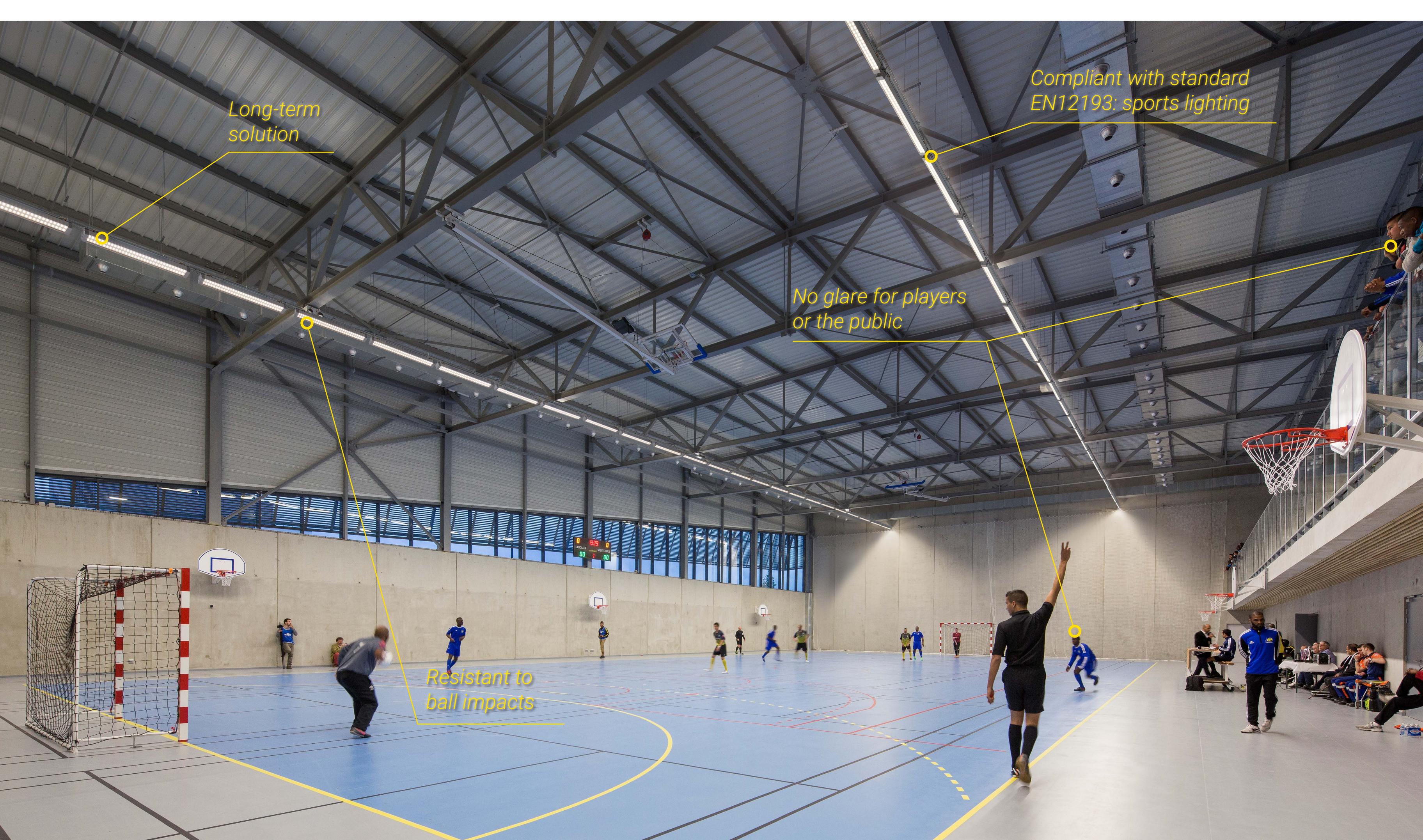




# Requirements for indoor sports activities



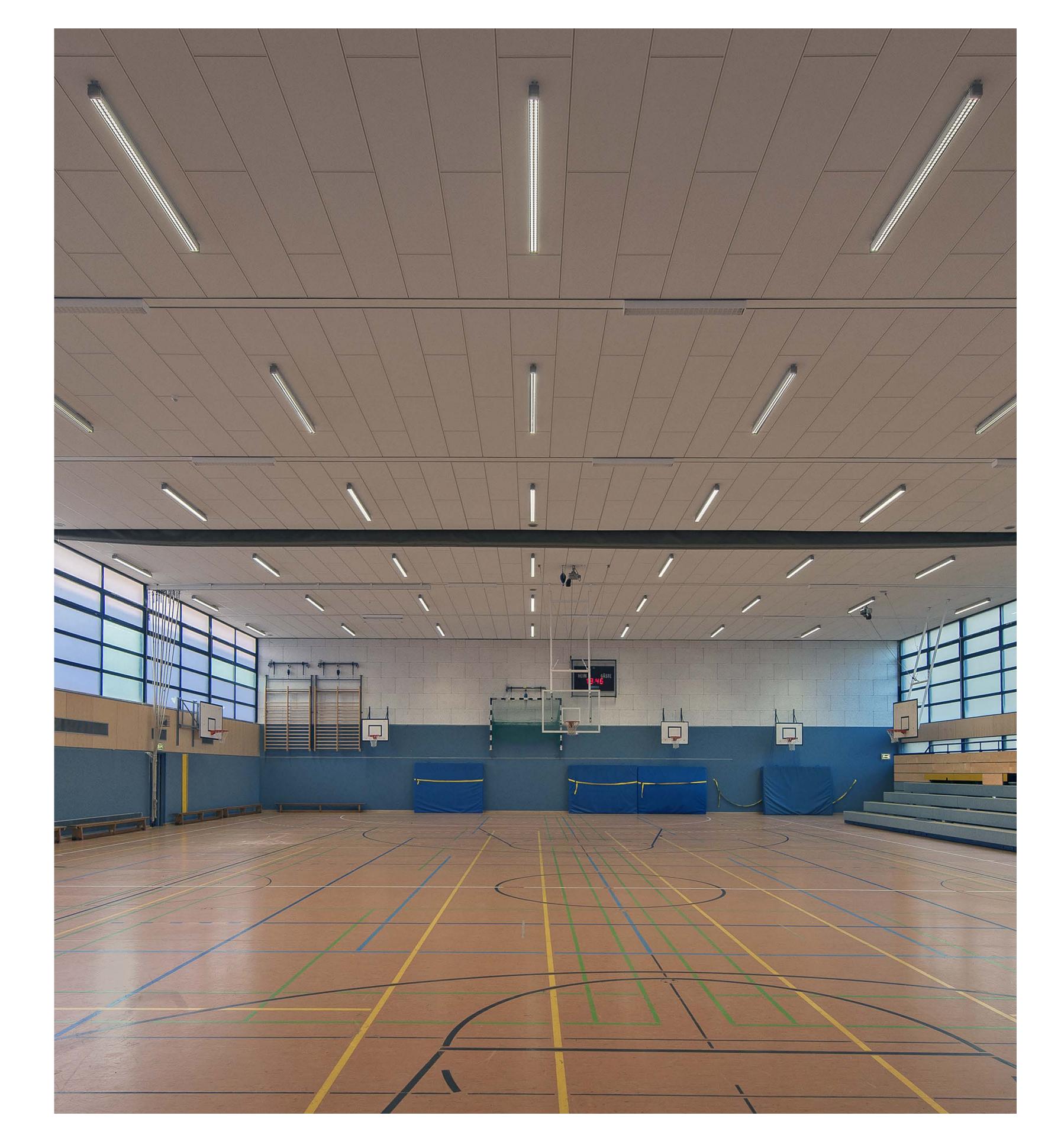


# E7 Sport | Lighting for indoor sports activities



#### E7 SPORT CHARACTERISTICS

- Compliant with standard EN12193: sports lighting
- Efficient and comfortable lighting
- Ball proof
- Long-term solution
- Extensive range of stylish luminaires











### E7 Sport | Complies with standard EN12193



#### STANDARD FOR SPORTS LIGHTING

According to EN12193, sports activities are subdivided into 3 classes

- Class 1: Sport in an international context and at top level
- Class 2: Sport at regional and local competition
- Class 3: Training and recreational use

The requirements for the minimum illuminance and uniformity are different per sport and per class.

	FOOTBALL, BASKETBALL <sup>1</sup> , HANDBALL, JUDO,		TENNIS <sup>2</sup>		BADMINTON <sup>2</sup> , SQUASH, TABLE TENNIS, HOCKEY		AEROBICS, ATHLETICS, DANCE, WALL CLIMBING <sup>3</sup>	
	E horizontal	E min/ E max	E horizontal	E min/ E max	E horizontal	E min/ E max	E horizontal	E min/ E max
Class 1	750 lux	0.7	750 lux	0.7	750 lux	0.7	500 lux	0.7
Class 2	500 lux	0.7	500 lux	0.7	500 lux	0.7	300 lux	0.6
Class 3	200 lux	0.5	300 lux	0.5	300 lux	0.7	200 lux	0.5

<sup>&</sup>lt;sup>1</sup> Circle Ø 4 m without luminaires above the basket

No luminaires above the playing field
 Values are also imposed for illuminance on the wall

# E7 Sport | Efficient and comfortable lighting





The LED+LENS™ technology works with high power LEDs, allowing luminous fluxes up to 10,000 lumen per meter – ideal for spaces where you need a lot of light.

The advanced lenses in turn ensure that the bright LED light is never disruptive – an essential factor in workshops, store environments or hectic public buildings. The result is a highly specific luminous flux (up to 129 lm per watt) and maximum visual comfort (UGR  $\leq$  22).

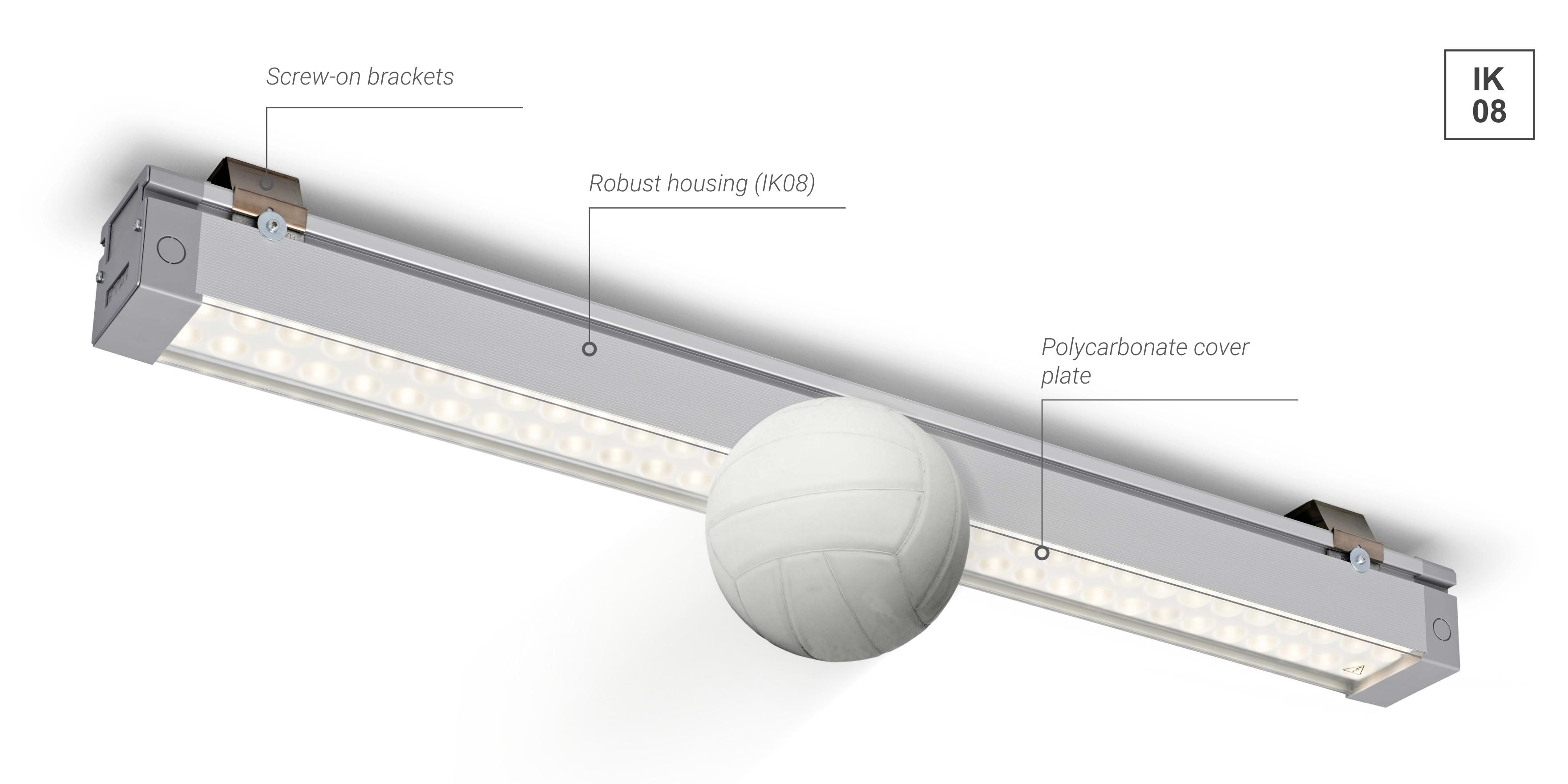
E7 sport is available with 2 light distributions:

- medium-wide beam
- wide beam



# E7 Sport | Ball proof





E7 Sport is resistant to the impact of a ball. This is tested according to DIN 57710 (VDE 0710 part 13 / 5.81). In this test, which is carried out by a certified body, the luminaire is fired 36 times with a handball at 60 km / h, at different angles.

# E7 Sport | Long-term solution



# LONG SERVICE LIFE AND LOW MAINTENANCE COSTS

Thanks to the use of high-power LEDs, a qualitative driver and an optimal thermal design, E7 Sport has the highest light retention on the market.



YEAR ≿

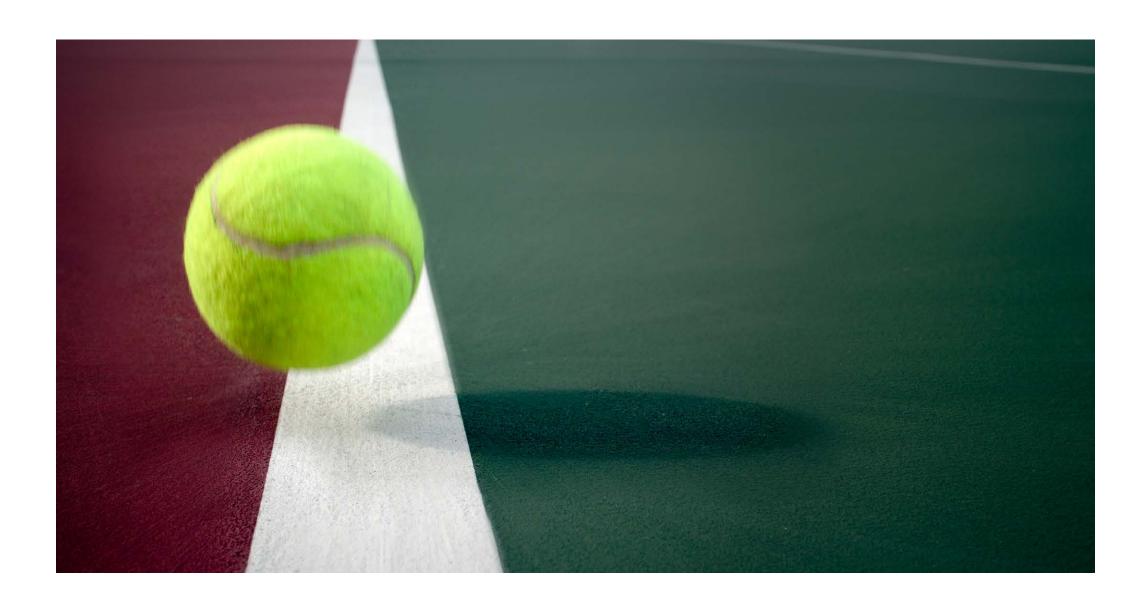


# E7 Sport | Long-term solution

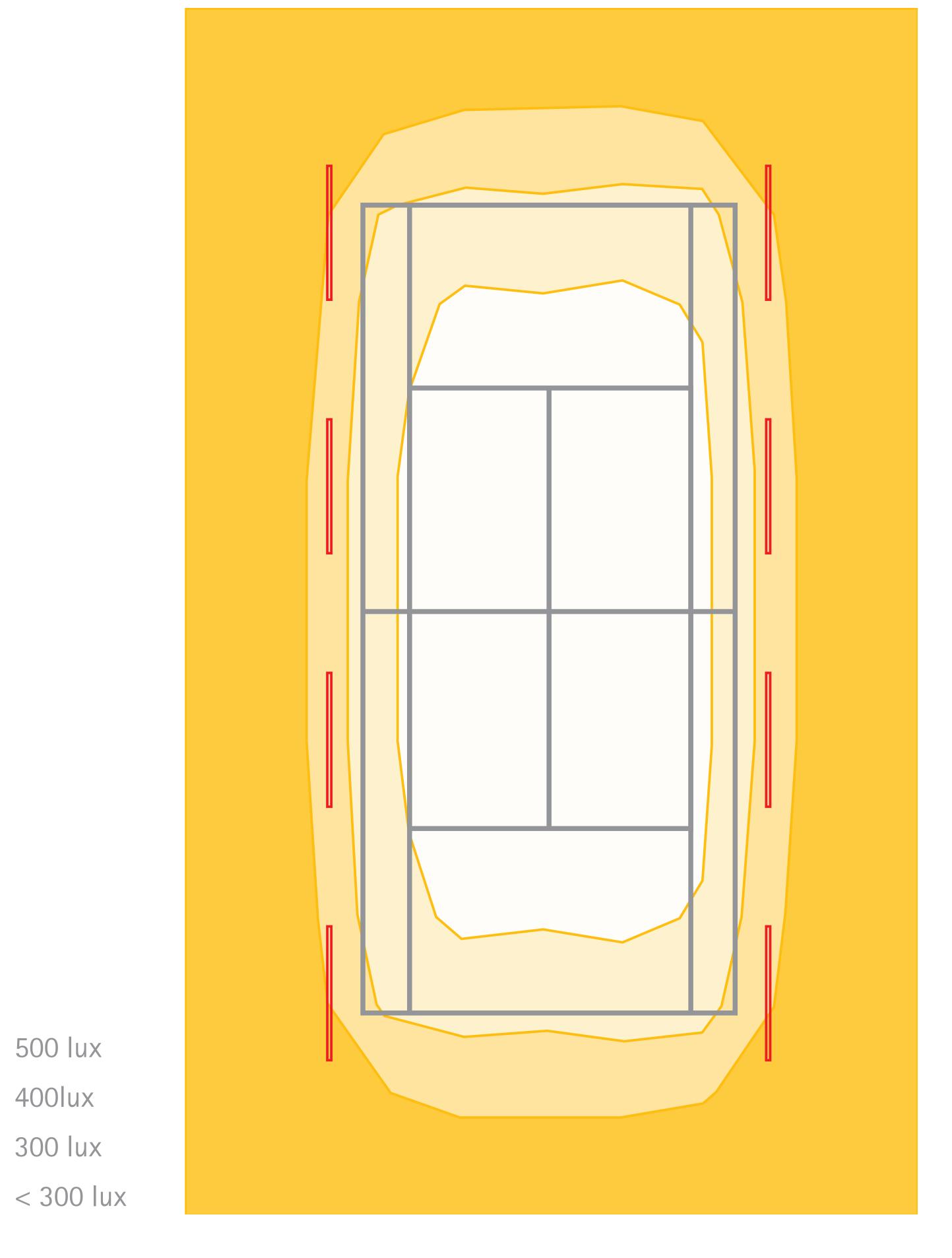


#### CALCULATION EXAMPLE: TENNIS COURT

Number of luminaires	8 x E7120/LED4N256400ST8  Mounted at a height of 7 m, tiltable mounting brackets
Average illuminance	534 lux
Uniformity on the playing field	0,7
Luminous flux	8 x 38.850 lumen
Installed power	2,4 kW (8 x 304 W)
Efficiency	128 lm/W
LLMF	L97 @ 50.000 h



Optimal light for a sporty game



500 lux

400lux

300 lux

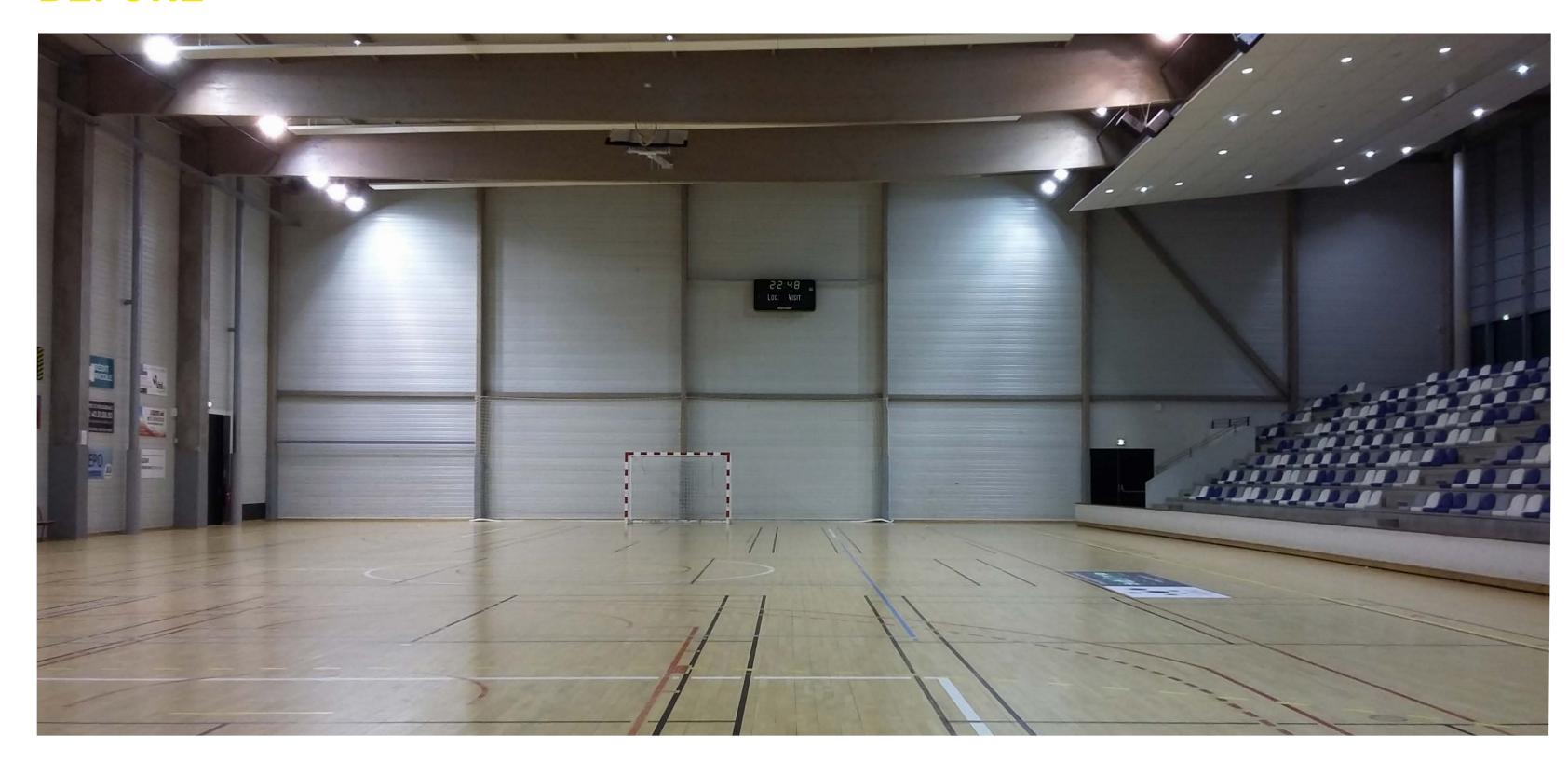
# E7 Sport | Long-term solution



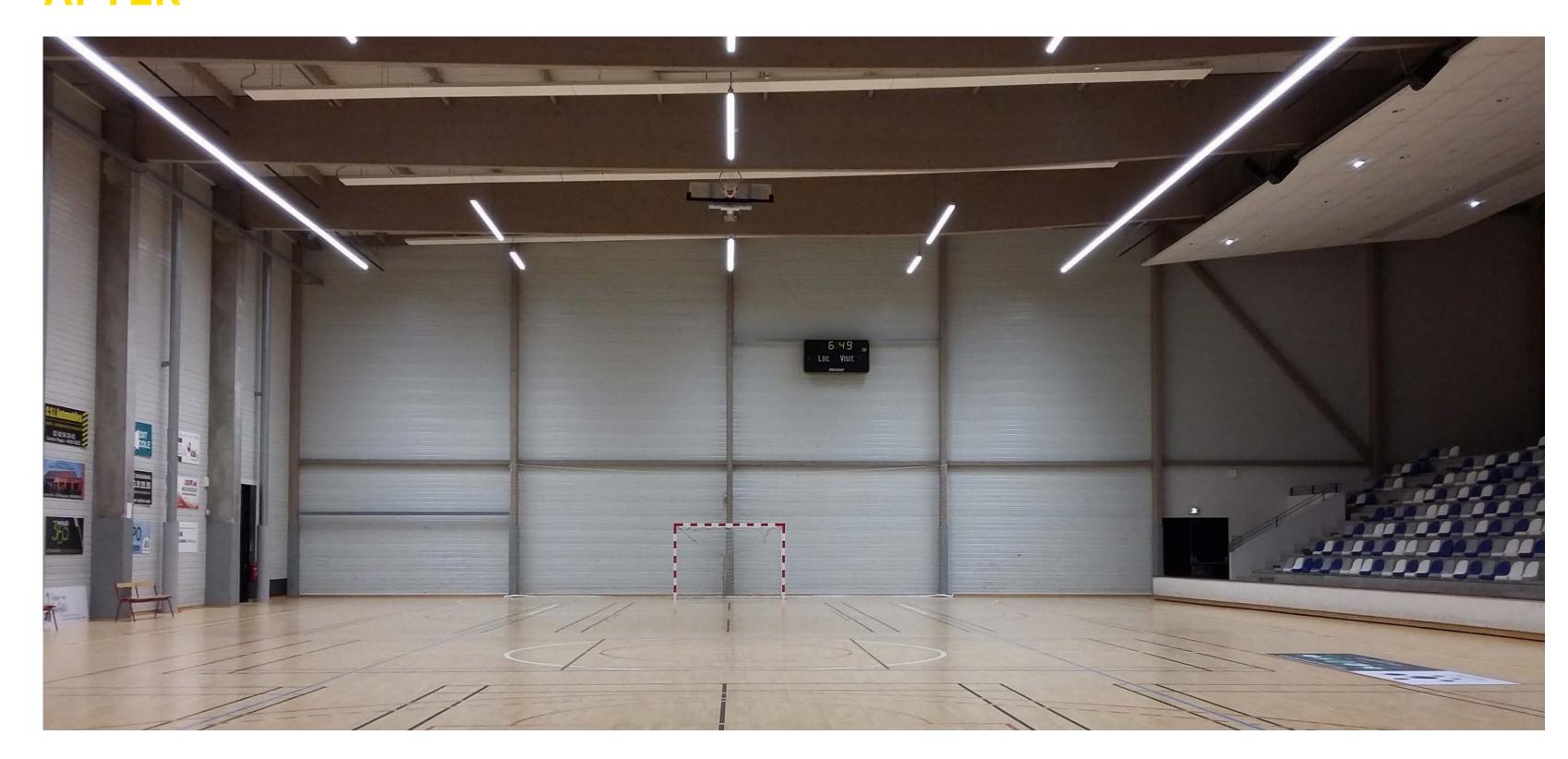
### RENOVATION SPORT COMPLEX OF BÉLIANS, BOUGUENAIS – FRANCE

	Before renovation	After renovation	Difference
Number of luminaires	32	35	
Average illuminance	638 lux	1041 lux	+63%
Installed power	25,6 kW	10,5 kW	-60%
Uniformity	0,62	0,72	
Specific power	3,18 W/m <sup>2</sup> /100 lux	0,97 W/m <sup>2</sup> /100 lux	-70%
Maintenance light source	every 10 000 hours	not applicable	
LLMF	L90 @ 10.000 uur	L97 @ 50.000 uur	

#### **BEFORE**



#### **AFTER**

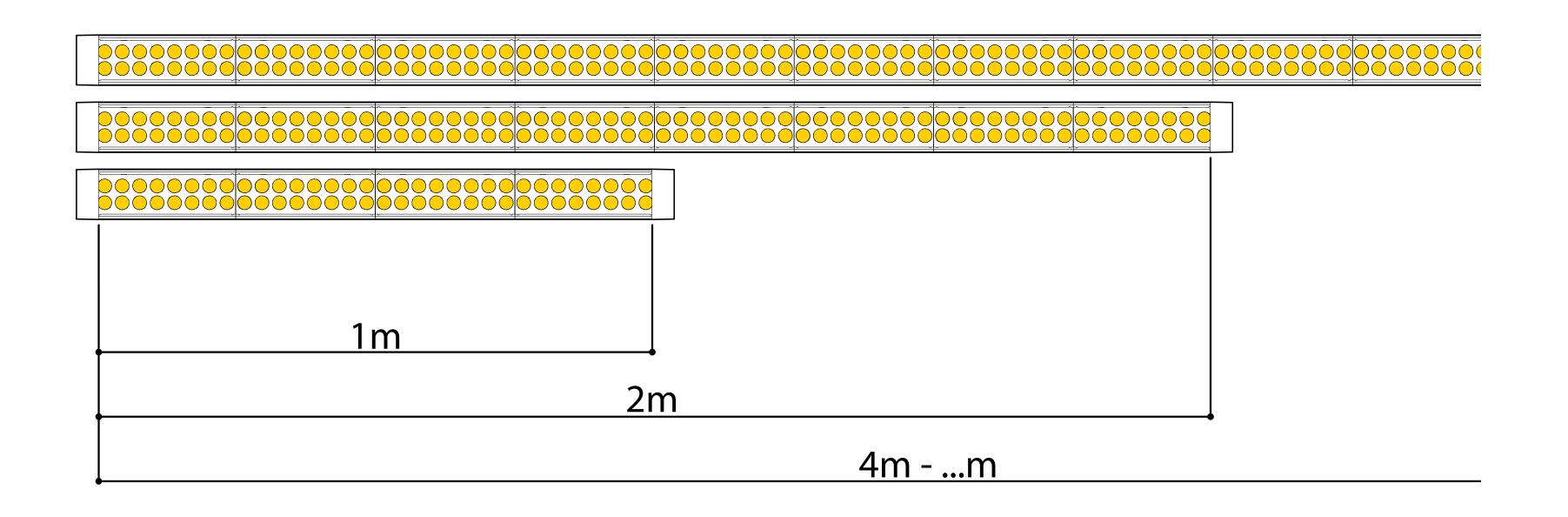


### E7 Sport | Extensive range of stylish luminaires



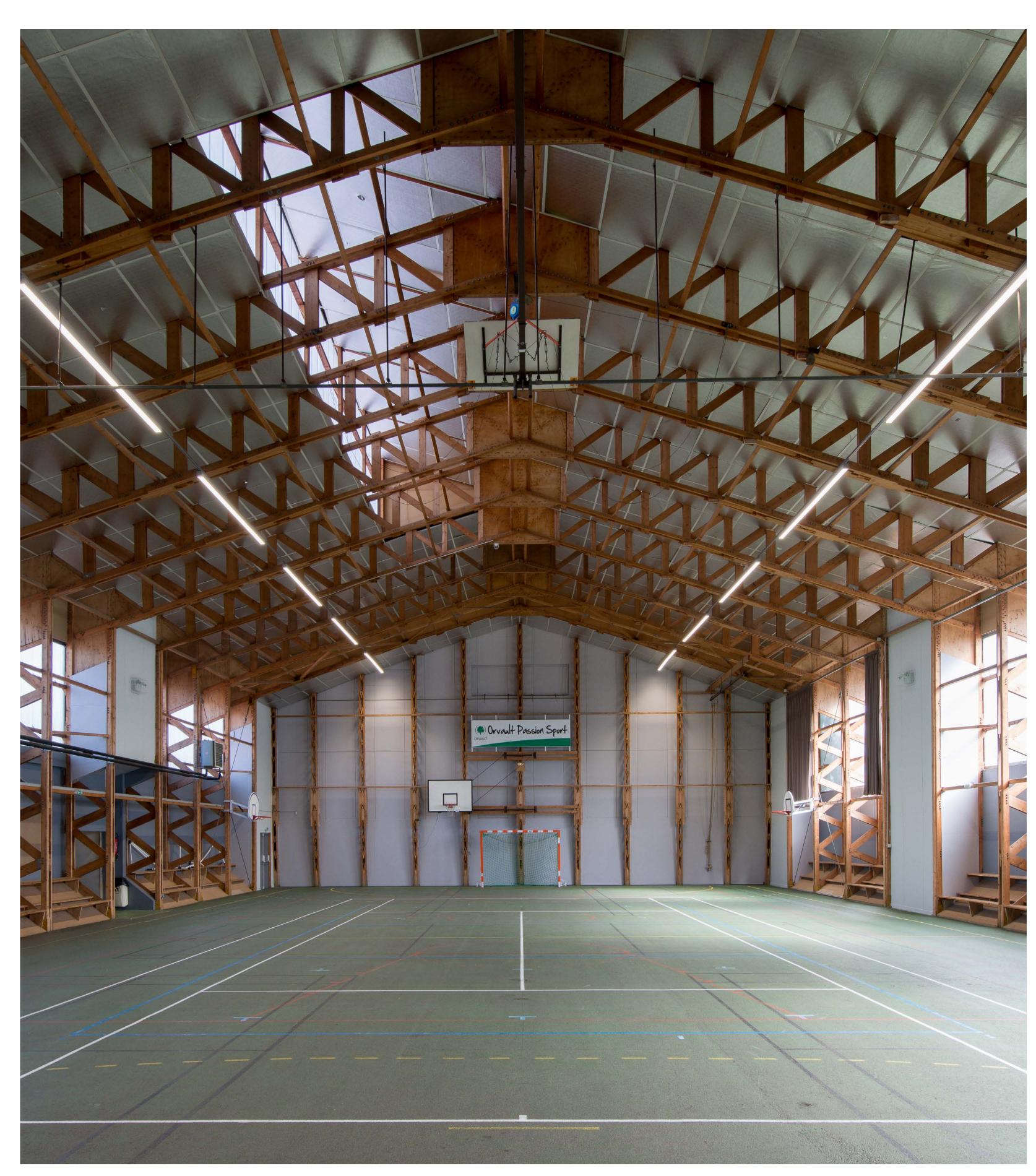
#### SUITABLE FOR ALL INDOOR SPORTSACTIVITIES

- Individual luminaires
   (continuous light lines are possible provided the extra IK08 end pieces and ball proof accessories are ordered)
- · Compact and stylish: suitable for any architecture



VIEW THE FULL RANGE OF E7
LUMINAIRES FOR SPORTS
ACCOMMODATIONS

VIEW OUR
REFERENCES IN SPORTS
APPLICATIONS



<sup>\*1.5</sup> m and 3 m luminaires: only available as individual luminaires 1.5 m and 3 m luminaires with wide-beam lenses: UGR ≤ 25

# E7 Sport | Installation



#### **EASY INSTALLATION IN 4 STEPS**





Mount the brackets 2. Hook in the luminaire 3. Connect the luminaire 4. Tighten the brackets



snap it shut and



Thanks to the through-wiring, in-line luminaires can be installed easily and quickly.



