



next generation led

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# EXPLOSION PROOF ATEX LUMINAIRE



## Properties

- Lifespan L80 %: > 50.000 hours
- Atex directive 94/9 EC
- Zone 2 and 22
- IP klasse : 66
- Lumen efficiency : 100 to 116 Lm/W
- Glass fibre reinforced polyester housing (yellow RAL1003)
- Polyurethane gasket, poured in one piece, one wire entry
- Stainless steel clips
- Transparent polycarbonate diffuser
- Electronic control gear BAG
- Emergency version available
- Warranty : 5 years



II 3 G EX NA IIC T GC  
II 3 D EX T IIIC T85°C DC IP66

Zone 2 and  
22

IK 08

## Specifications

ACQUEX	120 CM	150 CM
Power	40 W	45 W
Luminous flux	4400 Lm	5200 Lm
Input voltage	220-240 V / 50 - 60 Hz	
Color rendering index	Ra >80	
Color temperature	4000 K	
Temperature in use	- 20°C ~ +40°C	
IK rate	850°C IK08	
Dimension	1287X145X101 mm	1587x145x101 mm
Emergency - lum flux	340 Lm	330 Lm
Current charging	200 mA	200 mA

## Application

Suitable for lighting premises of oil and gas, chemical, pharmaceutical, food and other industrial sites.

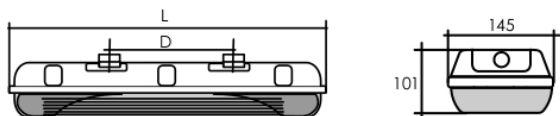
Updated: July 2016



# Installation guide

	L	D*	max.kg
Acquex LED-M 600	665	390	2
Acquex LED-M 1200	1282	800	3.3
Acquex LED-M 1500	1578	1100	3.6
Acquex LED-M 1200 EB	1282	800	3.7
Acquex LED-M 1500 EB	1578	1100	4.4

\* ± 20 mm



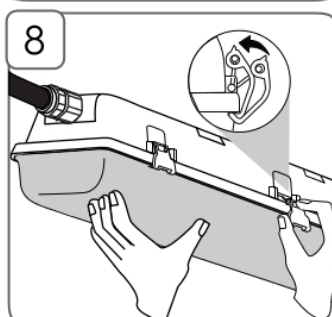
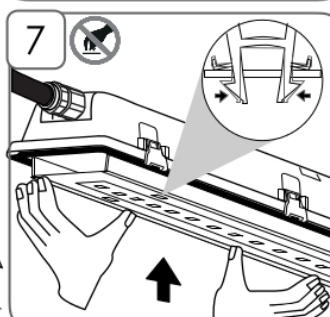
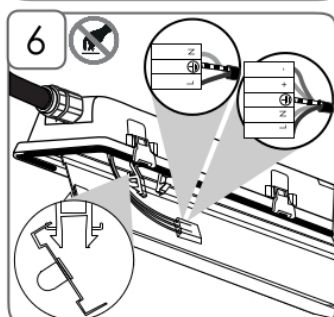
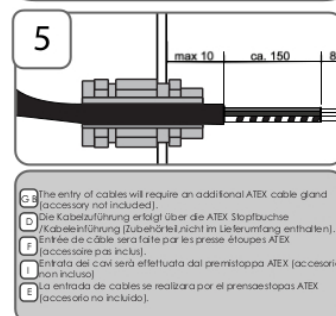
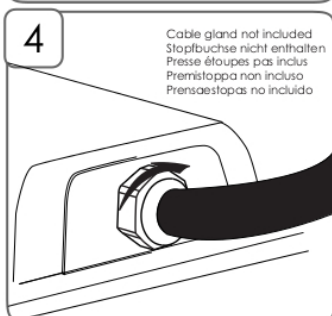
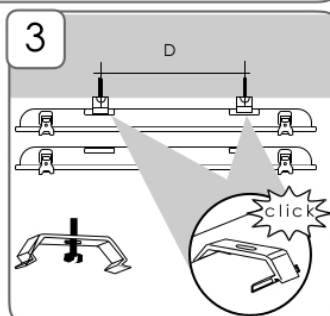
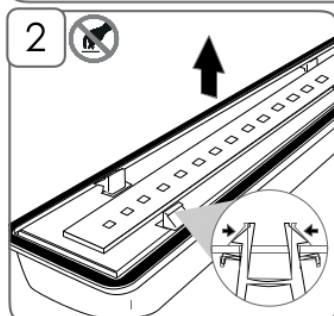
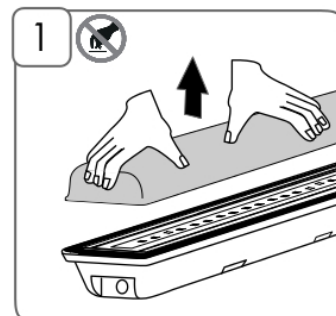
**⚠** Please ensure that the main supply is fully isolated before carrying out any maintenance to luminaire. Disconnect the luminaire before the installation is tested.

**D** Vor Durchführung von Wartungsarbeiten dieser Leuchte stellen Sie sicher, dass das Netz vollständig isoliert ist. Trennen Sie den Beleuchtungskörper vor Isolationsprüfung von der Anlage.

**F** Avant d'effectuer tout service de cet appareil, assurez-vous le réseau est complètement isolé. Débranchez le luminaire avant test d'isolation de l'installation.

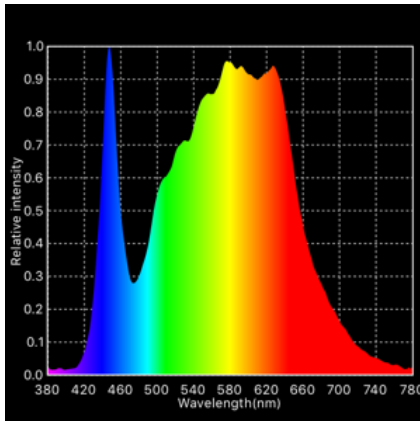
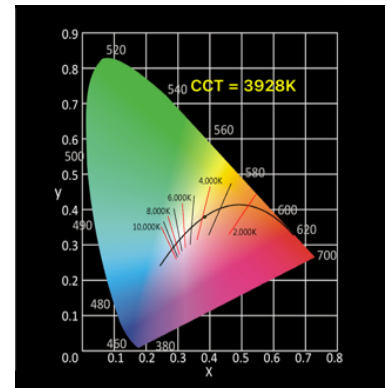
**I** Prima di eseguire qualsiasi servizio di questo apparecchio, assicurarsi la rete è completamente isolata. Scollegare il prodotto prima prova di isolamento di installazione.

**E** Antes de realizar cualquier servicio de esta luminaria, asegúrese de que la red está completamente aislada. Desconecte la luminaria antes de la prueba de aislamiento de la instalación.



## 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.

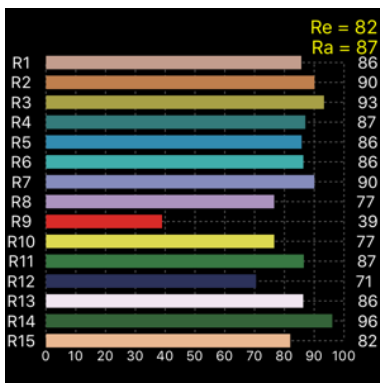
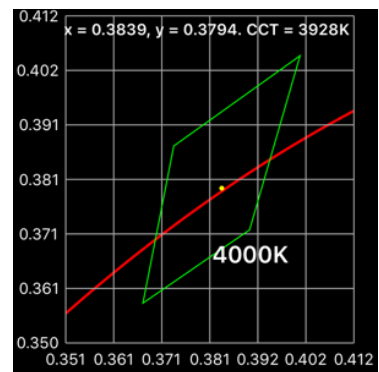


## SPECTRUM

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

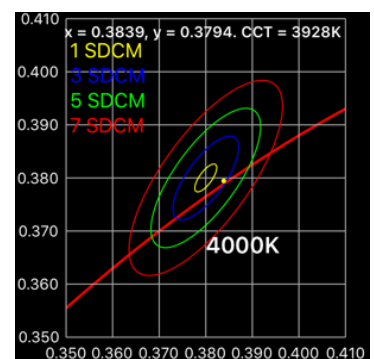
Re = average of R1 to R15

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

## SDCM

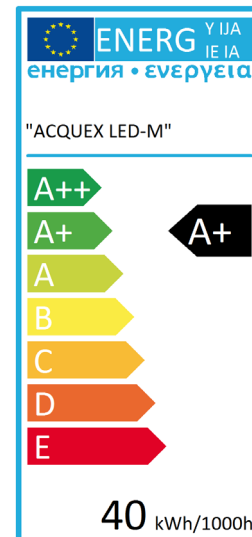
SDCM is an acronym which stands for Standard Deviation Colour Matching. SDCM has the same meaning as a "MacAdam ellipse". A 1-step MacAdam ellipse defines a zone in the CIE 1931 2 deg (xy) colour space within which the human eye cannot discern colour difference. Most LEDs are binned at the 4-7 step level,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

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



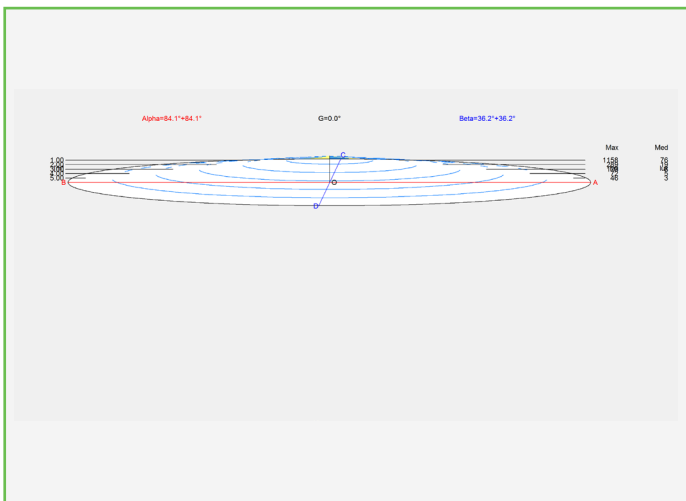
## ENERGYLABEL

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.



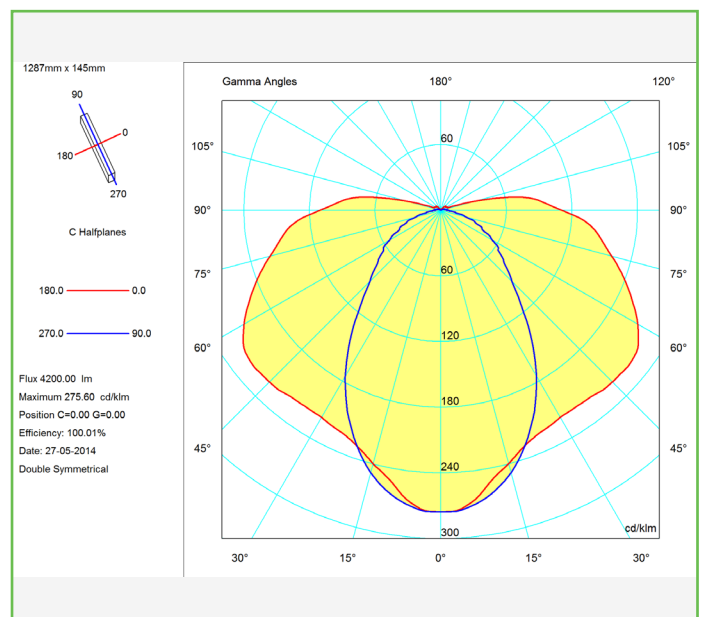
## BEAM

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.



## EXPLOSION FREE LUMINAIRES

REFERENCE	WATT	LUMEN	COLOR	COVER	IK
802-0001	40 W	4400 Lm	4000 K	PC	IK08
802-0002	45 W	5200 Lm	4000 K	PC	IK08

Chemical agents	Polyester	Polycarbonaat	Acrylic	Aluminium
Acetic Acid 10%	●	●	●	●
Acetone	○	×	×	●
Alcoholic beverages	●	●	●	●
Aluminium sulphate	●	●	●	●
Ammonia 5%	○	×	●	●
Aniline	○	×	○	●
Arsenic acid 20%	○	●	●	●
Benzene	×	×	×	●
Bencylic alcohol	×	×	×	○
Benczyl	×	×	×	●
Bromine	×	×	×	×
Calcium chloride	●	●	●	●
Calcium nitrate	●	●	●	●
Carbon tetrachloride	×	×	×	●
Carbonic acid	●	×	×	●
Caustic potash	×	×	●	×
Cement	●	●	●	●
Chlorhydric acid 15%	○	●	●	×
Chlorine vapours/liquid	×	×	×	×
Chloroform	×	×	×	●
Chromic acid	×	○	○	×
Citric acid 20%	●	●	●	●
Copper sulphate	●	●	●	×
Diesel	●	○	●	●
Ethyl alcohol	●	●	●	●
Ethyl chloride	×	×	×	○
Ethyl ether	●	×	×	●
Food oils and fats	●	×	●	●
Formic acid 10%	○	●	●	×
Glycerine	●	●	●	●
Hexane	○	●	●	●
Iodine	●	×	×	○
Iron chloride	●	●	●	○
Isopropylic alcohol	●	○	○	●
Lubricating oil	●	●	●	●
Magnesium sulphate	●	●	●	●
Methanol	●	×	×	●
Mineral oils	●	●	●	●
Nitric acid 20%	×	○	○	×
Oxygen	●	●	●	●
Ozone	●	●	●	●
Perchloric acid 10%	×	●	●	×
Petrol	●	×	●	●
Phenol	○	×	×	●
Pothassium bromide	●	●	●	○
Pothassium nitrate	●	●	●	●
Pothassium permanganate	●	●	●	●
Sea climate	●	●	●	○
Silicon oils	●	●	○	●
Soda bleach 15%	●	×	●	○
Sodium chloride	●	●	●	○
Sodium hydroxide 5%	●	×	●	×
Sodium sulphate	●	●	●	●
Sugar	●	●	●	●
Sulphur	●	●	●	●
Sulphuric acid 30%	×	●	●	×
Toluene	×	×	×	●
Trichloro ethylene	×	×	×	●
Zinc sulphate	●	●	●	○

●	resistant
○	Relatively resistant
×	Non-resistant