

# PRODUCT SPECIFICATION

**PRODUCT TYPE: Fonterra 450mm Flat Hibay**

**MODEL NO: ZO-HB-250-E**



## LIGHT SPECIFICATIONS

overview table

Height	Φ 50%	60°	Lux Value
5 m	5.7 m		1000 lux
8 m	9 m		375lux
10m	11 m		250Lux

Model	Color	Color Temp
ZO-HB-2500-E	Cool White	6000K
	Cool White	5000K
	Natural White	4000K
	Warm White	3000K
Luminous Flux	Cool White	25,000 Lumens
	Warm White	20,000 Lumens
CRI	80	
Beam Angle	25/35/45/60 Degrees	

ELECTRICAL SPECIFICATIONS	
Driver Input Voltage	AC85-260V
Watts	250W
LED Type	Cree XBD
LED Units	224
Transformer	Meanwell
Output	48V 5 A
Rated Frequency	50/60Hz
Power Factor	95%
Conv. Efficiency	90%
THD	15%
Lifetime	50,000 hours

PHYSICAL SPECIFICATIONS	
Case Material	Aluminum Frame
Mask Material (C)	Tempered Glass
Index of Protection	IP65
N.W.	7.00 kg
G.W.	11.00 kg
Dimensions	450 X 450 X 125 mm
Size Within Box (1 Pcs)	500 X 500 X 310 mm
Outer Box G.W.	25.00 kg ( 1 Units)
Other	

**Applications:**

- Multi Purpose High power Lighting
- Emergency Lighting

**Benefits:**

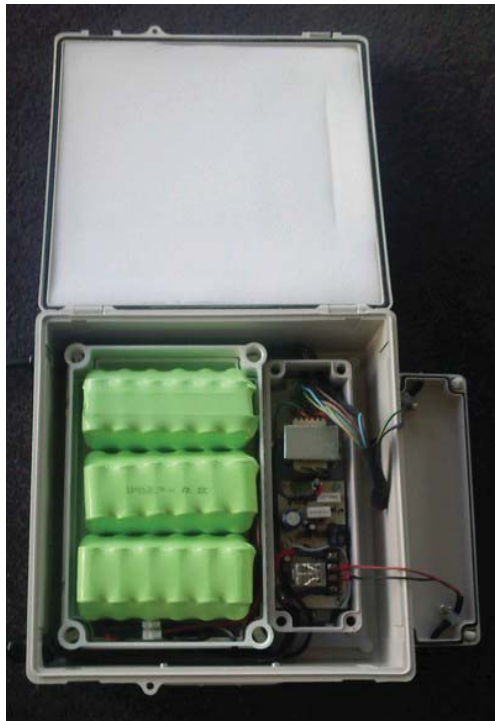
- Energy Efficient
- High Luminosity,
- Low Heat Light Source
- 5 year Warranty

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### Emergency Power Supply Specification



BATTERY SPECIFICATION	
<b>Battery Type</b>	Mi-MH Battery
<b>Capacity</b>	2.5Hours Emergency Duration
<b>Charging Time</b>	24Hours
<b>Performance (Full Charging)</b>	<b>Initial Emergency:</b> 60% luminance <b>One Hour Emergency:</b> 50% luminance <b>Two Hour Emergency:</b> 30% luminance

INVERTER SYSTEM	
<b>1. AC Working</b>	Sleep status Charging if battery not full
<b>2. AC Cut Off</b>	Change to EPS Working in 0.1~4 S
<b>3. AC Recovery</b>	Change back to AC, Charging for battery

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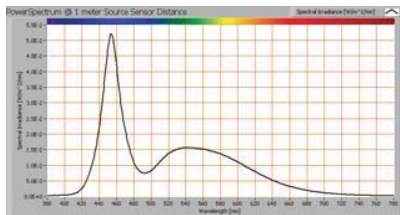
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### MODEL NO: ZO-HB-250-E

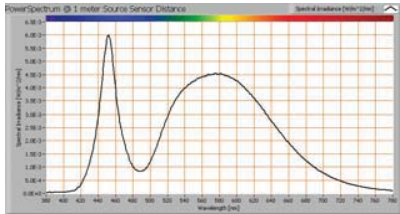
#### Spectral Response Curve

Below are the spectral response graphs for: 6000K, 4000K, 3000K, 2700K

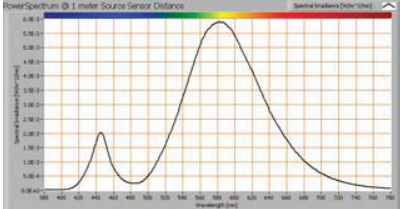
Color Spectrum: Cool White 6000K



Color Spectrum: Natural White 4000K



Color Spectrum: WarmWhite 3000K




#### Luminosity Overview Table

Below: lux values for 25° 35° 45° 60°

Height	Φ 50%	25°	Lux Value	Height	Φ 50%	35°	Lux Value
8 m	3.5 m		2080 lux	8 m	5 m		1080 lux
10 m	4.4 m		1420 Lux	10 m	6.3 m		710 Lux
15m	6.6 m		500 Lux	15m	9.4 m		325 Lux

Height	Φ 50%	45°	Lux Value	Height	Φ 50%	60°	Lux Value
5 m	4 m		1660 lux	5 m	5.7 m		1000 lux
8 m	6.6 m		660 Lux	8 m	9 m		375 Lux
10 m	8.2 m		410 Lux	10m	11m		250 Lux

Energy 

**A**

**B**

**C**

**D**

**E**

**F**

**G**

**A**

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**25060**                      **Lumen**

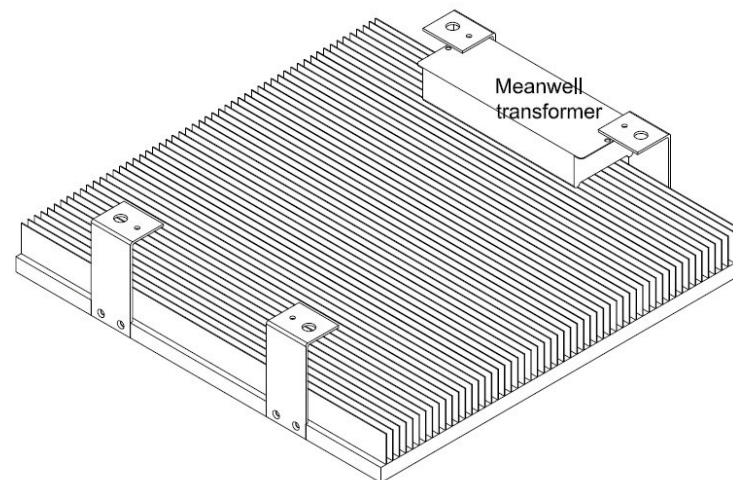
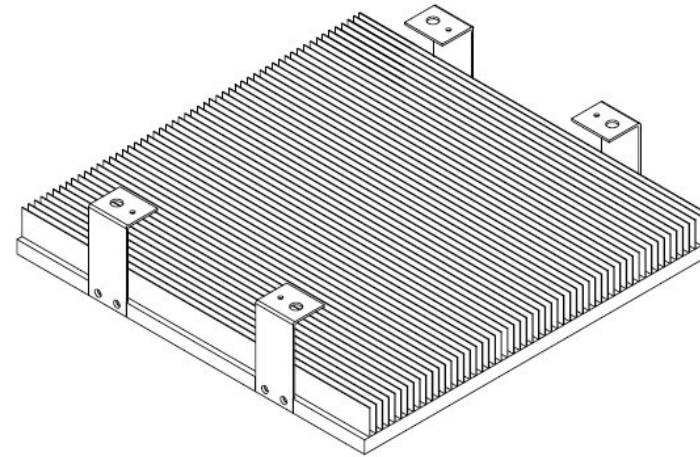
**251. 6**                      **Watt**

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## Lamp Drawings

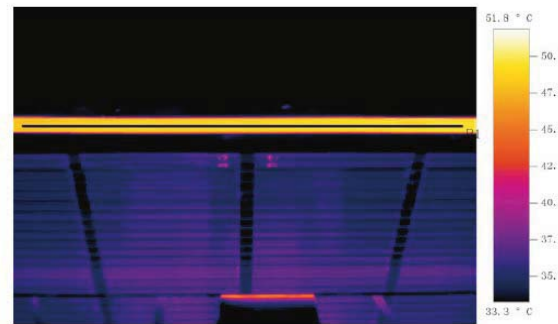
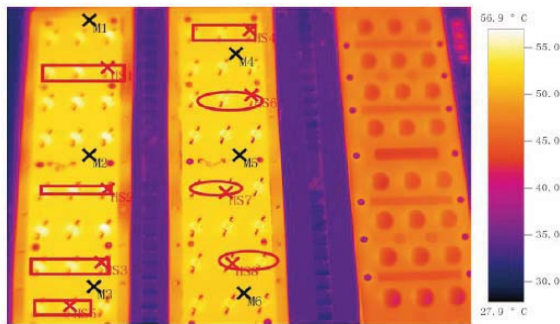
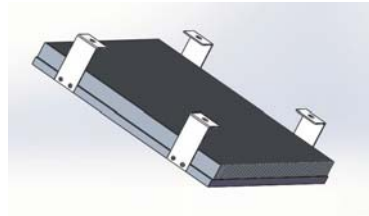


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## Thermal Testing



Thermal Image ( Front )		
Point	Location	Temperature
M1	Chip Board Surface	52.6
M2	Chip Board Surface	52.2
M3	Chip Board Surface	52.2
M4	Chip Board Surface	52.1
M5	Chip Board Surface	51.8
M6	Chip Board Surface	56.9
HS1	Junction Temp.	55.6
HS2	Junction Temp.	60.4

Thermal Image ( Back )		
HS3	Junction Temp.	56.2
HS4	Junction Temp.	55.1
HS5	Junction Temp.	53.8
HS6	Junction Temp.	56.4
HS7	Junction Temp.	55.7
HS8	Junction Temp.	55.7

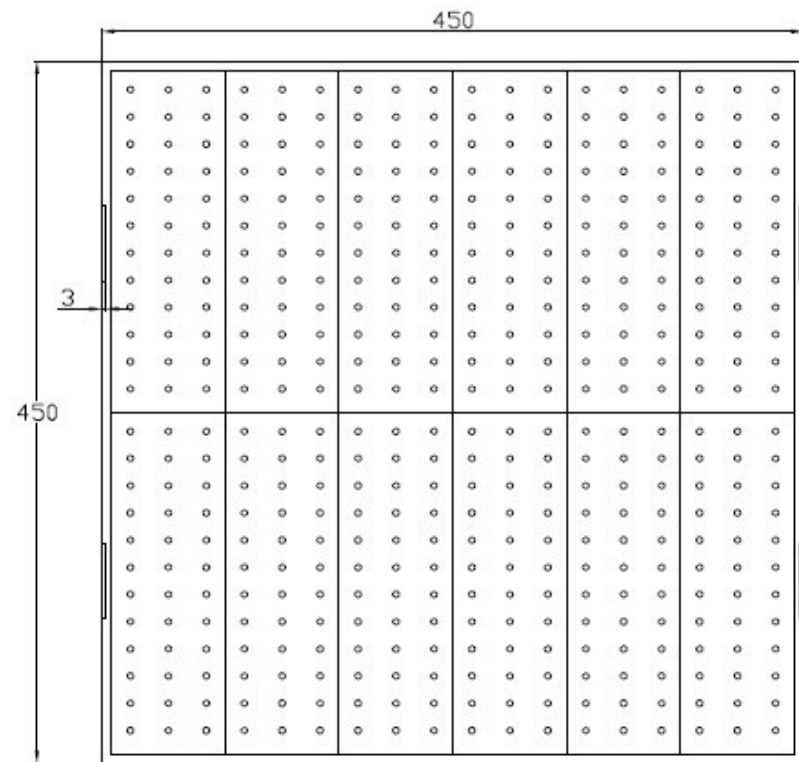
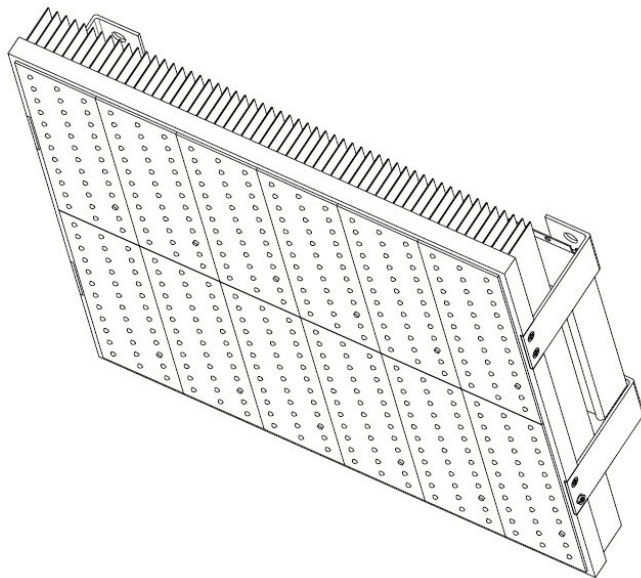
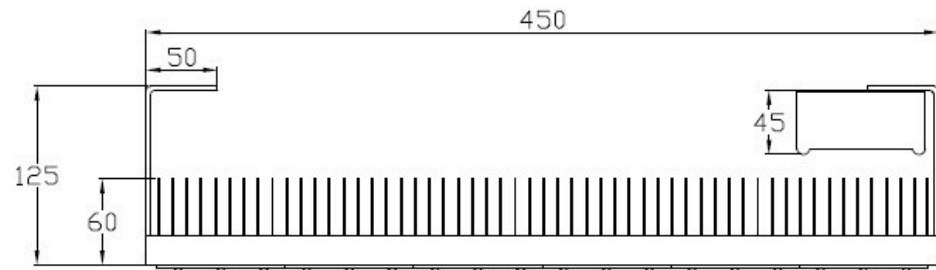
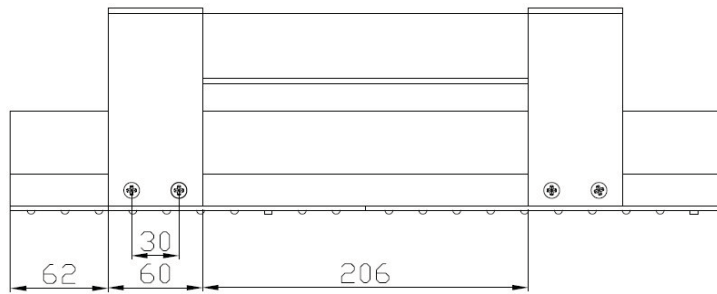
lamp status	> 24 hours on
testing environment temperature	25 C
reflected apparent temperature	25 C
Camera	Flir T335
emissivity	0.89 (edge panel,0.95 rest
measuring distance	0.5, 1 m
IFOV gometric	0.136 mm per 0.1 m distance
NETD ( thermal sensitivity )	50 mK

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**Lamp Dimensions:**

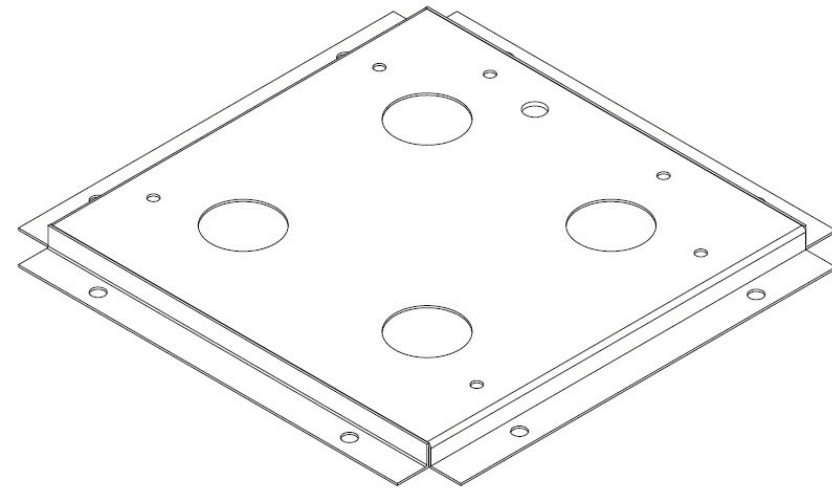
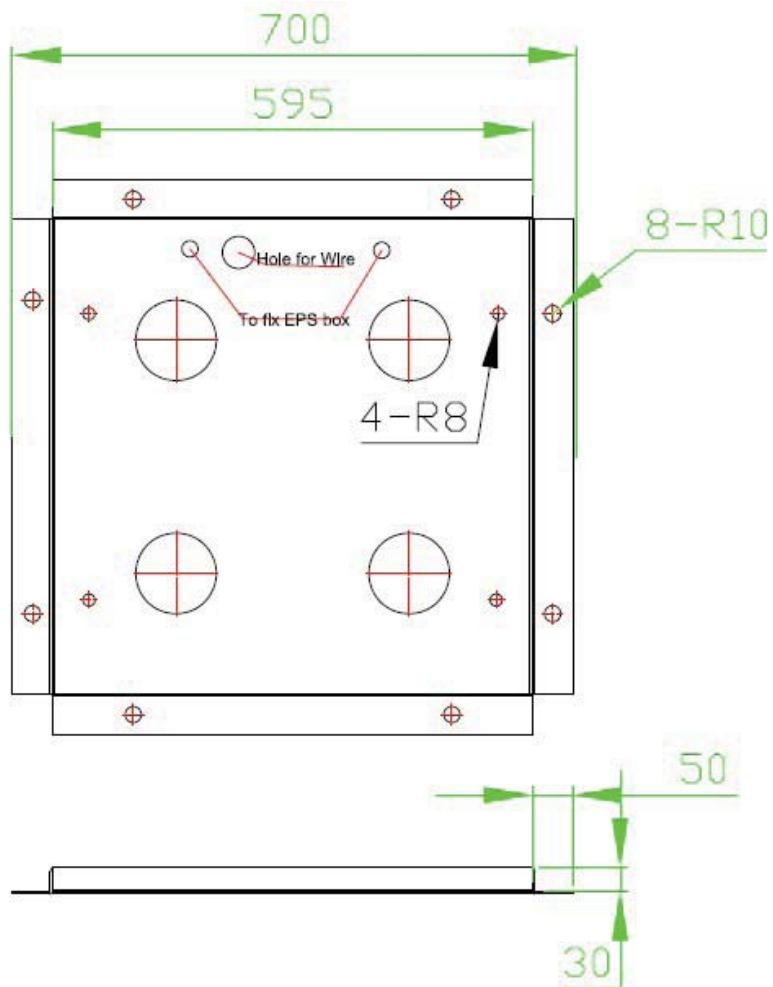


## PRODUCT SPECIFICATION

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Cover Dimensions ( Unit: mm )



Metal Thickness: 3mm

Note: The cover is same as 555mm Flat Hibay

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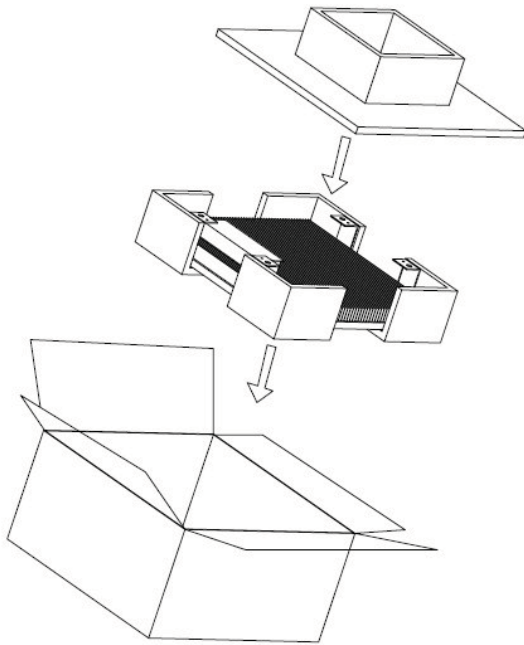
**MODEL NO: ZO-HB-250-E**

### Packing

#### 1. Lamp and EPS (1 Unit per CTN)

Dimension: 500mm x 500mm x 310mm

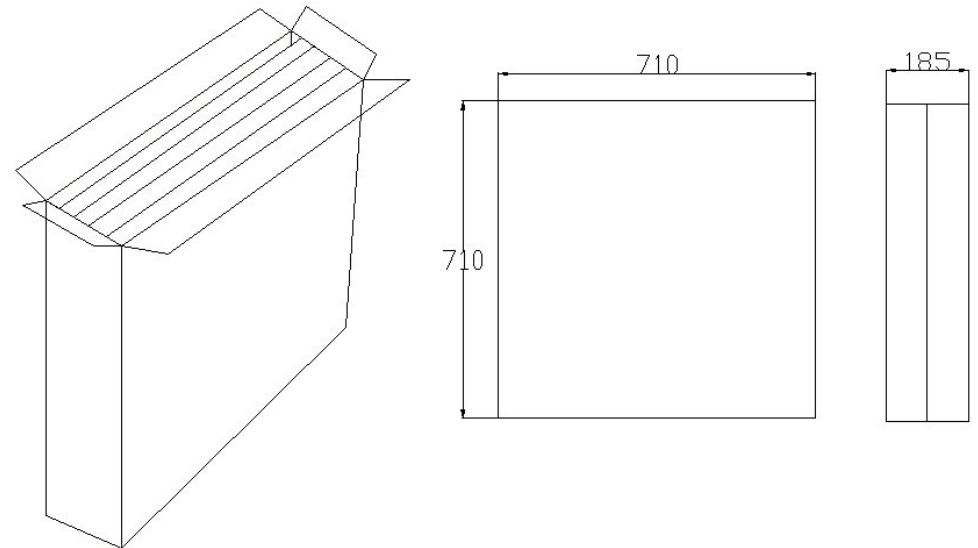
G.W: 25Kg



#### 2. Cover (5 Units per CTN)

Dimension: 710mm x 710mm x 185mm

G.W: 20Kg





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## Marking and Labels

Marking lasered on the product

ZeroUNO
Model : ZO-HB-250-E
300W : AC85 - 265V MFG MM: DD:YY
Beam Angle: 15DEG Color: 6000K
SN : XXXX-XX-XXXXXX-XXXXX

Label on the Inner Box:

<b>ZeroUNO</b>	
Fonterra 450mm Flat Hibay	QTY: 1 Unit
Product Code: ZO-HB-250-E	N.W.
Power : 250W	Color: XXXX K
Input : AC 85-265V	
Protection Index: IP65	MFG: xx-xx-xx
Complies to: IEC 60598-2-22 Ed3.2. CE FCC RoHs	

Label on the outer box:

<b>ZeroUNO</b>	
Fonterra 450mm Flat Hibay	QTY: 1 Unit
Product Code: ZO-HB-250-E	N.W.
Power : 250W	Color: XXXX K
Input : AC 85-265V	
Protection Index: IP65	MFG: xx-xx-xx
Complies to: IEC 60598-2-22 Ed3.2. CE FCC RoHs	
SN: XXXX-XX-XXXXX-XXXXX - (xxxxx)	