



next generation led

info@nextgenerationled.be  
www.nextgenerationled.be  
Tel + 32 53 71 09 42

## TL T5



### Properties

- Lifespan L80B10: 70.000 hours
- External driver (selv type)
- Fully Dimmable (1-10 V or DALI)
- Safety Extra Low voltage equivalent
- IP65: dust and waterproof
- Flicker free to reduce the eyestrain
- Environmentally friendly
- High resistance to corrosive gasses
- Instant switch-on
- Protection Class III
- Temp. resistance: 85°C
- Norms: IEC/EN61195, IEC/EN62031, IEC/EN62717, EN61347-1, EN61347-2-13, EN62384, EN6154, EN55015, EN62386-102, IEC60068-2-6, IEC60068-2-2 and IEC60068-2-29
- Warranty: 6 years

### Application

Offices, hospitals, hotels, supermarkets, library, corridors,...

165lm/w

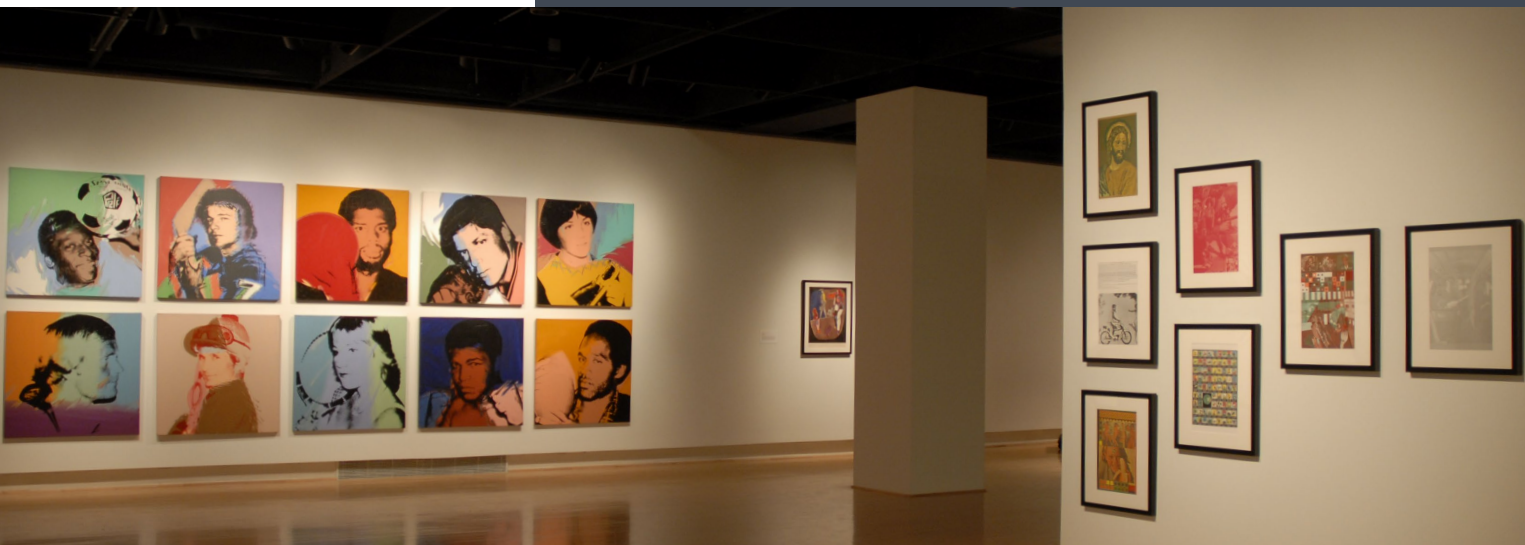
Dimmable

External Driver

### Specifications

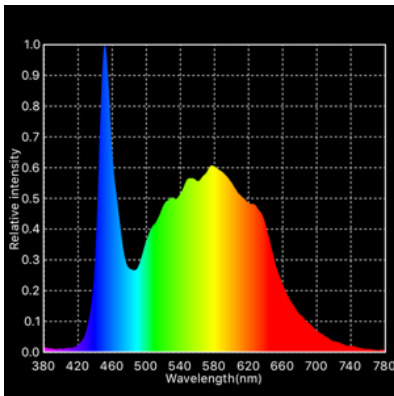
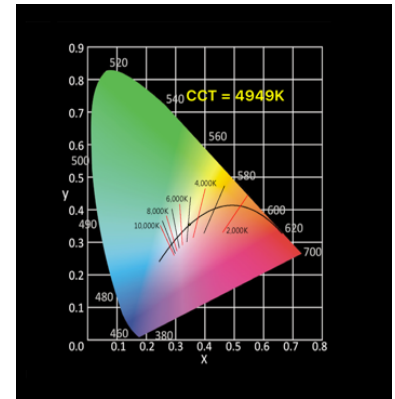
LED T5	60	120	150
Length	549 mm	1149 mm	1449 mm
Power	8.5 W	17 W - 32.5W	30 W - 43W
Luminous flux	1400 Lm	2800 Lm - 5350Lm	4950 Lm - 7095Lm
Diameter		16 mm (cap 18.5 mm)	
Color temperature		3000K - 4000 K - 5000 K	
IP Index		IP 65	
Color rendering index		83 (92 and 98 available)	
Temperature in use		- 40°C ~ +45°C	
Dimmable		1-10 V or DALI	
Beam angle		130 °	
Driver requirement	135-20Li	170-35Li	170-35Li-1150-50Fr

Updated: August 2017



## CIE 1931

The CIE color space, developed in 1931, is still used to define colors, and as a reference for other color spaces. The figure is a two-dimensional display of colors of the same intensity (brightness), which is based on observations of color measurements by people.

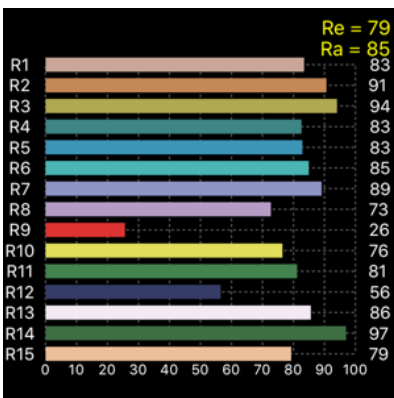
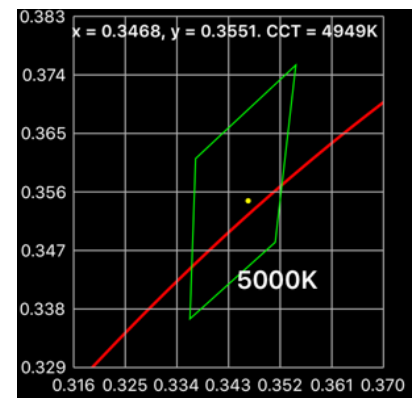


## SPECTRUM

Isaac Newton used the Latin word spectrum to define the color series which arose when he dropped a bundle of sunlight through a glass prism. The color spectrum consists of the colors of the rainbow with the color sequence red-orange-yellow-green-blue-indigo-violet, which corresponds to bearish wave length (increasing frequency) of the light waves.

## C78 377

ANSI C 78.377 is now the standard for color quality, as determined by the American National Standards Institute. ANSI recommends lamp manufacturers to stay within a 4-step ellipse. This means that manufacturers with a particular focus on the CIE diagram have a broad range of observable differences.



## CRI HISTOGRAM

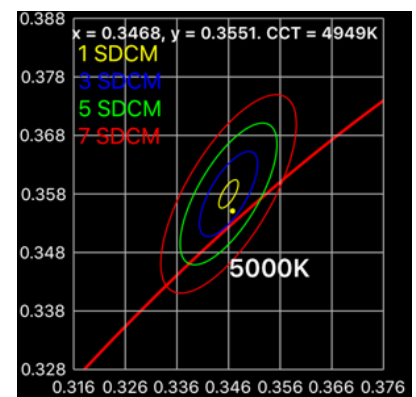
The color reproduction of a light source indicates whether the color of an object can be displayed true to nature. The graph shows whether we can accurately determine color, depending on the color rendering properties of the light source.

Ra = average of R1 to R8  
Re = average of R1 to R15  
R9 = saturated red. Should be as high as possible.

## SDCM

SDCM is an acronym which stands for Standard Deviation Colour Matching. SDCM has the same meaning as a "MacAdam ellipse". A 1-step MacAdam ellipse defines a zone in the CIE 1931 2 deg (xy) colour space within which the human eye cannot discern colour difference. Most LEDs are binned at the 4-7 step level, in other words you certainly can see colour differences in LEDs that are ostensibly the same colour.

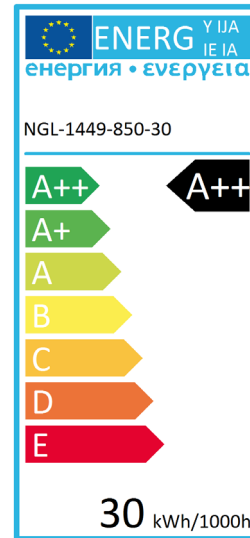
SDCM	CCT @ 3000K	$\Delta UV$
1x	±30K	±0.0007
2x	±60K	±0.0010
4x	±100K	±0.0020
7-8x	±175K	±0.0060



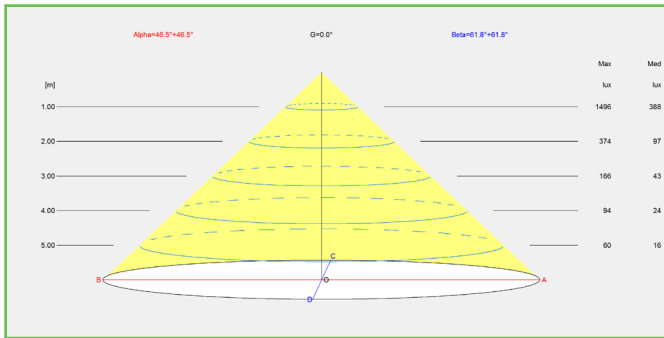
## ENERGY LABEL

Electrical appliances carry an energy label. This label prints the so-called energy efficiency score in classes. These classes range from 'very energy efficient' (A++) to 'very waste of energy' (E).

A more expensive new device may eventually turn out to be cheaper if the energy score is good. IPEA is the new system for luminaire energy efficiency assessment.



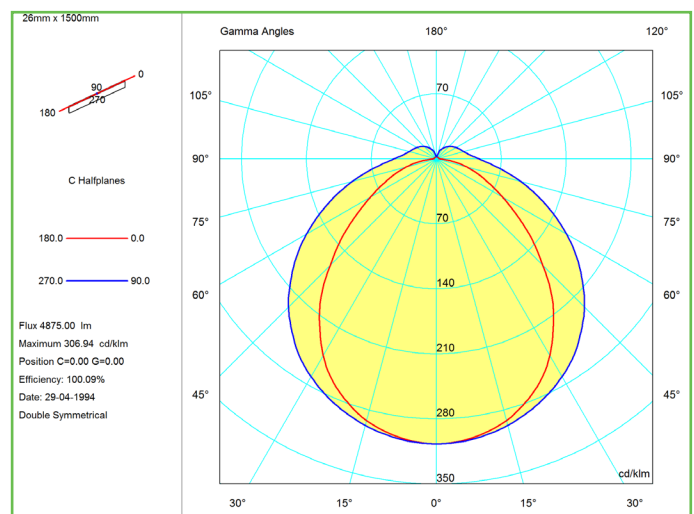
## BEAM



The Illuminance Cone Diagram indicates the maximum illuminance at different distances from the fixture.>

## POLAR DIAGRAM

The polar luminous intensity graph illustrates the distribution of luminous intensity, in candelas, for the transverse (solid line) and axial (dashed line) planes of the luminaire. The shown curve provides a visual guide to the type of distribution expected from the luminaire e.g. wide, narrow, direct, indirect... in addition to intensity.



## TL T5

REFERENCE	LENGTH	WATT	COLOR	DRIVER	DIMMABLE
220-0001	549 mm	8,5 W	4000K - 5000K	135-20Li	Yes
220-0002	1149 mm	17 W	4000K - 5000K	170-35Li	Yes
220-0003	1149 mm	32,5 W	4000K - 5000K	170-35Li	Yes
220-0004	1449 mm	30 W	4000K - 5000K	170-35Li	Yes
220-0005	1449 mm	43 W	4000K - 5000K	1150-50Fr	Yes

