

# FONUX BK2-DALI-Z EMERGENCY LIGHT

Brand: **Fonux** | Category: **Emergency Light**

<b>Product Datasheet</b>	Website Know More PDF
<b>Recommended Website Card Name</b>	FONUX BK2-DALI-Z EMERGENCY LIGHT
<b>Source Datasheet</b>	Monitoring Light Data sheet for DALI - Founx.pdf



## Smart Emergency Management Master

*An Digital Addressable Lighting System*



## Key Details

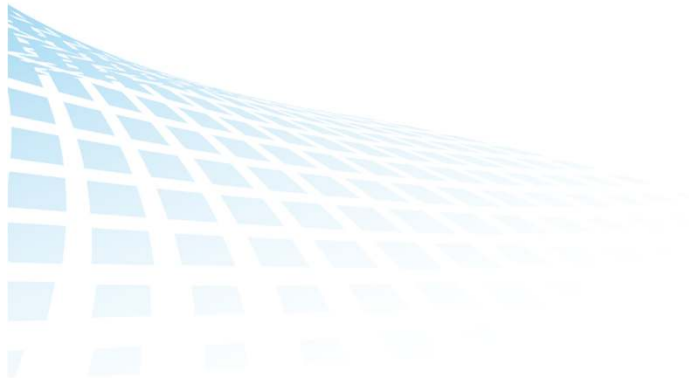
- DALI addressable emergency lighting
- Bulkhead emergency light series
- For monitored emergency lighting systems

Original manufacturer / supplier datasheet pages are included after this cover page for technical reference.



# Smart Emergency Management Master

*An Digital Addressable Lighting  
System*



# INSTALLATION PROCEDURE

TECHNICAL DATA	
Rated voltage and Frequency:	220~240V @ 50/60Hz, consuming 6.0W total
Temperature range:	0°C to +50°C
Weight:	873g without power supplies and controls
Dimensions W x H x D(mm):	213x150x35 (including Surface mount housing)
Cutout Size(mm):	198 x 117
Protection rating:	IP20 - Suitable for indoor use only
Number of DALI Lines: Number of DALI Emergency lights per lines:	2 64
Mounting way:	Wall Mounting
Memory Capacity:	4years of report Storage
CABLE REQUIREMENTS	
USB:	For upgrading not for end user use
AC input:	2-core TPS twin 1.5mm <sup>2</sup> minimum
Relay:	Extension to inform failure
Network:	Cat 5e Ethernet Cable RJ45
DALI 1 and 2:	2-core (Mains Rated) 1.0 to 1.5mm <sup>2</sup> [200metres and 300metres respectively] per DALI Network

## DALI Features

- Status of battery
- Status of lamp
- Charge condition
- Function test
- Duration test
- Group testing
- Inhibit mode





**Generates** - Email test results, fault information, reliability graphs and other information to selected groups. Send work orders to appointed contractors to rectify issues.



**Cloud /WEB Services** - This is an optional upgrade on traditional services, and provides that next level of flexibility, automation and control.



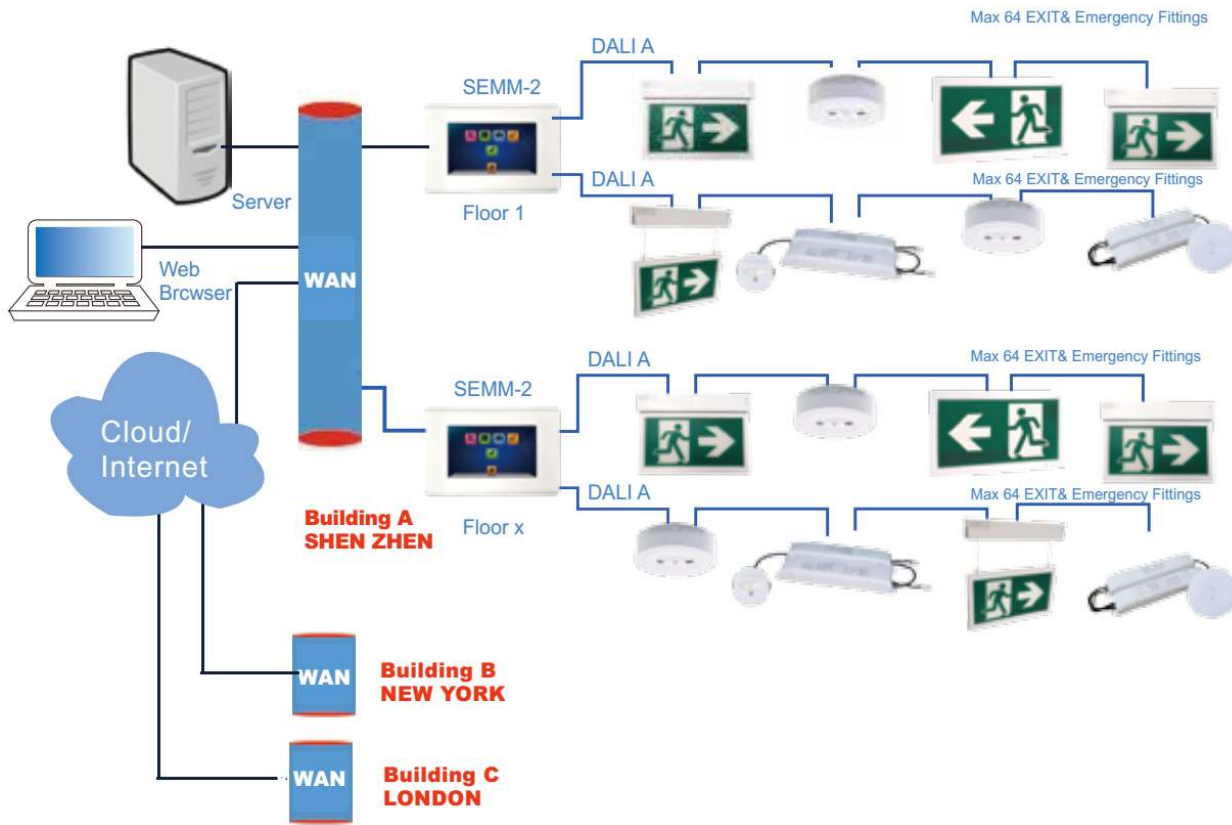
**Automatic** -Automaticaddressing, grouping,debugging and commissioning , many tasks are completed before the commissioning begins

**The SEMM Advantage**  
**SEMM control system** saves time and cost in set up and commissioning

Task	Previously	SEMM
Random addressing	5-10mins/64 fittings	Automatic
Scanning setting	2-10mins depending on	Automatic
Readdressing new devices	2+mins	Automatic
Fixing address conflicts	2+mins	Automatic



# SCHEMATIC DIAGRAM



# EMERGENCY BULK HEAD

## PRODUCT SPECIFICATION SHEET

MODEL : **BK2-DALI**

### INPUT VOLTAGE :

220-240VAC

### OUTPUT LUMENS:

150 LM 3H



### PRODUCT ADVANTAGES



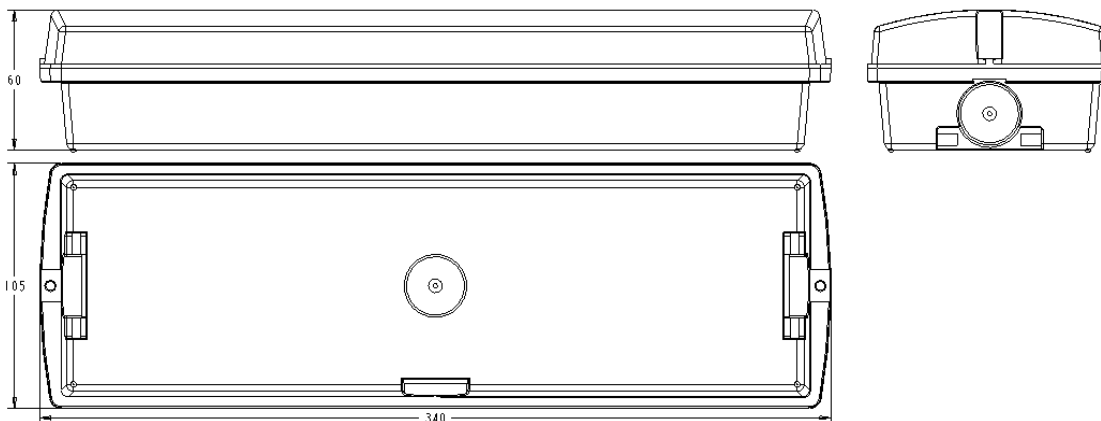
- ◆ Battery charge and discharge protection
- ◆ Long-life, LiFePO4 battery
- ◆ IP65 for outdoor used
- ◆ IK 08 protection rating
- ◆ RoHS Compliant.
- ◆ Clear or opal lens available
- ◆ Surface and recessed mount
- ◆ UL 3hour discharge certificate

### SPECIFICATIONS

- ◆ Input Voltage : 220-240Vac , 50Hz
- ◆ Input Power Rating : 3.5 Watts
- ◆ Output lumens 150lm
- ◆ Maintain and Non-maintain
- ◆ Discharge Operation: 1h/3h
- ◆ Battery:3.2V 3200mAh 26650type
- ◆ Recharge Time : 24 Hours
- ◆ Temperature Rating : 5~45°C
- ◆ Warranty : 5 Years for fixture

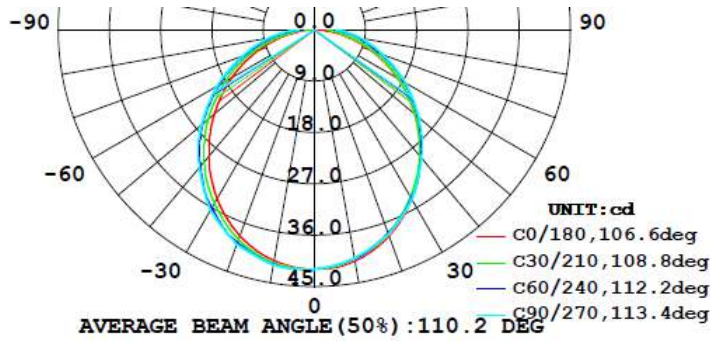


### DIMENSIONS

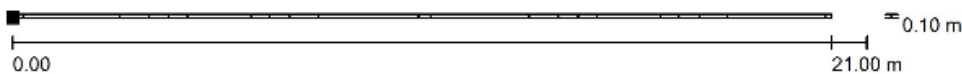
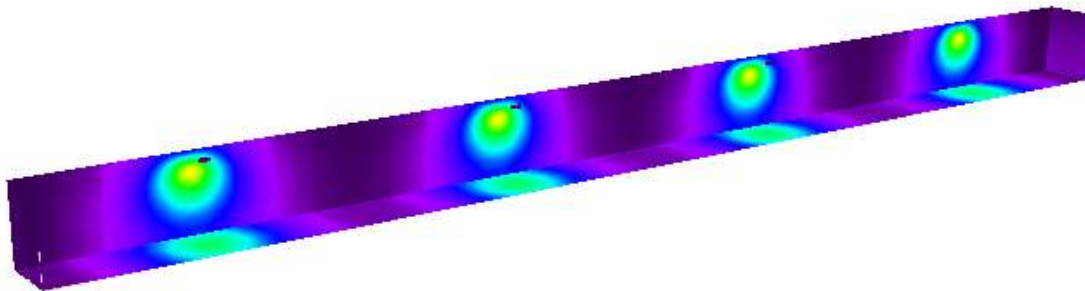
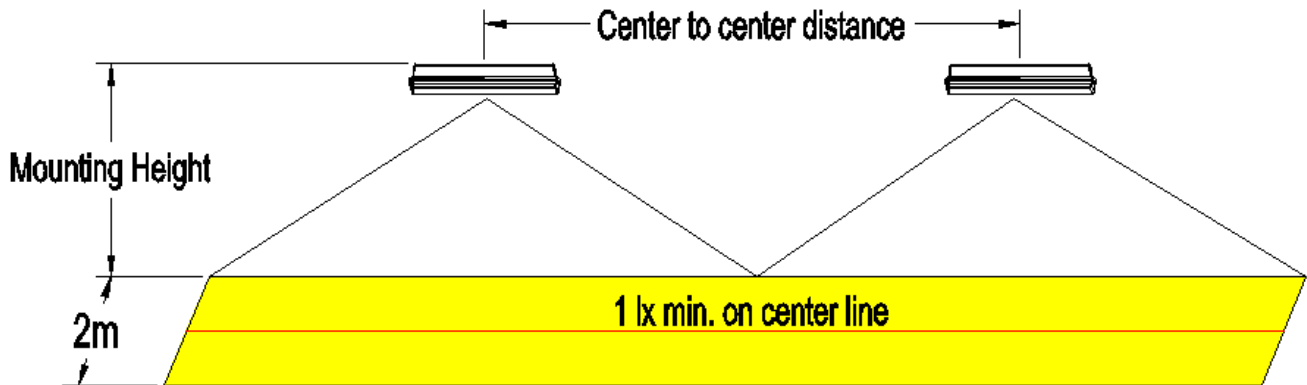


# Photometric for EU standard (EN1838)

## Corridor lens (default assemble)



## Luminaire mounting space (EU version model)



Position of surface in room:  
Marked point: (10.500 m, 0.950 m, 0.000 m)



Grid: 128 x 32 Points

$E_{av}$  [lx] 2.72     
  $E_{min}$  [lx] 1.03     
  $E_{max}$  [lx] 6.24     
 u0 0.380

Mounting Height	Center to center distance
2.5m	10.5m
3.0m	11m
3.5m	11m

Compliant EUROPE standard EN1838  
Illuminance requirement:  
Escape route up to 2 m wide, 1 lx on the central axis and 0.5 lx at 50% of the width.

**INPUT VOLTAGE :**

220-240VAC

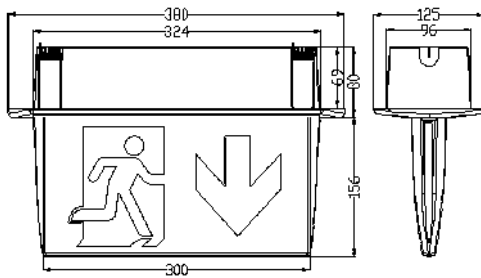
**OUTPUT LUMENS:**

VIEW DISTANCE 30M



Recessed ceiling mounted

**DIMENSIONS**



Insert an Acrylic box with PP pictogram

**STANDARD FEATURES**



- ◆ PC Housing
- ◆ Changeable pictogram
- ◆ IP44 for lens side
- ◆ IK 06 protection rating
- ◆ Suitable for damp location.
- ◆ Suitable for use in 5~45°C ambient temperature.
- ◆ RoHS Compliant.
- ◆ Recessed ceiling mounted
- ◆ Warranty: **5 Years for fixture, 5 Years for Battery.**

**ELECTRICAL FEATURES**

- ◆ Input Voltage: 220~240Vac, 50Hz
- ◆ Input Power Rating : 3.5 Watts max, SMD LED
- ◆ LED color temperature: 6000K-7000K
- ◆ **VIEW DISTANCE: 30M**
- ◆ Maintain and Non-maintain is switchable option
- ◆ Battery : 3.2V 1500mAh 18650type
- ◆ Discharge Operation : 3 Hours
- ◆ Recharge Time : 24 Hours
- ◆ LED indicator light and push button test switch.

**CERTIFICATION**

**UL certificate**



**ORDER GUIDE**

**Model no.: BK3-ACEM-RM**

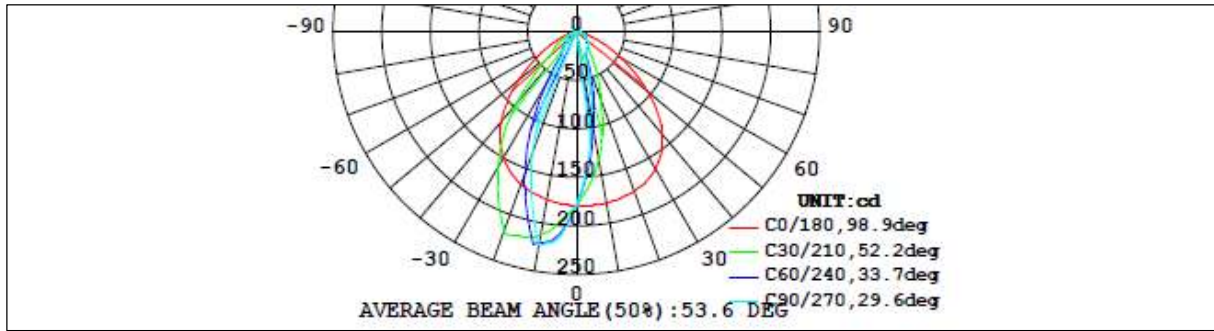
- ◆ Common Non-maintained & Maintained switchable self-contained emergency light
- ◆ **Manual test**

**Model no.: BK3-DALI-RM**

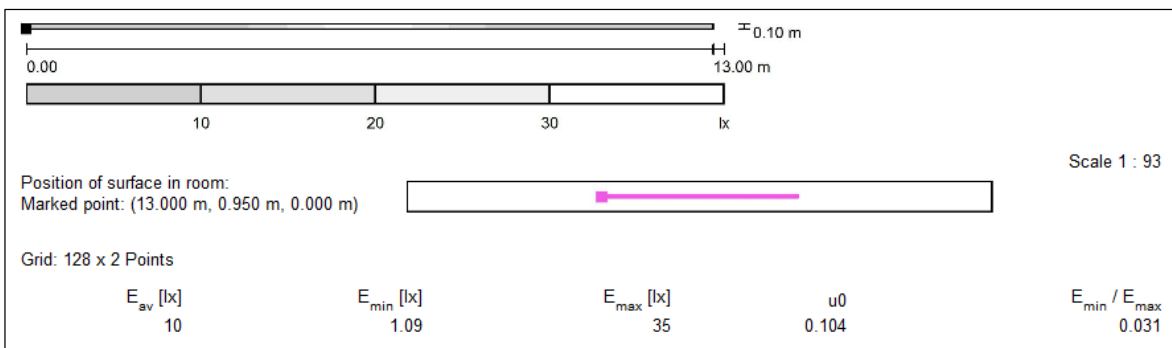
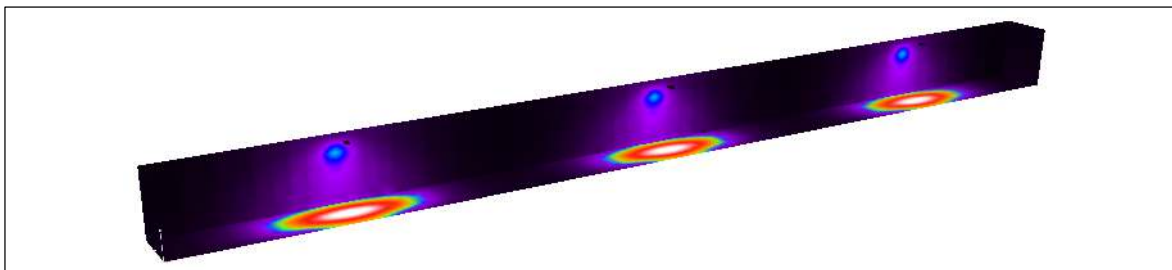
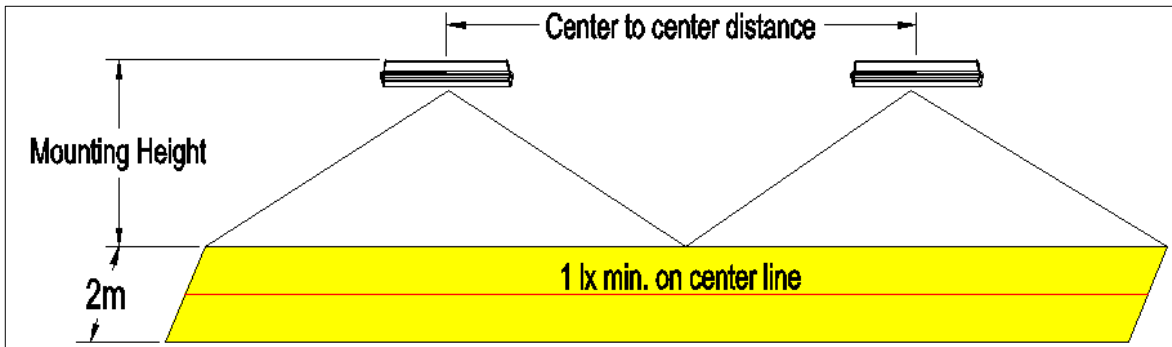
- ◆ **Using for monitoring system**
- ◆ Addressable lighting fitting.
- ◆ DALI options give further benefits to the user enabling the testing and monitoring of the emergency lighting system on site or via the internet.
- ◆ **DALI interface test**

Photometric for EU standard (EN1838)

Luminous intensity distribution



Luminaire mounting space (EU version model)

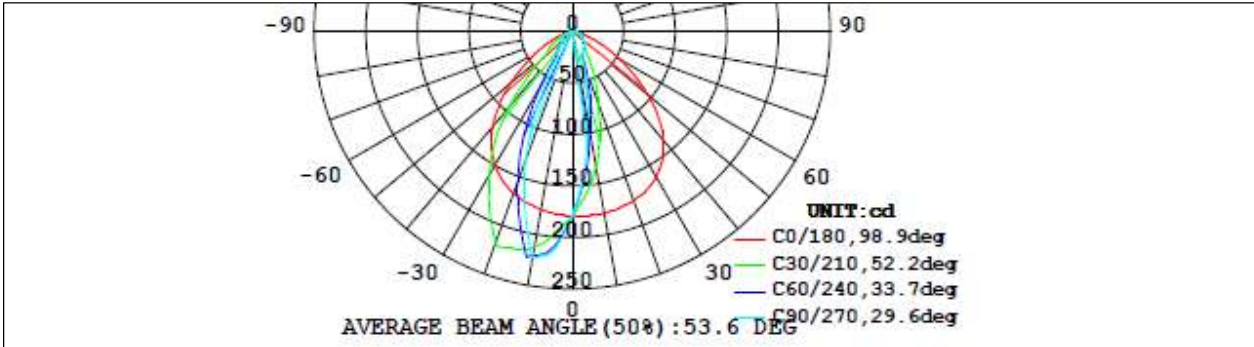


Mounting Height	Center to center distance
2.5m	13m
3.0m	14m
3.5m	15m

Compliant EUROPE standard EN1838  
illuminance requirement:  
Escape route up to 2 m wide, 1 lx on the  
central axis and 0.5 lx at 50% of the width.

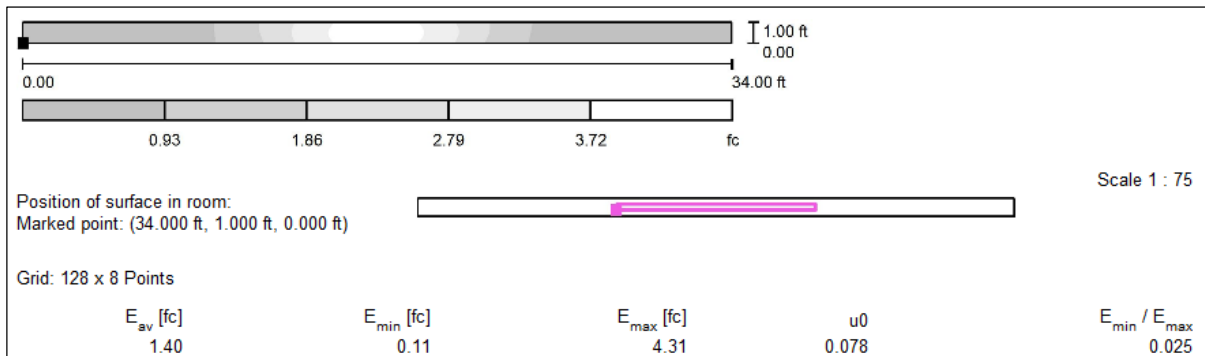
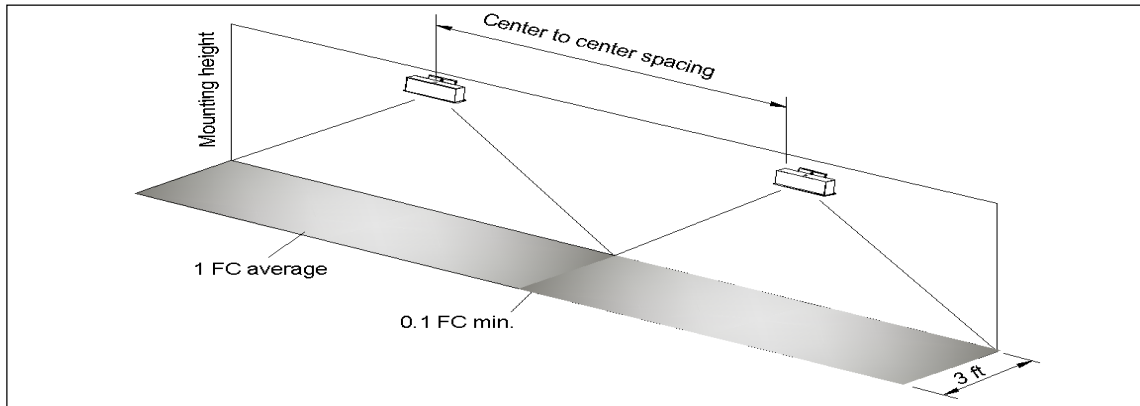
Photometric for US standard(UL924)

Luminous intensity distribution



Center to Center Spacing

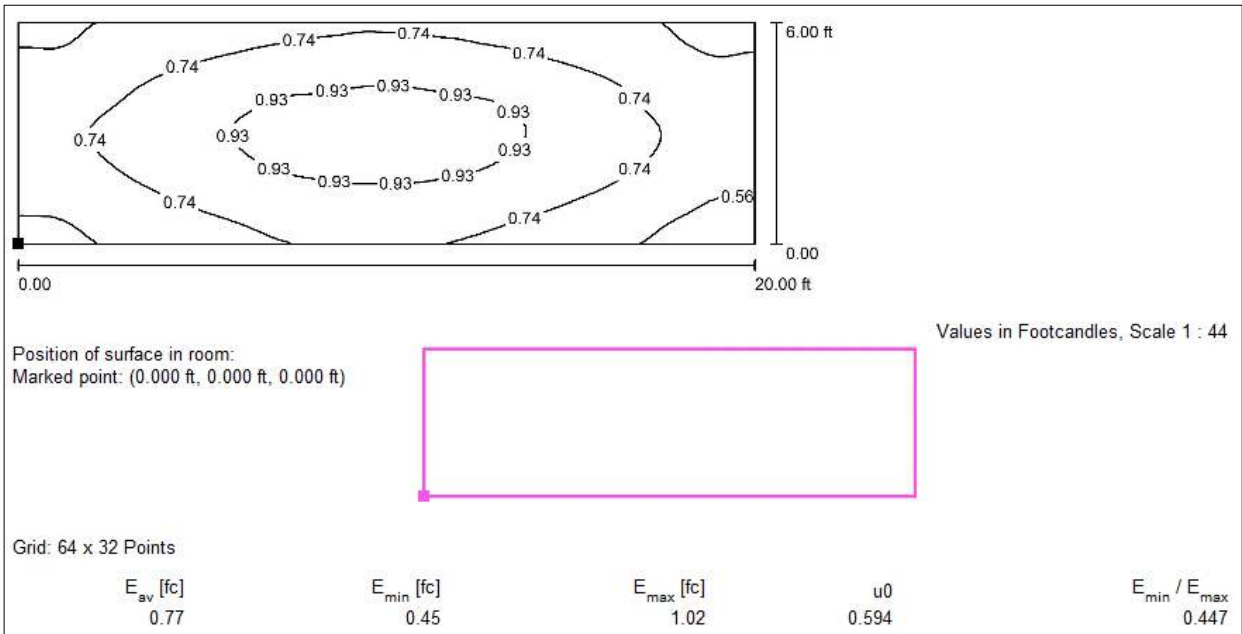
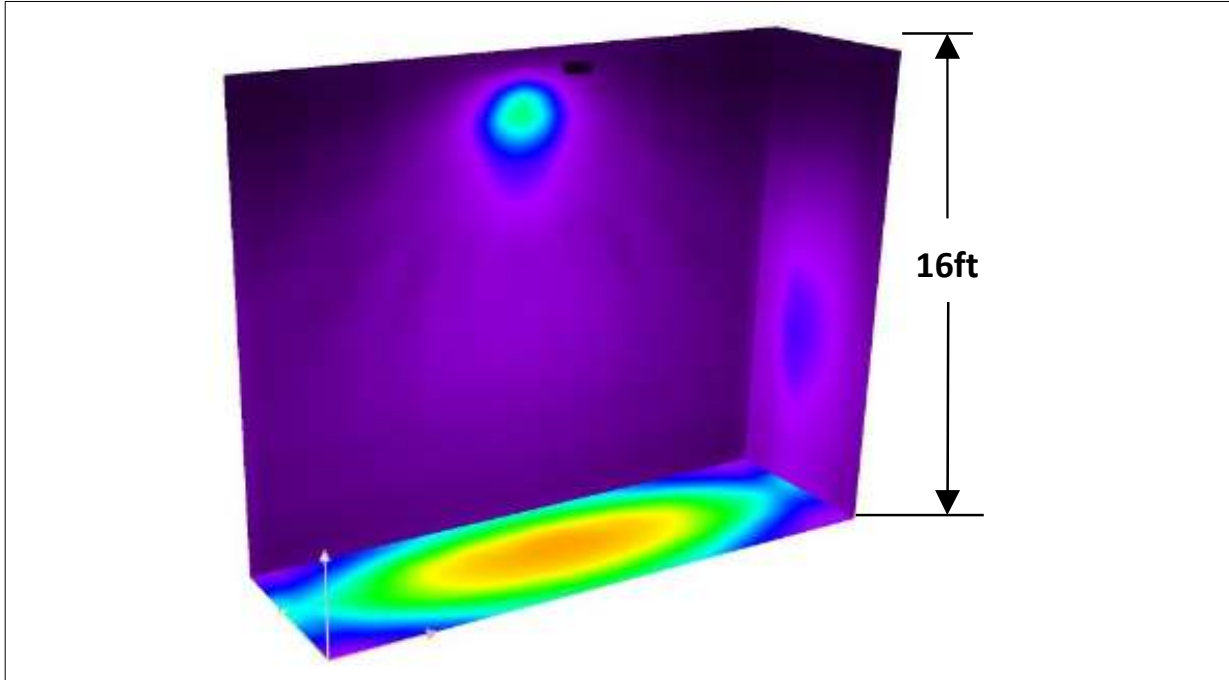
NFPA 101 requires 1.0 foot-candle average and 0.1 foot-candle minimum with a 40:1 maximum/minimum ratio. The corridor used is 100 feet long, 9 feet ceiling with a 6 feet wide walkway and 3 feet path of egress. The reflectance are 80% ceiling, 50% walls and 20% floors. The fixture mounting height is 7.5 feet.



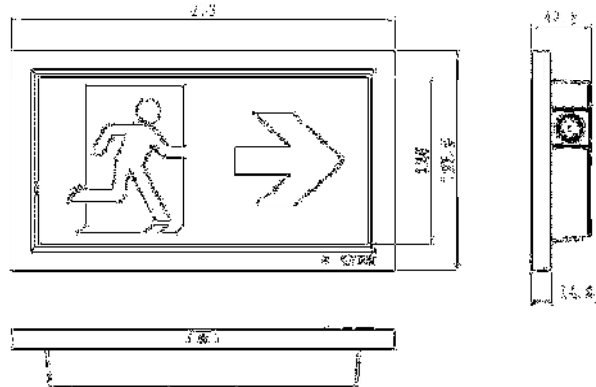
No.	Spacing @ 7.5 feet mounting height	Spacing @ 10 feet mounting height
1	34 feet	34feet

Photometric for US standard(UL924)

Mounting Height



## Photo and Dimension



## Feature

- Compact and decorative design.
- LED self contained luminaire with manual test and AUTO test optional.
- Ni-cad and Ni-MH battery optional.
- Single and double face universal.
- Replaceable pictogram design, including arrow right, left, down pictograms in package.
- High luminance model optional.
- Low operation cost via low power consumption.
- Maintained and non-maintained operation changeable.
- Material of luminaire compliant with the glow wire test at temperature of 850°C.
- RoHS compliance.

## Technical Specification

Rated Power Supply	220-240VAC 50/60Hz
Power consumption	Max.3.5W
Charge time	24 hours
Discharge duration	3hours
Changeover voltage	144-187VAC
Test facility	Manual test and AUTO test, DALI interface available
Viewing distance	24m
Operation	Maintained
Mounting	Wall mounting and Flush mounting
LED	SMD 2835, CCT 6000K, CRI>70
Luminance of white area on pictogram	Normal luminance 200cd/m <sup>2</sup> high luminance 500cd/m <sup>2</sup>

Safe color of Pictogram	Pantone 336C or Pantone 348C optional
Degree of protection	IP40
Insulation Class	Class II
Housing material	ABS
Ambient temperature	-5°C...+45°C
<b>Certification</b>	<b>CB Certificate issued by TUV SUD, Singapore</b>

### Order Guide

Family	Emergency Duration	Test Function	Battery
ESA12	3H: 3hours	<b>MT:</b> Manual test <b>AT:</b> AUTO test <b>DA:</b> DALI interface	<b>MH:</b> Ni-Mh battery

**Note:**

**DA:** is addressable lighting fitting. DALI options give further benefits to the user enabling the testing and monitoring of the emergency lighting system on site or via the internet.

### Model List and Electric Rating

Model no.	Input voltage	Charge Duration	Discharge Duration	Battery	Power Consumption	Test facility
ESA12/3H/MT/MH	220~240VAC 50/60Hz	24hrs	3hrs	Ni-Mh battery 3.6V1000mh	3.5W Max	Manual Test
ESA12/3H/AT/MH	220~240VAC 50/60Hz	24hrs	3hrs	Ni-Mh battery 3.6V 1000mh	3.5W Max	AUTO Test
ESA12/3H/DA	220~240VAC 50/60Hz	24hrs	3hrs	Ni-Mh battery 3.6V 2100mh	3.5W Max	DALI

### Pictogram Pack

**Note :** Universal 3 pcs pictogram to be supplied: 2x Arrow (1 left & 1 right) , 1x Exit (running man)



Arrow right 1pc



Arrow left 1pc



Without Arrow 1pc

#### Mounting Options

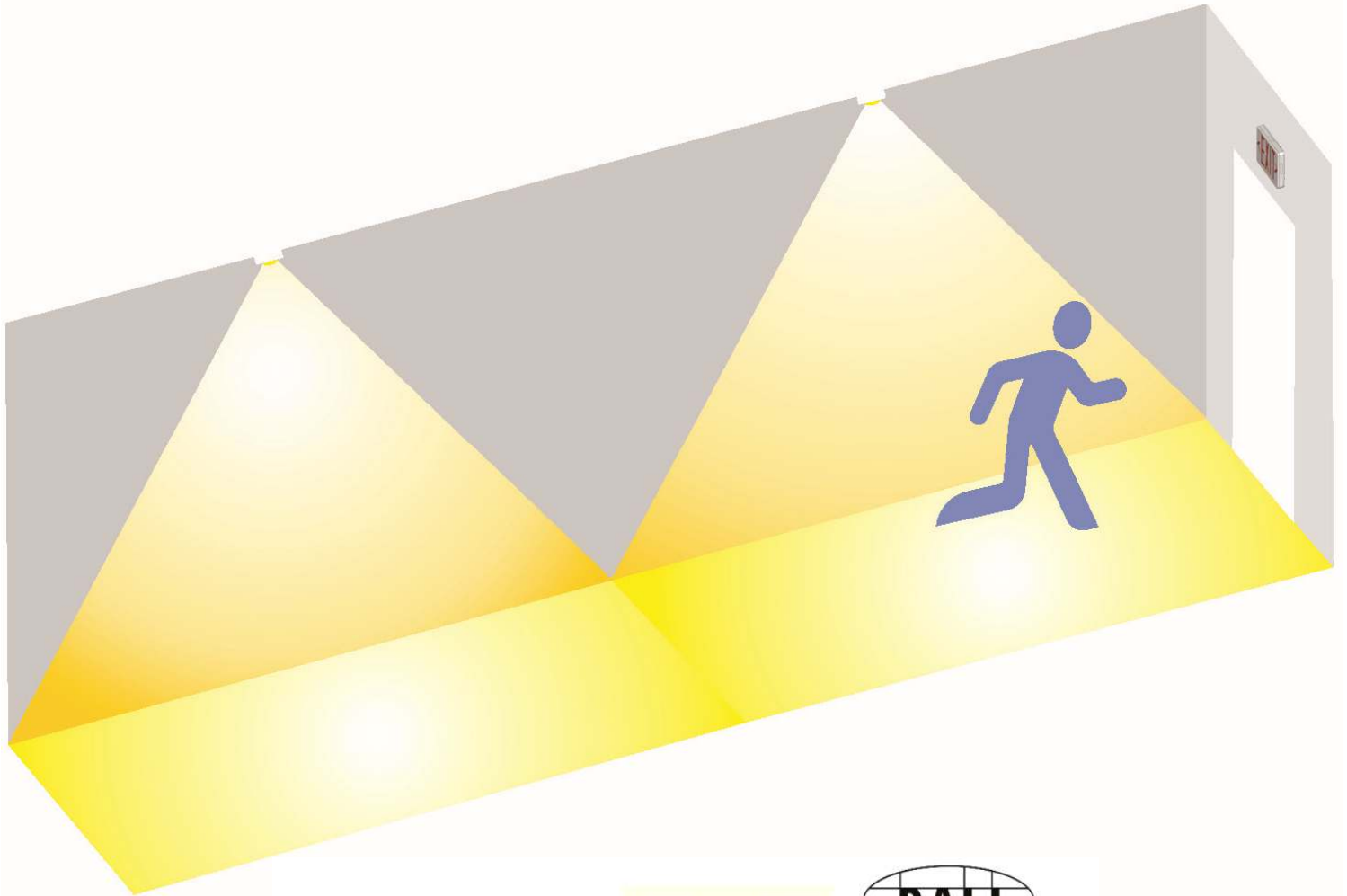
Wall surface mount



Wall flush mount



# SPECIFICATION SHEET FOR LED Emergency down Light EMDS2 Series



**CB IP20**



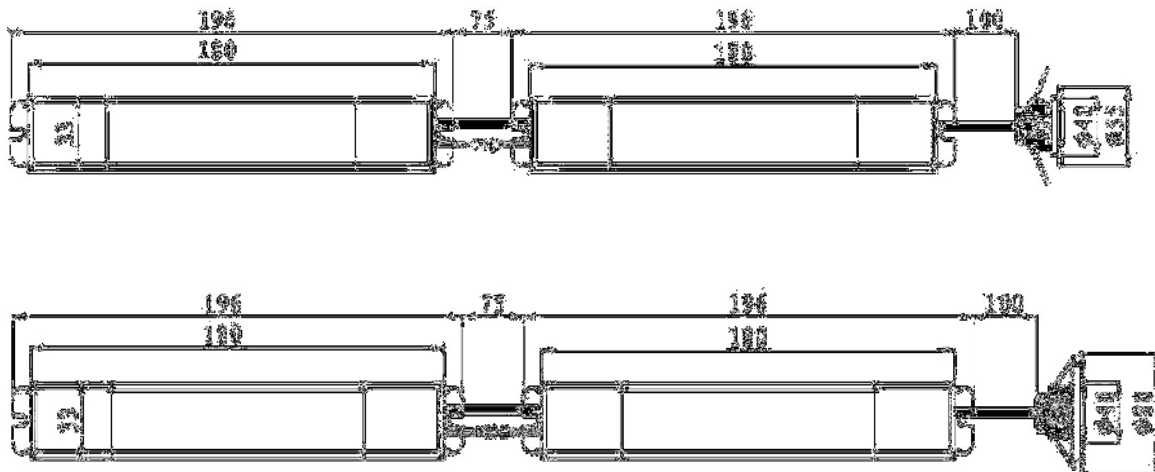
## Photo and Dimension



EMDS2 Dia. 55mm trim plate



EMDS2 Dia. 80mm trim plate



## Technical Specification

Rated Power Supply	220-240VAC 50/60Hz
Power consumption	Max. 5W
Charge time	24 hours
Discharge duration	3 hours
Battery	Ni-MH battery
Changeover voltage	144-187VAC
Test facility	DALI and AUTO test
Operation	Maintained and Non-maintained

Mounting	Ceiling recessed mounting
Cut hole	D80: Dia. 66-70mm D55: Dia. 42-50mm
Lighting source	3535 LED, 6500K
Luminous flux	180 lm
Degree of protection	IP20, indoor use
Insulation Class	Class II
Ambient temperature	0°C...+40°C
<b>Certification</b>	<b>CB Certificate issued by TUV SUD, Singapore</b>

## Complies standard

EN 60598-1, EN 60598-2-22, EN61347-1,EN61347-2-7, EN61347-2-13,  
EN 62493, EN 55015, EN 61547, EN61000-3-2, EN61000-3-3

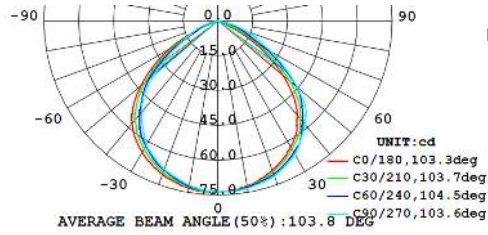
## Order Guide

Model No.	Duration	Emergency test function	Battery	Trim plate
<b>EMDS2</b>	<b>3H: 3 Hours</b>	<b>AT: AUTO Test</b>  <b>DA: DALI Interface</b>	Blank: Ni-MH battery	Blank: Dia. 55mm round cover  <b>D80:</b> Dia. 80mm round cover

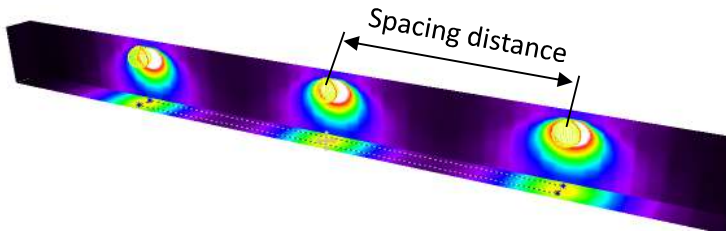
## Model list

Model No.	Input	Test facility	Charge time	Discharge time	Battery	Trim plate	Lumen output
EMDS2/3H/AT	220-240VAC, 50/60HZ	Auto test	24hours	3H	Ni-MH battery 3.6V 2.6Ah	D55	180lm
EMDS2/3H/AT/DA80				3H	Ni-MH battery 3.6V 2.6Ah	D80	
EMDS2/3H/DA	220-240VAC, 50/60HZ	DALI	24hours	3H	Ni-MH battery 3.6V 2.6Ah	D55	180lm
EMDS2/3H/DA/DA80				3H	Ni-MH battery 3.6V 2.6Ah	D80	

**Photometric**

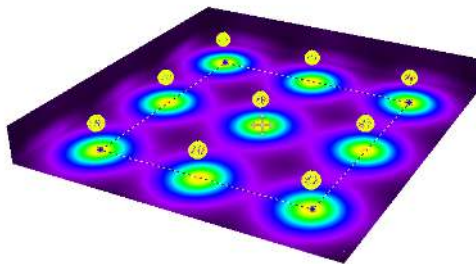


**For escape route**



Mounting Height			
2.5m	4.8m	12.0m	4.8m
3.0m	5.4m	13.5m	5.4m
3.5m	5.8m	14.5m	5.8m
4.0m	6.2m	15.5m	6.2m

**For anti-panic area**



Mounting Height					
2.5m	3.0m	10.0m	9.0m	7.5m	4.0m
3.0m	3.2m	11.0m	10.0m	8.0m	4.4m
3.5m	3.4m	11.5m	10.0m	8.5m	4.6m
4.0m	3.6m	12.0m	11.0m	9.0m	4.8m