



PRODUCT Manual

Docu. No.

Product Name	LED Retrofit Kit	Date	2015.11.26.
Model Name	YLRK120_HBE_Engine-130W	Rev. No.	1.0
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MODEL : YLRK120_HBE_Engine-130W

YL Co., Ltd			
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	SALES	QA	
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1. Applications

- 1) This Engine is LED Retrofit Kit for HID Fixtures.
Specially, it is suitable for replacing 250 ~ 400W HID fixture lamps.
- 2) This Specification can be modified by agreement with users
- 3) This Specification can't be changed arbitrarily.

2. Key Features

- 1) Variable Wattage LED retrofit kit : 60, 100, 120W (up to 130W)
- 2) 120° standard beam angle with other angle options available via optic lens
- 3) Customized dimming via mobile app through bluetooth communication
- 4) Instant Start
- 5) Using COB Module of Citizen



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3. Product Image



Dimensions (LxWxH):
7.25" x 5" x 2.5"





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4. Product Specification

Model	YLRK120_HBE_Engine-130W	비고
Rated Voltage(V)	39.5	
Rated Current(A)	3.3	
Wattage(W)	130	
Total Lumen	>13000	
Efficacy(lm/W)	>100	
CCT(K)	3000/4000/5000	
CRI(Ra)	>80	
Life Time(Hours)	>30,000	
Beam Angle(°)	120	
Dimming	Programmable via Mobile App.	
ta(°F)	-4 ~ 140	
tc(°F)	Max 176	
Size(inch)	7.25" x 5" x2.5"(LxWxH)	
Weight(g)	390	
Origin	KOREA	

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5. Light Engine : CITILED CLU034-1206B8



2. Performance Characteristics

2-1. Electro Optical Characteristics

Productcode	Nominal CCT	CRI (Ra)		Luminous flux (lm)		Efficacy (lm/W)		Forward Current (mA)	Voltage (V)			Thermal Resistance R _{th} c (C/W)
		Min	Typ.	Min	Typ.	Min	Typ.		Min	Typ.	Max	
CLU034-1206B8-273M1A2	2700K	80	-	2,099	2,385	124	540	32.8	35.7	38.5	0.98	
CLU034-1206B8-303M1A2	3000K	80	-	2,199	2,468	130	540	32.8	35.7	38.5	0.98	
CLU034-1206B8-353M1A2	3500K	80	-	2,255	2,502	133	540	32.8	35.7	38.5	0.98	
CLU034-1206B8-403M1A2	4000K	80	-	2,301	2,615	136	540	32.8	35.7	38.5	0.98	
CLU034-1206B8-503M1A2	5000K	80	-	2,346	2,666	138	540	32.8	35.7	38.5	0.98	
CLU034-1206B8-503M1C8	5000K	70	-	2,352	2,673	139	540	32.8	35.7	38.5	0.98	
CLU034-1206B8-40A17C8	4000K	70	-	2,462	2,798	145	540	32.8	35.7	38.5	0.98	
CLU034-1206B8-50A17C8	5000K	70	-	2,492	2,832	147	540	32.8	35.7	38.5	0.98	

Notes :

1. Citizen Electronics maintains forward voltage +/-2%, luminous flux +/-10%, chromaticity (x, y) +/-0.005 and Ra +/-1.

2-2. Absolute Maximum Ratings

PARAMETER	Symbol	Rating	
Input Power (W)	P ₁	44.6	*1
Forward Current (mA)	I _f	1080	
Minimum Current (mA)	I _{f min}	30	
Reverse Current (mA)	I _r	1	
Operating Temperature (C)	T _{op}	-30 ~ +85	
Storage Temperature (C)	T _{st}	-40 ~ +100	
Case Temperature (C)	T _c	100	*2
Junction Temperature (C)	T _j	140	*3

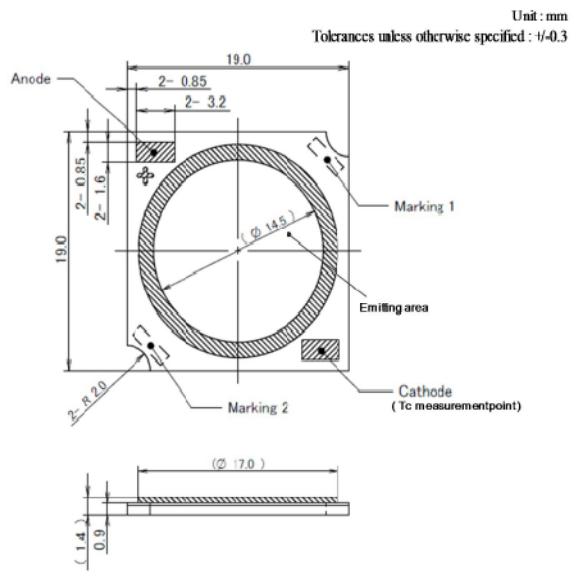
*1. Input power and forward current are the values when the LED is used within the range of the derating curve in this data sheet.

*2. Refer to 3. Outline drawing for T_c measurement point.

*3. D.C. Current : T_j = T_c + R_{j-c} x P₁

3. Mechanical Dimensions

Figure 1. Outline drawing - Marking



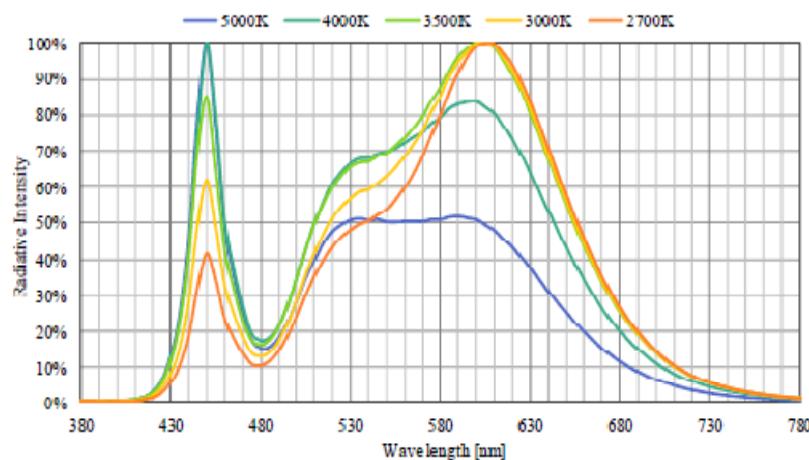
Marking 1 : SerialNo.

Marking 2 : B 12 06 ***

CCT
 CRI
 Die count in parallel
 Die count in series

4-2. Optical Characteristics

Spectrum : CRI(Ra) 80Min.



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6. Precautions

- Please be careful not to go into shock silicone molding parts of COB
- Do not give a shock to the product After removing the product from the box Do not nested among products
- Do not touch on silicon molding area of COB. Because of this, Gold wire in COB could be broken
- Don't connect to the AC power directly. This is DC power supply products.

Because of this, This product may be damaged or brokened.

- If physical impact is applied from the outside, this may bring to severe damage to the product
- Precautions in Use
 - Use according to product specification
 - If you watch the lamp directly, this could be damage on your eyes
 - Because of performance tolerance, You can feel some difference in color, luminance etc



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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Modifications made to the product, unless expressly approved by YL Co., Ltd, could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.