

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

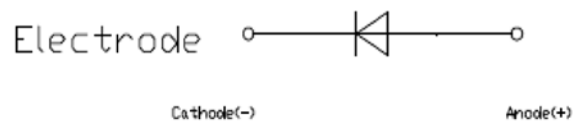
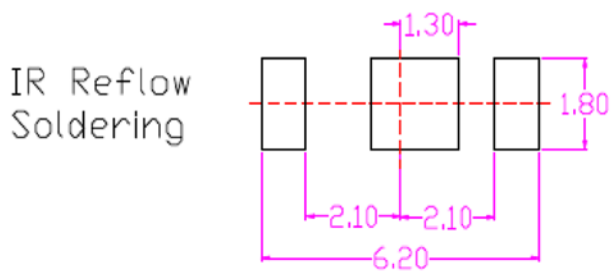
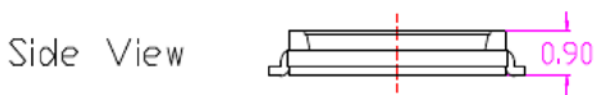
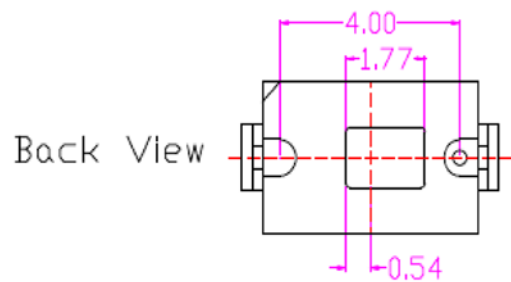
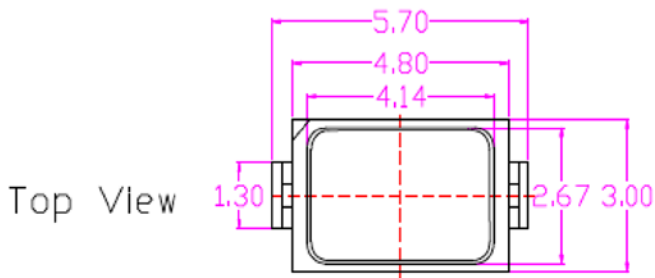
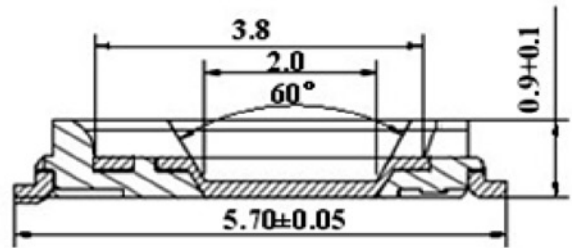
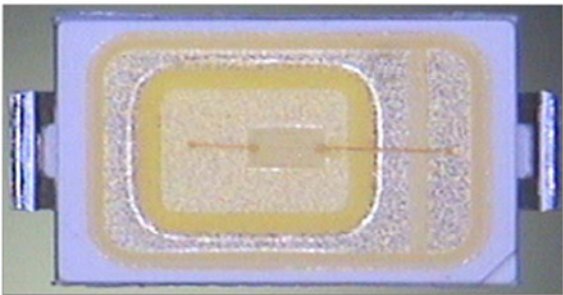
■ **2. Applications**

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)**

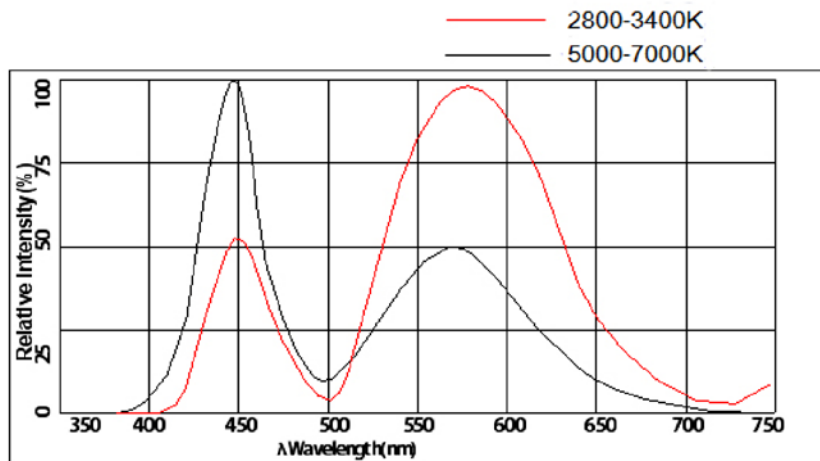
Project	Symbol	Conditions	Minimum	Average	Max.	Units
Forward Voltage	VF	IF=150mA		3,2		V
Reverse current	IR	VR=1.2V			5	μA
Flux	Φ	IF=150mA	55		65	Lm
Color Temperature	CCT	IF=150mA	2800		3000	K
Color Rendering Index	Ra	IF=150mA	60		85	

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

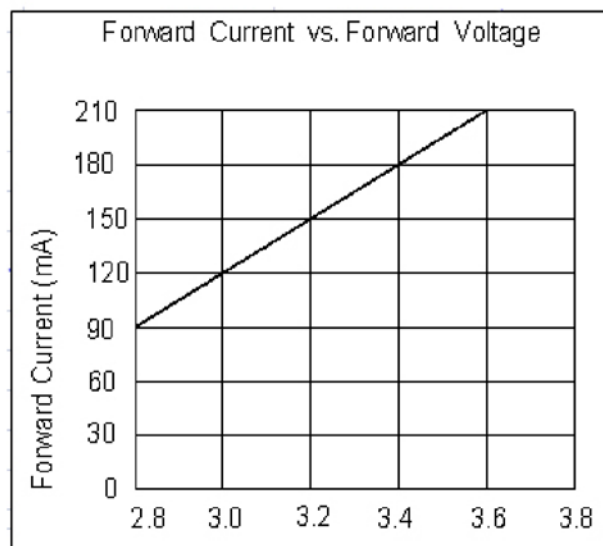
Project	Symbol	Limit parameter	Units
Forward Current	IF	150	mA
Recommended Current	IF	≤120	mA
Pulse peak current	IFP	500	mA
Reverse Voltage	VR	5	V
Power	PD	0,5	W
Operating temperature	Topr	(-30~+85)	°C
Storage Temperature	Tstg	(-40~+100)	°C
Soldering temperature	Tsol	reflow soldering: 250°C/10(Seconds0);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

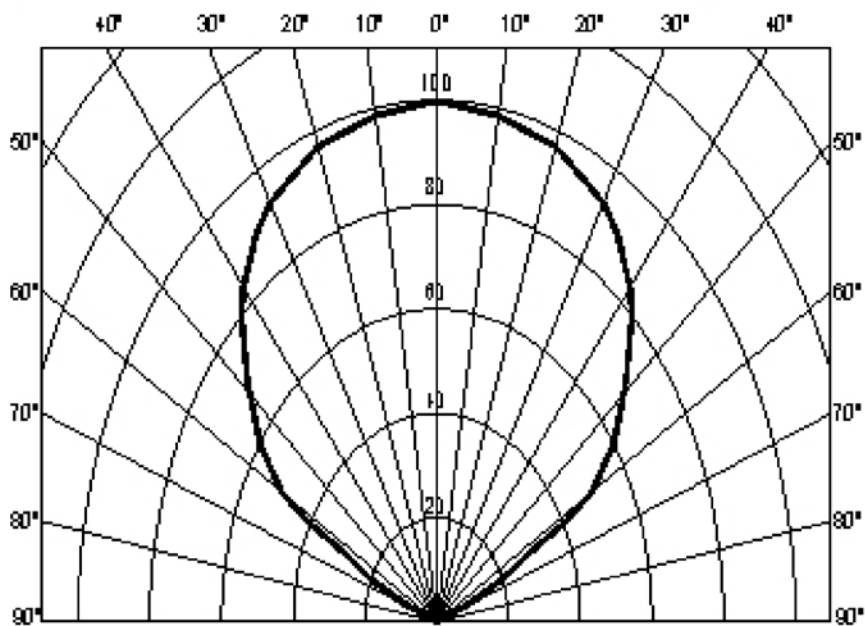
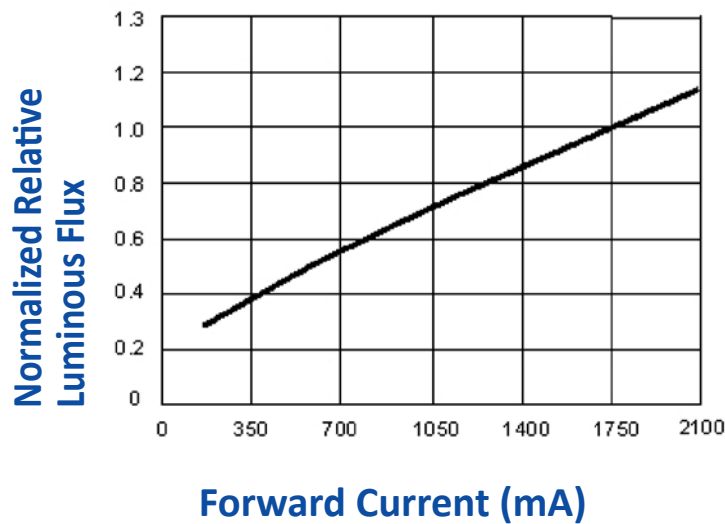
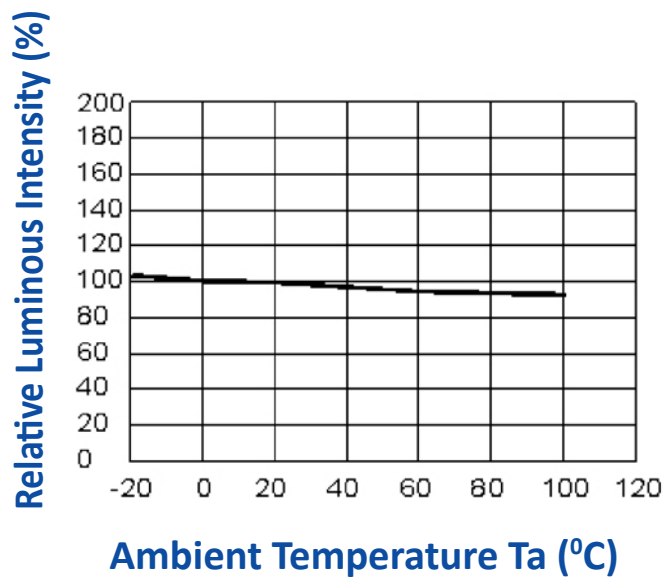
- 7. Typical electro-optical characteristics curves

Spectrum Distribution TA=25°C



Forward voltage and forward current curves TA=25°C

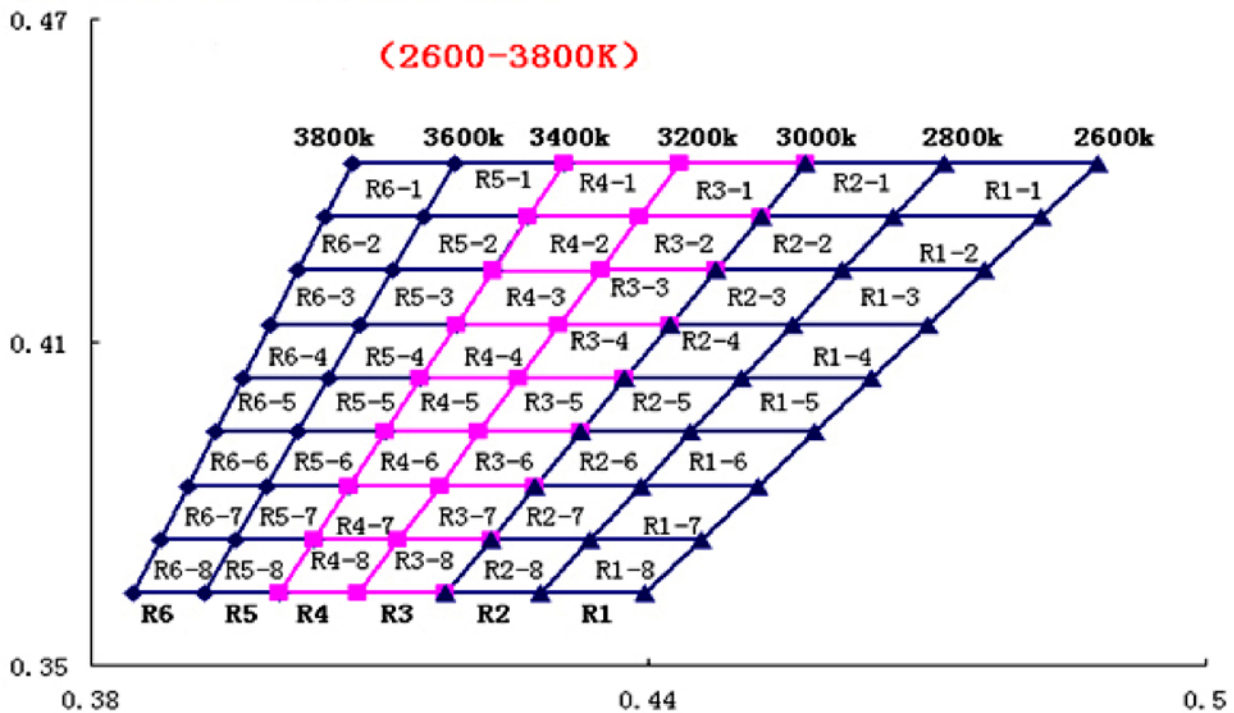




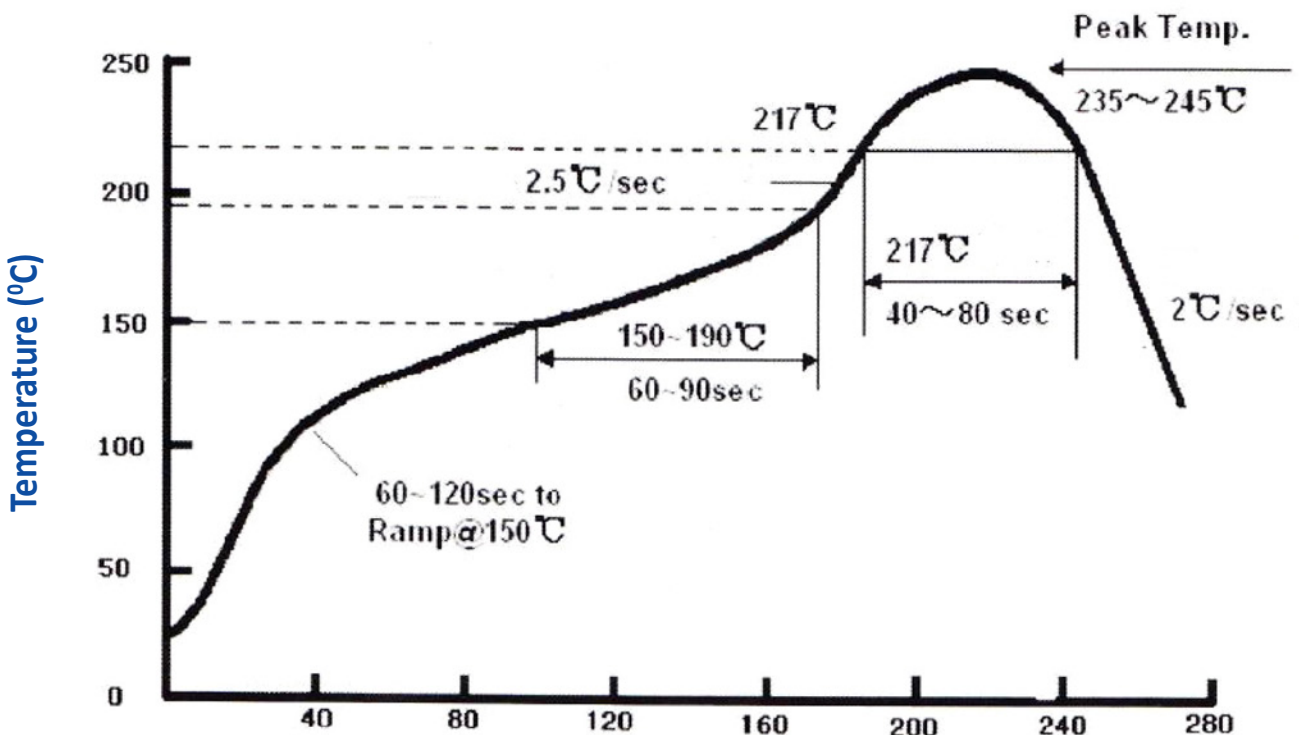
8. Reliability Test Standards

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 _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

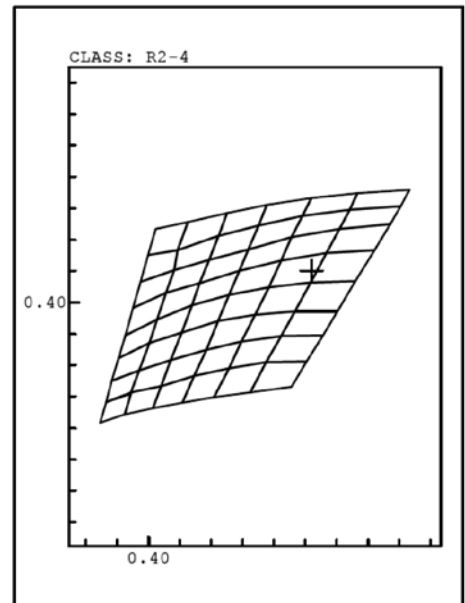
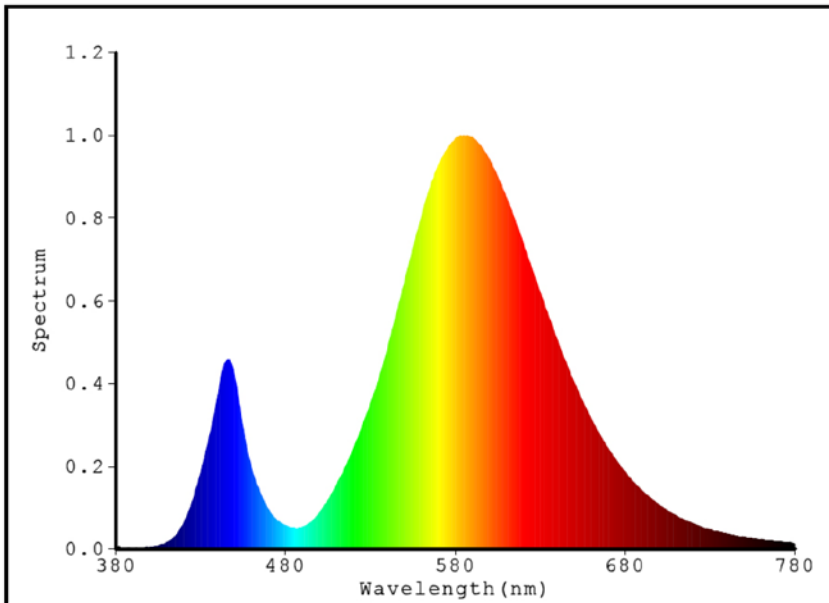


10. Solder conditions



■ 11. Test Report (EVERFINE LEDspec)

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4520$ $y=0.4101$ / $u'=0.2576$ $v'=0.5260$ $duv=4.863e-004$

Tc=2810K Dominant WL:Ld=583.5nm Purity=58.8%

Ratio:R=22.0% G=76.9% B=1.1% Peak WL:Lp=585.0nm HWL:99.4nm

Render Index:Ra=58.8 [None]

R1 =52 R2 =73 R3 =90 R4 =49 R5 =49 R6 =58 R7 =72

R8 =28 R9 =-70 R10=37 R11=34 R12=24 R13=55 R14=94 R15=47

Photo Parameters:

Flux = 63.35 lm Eff. : 123.77 lm/W Fe = 141.0 mW

Electrical parameters:

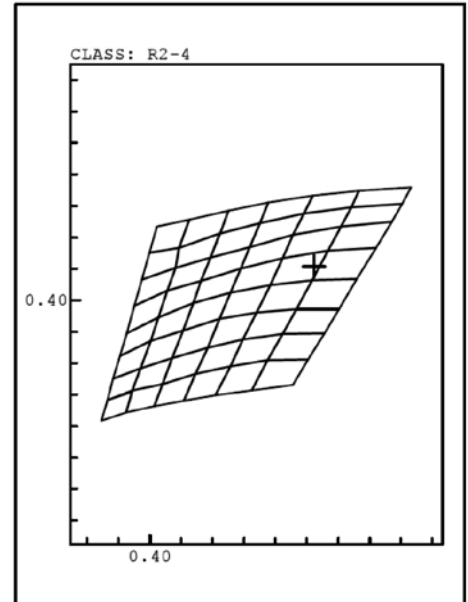
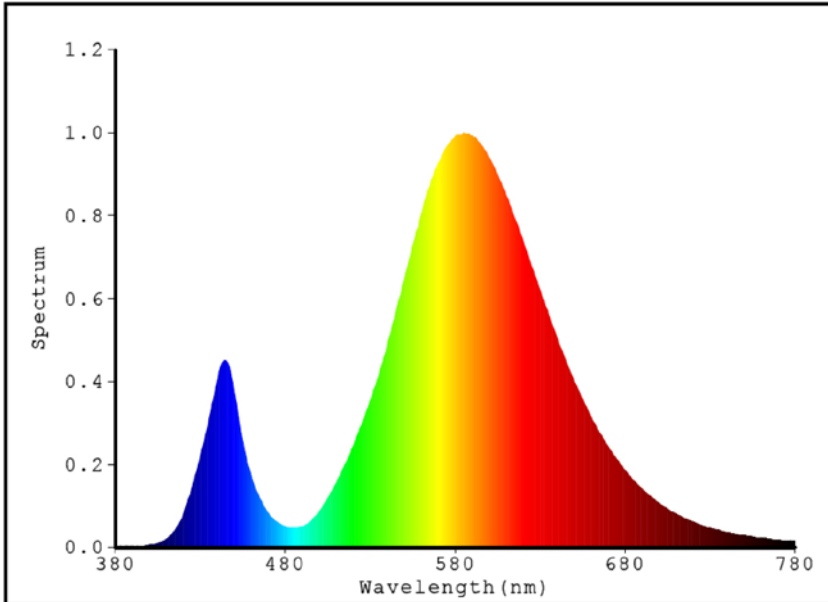
VF = 3.412 V IF = 149.9 mA P = 511.8 mW

LEVEL:529 WHITE:R2-4

Status: T=1299.00ms Ip=51126 (78%) [HAAS2000_V1_USB] V2.00.167



Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4524$ $y=0.4107$ / $u'=0.2576$ $v'=0.5263$ $duv=6.602e-004$

$T_c=2809K$ Dominant WL: $L_d=583.4nm$ Purity=59.0%

Ratio: R=22.0% G=77.0% B=1.0% Peak WL: $L_p=585.5nm$ HWL: 99.5nm

Render Index: $R_a=58.5$ [None]

$R_1=52$ $R_2=72$ $R_3=89$ $R_4=49$ $R_5=49$ $R_6=57$ $R_7=72$

$R_8=28$ $R_9=70$ $R_{10}=36$ $R_{11}=35$ $R_{12}=23$ $R_{13}=55$ $R_{14}=94$ $R_{15}=47$

Photo Parameters:

Flux = 60.85 lm Eff. : 115.70 lm/W $F_e = 135.5$ mW

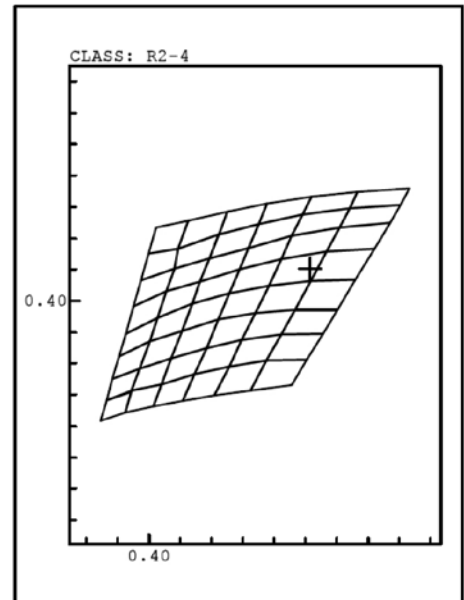
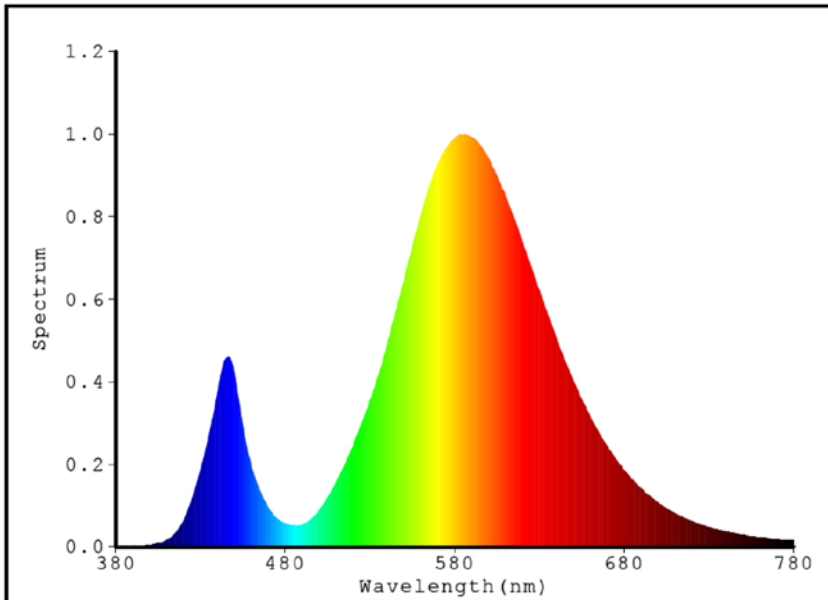
Electrical parameters:

$V_f = 3.506$ V $I_f = 149.9$ mA $P = 525.9$ mW

LEVEL: 629 WHITE: R2-4

Status: $T=1299.00ms$ $I_p=49118$ (75%) [HAAS2000_V1_USB] V2.00.167

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.4516$ $y=0.4103$ / $u'=0.2573$ $v'=0.5260$ $duv=6.044e-004$

Tc=2818K Dominant WL:Ld=583.4nm Purity=58.7%

Ratio:R=22.0% G=77.0% B=1.1% Peak WL:Lp=582.9nm HWL:99.5nm

Render Index:Ra=58.9 [None]

R1 =52 R2 =73 R3 =90 R4 =49 R5 =50 R6 =58 R7 =72

R8 =28 R9 =-69 R10=37 R11=35 R12=24 R13=55 R14=94 R15=47

Photo Parameters:

Flux = 62.01 lm Eff. : 119.76 lm/W Fe = 138.0 mW

Electrical parameters:

VF = 3.452 V IF = 149.9 mA P = 517.8 mW

LEVEL:529 WHITE:R2-4

Status: T=1299.00ms Ip=50008 (76%) [HAAS2000_V1_USB] V2.00.167