# next generation led

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

## SPOT MR11 TUNABLE



### Properties

- Lifespan L70 %: > 25.000 hours
- Perfect dimming standard Triac dimmers
- Intelligent dynamic colour tunable from 2000 to 2800 K
- Approaches daylight spectrum
- External driver included
- Flicker free to reduce the eyestrain
- Environment friendly : no mercury or toxic gasses
- Immediate start regardless of temperature or humidity
- Equal light distribution and high uniformity
- No black stains caused by heat
- Warranty: 3 years



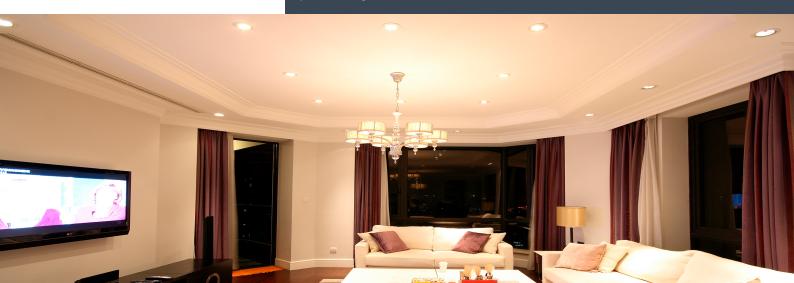
#### Specifications

5 W
320 LM
25°
220 - 240 V AC
2000 - 2800 K
IP 20
35 x 80 mm
-5° C ~ + 25° C

#### Application

Offices, shops, showroom, exposition hall, meeting room, elevators, veranda, home applications ...

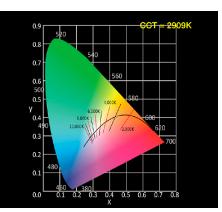
Updated: August 2017

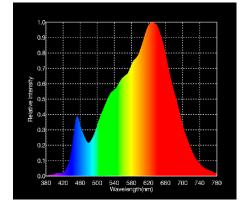




CIE 1931

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.



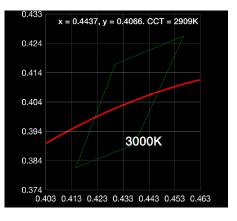


#### SPECTRUM

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.



		Re = 94								
									F	Ra = 96
R1										-: 97
R2 📃										98
R3										96
R4										97
R5										96
R6										97
R7										96
R8										92
R9										80
R10										93
R11			•		•			•		98
R12										84
R13		•								97
R14		•	•							97
R15	-	-	-	-		-	-	-		95
0	10	20	30	40	50	60	70	80	90	100

#### 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.

<u>SDCM</u>	<u>CCT @ 3000K</u>	
1x	±30K	±0.0007
2x	±60K	±0.0010
4x	±100K	±0.0020
7-8x	±175K	±0.0060

0.433	x = 0.4437, y = 0.4066. CCT = 2909K
0.423	1 SDCM 3 SDCM
0.413	5 SDCM 7 SDCM
0.403	
0.403	
0.393	3000K
0.383	
0.373	
0.4	10 0.420 0.430 0.440 0.450 0.460 0.470



### SPOT MR11 TUNABLE

REFERENCE	WATT	LUMEN	COLOR	BEAM ANGLE	DIMMABLE
115-0100	5 W (clips)	320 Lm	2000-2800 K	25 °	Yes
115-0101	5 W (no clips)	320 Lm	2000-2800 K	25 °	Yes

