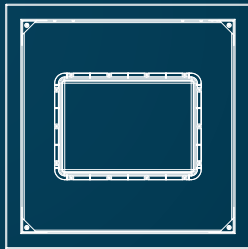
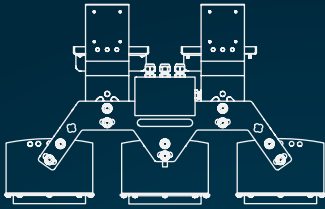


LED LIGHTING SOLUTIONS



2019



In the next pages, we are presenting a wide range of lighting solutions with LEDs, produced by Electromagnetica, according to the European Standards in force. You will discover perfect luminaires with a large palette of mounting variants from where you can choose the appropriate solution for your space.

ELECTROMAGNETICA

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Residential/ ambiental/ office lighting



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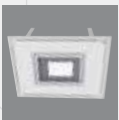
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Residential/ ambiental/ office lighting

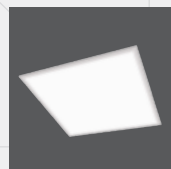
Content



Alcor 6



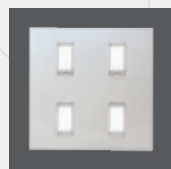
Tempus 32



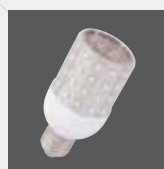
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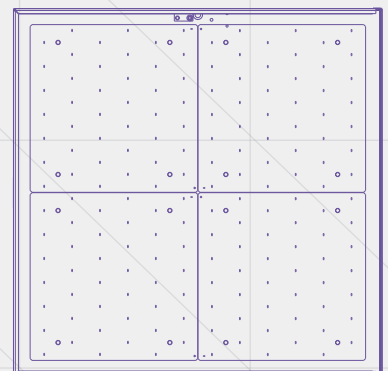


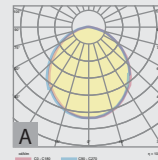
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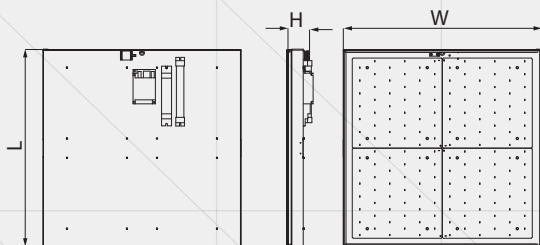
ALCOR

ALCOR lighting devices are distinguished by their minimalist design and their easy installation system for rooms with coffered ceiling. It's time to abandon 4x18 W fluorescent lamps and to choose ALCOR range!





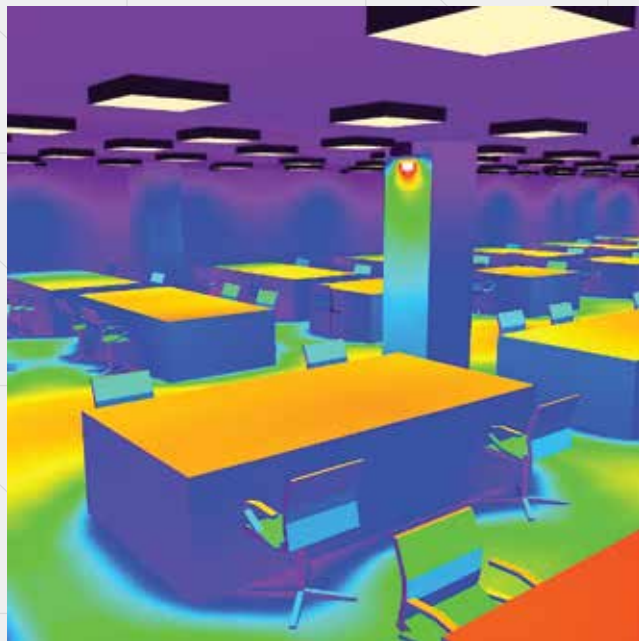
- Application type: Shopping centers, offices, conference rooms
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: + 5°C . . . + 40°C
- Distribution: A
- Emergency lighting: battery autonomy - 60 min



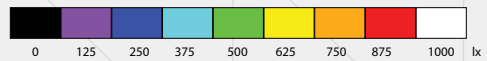
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81938A1-DL	33 W	plexiglass disperser	3800 lm	594 x 594 x 80 mm 4,2 kg	-
RS 81938A1-DL2	33 W	polystyrene disperser	3300 lm	594 x 594 x 80 mm 4,2 kg	-
RS 81938 A1-CL	33 W	plexiglass disperser	4000 lm	594 x 594 x 80 mm 4,9 kg	-
RS 81952 A1-CL	51 W	plexiglass disperser	6300 lm	594 x 594 x 80 mm 4,4 kg	-
RS 81952 A1-DL	51 W	plexiglass disperser	5440 lm	594 x 594 x 80 mm 4,4 kg	-
RS 81952 A1-DL2	51 W	polystyrene disperser	5220 lm	594 x 594 x 80 mm 4,2 kg	-
RS 81952 A1D-DL2	51 W	polystyrene disperser	5220 lm	594 x 594 x 80 mm 4,4 kg	dimnable
RS 81778-003	16 W	PMMA disperser	1900 lm	663 x 298 x 45 mm 3,1 kg	apparent mounting
RS 81778-014	48 W	plexiglass disperser	6700 lm	594 x 594 x 80 mm 4,4 kg	-
RS 81778-015	48 W	polystyrene disperser	6000 lm	594 x 594 x 80 mm 4,4 kg	-
RS 81778-018	30 W	plexiglass disperser	3750 lm	594 x 594 x 80 mm 4,4 kg	-
RS 81778-019	30 W	polystyrene disperser	3480 lm	594 x 594 x 80 mm 4,4 kg	-
RS 81778-022	30 W	plexiglass disperser	3750 lm	594 x 594 x 80 mm 4,2 kg	Bluetooth module
RS 81778-023	32 W	plexiglass disperser	4200 lm	594 x 594 x 80 mm 4,2 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81778-024	50 W	polystyrene disperser	5600 lm	594 x 594 x 80 mm 4,2 kg	dimnable
RS 81778-025	30 W	polystyrene disperser	3300 lm	594 x 594 x 50 mm 4,2 kg	with central mode
RS 81778-026	33 W	polystyrene disperser	3300 lm	594 x 594 x 80 mm 4,2 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81778-028	52 W	plexiglass disperser	7300 lm	1260 x 350 x 40 mm 5,2 kg	apparent mounting

Applicable standards:
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space: 3.000 m
 Fitting height: 3.000 m
 Maintenance factor : 0.90

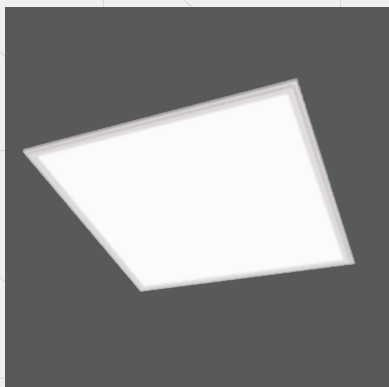


Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	484	23	828	0.047
Floor	20	300	5.91	743	0.020
Ceiling	70	102	35	214	0.346
Walls	50	291	46	2030	/

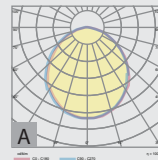


ATLAS

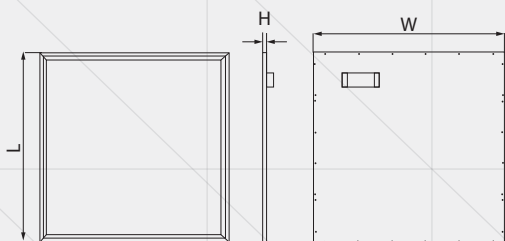
With their elegant design and only 10 mm thick, **ATLAS** light fittings are designed for lighting office buildings, conference halls, pharmacies. Illumination from the side of the light fitting eliminates the pixel effect from the light source .



ATLAS



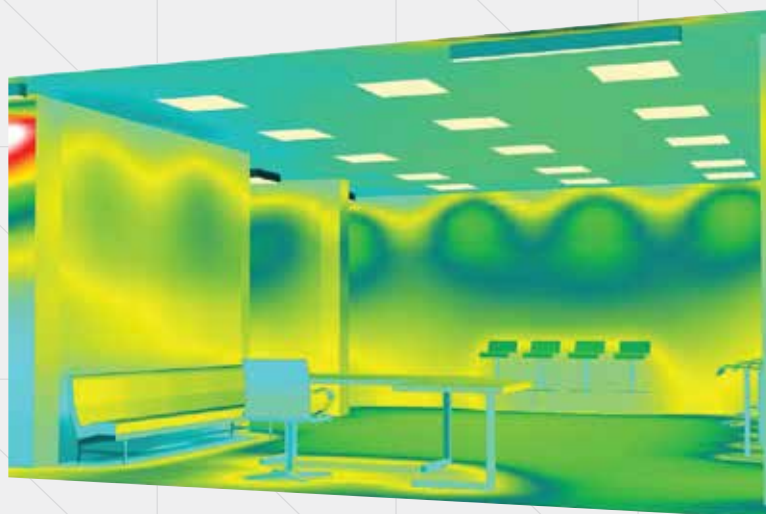
- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: + 5°C . . . + 40°C
- Distribution: A



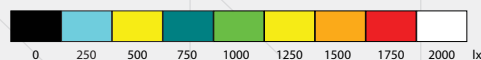
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 82019-001	30 W	polycarbonate disperser	3300 lm	595 x 595 x 10 mm 3,2 kg	-
RS 82019-002	30 W	polycarbonate disperser	3300 lm	605 x 602 x 50 mm 3,4 kg	-

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-2:2012
 SR EN 62031:2009+A1:2013+
 A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 3,000 m
 Maintenance factor : 0,90



Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	723	36	1244	0.050
Floor	41	546	20	1095	/
Ceiling	70	227	40	810	/
Walls	50	347	33	3520	/

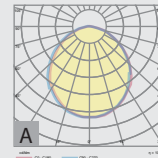


ARIES - VELA

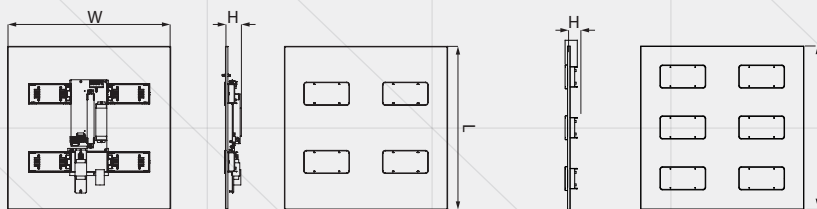
Do you need a modular solution? Choose the **ARIES** and **VELA** luminaires. They can be made of 4,6 modules in the case of **ARIES** luminaire, respectively 8 modules in the case of **VELA** luminaire, on a metallic panel structure. With an elegant design, **ARIES** and **VELA** luminaires fit perfect in public open spaces such as: offices, medical clinics, conference halls and commercial spaces.



ARIES



- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: max. + 40°C
- Distribution: A
- Emergency lighting: battery autonomy - 60 min

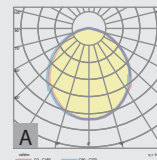


Code	Nominal power	Optics	Light flow	Modules number	Sizes; Mass (L x W x H);(kg)	Observations
RS 81937-017	33 W	transparent polycarbonate disperser	3700 lm	6	592 x 592 x 75 mm 2,9 kg	-
RS 81937-018	33 W	matte polycarbonate disperser	3600 lm	6	592 x 592 x 75 mm 2,9 kg	-
RS 81937-020	37 W	transparent polycarbonate disperser	3700 lm	6	592 x 592 x 75 mm 3,4 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81937-021	37 W	matte polycarbonate disperser	3600 lm	6	592 x 592 x 75 mm 3,4 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81937-029	26 W	transparent polycarbonate disperser	2400 lm	6	592 x 592 x 75 mm 3,2 kg	-
RS 81937-030	26 W	matte polycarbonate disperser	2200 lm	6	592 x 592 x 75 mm 3,2 kg	-
RS 81937-032	29 W	transparent polycarbonate disperser	2400 lm	6	592 x 592 x 75 mm 3,2 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81937-033	29 W	matte polycarbonate disperser	2300 lm	6	592 x 592 x 75 mm 3,2 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81937-037	18 W	transparent polycarbonate disperser	1480 lm	4	592 x 592 x 75 mm 3 kg	-
RS 81937-038	18 W	matte polycarbonate disperser	1440 lm	4	592 x 592 x 75 mm 3 kg	-
RS 81937-040	21 W	transparent polycarbonate disperser	1480 lm	4	592 x 592 x 75 mm 3 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81937-041	21 W	matte polycarbonate disperser	1480 lm	4	592 x 592 x 75 mm 3 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81937-043	24 W	transparent polycarbonate disperser	2500 lm	4	592 x 592 x 75 mm 2,5 kg	-
RS 81937-044	24 W	matte polycarbonate disperser	2400 lm	4	592 x 592 x 75 mm 2,5 kg	-
RS 81937-046	27 W	transparent polycarbonate disperser	2550 lm	4	592 x 592 x 75 mm 2,7 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81937-047	27 W	matte polycarbonate disperser	2450 lm	4	592 x 592 x 75 mm 2,7 kg	Ni-Cd batteries 4,8 V / 1,6 Ah

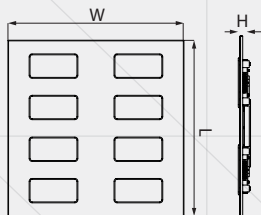
Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-2:2012
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



VELA



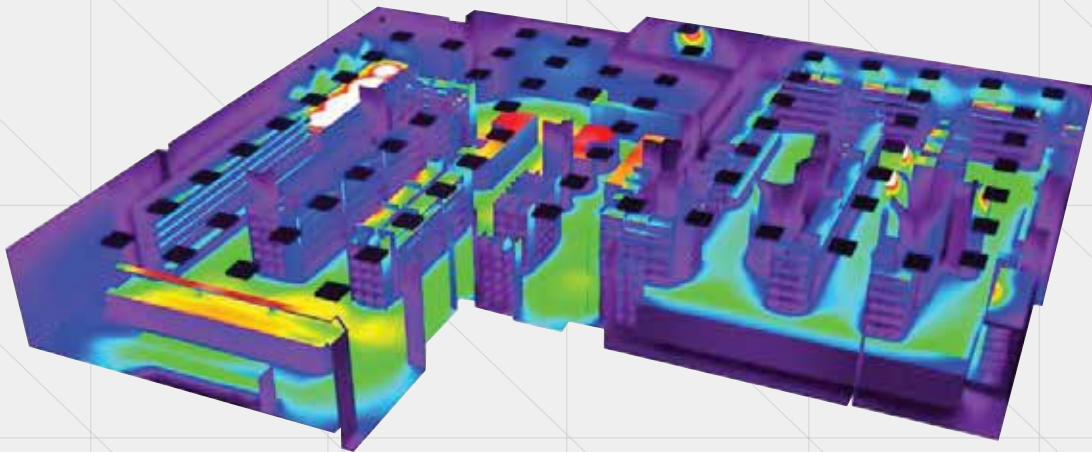
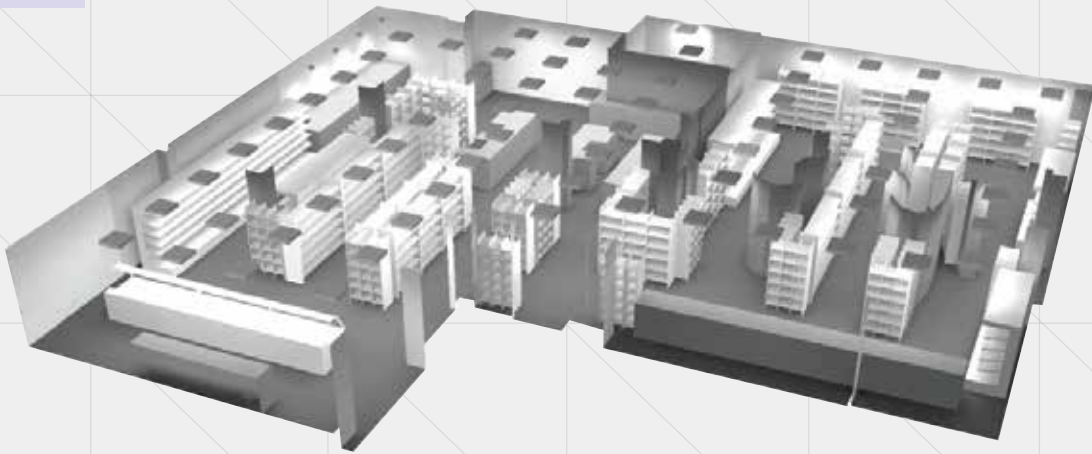
- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: + 5°C . . . + 40°C
- Distribution: A
- Emergency lighting: battery autonomy - 60 min



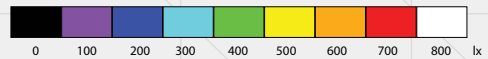
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81728-007	38 W	transparent polycarbonate disperser	4100 lm	592 x 592 x 75 mm 3 kg	-
RS 81728-008	38 W	matte polycarbonate disperser	3900 lm	592 x 592 x 75 mm 3 kg	-
RS 81728-016	42 W	striation transparent disperser	3600 lm	592 x 592 x 75 mm 3,5 kg	Ni-Cd batteries 3,6 V / 3,0 Ah
RS 81728-017	42 W	striation matte disperser	3400 lm	592 x 592 x 75 mm 3,2 kg	Ni-Cd batteries 3,6 V / 3,0 Ah

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-2:2012
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010

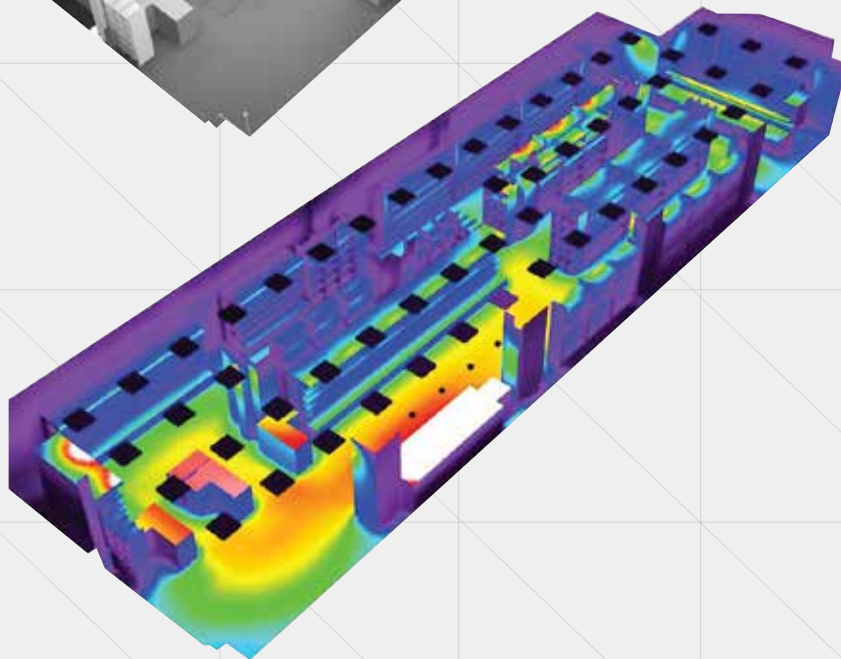
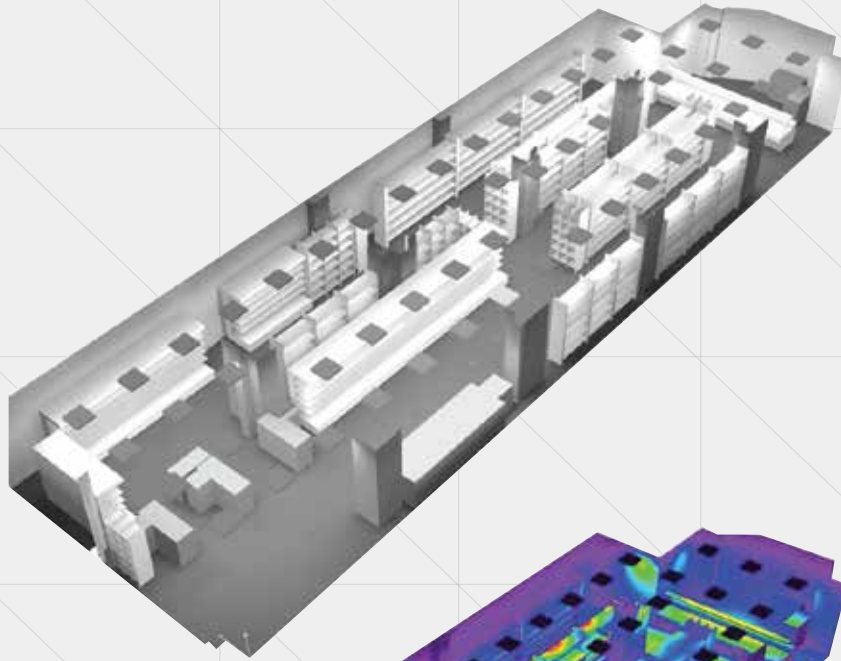




Height of space: 2.800 m
 Fitting height: 2.800 m
 Maintenance factor : 0.90



Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	337	11	718	0.033
Floor	20	229	10	589	0.044
Ceiling	70	74	23	159	0.303
Walls	50	124	12	857	/



Height of space: 3.000 m
 Fitting height: 3.000 m
 Maintenance factor : 0.90



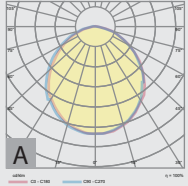
Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	402	11	884	0.027
Floor	20	260	3.30	725	0.013
Ceiling	70	85	31	233	0.362
Walls	50	129	8.82	698	/



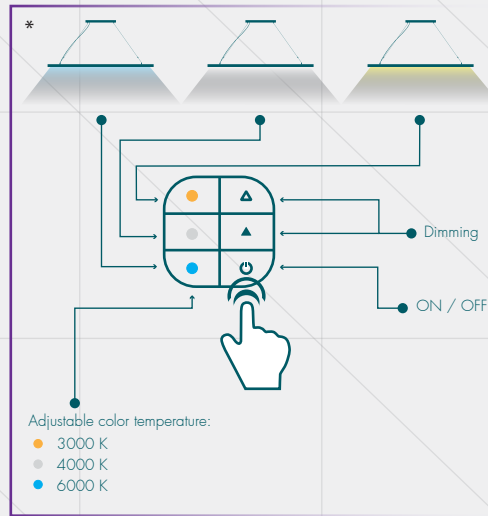
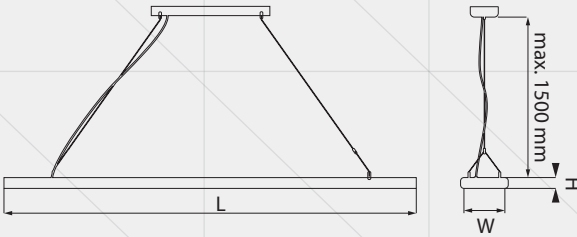
INDO

INDO is an elegant and efficient indoor lighting solution, suitable for office spaces. The difference is made by the colour temperature, adjustable on 3 levels: 3,000 Warm, 4,000 Neutral and 6,000 Cold.





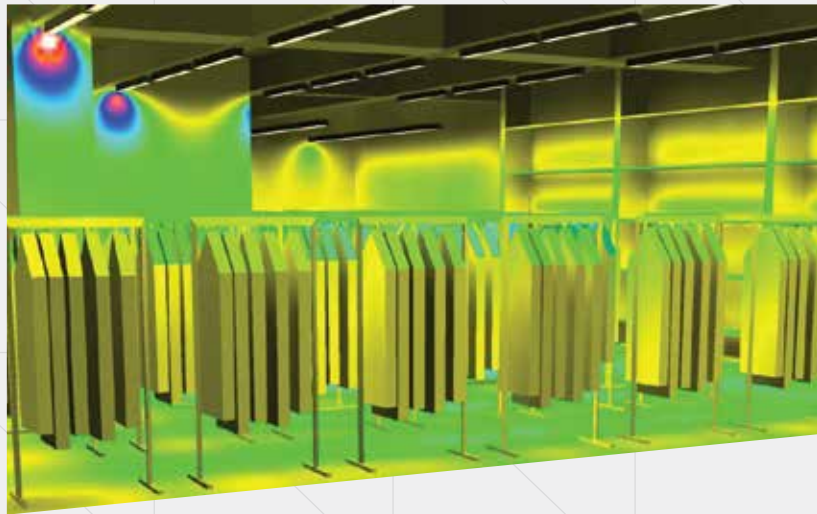
- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: + 5°C . . . + 40°C
- Distribution: A
- Emergency lighting: battery autonomy - 60 min



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x l x h);(kg)	Mounting type	Observations
RS 82014-001	52 W	matte disperser/ textured plexiglass	6500 lm	1500 x 175 x 40 mm 4 kg	suspended	-
RS 82014-002	53 W	matte disperser/ textured plexiglass	6000 lm	1500 x 175 x 40 mm 4 kg	suspended	* adjustable color temperature
RS 82014-003	52 W	matte disperser/ textured plexiglass	6500 lm	1500 x 175 x 40 mm 4 kg	apparent	-
RS 82014-004	53 W	matte disperser/ textured plexiglass	6000 lm	1500 x 175 x 40 mm 4 kg	apparent	* adjustable color temperature
RS 82014-005	42 W	matte disperser/ textured plexiglass	5200 lm	1200 x 175 x 40 mm 3,7 kg	suspended	-
RS 82014-006	43 W	matte disperser/ textured plexiglass	5000 lm	1200 x 175 x 40 mm 3,7 kg	suspended	* adjustable color temperature
RS 82014-007	42 W	matte disperser/ textured plexiglass	5200 lm	1200 x 175 x 40 mm 3,7 kg	apparent	-
RS 82014-008	43 W	matte disperser/ textured plexiglass	5000 lm	1200 x 175 x 40 mm 3,7 kg	apparent	* adjustable color temperature
RS 82014-009	55 W	matte disperser/ textured plexiglass	6500 lm	1500 x 175 x 40 mm 5 kg	suspended	Ni-Cd batteries 4,8 V / 4,0 Ah
RS 82014-010	56 W	matte disperser/ textured plexiglass	6000 lm	1500 x 175 x 40 mm 4 kg	suspended	* Ni-Cd batteries 4,8 V / 4,0 Ah
RS 82014-011	55 W	matte disperser/ textured plexiglass	6500 lm	1500 x 175 x 40 mm 4 kg	apparent	Ni-Cd batteries 4,8 V / 4,0 Ah
RS 82014-012	56 W	matte disperser/ textured plexiglass	6000 lm	1500 x 175 x 40 mm 4 kg	apparent	* Ni-Cd batteries 4,8 V / 4,0 Ah
RS 82014-013	45 W	matte disperser/ textured plexiglass	5200 lm	1200 x 175 x 40 mm 3,7 kg	suspended	Ni-Cd batteries 4,8 V / 4,0 Ah
RS 82014-014	46 W	matte disperser/ textured plexiglass	5000 lm	1200 x 175 x 40 mm 3,7 kg	suspended	* Ni-Cd batteries 4,8 V / 4,0 Ah
RS 82014-015	45 W	matte disperser/ textured plexiglass	5200 lm	1200 x 175 x 40 mm 3,7 kg	apparent	Ni-Cd batteries 4,8 V / 4,0 Ah
RS 82014-016	46 W	matte disperser/ textured plexiglass	5000 lm	1200 x 175 x 40 mm 3,7 kg	apparent	* Ni-Cd batteries 4,8 V / 4,0 Ah

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 60598-2-2:2015+
 AC:2015+AC:2016
 SR EN 62031:2009+A1:2013+
 A2:2015
 SR EN 55014:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 4,400 m
 Maintenance factor : 0,90



Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	570	105	911	0.184
Floor	50	463	101	763	0.218
Ceiling	70	70	33	119	0.479
Walls	50	241	39	2880	/

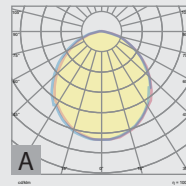


CYGNUS

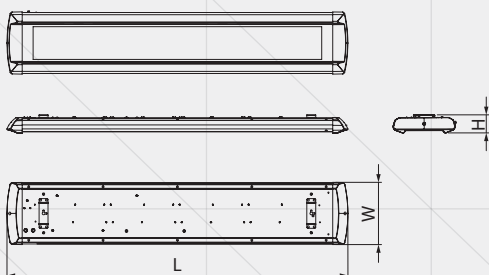
This lighting device was specifically designed for offices, but it suits for several general indoor lighting applications: office buildings, residential buildings, conference and protocol halls, etc. **CYGNUS** is a viable substitute for the fluorescent light fixtures.



CYGNUS



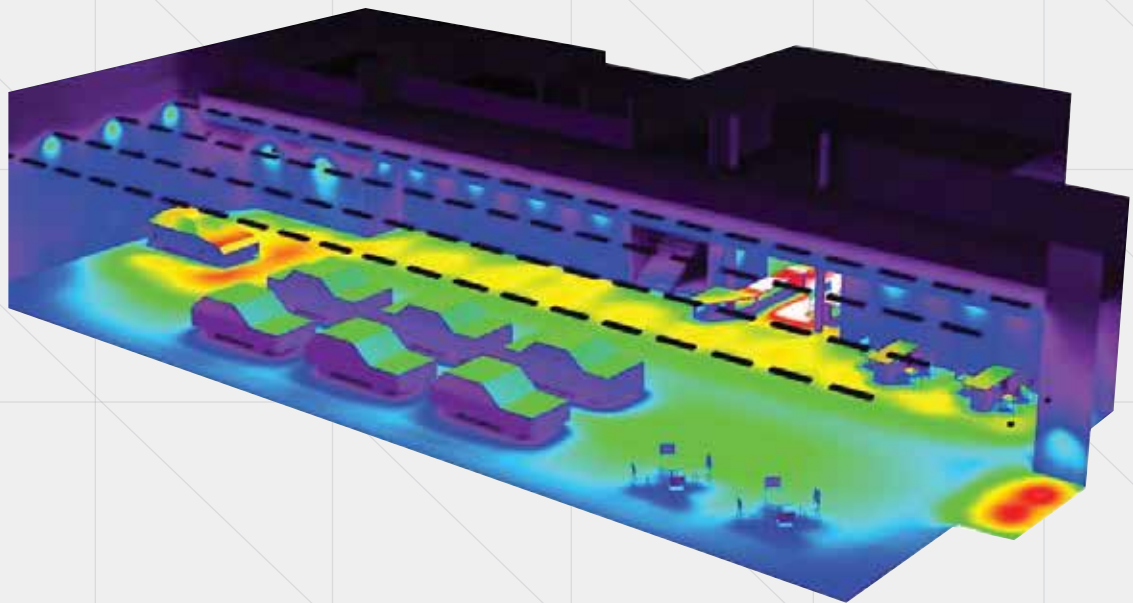
- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: max. + 40°C
- Distribution: A



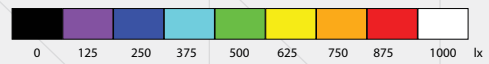
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81877-001	24 W	PMMA disperser	2600 lm	741 x 209 x 61 mm 2,9 kg	-
RS 81877-002	38 W	PMMA disperser	4750 lm	1372 x 209 x 63 mm 2,9 kg	-

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 6,830 m
 Maintenance factor : 0,90

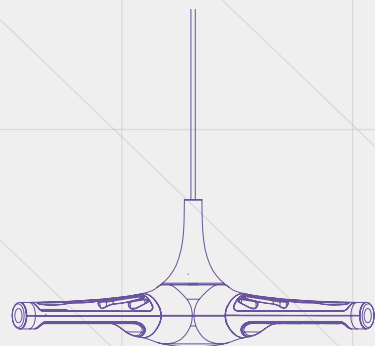
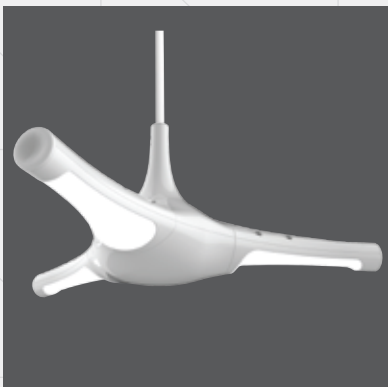


Surface	p [%]	Em [lx]	Emin [lx]	Emax [lx]	u0
Usable surface	/	551	23	1506	0.041
Floor	20	444	15	1123	0.034
Ceiling	70	46	4.01	85	0.088
Walls	50	103	8.00	606	/



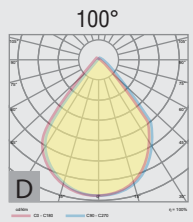
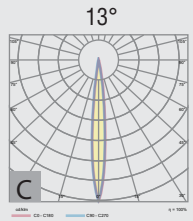
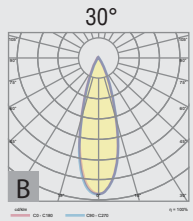
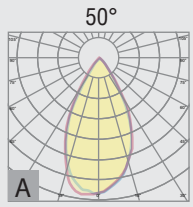
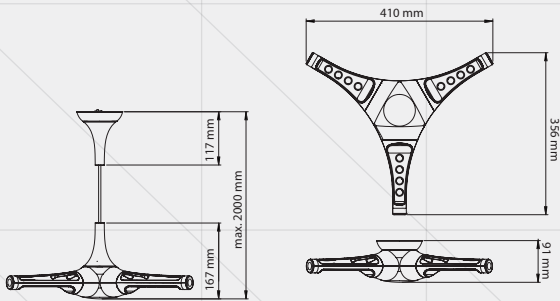
IGREGO

Originality and innovation, elegance and simplicity are the characteristics **IGREGO** development is based on. From minimalist to industrial influence interiors, **IGREGO** will fit perfectly in any space, being mounted both individually and in several interconnected bodies.



IGREGO

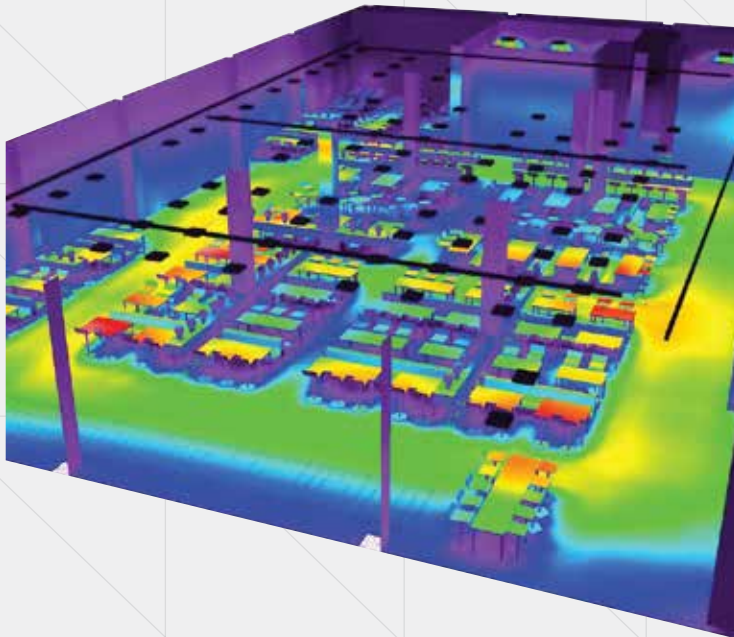
- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: II
- Working temperature: max. + 40°C



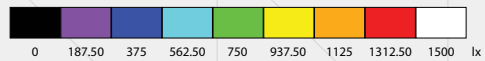
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Distribution	Observation
RS 81760-001	27 W	matte disperser	3700 lm	592 x 592 x 75 mm 1 kg	D	without electrical interconnection
RS 81760-002	27 W	PMMA lenses	3700 lm	592 x 592 x 75 mm 1 kg	C	without electrical interconnection
RS 81760-003	27 W	PMMA lenses	3600 lm	592 x 592 x 75 mm 1 kg	B	without electrical interconnection
RS 81760-004	27 W	PMMA lenses	3700 lm	592 x 592 x 75 mm 1 kg	A	without electrical interconnection
RS 81760-005	27 W	matte disperser	2400 lm	592 x 592 x 75 mm 1 kg	D	with electrical interconnection
RS 81760-006	27 W	PMMA lenses	2200 lm	592 x 592 x 75 mm 1 kg	C	with electrical interconnection
RS 81760-007	27 W	PMMA lenses	2400 lm	592 x 592 x 75 mm 1 kg	B	with electrical interconnection
RS 81760-008	27 W	PMMA lenses	2360 lm	592 x 592 x 75 mm 1 kg	A	with electrical interconnection

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-2:2012
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 4,700 m
 Maintenance factor : 0,90

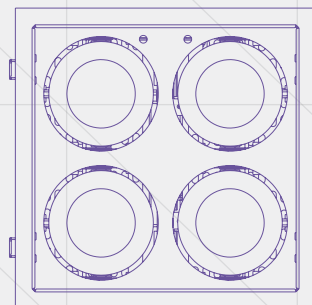
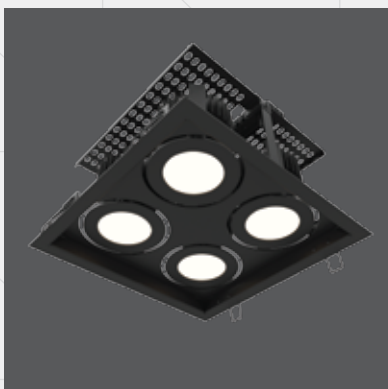


Surface	p [%]	Em [lx]	Emin [lx]	Emax [lx]	u0
Usable surface	/	634	55	1465	0.087
Floor	20	434	23	1136	0.053
Ceiling	70	126	28	271	0.327
Walls	50	170	36	544	0.221

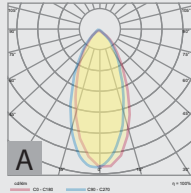


OMICRON 4M

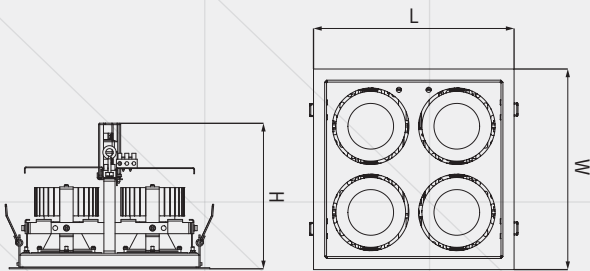
If you own a space with several areas of interest to be lit, choose the **OMICRON 4M** range of lighting devices. They were created in such way that their form perfectly combines with their functionality, so you can redirect the light towards certain key areas.



OMICRON 4M



- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: II
- Working temperature: max. + 40°C
- Emergency lighting: battery autonomy - 60 min

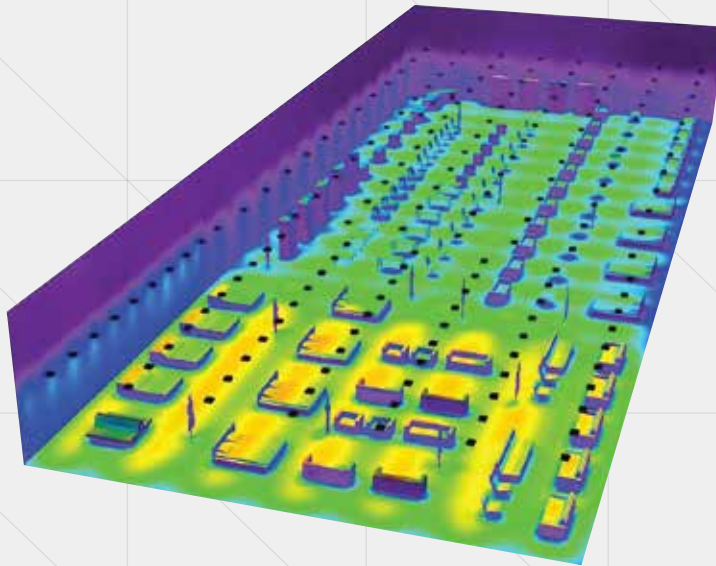


Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observation
RS 81637-001	50 W	plexiglass matte disperser	5200 lm	270 x 270 x 215 mm 2 kg	-
RS 81637-002	56 W	plexiglass matte disperser	5200 lm	270 x 270 x 215 mm 2,8 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81637-003	27 W	plexiglass matte disperser	2700 lm	270 x 160 x 153 mm 1,5 kg	-

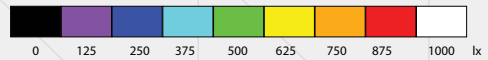
Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



OMICRON 4M



Height of space: 6.000 m
 Fitting height: 3.500 m
 Maintenance factor : 0.90

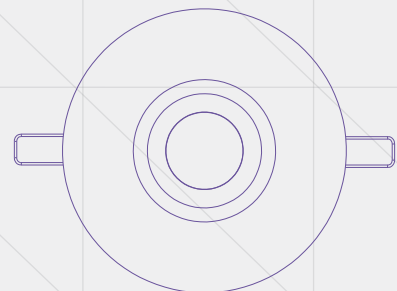


Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	1042	12	2522	0.012
Floor	20	760	9.49	2263	0.012
Ceiling	70	307	43	638	0.140
Walls	50	225	27	1078	/



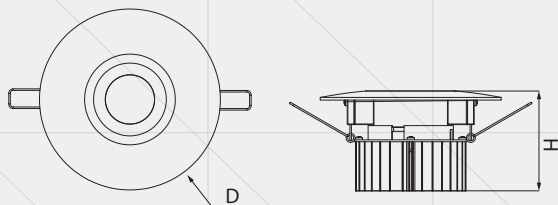
NABU

NABU lighting devices range is the perfect choice for lighting blocks, shop windows and hallways. The bodies are made of extruded aluminum radiator and plastic casing and the practical design eases the installation in the ceiling.



NABU

- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: II
- Working temperature: max. + 40°C
- Mass: 0,4 kg



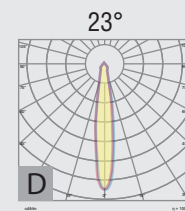
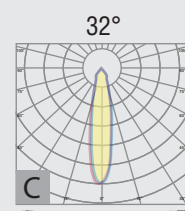
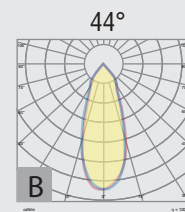
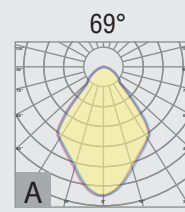
Code	Nominal power	Optics	Light flow	Distribution	Sizes (D x H)	Observations
RS 81745-[]-[]-[]	12 W	plexiglass matte disperser	1000 lm	A / B / C / D	188 x 100 mm	-
RS 81746-[]-[]-[]	20 W	plexiglass matte disperser	1500 lm	A / B / C / D	188 x 100 mm	-

RS 81745-[]-[]-[]

ND: non-dimmable source
D1: dimmable source
D2: dimmable source

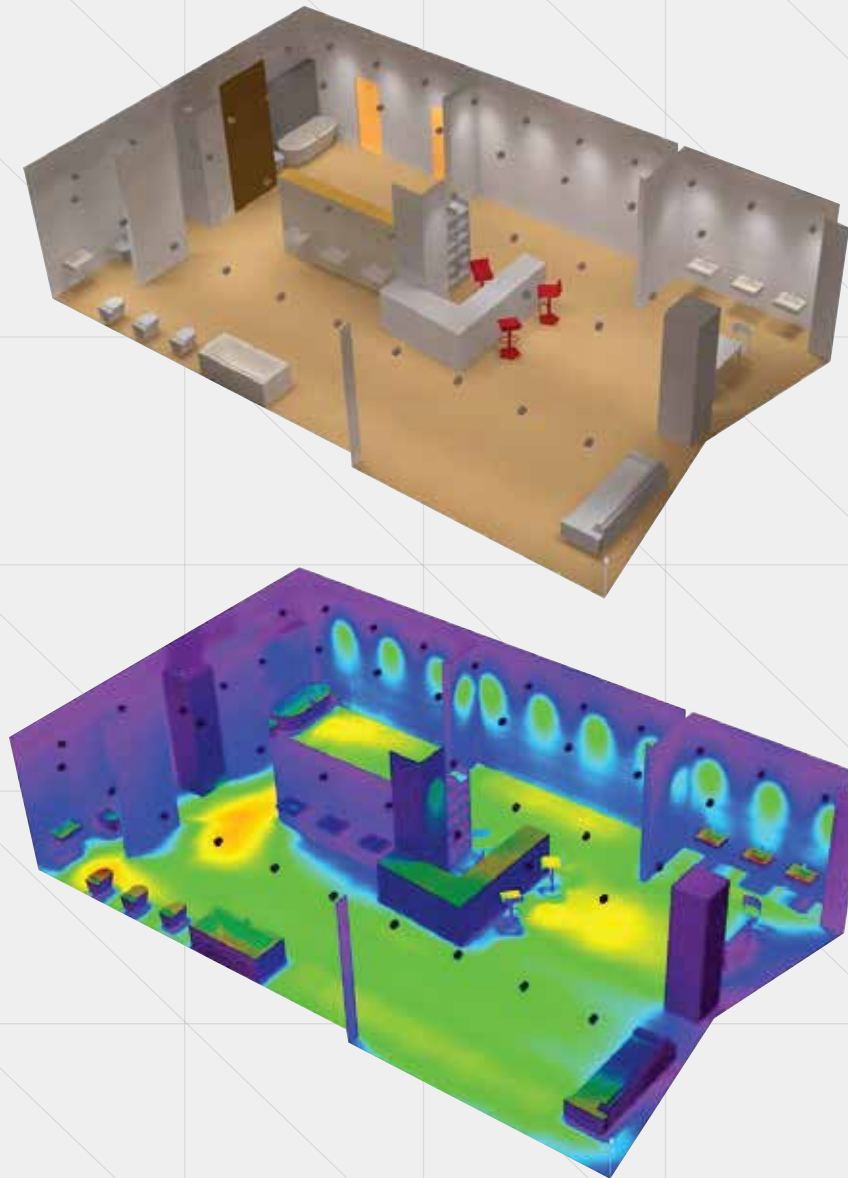
S: small - reflector with the angle of 23°
M: medium - reflector with the angle of 32°
W: wide - reflector with the angle of 44°
XW: extra-wide - reflector with the angle of 69°

CL: transparent diffuser
DL: matte diffuser

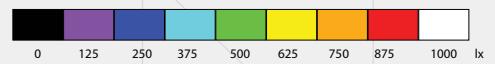


Applicable standards :
SR EN 60598-1:2015+AC:2016
SR EN 60598-2-1:2001
SR EN 62031:2009+A1:2013+A2:2015
SR EN 55015:2014+A1:2015
SR EN 61000-3-2:2015
SR EN 61000-3-3:2014
SR EN 61547:2010





Height of space: 6.000 m
 Fitting height: 3.500 m
 Maintenance factor: 0.90

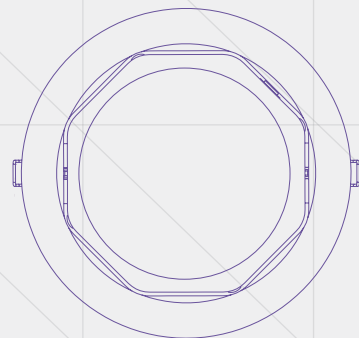


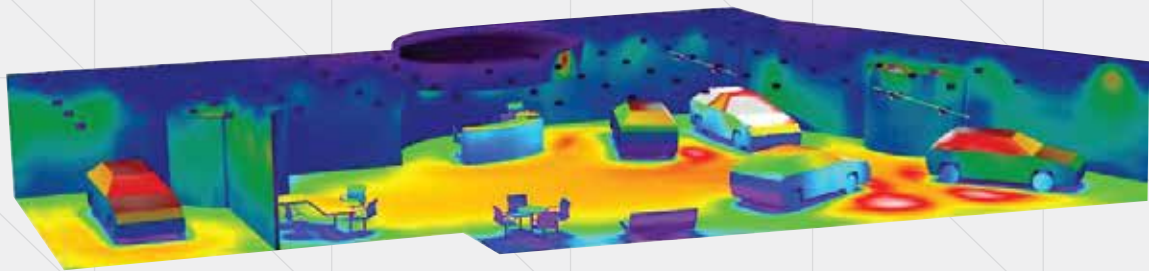
Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	512	60	1090	0.116
Floor	51	430	26	743	0.060
Ceiling	70	177	90	256	0.506
Walls	50	201	7.87	991	/



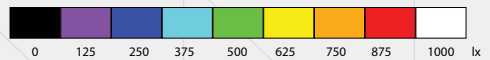
TEMPUS

Why is the **TEMPUS** range suitable for indoors lighting? Because it is of downlight type and allows directing the light flow. These lighting devices are suitable for public places such as schools, institutions, offices, shops, hotels.





Height of space: 3,470 m
 Maintenance factor : 0.90

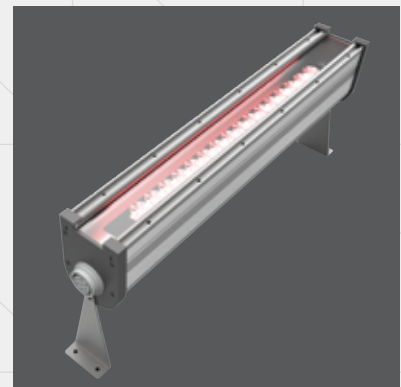


Surface	p [%]	Em [lx]	Emin [lx]	Emax [lx]	u0
Usable surface	/	728	170	1494	0.233
Floor	10	545	37	988	0.067
Ceiling	70	176	53	451	0.300
Walls	85	323	78	2207	/



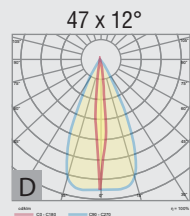
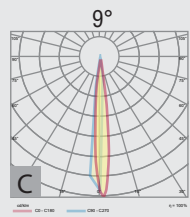
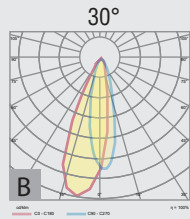
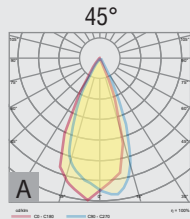
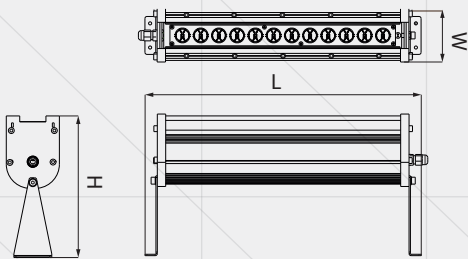
NORMA

NORMA is a LED lighting device of wallwasher type, specifically designed for architectural and decorative lighting. It is recommended for imposing buildings lighting due to its design: the floodlight has extruded aluminum body, LEDs with individual lenses and multiple distributions and lengths.



NORMA

- Application type: Architectural lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: - 25°C . . . + 40°C



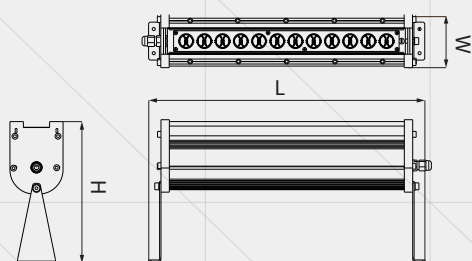
Code	Nominal power	Optics	Light flow	Distribution	Sizes; Mass (L x W x H); (kg)	Observation
RS 81440 A-1	15 W	disperser and lenses	1220 lm	D	410 x 77 x 206 mm 2 kg	-
RS 81440 A-2	15 W	disperser and lenses	1220 lm	C	410 x 77 x 206 mm 2 kg	-
RS 81440 A-3	15 W	disperser and lenses	1220 lm	B	410 x 77 x 206 mm 2 kg	-
RS 81440 A-4	15 W	disperser and lenses	1220 lm	A	410 x 77 x 206 mm 2 kg	-
RS 81440 B-1	28 W	disperser and lenses	2330 lm	D	750 x 77 x 206 mm 3,5 kg	-
RS 81440 B-2	28 W	disperser and lenses	2330 lm	C	750 x 77 x 206 mm 3,5 kg	-
RS 81440 B-3	28 W	disperser and lenses	2330 lm	B	750 x 77 x 206 mm 3,5 kg	-
RS 81440 B-4	28 W	disperser and lenses	2330 lm	A	750 x 77 x 206 mm 3,5 kg	-

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-5:2001
 SR EN 62031:2009+A1:2013
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



NORMA RGBW

- Application type: Architectural lighting
- Color temperature: RGBW-depending on the DMX program
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: - 25°C . . . + 40°C

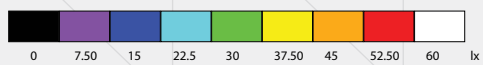
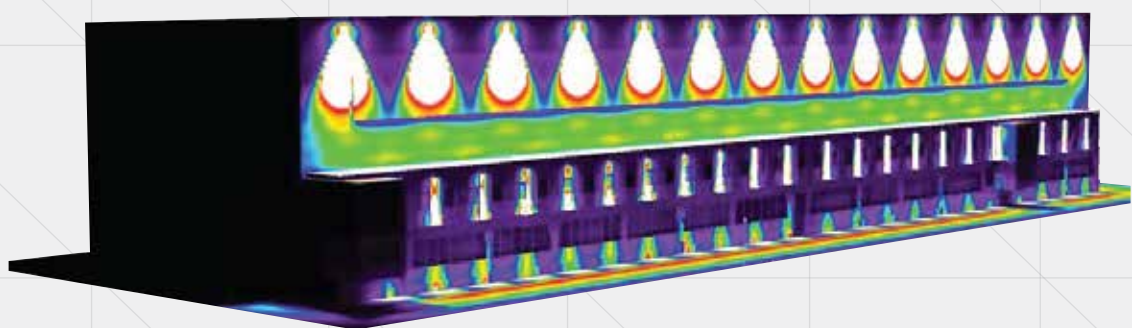
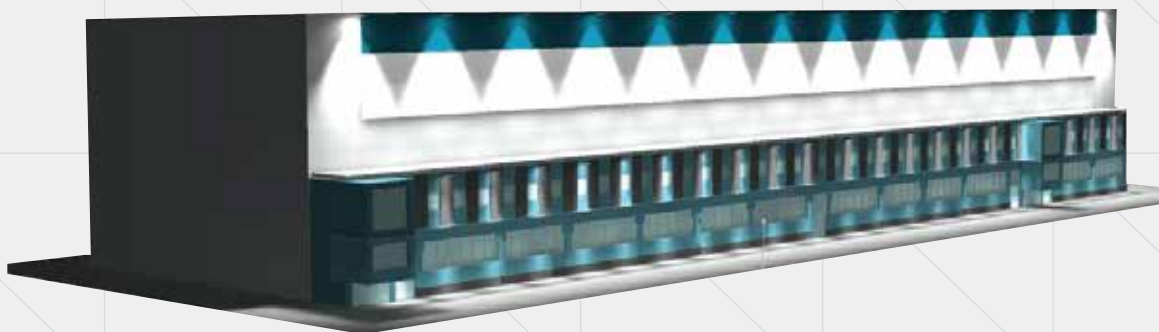


Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81440-001	45 W	disperser and lenses	2025 lm	543 x 206 x 77 mm 3 kg	-

Norma is part of the wallwasher architectural lighting category. Constructively, this light fitting is made of extruded aluminium with plastic caps. The optical system consists of 16 LEDs, four LEDs for each R/G/B/W colour, with individual lenses and clear PMMA diffuser. This light fitting can be integrated into a DMX system. Their connection is performed with ease, by their lateral connectors so they can form a chain of light fittings. It can also be used for decorative lighting and projector type applications. The distribution of light generated by this device may be narrow, medium, wide, symmetrical or asymmetrical..

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-5:2001
 SR EN 62031:2009+A1:2013
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Maintenance factor : 0.90 URL (light up ratio): 0.0%



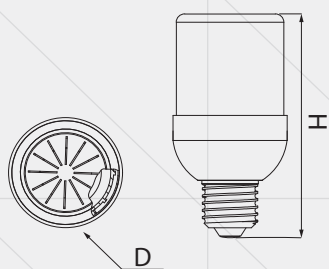
LEC

With a polycarbonate casing, mechanical resistance and a longer service life than the traditional bulbs, **LEC** range is characterized by its high reliability. This type of lighting electric lamp is a direct replacement for filament bulbs and compact fluorescent ones.



LEC 4

- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Disperser: transparent polycarbonate
- Protection degree: IP20
- Mass: 0,050 kg
- Nominal power: 4 W



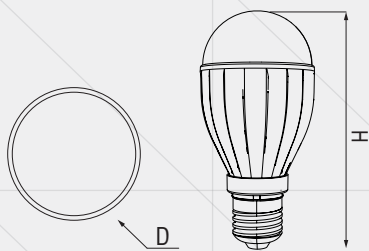
Code	Light flow	Lamp socket	Sizes (D x H)	Observations
RS 81184 A	340 lm	E27	108 x 52 mm	230 V / 50 Hz
RS 81184 B	340 lm	E14	108 x 52 mm	230 V / 50 Hz
RS 81390 A	370 lm	E27	111 x 52 mm	24 Vcc
RS 81390 B	370 lm	E14	108 x 52 mm	24 Vcc
RS 81741 A	400 lm	E27	108 x 52 mm	110 V / 60 Hz

Applicable standards :
 SR EN 62560:2013
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2 :2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



LEC 8

- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Disperser: matte polycarbonate
- Power supply: 230 V / 50 Hz
- Protection degree: IP20
- Mass: 0,200 kg
- Nominal power: 8 W



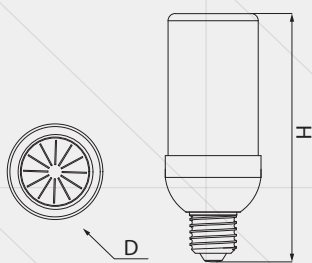
Code	Light flow	Lamp socket	Sizes (D x H)	Observations
RS 81996-001	800 lm	E27	127 x 61 mm	thermally conductive plastic radiator

Applicable standards :
SR EN 62560:2013
SR EN 55015:2014+A1:2015
SR EN 61000-3-2 :2015
SR EN 61000-3-3:2014
SR EN 61547:2010



LEC 9/12

- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Disperser: transparent polycarbonate
- Power supply: 230 V / 50 Hz
- Protection degree: IP20



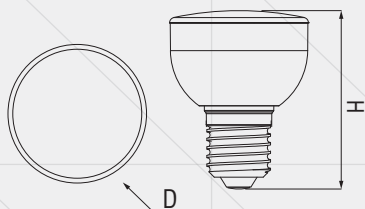
Code	Light flow	Lamp socket	Sizes (D x H)	Observations
RS 81237 A	950 lm	E27	170 x 52 mm	9 W
RS 81237 B	950 lm	E14	170 x 52 mm	9 W
RS 81503 A	1100 lm	E27	170 x 52 mm	12 W
RS 81503 B	1100 lm	E14	170 x 52 mm	12 W

Applicable standards :
SR EN 62560:2013
SR EN 55015:2014+A1:2015
SR EN 61000-3-2 :2015
SR EN 61000-3-3:2014
SR EN 61547:2010



LEC 4 spot

- Application type: Conference rooms, office lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Disperser: transparent polycarbonate
- Protection degree: IP20
- Mass: 0,050 kg
- Nominal power: 4 W



Code	Light flow	Lamp socket	Sizes (D x H)	Observations
RS 81742A3	420 lm	E27	65 x 53 mm	110 V/ 60 Hz
RS 81249C3	300 lm	E27	85 x 49 mm	-
RS 81249D	300 lm	E14	85 x 49 mm	-
RS 81249 []	300 lm	E14	65 x 53 mm	-

Applicable standards :
SR EN 62560:2013
SR EN 55015:2014+A1:2015
SR EN 61000-3-2 :2015
SR EN 61000-3-3:2014
SR EN 61547:2010



Industrial lighting

Content



Argo 45



Atria 48



Eris 48



Hercules 52



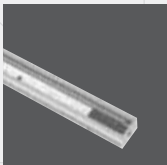
Eta 55



Gemma 58



Corona 58



Avio 62



Lotus 65



Apliled 68



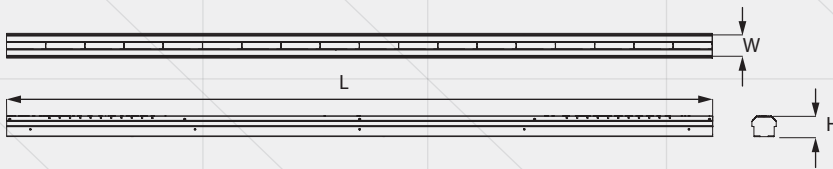
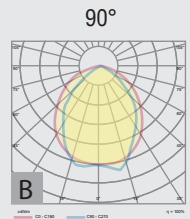
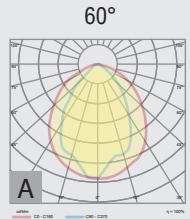
ARGO

Have you got a commercial or industrial centre? We have the perfect solution for you: the **ARGO** series. The **ARGO** luminaire can be fitted in line, suspended or apparent. Everything depends on what you want to have or how your space is organised.



ARGO

- Application type: Commercial centers lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: max. + 45°C
- Emergency lighting: battery autonomy - 60 min



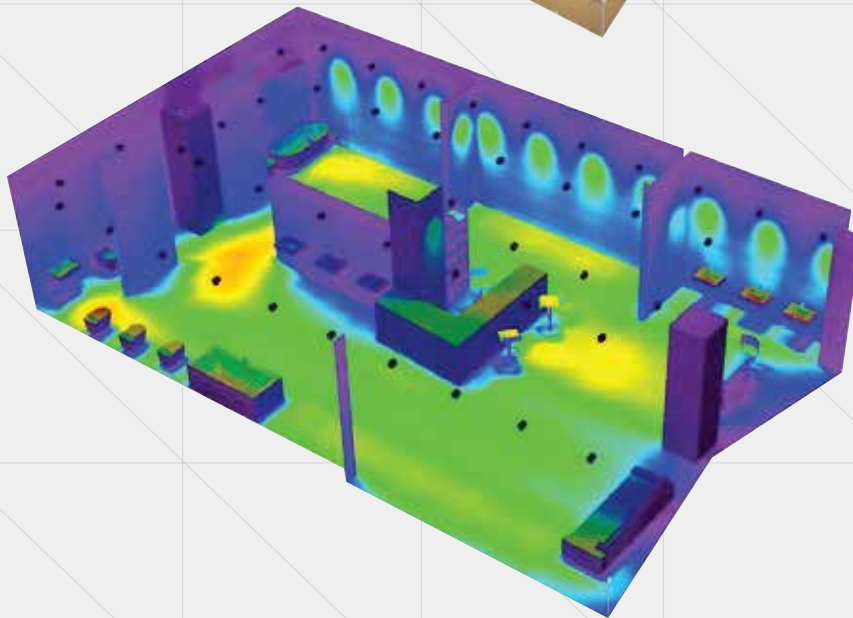
Code	Nominal power	Optics	Light flow	Distribution	Sizes; Mass (L x W x H);(kg)	Observations
RS 81880-001	72 W	lenses	8500 lm	B	1915 x 69 x 51 mm 3,7 kg	Ni-Cd batteries 4,8 Vcc / 1,6 Ah *
RS 81880-002	72 W	lenses	8500 lm	A	1915 x 69 x 51 mm 3,7 kg	Ni-Cd batteries 4,8 Vcc / 1,6 Ah *
RS 81880-003	74 W	lenses	10600 lm	B	1718 x 60 x 51 mm 2,8 kg	-
RS 81880-004	74 W	lenses	10600 lm	A	1718 x 60 x 51 mm 2,8 kg	-
RS 81880-005	74 W	lenses	10600 lm	B	1718 x 60 x 51 mm 2,8 kg	dimnable
RS 81880-006	74 W	lenses	10600 lm	A	1718 x 60 x 51 mm 2,8 kg	dimnable
RS 81880-015	78 W	lenses	10600 lm	B	1718 x 60 x 51 mm 3 kg	Ni-Cd batteries 4,8 Vcc / 1,6 Ah *
RS 81880-016	78 W	lenses	10600 lm	A	1718 x 60 x 51 mm 3 kg	Ni-Cd batteries 4,8 Vcc / 1,6 Ah *
RS 81880-027	74 W	lenses	10600 lm	B	1915 x 69 x 51 mm 3,7 kg	*
RS 81880-028	74 W	lenses	10600 lm	A	1915 x 69 x 51 mm 3,7 kg	*
RS 81880-047	144 W	lenses	21600 lm	B	1718 x 60 x 51 mm 4 kg	**
RS 81880-048	144 W	lenses	21600 lm	A	1718 x 60 x 51 mm 4 kg	**
RS 81880-054	50 W	lenses	7000 lm	B	1915 x 69 x 51 mm 3,7 kg	*

* The marked light fittings are equipped with the "BUS" system;

**The marked light fittings are double as number of LED modules;

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+
 A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 6.000 m
 Fitting height: 3.500 m
 Maintenance factor : 0.90



Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	512	60	1090	0.116
Floor	51	430	26	743	0.060
Ceiling	70	177	90	256	0.506
Walls	50	201	7.87	991	/

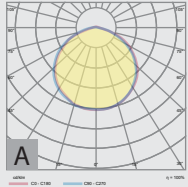


ATRIA-ERIS

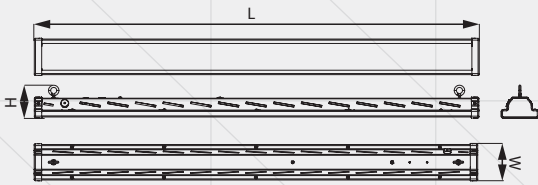
The illuminators from **ATRIA** and **ERIS** series are installed on a linear metal structure, having different lengths and a specific design. If you are the owner of a shop or a warehouse, these illuminators will integrate perfectly due to the fact that they can be mounted easily both suspended and applied on the walls.



ERIS



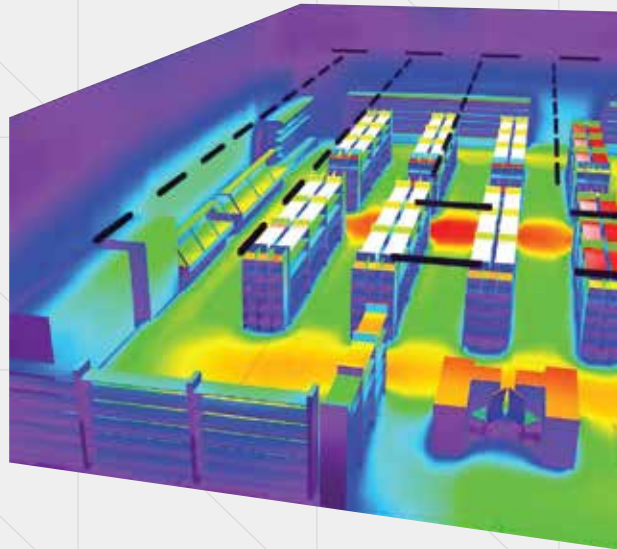
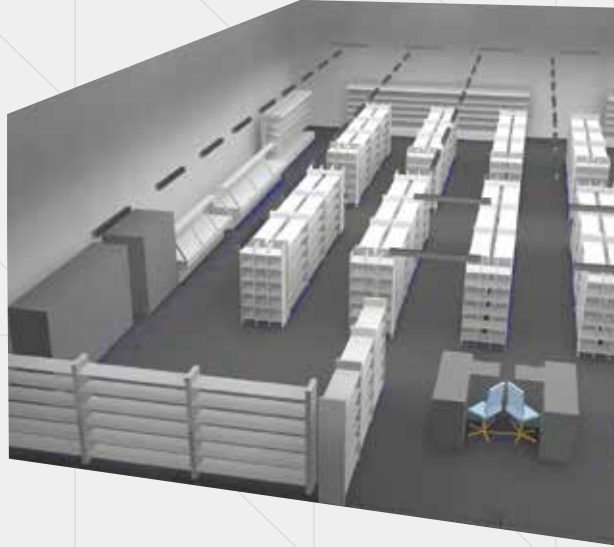
- Application type: Comercial, industrial centers lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: max. + 40°C
- Emergency lighting: battery autonomy - 60 min



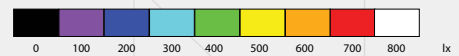
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81835 E	22 W	transparent disperser	2470 lm	555 x 101 x 87 mm 1,4 kg	-
RS 81835 E1	22 W	matte disperser	2430 lm	555 x 101 x 87 mm 1,4 kg	-
RS 81814 E	42 W	transparent disperser	5000 lm	1205 x 101 x 87 mm 3 kg	-
RS 81814 E1	42 W	matte disperser	4600 lm	1205 x 101 x 87 mm 3 kg	-
RS 81815-001	45 W	transparent disperser	5170 lm	1205 x 101 x 87 mm 3,2 kg	Ni-Cd batteries 4,8 Vcc / 1,6 Ah
RS 81815-002	45 W	matte disperser	4930 lm	1205 x 101 x 87 mm 3,2 kg	Ni-Cd batteries 4,8 Vcc / 1,6 Ah
RS 81815 E	52 W	transparent disperser	5570 lm	1497 x 101 x 87 mm 3,2 kg	-
RS 81815 E1	52 W	matte disperser	5370 lm	1497 x 101 x 87 mm 3,2 kg	-
RS 81815-003	56 W	transparent disperser	5570 lm	1497 x 101 x 87 mm 3,2 kg	-
RS 81815-004	56 W	matte disperser	5370 lm	1497 x 101 x 87 mm 3,2 kg	-

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 5.500 m
 Fitting height : 4.000 m
 Maintenance factor : 0.90



Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	389	38	762	0.099
Floor	20	353	22	776	0.063
Ceiling	70	136	65	232	0.477
Walls	50	156	25	397	/

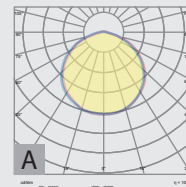


HERCULES

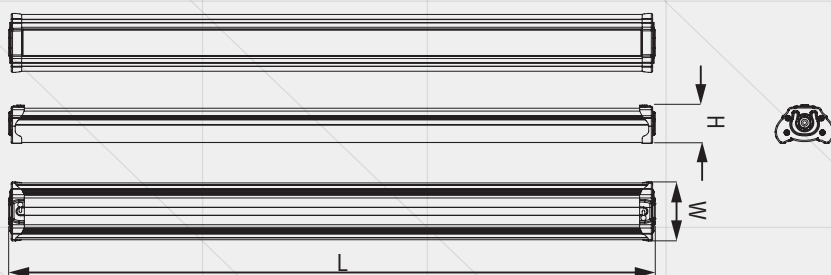
This illuminator is a viable alternative for indoor and outdoor lighting of halls, warehouses and industrial spaces. It is made of extruded aluminum profile and polycarbonate disperser. Its design is special, and at the same time, practical. It can be mounted in three variants: apparently, suspended and adjustable.



HERCULES



- Application type: Commercial centers lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP65
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: - 30°C ... + 45°C

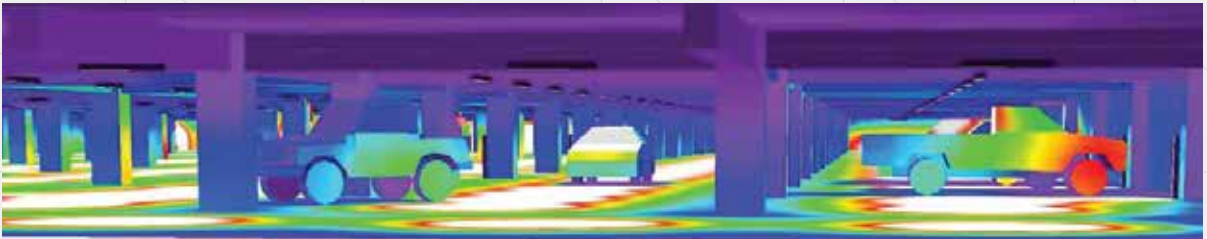


Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81487-002	40 W	matte disperser	4840 lm	1237 x 113 x 73,5 mm 3,7 kg	apparent mounting
RS 81487-004	40 W	matte disperser	4840 lm	1237 x 113 x 74 mm 3,7 kg	suspended mounting

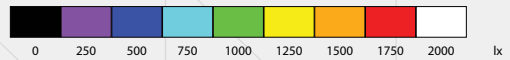
Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



HERCULES



Height of space : 2,830 m
 Maintenance factor : 0,90



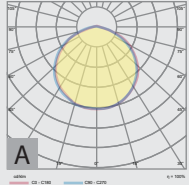
Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	213	18	3193	0.084
Floor	20	211	19	4174	0.090
Ceiling	70	53	13	6723	/
Walls	50	89	17	1809	/



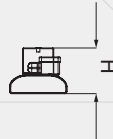
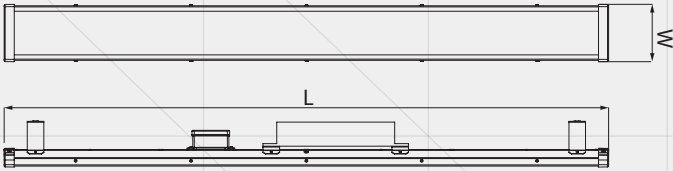
ETA

This is an illuminator specially designed for heavy industrial areas, being provided with a disperser of tempered glass and a wide range of working temperature. The illuminator can be mounted suspended, and the feature that will convince you to choose it is the good ratio between its cost and the maximum performances it offers.





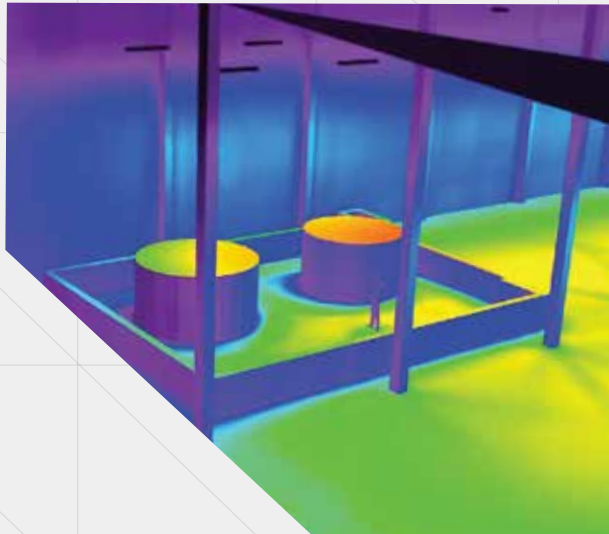
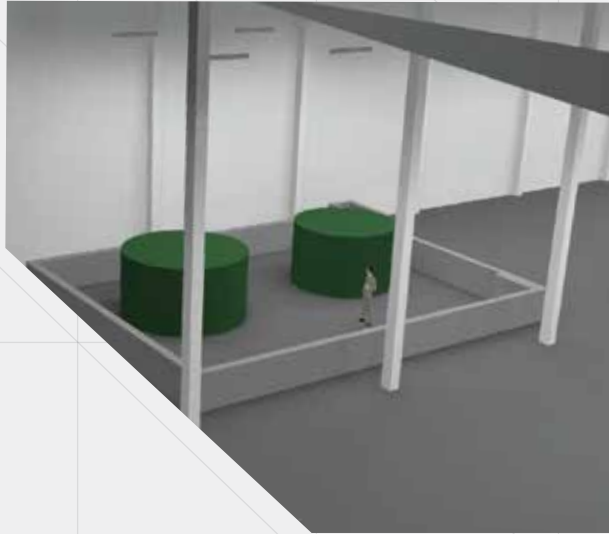
- Application type: Industrial lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP54
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: - 25°C ... + 55°C



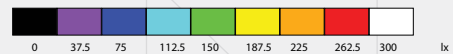
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81633E	50 W	flat transparent glass disperser	6600 lm	1200 x 115 x 85 mm 2,8 kg	suspended mounting

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+
 A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 2,830 m
Maintenance factor : 0,90



Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	165	48	210	0.290
Floor	20	148	7.26	202	0.049
Ceiling	70	20	11	38	/
Walls	50	68	12	219	/

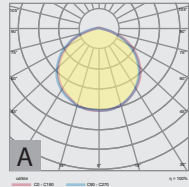


GEMMA-CORONA

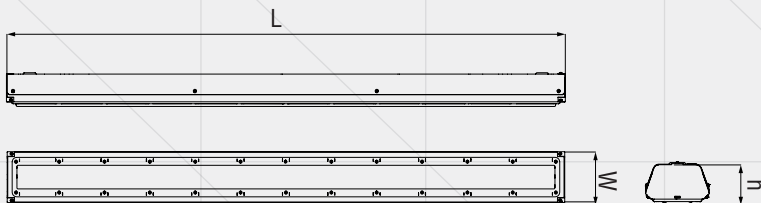
The illuminators of **CORONA** and **GEMMA** series have been designed to cover a wide range of needs of general lighting, both for indoor and outdoor, especially in atmospheric and ambient environment, which require a high degree of protection against humidity and dust. This illuminators can be mounted both suspended and exposed.



GEMMA



- Application standards: Comercial centers lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP65
- Power supply: 230 V / 50 Hz
- Insulation class: II
- Distribution: A
- Working temperature: -25 . . . + 45°C
- Emergency lighting: battery autonomy - 60 min

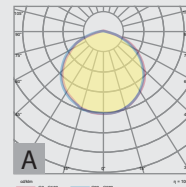


Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81859 A1-CL/DL	24 W	transparent polycarbonate disperser	2700 lm	582 x 112 x 72 mm 1,7 kg	-
RS 81859 B1D-CL/DL	28 W	transparent polycarbonate disperser	3100 lm	582 x 112 x 72 mm	dimnable
RS 81860 A1-CL/DL	40 W	transparent polycarbonate disperser	4925 lm	1229 x 112 x 72 mm 3,2 kg	-
RS 81860 B1D-CL/DL	40 W	transparent polycarbonate disperser	4925 lm	1229 x 112 x 72 mm 3,2 kg	dimnable
RS 81858 A1-CL/DL	50 W	transparent polycarbonate disperser	6000 lm	1512 x 112 x 72 mm	-
RS 81858 B1D-CL/DL	50 W	transparent polycarbonate disperser	5500 lm	1512 x 112 x 72 mm	dimnable
RS 81860A1S []	44 W	transparent polycarbonate disperser	4400 lm	1229 x 112 x 72 mm 3,5 kg	Ni-Cd batteries 4,8 Vcc / 1,6 Ah
RS 81858-005	24 W	matte polypropylene disperser	2970 lm	582 x 114 x 74 mm 1,7 kg	IP67
RS 81858-010	19 W	matte polypropylene disperser	2100 lm	582 x 114 x 74 mm 1,4 kg	IP67
RS 81858-012	27 W	matte polypropylene disperser	3000 lm	582 x 114 x 74 mm 1,4 kg	dimnable, IP67
RS 81858-013	24 W	transparent polycarbonate disperser	3100 lm	582 x 112 x 72 mm	-
RS 81859A5S-CL/DL	26 W	transparent polycarbonate disperser	2700 lm	582 x 112 x 72 mm	Ni-Cd batteries 4,8 Vcc / 1,6 Ah
RS 81858-002	40 W	transparent polycarbonate disperser	5100 lm	1227 x 114 x 74 mm 3 kg	insulation class I
RS 81860B2-DL1	40 W	matte polypropylene disperser	4900 lm	1227 x 114 x 74 mm 3 kg	-
RS 81860A3S-CL/DL	44 W	transparent polycarbonate disperser	4950 lm	1227 x 114 x 74 mm 3 kg	Ni-Cd batteries 4,8 Vcc / 1,6 Ah
RS 81858-007	60 W	transparent polycarbonate disperser	7950 lm	1502 x 114 x 74 mm 3,5 kg	insulation class I
RS 81858-004	50 W	matte polypropylene disperser	6000 lm	1502 x 114 x 74 mm 3,5 kg	-
RS 81860A3S-CL/DL	64 W	matte polypropylene disperser	7950 lm	1502 x 114 x 74 mm	Ni-Cd batteries 4,8 Vcc / 1,6 Ah

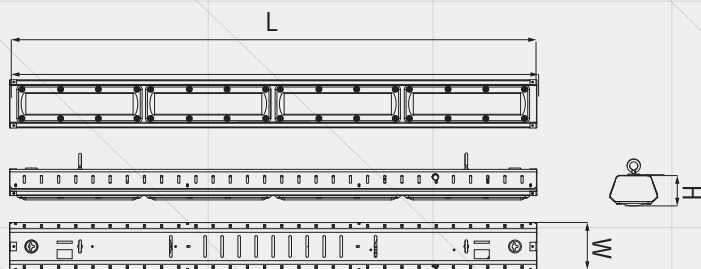
Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



CORONA



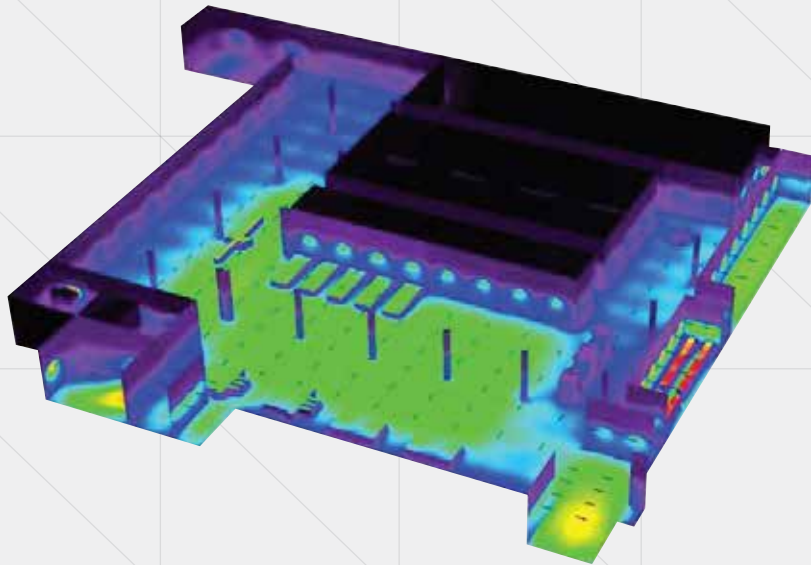
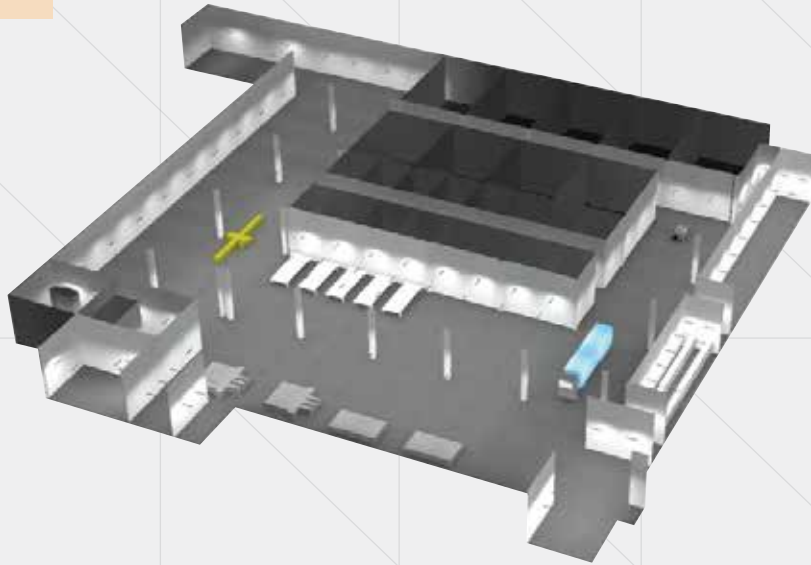
- Application standards: Comercial centers lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP65
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: -25°C ... + 45°C



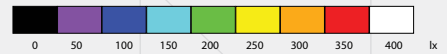
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81269	40 W	transparent polycarbonate disperser	3250 lm	1227 x 114 x 74 mm 3,4 kg	-
RS 81311	60 W	transparent polycarbonate disperser	5100 lm	1229 x 112 x 72 mm 3,6 kg	-
RS 81269 S	42 W	transparent polycarbonate disperser	3250 lm	1227 x 119 x 78 mm 3,7 kg	Ni-Cd batteries 3,6 V / 3,0 Ah

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 9,000 m
 Maintenance factor : 0,90

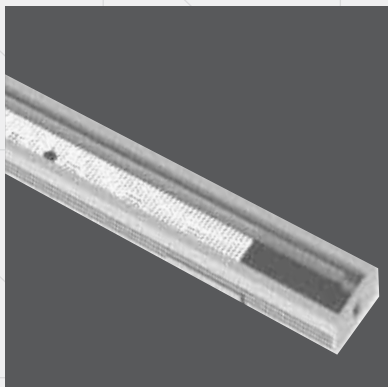


Surface	p [%]	Em [lx]	Emin [lx]	Emax [lx]	u0
Usable surface	/	105	0.19	364	0.002
Floor	20	99	0.21	288	0.002
Ceiling	70	20	0.24	61	0.012
Walls	50	23	0.41	577	/

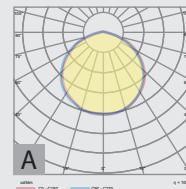


AVIO

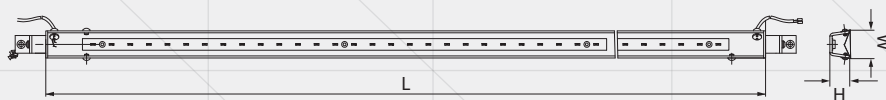
This is an illuminator designed for the lighting of shelves, as it has been specially designed to show up the products on the shop shelves. It can be ordered in different variants, according to your needs and the necessities of your commercial space.



AVIO



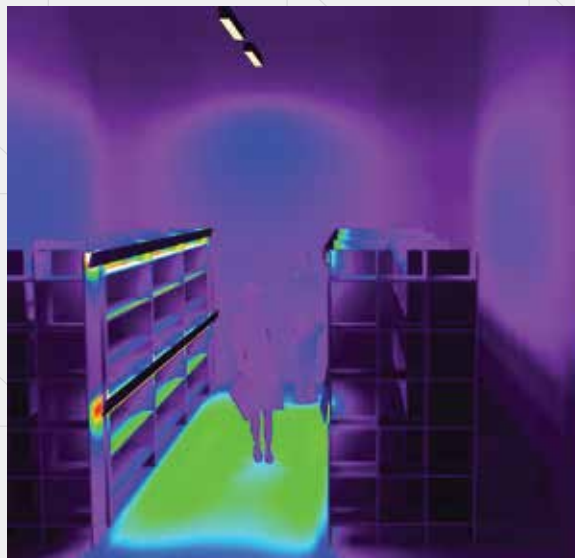
- Application type: Shopping centers shelves, showcases lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP20
- Insulation class: III
- Distribution: A
- Working temperature: + 5°C ... + 40°C



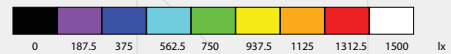
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81940 A	18 W	transparent PMMA	1700 lm	2014 x 25 x 17 mm 1 kg	power supply 12 Vcc
RS 81940 B1	20 W	transparent PMMA	1800 lm	1496 x 25 x 17 mm 1 kg	power supply 12 Vcc
RS 81941 A	17 W	transparent PMMA	1700 lm	2014 x 25 x 17 mm 1 kg	power supply 9,7 Vcc
RS 81941 B1	16 W	transparent PMMA	1800 lm	1496 x 25 x 17 mm 1 kg	power supply 9,2 Vcc

Applicable standards:
SR EN 62031:2009+A1:2013
+A2:2015





Height of space : 5,500 m
 Maintenance factor : 0,90

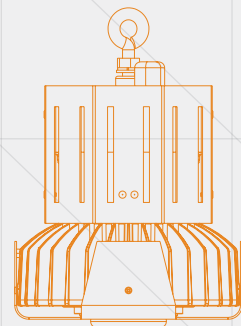


Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	245	6.70	818	0.027
Floor	20	245	13	820	0.052
Ceiling	70	92	67	117	0.726
Walls	50	128	22	366	/



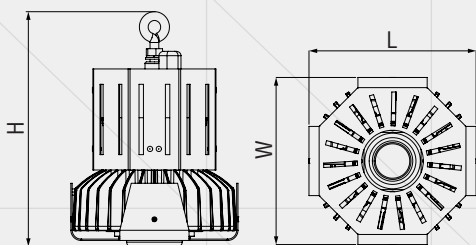
LOTUS

If you have an industrial building, we recommend you to choose the lighting fixtures **LOTUS**, since the high bay version allows the lighting from above. Supplemented by other optical variants, **LOTUS** range is one of the best choices for the industrial lighting.



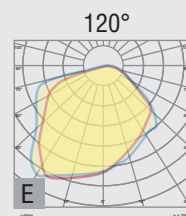
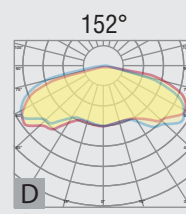
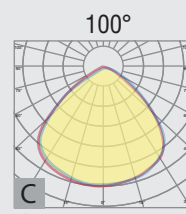
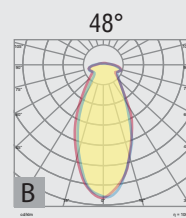
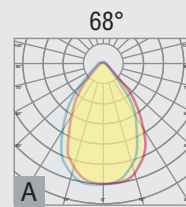
LOTUS

- Application type: Industrial lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP54
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: - 25°C ... + 45°C



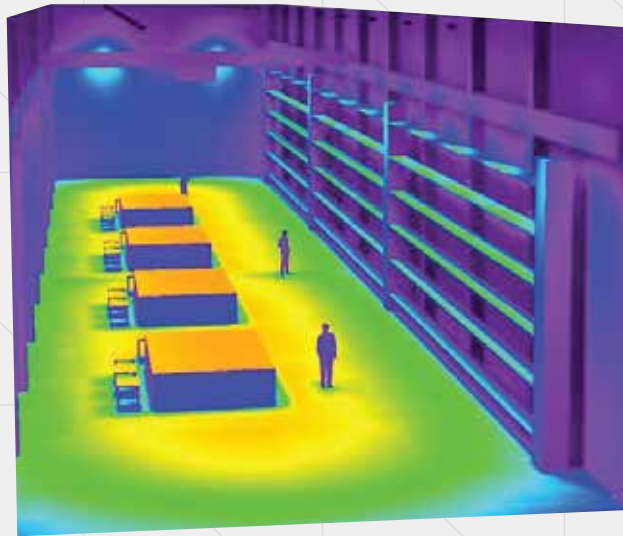
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Distribution	Observations
RS 81804-001	80 W	silicone lens	10570 lm	190 x 190 x 270 mm 3,9 kg	A	-
RS 81804-004	80 W	silicone lens	9510 lm	360 x 150 mm 3,9 kg	B	-
RS 81804-005	80 W	silicone lens	8890 lm	360 x 150 mm 3,9 kg	C	-
RS 81804-006	80 W	silicone lens	10730 lm	360 x 150 mm 3,9 kg	D	-
RS 81804-007	80 W	silicone lens	10030 lm	360 x 150 mm 3,9 kg	E	-

* Variants with 2 or 3 modules can also be ordered;

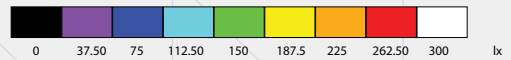


Applicable standards :
SR EN 62031:2009+A1:2013
+A2:2015





Height of space : 10.000 m
 Height of mounting: 10.000 m
 Maintenance factor : 0.90

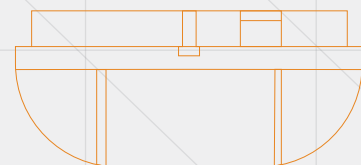


Surface	p [%]	Em [lx]	Emin [lx]	Emax [lx]	u0
Usable surface	/	188	16	230	0.085
Floor	20	146	4.67	217	0.032
Ceiling	56	30	20	39	0.657
Walls	50	45	9.02	121	/

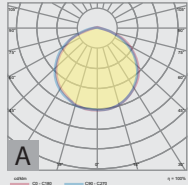


APLILED

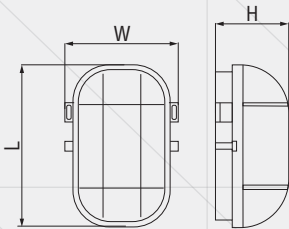
This luminaire can be used in the lighting of access roads in buildings and in technical spaces. Mounting is apparent and can be placed on the ceiling or wall of the room.



APLILED



- Application type: Comercial centers lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP44
- Power supply: 230 V / 50 Hz
- Distribution: A
- Working temperature: - 25°C ... + 45°C



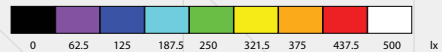
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81347 A1	4 W	glass disperser	400 lm	172 x 125 x 110 mm 0,65 kg	power supply 24 Vac, insulation class III
RS 81149 A	4 W	glass disperser	400 lm	172 x 125 x 110 mm 0,65 kg	power supply 230 V / 50 Hz, insulation class II

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+
 A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 2.800 m
 Fitting height : 2.800 m
 Maintenance factor : 0.90



Surface	p [%]	Em [lx]	Emin [lx]	Emax [lx]	u0
Usable surface	/	74	7.77	114	0.106
Floor	20	50	6.53	86	0.131
Ceiling	70	21	13	64	0.591
Walls	50	34	3.37	184	/

Projectors

Content



Virgo 72



Fornax 75



Castor 78



Aquilla 1M 81

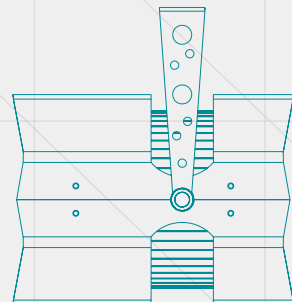


Aquilla 3M 81



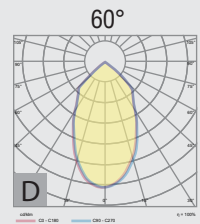
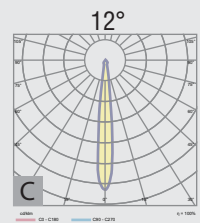
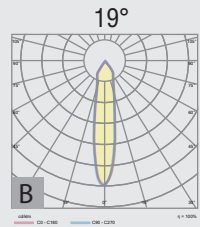
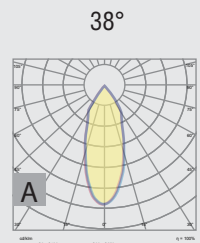
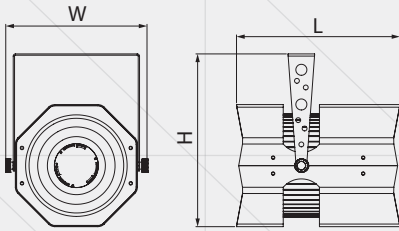
VIRGO

VIRGO lighting device is of floodlight type, suitable for accent and general lighting applications. With asymmetrical and dynamical shapes, the design of these devices combines perfectly with pure performance. The multiple optical variants recommends it for use in various applications, and the design allows the integration into any type of environment, especially in retail areas .



VIRGO

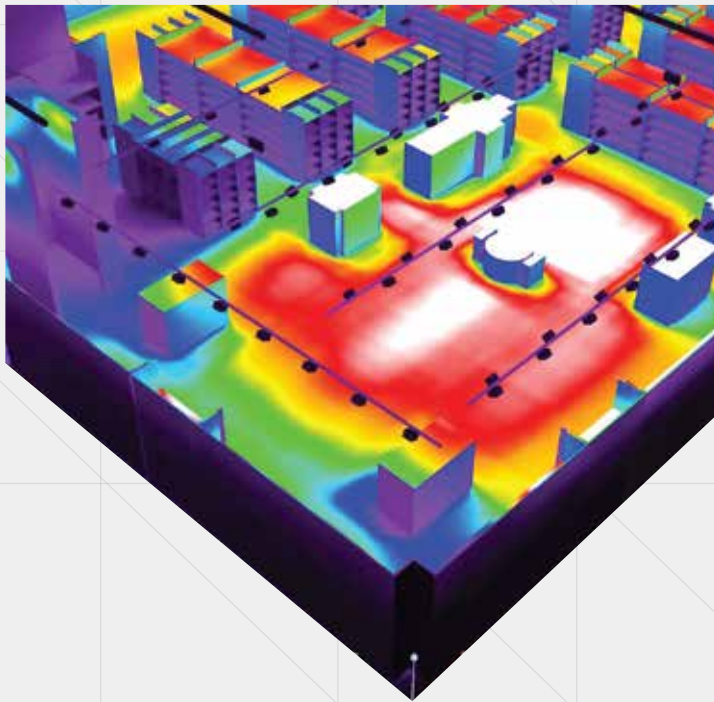
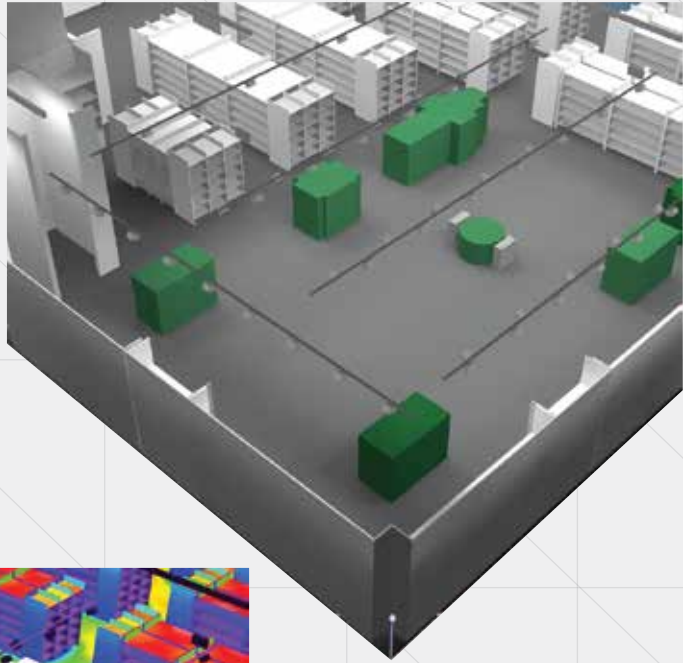
- Application type: Comercial centers lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP30
- Power supply: 230 V / 50 Hz
- Insulation class: II
- Working temperature: max. + 45°C



Code	Nominal power	Optics	Light flow	Sizes; Masa (L x W x H);(kg)	Distribution	Observations
RS 81797-001	40 W	matte disperser	4300 lm	195 x 185 x 138 mm 1,6 kg	C	-
RS 81797-002	40 W	matte disperser	4300 lm	195 x 185 x 138 mm 1,6 kg	B	-
RS 81797-003	40 W	matte disperser	4300 lm	195 x 185 x 138 mm 1,6 kg	A	-
RS 81797-004	20 W	matte disperser	1500 lm	186 x 128 x 132 mm 0,8 kg	A	rail mounting
RS 81797-005	20 W	matte disperser	1500 lm	186 x 128 x 132 mm 0,8 kg	B	rail mounting
RS 81797-006	20 W	matte disperser	1500 lm	186 x 128 x 132 mm 0,8 kg	D	rail mounting
RS 81797-007	20 W	transparent disperser	1500 lm	186 x 128 x 132 mm 0,8 kg	C	rail mounting

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 3,500 m
 Maintenance factor : 0,90



Surface	p [%]	Em [lx]	Emin [lx]	Emax [lx]	u0
Usable surface	/	1042	12	2522	0.012
Floor	20	760	9.49	2263	0.012
Ceiling	70	307	43	638	0.140
Walls	50	225	27	1078	/

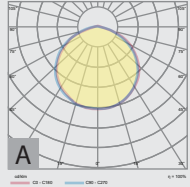


FORNAX

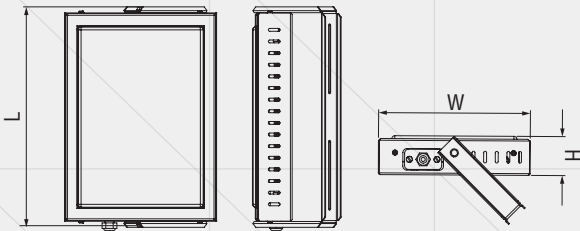
Due to its high potential of protection - IP66, **FORNAX** series fulfills the imposed requirements of indoor and outdoor lighting in the industrial environments. The symmetric distribution of light allows the use of this lighting product without shining effects.



FORNAX



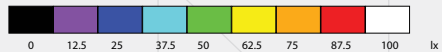
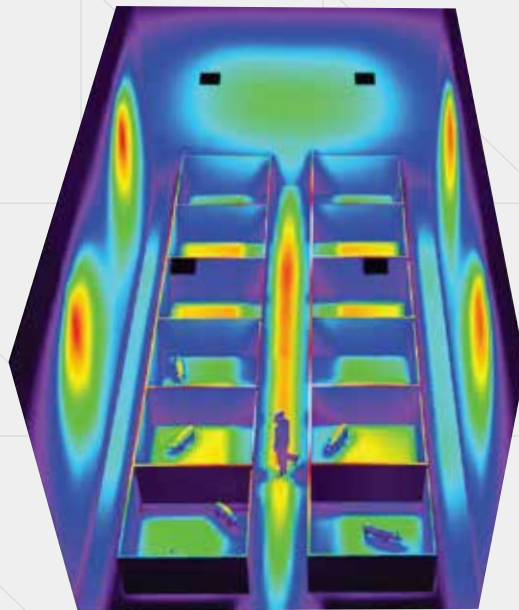
- Application type: Industrial lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: - 30°C . . . + 45°C



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81922 A	52 W	polycarbonate disperser	5900 lm	379 x 261 x 152 mm 3,7 kg	-
RS 81922 B	36 W	polycarbonate disperser	4100 lm	379 x 261 x 152 mm 3,7 kg	-

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-5:2016
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





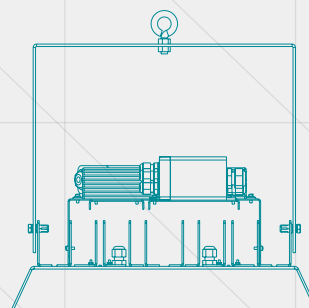
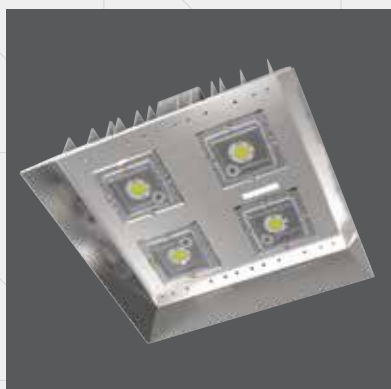
Height of space : 6.000 m
 Fitting height: 5.000 m
 Maintenance factor : 0.80

Surface	p [%]	Em [lx]	Emin [lx]	Emax [lx]	u0
Usable surface	/	32	1.21	85	0.038
Floor	5	38	1.10	84	0.029
Ceiling	10	3.67	2.69	4.45	0.719
Walls	30	27	1.79	87	/



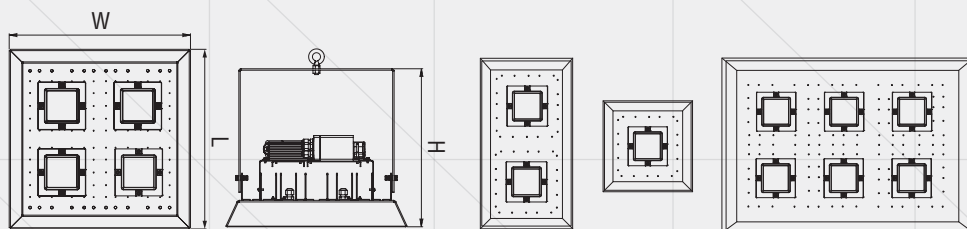
CASTOR

CASTOR illuminator is part of the LED projectors, being suitable both for the indoor and outdoor lighting of the warehouses and industrial buildings. The product has been conceived in such a way as to provide a fast and easy mounting, suspended or exposed on the ceiling or on the wall, being adjustable with 90 degrees rotation upward and downward and indexed with 15 degrees.

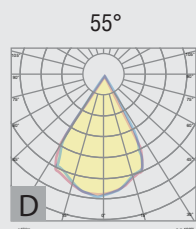
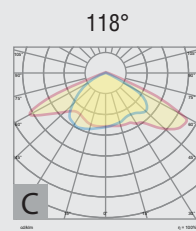
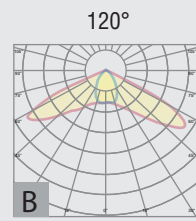
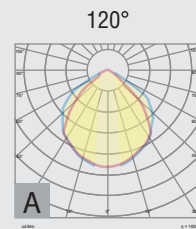


CASTOR

- Application type: Industrial lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP65
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: max. + 45°C

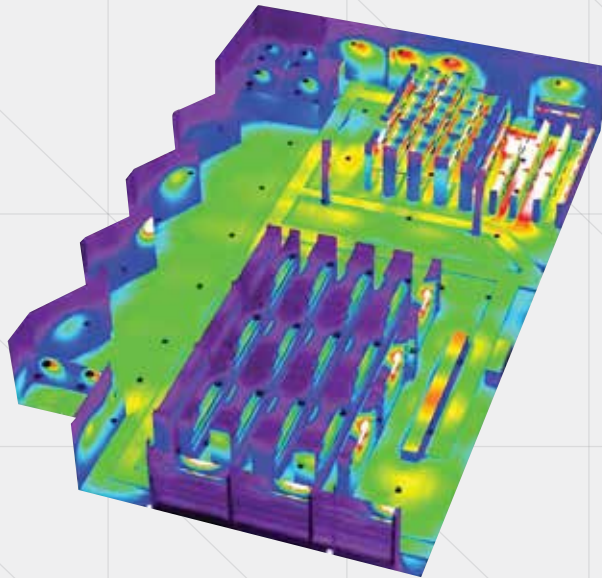
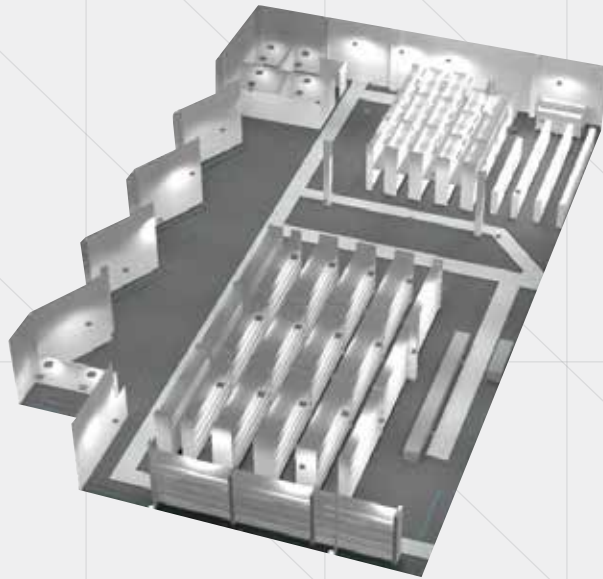


Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Distribution	Modules number	Observations
RS 81455-008	132 W	glass lenses	16100 lm	383 x 380 x 335 mm 6,2 kg	D	4	-
RS 81455-009	200 W	glass lenses	24000 lm	550 x 425 x 312 mm 10,7 kg	D	6	-
RS 81455-011	132 W	polycarbonate disperser	16100 lm	383 x 380 x 335 mm 6,2 kg	A	4	-
RS 81455-012	132 W	glass lenses	16100 lm	383 x 380 x 335 mm 6,2 kg	C	4	-
RS 81455-013	66 W	polycarbonate disperser	7850 lm	380 x 225 x 303 mm 4 kg	A	2	-
RS 81455-014	66 W	glass lenses	7800 lm	380 x 225 x 303 mm 4,2 kg	C	2	-
RS 81455-015	132 W	glass lenses	16000 lm	383 x 380 x 335 mm 6,5 kg	B	4	-
RS 81455-016	66 W	glass lenses	7830 lm	380 x 225 x 303 mm 4,2 kg	B	2	-
RS 81455-018	42 W	polycarbonate disperser	4850 lm	240 x 240 x 260 mm 2,8 kg	A	1	-
RS 81455-021	200 W	polycarbonate disperser	25800 lm	550 x 425 x 312 mm 9,5 kg	A	6	-
RS 81455-031	65 W	polycarbonate disperser	9550 lm	310 x 210 x 285 mm 4 kg	A	2	-
RS 81455-038	137 W	polycarbonate disperser	17600 lm	310 x 210 x 285 mm 5,5 kg	A	4	-

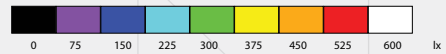


Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-5:2016
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





Height of space : 7.000 m
 Maintenance factor : 0.80



Surface	ρ [%]	E_m [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Usable surface	/	299	13	907	0.044
Floor	20	220	7.68	756	0.035
Ceiling	70	86	35	217	0.405
Walls	50	131	24	2777	/



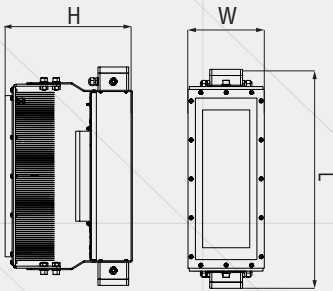
AQUILLA

The **AQUILLA** luminaires have been specially designed for football stadium and sport grounds, areas that require strong lighting to carry out activities in the best conditions. These can be ordered in 1 or 3 module variants, depending on the application location.

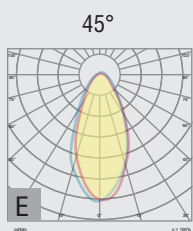
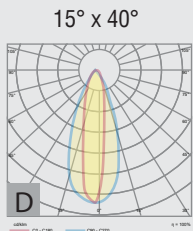
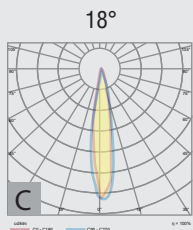
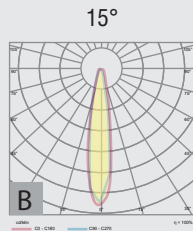
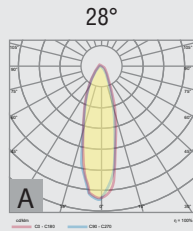


AQUILLA 1M

- Application type: Stadium, parking, tunnel, architectural lighting
- Color temperature: 5700K
- Color rendering index: CRI > 90
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: - 30°C . . . + 45°C



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Distribution	Observations
RS 82025-006	226 W	PMMA lenses	21000 lm	534 x 311 x 186 mm 9 kg	A	dimnable
RS 82025-007	226 W	PMMA lenses	21800 lm	534 x 311 x 186 mm 9 kg	B	dimnable
RS 82025-008	226 W	PMMA lenses	21600 lm	534 x 311 x 186 mm 9 kg	C	dimnable
RS 82025-009	226 W	PMMA lenses	21280 lm	534 x 311 x 186 mm 9 kg	D	dimnable
RS 82025-010	226 W	PMMA lenses	19700 lm	534 x 311 x 186 mm 9 kg	E	dimnable

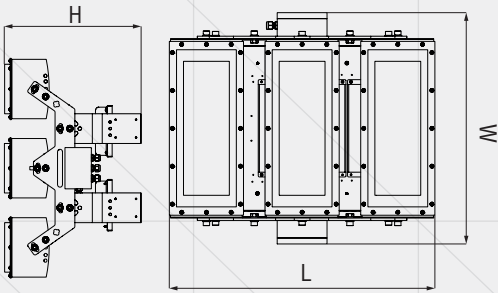


Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+
 A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010

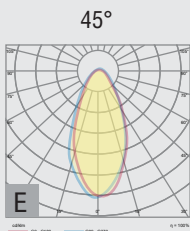
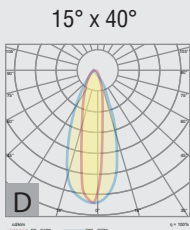
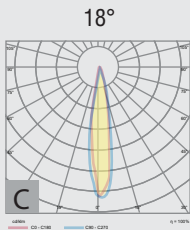
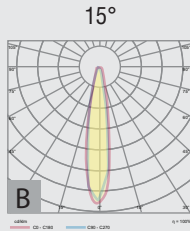
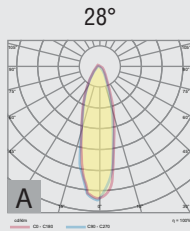


AQUILLA 3M

- Application type: Sport grounds, stadium lighting
- Color temperature: 5700K
- Color rendering index: CRI > 90
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: - 30°C . . . + 45°C



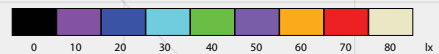
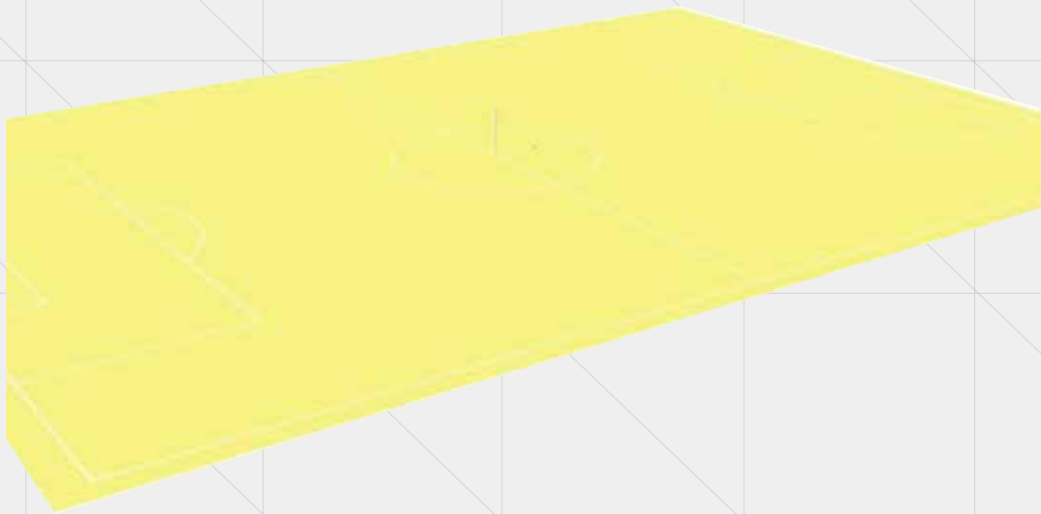
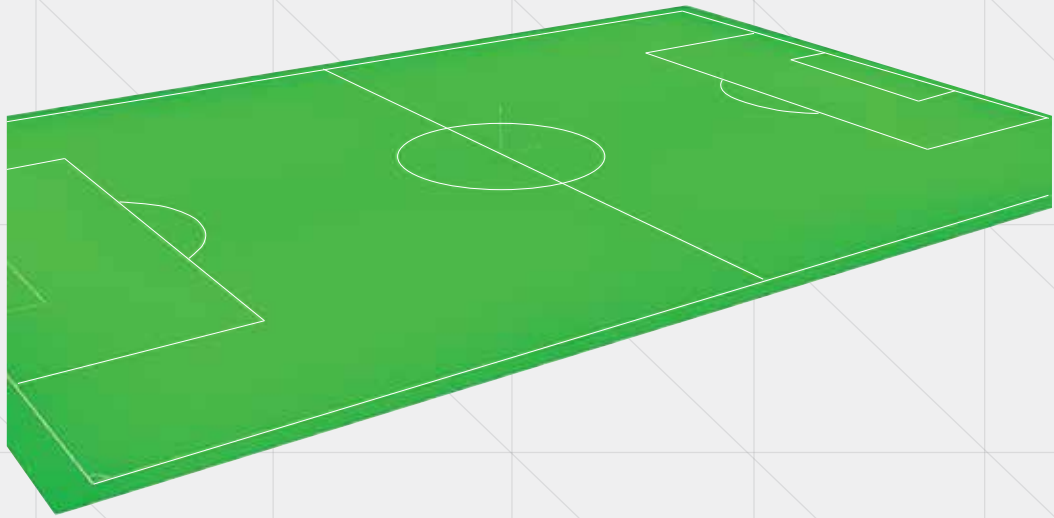
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Distribution	Observations
RS 82025-001	3 x 226 W	PMMA lenses	3 x 21000 lm	643 x 580 x 415 mm 24 kg	A	dimnable
RS 82025-002	3 x 226 W	PMMA lenses	3 x 21800 lm	643 x 580 x 415 mm 24 kg	B	dimnable
RS 82025-003	3 x 226 W	PMMA lenses	3 x 21600 lm	643 x 580 x 415 mm 24 kg	C	dimnable
RS 82025-004	3 x 226 W	PMMA lenses	3 x 21280 lm	643 x 580 x 415 mm 24 kg	D	dimnable
RS 82025-005	3 x 226 W	PMMA lenses	3 x 19700 lm	643 x 580 x 415 mm 24 kg	E	dimnable



Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-1:2001
 SR EN 62031:2009+A1:2013+
 A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



AQUILLA



E_{min} [lx]	E_{max} [lx]	u_0	E_m [lx]/ E_{max}
966	1482	0.78	0.65

Street lighting

Content



Antilia 86



Lyra 104



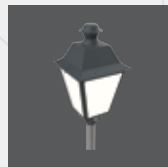
Evocity 89



Delta 107



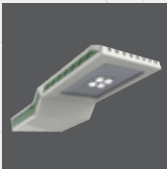
Orion 1M 92



Phoenix 110



Orion 2M 95



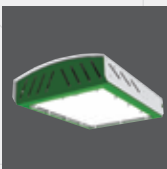
Radiant 98



Elma 101



Cityblue 101



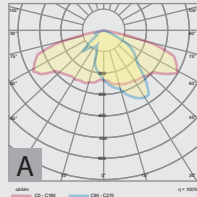
Cityeco 101



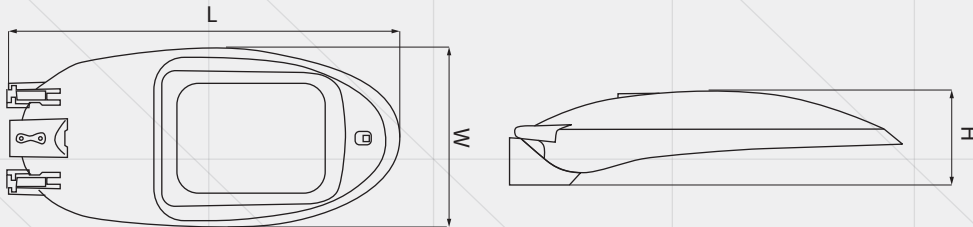
ANTILIA

This lighting device allows the developing of street illumination applications, inclusive in ME3, ME4 classes. **ANTILIA** offers flexible module combinations with LEDs for medium power (75W) and high power (150W) and a dimming option, to maximize the energy and cost economy. The **ANTILIA** lighting device is made of an aluminum cast body, in light gray color, with outer protection, corrosion protection treatment and UV resistant paint. It has a tempered glass disperser with IK08 impact protection and, optional, a polycarbonate disperser, UV resistant, with IK10 impact protection. In the same time, **ANTILIA** has an over voltage protection of 10kV, dimming source of 1-10V (PWM), with thermal protection by dimming the light flow and reducing the power consumption, a safety disconnecter for disconnecting the device from the power network when mounting. The mounting on the pole can be made horizontally or vertically, with the possibility of adjusting the angle between 0° and 15°. **ANTILIA** body ensures an IP66 protection degree for all constructive variants.

ANTILIA



- Application type: Street lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: - 30°C . . . + 45°C
- Pipe mounting: Ø 48 - 60 mm



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81824-009	132 W	glass disperser / PMMA lenses	14000 lm	820 x 380 x 180 mm 12 kg	IK08
RS 81824-011	75 W	glass disperser / PMMA lenses	8460 lm	620 x 295 x 152 mm 7,3 kg	IK08
RS 81824 A1/PC	150 W	glass disperser / PC PMMA lenses	16000 lm	820 x 380 x 180 mm 11 kg	IK08
RS 81824 A1D/PC	150 W	glass disperser / PC PMMA lenses	16000 lm	820 x 380 x 180 mm 11 kg	IK10
RS 81824-025	35 W	glass disperser / PMMA lenses	4000 lm	514 x 250 x 130 mm 4,1 kg	IK08
RS 81824-026	45 W	glass disperser / PMMA lenses	5350 lm	620 x 295 x 152 mm 6,8 kg	IK08

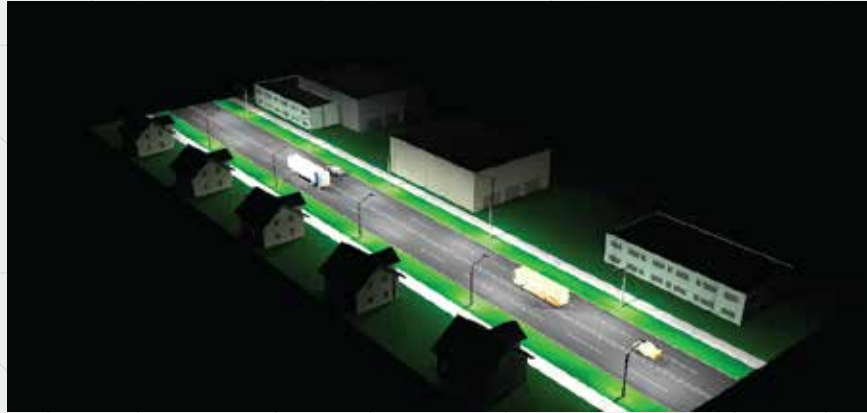
Applicable standards :
 SR EN 60598-1:2015
 +AC:2016
 SR EN 60598-2-3:2004
 +A1:2012
 SR EN 62031:2009+A1:2013
 +A2:2015 art. 13.2 si 15
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



ANTILIA

Calculation area list

Evaluation field: Street 1
 Length: 35.000 m, Width: 14.000 m
 Raster: 12 x 12 Points
 Attached street elements: Street 1.
 Covering: R2, q0: 0.070
 Selected illumination class: ME3



(All photometric requirements are met.)

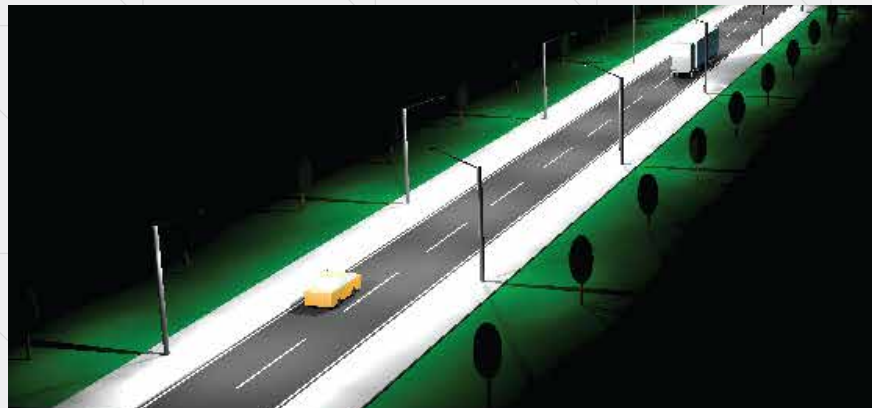
Calculated values:
 Necessary values according to class:
 Acquired/ Not acquired:

Lm [cd/m ²]	U0	UI	TI [%]	SR
2.06	0.59	0.73	10	0.50
≥ 2.00	≥ 0.40	≥ 0.70	≤ 10	≥ 0.50
✓	✓	✓	✓	✓

ANTILIA

Calculation area list

Evaluation field: Street 1
 Length: 35.000 m, Width: 14.000 m
 Raster: 12 x 6 Points
 Attached street elements: Street 1.
 Covering: R3, q0: 0.070
 Selected illumination class: ME4



(All photometric requirements are met.)

Calculated values:
 Necessary values according to class:
 Acquired/ Not acquired:

Lm [cd/m ²]	U0	UI	TI [%]	SR
1.60	0.77	0.86	5	0.68
≥ 1.50	≥ 0.40	≥ 0.70	≤ 10	≥ 0.50
✓	✓	✓	✓	✓

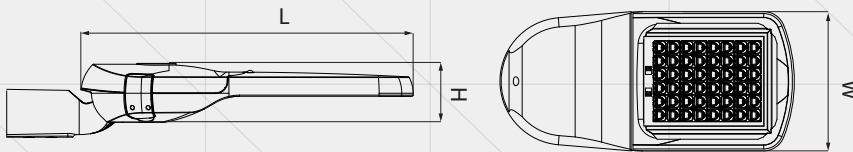
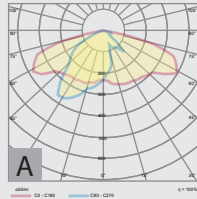


EVOCITY

The **EVOCITY** lighting device offers flexible module combinations with LEDs for powers between 45 - 160 W. **EVOCITY** lighting device is made of an aluminum cast body, in dark gray color, with outer protection, corrosion protection treatment and UV resistant paint. It has a tempered glass disperser with IK09 impact protection. The mounting on the pole can be made horizontally or vertically, with the possibility of adjusting the angle between -15° and $+15^{\circ}$. **EVOCITY** luminaire has an over voltage protection of 10kV and ensure a IP66 protection degree for all constructive variants.

EVOCITY

- Application type: Street lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: - 30°C . . . + 45°C
- Pipe mounting: Ø 60 mm



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 82023-006	100 W ¹	glass disperser / PMMA lenses	14800 lm	673 x 260 x 123 mm 6 kg	-
RS 82023-007	160 W ²	glass disperser / PMMA lenses	24000 lm	800 x 320 x 127 mm 8,9 kg	-
RS 82023-008	45 W ³	glass disperser / PMMA lenses	5900 lm	527 x 200 x 116 mm 3,3 kg	pipe diameter: Ø 48 mm
RS 82023-009	75 W ⁴	glass disperser / PMMA lenses	8900 lm	579 x 234 x 117 mm 4,7 kg	-

¹ At customer's request the power may have values between 75 - 100 W;

² At customer's request the power may have values between 100 - 160 W;

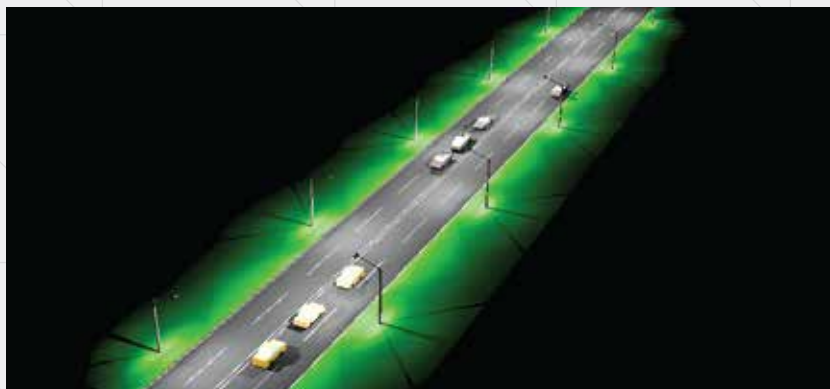
³ At customer's request the power may have values between 20 - 45 W;

⁴ At customer's request the power may have values between 45 - 75 W;

Applicable standards :
 SR EN 60598-1:2015
 +AC:2016
 SR EN 60598-2-3:2004
 +A1:2012
 SR EN 62031:2009+A1:2013
 +A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



EVOCITY



Calculation area list

Evaluation field: Street 1
 Length: 35.000 m, Width: 14.000 m
 Raster: 12 x 12 Points
 Attached street elements: Street 1.
 Covering: R2, q0: 0.070
 Selected illumination class: ME3

(All photometric requirements are met.)

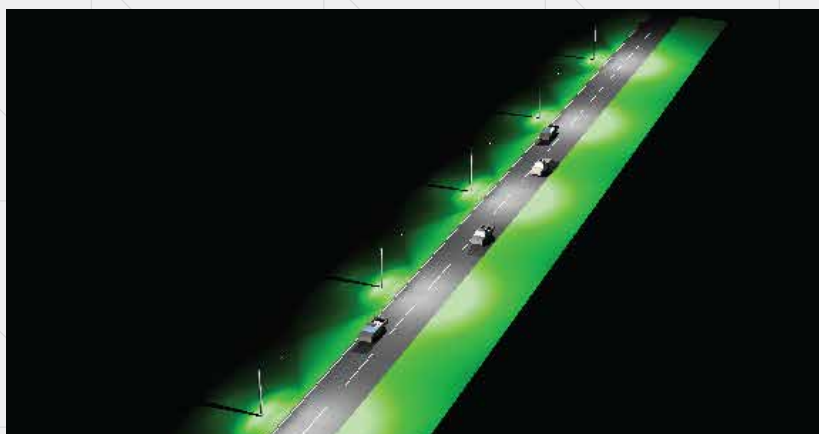
Calculated values:

Necessary values according to class:

Acquired/ Not acquired:

	Lm [cd/m ²]	U0	UI	TI [%]	SR
Calculated values:	1.51	0.71	0.71	2	0.69
Necessary values according to class:	≥ 1.50	≥ 0.40	≥ 0.71	≤ 10	≥ 0.50
Acquired/ Not acquired:	✓	✓	✓	✓	✓

EVOCITY



Calculation area list

Evaluation field: Street 1
 Length: 35.000 m, Width: 7.000 m
 Raster: 12 x 6 Points
 Attached street elements: Street 1.
 Covering: R3, q0: 0.070
 Selected illumination class: ME4

(All photometric requirements are met.)

Calculated values:

Necessary values according to class:

Acquired/ Not acquired:

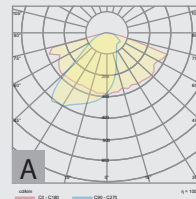
	Lm [cd/m ²]	U0	UI	TI [%]	SR
Calculated values:	0.32	0.49	0.46	3	0.69
Necessary values according to class:	≥ 0.30	≥ 0.35	≥ 0.40	≤ 15	/
Acquired/ Not acquired:	✓	✓	✓	✓	✓



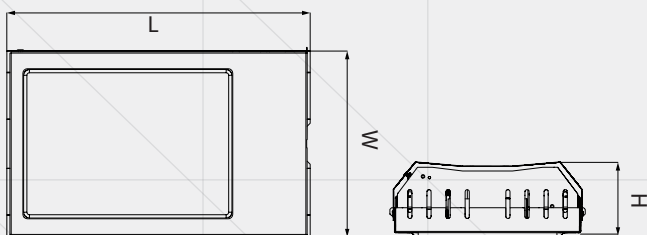
ORION 1M

The **ORION 1M** lighting device is appropriate for external, perimeter or ambient illumination for streets, alleys, parks, roads and parkings. It is made of a metallic case, electrostatic field painted, with external corrosion protection, lighting system made of a LED matrix with high efficiency and polycarbonate disperser. The lighting body ensures an IP66 protection degree, and its impact resistance is IK10. Optional: can be delivered together with a mounting device with adjustable tilting.

ORION 1M



- Application type: Street lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: -30°C . . . + 45°C
- Pipe mounting: Ø 48 - 60

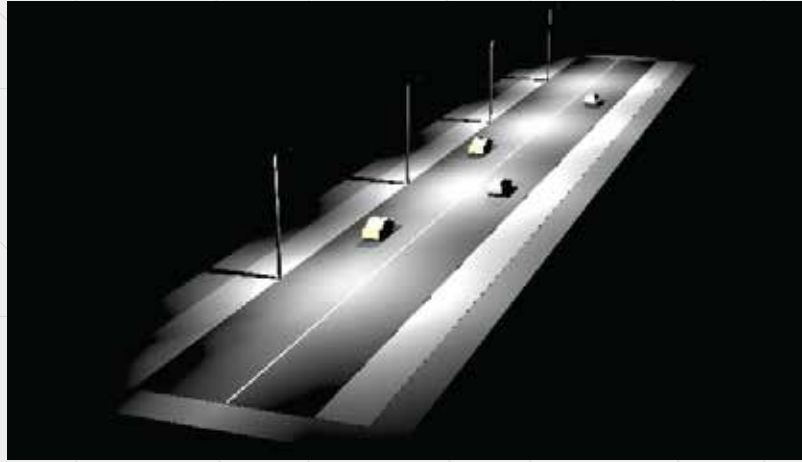


Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81781-014	30 W	PMMA lenses/ polycarbonate disperser	4250 lm	370 x 227 x 89 mm 2,5 kg	-
RS 81781-015	45 W	PMMA lenses/ polycarbonate disperser	6000 lm	370 x 227 x 89 mm 2,5 kg	-
RS 81781-019	60 W	PMMA lenses/ polycarbonate disperser	8400 lm	400 x 262 x 90 mm 3,3 kg	-
RS 81781-043	30 W	PMMA lenses/ polycarbonate disperser	3900 lm	295 x 225 x 70 mm 2 kg	-

Applicable standards :
 SR EN 60598-1:2015
 +AC:2016
 SR EN 60598-2-3:2004
 +A1:2012
 SR EN 62031:2009+A1:2013
 +A2:2015 art. 13.2 si 15
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



ORION 1M



Calculation area list

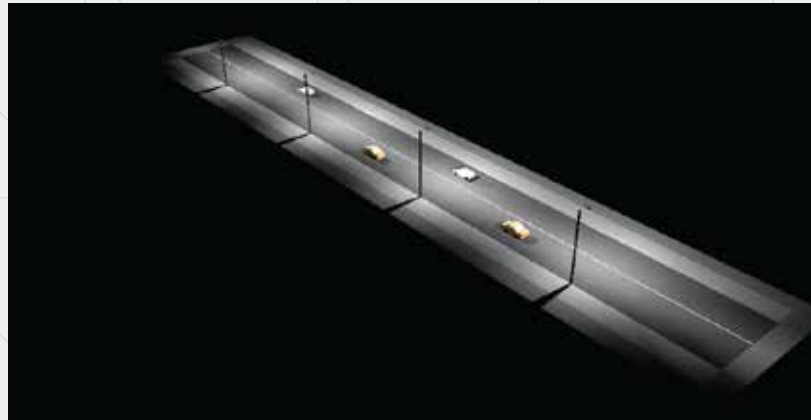
Evaluation field: Street 1
 Length: 35.000 m, Width: 7.000 m
 Raster: 12 x 6 Points
 Attached street elements: Street 1.
 Covering: R3, q0: 0.070
 Selected illumination class: ME3

(All photometric requirements are met.)

Calculated values:
 Necessary values according to class:
 Acquired/ Not acquired:

	Lm [cd/m ²]	U0	UI	TI [%]	SR
Calculated values:	1.02	0.62	0.72	7	0.69
Necessary values according to class:	≥ 1.00	≥ 0.40	≥ 0.70	≤ 15	≥ 0.50
Acquired/ Not acquired:	✓	✓	✓	✓	✓

ORION 1M



Calculation area list

Evaluation field: Street 1
 Length: 35.000 m, Width: 7.000 m
 Raster: 12 x 6 Points
 Attached street elements: Street 1.
 Covering: R3, q0: 0.070
 Selected illumination class: ME4

(All photometric requirements are met.)

Calculated values:
 Necessary values according to class:
 Acquired/ Not acquired:

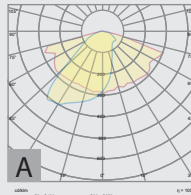
	Lm [cd/m ²]	U0	UI	TI [%]	SR
Calculated values:	0.92	0.58	0.83	13	0.53
Necessary values according to class:	≥ 0.75	≥ 0.40	≥ 0.60	≤ 15	≥ 0.50
Acquired/ Not acquired:	✓	✓	✓	✓	✓



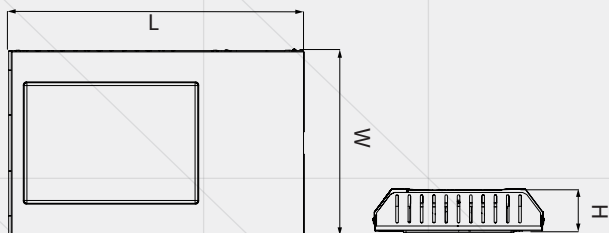
ORION 2M

With a illumination system made of street type individual lenses, which covers the entire range of lighting distributions, the **ORION 2M** lighting device has as scope the street illumination. It is equipped with last generation performance LEDs, having a very high efficiency, ensuring an IP66 protection degree and IK10 impact protection. From constructive point of view, **ORION 2M** is made of a metallic case, electrostatic field painted, with external corrosion protection, aluminum heat sink and polycarbonate disperser. Optional: can be delivered with mounting device with adjustable tilting. Also optional, it can be mounted higher than 8m (up to 13m). It also has the variant with dimmer power source 1-10V (PWM).

ORION 2M



- Application type: Street lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: -30°C . . . + 45°C
- Pipe mounting: Ø 48 - 60



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81781-007	130 W	PMMA lenses / polycarbonate disperser	16700 lm	459 x 437 x 114 mm 8 kg	-
RS 81781-025	102 W	PMMA lenses / polycarbonate disperser	15550 lm	528 x 329 x 91 mm 6 kg	-

Applicable standards :

SR EN 60598-1:2015
+AC:2016

SR EN 60598-2-3:2004
+A1:2012

SR EN 62031:2009+A1:2013
+A2:2015 art. 13.2 si 15

SR EN 55015:2014+A1:2015

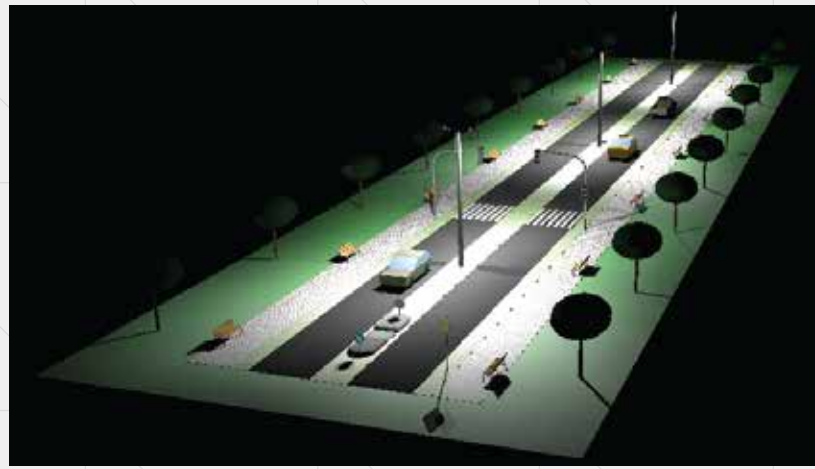
SR EN 61000-3-2:2015

SR EN 61000-3-3:2014

SR EN 61547:2010



ORION 2M



Calculation area list

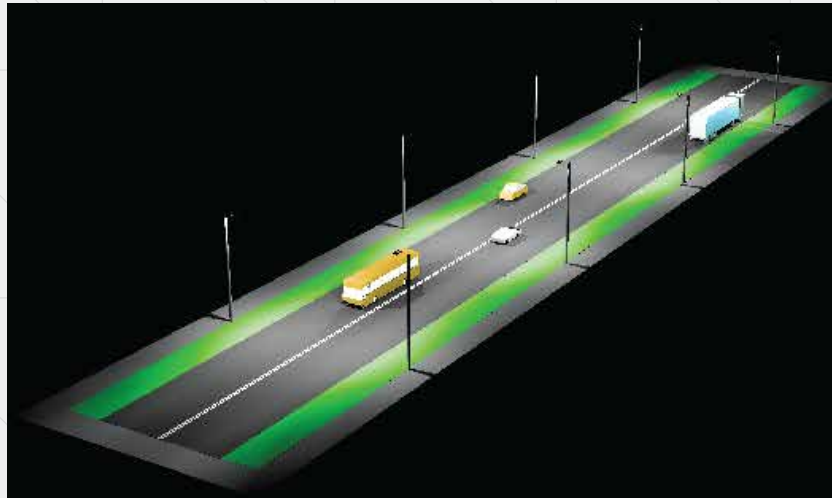
Evaluation field: Street 1
 Length: 35.000 m, Width: 14.000 m
 Raster: 12 x 12 Points
 Attached street elements: Street 1.
 Covering: R3, q_0 : 0.070
 Selected illumination class: ME4

(All photometric requirements are met.)

Calculated values:
 Necessary values according to class:
 Acquired/ Not acquired:

Lm [cd/m^2]	U0	UI	TI [%]	SR
0.75	0.40	0.81	15	0.52
≥ 0.75	≥ 0.40	≥ 0.60	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

ORION 2M



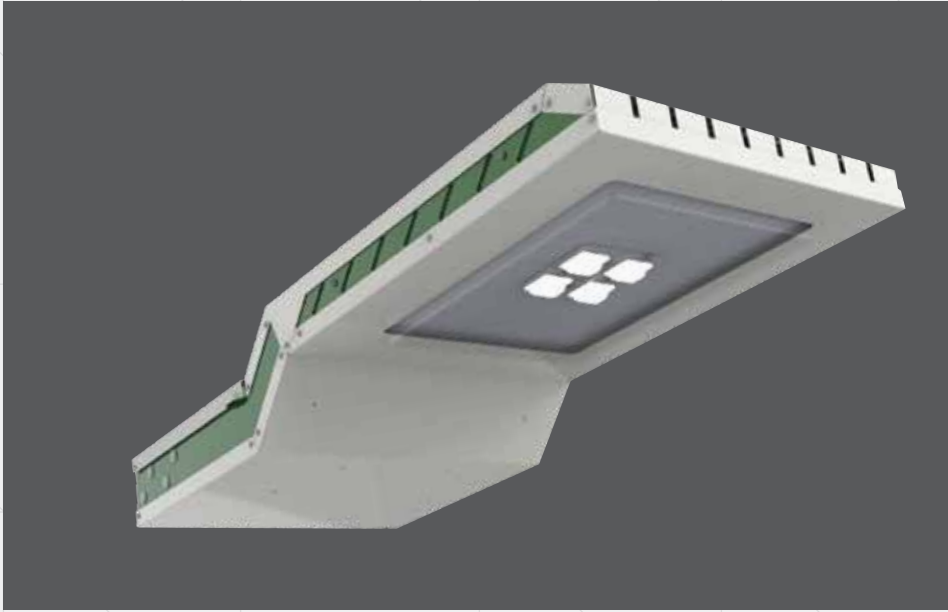
Listă suprafață de calcul

Evaluation field Street 1
 Length: 35.000 m, Width: 14.000 m
 Raster: 12 x 12 Points
 Attached street elements: Street 1.
 Covering: R3, q_0 : 0.070
 Selected illumination class: ME3

(All photometric requirements are met.)

Calculated values:
 Necessary values according to class:
 Acquired/ Not acquired:

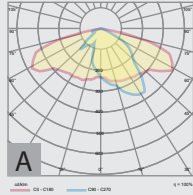
Lm [cd/m^2]	U0	UI	TI [%]	SR
2.01	0.62	0.73	10	0.52
≥ 2.00	≥ 0.40	≥ 0.70	≤ 10	≥ 0.50
✓	✓	✓	✓	✓



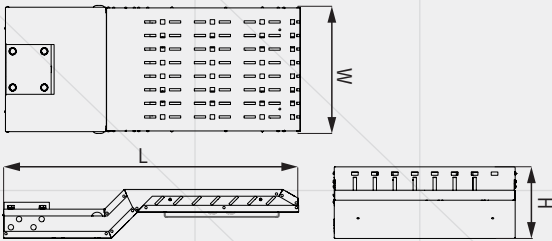
RADIANT

The **RADIANT** lighting device is perfect if you want a street illumination device having the last generation of performance LEDs with high index of color reproduction with color temperature on request in the warm, neutral and cold domain. Its body is metallic, the heat sink is in aluminum and the disperser is in polycarbonate. The **RADIANT** lighting device has an IP66 protection degree, with an IK10 impact resistance. Optional: can be delivered together with a mounting device with adjustable tilting. It is delivered together with a dimmer 1-10V PWM.

RADIANT



- Application type: Street lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: -35°C . . . + 45°C
- Pipe mounting: Ø 48 - 60



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81550-001	36 W	plastic lenses / polycarbonate disperser	4200 lm	652 x 272 x 108 mm 6 kg	-
RS 81550-002	64 W	plastic lenses / polycarbonate disperser	7600 lm	652 x 272 x 108 mm 8 kg	-

Applicable standards :
 SR EN 60598-1:2015
 +AC:2016
 SR EN 60598-2-3:2004
 +A1:2012
 SR EN 62031:2009+A1:2013
 +A2:2015 art. 13.2 si 15
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



RADIANT



Calculation area list

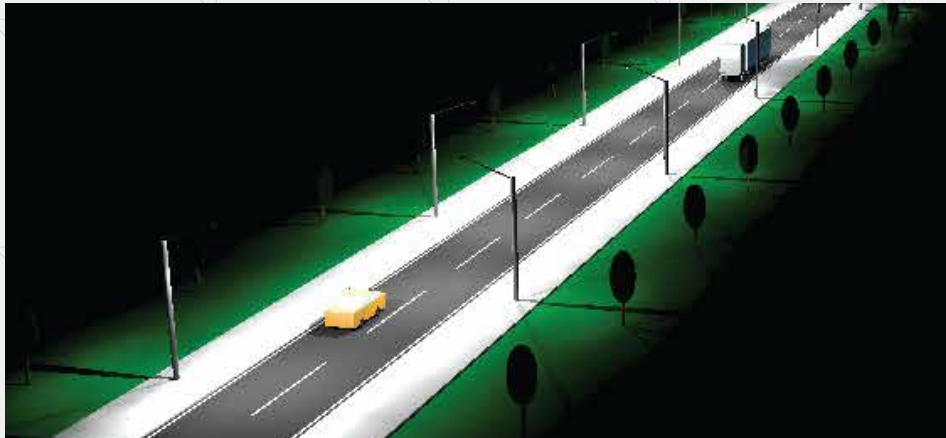
Evaluation field: Street 1
 Length: 40.000 m, Width: 7.000 m
 Raster: 12 x 6 Points
 Attached street elements: Street 1.
 Covering: R3, q0: 0.070
 Selected illumination class: ME4

(All photometric requirements are met.)

Calculated values:
 Necessary values according to class:
 Acquired/ Not acquired:

Lm [cd/m ²]	U0	UI	TI [%]	SR
0.75	0.61	0.80	13	0.60
≥ 0.75	≥ 0.40	≥ 0.50	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

RADIANT



Calculation area list

Evaluation field: Street 1
 Length: 40.000 m, Width: 7.000 m
 Raster: 14 x 6 Points
 Attached street elements: Street 1.
 Covering: R3, q0: 0.070
 Selected illumination class: ME3

(All photometric requirements are met.)

Calculated values:
 Necessary values according to class:
 Acquired/ Not acquired:

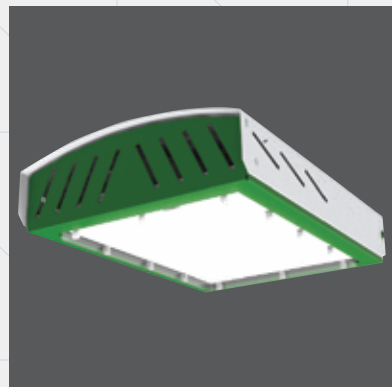
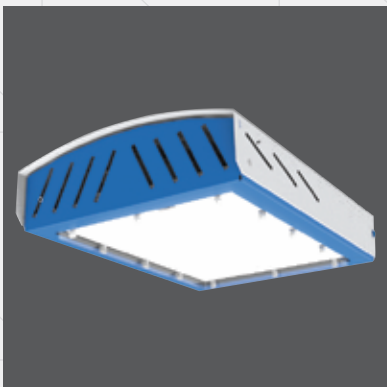
Lm [cd/m ²]	U0	UI	TI [%]	SR
1.52	0.60	0.74	8	0.60
≥ 1.50	≥ 0.40	≥ 0.70	≤ 10	≥ 0.50
✓	✓	✓	✓	✓



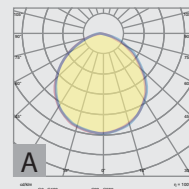
ELMA 80

CITYBLUE - CITYECO

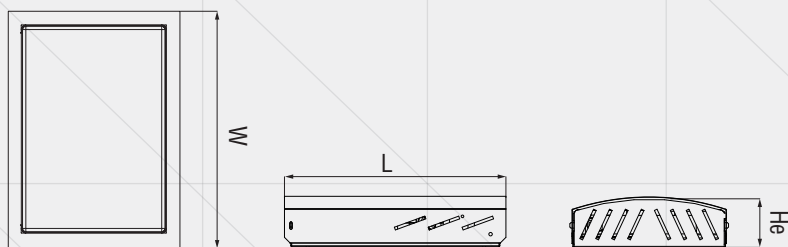
ELMA 80 is the right solution for external, perimeter or ambient illumination of streets, alleys, parks, roads and parkings. It is made of an electrostatic field painted metallic body with corrosion protection for outside, lighting system - made of a LED matrix with high resistance and polycarbonate disperser. The **ELMA** lighting device has an IP66 protection degree and IK10 impact resistance. **CITYBLUE** luminaire has a blue case and **CITYECO** luminaire has a green case.



ELMA/CITYBLUE/CITYECO



- Application type: Street lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: - 40°C . . . + 45°C
- Pipe mounting: Ø 48 - 60



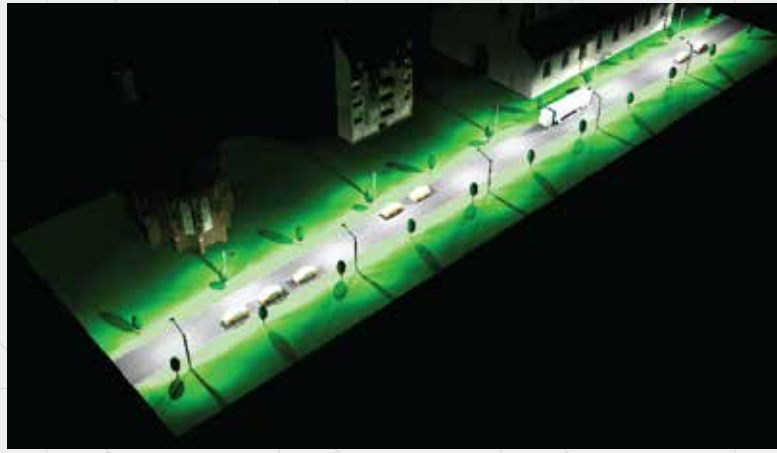
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81736F1	52 W	polycarbonate disperser	5970 lm	383 x 273 x 117 mm 4 kg	-
RS 81758C1	35 W	polycarbonate disperser	4000 lm	383 x 275 x 95 mm 3,5 kg	-
RS 82007-003	52 W	polycarbonate disperser	5920 lm	383 x 274 x 117 mm 3,5 kg	case color: blue
RS 82007-004	35 W	polycarbonate disperser	4090 lm	383 x 274 x 117 mm 3,5 kg	case color: blue
RS 82007-005	52 W	polycarbonate disperser	5970 lm	383 x 274 x 117 mm 3,5 kg	dimnable, case color: blue
RS 82007-006	35 W	polycarbonate disperser	4090 lm	383 x 274 x 117 mm 3,5 kg	dimnable, case color: blue
RS 82008-003	52 W	polycarbonate disperser	5920 lm	383 x 274 x 117 mm 3,5 kg	case color: green
RS 82008-004	35 W	polycarbonate disperser	4090 lm	383 x 274 x 117 mm 3,5 kg	case color: green
RS 82008-005	52 W	polycarbonate disperser	5970 lm	383 x 274 x 117 mm 3,5 kg	dimnable, case color: green
RS 82008-006	35 W	polycarbonate disperser	4090 lm	383 x 274 x 117 mm 3,5 kg	dimnable, case color: green

Applicable standards :
SR EN 60598-1:2015
+AC:2016
SR EN 60598-2-3:2004
+A1:2012

SR EN 62031:2009+A1:2013
+A2:2015 art. 13.2 si 15
SR EN 55015:2014+a1:2015
SR EN 61000-3-2:2015
SR EN 61000-3-3:2014
SR EN 61547:2010



ELMA 80



Calculation area list

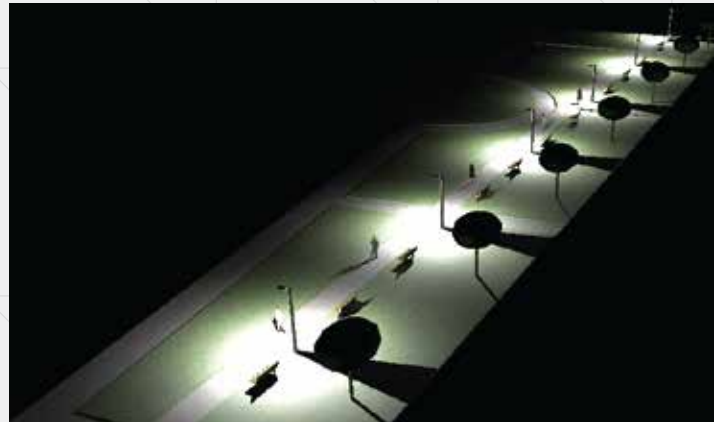
Evaluation field: Street 1
 Length: 40.000 m, Width: 7.000 m
 Raster: 14 x 6 Points
 Attached street elements: Street 1.
 Covering: R3, q0: 0.070
 Selected illumination class: ME6

Calculated values:
 Necessary values according to class:
 Acquired/ Not acquired:

(All photometric requirements are met.)

Lm [cd/m ²]	U0	UI	TI [%]	SR
0.51	0.67	0.73	3	0.71
≥ 0.30	≥ 0.35	≥ 0.40	≤ 15	/
✓	✓	✓	✓	✓

ELMA 80



Calculation area list

Evaluation field: Street 1
 Length: 20.000 m, Width: 3.000 m
 Raster: 10 x 3 Points
 Attached street elements: Pedestrian alley
 Covering: R3, q0: 0.070
 Selected illumination class: S2

Calculated values:
 Necessary values according to class:
 Acquired/ Not acquired:

(All photometric requirements are met.)

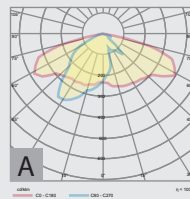
Em [lx]	Emin [lx]
14.50	4.26
≥ 10.00	≥ 3.00
✓	✓



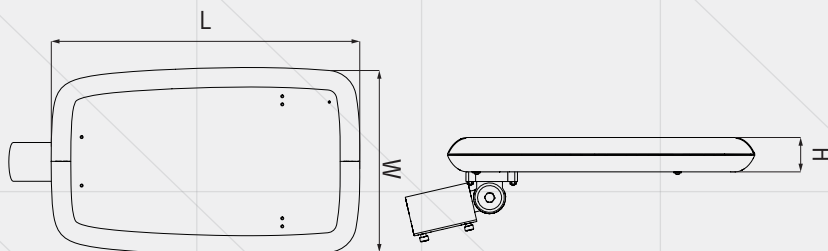
LYRA

LYRA street luminaire is remarkable in its particular design, with a unique textured paint, but also a futuristic shape. It is equipped with the latest version of LEDs and with high efficiency. Ensures impact resistance IK10. It is available in 2 color variants: gray and black. Mounting on the pole of **LYRA** luminaire can be done horizontally or vertically, with the possibility of adjusting the angle.

LYRA



- Application type: Street lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: -40°C . . . + 45°C
- Pipe mounting: Ø 48 - 60



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 82027-004	100 W	transparent disperser	14500 lm	670 x 350 x 160 mm 5,6 kg	case color: gray
RS 82027-005	100 W	transparent disperser	14500 lm	670 x 350 x 160 mm 5,6 kg	case color: black

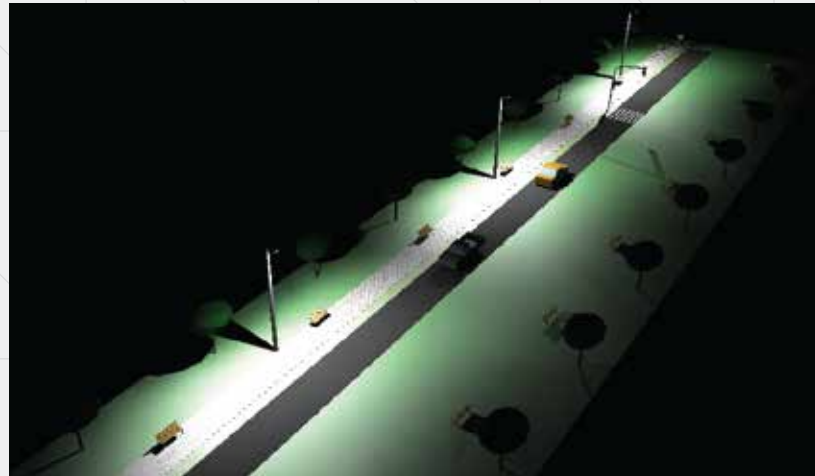
Applicable standards :
 SR EN 60598-1:2015
 +AC:2016
 SR EN 60598-2-3:2004
 +A1:2012
 SR EN 62031:2009+A1:2013
 +A2:2015 art. 13.2 si 15
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



LYRA

Calculation area list

Evaluation field Street 1
Length: 35.000 m, Width: 3.500 m
Raster: 12 x 3 Points
Attached street elements: Street 1.
Covering: R3, q0: 0.070
Selected illumination class: ME4



(All photometric requirements are met.)

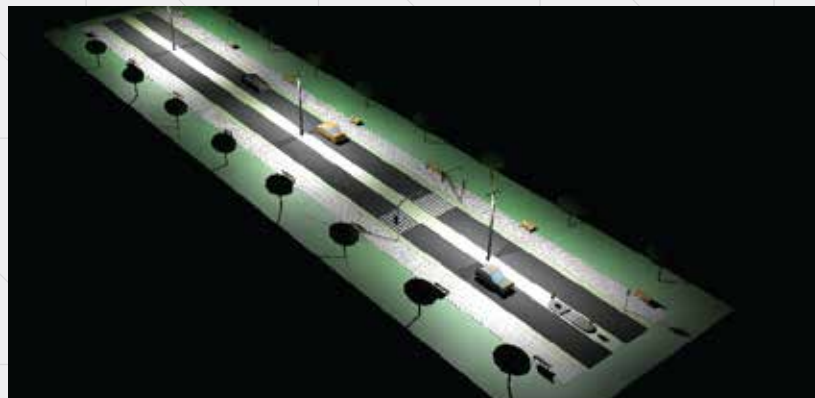
Calculated values:
Necessary values according to class:
Acquired/ Not acquired:

Lm [cd/m ²]	U0	UI	TI [%]	SR
0.75	0.66	0.50	2	0.97
≥ 0.75	≥ 0.40	≥ 0.50	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

LYRA

Calculation area list

Evaluation field Street 1
Length: 35.000 m, Width: 3.500 m
Raster: 12 x 6 Points
Attached street elements: Street 1.
Covering: R3, q0: 0.070
Selected illumination class: ME3



(All photometric requirements are met.)

Calculated values:
Necessary values according to class:
Acquired/ Not acquired:

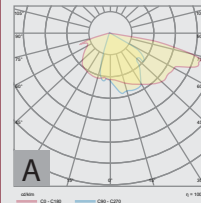
Lm [cd/m ²]	U0	UI	TI [%]	SR
1.07	0.71	0.60	2	0.96
≥ 1.00	≥ 0.40	≥ 0.60	≤ 15	≥ 0.50
✓	✓	✓	✓	✓



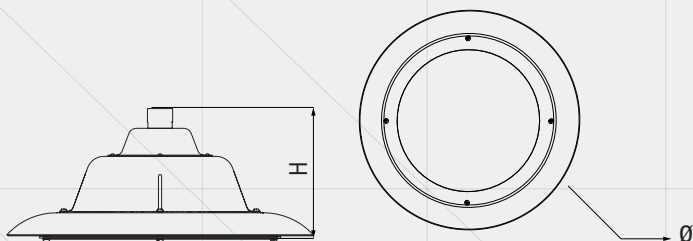
DELTA

DELTA light fixtures with LED are the adequate solution for street lighting in pedestrian zones. Choose it with confidence because it is made with an aluminium housing, manufactured by cold plastic deformation, clear plexiglass diffuser and individual plastic lenses.

DELTA



- Application type: Pedestrian lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Distribution: A
- Working temperature: - 30°C . . . + 45°C
- Pipe mounting: Ø 48 - 60



Code	Nominal power	Optics	Light flow	Sizes; Mass (\varnothing x H); (kg)	Observations
RS 82017-001	36 W	plastic lenses	4600 lm	\varnothing 388 x 168,5 mm 2 kg	-

Applicable standards :
 SR EN 60598-1:2015
 +AC:2016
 SR EN 60598-2-3:2004
 +A1:2012
 SR EN 62031:2009+A1:2013
 +A2:2015 art. 13.2 si 15
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



DELTA

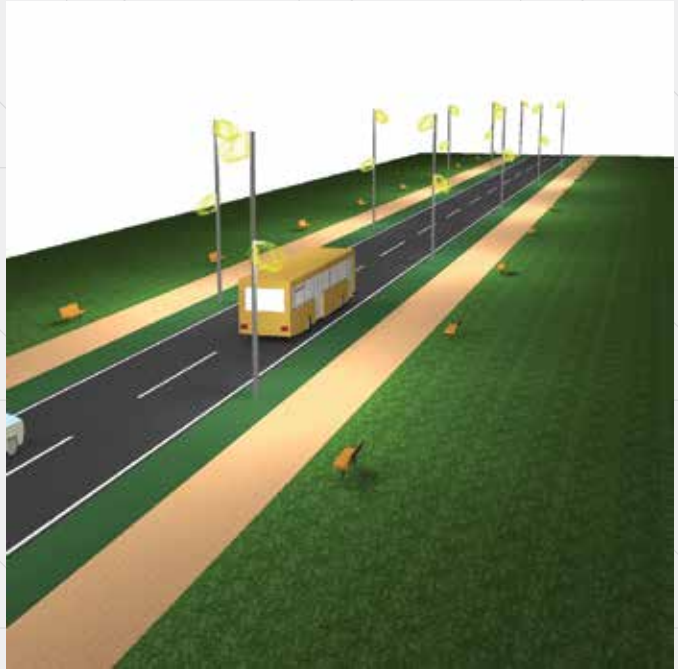
Calculation area list

Evaluation field: Street 1
Length: 35.000 m, Width: 7000 m
Raster: 12 x 6 Points
Attached street elements: Street 1.
Covering: R3, q0: 0.070
Selected illumination class: ME4

(All photometric requirements are met.)

Lm [cd/m ²]	U0	UI	TI [%]	SR
1.02	0.71	0.73	8	1.08
≥ 1.00	≥ 0.40	≥ 0.50	≤ 15	≥ 0.50
✓	✓	✓	✓	✓

Calculated values:
Necessary values according to class:
Acquired/ Not acquired:



DELTA

Calculation area list

Evaluation field : Sidewalk 1
Length: 35.000 m, Width: 3.000 m
Raster: 12 x 3 Points
Attached street elements: Sidewalk 1.
Selected illumination class: S2

(All photometric requirements are met.)

E [lx]	E [lx]
13.74	5.73
≤ 10.00	≥ 3.00
✓	✓

Calculated values:
Necessary values according to class:
Acquired/ Not acquired:

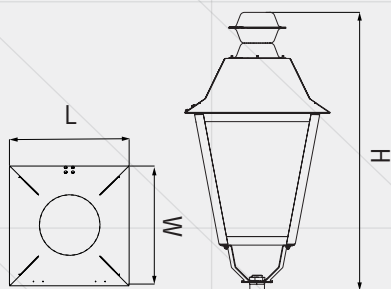


PHOENIX

The **PHOENIX** lantern with LED is used in street lighting, for pedestrian areas. The main reason is its zinc-plated sheet metal housing, coated under electrostatic charge, and its matte plexiglass diffuser. With an attractive retro design, it creates a pleasant environment.

PHOENIX

- Application type: Pedestrian lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP66
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: - 30°C . . . + 45°C
- Pipe mounting: Ø 48 - 60

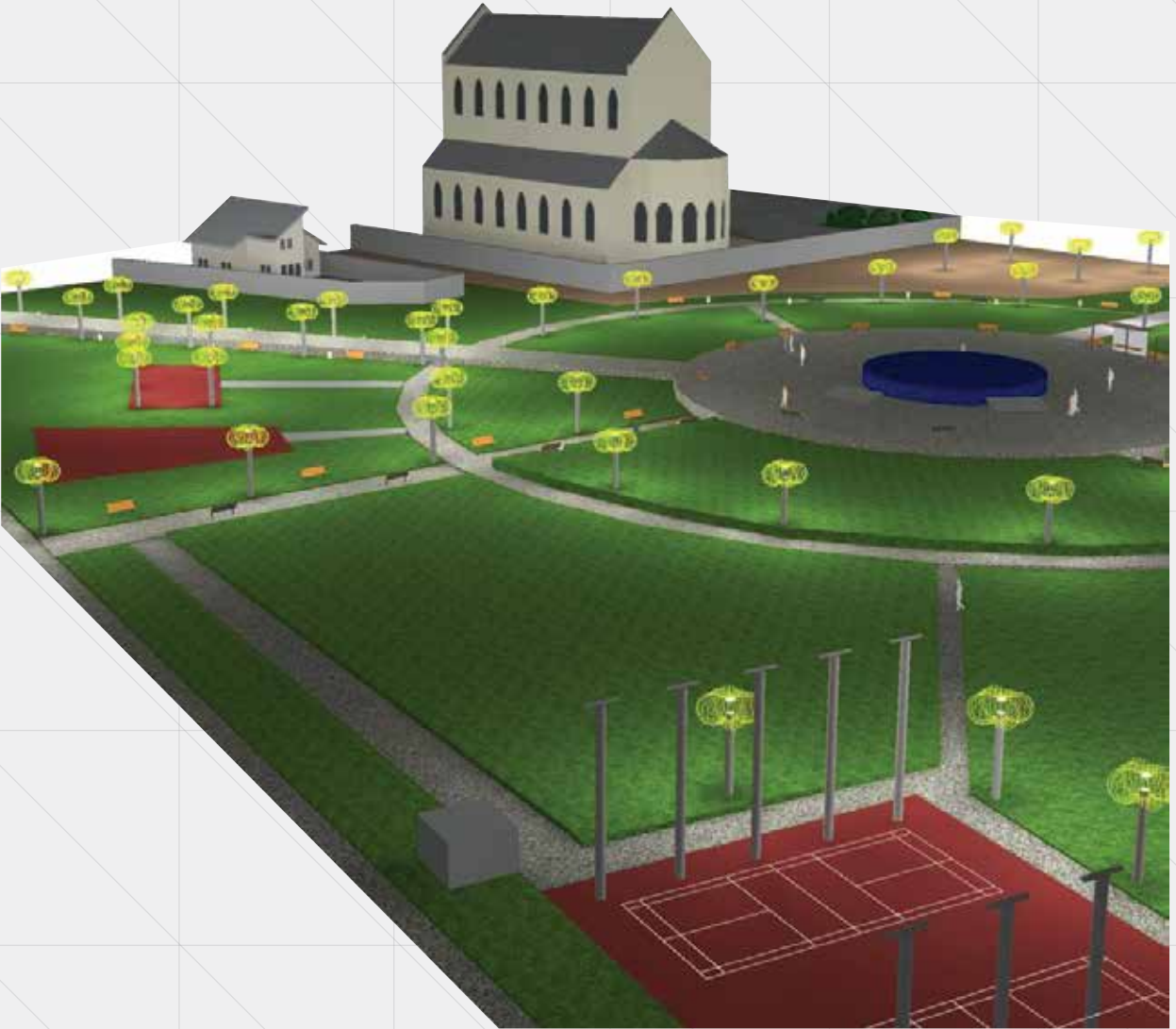


Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81708-003	60 W	plexiglass disperser	5500 lm	500 x 500 x 850 mm 8 kg	-

Applicable standards :
 SR EN 60598-1:2015
 +AC:2016
 SR EN 60598-2-3:2004
 +A1:2012
 SR EN 62031:2009+A1:2013
 +A2:2015 art. 13.2 si 15
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



PHOENIX



Emergency indication luminaires

Content



..... Sigma 114

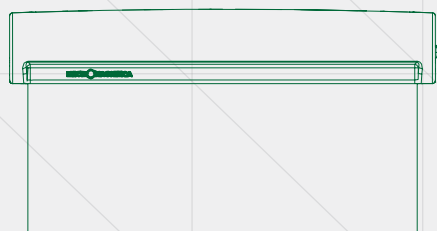


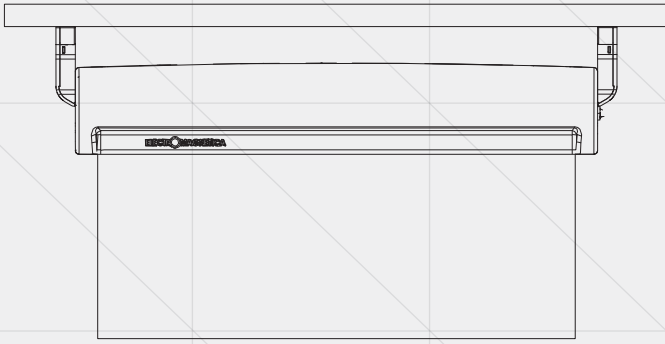
..... Indus 119



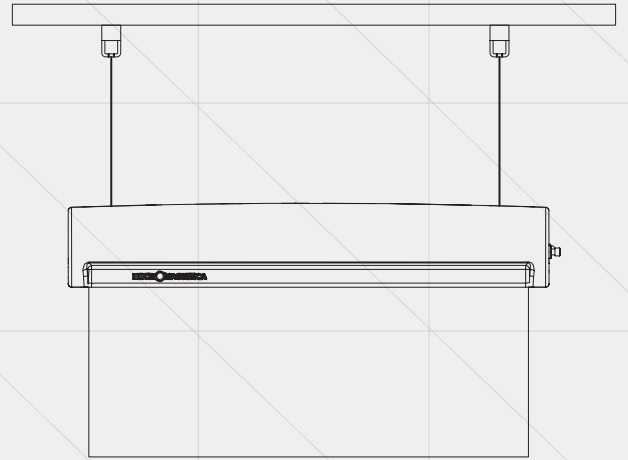
SIGMA

When there are evacuation routes in the building, it is good to mark them so they can be easily identified and used. Choose **SIGMA**, LED security indicator which design was created in such way to be integrated easily in any type of space. **SIGMA** is produced in many mounting variants, so you can choose the best solution, suitable for your space.

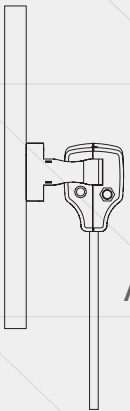




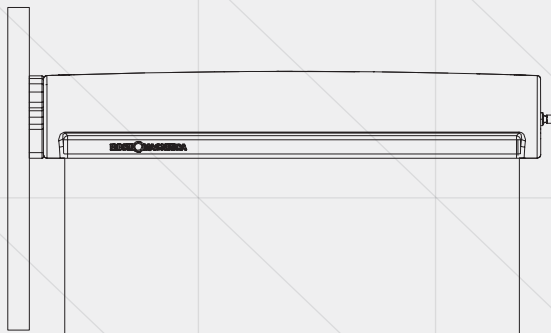
Applied on the ceiling



Suspended



Applied on the wall



Laterally applied on the wall

Mounting variants



RS 81805-S-H



RS 81805-S-D



RS 81805-S-L



RS 81805-S-R



RS 81805-S-RDS



RS 81805-S-LUS



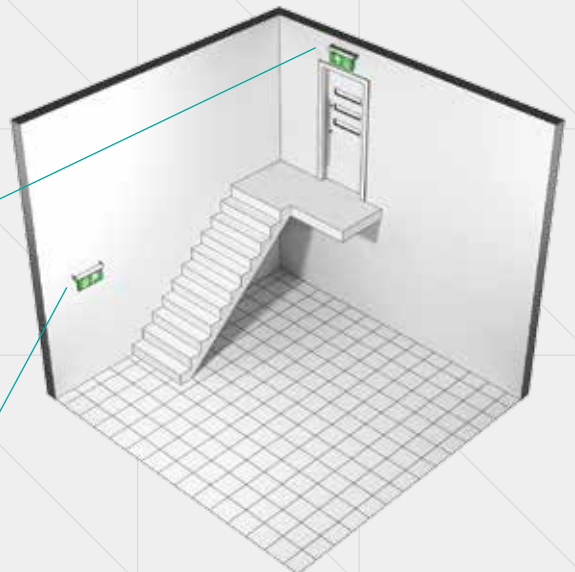
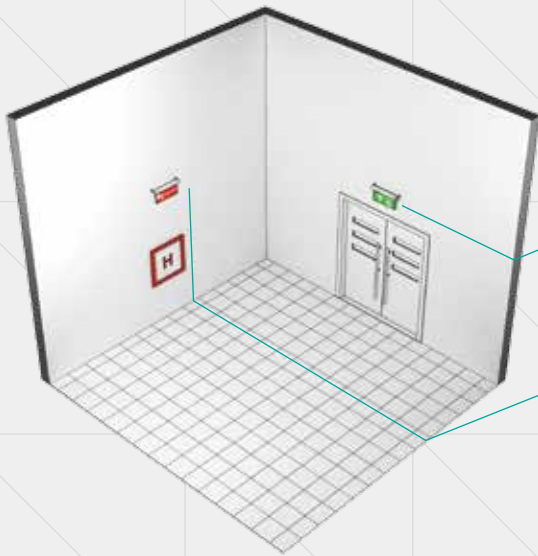
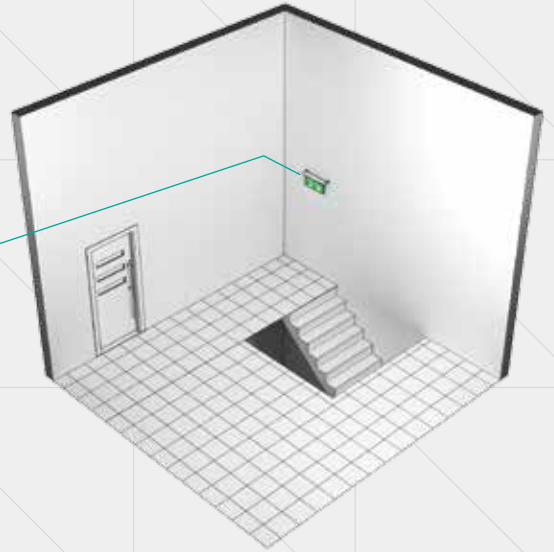
RS 81805-S-RUS



RS 81805-S-LDS

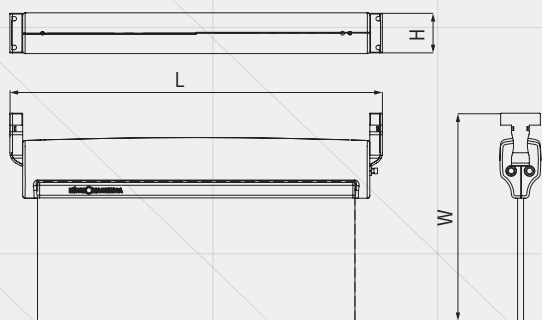


RS 81805-S-U



SIGMA

- Application type: Emergency lighting
- Protection degree: IP30
- Power supply: 230 V / 50 Hz
- Insulation class: II
- Working temperature: max. + 40°C
- Emergency lighting: battery autonomy - 180 min
- Mass: 0,8 kg



Code	Nominal power	Optics	Sizes (L x W x H)	Observations
RS 81805-S-H	3 W	plexiglass disperser	375 x 185 x 40 mm	batteries Ni-Mh 3,6 V / 2000 mAh
RS 81805-S-D	3 W	plexiglass disperser	375 x 185 x 40 mm	batteries Ni-Mh 3,6 V / 2000 mAh
RS 81805-S-L	3 W	plexiglass disperser	375 x 185 x 40 mm	batteries Ni-Mh 3,6 V / 2000 mAh
RS 81805-S-R	3 W	plexiglass disperser	375 x 185 x 40 mm	batteries Ni-Mh 3,6 V / 2000 mAh
RS 81805-S-RDS	3 W	plexiglass disperser	375 x 184 x 40 mm	batteries Ni-Mh 3,6 V / 2000 mAh
RS 81805-S-LUS	3 W	plexiglass disperser	375 x 184 x 40 mm	batteries Ni-Mh 3,6 V / 2000 mAh
RS 81805-S-RUS	3 W	plexiglass disperser	375 x 184 x 40 mm	batteries Ni-Mh 3,6 V / 2000 mAh
RS 81805-S-LDS	3 W	plexiglass disperser	375 x 184 x 40 mm	batteries Ni-Mh 3,6 V / 2000 mAh
RS 81805-S-U	3 W	plexiglass disperser	375 x 185 x 40 mm	batteries Ni-Mh 3,6 V / 2000 mAh

Applicable standards:
 SR EN 1838:2014
 SR EN 60598-1:2015
 +AC:2016
 SR EN 60598-2-22:2015
 +AC:2015+AC:2016
 SR EN 62031:2009+A1:2013
 +A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



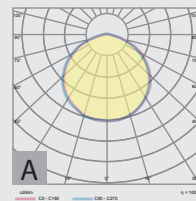


INDUS

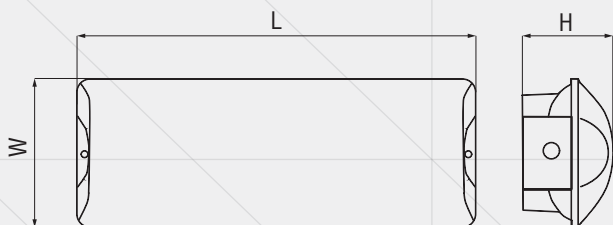
Special created to illuminate the emergency escape route and to signal the escape routes, the **INDUS** lighting devices are perfect to be mounted in any public space.



INDUS



- Application type: Emergency lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP44
- Power supply: 230 V / 50 Hz
- Insulation class: II
- Distribution: A
- Working temperature: max. + 40°C
- Emergency lighting: battery autonomy - 60 min



Code	Nominal power	Optics	Light flow	Sizes (L x W x H)	Observations
RS 81140 E	7 W	transparent disperser	475 lm	356 x 136 x 84 mm 0,7 kg	-
RS 81140 DS1	8 W	transparent disperser	440 lm	356 x 136 x 84 mm 1,2 kg	Ni-Cd batteries 4,8 V / 1,6 Ah
RS 81312-001	7 W	transparent disperser	720 lm	356 x 136 x 84 mm 0,7 kg	IP65
RS 81312-002	7 W	satinated disperser	680 lm	328 x 153 x 90 mm 0,8 kg	IP65
RS 81312-007	8 W	transparent disperser	450 lm	356 x 136 x 84 mm 0,9 kg	Ni-Cd batteries 3,6 V / 3,0 Ah
RS 81312-008	7 W	satinated disperser	680 lm	356 x 136 x 84 mm 1,1 kg	Ni-Cd batteries 3,6 V / 3,0 Ah, IP65

Applicable standards:
 SR EN 60598-1:2015
 +AC:2016
 SR EN 60598-2-22:2015
 +AC:2015+AC:2016
 SR EN 62031:2009+A1:2013
 +A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



Antiex

Content



Cetex 122

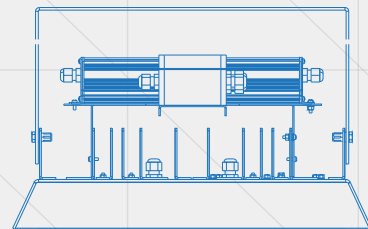
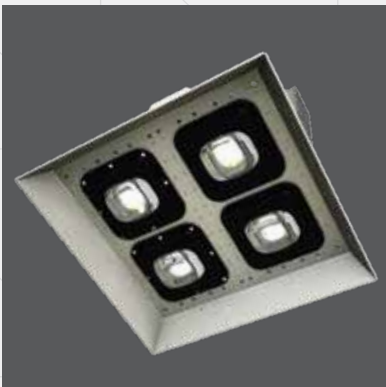


Gemma 125

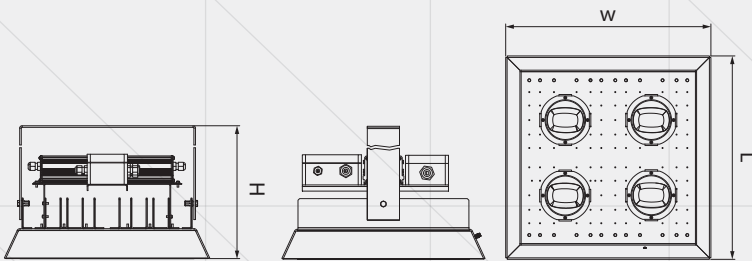


CETEX

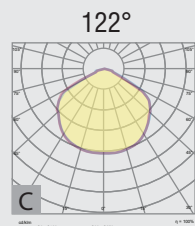
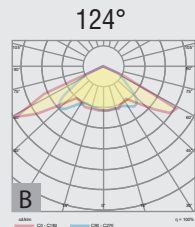
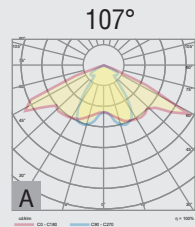
This series of illuminators is perfect for industrial environment, especially because it has been designed for areas with potentially explosive atmosphere due to the presence of gas and dust. It can be fitted suspended and also applied on the ceiling or on the wall, having an adjustable position.



- Application type: Gas station lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP65
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: - 30°C . . . + 45°C
- Certificate of conformity: Nr.SECCEX.16.1549X



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Distribution	Observation
RS 81951 A	140 W	polycarbonate disperser	15700 lm	382 x 378 x 332 mm 7 kg	C	-
RS 81951 AL1	140 W	glass lenses	16400 lm	400 x 378 x 332 mm 7,4 kg	B	-
RS 81951 AL2	140 W	glass lenses	15900 lm	382 x 378 x 332 mm 7,4 kg	A	-
RS 81951 B	70 W	polycarbonate disperser	8300 lm	378 x 225 x 332 mm 4,5 kg	C	-
RS 81951 BL1	70 W	glass lenses	8600 lm	378 x 233 x 332 mm 4,5 kg	B	-
RS 81951 BL2	70 W	glass lenses	8400 lm	378 x 225 x 332 mm 4,5 kg	A	-

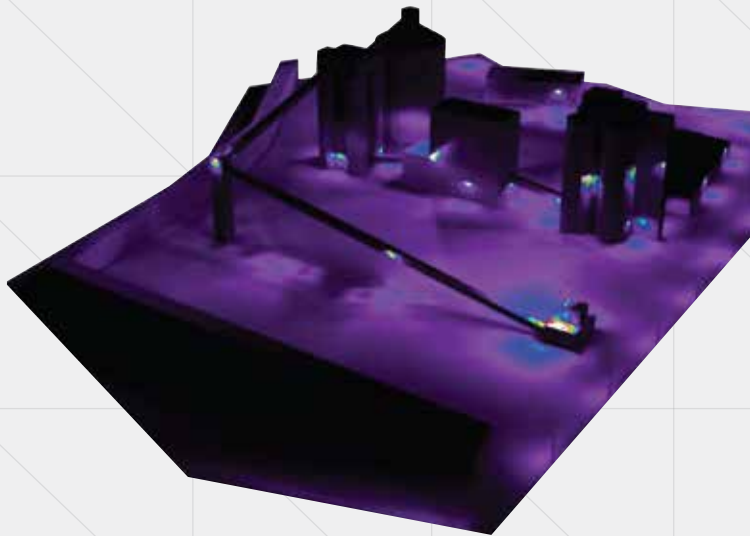
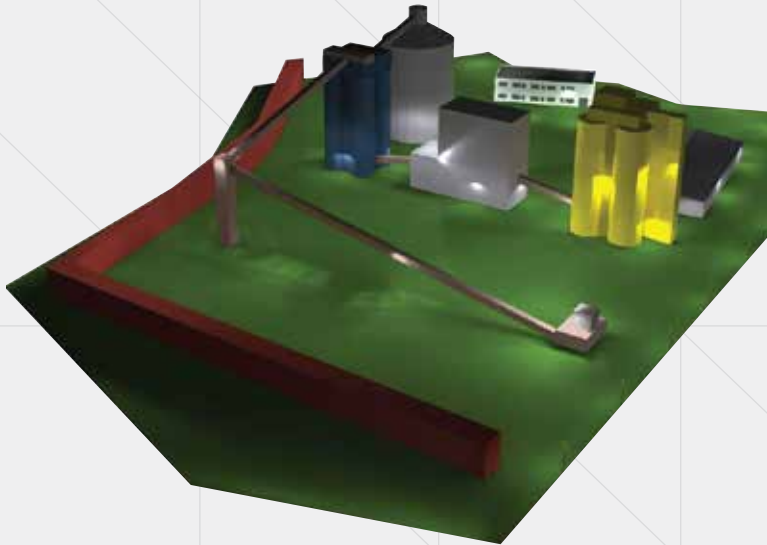


Antiex 

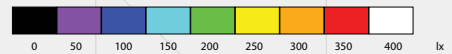
Lighting devices marked with antiex sign are designed for operation in risk of explosion areas (zone 2 protection level Gc gas group IIB, temperature class T4 max.100, type of protection "nA" and "mc") and for risk of explosion due dust lighting, zone 22 with level of protection Dc- group IIIC (maximum surface temperature of 100 °) type of protection tc.

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-5:2016
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010
 SR EN 60079-0:2013
 SR EN 60079-15:2011
 SR EN 60079-31:2014





Height of space : 12.000 m
 Maintenance factor : 0.80



Surface	p [%]	Em [lx]	Emin [lx]	Emax [lx]	u0
Usable surface	/	226	20	328	0.089
Floor	20	221	26	306	0.117
Ceiling	70	65	26	112	/
Walls	50	134	41	4992	/

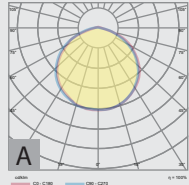


GEMMA

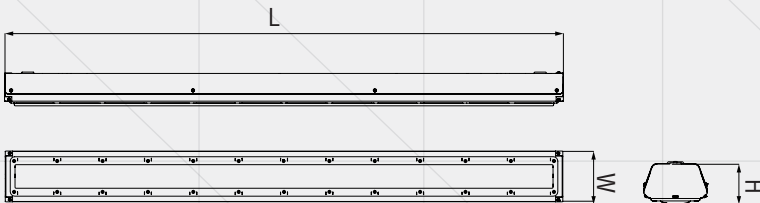
The **GEMMA** luminaire has been design to cover a wide range of lighting needs in potentially explosive atmospheres such as gas or dust. This luminaire can be mounted both suspended and apparent.



GEMMA



- Application type: Gas station lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP65
- Power supply: 230 V / 50 Hz
- Insulation class: II
- Distribution: A
- Working temperature: - 25°C . . . + 45°C
- Certificate of conformity: Nr.SECEx.16.1549X



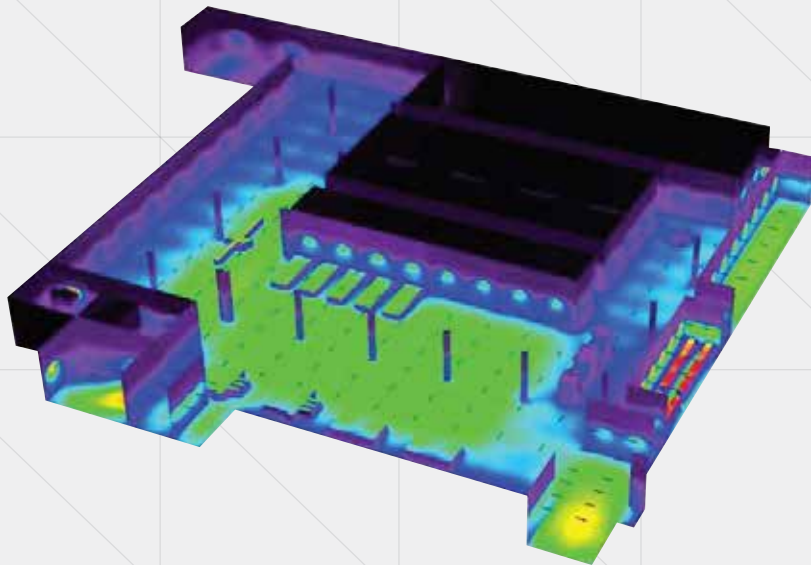
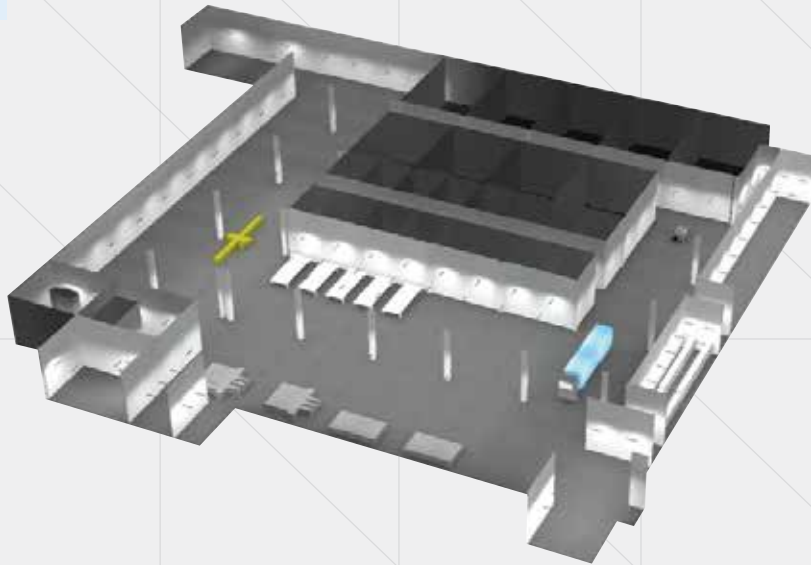
Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81953 A-EX	60 W	transparent polycarbonate disperser	6150 lm	1200 x 130 x 89 mm 4,2 kg	-
RS 81953 B-EX	35 W	transparent polycarbonate disperser	3700 lm	732 x 130 x 89 mm 3,5 kg	-

Antiex 

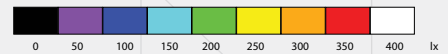
Lighting devices marked with antiex sign are designed for operation in risk of explosion areas (zone 2 protection level Gc gas group IIB, temperature class T4 max.100, type of protection "nA" and "mc") and for risk of explosion due dust lighting, zone 22 with level of protection Dc- group IIIC (maximum surface temperature of 100 °) type of protection tc.

Applicable standards:
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-5:2016
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010
 SR EN 60079-0:2013
 SR EN 60079-15:2011
 SR EN 60079-31:2014





Height of space: 9,000 m
 Maintenance factor : 0,90



Surface	p [%]	Em [lx]	Emin [lx]	Emax [lx]	u0
Usable surface	/	105	0.19	364	0.002
Floor	20	99	0.21	288	0.002
Ceiling	70	20	0.24	61	0.012
Walls	50	23	0.41	577	/

Special applications

Content



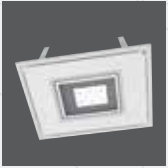
Canopus 129



Asterion 131



Dorado 133

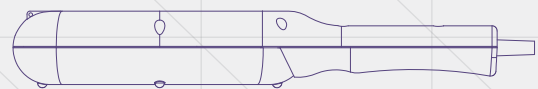


Vega 136

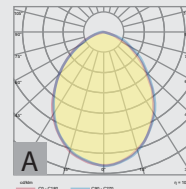


CANOPUS

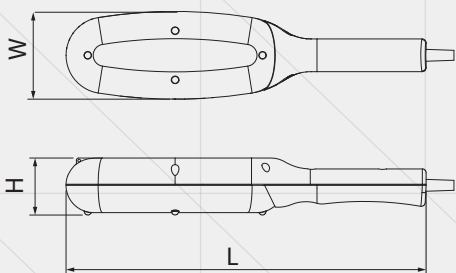
CANOPUS is a portable illuminator. It has been designed for the lighting of the working spaces that requires the mobility of its user. Its simple and efficient design allows an easy handling, and due to its high resistance can be used in industrial environments. In addition, this illuminator can be clamped with magnets in laid into iron bolsters .



CANOPUS



- Application type: Portable hand lamp
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP65
- Working temperature: max. + 45°C
- Distribution: A
- Mass: 0,9 kg



Code	Nominal power	Optics	Light flow	Sizes (L x W x H)	Observations
RS 81174-[]*	4 W	polycarbonate disperser	370 lm	330 x 80 x 52 mm	24 Vca, Insulation class III
RS 81175-[]*	6 W	polycarbonate disperser	330 lm	330 x 80 x 52 mm	230 V / 50 Hz, Insulation class II

* [] - it can be ordered with different lengths of cable: 5, 15, 25 m;

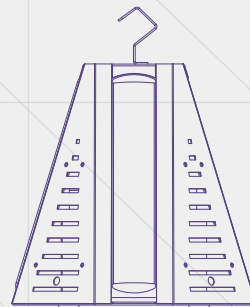
Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-8:2001+A1:2001
 +A2:2008
 SR EN 62031:2009+A1:2013+
 A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





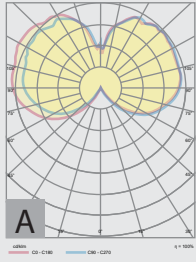
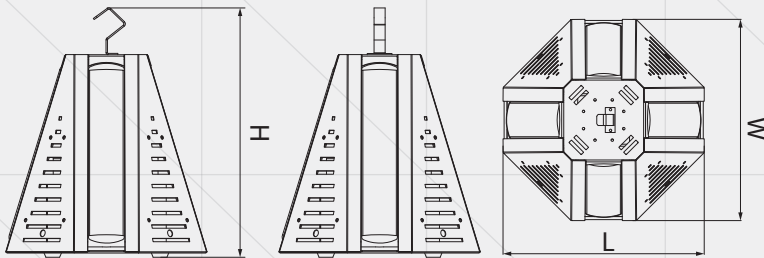
ASTERION

ASTERION is a portable illuminator specially designed for the lighting of difficult areas , such as vessel construction zones. Its robust and special design, as well as the degree of protection IP65, allows the mounting of this illuminator on the floor or its hanging with a help of a hook.



ASTERION

- Application type: Shipyard lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Power supply: 230 V / 50 Hz
- Protection degree: IP65
- Insulation class: I
- Working temperature: - 30°C . . . + 45°C
- Distribution: A
- Emergency lighting: battery autonomy- 60 min



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Observations
RS 81467-001	52 W	polycarbonate disperser	6000 lm	292 x 292 x 360 mm 3 kg	-
RS 81467-002	55 W	polycarbonate disperser	7240 lm	292 x 292 x 364 mm 4 kg	Ni-Cd batteries 4,8 V / 1,6 Ah

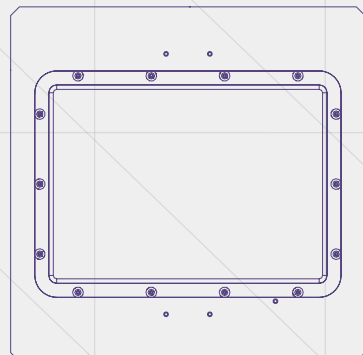
Applicable standards:
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-22:2015
 +AC:2015+AC:2016
 SR EN 60598-2-4:2001
 SR EN 62031:2009+A1:2013+
 A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





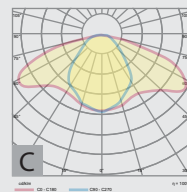
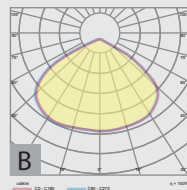
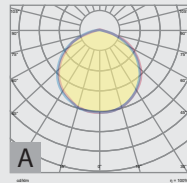
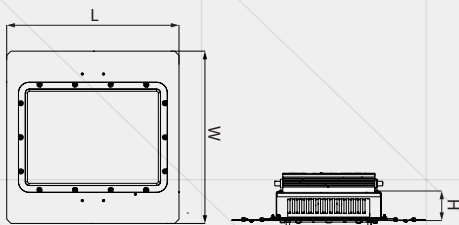
DORADO

The illuminators **DORADO** have been specially projected for gas stations and other spaces which need low height mounting of the illuminators . Their structure is robust and reliable, ensuring an easy mounting. It is a perfect alternative that you should take into consideration.



DORADO

- Application type: Gas station lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP65
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: - 30°C ... + 45°C

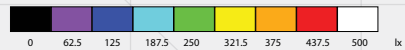
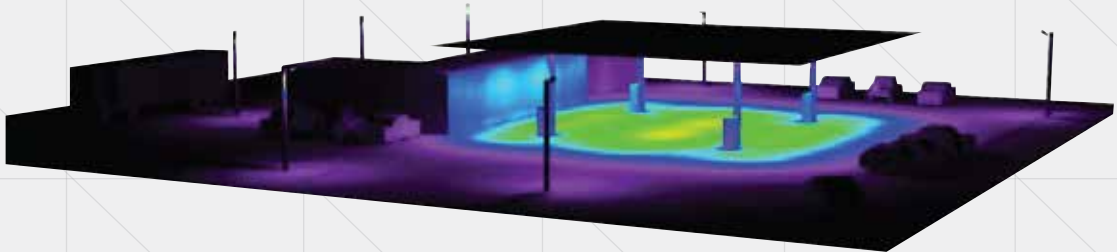
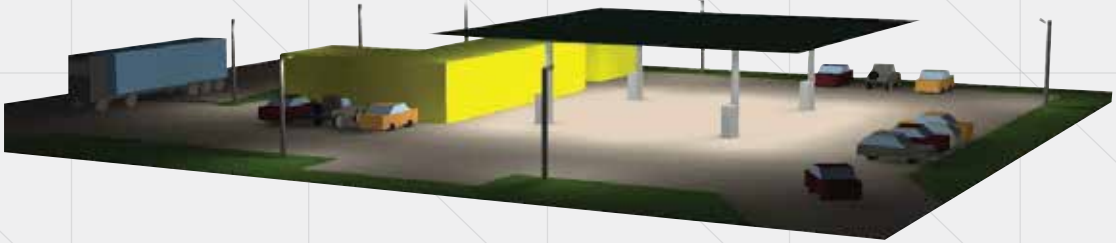


Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Distribution	Observations
RS 81160-001	115 W	transparent polycarbonate disperser	13780 lm	440 x 440 x 160 mm 7,5 kg	A	-
RS 81160-002	140 W	transparent polycarbonate disperser	14940 lm	440 x 440 x 160 mm 7,8 kg	A	-
RS 81160-003	100 W	transparent polycarbonate disperser	15570 lm	330 x 330 x 105 mm 2,9 kg	C	-
RS 81160-004	100 W	transparent polycarbonate disperser	16000 lm	345 x 345 x 114 mm 3 kg	B	-
RS 81160-006	100 W	transparent polycarbonate disperser	16000 lm	441 x 413 x 114 mm 3 kg	B	*includes mounting frame

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-2:2012
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010



DORADO

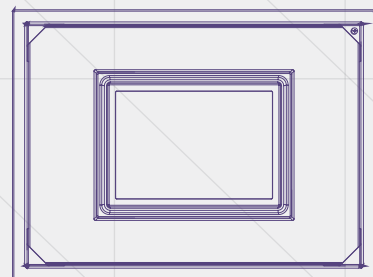
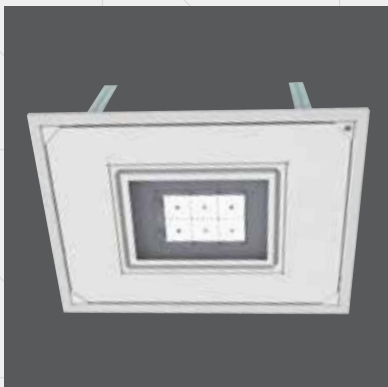


p [%]	Em [lx]	E _{min} [lx]	E _{max} [lx]	Em [lx]/E _{max}
228	53	339	0.232	0.156



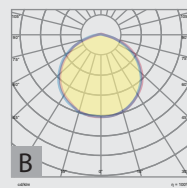
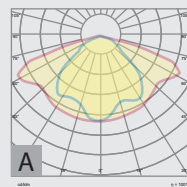
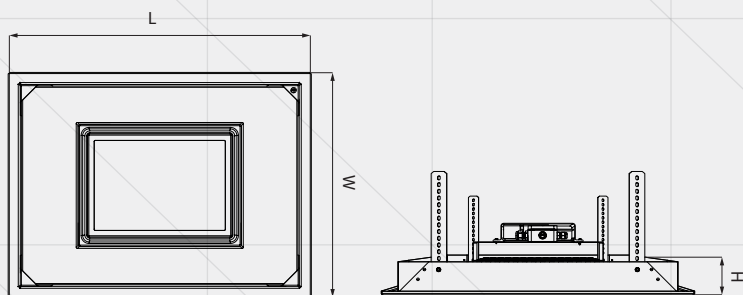
VEGA

The series **VEGA** consists of specially designed illuminators that can be fitted at a low height. Having a robust and reliable structure, the illuminator **VEGA** ensures an easy mounting, being a good alternative to the existing lighting solutions.



VEGA

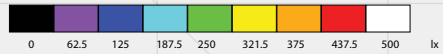
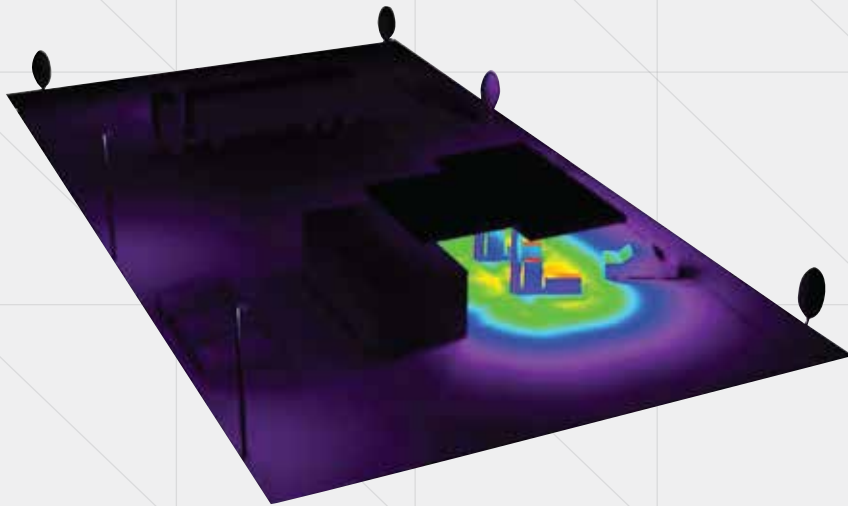
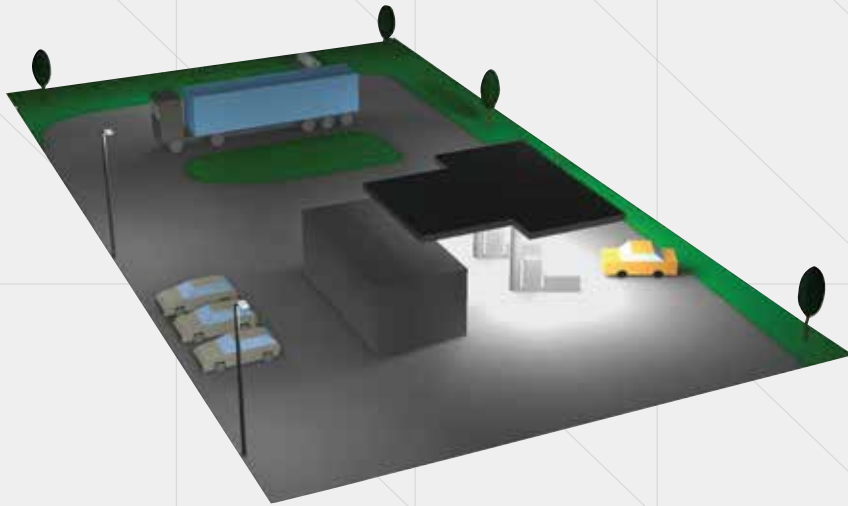
- Application type: Gas station lighting
- Color temperature: warm, neutral, cold
- Color rendering index: CRI > 80
- Protection degree: IP65
- Power supply: 230 V / 50 Hz
- Insulation class: I
- Working temperature: - 30°C ... + 45°C



Code	Nominal power	Optics	Light flow	Sizes; Mass (L x W x H);(kg)	Distribution	Observation
RS 81520-001	60 W	polycarbonate disperser	7200 lm	580 x 580 x 256 mm 4,3 kg	B	-
RS 81520-003	75 W	polycarbonate disperser	10000 lm	590 x 440 x 240 mm 4,3 kg	A	-

Applicable standards :
 SR EN 60598-1:2015+AC:2016
 SR EN 60598-2-2:2012
 SR EN 62031:2009+A1:2013+A2:2015
 SR EN 55015:2014+A1:2015
 SR EN 61000-3-2:2015
 SR EN 61000-3-3:2014
 SR EN 61547:2010





p [%]	Em [lx]	Emin [lx]	Emax [lx]	Em [lx]/Emax
332	139	425	0.419	0.328

REMOTE MANAGEMENT SYSTEM FOR STREET ILLUMINATION

The remote management system scope for street illumination, is the remote controlling and monitoring of the LED lighting devices. This system allows the reduction of electricity consumption, increasing the lighting devices life time, prompt and fast corrective maintenance activities development and easily design the preventive maintenance.

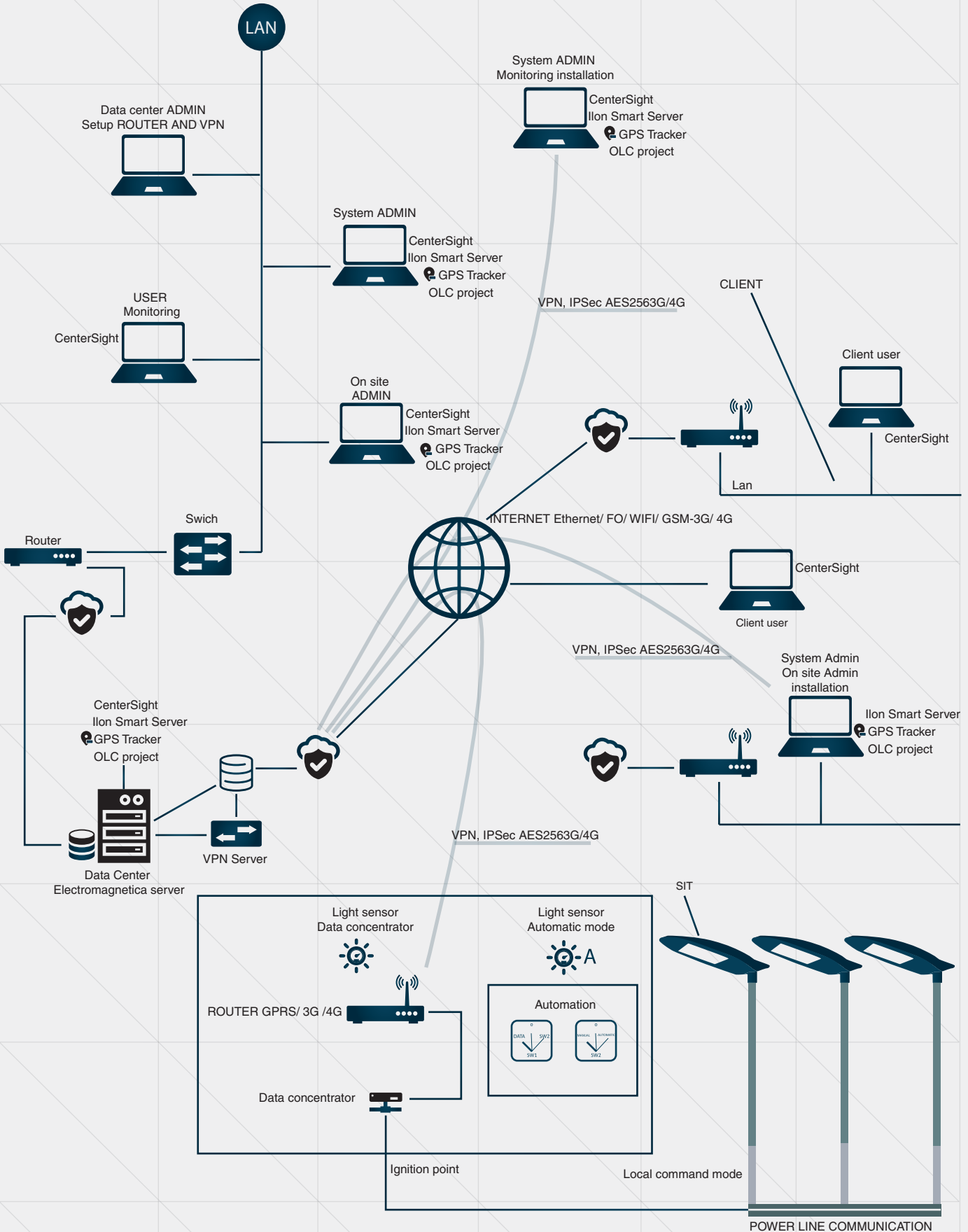
Here are the system's functions:

- Turning on/ off and dimming the light flow (level dimming) of the lighting devices, individually or on logical groups;
- Easily programming and re-programming the functioning profiles of the lighting devices (on/ off, level dimming), for different hours setting;
- Graphical display of the lighting points (lighting devices) and data concentrators on the map.

The web-based CenterSight application communicates with the data concentrators, collects and centralizes the data from data concentrators, allows the remote controlling and monitoring of the lighting devices and displays their status and parameters. The communication is made through UMTS/HSPA+ (max. 14,4/5,7Mbps, DL/UL) mobile data networks with automatic performance degrading to GPRS/EDGE, according to the radio signal quality, Tunelling IPsec, AES 256 SH1 encryption or through Ethernet networks, Cat 5 cable transmission medium.

The data communication between data concentrator and the individual control element is made through low voltage electrical circuits for powering the lighting devices, by using the LON Power Line Communication bi-directional communication technology, in the C (125...140kHz)/ B (95...125Khz) frequency band, according to CENELEC EN 50065-1 and according to ANSI CEA 709.1 / EN 14908-1 and ANSI CEA 709.3 / EN 14908-3 standards.

ELECTROMAGNETICA S.A.





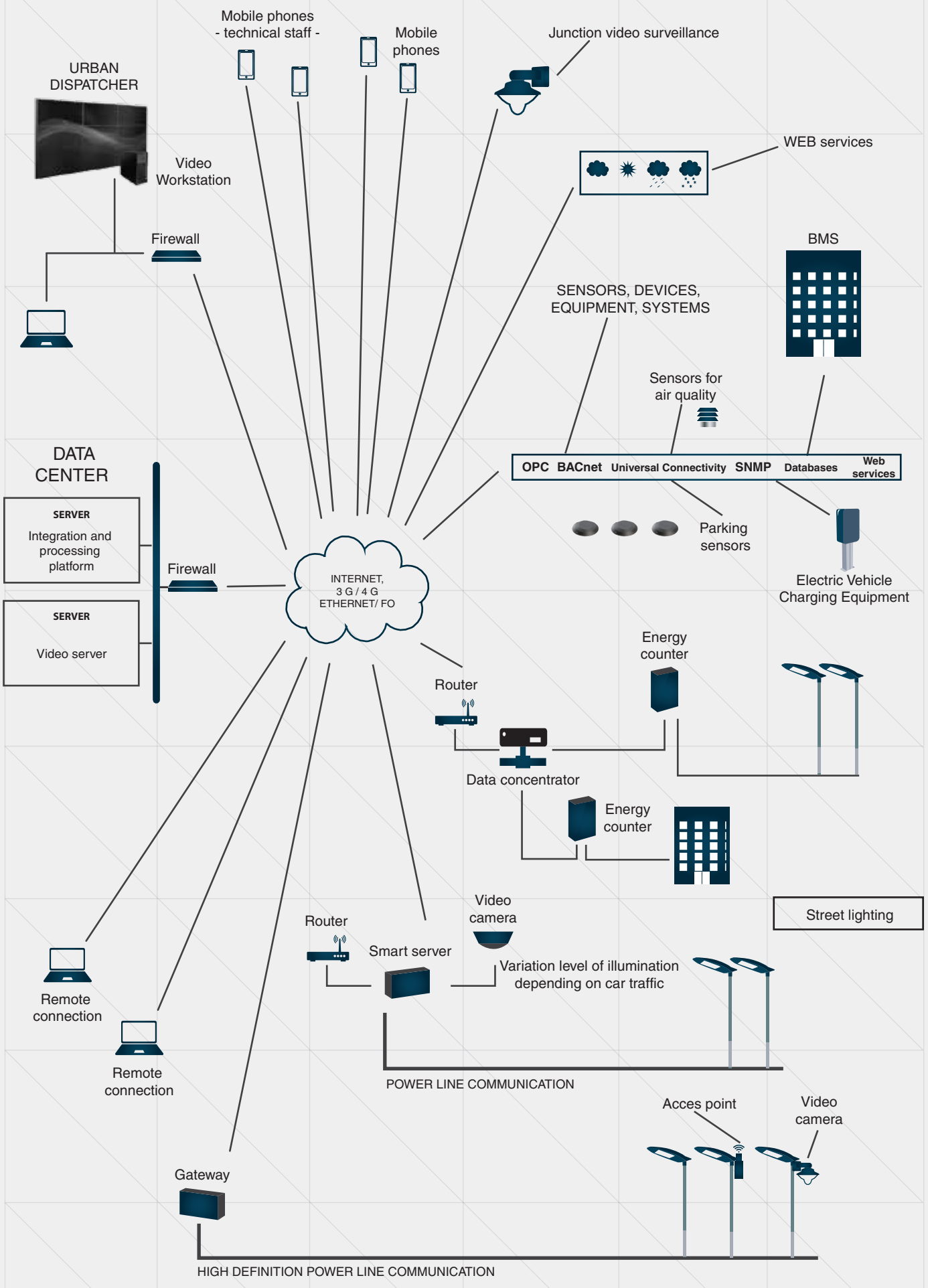
SMART CITY PLATFORM

A platform that helps knowing, analysing and anticipating events, influence factors, and variables that affect the safe and efficient operation of the systems of interest that are connected to it.

It integrates information from different systems and data from different data sources, and without altering them, provides features such as collection, visualisation, management, analysis, prediction and generation of orders.

Platform integration capabilities:

- street lighting management systems;
- energy management systems;
- electric vehicle charging systems;
- video surveillance and vehicle traffic estimation systems;
- sensor systems;
- PLC/BMS systems and equipment
- WEB services;
- any other systems with OPC interfaces;



URBAN DISPATCHER

Mobile phones - technical staff -

Mobile phones

Junction video surveillance

WEB services

Video Workstation

Firewall

SENSORS, DEVICES, EQUIPMENT, SYSTEMS

BMS

Sensors for air quality

DATA CENTER

OPC BACnet Universal Connectivity SNMP Databases Web services

SERVER

Integration and processing platform

SERVER

Video server

Firewall

INTERNET, 3 G / 4 G, ETHERNET/ FO

Parking sensors

Electric Vehicle Charging Equipment

Router

Energy counter

Data concentrator

Energy counter

Street lighting

Router

Smart server

Video camera

Variation level of illumination depending on car traffic

Remote connection

Remote connection

POWER LINE COMMUNICATION

Gateway

Acces point

Video camera

HIGH DEFINITION POWER LINE COMMUNICATION



Dimming application

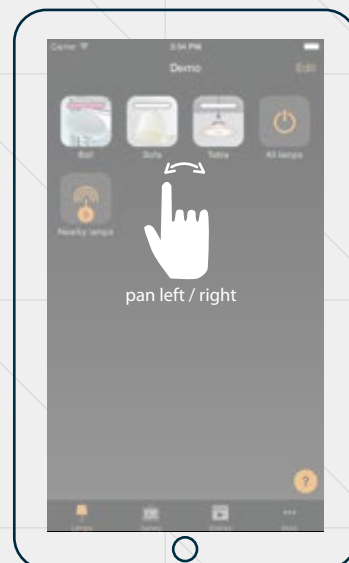
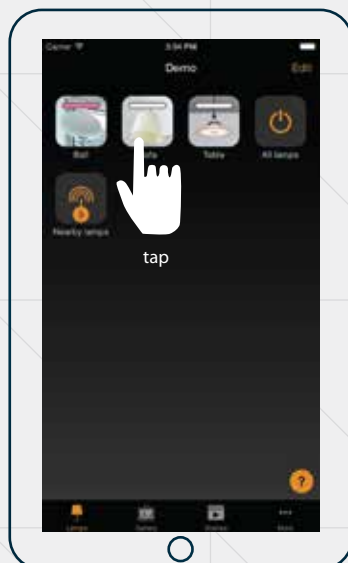
CASAMBI

Bluetooth mesh application

Communicates wirelessly through Bluetooth mesh technology, so each Bluetooth module behaves like a router. Remote control and monitoring of luminaires and display of states and their parameters are ensured.

Facilities:

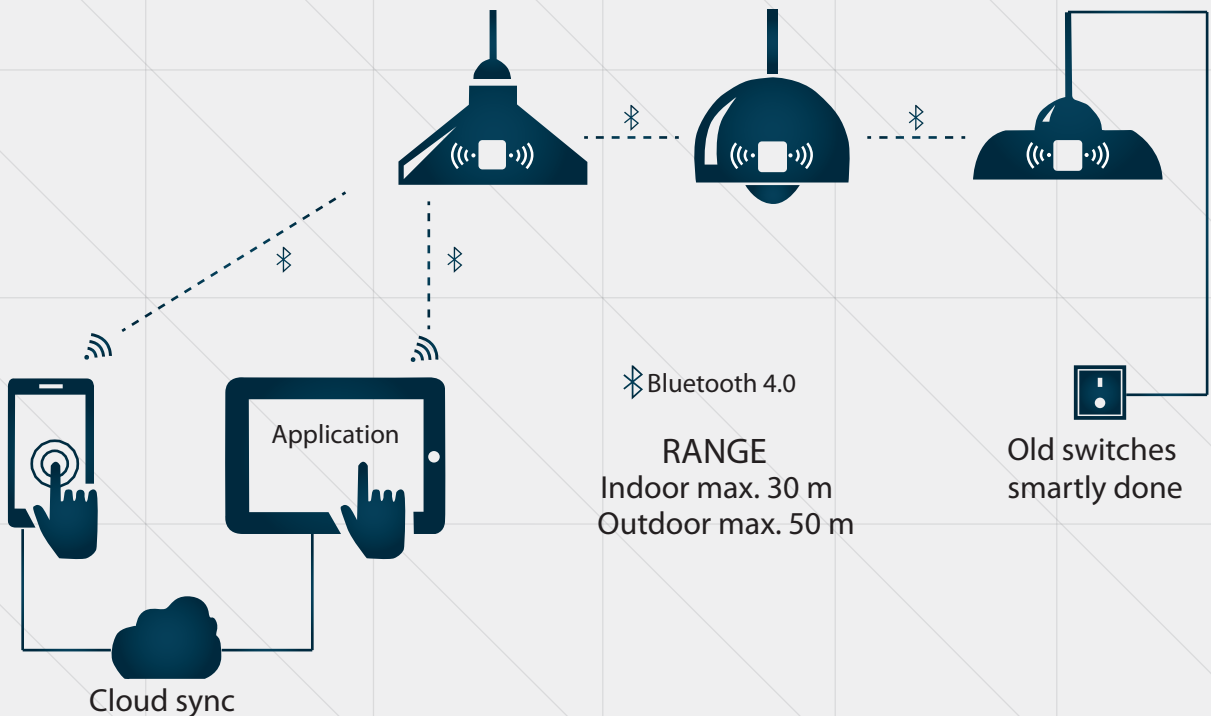
- simultaneous access of multiple predefined users connected to the application through mobile control devices (tablets or handsets equipped with Bluetooth modules). Access to the application is protected by password and user name with the possibility of restricting the rights according to the type of user;
- displaying the lighting system configuration on a tree structure, including groups of lamps with independent configurations, but also generalized control and adjustment;
- igniting / extinguishing and reducing the light output (dimming level) of the luminaires individually or by logic groups;
- easy programming and reprogramming, lighting profiles (on / off , dimming level) for different time ranges;
- easy maintenance, the application being a configurator of settings.





Facilities:

- works in online mode and in stand-alone mode if the user connection is interrupted without losing the default information;
- individually addressable and programmable and firmware updatable via an application available from the manufacturer's website;
- can be programmed individually;
- DOO (Dimmed ON/OFF) provides for the progressive increase of the ignition light flux and the progressive decrease of the extinguishing luminous flux; the function is accessible in the stand-alone mode depending on a certain number of seconds that can be programmable.





Colour aspects

A lamp with relatively white colour has two qualities:

- the apparent colour of the lamp;
- the ability of the lamp to emit the colour, a characteristic that can affect the colour appearance of the objects and people that are illuminated by the lamp.

These two attributes have to be considered separately.

The colour appearance

The appearance of the colour refers to the apparent colour (chromatic) of the beam of light. This is quantified by the temperature of the correlated colour (TCP).

The colour appearance is described in the table below.

***The luminaires in this catalog have the light flow measured in neutral, white - 4000K.**

The color appearance	Colour temperature correlated TCP K
Warm	Smaller then 3300 K
Neutral	From 3300 to 5300 K
Cold	Greater than 5300 K

Correlation between the colour rendering index and the colour classes of light source	
Colour class	Colour rendering index Ra
1A	>90
2B	80<Ra<90
2A	60<Ra<80
2B	40<Ra<60
3	20<Ra<40

The choice of the colour appearance represents a psychological, aesthetic and contextual matter. The choice depends on the level of illumination, the colours of the room and furniture, the environment and the mounting way. In warm environments, a colder appearance of the light is preferred, whereas in the colder environments a warmer appearance is favoured.

Colour rendering

For a good visual performance and a feeling of comfort and wellness, it is important that all the colours of the environment, the colour of the objects and human complexion be rendered naturally, correctly and in a way that makes people look natural.

The safety colours must always be identified as such (see ISO 3864).

To ensure an objective designation of the colour rendering properties of a lighting source the general index Ra of colour rendering was created. The maximum value of Ra is 100. This values decreases along with the decrease of the colour rendering. The lamps with a colour rendering index smaller than 80 should not be used in enclosed spaces in which people work or stay for a longer period. Exceptions may be accepted for some certain things and/or activities (for example high level lighting), but adequate measures have to be taken to ensure great rendering illumination in fixed working places that are continuously occupied where the safety colours should be acknowledged.



Degree of protection IP SR EN 60529

The first characteristic figure
Protection against solid foreign bodies

0 Unprotected

1 Protection against solid foreign bodies with a width greater than or equal to 50 mm.

2 Protected against solid foreign bodies with a width greater than or equal with 12,5 mm.

3 Protected against solid foreign bodies with a width greater than or equal with 2,5 mm.

4 Protected against solid foreign bodies with a width greater than or equal with 1 mm.

5 Protected against dust.

6 Dust - proof.

The second characteristic figure
Protection against water

0 Unprotected

1 Protected against vertical falling of water drops.

2 Protected against vertical falling of water drops when the framing is tilted up to maxim 15°.

3 Protected against rain; water finely sprayed falling from a direction which makes an angle up to 60° on either sides of the vertical.

4 Protected against water spray coming from all directions.

5 Protected against water jets.

6 Protected against powerful water jets.

7 Protected against temporary immersion in water.

8 Protected against prolonged immersion in water.



PROTECTION AGAINST ELECTRIC SHOCK

CLASS I LIGHTING DEVICE



Lighting device where the protection against electrical shock is not based only on base insulation, but includes a supplementary safety measure as some means of connecting the accessible conducting parts to a protection wire (earthing) from the fixed installation cabling, so the accessible conducting parts not becoming active if the base insulation fails.

CLASS II LIGHTING DEVICE II



Lighting device where the protection against electrical shock is not based only on base insulation, but includes supplementary safety measures, as double insulation or hardened insulation. These devices are not containing any protection device based on earthing or installation conditions .

CLASS III LIGHTING DEVICE



Lighting device where the protection against electrical shock is based on power feeding at a very low safety voltage (VLSV) and where higher voltages than the very low safety voltage (VLSV) are not generated.

NOTE – A Class III lighting de vice must not have any protection means by earthing.



IK protection level

This level classifies the protection level against mechanical impacts from outside on the cases of the electrical devices.

IK

1	Resistant against the impact of a 200 g object thrown from a height of 7.5 cm.
2	Resistant against the impact of a 200 g object thrown from a height of 10 cm.
3	Resistant against the impact of a 200 g object thrown from a height of 17.5 cm.
4	Resistant against the impact of a 200 g object thrown from a height of 25 cm.
5	Resistant against the impact of a 200 g object thrown from a height of 35 cm.
6	Resistant against the impact of a 500 g object thrown from a height of 20 cm.
7	Resistant against the impact of a 500 g object thrown from a height of 40 cm.
8	Resistant against the impact of a 1.7 kg object thrown from a height of 29.5 cm.
9	Resistant against the impact of a 5 kg object thrown from a height of 20 cm.
10	Resistant against the impact of a 5 kg object thrown from a height of 40 cm.



LED emergency lighting

As you probably know, the general objective of emergency lighting for evacuation is to guide the way out of the building, safely, on power grid failure.

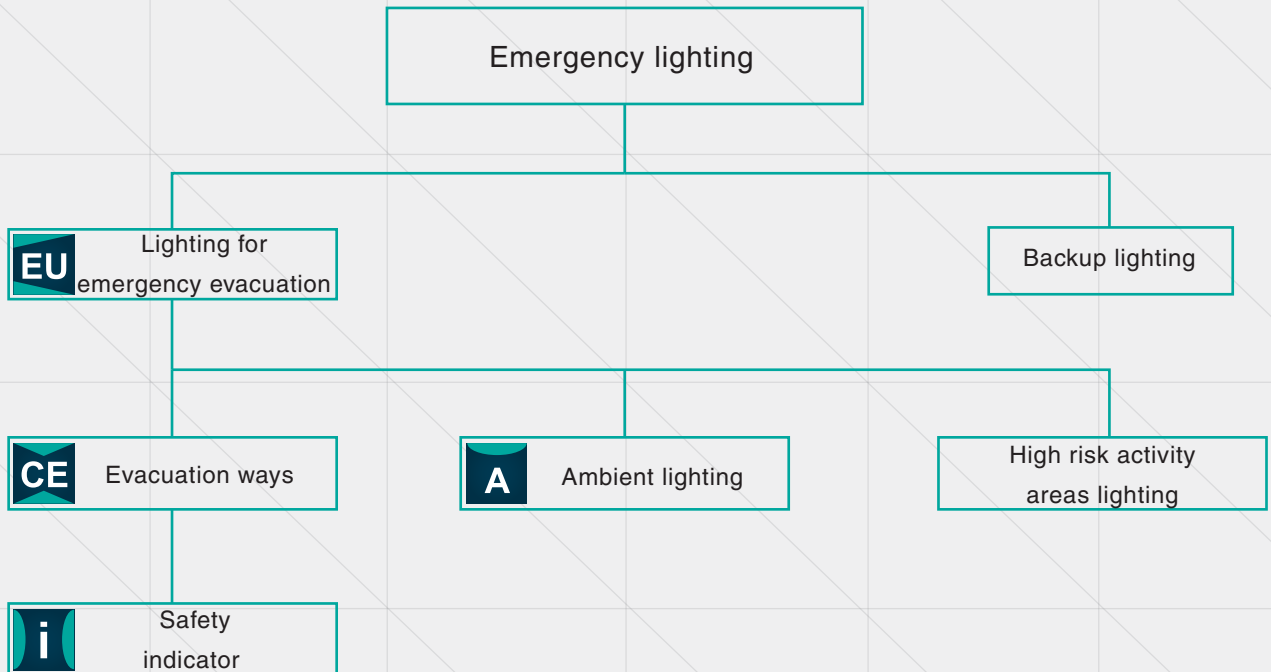
Here are the objectives of each emergency lighting type:

- The lighting of the evacuation ways – its purpose is to facilitate the exit from a building, in safe conditions. It ensures the necessary visibility to identify and use the evacuation ways, on one hand, and ensures the necessary visibility to locate and use the safety and firefighting equipment, on the other hand;
- Emergency safety lighting – its objective is to ensure the visibility for orientation and to locate and use the evacuation ways;
- The ambient lighting (anti-panic) – its role is to reduce the risk of agitation and panic, allowing the persons that have to evacuate the space to move and orientate in safe conditions. For evacuation ways or for open spaces, it is recommended that the lighting flow to be oriented downwards, in the direction of the working plan. In the same time it is recommended the illumination of any obstacle situated up to 2 meters in height from that plan.
- The illumination of the high risk activities areas - its purpose is to contribute to the safety of the persons that are working in high risk potential areas or in dangerous areas . In the same time, this kind of lighting allows the well developing of the stopping procedures for other persons safety in the same location.



Legend

Specific categories for emergency lighting





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