

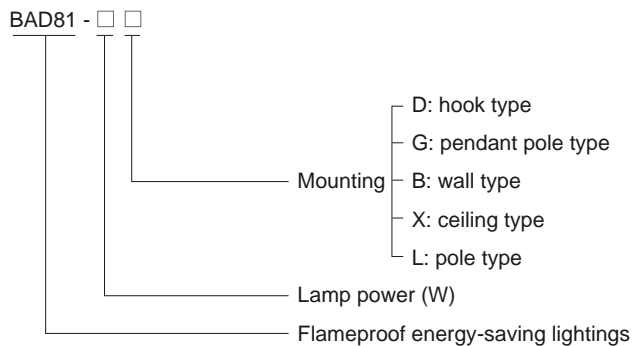


## Energy-saving Lightings

### BAD81 Series Flameproof Energy-saving Lightings

- ◆ Explosion protection to
  - CENELEC
  - IEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
- ◆ Two enclosure types separately for 42W and 68W compact energy-saving lamps, with good performance including rapid starting, flash free, high lighting efficiency, long service life and energy saving, etc.
- ◆ The luminous intensity of 42W compact energy-saving lamp equals to 80W mercury lamp; the luminous intensity of 68W compact energy-saving lamp equals to 125W mercury lamp.
- ◆ Powder coated wire guard, white.
- ◆ Toughened glass cover resistant to temperature changes.

#### Catalogue number logic



#### Selection table

Type/Ordering code	Lamp power(W)	Weight(kg)	Type/Ordering code	Lamp power(W)	Weight(kg)
BAD81-42D	42W	4.10	BAD81-68D	68W	6.20
BAD81-42G	42W	5.60	BAD81-68G	68W	7.70
BAD81-42B	42W	5.85	BAD81-68B	68W	7.95
BAD81-42X	42W	5.20	BAD81-68X	68W	7.30
BAD81-42L	42W	4.20	BAD81-68L	68W	6.30

- Note:** 1. Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/29).  
 2. The light fittings are supplied without external reflector. Please specify when ordering.  
 3. The light fittings are supplied with lamps.

Zones 1&2; 21&22

**Technical data**

**Flameproof energy-saving lightings BAD81-□□**

**Explosion protection**

Gas explosion protection  
 Dust explosion protection

⊕ II 2 G Ex d IIC T4  
 Ex tD A21 T130°C IP65

**Certificates**

For gas explosion protection  
 For dust explosion protection

LCIE 07 ATEX 6037; IECEx CQM 08.0002  
 PCEC (China)

**Conformity to standards**

EN 60079-0: 2006, EN 60079-1: 2004  
 IEC 60079-0: 2004, IEC 60079-1: 2003, IEC 61241-0: 2004, IEC 61241-1: 2004

**Material**

Enclosure  
 Wire guard  
 Transparent cover  
 Internal reflector  
 External reflector (optional)  
 Exposed fastener

Copper-free aluminium, powder coated external surface, yellow (RAL1021)  
 Powder coated carbon steel (white)  
 Toughened glass, stands 4J impact  
 High-purity aluminium  
 Pure aluminium, anodicoxidation treatment for surface  
 Stainless steel

**Lamp**

Lamp holder  
 Lamp brand  
 Lamp power (W)

E27  
 TCP (for sealed atmosphere)  
 42W  
 68W

**Rated voltage**

220~240V AC 50/60Hz

**Earthing protection**

M5 (internal & external earth bolts)

**Degree of protection**

IP65

**Ambient temperature**

-20°C~+55°C

**Terminal**

3 x 1.5~2.5mm<sup>2</sup> (L+N+PE)

**Cable entries**

G3/4" (NPT3/4" or M25x1.5 with reducer on request)

**Cable gland**

See Mounting Accessories and Spare Parts Table

**Available cable outer diameter**

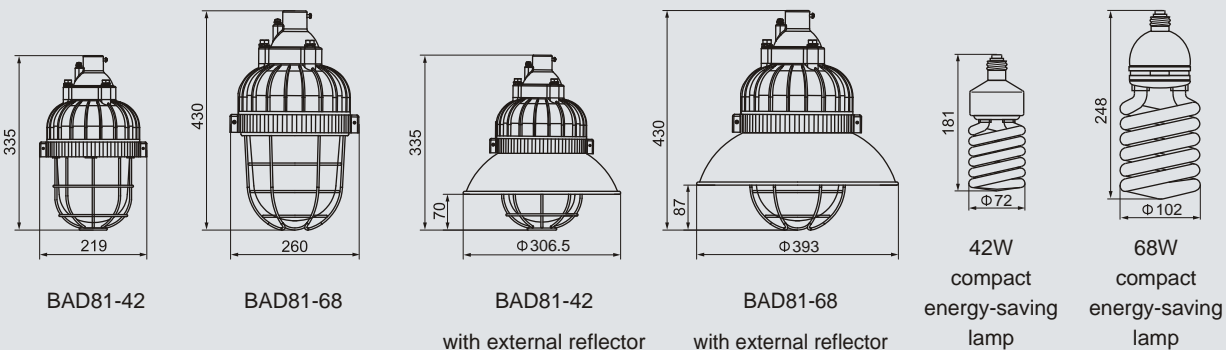
Φ10~Φ14 (mm)



**Lamp data**

Energy-saving lamp	Rated voltage	Working current	Luminous flux	Service life
42W	220~240V AC	380mA	2800lm	10000h
68W	220~240V AC	618mA	4200lm	10000h

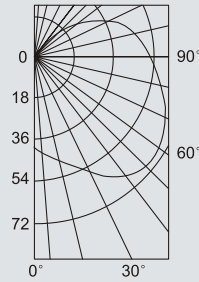
**Dimension drawings (all dimensions in mm) - subject to alteration**



### Photometric data

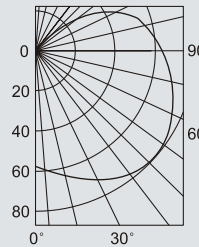


Photometric data of 42W compact energy-saving lamp  
Rated luminous flux:2800lm;  
The data from TCP lamp;  
Luminous intensity distribution cd/1000lm



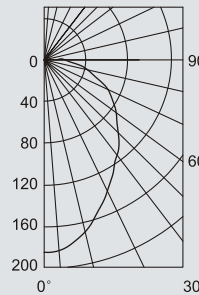
Angle	CP	Angle	CP	Angle	CP
0	115	60	196	120	96
5	129	65	190	125	79
10	135	70	190	130	66
15	152	75	182	135	49
20	162	80	173	140	33
25	170	85	170	145	19
30	181	90	159	150	0
35	197	95	156	155	0
40	209	100	146	160	0
45	213	105	140	165	0
50	212	110	132	170	0
55	204	115	107	175	0
				180	0

Photometric data of 68W compact energy-saving lamp  
Rated luminous flux:4200lm;  
The data from TCP lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP	Angle	CP
0	249	60	331	120	172
5	241	65	322	125	150
10	244	70	316	130	125
15	257	75	305	135	100
20	273	80	280	140	76
25	283	85	263	145	53
30	292	90	261	150	33
35	313	95	255	155	16
40	325	100	246	160	0
45	332	105	225	165	0
50	336	110	217	170	0
55	334	115	199	175	0
				180	0

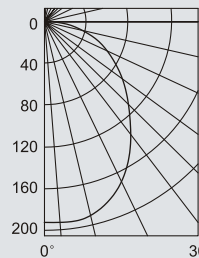
Photometric data of 42W compact energy-saving lamp (with wide reflector)  
Rated luminous flux:2800lm;  
The data from TCP lamp;  
Luminous intensity distribution cd/1000lm



Angle	CP	Angle	CP
0	482	50	240
5	477	55	219
10	461	60	197
15	433	65	171
20	403	70	149
25	371	75	117
30	341	80	91
35	313	85	65
40	290	90	37
45	265		



Photometric data of 68W compact energy-saving lamp (with wide reflector)  
Rated luminous flux:4200lm;  
The data from TCP lamp;  
Luminous intensity distribution cd/1000lm



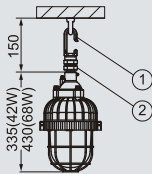
Angle	CP	Angle	CP
0	482	50	240
5	477	55	219
10	461	60	197
15	433	65	171
20	403	70	149
25	371	75	117
30	341	80	91
35	313	85	65
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45	265		



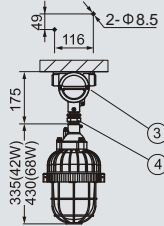
**Mounting type** (all dimensions in mm) - subject to alteration

Installation reference

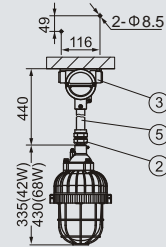
D: hook type



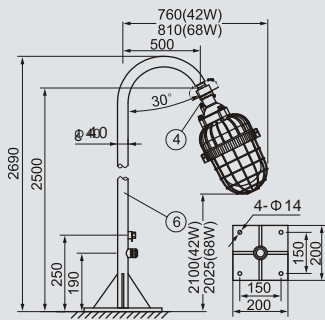
X: ceiling type



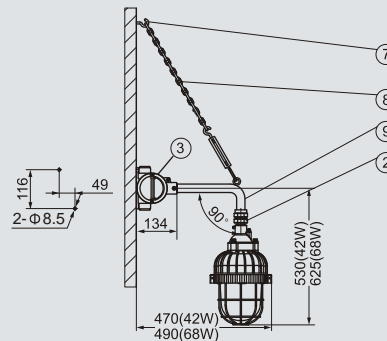
G: pendant pole type



L: pole type

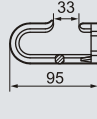



B: wall type



**Mounting accessories and spare parts table**

Supplied according to the mounting type

Mounting type	Accessories			Ordering code	Weight (kg)
	Name	Qty	Illustration		
D: hook type	①.Hook (stainless steel)	1		61020	0.20
	②.BGJ-III Explosion-proof connector	1	G3/4" (M)/M25 x 1.5(F) Carbon steel	81D20	0.26
X: ceiling type	③.BHD51 Explosion-proof junction box	1	Copper-free aluminium (Ex d IIC)	BHD51-F	0.80
	④.BGJ-III Explosion-proof connector	1	M25 x 1.5(M)/ G3/4" (M) Carbon steel	81X01	0.30
G: pendant pole type	②.BGJ-III Explosion-proof connector	1	G3/4" (M)/M25 x 1.5(F) Carbon steel	81D02	0.26
	③.BHD51 Explosion-proof junction box	1	Copper-free aluminium (Ex d IIC)	BHD51-F	0.80
	⑤.Straight pipe (M25 x 1.5)	1	Length: 300mm	81G01	0.41
L: pole type	④.BGJ-III Explosion-proof connector	1	M25 x 1.5(M)/ G3/4" (M) Carbon steel	81X01	0.30
	⑥.Pole	1	Φ 40mm	81L01	-
B: wall type	②.BGJ-III Explosion-proof connector	1	G3/4" (M)/M25 x 1.5(F) Carbon steel	81D02	0.26
	③.BHD51 Explosion-proof junction box	1	Copper-free aluminium (Ex d IIC)	BHD51-F	0.80
	⑨.Elbow pipe 90° (M25 x 1.5)	1	Length: 400mm	51022	0.55
	⑧.Chain	1	Length: 580mm	80B11	0.09
	⑦.Hook expansion bolt	1		52017	0.03

**Note:** 1. Accessories not in the table shall be supplied by user.

2. Pole ⑥ shall not be supplied with light fittings; if required, please specify when ordering.