



深圳市百康光电有限公司

Bicom Optics

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# 规 格 书

## SPECIFICATION

品 名

Description: LED Lens

型 号

Part No.: BK-LED-1732ZZ


材 料

Material: PMMA

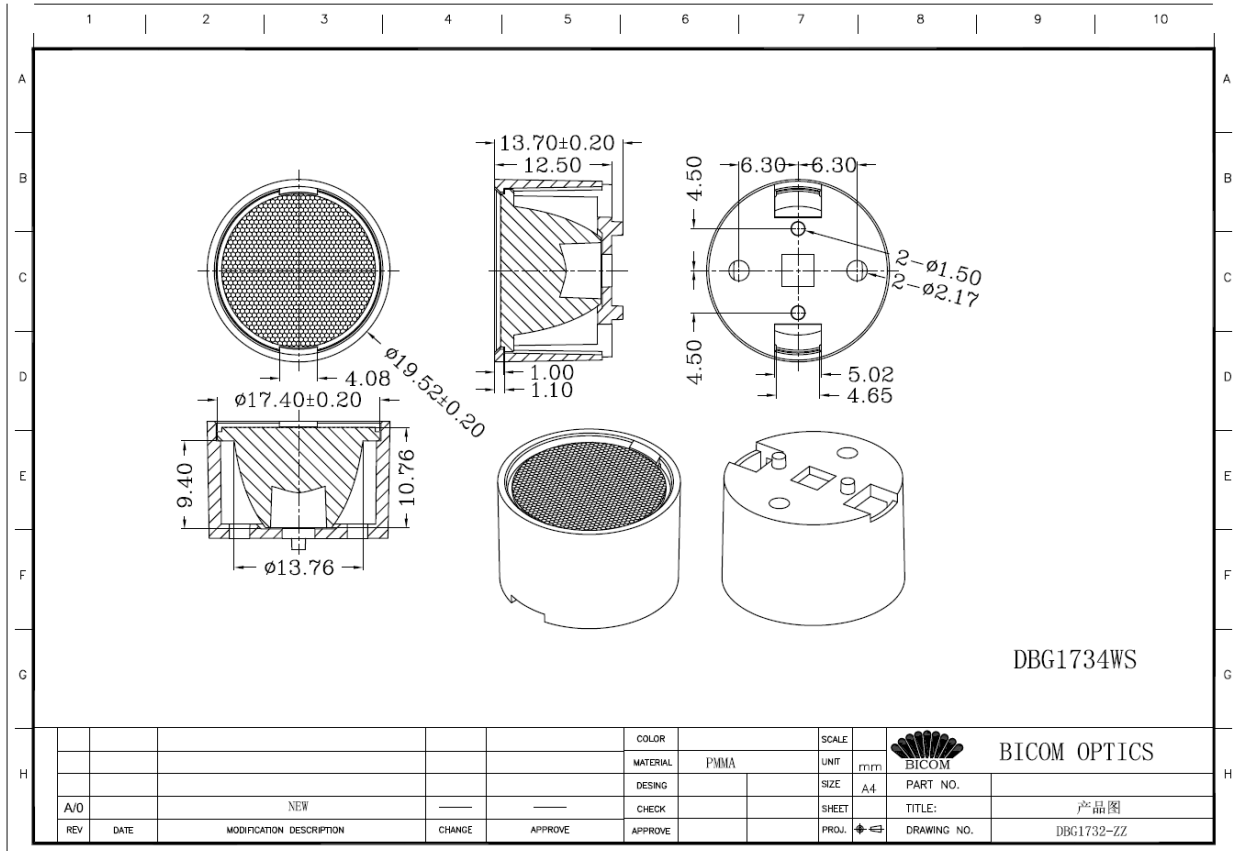
Made by: Ann

## 透 镜 规 格

## Lens Spec.

产品型号 Part Number	产品图片 Picture	产品尺寸 Dimension	适配 LED 种类 LED type	角度 Angle
BK-LED-1732ZZ		直径 Dia: $\Phi 19.52\text{mm}$ 高度 Height: 13.70mm	OSRAM 4715	38.4°

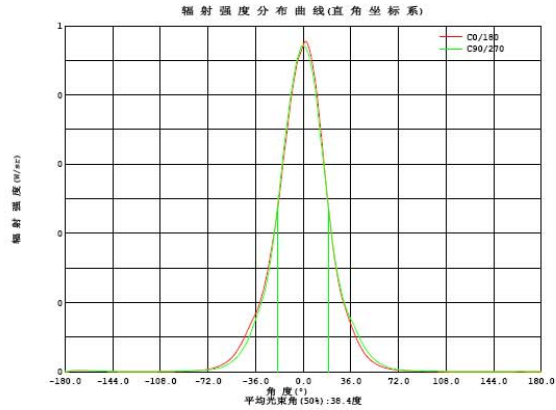
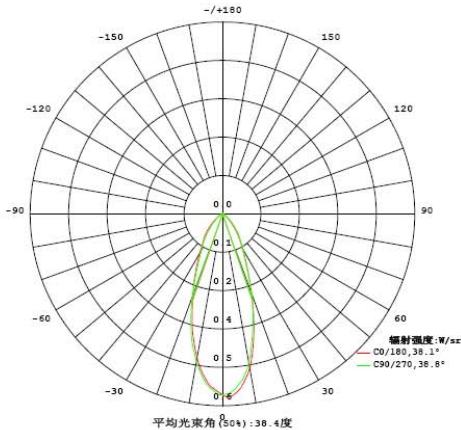
### 尺寸图 Drawing





# 光学检验报告

## Optical Test Report



辐射强度数据: (角度°, 强度W/sr) C0/180

角度	强度	角度	强度	角度	强度	角度	强度	角度	强度	角度	强度
-180.0	0.0000	-117.0	0.0003	-54.0	0.0243	9.0	0.5064	72.0	0.0028	135.0	0.0001
-177.0	0.0010	-114.0	0.0003	-51.0	0.0329	12.0	0.4475	75.0	0.0023	138.0	0.0001
-174.0	0.0017	-111.0	0.0004	-48.0	0.0440	15.0	0.3782	78.0	0.0018	141.0	0.0002
-171.0	0.0020	-108.0	0.0005	-45.0	0.0570	18.0	0.3094	81.0	0.0014	144.0	0.0002
-168.0	0.0020	-105.0	0.0006	-42.0	0.0719	21.0	0.2462	84.0	0.0011	147.0	0.0003
-165.0	0.0018	-102.0	0.0006	-39.0	0.0867	24.0	0.1916	87.0	0.0008	150.0	0.0003
-162.0	0.0017	-99.0	0.0007	-36.0	0.1002	27.0	0.1518	90.0	0.0008	153.0	0.0003
-159.0	0.0015	-96.0	0.0007	-33.0	0.1179	30.0	0.1230	93.0	0.0007	156.0	0.0004
-156.0	0.0012	-93.0	0.0007	-30.0	0.1425	33.0	0.1017	96.0	0.0007	159.0	0.0004
-153.0	0.0010	-90.0	0.0008	-27.0	0.1733	36.0	0.0822	99.0	0.0007	162.0	0.0005
-150.0	0.0009	-87.0	0.0011	-24.0	0.2130	39.0	0.0646	102.0	0.0006	165.0	0.0005
-147.0	0.0007	-84.0	0.0015	-21.0	0.2548	42.0	0.0491	105.0	0.0005	168.0	0.0005
-144.0	0.0006	-81.0	0.0020	-18.0	0.3051	45.0	0.0367	108.0	0.0004	171.0	0.0003
-141.0	0.0005	-78.0	0.0025	-15.0	0.3661	48.0	0.0270	111.0	0.0003	174.0	0.0002
-138.0	0.0004	-75.0	0.0031	-12.0	0.4211	51.0	0.0201	114.0	0.0002	177.0	0.0001
-135.0	0.0003	-72.0	0.0041	-9.0	0.4750	54.0	0.0150	117.0	0.0001	180.0	0
-132.0	0.0003	-69.0	0.0055	-6.0	0.5172	57.0	0.0110	120.0	0.0001		
-129.0	0.0002	-66.0	0.0075	-3.0	0.5465	60.0	0.0081	123.0	0.0001		
-126.0	0.0002	-63.0	0.0102	0.0	0.5663	63.0	0.0060	126.0	0.0001		
-123.0	0.0002	-60.0	0.0138	3.0	0.5701	66.0	0.0045	129.0	0.0001		
-120.0	0.0002	-57.0	0.0184	6.0	0.5469	69.0	0.0035	132.0	0.0001		

### 电学参数:

工作电压: 3.114 V      工作电流: 0.3499 A  
 电功率: 1.090 W      功率因数: 1.000

### 光学参数 (测试距离: 1.900m):

总辐射通量:  $\Phi_t = 365.35 \text{ mW}$

平均辐射扩散角:  $\theta(25\%): 57.5^\circ$      $\theta(50\%): 38.4^\circ$      $\theta(75\%): 24.6^\circ$      $\theta(10\%): 84.8^\circ$

C0/180:  $\theta(25\%): 57.7^\circ$      $\theta(50\%): 38.1^\circ$      $\theta(75\%): 24.3^\circ$      $\theta(10\%): 85.2^\circ$

C0/180  $I_{max} = 0.5731 \text{ W/sr}$  ( $G=2.0^\circ$ )  $I_o = 0.5663 \text{ W/sr}$

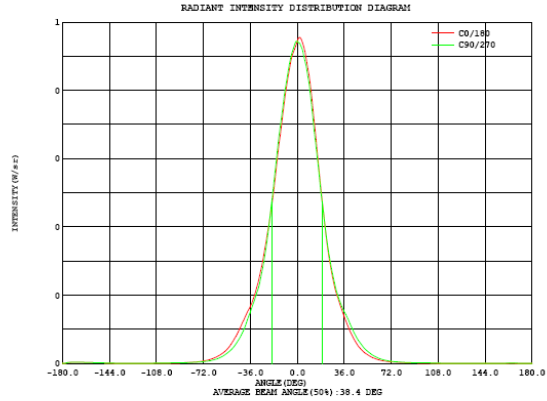
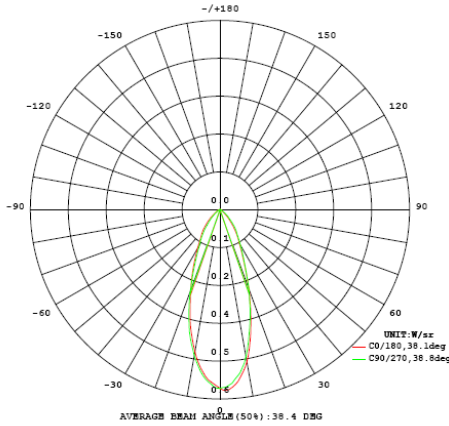
C角度范围: 0度 - 360度  
 C角度间隔: 90.0度  
 测试速度: 快速  
 环境温度: 25°C  
 测试人员: \_\_\_\_\_ Mc.  
 测试日期: 2014-02-13

Y角度范围: 0度 - 180度  
 Y角度间隔: 1.0度  
 测试系统: 远方(EVERFINE)GO-R5000\_V2系统 V2.0.284  
 环境湿度: 40%  
 测试距离: 1.900米 [K=0.6137]  
 备注:



# 光学检验报告

## Optical Test Report



Intensity data: (deg , W/sr) C0/180

A	I	A	I	A	I	A	I	A	I	A	I
-180.0	0.0000	-117.0	0.0003	-54.0	0.0243	9.0	0.5064	72.0	0.0028	135.0	0.0001
-177.0	0.0010	-114.0	0.0003	-51.0	0.0329	12.0	0.4475	75.0	0.0023	138.0	0.0001
-174.0	0.0017	-111.0	0.0004	-48.0	0.0440	15.0	0.3782	78.0	0.0018	141.0	0.0002
-171.0	0.0020	-108.0	0.0005	-45.0	0.0570	18.0	0.3094	81.0	0.0014	144.0	0.0002
-168.0	0.0020	-105.0	0.0006	-42.0	0.0719	21.0	0.2462	84.0	0.0011	147.0	0.0003
-165.0	0.0018	-102.0	0.0006	-39.0	0.0867	24.0	0.1916	87.0	0.0008	150.0	0.0003
-162.0	0.0017	-99.0	0.0007	-36.0	0.1002	27.0	0.1518	90.0	0.0008	153.0	0.0003
-159.0	0.0015	-96.0	0.0007	-33.0	0.1179	30.0	0.1230	93.0	0.0007	156.0	0.0004
-156.0	0.0012	-93.0	0.0007	-30.0	0.1425	33.0	0.1017	96.0	0.0007	159.0	0.0004
-153.0	0.0010	-90.0	0.0008	-27.0	0.1733	36.0	0.0822	99.0	0.0007	162.0	0.0005
-150.0	0.0009	-87.0	0.0011	-24.0	0.2130	39.0	0.0646	102.0	0.0006	165.0	0.0005
-147.0	0.0007	-84.0	0.0015	-21.0	0.2548	42.0	0.0491	105.0	0.0005	168.0	0.0005
-144.0	0.0006	-81.0	0.0020	-18.0	0.3051	45.0	0.0367	108.0	0.0004	171.0	0.0003
-141.0	0.0005	-78.0	0.0025	-15.0	0.3661	48.0	0.0270	111.0	0.0003	174.0	0.0002
-138.0	0.0004	-75.0	0.0031	-12.0	0.4211	51.0	0.0201	114.0	0.0002	177.0	0.0001
-135.0	0.0003	-72.0	0.0041	-9.0	0.4750	54.0	0.0150	117.0	0.0001	180.0	0
-132.0	0.0003	-69.0	0.0055	-6.0	0.5172	57.0	0.0110	120.0	0.0001		
-129.0	0.0002	-66.0	0.0075	-3.0	0.5465	60.0	0.0081	123.0	0.0001		
-126.0	0.0002	-63.0	0.0102	0.0	0.5663	63.0	0.0060	126.0	0.0001		
-123.0	0.0002	-60.0	0.0138	3.0	0.5701	66.0	0.0045	129.0	0.0001		
-120.0	0.0002	-57.0	0.0184	6.0	0.5469	69.0	0.0035	132.0	0.0001		

**Electricity Parameter:**

Voltage : 3.114 V Current : 0.3499 A  
 Power P: 1.090 W Power Factor: 1.000

**Optical Parameter (Distance:1.900m) :**

Radiant flux = 365.35 mW

Avg. Beam angle: @ (25%):57.5deg @ (50%):38.4deg @ (75%):24.6deg @ (10%):84.8deg  
 C0/180: @ (25%):57.7deg @ (50%):38.1deg @ (75%):24.3deg @ (10%):85.2deg  
 C0/180 I<sub>max</sub> = 0.5731 W/sr (G=2.0deg) I<sub>o</sub> = 0.5663 W/sr

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators: \_\_\_\_\_ Mc.  
 Test Date:2014-02-13

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.284  
 Humidity:40%  
 Test Distance:1.900m [K=0.6137]  
 Remarks:

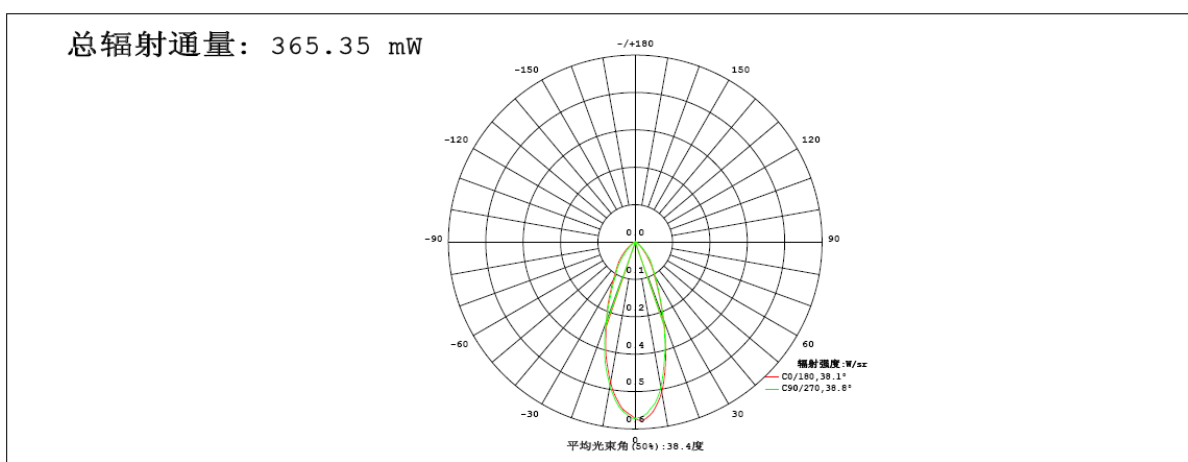


### 光学检验报告

### Optical Test Report

### 辐射通量测试报告

光源型号: DB1732配1734W		
功率: 1W	电源电压: 3V	额定工作电压: 3V
制造厂商: 深圳市百康光电有限公司		



$\gamma$	C0	C90	C180	C270				$\gamma(^{\circ})$	$\phi_{环}$	$\phi_{总}$	%
10	0.4892	0.4724	0.4570	0.4703				0- 10	0.0495	0.0495	13.5
20	0.2668	0.2661	0.2704	0.2756				10- 20	0.1022	0.1517	41.5
30	0.1230	0.1281	0.1425	0.1311				20- 30	0.0865	0.2382	65.2
40	0.0590	0.0723	0.0819	0.0649				30- 40	0.0608	0.2991	81.9
50	0.0221	0.0305	0.0365	0.0256				40- 50	0.0358	0.3349	91.7
60	0.0081	0.0117	0.0138	0.0094				50- 60	0.0163	0.3512	96.1
70	0.0032	0.0044	0.0050	0.0036				60- 70	0.0067	0.3579	98
80	0.0016	0.0021	0.0021	0.0018				70- 80	0.0030	0.3609	98.8
90	0.0008	0.0010	0.0008	0.0008				80- 90	0.0014	0.3623	99.2
100	0.0006	0.0008	0.0006	0.0007				90-100	0.0008	0.3631	99.4
110	0.0004	0.0005	0.0005	0.0005				100-110	0.0006	0.3638	99.6
120	0.0001	0.0001	0.0002	0.0002				110-120	0.0003	0.3640	99.6
130	0.0001	0.0001	0.0002	0.0002				120-130	0.0001	0.3641	99.7
140	0.0002	0.0001	0.0005	0.0005				130-140	0.0002	0.3643	99.7
150	0.0003	0.0003	0.0009	0.0009				140-150	0.0003	0.3646	99.8
160	0.0005	0.0005	0.0015	0.0015				150-160	0.0004	0.3649	99.9
170	0.0004	0.0004	0.0020	0.0020				160-170	0.0003	0.3653	100
180	0	0	0.0000	0.0000				170-180	0.0001	0.3654	100
单位: $^{\circ}$	辐射强度: W/sr								单位: W		

C角度范围: 0度 - 360度  
 C角度间隔: 90.0度  
 测试速度: 快速  
 环境温度: 25°C  
 测试人员: \_\_\_\_\_ Mc.  
 测试日期: 2014-02-13

$\gamma$ 角度范围: 0度 - 180度  
 $\gamma$ 角度间隔: 1.0度  
 测试系统: 远方 (EVERFINE) GO-R5000\_V2系统 V2.0.284  
 环境湿度: 40%  
 测试距离: 1.900米 [K=0.6137]  
 备注:

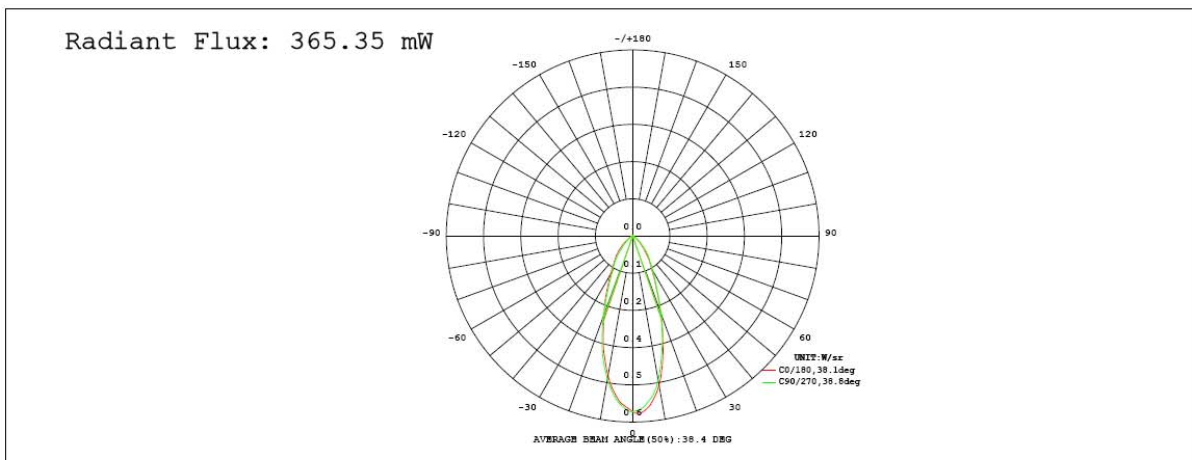


### 光学检验报告

### Optical Test Report

#### RADIANT FLUX TEST REPORT

MODEL: DB1732配1734W		
POWER: 1W	VOLTAGE: 3V	WORKING VOLTAGE: 3V
MANUFACTURER: 深圳市百康光电有限公司		



γ	C0	C90	C180	C270					γ	Φ zone	Φ total	%
10	0.4892	0.4724	0.4570	0.4703					0- 10	0.0495	0.0495	13.5
20	0.2668	0.2661	0.2704	0.2756					10- 20	0.1022	0.1517	41.5
30	0.1230	0.1281	0.1425	0.1311					20- 30	0.0865	0.2382	65.2
40	0.0590	0.0723	0.0819	0.0649					30- 40	0.0608	0.2991	81.9
50	0.0221	0.0305	0.0365	0.0256					40- 50	0.0358	0.3349	91.7
60	0.0081	0.0117	0.0138	0.0094					50- 60	0.0163	0.3512	96.1
70	0.0032	0.0044	0.0050	0.0036					60- 70	0.0067	0.3579	98
80	0.0016	0.0021	0.0021	0.0018					70- 80	0.0030	0.3609	98.8
90	0.0008	0.0010	0.0008	0.0008					80- 90	0.0014	0.3623	99.2
100	0.0006	0.0008	0.0006	0.0007					90-100	0.0008	0.3631	99.4
110	0.0004	0.0005	0.0005	0.0005					100-110	0.0006	0.3638	99.6
120	0.0001	0.0001	0.0002	0.0002					110-120	0.0003	0.3640	99.6
130	0.0001	0.0001	0.0002	0.0002					120-130	0.0001	0.3641	99.7
140	0.0002	0.0001	0.0005	0.0005					130-140	0.0002	0.3643	99.7
150	0.0003	0.0003	0.0009	0.0009					140-150	0.0003	0.3646	99.8
160	0.0005	0.0005	0.0015	0.0015					150-160	0.0004	0.3649	99.9
170	0.0004	0.0004	0.0020	0.0020					160-170	0.0003	0.3653	100
180	0	0	0.0000	0.0000					170-180	0.0001	0.3654	100
DEG	INTENSITY:W/SR									UNIT:W		

C Range: 0 - 360DEG  
 C Interval: 90.0DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operator: \_\_\_\_\_ Mc.  
 Test Date: 2014-02-13

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.284  
 Humidity: 40%  
 Test Distance: 1.900m [K=0.6137]  
 Remarks: