

:

```
( 2 ) :x=0.7191 y=0.2789/u'=0.5861 v'=0.5114 duv=-1.388e-001
      :Tc=1001K      :λd=642.8nm      : Purity=99.4%
      :R=99.5% G=0.4% B=0.0%      :λp=656.5nm      :Δλd=16.3nm
      :Ra=8.4 AvgR=-1.1 Kred=99.09%
R1 =4.25      R2 =80.15      R3 =22.55      R4 =-30.33      R5 =-0.82
R6 =88.14      R7 =-2.67      R8 =-93.85      R9 =-271.71      R10=78.40
R11=-13.91      R12=81.26      R13=31.70      R14=53.48      R15=-43.32
```

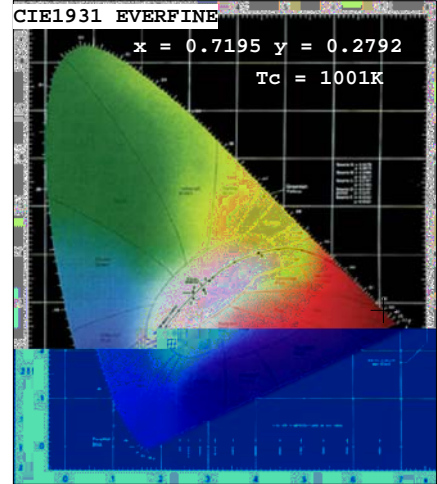
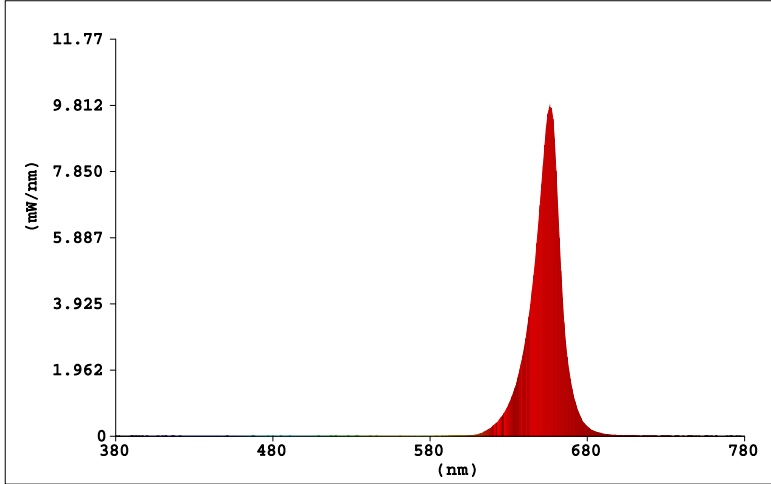
:

```
400~700nm : PPF: 0.73485μmol/s
            PRF:134.92mW
            Eff(PPF): 4.10μmol/s/W
```

:

```
VF = 1.784 V      IF = 100.4 mA      P = 179.2 mW
:**[OUT]          :OUT
```

```
:5#              :3
:DAMIN           :2021-01-26 11-27
:25.3           :65.0%
:EVERFINE       :5
:damin
:LED300 + HAAS1200_V1_USB
```



:

```
( 2 ) :x=0.7195  y=0.2792/u'=0.5860  v'=0.5116  duv=-1.387e-001
      :Tc=1001K      :λd=642.2nm      : Purity=99.6%
      :R=99.5% G=0.5% B=0.0%      :λp=656.3nm      :Δλd=16.7nm
      :Ra=10.1  AvgR=0.6  Kred=99.04%
R1 =5.72      R2 =80.46      R3 =24.49      R4 =-26.87      R5 =1.32
R6 =88.46      R7 =-1.23      R8 =-91.63      R9 =-268.43      R10=78.61
R11=-9.23      R12=81.41      R13=33.00      R14=54.68      R15=-41.81
```

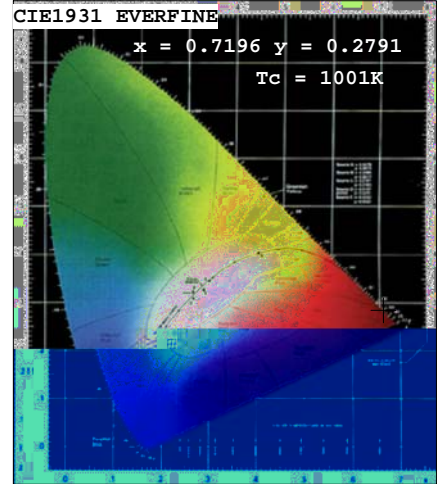
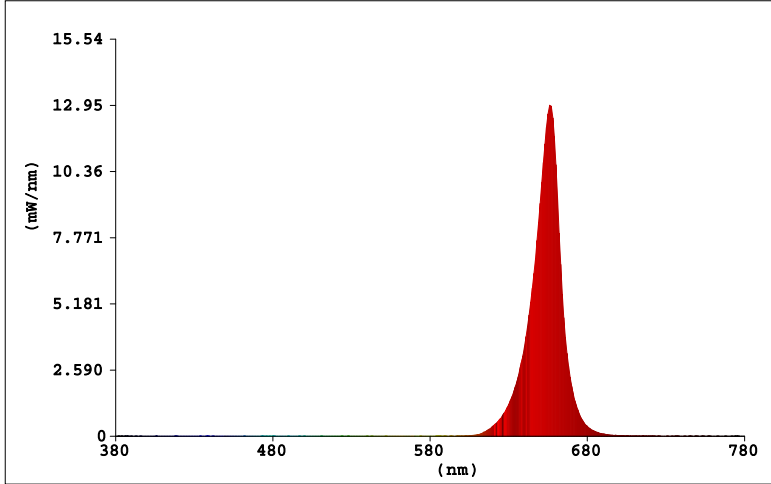
:

```
400~700nm  :      PPF: 1.1106μmol/s
              PRF:203.87mW
              Eff(PPF): 4.05μmol/s/W
```

:

```
VF = 1.824 V      IF = 150.4 mA      P = 274.5 mW
:**[OUT]          :OUT
```

```
:5#              :4
:DAMIN           :2021-01-26 11-28
:25.3           :65.0%
:EVERFINE       :5
:damin
:LED300 + HAAS1200_V1_USB
```



:

```
( 2 ) :x=0.7196  y=0.2791/u'=0.5863  v'=0.5116  duv=-1.390e-001
      :Tc=1001K      :λd=642.4nm      : Purity=99.6%
      :R=99.5% G=0.4% B=0.0%      :λp=655.9nm      :Δλd=17.0nm
      :Ra=8.4  AvgR=-1.1  Kred=99.11%
R1 =4.04      R2 =79.80      R3 =23.61      R4 =-30.14      R5 =-1.29
R6 =87.36     R7 =-2.45      R8 =-94.07     R9 =-272.54    R10=77.35
R11=-13.81    R12=83.05      R13=31.52     R14=54.11     R15=-43.65
```

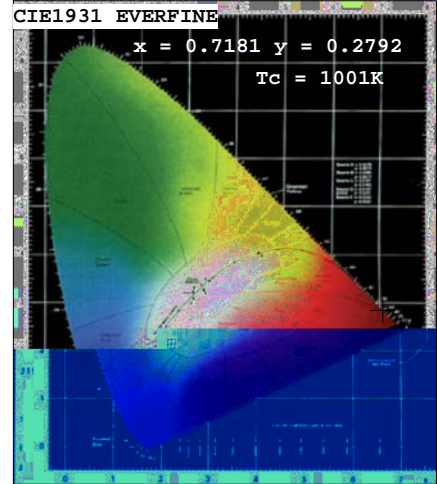
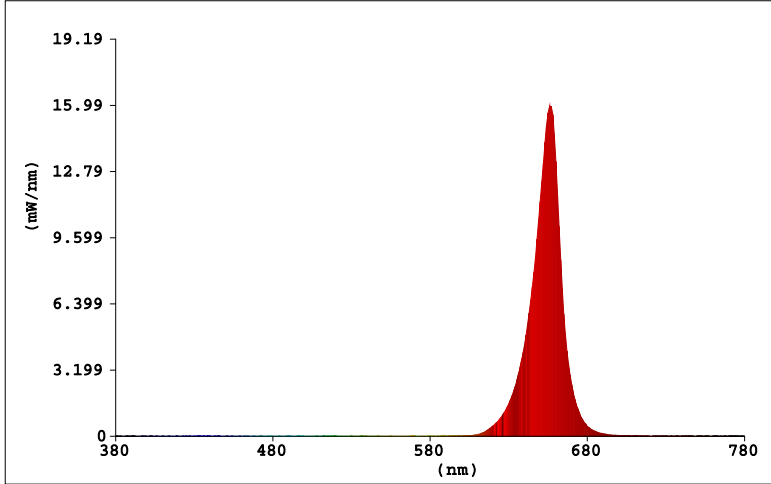
:

```
400~700nm  :      PPF: 1.4883μmol/s
              PRF:273.18mW
              Eff(PPF): 3.98μmol/s/W
```

:

```
VF = 1.863 V      IF = 200.4 mA      P = 373.5 mW
:**[OUT]          :OUT
```

```
:5#              :5
:DAMIN           :2021-01-26 11-28
:25.3           :65.0%
:EVERFINE       :5
:damin
:LED300 + HAAS1200_V1_USB
```



:

( 2 ) : x=0.7181 y=0.2792/u'=0.5846 v'=0.5113 duv=-1.373e-001  
 : Tc=1001K : λd=642.6nm : Purity=99.2%  
 : R=99.2% G=0.7% B=0.1% : λp=656.3nm : Δλd=17.3nm  
 : Ra=14.8 AvgR=5.3 Kred=98.75%  
 R1 =10.52 R2 =82.70 R3 =27.10 R4 =-19.25 R5 =8.31  
 R6 =91.31 R7 =2.13 R8 =-84.20 R9 =-255.30 R10=82.61  
 R11=0.06 R12=74.82 R13=37.32 R14=56.38 R15=-35.74

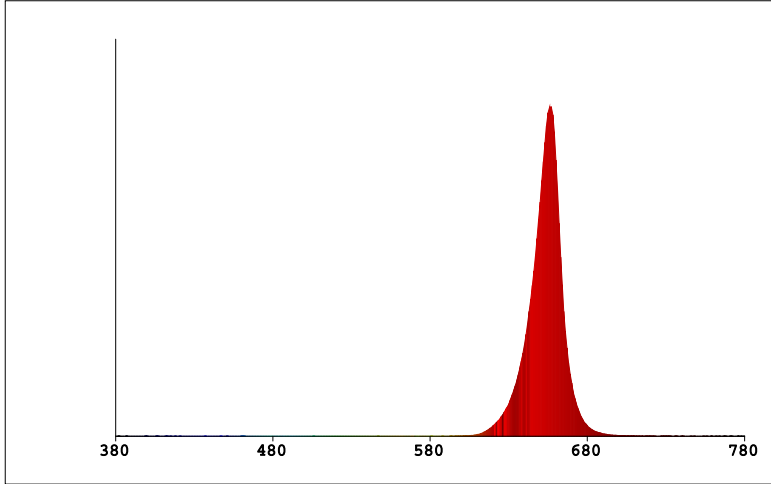
:

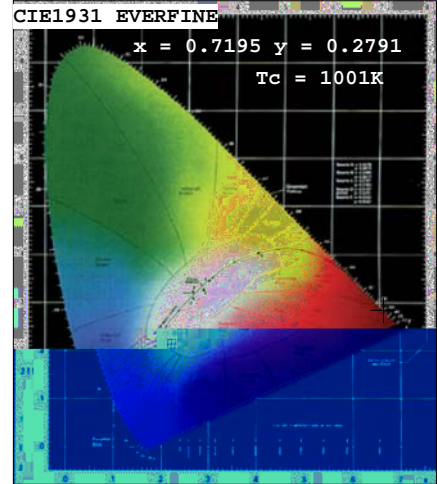
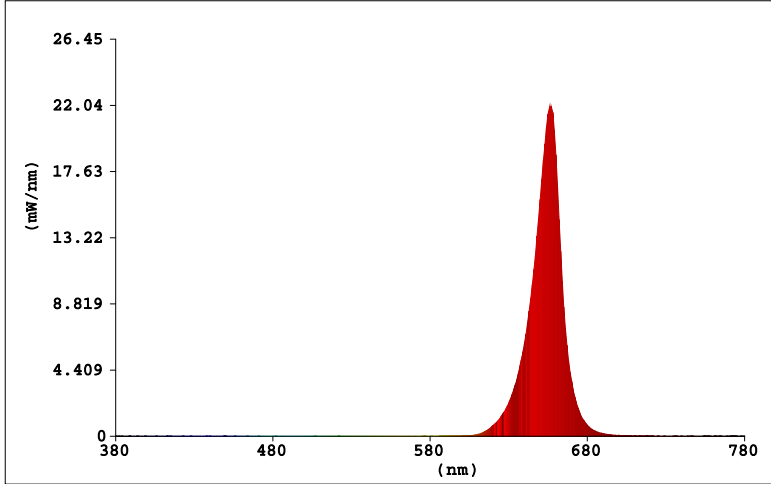
400~700nm : PPF: 1.8648μmol/s  
 PRF: 342.34mW  
 Eff(PPF): 3.94μmol/s/W

:

VF = 1.896 V IF = 249.7 mA P = 473.4 mW  
 \*\*: [OUT] : OUT

:5# :6  
 :DAMIN :2021-01-26 11-28  
 :25.3 :65.0%  
 :EVERFINE :5  
 :damin  
 :LED300 + HAAS1200\_V1\_USB





:

( 2 ) : x=0.7195 y=0.2791/u'=0.5861 v'=0.5116 duv=-1.388e-001  
 :Tc=1001K :λd=642.3nm : Purity=99.6%  
 :R=99.5% G=0.4% B=0.0% :λp=657.2nm :Δλd=17.7nm  
 :Ra=7.7 AvgR=-1.7 Kred=99.07%  
 R1 =3.17 R2 =79.28 R3 =23.13 R4 =-31.54 R5 =-2.48  
 R6 =86.53 R7 =-2.40 R8 =-94.13 R9 =-272.72 R10=76.75  
 R11=-15.68 R12=83.88 R13=30.60 R14=53.70 R15=-44.10

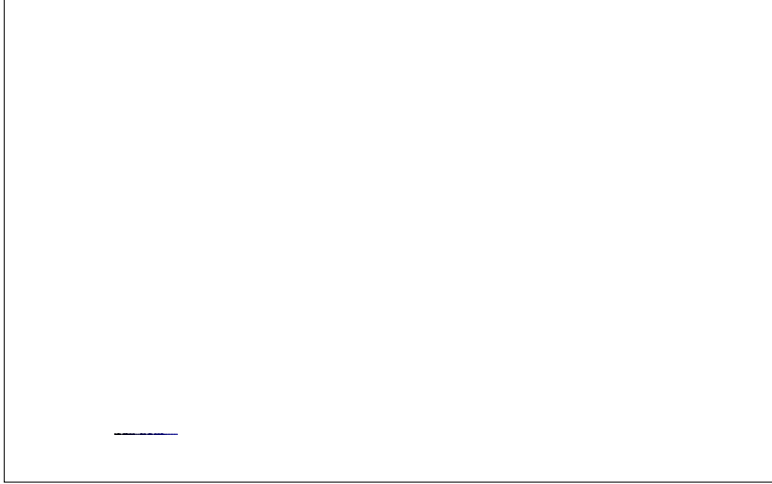
:

400~700nm : PPF: 2.6177μmol/s  
 PRF:480.38mW  
 Eff(PPF): 3.81μmol/s/W

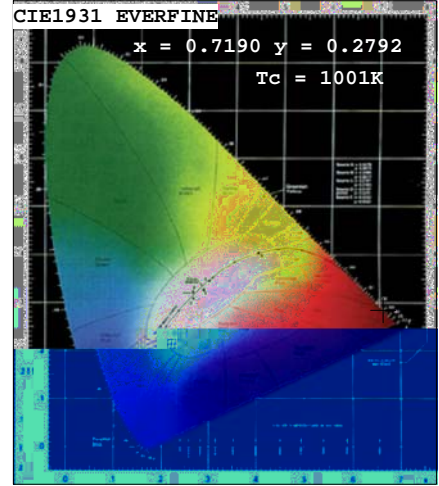
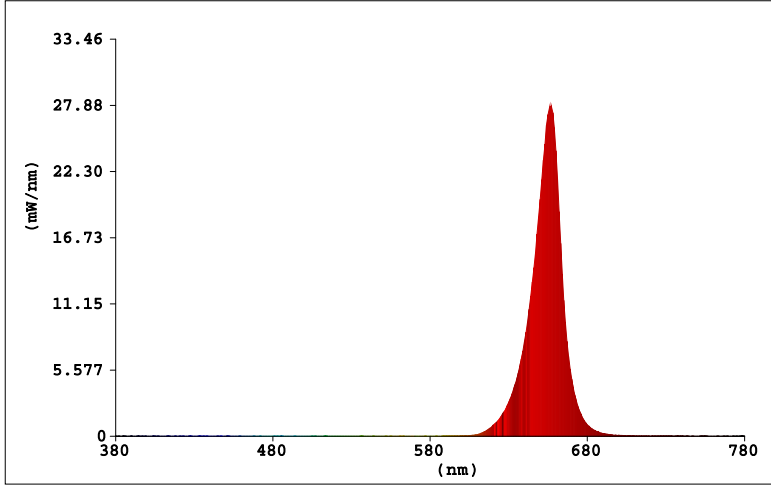
:

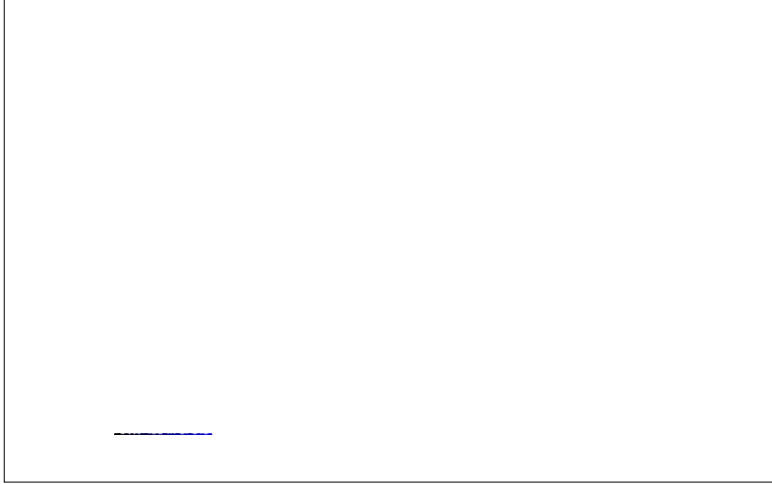
VF = 1.961 V IF = 350.3 mA P = 687.3 mW  
 : \*\*[OUT] : OUT

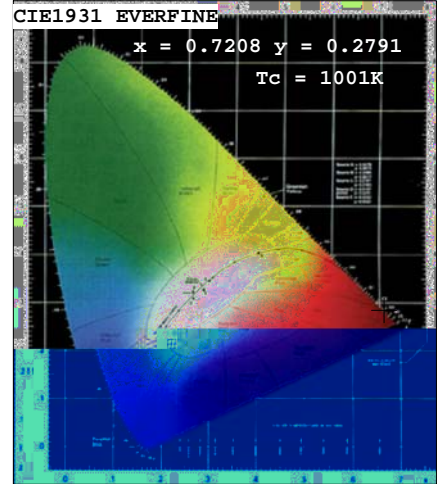
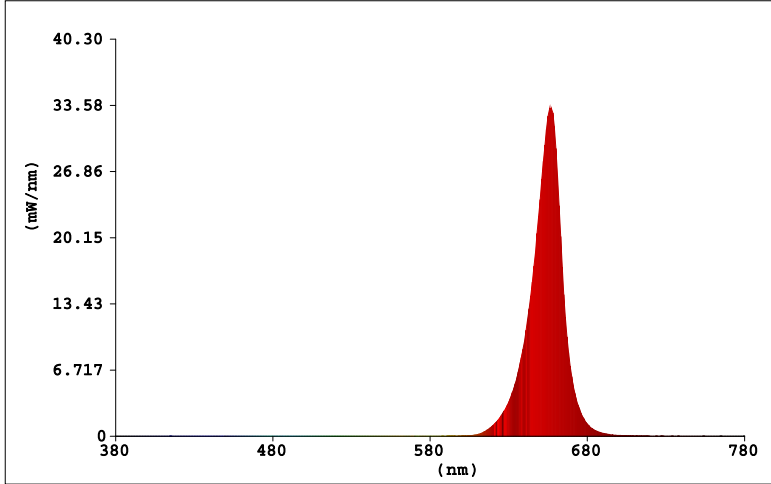
:5# :9  
 :DAMIN :2021-01-26 11-29  
 :25.3 :65.0%  
 :EVERFINE :5  
 :damin  
 :LED300 + HAAS1200\_V1\_USB











:

```
( 2 ) :x=0.7208  y=0.2791/u'=0.5876  v'=0.5118  duv=-1.403e-001
      :Tc=1001K      :λd=642.1nm      : Purity=100.0%
      :R=99.9% G=0.1% B=0.0%      :λp=656.6nm      :Δλd=18.4nm
      :Ra=1.1  AvgR=-8.6  Kred=99.42%
R1 =-3.35      R2 =76.54      R3 =18.95      R4 =-42.34      R5 =-11.95
R6 =82.75      R7 =-7.18      R8 =-104.22    R9 =-290.25    R10=72.13
R11=-28.82     R12=85.14     R13=24.91     R14=50.90     R15=-52.32
```

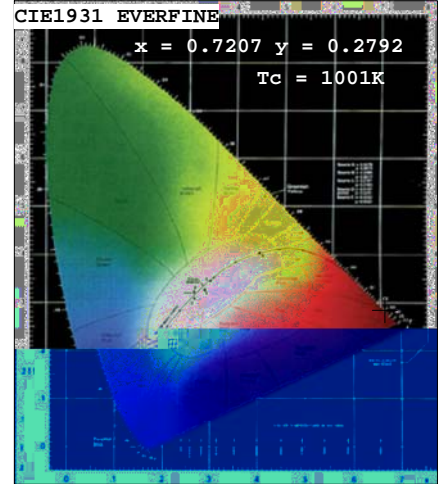
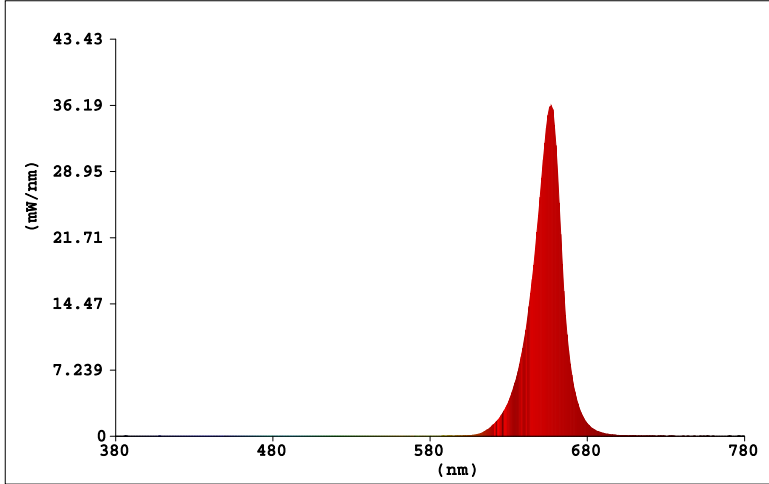
:

```
400~700nm  :      PPF: 4.0942μmol/s
              PRF:750.98mW
              Eff(PPF): 3.58μmol/s/W
```

:

```
VF = 2.080 V      IF = 550.3 mA      P = 1145 mW
:**[OUT]          :OUT
```

```
:5#              :13
:DAMIN           :2021-01-26 11-30
:25.3           :65.0%
:EVERFINE       :5
:damin
:LED300 + HAAS1200_V1_USB
```



:

```
( 2 ) :x=0.7207  y=0.2792/u'=0.5873  v'=0.5118  duv=-1.400e-001
      :Tc=1001K      :λd=642.1nm      : Purity=99.9%
      :R=99.8% G=0.2% B=0.0%      :λp=656.6nm      :Δλd=18.6nm
      :Ra=2.3  AvgR=-7.4  Kred=99.34%
R1 =-2.26      R2 =76.89      R3 =19.79      R4 =-40.50      R5 =-10.41
R6 =83.10      R7 =-6.12      R8 =-102.16    R9 =-286.72    R10=72.78
R11=-26.76     R12=85.36     R13=25.76     R14=51.41     R15=-50.70
```

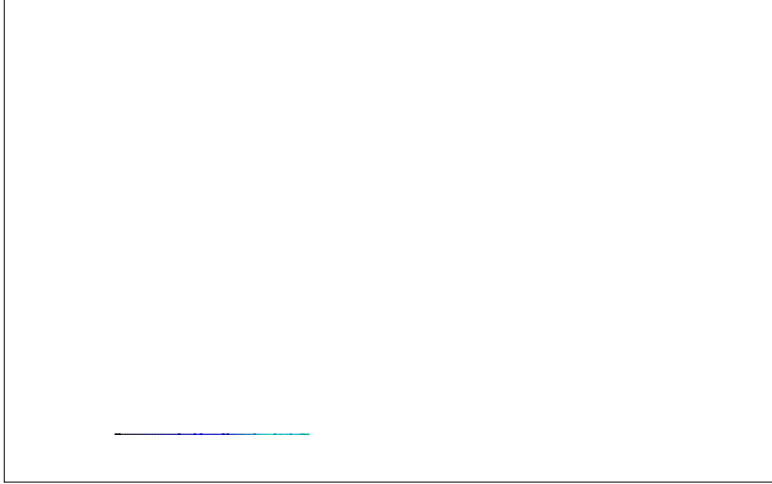
:

```
400~700nm  :      PPF: 4.463μmol/s
              PRF:818.63mW
              Eff(PPF): 3.53μmol/s/W
```

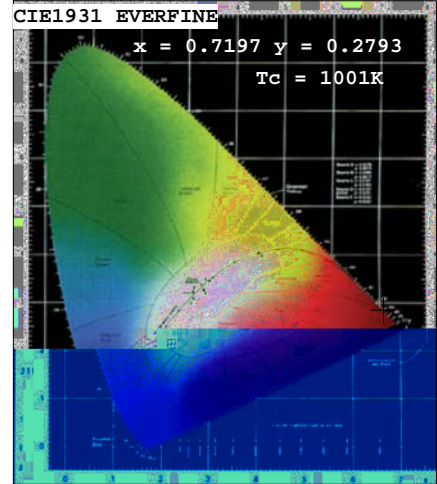
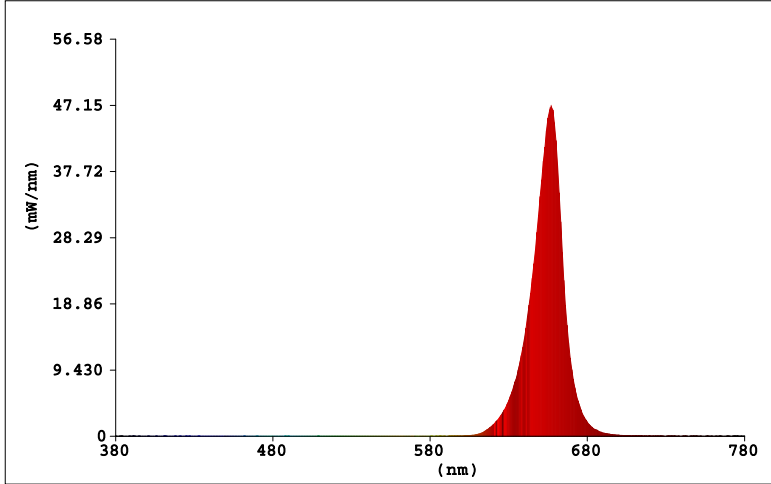
:

```
VF = 2.108 V      IF = 600.3 mA      P = 1266 mW
:**[OUT]          :OUT
```

```
:5#              :14
:DAMIN           :2021-01-26 11-30
:25.3           :65.0%
:EVERFINE       :5
:damin
:LED300 + HAAS1200_V1_USB
```

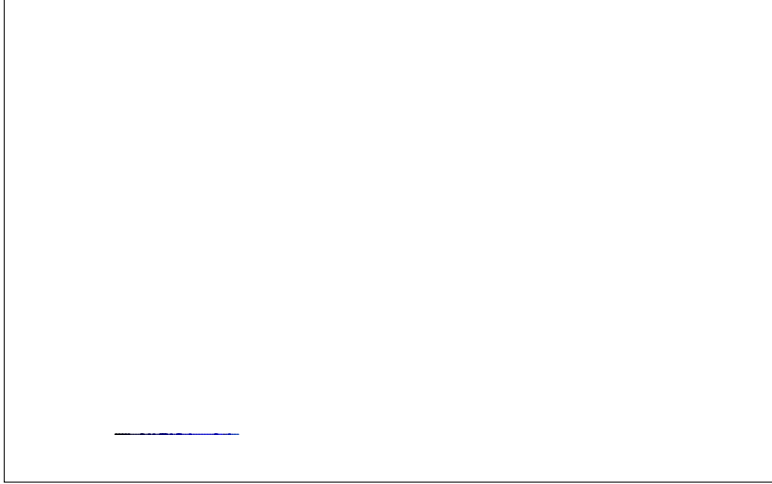




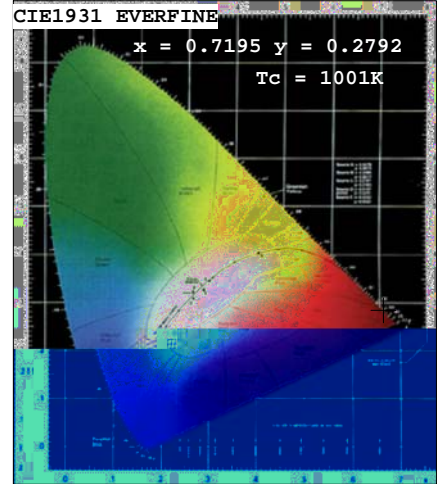
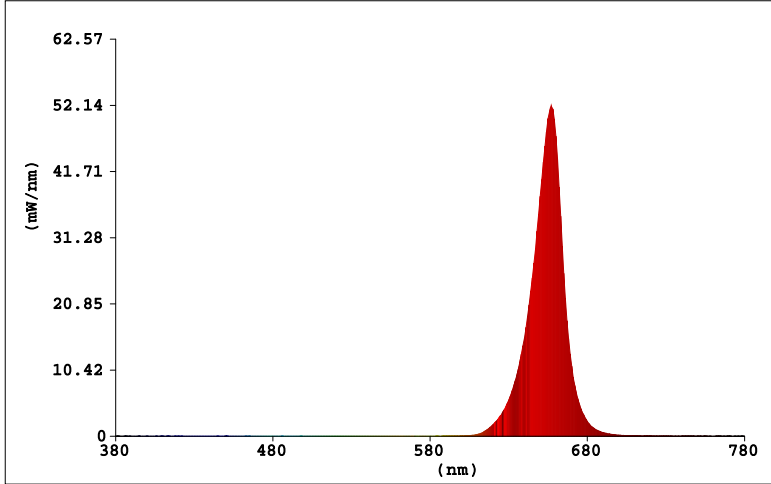


:

( 2 ) : x=0.7197 y=0.2793 / u'=0.5860 v'=0.5117 duv=-1.388e-001  
 : Tc=1001K : λ







:

( 2 ) : x=0.7195 y=0.2792/u'=0.5860 v'=0.5116 duv=-1.387e-001  
 : Tc=1001K : λd=642.2nm : Purity=99.6%  
 : R=99.6% G=0.4% B=0.0% : λp=657.2nm : Δλd=19.4nm  
 : Ra=6.7 AvgR=-2.7 Kred=99.09%  
 R1 =2.18 R2 =78.87 R3 =21.98 R4 =-33.46 R5 =-3.87  
 R6 =85.67 R7 =-2.68 R8 =-94.76 R9 =-273.78 R10=76.43  
 R11=-18.43 R12=84.32 R13=29.66 R14=52.92 R15=-44.90

:

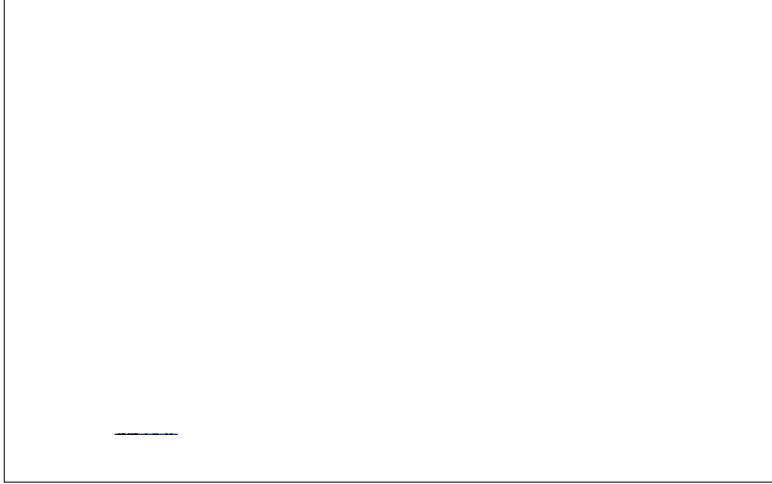
400~700nm : PPF: 6.6369μmol/s  
 PRF:1217mW  
 Eff(PPF): 3.25μmol/s/W

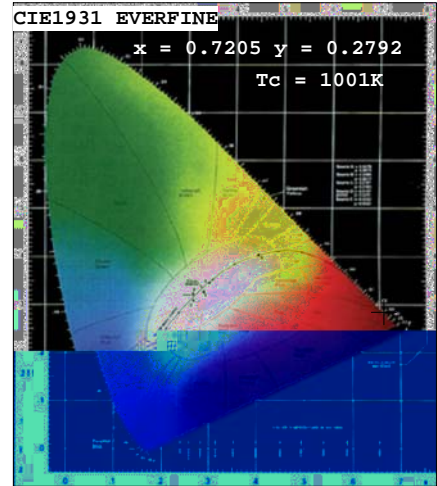
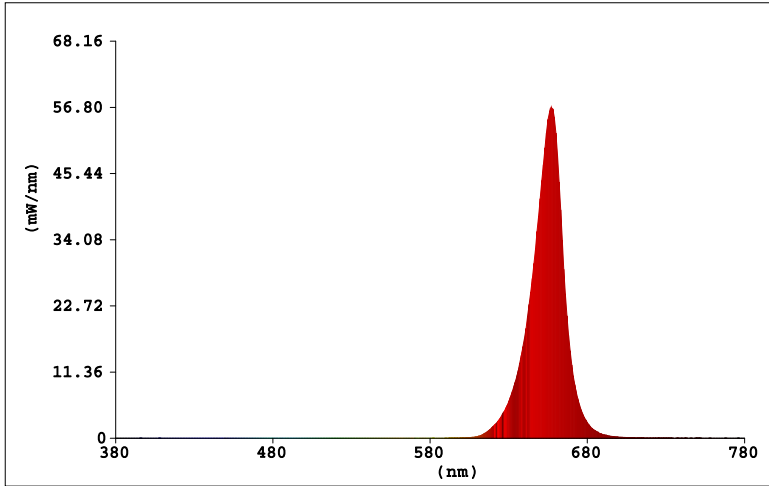
:

VF = 2.269 V IF = 900.2 mA P = 2043 mW  
 : \*\* [OUT] : OUT

:5#  
 :DAMIN  
 :25.3  
 :EVERFINE

:19  
 :2021-01-26 11-31  
 :65.0%





:

( 2 ) :x=0.7205 y=0.2792/u'=0.5870 v'=0.5118 duv=-1.398e-001

:Tc=1001K :λd=642.1nm : Purity=99.9%

:R=99.8% G=0.2% B=0.0% :λp=656.9nm :Δλd=19.7nm

:Ra=2.9 AvgR=-6.7 Kred=99.29%

R1 =-1.72	R2 =77.10	R3 =20.03	R4 =-39.73	R5 =-9.65
R6 =83.13	R7 =-5.40	R8 =-100.80	R9 =-284.43	R10=73.26
R11=-26.12	R12=85.65	R13=26.21	R14=51.55	R15=-49.78

:

400~700nm :

PPF: 7.3444μmol/s

PRF:1346.3mW

Eff(PPF): 3.16μmol/s/W

:

VF = 2.321 V

IF = 1000 mA

P = 2323 mW

:\*\*[OUT]

:OUT

:5#  
 :DAMIN  
 :25.3  
 :EVERFINE  
 :damin  
 :LED300 + HAAS1200\_V1\_USB

:21  
 :2021-01-26 11-31  
 :65.0%  
 :5