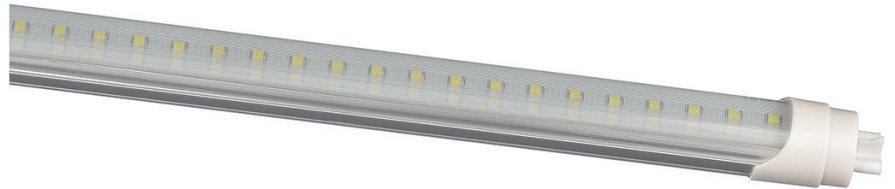




next generation led

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

## TL ECO 30mm



### Properties

- Lifespan L70 %: > 50.000 hours
- SMD2835 (Surface Mounted Device)
- Energy savings up to 70%
- 150lm/W @ CRI80, 135lm/W @ CRI90
- Aluminum cooling surface
- Built in driver
- Flicker free to reduce the eyestrain
- Will not break when dropped
- Environment friendly : no mercury or toxic gasses
- Cover: frosted (clear/striped on request)
- 80% more efficiency compared to traditional fluorescent
- Immediate start regardless of temperature or humidity

Retro-fit

70% Saving

50.000 h

5y. war.

### Specifications

TL ECO 30	60cm	90cm	120cm	150cm
Power	10W	15W	20W	24W
Input voltage	AC 85~165/ 165 ~265 V			
Diameter	30 mm			
Color temperature	3000 K / 4000 K /5000 K (other colors available on request)			
Color rendering index	Standard CRI>80, Optional CRI>90			
Powerfactor	>0.8			
Luminous intensity				
Warm White	1350	2100	2850	3450
Neutral White	1400	2150	2900	3500
Pure White	1450	2200	2950	3550
Cold White	1500	2250	3000	3600

### Application

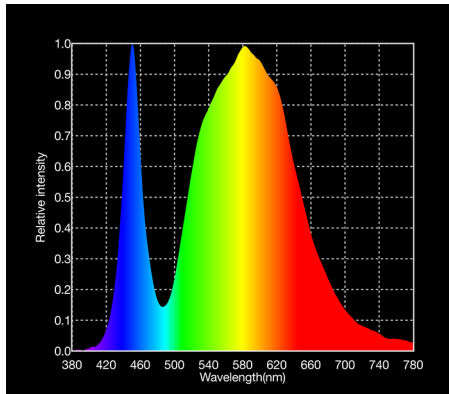
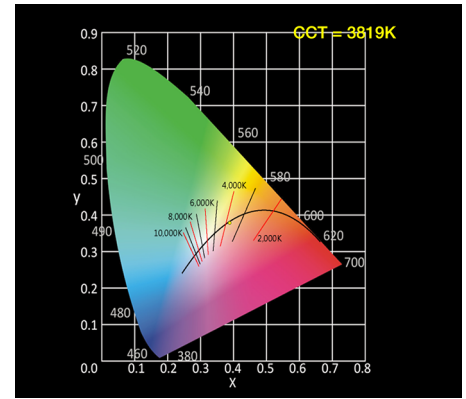
Office, hospital, hotel, supermarket, library, parking, corridors ...

Updated: Feb 2022



## 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.

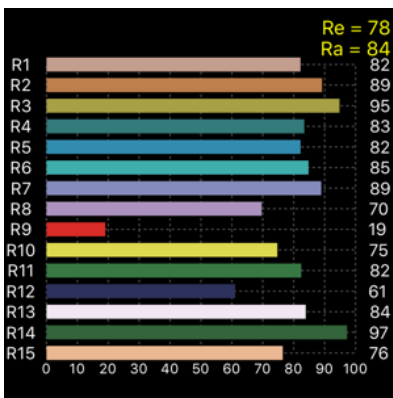
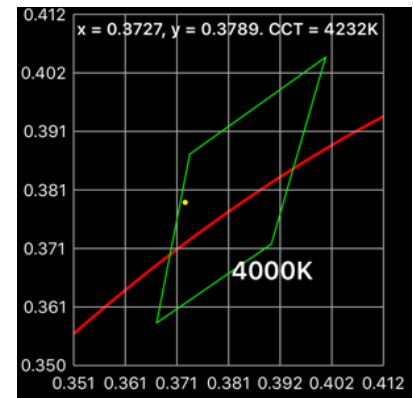


## SPECTRUM

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

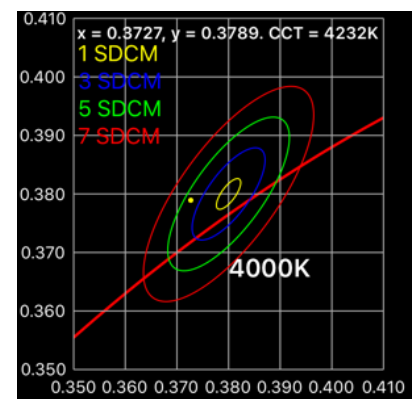
Re = average of R1 to R15

R9 = saturated red. Should be as high as possible.

## SDCM

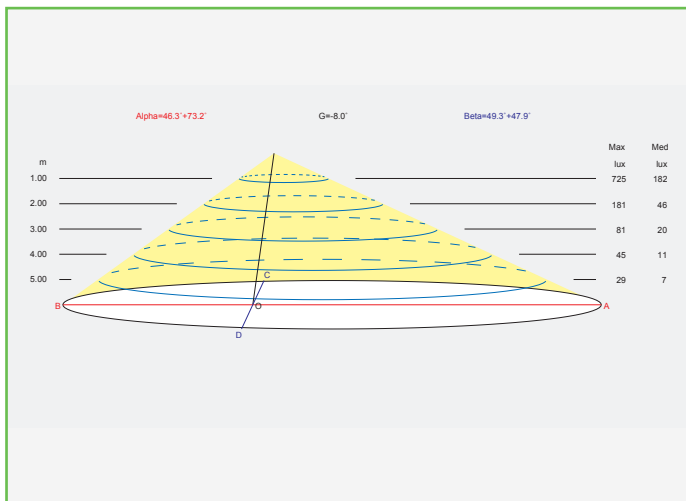
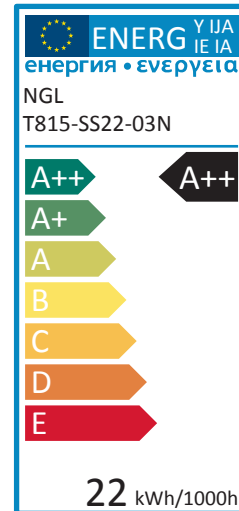
SDCM is an acronym which stands for Standard Deviation Colour Matching. SDCM has the same meaning as a "MacAdam ellipse". A 1-step MacAdam ellipse defines a zone in the CIE 1931 2 deg (xy) colour space within which the human eye cannot discern colour difference. Most LEDs are binned at the 4-7 step level,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

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



## 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.

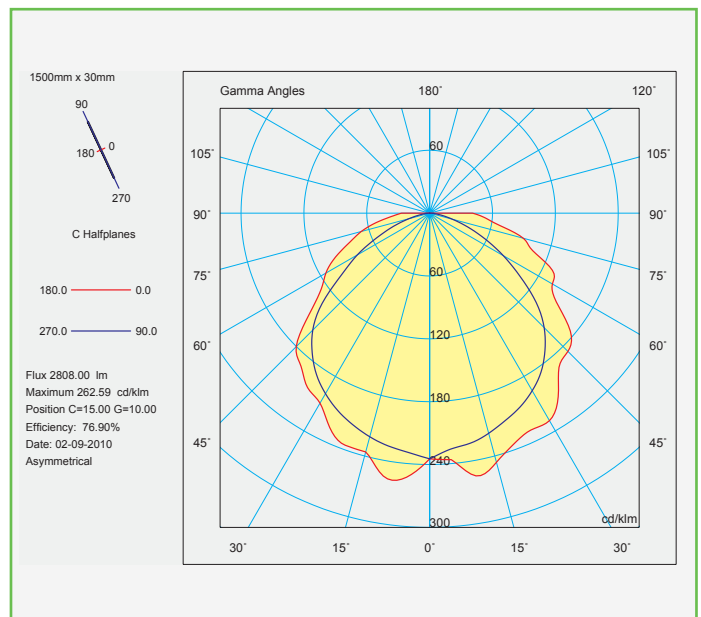


## BEAM

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 ECO 30

REFERENCE	LENGTH	WATT	COVER	COLOR	CRI
273-0001	60 CM	10 W	FROSTED	3000 K	80
273-0002	60 CM	10 W	FROSTED	4000 K	80
273-0003	60 CM	10 W	FROSTED	5000 K	80
273-0004	90 CM	15 W	FROSTED	3000 K	80
273-0005	90 CM	15 W	FROSTED	4000 K	80
273-0006	90 CM	15 W	FROSTED	5000 K	80
273-0007	120 CM	20 W	FROSTED	3000 K	80
273-0008 (272-0014)	120 CM	20 W	FROSTED	4000 K	80
273-0009	120 CM	20 W	FROSTED	5000 K	80
273-0013	150 CM	24 W	FROSTED	3000 K	80
273-0014	150 CM	24 W	FROSTED	4000 K	80
273-0015	150 CM	24 W	FROSTED	5000 K	80
273-0100	60 CM	10 W	FROSTED	3000 K	90
273-0101	60 CM	10 W	FROSTED	4000 K	90
273-0102	60 CM	10 W	FROSTED	5000 K	90
273-0103	90 CM	15 W	FROSTED	3000 K	90
273-0104	90 CM	15 W	FROSTED	4000 K	90
273-0105	90 CM	15 W	FROSTED	5000 K	90
273-0106	120 CM	20 W	FROSTED	3000 K	90
273-0107	120 CM	20 W	FROSTED	4000 K	90
273-0108	120 CM	20 W	FROSTED	5000 K	90
273-0112	150 CM	24 W	FROSTED	3000 K	90
273-0113	150 CM	24 W	FROSTED	4000 K	90
273-0114	150 CM	24 W	FROSTED	5000 K	90

