

SPECIFICATION

MODEL: GL-5730WEA-2



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■ **1. Features**

- 1.1 Package: 5.7*3.0*0.9mm
- 1.2 Emitted Color: White
- 1.3 Mono-color type
- 1.4 Soldering methods: All SMT assembly methods
- 1.5 Comply RoHS standard

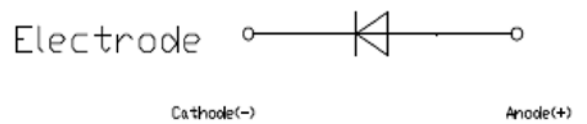
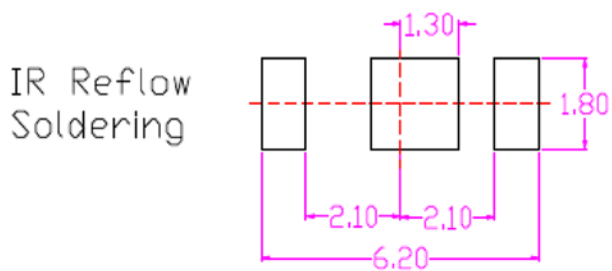
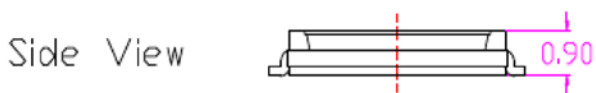
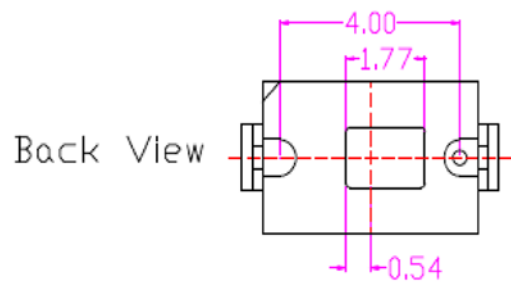
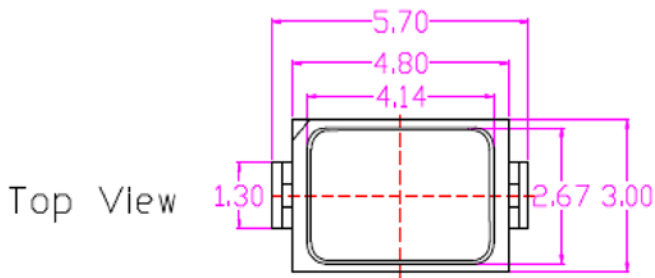
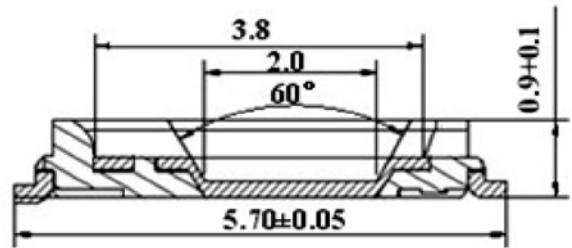
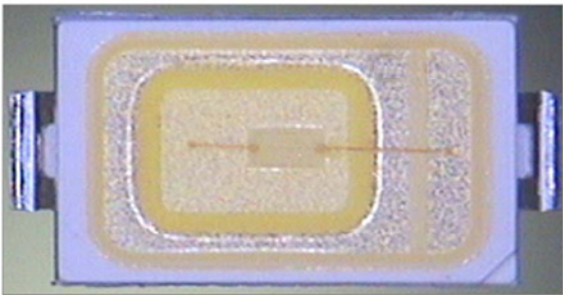
■ **2. Applications**

Apply to indoor lighting, outdoor lighting field

■ **3. Product Naming**

GL	5730	W	X	X	—	X
Company Name: Good Led	products model: 5730	LED Color Products: White	Chip manufacturers E-EPISTAR	Chip code: A+:(20*40) A:(20*38) B:(17*34)		Angle: 1:(140°C) 2:(120°C)

4. External Dimensions



■ **5. The main optical and electrical properties (Ta=25°C)**

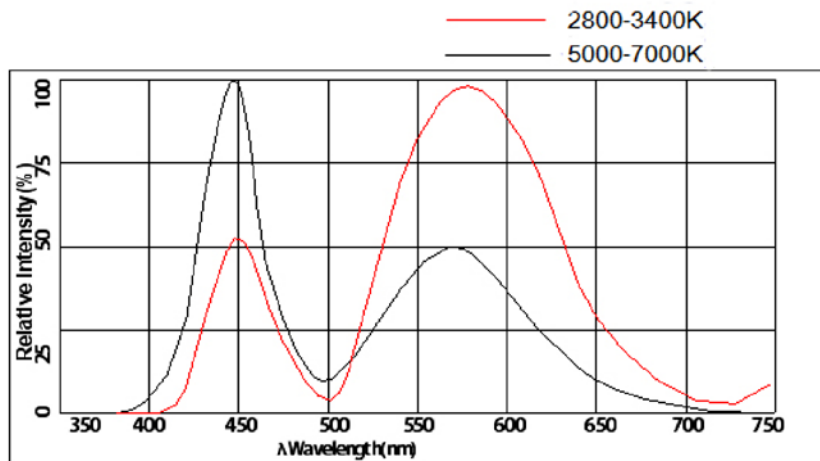
Project	Symbol	Conditions	Minimum	Average	Max.	Units
Forward Voltage	VF	IF=150mA		3,2		V
Reverse current	IR	VR=1.2V			5	μA
Flux	Φ	IF=150mA	55		65	Lm
Color Temperature	CCT	IF=150mA	5500		6000	K
Color Rendering Index	Ra	IF=150mA	60		85	

■ **6. Absolute Maximum Rating (Ta=25°C)**

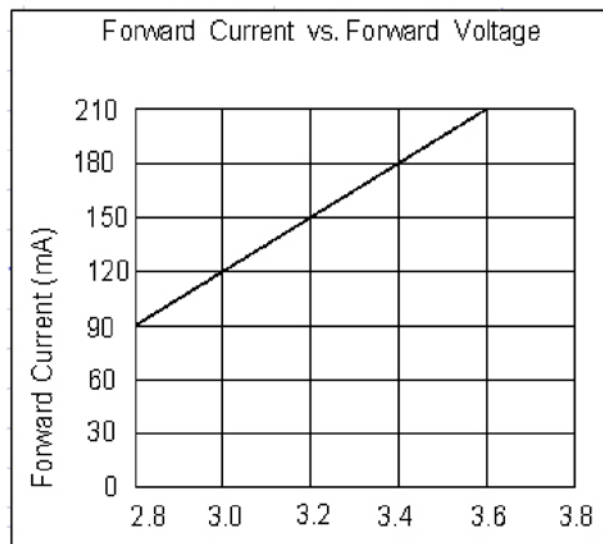
Project	Symbol	Limit parameter	Units
Forward Current	IF	150	mA
Recommended Current	IF	≤120	mA
Pulse peak current	IFP	500	mA
Reverse Voltage	VR	5	V
Power	PD	0,5	W
Operating temperature	Topr	(-30~+85)	°C
Storage Temperature	Tstg	(-40~+100)	°C
Soldering temperature	Tsol	reflow soldering: 250°C/10(Seconds0); Hand soldering: 300°C/3(Seconds)	
ESD Sensitivity	ESD	2000V HBM	

- 7. Typical electro-optical characteristics curves

Spectrum Distribution TA=25°C

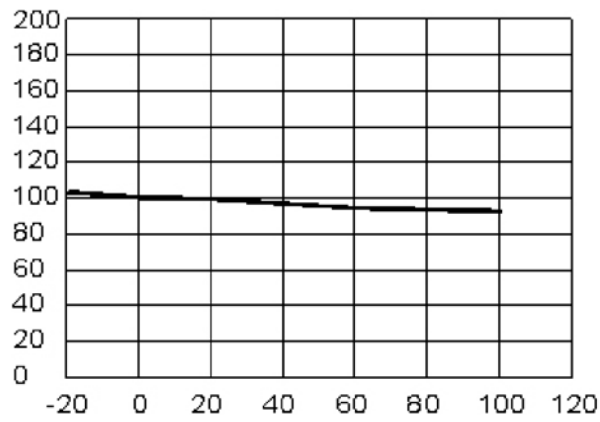


Forward voltage and forward current curves TA=25°C



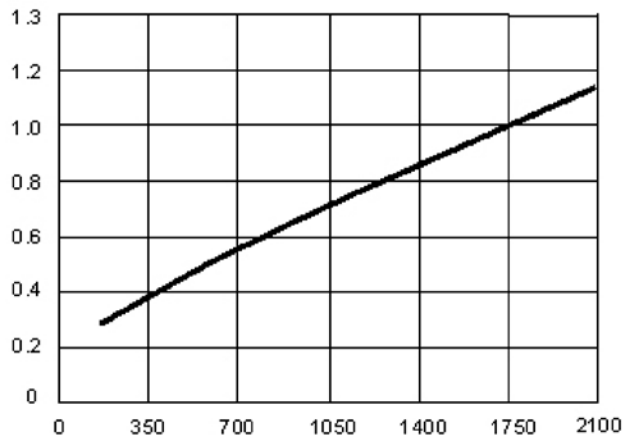


Relative Luminous Intensity (%)

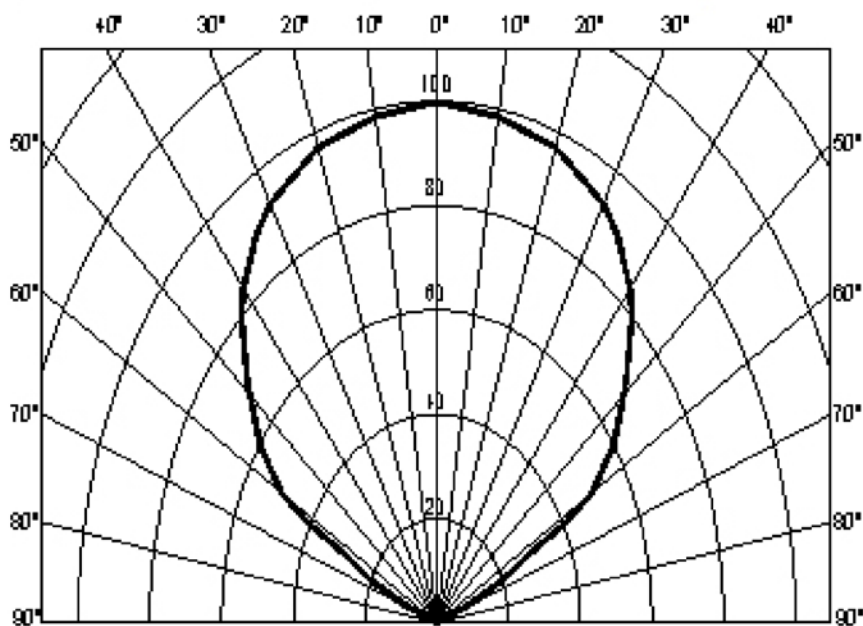


Ambient Temperature Ta (°C)

Normalized Relative Luminous Flux



Forward Current (mA)

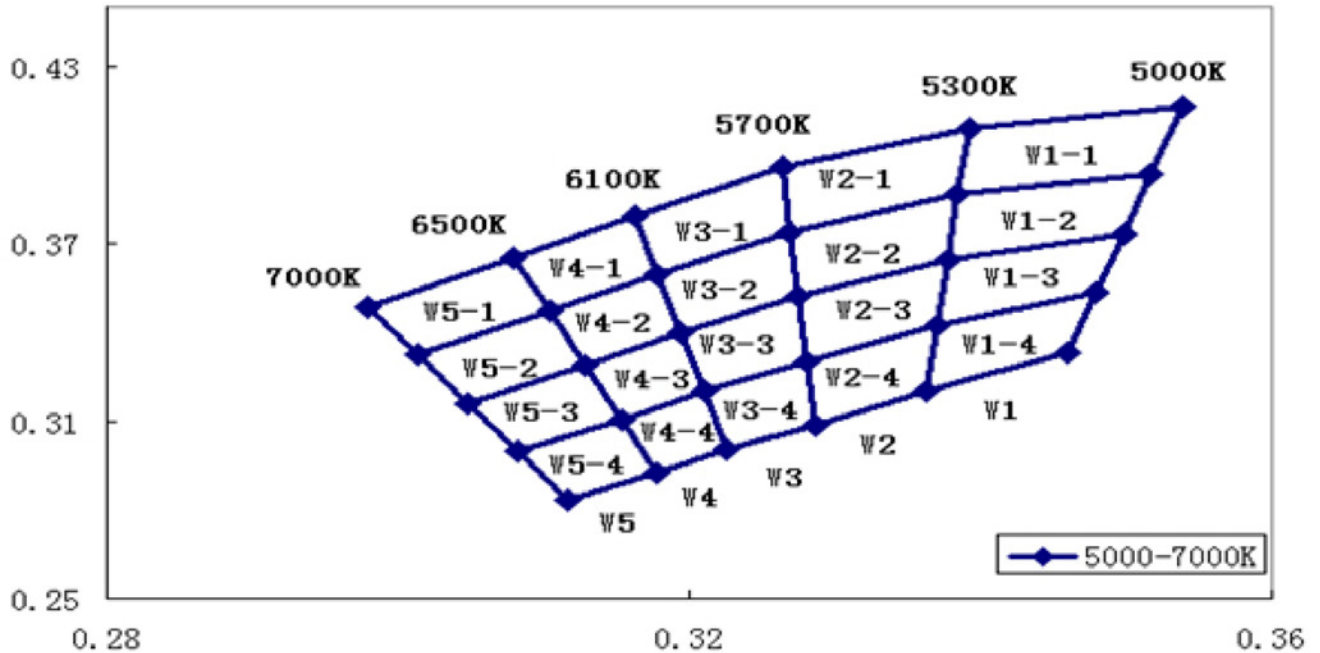


8. Reliability Test Standards

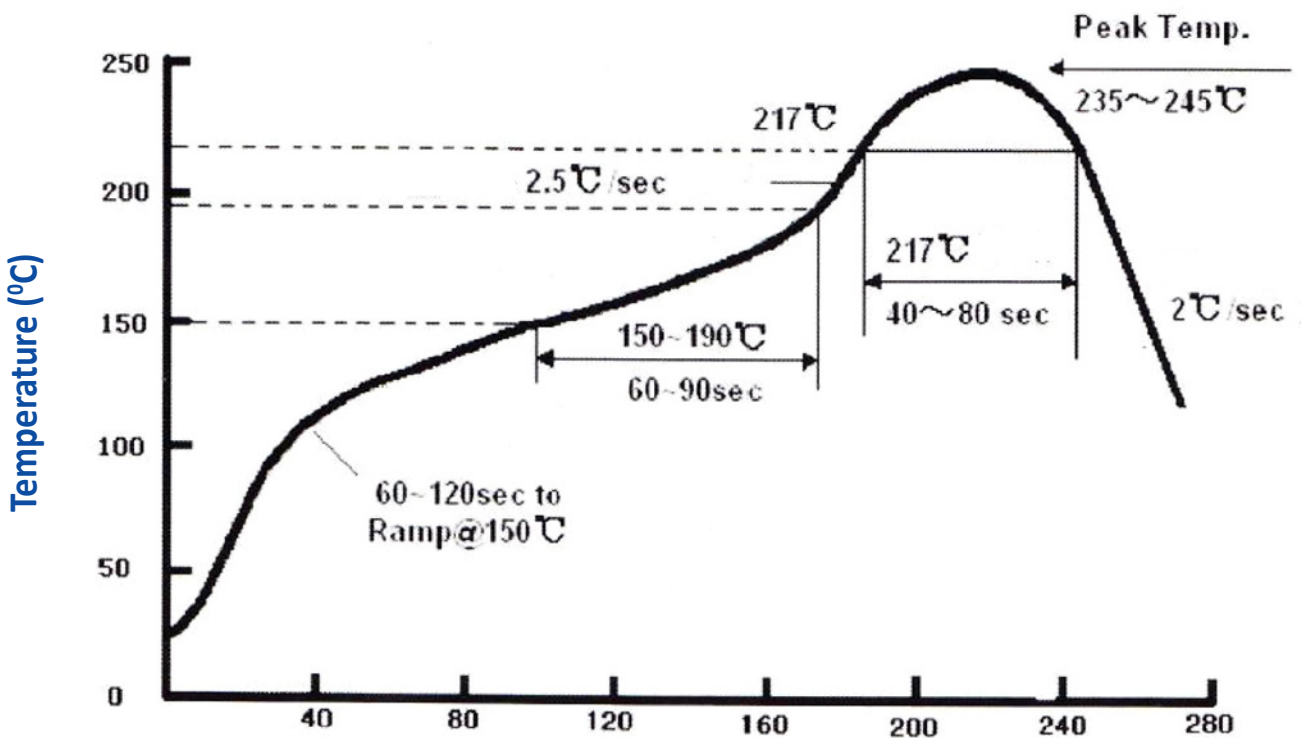
Type	Pilot project	Test conditions	Duration	The number of samples	Charge level
Environmental testing	Temperature cycling	45°C(30Min)~25°C(5Min) ~100°C(30Min)~25°C(5Min)	Cycle 100 Round	30	0/30
	Thermal Shock	-40°C(15Min) ~100°C(15Min)	Cycle 300 Round	30	0/30
	Humidity cycle	30°C~65°C RH=90% 24H/1Round	Cycle 50 Round	30	0/30
	High Temperature Storage	T _a =100°C	1000H	30	0/30
	Cryogenic storage	T _a =-40°C	1000H	30	0/30
	High temperature and humidity storage	T _a =60°C RH=90%	1000H	30	0/30
Life test	Life test at room temperature	T _a =25°C IF=150mA	1000H	30	0/30
	High temperature and humidity life test	T _a =60°C RH=90% IF=150mA	1000H	30	0/30
	Low-temperature life test	T _a =-30°C IF=150mA	1000H	30	0/30
Destructive test	Resistance to soldering heat	T _{sol} =360°C±5°C,10S	Welding time	5	0/5
	Solderability	T _{sol} =350°C±5°C,5S Using flux	Welding time	5	0/5
Mechanical test	Vibration test	20G 20-2000HZ 4Min X, Y, Z	Loop 4 times in each direction	5	0/5
	Drop test	75mm	Cycle 3 Round	5	0/5

9. White color coordinates map

5000-7000K

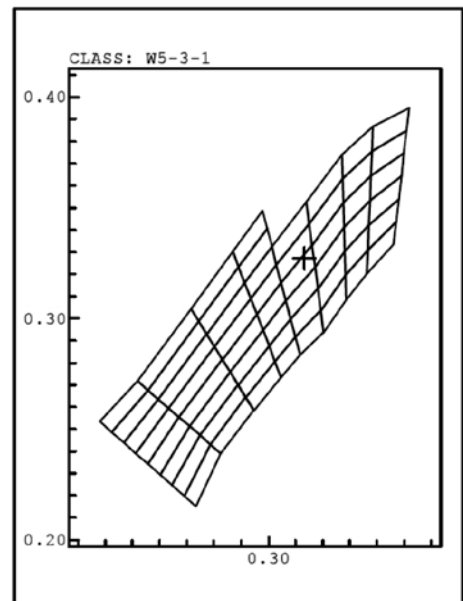
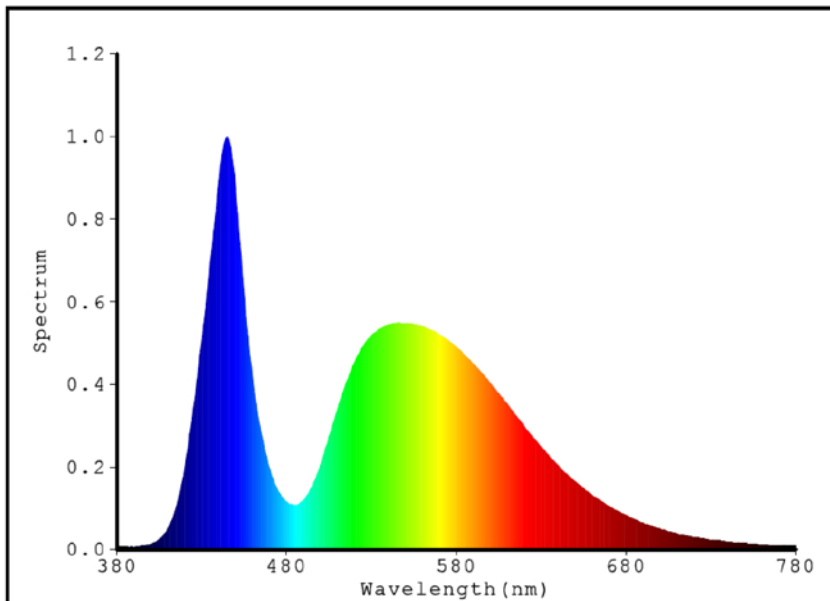


10. Solder conditions



■ 11. Test Report (EVERFINE LEDspec)

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3133$ $y=0.3274$ $u'=0.1988$ $v'=0.4675$ $duv=3.075e-003$

Tc=6486K Dominant WL:Ld=487.8nm Purity=7.2%

Ratio:R=13.0% G=83.7% B=3.3% Peak WL:Lp=444.9nm HWL:27.7nm

Render Index:Ra=70.0 [None]

R1 =69 R2 =72 R3 =73 R4 =72 R5 =71 R6 =64 R7 =78

R8 =61 R9 =-28 R10=32 R11=71 R12=44 R13=68 R14=84 R15=64

Photo Parameters:

Flux = 60.58 lm Eff. : 124.51 lm/W Fe = 157.4 mW

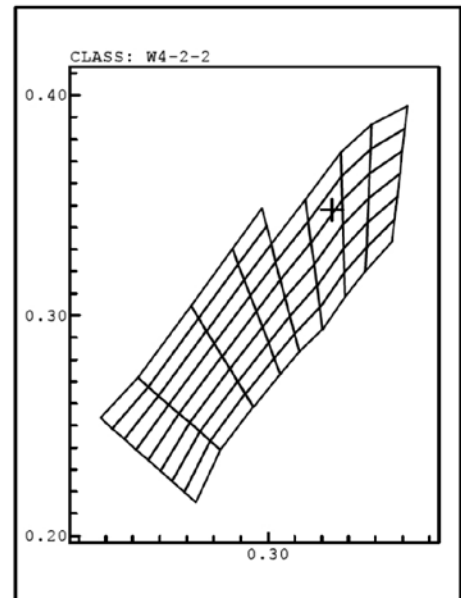
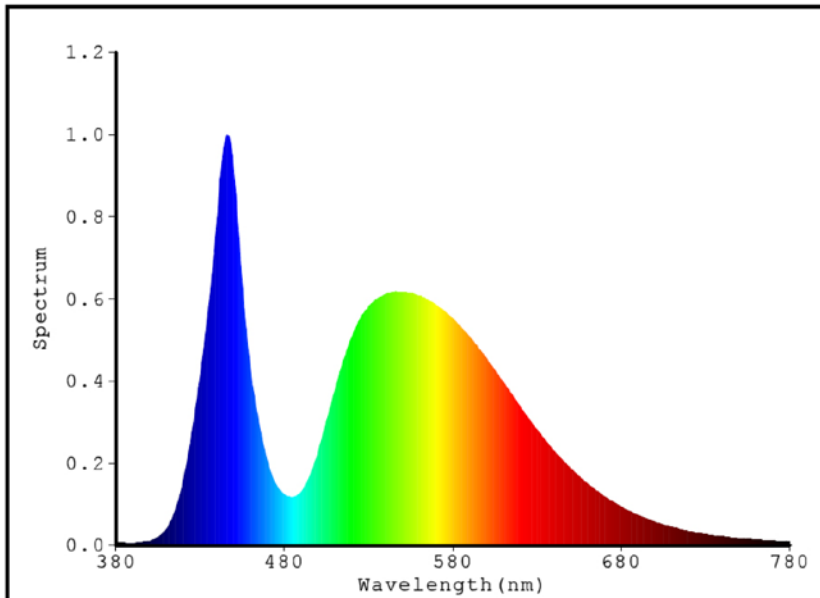
Electrical parameters:

VF = 3.243 V IF = 149.9 mA P = 486.5 mW

LEVEL:519 WHITE:W5-3-1

Status: T=1556.00ms Ip=44133 (67%) [HAAS2000_V1_USB] V2.00.167

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3238$ $y=0.3481$ / $u'=0.1983$ $v'=0.4798$ $duv=8.362e-003$

$T_c=5877K$ Dominant WL: $L_d=513.7nm$ Purity=3.2%

Ratio: R=13.1% G=83.9% B=3.0% Peak WL: $L_p=446.2nm$ HWL: 25.0nm

Render Index: $R_a=68.9$ [None]

$R_1=66$ $R_2=72$ $R_3=76$ $R_4=70$ $R_5=68$ $R_6=63$ $R_7=79$

$R_8=57$ $R_9=-40$ $R_{10}=33$ $R_{11}=68$ $R_{12}=41$ $R_{13}=66$ $R_{14}=86$ $R_{15}=60$

Photo Parameters:

Flux = 63.08 lm Eff. : 124.33 lm/W Fe = 156.2 mW

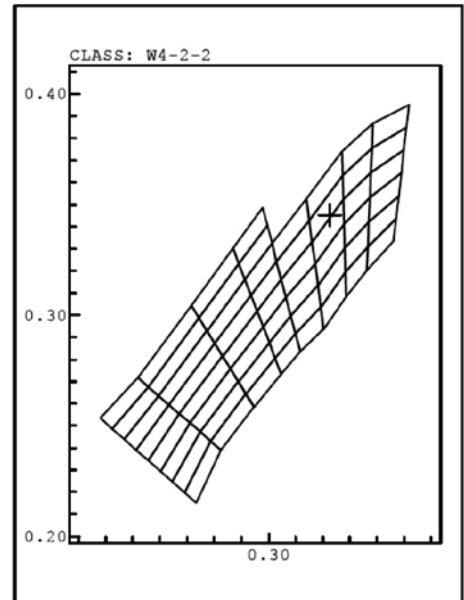
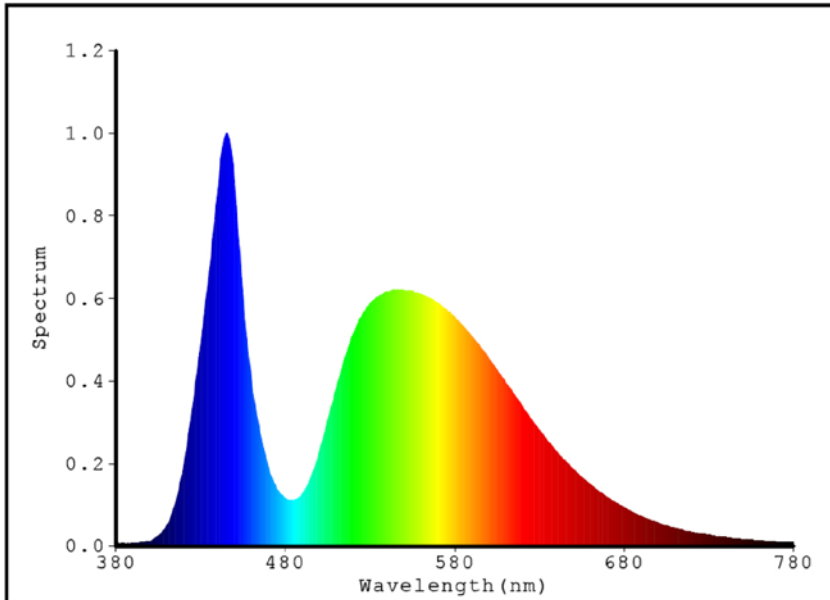
Electrical parameters:

$V_f = 3.382$ V $I_f = 150.0$ mA $P = 507.4$ mW

LEVEL: 519 WHITE: W4-2-2

Status: $T=1806.00ms$ $I_p=53435$ (82%) [HAAS2000_V1_USB] V2.00.167

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3224$ $y=0.3452$ / $u'=0.1985$ $v'=0.4782$ $duv=7.563e-003$

Tc=5942K Dominant WL:Ld=506.7nm Purity=3.3%

Ratio:R=13.0% G=84.0% B=3.0% Peak WL:Lp=445.9nm HWL:26.8nm

Render Index:Ra=68.4 [None]

R1 =66 R2 =71 R3 =75 R4 =70 R5 =68 R6 =63 R7 =78

R8 =57 R9 =-40 R10=31 R11=68 R12=42 R13=65 R14=86 R15=60

Photo Parameters:

Flux = 62.62 lm Eff. : 129.30 lm/W Fe = 156.4 mW

Electrical parameters:

VF = 3.229 V IF = 149.9 mA P = 484.3 mW

LEVEL:519 WHITE:W4-2-2

Status: T=1806.00ms Ip=52965 (81%) [HAAS2000_V1_USB] V2.00.167