



L.T.F

AC Line Voltage LED DOBi Board

45W California Title 24 Compliant
QLUXDOBAR30045W123LED DOBi Series



General Information	
Wattage	45W
CRI	94+
CCT	2700-5000K
Custom CCT	Available
Size	300mm (OD)
Dimming	Phase Dimming (Triac & ELV)
Beam Angle	160



RoHS



50,000 Hour
Warranty

FEATURES

- Hot Spot Free Design
- Meets California Title 24 requirements
- Proprietary IC providing smooth & unified dimming
- High power factor PF>0.90, THD<20%
- Flicker free dimming
- Dimming range 5% - 100%
- Flicker index <0.1
- 0-10V dimming option available
- Triac dimming to comply with NEMA SSL-7A, down to 10%
- High color rendering index (94+ CRI)
- Excellent R1-R15 color rendering index values
- High efficacy lumen output; Up to 85lm/W
- LM-80 compliant LEDs
- 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
- 277V option available

APPLICATIONS

For Architectural New Designs and Retrofits lighting fixtures:

Indoor Lightings:

- Recessed light
- Ceiling light
- Wall sconces
- Signage

Outdoor Lightings:

- Street light
- Marker lights
- Wall sconces
- Signage lights

ELECTRO-OPTICAL CHARACTERISTICS (TA=25° C)

Order Number	Suffix	CRI	CCT	Luminous Flux
QLUXDOBAR30045W123LED	- 927	94	2700K	3900lm
QLUXDOBAR30045W123LED	- 930	94	3000K	4000lm
QLUXDOBAR30045W123LED	- 935	94	3500K	4100lm
QLUXDOBAR30045W123LED	- 940	94	4000K	4200lm



ABSOLUTE MAXIMUM RATINGS (TA=25°C)

Parameter	Symbol	Value	Unit
Voltage	V in	132	Vac
LED Solder Temperature	Ts	-20~85	°C
Storage Temperature	Tstg	-40~+100	°C
ESD Sensitivity (HBM)	---	±4000	V
Surge	---	1000	Vac

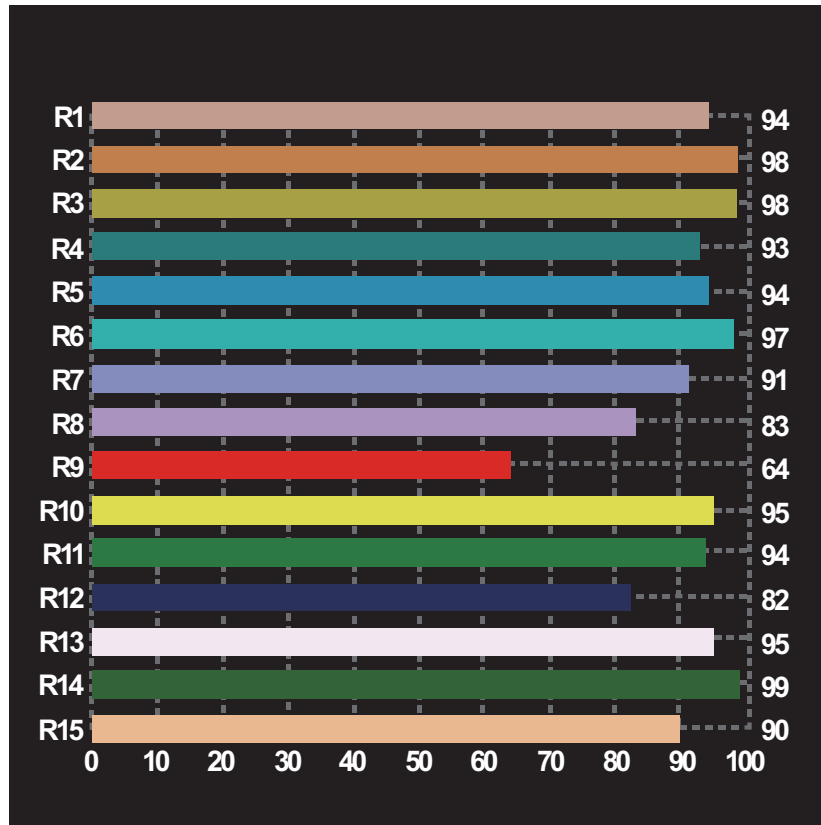
PERCENT FLICKER WHEN TRIAC DIMMING AT 120VAC/60HZ

Dimmer		Percent Flicker		Flicker Index	
Brand	Model	@ 100% dim	@ 20% dim	@ 100% dim	@ 20% dim
Lutron	CT-600P	18.6%	20.9%	0.048	0.053
	CTCL-153P	17.9%	21.4%	0.049	0.054
	DVCL-153P	18.2%	22.5%	0.051	0.055
	MACL-153M	19.2%	23.6%	0.053	0.060
	S-600P	18.6%	26.0%	0.052	0.060
	S-603P	18.4%	21.2%	0.047	0.052
	SCL-153P	17.6%	21.1%	0.049	0.054
	TGCL-153P	19.3%	23.5%	0.050	0.057
Leviton	6631	18.4%	24.4%	0.048	0.057
	6674	17.2%	24.4%	0.046	0.053
	IPL06	18.5%	24.9%	0.050	0.056



CIE Colorimetric Parameters*	
Chromaticity Coordinates	x=0.4332 y=0.4041
CCT	3063K
Peak Wavelength	621nm
Dominant Wavelength	nm
Rendering Index	94
Color Ratio	R=%, G=%, B=%
Half Bandwidth	nm
Color Purity	%

COMPLETE R VALUES

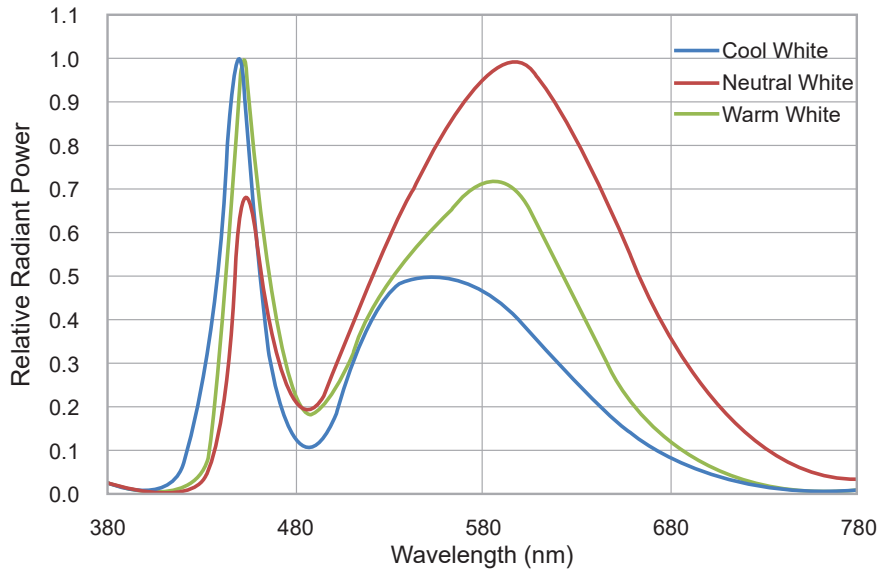


R1=94	R2=98	R3=98	R4=93	R5=94	R6=97	R7=91	R8=83
R9=64	R10=95	R11=94	R12=82	R13=95	R14=99	R15=90	

* Test result shown based on 3000 CCT, 94 CRI model



RELATIVE SPECTRAL DISTRIBUTION VS. WAVELENGTH CHARACTERISITC



Photometric Parameters*	
Luminous Flux:	4000 lm
Radiant Power:	mW
Efficacy:	≈ 85 lm/W

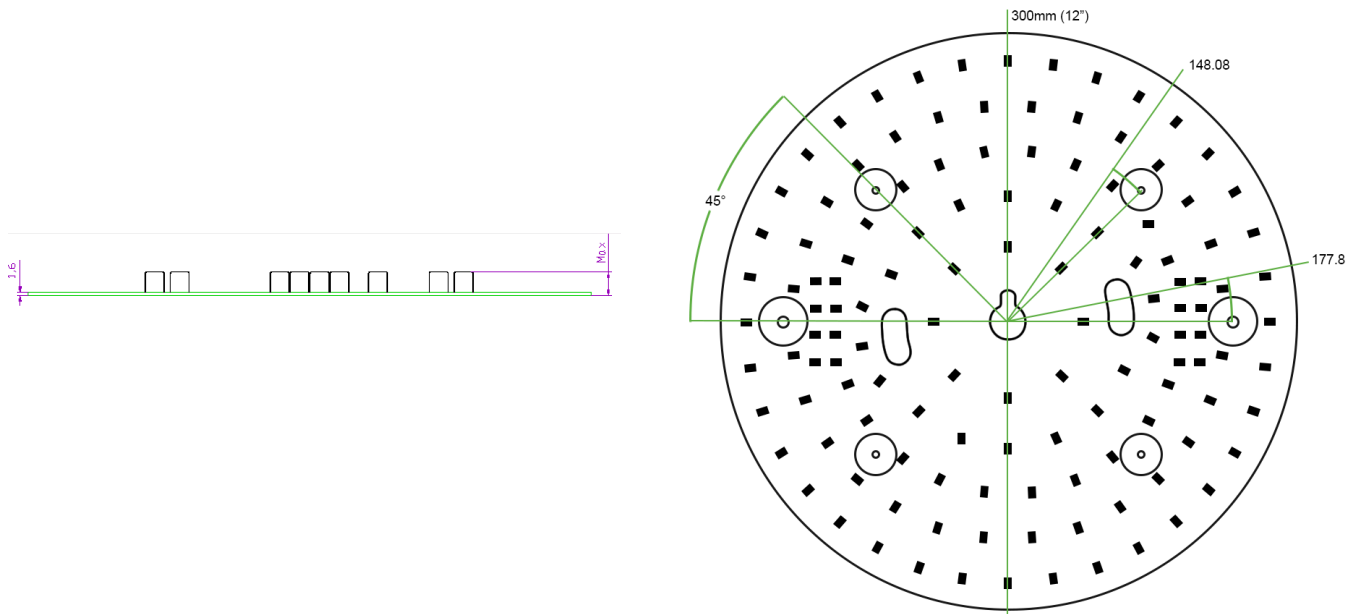
* Test result shown based on 3000 CCT, 94 CRI model

Electric Parameters	
Voltage	U=120V
Current	I= N/A
Power	P=45W
Power Factor	PF≈ 0.90

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MECHANICAL SPECS.



Precaution for use:

(1) Storage

To avoid the moisture penetration, we recommend store in a dry box with a desiccant . The recommended storage temperature range is 5C to 50C and a maximum humidity of RH50%.

(2) Use Precaution after Opening the Packaging as separation of the lens may affect the light output efficiency.

Pay attention to the following:

a. Recommend conditions after opening the package

- Sealing

- Temperature : 5 ~ 40° Humidity : less than RH30%

(3) Do not apply mechanical force or excess vibration during the cooling process to normal temperature after soldering.

(4) Radioactive exposure is not considered for the products listed here in.

(5) Gallium arsenide is used in some of the products listed in this publication. These products are dangerous if they are burned or shredded in the process of disposal. It is also dangerous to drink the liquid or inhale the gas generated by such products when chemically disposed of.

(6) This device should not be used in any type of fluid such as water, oil, organic solvent and etc. When washing is required, IPA (Isopropyl Alcohol) should be used.

(7) When the LEDs are in operation the maximum current should be decided after measuring the package temperature.

(8) LEDs must be stored properly to maintain the device. If the LEDs are stored for 3 months or more after being shipped from SSC, a sealed container with a nitrogen atmosphere should be used for storage.

(9) The appearance and specifications of the product may be modified for improvement without notice.

(10) Long time exposure of sunlight or occasional UV exposure will cause lens discoloration.

(11) VOCs (Volatile organic compounds) emitted from materials used in the construction of fixtures can penetrate silicone encapsulants of LEDs and discolor when exposed to heat and photonic energy. The result can be a significant loss of light output from the fixture.

Knowledge of the properties of the materials selected to be used in the construction of fixtures can help prevent these issues.

CAUTION!

- Turn the power off before installing LED to the proper constant current LED driver.
- Avoid short circuit, or drilling / cutting the LED board! It will damage its electrical circuit!