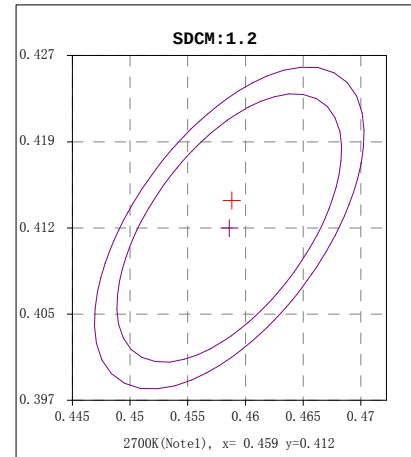
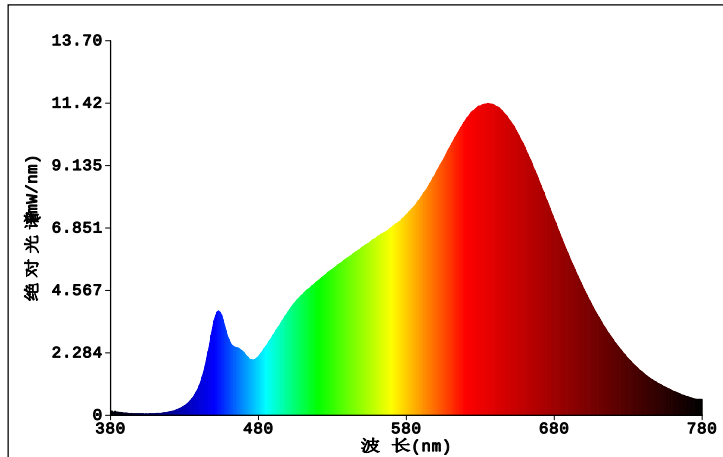


光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.4592$ $y=0.4144$ / $u'=0.2604$ $v'=0.5287$ $duv=1.450e-003$ 相关色温: $T_c=2739K$ 主波长: $\lambda_d=583.5nm$ 色纯度: Purity=62.2%色比: R=26.9% G=70.4% B=2.7% 峰值波长: $\lambda_p=636.7nm$ 半宽度: $\Delta\lambda_d=152.2nm$ 显色指数: $R_a=98.2$ $AvgR=96.9$ $K_{red}=19.50\%$ 平均波长 $\lambda_{av}=615.0nm$

R1 =99.02 R2 =99.69 R3 =97.46 R4 =98.31 R5 =99.16

R6 =97.96 R7 =97.92 R8 =96.12 R9 =90.25 R10=98.65

R11=95.59 R12=88.88 R13=99.02 R14=97.53 R15=97.90

TM30 参数: $R_f = 95.3$, $R_g=99.6$

光度参数:

光通量 $\Phi = 491.2 lm$ 光效: $108.33 lm/W$ $\phi_e = 1865 mW$ 光量子= $9.433e+000 umol/s$ 荧光蓝光比=12.4 荧光效能= $3.808e-001$

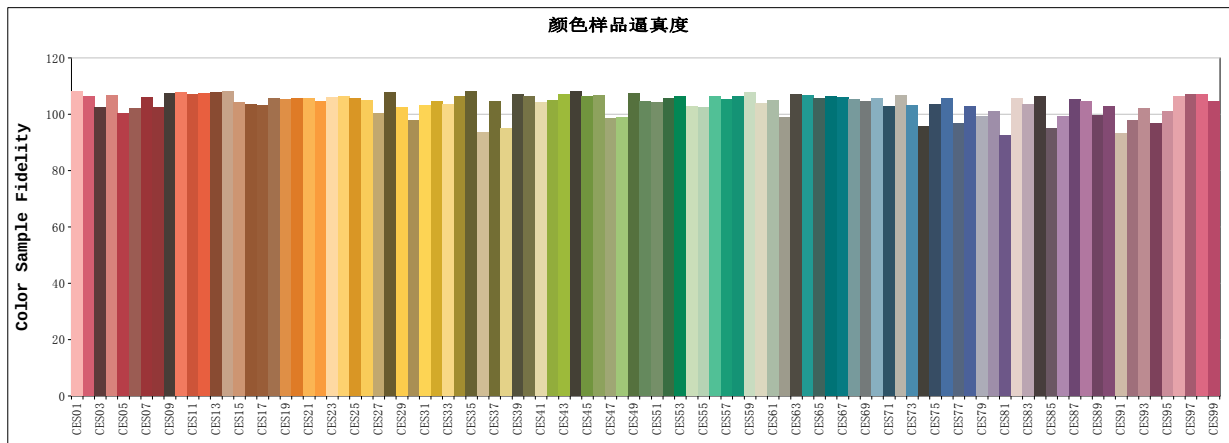
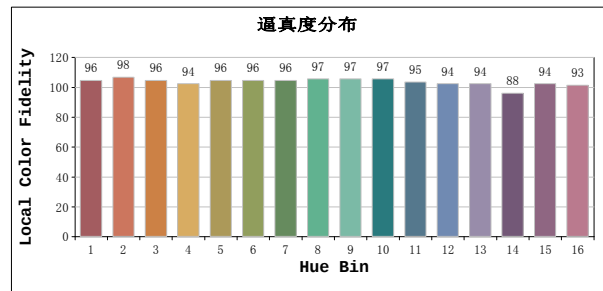
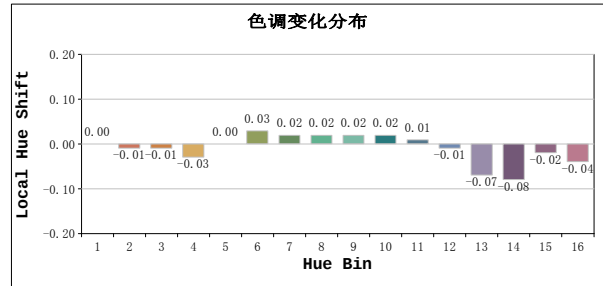
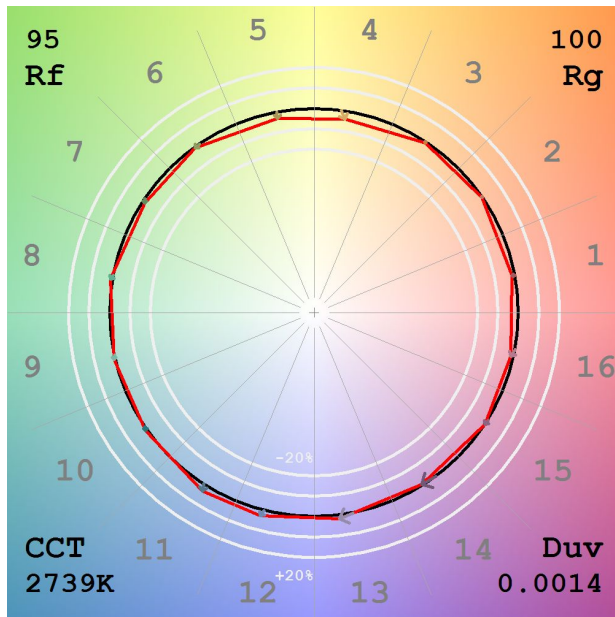
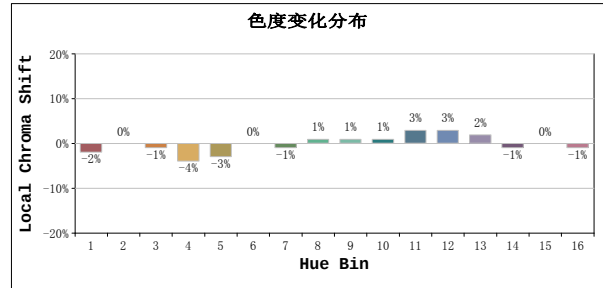
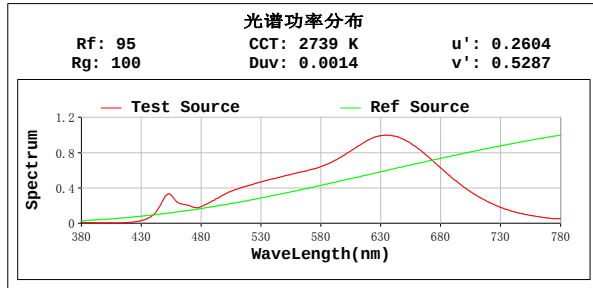
电参数:

正向电压 $V_F = 15.12 V$ 正向电流 $I_F = 299.8 mA$ 功率 $P = 4534 mW$ Ch1

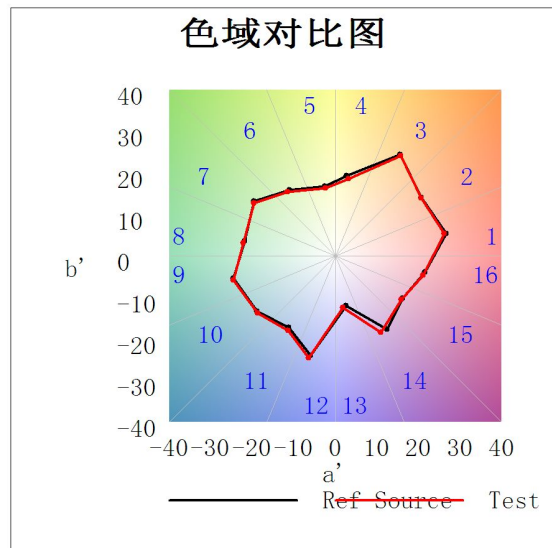
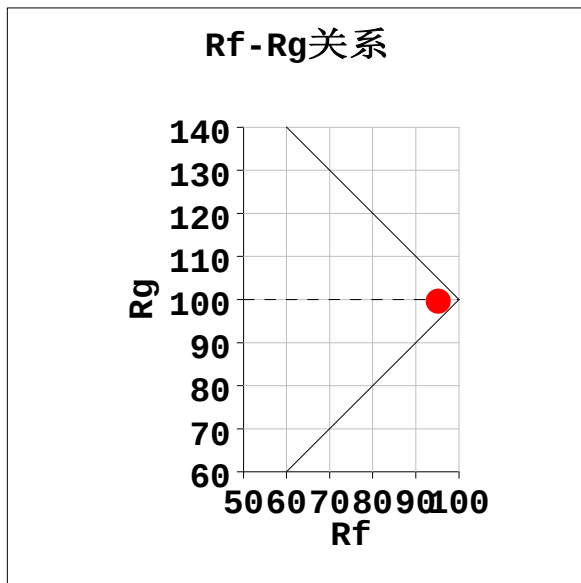
分级:*0[OUT] 白光分类:2700K

仪器状态: 积分时间 $T=48.00ms$ $I_p=50416 (77\%)$ [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:2023-11-19 09-58
环境湿度:65.0%
备 注:---

IES TM-30-18 Color Rendition Report



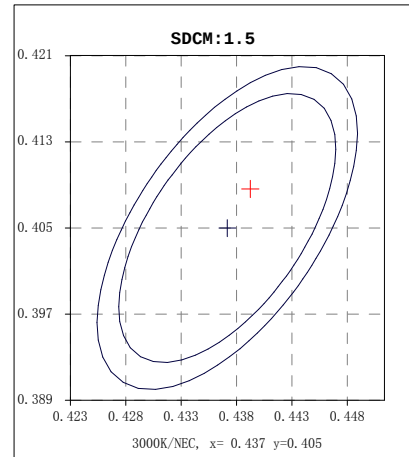
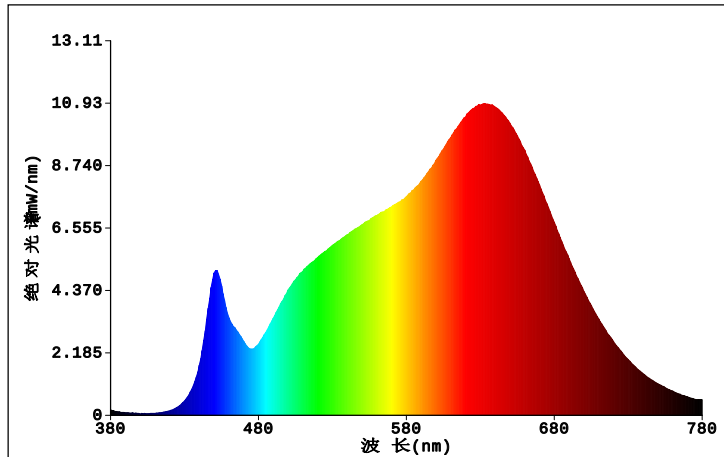
TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	96	-2	0
2	22.5° - 45.0°	98	0	-1
3	45.0° - 67.5°	96	-1	-1
4	67.5° - 90.0°	94	-4	-3
5	90.0° - 112.5°	96	-3	0
6	112.5° - 135.0°	96	0	3
7	135.0° - 157.5°	96	-1	2
8	157.5° - 180.0°	97	1	2
9	180.0° - 202.5°	97	1	2
10	202.5° - 225.0°	97	1	2
11	225.0° - 247.5°	95	3	1
12	247.5° - 270.0°	94	3	-1
13	270.0° - 292.5°	94	2	-7
14	292.5° - 315.0°	88	-1	-8
15	315.0° - 337.5°	94	0	-2
16	337.5° - 360.0°	93	-1	-4

光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.4391$ $y=0.4085$ $u'=0.2500$ $v'=0.5234$ $duv=1.470e-003$ 相关色温: $T_c=3000K$ 主波长: $\lambda_d=582.3nm$ 色纯度: Purity=54.4%色比: R=24.9% G=72.1% B=3.0% 峰值波长: $\lambda_p=632.8nm$ 半宽度: $\Delta\lambda_d=171.8nm$ 显色指数: $R_a=98.3$ $AvgR=96.6$ $K_{red}=17.89\%$ 平均波长 $\lambda_{av}=608.0nm$

R1 =99.51 R2 =99.03 R3 =96.80 R4 =99.30 R5 =99.02

R6 =98.39 R7 =98.47 R8 =95.99 R9 =89.30 R10=96.65

R11=96.90 R12=85.97 R13=99.53 R14=97.35 R15=97.38

TM30 参数: $R_f = 95.9$, $R_g=100.2$

光度参数:

光通量 $\Phi = 515.9 lm$ 光效: $113.67 lm/W$ $\phi_e = 1907 mW$ 光量子= $9.539e+000 umol/s$ 荧光蓝光比=9.74 荧光效能= $3.811e-001$

电参数:

正向电压 $V_F = 15.14 V$ 正向电流 $I_F = 299.8 mA$ 功率 $P = 4539 mW$ Ch1

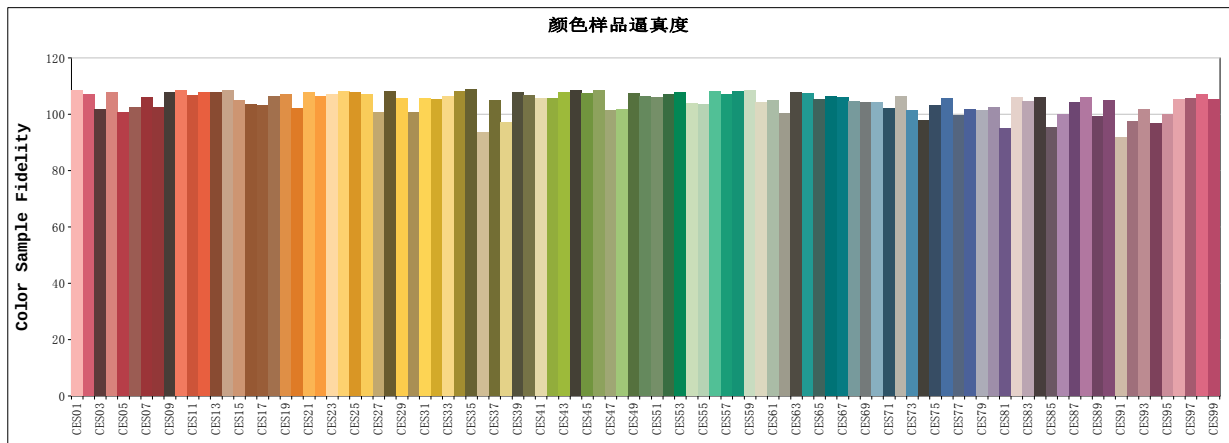
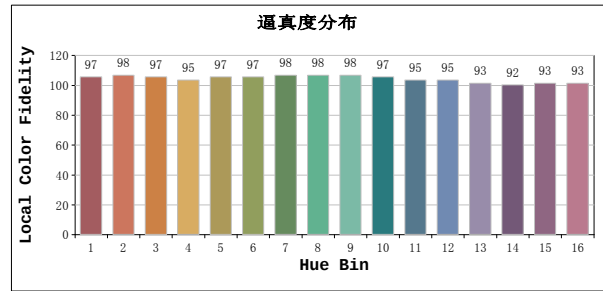
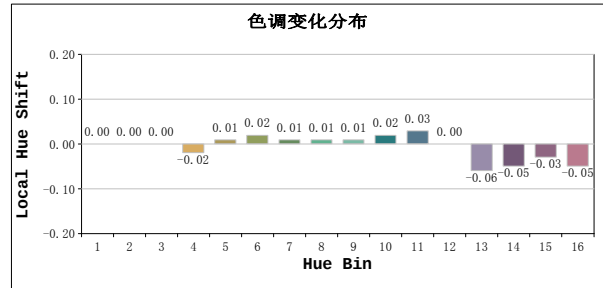
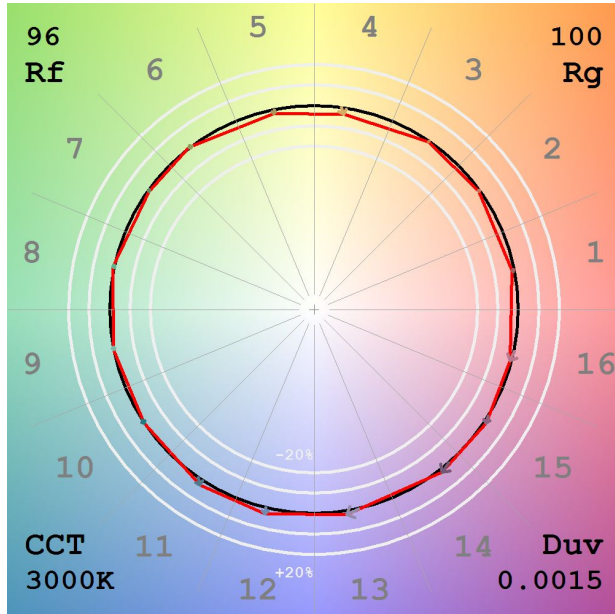
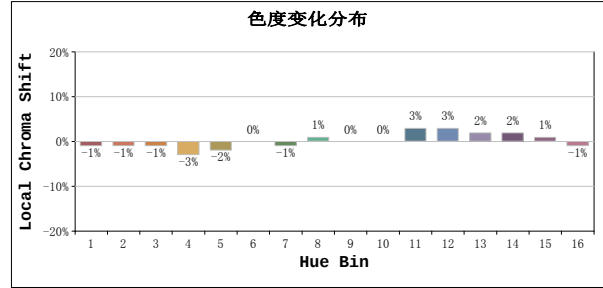
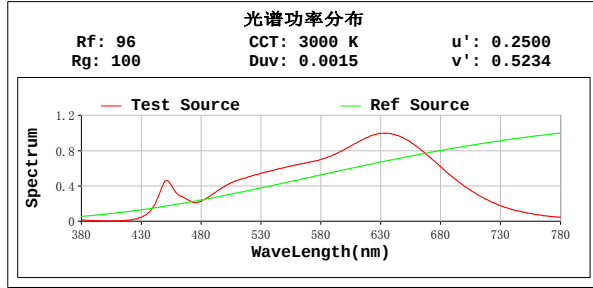
分级:*0[OUT] 白光分类:3000K

仪器状态: 积分时间 $T=48.00ms$ $I_p=48305 (74\%)$ [HAAS2000_V1_USB] V2.00.302

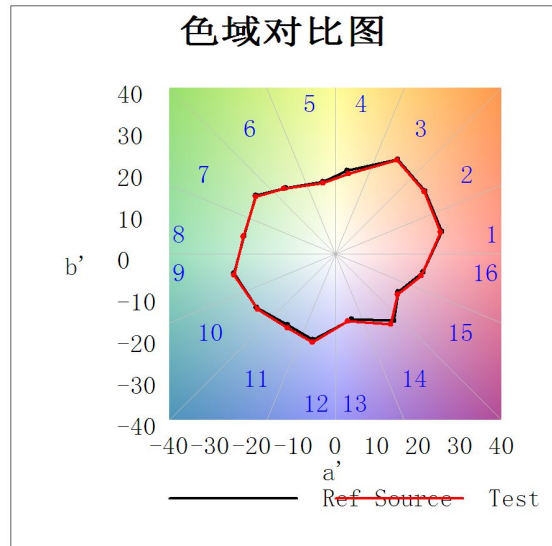
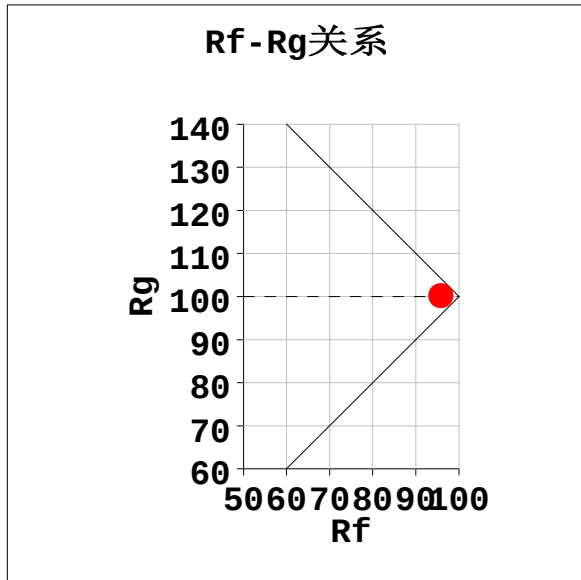
产品型号:3000K
测试人员:DAMIN
环境温度:25.3℃
制造厂商:EVERFINE
审核人员:damin
测试仪器:WY + HAAS2000_V1_USB

产品编号:2
测试日期:2023-11-19 09-59
环境湿度:65.0%
备 注:---

IES TM-30-18 Color Rendition Report



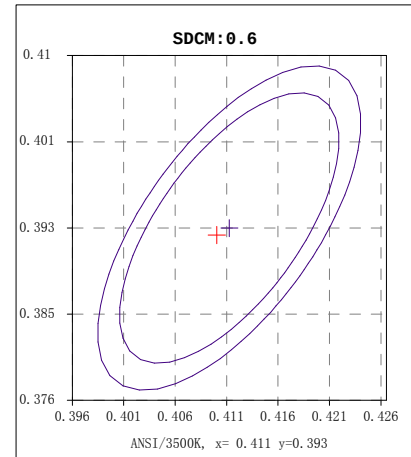
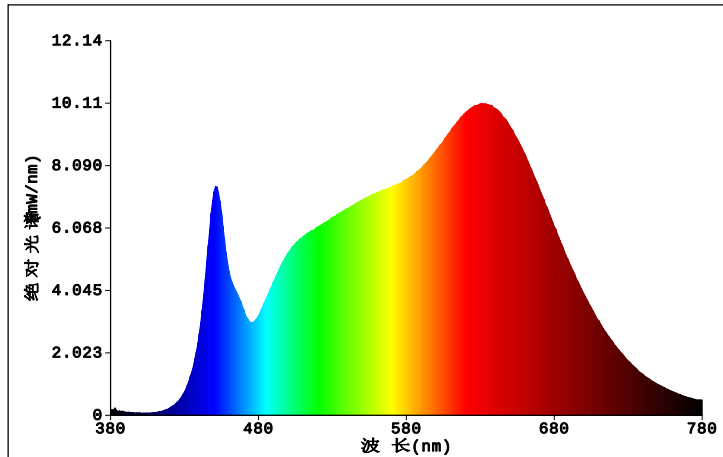
TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	97	-1	0
2	22.5° - 45.0°	98	-1	0
3	45.0° - 67.5°	97	-1	0
4	67.5° - 90.0°	95	-3	-2
5	90.0° - 112.5°	97	-2	1
6	112.5° - 135.0°	97	0	2
7	135.0° - 157.5°	98	-1	1
8	157.5° - 180.0°	98	1	1
9	180.0° - 202.5°	98	0	1
10	202.5° - 225.0°	97	0	2
11	225.0° - 247.5°	95	3	3
12	247.5° - 270.0°	95	3	0
13	270.0° - 292.5°	93	2	-6
14	292.5° - 315.0°	92	2	-5
15	315.0° - 337.5°	93	1	-3
16	337.5° - 360.0°	93	-1	-5

光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.4098$ $y=0.3923$ / $u'=0.2380$ $v'=0.5126$ $duv=-2.599e-004$ 相关色温: $T_c=3417K$ 主波长: $\lambda_d=581.3nm$ 色纯度: $Purity=40.7\%$ 色比: $R=22.9\%$ $G=73.3\%$ $B=3.8\%$ 峰值波长: $\lambda_p=631.6nm$ 半宽度: $\Delta\lambda_d=191.6nm$ 显色指数: $R_a=98.5$ $AvgR=97.3$ $K_{red}=16.31\%$ 平均波长 $\lambda_{av}=597.7nm$

R1 =98.59	R2 =99.62	R3 =97.91	R4 =98.75	R5 =99.04
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R6 =97.47	R7 =98.64	R8 =98.05	R9 =95.41	R10=99.71
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R11=96.06	R12=84.62	R13=98.75	R14=98.14	R15=98.63
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TM30 参数: $R_f = 96.0$, $R_g:101.2$

光度参数:

光通量 $\Phi = 526.7 lm$ 光效: $114.88 lm/W$ $\phi_e = 1933 mW$ 光量子 $=9.518e+000 umol/s$ 荧光蓝光比 $=6.84$ 荧光效能 $=3.680e-001$

电参数:

正向电压 $V_F = 15.29 V$ 正向电流 $I_F = 299.8 mA$ 功率 $P = 4585 mW$ Ch1

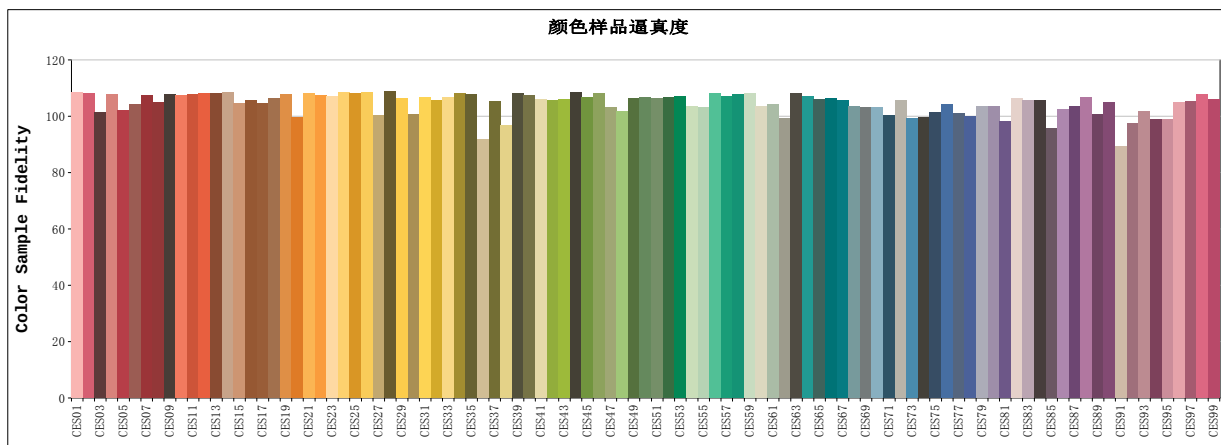
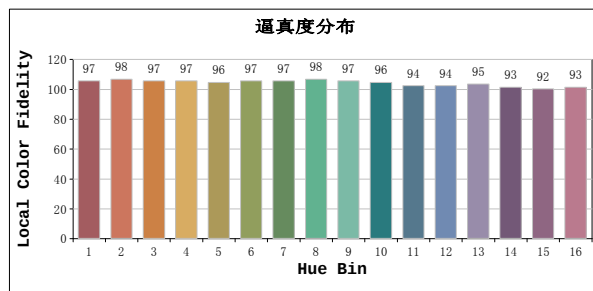
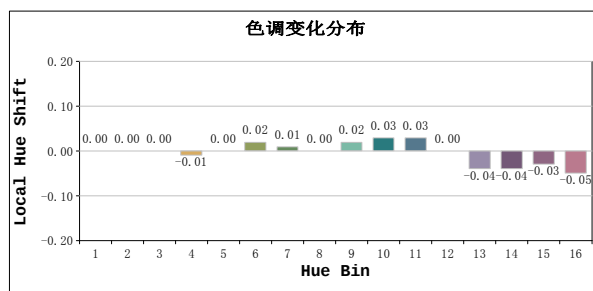
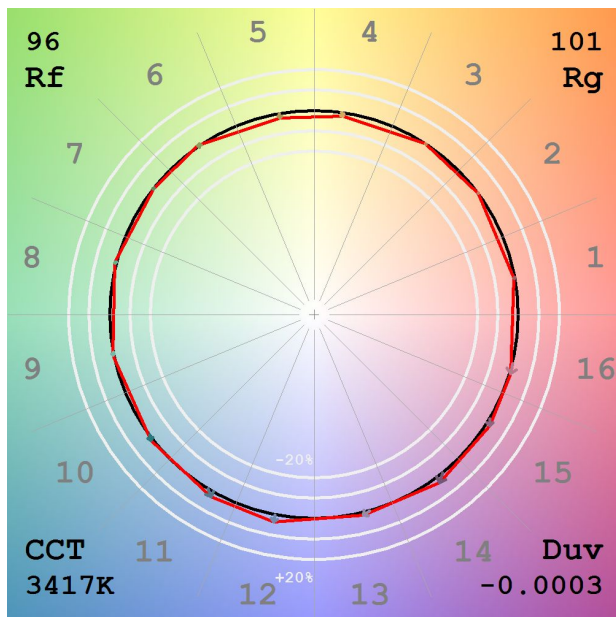
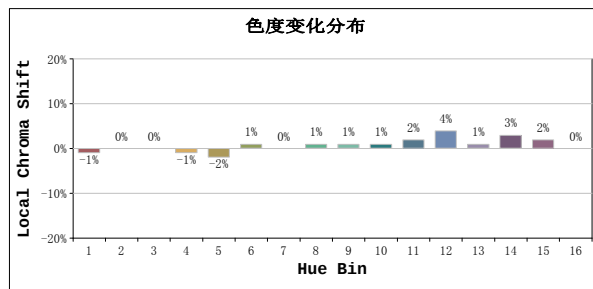
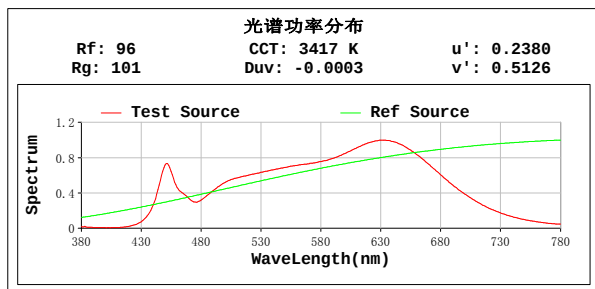
分级: *0[OUT] 白光分类: 3500K

仪器状态: 积分时间 $T=48.00ms$ $I_p=44750 (68\%)$ [HAAS2000_V1_USB] V2.00.302

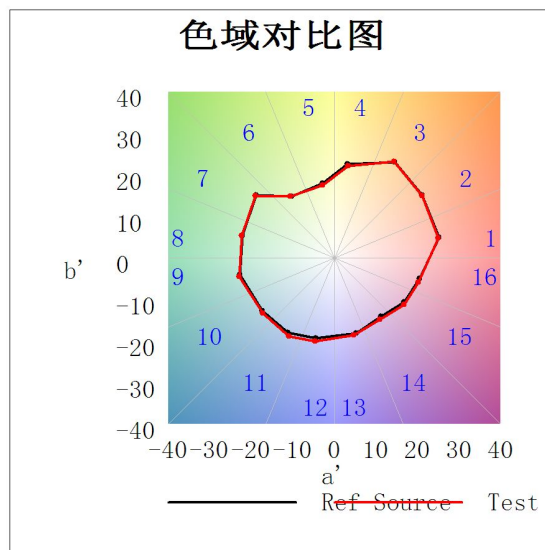
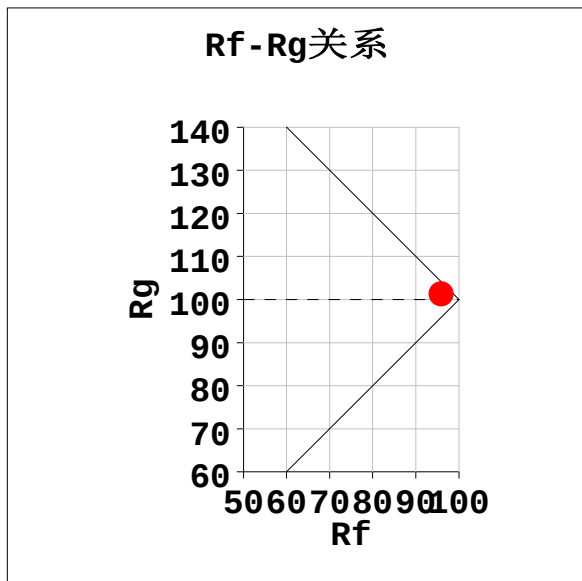
产品型号: 3500K
测试人员: DAMIN
环境温度: 25.3°C
制造厂商: EVERFINE
审核人员: damin
测试仪器: WY + HAAS2000_V1_USB

产品编号: 3
测试日期: 2023-11-19 10-00
环境湿度: 65.0%
备 注: ---

IES TM-30-18 Color Rendition Report



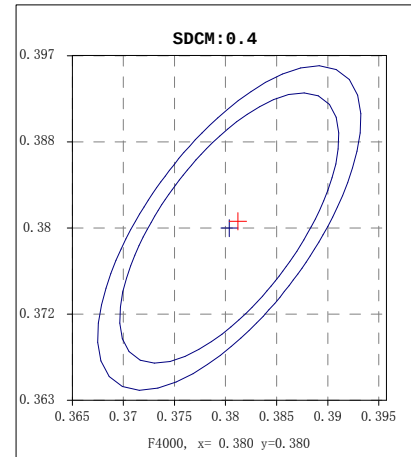
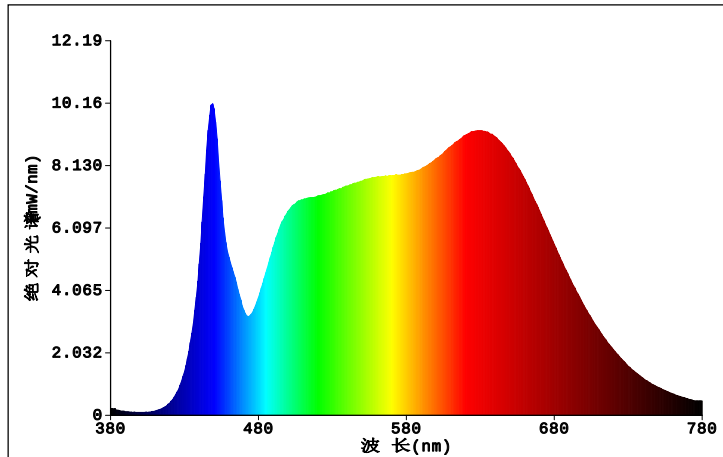
TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	97	-1	0
2	22.5° - 45.0°	98	0	0
3	45.0° - 67.5°	97	0	0
4	67.5° - 90.0°	97	-1	-1
5	90.0° - 112.5°	96	-2	0
6	112.5° - 135.0°	97	1	2
7	135.0° - 157.5°	97	0	1
8	157.5° - 180.0°	98	1	0
9	180.0° - 202.5°	97	1	2
10	202.5° - 225.0°	96	1	3
11	225.0° - 247.5°	94	2	3
12	247.5° - 270.0°	94	4	0
13	270.0° - 292.5°	95	1	-4
14	292.5° - 315.0°	93	3	-4
15	315.0° - 337.5°	92	2	-3
16	337.5° - 360.0°	93	0	-5

光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.3808$ $y=0.3807$ / $u'=0.2238$ $v'=0.5034$ $duv=1.707e-003$ 相关色温: $T_c=4017K$ 主波长: $\lambda_d=578.1nm$ 色纯度: Purity=28.5%色比: R=20.2% G=75.3% B=4.5% 峰值波长: $\lambda_p=448.5nm$ 半宽度: $\Delta\lambda_d=20.1nm$ 显色指数: $R_a=98.1$ $AvgR=96.5$ $K_{red}=14.27\%$ 平均波长 $\lambda_{av}=583.5nm$

R1 =99.09 R2 =98.26 R3 =96.67 R4 =98.31 R5 =98.67

R6 =96.96 R7 =99.05 R8 =97.81 R9 =92.79 R10=95.95

R11=96.07 R12=83.15 R13=98.75 R14=97.87 R15=97.66

TM30 参数: $R_f = 96.4$, $R_g=100.9$

光度参数:

光通量 $\Phi = 556.7 lm$ 光效: $121.29 lm/W$ $\phi_e = 2007 mW$ 光量子= $9.709e+000 umol/s$ 荧光蓝光比=5.26 荧光效能= $3.676e-001$

电参数:

正向电压 $V_F = 15.31 V$ 正向电流 $I_F = 299.8 mA$ 功率 $P = 4590 mW$ Ch1

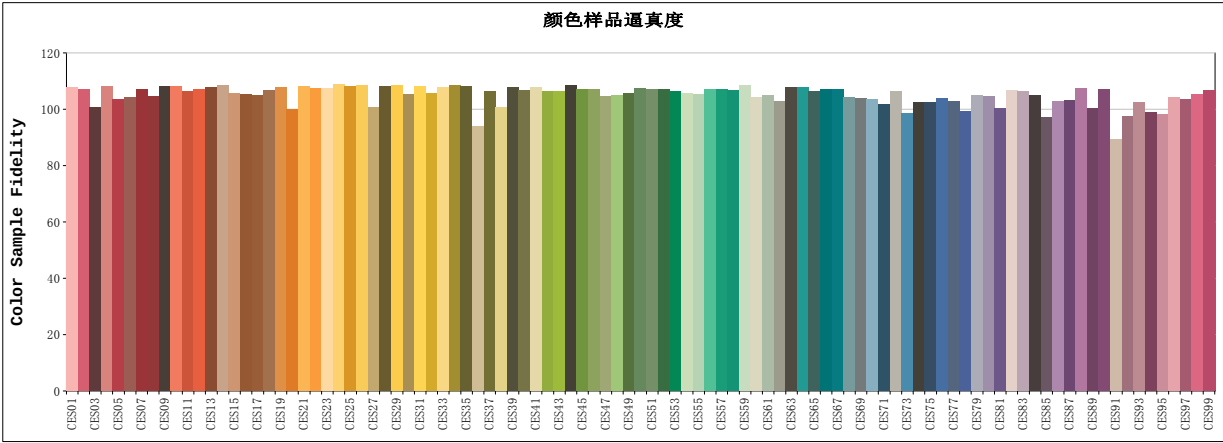
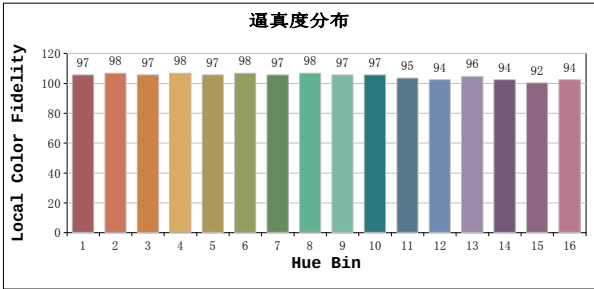
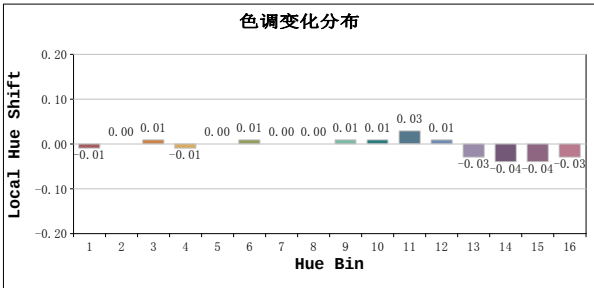
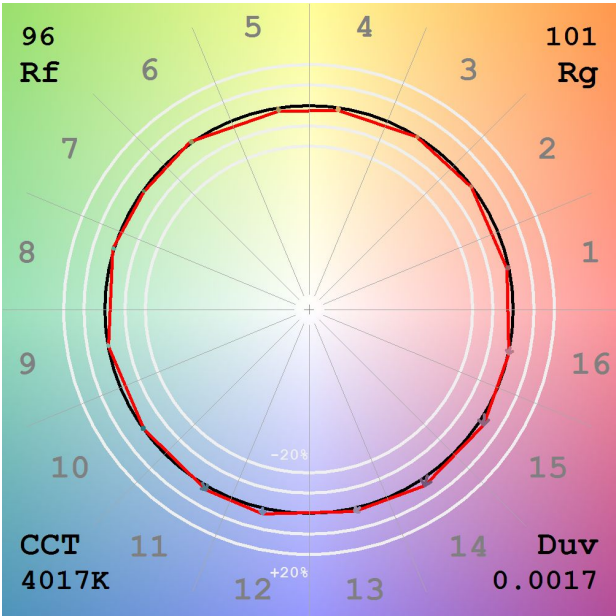
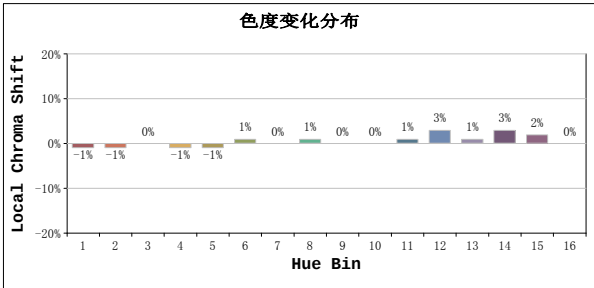
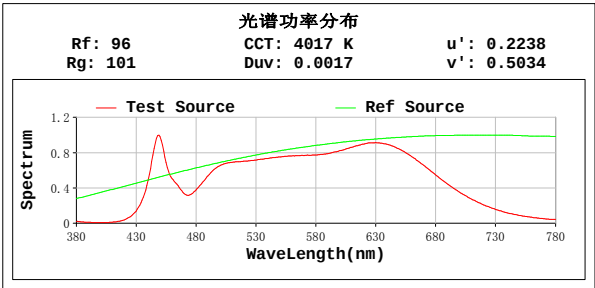
分级:*0[OUT] 白光分类:4000K

仪器状态: 积分时间 $T=60.00ms$ $I_p=51341 (78\%)$ [HAAS2000_V1_USB] V2.00.302

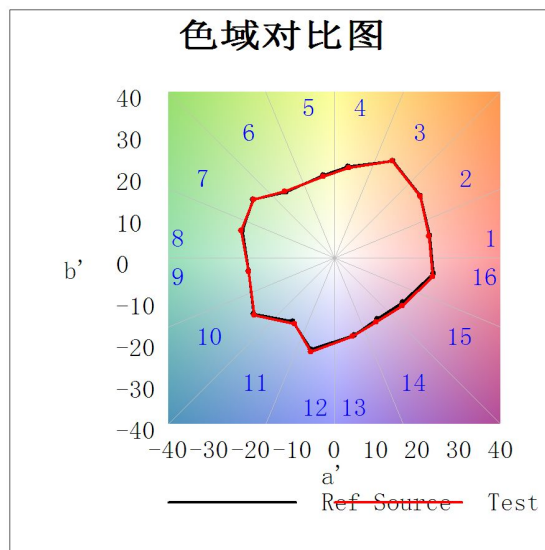
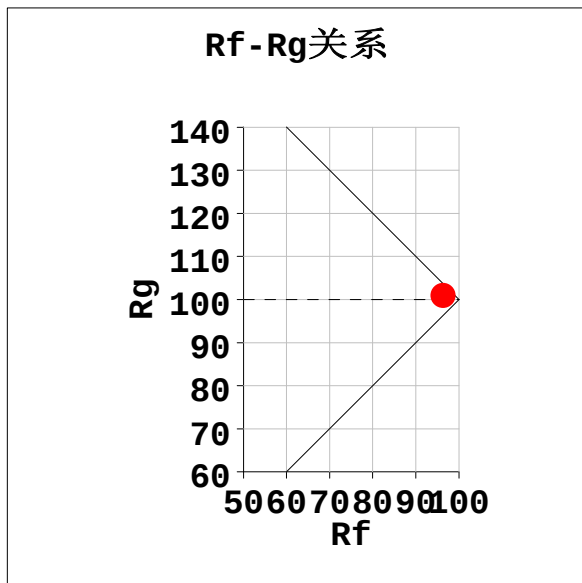
产品型号:4000K
测试人员:DAMIN
环境温度:25.3℃
制造厂商:EVERFINE
审核人员:damin
测试仪器:WY + HAAS2000_V1_USB

产品编号:4
测试日期:2023-11-19 10-04
环境湿度:65.0%
备 注:---

IES TM-30-18 Color Rendition Report



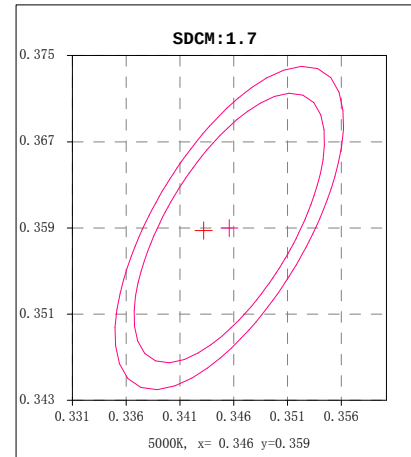
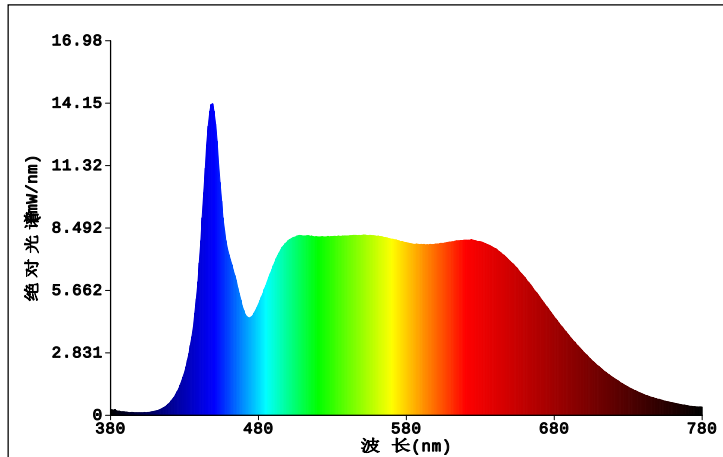
TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	97	-1	-1
2	22.5° - 45.0°	98	-1	0
3	45.0° - 67.5°	97	0	1
4	67.5° - 90.0°	98	-1	-1
5	90.0° - 112.5°	97	-1	0
6	112.5° - 135.0°	98	1	1
7	135.0° - 157.5°	97	0	0
8	157.5° - 180.0°	98	1	0
9	180.0° - 202.5°	97	0	1
10	202.5° - 225.0°	97	0	1
11	225.0° - 247.5°	95	1	3
12	247.5° - 270.0°	94	3	1
13	270.0° - 292.5°	96	1	-3
14	292.5° - 315.0°	94	3	-4
15	315.0° - 337.5°	92	2	-4
16	337.5° - 360.0°	94	0	-3

光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.3436$ $y=0.3588$ / $u'=0.2077$ $v'=0.4879$ $duv=4.145e-003$ 相关色温: $T_c=5077K$ 主波长: $\lambda_d=567.9nm$ 色纯度: Purity=10.8%色比: R=17.2% G=77.2% B=5.6% 峰值波长: $\lambda_p=448.6nm$ 半宽度: $\Delta\lambda_d=20.8nm$ 显色指数: $R_a=98.1$ $AvgR=94.1$ $K_{red}=11.87\%$ 平均波长 $\lambda_{av}=562.5nm$

R1 =98.08 R2 =98.58 R3 =98.86 R4 =98.82 R5 =97.48

R6 =95.20 R7 =97.17 R8 =93.58 R9 =88.78 R10=92.79

R11=96.32 R12=81.96 R13=96.20 R14=98.39 R15=94.63

TM30 参数: $R_f = 95.4$, $R_g:100.4$

光度参数:

光通量 $\Phi = 573.7 lm$ 光效: $126.13 lm/W$ $\phi_e = 2044 mW$ 光量子 $=9.631e+000 umol/s$ 荧光蓝光比=3.64 荧光效能=3.527e-001

电参数:

正向电压 $V_F = 15.17 V$ 正向电流 $I_F = 299.8 mA$ 功率 $P = 4549 mW$ Ch1

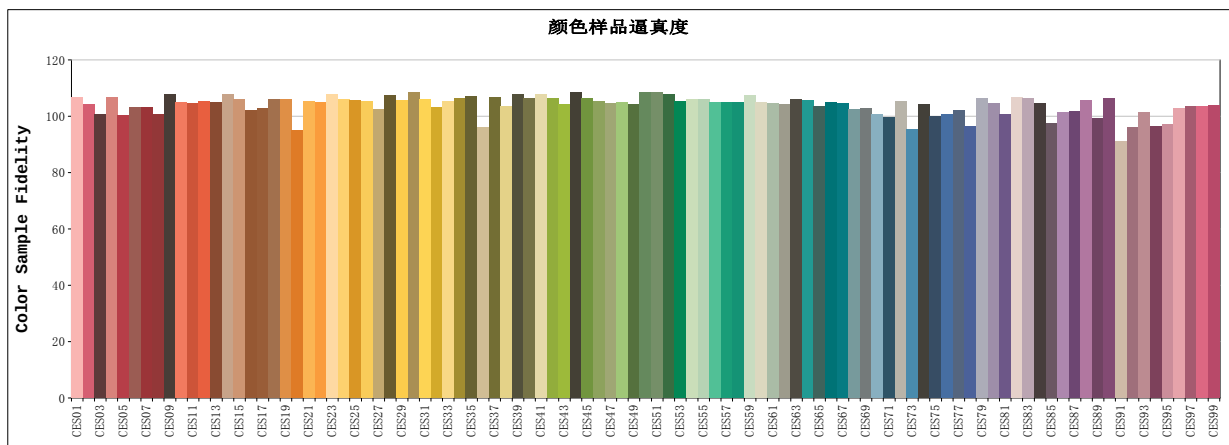
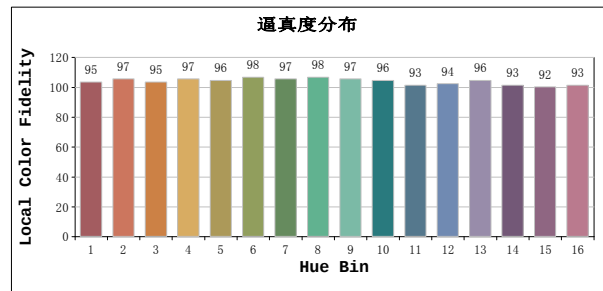
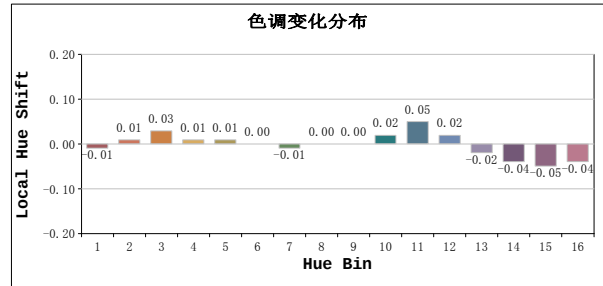
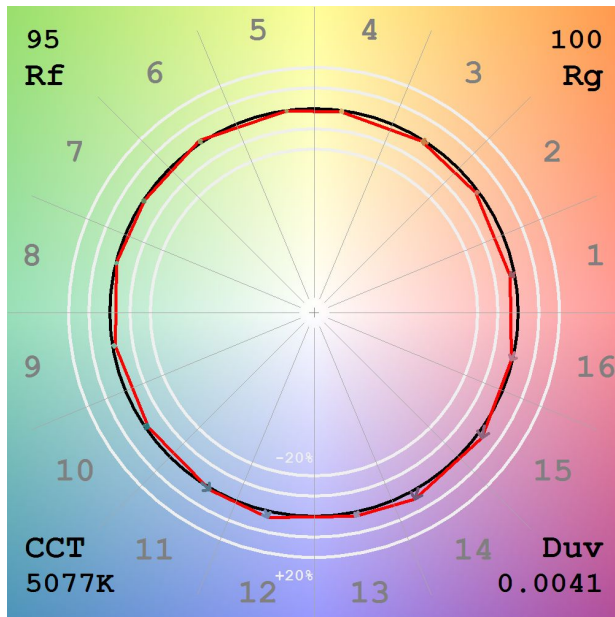
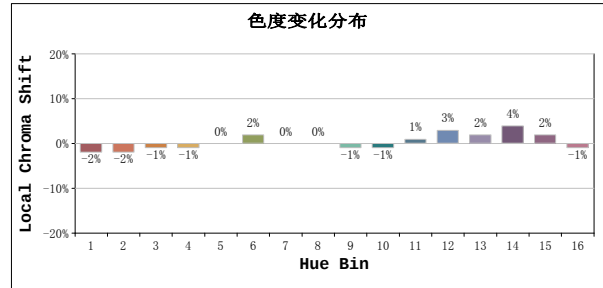
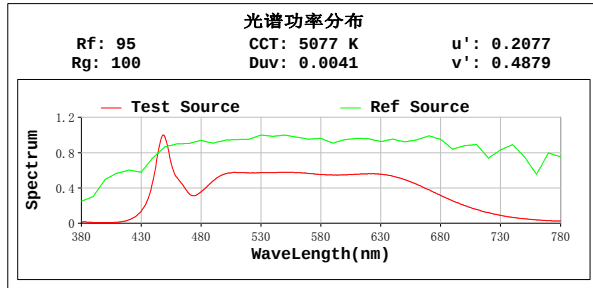
分级: *0[OUT] 白光分类: 5000K

仪器状态: 积分时间 $T=68.00ms$ $I_p=50764 (77\%)$ [HAAS2000_V1_USB] V2.00.302

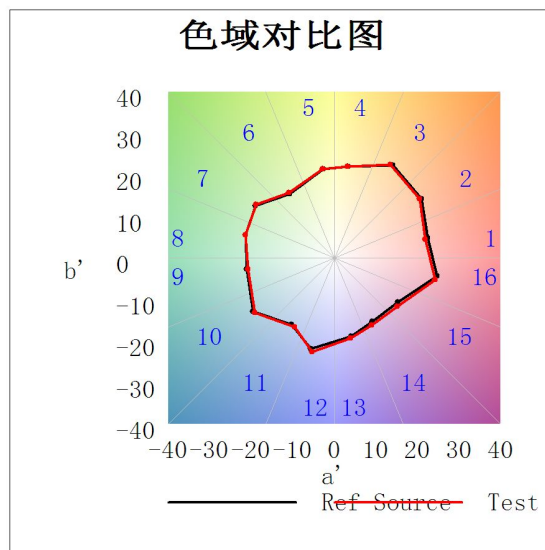
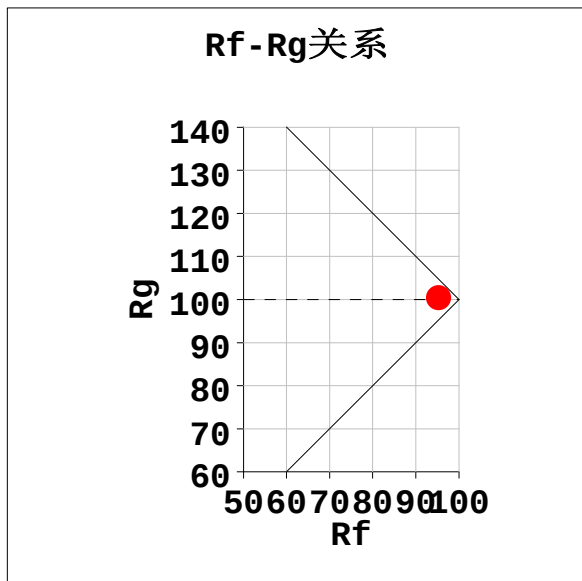
产品型号: 5000K
测试人员: DAMIN
环境温度: 25.3°C
制造厂商: EVERFINE
审核人员: damin
测试仪器: WY + HAAS2000_V1_USB

产品编号: 5
测试日期: 2023-11-19 10-13
环境湿度: 65.0%
备 注: ---

IES TM-30-18 Color Rendition Report



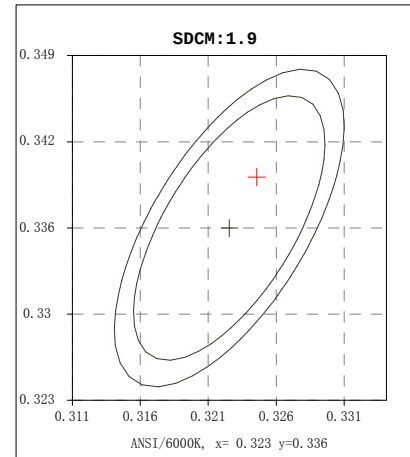
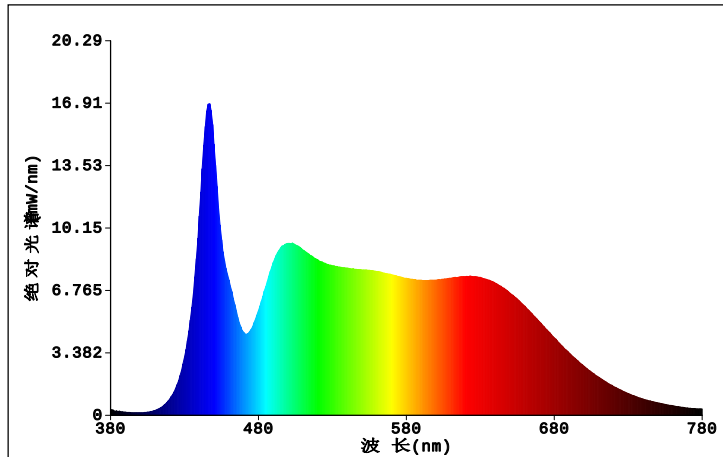
TM30 Report



数据分析表

			Graphic shift(%)	
Hue Bin	Hue Angle	Rf	Chroma	Hue
1	0.0° - 22.5°	95	-2	-1
2	22.5° - 45.0°	97	-2	1
3	45.0° - 67.5°	95	-1	3
4	67.5° - 90.0°	97	-1	1
5	90.0° - 112.5°	96	0	1
6	112.5° - 135.0°	98	2	0
7	135.0° - 157.5°	97	0	-1
8	157.5° - 180.0°	98	0	0
9	180.0° - 202.5°	97	-1	0
10	202.5° - 225.0°	96	-1	2
11	225.0° - 247.5°	93	1	5
12	247.5° - 270.0°	94	3	2
13	270.0° - 292.5°	96	2	-2
14	292.5° - 315.0°	93	4	-4
15	315.0° - 337.5°	92	2	-5
16	337.5° - 360.0°	93	-1	-4

光源光谱测试报告



颜色参数:

色品坐标(2度): $x=0.3250$ $y=0.3397$ $u'=0.2023$ $v'=0.4758$ $duv=2.699e-003$ 相关色温: $T_c=5936K$ 主波长: $\lambda_d=502.0nm$ 色纯度: $Purity=2.5\%$ 色比: $R=16.5\%$ $G=77.0\%$ $B=6.6\%$ 峰值波长: $\lambda_p=446.6nm$ 半宽度: $\Delta\lambda_d=18.9nm$ 显色指数: $R_a=97.7$ $AvgR=97.0$ $K_{red}=11.39\%$ 平均波长 $\lambda_{av}=552.2nm$ $R1=99.29$ $R2=98.61$ $R3=97.42$ $R4=94.65$ $R5=98.43$ $R6=97.59$ $R7=97.30$ $R8=98.10$ $R9=96.59$ $R10=98.36$ $R11=91.82$ $R12=89.65$ $R13=99.77$ $R14=98.72$ $R15=99.35$ TM30 参数: $R_f=96.5$, $R_g=102.1$

光度参数:

光通量 $\Phi=566.4lm$ 光效: $122.06lm/W$ $\phi_e=2091mW$ 光量子: $9.725e+000umol/s$ 荧光蓝光比: 3.04 荧光效能: $3.392e-001$

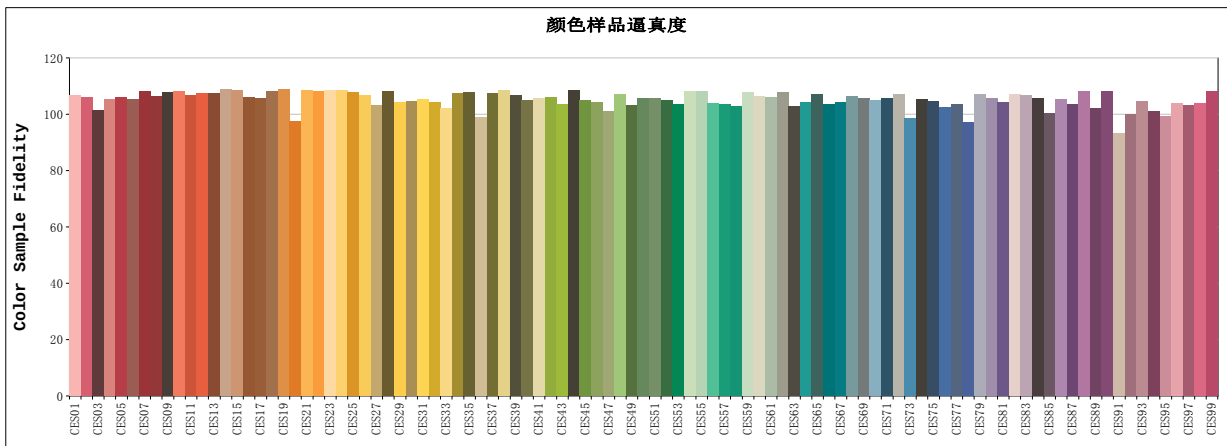
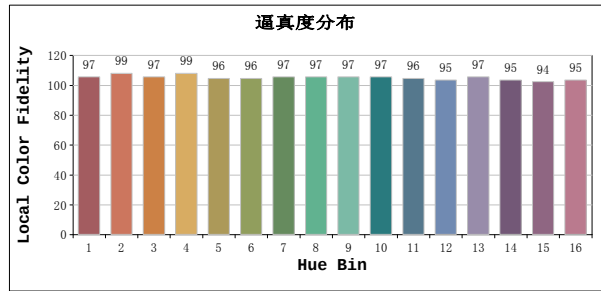
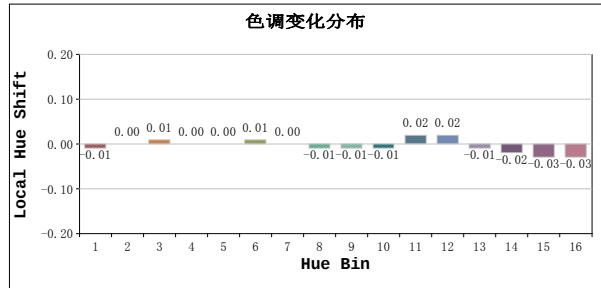
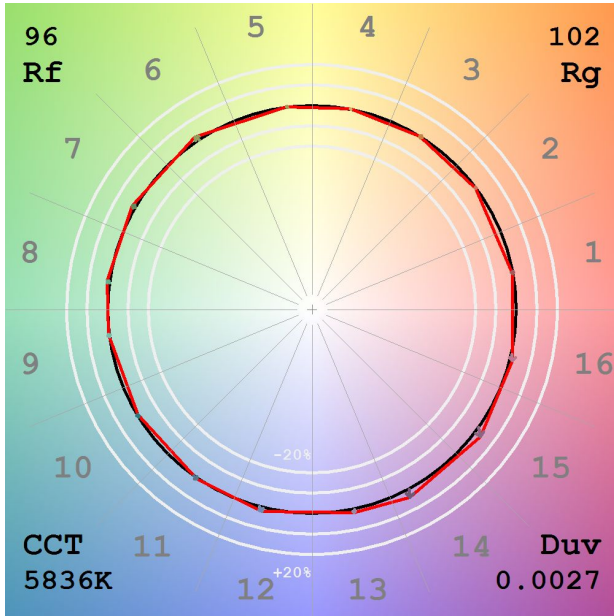
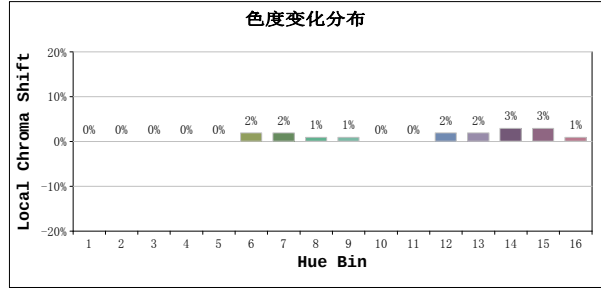
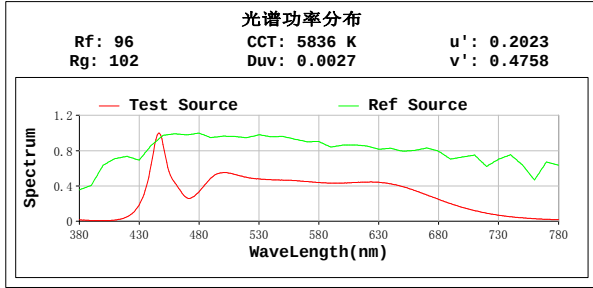
电参数:

正向电压 $V_F=15.48V$ 正向电流 $I_F=299.8mA$ 功率 $P=4640mW$ Ch1

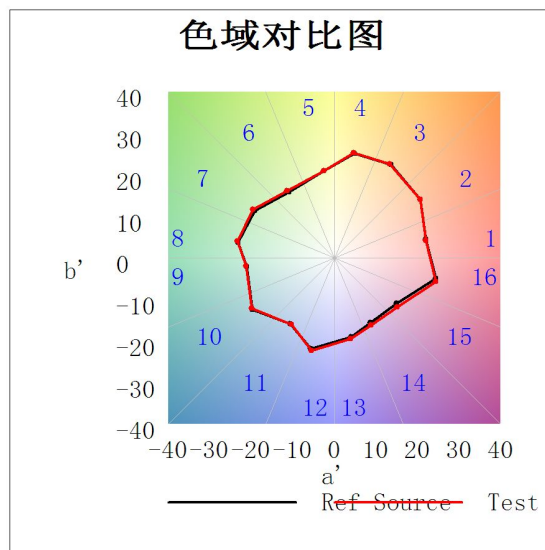
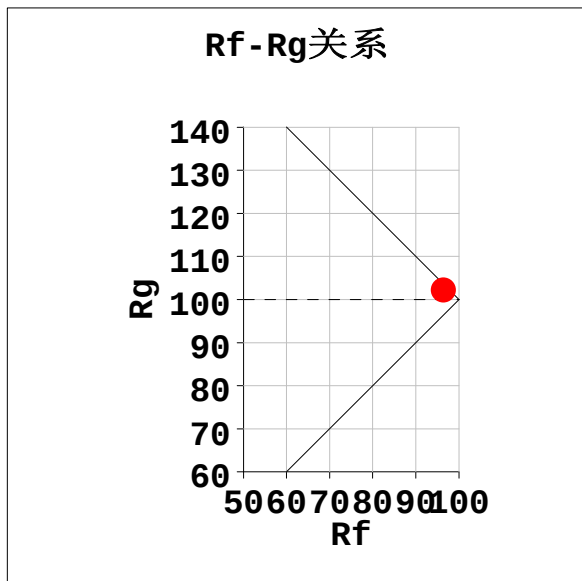
分级: *0[OUT] 白光分类: 5700K

仪器状态: 积分时间 $T=68.00ms$ $I_p=53232(81\%)$ [HAAS2000_V1_USB] V2.00.302产品型号: 6000K
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: 6
测试日期: 2023-11-19 10-17
环境湿度: 65.0%
备 注: ---

IES TM-30-18 Color Rendition Report



TM30 Report



数据分析表

Hue Bin	Hue Angle	Rf	Graphic shift(%)	
			Chroma	Hue
1	0.0° - 22.5°	97	0	-1
2	22.5° - 45.0°	99	0	0
3	45.0° - 67.5°	97	0	1
4	67.5° - 90.0°	99	0	0
5	90.0° - 112.5°	96	0	0
6	112.5° - 135.0°	96	2	1
7	135.0° - 157.5°	97	2	0
8	157.5° - 180.0°	97	1	-1
9	180.0° - 202.5°	97	1	-1
10	202.5° - 225.0°	97	0	-1
11	225.0° - 247.5°	96	0	2
12	247.5° - 270.0°	95	2	2
13	270.0° - 292.5°	97	2	-1
14	292.5° - 315.0°	95	3	-2
15	315.0° - 337.5°	94	3	-3
16	337.5° - 360.0°	95	1	-3