

# Specification

Customer Name : \_\_\_\_\_

Customer P/N : \_\_\_\_\_

Refond P/N : \_\_\_\_\_

Sending Date: \_\_\_\_\_

Technical Reference			Sample	Mass Product		
Customer approval			Refond approval			
Approval	Audit	Confirmation	Approval	Audit	Confirmation	
Qualified		Disqualified	Date			

**Address:** 1-8th Floor, Building #1,10th Industrial Zone, Tian Liao Community, Gong Ming Area, Guang Ming New District, Shenzhen, China.

**Tel/** 0755-66839118      **Fax/** 0755-66839300      **Web/** [www.refond.com](http://www.refond.com)

**Features**

- PLCC-2 Package.
- Extremely wide viewing angle.
- Suitable f

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Electrical / Optical Characteristics at Ts=25°C

Item	Coding	Symbol	test condition	Value			Unit
				Min.	Max.	Typ.	
Forward voltage	Rank F2	VF	IF=30mA	2.7	2.8	3.2	V
	Rank G1			2.8	2.9		V
	Rank G2			2.9	3.0		V
	Rank H1			3.0	3.1		V
	Rank H2			3.1	3.2		V
	Rank I1			3.2	3.3		V
	Rank I2			3.3	3.4		V
RF-27HK13DS-ED-F-Y Luminous flux 2650-2868K	Rank OFA			9.0	10.0		lm
	Rank OGA		IF=30mA	10.0	11.0	10.9	

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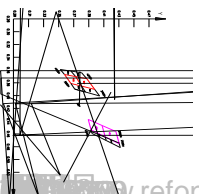
Absolute Maximum Ratings at Ts=25°C

- Note: 1. 1/10 Duty cycle, 0.1ms pulse width. 0.1ms 1/10.  
2. The above forward voltage measurement all on

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BIN CODE	CIE-X1	CIE-Y1	CIE-X2	CIE-Y2	CIE-X3	CIE-Y3	CIE-X4	CIE-Y4
WP2	0.4468	0.4077	0.4644	0.4118	0.4535	0.3930	0.4373	0.3893
WK2	0.4562	0.4260	0.4754	0.4305	0.4644	0.4118	0.4468	0.4077
WP3	0.4333	0.4004	0.4481	0.4053	0.4399	0.3899	0.4262	0.3854
WK3	0.4431	0.4213	0.4594	0.4267	0.4481	0.4053	0.4333	0.4004
NP3	0.3591	0.3521	0.3616	0.3663	0.3703	0.3726	0.3670	0.3578
NK3	0.3616	0.3663	0.3642	0.3805	0.3736	0.3874	0.3703	0.3726
NP2	0.3670	0.3578	0.3703	0.3726	0.3852	0.3806	0.3810	0.3663
NK2	0.3703	0.3726	0.3736	0.3874	0.3903	0.3979	0.3852	0.3806
NP1	0.3810	0.3663	0.3852	0.3806	0.3944	0.3856	0.3899	0.3716
NK1	0.3852	0.3806	0.3903	0.3979	0.4006	0.4044	0.3944	0.3856
CK4	0.3322	0.3429	0.3321	0.3566	0.3194	0.3451	0.3202	0.3321
CP4	0.3322	0.3331	0.3322	0.3429	0.3202	0.3321	0.3207	0.3230
CK4	0.3223	0.3476	0.3312	0.3558	0.3312	0.344	0.3226	0.3361
CP4	0.3226	0.3361	0.3312	0.344	0.3312	0.3322	0.323	0.325
CK5	0.3115	0.3378	0.3223	0.3476	0.3226	0.3361	0.313	0.3271
CP5	0.313	0.3271	0.3226	0.3361	0.323	0.325	0.3144	0.3174

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## Typical Optical Characteristics Curves

Fig.1-Forward Voltage Vs. Forward Current

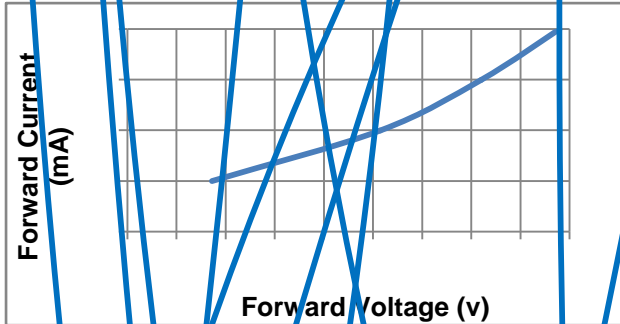


Fig.2-Forward Current Vs. Relative Intensity

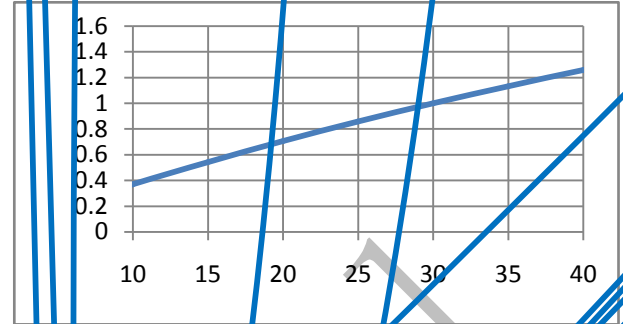


Fig.3- Pin Temperature Vs. Relative Intensity

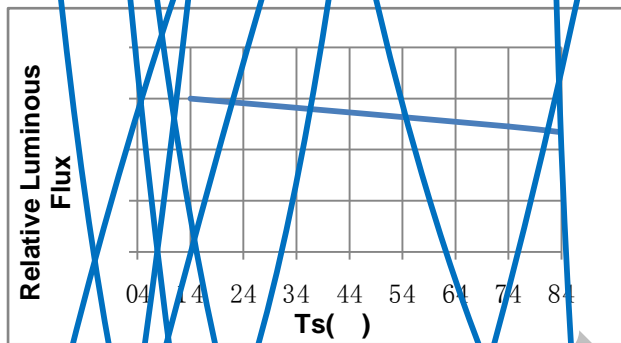


Fig.4- Pin Temperature Vs. Forward Current

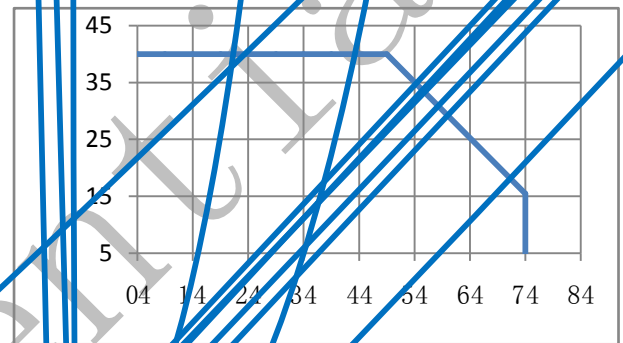


Fig.5-Forward Voltage Vs. Pin Temperature

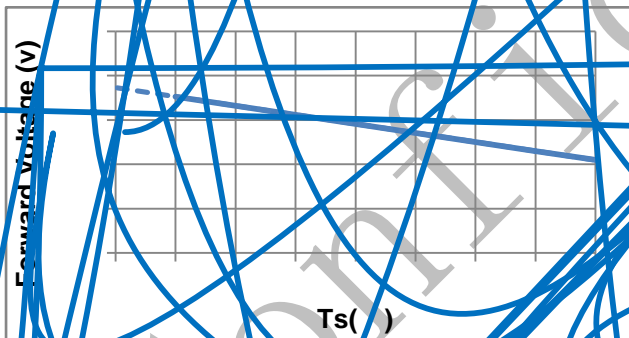


Fig.6-Radiation diagram

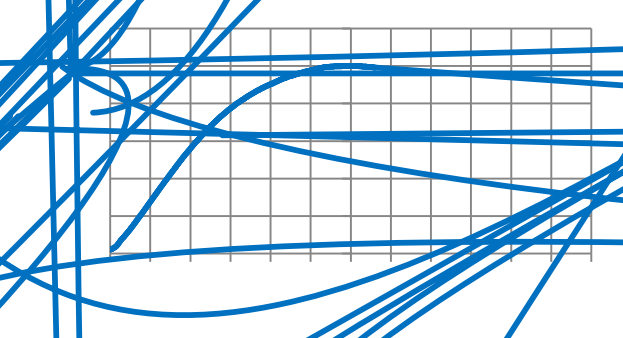
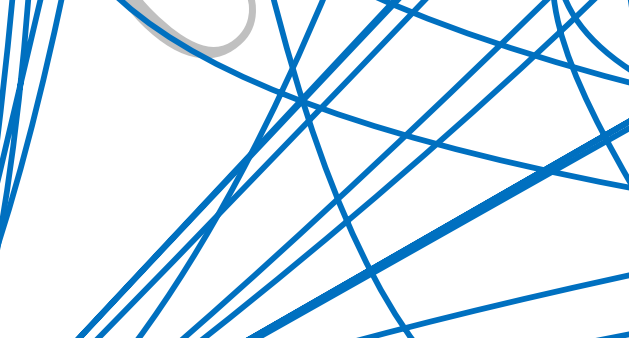


Fig.7- Spectrum Distribution



### Note

All the parameters and standards in the specification are based on Refond standard test platform.



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12>.The customer shall not disassemble or analyze the LEDs without having consent from Refond. When defective LEDs are found, the customer shall inform Refond in writing directly before disassembling or analysis.

13>.Other points for attention, please refer to our LED user manual.

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## Declare

This specification is written both in English and in Chinese and the latter is formal.

Both the customers and Refond will agree on official specifications of supplied products before a  
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right to further modify the specification for technical reference and sample without noticing the customers.

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