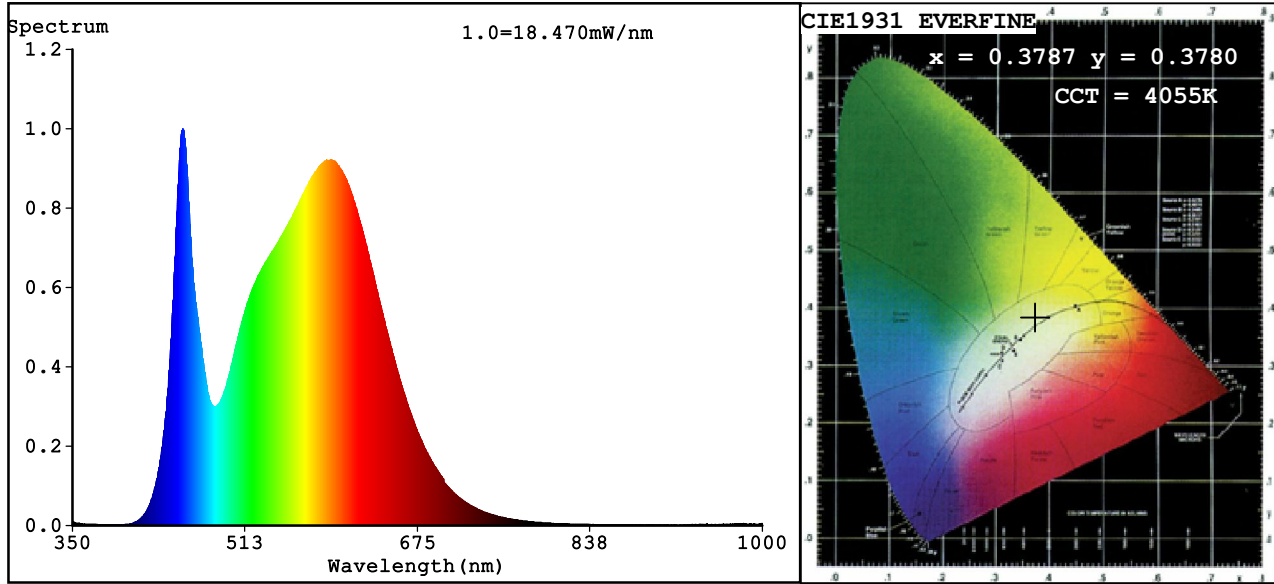


Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3787$ $y=0.3780$ / $u'=0.2235$ $v'=0.5019$
 CCT=4055K (Duv=0.0011) Dominant WL:Ld =578.3nm Purity=27.1%
 Ratio:R=17.9% G=78.3% B=3.8%;; Peak WL:Lp=454.0nm FWHM=25.4nm
 Render Index:Ra=82.1
 R1 =80 R2 =90 R3 =95 R4 =79 R5 =80 R6 =85 R7 =85
 R8 =63 R9 =4 R10=74 R11=77 R12=59 R13=83 R14=98 R15=74

Photo Parameters:

Flux = 979.1 lm Eff. : 99.60 lm/W Fe = 2.965 W

Electrical parameters:

V = 12.080 V I = 0.8138 A P = 9.831 W PF = 1.000

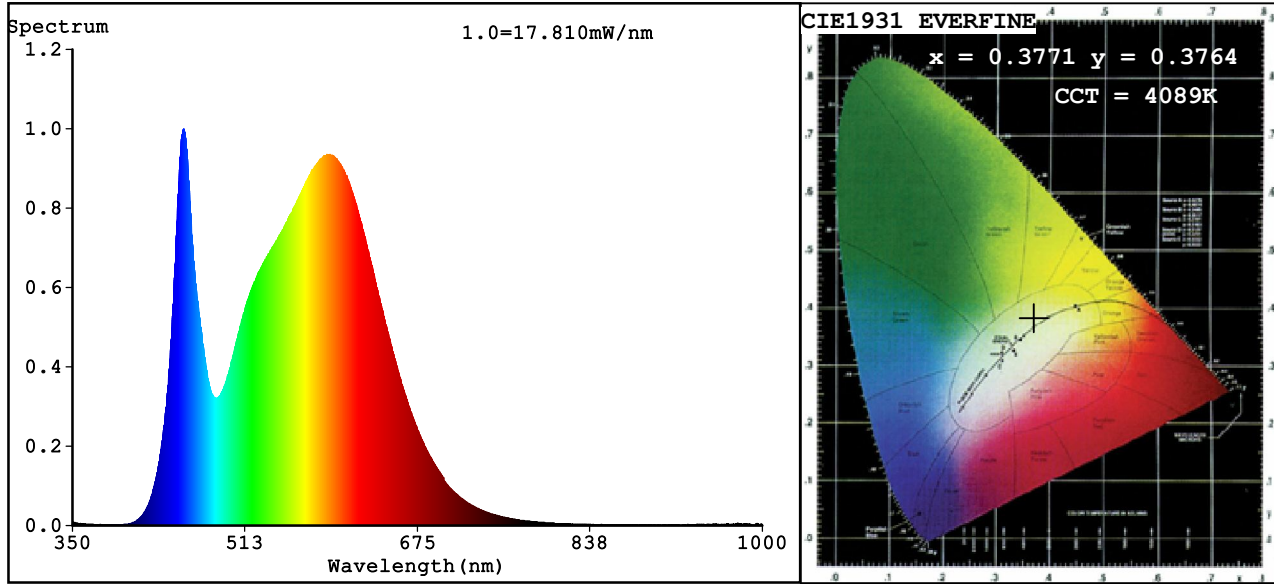
WHITE:ANSI_4000K

Status: Integral T = 51 ms Ip = 44417 (68%)

Model:LED Module/9W
 Tester:Petya Marinova
 Temperature:25.3Deg
 Manufacturer:ELMARK

Number:99LED766T
 Date:2018-01-16 11:07
 Humidity:65.0%
 Remarks:017V37A_4082

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3771$ $y=0.3764$ $u'=0.2230$ $v'=0.5009$

CCT=4089K(Duv=0.0008) Dominant WL:Ld =578.3nm Purity=26.1%

Ratio:R=17.8% G=78.2% B=3.9%;;Peak WL:Lp=455.0nm FWHM=27.1nm

Render Index:Ra=82.1

R1 =80	R2 =90	R3 =95	R4 =79	R5 =80	R6 =85	R7 =85		
R8 =62	R9 =4	R10=75	R11=77	R12=60	R13=83	R14=98	R15=74	

Photo Parameters:

Flux = 958.9 lm Eff. : 99.07 lm/W Fe = 2.918 W

Electrical parameters:

V = 12.080 V I = 0.8013 A P = 9.680 W PF = 1.000

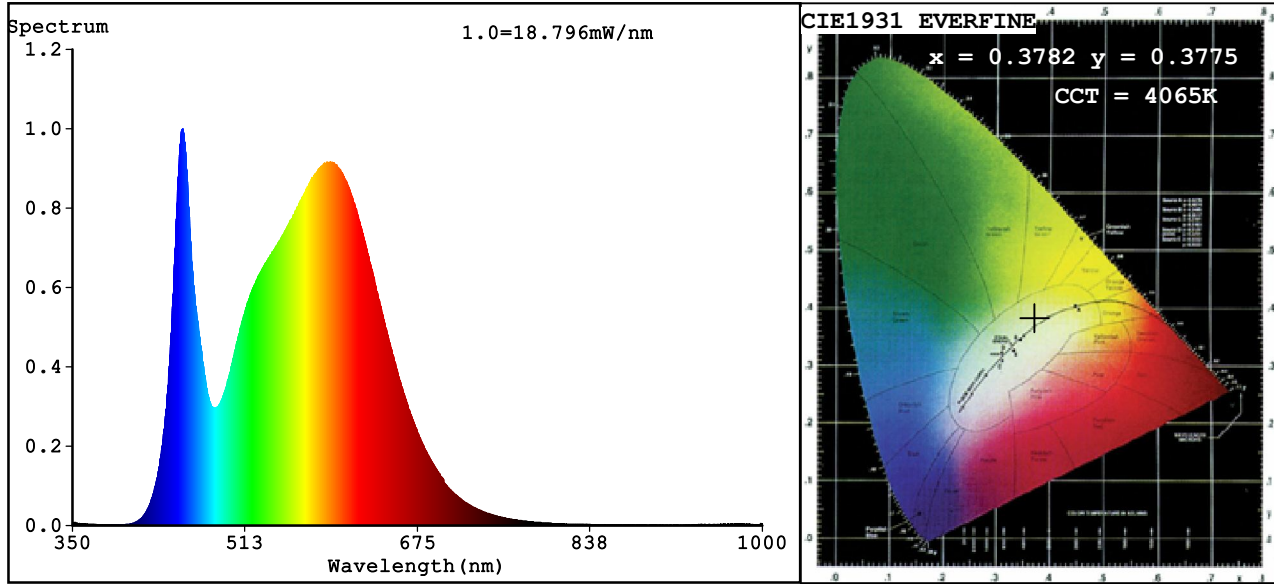
WHITE:ANSI_4000K

Status: Integral T = 51 ms Ip = 43514 (66%)

Model:LED Module/9W
Tester:Petya Marinova
Temperature:25.3Deg
Manufacturer:ELMARK

Number:99LED766T
Date:2018-01-16 11:10
Humidity:65.0%
Remarks:017V37A_4082

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3782$ $y=0.3775$ $u'=0.2234$ $v'=0.5016$

CCT=4065K(Duv=0.0010) Dominant WL:Ld =578.3nm Purity=26.8%

Ratio:R=17.9% G=78.3% B=3.8%;;Peak WL:Lp=454.0nm FWHM=25.3nm

Render Index:Ra=82.0

R1 =80	R2 =89	R3 =95	R4 =79	R5 =80	R6 =85	R7 =85	
R8 =63	R9 =4	R10=74	R11=77	R12=59	R13=83	R14=98	R15=74

Photo Parameters:

Flux = 992.1 lm Eff. : 101.07 lm/W Fe = 3.005 W

Electrical parameters:

V = 12.080 V I = 0.8126 A P = 9.816 W PF = 1.000

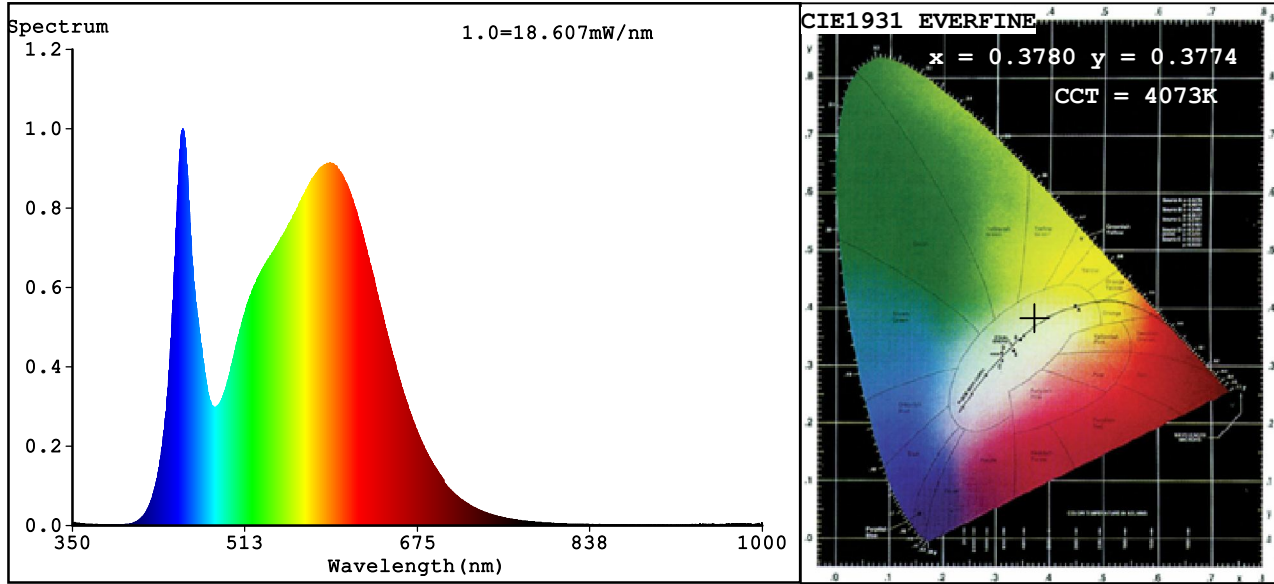
WHITE:ANSI_4000K

Status: Integral T = 51 ms Ip = 44951 (69%)

Model:LED Module/9W
Tester:Petya Marinova
Temperature:25.3Deg
Manufacturer:ELMARK

Number:99LED766T
Date:2018-01-16 11:19
Humidity:65.0%
Remarks:017V37A_4082

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3780$ $y=0.3774$ / $u'=0.2232$ $v'=0.5015$
CCT=4073K(Duv=0.0011) Dominant WL:Ld =578.2nm Purity=26.7%
Ratio:R=17.9% G=78.3% B=3.8%;;Peak WL:Lp=454.0nm FWHM=25.4nm
Render Index:Ra=82.0
R1 =80 R2 =90 R3 =95 R4 =79 R5 =80 R6 =85 R7 =85
R8 =63 R9 =4 R10=74 R11=77 R12=59 R13=83 R14=98 R15=74

Photo Parameters:

Flux = 979.4 lm Eff. : 99.78 lm/W Fe = 2.967 W

Electrical parameters:

V = 12.080 V I = 0.8126 A P = 9.816 W PF = 1.000

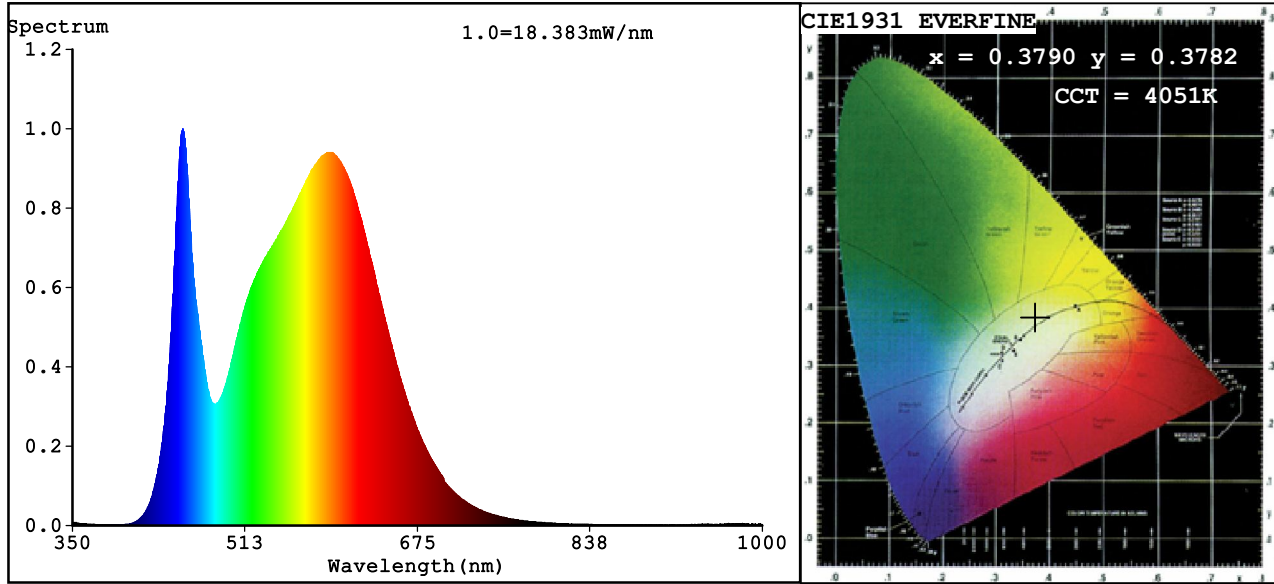
WHITE:ANSI_4000K

Status: Integral T = 51 ms Ip = 44338 (68%)

Model:LED Module/9W
Tester:Petya Marinova
Temperature:25.3Deg
Manufacturer:ELMARK

Number:99LED766T
Date:2018-01-16 11:45
Humidity:65.0%
Remarks:017V37A_4082

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3790$ $y=0.3782$ $u'=0.2236$ $v'=0.5020$

CCT=4051K(Duv=0.0011) Dominant WL:Ld =578.3nm Purity=27.2%

Ratio:R=17.9% G=78.3% B=3.8%;;Peak WL:Lp=454.0nm FWHM=26.0nm

Render Index:Ra=82.0

R1 =80	R2 =90	R3 =95	R4 =79	R5 =80	R6 =85	R7 =85		
R8 =62	R9 =4	R10=74	R11=77	R12=59	R13=83	R14=98	R15=74	

Photo Parameters:

Flux = 993.8 lm Eff. : 99.09 lm/W Fe = 3.010 W

Electrical parameters:

V = 12.080 V I = 0.8302 A P = 10.03 W PF = 1.000

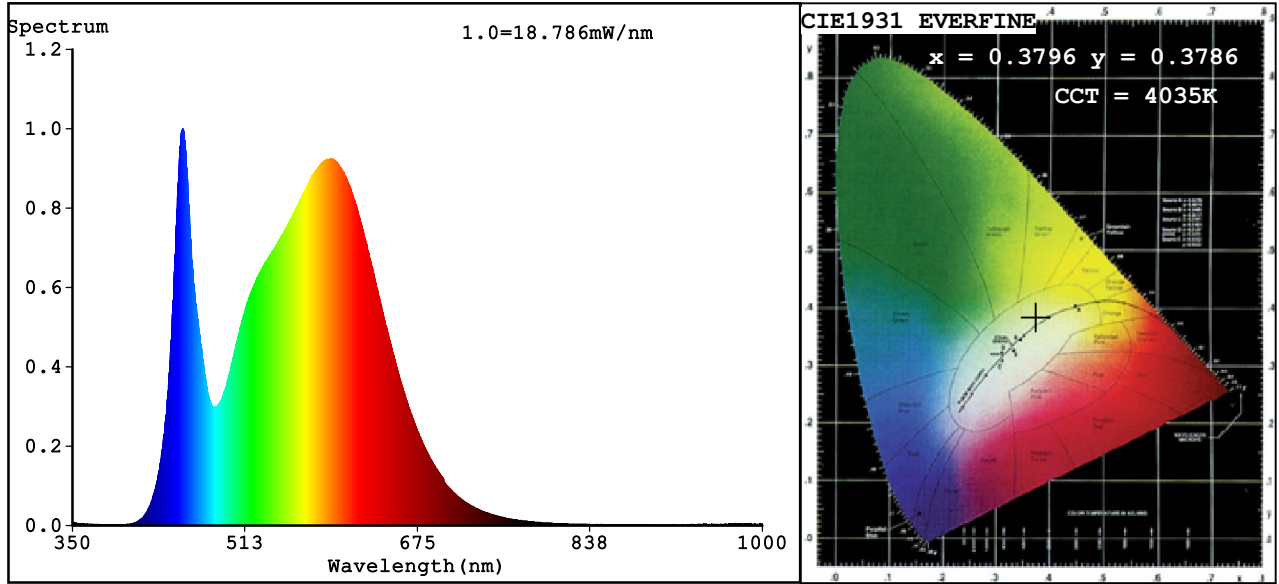
WHITE:ANSI_4000K

Status: Integral T = 51 ms Ip = 45051 (69%)

Model:LED Module/9W
Tester:Petya Marinova
Temperature:25.3Deg
Manufacturer:ELMARK

Number:99LED766T
Date:2018-01-16 12:48
Humidity:65.0%
Remarks:017V37A_4082

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3796$ $y=0.3786$ $u'=0.2238$ $v'=0.5023$

CCT=4035K(Duv=0.0011) Dominant WL:Ld =578.3nm Purity=27.5%

Ratio:R=18.0% G=78.2% B=3.8%;;Peak WL:Lp=454.0nm FWHM=25.2nm

Render Index:Ra=82.1

R1 =80	R2 =90	R3 =95	R4 =79	R5 =80	R6 =85	R7 =85		
R8 =63	R9 =4	R10=75	R11=77	R12=59	R13=83	R14=98	R15=74	

Photo Parameters:

Flux = 997.7 lm Eff. : 98.98 lm/W Fe = 3.018 W

Electrical parameters:

V = 12.080 V I = 0.8344 A P = 10.08 W PF = 1.000

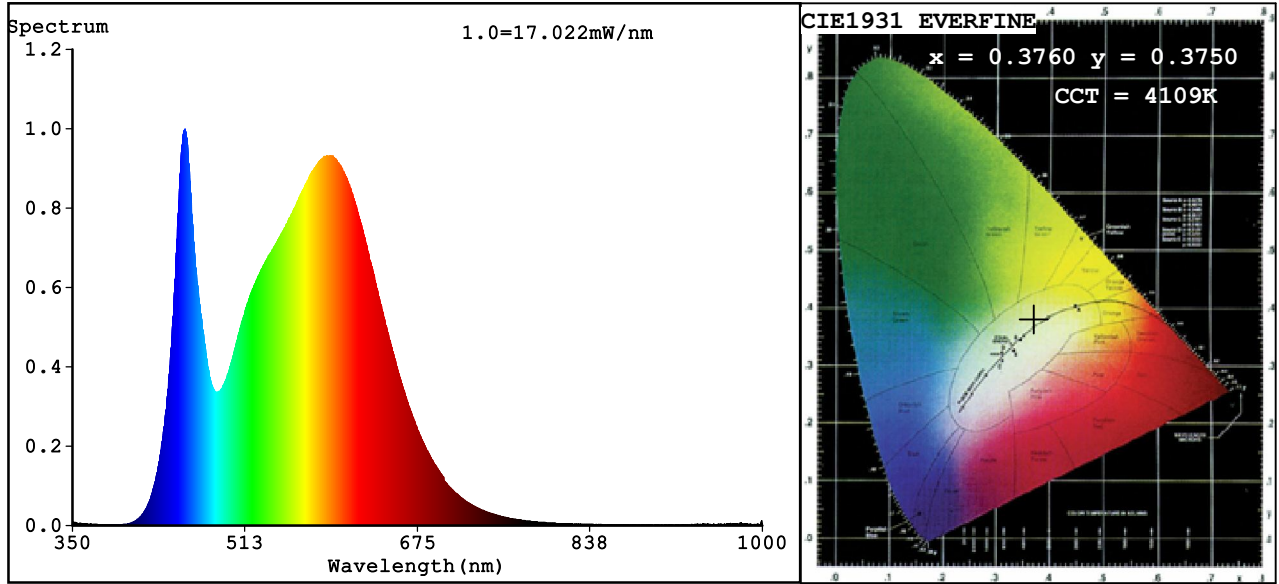
WHITE:ANSI_4000K

Status: Integral T = 51 ms Ip = 45253 (69%)

Model:LED Module/9W
Tester:Petya Marinova
Temperature:25.3Deg
Manufacturer:ELMARK

Number:99LED766T
Date:2018-01-16 12:50
Humidity:65.0%
Remarks:017V37A_4082

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3760$ $y=0.3750$ $u'=0.2229$ $v'=0.5002$

CCT=4109K(Duv=0.0005) Dominant WL:Ld =578.3nm Purity=25.4%

Ratio:R=17.8% G=78.1% B=4.1%;;Peak WL:Lp=456.0nm FWHM=28.2nm

Render Index:Ra=82.4

R1 =81	R2 =91	R3 =95	R4 =79	R5 =80	R6 =86	R7 =85	
R8 =63	R9 =5	R10=77	R11=76	R12=61	R13=84	R14=98	R15=75

Photo Parameters:

Flux = 912.8 lm Eff. : 95.12 lm/W Fe = 2.792 W

Electrical parameters:

V = 12.080 V I = 0.7944 A P = 9.596 W PF = 1.000

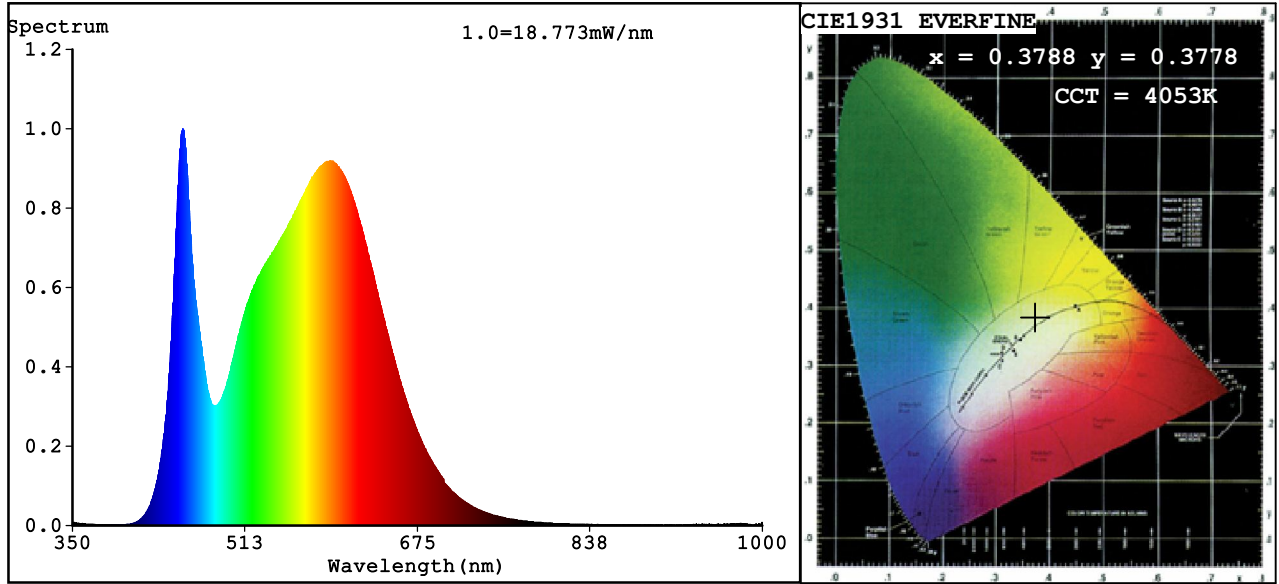
WHITE:ANSI_4000K

Status: Integral T = 51 ms Ip = 41467 (63%)

Model:LED Module/9W
Tester:Petya Marinova
Temperature:25.3Deg
Manufacturer:ELMARK

Number:99LED766T
Date:2018-01-16 13:03
Humidity:65.0%
Remarks:017V37A_4082

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3788$ $y=0.3778$ $u'=0.2236$ $v'=0.5018$

CCT=4053K(Duv=0.0010) Dominant WL:Ld =578.3nm Purity=27.1%

Ratio:R=18.0% G=78.2% B=3.8%;;Peak WL:Lp=454.0nm FWHM=25.4nm

Render Index:Ra=82.2

R1 =80	R2 =90	R3 =95	R4 =79	R5 =80	R6 =85	R7 =85		
R8 =63	R9 =5	R10=75	R11=77	R12=59	R13=83	R14=98	R15=74	

Photo Parameters:

Flux = 991.8 lm Eff. : 98.89 lm/W Fe = 3.005 W

Electrical parameters:

V = 12.080 V I = 0.8303 A P = 10.03 W PF = 1.000

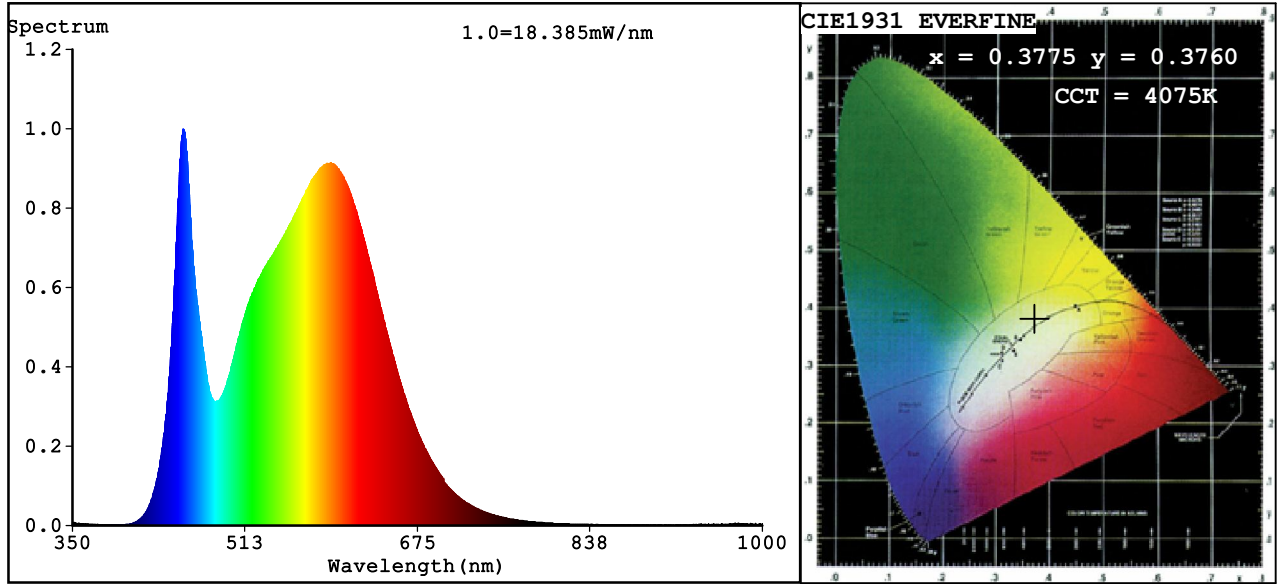
WHITE:ANSI_4000K

Status: Integral T = 51 ms Ip = 44944 (69%)

Model:LED Module/9W
Tester:Petya Marinova
Temperature:25.3Deg
Manufacturer:ELMARK

Number:99LED766T
Date:2018-01-16 13:05
Humidity:65.0%
Remarks:017V37A_4082

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3775$ $y=0.3760$ / $u'=0.2234$ $v'=0.5008$

CCT=4075K (Duv=0.0005) Dominant WL:Ld =578.5nm Purity=26.1%

Ratio:R=17.9% G=78.1% B=3.9%; Peak WL:Lp=454.4nm FWHM=26.4nm

Render Index:Ra=82.4

R1 =81	R2 =90	R3 =95	R4 =79	R5 =80	R6 =86	R7 =85	
R8 =63	R9 =6	R10=76	R11=77	R12=60	R13=83	R14=98	R15=75

Photo Parameters:

Flux = 965.6 lm Eff. : 97.92 lm/W Fe = 2.941 W

Electrical parameters:

V = 12.080 V I = 0.8163 A P = 9.861 W PF = 1.000

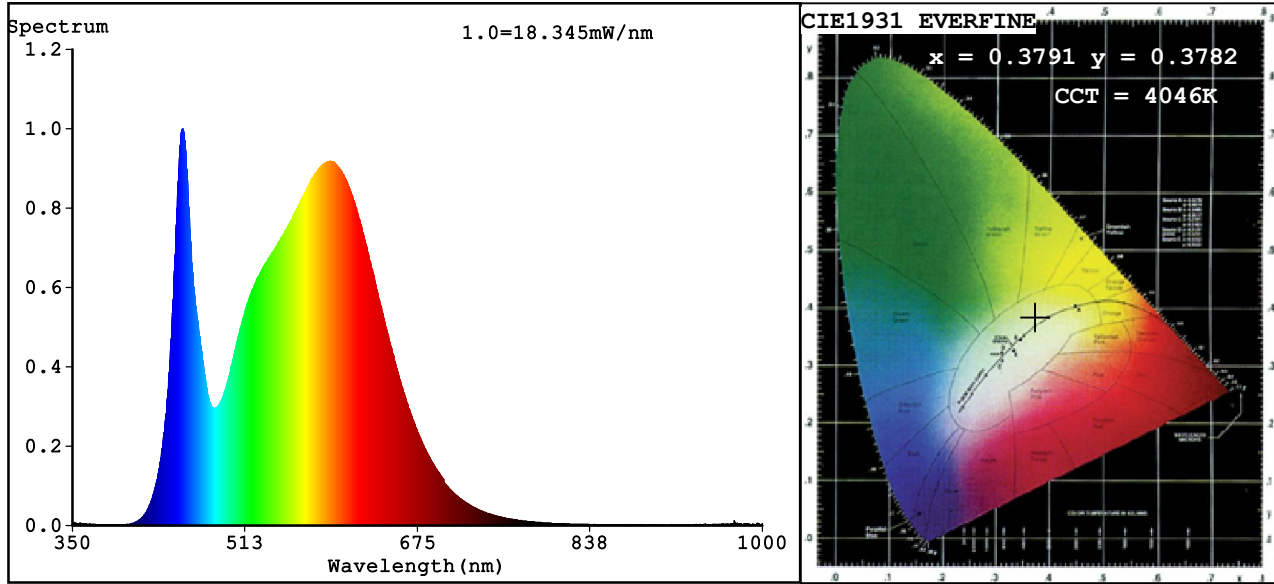
WHITE:ANSI_4000K

Status: Integral T = 51 ms Ip = 43814 (67%)

Model:LED Module/9W
Tester:Petya Marinova
Temperature:25.3Deg
Manufacturer:ELMARK

Number:99LED766T
Date:2018-01-16 13:07
Humidity:65.0%
Remarks:017V37A_4082

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3791$ $y=0.3782$ $u'=0.2237$ $v'=0.5020$
 CCT=4046K(Duv=0.0011) Dominant WL:Ld =578.3nm Purity=27.3%
 Ratio:R=18.0% G=78.3% B=3.8%;;Peak WL:Lp=454.0nm FWHM=24.9nm
 Render Index:Ra=82.1
 R1 =80 R2 =90 R3 =95 R4 =79 R5 =80 R6 =85 R7 =85
 R8 =63 R9 =4 R10=74 R11=77 R12=59 R13=83 R14=98 R15=74

Photo Parameters:

Flux = 968.2 lm Eff. : 96.35 lm/W Fe = 2.930 W

Electrical parameters:

V = 12.080 V I = 0.8318 A P = 10.05 W PF = 1.000

WHITE:ANSI_4000K

Status: Integral T = 51 ms Ip = 43886 (67%)

Model:LED Module/9W
 Tester:Petya Marinova
 Temperature:25.3Deg
 Manufacturer:ELMARK

Number:99LED766T
 Date:2018-01-16 13:10
 Humidity:65.0%
 Remarks:017V37A_4082