

Duchek AirDome 75x45

Basic lighting concept according to given guidelines:

- PA: $E_m \geq 400\text{lx}$.

This document has been made for informational purposes and does not constitute an offer nor trade deal.

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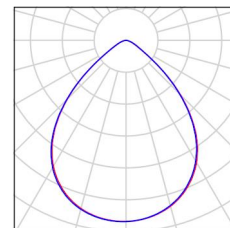
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Duchek AirDome 75x45 / Luminaire parts list

49 Pieces PERFAND LED P0242006J840R04MAA ANOR 2 See our luminaire
200W O90 840 catalog for an image of
Article No.: P0242006J840R04MAA the luminaire.
Luminous flux (Luminaire): 34600 lm
Luminous flux (Lamps): 34603 lm
Luminaire Wattage: 200.0 W
Luminaire classification according to CIE: 100
Fitting: 1 x User defined (Correction Factor
1.000).



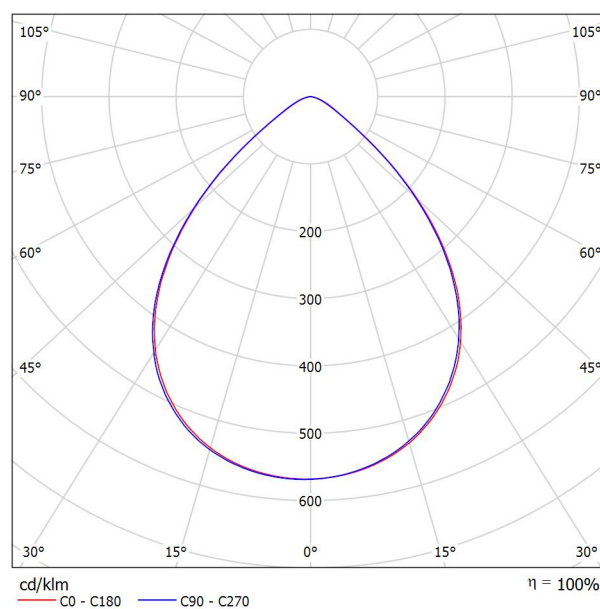
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PERFAND LED P0242006J840R04MAA ANOR 2 200W O90 840 / Luminaire Data Sheet

See our luminaire catalog for an image of the luminaire.

Luminous emittance 1:



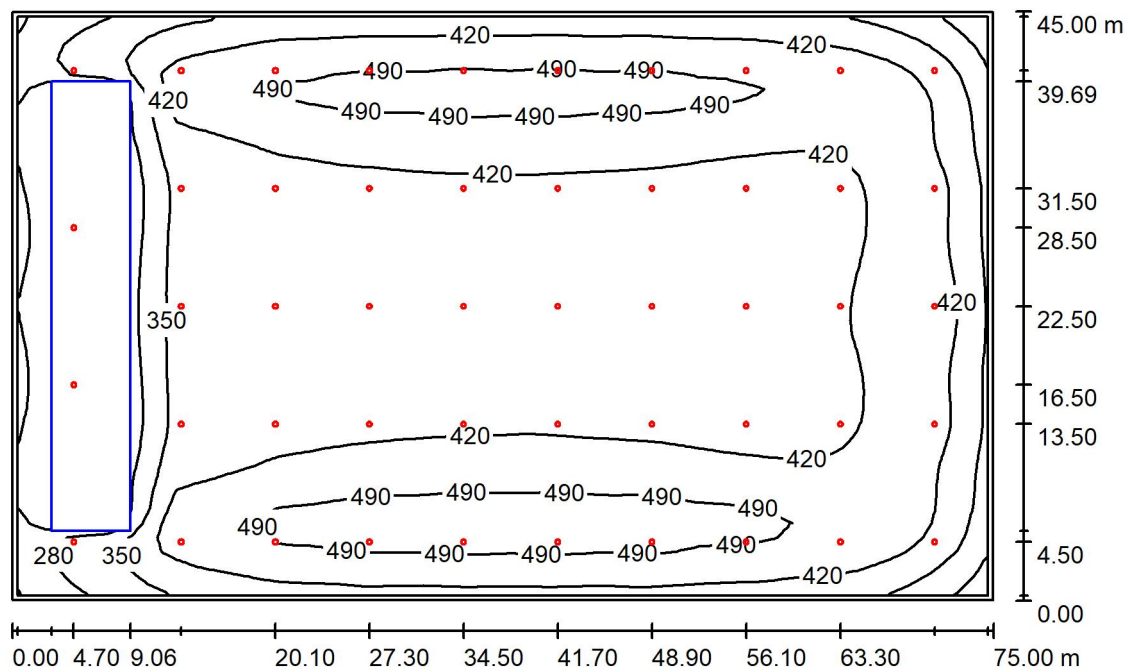
Luminaire classification according to CIE: 100
CIE flux code: 71 95 99 100 100

Due to missing symmetry properties, no UGR table can be displayed for this luminaire.

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AirDome - field / Summary



Height of Room: 18.000 m, Maintenance factor: 0.80

Values in Lux, Scale 1:578

Surface	ρ [%]	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u_0
Workplane	/	413	181	522	0.437
Floor	20	383	9.80	519	0.026

Workplane:

Height: 0.000 m
Grid: 67 x 40 Points
Boundary Zone: 0.400 m

Luminaire Parts List

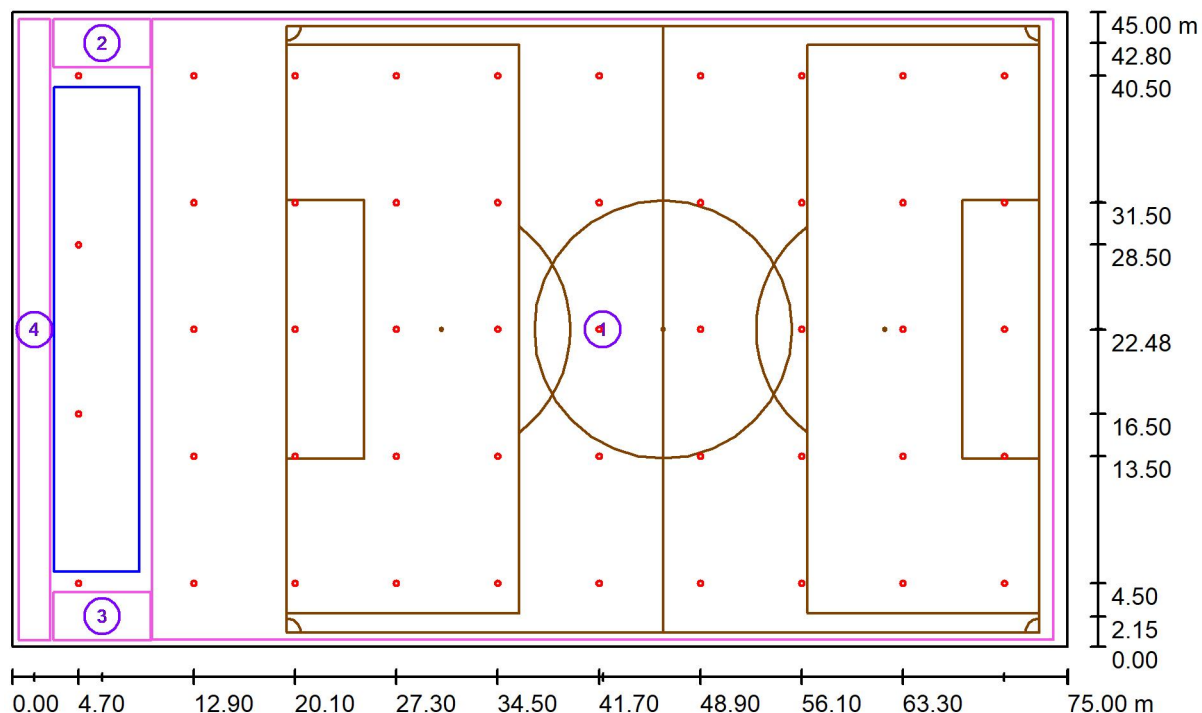
No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	49	PERFAND LED P0242006J840R04MAA ANOR 2 200W O90 840 (1.000)	34600	34603	200.0
Total:			1695380	1695547	9800.0

Specific connected load: $2.90 \text{ W/m}^2 = 0.70 \text{ W/m}^2/100 \text{ lx}$ (Ground area: 3375.00 m^2)

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AirDome - field / Calculation surfaces (results overview)



Scale 1 : 537

Calculation Surface List

No.	Designation	Type	Grid	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u_0	E_{min} / E_{max}
1	Play sector	perpendicular	64 x 44	425	255	519	0.599	0.490
2	Communication 1	perpendicular	16 x 8	306	243	370	0.793	0.656
3	Communication 2	perpendicular	16 x 8	318	254	381	0.798	0.665
4	Communication 3	perpendicular	4 x 64	202	108	264	0.535	0.408

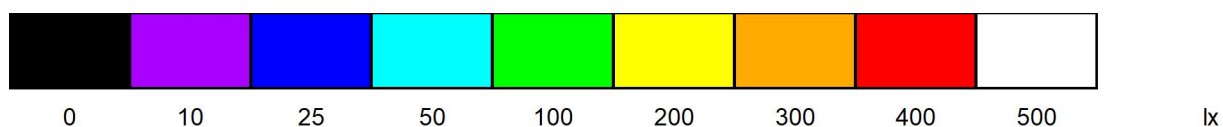
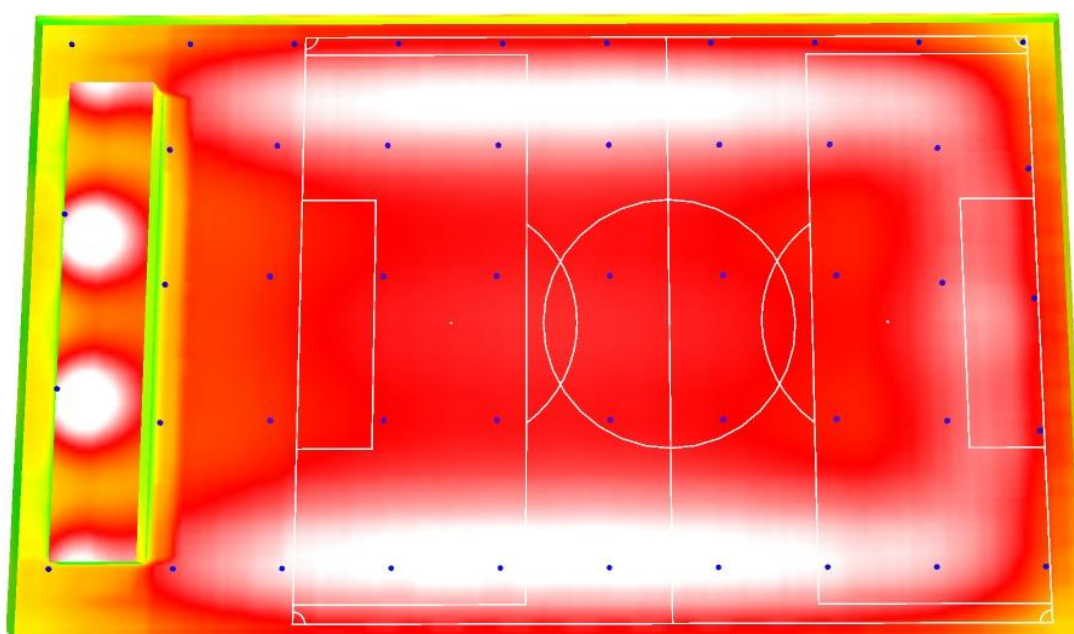
Summary of Results

Type	Quantity	Average [lx]	Min [lx]	Max [lx]	u_0	E_{min} / E_{max}
perpendicular	4	416	108	519	0.26	0.21

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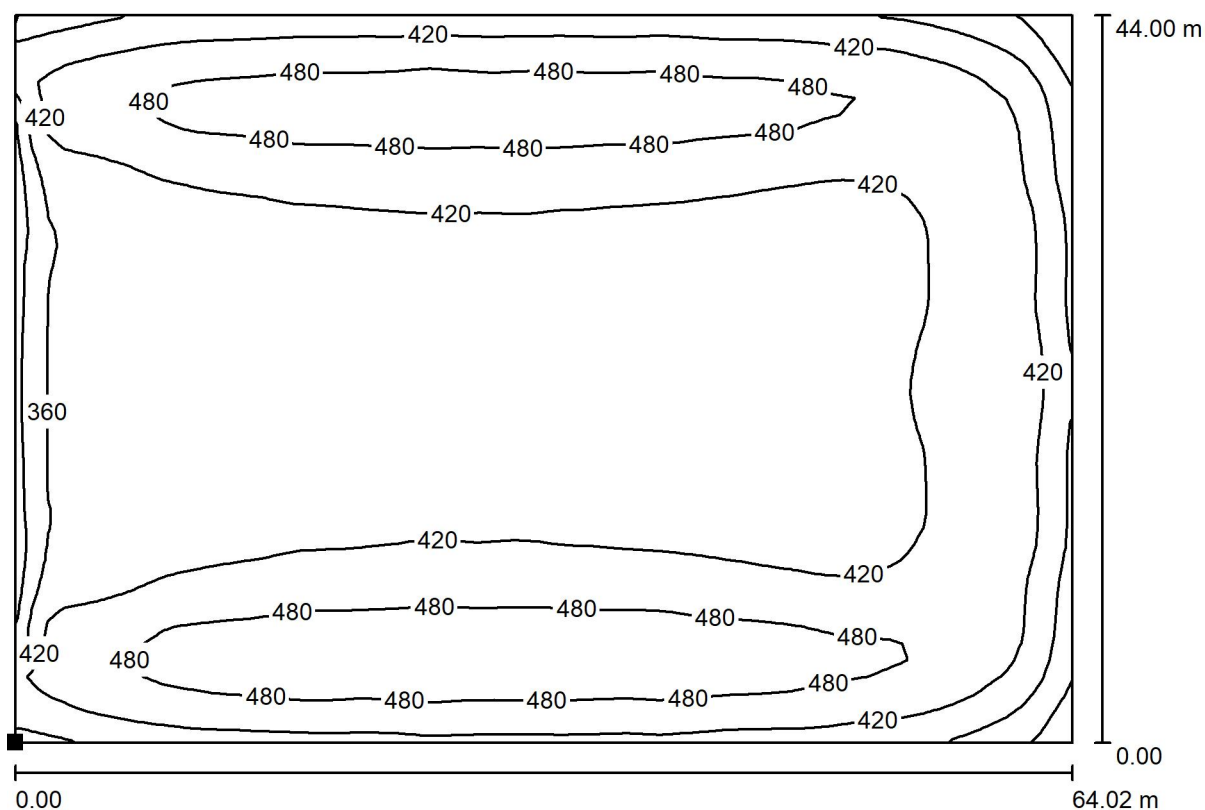
AirDome - field / False Colour Rendering



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AirDome - field / Play sector / Isolines (E, Perpendicular)



Values in Lux, Scale 1 : 458

Position of surface in room:
Marked point:
(9.962 m, 0.500 m, 0.000 m)



Grid: 64 x 44 Points

E_{av} [lx]
425

E_{min} [lx]
255

E_{max} [lx]
519

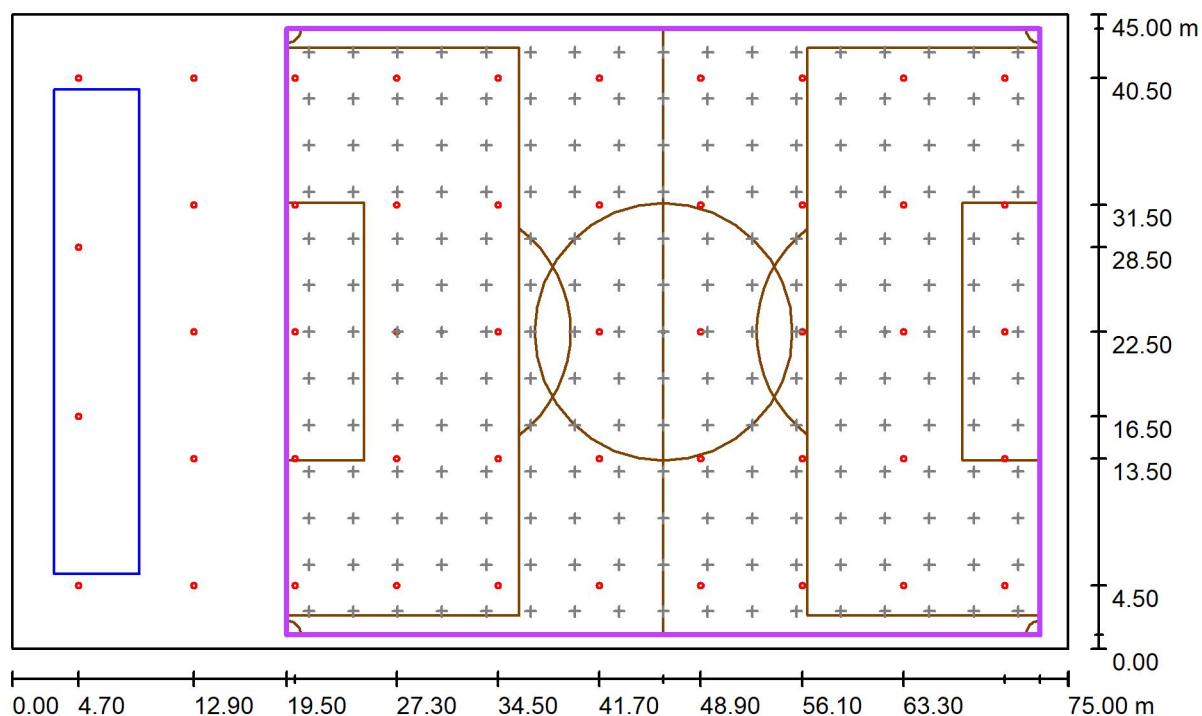
u_0
0.599

E_{min} / E_{max}
0.490

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AirDome - field / Soccerfield (PA) / Summary



Scale 1 : 537

Position: (46.250 m, 22.500 m, 0.000 m)
Size: (53.500 m, 43.000 m)
Rotation: (0.0°, 0.0°, 0.0°)
Type: Normal, Grid: 17 x 13 Points
Belongs to the following sport arena: Soccerfield

Results overview

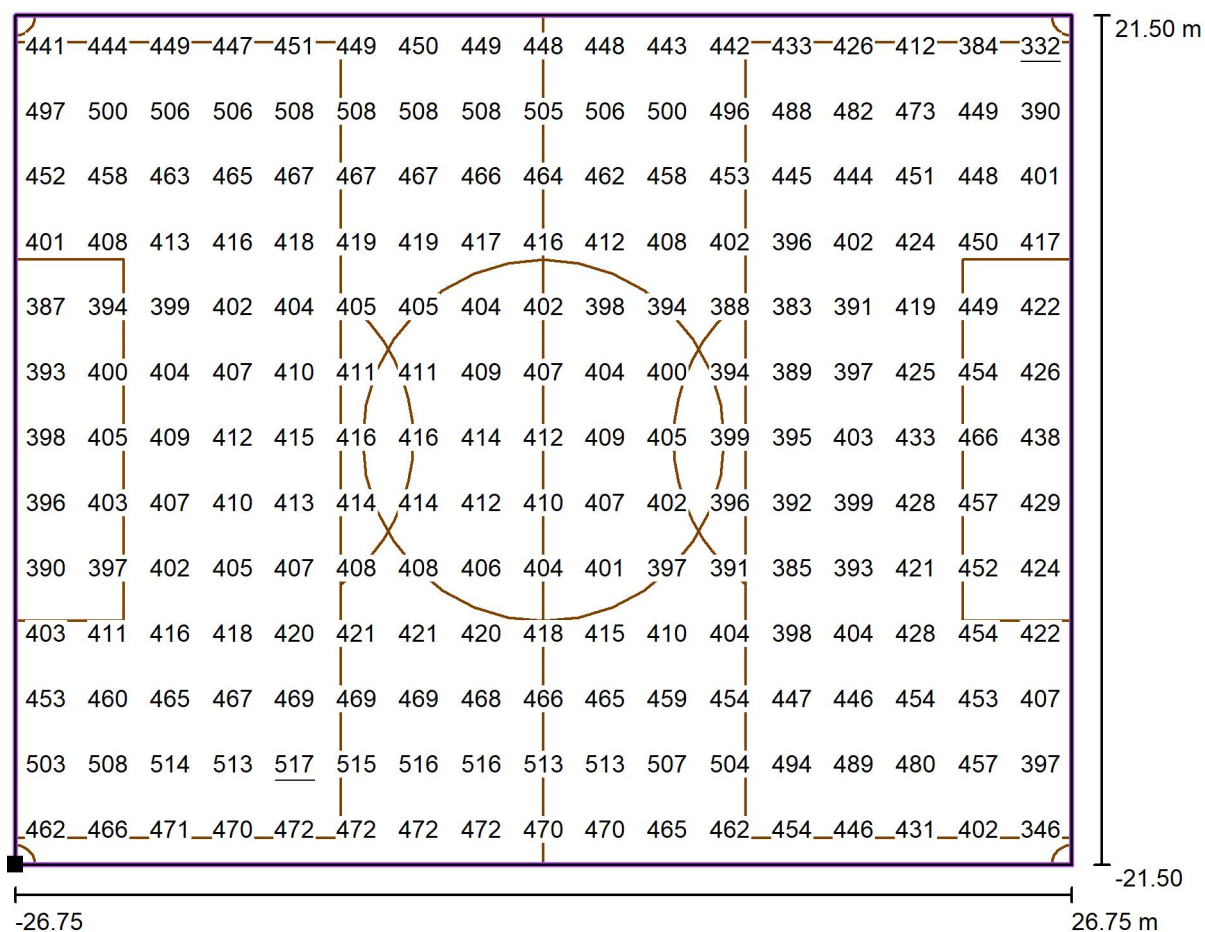
No.	Type	E_{av} [lx]	E_{min} [lx]	E_{max} [lx]	u0	E_{min} / E_{max}	$E_{h\ m} / E_m$	H [m]	Camera
1	perpendicular	435	332	517	0.76	0.64	/	0.000	/

$E_{h\ m} / E_m$ = Relationship between middle horizontal and vertical illuminance, H = Measuring Height

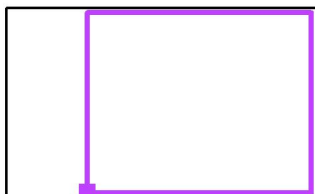
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AirDome - field / Soccerfield (PA) / Value Chart (E, Perpendicular)



Position of surface in room:
Marked point: (19.500 m, 1.000 m,
0.000 m)



Grid: 17 x 13 Points

E_{av} [lx]
435

E_{min} [lx]
332

E_{max} [lx]
517

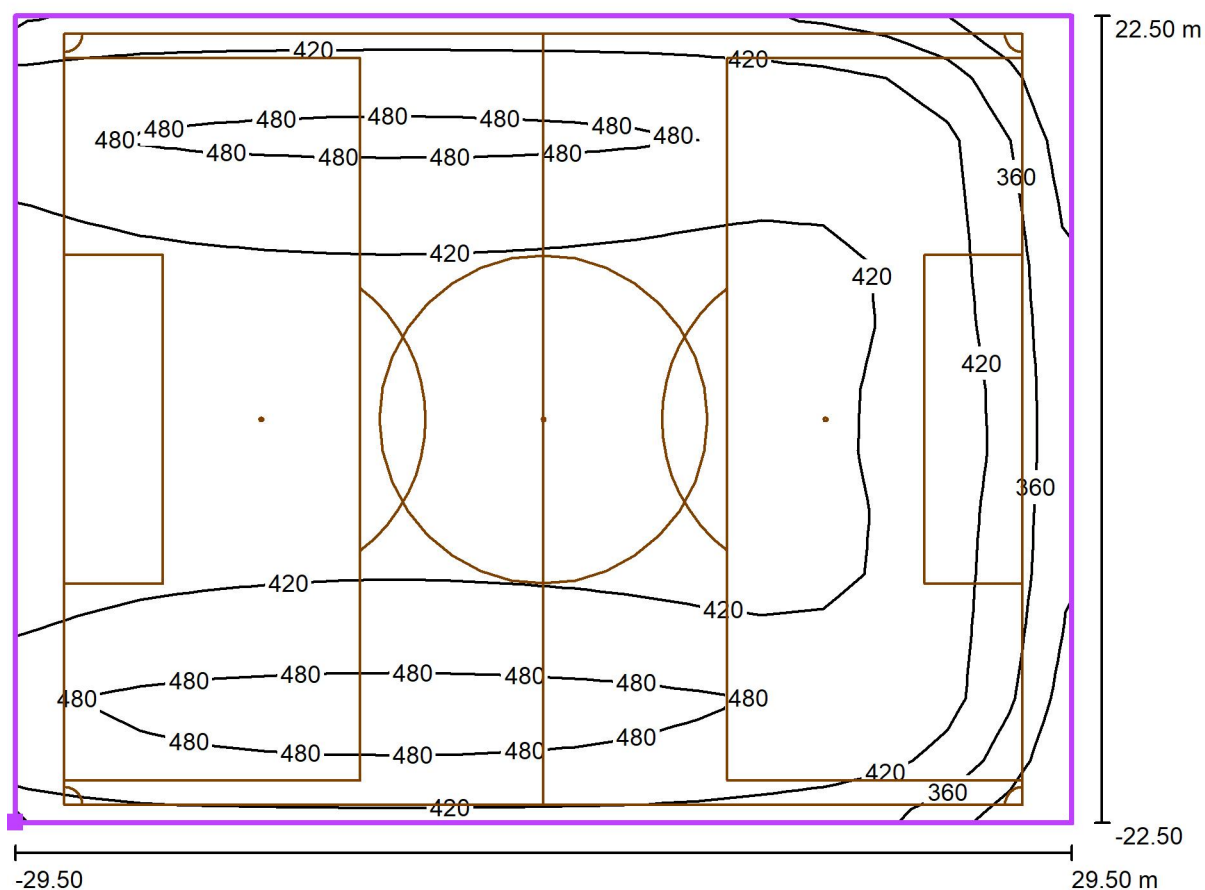
u_0
0.76

E_{min} / E_{max}
0.64

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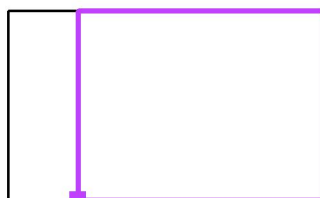
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AirDome - field / Soccerfield (TA) / Isolines (E, Perpendicular)



Values in Lux, Scale 1 : 422

Position of surface in room:
Marked point: (16.750 m, 0.000 m,
0.000 m)



Grid: 17 x 13 Points

E_{av} [lx]
426

E_{min} [lx]
246

E_{max} [lx]
517

u_0
0.58

E_{min} / E_{max}
0.48