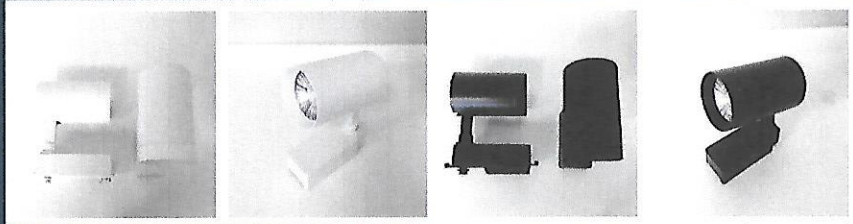


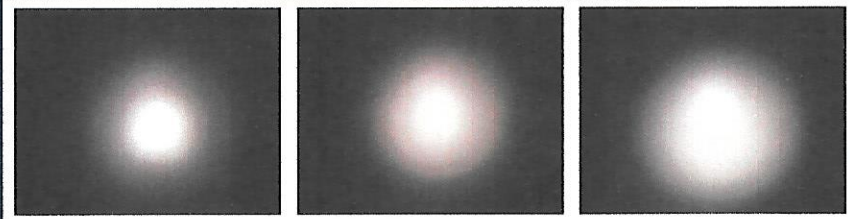
CHOOSE THE BEST COLOR FOR YOUR LIGHT

ALLIX Art Gallery Lighting

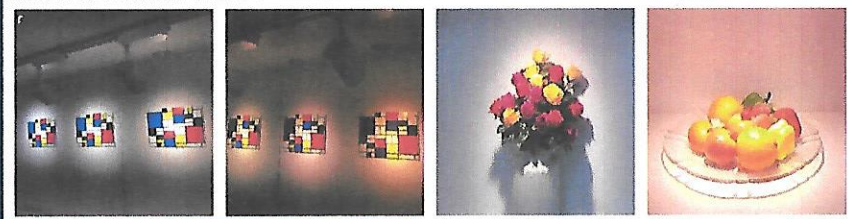


20W & 30W LED SPOT LIGHT 외관 (WHITE, BLACK)

Museum & Art Gallery Lighting



Beam Angle 별 렌즈 종류 세가지 옵션 선택 가능 (10°, 20°, 30°)



사용 예시

About ALLIX



[o:liks] All Experience, All Expectation, All IX

As a trademark where the expansion of new business areas is expected, IX, representing nine in Latin, signifies "Maturity" which is the final stage toward perfection. Also, IX symbolizes company's technology and service to its customers.

ALLIX Co., Ltd.

69 Ballyong-ro, Deokjin gu, Jeonju-city, Jeollabuk-do, South Korea / Postal Code : 54853
Tel: +82-63-214-8517 E-Mail: allix@allix.com Homepage: www.allix.com



ALTP & Associates

www.altplic.com

CALL: (847) 821-0032



CHOOSE THE BEST COLOR FOR YOUR LIGHT



ALLIX believes that each person has its own color suits them perfectly.
Lights are no longer just the tools which light up the places.
Lights have played roles from as daily necessities to enhance efficiency and to maximize use of a space to as a sensitivity booster.
Customize your own lighting designs at ALLIX.

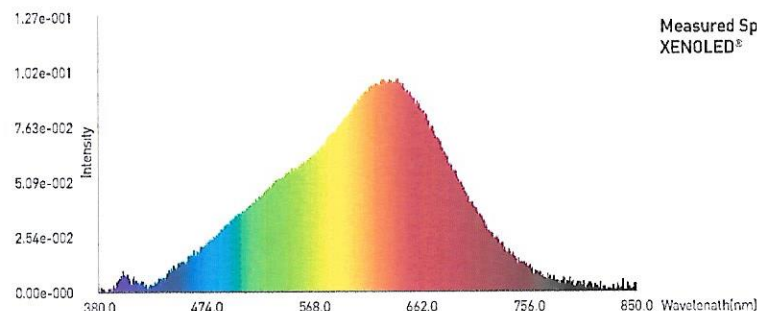
ALLIX Museum & Art Gallery Lighting LED

- ALLIX® XENOLED®, ALLIX's high color quality product brand, is made with Near Violet chip and the multiple phosphor.
- ALLIX® XENOLED® is Near Violet 칩에 다수의 형광체를 적용한 LED 소자.
- ALLIX® XENOLED® II represents object colors as close as the ones under the natural sunlight and provides museum gallery lighting with accurate color and continuous spectrum distribution.
- 태양광과 유사한 스펙트럼 구현이 가능하며, 균일한 스펙트럼으로 정확한 색상의 박물관 갤러리 조명을 제공.



- ① General LED Solution (Blue + YAG Phosphor)
 - High Brightness
 - Poor color rendering
 - High blue spikes
- ② Good LED Solution (Blue + R,G Phosphor)
 - Good color rendering
 - High R9 Values
 - Peaks of blue spikes
- ③ Best LED Solution ALLIX® XENOLED® (n-UV + R,G,B Phosphor)
 - Excellent color rendering (High R9, R12, values)
 - Minimal Blue Spike
 - No UV, IR rays

ALLIX® XENOLED® needs No IR Filter, No UV Filter

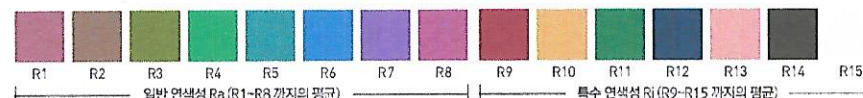


Measured Spectrum of XENOLED®

High CRI

- Color Rendering Index(CRI) : a quantitative measure of the ability of a light source to reveal the colors of various objects faithfully in comparison with natural light source.
- Color Rendering Index(CRI) : 자연광에서의 색상 재현과 비교하여 인공 광원 하에서 색상을 정확하게 표현하는 정도를 나타내는 척도.
- It expresses each color from R1 to R15
- R1~R15 까지 각각의 색상에 대한 표현력을 의미함.
- It is very important in the field of Museum & Gallery Lighting in that it shows a more accurate representation of the actual color, R9 for 'red', R12 for 'blue', and R13 for 'skin tone' value
- '빨간색'에 대한 표현력 R9, '파란색'에 대한 표현력 R12, '피부색'에 대한 표현력 R13은 Museum & Gallery Lighting 분야에서 매우 중요함.

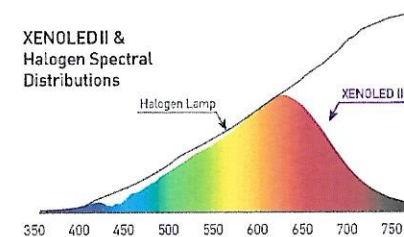
Color Samples for CRI



ALLIX high CRI techniques

- ALLIX® XENOLED® II is able to express the natural color accurately based on high general color rendering and special color rendering.
- ALLIX® XENOLED® II는 높은 일반 연색성 및 특수 연색성을 바탕으로, 작품 본연의 색을 가장 정확하게 표현 가능함.
- IR wavelength of a normal halogen lamp is mostly thermal energy which can cause damage to the work, 기존 할로겐 램프의 IR 파장은 대부분 열 에너지로서 작품에 열손상을 줄 수 있음.
- Typical fluorescent lamps and existing LED light induce discoloration and denaturation of the work with Blue Spike and UV wavelength.
- 일반적인 형광등 및 기존 LED 광원은 Blue Spike와 UV 파장으로 작품의 탈·변색 및 변성을 유도함.

XENOLED II & Halogen Spectral Distributions



R1	R2	R3	R4	R5	R6	R7	R8
Light greyish red	Dark greyish yellow	Strong yellow green	Moderate yellowish green	Light bluish green	Light blue	Light violet	Light reddish purple
99	99	98	97	98	98	97	98
R9	R10	R11	R12	R13	R14	R15	CRI
Strong red	Strong yellow	Strong green	Light yellowish pink (skin)	Moderate olive green	Asian Skin	Ra	
95	99	95	99	98	98	98	99

Why High CRI XENOLED II ?

- Almost 99 in CRI(Ra), over 95 in R9 and R12
- No UV, NO IR rays
- No blue spikes : preferred in Museums and Art galleries.

LED	LED	Halogen Lamp	ALLIX
CRI 60	CRI 90	CRI 99	CRI 99
R9 < 30	R9 < 45	R9 < 99	R9 < 99
R12 < 45	R12 < 75	R12 < 99	R12 < 99

- ① High R12 Value
R12 Value (Strong blue) are prevalent in old paintings.
- ② Representing Halogen Spectrum
Halogen has CRI 99.
- ③ UV, IR rays
Halogen emits UV, IR rays, which can harm human health.
- ④ No Blue Spikes
Blue spikes can discolor oil paints in the paintings.

ALLIX innovation technologies with XENOLED®

- Near Violet Chip White Conversion Method
- Near Violet 칩을 적용 하여 백색광으로 변환시키는 기술.
- Best Quality of Light similar to SUN Light Photometric Spectrum with NO UV and NO IR
- UV 및 IR이 없는 태양광 스펙트럼과 유사한 최상의 빛 품질.
- High CRI over than 95% and up to 99% are available
- Ra 95% 이상에서 99%까지 가능한 High CRI 제품.
- ALLIX Patent Registered No. : 10-1651342 (KR) 'LED and module satisfying spectral characteristics for art illumination.'
- ALLIX 특허 등록 번호 : 10-1651342 (KR) '미술 조명을 위한 스펙트럼 특성을 만족하는 발광 다이오드 소자 및 모듈'



XENOLED™ 400

White LED Devices for Illumination using Near Violet Light and Phosphors

- ▶ XENOLED™ is the Trademark for the Innovation of "White LED Devices for Illumination using near Violet Light and Phosphors" under Registration by LEDst

Near Violet Chip White Conversion Method (Innovation!!)

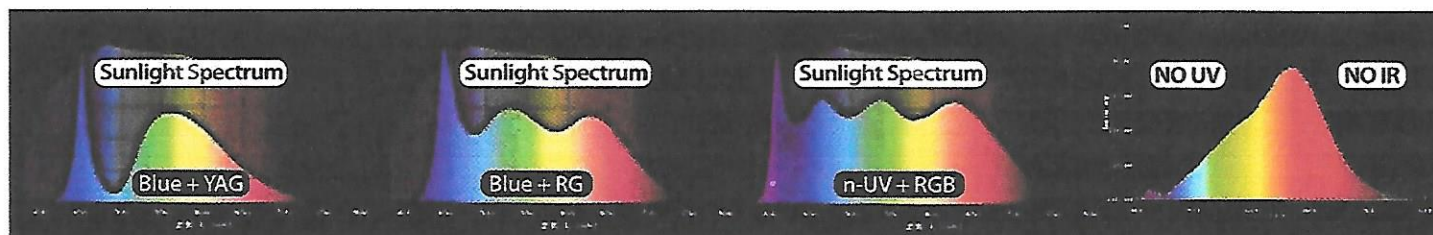
The main idea of this item is to use RGB+Y phosphor materials to convert monochromatic light from a Near Violet LED to broad-spectrum white light similar to Sunlight spectrum

- Applied No. 10-2013-0103570 at South Korea

- Applied No. PCT/KR2013/007811 at PCT International

- ▶ Best Light Quality similar to SUN Light Photometric Spectrum with NO UV and NO IR
- ▶ High CRI over than 90% ($R_a \geq 90$, $R_i \geq 90$), and up to 99% ($R_a \approx 99$, $R_i \approx 99$) is available
- ▶ This item is available for all kind of LED packages such as SMD 3528, 5450, 5630 type, lamp type, COB type, etc.
- ▶ Application area includes Light Source for biological & medical applications such as stereomicroscope, endoscope, medical examination room, production line of pharmaceutical factory, and museum applications including art gallery shop, art drawing room and any other application which need enhanced spectrum characteristics with Ultra High CRI

LEDst Near violet White LED Solution Compare to Three Primary Ways



① General White
(Blue+YAG Phosphor)

② Good LED Solution
(Blue+RG Phosphor)

③ Better LED Solution
(n-UV+RGB Phosphor)

④ Best LEDst Solution
(Near Violet+RGBY)



MUSEUM LIGHTING & FINE ART LIGHTING



ALLIX XENOLED® Series
Provides the highest
CRI LEDs.

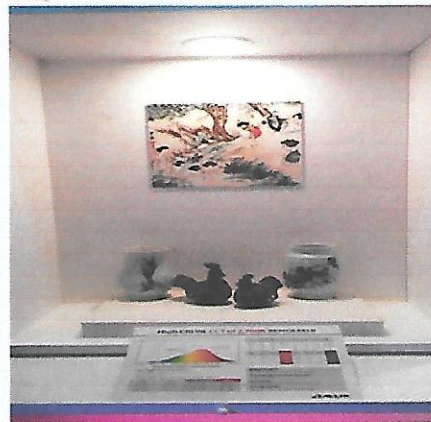
XENOLED® I
Blue chip - phosphors

XENOLED® II
A-violet chip - phosphors

High CRI
Ra:95 Ra:90 Ra:85 Ra:80

High CRI
Custom Design Modules Available

ALLIX
Building to All Designers, Services Available, South Korea
Tel: +82-42-933-1155 Fax: +82-42-933-1155 (Korea)
Represented in the USA & Canada by:
ALT & Associates LLC
ALT & Associates LLC, 10000 E. 10th Ave., Suite 100, Denver, CO 80231, USA



ALLIX IS:  **HumanCentric**
Lighting Society

LM-80 **LEDs**

REPRESENTED IN THE USA & Canada:



Access the ALLIX WebSite by clicking on: WWW.ALTPLLC.COM