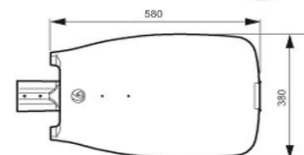
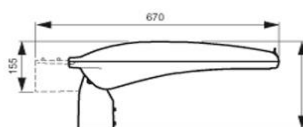
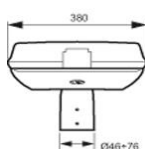




CHALLENGE CITY



GENERAL SPECIFICATIONS	
Type	Streetlights
Applications	Suitable for large and high-speed roadways.
SAFEWAY® OPTICAL SYSTEM	
SAFEWAY® - AB1	Mixed refraction/ reflection optic system. for carriageway with a width greater than 0.85 times the height of installation. Suitable for large and high-speed roadways.
SAFEWAY® - B1	Mixed refraction/ reflection optic system. for carriageway with a width equal to or less than 0.85 times the height of installation. Suitable for urban roads, car parks and bike paths.
SAFEWAY® - C	Refraction optic system. for carriageway with a width equal to or less than 0.7 times the height of installation. suitable for narrow roads.
SAFEWAY® - S	Refraction optic system. for up to M3 Category carriageways, with high interdistance between poles and with a width equal to or less than 0.6 times the height of installation. suitable for narrow roads.
SAFEWAY® - V	Refraction optic system. for up to M3 Category carriageways, with high interdistance between poles and with a width equal to or less than 0.75 times the height of installation. The device has an emission behind the pole. Ideal for medium width roads.
TECHNICAL SPECIFICATIONS	
Insulation class	CL I/CL II
Overall protection degree	IP66
Protection degree against external impacts	IK09
Color temperature	4000K (optional: 3000/5000K)
Color rendering index (CRI)	>70
Certifications	CE - ENEC
ENEC approval	The laboratory tests were conducted at an ambient temperature of + 35°C and the endurance test at + 45°C.
Construction standards	EN 60598-1, EN 60598-2-3
Class of photobiological risk	Risk group exempt from this according to EN 62471
POWER SUPPLY SPECIFICATIONS	
Power supply	220 - 240V / 50 - 60 Hz VAC (optional: 120-277V / 50-60 Hz VAC).
Driver	high efficiency electronic power source and duration, intended for external use.
Power correction factor	> 0,9
Knife switch	included, to interrupt the power supply at the device's opening.
Cable plate	complete with easily replaceable electronic unit with "Plug and Play" anti-inversion system.
Power supply cable access	through a PG 16 cable gland (IP68).
Protection against surges	CL I: up to 10kV, both in common and differential mode. CL II: up to 10kV in common mode, 6kV in differential mode.
MAINTAINED AVERAGE LUMINOUS FLUX - Ta 35°C	
L80	> 100000 hours
MATERIALS AND FITTINGS	
LED	Single and Multichip LED technology on a pressed aluminum circuit, highly heat dissipating MCPCB (Metal Core Printed Circuit Board).
Body and cover	In die cast aluminum (EN AB 47100).
Upper cover	a finitura liscia ad alto contenuto estetico, con sistema di asportazione del calore interno all'apparecchio.
Automatic anti-closing mechanism	Included, to prevent accidental closure of the cover during assembly and maintenance.
Pole installation system	In die cast aluminum.
Paint	Silver-colored polyester powders (RAL 9006).
Glass	Extra-clear tempered glass, 4mm thick.
Pressure compensation filter	Teflon.
Gaskets	Anti-aging rubber.
Closure clip	In stainless steel.

CHALLENGE CITY - AB1 OPTIC

SAFEWAY® OPTICAL SYSTEM	
SAFEWAY® - AB1	Mixed refraction/ reflection optic system.
	for carriageway with a width greater than 0.85 times the height of installation.
	Suitable for large and high-speed roadways.

DRIVER*	CODE CL I	DRIVER*	CODE CL II	DESCRIPTION	W (LED + DRIVER)	EFFICIENCY Lm/W	NOMINAL FLUX (Lumen)	USEFUL OUTPUT FLUX (Lumen)	COLOR TEMPERATURE °K	Ta Max °C	GROSS WEIGHT (KG)	VOL (m ³)
P	45033	P	45533	18 LED 530mA	29	130	4490	3770	4000	35	10,60	0,0514
P	45034	P	45534	18 LED 700mA	39	124	5770	4850	4000	35	10,60	0,0514
P	45050	P	45550	24 LED 700mA	52	124	7650	6430	4000	35	10,85	0,0514

Singlechip LED technology (2mmq) - Color temperature 4000K - CRI>70

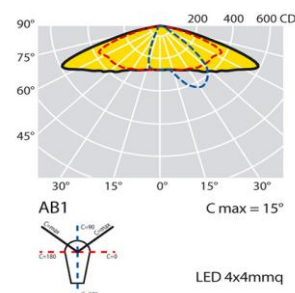
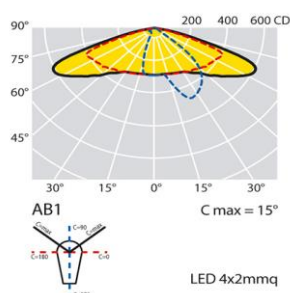
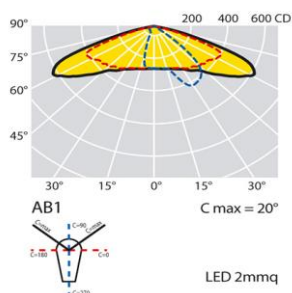
P	45333	P	45833	6 LED 530mA	39	135	6260	5260	4000	35	10,45	0,0514
P	45334	P	45834	6 LED 700mA	52	130	8040	6760	4000	35	10,45	0,0514
P	45365	P	45865	9 LED 530mA	58	134	9220	7750	4000	35	10,50	0,0514
P	45366	P	45866	9 LED 700mA	77	128	11730	9860	4000	35	10,50	0,0514
P	45381	P	45881	12 LED 530mA	78	132	12260	10300	4000	35	10,60	0,0514
P	45382	P	45882	12 LED 700mA	100	127	15160	12740	4000	35	10,60	0,0514
P	45317	P	45817	16 LED 530mA	100	131	15550	13070	4000	35	10,75	0,0514
P	45318	P	45818	16 LED 650mA	126	124	18340	15660	4000	35	10,75	0,0514

Multichip LED technology (4x2mmq) - Color temperature 4000K - CRI>70

P	45435	P	45935	6 LED 800mA	58	141	9730	8180	4000	35	10,45	0,0514
P	45436	P	45936	6 LED 1000mA	73	134	11600	9750	4000	35	10,45	0,0514
P	45467	P	45967	9 LED 800mA	85	142	14400	12100	4000	35	10,50	0,0514
P	45468	P	45968	9 LED 1000mA	109	131	17010	14300	4000	35	10,50	0,0514
P	45477	P	45983	12 LED 700mA	99	143	16840	14150	4000	35	10,60	0,0514
P	45478	P	45984	12 LED 1000mA	144	128	21900	18400	4000	35	10,60	0,0514
P	45419	P	45919	16 LED 700mA	130	131	20290	17050	4000	35	10,75	0,0514
P	45420	P	45920	16 LED 800mA	150	137	24510	20600	4000	35	10,75	0,0514

Multichip LED technology (4x4mmq) - Color temperature 4000K - CRI>70

PHOTOMETRIC DATA



Photometric data conforms to UNI EN 13032-1 e IES LM 79-08

MOUNTING SPECIFICATIONS	
Max weight	9,30 kg
Wind exposed surface with tilt 0°	lateral: 0,064 m ² front: 0,061 m ²
Top entry installation	Ø 46 mm ÷ 76 mm, tilt from 0° to +20° with constant pitch of 2.5°
Side entry installation	Ø 46 mm ÷ 76 mm, tilt 0°
Installation height	Fixing device pole to bring the tilt luminaire at 0° in case of side entry installation with tilt of 5°, 10°, 15° and 20° 4 ÷ 16 m

The flux values given in this data sheet are to be considered with a tolerance of +/- 10%.

The wattages values given in this data sheet are to be considered with a tolerance of +/- 5%.

CHALLENGE CITY - B1 OPTIC

SAFEWAY® OPTICAL SYSTEM	
SAFEWAY® - B1	Mixed refraction/ reflection optic system.
	for carriageway with a width equal to or less than 0.85 times the height of installation.
	Suitable for urban roads, car parks and bike paths.

DRIVER*	CODE CL I	DRIVER*	CODE CL II	DESCRIPTION	W (LED + DRIVER)	EFFICIENCY Lm/W	NOMINAL FLUX (Lumen)	USEFUL OUTPUT FLUX (Lumen)	COLOR TEMPERATURE °K	Ta Max °C	GROSS WEIGHT (KG)	VOL (m ³)
P	45041	P	45541	18 LED 530mA	29	130	4490	3770	4000	35	10,60	0,0514
P	45042	P	45542	18 LED 700mA	39	124	5770	4850	4000	35	10,60	0,0514
P	45058	P	45558	24 LED 700mA	52	124	7650	6430	4000	35	10,85	0,0514

Singlechip LED technology (2mmq) - Color temperature 4000K - CRI>70

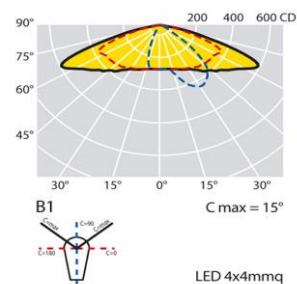
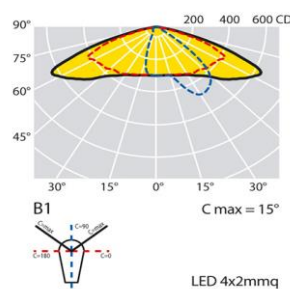
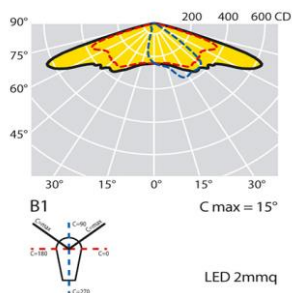
P	45341	P	45841	6 LED 530mA	39	135	6260	5260	4000	35	10,45	0,0514
P	45342	P	45842	6 LED 700mA	52	130	8040	6760	4000	35	10,45	0,0514
P	45373	P	45873	9 LED 530mA	58	134	9220	7750	4000	35	10,50	0,0514
P	45374	P	45874	9 LED 700mA	77	128	11730	9860	4000	35	10,50	0,0514
P	45389	P	45889	12 LED 530mA	78	132	12260	10300	4000	35	10,60	0,0514
P	45390	P	45890	12 LED 700mA	100	127	15160	12740	4000	35	10,60	0,0514
P	45325	P	45825	16 LED 530mA	100	131	15550	13070	4000	35	10,75	0,0514
P	45326	P	45826	16 LED 650mA	126	124	18340	15660	4000	35	10,75	0,0514

Multichip LED technology (4x2mmq) - Color temperature 4000K - CRI>70

P	45443	P	45943	6 LED 800mA	58	141	9730	8180	4000	35	10,45	0,0514
P	45444	P	45944	6 LED 1000mA	73	134	11600	9750	4000	35	10,45	0,0514
P	45475	P	45975	9 LED 800mA	85	142	14400	12100	4000	35	10,50	0,0514
P	45476	P	45976	9 LED 1000mA	109	131	17010	14300	4000	35	10,50	0,0514
P	45491	P	45991	12 LED 700mA	99	143	16840	14150	4000	35	10,60	0,0514
P	45492	P	45992	12 LED 1000mA	144	128	21900	18400	4000	35	10,60	0,0514
P	45427	P	45927	16 LED 700mA	130	131	20290	17050	4000	35	10,75	0,0514
P	45428	P	45928	16 LED 800mA	150	137	24510	20600	4000	35	10,75	0,0514

Multichip LED technology (4x4mmq) - Color temperature 4000K - CRI>70

PHOTOMETRIC DATA



Photometric data conforms to UNI EN 13032-1 e IES LM 79-08

MOUNTING SPECIFICATIONS	
Max weight	9,30 kg
Wind exposed surface with tilt 0°	lateral: 0,064 m ² front: 0,061 m ²
Top entry installation	Ø 46 mm ÷ 76 mm, tilt from 0° to +20° with constant pitch of 2.5°
Side entry installation	Ø 46 mm ÷ 76 mm, tilt 0°
Installation height	Fixing device pole to bring the tilt luminaire at 0° in case of side entry installation with tilt of 5°, 10°, 15° and 20° 4 ÷ 16 m

The flux values given in this data sheet are to be considered with a tolerance of +/- 10%.

The wattages values given in this data sheet are to be considered with a tolerance of +/- 5%.

CHALLENGE CITY - C OPTIC

SAFEWAY® OPTICAL SYSTEM	
SAFEWAY® - C	Refraction optic system. for carriageway with a width equal to or less than 0.7 times the height of installation. suitable for narrow roads.

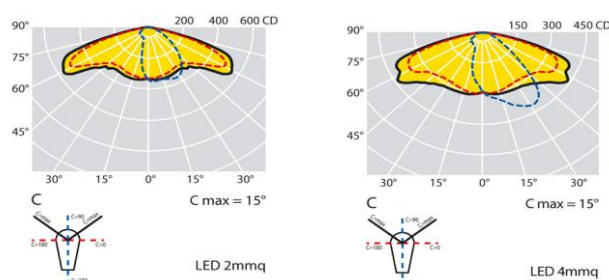
DRIVER*	CODE CL I	DRIVER*	CODE CL II	DESCRIPTION	W (LED + DRIVER)	EFFICIENCY Lm/W	NOMINAL FLUX (Lumen)	USEFUL OUTPUT FLUX (Lumen)	COLOR TEMPERATURE °K	Ta Max °C	GROSS WEIGHT (KG)	VOL (m³)
P	47208	P	47248	24 LED 530mA	40	127	6050	5080	4000	35	10,00	0,0514
P	47210	P	47250	24 LED 700mA	52	123	7640	6420	4000	35	10,00	0,0514
P	47214	P	47254	36 LED 530mA	58	127	8750	7350	4000	35	10,10	0,0514
P	47216	P	47256	36 LED 700mA	76	122	11070	9300	4000	35	10,10	0,0514

Singlechip LED technology (2mmq) - Color temperature 4000K - CRI>70

P	47215	P	47255	36 LED 800mA	90	128	12880	11500	4000	35	10,10	0,0514
P	47217	P	47257	36 LED1000mA	115	120	15460	13800	4000	35	10,10	0,0514

Singlechip LED technology (4mmq) - Color temperature 4000K - CRI>70

PHOTOMETRIC DATA



Photometric data conforms to UNI EN 13032-1 e IES LM 79-08

MOUNTING SPECIFICATIONS	
Max weight	9,30 kg
Wind exposed surface with tilt 0°	lateral: 0,064 m² front: 0,061 m²
Top entry installation	Ø 46 mm ÷ 76 mm, tilt from 0° to +20° with constant pitch of 2.5°
Side entry installation	Ø 46 mm ÷ 76 mm, tilt 0° Fixing device pole to bring the tilt luminaire at 0° in case of side entry installation with tilt of 5°, 10°, 15° and 20°
Installation height	4 ÷ 16 m

The flux values given in this data sheet are to be considered with a tolerance of +/- 10%.
The wattages values given in this data sheet are to be considered with a tolerance of +/- 5%.



CHALLENGE CITY - S OPTIC

SAFEWAY® OPTICAL SYSTEM	
SAFEWAY® - S	Refraction optic system.
	for up to M3 Category carriageways, with high interdistance between poles and with a width equal to or less than 0.6 times the height of installation.
	suitable for narrow roads.

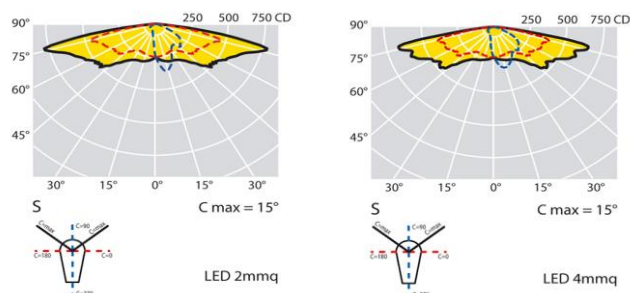
DRIVER*	CODE CL I	DRIVER*	CODE CL II	DESCRIPTION	W (LED + DRIVER)	EFFICIENCY Lm/W	NOMINAL FLUX (Lumen)	USEFUL OUTPUT FLUX (Lumen)	COLOR TEMPERATURE °K	Ta Max °C	GROSS WEIGHT (KG)	VOL (m³)
P	47800	P	47801	24 LED 530mA	40	122	6050	4880	4000	35	10,00	0,0514
P	47802	P	47803	24 LED 700mA	52	118	7640	6160	4000	35	10,00	0,0514
P	47804	P	47805	36 LED 530mA	58	122	8750	7050	4000	35	10,10	0,0514
P	47806	P	47807	36 LED 700mA	76	118	11070	8930	4000	35	10,10	0,0514

Singlechip LED technology (2mmq) - Color temperature 4000K - CRI>70

P	47810	P	47811	36 LED 800mA	90	123	12880	11050	4000	35	10,10	0,0514
P	47812	P	47813	36 LED1000mA	115	115	15460	13250	4000	35	10,10	0,0514

Singlechip LED technology (4mmq) - Color temperature 4000K - CRI>70

PHOTOMETRIC DATA



Photometric data conforms to UNI EN 13032-1 e IES LM 79-08

MOUNTING SPECIFICATIONS	
Max weight	9,30 kg
Wind exposed surface with tilt 0°	lateral: 0,064 m ² front: 0,061 m ²
Top entry installation	Ø 46 mm ÷ 76 mm, tilt from 0° to +20° with constant pitch of 2.5°
Side entry installation	Ø 46 mm ÷ 76 mm, tilt 0°
Installation height	Fixing device pole to bring the tilt luminaire at 0° in case of side entry installation with tilt of 5°, 10°, 15° and 20° 4 ÷ 16 m

The flux values given in this data sheet are to be considered with a tolerance of +/- 10%.

The wattages values given in this data sheet are to be considered with a tolerance of +/- 5%.



CHALLENGE CITY - V OPTIC

SAFEWAY® OPTICAL SYSTEM	
SAFEWAY® - V	Refraction optic system. for up to M3 Category carriageways, with high interdistance between poles and with a width equal to or less than 0.75 times the height of installation. The device has an emission behind the pole. Ideal for medium width roads.

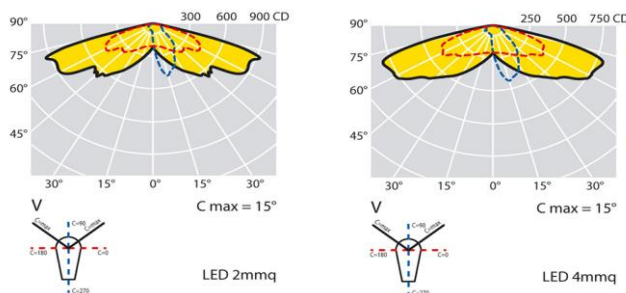
DRIVER*	CODE CL I	DRIVER*	CODE CL II	DESCRIPTION	W (LED + DRIVER)	EFFICIENCY Lm/W	NOMINAL FLUX (Lumen)	USEFUL OUTPUT FLUX (Lumen)	COLOR TEMPERATURE °K	Ta Max °C	GROSS WEIGHT (KG)	VOL (m³)
P	47820	P	47821	24 LED 530mA	40	130	6050	5180	4000	35	10,00	0,0514
P	47822	P	47823	24 LED 700mA	52	126	7640	6550	4000	35	10,00	0,0514
P	47824	P	47825	36 LED 530mA	58	129	8750	7500	4000	35	10,10	0,0514
P	47826	P	47827	36 LED 700mA	76	125	11070	9500	4000	35	10,10	0,0514

Singlechip LED technology (2mmq) - Color temperature 4000K - CRI>70

P	47830	P	47831	36 LED 800mA	90	130	12880	11730	4000	35	10,10	0,0514
P	47832	P	47833	36 LED 1000mA	115	122	15460	14080	4000	35	10,10	0,0514

Singlechip LED technology (4mmq) - Color temperature 4000K - CRI>70

PHOTOMETRIC DATA



Photometric data conforms to UNI EN 13032-1 e IES LM 79-08

MOUNTING SPECIFICATIONS

Max weight	9,30 kg	
Wind exposed surface with tilt 0°	lateral: 0,064 m²	front: 0,061 m²
Top entry installation	Ø 46 mm ÷ 76 mm, tilt from 0° to +20° with constant pitch of 2.5°	
Side entry installation	Ø 46 mm ÷ 76 mm, tilt 0°	
Installation height	Fixing device pole to bring the tilt luminaire at 0° in case of side entry installation with tilt of 5°, 10°, 15° and 20° 4 ÷ 16 m	

The flux values given in this data sheet are to be considered with a tolerance of +/- 10%.

The wattages values given in this data sheet are to be considered with a tolerance of +/- 5%.