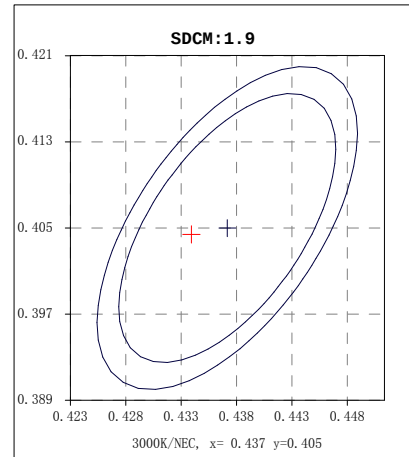
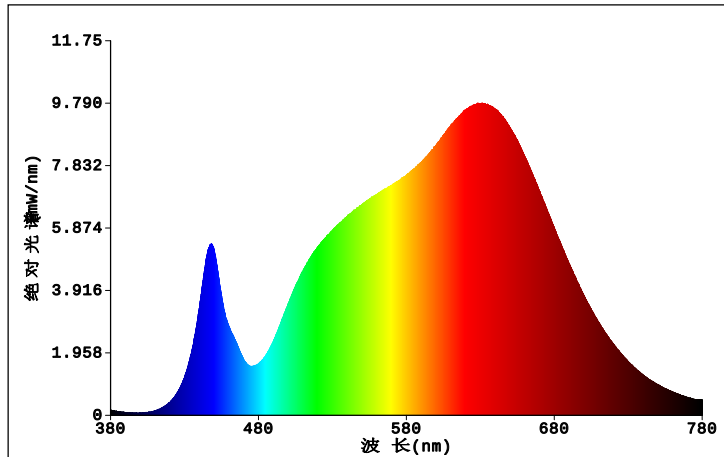


光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.4338$ $y=0.4044$ / $u'=0.2484$ $v'=0.5210$ $duv=5.807e-004$ 相关色温: $T_c=3057K$ 主波长: $\lambda_d=582.4nm$ 色纯度: Purity=51.6%色比: R=23.9% G=73.6% B=2.4% 峰值波长: $\lambda_p=628.4nm$ 半宽度: $\Delta\lambda_d=174.2nm$ 显色指数: $R_a=92.8$ $AvgR=90.2$ $K_{red}=17.00\%$ 平均波长 $\lambda_{av}=604.0nm$

R1 =94.25 R2 =93.66 R3 =91.35 R4 =93.90 R5 =92.94

R6 =91.17 R7 =94.61 R8 =90.17 R9 =74.55 R10=83.98

R11=94.24 R12=78.10 R13=93.74 R14=94.32 R15=92.47

TM30 参数: $R_f = 91.5$, $R_g:102.3$

光度参数:

光通量 $\Phi = 491.4 lm$ 光效: $112.55 lm/W$ $\phi_e = 1761 mW$ 光量子 $= 8.762e+000 umol/s$ 荧光蓝光比=8.95 荧光效能=3.629e-001

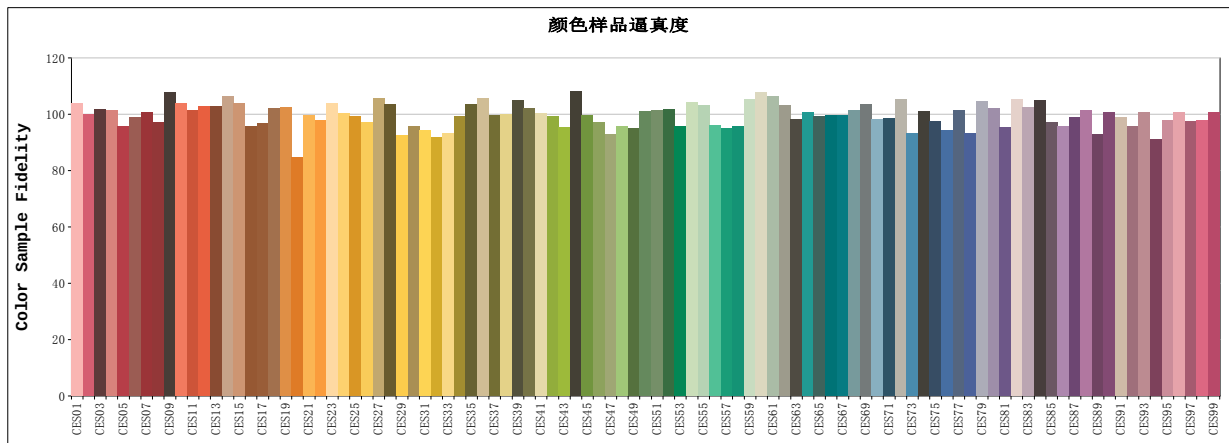
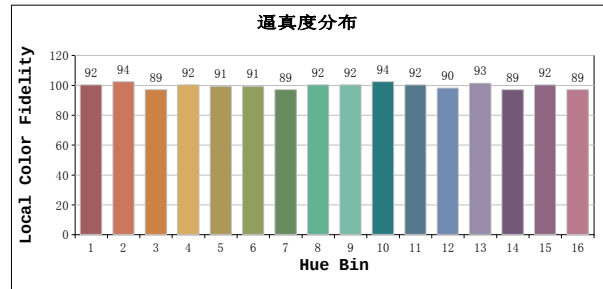
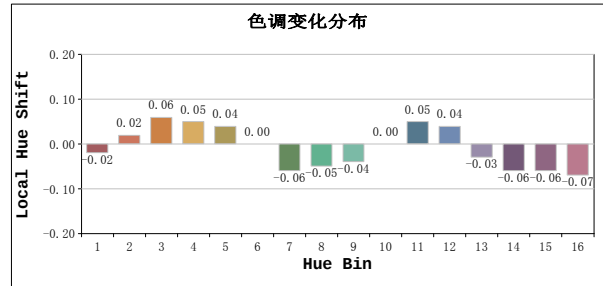
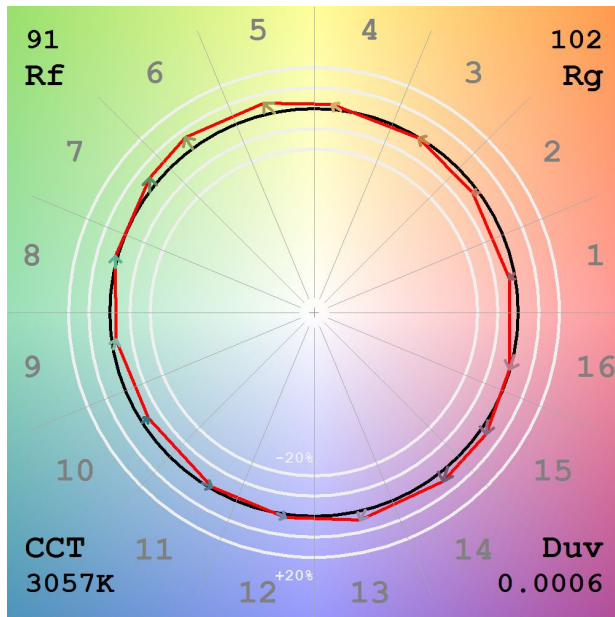
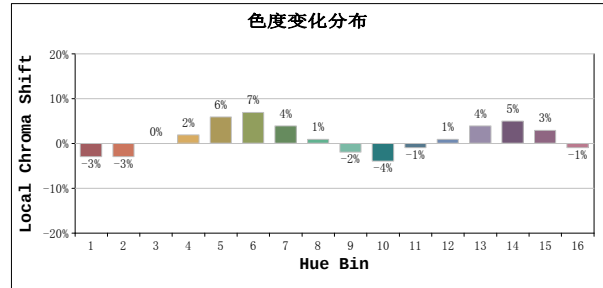
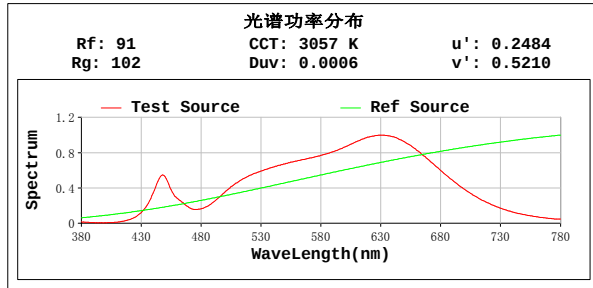
电参数:

正向电压 $V_F = 14.99 V$ 正向电流 $I_F = 291.2 mA$ 功率 $P = 4366 mW$ Ch1

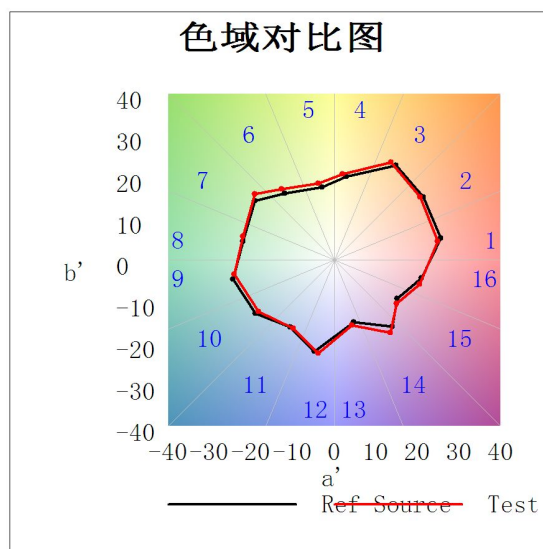
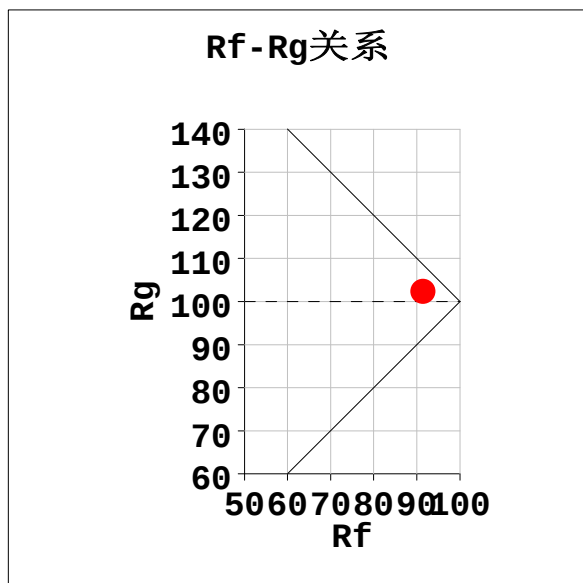
分级:*0[OUT] 白光分类:ANSI_3000K

仪器状态: 积分时间 $T=63.00ms$ $I_p=56849 (87\%)$ [HAAS2000_V1_USB] V2.00.302产品型号:3000K
测试人员:DAMIN
环境温度:25.3℃
制造厂商:EVERFINE
审核人员:damin
测试仪器:WY + HAAS2000_V1_USB产品编号:2
测试日期:2023-11-14 09-28
环境湿度:65.0%
备 注:---

IES TM-30-18 Color Rendition Report



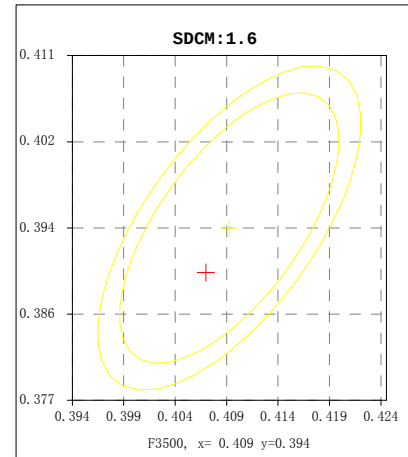
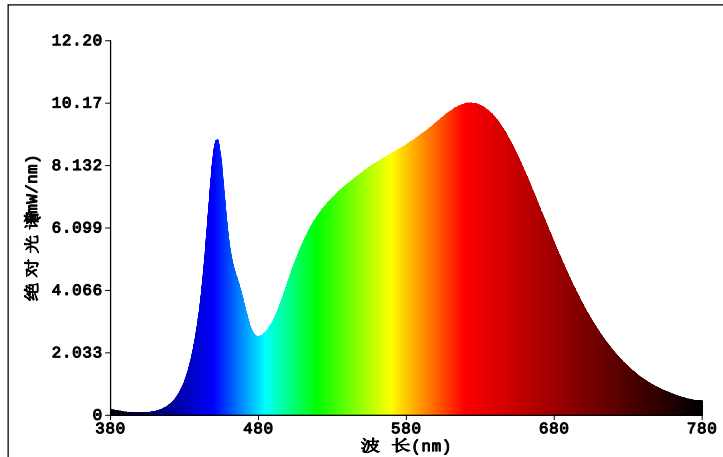
TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	92	-3	-2
2	22.5° - 45.0°	94	-3	2
3	45.0° - 67.5°	89	0	6
4	67.5° - 90.0°	92	2	5
5	90.0° - 112.5°	91	6	4
6	112.5° - 135.0°	91	7	0
7	135.0° - 157.5°	89	4	-6
8	157.5° - 180.0°	92	1	-5
9	180.0° - 202.5°	92	-2	-4
10	202.5° - 225.0°	94	-4	0
11	225.0° - 247.5°	92	-1	5
12	247.5° - 270.0°	90	1	4
13	270.0° - 292.5°	93	4	-3
14	292.5° - 315.0°	89	5	-6
15	315.0° - 337.5°	92	3	-6
16	337.5° - 360.0°	89	-1	-7

光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.4067$ $y=0.3897$ / $u'=0.2371$ $v'=0.5110$ $duv=-7.764e-004$ 相关色温: $T_c=3460K$ 主波长: $\lambda_d=581.3nm$ 色纯度: Purity=39.0%色比: R=21.7% G=75.1% B=3.1% 峰值波长: $\lambda_p=623.0nm$ 半宽度: $\Delta\lambda_d=179.0nm$ 显色指数: $R_a=92.3$ $AvgR=89.0$ $K_{red}=15.15\%$ 平均波长 $\lambda_{av}=591.8nm$

R1 =93.01 R2 =94.15 R3 =93.17 R4 =92.78 R5 =91.73

R6 =90.87 R7 =94.74 R8 =87.68 R9 =68.71 R10=84.56

R11=92.11 R12=71.82 R13=93.19 R14=95.51 R15=91.44

TM30 参数: $R_f = 91.1$, $R_g:101.1$

光度参数:

光通量 $\Phi = 573.0 lm$ 光效: $126.03 lm/W$ $\phi_e = 1989 mW$ 光量子= $9.723e+000 umol/s$ 荧光蓝光比=6.31 荧光效能= $3.778e-001$

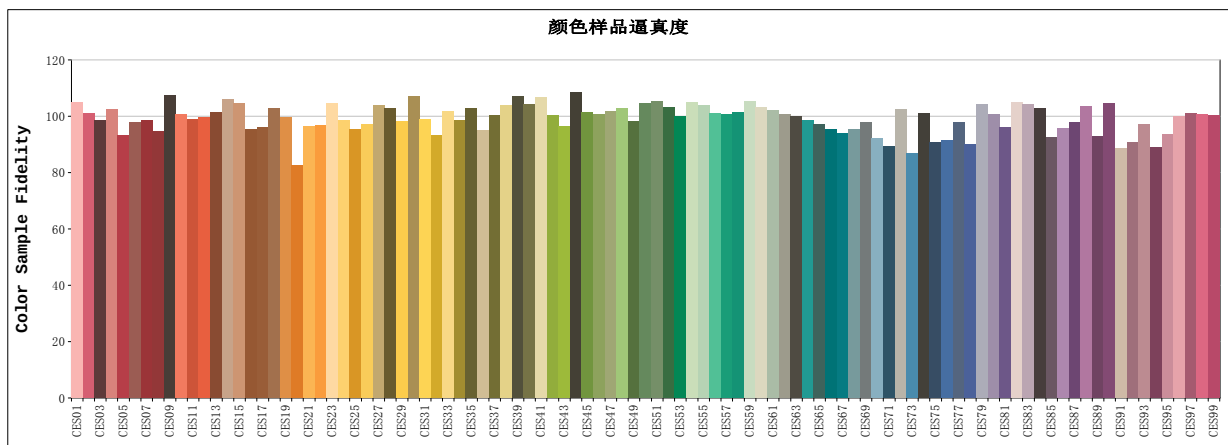
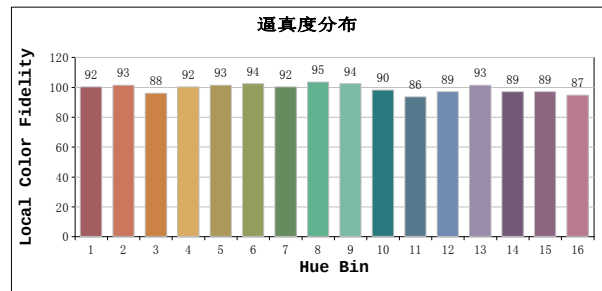
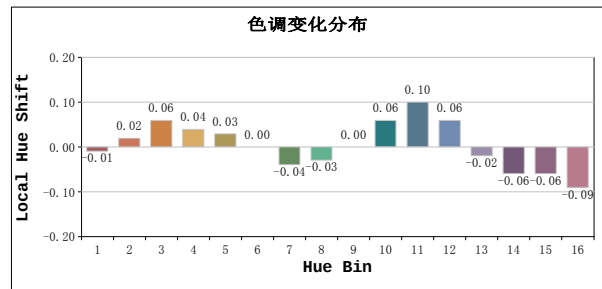
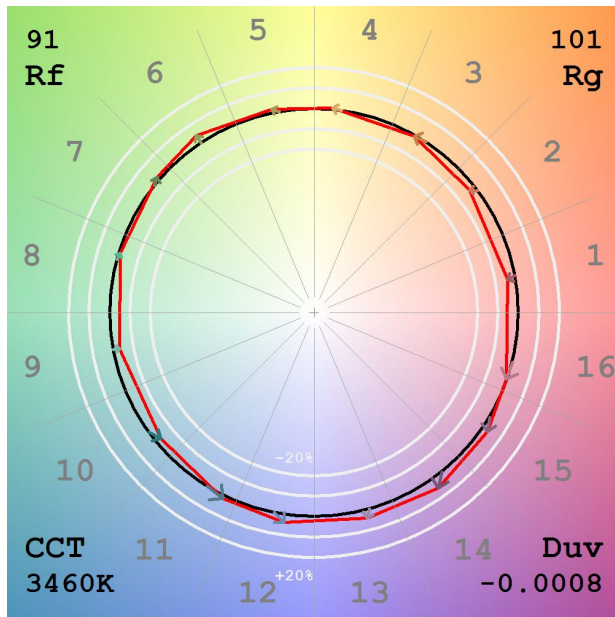
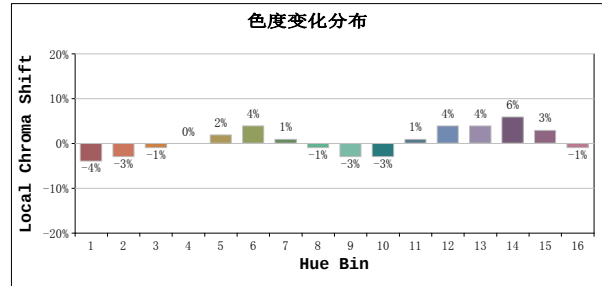
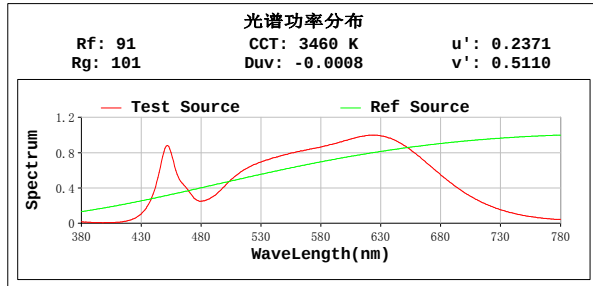
电参数:

正向电压 $V_F = 15.17 V$ 正向电流 $I_F = 299.8 mA$ 功率 $P = 4546 mW$ Ch1

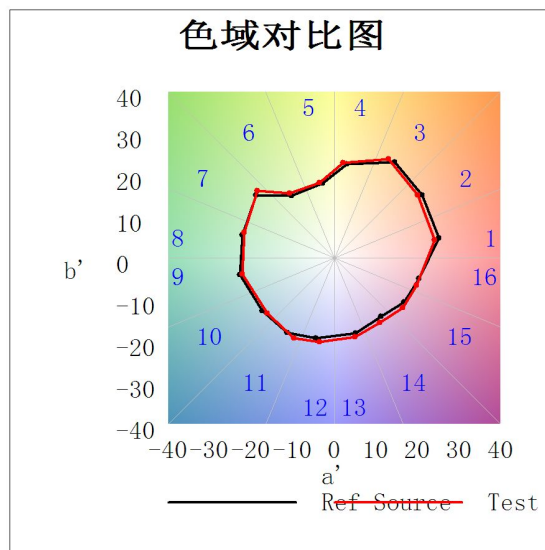
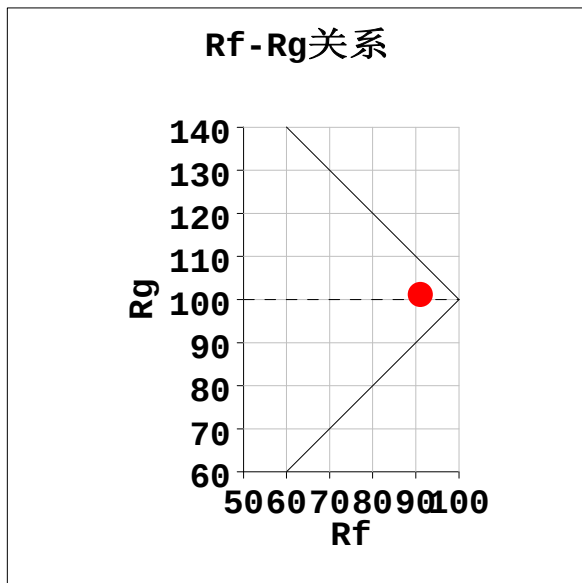
分级:*0[OUT] 白光分类:ANSI_3500K

仪器状态: 积分时间 $T=63.00ms$ $I_p=59531 (91\%)$ [HAAS2000_V1_USB] V2.00.302产品型号:3000K
测试人员:DAMIN
环境温度:25.3℃
制造厂商:EVERFINE
审核人员:damin
测试仪器:WY + HAAS2000_V1_USB产品编号:3
测试日期:2023-11-14 09-32
环境湿度:65.0%
备 注:---

IES TM-30-18 Color Rendition Report



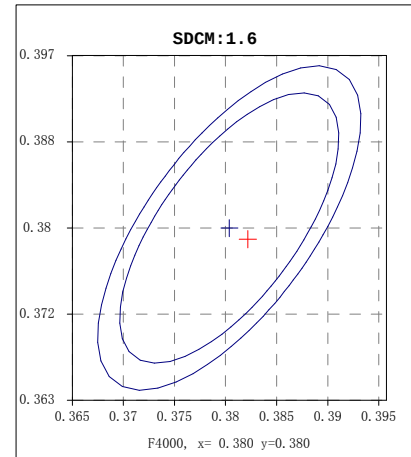
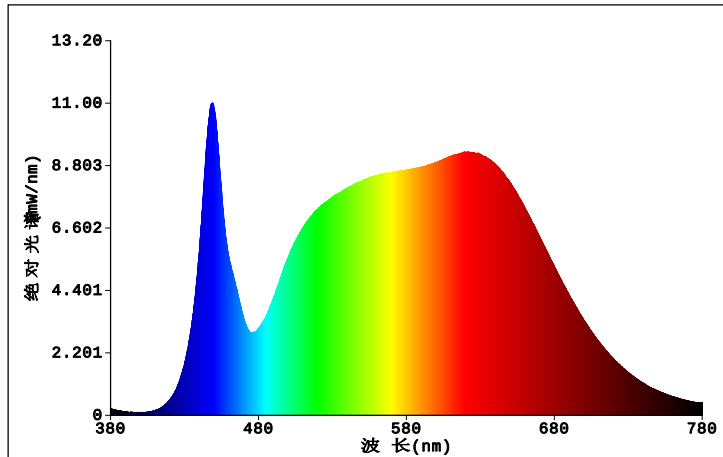
TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	92	-4	-1
2	22.5° - 45.0°	93	-3	2
3	45.0° - 67.5°	88	-1	6
4	67.5° - 90.0°	92	0	4
5	90.0° - 112.5°	93	2	3
6	112.5° - 135.0°	94	4	0
7	135.0° - 157.5°	92	1	-4
8	157.5° - 180.0°	95	-1	-3
9	180.0° - 202.5°	94	-3	0
10	202.5° - 225.0°	90	-3	6
11	225.0° - 247.5°	86	1	10
12	247.5° - 270.0°	89	4	6
13	270.0° - 292.5°	93	4	-2
14	292.5° - 315.0°	89	6	-6
15	315.0° - 337.5°	89	3	-6
16	337.5° - 360.0°	87	-1	-9

光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.3818$ $y=0.3789$ / $u'=0.2251$ $v'=0.5027$ $duv=6.102e-004$ 相关色温: $T_c=3979K$ 主波长: $\lambda_d=578.8nm$ 色纯度: $Purity=28.3\%$ 色比: $R=19.7\%$ $G=76.6\%$ $B=3.7\%$ 峰值波长: $\lambda_p=448.9nm$ 半宽度: $\Delta\lambda_d=20.7nm$ 显色指数: $R_a=92.3$ $AvgR=89.3$ $K_{red}=13.65\%$ 平均波长 $\lambda_{av}=581.4nm$ $R_1=93.03$ $R_2=93.20$ $R_3=92.04$ $R_4=93.31$ $R_5=92.09$ $R_6=89.77$ $R_7=94.89$ $R_8=89.93$ $R_9=71.92$ $R_{10}=83.21$ $R_{11}=93.05$ $R_{12}=72.63$ $R_{13}=92.79$ $R_{14}=95.21$ $R_{15}=91.79$ TM30 参数: $R_f=91.9$, $R_g=101.1$

光度参数:

光通量 $\Phi = 582.6 lm$ 光效: $127.38 lm/W$ $\phi_e = 2028 mW$ 光量子 $= 9.776e+000 umol/s$ 荧光蓝光比 $= 5.08$ 荧光效能 $= 3.705e-001$

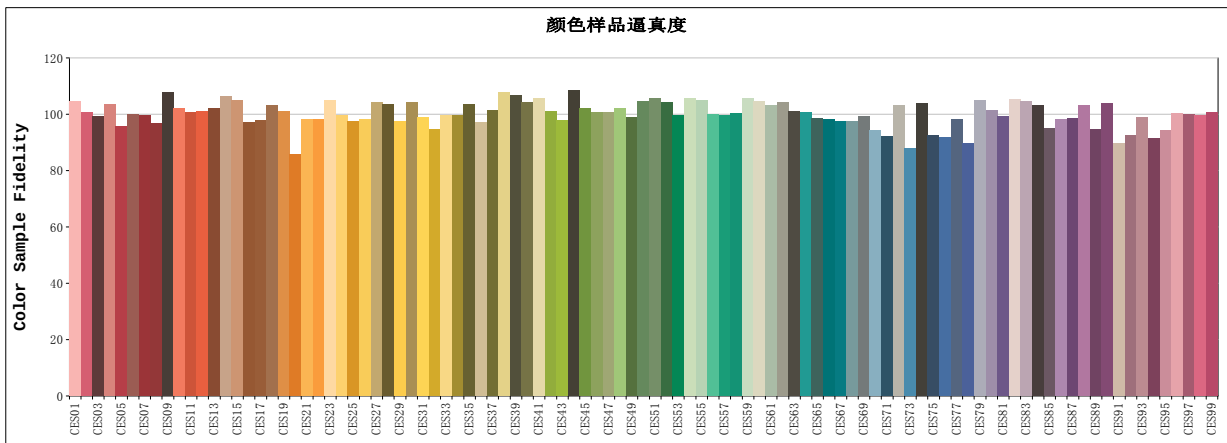
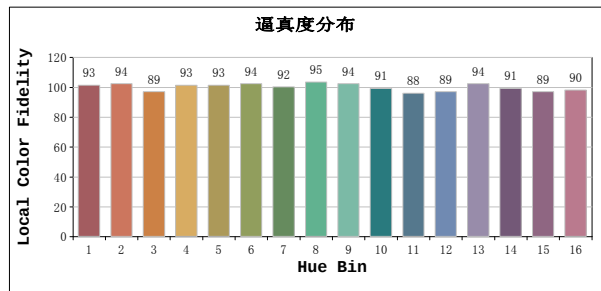
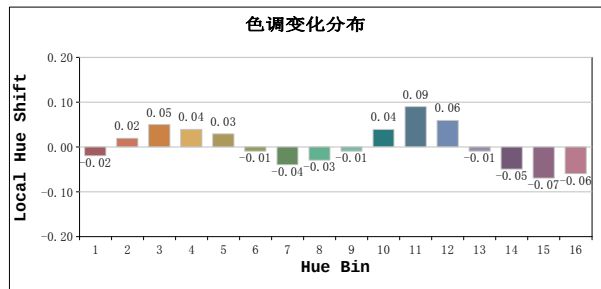
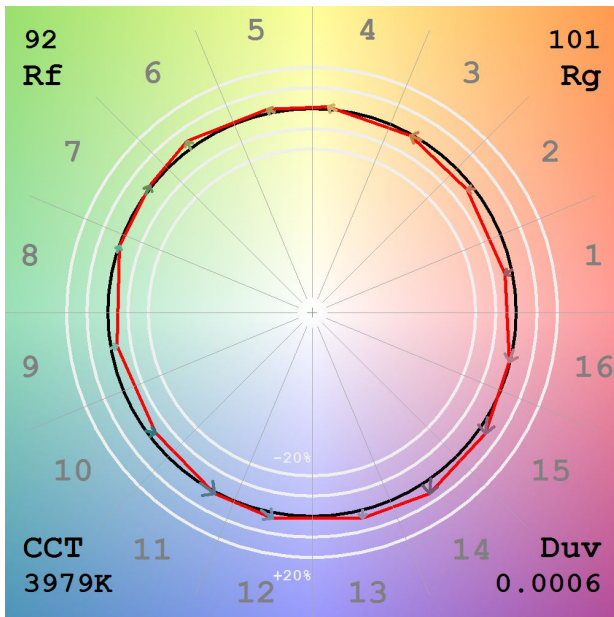
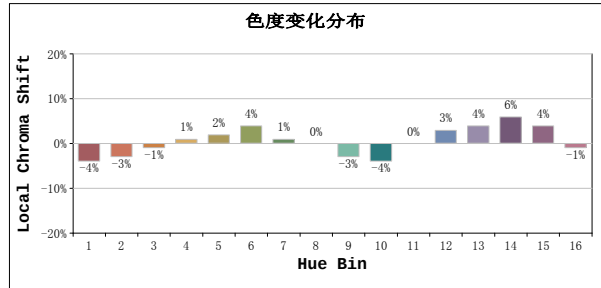
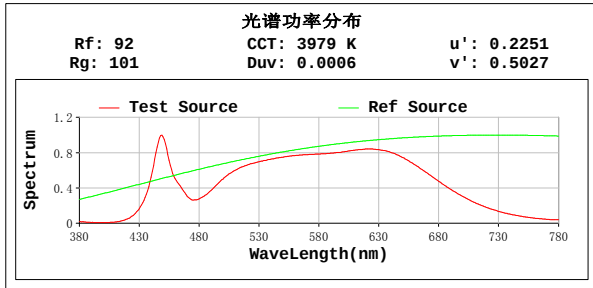
电参数:

正向电压 $V_F = 15.26 V$ 正向电流 $I_F = 299.8 mA$ 功率 $P = 4574 mW$ Ch1

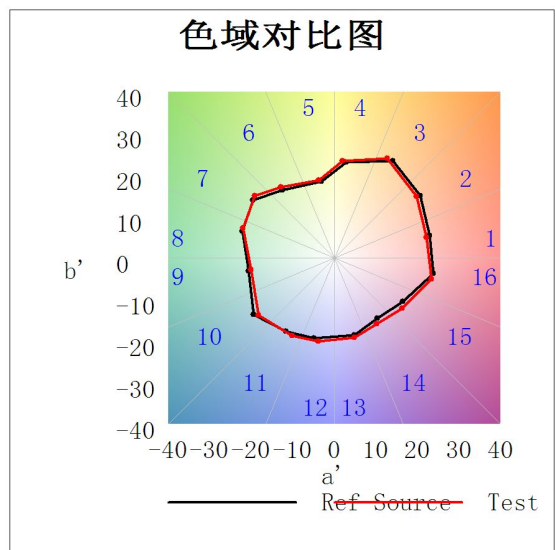
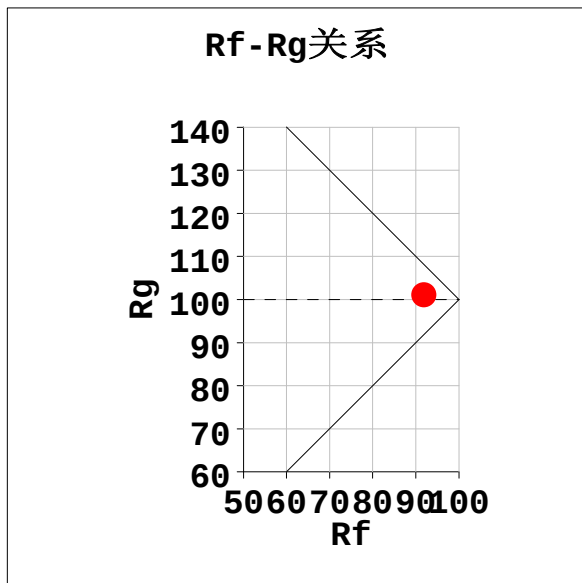
分级: *0[OUT] 白光分类: ANSI_4000K

仪器状态: 积分时间 $T=63.00ms$ $I_p=54677 (83\%)$ [HAAS2000_V1_USB] V2.00.302产品型号: 4000K
测试人员: DAMIN
环境温度: 25.3°C
制造厂商: EVERFINE
审核人员: damin
测试仪器: WY + HAAS2000_V1_USB产品编号: 4
测试日期: 2023-11-14 09-41
环境湿度: 65.0%
备 注: ---

IES TM-30-18 Color Rendition Report



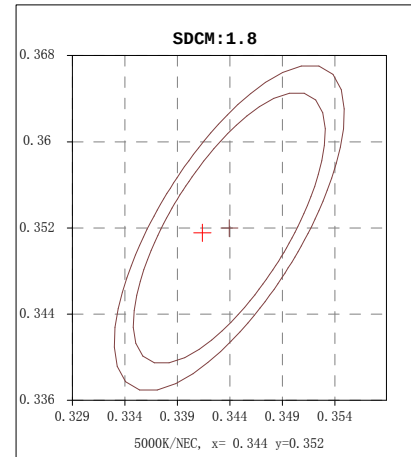
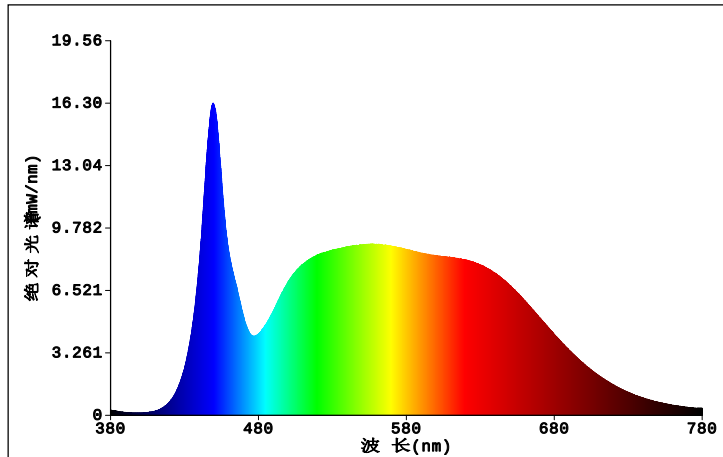
TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	93	-4	-2
2	22.5° - 45.0°	94	-3	2
3	45.0° - 67.5°	89	-1	5
4	67.5° - 90.0°	93	1	4
5	90.0° - 112.5°	93	2	3
6	112.5° - 135.0°	94	4	-1
7	135.0° - 157.5°	92	1	-4
8	157.5° - 180.0°	95	0	-3
9	180.0° - 202.5°	94	-3	-1
10	202.5° - 225.0°	91	-4	4
11	225.0° - 247.5°	88	0	9
12	247.5° - 270.0°	89	3	6
13	270.0° - 292.5°	94	4	-1
14	292.5° - 315.0°	91	6	-5
15	315.0° - 337.5°	89	4	-7
16	337.5° - 360.0°	90	-1	-6

光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.3414$ $y=0.3516$ / $u'=0.2090$ $v'=0.4841$ $duv=1.459e-003$ 相关色温: $T_c=5142K$ 主波长: $\lambda_d=568.8nm$ 色纯度: Purity=7.9%色比: R=16.7% G=78.4% B=5.0% 峰值波长: $\lambda_p=449.3nm$ 半宽度: $\Delta\lambda_d=20.6nm$ 显色指数: $R_a=92.3$ $AvgR=88.0$ $K_{red}=11.32\%$ 平均波长 $\lambda_{av}=560.6nm$

R1 =92.67 R2 =92.41 R3 =93.82 R4 =92.23 R5 =91.86

R6 =88.98 R7 =93.57 R8 =88.02 R9 =65.52 R10=81.81

R11=92.34 R12=72.46 R13=91.66 R14=95.42 R15=90.63

TM30 参数: $R_f = 90.5$, $R_g=100.6$

光度参数:

光通量 $\Phi = 606.3 lm$ 光效: $132.60 lm/W$ $\phi_e = 2112 mW$ 光量子 $= 9.897e+000 umol/s$ 荧光蓝光比=3.38 荧光效能=3.564e-001

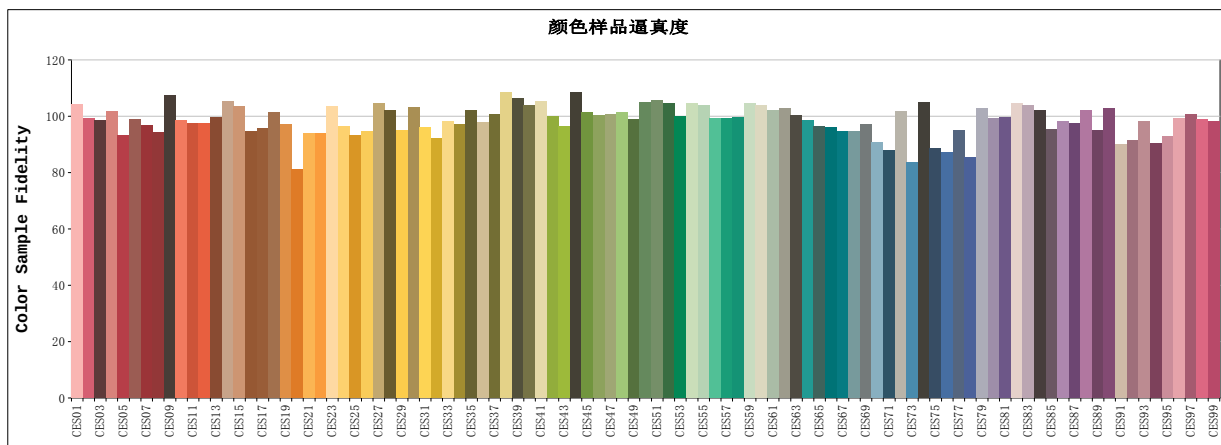
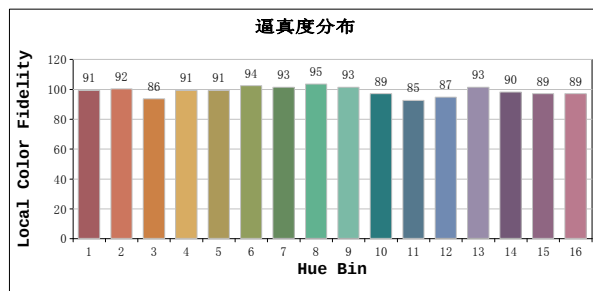
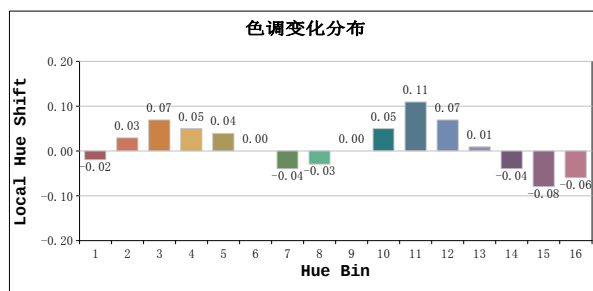
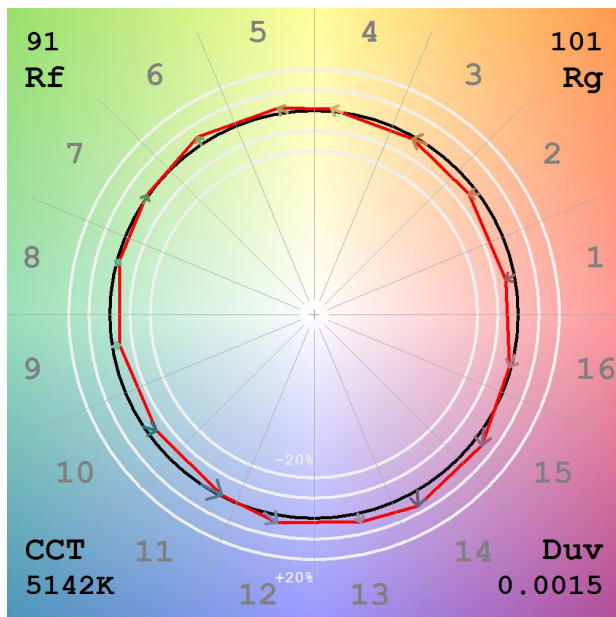
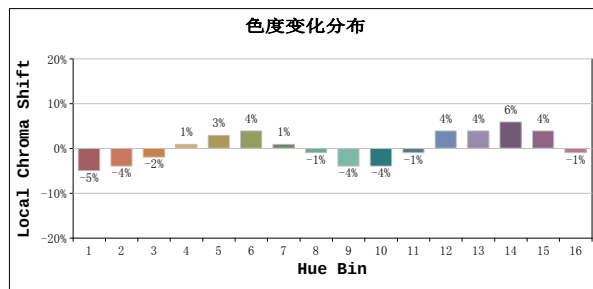
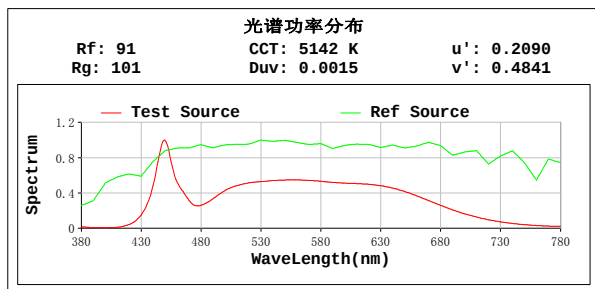
电参数:

正向电压 $V_F = 15.25 V$ 正向电流 $I_F = 299.8 mA$ 功率 $P = 4572 mW$ Ch1

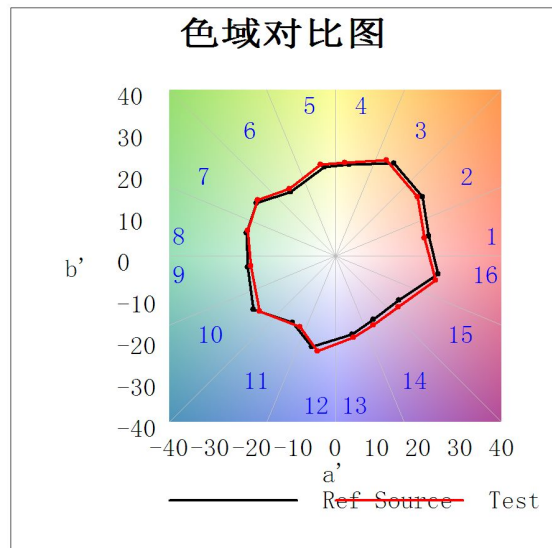
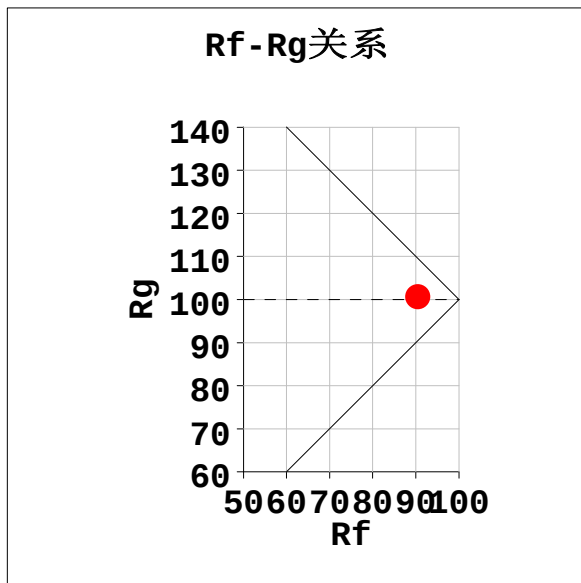
分级: *0[OUT] 白光分类: ANSI_5000K

仪器状态: 积分时间 $T=63.00ms$ $I_p=51372 (78\%)$ [HAAS2000_V1_USB] V2.00.302产品型号: 5000K
测试人员: DAMIN
环境温度: 25.3°C
制造厂商: EVERFINE
审核人员: damin
测试仪器: WY + HAAS2000_V1_USB产品编号: 5
测试日期: 2023-11-14 09-46
环境湿度: 65.0%
备 注: ---

IES TM-30-18 Color Rendition Report



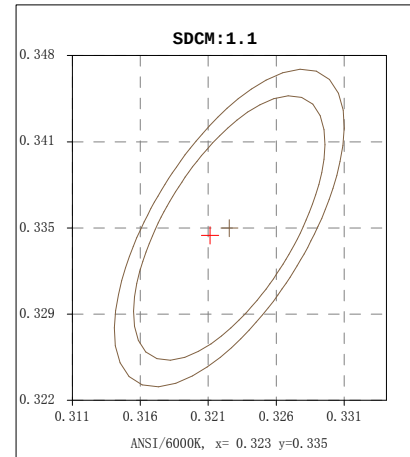
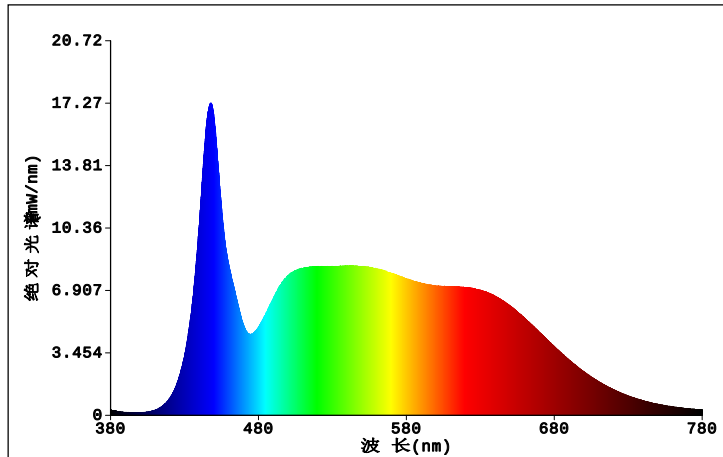
TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	91	-5	-2
2	22.5° - 45.0°	92	-4	3
3	45.0° - 67.5°	86	-2	7
4	67.5° - 90.0°	91	1	5
5	90.0° - 112.5°	91	3	4
6	112.5° - 135.0°	94	4	0
7	135.0° - 157.5°	93	1	-4
8	157.5° - 180.0°	95	-1	-3
9	180.0° - 202.5°	93	-4	0
10	202.5° - 225.0°	89	-4	5
11	225.0° - 247.5°	85	-1	11
12	247.5° - 270.0°	87	4	7
13	270.0° - 292.5°	93	4	1
14	292.5° - 315.0°	90	6	-4
15	315.0° - 337.5°	89	4	-8
16	337.5° - 360.0°	89	-1	-6

光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.3216$ $y=0.3345$ / $u'=0.2019$ $v'=0.4725$ $duv=1.635e-003$ 相关色温: $T_c=6016K$ 主波长: $\lambda_d=493.0nm$ 色纯度: Purity=3.9%色比: R=15.7% G=78.4% B=5.9% 峰值波长: $\lambda_p=447.8nm$ 半宽度: $\Delta\lambda_d=21.0nm$ 显色指数: $R_a=93.7$ $AvgR=91.6$ $K_{red}=10.74\%$ 平均波长 $\lambda_{av}=550.5nm$

R1 =95.14 R2 =94.06 R3 =92.06 R4 =93.82 R5 =95.33

R6 =91.23 R7 =94.60 R8 =93.67 R9 =81.23 R10=86.09

R11=93.53 R12=77.61 R13=94.73 R14=95.69 R15=95.01

TM30 参数: $R_f = 92.7$, $R_g:101.5$

光度参数:

光通量 $\Phi = 560.3 lm$ 光效: $124.56 lm/W$ $\phi_e = 2027 mW$ 光量子= $9.384e+000 umol/s$ 荧光蓝光比=2.83 荧光效能= $3.330e-001$

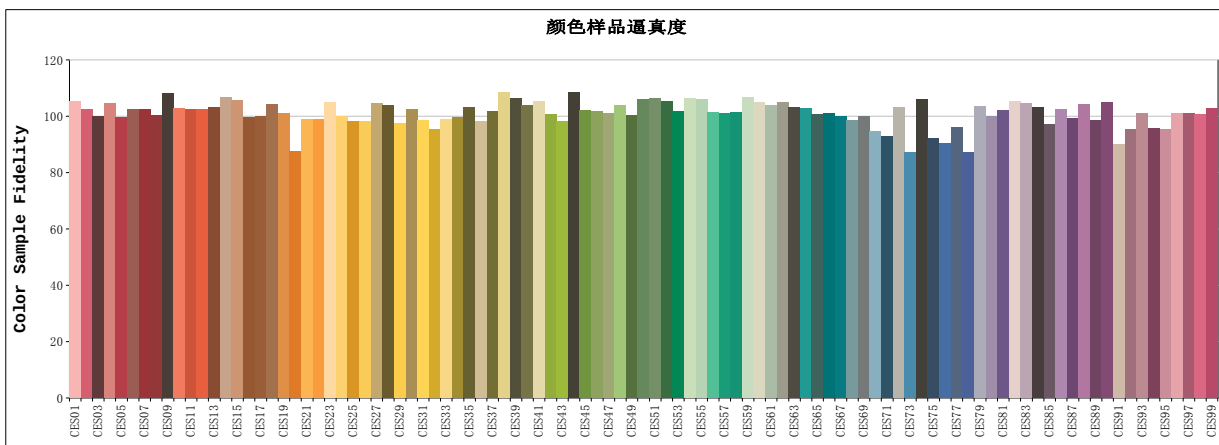
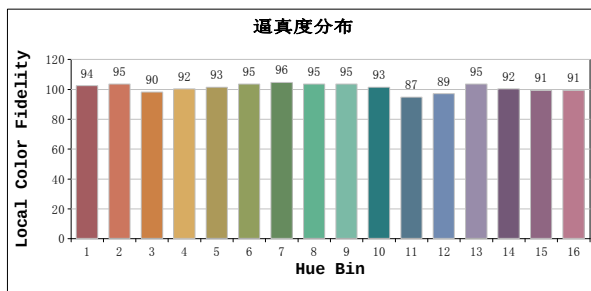
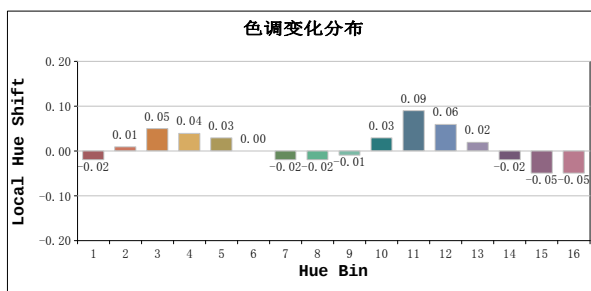
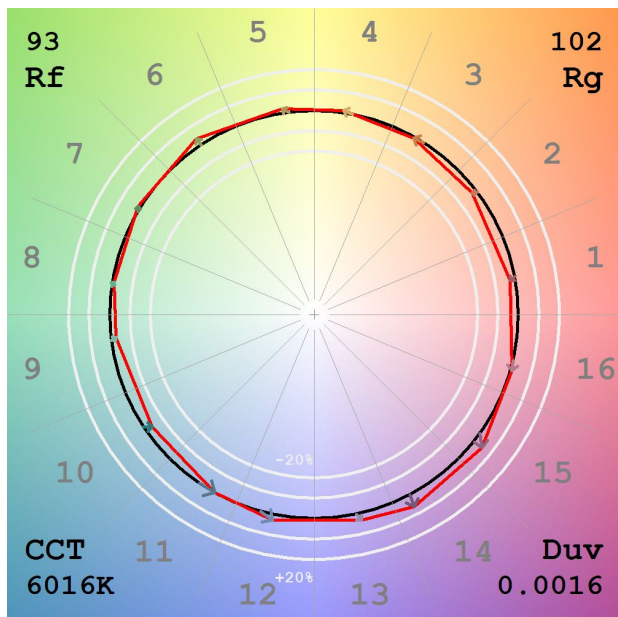
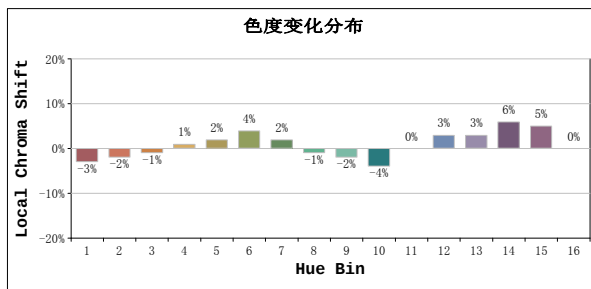
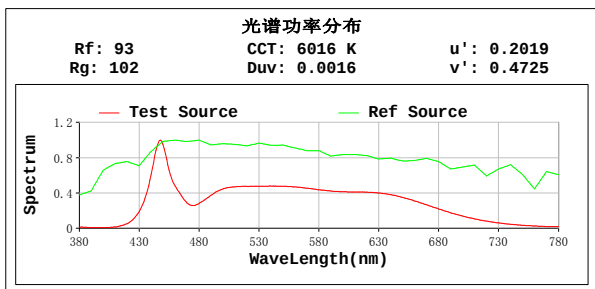
电参数:

正向电压 $V_F = 15.01 V$ 正向电流 $I_F = 299.8 mA$ 功率 $P = 4499 mW$ Ch1

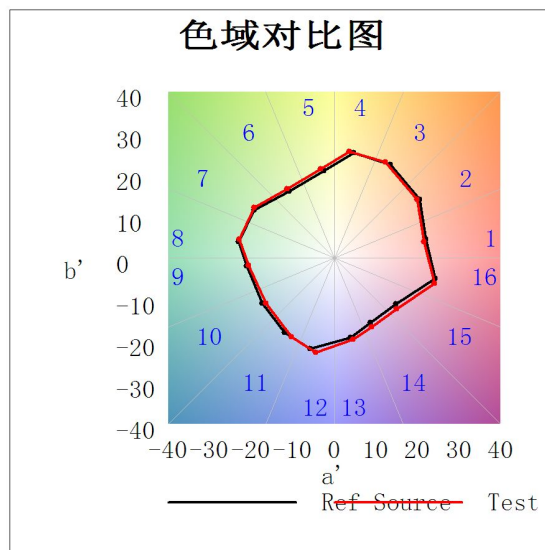
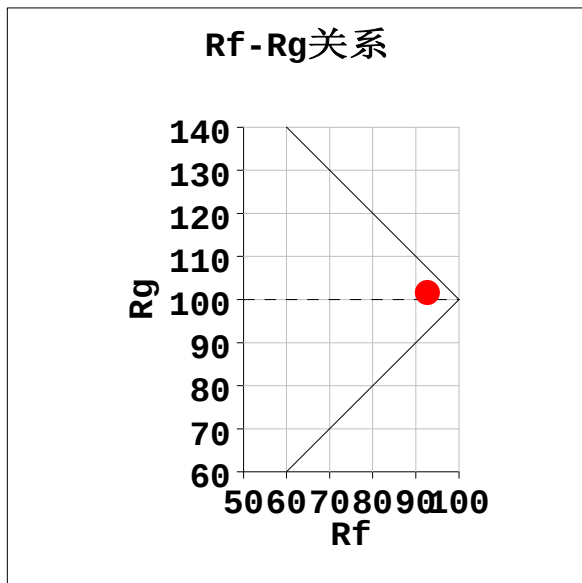
分级:*0[OUT] 白光分类:ANSI_5700K

仪器状态: 积分时间 $T=68.00ms$ $I_p=55029 (84\%)$ [HAAS2000_V1_USB] V2.00.302产品型号:6000K
测试人员:DAMIN
环境温度:25.3℃
制造厂商:EVERFINE
审核人员:damin
测试仪器:WY + HAAS2000_V1_USB产品编号:6
测试日期:2023-11-14 09-59
环境湿度:65.0%
备 注:---

IES TM-30-18 Color Rendition Report



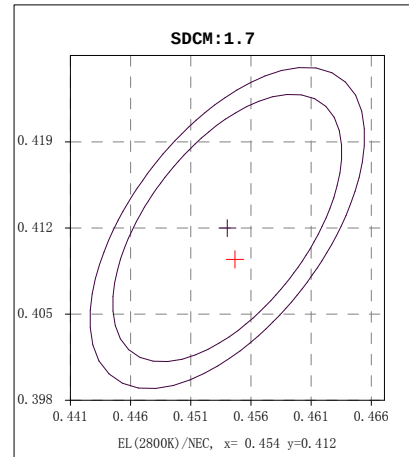
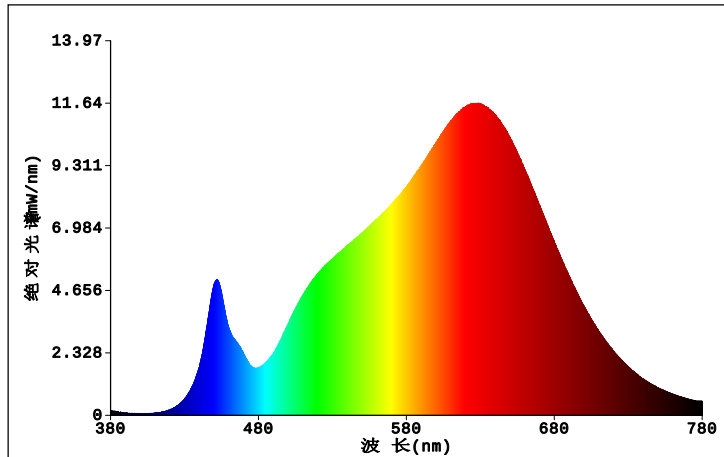
TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	94	-3	-2
2	22.5° - 45.0°	95	-2	1
3	45.0° - 67.5°	90	-1	5
4	67.5° - 90.0°	92	1	4
5	90.0° - 112.5°	93	2	3
6	112.5° - 135.0°	95	4	0
7	135.0° - 157.5°	96	2	-2
8	157.5° - 180.0°	95	-1	-2
9	180.0° - 202.5°	95	-2	-1
10	202.5° - 225.0°	93	-4	3
11	225.0° - 247.5°	87	0	9
12	247.5° - 270.0°	89	3	6
13	270.0° - 292.5°	95	3	2
14	292.5° - 315.0°	92	6	-2
15	315.0° - 337.5°	91	5	-5
16	337.5° - 360.0°	91	0	-5

光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.4546$ $y=0.4094$ $u'=0.2597$ $v'=0.5261$ $duv=1.553e-005$ 相关色温: $T_c=2765K$ 主波长: $\lambda_d=583.9nm$ 色纯度: Purity=59.4%色比: R=26.0% G=71.8% B=2.3% 峰值波长: $\lambda_p=628.5nm$ 半宽度: $\Delta\lambda_d=154.9nm$ 显色指数: $R_a=93.2$ $AvgR=90.5$ $K_{red}=18.36\%$ 平均波长 $\lambda_{av}=608.3nm$

R1 =93.87 R2 =95.64 R3 =95.79 R4 =94.16 R5 =93.09

R6 =94.61 R7 =93.76 R8 =85.02 R9 =65.52 R10=88.57

R11=94.87 R12=80.64 R13=94.30 R14=96.68 R15=90.46

TM30 参数: $R_f = 92.0$, $R_g:101.0$

光度参数:

光通量 $\Phi = 538.8 lm$ 光效: $116.19 lm/W$ $\phi_e = 1923 mW$ 光量子= $9.641e+000 umol/s$ 荧光蓝光比=10.9 荧光效能= $3.800e-001$

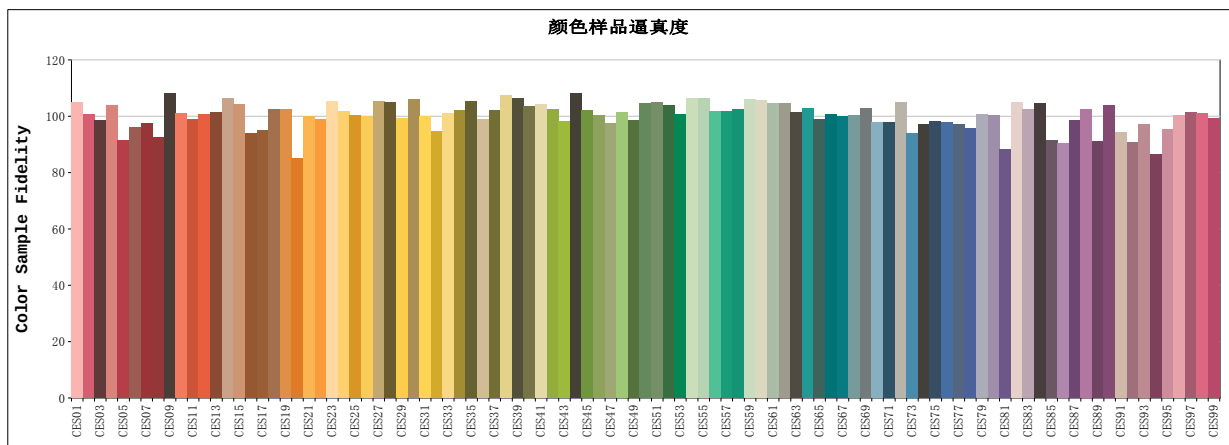
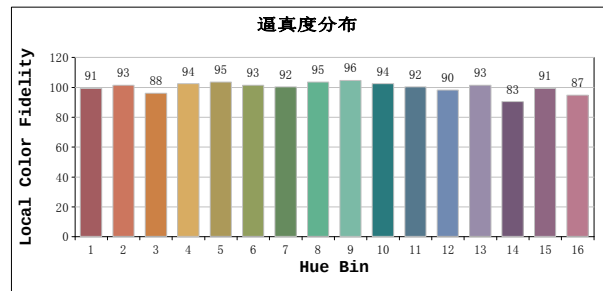
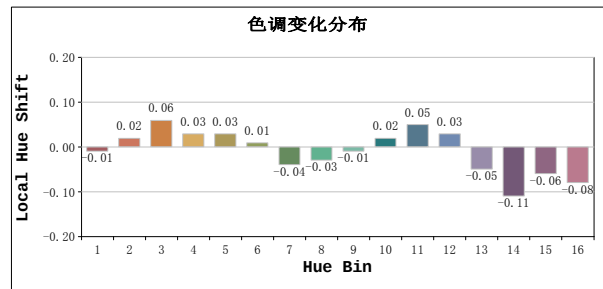
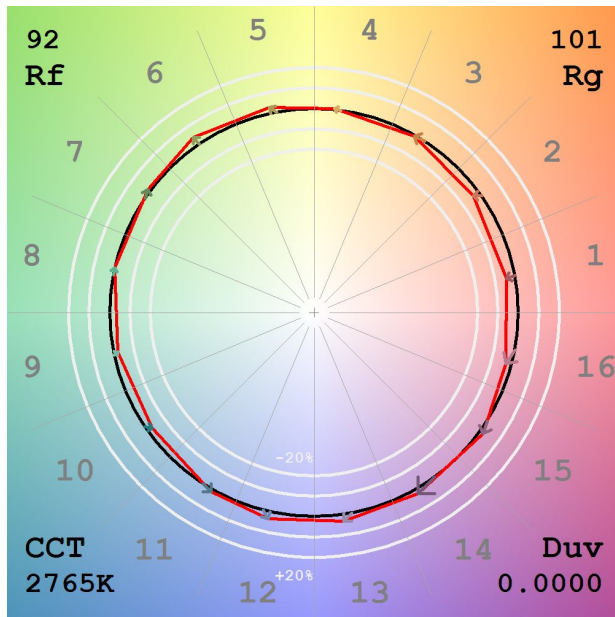
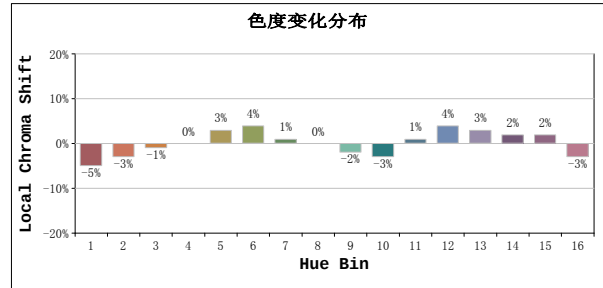
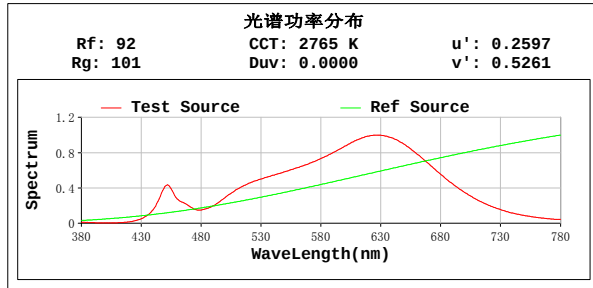
电参数:

正向电压 $V_F = 15.47 V$ 正向电流 $I_F = 299.8 mA$ 功率 $P = 4637 mW$ Ch1

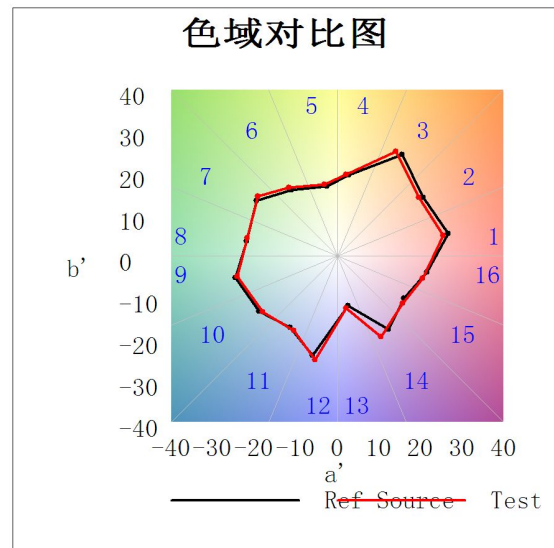
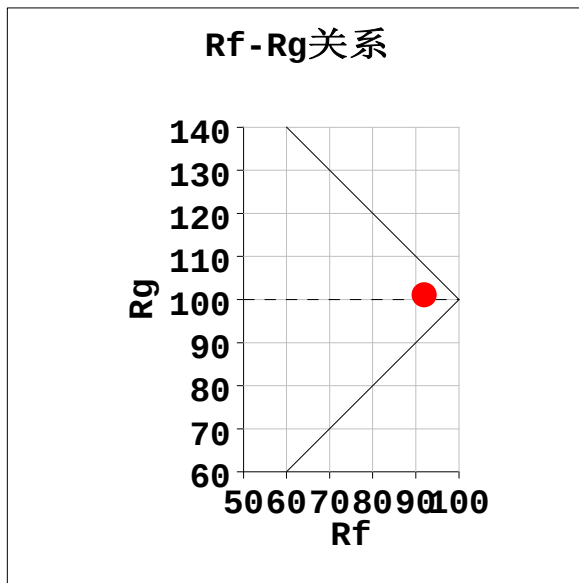
分级:*0[OUT] 白光分类:ANSI_2700K

仪器状态: 积分时间 $T=50.00ms$ $I_p=53670 (82\%)$ [HAAS2000_V1_USB] V2.00.302产品型号:2700K
测试人员:DAMIN
环境温度:25.3℃
制造厂商:EVERFINE
审核人员:damin
测试仪器:WY + HAAS2000_V1_USB产品编号:1
测试日期:2023-11-14 09-27
环境湿度:65.0%
备 注:---

IES TM-30-18 Color Rendition Report



TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	91	-5	-1
2	22.5° - 45.0°	93	-3	2
3	45.0° - 67.5°	88	-1	6
4	67.5° - 90.0°	94	0	3
5	90.0° - 112.5°	95	3	3
6	112.5° - 135.0°	93	4	1
7	135.0° - 157.5°	92	1	-4
8	157.5° - 180.0°	95	0	-3
9	180.0° - 202.5°	96	-2	-1
10	202.5° - 225.0°	94	-3	2
11	225.0° - 247.5°	92	1	5
12	247.5° - 270.0°	90	4	3
13	270.0° - 292.5°	93	3	-5
14	292.5° - 315.0°	83	2	-11
15	315.0° - 337.5°	91	2	-6
16	337.5° - 360.0°	87	-3	-8