MADE IN GERMANY

AREALO 2



# Spo(r)t on!

## Sports facilities optimally illuminated

**installation-friendly – highly efficient – AREALO 2**

SCHUCH

# AREALO 2 – Sports facilities in perfect light

Whether small pitches, sports fields or training grounds for football, hockey, tennis etc., with the powerful, energy-efficient and durable AREALO 2 floodlights you can always illuminate sports facilities to optimum effect - naturally in compliance with the requirements of DIN 12193.

## UNBEATABLE ADVANTAGES

**Simple, cost-effective mounting**
- low total weight, low mast load
- quick electrical connection due to outlaying electrical connection box
- simple ECG replacement, no lifting platforms required (OV version)

**Highly economical**
- high luminous efficacy up to 154 lm/W
- extremely long service life L95 > 100.000 h
- maximum energy cost savings through needs-based light management with LIMAS Air CASA

**Future-proof product design**
- no light emission into the upper half-space, ULOR = 0
- replaceable components – not a disposable luminaire
- long-term availability of spare parts guaranteed



LED | IP66 | EEC B

| Typ | Connected load | Luminous flux [lm] | | Luminous efficacy [lm/W] | |
|---|---|---|---|---|---|
| | [W] | LF 740 [1] | LF 730 [2] | LF 740 [1] | LF 730 [2] |
| **7950 14404SP OP RFLSO** | 432 | 66,500 | 63,200 | 154 | 146 |
| **7950 14404SP OV *** | 432 | 66,500 | 63,200 | 154 | 146 |

| ECG units for pole mounting | Description |
|---|---|
| **EVG 7950 1 14404 OV** | ECG unit for one luminaire 7950 14404 OV |
| **EVG 7950 2 14404 OV** | ECG unit for two luminaires 7950 14404 OV |
| **EVG 7950 3 14404 OV** | ECG unit for three luminaires 7950 14404 OV |
| **EVG 7950 4 14404 OV** | ECG unit for four luminaires 7950 14404 OV |

* without ballasts (OV), separate ECG required
[1] Light colour 4,000 K (neutral white) [2] Light colour 3,000 K (warm white)
(Rounded values, technical developments reserved)

**More info:**

AREALO 2



# INTELLIGENT CONTROL OPTIONS

Simply switching the spotlights of a sports facility on and off is neither efficient, nor cost-saving and environmentally friendly. Therefore, when converting to LED luminaires, fundamentally possible control functions should also be considered.

## DIMMING

The simplest way is to dim the floodlight system via DALI. Since the maximum illuminance is usually only required for match and competition operation, the light can be sensibly regulated by continuously dimming the luminaires or switching on preset lighting levels in training mode.

This is easily possible with the DIMD version of AREALO 2 and DALI cabling to the masts, and ensures high energy cost savings.

## LIMAS AIR CASA

With the RFL version plus light management controller (RFL LACA FM DS), your floodlight system becomes smart. Configuration and control are carried out using a free app via a smart device – individually per luminaire, in groups or per pole unit (accessories required). In conjunction with push-buttons, pre-programmed scenes can also be conveniently called up, e.g. competition mode, training or half-field lighting. Neither an internet connection nor a gateway is required for this. This efficient and demand-led control system reduces operating times and maximises energy cost savings.

## CROSSBAR MOUNTING ADVANTAGE

- Up to five luminaires per crossbar
- Precise light distribution thanks to flexible alignment: swivelling by up to 50° sideways, up to 180° via the mounting bracket
- Easy crossbar mounting of the junction box – only one supply cable required in or along the pole
- Light management components can be integrated directly onto the crossbar

Mounting multiple luminaires on a single pole is a major advantage, particularly for sports facilities. Thanks to the low weight of the AREALO 2, this is no problem. Different crossbar variants provide flexible solutions for a wide range of project requirements.



# PLANNING EXAMPLES OF SPORTS FIELD LIGHTING

The basis for planning is the DIN EN 12193 regulation. It defines clear standards for illuminance, uniformity, glare limitation and color rendering for different lighting classes.

## LIGHTING CLASSES

**1** High-performance competitions • international and national competitions with high visual requirements • high-performance training

**2** Intermediate level competitions • Regional competitions with medium visual requirements • Performance training

**3** Simple competitions • local competitions • school sports • general leisure sports • general training

## REQUIREMENTS

| lighting class | mean horizontal illuminance (Em) | uniformity (Uo) |
|---|---|---|
| 1 | ≥ 500 lx | ≥ 0.7 |
| 2 | ≥ 200 lx | ≥ 0.6 |
| 3 | ≥ 75 lx | ≥ 0.5 |

## Example I football field, lighting class 3, 6-pole system

### Facility data

| | |
|---|---|
| Field size according to FIFA | 105 x 68 m |
| Light spot height | 16 m |
| Mast distance to the playing field | 3 m |
| Maintenance factor | 0.90 |

### Lighting requirements

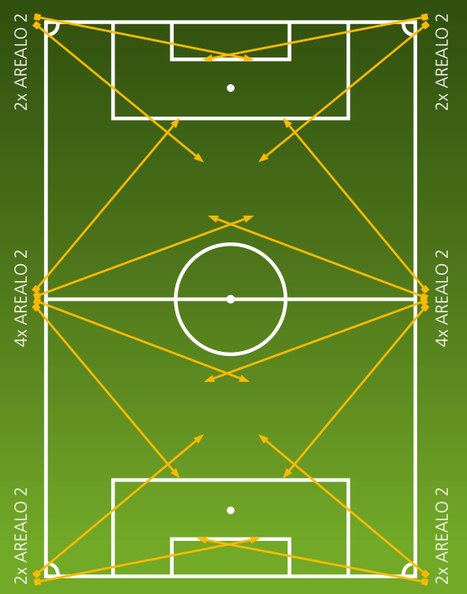
| | |
|---|---|
| Mean horizontal illuminance | ≥ 75 lx |
| Uniformity | ≥ 0.5 |

### Luminaires

16 x AREALO 2 7950 14404SP OP RFLSO
16 x RFL LACA FM DS

**Result:**

Mean horizontal illuminance:
**Em = 82 lx**
Uniformity: **Uo = 0.62**
ULOR: **0 %**
Output: **6.9 kW**




## Example II football field, lighting class 3, 4-pole system

### Facility data

| | |
|---|---|
| Field size according to FIFA | 105 x 68 m |
| Light spot height | 16 m |
| Mast distance to the playing field | 3 m |
| Maintenance factor | 0.90 |

### Lighting requirements

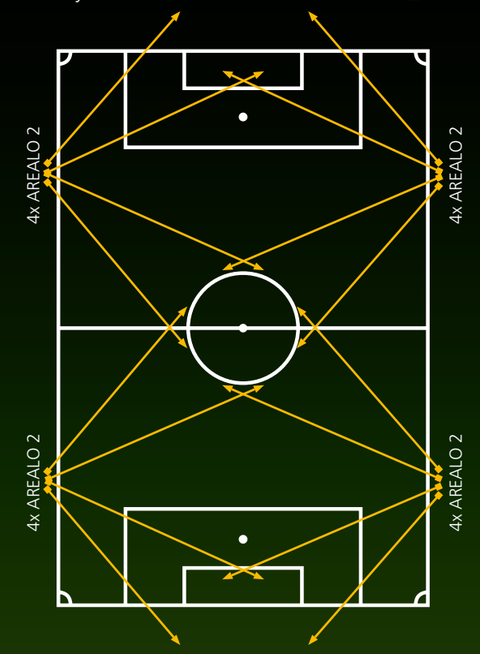
| | |
|---|---|
| Mean horizontal illuminance | ≥ 75 lx |
| Uniformity | ≥ 0.5 |

### Luminaires

16 x AREALO 2 7950 14404SP OP RFLSO
16 x RFL LACA FM DS

**Result:**

Mean horizontal illuminance:
**Em = 83 lx**
Uniformity: **Uo = 0.55**
ULOR: **0 %**
Output: **6.9 kW**




## Example III football field, lighting class 2, 8-pole system

### Facility data

| | |
|---|---|
| Field size according to FIFA | 105 x 68 m |
| Light spot height | 18 m |
| Mast distance to the playing field | 3 m |
| Maintenance factor | 0.90 |

### Lighting requirements

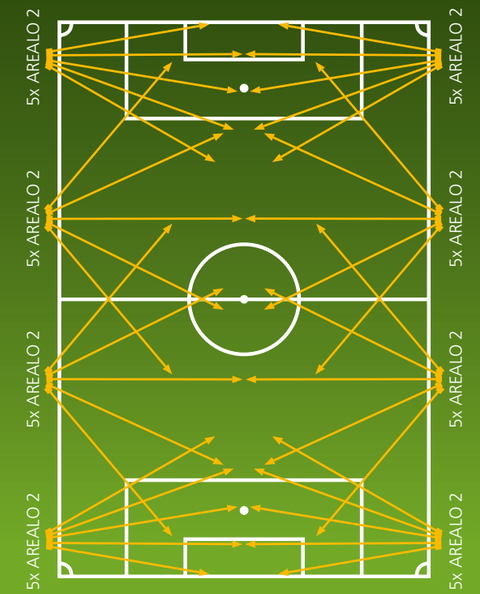
| | |
|---|---|
| Mean horizontal illuminance | ≥ 200 lx |
| Uniformity | ≥ 0.6 |

### Luminaires

40 x AREALO 2 7950 14404SP OP RFLSO
40 x RFL LACA FM DS

**Result:**

Mean horizontal illuminance:
**Em = 217 lx**
Uniformity: **Uo = 0.79**
ULOR: **0 %**
Output: **17.3 kW**



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