

Round LED modules 440mm

Product description

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



RdLED CRI 80 CJ G4

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ Φ [lm]	Useful luminous flux ² [lm]	Voltage Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 440mm 5000lm 830 39V CJ G4	1010 147 79146	3000	735	4904	5029	35	26	191	120	3000	C
RdLED 440mm 5000lm 830 117V CJ G4	1010 147 79346		245	4904	5029	105	26	191	40	1000	C
RdLED 440mm 5000lm 840 39V CJ G4	1010 147 79246	4000	735	5100	5230	35	26	199	120	3000	B
RdLED 440mm 5000lm 840 117V CJ G4	1010 147 79446		245	5100	5230	105	26	199	40	1000	B

RdLED CRI 80 CN G3

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ Φ [lm]	Useful luminous flux ² [lm]	Voltage Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 440mm 5000lm 830 39V CN G3	1010 147 78746	3000	765	4883	5053	35	27	182	120	1800	C
RdLED 440mm 5000lm 830 117V CN G3	1010 147 78946		255	4883	5053	105	27	182	40	600	C
RdLED 440mm 5000lm 840 39V CN G3	1010 147 78846	4000	765	5151	5331	35	27	192	120	1800	C
RdLED 440mm 5000lm 840 117V CN G3	1010 147 79046		255	5151	5331	105	27	192	40	600	C

RdLED CRI 80 LG G2

Product name	Ordering code	Colour temperature [K]	Current nominal If nom [mA]	Luminous flux ¹ Φ [lm]	Useful luminous flux ² [lm]	Voltage Vf [V]	Power ¹ P [W]	Efficacy ¹ [lm/W]	Current minimum If min ³ [mA]	Current maximum If max [mA]	Energy Efficiency Class
RdLED 440mm 5000lm 830 39V LG G2	1010 147 78346	3000	795	4890	5044	36	29	171	120	2400	C
RdLED 440mm 5000lm 830 117V LG G2	1010 147 78546		265	4890	5044	108	29	171	40	800	C
RdLED 440mm 5000lm 840 39V LG G2	1010 147 78446	4000	795	5196	5359	36	29	182	120	2400	C
RdLED 440mm 5000lm 840 117V LG G2	1010 147 78646		265	5196	5359	108	29	182	40	800	C

¹At nominal current and T_p

²At nominal current and 25°C

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

Tolerance range for optical and electrical ±10%

Round LED modules 440mm

Temperature & humidity

Specification item	Unit	Value
Tp	[°C]	45
Tp rated	[°C]	65
Tc	[°C]	85
Relative humidity (non-condensing)	[%]	5 ... 85
Storage ambient temperature	[°C]	-25 ... +85
Storage relative humidity (non-condensing)	]	5 ... 85

Tp - Temperature related to the performance parameters of the LED modules

Tp rated - Maximum operating temperature to which the rated performance characteristics are declared

Tc - Highest permissible value for safe operation

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 _x	CIE _y
2700K	0.4578	0.4101
3000K	0.4338	0.4030
4000K	0.3818	0.3797
6500K	0.3123	0.3282

Certificates & standards

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

Lumen maintenance

for LE G5, LG G2, LA G3

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	>100 000
	55°C>100 000	>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	>100 000
	75°C>100 000	>100 000	>100 000	>100 000	>100 000	98 000	98 000
	85°C>100 000	>100 000	>100 000	>100 000	81 000	73 000	73 000
If max	45°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	55°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	65°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	75°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000
	85°C>100 000	>100 000	92 000	87 000	45 000	42 000	42 000

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

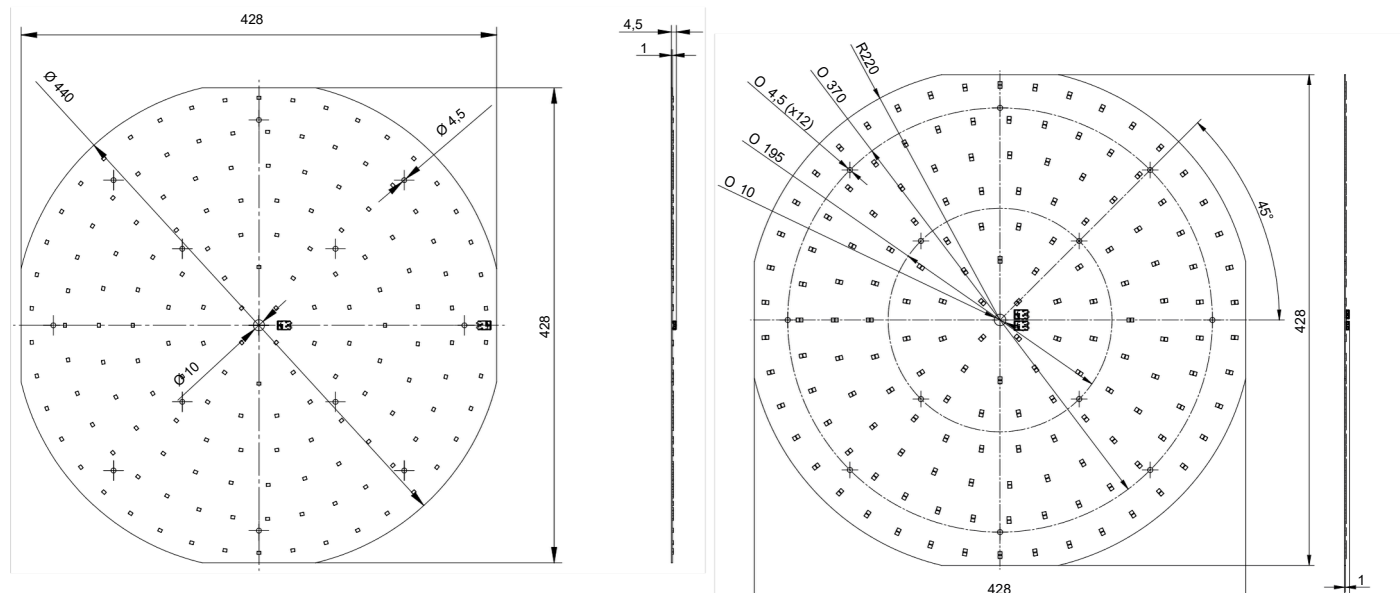
for CJ G4, CN G3

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	>102 000
	55°C>102 000	>102 000	>102 000	>102 000	>102 000	>102 000	>102 000
	65°C>102 000	>102 000	>102 000	>102 000	>102 000	89 000	88 000
	75°C>102 000	>102 000	>102 000	>102 000	>102 000	75 000	74 000
	85°C>102 000	>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	>102 000
	55°C>102 000	>102 000	>102 000	>102 000	>102 000	93000	92000
	65°C>102 000	>102 000	>102 000	>102 000	>102 000	79 000	78 000
	75°C>102 000	>102 000	>102 000	>102 000	>102 000	67 000	66 000
	85°C>102 000	>102 000	>102 000	>102 000	>102 000	57 000	56 000

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

Round LED modules 440mm

Dimensions



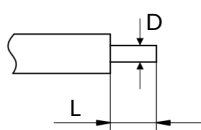
Mounting

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:



D - wire cross section (solid and flexible wires)	Min	Max
	0.2mm ²	0.75mm ²
	AWG 24	AWG 18

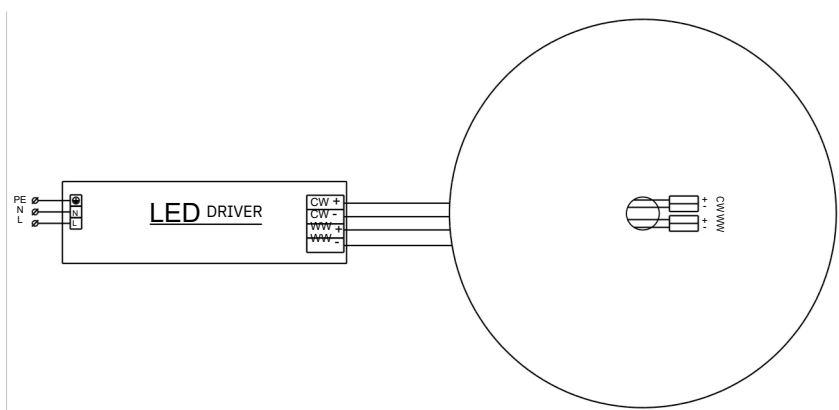
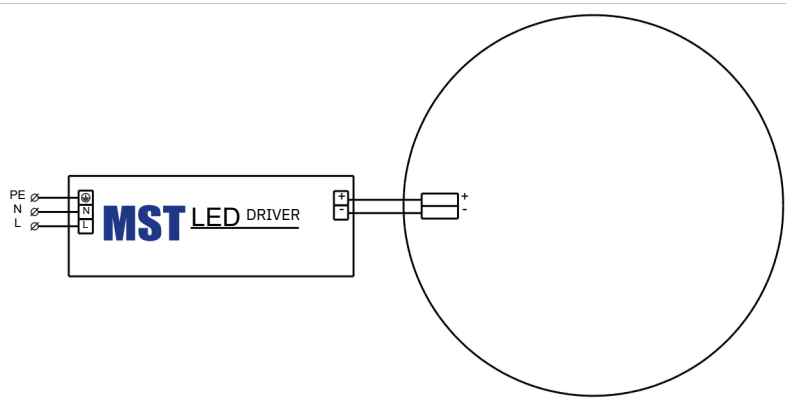
L - strip length	Min	Max
	8mm	9mm

Opening for the release of wires from the top with release pin Electroterminal art. 881 167 884:



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Connections



Energy Label / EPREL database

To obtain Energy Label for this product visit <https://eprel.ec.europa.eu/> and enter model identifier

Model identifier consists of 10 digits XXXX XXX XXX. It is printed directly on the LED module or on product label. This is the number you can see in EPREL database.

Ordering code consist of 12 digits XXXX XXX XXX46. Additional last two digits means packaging of the product.

Ordering codes

Product name	Ordering code	Pieces per box	Pieces per pallet	Box dimensions [mm]
RdLED 440mm 5000lm 830 39V CJ G4	1010 147 79146	12	336	441 x 441 x 58
RdLED 440mm 5000lm 830 117V CJ G4	1010 147 79346	12	336	441 x 441 x 58
RdLED 440mm 5000lm 840 39V CJ G4	1010 147 79246	12	336	441 x 441 x 58
RdLED 440mm 5000lm 840 117V CJ G4	1010 147 79446	12	336	441 x 441 x 58
RdLED 440mm 5000lm 830 39V CN G3	1010 147 78746	12	336	441 x 441 x 58
RdLED 440mm 5000lm 830 117V CN G3	1010 147 78946	12	336	441 x 441 x 58
RdLED 440mm 5000lm 840 39V CN G3	1010 147 78846	12	336	441 x 441 x 58
RdLED 440mm 5000lm 840 117V CN G3	1010 147 79046	12	336	441 x 441 x 58
RdLED 440mm 5000lm 830 39V LG G2	1010 147 78346	12	336	441 x 441 x 58
RdLED 440mm 5000lm 830 117V LG G2	1010 147 78546	12	336	441 x 441 x 58
RdLED 440mm 5000lm 840 39V LG G2	1010 147 78446	12	336	441 x 441 x 58
RdLED 440mm 5000lm 840 117V LG G2	1010 147 78646	12	336	441 x 441 x 58