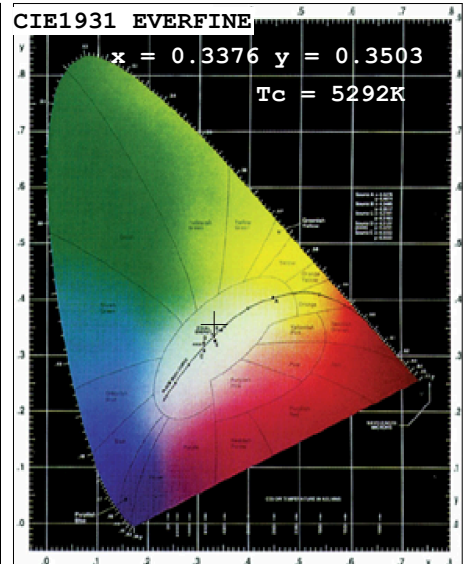
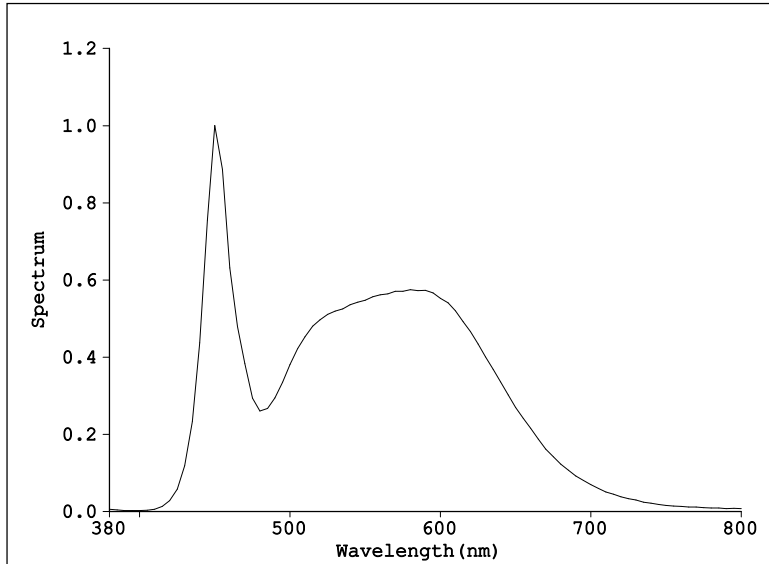


Light Source Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3376$ $y=0.3503$
Chromaticity Coordinate: $u'=0.3376$ $v'=0.3503$ ($duv=2.46e-03$)
 $T_c=5292K$ Dominant WL: $L_d=563.8nm$ Purity=6.4% Centroid WL: $551.0nm$
Ratio: $R=16.7\%$ $G=78.9\%$ $B=4.5\%$ Peak WL: $L_p=450.0nm$ HWL: $23.3nm$
Render Index: $R_a=84.6$
 $R_1 = 83$ $R_2 = 89$ $R_3 = 93$ $R_4 = 85$ $R_5 = 84$ $R_6 = 85$ $R_7 = 88$
 $R_8 = 70$ $R_9 = 14$ $R_{10} = 74$ $R_{11} = 84$ $R_{12} = 63$ $R_{13} = 85$ $R_{14} = 96$ $R_{15} = 78$

Photo Parameters:

Flux: 5054.8 lm $F_e = 15.959$ W Efficacy: 121.7 lm/W

Electrical Parameters:

Luminaire: $U=2.999V$ $I=1.249A$ $P=3.746W$ $PF=1.000$
Lamp : $U=219.8V$ $I=0.1965A$ $P=41.55W$ $PF=0.9617$

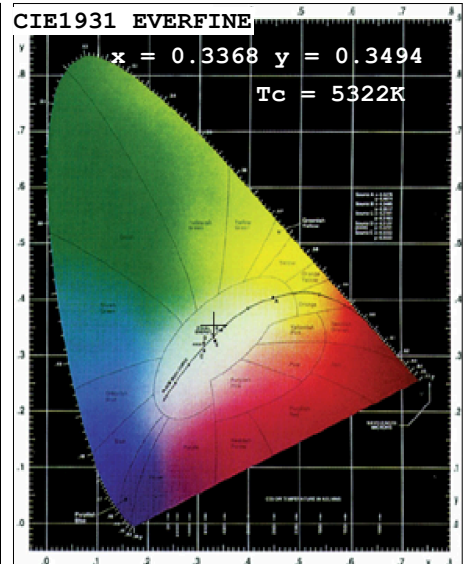
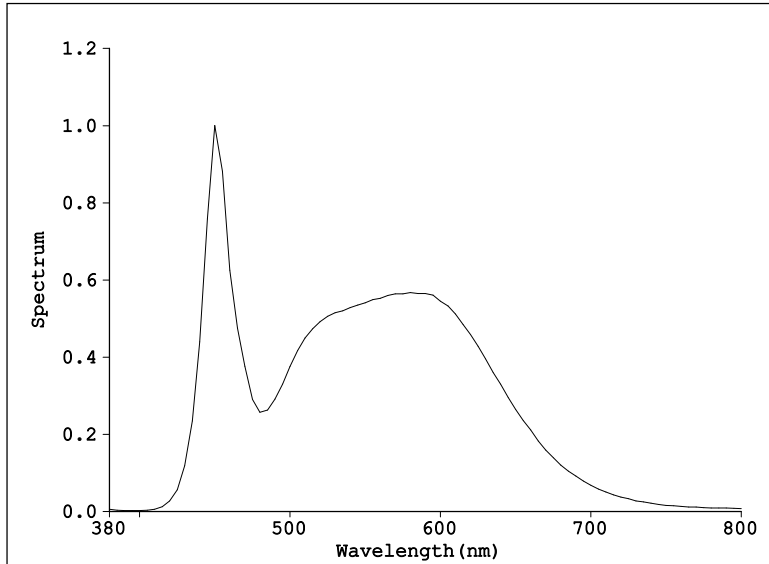
Instrument Status:

Scan Range: $380.0nm-800.0nm$ Interval: $5.0nm[0]$ $I_p=14299$ ($G=3, D=56$)
REF=7396 ($R=2$) $\%=-0.397\%$ PMT: 32.3 centigrade [150.0]

Product Type:
Number: 19
Temperature: 26.8 deg
Test Operator: QC-01
Software: V2.00.122

Manufacturer:
Test Department:
Humidity: 70%
Test Date: 2017-05-16 18:52:32
Instrument: PMS-80_V1 (SN: 11080027)

Light Source Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3368$ $y=0.3494$
 Chromaticity Coordinate: $u'=0.3368$ $v'=0.3494$ ($duv=2.35e-03$)
 $T_c=5322K$ Dominant WL: $L_d=562.7nm$ Purity=5.9% Centroid WL: $551.0nm$
 Ratio: $R=16.6\%$ $G=78.9\%$ $B=4.5\%$ Peak WL: $L_p=450.0nm$ HWL: $23.2nm$
 Render Index: $R_a=84.5$

R1 =83	R2 =89	R3 =93	R4 =85	R5 =84	R6 =85	R7 =88	
R8 =70	R9 =14	R10=74	R11=84	R12=63	R13=85	R14=96	R15=78

Photo Parameters:

Flux: 5039.5 lm Fe: 15.926 W Efficacy: 120.4 lm/W

Electrical Parameters:

Luminaire: $U=2.999V$ $I=1.249A$ $P=3.746W$ $PF=1.000$
 Lamp : $U=219.7V$ $I=0.1979A$ $P=41.85W$ $PF=0.9624$

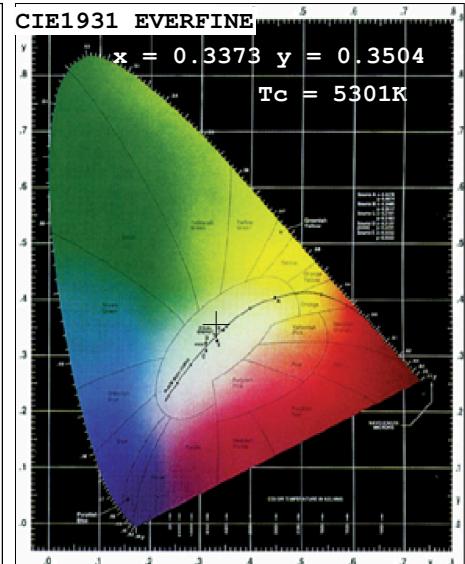
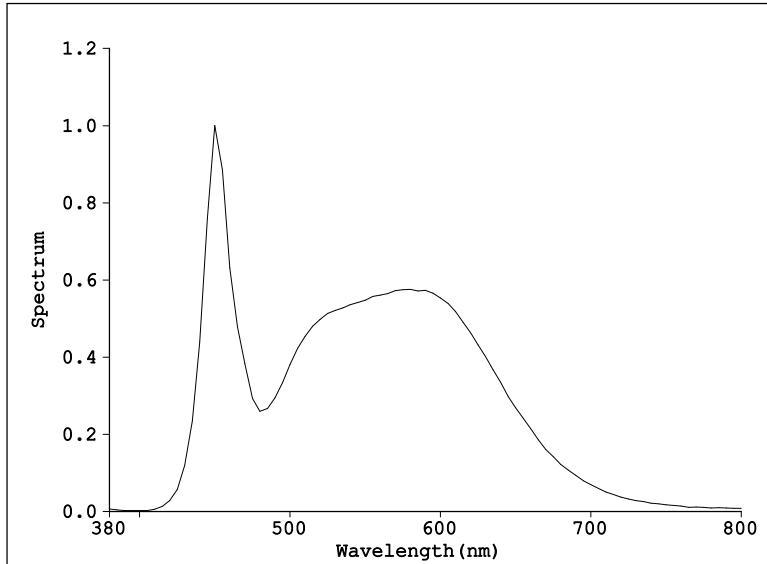
Instrument Status:

Scan Range: $380.0nm-800.0nm$ Interval: $5.0nm[0]$ $I_p=14447(G=3,D=56)$
 REF=7373 (R=2) $\%=-0.439\%$ PMT: 32.6 centigrade [150.0]

Product Type:
 Number: 20
 Temperature: 26.8 deg
 Test Operator: QC-01
 Software: V2.00.122

Manufacturer:
 Test Department:
 Humidity: 70%
 Test Date: 2017-05-16 18:54:24
 Instrument: PMS-80_V1 (SN: 11080027)

Light Source Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3373$ $y=0.3504$
 Chromaticity Coordinate: $u'=0.3373$ $v'=0.3504$ ($duv=2.59e-03$)
 $T_c=5301K$ Dominant WL: $L_d=563.3nm$ Purity=6.4% Centroid WL: $551.0nm$
 Ratio: $R=16.6\%$ $G=78.9\%$ $B=4.5\%$ Peak WL: $L_p=450.0nm$ HWL: $23.3nm$
 Render Index: $R_a=84.4$

R1 =83	R2 =89	R3 =93	R4 =84	R5 =84	R6 =85	R7 =88	
R8 =69	R9 =13	R10=74	R11=84	R12=63	R13=85	R14=96	R15=78

Photo Parameters:

Flux: 5148.0 lm Fe: 16.249 W Efficacy: 120.9 lm/W

Electrical Parameters:

Luminaire: U=2.999V I=1.249A P=3.746W PF=1.000
 Lamp : U=219.8V I=0.2016A P=42.59W PF=0.9611

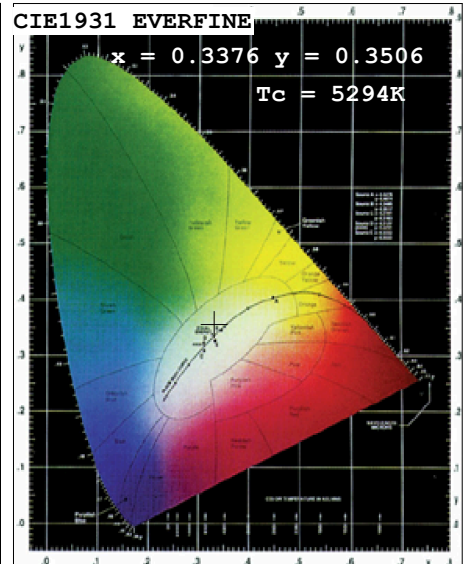
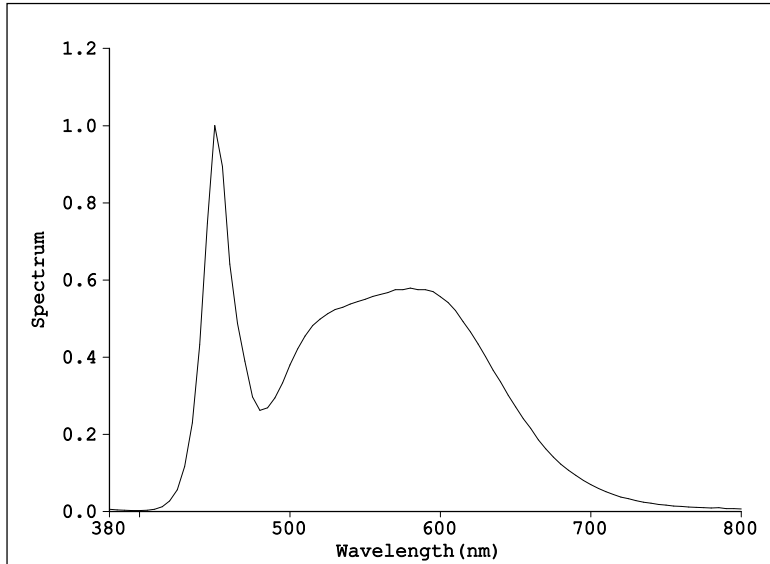
Instrument Status:

Scan Range: 380.0nm-800.0nm Interval: 5.0nm[0] $I_p=14606$ ($G=3, D=56$)
 REF=7530 (R=2) $\%=-0.536\%$ PMT: 32.8 centigrade [150.0]

Product Type:
 Number: 21
 Temperature: 26.8 deg
 Test Operator: QC-01
 Software: V2.00.122

Manufacturer:
 Test Department:
 Humidity: 70%
 Test Date: 2017-05-16 18:56:11
 Instrument: PMS-80_V1 (SN: 11080027)

Light Source Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3376$ $y=0.3506$

Chromaticity Coordinate: $u'=0.3376$ $v'=0.3506$ ($duv=2.62e-03$)

$T_c=5294K$ Dominant WL: $L_d=563.6nm$ Purity=6.5% Centroid WL: $551.0nm$

Ratio: $R=16.6\%$ $G=78.9\%$ $B=4.5\%$ Peak WL: $L_p=450.0nm$ HWL: $23.5nm$

Render Index: $R_a=84.4$

$R_1 = 83$ $R_2 = 89$ $R_3 = 93$ $R_4 = 84$ $R_5 = 84$ $R_6 = 85$ $R_7 = 88$

$R_8 = 69$ $R_9 = 13$ $R_{10} = 74$ $R_{11} = 84$ $R_{12} = 62$ $R_{13} = 85$ $R_{14} = 96$ $R_{15} = 78$

Photo Parameters:

Flux: 5041.9 lm $F_e = 15.897$ W Efficacy: 120.6 lm/W

Electrical Parameters:

Luminaire: $U=2.999V$ $I=1.249A$ $P=3.746W$ $PF=1.000$

Lamp : $U=219.7V$ $I=0.1985A$ $P=41.80W$ $PF=0.9585$

Instrument Status:

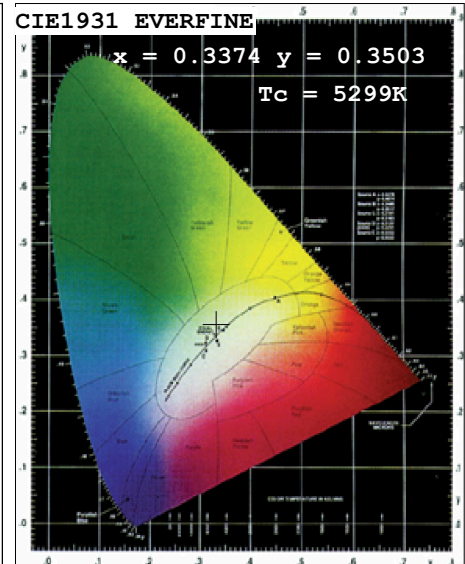
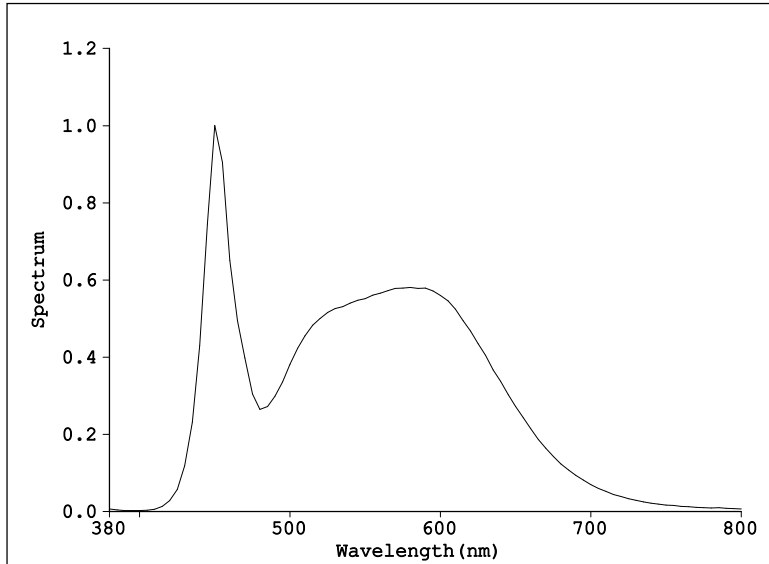
Scan Range: $380.0nm-800.0nm$ Interval: $5.0nm[0]$
REF=7377 (R=2) $\% = 0.371\%$

$I_p = 14250$ ($G=3, D=56$)
PMT: 32.8 centigrade [150.0]

Product Type:
Number: 22
Temperature: 26.8 deg
Test Operator: QC-01
Software: V2.00.122

Manufacturer:
Test Department:
Humidity: 70%
Test Date: 2017-05-16 18:58:08
Instrument: PMS-80_V1 (SN: 11080027)

Light Source Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3374$ $y=0.3503$
 Chromaticity Coordinate: $u'=0.3374$ $v'=0.3503$ ($duv=2.55e-03$)
 $T_c=5299K$ Dominant WL: $L_d=563.4nm$ Purity=6.4% Centroid WL: $551.0nm$
 Ratio: $R=16.6\%$ $G=78.9\%$ $B=4.5\%$ Peak WL: $L_p=450.0nm$ HWL: $23.7nm$
 Render Index: $R_a=84.4$

R1 =83	R2 =89	R3 =93	R4 =84	R5 =84	R6 =85	R7 =88	
R8 =69	R9 =13	R10=74	R11=84	R12=62	R13=85	R14=97	R15=78

Photo Parameters:

Flux: 5039.9 lm Fe: 15.904 W Efficacy: 120.3 lm/W

Electrical Parameters:

Luminaire: $U=2.999V$ $I=1.249A$ $P=3.746W$ $PF=1.000$
 Lamp : $U=259.8V$ $I=0.1726A$ $P=41.89W$ $PF=0.9342$

Instrument Status:

Scan Range: $380.0nm-800.0nm$ Interval: $5.0nm[0]$ $I_p=14150$ ($G=3, D=56$)
 REF=7374 ($R=2$) $\%=0.454\%$ PMT: 33.0 centigrade [150.0]

Product Type:
 Number: 23
 Temperature: 26.8 deg
 Test Operator: QC-01
 Software: V2.00.122

Manufacturer:
 Test Department:
 Humidity: 70%
 Test Date: 2017-05-16 18:59:27
 Instrument: PMS-80_V1 (SN: 11080027)