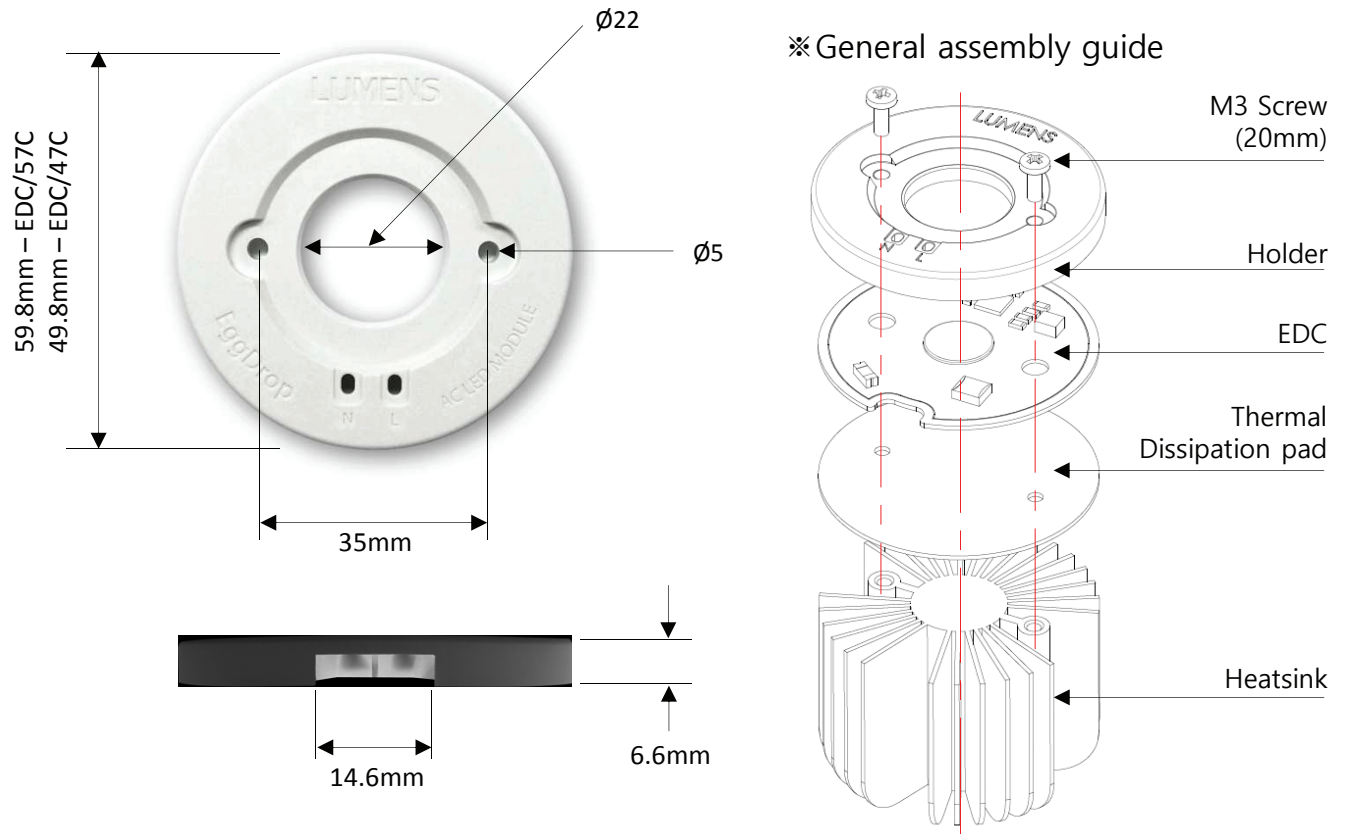
### Chromaticity Binning



### Mechanical Dimension



### Optional Item (Lamp Holder)





## Dimmer Compatibility

### Leading Edge Dimmer

- . Use with most incandescent and magnetic low voltage.
- . Dimming range is typically 100% down to 5% maximum load of 60% of the dimmer rated load.
- . Maximum rated load of each dimmer may vary depending on dimmer model.

- ▶ Example : Fixture rating = 10W  
Dimmer rating = 600W  
Equivalent incandescent load (EIL) factor = 50% (.5)  
 $(600/10) \times .5 = 30$  fixtures per dimmer

#### Lumens Qualified Dimmers Include :

##### Model Numbers :

- ZANO ZGRIDLED
- Jung 225 NV DE
- PEHA 431 HAN LED

\* Lumens most recommended

### Trailing Edge Dimmer

- . Use with most Electronic low voltage
- . Dimming range is typically 100% down to 5% maximum load of 75% of the dimmer rated load.
- . Maximum rated load of each dimmer may vary depending on dimmer model.

- ▶ Example : Fixture rating = 10W  
Dimmer rating = 600W  
Equivalent incandescent load (EIL) factor = 75% (.75)  
 $(600/10) \times .75 = 45$  fixtures per dimmer

#### Lumens Qualified Dimmers Include :

##### Model Numbers :

- ROBUS RLA200DT
- LightwaveRF JSJSLW400WH
- Busch-Jaeger 65234
- Varilight ZOJP250-P
- PEHA 433 HAB
- Jung 243 EX 20W

\* Lumens most recommended