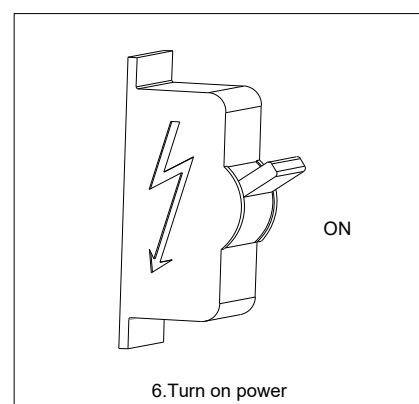
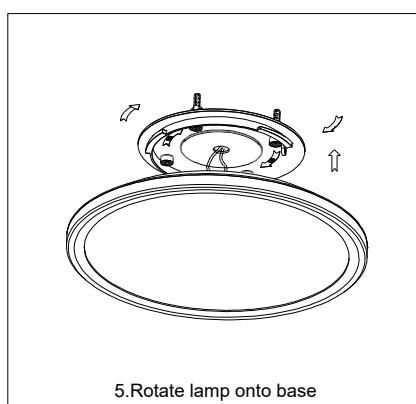
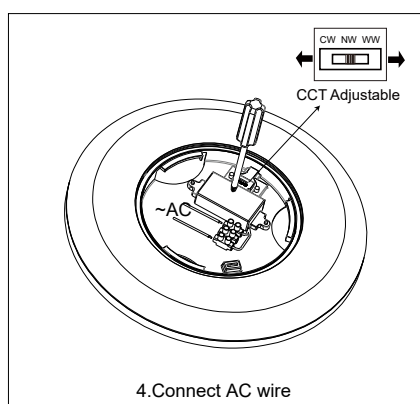
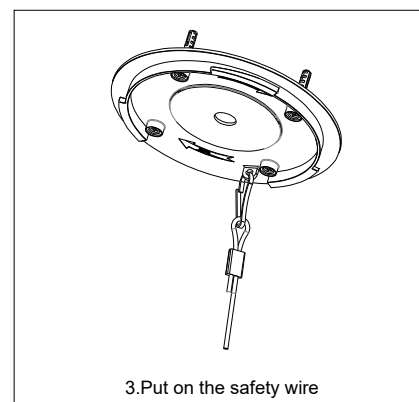
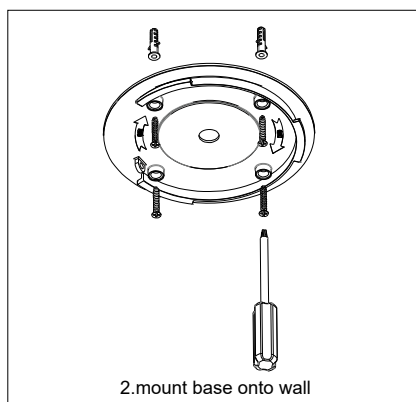
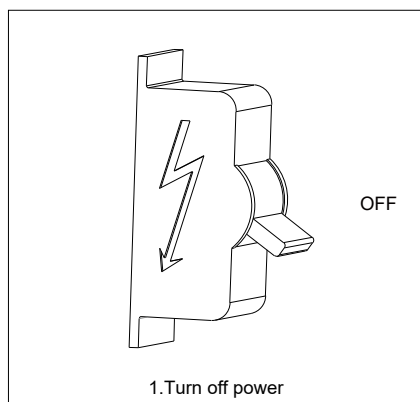
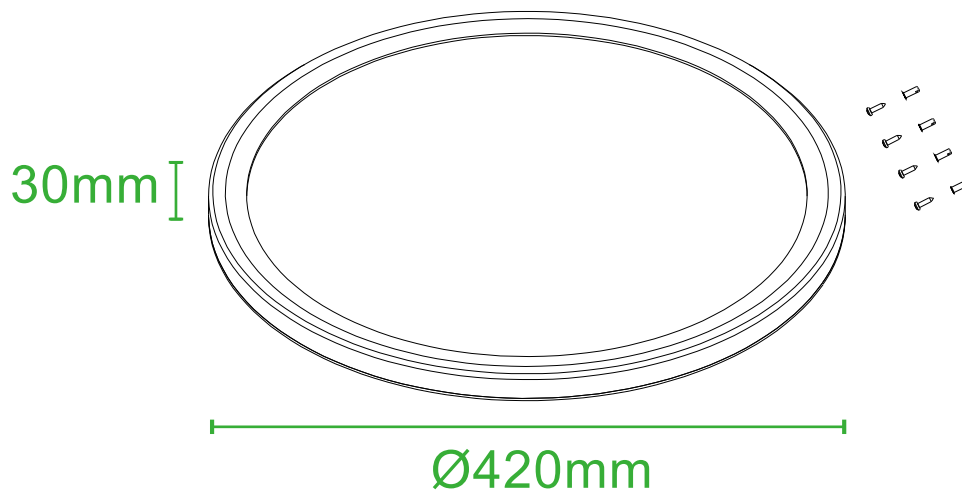


LED CEILING LAMP CCT SPECIFICATION



TECHNICAL SPECIFICATION	
MODEL	HL24LED
VOLTAGE	220-240VAC
FREQUENCY	50/60Hz
LUMINOUS FLUX	3000K-2160LM 4000K/6500K-2400LM
LED CHIP	SMD2835
LED QTY	276PCS
COLOR TEMP.	CCT DIAL SWITCH 3000K-4000K-6500K
IP RATING	IP54
BEAM ANGLE	120°
WORKING TEMP.	-20℃ - +45℃
WORKING HUMIDITY	90%
PRODUCT DIMENSION	420*30mm
MATERIAL	PMMA(LGP)
FRAME COLOR	White / Silver
NET WEIGHT	1.15kgs

LED CEILING LAMP CCT SPECIFICATION



LED CEILING LAMP CCT SPECIFICATION



- Ultra-slim design, more elegant and beautiful. Can choose frame color: white, black, silver and golden.
- With internal power supply, no dark space on the cover.
- High quality material, using PMMA light guide plate to get high light transmittance.
- Uniform and high brightness reaches 100lm/w, 2400lm.
- Lower power consumption, high intensity, low lumen attenuation.
- CCT dial switch design, Warm white, Nature white and Cool white for option.
- Rotary base design, easy for installation.
- IP54 lamp, compared with IP20 ceiling lamp, it is more widely used.
- Optimized heat sink design to ensure an excellent heat dissipation system.
- Widely application: living room, kitchen, bathroom, shop store and other indoor places.

Optical & Electrical Test Report 3000K

Lightsource Test Report

Product Information

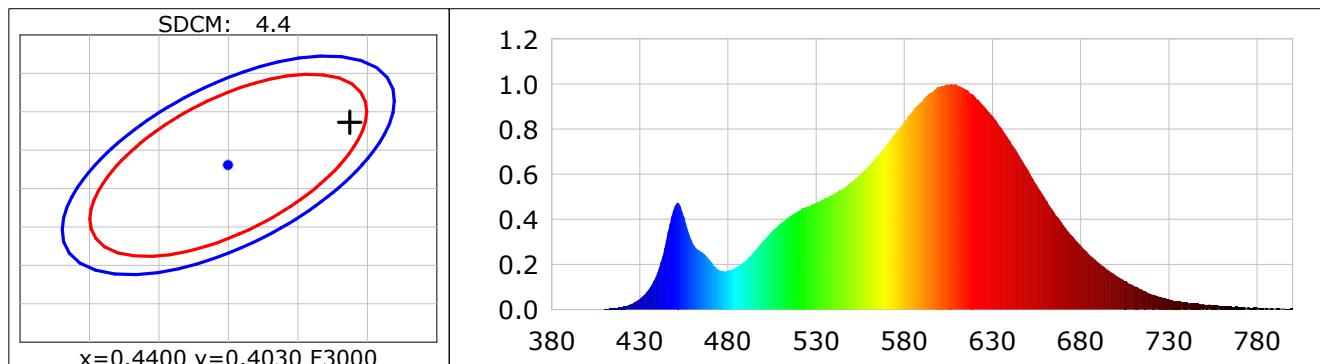
Product Type: HL 24LED 3000K

Product Number: 1

CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.4488$ $y=0.4086$ $u(u')=0.2562$ $v=0.3499$ $v'=0.5249$
 CCT: $T_c=2847K$ ($duv=0.00032$) Color Ratio: $R=0.241$ $G=0.734$ $B=0.024$
 Peak Wavelength: 608.9nm Half Bandwidth: 122.5nm
 Dominant Wavelength: 583.4nm Color Purity: 0.574
 Central Wave: 598.0nm Gravity Wave: 601.6nm
 CRI: $R_a=83.7$ TM30: $R_f=86$, $R_g=96$
 GAI: $GAI_BB_8=92.5$, $GAI_BB_15=100.0$, $GAI_EES=49.1$

R1 =82	R2 =92	R3 =96	R4 =82	R5 =83	R6 =92	R7 =82	R8 =60
R9 =11	R10=82	R11=83	R12=75	R13=85	R14=99	R15=74	
Color Quality Scale: $Q_a=83.7$, $Q_f=85.7$, $Q_p=84.7$, $Q_g=91.0$							
Q1 =79	Q2 =94	Q3 =85	Q4 =82	Q5 =85	Q6 =85	Q7 =85	Q8 =87
Q9 =95	Q10=91	Q11=88	Q12=85	Q13=84	Q14=73	Q15=75	



Photometric Parameters

Luminous Flux: 2284.9 lm Efficiency: 92.51 lm/W Radiant Power: 6.958 W
 Total mains efficacy: 92.51 lm/W Energy Efficiency Class: F (EU 2019/2015)

Electric Parameters

Voltage: 230.10V Current: 0.1750A Power: 24.70W
 Power Factor: 0.6120 Frequency: 50.00Hz

Test Information

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Sec ALC.: 1.0000 Photometric Condition: Sphere diameter: 1.50m, 4T
 Max of Signal: 45703 (2664) CCD Integration Time: 206.74 ms

Optical & Electrical Test Report 4000K

Lightsource Test Report

Product Information

Product Type: HL 24LED 4000K

Product Number: 1

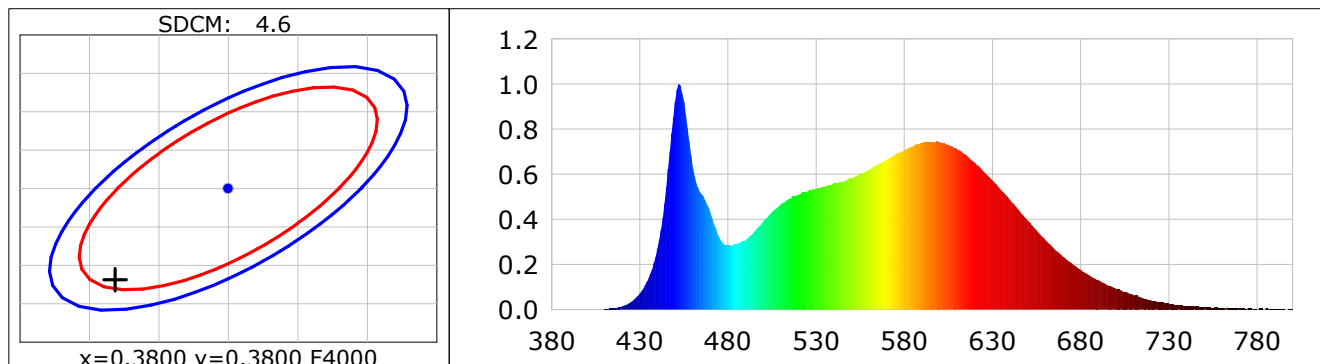
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3719$ $y=0.3681$ $u(u')=0.2229$ $v=0.3309$ $v'=0.4964$
 CCT: $T_c=4183K$ ($duv=-0.00151$) Color Ratio: $R=0.184$ $G=0.773$ $B=0.043$
 Peak Wavelength: 452.3nm Half Bandwidth: 21.8nm
 Dominant Wavelength: 579.3nm Color Purity: 0.221
 Central Wave: 455.3nm Gravity Wave: 454.2nm
 CRI: $R_a=86.4$ TM30: $R_f=85$, $R_g=95$
 GAI: $GAI_BB_8=94.4$, $GAI_BB_15=101.2$, $GAI_EES=77.1$

R1 =86	R2 =94	R3 =96	R4 =85	R5 =86	R6 =90	R7 =86	R8 =69
R9 =22	R10=84	R11=85	R12=65	R13=88	R14=99	R15=80	

Color Quality Scale: $Q_a=85.0$, $Q_f=85.1$, $Q_p=84.7$, $Q_g=93.3$

Q1 =83	Q2 =98	Q3 =82	Q4 =78	Q5 =83	Q6 =86	Q7 =88	Q8 =91
Q9 =98	Q10=92	Q11=88	Q12=86	Q13=86	Q14=77	Q15=79	



Photometric Parameters

Luminous Flux: 2528.6 lm Efficiency: 107.60 lm/W Radiant Power: 7.832 W
 Total mains efficacy: 107.60 lm/W Energy Efficiency Class: F (EU 2019/2015)

Electric Parameters

Voltage: 230.10V Current: 0.1680A Power: 23.50W
 Power Factor: 0.6050 Frequency: 50.00Hz

Test Information

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Sec ALC.: 1.0000 Photometric Condition: Sphere diameter: 1.50m, 4T
 Max of Signal: 45731 (2595) CCD Integration Time: 139.11 ms

Optical & Electrical Test Report 6500K

Lightsource Test Report

Product Information

Product Type: HL 24LED 6500K

Product Number: 1

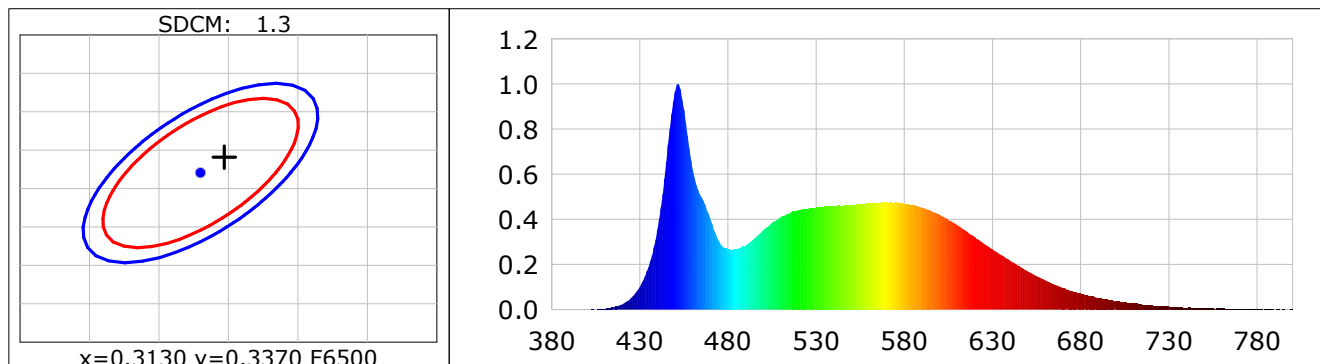
CIE Colorimetric Parameters

Chromaticity coordinates: $x=0.3147$ $y=0.3391$ $u(u')=0.1955$ $v=0.3159$ $v'=0.4739$
 CCT: $T_c=6336K$ ($duv=0.00728$) Color Ratio: $R=0.130$ $G=0.812$ $B=0.058$
 Peak Wavelength: 451.6nm Half Bandwidth: 22.0nm
 Dominant Wavelength: 495.7nm Color Purity: 0.060
 Central Wave: 453.8nm Gravity Wave: 453.2nm
 CRI: $R_a=81.8$ TM30: $R_f=82$, $R_g=92$
 GAI: $GAI_BB_8=86.4$, $GAI_BB_15=92.0$, $GAI_EES=83.6$

$R1=79$	$R2=88$	$R3=94$	$R4=80$	$R5=80$	$R6=84$	$R7=87$	$R8=65$
$R9=-7$	$R10=72$	$R11=79$	$R12=57$	$R13=82$	$R14=97$	$R15=72$	

Color Quality Scale: $Q_a=80.8$, $Q_f=81.2$, $Q_p=79.6$, $Q_g=89.0$

$Q1=80$	$Q2=98$	$Q3=81$	$Q4=74$	$Q5=78$	$Q6=80$	$Q7=84$	$Q8=89$
$Q9=97$	$Q10=89$	$Q11=85$	$Q12=83$	$Q13=82$	$Q14=67$	$Q15=73$	



Photometric Parameters

Luminous Flux: 2453.5 lm Efficiency: 100.97 lm/W Radiant Power: 7.704 W
 Total mains efficacy: 100.97 lm/W Energy Efficiency Class: F (EU 2019/2015)

Electric Parameters

Voltage: 230.10V Current: 0.1740A Power: 24.30W
 Power Factor: 0.6070 Frequency: 50.00Hz

Test Information

Scan Range: 380~800:1nm Photometric Method: sphere-spectroradiometer
 Stabilization Time: 0 Sec ALC.: 1.0000 Photometric Condition: Sphere diameter: 1.50m, 4T
 Max of Signal: 52383 (2584) CCD Integration Time: 118.24 ms