

OWA FL LED

OWA FL LED is a high efficiency recessed LED luminaire designed for emergency lighting installed inside buildings. Its main task is to illuminate escape routes, evacuation signs, rooms in public facilities, work places, etc.

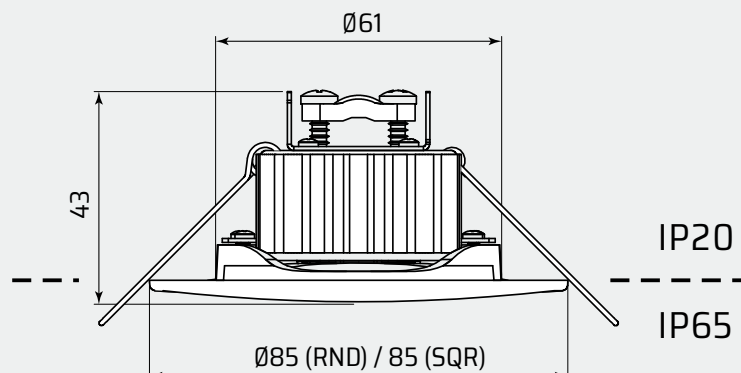
Round (RND) and square (SQR) light sources available.



AREA/AREA PLUS



ROAD PLUS



LUMINAIRE FEATURES

- Deep discharge battery protection
- Non-maintained, switched maintained or night (hotel) operation mode
- Possibility to connect to the central management system, central power supply or group power supply
- Lighting of escape routes, open spaces and fire point
- Small light source housing made of plastic
- Three variants of the luminaire power (1W/2W/3W)
- Wide range of optics
- Special variant, emergency module with Ingress Protection IP65

AVAILABLE SYSTEMS

STANDARD - (ST) tests manually

AUTOTEST - (AT) internal components, battery and light source tests being performed automatically

CENTRALTEST - (CT) internal components, battery and light source tests being performed on command from the main unit of central management system

CB - luminaire supplied from HVCBS (230V AC / 216V DC / 108V DC), without address module

CBAM - luminaire supplied from the HVCBS (230V AC / 216V DC), with built-in address module

LVAM - luminaire supplied with 24V DC from the LVDBS system, with built-in address module

TECHNICAL DATA

Supply voltage	ST, AT, CT	230V AC 50/60Hz
	CB	230V AC 50/60Hz 80-275V DC
	CBAM	230V AC 50/60Hz 170-275V DC
	LVAM	8-32V DC
Protection class	ST, AT, CT, CB, CBAM	I
	LVAM	III
Ingress protection		IP65 / IP20 ¹⁾
Light source		LED Module ²⁾
Light colour temperature		5700K
Colour rendering index		70
Light source supply power		1W, 2W, 3W
Minimum luminous flux (1W/2W/3W)	RP	145/238/347 lm
	AP	142/233/340 lm
	AR	148/243/355 lm
Light source lifespan		> 50 000h

Battery type / voltage	Ni-Cd; Ni-MH	4,8V
Battery capacity		1,0; 1,5; 1,6; 2,1; 2,5; 4,0Ah
Battery charging time		< 24h
Emergency operation time (tau)		1h, 3h
Ambient temperature (1W)	ST, AT, CT	+5 - +35°C; TE: ³⁾ -20 - +40°C
	CB, CBAM	-10 - +60°C; TE: ³⁾ -25 - +60°C
	LVAM	-25 - +60°C
Ambient temperature (2W, 3W)	ST, AT, CT	+5 - +35°C; TE: ³⁾ -20 - +40°C
	CB, CBAM	-10 - +55°C; TE: ³⁾ -25 - +55°C
	LVAM	-25 - +55°C
Supply cable cross-section area		0,5 - 2,5mm ²
Supply cable diameter		≤ 8mm
Suitable for through wiring		YES

¹⁾ For variant 0101, the ingress protection of the emergency module is IP65;

²⁾ Non-exchangeable, but serviveable light source; ³⁾ TE - extended temperature range

MATERIAL

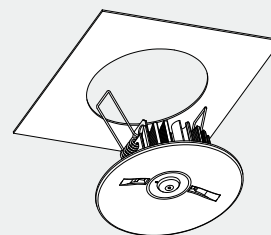
Light source housing material - PC/ABS

Light source housing colour - ○ RAL 9016, ● RAL 7042, ● RAL 9005

Power supply material - steel

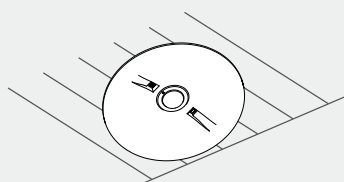
MOUNTING KIT

C125 - is used to mount luminaires in a raster ceiling



MOUNTING TYPES

Recessed



AVAILABLE OPTICS

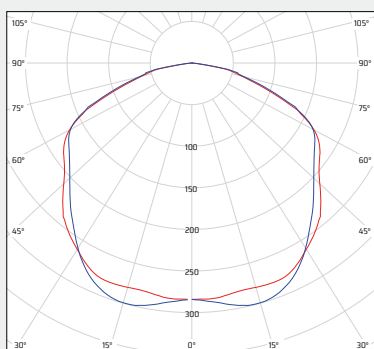
AREA - (AR) symmetrical light distribution in all directions, recommended for use in places of considerable height or to illuminate fire points

AREA PLUS - (AP) symmetrical light distribution in all directions, ensuring adequate illumination on a large area

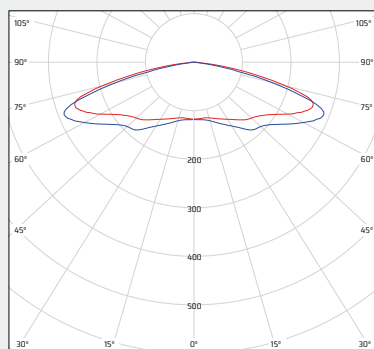
ROAD PLUS - (RP) light distribution mainly along the escape route with a long range, for small heights

LIGHT DISTRIBUTION CURVES

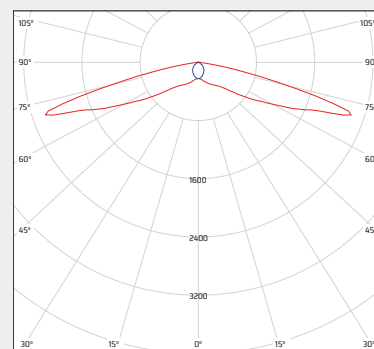
AREA (AR)



AREA PLUS (AP)



ROAD PLUS (RP)



cd/klm — C0 - C180 — C90 - C270

DISTANCE TABLES

Tables for open area lighting

AREA; 1W; 5700K

↓ [m]	↔↔0	0↔↔0
2	3,3	8,0
2,5	3,5	8,8
3	3,7	9,4
3,5	3,7	9,9
4	3,8	10,2
4,5	3,8	10,4
5	3,8	10,5
5,5	3,7	10,6
6	3,6	10,7
6,5	3,4	10,7
7	3,1	10,6
7,5	2,8	10,5
8	1,7	10,4

AREA; 2W; 5700K

↓ [m]	↔↔0	0↔↔0
2	3,8	9,0
2,5	4,2	10,1
3	4,4	11,0
3,5	4,6	11,7
4	4,7	12,2
4,5	4,8	12,6
5	4,8	12,9
5,5	4,9	13,2
6	4,9	13,4
6,5	4,8	13,5
7	4,8	13,6
7,5	4,7	13,6
8	4,5	13,7
8,5	4,3	13,7
9	3,9	13,6
9,5	3,7	13,5
10	2,9	13,4

AREA; 3W; 5700K

↓ [m]	↔↔0	0↔↔0
2	4,2	9,9
2,5	4,7	11,1
3	5,0	12,2
3,5	5,3	13,1
4	5,5	13,8
4,5	5,6	14,4
5	5,7	14,9
5,5	5,8	15,3
6	5,8	15,6
6,5	5,9	15,9
7	5,9	16,1
7,5	5,8	16,2
8	5,8	16,3
8,5	5,7	16,4
9	5,6	16,5
9,5	5,5	16,5
10	5,3	16,5
10,5	4,7	16,5
11	4,6	16,4
11,5	4,4	16,3
12	3,7	16,2

AREA PLUS; 1W; 5700K

↑ [m]	↔↔0	0↔0
2	3,8	9,9
2,5	3,7	10,5
3	3,5	10,7
3,5	3,3	10,5
4	3,1	10,1
4,5	2,3	9,7
5	0,6	9,3

AREA PLUS; 2W; 5700K

↑ [m]	↔↔0	0↔0
2	4,6	11,3
2,5	4,8	12,5
3	4,8	13,2
3,5	4,7	13,6
4	4,4	13,6
4,5	4,2	13,4
5	4,0	13,1
5,5	3,4	12,7
6	2,4	12,2

AREA PLUS; 3W; 5700K

↑ [m]	↔↔0	0↔0
2	5,2	12,4
2,5	5,6	13,9
3	5,8	15,1
3,5	5,8	15,8
4	5,7	16,3
4,5	5,5	16,5
5	5,3	16,4
5,5	5,1	16,2
6	4,9	15,8
6,5	4,3	15,4
7	3,4	14,9
7,5	2,0	14,5

Tables for emergency routes

ROAD PLUS; 1W; 5700K

↑ [m]	↔↔◊	◊↔◊	◊↔◊	◊↔0	↔↔0
2	7,0	15,7	10,3	5,1	2,0
2,5	8,0	18,2	11,7	5,4	2,1
3	8,5	20,4	12,9	5,7	2,0
3,5	7,8	22,3	13,3	5,8	1,9
4	6,9	22,9	12,9	5,7	1,6
4,5	4,3	23,1	11,5	5,6	1,2
5	3,0	21,7	9,3	5,2	0,1

ROAD PLUS; 3W; 5700K

↑ [m]	↔↔◊	◊↔◊	◊↔◊	◊↔0	↔↔0
2	8,1	18,2	12,0	6,0	2,7
2,5	9,4	21,1	13,8	7,0	2,9
3	10,6	23,8	15,5	7,8	3,0
3,5	11,6	26,3	17,2	8,1	3,2
4	12,5	28,7	18,5	8,4	3,2
4,5	13,2	31,0	19,6	8,7	3,1
5	12,4	33,0	20,7	8,9	3,0
5,5	12,0	34,8	20,5	9,0	2,8
6	11,1	35,1	20,1	8,9	2,6
6,5	9,9	35,7	19,5	8,8	2,2
7	6,4	35,5	17,7	8,6	1,8
7,5	5,3	34,2	15,0	8,2	1,0

ROAD PLUS; 2W; 5700K

↑ [m]	↔↔◊	◊↔◊	◊↔◊	◊↔0	↔↔0
2	7,6	17,1	11,2	5,8	2,4
2,5	8,8	19,8	12,9	6,5	2,5
3	9,8	22,3	14,5	6,8	2,6
3,5	10,7	24,7	15,7	7,1	2,6
4	10,7	26,8	16,8	7,3	2,6
4,5	10,0	28,7	17,0	7,4	2,4
5	9,1	29,2	16,6	7,4	2,1
5,5	7,9	29,7	15,9	7,2	1,8
6	4,8	28,7	13,5	7,0	1,2

The distance tables for flat escape routes are based on the following parameters:

- Maintenance factor: 0,77
- The minimum illuminance on centerline: 1,00 lx
- Minimum illuminance on half of escape route width: 0,50 lx
- Diversity on the centre line max.: 40:1
- Escape routes width: 2,00 m




The distance tables for open area lighting are based on the following parameters:

- Maintenance factor: 0,77
- Minimum illuminance at the floor level: 0,50 lx
- Diversity on the centre line max.: 40:1

LEGEND:

↑ - fixture mounting height; ↔↔0 - distance between the wall and the fixture; 0↔0 - distance between the fixtures; ↔↔◊ - distance between the wall and the luminaire placed longer angle of light parallel to the wall; ◊↔◊ - distance between the luminaires placed longer angle of light parallel to each other; ◊↔◊ - distance between the luminaires placed longer angle of light perpendicular to each other; ◊↔◊ - distance between the luminaires placed shorter angle of light parallel to each other; ↔↔◊ - distance between the wall and the luminaire placed shorter angle of light parallel to the wall

ORDERING

	OWA FL LED	0000	- EN	- RP	- 3W	- AT	- 3h	- NM	- TS	- CW	- L040	- 9016	- RND
Variant:													
0000 – base variant													
0001 – extended warranty variant													
0008 – 1h luminaire variant with 3h battery													
0009 – 2h luminaire variant with 3h battery													
0101 – emergency module with Ingress Protection IP65													
Optics:													
AR – area													
AP – area plus													
RP – road plus													
Light source supply power:													
1W – LED module powered by 1W													
2W – LED module powered by 2W													
3W – LED module powered by 3W													
System variant:													
ST – standard													
AT – autotest													
CT – centraltest													
CB – centrally supplied luminaire													
CBAM – centrally supplied luminaire with address module													
LVAM – centrally low voltage supplied luminaire with address module													
Emergency operation time:													
1h – emergency operation time of 60 minutes													
3h – emergency operation time of 180 minutes													
X – not applicable (CB, CBAM, LVAM)													
Operation mode:													
NM – non-maintained													
SM – switched maintained													
N – night (available only for CT system variant)													
X – not applicable (CB, CBAM, LVAM)													
Operating temperature range of luminaire:													
TS – standard operating temperature range													
TE – extended operating temperature range													
Distance between the light source and the power module:													
L040 – 40cm of cable length (standard)													
...													
L100 – 100cm of cable length													
Housing colour:													
9016 –  RAL 9016													
7042 –  RAL 7042													
9005 –  RAL 9005													
... – other on special order													
Light source shape:													
RND – round													
SQR – square													