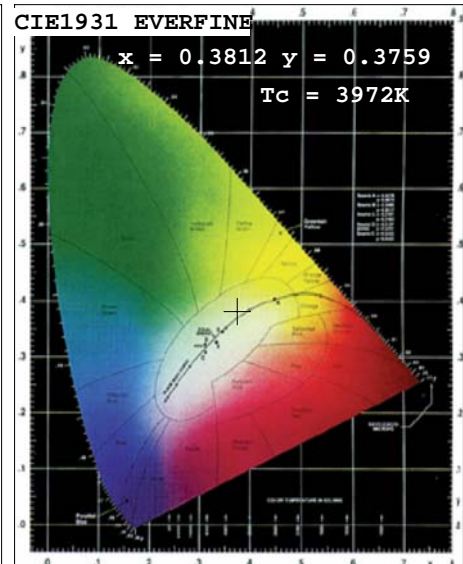
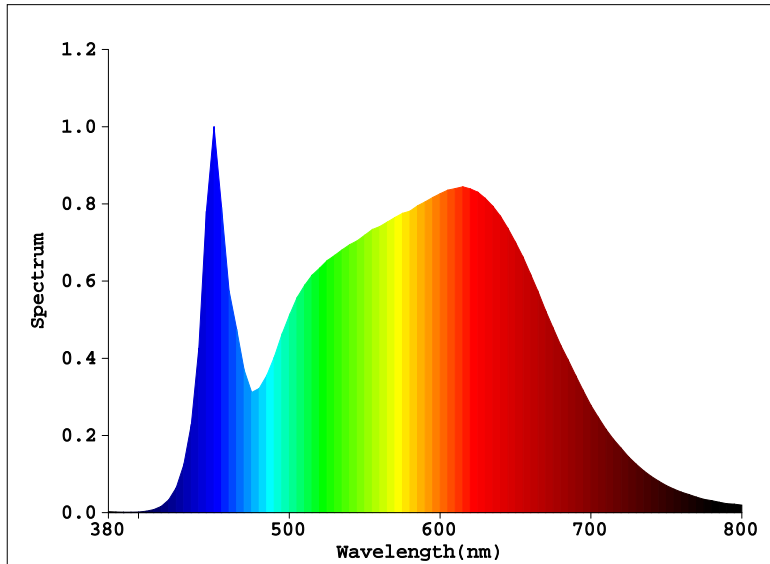


## Light Source Test Report



## Color Parameters:

Chromaticity Coordinate:  $x=0.3812$   $y=0.3759$

Chromaticity Coordinate:  $u'=0.2260$   $v'=0.5013$  ( $duv=-6.19e-04$ )

$T_c=3972K$  Dominant WL:  $L_d=579.5nm$  Purity= $27.2\%$  Centroid WL:  $580.0nm$

Ratio:  $R=21.2\%$   $G=75.1\%$   $B=3.7\%$  Peak WL:  $L_p=450.0nm$  HWL:  $22.7nm$

Render Index:  $R_a=93.3$

R1 =94    R2 =95    R3 =96    R4 =94    R5 =93    R6 =92    R7 =95

R8 =88    R9 =68    R10=88    R11=94    R12=74    R13=94    R14=97    R15=92

## Photo Parameters:

Flux:  $5561.7$  lm     $F_e=19.224$  W    Efficacy:  $131.1$  lm/W

## Electrical Parameters:

Lamp :  $U=24.00V$   $I=1.768A$   $P=42.42W$   $PF=1.000$

## Instrument Status:

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

REF=55158(R=3)

%=0.055%

$I_p=26125(G=3, D=56)$

PMT:  $27.6$  centigrade [ $27.2$ ]

Product Type:  $HH-SNW240F012W24-2835$

Number: 1

Temperature:  $25.3$  deg

Test Operator:

Software:  $V2.00.122$

Manufacturer:

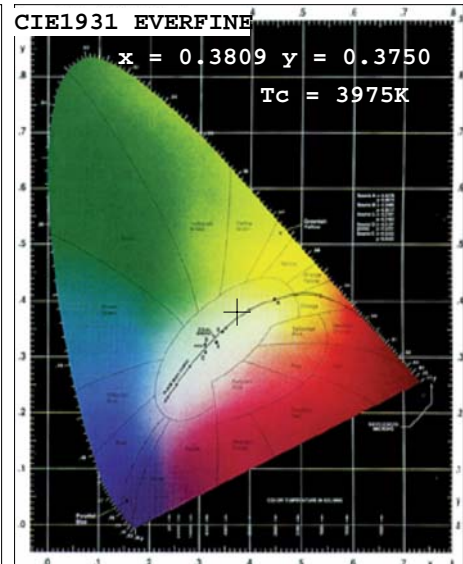
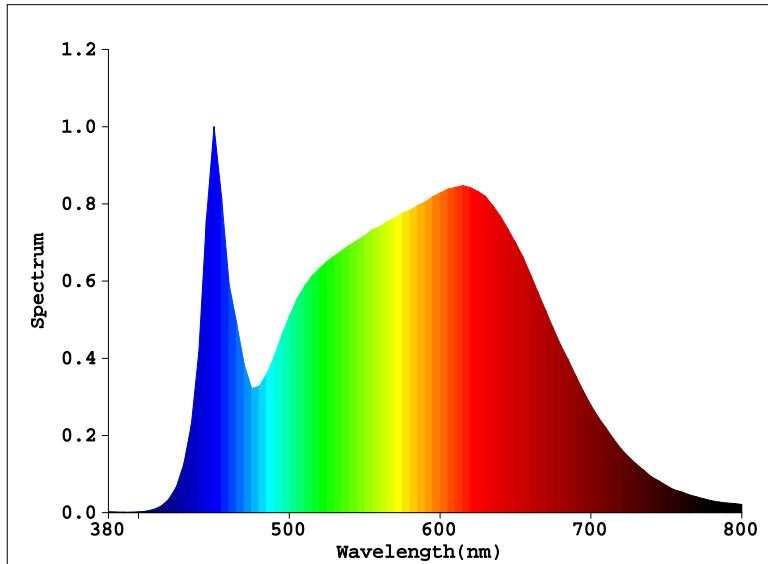
Test Department:

Humidity:  $90.2\%$

Test Date:  $2020-03-13$   $16:39:50$

Instrument:  $PMS-80\_V1$  (SN:  $YG107113N11110076$ )

## Light Source Test Report

**Color Parameters:**

Chromaticity Coordinate:  $x=0.3809$   $y=0.3750$

Chromaticity Coordinate:  $u'=0.2261$   $v'=0.5009$  ( $duv=-9.54e-04$ )

$T_c=3975K$  Dominant WL:  $L_d=579.7nm$  Purity=26.8% Centroid WL:  $580.0nm$

Ratio:  $R=21.3\%$   $G=75.0\%$   $B=3.7\%$  Peak WL:  $L_p=450.0nm$  HWL:  $23.3nm$

Render Index:  $R_a=93.4$

$R_1 = 94$      $R_2 = 96$      $R_3 = 96$      $R_4 = 94$      $R_5 = 93$      $R_6 = 93$      $R_7 = 95$

$R_8 = 88$      $R_9 = 68$      $R_{10} = 89$      $R_{11} = 94$      $R_{12} = 74$      $R_{13} = 94$      $R_{14} = 97$      $R_{15} = 92$

**Photo Parameters:**

Flux:  $5181.9$  lm     $F_e = 17.942$  W    Efficacy:  $130.7$  lm/W

**Electrical Parameters:**

Lamp :  $U=23.75V$   $I=1.670A$   $P=39.65W$   $PF=1.000$

**Instrument Status:**

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

REF=51398( $R=3$ )

$\% = 0.006\%$

$I_p = 24396$  ( $G=3, D=56$ )

PMT:  $27.6$  centigrade [ $27.6$ ]

Product Type:  $HH-SNW240F012W24-2835$

Number:  $2$

Temperature:  $25.3$  deg

Test Operator:

Software:  $V2.00.122$

Manufacturer:

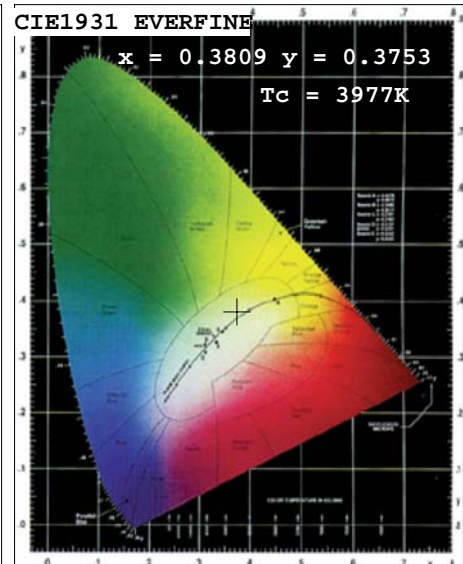
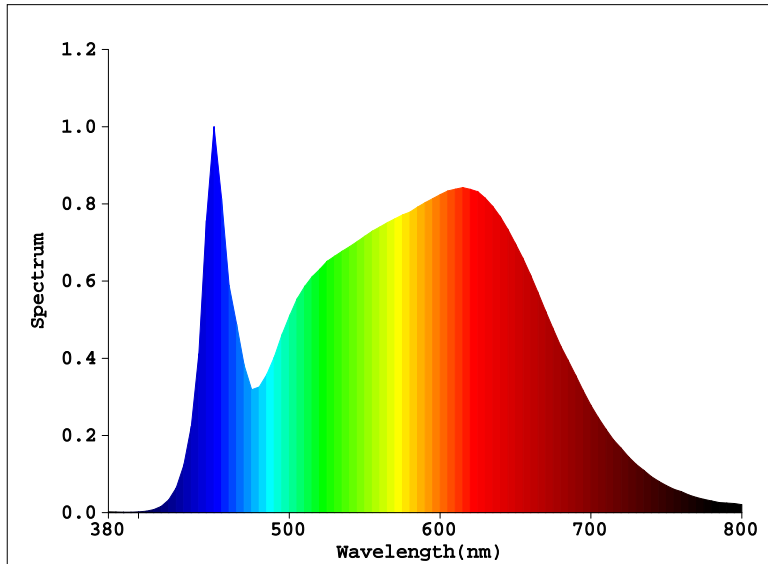
Test Department:

Humidity:  $90.2\%$

Test Date:  $2020-03-13$   $16:43:43$

Instrument:  $PMS-80\_V1$  (SN:  $YG107113N11110076$ )

## Light Source Test Report

**Color Parameters:**

Chromaticity Coordinate:  $x=0.3809$   $y=0.3753$

Chromaticity Coordinate:  $u'=0.2260$   $v'=0.5010$  ( $duv=-8.33e-04$ )

$T_c=3977K$  Dominant WL:  $L_d=579.6nm$  Purity=26.9% Centroid WL:  $580.0nm$

Ratio: R=21.3% G=75.0% B=3.7% Peak WL:  $L_p=450.0nm$  HWL:  $23.1nm$

Render Index:  $R_a=93.5$

R1 =94    R2 =96    R3 =96    R4 =94    R5 =93    R6 =93    R7 =95

R8 =88    R9 =69    R10=89    R11=94    R12=74    R13=94    R14=97    R15=92

**Photo Parameters:**

Flux: 4766.3 lm     $F_e$ : 16.499 W Efficacy: 132.8 lm/W

**Electrical Parameters:**

Lamp : U=23.50V I=1.528A P=35.90W PF=1.000

**Instrument Status:**

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

REF=47282(R=3)

%=0.002%

$I_p=22539(G=3, D=56)$

PMT: 27.7 centigrade [27.7]

Product Type: HH-SNW240F012W24-2835

Number: 3

Temperature: 25.3 deg

Test Operator:

Software: V2.00.122

Manufacturer:

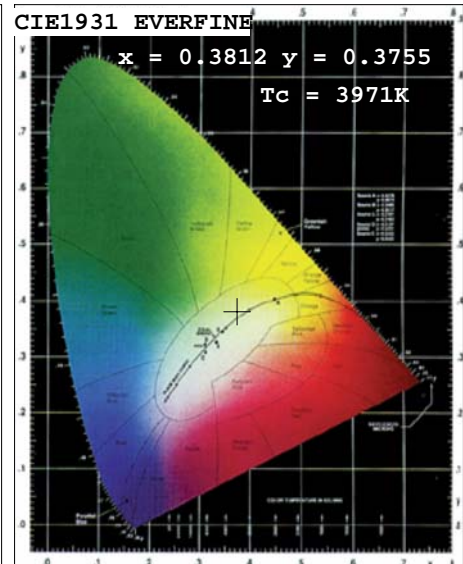
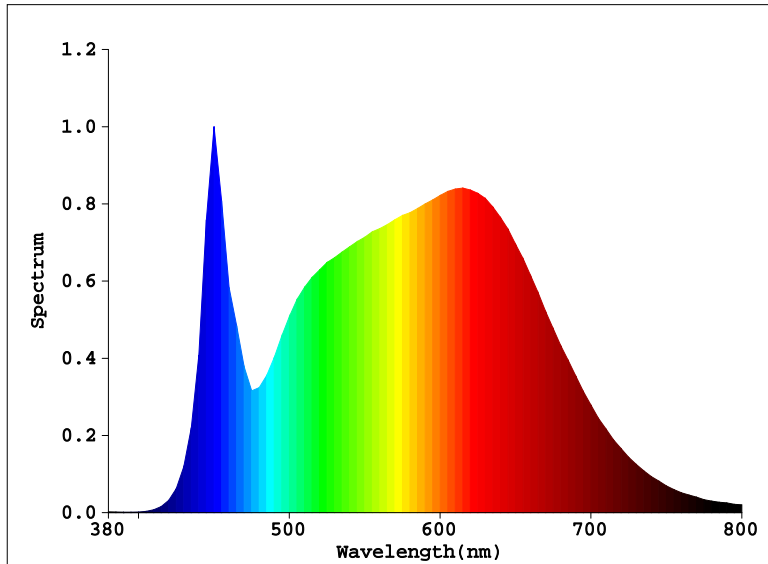
Test Department:

Humidity: 90.2%

Test Date: 2020-03-13 16:45:20

Instrument: PMS-80\_V1 (SN: YG107113N11110076)

## Light Source Test Report



## Color Parameters:

Chromaticity Coordinate:  $x=0.3812$   $y=0.3755$

Chromaticity Coordinate:  $u'=0.2261$   $v'=0.5011$  ( $duv=-8.07e-04$ )

$T_c=3971K$  Dominant WL:  $L_d=579.6nm$  Purity=27.1% Centroid WL: 580.0nm

Ratio: R=21.3% G=75.0% B=3.7% Peak WL:  $L_p=450.0nm$  HWL: 22.9nm

Render Index:  $R_a=93.5$

R1 =94    R2 =96    R3 =96    R4 =94    R5 =93    R6 =93    R7 =95

R8 =88    R9 =69    R10=89    R11=94    R12=74    R13=95    R14=97    R15=92

## Photo Parameters:

Flux: 4342.9 lm     $F_e$ : 15.033 W    Efficacy: 135.1 lm/W

## Electrical Parameters:

Lamp : U=23.25V    I=1.383A    P=32.15W    PF=1.000

## Instrument Status:

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

REF=43093(R=3)

%=-0.007%

$I_p=20594(G=3, D=56)$

PMT: 27.8 centigrade [27.7]

Product Type: HH-SNW240F012W24-2835

Number: 4

Temperature: 25.3 deg

Test Operator:

Software: V2.00.122

Manufacturer:

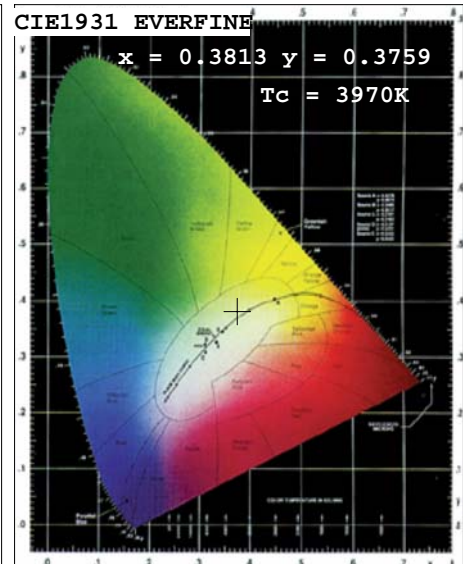
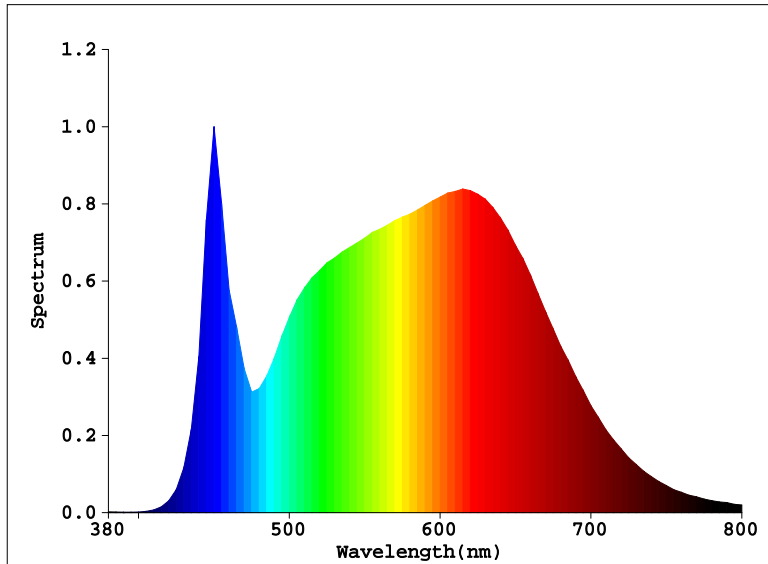
Test Department:

Humidity: 90.2%

Test Date: 2020-03-13 16:47:03

Instrument: PMS-80\_V1 (SN: YG107113N11110076)

## Light Source Test Report

**Color Parameters:**

Chromaticity Coordinate:  $x=0.3813$   $y=0.3759$

Chromaticity Coordinate:  $u'=0.2260$   $v'=0.5013$  ( $duv=-6.51e-04$ )

$T_c=3970K$  Dominant WL:  $L_d=579.5nm$  Purity=27.2% Centroid WL: 581.0nm

Ratio: R=21.3% G=75.0% B=3.7% Peak WL:  $L_p=450.0nm$  HWL: 22.6nm

Render Index:  $R_a=93.5$

R1 =94    R2 =96    R3 =96    R4 =94    R5 =93    R6 =93    R7 =95

R8 =88    R9 =69    R10=89    R11=94    R12=74    R13=95    R14=97    R15=92

**Photo Parameters:**

Flux: 3915.3 lm     $F_e$ : 13.548 W Efficacy: 137.3 lm/W

**Electrical Parameters:**

Lamp : U=23.00V I=1.240A P=28.52W PF=1.000

**Instrument Status:**

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

REF=38860(R=3)

%=-0.018%

$I_p=18635(G=3, D=56)$

PMT: 27.8 centigrade [27.7]

Product Type: HH-SNW240F012W24-2835

Number: 5

Temperature: 25.3 deg

Test Operator:

Software: V2.00.122

Manufacturer:

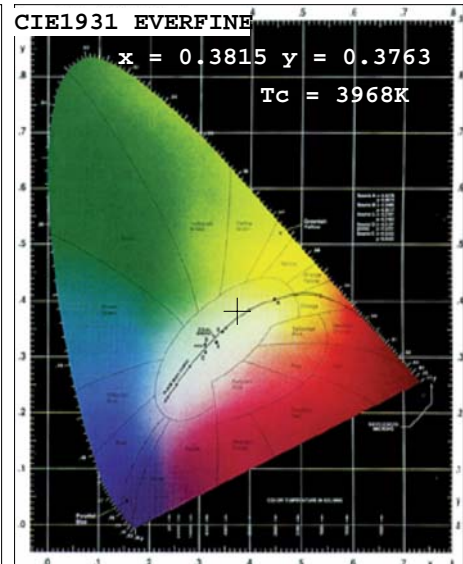
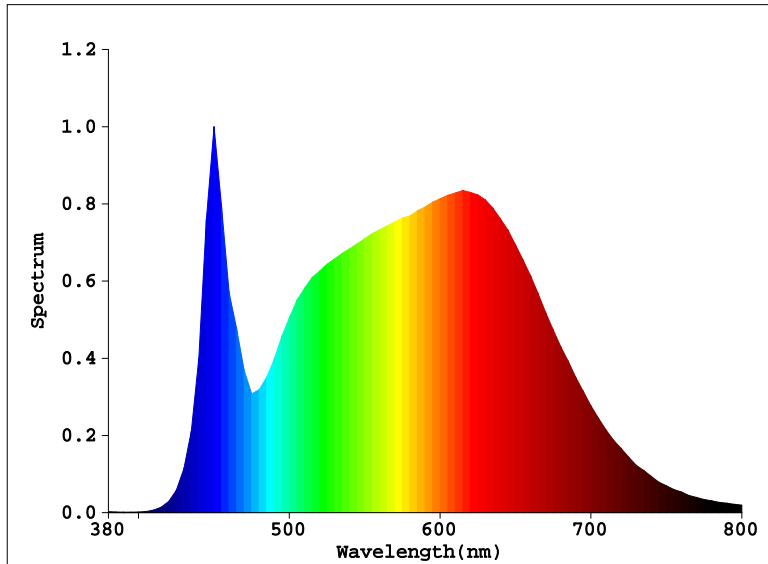
Test Department:

Humidity: 90.2%

Test Date: 2020-03-13 16:48:59

Instrument: PMS-80\_V1 (SN: YG107113N11110076)

## Light Source Test Report

**Color Parameters:**

Chromaticity Coordinate:  $x=0.3815$   $y=0.3763$

Chromaticity Coordinate:  $u'=0.2260$   $v'=0.5015$  ( $duv=-5.26e-04$ )

$T_c=3968K$  Dominant WL:  $L_d=579.5nm$  Purity=27.4% Centroid WL:  $581.0nm$

Ratio:  $R=21.3\%$   $G=75.0\%$   $B=3.7\%$  Peak WL:  $L_p=450.0nm$  HWL:  $22.4nm$

Render Index:  $R_a=93.5$

$R_1 = 94$      $R_2 = 96$      $R_3 = 96$      $R_4 = 94$      $R_5 = 93$      $R_6 = 93$      $R_7 = 95$

$R_8 = 88$      $R_9 = 69$      $R_{10} = 89$      $R_{11} = 94$      $R_{12} = 74$      $R_{13} = 94$      $R_{14} = 97$      $R_{15} = 92$

**Photo Parameters:**

Flux:  $3485.2$  lm     $F_e = 12.054$  W    Efficacy:  $139.5$  lm/W

**Electrical Parameters:**

Lamp :  $U=22.75V$   $I=1.098A$   $P=24.98W$   $PF=1.000$

**Instrument Status:**

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

REF=34604(R=3)

$\% = -0.029\%$

$I_p = 16657(G=3, D=56)$

PMT:  $27.8$  centigrade [ $27.7$ ]

Product Type: HH-SNW240F012W24-2835

Number: 6

Temperature:  $25.3$  deg

Test Operator:

Software: V2.00.122

Manufacturer:

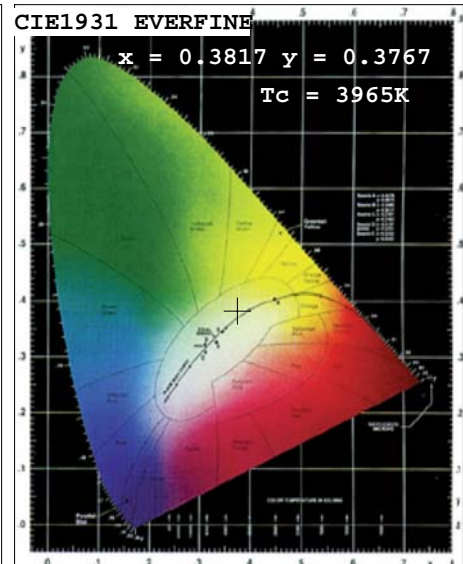
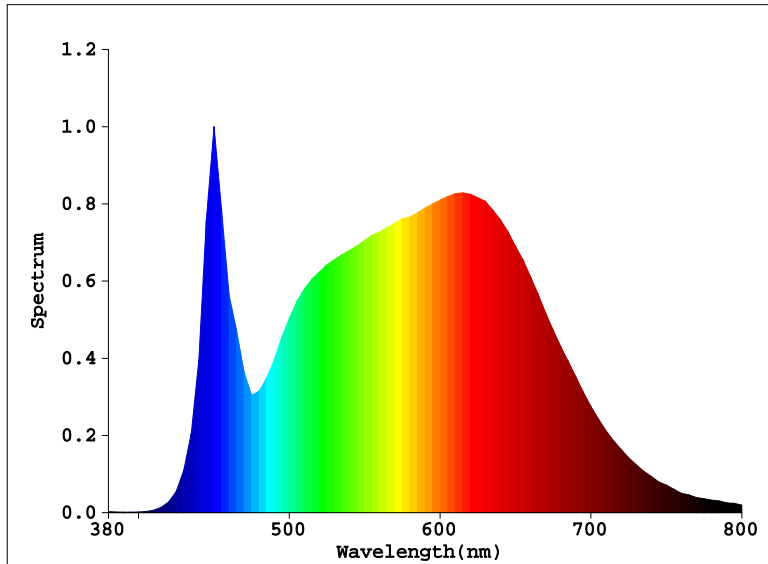
Test Department:

Humidity:  $90.2\%$

Test Date: 2020-03-13 16:50:47

Instrument: PMS-80\_V1 (SN: YG107113N11110076)

## Light Source Test Report



## Color Parameters:

Chromaticity Coordinate:  $x=0.3817$   $y=0.3767$

Chromaticity Coordinate:  $u'=0.2260$   $v'=0.5017$  ( $duv=-4.06e-04$ )

$T_c=3965K$  Dominant WL:  $L_d=579.4nm$  Purity=27.6% Centroid WL:  $581.0nm$

Ratio: R=21.3% G=75.0% B=3.7% Peak WL:  $L_p=450.0nm$  HWL:  $22.0nm$

Render Index:  $R_a=93.5$

R1 =94 R2 =96 R3 =96 R4 =94 R5 =93 R6 =93 R7 =95

R8 =88 R9 =69 R10=89 R11=94 R12=74 R13=94 R14=97 R15=92

## Photo Parameters:

Flux: 3055.9 lm Fe: 10.569 W Efficacy: 141.8 lm/W

## Electrical Parameters:

Lamp : U=22.50V I=0.9578A P=21.55W PF=1.000

## Instrument Status:

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

REF=30354(R=3)

%=-0.043%

$I_p=14686$  (G=3, D=56)

PMT: 27.8 centigrade [27.7]

Product Type: HH-SNW240F012W24-2835

Number: 7

Temperature: 25.3 deg

Test Operator:

Software: V2.00.122

Manufacturer:

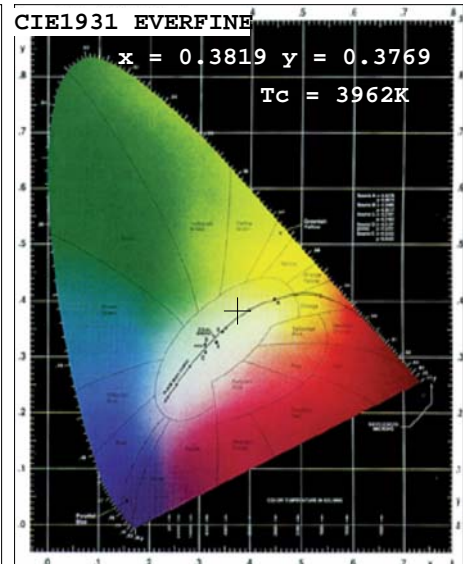
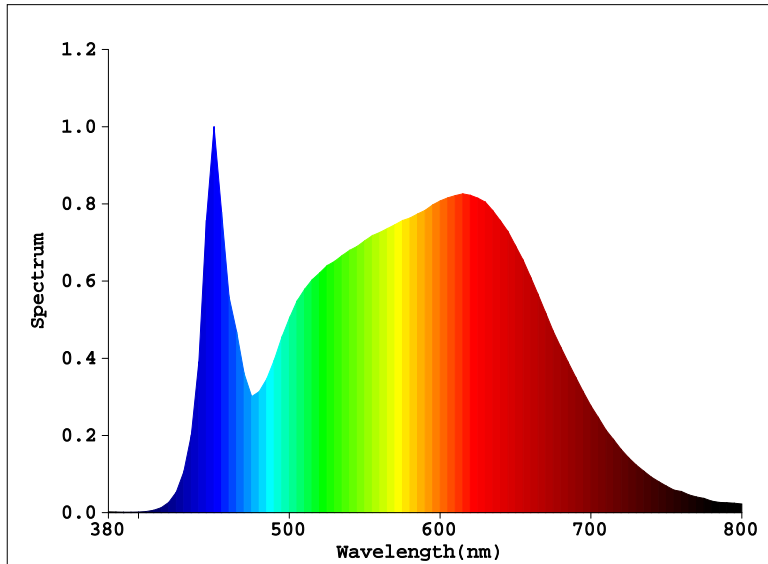
Test Department:

Humidity: 90.2%

Test Date: 2020-03-13 16:52:19

Instrument: PMS-80\_V1 (SN: YG107113N11110076)

## Light Source Test Report

**Color Parameters:**

Chromaticity Coordinate:  $x=0.3819$   $y=0.3769$

Chromaticity Coordinate:  $u'=0.2260$   $v'=0.5019$  ( $duv=-3.33e-04$ )

$T_c=3962K$  Dominant WL:  $L_d=579.4nm$  Purity=27.7% Centroid WL: 581.0nm

Ratio: R=21.3% G=75.0% B=3.7% Peak WL:  $L_p=450.0nm$  HWL: 21.8nm

Render Index:  $R_a=93.5$

R1 =94    R2 =96    R3 =96    R4 =94    R5 =93    R6 =93    R7 =95

R8 =88    R9 =69    R10=89    R11=94    R12=74    R13=94    R14=97    R15=92

**Photo Parameters:**

Flux: 2630.1 lm     $F_e$ : 9.0999 W Efficacy: 143.7 lm/W

**Electrical Parameters:**

Lamp : U=22.25V I=0.8224A P=18.30W PF=1.000

**Instrument Status:**

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

REF=26140(R=3)

%=-0.061%

$I_p=12684(G=3, D=56)$

PMT: 27.9 centigrade [27.7]

Product Type: HH-SNW240F012W24-2835

Number: 8

Temperature: 25.3 deg

Test Operator:

Software: V2.00.122

Manufacturer:

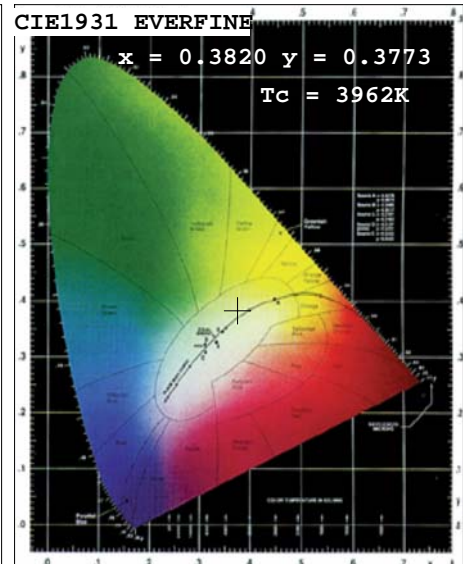
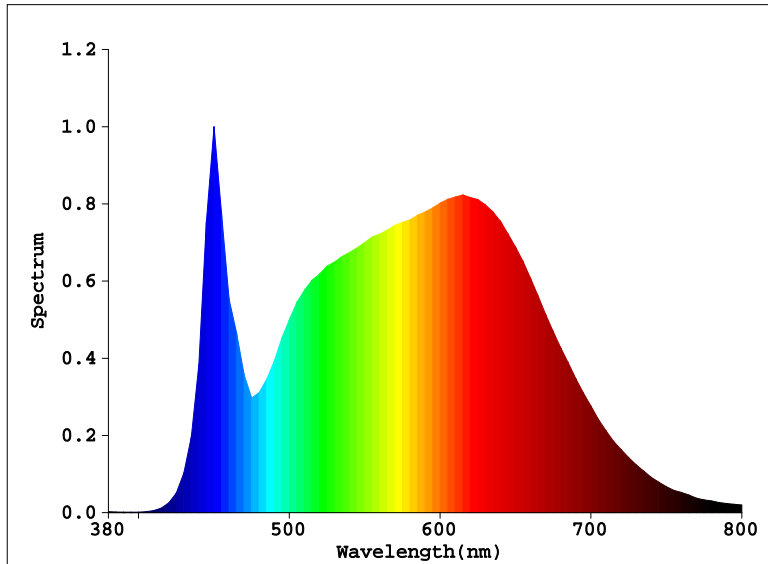
Test Department:

Humidity: 90.2%

Test Date: 2020-03-13 16:53:27

Instrument: PMS-80\_V1 (SN: YG107113N11110076)

## Light Source Test Report



## Color Parameters:

Chromaticity Coordinate:x=0.3820 y=0.3773

Chromaticity Coordinate:u'=0.2259 v'=0.5021(duv=-1.94e-04)

Tc=3962K Dominant WL:Ld=579.3nm Purity=27.9% Centroid WL:581.0nm

Ratio:R=21.3% G=75.0% B=3.7% Peak WL:Lp=450.0nm HWL:21.4nm

Render Index:Ra=93.5

R1 =94 R2 =96 R3 =96 R4 =94 R5 =93 R6 =93 R7 =95

R8 =88 R9 =69 R10=89 R11=94 R12=73 R13=94 R14=97 R15=92

## Photo Parameters:

Flux: 2209.3 lm Fe: 7.6337 W Efficacy:145.9 lm/W

## Electrical Parameters:

Lamp : U=22.00V I=0.6885A P=15.15W PF=1.000

## Instrument Status:

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

REF=21974(R=3)

%=-0.078%

Ip=49493(G=4,D=57)

PMT: 27.9 centigrade [27.7]

Product Type:HH-SNW240F012W24-2835

Number:9

Temperature:25.3 deg

Test Operator:

Software:V2.00.122

Manufacturer:

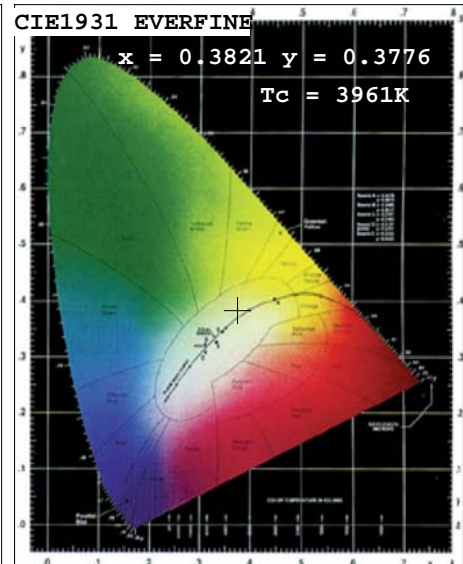
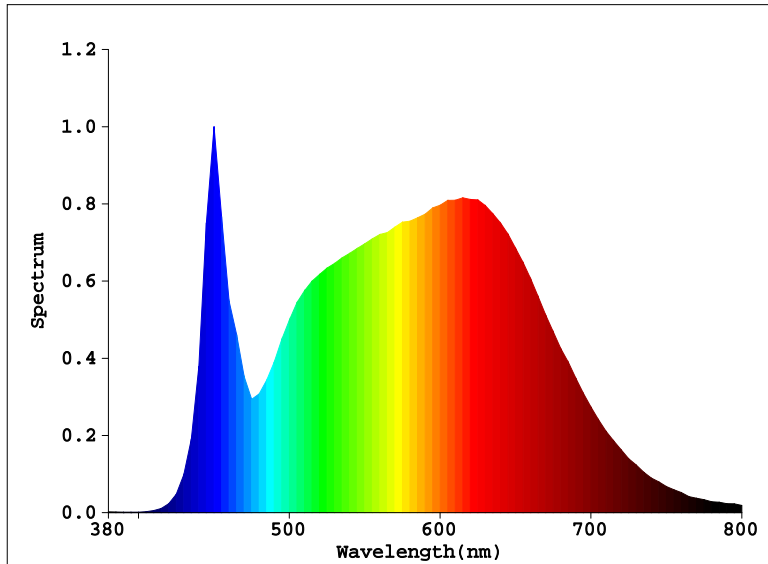
Test Department:

Humidity:90.2%

Test Date:2020-03-13 16:54:42

Instrument:PMS-80\_V1 (SN:YG107113N11110076)

## Light Source Test Report

**Color Parameters:**

Chromaticity Coordinate:  $x=0.3821$   $y=0.3776$

Chromaticity Coordinate:  $u'=0.2259$   $v'=0.5022$  ( $duv=-7.94e-05$ )

$T_c=3961K$  Dominant WL:  $L_d=579.3nm$  Purity=28.0% Centroid WL:  $581.0nm$

Ratio: R=21.3% G=75.1% B=3.7% Peak WL:  $L_p=450.0nm$  HWL:  $21.1nm$

Render Index:  $R_a=93.5$

R1 =94    R2 =95    R3 =96    R4 =94    R5 =93    R6 =93    R7 =95

R8 =88    R9 =69    R10=89    R11=94    R12=73    R13=94    R14=97    R15=92

**Photo Parameters:**

Flux: 1796.9 lm     $F_e$ : 6.2073 W Efficacy: 148.3 lm/W

**Electrical Parameters:**

Lamp : U=21.75V I=0.5572A P=12.12W PF=1.000

**Instrument Status:**

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

REF=17891(R=3)

%=-0.090%

$I_p=40451(G=4, D=57)$

PMT: 28.0 centigrade [27.7]

Product Type: HH-SNW240F012W24-2835

Number: 10

Temperature: 25.3 deg

Test Operator:

Software: V2.00.122

Manufacturer:

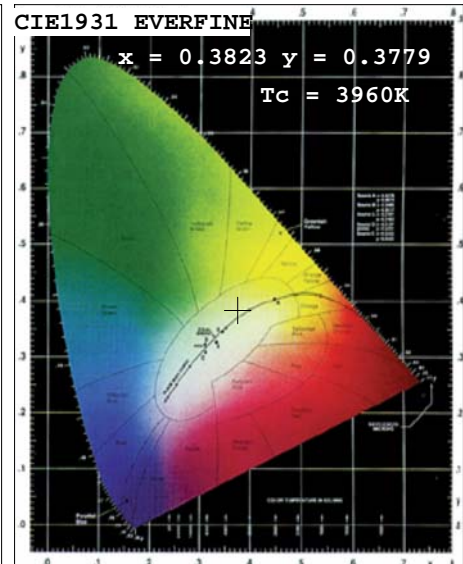
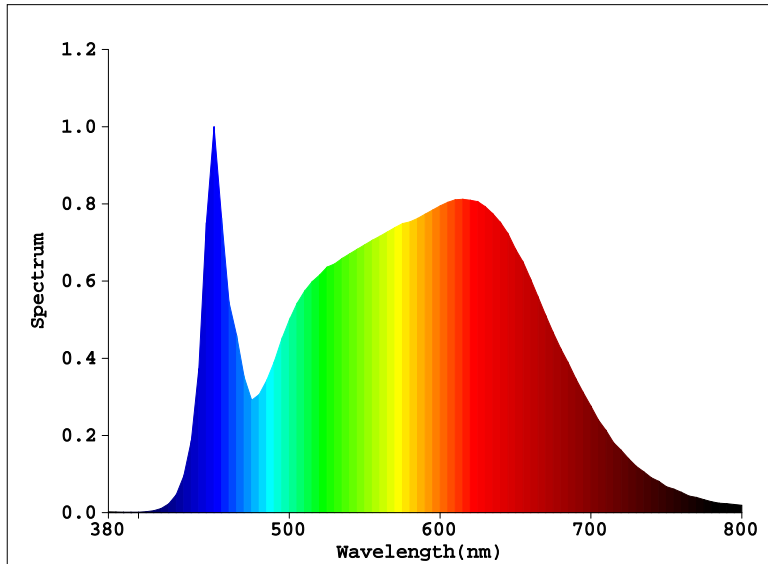
Test Department:

Humidity: 90.2%

Test Date: 2020-03-13 16:56:08

Instrument: PMS-80\_V1 (SN: YG107113N11110076)

## Light Source Test Report



## Color Parameters:

Chromaticity Coordinate:  $x=0.3823$   $y=0.3779$

Chromaticity Coordinate:  $u'=0.2258$   $v'=0.5024$  ( $duv=1.84e-05$ )

$T_c=3960K$  Dominant WL:  $L_d=579.2nm$  Purity=28.1% Centroid WL: 581.0nm

Ratio: R=21.3% G=75.1% B=3.7% Peak WL:  $L_p=450.0nm$  HWL: 20.9nm

Render Index:  $R_a=93.5$

R1 =94    R2 =95    R3 =96    R4 =94    R5 =93    R6 =93    R7 =95

R8 =88    R9 =69    R10=89    R11=94    R12=73    R13=94    R14=97    R15=92

## Photo Parameters:

Flux: 1403.7 lm     $F_e$ : 4.8488 W Efficacy: 149.6 lm/W

## Electrical Parameters:

Lamp : U=21.50V I=0.4363A P=9.380W PF=1.000

## Instrument Status:

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

REF=13999(R=3)

%=-0.129%

$I_p=31705(G=4, D=57)$

PMT: 28.1 centigrade [27.5]

Product Type: HH-SNW240F012W24-2835

Number: 11

Temperature: 25.3 deg

Test Operator:

Software: V2.00.122

Manufacturer:

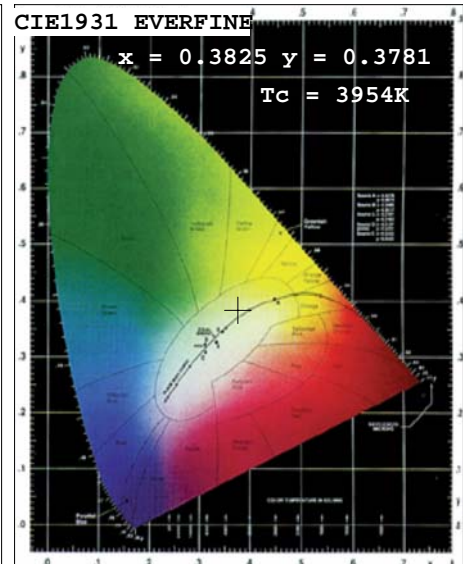
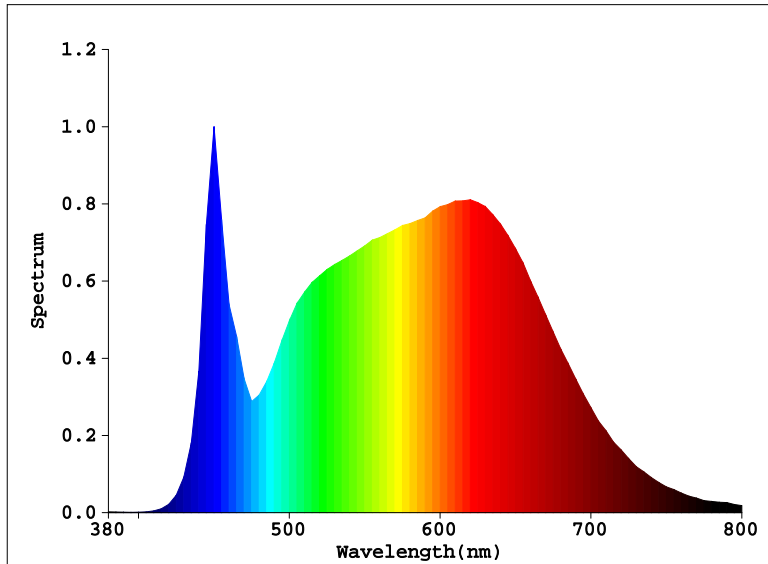
Test Department:

Humidity: 90.2%

Test Date: 2020-03-13 16:57:15

Instrument: PMS-80\_V1 (SN: YG107113N11110076)

## Light Source Test Report

**Color Parameters:**

Chromaticity Coordinate:  $x=0.3825$   $y=0.3781$

Chromaticity Coordinate:  $u'=0.2259$   $v'=0.5025$  ( $duv=3.90e-05$ )

$T_c=3954K$  Dominant WL:  $L_d=579.2nm$  Purity=28.3% Centroid WL:  $581.0nm$

Ratio: R=21.3% G=75.0% B=3.7% Peak WL:  $L_p=450.0nm$  HWL:  $20.6nm$

Render Index:  $R_a=93.6$

R1 =94    R2 =96    R3 =96    R4 =94    R5 =93    R6 =93    R7 =95

R8 =88    R9 =70    R10=89    R11=94    R12=73    R13=94    R14=97    R15=92

**Photo Parameters:**

Flux:  $1032.3$  lm     $F_e$ :  $3.5662$  W Efficacy:  $151.4$  lm/W

**Electrical Parameters:**

Lamp : U= $21.25V$  I= $0.3208A$  P= $6.817W$  PF= $1.000$

**Instrument Status:**

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

REF= $10323(R=3)$

%= $-0.147\%$

$I_p=23452(G=4, D=57)$

PMT:  $28.1$  centigrade [ $27.6$ ]

Product Type:  $HH-SNW240F012W24-2835$

Number:  $12$

Temperature:  $25.3$  deg

Test Operator:

Software:  $V2.00.122$

Manufacturer:

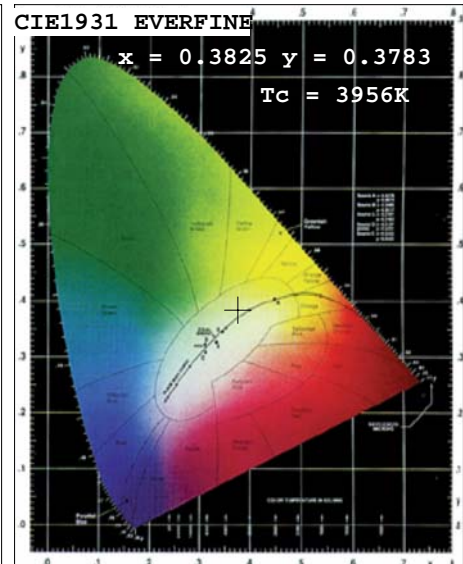
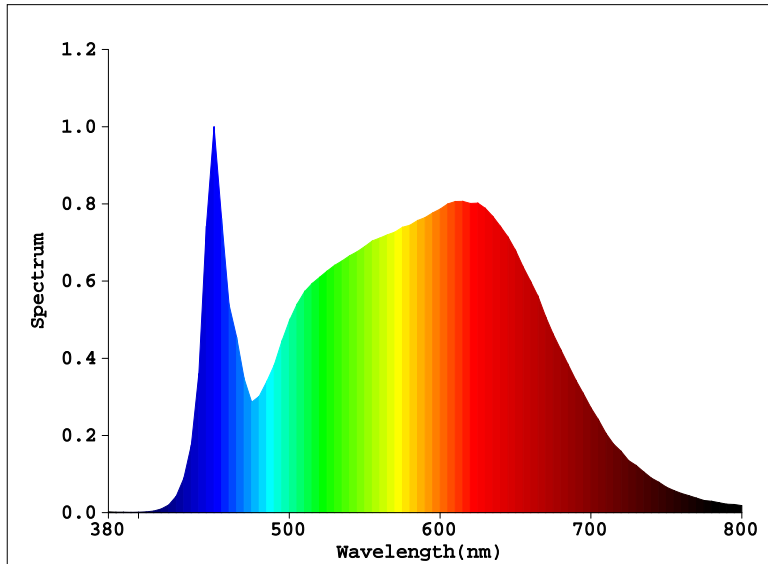
Test Department:

Humidity:  $90.2\%$

Test Date:  $2020-03-13$   $16:58:30$

Instrument:  $PMS-80\_V1$  (SN:  $YG107113N11110076$ )

## Light Source Test Report



## Color Parameters:

Chromaticity Coordinate:x=0.3825 y=0.3783

Chromaticity Coordinate:u'=0.2258 v'=0.5026(duv=1.30e-04)

Tc=3956K Dominant WL:Ld=579.2nm Purity=28.3% Centroid WL:581.0nm

Ratio:R=21.3% G=75.1% B=3.6% Peak WL:Lp=450.0nm HWL:20.5nm

Render Index:Ra=93.6

R1 =94 R2 =96 R3 =96 R4 =94 R5 =93 R6 =93 R7 =95

R8 =88 R9 =69 R10=89 R11=94 R12=73 R13=94 R14=97 R15=92

## Photo Parameters:

Flux: 697.14 lm Fe: 2.4051 W Efficacy:151.7 lm/W

## Electrical Parameters:

Lamp : U=21.00V I=0.2189A P=4.597W PF=1.000

## Instrument Status:

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

REF=7005(R=3)

%=-0.188%

Ip=55458(G=5,D=59)

PMT: 28.1 centigrade [27.6]

Product Type:HH-SNW240F012W24-2835

Number:13

Temperature:25.3 deg

Test Operator:

Software:V2.00.122

Manufacturer:

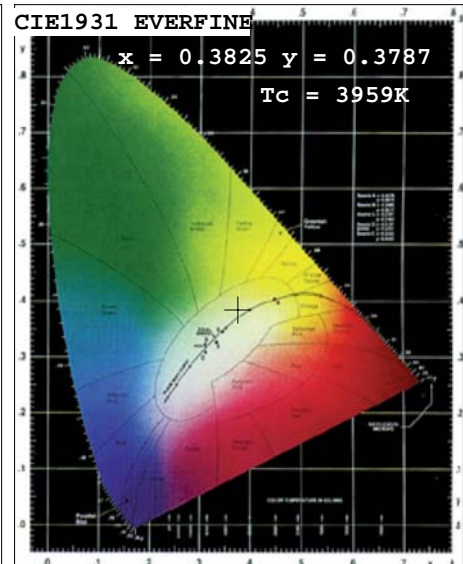
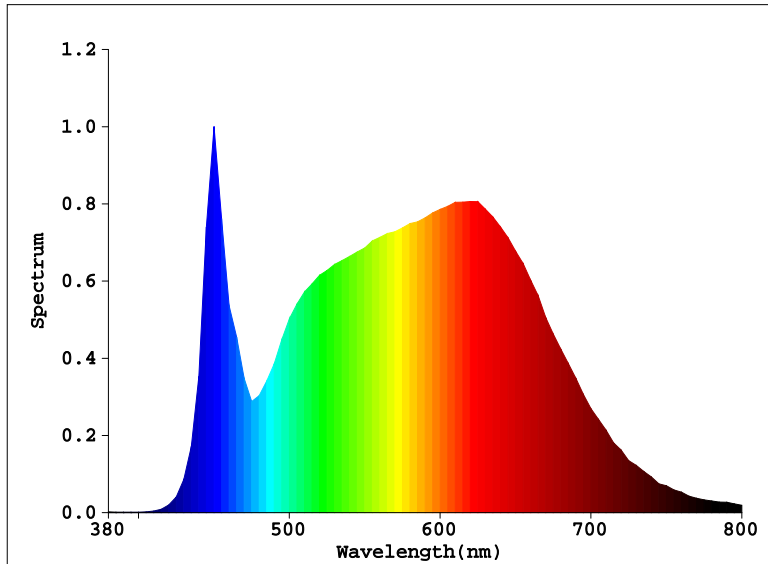
Test Department:

Humidity:90.2%

Test Date:2020-03-13 16:59:43

Instrument:PMS-80\_V1 (SN:YG107113N11110076)

## Light Source Test Report

**Color Parameters:**

Chromaticity Coordinate:  $x=0.3825$   $y=0.3787$

Chromaticity Coordinate:  $u'=0.2257$   $v'=0.5028$  ( $duv=3.27e-04$ )

$T_c=3959K$  Dominant WL:  $L_d=579.0nm$  Purity=28.5% Centroid WL:  $581.0nm$

Ratio:  $R=21.3\%$   $G=75.1\%$   $B=3.7\%$  Peak WL:  $L_p=450.0nm$  HWL:  $20.3nm$

Render Index:  $R_a=93.6$

$R_1 = 94$   $R_2 = 96$   $R_3 = 96$   $R_4 = 94$   $R_5 = 93$   $R_6 = 93$   $R_7 = 95$

$R_8 = 88$   $R_9 = 70$   $R_{10} = 89$   $R_{11} = 94$   $R_{12} = 73$   $R_{13} = 94$   $R_{14} = 97$   $R_{15} = 92$

**Photo Parameters:**

Flux:  $415.13$  lm  $F_e = 1.4337$  W Efficacy:  $151.1$  lm/W

**Electrical Parameters:**

Lamp :  $U=20.75V$   $I=0.1324A$   $P=2.747W$   $PF=1.000$

**Instrument Status:**

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

REF=41312(R=4)

$\%=-0.257\%$

$I_p=33132(G=5, D=59)$

PMT:  $28.3$  centigrade [ $27.6$ ]

Product Type:  $HH-SNW240F012W24-2835$

Number:  $14$

Temperature:  $25.3$  deg

Test Operator:

Software:  $V2.00.122$

Manufacturer:

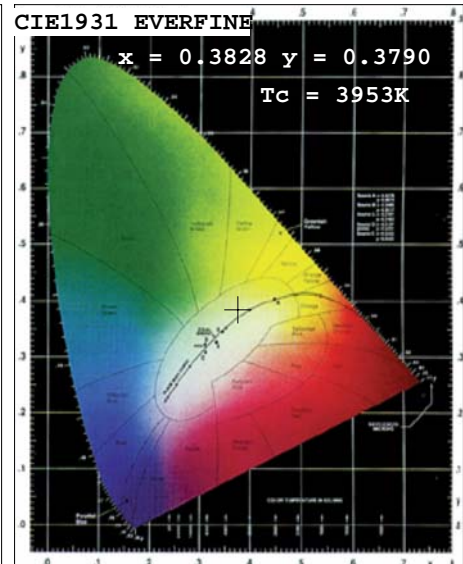
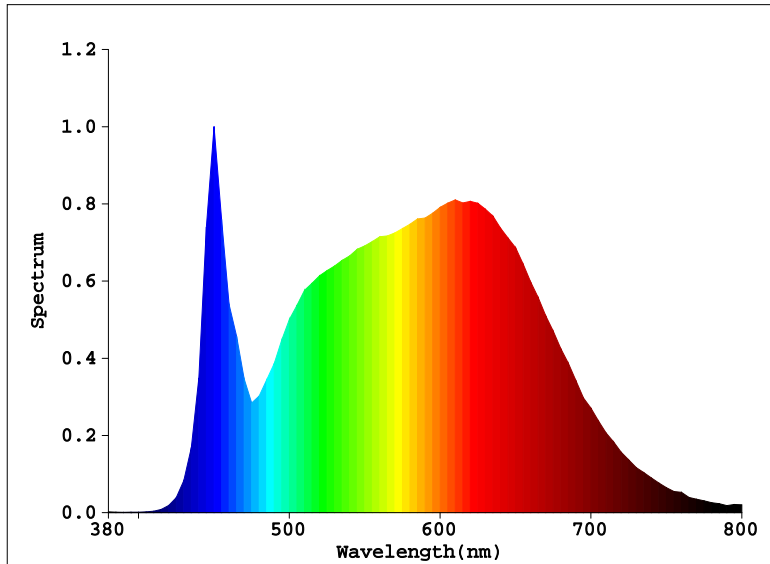
Test Department:

Humidity:  $90.2\%$

Test Date:  $2020-03-13$   $17:00:54$

Instrument:  $PMS-80\_V1$  (SN:  $YG107113N11110076$ )

## Light Source Test Report

**Color Parameters:**

Chromaticity Coordinate:  $x=0.3828$   $y=0.3790$

Chromaticity Coordinate:  $u'=0.2258$   $v'=0.5029$  ( $duv=3.55e-04$ )

$T_c=3953K$  Dominant WL:  $L_d=579.1nm$  Purity=28.6% Centroid WL:  $581.0nm$

Ratio:  $R=21.3\%$   $G=75.0\%$   $B=3.7\%$  Peak WL:  $L_p=450.0nm$  HWL:  $20.4nm$

Render Index:  $R_a=93.6$

$R_1 = 94$      $R_2 = 96$      $R_3 = 96$      $R_4 = 94$      $R_5 = 93$      $R_6 = 93$      $R_7 = 95$

$R_8 = 88$      $R_9 = 69$      $R_{10} = 89$      $R_{11} = 94$      $R_{12} = 73$      $R_{13} = 94$      $R_{14} = 97$      $R_{15} = 92$

**Photo Parameters:**

Flux: 206.06 lm     $F_e = 0.70991$  W Efficacy: 148.7 lm/W

**Electrical Parameters:**

Lamp :  $U=20.50V$   $I=0.06760A$   $P=1.386W$   $PF=1.000$

**Instrument Status:**

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

REF=20562(R=4)

$\% = -0.268\%$

$I_p = 16440(G=5, D=61)$

PMT: 28.1 centigrade [27.5]

Product Type: HH-SNW240F012W24-2835

Number: 15

Temperature: 25.3 deg

Test Operator:

Software: V2.00.122

Manufacturer:

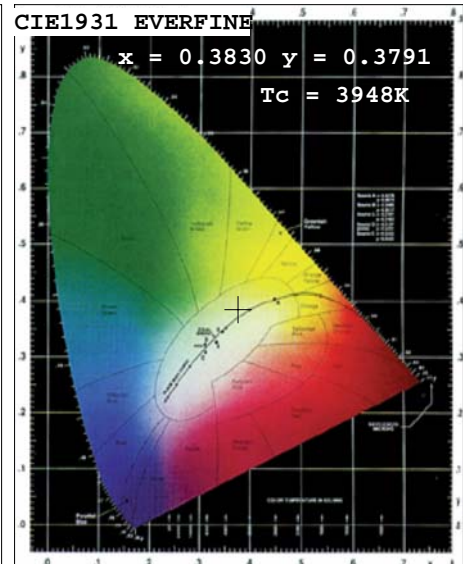
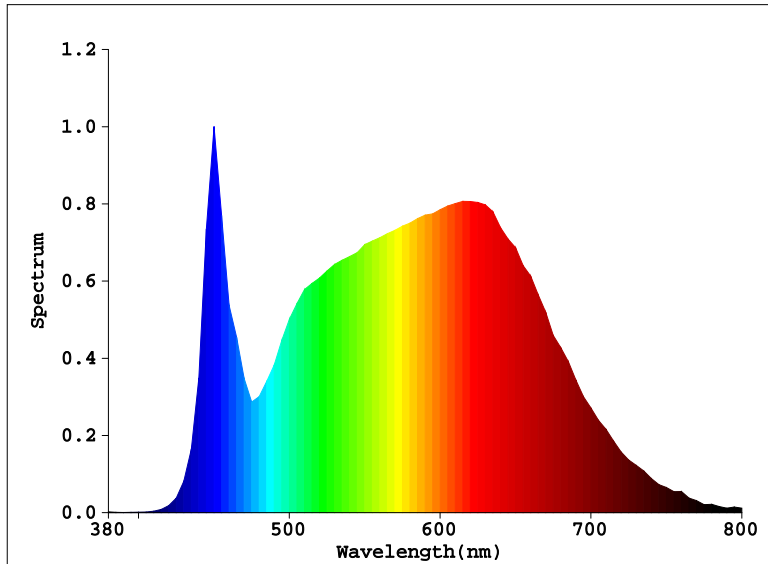
Test Department:

Humidity: 90.2%

Test Date: 2020-03-13 17:02:58

Instrument: PMS-80\_V1 (SN: YG107113N11110076)

## Light Source Test Report

**Color Parameters:**

Chromaticity Coordinate:  $x=0.3830$   $y=0.3791$

Chromaticity Coordinate:  $u'=0.2259$   $v'=0.5030$  ( $duv=3.62e-04$ )

$T_c=3948K$  Dominant WL:  $L_d=579.1nm$  Purity=28.7% Centroid WL:  $581.0nm$

Ratio: R=21.3% G=75.1% B=3.6% Peak WL:  $L_p=450.0nm$  HWL:  $20.3nm$

Render Index:  $R_a=93.6$

R1 =94    R2 =96    R3 =96    R4 =94    R5 =93    R6 =93    R7 =95

R8 =88    R9 =70    R10=89    R11=94    R12=72    R13=94    R14=97    R15=92

**Photo Parameters:**

Flux: 84.682 lm     $F_e=0.29154$  W Efficacy: 143.2 lm/W

**Electrical Parameters:**

Lamp : U=20.25V I=0.02920A P=0.5913W PF=1.000

**Instrument Status:**

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

REF=8515(R=4)

%=-0.308%

$I_p=29940$  (G=6, D=75)

PMT: 28.3 centigrade [27.5]

Product Type: HH-SNW240F012W24-2835

Number: 16

Temperature: 25.3 deg

Test Operator:

Software: V2.00.122

Manufacturer:

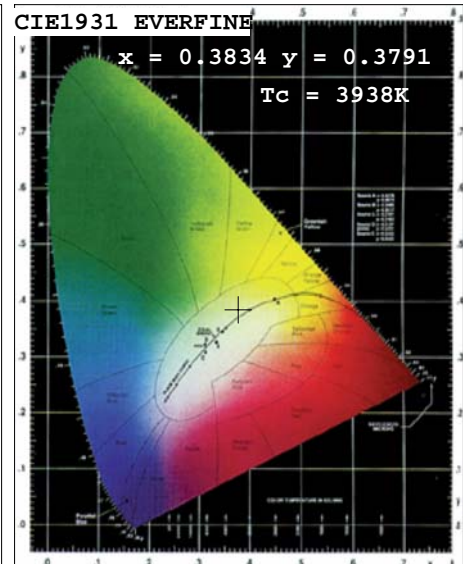
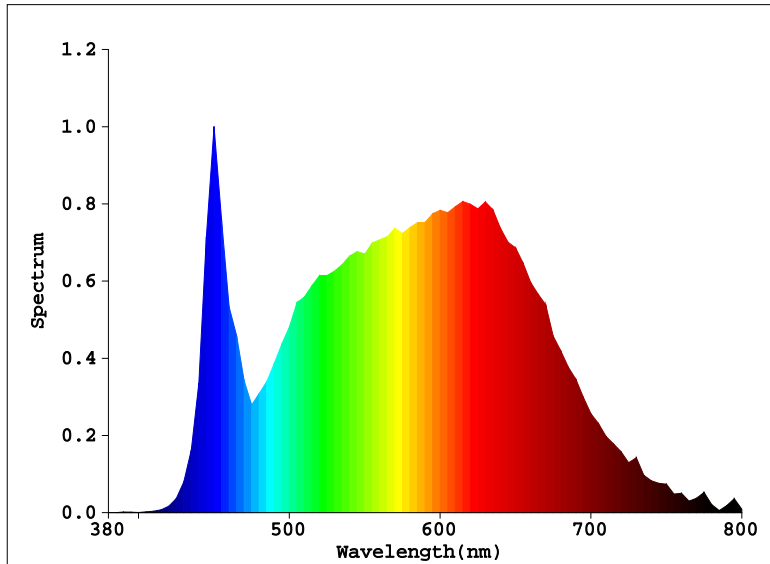
Test Department:

Humidity: 90.2%

Test Date: 2020-03-13 17:04:10

Instrument: PMS-80\_V1 (SN: YG107113N11110076)

## Light Source Test Report



## Color Parameters:

Chromaticity Coordinate:  $x=0.3834$   $y=0.3791$

Chromaticity Coordinate:  $u'=0.2261$   $v'=0.5030$  ( $duv=2.22e-04$ )

$T_c=3938K$  Dominant WL:  $L_d=579.2nm$  Purity=28.8% Centroid WL:  $581.0nm$

Ratio:  $R=21.3\%$   $G=75.0\%$   $B=3.7\%$  Peak WL:  $L_p=450.0nm$  HWL:  $20.1nm$

Render Index:  $R_a=93.8$

$R_1 = 94$   $R_2 = 96$   $R_3 = 96$   $R_4 = 94$   $R_5 = 93$   $R_6 = 93$   $R_7 = 95$

$R_8 = 89$   $R_9 = 71$   $R_{10} = 89$   $R_{11} = 94$   $R_{12} = 73$   $R_{13} = 95$   $R_{14} = 97$   $R_{15} = 92$

## Photo Parameters:

Flux: 29.342 lm  $F_e = 0.10120$  W Efficacy: 134.6 lm/W

## Electrical Parameters:

Lamp :  $U=20.00V$   $I=0.01090A$   $P=0.2180W$   $PF=1.000$

## Instrument Status:

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

REF=3022( $R=4$ )

$\% = -0.274\%$

$I_p = 10556$  ( $G=6, D=75$ )

PMT: 28.4 centigrade [ $27.6$ ]

Product Type: HH-SNW240F012W24-2835

Number: 17

Temperature: 25.3 deg

Test Operator:

Software: V2.00.122

Manufacturer:

Test Department:

Humidity: 90.2%

Test Date: 2020-03-13 17:05:25

Instrument: PMS-80\_V1 (SN: YG107113N11110076)