

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

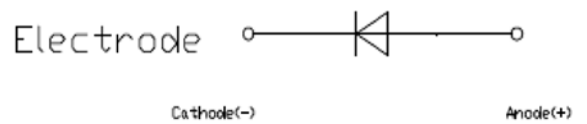
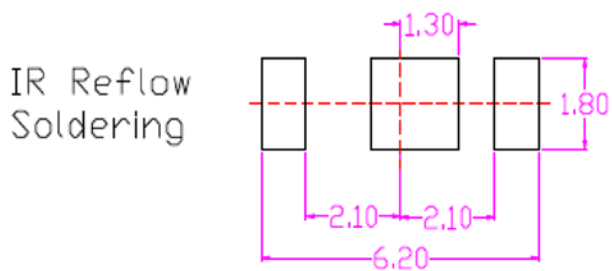
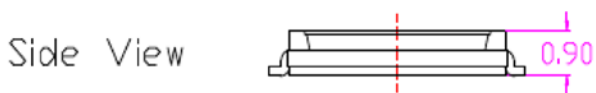
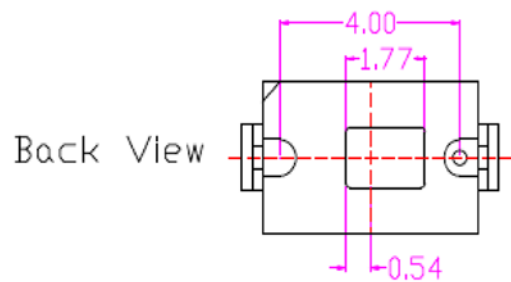
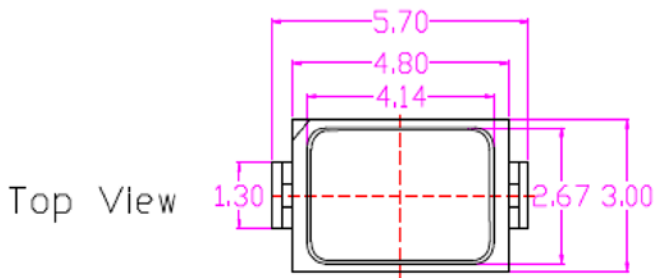
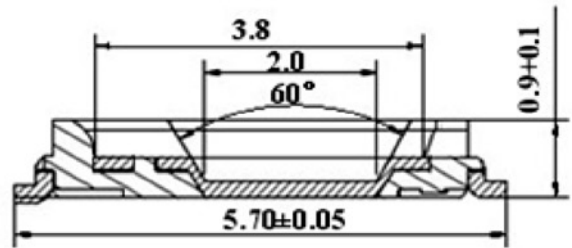
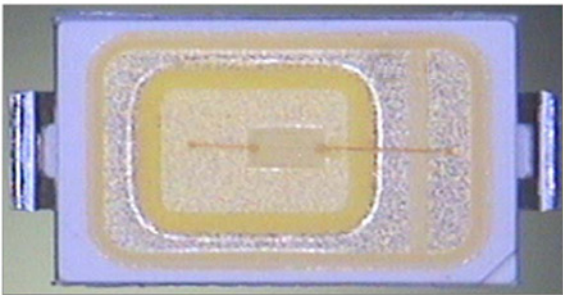
■ **2. Applications**

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)**

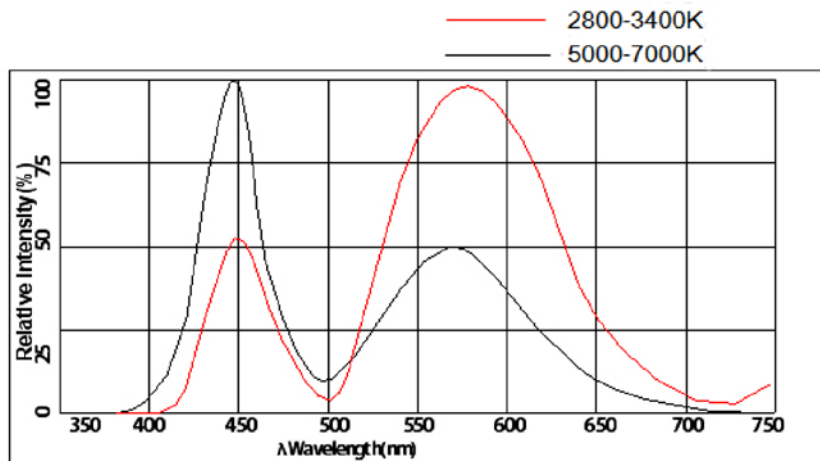
Project	Symbol	Conditions	Minimum	Average	Max.	Units
Forward Voltage	VF	IF=150mA		3,2		V
Reverse current	IR	VR=1.2V			5	μA
Flux	Φ	IF=150mA	55		65	Lm
Color Temperature	CCT	IF=150mA	4000		4500	K
Color Rendering Index	Ra	IF=150mA	60		85	

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

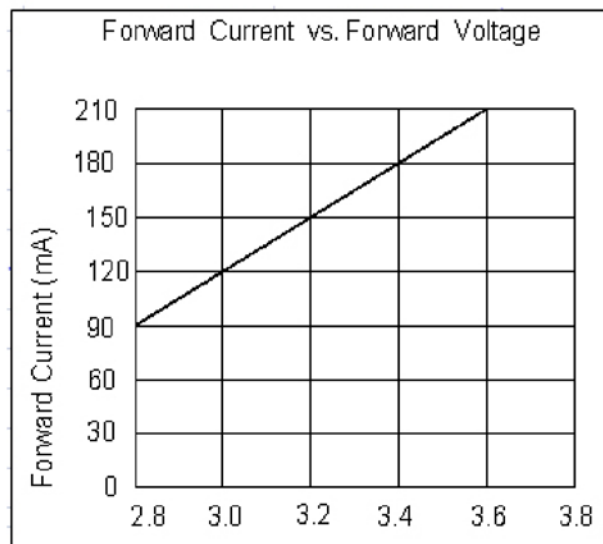
Project	Symbol	Limit parameter	Units
Forward Current	IF	150	mA
Recommended Current	IF	≤120	mA
Pulse peak current	IFP	500	mA
Reverse Voltage	VR	5	V
Power	PD	0,5	W
Operating temperature	Topr	(-30~+85)	°C
Storage Temperature	Tstg	(-40~+100)	°C
Soldering temperature	Tsol	reflow soldering: 250°C/10(Seconds0);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

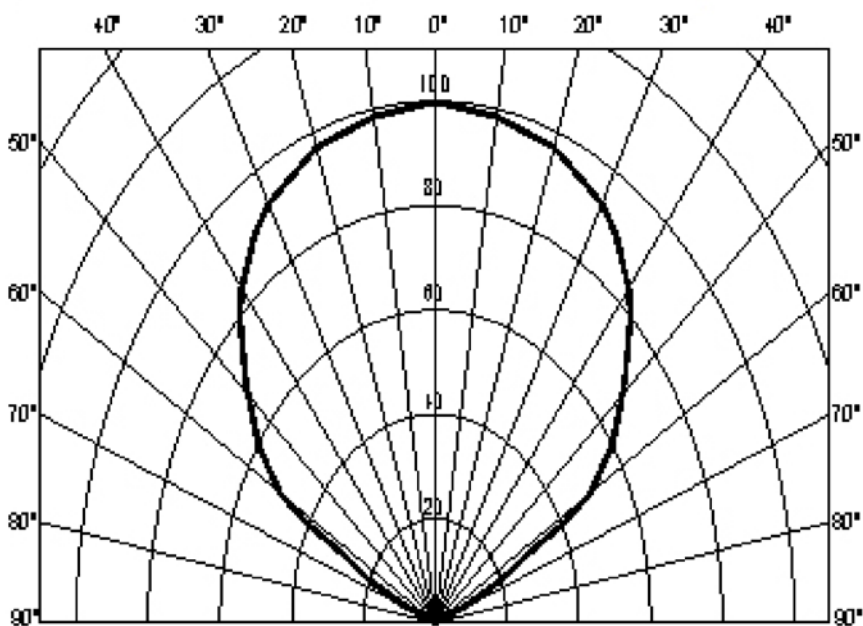
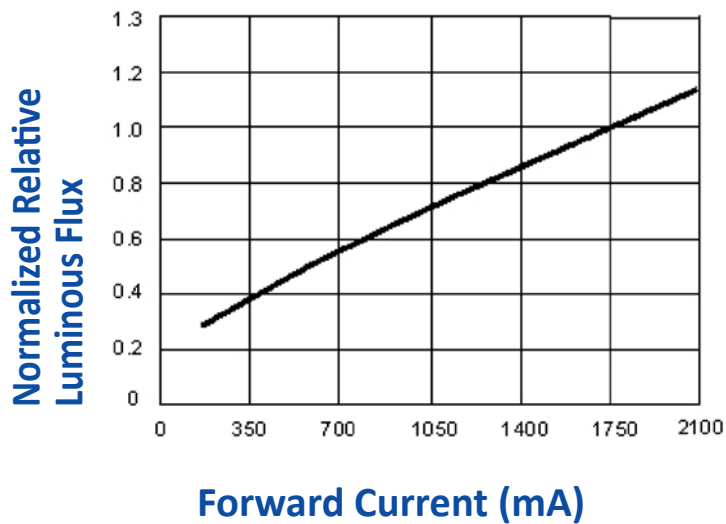
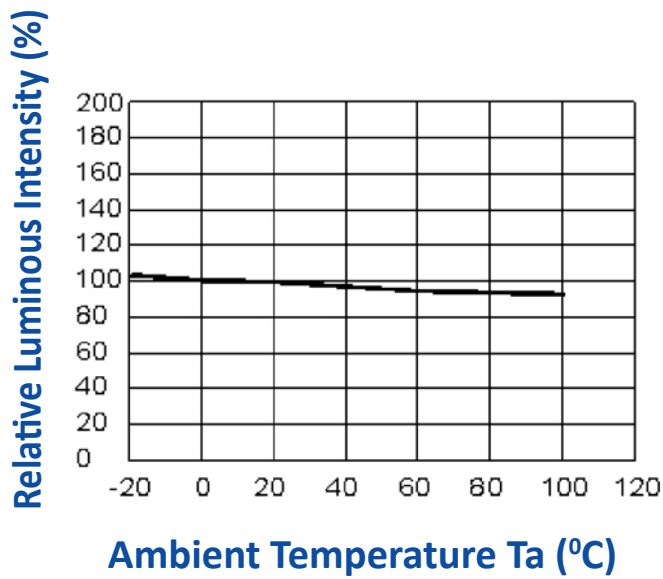
- 7. Typical electro-optical characteristics curves

Spectrum Distribution TA=25°C



Forward voltage and forward current curves TA=25°C



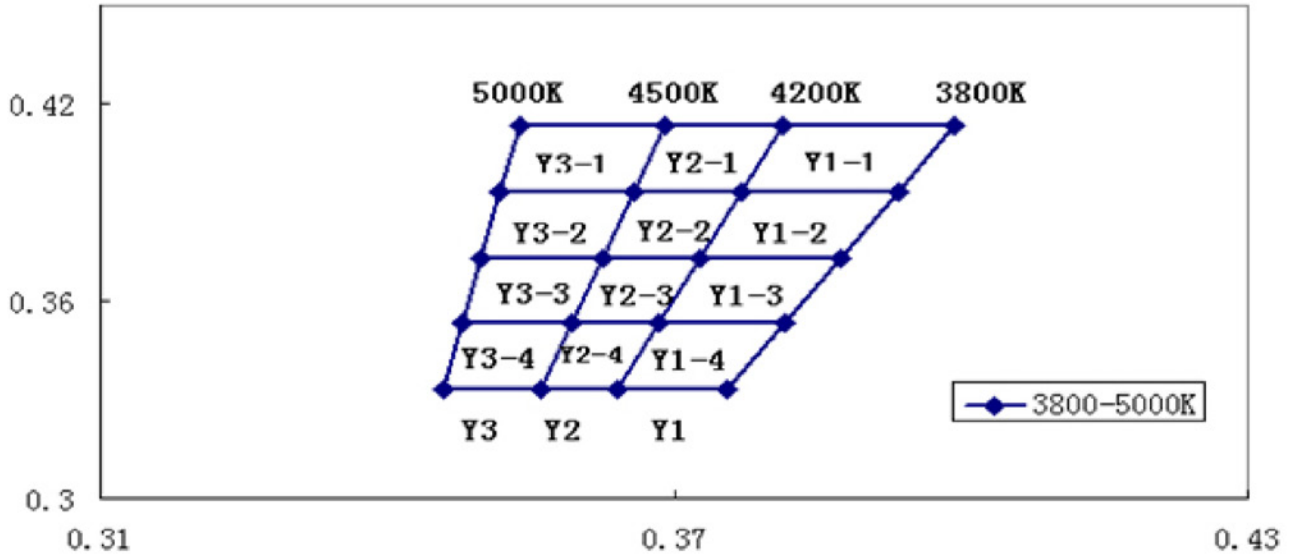


8. Reliability Test Standards

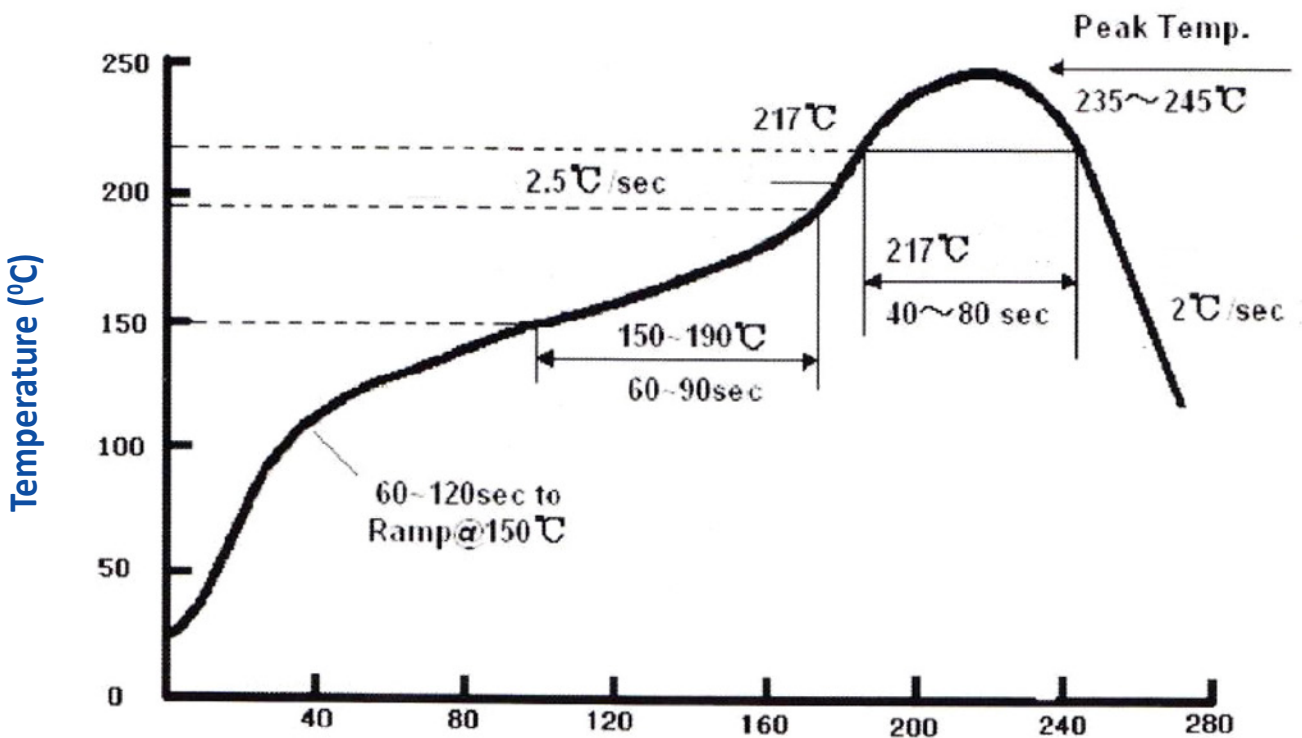
Type	Pilot project	Test conditions	Duration	The number of samples	Charge level
Environmental testing	Temperature cycling	45°C(30Min)~25°C(5Min) ~100°C(30Min)~25°C(5Min)	Cycle 100 Round	30	0/30
	Thermal Shock	-40°C(15Min) ~100°C(15Min)	Cycle 300 Round	30	0/30
	Humidity cycle	30°C~65°C RH=90% 24H/1Round	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

3800-5000K

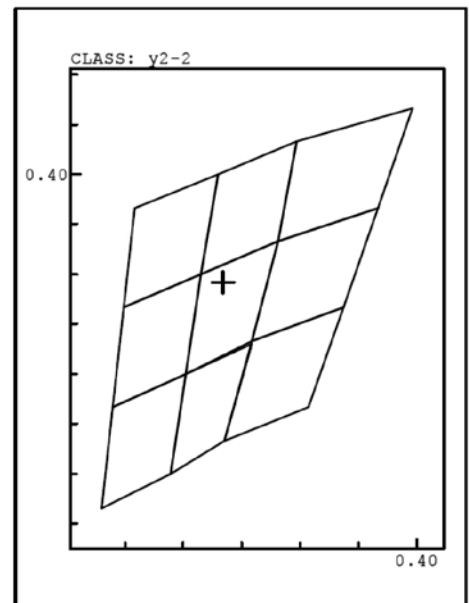
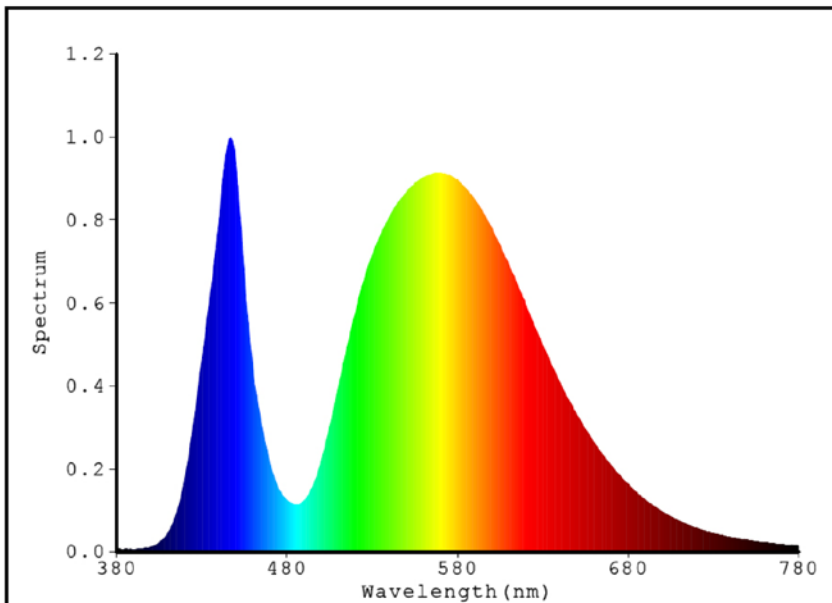


10. Solder conditions



■ 11. Test Report (EVERFINE LEDspec)

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3668$ $y=0.3783$ / $u'=0.2155$ $v'=0.5003$ $duv=5.566e-003$

Tc=4400K Dominant WL:Ld=574.5nm Purity=23.6%

Ratio:R=15.8% G=82.1% B=2.1% Peak WL:Lp=446.7nm HWL:27.1nm

Render Index:Ra=66.8 [None]

R1 =63 R2 =72 R3 =79 R4 =67 R5 =63 R6 =61 R7 =79

R8 =51 R9 =-46 R10=34 R11=60 R12=33 R13=64 R14=88 R15=57

Photo Parameters:

Flux = 67.04 lm Eff. : 135.12 lm/W Fe = 156.6 mW

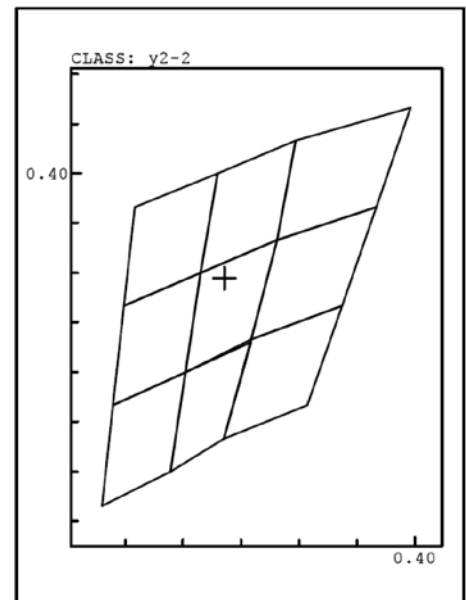
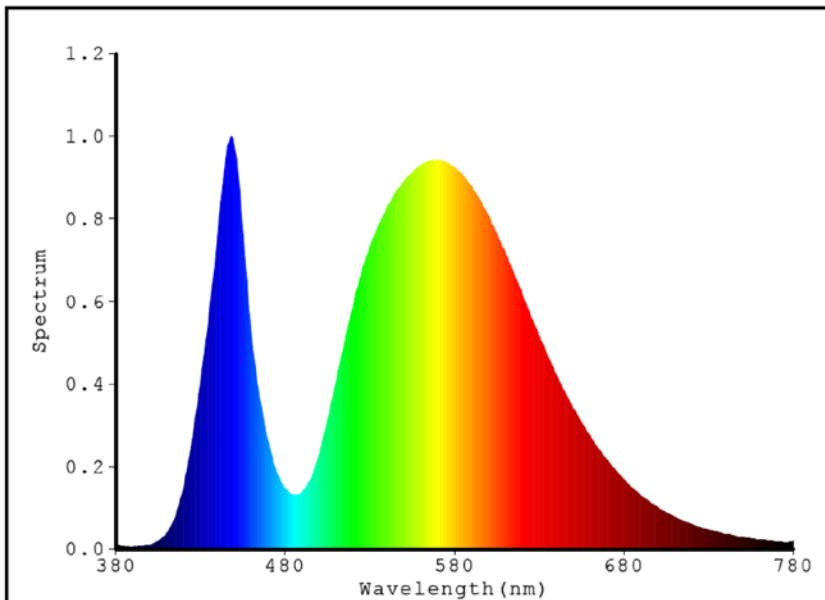
Electrical parameters:

VF = 3.307 V IF = 149.9 mA P = 496.1 mW

LEVEL:519 WHITE:y2-2

Status: T=1556.00ms Ip=52279 (80%) [HAAS2000_V1_USB] V2.00.167

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3671$ $y=0.3789$ $u'=0.2156$ $v'=0.5005$ $duv=5.694e-003$

$T_c=4393K$ Dominant WL: $L_d=574.4nm$ Purity=23.9%

Ratio: R=15.8% G=81.9% B=2.3% Peak WL: $L_p=448.2nm$ HWL: 27.6nm

Render Index: $R_a=67.5$ [None]

$R_1=63$ $R_2=73$ $R_3=80$ $R_4=67$ $R_5=63$ $R_6=62$ $R_7=80$

$R_8=51$ $R_9=-44$ $R_{10}=36$ $R_{11}=60$ $R_{12}=33$ $R_{13}=64$ $R_{14}=89$ $R_{15}=58$

Photo Parameters:

Flux = 66.21 lm Eff. : 133.72 lm/W Fe = 154.6 mW

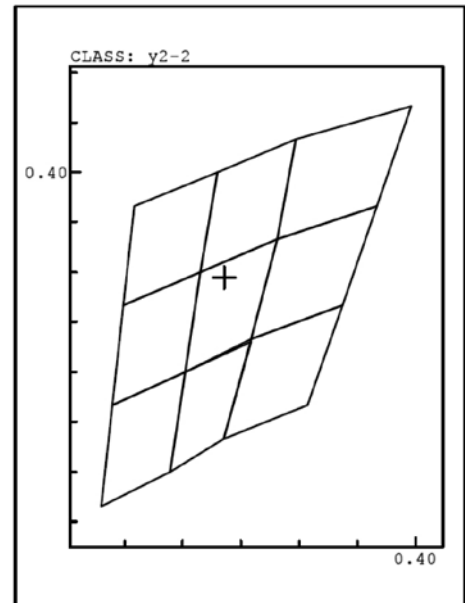
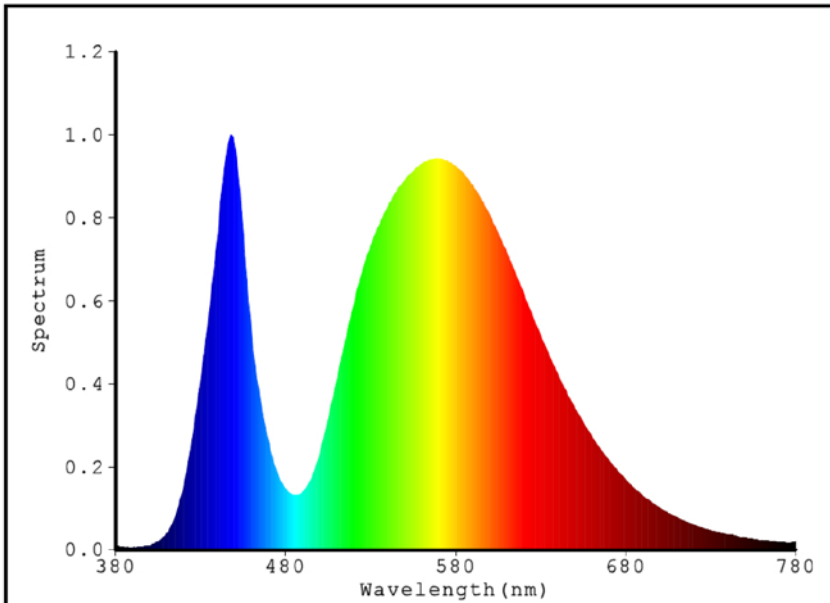
Electrical parameters:

$V_F=3.301V$ $I_F=149.9mA$ $P=495.1mW$

LEVEL: 519 WHITE: y2-2

Status: $T=1556.00ms$ $I_p=51674(79\%)$ [HAAS2000_V1_USB] V2.00.167

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate: $x=0.3670$ $y=0.3785$ $u'=0.2156$ $v'=0.5004$ $duv=5.581e-003$

$T_c=4396K$ Dominant WL: $L_d=574.5nm$ Purity=23.7%

Ratio: R=15.8% G=82.1% B=2.1% Peak WL: $L_p=447.0nm$ HWL: 26.7nm

Render Index: $R_a=66.7$ [None]

R1 =63 R2 =72 R3 =79 R4 =67 R5 =63 R6 =61 R7 =79

R8 =51 R9 =-46 R10=34 R11=60 R12=33 R13=64 R14=88 R15=57

Photo Parameters:

Flux = 67.23 lm Eff. : 135.64 lm/W Fe = 156.9 mW

Electrical parameters:

VF = 3.304 V IF = 149.9 mA P = 495.6 mW

LEVEL:519 WHITE:y2-2

Status: T=1556.00ms $I_p=52383$ (80%) [HAAS2000_V1_USB] V2.00.167