SPECIFICATION

MODEL: GL-5730WEA-2

RoHS

CE

ATTENTION

OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

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

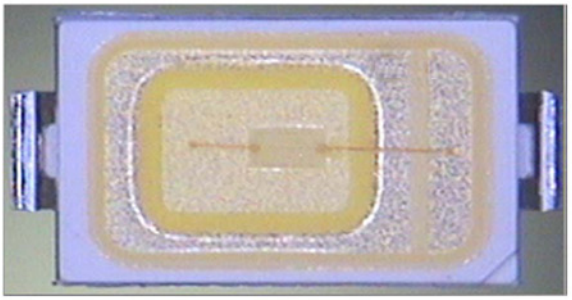
2. Applications

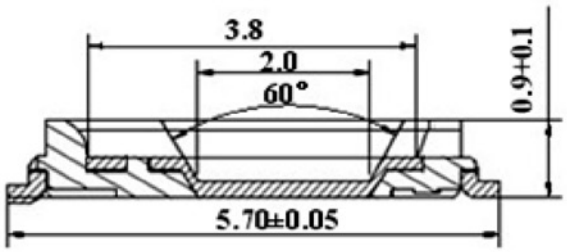
Apply to indoor lighting, outdoor lighting field

3. Product Naming

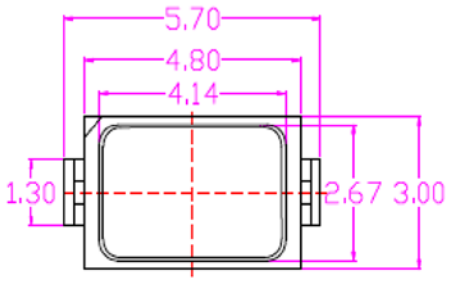
GL	5730	W	X	X	—	X
Company Name: Good Led	products model: 5730	LED Color Products: White	Chip manufacturers E-EPISTAR	Chip code: A+:(20*40) A:(20*38) B:(17*34)		Angle: 1:(140°C) 2:(120°C)

4. Extemal Dimensions

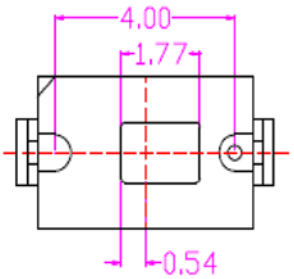




Top View

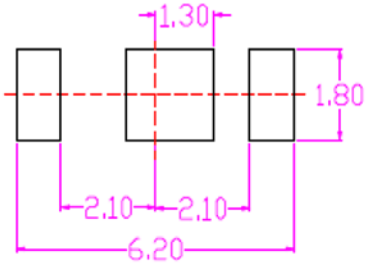


Back View

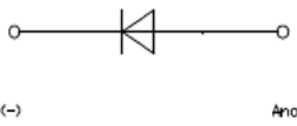


Side View

IR Reflow Soldering



Electrode



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

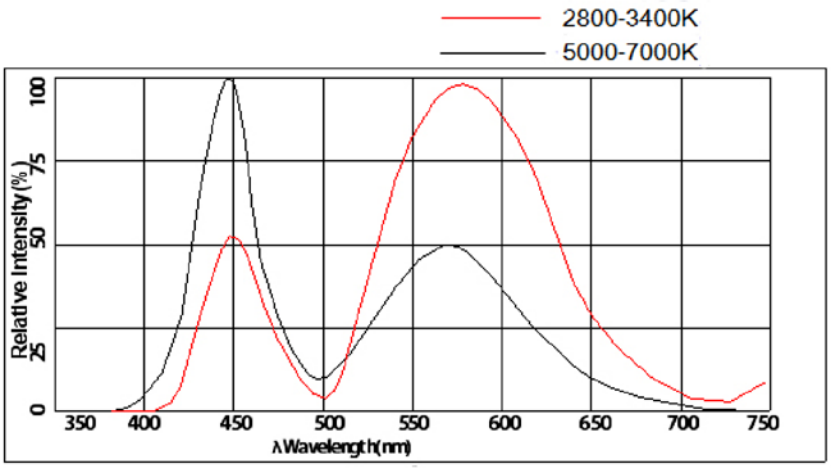
Project	Symbol	Conditions	Minimum	Average	Max.	Units
Forward Voltage	VF	IF=150mA	3	3,2	3,4	V
Reverse current	IR	VR=1.2V			5	μA
Flux	Φ	IF=150mA	50		60	Lm
Color Tenperature	CCT	IF=150mA	2800		7000	K
Color Rendering Index	Ra	IF=150mA	60		85	

6. Absolute Maximum Rating (Ta=25°C)

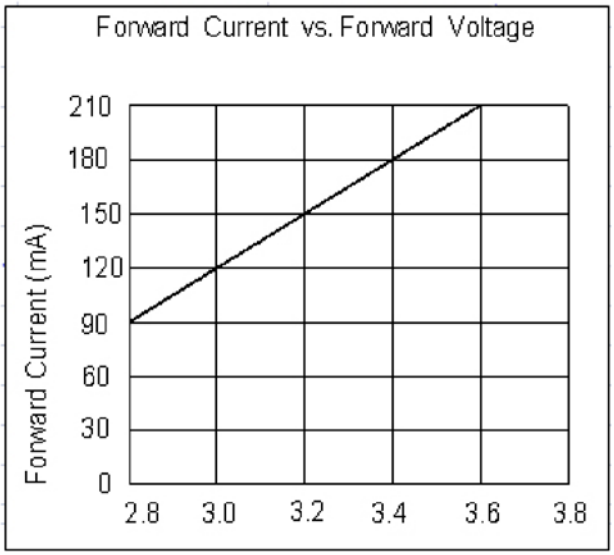
Project	Symbol	Limit parameter	Units
Forward Current	IF	150	mA
Recommended Current	IF	⩽120	mA
Pulse peak current	IFP	500	mA
Reverse Voltage	VR	5	V
Power	PD	0,5	W
Operating temperature	Topr	(-30~+85)	°C
Storage Temperature	Tstg	(-40~+100)	°C
Soldering temperature	Tsol	reflow soldering: 250°C/10(Seconds0);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

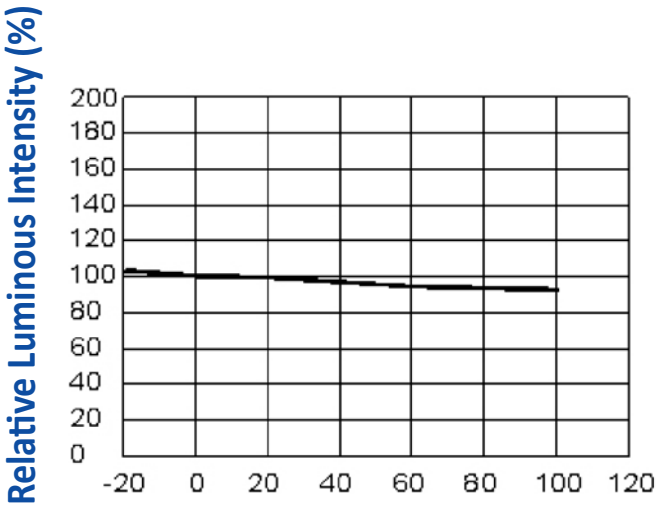
7. Typical electro-optical characteristics curves

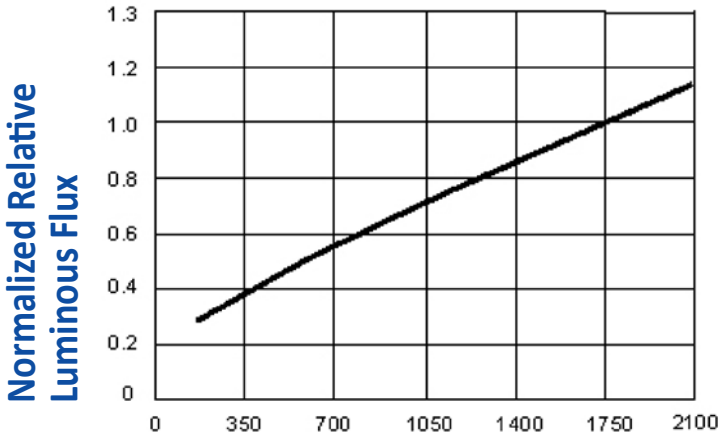
Spectrum Distribution TA=25^{0}C

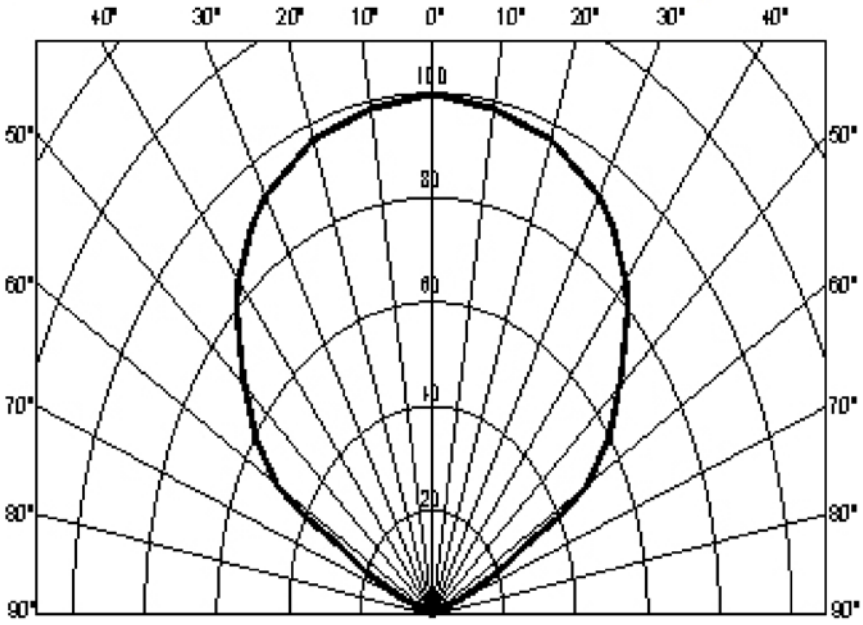


Forward voltage and forward current curves TA=25^{0}C




Relative Luminous Intensity (%)
200
180
160
140
120
100
80
60
40
20
0
-20
0
20
40
60
80
100
120
Ambient Temperature Ta (°C)

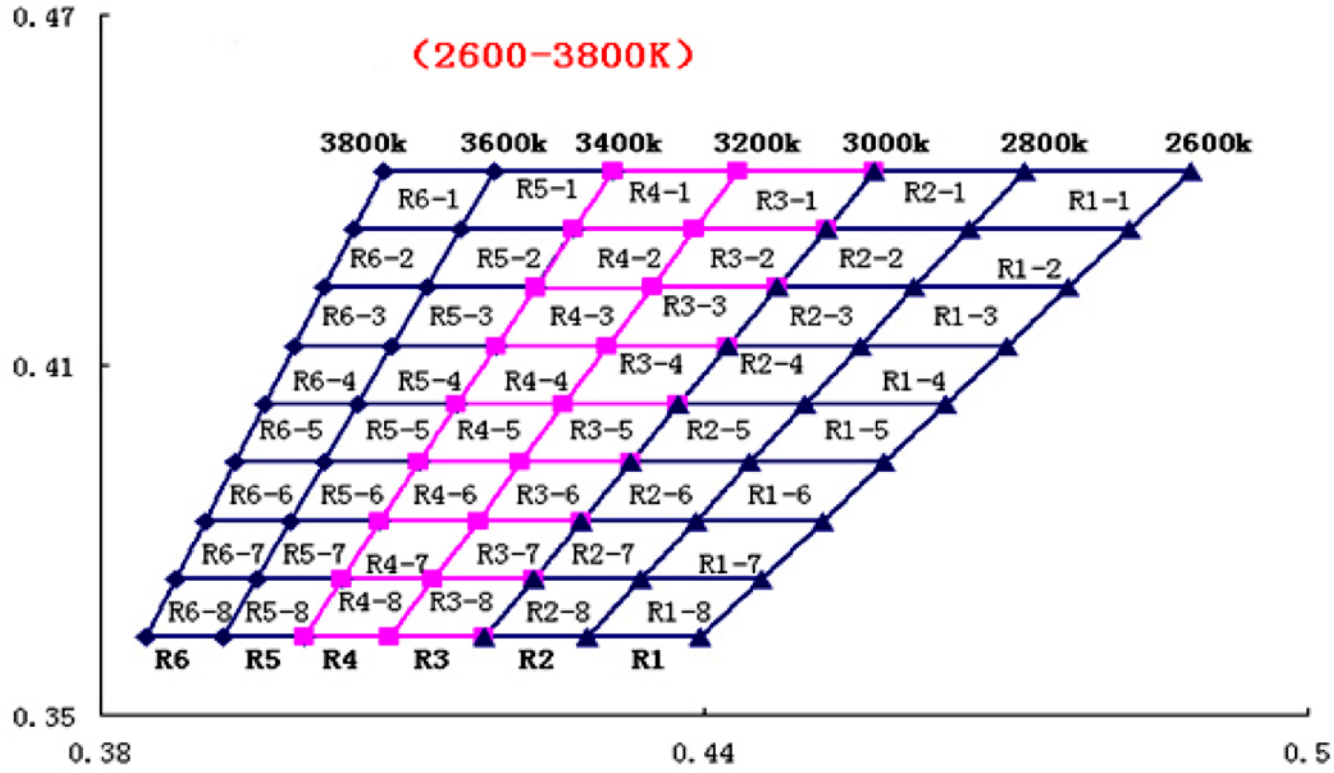

Normalized Relative Luminous Flux
1.3
1.2
1.0
0.8
0.6
0.4
0.2
0
0
350
700
1050
1400
1750
2100
Forward Current (mA)

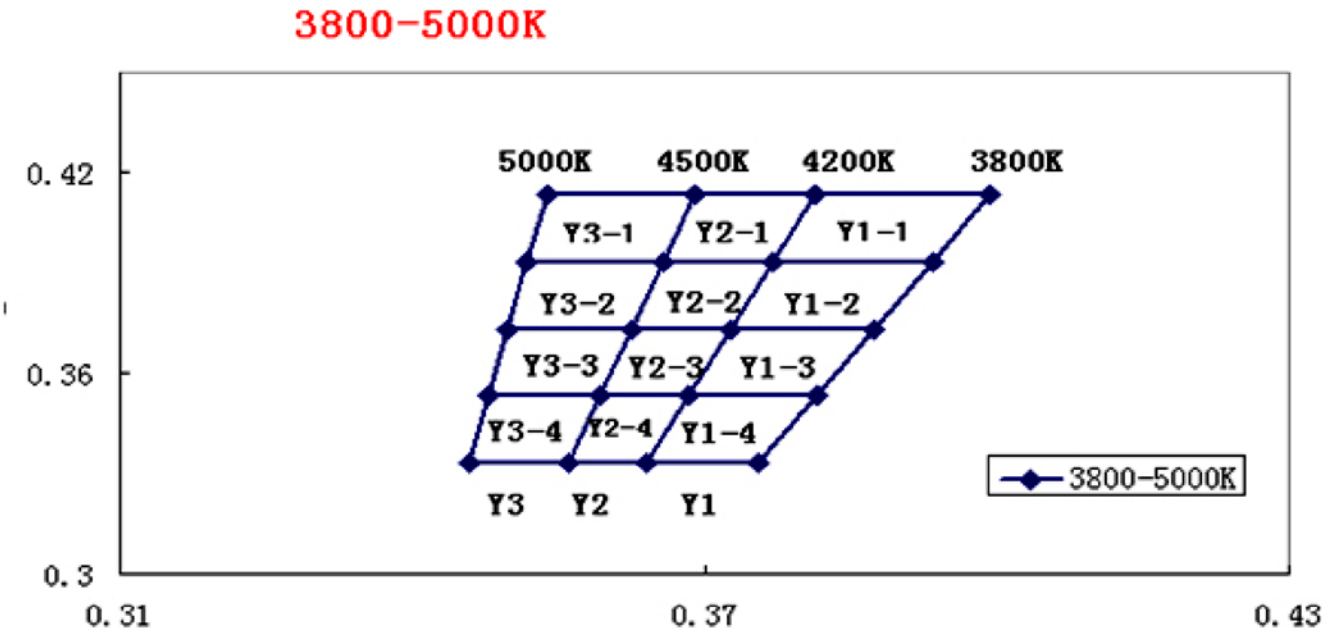

40°
30°
20°
10°
0°
10°
20°
30°
40°
50°
60°
70°
80°
90°
100
80
60
40
20

8. Reliability Test Standards

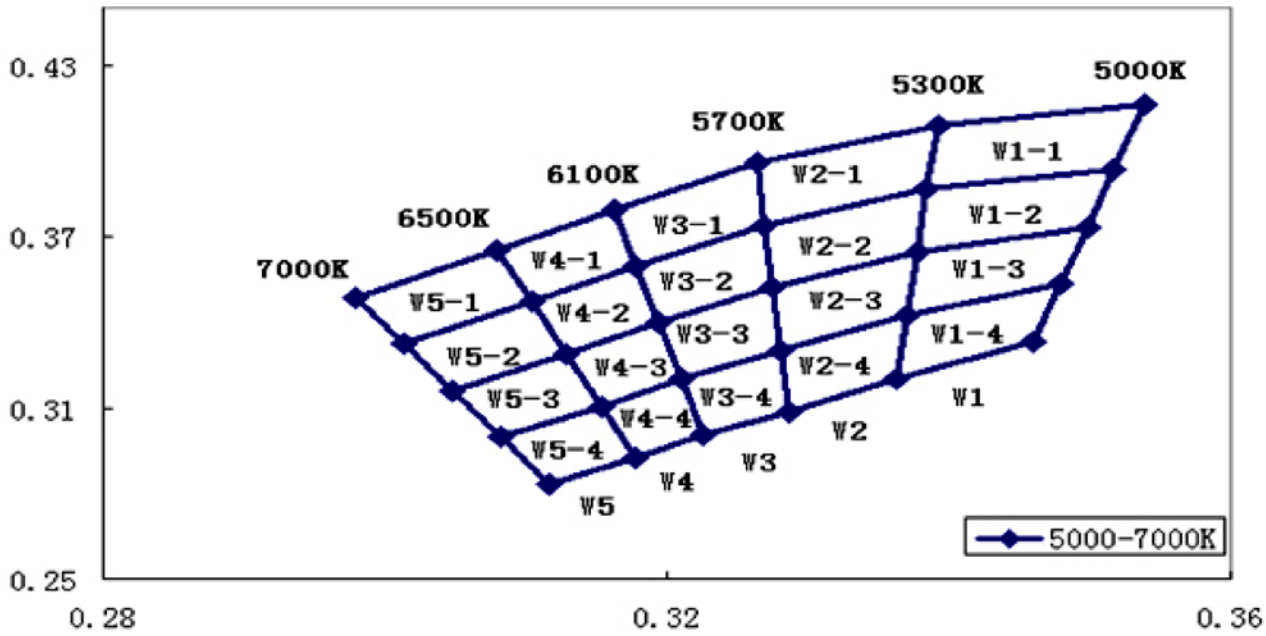
Type	Pilot project	Test conditions	Duration	The number of samples	Charge level
Environmental testing	Temperature cycling	45°C(30Min)~25°C(5Min) ~100°C(30Min)~25°C(5Min)	Cycle 100 Round	30	0/30
	Thermal Shock	-40°C(15Min) ~100°C(15Min)	Cycle 300 Round	30	0/30
	Humidity cycle	30°C~65°C RH=90% 24H/1Round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


0. 43
0. 37
0. 31
0. 25
0. 28
0. 32
0. 36
5000K
5300K
5700K
6100K
6500K
7000K
W1-1
W1-2
W1-3
W1-4
W2-1
W2-2
W2-3
W2-4
W3-1
W3-2
W3-3
W3-4
W4-1
W4-2
W4-3
W4-4
W5-1
W5-2
W5-3
W5-4
W1
W2
W3
W4
W5
5000-7000K

10. Solder conditions