

Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-27K
Sample No. : 1

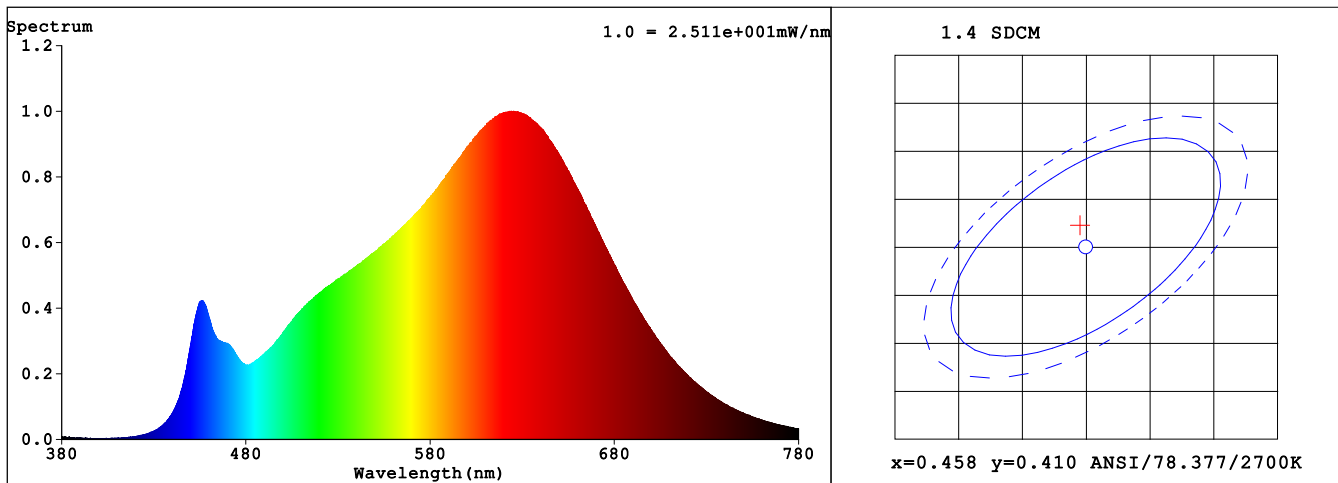
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 52881 (81%)
T : 164 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4573$ $y = 0.4124$ / $u' = 0.2601$ $v' = 0.5276$ ($duv=5.93e-04$)
CCT= 2750K Prcp WL: $L_d=583.7nm$ Purity=61.1%
Peak WL: $L_p=625nm$ FWHM: $=149.7nm$ Ratio:R=26.0% G=71.2% B=2.8%
Render Index: $R_a = 94.1$ CRI = 91.7 TM30:Rf=92 Rg=98

EEL: 0.11881 A+

R1 =95 R2 =98 R3 =99 R4 =94 R5 =94 R6 =98 R7 =92
R8 =83 R9 =64 R10=95 R11=95 R12=83 R13=96 R14=100 R15=90
LEVEL:OUT WHITE:ANSI_2700K

Photometric & Radiometric Parameters

Flux = 1166.3 lm Eff. : 112.57 lm/W $F_e = 4.1226 W$

Electrical parameters

V = 24.00 V I = 0.4317 A P = 10.36 W PF = 1.000 F=0.00 Hz



Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-27k-32
Sample No. : 1

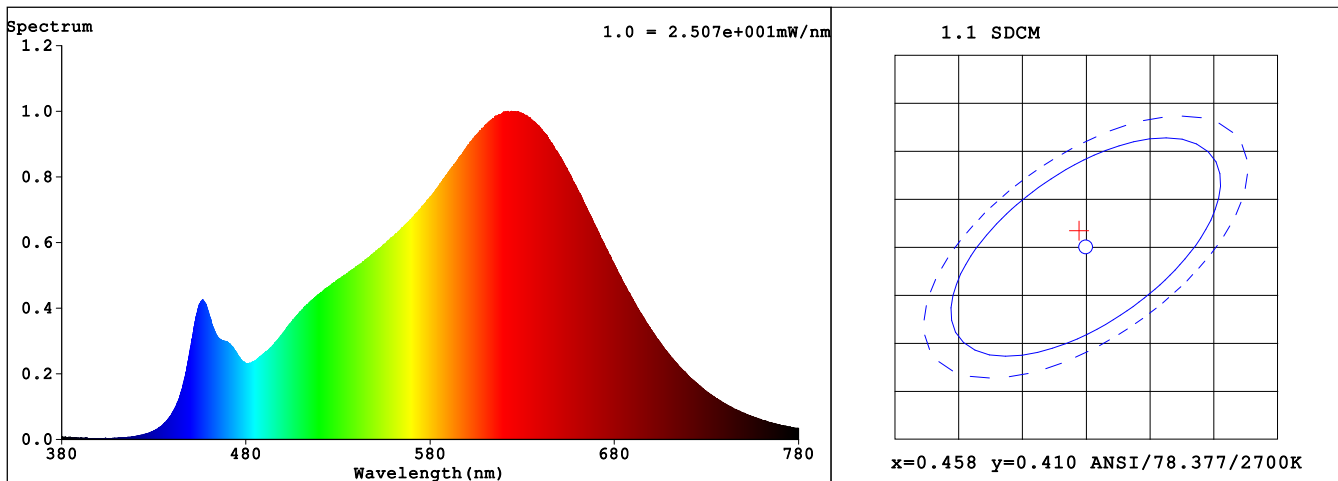
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 52862 (81%)
T : 164 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4573$ $y = 0.4118$ / $u' = 0.2603$ $v' = 0.5274$ ($duv=3.84e-04$)
CCT= 2746K Prcp WL: $L_d=583.8nm$ Purity=60.9%
Peak WL: $L_p=622nm$ FWHM: $=149.1nm$ Ratio:R=26.0% G=71.2% B=2.8%
Render Index: $R_a = 93.9$ CRI = 91.7 TM30:Rf=91 Rg=98

EEL: 0.12000 A+

R1 =95 R2 =99 R3 =98 R4 =93 R5 =94 R6 =97 R7 =91
R8 =83 R9 =64 R10=96 R11=95 R12=83 R13=96 R14=100 R15=90
LEVEL:OUT WHITE:ANSI_2700K

Photometric & Radiometric Parameters

Flux = 1163.3 lm Eff. : 111.41 lm/W $\eta_e = 4.1167$ W

Electrical parameters

V = 24.00 V I = 0.4351 A P = 10.44 W PF = 1.000 F=0.00 Hz



Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-3K
Sample No. : 1

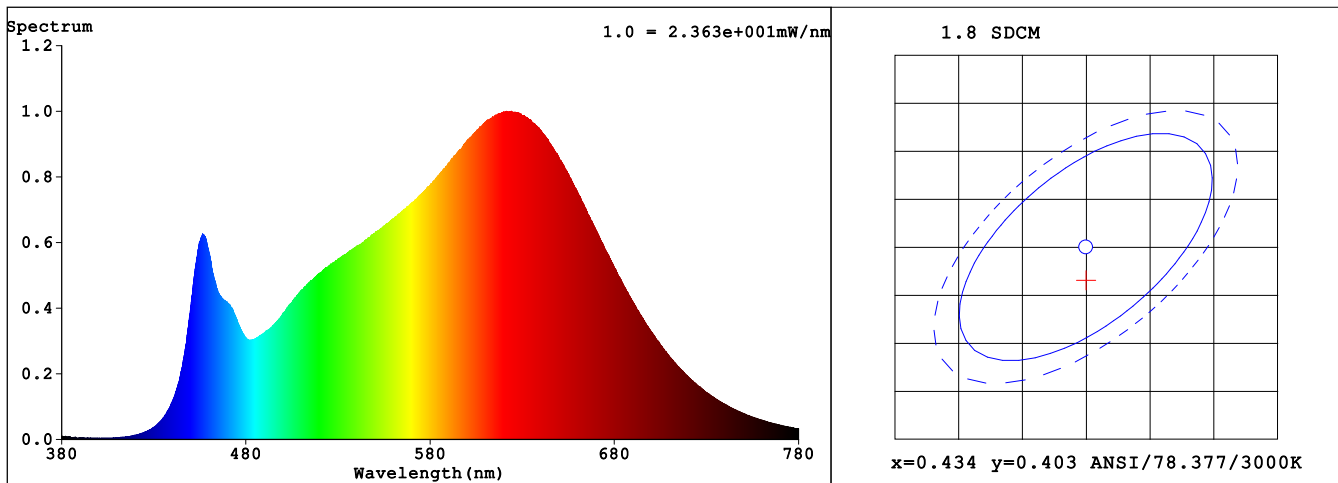
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 52723 (80%)
T : 173 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4338$ $y = 0.3995$ / $u' = 0.2505$ $v' = 0.5191$ ($duv = -1.58e-03$)

CCT= 3016K Prcp WL: $L_d = 583.3\text{nm}$ Purity=50.1%

Peak WL: $L_p = 624\text{nm}$ FWHM: $=163.4\text{nm}$ Ratio: R=24.4% G=72.2% B=3.4%

Render Index: $R_a = 94.5$ CRI = 92.8 TM30: $R_f = 91$ $R_g = 99$

EEL: 0.11543 A+

R1 = 96 R2 = 99 R3 = 98 R4 = 94 R5 = 96 R6 = 96 R7 = 91
R8 = 85 R9 = 71 R10 = 99 R11 = 95 R12 = 80 R13 = 98 R14 = 100 R15 = 93
LEVEL: OUT WHITE: ANSI_3000K

Photometric & Radiometric Parameters

Flux = 1173.2 lm Eff. : 115.98 lm/W $F_e = 4.1395\text{ W}$

Electrical parameters

V = 24.00 V I = 0.4215 A P = 10.12 W PF = 1.000 F = 0.00 Hz



Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-3K-32
Sample No. : 1

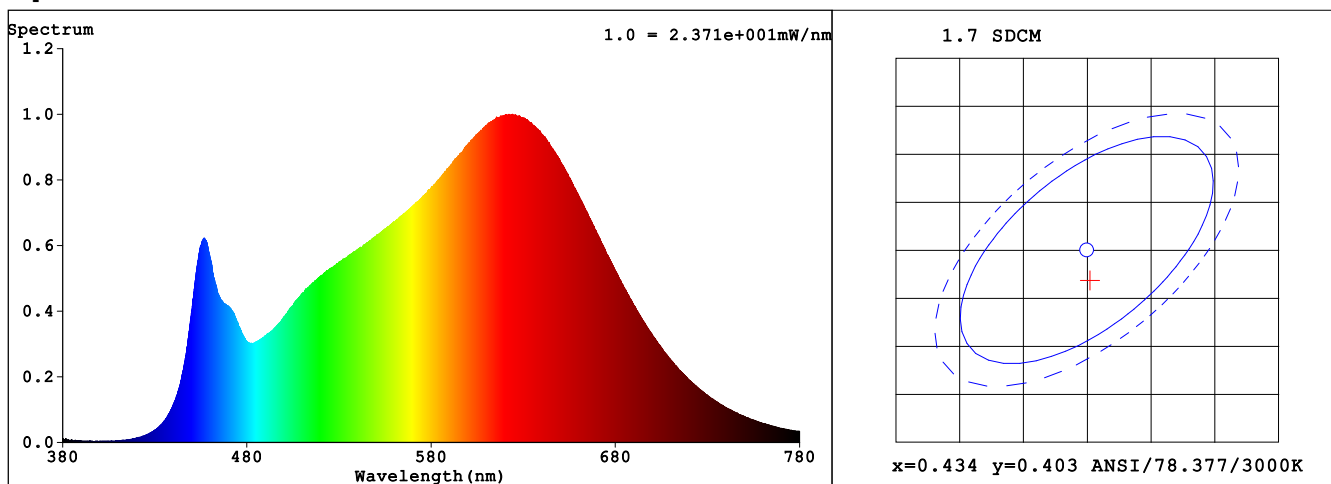
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 52382 (80%)
T : 171 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.4340$ $y = 0.3999$ / $u' = 0.2505$ $v' = 0.5193$ ($duv = -1.49e-03$)

CCT= 3015K Prcp WL: Ld=583.2nm Purity=50.3%

Peak WL: Lp=624nm FWHM: =163.5nm Ratio:R=24.4% G=72.2% B=3.4%

Render Index: Ra = 94.5 CRI = 92.8 TM30:Rf=91 Rg=99

EEL: 0.11475 A+

R1 =96 R2 =100 R3 =98 R4 =94 R5 =96 R6 =96 R7 =91
R8 =85 R9 =71 R10=99 R11=95 R12=80 R13=98 R14=100 R15=93
LEVEL:OUT WHITE:ANSI_3000K

Photometric & Radiometric Parameters

Flux = 1177.3 lm Eff. : 116.75 lm/W Fe = 4.1513 W

Electrical parameters

V = 24.00 V I = 0.4202 A P = 10.08 W PF = 1.000 F=0.00 Hz



Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-4K
Sample No. : 1

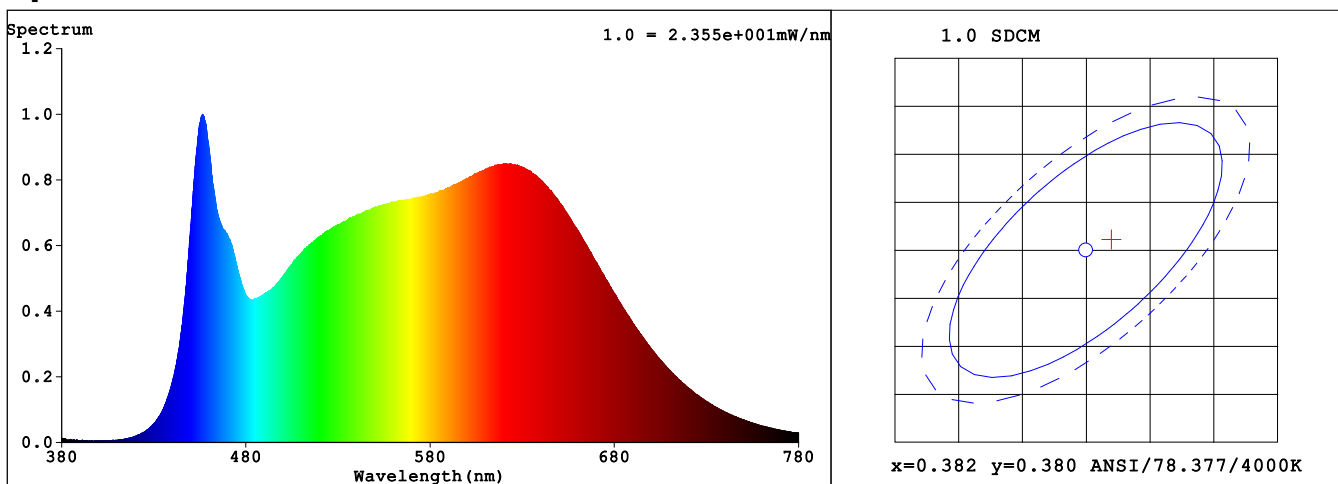
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 50547 (77%)
T : 194 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3838$ $y = 0.3808$ / $u' = 0.2257$ $v' = 0.5039$ ($duv=1.05e-03$)
CCT= 3940K Prcp WL: $L_d=578.8nm$ Purity=29.5%
Peak WL: $L_p=457nm$ FWHM: $=29.0nm$ Ratio: $R=20.1\%$ $G=75.1\%$ $B=4.8\%$
Render Index: $R_a = 95.0$ $CRI = 93.1$ $TM30:R_f=91$ $R_g=97$

EEL: 0.11114 A+

$R_1=97$ $R_2=100$ $R_3=99$ $R_4=92$ $R_5=94$ $R_6=96$ $R_7=93$
 $R_8=90$ $R_9=81$ $R_{10}=98$ $R_{11}=94$ $R_{12}=71$ $R_{13}=98$ $R_{14}=100$ $R_{15}=94$
LEVEL:OUT WHITE:ANSI_4000K

Photometric & Radiometric Parameters

Flux = 1218.6 lm Eff. : 121.25 lm/W $F_e = 4.2573 W$

Electrical parameters

$V = 24.00 V$ $I = 0.4188 A$ $P = 10.05 W$ $PF = 1.000$ $F=0.00 Hz$



Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-4K-32
Sample No. : 1

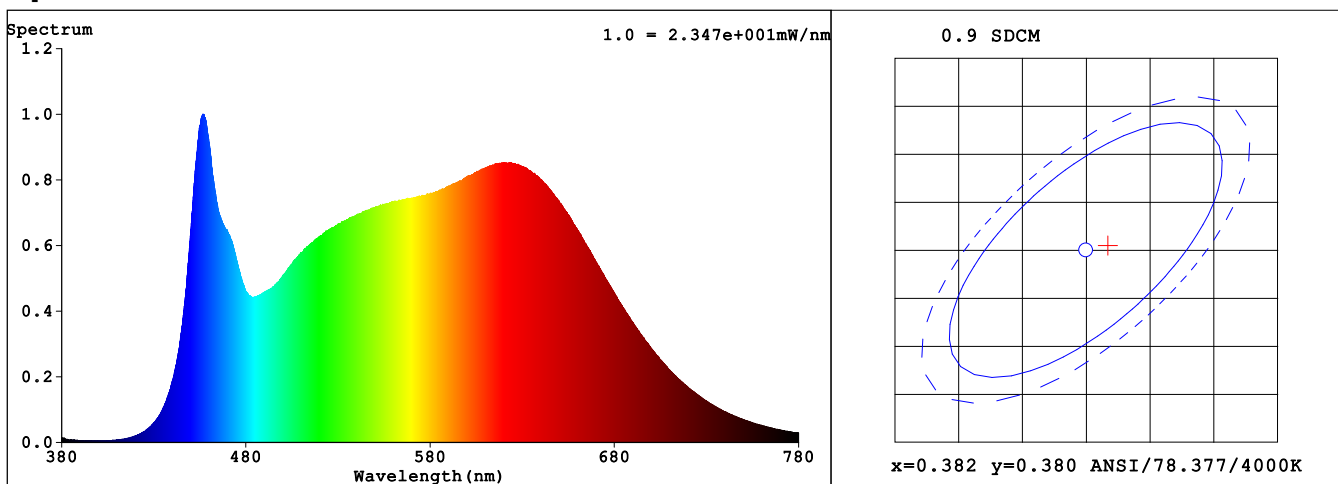
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 50671 (77%)
T : 194 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3835$ $y = 0.3802$ / $u' = 0.2258$ $v' = 0.5035$ ($duv=8.53e-04$)

CCT= 3943K Prcp WL: $L_d=578.9nm$ Purity=29.2%

Peak WL: $L_p=457nm$ FWHM: $=29.4nm$ Ratio:R=20.1% G=75.0% B=4.8%

Render Index: $R_a = 94.9$ CRI = 93.1 TM30:Rf=91 Rg=97

EEL: 0.11203 A+

R1 =97 R2 =99 R3 =99 R4 =92 R5 =94 R6 =96 R7 =92
R8 =90 R9 =81 R10=98 R11=94 R12=72 R13=99 R14=100 R15=94
LEVEL:OUT WHITE:ANSI_4000K

Photometric & Radiometric Parameters

Flux = 1218.4 lm Eff. : 120.29 lm/W $\Phi_e = 4.2621 W$

Electrical parameters

V = 24.00 V I = 0.4221 A P = 10.13 W PF = 1.000 F=0.00 Hz



Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-6K
Sample No. : 1

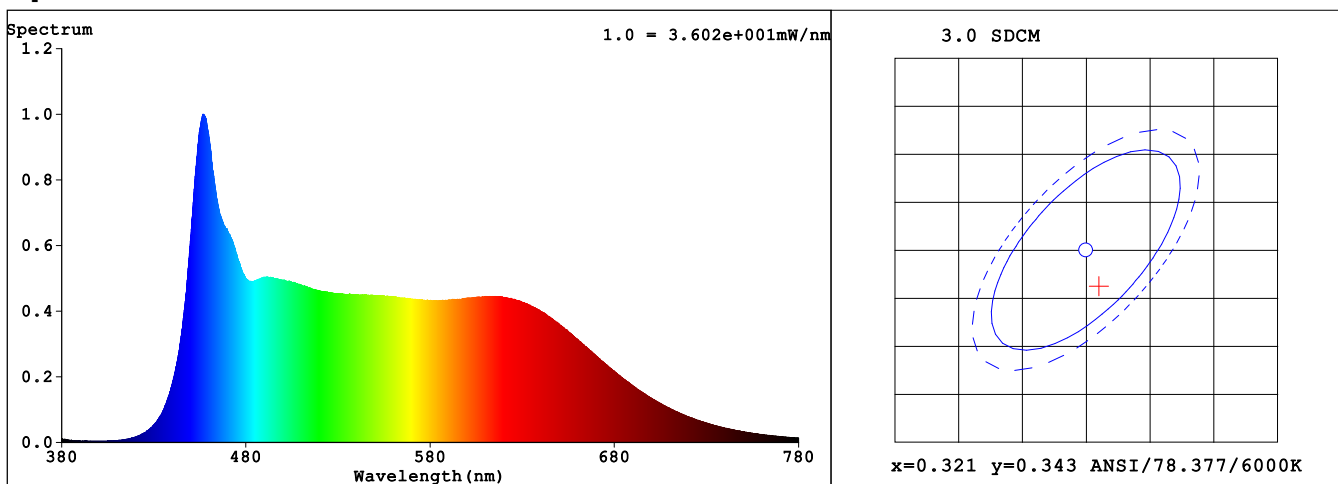
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 47427 (72%)
T : 194 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3220$ $y = 0.3388$ / $u' = 0.2006$ $v' = 0.4748$ ($duv=3.62e-03$)
CCT= 5979K Prcp WL: $L_d=498.0nm$ Purity=3.5%
Peak WL: $L_p=457nm$ FWHM: $=31.6nm$ Ratio:R=16.6% G=75.4% B=8.0%
Render Index: $R_a = 90.6$ CRI = 90.2 TM30:Rf=88 Rg=97

EEL: 0.11622 A+

R1 =95 R2 =93 R3 =90 R4 =88 R5 =93 R6 =91 R7 =87
R8 =89 R9 =96 R10=84 R11=93 R12=73 R13=94 R14=95 R15=93
LEVEL:OUT WHITE:ANSI_5700K

Photometric & Radiometric Parameters

Flux = 1179.6 lm Eff. : 115.30 lm/W $F_e = 4.3127 W$

Electrical parameters

V = 24.00 V I = 0.4263 A P = 10.23 W PF = 1.000 F=0.00 Hz



Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-6K-32
Sample No. : 1

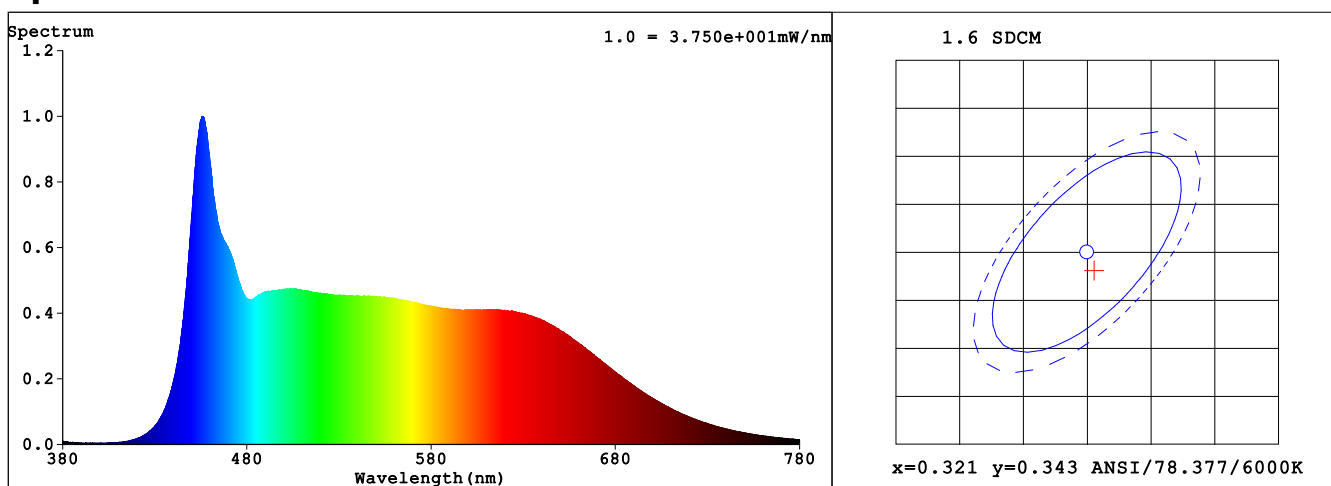
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 48409 (74%)
T : 194 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.3216$ $y = 0.3406$ / $u' = 0.1996$ $v' = 0.4757$ ($duv=5.38e-03$)
CCT= 5997K Prcp WL: $L_d=499.8nm$ Purity=3.6%
Peak WL: $L_p=456nm$ FWHM: $=28.2nm$ Ratio:R=15.9% G=76.5% B=7.7%
Render Index: $R_a = 92.8$ CRI = 91.8 TM30:Rf=90 Rg=97

EEL: 0.11189 A+

R1 =97 R2 =96 R3 =93 R4 =89 R5 =94 R6 =95 R7 =89
R8 =90 R9 =92 R10=91 R11=93 R12=72 R13=97 R14=96 R15=93
LEVEL:OUT WHITE:ANSI_5700K

Photometric & Radiometric Parameters

Flux = 1198.0 lm Eff.: 120.09 lm/W $F_e = 4.3785 W$

Electrical parameters

V = 24.00 V I = 0.4157 A P = 9.976 W PF = 1.000 F=0.00 Hz



Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-BL
Sample No. : 1

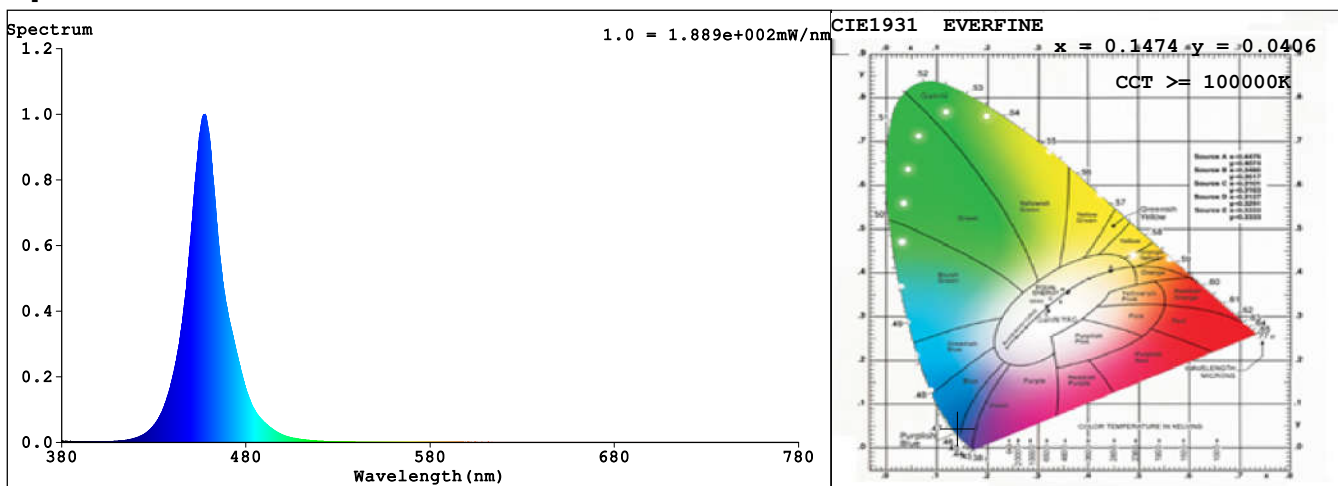
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 52858 (81%)
T : 41 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.1474$ $y = 0.0406$ / $u' = 0.1847$ $v' = 0.1143$ ($duv = -1.92e-01$)
CCT $\geq$ 100000K Prcp WL: $L_d = 461.3nm$ Purity=97.1%
Peak WL: $L_p = 458nm$ FWHM: $\approx 19.0nm$ Ratio: R=0.4% G=10.2% B=89.4%
Render Index: Ra = 0.1 CRI = 0.0 TM30: Rf=0 Rg=28

EEL: 0.41841 B

R1=0 R2=0 R3=0 R4=0 R5=1 R6=0 R7=0
R8=0 R9=0 R10=0 R11=0 R12=0 R13=0 R14=0 R15=0
LEVEL:OUT WHITE:OUT

Photometric & Radiometric Parameters

Flux = 230.01 lm Eff.: 22.33 lm/W Fe = 4.6899 W

Electrical parameters

V = 24.00 V I = 0.4292 A P = 10.30 W PF = 1.000 F=0.00 Hz

 EVERFINE

Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-GN
Sample No. : 1

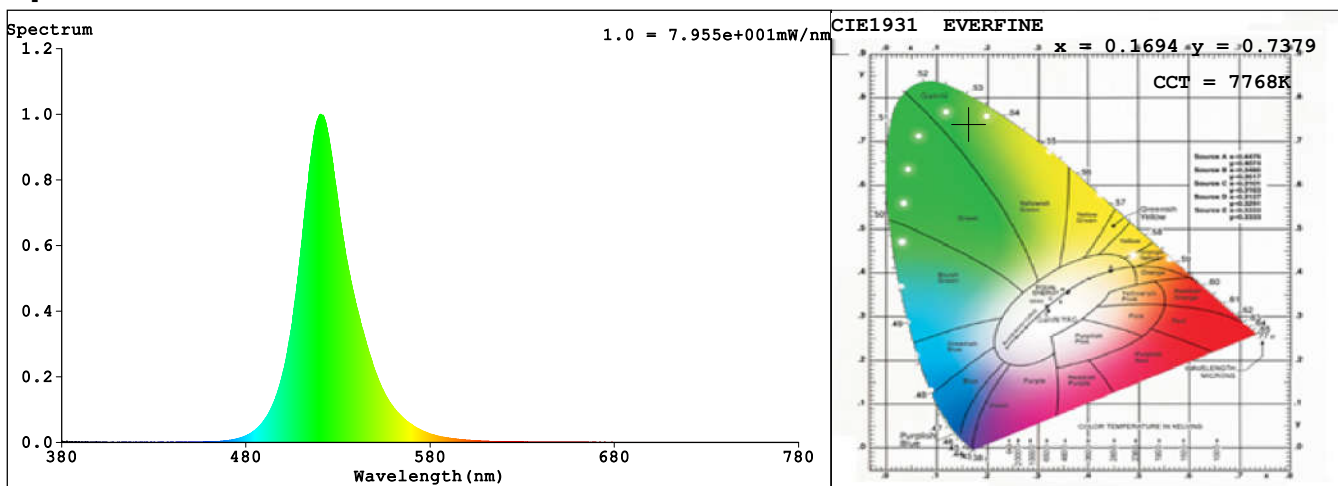
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 52875 (81%)
T : 58 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.1694$ $y = 0.7379$ / $u' = 0.0588$ $v' = 0.5767$ ($duv=1.60e-01$)
CCT= 7768K Prcp WL: $L_d=527.9nm$ Purity=84.0%
Peak WL: $L_p=521nm$ FWHM: $=28.5nm$ Ratio:R=0.2% G=98.2% B=1.6%
Render Index: $R_a = 0.0$ CRI = 2.4 TM30:Rf=1 Rg=6

EEL: 0.09603 A++ Highest

R1=0 R2=0 R3=0 R4=0 R5=0 R6=0 R7=0
R8=0 R9=0 R10=0 R11=0 R12=0 R13=0 R14=36 R15=0
LEVEL:OUT WHITE:OUT

Photometric & Radiometric Parameters

Flux = 1375.6 lm Eff.: 141.85 lm/W $F_e = 2.7693 W$

Electrical parameters

V = 24.00 V I = 0.4041 A P = 9.698 W PF = 1.000 F=0.00 Hz

 EVERFINE

Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-RD
Sample No. : 1

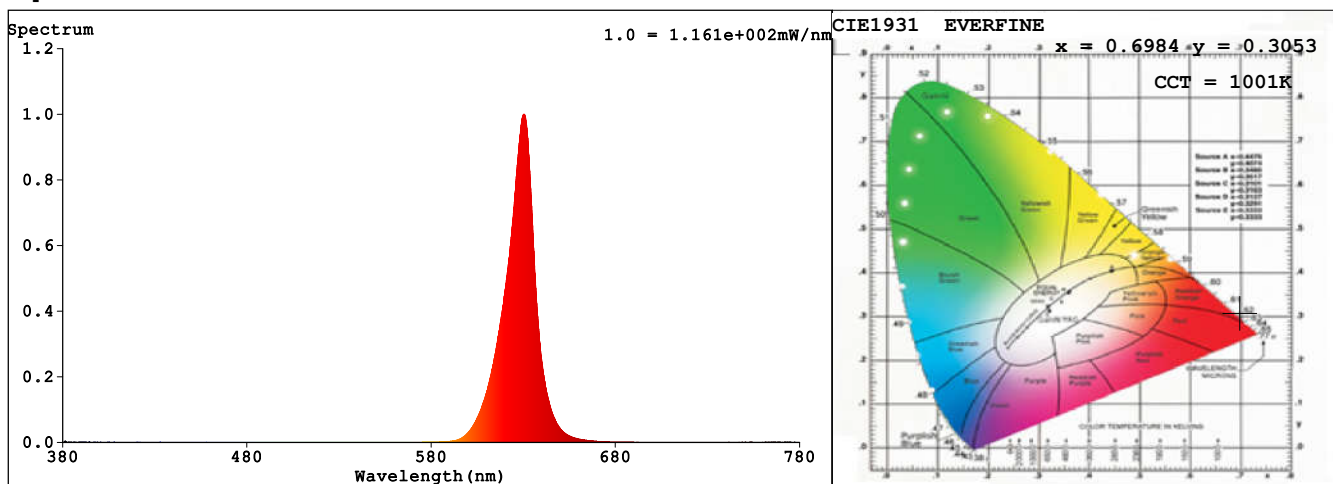
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 46301 (71%)
T : 32 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.6984$ $y = 0.3053$ / $u' = 0.5303$ $v' = 0.5217$ ($duv = -8.18e-02$)
CCT= 1001K Prcp WL: $L_d = 621.3nm$ Purity=100.0%
Peak WL: $L_p = 630nm$ FWHM: $=15.5nm$ Ratio: $R=98.4\%$ $G=1.6\%$ $B=0.0\%$
Render Index: $R_a = 24.3$ CRI = 28.6 TM30: $R_f = 0$ $R_g = 0$

EEL: 0.23261 A

R1=2 R2=78 R3=25 R4=0 R5=0 R6=90 R7=0
R8=0 R9=0 R10=72 R11=0 R12=79 R13=28 R14=56 R15=0
LEVEL:OUT WHITE:OUT

Photometric & Radiometric Parameters

Flux = 455.81 lm Eff.: 47.65 lm/W $F_e = 2.2245 W$

Electrical parameters

V = 24.00 V I = 0.3986 A P = 9.566 W PF = 1.000 F=0.00 Hz

 EVERFINE

Date : 2026-04-24
Test by : E.V.
Specification : AL-SL-NU-IP20-24-YW
Sample No. : 1

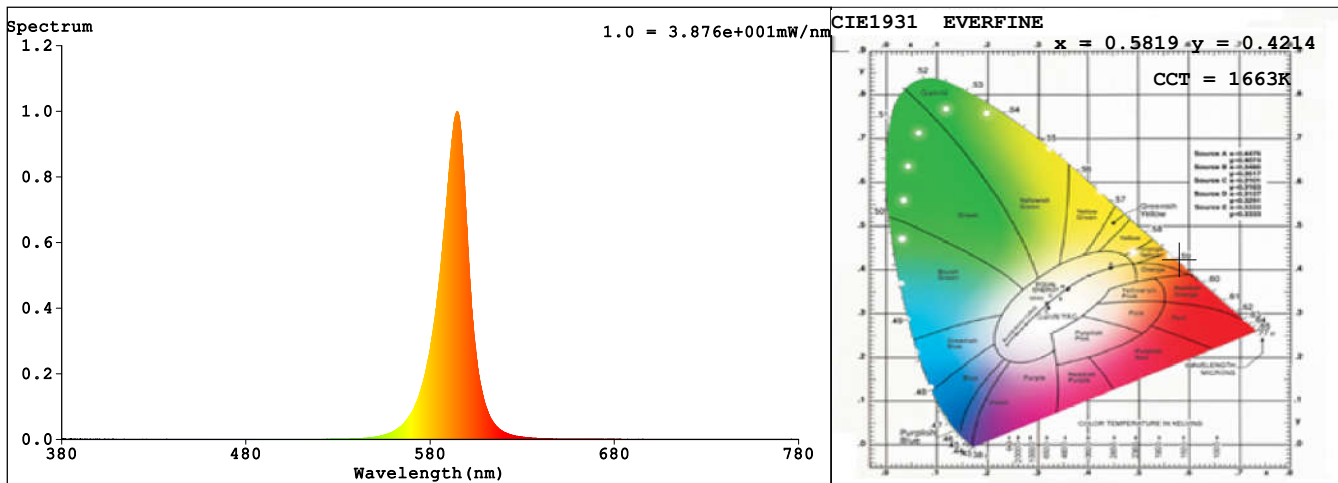
Sam. Status : Finished product test
Instrument : HaasSuite(EVERFINE)
Remark : 1M
Device SN : HS-2000

Test Condition

Temperature : 25Deg
WL Range : 380nm-780nm
Test Mode : Fast Test
Sensitivity : High

RH : 60.0%
IP : 48849 (75%)
T : 99 ms

Spectrum



Colorimetric Parameters

Chromaticity Coordinate: $x = 0.5819$ $y = 0.4214$ / $u' = 0.3377$ $v' = 0.5502$ ($duv = 5.63e-03$)
CCT= 1663K Prcp WL: $L_d = 590.7\text{nm}$ Purity=100.0%
Peak WL: $L_p = 595\text{nm}$ FWHM: $=16.2\text{nm}$ Ratio: R=15.5% G=84.5% B=0.0%
Render Index: $R_a = 12.8$ CRI = 11.5 TM30: $R_f = 1$ $R_g = 3$

EEL: 0.26323 B

R1=0 R2=49 R3=20 R4=0 R5=0 R6=34 R7=0
R8=0 R9=0 R10=23 R11=0 R12=0 R13=0 R14=47 R15=0
LEVEL:OUT WHITE:OUT

Photometric & Radiometric Parameters

Flux = 380.38 lm Eff.: 40.36 lm/W Fe = 772.45 mW

Electrical parameters

V = 24.00 V I = 0.3927 A P = 9.424 W PF = 1.000 F=0.00 Hz

