



A new paradigm of life quarantine that neutralizes viruses with light!

Antiviral • antibacterial artificial sunlight lighting

Various bacteria 99.9% Neutralization **Antibacterial** harmful bacteria

> **Human body** Safety evaluation IEC62471 Highest grade

> > **FULL SPECTRUM** Wavelength Artificial sunlight lighting

> > > Convenient management without need for ventilation or cleaning

















# What is XENOSUN LIGHT ?

As an LED lighting that neutralize harmful viruses and bacteria such as respiratory viruses (COVID-19, MERS, SARS etc), Salmonella, E.coli, pneumonia and etc, A 405nm purple LED that isharmless to the human body is used, and it is an artificial sunlightwhite LED similar to natural sunlight that has high CRI and minimize eyestrain.

#### 405nm

Antiviral, Antibacterial function / Purple area



#### **BLUE SPIKELESS**

Eyesight protection / Bio-rhythm aid



Artificial sunlight function / Visible light area (Full Spectrum)

Applied patent technology: 10-1990475

Multi-wavelength multifunctional integrated LED new light source



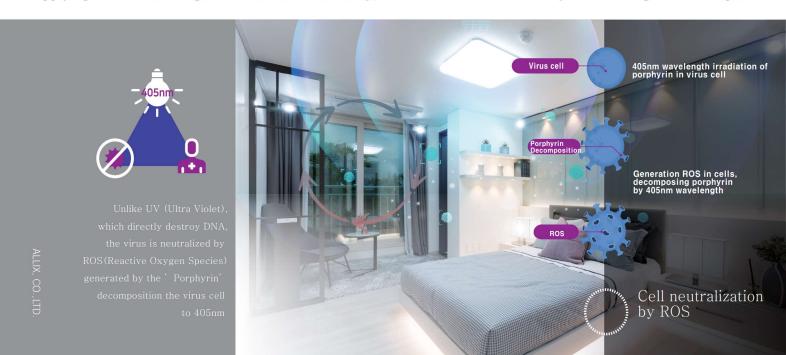
## **General LED lighting features**

While general LED that we use are energy efficient, eco-friendly and have many advantages such as long battery. Including blue light due to the nature of light implementation, Blue light has a disadvantage of reducing the secretion of melatonin at night, adversely affecting sleep, and accelerating the aging of the retinal tissue, reducing vision and increasing eyestrain. In particular, it has the disadvantage of causing certain degenerative eye disease such as age-related macular degeneration.



That is how neutralizes the virus.

Applying 405nm wavelength harmless to human body, It neutralizes the virus everywhere the light hits the space.





## The reason why we need artificial sunlight

#### 1. BLUE SPIKELESS

There is no blue spike that adversely affects eyeball macular degeneration or melatonin secretion.



#### 2, HIGH CRI

The Ultra-high CRI LED of CRI max.99 makes colors vivid and vibrant.



#### 3. Prevention of myopia/glaucoma

The genes that play a role in protecting myopiz in the retina are increased, helping to prevent myopia and glaucoa.



#### 4. FULL SPECTRUM (Artificial sunlgiht / natural light)

It is a continuous spectrum of seven colors with less strain and covers all visible light such as sunlight.



#### 5, Human Centric Lighting & Circadian rhythm lighting

This LED is the most similar light to natural sunlight, and is suitable for H.C.L and circadian rhythm (biorhythm) lighting.



## Spectrum of light

- As high and low in the wavelength range, Spectrum of light can know the features of each light source.
- The fact the wavelength intensity of the spectrum is evenly expressed in the visible region means that any color is well expressed.
- In other words, High-CRI enhances color reproducibility, increasing concentration and reducing light fatigue.
- XENOSUN LED most similar to natural light wavelength.









## Comparison by light source

Feature	XenoSun LED	M Company	H Company	
Antiviral	0	0	0	
Artificial sunlight	0	x	х	
Antibacterial effect	0	0	0	
Color implementation	Can implement daylight color, day white color, light bulb color	Can implement Purple only with 405nm wavelength	Can implement Purple only with 405nm wavelength	
Harmless to human body	0	0	0	



#### **Downlight**

Model No.	Power(W)	CCT(K)	CRI(Ra)	Size	Input Voltage(VAC/Hz)	Remark
AQD170(15)	15	4000 ~ 7000	95~99	6 in	AC 200- 250 50/60	
AQD170(20)	20	4000 ~ 7000	95~99	6 in	AC 200- 250 50/60	
AQD190(30)	30	4000 ~ 7000	95~99	8 in	AC 200- 250 50/60	
AQD170(40)	40	4000 ~ 7000	95~99	6 in x 2	AC 200- 250 50/60	Dual

### **Panel Light**

Model No.	Power(W)	CCT(K)	CRI(Ra)	Size	Input Voltage(VAC/Hz)	Remark
AQP600(25)	25	4000 ~ 7000	95~99	630 x 320mm	AC 200- 250 50/60	
AQP600(40)	40	4000 ~ 7000	95~99	630 x 630mm	AC 200- 250 50/60	
AQP600(50)	50	4000 ~ 7000	95~99	630 x 630mm	AC 200- 250 50/60	
AQP600(60)	60	4000 ~ 7000	95~99	630 x 630mm	AC 200- 250 50/60	
AQP600(100)	100	4000 ~ 7000	95~99	630 x 630mm	AC 200- 250 50/60	
AQP1200(40)	40	4000 ~ 7000	95~99	1280 x 320mm	AC 200- 250 50/60	
AQP1200(50)	50	4000 ~ 7000	95~99	1280 x 320mm	AC 200- 250 50/60	
AQP1200(60)	60	4000 ~ 7000	95~99	1280 x 320mm	AC 200- 250 50/60	
AQP1200(100)	100	4000 ~ 7000	95~99	1280 x 320mm	AC 200- 250 50/60	

# XENOSUN LIGHT

# **Patent details**





Domestic Patent: 10-1990475

With a patent that minimizes UV wavelength and Blue Spike by using an LED device with a number of phosphors applied to the Near Violet chip(405nm), it performs antiviral and antibacterial functions through 405nm wavelength, Light source technology that minimizes eyestrain by implementing a spectrum(visible light region) similar to sunlight.

#### International Patent

Japan (6854831): Registered Patent Europe (18804220.4) / U.S (16/098,224): Under Registration examination.



#### XENOSUN artificial test report>

#### XENOSUN photobiological stability test report >





# Certificate of conformity registration of XENOSUN broadcasting and communication equipment, etc >

### 방송통신기자재등의 적합등록 필증 Registration of Broadcasting and Communication Equipments 상호 또는 성명 Teach Name or Registers 기자재명칭(제품명칭) LED 등기구(메입형) 기본모델명 Bark Model Number AQD180(15) 파생모델명 등록번호 Peristration No. 제조자/제조(조립)국가 Manufacturer/Country of Origin (주) 윤익스 / 한 등록연월일 Date of Registration 위 기자재는 「전파법」제58조의2 제3항에 따라 등록되었음을 증명합니다. s verified that foregoing equipment has been registered under the Clause 3, Article 58-2 of Radio Waves Act. 2020년(Year) 08월(Month) 20일(Day) 로립전 국립전파연구원장 <mark>파연구</mark> 당인 Director General of National Radio Research Agency ※ 석합등록 말순통신기자계는 반드시 "적합성평가표시" 를 부착하여 유통하여야 합니다. 위반시 과태로 서본 및 등록이 취소될 수 있습니다.

#### < XENOSUN Safety certification >



# Neutralizing viruses and bacteria in real time

