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SHAPING YOUR LIGHT











50 x 50 Road lighting families AVIKA2X2 AVIKA8X1

AVIKA2X25050*



GAGGIONE's standard road lighting range is expanding! New AVIKA2X25050* -LN1, -ME and -LW1 lenses are the first optics in the market passing requirements energy efficiently with both 5050 and 3535 LED packages. Versatile solution for both: Illuminance and Luminance based roads. Extremely low threshold increment(TI) and high longitudinal uniformity (UI). Designed and manufactured in FRANCE.

Optics are optimized for EN13201 M roads, providing excellent uniformity and minimized backlight. Well controlled backlight and Cut-off design allows the lenses to be used in countries where backlight is regulated by law. For even stricter requirements, GAGGIONE have developed backlighting mask which is ideal for next to building installations.

Dimensions: (W) 50 mm x (L) 50 mm x (H) <10mm

Mounting method: M3 Screw Optical efficiency: >90%

LED types: 3535 & 5050 packages

Cut-off classification: Cut-off (full cut-off in actual luminaire)

Materials: PMMA & PC



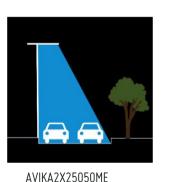
M1AVIKA2X25050 backlighting mask

AVIKA2X25050LN1 - ideal for installations, where road width is narrower than the pole height

AVIKA2X25050ME – ideal for installations, where road width is the same or less as the pole height

AVIKA2X25050LW1 - ideal for installations, where road width is wider than the pole height

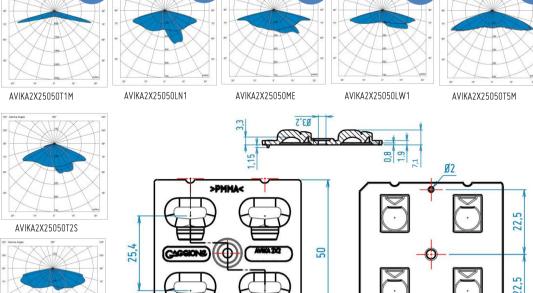












AVIKA2X25050T3S

25.4 50

AVIKA2X25050* Amber versions





GAGGIONE's standard AVIKA2X25050 optics are now available in Amber-yellow and Amber-orange colour grades.

Amber-orange lenses:

•Ideal for architectural lighting in old cities and historical sites and areas requiring wildlife friendly lighting.

- Converts 3000K LED to <1900K
- Providing beautiful traditional amber-orange colour
- Transmits 85% of light between 560nm 700nm

(less than 0.5% of blue light)

- CRI 62, LOR 72%

Amber-yellow lenses:

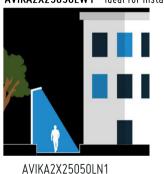
Are developed to recreate the warm glow of traditional sodium lamps while being as energy-efficient as possible and environmentally friendly. Amber lenses are transmitting wavelength that is sea turtle friendly.

- Converts 4000K LED to 3000K
- Beautiful traditional amber colour
- Less than 1.25% of light emitted @ 500nm
- CRI 68, LOR 85%

AVIKA2X25050LN1 - ideal for installations, where road width is narrower than the pole height

AVIKA2X25050ME – ideal for installations, where road width is the same or less as the pole height

AVIKA2X25050LW1 - ideal for installations, where road width is wider than the pole height

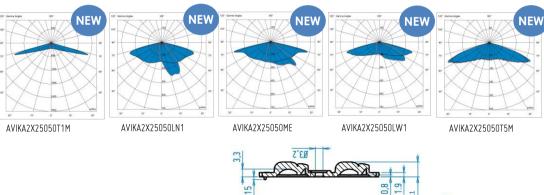


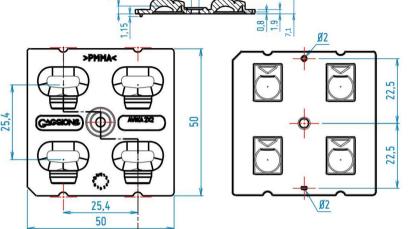




AVIKA2X25050LW1







AVIKA2X250501 N1







Application example: Regulation M3 road, motorway

- Luminaires on the side (2 lanes, two way)

- LED type: 5050 & 3535

>1.0 cd/m2 (min) - Average Road Brightness:

7 m (3.5 m x 2) - Road width:

- Pole distance : 45 m - Pole height: 10 m - Boom lenath: 1 m - Boom anale: 0°

- Maintenance factor: 0.8 - Overhana: $0 \, \mathrm{m}$

- Pole distance to roadway: $0 \, \mathrm{m}$

- Overall uniformity (U0): > 0.40 - Traffic lane uniformity (UI): > 0.60

- Edge illumination ratio (EIR): > 0.30

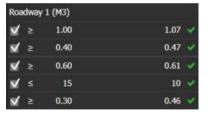
- Glare (TI): < 15

Tarmac (R3) - Road condition:

Cut-off - Luminous intensity class:



M1AVIKA2X25050 backlighting mask



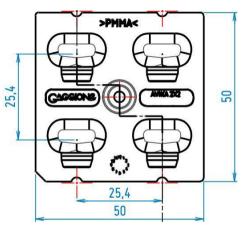
| Roa | dwa | y 1 (M3) | |
|----------|-----|----------|--------|
| V | ≥ | 1.00 | 1.01 🗸 |
| ✓ | | 0.40 | 0.47 🗸 |
| V | ≥ | 0.60 | 0.64 🗸 |
| ✓ | ≤ | 15 | 11 🗸 |
| ✓ | 2 | 0.30 | 0.65 🗸 |

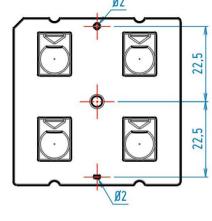


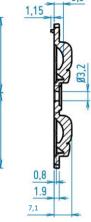


AVIKA2X25050LN1

- * Typically 10-20% less lumens or LEDs required vs competition
- * Photometry and simulation made with protective glass







AVIKA2X25050MF







Application example: Regulation M3 road, motorway

- Luminaires on the side (3 lanes, one way)

- LED type: 5050 & 3535

Available in recycled PMMA

- Average Road Brightness: > 1.0 cd/m2 (min)
- Road width: 10.5 m (3.5 m x 3)

Pole distance: 45 m
Pole height: 10 m
Boom length: 1 m
Boom angle: 0°
Maintenance factor: 0.8

- Overhang: -0.650 m

Pole distance to roadway: 0 m
 Overall uniformity (U0): > 0.40
 Traffic lane uniformity (UI): > 0.60

Edge illumination ratio (EIR): > 0.30Glare (TI): < 15

- Road condition: Tarmac (R3)

- Luminous intensity class: Cut-off

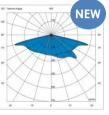


M1AVIKA2X25050 backlighting mask



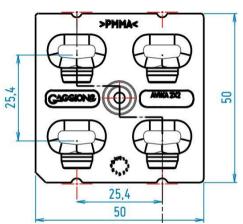
| Road | tway | 2 (M3) | | |
|----------|------|--------|------|---|
| ✓ | ≥ | 1.00 | 1.00 | , |
| ✓ | ≥ | 0.40 | 0.39 | ¢ |
| ✓ | ≥ | 0.60 | 0.65 | , |
| V | ≤ | 15 | 14 | r |
| V | 2 | 0.30 | 0.59 | , |

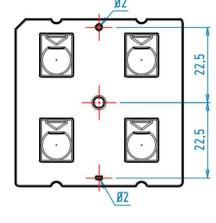


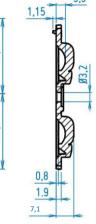


AVIKA2X25050ME

- * Typically **10-20%** less lumens or LEDs required vs competition
- * Photometry and simulation made with protective glass







AVIKA2X250501 W1







Application example: Regulation M3 road, motorway

- Luminaires on the side (4 lanes, one way)

- LED type: 5050 & 3535

>1.0 cd/m2 (min) - Average Road Brightness:

15 m (3.75 m x 4) - Road width ·

- Pole distance : 50 m - Pole height: 12 m - Boom length: 1 m - Boom angle: O٥

- Maintenance factor: 8.0 - Overhana: -2 m

- Pole distance to roadway: 3 m

- Overall uniformity (U0): > 0.40 - Traffic lane uniformity (UI): > 0.60

- Edge illumination ratio (EIR): > 0.30

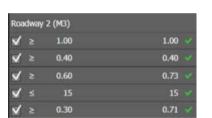
- Glare (TI): < 15

Tarmac (R3) - Road condition:

Cut-off - Luminous intensity class:

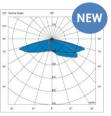


M1AVIKA2X25050 backlighting mask



| Roa | dway | 2 (M3) | |
|----------|------|--------|--------|
| ✓ | ≥ | 1.00 | 0.99 🗶 |
| V | 2 | 0.40 | 0.44 🗸 |
| ✓ | 2 | 0.60 | 0.77 🗸 |
| V | ≤ | 15 | 17 🗶 |
| ~ | ≥ | 0.30 | 0.73 🗸 |

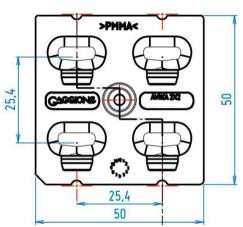


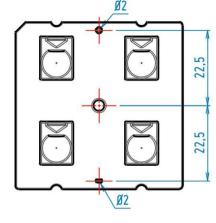


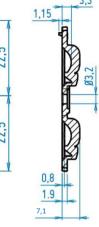
AVIKA2X25050LW1

10

- * Typically 5-15% less lumens or LEDs required vs competition
- * Photometry and simulation made with protective glass







AVIKA2X25050T1M





Application example: Regulation P4, Pedestrian road. Type I Medium.

- Luminaires on the side: 1 Luminaire (2 lanes, bicycle/walking road)

- LED type: 5050 & 3535

- Lumens per luminaire: 3000 - Average Illuminance: 6.05 lx

5 m (2.5 m x 2) - Road width:

- Pole distance : 42 m - Pole height: 5 m

0.5 - 1 m - Boom length:

0-5° - Boom anale:

- Maintenance factor: 0.80

- Overhana: 0 m

- Pole distance to roadway: 1 m

- Road condition: Tarmac (R3)

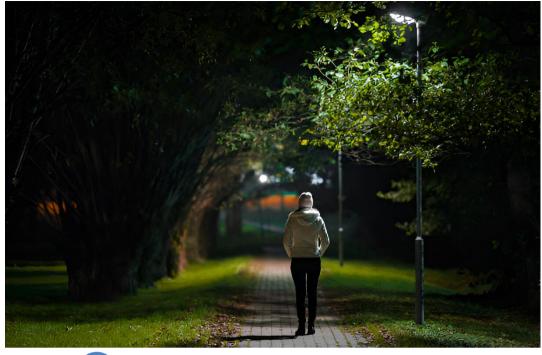
- Luminous intensity class: Cut-off

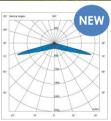


M1AVIKA2X25050 backlighting mask



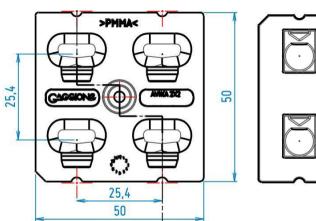
| Roadway 1 (P4) | | | | | | | |
|----------------|---|------|---|------|------|---|--|
| | ≤ | 30 | | | 45 | | |
| \checkmark | ≥ | 5.00 | ≤ | 7.50 | 3.42 | × | |
| ✓ | ≥ | 1.00 | | | 0.75 | × | |

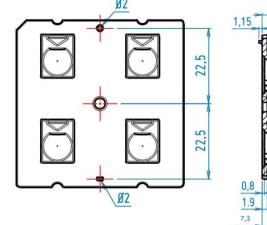




AVIKA2X25050T1M

- * Typically 5-15% less lumens or LEDs required vs competition
- * Photometry and simulation made with protective glass







Application example: Parking lot, Area and Wide area lighting

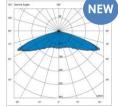
 $0 \, \mathrm{m}$

- LED type: 5050 & 3535

- Overhang:

- Lumens per luminaire: 16 000
- Average illuminance: 19lx
- Pole distance: 25 m
- Pole height: 5 m
- Boom length: 0 m
- Boom angle: 0°
- Maintenance factor: 0.80

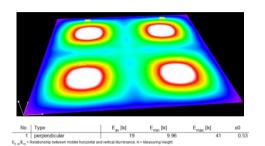
Road condition: Tarmac (R3)Luminous intensity class: Semi-cutoff

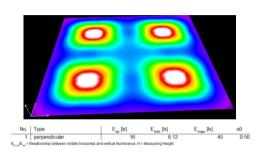


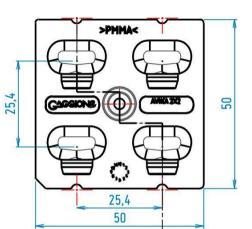
AVIKA2X25050T5M

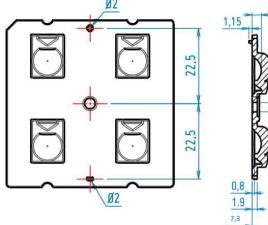


- * Typically **5-15%** less lumens or LEDs required vs competition
- * Photometry and simulation made with protective glass









AVIKA8X1*



New AVIKA8X1* road lighting family is the best compromise between price and performance. AVIKA8X1* product family is optimized for up to 3535 LED packages and provides the same lumen output as AVIKA2X2 with 5050 (up to 2500 lumens). AVIKA8X1 family has the same PCB location pin positions and screw mounting hole as AVIKA2X2 and is also **designed and manufactured in FRANCE**.

Optics are optimized for EN13201 M roads, providing excellent uniformity and minimized backlight. Well controlled backlight and Cut-off design allows the lenses to be used in countries where backlight is regulated by law. For even stricter requirements, GAGGIONE have developed **backlighting mask** which is ideal for next to building installations.

Dimensions: (W) 49.5 mm x (L) 49.5 mm x (H) <10mm

Mounting method: M3 Screw Optical efficiency: >90%

LED types: 3030 & 3535 packages

Cut-off classification: Cut-off (full cut-off in actual luminaire)

Materials: PMMA & PC



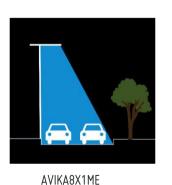
M1AVIKA8X1 backlighting mask

AVIKA8X1T1M - ideal for installations, where road width is narrower than the pole height

AVIKA8X1TME - ideal for installations, where road width is the same or less as the pole height

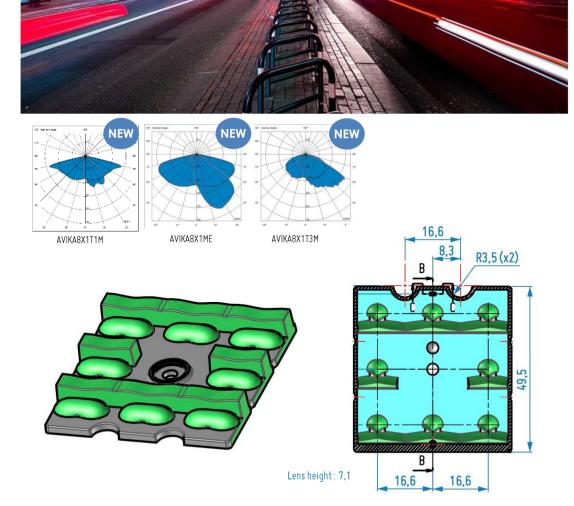
AVIKA8X1T3M - ideal for installations, where road width is wider than the pole height







AVIKA8X1T3M



AVIKA8X1* Amber versions





GAGGIONE's standard AVIKA8X1 optics are now available in Amber-yellow and Amber-orange colour grades.

Amber-orange lenses:

•Ideal for architectural lighting in old cities and historical sites and areas requiring wildlife friendly lighting.

- Converts 3000K LED to <1900K
- Providing beautiful traditional amber-orange colour
- Transmits 85% of light between 560nm 700nm
- (less than 0.5% of blue light)
- CRI 62, LOR 72%

Amber-yellow lenses:

Are developed to recreate the warm glow of traditional sodium lamps while being as energy-efficient as possible and environmentally friendly. Amber lenses are transmitting wavelength that is sea turtle friendly.

- Converts 4000K LED to 3000K
- Beautiful traditional amber colour
- Less than 1.25% of light emitted @ 500nm
- CRI 68, LOR 85%

AVIKA8X1T1M - ideal for installations, where road width is narrower than the pole height

AVIKA8X1TME - ideal for installations, where road width is the same or less as the pole height

AVIKA8X1T3M - ideal for installations, where road width is wider than the pole height



