

# **QT-Brightek PLCC Series**

## **2014 PLCC2 White LED**

**Part No.: QBLP675-IW**

Product: QBLP675-IW	Date: December 20 <sup>th</sup> , 2021	Page 1 of 10
	Version# 1.0	

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## Introduction

**Feature:**

- Package in tape and reel
- Yellow diffused lens
- Ultra bright reflector type 2014 PLCC 2 LED
- InGaN technology for IW
- Viewing angle: 120 deg typ.

**Description:**

This ultra-bright 2014 LED has a height profile of 1.30mm. Combination of high brightness output and robust package, this LED is ideal for back lighting, architecture lighting, and industrial equipment lighting applications.

**Application:**

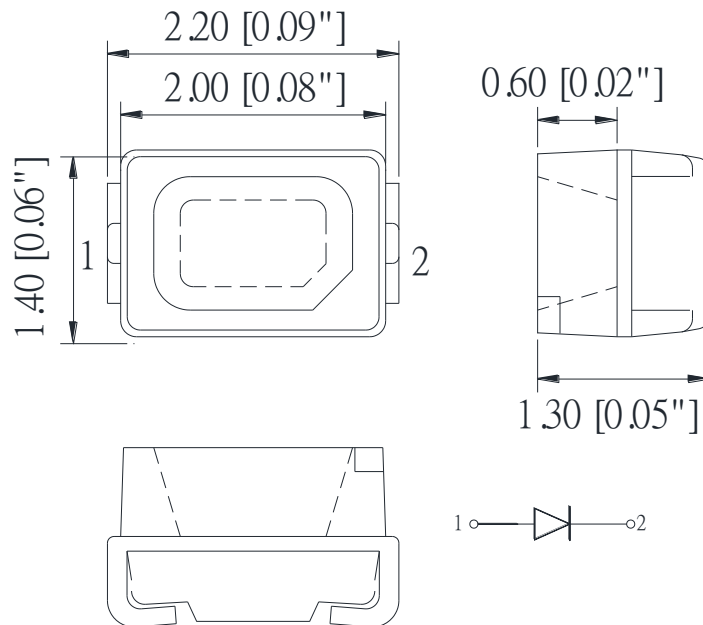
- Status indication
- Industrial equipment backlighting
- Architecture lighting

**Certification & Compliance:**

- ISO9001
- RoHS Compliant



**Dimension:**



Units: mm / tolerance = +/-0.2mm

### Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V)		CIE Coordinate			I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP675-IW	White	20	3.1	3.5	-	X=0.29 Y=0.285	-	800	1300

### Absolute Maximum Rating

Material	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SO L</sub> (°C)**
InGaN	105	30	125	5	-40 ~ +80	-40 ~ +85	260

\*Duty 1/10 @ 1KHz

\*\*IR Reflow for no more than 10 sec @ 260 °C

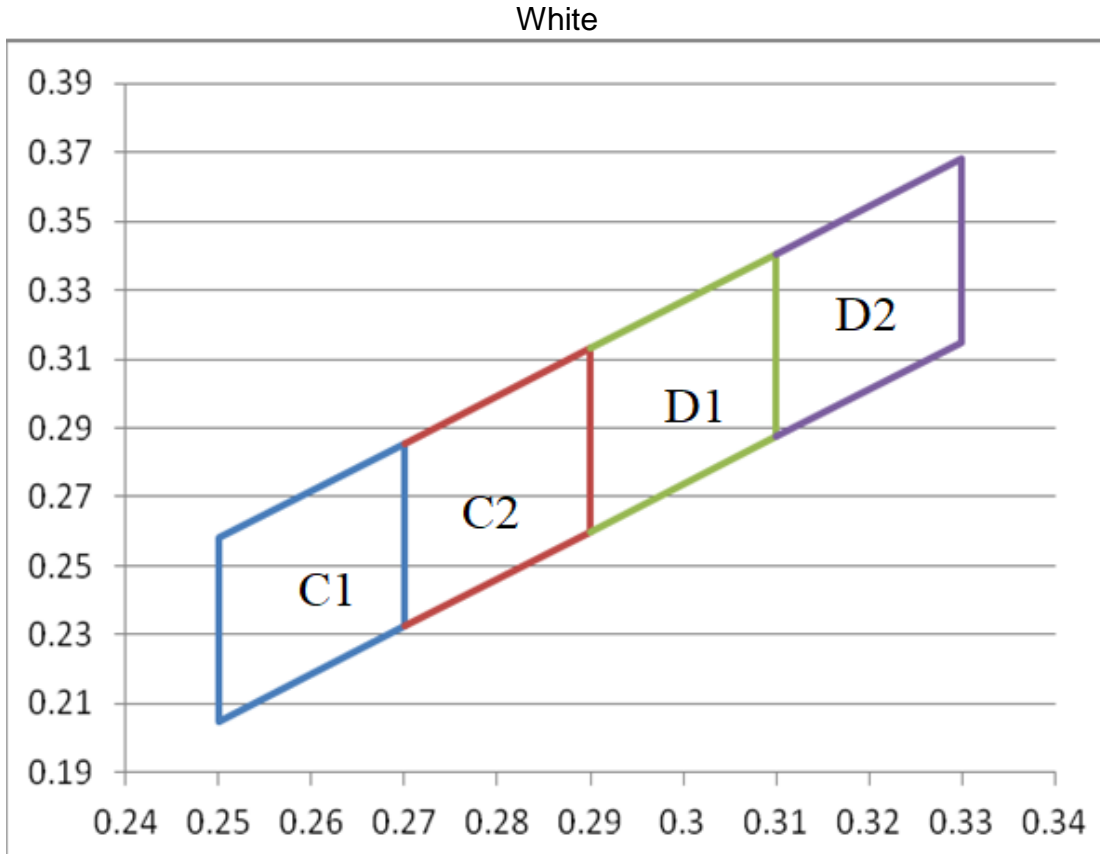
### Forward Voltage V<sub>F</sub> @ I<sub>F</sub>=20mA

Bin	Min.	Max.	Unit
A	2.7	2.9	V
B	2.9	3.1	
C	3.1	3.3	
D	3.3	3.5	

### Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=20mA

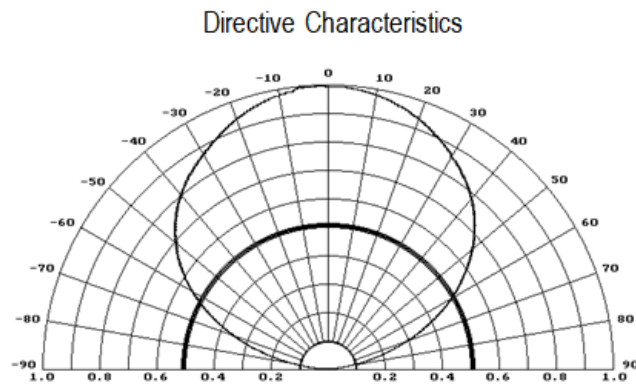
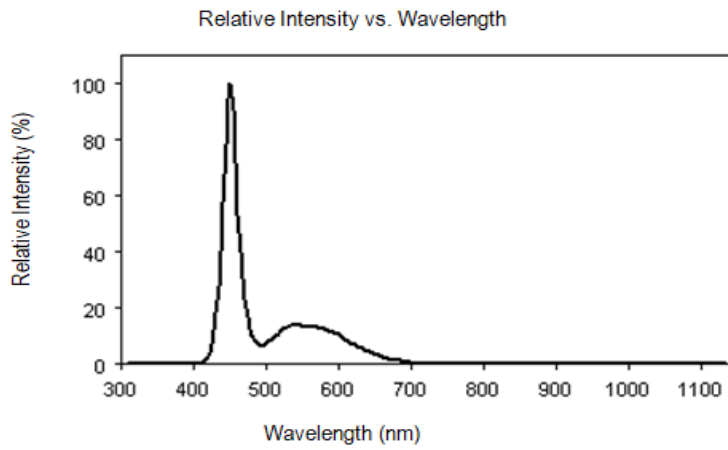
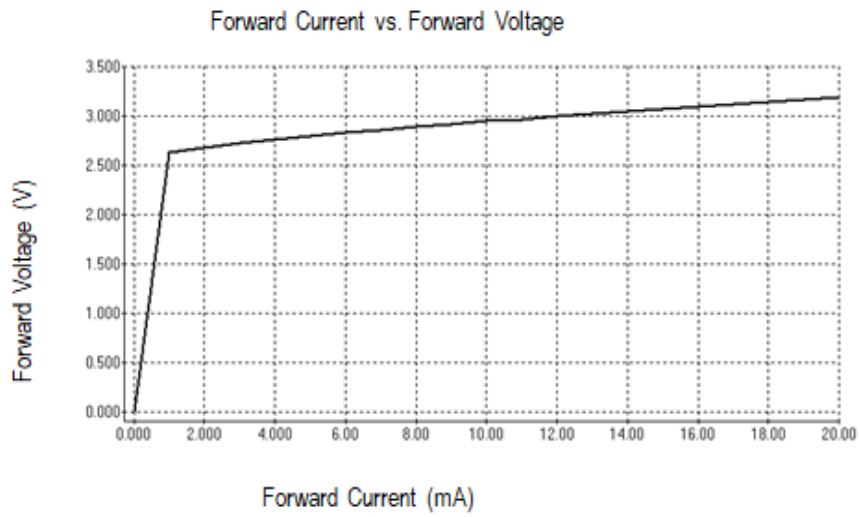
Bin	Min.	Max.	Unit
S	800	1000	mcd
T	1000	1250	
U	1250	1600	
V	1600	2000	
W	2000	2500	

**Correlated Color Temperature**



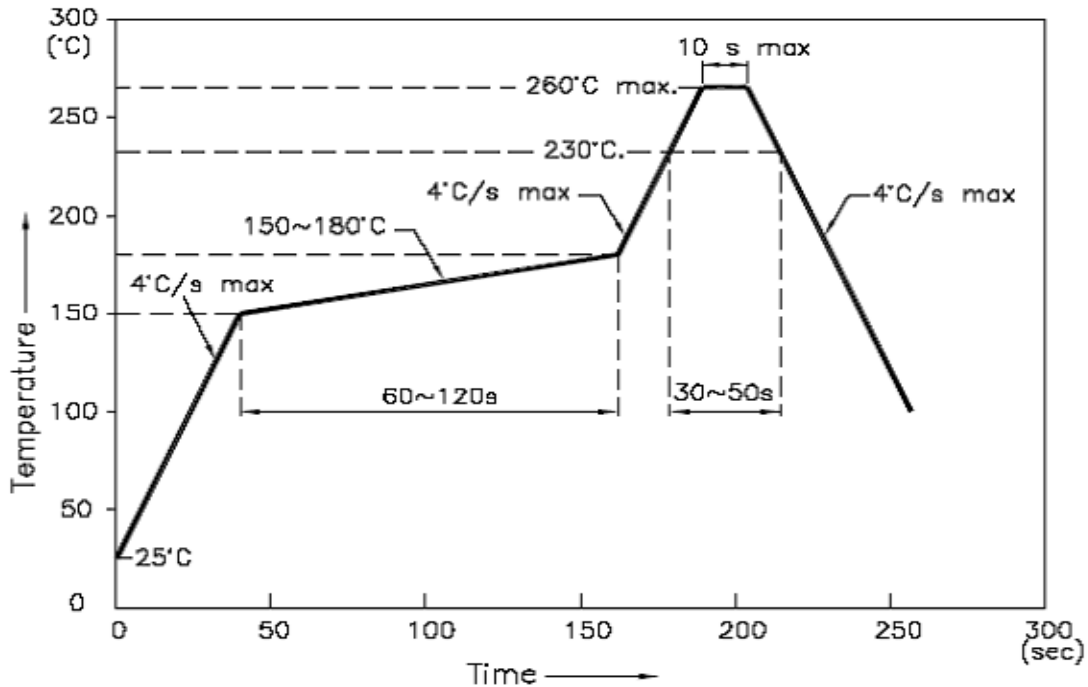
Rank	Chromaticity coordinates				
	C1	X	0.25	0.27	0.27
	Y	0.258	0.2855	0.2325	0.205
C2	X	0.27	0.29	0.29	0.27
	Y	0.2855	0.313	0.26	0.2325
D1	X	0.29	0.31	0.31	0.29
	Y	0.313	0.3405	0.2875	0.26
D2	X	0.31	0.33	0.33	0.31
	Y	0.3405	0.368	0.315	0.2875

## Characteristic Curves

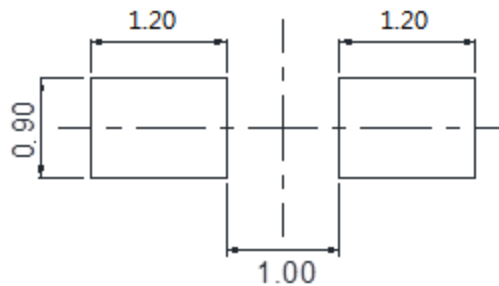


## Solder Profile & Footprint

-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



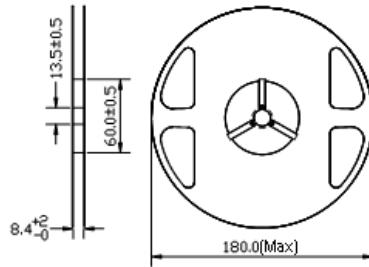
### Recommended Pad Layout



Units: mm

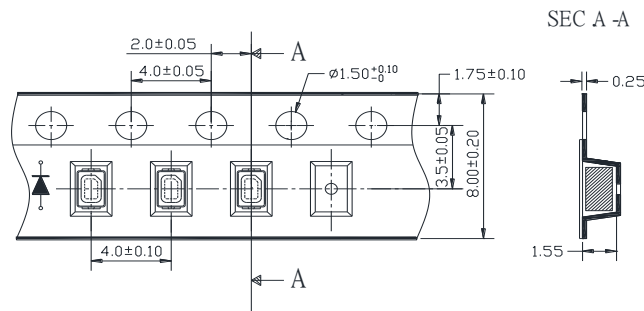
## Packing

Reel Dimension:



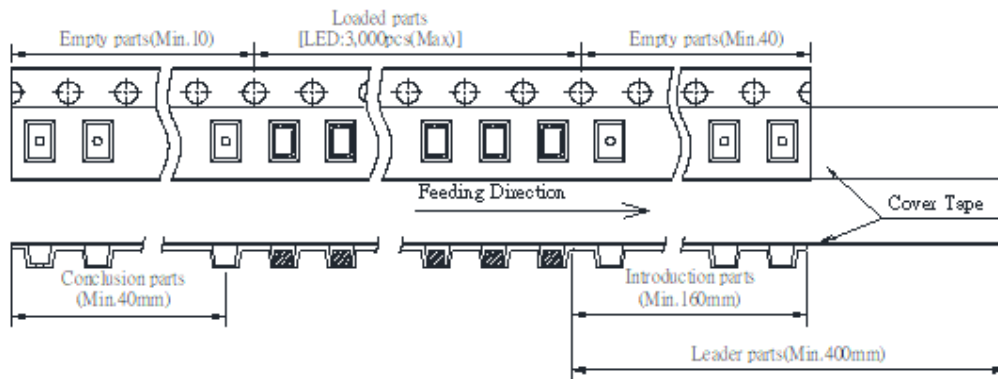
Unit: mm

Tape Dimension:

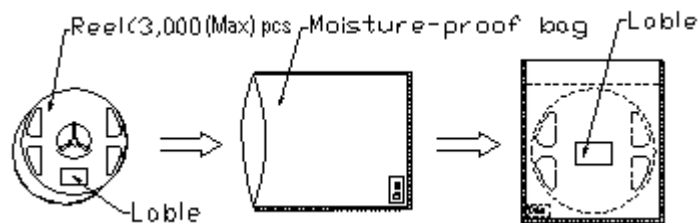


Unit: mm

Arrangement of Tape:



Packaging Specifications:





## Labeling



Part No: \_\_\_\_\_  
Customer P/N: \_\_\_\_\_  
Item: \_\_\_\_\_  
Q'ty: \_\_\_\_\_  
Vf: \_\_\_\_\_  
Iv: \_\_\_\_\_  
WI: \_\_\_\_\_  
Date: \_\_\_\_\_

**Made in China**

## Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP675-IW	QBLP675-IW	Iv=1300mcd typ. @ 20mA / CIE Coordinate: (X=0.29, Y=0.285) typ.	3,000 units

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## Revision History

Description:	Revision #	Revision Date
New Release of QBLP675-IW	V1.0	12/20/2021



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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.