

# Professional lighting solutions for SPORTS facilities







Prilux is a company with more than 35 years in the lighting sector.

Focused on R+D+I, we design and manufacture light fixtures and technology.

We ligh spaces.

Our technological solutions and products are reliable and innovative, adapting to the needs of the client.

We offer control systems. Our patented technology manages the consumption optimally and sustainably, reducing costs.

We are more than a manufacturer; Prilux is your partner in lighting, working with you in all phases of the project, from design to installation.

Our values: "customisation, flexibility, efficiency and sustainability".

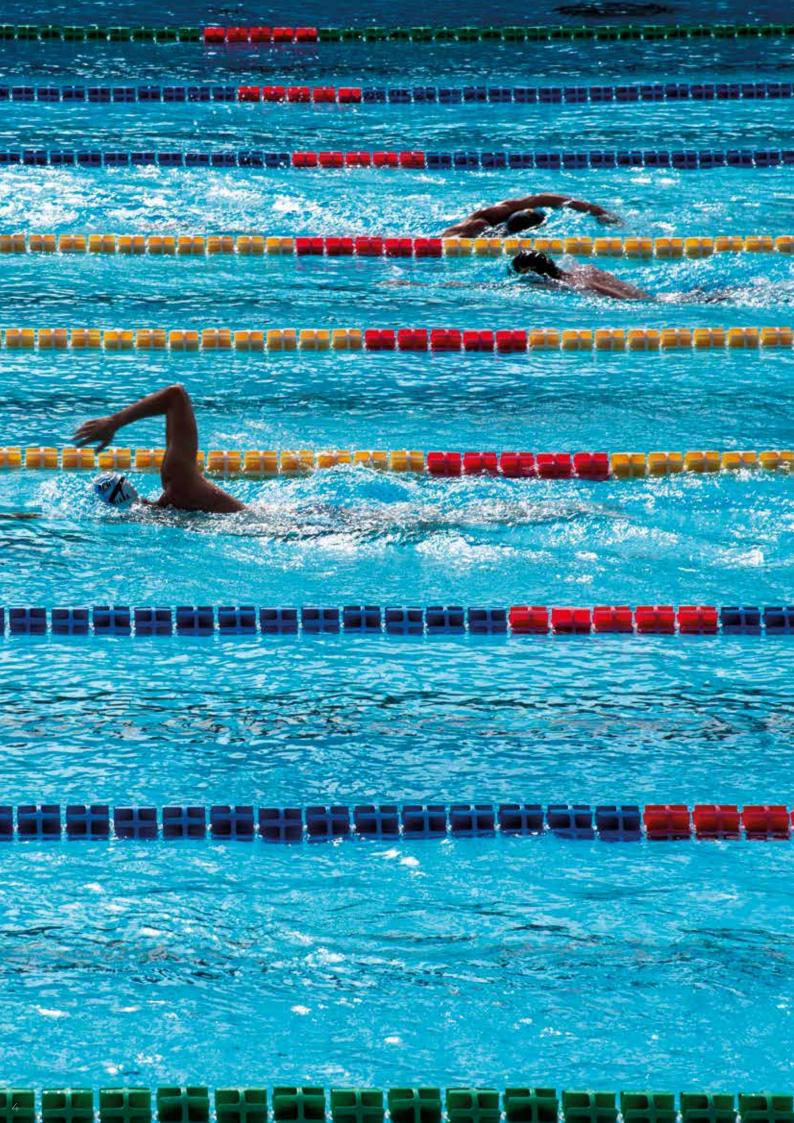












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# Sustainable sports facilities with high-quality lighting

Sport is an essential activity that improves physical and mental health. Proper lighting makes it safer, more comfortable, and more profitable.

Our sports lighting solutions have been adapted to technological advances and demanding users, making spaces more flexible and infrastructures more sustainable. Prilux lights properly the spaces, adapting to the different locations, schedules, multi-activities, seasons, and any other conditioning factor.

Lighting that offers comfort to athletes and sports broadcasts.



Social development



Physical and mental development



Leisure and entertainment



# Sports lighting

## Today's solutions for future needs

CORA SPORTS, the control system developed by Prilux, provides smart management of lighting in sports facilities

CORA SPORTS combines LED technology in lightingwith a control system, flexible and profitable. Energy consumption costs are reduced by 70%, and also maintenance costs and CO2 emissions.

Lighting solutions, ideal for sports pavilions, swimming pools, running tracks, tennis courts, paddle tennis, football fields, rugby, hockey, golf, as well as professional sports stadiums and race tracks.

A control system that extends to the interior and exterior of adjacent spaces, changing rooms, common areas, cafeteria, access areas and car parks.







- Energy-sustainable lighting system with a consumption reduction of up to 70%
- Long-lasting state-of-the-art LED technology.
- LED technology with lower CO2 emissions.
- Reduced light pollution, wide variety of optics provide light when and where it's needed,
- Light fixtures with remote equipment boxes, lower operating costs by avoiding the need for platform lifts.



#### Flexible installations

- Easy remote lighting control with CORA SPORTS and its wireless Bluetooth 5.0 technology.
- The installation is easy to configure and manage with the intuitive PLAY MESH SPORT app.
- Lighting that can be adapted to the needs of different sports, schedules and calendars.
- Different programmable lighting arrangements for maintenance tasks, trainning days and competition days.
- Zoning of the installation, lights can be dimmed or turned off by areas.



#### Personalised experiences

- High quality, uniform lighting on the playing field, avoiding waste, glare and shadows.
- Optimal viewing for players and spectators from any point of the installation.
- · Instant-on and instant-restarting in the event of a power failure.
- Special light fixtures for top-quality, flicker-free live TV broadcasting.
- Possibility of special effects, with dynamic lighting that creates interaction with spectators and unforgettable experiences.

# What does good lighting provide?

Proper lighting benefits all activities, with tangible results for everyone involved in the creation and use of the facility: unforgettable experiences for players and spectators, and added benefits for installers, maintenance personnel, etc.



# **Users/**Enjoy your sports experience

- Optimal lighting conditions, brings out the full potential of players and improves their experience during the game.
- Facilities adapted to the needs and schedules of users.



# **Sports clubs**Maximise the performance of your installations.

Cost-effective, safe and comfortable sports facilities that allow different non-sporting uses. Helps attract new business opportunities and partners.



#### **Installers and maintenance** Control has never been so easy

- Real-time monitoring favours maintenance work, and easily adapts the lighting to any sport, activity, schedules and calendars reducing operational costs.
- It allows future expansions of the sports facility without replacing or changing the control system.



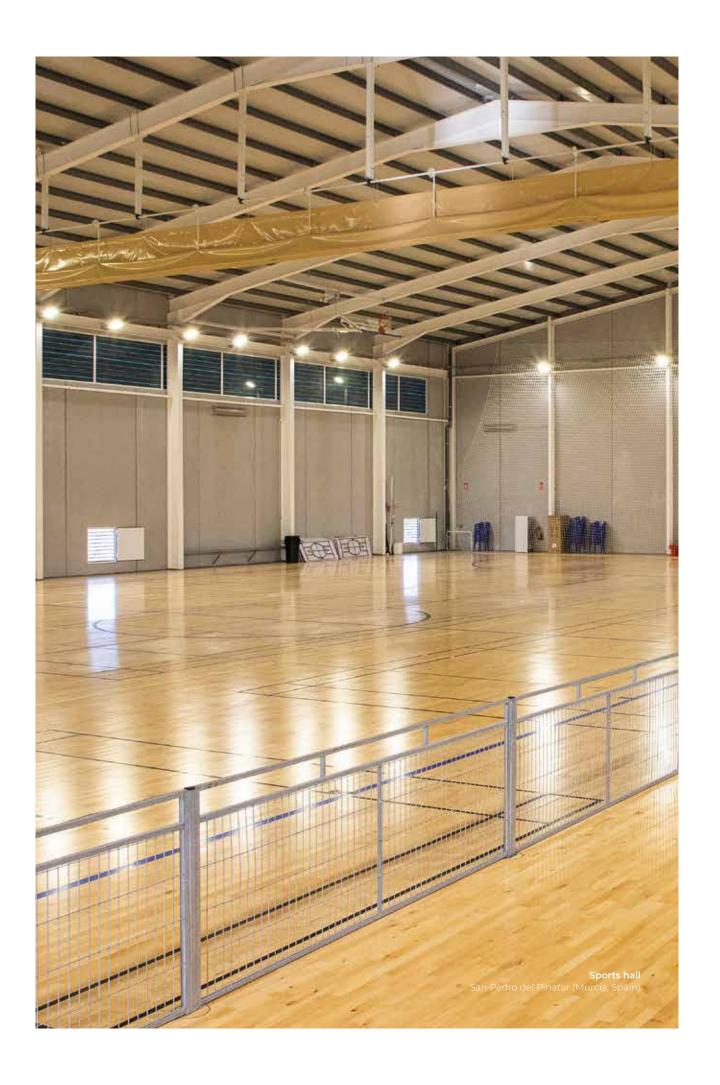
# **Engineering**Quality and reliability in a single solution

 Advice and technical support that helps resolve any needs that arise before, during and after installation.



# **Public administration**Sustainable solutions for smart cities

- Efficient and sustainable sports facilities; adapted to current and future European and international regulations to reduce the carbon footprint.
- Quality lighting, improving the safety and well-being of the sports community.



# 360° Solutions

## We work with you from start to finish



We guarantee the success of our projects by working closely with our clients to provide a customised, efficient and sustainable solution.

We carry out an exhaustive preliminary lighting study that takes into account the technical characteristics and requirements of the facility, its activities and the economic needs of the owners.

We then offer a comprehensive audit and technical consulting service prior to the development of the engineering design. This ensures optimal lighting results in terms of lighting levels, glare, uniformity in the vertical and horizontal planes, among other things.





# CORA SPORTS



# Control system CORA SPORTS

CORA SPORTS, a device developed by Prilux to control DALI light fixtures in new or existing installations, indoors or outdoors, using Bluetooth 5.0 wireless technology.

Technology that is more efficient and easier to deploy and scale for professional lighting applications. It can work in a meshed arrangement with the light fixtures and to create smart communication networks.

Especially recommended in installations with towers and/or groups of light fixtures to make it possible to operate them as a group or individually.

The PLAYMESH SPORTS application is used to start, configure and control the lighting. A simple, intuitive interface to remotely manage any light fixture in the installation, controlling electrical installations from mobile devices to:







Cora Master



# CORA SPORTS Benefits





Create networks and groups of light fixtures quickly to solve specific or temporary needs



#### ON/OFF

Control on/off and intensity individually or as a group



#### **Default scenes**

Activate the pre-set lighting arrangements (0, 25, 50, 75 and 100%) using the app or a button connected to a potential-free input



#### Dynamic effects

Activate dynamic effects, such as Goal and Flash modes.



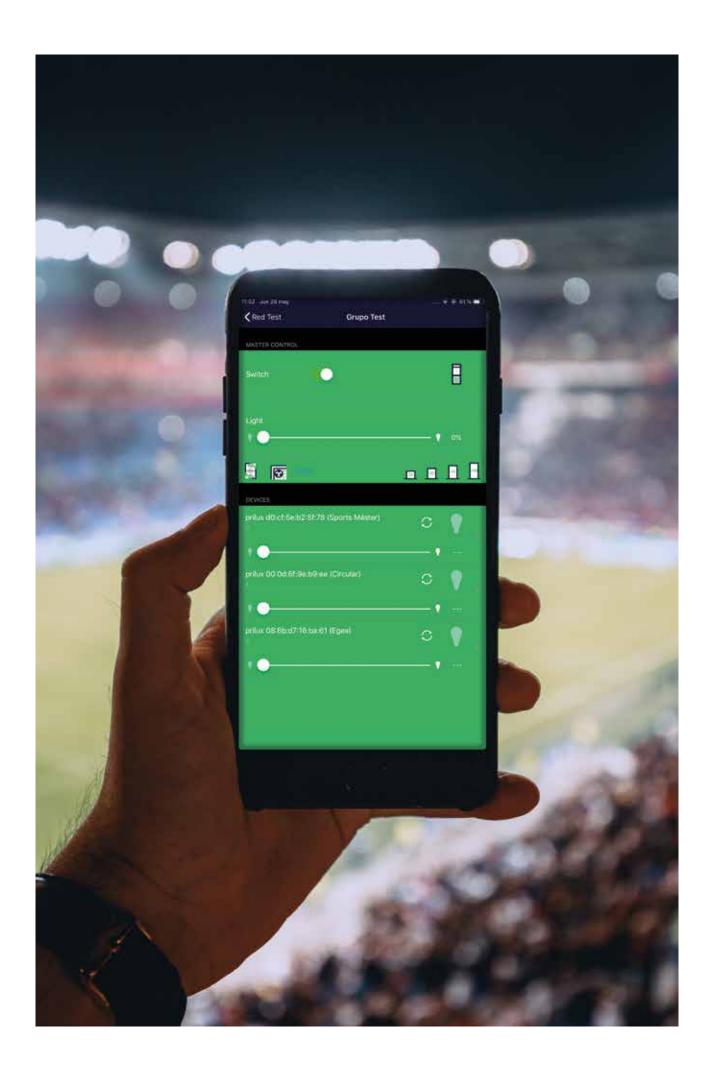
#### **Activity Settings**

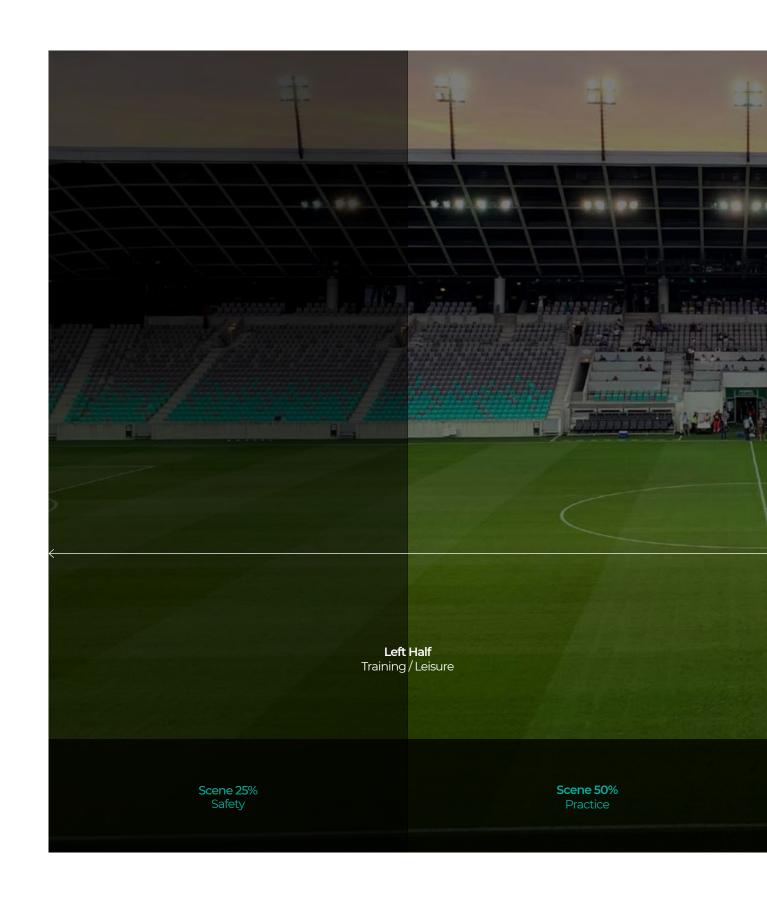
Configure activities based on the time and day of the week



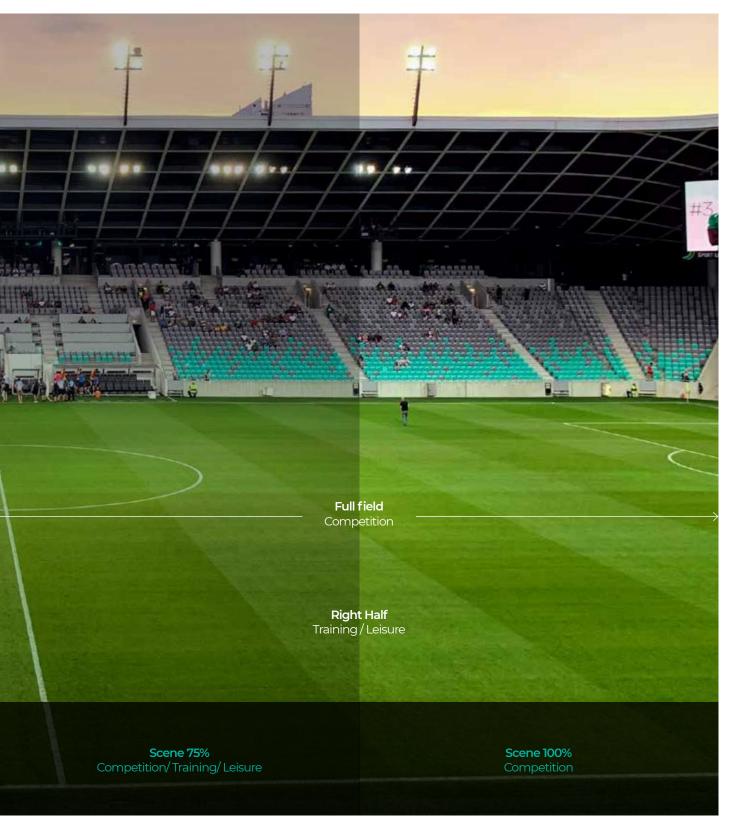
#### Consumption optimization

Optimise electricity consumption with brightness sensors





# Lighting control for each use o application

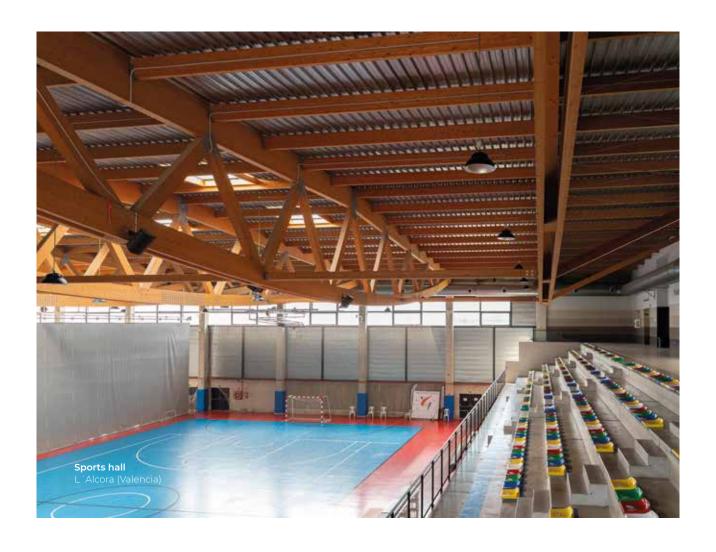




Requires iOS 10.0 or later. Compatible with iPhone, iPad and iPod touch







# Cora Stadium







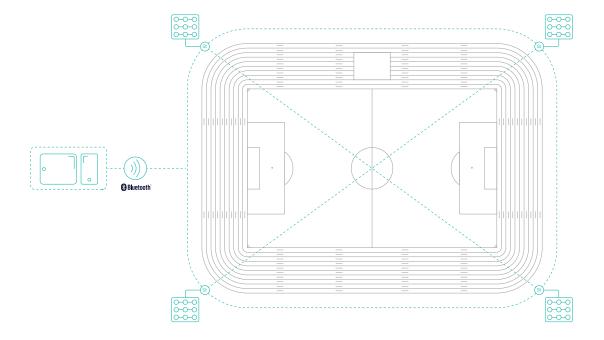
Long distances Range up to 200 metres

Controls up to 64 drivers





Example of a football stadium lit with floodlights distributed on four light towers located in the corners





# Cora Master

# Total flexibility for any installation

The CORA SPORTS MASTER wireless device controls groups of light fixtures that are connected to a CORA STADIUM device, with a simple button and without additional wiring. The device allows to control lighting by sectors, adapting it to the activity at any given time. For more flexibility, management tasks can be carried out using the PLAYMESH application.



**Control solution** 



Range up to 200 metres



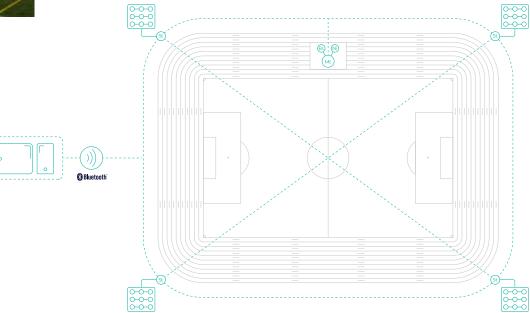
Controls up to 30 CORA SPORTS/STADIUM





### Football stadium lighting

Example of a football stadium lit with floodlights distributed on four light towers located in the corners.





# Floodlights for sports lighting solutions

# Hexagon Play















HEXAGON PLAY, next-generation modular floodlights for large indoor and outdoor spaces with high technical requirements.

Flexible light fixture with optical groups that can be combined. Up to 5 modules.

Compact, robust design with a high degree of watertightness. Extremely resistant to impacts, strong winds and vibrations.

DALI DALI control as standard,, except for Hexagon ESSENTIAL.

Compatible with CORA SPORTS control systems and CORA remote control systems, which reduce energy consumption by up to 70%.



#### Certifications











#### **Technologies**







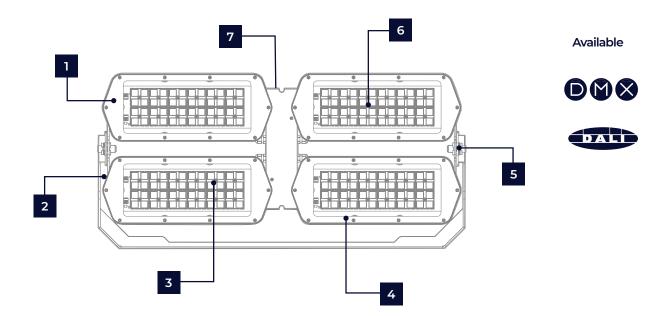


Surge protector, three protection spheres.

Operating temperature control: by NTC above 70W (85°C) or internal thermal control in drivers (depending on model).

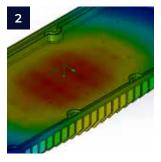
High Cooled Box, in the equipment boxes, providing optimal thermal operating conditions.

Temperature Evacuation Skin System, a mechanical micro-compacting of the surface of the material to increase heat dissipation.





Die-cast aluminium body. Improved alloy with high corrosion resistance.



Optimised heat sink. Operation up to 50°. Wide variety of optics.



Wide variety of optics, reducing the number of floodlights and installation costs.



Enclosure: Polycarbonate diffuser with UV treatment.



Installation: Adjustable.



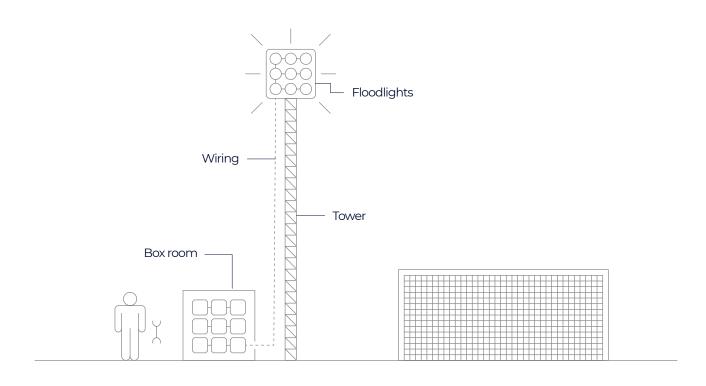
Glare level controlled. High uniformity.



Integrated Box or Remote Box.

# Hexagon Play

Floodlights equipped with remote boxes allow installation up to 80m away, allowing floodlights to be installed at great heights, on towers, eaves, roofs and structures, while grouping the boxes in spaces on levels that are more easily accessible to installers or maintenance staff.





#### Simple maintenance

Installations equipped with remote boxes located in more accessible areas for quicker and easier maintenance.



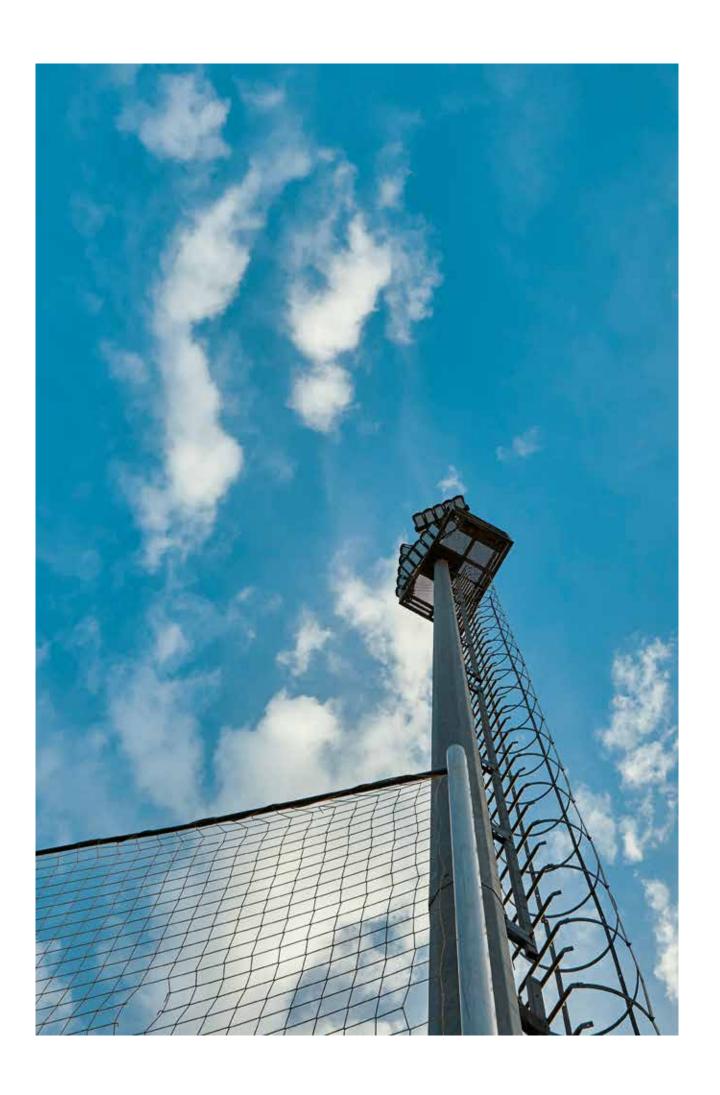
#### Safe installations

The remote installation of boxes is safer for operators because it avoids maintenance work at great heights and makes towers lighter.



#### Economic savings and efficiency

Lower costs, auxiliary equipment like telescoping cranes or platform are not required in the event of an incident.



### Hexagon Play Essential

1X with integrated box



48LEDs 144W/1x, 2x, 3x, 4x, 5x with integrated box



Compact floodlight, high light output and power up to 192W. Installations with basic lighting requirements. (e.g. Recreational sports courts).

Floodlight up to 720W. Installations with lighting solutions that require asymmetry and special optics. (e.g. Sports areas with lighting installed at lower than standard heights).

#### Hexagon Play Was 1X, 2X, 2X with integrated box



Hexagon Play Match Unity 144LEDs/2X with integrated box



Floodlight with dynamic colour temperature changing. To create atmospheres, influencing moods-sensations and improving user well-being. (e.g. Sports hall).

Floodlight up to 500W. Small sports areas that require a lot of lighting, where the light source and the electronic equipment must be kept together. (e.g. Tennis courts, paddle tennis courts).

Essential	Ópt	ima	W	/as	Match Unity
1X	1X 2X 3X 4X 5X		1X	2X	2X
INTEGRATED DRIVER	INTEGRATED BOX			RATED OX	INTEGRATED BOX
PC S-055	PMMA A-EX	PMMA A-IN	PMMA S-033	PMMA A-IN	PC S-060
PC S-025	PMMA P-IN	PMMA P-EX	PMMA P-IN	PMMA A-EX	PC S-020
PC S-090	PMMA S-014	PMMA S-033	PMMA P-EX	PMMA S-014	PC S-030
s/lente	PMMA S-069	PMMA S-138	PMMA S-069	PMMA S-138	PC S-090
-	PMMA S-150	-	PMMAS-150	-	-
Ra ≥7/ 4.000K	Ra ≥70 / 4.000K	RED l≤700mA (620-625mm)	Ra≥70 / 4.000K		Ra ≥70 / 4.000K
Ra≥70/3.000K	Ra≥70/3.000K	GREEN l≤700mA (520-535mm)	PCA		Ra≥70 / 5.000K
Ra≥70 / 5.000K	Ra≥70 / 5.000K	BLUE l≤700mA (465-480mm)		-	Ra≥70/3.000K
-	-	-		-	Ra≥80/3000K

#### Hexagon Play Match 144 LEDS/2X, 3X, 4X with remote box

#### Hexagon Play Arena 2X, 3X, 4X with remote box



Robust, heavy-duty floodlight with maximum performance. Sports areas with very demanding lighting requirements or large areas. (e.g. class I and class II football fields, class I sports centres, large open spaces).



High-performance floodlight designed for TV broadcasting, with light flows for large professional competitions and true-to-life colour reproduction.

## Hexagon Play RGBW 1X, 2X with integrated box



Colour projection both indoors and outdoors. Designed to light by flooding the desired space or surface, but with special optics that allow graze lighting over long distances. (e.g.: Sports areas).

## Hexagon Play RGBW Remote 1X, 2X with remote box

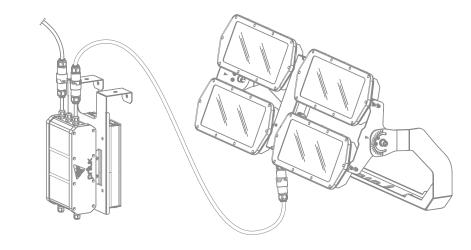


Minimalist colour projection, allowing the electronics to be separated from the module to facilitate maintenance. (e.g.: Small sports facilities).

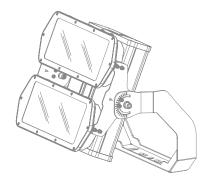
Match	Arena 4K	RGE	3W
2X 3X 4X	2X 3X 4X	1X :	
REMOTE BOX	REMOTE BOX	INTEGRATED BOX	REMOTE BOX
PC S-060	PC S-026	PMMA P-EX	PMMA S-033
PC S-030	PC S-066	PMMA A-IN	PMMA S-069
PC S-020	PC S-037	PMMA A-EX	PMMA S-138
PC S-090	PC S-090	PMMA P-IN	PMMA S-150
-	-	PMMA S-014	-
Ra ≥70 / 4.000K	Ra≥90 / 6.000K	RGBW (White	4000K Ra> 80)
Ra ≥70 / 5.000K	-	-	
Ra≥70/3.000K	-	-	
Ra≥80/3000K	-	-	

# Hexagon Play COMPONENTS

#### Equipment



Remote Box



Integrated Box

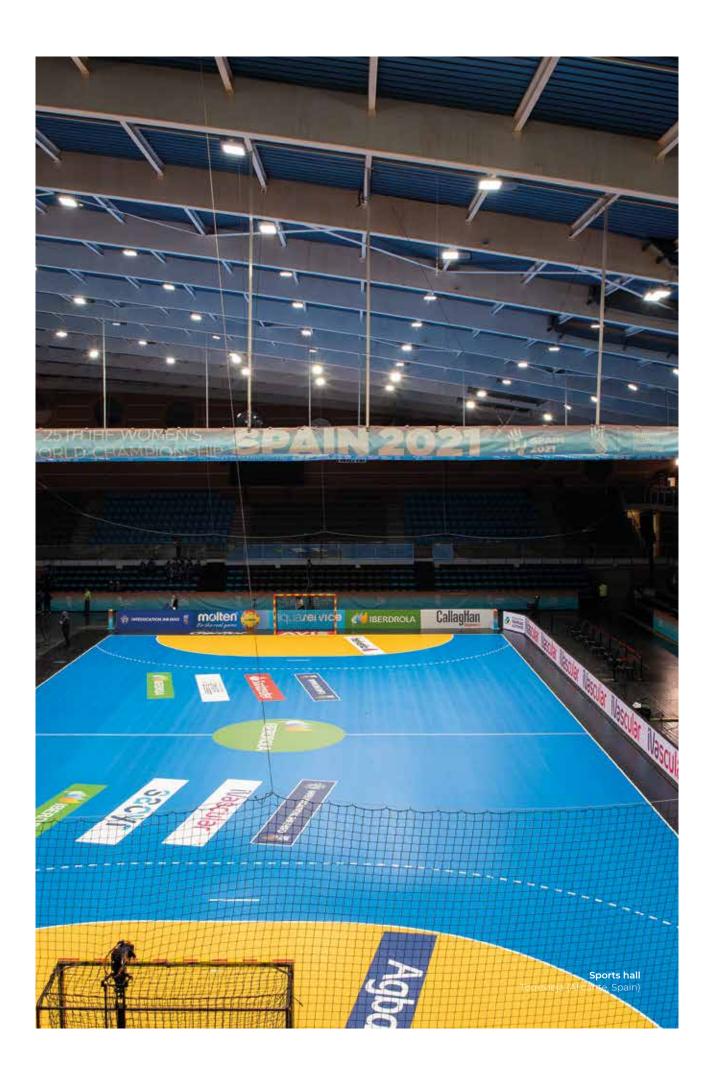


**Integrated Driver** 

#### Optical

PMMA P-IN	Polymethylmethacrylate Intensive Corridor
PMMA P-EX	Polymethylmethacrylate Extensive Corridor
PMMA A-IN	Polymethylmethacrylate Asymmetric Intensive
PMMA A-EX	Polymethylmethacrylate Asymmetric Extensive
PMMA S-014	Polymethylmethacrylate Superintensive Symmetric 14°
PMMA S-033	Polymethylmethacrylate Symmetric Intensive 33°
PMMA S-069	Polymethylmethacrylate Average Symmetrical 69°
PMMA S-090	Polymethylmethacrylate Symmetric 90°
PMMA S-138	Polymethylmethacrylate Extensive Symmetric 138°
PMMA S-150	Polymethylmethacrylate Superextensive Symmetric 150°

PC S-020	Polycarbonate Symmetric Intensive 20°
PC S-025	Polycarbonate Symmetric Intensive 25°
PC S-026	Polycarbonate Symmetric Intensive 26°
PC S-030	Polycarbonate Symmetric Intensive 30°
PC S-037	Polycarbonate Symmetric Intensive 37°
PC S-060	Polycarbonate Symmetric Average 60°
PC S-066	Polycarbonate Symmetric Average 66°
PC S-090	Polycarbonate Symmetric 90°



# Hexagon Play Arena















We design solutions for the most demanding sports competitions and for large stadiums for professional sports.

Artificial lighting has a direct impact on the quality of the TV picture and thus on visual perception. Sporting events must take into account not only the essential lighting requirements demanded by the sporting activities standards,, but must also comply with the specific visual conditions for television broadcasting, if required.

The lighting of the stadiums must allow the broadcast of events with a high level of digital quality. HEXAGON ARENA is the perfect luminaire to comply with the television broadcasting standards and regulations required by sports federations.. It provides optimal lighting for 4K broadcasting as it maximizes the image results. With a TLCI >94 (Television Lighting Consistency Index), it ensures true-to-life colour reproduction.



#### Certifications

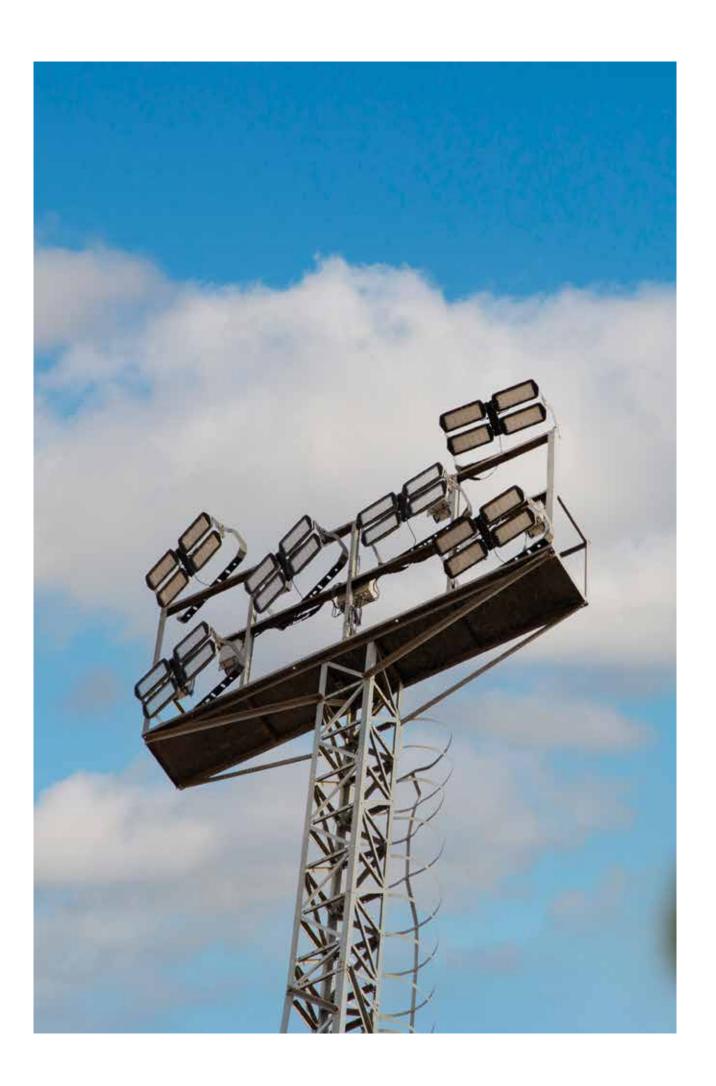












# Hexagon Play RGBW













Sports facilities are becoming more and more flexible offering alternative uses, such as concerts and events. We have developed lighting solutions to offer unforgettable experiences not only during high-level sporting competitions, but also by creating different pre-match shows, half-time shows, etc., and even for large-scale non-sporting shows and events.

Thanks to its DALI or DMX options, the concept of dynamic lighting is maximised. HEXAGON RGBW can project both static and dynamic instantresponse programmed colour scenes and can synchronise the settings with sound.

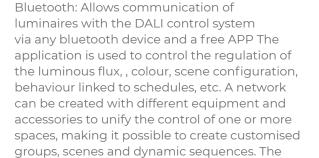
HEXAGON RGBW offers a variety of control possibilities using standard protocols such as Bluetooth or DMX.





### **Technologies**





Bluetooth device is a box connected to the

Hexagon, one per each module.







DMX solution: It is composed of a 4.3" controller and touch panel that allows the RGBW installation to be controlled via DMX. It allows the installation to create different dynamic instant-response scenes with light and sound effects in installations where audiovisual or interactive shows are projected, creating unique, different and original settings. The installation can be controlled or by using a button panel/touch screen, or remotely with a movile device connected to the same network (via cable, Wi Fi or internet) (if available).

# Nantes Play















The NANTES PLAY family of floodlights is suitable for lighting projects that require power and photometries that guarantee uniformity and high levels in the installation. Ideal for small and medium-sized class I, II and III sports fields, as well as indoor and outdoor multi-sports areas.

The Nantes has a compact, minimalist design and is designed to dissipate heat, extending the life of its components and facilitatingwater removal, self-cleaning and preveting rusting.

They are DALI floodlights compatible with CORA SPORTS that offer multiple combinations of sports lighting solutions.

Nantes Play



Nantes L Play



Nantes XL Play









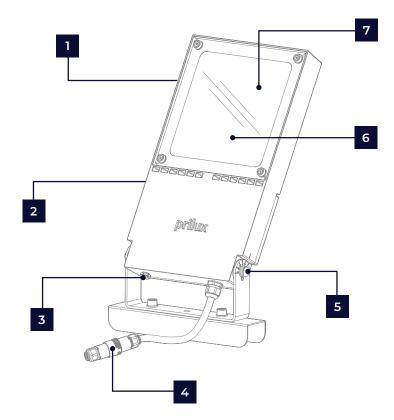
### **Technologies**





Surge protector, three protection spheres.

Operating temperature control: by NTC from 70W (85°C) or internal thermal control in drivers (depending on model).







**Design:**Compact and minimalist, made of high-pressure diecast aluminium.



**Connectivity:** NEMA 7



ZHAGA BOOK 18



**Depressor valve:**Prevents condensation on electronic components.



Installation:
Includes a 1m hose and an IP68 connection block.



**Orientation:**The adjustable beam enables precise lighting placement of +/-90°

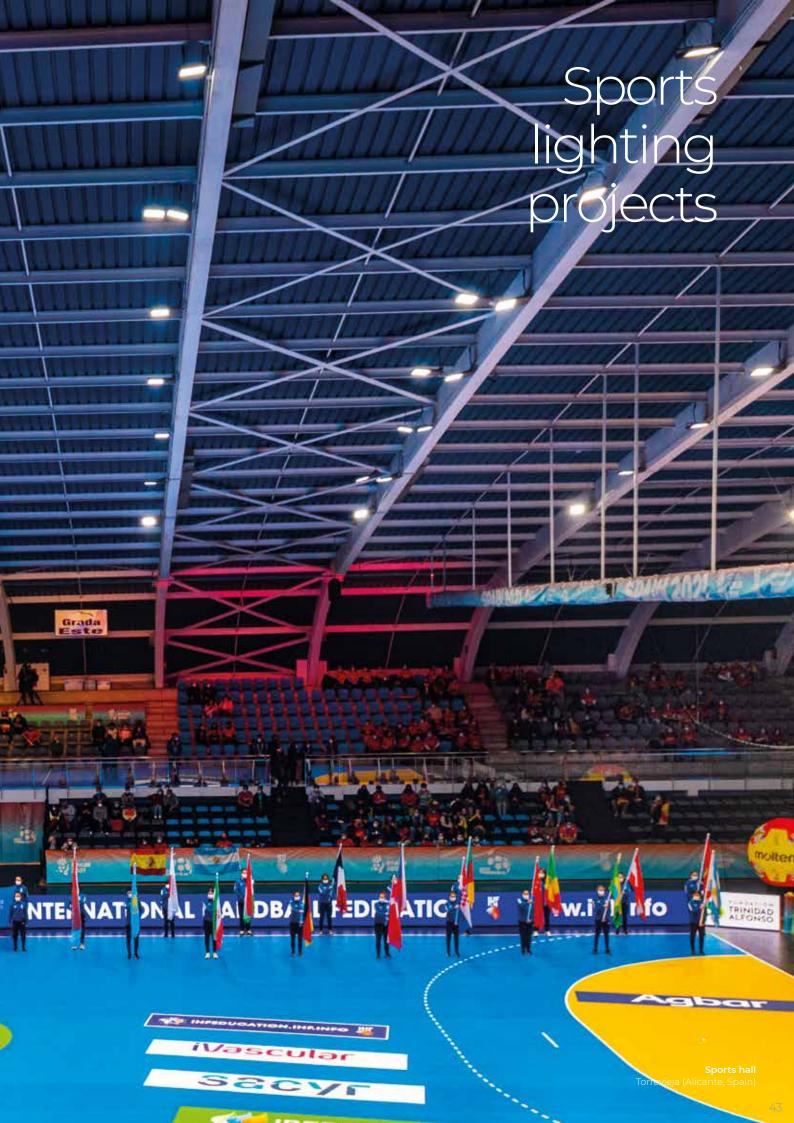


**Tempered glass:** Thickness: 5 mm



**Light source::** Efficiencies of up to 1681m/W







# Football field lighting

Most of the training sesions and matches are at sunset, so it is required high-quality and effective lighting that provides perfect visibility conditions.

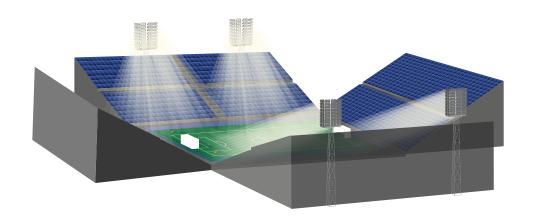
The lighting requirements of sports facilities must be adapted to each event, training, match (international, national, regional, local) and its television broadcast. Always keeping in mind the uniformity and the visual comfort, avoiding glare.



### Television broadcasting

Lighting project of a 100x64m football field, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for high-level international and national competitions with television broadcasting (CLASS I).

Lighting solution: HEXAGON ARENA floodlights, achieving the average values specified as standard for this type of installation.

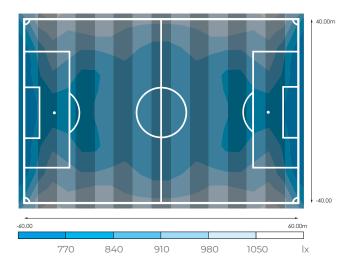


### Data

100 x 64m
6.400m <sup>2</sup>
24m
214.000W
33,44W/m <sup>2</sup>
22.774.652lm

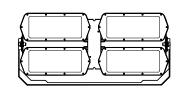
### Illuminance

Em	891lx		/= /= )	0.00
Emin	953lx	Uniformity	U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,82



### Hexagon Arena

Ud	20	W <sub>T</sub>	фт
4	HEXAGON ARENA 4X144LEDS 960 S-037 DMX	1.000W	121.705lm
20	HEXAGON ARENA 4X144LEDS 960 S-037 DMX	1.500W	155.753lm
84	HEXAGON ARENA 4X144LEDS 960 S-026 DMX	1.500W	158.088lm
36	HEXAGON ARENA 4X144LEDS 960 S-066 DMX	1.500W	163.705lm



### Class I

Lighting project of a 100x64m football field, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for high-level international and national competitions (CLASS I).

Lighting solution: HEXAGON MATCH 4X floodlights, achieving the average values specified as standard for this type of installation.

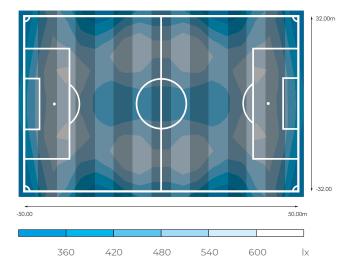


### Data

Dimensions	100 x 64m
Surface Area	6.400m <sup>2</sup>
Luminaire height	24m
Total power	55.440W
Power/m <sup>2</sup>	8,66W/m²
Total flux	5.987.924lm

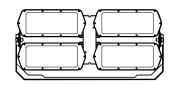
### Illuminance

E <sub>m</sub>	504lx	11-:6	/E /E \	0.70
Emin	3511x	Uniformity	U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,70



### Hexagon Match 4X

Ud	26	W <sub>T</sub>	$\phi_{T}$
16	HEXAGON MATCH 4X144LEDS 740 S-020 DALI	1.540W	158.399lm
20	HEXAGON MATCH 4X 740 SIM 30D	1.540W	172.677lm

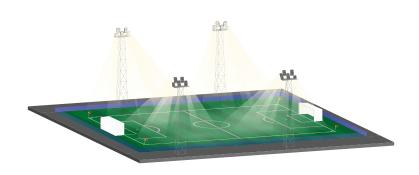


### Class II

Lighting project of a 100x64m football field, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE).

Designed for regional competitions and high-level training (CLASS II).

Lighting solution: HEXAGON MATCH 2X and 3X floodlights, achieving the average values specified as standard for this type of installation.

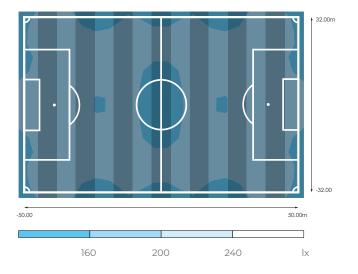


### Data

Dimensions	100 x 64m
Surface Area	6.400m <sup>2</sup>
Luminaire height	18m
Total power	18.328W
Power/m <sup>2</sup>	2,86W/m <sup>2</sup>
Total flux	2.271.216lm

### Illuminance

E <sub>m</sub>	202lx		/= /= )	0.50
Emin	120lx	Uniformity	U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,60



### Hexagon Match 2X/3X

Ud	80	WT	фт
4	HEXAGON MATCH 2X 740 S-30	680W	84.418lm
4	HEXAGON MATCH 3X 740 S-30	977W	120.065lm
12	HEXAGON MATCH 3X 740 S-30	975W	121.107lm

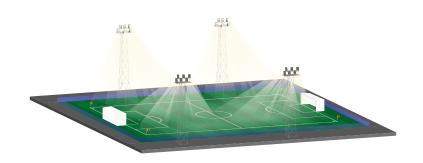




### Class III

Lighting project of a 100x64m football field, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for regional local competitions, training and recreational use (CLASS III).

Lighting solution: NANTES XL PLAY floodlights, achieving the average values specified as standard for this type of installation.

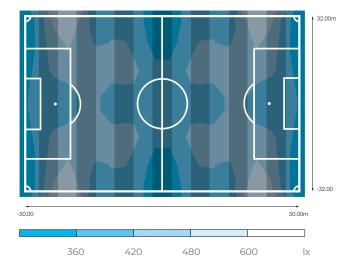


### Data

Dimensions	100 x 64m
Surface Area	6.400m <sup>2</sup>
Luminaire height	16m
Total power	7.728W
Power/m <sup>2</sup>	1,21W/m²
Total flux	1.018.608lm

### Illuminance

E <sub>m</sub>	79lx	l le ife me its .	II (F	0.63
Emin	49lx	Uniformity	U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,62



### Nantes XL Play

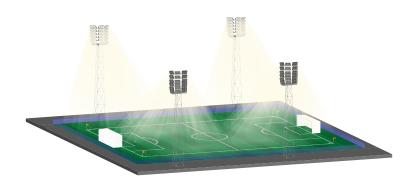
Ud	20	WT	фт
12	NANTES XL 300LEDS 1000mA 740 S-25	322W	42.438lm
12	NANTES XL 300LEDS 1000mA 740 S-55	322W	42.446lm



### Level E3 (FFF)

Lighting project of a 100x64m football field, according to the French Football Federation norm (FFF). Designed for sports activities classified at Level E3.

Lighting solution: HEXAGON MATCH 4X floodlights, achieving the average values specified as standard for this type of installation.

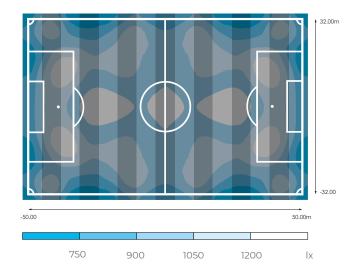


#### Data

100 x 64m	
6.400m²	
20m	
110.880W	
17,32W/m <sup>2</sup>	
11.918.736lm	

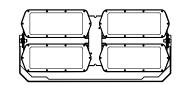
### Illuminance

E <sub>m</sub>	774lx	11-161	/E /E )	0.70
Emin	602lx	Uniformity U <sub>o</sub>	(E <sub>min</sub> /E <sub>m</sub> )	0,78



### Hexagon Match 4X

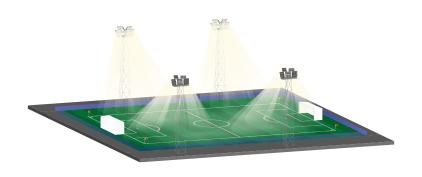
Ud	20	WT	фт
4	HEXAGON MATCH 4X144LEDS 740 S-020 DALI	1.540W	158.399lm
4	HEXAGON MATCH 4X144LEDS 740 S-030 DALI	1.540W	172.677lm



## Football field-11 Level E4 (FFF)

Lighting project of a 100x64m football field, according to the French Football Federation norm (FFF). Designed for sports activities classified at Level E4.

Lighting solution: HEXAGON MATCH 4X floodlights, achieving the average values specified as standard for this type of installation.

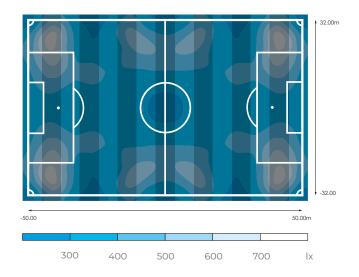


#### Data

Dimensions	100 x 64m
Surface Area	6.400m <sup>2</sup>
Luminaire height	16m
Total power	49.280W
Power/m <sup>2</sup>	7,70W/m <sup>2</sup>
Total flux	10.594.432lm

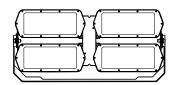
### Illuminance

E <sub>m</sub>	330lx		/E /E \	0.77
Emin	242lx	Uniformity U	(E <sub>min</sub> /E <sub>m</sub> )	0,73



### Hexagon Match 4X

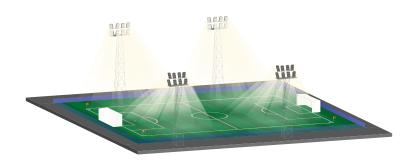
Ud	20	WT	Фт
24	HEXAGON MATCH 4X144LEDS 740 S-020 DALI	1.540W	158.399lm
8	HEXAGON MATCH 4X144LEDS 740 S-030 DALI	1.540W	172.677lm



## Football field-11 Level E5 (FFF)

Lighting project of a 100x64m football field, according to the French Football Federation norm (FFF). Designed for sports activities classified at Level E5.

Lighting solution: HEXAGON MATCH 3X floodlights, achieving the average values specified as standard for this type of installation.

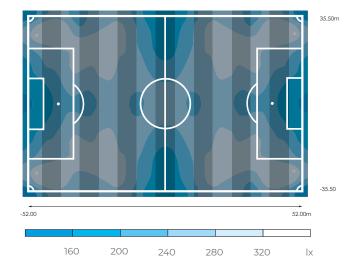


#### Data

Dimensions	100 x 64m
Surface Area	6.400m <sup>2</sup>
Luminaire height	16m
Total power	31.264W
Power/m <sup>2</sup>	4,88W/m²
Total flux	3.847.044lm

### Illuminance

E <sub>m</sub>	2131x	11-161411	(F /F )	0.72
Emin	152lx	Uniformity U	(E <sub>min</sub> /E <sub>m</sub> )	0,72



### Hexagon Match 3X

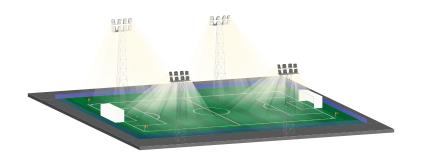
Ud	20	WT	фт
20	HEXAGON MATCH 3X144LEDS 740 S-030 DALI	977W	121.107lm
12	HEXAGON MATCH 3X144LEDS 740 S-060 DALI	977W	118.742lm



Level E6 (FFF)

Lighting project of a 100x64m football field, according to the French Football Federation norm (FFF). Designed for sports activities classified at Level E6

Lighting solution: HEXAGON MATCH 2X144LEDS 740 S-030 DALI, HEXAGON MATCH 2X144LEDS 740 S-030 DALI, HEXAGON MATCH 2X144LEDS 740 S-060 DALI floodlights, achieving the average values specified as standard for this type of installation.

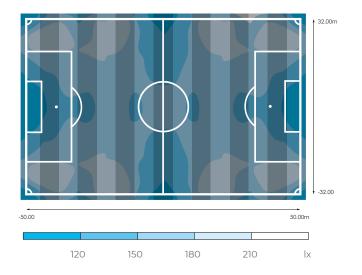


#### Data

Dimensions	100 x 64m
Surface Area	6.400m <sup>2</sup>
Luminaire height	16m
Total power	19.744W
Power/m <sup>2</sup>	3,08W/m <sup>2</sup>
Total flux	2.465.348lm

### Illuminance

E <sub>m</sub>	138lx		(= /= )	070
E	97lx	Uniformity	U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,70



### Hexagon Match 2X

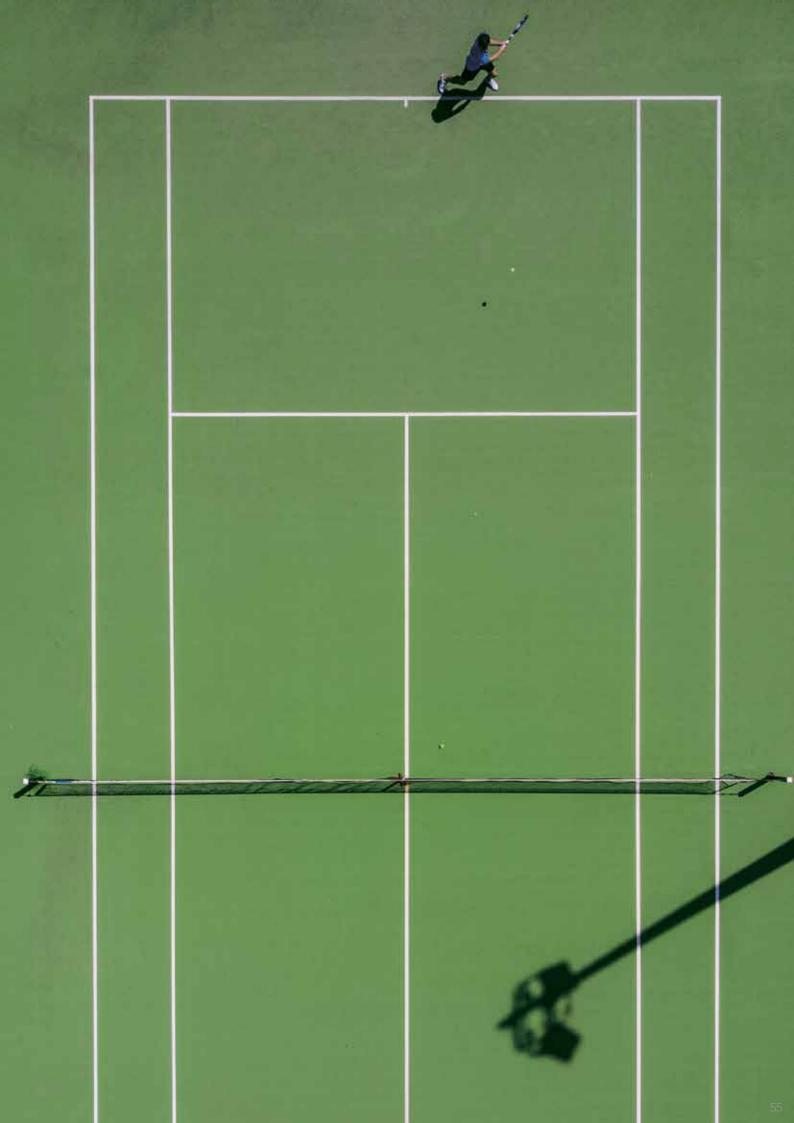
Ud	20	WT	фт
16	HEXAGON MATCH 2X144LEDS 740 S-030 DALI	546W	70.918lm
4	HEXAGON MATCH 2X144LEDS 740 S-030 DALI	688W	84.418lm
12	HEXAGON MATCH 2X144LEDS 740 S-060 DALI	688W	82.749lm





# Tennis court lighting

Tennis court lighting aims to ensure that the ball is visible at all times, for both players and spectators, regardless of the position and speed of the ball. For this reason, it is important to consider ideal uniformity values when designing the lighting for the installation.



# Tennis court (Outdoor)

### Class I

Lighting project of a 36x18m tennis court, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for high-level international and national competitions (CLASS I).

Lighting solution: HEXAGON MATCH 3X floodlights, achieving the average values specified as standard for this type of installation.

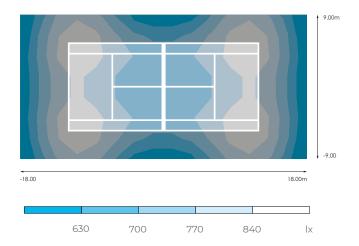


#### Data

Dimensions	36 x 18m
Surface Area	648m²
Luminaire height	10m
Total power	11.724W
Power/m <sup>2</sup>	18,09W/m²
Total flux	1.424.904lm

### Illuminance

E <sub>m</sub>	770lx		0.70
Emin	600lx	Uniformity U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,78



### Hexagon Match 3X

Ud	Ud 🖧		$\phi_{T}$
12	HEXAGON MATCH 3X 740 S-60 DALI	977W	118.742lm



# Tennis court (Indoor)

Lighting project of a 36x18m tennis court, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for regional competitions and high-level training (CLASS II).

Lighting solution: HEXAGON MATCH 2X floodlights, achieving the average values specified as standard for this type of installation.

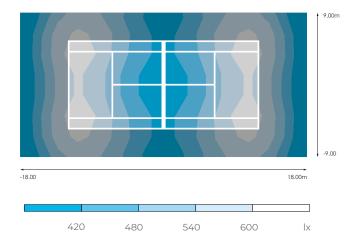


#### Data

Dimensions	36 x 18m
Surface Area	648m²
Luminaire height	10m
Total power	6.552W
Power/m <sup>2</sup>	10,11W/m²
Total flux	835.080lm

### Illuminance

E <sub>m</sub>	505lx		0.7/
Emin	376lx	Uniformity U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,74



### Hexagon Match 2X

Ud	20		$\phi_{T}$
12	HEXAGON MATCH 2X144LEDS 740 S-060 DALI	546W	69.590lm



# Tennis court (Outdoor)

### Class III

Lighting project of a 36x18m tennis court, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for local competitions, training and recreational use (CLASS III).

Lighting solution: NANTES XL PLAY floodlights, achieving the average values specified as standard for this type of installation.

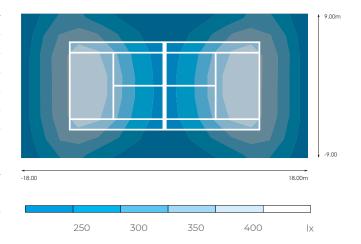


#### Data

Dimensions	36 x 18m
Surface Area	648m²
Luminaire height	10m
Total power	3.864W
Power/m <sup>2</sup>	5,96W/m <sup>2</sup>
Total flux	509.352lm

### Illuminance

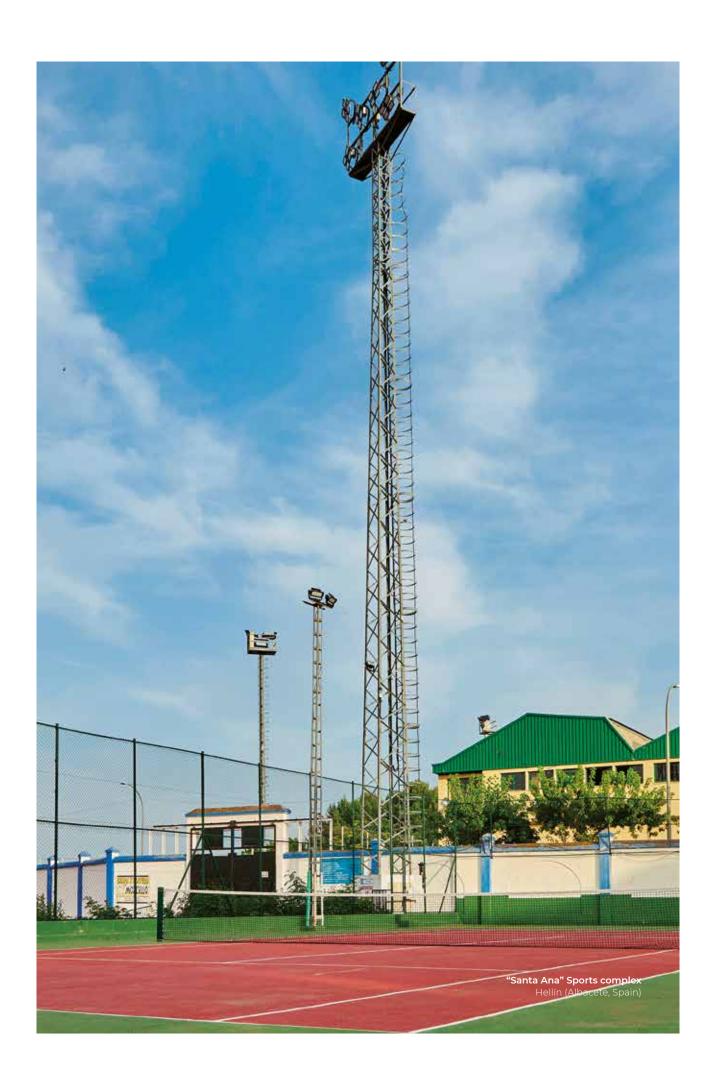
E <sub>m</sub>	320lx		0.67
E <sub>min</sub>	214lx	Uniformity U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,67



### Nantes XL Play

Ud	20	WT	фт
4	NANTES XL PLAY 300LEDS 1000mA 740 S-90	322W	42.446lm
8	NANTES XL PLAY 300LEDS 1000mA 740 S-55	322W	42.446lm







# Paddle court lighting

Because of the dynamic movement and high speed of the ball in this sport, lighting is essential to be able to locate it at all times. For this reason, the uniformity values are important to be considered in the design of these installations.

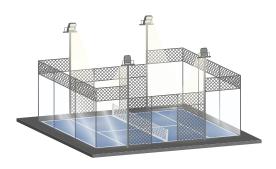


# Paddle court (Outdoor)

### Class I

Lighting project of a 20x10m paddle court, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for high-level international and national competitions (CLASS I).

Lighting solution: NANTES L PLAY floodlights, achieving the average values specified as standard for this type of installation.

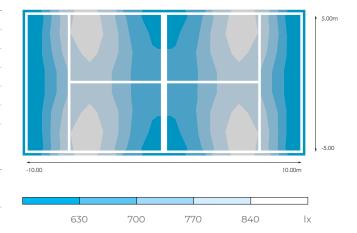


#### Data

Dimensions	20 x 10m
Surface Area	200m²
Luminaire height	6m
Total power	1.672W
Power/m <sup>2</sup>	8,36W/m <sup>2</sup>
Total flux	220.328lm

### Illuminance

E <sub>m</sub>	770lx		0.70
Emin	600lx	Uniformity U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,78



### Nantes L Play

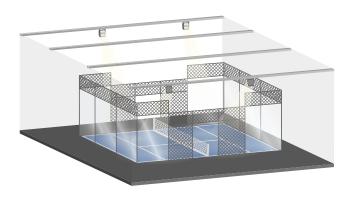
Ud	26	W <sub>T</sub>	фт
8	NANTES L 192LEDS 100mA 740 S-55	209W	27.541lm



# Paddle court (Indoor) Class I

Lighting project of a 20x10m paddle court, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for high-level international and national competitions (CLASSI).

Lighting solution: HEXAGON MATCH UNITY floodlights, achieving the average values specified as standard for this type of installation.

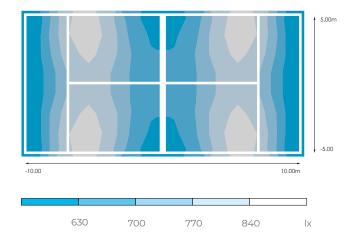


#### Data

Dimensions	20 x 10m
Surface Area	200m²
Luminaire height	6m
Total power	2.184W
Power/m <sup>2</sup>	10,92W/m <sup>2</sup>
Total flux	277.496lm

### Illuminance

E <sub>m</sub>	591lx		0.70
Emin	4131x	Uniformity $U_o$ ( $E_{min}/E_m$ )	0,70



### Hexagon Match Unity

Ud	20	WT	фт
4	HEXAGON MATCH UNITY 2X144LEDS 740 S-090	546W	69.374lm



## Paddle court (Outdoor)

### Class II

Lighting project of a 20x10m paddle court, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for regional competitions and high-level training (CLASS II).

Lighting solution: NANTES PLAY floodlights, achieving the average values specified as standard for this type of installation.

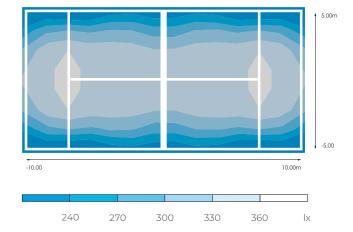


#### Data

Dimensions	20 x 10m
Surface Area	200m²
Luminaire height	6m
Total power	944W
Power/m <sup>2</sup>	4,72W/m²
Total flux	120.720lm

### Illuminance

E <sub>m</sub>	320lx		0.72
Emin	232lx	Uniformity $U_o$ ( $E_{min}/E_m$ )	0,72



### Nantes Play

Ud	80	WT	фт
8	NANTES PLAY 740 S-055	118W	15.090lm



# Paddle court (Outdoor) Class III

Lighting project of a 20x10m paddle court, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for local competitions, training and recreational use (CLASS III).

Lighting solution: NANTES PLAY floodlights, achieving the average values specified as standard for this type of installation.

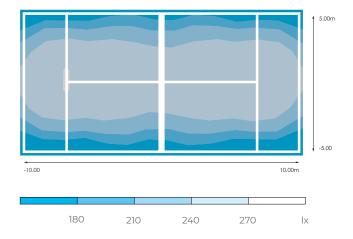


#### Data

Dimensions	20 x 10m
Surface Area	200m²
Luminaire height	6m
Total power	632W
Power/m <sup>2</sup>	3,16W/m²
Total flux	93.104lm

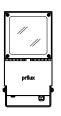
### Illuminance

E <sub>m</sub>	237lx		0.72
Emin	172lx	Uniformity U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,72



### Nantes Play

Ud	80	WT	фт
8	NANTES 108LEDS 1.000mA 740 S-55	79W	11.638lm





# Sports hall Lighting

The lighting solutions in indoor sports venues are aimed at providing proper viewing of the activity, which means that the ball must be visible and detectable anywhere on the court. To achieve this, it is essential to create contrasts between the objects on the court, and also for all areas of the floor to have the proper uniformity, making it essential to consider the level that the installation was designed for and glare limitation.

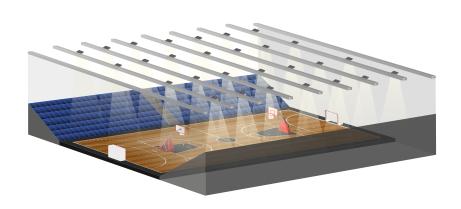


# Sports hall

### Class I

Lighting project of a 40x20m sports hall, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for high-level international and national competitions (CLASS I).

Lighting solution: NANTES L PLAY floodlights, achieving the average values specified as standard for this type of installation.

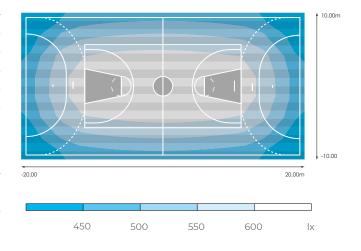


#### Data

Dimensions	40 x 20m
Surface Area	800m²
Luminaire height	9m
Total power	5.852W
Power/m <sup>2</sup>	7,31W/m²
Total flux	771.148lm

### Illuminance

E <sub>m</sub>	562lx	11:-::f:t 11 /E /E	0.72
Emin	406lx	Uniformity U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub>	0,72



### Nantes L Play

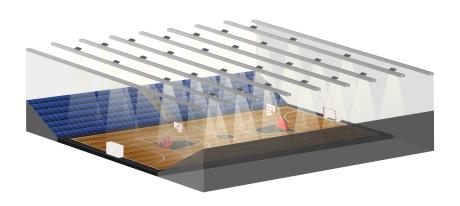
Ud	20	W <sub>T</sub>	фт
28	NANTES L PLAY 192LEDS 740 S-090	209W	27.541lm



### Sports hall Class II

Lighting project of a 40x20m sports hall, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for regional competitions and high-level training (CLASS II).

Lighting solution: NANTES L PLAY floodlights, achieving the average values specified as standard for this type of installation.

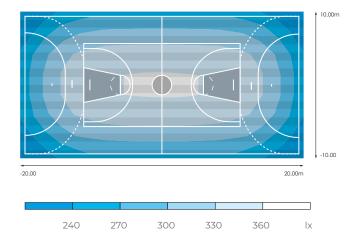


#### Data

Dimensions	40 x 20m
Surface Area	800m²
Luminaire height	9m
Total power	2.744W
Power/m <sup>2</sup>	3,43W/m <sup>2</sup>
Total flux	433.496lm

### Illuminance

E <sub>m</sub>	316lx		0.72
Emin	229lx	Uniformity $U_o$ ( $E_{min}/E_m$ )	0,72



### Nantes L Play

Ud	d &		$\varphi_{T}$
28	NANTES L PLAY 192LEDS 740 S-090	98W	15.482lm

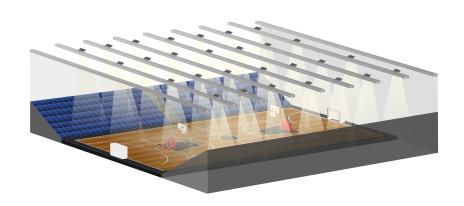


# Sports hall

### Class III

Lighting project of a 40x20m sports hall, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for Local competitions, training and recreational use (CLASS III).

Lighting solution: NANTES PLAY floodlights, achieving the average values specified as standard for this type of installation.

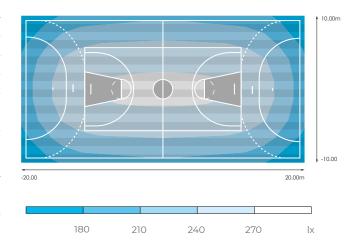


#### Data

Dimensions	40 x 20m
Surface Area	800m²
Luminaire height	9m
Total power	2.212W
Power/m <sup>2</sup>	2,76W/m <sup>2</sup>
Total flux	325.892lm

### Illuminance

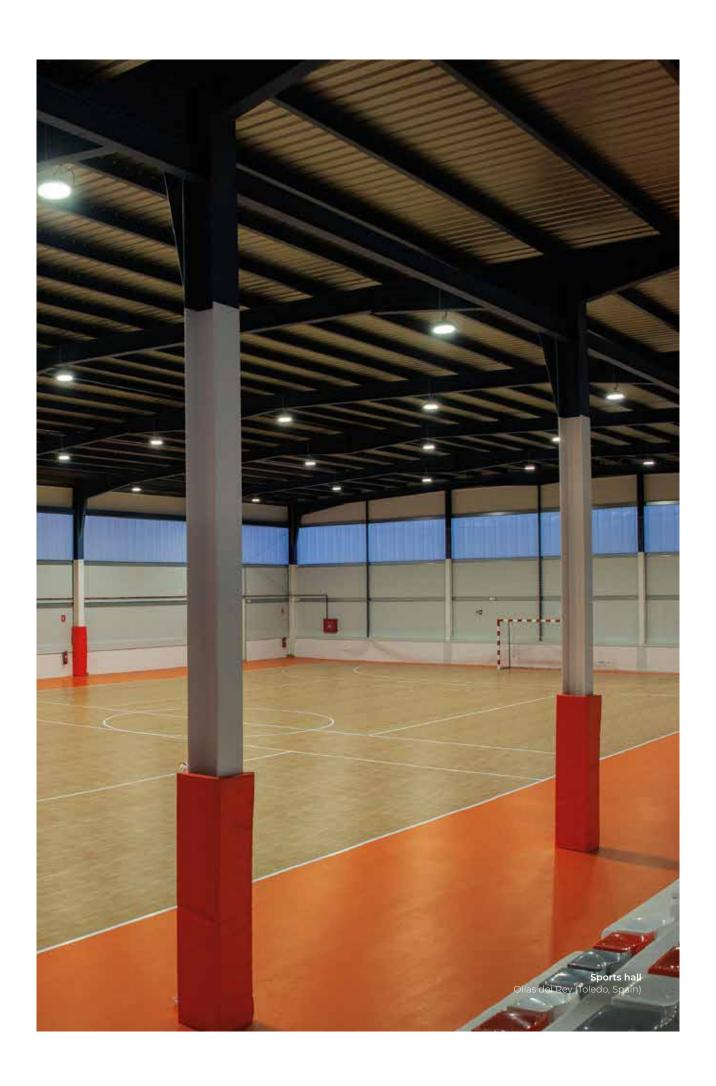
E <sub>m</sub>	240lx	11-: :f: tr 11 /F /F	0.77
Emin	175lx	Uniformity U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub>	0,73



### Nantes Play

Ud	26	W <sub>T</sub>	фт
28	NANTES PLAY 108LEDS 700mA 790 S-055	79W	11.639lm







Swimming pool lighting is essential for safety during use, especially for lifeguards and swimmers or users who may experience some kind of difficulty in the pool. For this reason, the design of the floodlight layout in the installation is a complex process that must be done in the early phases of execution due to the many the restrictions and indications marked in the standards.

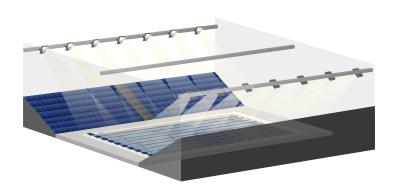


# Indoor pool

### Class III

Lighting project of a 25x16.50m indoor pool, according to UNE-EN 12193 "Standards for Sports and Recreational Facilities" (NIDE). Designed for Local competitions, training and recreational use (CLASS III).

Lighting solution: NANTES L PLAY floodlights, achieving the average values specified as standard for this type of installation.

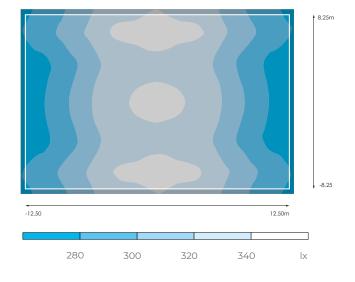


#### Data

Dimensions	25 x 16,50m
Surface Area	412.5m <sup>2</sup>
Luminaire height	6m
Total power	1.666W
Power/m <sup>2</sup>	2,08W/m²
Total flux	264.440lm

### Illuminance

E <sub>m</sub>	3131x		/E /E \	0.07
E	263lx	Uniformity	U <sub>o</sub> (E <sub>min</sub> /E <sub>m</sub> )	0,83



### Nantes L Play

Ud	20	W <sub>T</sub>	фт
12	NANTES L PLAY 192LEDS 740 AV 60X145	138,8W	18.870lm



