

LED BULB LAMP SPECIFICATION

AC Direct Driving LED Bulb Lamp

MODEL NAME	PBA-0422-04A, PBA-0622-04A, PBA-0822-04A PBA-1022-04A, PBA-1222-04A
PRODUCT	LED Bulb Lamp / AC Direct Driving
SHEET STATUS	Rev. 0
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REVISION HISTORY

No.	Date	Description	Ver.	Editor
1	2016.11.23	Preliminary edition is published	0	YG Han

CONTENTS

PRODUCTION SELECTION TABLE	.....	4
<hr/>		
FEATURES	.....	5
<hr/>		
APPLICATIONS	.....	5
<hr/>		
ELECTRICAL CHARACTERISTICS	.....	6
<hr/>		
OPTICAL CHARACTERISTICS	.....	7
<hr/>		
LUMINOUS INTENSITY DISTRIBUTION	.....	9
<hr/>		
CONICAL ILLUMINANCE	.....	11
<hr/>		
PRODUCT DIMENSIONS	.....	12
<hr/>		

PRODUCT SELECTION TABLE^{*1)}

Model Name		CCT		Power	Input Voltage	CRI	Certificate
		Color	Typ.			Min	
PBA-0422-04A	PBA-0422-WW-04A_30K80	Warm	3000K	4W	AC220/230V 50/60Hz	80	KC
	PBA-0422-NW-04A_40K80	Neutral	4000K				
	PBA-0422-CW-04A_57K80	Cool	5700K				
PBA-0622-04A	PBA-0622-WW-04A_30K80	Warm	3000K	6W			
	PBA-0622-NW-04A_40K80	Neutral	4000K				
	PBA-0622-CW-04A_57K80	Cool	5700K				
PBA-0822-04A	PBA-0822-WW-04A_30K80	Warm	3000K	8W			
	PBA-0822-NW-04A_40K80	Neutral	4000K				
	PBA-0822-CW-04A_57K80	Cool	5700K				
PBA-1022-04A	PBA-1022-WW-04A_30K80	Warm	3000K	10W			
	PBA-1022-NW-04A_40K80	Neutral	4000K				
	PBA-1022-CW-04A_57K80	Cool	5700K				
PBA-1222-04A	PBA-1222-WW-04A_30K80	Warm	3000K	12W			
	PBA-1222-NW-04A_40K80	Neutral	4000K				
	PBA-1222-CW-04A_57K80	Cool	5700K				

- *1) Please include color option (CCT) in your purchase order.

FEATURES

- AC Direct Driving LED Light
- Life Time to Failure > 50,000 hours
- Low THD (Total Harmonic Distortion)
- High Power Efficiency and PF
- NTC (Negative Temperature Coefficient)
- Dimmable with Most Standard LED Dimmer & RFsemi 2-wire Dimmer
- **Water Resistant**
- 5 year Manufacture's Warranty

APPLICATIONS

- Home
- Shopping mall
- Restaurant
- Chicken farm
- Hotel



ELECTRICAL CHARACTERISTICS

 $T_A = 25\text{ }^\circ\text{C}$

Parameter	Model	Condition	Symbol	Min.	Typ.	Max.	Unit
Input Power	PBA-0422-04A	$V_{AC} = 220V$	P_{IN}	3.6	4	4.4	W
	PBA-0622-04A			5.4	6	6.6	
	PBA-0822-04A			7.2	8	8.8	
	PBA-1022-04A			9	10	11	
	PBA-1222-04A			10.8	12	13.2	
Operating Voltage	PBA-0422-04A PBA-0622-04A PBA-0822-04A PBA-1022-04A PBA-1222-04A		V_{AC}	200	220	240	V [RMS]
Operating Frequency			Freq.	50 / 60			Hz
Total Harmonic Distortion		$V_{AC} = 220V$	THD			20	%
Power Factor			PF	0.95	0.98	-	-
Operating Temperature		T_A	T_{op}	-30		50	$^\circ\text{C}$

OPTICAL CHARACTERISTICS

 T_A = 25 °C

PBA-0422-04A						
Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Luminous Flux ^{*1)}	CCT = 3000K	∅ _v		200		lm
	CCT = 4000K			230		
	CCT = 5700K			230		
Luminous Efficacy	CCT = 3000K	η		50		lm/W
	CCT = 4000K			58		
	CCT = 5700K			58		
Color Rendering Index		Ra	80			-
View angle ^{*2)}		2∅ _{1/2}		180		deg.

 T_A = 25 °C

PBA-0622-04A						
Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Luminous Flux ^{*1)}	CCT = 3000K	∅ _v		460		lm
	CCT = 4000K			540		
	CCT = 5700K			540		
Luminous Efficacy	CCT = 3000K	η		78		lm/W
	CCT = 4000K			90		
	CCT = 5700K			90		
Color Rendering Index		Ra	80			-
View angle ^{*2)}		2∅ _{1/2}		215		deg.

 T_A = 25 °C

PBA-0822-04A						
Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Luminous Flux ^{*1)}	CCT = 3000K	∅ _v		630		lm
	CCT = 4000K			680		
	CCT = 5700K			680		
Luminous Efficacy	CCT = 3000K	η		80		lm/W
	CCT = 4000K			85		
	CCT = 5700K			85		
Color Rendering Index		Ra	80			-
View angle ^{*2)}		2∅ _{1/2}		215		deg.

T_A = 25 °C

PBA-1022-04A						
Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Luminous Flux ^{*1)}	CCT = 3000K	Ø _v		900		lm
	CCT = 4000K			940		
	CCT = 5700K			940		
Luminous Efficacy	CCT = 3000K	η		90		lm/W
	CCT = 4000K			94		
	CCT = 5700K			94		
Color Rendering Index		Ra	80			-
View angle ^{*2)}		2Θ _{1/2}		215		deg.

 T_A = 25 °C

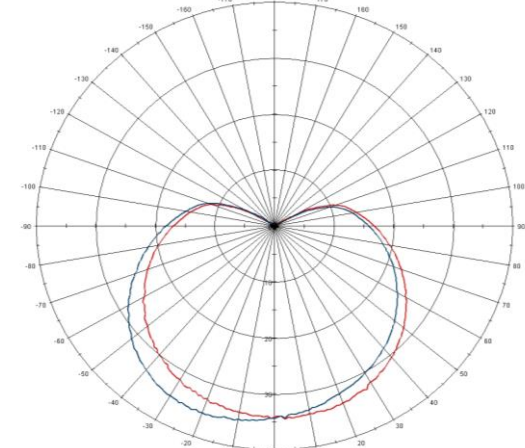
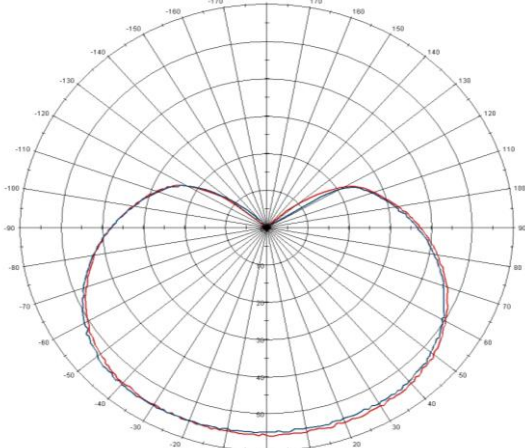
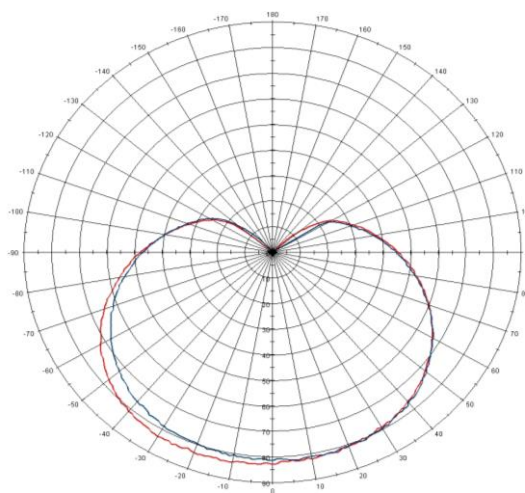
PBA-1222-04A						
Parameter	Condition	Symbol	Min.	Typ.	Max.	Unit
Luminous Flux ^{*1)}	CCT = 3000K	Ø _v		1080		lm
	CCT = 4000K			1150		
	CCT = 5700K			1150		
Luminous Efficacy	CCT = 3000K	η		90		lm/W
	CCT = 4000K			95		
	CCT = 5700K			95		
Color Rendering Index		Ra	80			-
View angle ^{*2)}		2Θ _{1/2}		215		deg.

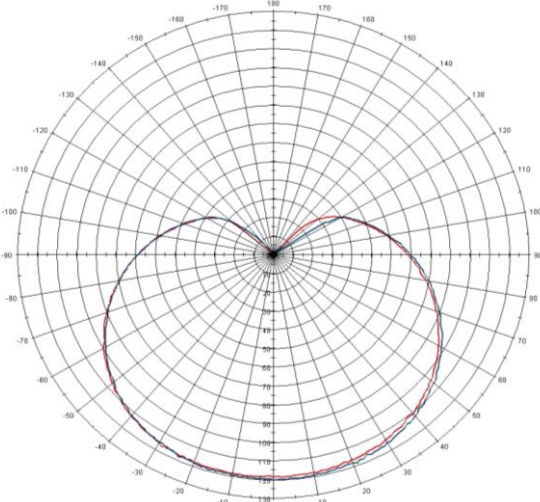
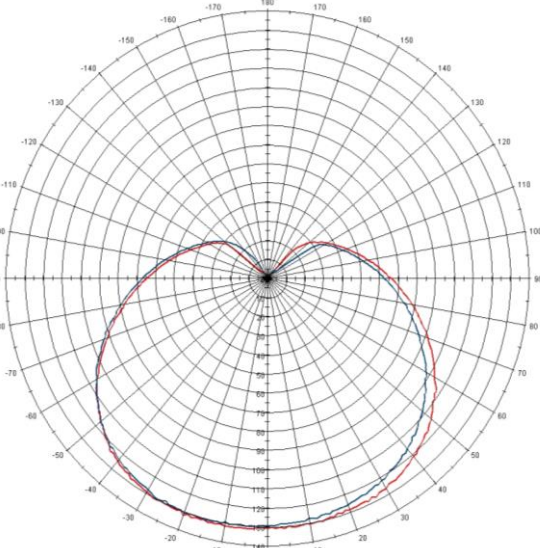
*1) Measurement tolerance : Flux ± 5%

*2) 2Θ_{1/2} is the off-axis where the luminous intensity is 1/2 of the peak intensity

LUMINOUS INTENSITY DISTRIBUTION

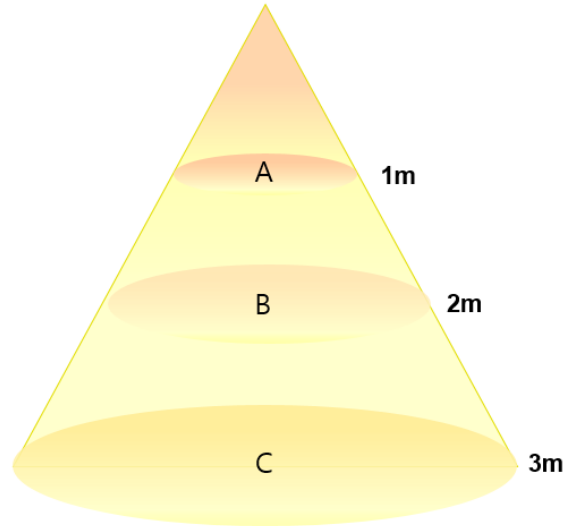
T_A = 25 °C

Model	Photometric Distribution
PBA-0422-04A	
PBA-0622-04A	
PBA-0822-04A	

Model	Photometric Distribution
PBA-1022-04A	 <p>The diagram for PBA-1022-04A is a circular photometric distribution plot. The vertical axis represents the beam angle from 0° at the top to 180° at the bottom, with major grid lines every 10 degrees. The horizontal axis represents the azimuthal angle from -180° to 180°, with major grid lines every 10 degrees. The plot shows a beam that is nearly circular but has a slight lobe extending downwards, reaching approximately 170° at the bottom. The beam diameter is roughly 120 degrees.</p>
PBA-1222-04A	 <p>The diagram for PBA-1222-04A is a circular photometric distribution plot, similar to the one above. It shows a beam with a slight lobe extending downwards, reaching approximately 170° at the bottom. The beam diameter is roughly 120 degrees.</p>

CONICAL ILLUMINANCE

T_A = 25 °C

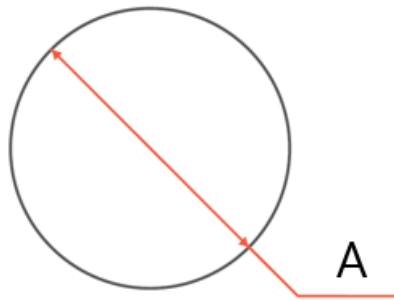


Unit : lx

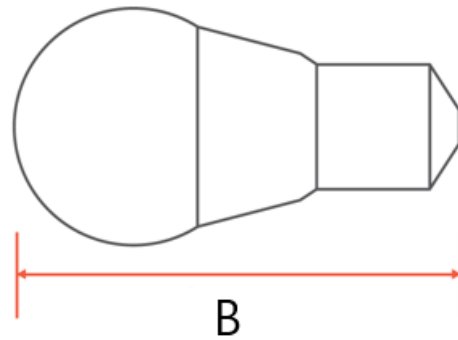
Model Name	3000K			4000K / 5700K		
	A	B	C	A	B	C
PBA-0422-04A	34	8	4	37	9	4
PBA-0622-04A	71	18	8	80	20	9
PBA-0822-04A	93	23	10	96	24	11
PBA-1022-04A	123	30	13	130	32	14
PBA-1222-04A	146	37	16	154	39	17

PRODUCT DIMENSIONS

Base type : E26/E27, B22



Top view



Side view

Unit : mm

Model Name	A	B
PBA-0422-04A	Ø50	91
PBA-0622-04A	Ø60	111
PBA-0822-04A	Ø65	118
PBA-1022-04A	Ø70	124
PBA-1222-04A	Ø82	146