

EM ready2apply SELFTEST 2 – 3 W

EM ready2apply



Product description

- _ LED emergency module suitable for direct installation in ceilings
- _ Complete set with integrated electronics, LED module, optics and battery
- _ All components replaceable on site (Battery, LED module, LED driver, lenses, etc.)
- _ Emergency lighting with self-test function
- _ Small size ceiling hole, 68 – 72 mm diameter, 100 mm height
- _ IP65 protection rating (in installed state)
- _ EM = Emergency

Properties

- _ Output power 2 – 3 W
- _ Very low stand-by power loss
- _ Replaceable bezel, black as an option
- _ Non-maintained variants
- _ 3 h rated duration
- _ Plug-in Lithium Iron Phosphate battery
- _ 5 years guarantee electronic (LED driver) (conditions at <https://www.tridonic.com/en/int/services/manufacture-guarantee-conditions>)
- _ 5 years guarantee for LiFePO4 batteries (conditions at <https://www.tridonic.com/en/int/services/manufacture-guarantee-conditions>)

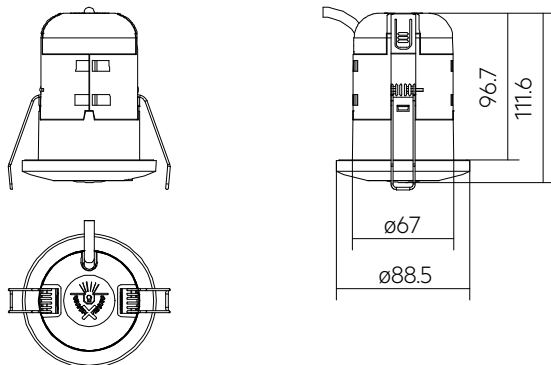
Website

<http://www.tridonic.com/89801222>



EM ready2apply SELFTEST 2 – 3 W

EM ready2apply



Ordering data

| Type | Article number | Operating mode | Rated duration | Number of cells | Packaging, carton | Packaging, pallet | Weight per pc. |
|--------------------------|----------------|----------------|----------------|-----------------|-------------------|-------------------|----------------|
| EM R2A 68mm ST NM 132 AP | 89801222 | Non-maintained | 3 h | 1 | 1 pc(s). | 180 pc(s). | 0.375 kg |
| EM R2A 68mm ST NM 133 AP | 89801228 | Non-maintained | 3 h | 3 | 1 pc(s). | 180 pc(s). | 0.415 kg |
| EM R2A 68mm ST NM 132 ER | 89801223 | Non-maintained | 3 h | 1 | 1 pc(s). | 180 pc(s). | 0.375 kg |
| EM R2A 68mm ST NM 133 ER | 89801229 | Non-maintained | 3 h | 3 | 1 pc(s). | 180 pc(s). | 0.415 kg |

Technical data

| | |
|--|---|
| Rated supply voltage | 220 – 240 V |
| Input voltage range AC (tolerance for safety) | 198 – 264 V |
| Input voltage range AC (tolerance for performance) | 198 – 254 V |
| Mains frequency | 50 / 60 Hz |
| Overvoltage protection | 320 V (for 48 h) |
| Starting time (Emergency operation) | < 0.5 s from detection of emergency event |
| Output current tolerance | ± 5 % |
| LF current ripple | ± 5 % |
| Ambient temperature t_a | 5 ... +40 °C |
| Mains voltage changeover threshold | According to EN 60598-2-22 |
| Type of protection | IP20 |
| Impact protection degree | IK03 |
| Protection class | II |
| Colour temperature | 6,500 K |
| Colour tolerance | 3 SDCM |
| Colour rendering index CRI | > 80 |
| Lifetime | up to 50,000 h |
| EoFI | 1 |

Approval marks



Standards

according to EN 50172, EN 55015, EN 60068-2-6, EN 60068-2-30, EN 60598-1, EN 60598-2-2, EN 60598-2-22, EN 61000-3-2, EN 61000-3-3, EN 61347-1, EN 61347-2-7, EN 61347-2-13, EN 61547, acc. to EN 62034, EN 62384, EN 62386-101, EN 62386-102, EN 62386-202, IEC 62133 (related to Lithium Iron battery), UN 38.3 (related to Lithium Iron battery), EN 62031, EN 62471

Specific technical data

| Type | Number of battery cells | Rated duration | Mains current (230 V, 50 Hz), non-maintained | | Typ. λ (at 230 V, 50 Hz, charging) | Typ. output current | Typ. forward voltage | Output power |
|----------------------------|-------------------------|----------------|--|-------------|--|---------------------|----------------------|--------------|
| | | | Charging | Charger off | | | | |
| Normal operation | | | | | | | | |
| EM R2A 68mm ST NM 132 AP | 1 | 3 h | 15 mA | 5 mA | 0.66C | - | - | - |
| EM R2A 68mm ST NM 132 ER | 1 | 3 h | 15 mA | 5 mA | 0.66C | - | - | - |
| EM R2A 68mm ST NM 133 AP | 3 | 3 h | 15 mA | 5 mA | 0.66C | - | - | - |
| EM R2A 68mm ST NM 133 ER | 3 | 3 h | 15 mA | 5 mA | 0.66C | - | - | - |
| Emergency operation | | | | | | | | |
| EM R2A 68mm ST NM 132 AP | 1 | 3 h | - | - | - | 170 mA | 12 V | 2.0 W |
| EM R2A 68mm ST NM 132 ER | 1 | 3 h | - | - | - | 170 mA | 12 V | 2.0 W |
| EM R2A 68mm ST NM 133 AP | 3 | 3 h | - | - | - | 225 mA | 12 V | 2.6 W |
| EM R2A 68mm ST NM 133 ER | 3 | 3 h | - | - | - | 225 mA | 12 V | 2.6 W |

LiFePO4 Battery pack 3.3 – 4.8 Ah

Accessory



ACCU-LiFePO4 4.8Ah 3B CON R2A 68MM

Product description

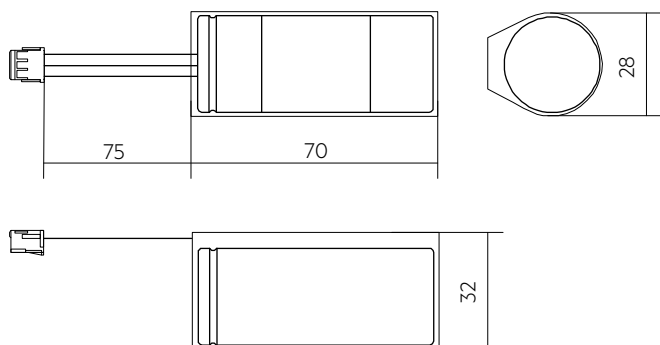
- _ High-temperature LiFePO4 cells only for use with Tridonic emergency lighting units
- _ 6 year design life (up to 30 °C ambient temperature)
- _ 4 year design life (up to 40 °C ambient temperature)
- _ 5 years guarantee (conditions at <https://www.tridonic.com/en/int/services/manufacturer-guarantee-conditions>)

Properties

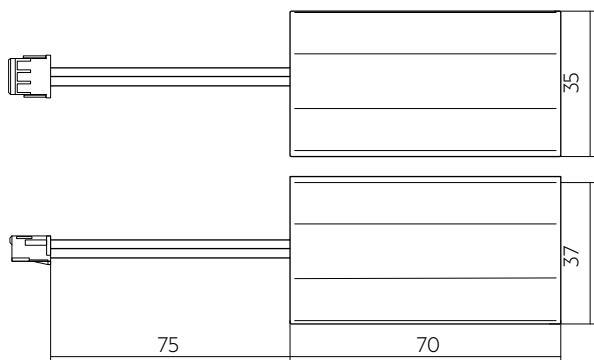
- _ Certified quality manufacturer
- _ Charge efficiency > 90 %
- _ Low self discharge
- _ Simple connection with plug-in system
- _ Protection and monitoring circuit built into battery enclosure
- _ Deep discharge protection
- _ Suitable for emergency lighting equipment as per IEC 60598-2-22

Website

<http://www.tridonic.com/28005687>



ACCU-LiFePO4 3.3Ah 1A CON R2A 68MM



ACCU-LiFePO4 4.8Ah 3B CON R2A 68MM

Ordering data

| Type | Article number | Capacity | Packaging, carton | Packaging, outer box | Weight per pc. |
|------------------------------------|----------------|----------|-------------------|----------------------|----------------|
| ACCU-LiFePO4 4.8Ah 3B CON R2A 68MM | 28005687 | 4.8 Ah | 25 pc(s). | 50 pc(s). | 0.125 kg |
| ACCU-LiFePO4 3.3Ah 1A CON R2A 68MM | 28005688 | 3.3 Ah | 20 pc(s). | 80 pc(s). | 0.232 kg |

EM r2a 68mm Bezel

Accessory



Product description

- _ Replaceable bezel
- _ Suitable for the use with EM r2a 68mm
- _ Black (RAL 9005)
- _ Polycarbonate

Website

<http://www.tridonic.com/28006212>



Ordering data

| Type | Article number | Colour | Packaging, carton | Weight per pc. |
|---------------|----------------|--------|-------------------|----------------|
| EM r2a 68mm B | 28006212 | Black | 100 pc(s). | 0.091 kg |

1. Standards

according to EN 50172
 EN 55015
 EN 60068-2-6
 according to EN 60068-2-30
 EN 60598-1
 EN 60598-2-2
 EN 60598-2-22
 EN 61000-3-2
 EN 61000-3-3
 EN 61347-1
 EN 61347-2-7
 EN 61347-2-7/A1
 EN 61347-2-13
 EN 61347-2-13/A1
 EN 61547
 according to EN 62034
 EN 62384
 EN 62386-101
 EN 62386-102
 EN 62386-202
 IEC 62133 (related to Lithium Iron battery)
 UN 38.3 (related to Lithium Iron battery)
 EN 62031
 EN 62471

1.1 Glow-wire test

according to EN 60598-1 with increased temperature of 850 °C passed.

2. Thermal data

2.1 Temperature range

According to the standard IEC 60598-1 a LED Driver for remote installation has a max. case temperature of 90 °C. The ambient temperature range t_a for the EM R2A ST is defined to meet this requirement.

2.2 Expected lifetime

Average lifetime 50,000 hours under rated conditions with a failure rate of less than 10 %. Average failure rate of 0.2 % per 1000 operating hours.

Expected lifetime

| Type | t_a | 25 °C | 35 °C | 40 °C |
|-----------|----------|-------------|-------------|-------------|
| EM R2A ST | lifetime | > 100,000 h | > 100,000 h | > 100,000 h |

2.3 Storage conditions

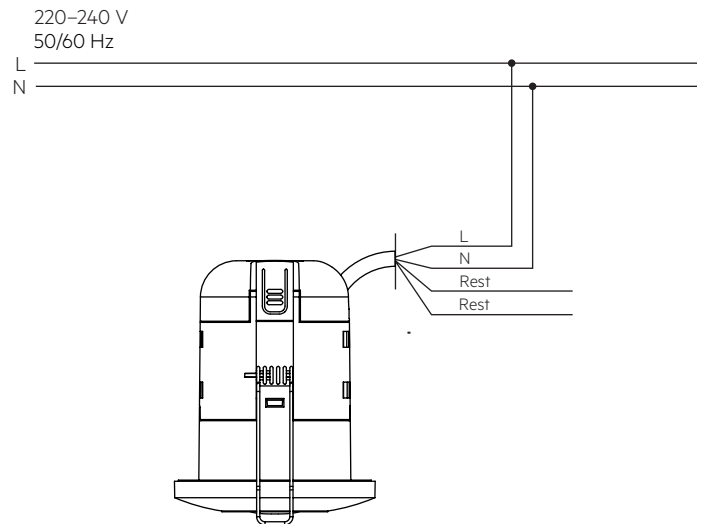
- Humidity 5% up to max. 85 %, not condensed (max. 56 days/year at 85 %)

Note: The devices have to be within the specified temperature range (t_a) before they are operated.

- Store batteries within the specified temperature range in low humidity conditions. Optimal storage conditions are:
 - Temperature: -20 ... +35 °C for up to 15 months
 - Relative humidity: 65 % ±5 %
- Avoid atmosphere with corrosive gas
- Disconnect batteries before store or delivery
- Avoid storage of discharged batteries

3. Installation / Wiring

3.1 Wiring diagrams

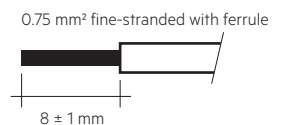


Note: Battery must be connected before mains connection.

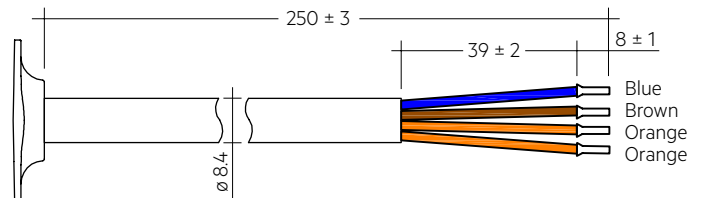
3.2 Wiring type and cross-section

Wiring

Mains (L, N): brown, blue
 Rest: orange, orange



Cable length: 250 mm with strain relief at the R2A ST module
 Cable: low smoke, halogen free



Recommended connector with strain-relief (plug and socket): Wieland GST18

No terminal block included. The installation of the terminal block has to be done by a qualified person.

Only a terminal complying with EN 60998-2-1 or EN 60998-2-2 shall be used

Note: If mains cable or battery strap are damaged the luminaire must be disposed.

4. Mechanical data

4.1 Housing properties

- Polycarbonate white RAL 9016
- Polycarbonate black RAL 9005
- Polycarbonate blue, RAL 5002

4.2 Battery connection

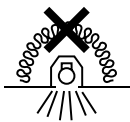
Battery pack connection
Simple connection with plug-in system (polarity reversal protection)

Module connection
Insert the battery in the designated position in the luminaire, plug the connector into the EM ready2apply and attach the safety cap.

4.3 Fixing

Spring fixing through hole in ceiling

- Hole diameter: 68 – 72 mm
- Ceiling thickness: 1 – 25 mm
- Ceiling void height: > 100 mm



Device not suitable for covering with thermally insulating material

5. Electrical data

5.1 Maximum loading of automatic circuit breakers

| Automatic circuit breaker type | C10 | C13 | C16 | C20 | B10 | B13 | B16 | B20 | Inrush current | |
|--------------------------------|---------------------|---------------------|---------------------|-------------------|---------------------|---------------------|---------------------|-------------------|----------------|--------|
| Installation Ø | 1.5 mm ² | 1.5 mm ² | 2.5 mm ² | 4 mm ² | 1.5 mm ² | 1.5 mm ² | 2.5 mm ² | 4 mm ² | I_{max} | time |
| EM R2A ST | 180 | 260 | 260 | 260 | 90 | 130 | 130 | 130 | 10 A | 120 µs |

5.3 Insulation matrix

| | Mains | Battery | Rest |
|---------|-------|---------|------|
| Mains | – | • • | • |
| Battery | • • | – | • |
| Rest | • | • | – |

- Represents basic insulation
- • Represents double or reinforced insulation

5.3 Battery charge regime / discharge

EM R2A 68mm SELFTEST 2 – 3 W, 3 h

| Type | | EM R2A 68mm SELFTEST 2 W | EM R2A 68mm SELFTEST 3 W |
|--------------------------------------|----------------|---|--------------------------|
| Article no. | | 89801222, 89801223 | 89801228, 89801229 |
| Cells | | 1 cell | 3 cells |
| Duration | | 3 h | 3 h |
| Battery charge time | Initial | 24 h | |
| | Recharge | 24 h | |
| | Trickle charge | continuously and battery voltage controlled | |
| Typ. charge current [®] | Initial charge | 270 mA | 270 mA |
| | Recharge | 270 mA | 270 mA |
| | Trickle charge | 270 mA / 0 mA | 270 mA / 0 mA |
| Mains power consumption | Initial charge | 2.3 W | 2.3 W |
| | Recharge | 2.3 W | 2.3 W |
| | Trickle charge | 2.3 W / 0 W | 2.3 W / 0 W |
| Discharge current at 3.2 V (nominal) | | 715 mA | 970 mA |

[®] Automatic recharge when battery voltage falls below 3.4 V.
Charger off (0 mA) when battery voltage exceeds 3.6 V.

Note: Battery protected against operation at excessive temperatures
(charging stopped when battery cell temperature < 0 °C or > 60 °C)

5.4 Battery selection for replacement

EM R2A 68mm SELFTEST 2 – 3 W, 3 h

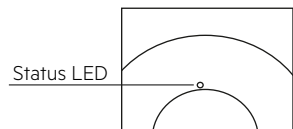
| | | Type | EM R2A 68mm SELFTEST 2 W | EM R2A 68mm SELFTEST 3 W | |
|-------------------------------|-------------|-----------------|------------------------------------|--------------------------|----------------------|
| Article no. | | | 89801222, 89801223 | 89801228, 89801229 | |
| Cells | | | 1 cell | 3 cells | |
| Duration | | | 3 h | 3 h | |
| Technology and capacity | Design | Number of cells | Type | Article no. | Assignable batteries |
| Lithium Iron Phosphate 3.3 Ah | single cell | 1 | ACCU-LiFePO4 3.3Ah 1A CON R2A 68MM | 28005688 | • |
| Lithium Iron Phosphate 4.8 Ah | pyramid | 3 | ACCU-LiFePO4 4.8Ah 3B CON R2A 68MM | 28005687 | • |

Note: If the rated duration of operation cannot be reached the battery must be replaced. Remove mains during battery replacement.

6. Functions

6.1 Status indication

System status is indicated by a bi-colour LED. The indication LED is integrated in the bezel.



| LED indication | Status | Comment |
|---|---------------------------|---|
| Permanent green | System OK | AC mode |
| Fast flashing green (0,1 sec on – 0,1 sec off) | Function test underway | |
| Slow flashing green (1 sec on – 1 sec off) | Duration test underway | |
| Red LED on | Load failure | Open circuit / Short circuit / LED failure |
| Slow flashing red (1 sec on – 1 sec off) | Battery failure | Battery failed the duration test or function test / Battery is defect or deep discharged / Incorrect battery voltage / Battery is outside of its temperature range for charging (0 – 60 °C) |
| Fast flashing red (0,1 sec on – 0,1 sec off) | Charging failure | Incorrect charging current |
| Double pulsing green | Inhibit mode | Switching into inhibit mode via controller |
| Green and red off | DC mode | Battery operation (emergency mode) |

6.2 Testing

Emergency operation can be manually tested by removal of the mains supply.

Commissioning test

A full commissioning test is carried out automatically after permanent connection of the supply for 5 days. The easy commissioning feature will set the initial test day and time to ensure random testing of units.

Functional test

Functional tests are carried out for 5 seconds on a weekly basis under the control of the Micro controller. Initiation and timing of these tests is set during the commissioning of the luminaire.

Duration test

A full duration test is carried out yearly to check the capacity of the batteries.

For a full description of commissioning and test features please refer to application notes.

Timer reset functionality

The timer for function and duration test can be set to a particular time of the day by cycling the unswitched line supply 5 times within 1 minute. The timer adjustment will enable the test start time to be defined manually at time in day when the timer was reset. It will also disable the adaptive test algorithm thereby forcing the unit to perform the test at the same time rather than it being defined by the adaptive algorithm. This function will only work provided the interval time is greater than zero (automatic test mode enabled). The delay timer value set when the unit was commissioned will be reloaded in order to randomise the tests between adjacent units.

Rest mode

Rest mode can be initiated by applying a short pulse of between 9.5 V_{bc} and 22.5 V_{bc} in amplitude for a period of between 150 ms and 1.0 s. This should be applied to terminals marked Rest after the mains supply has been disconnected and whilst the module is in emergency operation. Terminals are not sensitive to polarity.

After a mains reset the EM R2A ST exits the rest mode. The EM R2A ST supports the re-light function.

| Pulse/Mode | Standby | Emergency | Rest |
|------------------|----------------|-----------|----------|
| 150 – 1,000 ms | Inhibit | Rest | – |
| 1,001 – 2,000 ms | Cancel inhibit | – | re-light |

6.3 Technical data batteries

Accu Lithium Iron Phosphate

Capacity 3.3 Ah

| | |
|--|----------------------------------|
| International designation | IFpR 27/67 |
| Battery voltage/cell | 3.2 V |
| Cell type | 26650 |
| Single cell dimensions | |
| Diameter | 26 mm |
| Height | 65 mm |
| Max. short term temperature (reduced lifetime) | 70 °C |
| Max. number discharge cycles | 50 cycles total |
| Max. storage time | 15 months at -20 °C to +25 °C |
| Packing quantity | 1 pc. per carton |

Capacity 4.8 Ah

| | |
|--|----------------------------------|
| International designation | IFpR 19/66 |
| Battery voltage/cell | 3.2 V |
| Cell type | 18650 |
| Single cell dimensions | |
| Diameter | 18 mm |
| Height | 65 mm |
| Max. short term temperature (reduced lifetime) | 70 °C |
| Max. number discharge cycles | 50 cycles total |
| Max. storage time | 15 months at -20 °C to +25 °C |
| Packing quantity | 1 pc. per carton |

Only use Tridonic batteries.

Comply with UN 38.3 and IEC 62133 (safety testing) protected against over charge, over discharge, charging at excessive temperatures, short-circuit and over current.

For battery data see separate data sheet.

7. Optical properties

7.1 Anti panic

EM R2A ST 2W – Max. spacing for >0.5 lux[®]

| Height | Centre to end [®] | | Centre to centre [®] | |
|--------|----------------------------|--------------|-------------------------------|--------------|
| | Trans | Longitudinal | Trans | Longitudinal |
| 2.5 m | 4.25 m | 4.20 m | 11.55 m | 11.55 m |
| 3.0 m | 4.65 m | 4.60 m | 12.80 m | 12.75 m |
| 4.0 m | 4.55 m | 4.55 m | 14.90 m | 14.90 m |
| 5.0 m | 4.35 m | 4.30 m | 16.80 m | 16.80 m |
| 6.0 m | 4.05 m | 4.00 m | 17.95 m | 17.90 m |
| 8.0 m | - | - | 18.15 m | 18.10 m |
| 10.0 m | - | - | 15.80 m | 15.80 m |
| 12.0 m | - | - | 12.20 m | 12.20 m |

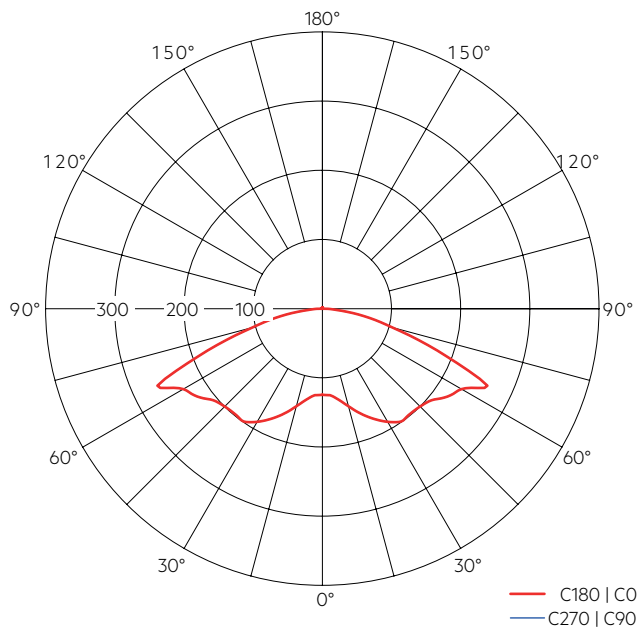
Luminous flux: 264 lm.

[®] Maintenance factor = 0.9, photometric data available on request.

[®] Distance between module and wall.

[®] Distance between two modules.

Light distribution



EM R2A ST 3W – Max. spacing for >0.5 lux[®]

| Height | Centre to end [®] | | Centre to centre [®] | |
|--------|----------------------------|--------------|-------------------------------|--------------|
| | Trans | Longitudinal | Trans | Longitudinal |
| 2.5 m | 3.10 m | 3.05 m | 7.10 m | 7.08 m |
| 3.0 m | 3.55 m | 3.50 m | 8.20 m | 8.20 m |
| 4.0 m | 4.40 m | 4.35 m | 10.30 m | 10.25 m |
| 5.0 m | 5.10 m | 5.05 m | 12.20 m | 12.20 m |
| 6.0 m | 5.20 m | 5.15 m | 14.05 m | 14.00 m |
| 8.0 m | 4.75 m | 4.70 m | 17.40 m | 17.40 m |
| 10.0 m | 5.00 m | 4.95 m | 18.30 m | 18.30 m |
| 12.0 m | 5.05 m | 5.05 m | 19.55 m | 19.55 m |

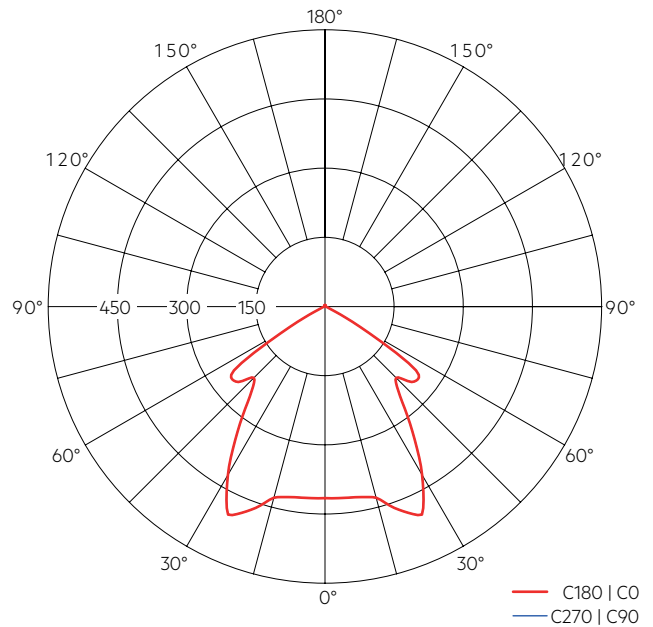
Luminous flux: 308 lm.

[®] Maintenance factor = 0.9, photometric data available on request.

[®] Distance between module and wall.

[®] Distance between two modules.

Light distribution



7.2 Escape route

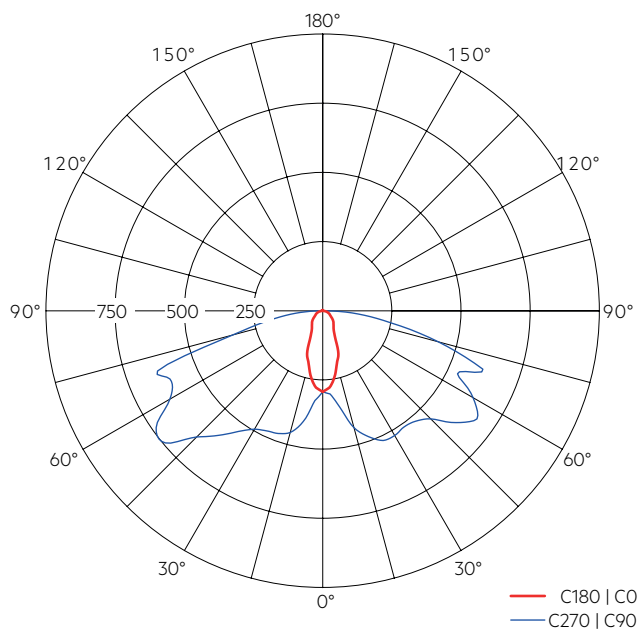
EM R2A ST 2W – Spacing data for 2m escape route[®]

| Height | Centre to end [®] | | Centre to centre [®] | |
|----------------------|----------------------------|-----------|-------------------------------|-----------|
| | Max. spacing | Diversity | Max. spacing | Diversity |
| Transversal > 1 lux | | | | |
| 2.5 m | 2.00 m | 0.102 | 5.55 m | 0.101 |
| 3.0 m | 190 m | 0.152 | 5.70 m | 0.146 |
| 4.0 m | 190 m | 0.260 | 5.55 m | 0.255 |
| 5.0 m | 195 m | 0.421 | 5.35 m | 0.387 |
| 6.0 m | 1.70 m | 0.584 | 5.40 m | 0.546 |
| 7.0 m | 1.20 m | 0.805 | 5.55 m | 0.721 |
| 8.0 m | - | - | 5.20 m | 0.906 |
| 9.0 m | - | - | 3.95 m | 0.917 |
| 10.0 m | - | - | 2.60 m | 0.923 |
| 11.0 m | - | - | 0.65 m | 0.999 |
| 12.0 m | - | - | - | - |
| 13.0 m | - | - | - | - |
| 14.0 m | - | - | - | - |
| Longitudinal > 1 lux | | | | |
| 2.5 m | 6.35 m | 0.077 | 15.60 m | 0.074 |
| 3.0 m | 6.30 m | 0.109 | 17.15 m | 0.107 |
| 4.0 m | 7.00 m | 0.190 | 18.10 m | 0.193 |
| 5.0 m | 7.40 m | 0.297 | 19.15 m | 0.291 |
| 6.0 m | 7.00 m | 0.425 | 20.20 m | 0.409 |
| 7.0 m | 5.90 m | 0.580 | 21.00 m | 0.545 |
| 8.0 m | - | - | 20.55 m | 0.684 |
| 9.0 m | - | - | 14.85 m | 0.659 |
| 10.0 m | - | - | 12.55 m | 0.717 |
| 11.0 m | - | - | 8.35 m | 0.728 |
| 12.0 m | - | - | - | - |
| 13.0 m | - | - | - | - |
| 14.0 m | - | - | - | - |

Luminous flux: 235 lm.

- [®] Maintenance factor = 0,9, photometric data available on request.
- [®] Distance between module and wall.
- [®] Distance between two modules.

Light distribution



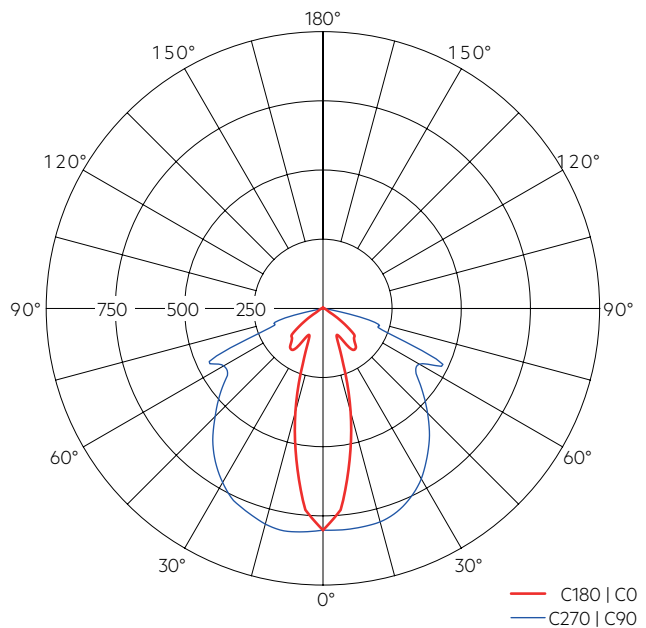
EM R2A ST 3W – Spacing data for 2m escape route[®]

| Height | Centre to end [®] | | Centre to centre [®] | |
|----------------------|----------------------------|-----------|-------------------------------|-----------|
| | Max. spacing | Diversity | Max. spacing | Diversity |
| Transversal > 1 lux | | | | |
| 2.5 m | 3.40 m | 0.026 | 7.65 m | 0.026 |
| 3.0 m | 3.80 m | 0.038 | 8.70 m | 0.037 |
| 4.0 m | 4.15 m | 0.065 | 10.40 m | 0.066 |
| 5.0 m | 2.45 m | 0.101 | 10.75 m | 0.101 |
| 6.0 m | 2.50 m | 0.153 | 10.15 m | 0.145 |
| 7.0 m | 2.65 m | 0.201 | 6.90 m | 0.187 |
| 8.0 m | 2.75 m | 0.264 | 7.05 m | 0.237 |
| 9.0 m | 2.80 m | 0.335 | 7.30 m | 0.298 |
| 10.0 m | 2.80 m | 0.406 | 7.55 m | 0.362 |
| 11.0 m | 2.65 m | 0.499 | 7.75 m | 0.439 |
| 12.0 m | 2.45 m | 0.590 | 7.90 m | 0.528 |
| 13.0 m | 2.15 m | 0.691 | 8.00 m | 0.622 |
| 14.0 m | 1.75 m | 0.801 | 7.90 m | 0.734 |
| Longitudinal > 1 lux | | | | |
| 2.5 m | 6.00 m | 0.026 | 13.30 m | 0.026 |
| 3.0 m | 6.75 m | 0.037 | 15.05 m | 0.037 |
| 4.0 m | 6.80 m | 0.065 | 18.35 m | 0.065 |
| 5.0 m | 7.00 m | 0.102 | 19.70 m | 0.101 |
| 6.0 m | 7.30 m | 0.148 | 19.45 m | 0.145 |
| 7.0 m | 7.55 m | 0.199 | 19.90 m | 0.197 |
| 8.0 m | 7.65 m | 0.260 | 20.60 m | 0.256 |
| 9.0 m | 7.65 m | 0.328 | 21.15 m | 0.320 |
| 10.0 m | 7.50 m | 0.406 | 21.55 m | 0.389 |
| 11.0 m | 7.20 m | 0.494 | 21.75 m | 0.468 |
| 12.0 m | 6.85 m | 0.583 | 21.85 m | 0.552 |
| 13.0 m | 6.20 m | 0.687 | 21.80 m | 0.641 |
| 14.0 m | 5.30 m | 0.795 | 21.50 m | 0.732 |

Luminous flux: 343 lm.

- [®] Maintenance factor = 0,9, photometric data available on request.
- [®] Distance between module and wall.
- [®] Distance between two modules.

Light distribution



8. Miscellaneous

8.1 Battery replacement

After a battery replacement and a subsequent full charge cycle (24 h) a duration test is mandatory to prove that with the new battery the rated duration is achieved.



Do not damage battery and other components during battery replacement.

8.2 Black Box data recording

Recording of several parameters only accessible for Tridonic.

8.3 Additional information

Additional technical information at www.tridonic.com → Technical Data

The light source of this luminaire is not replaceable; when the light source reaches its end of life replace the whole luminaire. Lifetime declarations are informative and represent no warranty claim. No warranty if device was opened.