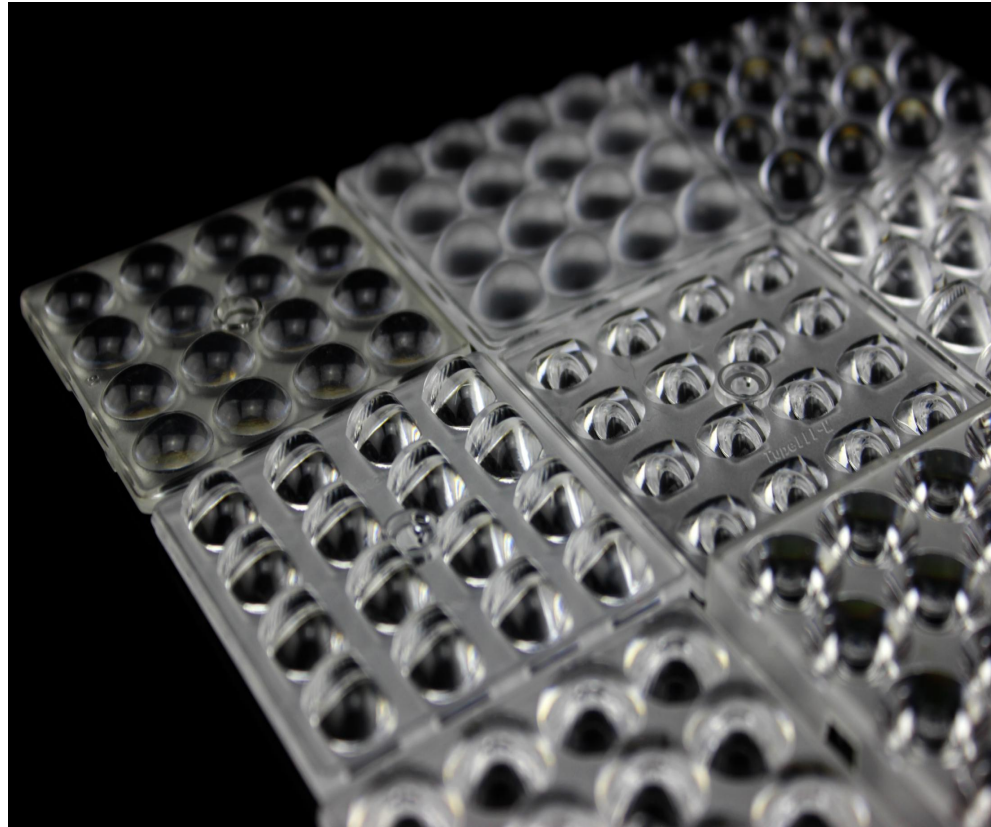


The most versatile modular product family, especially have all optical solutions for lighting applications. Standard module length sizes is 50*50MM version.

Dimensions: 50*50 MM
Height: 5.0- 9.5 MM
Fastening: Screw
RoHS and REACH compliant: YES
Accessories : NO
Protection level: NO
Compatible:3030.3535 Size Led



The ZHAGA5016 family is one of Toshine's most comprehensive product lines. It has a very comprehensive optical program, suitable for indoor and outdoor lighting. Uniform size allows the same fixture structure to be used in a wide variety of scenarios, helping the fixture factory to achieve modular production.

产品满足CSA标准! 统一PCB板, 18种光学可供选择。

↪ General Information

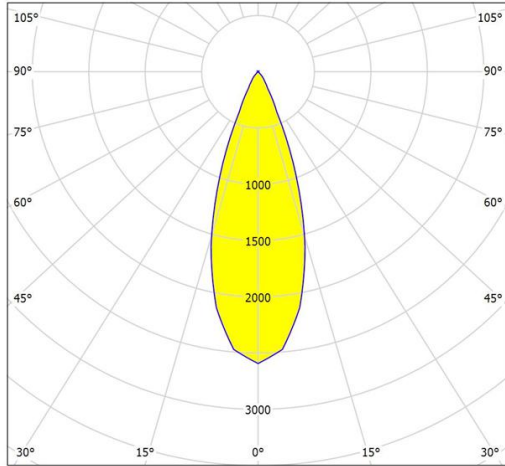
- Lens Material : PC1225Z
- Operating Temperature range $-40^{\circ}\text{C}\sim+110^{\circ}\text{C}$ (upper limit $+120^{\circ}\text{C}$).
- Storage Temperature range $-40^{\circ}\text{C}\sim+110^{\circ}\text{C}$ (upper limit $+120^{\circ}\text{C}$).
- Average transmittance in visible spectrum $400\text{nm}\sim700\text{nm}>90\%$.

↪ Usage and Maintenance:

- 1.If necessary, clean lenses with mild soap, water and soft cloth.
- 2.Never use any commercial cleaning solvents on lenses, like alcohol.
- 3.Please handle or install lenses with wearing gloves, skin oils may damage lens or its optical characteristic.

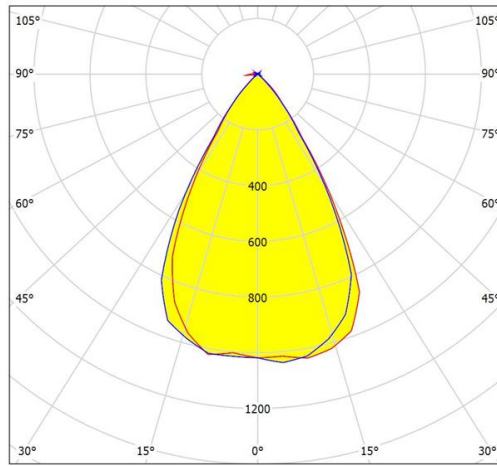
PRODUCTS OPTICS

ZHAGA-TL50A30L



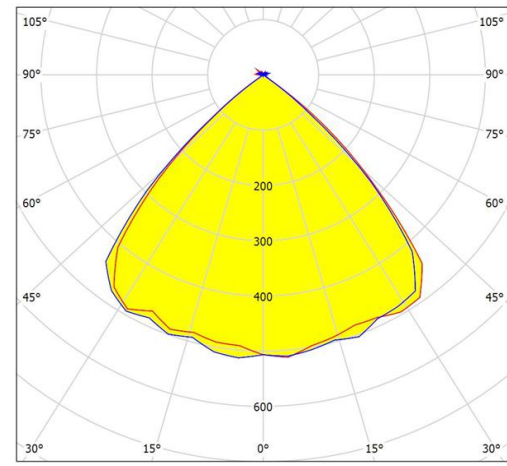
33° beam optimized for flood lighting, High bay lighting, spot lighting. Variant made from PC.

ZHAGA-TL50A60L



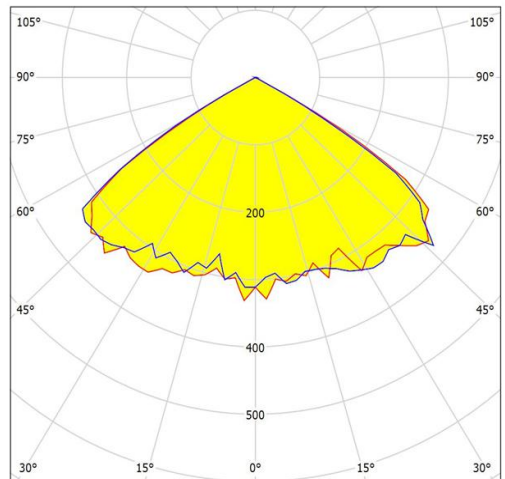
60° beam optimized for flood lighting, High bay lighting, spot lighting. Variant made from PC.

ZHAGA-TL50A90L



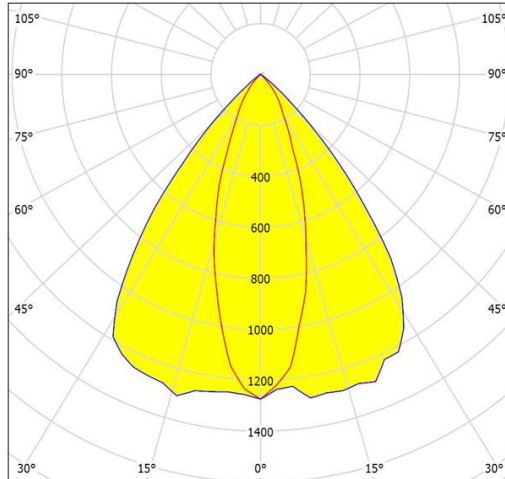
90° beam optimized for flood lighting, High bay lighting, Street lighting. Variant made from PC.

ZHAGA-TL50A120L



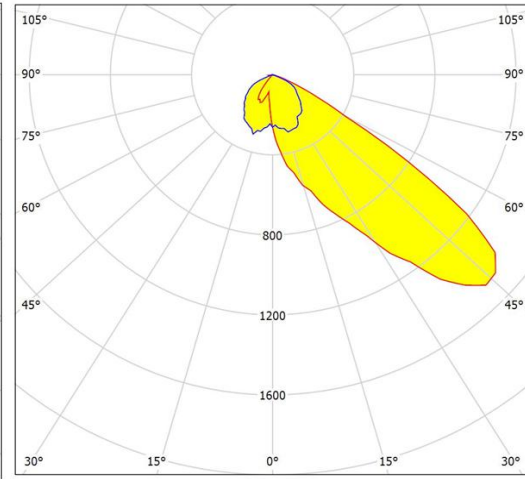
120° beam optimized for flood lighting, High bay lighting, Street lighting. Variant made from PC.

ZHAGA-TL50A3070L



~33° + 75° beam optimized for flood lighting, High bay lighting. Variant made from PC.

ZHAGA-TL50A3090L



~30° + 90° beam optimized for flood lighting, High bay lighting, Street lighting. Variant made from PC.

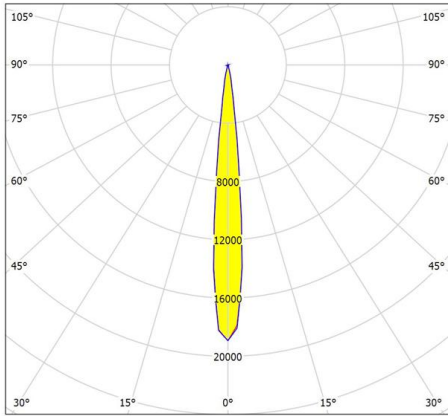
NOTE:

The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value

以上数据为LUMILEDS 3030LED测试而来，也可以适配其他品牌的2835. 3030LED，测试结构可能会有不同，请使用前先进进行测试！

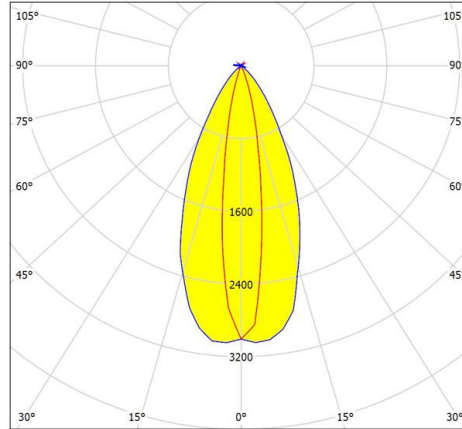
PRODUCTS OPTICS

ZHAGA-TL50A15L



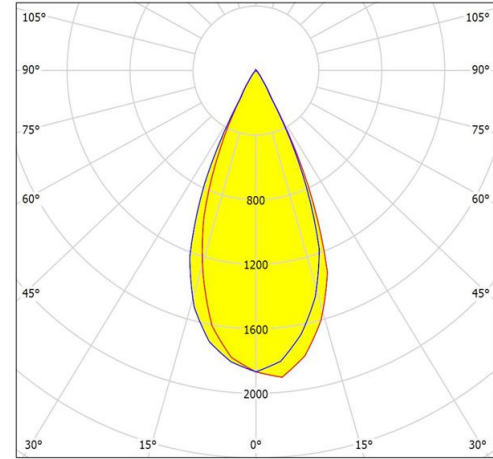
12° beam optimized for flood lighting, High bay lighting, spot lighting. Variant made from PC.

ZHAGA-TL50A1560L



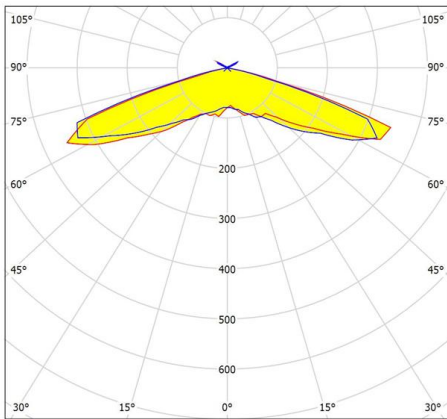
10-60° beam optimized for flood lighting, High bay lighting, spot lighting. Variant made from PC.

ZHAGA-TL50A45L



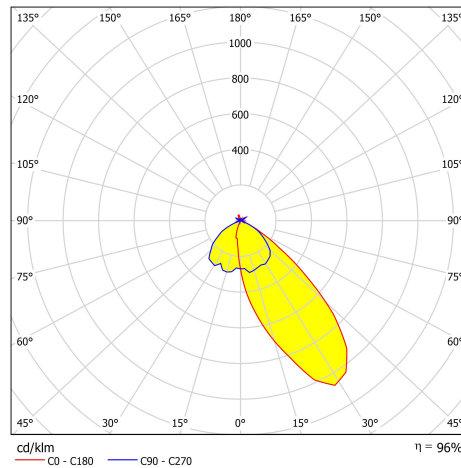
45° beam optimized for flood lighting, High bay lighting, Street lighting. Variant made from PC.

ZHAGA-TL50TVM



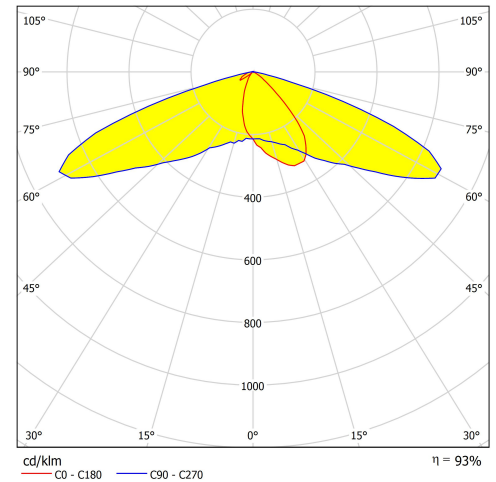
160° beam optimized for flood lighting, High bay lighting, Street lighting. Variant made from PC.

ZHAGA-TL50A50120L



~50° + 120° beam optimized for flood lighting, High bay lighting, Street lighting. Variant made from PC.

ZHAGA-TL50TIIS



65*145° beam Universal road lighting (IESNA Type II SHORT) beam with excellent mixed illuminance and luminance uniformity. Variant made from PC.

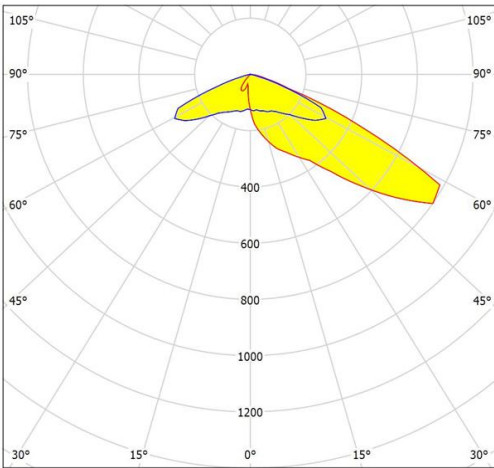
NOTE:

The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value

以上数据为LUMILEDS 3030LED测试而来，也可以适配其他品牌的2835. 3030LED, 测试结构可能会有不同，请使用前先进进行测试！

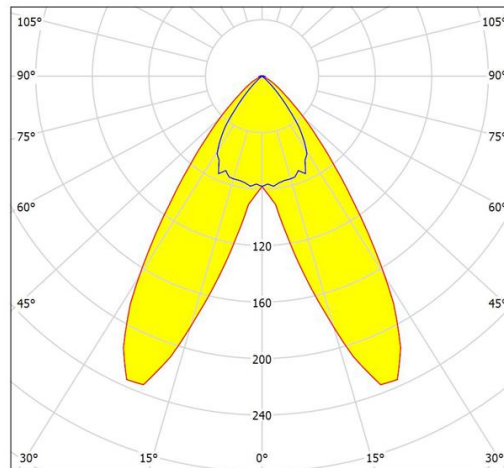
PRODUCTS OPTICS

ZHAGA-TL50TIVS



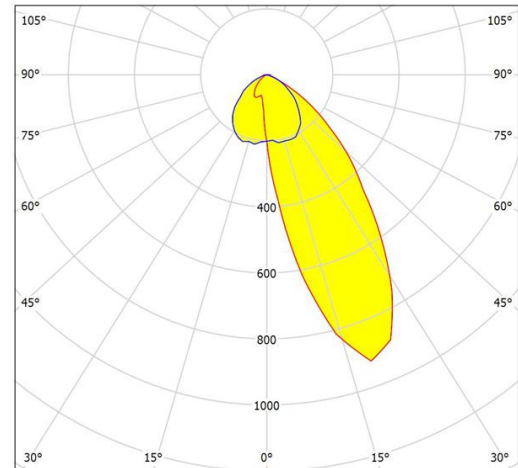
~30° + 140° beam optimized for flood lighting, High bay lighting, Street lighting
Variant made from PC.

ZHAGA-TL50AD25L



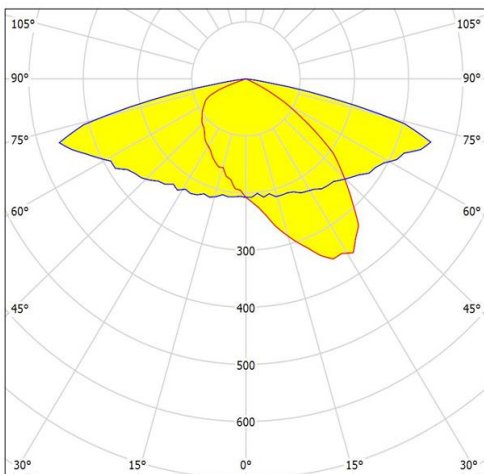
~25° + 90° Double asymmetric beam for aisle and shelf lighting optimized.

ZHAGA-TL50AA25L



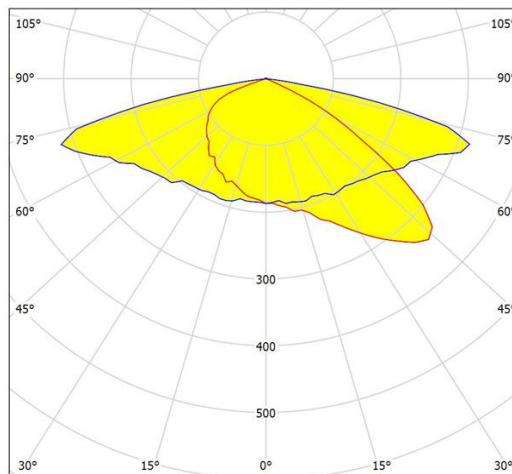
~25° + 90° Asymmetric beam for wall-washing
Variant made from PC.

ZHAGA-TL252TIIM



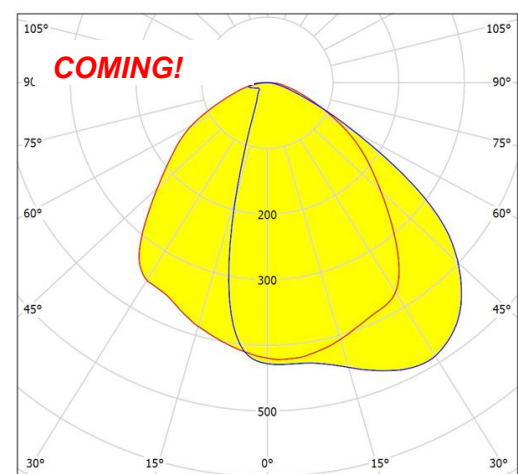
70*150° beam
Universal road lighting (IESNA Type II medium) beam with excellent mixed illuminance and luminance uniformity.
Variant made from PC.

ZHAGA-TL252TIIM



80*150° beam
Universal road lighting (IESNA Type III medium) beam with excellent mixed illuminance and luminance uniformity.
Variant made from PC.

ZHAGA-TL252A80100L



Asymmetric square beam for illuminating near field shelf objects and floor/ground areas in larger environments
Variant made from PC.

NOTE:

The typical beam angle will be changed by different color, chip size and chip position tolerance. The typical total beam angle is the full angle measured where the luminous intensity is half of the peak value

以上数据为LUMILEDS 3030LED测试而来，也可以适配其他品牌的2835. 3030LED，测试结构可能会有不同，请使用前先进进行测试！

Panlite® L-1250Z100

TEIJIN LIMITED - 聚碳酸酯

2019年6月6日

一般信息

产品说明

Weather Resistant grade

总体

材料状态	• 已商用：当前有效		
供货地区	• 北美洲 • 非洲和中东	• 拉丁美洲 • 欧洲	• 亚太地区
特性	• 耐候性，良好	• 脱模性能良好	• 中等粘性
用途	• 汽车领域的应用	• 通用	
外观	• 清晰/透明		
形式	• 粒子		
加工方法	• 注射成型		

ASTM & ISO 属性¹

物理性能	额定值	单位制	测试方法
密度	1.20	g/cm ³	ISO 1183
熔融体积流量 (MVR) (300°C/1.2 kg)	8.00	cm ³ /10min	ISO 1133
收缩率			内部方法
横向流量：4.00 mm	0.50 到 0.70	%	
流动：4.00 mm	0.50 到 0.70	%	
吸水率 (24 hr, 23°C)	0.20	%	ISO 62
机械性能	额定值	单位制	测试方法
拉伸模量	2400	MPa	ISO 527-2/1
拉伸应力 (屈服)	61.0	MPa	ISO 527-2/50
拉伸应变 (屈服)	6.0	%	ISO 527-2/50
标称拉伸断裂应变	> 50	%	ISO 527-2/50
弯曲模量 ²	2350	MPa	ISO 178
弯曲应力 ²	93.0	MPa	ISO 178
冲击性能	额定值	单位制	测试方法
简支梁缺口冲击强度	76	kJ/m ²	ISO 179
简支梁无缺口冲击强度	无断裂		ISO 179
热性能	额定值	单位制	测试方法
热变形温度 (0.45 MPa, 未退火)	142	°C	ISO 75-2/B
热变形温度 (1.8 MPa, 未退火)	129	°C	ISO 75-2/A
维卡软化温度	149	°C	ISO 306/B50
线形热膨胀系数 - 流动	7.0E-5	cm/cm/°C	ISO 11359-2
线形热膨胀系数 - 横向	7.0E-5	cm/cm/°C	ISO 11359-2
RTI Elec (0.75 mm)	125	°C	UL 746
RTI Imp (0.75 mm)	115	°C	UL 746
RTI (0.75 mm)	125	°C	UL 746

责任相关注意事项

- 数据表中所载数据为依照标准试验方法所测得的代表性数值，并不能作为特殊用途的性能保证。
- 数据表中所载燃烧性由小规模测试得出，并不能直接适用于实际的火灾危险性评价。
- 如将本树脂用于医疗器械、食品容器包装以及玩具用途，请事先向帝人（株）咨询。
- 如需在本树脂中添加添加剂（例如抗菌剂、稳定剂以及阻燃剂等），请务必事先与帝人（株）进行咨询。帝人（株）对于添加剂的添加所产生的后果不作任何保证也不承担任何责任。
- 数据表内数据可能会在没有通知的情况下进行变更。
- 其它注意事项请参照《产品安全数据表》（MSDS）。
- 详细数据请向帝人（株）树脂事业本部咨询。
- 因收货地区不同，本产品中所使用的原材料可能会被列入限制名单中，需要另行申报或者被禁止进口。如果贵司要将本产品出口或者进口到新的地区，请务必提前确认当地的相关规定。

材料保证

Panlite® L-1250Z100
TEIJIN LIMITED - 聚碳酸酯

电气性能	额定值	单位制	测试方法
表面电阻率	> 1.0E+15	ohms	IEC 60093
体积电阻率	> 1.0E+15	ohms-cm	IEC 60093
介电强度 ³	30	kV/mm	IEC 60243-1
相对电容率			IEC 60250
100 Hz	3.10		
1 MHz	3.00		
耗散因数			IEC 60250
100 Hz	1.0E-3		
1 MHz	9.0E-3		
漏电起痕指数	250	V	IEC 60112
可燃性	额定值	单位制	测试方法
UL 阻燃等级			UL 94
1.5 mm	HB		
0.40 mm	V-2		
灼热丝易燃指数			IEC 60695-2-12
1.5 mm	825	°C	
3.0 mm	875	°C	
热灯丝点火温度			IEC 60695-2-13
1.5 mm	850	°C	
3.0 mm	850	°C	
光学性能	额定值	单位制	测试方法
折射率	1.585		ASTM D542
透射率 (3000 μm)	88.0	%	ASTM D1003

备注

¹ 一般属性：这些不能被视为规格。

² 2.0 mm/min

³ short time test

本公司保证此系列产品均采用日本帝人PC-1225Z或PC-1250Z材料生产。保证100%原厂原料生产，不添加任何水口料。如证实本公司有违背上述者，本司退还客户所有货款并承担由此造成客户直接或间接的全部损失！请广大客户给予监督！

The company guarantees that this series of products are produced with Japanese TEIJIN PC-1225Z or PC-1250Z materials. Guarantee 100% raw material production, do not add any nozzle material.

Product Shelf life:

1, the product optical performance shelf life and the product raw material shelf life consistent, please check the raw material shelf life.

2, the product structure size and the function shelf life because uses the environment and so on condition influence, therefore can not give the concrete shelf life time, but in did not use and under the condition which does not have the external factor influence, the product shelf life is consistent with above-mentioned shelf life.

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