

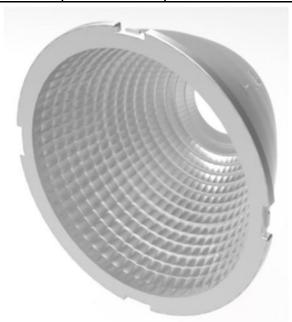
# Chengdu HercuLux Photoelectric Technology Co.,Ltd **Product Approval**

Approval number:

Customer:

Manufacturer: Chengdu HercuLux Photoelectric Technology Co.,Ltd

PN	Code	Product
HK-GY-62@41-24-D14.5-2#-1g-1	1. 08. 23170	HK V series 62@41-24 deg reflector
HK-GY-62@41-36-D14.5-2#-1g-1	1. 08. 23171	HK V series 62@41-36 deg reflector
HK-GY-62@41-50-D14.5-2#-1g-1	1. 08. 33480	HK V series 62@41-50 deg reflector



	Supplier	confirmatio	n		Client cor	firmation	
Proposed		DATE		Qualified□			
Project manager		DATE		Unqualified□		DATE	
Audit		DATE		Audit		DATE	
Approved		DATE		Approved		DATE	
Stamp		DATE		Stamp		DATE	

( Confirmation of acceptance by both parties must be signed and sealed )  $\,$ 

Factory: Chengdu Shuangliu District, Iot industrial park 2 road HercuLux Photoelectric Park

Phone: 028-85887727 (801) 028-85887990 (801) Fax: 028-85887730 http://www.herculux.cn/

Sales Dept: Shenzhen Nanshan District Nanshan Cloud Valley Innovation Industrial Park Comprehensive Service Building, 501-505

TEL: 0755-2937 1541 FAX: 0755-2907 5140

<sup>\*</sup>Approval In duplicate, for both supplier and customer.

# Disclaimer



Please use this product within the permitted range and environment according to the structure and material of the product. If the usage exceeds the recommended value, please test and verify by yourself. If the product is damaged due to out-of-range use, our company will not be responsible for the warranty.

## Product material:

Customized products: The specifications and models of materials used are subject to the agreement between the two parties.

Conventional products: As a product that we continuously research and improve, under the premise of ensuring the quality and availability of the product, our company reserves the right to change the material. If the material specification and model change, without prior notice.

# product data:

The measurement data and dimensional tolerances of the 2D drawings in the product data sheet of this acknowledgement are for reference only, and the final size shall prevail in kind.

The measurement data presented in this acknowledgment is a performance test of the product based on our company's internal test conditions and quality requirements, and the reported data is a typical value of the average results of multiple measurements. Therefore, in some cases, the actual product may deviate from the data provided. We reserve the right to notify you in advance of this data.

# Product changes and improvements:

Changes and improvements of customized products are subject to the agreement between the two parties in the contract or technical documents.

As the conventional products that we continue to research and improve, our company reserves the right to make technical changes to its products, and reserves the right to make changes to data resulting from improvements withou t prior notice.

# Operation cautions:

- 1. Please wear clean gloves during product assembly to prevent product surface contamination.
- 2. Try to avoid touching the optical surface of the lens when taking the lens.
- 3. When the surface of the product is polluted, please wipe it gently with a soft cotton cloth dipped in analytically pure neutral solvent. It is forbidden to use industrial solvents (alcohol, isopropanol, acetone, ether, toluene, xylene, carbon tetrachloride, MMA monomerm,etc.) wipe.
- 4.The lens made of PC should not be exposed to direct sunlight in the storage and use environment. If the lens turns yellow or cracks due to long-term sunlight exposure, our company will not be responsible for the warranty.

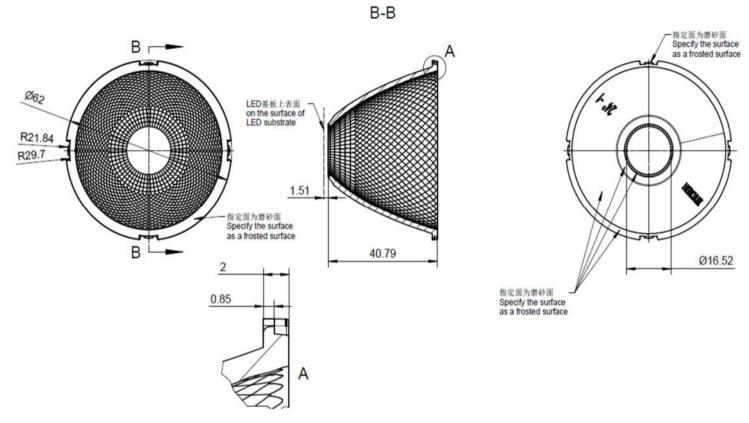


# **Basic product information**

TEL: 0755-2937 1541 FAX: 0755-2907 5140 http://www.herculux.com/ Date updated: 2023/5/13

Product Picture:	
Size(L*W*H/Φ*H):	Ф : 62mm*H : 41mm
Material:	PC aluminium plating
Effiency:	\
Temperature(Topr):	Material extreme temperature resistance : -40°C to +120°C long-term use temperature : -40°C to +100°C
FWHM:	24°、36°、60°
Matched LES:	D14.5
Recommended MAX power:	30W





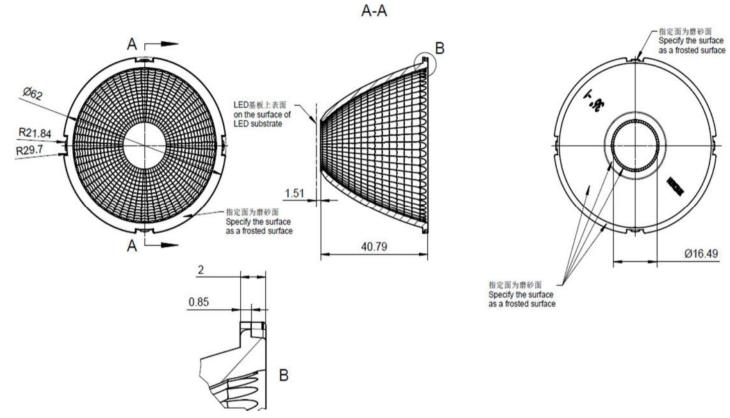
#### Technical remark:

- 1. The 3D map is not indicated for rounded corners and draft angle.
- 2. The dimensional tolerances are not specified according to GB/T 14486 2008 MT5.
- 3, The surface has no flash, shrinkage, bubbles and other defects.
- \*4. When the lamp adopts rubber ring for waterproofing: the roughness of the contact surface between the radiator and the rubber ring is required: Ra<3.2 $\mu$ m

Optica	al design						HK-G	Y-62@41-24-D14.	5-2#-1g-1
tructu	re desig				HK V series 62	@41-24 deg reflector		1.08.23170	
Re	eview						umber of dra	awin qty	weight
Vali	/alidation			Material:	PC aluminium plating		CDHK		
~250	250~	~450	>4	450					

							Vali	uation			iviateriai:	PC aluminium plating	CDHK	
MT5 Tolerance	Basic size	<3	3~10	10~24	24~65	65~140	140~250	250~450	>45	50				
	olerance valu	±0.1	±0.15	±0.2	±0.35	±0.50	±0.80	±1.2	±2.	0				





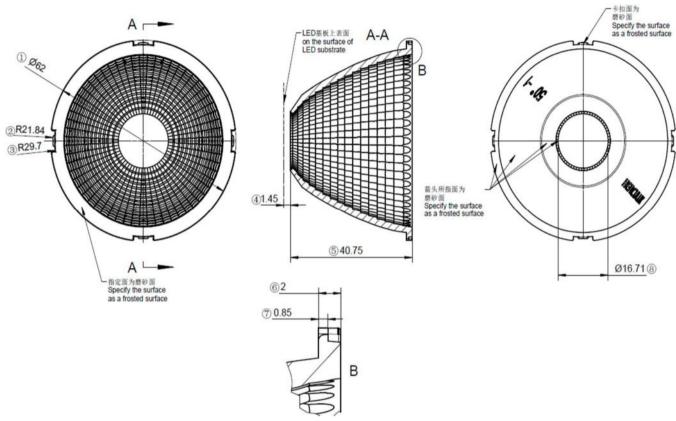
#### Technical remark:

- 1. The 3D map is not indicated for rounded corners and draft angle.
- 2. The dimensional tolerances are not specified according to GB/T 14486 2008 MT5.
- 3, The surface has no flash, shrinkage, bubbles and other defects.
- \*4. When the lamp adopts rubber ring for waterproofing: the roughness of the contact surface between the radiator and the rubber ring is required: Ra<3.2 $\mu$ m

O	ptical	design	esig /				HK-G	iY-62(	@41-36-D14.5	5-2#-1g-	·1		
itr	uctur	desig I		HK V series 62	@41-36 deg reflector			1.08.23171					
	Roy	ure desig eview				umber of dra	awin	qty	wei	ght			
	IVE	Review											
	Valida	ation					Material:	PC aluminium plating			CDHK		
~2	250	250~	~450	>4	450								

								valluatio	OH			Material:	PC aluminium plating	CDHK	
MT5 Tolerance	Basic size	<3	3∼10	10~24	24~65	65~140	140~	250 2	250~450	>4	150				
	olerance valu	±0.1	±0.15	±0.2	±0.35	±0.50	±0.8		±1.2	±2	.0				





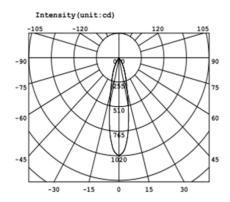
#### Technical remark:

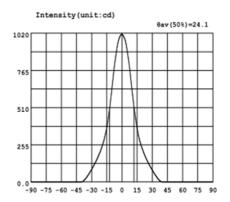
- 1. The 3D map is not indicated for rounded corners and draft angle.
- 2. The dimensional tolerances are not specified according to GB/T 14486 2008 MT5.
- 3, The surface has no flash, shrinkage, bubbles and other defects.
- \*4. When the lamp adopts rubber ring for waterproofing: the roughness of the contact surface between the radiator and the rubber ring is required:  $Ra<3.2\mu m$

	Optical	design	desig				Hk	<-GY-62	@41-50-D14.5	5-2#-1g-	-1		
	tructur	e desig H		HK V series 62	@41-50 deg reflector			1.08.33480					
	Rev	ure desig I eview				umber of	drawin	qty	wei	ght			
	Valid	ation					Material:	PC aluminium plating			CDHK		
)^	~250	250^	~450	>4	450								

							v	alluation				iviateriai:	PC aluminum plating	CDIIK
MT5 Tolerance	Basic size	<3	3~10	10~24	24~65	65~140	140~25	0 250~	~450	>450	0			
	olerance valu	±0.1	±0.15	±0.2	±0.35	±0.50	±0.80	±.	1.2	±2.0	)			







Intensity data: (deg , cd) C0-180

A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0.3503	-58.5	0.3919	-27.0	125.2	4.5	931.1	36.0	20.55	67.5	0.3027
-88.5	0.3728	-57.0	0.3804	-25.5	145.0	6.0	864.1	37.5	9.366	69.0	0.3005
-87.0	0.3607	-55.5	0.3802	-24.0	167.1	7.5	786.2	39.0	2.576	70.5	0.3119
-85.5	0.3266	-54.0	0.3821	-22.5	191.9	9.0	693.6	40.5	0.9925	72.0	0.3029
-84.0	0.3263	-52.5	0.3954	-21.0	217.0	10.5	599.3	42.0	0.6892	73.5	0.3030
-82.5	0.3042	-51.0	0.4090	-19.5	247.8	12.0	511.8	43.5	0.5988	75.0	0.3031
-81.0	0.3051	-49.5	0.4203	-18.0	282.0	13.5	436.1	45.0	0.5383	76.5	0.2485
-79.5	0.2950	-48.0	0.4389	-16.5	323.8	15.0	373.6	46.5	0.4888	78.0	0.2670
-78.0	0.2958	-46.5	0.4731	-15.0	374.8	16.5	315.8	48.0	0.4581	79.5	0.2729
-76.5	0.2848	-45.0	0.4997	-13.5	437.5	18.0	275.4	49.5	0.4395	81.0	0.2647
-75.0	0.3172	-43.5	0.5676	-12.0	513.4	19.5	241.3	51.0	0.4214	82.5	0.2727
-73.5	0.3267	-42.0	0.6915	-10.5	603.8	21.0	211.9	52.5	0.3922	84.0	0.3022
-72.0	0.3349	-40.5	1.106	-9.0	699.1	22.5	185.4	54.0	0.3860	85.5	0.3109
-70.5	0.3356	-39.0	3.424	-7.5	791.4	24.0	161.5	55.5	0.3719	87.0	0.3138
-69.0	0.3354	-37.5	11.55	-6.0	868.7	25.5	139.8	57.0	0.3639	88.5	0.3039
-67.5	0.3264	-36.0	22.81	-4.5	935.3	27.0	120.2	58.5	0.3503	90.0	0.3153
-66.0	0.3191	-34.5	37.07	-3.0	979.3	28.5	100.6	60.0	0.3361		
-64.5	0.3108	-33.0	52.11	-1.5	1005	30.0	82.90	61.5	0.3245		
-63.0	0.3307	-31.5	68.95	0.0	1014	31.5	65.28	63.0	0.3130		
-61.5	0.3519	-30.0	86.70	1.5	1002	33.0	48.72	64.5	0.3014		
-60.0	0.3537	-28.5	105.0	3.0	977.0	34.5	33.88	66.0	0.3139		

# Electricity Parameter:

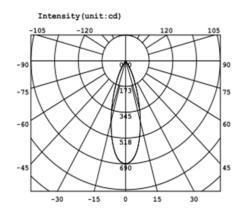
Current I: 0.1000A Power: 3.190W Voltage V: 31.89V PF: 1.000

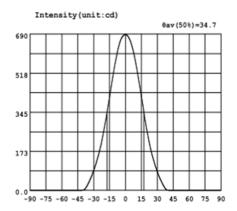
# Optical Parameter (Distance=2.410m):

Equivalent Luminous flux:  $\Phi$ eff = 274.4lm Efficiency: Eff=86.03lm/W

C0-180Plane I0= 1014cd







Intensity data:(deg , cd) C0-180

A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0.3051	-58.5	0.4710	-27.0	131.1	4.5	661.3	36.0	19.95	67.5	0.3681
-88.5	0.3274	-57.0	0.4840	-25.5	155.5	6.0	639.6	37.5	8.644	69.0	0.3706
-87.0	0.3160	-55.5	0.5045	-24.0	183.5	7.5	613.1	39.0	2.563	70.5	0.3616
-85.5	0.3271	-54.0	0.5105	-22.5	213.5	9.0	580.7	40.5	1.188	72.0	0.3411
-84.0	0.3273	-52.5	0.5353	-21.0	249.5	10.5	542.5	42.0	0.8514	73.5	0.3245
-82.5	0.3059	-51.0	0.5693	-19.5	287.2	12.0	501.0	43.5	0.7568	75.0	0.3222
-81.0	0.3287	-49.5	0.6057	-18.0	326.7	13.5	458.8	45.0	0.6503	76.5	0.3088
-79.5	0.3294	-48.0	0.6488	-16.5	369.2	15.0	416.1	46.5	0.6547	78.0	0.3146
-78.0	0.3297	-46.5	0.7496	-15.0	412.0	16.5	373.7	48.0	0.6058	79.5	0.3147
-76.5	0.3503	-45.0	0.7595	-13.5	455.9	18.0	325.5	49.5	0.5796	81.0	0.3131
-75.0	0.3816	-43.5	0.8448	-12.0	499.6	19.5	283.9	51.0	0.5536	82.5	0.3246
-73.5	0.3710	-42.0	0.9631	-10.5	541.3	21.0	245.8	52.5	0.5407	84.0	0.3332
-72.0	0.3914	-40.5	1.425	-9.0	579.3	22.5	209.9	54.0	0.5084	85.5	0.3051
-70.5	0.3717	-39.0	3.168	-7.5	613.6	24.0	177.9	55.5	0.5033	87.0	0.2950
-69.0	0.3740	-37.5	10.35	-6.0	642.3	25.5	150.3	57.0	0.4745	88.5	0.2860
-67.5	0.3905	-36.0	21.87	-4.5	664.2	27.0	126.3	58.5	0.4493	90.0	0.3153
-66.0	0.3896	-34.5	35.69	-3.0	678.4	28.5	104.0	60.0	0.4293		
-64.5	0.4012	-33.0	52.09	-1.5	685.8	30.0	83.23	61.5	0.4009		
-63.0	0.4129	-31.5	68.07	0.0	688.5	31.5	64.78	63.0	0.3981		
-61.5	0.4519	-30.0	87.19	1.5	685.2	33.0	48.28	64.5	0.3929		
-60.0	0.4615	-28.5	108.1	3.0	675.7	34.5	33.52	66.0	0.3757		

# Electricity Parameter:

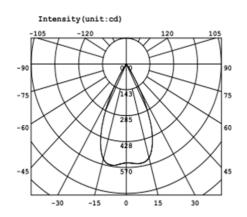
Current I: 0.1000A Power: 3.190W Voltage V: 31.89V PF: 1.000

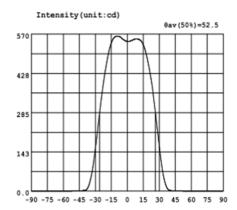
# Optical Parameter (Distance=2.410m):

Equivalent Luminous flux:  $\Phi$ eff = 269.5lm Efficiency: Eff=84.51lm/W

C0-180Plane I0= 688.5cd







Intensity data: (deg , cd) C0-180

A	I	A	I	A	I	A	I	A	I	A	I
-90.0	0.3841	-58.5	0.6190	-27.0	250.0	4.5	548.1	36.0	24.19	67.5	0.4615
-88.5	0.3283	-57.0	0.6854	-25.5	299.8	6.0	550.6	37.5	10.44	69.0	0.4519
-87.0	0.3393	-55.5	0.7742	-24.0	346.3	7.5	552.6	39.0	4.250	70.5	0.4384
-85.5	0.3058	-54.0	0.8607	-22.5	389.4	9.0	552.9	40.5	2.354	72.0	0.4230
-84.0	0.3164	-52.5	0.9674	-21.0	428.4	10.5	551.9	42.0	1.740	73.5	0.4047
-82.5	0.3494	-51.0	1.050	-19.5	463.1	12.0	548.7	43.5	1.517	75.0	0.3896
-81.0	0.3487	-49.5	1.154	-18.0	493.8	13.5	542.6	45.0	1.450	76.5	0.3747
-79.5	0.3479	-48.0	1.274	-16.5	519.0	15.0	532.1	46.5	1.326	78.0	0.3425
-78.0	0.3170	-46.5	1.406	-15.0	538.4	16.5	515.7	48.0	1.230	79.5	0.3328
-76.5	0.3510	-45.0	1.577	-13.5	551.4	18.0	494.2	49.5	1.124	81.0	0.3228
-75.0	0.3424	-43.5	1.741	-12.0	559.1	19.5	467.7	51.0	1.022	82.5	0.3096
-73.5	0.3644	-42.0	1.939	-10.5	562.4	21.0	437.4	52.5	0.9426	84.0	0.3262
-72.0	0.3769	-40.5	2.462	-9.0	563.0	22.5	402.8	54.0	0.8681	85.5	0.3661
-70.5	0.3977	-39.0	4.041	-7.5	561.8	24.0	362.5	55.5	0.7909	87.0	0.3565
-69.0	0.4406	-37.5	9.361	-6.0	558.4	25.5	313.3	57.0	0.7427	88.5	0.3681
-67.5	0.4456	-36.0	22.04	-4.5	553.1	27.0	266.0	58.5	0.7031	90.0	0.3717
-66.0	0.4931	-34.5	42.69	-3.0	548.9	28.5	215.6	60.0	0.6525		
-64.5	0.5055	-33.0	70.50	-1.5	545.5	30.0	165.1	61.5	0.6074		
-63.0	0.5280	-31.5	107.7	0.0	544.4	31.5	117.1	63.0	0.5589		
-61.5	0.5569	-30.0	152.7	1.5	543.7	33.0	76.43	64.5	0.5274		
-60.0	0.5734	-28.5	199.6	3.0	545.7	34.5	45.73	66.0	0.5016		

# Electricity Parameter:

Current I: 0.1000A Power: 2.789W Voltage V: 27.89V PF: 1.000

# Optical Parameter(Distance=2.410m):

C0-180Plane I0= 544.4cd



			standar d size	Upper Size Iimit	Lower size limit	Test result1	Test result2	Test result3	Test result4	Jud gme nt	Remarks	
	diam er		62			61.95	61. 95	61.93	61.96		environment:	
1.Size	heig	ht ·	40. 79			40. 78	40. 79	40. 77	40. 77		In 20 °C -25 °C environment	
	thic		2			2.06	2.05	2.07	2. 08		to achieve	
					Gat	e shear can not	affect the appea	arance of the lan	np			
					Se	e attachment "A	ppearance Insp	ection Standards	3"			
2.Appea	ran j	attac	See hment earanc	E		No burr	No burr	No burr	No burr		OK	
ce Quali	ıy e	"Appearance Inspection Standards"				No stains	No stains	No stains	No stains	;		
3.Materi	al			PC alumi	nium plat	ting	Color	Tra	insparent		OK	
	sting	j LE					D14.5					
4.Optic	The size and rated power of the light-emitting surface (LES) of the COB recommended by this lens should conform to the parameters in the product basic information table. if it is required to be out of range. According to the heat dissipation capability of the lamp and the actual conditions of the use environment, the lens should be fully tested and tested to prevent the lens life.											
al index	0 2 1 4 2 4 3 4											
		angle				24. 1	24.8	24. 1	23.8			
	K- valı					3. 69	3.6	3. 7	3. 75			
	fici	_				84.00%	84. 00%	82.80%	83. 00%			
	acu See the signature sample `											
sive							Qual	ified				
Remarks 1. Tool Vernier of Quadrat Gauge M Microsco Needle Gauge E 2. Amb tempera size of th refer to t the right	Num Calip ic H-I  I-Too ope F  I-Thi R-Rac E-Visi oient ture one pro	er 2D Heigh ol ck dius ual. on the	e t	(	0.9	product size ch	nanges with te	30	Size: Size: Size: Size: Size: Size: Size: C)	100mr 150mr 200mr 250mr	n n n	

# Precautions:

- 1. Please wear clean gloves during the lens assembly process to prevent the lens surface from being contaminated.
- 2. Try to avoid touching the total reflection surface when taking the lens.
- 3. The lens surface is contaminated. Only use a soft cotton cloth dipped in analytically pure neutral solvent to wipe gently. Do not wipe with industrial solvents (alcohol, isopropanol, acetone, ether, toluene, xylene, carbon tetrachloride, MMA Body, etc.).
- 4. The working temperature of the lens should be within the temperature resistance limit of the lens material. Exceeding the temperature resistance limit will cause the lens to crack or melt and affect the service life of the lens. It is recommended that the upper surface temperature of the LED colloid should be less than 120 degrees.



			Standar d size	Upper Size Iimit	Lower size limit	Test result1	Test result2	Test result3	Test result4	Jud gme nt	Remarks	
	dian en		62			61. 9	61. 95	61.96	61.9		environment:	
1.Size	heig		40. 79			40. 78	40.75	40.78	40. 78		In 20 °C -25 . °C	
	thic es		2			2.06	2.08	2.09	2. 1		environment to achieve thermal	
					Gate	e shear can not	affect the appea	arance of the lar	np		шешна	
					See	e attachment "A	ppearance Inspe	ection Standard	s"			
2.Appea	ıran	attac	See chment earanc	E		No burr	No burr	No burr	No burr		OK	
ce Quali		"Appearar e Inspection Standards		ı		No stains	No stains No stains		No stains	3		
3.Materia	al			PC alumi	nium plat	ing	Color	Tra	insparent		OK	
	esting	g LE					D14.5					
4.Optic	teste	the heat dissipation capability of the lamp and the actual conditions of the use environment, the lens should be fully tested and tested to prevent the lens life.  FWHM  See light distribution curve										
	angle				34. 7		34.8	34. 9	35. 5			
		K- value				2. 55	2. 54	2. 54	2. 49			
	fic		_			84. 00%	84. 00%	84. 30%	84. 60%		$\overline{}$	
		See i	he sign	ature san	nple	,		•				
Compre sive iudame						· ·	Qual	lified				
Remarks 1. Tool Vernier ( Quadrati Gauge N Microsco	Num Calip ic H- d-Too ope F	er 20 Heigl ol o <sub>-</sub>	)-	changes (mm)	0.9	product size ch	nanges with te	emperature ta	→ Size:	100mn 150mn	n	

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- 2. Try to avoid touching the total reflection surface when taking the lens.
- 3. The lens surface is contaminated. Only use a soft cotton cloth dipped in analytically pure neutral solvent to wipe gently. Do not wipe with industrial solvents (alcohol, isopropanol, acetone, ether, toluene, xylene, carbon tetrachloride, MMA Body, etc.).
- 4. The working temperature of the lens should be within the temperature resistance limit of the lens material. Exceeding the temperature resistance limit will cause the lens to crack or melt and affect the service life of the lens. It is recommended that the upper surface temperature of the LED colloid should be less than 120 degrees.



		Standard	Upper Size limit	Lower size limit	Test result1	Test result2	Test result3	Test result4	Jud gme nt	Remarks
	diamete	r 62			62. 02	61. 98	61.99	61. 94		Test environment: In 20 ℃ -25 ℃
1.Size	height	40. 75			40. 72	40. 75	40. 75	40.69		environment to achieve thermal
	thickne s	s 2			2.06	2.08	2. 07	2.06		equilibrium after the test.
			Gate	shear car	not affect	the appea	rance of the	e lamp		
			See	attachme	nt "Appear	ance Inspe	ction Stanc	lards"		
2.Appear	anc   "	See ttachment ppearance	E	1	No burr	No burr	No burr	No burr		OK
e Quality	I	nspection Standards"	tion		No stains		No stains	No stains		
3.Materia	al	P	C aluminiun	n plating		Color	Tra	nsparent		OK
	esting LI	Ε <b>(</b>				D14.5				
4.Optica	The size and rated power of the light-emitting surface (LES) of the COB recommended by this lens should conform to the parameters in the product basic information table. if it is required to be out of range. According to the heat dissipation capability of the lamp and the actual conditions of the use environment, the lens should be fully tested and tested to prevent the lens life.  FWHM  See light distribution curve									of range.
l maox	angle				52. 1	52. 1	52. 4	52. 5		
	K-valu				1. 52	1. 51	1. 49	1. 48	_	
	(CD/LM) (fficien				82.00%	82. 20%	82. 30%	82. 80%	_	$\overline{}$
	acul Se	e the signat	ure sample		`					
Compreh ve judgr					•	(	Qualified			
	•			_	uct size ch	nanges wi	th temper	ature tak	ole	
1、Tool Number: V- cha			Length 0.9 changes 0.8 (mm) 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0		10	20	30	40 (°C)	<b>→</b> 9	Size: 50mm Size: 100mm Size: 150mm Size: 200mm Size: 250mm Size: 300mm

# Precautions:

- 1. Please wear clean gloves during the lens assembly process to prevent the lens surface from being contaminated.
- 2. Try to avoid touching the total reflection surface when taking the lens.
- 3. The lens surface is contaminated. Only use a soft cotton cloth dipped in analytically pure neutral solvent to wipe gently. Do not wipe with industrial solvents (alcohol, isopropanol, acetone, ether, toluene, xylene, carbon tetrachloride, MMA Body, etc.).
- 4. The working temperature of the lens should be within the temperature resistance limit of the lens material. Exceeding the temperature resistance limit will cause the lens to crack or melt and affect the service life of the lens. It is recommended that the upper surface temperature of the LED colloid should be less than 120 degrees.



Р	N	HK-GY-62@41-24-D14.5-	-2#-1g-1	Product Name	HK V series 62@41	-24 deg	reflector		
Product	material	PC aluminium plating							
Package diagram			-	<b>→</b>		5			
Product	packing	45	A/ Bag	180	A/Layer				
		4	Layer/Box	720	A/ Carton				
	NO.	Part No	Part name	Size	Dosage	Unit	Remarks		
	1		Plastic bag		16	PCS			
	2	2.06.0005	Box label paper	62mm*70mm	1	sheet			
Packagin g Materials	3	2.06.0007	Middle partition	39cm*29cm	5	sheet			
	4	2.06.0012	Medium carton	41cm*31cm*27c	cm 1	PCS			
	5								
	6								
Remarks	The loose packing is not subject to this specification. Customer's requirements shall prevail								



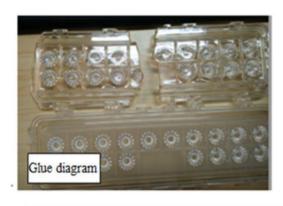
# Special notice

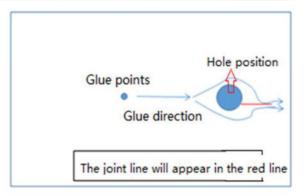
When gule pass through holes, columns and other structures, or part of the thin structure, will form a weld line. The product which uses multi-point injection welding line will appear because of the combination of sol, as shown below:

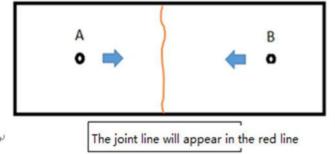
## Syntneti











# Please note:

The appearance of lines in the structure of the product as well as at the screw hole is a normal phenomenon, will not affect the actual use of the product, and can not be avoided at this stage.



## Appearance inspection standards

# 1 Operating procedures

1.1.1Sampling standards, sampling plan and AQL

Test level : GB/T2828.1-2012The first part is according to the acceptance quality limit (AQL) retrieval batch inspection sampling plan, general inspection level  $\Pi$  level, CR class defect coefficient 0, MA defect rejection level AQL = 0.65, MI class defect rejection level AQL = 1.0; defect level please see 5.4.

2 Code table

Code	Code	Unit	Code	Code	Unit
	description			description	
N	Amount/pcs	pcs	D	Diameter	mm
L	Length	mm	Н	Depth	mm
W	Width	mm	DS	Distance	mm
S	Proportion	mm²	SS	Offset	mm

## 3 Test conditions

- 3.1 Sight distance and working hours: Sight distance should be 30-35cm, each side of the inspection time does not exceed 12s, the visual angle of 45-135 degrees;
- 3.2 Light: 2x40w cool white fluorescent lamp, the light source is 500-550mm away from the lens surface; in order to make the appearance defect can be correctly recognized, the illumination should be 500-1000Lux, and the observation time is 10 seconds.
  - 3.3 Visual inspection staff should be 1.0 (including corrected visual acuity) above, no color blindness, color weakness.

## 4 Appearance inspection standards

Test items	ludging standard	Inspection equipment	Defec		
restitems	Judging standard	Testing method	O I MI I MA		CR
	When start the machine and process, all products have to check the appearance of the sample, the appearance of the sample is divided into qualified samples and limited samples.				
Check the sample	1: Qualified sample refers to the appearance and structure standard of the product which recognized by the client, the sample size should be confirmed before mass production;	Sample comparison , visual			√

1		1		
	2: The limited sample refers to the limit of a particular exceptionally developed sample. Limit the sample only for its specific point of exception to confirm; The priority is higher than the other criteria in this table. When there is a limited sample, the limit sample shall prevail.			
Raw edge	Not allowed to affect the size and assembly	Visual, point card	√	
Scratch	1: Non-optical surface and non-exposed surface scratches should be visually insignificant and the length is less than 1/10 of the maximum surface size.	Visual, point card, calipers	<b>√</b>	
Fingerprint	Fingerprints are not allowed on all products	Visual	√	
Foreign objects, black spots, white spots	The product may not be attached to foreign objects, including oil, fiber, dregs of water gap and so on			<b>√</b>
Deformation	Insufficient filling shall not affect the appearance of the assembly and the exposed surfaces.	Visual, feeler		<b>√</b>
Poor ejection	Products may not appear bad ejection, including no convex top, thimble printed on the assembly surface shall not be higher than the product surface, non-assembled surface thimble height should not exceed the product size tolerances; thimble printing should be less than the product surface and no more than 0.3; thimble surface treatment should be consistent with the product side.  Ejection strain: the optical surface and the appearance of the exposed surface after assembly are not allowed to have a strain,	Visual, point card	<b>V</b>	
	and the structural surface does not allow visual obvious strain.			
Insufficient filling	Insufficient filling shall not affect the appearance of the assembly and the exposed surfaces, The signature sample shall prevail.	Visual, point card	√	
Shrink	When the entire surface of the product shrinks, the optical properties and dimensions must meet the requirements, and the visual will not significantly affect the appearance.Part shrink reference point defects	Visual, point card	<b>V</b>	
Flow marks、Welding line	<ol> <li>1 : Product does not allow the presence of flow marks and welding lines unless the structure can not be avoided;</li> <li>2: The remaining flow marks shall not appear in the optical surface, a single L ≤ 10mm, no more than two</li> </ol>	Visual	٧	

Bubble	No bubbles are allowed	Visual		√	
Foreign objects, black spots, white spots	Not obvious or D ≤ 0.3mm black spots and foreign bodies in the area of 100x100mm not more than 1; Exceeded foreign matter black spots is judged bad.	Visual, point card	<b>√</b>		
Damaged	No damage is allowed	Visual			√
Cold glue	Optical surface may not have cold glue, non- optical surface cold glue should meet the visual is not obvious.	Visual	<b>√</b>		
	1: Do not affect the product size, shall not penetrate the optical surface, the cut should be smooth;				
Bad incision	2: Laser cutting products, the optical surface burns shall not occur after the processing is completed. Beading must not affect product installation				√
	3: Three molds and hot runner gate shall not appear residue.				
Scrub	Scrub surface should be uniform, off the scrub phenomenon should not be obvious , A single off scrub imprint requires D $\leq$ 1 mm and no more than 1 area within a 50x50 mm area	Visual		√	