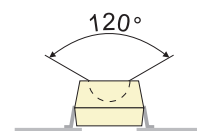


Technical Specifications of LEDs used

hansen



Typical radiation angle: 120°

The data given on this sheet applies to the LEDs used in our LED Tube and our 12 V printed circuit boards. It is based on the specifications published by the LED manufacturers and Hansen Neon assumes no responsibility for the correctness of this information.

Standard LEDs

Type	Manu- facturer	Light colour	Wavelength	Colour ren- dering index	Luminous intensity	Luminous flux ²⁾³⁾	Luminous efficacy ²⁾³⁾	Forward voltage	Operating current
			(nm)	CRI	(mcd)	(Lm)	(Lm/W)	(V)	(mA)
NHSW157AT	Nichia	White (6500 K ¹⁾)		70	2451	7.7	99.4	2.9...3.2	25
NHSW157AT-H3	Nichia	White (5000 K ¹⁾)		80	2451	7.7	99.4	2.9...3.2	25
NHSL157AT-H3	Nichia	White (4000 K ¹⁾)		80	2292	7.2	94.3	2.9...3.2	25
NHSL157AT-H3	Nichia	White (3000 K ¹⁾)		80	2292	7.2	94.3	2.9...3.2	25
LBE6SG T1U2	Osram	Blue	463 - 471		382	1.2	15.4	3.1...3.4	25
MGT 801	Seoul Semi.	Green	516 - 534		859	2.7	29.7	3.4...3.6	25
LAE6SF-AABA-24-1	Osram	Red (Amber)	612 - 624		2030	6.4	60.9	2.0...2.1	50
LSE6SF-V2BA-1-1	Osram	Super red	627 - 639		1240	3.9	38.6	2.0...2.1	50
DWY-MJS WX-2	Dominant	Yellow	583 - 592		1870	5.9	52.2	2.1...2.2	50
LOE6SF-ABCB-24-1	Osram	Orange	600 - 609		2040	6.4	60.9	2.0...2.1	50

Standard PLUS LEDs

Type	Manu- facturer	Light colour	Wavelength	Colour ren- dering index	Luminous intensity	Luminous flux ²⁾³⁾	Luminous efficacy ²⁾³⁾	Forward voltage	Operating current
			(nm)	CRI	(mcd)	(Lm)	(Lm/W)	(V)	(mA)
NESW157AT	Nichia	White (6500 K ¹⁾)		70	4202	13.2	87.8	2.9...3.2	50
NESW157AT-H3	Nichia	White (5000 K ¹⁾)		80	4202	13.2	87.8	2.9...3.2	50
NESL157AT-H3	Nichia	White (4000 K ¹⁾)		80	3915	12.3	96.8	2.9...3.2	50
NESL157AT-H3	Nichia	White (3000 K ¹⁾)		80	3915	12.3	96.8	2.9...3.2	50

Power LEDs

Type	Manu- facturer	Light colour	Wavelength	Colour ren- dering index	Luminous intensity	Luminous flux	Luminous efficacy ²⁾	Forward voltage	Operating current
			(nm)	CRI	(mcd)	(Lm)	(Lm/W)	(V)	(mA)
NSSW157AT	Nichia	White (6500 K ¹⁾)		70	9613	30.2	90.4	2.9...3.2	100
NSSW157AT-H3	Nichia	White (5000 K ¹⁾)		80	9613	30.2	90.4	2.9...3.2	100
NSSL157AT-H3	Nichia	White (4000 K ¹⁾)		80	9008	28.3	91.1	2.9...3.2	100
NSSL157AT-H3	Nichia	White (3000 K ¹⁾)		80	9008	28.3	91.1	2.9...3.2	100
NAB-FSG-HJ1	Dominant	Blue	464...476		1370	4.3	13.3	3.2...3.4	100
NAT-SSG-NP	Dominant	Green	520...535		6330	19.9	62.8	3.2...3.4	100
LAG6SP DADB 2-4	Osram	Red	612...624		3790	11.9	58.6	1.9...2.65	100
STW8Q2PA/A	Seoul Semi.	White (6500 K ¹⁾)		75	8859	27.8	90.9	2.9...3.2	100
STW8Q2PA/C	Seoul Semi.	White (5000 K ¹⁾)		80	9075	28.5	91.8	2.9...3.2	100
STW8Q2PA/E	Seoul Semi.	White (4000 K ¹⁾)		80	8031	25.2	81.9	2.9...3.2	100
STW8Q2PA/G	Seoul Semi.	White (3000 K ¹⁾)		80	8031	25.2	81.9	2.9...3.2	100

Notes:

¹⁾ The colour temperature value is a typical value and might deviate by up to +/-10% from the actual value. In individual cases the actual colour temperatures of the current production can be obtained on request.

²⁾ The lumen per watt (Lm/W) values have been calculated using the below formula (using the luminous flux according to the manufacturer's specification). The power loss of the ballast or any power loss in series resistors or constant-current regulators (e.g. in 12 V operation) is not taken into account in the calculation.

³⁾ Manufacturer's specification recalculated for the actual operating current.

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

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