

# Unilux IP65 High Bay -200W

Authorized Licensee for TOSHIBA trademark



## 1. Specification:

### A. General Data

<b>Model</b>	4000K 60D	4000K 90D	4000K 110D	5000K 110D
<b>P/N</b>	AELL-HB4220060 A013	AELL-HB4220090A 013	AELL-HB42200A1A 013	AELL-HB52200A1A 013
<b>Product code</b>	TBD			
<b>Rated Voltage</b>	100-240 VAC			
<b>Frequency</b>	50/60 Hz			
<b>Rated Wattage</b>	200.0 W			
<b>Deviation Tolerance of Wattage</b>	±10 %			
<b>Power Factor*</b>	0.95(typical)			
<b>Rated Input Current</b>	1.82 A (110V) 0.91 A (220V)			
<b>Maximum Input Current</b>	2.2 A			
<b>Start On</b>	<0.5S			
<b>Warm-up time up to 60% of the full light output</b>	<1S			
<b>Dimmable</b>	NO			
<b>Beam Angle</b>	60°	90°	110°	110°
<b>Unified Glare Rating Room dimensions of 4H/8H</b>	<22	<25	<30	<30
<b>Peak luminous intensity (cd)</b>	29000	15900	12300	12300
<b>R9 CRI</b>	>0	>0	>0	>0
<b>Survival factor</b>	>0.9	>0.9	>0.9	>0.9

<b>Lumen Maintenance factor</b>	>96%	>96%	>96%	>96%
<b>Displacement factor (cos φ1)</b>	≧ 0.9	≧ 0.9	≧ 0.9	≧ 0.9
<b>Stroboscopic effect metric (SVM)**</b>	0.00	0.00	0.00	0.00
<b>Flicker metric (PstLM)**</b>	0.00	0.00	0.00	0.00
<b>Energy Efficiency Class(EEC)</b>	D	D	D	D
<b>Safety requirements</b>	CE			
<b>Applicable Environments</b>	IP65 / IK08			
<b>Type of Installation</b>	Suspension			
<b>Exchangeable LED Module</b>	NO			
<b>Photobiological Group</b>	RG1			
<b>Safety class</b>	Class I			

\* PF tolerance +/- 5%

\*\*Outdoor product belongs to the (EU) 2019/2020 Appendix III exemption light source item.

### B. Light Data

<b>Color</b>	Natural White			Cool White
<b>Color Temperature (CCT)</b>	4000K			5000K
<b>Total luminous flux*</b>	28,000 lm			
<b>Useful luminous flux*</b>	<b>24,500 lm</b>	<b>26,500 lm</b>	<b>26,300 lm</b>	<b>26,300 lm</b>
<b>Color Rendering Index*</b>	80			
<b>Efficacy (Total)*</b>	140 lm/W			
<b>Efficacy (Useful)*</b>	122.5 lm/W	132.5 lm/W	131.5 lm/W	131.5 lm/W
<b>Color Consistency**</b>	6 Step MacAdam Ellipse (6 SDCM)			

\* tolerance +/- 10% \*\* 4000K center point (0.3818, 0.3797), 5000K center point(0.3447, 0.3553)

### C. Lifetime

(Supplied Voltage: AC230V; Ambient Temperature: 25°C)

<b>Lumen Maintenance Factor</b>	70% of the rated lifetime
<b>Rated Lifetime – L<sub>70B50</sub></b>	50,000 hrs
<b>Switching Cycles</b>	≧ 25,000

### D. Temperature Operation

<b>Normal operation temperature</b>	-10°C ~ 40°C
<b>Relative Humidity</b>	10% ~ 90%

E. Geometric Data

<b>Model</b>	Unilux IP65 High bay -200W
<b>Maximum length</b>	φ364 mm ± 5 mm
<b>Maximum width</b>	φ364 mm ± 5 mm
<b>Maximum height</b>	191 mm ± 5 mm
<b>Mass</b>	3200 g ± 5%

F. Environmental relevant materials

<b>Mercury (Hg)</b>	Comply with RoHS Directive 2011/65/EU
<b>Lead (Pb)</b>	
<b>Cadmium(Cd)</b>	
<b>Hexavalent Chromium(Cr6+)</b>	
<b>Polybrominated Biphenyls(PBBs)</b>	
<b>Polybrominated Diphenyl Ethers(PBDEs)</b>	
<b>Bis (2-ethylhexyl) phthalate(DEHP)</b>	
<b>Butyl benzyl phthalate(BBP)</b>	
<b>Dibutyl phthalate(DBP)</b>	
<b>Diisobutyl phthalate(DIBP)</b>	

**2. Outline Drawing**

Unit : mm

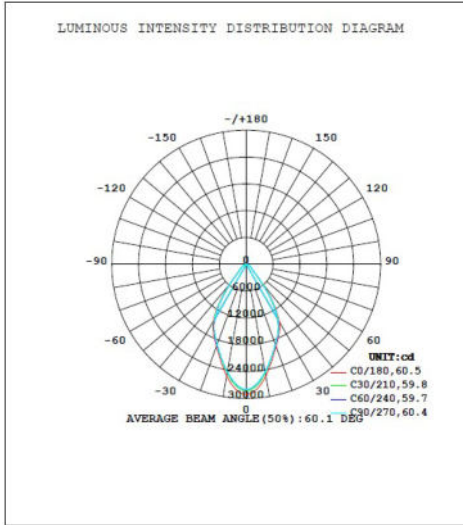


**Material Information**

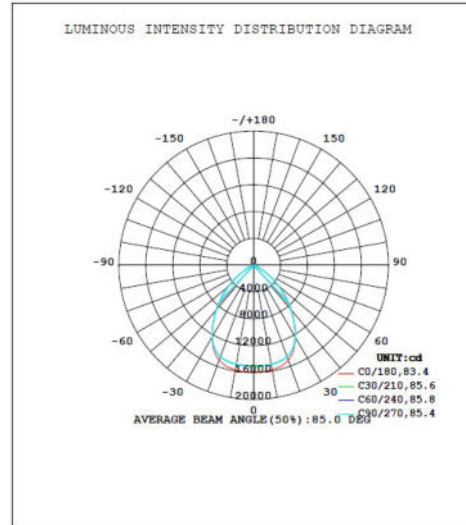
- |                    |          |
|--------------------|----------|
| 1. Driver :        | Aluminum |
| 2. Heat sink:      | Aluminum |
| 3. MCPCB :         | Aluminum |
| 4. Gasket          | Silicone |
| 5. Plastics washer | PC       |
| 6. Optical lens:   | PC       |

### 3. Light Distribution Curve

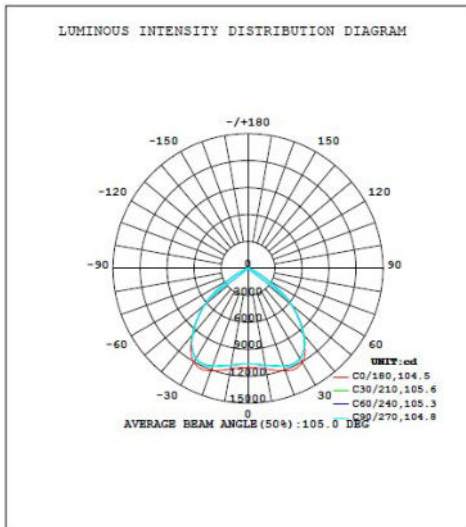
200W- 60D



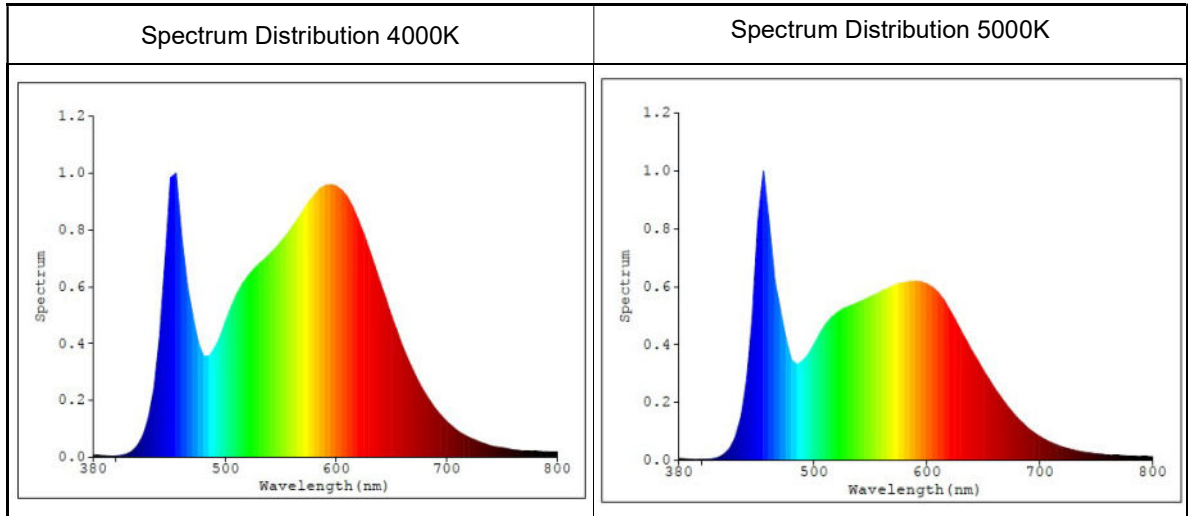
200W-90D



200W- 110D

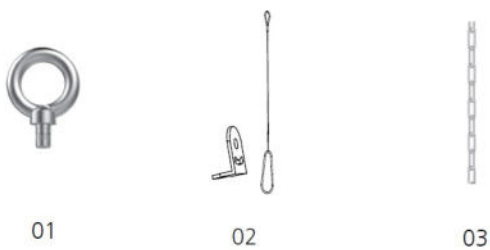


**4. Spectrum Distribution**



**5. Accessory**

Round hook: M10, Bracket: 39.6\*30\*18.5mm, Safety rope: 1M  $\Phi$ 1.5mm



**Mounting Accessories**

Accessories	IMAGE	DESIGNTION	MATERIAL	QUANTITY	ACCESSORY USE
Standard	01	Round hook	Stainless steel	1PC	Used for suspending.
Standard	02	Safety rope Bracket	Stainless steel SPCC	1PC	Used for suspending.
Optional	03	Chain	Stainless steel	1PC	Used for suspending.

## 6. Installation

Junction Box is not provide.

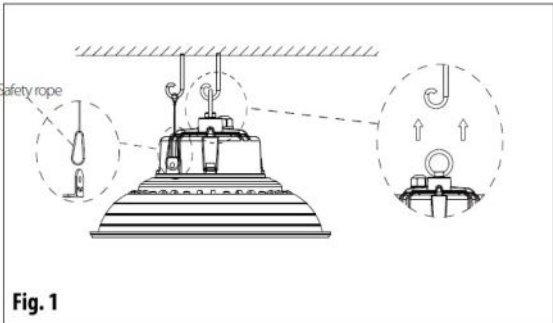
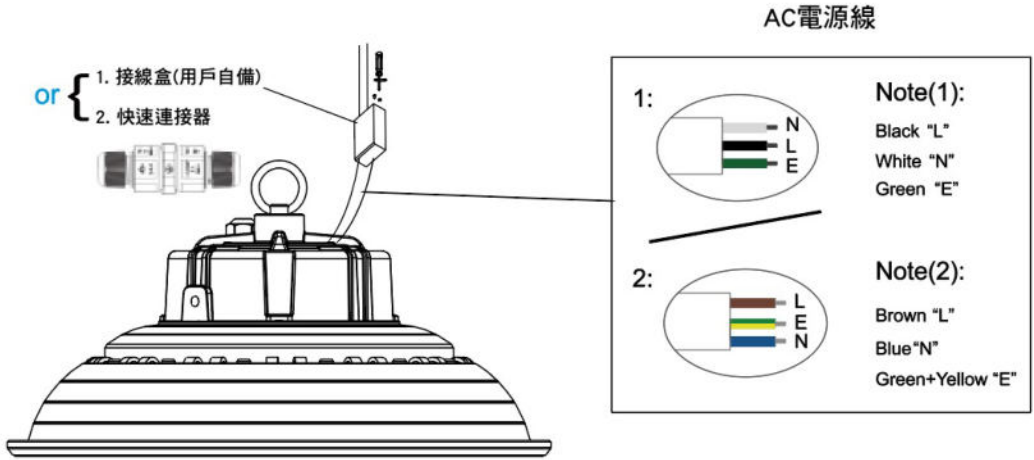


Fig. 1

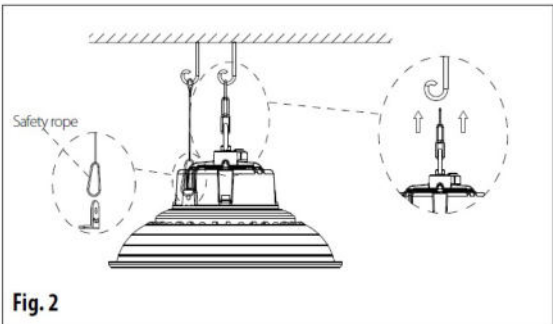


Fig. 2

### 1

#### Round hook

- A. First fix two hooks to the wall.
- B. Fix the lamp by connecting the lifting ring on the power supply through the hook.
- C. Fix the safety rope by connecting the hole bracket on the power supply through the hook.
- D. Connect the power cord, pay attention to distinguish the live, neutral and ground of the power supply.
- E. Press the power cord to illuminate the light to ensure the light is on.

### 2

#### Chain

- A. First fix two hooks to the wall.
- B. Fix the chain by connecting the lifting ring on the power supply through the hook.
- C. Fix the safety rope by connecting the hole bracket on the power supply through the hook.
- D. Connect the power cord, pay attention to distinguish the live, neutral and ground of the power supply.
- E. Press the power cord to illuminate the light to ensure the light is on.

## 7. Warnings

- Before replacing, turn off power and let high bay cool to avoid electrical shock or burn.
- Do not touch electronic components, electronic components maybe under high voltage.
- Do not stare into LED light beam
- The luminaire shall be installed by a qualified electrician and wired in accordance with the latest IEE electrical regulations or the national requirements.

## 8. Cautions

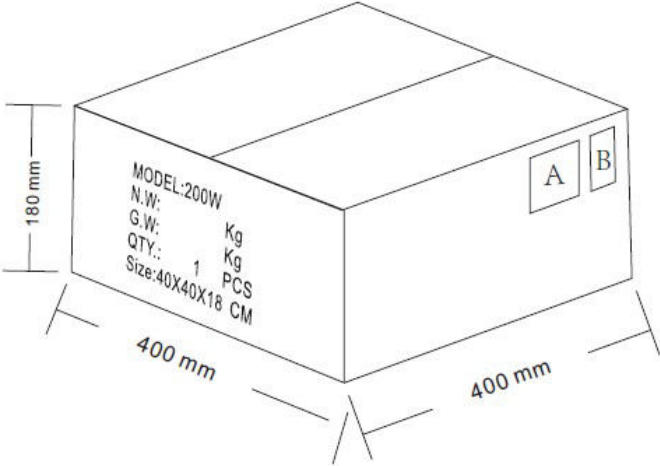
Only to apply in dry or damp locations and most of open fixtures with lamp-holders that offer sufficient space (10 mm free air space). Not intended for use with emergency light fixtures or exit lights.

## 9. Notes

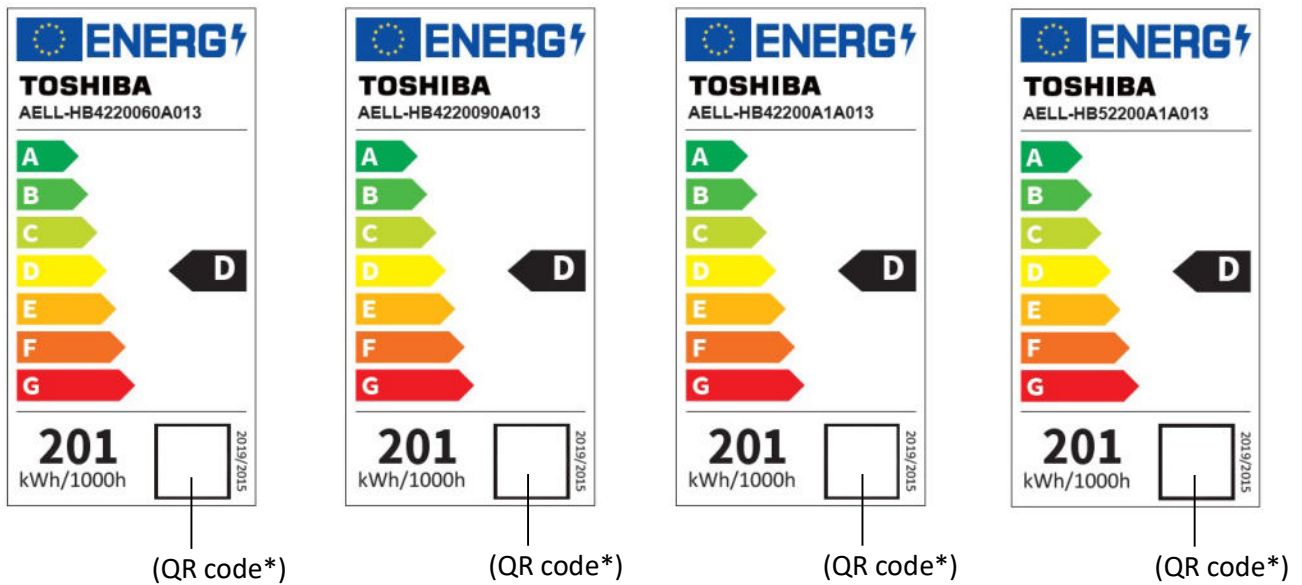
All characteristics are estimated at room temperature (25°C), free air burning, base up burning position and at rated voltage. In view of the complex manufacturing process for light above for the technical LED parameters are merely statistical values that do not necessarily correspond to the actual technic individual products may vary from the typical values.

## 10. Logistic information

Model	4000K 60D	4000K 90D	4000K 110D	5000K 110D
P/N	AELL-HB4220060 A013	AELL-HB4220090 A013	AELL-HB42200A1 A013	AELL-HB52200A1 A013
Pieces per pack	N/A			
EAN code on pack	N/A			
Size of pack	N/A			
Weight per pack (G.W)	N/A			
Packs per inner box	N/A			
EAN code on inner box	N/A			
ITF code on inner box	N/A			
Size of inner box	N/A			
Weight per inner box(G.W)	N/A			
Packs per outer box	1			

<b>EAN code on outer box</b>	4711112383115	4711112383122	4711112383139	4711112383146
<b>ITF code on outer box</b>	14711112383112	14711112383129	14711112383136	14711112383143
<b>Size of outer box</b>	450x450x200 mm			
<b>Weight per outer box(G.W)</b>	4.4			
<b>Packing Photograph</b>	 <p>A : Product label B : Erp label</p>			

**11. ERP Label**



\*Suppliers have to use the EPREL official website to generate a QR-code by a pre-registration.



**12. Conformity**

<b>2014/35/EU; Low Voltage Directive</b>	EN 60598-2-1:1989 ; EN 60598-1: 2015+A1:2018 ; EN 62471:2008 ; EN 62493:2015 ; EN 62031:2008+A1:2013+A2:2015
<b>2014/30/EU; EMC Directive</b>	EN 55015: 2013+A1:2015 、 EN 61000-3-2:2014 、 EN 61000-3-3: 2013 EN 61547:2009
<b>2009/125/EC; ErP Directive</b>	(EU) 2019/2015 、 (EU) 2019/2020 、 (EU) 2021/340 、 (EU) 2021/341
<b>2011/65/EU+(EU)2015/863; RoHS Directive</b>	EN 50581: 2012

**13. Applicable countries**

Albania ,Austria , Belgium , Bulgaria , Croatia , Cyprus , Czech , Denmark , Estonia , Finland , France , Georgia  
Germany ,Greece , Iceland , Ireland , Italy , Luxembourg , Malta , Morocco , Netherland , Norway , Portugal  
Romania ,Serbia , Spain , Sweden , Switzerland , Tunisia ,U.K

Note : The requirement of each country will be reflected to the product specifications, when the products will be shipped to such country.

**14. Manufacturer and Toshiba brand licensee**

EPILEDS TECHNOLOGIES, INC.