

## Linear LED modules 1100lm per 1 ft LIANNA-2R

A linear solution for retail and industrial lighting. Optimized for LEDiL's LIANNA-2R optics.

### Product description

- Long life-time
- Built-in, constant current LED module
- Re-workable push-in terminals enabling easy connection
- Compliance and approval: CE
- Available CCT from 2700K to 6500K and CRI 80, 90



### LinLED CRI 80 LE G5

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux <sup>1</sup> φ [lm]	Useful luminous flux <sup>2</sup> [lm]	Voltage <sup>1</sup> Vf [V]	Power <sup>1</sup> P [W]	Efficacy <sup>1</sup> [lm/W]	Current minimum If min <sup>3</sup> [mA]	Current maximum If max [mA]	Energy Efficiency Class
LinLED 277x26mm 1100lm 830 2C 27V LIANNA-2R LE G5	1010 147 03846	3000	225	1091	1120	24	5.4	202	40	800	B
LinLED 557x26mm 2200lm 830 2C 54V LIANNA-2R LE G5	1010 147 03946		225	2182	2239	48	11	202	40	800	B
LinLED 1119.5x26mm 4400lm 830 2C 108V LIANNA-2R LE G5	1010 147 04046		225	4365	4478	96	22	202	40	800	B
LinLED 277x26mm 1100lm 840 2C 27V LIANNA-2R LE G5	1010 147 04146	4000	225	1152	1182	24	5.4	213	40	800	B
LinLED 557x26mm 2200lm 840 2C 54V LIANNA-2R LE G5	1010 147 04246		225	2304	2363	48	11	213	40	800	B
LinLED 1119.5x26mm 4400lm 840 2C 108V LIANNA-2R LE G5	1010 147 04346		225	4607	4727	96	22	213	40	800	B

### LinLED CRI 80 CJ G4

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux <sup>1</sup> φ [lm]	Useful luminous flux <sup>2</sup> [lm]	Voltage <sup>1</sup> Vf [V]	Power <sup>1</sup> P [W]	Efficacy <sup>1</sup> [lm/W]	Current minimum If min <sup>3</sup> [mA]	Current maximum If max [mA]	Energy Efficiency Class
LinLED 277x26mm 1100lm 830 2C 27V LIANNA-2R CJ G4	1010 127 90746	3000	230	1065	1092	24	5.5	193	40	1000	C
LinLED 557x26mm 2200lm 830 2C 54V LIANNA-2R CJ G4	1010 127 91246		230	2129	2183	48	11	193	40	1000	C
LinLED 1119.5x26mm 4400lm 830 2C 108V LIANNA-2R CJ G4	1010 127 91346		230	4259	4367	96	22	193	40	1000	C
LinLED 277x26mm 1100lm 840 2C 27V LIANNA-2R CJ G4	1010 127 90846	4000	230	1107	1135	24	5.5	201	40	1000	B
LinLED 557x26mm 2200lm 840 2C 54V LIANNA-2R CJ G4	1010 127 91446		230	2214	2271	48	11	201	40	1000	B
LinLED 1119.5x26mm 4400lm 840 2C 108V LIANNA-2R CJ G4	1010 127 91546		230	4429	4542	96	22	201	40	1000	B

### LinLED CRI 90 LE G5

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux <sup>1</sup> φ [lm]	Useful luminous flux <sup>2</sup> [lm]	Voltage <sup>1</sup> Vf [V]	Power <sup>1</sup> P [W]	Efficacy <sup>1</sup> [lm/W]	Current minimum If min <sup>3</sup> [mA]	Current maximum If max [mA]	Energy Efficiency Class
LinLED 277x26mm 1100lm 930 2C 27V LIANNA-2R LE G5	1010 147 04446	3000	255	1097	1126	24	6.2	178	40	800	C
LinLED 557x26mm 2200lm 930 2C 54V LIANNA-2R LE G5	1010 147 04546		255	2195	2252	48	12	178	40	800	C
LinLED 1119.5x26mm 4400lm 930 2C 108V LIANNA-2R LE G5	1010 147 04646		255	4389	4504	97	25	178	40	800	C
LinLED 277x26mm 1100lm 940 2C 27V LIANNA-2R LE G5	1010 147 04746	4000	255	1166	1196	24	6.2	190	40	800	C
LinLED 557x26mm 2200lm 940 2C 54V LIANNA-2R LE G5	1010 147 04846		255	2332	2393	48	12	190	40	800	C
LinLED 1119.5x26mm 4400lm 940 2C 108V LIANNA-2R LE G5	1010 147 04946		255	4664	4785	97	25	190	40	800	C

<sup>1</sup>At nominal current and T<sub>p</sub>

<sup>2</sup>At nominal current and 25°C

<sup>3</sup>It is recommended not to operate below minimum current in order to avoid un-even brightness

Tolerance range for optical and electrical ±10%

### Temperature & humidity

Specification item	Unit	Value
T <sub>p</sub>	[°C]	45
T <sub>p</sub> rated	[°C]	65
T <sub>c</sub>	[°C]	85
Relative humidity (non-condensing)	[%]	5 ... 85
Storage ambient temperature	[°C]	-25 ... +85
Storage relative humidity (non-condensing)	[%]	5 ... 85

T<sub>p</sub> - Temperature related to the performance parameters of the LED modules

T<sub>p</sub> rated - Maximum operating temperature to which the rated performance characteristics are declared

T<sub>c</sub> - Highest permissible value for safe operation

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### Technical data

Specification item	Unit	Value
Classification acc. to IEC 62031		built-in
Working voltage	[Vdc]	350
Beam angle	[deg]	120
Initial color consistency	[SDCM]	3
Photobiological safety		RG1 unlimited

### Color coordinates

According to CIE 1931

Specification item	CIE <sub>x</sub>	CIE <sub>y</sub>
3000K	0.4338	0.4030
4000K	0.3818	0.3797

### Certificates & standards

Specification item	Compliant
ENEC	Pending
CE	Yes
RoHS	Yes
REACH	Yes
Zhaga	No
IP rating	No IP rating

### Lumen maintenance

for LE G5

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	55°C	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	65°C	>100 000	>100 000	>100 000	>100 000	>100 000	>100 000
	75°C	>100 000	>100 000	>100 000	>100 000	>100 000	98 000
	85°C	>100 000	>100 000	>100 000	>100 000	81 000	73 000
If max	45°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	55°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	65°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	75°C	>100 000	>100 000	92 000	87 000	45 000	42 000
	85°C	>100 000	>100 000	92 000	87 000	45 000	42 000

Calculated data based on LM80 LED data (12 000h)

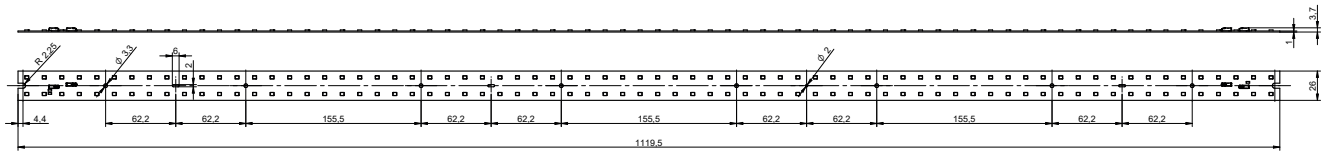
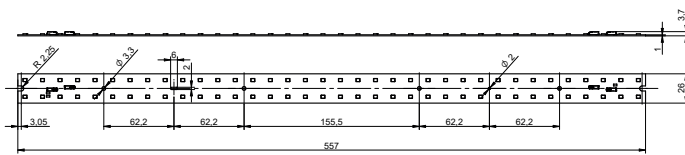
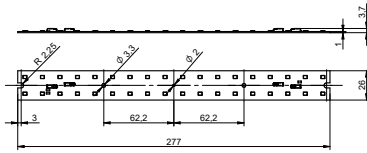
for CJ G4

Forward current	Tp temp.	L70 [h]		L80 [h]		L90 [h]	
		B50	B10	B50	B10	B50	B10
If nom	45°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	55°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	65°C	>102 000	>102 000	>102 000	>102 000	89 000	88 000
	75°C	>102 000	>102 000	>102 000	>102 000	75 000	74 000
	85°C	>102 000	>102 000	>102 000	>102 000	64 000	63 000
If max	45°C	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	55°C	>102 000	>102 000	>102 000	>102 000	93 000	92 000
	65°C	>102 000	>102 000	>102 000	>102 000	79 000	78 000
	75°C	>102 000	>102 000	>102 000	>102 000	67 000	66 000
	85°C	>102 000	>102 000	>102 000	>102 000	57 000	56 000

Reported data based on LM80 LED data (17 000h)

## Linear LED modules 1100lm per 1 ft LIANNA-2R

### Dimensions



### Mounting

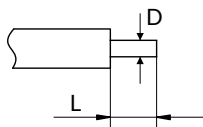
LED Modules cannot be exposed to tensile or compressive stresses. For this purpose it is necessary that the modules are assembled to a flat surface by only rounded head screws. Additionally plastic flat washer should be used to ensure creepage distance between screw's head and surface of the pcb. Max. torque for fixing: 0,5Nm.

LED modules are sensitive to electrostatic discharge (ESD). Follow safety regulations according to IEC 61340-5-1.

### Wiring

Wire cross section and strip length:

Opening for the release of wires from the top with release tool BJB art. 46.141.U801.89:



D - wire cross section solid and flexible wires	Min	Max
	0.2mm <sup>2</sup>	0.5mm <sup>2</sup>
	AWG 24	AWG 20

L - strip length	
	7mm

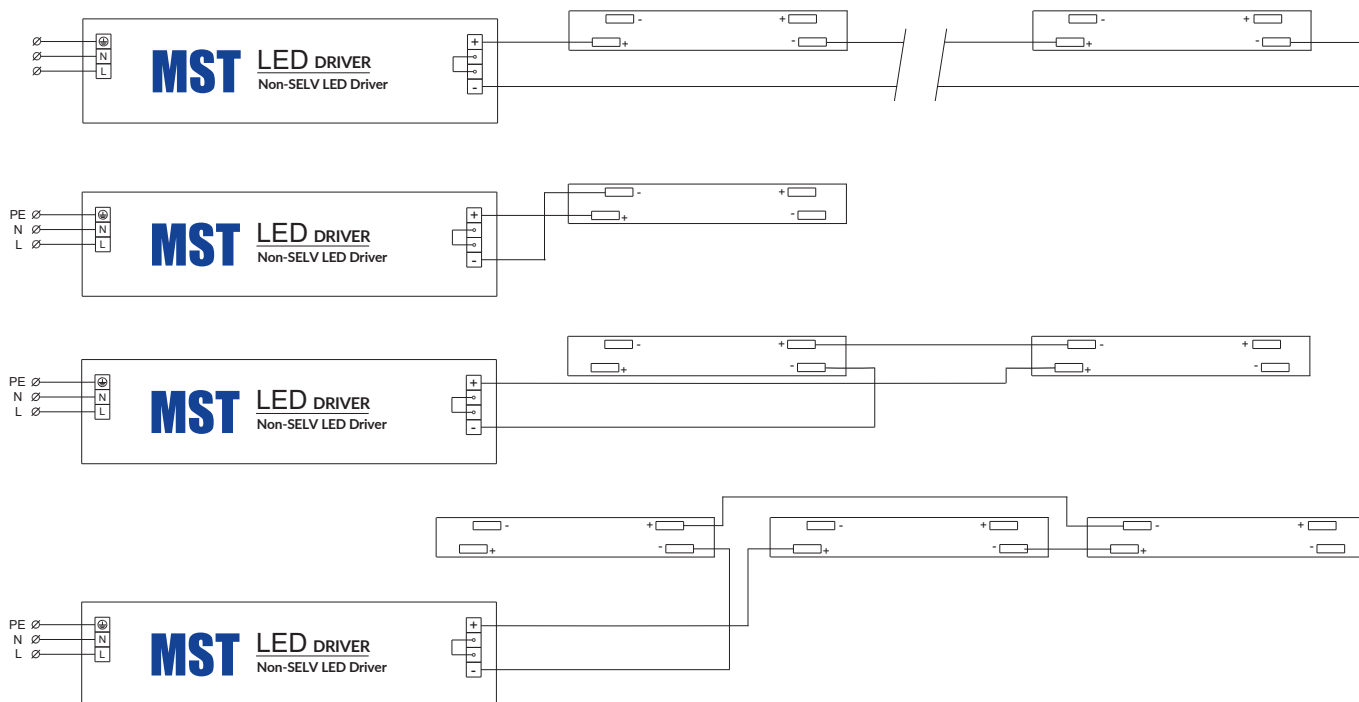


## Linear LED modules 1100lm per 1 ft LIANNA-2R

### Connections

Max number of modules	Unit	Series	Parallel
LinLED 277x26mm...	[pcs]	12	-
LinLED 557x26mm..	[pcs]	6	-
LinLED 1119.5x26mm	[pcs]	3	-

### Wiring for series connection system



### Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
LinLED 277x26mm 1100lm 830 2C 27V LIANNA-2R CJ G4	1010 127 90746	153	18360	300 x 266 x 83
LinLED 557x26mm 2200lm 830 2C 54V LIANNA-2R CJ G4	1010 127 91246	153	9180	603 x 266 x 83
LinLED 1119.5x26mm 4400lm 830 2C 108V LIANNA-2R CJ G4	1010 127 91346	153	4590	1198 x 266 x 83
LinLED 277x26mm 1100lm 840 2C 27V LIANNA-2R CJ G4	1010 127 90846	153	18360	300 x 266 x 83
LinLED 557x26mm 2200lm 840 2C 54V LIANNA-2R CJ G4	1010 127 91446	153	9180	603 x 266 x 83
LinLED 1119.5x26mm 4400lm 840 2C 108V LIANNA-2R CJ G4	1010 127 91546	153	4590	1198 x 266 x 83
LinLED 277x26mm 1100lm 830 2C 27V LIANNA-2R LE G5	1010 147 03846	153	18360	300 x 266 x 83
LinLED 557x26mm 2200lm 830 2C 54V LIANNA-2R LE G5	1010 147 03946	153	9180	603 x 266 x 83
LinLED 1119.5x26mm 4400lm 830 2C 108V LIANNA-2R LE G5	1010 147 04046	153	4590	1198 x 266 x 83
LinLED 277x26mm 1100lm 840 2C 27V LIANNA-2R LE G5	1010 147 04146	153	18360	300 x 266 x 83
LinLED 557x26mm 2200lm 840 2C 54V LIANNA-2R LE G5	1010 147 04246	153	9180	603 x 266 x 83
LinLED 1119.5x26mm 4400lm 840 2C 108V LIANNA-2R LE G5	1010 147 04346	153	4590	1198 x 266 x 83
LinLED 277x26mm 1100lm 930 2C 27V LIANNA-2R LE G5	1010 147 04446	153	18360	300 x 266 x 83
LinLED 557x26mm 2200lm 930 2C 54V LIANNA-2R LE G5	1010 147 04546	153	9180	603 x 266 x 83
LinLED 1119.5x26mm 4400lm 930 2C 108V LIANNA-2R LE G5	1010 147 04646	153	4590	1198 x 266 x 83
LinLED 277x26mm 1100lm 940 2C 27V LIANNA-2R LE G5	1010 147 04746	153	18360	300 x 266 x 83
LinLED 557x26mm 2200lm 940 2C 54V LIANNA-2R LE G5	1010 147 04846	153	9180	603 x 266 x 83
LinLED 1119.5x26mm 4400lm 940 2C 108V LIANNA-2R LE G5	1010 147 04946	153	4590	1198 x 266 x 83