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SHANGHAI TOPLIGHT TECHNOLOGY CO., LTD.

上海鼎晖科技有限公司



TOPLIGHT

- COB 产品目录 -

About 公司简介



• 全自动生产线
Automatic Production Line
自動製造ライン



■ 上海鼎晖科技有限公司 成立于1996年，通过多年的行业磨练及稳健的发展，已成LED光电领域的主要制造商之一。企业荣获：上海市国家高新技术企业、上海小巨人培育型企业等称号。公司生产基地位于上海嘉定,青浦,生产场地40000余平方米，主要生产LED数字显示器件及LED照明光源模组，年产量200亿光源点，人员及专业资深工程团队、生产制造团队共300余名。公司生产基地拥有业界国际最先进的全自动成套封装设备及各类先进的测试分析检测仪器；全静电十万级无尘车间及大型高温老化检测等基础设施，通过ISO9001、ISO14000、RoHS等多项认证，部分产品通过CE、ETL、CCC、CQC等国际认证。

鼎晖科技以诚信拓市场，以稳健树品牌，以品质创未来。公司由日籍资深管理团队担任核心领导层，以稳定的品质开拓市场。在上海市半导体照明工程技术研究中心的支持下，承担国家863计划LED封装项目及各项上海市科技研发项目，企业联合复旦大学、北京大学、上海大学等众多科技研究机构共同研发生产高水准，高信赖性LED相关产品。以生产高品质要求的LED光源器件作为企业主要发展方向。

Shanghai Toplight Technology Co.Ltd was founded in 1996, through 20 years of industry experience steady development, has become one of the led leading manufactures in LED photoelectric field. Toplight is located in Jiading & Qingpu district Shanghai with 40,000m² plant space, main products are LED displays and LED components for lighting. Annual output points of light source are twenty billion. Toplight not only has professional engineer team and production team with about 300 staffs, but also the most advanced imported automatic complete packaging equipment and all kinds of advanced test and analysis instrument; SGS dust-free workshop and large scale high temperature aging test and other infrastructures. Through ISO9001,ISO14000,ROHS etc. Certification.

Toplight brings integrity steady and high quality into the market. Toplight uses Japanese senior management team as the core leadership. Under the support of Shanghai semiconductor lighting engineering research center undertake national 863 programme, LED encapsulation project and various Shanghai LED lighting tech-researching and development projects. With Fundan University, Beijing University, Shanghai University and other scientific research institutions Toplight is able to produce high level and high reliability of products. Producing high quality LED light source device as the main development direction of our enterprise.

上海鼎晖科技有限公司は、1996年に創立、この間研鑽を積み重ね順調に発展、LED業界の主要メーカーとして成長して来ました。上海市からは、長年の功績と実績により「上海市国家ハイテク企業」・「上海市小巨人育成企業」の認定会社として称号を受けています。生産拠点は、上海市の嘉定区と青浦区にあり、工場面積40,000平方メートルあり、主要商品は、LEDデジタルディスプレイ、LED照明光源モジュールを主に、年間約200億光源点の生産能力があります。生産人員、開発陣スタッフ含めて約300名の人員になります。生産は、十万クラスのクリ - ンル - ム環境下で、最先端の輸入自動機械設備と高性能試験・分析機器・高温工-ジングル - ムを保有、ISO9001、ISO14000、RoHS認証を持つ工場であります。

Toplightは、お客様の信頼・商品力・品質力をより高める為に、日本人のトップ管理者により、日本式マネジメントシステムを採用品質・技術開発面での強化を図っています。上海市半導体照明工公司的支援を受け、国家技術発展計画プロジェクト「863国家プロジェクト」の認定会社でもあります。又有名大学上海復旦大学、北京大学、上海大学と共同研究開発を進め、高品質・高信赖性の商品開発を提供できる体制を構築しています。TOPLIGHTは、お客様と高い信赖と誠実な絆を大切にして、お客様に満足していただける商品とサービスを提供し続けます。



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杰出案例 Successful case



- 上海延安路高架桥 选用本公司大功率蓝光产品50余颗，完成14公里泛光照明工程。至今已五年，使用良好。

Over 500,000 blue light High Power LED, made by us, have been sustainable applied to Shanghai Yanan Elevated Road for five years already, completing a 14km lighting project.



- 苏州河18座桥梁 选用本公司彩色大功率产品，展现上海百年文化长廊之夜景。已完成四年，使用良好。

Our color light High Power LED has been applied to 18 bridges across Suzhou River for 4 years, well displaying a charmful night view of Shanghai as a hundred years of culture corridor.



- 2010年EXPO主题馆 选用本公司大功率白光产品作泛光照明，协助安装设计公司，荣获国家建筑鲁班奖。

Our white light High Power LED, selected and used in the Theme Pavilion of 2010 EXPO, won the Luban Prize for National Construction, with the assistance of design&installation company.



- 上海之心脏：城市规划馆。选用本公司大功率LED照明511系列，展示上海中心文化风采，已使用三年。

Shanghai urban planning exhibition center, regarded as the heart of Shanghai, has selected and used our 511 series HighPowerLED for 3 years, a good display of Shanghai culture style.



- 上海外滩代表建筑：和平饭店。使用TOPLIGHT产品。

Peace Hotel, the landmark of the Bund, is a faithful consumer of our TOPLIGHT products.

How to use LED Products

如何使用LED产品

	Iron Soldering 烙铁焊接		Wave soldering 波峰焊接	
Soldering technology 焊接工艺	Iron Temperature 烙铁尖温度	< 350°C 350°C以下	Preheat temperature 预热温度	<120°C 120°C以下
	Soldering time 焊接时间	< 3 sec 3秒以内	Preheat time 预热时间	< 120 sec. 120秒以下
	Soldering position 焊接位置	more than 1/16 inch from the 距LED根部1/16英寸以上	Tin stove temperature 锡炉温度	< 260°C 260°C以下
	Soldering power 烙铁功率	≤40W	Dip soldering time 浸焊时间	3 sec. 3秒
	Soldering number 焊接次数	One time 1次	Soldering number 焊接次数	One time 1次
Clean 清 洁	Soldering position 焊接位置			
	1. Avoid using unknown chemical liquid to wipe the digital display, If it is necessary, please make sure that the contain chemical composition won't cause corrosion to te device. 避免使用不明化学液体擦拭数码显示器件,如果一定要擦拭,请先确认其所含化学成分是否会对器件造成腐蚀。			
	2. Alcohol is recommended, wipe under normal temperature and uss than one minute meanwhile, avoid device soak in alcohol. 通常推荐使用酒精, 在常温下擦拭, 时间不超过1分钟; 同时应该避免将器件浸泡在酒精中。			
	1. Do not use excessive current. 严禁使用过大电流。			
	2. In the application circuit, must limit current, When the luminous intensity meet the requirement drive current less than rated current recommend that. 在应用电路中, 限流措施是必须的, 在发光亮度满足要求的前提下, 建议使用低于额定电流的驱动电流。			
Forward current 正向电流	3. In the application circuit, should consider the difference between each led and V_f , set upper and lower of the drive current reasonable. Avoid brightness difference caused by current factor, recommend constant current drive. 应用电路设计时, 应考虑每颗 LED 之间的 V_f 差异, 合理设置驱动电流上下限, 避免电流因素带来的亮度差异, 推荐恒流驱动。			
	4. Using spectrophotometric color products, avoid uneven brightness and color difference, should match the products we provide. 使用经过分光分色的产品时, 应该按照我司提供的配组使用, 以免造成亮度不均和色泽差异。			
Storage 产品储存	1. This product avoid storing under high temperature humidity, dirty or corrosive inappropriate environment. Recommend storage condition : temperature 25±5°C ; humidity ≤60%RH. 此产品应避免存放于如高温、高湿、不洁或有腐蚀性的不适宜环境下。建议储存条件: 温度25 ± 5°C; 湿度≤60%RH。			
	2. Don't bend PIN or let PIN under heavy pressure. 不要弯曲PIN或使其受到重压。			
	3. Guarantee the weldability of the product, the test storage time is one year. 此产品的最佳保存时间为 1 年, 以确保产品的可焊性。			
	4. Product has been stored for a long time need dehumidification process before welding. 此产品的最佳保存时间为 1 年, 以确保产品的可焊性。			

QUALITY CONTROL AND QUALITY ASSURANCE

品质管控与品质保证

CLASSIFICATION 类别	TEST ITEM 检验项目	DESCRIPTION AND TEST CONDITION 检验条件
RELIABILITY TEST 信赖性测试	OPERATION LIFE 使用寿命测试	Evaluate operation life of the device under strong current 评估器件在强电流条件下的使用寿命 Ta=under room temperature 温度: 室温 $I_f=12mA-25mA$ per segment or $I_p=80mA/duty=1/8, P_w=1.25mS$ $I_p=160mA/duty=1/16, P_w=1.mS(DOT)$ Test time=1000HRS(-24HRS+72HRS) 测试时间: 1000 (-24+72) 小时
	HIGH TEMPERATURE HIGH HUMIDITY STORAGE 高温高湿保存测试	Evaluate storage time of the device under high temperature and high humidity 在高温高湿的条件下评估器件的可保存时间 Ta=65°C±5°C 温度: 65°C±5°C RH=90-95% 湿度: 90-95% Test time =240HRS±2HRS 测试时间: 240±2小时
	HIGH TEMPERATURE HIGH HUMIDITY REVERSE BIAS 高温高湿冲击测试	Evaluate leakage current of the device under high temperature and high humidity 在高温高湿强电流条件下评估器件的漏电流 Ta=65°C±5°C 温度: 65°C±5°C RH=90 ~ 95% 湿度: 90 ~ 95% VR=5V 反向电压: 5V Test time=500hrs(-24HRS+48HRS) 测试时间: 500 (-24+48) 小时
	HIGH TEMPERATURE STORAGE 高温保存测试	Evaluate reliability test of the device under high temperature 评估器件在高温条件下的信赖性测试 Ta=85±5°C 温度: 85±5°C Test time=1000HRS(-24HRS+72HRS) 测试时间: 1000 (-24+72) 小时
	LOW TEMPERATURE STORAGE 低温保存测试	Evaluate reliability test of the device under low temperature 评估器件在低温条件下的信赖性测试 Ta=-35°C±5°C 温度: -35°C±5°C Test time=1000HRS(-24HRS+72HRS) 测试时间: 1000 (-24+72) 小时
ENVIRONMENTAL TEST 环境测试	TEMPERATURE CYCLING 温度循环测试	Evaluate thermal expansion and cold contraction of the device 评估器件在恶劣温度条件下的热胀冷缩变化 Ta=85°C ~ 25°C ~ -35°C ~ 25°C 温度: 85°C ~ 25°C ~ -35°C ~ 25°C time=30min 5min 30min 5min 时间: 30分5分30分5分 Cycle test: 10cycles 循环次数: 10次
	THERMAL SHOCK 温度冲击测试	Evaluate structural and mechanical of the device under sudden thermal shock 评估器件在温度突然冲击下的结构和机械度的信赖性状况 Ta=85°C±5°C ~ -35°C±5°C 温度: 85°C±5°C ~ -35°C±5°C time=10min 10min 时间: 10分10分 Cycle test: 10cycles 循环次数: 10次
	* SOLDERING RESISTANCE 耐焊性能测试	Evaluate performance of the device withstand thermal shock during welding 评估器件在焊接时承受热冲击的性能 T.sol=260°C±5°C 温度: 260°C±5°C time=10±1sec 时间: 10±1秒
	* SOLDERABILITY 可焊性测试	Evaluate solder ability of the device 评估器件的可焊性 T.sol=230°C±5°C 温度: 230°C±5°C time=5±1sec 时间: 5±1秒

*Distance from the bottom must more than 1/16 inch in all welding test.
所有测试焊接需距离1 /16英寸以上。

适用于射灯COB LED光源

COB LED for Spot light



TE-R5



TE-R6



特征(Characteristic):

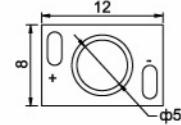
- 高显指设计，适用于商业照明。
High CRI design, suitable for commercial lighting.
- 一体化光源点，配光简单,无叠影。
Integrated light point source, simple light distribution, no overlap image.
- 直接散热，热阻低;符合Zhaga通用设计。
Heat radiation directly low thermal resistance, meet Zhaga universal design.



VS

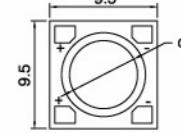


TE-R5



PART NO.	CCT UNIT	Length of side mm	Window size mm	Luminous Typ. lm	Luminous Efficacy Min. Max. lm/W lm/W	Ra	Ta=25°C		
							Forward Voltage V	Forward Current mA	Power W
TE-R5	3000K	12*8	φ 5	400	90 125	≥80 min	DC 9.6	400	avg. 3.8
	5000K			418	95 135				

TE-R6

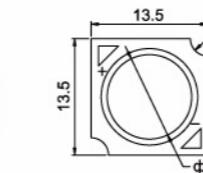
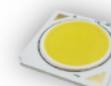


PART NO.	CCT UNIT	Length of side mm	Window size mm	Luminous Typ. lm	Luminous Efficacy Min. Max. lm/W lm/W	Ra	Ta=25°C		
							Forward Voltage V	Forward Current mA	Power W
TE-R6	3000K	9.5*9.5	φ 6	294	90 125	≥80 min	DC 9.2	300	avg. 2.8
	5000K			308	95 135				

COB LED 模组

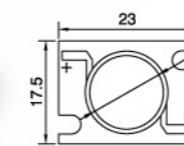
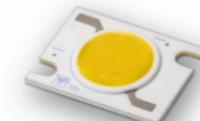
COB LED Module

TE-R10



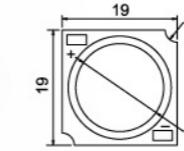
PART NO.	CCT UNIT	Length of side mm	Window size mm	Luminous Typ. lm	Luminous Efficacy Min. Max. lm/W lm/W	Ra	Ta=25°C		
							Forward Voltage V	Forward Current mA	Power W
TE-R10	3000K	13.5*13.5	φ 10	682	90 125	≥80 min	DC 36.6	180	avg. 6.5
	5000K			715	95 135				

TE-R14



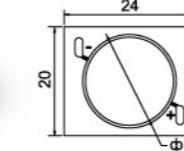
PART NO.	CCT UNIT	Length of side mm	Window size mm	Luminous Typ. lm	Luminous Efficacy Min. Max. lm/W lm/W	Ra	Ta=25°C		
							Forward Voltage V	Forward Current mA	Power W
TE-R14	3000K	23*17.5	φ 14	1365	90 125	≥80 min	DC 18.6	720	avg. 13.0
	5000K			1430	95 135				

TE-R15



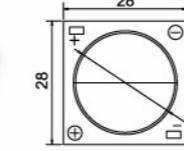
PART NO.	CCT UNIT	Length of side mm	Window size mm	Luminous Typ. lm	Luminous Efficacy Min. Max. lm/W lm/W	Ra	Ta=25°C		
							Forward Voltage V	Forward Current mA	Power W
TE-R15	3000K	19*19	φ 15	1838	90 125	≥80 min	DC 36.6	480	avg. 17.5
	5000K			1925	95 135				

TE-R16



PART NO.	CCT UNIT	Length of side mm	Window size mm	Luminous Typ. lm	Luminous Efficacy Min. Max. lm/W lm/W	Ra	Ta=25°C		
							Forward Voltage V	Forward Current mA	Power W
TE-R16	3000K	24*20	φ 16	1575	90 125	≥80 min	DC 36.6	400	avg. 15.0
	5000K			1650	95 135				

TE-R23



PART NO.	CCT UNIT	Length of side mm	Window size mm	Luminous Typ. lm	Luminous Efficacy Min. Max. lm/W lm/W	Ra	Ta=25°C		
							Forward Voltage V	Forward Current mA	Power W
TE-R23	3000K	28*28	φ 23	4200	90 125	≥80 min	DC 36.6	10	

适用于日光灯COB LED光源

COB LED for LED-TUBE

TL-B36

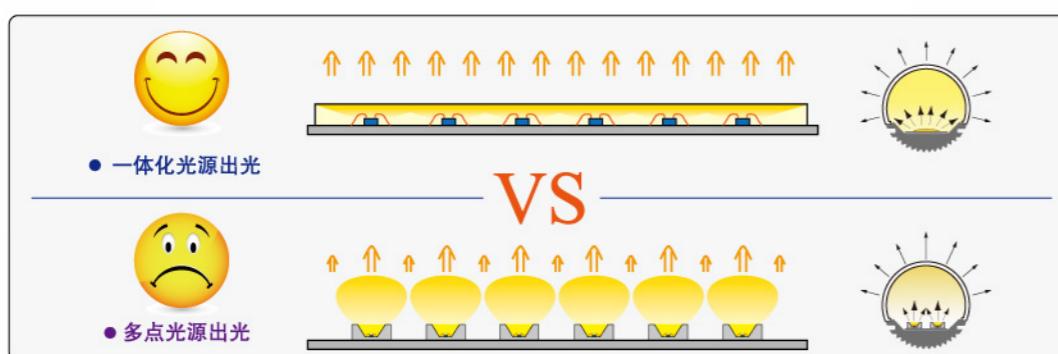


■ For 18~22W Tube

特征(Characteristic):

- ★ 线型发光区域，无点光源现象。
Linear light-emitting area, no point light source phenomenon.
- ★ 一体化制造，光色均匀。
Integrated manufacture, uniform light color.
- ★ 直接散热，热阻低；发光角度大，无光死角。
Heat radiation directly low thermal resistance; big beam angle, no dead area.

- LED灯具组装工艺简单,节约灯具制作成本。
Simple lamps assembly process, saving lamps production cost.
- 无需回流焊(高温二次伤害), 提高LED良率。
No need to reflow welding, improve LED quality.



LED VIEW	PART NO.	CCT	Luminous Max.		Luminous Efficacy Max.		Forward Voltage	Power	Power Max*
		UNIT	lm	lm	lm/W	lm/W			
	TL-B36	3000K	475	540	110	125	DC 54	4.3	6.5
		5000K	518	626	120	145			
	TL-B24	3000K	446	535	100	120	DC 75	4.5	6.7
		5000K	500	602	112	135			

适用于日光灯COB LED光源

COB LED for LED-TUBE

(AL PCB) TL-S72



(AL PCB) TL-Z72



(AL PCB) TL-S40



(AL PCB) TL-B72

(AL PCB) TL-J72



(AL PCB) TL-O72

(FR-4PCB) TL-FS72

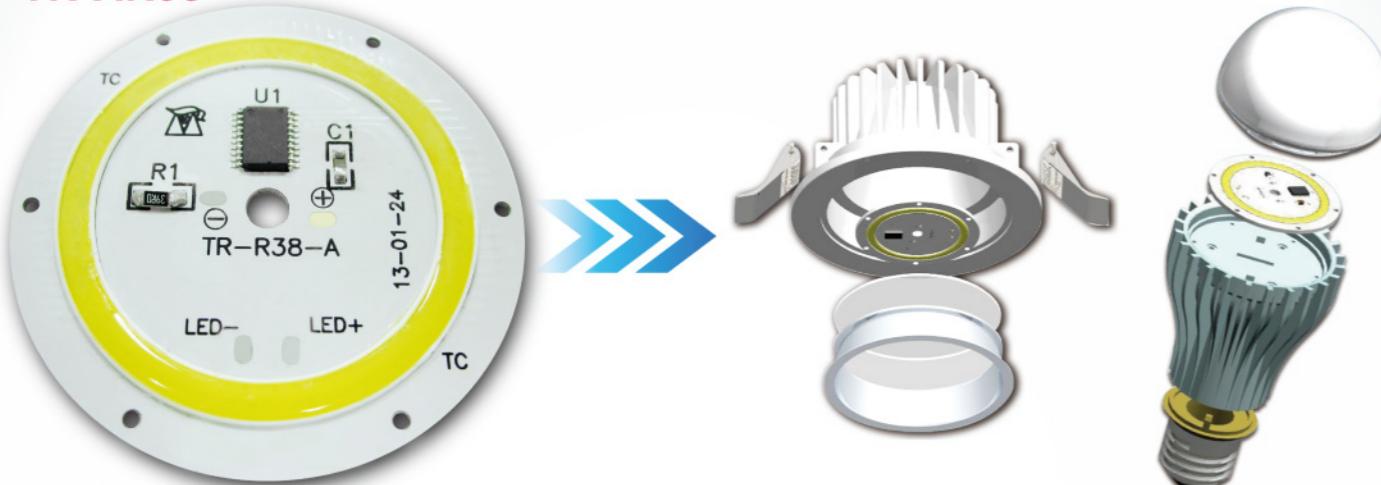


(FR-4PCB) TL-FB72

高压交流驱动 COB LED光源

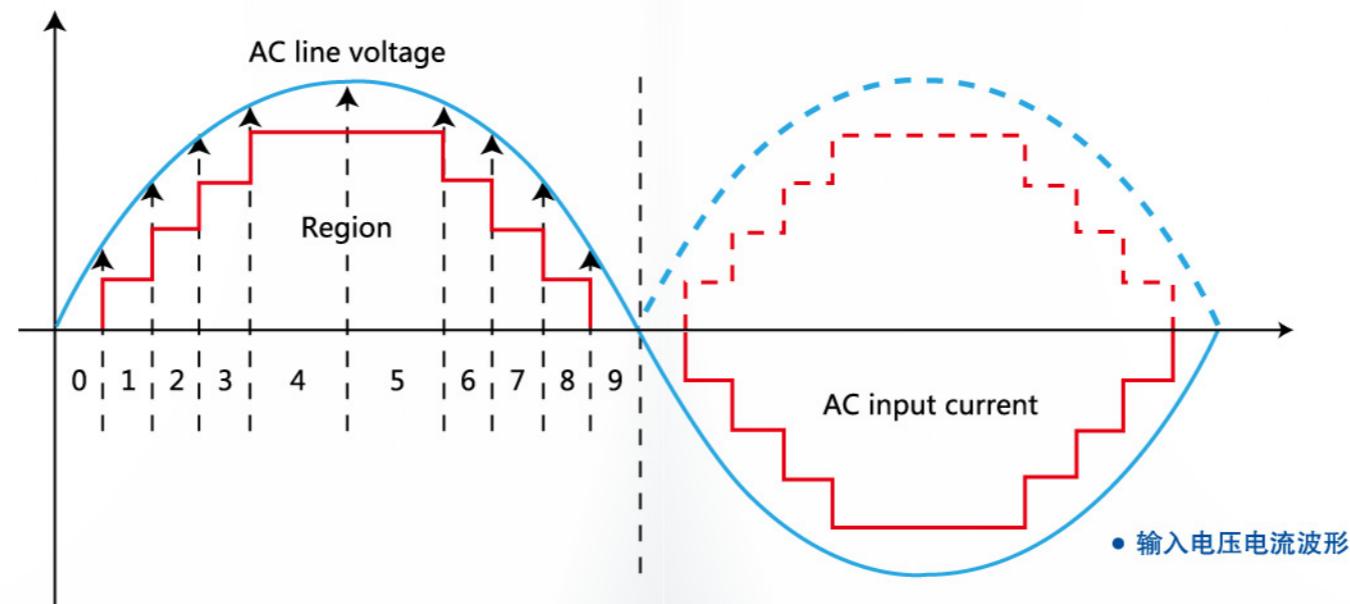
High-voltage ac drive COB LED light

TR-AR38



特征(Characteristic):

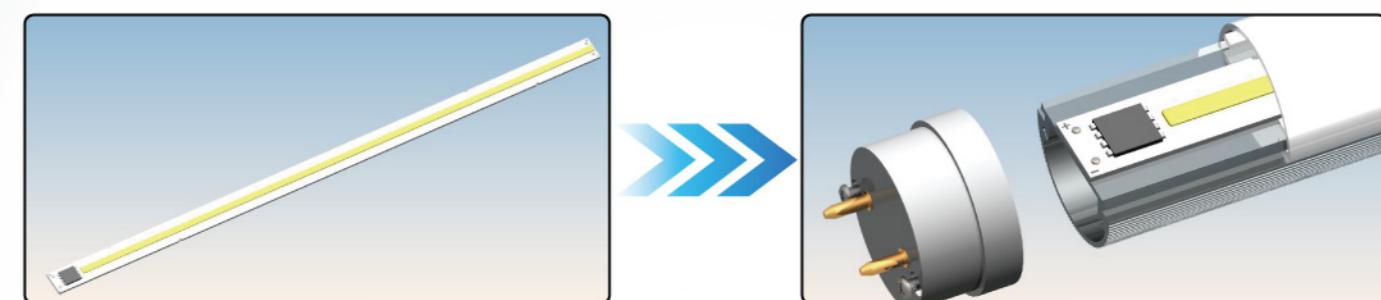
- ★ 高可靠，可调光，PF大于0.95。
High reliable, can adjust light PF>0.95.
- ★ 驱动简洁，成本低，可过UL、CE。
Easy drive cost is low, can pass UL、CE.
- 内置交直流转换，可直接输入市电。
AC/DC inside conversion , could be input directly.
- 环形出光，照度分布均匀。
Circle light-emitting, uniform illumination distribution.
- LED发热点分散，横向散热显著。
LED heat spots dispersed, lateral heat dissipation characteristics remarkable.



高压交流驱动 COB LED光源

High-voltage ac drive COB LED light

TL-AB44



特征(Characteristic):

- ★ 驱动简洁，成本低，可过UL、CE。
Easy drive cost is low, can pass UL、CE.
- ★ 线型发光，发光角度大，无点光源。
Linear light-emitting area, big beam angle, no point light source phenomenon.
- 内置交直流转换，可直接输入市电。
AC/DC inside conversion , could be input directly.
- 高可靠，可调光，PF大于0.95。
High reliable, can adjust light PF>0.95.
- 直接散热，热阻低。
Heat radiation directly, structure thermal resistance.

LED VIEW	PART NO.	CCT	Luminous Typ.	Luminous Efficacy Typ.		Forward Voltage	Power	Power Max*	Replace Tungsten Bulb
		UNIT	lm	lm/W	lm/W	V	W	W	
	TR-AR38	3000K	648	108	125	DC 264	6.0	8.0	60W
		5000K	690	115	145				

LED VIEW	PART NO.	CCT	Luminous Typ.		Luminous Efficacy Typ.		Forward Voltage	Power	Power Max*
		UNIT	lm	lm	lm/W	lm/W	V	W	W
	TL-AB44	3000K	462	525	110	125	DC 264	4.5	6.0
		5000K	504	610	120	145			

适用于球泡灯COB LED光源

COB LED for Bulb



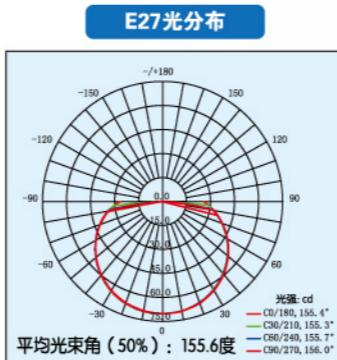
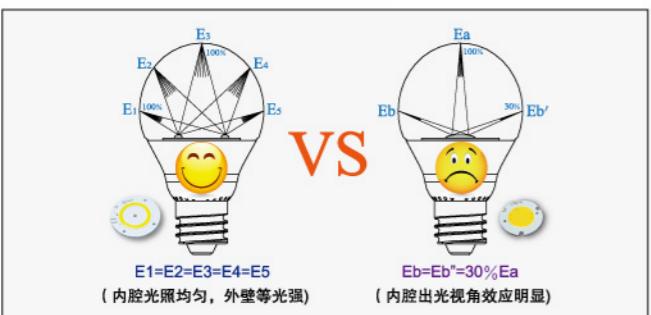
TR-R27



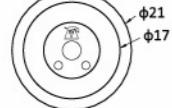
特征(Characteristic):

- 环形出光，到达外壁照度均匀分布。
Circular light-emitting, reach the outer uniformity.
- 对面罩散色性要求小，可提高光透过率。
Lower requirement to scattered color of the mask, improve translucent.
- LED发热点分散，提高横向散热特性。
LED heat spots dispersed, improve lateral heat dissipation characteristics.

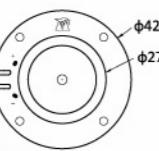
- LED灯具组装工艺简单,节约灯具制作成本。
Simple lamps assembly process, saving lamps production cost.
- 无需回流焊(高温二次伤害)，提高LED品质。
No need to reflux welding, improve LED quality.



TR-R17



TR-R27



PART NO.	CCT	Length of side	Window size	Luminous Typ.		Luminous Efficacy		Forward Voltage	Power	Power Max*	Replace Tungsten Bulb
				UNIT	mm	Im	Im/W				
TR-R17	3000K	Φ 21	Φ 17	151	105	125	DC 72	1.5	2.88	15W	
	5000K			158	110	145					

Ta=25°C

PART NO.	CCT	Length of side	Window size	Luminous Typ.		Luminous Efficacy		Forward Voltage	Power	Power Max*	Replace Tungsten Bulb
				UNIT	mm	Im	Im/W				
TR-R27	3000K	Φ 42	Φ 27	544	108	125	DC 180	5.0	9.0	40W	
	5000K			630	125	145					

Ta=25°C

COB LED 模组

COB LED Module

TS-AR30



TS-R30



TS-R40-5W



TP-1010



TP-1818



TP-2424



Ta=25°C

PART NO.	CCT	Length of side	Window size	Luminous Typ.		Luminous Efficacy		Ra	Forward Voltage	Forward Current	Power
				UNIT	mm	Im	Im/W				
TS-AR30	3000K	Φ 45	Φ 30	484	80	110	≥80 min	AC 220	20	avg. 4.4	
	5000K			528	80	120					

Ta=25°C

PART NO.	CCT	Length of side	Window size	Luminous Typ.		Luminous Efficacy		Ra	Forward Voltage	Forward Current	Power
				UNIT	mm	Im	Im/W				
TS-R30	3000K	Φ 42	Φ 30	400	90	125	≥80 min	DC 140	31	avg. 3.8	
	5000K			418	95	135					

Ta=25°C

PART NO.	CCT	Length of side	Window size	Luminous Typ.		Luminous Efficacy		Ra	Forward Voltage	Forward Current	Power
				UNIT	mm	Im	Im/W				
TS-R40-5W	3000K	Φ 40	17*16	472	90	125	≥80 min	DC 15	300	avg. 4.5	
	5000K			495	95	135					

Ta=25°C

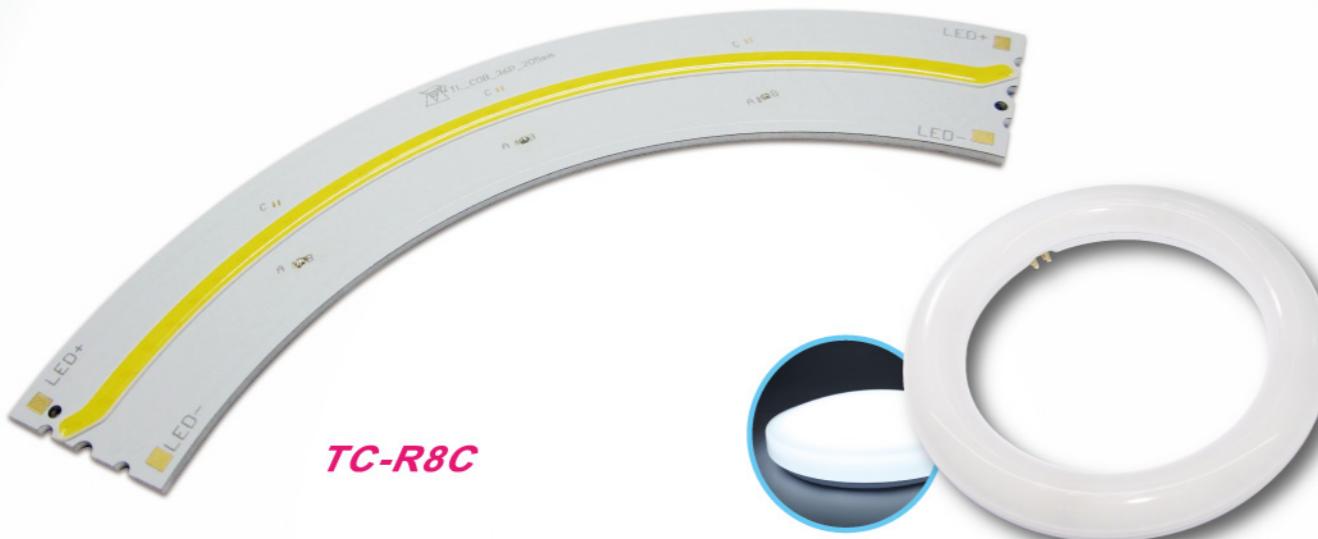
PART NO.	CCT	Length of side	Window size	Luminous Typ.		Luminous Efficacy		Ra	Forward Voltage	Forward Current	Power
				UNIT	mm	Im	Im/W				
TP-1010	3000K	20*20	10*10	1155	90	125	≥80 min	DC 15.5	700	avg. 11.0	
	5000K			1210	95	135					

Ta=25°C

| PART NO. |
<th rowspan="2
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适用于环形灯COB LED光源

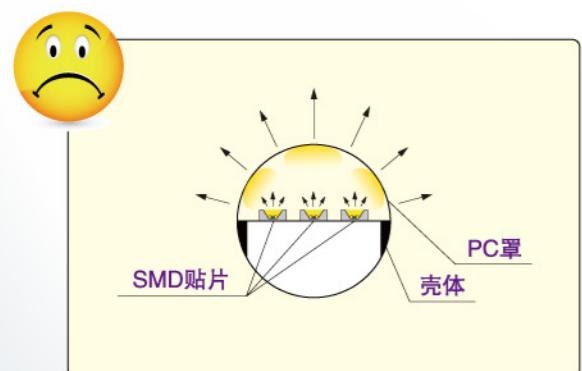
COB LED for Circular light



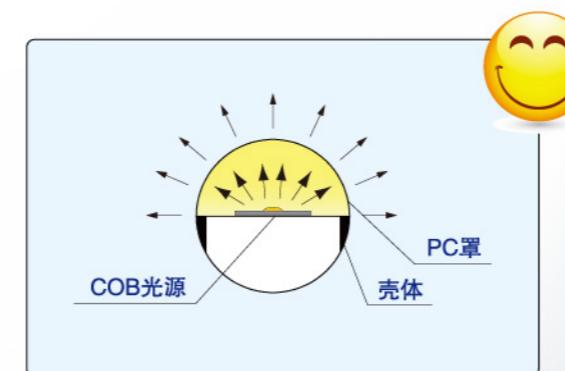
特征(Characteristic):

- ★ 配合圆弧形设计，线形发光区域，无点光源现象。
With Arc-Sharp design, linear light-emitting area, no point light source phenomenon.
- ★ 一体化光源点，配光简单。
Integrated light point source , simple light distribution.
- ★ 直接散热，热阻低。
Heat radiation directly, structure thermal resistance.

- LED组装工艺简单。
Simple lamps assembly process.
- 无需回流焊(高温二次伤害)，提高LED品质。
No need to reflux welding, improve LED quality.



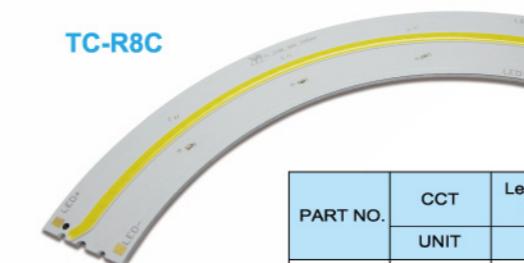
VS



适用于环形灯COB LED光源

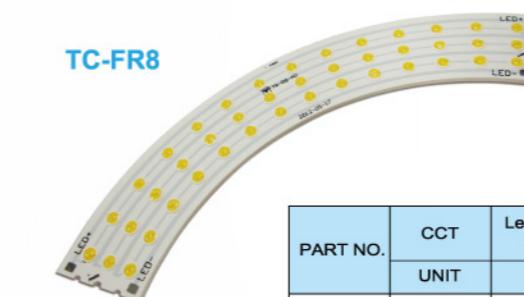
COB LED for Circular light

TC-R8C



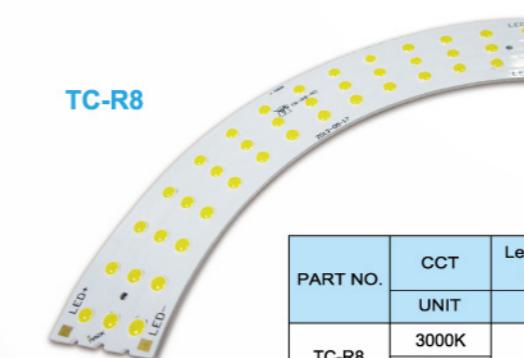
PART NO.	CCT UNIT	Length of side mm	Luminous Typ.		Luminous Efficacy		Ra	Forward Voltage V	Forward Current mA	Power W
			Min.	Max.	Min.	Max.				
TC-R8C	3000K	8"	230	90	125	125	≥80 min	DC 108	20	avg. 2.2
	5000K		242	95	135	135				

TC-FR8



PART NO.	CCT UNIT	Length of side mm	Luminous Typ.		Luminous Efficacy		Ra	Forward Voltage V	Forward Current mA	Power W
			Min.	Max.	Min.	Max.				
TC-FR8	3000K	8"	275	90	125	125	≥80 min	DC 130	20	avg. 2.6
	5000K		286	95	135	135				

TC-R8



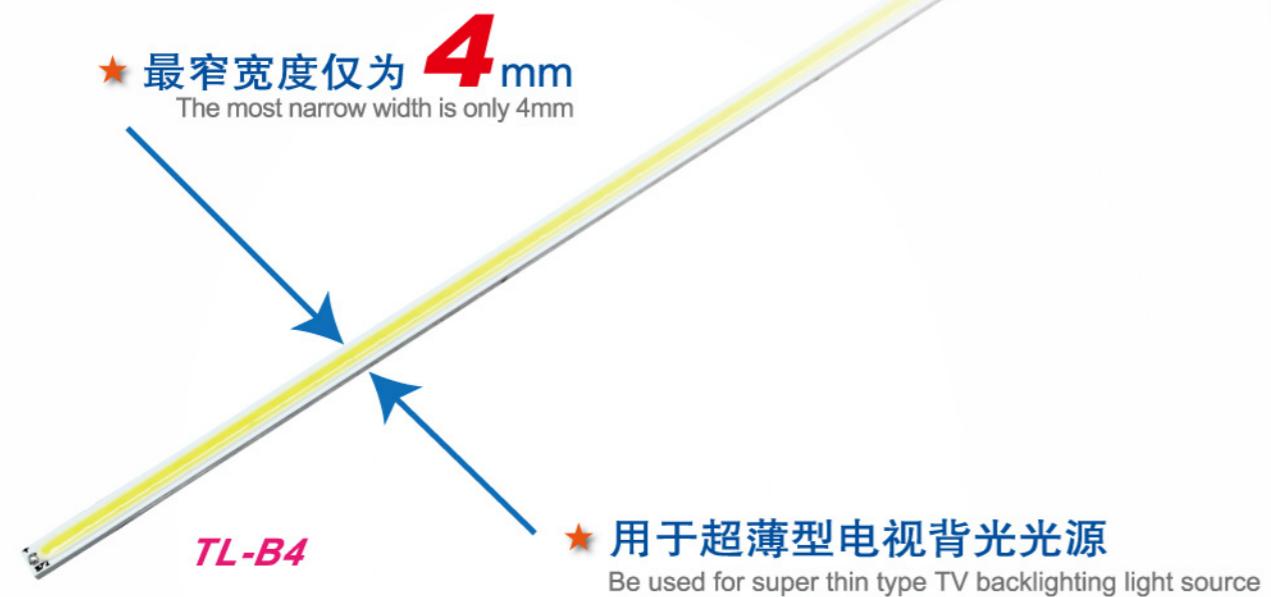
PART NO.	CCT UNIT	Length of side mm	Luminous Typ.		Luminous Efficacy		Ra	Forward Voltage V	Forward Current mA	Power W
			Min.	Max.	Min.	Max.				
TC-R8	3000K	8"	275	90	125	125	≥80 min	DC 130	20	avg. 2.6
	5000K		286	95	135	135				

纤细型LED线性灯条

Fine type LED line light bar

TL-B4系列

TL-B4 series

★ 用于平板灯侧光光源
Be used for side light source of plat light

SMD LED

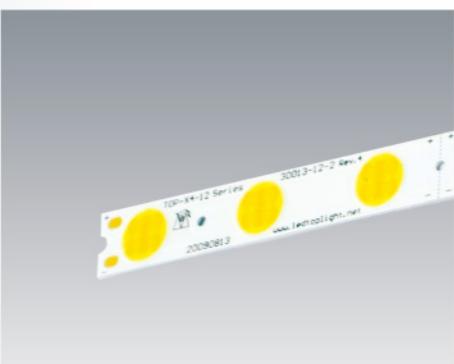


可直接用于泛光照明的COB光源

The COB light source which can be used in floodlight lighting directly

TL-X4 系列

TL-X4 series



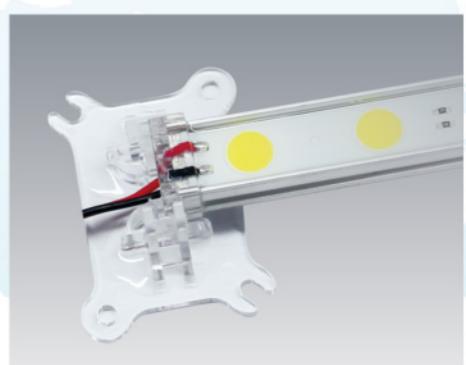
TL-X4-12(18V)



TL-X4-12R(24V)



TL-L330(for counter bar)



TL-L310(for rooftop)

CCT	length	width	thickness	Luminous efficacy Typ.	Ta=25°C	
					Ra	Forward Voltage V
UNIT	300 max	12.5	1.2	lm/w	80 min	DC 18 or 24
				80		
				85		
				104		
				115		

(应用案例) Application case



- 上海公交通车节能LED改造
选用本公司TL-X4-12系列产品8万余米，
直接用于近1万辆公交通车内照明。



- 国内某大型商场
直接选用本公司TL-X4系列产品用于
商场嵌入式泛光照明，照明面积30余万平方米。

• Shanghai public bus energy saving transformation Using LED
Our company TL-X4-12 series product more than 80 thousand
meter is used in almost 10 thousand public bus for lighting.

• Domestic large shopping mall
Select our company TL-X4 series product for the shopping mall
lighting. Light area up to more than 300 thousand square meter.

(使用案例) Use case



衣柜内饰光源 Light source for chest interior



展品柜内嵌光源 Light source for cabinet interior



专柜镜前灯用 Light source for specialty stores



办公室泛光照明 Office floodlight lighting



居家泛光照明 House floodlight lighting



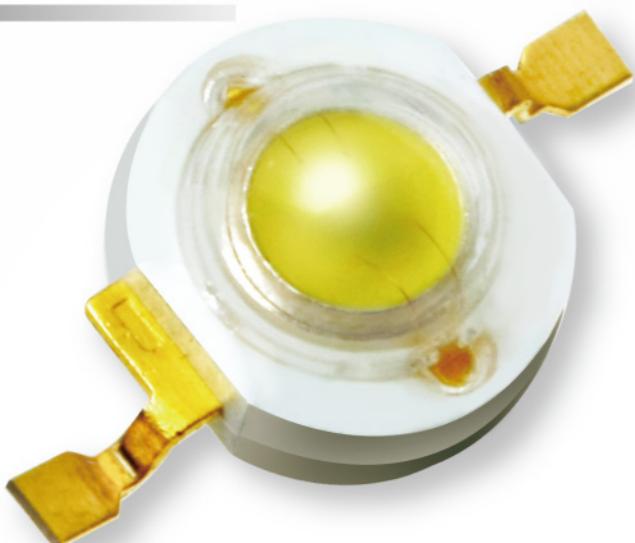
商业场所泛光照明 Market floodlight lighting

独立型大功率LED零件

Discrete High Power LED Lamp

TOP-HR511系列

TOP-HR511 series



- 便于安装二次透镜作配光
 - 可选择PC透镜或硅透镜
 - 底部铜基热沉散热
 - Easy install second lens for light distribution
 - Can use PC lens or Silicon lens
 - At the Bottom, use the copper heat sink for heat dissipation
- 优点:**
 - 热沉散热及时 光效高
 - 光维持率1000HRS 大于98.5%
 - Advantages:
 - Efficient heat dissipation, high-output efficacy
 - Maintains greater than 98.5% of light output after 1000 hours operation

Ta=25°C					
CCT	Luminous Flux Typ.	Luminous Efficacy Typ.	Angle of View	Forward Current	Ra
UNIT	lm	lm/W	Deg	mA	
2700K	106	95	60~175	350	80 min
3000K	118	105			
5000K	128	115			
6500K	138	123			

■ 用于独立型零件焊接所组合的照明或投光灯具

Applicable to lighting system made with stand-alone soldered components

(应用案例) Successful Projects



• 上海世博会主题馆

应用本公司TOP-HR511W 10万余只，
用于南壁艺术灯光。

• Shanghai world expo theme pavilion
Application of our company TOP-HR511W more
than 1 hundred thousand as South Wall art light.



• 上海延安路高架

应用本公司TOP-HR511B产品共计50余
万只，作为泛光照明。

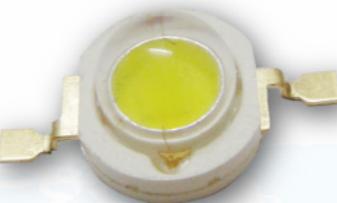
• Shanghai Yan An road overpass
Application of our company TOP-HR511B products
more than 3 hundred thousand as floodlight lighting.



• 世博公园

用本公司TOP-511W组成光源模组，应
用于LED路灯照明

• EXPO park
Use our company TOP-511W for lighting module
applying to the LED road light



TOP-HR511W



TOP-HR511W(175°)



TOP-HR511R(For Red)



TOP-HR511B(For Blue)



TOP-HR511G(For Green)



TOP-HR511W-2A



TOP-7825



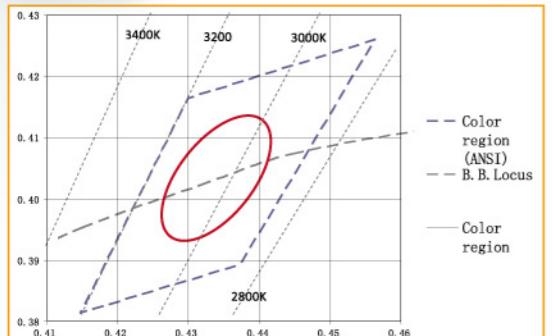
TOP-HR511W-5B

CHROMATICITY COORDINATES

Warm Light • MacAdam 3step

CCT : 3000K

— 色度坐标 —



W1 3800—4500

X	0.367	0.402	0.392	0.362
Y	0.400	0.423	0.391	0.372

W4 3250—3800

X	0.392	0.424	0.410	0.383
Y	0.391	0.406	0.374	0.360

W2 3800—4500

X	0.362	0.392	0.383	0.357
Y	0.372	0.391	0.360	0.343

W5 2500—3250

X	0.438	0.505	0.482	0.424
Y	0.440	0.458	0.423	0.406

W3 3250—3800

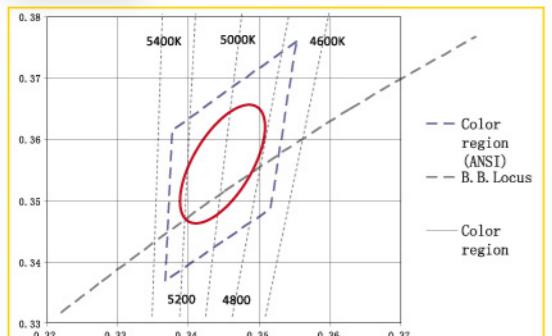
X	0.402	0.438	0.424	0.392
Y	0.423	0.440	0.406	0.391

W6 2500—3250

X	0.424	0.482	0.464	0.410
Y	0.406	0.423	0.394	0.374

Day Light • MacAdam 3step

CCT : 5000K



D1 4500—5300

X	0.338	0.367	0.362	0.337
Y	0.378	0.400	0.372	0.360

D3 3700—4500

X	0.367	0.408	0.398	0.362
Y	0.400	0.427	0.395	0.372

D2 4500—5300

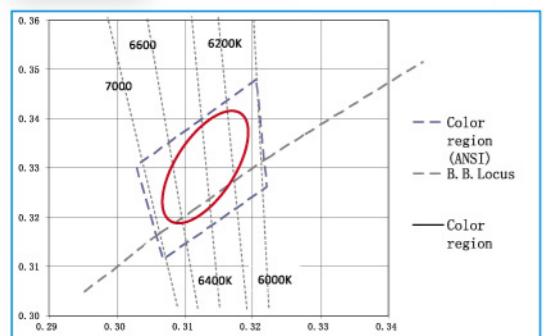
X	0.337	0.362	0.357	0.336
Y	0.360	0.372	0.343	0.325

D4 3700—4500

X	0.362	0.398	0.388	0.357
Y	0.372	0.395	0.362	0.343

Cool Light • MacAdam 3step

CCT : 6500K



C1 8000—15000

X	0.254	0.291	0.302	0.28
Y	0.279	0.318	0.283	0.248

C4 5650—6300

X	0.314	0.329	0.329	0.319
Y	0.355	0.369	0.31	0.3

C2 7000—8000

X	0.291	0.303	0.311	0.302
Y	0.318	0.334	0.293	0.283

C5 5000—5600

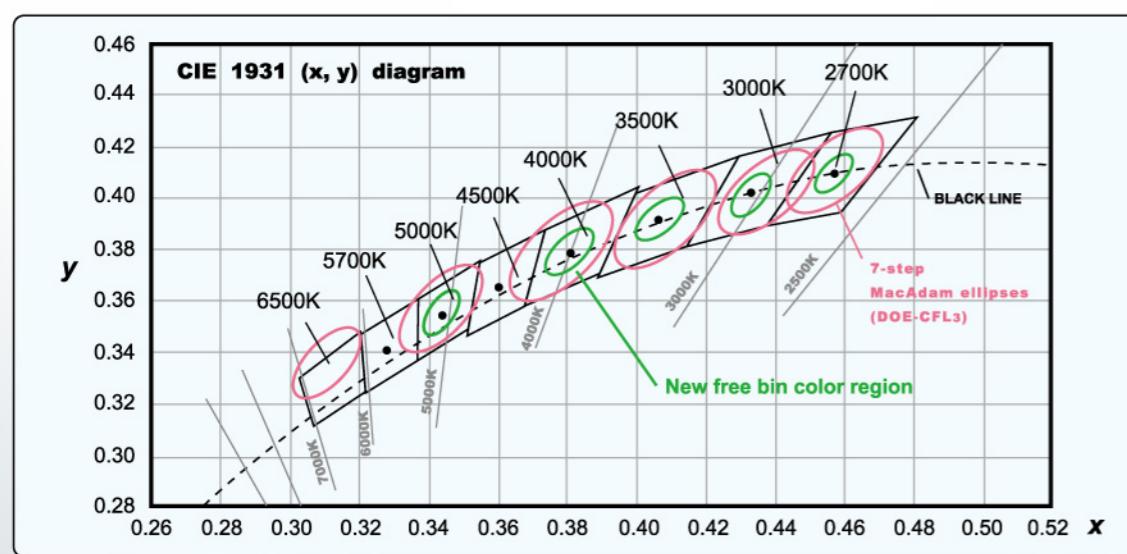
X	0.329	0.348	0.343	0.329
Y	0.369	0.385	0.331	0.32

C3 6300—7000

X	0.301	0.314	0.319	0.311
Y	0.344	0.355	0.3	0.293

C6 4500—5000

X	0.348	0.367	0.36	0.344
Y	0.385	0.4	0.357	0.344



Professional Manufacture
for COB LED Module

2013 年版 第一次印刷