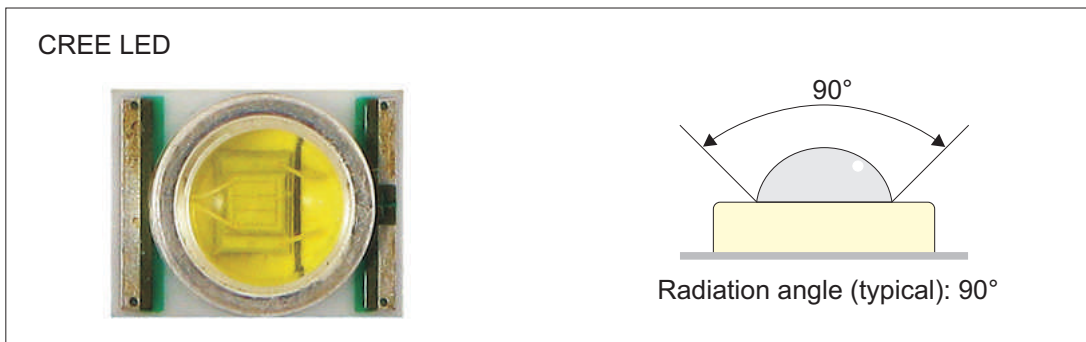
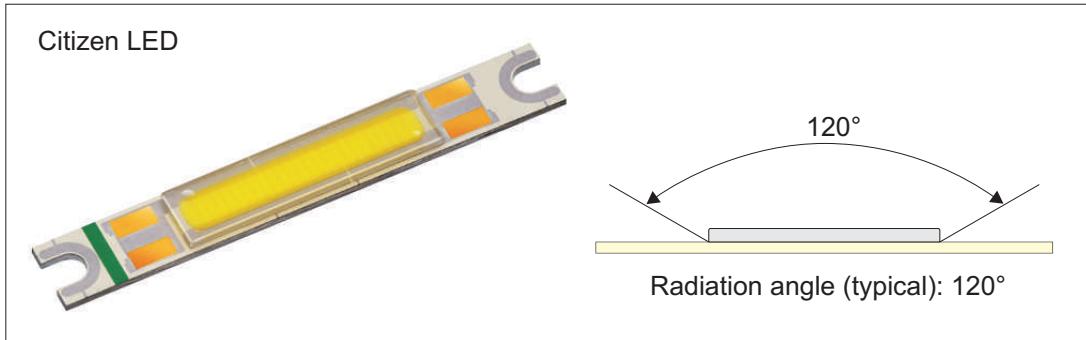


Specifications of the LEDs used

The data given is based on the manufacturers' specifications.



High-power LEDs

Type	Manufacturer	Light colour	Wavelength	Luminous intensity ³⁾	Luminous flux ³⁾	Luminous efficacy ²⁾	Forward voltage	Operating current
			(nm)	(cd)	(Lm)	(Lm/W)	(V)	(mA)
XRE	CREE	White (3000 K ¹⁾)	80,6	104,8	141,1	71.2	3.2...3.7	750
XRE	CREE	White (4000 K ¹⁾)	100	130	175	89.3	3.2...3.7	750
XRE	CREE	White (5000 K ¹⁾)	100	130	175	89.3	3.2...3.7	750
XRE	CREE	White (6500 K ¹⁾)	107	139	187	95.5	3.2...3.7	750
CL-L102-C3L	Citizen	White (3000 K ¹⁾)	150	-	-	40.8	9...12	350
CL-L102-C3N	Citizen	White (5000 K ¹⁾)	245	-	-	66.7	9...12	350

Footnotes:

¹⁾ The given colour temperature is a typical value and may deviate by up to +/-10%. In individual cases the "real" colour temperature values of the current production can be obtained on request.

²⁾ The lumen per watt (Lm/W) values were calculated using the below formula (using the luminous flux specified by the manufacturer). The power loss of the ballast or any power loss in series resistors or constant-current regulators (e.g. in 12 V operation) are not taken into account in the calculation.

$$\text{Luminous efficacy (Lm/W)} = \frac{\text{Luminous flux (Lm)}}{(\text{Mean}) \text{ forward voltage (V)} \times \text{Operating current (A)}}$$

³⁾ Manufacturer's specification which applies to an operating current of 350 mA.