Sigma Street

Options:	small, medium
Colour temperature:	4000K / 3000K / 2700K
Type of optics:	cycle path LT-C1
	asymmetrical street ST-02, ME-05, LA-03, PB-01
	asymmetrical LT-64

06SG_____
Colour: Sablé 100 Noir

Small

290
173
290

Medium

390
222
390

General features

Description: LED device for the lighting of pathways and urban areas

Insulation class: class II (class I on request)

Nominal voltage: 220-240 V / 50-60 Hz

Protection level: IP66

Protection against impact: IK09 – IK10 (Post top version)

Surge protection device: integrated 10kV-10kA, Class III, equipped with LED signalling and thermal fuse for disconnection at product end of life; impulse resistance CL II 10kV CM/DM

Power factor: > 0.9

Ambient temperature Ta: -30°C +50°C

Weight: small 4 kg; medium 8 kg

Maximum exposed surface: small 0,06 m²; medium 0,13 m²

Exposed lateral surface: small 0,042 m²; medium 0,075 m²

Common mode surge protection: 10 kV

Differential mode surge protection: 10 kV

Driver: included

Lifetime driver: >100.000 h @ Ta 25°C (0,2% / 1000 h)

Marks and Certifications: CE

Classification: CUT OFF

Materials

Body: die-cast aluminium alloy UNI EN AB 47100 (copper content <1%)

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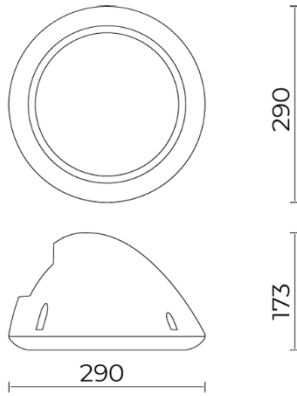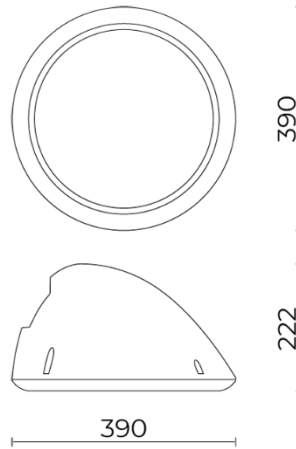
Sigma Street

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                          asymmetrical LT-64

06SG_____

Colour: Sablé 100 Noir

Screen: tempered flat glass 4 mm

Optical unit: High-transparency PMMA lenses

Seal: anti-age expanded silicone

External screws and metal components: AISI 304 stainless steel

Internal screws: chrome-plated steel

Wiring plate: galvanised steel

Finish: phosphochromatisation-treated and polyester powder-coated in 16 phases for optimal weather resistance

Colour

Sablé 100 Noir

Installation and maintenance

Installation: post top / pole side / wall

Poles diameter: Ø 60 - 76 - 102 mm

Post top fitting: kit post top (for 60 mm Ø poles or 76 mm Ø poles with reduction Ø 60 x h 90); made in die-cast aluminium alloy UNI EN AB 47100, polyester powder-coated Sablé 100 Noir.

Pole side fitting: upwards installation on pole arm (for 60-76-102 mm Ø poles) with adjustable joint (-90° +35°); made of die-cast aluminium alloy UNI EN AB 47100, polyester powder-coated Sablé 100 Noir.

Wall fitting: with adjustable joint (-90° +35°) offering ±30° rotation, made in die-cast aluminium alloy UNI EN AB 47100, polyester powder-coated Sablé 100 Noir.

Wiring: pre-wired product with an outgoing cable (L = 200 mm) and a plug and socket connector

Ø power cable: 10 ÷ 14 mm

1 x 0.75 mm^2 double-insulated pvc + pvc rigid cables

Cable gland: PG16

Optical unit substitutability: removable by unlocking grubscrews

Wiring plate substitutability: removable plate

Power supply compartment: independent from the optical system

Optical system

Provided with 4000K, 3000K and 2700K white emitters fitted via a "pick and place" system to a heat sinking metal core printed circuit board (MCPCB). Optical system composed of high-transparency poly-methyl-methacrylate lenses developed in order that each light source provides full photometry. This solution guarantees that the malfunctioning of an individual LED will not lead to less-illuminated areas, but at most will cause an overall decrease in the percentage of light over the entire area covered.

Colour rendering index (CRI): ≥ 70

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	asymmetrical LT-64

Colour: Sablé 100 Noir

Chromatic consistency (SDCM): ≤ 3

Optical unit life expectancy: >100.000 h @ Ta 25°C L90B10

Photobiological safety class: EXEMPT GROUP

ULOR: 0%

DLOR: 100%

Light intensity category: G*3 cycle path LT-C1 and asymmetrical street ST-02, ME-05, LA-03; G*4 low pole PB-01 and asymmetrical LT-64
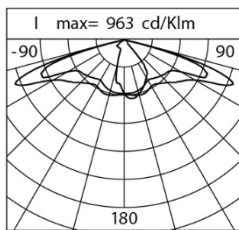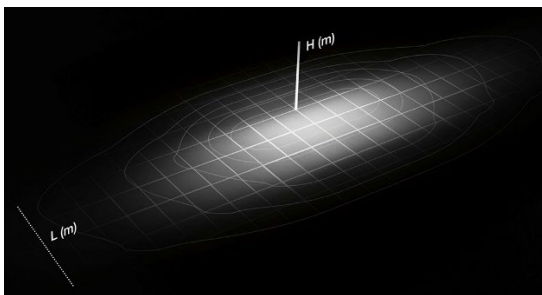

Normative framework

EN60598-1 / EN60598-2-3 / EN62471 / EN61547

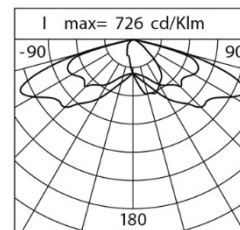**Cyple path optics and asymmetrical street optics**

LT-C1 Cycle path

L/H = 0,5 (L = Street width, H = Pole height)

I max= 963 cd/Klm

ST-02 Narrow street

L/H = 0,75 (L = Street width, H = Pole height)

I max= 726 cd/Klm
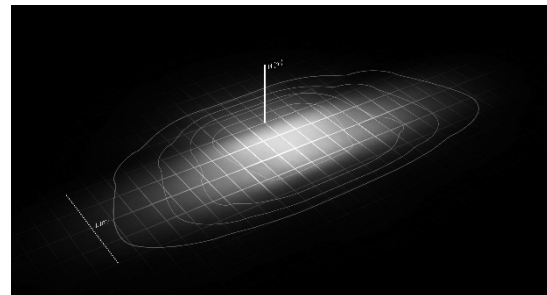
ME-05 Medium street

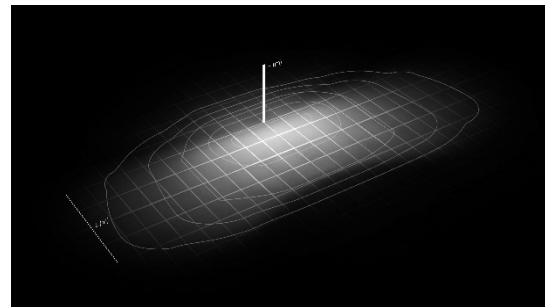L/H = 1 (L = Street width, H = Pole height)
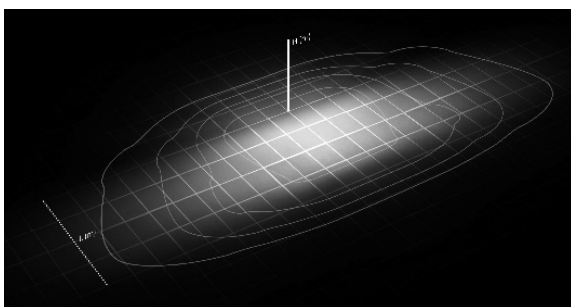
LA-03 Wide street

L/H = 1,25 (L = Street width, H = Pole height)

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Line Sheet
Rev 28.05.24

Sigma Street
Options: small, medium
Colour temperature: 4000K / 3000K / 2700K
Type of optics: cycle path LT-C1
                              asymmetrical street ST-02, ME-05, LA-03, PB-01
                              asymmetrical LT-64

06SG_____
Colour: Sablé 100 Noir

I   max= 592 cd/Klm

I   max= 692 cd/Klm
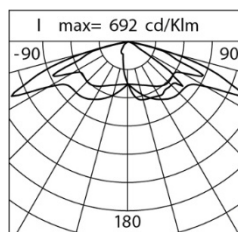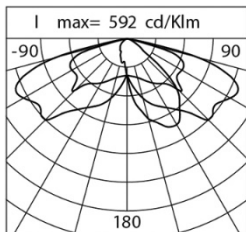
PB-01 Low pole

L/H = 2 (L = Street width, H = Pole height)

I   max= 504 cd/Klm

Asymmetrical optics

LT-64 Asymmetric beam with backlight

L/H = 2 (L = Street width, H = Pole height)

I   max= 629 cd/Klm

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Line Sheet
Rev 28.05.24

Sigma Street
Options: small, medium
Colour temperature: 4000K / 3000K / 2700K
Type of optics: cycle path LT-C1
                    asymmetrical street ST-02, ME-05, LA-03, PB-01
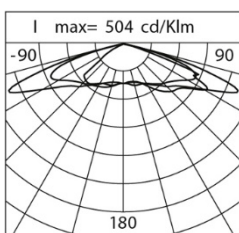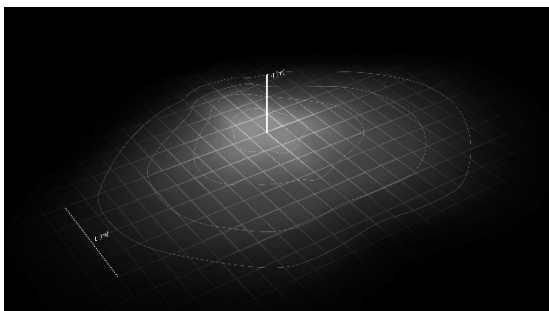   asymmetrical LT-64
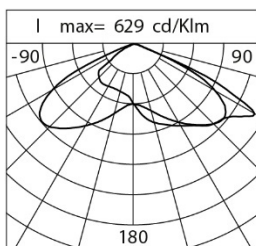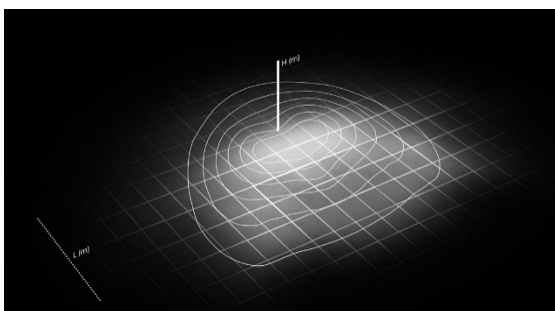
06SG_____
Colour: Sablé 100 Noir

Performance data

Options	Sources	K	φ mod [lm]	P mod [W]	η mod [lm/W]	φ app [lm]	P app [W]	η app [lm/W]
CYCLE PATH LT-C1 (only for SMALL) **ASYMMETRICAL STREET ST-02 (only for SMALL)** **ASYMMETRICAL STREET ME-05, LA-03, PB-01** **ASYMMETRICAL LT-64**								
small	LED R1	4000	2040	9	226	1755	12	146
small	LED R1	4000	2330	10,5	221	2000	13	153
small	LED R1	4000	2885	13	221	2480	16	155
small	LED R1	4000	3425	16	214	2945	19	155
small	LED R1	4000	3960	19	208	3405	22	154
small	LED R1	4000	4480	21,5	208	3850	25	154
small	LED R1	4000	4975	24,5	203	4275	28	152
small	LED R1	4000	5465	27,5	198	4700	31	151
small	LED R1	4000	5935	30,5	194	5105	34	150
small	LED R1	4000	6440	33,5	192	5540	37	149
small	LED R2	4000	6805	32	212	5855	36	162
small	LED R2	4000	7855	37,5	209	6755	42	160
small	LED R2	4000	8880	43	206	7635	47	162
small	LED R2	4000	9840	49	200	8460	53	159
small	LED R2	4000	10785	55	196	9275	60	154
small	LED R2	4000	11720	61	192	10080	65	155
small	LED R2	4000	12620	67	188	10855	72	150
medium	LED R2	4000	6805	32	212	5855	36	162
medium	LED R2	4000	7855	37,5	209	6755	42	160
medium	LED R2	4000	8880	43	206	7635	47	162
medium	LED R2	4000	9840	49	200	8460	53	159
medium	LED R2	4000	10785	55	196	9275	60	154
medium	LED R2	4000	11720	61	192	10080	65	155
medium	LED R2	4000	12620	67	188	10855	72	150
medium	LED R3	4000	13255	65	203	11400	71	160
medium	LED R3	4000	14660	73,5	199	12610	80	157
medium	LED R3	4000	16045	82	195	13800	89	155
medium	LED R3	4000	17435	91	191	14995	98	153
medium	LED R3	4000	18775	100	187	16150	108	149

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Line Sheet
Rev 28.05.24

Sigma Street
Options: small, medium
Colour temperature: 4000K / 3000K / 2700K
Type of optics: cycle path LT-C1
asymmetrical street ST-02, ME-05, LA-03, PB-01
asymmetrical LT-64

06SG_____
Colour: Sablé 100 Noir

Options	Sources	K	φ mod [lm]	P mod [W]	η mod [lm/W]	φ app [lm]	P app [W]	η app [lm/W]
small	LED R1	3000	1940	9	215	1670	12	139
small	LED R1	3000	2210	10,5	210	1900	13	146
small	LED R1	3000	2740	13	210	2355	16	147
small	LED R1	3000	3255	16	203	2800	19	147
small	LED R1	3000	3760	19	197	3235	22	147
small	LED R1	3000	4255	21,5	197	3660	25	146
small	LED R1	3000	4725	24,5	192	4065	28	145
small	LED R1	3000	5190	27,5	188	4465	31	144
small	LED R1	3000	5640	30,5	184	4850	34	142
small	LED R1	3000	6095	33,5	181	5240	37	141
small	LED R2	3000	6465	32	202	5560	36	154
small	LED R2	3000	7465	37,5	199	6420	42	152
small	LED R2	3000	8435	43	196	7255	47	154
small	LED R2	3000	9345	49	190	8040	53	151
small	LED R2	3000	10245	55	186	8810	60	146
small	LED R2	3000	11135	61	182	9575	65	147
small	LED R2	3000	11990	67	178	10310	72	143
medium	LED R2	3000	6465	32	202	5560	36	154
medium	LED R2	3000	7465	37,5	199	6420	42	152
medium	LED R2	3000	8435	43	196	7255	47	154
medium	LED R2	3000	9345	49	190	8040	53	151
medium	LED R2	3000	10245	55	186	8810	60	146
medium	LED R2	3000	11135	61	182	9575	65	147
medium	LED R2	3000	11990	67	178	10310	72	143
medium	LED R3	3000	12590	65	193	10830	71	152
medium	LED R3	3000	13925	73,5	189	11980	80	149
medium	LED R3	3000	15240	82	185	13110	89	147
medium	LED R3	3000	16560	91	181	14245	98	145
medium	LED R3	3000	17835	100	178	15340	108	142

CYCLE PATH LT-C1 (only for SMALL)
ASYMMETRICAL STREET ST-02 (only for SMALL)
ASYMMETRICAL STREET ME-05, LA-03, PB-01
ASYMMETRICAL LT-64

Options	Sources	K	φ mod [lm]	P mod [W]	η mod [lm/W]	φ app [lm]	P app [W]	η app [lm/W]
small	LED R1	2700	1765	9	196	1510	12	125
small	LED R1	2700	2015	10,5	191	1720	13	132

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Sigma Street

Options: small, medium
Colour temperature: 4000K / 3000K / 2700K
Type of optics: cycle path LT-C1
asymmetrical street ST-02, ME-05, LA-03, PB-01
asymmetrical LT-64

06SG_____
Colour: Sablé 100 Noir

small	LED R1	2700	2495	13	191	2135	16	133
small	LED R1	2700	2960	16	185	2535	19	133
small	LED R1	2700	3420	19	180	2930	22	133
small	LED R1	2700	3870	21,5	180	3315	25	132
small	LED R1	2700	4300	24,5	175	3680	28	131
small	LED R1	2700	4720	27,5	171	4040	31	130
small	LED R1	2700	5130	30,5	168	4390	34	129
small	LED R1	2700	5565	33,5	166	4745	37	128
small	LED R2	2700	5880	32	183	5035	36	139
small	LED R2	2700	6785	37,5	180	5810	42	138
small	LED R2	2700	7670	43	178	6570	47	139
small	LED R2	2700	8500	49	173	7275	53	137
small	LED R2	2700	9315	55	169	7975	60	132
small	LED R2	2700	10125	61	165	8670	65	133
small	LED R2	2700	10900	67	162	9335	72	129
medium	LED R2	2700	5880	32	183	5035	36	139
medium	LED R2	2700	6785	37,5	180	5810	42	138
medium	LED R2	2700	7670	43	178	6570	47	139
medium	LED R2	2700	8500	49	173	7275	53	137
medium	LED R2	2700	9315	55	169	7975	60	132
medium	LED R2	2700	10125	61	165	8670	65	133
medium	LED R2	2700	10900	67	162	9335	72	129
medium	LED R3	2700	11450	65	176	9805	71	138
medium	LED R3	2700	12665	73,5	172	10845	80	135
medium	LED R3	2700	13860	82	169	11865	89	133
medium	LED R3	2700	15060	91	165	12895	98	131
medium	LED R3	2700	16215	100	162	13885	108	128

Data of the lighting source flux and efficiency refer to the LED module, without lenses. In case you need data of the LED module complete with lenses, please multiply the mentioned data by 0.9 factor.
Values indicated in this technical sheet are to be considered nominal values with a tolerance of +/-7%.

Legend

K = Colour temperature

φ mod [lm] = Source flux φ app [lm] = Unit flux

P mod [W] = Source power   P app [W] = Unit power

η mod [lm/W] = Source efficiency η app [lm/W] = Unit efficiency

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asymmetrical LT-64

06SG_____
Colour: Sablé 100 Noir

Flux regulation

	On request
Self-learning virtual midnight	X
Constant Light Output (CLO)	X
1-10V Regulation	X
DALI Regulation	X
Main voltage variation	X
Power line telemanagement (PLC)	X
Wireless telemanagement	X
Motion / brightness detectors	X

Flux regulation

Custom programmable virtual midnight self-learning (code ending in _HM4)

Custom programmable versions available on request; via the virtual midnight algorithm it is possible to obtain a precise percentage reduction of the luminous flux and therefore of the power consumption of the unit. The system can be programmed to function with DALI protocol.

Constant Lumen Output CLO (on request)

The aim of the CLO is to compensate the natural deterioration of the luminous flux of the LEDs. Through a gradual pre-programmed increase in current, the luminous flux is maintained over time and in any case never drops below pre-set limits.

Group Management: flux adjustment of 1-10V (on request) and DALI (on request)

1-10V — This is an analogical control system based on the distribution of a voltage signal of between 1 and 10 Volts, where 1V corresponds to the minimum light intensity value and 10V corresponds to the maximum value.

DALI — This is a digital control system where every device is assigned a unique address that allows individual light points to be controlled and control groups to be created.
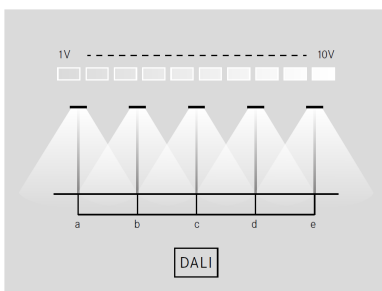
Remote Management (on request)

PLC (Power Line Communication) and wireless remote control systems allow remote luminous flux dimming managing, system monitoring and the display of consumption statistics and faults. In addition to reducing consumption and running costs, remote

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Line Sheet   **Sigma Street**   **06SG_____**
Rev 28.05.24   Options: small, medium   Colour: Sablé 100 Noir
   Colour temperature: 4000K / 3000K / 2700K
                                  Type of optics: cycle path LT-C1
                                                       asymmetrical street ST-02, ME-05, LA-03, PB-01
                                                       asymmetrical LT-64

management systems provide an infrastructure that can be used to host other local systems or services that are compatible with the latest smart lighting projects.

PLC — Via PLC, without additional wiring in the system, it is possible to communicate with every single light point. The system allows each individual unit to be monitored remotely and consumption profiles to be modified.
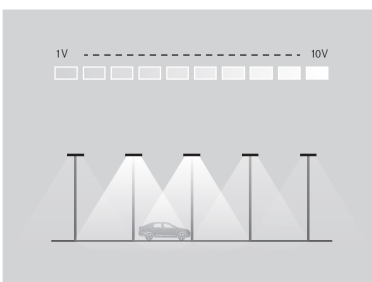
Wireless — The wireless remote management system allows simple remote management of units, without any constraint due to the pre-existing system. Wireless technology allows each individual unit to be monitored and consumption profiles to be modified.
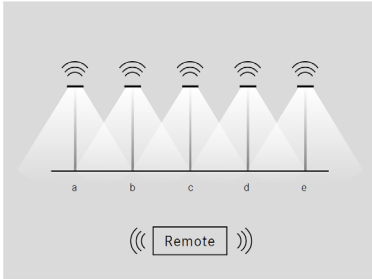
Sensors (on request)

Motion and presence sensors — The use of motion sensors allows for the detection of passing pedestrians or vehicles and the regulation of the flux, thus guaranteeing an appropriate level of safety. If no moving pedestrians or vehicles are detected, flux is reduced, thus allowing significant reductions in consumption and cost. The type of sensor and the method of installation must be defined according to the application context and the size and shape of the space in question. The system control can be centralised through communication with the 1-10V, DALI or Wireless systems. Sensors must be mounted on the exterior of the product.

Light sensor — Cariboni products with DALI, 1-10V or Wireless adjustment are compatible with light sensors that adjust light emission based on the level of environmental light. This solution avoids unnecessary waste and guarantees rapid return on investment.

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