

8301 - 8302 Series

LED EMERGENCY UNIT



General Description

8301 and 8302 series of LED emergency lights are flush ceiling mounted light fittings, with option for surface mounting. A key feature of this series is that a narrow angle lens or wide-angle lens can be used on the same fittings, based on the project requirement. The narrow angle lens produces a beam angle will be approximately 72 deg, and with wide angle lens the beam dispersion angle achieved is 149 deg.

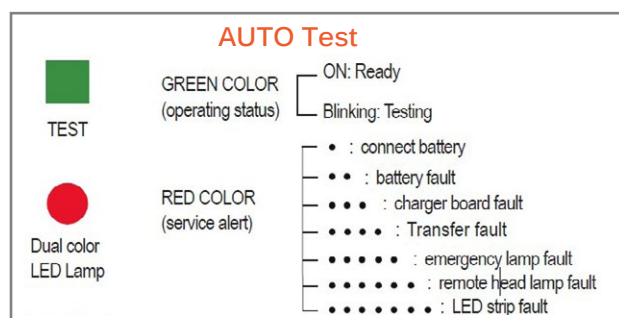
With lux output ranging from 235 to 375 lm for various models, this series is the ideal choice for both exit routes and anti-panic lighting.

AUTO Test

Auto-Test Option provides automatic testing of light fitting when used without DALI central monitoring option, and provides continuous monitoring of the unit and indicates service alert using dual-color LED lamp

The unit will automatically initiate a Self-Test and Self-Diagnostics test as follows:

- Verifies battery disconnection, charger failure, lamp failure and transformer
- failure at every 5 seconds.
- One minute self-testing every month.
- 30 minutes self-testing on the 6th month of the year after installation.
- 90 minutes self-testing on the 12th month of the year after installation.
- Automatically indicates lamp, battery and charger status by dual-color
- LED lamp.
- Factory preset - does not need field adjustment.



The power consumption is very low at 4 watts, and the 8301 models come with the option to operate as non-maintained or switched maintained. The 8302 models operates only on non-maintained mode. This series comes with options for one hour & 3 hours battery stand-by time, and has various models with options for self-contained manual testing, self contained auto testing and DALI monitored self contained luminaire.

Manual Test

Tests are initiated manually, and can be initiated by the following action:

Press test button once	30 seconds test
Press test button twice (within 2 seconds)	3 minutes test
Press test button 3 times (within 2 seconds)	30 minutes test
Press test button 4 times (within 2 seconds)	1 hour or 3 hours test

Service Alert code for Manual Testing:

One blink ON/pause (4 seconds)	Battery is not connected
Two blink ON/pause (4 seconds)	Battery is shorted or Battery voltage drops below than acceptable value
Three blink ON/pause (4 seconds)	Charger board circuit fault
Four blink ON/pause (4 seconds)	Transfer fault
Five blink ON/pause (4 seconds)	Emergency lamp fault

TECHNICAL SPECIFICATION

Normal Supply	220-240V 50/60Hz
Power consumption	4W max.
Charge / discharge time	24 hours charge, 1/3hour discharge
Battery	Ni-MH battery
Test facility	Manual test, AUTO test and DALI monitoring option.
Operation	8301 Serie : non-maintained, can change to switchable main- tained 8302 Series : non-maintained only
Mounting	Recessed mounting and ceiling surface mounting
LED	Bridgelux SMD 3030 1W, CCT 6500K
Deliver lumen	NEMD:235lm, NEMD2:335-375lm, constant lumen output
Lens option	Wide lens for open area, narrow lens for corridor
Cut out hole	Dia.120mm
AC supply cable	H03VV-F 0.75 X 2C(3C), suitable AC supply 1 in and 1out.
Degree of protection	IP20
Luminaire classification	Class II
Ambient temperature range	0C...+40C
Certification	CE,CB, TUV

"All models of our emergency lighting luminaires will maintain the same lux output during the entire emergency mode operation as specified (only the battery being used to power the lamp and fitting controls). This is achieved as our luminaires are working with "constant current" technology. The same current output is maintained even if the battery voltage goes down. The luminaire lamp current is totally cut off when the battery voltage falls below a certain pre-determined voltage. Leaving enough charge to power the control module".

8301 series of luminaire has option to operate as non-maintained mode or as switched maintained mode.

8302 series of luminaire operates only as non-maintained.



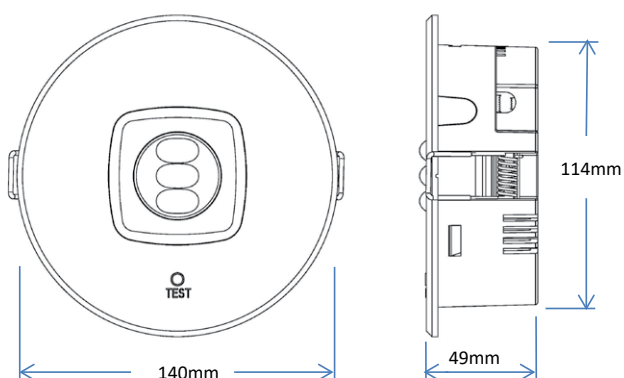
DIMENSIONS (mm)



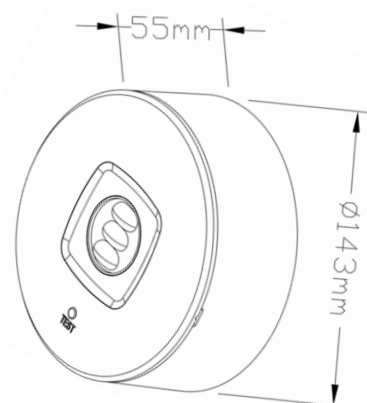
8302 /N narrow lens for corridor



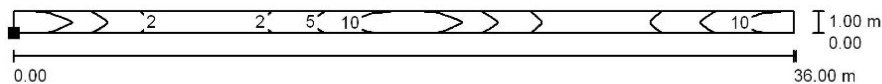
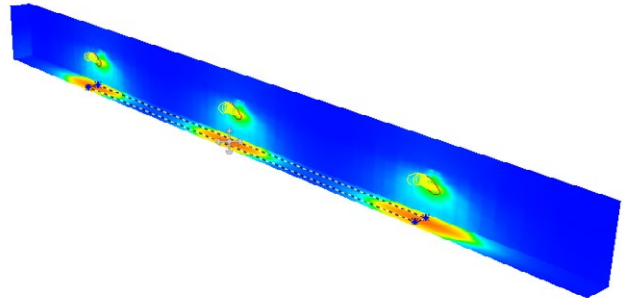
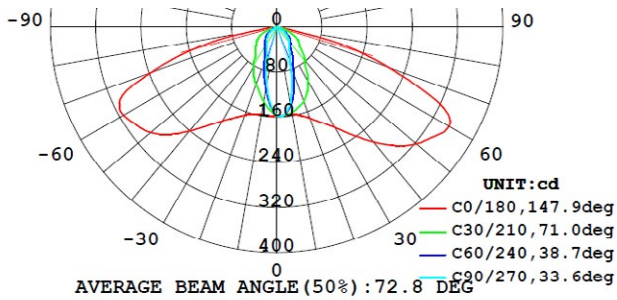
8302 /W wide lens for open area



Surface Mounting Kit



PHOTOMETRIC - 8301 SERIES/N



Position of surface in room:

Marked point: (-18.000 m, 0.500 m, 0.000 m)

Values in Lux

Grid: 128 x 32 Points

E_{av} [lx]
5.55

E_{min} [lx]
1.05

E_{max} [lx]
14

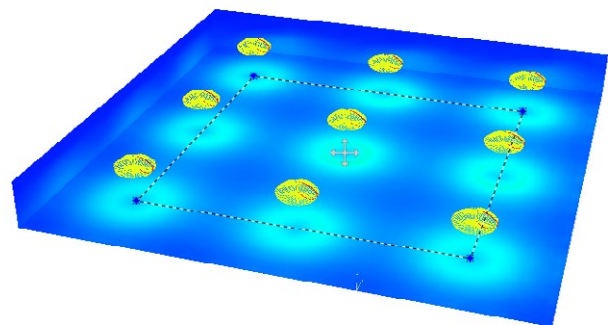
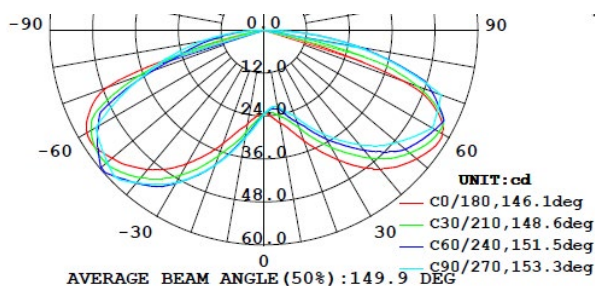
$u0$
0.189

Complies Standards

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.

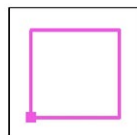
Mounting Height	Center to center distance
2.5m	16m
3.0m	18m
3.5m	19m

PHOTOMETRIC - 8301 SERIES/W



Position of surface in room:

Marked point: (-14.469 m, 5.517 m, 0.000 m)



Grid: 128 x 128 Points

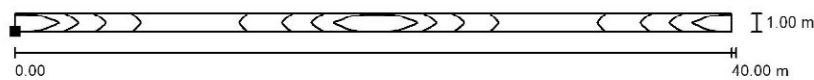
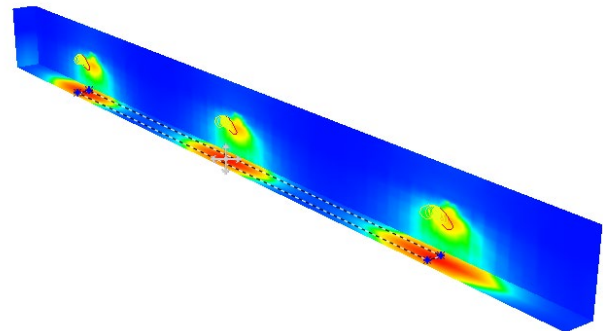
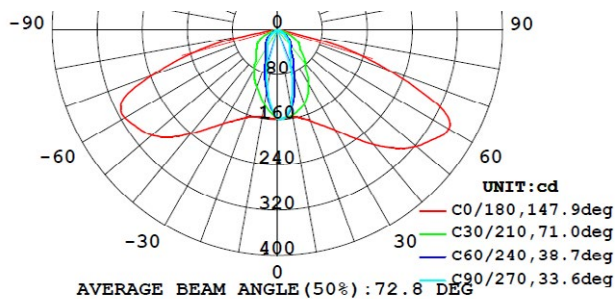
E_{av} [lx]
2.15

E_{min} [lx]
1.20

E_{max} [lx]
3.70

Mounting Height	Center to center distance
2.5m	10*10m
3.0m	11*11m
3.5m	12*12m

PHOTOMETRIC - 8302 SERIES/N



Position of surface in room:
Marked point: (-20.000 m, 0.500 m, 0.000 m)

Grid: 128 x 32 Points

E_{av} [lx]
7.02

E_{min} [lx]
1.05

E_{max} [lx]
20

$u0$
0.150

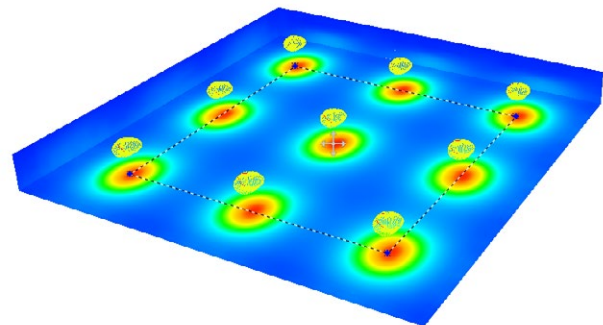
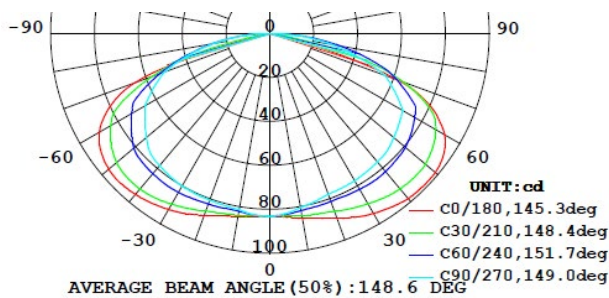
Values in Lux

Complies Standards

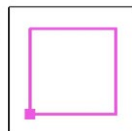
Compliant EUROPE standard EN1838

Mounting Height	Center to center distance
2.5m	18m
3.0m	20m
3.5m	22m

PHOTOMETRIC - 8302 SERIES/W



Position of surface in room:
Marked point: (-14.014 m, 5.979 m, 0.000 m)



Grid: 128 x 128 Points

E_{av} [lx]
2.58

E_{min} [lx]
1.13

E_{max} [lx]
8.40

Mounting Height	Center to center distance
2.5m	11*11m
3.0m	12*12m
3.5m	13*13m

Compliant EUROPE standard EN1838 Illuminance requirement:

MODEL LIST AND RATING

Part number	Alternative part number	Emergency (Hour)	Test facility	Battery	Output Deliver lumen
8301-1MH(N)	NEMD1/N/1H/MT/MH	1 hour	Manual test	Ni-MH HT 7.2V800mA	235lm
8301-1MH(W)	NEMD1/W/1H/MT/MH	1 hour	Manual test	Ni-MH HT 7.2V800mA	235lm
8301-1AHw(N)	NEMD1/N/1H/AT/MH	1 hour	AUTO test	Ni-MH HT 7.2V800mA	235lm
8301-1AH(W)	NEMD1/W/1H/AT/MH	1 hour	AUTO test	Ni-MH HT 7.2V800mA	235lm
8301-3MH(N)	NEMD1/N/3H/MT/MH	3 hour	Manual test	Ni-MH HT 7.2V1300mA	235lm
8301-3MH(W)	NEMD1/W/3H/MT/MH	3 hour	Manual test	Ni-MH HT 7.2V1300mA	235lm
8301-3AH(N)	NEMD1/N/3H/AT/MH	3 hour	Auto test	Ni-MH HT 7.2V1300mA	235lm
8301-3AH(W)	NEMD1/W/3H/AT/MH	3 hour	Auto test	Ni-MH HT 7.2V1300mA	235lm
8302-1MH(N)	NEMD2/N/1H/MT/MH	1 hour	Manual test	Ni-MH HT 7.2V1300mA	375lm
8302-1MH(W)	NEMD2/W/1H/MT/MH	1 hour	Manual test	Ni-MH HT 7.2V1300mA	375lm
8302-1AH(N)	NEMD2/N/1H/AT/MH	1 hour	Auto test	Ni-MH HT 7.2V1300mA	375lm
8302-1AH(W)	NEMD2/W/1H/AT/MH	1 hour	Auto test	Ni-MH HT 7.2V1300mA	375lm
8302-3MH(N)	NEMD2/N/3H/MT/MH	3 hour	Manual test	Ni-MH HT 7.2V1800mA	335lm
8302-3MH(W)	NEMD2/W/3H/MT/MH	3 hour	Manual test	Ni-MH HT 7.2V1800mA	335lm
8302-3AH(N)	NEMD2/N/3H/AT/MH	3 hour	Auto test	Ni-MH HT 7.2V1800mA	335lm
8302-3AH(W)	NEMD2/W/3H/AT/MH	3 hour	Auto test	Ni-MH HT 7.2V1800mA	335lm
8301-1DH(N)	NEMD1/N/1H/DA/MH	1 hour	DALI	Ni-MH HT 7.2V800mA	235lm
8301-1DH(W)	NEMD1/W/1H/DA/MH	1 hour	DALI	Ni-MH HT 7.2V800mA	235lm
8301-3DH(N)	NEMD1/N/3H/DA/MH	3 hour	DALI	Ni-MH HT 7.2V800mA	235lm
8301-3DH(W)	NEMD1/W/3H/DA/MH	3 hour	DALI	Ni-MH HT 7.2V800mA	235lm
8302-1DH(N)	NEMD2/N/1H/DA/MH	1 hour	DALI	Ni-MH HT 7.2V1300mA	335lm
8302-1DH(W)	NEMD2/W/1H/DA/MH	1 hour	DALI	Ni-MH HT 7.2V1300mA	335lm
8302-3DH(N)	NEMD2/N/3H/DA/MH	3 hour	DALI	Ni-MH HT 7.2V1300mA	335lm
8302-3DH(W)	NEMD2/W/3H/DA/MH	3 hour	DALI	Ni-MH HT 7.2V1300mA	335lm

NEMD 1 models (8301 series) can operate on non-maintained or switched maintained mode.
NEMD 2 models (8302 series) has only non-maintained mode of operation.

ORDER GUIDE

X-Y-Z ARE THE THREE ALPHABETS AFTER THE SERIES NUMBER OF THE MODEL						(W/N/H/80)	
X		Y		Z		ALPHABET APPEARING IN BRACKETS	
Battery stand-by Duration		Type of test		Battery Type		Application	
1	For 1 Hr	M	Manual testing	L	Lithium Iron Phosphate	W	Wide lens for open area
3	For 3 Hrs	A	Auto Testing	C	Nickle cadmium	N	Narrow lens for corridor
		D	DALI	H	Nickel metal Hydride	H	A product with DALI function, a handset device allowed to manage the address and group of fittings