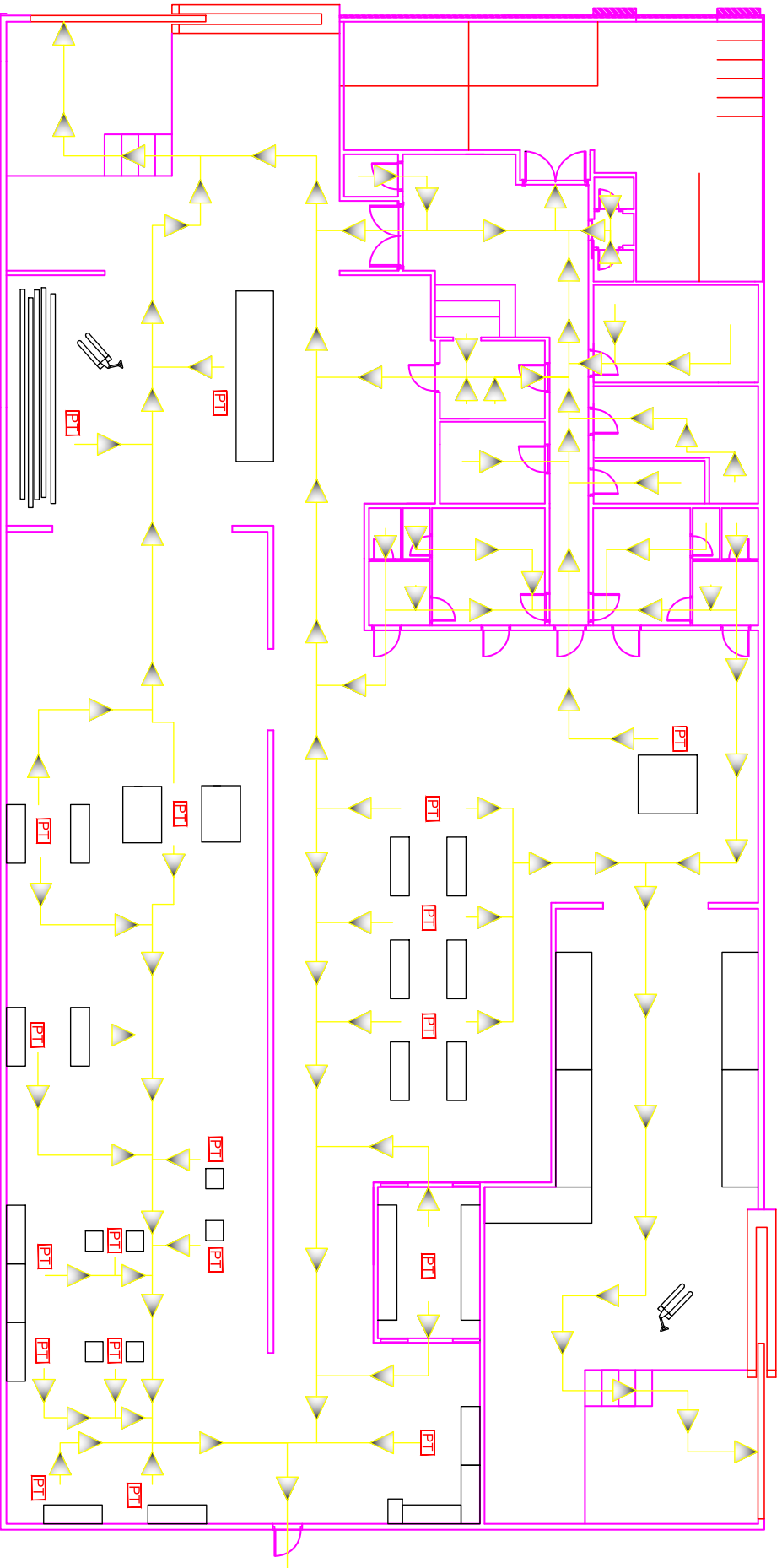


Date	Name	Signature	Specialty:
04/15	GRUPO		Electrical engineering
04/15	SERGIO HARO		Bioyostok university of technology
drawn			
Comprob.			
Id.s.norm			

Scale: **1:110** **Plane 01.01**

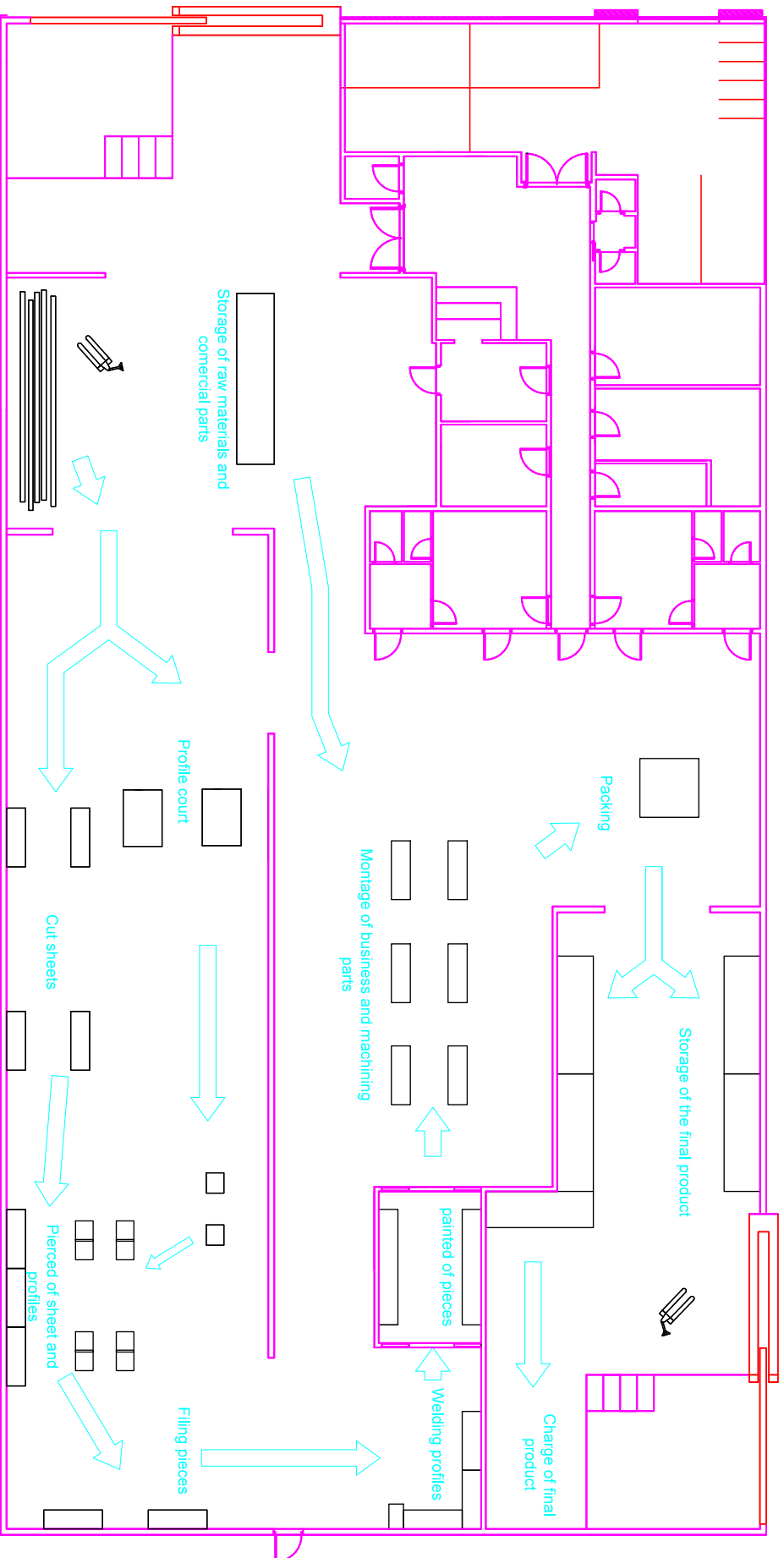
DISTRIBUTION OF THE PLANT

Sheet **21**
Specialty: **Electrical**



PT WORKSTATION

Date	04/15	Name	GRUPO	Signature	Electrical ingenieering Biolystok university of technology
drawn	04/15	Comprob.	SERGIO HARO		
Scale:	1:110	id:s:norm			
EVACUATION PLAN			Plane	07.01	
			Sheet	21	Specialty: Electrical

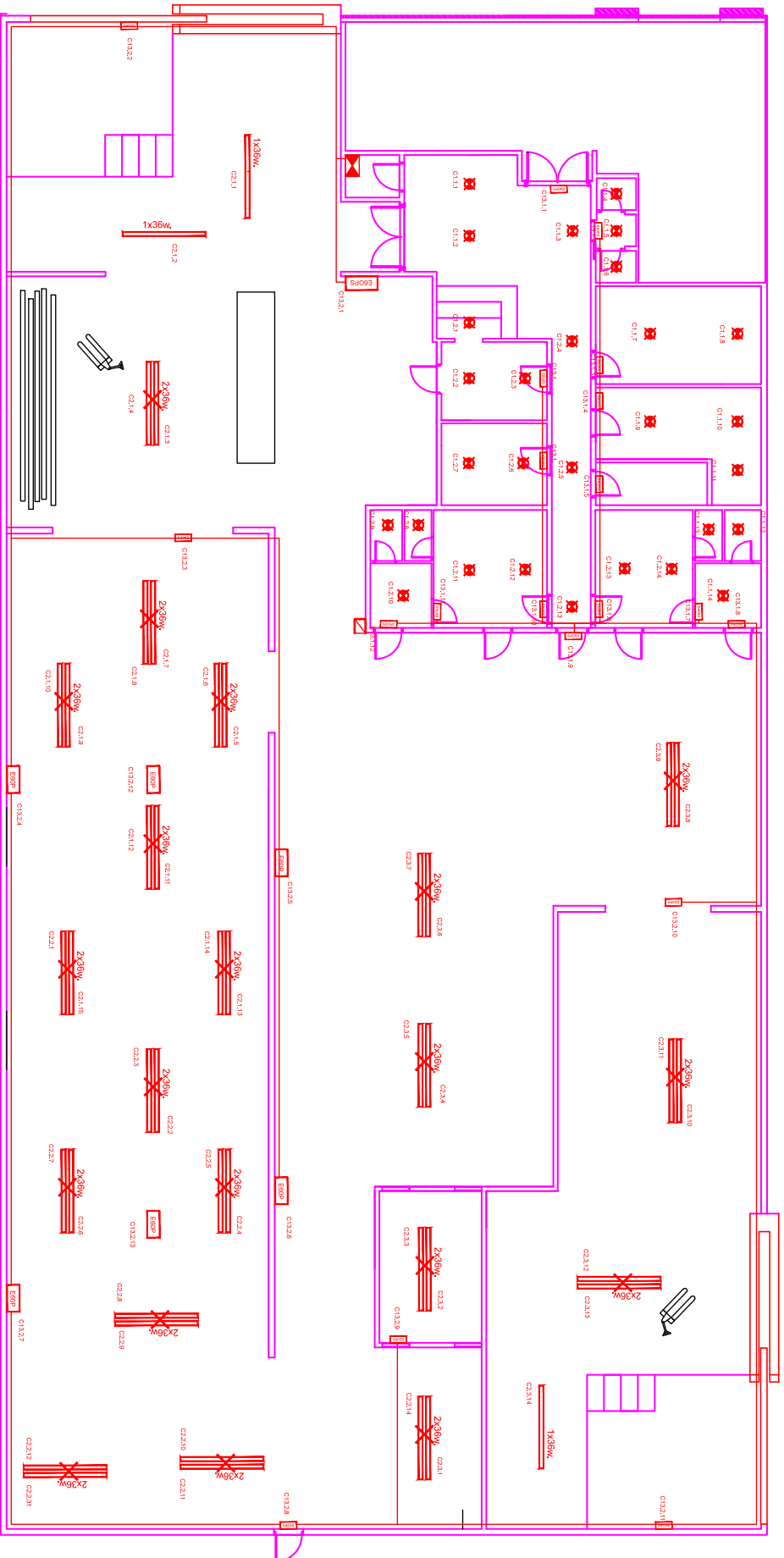


Date	04/15	Name	GRUPO	Signature	Electrical engineering Biolystok university of technology
drawn	04/15	Comprob.	SERGIO HARO		
ids.norm					
Scale:					







1:110

FABRICATION PROCESS

Plane	02.01
Sheet	21
Specialty:	Electrical



LEGEND OF FACILITIES

-  FLUORESCENT STRIP OF 2X36 W.
-  FLUORESCENT STRIP OF 1X36 W.
-  CEILING FIXTURE WITH LAMP DE 100 W.
-  DISTRIBUTION PANEL
-  EMERGENCY OF 60 LUMENS, WITH PERMANENT INDICATION
-  EMERGENCY OF 60 LUMENS, PERMANENT AND EXIT SIGN

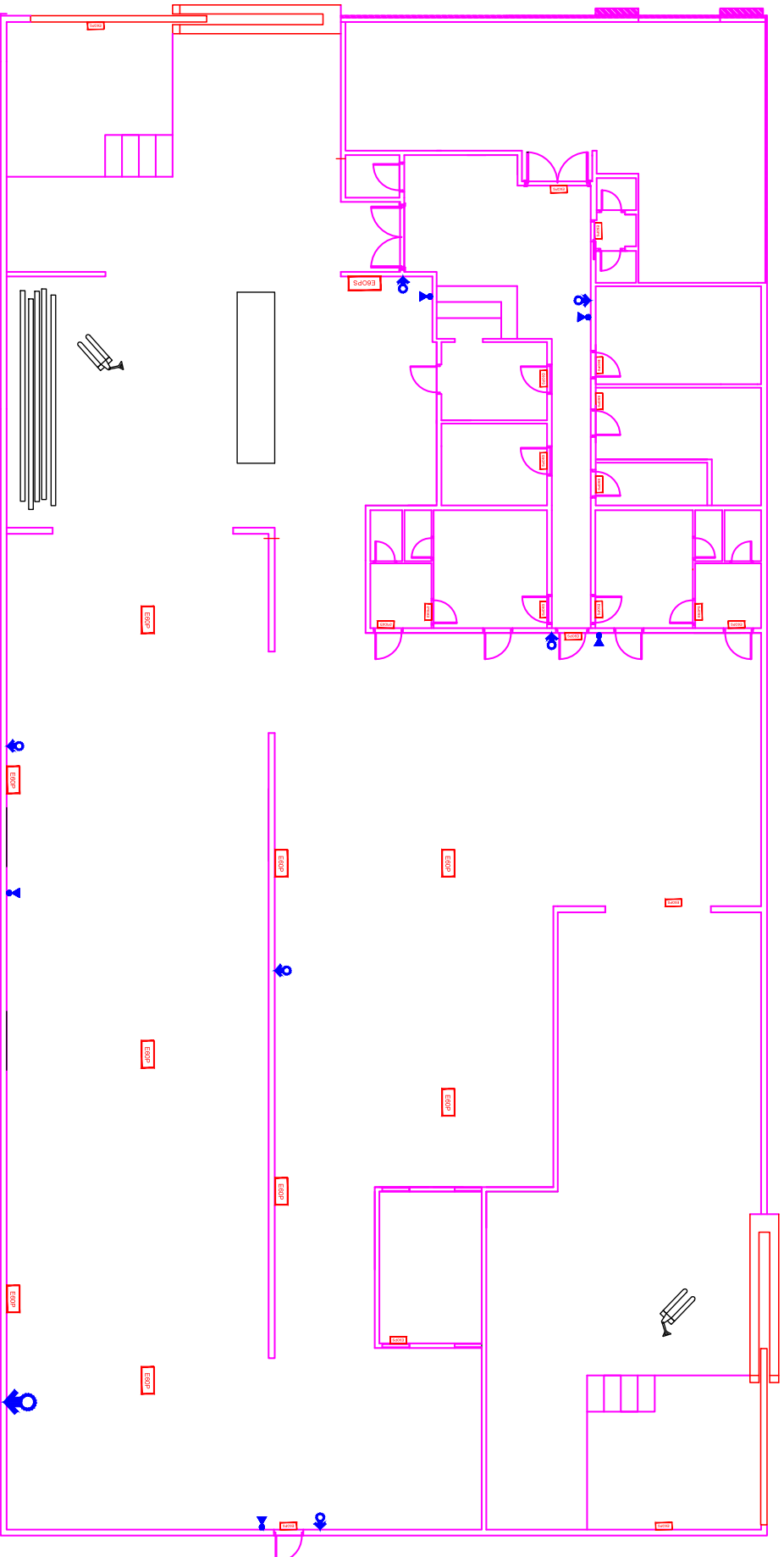
	Date	Name	Signature	
drawn	04/15	GRUPO		Electrical Engineering Biolystok university of technology
Comprob.	04/15	SERGIO HARO		
Id:s:norm				





Scale:

1:110

LIGHTING

Plane	06.01
Sheet	21
Specialty:	Electrical



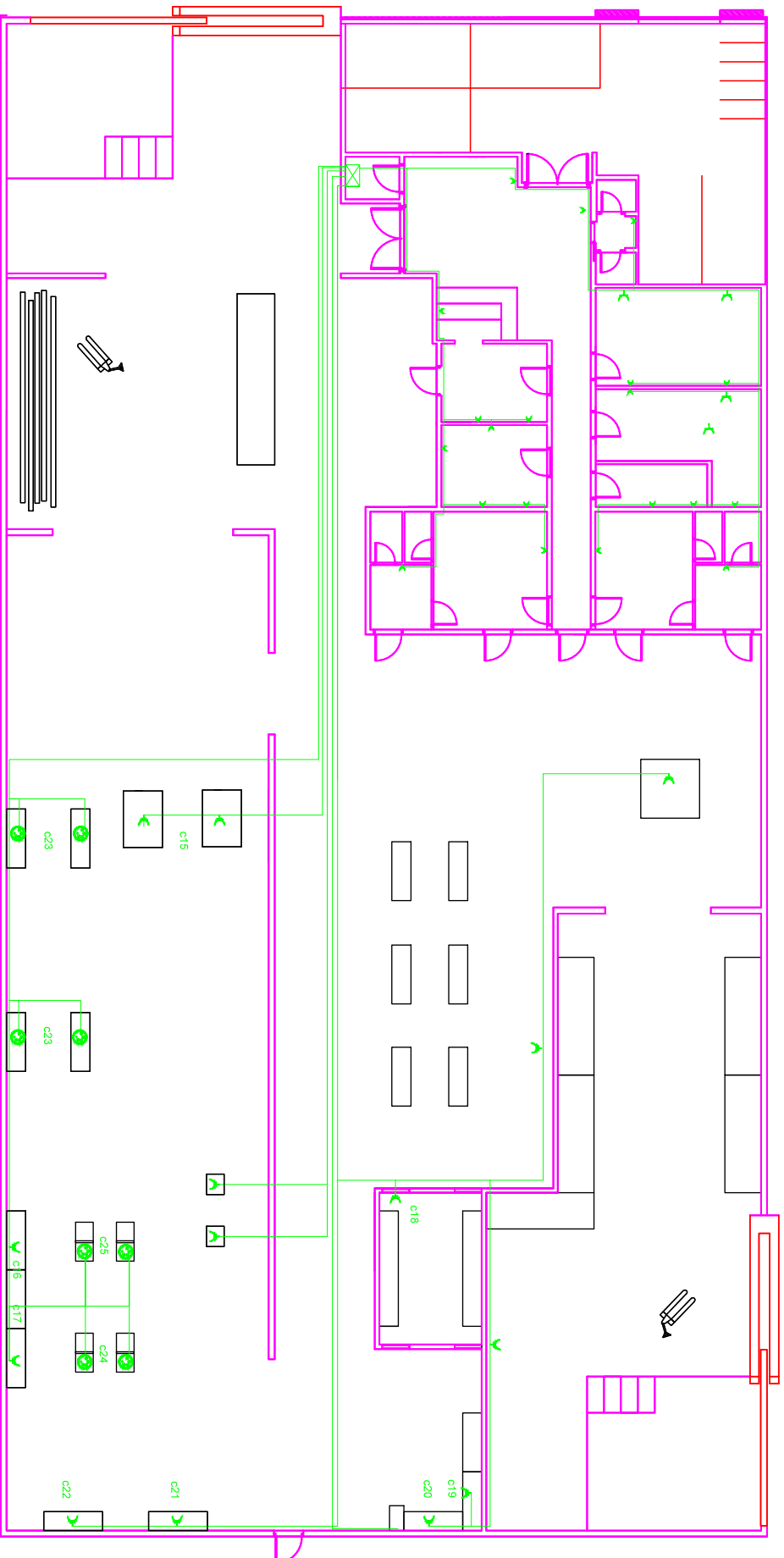
-  EXTINGUISHER
-  HOOTER
-  EMERGENCY OF 60 LUMENS, PERMANENT INDICATION
-  EMERGENCY DE 60 LUMENES, PERMANENTE Y ROTULO DE SALIDA

Date		Name		Signature		Specialty	
04/15		GRUPO				Electrical Engineering	
04/15		SERGIO HARO				Biolystok university of technology	
Scale:						Plane 03.01	

1:110

FIRE PREVENTION

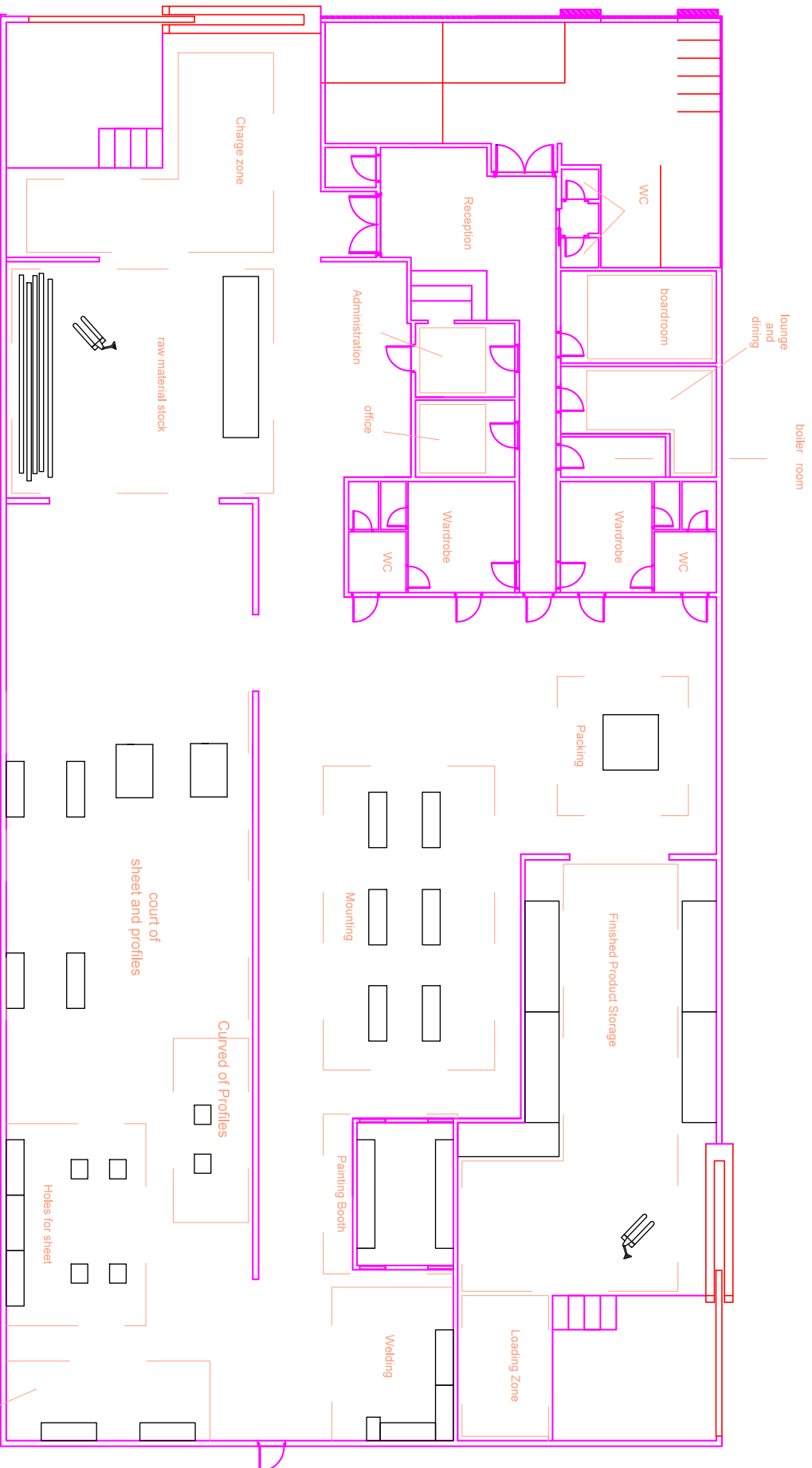
Sheet 21
Specialty:
Electrical



LEND OF FACILITIES

-  PLUG II + T OF 10 A.
-  PLUG II + T OF 25 A.
-  TRIFASIC PLUG.

drawn	Date	Name	Signature	Electrical engineering Biolystok university of technology
Comprob.	04/15	GRUPO		
Id.s.norm	04/15	SERGIO HARO		
Scale:		Plane 05.01		
1:110		Sheet 21		
POWER PLUG		Specialty: Electrical		

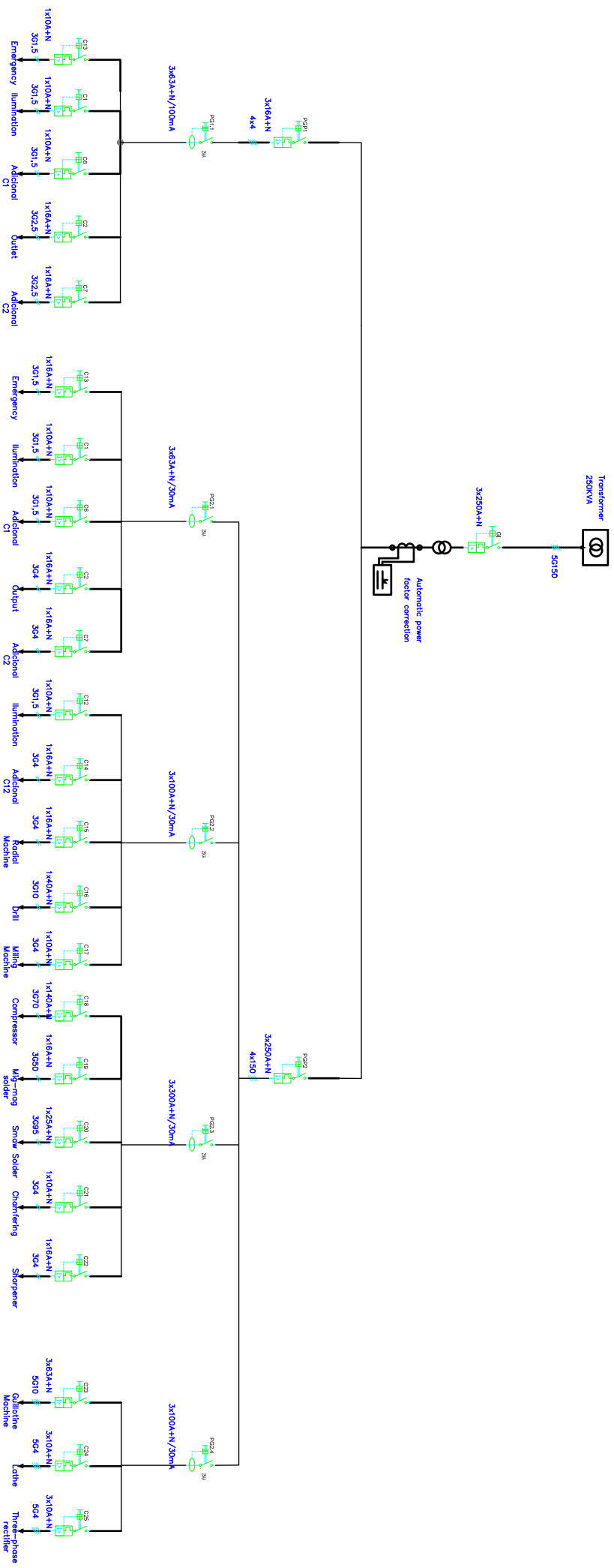


Date	04/15	Name	GRUPO	Signature	Electrical engineering Biolyistik university of technology
drawn	04/15	Comprob.	SERGIO HARO		
Id.s.norm		Scale:			

1:110

WORK AREA

Plane	04.01
Sheet	21
Speciality:	Electrical



Date	Name	Signature	Specialty:
04/15	GRUPO		Electrical engineering
04/15	SERGIO HARO		Bolystok university of technology

drawn
Comprob.
Id.s: norm

Scale:
1:110

Plane 08.01
Sheet 21
Specialty:
Electrical

UNIFILAR

Date:
07/05/2015

Sergio

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Sergio

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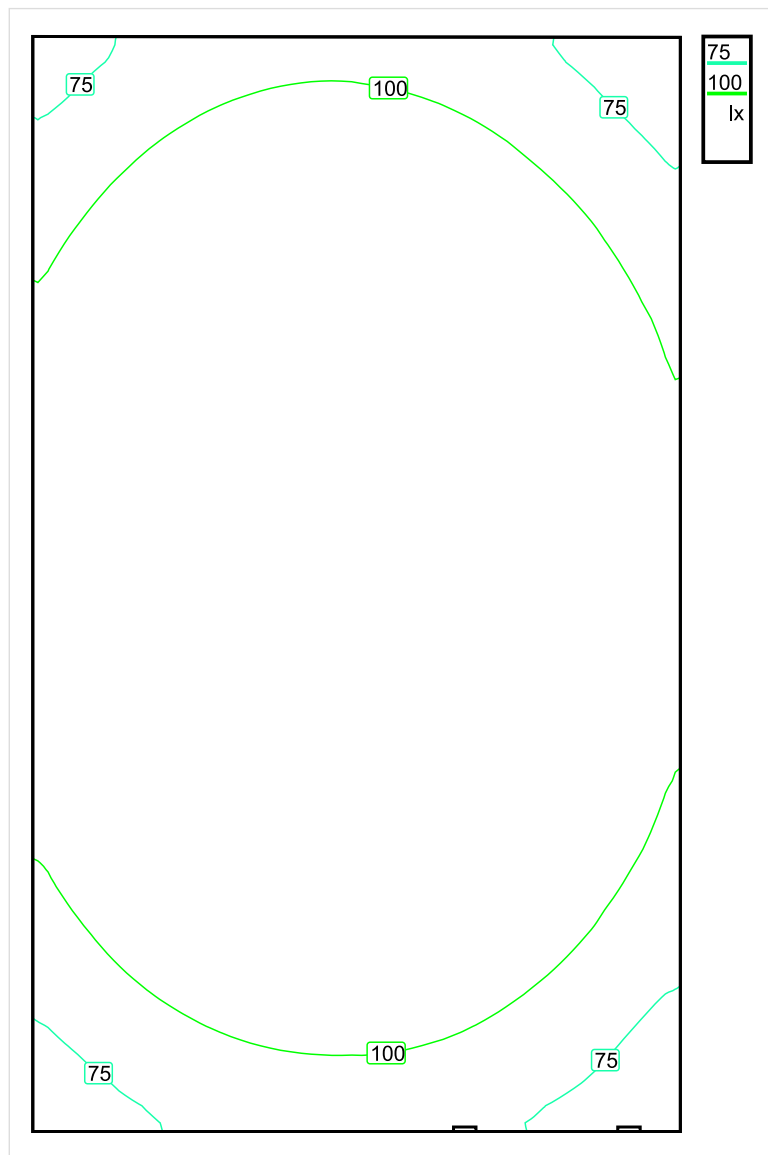
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Local 1 / Room summary



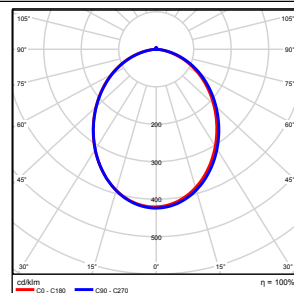
Scale: 1 : 25

Perpendicular illuminance (adaptive)

Name	Average [lx]	Min [lx]	Max [lx]	Min/average	Min/max	Points (Relevant)
Plano útil 1	128	55	190	0.430	0.289	64 x 64 (all)

Height of room: 2.800 m, Height of working plane: 0.800 m, Wall zone: 0.000 m, Reflection factors: Ceiling 70,0%, Walls 50,0%, Floor 20,0%, Maintenance factor: 0,80

No.	Quantity	
1	2	Green Ray LED LED Downlight 4100K 16w GR-RC-41F16S120NWRV Light output ratio: 99.99% Luminous flux: 980 lm, Power: 16.0 W

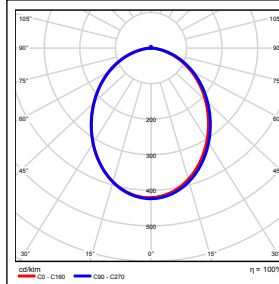


Total luminous flux: 1960 lm, Total Load: 32 W

Specific connection value: $4.03 \text{ W/m}^2 = 3.14 \text{ W/m}^2/100 \text{ lx}$ (Ground area 7.94 m^2)

Local 1 / Luminaire parts list

1.) 2 x Green Ray LED LED Downlight 4100K 16w GR-RC-41F16S120NWRV



Luminous emittance 1

Fitting: 1xGR-RC-
41F16S120NWRV
Light output ratio: 99.99%
Luminous flux: 980 lm
Power: 16.0 W

Total luminous flux: 1960 lm, Total Load: 32 W

Local 1 / Results summary of surfaces

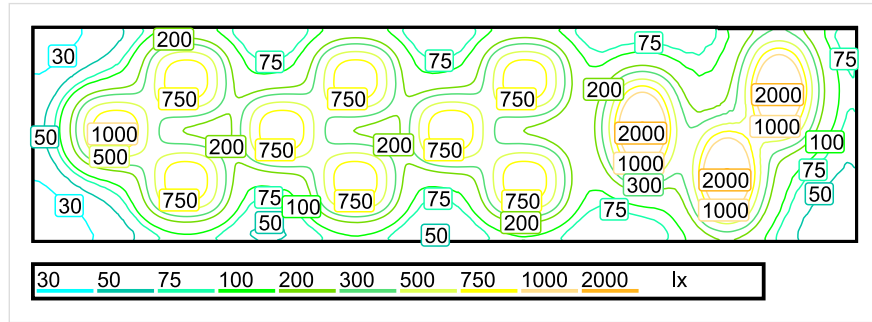
Perpendicular illuminance (adaptive)

Name	Average [lx]	Min [lx]	Max [lx]	Min/average	Min/max	Points (Relevant)
Plano útil 1	128	55	190	0.430	0.289	64 x 64 (all)

Height of room: 2.800 m, Height of working plane: 0.800 m, Wall zone: 0.000 m, Reflection factors: Ceiling 70,0%, Walls 50,0%, Floor 20,0%, Maintenance factor: 0,80

Relevant points are points in a surface that are not covered by room elements. The summarised results are based exclusively on these relevant points, as the remaining points would falsify the results.

Local 2 / Room summary



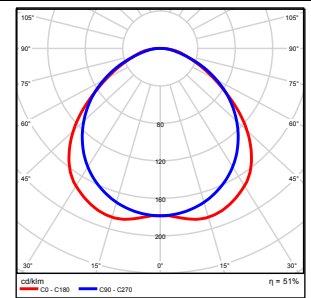
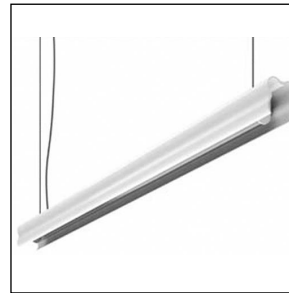
Scale: 1 : 200

Perpendicular illuminance (adaptive)

Name	Average [lx]	Min [lx]	Max [lx]	Min/average	Min/max	Points (Relevant)
Plano útil 2	349	21	2052	0.060	0.010	1024 x 256 (261803)

Height of room: 2.800 m, Height of working plane: 0.800 m, Wall zone: 0.000 m, Reflection factors: Ceiling 70,0%, Walls 50,0%, Floor 20,0%, Maintenance factor: 0,80

No.	Quantity	
1	30	Lighting Technologies - Flex 135 Light output ratio: 50.83% Luminous flux: 1677 lm, Power: 35.0 W

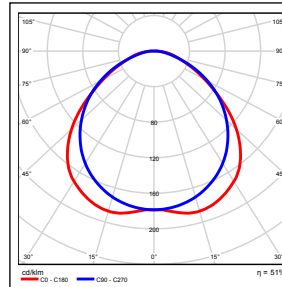
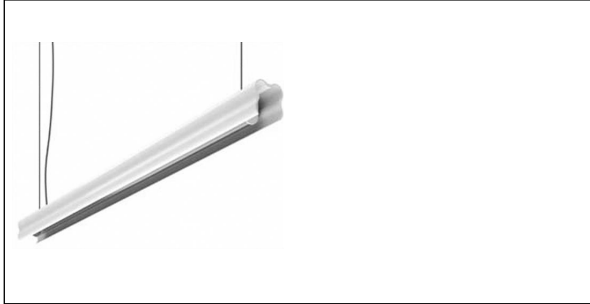


Total luminous flux: 50323 lm, Total Load: 1050 W

Specific connection value: $8.45 \text{ W/m}^2 = 2.42 \text{ W/m}^2/100 \text{ lx}$ (Ground area 124.33 m²)

Local 2 / Luminaire parts list

1.) 30 x Lighting Technologies - Flex 135



Luminous emittance 1

Fitting: 1xOSRAM
LUMILUX FH 35 W
Light output ratio: 50.83%
Luminous flux: 1677 lm
Power: 35.0 W

Total luminous flux: 50323 lm, Total Load: 1050 W

Local 2 / Results summary of surfaces

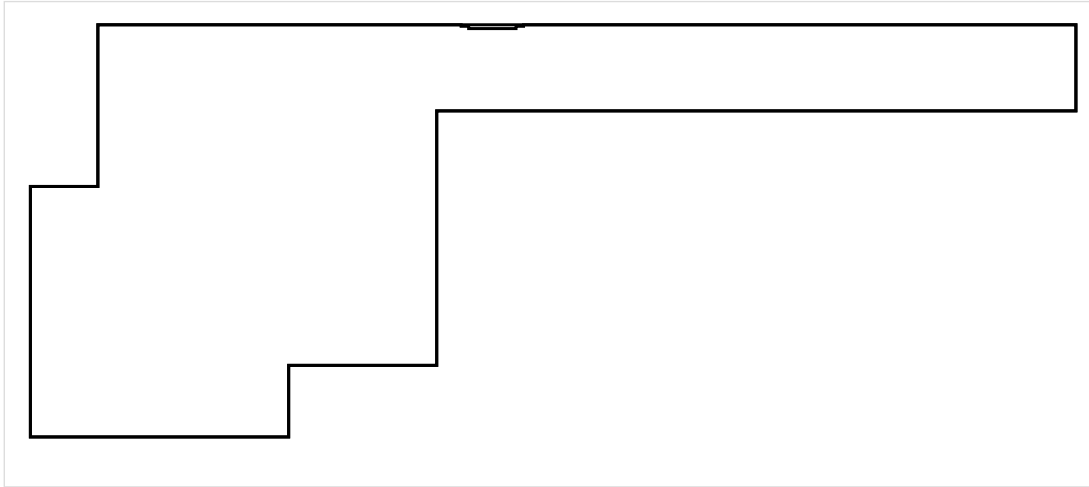
Perpendicular illuminance (adaptive)

Name	Average [lx]	Min [lx]	Max [lx]	Min/average	Min/max	Points (Relevant)
Plano útil 2	349	21	2052	0.060	0.010	1024 x 256 (261803)

Height of room: 2.800 m, Height of working plane: 0.800 m, Wall zone: 0.000 m, Reflection factors: Ceiling 70,0%, Walls 50,0%, Floor 20,0%, Maintenance factor: 0,80

Relevant points are points in a surface that are not covered by room elements. The summarised results are based exclusively on these relevant points, as the remaining points would falsify the results.

Local 3 / Room summary



Scale: 1 : 75

Perpendicular illuminance (adaptive)

Name	Average [lx]	Min [lx]	Max [lx]	Min/average	Min/max	Points (Relevant)
Plano útil 3	0.00	0.00	0.01	/	0.000	256 x 128 (15257)

Height of room: 2.800 m, Height of working plane: 0.800 m, Wall zone: 0.000 m, Reflection factors: Ceiling 70,0%, Walls 50,0%, Floor 20,0%, Maintenance factor: 0,80

Local 3 / Results summary of surfaces

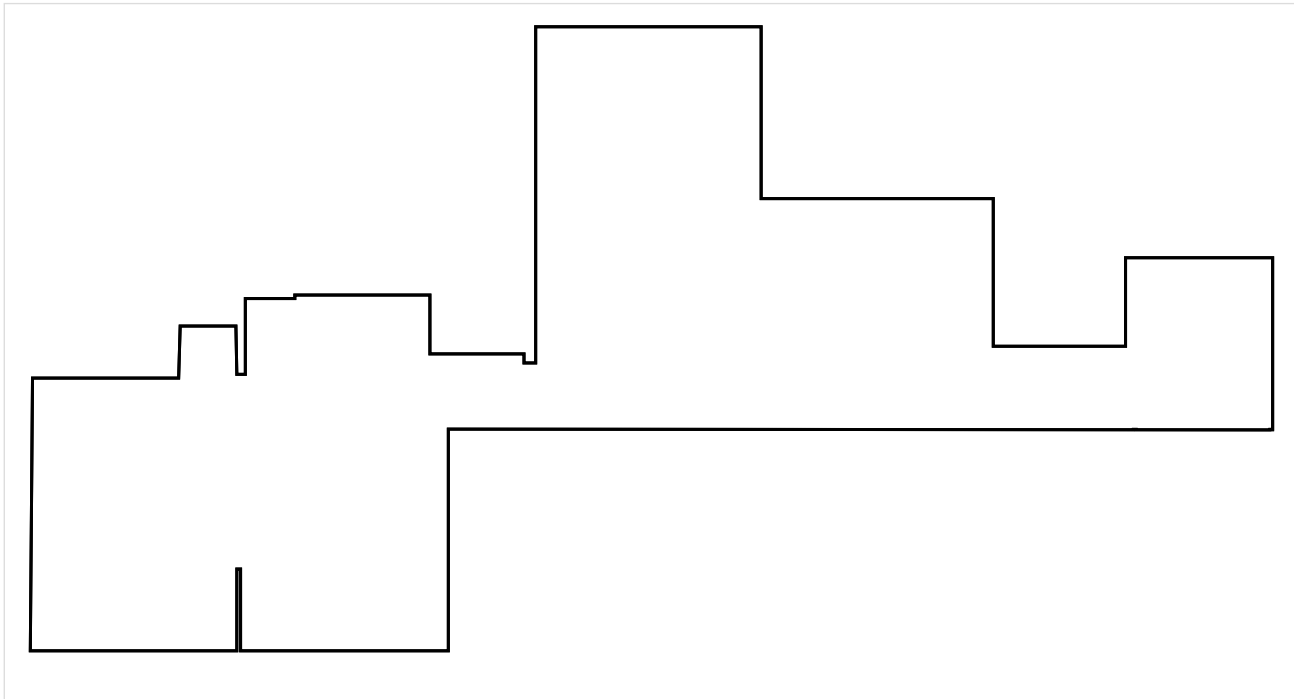
Perpendicular illuminance (adaptive)

Name	Average [lx]	Min [lx]	Max [lx]	Min/average	Min/max	Points (Relevant)
Plano útil 3	0.00	0.00	0.01	/	0.000	256 x 128 (15257)

Height of room: 2.800 m, Height of working plane: 0.800 m, Wall zone: 0.000 m, Reflection factors: Ceiling 70,0%, Walls 50,0%, Floor 20,0%, Maintenance factor: 0,80

Relevant points are points in a surface that are not covered by room elements. The summarised results are based exclusively on these relevant points, as the remaining points would falsify the results.

Local 4 / Room summary



Scale: 1 : 200

Perpendicular illuminance (adaptive)

Name	Average [lx]	Min [lx]	Max [lx]	Min/average	Min/max	Points (Relevant)
Plano útil 4	0.00	0.00	0.01	/	0.000	2048 x 1024 (886516)

Height of room: 2.800 m, Height of working plane: 0.800 m, Wall zone: 0.000 m, Reflection factors: Ceiling 70,0%, Walls 50,0%, Floor 20,0%, Maintenance factor: 0,80

Local 4 / Results summary of surfaces

Perpendicular illuminance (adaptive)

Name	Average [lx]	Min [lx]	Max [lx]	Min/average	Min/max	Points (Relevant)
Plano útil 4	0.00	0.00	0.01	/	0.000	2048 x 1024 (886516)

Height of room: 2.800 m, Height of working plane: 0.800 m, Wall zone: 0.000 m, Reflection factors: Ceiling 70,0%, Walls 50,0%, Floor 20,0%, Maintenance factor: 0,80

Relevant points are points in a surface that are not covered by room elements. The summarised results are based exclusively on these relevant points, as the remaining points would falsify the results.