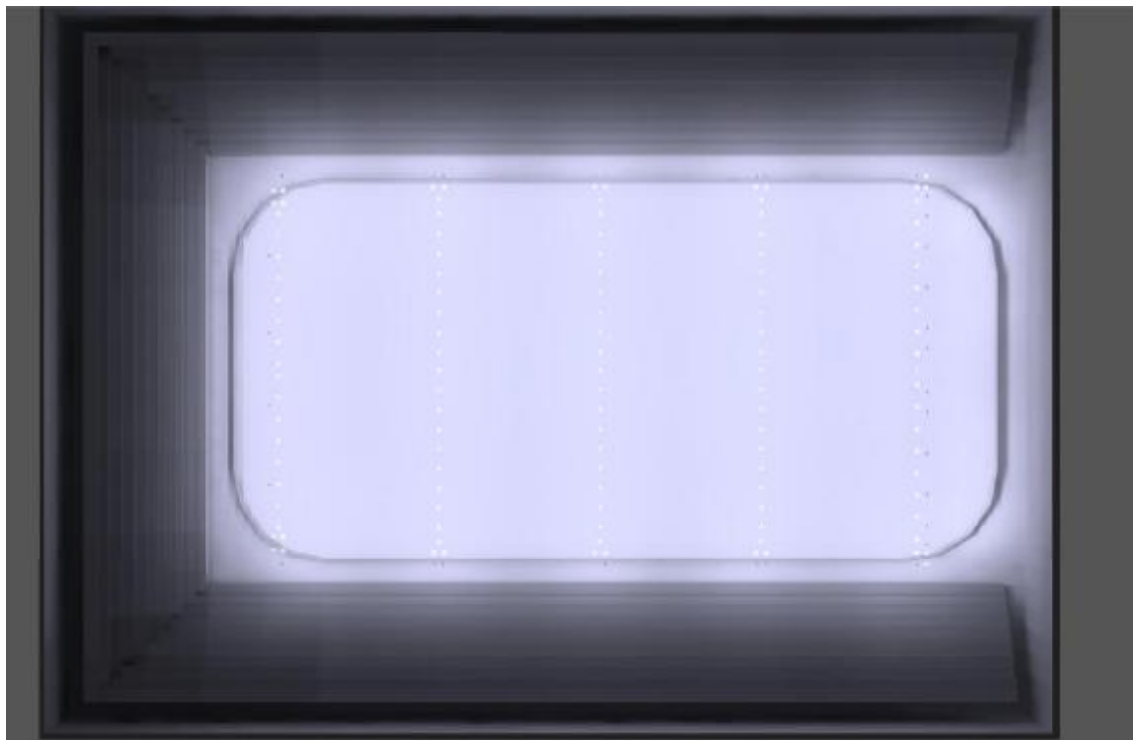


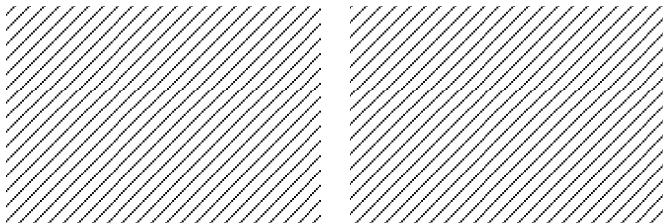
Date



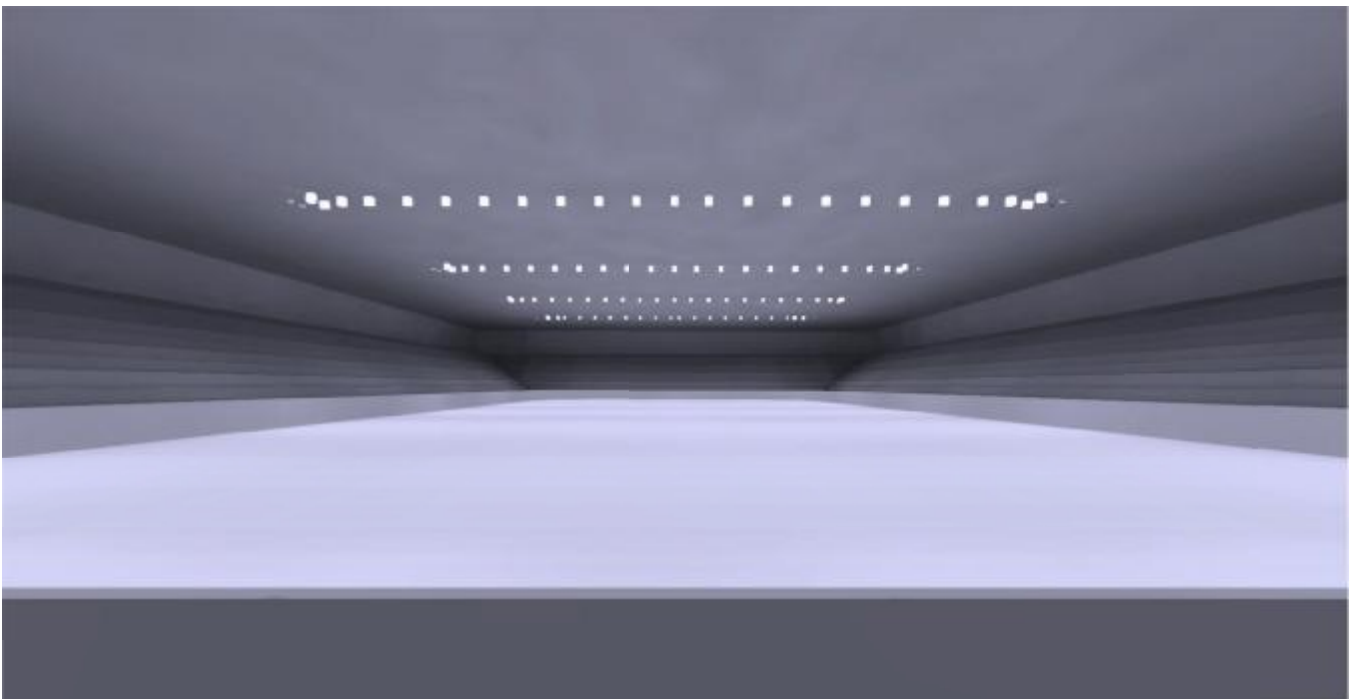
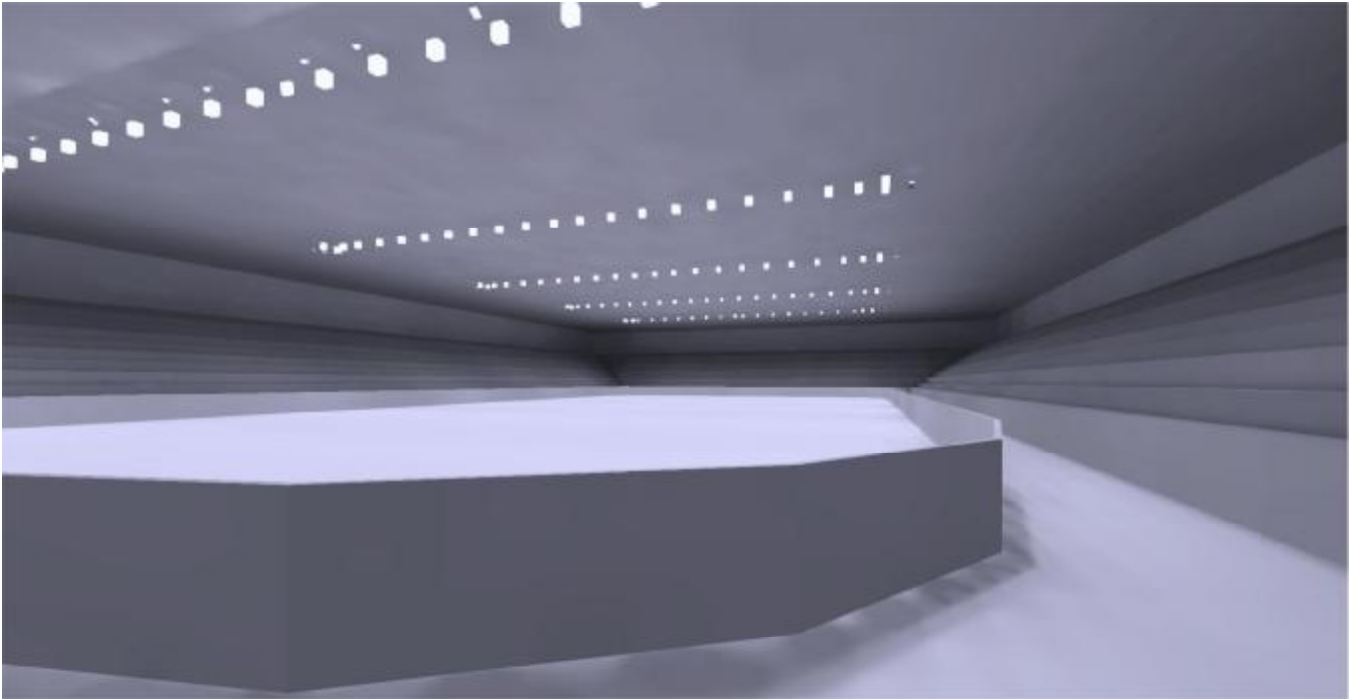
Osvetlenie Zimného štadióna v Trnave - HALA A

Rozloženie svietidiel na pozície nosníkov

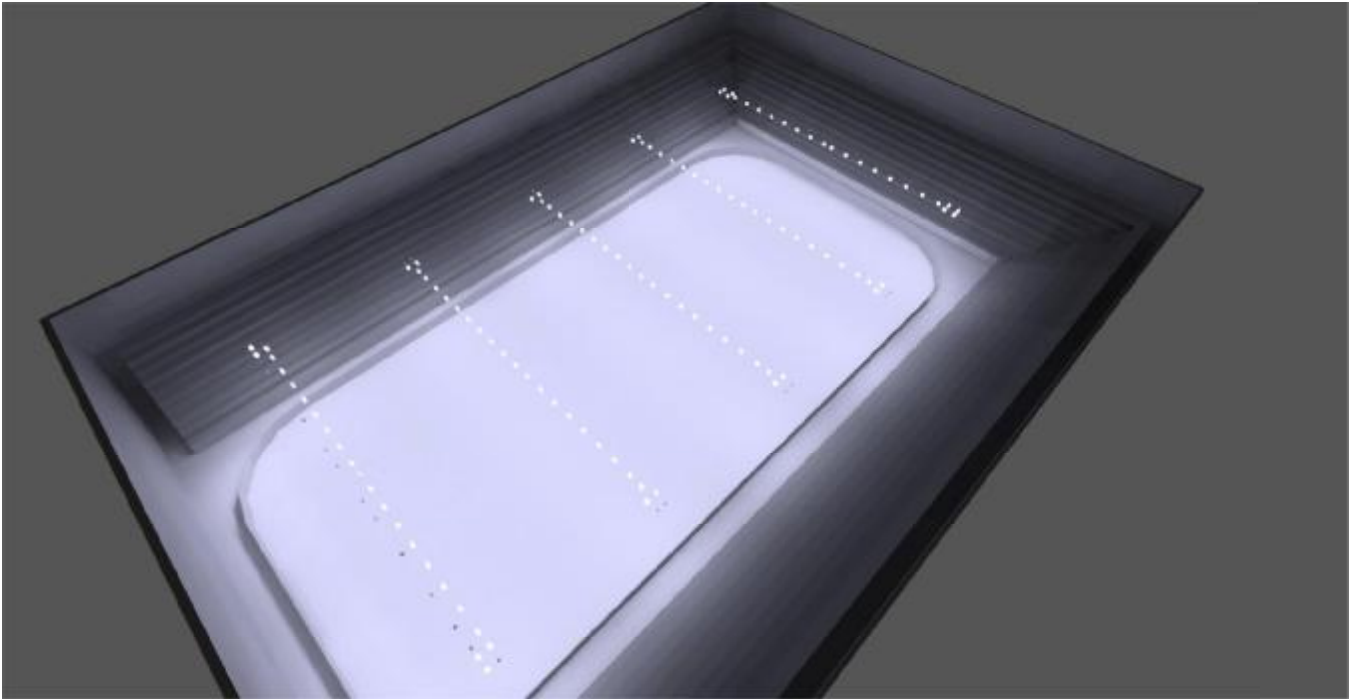
Contacts



Images

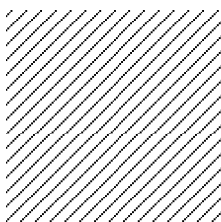


Images

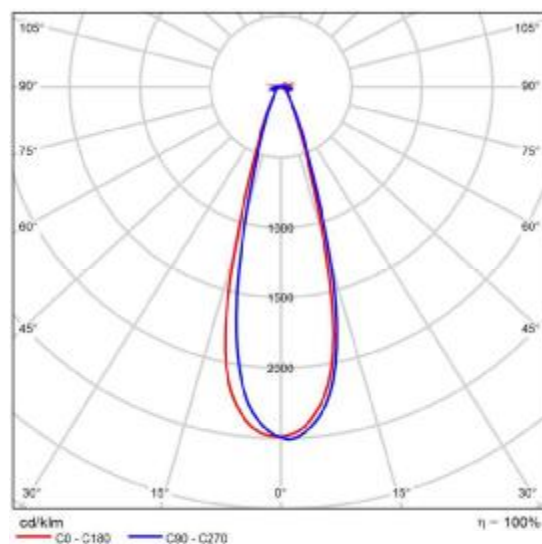


Product data sheet

LED FLOOD LIGHT



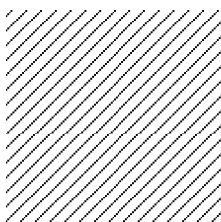
| | |
|---------------------------|----------------|
| Article No. | T400A-100W-30D |
| P | 100.1 W |
| Φ_{Lamp} | 15102 lm |
| $\Phi_{\text{Luminaire}}$ | 15093 lm |
| η | 99.94 % |
| Luminous efficacy | 150.8 lm/W |
| CCT | 5000 K |
| CRI | 80 |



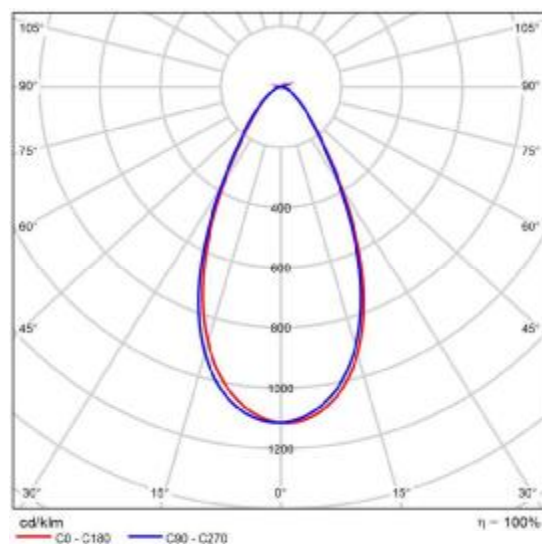
Polar LDC

Product data sheet

LED FLOOD LIGHT



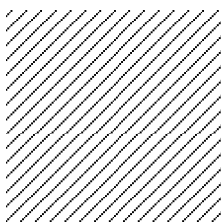
| | |
|---------------------------|----------------|
| Article No. | T400A-100W-60D |
| P | 99.4 W |
| Φ_{Lamp} | 15727 lm |
| $\Phi_{\text{Luminaire}}$ | 15724 lm |
| η | 99.98 % |
| Luminous efficacy | 158.3 lm/W |
| CCT | 5000 K |
| CRI | 80 |



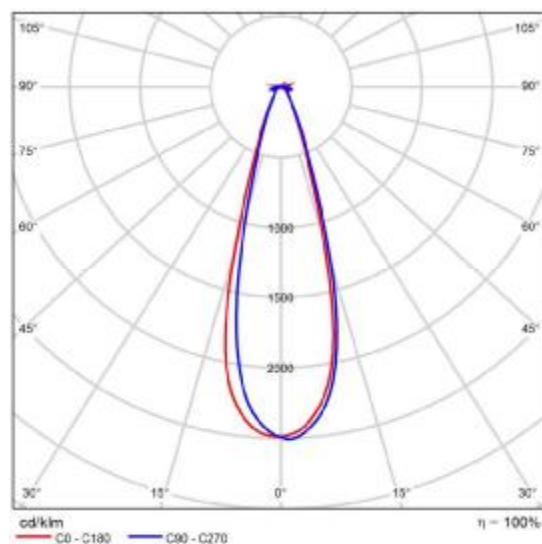
Polar LDC

Product data sheet

LED FLOOD LIGHT



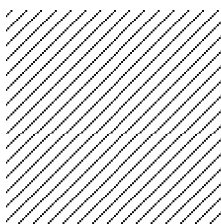
| | |
|---------------------------|----------------|
| Article No. | T400A-200W-30D |
| P | 201.3 W |
| Φ_{Lamp} | 30228 lm |
| $\Phi_{\text{Luminaire}}$ | 30211 lm |
| η | 99.94 % |
| Luminous efficacy | 150.1 lm/W |
| CCT | 5000 K |
| CRI | 80 |



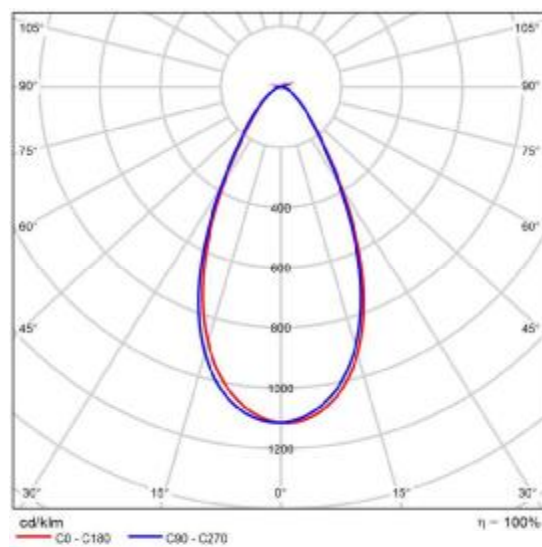
Polar LDC

Product data sheet

LED FLOOD LIGHT



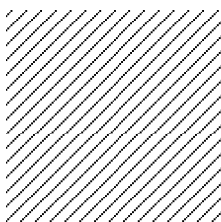
| | |
|---------------------------|----------------|
| Article No. | T400A-200W-60D |
| P | 201.5 W |
| Φ_{Lamp} | 31850 lm |
| $\Phi_{\text{Luminaire}}$ | 31842 lm |
| η | 99.98 % |
| Luminous efficacy | 158.0 lm/W |
| CCT | 5000 K |
| CRI | 80 |



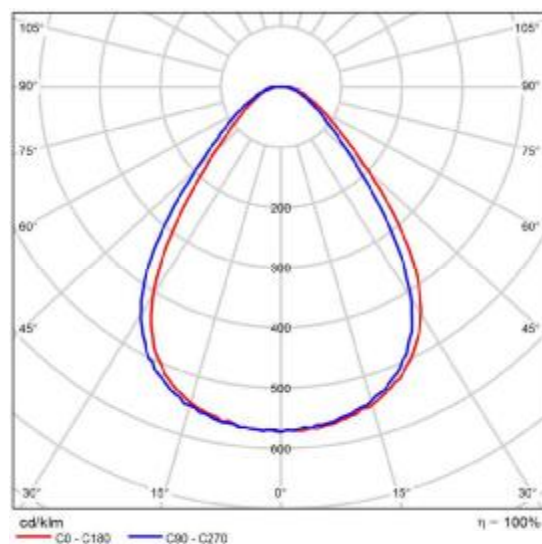
Polar LDC

Product data sheet

T400A-100W-90D



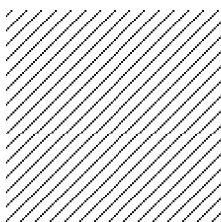
| | |
|---------------------------|------------|
| P | 98.6 W |
| Φ_{Lamp} | 15817 lm |
| $\Phi_{\text{Luminaire}}$ | 15828 lm |
| η | 100.07 % |
| Luminous efficacy | 160.6 lm/W |
| CCT | 5000 K |
| CRI | 80 |



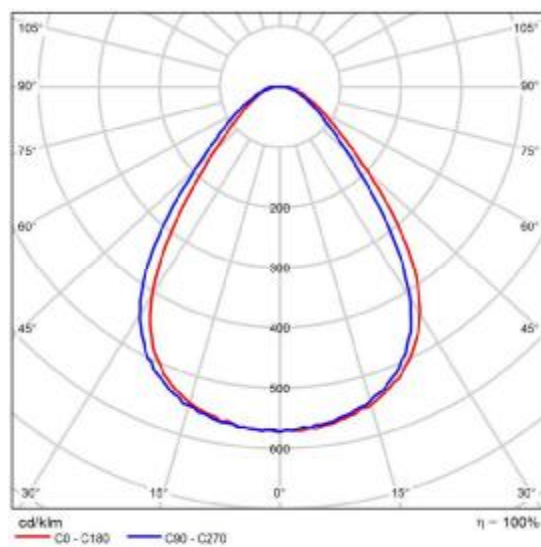
Polar LDC

Product data sheet

T400A-200W-90D



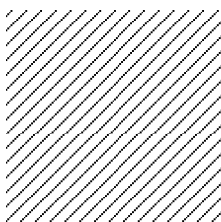
| | |
|---------------------------|------------|
| P | 199.2 W |
| Φ_{Lamp} | 31761 lm |
| $\Phi_{\text{Luminaire}}$ | 31782 lm |
| η | 100.07 % |
| Luminous efficacy | 159.6 lm/W |
| CCT | 5000 K |
| CRI | 80 |



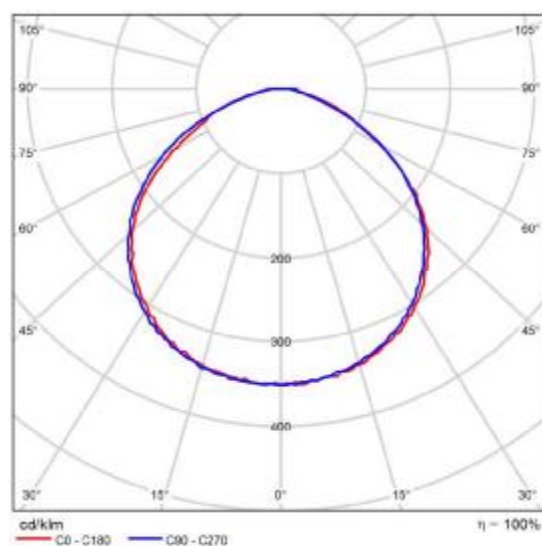
Polar LDC

Product data sheet

T400A-200W-120D



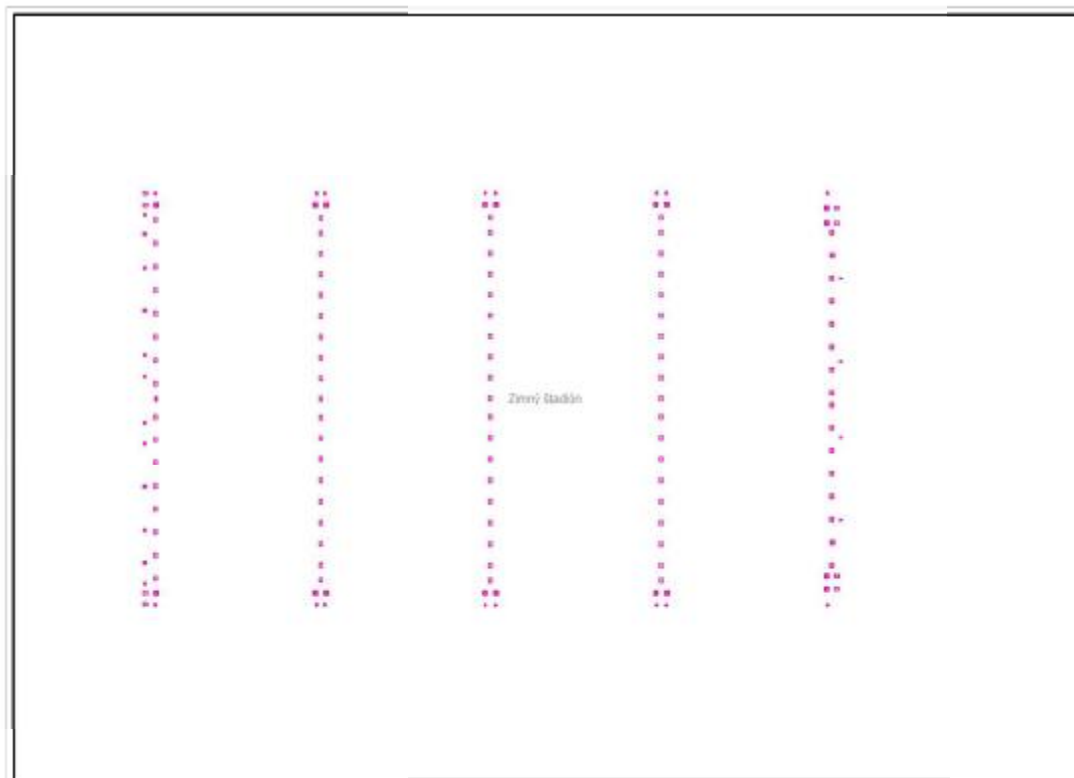
| | |
|---------------------------|------------|
| P | 200.2 W |
| Φ_{Lamp} | 32061 lm |
| $\Phi_{\text{Luminaire}}$ | 32083 lm |
| η | 100.07 % |
| Luminous efficacy | 160.3 lm/W |
| CCT | 5000 K |
| CRI | 80 |



Polar LDC

HALA A · 1NP

Room List (Energy evaluation)



HALA A · 1NP

Room List (Energy evaluation)

Zimný štadión

P_{total}
26900.4 W

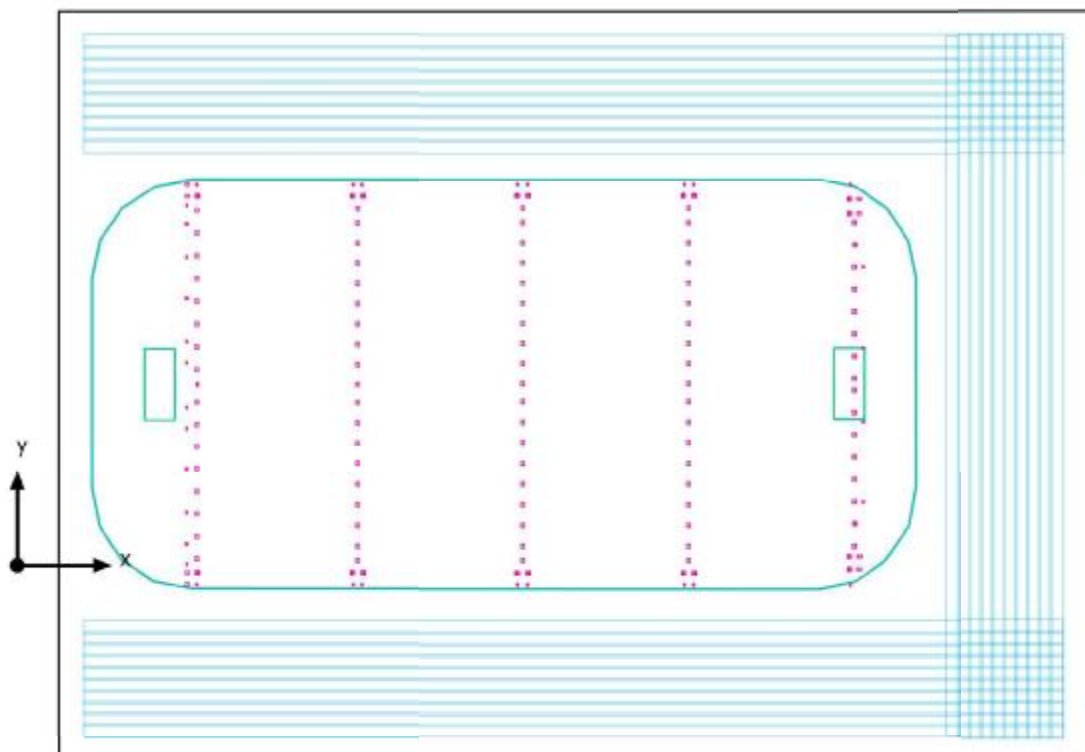
A_{Room}
4041.48 m²

Lighting power density
6.66 W/m² (Room)

| pcs. | Manufacturer | Article No. | Article name | P | $\Phi_{\text{Luminaire}}$ |
|------|--------------|----------------|-----------------|---------|---------------------------|
| 1 | | | T400A-100W-90D | 98.6 W | 15828 lm |
| 97 | | | T400A-200W-120D | 200.2 W | 32083 lm |
| 18 | | | T400A-200W-90D | 199.2 W | 31782 lm |
| 6 | | T400A-100W-30D | LED FLOOD LIGHT | 100.1 W | 15093 lm |
| 20 | | T400A-100W-60D | LED FLOOD LIGHT | 99.4 W | 15724 lm |
| 4 | | T400A-200W-30D | LED FLOOD LIGHT | 201.3 W | 30211 lm |
| 2 | | T400A-200W-60D | LED FLOOD LIGHT | 201.5 W | 31842 lm |

HALA A · 1NP · Zimný štadión

Summary



HALA A · 1NP · Zimný štadión

Summary

Results

| | Symbol | Calculated | Target | Check | Index |
|------------------------|-------------------|-----------------------|-------------------|-------|-------|
| Glare | GR _{max} | 15 | - | - | S5 |
| Consumption values | Consumption | 73950 kWh/a | max. 141500 kWh/a | ✓ | |
| Lighting power density | Room | 6.66 W/m ² | - | - | |

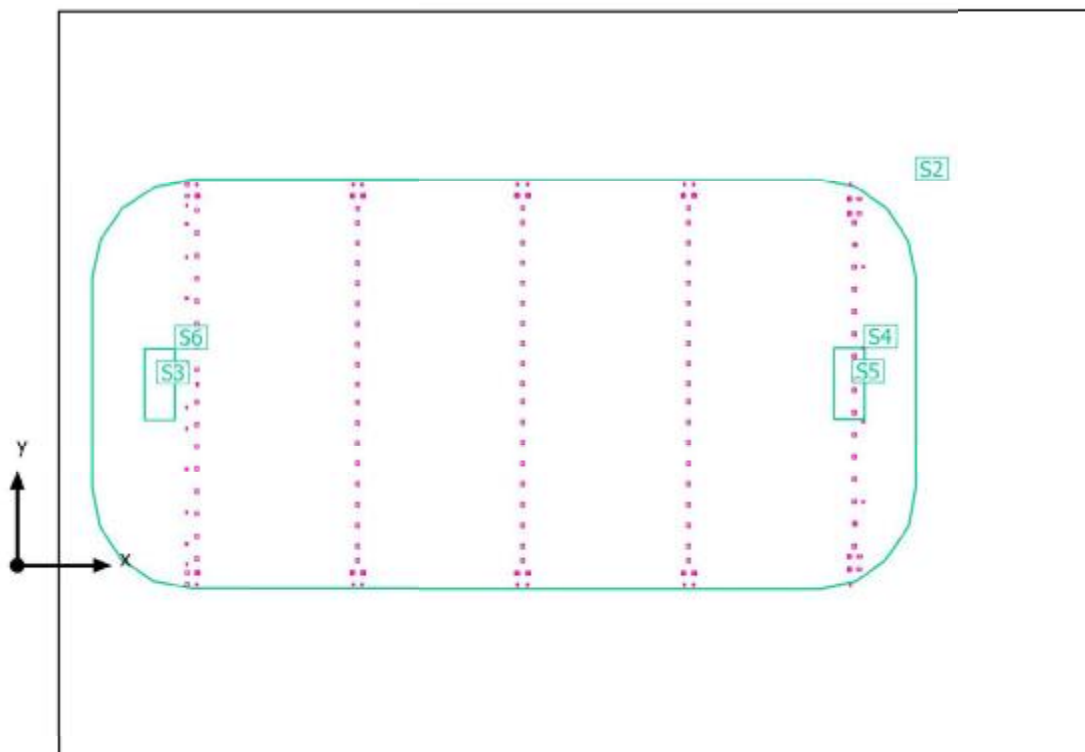
Utilisation profile: DIALux presetting, Standard (office)

Luminaire list

| pcs. | Manufacturer | Article No. | Article name | P | Φ | Luminous efficacy |
|------|--------------|----------------|-----------------|---------|----------|-------------------|
| 1 | | | T400A-100W-90D | 98.6 W | 15828 lm | 160.6 lm/W |
| 97 | | | T400A-200W-120D | 200.2 W | 32083 lm | 160.3 lm/W |
| 18 | | | T400A-200W-90D | 199.2 W | 31782 lm | 159.6 lm/W |
| 6 | | T400A-100W-30D | LED FLOOD LIGHT | 100.1 W | 15093 lm | 150.8 lm/W |
| 20 | | T400A-100W-60D | LED FLOOD LIGHT | 99.4 W | 15724 lm | 158.3 lm/W |
| 4 | | T400A-200W-30D | LED FLOOD LIGHT | 201.3 W | 30211 lm | 150.1 lm/W |
| 2 | | T400A-200W-60D | LED FLOOD LIGHT | 201.5 W | 31842 lm | 158.0 lm/W |

HALA A · 1NP · Zimný štadión

Calculation objects



HALA A · 1NP · Zimný štadión

Calculation objects

Calculation surfaces

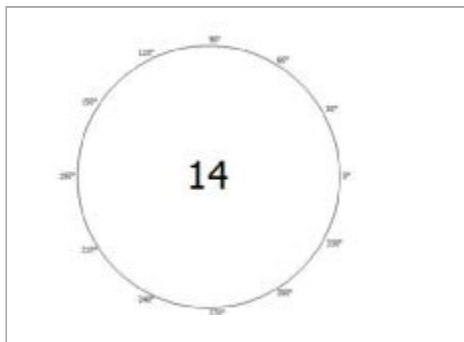
| Properties | \bar{E} | E_{\min} | E_{\max} | g_1 | g_2 | Index |
|---|-----------|------------|------------|-------|-------|-------|
| pracovná rovina - hracia plocha Perpendicular illuminance Height: 0.000 m | 1501 lx | 1286 lx | 1687 lx | 0.86 | 0.76 | S2 |
| pracovná rovina - hracia plocha Camera-orientated illuminance Camera 1, Camera position: (38.679 m, 13.967 m, 6.200 m), Height: 0.000 m | 1046 lx | 757 lx | 1624 lx | 0.72 | 0.47 | S2 |

HALA A · 1NP · Zimný štadión

Calculation objects

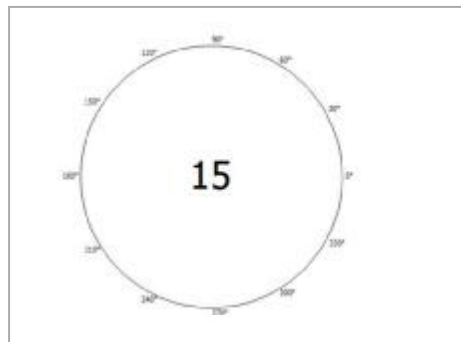
oslňenie GR brankár č.1 (GR)

| | |
|----------------------|--|
| Strongest glare at | 30° |
| max | 14 |
| Target | - |
| Viewing sector | 0° - 360° |
| Step width | 15° |
| Angle of inclination | -2° |
| Height | 1.500 m |
| Index | S3 |
| Method | Exact calculation according to CIE 112 |



oslňenie GR brankár č.2 (GR)

| | |
|----------------------|--|
| Strongest glare at | 165° |
| max | 15 |
| Target | - |
| Viewing sector | 0° - 360° |
| Step width | 15° |
| Angle of inclination | -2° |
| Height | 1.500 m |
| Index | S5 |
| Method | Exact calculation according to CIE 112 |



HALA A · 1NP · Zimný štadión

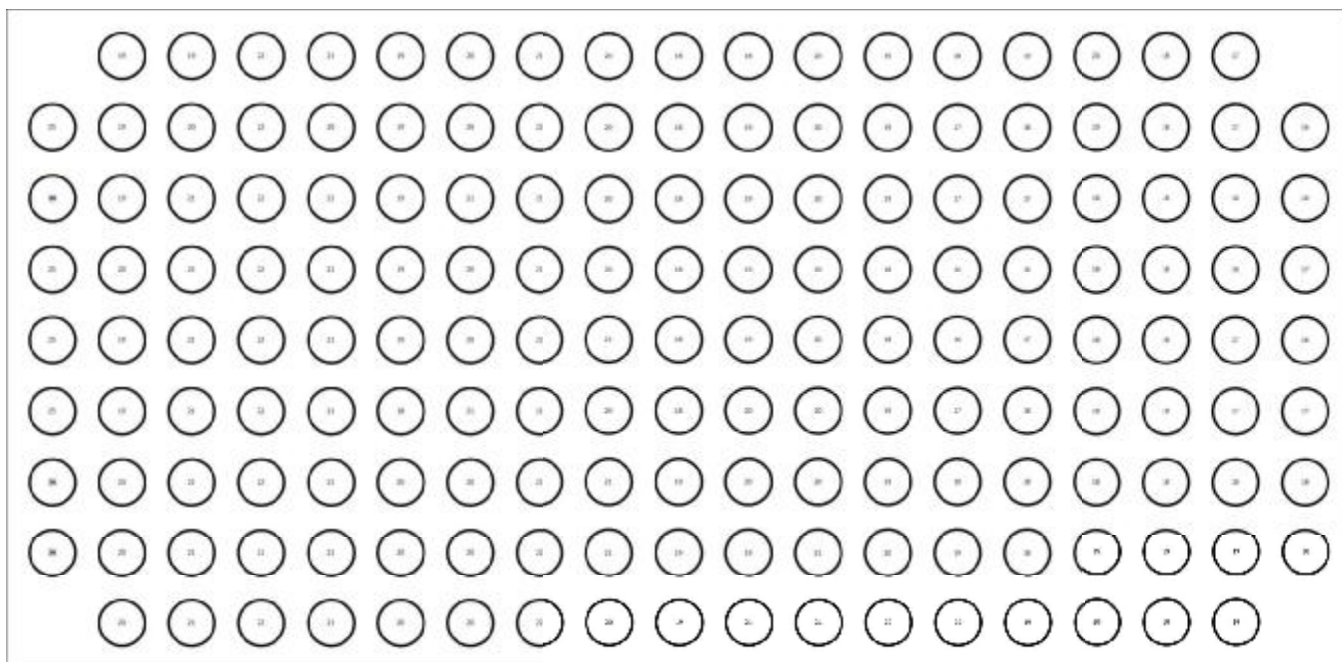
Calculation objects

pracovná rovina - hracia plocha
(GR)

| | |
|----------------------|---|
| Strongest glare at | 15° |
| max | 26 |
| Target | - |
| Viewing sector | 0° - 360° |
| Step width | 15° |
| Angle of inclination | 0° |
| Height | 1.500 m |
| Index | S2 |
| Method | Exact calculation according to CIE 112 |

HALA A · 1NP · Zimný štadión

Calculation objects



HALA A · 1NP · Zimný štadión

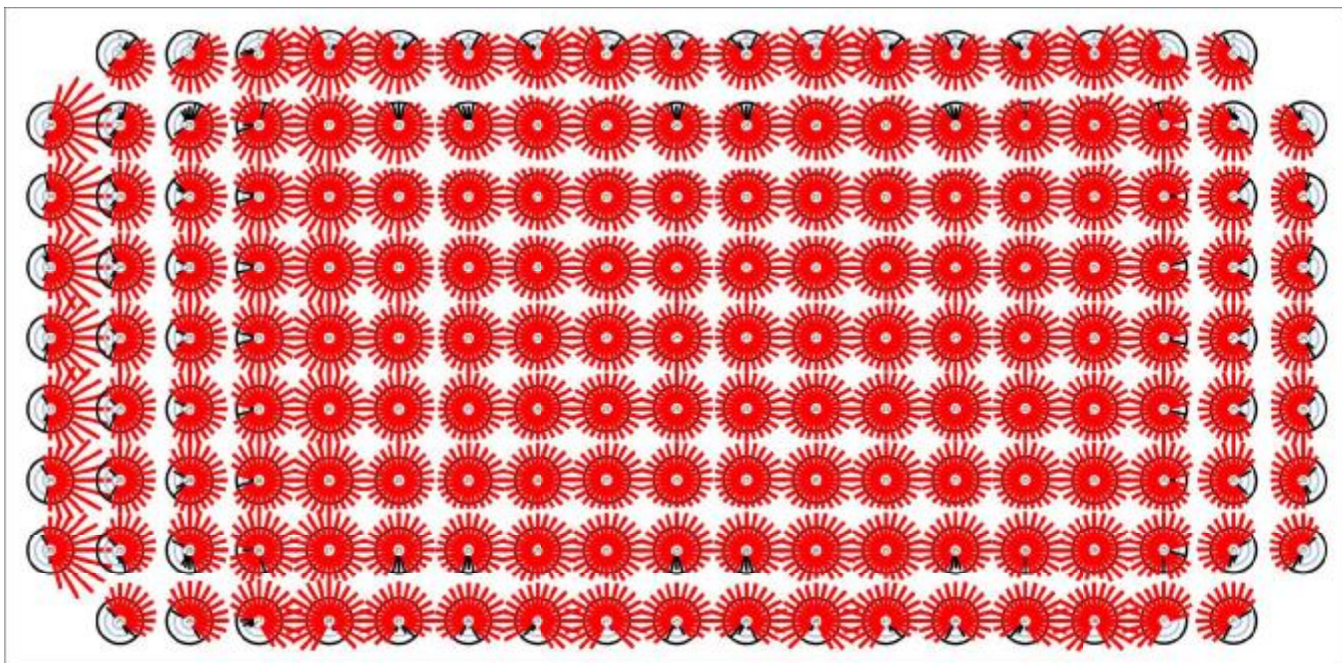
Calculation objects

pracovná rovina - hracia plocha
(UGR)

| | |
|--------------------|-----------|
| Strongest glare at | 345° |
| max | >30 |
| Target | ≤19.0 |
| Viewing sector | 0° - 360° |
| Step width | 15° |
| Height | 1.500 m |
| Index | S2 |

HALA A · 1NP · Zimný štadión

Calculation objects



HALA A · 1NP · Zimný štadión

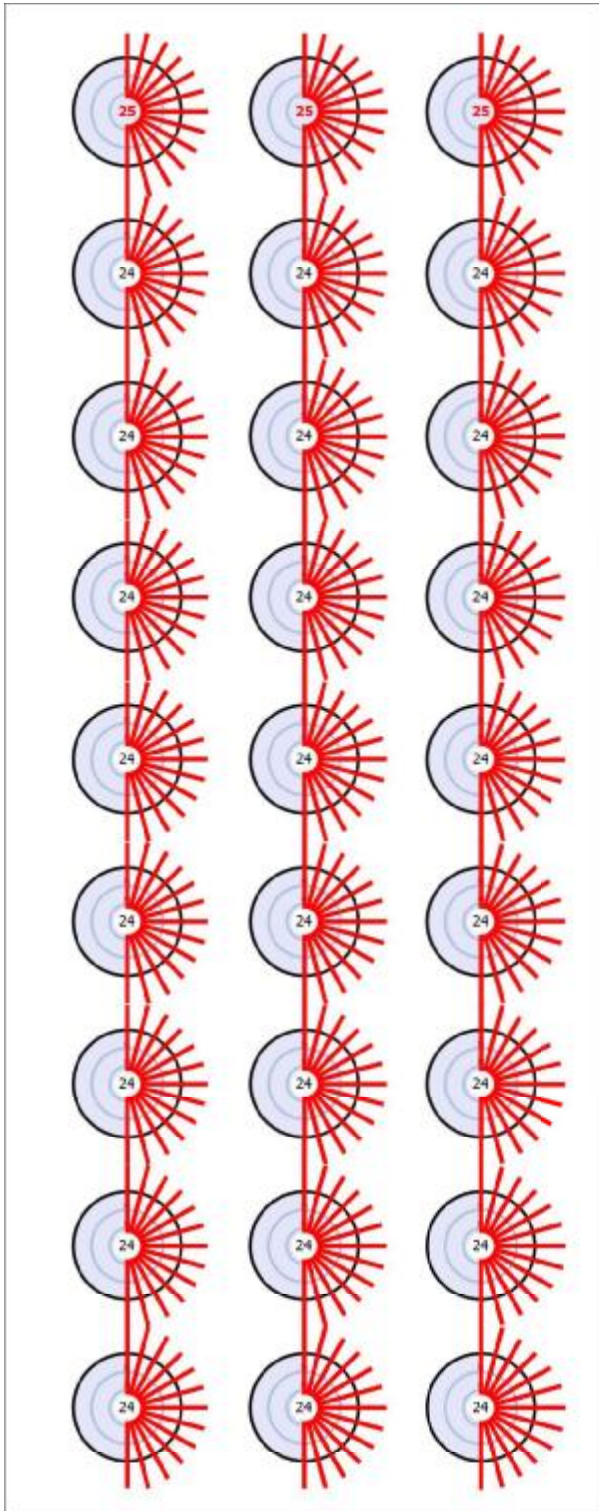
Calculation objects

oslňenie UGR brankár č.2 (UGR)

| | |
|--------------------|-----------|
| Strongest glare at | 15° |
| max | 24.7 |
| Target | ≤19.0 |
| Viewing sector | 0° - 180° |
| Step width | 15° |
| Height | 1.500 m |
| Index | S4 |

HALA A · 1NP · Zimný štadión

Calculation objects



HALA A · 1NP · Zimný štadión

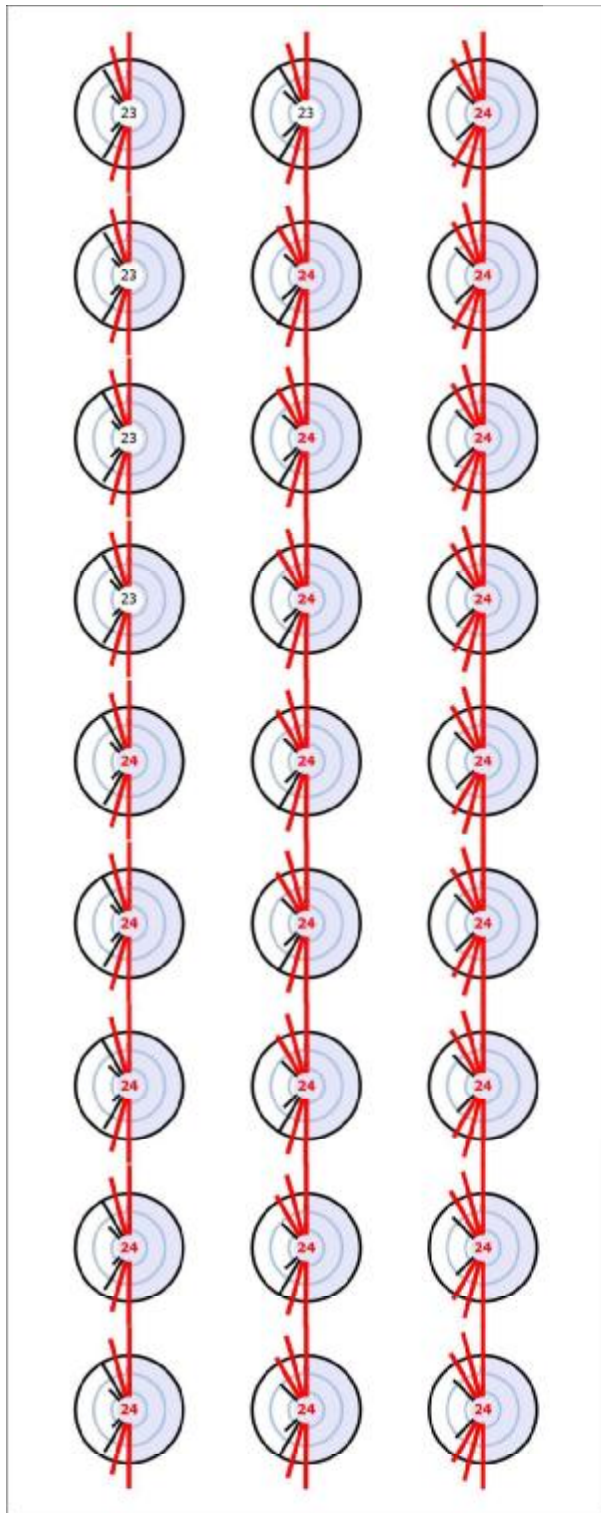
Calculation objects

oslňenie UGR brankár č.1 (UGR)

| | |
|--------------------|-------------|
| Strongest glare at | 180° |
| max | 24.2 |
| Target | ≤19,0 |
| Viewing sector | 180° - 360° |
| Step width | 15° |
| Height | 1.500 m |
| Index | S6 |

HALA A · 1NP · Zimný štadión

Calculation objects

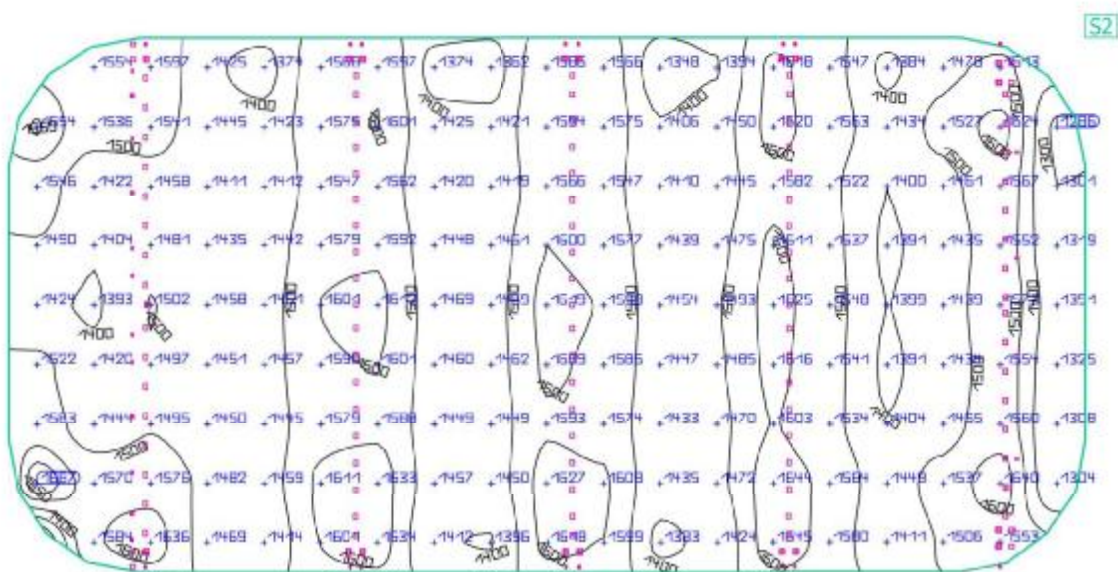


HALA A · 1 NP · Zimný štadión

Calculation objects

Utilisation profile: DIALux presetting, Standard (office)

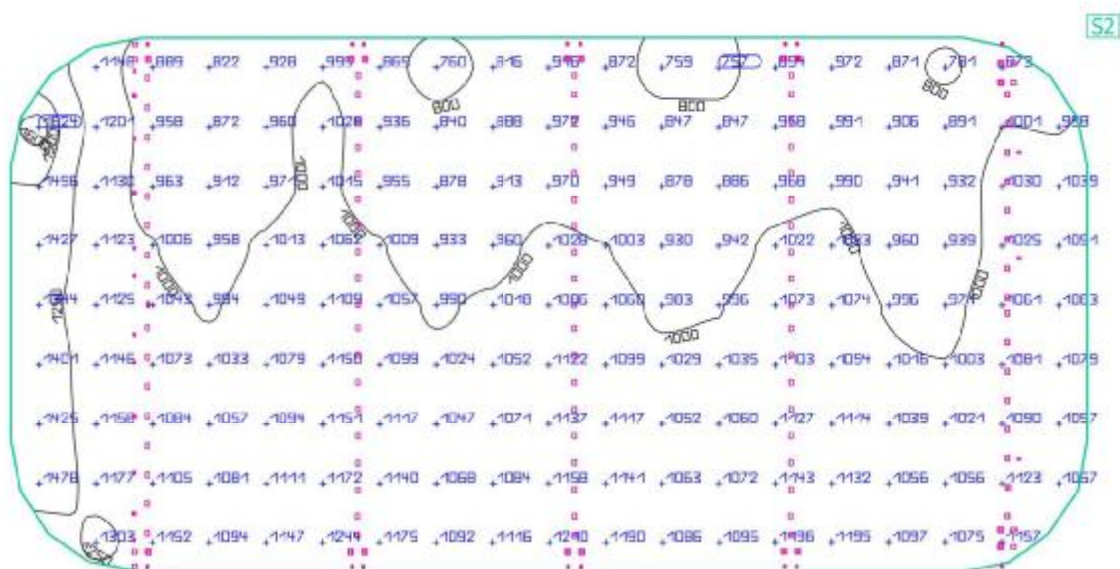
HALA A · 1NP · Zimný štadión

pracovná rovina - hracia plocha

| Properties | \bar{E} | E_{min} | E_{max} | g_1 | g_2 | Index |
|---------------------------------|-----------|-----------|-----------|-------|-------|-------|
| pracovná rovina - hracia plocha | 1501 lx | 1286 lx | 1687 lx | 0.86 | 0.76 | S2 |
| Perpendicular illuminance | | | | | | |
| Height: 0.000 m | | | | | | |

Utilisation profile: DIALux presetting, Standard (office)

HALA A · 1NP · Zimný štadión

pracovná rovina - hracia plocha

| Properties | \bar{E} | E_{min} | E_{max} | g_1 | g_2 | Index |
|---|-----------|-----------|-----------|-------|-------|-------|
| pracovná rovina - hracia plocha | 1046 lx | 757 lx | 1624 lx | 0.72 | 0.47 | S2 |
| Camera-orientated illuminance | | | | | | |
| Camera 1, Camera position: (38.679 m, 13.967 m, 6.200 m), Height: 0.000 m | | | | | | |

Utilisation profile: DIALux presetting, Standard (office)