



# DATA SHEET GLV9\_C50501 Series

Part of the simpleLED® Program



## simpleLED GLV9\_C50501 SERIES

The light engine series consist of 7 high power LUXEON Rebel LEDs. It is engineered to provide customers with the flexibility to select the optimal light source for their applications. Customers also have the option of modifying their light engine by selecting their preferred LUXEON Rebel LED, optic and/or connector that best suits the application.

#### **FEATURES & BENEFIT**

3 year manufacture (GL-Lighting) warranty High-reliability LED sources Wide operational temperature range

Multiple configurable options

Multiple optic options

Wide range of drive current

Multiple CCT's available

7 LEDs in series

Short lead time

CE certified, UL recognized



GLV91C50501

#### TYPICAL APPLICATIONS

Directional lighting

Track lighting

Accent lighting

Display lighting

Recessed down lighting



GLV92C50501





# simpleLED GLV9\_C50501 WARM WHITE SERIES

PARAMI	ETER	CONDITIONS
РСВ		FR4/MCPCB
Finish		White
Size	)	Dia 50mm
Source	Туре	LUXEON Rebel LXM8-PW30
	00	Solder Pad
Connector	20	20cm UL1007 20Awg
	CN	TYCO 2008563-1
Thermal Resistance (p-n junction to Tp)		Rth= 21 K/W (FR4) Rth= 14 K/W (MCPCB)
Rated Lumen Tp=25°C @350mA		>=560lm
сст		3045k
CRI		Min. 80
Tp Maximum T	emperature	80 °C

## **ELECTRICAL CHARACTERISTICS**

PARAMETER	MIN	TYPICAL	MAX
Forward Voltage (V) @350mA & Tp=25 <sup>o</sup> C	17.5	21	22.75
Power Consumption @350mA (W)	6.13	7.35	7.96
Efficacy (lm/Watt) @350mA, Tp=25°C	>=70	>=76	>=91

Driving Current	100mA	350mA	700mA
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## **ENVIRONMENTAL CHARACTERISTICS**

PARAMETER	MIN	MAX
Storage Temperature (°C)	-40	+85
Tp Temperature (°C)	-40	+80





# simpleLED GLV9\_C50501 NEUTRAL WHITE SERIES

PARAMETER		CONDITIONS
PCB	РСВ	
Finish		White
Size		Dia 50 mm
Source 1	<sup>-</sup> уре	LUXEON Rebel LXML-PWN2
	00	Solder Pad
Connector	20	20cm UL1007 20Awg
	CN	TYCO 2008563-1
Thermal Resistance (p-n junction to Tp)		Rth= 17 K/W (FR4) Rth= 10 K/W (MCPCB)
Rated Lumen Tp=25°C @700mA		>=1400lm
сст		4100k
CRI		Min. 60
Tp Maximum Te	emperature	80 °C

#### **ELECTRICAL CHARACTERISTICS**

PARAMETER	MIN	TYPICAL	MAX
Forward Voltage (V) @700mA & Tp=25 <sup>o</sup> C	17.5	21	24.5
Power Consumption @700mA (W)	12.25	14.7	17.15
Efficacy (lm/Watt) @700mA, Tp=25°C	>=81	>=95	>=114

Driving Current	100mA	700mA	1000mA
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## **ENVIRONMENTAL CHARACTERISTICS**

PARAMETER	MIN	MAX
Storage Temperature (°C)	-40	+85
Tp Temperature (°C)	-40	+80





# simpleLED GLV9\_C50501 COOL WHITE SERIES

PARAMETER		CONDITIONS
РСВ		FR4/MCPCB
Finish		White
Size		Dia 50 mm
Source 1	<sup>-</sup> уре	LUXEON Rebel LXML-PWC2
	00	Solder Pad
Connector	20	20cm UL1007 20Awg
	CN	TYCO 2008563-1
Thermal Resistance (p-n junction to Tp)		Rth= 17 K/W (FR4) Rth= 10 K/W (MCPCB)
(p-ii junction	тю тр)	KIII= IV RVV (NICECB)
Rated Lumen Tp=25°C @700mA		>=1400lm
сст		5650k
CRI		Min. 60
Tp Maximum Temperature		80 °C

## **ELECTRICAL CHARACTERISTICS**

PARAMETER	MIN	TYPICAL	MAX
Forward Voltage (V) @700mA & Tp=25 <sup>o</sup> C	17.5	21	24.5
Power Consumption @700mA (W)	12.25	14.7	17.15
Efficacy (lm/Watt) @700mA, Tp=25°C	>=81	>=95	>=114

Driving Current	100mA	700mA	1000mA
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## **ENVIRONMENTAL CHARACTERISTICS**

PARAMETER	MIN	MAX
Storage Temperature (°C)	-40	+85
Tp Temperature (°C)	-40	+80

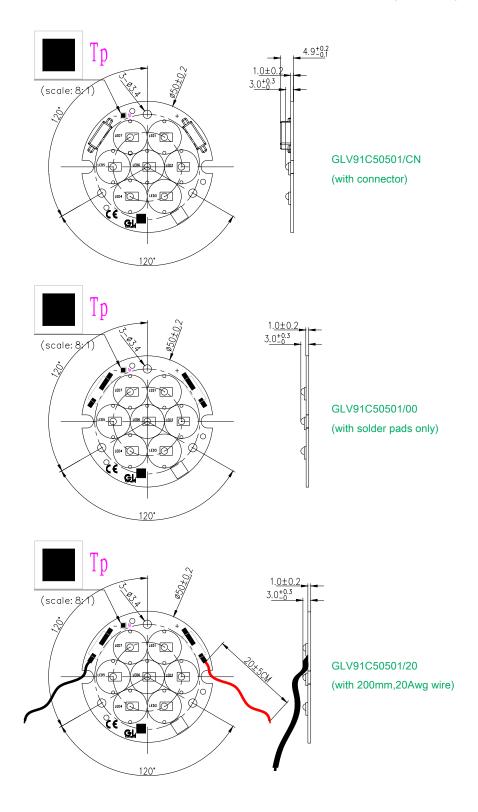




# MECHANICAL DRAWINGS (GLV91C50501 / FR4)

2D drawing with dimensions:

( Unit: mm)



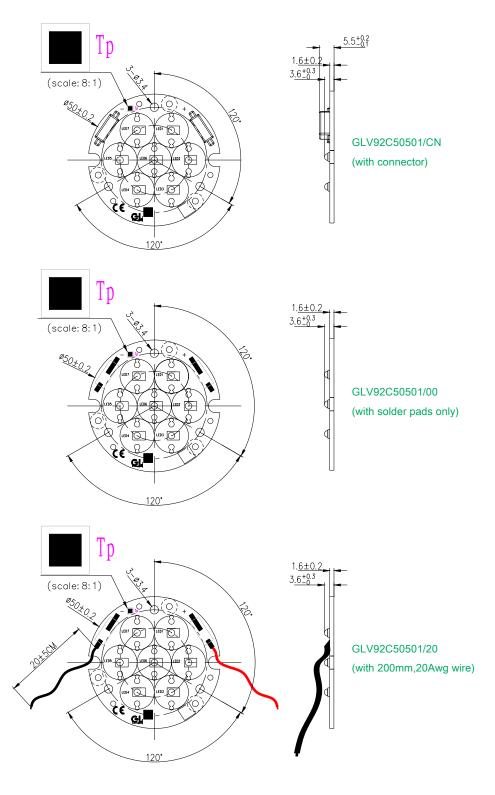




# MECHANICAL DRAWINGS(GLV92C50501 / MCPCB)

2D drawing with dimensions:

( Unit: mm)







#### PART NUMBERING & ORDERING INFORMATION

1. PRODUCT SERIES

GLV91C50501

Circular FR4 with 7 LEDs in series

GLV92C50501

Circular MCPCB with 7 LEDs in series

2. CONNECTOR TYPE

00 - Solder Pad

20 - 20cm UL1007 20Awg

CN - TYCO 2008563-1

3. LED TYPE

LL - LXML LUXEON REBEL

LB - LXM8 LUXEON REBEL

LG - LXML LUXEON REBEL ES

4. NUMBER OF LED

07 - 7 LEDs

5. CCT

S30 - 3000K ANSI

D40 - 4000K

S40 - 4000K ANSI

W00 - 5600K

S50 - 5000K ANSI

6. FLUX BIN

L – Min 80lm@350mA

N - Min 100lm@350mA

R - Min 160 Lumens@700mA

S - Min 180 Lumens@700mA

T-Min 200 Lumens@700mA

7. OPTICS

0BS - 18/22 Degree, single lens

0BN - 25/27 Degree, single lens

0BF - 37 Degree, single lens

0BW - 52/55 Degree, single lens

BWS - 20/22 Degree, multiple lens

BWN - 25/27 Degree, multiple lens

BWF - 37 Degree, multiple lens

BWW - 52/55 Degree, multiple lens

DFF - Diffuser

Part Number:

GLV9\*C50501 / AA – BB CC DDD E FFF 1 2 3 4 5 6 7





#### ACCESSORIES FOR LENS

#### •Single Lens

No.	BRAND	MANUFACTURER PART #	SIZE	LUXEON REBEL	LUXEON REBEL ES	HOLDER
1	GL	GLVA1BS01H	θ13.5x7.3mm	18°	22°	Yes
2		GLVA1BN01H	θ13.5x7.3mm	25°	27°	Yes
3		GLVA1BF01H	θ13.5x7.3mm	37°	TBD	Yes
4		GLVA1BW01H	θ13.5x7.3mm	52°	55°	Yes

#### Part Number:



1. ACCESSORIES CATEGORY NUMBER GLVA1

**Optics Number** 

2. OPTICS ANGLE

BS - 18/22 Degree Lens

BN - 25/27 Degree Lens

BF - 37 Degree Lens

BW - 52/55 Degree Lens

3. LENS NUMBER

01 - Exclude DF, 1 Lens, With Holder

4. RING / HOLDER

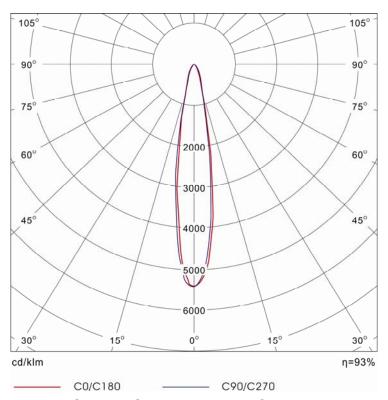
H - Single Lens Holder

N – Lens only; No Ring, No Holder

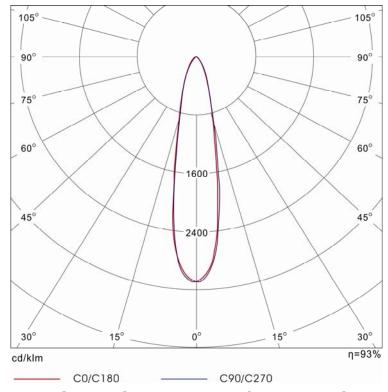




## **RELATIVE INTENSITY OF GLVA1BS01**



GLVA1BS01 - With LUXEON REBEL

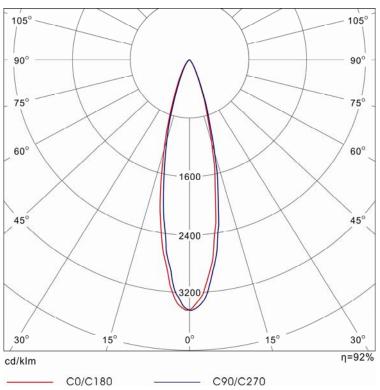


GLVA1BS01 - With LUXEON REBEL ES

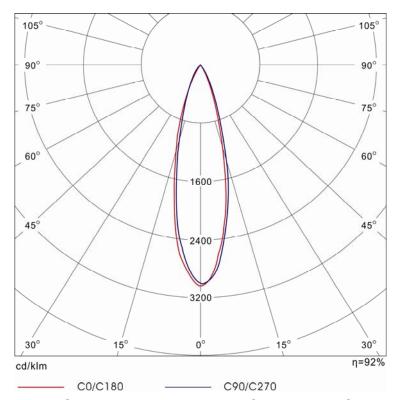




## **RELATIVE INTENSITY OF GLVA1BN01**



GLVA1BN01 - With LUXEON REBEL

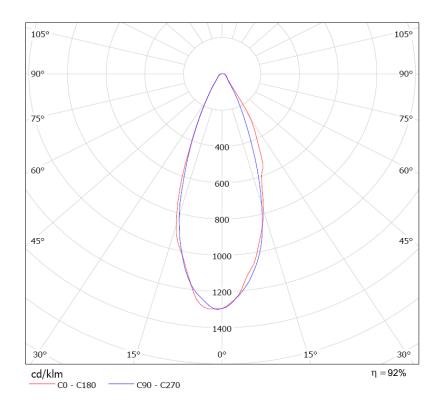


GLVA1BN01 - With LUXEON REBEL ES





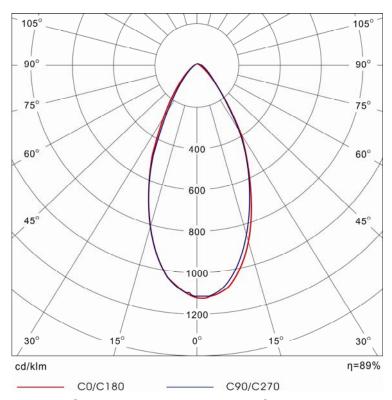
## **RELATIVE INTENSITY OF GLVA1BF01**



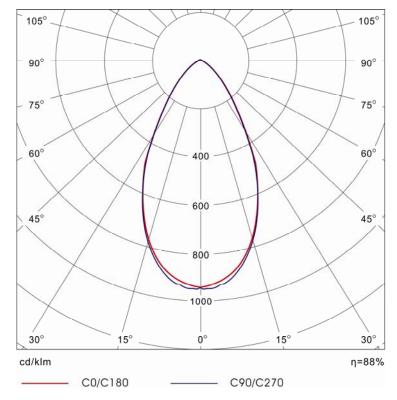
GLVA1BF01 - With LUXEON REBEL



## **RELATIVE INTENSITY OF GLVA1BW01**



GLVA1BW01 - With LUXEON REBEL



GLVA1BW01 - With LUXEON REBEL ES





#### ACCESSORIES FOR LENS

#### Multiple Lens

No.	BRAND	MANUFACTURER PART #	SIZE	LUXEON REBEL	LUXEON REBEL ES	HOLDER
1		GLVA1BS07N50	θ43x7.3mm	20°	22°	N0
2		GLVA1BN07N50	θ43x7.3mm	25°	27°	N0
3	GL	GLVA1BF07N50	θ43x7.3mm	37°	TBD	N0
4		GLVA1BW07N50	θ43x7.3mm	52°	55°	N0
5		GLVA1DF50N50	Θ50x26.3mm	140°	140°	N0

#### Part Number:

GLVA1 BS 07 X 50 1 1 2 3 4 5

1. ACCESSORIES CATEGORY NUMBER GLVA1

**Optics Number** 

3. LENS NUMBER

07 - 7 Lens Assembly

50 - For DF only, 50mm diffuser

2. OPTICS ANGLE

BS - 20/22 Degree Lens

BN - 25/27 Degree Lens

BF - 37 Degree Lens

BW - 52/55 Degree Lens

DF - Diffuser

4. RING / HOLDER

X – With Holder; Multiple Lens

Y – With Ring Only; Multiple Lens

C - With Ring/Holder combo; Multiple Lens

N – Lens only; No Ring, No Holder

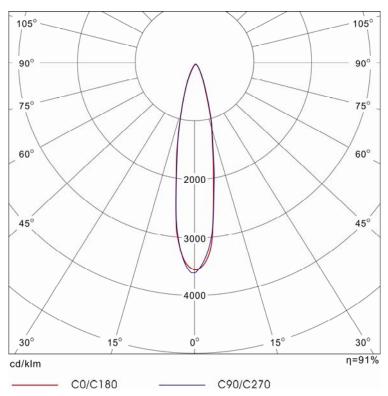
5. DIA. OF MULTIPLE LENS

50 – For 7 Lens Assembly

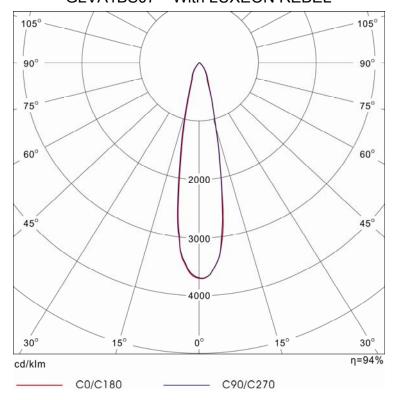




# INTENSITY DIAGRAM (BS\_20/23deg\_POLAR)



#### GLVA1BS07 - With LUXEON REBEL

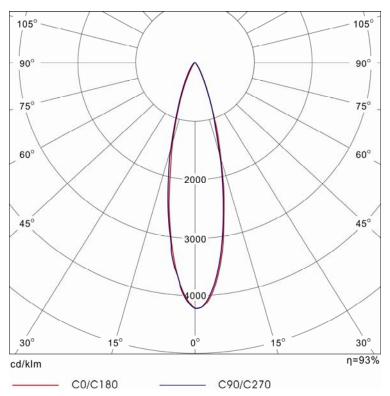


GLVA1BS07 - With LUXEON REBEL ES

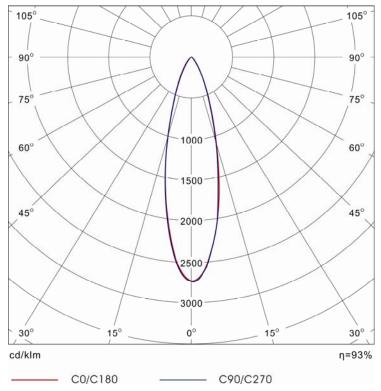




# INTENSITY DIAGRAM (BN\_25/27deg\_POLAR)



GLVA1BN07 - With LUXEON REBEL



GLVA1BN07 - With LUXEON REBEL ES





## ACCESSORY FOR HEAT SINK



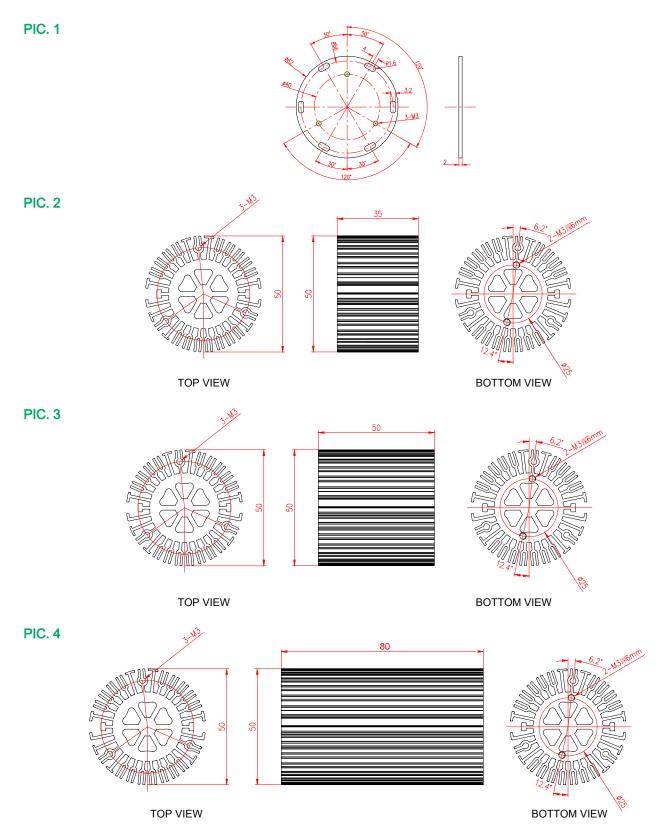


No.	BRAND	MANUFACTURER PART #	SIZE	MATERIAL	SURFACE TREATMENT	DRAWING NO.
1-1		GLVA2C50501K02	Die Communitation of Communitation		Black Coating	PIC.1
1-2		GLVA2C50501A02	Dia 62mm x Height 2mm		Anodized	
2-1	- GL	GLVA2C50501K35	Dia 50mm x Height 35mm	Aluminium	Black Coating	PIC.2
2-2		GLVA2C50501A35			Anodized	
3-1		GLVA2C50501K50	Die Former Heiseld Former		Black Coating	PIC.3
3-2		GLVA2C50501A50	Dia 50mm x Height 50mm		Anodized	PIC.3
4-1		GLVA2C50501K80	Die 50 von Heistel 00 von	E	Black Coating	DIC 4
4-2		GLVA2C50501A80	Dia 50mm x Height 80mm		Anodized	PIC.4





## **ACCESSORY DIMENSION - HEAT SINK**







## PACKAGING INFORMATION

INNER PACKING	SIZE	TRAY	QTY
TYPE	345*295*11mm	1	20







INNER PACKING	SIZE	TRAY	QTY
TYPE 1	350*300*30mm	1	20
TYPE 2	350*300*250mm	18	360







#### **COMPANY INFORMATION**

#### **About Future Lighting Solutions**

Future Lighting Solutions (www.futurelightingsolutions.com) is a leading provider of LED lighting components and support services for solid-state lighting products and installations, including engineering expertise, concept development, full system solutions and online tools that accelerate quality application development. The company is a division of Future Electronics.

#### About simpleLED®

Future Lighting Solutions simpleLED program has over 500 combinations of LUXEON® LED & Optic configurations, enabling you to select the right Light Engine for your application, eliminate prototyping delays and accelerating time to market. Additional benefits include UL recognized quality and a 3 year warranty. Visit our website and start innovating.

#### **CONTACT DETAILS**

In North America:

1-888-LUXEON2

Americas@futurelightingsolutions.com

In Europe:

00-800-44FUTURE

Europe@futurelightingsolutions.com

In Asia:

+800-LUMILEDS

Asia@futurelightingsolutions.com

In Japan:

+81-0120-667-013

Japan@futurelightingsolutions.com

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