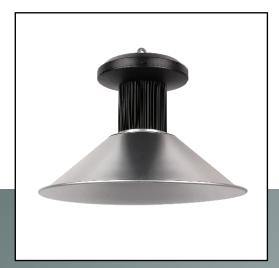
# LED High Bay Light VARIO Series

2013/10













#### Variety of type **Combinations**



#### Modularization

The modularization design of Vario series High Bay Light makes the chip can be replaced and as simple as replacing light bulbs, we don't have to replace the whole lamp but easy replace to use the most advanced LED chip in future.



#### **Upgrade Protection** Design



The Protection range of Vario Series High Bay Light is upgraded to IP65 for against harsh environment.



Ambient temperature -25℃— + 55℃



#### Anti-corrosion and oxidant

For the traffic shed, toll station that outdoor places easy to corrosion, or for the washing and dyeing workshop, food factories that easy to lead to the oxidation of indoor resistance environment, It is optional to have the resistance acid dust proof and antioxidant functions.



#### High Efficiency and **Environment-friendly**



#### **High Output**

The luminous efficacy is high at 130lm/w , which not only shorten ROI but also save energy and protect environment.



#### Complies to Photo-Biological Safety Standards EN62471:2008

Safety Assurance on human eyes and skin.



#### Obtained LM-80 Certification

70% lumens maintained after 35,000 hours of operation.



#### **Accordance with the Standard ANSI C78.377**

Complies to "3-Step MacAdam Eclipses" (Chromaticity control standard), Sonaray uses LED chip with the best chromaticity.



#### High Efficiency Energy Saving

Pursuing more energy saving ,higher efficiency, achieved 40%-80% energy saving



#### High CRI

Ra > 80, The space color have more layers.



## **Convenient** maintenance



Modularization design makes the maintenance of lamps (simple replacement chips, power supply) convenient and no longer needed the mechanic, reduce cost.



High Bay Light

#### **Specifications**

25W 35W 40W



HB-B-2025



HB-B-2035

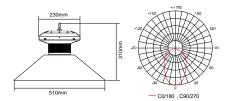


HB-B-2045

#### **General Specifications** Material: Aluminum

Housing Color: Black body, Silver lampshade Ambient temperature : -

25℃~+45℃ Weight: 3.1kg



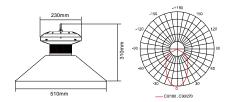
Input Voltage

AC 100V-240V,50/60Hz



Material: Aluminum Housing Color: Black body, Silver lampshade Ambient temperature : -25℃~+45℃

Weight: 3.1kg



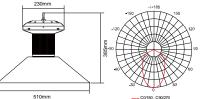
### **General Specifications**

Material: Aluminum Housing Color: Black body, Silver lampshade Ambient temperature : -

Luminous Flux

4400lm

25℃~+45℃ Weight: 3.1kg



Input Voltage

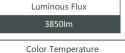


Color Temperature

5000K/3000K









Input Voltage AC 100V-240V,50/60Hz 5000K/3000K Design Lifetime

60000hrs

Color Temperature 5000K/3000K

CRI

Beam angle
70°

Design Lifetime	
60000hrs	

Power

40W



Light efficiency

110lm/w







#### Lighting Distribution

Beam angle

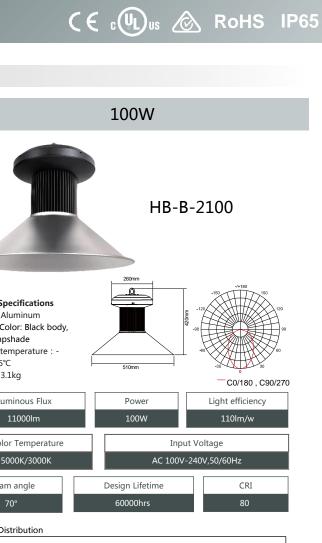
<u>//\</u>								
41								
1815	268	28	0.09	0.02	0.01	1	1	Beam
455	219	66	23	6.98	0.29	0.03	0.01	angle 70°
203	136	66	30	14	7.31	2.81	0.47	
114	89	54	31	17	9.13	5.75	3.68	
73	62	43	28	17	10	6.74	4.48	
51	45	34	24	17	11	7.44	5.07	
37	34	28	21	15	11	7.69	5.49	
29	26	23	18	14	10	7.62	5.66	
23	21	18	15	12	9.49	7.34	5.65	高度: m
18	17	15	13	11	8.73	6.96	5.51	地面长原 照度: lu

#### Lighting Distribution

1									
	2551	339	28	0.37	0.11	0.03	0.02	0.01	Beam
2	642	286	86	30	6.99	0.72	0.09	0.04	70°
3	286	184	85	38	19	9.36	2.8	0.69	
ı	160	122	71	39	21	12	7.34	4.46	
; ;	103	84	57	36	22	13	8.56	5.77	
	71	62	46	32	21	14	9.28	6.43	
	53	47	37	28	20	14	9.58	6.86	
	40	37	30	24	18	13	9.56	7.16	
	32	29	25	21	16	12	9.31	7.17	高度: m
0	26	24	21	18	14	11	8.92	6.95	地面长度: m 照度: lux

#### Lighting Distribution

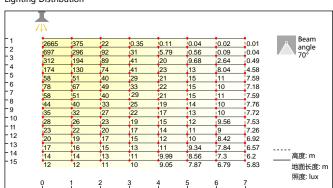
4	<b>/</b> \								
2	1299	195	24	0.08	0.01	/	/		Beam angle 70°
	326 145	162	48	17	5.95	0.43 5.3	0.03	0.01	70°
	82	65	40	23	12	6.65	4.16	2.68	
	52	45	32	21	13	7.61	4.89	3.24	
	36	33	25	18	12	7.96	5.42	3.69	
	27	25 19	16	15	11	7.85	5.64	4.15	
	16	15	13	11	8.97	7.04	5.43	4.16	高度: m
)	13	13	11	9.64	7.99	6.46	5.15	4.07	地面长度 照度: lux
	<b>o</b>	1	2	3	4	5	ę	7	





#### **Specifications**





<del>1</del>								
3424	535	52	1.04	0.12	0.05	0.02	0.01	<sub>R</sub> Beam
856	434	137	46	13	2.27	0.29	0.1	angle
380	277	131	59	29	15	5.95	1.99	80°
214	179	108	61	34	20	12	7.33	
137	124	87	56	35	22	14	9.35	
95	91	69	49	33	22	15	11	
70	69	56	42	31	22	16	11	
54	53	45	36	28	21	15	12	
43	43	37	31	25	19	15	12	
37	35	31	27	22	18	14	11	
31	29	27	23	20	16	13	11	
26	25	123	20	18	15	12	10	
22	21	20	18	16	13	12	9.81	
19	18	17	16	14	12	11	9.21	高度: m
16	16	15	14	13	11	9.93	8.62	地面长度: n
Q	1	2	3	4	5	6	7	照度: lux

<u> </u>								
4472	736	96	1.76	0.14	0.04	0.02	0.01	Beam
11121	593	1182	64	24	3.43	10.44	0.09	angle
499	363	179	82	40	21	9.93	3.48	80°
281	235	148	83	46	26	16	10	
180	161	1117	76	47	29	19	12	
125	116	92	66	45	30	20	14	
92	187	73	56	41	29	21	15	
70	67	59	48	37	28	21	15	
56	54	48	41	33	26	20	15	
45	44	40	35	29	24	119	15	
37	36	34	30	26	22	18	14	
31	31	29	26	23	20	16	14	
27	26	25	23	20	18	15	13	
23	23	22	20	118	16	14	12	高度: m
20	20	19	18	16	15	13	11	地面长度: r
φ	1	2	3	4	5	6	7	照度: lux





High Bay Light

#### **Specifications**

65W 85W 100W



HB-BD-2065

HB-BD-2085

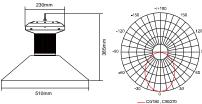


HB-BD-2100

#### **General Specifications**

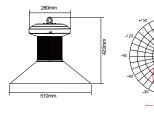
Material: Aluminum Housing Color: Black body, Silver lampshade Ambient temperature : -

25℃~+45℃ Weight: 3.1kg

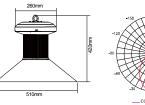


Input Voltage

**General Specifications** Material: Aluminum Housing Color: Black body, Silver lampshade Ambient temperature : -25°C~+45°C Weight: 3.1kg









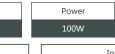








	Light efficiency	Luminous Flux
	110lm/w	11000lm
Inpu	ut Voltage	Color Temperature





Color Temperature 5000K/3000K Beam angle





300019300010		
Beam angle		
70°		

	AC 100V	-240
Design Lifet	ime	
60000hrs		

V,30/00112	
CRI	
80	

	Design Lifetime
	60000hrs

CRI
80

AC 100V-240V,50/60Hz

#### Lighting Distribution

$\overline{4\lambda}$							
•	•				•		lo se Bea
1809	1322	40	8.75	2.64	11.05	10.48	0.26 Bea
453	252	80	26	10	4.38	2.18	1.18
202	150	78	36	17	8.04	4.46	2.56
1113	96	63	36	20	111	6.57	4.01
73	65	49	33	21	13	8.1	5.24
50	47	38	28	20	113	8.93	6.1
37	35	30	24	18	13	9.19	6.59
28	27	24	20	16	12	9.06	6.77
22	22	20	17	14	111	8.68	6.73
18	18	16	14	12	10	8.16	6.53
15	15	14	12	11	9.11	7.59	6.24
13	12	12	111	9.47	8.23	7.01	5.89
11	11	10	9.36	8.4	7.42	6.45	5.53
9.26	9.13	8.78	8.22	7.53	6.77	5.99	5.22 高度:
8.07	7.97	7.7	7.27	6.73	6.12	5.49	4.86 地面

Lighting Distribution

7	T\								
	•								
	2770	507	64	14	4.46	1.81	0.86	0.47	A Bea
	695	394	126	42	16	7.13	3.59	1.98	and
	309	234	122	57	27	13	7.23	4.17	90
	174	148	98	57	32	17	10	6.46	
	111	100	76	51	33	20	13	8.35	
	77	72	59	44	31	20	14	9.66	
	57	54	46	37	28	20	14	10	
	44	42	37	31	24	19	14	11	
	34	33	30	26	22	17	14	11	
	28	27	25	22	19	16	13	10	
	23	23	21	19	17	14	12	9.79	
	19	19	18	16	15	13	!11	9.22	
	16	116	116	14	113	12	10	8.64	
	14	14	114	113	112	111	9.34	8.15	高度: m
	12	12	12	11	10	9.52	8.55	7.58	地面长度
									照度: lu
	Q	1	2	3	4	5	6	7	лπ.χ. га.

Lighting Distribution

Beam angle

5000K/3000K

I									
41	· ·								
13	3233	580	73	16	4.99	2.01	0.94	0.52	Beam
8	809	453	144	48	19	8.14	4.05	2.22	angle
3	860	269	140	65	31	15	8.25	4.76	90°
2	203	171	113	65	37	20	12	7.35	
1	30	116	87	50	37	23	15	9.53	
9	90	83	68	50	35	23	16	11	
	6	62	54	43	32	23	17	12	
	51	48	43	36	28	22	16	12	
	Ю	39	35	30	25	20	16	12	
13	32	31	29	26	22	18	15	12	
	27	26	24	22	19	16	14	111	
	23	22	21	19	17	15	13	111	
1	9	19	18	17	15	13	12	9.92	
1	7	16	16	15	13	12	11	9.37	高度: m
1	4	14	14	13	12	11	9.83	8.72	 地面长度: n
									照度: lux
Q		1 :	2 :	3	4	5	6	7	照规反. IUX





#### 25W 35W 35W



HB-A-2025



HB-A-2035

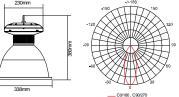


HB-AD-2035

#### **General Specifications** Material: Aluminum

Housing Color: Black body, Silver lampshade Ambient temperature : -

25℃~+45℃ Weight: 2.7kg



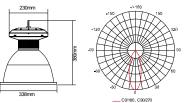
Input Voltage

AC 100V-240V,50/60Hz



Housing Color: Black body, Silver lampshade Ambient temperature : -25℃~+45℃

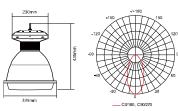
Weight: 2.7kg



#### **General Specifications**

Material: Aluminum Housing Color: Black body, Silver lampshade Ambient temperature : -25℃~+45℃

Weight: 2.7kg



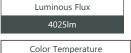


Color Temperature

5000K/3000K









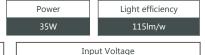
60000hrs





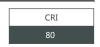
Luminous Flux

4025lm



Beam angle 35°





5000K/3000K	
eam angle	Design Lifet

0V,50/60Hz
CRI

Input Voltage

AC 100 Beam angle Design Lifetime 35° 60000hrs

)V-240	V,50/60Hz
_	
	CRI
	80

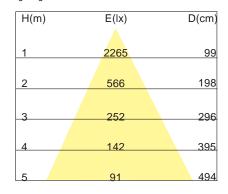
#### Lighting Distribution

•	•	•	•	•	•	•	•	Bea
3635	47	0.67	0.11	0.03	0.01	<u>'</u> /	1/	A ang
921	187	11	0.72	0.2	0.07	0.03	0.01	35°
410	168	46	5.37	0.59	0.22	0.09	0.04	
231	132	46	20	3.12	0.47	0.2	0.1	
148	101	45	21	10	1.69	0.38	0.18	
103	77	42	21	12	5.54	1.23	0.32	
75	61	37	21	12	7.18	3.47	0.93	
58	49	33	20	12	7.28	4.92	2.34	
46	40	29	19	12	7.3	5.15	3.49	高度: r 地面长
37	33	25	17	12	7.33	5.17	3.78	照度: 1

Lighting Distribution

5532	90	0.84	0.16	0.04	0.01	0.01	,	Bea
1399	290	23	0.86	0.25	0.09	0.04	0.02	35°
623	276	66	9.88	0.7	0.26	0.11	0.05	
351	218	72	29	5.7	0.58	0.24	0.12	
224	165	73	30	16	3.17	0.5	0.22	
156	125	69	32	17	8.85	2.27	0.44	
115	98	62	33	18	10	5.76	1.71	
88	78	54	32	18	11	7.03	3.99	
69	63	47	31	19	11	7.26	5.18	高度:
56	52	41	29	19	11	7.59	5.36	地面も 照度:
)	1	2	3	4	5	6	7	

Lighting Distribution









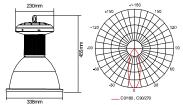


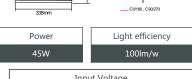
**General Specifications** Material: Aluminum Housing Color: Black body, Silver lampshade Ambient temperature : -

Luminous Flux

4500lm

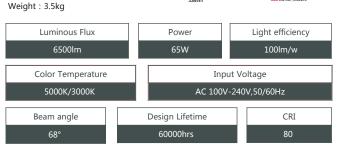
25℃~+45℃ Weight: 3.5kg







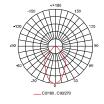


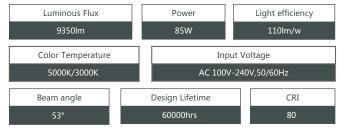




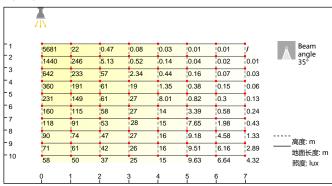
HB-A-2085







Lighting Distribution



Lighting Distribution

	I								
	<i>A</i>  \								
	9412	43	0.63	0.11	0.03	0.01	0.01	1	Beam
	2391	353	9.45	0.69	0.19	0.05	0.03	0.01	angle 35°
	1066	356	84	4.37	0.63	0.21	0.1	0.04	33
	600	297	88	34	2.6	0.49	0.2	0.08	
	383	235	91	38	16	1.33	0.39	0.16	
	266	183	88	39	22	7.26	1.07	0.32	
	196	146	82	41	22	13	4.29	0.81	
	150	118	74	41	22	14	8.28	2.91	
	119	97	66	40	23	114	9.48	5.51	
0	96	81	59	38	23	14	9.58	6.89	
1	79	69	52	36	23	14	9.68	7.02	
2	67	59	46	33	22	14	9.67	7.08	
3	57	51	41	31	22	14	9.99	7.14	
4	49	44	37	28	21	14	10	7.24	高度: m
5	43	39	33	26	20	14	10	7.34	 地面长度: ı
			2	3					照度: lux

Lighting Distribution

5406	237	16	2.74	0.81	20.33	10.15	0.07	Bear
1359	588	58	13	4.09	1.59	0.77	0.39	A angl
604	381	172	26	9.4	3.91	1.87	1.02	70°
340	253	146	69	15	6.54	3.34	1.83	, ,
218	178	118	75	33	8.96	4.89	2.8	
151	131	95	65	44	17	6.51	3.77	
111	99	77	56	41	26	11	4.83	
85	78	64	49	37	27	17	7.35	
67	63	53	42	33	26	19	11	
54	51	45	37	30	23	19	14	
45	43	38	32	26	22	18	14	
38	36	33	28	24	20	16	14	
32	31	28	25	21	18	15	13	
28	27	25	22	19	17	14	12	高度: n
24	23	22	20	18	15	13	11	地面长



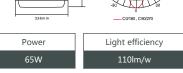




HB-AD-2065

HB-C-2045

#### **General Specifications** Material: Aluminum Housing Color: Black body, Silver lampshade Ambient temperature : -25℃~+45℃ Weight: 3.8kg



Input Voltage





Color Temperature	
5000K/3000K	

Beam angle

Luminous Flux

7150lm

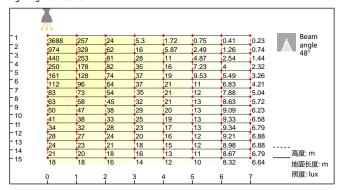


CRI	
80	

Beam angle	Design Lifetime
53°	60000hrs

CRI 80

#### Lighting Distribution



#### Lighting Distribution

**General Specifications** 

Housing Color: Black body,

Ambient temperature : -

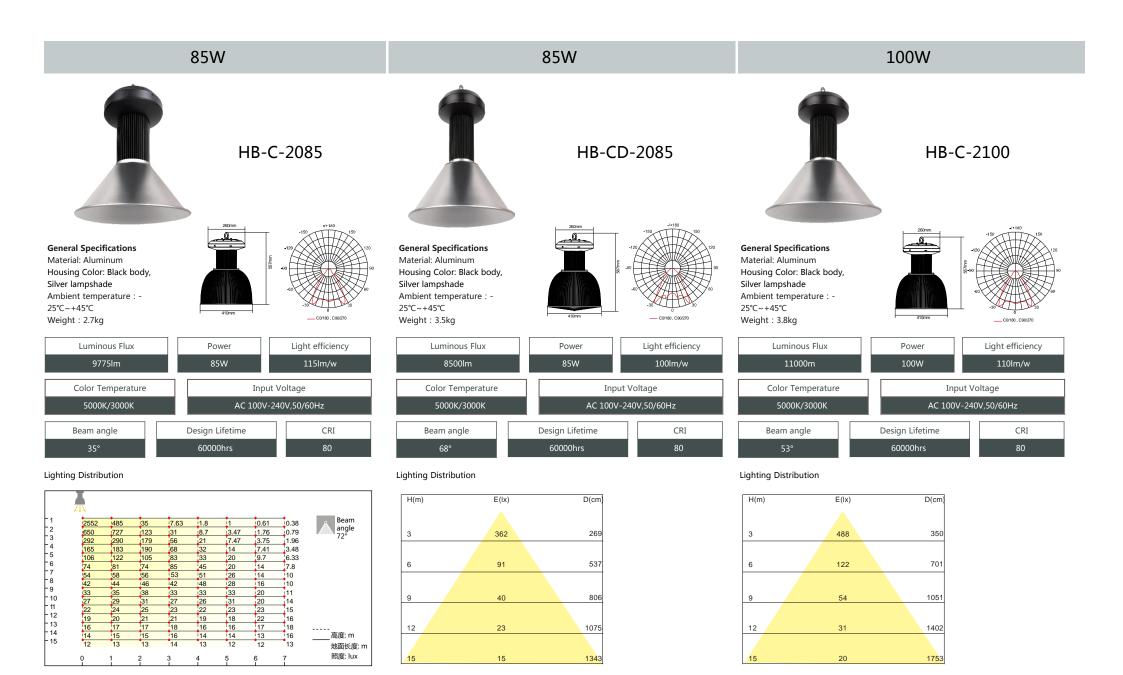
Material: Aluminum

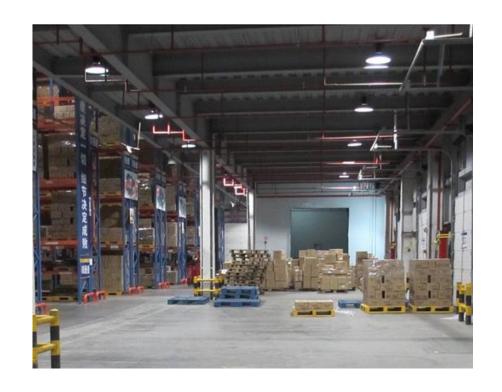
Silver lampshade

25℃~+45℃

H(m)	E(lx)	D(cm)
1	2149	99
2	537	199
3	239	298
4	134	398
5	86	497









Warehouse

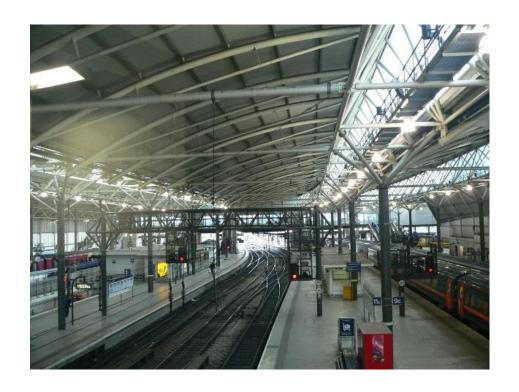
Supermarket





**Book Vault** 

Exhibition room





Train station

Factory