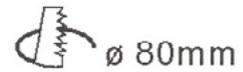
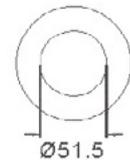
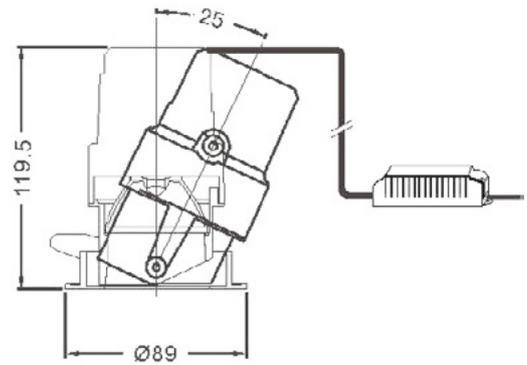


# DARKLIGHT DESIGN

## DARKLIGHT DESIGN JUNO LED RECESSED ADJUSTABLE DOWNLIGHT 0164018FI



\*complete with 500mA dimmable driver

\* can be dimmed via compatible DALI, 0-10v, trailing edge or leading edge drivers. Please specify your preference at the time of ordering.

# DARKLIGHT DESIGN

## DARKLIGHT DESIGN JUNO LED RECESSED ADJUSTABLE DOWNLIGHT 0164018FI

### LED 15 °

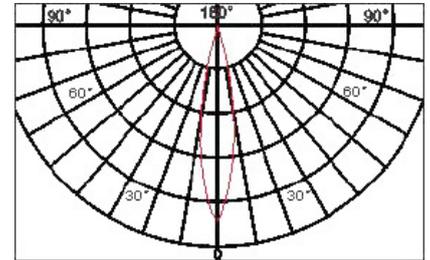
Power	8W	8W
CCT	2700K	3000K
CRI	=80(min)	=80(min)
Output V.	18V DC	18V DC
I	350mA	350mA
Efficacy	53lm/W	55lm/W

### 8W 2700K

Lux			
h(m)	d(cm)	Em	Emax
1	28	1540	2650
2	56	385	697
3	85	171	309

### 8W 3000K

Lux			
h(m)	d(cm)	Em	Emax
1	25	2077	2730
2	52	519	727
3	78	230	322



Fitting: Die-cast aluminium ADC12  
Ambient temperature: -15 °C~40 °C  
QTY/CTN: 27 PCS/CTN  
GW: 13.4kg/CTN  
CTN size: 420x420x465mm

### LED 25 °

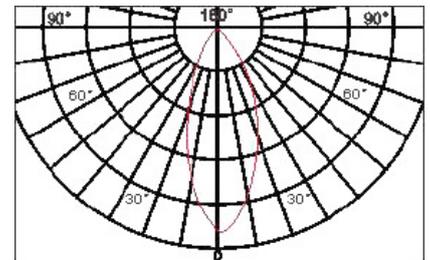
Power	8W	8W
CCT	2700K	3000K
CRI	=80(min)	=80(min)
Output V.	18V DC	18V DC
I	350mA	350mA
Efficacy	45lm/W	48lm/W

### 8W 2700K

Lux			
h(m)	d(cm)	Em	Emax
1	46	745	1140
2	93	186	295
3	139	82	130

### 8W 3000K

Lux			
h(m)	d(cm)	Em	Emax
1	47	789	1210
2	95	197	315
3	143	87	139



Fitting: Die-cast aluminium ADC12  
Ambient temperature: -15 °C~40 °C  
QTY/CTN: 27 PCS/CTN  
GW: 13.4kg/CTN  
CTN size: 420x420x465mm

### LED 35 °

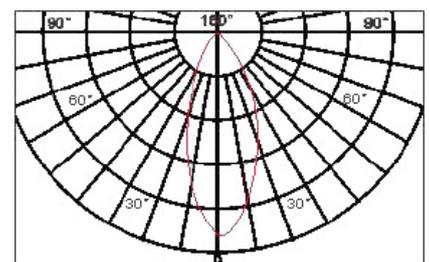
Power	8W	8W
CCT	2700K	3000K
CRI	=80(min)	=80(min)
Output V.	18V DC	18V DC
I	350mA	350mA
Efficacy	45lm/W	46lm/W

### 8W 2700K

Lux			
h(m)	d(cm)	Em	Emax
1	61	585	768
2	121	146	192
3	183	62	85

### 8W 3000K

Lux			
h(m)	d(cm)	Em	Emax
1	60	597	784
2	120	149	201
3	181	66	88



Fitting: Die-cast aluminium ADC12  
Ambient temperature: -15 °C~40 °C  
QTY/CTN: 27 PCS/CTN  
GW: 13.4kg/CTN  
CTN size: 420x420x465mm

All the information in this document is provided in good faith. Darklight Design will not be held responsible for any losses due to inaccuracies within this document.

# DARKLIGHT DESIGN

## DARKLIGHT DESIGN JUNO LED RECESSED ADJUSTABLE DOWNLIGHT 0164018FI

### LED 15 °

Power	12W	12W
CCT	2700K	3000K
CRI	=80(min)	=80(min)
Output V.	18V DC	18V DC
I	500mA	500mA
Efficacy	48lm/W	48lm/W

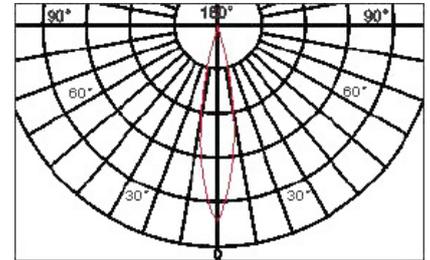
Fitting: Die-cast aluminium ADC12  
Ambient temperature: -15 °C~40 °C  
QTY/CTN: 27 PCS/CTN  
GW: 13.4kg/CTN  
CTN size: 420x420x465mm

### 12W 2700K

Lux				
h(m)	d(cm)	Em	Emax	
1	26	2615	3630	
2	52	653	936	
3	82	290	415	

### 12W 3000K

Lux				
h(m)	d(cm)	Em	Emax	
1	26	2667	3750	
2	53	667	982	
3	89	296	436	



### LED 25 °

Power	12W	12W
CCT	2700K	3000K
CRI	=80(min)	=80(min)
Output V.	18V DC	18V DC
I	500mA	500mA
Efficacy	40lm/W	41lm/W

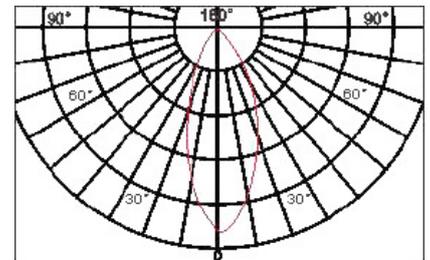
Fitting: Die-cast aluminium ADC12  
Ambient temperature: -15 °C~40 °C  
QTY/CTN: 27 PCS/CTN  
GW: 13.4kg/CTN  
CTN size: 420x420x465mm

### 12W 2700K

Lux				
h(m)	d(cm)	Em	Emax	
1	46	1007	1540	
2	92	251	395	
3	138	111	174	

### 12W 3000K

Lux				
h(m)	d(cm)	Em	Emax	
1	48	1016	1610	
2	96	254	413	
3	144	112	182	



### LED 35 °

Power	12W	12W
CCT	2700K	3000K
CRI	=80(min)	=80(min)
Output V.	18V DC	18V DC
I	500mA	500mA
Efficacy	40lm/W	41lm/W

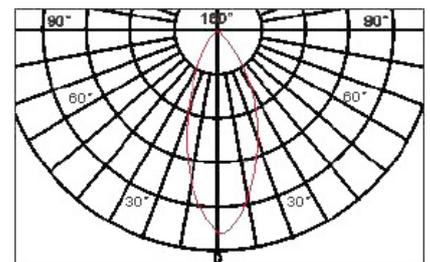
Fitting: Die-cast aluminium ADC12  
Ambient temperature: -15 °C~40 °C  
QTY/CTN: 27 PCS/CTN  
GW: 13.4kg/CTN  
CTN size: 420x420x465mm

### 12W 2700K

Lux				
h(m)	d(cm)	Em	Emax	
1	62	773	1100	
2	122	194	275	
3	184	86	122	

### 12W 3000K

Lux				
h(m)	d(cm)	Em	Emax	
1	61	789	1130	
2	123	197	285	
3	185	87	126	



All the information in this document is provided in good faith. Darklight Design will not be held responsible for any losses due to inaccuracies within this document.

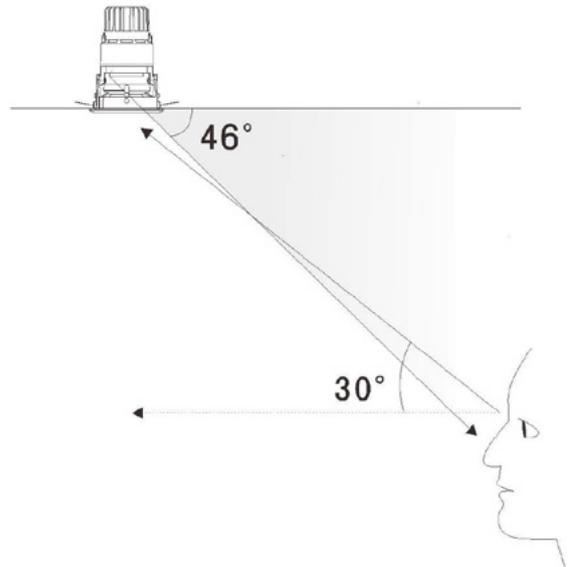
# DARKLIGHT DESIGN

## DARKLIGHT DESIGN JUNO LED RECESSED ADJUSTABLE DOWNLIGHT 0164018FI

### GLARE CONTROL

As shown in the diagram on the right, the glare-cut reaches  $46^\circ$  MAX, offering good glare control. The MAX cut-off which human can bear is  $30^\circ$  MAX at horizontal. Otherwise, glare is visible.

The glare-cut off is over  $30^\circ$ . The glare is consequently well kept beyond the glare area.

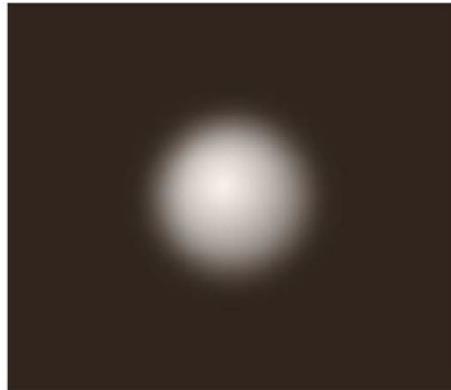


### ACCURATE LIGHT DISTRIBUTION AND CONTROL

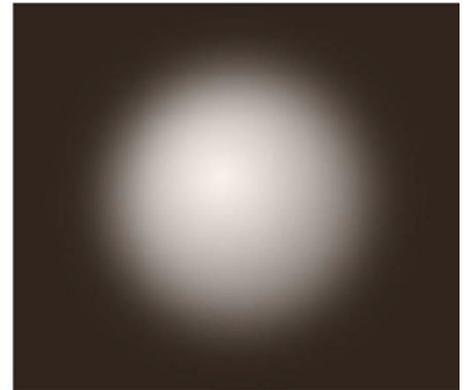
Available with beam angles at  $15^\circ$ ,  $25^\circ$  or  $35^\circ$  to cater for differing requirements.



$15^\circ$



$25^\circ$



$35^\circ$

All the information in this document is provided in good faith. Darklight Design will not be held responsible for any losses due to inaccuracies within this document.

# DARKLIGHT DESIGN

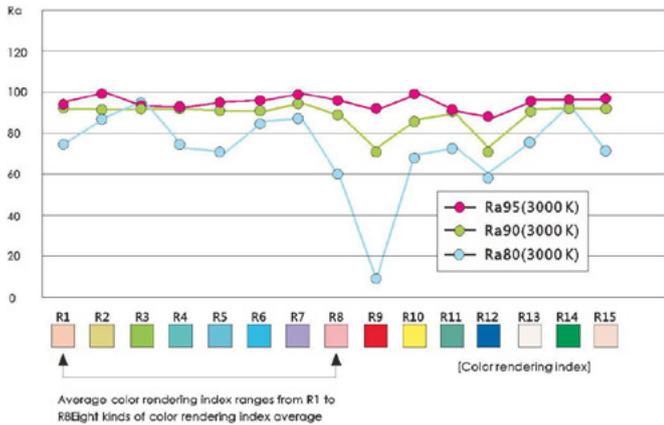
## DARKLIGHT DESIGN JUNO LED RECESSED ADJUSTABLE DOWNLIGHT 0164018FI

### HIGH CRI

Utilizing a world top class LED chip which creates high color rendering with RA > 90 and makes the subject natural and fresh in a way that few other LED products can do at present.

Lighting in high power & high CRI results in higher definition of the colour and detail of the subject. Subsequently this fitting is an ideal lighting solution for both the retail sector and public spaces.

This fitting is available in CRI 80 or CRI 90.



### AVERAGE RA EVALUATION INDEX

Ra Evaluation Index is applied to estimate the color rendering index of the lighting product to see the reflection level of natural color compared to those by conventional lightings.

Average color rendering index ranges from R1 to R8.

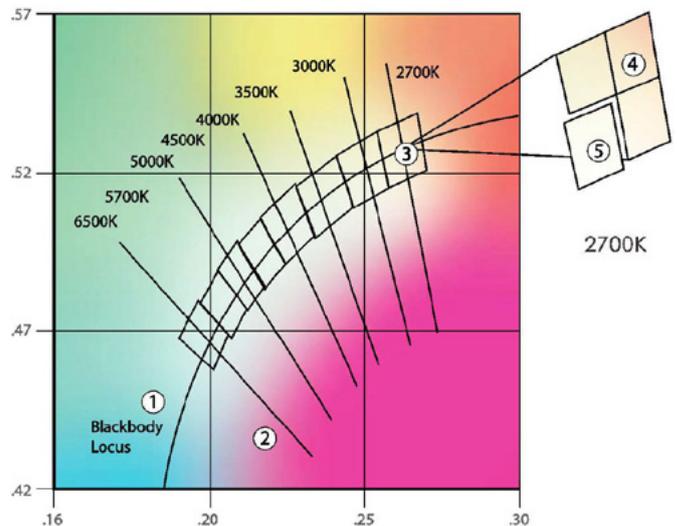
All the information in this document is provided in good faith. Darklight Design will not be held responsible for any losses due to inaccuracies within this document.

# DARKLIGHT DESIGN

## DARKLIGHT DESIGN JUNO LED RECESSED ADJUSTABLE DOWNLIGHT 0164018FI

### RA CONSISTENCY

The requirement for high Ra consistency for the quality lighting and also faces the phenomenon of inconsistency in terms of Ra market. It is a headache of designers and the consumers. For this purpose, our LED chips are sourced at a high consistency from the quality chips manufacturers. All LED chips are sorted out, stored and processed in strict and scientific criterion to guarantee the LED chip in consistency in one batch.



When LEDs are manufactured, the most challenging part is producing consistent and precise white color. Binning is the process of sorting the white LEDs into groups of similar white colors. The regulation of this process is outlined by the ANSI standards for tolerances of white color variations to fit within a color temperature group, or bin. Some LED manufacturers have adapted a more stringent process of sorting called micro-bins which allows for much smaller white color variations.

Our LEDs exceed the ANSI binning standards, giving our fittings optimal color matching. Definition of 'Binning' - when white LEDs are created, whether they be on the warm or cool end of the spectrum, there are always slight inconsistencies with regards to specific color temperatures.

- The arced black line in the graph represents the white color spectrum.
- These long intersecting lines represent the range, from one end of the line to the other, of variation in color for each corresponding color temperature.
- In order to keep the range of each temperature as close to the same color as possible, ANSI created tolerance zones. Only the LEDs that fall into this range are used for that particular color temperature, these are referred to as "bins".
- As you can see this bin still has plainly visible variations throughout. ANSI tolerance zones are adjacent to account for the challenges around manufacturing LED chips consistently.
- Once divided into smaller bins, the differences in color are much less, allowing for minimal variation when two or more LEDs are used together.

Although there is a cost associated with consistency, various LED chip manufacturers now make smaller bins available.

Micro-bin sizes vary between chip manufacturers and while micro-bins allow for better consistency by batch, there is commonly a color variation between batches.

All the information in this document is provided in good faith. Darklight Design will not be held responsible for any losses due to inaccuracies within this document.