

# PRODUCT DATASHEET

## SF FLAT SQ SN 500 P 27W ML 83040

SURFACE FLAT SQUARE SENSOR | Versatile square wall and ceiling luminaire with integrated sensor



### Areas of application

- Direct replacement for surface luminaires with integrated CFLni lamps
- Corridors
- Stairwells
- Bathrooms
- Foyers

### Product benefits

- Multiple settings for sensor range, daylight detection, hold time and DIM-level /-period by DIP switches
- Wireless (radio frequency) communication with other sensor luminaires in a distance of up to 15 m
- Assignment of up to 15 groups and cross-group interaction (leader/follower or swarm function)
- Easy upgradeability of light source, driver and sensor (EVERLOOP design)
- Highly versatile due to selectable CCT and power steps (Multi Color / Multi Lumen) on the driver
- Indoor luminaire with high luminous efficacy up to 140 lm/W
- High color consistency with SDCM 3
- Tool-free electrical connection due to push button connector
- Very homogenous light with a slight backlight effect
- For comfortable configuration the sensor can be removed from luminaire
- 5 years guarantee

### Product features

- High frequency sensor for daylight and motion detection, corridor- and grouping function
- Type of protection: IP54 (wall and ceiling)



- Impact resistance: IK08
- Lifetime (L80/B10): 100,000 h (at 25 °C), (L90/B10): 50,000 h (at 25 °C)
- Polycarbonate (PC) housing, PC-diffuser
- Ambient temperature in operation: -20...+45 °C
- Glow Wire Test according to IEC 60695-2-12: 850 °C
- 5-pole terminal block, cable cross section up to 5 x 2.5 mm<sup>2</sup>
- Through-wiring possible
- Indoor use only, not suitable for outdoor use

## TECHNICAL DATA

### Electrical data

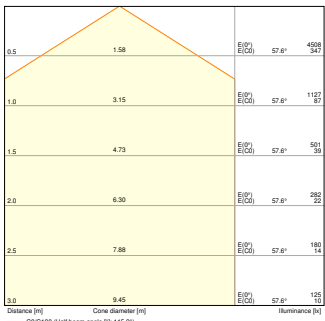
|                                                             |                           |
|-------------------------------------------------------------|---------------------------|
| Nominal wattage                                             | 27 W / 19 W <sup>1)</sup> |
| Nominal voltage                                             | 220...240 V               |
| Mains frequency                                             | 50...60 Hz                |
| Nominal current                                             | 120.000 mA                |
| Inrush current                                              | 13 A                      |
| Inrush current time T <sub>h50</sub>                        | 112 µs                    |
| Max. number of luminaires per miniature circuit breaker B16 | 57                        |
| Max. number of luminaires per miniature circuit breaker C10 | 46                        |
| Max. number of luminaires per miniature circuit breaker C16 | 73                        |
| Power factor $\lambda$                                      | > 0.90                    |
| Total harmonic distortion                                   | < 20 %                    |
| Protection class                                            | II                        |
| Operating mode                                              | Integrated LED driver     |

<sup>1)</sup> For possible options refer to lumen/power table image

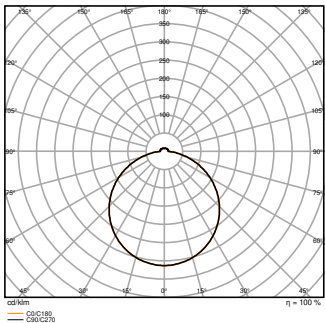
### Photometrical data

|                                              |                                   |
|----------------------------------------------|-----------------------------------|
| Luminous flux                                | 3780 lm / 2660 lm <sup>1)</sup>   |
| Luminous efficacy                            | 140 lm/W / 133 lm/W <sup>1)</sup> |
| Color temperature                            | 3000 K / 4000 K                   |
| Light color (designation)                    | Warm White / Cool White           |
| Color rendering index Ra                     | > 80                              |
| Standard deviation of color matching         | 3 sdcn                            |
| Low flicker                                  | Yes                               |
| Flickering metric (Pst LM)                   | <1                                |
| Stroboscope effect metric (SVM)              | <0.4                              |
| Photobiological safety group acc. to EN62778 | RG0                               |
| Beam angle                                   | 120 °                             |

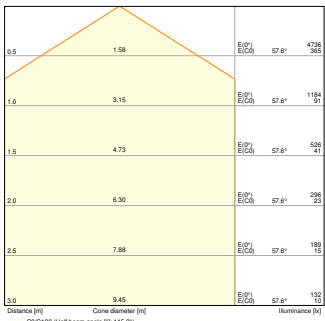
<sup>1)</sup> For possible options refer to lumen/power table image



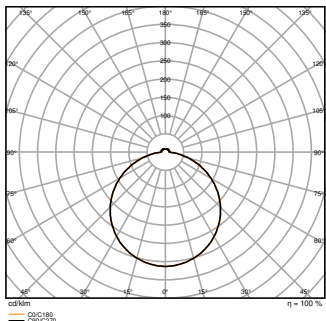
SF FLAT SQ SEN 500 P 27W  
3000K 3600lm



SF FLAT SQ SEN 500 P 27W  
4000K 3780lm



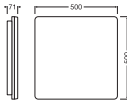
SF FLAT SQ SEN 500 P 27W  
4000K 3780lm



SF FLAT SQ SEN 500 P 27W  
3000K 3600lm

Dimensions & Weight

|                |           |
|----------------|-----------|
| Length         | 500.00 mm |
| Width          | 500.00 mm |
| Height         | 71.00 mm  |
| Product weight | 3677.00 g |



SF FLAT SQ 500/SEN/DALI CPS

Materials & Colors

|                          |          |
|--------------------------|----------|
| Product color            | White    |
| Housing color            | White    |
| RAL Color (most similar) | RAL 9003 |

|                                            |                    |
|--------------------------------------------|--------------------|
| Body material                              | Polycarbonate (PC) |
| Cover material                             | Polycarbonate (PC) |
| Light emitting surface material            | Polycarbonate (PC) |
| Glow Wire Test according to IEC 60695-2-12 | 850 °C             |
| Mercury content                            | 0.0 mg             |

### Application & Mounting

|                                        |                    |
|----------------------------------------|--------------------|
| Ambient temperature range              | -20...+45 °C       |
| Temperature range at storage           | -40...+80 °C       |
| Type of connection                     | Screwless terminal |
| Type of protection                     | IP54               |
| Protection class IK (shock resistance) | IK08               |
| Dimmable                               | No                 |
| Mounting type                          | Surface            |
| Mounting location                      | Ceiling / Wall     |
| Application environment                | Indoor             |
| With light source                      | Yes                |
| Replaceable light source               | Yes                |

### Lifespan

|                            |                        |
|----------------------------|------------------------|
| Lifespan L70/B50 at 25 °C  | 100000 h <sup>1)</sup> |
| Lifespan L80/B10 at 25 °C  | 100000 h <sup>1)</sup> |
| Lifespan L80/B50 at 25 °C  | 100000 h               |
| Lifespan L90/B10 at 25 °C  | 50000 h                |
| Number of switching cycles | 100000                 |

<sup>1)</sup> t[h]: L70 / B50 @ 25 °C (Ta), t[h]: L80 / B10 @ 25 °C (Ta), t[h]: L90 / B10 @ 25 °C (Ta)

### Control gear

|                             |        |
|-----------------------------|--------|
| Output current              | 650 mA |
| ECG - Output ripple current | < 5 %  |

### Sensor

|                                  |                |
|----------------------------------|----------------|
| Type of sensor                   | Motion / Light |
| Sensor technology                | Microwave      |
| Sensor detection angle           | 120 °          |
| Sensor controlled switching time | 5 s...20 min   |

|                                        |             |
|----------------------------------------|-------------|
| Detection range of motion sensor       | 3...7 m     |
| Detection threshold of daylight sensor | 15...150 lx |

Certificates & Standards

|                                                      |                                   |
|------------------------------------------------------|-----------------------------------|
| Standards                                            | CE / CB / ENEC / UKCA / EAC / EPD |
| Luminaire with limited surface temperature, "D sign" | Yes                               |
| Ball shot safe                                       | No                                |
| EPD                                                  | LEDV-00028-V01.01-EN              |
| Replaceable light source (EPREL)                     | Not replaceable                   |

Additional product data

|                |                         |
|----------------|-------------------------|
| Added function | EVERLOOP / MULTI SELECT |
|----------------|-------------------------|

Accessories Optional

| Product image                                                                       | Product name                        | EAN           |
|-------------------------------------------------------------------------------------|-------------------------------------|---------------|
|   | LISOEV 500 SQ 27W 830 840 SF FLAT   | 4099854312274 |
|  | SF FLAT 500 SQUARE FRAME SI         | 4099854292958 |
|  | DR DS SENS-P- 27/220-240V/650 SF FL | 4099854292873 |
|  | SENSOR SF FLAT LEADER FOLLOWER      | 4099854292897 |

EQUIPMENT / ACCESSORIES

- EVERLOOP luminaire: upgrades and replacements available
- Decorative silver frame separately available

Upgrade and replacement components

|                         |
|-------------------------|
| Components Light Source |
|-------------------------|

| Product image                                                                     | Product name                      | EAN           |
|-----------------------------------------------------------------------------------|-----------------------------------|---------------|
|  | LISOEV 500 SQ 27W 830 840 SF FLAT | 4099854312274 |

|                   |
|-------------------|
| Components Driver |
|-------------------|

| Product image                                                                     | Product name                        | EAN           |
|-----------------------------------------------------------------------------------|-------------------------------------|---------------|
|  | DR DS SENS-P- 27/220-240V/650 SF FL | 4099854292873 |

DOWNLOAD DATA

| Documents and certificates                                                         |                                        | Document name                      |
|------------------------------------------------------------------------------------|----------------------------------------|------------------------------------|
|    | User instruction / safety instructions | SF FLAT LUM/SEN                    |
|   | User instruction / safety instructions | SF FLAT                            |
|  | Legal information                      | LISO Insert SF FLAT                |
|  | Legal information                      | Legal Insert SF FLAT               |
|  | Legal information                      | Informationstext 18 Abs 4 ElektroG |
|  | Declarations of conformity             | SF FLAT RD SQ SEN P CPS            |
|  | Declarations of conformity UKCA        | SF FLAT RD SQ SEN P CPS            |
|  | Certificates                           | ENEC SF FLAT                       |
|  | EPD                                    | EPD EN SURFACE FLAT                |

| Photometric and lighting design files                                              |                | Document name                         |
|------------------------------------------------------------------------------------|----------------|---------------------------------------|
|  | IES file (IES) | SF FLAT SQ SEN 500 P 27W 3000K 3600lm |

| Photometric and lighting design files                                               |                                     | Document name                               |
|-------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------------|
|    | IES file (IES)                      | SF FLAT SQ SEN 500 P 27W 4000K 3780lm       |
|    | LDT file (Eulumdat)                 | SF FLAT SQ SEN 500 P 27W 3000K 3600lm       |
|    | LDT file (Eulumdat)                 | SF FLAT SQ SEN 500 P 27W 4000K 3780lm       |
|    | ULD file (DIALux)                   | SF FLAT SQ SEN 500 P 27W CPS                |
|    | ROLF file (RELUX)                   | SF FLAT SQ SEN 500 P 27W CPS                |
|    | UGR file (UGR table)                | SF FLAT SQ SEN 500 P 27W 3000K 3600lm       |
|    | UGR file (UGR table)                | SF FLAT SQ SEN 500 P 27W 4000K 3780lm       |
|    | Light distribution curve type cone  | SF FLAT SQ SEN 500 P 27W 3000K 3600lm       |
|    | Light distribution curve type cone  | SF FLAT SQ SEN 500 P 27W 4000K 3780lm       |
|    | Light distribution curve type polar | SF FLAT SQ SEN 500 P 27W 3000K 3600lm       |
|  | Light distribution curve type polar | SF FLAT SQ SEN 500 P 27W 4000K 3780lm       |
| CAD/BIM files                                                                       |                                     | Document name                               |
|  | BIM Revit 3D                        | Surface Flat                                |
|  | CAD STEP 3D                         | SF FLAT SQ 500                              |
| Tender texts                                                                        |                                     | Document name                               |
|  | Tender documents                    | SURFACE FLAT SQUARE SENSOR 500 P 27W CPS-EN |

LOGISTICAL DATA

| Product code  | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume                |
|---------------|------------------------------|--------------------------------------|--------------|-----------------------|
| 4099854292750 | Folding box<br>1             | 77 mm x 507 mm x 507 mm              | 3938.00 g    | 19.79 dm <sup>3</sup> |
| 4099854292767 | Shipping box<br>4            | 520 mm x 327 mm x 530 mm             | 16602.00 g   | 90.12 dm <sup>3</sup> |

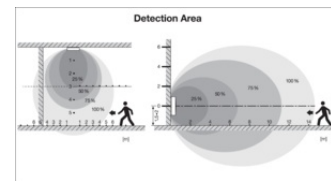
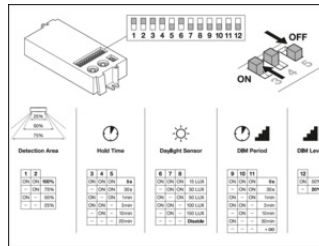
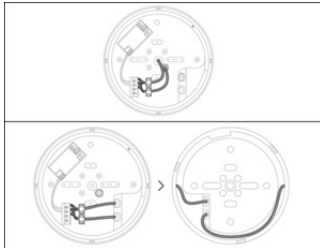
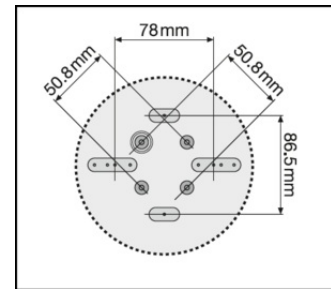
The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

## ADDITIONAL CATALOG INFORMATION

| SF FLAT SQ SN 500 | ORDER | CCT | W | lm | lm/W | EM W | EM W | EM W | EM W |
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[www.ledvance.com/everloop-replacement](http://www.ledvance.com/everloop-replacement)



## References / Links

– For Guarantee see [www.ledvance.com/guarantee](http://www.ledvance.com/guarantee)

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