# CAGEION®

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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

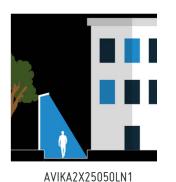
**Cut-off classification**: Cut-off (full cut-off in actual luminaire)

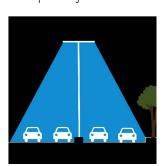
Materials: PMMA & PC



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



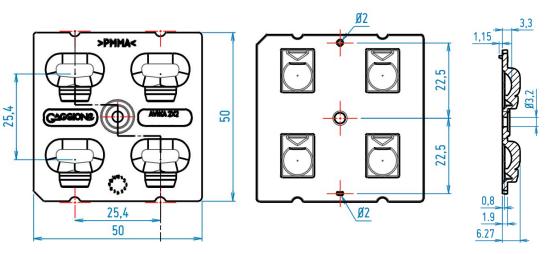


AVIKA2X25050ME

AVIKA2X25050LW1







For full compatibility matrix, please refer to our website www.optic-gaggione.com

# AVIKA2X25050LN1







## Application example: Regulation M3 road, motorway

- Luminaires on the side (2 lanes, two way)
- LED type: 5050 & 3535

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

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

- Pole distance: 45 m
- Pole height: 10 m
- Boom length: 1 m
- Boom angle: 0°

- Maintenance factor: 0.8- Overhang: 0 m

- Pole distance to roadway: 0 m

- Overall uniformity (U0): > 0.40

- Traffic lane uniformity (UI): > 0.60- Edge illumination ratio (EIR): > 0.30

Edge morrimanorrano (Ent): > 0.50

- Glare (TI): < 15

- Road condition: Tarmac (R3)

- Luminous intensity class: Cut-off



M1AVIKA2X25050 backlighting mask

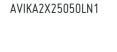


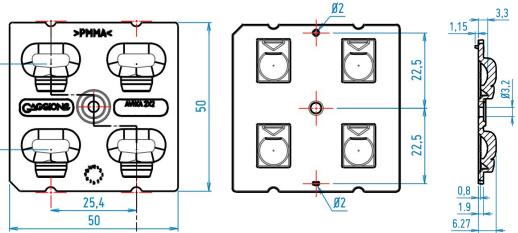
Roa	dwa	y 1 (M3)		
<b>V</b>	≥	1.00	1.01	Y
✓	2	0.40	0.47	¥
✓	2	0.60	0.64	Y
✓	≤	15	11	Y
<b>V</b>	2	0.30	0.65	4





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





25,4

# AVIKA2X25050ME







## Application example: Regulation M3 road, motorway

- Luminaires on the side (3 lanes, one way)
- LED type: 5050 & 3535

- 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:  $0^{\circ}$ - 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): > 0.30 - Glare (TI): < 15

Tarmac (R3)

- Luminous intensity class: Cut-off



M1AVIKA2X25050 backlighting mask





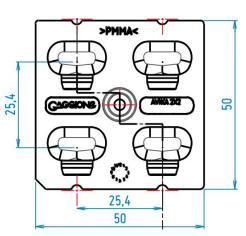
Roa	dway	y 2 (M3)	10.0	
$\checkmark$	2	1.00	1.00	Y
✓	≥	0.40	0.39	×
<b>V</b>	≥	0.60	0.65	~
<b>V</b>	≤	15	14	Y
<b>V</b>	2	0.30	0.59	4

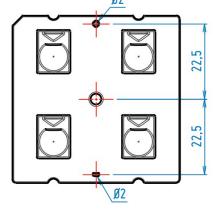


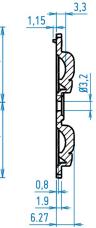


AVIKA2X25050ME

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







# AVIKA2X25050LW







## Application example: Regulation M3 road, motorway

- Luminaires on the side (4 lanes, one way)
- LED type: 5050 & 3535

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

- Road width: 15 m (3.75 m x 4)

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

O° - Boom angle:

- Maintenance factor: 0.8

- Overhang: -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

- Road condition: Tarmac (R3)

- Luminous intensity class: Cut-off



M1AVIKA2X25050 backlighting mask

Roa	dway	2 (M3)		
✓	≥	1.00	1.00	4
✓	2	0.40	0.48	4
✓	2	0.60	0.65	4
<b>V</b>	≤	15	11	Y
<b>V</b>	≥	0.30	0.55	Y

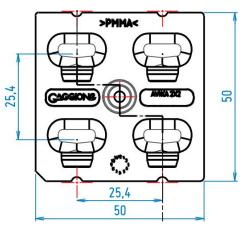
Roadway	2 (M3)	
<b>√</b> ≥	1.00	0.99 🗶
<b>√</b> ≥	0.40	0.44 🗸
<b>√</b> ≥	0.60	0.77 🗸
<b>√</b> ≤	15	17 ×
<b>√</b> ≥	0.30	0.73 🗸

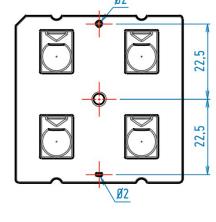


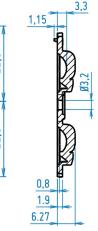


AVIKA2X25050LW1

- \* 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

AVIKA8X1T2M - 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



