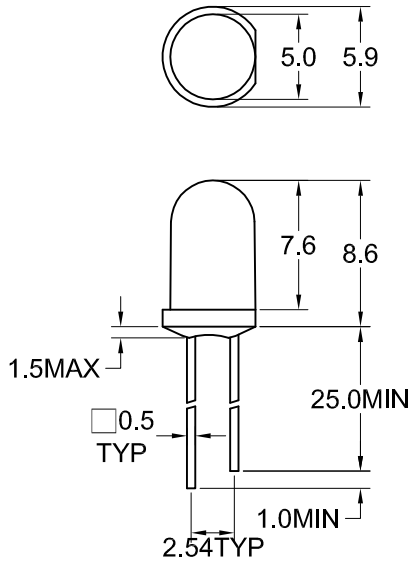
LIGITEK

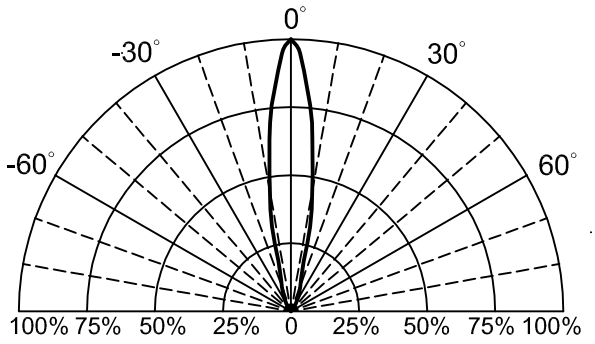
ROUND TYPE LED LAMPS **LWK3333** SERIES

Package Dimension



Note:1.All dimension are in millimeter tolerance is ±0.25mm unless otherwise noted
2.Specifications are subject to change without notice

Directivity Radiation



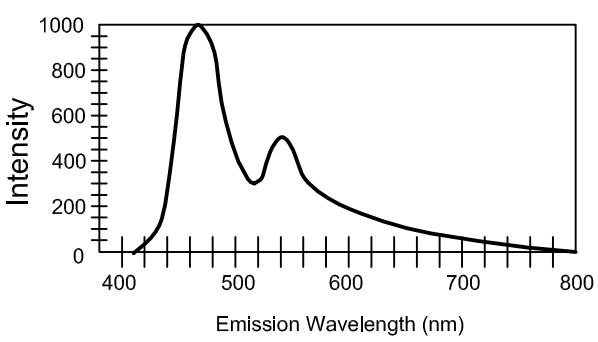
• Part Selection And Application Information (Ratings At 25℃ Ambient)

PART NO	MATERIAL	COLOR		Chromaticity Coordinates		Forward voltage @20mA(V)		Luminous Intensity @20mA(mcd)		Viewing angle 2θ 1/2 (deg)
		Emitted	Lens	X	Y	Typ.	Max.	Min.	Typ.	
LWK3333	InGaN/GaN	White	Water Clear	0.28±0.03	0.28±0.06	3.5	4.0	2200	5000	16

• Absolute Maximum Rating (Ta=25℃)

PARAMETER	WHITE	UNIT
	WK	
Forward Current	30	mA
Peak Forward Current Duty 1/10 @10KHz	100	mA
Power Dissipation	120	mW
Reverse Current @5V	50	μA
Operating Temperature	-20℃ TO +80℃	
Storage Temperature	-30℃ TO +100℃	
Lead Soldering Temperature 260℃ For 5 Seconds(2.0mm From Body)		

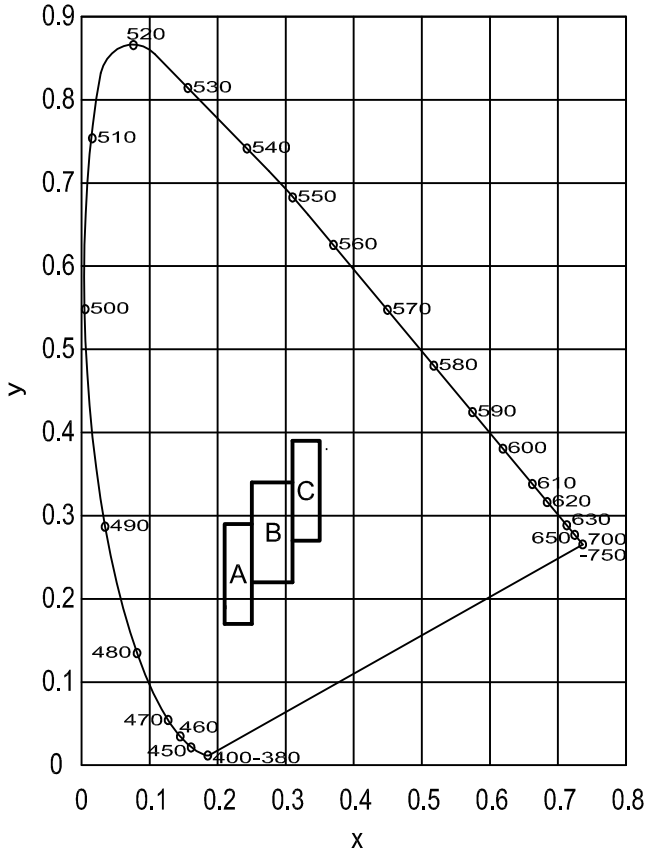
. Luminous Spectrum (Ta=25℃)



. Chromaticity Coordinates Specifications for Bin Grading

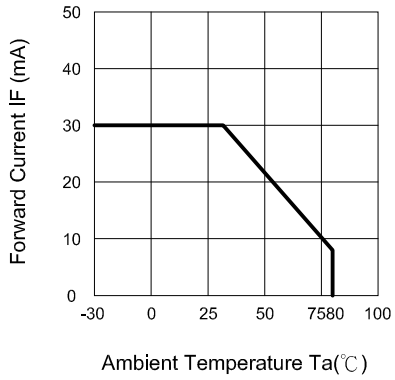
Rank	Chromaticity Coordinates		Rank	Chromaticity Coordinates		Rank	Chromaticity Coordinates	
A	X=0.23±0.02	Y=0.23±0.06	B	X=0.28±0.03	Y=0.28±0.06	C	X=0.33±0.02	Y=0.33±0.06
A-1	X=0.23±0.02	Y=0.2±0.03	B-1	X=0.28±0.03	Y=0.24±0.015	C-1	X=0.33±0.02	Y=0.3±0.03
A-2	X=0.23±0.02	Y=0.26±0.03	B-2	X=0.28±0.03	Y=0.26±0.015	C-2	X=0.33±0.02	Y=0.36±0.03
			B-3	X=0.28±0.03	Y=0.29±0.015			
			B-4	X=0.28±0.03	Y=0.32±0.015			

. CIE Chromaticity Diagram

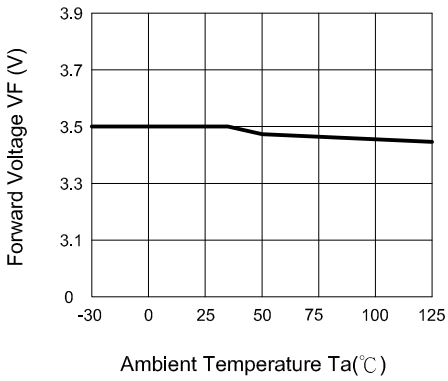


. Typical Electro-Optical Characteristics Curves

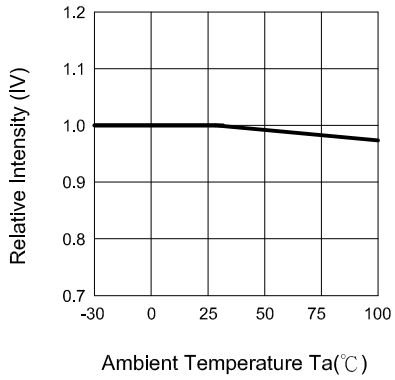
. Forward Current vs Ambient Temperature



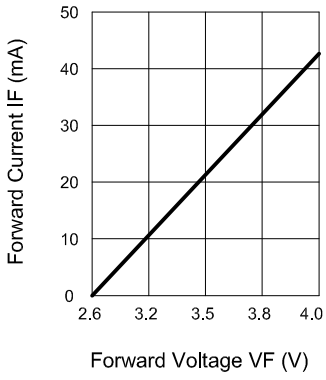
. Forward Voltage vs Ambient Temperature



. Relative Intensity vs Ambient Temperature



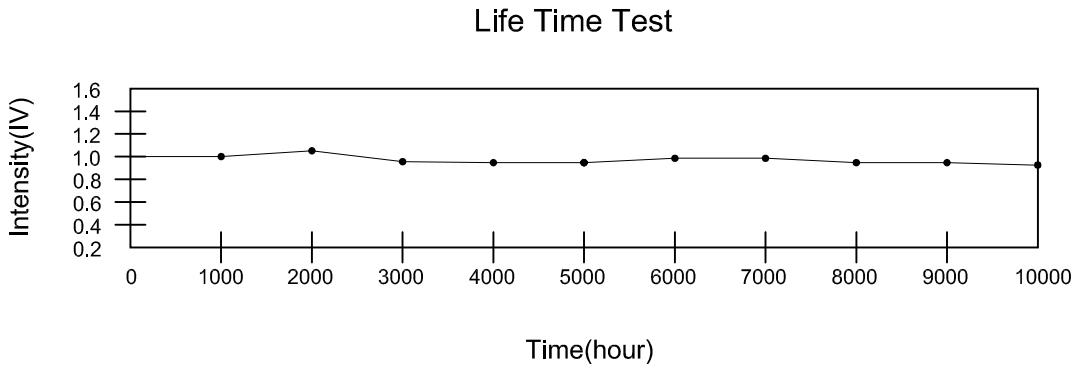
. Forward Current vs Forward Voltage



. Reliability Teat Report

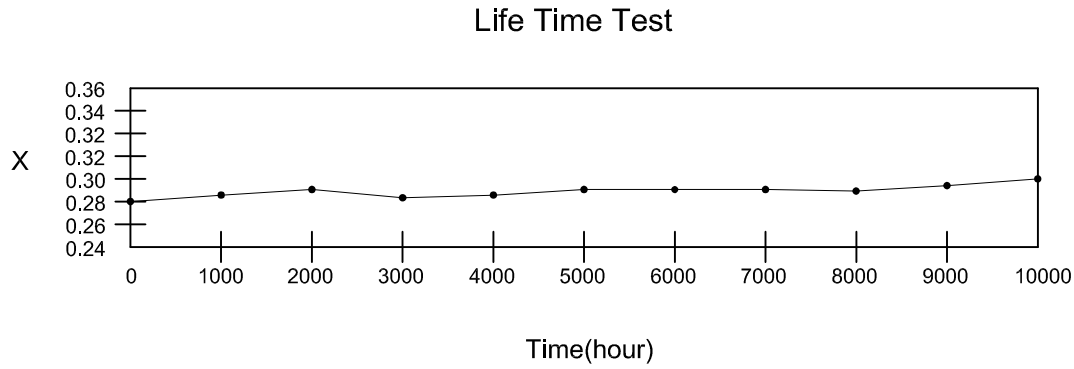
Part No : LWK3333

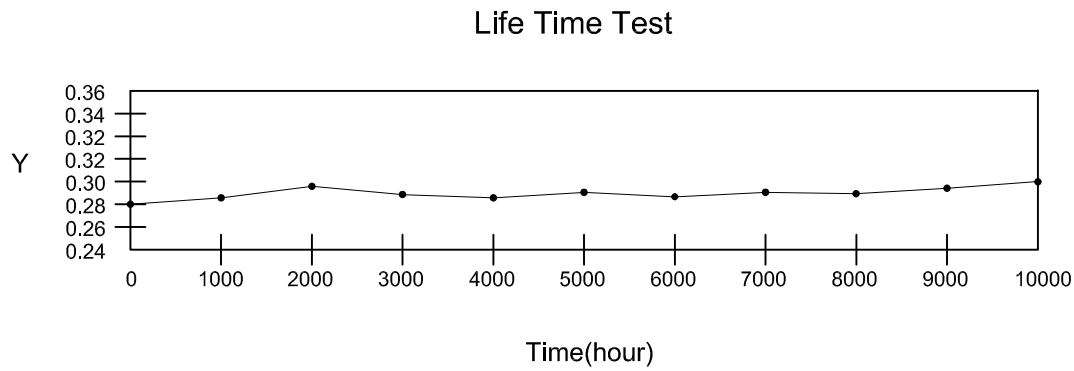
Test item	Teat Condition	Test Equipment	Test Environment	Quantity	Test Succeed or Failure	Defective Quantity		Failure Rate
						Open/Short	Appearance	
Operating Life Test	1.Constant Current = 20mA 2.Test Time = 1001 Hours 3.Under Room Temperature	Life Test	22.9℃/78% RH	200 pcs	OK	0 pcs	0 pcs	0%
High Temperature Storage Test	1.Temperature = 105℃± 5℃ 2.Test Time = 1001 Hours	CSUM-MA1001	23.8℃/75% RH	200 pcs	OK	0 pcs	0 pcs	0%
Low Temperature Storage Test	1.Temperature = -40℃ ± 5℃ 2.Test Time = 1001 Hours	Denstar Refrigerator	22.5℃/62% RH	200 pcs	OK	0 pcs	0 pcs	0%
High Temperature High Humidity Test	1.TA=65℃± 5℃ 2.90%-95% RH 3.Test Time 502 Hours	YL-80	21.9℃/73% RH	200 pcs	OK	0 pcs	0 pcs	0%
Thermal Shock Test	1.105℃± 5℃ &-40℃±5℃ 2.Total = 10Cycie	YL-80	22.8℃/72% RH	200 pcs	OK	0 pcs	0 pcs	0%
Solderability Test	1.TA = 260℃± 5℃ 2.Dwell Time = 5 sec ± 1 sec 3.More Then 1.6mm Away Form LED Resin	Solderability	24.2℃77% RH	200 pcs	OK	0 pcs	0 pcs	0%
Remarks	According To Ligitek Out Going Spec							



Test Condition : Ta= 25℃ , If = 20mA

. CIE 1931(X,Y) Chromaticity Coordinates (Life Time Test)





Measuring Condition : Ta = 25℃