

## **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

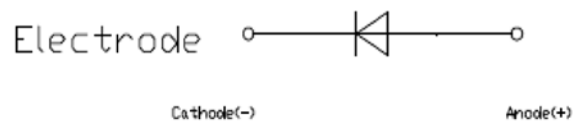
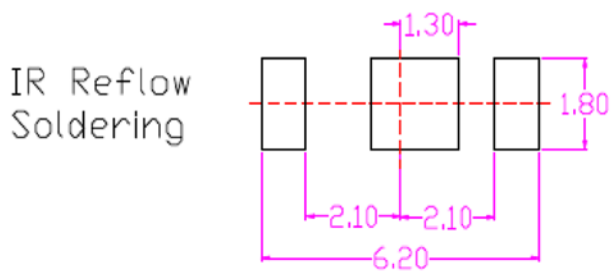
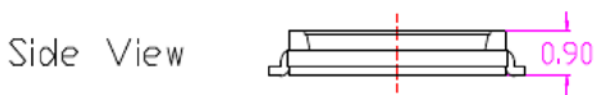
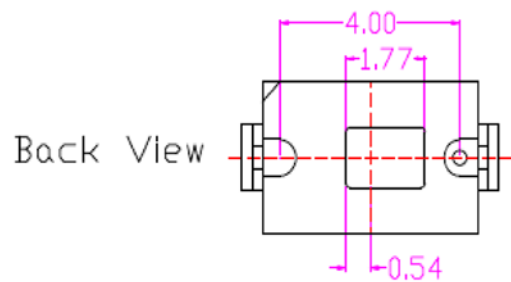
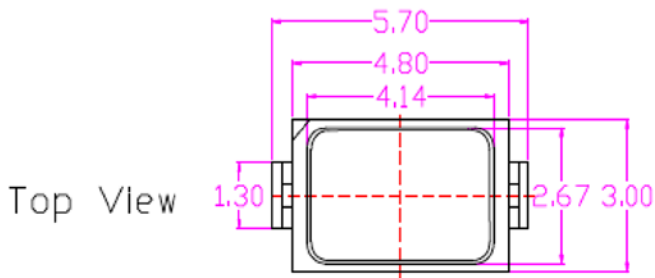
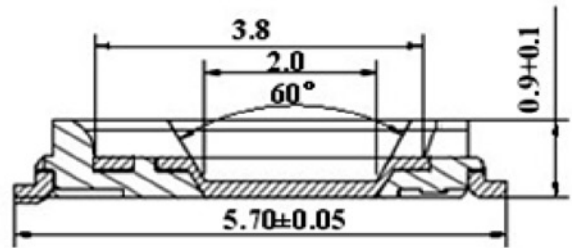
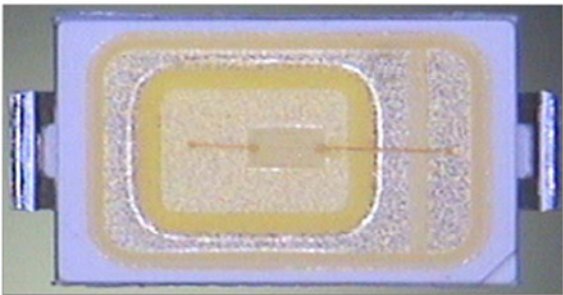
■ **2. Applications**

Apply to indoor lighting, outdoor lighting field

■ **3. Product Naming**

<b>GL</b>	<b>5730</b>	<b>W</b>	<b>X</b>	<b>X</b>	<b>—</b>	<b>X</b>
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)**

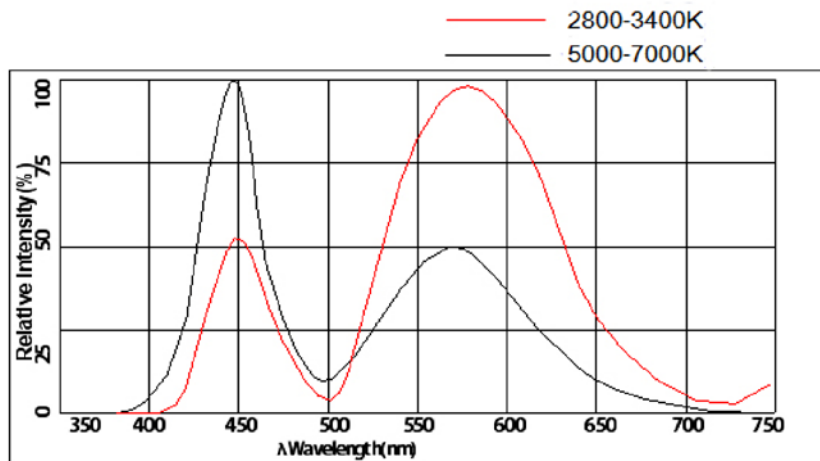
Project	Symbol	Conditions	Minimum	Average	Max.	Units
Forward Voltage	VF	IF=150mA		3,2		V
Reverse current	IR	VR=1.2V			5	μA
Flux	Φ	IF=150mA	55		65	Lm
Color Temperature	CCT	IF=150mA	3000		3200	K
Color Rendering Index	Ra	IF=150mA	60		85	

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

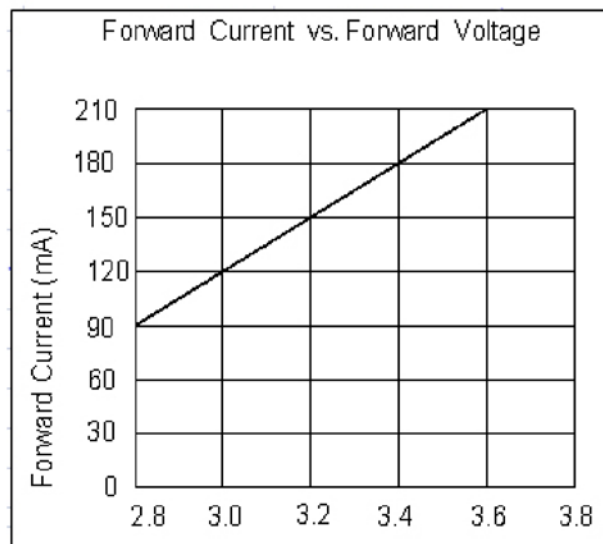
Project	Symbol	Limit parameter	Units
Forward Current	IF	150	mA
Recommended Current	IF	≤120	mA
Pulse peak current	IFP	500	mA
Reverse Voltage	VR	5	V
Power	PD	0,5	W
Operating temperature	Topr	(-30~+85)	°C
Storage Temperature	Tstg	(-40~+100)	°C
Soldering temperature	Tsol	reflow soldering: 250°C/10(Seconds0);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

- 7. Typical electro-optical characteristics curves

**Spectrum Distribution TA=25°C**

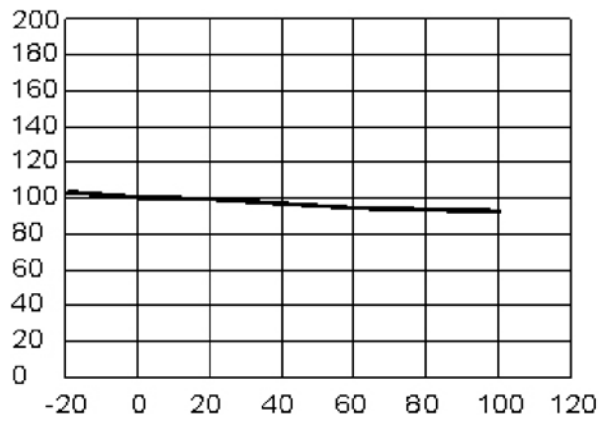


**Forward voltage and forward current curves TA=25°C**



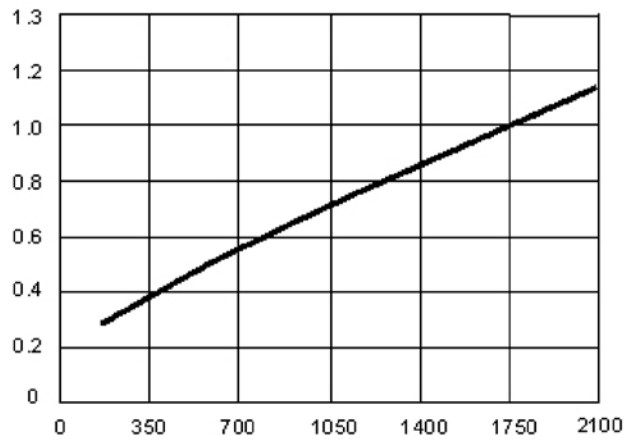


Relative Luminous Intensity (%)

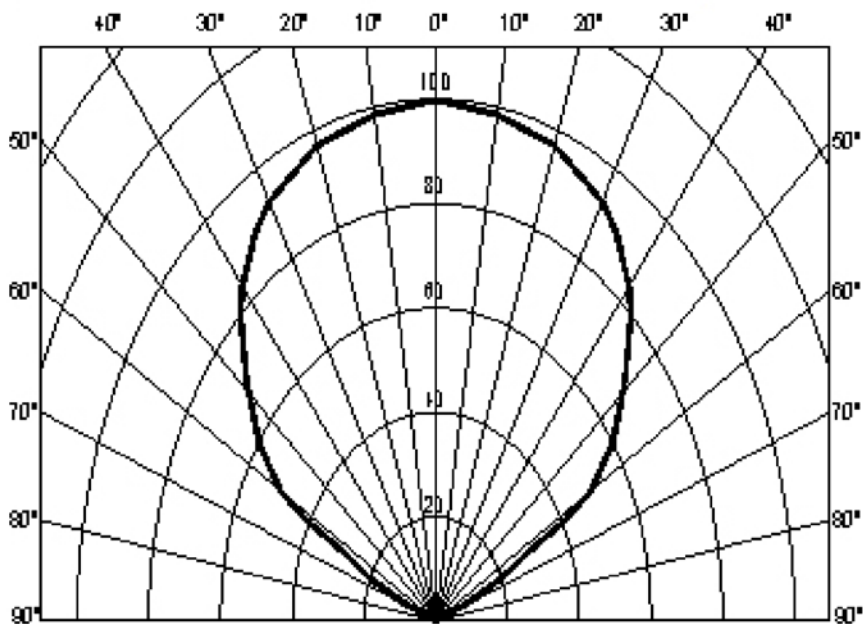


Ambient Temperature Ta (°C)

Normalized Relative Luminous Flux



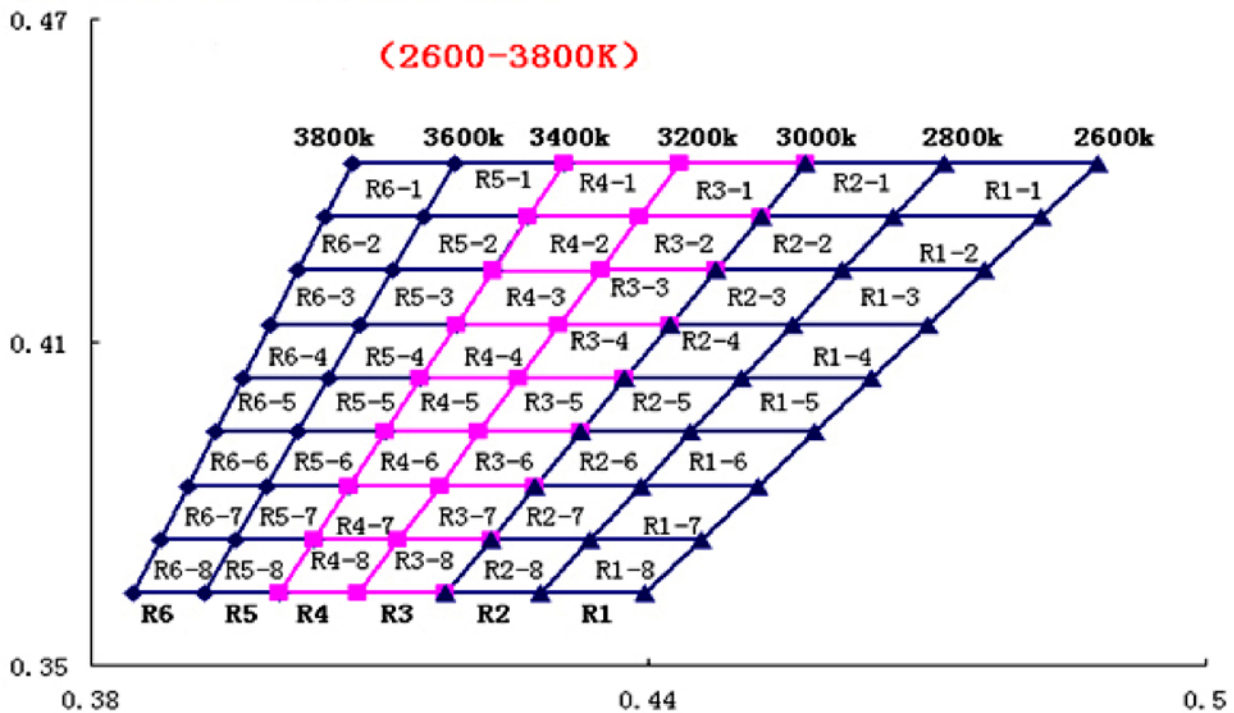
Forward Current (mA)



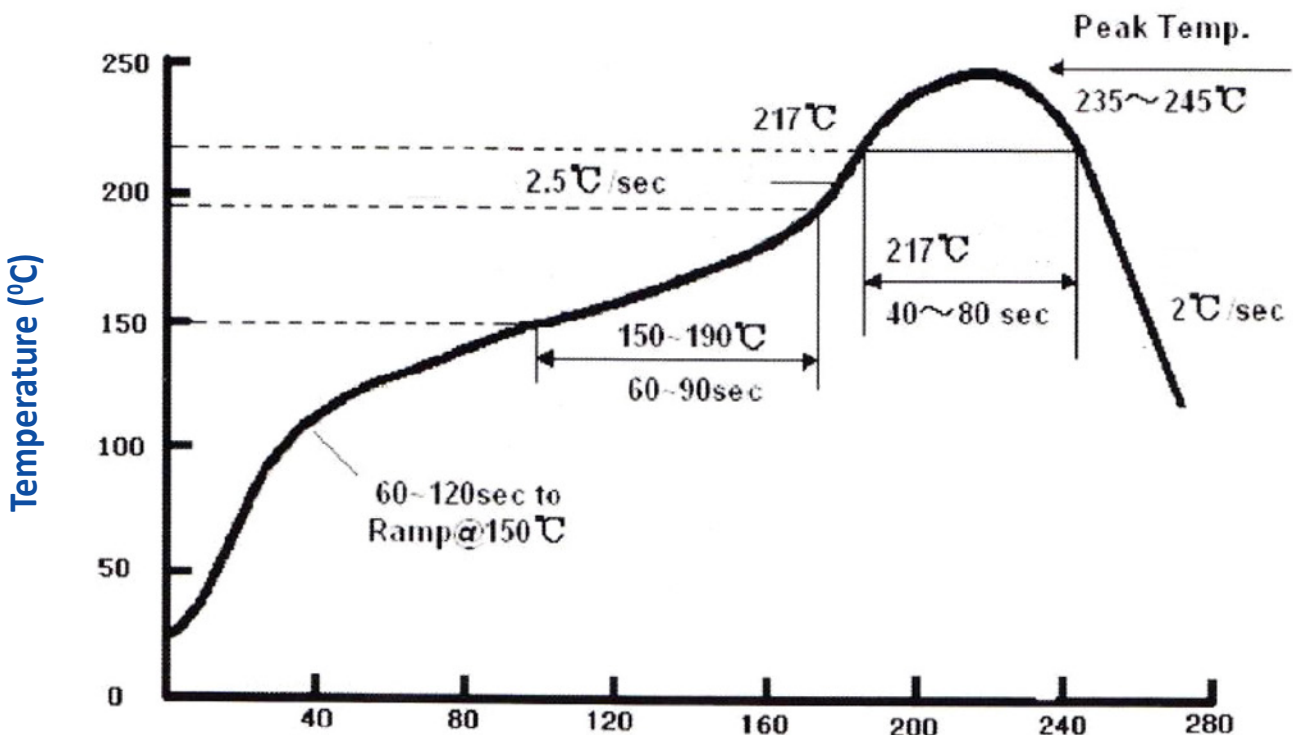
## 8. Reliability Test Standards

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 <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



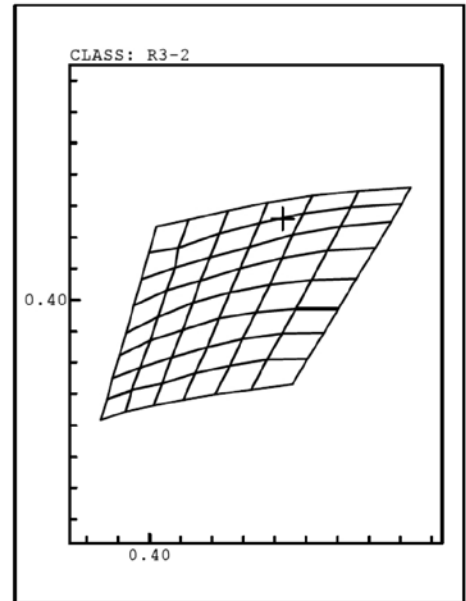
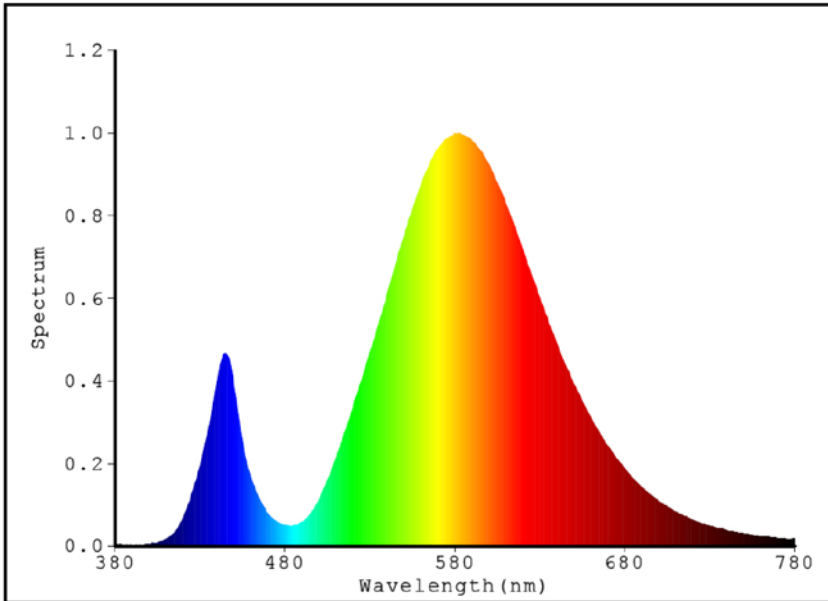
10. Solder conditions





■ 11. Test Report (EVERFINE LEDspec)

**Spectrum Test Report**



**Color Parameters:**

Chromaticity Coordinate:  $x=0.4425$   $y=0.4257$  /  $u'=0.2450$   $v'=0.5304$   $duv=7.684e-003$   
 Tc=3078K Dominant WL:Ld=580.1nm Purity=60.6%  
 Ratio:R=20.0% G=79.0% B=1.0% Peak WL:Lp=579.8nm HWL:106.6nm  
 Render Index:Ra=60.1 [None]  
 R1 =54 R2 =70 R3 =86 R4 =55 R5 =51 R6 =55 R7 =76  
 R8 =33 R9 =-68 R10=32 R11=42 R12=20 R13=56 R14=92 R15=47

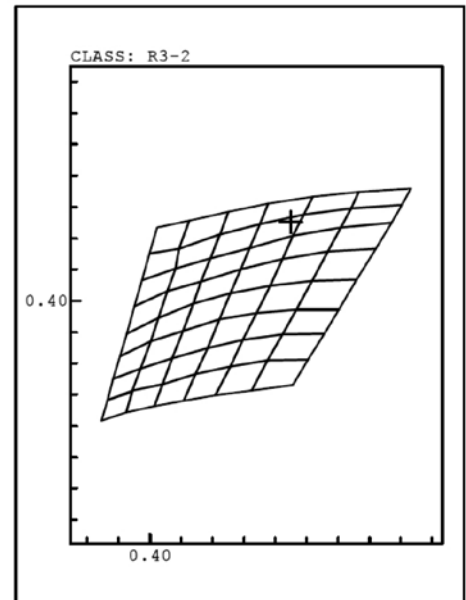
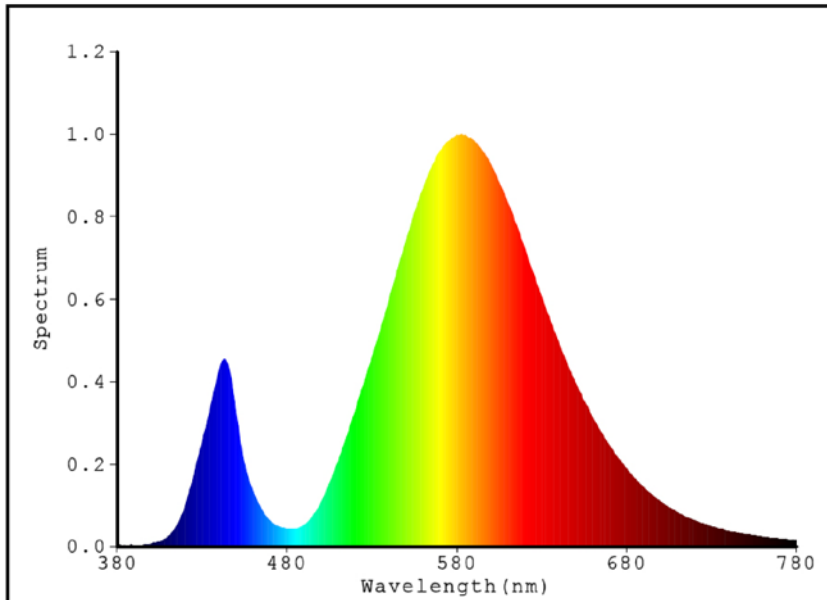
**Photo Parameters:**

Flux = 65.03 lm Eff. : 130.66 lm/W Fe = 140.4 mW

**Electrical parameters:**

VF = 3.318 V IF = 149.9 mA P = 497.7 mW  
 LEVEL:529 WHITE:R3-2  
 Status: T=938.00ms Ip=35655 (54%) [ HAAS2000\_V1\_USB ] V2.00.167

## Spectrum Test Report



### Color Parameters:

Chromaticity Coordinate:  $x=0.4449$   $y=0.4253$  /  $u'=0.2467$   $v'=0.5306$   $duv=7.152e-003$

Tc=3036K Dominant WL:Ld=580.5nm Purity=61.2%

Ratio:R=20.3% G=78.9% B=0.9% Peak WL:Lp=583.0nm HWL:106.1nm

Render Index:Ra=59.6 [None]

R1 =53 R2 =70 R3 =85 R4 =55 R5 =51 R6 =55 R7 =75

R8 =33 R9 =-68 R10=31 R11=42 R12=20 R13=55 R14=91 R15=47

### Photo Parameters:

Flux = 66.47 lm Eff. : 133.15 lm/W Fe = 144.1 mW

### Electrical parameters:

VF = 3.328 V IF = 149.9 mA P = 499.2 mW

LEVEL:529 WHITE:R3-2

Status: T=1348.00ms Ip=52306 (80%) [ HAAS2000\_V1\_USB ] V2.00.167