



**L.T.F.**

## High CRI Chip on Board LED

**COBI 1512 12W Single CCT COB  
QLUXCOBI15129030 & QLUXCOBI15129027**

# QLUX COB



<b>Typical Lumens</b>	≈ 1200lm
<b>Typical Wattage</b>	12W
<b>CRI / R9</b>	98 / 89+
<b>Available CCT</b>	3000K, 2700K
<b>Dimming</b>	CCR; constant current reduction



**RoHS**



## FEATURES

- Precise light output with no additional need for complicated control system or multiple optics
- High color rendering index (CRI) Ra max. 98, R9 89+
- LM-80 compliant LEDs
- Tight binning 3 step Mac Adam Ellipses
- Uniform and crisp light source intensity
- Exceeds ENERGY STAR lumen maintenance requirements
- Extra thin low profile
- Low heat generation, easy thermal management
- Easy to fit in new design or retrofit applications

## APPLICATIONS

For architectural, residential, hospitality, retrofit, and general lighting fixtures.

- Spot lighting
- Down lighting
- Recessed can lighting
- Ceiling lighting
- Wall sconces
- Table lamps
- Pendants
- Track heads

## GENERAL SPECIFICATIONS

Model	Wattage	CCT	Ra	R9	Luminous Flux
QLUXCOBI15129030	12W	3000K	98	93	1245 lm*
QLUXCOBI15129027		2700K	98	89	1271 lm*

\* at 350mA

## COMPATIBLE LTF LED DRIVERS

Model #	Input Voltage	Input Current	Output Voltage	Output Current	Dimming
<a href="#">DA15W350C1042-3001</a>	120V AC 50/60Hz	0.125 A	10-42V DC	350mA	Triac/ELV
<a href="#">DA15W350C1842D010</a>	120V AC 50/60Hz	0.125 A	18-42V DC	350mA	Triac/ELV/ 0-10V
<a href="#">DE15W350C1842D010</a>	277V AC 50/60Hz	0.054 A	18-42V DC	350mA	Triac/ELV/ 0-10V
<a href="#">DS15W350C1042UD</a>	100-305V AC 50/60Hz	0.15 A	10-42V DC	350mA	Triac/ELV/ 0-10V
<a href="#">DL115W350C</a>	12V AC/DC 50/60Hz	0.05 A	18-42V DC	350mA	ELV / Magnetic ELV
<a href="#">DL215W350C</a>	24V AC/DC 50/60Hz	0.05 A	18-42V DC	350mA	ELV / Magnetic ELV



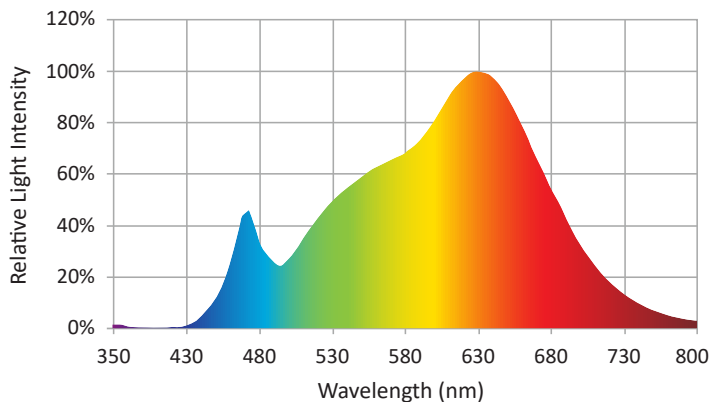
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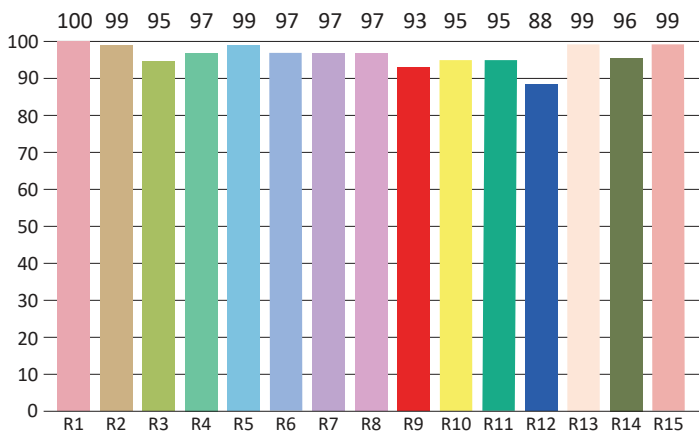


### SPECTRORADIOMETRIC CHARACTERISTICS - 3000K



**Luminous Flux:** 1244.69  
**Radiant Flux:** 4664mW  
**Efficacy:** 94.3 lm/W  
**Nominal CCT:** LED\_3000K  
 x0=0.4338 y0=0.4030  
**Chromaticity Coordinates:**  
 x=0.4252 y=0.3943 u'=0.2472 v'=0.5157  
**Chromaticity Difference:** -0.00226Duv  
**CCT:** 3127K

### CRI TEST RESULTS - 3000K



**Color Rendering Index (CRI):** Ra=97.6  
**Dominant Wavelength:** 582nm  
**Peak Wavelength:** 630nm  
**Colour Fidelity Index:** Rf=94  
**Gamut Index:** Rg=103  
**Color Purity:** 0.4604  
**Color Ratio:** Kr=42.3% Kg=48.9% Kb=8.8%  
**Bandwidth:** 178.2nm

R1=100	R2=99	R3=95	R4=97	R5=99	R6=97	R7=97	R8=97
R9=93	R10=95	R11=95	R12=88	R13=99	R14=96	R15=99	Re=96

\* Test result shown based on 3000K CCT



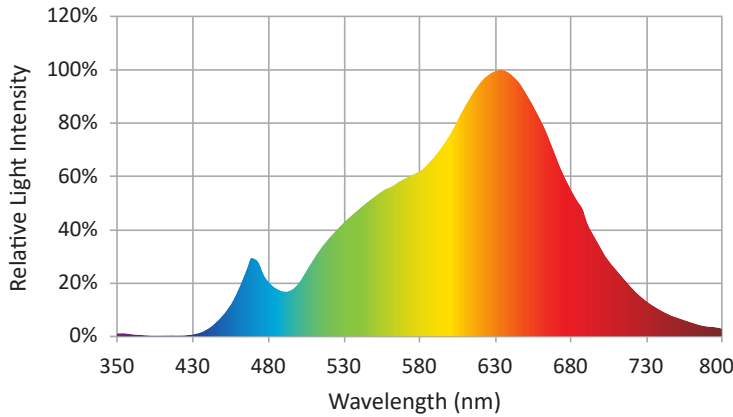
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**High CRI Chip on Board LED**

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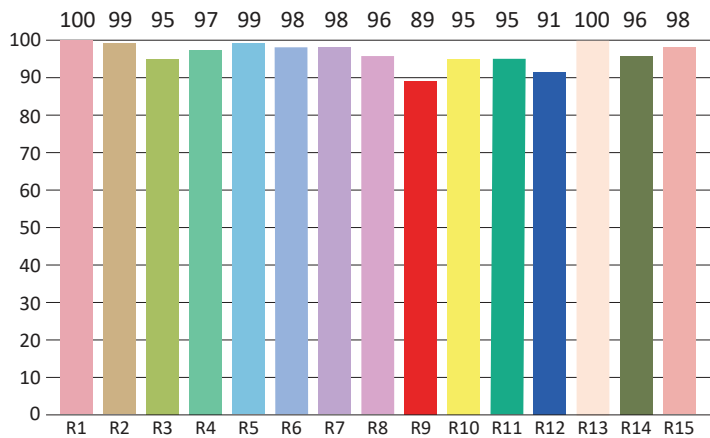


**SPECTRORADIOMETRIC CHARACTERISTICS - 2700K**



**Luminous Flux:** 1244.69 lm  
**Radiant Flux:** 4685 mW  
**Efficacy:** 96.4 lm/W  
**Nominal CCT:** LED\_2700K  
 x0=0.4578 y0=0.4101  
**Chromaticity Coordinates:**  
 x=0.4513 y=0.4087 u'=0.2578 v'=0.5253  
**Chromaticity Difference:** +0.00008Duv  
**CCT:** 2809K

**CRI TEST RESULTS - 2700K**



**Color Rendering Index (CRI):** Ra=97.8  
**Dominant Wavelength:** 582 nm  
**Peak Wavelength:** 630 nm  
**Colour Fidelity Index:** Rf=95  
**Gamut Index:** Rg=101  
**Color Purity:** 0.4604  
**Color Ratio:** Kr=44.7% Kg=47.4% Kb=7.8%  
**Bandwidth:** 161 nm

R1=100	R2=99	R3=95	R4=97	R5=99	R6=98	R7=98	R8=96
R9=89	R10=95	R11=95	R12=91	R13=100	R14=96	R15=98	Re=97

\* Test result shown based on 2700K CCT



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High CRI Chip on Board LED

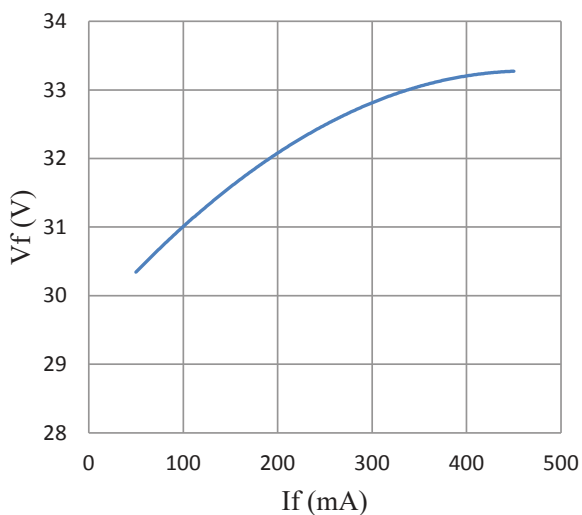


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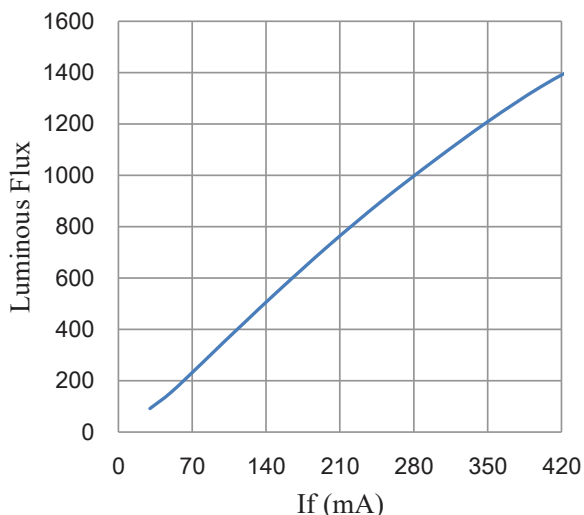
**ABSOLUTE MAXIMUM RATINGS (Ta=25°C)**

	Symbol	Absolute Maximum Rating	Unit
<b>Forward Current</b>	If	420	mA
<b>Peak Power</b>	P	16.9	W
<b>Reverse Voltage</b>	vr	-15	V
<b>Operating Temperature</b>	TOPR	-30~+100	°C
<b>Storage Temperature</b>	Tstg	-40~100	°C
<b>Hand soldering condition</b>	Tsld	3.5sec@350°C	sec
<b>Case Temperature</b>	Tc	100	°C
<b>LED Junction Temperature</b>	Tj	125	°C
<b>Temperature of central silicon surface</b>	Ts	125@IRDA Test	°C

**FORWARD CURRENT  
VS. FORWARD VOLTAGE**



**FORWARD CURRENT  
VS. RELATIVE LUMINOUS FLUX**





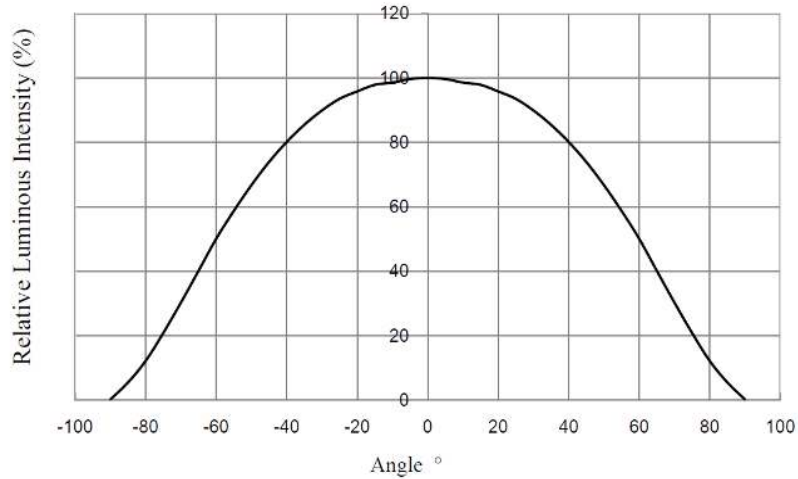
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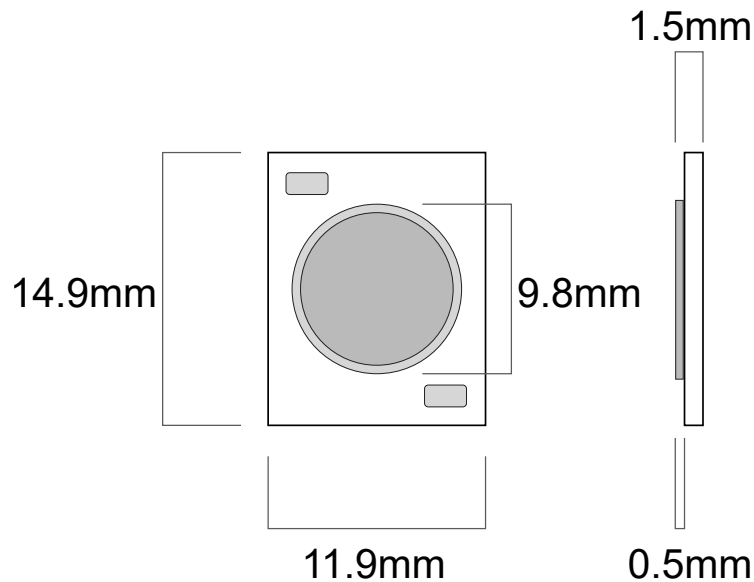


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### TYPICAL SPATIAL DISTRIBUTION



### MECHANICAL SPECIFICATIONS



US Patent  
#10297584



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## PACKAGING INFORMATION

