Solutions for
sport facilities lighting

1st edition

Lighting

GEWISS

Contents

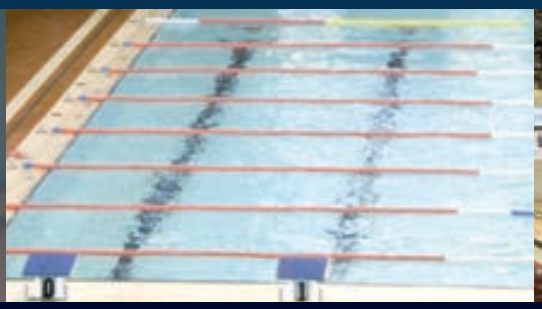
OUTDOOR SPORTS PROJECTS

OUTDOOR

INDOOR SPORTS PROJECTS

INDOOR

System	Class EN 12193	Dimensions (metres)	Average lighting [lx]	MinE/AveE	[RA]	Device	Page
TENNIS	I	36x18	750	0.7	60	MERCURIO 2 400W	28
	II	36x18	500	0.7	60	MERCURIO 2 400W	29
	III	36x18	300	0.5	20	MERCURIO 2 400W	30
HANDBALL	II	40x20	500	0.7	60	MERCURIO 2 400W	31
	III	40x20	200	0.5	20	MERCURIO 2 400W	32
SQUASH	II	9.75x6.40	500	0.7	60	ZNT 2x80W	33
	III	9.75x6.40	300	0.7	20	ZNT 4x55W	34
VOLLEYBALL	I	24x15	750	0.7	60	MERCURIO 2 400W	35
	II	24x15	500	0.7	60	MERCURIO 2 400W	36
	III	24x15	200	0.5	20	MERCURIO 2 400W	37
BASKETBALL	I	28x15	750	0.7	60	MERCURIO 2 400W	38
	II	28x15	500	0.7	60	MERCURIO 2 400W	39
	III	28x15	200	0.5	20	MERCURIO 2 400W	40
SWIMMING	I	50x21	500	0.7	60	HORUS 3 AS. 400W	41
	II	50x21	300	0.7	60	HORUS 3 AS. 400W	42
	III	50x21	200	0.5	20	HORUS 3 AS. 400W	43



MERCURIO

One product, a thousand solutions.

A range of low/medium power (70 - 400W) outdoor floodlights in die-cast aluminium, in two sizes to meet all design requirements. The compact, technical design means it can be used for both floodlighting purposes and in the urban lighting context. Great attention to detail, shown by the perfect integration of the handle and hinge with the body of the product. Thanks to the various optics (symmetrical, asymmetrical, circular, street) and the use of different light sources (both discharge and fluorescent), all design needs can be satisfied while at the same time ensuring good energy savings and excellent performance. There are many fields of application, above all floodlighting in urban, industrial and sports environments, the lighting of advertising signs, and use in urban lighting (with the relative poles and arms - Mercurio 1 system).

COLOSSEUM

Winning power.

The Colosseum range: light at its most powerful. A range of die-cast aluminium floodlights for discharge lamps with a maximum power of 2000W. A product line enriched with a vast range of optics: symmetrical, asymmetrical, and circular, with diffused and restricted beams responding to any need, from lighting sports facilities where colour TV images are filmed, through to the specific needs of ports and airports. Versions with lamp hot re-ignition and optical accessories such as visors and diffusing glass are also available. Colosseum, a truly winning range.

TITANO

Higher quality solutions.

The Titano range: a success enriched with innovative solutions. Like the new front opening, adjusted by manual clip hooks: offering great convenience, and improving the efficiency of installation and maintenance interventions. A body in die-cast aluminium, with separate wiring and optical compartments. High bay in 99.85 polished and anodised aluminium. Closing hooks and external nuts and bolts in stainless steel. Tempered glass and silicone gaskets.
The floodlights of the Titano range are also available in the special version for ATEX environments.

HORUS 3

Everything seen in a new light.

The Horus range guarantees high performance, even in critical environments. A range of floodlights for indoors and outdoors, made of reinforced, mass-coloured polyamide. The material used (more prized than polycarbonate) guarantees greater mechanical resistance and reduced ageing due to thermal stress and U.V. rays. In addition, a complete range of 99.85 aluminium optics, polished and anodised, ensures the best light yield over time. All the models are characterised by tempered, serigraphed glass and handle-operated opening.

ZNT

The only compact fluorescent sources.

The ZNT range: market leader in terms of efficiency and robustness. Watertight luminaires with high-quality polycarbonate body and transparent polycarbonate diffuser stabilised for U.V. rays. Self-extinguishing degree of 850°C; impact resistance of IK 09. Equipped with stainless steel clips that can only be released using a tool, to guarantee vandal-proof protection. The range also includes compact fluorescent versions of 55 and 80W with an electronic power supply - the only ones of their kind on the market.


TOYOTA
FORTUNA

SPORTS FACILITIES LIGHTING

This collection aims to spread a lighting culture from the design and installation viewpoint, providing the basic information needed to create sport facilities lighting systems of the best quality, from design through to installation.

Apart from skilled professionals and qualified installers, these solutions will also be useful for those wanting to acquire further knowledge about the design and application aspects of lighting, such as students of professional technical colleges and aspiring lighting designers.

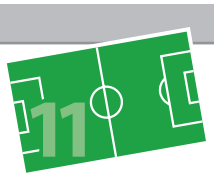
The design sheets refer to sports fields of standard sizes, and the projects were developed in compliance with the regulations, producing various levels of lighting to meet the needs of a range of activities from amateur to semi-professional and professional.

FOOTBALL - HIGH-LEVEL COMPETITIONS

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS I

OUTDOOR

REQUISITES



Play area dimensions

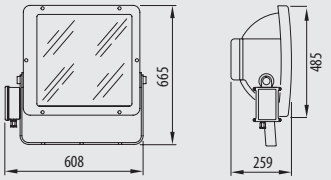
Length [m]	105
Width [m]	65
Grid points (length)	21
Grid points (width)	15

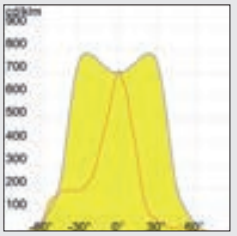
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
I	500	0.7	50	60

PROPOSED SOLUTION

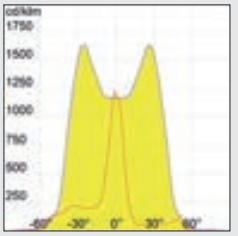
"Colosseum" symmetrical floodlight 2000W - GW84644 GW84744

to be used with the relative supply unit





GW84644



GW84744

TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Colosseum
Optic	Symmetrical restricted/diffused
Lamp	MHN-LA 2000W/842 400V
Lamp flux (lm)	220,000

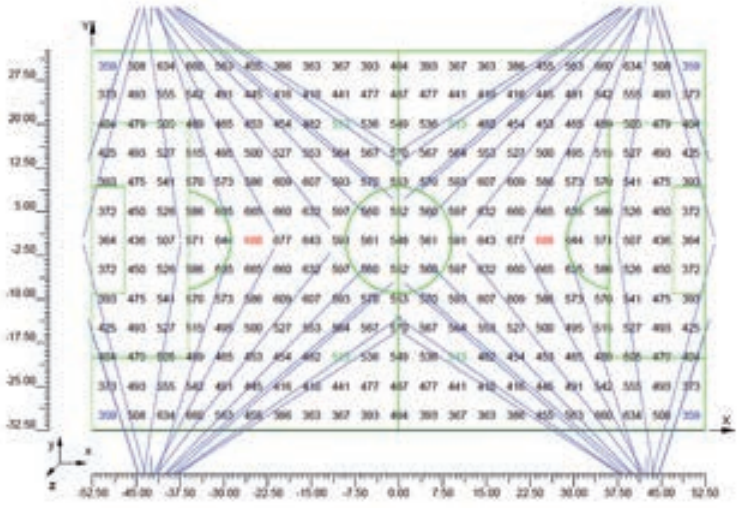
TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	20
Number of floodlights	48
Number of floodlights per pole	12

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1*	-41	-42	20	0°; -67.5°; 33°
1*	-42	-42	20	0°; -65°; 72°
1*	-43	-42	20	0°; -65°; 105°
1	-41	-42	21	0°; -67.5°; 35°
1	-42	-42	21	0°; -67.5°; 41°
1	-43	-42	21	0°; -67.5°; 52°
1*	-44	-42	20	0°; -55°; 108°
1	-44	-42	21	0°; -55°; 108°
1	-41	-42	22	0°; -67.5°; 41°
1	-42	-42	22	0°; -67.5°; 46°
1	-43	-42	22	0°; -64.5°; 62°
1	-44	-42	22	0°; -62.5°; 81°

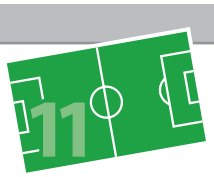
* floodlight code GW84644

CALCULATION RESULTS



GRID 21x15	
AveE [lux]	513
MinE/AveE	0.70
GR	49
Index [RA]	80
No. floodlights	48
Floodlight height [m]	20-22m

REQUISITES



Play area dimensions

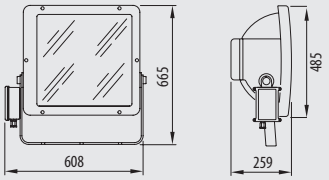
Length [m]	105
Width [m]	65
Grid points (length)	21
Grid points (width)	15

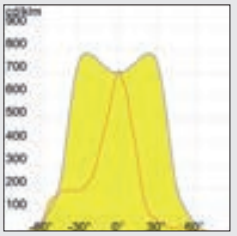
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
II	200	0.6	50	60

PROPOSED SOLUTION

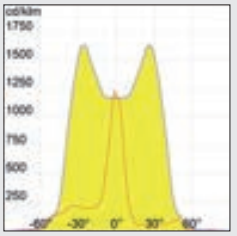
"Colosseum" symmetrical floodlight 2000W - GW84644 GW84744

to be used with the relative supply unit





GW84644



GW84744

TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Colosseum
Optic	Symmetrical restricted/diffused
Lamp	MHN-LA 2000W/842
Lamp flux (lm)	220,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	18
Number of floodlights	20
Number of floodlights per pole	5

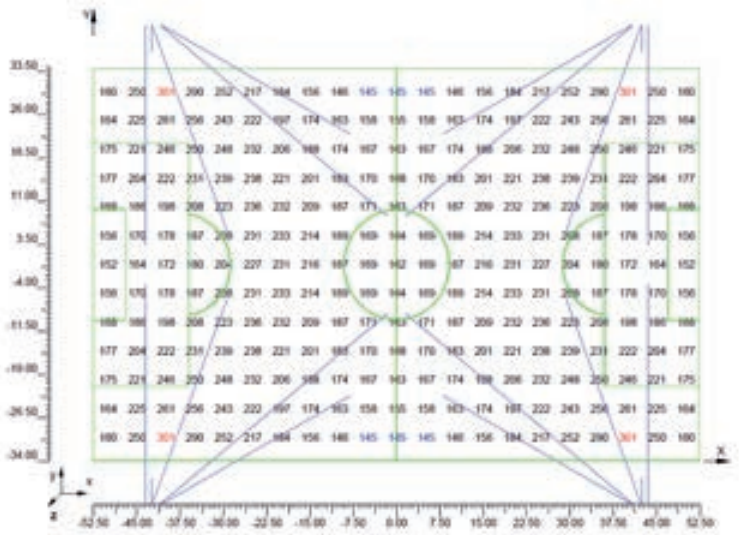
The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING

Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1*	-41.50	-42	18	0°; -65°; 30°
1*	-42.50	-42	18	0°; -65°; 70°
1*	-43.50	-42	18	0°; -65°; 90°
1	-41.50	-42	19	0°; -70°; 40°
1*	-43.50	-42	19	0°; -60°; 90
2*	-41.50	42	18	0°; -65°; -30°
2*	-42.50	42	18	0°; -65°; -70°
2*	-43.50	42	18	0°; -65°; -90°
2	-41.50	42	19	0°; -70°; -40°
2*	-43.50	42	19	0°; -60°; -90°

* floodlight code GW84644

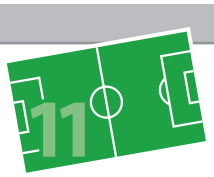
CALCULATION RESULTS



GRID 21x15	
AveE [lux]	202
MinE/AveE	0.72
GR	49
Index [RA]	80
No. floodlights	20
Floodlight height [m]	18m

OUTDOOR

REQUISITES



Play area dimensions

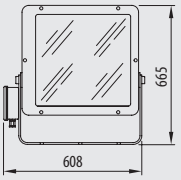
Length [m]	105
Width [m]	65
Grid points (length)	21
Grid points (width)	15

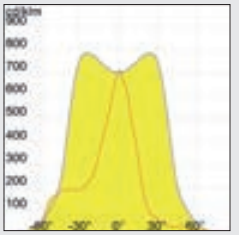
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
III	75	0.5	55	20

PROPOSED SOLUTION

"Colosseum" symmetrical floodlight 2000W - GW84644

to be used with the relative supply unit





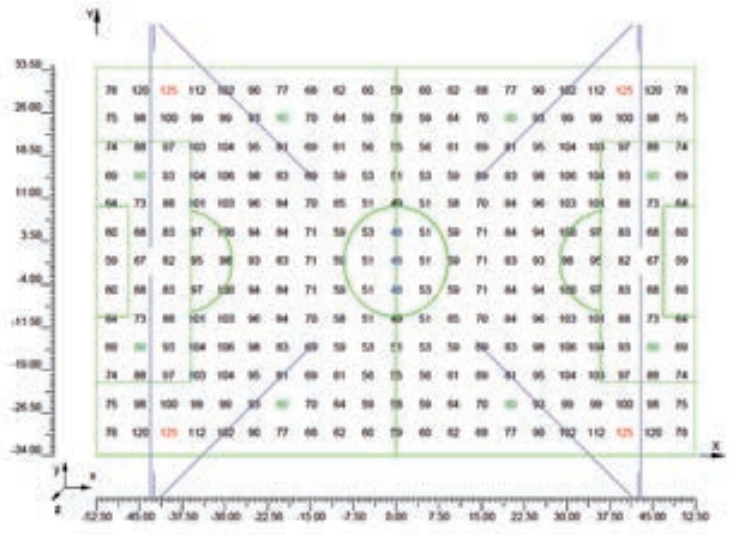
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Colosseum
Optic	Symmetrical diffused
Lamp	MHN-LA 2000W/842
Lamp flux (lm)	220,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	18
Number of floodlights	8
Number of floodlights per pole	2

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-42	-42	18	0°; -65°; 45°
1	-43	-42	18	0°; -65°; 90°
2	-42	42	18	0°; -65°; -45°
2	-43	42	18	0°; -65°; -90°
3	42	42	18	0°; -65°; -135°
3	43	42	18	0°; -65°; -90°
4	42	-42	18	0°; -65°; 135°
4	43	-42	18	0°; -65°; 90°

CALCULATION RESULTS



GRID 21x15	
AveE [lux]	80
MinE/AveE	0.59
GR	49
Index [RA]	80
No. floodlights	8
Floodlight height [m]	18m

REQUISITES

Play area dimensions

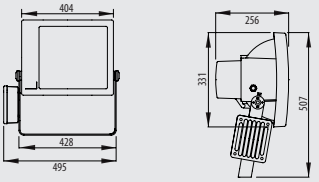
Length [m]	40
Width [m]	20
Grid points (length)	15
Grid points (width)	7

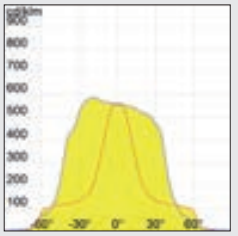
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
I	500	0.7	50	60

PROPOSED SOLUTION

"Titano" symmetrical floodlight 1000W GW84468

to be used with the relative supply unit





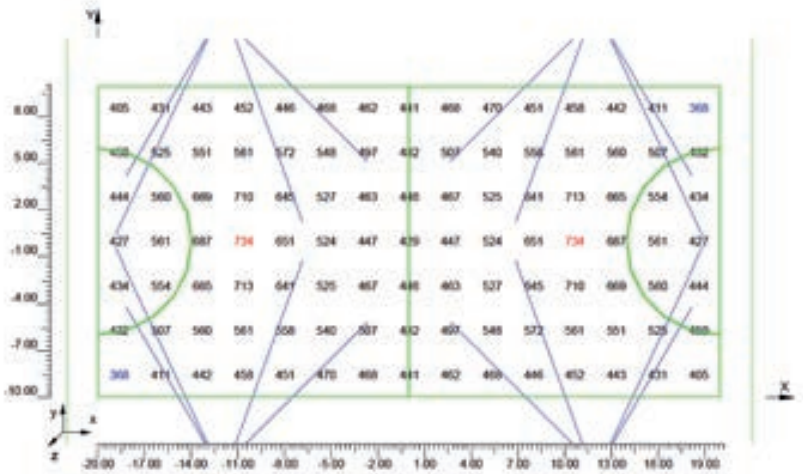
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Titano
Optic	Symmetrical diffused
Lamp	HQI-T 1000/N
Lamp flux (lm)	110,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	10
Number of floodlights	16
Number of floodlights per pole	4

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-11.50	-14	10.5	0°; -50°; 45°
1	-12.50	-14	10.5	0°; -55°; 115°
1	-11.50	-14	9.5	0°; -55°; 70°
1	-12.50	-14	9.5	0°; -50°; 120°
2	-11.50	14	10.5	0°; -50°; -45°
2	-12.50	14	10.5	0°; -55°; -115°
2	-11.50	14	9.5	0°; -55°; -70°
2	-12.50	14	9.5	0°; -50°; -120°
3	11.50	14	10.5	0°; -50°; -135°
3	12.50	14	10.5	0°; -55°; -65°
3	11.50	14	9.5	0°; -55°; -110°
3	12.50	14	9.5	0°; -50°; -60°
4	11.50	-14	10.5	0°; -50°; 135°
4	12.50	-14	10.5	0°; -55°; 65°
4	11.50	-14	9.5	0°; -55°; 110°
4	12.50	-14	9.5	0°; -50°; 60°

CALCULATION RESULTS



GRID 15x7	
AveE [lux]	518
MinE/AveE	0.71
GR	42
Index [RA]	65
No. floodlights	16
Floodlight height [m]	9.5 - 10.5m

HANDBALL - MEDIUM-LEVEL COMPETITION

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS II

OUTDOOR

REQUISITES

Play area dimensions

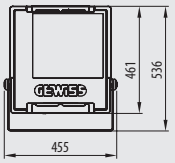
Length [m]	40
Width [m]	20
Grid points (length)	15
Grid points (width)	7

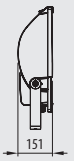
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
II	200	0.6	50	60

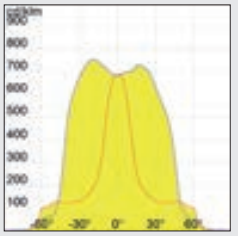
PROPOSED SOLUTION

"Mercurio" symmetrical floodlight 400W MT GW85404M

GW85404M: code referring to the 230V 50Hz version







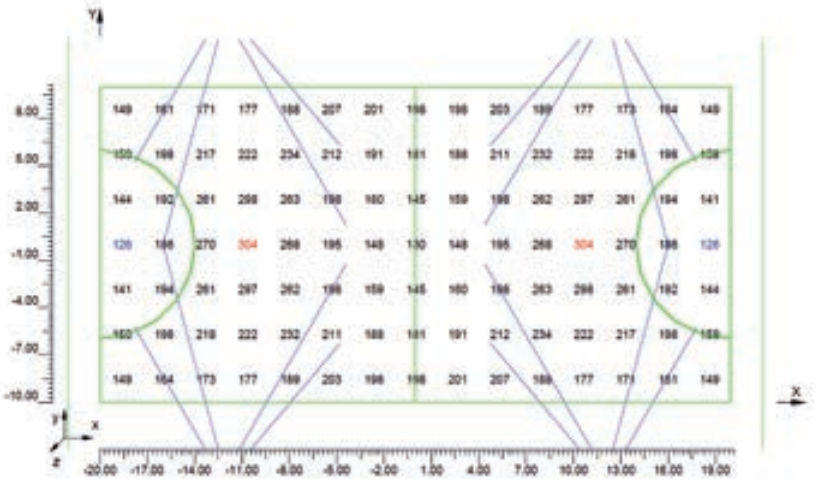
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Symmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	8
Number of floodlights	16
Number of floodlights per pole	4

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-11.25	-14	8	0°; -50°; 50°
1	-11.75	-14	8	0°; -60°; 60°
1	-12.25	-14	8	0°; -60°; 105°
1	-12.75	-14	8	0°; -50°; 120°
2	-11.25	14	8	0°; -50°; -50°
2	-11.75	14	8	0°; -60°; -60°
2	-12.25	14	8	0°; -60°; -105°
2	-12.75	14	8	0°; -50°; -120°
3	11.25	14	8	0°; -50°; -130°
3	11.75	14	8	0°; -60°; -120°
3	12.25	14	8	0°; -60°; -75°
3	12.75	14	8	0°; -50°; -60°
4	11.25	-14	8	0°; -50°; 130°
4	11.75	-14	8	0°; -60°; 120°
4	12.25	-14	8	0°; -60°; 75°
4	12.75	-14	8	0°; -50°; 60°

CALCULATION RESULTS



GRID 15x7	
AveE [lux]	200
MinE/AveE	0.63
GR	46
Index [RA]	65
No. floodlights	16
Floodlight height [m]	8 m

HANDBALL - TRAINING LEVEL

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS III

REQUISITES

Play area dimensions

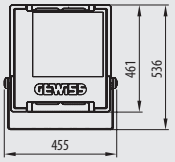
Length [m]	40
Width [m]	20
Grid points (length)	15
Grid points (width)	7

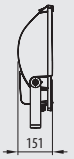
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
III	75	0.5	55	20

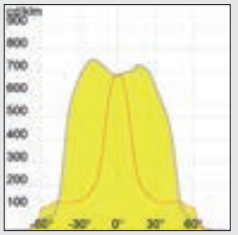
PROPOSED SOLUTION

"Mercurio" symmetrical floodlight 400W MT GW85404M

GW85404M: code referring to the 230V 50Hz version







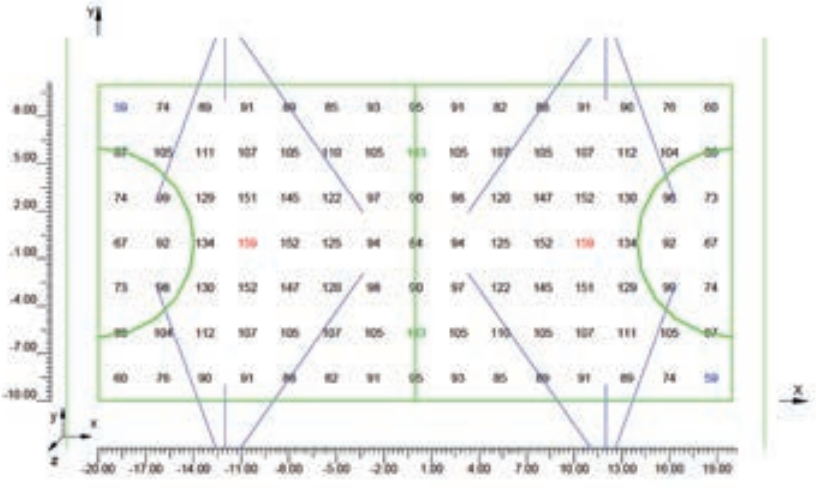
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Symmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	8
Number of floodlights	8
Number of floodlights per pole	2

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-11.75	-14	8	0°; -60°; 55°
1	-12.25	-14	8	0°; -55°; 110°
2	-11.75	14	8	0°; -60°; -55°
2	-12.25	14	8	0°; -55°; -110°
3	11.75	14	8	0°; -60°; -125°
3	12.25	14	8	0°; -55°; -70°
4	11.75	-14	8	0°; -60°; 125°
4	12.25	-14	8	0°; -55°; 70°

CALCULATION RESULTS



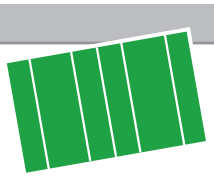
GRID 15x7	
AveE [lux]	103
MinE/AveE	0.57
GR	46
Index [RA]	65
No. floodlights	8
Floodlight height [m]	8 m

RUGBY - HIGH-LEVEL COMPETITIONS

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS I

OUTDOOR

REQUISITES



Play area dimensions

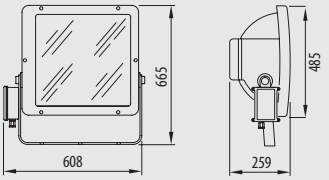
Length [m]	144
Width [m]	69
Grid points (length)	23
Grid points (width)	11

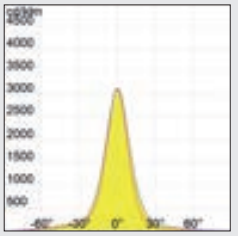
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
I	500	0.7	50	60

PROPOSED SOLUTION

"Colosseum" circular floodlight 2000W - GW84757

to be used with the relative supply unit





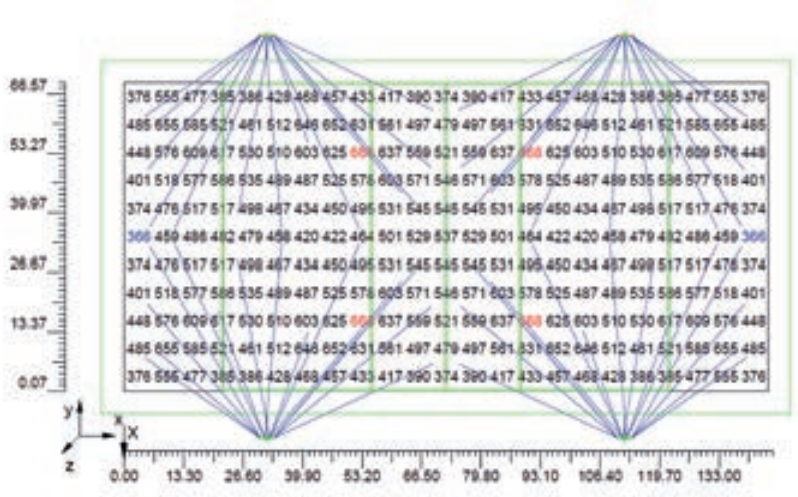
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Colosseum
Optic	Circular 40°
Lamp	HQI-TS 2000W/D/S
Lamp flux (lm)	200,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	25
Number of floodlights	60
Number of floodlights per pole	15

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

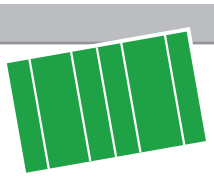
FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-41.50	-45	25.5	0°; -50°; 140°
1	-40.50	-45	25.5	0°; -50°; 110°
1	-39.50	-45	25.5	0°; -45°; 70°
1	-38.50	-45	25.5	0°; -50°; 50°
1	-41.50	-45	26.5	0°; -50°; 145°
1	-40.50	-45	26.5	0°; -60°; 85°
1	-39.50	-45	26.5	0°; -60°; 50°
1	-38.50	-45	26.5	0°; -60°; 40°
1	-41.50	-45	27.5	0°; -55°; 130°
1	-40.50	-45	27.5	0°; -60°; 115°
1	-39.50	-45	27.5	0°; -60°; 65°
1	-38.50	-45	27.5	0°; -55°; 25°
1	-41.50	-45	28.5	0°; -60°; 120°
1	-39.50	-45	28.5	0°; -55°; 100°
1	-38.50	-45	28.5	0°; -60°; 50°

CALCULATION RESULTS



GRID 23x11	
AveE [lux]	513
MinE/AveE	0.71
GR	43
Index [RA]	90
No. floodlights	60
Floodlight height [m]	25 m

REQUISITES



Play area dimensions

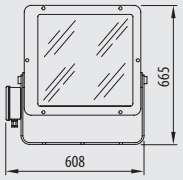
Length [m]	144
Width [m]	69
Grid points (length)	23
Grid points (width)	11

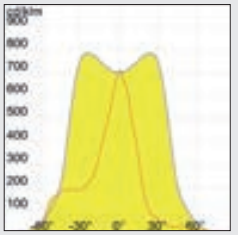
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
II	200	0.6	50	60

PROPOSED SOLUTION

"Colosseum" symmetrical floodlight 2000W - GW84644

to be used with the relative supply unit





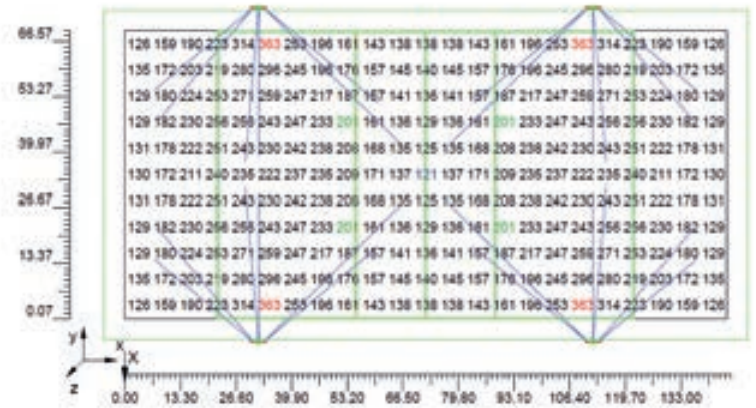
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Colosseum
Optic	Symmetrical diffused
Lamp	MHN-LA 2000W/842 400V
Lamp flux (lm)	220,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	20
Number of floodlights	24
Number of floodlights per pole	6

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-41.33	-40	20.50	0°; -60°; 130°
1	-40	-40	20.50	0°; -60°; 90°
1	-38.67	-40	20.50	0°; -60°; 40°
1	-41.33	-40	21.50	0°; -55°; 140°
1	-40	-40	21.50	0°; -60°; 95°
1	-38.67	-40	21.50	0°; -65°; 45°
2	-41.33	40	20.50	0°; -60°; -130°
2	-40	40	20.50	0°; -60°; -90°
2	-38.67	40	20.50	0°; -60°; -40°
2	-41.33	40	21.50	0°; 55°; -140°
2	-40	40	21.50	0°; -60°; -95°
2	-38.67	40	21.50	0°; -65°; -45°

CALCULATION RESULTS



GRID 23x11	
AveE [lux]	201
MinE/AveE	0.60
GR	47
Index [RA]	80
No. floodlights	24
Floodlight height [m]	20 m

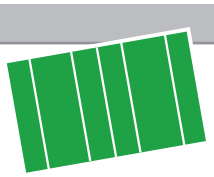
OUTDOOR

RUGBY - TRAINING ACTIVITIES

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS III

OUTDOOR

REQUISITES



Play area dimensions

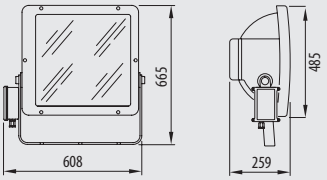
Length [m]	144
Width [m]	69
Grid points (length)	23
Grid points (width)	11

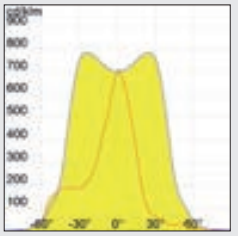
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
III	75	0.5	55	20

PROPOSED SOLUTION

"Colosseum" symmetrical floodlight 2000W - GW84644

to be used with the relative supply unit





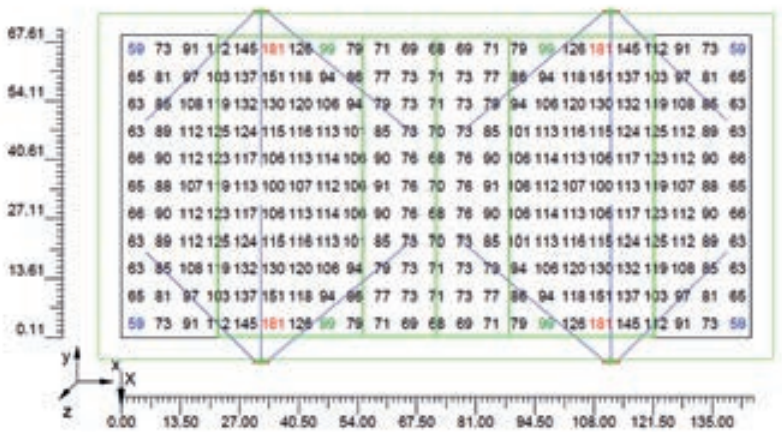
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Colosseum
Optic	Symmetrical diffused
Lamp	MHN-LA 2000W/842 400V
Lamp flux (lm)	220,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	20
Number of floodlights	12
Number of floodlights per pole	3

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

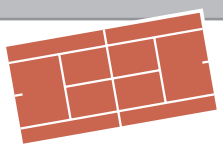
FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-41.33	-40	20.5	0°; -60°; 135°
1	-40	-40	20.5	0°; -60°; 90°
1	-38.67	-40	20.5	0°; -65°; -40°
2	-41.33	40	20.5	0°; -60°; -135°
2	-40	40	20.5	0°; -60°; -90°
2	-38.67	40	20.5	0°; -65°; -40°
3	41.33	40	20.5	0°; -60°; -45°
3	40	40	20.5	0°; -60°; -90°
3	38.67	40	20.5	0°; -65°; -140°
4	41.33	-40	20.5	0°; -60°; 45°
4	40	-40	20.5	0°; -60°; 90°
4	38.67	-40	20.5	0°; -65°; 140°

CALCULATION RESULTS



GRID 23x11	
AveE [lux]	99
MinE/AveE	0.60
GR	49
Index [RA]	80
No. floodlights	12
Floodlight height [m]	20 m

REQUISITES



Play area dimensions

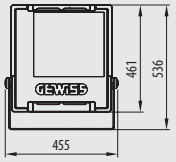
Length [m]	36
Width [m]	18
Grid points (length)	15
Grid points (width)	7

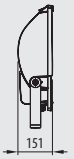
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
II	300	0.7	50	60

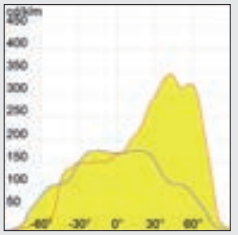
PROPOSED SOLUTION

"Mercurio" asymmetrical floodlight 400W MT GW85424M

GW85424M code referring to the 230V 50Hz version







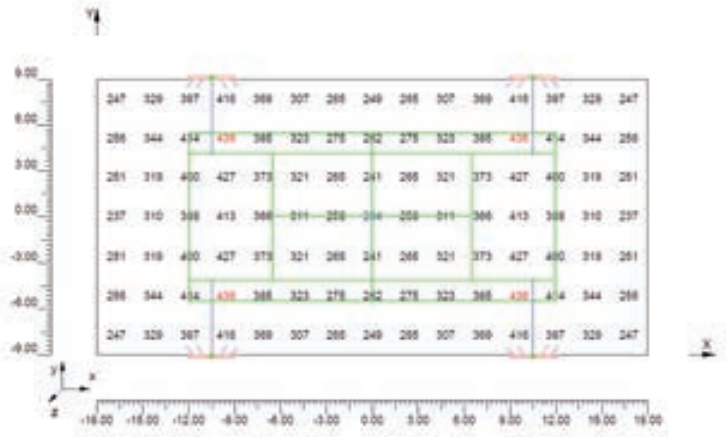
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	mercurio
Optic	asymmetrical diffused
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	8
Number of floodlights	20
Number of floodlights per pole	5

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-9.30	-9	8	0°; -5°; 40°
1	-9.90	-9	8	0°; -5°; 55°
1	-10.50	-9	8	0°; -5°; 90°
1	-11.10	-9	8	0°; -5°; 120°
1	-11.70	-9	8	0°; -5°; 130°
2	-9.30	9	8	0°; -5°; -40°
2	-9.90	9	8	0°; -5°; -55°
2	-10.50	9	8	0°; -5°; -90°
2	-11.10	9	8	0°; -5°; -120°
2	-11.70	9	8	0°; -5°; -130°

CALCULATION RESULTS

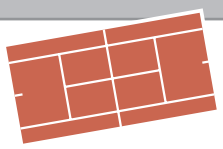


GRID 15x7	
AveE [lux]	331
MinE/AveE	0.71
GR	38
Index [RA]	65
No. floodlights	20
Floodlight height [m]	8 m

TENNIS (SINGLES) - TRAINING ACTIVITIES

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS III

REQUISITES



Play area dimensions

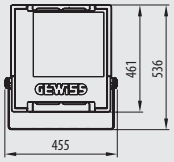
Length [m]	36
Width [m]	18
Grid points (length)	15
Grid points (width)	7

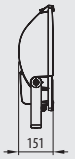
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
III	200	0.6	55	20

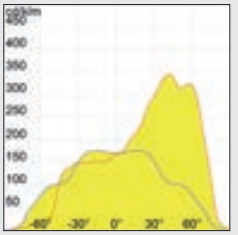
PROPOSED SOLUTION

"Mercurio" asymmetrical floodlight 400W MT GW85424M

GW85424M: code referring to the 230V 50Hz version







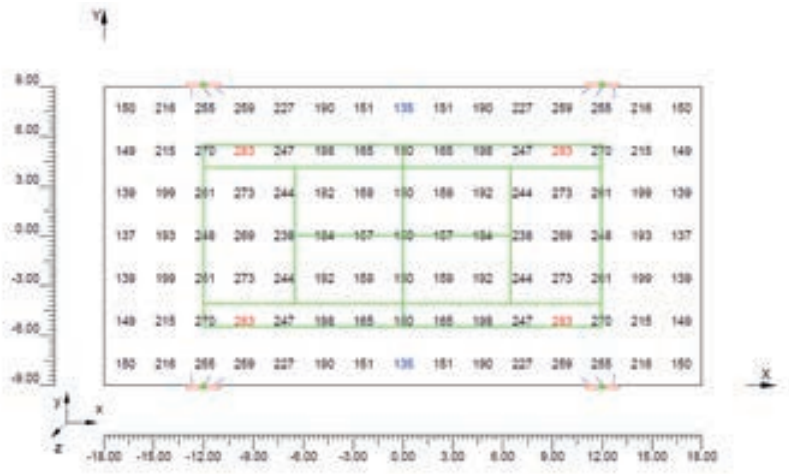
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	mercurio
Optic	asymmetrical diffused
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	8
Number of floodlights	12
Number of floodlights per pole	3

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-11.33	-9	8	0°; -5°; 40°
1	-12	-9	8	0°; -5°; 55°
1	-12.67	-9	8	0°; -5°; 95°
2	-11.33	9	8	0°; -5°; -40°
2	-12	9	8	0°; -5°; -55°
2	-12.67	9	8	0°; -5°; -95°
3	11.33	9	8	0°; -5°; -140°
3	12	9	8	0°; -5°; -125°
3	12.67	9	8	0°; -5°; -85°
4	11.33	-9	8	0°; -5°; 140°
4	12	-9	8	0°; -5°; 125°
4	12.67	-9	8	0°; -5°; 85°

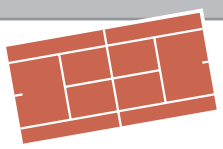
CALCULATION RESULTS



GRID 15x7	
AveE [lux]	206
MinE/AveE	0.65
GR	39
Index [RA]	65
No. floodlights	12
Floodlight height [m]	8 m

OUTDOOR

REQUISITES



Play area dimensions

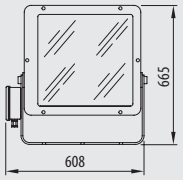
Length [m]	36
Width [m]	36
Grid points (length)	15
Grid points (width)	7

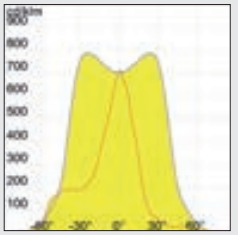
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
I	500	0.7	50	60

PROPOSED SOLUTION

"Colosseum" symmetrical floodlight 2000W - GW84644

to be used with the relative supply unit





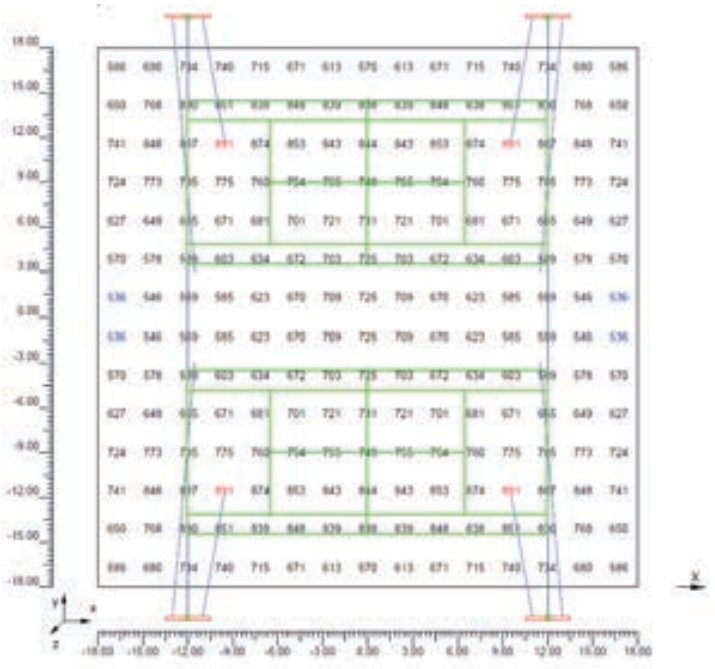
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	colosseum
Optic	Symmetrical diffused
Lamp	MHN-LA 2000W/842
Lamp flux (lm)	220,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	12
Number of floodlights	12
Number of floodlights per pole	3

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-11	-20	12	0°; -35°; 80°
1	-12	-20	12	0°; -60°; 90°
1	-13	-20	12	0°; -55°; 85°
2	-11	20	12	0°; -35°; -80°
2	-12	20	12	0°; -60°; -90°
2	-13	20	12	0°; -55°; -85°
3	11	20	12	0°; -35°; -100°
3	12	20	12	0°; -60°; -90°
3	13	20	12	0°; -55°; -95°
4	11	-20	12	0°; -35°; 100°
4	12	-20	12	0°; -60°; 90°
4	13	-20	12	0°; -55°; 95°

CALCULATION RESULTS



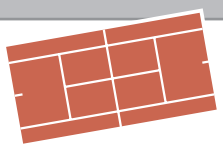
GRID 15x7	
AveE [lux]	714
MinE/AveE	0.75
GR	43
Index [RA]	80
No. floodlights	12
Floodlight height [m]	12 m

TENNIS (DOUBLES) - MEDIUM-LEVEL COMPETITIONS

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS II

OUTDOOR

REQUISITES



Play area dimensions

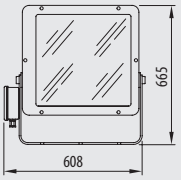
Length [m]	36
Width [m]	36
Grid points (length)	15
Grid points (width)	7

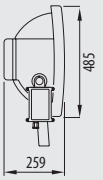
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
II	300	0.7	50	60

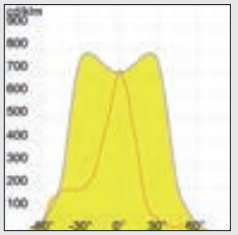
PROPOSED SOLUTION

"Colosseum" symmetrical floodlight 1000W - GW84649

to be used with the relative supply unit







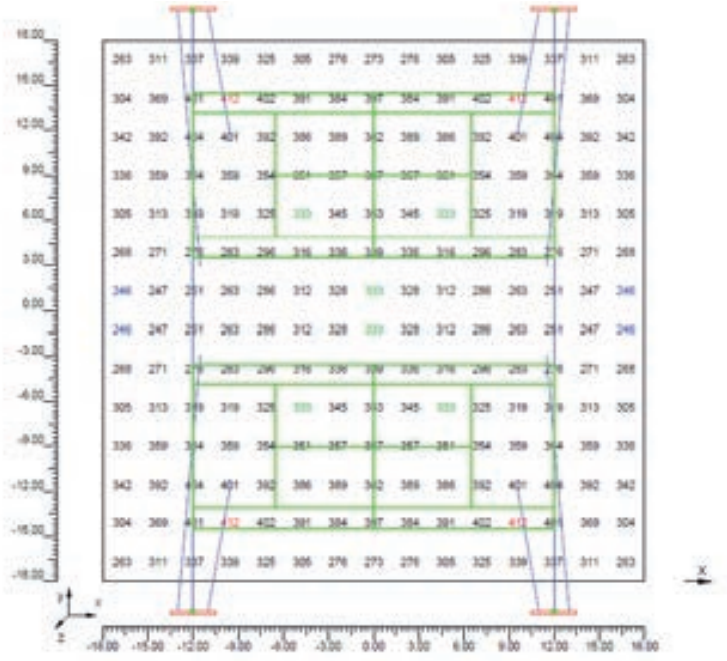
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	colosseum
Optic	Symmetrical diffused
Lamp	MHN-LA 1000W/842
Lamp flux (lm)	100,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	12
Number of floodlights	12
Number of floodlights per pole	3

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

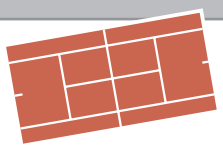
FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-11	-20	12	0°; -35°; 80°
1	-12	-20	12	0°; -60°; 90°
1	-13	-20	12	0°; -55°; 85°
2	-11	20	12	0°; -35°; -80°
2	-12	20	12	0°; -60°; -90°
2	-13	20	12	0°; -55°; -85°
3	11	20	12	0°; -35°; -100°
3	12	20	12	0°; -60°; -90°
3	13	20	12	0°; -55°; -95°
4	11	-20	12	0°; -35°; 100°
4	12	-20	12	0°; -60°; 90°
4	13	-20	12	0°; -55°; 95°

CALCULATION RESULTS



GRID 15x7	
AveE [lux]	333
MinE/AveE	0.74
GR	42
Index [RA]	80
No. floodlights	12
Floodlight height [m]	12 m

REQUISITES



Play area dimensions

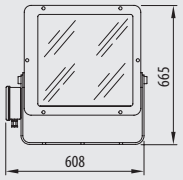
Length [m]	36
Width [m]	36
Grid points (length)	15
Grid points (width)	7

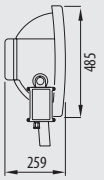
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
III	200	0.6	55	20

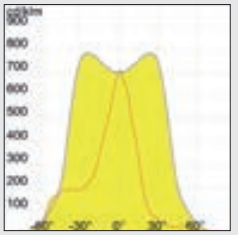
PROPOSED SOLUTION

"Colosseum" symmetrical floodlight 1000W - GW84649

to be used with the relative supply unit







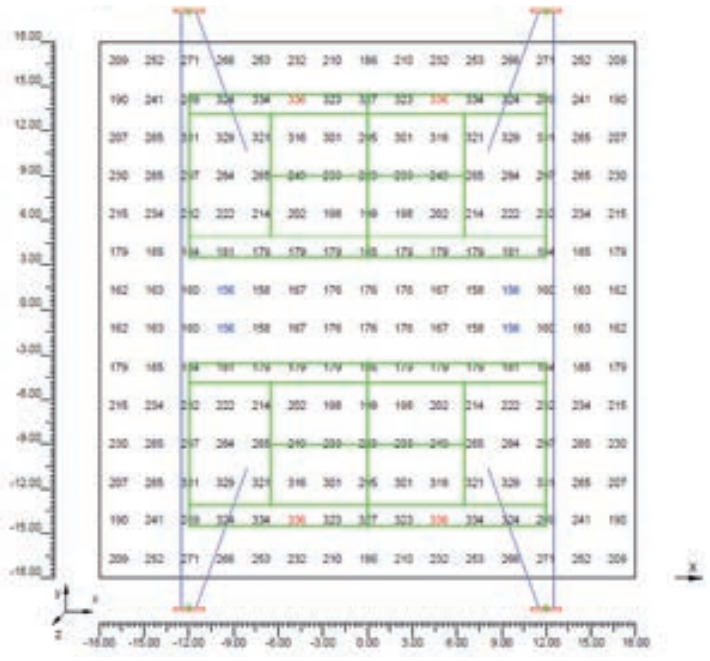
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	colosseum
Optic	Symmetrical diffused
Lamp	MHN-LA 1000W/842
Lamp flux (lm)	100,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	10
Number of floodlights	8
Number of floodlights per pole	2

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-11.50	-20	10	0°; -45°; 70°
1	-12.50	-20	10	0°; -65°; 90°
2	-11.50	20	10	0°; -45°; -70°
2	-12.50	20	10	0°; -65°; -90°
3	11.50	20	10	0°; -45°; -110°
3	12.50	20	10	0°; -65°; -90°
4	11.50	-20	10	0°; -45°; 110°
4	12.50	-20	10	0°; -65°; 90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS

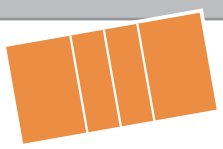


GRID 15x7	
AveE [lux]	236
MinE/AveE	0.66
GR	46
Index [RA]	80
No. floodlights	8
Floodlight height [m]	10 m

VOLLEYBALL - HIGH-LEVEL COMPETITIONS

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS I

REQUISITES



Play area dimensions

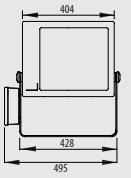
Length [m]	24
Width [m]	15
Grid points (length)	13
Grid points (width)	9

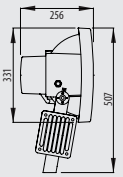
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
I	500	0.7	50	60

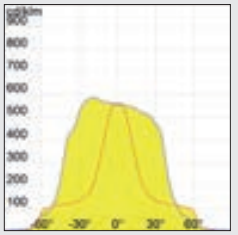
PROPOSED SOLUTION

"Titano" symmetrical floodlight 1000W GW84468

to be used with the relative supply unit







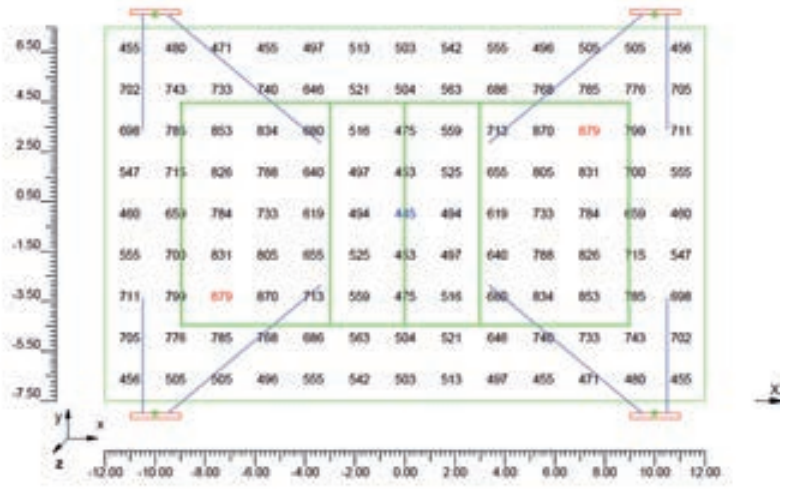
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	titano
Optic	Symmetrical diffused
Lamp	HQI-T 1000/N
Lamp flux (lm)	110,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	8
Number of floodlights	8
Number of floodlights per pole	2

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-9.50	-8	8	0°; -45°; 40°
1	-10.50	-8	8	0°; -30°; 90°
2	-9.50	8	8	0°; -45°; -40°
2	-10.50	8	8	0°; -30°; -90°
3	9.50	8	8	0°; -45°; -140°
3	10.50	8	8	0°; -30°; -90°
4	9.50	-8	8	0°; -45°; 140°
4	10.50	-8	8	0°; -30°; 90°

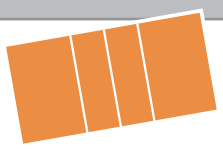
The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



GRID 13x9	
AveE [lux]	636
MinE/AveE	0.70
GR	38
Index [RA]	65
No. floodlights	8
Floodlight height [m]	8 m

REQUISITES



Play area dimensions

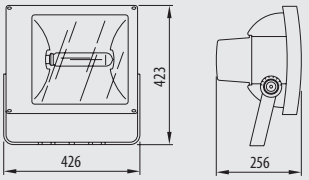
Length [m]	24
Width [m]	15
Grid points (length)	13
Grid points (width)	9

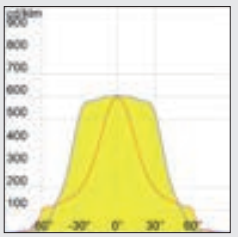
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
II	200	0.6	50	60

PROPOSED SOLUTION

"Titano" symmetrical floodlight 400W GW84466M

GW84466M: code referring to the 230V 50Hz version





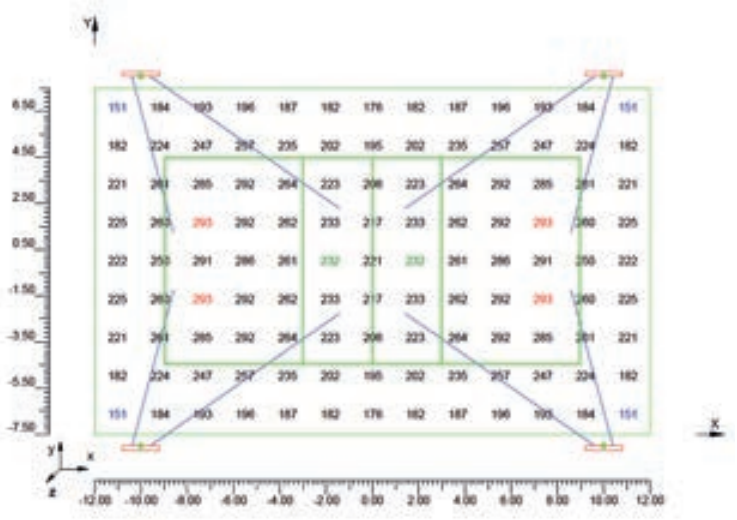
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	titano
Optic	Symmetrical diffused
Lamp	HQI-T 400W/N/SI
Lamp flux (lm)	33,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	7
Number of floodlights	8
Number of floodlights per pole	2

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-9.60	-8	7	0°; -55°; 35°
1	-10.40	-8	7	0°; -45°; 75°
2	-9.60	8	7	0°; -55°; -35°
2	-10.40	8	7	0°; -45°; -75°
3	9.60	8	7	0°; -55°; -145°
3	10.40	8	7	0°; -45°; -105°
4	9.60	-8	7	0°; -55°; 145°
4	10.40	-8	7	0°; -45°; 105°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS

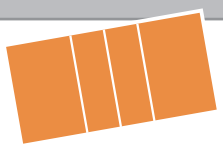


GRID 13x9	
AveE [lux]	232
MinE/AveE	0.65
GR	42
Index [RA]	65
No. floodlights	8
Floodlight height [m]	7 m

VOLLEYBALL - TRAINING ACTIVITIES

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS III

REQUISITES



Play area dimensions

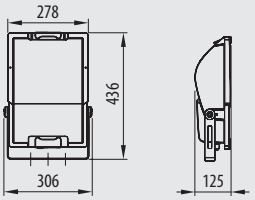
Length [m]	24
Width [m]	15
Grid points (length)	13
Grid points (width)	9

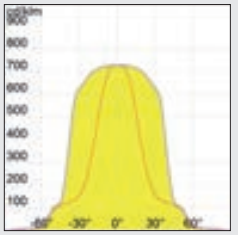
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
III	75	0.5	55	20

PROPOSED SOLUTION

"Mercurio1" symmetrical floodlight 150W GW84014M

GW84014M: code referring to the 230V 50Hz version





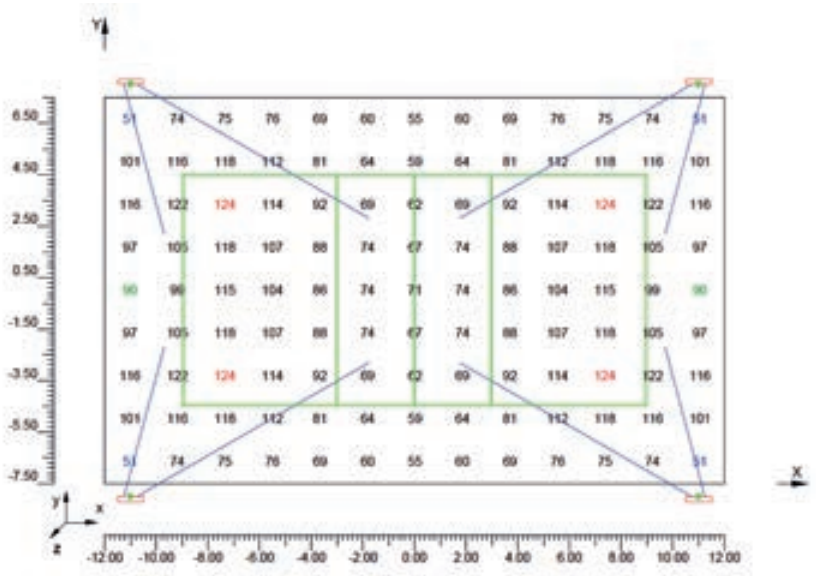
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 1
Optic	Symmetrical diffused
Lamp	HQI-TS 150/NDL
Lamp flux (lm)	11.250

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	6
Number of floodlights	8
Number of floodlights per pole	2

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-10.75	-8	6	0°; -60°; 30°
1	-11.25	-8	6	0°; -45°; 75°
2	-10.75	8	6	0°; -60°; -30°
2	-11.25	8	6	0°; -45°; -75°
3	10.75	8	6	0°; -60°; -150°
3	11.25	8	6	0°; -45°; -105°
4	10.75	-8	6	0°; -60°; 150°
4	11.25	-8	6	0°; -45°; 105°

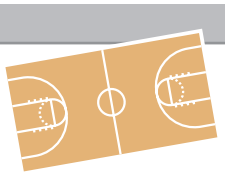
The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



GRID 13x9	
AveE [lux]	90
MinE/AveE	0.57
GR	46
Index [RA]	85
No. floodlights	8
Floodlight height [m]	6 m

REQUISITES



Play area dimensions

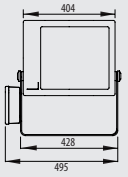
Length [m]	28
Width [m]	15
Grid points (length)	13
Grid points (width)	7

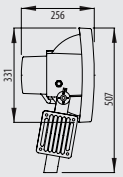
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
I	500	0.7	50	60

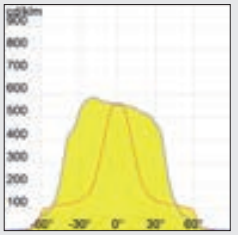
PROPOSED SOLUTION

"Titano" symmetrical floodlight 1000W GW84468

to be used with the relative supply unit







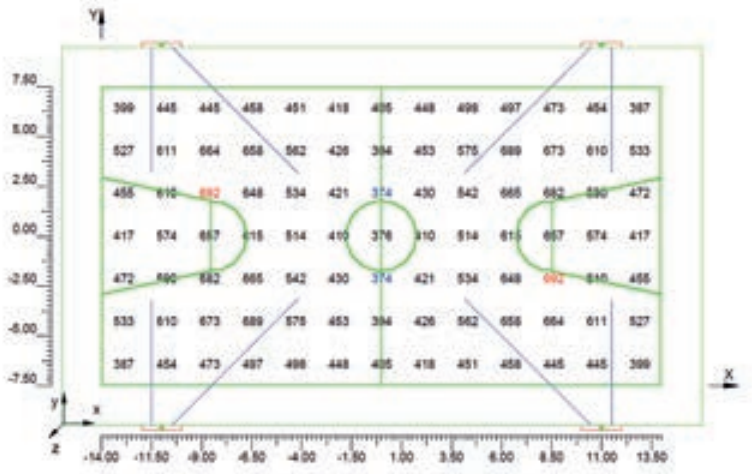
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	titano
Optic	Symmetrical diffused
Lamp	HQI-T 1000/N
Lamp flux (lm)	110,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	9
Number of floodlights	8
Number of floodlights per pole	2

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-10.50	-9.50	9	0°; -45°; 45°
1	-11.50	-9.50	9	0°; -35°; 90°
2	-10.50	9.50	9	0°; -45°; -45°
2	-11.50	9.50	9	0°; -35°; -90°
3	10.50	9.50	9	0°; -45°; -135°
3	11.50	9.50	9	0°; -35°; -90°
4	10.50	-9.50	9	0°; -45°; 135°
4	11.50	-9.50	9	0°; -35°; 90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



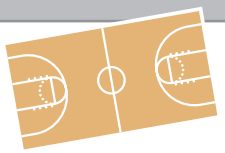
GRID 13x7	
AveE [lux]	520
MinE/AveE	0.72
GR	37
Index [RA]	65
No. floodlights	8
Floodlight height [m]	9 m

Basketball - Medium-level competitions

Project compliant with: EN 12193 (2008): Class II

OUTDOOR

REQUISITES



Play area dimensions

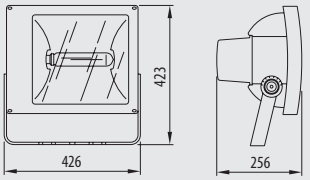
Length [m]	28
Width [m]	15
Grid points (length)	13
Grid points (width)	7

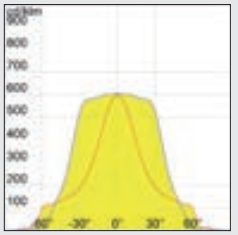
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
II	200	0.6	50	60

PROPOSED SOLUTION

"Titano" symmetrical floodlight 400W GW84466M

GW84466M: code referring to the 230V 50Hz version





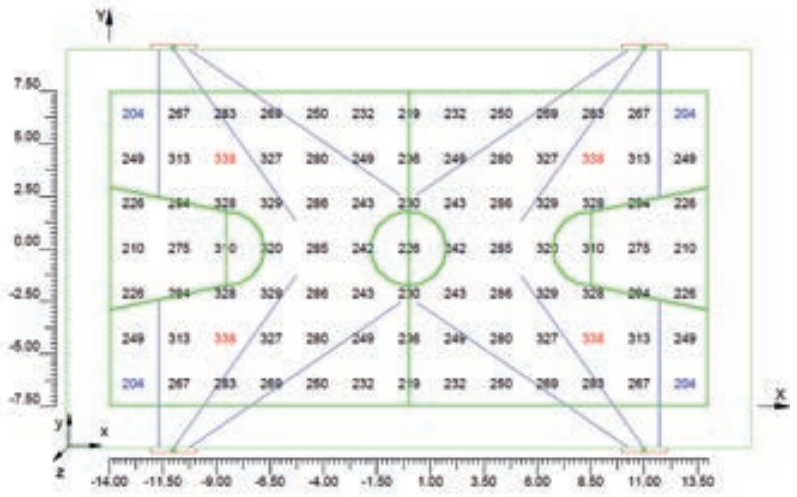
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	titano
Optic	Symmetrical diffused
Lamp	HQI-T 400W/N/SI
Lamp flux (lm)	33,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	7
Number of floodlights	12
Number of floodlights per pole	3

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

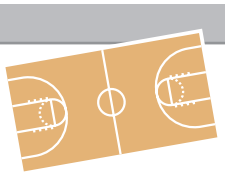
FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-10.30	-9.50	7	0°; -60°; 35°
1	-11.00	-9.50	7	0°; -55°; 55°
1	-11.70	-9.50	7	0°; -45°; 90°
2	-10.30	9.50	7	0°; -60°; -35°
2	-11.00	9.50	7	0°; -55°; -55°
2	-11.70	9.50	7	0°; -45°; -90°
3	10.30	9.50	7	0°; -60°; -145°
3	11.00	9.50	7	0°; -55°; -125°
3	11.70	9.50	7	0°; -45°; -90°
4	10.30	-9.50	7	0°; -60°; 155°
4	11.00	-9.50	7	0°; -55°; 125°
4	11.70	-9.50	7	0°; -45°; 90°

CALCULATION RESULTS



GRID 13x7	
AveE [lux]	272
MinE/AveE	0.75
GR	44
Index [RA]	65
No. floodlights	12
Floodlight height [m]	7 m

REQUISITES



Play area dimensions

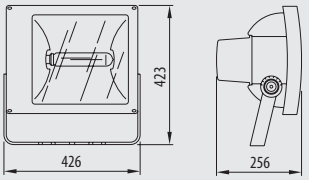
Length [m]	28
Width [m]	15
Grid points (length)	13
Grid points (width)	7

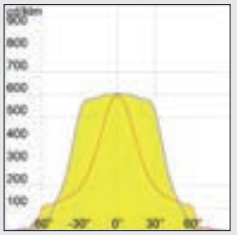
VALUES REQUIRED				
Class	AveE [lx]	MinE/AveE	GR	Colour yield index [RA]
III	75	0.5	55	20

PROPOSED SOLUTION

"Titano" symmetrical floodlight 250W GW84465M

GW84465M: code referring to the 230V 50Hz version





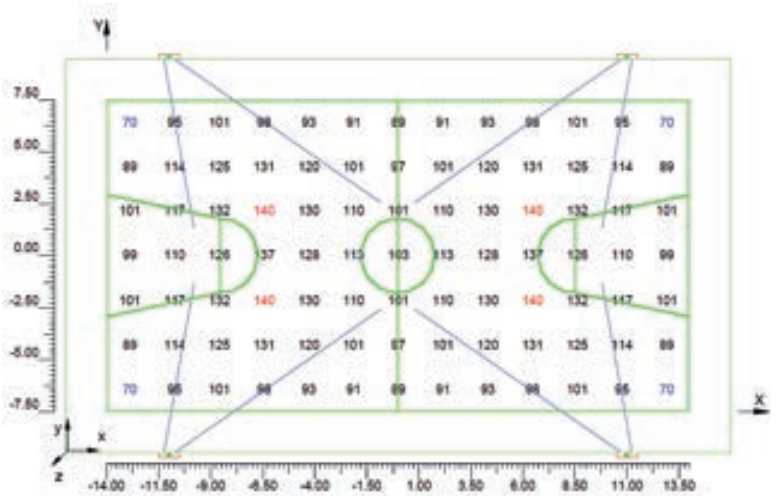
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	titano
Optic	Symmetrical diffused
Lamp	HQI-T 250W/N/SI
Lamp flux (lm)	20,000

TECHNICAL DATA OF THE STRUCTURES	
Number of poles	4
Pole height (m. above ground)	7
Number of floodlights	8
Number of floodlights per pole	2

FLOODLIGHT POSITIONING				
Lighting tower	Pos. devices X	Pos. devices Y	Pos. devices Z	Rotation devices X°; Y°; Z°
1	-10.75	-9.50	7	0°; -60°; 35°
1	-11.25	-9.50	7	0°; -50°; 80°
2	-10.75	9.50	7	0°; -60°; -35°
2	-11.25	9.50	7	0°; -50°; -80°
3	10.75	9.50	7	0°; -60°; -145°
3	11.25	9.50	7	0°; -50°; -100°
4	10.75	-9.50	7	0°; -60°; 145°
4	11.25	-9.50	7	0°; -50°; 100°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



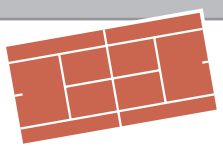
GRID 13x7	
AveE [lux]	109
MinE/AveE	0.64
GR	44
Index [RA]	65
No. floodlights	8
Floodlight height [m]	7 m

TENNIS - HIGH-LEVEL COMPETITIONS

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS I

INDOOR

REQUISITES



Play area dimensions

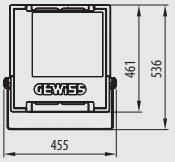
Length [m]	36
Width [m]	18
Grid points (length)	15
Grid points (width)	7

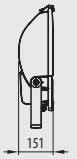
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
I	750	0.7	60

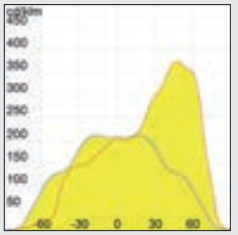
PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85423M

GW85423M: code referring to the 230V 50Hz version







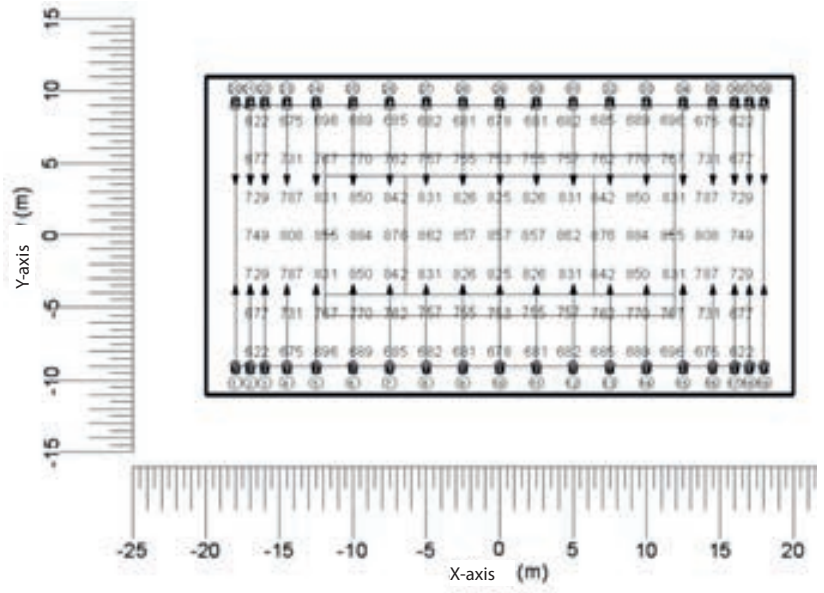
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HQI-BT 400/D
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	38

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING			
Lighting tower	Pos. devices X	Pos. devices Y	Rotation devices X°; Y°; Z°
1	-18.00	-9.00	0°; 0°; 90°
2	-17.00	-9.00	0°; 0°; 90°
3	-16.00	-9.00	0°; 0°; 90°
4	-14.50	-9.00	0°; 0°; 90°
5	-12.50	-9.00	0°; 0°; 90°
6	-10.00	-9.00	0°; 0°; 90°
7	-7.50	-9.00	0°; 0°; 90°
8	-5.00	-9.00	0°; 0°; 90°
9	-2.50	-9.00	0°; 0°; 90°
10	0.00	-9.00	0°; 0°; 90°

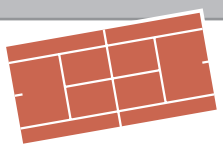
CALCULATION RESULTS



GRID 15x7	
AveE [lux]	759
MinE/AveE	0.82
Index [RA]	90
No. floodlights	38
Floodlight height [m]	10 m

Lighting project for covered sports centre.

REQUISITES



Play area dimensions

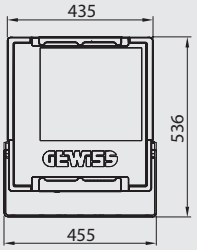
Length [m]	36
Width [m]	18
Grid points (length)	15
Grid points (width)	7

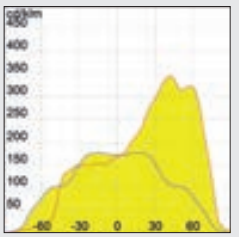
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
II	500	0.7	60

PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85424M

GW85424M: code referring to the 230V 50Hz version





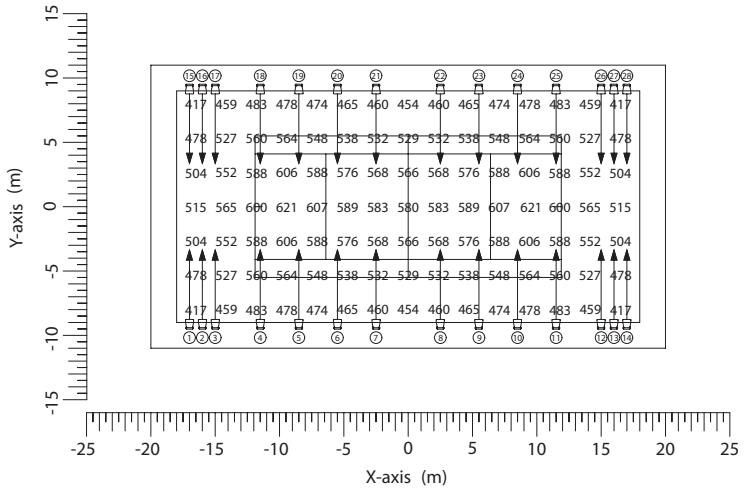
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	28

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-17.00	-9.00	0°; 0°; 90°
2	-16.00	-9.00	0°; 0°; 90°
3	-15.00	-9.00	0°; 0°; 90°
4	-11.50	-9.00	0°; 0°; 90°
5	-8.50	-9.00	0°; 0°; 90°
6	-5.50	-9.00	0°; 0°; 90°
7	-2.50	-9.00	0°; 0°; 90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



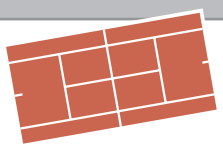
GRID 15x7	
AveE [lux]	528
MinE/AveE	0.79
Index [RA]	80
No. floodlights	28
Floodlight height [m]	10

Lighting project for covered sports centre.

TENNIS - TRAINING ACTIVITIES

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS III

REQUISITES



Play area dimensions

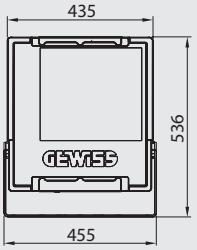
Length [m]	36
Width [m]	18
Grid points (length)	15
Grid points (width)	7

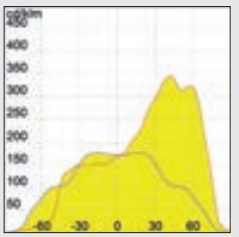
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
III	300	0.5	20

PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85424M

GW85424M: code referring to the 230V 50Hz version





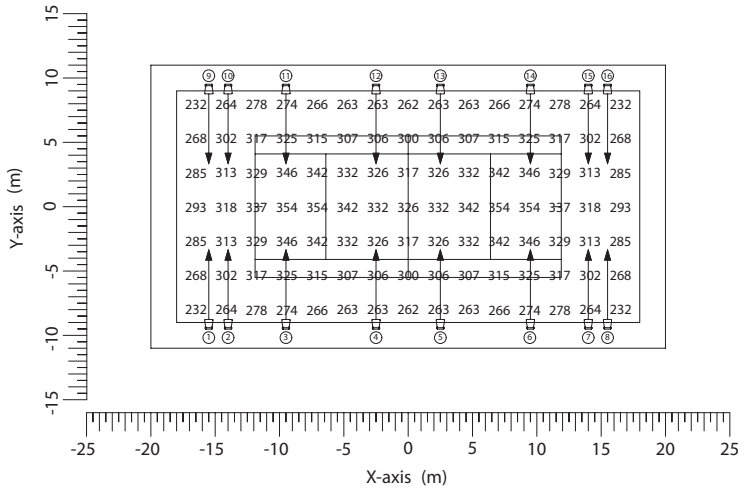
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	16

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-15.50	-9.00	0°; 0°; 90°
2	-14.00	-9.00	0°; 0°; 90°
3	-9.50	-9.00	0°; 0°; 90°
4	-2.50	-9.00	0°; 0°; 90°
13	2.50	9.00	0°; 0°; -90°
14	9.50	9.00	0°; 0°; -90°
15	14.00	9.00	0°; 0°; -90°
16	15.50	9.00	0°; 0°; -90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



GRID 15x7	
AveE [lux]	302
MinE/AveE	0.77
Index [RA]	80
No. floodlights	16
Floodlight height [m]	10

Lighting project for covered sports centre.

HANDBALL - MEDIUM-LEVEL COMPETITIONS

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS II

REQUISITES

Play area dimensions

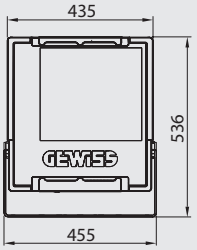
Length [m]	40
Width [m]	20
Grid points (length)	15
Grid points (width)	9

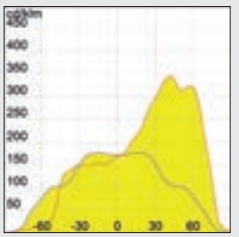
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
II	500	0.7	60

PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85424M

GW85424M: code referring to the 230V 50Hz version





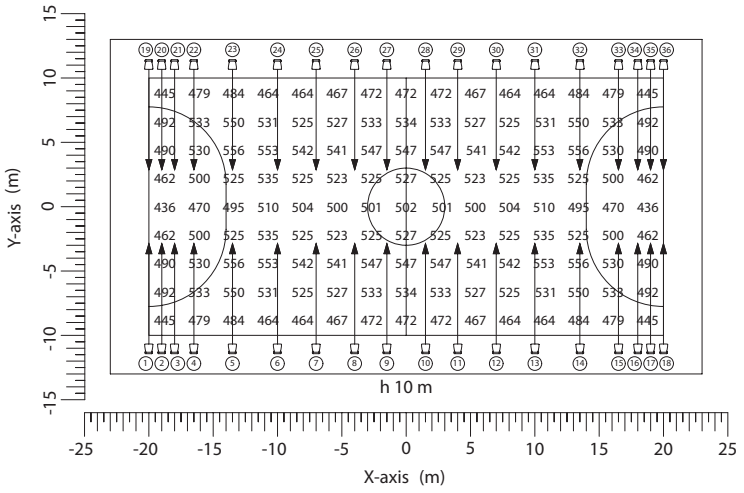
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	36

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-20.00	-11.00	0°; 0°; 90°
2	-19.00	-11.00	0°; 0°; 90°
3	-18.00	-11.00	0°; 0°; 90°
4	-16.50	-11.00	0°; 0°; 90°
5	-13.50	-11.00	0°; 0°; 90°
6	-10.00	-11.00	0°; 0°; 90°
7	-7.00	-11.00	0°; 0°; 90°
8	-4.00	-11.00	0°; 0°; 90°
9	-1.50	-11.00	0°; 0°; 90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



GRID 15x9	
AveE [lux]	509
MinE/AveE	0.85
Index [RA]	80
No. floodlights	36
Floodlight height [m]	10

Lighting project for covered sports centre.

INDOOR

HANDBALL - TRAINING ACTIVITIES

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS III

REQUISITES

Play area dimensions

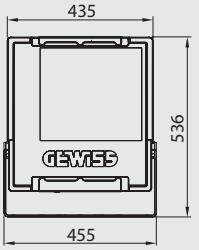
Length [m]	40
Width [m]	20
Grid points (length)	15
Grid points (width)	9

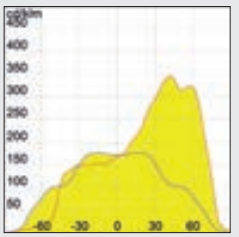
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
III	200	0.5	20

PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85424M

GW85424M: code referring to the 230V 50Hz version





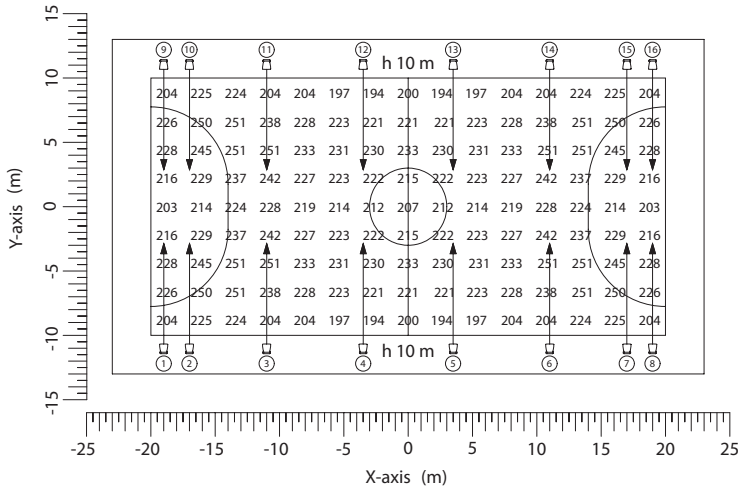
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	16

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-19.00	-11.00	0°; 0°; 90°
2	-17.00	-11.00	0°; 0°; 90°
3	-11.00	-11.00	0°; 0°; 90°
4	-3.50	-11.00	0°; 0°; 90°
13	3.50	11.00	0°; 0°; -90°
14	11.00	11.00	0°; 0°; -90°
15	17.00	11.00	0°; 0°; -90°
16	19.00	11.00	0°; 0°; -90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



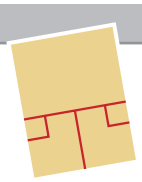
GRID 15x9	
AveE [lux]	225
MinE/AveE	0.86
Index [RA]	80
No. floodlights	16
Floodlight height [m]	10

Lighting project for covered sports centre.

SQUASH - MEDIUM-LEVEL COMPETITIONS

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS II

REQUISITES



Play area dimensions

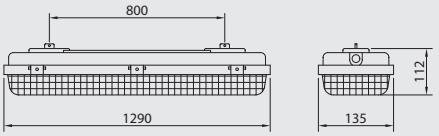
Length [m]	9.75
Width [m]	6.40
Grid points (length)	9
Grid points (width)	5

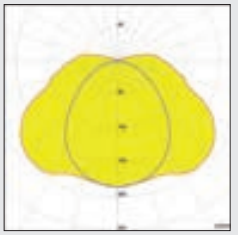
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
II	500	0.7	60

PROPOSED SOLUTION

Watertight luminaire "ZNT" 2X80W GW80194F

GW80194F: code referring to the 220/240V - 50/60Hz version





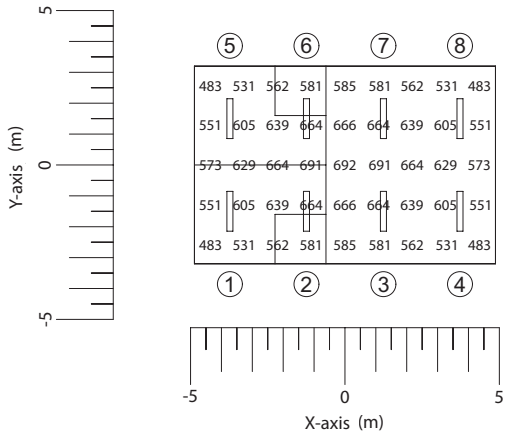
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Znt
Optic	Diffused
Lamp	2 conduits (80W) FSD 2G11
Lamp flux (lm)	12,000

TECHNICAL DATA OF THE LUMINAIRES	
Luminaire assembly height (m)	4.5
Number of luminaires	8

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-3.70	-1.50	0°; 0°; 0°
2	-1.25	-1.50	0°; 0°; 0°
3	1.25	-1.50	0°; 0°; 0°
4	3.70	-1.50	0°; 0°; 0°
5	-3.70	1.50	0°; 0°; 0°
6	-1.25	1.50	0°; 0°; 0°
7	1.25	1.50	0°; 0°; 0°
8	3.70	1.50	0°; 0°; 0°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



GRID 9x5	
AveE [lux]	595
MinE/AveE	0.81
Index [RA]	80
No. floodlights	8
Floodlight height [m]	4.5

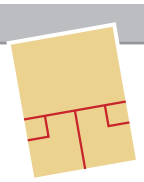
Lighting project for covered sports centre.

INDOOR

SQUASH - TRAINING ACTIVITIES

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS III

REQUISITES



Play area dimensions

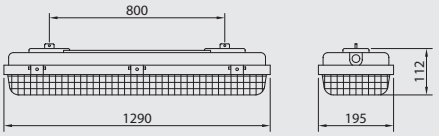
Length [m]	9.75
Width [m]	6.40
Grid points (length)	9
Grid points (width)	5

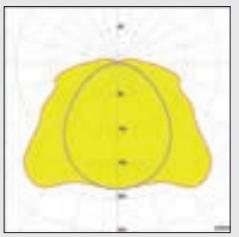
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
III	300	0.7	20

PROPOSED SOLUTION

Watertight luminaire "ZNT" 4x55W GW80195F

GW80195F: code referring to the 220/240V - 50/60Hz version





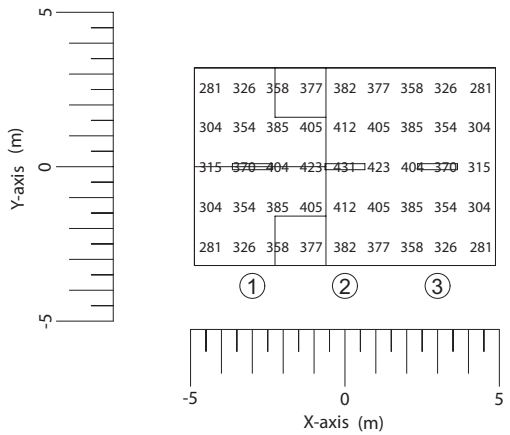
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Znt
Optic	Diffused
Lamp	4 conduits (55W) FSD 2G11
Lamp flux (lm)	19,200

TECHNICAL DATA OF THE LUMINAIRES	
Luminaire assembly height (m)	4.5
Number of luminaires	3

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-3.00	0,00	0°; 0°; 90°
2	0.00	0.00	0°; 0°; 90°
3	3.00	0.00	0°; 0°; 90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

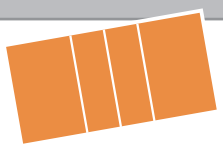
CALCULATION RESULTS



GRID 9x5	
AveE [lux]	360
MinE/AveE	0.78
Index [RA]	80
No. floodlights	3
Floodlight height [m]	4.5

Lighting project for covered sports centre.

REQUISITES



Play area dimensions

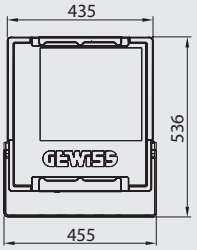
Length [m]	24
Width [m]	15
Grid points (length)	13
Grid points (width)	9

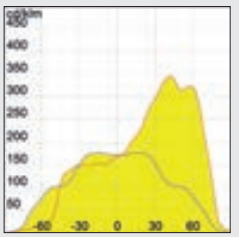
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
I	750	0.7	60

PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85424M

GW85424M: code referring to the 230V 50Hz version





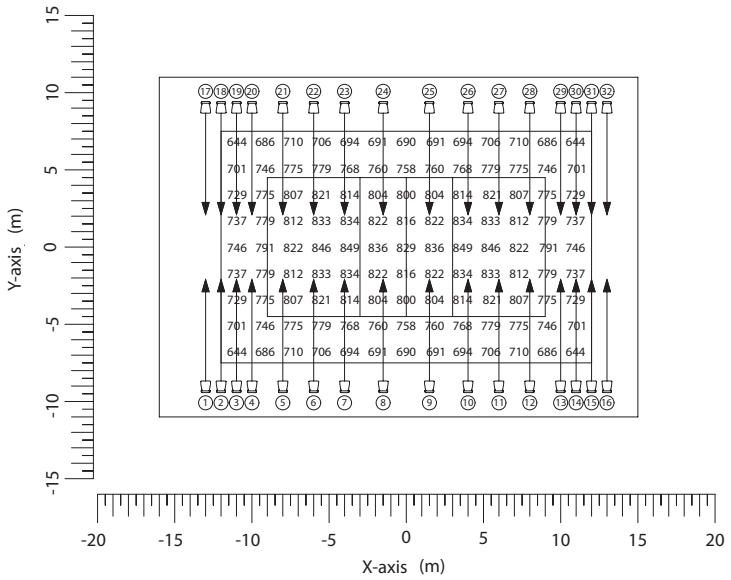
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	32

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-13.00	-9.00	0°; 0°; 90°
2	-12.00	-9.00	0°; 0°; 90°
3	-11.00	-9.00	0°; 0°; 90°
4	-10.00	-9.00	0°; 0°; 90°
5	-8.00	-9.00	0°; 0°; 90°
6	-6.00	-9.00	0°; 0°; 90°
7	-4.00	-9.00	0°; 0°; 90°
8	-1.50	-9.00	0°; 0°; 90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



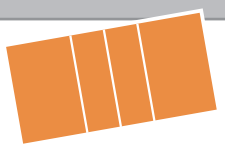
GRID 13x9	
AveE [lux]	766
MinE/AveE	0.84
Index [RA]	80
No. floodlights	32
Floodlight height [m]	10

Lighting project for covered sports centre.

VOLLEYBALL - MEDIUM-LEVEL COMPETITIONS

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS II

REQUISITES



Play area dimensions

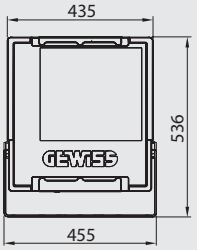
Length [m]	24
Width [m]	15
Grid points (length)	13
Grid points (width)	9

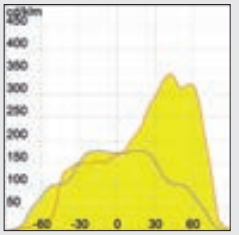
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
II	500	0.7	60

PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85424M

GW85424M: code referring to the 230V 50Hz version





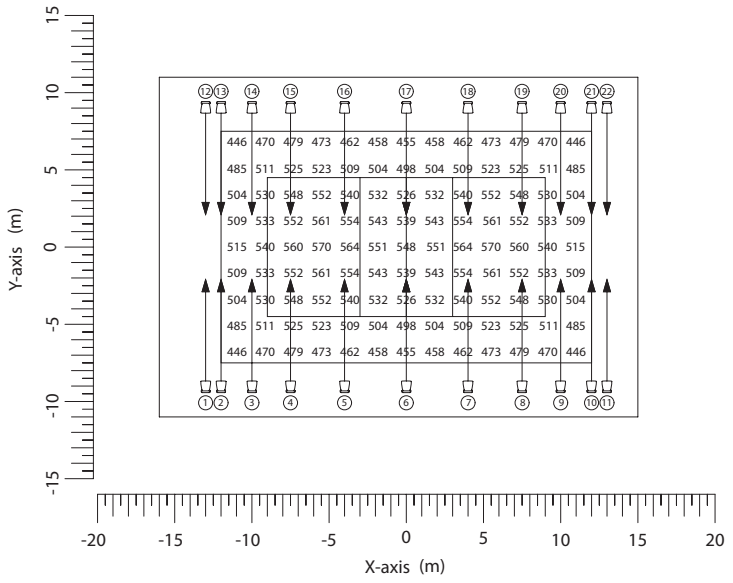
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	22

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-13.00	-9.00	0°; 0°; 90°
2	-12.00	-9.00	0°; 0°; 90°
3	-10.00	-9.00	0°; 0°; 90°
4	-7.50	-9.00	0°; 0°; 90°
5	-4.00	-9.00	0°; 0°; 90°
6	0.00	-9.00	0°; 0°; 90°
7	4.00	-9.00	0°; 0°; 90°
8	7.50	-9.00	0°; 0°; 90°
9	10.00	-9.00	0°; 0°; 90°
10	12.00	-9.00	0°; 0°; 90°
11	13.00	-9.00	0°; 0°; 90°

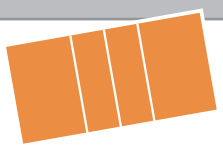
CALCULATION RESULTS



GRID 13x9	
AveE [lux]	516
MinE/AveE	0.86
Index [RA]	80
No. floodlights	22
Floodlight height [m]	10

Lighting project for covered sports centre.

REQUISITES



Play area dimensions

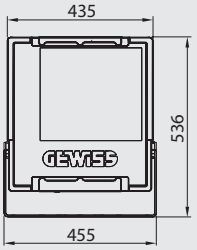
Length [m]	24
Width [m]	15
Grid points (length)	13
Grid points (width)	9

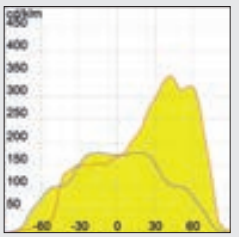
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
III	200	0.5	20

PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85424M

GW85424M: code referring to the 230V 50Hz version





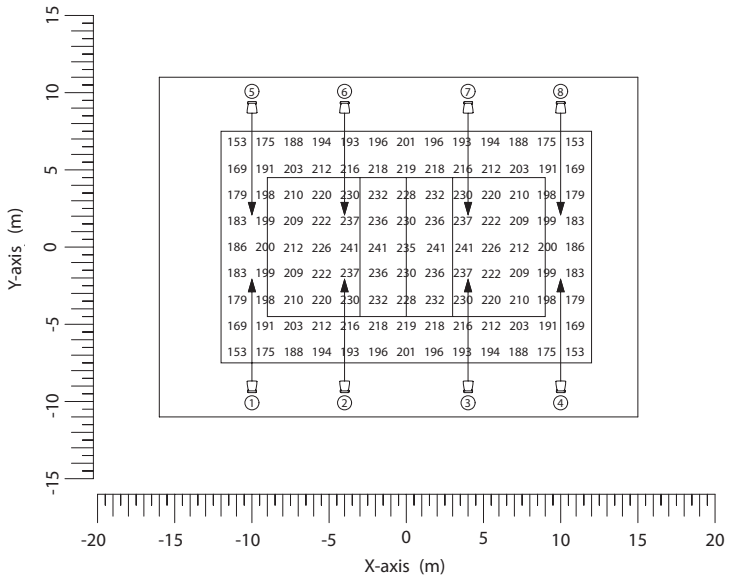
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	8

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-10.00	-9.00	0°; 0°; 90°
2	-4.00	-9.00	0°; 0°; 90°
3	4.00	-9.00	0°; 0°; 90°
4	10.00	-9.00	0°; 0°; 90°
5	-10.00	9.00	0°; 0°; -90°
6	-4.00	9.00	0°; 0°; -90°
7	4.00	9.00	0°; 0°; -90°
8	10.00	9.00	0°; 0°; -90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



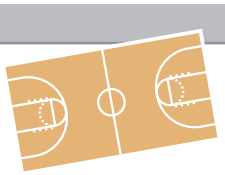
GRID 13x9	
AveE [lux]	205
MinE/AveE	0.74
Index [RA]	80
No. floodlights	8
Floodlight height [m]	10

Lighting project for covered sports centre.

BASKETBALL - HIGH-LEVEL COMPETITIONS

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS I

REQUISITES



Play area dimensions

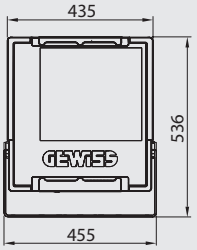
Length [m]	28
Width [m]	15
Grid points (length)	13
Grid points (width)	7

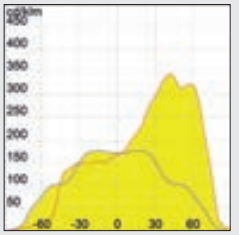
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
I	750	0.7	60

PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85424M

GW85424M: code referring to the 230V 50Hz version





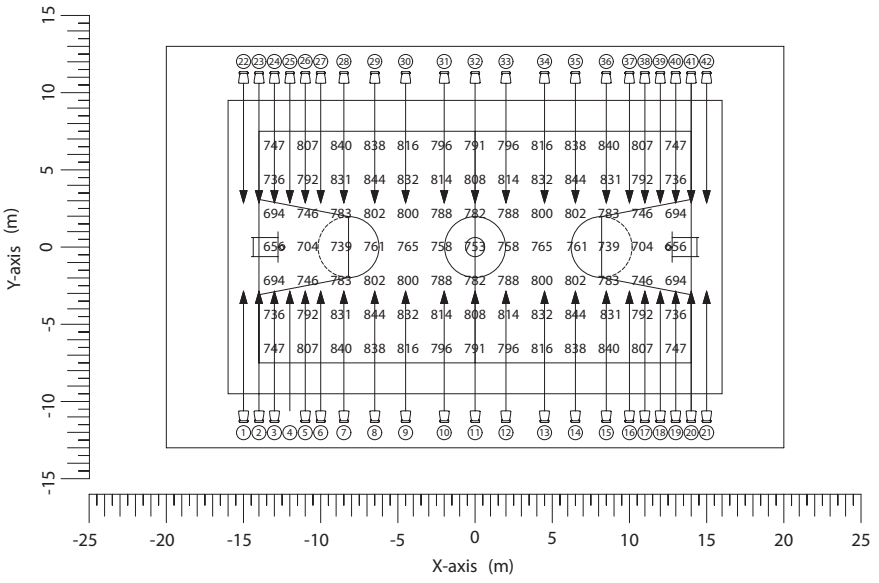
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	42

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-15.00	-11.00	0°; 0°; 90°
2	-14.00	-11.00	0°; 0°; 90°
3	-13.00	-11.00	0°; 0°; 90°
4	-12.00	-11.00	0°; 0°; 90°
5	-11.00	-11.00	0°; 0°; 90°
6	-10.00	-11.00	0°; 0°; 90°
7	-8.50	-11.00	0°; 0°; 90°
8	-6.50	-11.00	0°; 0°; 90°
9	-4.50	-11.00	0°; 0°; 90°
10	-2.00	-11.00	0°; 0°; 90°
11	0.00	-11.00	0°; 0°; 90°

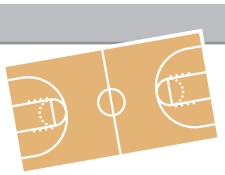
CALCULATION RESULTS



GRID 13x7	
AveE [lux]	786
MinE/AveE	0.83
Index [RA]	80
No. floodlights	42
Floodlight height [m]	10

Lighting project for covered sports centre.

REQUISITES



Play area dimensions

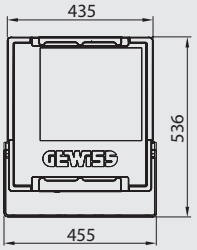
Length [m]	28
Width [m]	15
Grid points (length)	13
Grid points (width)	7

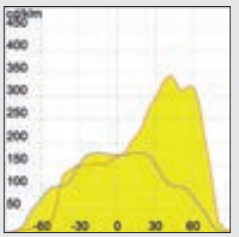
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
II	500	0.7	60

PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85424M

GW85424M: code referring to the 230V 50Hz version





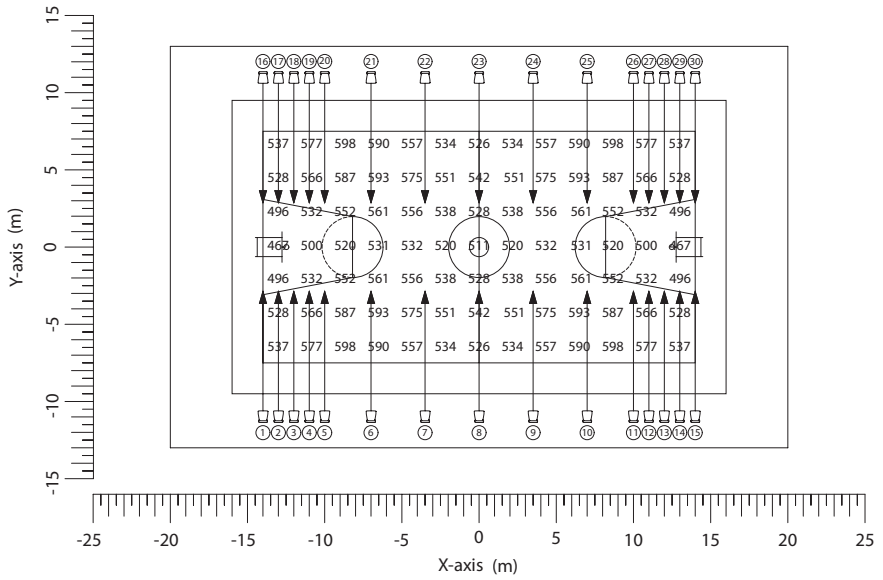
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	30

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-14.00	-11.00	0°; 0°; 90°
2	-13.00	-11.00	0°; 0°; 90°
3	-12.00	-11.00	0°; 0°; 90°
4	-11.00	-11.00	0°; 0°; 90°
5	-10.00	-11.00	0°; 0°; 90°
6	-7.00	-11.00	0°; 0°; 90°
7	-3.50	-11.00	0°; 0°; 90°
8	0,00	-11.00	0°; 0°; 90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



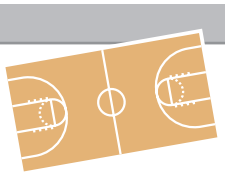
GRID 13x7	
AveE [lux]	549
MinE/AveE	0.85
Index [RA]	80
No. floodlights	30
Floodlight height [m]	10

Lighting project for covered sports centre.

BASKETBALL - TRAINING ACTIVITIES

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS III

REQUISITES



Play area dimensions

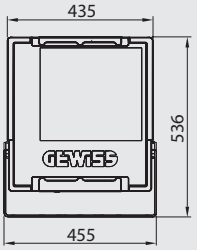
Length [m]	28
Width [m]	15
Grid points (length)	13
Grid points (width)	7

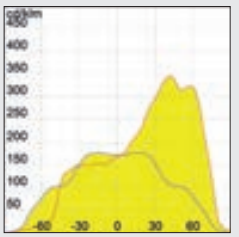
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
III	200	0.5	20

PROPOSED SOLUTION

"Mercurio 2" Floodlight asymmetrical 400W GW85424M

GW85424M: code referring to the 230V 50Hz version





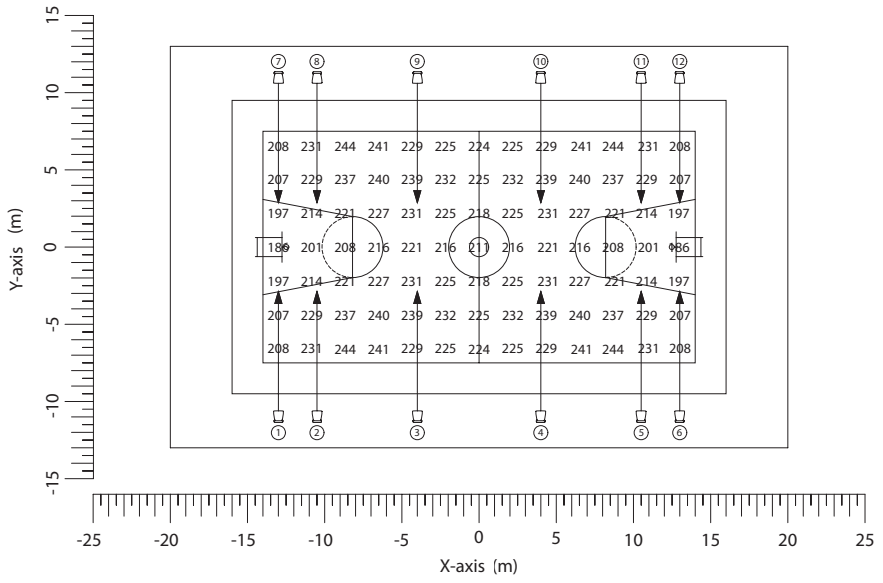
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Mercurio 2
Optic	Asymmetrical
Lamp	HPI-T plus 400W
Lamp flux (lm)	35,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	12

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-13.00	-11.00	0°; 0°; 90°
2	-10.50	-11.00	0°; 0°; 90°
3	-4.00	-11.00	0°; 0°; 90°
10	4.00	11.00	0°; 0°; -90°
11	10.50	11.00	0°; 0°; -90°
12	13.00	11.00	0°; 0°; -90°

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

CALCULATION RESULTS



GRID 13x7	
AveE [lux]	224
MinE/AveE	0.83
Index [RA]	80
No. floodlights	12
Floodlight height [m]	10

Lighting project for covered sports centre.

REQUISITES

Play area dimensions

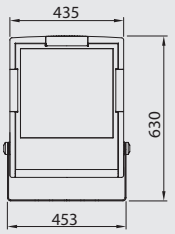
Length [m]	50
Width [m]	21
Grid points (length)	17
Grid points (width)	7

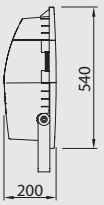
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
I	500	0.7	60

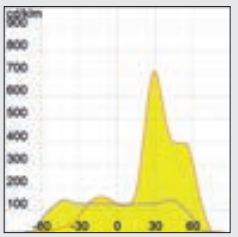
PROPOSED SOLUTION

"Horus 3"
Asymmetrical
floodlight 400W
GW 85 134 M

GW85134M: code referring to the 230V 50Hz version







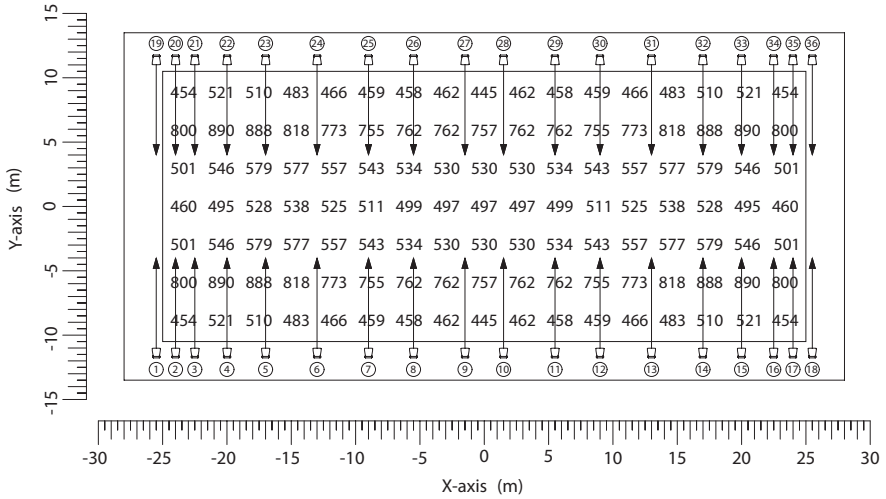
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Horus 3
Optic	Asymmetrical
Lamp	HQI-T 400W/N/SI
Lamp flux (lm)	33,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	36

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-25.50	-11.70	0°; 0°; 90°
2	-24.00	-11.70	0°; 0°; 90°
3	-22.50	-11.70	0°; 0°; 90°
4	-20.00	-11.70	0°; 0°; 90°
5	-17.00	-11.70	0°; 0°; 90°
6	-13.00	-11.70	0°; 0°; 90°
7	-9.00	-11.70	0°; 0°; 90°
8	-5.50	-11.70	0°; 0°; 90°
9	-1.50	-11.70	0°; 0°; 90°

CALCULATION RESULTS



GRID 17x7	
AveE [lux]	591
MinE/AveE	0.75
Index [RA]	65
No. floodlights	36
Floodlight height [m]	10

Lighting project for covered sports centre.

SWIMMING - MEDIUM-LEVEL COMPETITIONS

PROJECT COMPLIANT WITH: EN 12193 (2008): CLASS II

REQUISITES

Play area dimensions

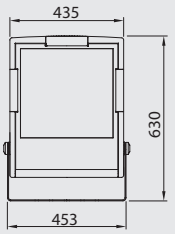
Length [m]	50
Width [m]	21
Grid points (length)	17
Grid points (width)	7

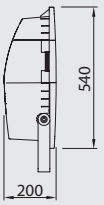
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
II	300	0.7	60

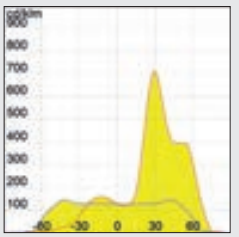
PROPOSED SOLUTION

"Horus 3" Asymmetrical floodlight 400W GW85134M

GW85134M: code referring to the 230V 50Hz version







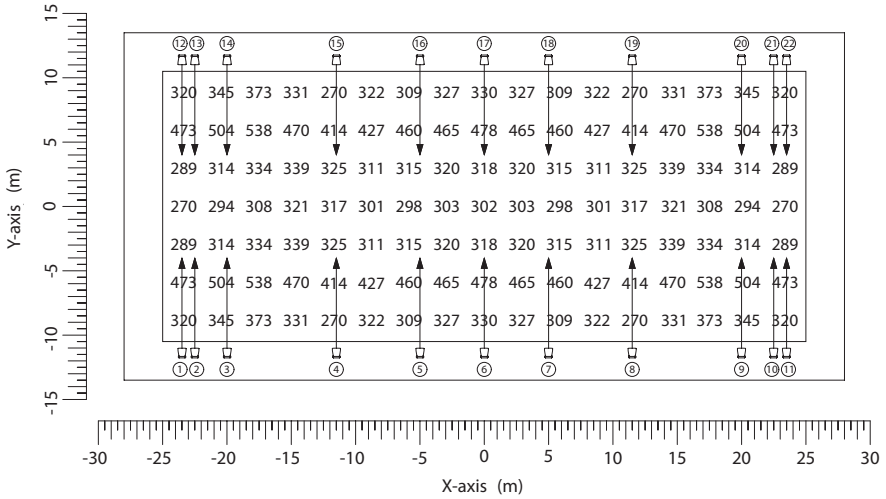
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Horus 3
Optic	Asymmetrical
Lamp	HQI-T 400W/N/SI
Lamp flux (lm)	33,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	22

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-23.50	-12.00	0°; 0°; 90°
2	-22.50	-12.00	0°; 0°; 90°
3	-20.00	-12.00	0°; 0°; 90°
4	-11.50	-12.00	0°; 0°; 90°
5	-5.00	-12.00	0°; 0°; 90°
6	0,00	-12.00	0°; 0°; 90°
7	5.00	-12.00	0°; 0°; 90°
8	11.50	-12.00	0°; 0°; 90°
9	20.00	-12.00	0°; 0°; 90°
10	22.50	-12.00	0°; 0°; 90°
11	23.50	-12.00	0°; 0°; 90°

CALCULATION RESULTS



GRID 17x7	
AveE [lux]	361
MinE/AveE	0.75
Index [RA]	65
No. floodlights	22
Floodlight height [m]	10

Lighting project for covered sports centre.

REQUISITES

Play area dimensions

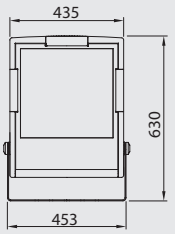
Length [m]	50
Width [m]	21
Grid points (length)	17
Grid points (width)	7

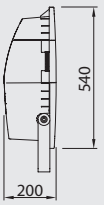
VALUES REQUIRED			
Class	AveE [lx]	MinE/AveE	Colour yield index [RA]
III	200	0.5	20

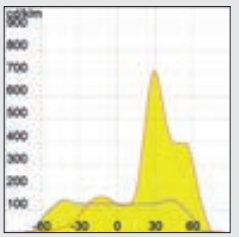
PROPOSED SOLUTION

"Horus 3" Asymmetrical floodlight 400W GW85134M

GW85134M: code referring to the 230V 50Hz version







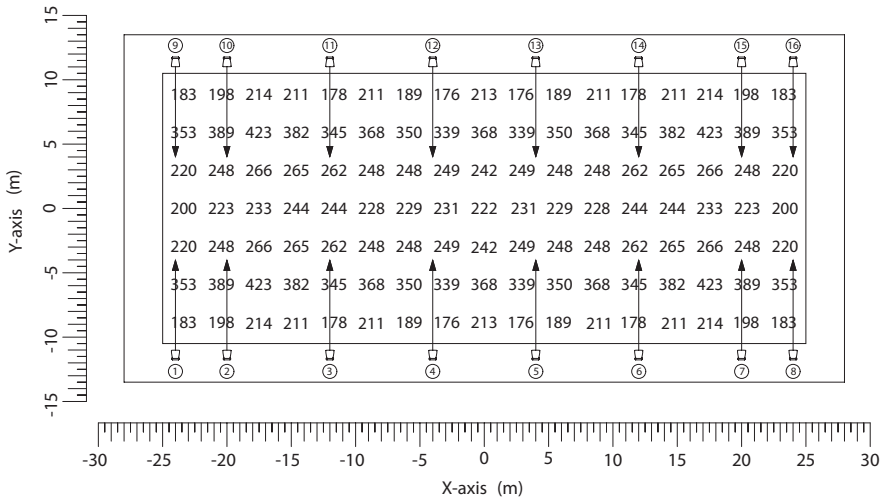
TECHNICAL DATA OF THE DEVICES	
Maintenance factor	0.8
Floodlight	Horus 3
Optic	Asymmetrical
Lamp	HQI-T 400W/N/SI
Lamp flux (lm)	33,000

TECHNICAL DATA OF THE FLOODLIGHTS	
Floodlight assembly height (m)	10
Number of floodlights	16

The lighting values actually measured may differ from the project ones due to the intrinsic tolerance levels of the light sources and devices, for their orientation, and for the different electricity supply parameters.

FLOODLIGHT POSITIONING			
Device	Position of devices X	Position of devices Y	Rotation devices X°; Y°; Z°
1	-24.00	-11.50	0°; 0°; 90°
2	-20.00	-11.50	0°; 0°; 90°
3	-12.00	-11.50	0°; 0°; 90°
4	-4.00	-11.50	0°; 0°; 90°
13	4.00	11.50	0°; 0°; -90°
14	12.00	11.50	0°; 0°; -90°
15	20.00	11.50	0°; 0°; -90°
16	24.00	11.50	0°; 0°; -90°

CALCULATION RESULTS



GRID 17x7	
AveE [lux]	265
MinE/AveE	0.66
Index [RA]	65
No. floodlights	16
Floodlight height [m]	10

Lighting project for covered sports centre.

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