



港照照明科技有限公司
KONG LIGHTING TECHNOLOGY LTD

SPECIFICATION FOR KONGLIGHTING LED LAMP

KONGLIGHTING

Document No. : SPC/ KL-5FAWC7L30-503

KONGLIGHTING

Model No. : KL-5FAWC7L30-503

Sample No. : KL-AW007

Customer Part No.:

Rev. No. : 01

Date: 2011-07-28


Description:

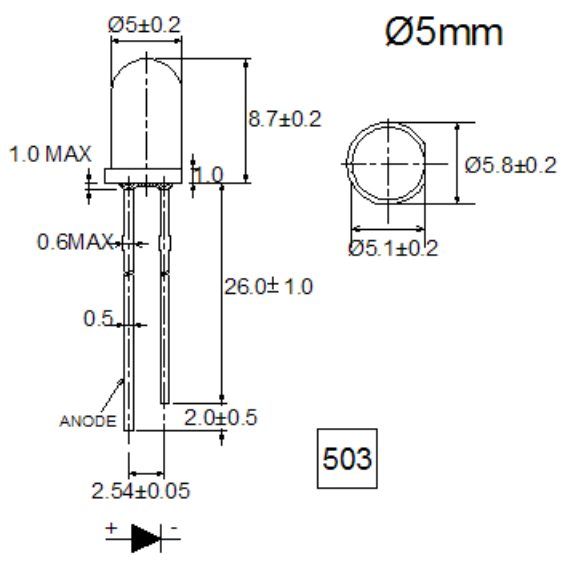

5mm Round LED Lamp in Long-lead Flash(White) Color with Water Transparent Lens

Dice Material: InGaN

Formal Specification



Approved By Customer	Confirmed By KONGLIGHTING
	

Package Outline	Features
	High Luminous Intensity Output Flash(White) Color LED Lamp
	Chip Technology-- InGaN
	Standard 5mm Water Clear Packages
	Viewing Angle 30 Degree (Reference)
	Picture 

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Absolute maximum Rating	Unit
Forward Current	I_F	20	mA
Peak Forward Current*	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	90	mW
Operation Temperature	T_{opr}	-30 ~ +80	°C
Storage Temperature	T_{stg}	-40 ~ +100	°C
Lead Soldering Temperature	T_{sol}	260°C for 5sec Max	

Where pulse width ≤ 0.1 msec, duty cycle $\leq 1/10$

Typical Electrical & Optical Characteristics at Ta = 25°C

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	I_v	$I_F = 20$ mA	3300	5000	--	mcd
Forward Voltage	V_F	$I_F = 20$ mA	--	3.5	4.5	V
Reverse Current	I_R	$V_R = 5$ V	---	---	10	μ A
Chromaticity Coordinates	x	$I_F = 20$ mA	---	0.28	---	---
	y	$I_F = 20$ mA	---	0.28	---	---
50% Power Angle	$2\theta_{\frac{1}{2}}$	$I_F = 20$ mA	---	30	---	deg

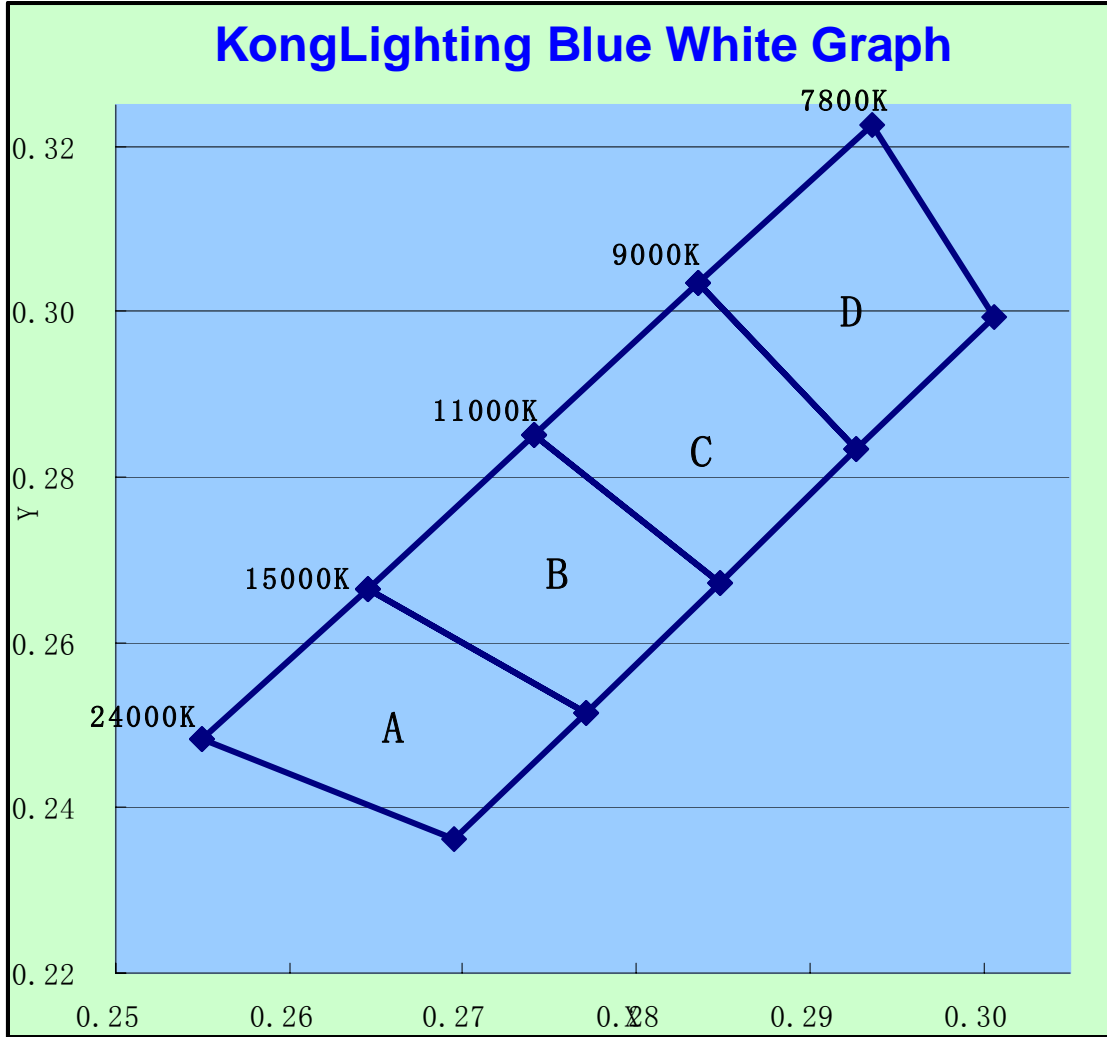
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Luminous Intensity Bin Table (IF = 20mA):

Rank Name	Min (mcd)	Max (mcd)
L	3300	5000
M	5000	7500

*Tolerance for each bin limit is $\pm 15\%$

Color Bin Table (IF=20mA):

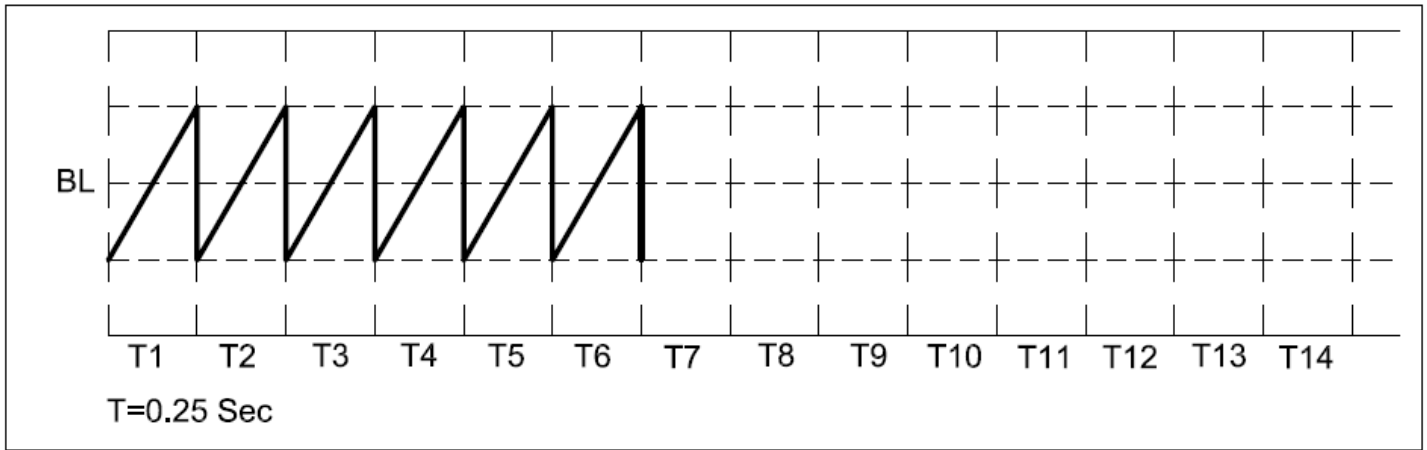


CA	X1	Y1	X2	Y2	X3	Y3	X4	Y4
A	0.255	0.2482	0.2645	0.2665	0.2771	0.2514	0.2695	0.2361
B	0.2645	0.2665	0.2741	0.285	0.2848	0.2672	0.2771	0.2514
C	0.2741	0.285	0.2836	0.3034	0.2927	0.2833	0.2848	0.2672
D	0.2836	0.3034	0.2936	0.3227	0.3006	0.2994	0.2927	0.2833

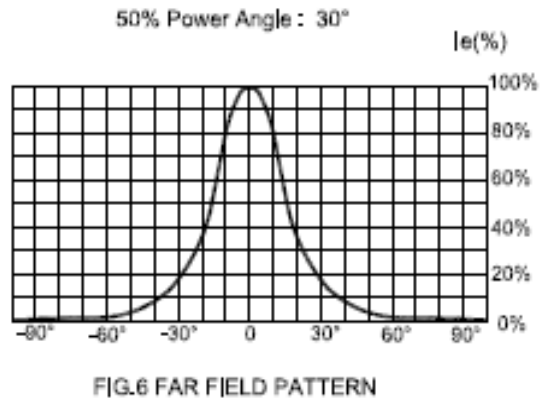
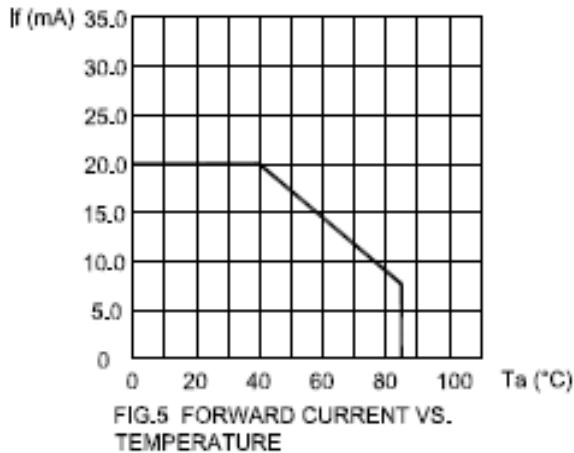
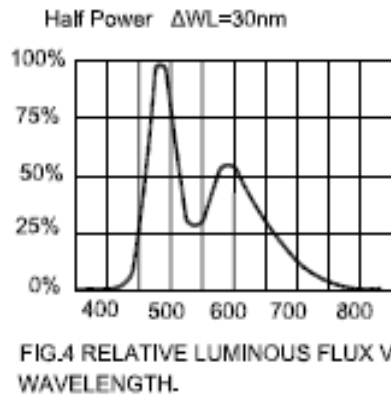
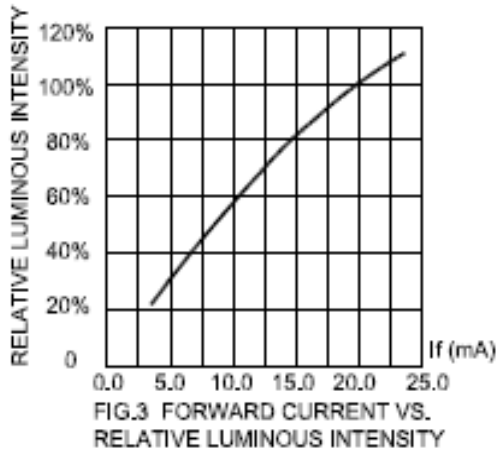
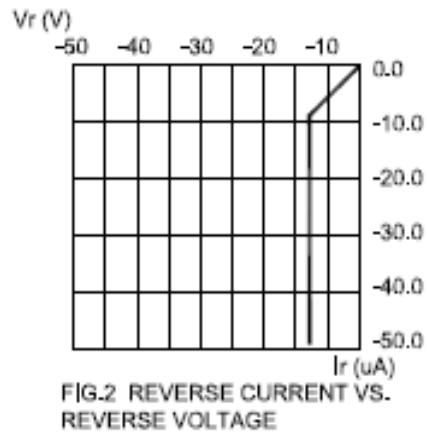
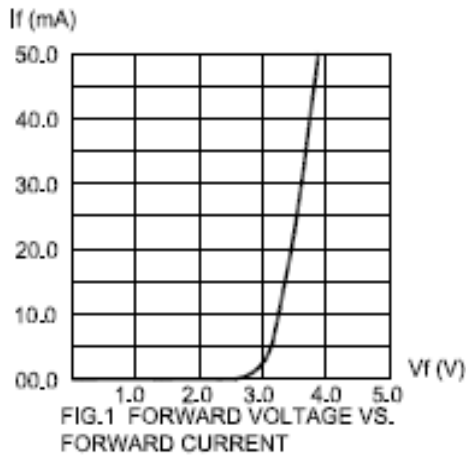
*Tolerance for each bin limit is ± 0.01

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The LEDs Output Diagram

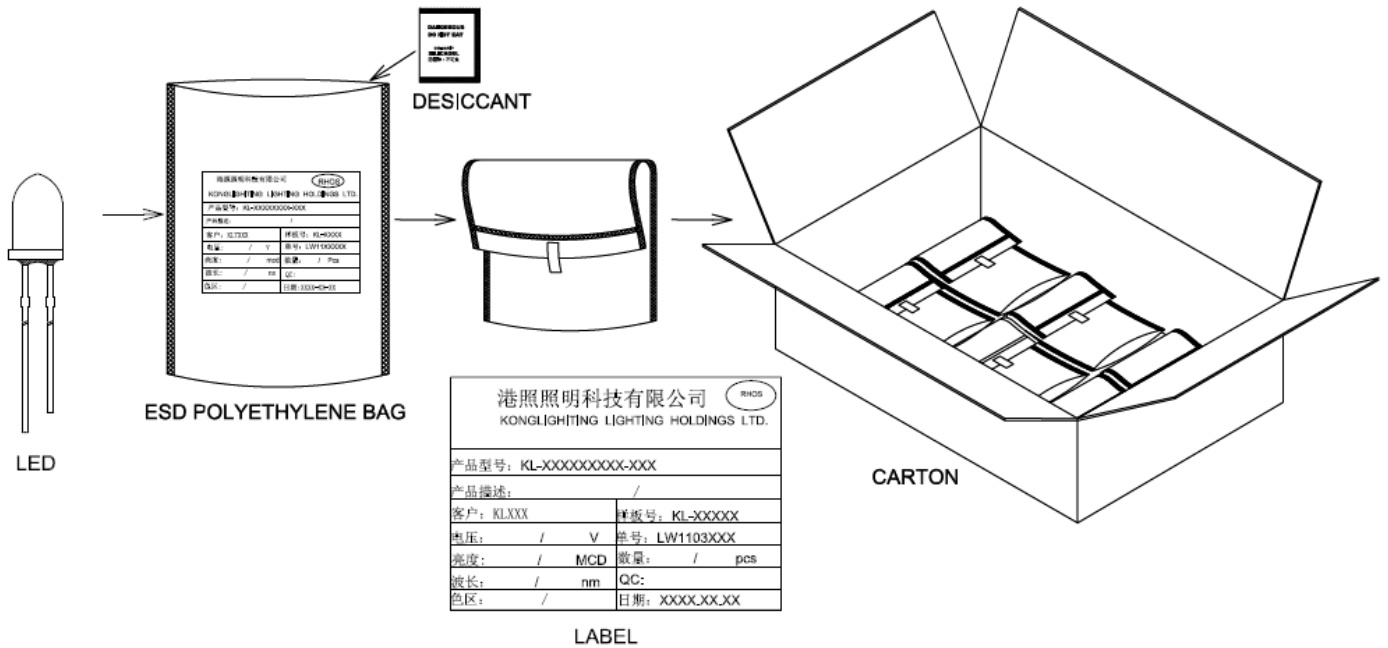


Optical-Electrical Characteristic Graphs



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Packaging Standard:



Important Notes:

- 1) Do not apply any stress to the lead, particularly when heated.
- 2) The LEDs must not be repositioned after soldering.
- 3) After soldering the LEDs, the epoxy bulb should be protected from mechanical shock or vibration until the LEDs return to room temperature.
- 4) Direct soldering onto a PC board should be avoided, Mechanical stress to the resin may be caused by the PC board warping or from the clinching and cutting of the lead frames, When it is absolutely necessary, the LEDs may be mounted in this fashion, but, the User will assume responsibility for any problems, Direct soldering should only be done after testing has confirmed that no damage, such as wire bond failure or resin deterioration, will occur.
- 5) When it is necessary to clamp the LEDs to prevent soldering failure, it is important to minimize the mechanical stress on the LEDs.
- 6) Cut the LED leadframes at room temperature, Cutting the lead frames at high temperatures may cause LED failure.
- 7) Customer acknowledges that it should not operate the samples beyond the level recommended in the specification guidelines.

Item	Signatures	Date
Prepared by	XiaoLin Zhu	2011-07-28
Checked by	Kevin Zhu	2011-07-28
Approved by	Andy Liu	2011-07-28
FCN#		

Revision History		
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