



**COBi 1512 12W Dim to Warm COB
QLUXCOBI1512903018WD**



Typical Lumens	950
Typical Wattage	12W
CRI	95+
CCT Range	3000K dim to 1800K
Dimming	CCR; constant current reduction

RoHS



QLUX COBI mimics the color shift of an incandescent source during dimming by a single phase dimmer. Also available in line voltage models

FEATURES

- Precise light output with no additional need to any complicated control system or multiple optics
- Sunset dimming
- High color rendering index (CRI) Ra max. 98 R9 55+
- LM-80 compliant LEDs
- Tight binning 3 Step Mac Adam Ellipses
- Uniform and crisp light source intensity
- Hot spot free design
- 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 (No Dim)	CCT (100% Dim)	Ra	Luminous Flux
QLUXCOBI1512903018WD	12W	3000K	1800K	96+	950**

ELECTRICAL SPECIFICATIONS

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

* Under confirmed thermal condition ** at 350mA

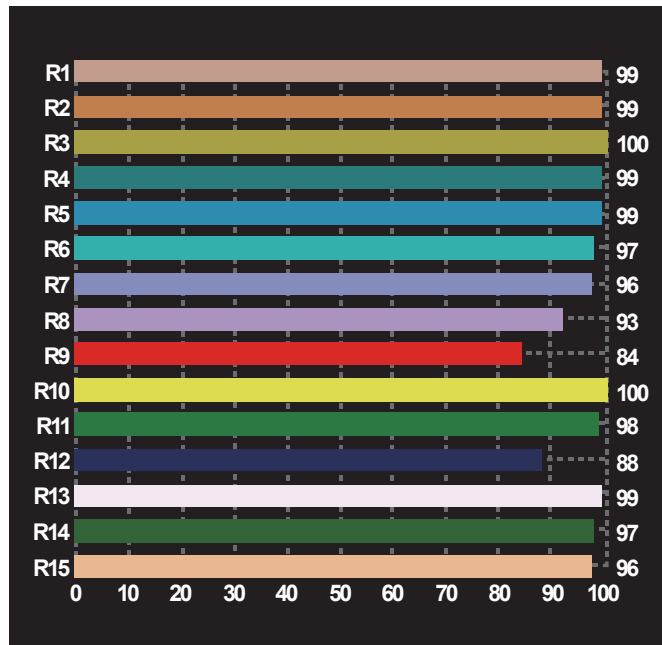
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CHARACTERISTICS (TC=25°C)

CCT	Item	Symbol	Condition	Min.	Typ.	Max.	Unit
1800K	Forward Voltage	VF	I =50mA	28	(34.0)	36	V
	Luminous Flux	Φ		116	(134.0)	--	lm
	Chromacity Coordinates	x		--	(0.5357)	--	--
		y		--	(0.4160)	--	--
General Color Rendering Index	Ra	81	(85)	--	--		
3000K	Forward Voltage	VF	I =350mA	31	(35)	39	V
	Luminous Flux	Φ		1013	(1150)	--	lm
	Chromacity Coordinates	x		--	(0.4338)	--	--
		y		--	(0.4030)	--	--
General Color Rendering Index	Ra	90	(93)	--	--		

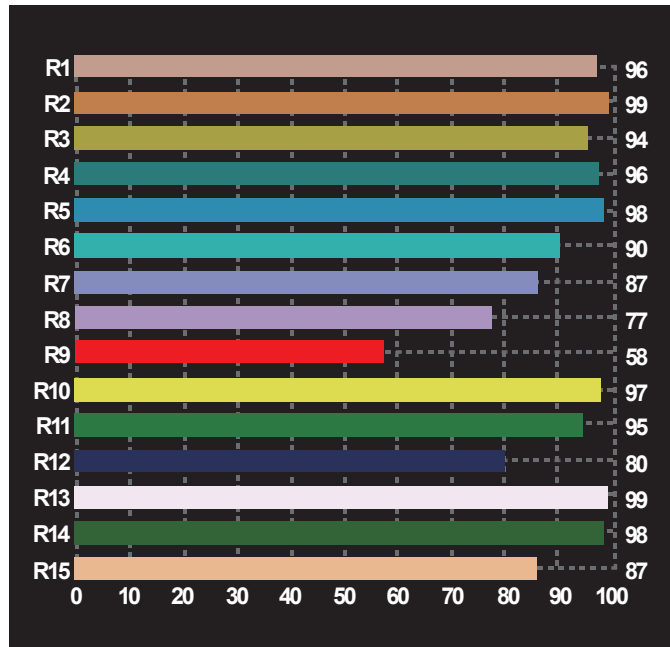
R VALUES AT 3000K



R1 = 99	R2 = 99	R3 = 100	R4 = 99	R5 = 99	R6 = 97	R7 = 96	R8 = 93
R9 = 84	R10 = 100	R11 = 98	R12 = 88	R13 = 99	R14 = 97	R15 = 96	

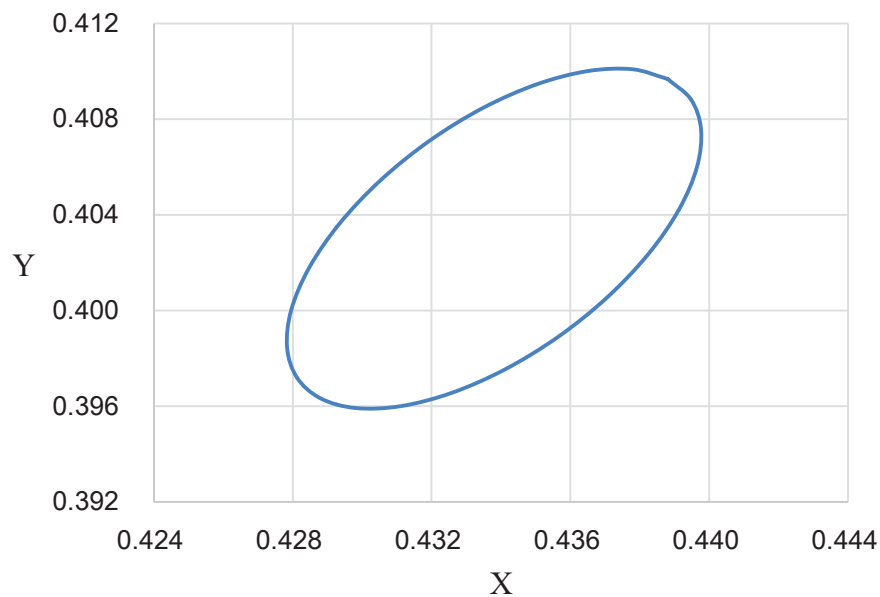


R VALUES AT 1800K



R1 = 96	R2 = 99	R3 = 94	R4 = 96	R5 = 98	R6 = 90	R7 = 87	R8 = 77
R9 = 58	R10 = 97	R11 = 95	R12 = 80	R13 = 99	R14 = 98	R15 = 87	

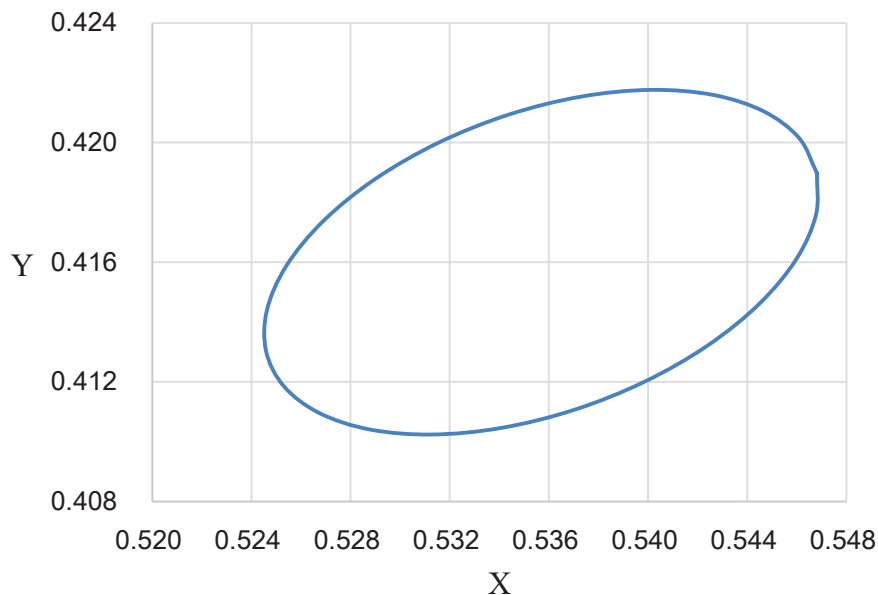
CHROMATICITY CHARACTERISTICS (Tc=25°C) AT 3000K



Bin Code	Nominal CCT	Center Point		Oval Parameter		
		x	y	a	b	Theta°
303	3000K (3-step)	0.4338	0.4030	0.00834	0.00408	53.17



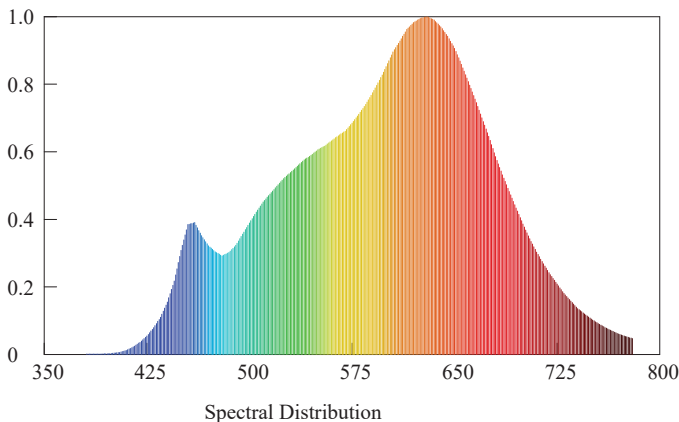
CHROMATICITY CHARACTERISTICS (Tc=25°C) AT 1800K



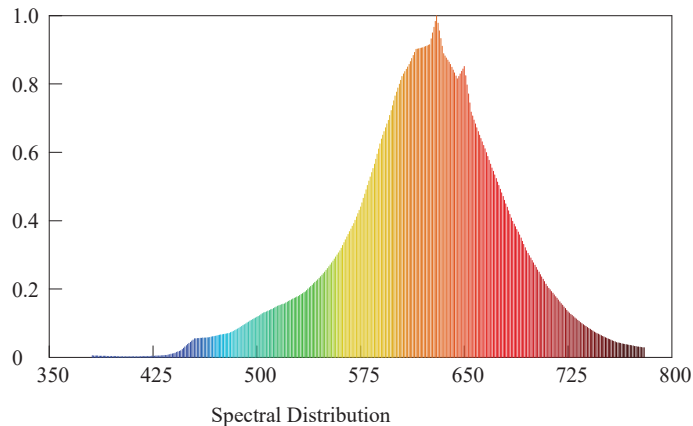
Bin Code	Nominal CCT	Center Point		Oval Parameter		
		x	y	a	b	Theta°
203	1800K (3-step)	0.5357	0.4160	0.0115	0.00511	15.00

SPECTRORADIOMETRIC PARAMETERS

AT 3000K



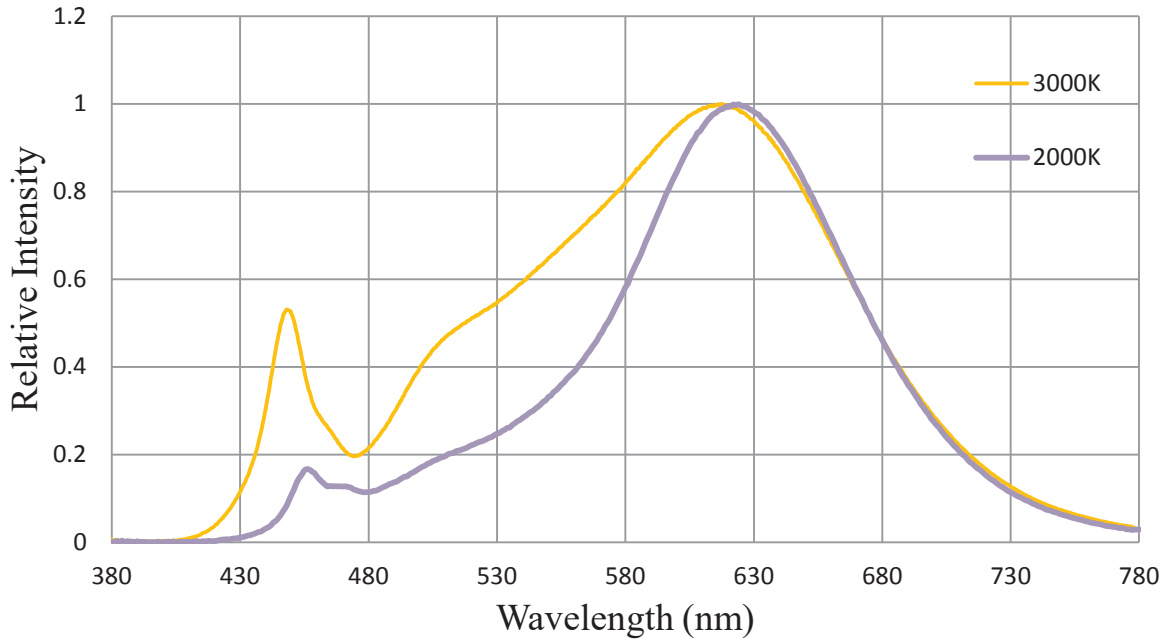
AT 1800K



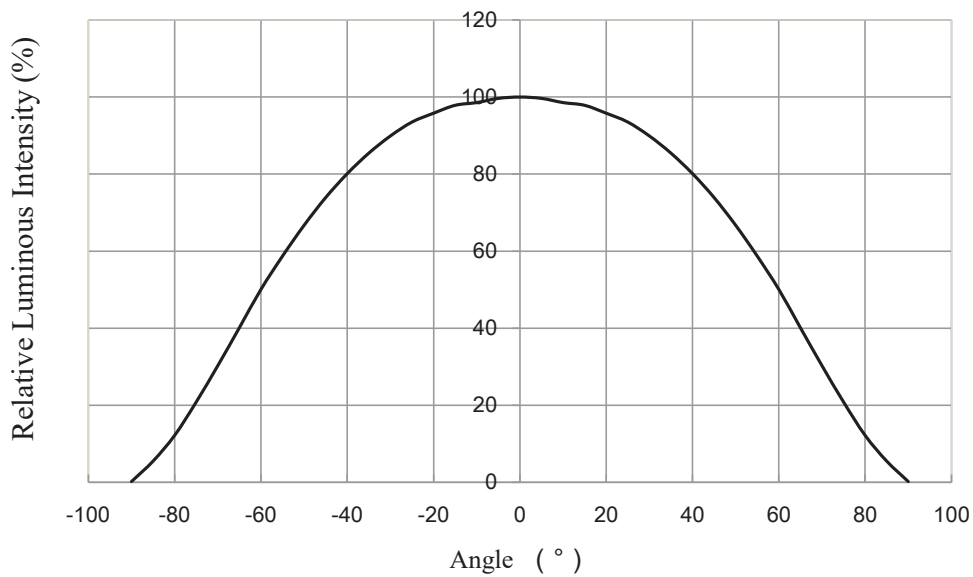
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TYPICAL RELATIVE SPECTRAL POWER DISTRIBUTION (Tc=25°C)

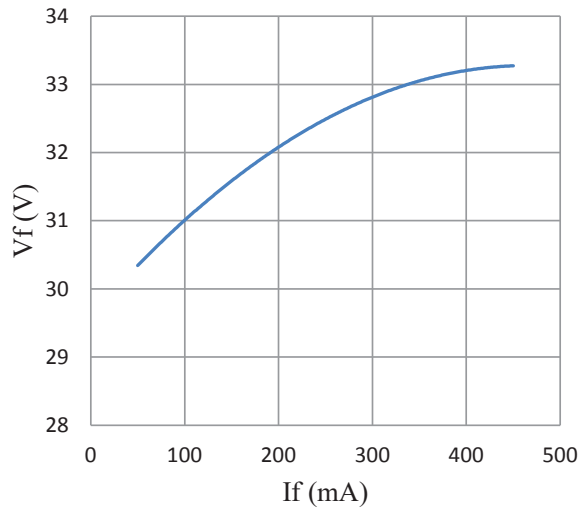


TYPICAL SPACIAL DISTRIBUTION (Tc=25°C)

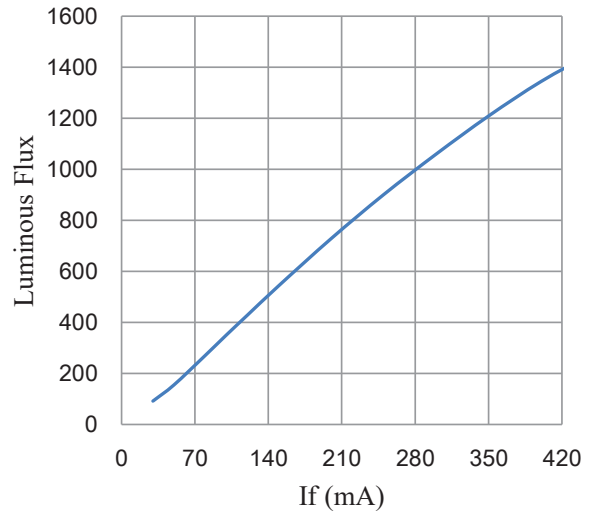




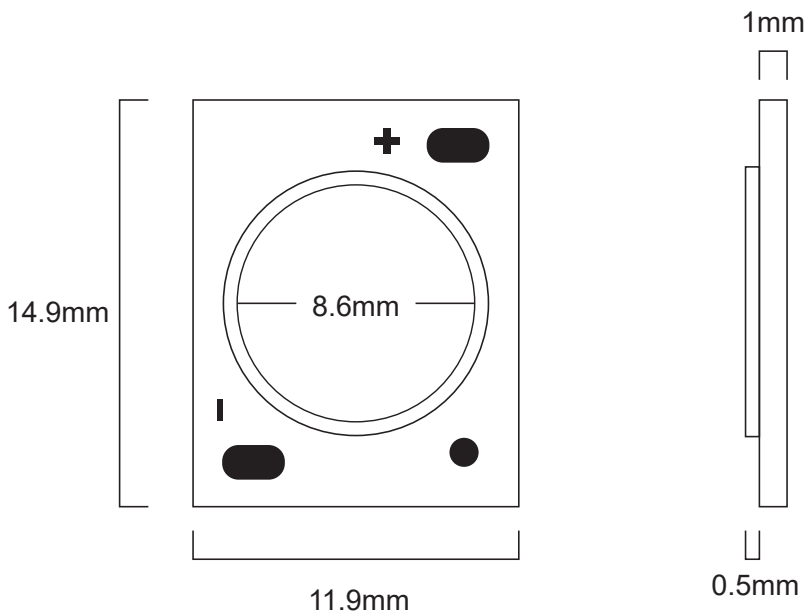
FORWARD CURRENT VS.
FORWARD VOLTAGE (Tc=25°C)



FORWARD CURRENT VS.
RELATIVE LUMINOUS FLUX (Tc=25°C)



MECHANICAL SPECS.



**INTELLECTUAL PROPERTY
PATENT PENDING**



COMPATIBLE LED DRIVERS

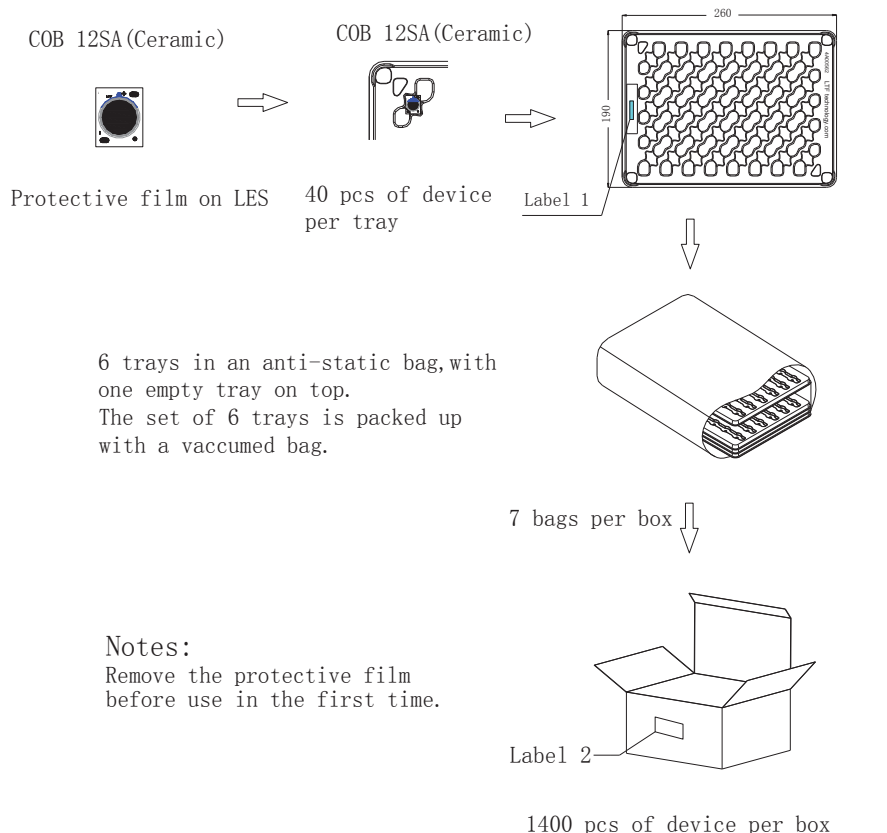
Line Voltage LED Drivers

Model #	Input Voltage	Input Current	Output Voltage	Output Current	Dimming
DA15W350C1042-3001	120V AC 50/60Hz	0.125	10-42V DC	350mA	Triac/ELV
DA15W350C1842D010	120V AC 50/60Hz	0.125	18-42V DC	350mA	Triac/ELV/ 0-10V
DE15W350C1842D010	277V AC 50/60Hz	0.054	18-42V DC	350mA	Triac/ELV/ 0-10V
DS15W350C1042UD	100-305V AC 50/60Hz	0.15	18-42V DC	350mA	Triac/ELV/ 0-10V

Low Voltage LED Drivers

Model #	Input Voltage	Input Current	Output Voltage	Output Current
DL115W350C	12V AC/DC 50/60Hz	0.05 A	18-42V DC	350 mA
DL215W350C	24V AC/DC 50/60Hz	0.05 A	18-42V DC	350 mA

PACKAGING INFORMATION



Notes:

Remove the protective film before use in the first time.

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