

AKRO



Luce & Light

AKRO

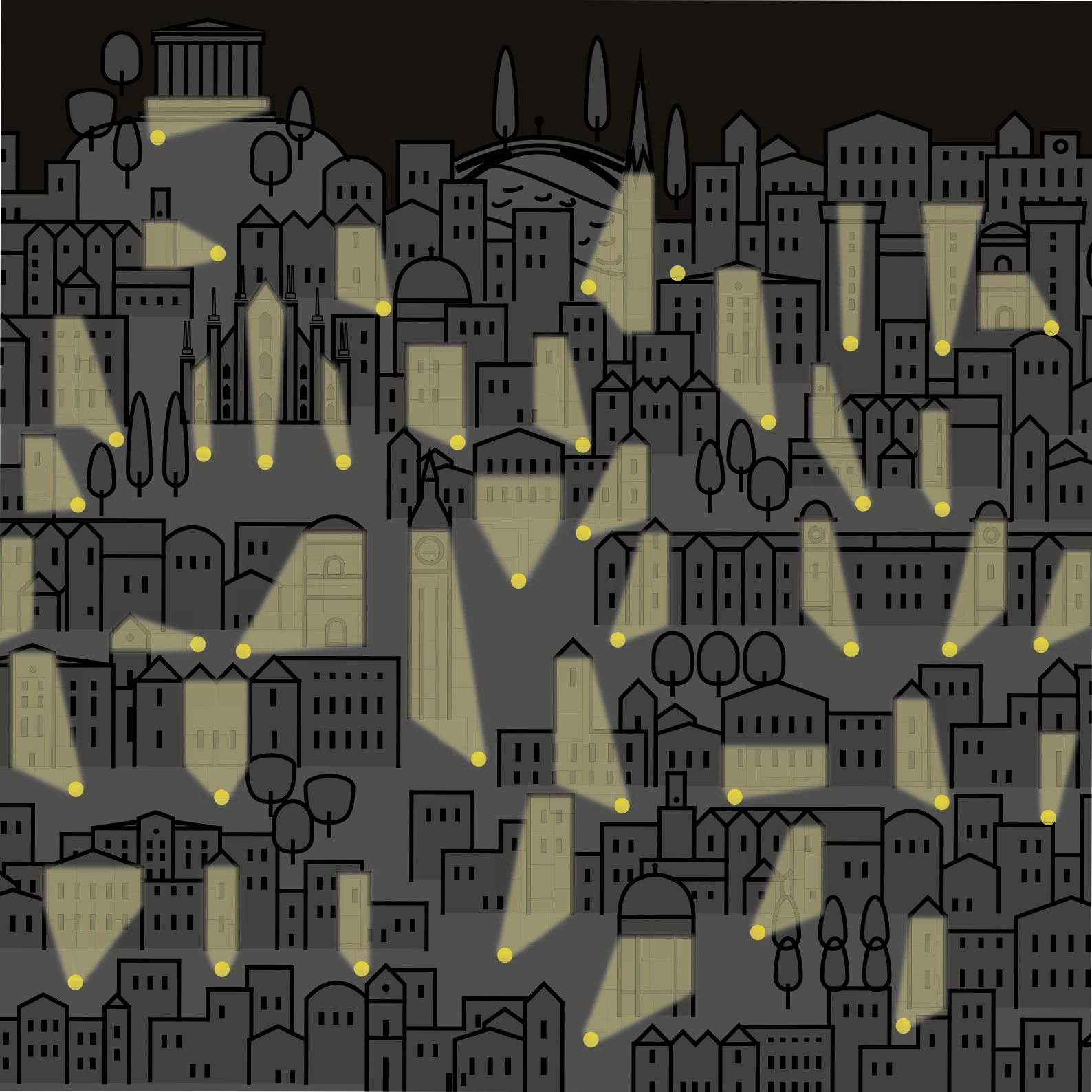
IP66 Outdoor Projectors.
The effects you've mastered indoors
have just left the building.



designplan[®] 

79 Trenton Avenue
Frenchtown, NJ 08825

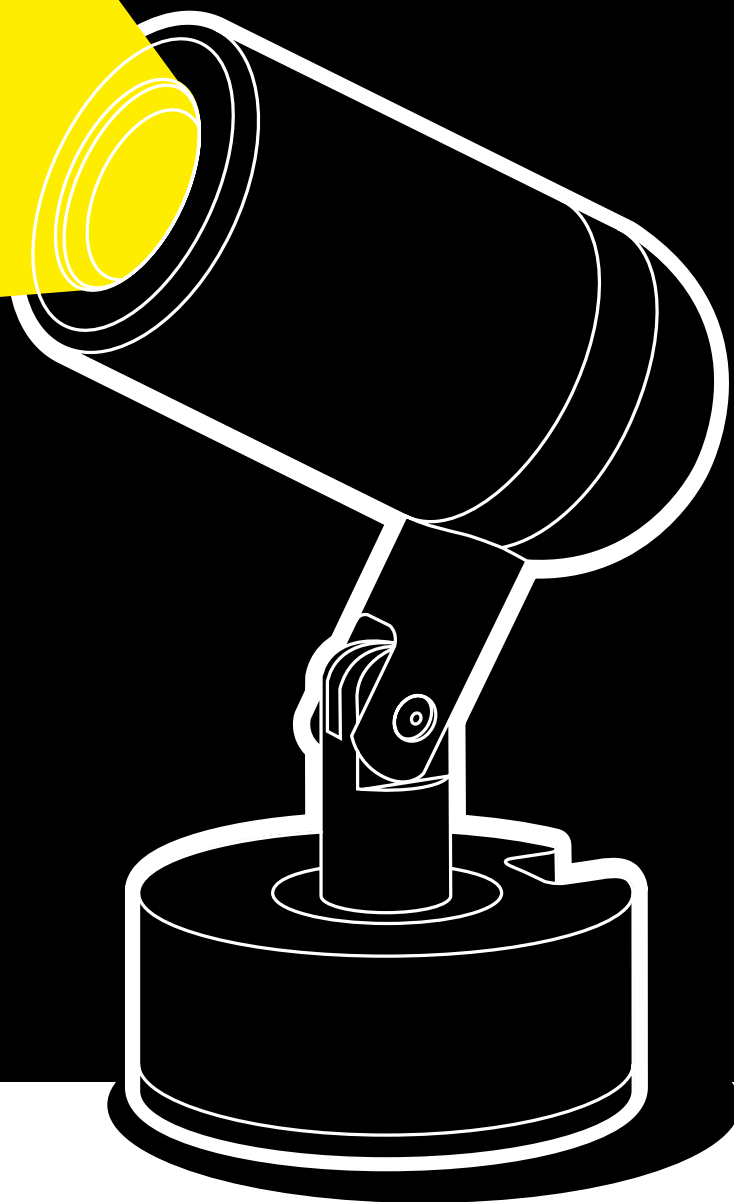
Tel: (908) 996-7710
Fax: (908) 996-7042



AKRO

MAIN FEATURES

- Optical ranges: 13°—32°, 16°—42°
- System of internal optics
- Zoom lens to manually adjust beam
- Wide range of filters (dichroic, elliptical, diffusion)
- Body with three sets of graduations to ensure precise positioning of the light beam
- IP66
Suitable for outdoor applications
- On-board protection systems
IPS Intelligent Protection System (Akro 1.0)
PID Protective Impedance Device (Akro 1.1 / 1.2)





L&L Luce&Light Akro projector is a lighting system that utilizes LED technology, and is designed to offer the architectural lighting community indoor optical performance for exterior use.

The anodized aluminum body houses a system of optics allowing manual variation of the zoom: beam widths between 13°—32° or 16°—42°.

The Akro comes in standard color temperature of 2700K, 3000K and 4000K, with a color rendering of up to 90 CRI. Alongside zoom functionality, the enormous versatility of the Akro allows for multiple filter combinations such as elliptical, diffusion, dichroic and color temperature conversion.

The range is also provided with anti-glare accessories such as honeycomb louvre, barn doors, and standard and asymmetrical snoots, allowing the user to contour and customize the beam distribution exactly to the project requirements. The Akro is site lockable in both pan and tilt and comes with multiple mounting accessories as standard. Akro has three sets of graduations to ensure the product can be precisely positioned upon commissioning. As with all L&L external products, Akro includes the Intelligent Protection System (IPS).

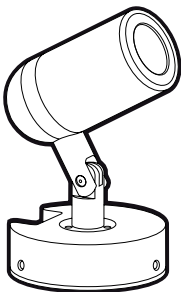
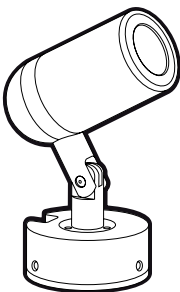
With 350° rotation and 150° tilt, the Akro is built to IP66 and IK06.

AKRO 1.1



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Versions



Product	AKRO 1.0	AKRO 1.1	AKRO 1.2
Nom. power consumption	37W	43W	43W
Power supply	1050mA	120VAC	120VAC
Power supply unit	remote, not included	integral	integral

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Versions



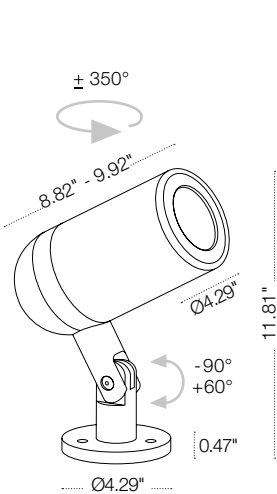
AKRO 1.2



AKRO 1.0



AKRO 1.1

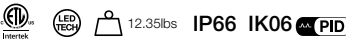
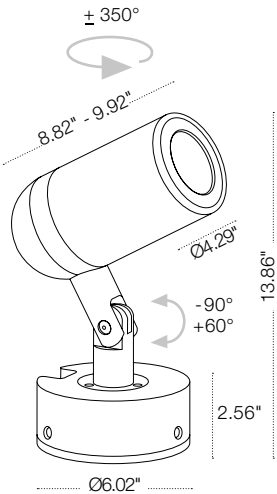


37W - 1050mA - CRI 80
AK10000 ■ ■ N Black

37W - 1050mA - CRI 90
AK10001 ■ ■ N Black

LED color	Optics
F - 2700K	R1 - 13°—32°
5 - 3000K	R2 - 16°—42°
9 - 4000K	

AKRO 1.0

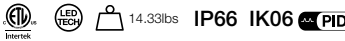
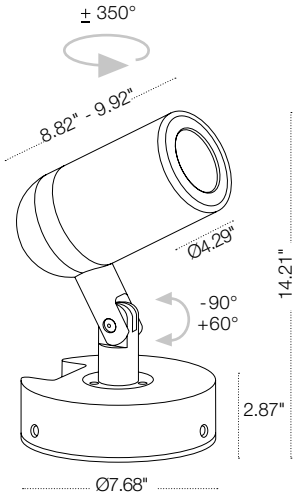


43W - 120VAC - CRI 80
AK11100 ■ ■ N Black

43W - 120VAC - CRI 90
AK11101 ■ ■ N Black

LED color	Optics
F - 2700K	R1 - 13°—32°
5 - 3000K	R2 - 16°—42°
9 - 4000K	

AKRO 1.1



43W - 120VAC - CRI 80 - 0-10V Dimming
AK12100 ■ ■ ND Black

43W - 120VAC - CRI 90 - 0-10V Dimming
AK12101 ■ ■ ND Black

LED color	Optics
F - 2700K	R1 - 13°—32°
5 - 3000K	R2 - 16°—42°
9 - 4000K	

AKRO 1.2

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Materials

Body in black
anodized aluminum
EN AW 6082

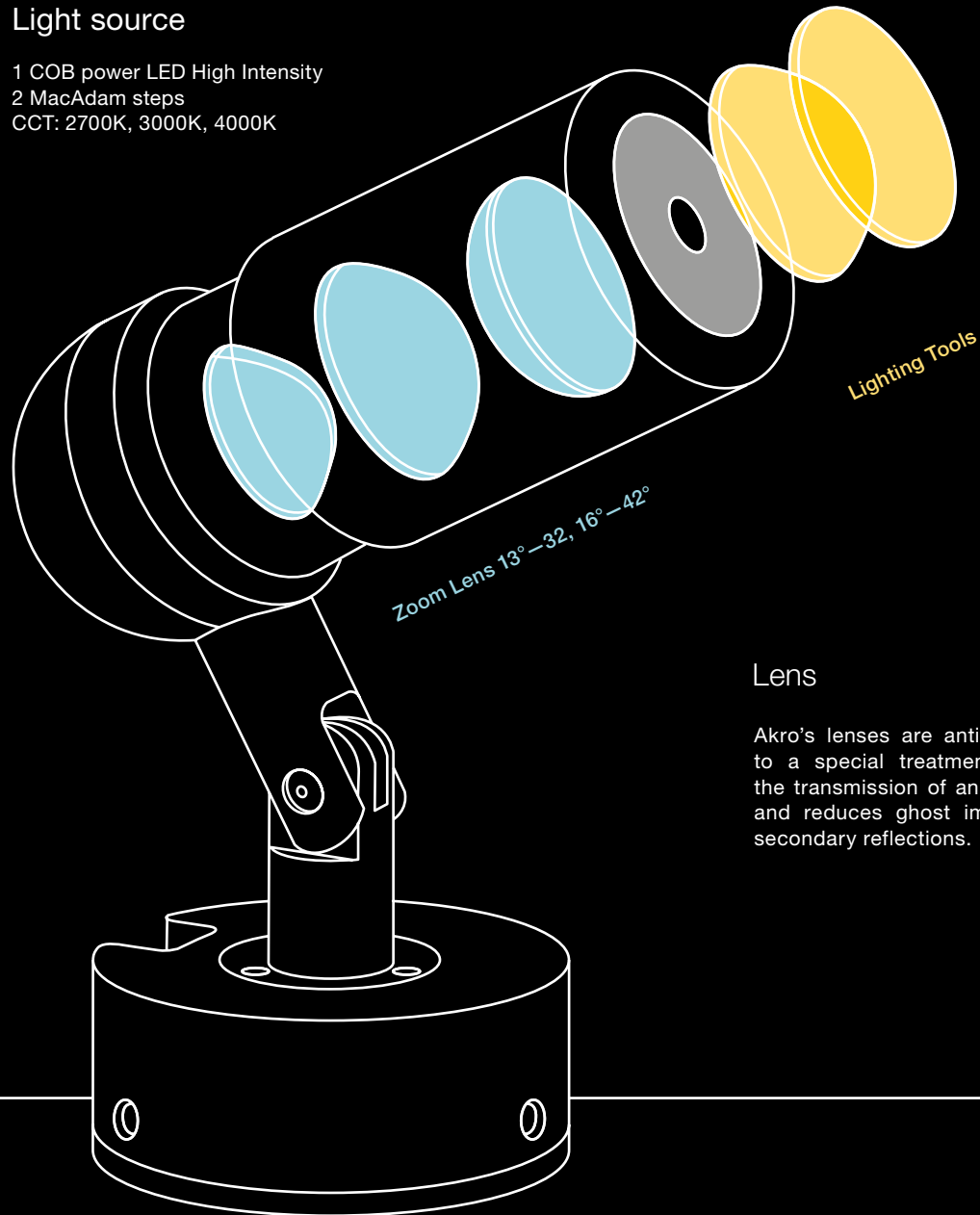
Lenses in BK7
borosilicate glass

Lens in 0.16"-thick
high-reflectance
tempered glass

Screws in AISI 316L
stainless steel

Light source

1 COB power LED High Intensity
2 MacAdam steps
CCT: 2700K, 3000K, 4000K



Lens

Akro's lenses are anti-reflective thanks to a special treatment that increases the transmission of an optical substrate and reduces ghost images caused by secondary reflections.

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Sets of graduations

Akro has three sets of graduations to ensure precise positioning of the light beam.



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Adjusting the zoom lens



1.



2.

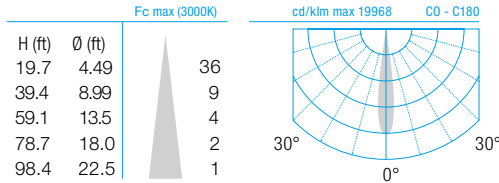


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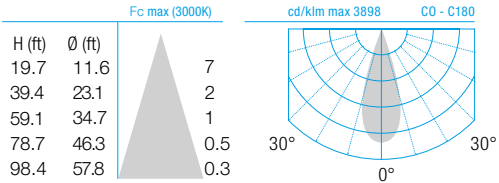
AKRO

Photometric data

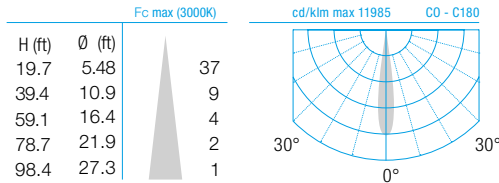
R1 - 13° (13°—32°)



R1 - 32° (13°—32°)

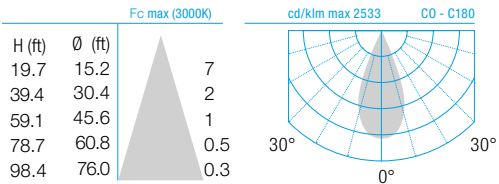


R2 - 16° (16°—42°)

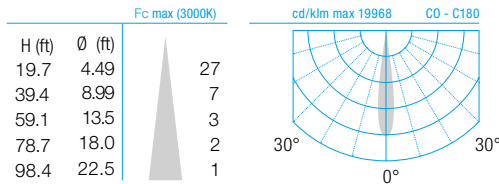


CRI 80

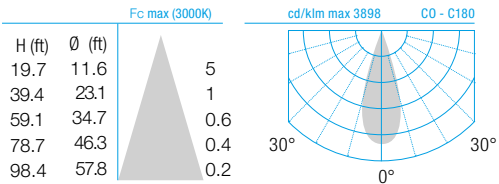
R2 - 42° (16°—42°)



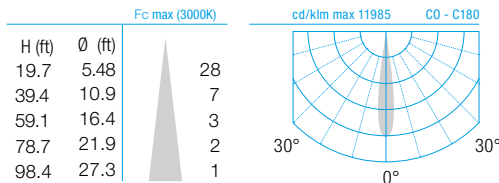
R1 - 13° (13°—32°)



R1 - 32° (13°—32°)

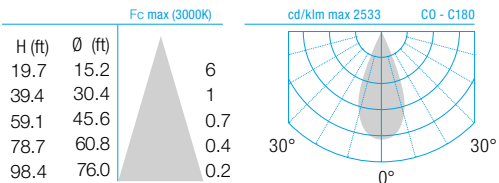


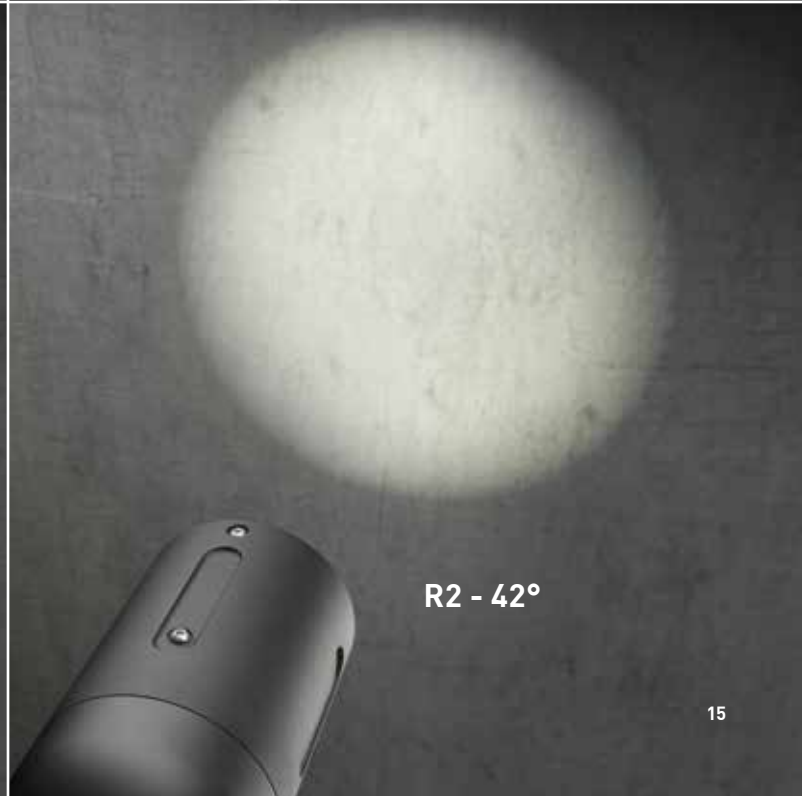
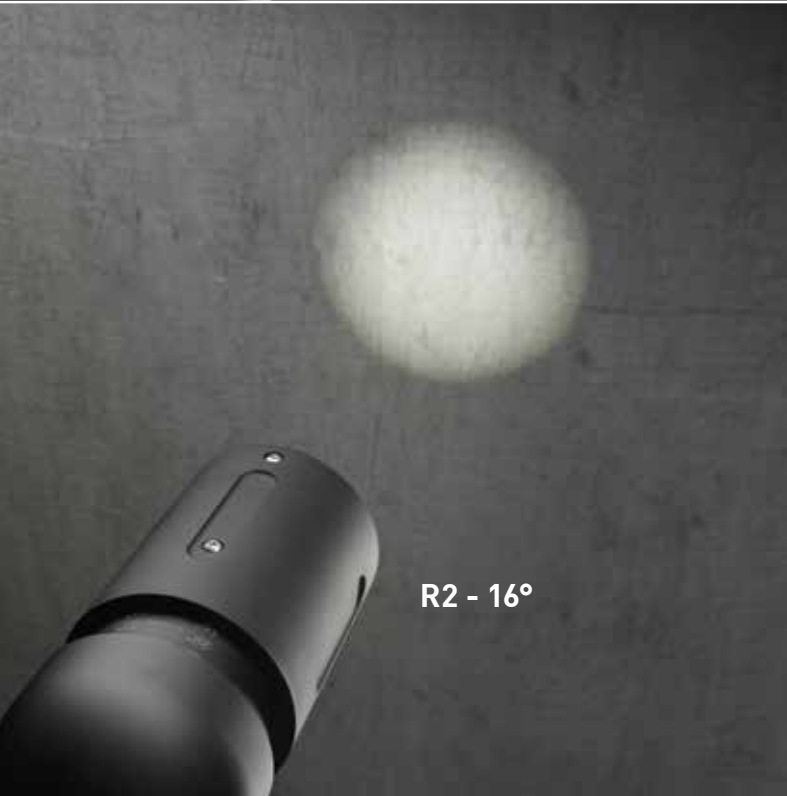
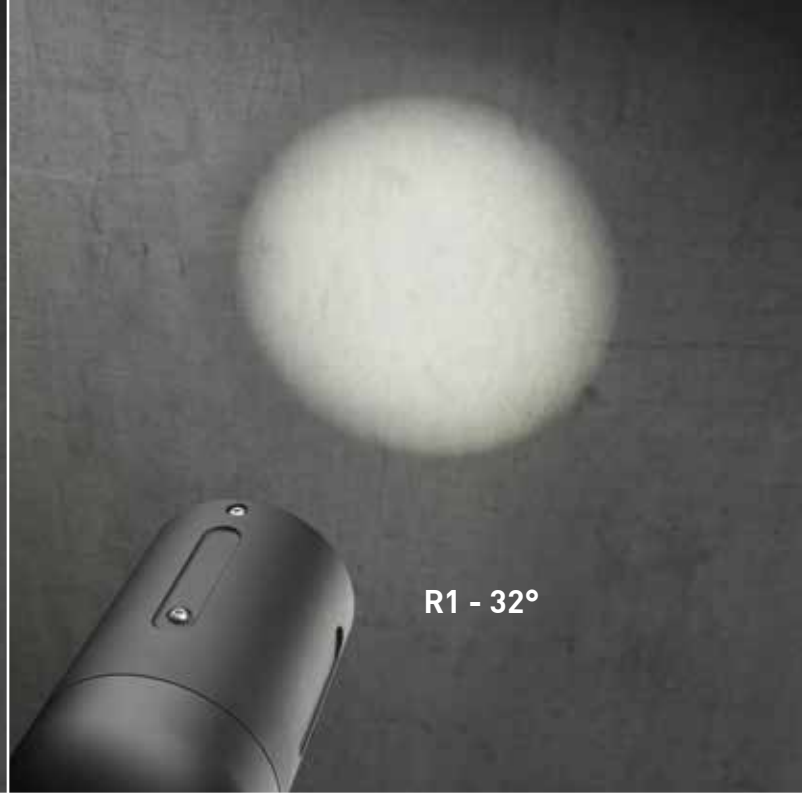
R2 - 16° (16°—42°)



CRI 90

R2 - 42° (16°—42°)





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Accessories



Anti-glare



WB1101N Black
Standard snoot

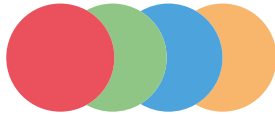


WB1102N Black
Asymmetrical snoot



WB1103N Black
Barn doors

Filters



- WR0001** Red
- WR0002** Green
- WR0003** Blue
- WR0004** Orange

Dichroic filter



WR0030 Variation towards warm white light

WR0031 Variation towards cold white light

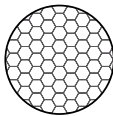
Color temperature conversion filter



WR0020 Elliptical

WR0010 Diffusion

Optical filter



WH0506

Honeycomb louvre

Akro can house up to two filters at the same time

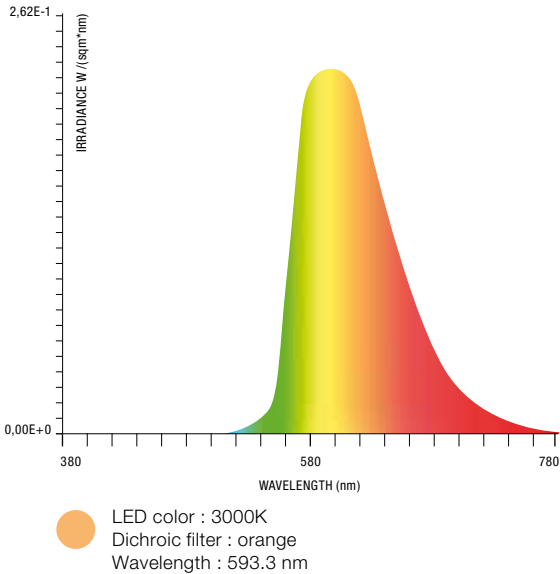
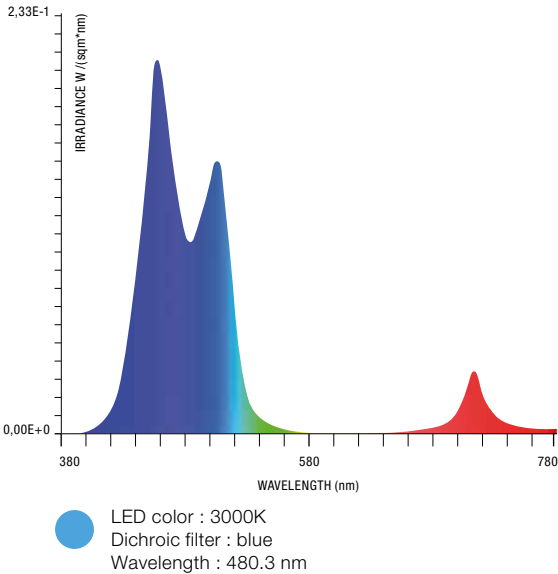
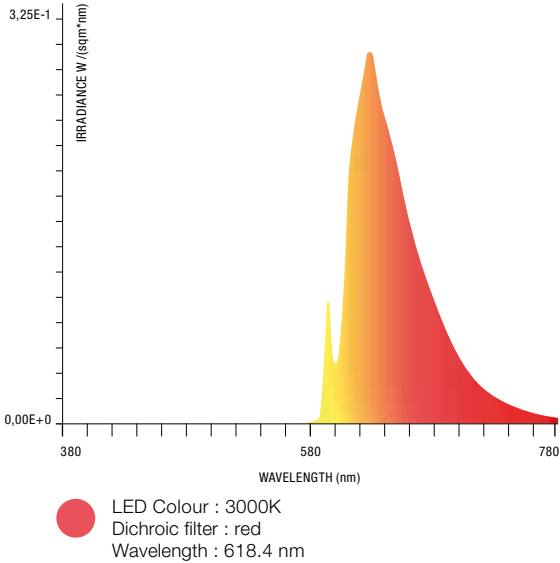
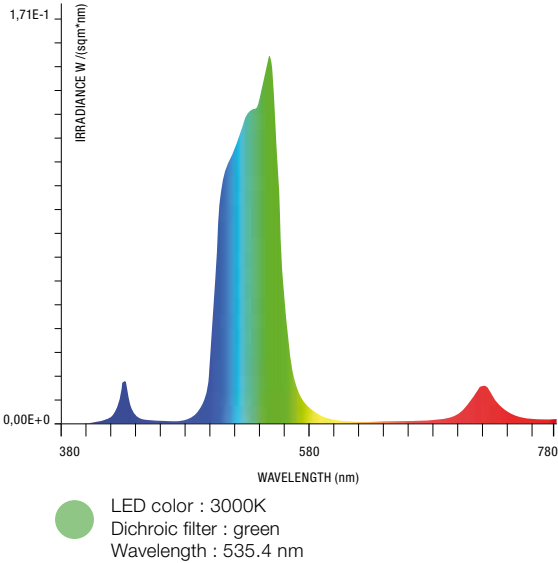
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Dichroic filters

The dichroic filters transmit a specific portion of the visible light spectrum and limit transmission of the remaining portion.

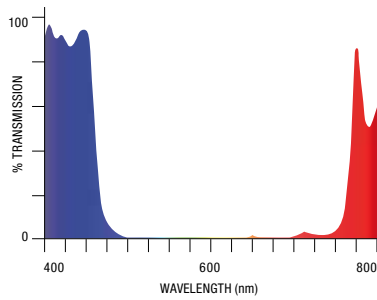


Akro 1.0
3000K, 37W, with elliptical filter and green, red, blue and orange dichroic filters

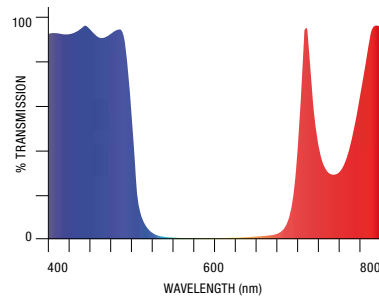


AKRO

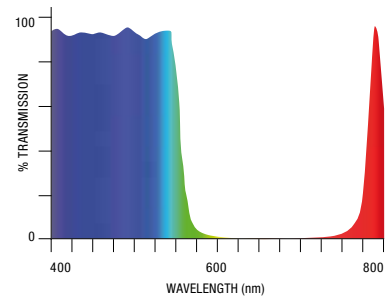
Dichroic filters on request



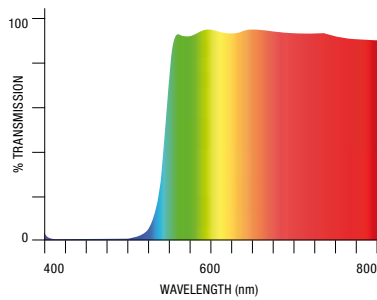
Midnight blue



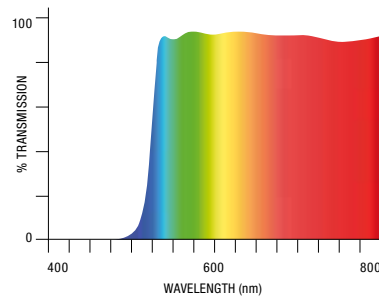
Dark blue



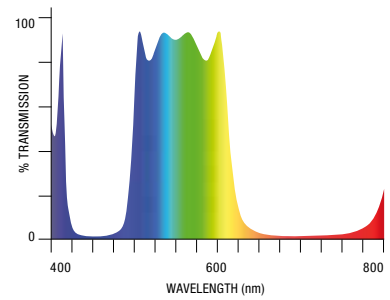
Cyan



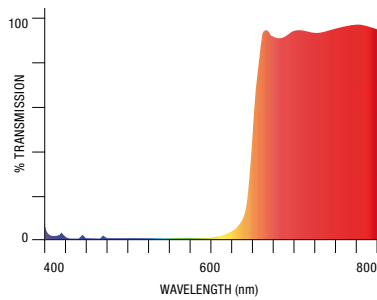
Dark yellow



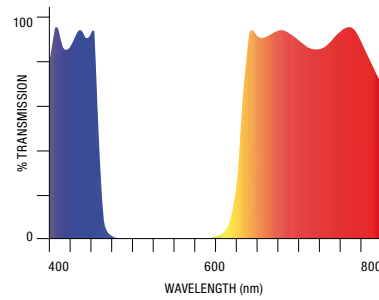
Yellow



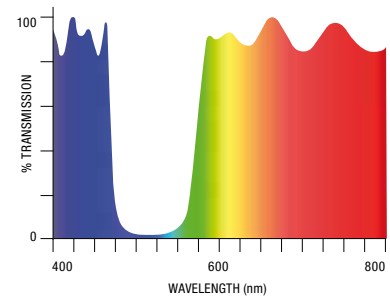
Light green



Dark red



Magenta



Pink



Akro 1.0
3000K, 37W, optical range 13°—32°,
with dichroic filters on request /

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Colour temperature conversion filters

The conversion filters change the emission spectrum of a light source, making it possible to change the white light colour temperature.



Akro 1.1

3000K, 43W, with conversion filter for cold white light



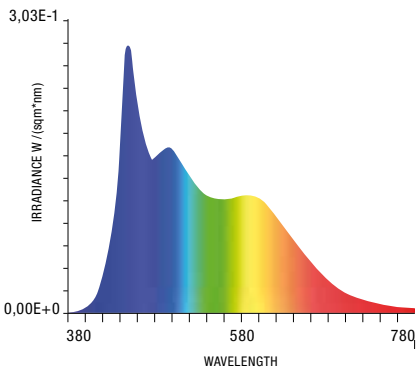
Akro 1.1

3000K, 43W

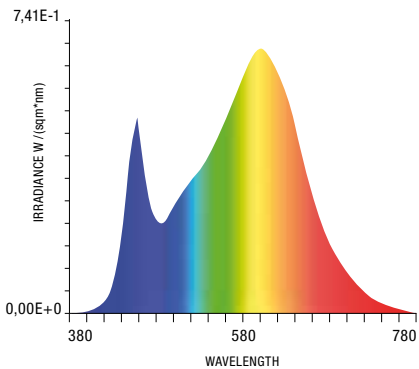


Akro 1.1

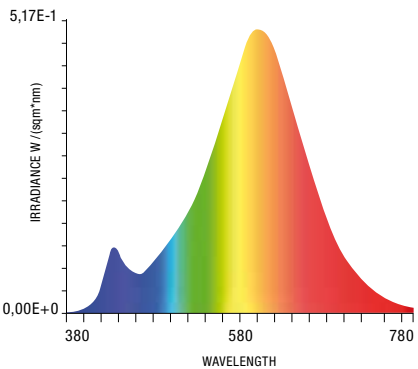
3000K, 43W, with conversion filter for warm white light



LED color : 3000K
Filter : 6000K
Wavelength : 488.2 nm



LED color : 3000K
Wavelength : 583.2 nm

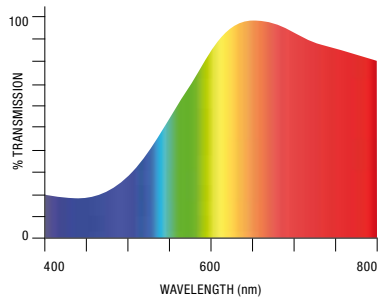


LED color : 3000K
Filter : 2200K
Wavelength : 586.4 nm

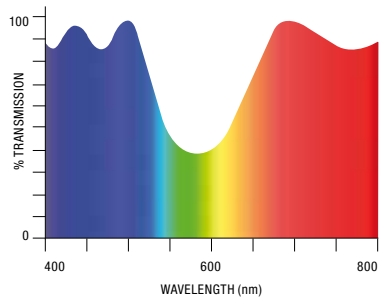
LED CCT	CONVERSION FILTER	CODE	LED CCT WITH CONVERSION FILTER	CCT VARIATION
2700K	Variation towards warm white light	WR0030	1950K	750K
2700K	Variation towards cold white light	WR0031	4500K	1800K
3000K	Variation towards warm white light	WR0030	2100K	900K
3000K	Variation towards cold white light	WR0031	5400K	1400K
4000K	Variation towards warm white light	WR0030	2550K	1750K
4000K	Variation towards cold white light	WR0031	9400K	5400K

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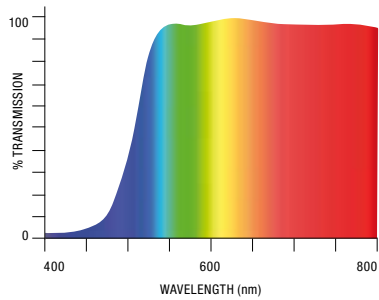
Hue-enhancing filters on request



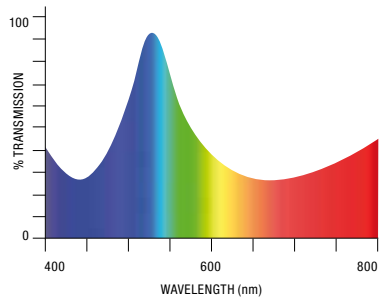
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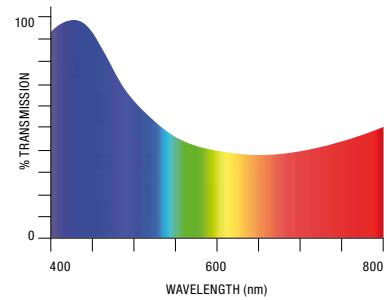
02



03



04



05



Akro 1.1
3000K, 43W,
with yellow-, orange- and red-hue-enhancing filter

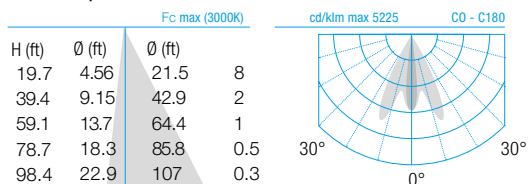


Akro 1.1
3000K, 43W, with blue- and green-hue-enhancing filter

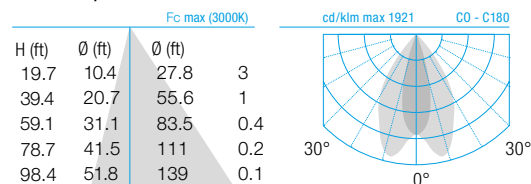
AKRO Elliptical filter

Photometric data

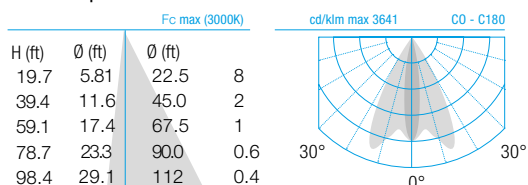
R1 + Elliptical filter 13°x57°



R1 + Elliptical filter 29°x70°

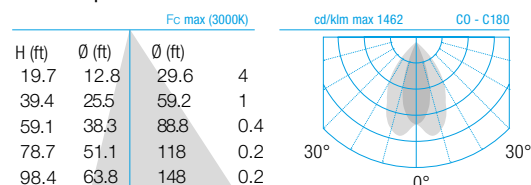


R2 + Elliptical filter 17°x59°

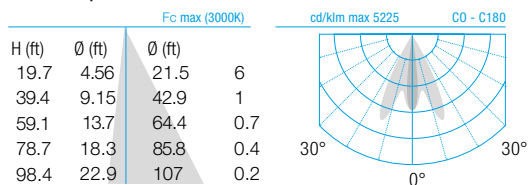


CRI 80

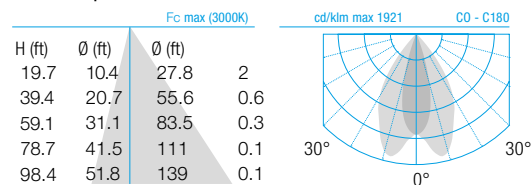
R2 + Elliptical filter 36°x74°



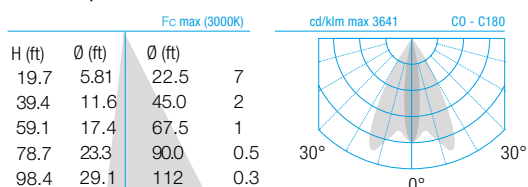
R1 + Elliptical filter 13°x57°



R1 + Elliptical filter 29°x70°

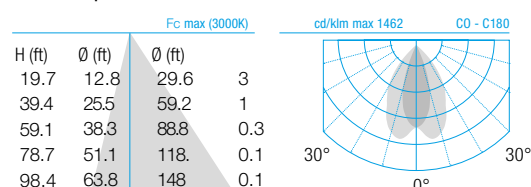


R2 + Elliptical filter 17°x59°

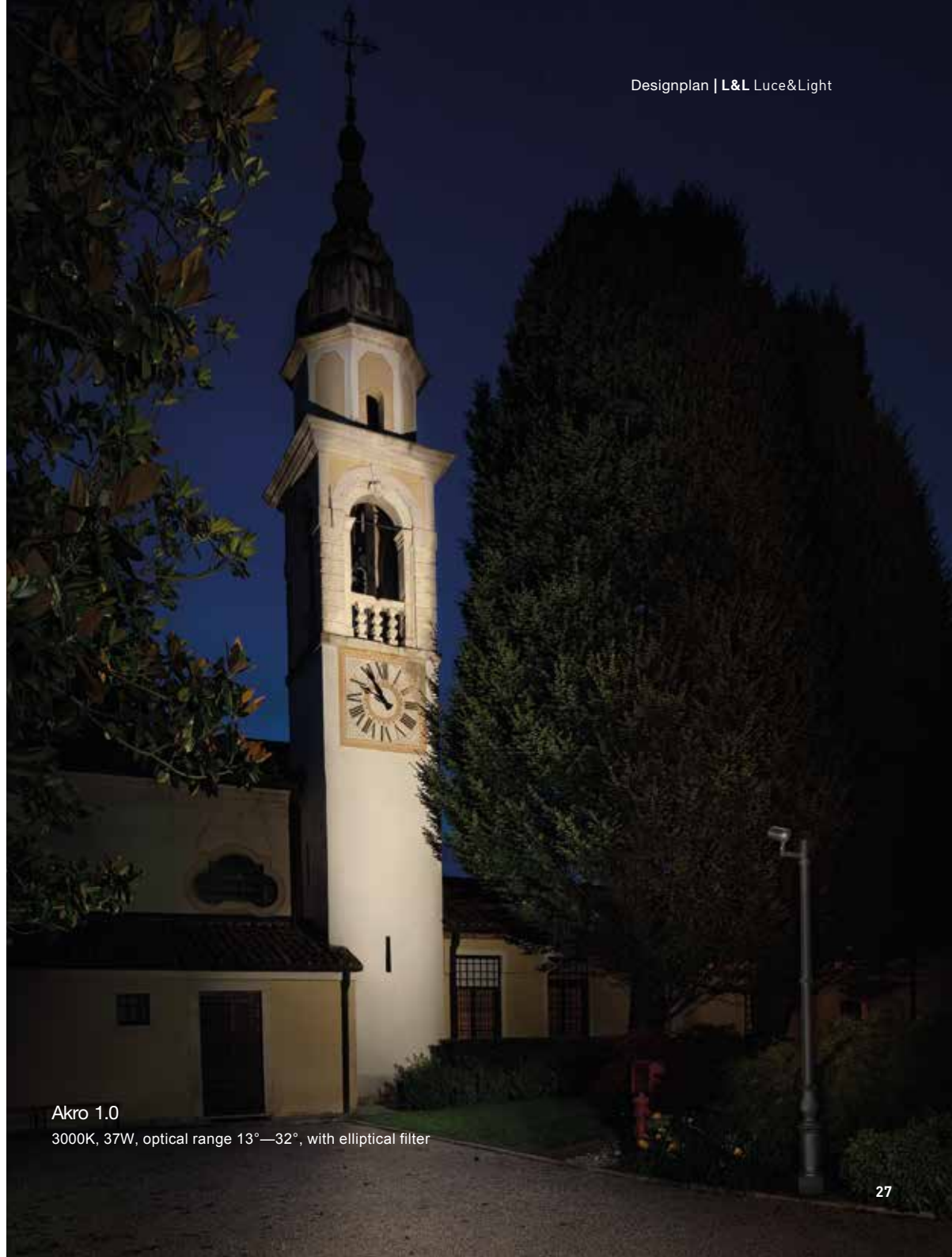


CRI 90

R2 + Elliptical filter 36°x74°



Filter positioning: structured side towards the source



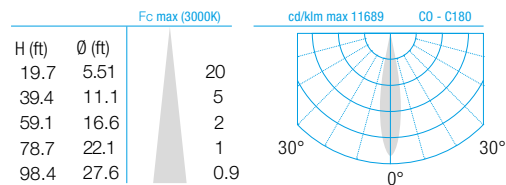
Akro 1.0

3000K, 37W, optical range 13°—32°, with elliptical filter

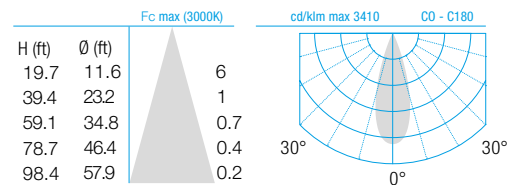
AKRO Diffusion filter

Photometric data

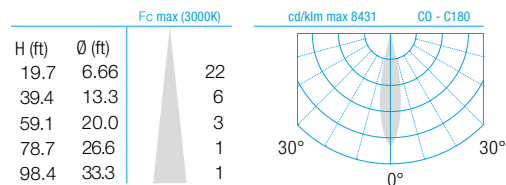
R1 + Diffusion filter 16° (16°—33°)



R1 + Diffusion filter 33° (16°—33°)

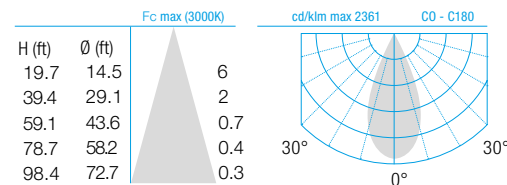


R2 + Diffusion filter 19° (19°—42°)

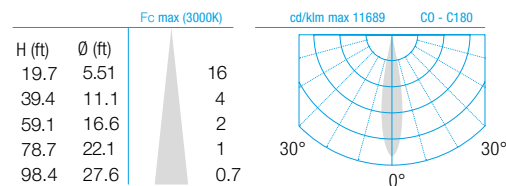


CRI 80

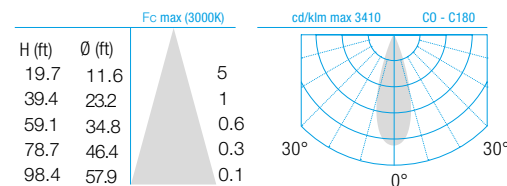
R2 + Diffusion filter 42° (19°—42°)



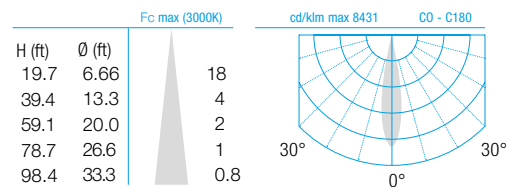
R1 + Diffusion filter 16° (16°—33°)



R1 + Diffusion filter 33° (16°—33°)

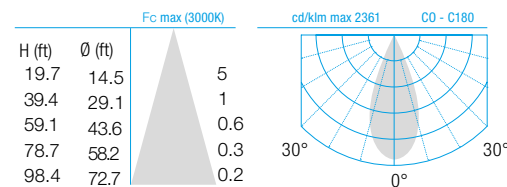


R2 + Diffusion filter 19° (19°—42°)



CRI 90

R2 + Diffusion filter 42° (19°—42°)



Filter positioning: structured side towards the source



Akro 1.1

3000K, 43W, optical range 13°—32°, with diffusion filter

Villa Da Porto Casarotto, Dueville, Vicenza, Italy

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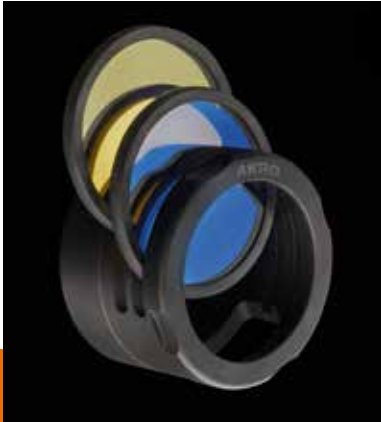
Changing filters

To facilitate lighting tests on site, and to test the various lighting effects, L&L will provide a mock-up cartridge on request so that the filters can be changed immediately.

Once the lighting effect has been finalised, you must replace the mock-up with the standard cartridge, to guarantee the device's protection (IP66).



WE0300
Accessory for changing filters



Mock-up cartridge on request



IP66 cartridge supplied

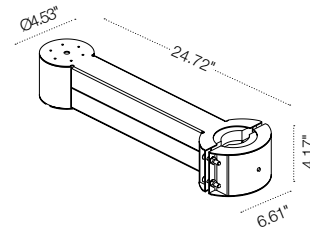
AKRO Accessories For installation



WP0300 - Akro 1.0
Stake for installation in the ground



WP1005N - Akro 1.0
Arm for pole mounting





designplan

79 Trenton Avenue
Frenchtown, NJ 08825

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