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EDCON COMPONENTS
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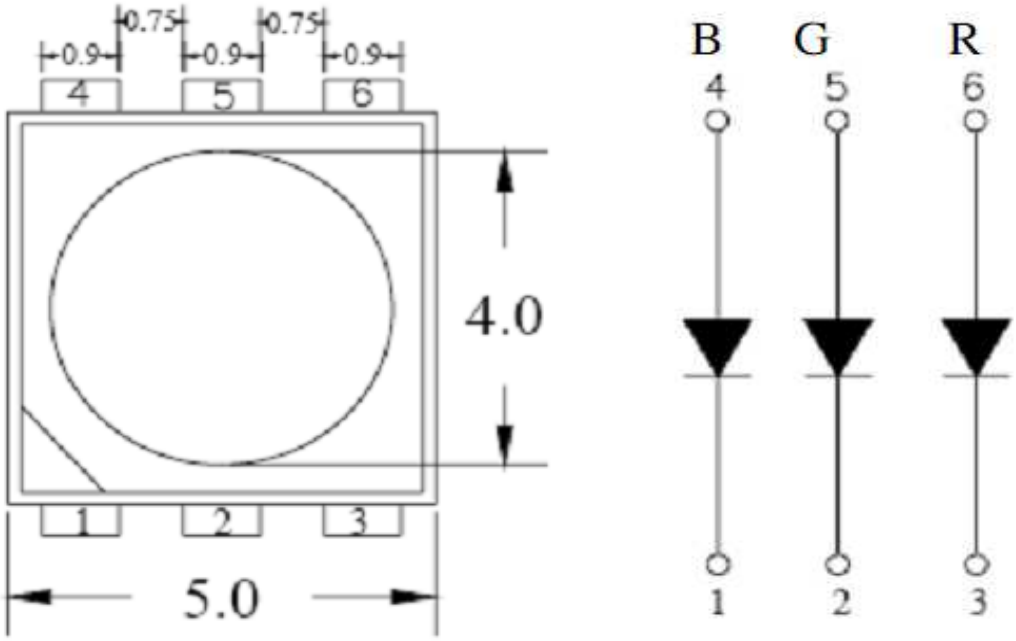
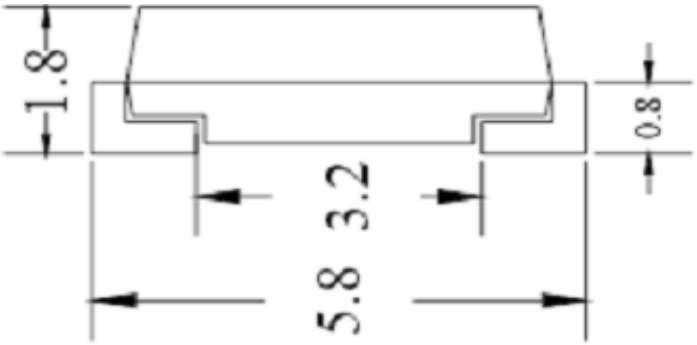
Applications

- Interior automotive lighting(dashboard backlight etc...)
- Optical indicators
- Communication Products
- Backlighting
- Toys

Package Dimensions





Notes:
All dimensions in mm tolerance is ±0.1mm unless otherwise noted.

PLCC 6 LED	**RGB-Colour**
Part No.:	**M11A6001**
Customer:	

DRW:	Harry	CHKD	Dustin	MATL	Wilson	TOLERANCE	Mason	DATE 24.07.2009
APPD:	Jason			FINISH	John		Sheet No.	1 from 11

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Absolute Maximum Ratings (Ta = 25°C)

Parameter	MAX.	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	50	mA
Continuous Forward Current	20	mA
Reverse Voltage	5	V
Operating Temperature Range	-25℃ to +85℃	
Storage Temperature Range	-40℃ to + 100℃	
Lead Soldering Temperature	260℃ for 3 Seconds	

*Pulse width ≤0.1msec duty ≤1/10

Typical Electrical & Optical Characteristics (IF=20mA and Ta = 25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	$I_{v(Red)}$	400	600	---	mcd	I_F =20mA (Note 8)
	$I_{v(Green)}$	400	600			
	$I_{v(Blue)}$	100	200			
Wavelength	$\lambda d_{(Red)}$	620	---	630	nm	I_F = 20mA
	$\lambda d_{(Green)}$	515		525		
	$\lambda d_{(Blue)}$	465		475		
Viewing Angle	2θ1/2	---	120	---	Deg	I_F = 20mA
Forward Voltage	$V_{F(Red)}$	---	2.0	2.8	V	I_F = 20mA
	$V_{F\ (Green)}$		3.2	4.0		
	$V_{F\ (Blue)}$		3.2	4.0		
Reverse Current	I_R	---	---	50	μA	V_R = 5V

Notes:

1. Tolerance of measurement of luminous intensity : ±15%
2. Tolerance of measurement of chromatic coordinates : ±0.02
3. Tolerance of measurement of forward voltage : ±0.1V

PLCC 6 LED RGB-Colour

Part No.: **M11A6001**

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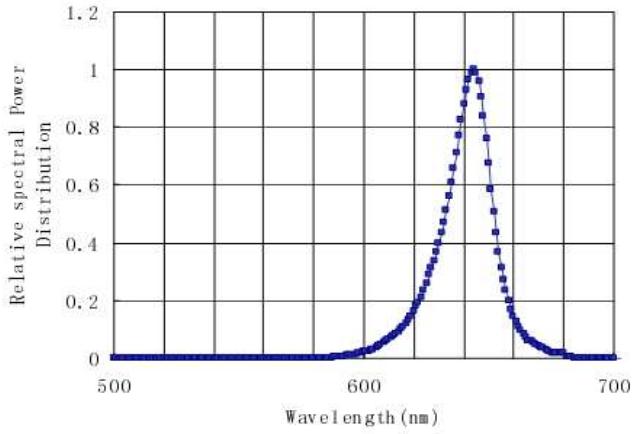

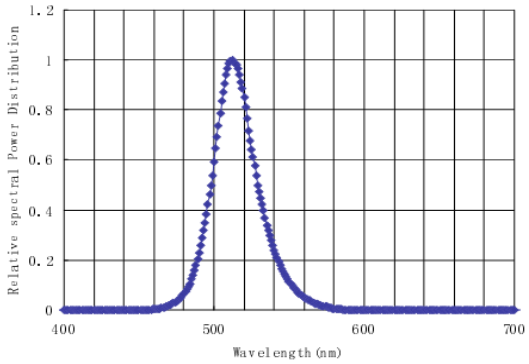

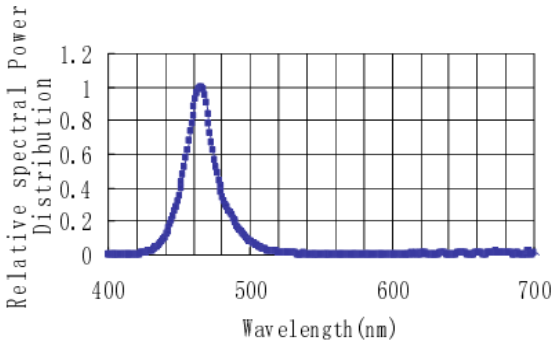

PLCC 6 LED	**RGB-Colour**
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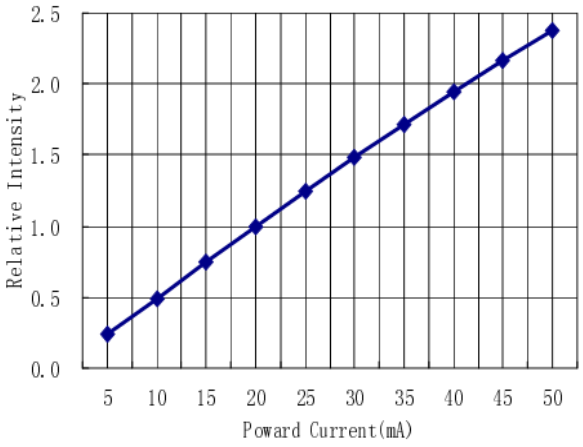
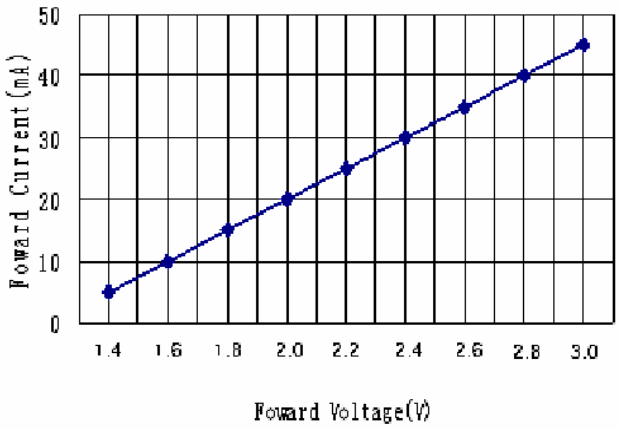
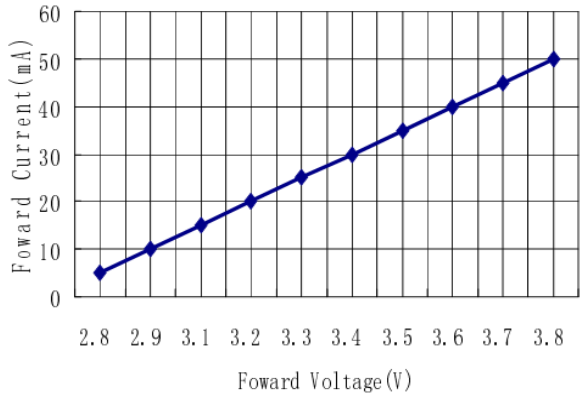
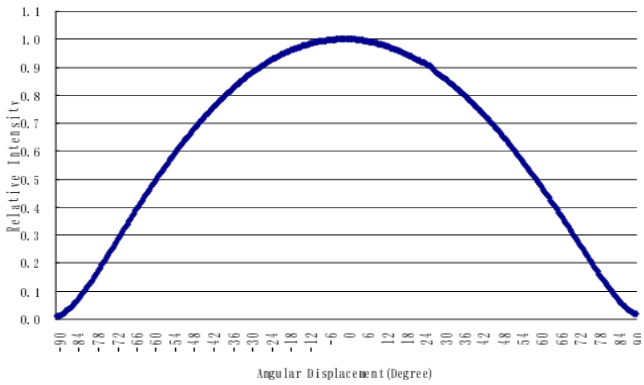
APPD:	Jason			FINISH	John		Sheet No.	3 from 11

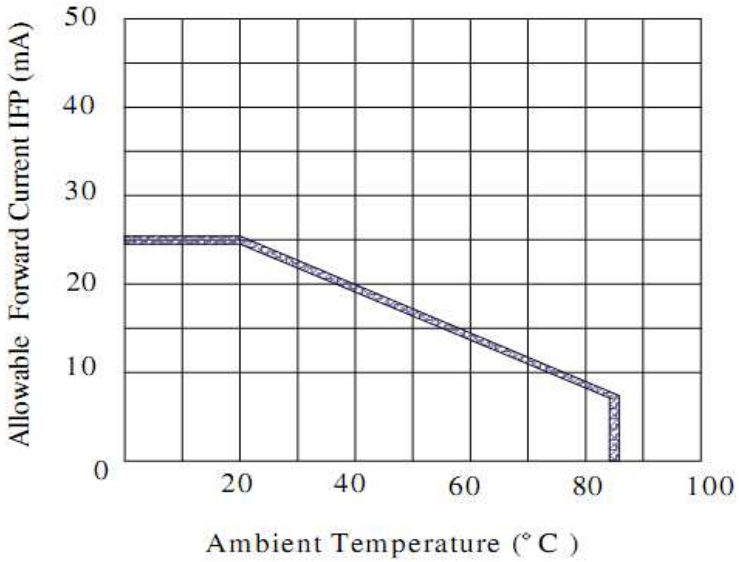
Typical Electrical/ Optical Characteristics Curves (Ta=25°C Unless Otherwise Noted)











PLCC 6 LED	RGB-Colour
Part No.:	M11A6001
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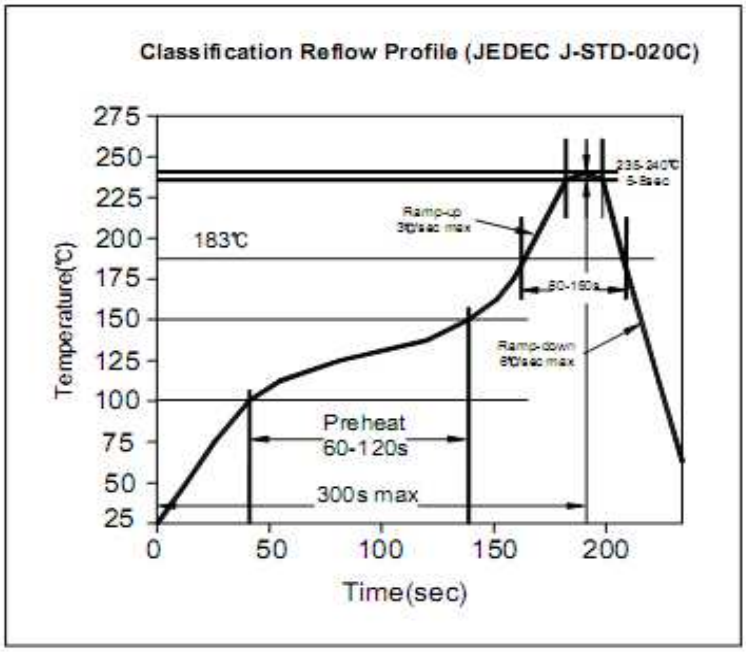
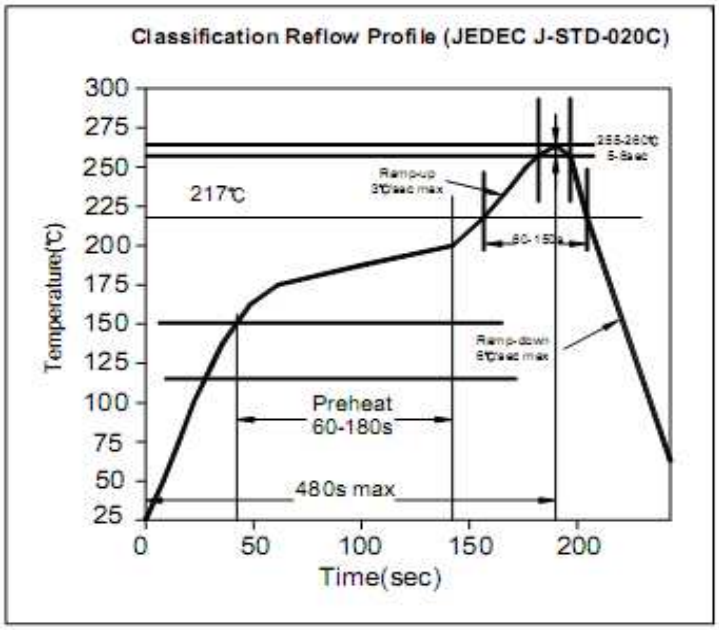
Solder Condition

lead solder



lead free solder



PLCC 6 LED	**RGB-Colour**
Part No.:	**M11A6001**
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APPD:	Jason			FINISH	John		Sheet No.	5 from 11

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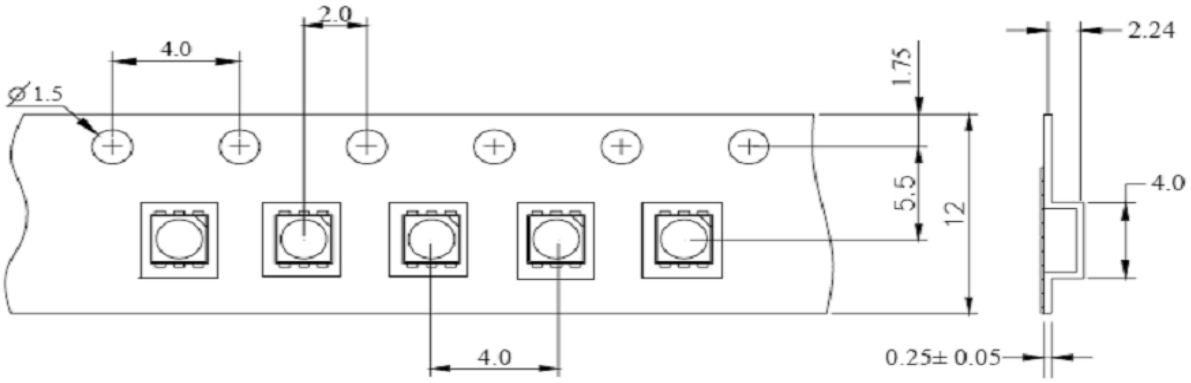
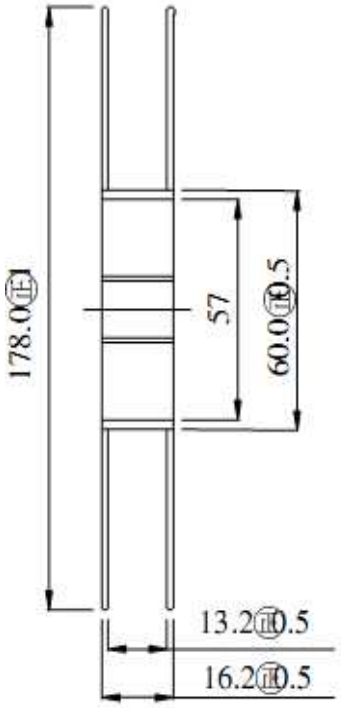
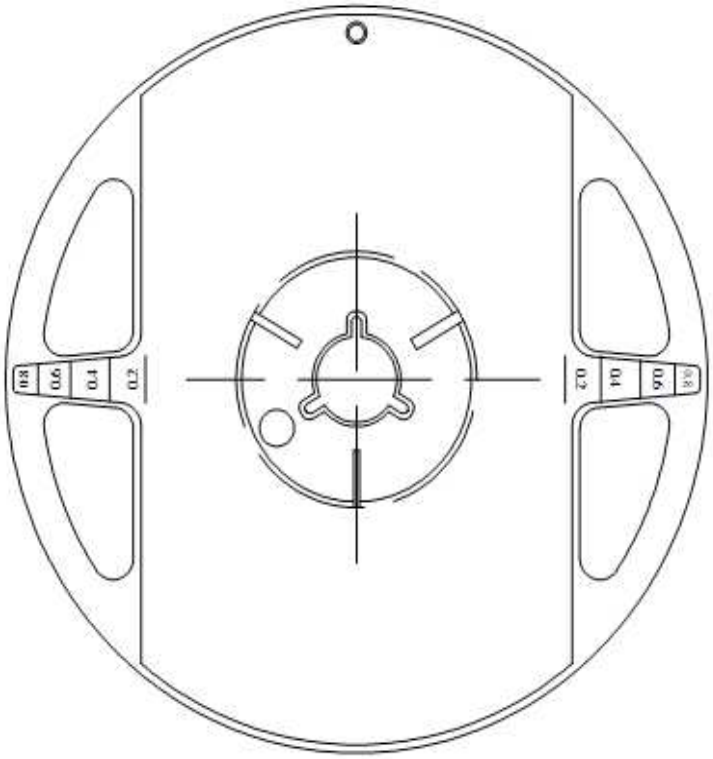
Packing Specifications:



Reel Specifications





Dimensions ate specified as follows:mm

Notes:
1) The packing only appropriate for ECGD
2) Normal packing quantity: 2,000pcs/reel

PLCC 6 LED	RGB-Colour
Part No.:	**M11A6001**
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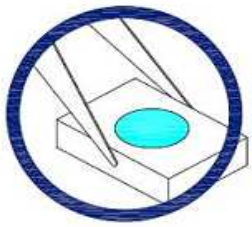
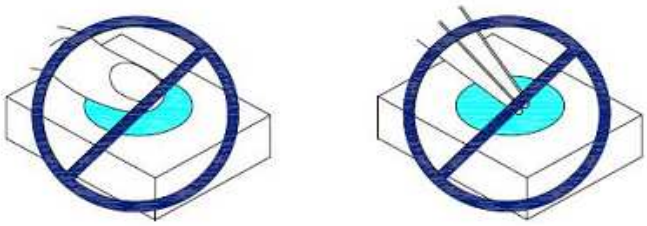
Handling Precautions

Compare to epoxy encapsulant that is hard and brittle, silicone is softer and flexible. Although its characteristic significantly reduces thermal stress, it is more susceptible to damage by external mechanical force. As a result, special handling precautions need to be observed during assembly using silicone encapsulated LED products. Failure to comply might leads to damage and premature failure of the LED.

1. Handle the component along the side surfaces by using forceps or appropriate tools.



2. Do not directly touch or handle the silicone lens surface. It may damage the internal circuitry.



3. Do not stack together assembled PCBs containing exposed LEDs. Outside impact may scratch the silicone lens or damage the internal circuitry.

4. The outer diameter of the TOP LED pickup nozzle should not exceed the size of the LED to prevent air leaks. The inner diameter of the nozzle should be as large as possible.

PLCC 6 LED	**RGB-Colour**
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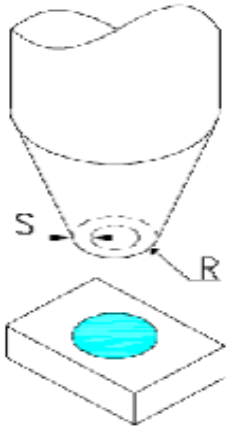
APPD:	Jason			FINISH	John		Sheet No.	7 from 11

5. A pliable material is suggested for the nozzle tip to avoid scratching or damaging the LED surface during pickup.

6. The dimensions of the component must be accurately programmed in the pick-and-place machine to insure precise pickup and avoid damage during production.



							PLCC 6 LED	**RGB-Colour**
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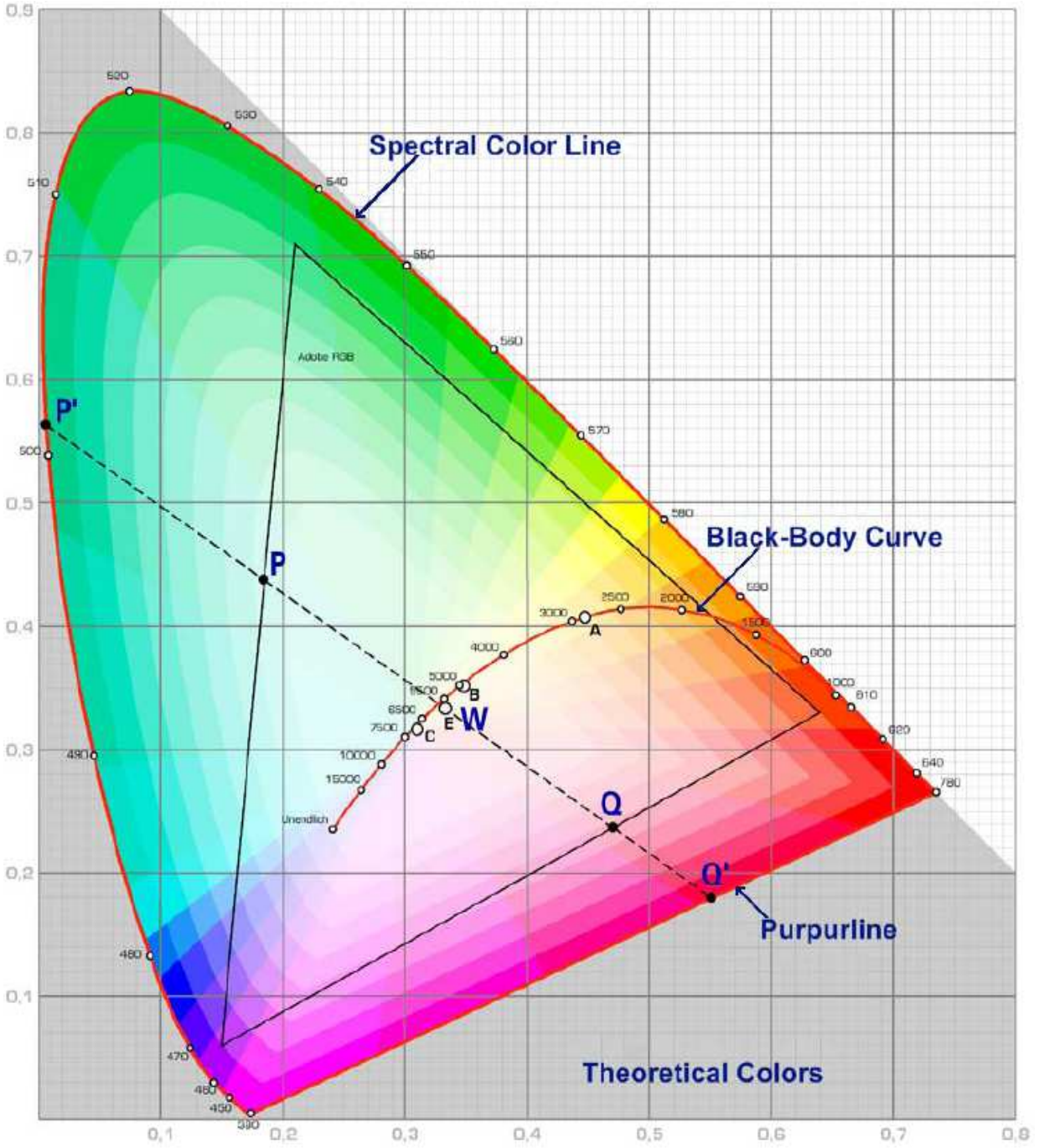
Color table curve



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Chromaticity Coordinates Specifications and BIN Grading

Color Bin Limits

BIN		RANK				BIN		RANK				BIN		RANK			
A 1	X	0.248	0.255	0.2625	0.2561	B3	X	0.2539	0.2603	0.2678	0.2614	D1	X	0.287	0.2934	0.3009	0.2945
	Y	0.233	0.2425	0.23875	0.22875		Y	0.25625	0.26625	0.2625	0.2525		Y	0.2925	0.3025	0.29875	0.28875
A 2	X	0.255	0.2614	0.2689	0.2625	B4	X	0.2603	0.2667	0.2742	0.2678	D2	X	0.2934	0.2998	0.3073	0.3009
	Y	0.2425	0.2525	0.24875	0.23875		Y	0.26625	0.27625	0.2725	0.2625		Y	0.3025	0.3125	0.30875	0.29875
A 3	X	0.2411	0.2475	0.255	0.248	C1	X	0.2742	0.2806	0.2881	0.2817	D3	X	0.2795	0.2859	0.2934	0.287
	Y	0.23625	0.24625	0.2425	0.233		Y	0.2725	0.2825	0.27875	0.26875		Y	0.29625	0.30625	0.3025	0.2925
A 4	X	0.2475	0.2539	0.2614	0.255	C2	X	0.2806	0.287	0.2945	0.28875	D4	X	0.2859	0.2923	0.2998	0.2934
	Y	0.24625	0.25625	0.2525	0.2425		Y	0.2825	0.2925	0.28875	0.27875		Y	0.30625	0.31625	0.3125	0.3025
B 1	X	0.2614	0.2678	0.2753	0.2689	C3	X	0.2667	0.2731	0.2806	0.2742	E1	X	0.2998	0.3062	0.3137	0.3073
	Y	0.2525	0.2625	0.25875	0.24875		Y	0.27625	0.28625	0.2825	0.2725		Y	0.3125	0.3225	0.31875	0.30875
B 2	X	0.2678	0.2742	0.2817	0.2753	C4	X	0.2731	0.2795	0.287	0.2806	E2	X	0.3062	0.3126	0.3201	0.3137
	Y	0.2625	0.2725	0.26875	0.25875		Y	0.28625	0.29625	0.2925	0.2825		Y	0.3225	0.3325	0.32875	0.31875
BIN		RANK				BIN		RANK				BIN		RANK			
E 3	X	0.2923	0.2987	0.3062	0.2998	G1	X	0.2881	0.2945	0.3074	0.301	H3	X	0.241	0.2474	0.2603	0.2539
	Y	0.31625	0.32625	0.3225	0.3125		Y	0.27875	0.28875	0.2825	0.2725		Y	0.262	0.272	0.26625	0.25625
E 4	X	0.2987	0.3051	0.3126	0.3062	G2	X	0.2945	0.3009	0.3138	0.3074	H4	X	0.2474	0.2539	0.2667	0.2603
	Y	0.32625	0.33625	0.3325	0.3225		Y	0.28875	0.29875	0.2925	0.2825		Y	0.272	0.282	0.27625	0.26625
F1	X	0.2461	0.2625	0.2754	0.269	G3	X	0.3009	0.3073	0.3202	0.3138	H5	X	0.2539	0.2602	0.2731	0.2667
	Y	0.22875	0.23875	0.2325	0.223		Y	0.29875	0.30875	0.3025	0.2925		Y	0.282	0.292	0.28625	0.27625
F2	X	0.2625	0.2689	0.2818	0.2754	G4	X	0.3073	0.3137	0.3266	0.3202	I1	X	0.2602	0.2666	0.2795	0.2731
	Y	0.23875	0.24875	0.2425	0.2325		Y	0.30875	0.31875	0.3125	0.3025		Y	0.292	0.302	0.29625	0.28625
F3	X	0.2689	0.2753	0.2882	0.2818	G5	X	0.3137	0.3201	0.333	0.3266	I2	X	0.2666	0.273	0.2859	0.2795
	Y	0.24875	0.25875	0.2525	0.2425		Y	0.31875	0.32875	0.3225	0.3125		Y	0.302	0.312	0.30625	0.29625
F4	X	0.2753	0.2817	0.2946	0.2882	H1	X	0.2282	0.2346	0.2475	0.2411	I3	X	0.273	0.2794	0.2923	0.2859
	Y	0.25875	0.26875	0.2625	0.2525		Y	0.242	0.252	0.24625	0.23625		Y	0.312	0.322	0.31625	0.30625
F5	X	0.2817	0.2881	0.301	0.2946	H2	X	0.2346	0.241	0.2539	0.2475	J4	X	0.2794	0.2858	0.2987	0.2923
	Y	0.26875	0.27875	0.2725	0.2625		Y	0.252	0.262	0.25625	0.24625		Y	0.322	0.332	0.32625	0.31625
												I5	X	0.2858	0.2922	0.3051	0.2987
													Y	0.332	0.342	0.33625	0.32625

PLCC 6 LED	**RGB-Colour**
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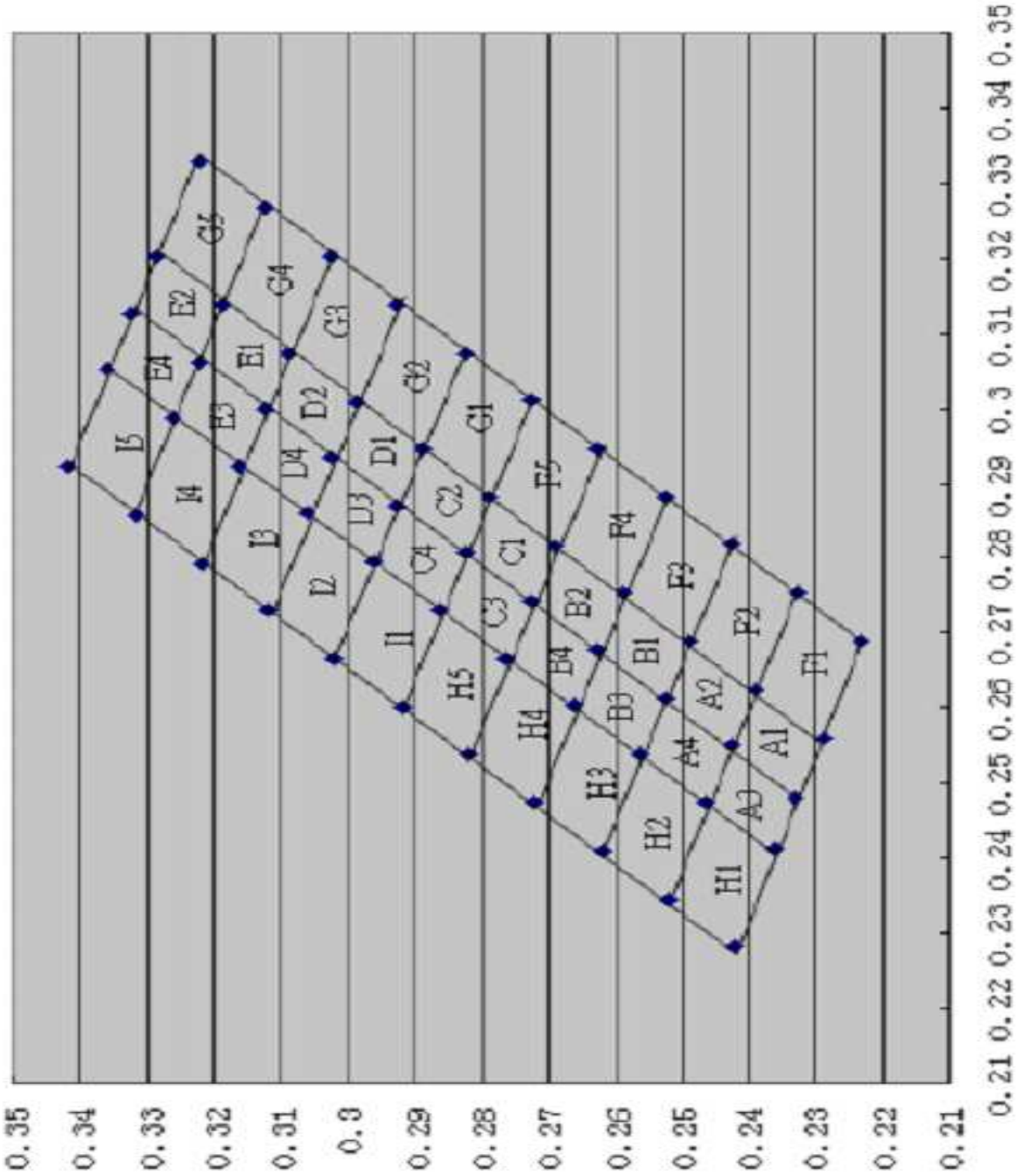
Chromaticity Coordinates Specifications and BIN Grading



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