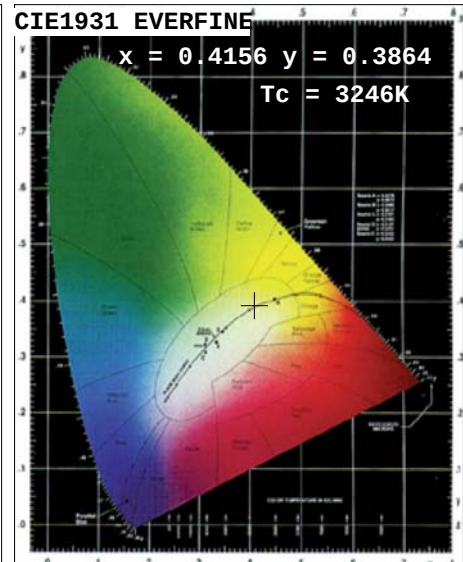
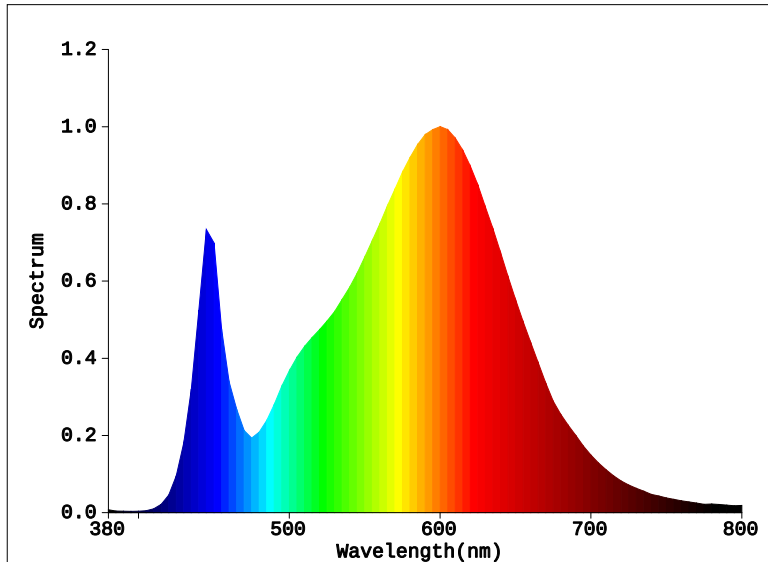


Light Source Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4156$ $y=0.3864$ $u'=0.2442$ $v'=0.5110$

$T_c=3246K$ Dominant WL: $L_d=583.5nm$ Purity=40.7% Centroid WL: $583.0nm$

Ratio: R=23.1% G=74.3% B=2.6% Peak WL: $L_p=600.0nm$ HWL: $128.8nm$

Render Index: $R_a=81.1$

R1 =79 R2 =89 R3 =96 R4 =79 R5 =80 R6 =86 R7 =82

R8 =58 R9 =3 R10=76 R11=77 R12=72 R13=81 R14=98 R15=73

Photo Parameters:

Flux: 976.32 lm Fe: 3.0104 W Efficacy: 76.73 lm/W

LEVEL: WHITE: ANSI_3500K

Electrical Parameters:

Luminaire: U=120.5V I=0.1096A P=12.72W PF=0.9634

Instrument Status:

Scan Range: 380.0nm-800.0nm Interval: 5.0nm[0]

REF=10359(R=3) %=-0.078%

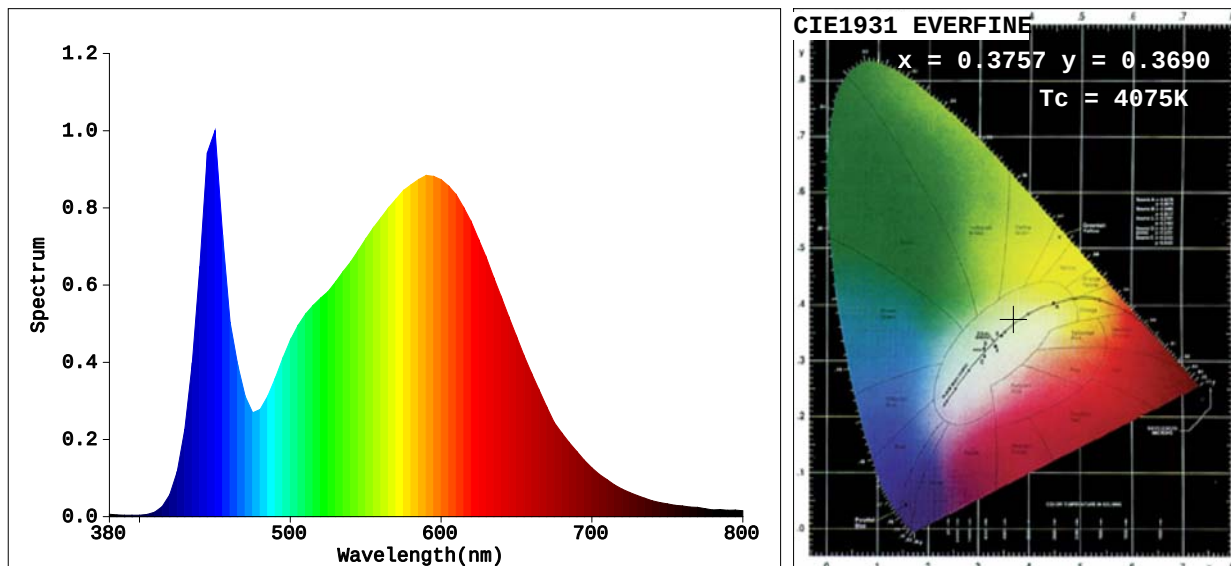
$I_p=3613(G=3, D=51)$

PMT: 32.1 centigrade [33.8]

Product Type: Down Light
Number: DD-13D-D180L
Temperature: 25.3 deg
Test Operator: Mr. Zhu
Software: V2.00.100

Manufacturer: Shenzhen OKT Lighting
Test Department: Shenzhen OKT Lighting
Humidity: 65.0%
Test Date: 2012-07-13 09:22:41
Instrument: PMS-50SSA_V1 (SN: 1010010)

Light Source Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3757$ $y=0.3690$ $u'=0.2251$ $v'=0.4974$

$T_c=4075K$ Dominant WL: $L_d=580.2nm$ Purity=23.5% Centroid WL: $568.0nm$

Ratio: R=19.7% G=76.9% B=3.4% Peak WL: $L_p=450.0nm$ HWL: 23.1nm

Render Index: $R_a=83.3$

R1 =82 R2 =89 R3 =94 R4 =83 R5 =82 R6 =85 R7 =86

R8 =66 R9 =12 R10=74 R11=81 R12=67 R13=83 R14=97 R15=77

Photo Parameters:

Flux: 1013.2 lm Fe: 3.1639 W Efficacy: 78.06 lm/W

LEVEL: WHITE: ANSI_4000K

Electrical Parameters:

Luminaire: U=120.5V I=0.1113A P=12.98W PF=0.9678

Instrument Status:

Scan Range: 380.0nm-800.0nm Interval: 5.0nm[0]

REF=10679(R=3)

%=-0.113%

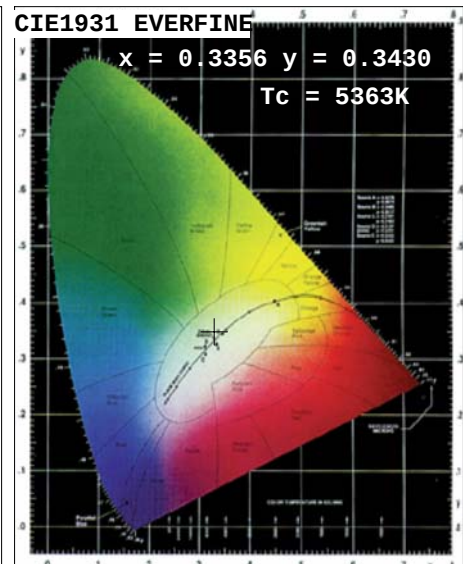
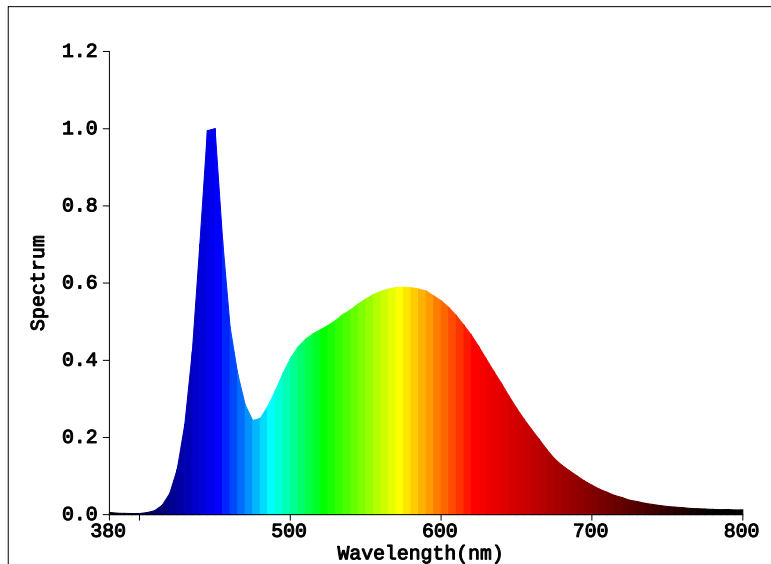
$I_p=5375(G=3, D=52)$

PMT: 31.8 centigrade [33.4]

Product Type: Down Light
Number: DD-13D-D180L
Temperature: 25.3 deg
Test Operator: Mr. Zhu
Software: V2.00.100

Manufacturer: Shenzhen OKT Lighting
Test Department: Shenzhen OKT Lighting
Humidity: 65.0%
Test Date: 2012-07-13 09:32:57
Instrument: PMS-50SSA_V1 (SN: 1010010)

Light Source Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3356$ $y=0.3430$ $u'=0.2083$ $v'=0.4790$

$T_c=5363K$ Dominant WL: $L_d=563.2nm$ Purity=3.6% Centroid WL: $551.0nm$

Ratio: R=16.6% G=79.1% B=4.4% Peak WL: $L_p=450.0nm$ HWL: $23.3nm$

Render Index: $R_a=83.7$

R1 =82 R2 =87 R3 =91 R4 =85 R5 =84 R6 =83 R7 =87

R8 =71 R9 =14 R10=70 R11=85 R12=68 R13=83 R14=95 R15=78

Photo Parameters:

Flux: $1048.2 lm$ Fe: $3.3804 W$ Efficacy: $82.59 lm/W$

LEVEL: WHITE:ANSI_5700K

Electrical Parameters:

Luminaire: U=120.5V I=0.1096A P=12.69W PF=0.9617

Instrument Status:

Scan Range: $380.0nm-800.0nm$ Interval: $5.0nm[0]$

REF=10973(R=3)

%=-0.129%

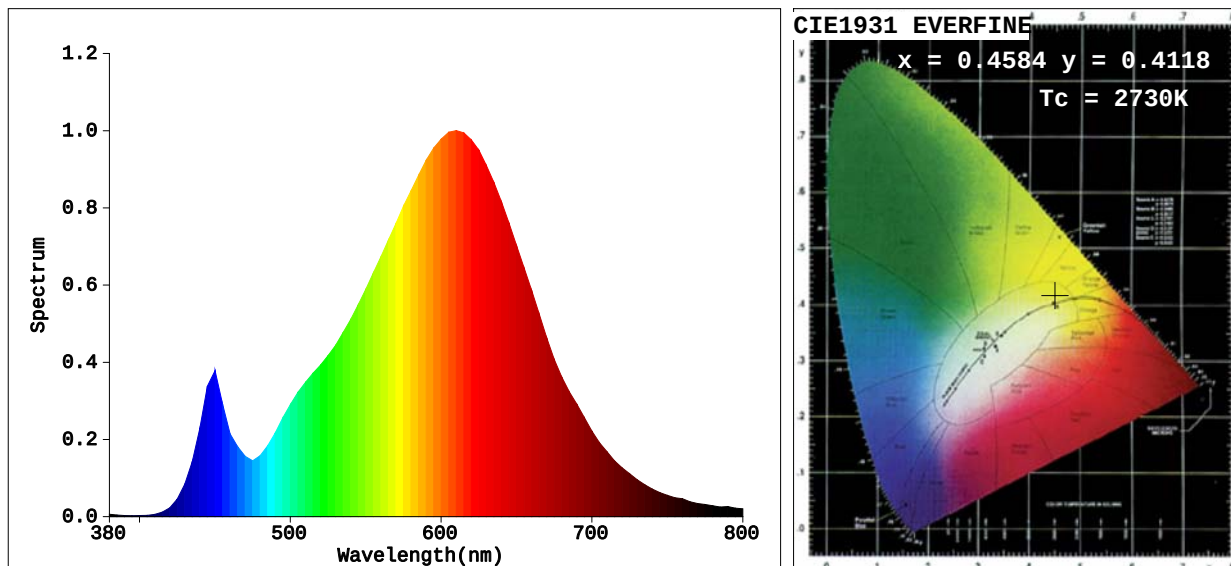
$I_p=7621(G=3,D=52)$

PMT: 31.6 centigrade [33.3]

Product Type:Down Light
Number:DD-13D-D180L
Temperature:25.3 deg
Test Operator:Mr.Zhu
Software:V2.00.100

Manufacturer:Shenzhen OKT Lighting
Test Department:Shenzhen OKT Lighting
Humidity:65.0%
Test Date:2012-07-13 09:36:50
Instrument:PMS-50SSA_V1 (SN:1010010)

Light Source Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4584$ $y=0.4118$ $u'=0.2610$ $v'=0.5276$

Tc=2730K Dominant WL:Ld=583.9nm Purity=61.2% Centroid WL:598.0nm

Ratio:R=26.6% G=71.5% B=1.9% Peak WL:Lp=610.0nm HWL:128.6nm

Render Index:Ra=83.3

R1 =81 R2 =91 R3 =97 R4 =81 R5 =81 R6 =88 R7 =84

R8 =62 R9 =17 R10=79 R11=79 R12=74 R13=83 R14=99 R15=75

Photo Parameters:

Flux: 937.10 lm Fe: 3.0002 W Efficacy:74.60 lm/W

LEVEL: WHITE:ANSI_2700K

Electrical Parameters:

Luminaire: U=120.5V I=0.1091A P=12.56W PF=0.9561

Instrument Status:

Scan Range:380.0nm-800.0nm Interval:5.0nm[0]

REF=9998(R=3)

%=-0.142%

Ip=2598(G=3,D=51)

PMT: 31.6 centigrade [33.2]

Product Type:Down Light
Number:DD-13D-D180L
Temperature:25.3 deg
Test Operator:Mr.Zhu
Software:V2.00.100

Manufacturer:Shenzhen OKT Lighting
Test Department:Shenzhen OKT Lighting
Humidity:65.0%
Test Date:2012-07-13 09:40:10
Instrument:PMS-50SSA_V1 (SN:1010010)