



DATA SHEET

GLV91RS417_ Series

Part of the simpleLED® Program

simpleLED GLV91RS417_ SERIES

The light engine series consist of 24 / 32 / 48 mid-power LEDs. It is engineered to provide customers with the flexibility to select the optimal light source for their applications.

FEATURES & BENEFITS

3 year manufacturer (GL-Lighting) warranty

High-reliability LED sources

LM-80 compliant LEDs

Industry standard ANSI color binning

Color consistency targeting a 3-step MacAdam Ellipse

Multiple CCT's available

Wide operating drive current and temperature range

Short lead time

Boards are UL Recognized (PCB only) and CE certified

TYPICAL APPLICATIONS

Office Lighting

High Bay

Poster Box

Cove Lighting

Wall Wash

Under-Cabinet

Note: All specifications are subject to change without notice.

simpleLED GLV91RS4171-SB24 WHITE SERIES

PARAMETER		CONDITIONS
PCB		FR4
Finish		White
Size		L 284mm x W 17mm
Source Type		Mid Power LED x 24
Connector	00	Solder Pad
	20	20cm UL1007 20Awg
	CW	Wago connector 2060-402/998-404
Thermal Resistance (Junction to solder point)		R _{th} < 20 °C/W
Thermal Resistance (Tp to Ts)		2.12 °C/W
Thermal Resistance Of The Board (Ts to the bottom of Ts)		2.84 °C/W
CRI		Min. 80
Tp Maximum Temperature		80 °C

PERFORMANCE SPECIFICATIONS (@ Ts=25 °C, Io=350mA)

CCT		2700K	3000K	3500K	4000K	5000K	5700K
Typical Light Output (lm)		760 lm	760 lm	760 lm	805 lm	790 lm	790 lm
Efficacy (lm/w)	Min.	109	109	109	116	113	113
	Typ.	119	119	119	126	123	123
	Max.	130	130	130	137	135	135

ELECTRICAL CHARACTERISTICS

PARAMETER	MIN	TYPICAL	MAX
Forward Voltage (V) @350mA & Ts=25°C	16.68	18.21	19.8
Power Consumption @350mA (W)	5.84	6.38	6.93
Driving Current	Absolute Max.		480mA
	For LM80		≤350mA

ENVIRONMENTAL CHARACTERISTICS

PARAMETER	MIN	MAX
Storage Temperature (°C)	-40	+100
Tp Temperature (°C)	-30	+80

Note: All specifications are subject to change without notice.

simpleLED GLV91RS4171-SB32 WHITE SERIES

PARAMETER		CONDITIONS
PCB		FR4
Finish		White
Size		L 284mm x W 17mm
Source Type		Mid Power LED x 32
Connector	00	Solder Pad
	20	20cm UL1007 20Awg
	CW	Wago connector 2060-402/998-404
Thermal Resistance (Junction to solder point)		Rth< 20 °C/W
Thermal Resistance (Tp to Ts)		1.77 °C/W
Thermal Resistance Of The Board (Ts to the bottom of Ts)		2.72 °C/W
CRI		Min. 80
Tp Maximum Temperature		80 °C

PERFORMANCE SPECIFICATIONS (@ Ts=25 °C, Io=700mA)

CCT		2700K	3000K	3500K	4000K	5000K	5700K
Typical Light Output (lm)		1010 lm	1010 lm	1010 lm	1070 lm	1050 lm	1050 lm
Efficacy (lm/w)	Min.	109	109	109	115	113	113
	Typ.	118	118	118	125	123	123
	Max.	129	129	129	137	134	134

ELECTRICAL CHARACTERISTICS

PARAMETER	MIN	TYPICAL	MAX
Forward Voltage (V) @700mA & Ts=25°C	11.12	12.14	13.2
Power Consumption @700mA (W)	7.79	8.5	9.24
Driving Current	Absolute Max.		960mA
	For LM80		<=700mA

ENVIRONMENTAL CHARACTERISTICS

PARAMETER	MIN	MAX
Storage Temperature (°C)	-40	+100
Tp Temperature (°C)	-30	+80

Note: All specifications are subject to change without notice.

simpleLED GLV91RS4171-SB48 WHITE SERIES

PARAMETER		CONDITIONS
PCB		FR4
Finish		White
Size		L 284mm x W 17mm
Source Type		Mid Power LED x 48
Connector	00	Solder Pad
	20	20cm UL1007 20Awg
Thermal Resistance (Junction to solder point)		Rth< 20 °C/W
Thermal Resistance (Tp to Ts)		0.55 °C/W
Thermal Resistance Of The Board (Ts to the bottom of Ts)		1.42 °C/W
CRI		Min. 80
Tp Maximum Temperature		80 °C

PERFORMANCE SPECIFICATIONS (@ Ts=25 °C, Io=700mA)

CCT		2700K	3000K	3500K	4000K	5000K	5700K
Typical Light Output (lm)		1520 lm	1520 lm	1520 lm	1610 lm	1575 lm	1575 lm
Efficacy (lm/w)	Min.	109	109	109	116	113	113
	Typ.	119	119	119	126	123	123
	Max.	130	130	130	137	134	134

ELECTRICAL CHARACTERISTICS

PARAMETER	MIN	TYPICAL	MAX
Forward Voltage (V) @700mA & Ts=25°C	16.68	18.21	19.8
Power Consumption @700mA (W)	11.68	12.75	13.86
Driving Current	Absolute Max.	960mA	
	For LM80	<=700mA	

ENVIRONMENTAL CHARACTERISTICS

PARAMETER	MIN	MAX
Storage Temperature (°C)	-40	+100
Tp Temperature (°C)	-30	+80

Note: All specifications are subject to change without notice.

simpleLED GLV91RS4172-SB48 WHITE SERIES

PARAMETER		CONDITIONS
PCB		FR4
Finish		White
Size		L 284mm x W 17mm
Source Type		Mid Power LED x 48
Connector	00	Solder Pad
	20	20cm UL1007 20Awg
	CW	Wago connector 2060-402/998-404
Thermal Resistance (Junction to solder point)		R _{th} < 20 °C/W
Thermal Resistance (Tp to Ts)		0.73 °C/W
Thermal Resistance Of The Board (Ts to the bottom of Ts)		1.54 °C/W
CRI		Min. 80
Tp Maximum Temperature		80 °C

PERFORMANCE SPECIFICATIONS (@ Ts=25 °C, Io=700mA)

CCT		2700K	3000K	3500K	4000K	5000K	5700K
Typical Light Output (lm)		1520 lm	1520 lm	1520 lm	1610 lm	1575 lm	1575 lm
Efficacy (lm/w)	Min.	109	109	109	116	113	113
	Typ.	119	119	119	126	123	123
	Max.	130	130	130	137	134	134

ELECTRICAL CHARACTERISTICS

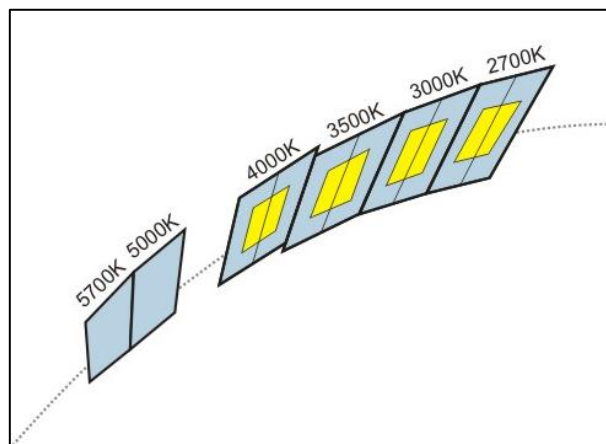
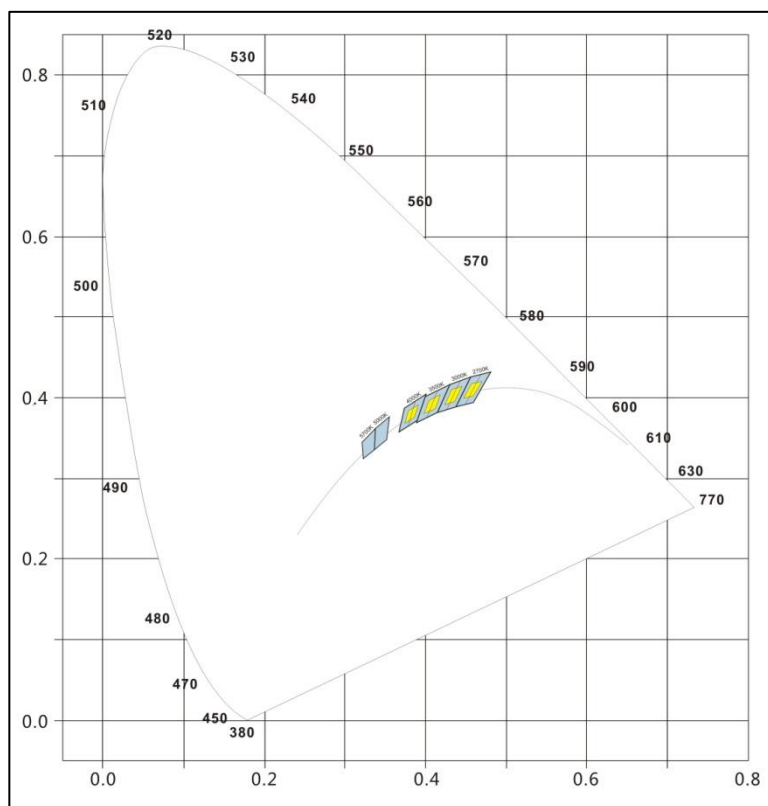
PARAMETER	MIN	TYPICAL	MAX
Forward Voltage (V) @700mA & Ts=25°C	16.68	18.21	19.8
Power Consumption @700mA (W)	11.68	12.75	13.86
Driving Current	Absolute Max.	960mA	
	For LM80	<=700mA	

ENVIRONMENTAL CHARACTERISTICS

PARAMETER	MIN	MAX
Storage Temperature (°C)	-40	+100
Tp Temperature (°C)	-30	+80

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CHROMATICITY DIAGRAM



-  - ANSI Binning Area
-  - Color consistency targeting a 3-step MacAdam Ellipse

CHROMATICITY COORDINATE – ANSI BINNING

2700K* ANSI		3000K* ANSI		3500K* ANSI		4000K* ANSI		5000K* ANSI		5700K* ANSI	
x	y	x	y	x	y	x	y	x	y	x	y
0.4562	0.4260	0.4299	0.4165	0.3996	0.4015	0.3736	0.3874	0.3376	0.3616	0.3207	0.3462
0.4813	0.4319	0.4562	0.4260	0.4299	0.4165	0.4006	0.4044	0.3551	0.3760	0.3376	0.3616
0.4373	0.3893	0.4147	0.3814	0.3889	0.3690	0.3670	0.3578	0.3366	0.3369	0.3222	0.3243
0.4593	0.3944	0.4373	0.3893	0.4147	0.3814	0.3898	0.3716	0.3515	0.3487	0.3366	0.3369

Color consistency targeting a 3-step MacAdam Ellipse

2700K*		3000K*		3500K*		4000K*	
x	y	x	y	x	y	x	y
0.4573	0.4178	0.4322	0.4096	0.4040	0.3966	0.3782	0.3837
0.4695	0.4207	0.4449	0.4141	0.4186	0.4037	0.3912	0.3917
0.4475	0.3994	0.4242	0.3919	0.3981	0.3800	0.3744	0.3685
0.4589	0.4021	0.4359	0.3960	0.4116	0.3865	0.3863	0.3758

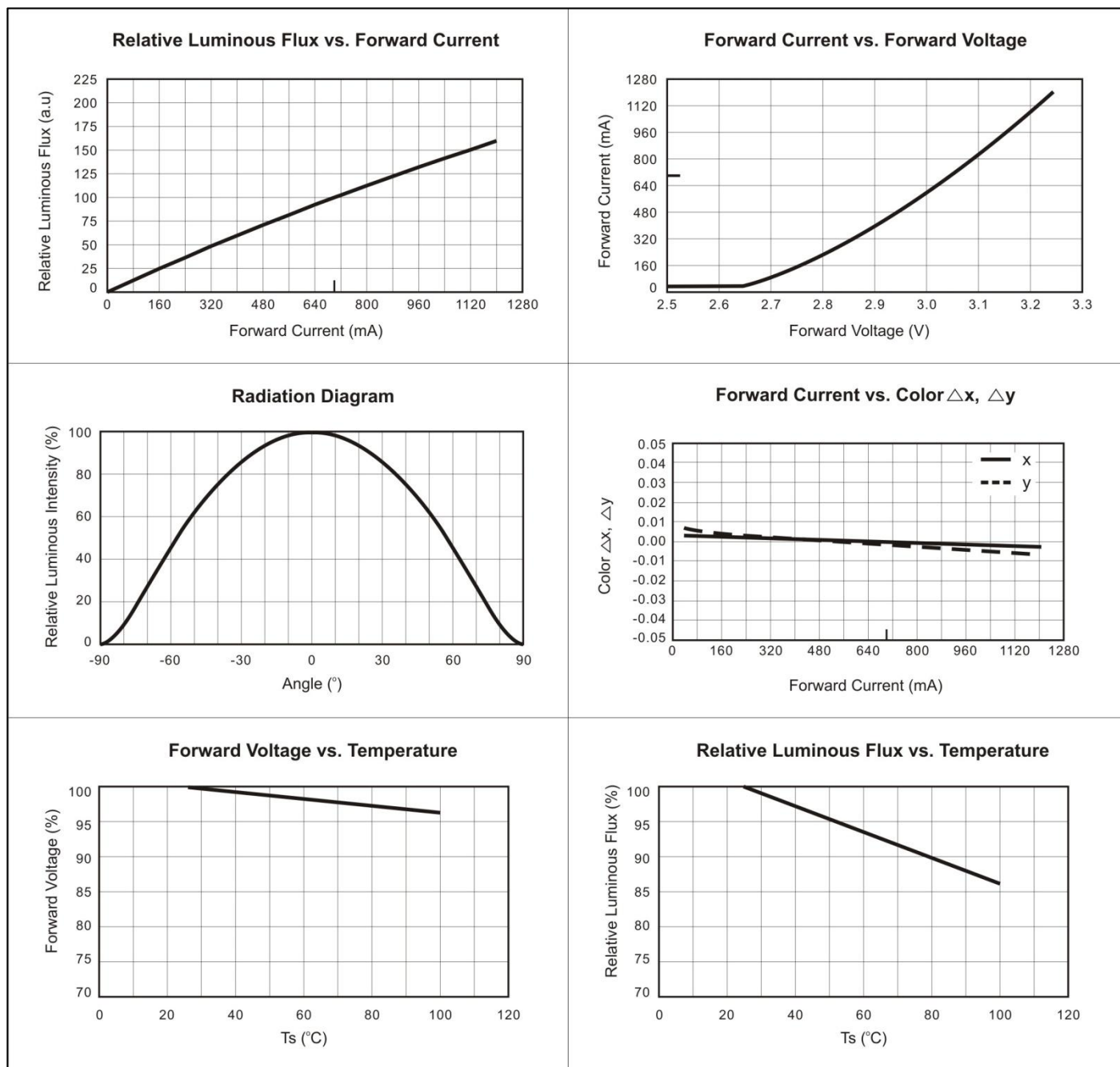
* The tolerances of the x,y coordinates. +/- 0.01

Note: All specifications are subject to change without notice.

TYPICAL CHARACTERISTICS GRAPH

*These graphs show typical values.

(Ts:25°C)

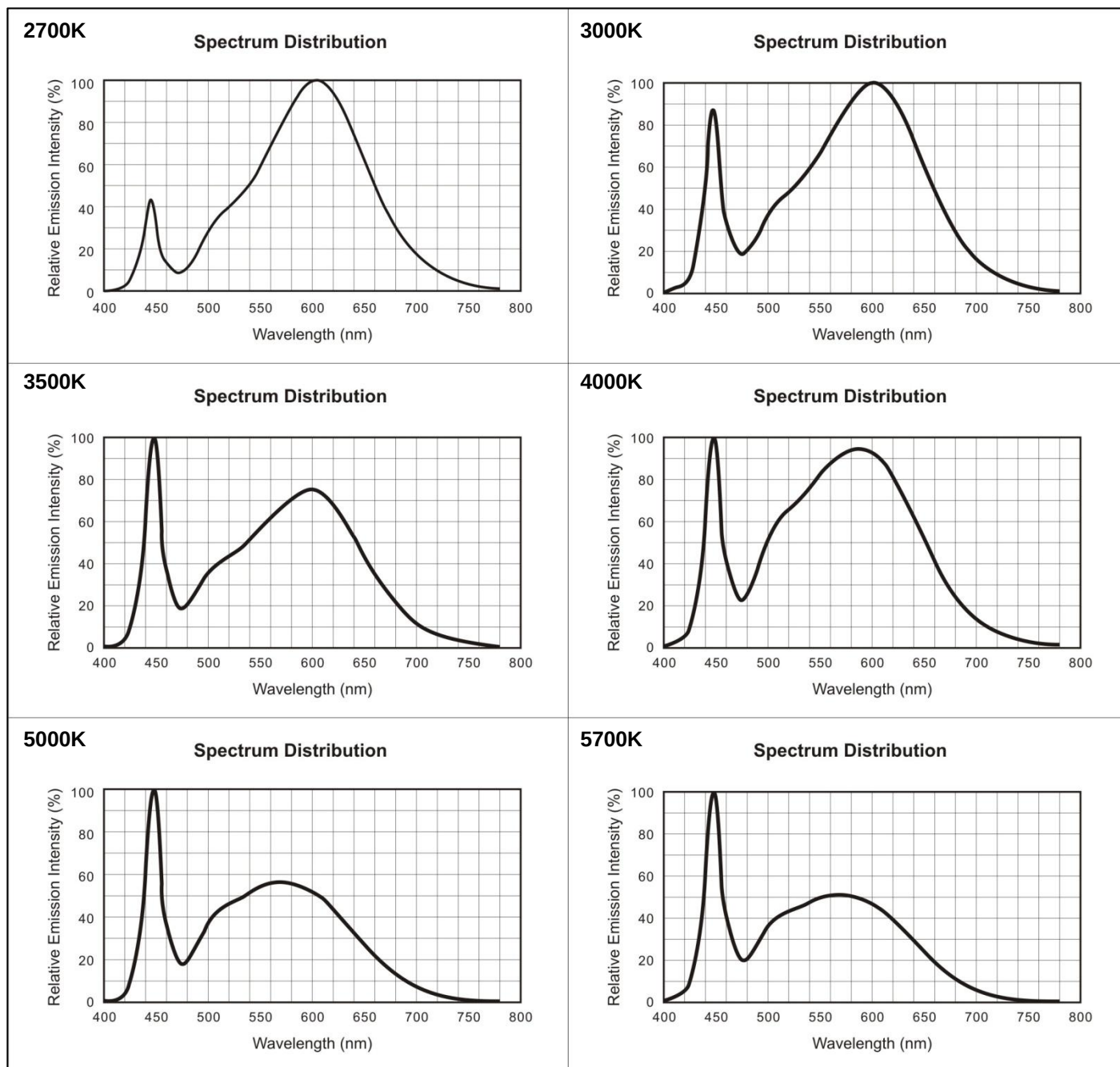


Note: All specifications are subject to change without notice.

TYPICAL CHARACTERISTICS GRAPH

*These graphs show typical values.

(Ts:25°C)

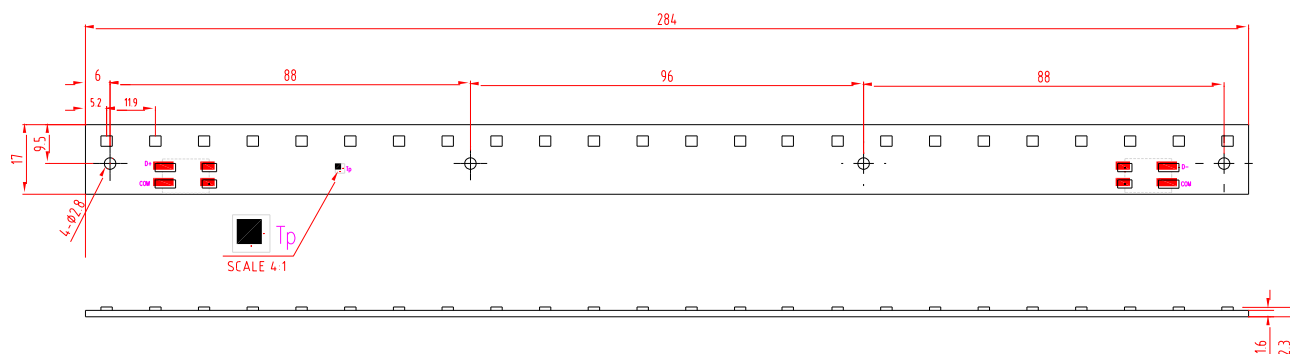


Note: All specifications are subject to change without notice.

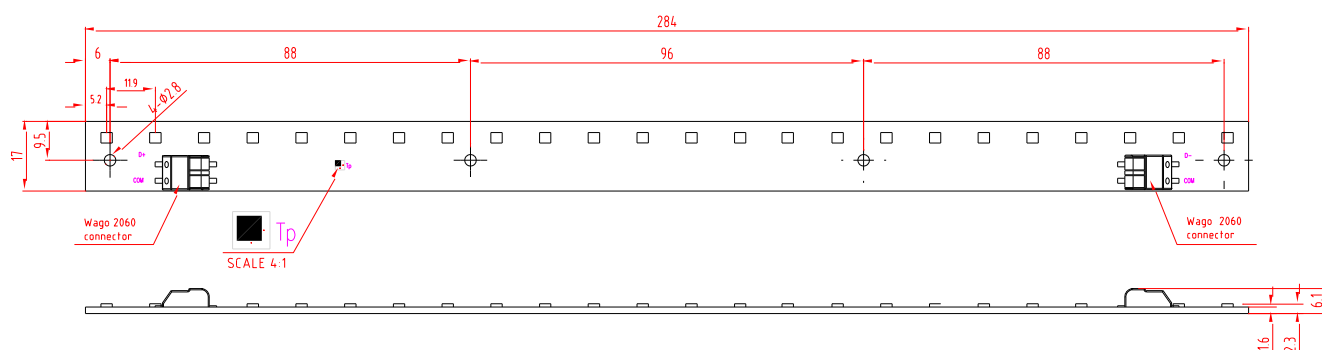
MECHANICAL DRAWINGS (GLV91RS4171-SB24 / FR4)

2D drawing with dimensions:

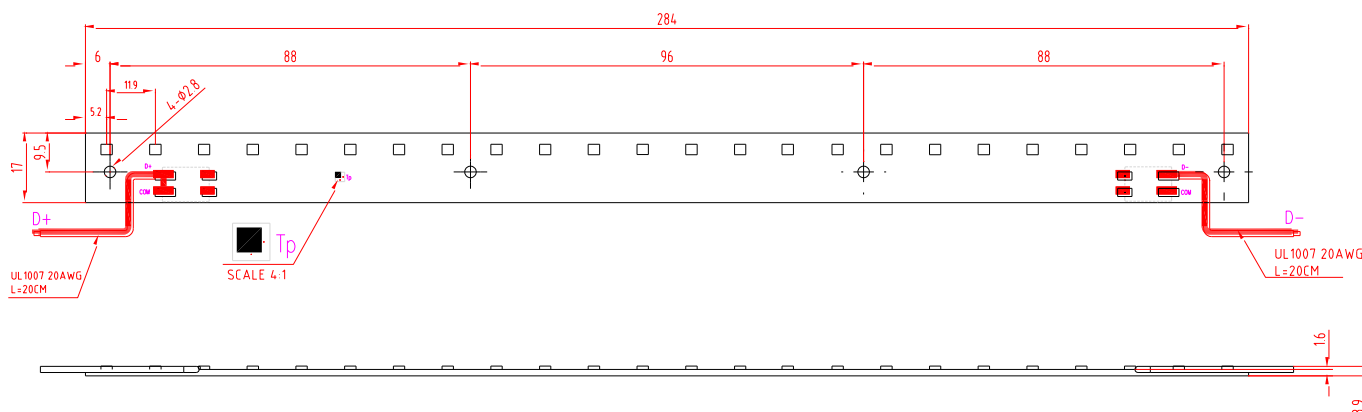
(Unit: mm)



GLV91RS4171/00-SB24 (with solder pads only)



GLV91RS4171/CW-SB24 (with connector)



GLV91RS4171/20-SB24 (with 200mm , 20Awg wire)

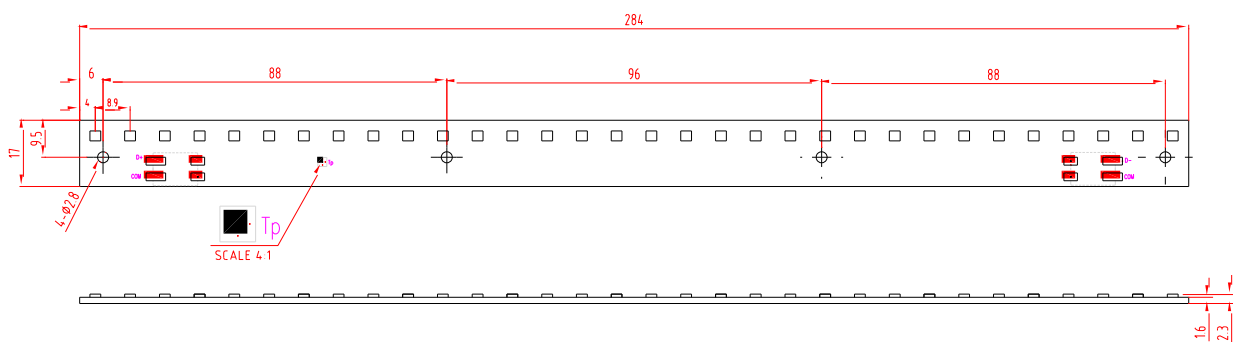
* Maximum connection units: 13 / 6 pcs (with / without plastic gasket for screws)

Note: All specifications are subject to change without notice.

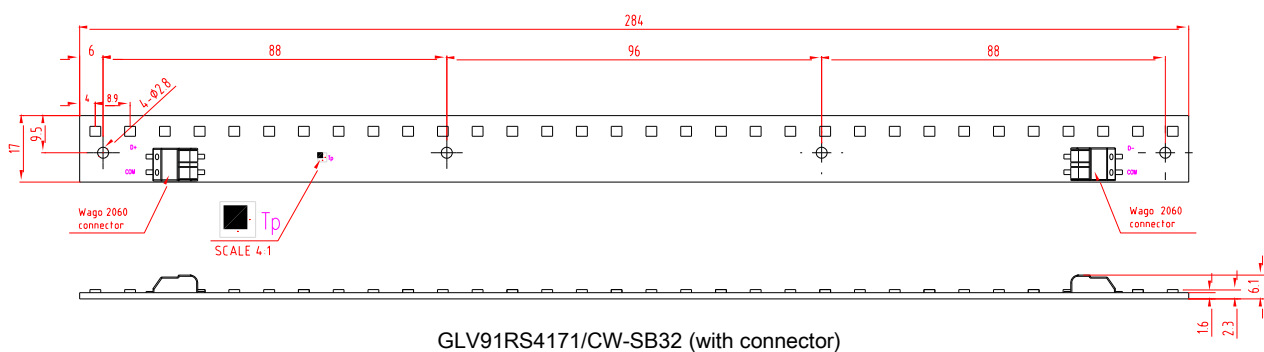
MECHANICAL DRAWINGS (GLV91RS4171-SB32 / FR4)

2D drawing with dimensions:

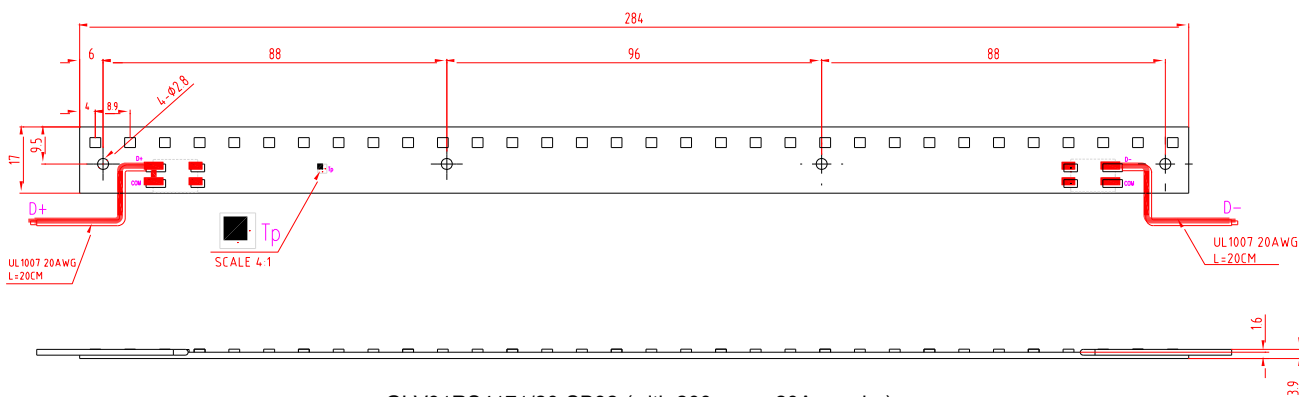
(Unit: mm)



GLV91RS4171/00-SB32 (with solder pads only)



GLV91RS4171/CW-SB32 (with connector)



GLV91RS4171/20-SB32 (with 200mm , 20Awg wire)

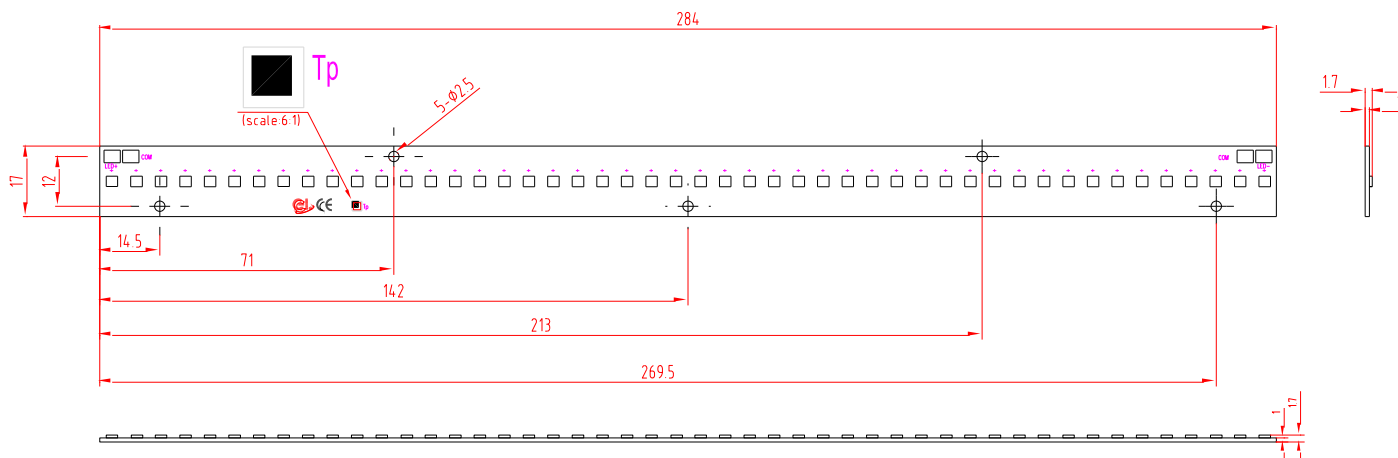
* Maximum connection units: 15 / 10 pcs (with / without plastic gasket for screws)

Note: All specifications are subject to change without notice.

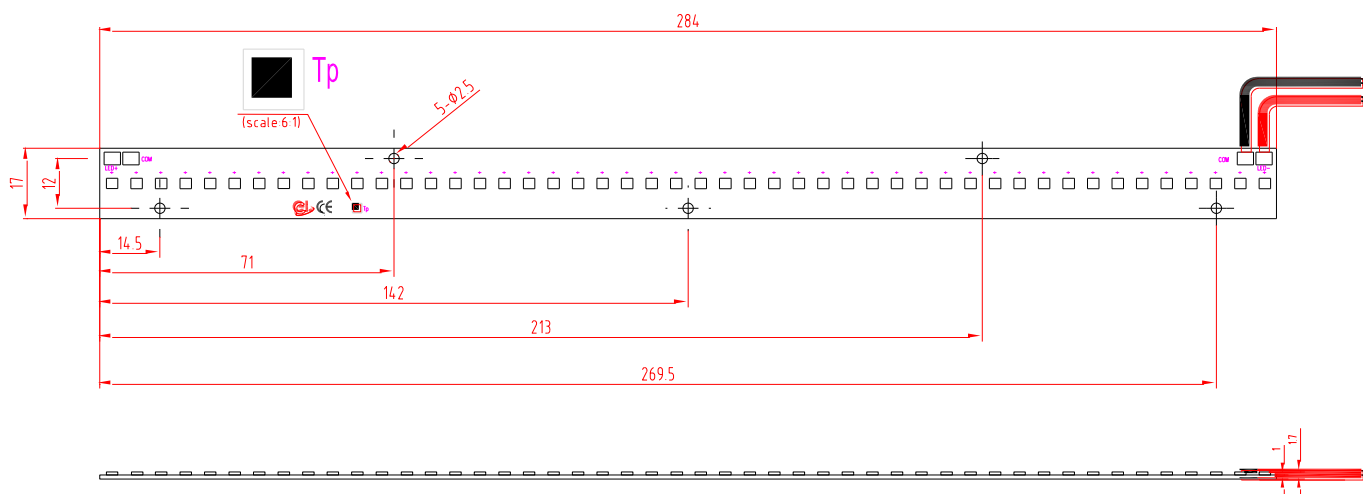
MECHANICAL DRAWINGS (GLV91RS4171-SB48 / FR4)

2D drawing with dimensions:

(Unit: mm)



GLV91RS4171/00 (with solder pads only)



GLV91RS4171/20 (with 200mm, 20Awg wire)

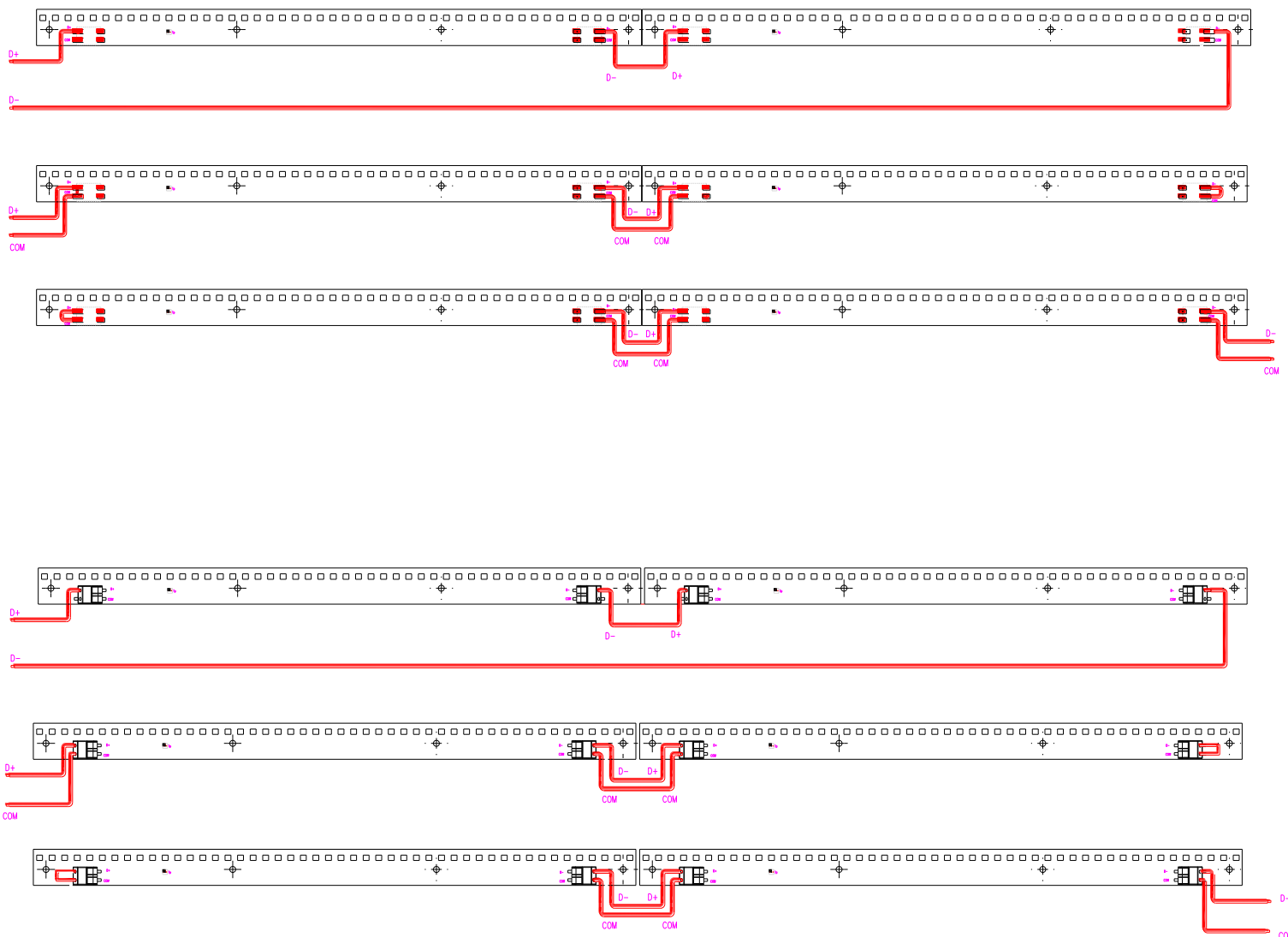
*** Maximum connection units: 8 / 6 pcs (with / without plastic gasket for screws)**

Note: All specifications are subject to change without notice.

PCB SERIES DRAWINGS

2D drawing with dimensions:

(Unit: mm)



Note: All specifications are subject to change without notice.

PART NUMBERING & ORDERING INFORMATION

1. PRODUCT SERIES GLV91RS4171 Rectangle FR4 with 24 or 32 offset LEDs or 48 centered LEDs GLV91RS4172 Rectangle FR4 with 48 offset LEDs	3. LED TYPE SD – Mid Power White LED (4P) SB - Mid Power White LED (8P)	6. FLUX BIN A – S0 Bin
2. CONNECTOR TYPE 00 – Solder Pad 20 – 20cm UL1007 20Awg CW – Wago connector 2060-402/998-404	4. NUMBER OF LED 24 - 24 LEDs (4P) 32 - 32 LEDs (8P) 48 - 48 LEDs (8P)	
	5. CCT S27 – 2700K ANSI S30 – 3000K ANSI S35 – 3500K ANSI S40 – 4000K ANSI S50 – 5000K ANSI S57 – 5700K ANSI	

Part Number :

GLV91RS4172 / AA – BB CC DDD E

1
2
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5
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Note: All specifications are subject to change without notice.

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 LED & Optic configurations, enabling you to select the right Light Engine for your application, eliminate prototyping delays and accelerating time to market. With a 3 year warranty. Visit our website and start innovating.

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Note: All specifications are subject to change without notice. Warranty provided by the manufacturer, GL-Lighting.