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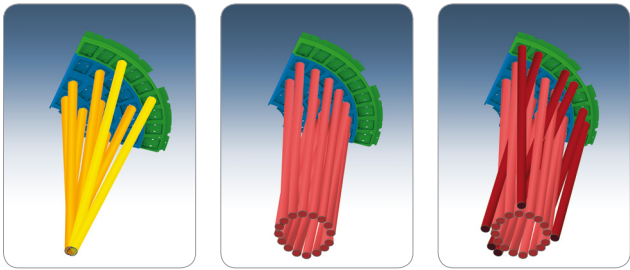
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Stable Illumination

Luvis L200 delivers stable illumination even for a long time use. Only 2% intensity drop after 12 hours continuous use. With patented CIS (Channel Illumination System), the intensity is maintained despite of Focus size.

- **CIS**
 - Channel illumination technology helps to prevent large falling of intensity as enlarging the pattern size.
 - Only 5% of difference will come as the pattern size enlarged while many others show 50% of intensity falling.
 - Channel illumination technology will help the surgeon to have stable well lit



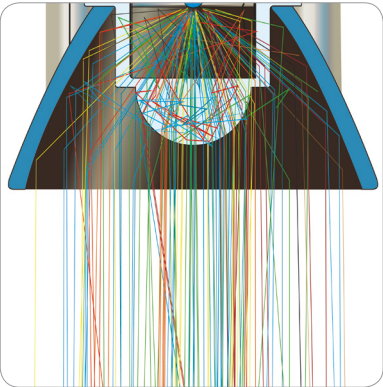
Channel Illumination System

Effective Illumination

By Adopting Hybrid LED Reflector, the efficiency of the illumination is maximized. With high efficiency, Luvis LED light minimize the heat emission.

- **Hybrid LED System**

Hybrid optical system delivers energy saving performance which directly link to lower heat emission. Hybrid optical system enables more various function such as color temperature change and focal size change even with less consumption of energy and heat. 30% higher efficiency comparing to normal reflector and less weighted solution comparing to lens system



- **Cool Light**

LED technology lets Luvis keep cool. Operating theatre light should detain the irradiation of light as the heat dry up the affected part. Standard recommends not to exceed 1000W/ m2 but all of LUVIS surgery lights irradiate far less than the standard requests Minimum heat emission will protect patients' wounds during the surgery.

Excellent Optical Performance

- **Dilution Effect**

All Medical lights have tested the dilution test to ensure the proper dilution performance which is highly crucial for performance of medical surgery. Luvis have excellent dilution effect comparing to any other existing medical illuminations.

- Luvis L200 : 75~98 %
- Luvis M300/M310 : 55~100 %
- Luvis M200/M210 : 50~100 %

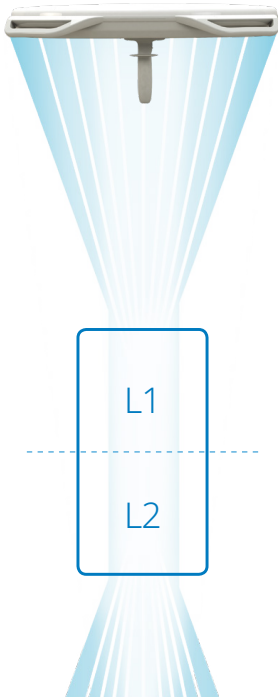


Model No.		L200	M300/M310	M200/M210
Dilution Effect	With Tube(%)	98	100	100
	1 mask(%)	75	55	50
	2 mask(%)	60	50	48

- **Depth of Illumination**

The distance between the point of maximum intensity of illumination at the center of the illuminated field (1 meter from the surface emission of light) and the detection of the value of 20% of the maximum intensity of illumination, measuring in the direction of the emission surface (L1) that in the opposite direction (L2). These values, added together (L1 + L2), gives the depth of illumination without the need to refocus. A higher level of illumination depth is very important especially in cases of narrow and deep wound channels

- L200**
 - Ec x 60 % : 85 cm
 - Ec x 20 % : 150 cm
- M300/M310**
 - Ec x 60 % : 90 cm
 - Ec x 20 % : 150 cm
- M200/M210**
 - Ec x 60 % : 65 cm
 - Ec x 20 % : 125 cm



L/L200 Ceiling Type

160,000 lx + 160,000 lx

Synchronized Intuitive Control Panel
touch sensor control



- Illumination Intensity
160,000lx (Max.)
- Focus Size
6 steps adjustment
(Max. 30 cm / Min. 20 cm)
- Color Temperature
3,800 K / 4,300 K / 4,800 K
- ENDO-MODE
Suitable for endo-surgery by one click, EC*5 %

Full-HD Camera
(Optional)

Installation Guide Video



Model	Code
L/L200	L2L2-MAD1000

Other Configuration



Full HD Camera

Image Sensor	1 / 2.8"-Type CMOS
Lens	10x optical zoom f = 3.8 mm (wide) to 38 mm (tele) F1.8 to F3.4
Picture Quality	Full HD 1080p (1920 *1080)
Digital Zoom	12x(120x with optical zoom)
Output	HD SDI(75Ω, BNC)
Image Point	2.14 M Pixels



Wall Controller

Classification	Description
Range of wireless Com.	<10 m
Protocol of Wireless Com.	IEEE802.15.4 (ISM 2.4 GHz)
Input	AC 100-240 V, 50/60 Hz
Output	DC 28 V x 2

320° Rotating Arm
With Full HD Camera

Hybrid LED System
Lower heat emission & Less consumption of energy



Center Grip
Quick controller & Autoclavable handle



Smart Sensor
Detect the obstacle & Increase the intensity automatically

Battery Type
DC 14.8 V, 26 Ah, 3.8 kg
3 hours when fully charged(100%)



Model	Code
L200	L2-MAS1000

L/M200


Ceiling Type


160,000 lx + 120,000 lx


Synchronized Intuitive
Control Panel


touch sensor control



- 

Illumination Intensity
L200 : 160,000 lx (Max.)
M200, M210 : 120,000 lx (Max.)
- 

Focus Size
6 steps adjustment
(Max. 30 cm / Min. 20 cm)
- 

Color Temperature
L200, M210 : 3,800 K / 4,300 K / 4,800 K
M200 : 4,300 K
- 

ENDO-MODE
Suitable for endo-surgery by
one click, EC*5 %

Center Grip

Quick controller & Autoclavable
handle



M200/M210

360° Rotating Arm

Hybrid LED System

Lower heat emission & Less
consumption of energy



Smart Sensor

Detect the obstacle & Increase
the intensity automatically



Battery Type

DC 14.8 V, 26 Ah, 3.8 kg
3 hours when fully charged(100%)



L200

Installation Guide Video



Model	Code
L/M200	L2M2-DAD1000
L/M210	L2M2-MAD1000

M300/M200


Ceiling Type


160,000 lx + 120,000 lx


Synchronized Intuitive
Control Panel


touch sensor control



- 

Illumination Intensity
M300, M310 : 160,000 lx (Max.)
M200, M210 : 120,000 lx (Max.)
- 

Focus Size
6 steps adjustment
(Max. 30 cm / Min. 20 cm)
- 

Color Temperature
M310, M210 : 3,800 K / 4,300 K / 4,800 K
M300, M200 : 4,300 K
- 

ENDO-MODE
Suitable for endo-surgery by
one click, EC*5 %

Center Grip

Quick controller & Autoclavable
handle



Installation Guide Video



Model	Code
M300/M200	M3M2-SAD1000
M310/M210	M3M2-MAD1000



360° Rotating Arm

Smart Sensor

Detect the obstacle & Increase
the intensity automatically



Hybrid LED System

Lower heat emission & Less
consumption of energy



Battery Type

DC 14.8 V, 26 Ah, 3.8 kg
3 hours when fully charged(100%)



Other Configuration

Model	Type
M/M300	M3M3-SAD1000
M/M310	M3M3-MAD1000

Model	Type
M300	M3-SAS1000
M310	M3-MAS1000

Model	Type
M200	M2-SAS1000
M210	M2-MAS1000

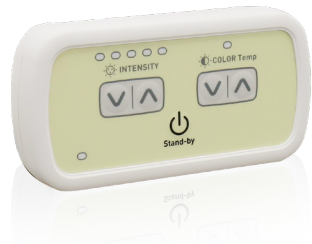
Model	Type
M/200	M2M2-SAD1000
M/210	M2M2-MAD1000


S200


Ceiling Type

100,000 lx + 100,000 lx

Intensity Control
in 5 Steps



 Illumination Intensity
100,000 lx (Max.)

 Color Temperature
3,800 K / 4,300 K / 4,800 K

Adjustable Focus

Select focal size easily
18cm or 30cm

Detachable
Handgrip

Easy and stable handling
autoclavable material





Installation Guide Video



Model	Code
S/S200	PL2S50-002E4

Other Configuration

			
Model	Type	Model	Type
S200	PL2S40-002D4	S200	PL2S30-002C4

L200

Mobile Type

160,000 lx

Smart Sensor

Smart sensor will detect the obstacle and increase the Intensity automatically. So Luvis can deliver more stable illumination



Main Control Panel



Quick Controller on central grip



Detachable and autoclavable hand grip

Battery Type

DC 14.8 V, 26 Ah, 3.8 kg
3 hours when fully charged(100%)



Max 160,000 lx Intensity
3 Steps of color Temperature selectable (3,800 K / 4,300 K / 4,800 K)
Excellent Depth of Volume of Light (L1+L2 150 cm)
Ra 95 of Highest Level of CRI
R9 90 of red color rendering ability
Selectable Focal Size (Dia.20 cm ~ Dia.30 cm)
Excellent Dilution Effect with 96 LED units (56 %~98 %)
4 Smart Sensors for maintaining intensity
Dentis Patent Channel Illumination Technology
Intuitive control with one touch panel
No UV emission & Lowest level of heat emission
Detachable & Autoclavable Hand Grip
Ergonomic & friendly design

Model	Code
L200 (Without Battery)	L2-MBM5000
L200 (With Battery)	L2-MBM5001



M300/M310

Mobile Type

Luvis LED Surgical Light 12 / 13

160,000 lx

Smart Sensor

Smart sensor will detect the obstacle and increase the Intensity automatically. So Luvis can deliver more stable illumination



Main Control Panel



Quick Controller on central grip



Detachable and autoclavable hand grip

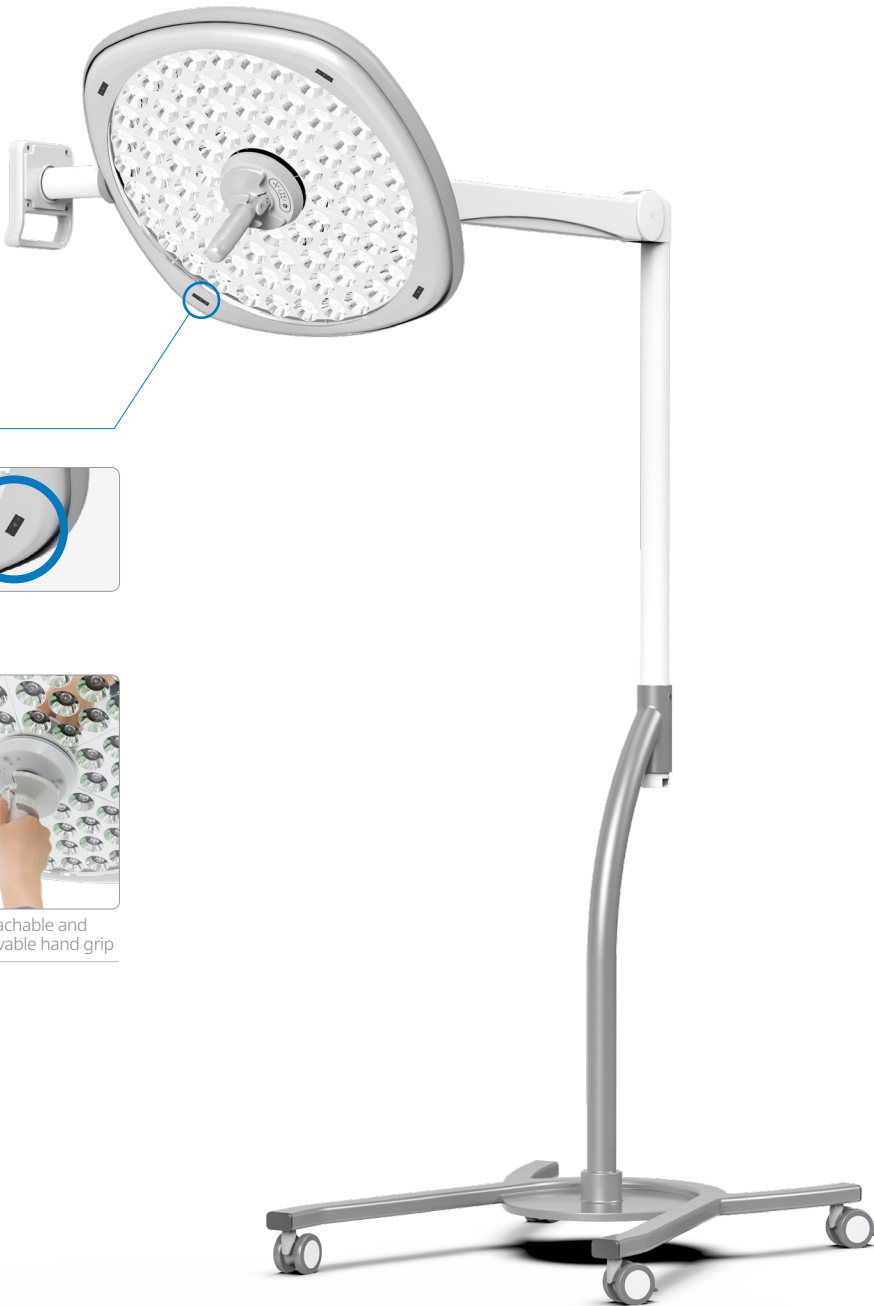
Battery Type

DC 14.8 V, 26 Ah, 3.8 kg
3 hours when fully charged(100%)



Max 160,000 lx Intensity
Color Temperature (M300 : 4,300 K / M310 : 3,800 K / 4,300 K / 4,800 K)
Excellent Depth of Volume of Light (L1+L2 150 cm)
Ra 95 of Highest Level of CRI
R9 90 of red color rendering ability
Selectable Focal Size (Dia.20 cm ~ Dia.30 cm)
Excellent Dilution Effect with 84 LED units (48 %~100 %)
4 Smart Sensors for maintaining intensity
Dentis Patent Channel Illumination Technology
Intuitive control with one touch panel
No UV emission & Lowest level of heat emission
Detachable & Autoclavable Hand Grip
Ergonomic & friendly design

Model	Code
M300 (Without Battery)	M3-SBM5000
M300 (With Battery)	M3-SBM5001
M310 (Without Battery)	M3-MBM5000
M310 (With Battery)	M3-MBM5001



Luvis **M200/M210**

Mobile Type

120,000 lx



Battery Type
DC 14.8 V, 26 Ah, 3.8 kg
3 hours when fully charged(100%)



Max 120,000 lx Intensity
Color Temperature (M200 : 4,300 K / M210 : 3,800 K / 4,300 K / 4,800 K)
Excellent Depth of Volume of Light (L1+L2 125 cm)
Ra 95 of Highest Level of CRI
R9 90 of red color rendering ability
Adjustable Focus Size (Dia.20 cm ~ Dia.30 cm)
Excellent Dilution Effect with 54 LED units (48 %~100 %)
No UV emission & Lowest level of heat emission
Intuitive control with one touch panel
Detachable & Autoclavable Hand Grip
Ergonomic & friendly design

Model	Code
M200 (Without Battery)	M2-SBM5000
M200 (With Battery)	M2-SBM5001
M210 (Without Battery)	M2-MBM5000
M210 (With Battery)	M2-MBM5001

Luvis **S200**

Mobile Type

100,000 lx



Max 100,000 lx Intensity
Intensity Control in 5 steps
3 Steps of color Temperature selectable (3,800 K / 4,300 K / 4,800 K)
Ra 90 of Highest Level of CRI
Adjustable Focus (Min 18 cm, Max 30 cm)
Excellent Dilution Effect with 18 LED Units
No UV emission & Lower Level of heat emission
Detachable & Autoclavable Hand Grip

Model	Code
S200	PL2S10-002A4

Luvis **E100** Mobile Type

60,000 lx



Battery Type
DC 14.8 V, 7.8 Ah, 2.0 kg
3 hours when fully charged(100%)

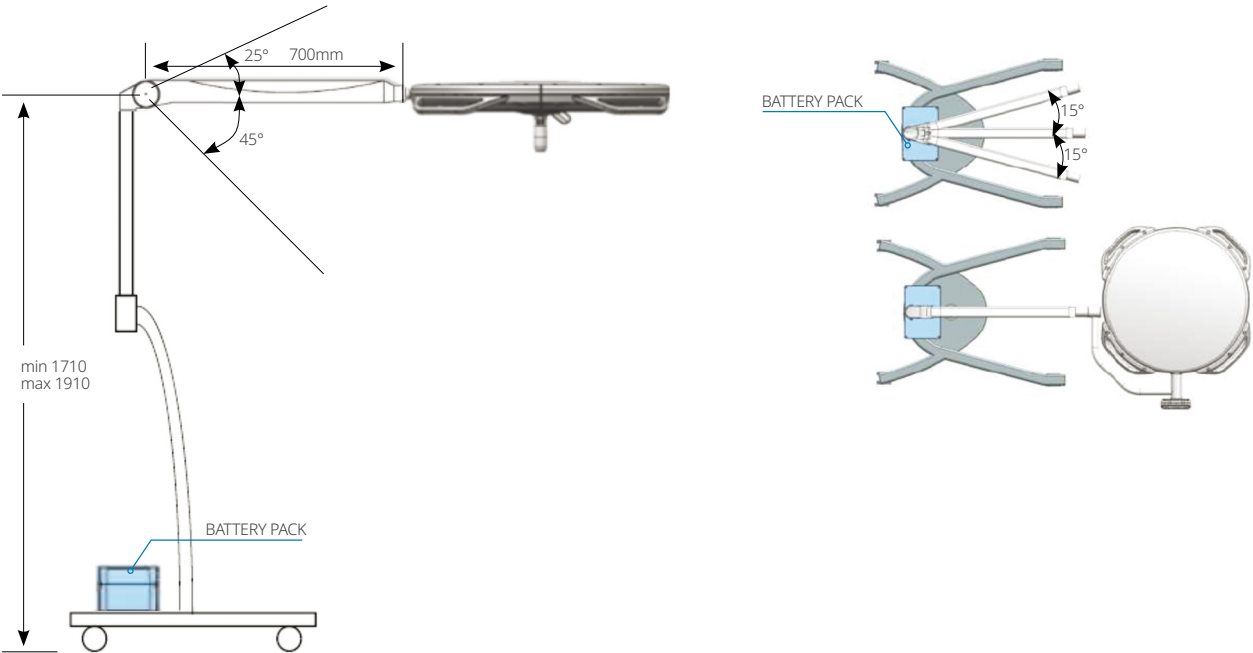


High Level of illumination intensity: 60,000 lx at 0.5 m
17 cm focal size
3 steps of intensity control
Accurate color rendering Ra>95
3 Steps of color Temperature selectable (3,500 K / 4,000 K / 4,500 K)
Easy to use, simple control unit on the head
Low maintenance cost
Lowest heat emission and no UV from the light

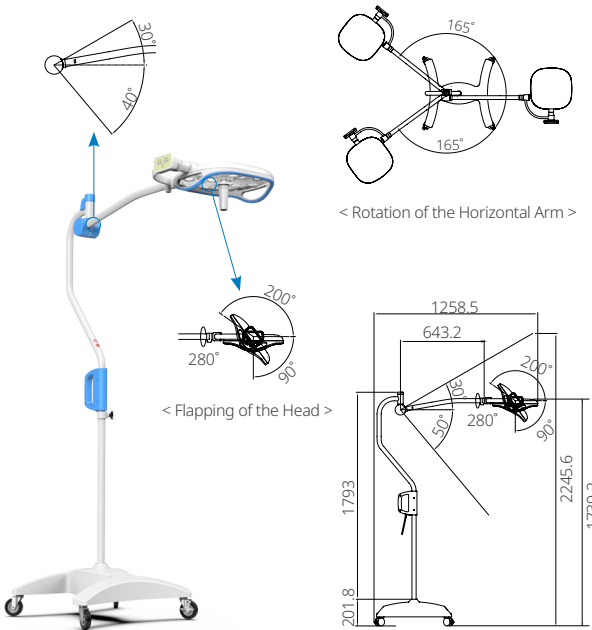
Model	Code
E100 (Without Battary)	E1-M
E100 (With Battary)	E1-MB

Movement & Installation

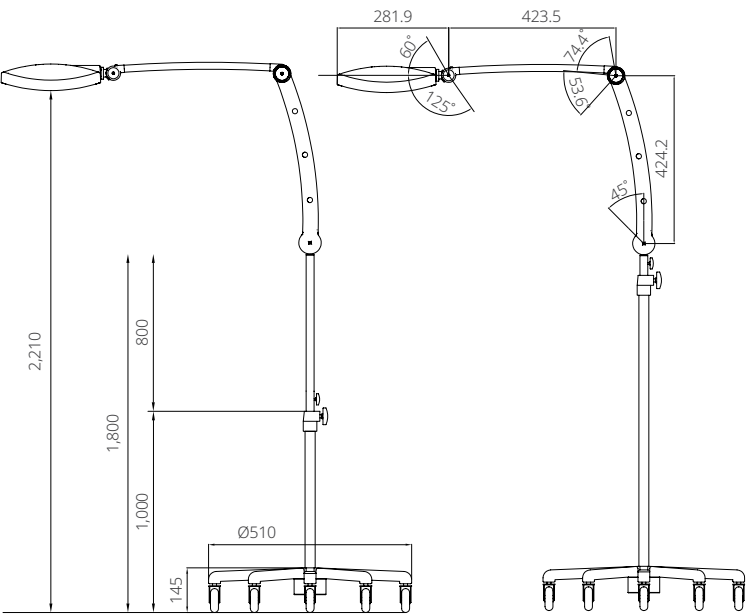
Luvis M/L Dimension (Unit : mm)








Luvis S200 Dimension (Unit : mm)




Luvis E100 Dimension (Unit : mm)



Technical Specification

Model	L200	M310	M300	M210	M200
Design (Light Head)					
Installation	Ceiling Dual Ceiling Mobile	Ceiling Dual Ceiling Mobile	Ceiling Dual Ceiling Mobile	Ceiling Dual Ceiling Mobile	Ceiling Dual Ceiling Mobile
Head Size(cm)	66	60	60	50	50
No. of LED(ea)	96	84	84	54	54
Intensity(lx)	Max 160,000 at 1 M	Max 160,000 at 1 M	Max 160,000 at 1 M	Max 120,000 at 1 M	Max 120,000 at 1 M
Intensity Control	6steps (40,000 lx ~ 160,000 lx)	6steps (40,000 lx ~ 160,000 lx)	6steps (40,000 lx ~ 160,000 lx)	6steps (40,000 lx ~ 120,000 lx)	6steps (40,000 lx ~ 120,000 lx)
CRI(Ra)	95	95	95	95	95
Color Temperature(K)	3,800 / 4,300 / 4,800	3,800 / 4,300 / 4,800	4,300	3,800 / 4,300 / 4,800	4300
Light Field Size	20~30 at 1 M	20~30 at 1 M	20~30 at 1 M	20~30 at 1 M	20~30 at 1 M
Depth of illumination(cm)	150(at 20 %) 85(at 60 %)	150(at 20 %) 90(at 60 %)	150(at 20 %) 90(at 60 %)	125(at 20 %) 65(at 60 %)	125(at 20 %) 65(at 60 %)
Smart sensor(ea)	4	4	4	No	No
Detachable Centre grip	Yes(2X)	Yes(2X)	Yes(2X)	Yes(2X)	Yes(2X)
LED Life Span(hrs)	50,000	50,000	50,000	50,000	50,000
(option) Internal Camera	Adoptable	Adoptable	Adoptable	-	-
(option) Wall controller	Adoptable	Adoptable	Adoptable	Adoptable	Adoptable
(option) Backup battery	Adoptable	Adoptable	Adoptable	Adoptable	Adoptable
Certificate	CE/FDA/UL	CE/FDA/UL	CE/FDA/UL	CE/FDA/UL	CE/FDA/UL
Power Consumption(W)	63	111	99	53	46

* Optical values are measured with a tolerance of ±10%

Model	S200	E100
Design (Light Head)		
Head Size(cm)	35 x 34	25 x 24.6
Intensity(lx)	Max. 100,000 @ 1 M	Max. 60,000 @ 0.5 M
CRI(Ra)	90	95
Color Temperature(K)	3,800 / 4,300 / 4,800	3,500 / 4,000 / 4,500
Depth of iluuminatation(cm)	EC 60 % > 90 cm EC 20 % > 125 cm	-
LED Life Span(hrs)	50,000	50,000
Power Consumption(W)	29	17
Light Field Size	18 (Circle) / 30 (Circle)	17 (Circle)
Focal Distance(m)	1	0.5
Input Power	AC 100~240 V, 50/60 Hz	AC 100~240 V, 50/60 Hz