

# PRODUCT CATALOG

**BARREL Co., Ltd.**

Aoi Tsuya Tomo Building 2F, 1-7-15 Aoi, Higashi-ku, Nagoya-shi, Aichi 453-0831

TEL: (052) 386-7923 FAX: (052) 307-3299

# INTRODUCTION.

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*About*  
**01**

## ABOUT PHOTOSYNTHESIS OF PLANTS HOW PLANTS GROW ON OUR LEDS.

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ALL OF OUR LED LIGHTS ARE "PLANT GROWING LIGHTS".  
THIS PLANT GROWING LIGHT IS A LIGHT THAT GROWS PLANTS  
WITH ARTIFICIAL LIGHT INSTEAD OF SUNLIGHT.

SINCE IT IS A LIGHT MADE ONLY WITH  
THE WAVELENGTH THAT IS MOST EFFECTIVE FOR PLANTS,  
THE PLANTS GROW QUICKLY, AND WHEN GROWING VEGETABLES,  
THE AMOUNT OF VITAMINS INCREASES DRAMATICALLY.

*About*  
**02**

## REGARDING THE COLOR RENDERING INDEX,

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THE NUMERICAL VALUE RA100 IS SET FOR SUNLIGHT.

THE CLOSER IT IS TO RA100, THE CLOSER IT IS TO  
THE COLOR RENDERING OF SUNLIGHT.

THE HIGHER THE NUMBER, THE MORE BEAUTIFUL MONO LOOKS AND  
THE MORE BEAUTIFUL THE PLANTS LOOK.

LET'S SAY THE NUMERICAL VALUE OF SUNLIGHT IS RA100,  
IT IS CLOSER TO THE COLOR RENDERING PROPERTY OF SUNLIGHT.

THE HIGHER THE NUMBER,  
THE MORE BEAUTIFUL MONO LOOKS AND  
THE MORE BEAUTIFUL THE PLANTS LOOK.

# SUN-10W-S

PRODUCTNUMBER NO.1

MODELNUMBER SUN-10W-S



## PRODUCT SPECIFICATIONS

● Illuminance (LUX) **8100lux** ● Luminous flux(Lumen) **765lm**

⚡ Socket (BASE) **E26** ⚡ Power Consumption **10W**

📊 Photosynthetic photon rapid density PPFD (when the irradiation distance is 30cm) **182 $\mu$ mol m<sup>-2</sup> s<sup>-1</sup>**

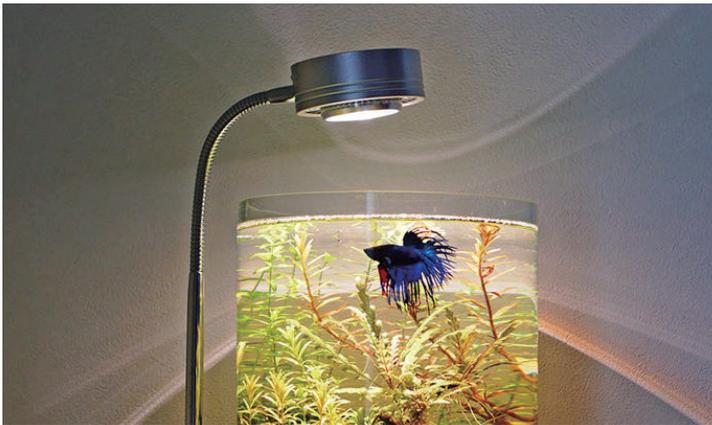
🕒 Rated life **30000hours**

🌈 Color Rendering Index (Ra) **Ra97**

## SIZE

Full length	50cm	Rated input current	90mA	Recommended irradiation distance	15cm~50cm	LED chip	COB
Light diameter	8.5cm	Rated voltage	100-240V	Color temperature	about 2900K	Power cord length	180cm
Weight	760g	Indoor AC	100V50-60Hz	Beam angle	45°	Base diameter	12cm

## USE CASE PHOTO

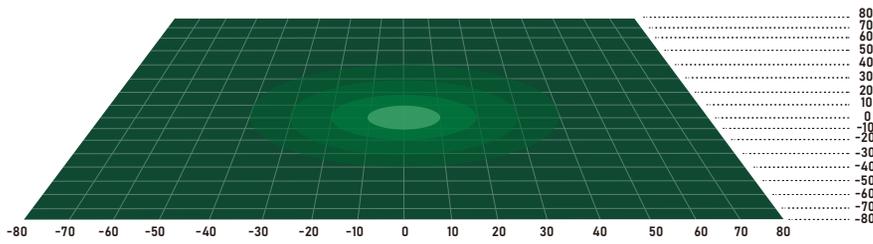


## 1 MONTH ELECTRICITY BILL

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# SUN-10W-S 02

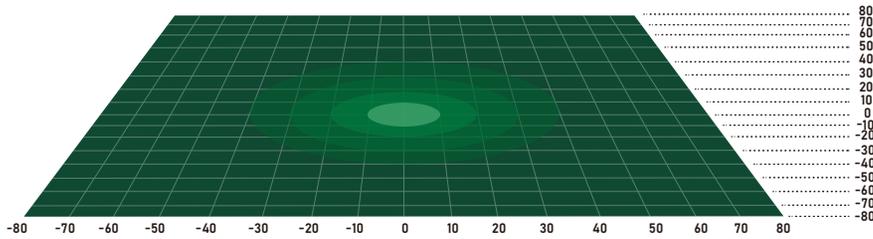
Photosynthetic photon flux density (normal / with reflector)



**Irradiation distance 10cm**

**Irradiation range 30cm**

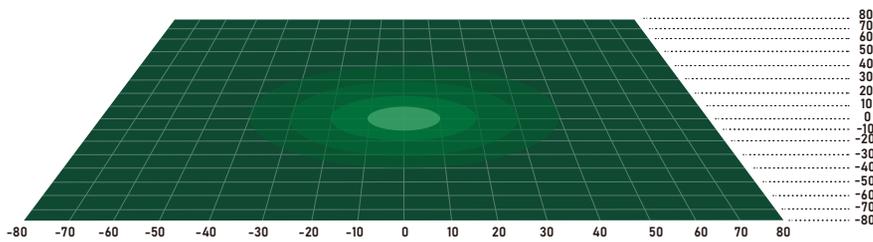
Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 450	● PPFD 200	● PPFD 2	● PPFD 2
● LUX 18550	● LUX 8760	● LUX 90	● LUX 80
Distance from the center 40cm			
● PPFD 2			
● LUX 80			



**Irradiation distance 20cm**

**Irradiation range 40cm**

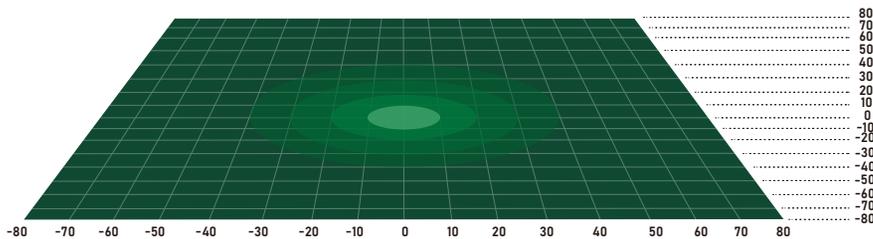
Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 378	● PPFD 100	● PPFD 6	● PPFD 2
● LUX 17120	● LUX 4280	● LUX 230	● LUX 90
Distance from the center 40cm			
● PPFD 2			
● LUX 90			



**Irradiation distance 30cm**

**Irradiation range 60cm**

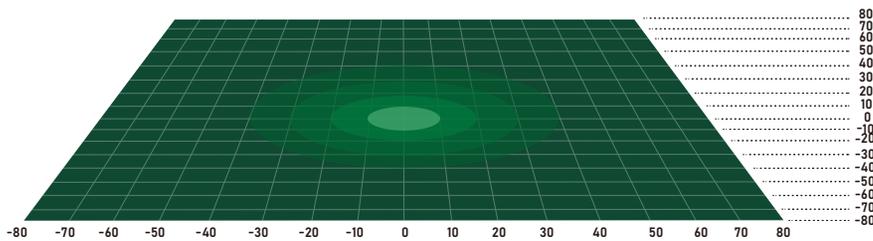
Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 182	● PPFD 140	● PPFD 41	● PPFD 8
● LUX 8100	● LUX 6100	● LUX 1740	● LUX 340
Distance from the center 40cm			
● PPFD 3			
● LUX 120			



**Irradiation distance 40cm**

**Irradiation range 80cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 99	● PPFD 66	● PPFD 24	● PPFD 9
● LUX 4410	● LUX 2900	● LUX 1040	● LUX 400
Distance from the center 40cm			
● PPFD 3			
● LUX 130			



**Irradiation distance 50cm**

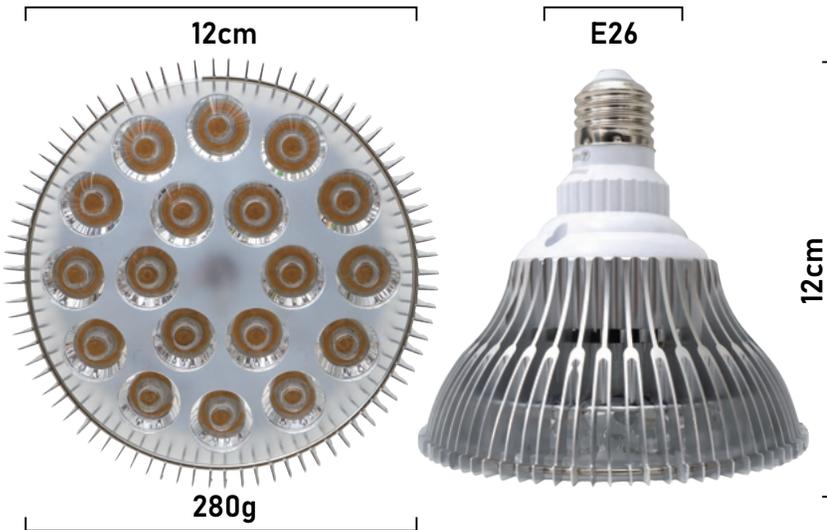
**Irradiation range 100cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 63	● PPFD 49	● PPFD 28	● PPFD 12
● LUX 2800	● LUX 2140	● LUX 1240	● LUX 520
Distance from the center 40cm			
● PPFD 6			
● LUX 250			

# SUN-18W

PRODUCT NUMBER NO.2

MODEL NUMBER SUN-18W



## PRODUCT SPECIFICATIONS

● Illuminance (LUX) **14110lux** ● Luminous flux(Lumen) **1445lm**

≡ Socket (BASE) **E26** ⚡ Power Consumption **18W**

▬ Photosynthetic photon rapid density PPF (when the irradiation distance is 40cm) **340μmol m<sup>-2</sup> s<sup>-1</sup>**

🕒 Rated life **30000hours**

🌿 Color Rendering Index (Ra) **Ra95**

## SIZE

Full length	12cm	Rated input current	170mA	Recommended irradiation distance	40cm~150cm	LED chip	SMD
Light diameter	12cm	Rated voltage	100~240V	Color temperature	about 3300K	Power cord length	30°
Weight	280g	Indoor AC	AC 100V~240V 50~60Hz				

## USE CASE PHOTO

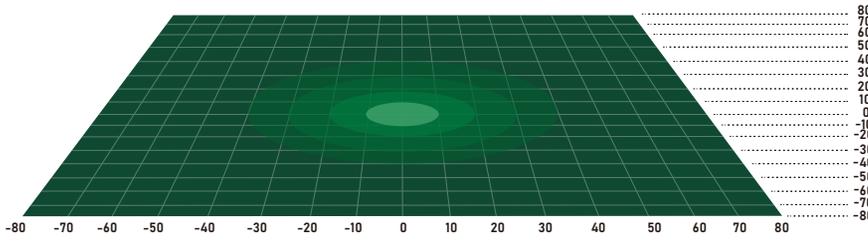


## 1 MONTH ELECTRICITY BILL

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

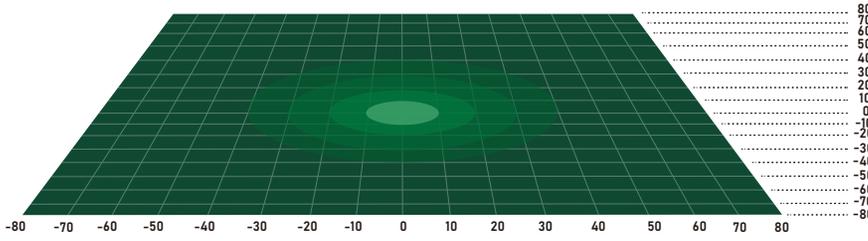
# SUN-18W 02

Photosynthetic photon flux density (normal / with reflector)



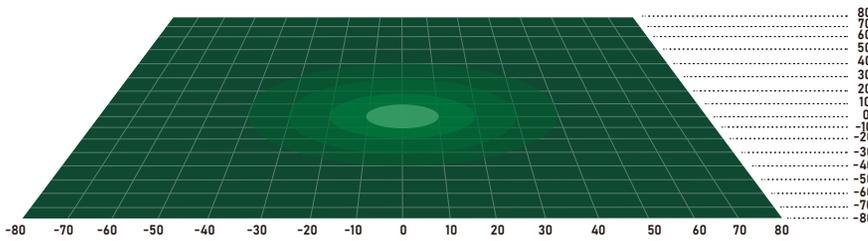
**Irradiation distance 40cm**  
**Irradiation range 40cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 340	● PPFD 112	● PPFD 12	● PPFD 6
● LUX 14110	● LUX 4480	● LUX 490	● LUX 240
Distance from the center 40cm			
● PPFD 6			
● LUX 240			



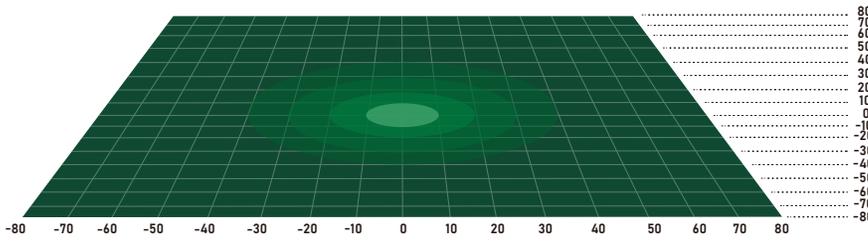
**Irradiation distance 60cm**  
**Irradiation range 60cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 160	● PPFD 134	● PPFD 63	● PPFD 10
● LUX 6450	● LUX 5460	● LUX 2520	● LUX 430
Distance from the center 40cm			
● PPFD 6			
● LUX 240			



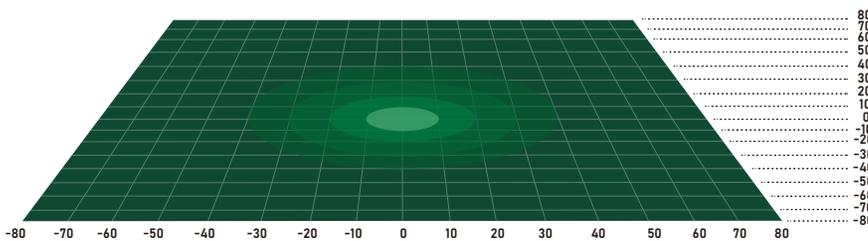
**Irradiation distance 80cm**  
**Irradiation range 80cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 90	● PPFD 63	● PPFD 27	● PPFD 8
● LUX 3670	● LUX 2550	● LUX 1090	● LUX 330
Distance from the center 40cm			
● PPFD 6			
● LUX 240			



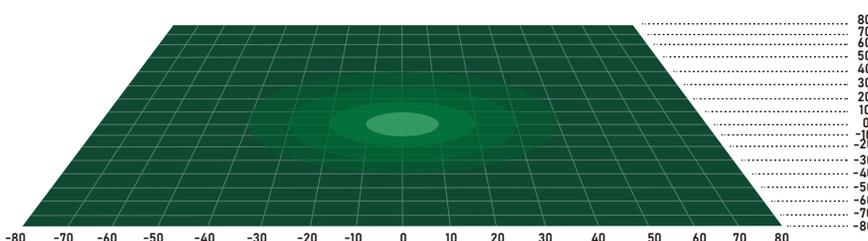
**Irradiation distance 100cm**  
**Irradiation range 100cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 60	● PPFD 51	● PPFD 34	● PPFD 17
● LUX 2470	● LUX 2070	● LUX 1380	● LUX 680
Distance from the center 40cm			
● PPFD 7			
● LUX 290			



**Irradiation distance 120cm**  
**Irradiation range 120cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 40	● PPFD 38	● PPFD 32	● PPFD 23
● LUX 1610	● LUX 1540	● LUX 1280	● LUX 930
Distance from the center 40cm			
● PPFD 14			
● LUX 570			



**Irradiation distance 150cm**  
**Irradiation range 150cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 26	● PPFD 25	● PPFD 22	● PPFD 16
● LUX 1060	● LUX 1020	● LUX 890	● LUX 650
Distance from the center 40cm			
● PPFD 10			
● LUX 400			

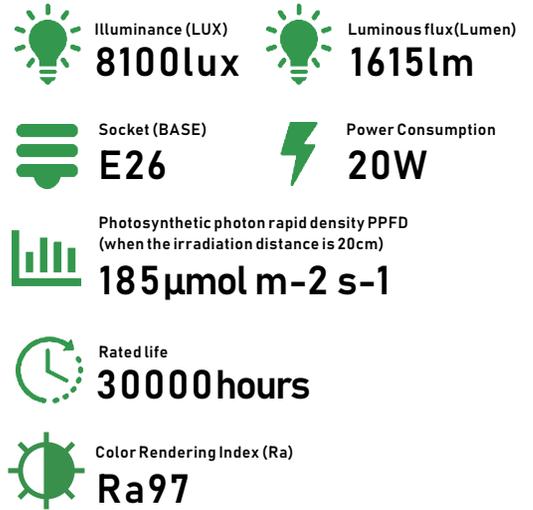
# SUN-20W-W

PRODUCTNUMBER NO.3

MODELNUMBER SUN-20W-W



## PRODUCT SPECIFICATIONS



## SIZE

Full length	12cm	Rated input current	190mA	Recommended irradiation distance	30cm~100cm	LED chip	COB
Light diameter	12cm	Rated voltage	100-240V	Color temperature	about 3200K	Power cord length	45°
Weight	360g	Indoor AC	100V50-60Hz				

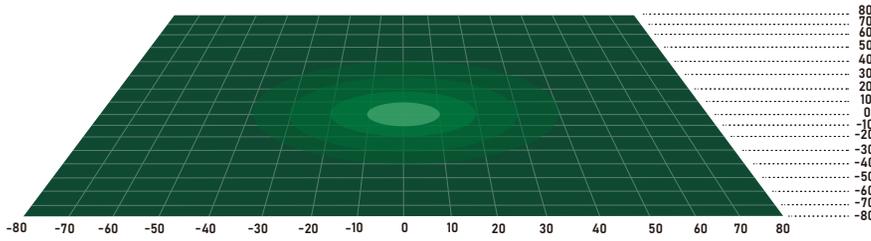
## USE CASE PHOTO



## 1 MONTH ELECTRICITY BILL

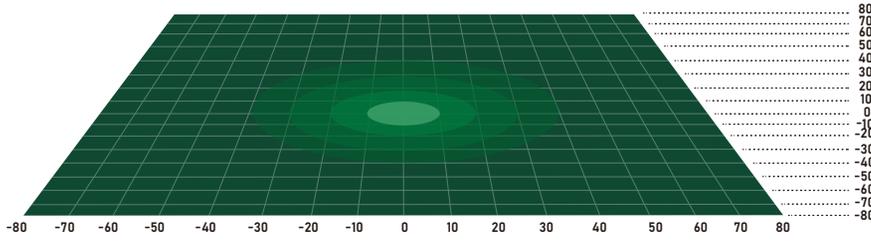
Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# SUN-20W-W 02 | Photosynthetic photon flux density (normal / with reflector)



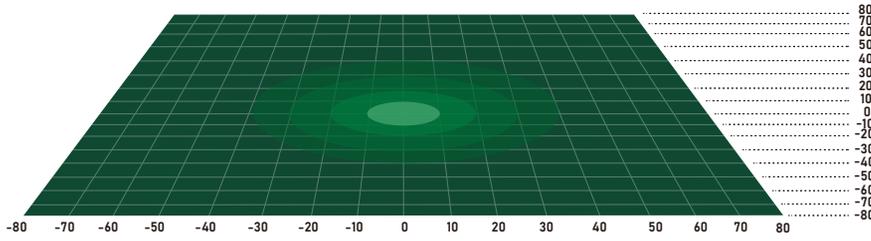
**Irradiation distance 20cm**  
**Irradiation range 70cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 185	● PPFD 120	● PPFD 60	● PPFD 12
● LUX 8100	● LUX 5150	● LUX 2600	● LUX 560
Distance from the center 40cm			
● PPFD 6			
● LUX 260			



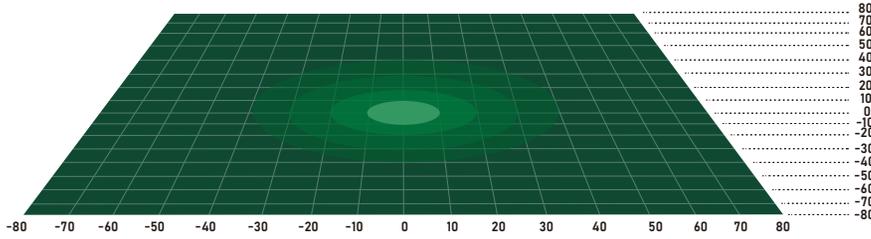
**Irradiation distance 30cm**  
**Irradiation range 90cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 100	● PPFD 85	● PPFD 40	● PPFD 11
● LUX 4360	● LUX 3780	● LUX 1730	● LUX 510
Distance from the center 40cm			
● PPFD 4			
● LUX 190			



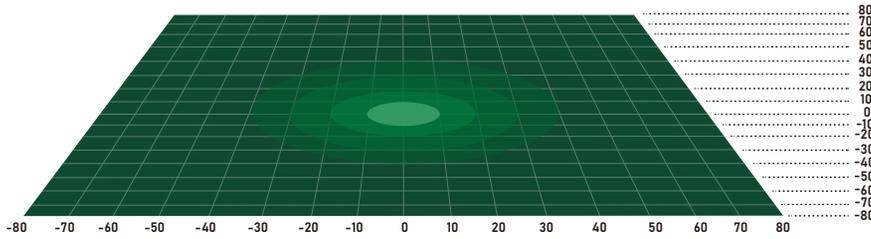
**Irradiation distance 40cm**  
**Irradiation range 120cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 58	● PPFD 47	● PPFD 32	● PPFD 22
● LUX 2520	● LUX 2050	● LUX 1370	● LUX 950
Distance from the center 40cm			
● PPFD 8			
● LUX 410			



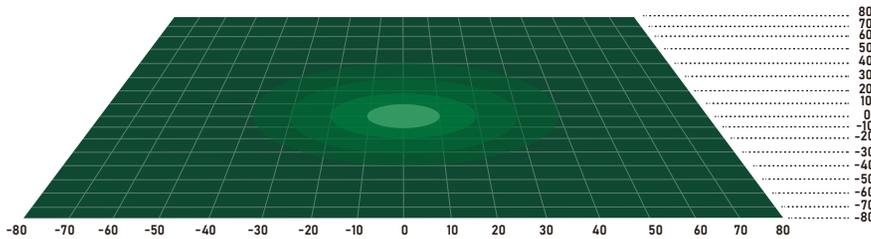
**Irradiation distance 60cm**  
**Irradiation range 150cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 32	● PPFD 24	● PPFD 22	● PPFD 17
● LUX 970	● LUX 1040	● LUX 970	● LUX 760
Distance from the center 40cm			
● PPFD 12			
● LUX 540			



**Irradiation distance 80cm**  
**Irradiation range 170cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 17	● PPFD 16	● PPFD 14	● PPFD 11
● LUX 760	● LUX 700	● LUX 610	● LUX 500
Distance from the center 40cm			
● PPFD 10			
● LUX 430			



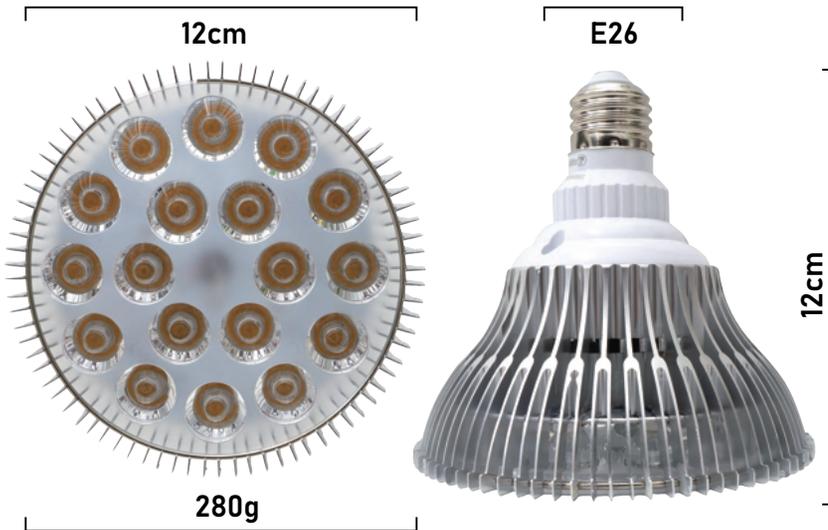
**Irradiation distance 100cm**  
**Irradiation range 190cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 12	● PPFD 11	● PPFD 10	● PPFD 10
● LUX 510	● LUX 470	● LUX 440	● LUX 420
Distance from the center 40cm			
● PPFD 9			
● LUX 370			

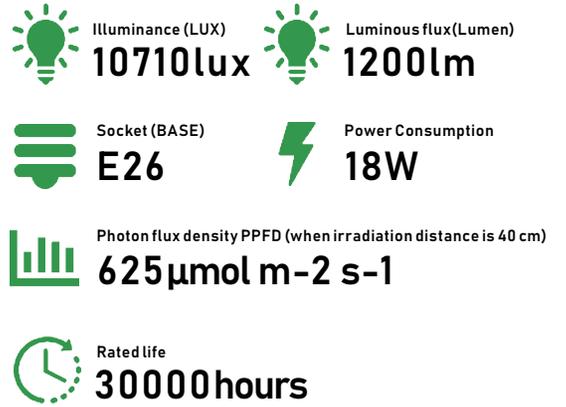
# OPT-18W

PRODUCT NUMBER NO.4

MODEL NUMBER OPT-18W



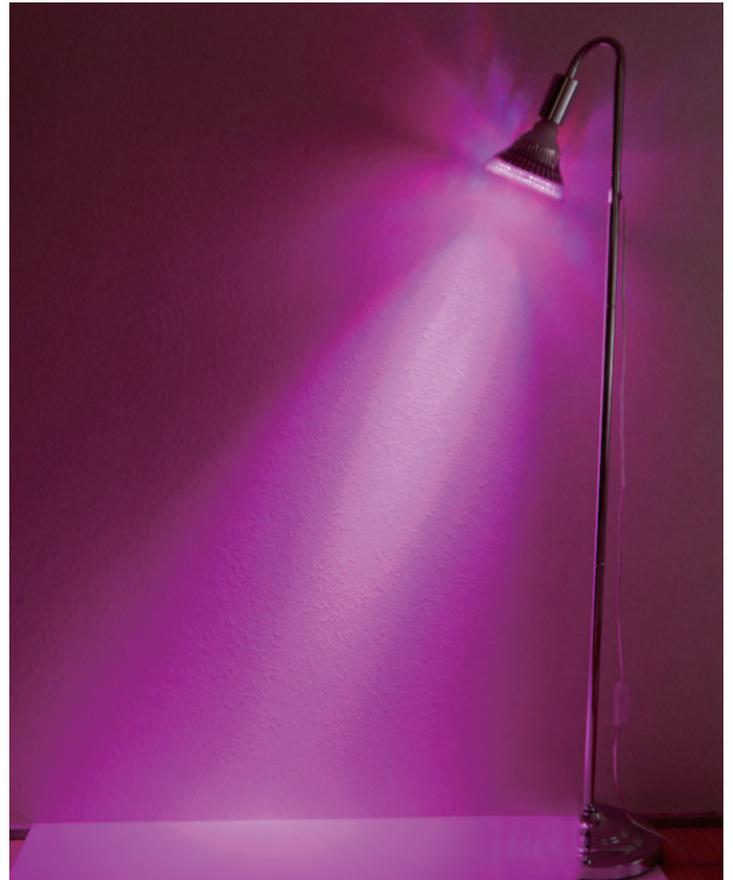
## PRODUCT SPECIFICATIONS



## SIZE

Full length	12cm	Rated input current	150mA	Recommended irradiation distance	40cm~150cm	LED chip	SMD
Light diameter	12cm	Rated voltage	100~240V	Color temperature	about 1700K	Power cord length	30°
Weight	280g	Indoor AC	100~240V50~60Hz				

## USE CASE PHOTO

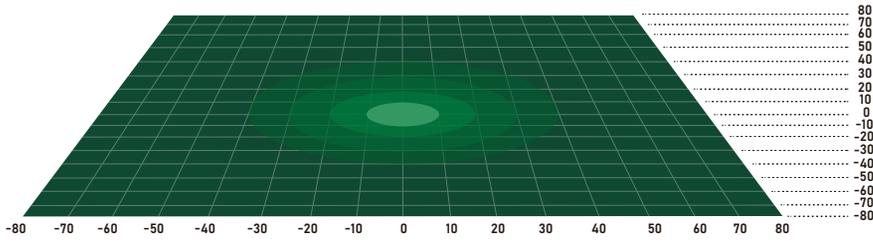


## 1 MONTH ELECTRICITY BILL

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# OPT-18W 02

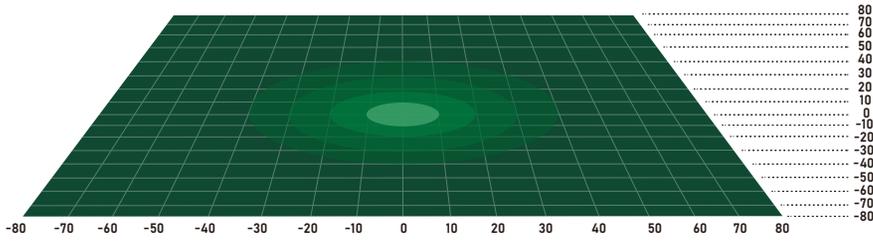
| Photosynthetic photon flux density (normal / with reflector)



**Irradiation distance 40cm**

**Irradiation range 40cm**

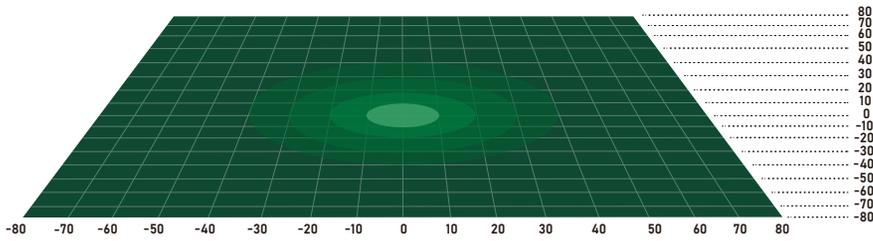
Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 625	● PPFD 186	● PPFD 14	● PPFD 3.5
● LUX 10710	● LUX 3180	● LUX 214	● LUX 55
Distance from the center 40cm	Distance from the center 50cm		
● PPFD 2.9	● PPFD 2.3		
● LUX 45	● LUX 37		



**Irradiation distance 60cm**

**Irradiation range 60cm**

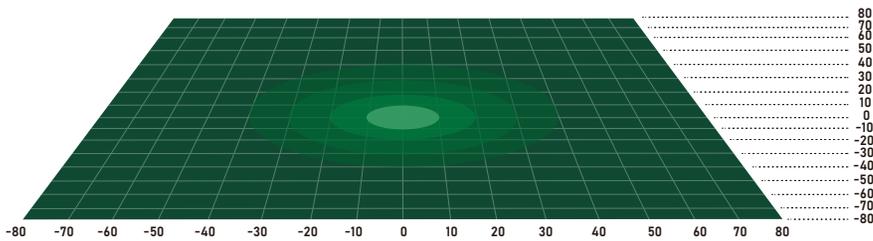
Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 360	● PPFD 143	● PPFD 66	● PPFD 6.6
● LUX 6560	● LUX 2310	● LUX 1170	● LUX 106
Distance from the center 40cm	Distance from the center 50cm		
● PPFD 2.4	● PPFD 1.6		
● LUX 39	● LUX 25		



**Irradiation distance 80cm**

**Irradiation range 80cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 229	● PPFD 111	● PPFD 67	● PPFD 24
● LUX 4260	● LUX 1870	● LUX 1160	● LUX 430
Distance from the center 40cm	Distance from the center 50cm		
● PPFD 4.4	● PPFD 2.1		
● LUX 74	● LUX 34		



**Irradiation distance 100cm**

**Irradiation range 100cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 134	● PPFD 74	● PPFD 52	● PPFD 22
● LUX 2490	● LUX 1270	● LUX 910	● LUX 400
Distance from the center 40cm	Distance from the center 50cm		
● PPFD 6	● PPFD 2.2		
● LUX 96	● LUX 37		

# SUN-5W-W

PRODUCTNUMBER NO.5

MODELNUMBER SUN-5W-W



## Product Specifications

- Illuminance (LUX) **1850lux**
- Luminous flux (Lumen) **330lm**
- Socket (BASE) **E17**
- Power Consumption **5W**
- Photosynthetic photon rapid density PPF (when the irradiation distance is 30cm) **49 $\mu$ mol m<sup>-2</sup> s<sup>-1</sup>**
- Rated life **30000hours**
- Color Rendering Index (Ra) **Ra81**

## Size

Full length	6.5cm	Rated input current	150mA	Recommended irradiation distance	10cm~30cm	LED chip	COB
Light diameter	4.8cm	Rated voltage	85-265V	Color temperature	about 3300K	Power cord length	30°
Weight	39g	Indoor AC	100V50-60Hz				

## Use case photo

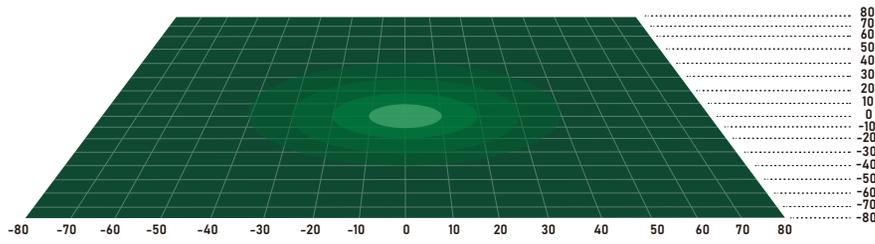


## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

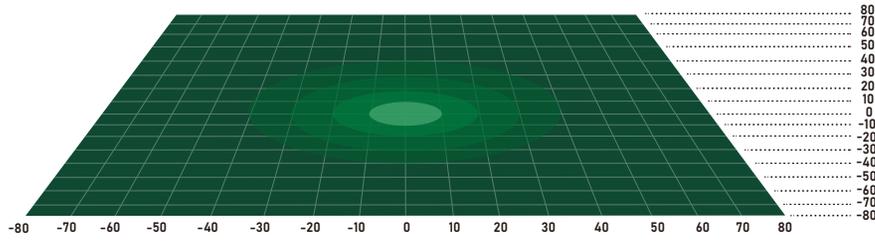
# SUN-5W-W 02

| Photosynthetic photon flux density (normal / with reflector)



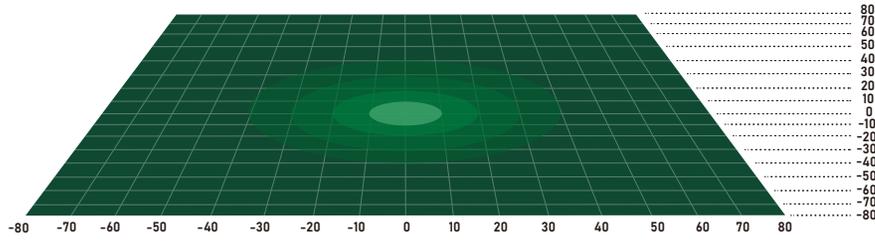
**Irradiation distance 10cm**  
**Irradiation distance 40cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 280	PPFD 72	PPFD 11	PPFD 5
LUX 10570	LUX 2670	LUX 440	LUX 200
Distance from the center 40cm			
PPFD 4			
LUX 150			



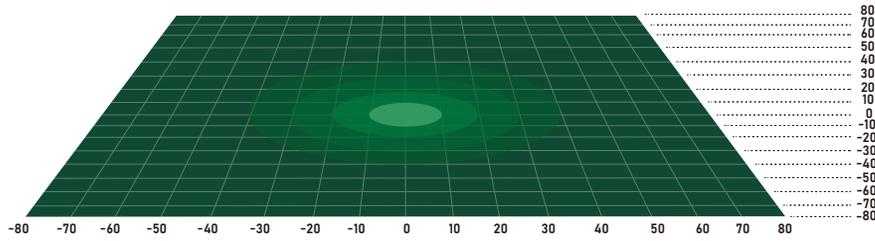
**Irradiation distance 20cm**  
**Irradiation distance 50cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 113	PPFD 31	PPFD 18	PPFD 9
LUX 4220	LUX 1170	LUX 700	LUX 340
Distance from the center 40cm			
PPFD 5			
LUX 200			



**Irradiation distance 30cm**  
**Irradiation distance 60cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 49	PPFD 21	PPFD 13	PPFD 7
LUX 1850	LUX 810	LUX 500	LUX 295
Distance from the center 40cm			
PPFD 6			
LUX 260			



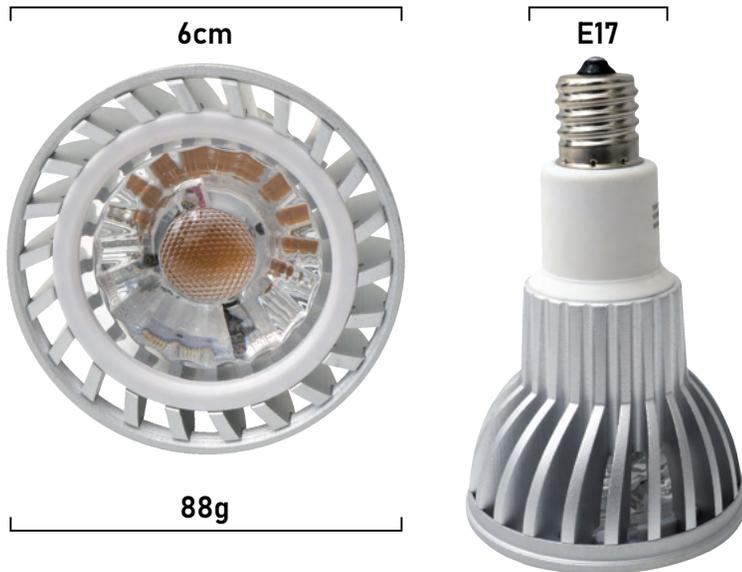
**Irradiation distance 40cm**  
**Irradiation distance 70cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 25	PPFD 20	PPFD 14	PPFD 10
LUX 960	LUX 780	LUX 540	LUX 400
Distance from the center 40cm			
PPFD 7			
LUX 290			

# SUN-10W-W(E17)

PRODUCTNUMBER NO.6

MODELNUMBER SUN-10W-W(E17)



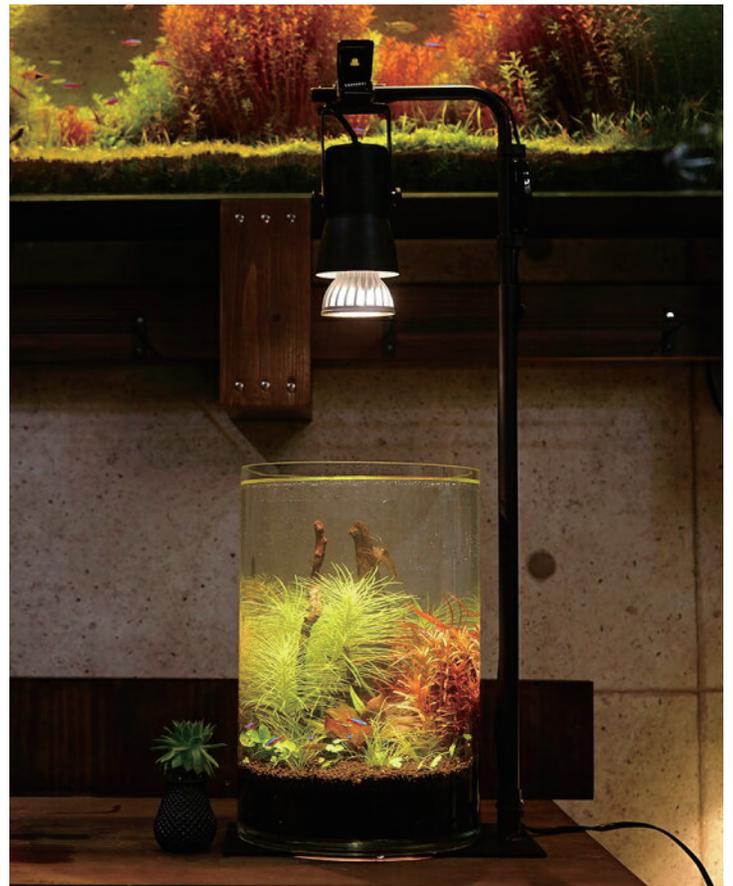
## Product Specifications

- Illuminance (LUX)** 12605lux
- Luminous flux(Lumen)** 750lm
- Socket (BASE)** E17
- Power Consumption** 10W
- Photosynthetic photon rapid density PPFD (when the irradiation distance is 30cm)** 306 $\mu$ mol m<sup>-2</sup> s<sup>-1</sup>
- Rated life** 30000hours
- Color Rendering Index (Ra)** Ra93

## Size

Full length	9.5cm	Rated input current	270mA	Recommended irradiation distance	20cm~70cm	LED chip	COB
Light diameter	6cm	Rated voltage	85-265V	Color temperature	about 3600K	Power cord length	45°
Weight	88g	Indoor AC	100V50-60Hz				

## Use case photo

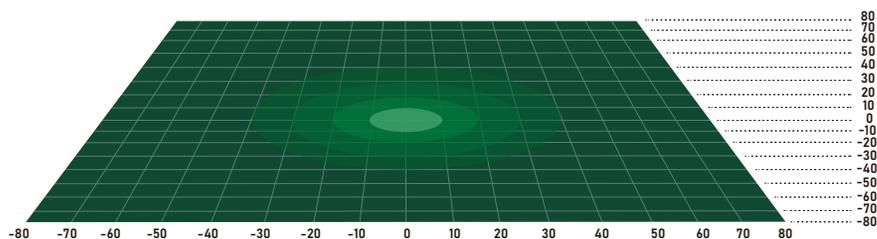


## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

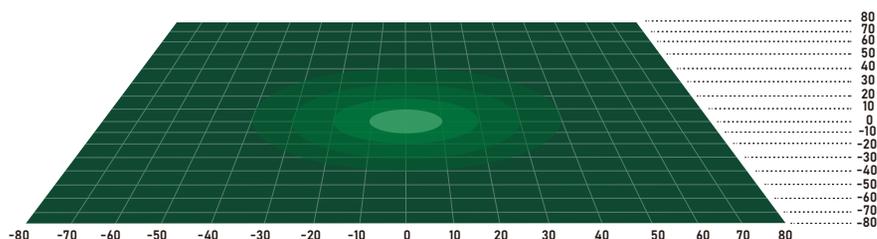
# SUN-10W-W(E17) 02

Photosynthetic photon flux density  
(normal / with reflector)



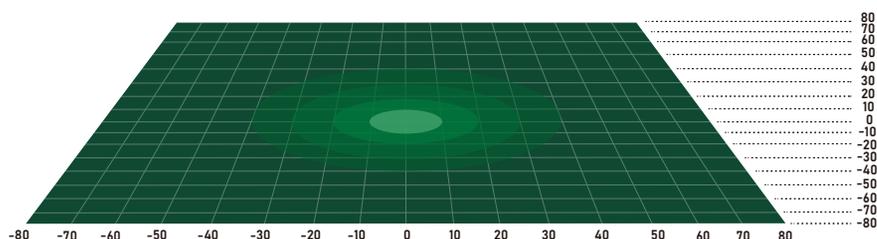
**Irradiation distance** 10cm  
**Irradiation range** 20cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 440	● PPFD 71	● PPFD 12	● PPFD 5
● LUX 18610	● LUX 2940	● LUX 500	● LUX 200
Distance from the center 40cm			
● PPFD 3			
● LUX 120			



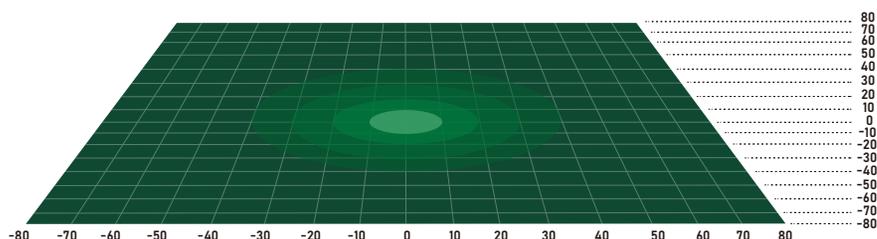
**Irradiation distance** 20cm  
**Irradiation range** 35cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 440	● PPFD 90	● PPFD 15	● PPFD 6
● LUX 18190	● LUX 3680	● LUX 620	● LUX 260
Distance from the center 40cm			
● PPFD 3			
● LUX 120			



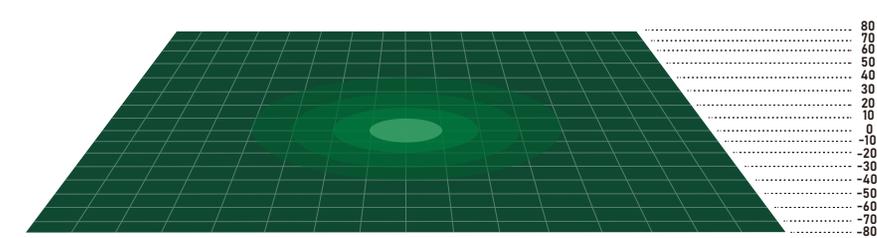
**Irradiation distance** 30cm  
**Irradiation range** 50cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 306	● PPFD 115	● PPFD 27	● PPFD 10
● LUX 12605	● LUX 4720	● LUX 1100	● LUX 420
Distance from the center 40cm			
● PPFD 5			
● LUX 230			



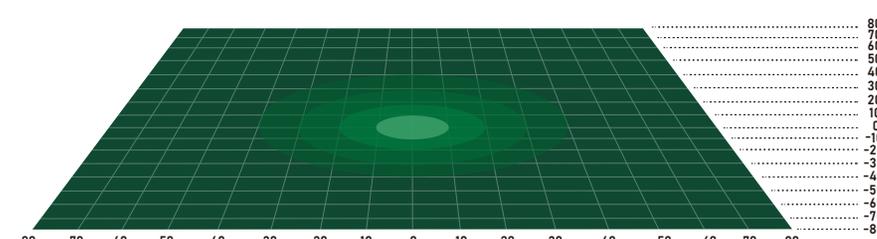
**Irradiation distance** 40cm  
**Irradiation range** 60cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 180	● PPFD 91	● PPFD 30	● PPFD 7
● LUX 7400	● LUX 3720	● LUX 1250	● LUX 290
Distance from the center 40cm			
● PPFD 4			
● LUX 140			



**Irradiation distance** 60cm  
**Irradiation range** 80cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 85	● PPFD 60	● PPFD 31	● PPFD 10
● LUX 3490	● LUX 2475	● LUX 1265	● LUX 420
Distance from the center 40cm			
● PPFD 4			
● LUX 170			



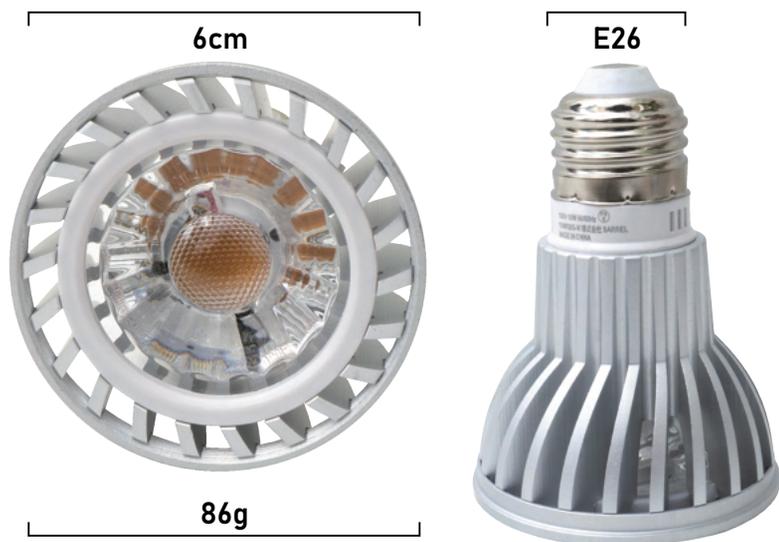
**Irradiation distance** 80cm  
**Irradiation range** 100cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 47	● PPFD 31	● PPFD 23	● PPFD 9
● LUX 1440	● LUX 1280	● LUX 960	● LUX 360
Distance from the center 40cm			
● PPFD 5			
● LUX 210			

# SUN-10W-W(E26)

PRODUCT NUMBER N0.7

MODEL NUMBER SUN-10W-W(E26)



## Product Specifications

- Illuminance (LUX) **12605lux**
- Luminous flux(Lumen) **750lm**
- Socket (BASE) **E26**
- Power Consumption **10W**
- Photosynthetic photon rapid density PPFD (when the irradiation distance is 30 cm) **306 $\mu$ mol m<sup>-2</sup> s<sup>-1</sup>**
- Rated life **30000hours**
- Color Rendering Index (Ra) **Ra93**

## Size

Full length	8.5cm	Rated input current	270mA	Recommended irradiation distance	20cm~70cm	LED chip	COB
Light diameter	6cm	Rated voltage	85-265V	Color temperature	about 3600K	Power cord length	45°
Weight	86g	Indoor AC	100V50-60Hz				

## Use case photo

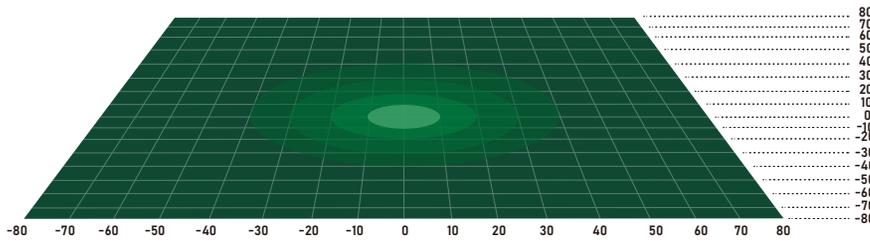


## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

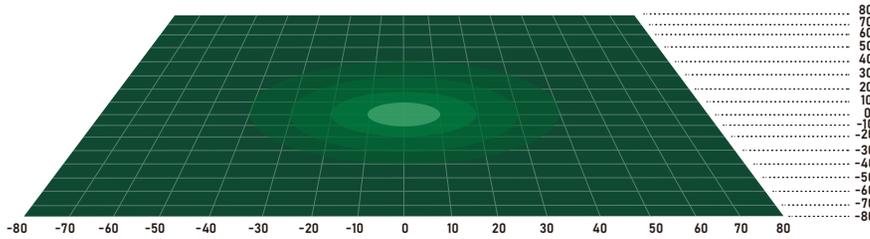
# SUN-10W-W(E26) 02

## Photosynthetic photon flux density (normal / with reflector)



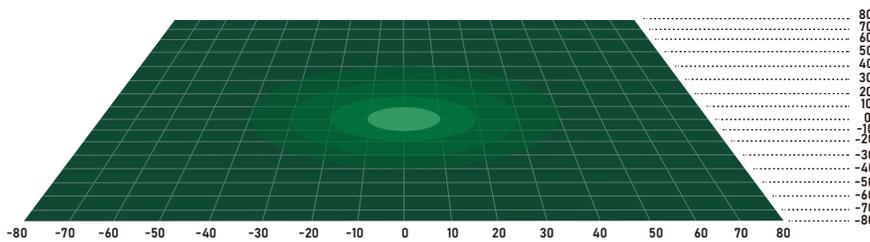
**Irradiation distance** 10cm  
**Irradiation range** 20cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 460	● PPFD 71	● PPFD 12	● PPFD 5
● LUX 18610	● LUX 2940	● LUX 500	● LUX 200
Distance from the center 40cm			
● PPFD 3			
● LUX 120			



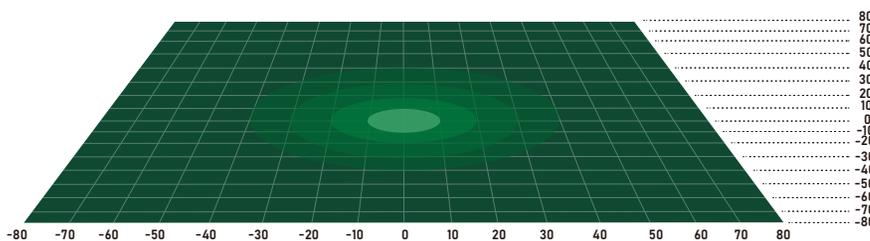
**Irradiation distance** 20cm  
**Irradiation range** 35cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 440	● PPFD 90	● PPFD 15	● PPFD 6
● LUX 18190	● LUX 3680	● LUX 620	● LUX 260
Distance from the center 40cm			
● PPFD 3			
● LUX 120			



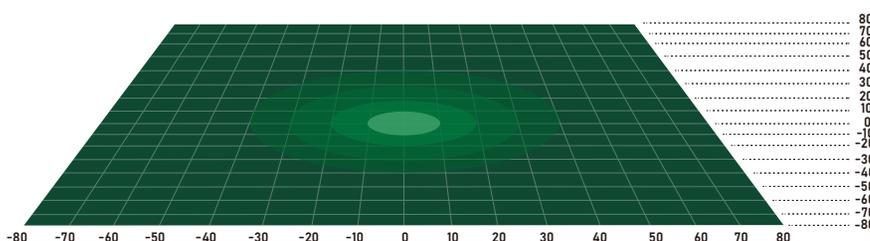
**Irradiation distance** 30cm  
**Irradiation range** 50cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 306	● PPFD 115	● PPFD 27	● PPFD 10
● LUX 12605	● LUX 4720	● LUX 1100	● LUX 420
Distance from the center 40cm			
● PPFD 5			
● LUX 230			



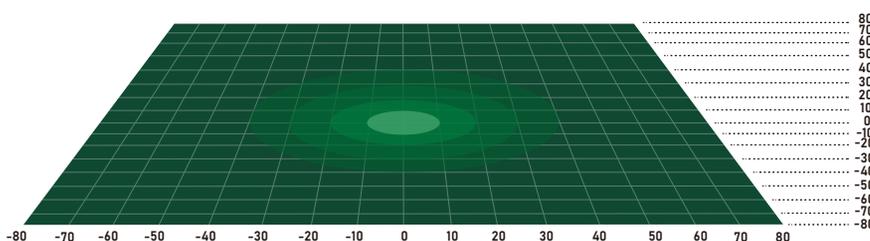
**Irradiation distance** 40cm  
**Irradiation range** 60cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 180	● PPFD 91	● PPFD 30	● PPFD 7
● LUX 7400	● LUX 3720	● LUX 1250	● LUX 290
Distance from the center 40cm			
● PPFD 4			
● LUX 140			



**Irradiation distance** 60cm  
**Irradiation range** 80cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 85	● PPFD 60	● PPFD 31	● PPFD 10
● LUX 3490	● LUX 2475	● LUX 1265	● LUX 420
Distance from the center 40cm			
● PPFD 4			
● LUX 170			



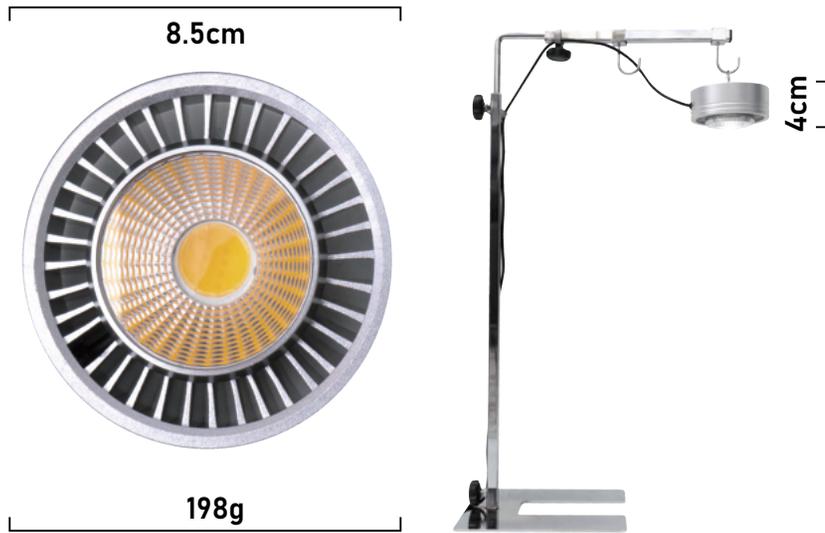
**Irradiation distance** 70cm  
**Irradiation range** 90cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 58	● PPFD 40	● PPFD 22	● PPFD 10
● LUX 2386	● LUX 1660	● LUX 890	● LUX 400
Distance from the center 40cm			
● PPFD 4			
● LUX 180			

# SUN-9.5W-W

PRODUCT NUMBER NO.8

MODEL NUMBER SUN-9.5W-W



## Product Specifications

 Illuminance (LUX) **6720lux**  Luminous flux(Lumen) **560lm**

 Socket (BASE) **E17**  Power Consumption **9.5W**

 Photosynthetic photon rapid density PPFD (when the irradiation distance is 30cm) **182 $\mu$ mol m<sup>-2</sup> s<sup>-1</sup>**

 Rated life **30000hours**

 Color Rendering Index (Ra) **Ra93**

## Size

Full length	4cm	Rated input current	70mA	Recommended irradiation distance	20cm~50cm	LED chip	COB
Light diameter	8.5cm	Rated voltage	100-240V	Color temperature	about 4300K	Power cord length	E17
Weight	198g	Indoor AC	100V50-60Hz	Beam angle	45°	Power cord length	240cm

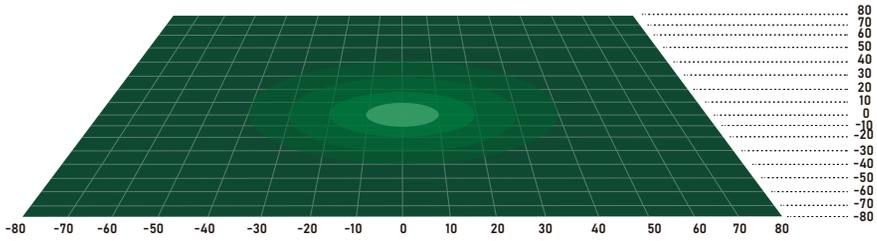
## Use case photo



## 1 month electricity bill

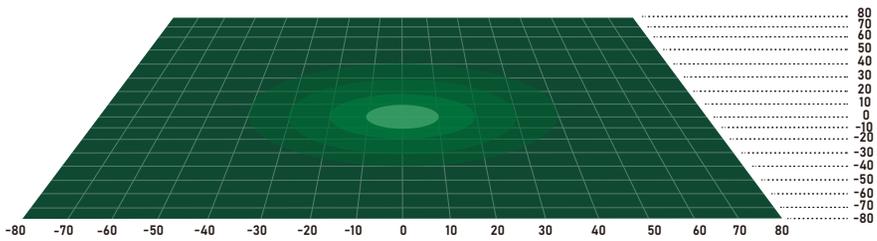
Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# SUN-9.5W-W 02 | Photosynthetic photon flux density (normal / with reflector)



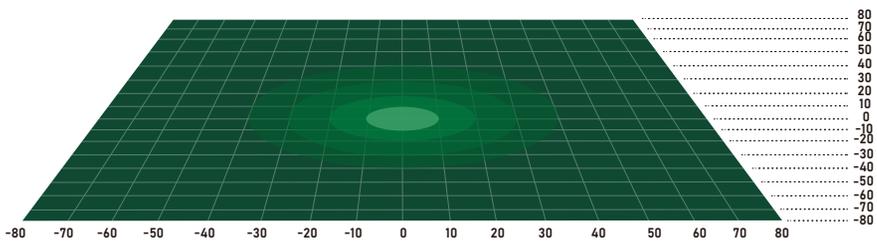
**Irradiation distance 10cm**  
**Irradiation range 30cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 450	● PPFD 200	● PPFD 2	● PPFD 2
● LUX 18550	● LUX 8760	● LUX 90	● LUX 80
Distance from the center 40cm			
● PPFD 2			
● LUX 80			



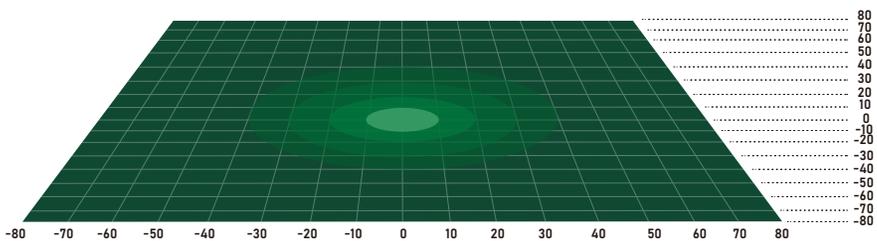
**Irradiation distance 20cm**  
**Irradiation range 80cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 378	● PPFD 100	● PPFD 6	● PPFD 2
● LUX 17120	● LUX 4280	● LUX 230	● LUX 90
Distance from the center 40cm			
● PPFD 2			
● LUX 90			



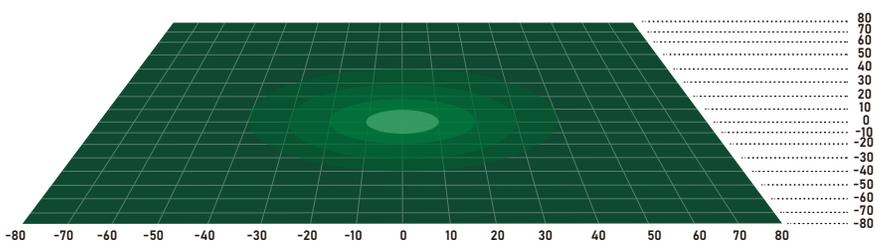
**Irradiation distance 30cm**  
**Irradiation range 60cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 182	● PPFD 140	● PPFD 41	● PPFD 8
● LUX 8100	● LUX 6100	● LUX 1740	● LUX 340
Distance from the center 40cm			
● PPFD 3			
● LUX 120			



**Irradiation distance 40cm**  
**Irradiation range 80cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 99	● PPFD 66	● PPFD 24	● PPFD 9
● LUX 4410	● LUX 2900	● LUX 1040	● LUX 400
Distance from the center 40cm			
● PPFD 3			
● LUX 130			



**Irradiation distance 50cm**  
**Irradiation range 100cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 63	● PPFD 49	● PPFD 28	● PPFD 12
● LUX 2800	● LUX 2140	● LUX 1240	● LUX 520
Distance from the center 40cm			
● PPFD 6			
● LUX 250			

# AMATERAS LED 20W

PRODUCTNUMBER NO.9

MODELNUMBER AMATERAS-20W



## Product Specifications

- Illuminance (LUX) **18300lux**
- Luminous flux (Lumen) **2098lm**
- Socket (BASE) **E26**
- Power Consumption **20W**
- Photosynthetic photon rapid density PPFD (when the irradiation distance is 40 cm) **560μmol m<sup>-2</sup> s<sup>-1</sup>**
- Rated life **30000hours**
- Color Rendering Index (Ra) **Ra97**

## Size

Full length	14cm	Rated input current	159mA	Recommended irradiation distance	40cm~150cm	LED chip	COB
External shape	12cm	Rated voltage	100V~240V	Color temperature	about 5900K		
Weight	350g	Indoor AC	AC 100V ~2 40V 50-60Hz	Beam angle	With reflector 45° / Without reflector 75°		

## Use case photo

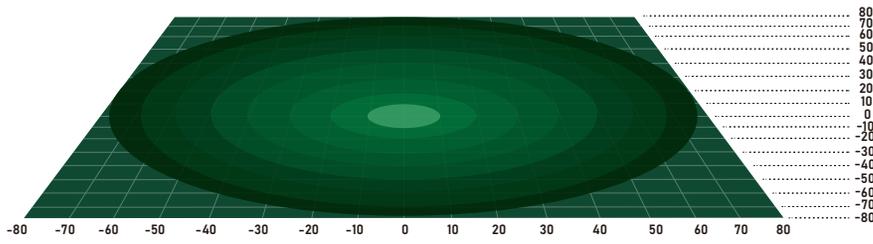


## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

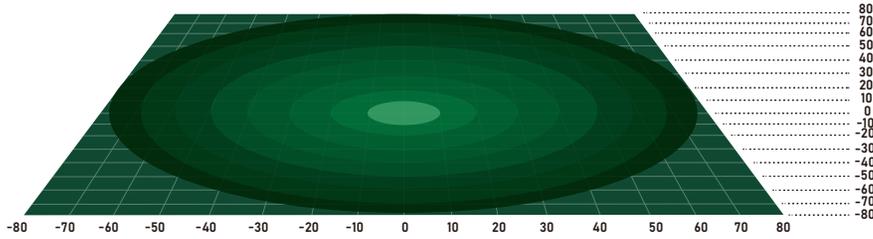
# AMATERAS LED 20W 02

Photosynthetic photon flux density  
(normal / with reflector)



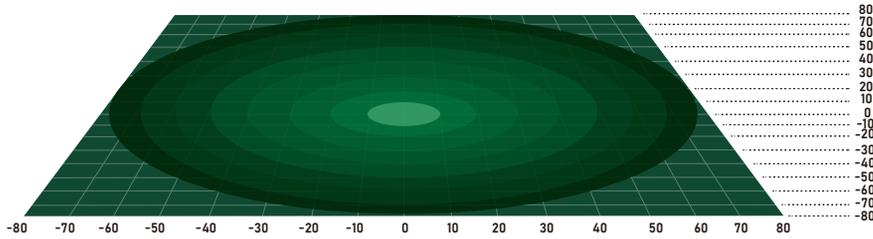
**Irradiation distance 40cm**  
**Irradiation range 40cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 560.5 ● LUX 26452	● PPFD 163.2 ● LUX 7653	● PPFD 53.9 ● LUX 2503	● PPFD 32.4 ● LUX 1511
Distance from the center 40cm	Distance from the center 50cm		
● PPFD 19.4 ● LUX 907	● PPFD 2.3 ● LUX 112		



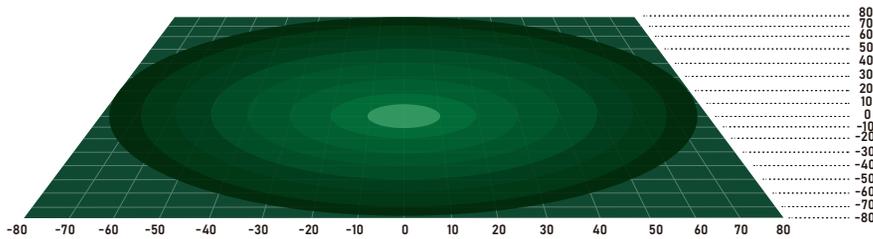
**Irradiation distance 60cm**  
**Irradiation range 60cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 310 ● LUX 14890	● PPFD 159 ● LUX 7420	● PPFD 40 ● LUX 1800	● PPFD 24 ● LUX 1120
Distance from the center 40cm	Distance from the center 50cm		
● PPFD 20 ● LUX 950	● PPFD 17 ● LUX 770		



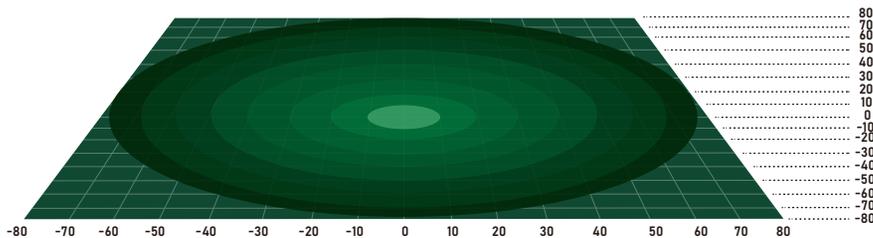
**Irradiation distance 80cm**  
**Irradiation range 80cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 152 ● LUX 7170	● PPFD 86 ● LUX 2070	● PPFD 30 ● LUX 1490	● PPFD 18 ● LUX 820
Distance from the center 40cm	Distance from the center 50cm		
● PPFD 14 ● LUX 660	● PPFD 13 ● LUX 590		



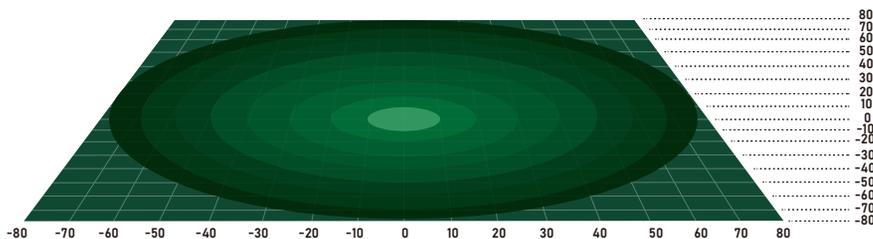
**Irradiation distance 100cm**  
**Irradiation range 60cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 104 ● LUX 4950	● PPFD 86 ● LUX 4010	● PPFD 45 ● LUX 2100	● PPFD 21 ● LUX 960
Distance from the center 40cm	Distance from the center 50cm		
● PPFD 11 ● LUX 510	● PPFD 9 ● LUX 420		



**Irradiation distance 120cm**  
**Irradiation range 120cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 83 ● LUX 3890	● PPFD 80 ● LUX 3790	● PPFD 54 ● LUX 2550	● PPFD 30 ● LUX 1400
Distance from the center 40cm	Distance from the center 50cm		
● PPFD 15 ● LUX 710	● PPFD 10 ● LUX 450		

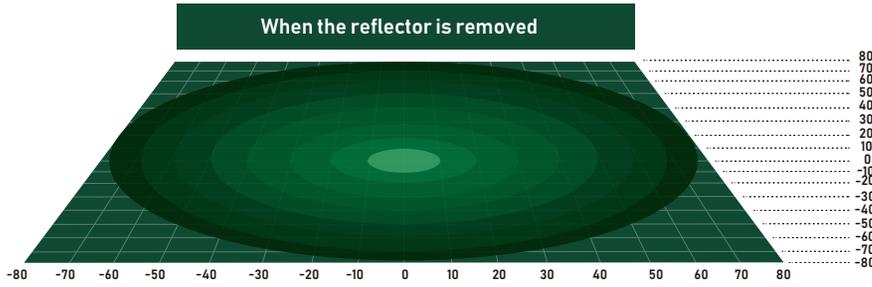


**Irradiation distance 150cm**  
**Irradiation range 150cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 48 ● LUX 2280	● PPFD 41 ● LUX 1940	● PPFD 29 ● LUX 1390	● PPFD 20 ● LUX 960
Distance from the center 40cm	Distance from the center 50cm		
● PPFD 11 ● LUX 510	● PPFD 8 ● LUX 360		

# AMATERAS LED 20W 03

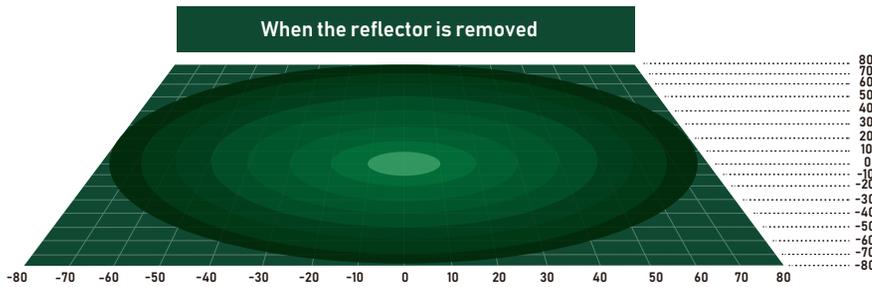
Photosynthetic photon flux density  
(When the reflector is removed)



Irradiation distance 20cm

Irradiation range 50cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 313	PPFD 210	PPFD 85	PPFD 30
LUX 14770	LUX 9830	LUX 3980	LUX 1450
Distance from the center 40cm	Distance from the center 50cm		
PPFD 10	PPFD 5		
LUX 490	LUX 240		



Irradiation distance 40cm

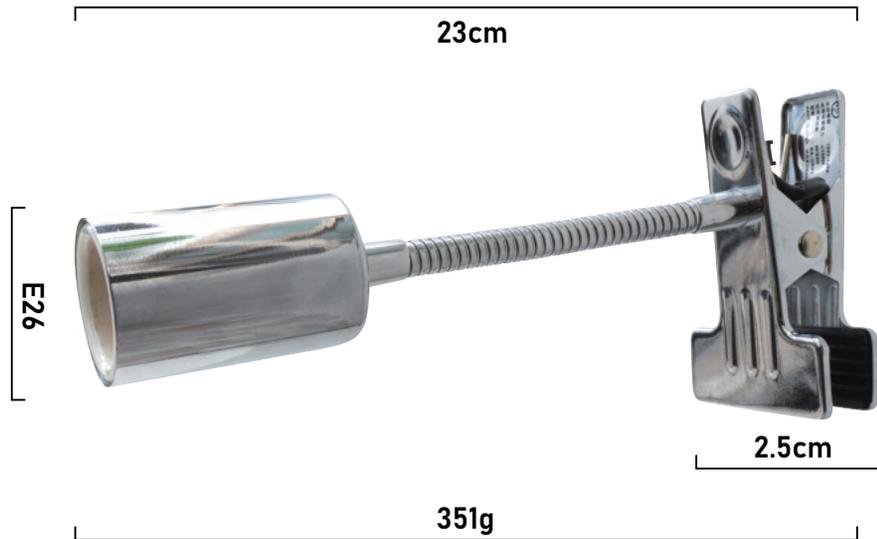
Irradiation range 100cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 82	PPFD 68	PPFD 56	PPFD 42
LUX 3800	LUX 3150	LUX 2600	LUX 1950
Distance from the center 40cm	Distance from the center 50cm		
PPFD 29	PPFD 17		
LUX 1370	LUX 790		

# PLANT CLIP-A(E26)

PRODUCTNUMBER NO.10

MODELNUMBER PLANT CLIP-A(E26)



## Size

Maximum grip width	2.5cm	Full length	23cm	Weight	351g	Socket	E26
Arm	13cm	Indoor AC	100V50-60Hz	Power cord length	195cm		

## Use case photo



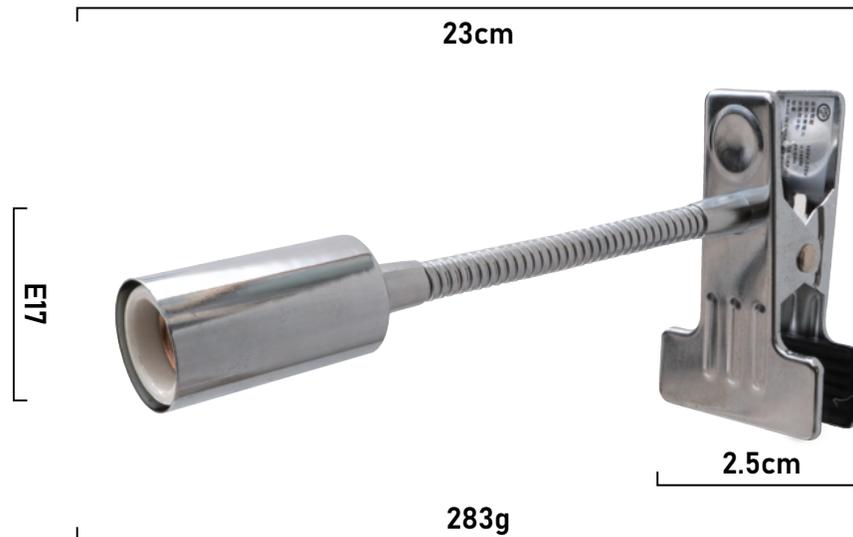
## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# PLANT CLIP-B(E17)

PRODUCTNUMBER NO.11

MODELNUMBER PLANT CLIP-B(E17)



## Size

Maximum grip width	2.5cm	Full length	23cm	Weight	283g	Socket	E17
Arm	13cm	Indoor AC	100V50-60Hz	Power cord length	195cm		

## Use case photo



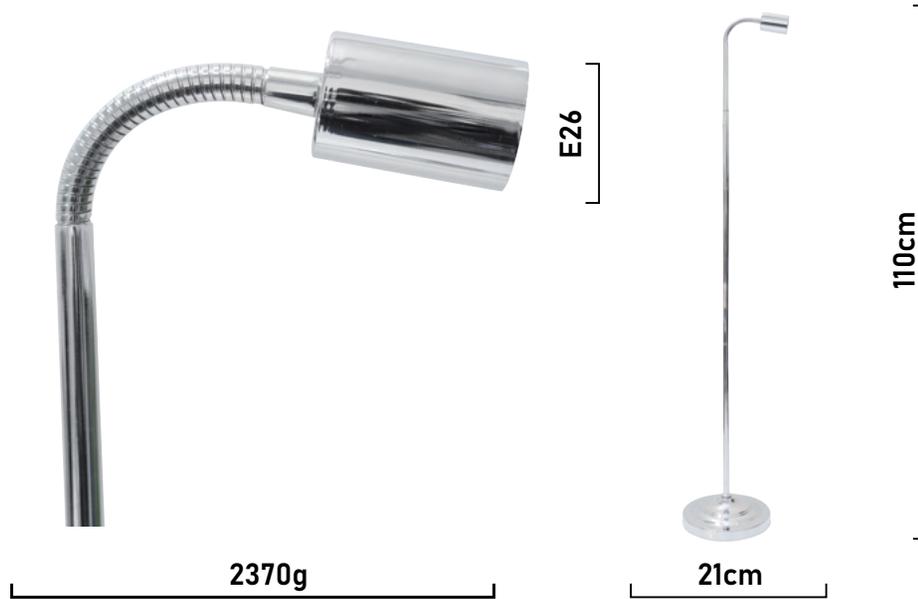
## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# PLANT STAND-A(E26)

PRODUCT NUMBER NO.12

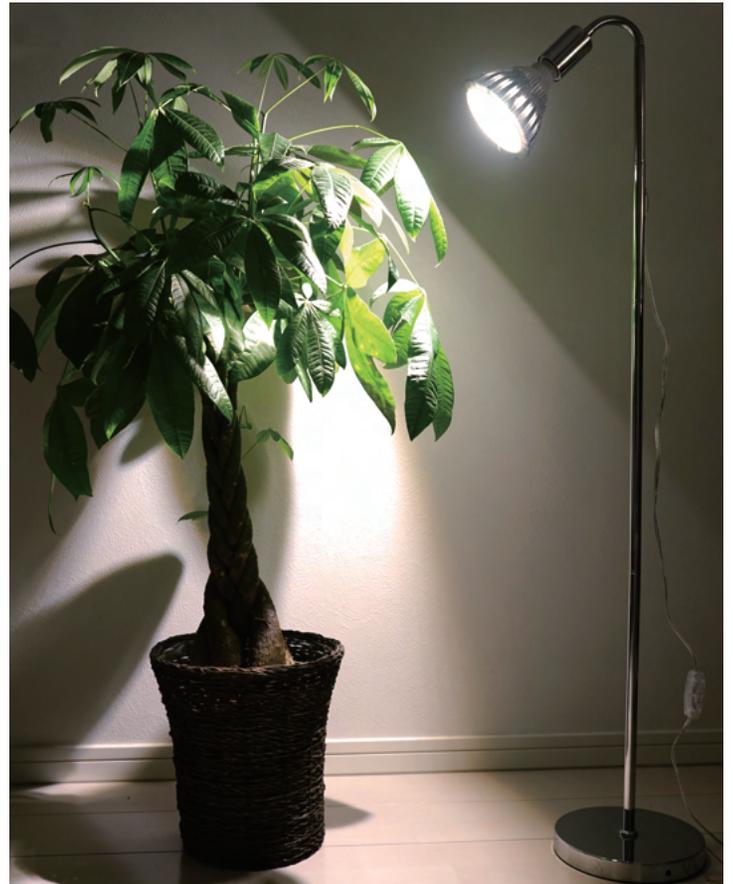
MODEL NUMBER PLANT STAND-A(E26)



## Size

Full length	110cm	External shape	21cm	Power cord length	165cm	Socket	E26
Weight	2370g	Indoor AC	100V50-60Hz				

## Use case photo



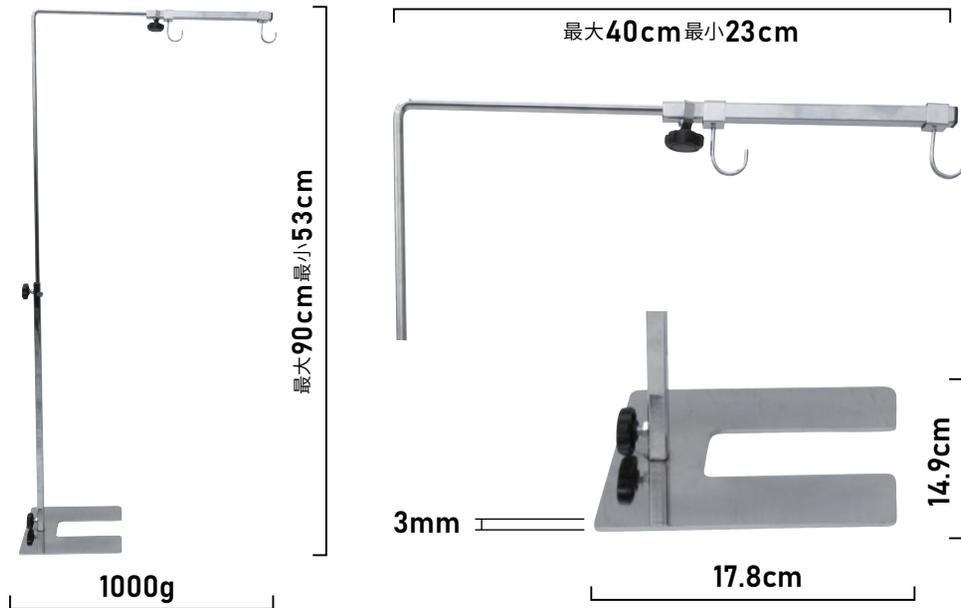
## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# AQUA LIGHT STAND

PRODUCTNUMBER NO.13

MODEL NUMBER AQUA LIGHT STAND



## Size

Base	14.9cm	Base depth	17.8cm	Base thickness	3mm
Depth	maximum40cmminimum23cm	Weight	1000g	Height	maximum90cmminimum53cm

## Use case photo



## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# AMATERAS LED 10W

PRODUCTNUMBER NO.14

MODELNUMBER AMATERAS-10W



## Product Specifications



Illuminance (LUX)  
**13580lux**



Luminous flux(Lumen)  
**914lm**



Socket (BASE)  
**E26**



power consumption  
**10W**



Photosynthetic photon rapid density PPFD  
(when the irradiation distance is 40cm)  
**287 $\mu$ mol m<sup>2</sup> s<sup>-1</sup>**



Rated life  
**20000hours**



Color Rendering Index (Ra)  
**Ra97**

10cm

## Size

Full length	10cm	Rated input current	95mA(100V)	Recommended irradiation distance	30cm~100cm	LED chip	COB
External shape	8.6cm	Rated voltage	85~265V	Color temperature	about 5900K		
Weight	185g	Indoor AC	50-60Hz	Beam angle	With reflector 45 ° / Without reflector 75 °		

## Use case photo

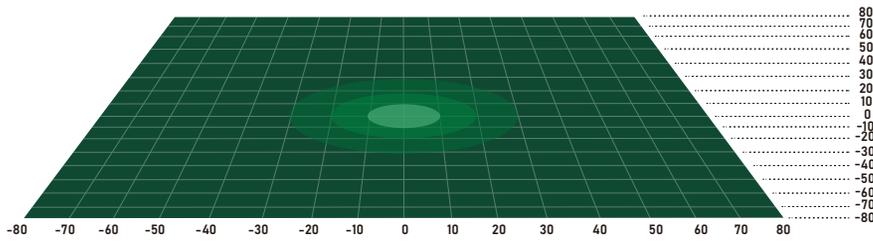


## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

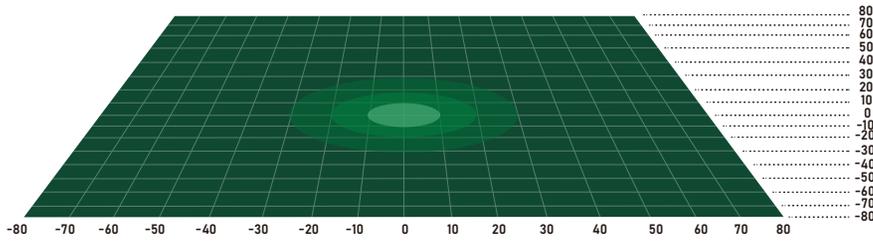
# AMATERAS LED 10W 02

## Photosynthetic photon flux density (normal / with reflector)



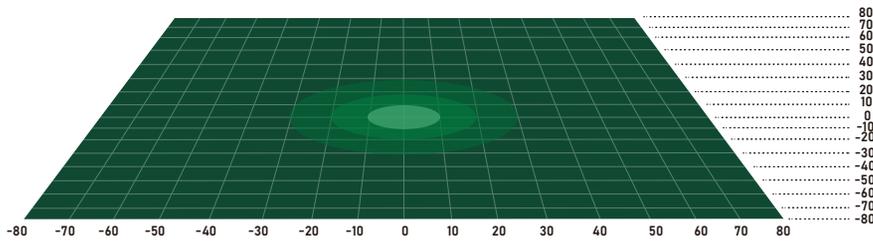
● Irradiation distance **30cm**  
 ● Irradiation range **30cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 390	● PPFD 150	● PPFD 50	● PPFD 20
● LUX 18040	● LUX 7120	● LUX 2360	● LUX 892



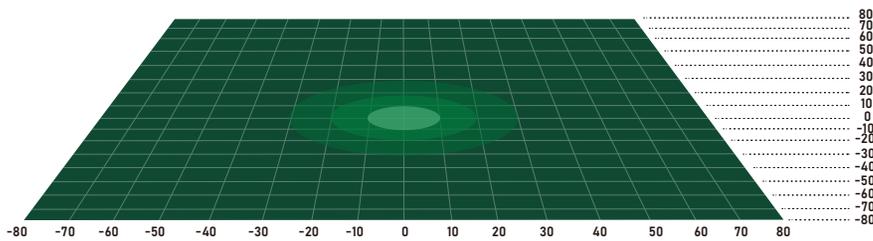
● Irradiation distance **40cm**  
 ● Irradiation range **40cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 287.8	● PPFD 103	● PPFD 35	● PPFD 20
● LUX 13580	● LUX 4720	● LUX 1630	● LUX 930



● Irradiation distance **60cm**  
 ● Irradiation range **60cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 152.5	● PPFD 95	● PPFD 43	● PPFD 20
● LUX 7164	● LUX 4420	● LUX 1920	● LUX 900

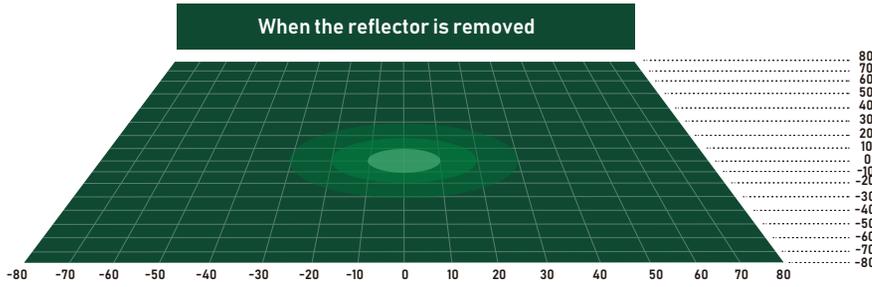


● Irradiation distance **80cm**  
 ● Irradiation range **80cm**

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
● PPFD 85.2	● PPFD 41	● PPFD 16	● PPFD 10
● LUX 4000	● LUX 1900	● LUX 740	● LUX 490

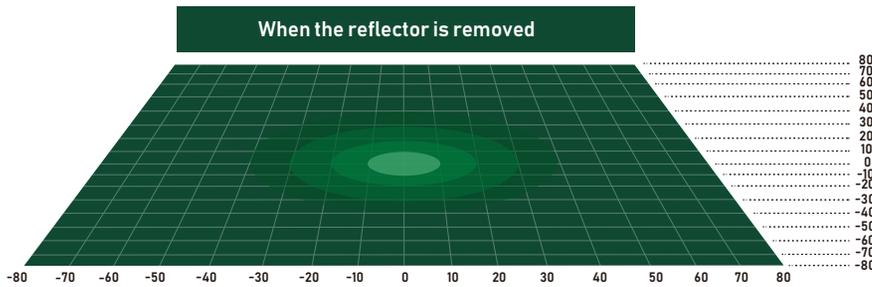
# AMATERAS LED 10W 03

## Photosynthetic photon flux density (When the reflector is removed)



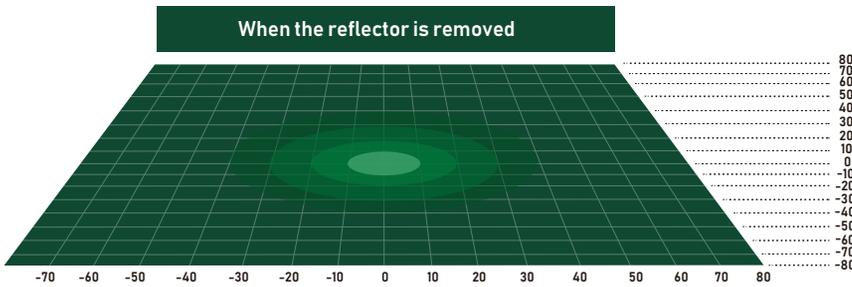
**Irradiation distance** 20cm  
**Irradiation range** 40cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 179	PPFD 95	PPFD 33	PPFD 6
LUX 8170	LUX 4450	LUX 1500	LUX 310



**Irradiation distance** 30cm  
**Irradiation range** 60cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 104	PPFD 75	PPFD 40	PPFD 23
LUX 4770	LUX 3450	LUX 1890	LUX 1000
Distance from the center 40cm			
PPFD 6			
LUX 310			



**Irradiation distance** 40cm  
**Irradiation range** 80cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 54	PPFD 44	PPFD 31	PPFD 22
LUX 2480	LUX 2040	LUX 1430	LUX 1000
Distance from the center 40cm			
PPFD 14			
LUX 660			

# TSUKUYOMILED | PRODUCTNUMBER NO.15 | MODELNUMBER TSUKUYOMI-20W



## Product specifications

- Illuminance (LUX) **25980lux** Luminous flux(Lumen) **2098lm**
- Socket(BASE) **E26** Power Consumption **20W**
- Photosynthetic photon rapid density PPFD (when the irradiation distance is 40 cm) **598 $\mu$ mol m<sup>-2</sup> s<sup>-1</sup>**
- Rated life **20000hours**
- Color Rendering Index(Ra) **Ra97**

## SIZE

Full Length	14cm	Rated Input Current	159mA	Recommended Irradiation distance	40cm~150cm	Led Chip	COB
External Shape	12cm	Rated Voltage	100V-240V	Color temperature	about 4000K~ 5000K		
Weight	350g	Indoor AC	100V-240V 50-60Hz	Beam Angle	With reflector	45° / No reflector	75°

## Use Case Photo

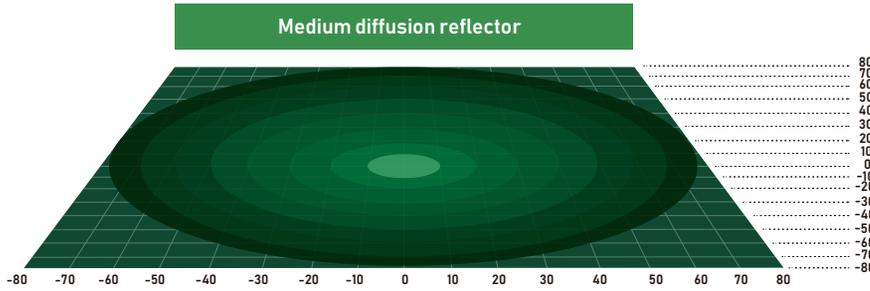


## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen (calculated at a unit price of 27 yen per kwh)

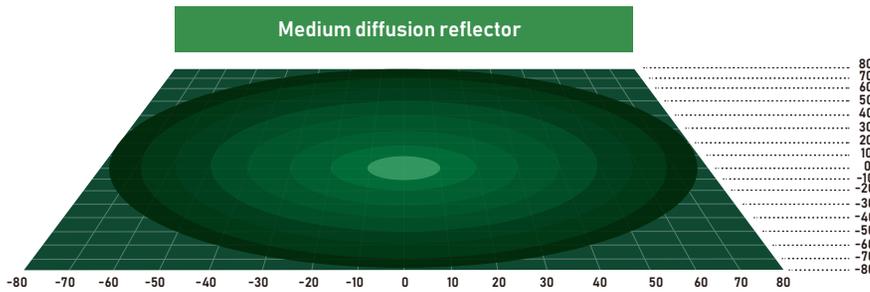
# TSUKUYOMI LED 02

Photosynthetic photon flux density  
(normal/with reflector)



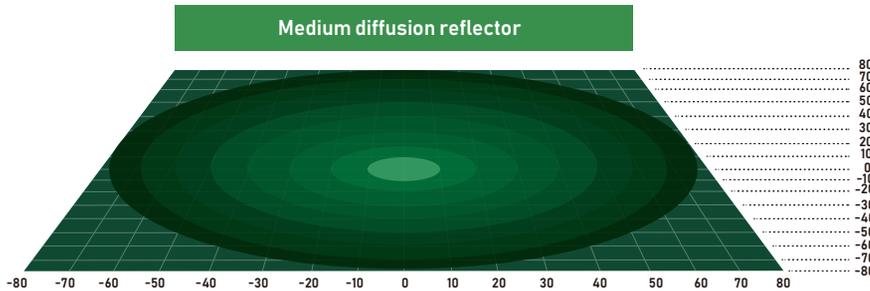
**Irradiation distance** 40cm  
**Irradiation range** 60cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 598.6 LUX 25982	PPFD 134 LUX 5859	PPFD 57 LUX 1450	PPFD 42 LUX 1795
Distance from the center 40cm PPFD 15 LUX 666	Distance from the center 50cm PPFD 2.1 LUX 90		



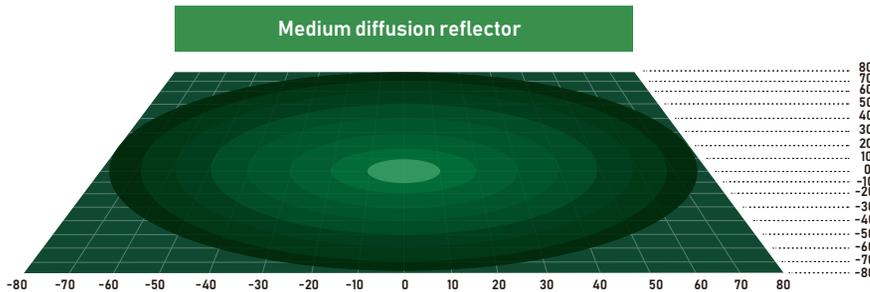
**Irradiation distance** 60cm  
**Irradiation range** 80cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 280 LUX 12181	PPFD 124.4 LUX 5398	PPFD 40.5 LUX 1744	PPFD 25.5 LUX 1095
Distance from the center 40cm PPFD 20.4 LUX 880	Distance from the center 50cm PPFD 15.5 LUX 671		



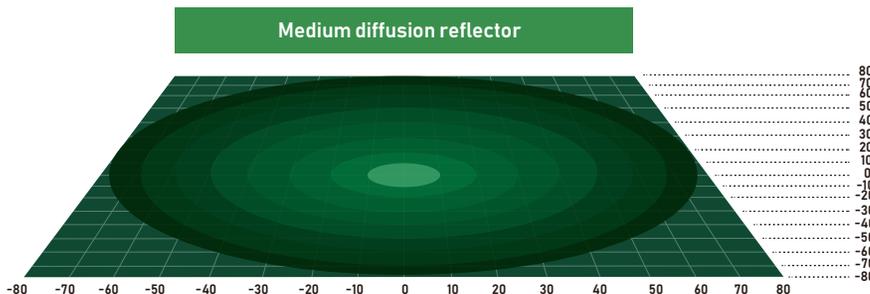
**Irradiation distance** 80cm  
**Irradiation range** 60cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 161 LUX 6989	PPFD 82 LUX 3552	PPFD 40 LUX 1739	PPFD 18 LUX 781
Distance from the center 40cm PPFD 15 LUX 645	Distance from the center 50cm PPFD 12 LUX 539		



**Irradiation distance** 100cm  
**Irradiation range** 70cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 96 LUX 4147	PPFD 53 LUX 2300	PPFD 25 LUX 1080	PPFD 13 LUX 564
Distance from the center 40cm PPFD 11 LUX 468	Distance from the center 50cm PPFD 9.4 LUX 402		

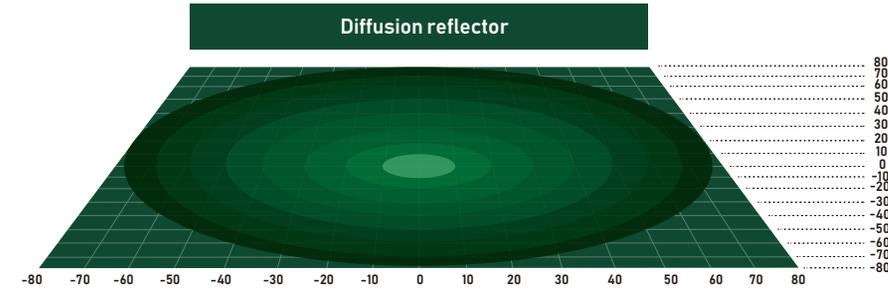


**Irradiation distance** 120cm  
**Irradiation range** 80cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 82 LUX 3580	PPFD 77 LUX 3340	PPFD 50 LUX 2210	PPFD 28 LUX 1210
Distance from the center 40cm PPFD 14 LUX 630	Distance from the center 50cm PPFD 10 LUX 450		

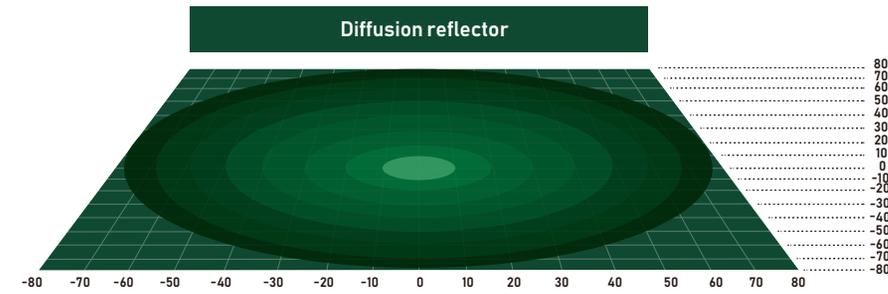
# TSUKUYOMI LED 03

## Photosynthetic photon flux density (normal / with reflector)



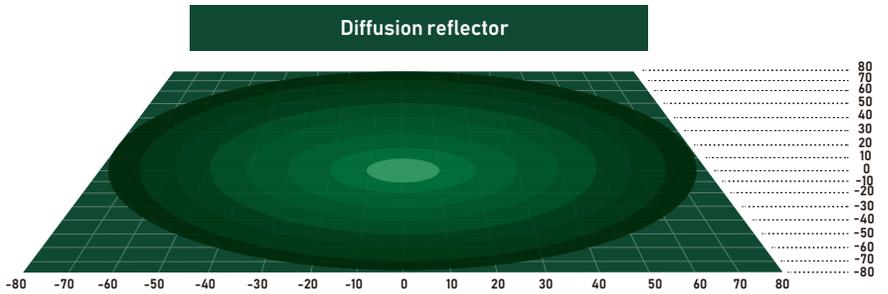
**Irradiation distance** 20cm  
**Radius distance** 60cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 889 LUX 38600	PPFD 201 LUX 8626	PPFD 93 LUX 4043	PPFD 13 LUX 599
Distance from the center 40cm PPFD 9 LUX 408	Distance from the center 50cm PPFD 6 LUX 274		



**Irradiation distance** 40cm  
**Radius distance** 100cm

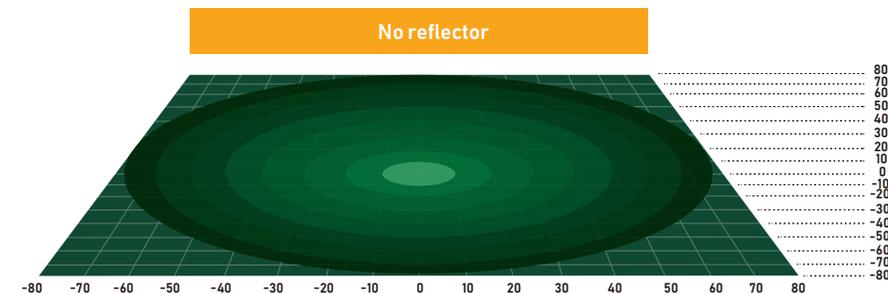
Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 434 LUX 18825	PPFD 120 LUX 5169	PPFD 58 LUX 2527	PPFD 42 LUX 1843
Distance from the center 40cm PPFD 22 LUX 980	Distance from the center 50cm PPFD 5 LUX 241		



**Irradiation distance** 60cm  
**Radius distance** 140cm

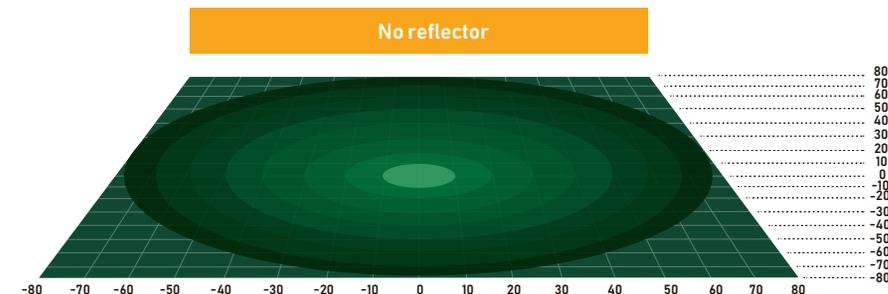
Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 239 LUX 10358	PPFD 120 LUX 5290	PPFD 34 LUX 1500	PPFD 27 LUX 1180
Distance from the center 40cm PPFD 22 LUX 990	Distance from the center 50cm PPFD 17 LUX 807		

## Photosynthetic photon flux density (without reflector)



**Irradiation distance** 20cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 407 LUX 17720	PPFD 205 LUX 8800	PPFD 70 LUX 3050	PPFD 22 LUX 980
Distance from the center 40cm PPFD 5 LUX 264	Distance from the center 50cm PPFD 3 LUX 160		



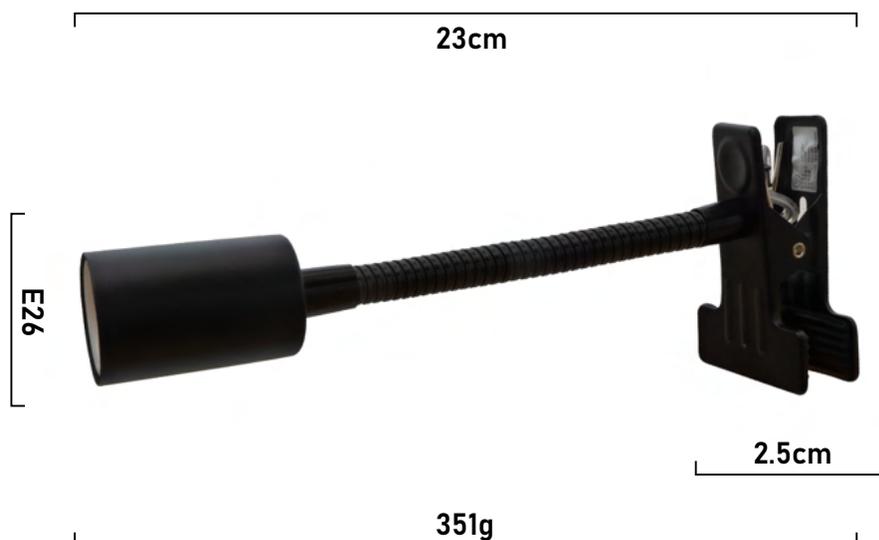
**Irradiation distance** 40cm

Distance from the center 0cm	Distance from the center 10cm	Distance from the center 20cm	Distance from the center 30cm
PPFD 107 LUX 4600	PPFD 90 LUX 3880	PPFD 69 LUX 2980	PPFD 45 LUX 1980
Distance from the center 40cm PPFD 31 LUX 1380	Distance from the center 50cm PPFD 13 LUX 615		

# PLANT CLIP A-BK(E26)

PRODUCTNUMBER N0.16

MODEL NUMBER CLIP-A-E26-BK



## Size

Grip width	2.5cm	Full length	23cm	Weight	351g	Socket	E26
Arm	13cm	Indoor AC	100V50-60Hz	Power cord length	180cm		

## Use case photo



## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# DIFFUSE REFLECTOR

PRODUCT NUMBER NO.17

MODEL NUMBER RF-D-01



## Size

Diameter	9cm	Weight	17.7g	Feature	surface plating
Model	AMATERAS-20W / TSUKUYOMI-20W				

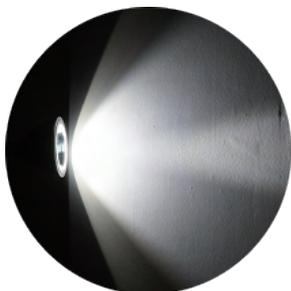
## Difference between diffuse and medium diffuse reflectors



Diffuse Reflector

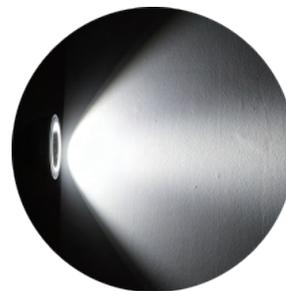


Medium Diffuse Reflector



**Close Range Illumination**

You can soften the light.



**Long-Distance Illumination**

For plants that need strong light

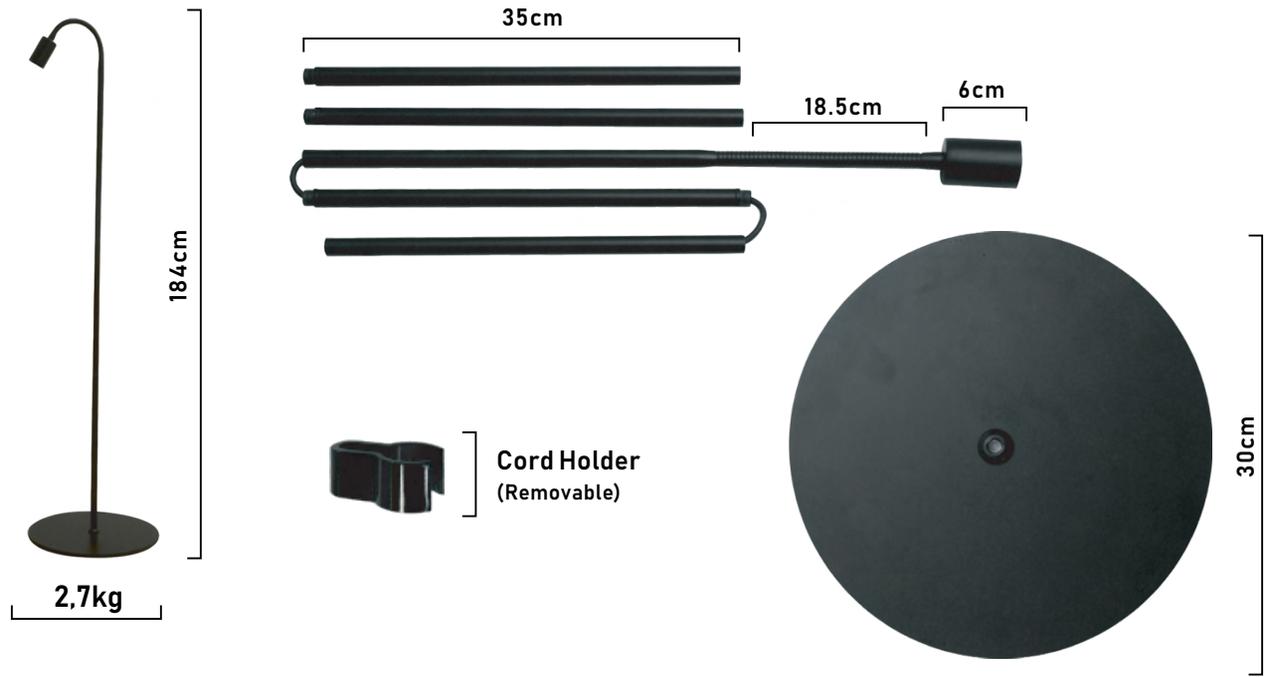
## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# FLEXIBLE ARM LIGHT STAND

PRODUCT NUMBER NO.18

MODEL NUMBER BA-ST184-BK



## Size

Base	30cm	Height	184cm	Height adjustment	184cm / 150cm / 115cm		
Weight	2.7kg	Pole length	35cm	Arm length	18.5cm	Light connection length	6cm

## Use case photo



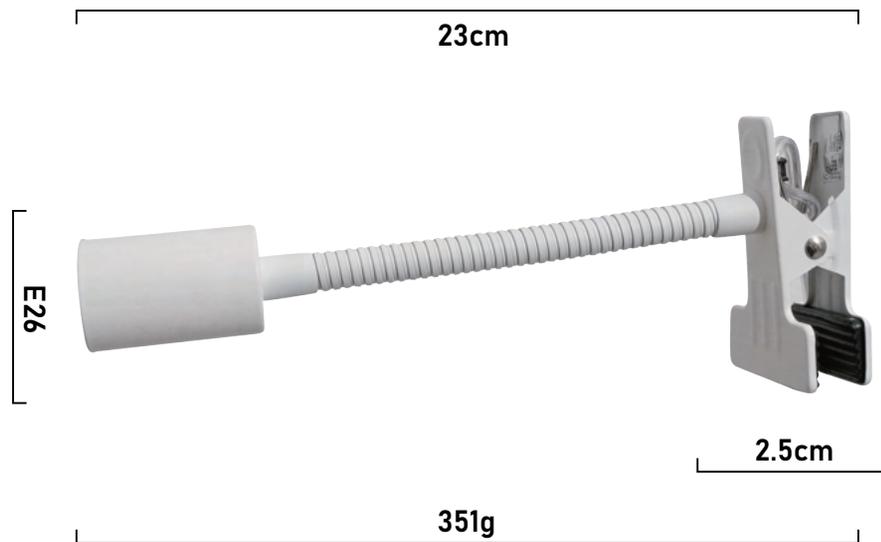
## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# PLANT CLIP A-WH(E26)

PRODUCT NUMBER NO.19

MODEL NUMBER CLIP-A-E26-WH



## Size

Grip width	2.5cm	Full length	23cm	Weight	351g	Socket	E26
Arm	13cm	Indoor AC	100V50-60Hz	Power cord length	180cm		

## Use case photo



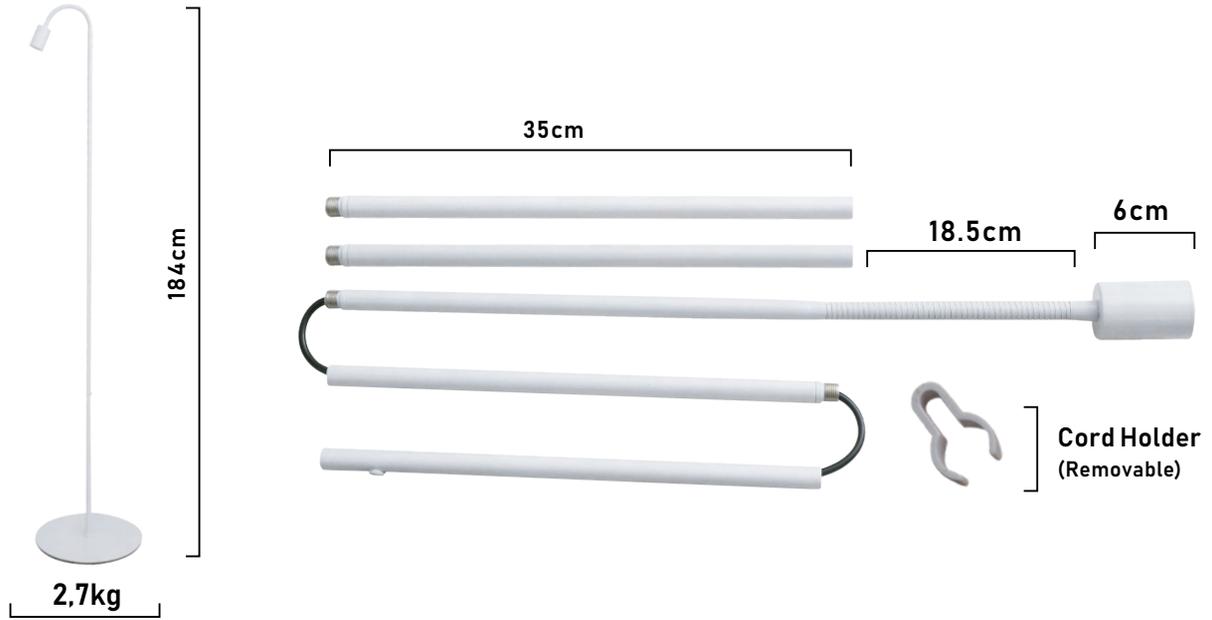
## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# FLEXIBLE ARM LIGHT STAND

PRODUCT NUMBER NO.20

MODEL NUMBER BA-ST184-WH



## Size

Base	30cm	Height	184cm	Height adjustment	184cm / 150cm / 115cm		
Weight	2.7kg	Pole length	35cm	Arm length	18.5cm	Light connection length	6cm

## Use case photo



## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
 (calculated at a unit price of 27 yen per kwh)

# FLOOR LAMP STAND AKOND

PRODUCT NUMBER NO.21,NO.22

MODEL NUMBER BA-AK-54



## Size

Base	26.7cm×12.5cm	Height	54.6cm	Power cord length	187cm	code color	Clear
Weight	0.76kg	load capacity	400g	Arm length	12cm		

## Use case photo



## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# FLOOR LAMP STAND AKOND

PRODUCT NUMBER NO.23,NO.24

MODEL NUMBER BA-AK-74



## Size

Base	34.5cm×14.5cm	Height	74.6cm	Power cord length	187cm	code color	Clear
Weight	0.76kg	load capacity	400g	Arm length	17cm		

## Use case photo



## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)

# SMALL BLOWER AECHMEA

PRODUCTNUMBER NO.25,NO.26

MODELNUMBER BA-FA-AC-E26



## 1 month electricity bill

Irradiation for 12 hours a day x 31 days = about 200 yen  
(calculated at a unit price of 27 yen per kwh)