

QT-Brightek PLCC Series

2014 PLCC2 White LED

Part No.: QBLP675-IW-XX

XX = WW/NW/CW

Product: QBLP675-IW-XX	Date: July 19 th , 2019	Page 1 of 12
	Version# 1.0	

Table of Contents:

Introduction	3
Electrical / Optical Characteristic (Ta=25 °C)	4
Absolute Maximum Rating	4
Correlated Color Temperature	5
Characteristic Curves.....	8
Solder Profile & Footprint.....	9
Packing	10
Labeling	11
Ordering Information	11
Revision History	12
Disclaimer	12

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:

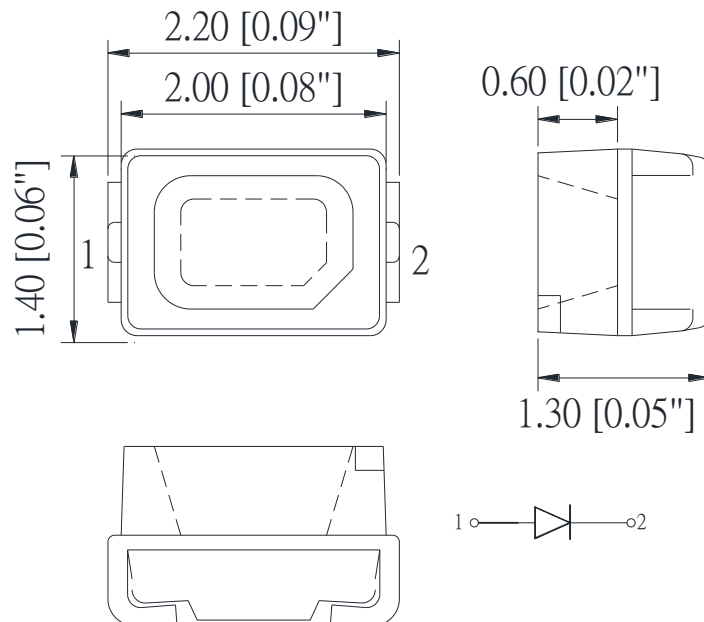
- Status indication
- Industrial equipment backlighting
- Architecture lighting

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		CIE Coordinate			I _V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP675-IW-WW	Warm White	20	3.1	3.6	-	X=0.4338 Y=0.4030	-	1250	1540
QBLP675-IW-NW	Natural White	20	3.1	3.6	-	X=0.3818 Y=0.3797	-	1250	1650
QBLP675-IW-CW	Cool White	20	3.1	3.6	-	X=0.3214 Y=0.3357	-	1250	1600

Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
InGaN	108	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_F @ I_F=20mA

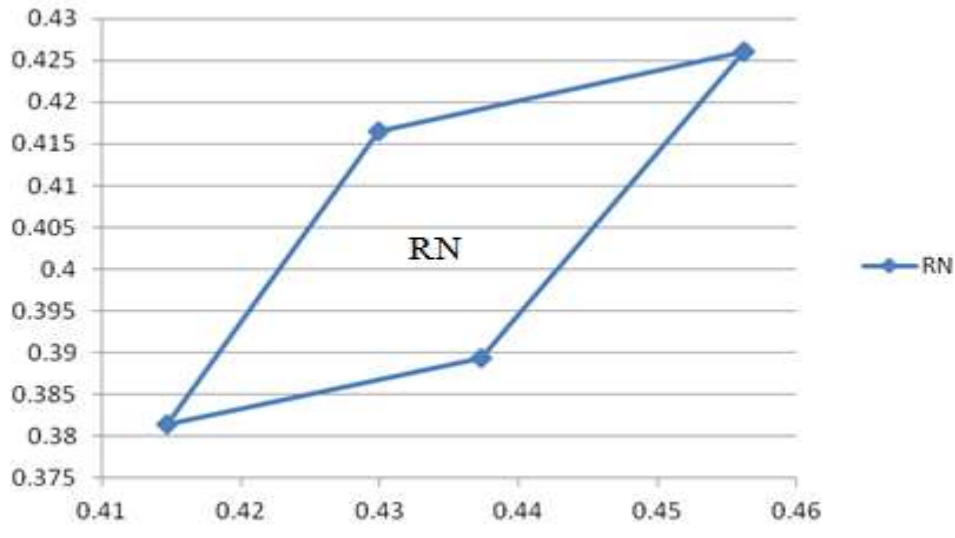
Bin	Min.	Max.	Unit
A	2.8	3.0	V
B	3.0	3.2	
C	3.2	3.4	
D	3.4	3.6	

Luminous Intensity I_V @ I_F=20mA

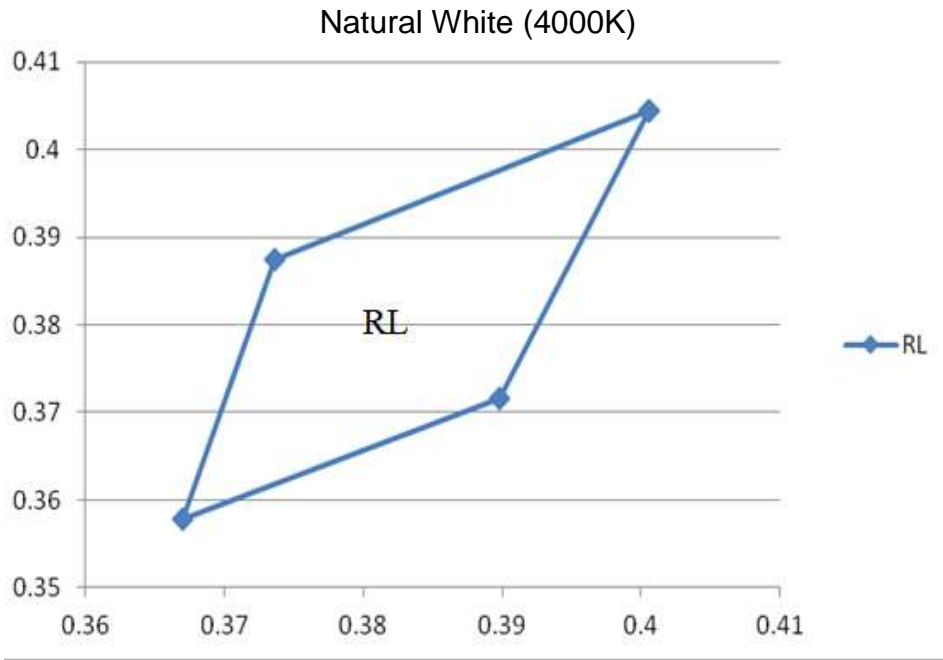
Bin	Min.	Max.	Unit
0	1250	1700	mcd
1	1700	2100	
2	2100	2500	

Correlated Color Temperature

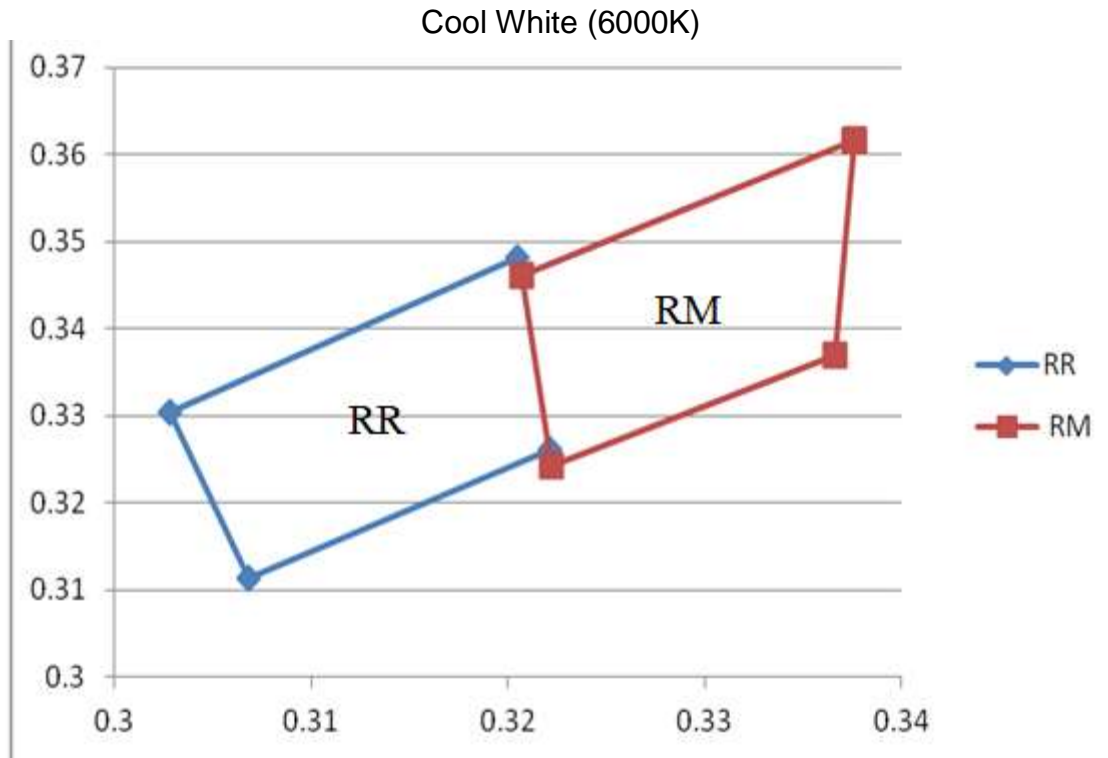
Warm White (3000K)



Rank	Chromaticity coordinates				
RN	X	0.4562	0.4299	0.4147	0.4373
	Y	0.4260	0.4165	0.3814	0.3893

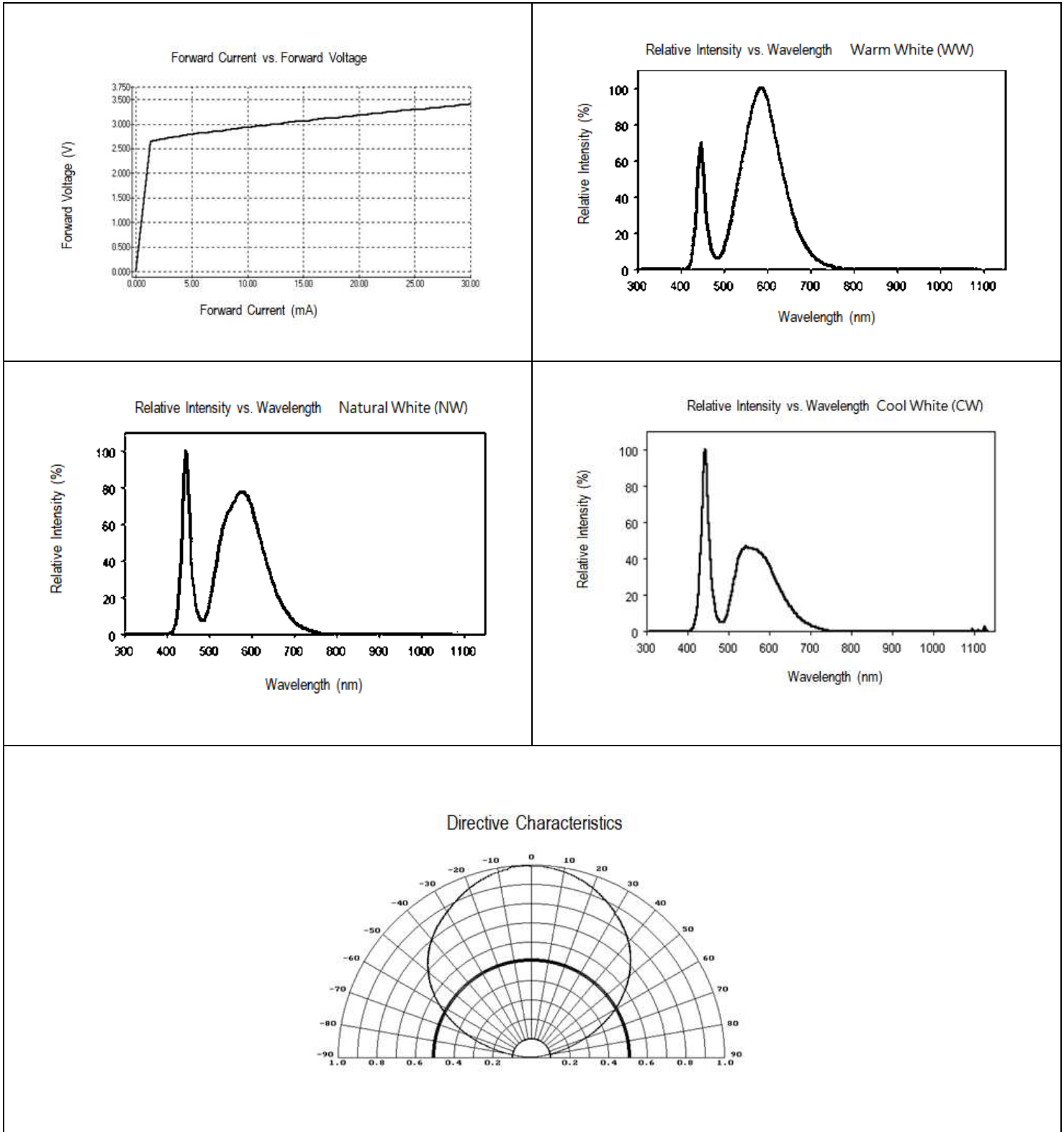


Rank	Chromaticity coordinates				
RL	X	0.4006	0.3736	0.3670	0.3898
	Y	0.4044	0.3874	0.3578	0.3716



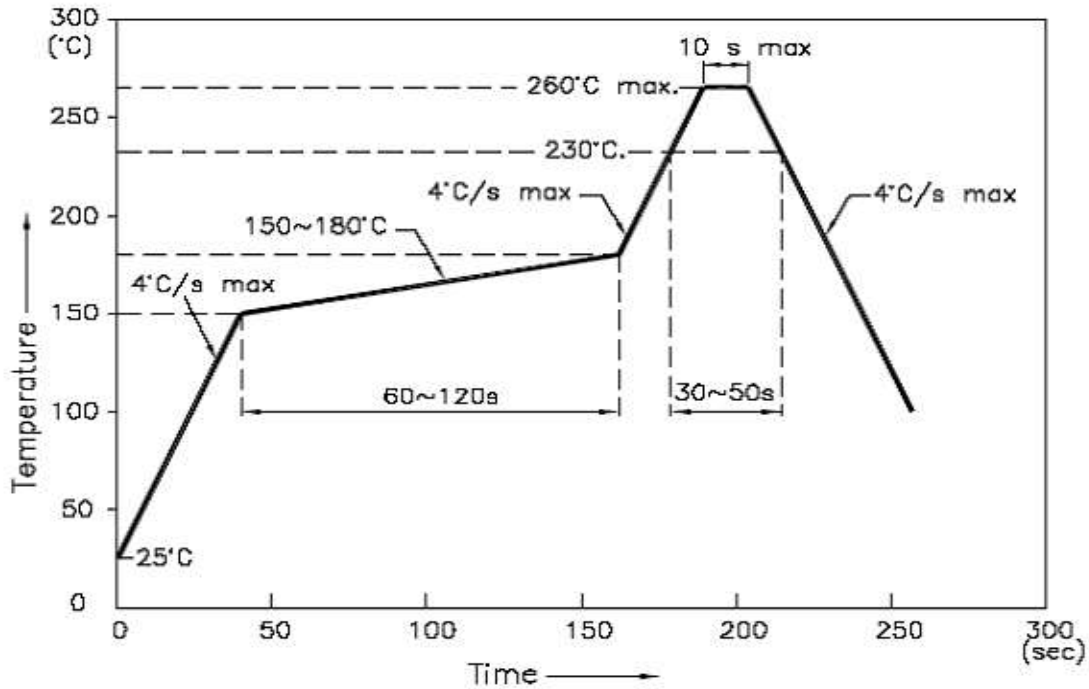
Rank	Chromaticity coordinates				
		X	0.3205	0.3028	0.3068
RR	Y	0.3481	0.3304	0.3113	0.3261
	X	0.3376	0.3207	0.3222	0.3366
RM	Y	0.3616	0.3462	0.3243	0.3369

Characteristic Curves

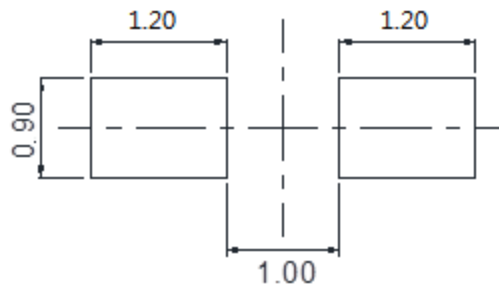


Solder Profile & Footprint

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



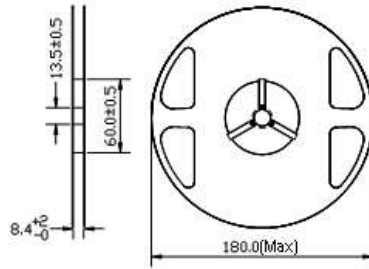
Recommended Pad Layout



Units: mm

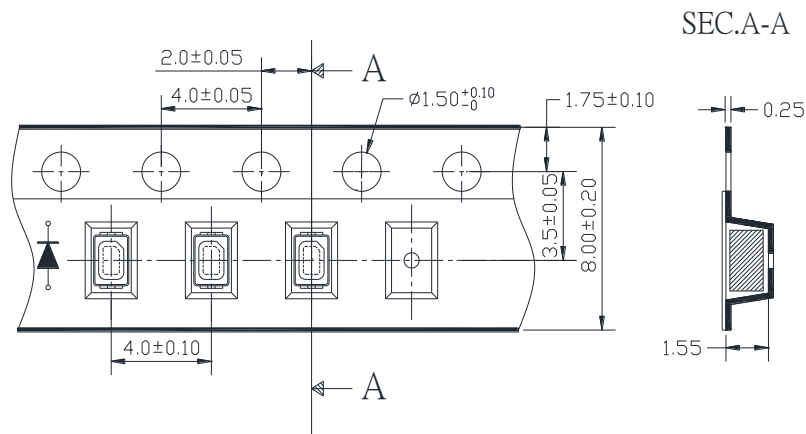
Packing

Reel Dimension:



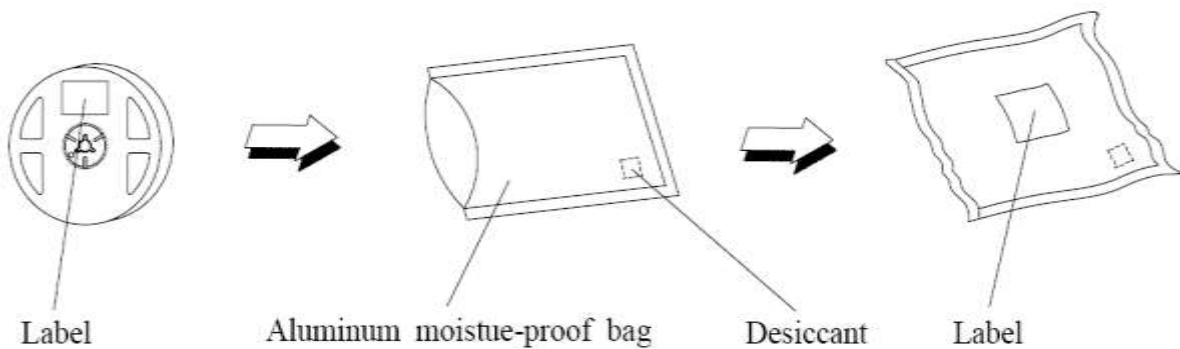
Unit: mm

Tape Dimension:



Unit: mm

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-WW	QBLP675-IW-WW	Iv=1540mcd typ. @ 20mA / CCT=3000K typ. (RN) Bin	3,000 units
QBLP675-IW-NW	QBLP675-IW-NW	Iv =1650 mcd typ. @ 20mA / CCT=4000K typ. (RL) Bin	3,000 units
QBLP675-IW-CW	QBLP675-IW-CW	Iv=1600mcd typ. @ 20mA / CCT=6000K typ. (RM & RR) Bin	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP675-IW-XX	V1.0	07/19/2019

Disclaimer

QT-BRIGHTTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. QT-BRIGHTTEK does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights, nor the rights of others.

Life Support Policy

QT-BRIGHTTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTTEK. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
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.