



Product Datasheet  
Lens Series

## DETAILS

Product Number: BK-LED-097WC129

Type: Lens

Color: Clear

Diameter: 13.00mm

Height: 7.40mm

Shape: Round

Optic Material: PMMA

Holder Material: PC

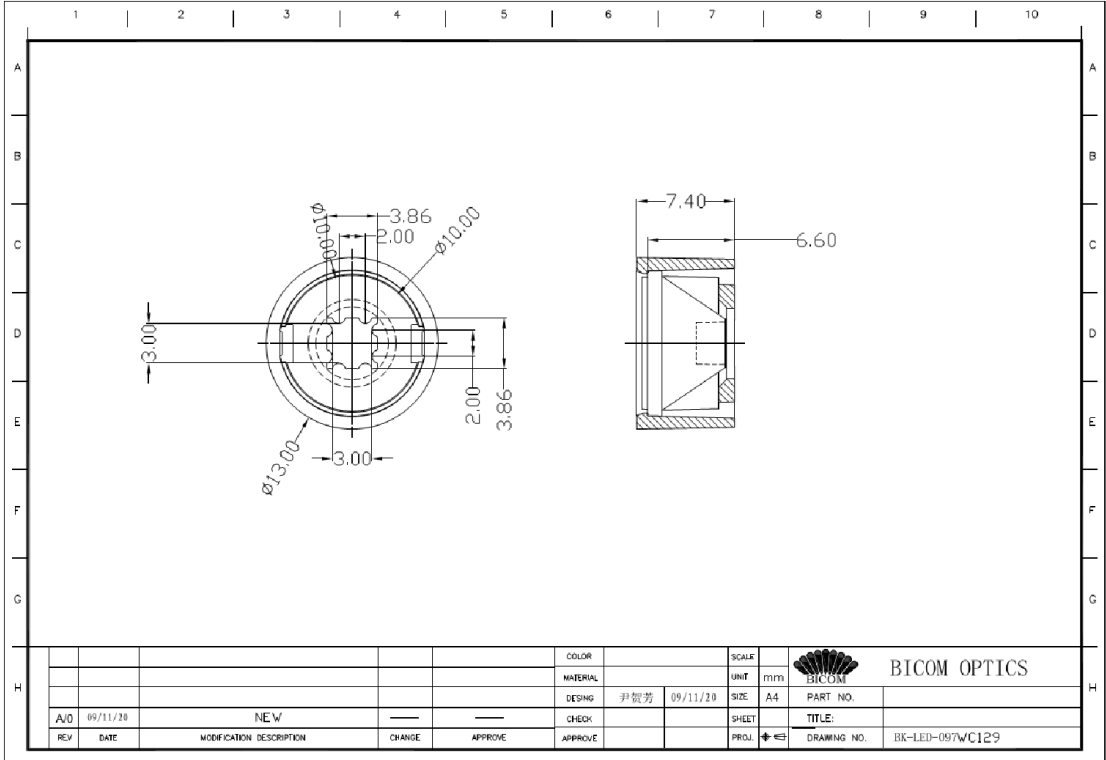
ROHS Compliant: Yes


Date Updated: 8/1/2014



## Optical properties

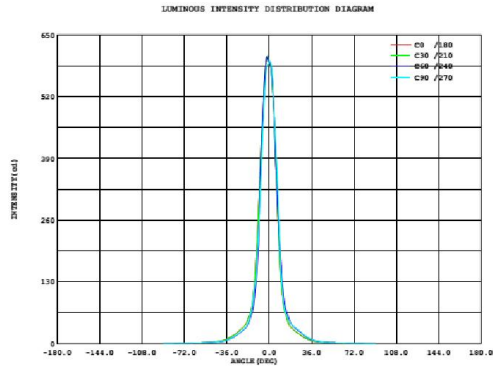
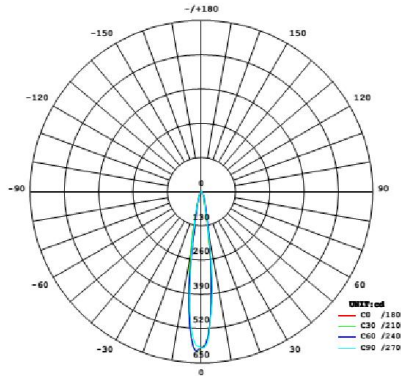
LED	FWHM (50%)	FWHM (10%)	Efficiency	cd/lm	Beam Type
OSLON SSL 80	15.5°	31.8°	91%	7.72	Narrow



				COLOR		SCALE		 <b>BICOM OPTICS</b>	
				MATERIAL		UNIT	mm		
				DESIGN	尹晓芳	DATE	09/11/20	SIZE	A4
				CHECK				PART NO.	
				APPROVE				TITLE:	
								DRAWING NO. BK-LED-097WC129	

OSLON SSL 80

I: 0.35A



Intensity data:(deg , cd) C0 /180

A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0	-58.5	1.865	-27.0	24.19	4.5	457.7	36.0	6.724	67.5	1.027
-88.5	0	-57.0	1.993	-25.5	27.25	6.0	357.1	37.5	5.898	69.0	0.9464
-87.0	0.0455	-55.5	2.142	-24.0	30.63	7.5	261.6	39.0	5.157	70.5	0.8699
-85.5	0.1065	-54.0	2.320	-22.5	33.69	9.0	167.6	40.5	4.502	72.0	0.7578
-84.0	0.1021	-52.5	2.544	-21.0	37.45	10.5	118.1	42.0	4.019	73.5	0.6335
-82.5	0.2474	-51.0	2.773	-19.5	43.28	12.0	82.12	43.5	3.614	75.0	0.5614
-81.0	0.3329	-49.5	3.010	-18.0	52.79	13.5	65.96	45.0	3.249	76.5	0.4494
-79.5	0.3650	-48.0	3.352	-16.5	60.60	15.0	54.36	46.5	2.960	78.0	0.3739
-78.0	0.4738	-46.5	3.734	-15.0	74.55	16.5	41.37	48.0	2.726	79.5	0.2763
-76.5	0.5559	-45.0	4.211	-13.5	102.7	18.0	35.56	49.5	2.517	81.0	0.2241
-75.0	0.6446	-43.5	4.709	-12.0	145.7	19.5	32.20	51.0	2.317	82.5	0.1853
-73.5	0.7256	-42.0	5.384	-10.5	212.0	21.0	28.85	52.5	2.155	84.0	0.1198
-72.0	0.8166	-40.5	6.152	-9.0	283.6	22.5	25.92	54.0	2.017	85.5	0.0732
-70.5	0.8920	-39.0	7.123	-7.5	379.2	24.0	22.86	55.5	1.897	87.0	0.0333
-69.0	1.032	-37.5	8.423	-6.0	452.1	25.5	20.12	57.0	1.767	88.5	0
-67.5	1.108	-36.0	10.03	-4.5	531.1	27.0	17.29	58.5	1.671	90.0	0.0311
-66.0	1.238	-34.5	11.84	-3.0	588.3	28.5	14.62	60.0	1.556		
-64.5	1.364	-33.0	13.64	-1.5	605.7	30.0	12.61	61.5	1.390		
-63.0	1.501	-31.5	15.89	0.0	593.6	31.5	10.99	63.0	1.327		
-61.5	1.605	-30.0	18.47	1.5	578.1	33.0	9.258	64.5	1.203		
-60.0	1.742	-28.5	21.30	3.0	530.0	34.5	7.769	66.0	1.154		

**Electricity Parameter:**

Voltage : 3.190 V Current : 0.3500 A  
 Power P: 1.117 W Power Factor: 1.000

**Optical Parameter(Distance:3.160m) :**

Luminous flux = 78.45 lm Efficiency: Eff=70.27 lm/W  
 Avg. Beam angle: @ (25%):21.3deg @ (50%):15.5deg @ (75%):10.7deg @ (10%):31.8deg  
 C0 /180: @ (25%):21.4deg @ (50%):15.5deg @ (75%):10.6deg @ (10%):31.8deg  
 C0 /180 I<sub>max</sub> = 605.7 cd (G=-1.5deg) I<sub>o</sub> = 593.6 cd

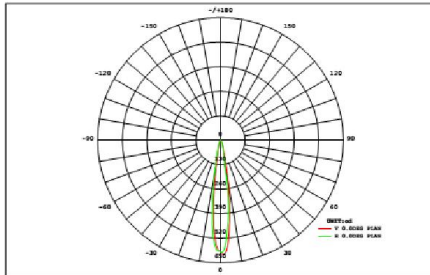
H(β) Range:-90 - 90DEG V(B) Range:-90 - 90DEG  
 H(β) Interval: 0.5DEG V(B) Interval: 0.5DEG  
 Test Speed: HIGH Test System:EVERFINE GO-SPEC316 SYSTEM V1.0.255  
 Temperature:25.3DEG Humidity:65.0%  
 Operators:BICOM Test Distance:3.160m [K=1.0000]  
 Test Date:2009-12-30 Remarks:

OSLON SSL 80

I: 0.35A

LUMINAIRE PHOTOMETRIC TEST REPORT

NAME: 097WC129	TYPE:	WEIGHT:
DIMENSION:	SPECIFICATION:	SERIAL No.:
MANUFACTURER: BICOM	SURFACE:	PROTECTION ANGLE:



DATA OF LAMP		PHOTOMETRIC DATA	
MODEL	OSRAM-CP7P	Imax (cd)	605.7
NOMINAL POWER (W)	1	AVAILABILITY (%)	54.6
RATED VOLTAGE (V)	3.19	Avai. FLUX (lm)	47.03
NOMINAL FLUX (lm)	86.210	EFFICIENCY (%)	91.0
LAMPS INSIDE	1	TOTAL FLUX (lm)	78.41
TEST VOLTAGE (V)	3.19	$\theta$ @50% (H,V)	16,16DEG

AREA FLUX DIAGRAM																	UNIT: lm			$\Phi$ t	$\Phi$ a
90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
80	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.16	0.00		
70	0.00	0.00	0.00	0.01	0.02	0.03	0.03	0.04	0.04	0.04	0.03	0.03	0.02	0.01	0.01	0.00	0.00	0.34	0.00		
60	0.00	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.52	0.00		
50	0.00	0.00	0.01	0.02	0.04	0.05	0.07	0.10	0.12	0.12	0.11	0.08	0.06	0.04	0.02	0.01	0.00	0.00	0.85	0.00	
40	0.00	0.00	0.01	0.03	0.04	0.08	0.14	0.23	0.31	0.32	0.26	0.16	0.09	0.05	0.03	0.01	0.00	0.00	1.76	0.00	
30	0.00	0.00	0.01	0.03	0.06	0.12	0.28	0.57	0.81	0.84	0.65	0.35	0.14	0.06	0.03	0.02	0.00	0.00	3.97	0.00	
	0.00	0.00	0.02	0.03	0.07	0.17	0.48	1.04	1.82	1.93	1.18	0.61	0.22	0.08	0.04	0.02	0.01	0.00	7.72	2.20	
	0.00	0.00	0.02	0.03	0.07	0.20	0.59	1.65	8.58	10.1	2.26	0.77	0.28	0.09	0.04	0.02	0.01	0.00	24.7	21.1	
	0.00	0.00	0.02	0.03	0.07	0.19	0.55	1.54	8.74	10.2	2.15	0.72	0.27	0.09	0.04	0.02	0.01	0.00	24.6	21.1	
	0.00	0.00	0.01	0.03	0.06	0.15	0.40	0.84	1.92	2.04	0.97	0.49	0.19	0.08	0.04	0.02	0.01	0.00	7.26	2.60	
-30	0.00	0.00	0.01	0.03	0.05	0.10	0.22	0.44	0.66	0.68	0.48	0.25	0.12	0.06	0.03	0.01	0.00	0.00	3.17	0.00	
-40	0.00	0.00	0.01	0.02	0.04	0.07	0.12	0.19	0.25	0.26	0.20	0.12	0.08	0.05	0.03	0.01	0.00	0.00	1.45	0.00	
-50	0.00	0.00	0.01	0.02	0.03	0.05	0.07	0.09	0.11	0.11	0.10	0.07	0.05	0.04	0.02	0.01	0.00	0.00	0.79	0.00	
-60	0.00	0.00	0.01	0.01	0.02	0.03	0.05	0.06	0.06	0.06	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.51	0.00	
-70	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.04	0.04	0.04	0.04	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.32	0.00	
-80	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.15	0.00	
-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	
	-90	-80	-70	-60	-50	-40	-30	-20	HORIZONTAL (DEG)	20	30	40	50	60	70	80	90				
$\Phi$ t	0.00	0.04	0.16	0.34	0.64	1.32	3.12	6.92	23.6	26.9	8.58	3.83	1.66	0.75	0.38	0.17	0.05	0.00	78	---	
$\Phi$ a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63	19.5	22.8	3.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	---	47	

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 0.5DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:BICOM  
Test Date:2009-12-30

V(B) Range:-90 - 90DEG  
V(B) Interval: 0.5DEG  
Test System:EVERFINE GO-SPEC316 SYSTEM V1.0.255  
Humidity:65.0%  
Test Distance:3.160m [K=1.0000]  
Remarks: