

## **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

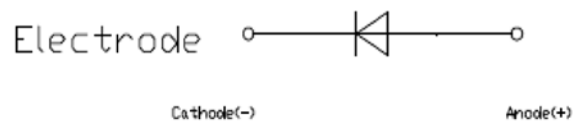
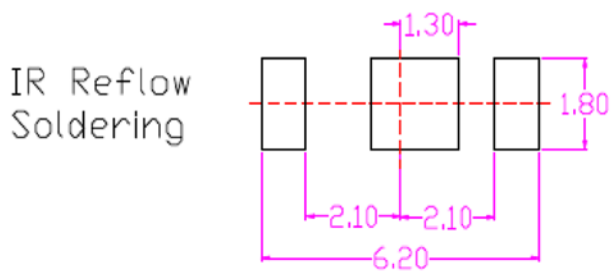
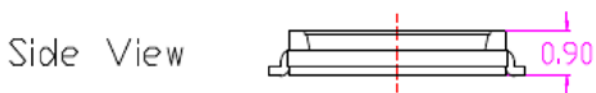
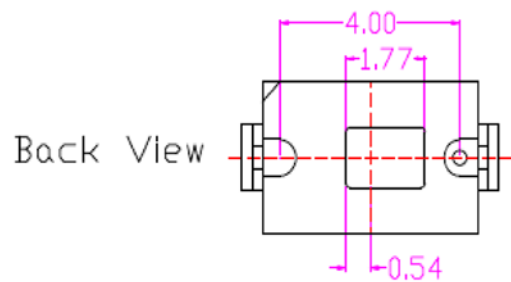
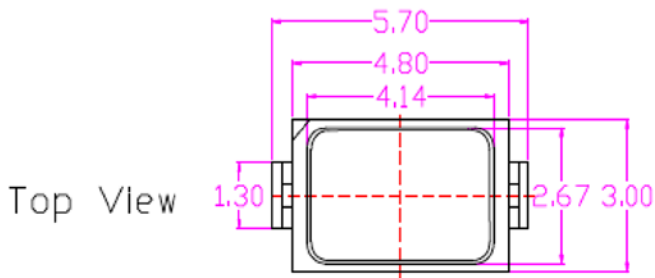
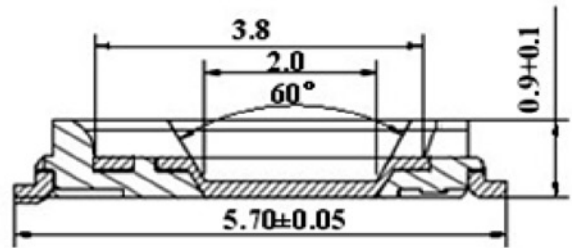
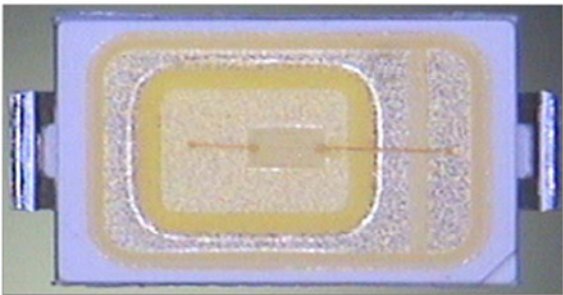
■ **2. Applications**

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)**

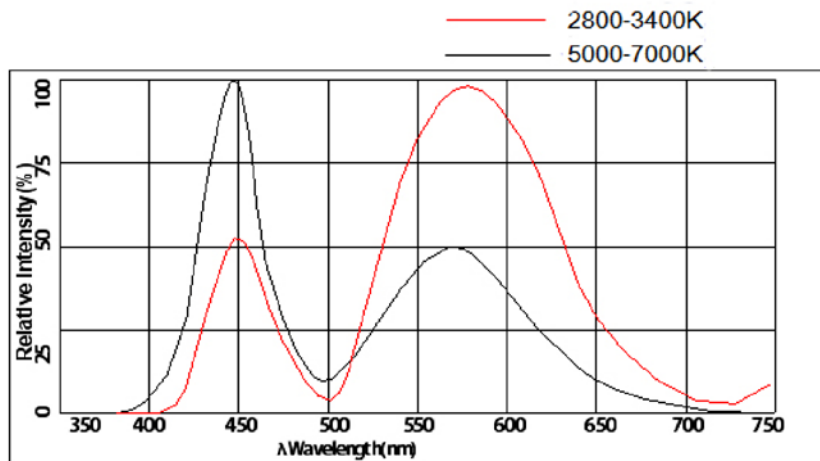
Project	Symbol	Conditions	Minimum	Average	Max.	Units
Forward Voltage	VF	IF=150mA		3,2		V
Reverse current	IR	VR=1.2V			5	μA
Flux	Φ	IF=150mA	55		60	Lm
Color Temperature	CCT	IF=150mA	2600		2800	K
Color Rendering Index	Ra	IF=150mA	60		85	

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

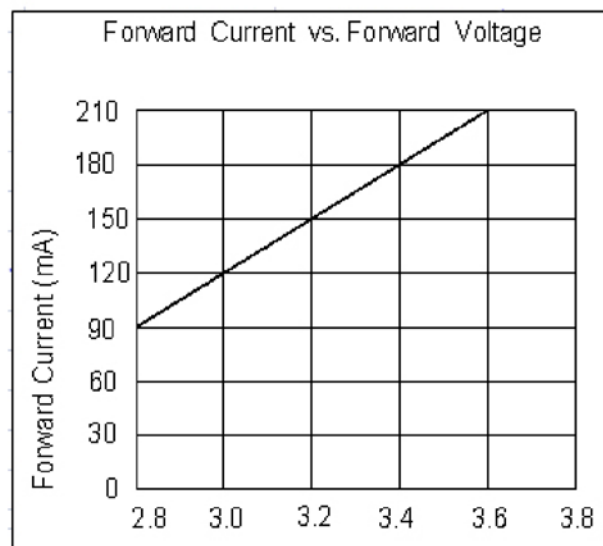
Project	Symbol	Limit parameter	Units
Forward Current	IF	150	mA
Recommended Current	IF	≤120	mA
Pulse peak current	IFP	500	mA
Reverse Voltage	VR	5	V
Power	PD	0,5	W
Operating temperature	Topr	(-30~+85)	°C
Storage Temperature	Tstg	(-40~+100)	°C
Soldering temperature	Tsol	reflow soldering: 250°C/10(Seconds0);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

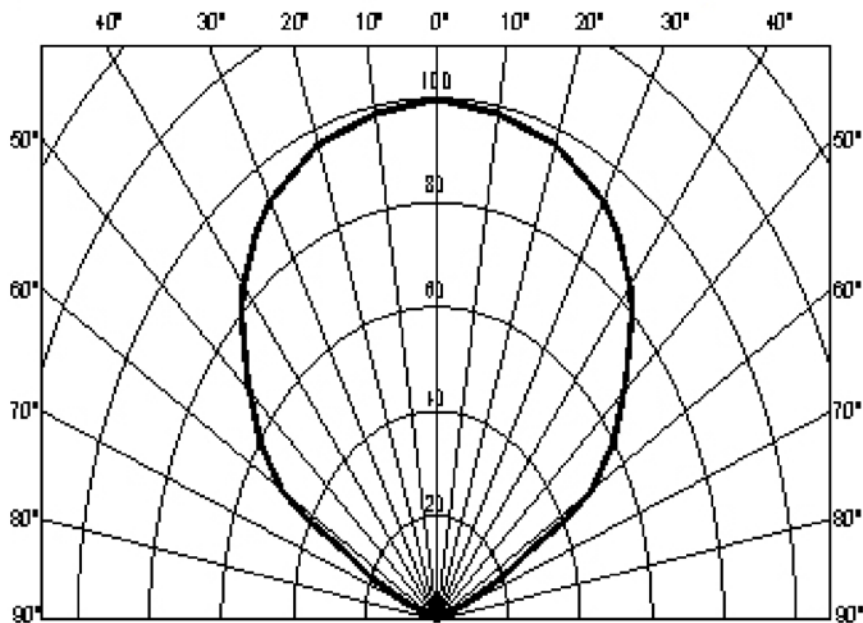
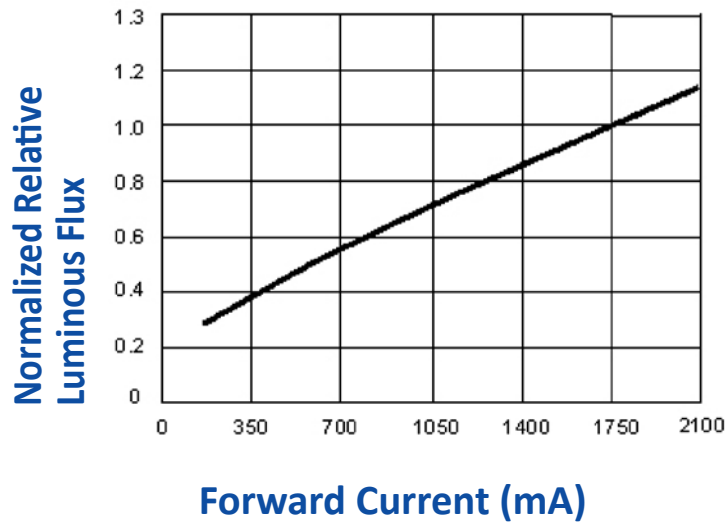
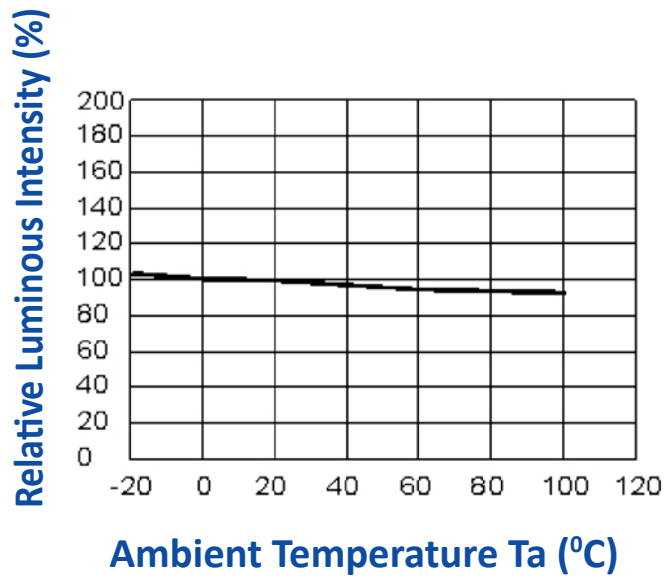
- 7. Typical electro-optical characteristics curves

**Spectrum Distribution TA=25°C**



**Forward voltage and forward current curves TA=25°C**



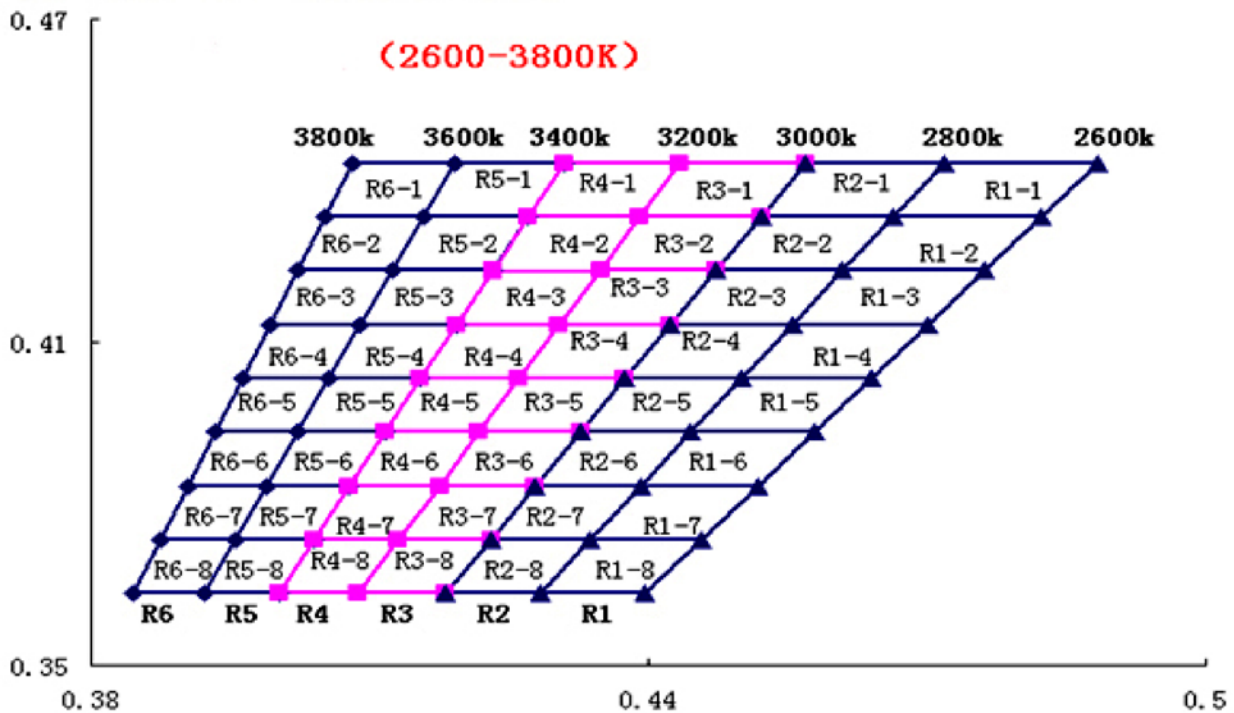


## 8. Reliability Test Standards

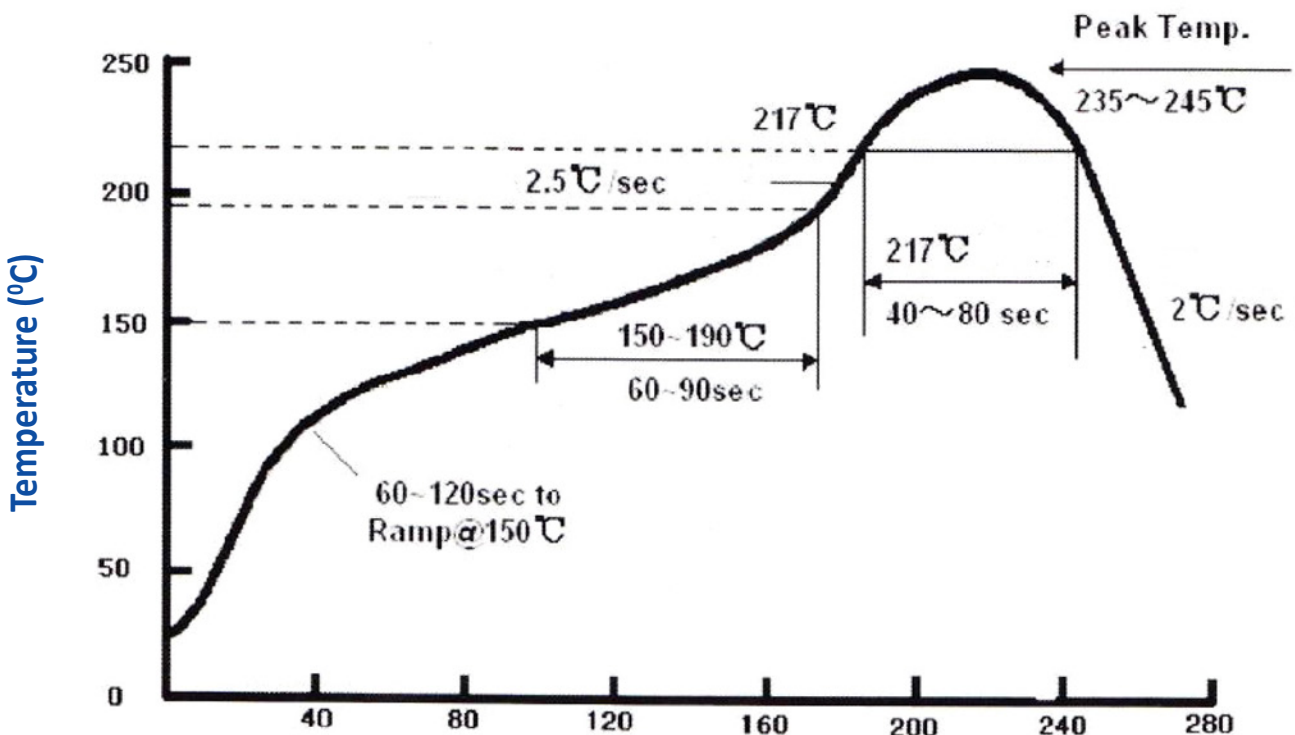
Type	Pilot project	Test conditions	Duration	The number of samples	Charge level
Environmental testing	Temperature cycling	45°C(30Min)~25°C(5Min) ~100°C(30Min)~25°C(5Min)	Cycle 100 Round	30	0/30
	Thermal Shock	-40°C(15Min) ~100°C(15Min)	Cycle 300 Round	30	0/30
	Humidity cycle	30°C~65°C RH=90% 24H/1Round	Cycle 50 Round	30	0/30
	High Temperature Storage	T <sub>a</sub> =100°C	1000H	30	0/30
	Cryogenic storage	T <sub>a</sub> =-40°C	1000H	30	0/30
	High temperature and humidity storage	T <sub>a</sub> =60°C RH=90%	1000H	30	0/30
Life test	Life test at room temperature	T <sub>a</sub> =25°C IF=150mA	1000H	30	0/30
	High temperature and humidity life test	T <sub>a</sub> =60°C RH=90% IF=150mA	1000H	30	0/30
	Low-temperature life test	T <sub>a</sub> =-30°C IF=150mA	1000H	30	0/30
Destructive test	Resistance to soldering heat	T <sub>sol</sub> =360°C±5°C,10S	Welding time	5	0/5
	Solderability	T <sub>sol</sub> =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



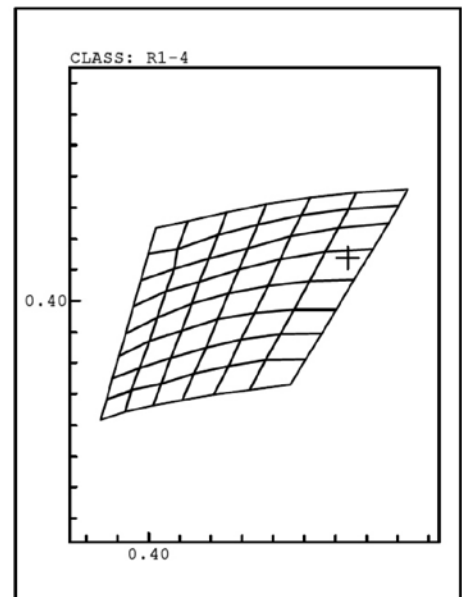
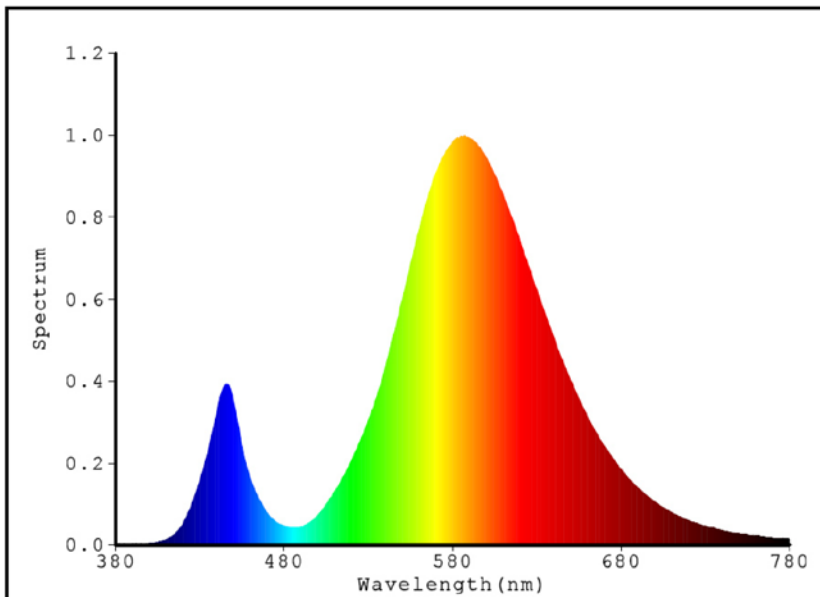
10. Solder conditions





■ 11. Test Report (EVERFINE LEDspec)

**Spectrum Test Report**



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4641$   $y=0.4137$  /  $u'=0.2638$   $v'=0.5292$   $duv=6.689e-004$

Tc=2666K Dominant WL:Ld=584.1nm Purity=63.5%

Ratio:R=22.9% G=76.1% B=0.9% Peak WL:Lp=586.6nm HWL:96.2nm

Render Index:Ra=57.0 [None]

R1 =50 R2 =72 R3 =91 R4 =46 R5 =47 R6 =57 R7 =70

R8 =24 R9 =-75 R10=37 R11=29 R12=21 R13=53 R14=95 R15=44

**Photo Parameters:**

Flux = 64.13 lm Eff. : 126.14 lm/W Fe = 142.1 mW

**Electrical parameters:**

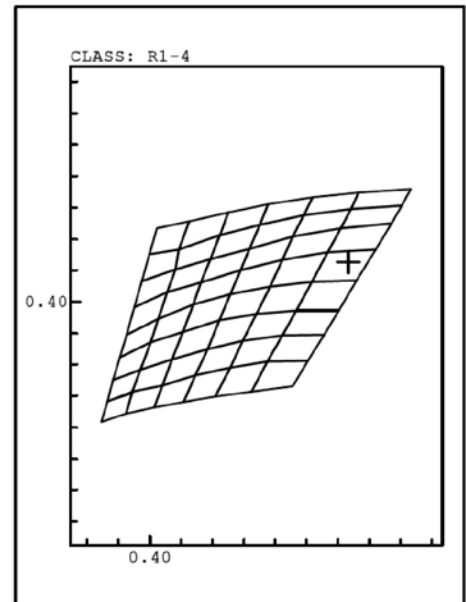
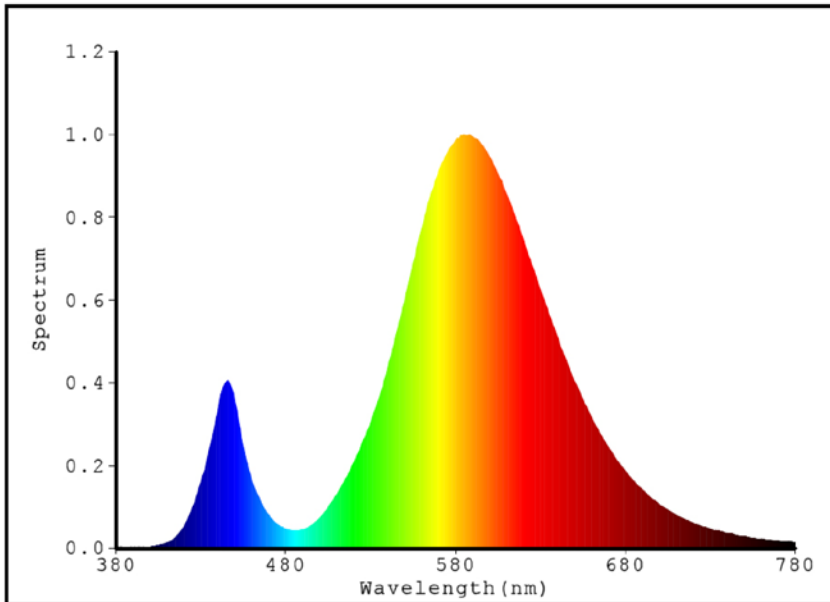
VF = 3.390 V IF = 149.9 mA P = 508.4 mW

LEVEL:529 WHITE:R1-4

Status: T=740.00ms Ip=30794 (47%) [ HAAS2000\_V1\_USB ] V2.00.167



## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4633$   $y=0.4127$  /  $u'=0.2638$   $v'=0.5287$   $duv=3.588e-004$

Tc=2669K Dominant WL:Ld=584.2nm Purity=62.9%

Ratio:R=22.9% G=76.1% B=0.9% Peak WL:Lp=588.0nm HWL:96.7nm

Render Index:Ra=57.1 [None]

R1 =50 R2 =72 R3 =91 R4 =46 R5 =47 R6 =57 R7 =70

R8 =24 R9 =-74 R10=37 R11=29 R12=22 R13=53 R14=95 R15=45

### Photo Parameters:

Flux = 62.67 lm Eff. : 124.68 lm/W Fe = 139.3 mW

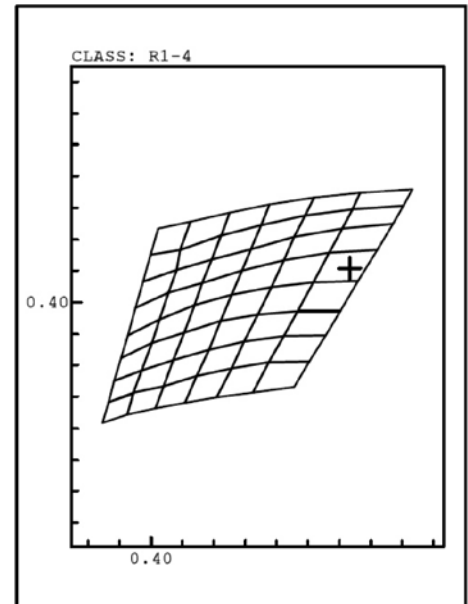
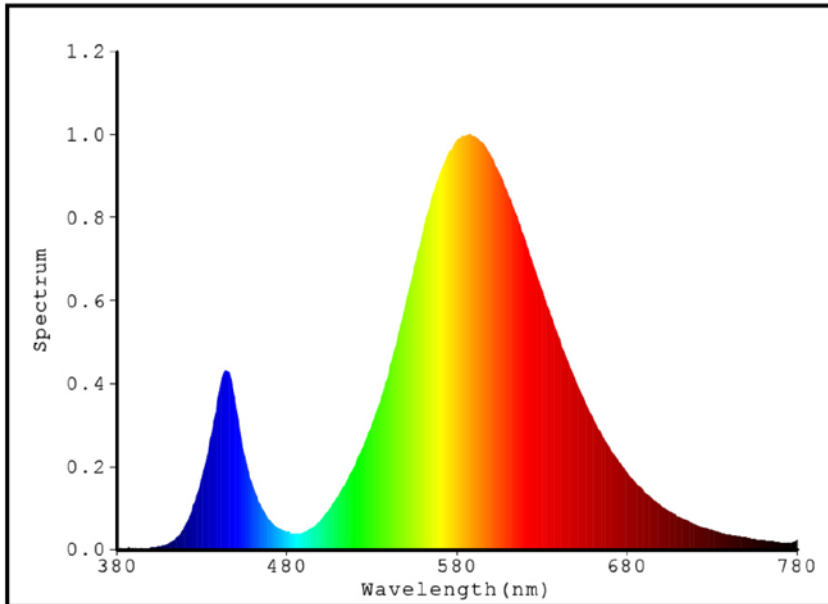
### Electrical parameters:

VF = 3.351 V IF = 149.9 mA P = 502.6 mW

LEVEL:529 WHITE:R1-4

Status: T=1231.00ms Ip=49570 (76%) [ HAAS2000\_V1\_USB ] V2.00.167

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4633$   $y=0.4108$  /  $u'=0.2646$   $v'=0.5279$   $duv=-3.227e-004$

Tc=2655K Dominant WL:Ld=584.5nm Purity=62.4%

Ratio:R=23.0% G=76.1% B=0.9% Peak WL:Lp=587.2nm HWL:96.2nm

Render Index:Ra=56.8 [None]

R1 =50 R2 =72 R3 =91 R4 =45 R5 =47 R6 =57 R7 =70

R8 =23 R9 =-75 R10=37 R11=29 R12=21 R13=53 R14=95 R15=45

### Photo Parameters:

Flux = 62.43 lm Eff. : 125.14 lm/W Fe = 139.0 mW

### Electrical parameters:

VF = 3.325 V IF = 150.0 mA P = 498.8 mW

LEVEL:529 WHITE:R1-4

Status: T=811.00ms Ip=32908 (50%) [ HAAS2000\_V1\_USB ] V2.00.167