

Ražošanas ēkas Nr. 6 jaunbūve

Installation : Apgaismojums

Project number : 1

Customer : Ventspils brīvostas pārvalde

Processed by : Intars Grigs

Date : 07.05.2018

The following values are based on exact calculations on calibrated lamps, luminaires and their arrangement. In practice, gradual divergences can occur.

Guarantee claims for luminaire data are excluded.

Relux and the luminaire manufacturers accept no liability for consequential damage and damage which is occasioned to the user or to third parties.

Object : Ražošanas ēkas Nr. 6 jaunbūve
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1 Luminaire data

1.1 NTC 22 840 04 PN S S 3... (NTC 22 840 04 P...)

1.1.1 Data sheet

NTC 22 840 04 PN S S 300 E ND

NTC 22 840 04 PN S S 300 E ND

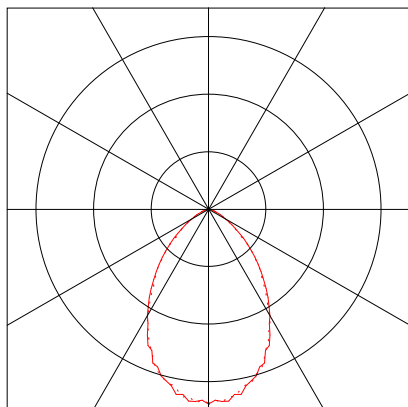
Luminaire data

Absolute Photometry
Luminaire efficacy : 67.35 lm/W
Classification : A60 100.0% ↑0.0%
CIE Flux Codes : 71 94 99 100 99
UGR 4H 8H : 17.8 / 17.7
Power : 21.524 W
Luminous flux : 1449.7 lm

Equipped with

Quantity : 1
Designation : Nest VANT04 module
Colour : 4092.4 K
Colour reproduction : 83.2

Dimensions : 300 mm x 300 mm x 2 mm



Object : Ražošanas ēkas Nr. 6 jaunbūve
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1 Luminaire data

1.2 NTC 33 840 04 PN S S 3... (NTC 33 840 04 P...)

1.2.1 Data sheet

NTC 33 840 04 PN S S 300 E ND

NTC 33 840 04 PN S S 300 E ND

Luminaire data

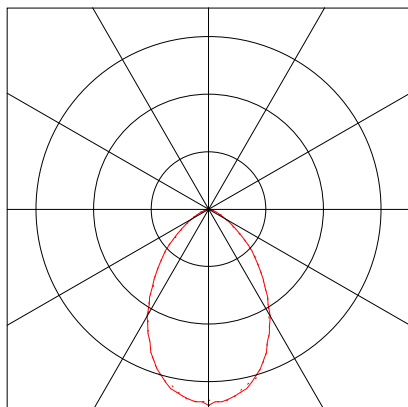
Absolute Photometry

Luminaire efficacy : 64.84 lm/W
Classification : A60 100.0% ↑0.0%
CIE Flux Codes : 70 94 99 100 100
UGR 4H 8H : 19.0 / 18.9
Power : 31.211 W
Luminous flux : 2023.7 lm

Equipped with

Quantity : 1
Designation : Nest VANT04 module
Colour : 4104.1 K
Colour reproduction : 83.1

Dimensions : 300 mm x 300 mm x 2 mm



Object : Ražošanas ēkas Nr. 6 jaunbūve
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1 Luminaire data

1.3 STB L 37 840 12S A2 N ... (VIZULO STONE 37...)

1.3.1 Data sheet

VIZULO STONE 37 W 4000 K 1200mm

STB L 37 840 12S A2 N 100 LT80

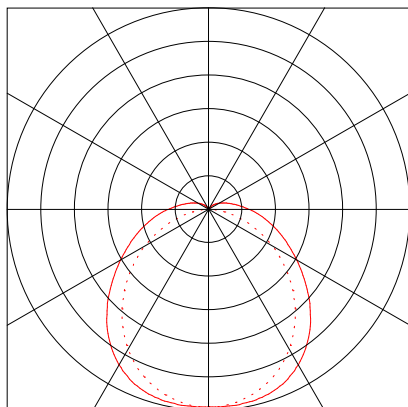
Luminaire data

Absolute Photometry
Luminaire efficacy : 117.37 lm/W
Classification : A31 92.1% ↑7.9%
CIE Flux Codes : 44 73 91 92 100
UGR 4H 8H : 23.5 / 21.6
Power : 36.834 W
Luminous flux : 4323.4 lm

Equipped with

Quantity : 1
Designation : Stone 2
modules LT80
Colour : 3961.9
Colour reproduction : 82.6

Dimensions : 1272 mm x 95 mm x 111 mm



Object : Ražošanas ēkas Nr. 6 jaunbūve
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1 Luminaire data

1.4 STB M 45 840 12D B4 N ... (VIZULO STONE 45...)

1.4.1 Data sheet

VIZULO STONE 45 W 4000 K 1200mm

STB M 45 840 12D B4 N 100 LT80

Luminaire data

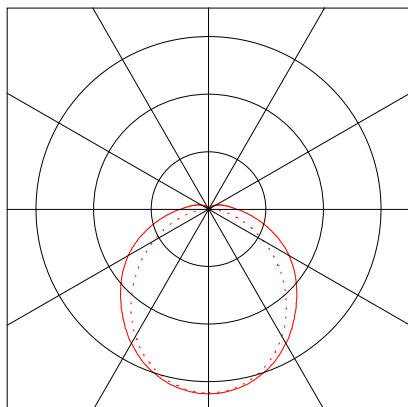
Absolute Photometry

Luminaire efficacy : 97.98 lm/W
Classification : A41 93.3% ↑6.7%
CIE Flux Codes : 45 74 92 93 100
UGR 4H 8H : 22.8 / 20.5
Power : 44.864 W
Luminous flux : 4395.9 lm

Equipped with

Quantity : 1
Designation : Stone 4
modules LT80
Colour : 4049.5
Colour reproduction : 82.9

Dimensions : 1272 mm x 145 mm x 111 mm



Object : Ražošanas ēkas Nr. 6 jaunbūve
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1 Luminaire data

1.5 LFS 35 840 R0606 WU D1... (Leaf Slim 35 W ...)

1.5.1 Data sheet

Leaf Slim 35 W 4000 K Prismatic

LFS 35 840 R0606 WU D10 H

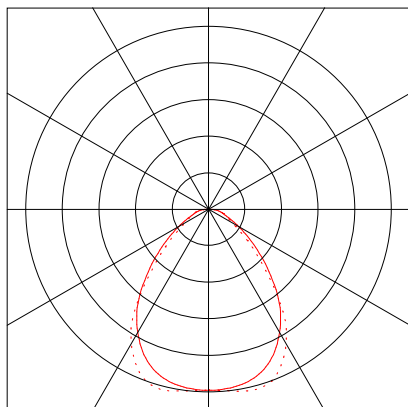
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 124.89 lm/W
Classification : A50 100.0% ↑0.0%
CIE Flux Codes : 64 88 97 100 100
UGR 4H 8H : 18.6 / 18.5
Power : 35.07 W
Luminous flux : 4380 lm

Equipped with

Quantity : 1
Designation : Leaf Slim 35 W
Colour : 4000 K
Luminous flux : 4380 lm
Colour reproduction : 83

Dimensions : 595 mm x 595 mm x 10 mm



1 Luminaire data

1.6 LFS 35 840 R0606 WU N2... (Leaf Slim 35 W ...)

1.6.1 Data sheet

Leaf Slim 35 W 4000 K Prismatic

LFS 35 840 R0606 WU N20 H

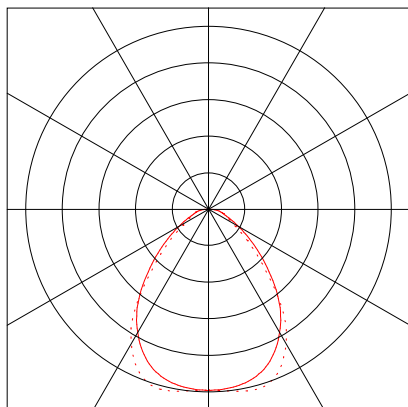
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 124.89 lm/W
Classification : A50 100.0% ↑0.0%
CIE Flux Codes : 64 88 97 100 100
UGR 4H 8H : 18.6 / 18.5
Power : 35.071 W
Luminous flux : 4380.1 lm

Equipped with

Quantity : 1
Designation : Leaf Slim 35 W
Colour : 4000 K
Luminous flux : 4380.1 lm
Colour reproduction : 83

Dimensions : 595 mm x 595 mm x 10 mm



Object : Ražošanas ēkas Nr. 6 jaunbūve
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1 Luminaire data

1.7 PN SS 52 840 1140 WUD N01 (PINE 52 W)

1.7.1 Data sheet

PINE 52 W PN SS 52 840 1140 WUD N01

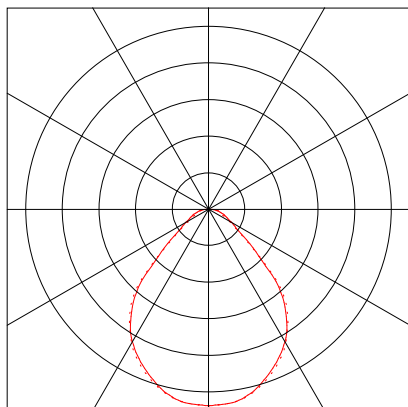
Luminaire data

Luminaire efficiency : 49.9993%
Luminaire efficacy : 51.92 lm/W
Classification : A50 100.0% ↑0.0%
CIE Flux Codes : 67 90 97 100 50
UGR 4H 8H : 20.5 / 20.7
Power : 52 W
Luminous flux : 2700 lm

Equipped with

Quantity : 1
Designation : PINE 52 W
Colour : 4007 K
Luminous flux : 5400 lm
Colour reproduction : 82

Dimensions : 1140 mm x 77 mm x 93 mm



Object : Ražošanas ēkas Nr. 6 jaunbūve
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1 Luminaire data

1.8 STC M 75 840 15D C0 N ... (VIZULO STONE 75...)

1.8.1 Data sheet

VIZULO STONE 75 W 4000 K 1500mm

STC M 75 840 15D C0 N 100

Luminaire data

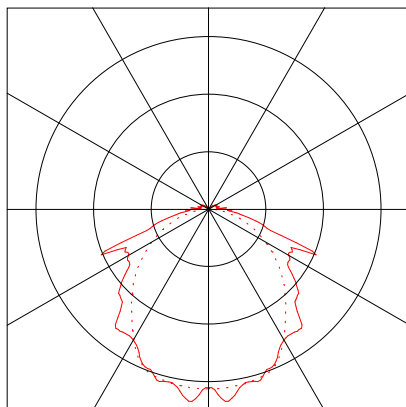
Absolute Photometry

Luminaire efficacy : 125.85 lm/W
Classification : A41 95.2% ↑4.8%
CIE Flux Codes : 45 74 93 95 100
UGR 4H 8H : 24.8 / 23.0
Power : 76.39 W
Luminous flux : 9614 lm

Equipped with

Quantity : 1
Designation : Stone 10 modules
Colour : 4028.1
Colour reproduction : 83.16

Dimensions : 1583 mm x 160 mm x 105 mm



1 Luminaire data

1.9 TREVOS, LED Ex,industrial,body... (PRIMA LED Ex 2....)

1.9.1 Data sheet

Manufacturer: TREVOS

**PRIMA LED Ex 2.4ft PCc 6400/840
clips**

LED Ex,industrial,body PC,diffuser translucent PC, stainless

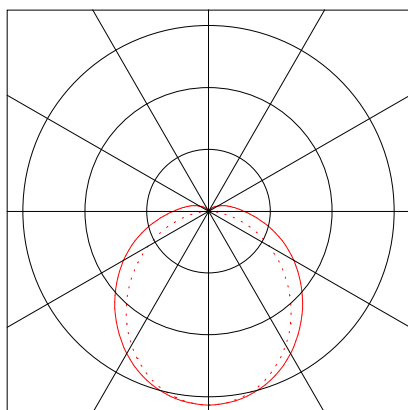
Luminaire data

Luminaire efficiency : 100.1%
Luminaire efficacy : 121.05 lm/W
Classification : A31 92.8% ↑ 7.2%
CIE Flux Codes : 44 74 91 93 100
UGR 4H 8H : 23.3 / 21.0
Power : 43 W
Luminous flux : 5205.2 lm

Equipped with

Quantity : 1
Designation : LEDLine
Colour : 4000
Luminous flux : 5200 lm
Colour reproduction : 85

Dimensions : 1272 mm x 145 mm x 100 mm



Object : Ražošanas ēkas Nr. 6 jaunbūve
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1 Luminaire data

1.10 NTC 42 840 05 PN S S 3... (NTC 42 840 05 P...)

1.10.1 Data sheet

NTC 42 840 05 PN S S 300 E ND

NTC 42 840 05 PN S S 300 E ND

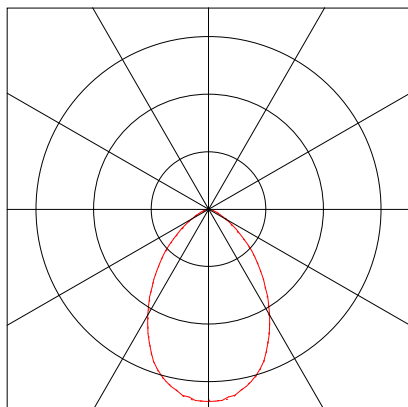
Luminaire data

Absolute Photometry
Luminaire efficacy : 63.66 lm/W
Classification : A60 100.0% ↑0.0%
CIE Flux Codes : 71 94 99 100 100
UGR 4H 8H : 19.9 / 19.8
Power : 40.718 W
Luminous flux : 2592 lm

Equipped with

Quantity : 1
Designation : Nest VANT03 module
Colour : 4085.0
Colour reproduction : 83.7

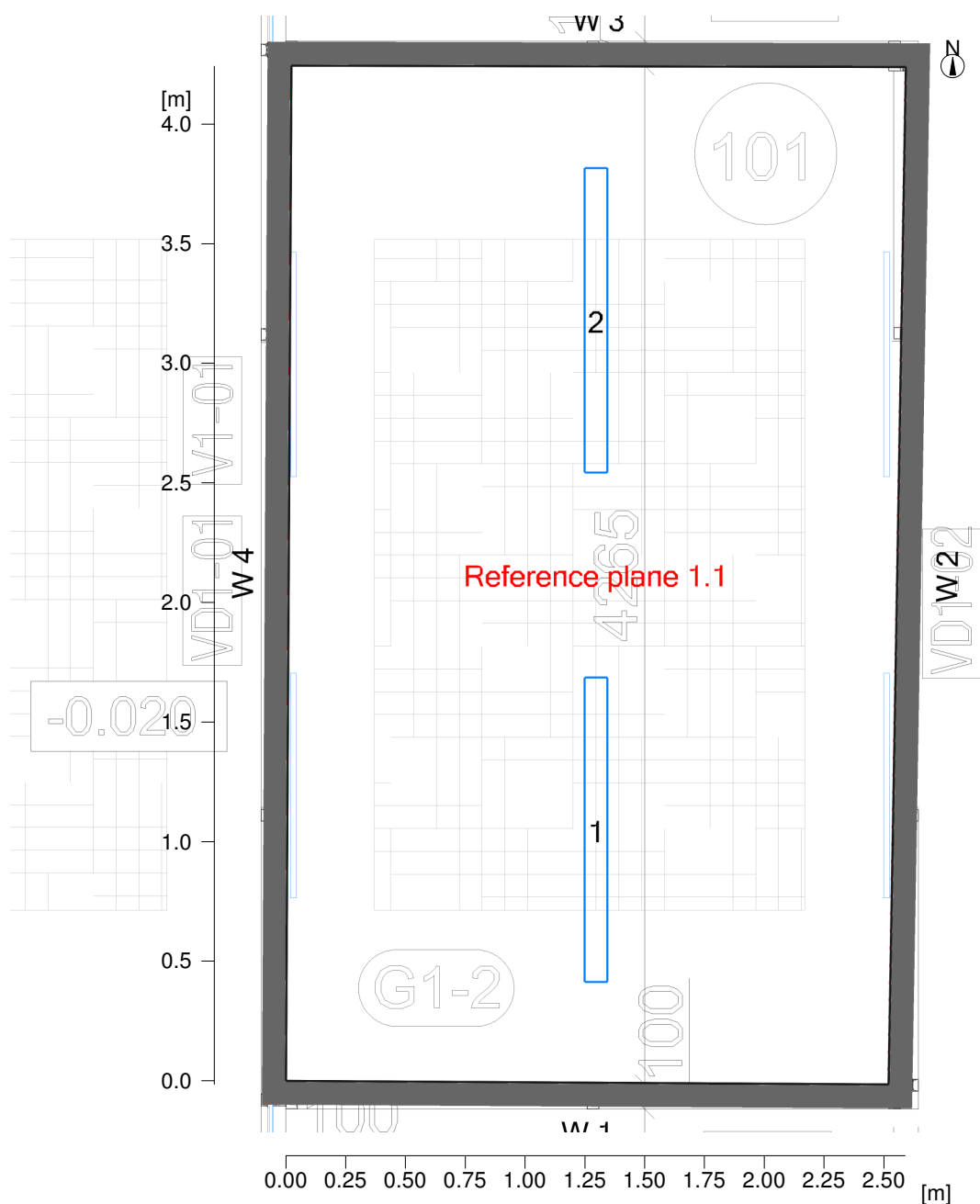
Dimensions : 300 mm x 300 mm x 2 mm



2 101

2.1 Description, 101

2.1.1 Floor plan

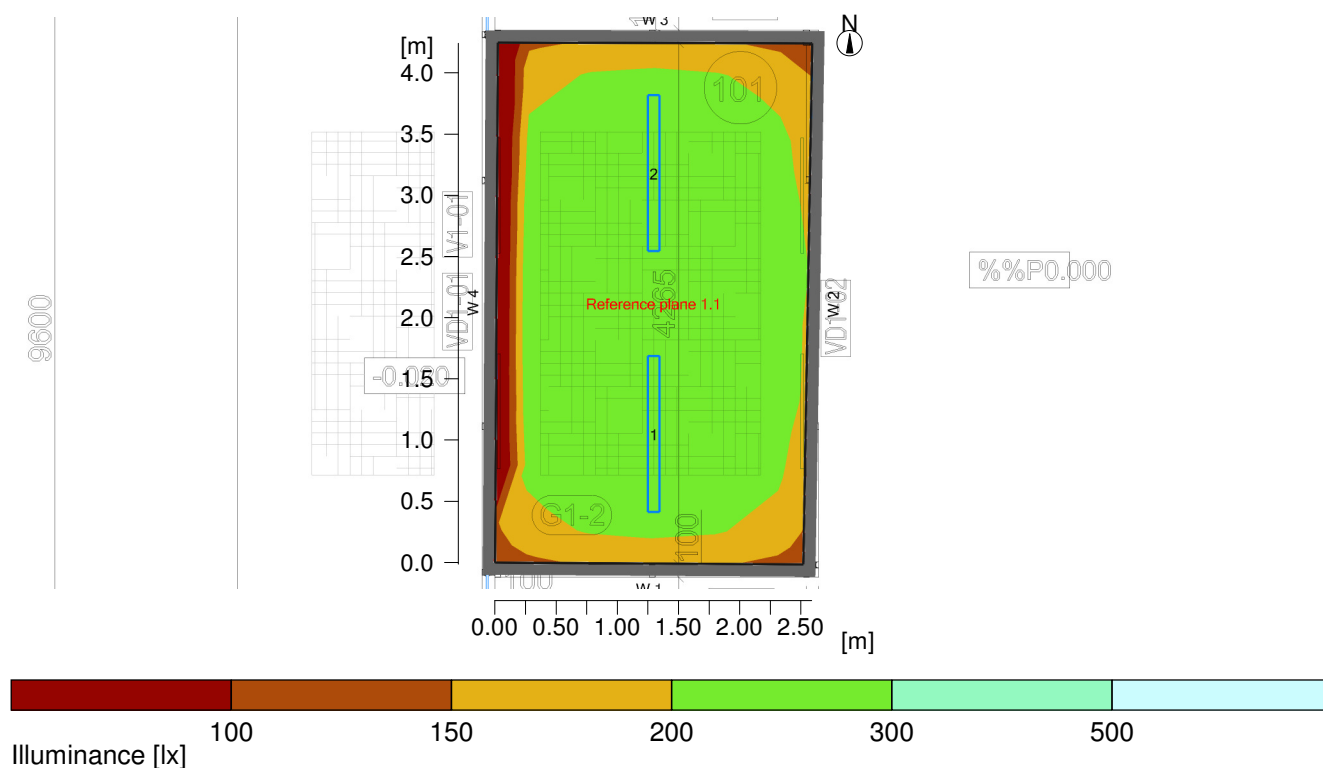


Wall	x	y	Length	Reflectance
1	4224.59 m	178.01 m	2.52 m	50.0 %
2	4224.67 m	182.26 m	4.25 m	50.0 %
3	4222.10 m	182.26 m	2.57 m	50.0 %
4	4222.08 m	178.02 m	4.24 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		3.12 m		
Height of ref. plane		0.00 m		

2 101

2.2 Summary, 101

2.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
Height of luminaire plane
Maintenance factor

Average indirect fraction
3.12 m
0.80

Total luminous flux of all lamps 8646.70 lm (100.00% dimmed)
(Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 73.7 W
Total power per area (10.79 m²) 6.82 W/m² (3.08 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
5.1.4 (EN 12464-1, 8.2011) Loading ramps/bays (Ra >40.00)
Horizontal

Em 222 lx (>= 150 lx)
Emin 172 lx
Emin/Eav (Uo) 0.78 (>= 0.40)
Emin/Emax (Ud) 0.65
UGR (1.4H 2.3H) <=19.0 (< 25.00)
Position 0.00 m

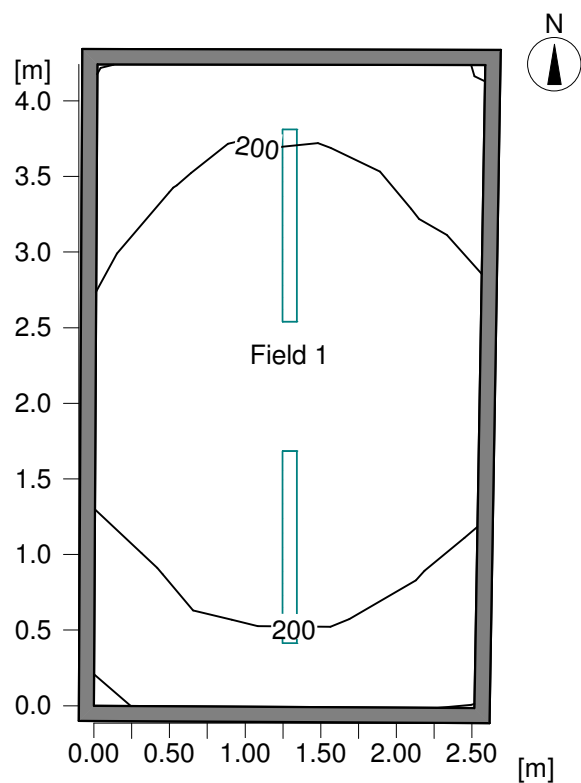
Type No./Make

10 2 Order No. : VIZULO STONE 37 W 4000 K 1200mm
Luminaire name : STB L 37 840 12S A2 N 100 LT80
Equipment : 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

2 101

2.3 Calculation results, 101

2.3.1 Isolines representation, Floor (E)



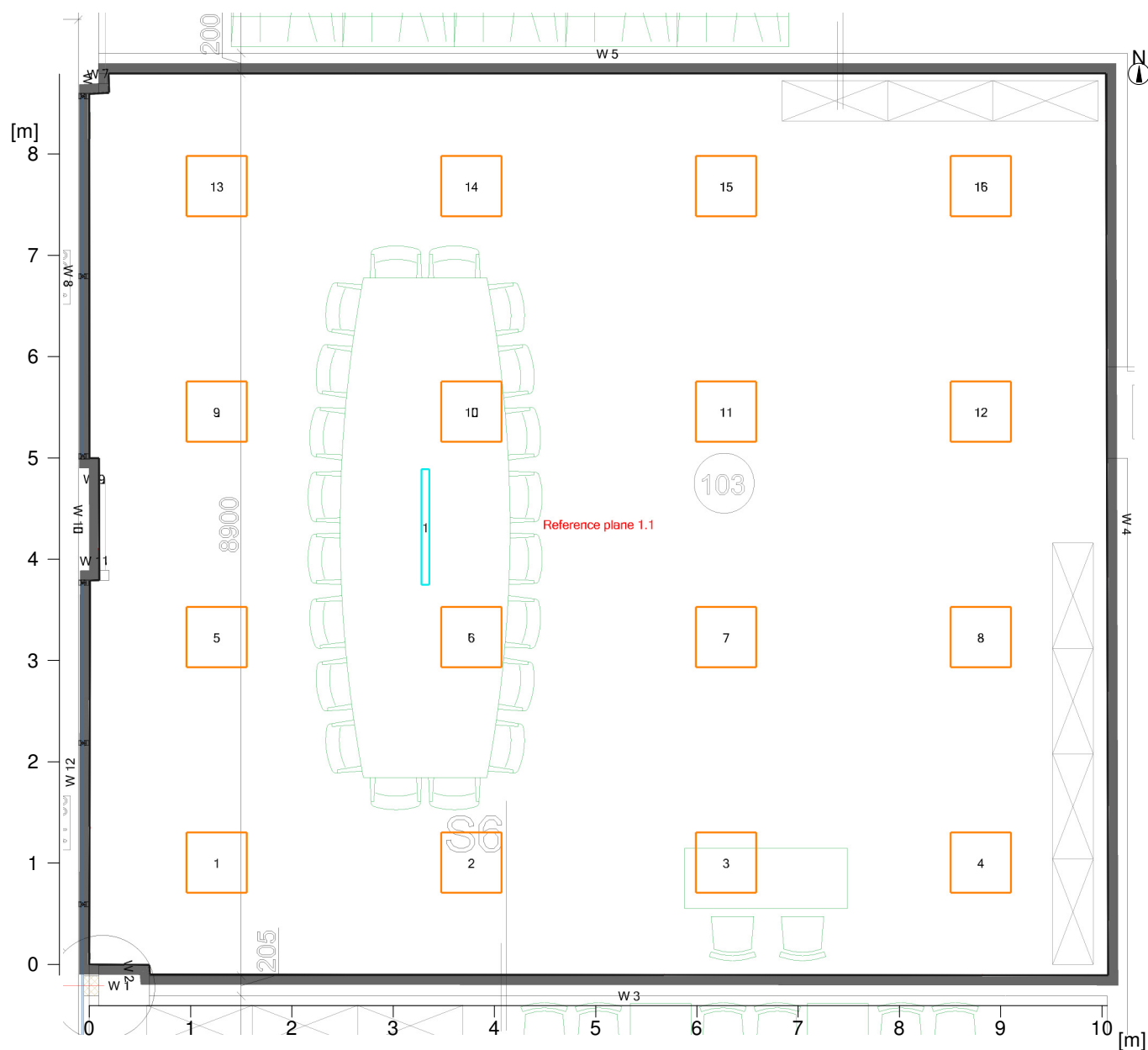
Illuminance [lx]

Average illuminance	Eav	: 219 lx
Minimum illuminance	Emin	: 180 lx
Maximum illuminance	Emax	: 248 lx
Uniformity Uo	Emin/Eav	: 1 : 1.21 (0.82)
Diversity Ud	Emin/Emax	: 1 : 1.38 (0.73)

3 103

3.1 Description, 103

3.1.1 Floor plan



Object : Ražošanas ēkas Nr. 6 jaunbūve
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3 103

3.1 Description, 103

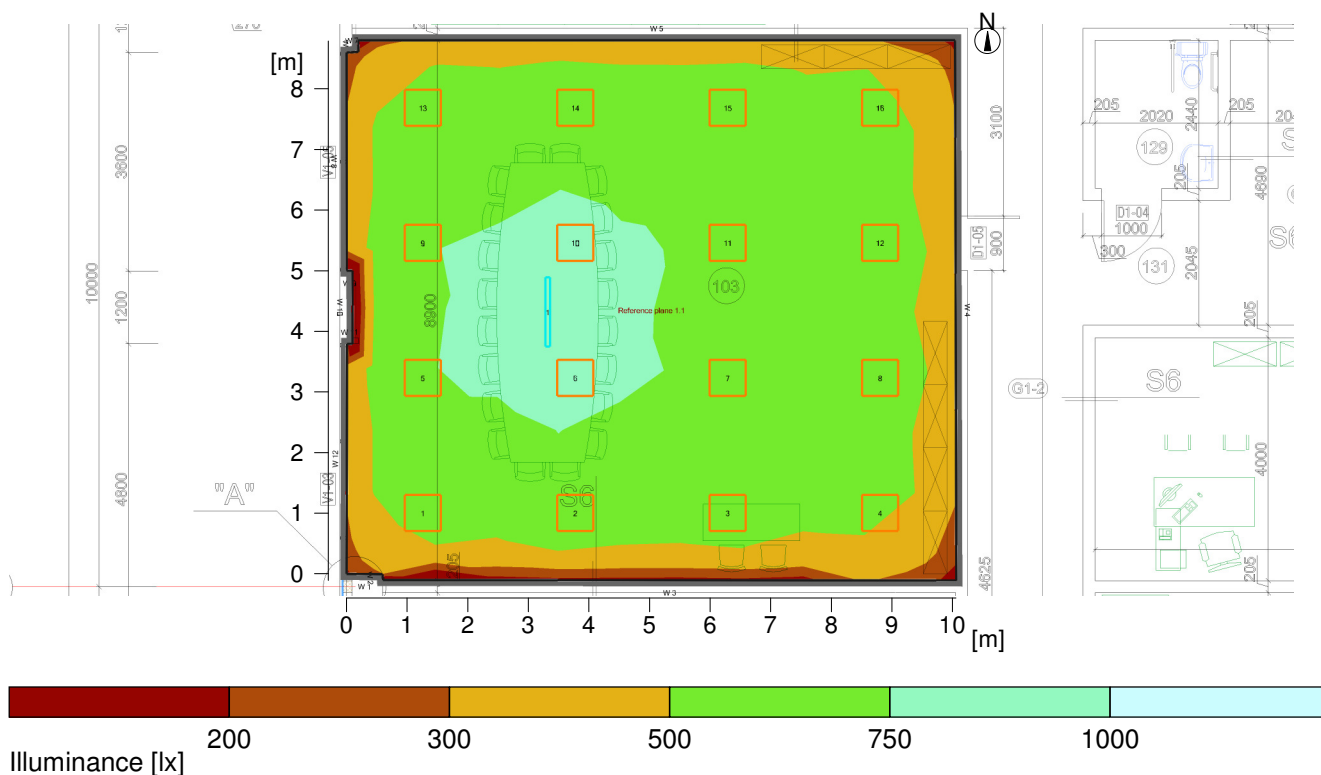
3.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4222.67 m	165.34 m	0.59 m	50.0 %
2	4222.68 m	165.25 m	0.10 m	50.0 %
3	4232.13 m	165.24 m	9.46 m	50.0 %
4	4232.11 m	174.14 m	8.90 m	50.0 %
5	4222.27 m	174.14 m	9.84 m	50.0 %
6	4222.27 m	173.95 m	0.19 m	50.0 %
7	4222.08 m	173.93 m	0.20 m	50.0 %
8	4222.08 m	170.34 m	3.59 m	50.0 %
9	4222.17 m	170.34 m	0.09 m	50.0 %
10	4222.18 m	169.14 m	1.20 m	50.0 %
11	4222.08 m	169.13 m	0.09 m	50.0 %
12	4222.08 m	165.35 m	3.79 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.75 m		

3 103

3.2 Summary, 103

3.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.85 m
 0.80

Total luminous flux of all lamps 75480.40 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 613.1 W
 Total power per area (89.09 m²) 6.88 W/m² (1.17 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Offices
 5.26.5 (EN 12464-1, 8.2011) Conference and meeting rooms (Ra >80.00)
 Horizontal
 Em 590 lx (>= 500 lx)
 Emin 321 lx
 Emin/Eav (Uo) 0.54 (>= 0.60)
 Emin/Emax (Ud) 0.35
 Position 0.75 m

Type No.\Make

13 16 Order No. : Leaf Slim 35 W 4000 K Prismatic
 Luminaire name : LFS 35 840 R0606 WU D10 H
 Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.03 lm

Object : Ražošanas ēkas Nr. 6 jaunbūve
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3 103

3.2 Summary, 103

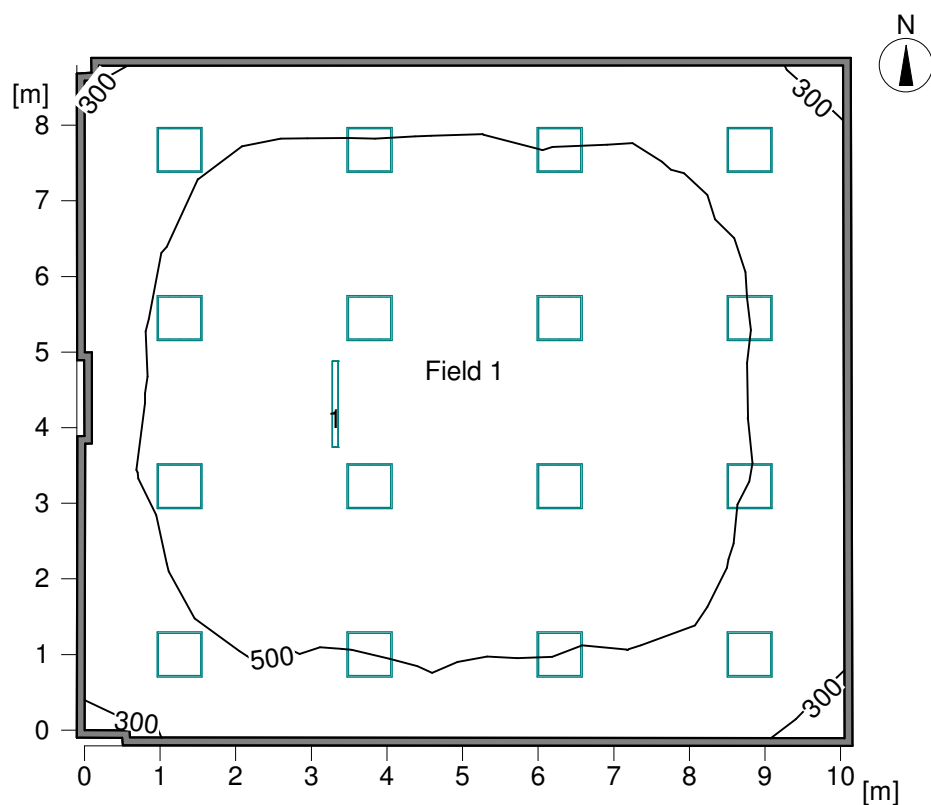
3.2.1 Result overview, Evaluation area 1

16	1	Order No.	: PINE 52 W
		Luminaire name	: PN SS 52 840 1140 WUD N01
		Equipment	: 1 x PINE 52 W 52 W / 5400 lm

3 103

3.3 Calculation results, 103

3.3.1 Isolines representation, Floor (E)



Illuminance [lx]

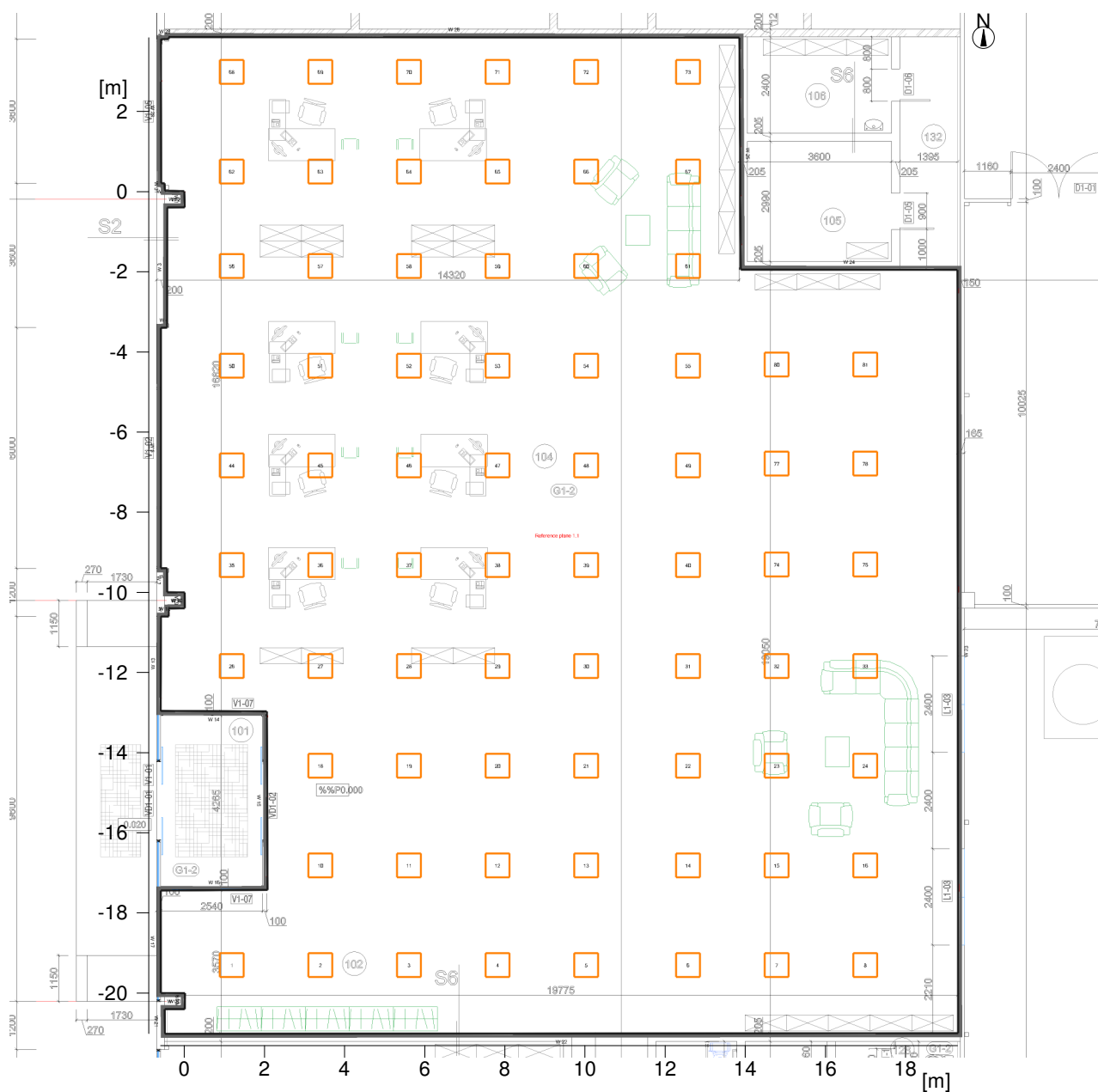
Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U_0
 Diversity U_d

Eav : 536 lx
 Emin : 230 lx
 Emax : 718 lx
 Emin/Eav : 1 : 2.33 (0.43)
 Emin/Emax : 1 : 3.13 (0.32)

4 104

4.1 Description, 104

4.1.1 Floor plan



Object : Ražošanas ēkas Nr. 6 jaunbūve
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4 104

4.1 Description, 104

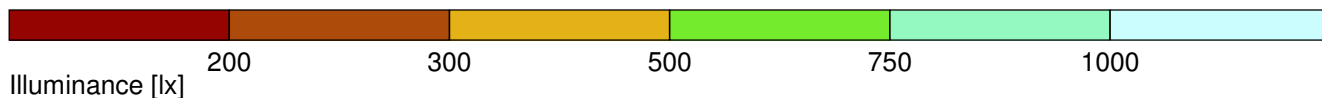
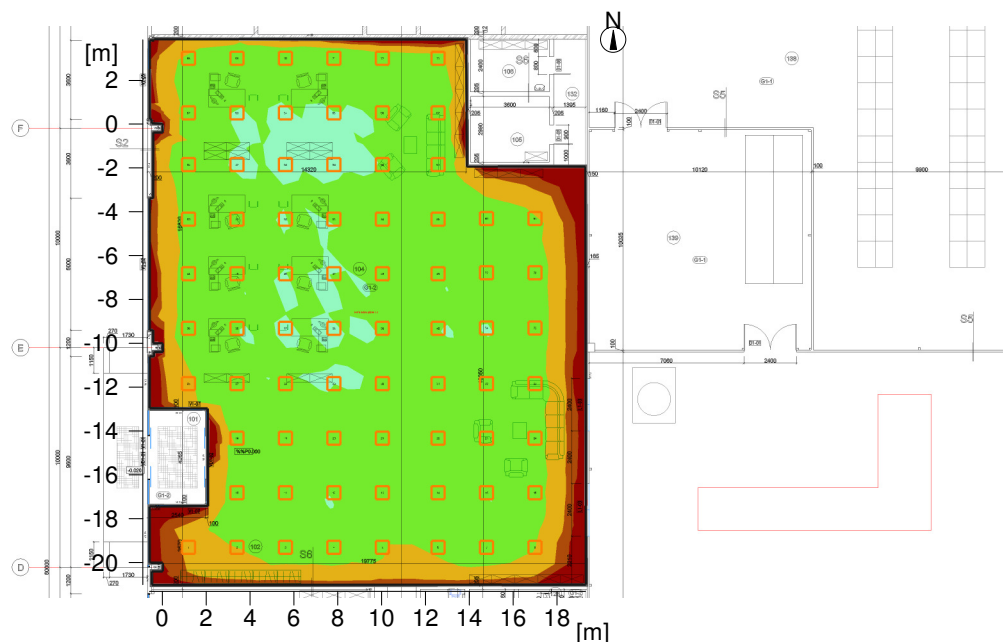
4.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4222.67 m	194.94 m	0.40 m	50.0 %
2	4222.24 m	194.94 m	0.44 m	50.0 %
3	4222.23 m	191.94 m	3.00 m	50.0 %
4	4222.08 m	191.93 m	0.16 m	50.0 %
5	4222.08 m	185.94 m	6.00 m	50.0 %
6	4222.23 m	185.94 m	0.15 m	50.0 %
7	4222.23 m	185.34 m	0.60 m	50.0 %
8	4222.67 m	185.33 m	0.44 m	50.0 %
9	4222.67 m	184.94 m	0.40 m	50.0 %
10	4222.27 m	184.93 m	0.40 m	50.0 %
11	4222.27 m	184.73 m	0.20 m	50.0 %
12	4222.08 m	184.73 m	0.19 m	50.0 %
13	4222.07 m	182.38 m	2.36 m	50.0 %
14	4224.72 m	182.37 m	2.65 m	50.0 %
15	4224.74 m	177.92 m	4.45 m	50.0 %
16	4222.07 m	177.90 m	2.66 m	50.0 %
17	4222.08 m	175.34 m	2.56 m	50.0 %
18	4222.68 m	175.34 m	0.60 m	50.0 %
19	4222.67 m	174.94 m	0.40 m	50.0 %
20	4222.17 m	174.94 m	0.50 m	50.0 %
21	4222.18 m	174.33 m	0.62 m	50.0 %
22	4241.96 m	174.34 m	19.78 m	50.0 %
23	4241.94 m	193.38 m	19.04 m	50.0 %
24	4236.54 m	193.38 m	5.40 m	50.0 %
25	4236.51 m	199.17 m	5.79 m	50.0 %
26	4222.27 m	199.18 m	14.23 m	50.0 %
27	4222.28 m	199.13 m	0.05 m	50.0 %
28	4222.08 m	199.13 m	0.20 m	50.0 %
29	4222.08 m	195.54 m	3.59 m	50.0 %
30	4222.17 m	195.54 m	0.08 m	50.0 %
31	4222.18 m	195.35 m	0.19 m	50.0 %
32	4222.66 m	195.34 m	0.49 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		3.12 m		
Height of ref. plane		0.75 m		

4 104

4.2 Summary, 104

4.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 3.12 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (449.00 m²)

315362.09 lm
 2525.0 W
 5.62 W/m² (0.99 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Offices
 5.26.2 (EN 12464-1, 8.2011) Writing, typing, reading, data processing (Ra >80.00)
 Horizontal
 Em 569 lx (>= 500 lx)
 Emin 120 lx
 Emin/Eav (Uo) 0.21 (>= 0.60)
 Emin/Emax (Ud) 0.16
 UGR (10.4H 13.0H) <=19.6 (< 19.00)
 Position 0.75 m

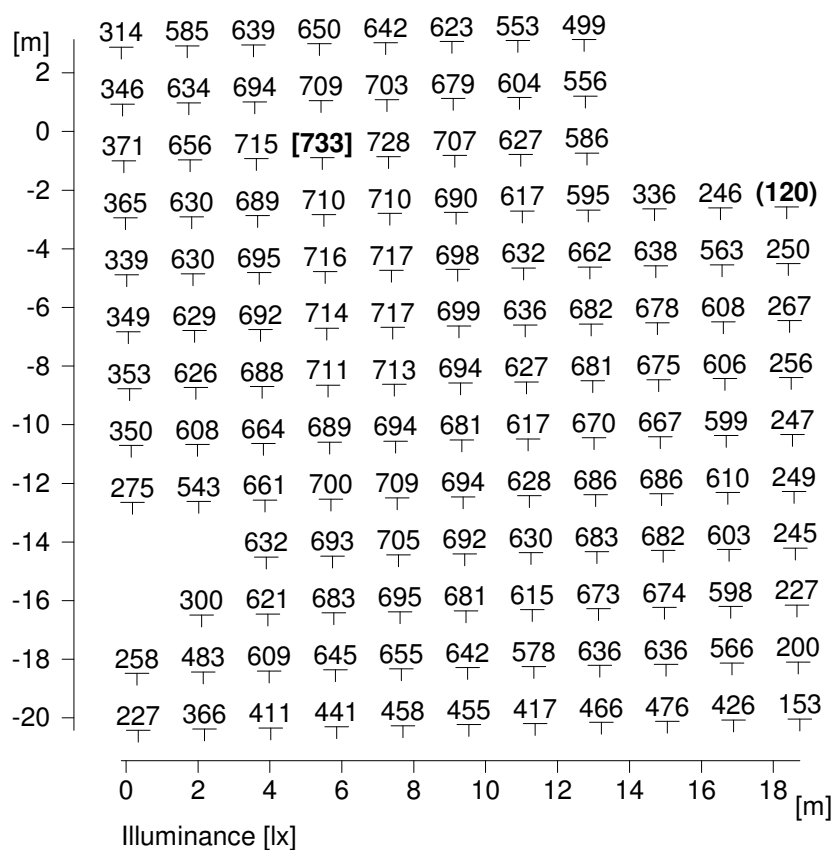
Type No.\Make

13 72



Order No. : Leaf Slim 35 W 4000 K Prismatic
 Luminaire name : LFS 35 840 R0606 WU D10 H
 Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.03 lm

4.3.1 Table, Reference plane 1.1 (E)

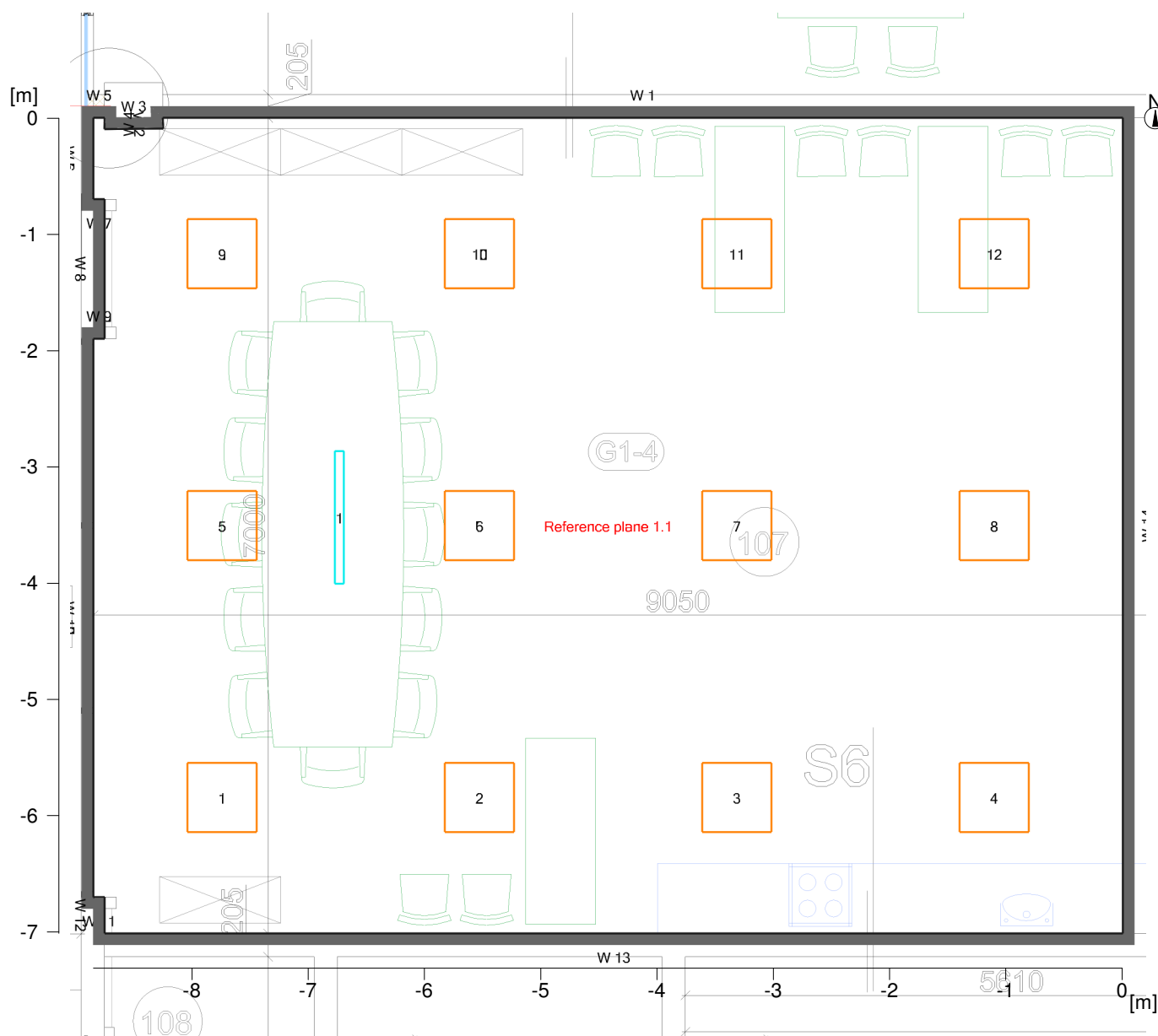


Height reference plane		: 0.75 m
Average illuminance	Eav	: 569 lx
Minimum illuminance	Emin	: 120 lx
Maximum illuminance	Emax	: 733 lx
Uniformity Uo	Emin/Eav	: 1 : 4.75 (0.21)
Diversity Ud	Emin/Emax	: 1 : 6.11 (0.16)

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5.1 Description, 107

5.1.1 Floor plan



Object : Ražošanas ēkas Nr. 6 jaunbūve
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5.1 Description, 107

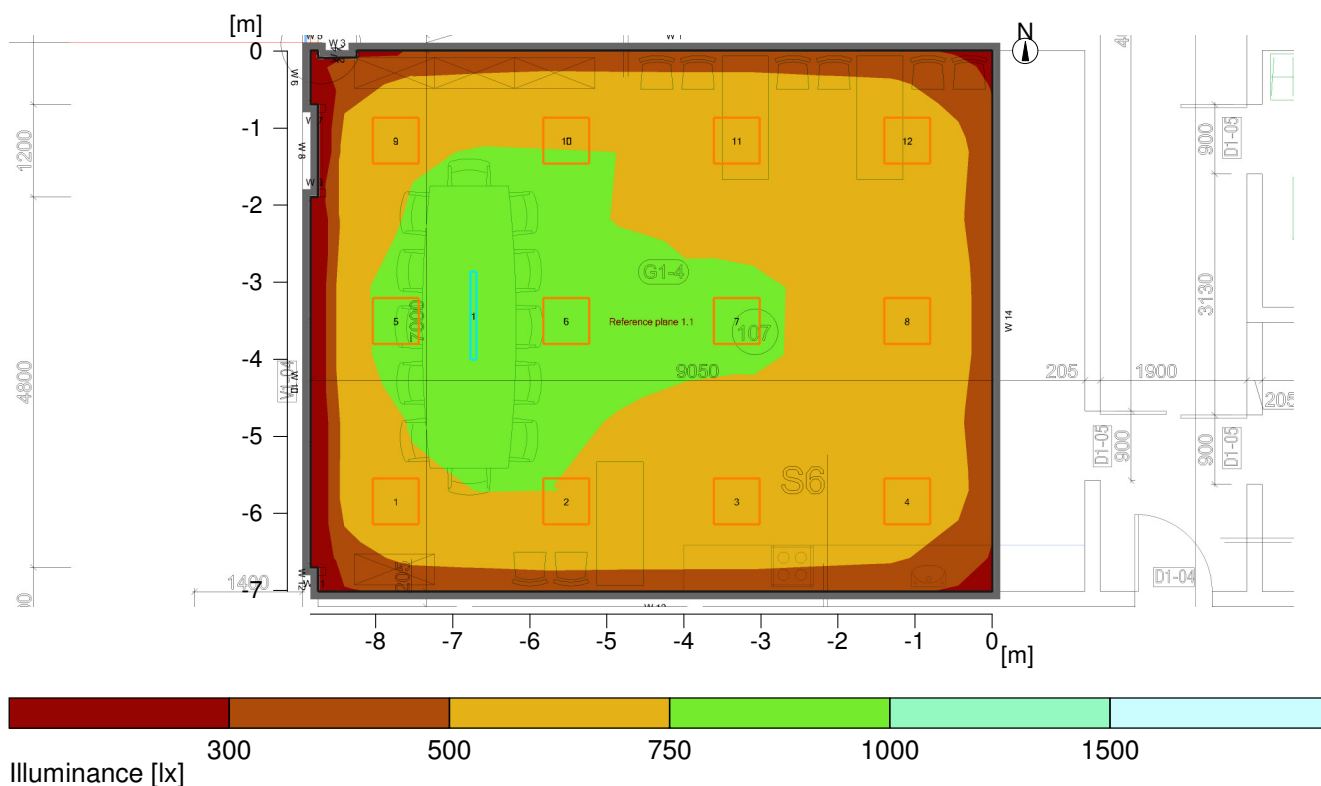
5.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4222.67 m	165.04 m	8.25 m	50.0 %
2	4222.68 m	164.94 m	0.09 m	50.0 %
3	4222.17 m	164.94 m	0.51 m	50.0 %
4	4222.17 m	165.04 m	0.10 m	50.0 %
5	4222.07 m	165.04 m	0.10 m	50.0 %
6	4222.07 m	164.34 m	0.70 m	50.0 %
7	4222.17 m	164.34 m	0.10 m	50.0 %
8	4222.17 m	163.14 m	1.20 m	50.0 %
9	4222.07 m	163.14 m	0.10 m	50.0 %
10	4222.07 m	158.34 m	4.80 m	50.0 %
11	4222.17 m	158.34 m	0.10 m	50.0 %
12	4222.17 m	158.02 m	0.31 m	50.0 %
13	4230.92 m	158.02 m	8.75 m	50.0 %
14	4230.92 m	165.04 m	7.01 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.75 m		

5 107

5.2 Summary, 107

5.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Maintenance factor

Average indirect fraction
 0.80

Total luminous flux of all lamps
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

57960.30 lm (100.00% dimmed)

Total power
 Total power per area (61.84 m²)

472.8 W
 7.65 W/m² (1.18 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Offices
 5.26.5 (EN 12464-1, 8.2011) Conference and meeting rooms (Ra >80.00)
 Horizontal
 Em 645 lx (>= 500 lx)
 Emin 405 lx
 Emin/Eav (Uo) 0.63 (>= 0.60)
 Emin/Emax (Ud) 0.43
 Position 0.75 m

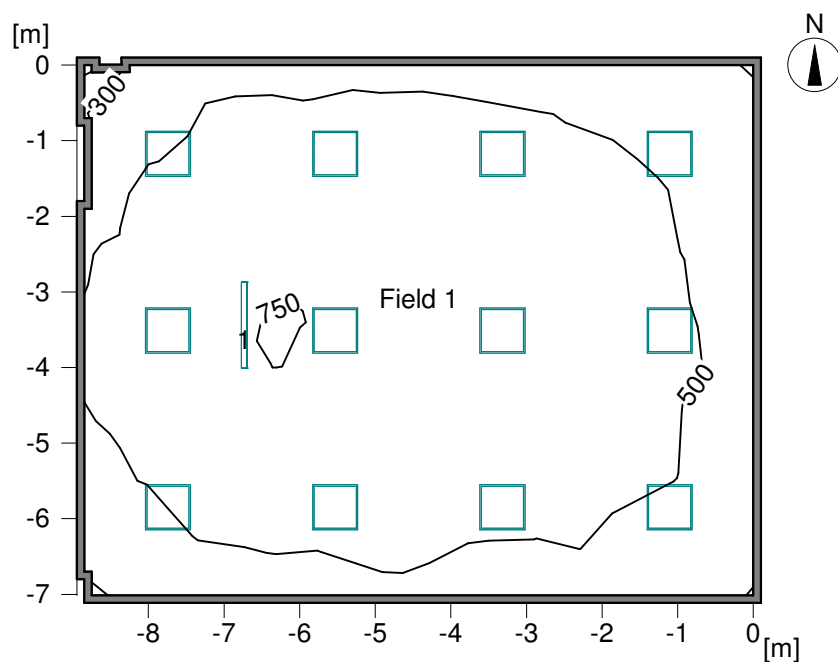
Type No.\Make

13	12	Order No.	: Leaf Slim 35 W 4000 K Prismatic
		Luminaire name	: LFS 35 840 R0606 WU D10 H
		Equipment	: 1 x Leaf Slim 35 W 35.07 W / 4380.03 lm
16	1	Order No.	: PINE 52 W
		Luminaire name	: PN SS 52 840 1140 WUD N01
		Equipment	: 1 x PINE 52 W 52 W / 5400 lm

5 107

5.3 Calculation results, 107

5.3.1 Isolines representation, Floor (E)



Illuminance [lx]

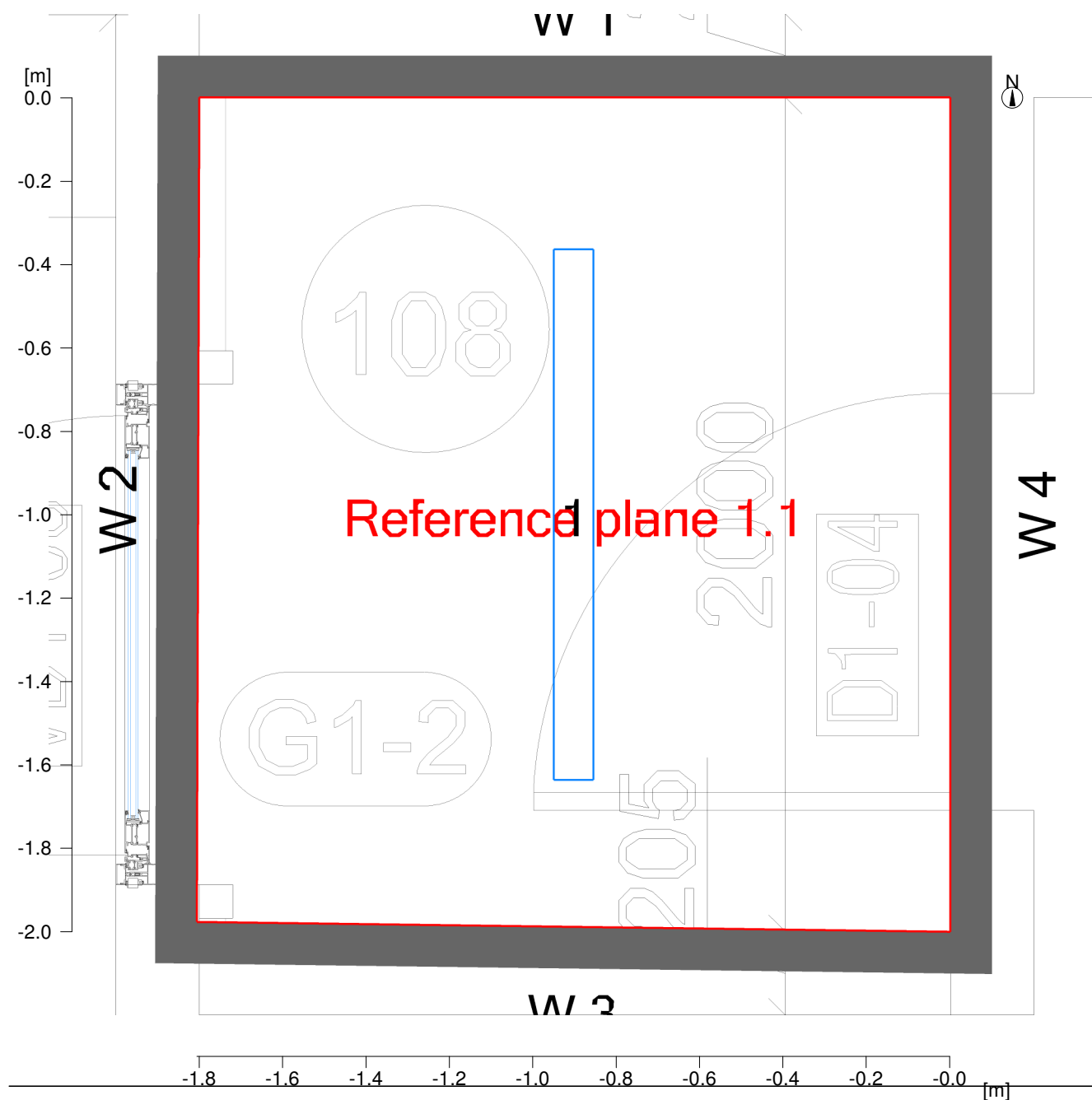
Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U_0
 Diversity U_d

Eav : 535 lx
 Emin : 286 lx
 Emax : 754 lx
 Emin/Eav : 1 : 1.87 (0.54)
 Emin/Emax : 1 : 2.64 (0.38)

6 108

6.1 Description, 108

6.1.1 Floor plan

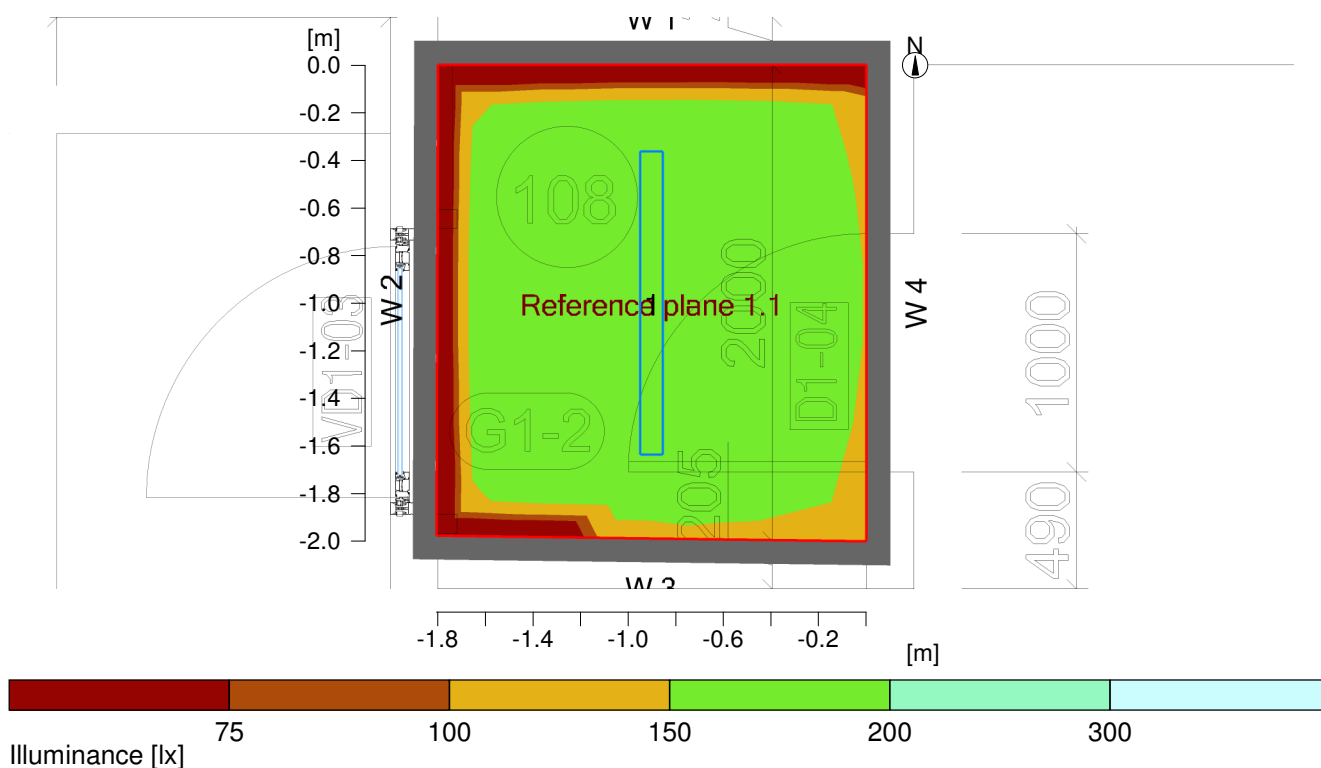


Wall	x	y	Length	Reflectance
1	4222.17 m	157.82 m	1.80 m	50.0 %
2	4222.17 m	155.85 m	1.98 m	50.0 %
3	4223.97 m	155.82 m	1.81 m	50.0 %
4	4223.97 m	157.82 m	2.00 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

6 108

6.2 Summary, 108

6.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.85 m
Maintenance factor	0.80
Total luminous flux of all lamps	4323.40 lm
Total power	36.8 W
Total power per area (3.58 m²)	10.28 W/m² (6.21 W/m²/100lx)

Evaluation area 1

User profile	Traffic zones inside buildings
	5.1.4 (EN 12464-1, 8.2011) Loading ramps/bays (Ra >40.00)
	Horizontal
Em	165 lx (>= 150 lx)
Emin	137 lx
Emin/Eav (Uo)	0.83 (>= 0.40)
Emin/Emax (Ud)	0.73
UGR (2.0H 2.0H)	<=18.5 (< 25.00)
Position	0.00 m

Major surfaces

	Em		Uo	
M 1.5 (Ceiling)	155 lx	(>= 30 lx)	0.39	(>= 0.10)
M 1.1 (Wall)	187 lx	(>= 50 lx)	0.38	(>= 0.10)
M 1.2 (Wall)	227 lx	(>= 50 lx)	0.37	(>= 0.10)
M 1.3 (Wall)	188 lx	(>= 50 lx)	0.38	(>= 0.10)
M 1.4 (Wall)	200 lx	(>= 50 lx)	0.34	(>= 0.10)

Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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6 108

6.2 Summary, 108

6.2.1 Result overview, Evaluation area 1

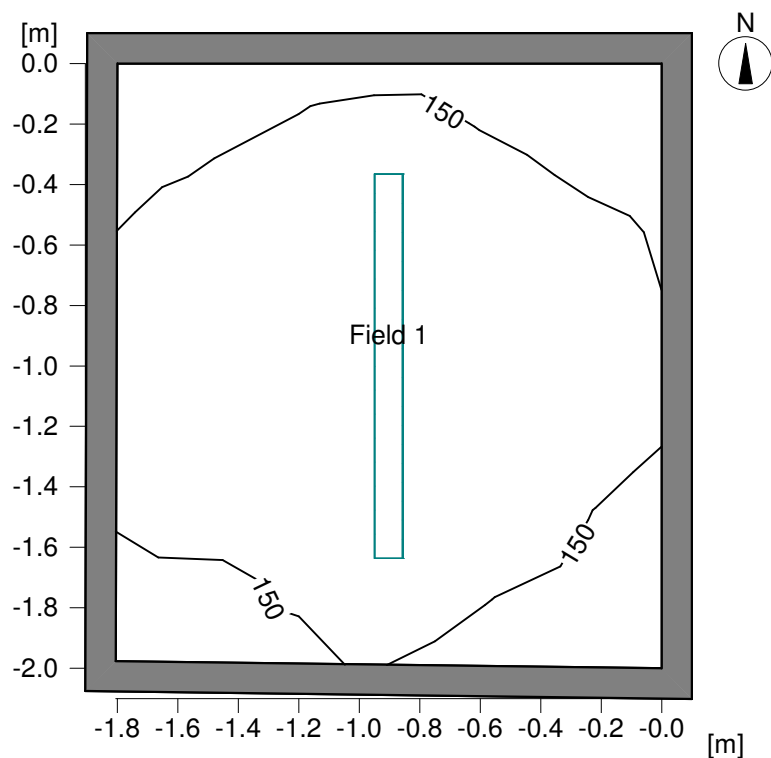
Type No.\Make

10	1	Order No.	: VIZULO STONE 37 W 4000 K 1200mm
		Luminaire name	: STB L 37 840 12S A2 N 100 LT80
		Equipment	: 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

6 108

6.3 Calculation results, 108

6.3.1 Isolines representation, Floor (E)



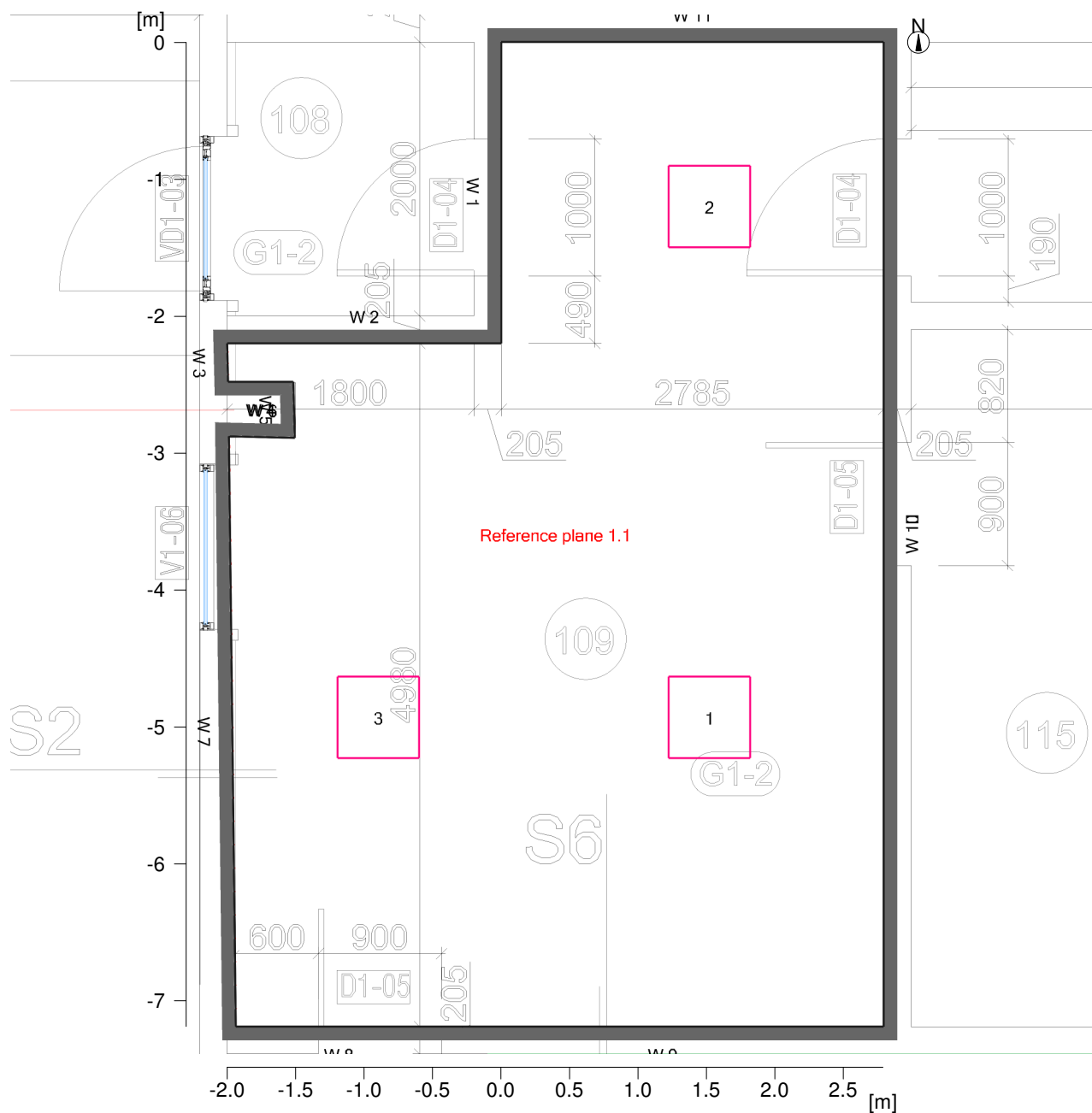
Illuminance [lx]

Average illuminance	Eav	: 158 lx
Minimum illuminance	Emin	: 129 lx
Maximum illuminance	Emax	: 176 lx
Uniformity Uo	Emin/Eav	: 1 : 1.22 (0.82)
Diversity Ud	Emin/Emax	: 1 : 1.36 (0.74)

7 109

7.1 Description, 109

7.1.1 Floor plan



Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018



7 109

7.1 Description, 109

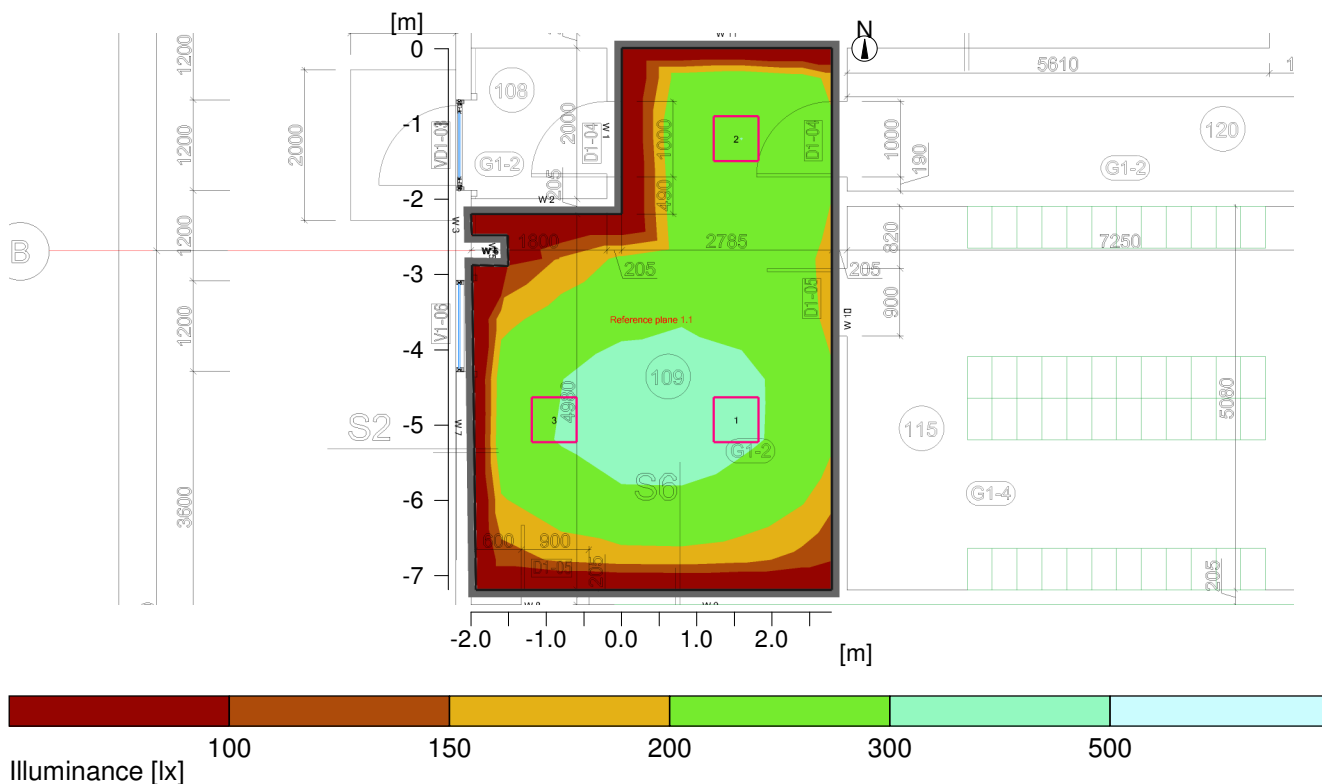
7.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4224.17 m	155.62 m	2.20 m	50.0 %
2	4222.17 m	155.62 m	2.00 m	50.0 %
3	4222.18 m	155.34 m	0.28 m	50.0 %
4	4222.65 m	155.34 m	0.48 m	50.0 %
5	4222.67 m	154.93 m	0.41 m	50.0 %
6	4222.18 m	154.94 m	0.48 m	50.0 %
7	4222.23 m	150.64 m	4.31 m	50.0 %
8	4223.74 m	150.64 m	1.50 m	50.0 %
9	4226.96 m	150.64 m	3.23 m	50.0 %
10	4226.96 m	157.82 m	7.19 m	50.0 %
11	4224.17 m	157.82 m	2.79 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

7 109

7.2 Summary, 109

7.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.88 m
 0.80

Total luminous flux of all lamps 13140.20 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 105.2 W
 Total power per area (29.67 m²) 3.55 W/m² (1.48 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
 5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
 Horizontal
 Em 239 lx (>= 100 lx)
 Emin 120 lx
 Emin/Eav (Uo) 0.50 (>= 0.40)
 Emin/Emax (Ud) 0.35
 UGR (2.9H 4.3H) <=17.2 (< 28.00)
 Position 0.00 m

Type No./Make

14 3

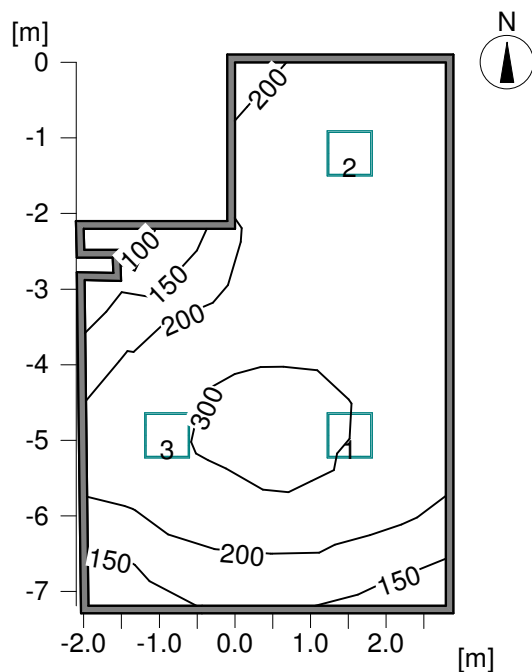


Order No. : Leaf Slim 35 W 4000 K Prismatic
 Luminaire name : LFS 35 840 R0606 WU N20 H
 Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.08 lm

7 109

7.3 Calculation results, 109

7.3.1 Isolines representation, Floor (E)



Illuminance [lx]

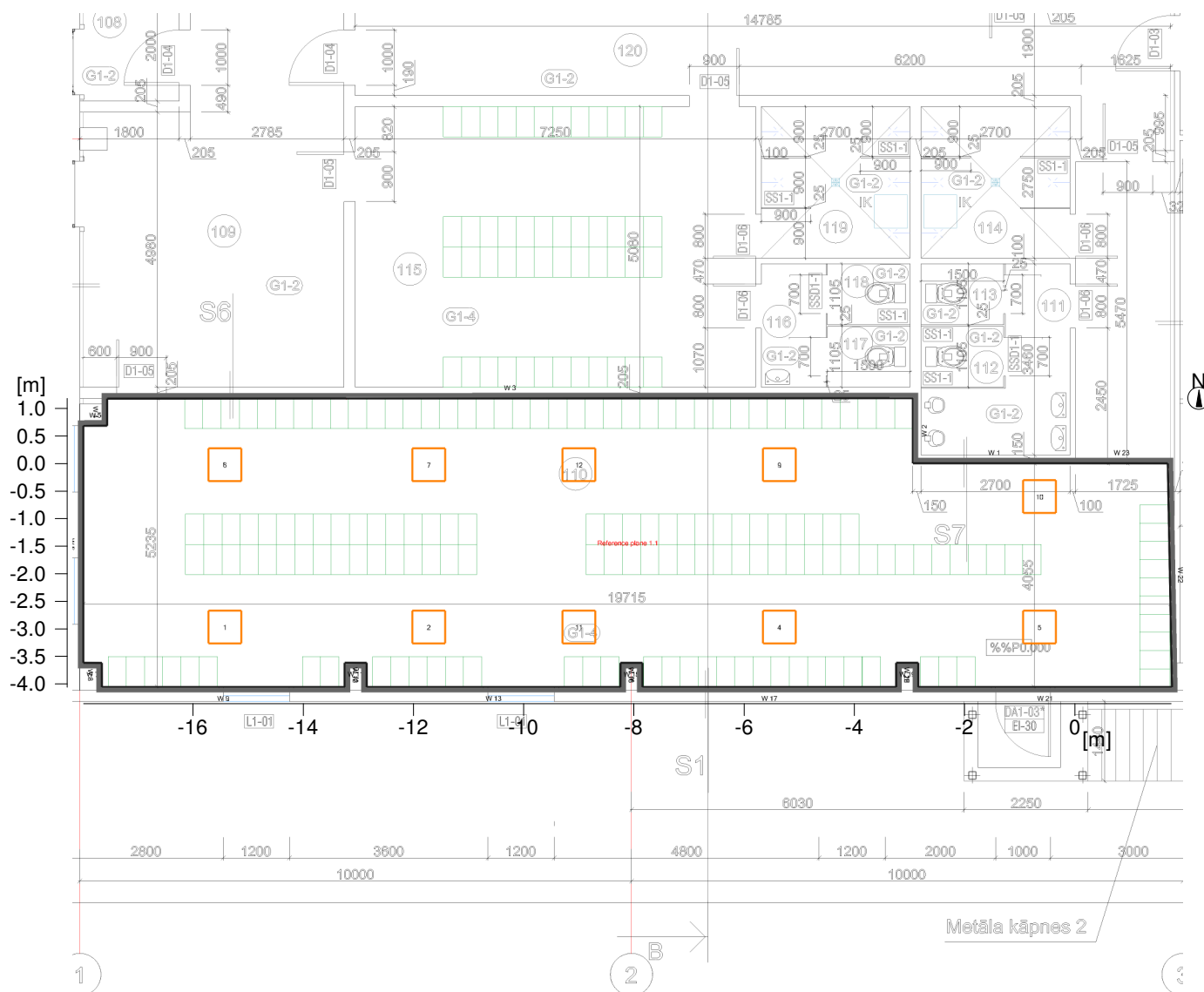
Average illuminance
Minimum illuminance
Maximum illuminance
Uniformity U_0
Diversity U_d

Eav : 224 lx
Emin : 94 lx
Emax : 340 lx
Emin/Eav : 1 : 2.39 (0.42)
Emin/Emax : 1 : 3.63 (0.28)

8 110

8.1 Description, 110

8.1.1 Floor plan



Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018



8 110

8.1 Description, 110

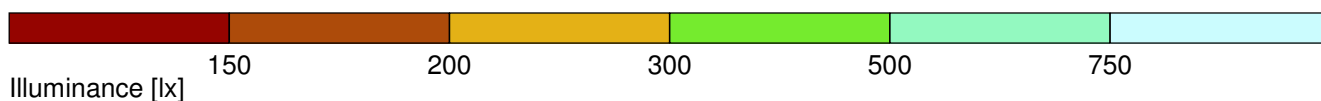
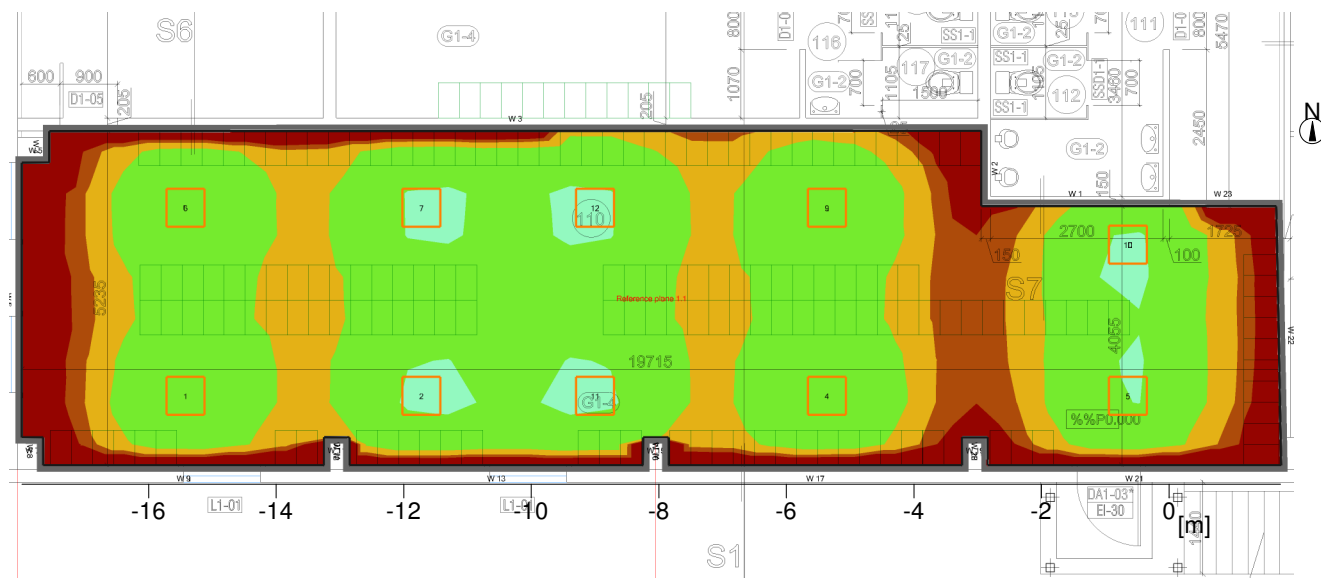
8.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4237.27 m	149.26 m	2.95 m	50.0 %
2	4237.27 m	150.44 m	1.18 m	50.0 %
3	4222.67 m	150.43 m	14.61 m	50.0 %
4	4222.67 m	149.94 m	0.49 m	50.0 %
5	4222.23 m	149.94 m	0.43 m	50.0 %
6	4222.23 m	145.64 m	4.30 m	50.0 %
7	4222.57 m	145.64 m	0.33 m	50.0 %
8	4222.57 m	145.20 m	0.44 m	50.0 %
9	4226.97 m	145.20 m	4.40 m	50.0 %
10	4226.97 m	145.64 m	0.44 m	50.0 %
11	4227.37 m	145.64 m	0.40 m	50.0 %
12	4227.37 m	145.20 m	0.44 m	50.0 %
13	4231.97 m	145.20 m	4.60 m	50.0 %
14	4231.97 m	145.64 m	0.44 m	50.0 %
15	4232.37 m	145.64 m	0.40 m	50.0 %
16	4232.37 m	145.20 m	0.44 m	50.0 %
17	4236.97 m	145.20 m	4.60 m	50.0 %
18	4236.97 m	145.64 m	0.44 m	50.0 %
19	4237.37 m	145.64 m	0.40 m	50.0 %
20	4237.37 m	145.20 m	0.44 m	50.0 %
21	4241.97 m	145.20 m	4.60 m	50.0 %
22	4241.89 m	149.25 m	4.06 m	50.0 %
23	4240.22 m	149.26 m	1.67 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.75 m		

8 110

8.2 Summary, 110

8.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.88 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (96.71 m²)

43800.30 lm
 350.7 W
 3.63 W/m² (1.13 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)

Horizontal

Em 322 lx (>= 200 lx)
 Emin 63 lx
 Emin/Eav (Uo) 0.20 (>= 0.40)
 Emin/Emax (Ud) 0.13
 UGR (3.1H 11.8H) <=18.4 (< 25.00)
 Position 0.75 m

Type No.\Make

13 10

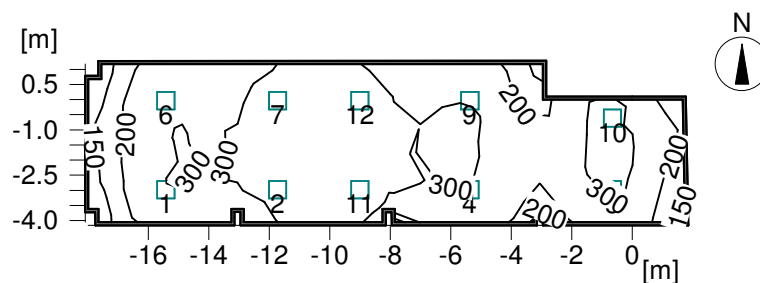


Order No. : Leaf Slim 35 W 4000 K Prismatic
 Luminaire name : LFS 35 840 R0606 WU D10 H
 Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.03 lm

8 110

8.3 Calculation results, 110

8.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 275 lx
Minimum illuminance	Emin	: 116 lx
Maximum illuminance	Emax	: 389 lx
Uniformity Uo	Emin/Eav	: 1 : 2.38 (0.42)
Diversity Ud	Emin/Emax	: 1 : 3.36 (0.30)

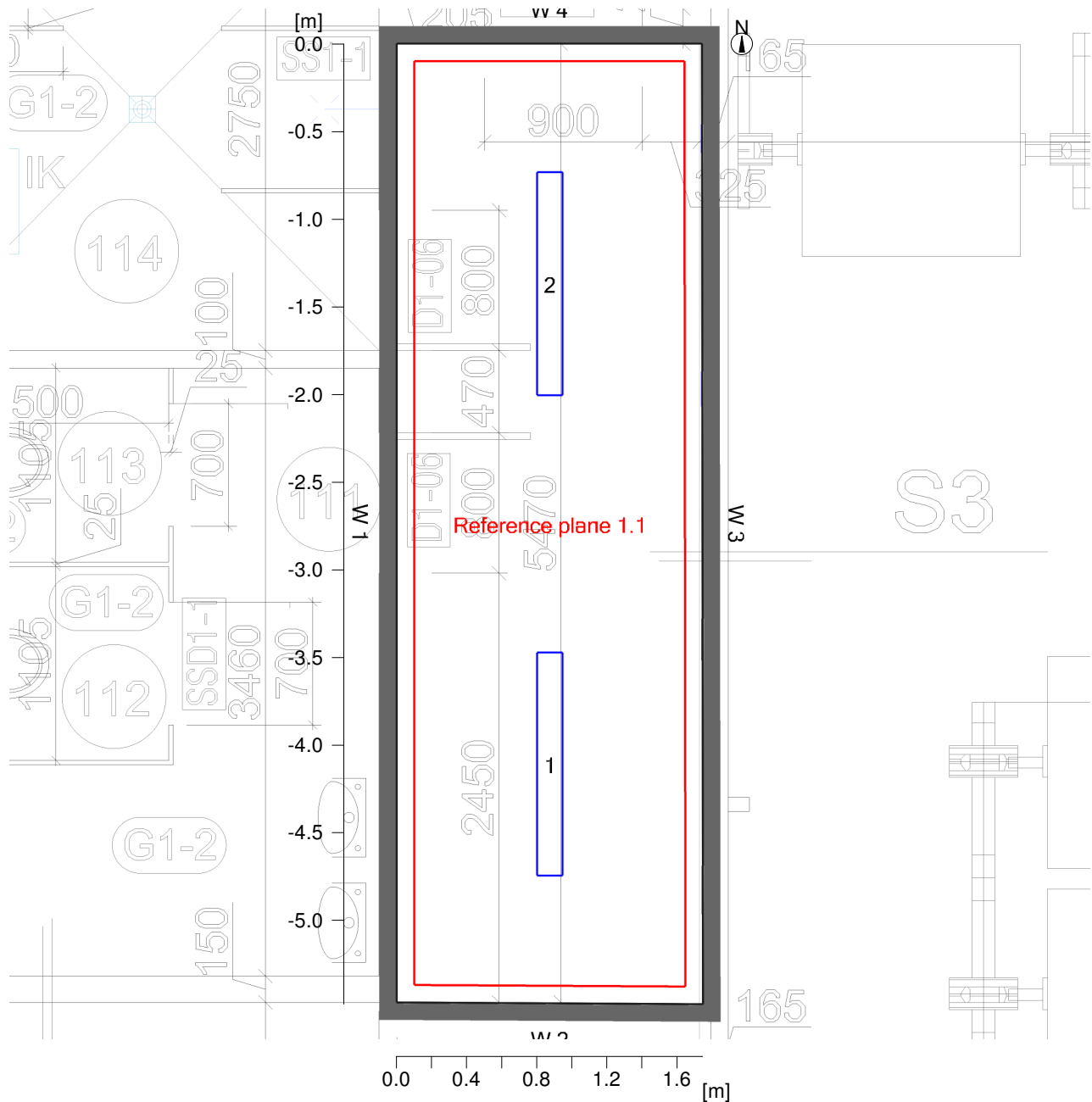
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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9 110/1

9.1 Description, 110/1

9.1.1 Floor plan

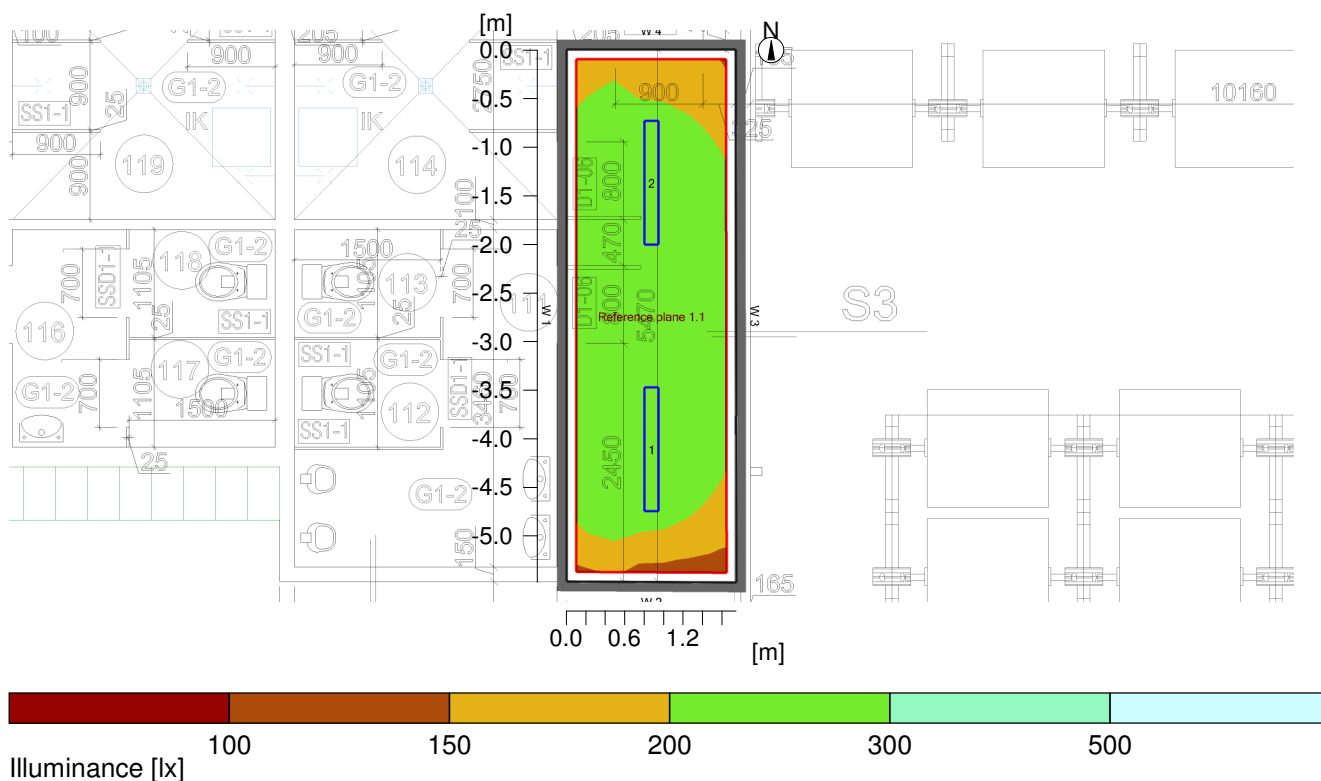


Wall	x	y	Length	Reflectance
1	4240.22 m	149.26 m	5.47 m	50.0 %
2	4241.97 m	149.25 m	1.75 m	50.0 %
3	4241.96 m	154.72 m	5.48 m	50.0 %
4	4240.22 m	154.72 m	1.74 m	50.0 %
Floor				30.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

9 110/1

9.2 Summary, 110/1

9.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.85 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (9.54 m²)

8791.80 lm
 89.7 W
 9.41 W/m² (4.34 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)

Horizontal

Em 217 lx (>= 200 lx)
 Emin 133 lx
 Emin/Eav (Uo) 0.61 (>= 0.40)
 Emin/Emax (Ud) 0.51
 UGR (1.1H 3.4H) <=20.0 (< 25.00)
 Position 0.00 m

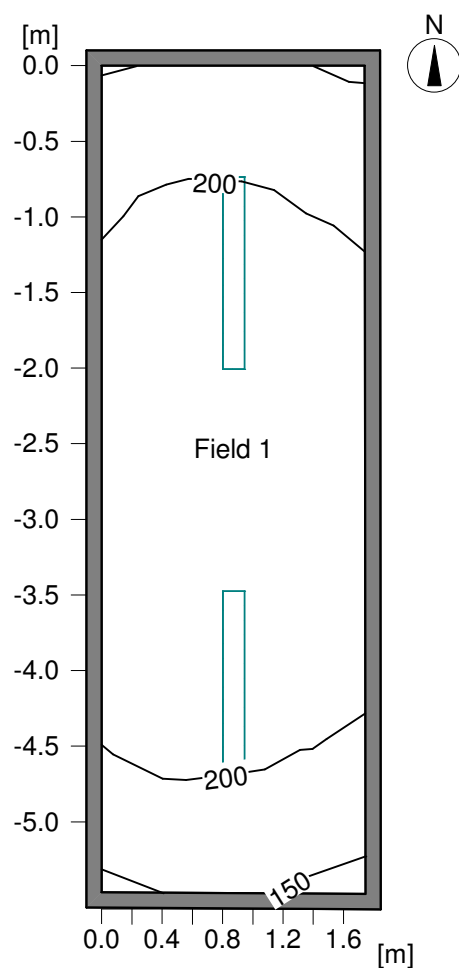
Type No.\Make

11	2	Order No.	: VIZULO STONE 45 W 4000 K 1200mm
		Luminaire name	: STB M 45 840 12D B4 N 100 LT80
		Equipment	: 1 x Stone 4 modules LT80 44.86 W / 4395.88 lm

9 110/1

9.3 Calculation results, 110/1

9.3.1 Isolines representation, Floor (E)



Illuminance [lx]

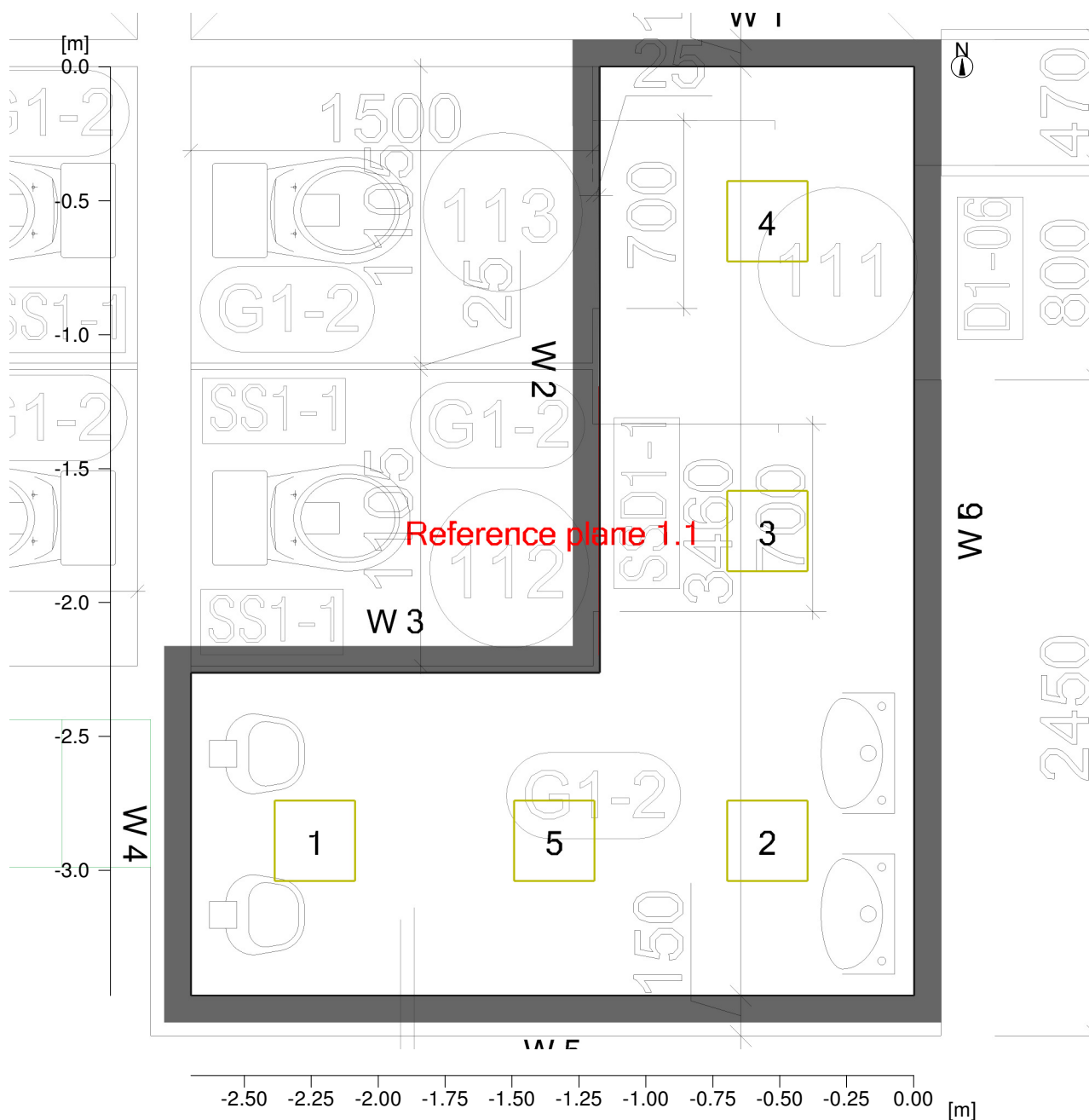
Average illuminance
Minimum illuminance
Maximum illuminance
Uniformity U_0
Diversity U_d

Eav : 204 lx
Emin : 134 lx
Emax : 237 lx
Emin/Eav : 1 : 1.53 (0.66)
Emin/Emax : 1 : 1.77 (0.56)

10 111

10.1 Description, 111

10.1.1 Floor plan

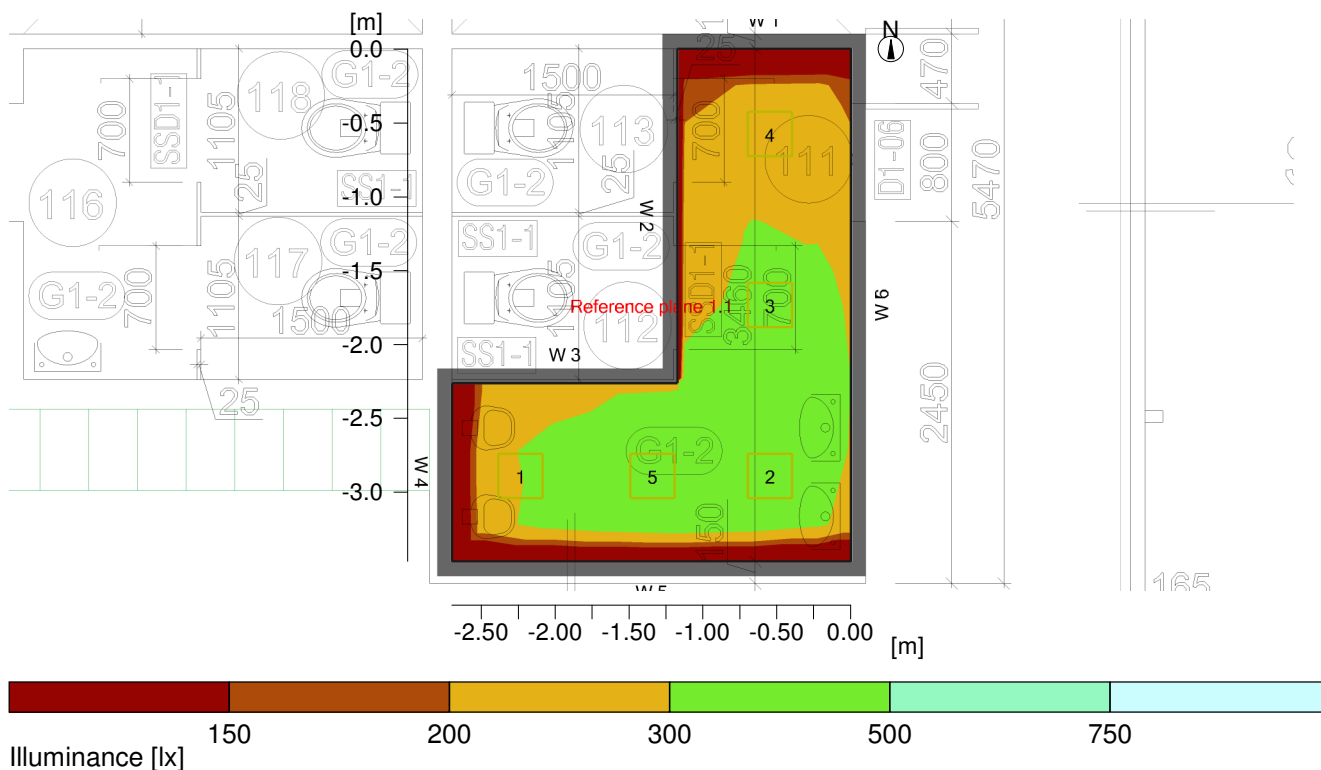


Wall	x	y	Length	Reflectance
1	4238.95 m	152.87 m	1.17 m	50.0 %
2	4238.95 m	150.61 m	2.26 m	50.0 %
3	4237.42 m	150.61 m	1.53 m	50.0 %
4	4237.42 m	149.41 m	1.21 m	50.0 %
5	4240.12 m	149.41 m	2.70 m	50.0 %
6	4240.12 m	152.87 m	3.47 m	50.0 %
Floor				30.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

10 111

10.2 Summary, 111

10.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.85 m
 0.80

Total luminous flux of all lamps 7248.50 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 107.6 W
 Total power per area (5.91 m²) 18.21 W/m² (6.08 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)

Horizontal

Em 299 lx (>= 200 lx)
 Emin 171 lx
 Emin/Eav (Uo) 0.57 (>= 0.40)
 Emin/Emax (Ud) 0.41
 Position 0.00 m

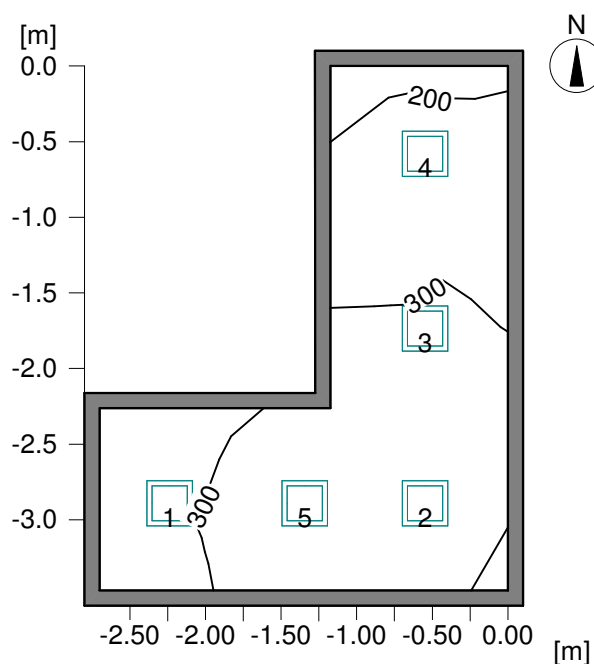
Type No.\Make

1 5 Order No. : NTC 22 840 04 PN S S 300 E ND
 Luminaire name : NTC 22 840 04 PN S S 300 E ND
 Equipment : 1 x Nest VANT04 module 21.52 W / 1449.71 lm

10 111

10.3 Calculation results, 111

10.3.1 Isolines representation, Floor (E)



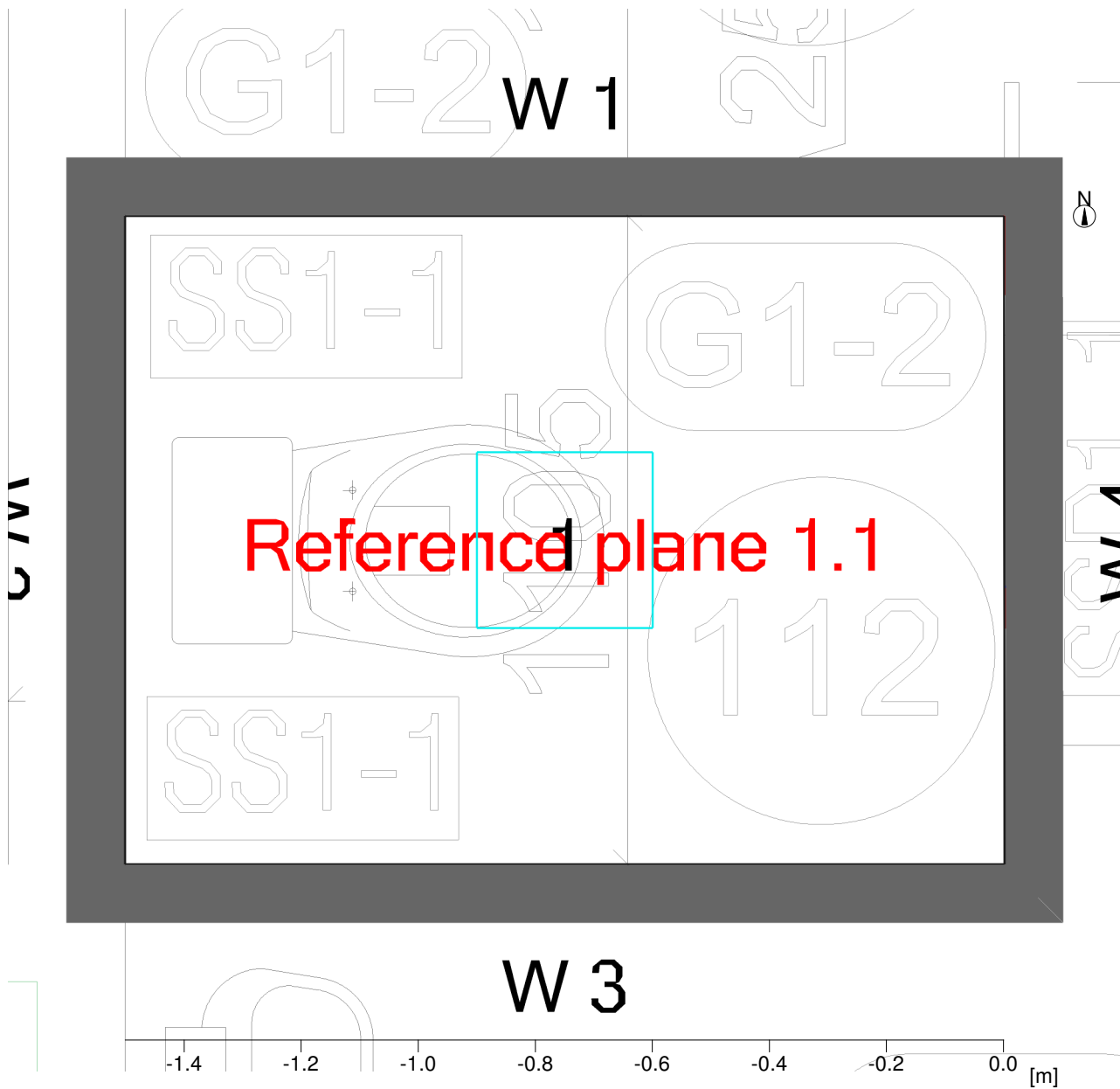
Illuminance [lx]

Average illuminance	Eav	: 296 lx
Minimum illuminance	Emin	: 182 lx
Maximum illuminance	Emax	: 395 lx
Uniformity Uo	Emin/Eav	: 1 : 1.63 (0.61)
Diversity Ud	Emin/Emax	: 1 : 2.18 (0.46)

11 112

11.1 Description, 112

11.1.1 Floor plan

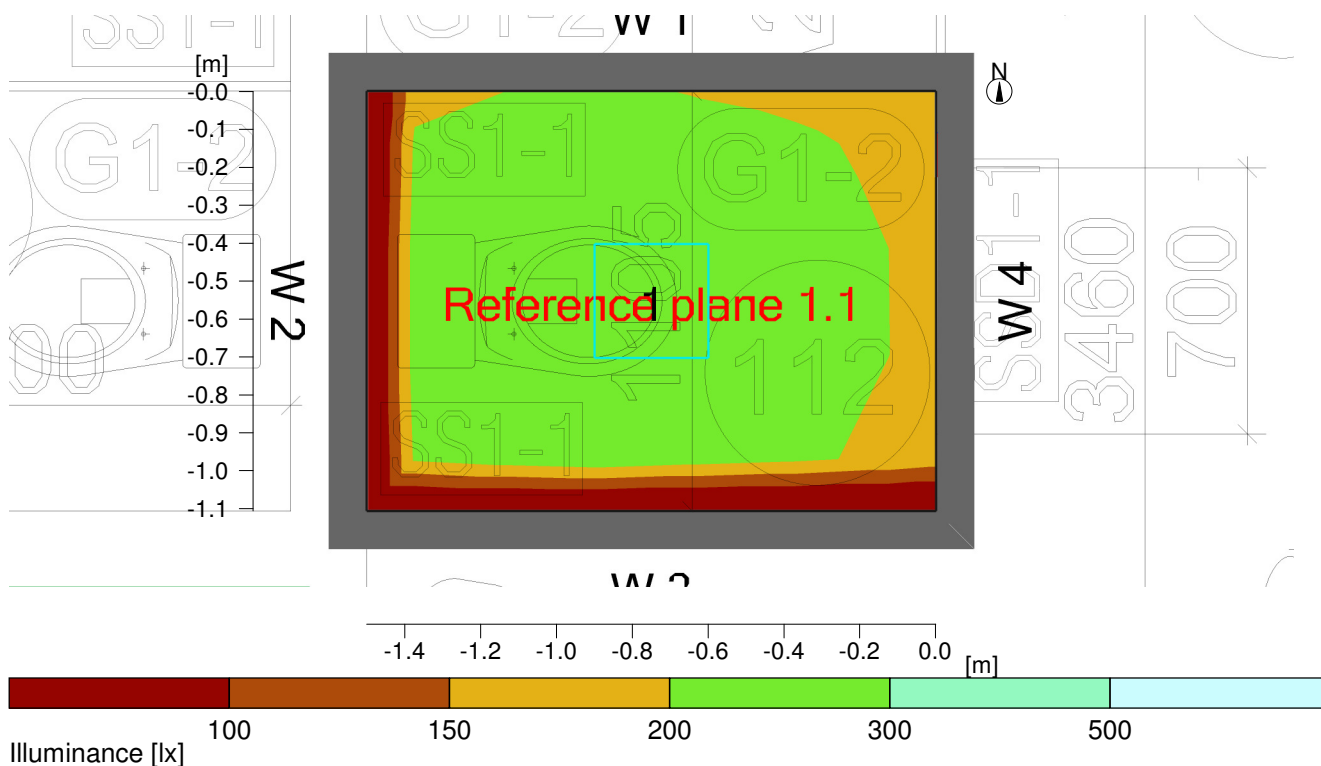


Wall	x	y	Length	Reflectance
1	4237.42 m	151.74 m	1.50 m	50.0 %
2	4237.42 m	150.64 m	1.11 m	50.0 %
3	4238.92 m	150.64 m	1.50 m	50.0 %
4	4238.92 m	151.74 m	1.11 m	50.0 %
Floor				30.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

11 112

11.2 Summary, 112

11.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.85 m
Maintenance factor	0.80
Total luminous flux of all lamps	2592.00 lm
Total power	40.7 W
Total power per area (1.66 m ²)	24.53 W/m ² (11.64 W/m ² /100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)
 Horizontal
 Em 211 lx (>= 200 lx)
 Emin 180 lx
 Emin/Eav (Uo) 0.85 (>= 0.40)
 Emin/Emax (Ud) 0.75
 UGR (2.0H 2.0H) <=19.3 (< 25.00)
 Position 0.00 m

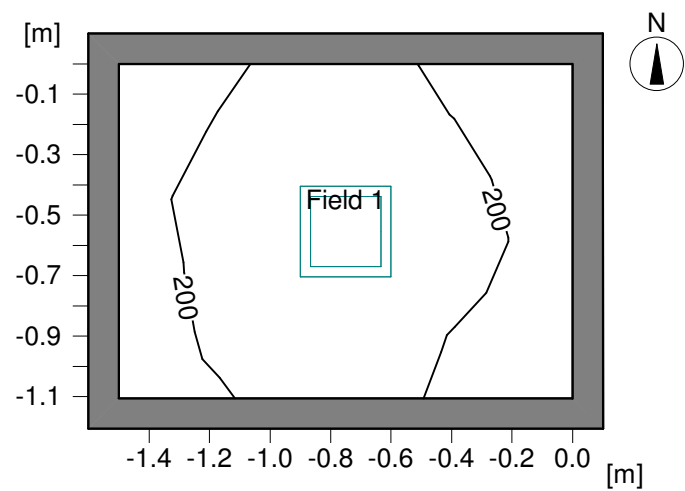
Type No.Make

38	1	Order No.	: NTC 42 840 05 PN S S 300 E ND
		Luminaire name	: NTC 42 840 05 PN S S 300 E ND
		Equipment	: 1 x Nest VANT03 module 40.72 W / 2591.96 lm

11 112

11.3 Calculation results, 112

11.3.1 Isolines representation, Floor (E)



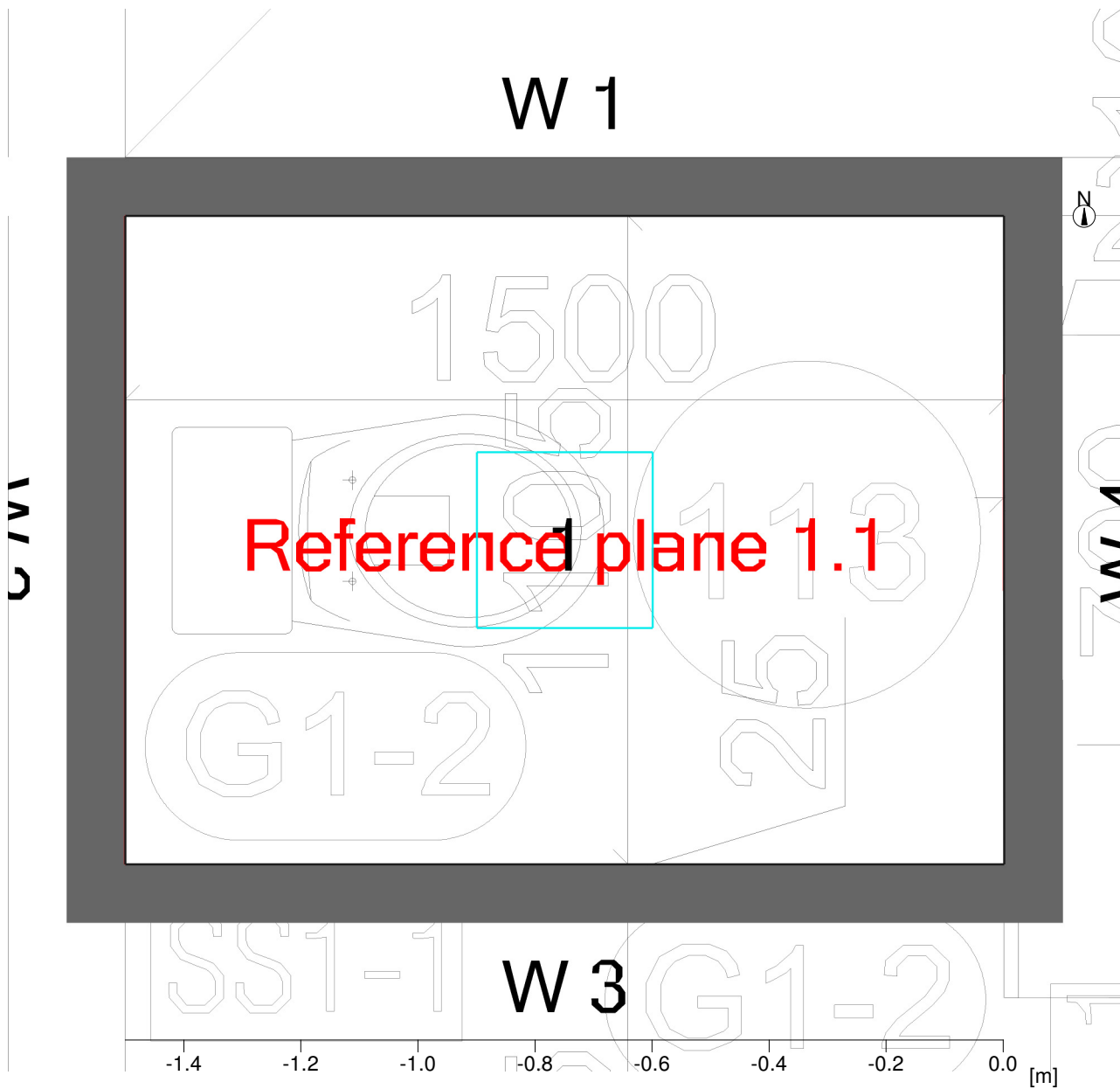
Illuminance [lx]

Average illuminance	Eav	: 204 lx
Minimum illuminance	Emin	: 182 lx
Maximum illuminance	Emax	: 221 lx
Uniformity Uo	Emin/Eav	: 1 : 1.12 (0.89)
Diversity Ud	Emin/Emax	: 1 : 1.22 (0.82)

12 113

12.1 Description, 113

12.1.1 Floor plan

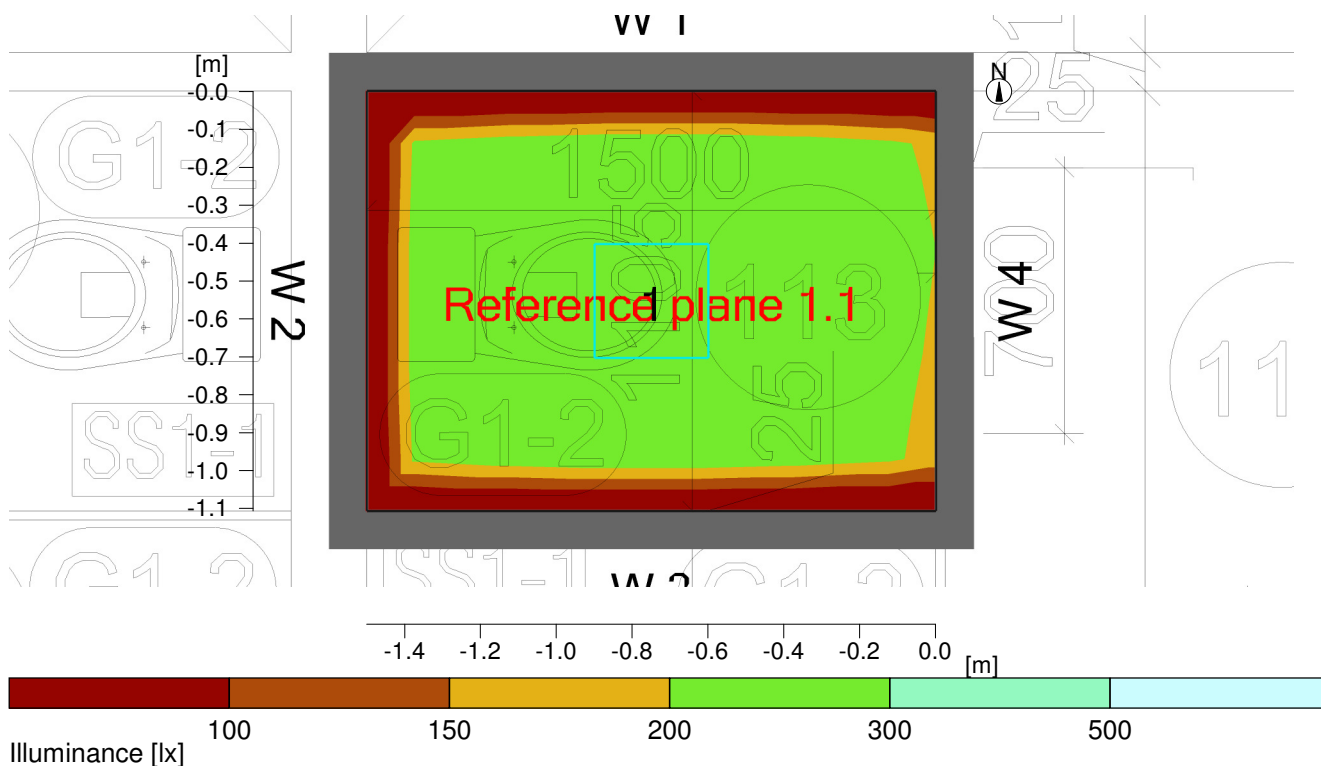


Wall	x	y	Length	Reflectance
1	4237.42 m	152.87 m	1.50 m	50.0 %
2	4237.42 m	151.77 m	1.11 m	50.0 %
3	4238.92 m	151.77 m	1.50 m	50.0 %
4	4238.92 m	152.87 m	1.11 m	50.0 %
Floor				30.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

12 113

12.2 Summary, 113

12.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.85 m
Maintenance factor	0.80
Total luminous flux of all lamps	2592.00 lm
Total power	40.7 W
Total power per area (1.66 m ²)	24.53 W/m ² (10.96 W/m ² /100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)
 Horizontal
 Em 224 lx (>= 200 lx)
 Emin 200 lx
 Emin/Eav (Uo) 0.89 (>= 0.40)
 Emin/Emax (Ud) 0.81
 UGR (2.0H 2.0H) <=19.3 (< 25.00)
 Position 0.00 m

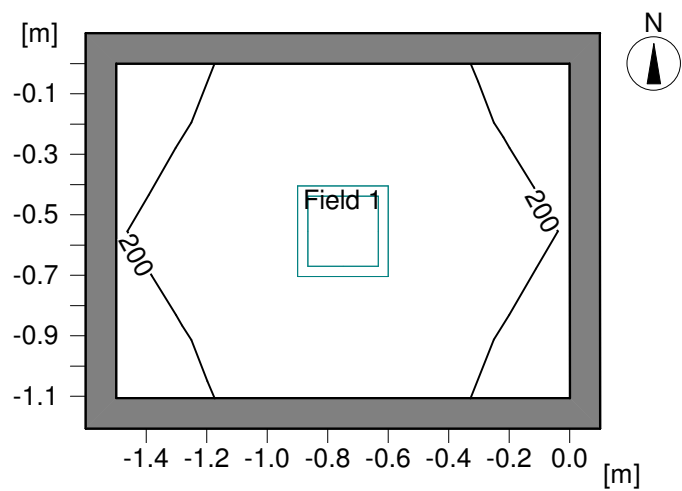
Type No. Make

38	1	Order No.	: NTC 42 840 05 PN S S 300 E ND
		Luminaire name	: NTC 42 840 05 PN S S 300 E ND
		Equipment	: 1 x Nest VANT03 module 40.72 W / 2591.96 lm

12 113

12.3 Calculation results, 113

12.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 208 lx
Minimum illuminance	Emin	: 187 lx
Maximum illuminance	Emax	: 228 lx
Uniformity Uo	Emin/Eav	: 1 : 1.11 (0.90)
Diversity Ud	Emin/Emax	: 1 : 1.22 (0.82)

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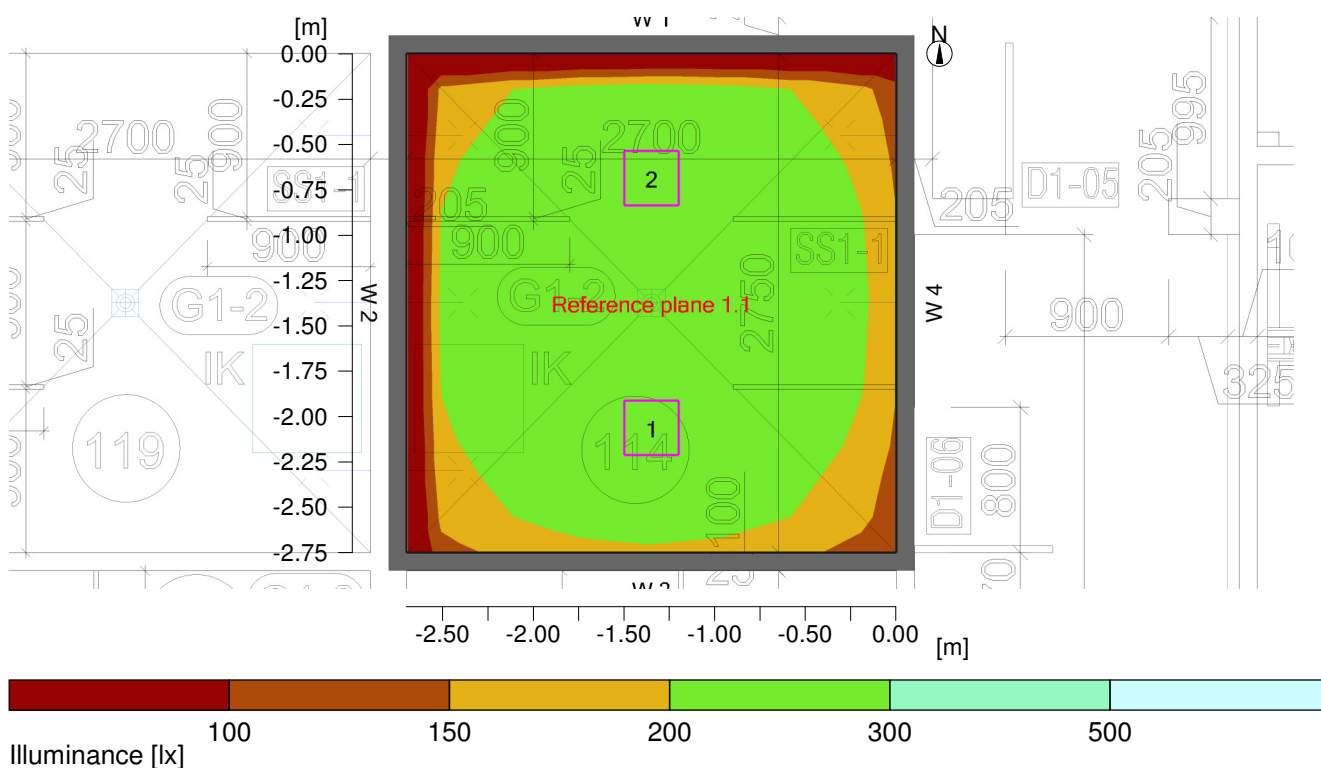
13.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4237.42 m	155.72 m	2.70 m	50.0 %
2	4237.42 m	152.97 m	2.75 m	50.0 %
3	4240.12 m	152.97 m	2.70 m	50.0 %
4	4240.12 m	155.72 m	2.75 m	50.0 %
Floor				30.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

13 114

13.2 Summary, 114

13.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.85 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (7.42 m²)

4047.40 lm
 62.4 W
 8.41 W/m² (3.81 W/m²/100lx)

Evaluation area 1

User profile

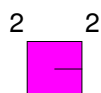
Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)

Horizontal

Em 220 lx (>= 200 lx)
 Emin 154 lx
 Emin/Eav (Uo) 0.70 (>= 0.40)
 Emin/Emax (Ud) 0.55
 UGR (2.0H 2.0H) <=18.5 (< 25.00)
 Position 0.00 m

Type No.\Make

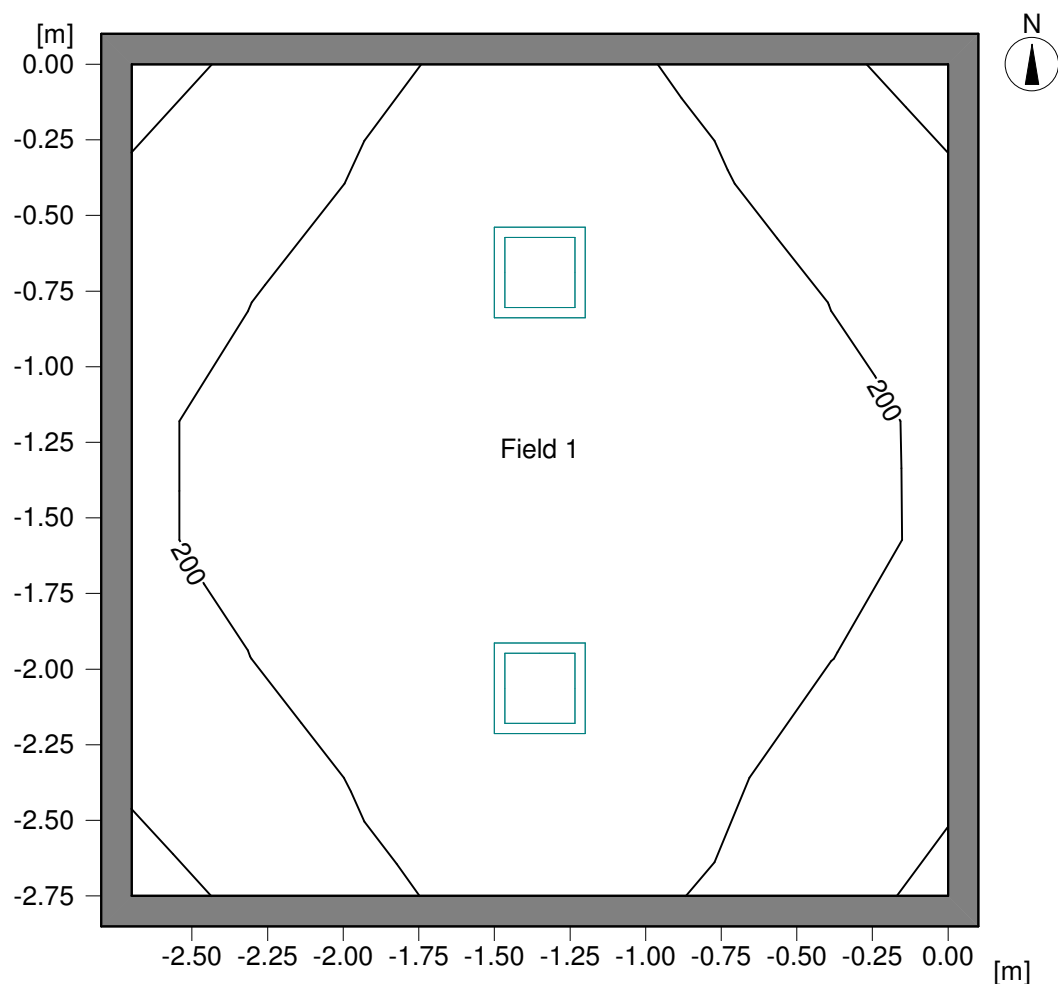


2 2 Order No. : NTC 33 840 04 PN S S 300 E ND
 Luminaire name : NTC 33 840 04 PN S S 300 E ND
 Equipment : 1 x Nest VANT04 module 31.21 W / 2023.69 lm

13 114

13.3 Calculation results, 114

13.3.1 Isolines representation, Floor (E)



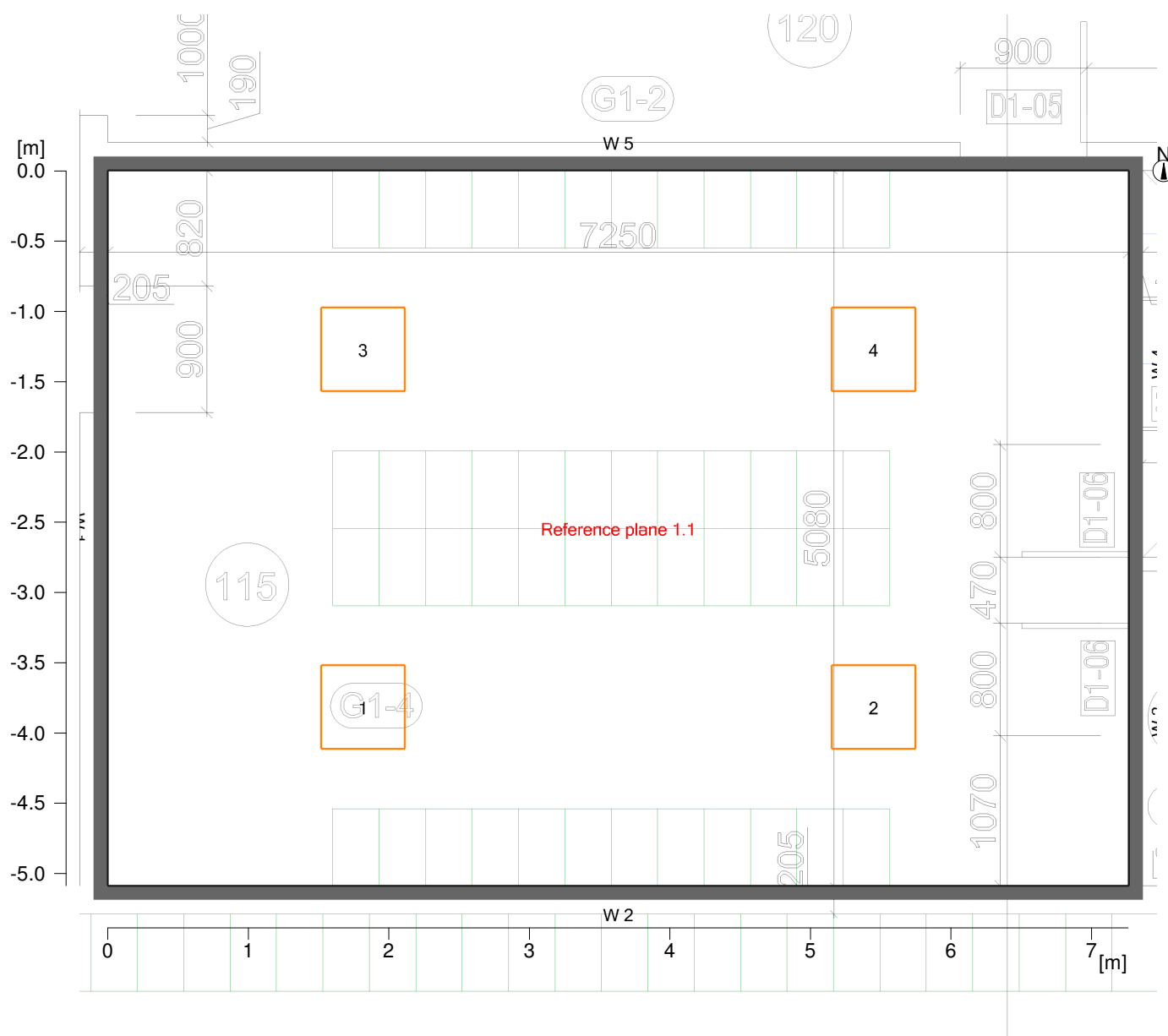
Illuminance [lx]

Average illuminance	Eav	: 208 lx
Minimum illuminance	Emin	: 137 lx
Maximum illuminance	Emax	: 266 lx
Uniformity Uo	Emin/Eav	: 1 : 1.51 (0.66)
Diversity Ud	Emin/Emax	: 1 : 1.94 (0.52)

14 115

14.1 Description, 115

14.1.1 Floor plan

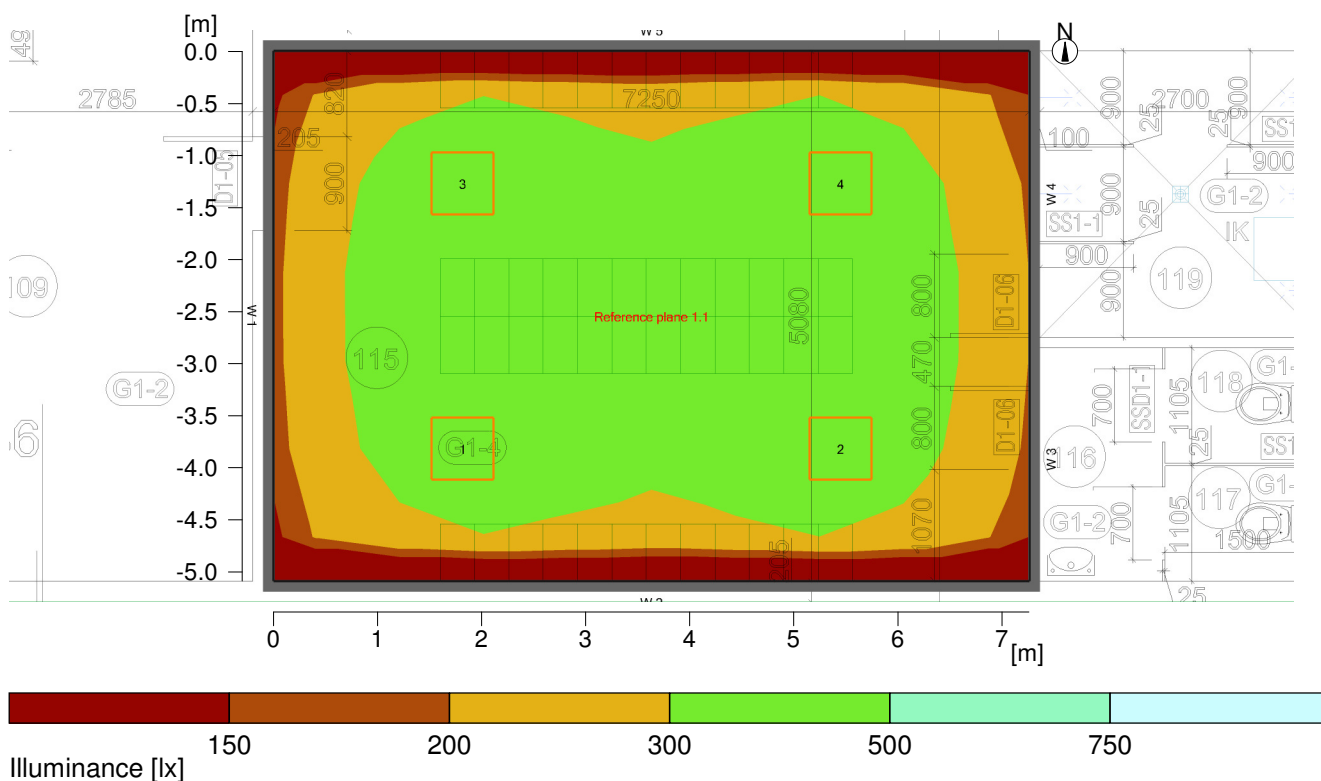


Wall	x	y	Length	Reflectance
1	4227.16 m	150.64 m	5.09 m	50.0 %
2	4234.42 m	150.64 m	7.26 m	50.0 %
3	4234.42 m	152.97 m	2.34 m	50.0 %
4	4234.42 m	155.72 m	2.75 m	50.0 %
5	4227.16 m	155.72 m	7.26 m	50.0 %
Floor				30.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

14 115

14.2 Summary, 115

14.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.85 m
 0.80

Total luminous flux of all lamps 17520.10 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 140.3 W
 Total power per area (36.94 m²) 3.80 W/m² (1.27 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)

Horizontal

Em 298 lx (>= 200 lx)
 Emin 194 lx
 Emin/Eav (Uo) 0.65 (>= 0.40)
 Emin/Emax (Ud) 0.52
 UGR (3.1H 4.4H) <=17.3 (< 25.00)
 Position 0.00 m

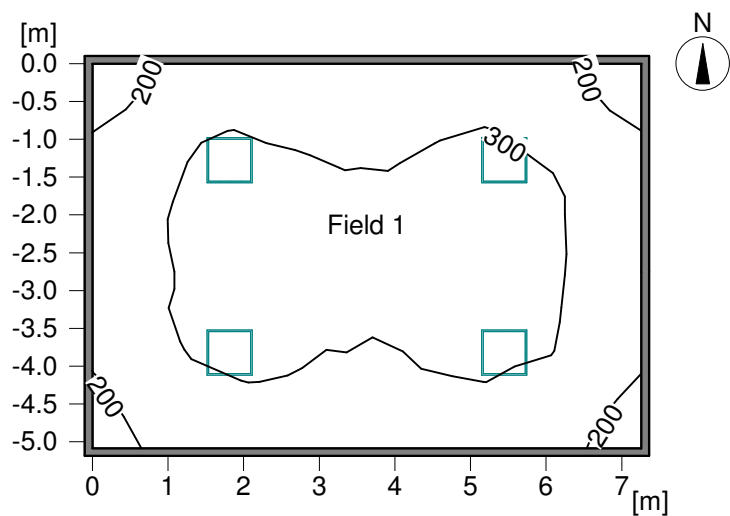
Type No.Make

13 4 Order No. : Leaf Slim 35 W 4000 K Prismatic
 Luminaire name : LFS 35 840 R0606 WU D10 H
 Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.03 lm

14 115

14.3 Calculation results, 115

14.3.1 Isolines representation, Floor (E)



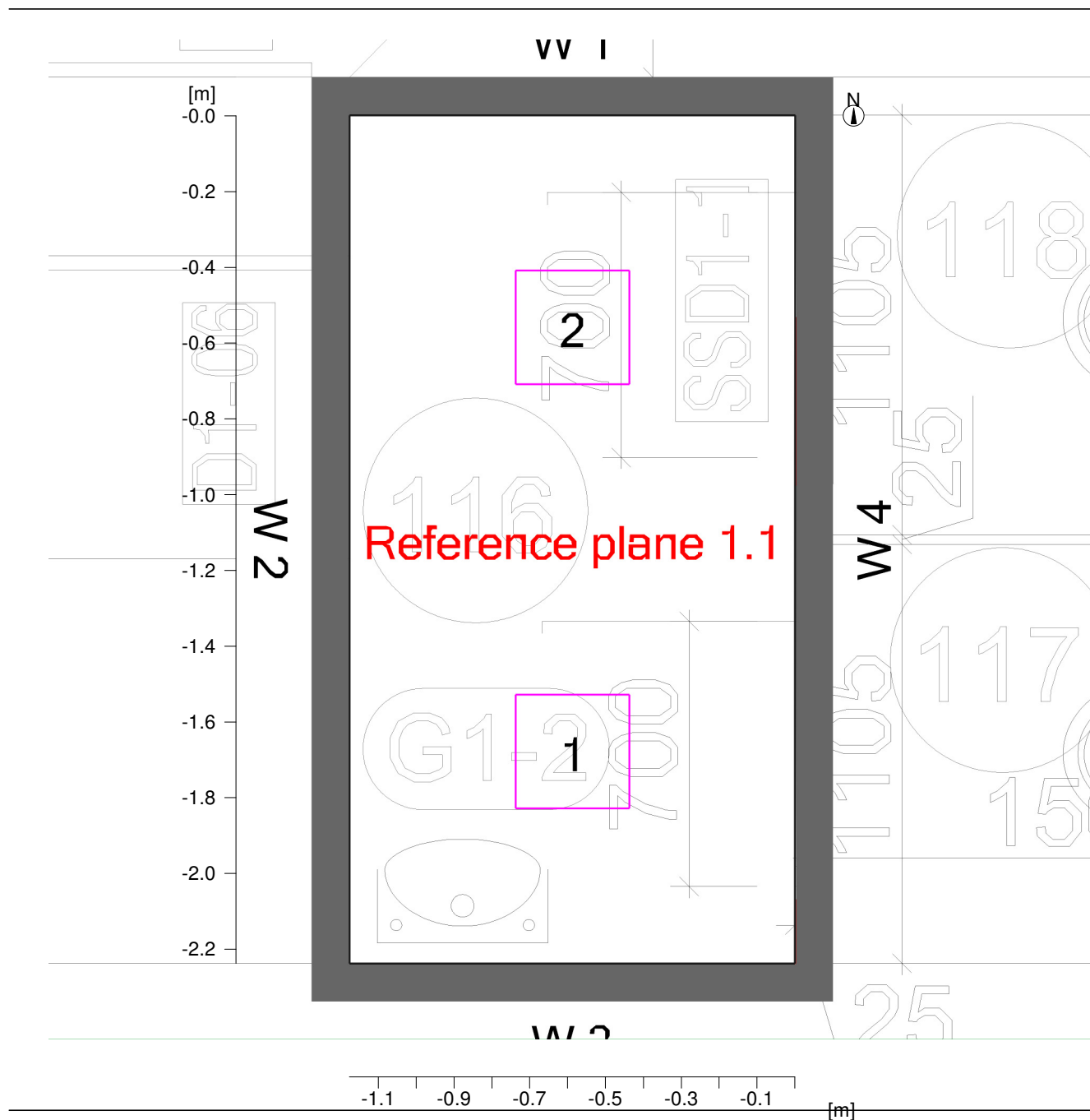
Illuminance [lx]

Average illuminance	Eav	: 263 lx
Minimum illuminance	Emin	: 151 lx
Maximum illuminance	Emax	: 343 lx
Uniformity Uo	Emin/Eav	: 1 : 1.75 (0.57)
Diversity Ud	Emin/Emax	: 1 : 2.28 (0.44)

15 116

15.1 Description, 116

15.1.1 Floor plan

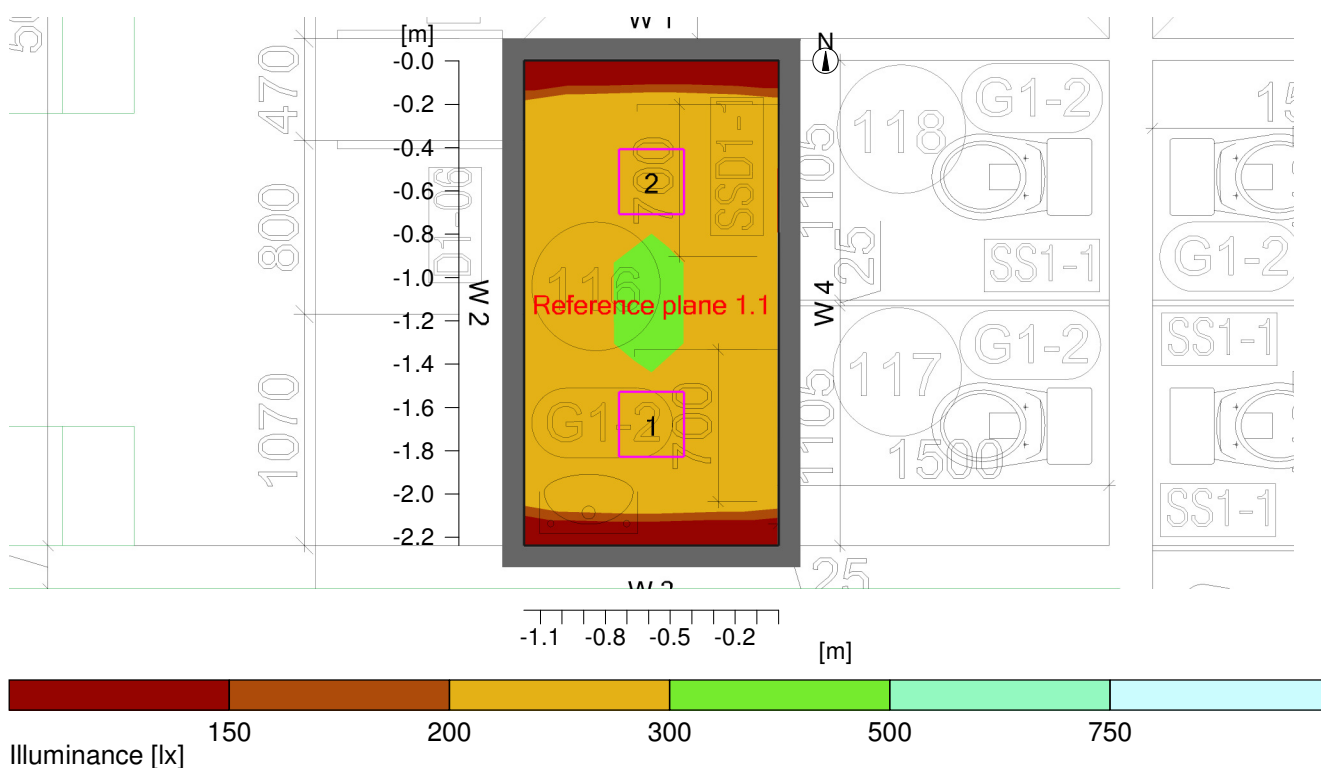


Wall	x	y	Length	Reflectance
1	4234.52 m	152.87 m	1.18 m	50.0 %
2	4234.52 m	150.64 m	2.24 m	50.0 %
3	4235.70 m	150.64 m	1.18 m	50.0 %
4	4235.70 m	152.87 m	2.24 m	50.0 %
Floor				30.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

15 116

15.2 Summary, 116

15.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.85 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (2.63 m²)

4047.40 lm
 62.4 W
 23.73 W/m² (9.20 W/m²/100lx)

Evaluation area 1

User profile

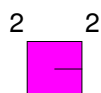
Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)

Horizontal

Em 258 lx (>= 200 lx)
 Emin 226 lx
 Emin/Eav (Uo) 0.88 (>= 0.40)
 Emin/Emax (Ud) 0.77
 UGR (2.0H 2.0H) <=18.5 (< 25.00)
 Position 0.00 m

Type No.\Make

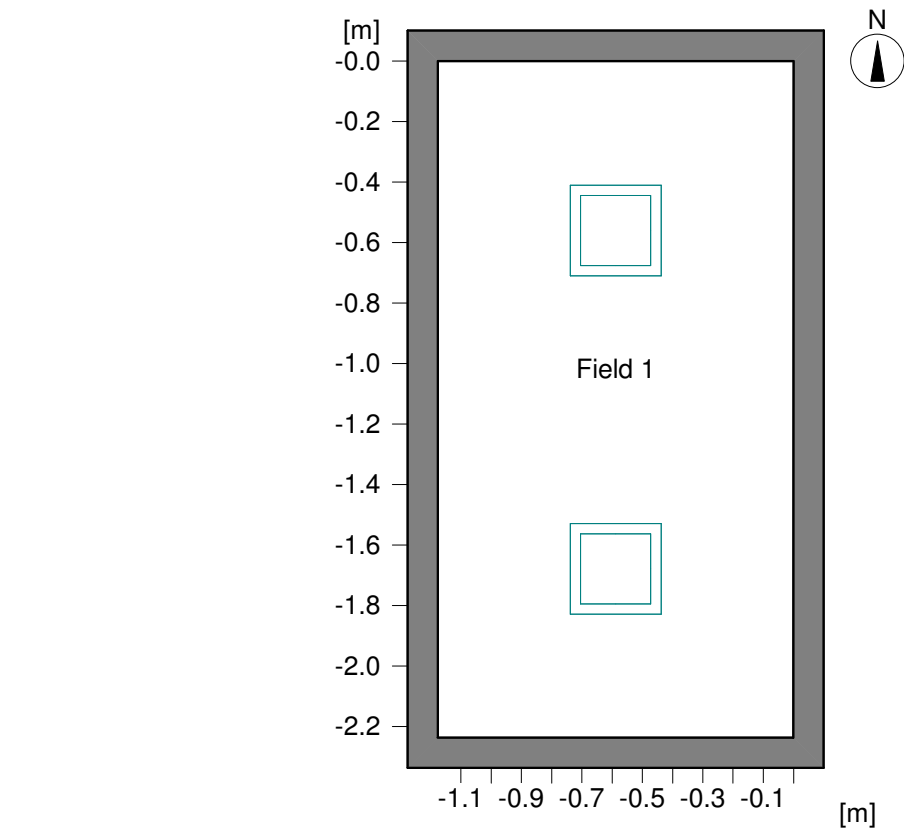


Order No. : NTC 33 840 04 PN S S 300 E ND
 Luminaire name : NTC 33 840 04 PN S S 300 E ND
 Equipment : 1 x Nest VANT04 module 31.21 W / 2023.69 lm

15 116

15.3 Calculation results, 116

15.3.1 Isolines representation, Floor (E)



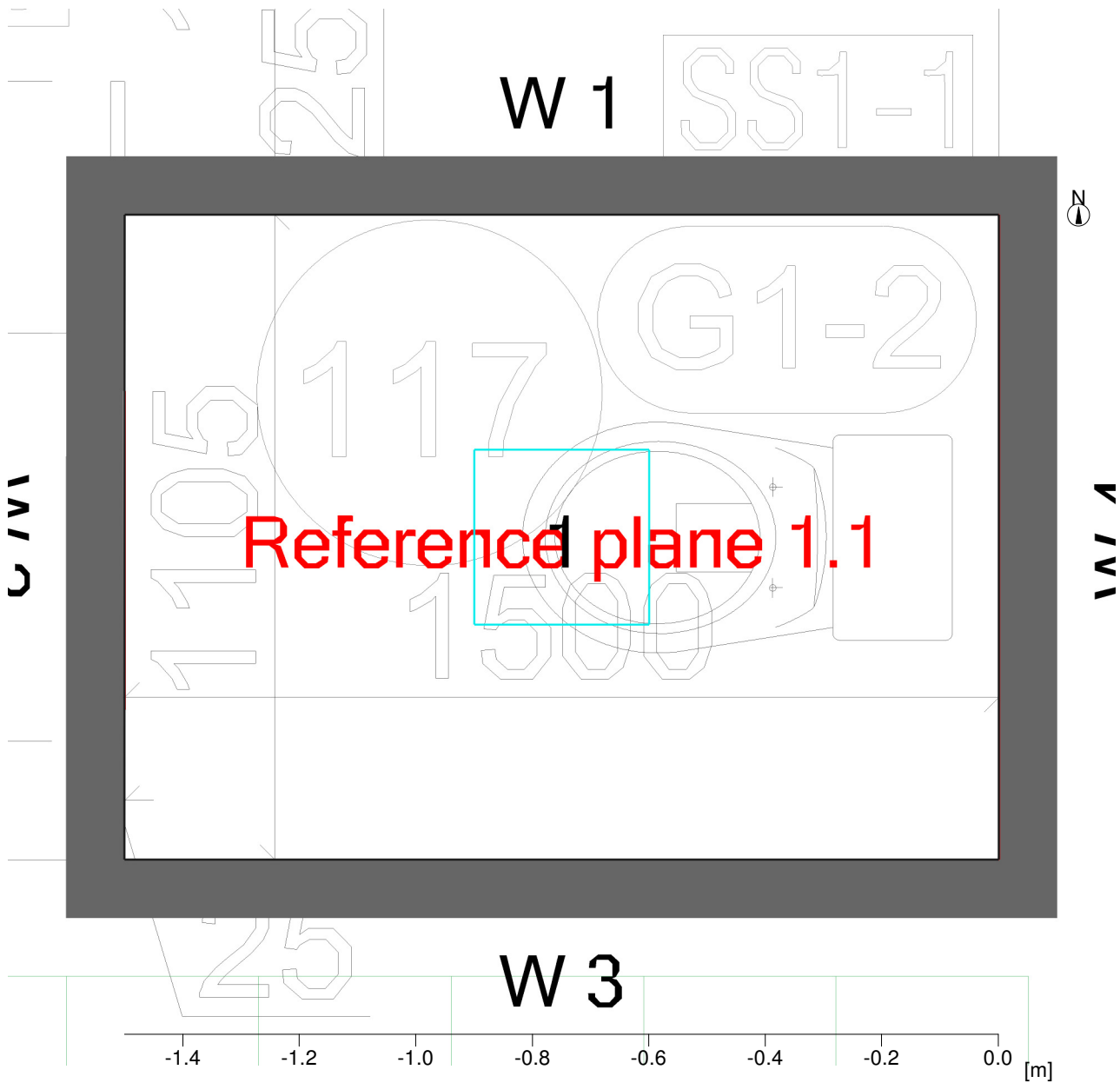
Illuminance [lx]

Average illuminance	Eav	: 250 lx
Minimum illuminance	Emin	: 203 lx
Maximum illuminance	Emax	: 284 lx
Uniformity Uo	Emin/Eav	: 1 : 1.23 (0.81)
Diversity Ud	Emin/Emax	: 1 : 1.40 (0.71)

16 117

16.1 Description, 117

16.1.1 Floor plan

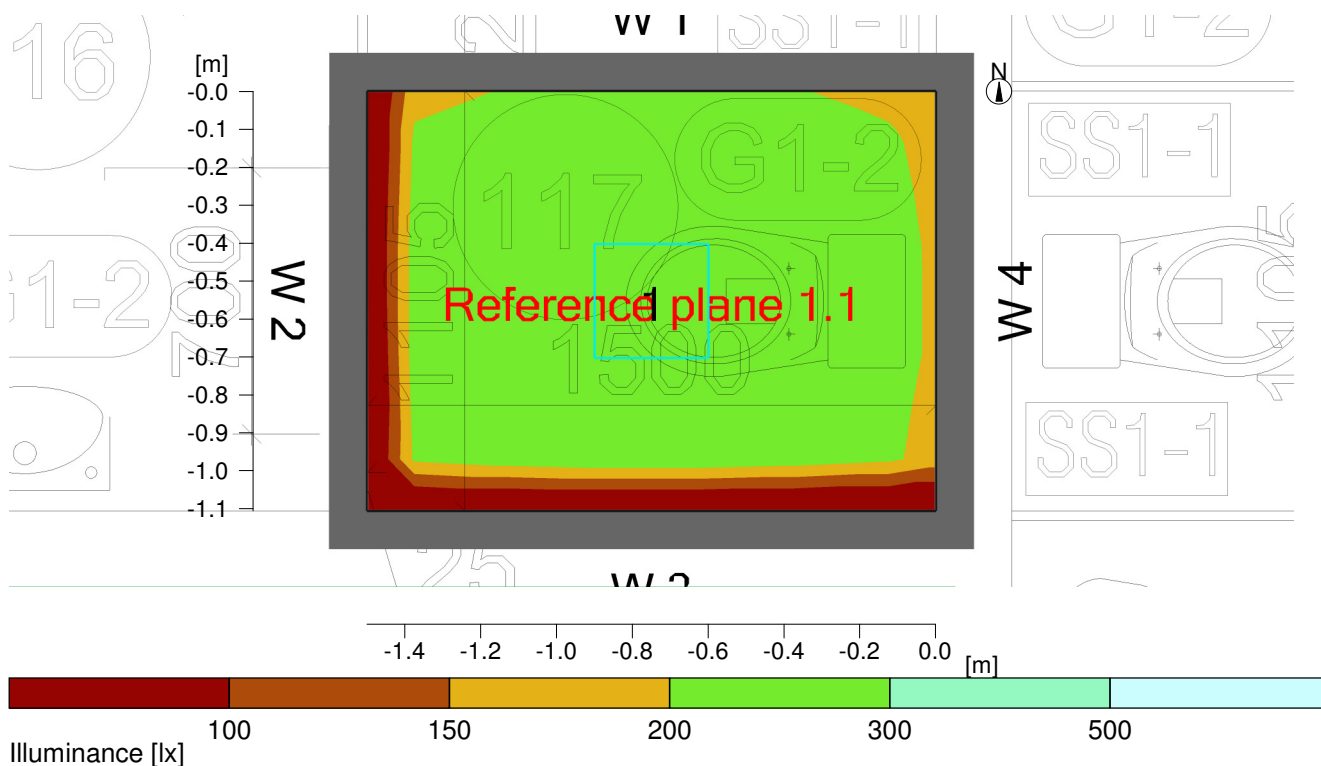


Wall	x	y	Length	Reflectance
1	4235.72 m	151.74 m	1.50 m	50.0 %
2	4235.72 m	150.64 m	1.11 m	50.0 %
3	4237.22 m	150.64 m	1.50 m	50.0 %
4	4237.22 m	151.74 m	1.11 m	50.0 %
Floor				30.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

16 117

16.2 Summary, 117

16.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.85 m
Maintenance factor	0.80
Total luminous flux of all lamps	2592.00 lm
Total power	40.7 W
Total power per area (1.66 m²)	24.55 W/m² (11.01 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)
 Horizontal
 Em 223 lx (>= 200 lx)
 Emin 200 lx
 Emin/Eav (Uo) 0.89 (>= 0.40)
 Emin/Emax (Ud) 0.82
 UGR (2.0H 2.0H) <=19.3 (< 25.00)
 Position 0.00 m

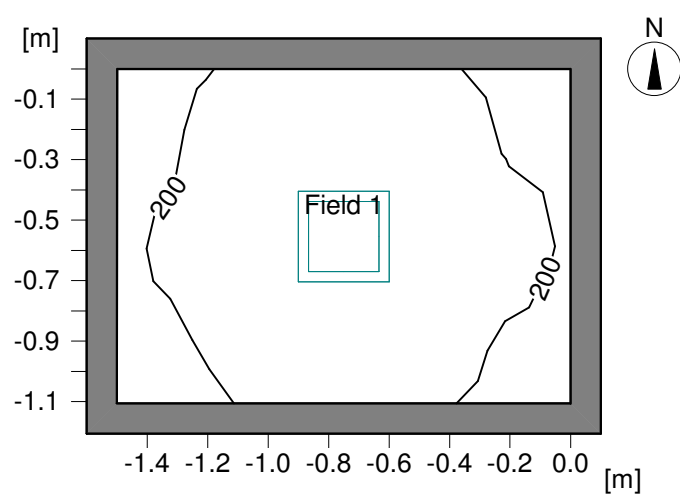
Type No.Make

38	1	Order No.	: NTC 42 840 05 PN S S 300 E ND
		Luminaire name	: NTC 42 840 05 PN S S 300 E ND
		Equipment	: 1 x Nest VANT03 module 40.72 W / 2591.96 lm

16 117

16.3 Calculation results, 117

16.3.1 Isolines representation, Floor (E)



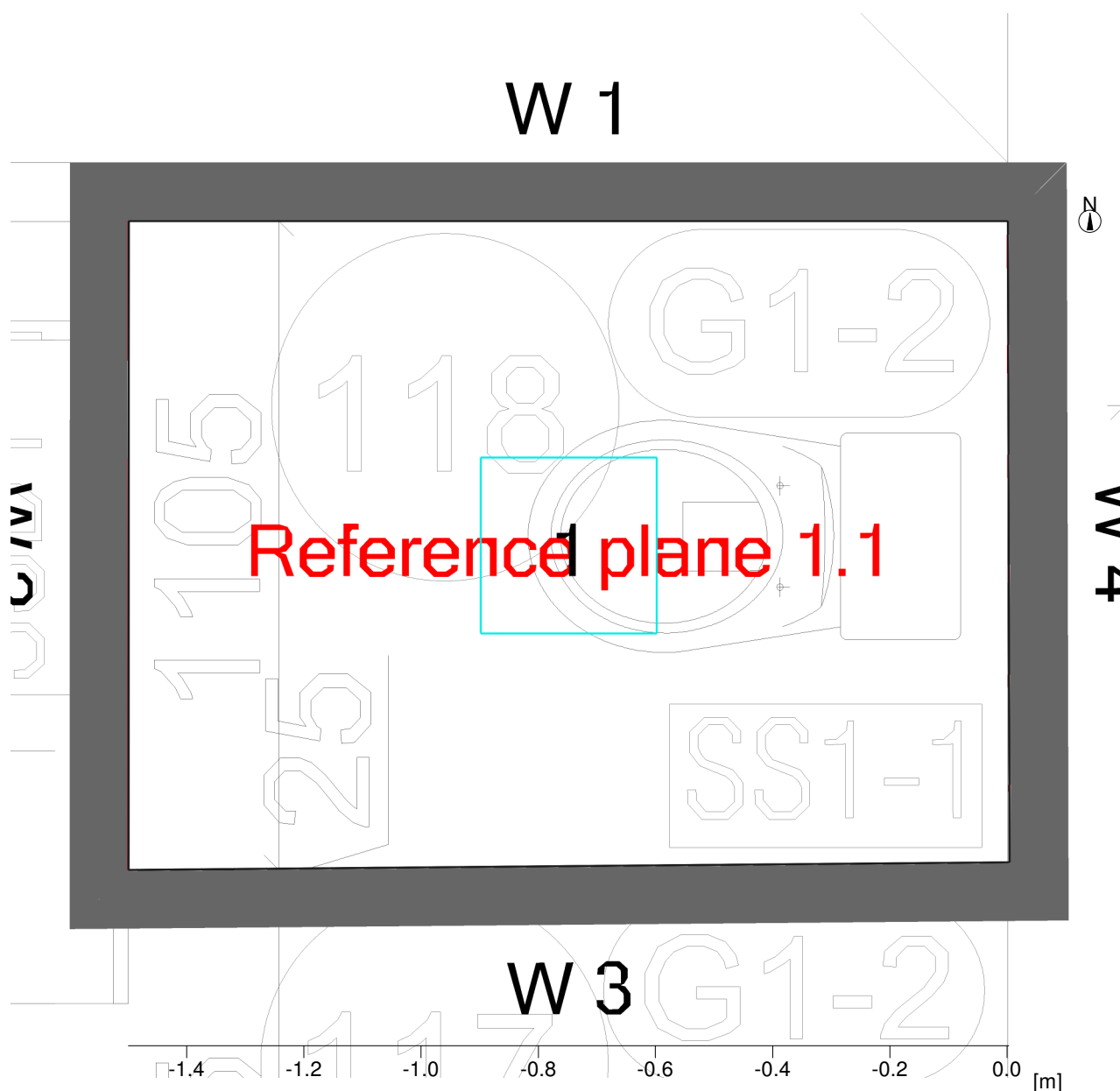
Illuminance [lx]

Average illuminance	Eav	: 207 lx
Minimum illuminance	Emin	: 184 lx
Maximum illuminance	Emax	: 230 lx
Uniformity Uo	Emin/Eav	: 1 : 1.12 (0.89)
Diversity Ud	Emin/Emax	: 1 : 1.25 (0.80)

17 118

17.1 Description, 118

17.1.1 Floor plan

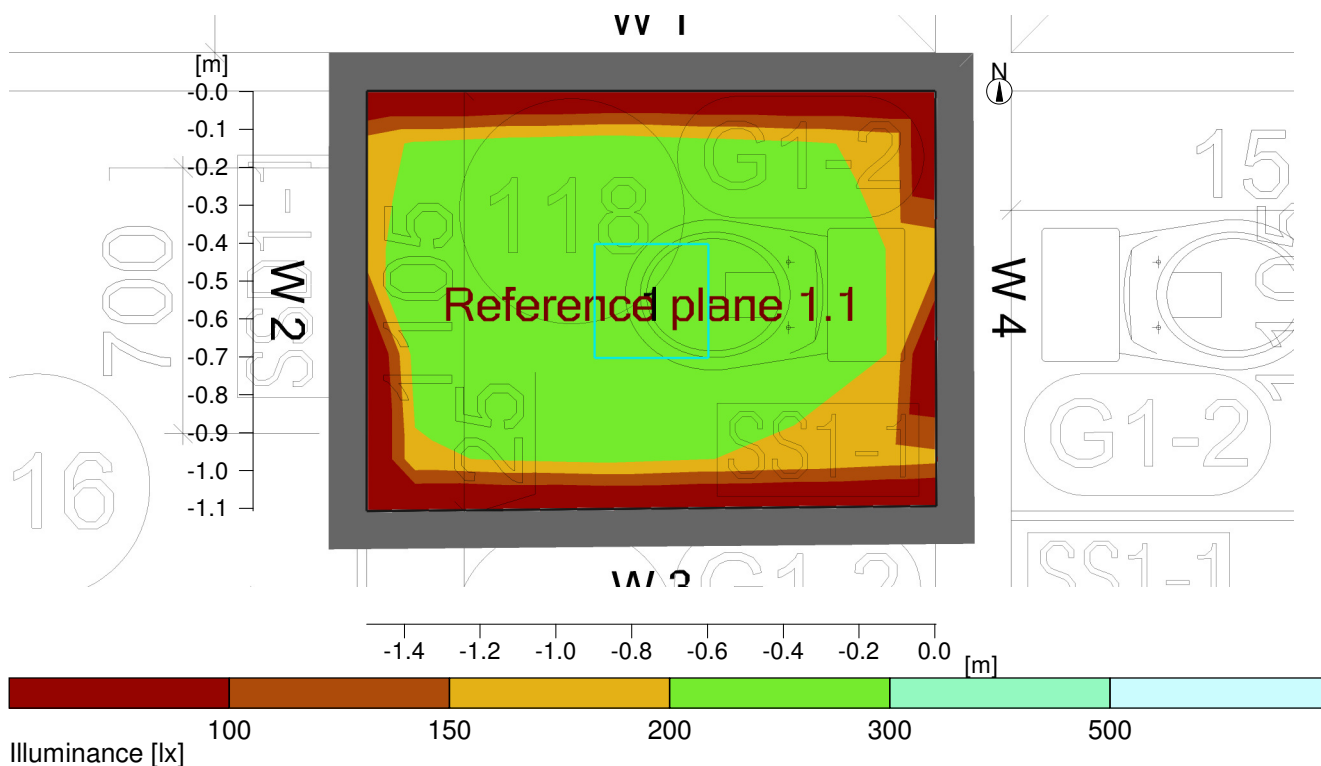


Wall	x	y	Length	Reflectance
1	4235.72 m	152.87 m	1.50 m	50.0 %
2	4235.72 m	151.77 m	1.11 m	50.0 %
3	4237.22 m	151.78 m	1.50 m	50.0 %
4	4237.22 m	152.87 m	1.09 m	50.0 %
Floor				30.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

17 118

17.2 Summary, 118

17.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.85 m
Maintenance factor	0.80
Total luminous flux of all lamps	2592.00 lm
Total power	40.7 W
Total power per area (1.65 m²)	24.67 W/m² (12.00 W/m²/100lx)

Evaluation area 1

User profile	Reference plane 1.1
	General areas inside buildings - Rest, sanitation and first aid rooms
	5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)
	Horizontal
Em	206 lx (>= 200 lx)
Emin	166 lx
Emin/Eav (Uo)	0.81 (>= 0.40)
Emin/Emax (Ud)	0.69
UGR (2.0H 2.0H)	<=19.3 (< 25.00)
Position	0.00 m

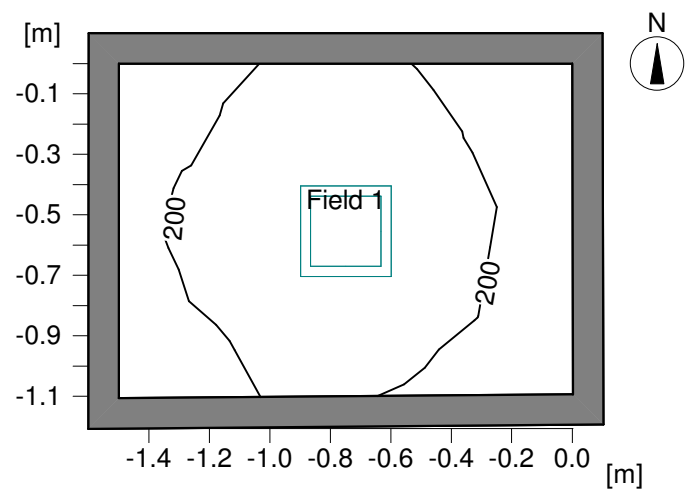
Type No.Make

38	1	Order No.	: NTC 42 840 05 PN S S 300 E ND
		Luminaire name	: NTC 42 840 05 PN S S 300 E ND
		Equipment	: 1 x Nest VANT03 module 40.72 W / 2591.96 lm

17 118

17.3 Calculation results, 118

17.3.1 Isolines representation, Floor (E)



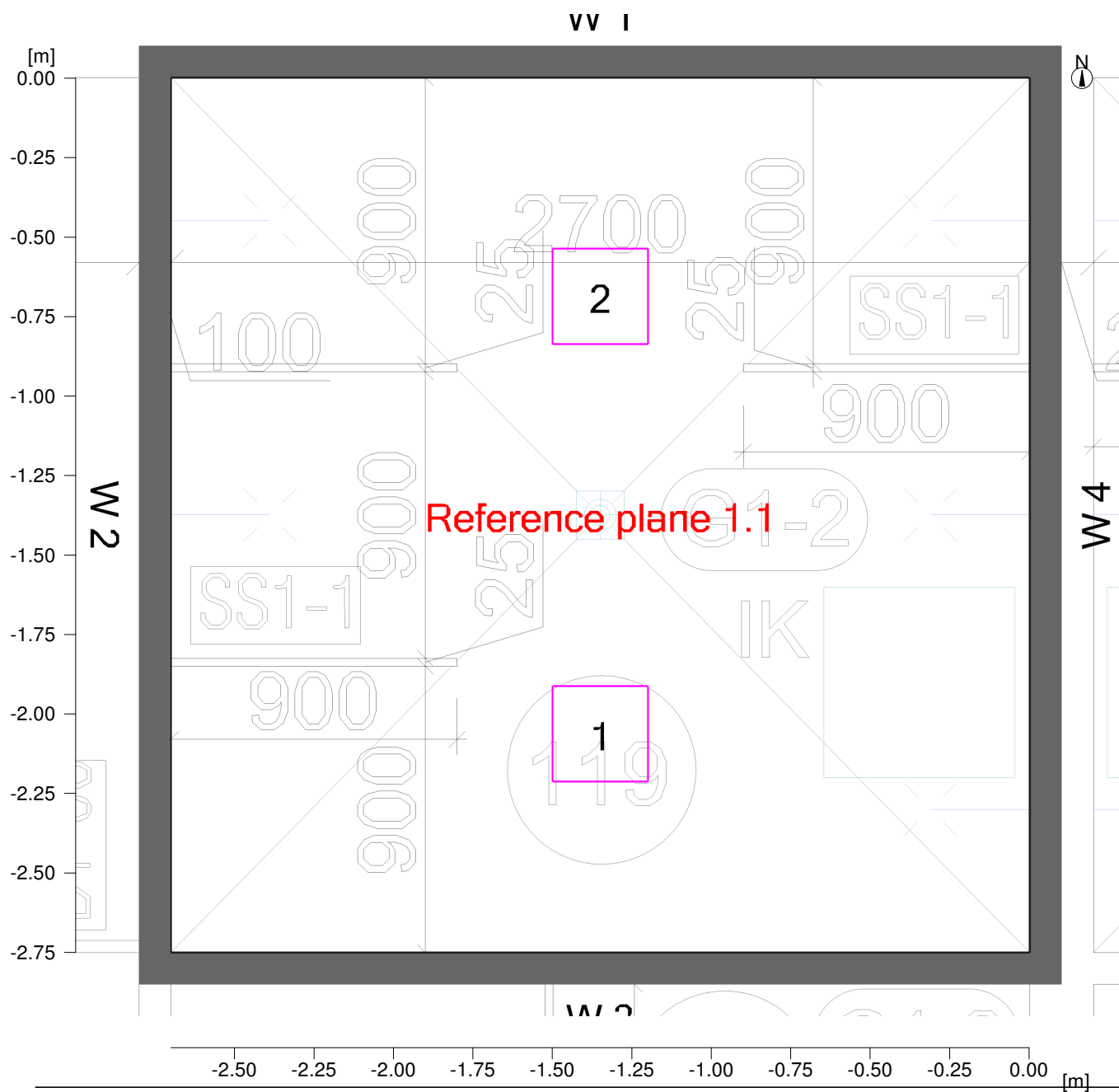
Illuminance [lx]

Average illuminance	Eav	: 207 lx
Minimum illuminance	Emin	: 194 lx
Maximum illuminance	Emax	: 220 lx
Uniformity Uo	Emin/Eav	: 1 : 1.07 (0.94)
Diversity Ud	Emin/Emax	: 1 : 1.13 (0.88)

18 119

18.1 Description, 119

18.1.1 Floor plan



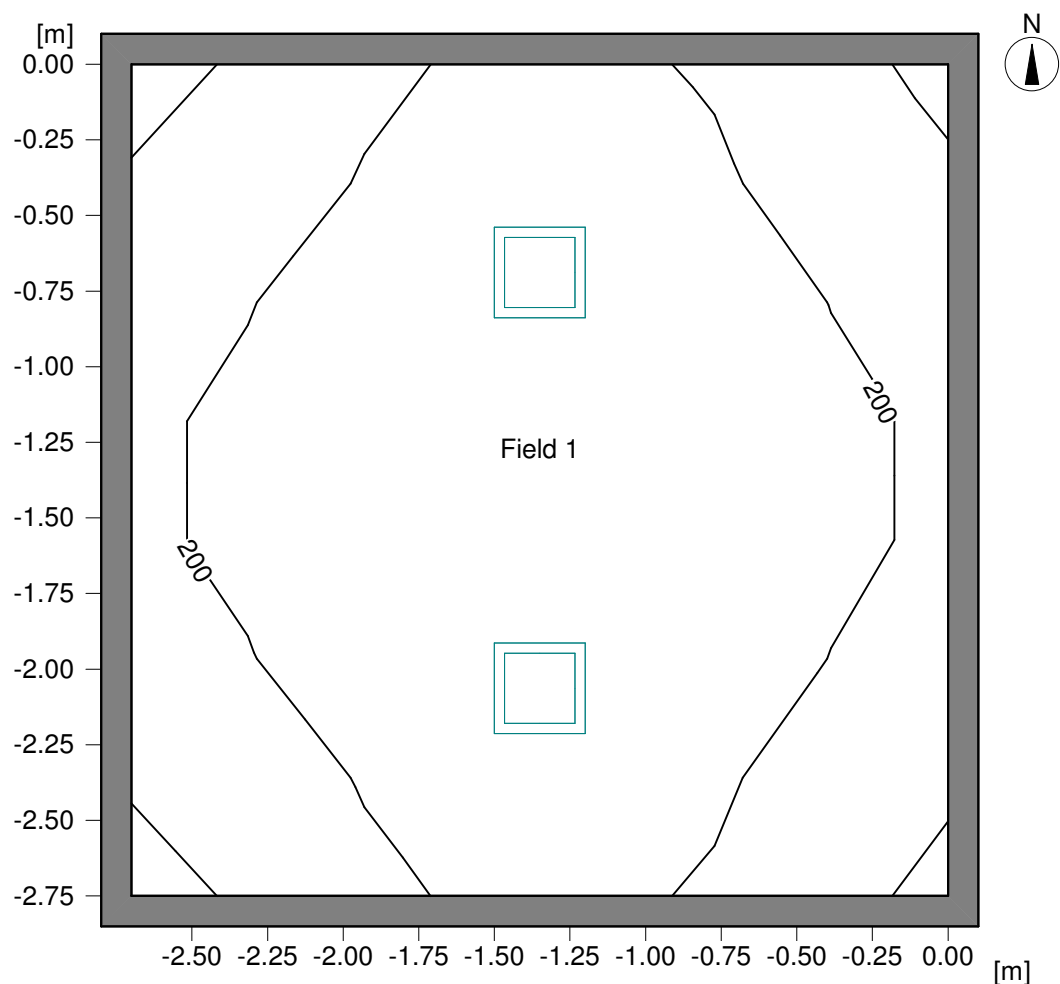
Wall	x	y	Length	Reflectance
1	4234.52 m	155.72 m	2.70 m	50.0 %
2	4234.52 m	152.97 m	2.75 m	50.0 %
3	4237.22 m	152.97 m	2.70 m	50.0 %
4	4237.22 m	155.72 m	2.75 m	50.0 %
Floor				30.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

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18 119

18.3 Calculation results, 119

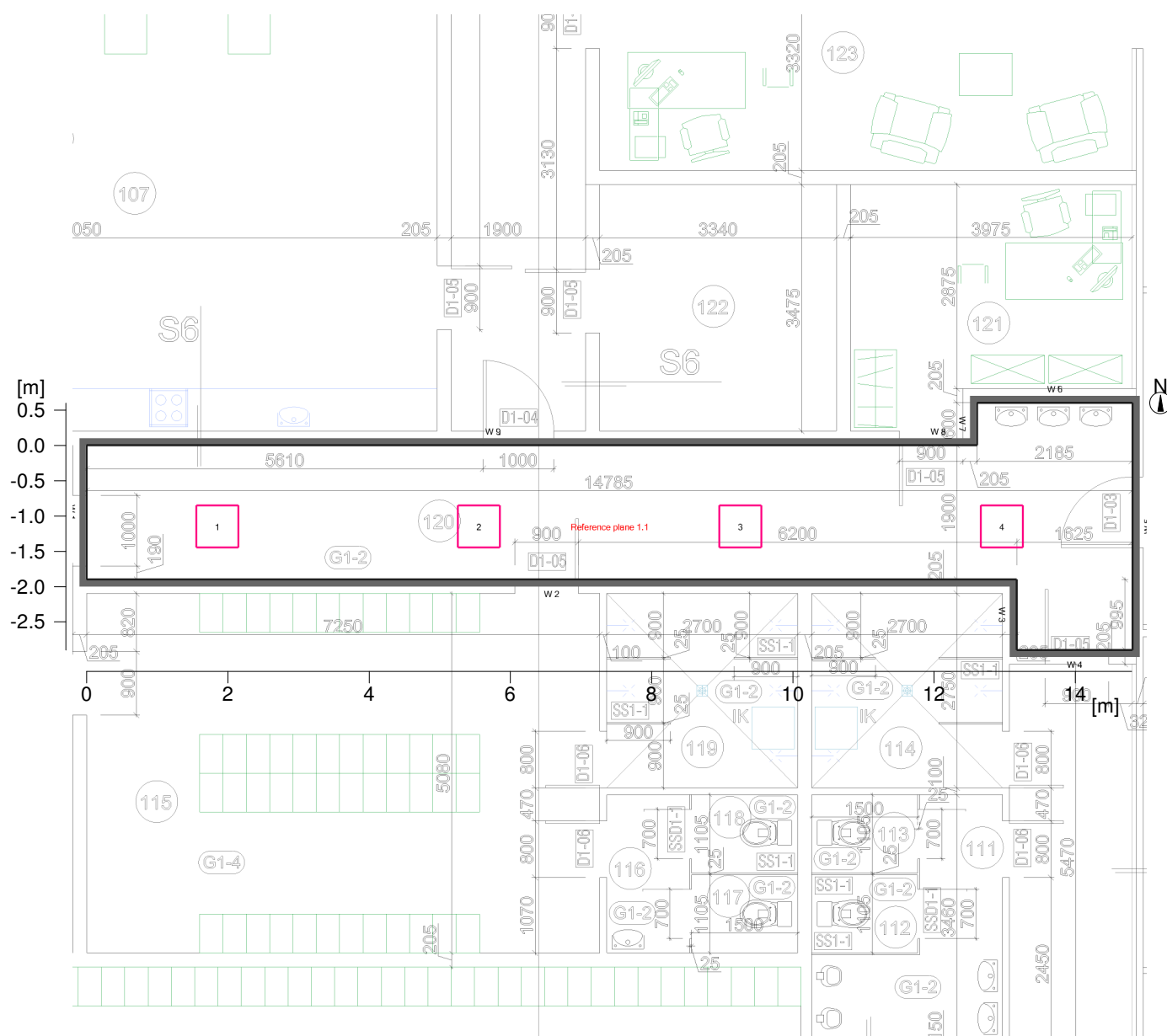
18.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 201 lx
Minimum illuminance	Emin	: 137 lx
Maximum illuminance	Emax	: 263 lx
Uniformity U ₀	Emin/Eav	: 1 : 1.47 (0.68)
Diversity U _d	Emin/Emax	: 1 : 1.92 (0.52)

19.1.1 Floor plan



Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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19 120

19.1 Description, 120

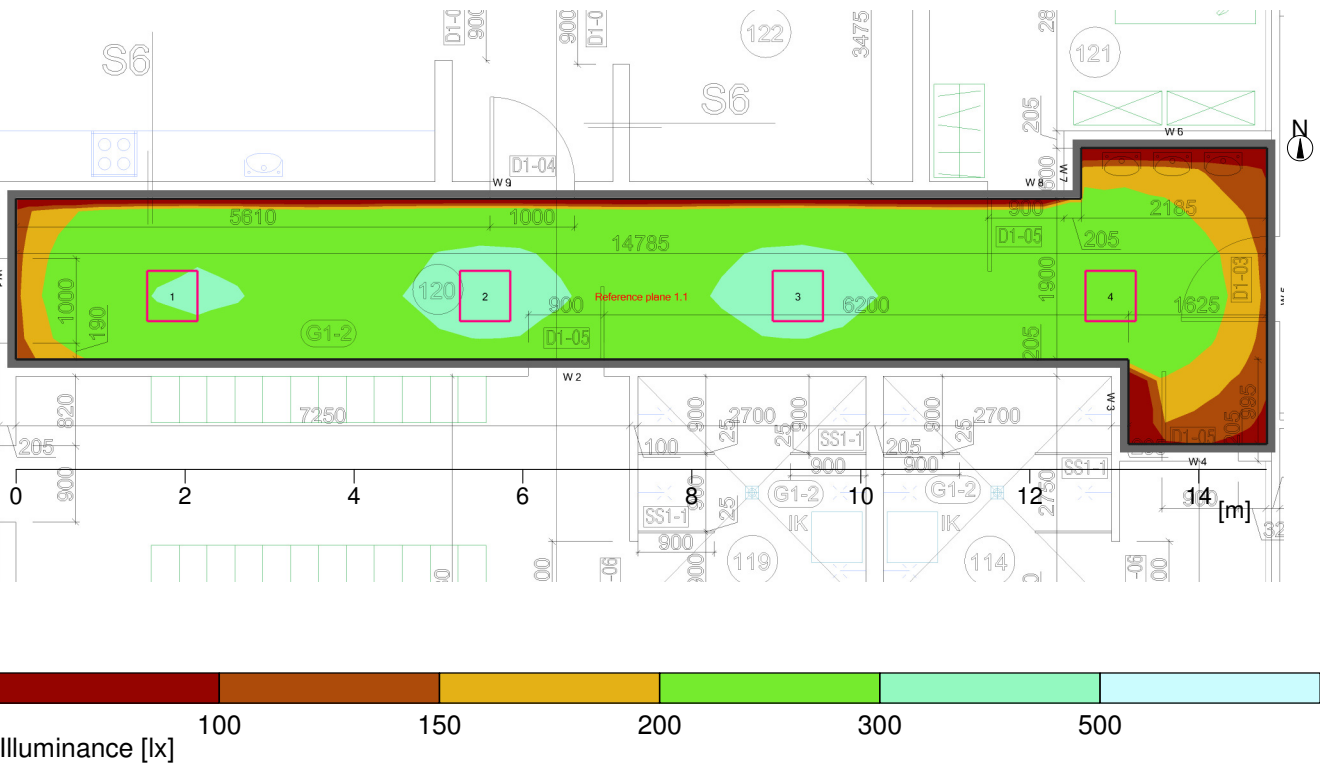
19.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4227.16 m	155.92 m	1.90 m	50.0 %
2	4240.32 m	155.92 m	13.16 m	50.0 %
3	4240.32 m	154.92 m	1.00 m	50.0 %
4	4241.96 m	154.92 m	1.64 m	50.0 %
5	4241.96 m	158.42 m	3.50 m	50.0 %
6	4239.76 m	158.42 m	2.20 m	50.0 %
7	4239.76 m	157.82 m	0.60 m	50.0 %
8	4238.66 m	157.82 m	1.10 m	50.0 %
9	4227.16 m	157.82 m	11.50 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

19 120

19.2 Summary, 120

19.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
Height of luminaire plane
Maintenance factor

Average indirect fraction
2.88 m
0.80

Total luminous flux of all lamps 17520.30 lm (100.00% dimmed)
(Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 140.3 W
Total power per area (31.08 m²) 4.51 W/m² (1.86 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
Horizontal

Em 242 lx (>= 100 lx)
Emin 102 lx
Emin/Eav (Uo) 0.42 (>= 0.40)
Emin/Emax (Ud) 0.34
Position 0.00 m

Type No.\Make

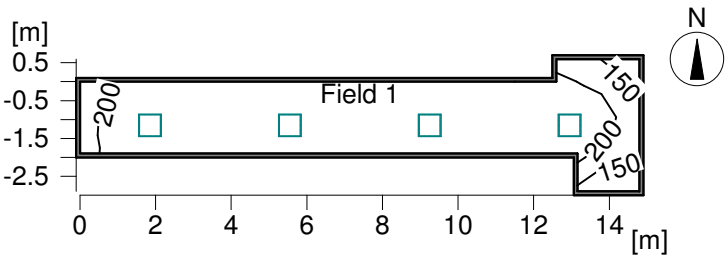


Order No. : Leaf Slim 35 W 4000 K Prismatic
Luminaire name : LFS 35 840 R0606 WU N20 H
Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.08 lm

19 120

19.3 Calculation results, 120

19.3.1 Isolines representation, Floor (E)



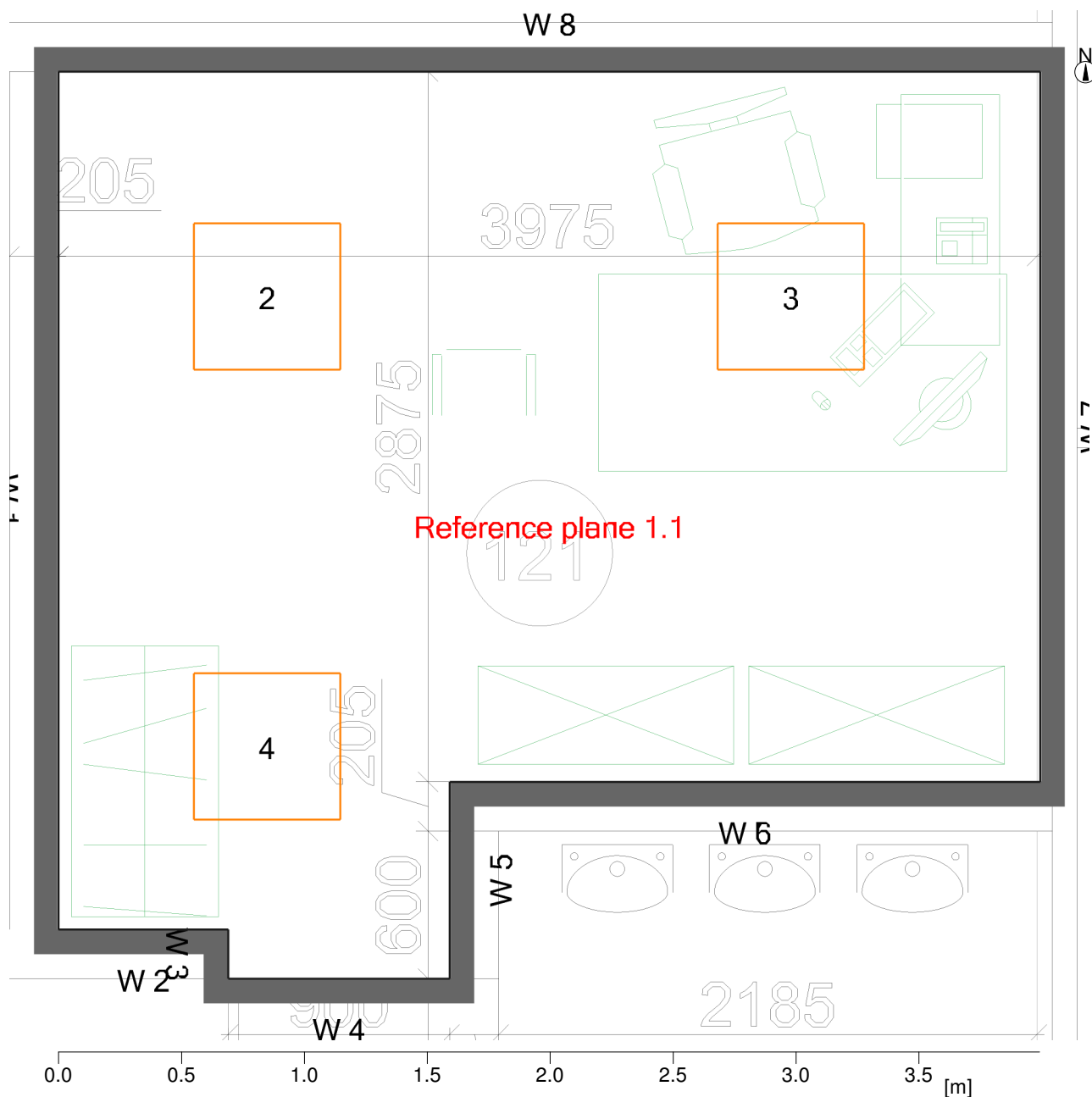
Illuminance [lx]

Average illuminance	Eav	: 224 lx
Minimum illuminance	Emin	: 101 lx
Maximum illuminance	Emax	: 283 lx
Uniformity Uo	Emin/Eav	: 1 : 2.22 (0.45)
Diversity Ud	Emin/Emax	: 1 : 2.81 (0.36)

20 121

20.1 Description, 121

20.1.1 Floor plan

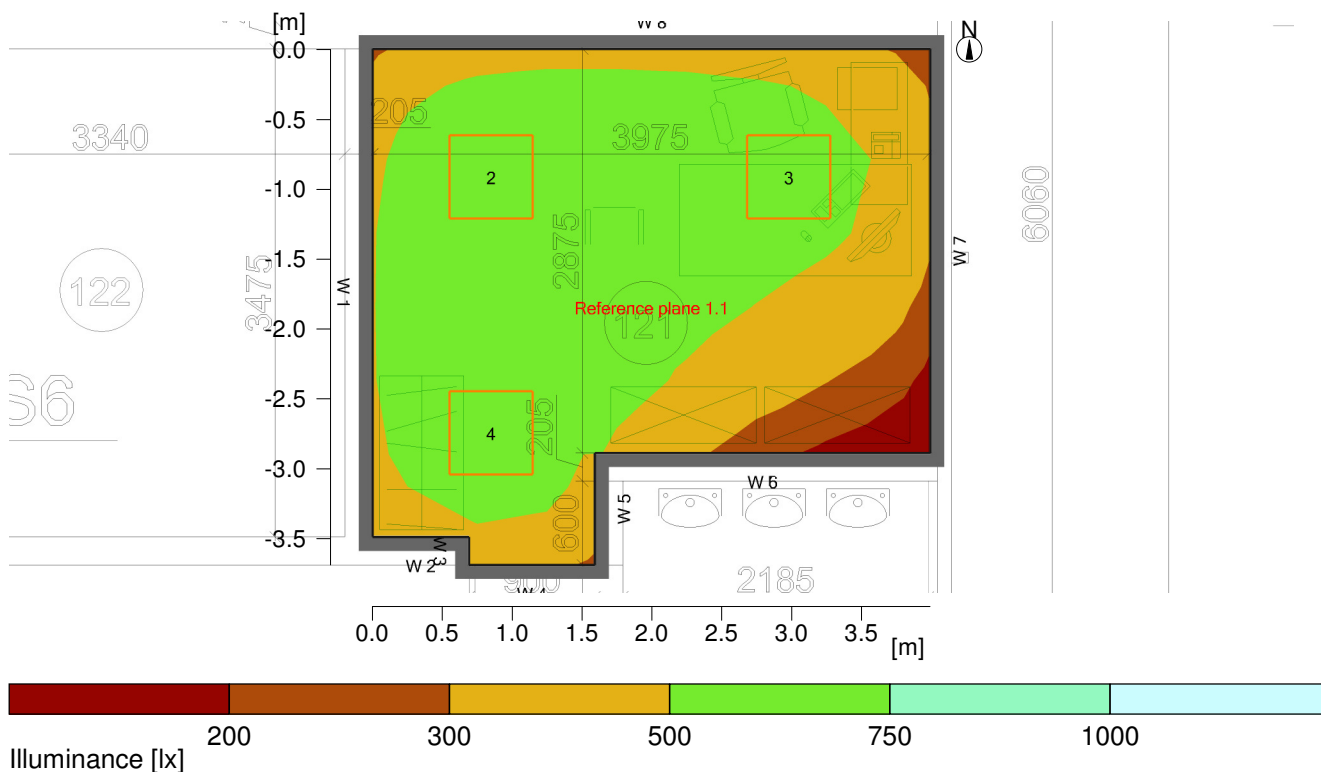


Wall	x	y	Length	Reflectance
1	4237.97 m	158.02 m	3.49 m	50.0 %
2	4238.66 m	158.02 m	0.69 m	50.0 %
3	4238.66 m	157.82 m	0.20 m	50.0 %
4	4239.56 m	157.82 m	0.90 m	50.0 %
5	4239.56 m	158.62 m	0.80 m	50.0 %
6	4241.96 m	158.62 m	2.40 m	50.0 %
7	4241.96 m	161.51 m	2.89 m	50.0 %
8	4237.97 m	161.51 m	3.99 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.75 m		

20 121

20.2 Summary, 121

20.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.88 m
Maintenance factor	0.80
Total luminous flux of all lamps	13140.10 lm
Total power	105.2 W
Total power per area (12.66 m ²)	8.31 W/m ² (1.56 W/m ² /100lx)

Evaluation area 1

User profile

Reference plane 1.1

Offices
 5.26.2 (EN 12464-1, 8.2011) Writing, typing, reading, data processing (Ra >80.00)
 Horizontal
 Em 532 lx (>= 500 lx)
 Emin 221 lx
 Emin/Eav (Uo) 0.42 (>= 0.60)
 Emin/Emax (Ud) 0.32
 UGR (2.2H 2.4H) <=15.8 (< 19.00)
 Position 0.75 m

Type No. Make

13 3

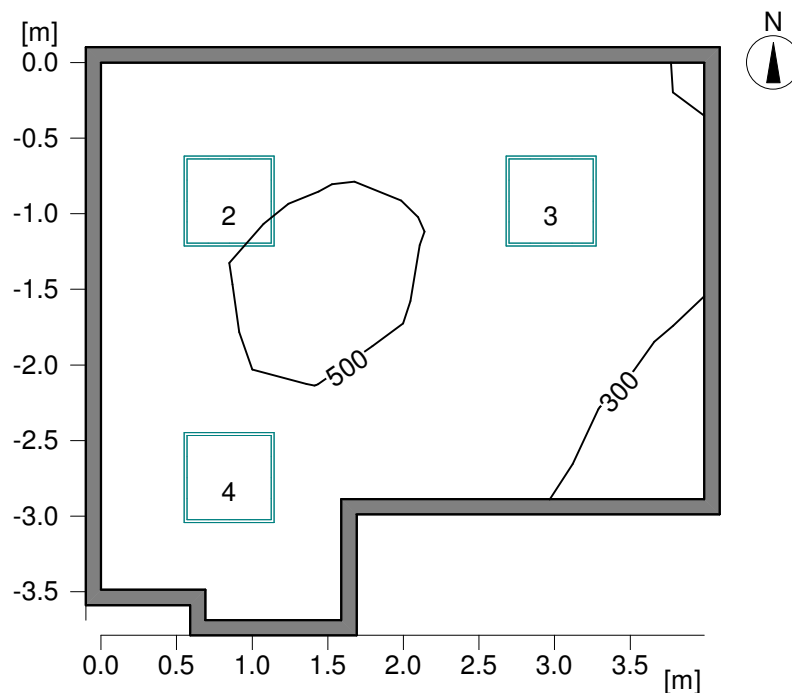


Order No. : Leaf Slim 35 W 4000 K Prismatic
 Luminaire name : LFS 35 840 R0606 WU D10 H
 Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.03 lm

20 121

20.3 Calculation results, 121

20.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 400 lx
Minimum illuminance	Emin	: 224 lx
Maximum illuminance	Emax	: 521 lx
Uniformity Uo	Emin/Eav	: 1 : 1.78 (0.56)
Diversity Ud	Emin/Emax	: 1 : 2.32 (0.43)

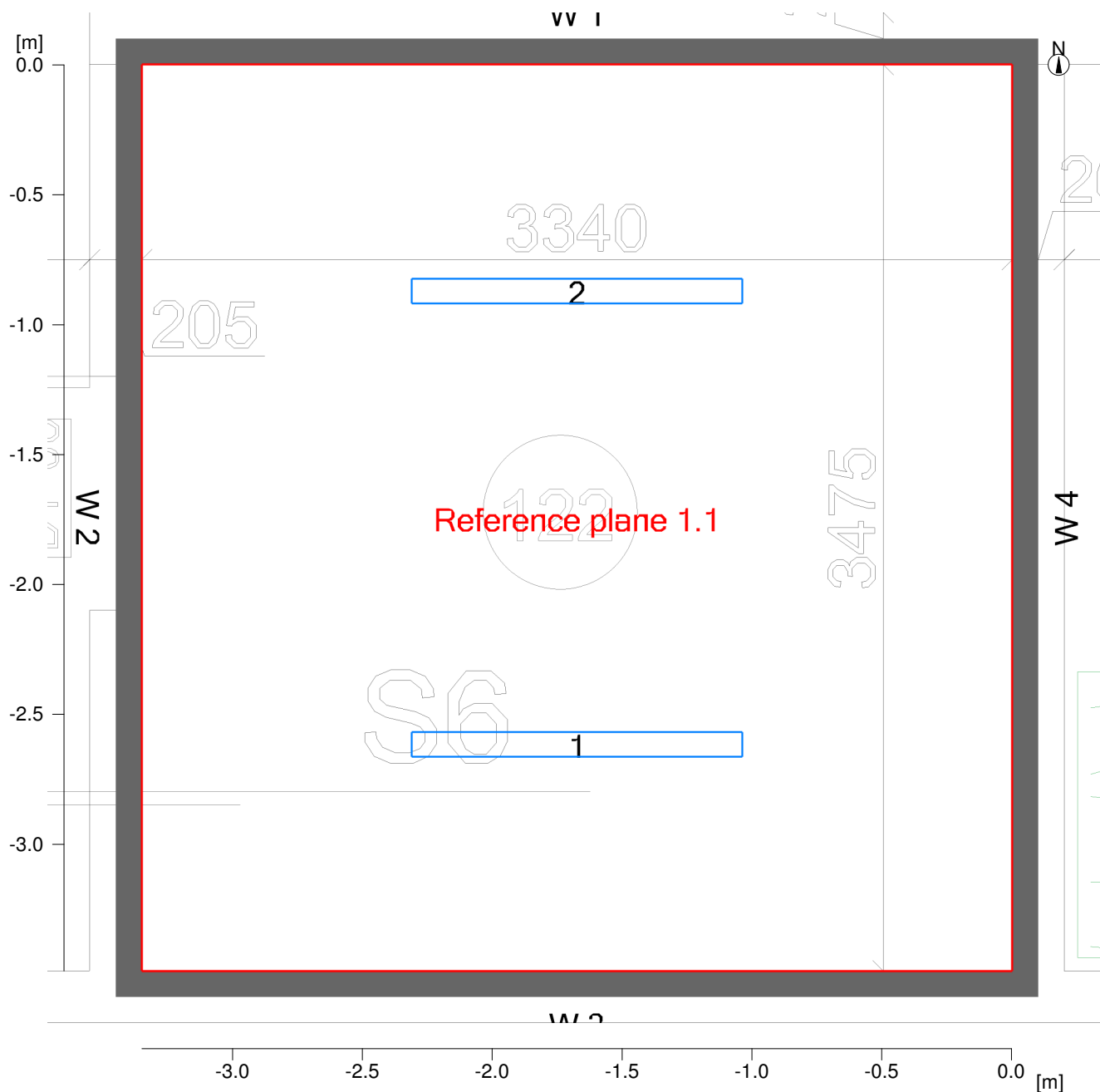
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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21 122

21.1 Description, 122

21.1.1 Floor plan

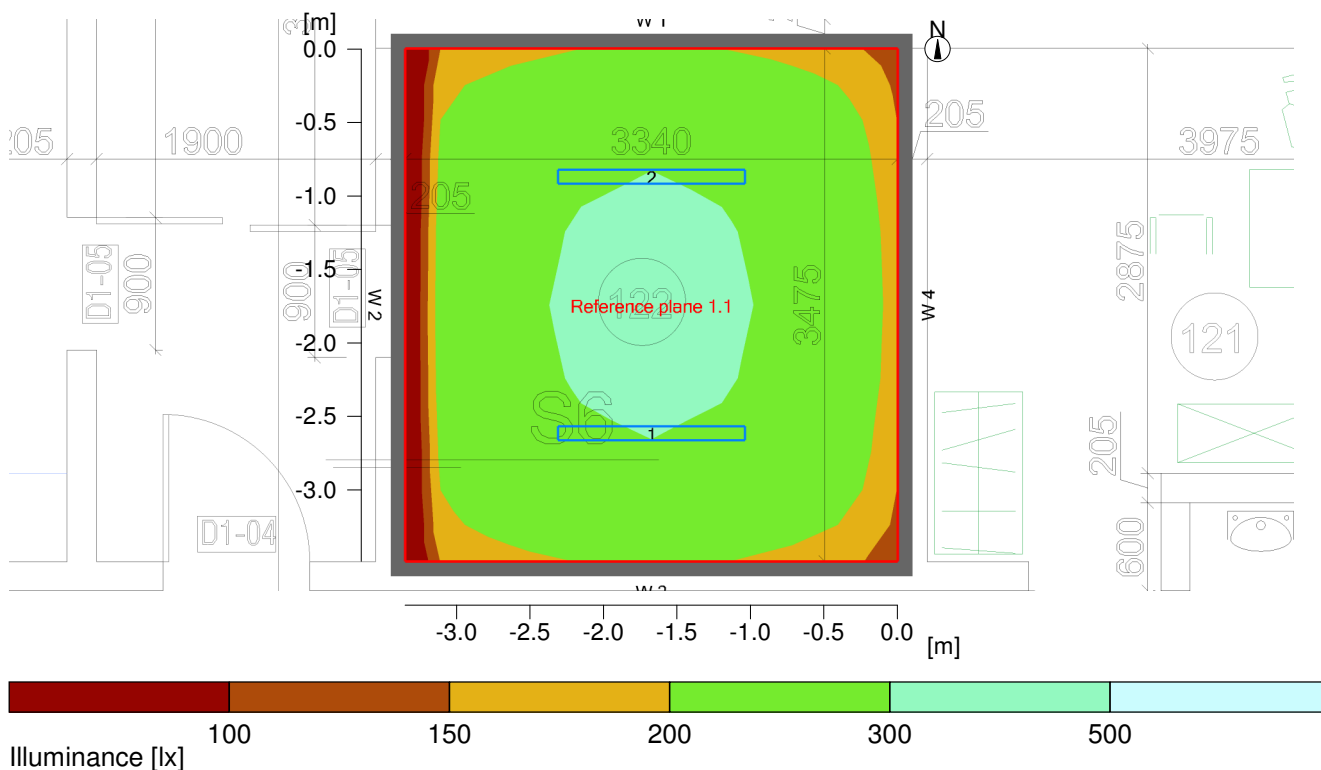


Wall	x	y	Length	Reflectance
1	4234.42 m	161.51 m	3.35 m	50.0 %
2	4234.42 m	158.02 m	3.49 m	50.0 %
3	4237.77 m	158.02 m	3.35 m	50.0 %
4	4237.77 m	161.51 m	3.49 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

21 122

21.2 Summary, 122

21.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.88 m
 0.80

Total luminous flux of all lamps 8646.70 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 73.7 W
 Total power per area (11.68 m²) 6.31 W/m² (2.57 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Control rooms
 5.3.1 (EN 12464-1, 8.2011) Plant rooms, switch gear rooms (Ra >60.00)
 Horizontal

Em 245 lx (>= 200 lx)
 Emin 178 lx
 Emin/Eav (Uo) 0.73 (>= 0.40)
 Emin/Emax (Ud) 0.57
 UGR (2.1H 2.2H) <=18.7 (< 25.00)
 Position 0.00 m

Major surfaces

	Em		Uo	
M 1.5 (Ceiling)	149 lx	(>= 30 lx)	0.48	(>= 0.10)
M 1.1 (Wall)	223 lx	(>= 50 lx)	0.52	(>= 0.10)
M 1.2 (Wall)	176 lx	(>= 50 lx)	0.69	(>= 0.10)
M 1.3 (Wall)	223 lx	(>= 50 lx)	0.52	(>= 0.10)
M 1.4 (Wall)	176 lx	(>= 50 lx)	0.69	(>= 0.10)

Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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21 122

21.2 Summary, 122

21.2.1 Result overview, Evaluation area 1

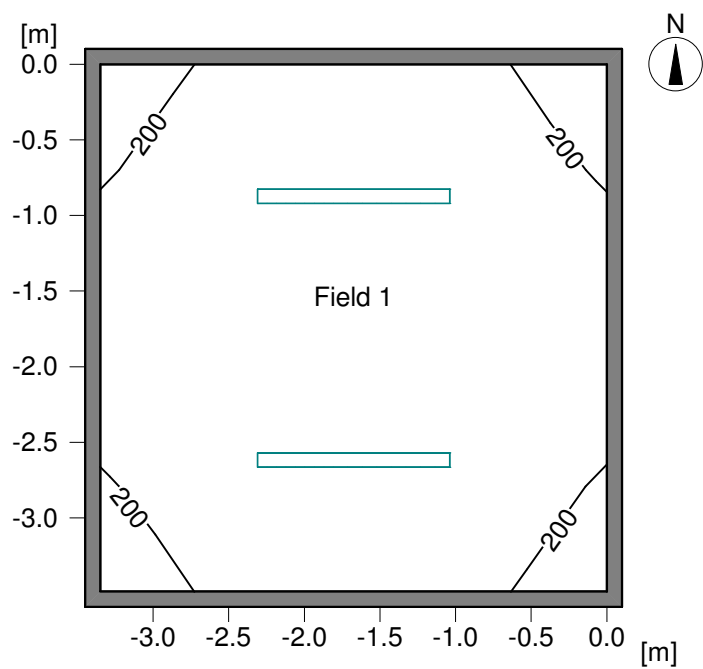
Type No.\Make

10	2	Order No.	: VIZULO STONE 37 W 4000 K 1200mm
		Luminaire name	: STB L 37 840 12S A2 N 100 LT80
		Equipment	: 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

21 122

21.3 Calculation results, 122

21.3.1 Isolines representation, Floor (E)



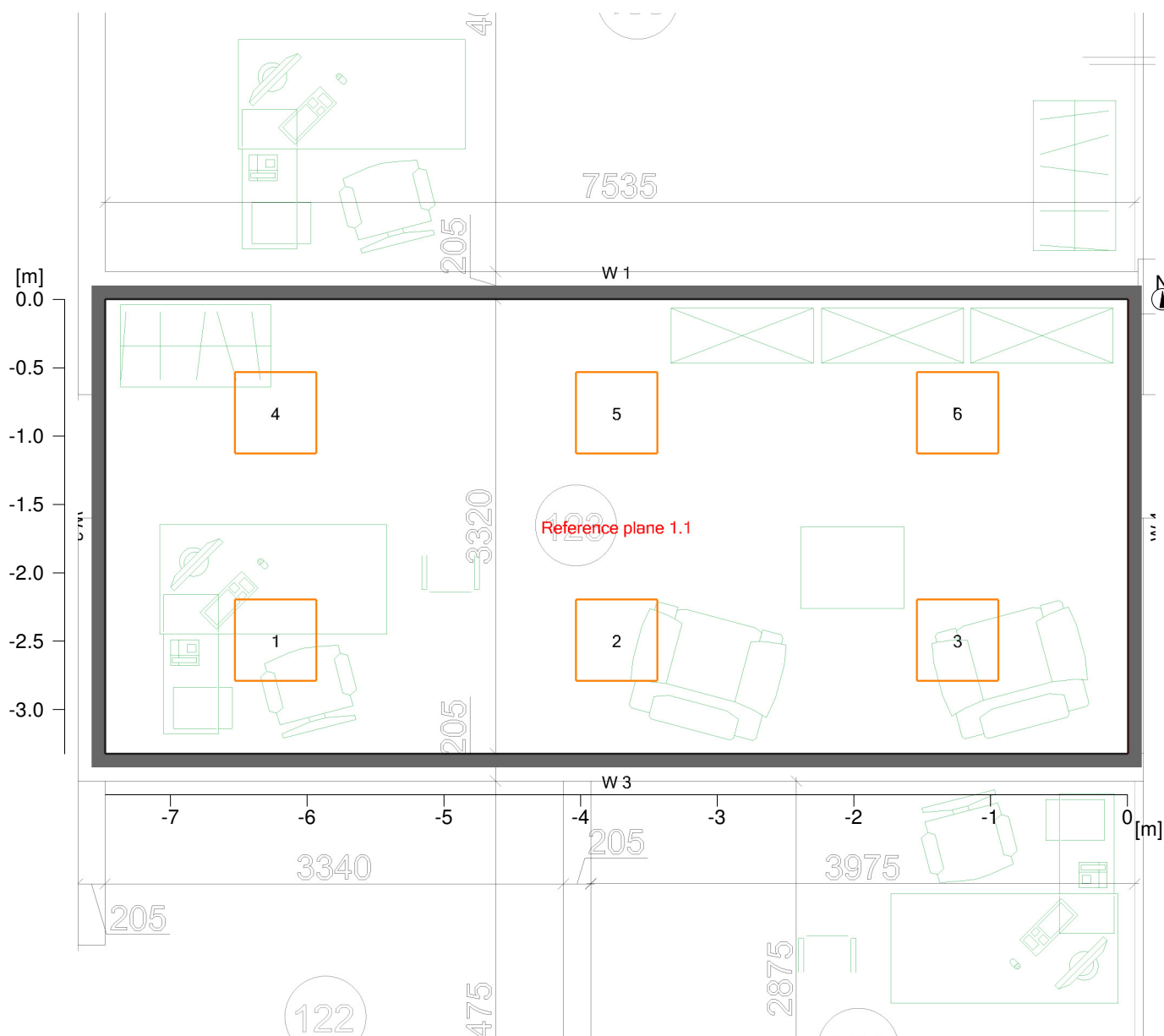
Illuminance [lx]

Average illuminance	Eav	: 227 lx
Minimum illuminance	Emin	: 174 lx
Maximum illuminance	Emax	: 284 lx
Uniformity Uo	Emin/Eav	: 1 : 1.31 (0.77)
Diversity Ud	Emin/Emax	: 1 : 1.64 (0.61)

22 123

22.1 Description, 123

22.1.1 Floor plan

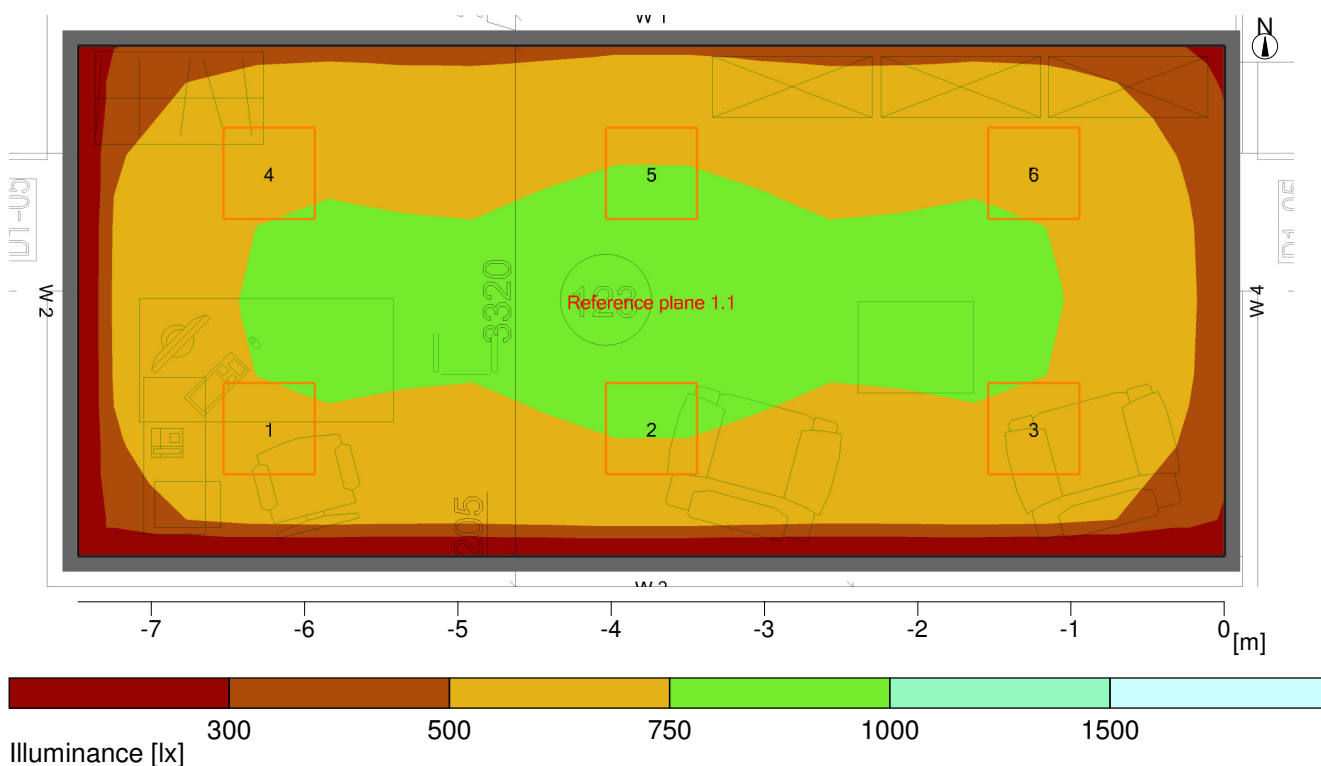


Wall	x	y	Length	Reflectance
1	4234.42 m	165.04 m	7.48 m	50.0 %
2	4234.42 m	161.71 m	3.32 m	50.0 %
3	4241.90 m	161.71 m	7.48 m	50.0 %
4	4241.90 m	165.04 m	3.32 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.75 m		

22 123

22.2 Summary, 123

22.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.88 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (24.86 m²)

26280.20 lm
 210.4 W
 8.46 W/m² (1.35 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Offices
 5.26.2 (EN 12464-1, 8.2011) Writing, typing, reading, data processing (Ra >80.00)
 Horizontal
 Em 627 lx (>= 500 lx)
 Emin 362 lx
 Emin/Eav (Uo) 0.58 (>= 0.60)
 Emin/Emax (Ud) 0.46
 UGR (2.0H 4.5H) <=17.1 (< 19.00)
 Position 0.75 m

Type No. Make

13 6

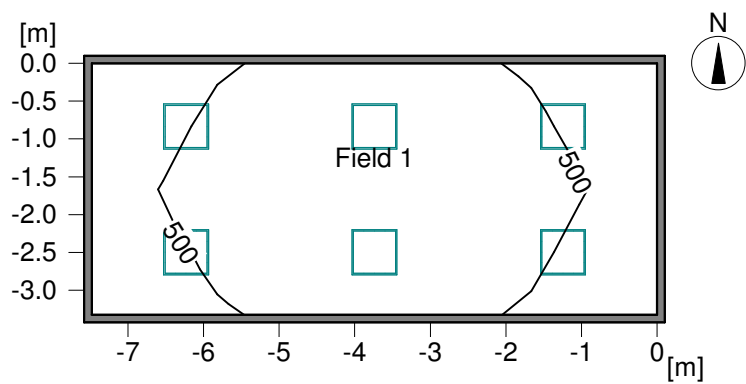


Order No. : Leaf Slim 35 W 4000 K Prismatic
 Luminaire name : LFS 35 840 R0606 WU D10 H
 Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.03 lm

22 123

22.3 Calculation results, 123

22.3.1 Isolines representation, Floor (E)



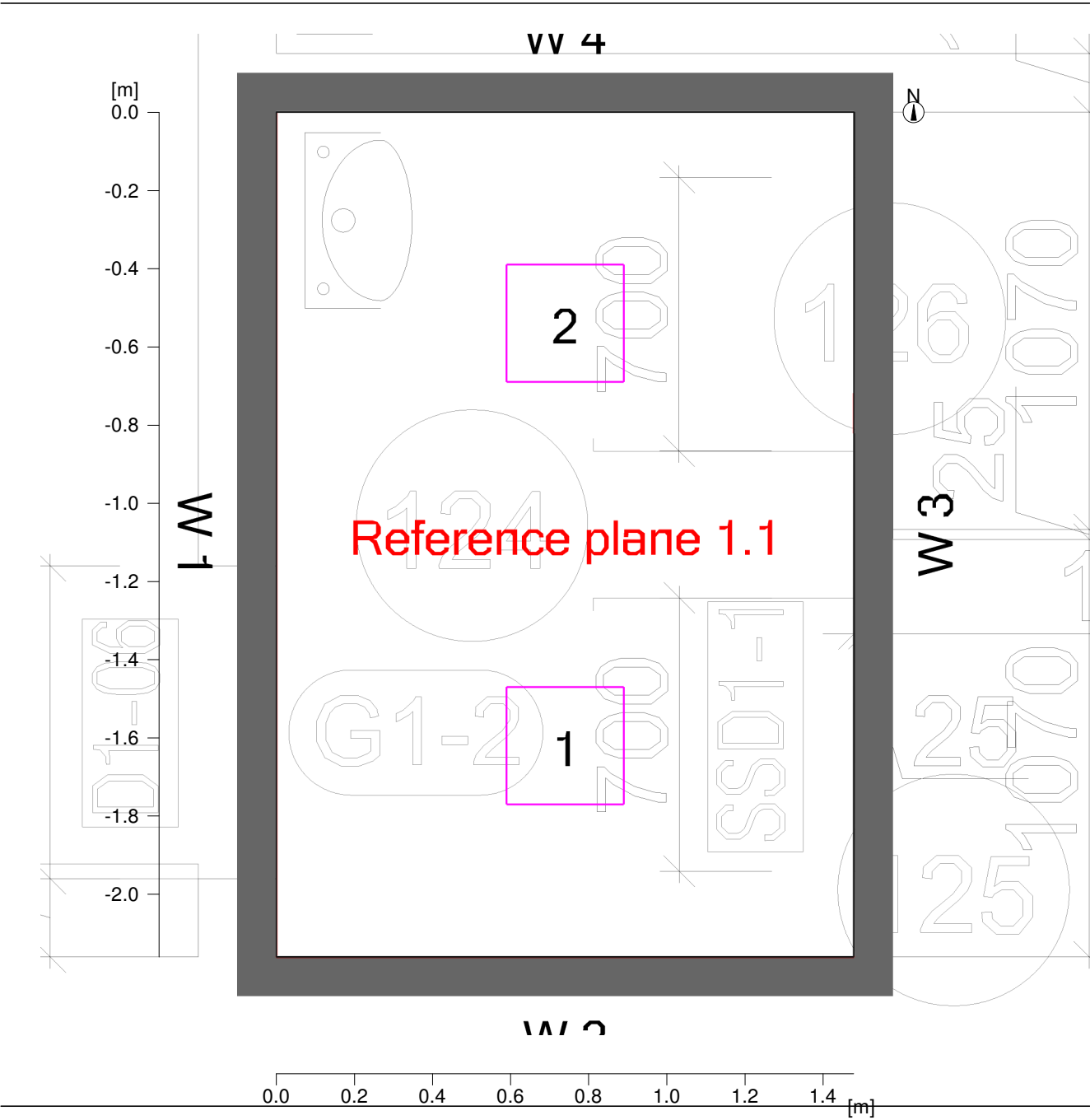
Illuminance [lx]

Average illuminance	Eav	: 498 lx
Minimum illuminance	Emin	: 366 lx
Maximum illuminance	Emax	: 618 lx
Uniformity Uo	Emin/Eav	: 1 : 1.36 (0.74)
Diversity Ud	Emin/Emax	: 1 : 1.69 (0.59)

23 124

23.1 Description, 124

23.1.1 Floor plan



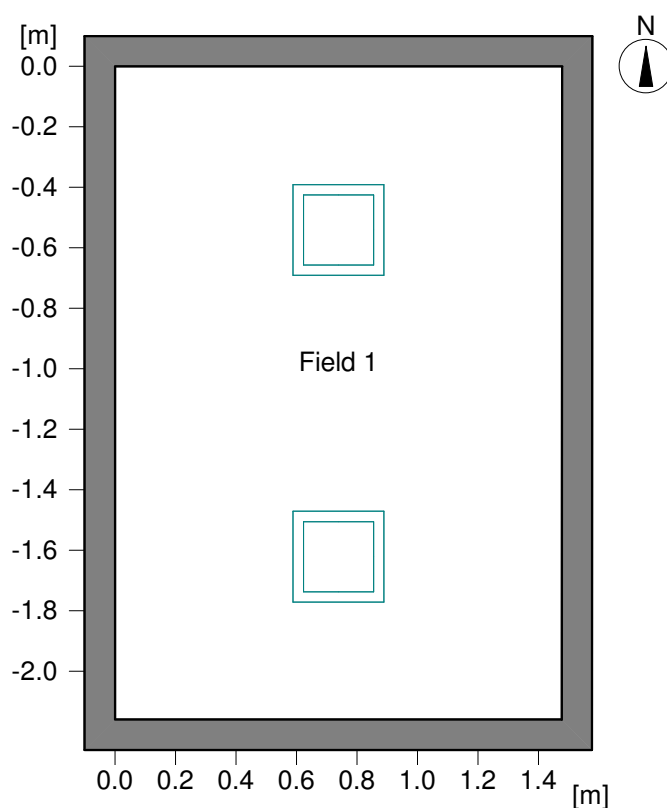
Wall	x	y	Length	Reflectance
1	4238.90 m	169.44 m	2.16 m	50.0 %
2	4240.37 m	169.44 m	1.48 m	50.0 %
3	4240.37 m	171.60 m	2.16 m	50.0 %
4	4238.90 m	171.60 m	1.48 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

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23 124

23.3 Calculation results, 124

23.3.1 Isolines representation, Floor (E)



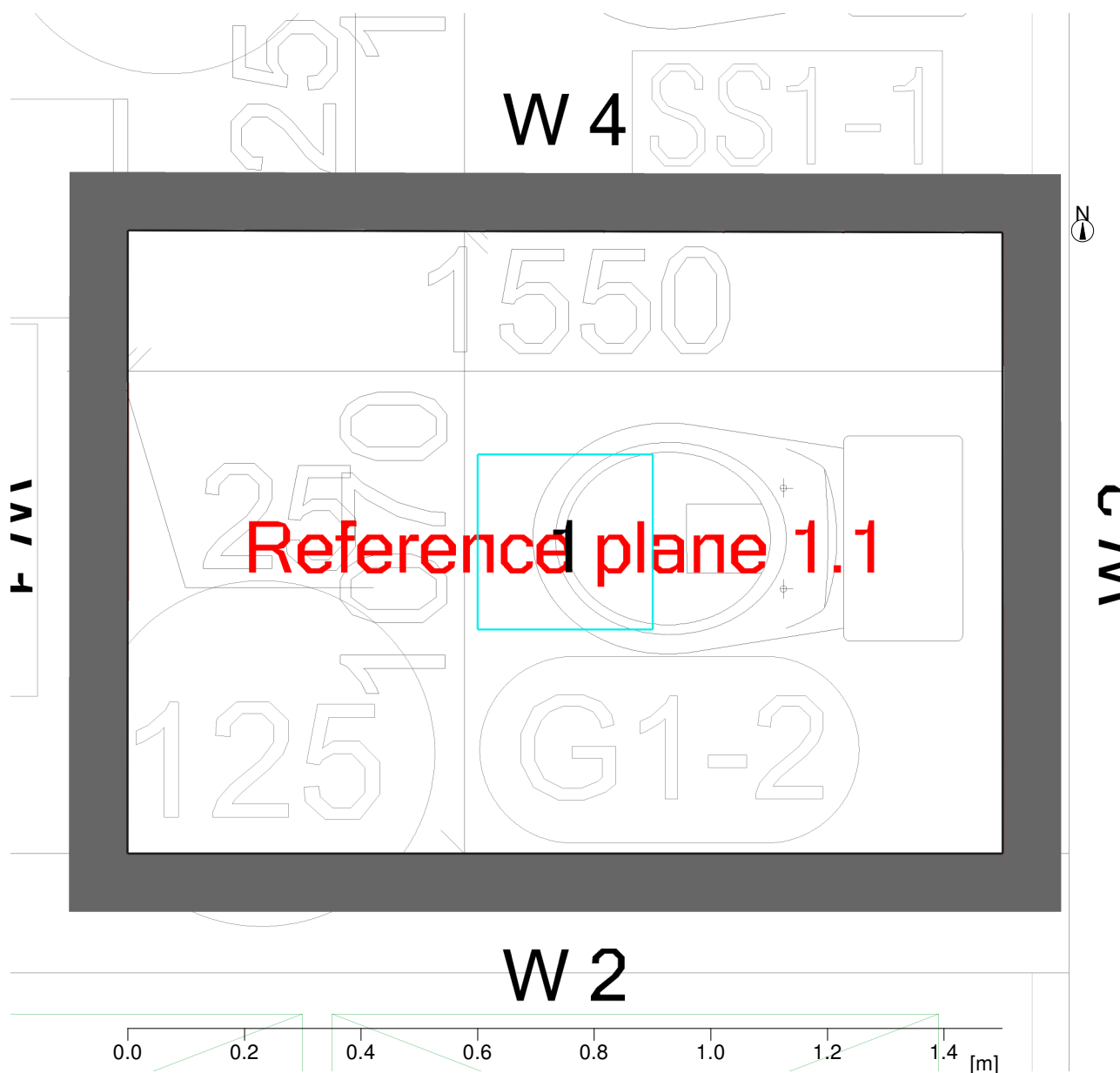
Illuminance [lx]

Average illuminance	Eav	: 242 lx
Minimum illuminance	Emin	: 209 lx
Maximum illuminance	Emax	: 282 lx
Uniformity Uo	Emin/Eav	: 1 : 1.16 (0.86)
Diversity Ud	Emin/Emax	: 1 : 1.35 (0.74)

24 125

24.1 Description, 125

24.1.1 Floor plan

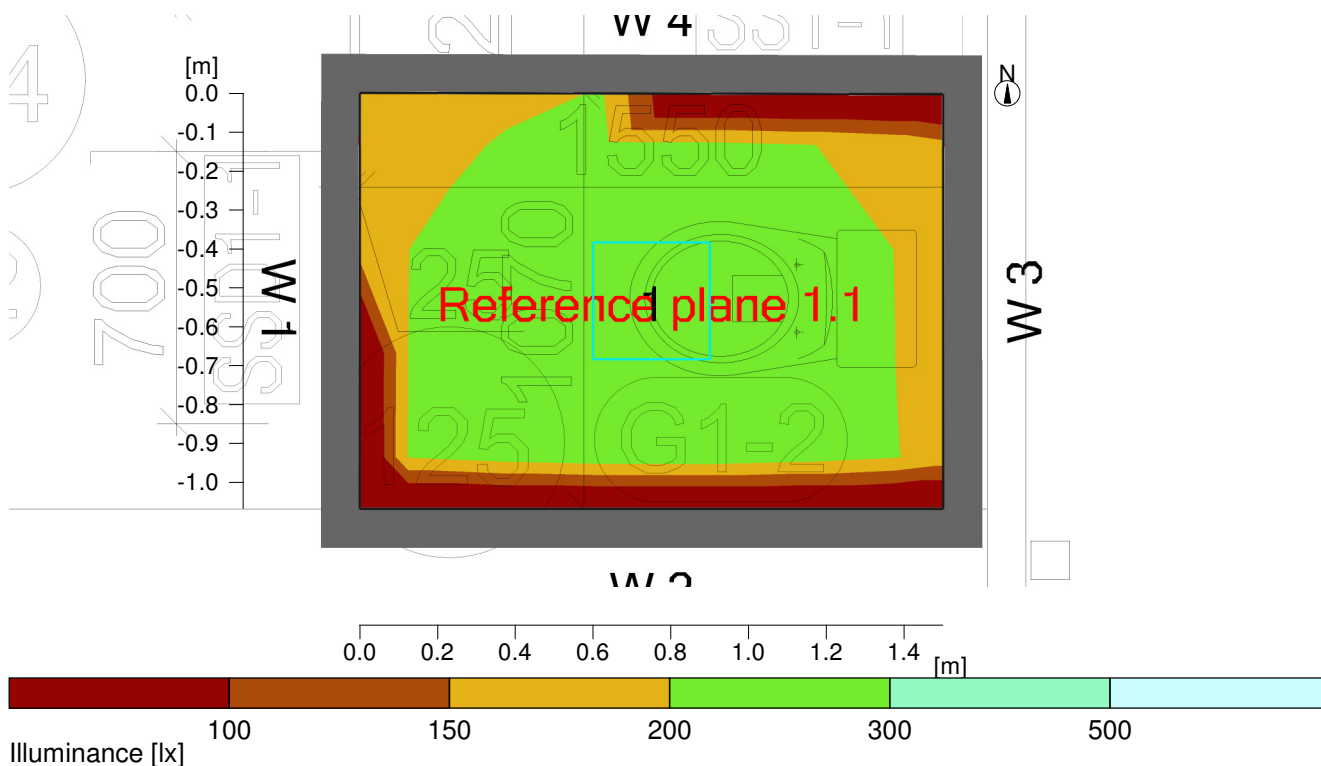


Wall	x	y	Length	Reflectance
1	4240.40 m	169.44 m	1.07 m	50.0 %
2	4241.90 m	169.44 m	1.50 m	50.0 %
3	4241.90 m	170.51 m	1.06 m	50.0 %
4	4240.40 m	170.51 m	1.50 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

24 125

24.2 Summary, 125

24.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.88 m
Maintenance factor	0.80
Total luminous flux of all lamps	2592.00 lm
Total power	40.7 W
Total power per area (1.60 m²)	25.47 W/m² (12.65 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)
 Horizontal
 Em 201 lx (>= 200 lx)
 Emin 179 lx
 Emin/Eav (Uo) 0.89 (>= 0.40)
 Emin/Emax (Ud) 0.81
 UGR (2.0H 2.0H) <=19.3 (< 25.00)
 Position 0.00 m

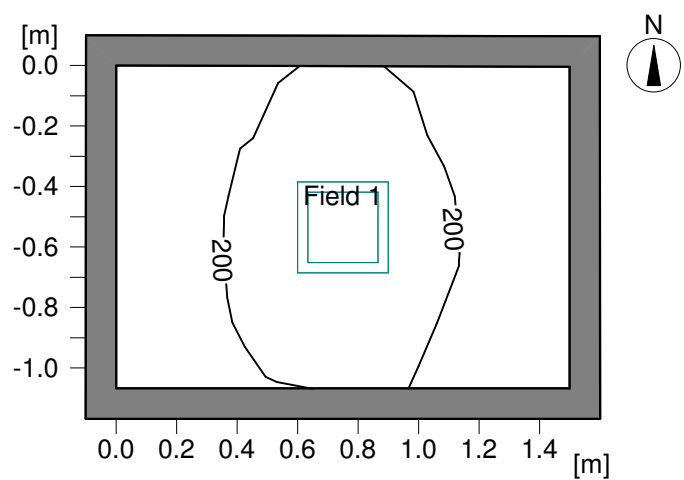
Type No. Make

38	1	Order No.	: NTC 42 840 05 PN S S 300 E ND
		Luminaire name	: NTC 42 840 05 PN S S 300 E ND
		Equipment	: 1 x Nest VANT03 module 40.72 W / 2591.96 lm

24 125

24.3 Calculation results, 125

24.3.1 Isolines representation, Floor (E)



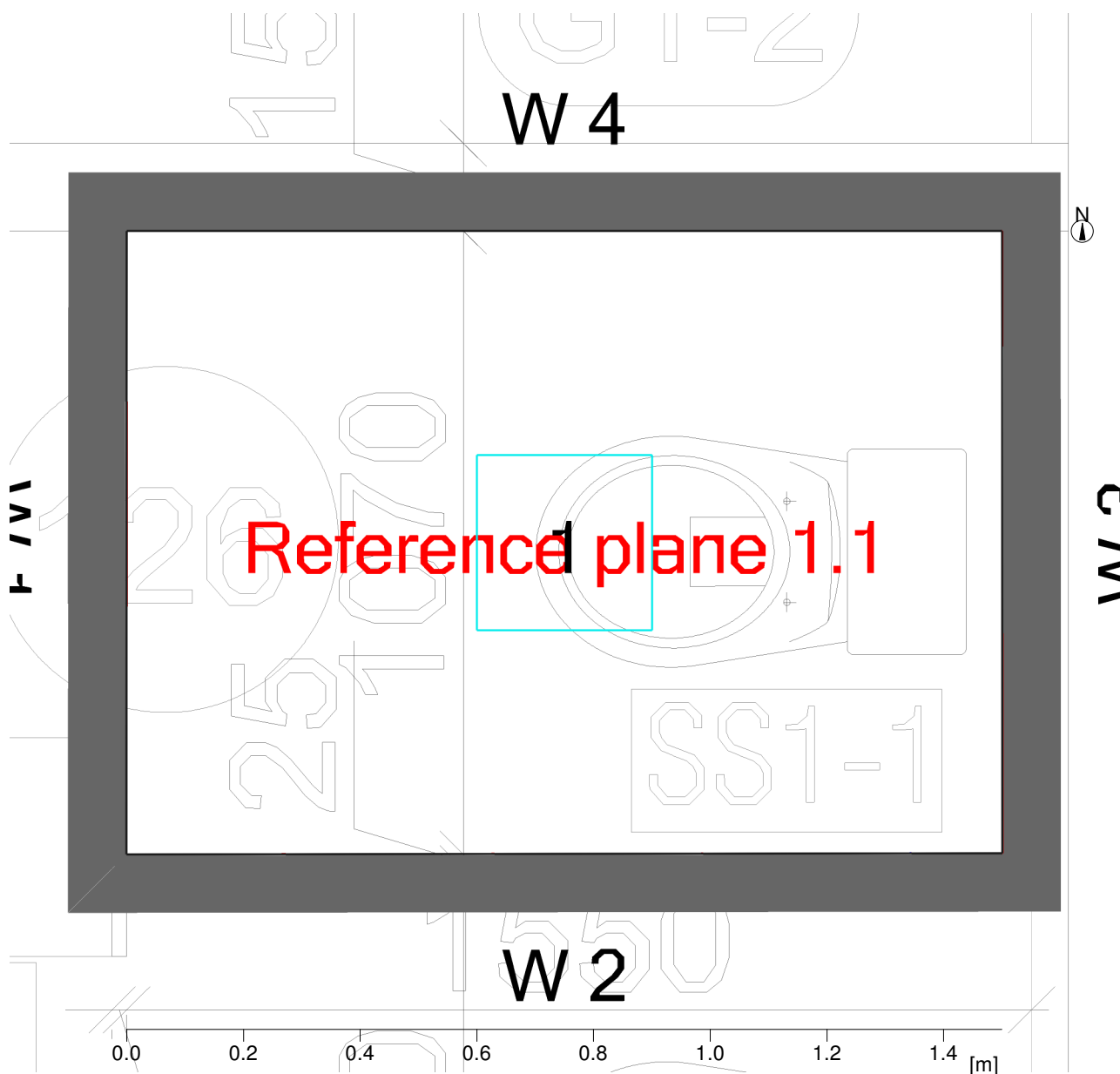
Illuminance [lx]

Average illuminance	Eav	: 198 lx
Minimum illuminance	Emin	: 182 lx
Maximum illuminance	Emax	: 211 lx
Uniformity Uo	Emin/Eav	: 1 : 1.08 (0.92)
Diversity Ud	Emin/Emax	: 1 : 1.16 (0.86)

25 126

25.1 Description, 126

25.1.1 Floor plan

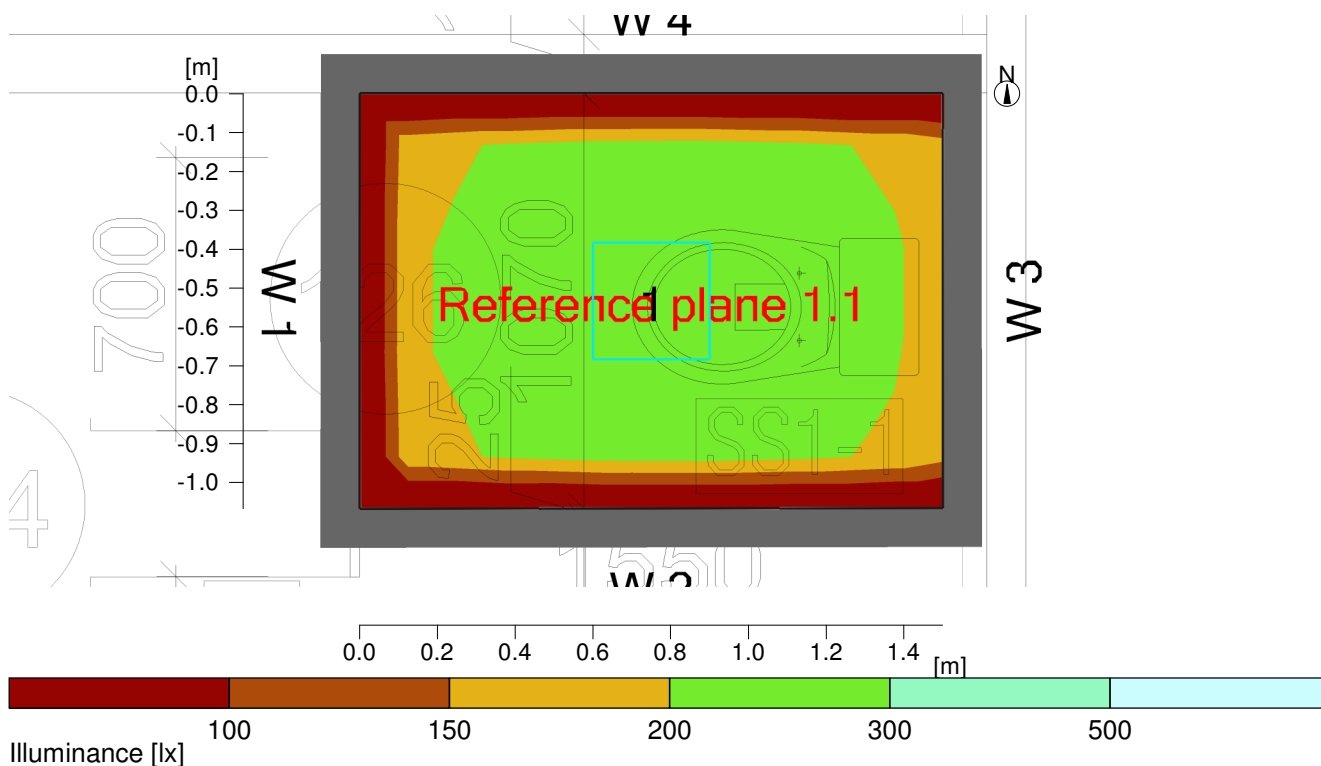


Wall	x	y	Length	Reflectance
1	4240.40 m	170.53 m	1.07 m	50.0 %
2	4241.90 m	170.54 m	1.50 m	50.0 %
3	4241.90 m	171.60 m	1.07 m	50.0 %
4	4240.40 m	171.60 m	1.50 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

25 126

25.2 Summary, 126

25.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.88 m
Maintenance factor	0.80
Total luminous flux of all lamps	2592.00 lm
Total power	40.7 W
Total power per area (1.60 m²)	25.46 W/m² (12.75 W/m²/100lx)


Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)
 Horizontal
 Em 200 lx (≥ 200 lx)
 Emin 176 lx
 Emin/Eav (Uo) 0.88 (≥ 0.40)
 Emin/Emax (Ud) 0.80
 UGR (2.0H 2.0H) ≤ 19.3 (< 25.00)
 Position 0.00 m

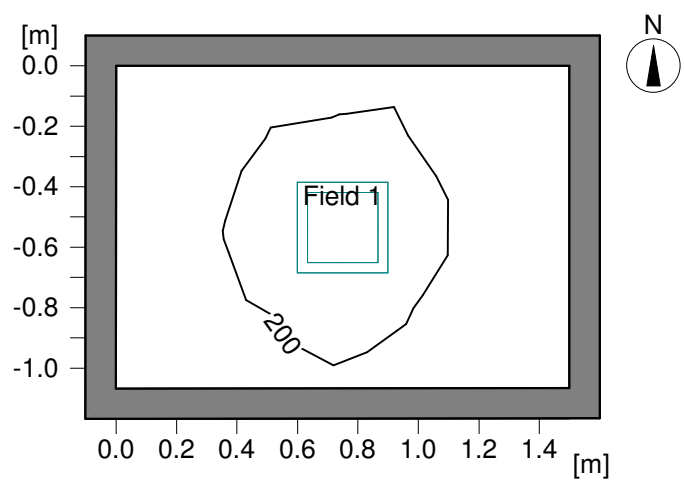
Type No.Make

38	1	Order No.	: NTC 42 840 05 PN S S 300 E ND
		Luminaire name	: NTC 42 840 05 PN S S 300 E ND
		Equipment	: 1 x Nest VANT03 module 40.72 W / 2591.96 lm

25 126

25.3 Calculation results, 126

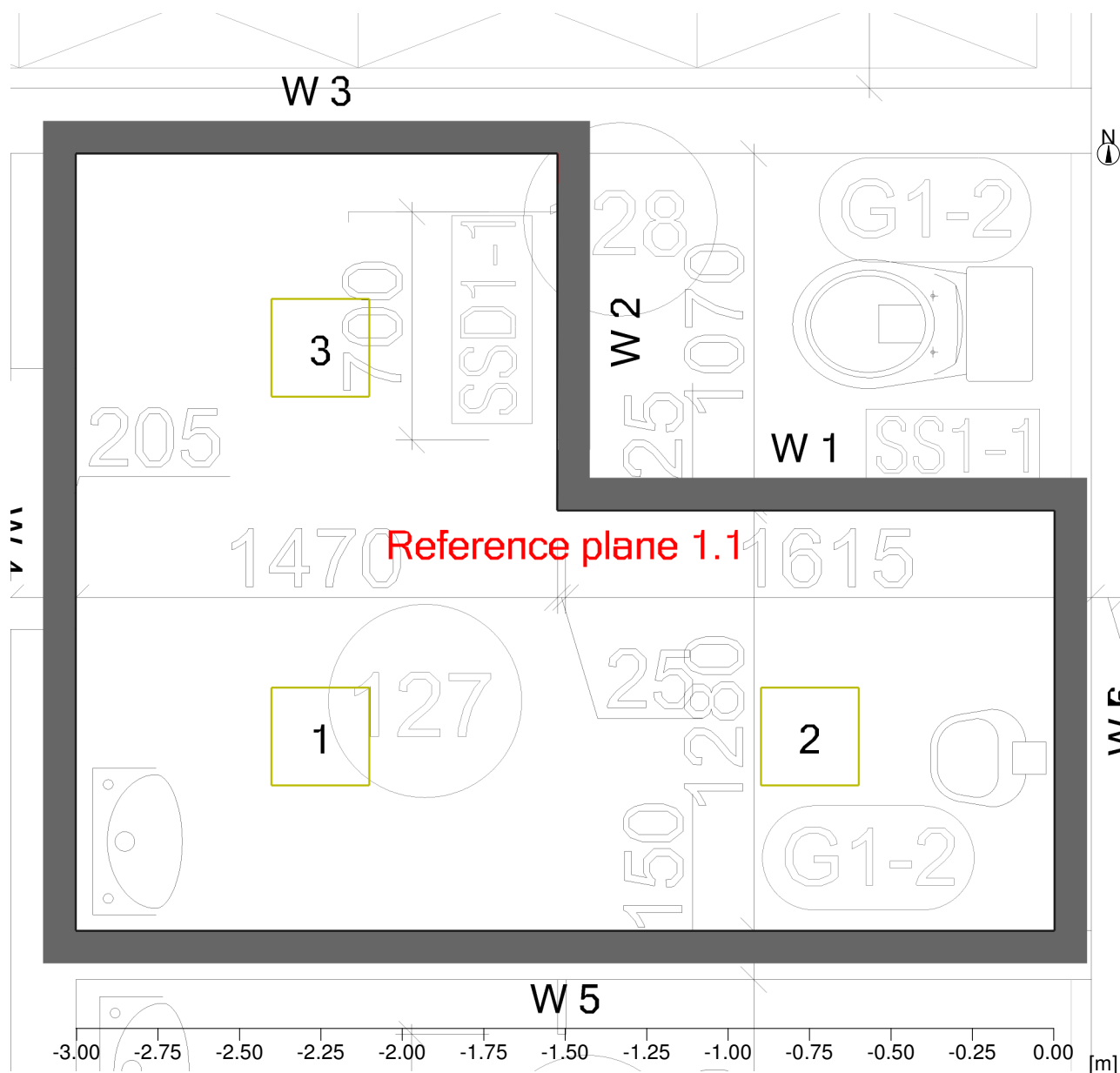
25.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 193 lx
Minimum illuminance	Emin	: 174 lx
Maximum illuminance	Emax	: 210 lx
Uniformity Uo	Emin/Eav	: 1 : 1.11 (0.90)
Diversity Ud	Emin/Emax	: 1 : 1.21 (0.83)

26.1.1 Floor plan

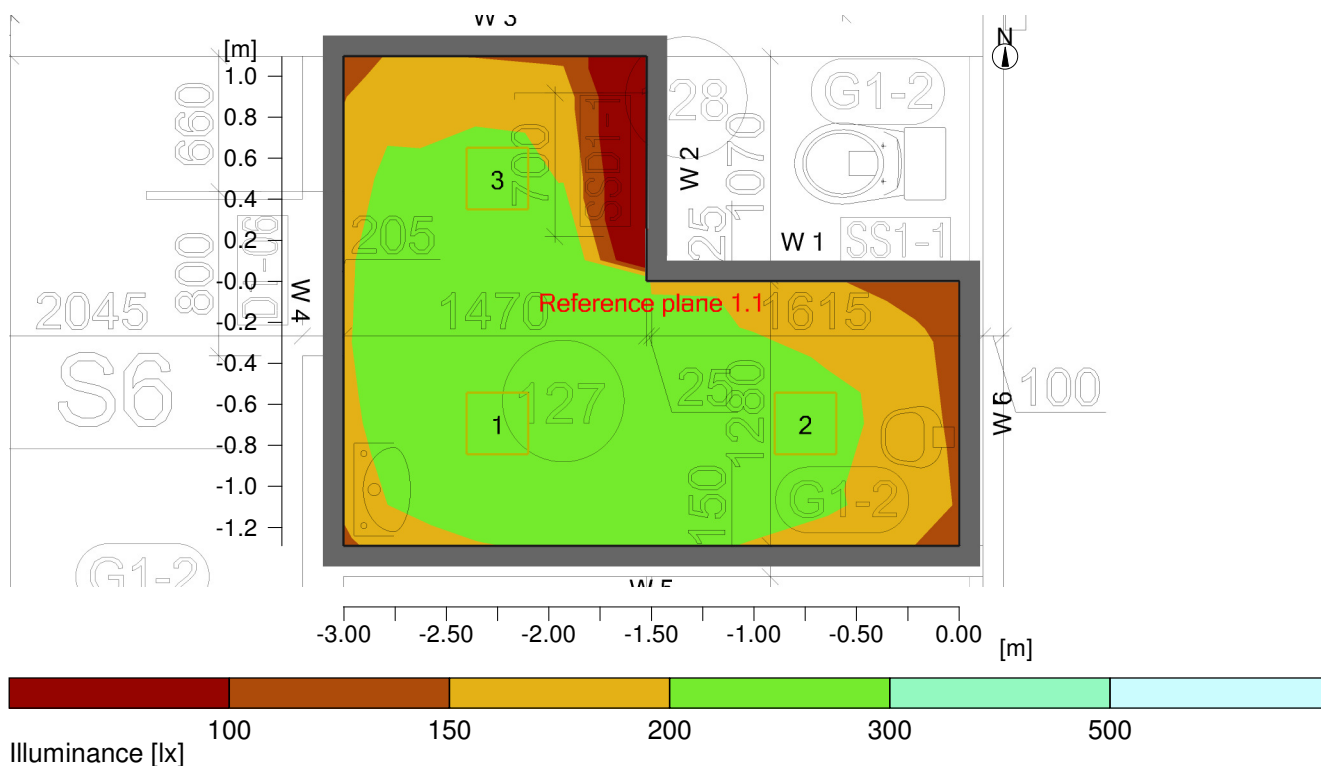


Wall	x	y	Length	Reflectance
1	4240.37 m	173.04 m	1.53 m	50.0 %
2	4240.37 m	174.14 m	1.10 m	50.0 %
3	4238.90 m	174.14 m	1.48 m	50.0 %
4	4238.90 m	171.75 m	2.38 m	50.0 %
5	4241.90 m	171.75 m	3.00 m	50.0 %
6	4241.90 m	173.04 m	1.29 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

26 127

26.2 Summary, 127

26.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.88 m
 0.80

Total luminous flux of all lamps 4349.10 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 64.6 W
 Total power per area (5.49 m²) 11.76 W/m² (5.46 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)

Horizontal

Em 215 lx (>= 200 lx)
 Emin 152 lx
 Emin/Eav (Uo) 0.71 (>= 0.40)
 Emin/Emax (Ud) 0.56
 UGR (2.0H 2.0H) <=17.2 (< 25.00)
 Position 0.00 m

Type No.Make

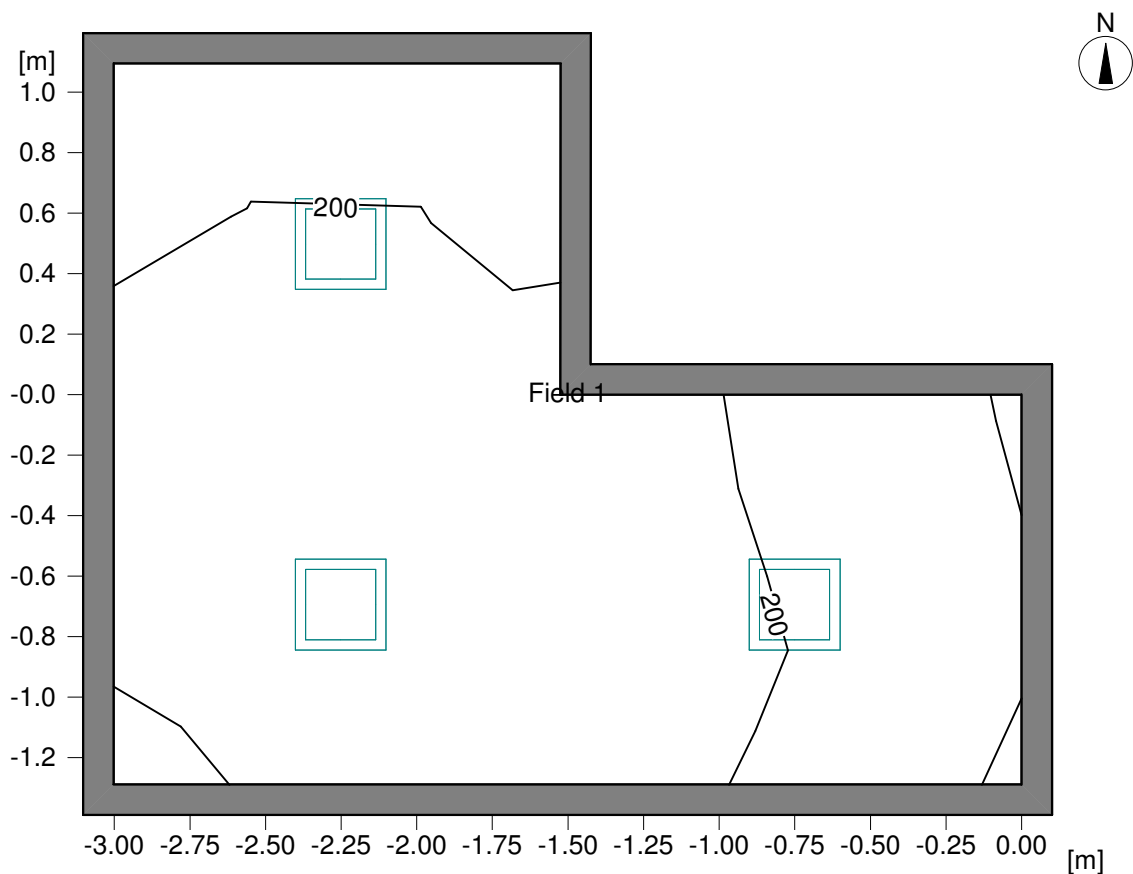


Order No. : NTC 22 840 04 PN S S 300 E ND
 Luminaire name : NTC 22 840 04 PN S S 300 E ND
 Equipment : 1 x Nest VANT04 module 21.52 W / 1449.71 lm

26 127

26.3 Calculation results, 127

26.3.1 Isolines representation, Floor (E)



Illuminance [lx]

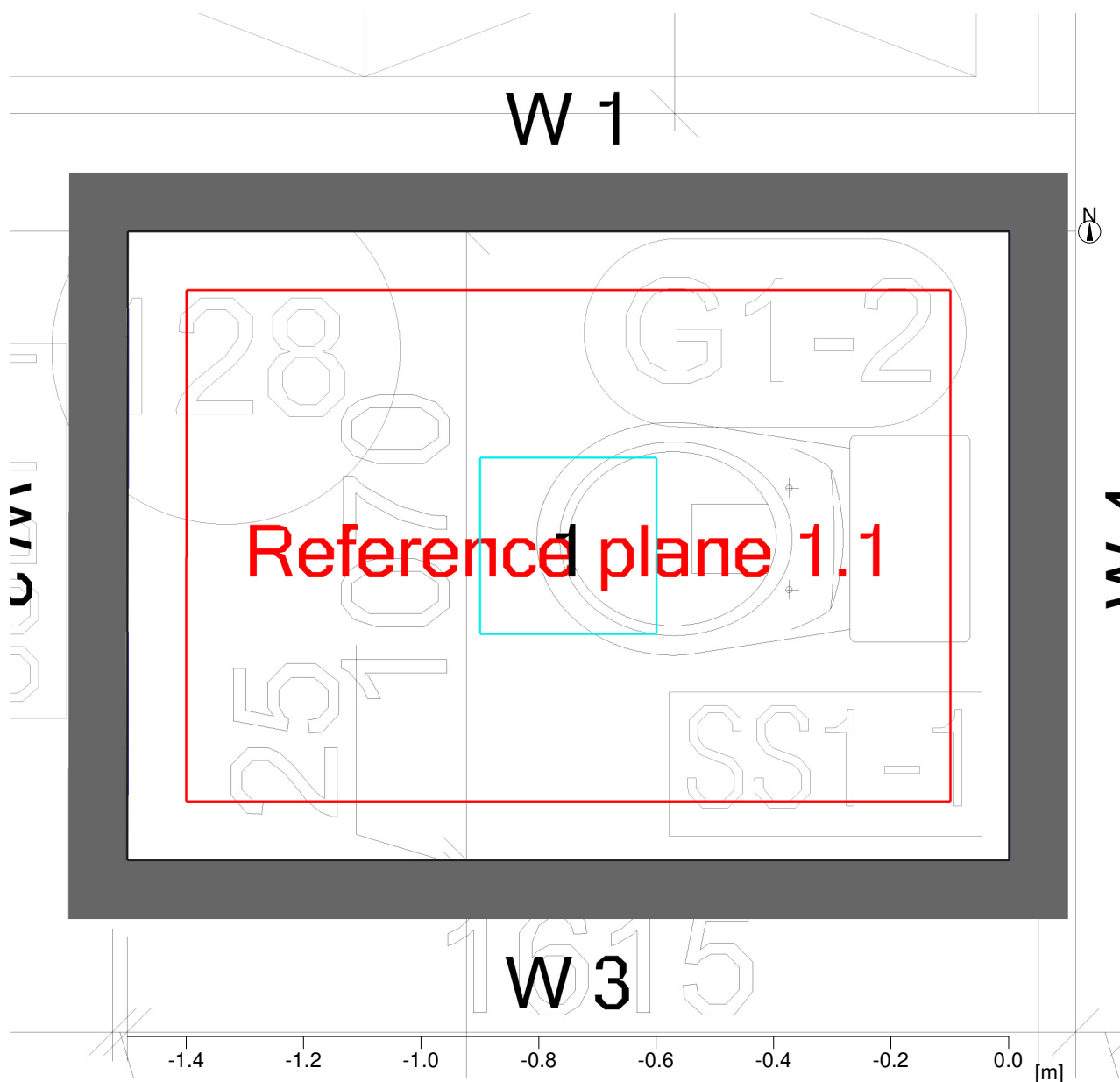
Average illuminance
Minimum illuminance
Maximum illuminance
Uniformity U_0
Diversity U_d

Eav : 199 lx
Emin : 145 lx
Emax : 254 lx
Emin/Eav : 1 : 1.37 (0.73)
Emin/Emax : 1 : 1.75 (0.57)

27 128

27.1 Description, 128

27.1.1 Floor plan

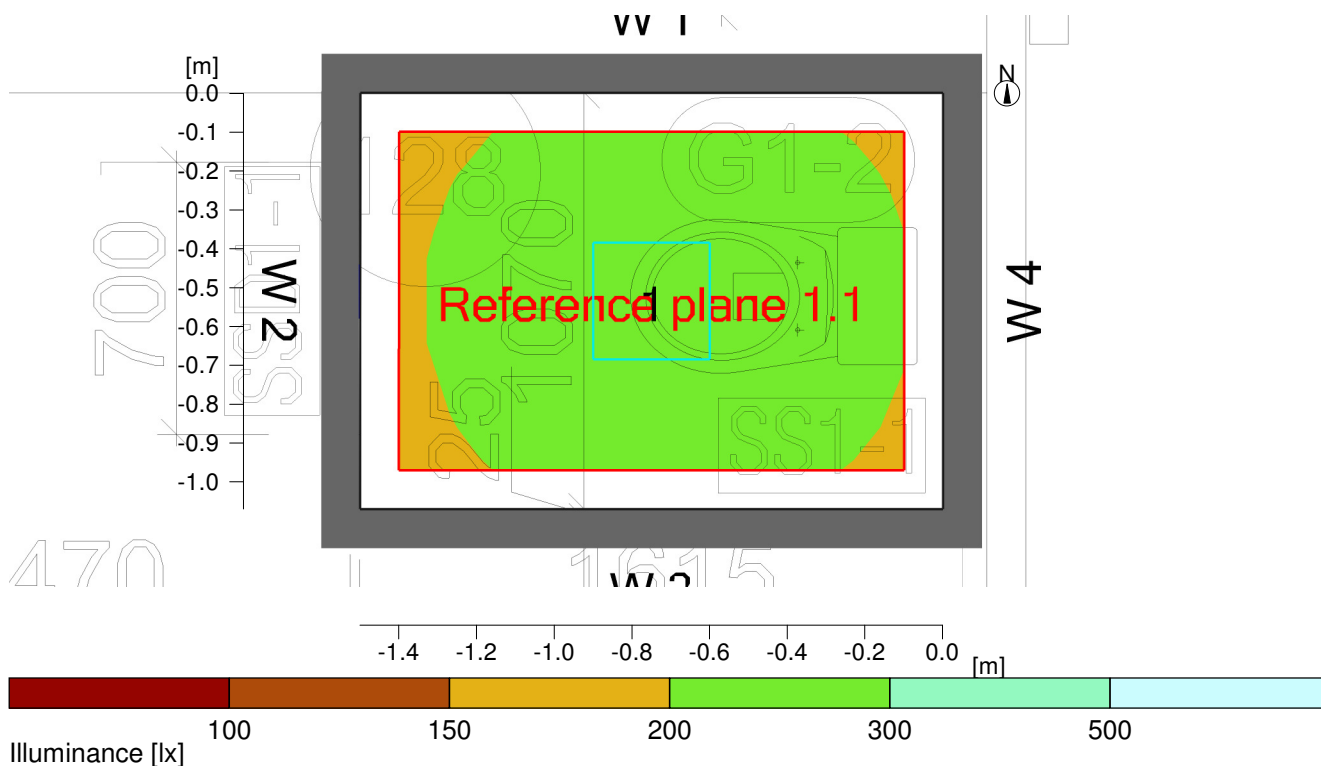


Wall	x	y	Length	Reflectance
1	4240.40 m	174.14 m	1.50 m	50.0 %
2	4240.40 m	173.07 m	1.07 m	50.0 %
3	4241.90 m	173.07 m	1.50 m	50.0 %
4	4241.90 m	174.14 m	1.07 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

27 128

27.2 Summary, 128

27.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	2.88 m
Maintenance factor	0.80
Total luminous flux of all lamps	2592.00 lm
Total power	40.7 W
Total power per area (1.60 m²)	25.38 W/m² (12.34 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
 5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)
 Horizontal
 Em 206 lx (>= 200 lx)
 Emin 189 lx
 Emin/Eav (Uo) 0.92 (>= 0.40)
 Emin/Emax (Ud) 0.86
 UGR (2.0H 2.0H) <=19.3 (< 25.00)
 Position 0.00 m

Type No.\Make

38 1

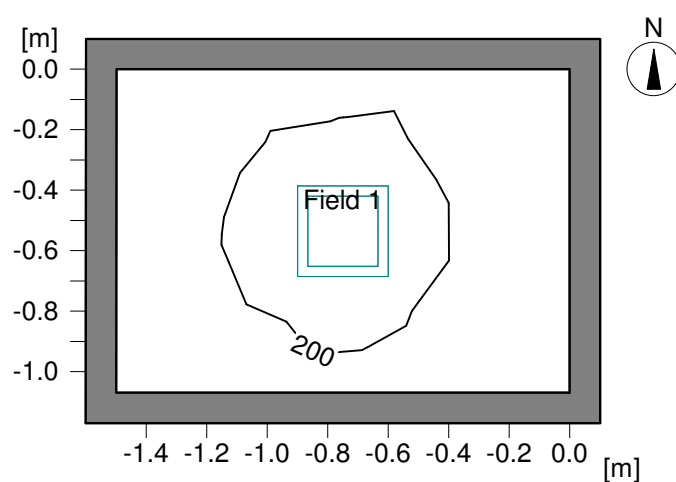


Order No. : NTC 42 840 05 PN S S 300 E ND
 Luminaire name : NTC 42 840 05 PN S S 300 E ND
 Equipment : 1 x Nest VANT03 module 40.72 W / 2591.96 lm

27 128

27.3 Calculation results, 128

27.3.1 Isolines representation, Floor (E)



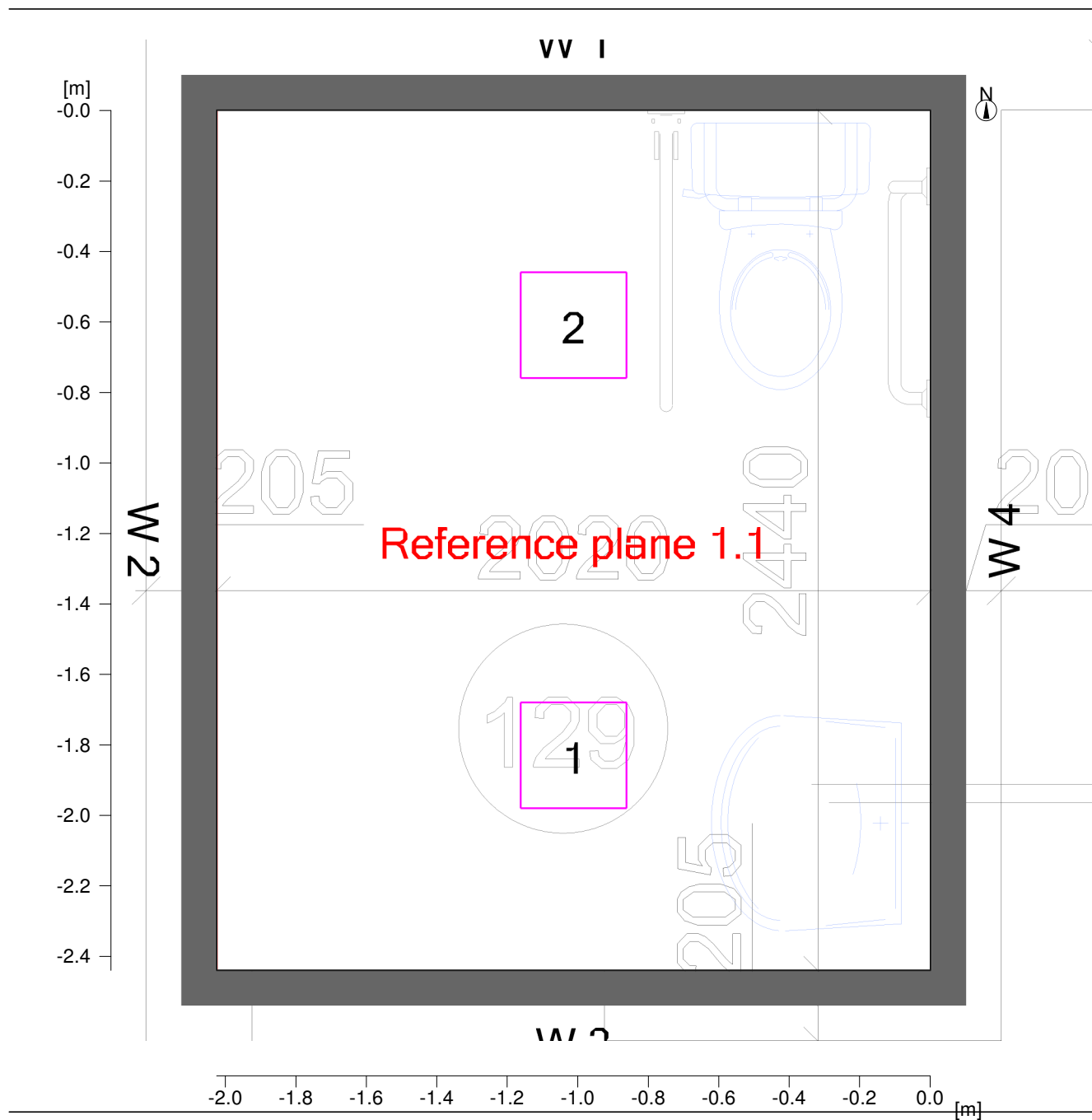
Illuminance [lx]

Average illuminance	Eav	: 193 lx
Minimum illuminance	Emin	: 174 lx
Maximum illuminance	Emax	: 210 lx
Uniformity Uo	Emin/Eav	: 1 : 1.11 (0.90)
Diversity Ud	Emin/Emax	: 1 : 1.21 (0.82)

28 129

28.1 Description, 129

28.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4234.42 m	174.14 m	2.02 m	50.0 %
2	4234.42 m	171.70 m	2.44 m	50.0 %
3	4236.45 m	171.70 m	2.02 m	50.0 %
4	4236.45 m	174.14 m	2.44 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

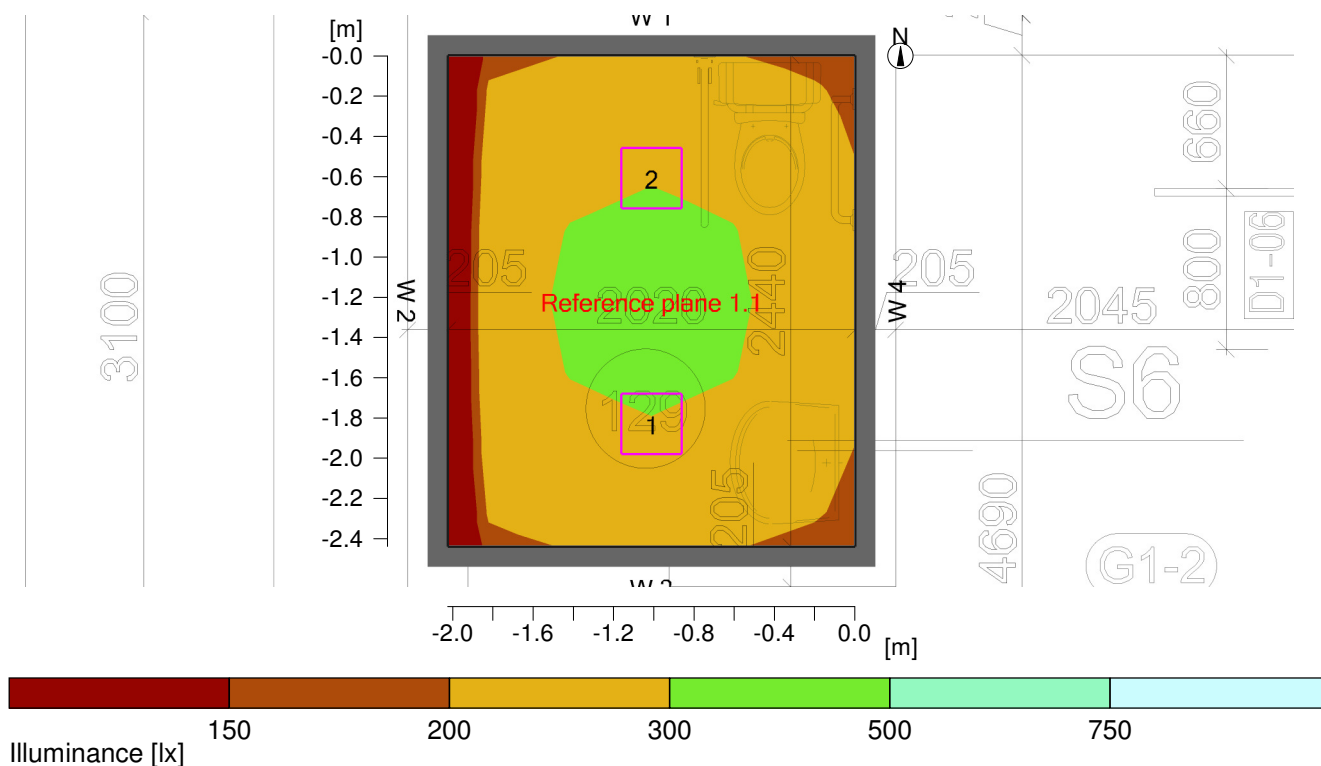
Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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28 129

28.2 Summary, 129

28.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
Height of luminaire plane
Maintenance factor

Average indirect fraction
2.88 m
0.80

Total luminous flux of all lamps
Total power
Total power per area (4.94 m²)

4047.40 lm
62.4 W
12.64 W/m² (4.98 W/m²/100lx)

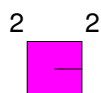
Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Rest, sanitation and first aid rooms
5.2.4 (EN 12464-1, 8.2011) Cloakrooms, washrooms, bathrooms, toilets (Ra >80.00)
Horizontal
Em 254 lx (>= 200 lx)
Emin 200 lx
Emin/Eav (Uo) 0.79 (>= 0.40)
Emin/Emax (Ud) 0.66
UGR (2.0H 2.0H) <=18.5 (< 25.00)
Position 0.00 m

Type No.\Make

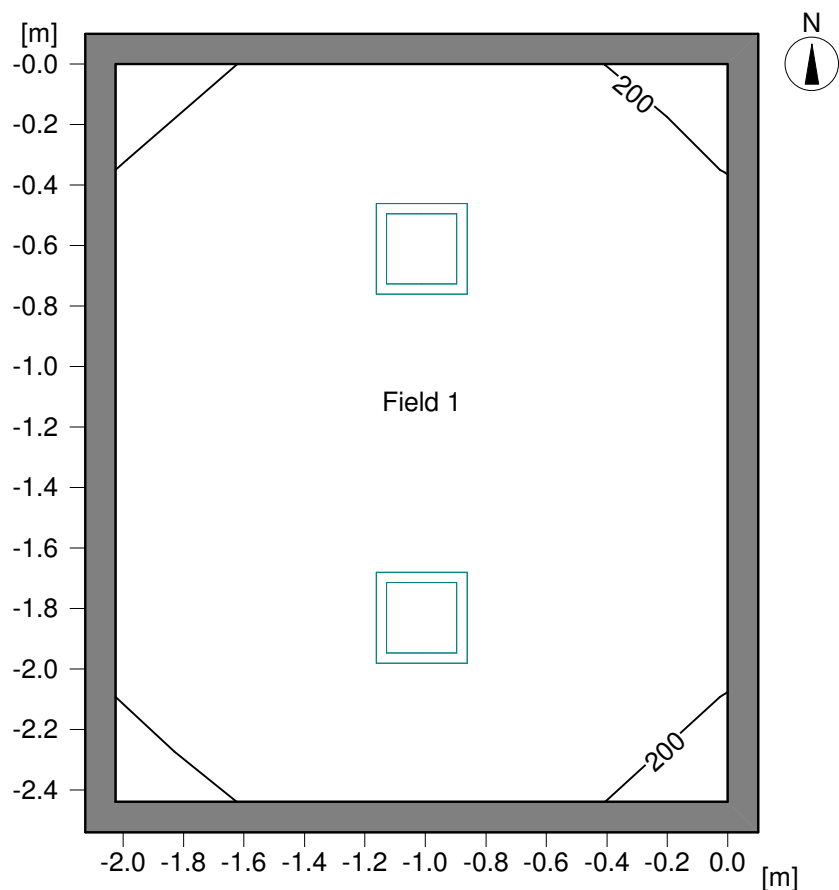


Order No. : NTC 33 840 04 PN S S 300 E ND
Luminaire name : NTC 33 840 04 PN S S 300 E ND
Equipment : 1 x Nest VANT04 module 31.21 W / 2023.69 lm

28 129

28.3 Calculation results, 129

28.3.1 Isolines representation, Floor (E)



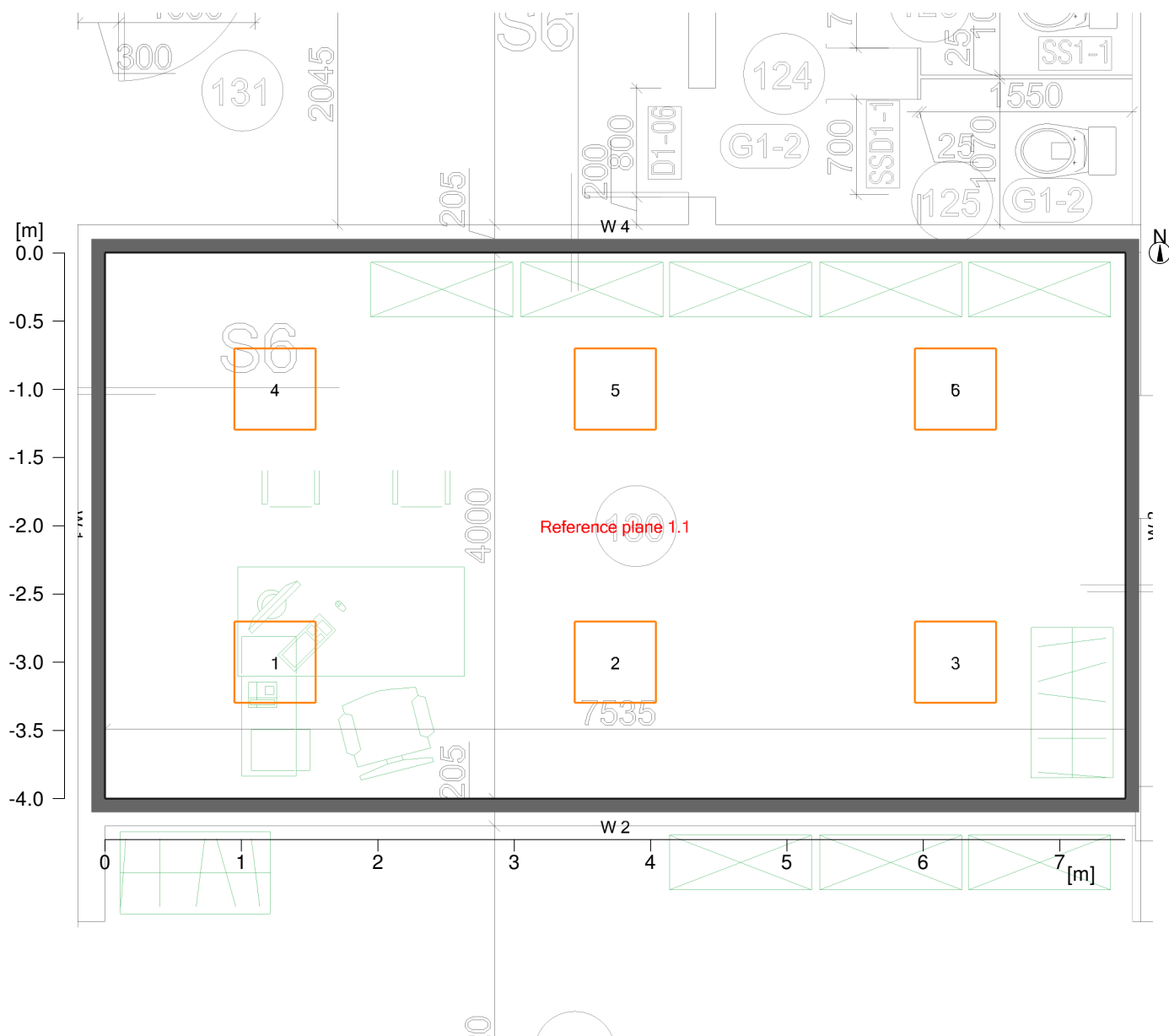
Illuminance [lx]

Average illuminance	Eav	: 238 lx
Minimum illuminance	Emin	: 183 lx
Maximum illuminance	Emax	: 288 lx
Uniformity Uo	Emin/Eav	: 1 : 1.30 (0.77)
Diversity Ud	Emin/Emax	: 1 : 1.57 (0.63)

29 130

29.1 Description, 130

29.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4234.42 m	165.24 m	4.00 m	50.0 %
2	4241.90 m	165.24 m	7.48 m	50.0 %
3	4241.90 m	169.24 m	4.00 m	50.0 %
4	4234.42 m	169.24 m	7.48 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.75 m		

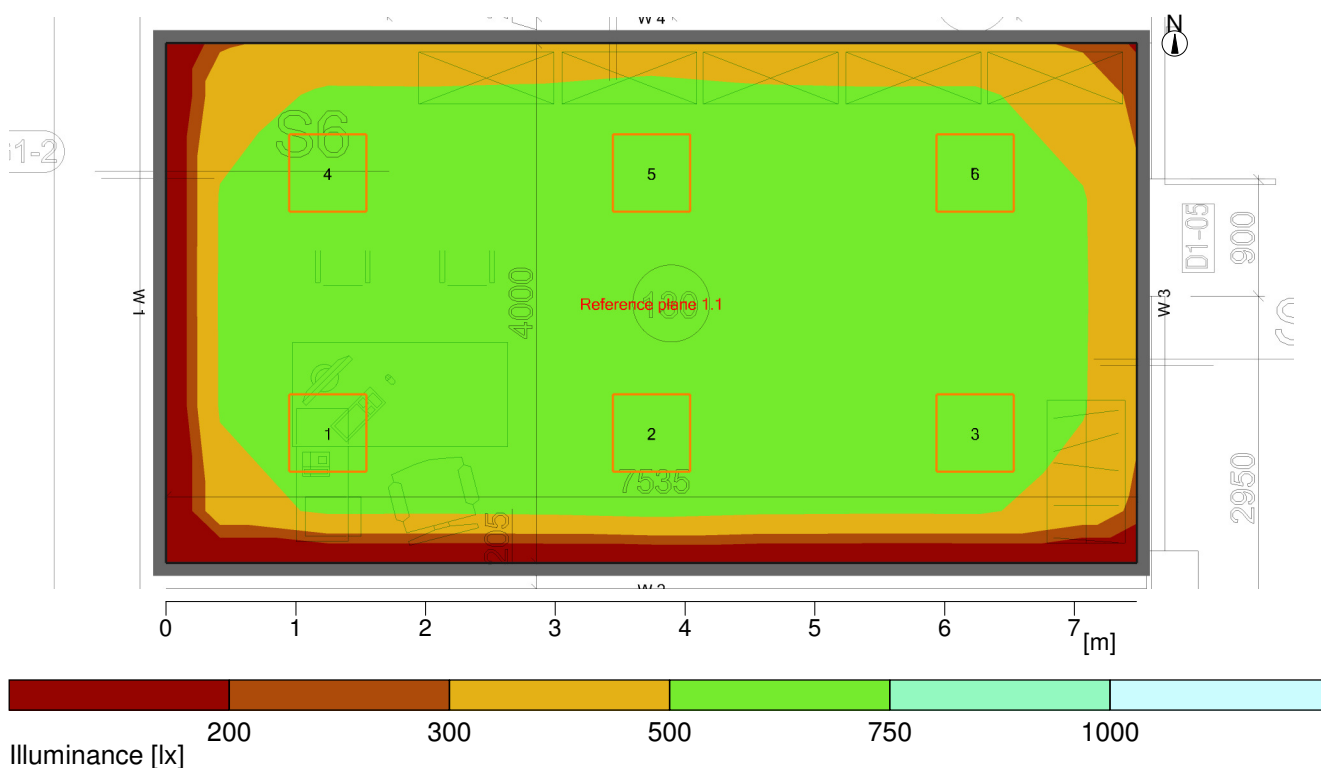
Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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29 130

29.2 Summary, 130

29.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
Height of luminaire plane
Maintenance factor

Average indirect fraction
2.88 m
0.80

Total luminous flux of all lamps
Total power
Total power per area (29.91 m²)

26280.20 lm
210.4 W
7.04 W/m² (1.26 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Educational premises - Educational buildings
5.36.9 (EN 12464-1, 8.2011) Practical rooms and laboratories (Ra >80.00)
Horizontal

Em 558 lx (>= 500 lx)
Emin 388 lx
Emin/Eav (Uo) 0.70 (>= 0.60)
Emin/Emax (Ud) 0.57
UGR (2.4H 4.5H) <=17.1 (< 19.00)
Position 0.75 m

Type No.\Make

13 6

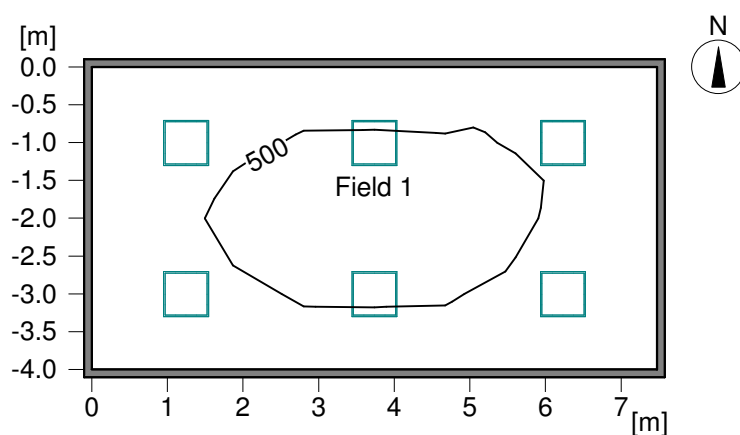


Order No. : Leaf Slim 35 W 4000 K Prismatic
Luminaire name : LFS 35 840 R0606 WU D10 H
Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.03 lm

29 130

29.3 Calculation results, 130

29.3.1 Isolines representation, Floor (E)



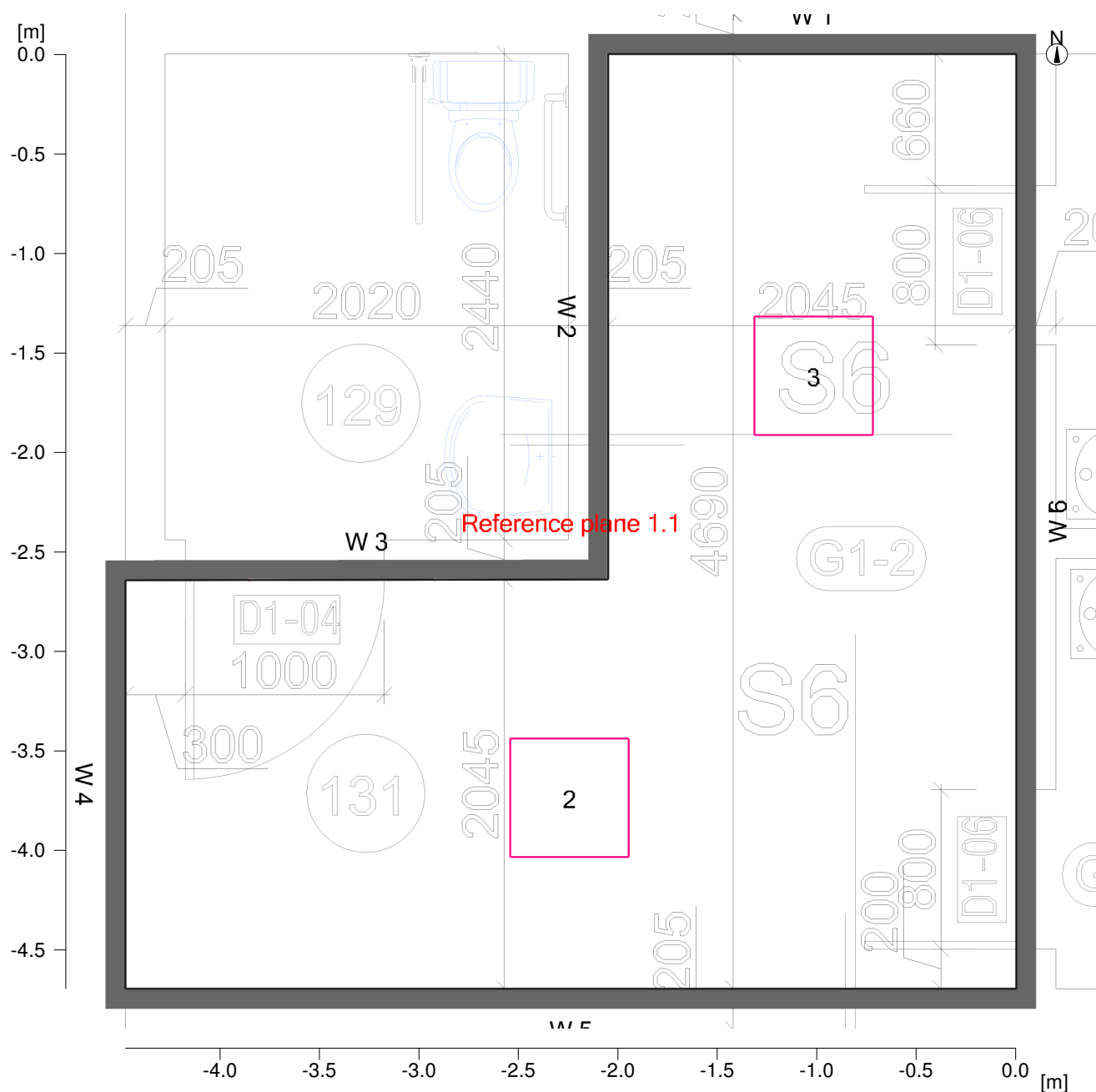
Illuminance [lx]

Average illuminance	Eav	: 442 lx
Minimum illuminance	Emin	: 329 lx
Maximum illuminance	Emax	: 557 lx
Uniformity U ₀	Emin/Eav	: 1 : 1.34 (0.74)
Diversity U _d	Emin/Emax	: 1 : 1.69 (0.59)

30 131

30.1 Description, 131

30.1.1 Floor plan

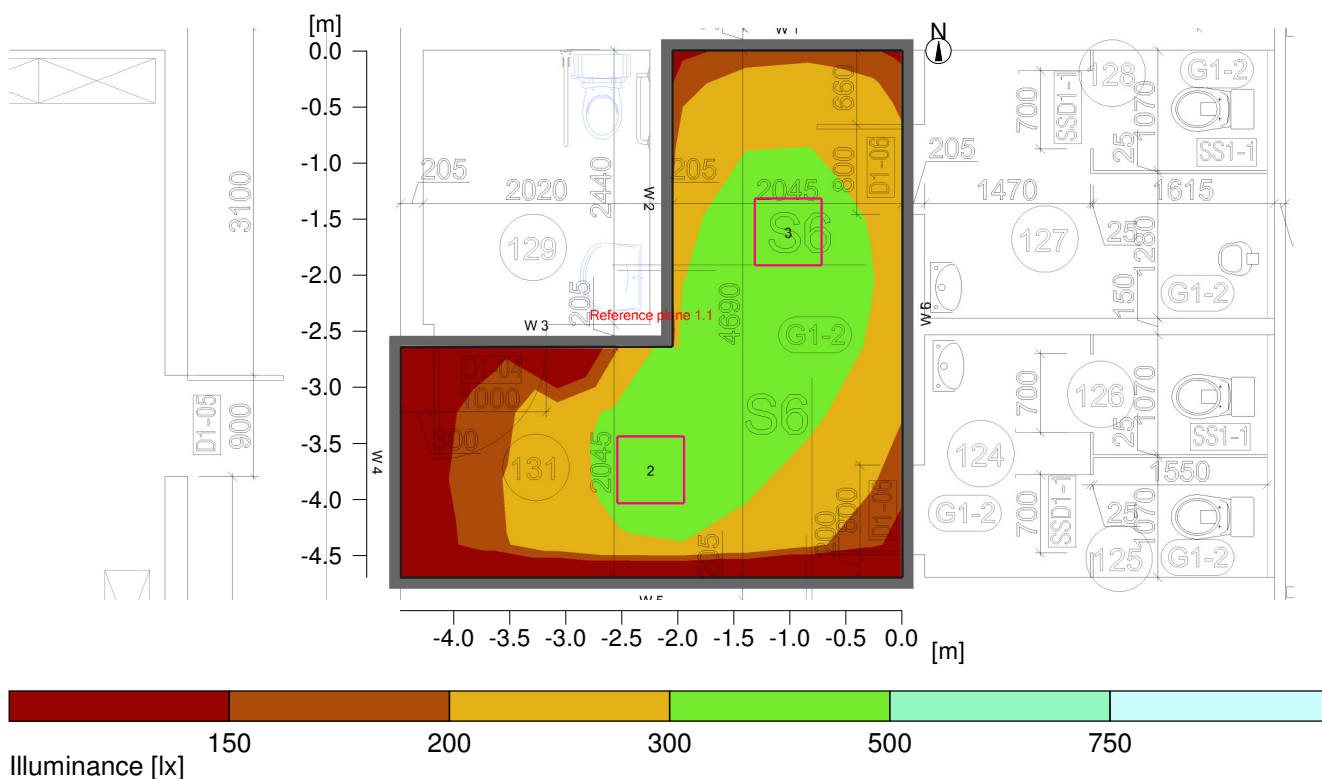


Wall	x	y	Length	Reflectance
1	4236.65 m	174.14 m	2.05 m	50.0 %
2	4236.65 m	171.50 m	2.64 m	50.0 %
3	4234.22 m	171.49 m	2.42 m	50.0 %
4	4234.22 m	169.44 m	2.05 m	50.0 %
5	4238.70 m	169.44 m	4.48 m	50.0 %
6	4238.70 m	174.14 m	4.69 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

30 131

30.2 Summary, 131

30.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.88 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (14.61 m²)

8760.20 lm
 70.1 W
 4.80 W/m² (1.90 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
 5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
 Horizontal
 253 lx (>= 100 lx)
 0 lx
 --- (>= 0.40)

 0.00 m

Type No.\Make

14 2

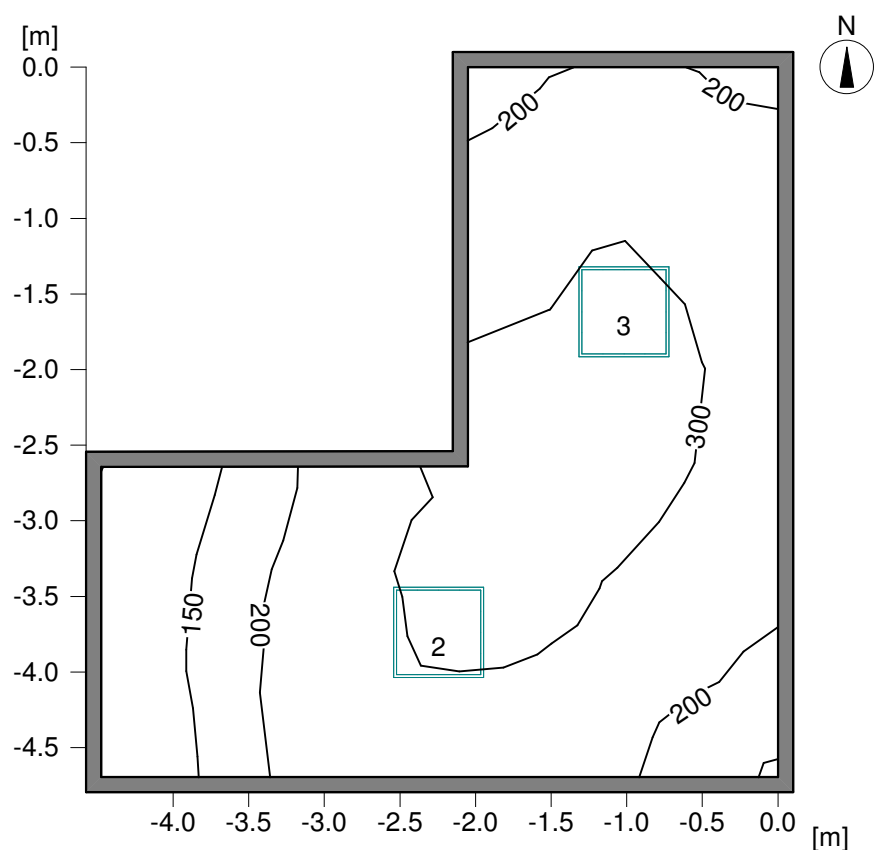


Order No. : Leaf Slim 35 W 4000 K Prismatic
 Luminaire name : LFS 35 840 R0606 WU N20 H
 Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.08 lm

30 131

30.3 Calculation results, 131

30.3.1 Isolines representation, Floor (E)



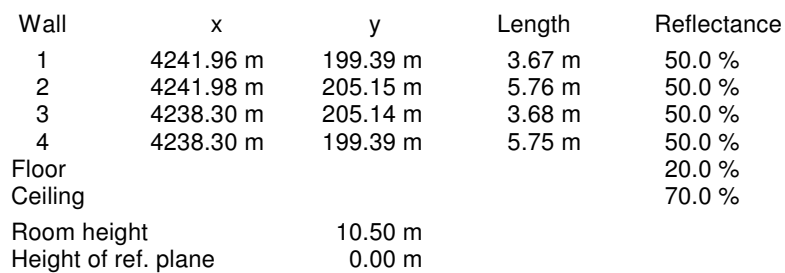
Illuminance [lx]

Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U_0
 Diversity U_d

Eav : 238 lx
 Emin : 107 lx
 Emax : 351 lx
 Emin/Eav : 1 : 2.23 (0.45)
 Emin/Emax : 1 : 3.29 (0.30)

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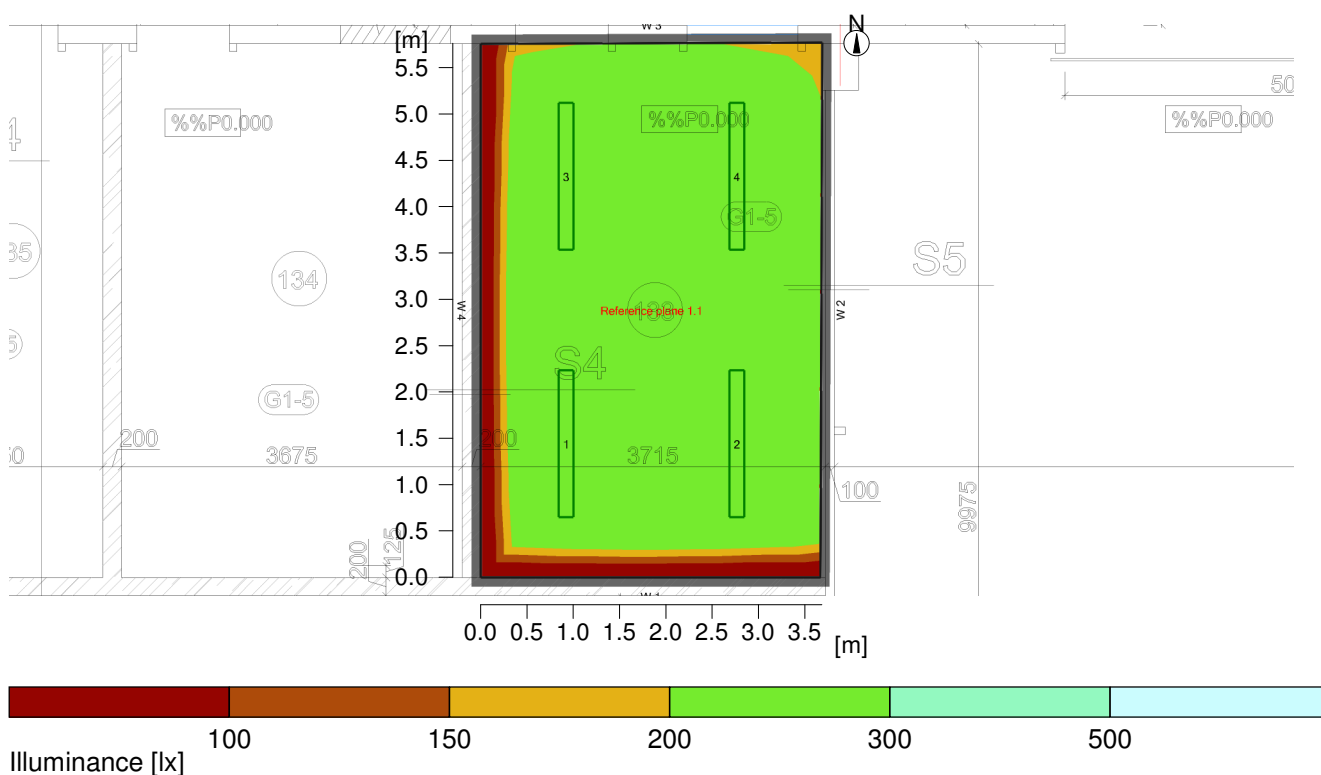
31.1.1 Floor plan



31 133

31.2 Summary, 133

31.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	7.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	38456.00 lm
Total power	305.6 W
Total power per area (21.15 m ²)	14.44 W/m ² (5.82 W/m ² /100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Control rooms
 5.3.1 (EN 12464-1, 8.2011) Plant rooms, switch gear rooms (Ra >60.00)
 Horizontal

Em	248 lx	(>= 200 lx)
Emin	209 lx	
Emin/Eav (Uo)	0.84	(>= 0.40)
Emin/Emax (Ud)	0.74	
UGR (2.0H 2.0H)	<=19.9	(< 25.00)
Position	0.00 m	

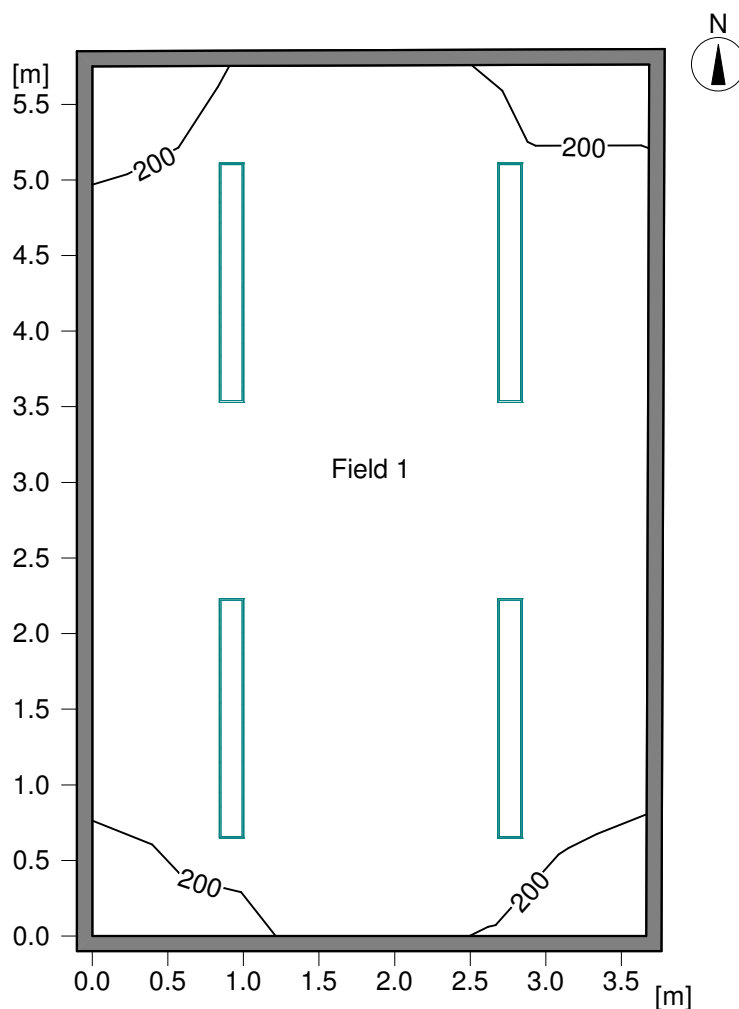
Type No.\Make

29	4	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

31 133

31.3 Calculation results, 133

31.3.1 Isolines representation, Floor (E)



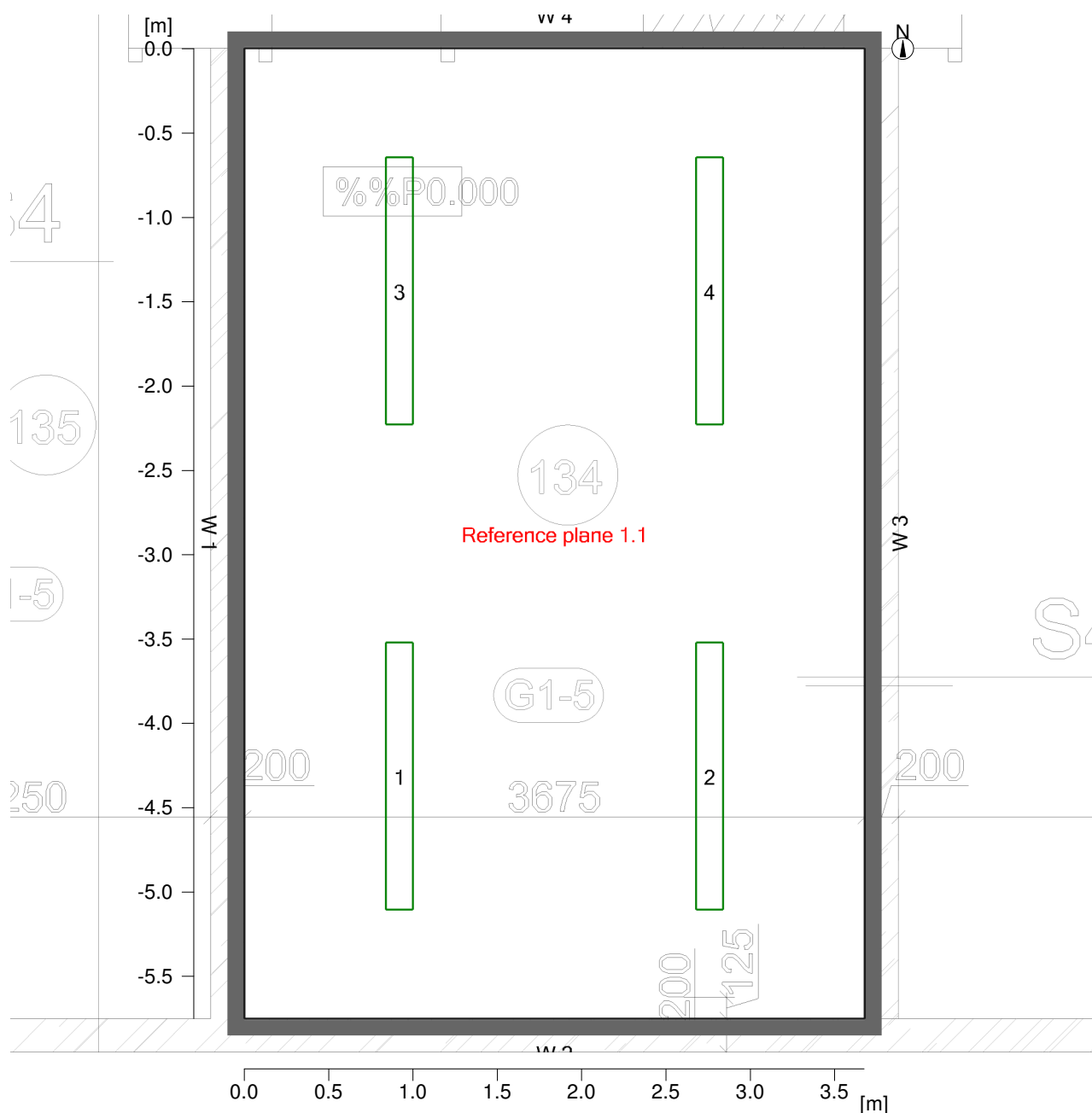
Illuminance [lx]

Average illuminance	Eav	: 227 lx
Minimum illuminance	Emin	: 189 lx
Maximum illuminance	Emax	: 258 lx
Uniformity Uo	Emin/Eav	: 1 : 1.20 (0.83)
Diversity Ud	Emin/Emax	: 1 : 1.37 (0.73)

32 134

32.1 Description, 134

32.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4234.42 m	199.39 m	5.75 m	50.0 %
2	4238.10 m	199.39 m	3.67 m	50.0 %
3	4238.10 m	205.14 m	5.75 m	50.0 %
4	4234.42 m	205.14 m	3.67 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

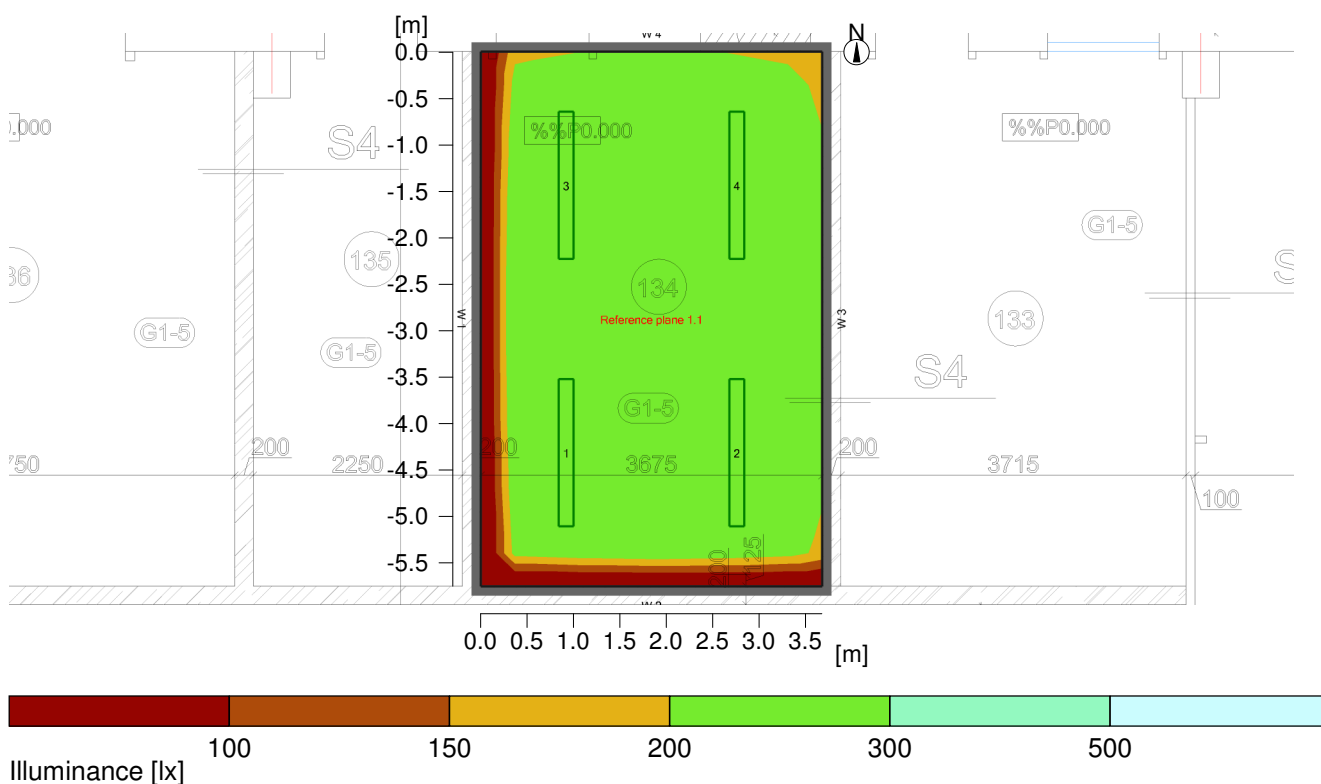
Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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32 134

32.2 Summary, 134

32.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
Height of luminaire plane
Maintenance factor

Average indirect fraction
7.00 m
0.80

Total luminous flux of all lamps
Total power
Total power per area (21.13 m²)

38456.00 lm
305.6 W
14.46 W/m² (5.82 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Control rooms
5.3.1 (EN 12464-1, 8.2011) Plant rooms, switch gear rooms (Ra >60.00)
Horizontal

Em 248 lx (>= 200 lx)
Emin 210 lx
Emin/Eav (Uo) 0.84 (>= 0.40)
Emin/Emax (Ud) 0.74
UGR (2.0H 2.0H) <=19.9 (< 25.00)
Position 0.00 m

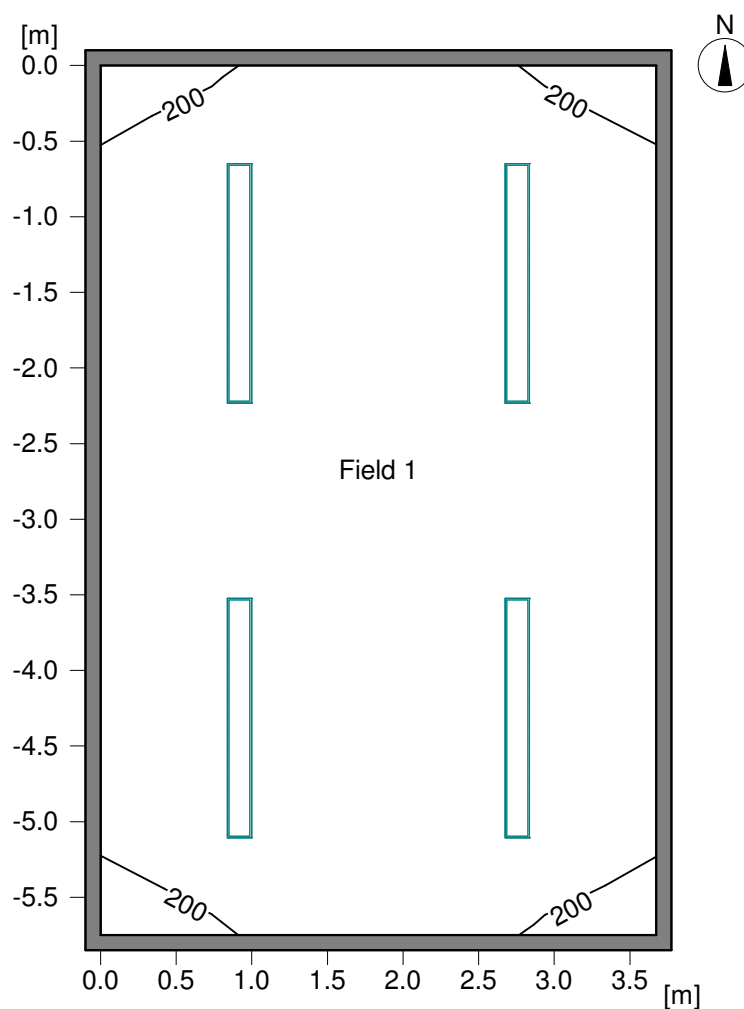
Type No.\Make

29 4 Order No. : VIZULO STONE 75 W 4000 K 1500mm
Luminaire name : STC M 75 840 15D C0 N 100
Equipment : 1 x Stone 10 modules 76.39 W / 9614 lm

32 134

32.3 Calculation results, 134

32.3.1 Isolines representation, Floor (E)



Illuminance [lx]

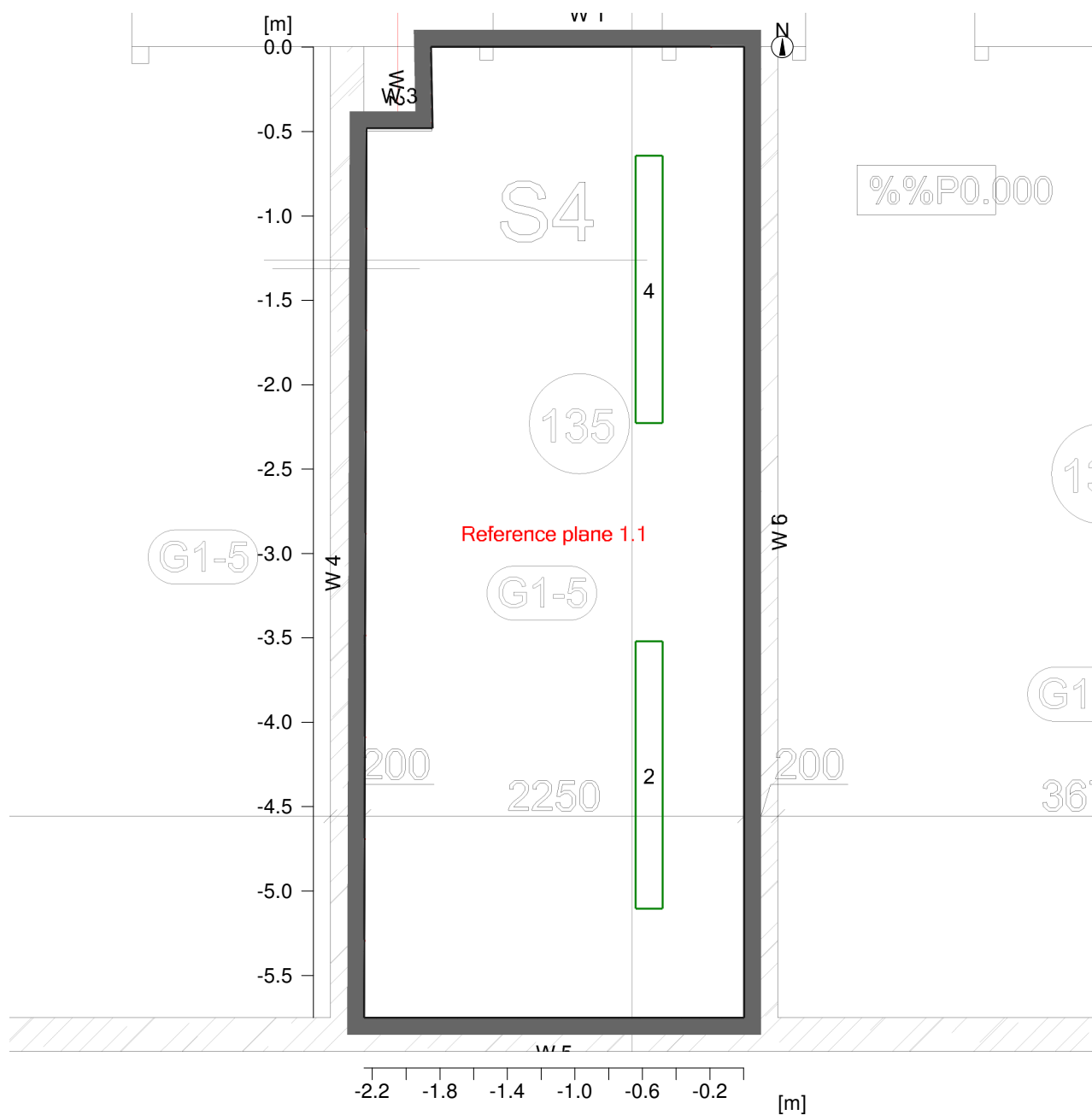
Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U_0
 Diversity U_d

Eav : 223 lx
 Emin : 192 lx
 Emax : 257 lx
 Emin/Eav : 1 : 1.16 (0.86)
 Emin/Emax : 1 : 1.33 (0.75)

33 135

33.1 Description, 135

33.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4232.37 m	205.13 m	1.85 m	50.0 %
2	4232.38 m	204.65 m	0.48 m	50.0 %
3	4231.99 m	204.65 m	0.39 m	50.0 %
4	4231.97 m	199.39 m	5.27 m	50.0 %
5	4234.22 m	199.39 m	2.25 m	50.0 %
6	4234.22 m	205.14 m	5.75 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		----		

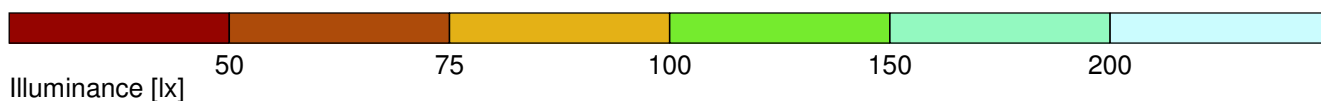
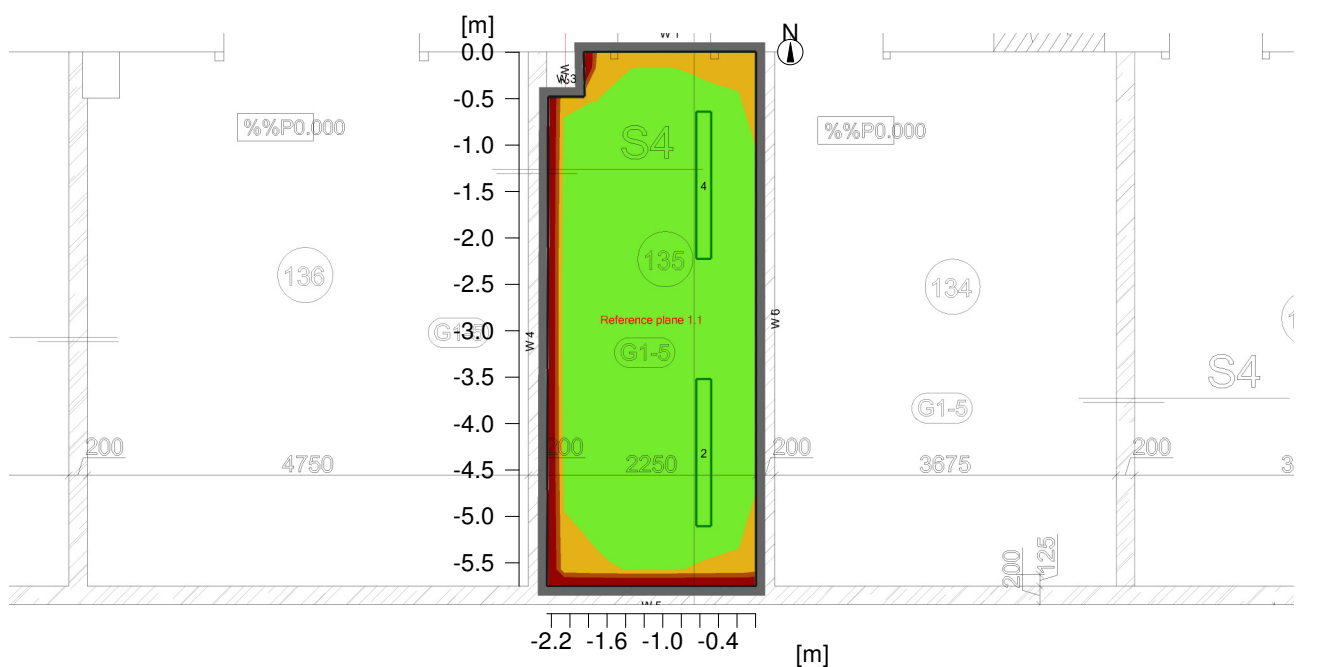
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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33 135

33.2 Summary, 135

33.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 7.00 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (12.71 m²)

19228.00 lm
 152.8 W
 12.02 W/m² (11.43 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Control rooms
 5.3.1 (EN 12464-1, 8.2011) Plant rooms, switch gear rooms (Ra >60.00)
 Horizontal

Em 105 lx (>= 200 lx)
 Emin 86 lx
 Emin/Eav (Uo) 0.81 (>= 0.40)
 Emin/Emax (Ud) 0.74
 UGR (2.0H 2.0H) <=19.9 (< 25.00)
 Position 0.00 m (rot: 0°/0.03°)

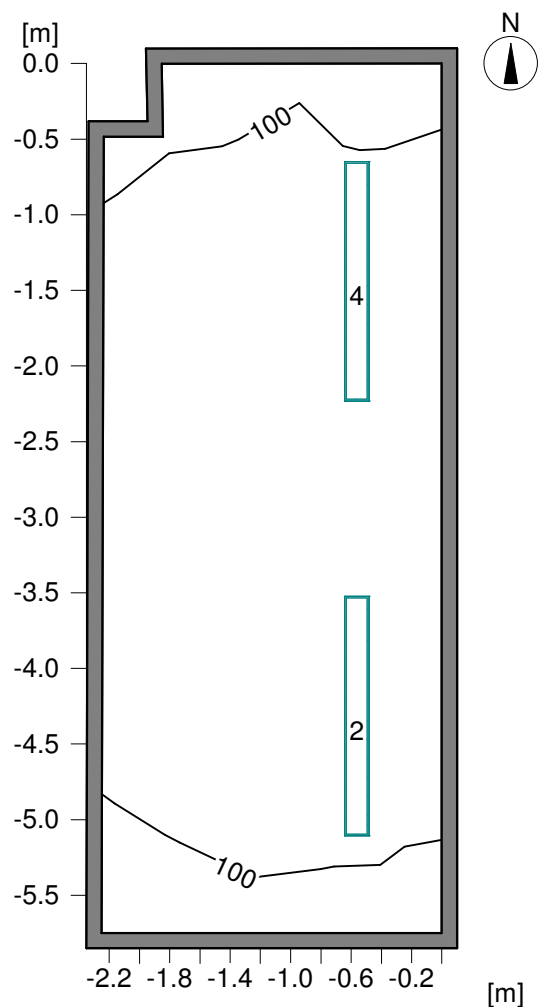
Type No.\Make

29 2 Order No. : VIZULO STONE 75 W 4000 K 1500mm
 Luminaire name : STC M 75 840 15D C0 N 100
 Equipment : 1 x Stone 10 modules 76.39 W / 9614 lm

33 135

33.3 Calculation results, 135

33.3.1 Isolines representation, Floor (E)



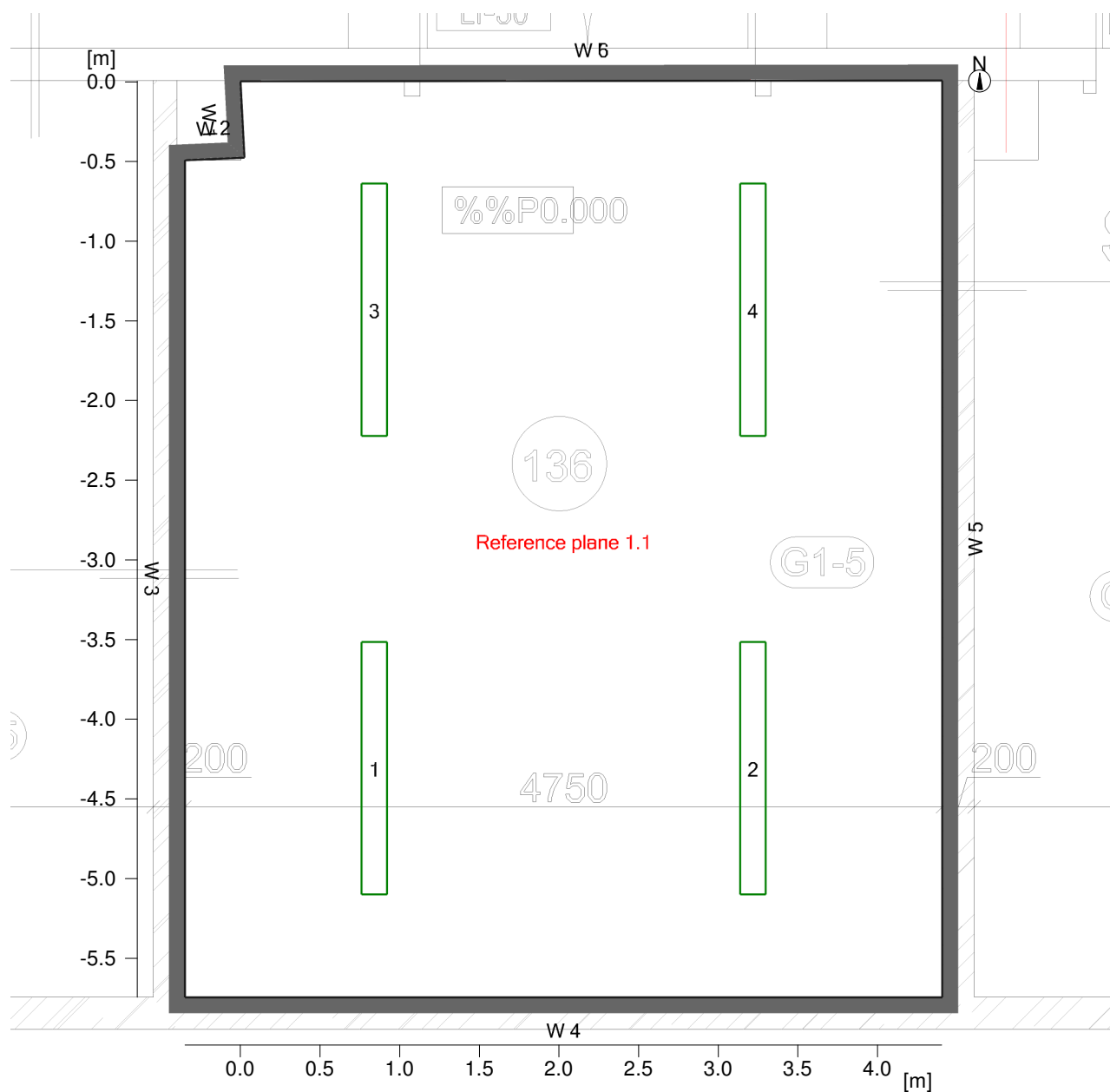
Illuminance [lx]

Average illuminance	Eav	: 107 lx
Minimum illuminance	Emin	: 94 lx
Maximum illuminance	Emax	: 118 lx
Uniformity Uo	Emin/Eav	: 1 : 1.14 (0.88)
Diversity Ud	Emin/Emax	: 1 : 1.25 (0.80)

34 136

34.1 Description, 136

34.1.1 Floor plan

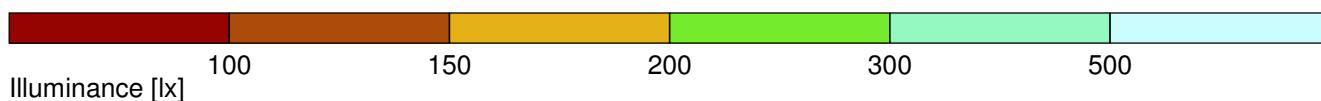
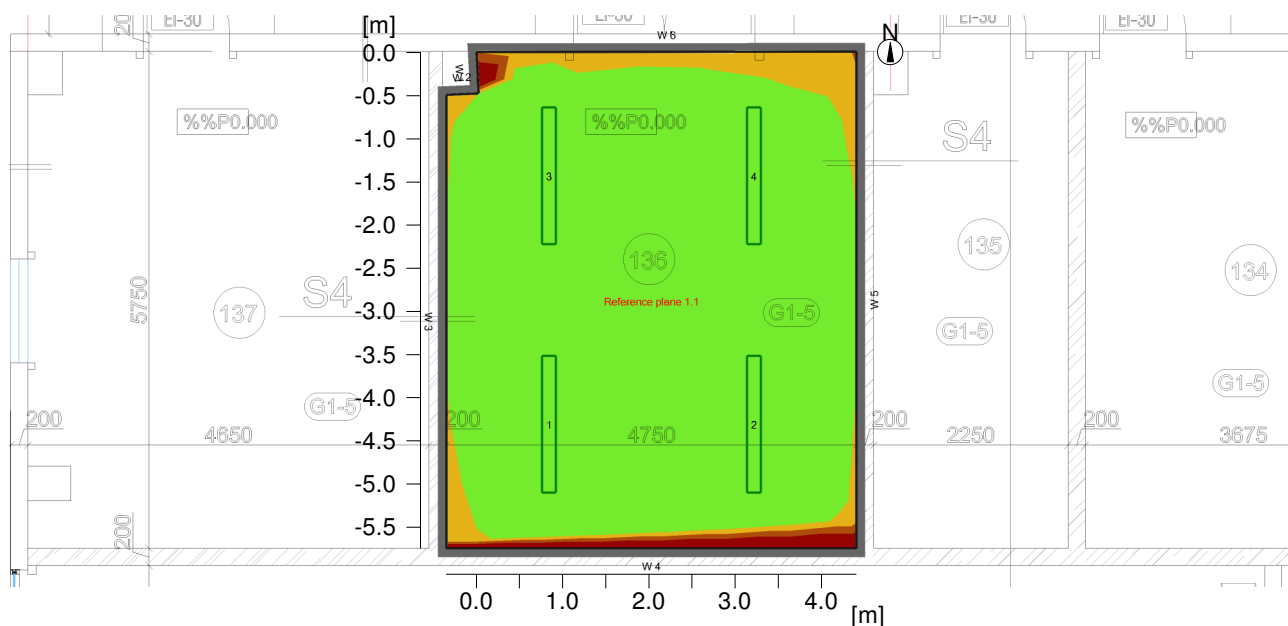


Wall	x	y	Length	Reflectance
1	4227.39 m	204.65 m	0.48 m	50.0 %
2	4227.02 m	204.64 m	0.37 m	50.0 %
3	4227.02 m	199.39 m	5.25 m	50.0 %
4	4231.77 m	199.39 m	4.75 m	50.0 %
5	4231.77 m	205.14 m	5.75 m	50.0 %
6	4227.37 m	205.13 m	4.40 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

34 136

34.2 Summary, 136

34.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 7.00 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (27.12 m²)

38456.00 lm
 305.6 W
 11.27 W/m² (4.83 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Control rooms
 5.3.1 (EN 12464-1, 8.2011) Plant rooms, switch gear rooms (Ra >60.00)
 Horizontal

Em 233 lx (>= 200 lx)
 Emin 166 lx
 Emin/Eav (Uo) 0.71 (>= 0.40)
 Emin/Emax (Ud) 0.61
 UGR (2.0H 2.0H) <=19.9 (< 25.00)
 Position 0.00 m

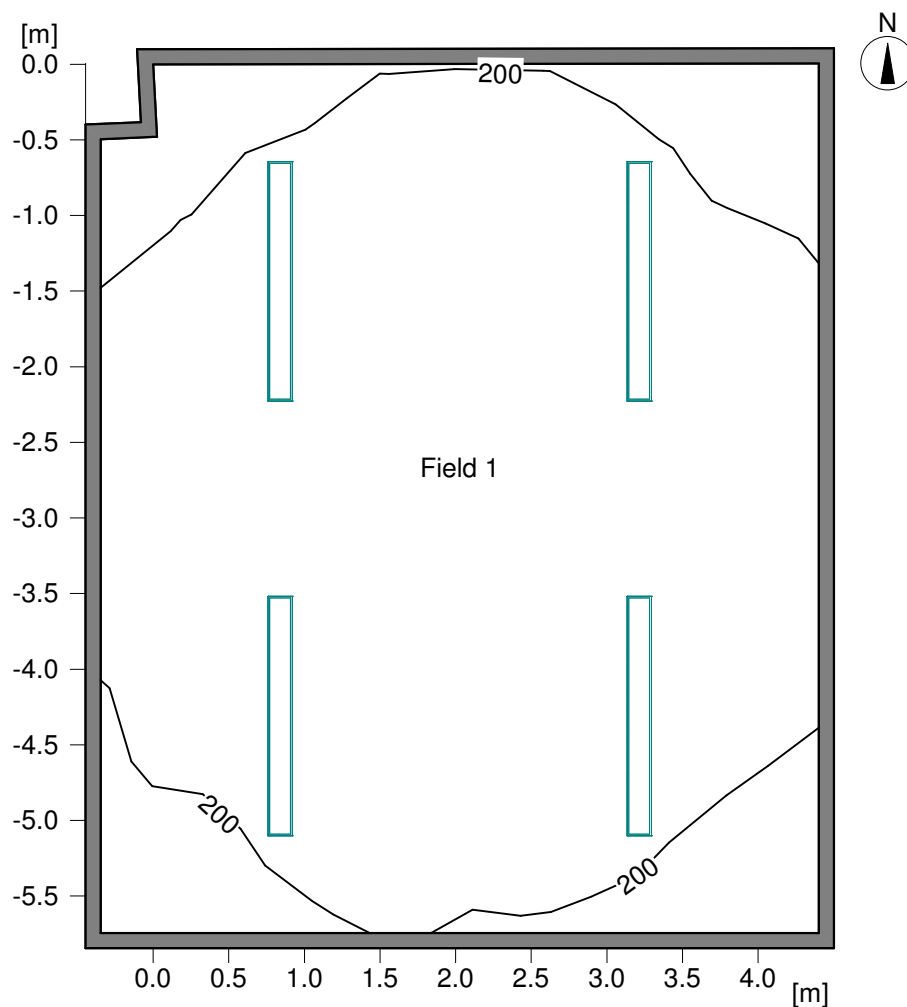
Type No.\Make

29 4 Order No. : VIZULO STONE 75 W 4000 K 1500mm
 Luminaire name : STC M 75 840 15D C0 N 100
 Equipment : 1 x Stone 10 modules 76.39 W / 9614 lm

34 136

34.3 Calculation results, 136

34.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 217 lx
Minimum illuminance	Emin	: 165 lx
Maximum illuminance	Emax	: 260 lx
Uniformity Uo	Emin/Eav	: 1 : 1.32 (0.76)
Diversity Ud	Emin/Emax	: 1 : 1.58 (0.63)

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Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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35 137

35.1 Description, 137

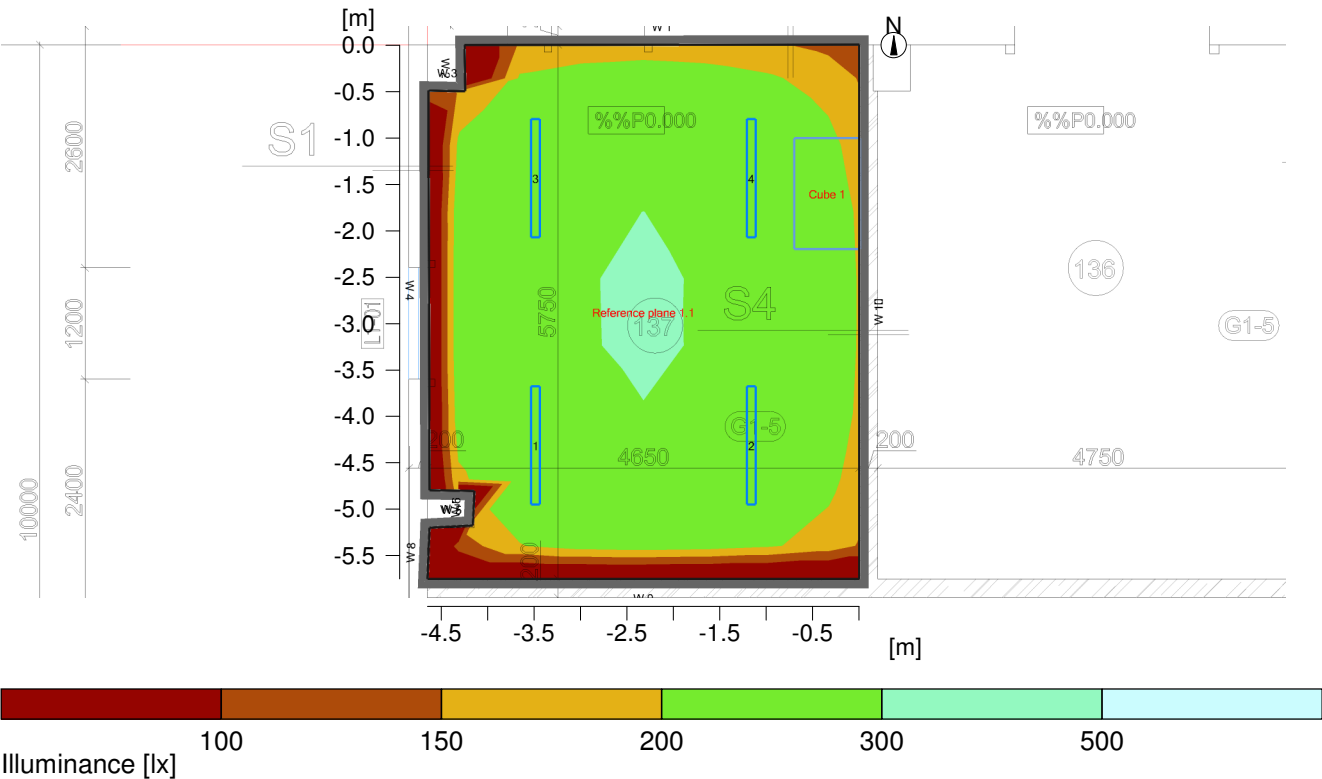
35.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4222.57 m	205.13 m	4.25 m	50.0 %
2	4222.58 m	204.63 m	0.50 m	50.0 %
3	4222.18 m	204.64 m	0.40 m	50.0 %
4	4222.19 m	200.34 m	4.30 m	50.0 %
5	4222.68 m	200.33 m	0.48 m	50.0 %
6	4222.66 m	199.96 m	0.37 m	50.0 %
7	4222.19 m	199.94 m	0.47 m	50.0 %
8	4222.17 m	199.39 m	0.55 m	50.0 %
9	4226.82 m	199.39 m	4.65 m	50.0 %
10	4226.82 m	205.14 m	5.75 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		----		

35 137

35.2 Summary, 137

35.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
Height of luminaire plane
Maintenance factor

Average indirect fraction
3.12 m
0.80

Total luminous flux of all lamps 17293.40 lm (100.00% dimmed)
(Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 147.3 W
Total power per area (26.26 m²) 5.61 W/m² (2.37 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Control rooms
5.3.1 (EN 12464-1, 8.2011) Plant rooms, switch gear rooms (Ra >60.00)
Horizontal
Em 237 lx (>= 200 lx)
Emin 112 lx
Emin/Eav (Uo) 0.47 (>= 0.40)
Emin/Emax (Ud) 0.39
UGR (2.5H 3.1H) <=20.3 (< 25.00)
Position 0.00 m (rot: 0°/0.05°)

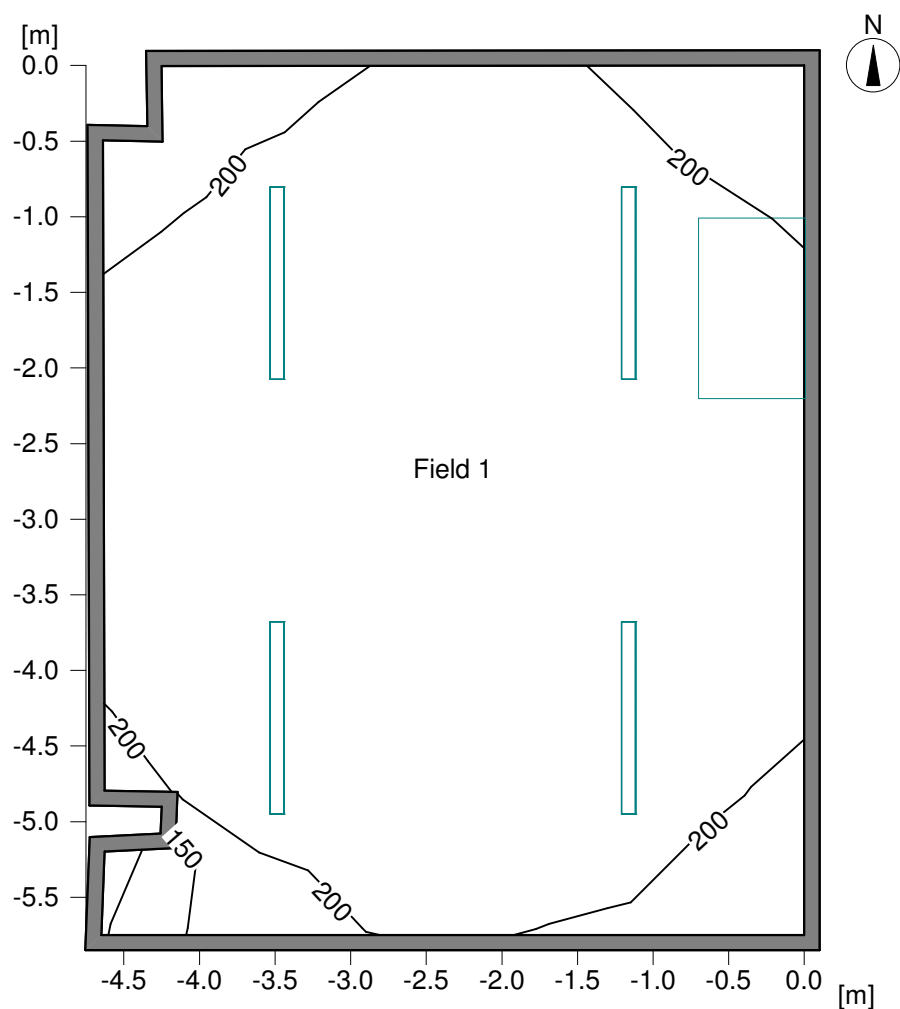
Type No.\Make

10 4 Order No. : VIZULO STONE 37 W 4000 K 1200mm
Luminaire name : STB L 37 840 12S A2 N 100 LT80
Equipment : 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

35 137

35.3 Calculation results, 137

35.3.1 Isolines representation, Floor (E)



Illuminance [lx]

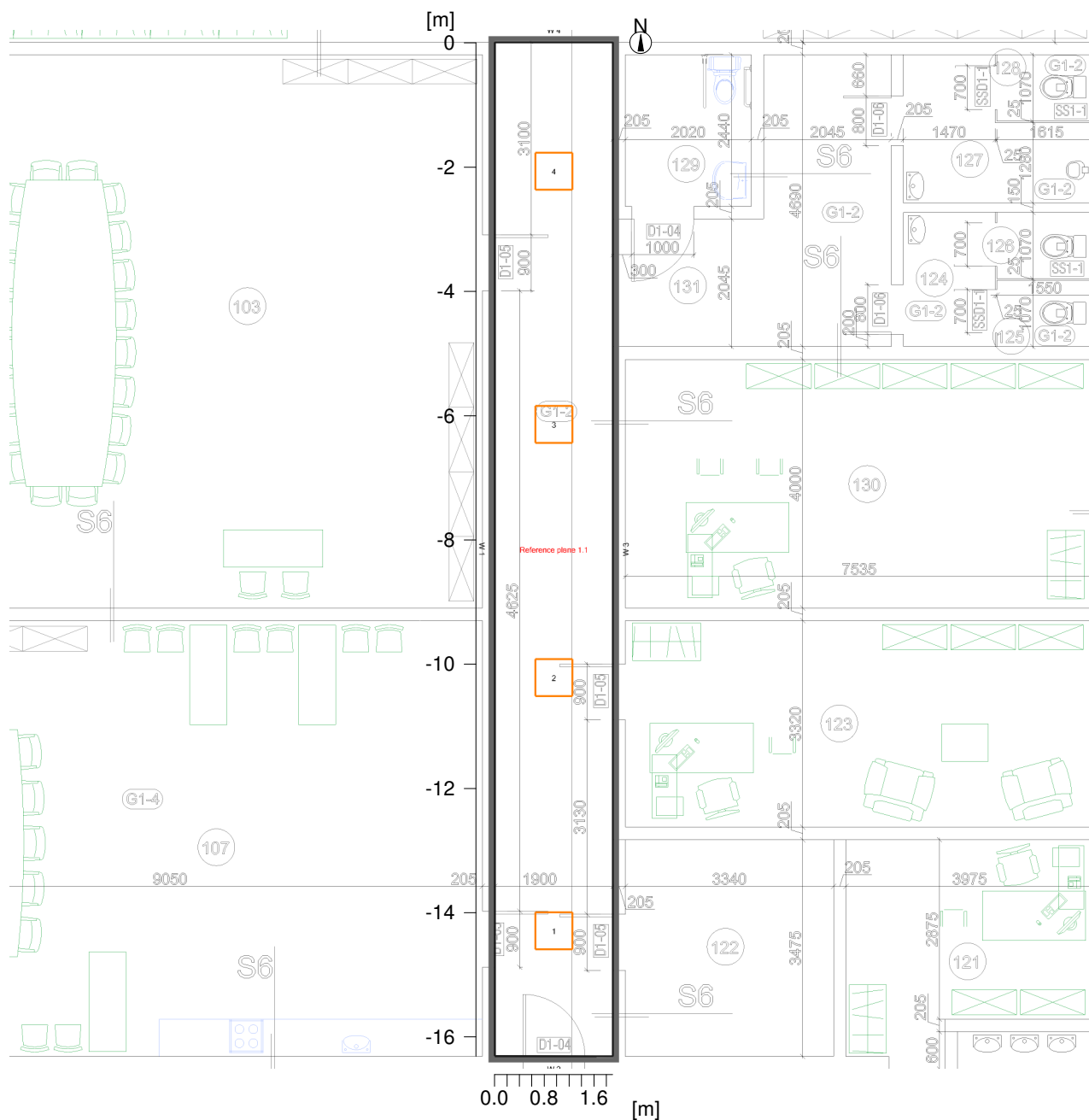
Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U_0
 Diversity U_d

Eav : 227 lx
 Emin : 95 lx
 Emax : 283 lx
 Emin/Eav : 1 : 2.39 (0.42)
 Emin/Emax : 1 : 2.97 (0.34)

36 102/1

36.1 Description, 102/1

36.1.1 Floor plan

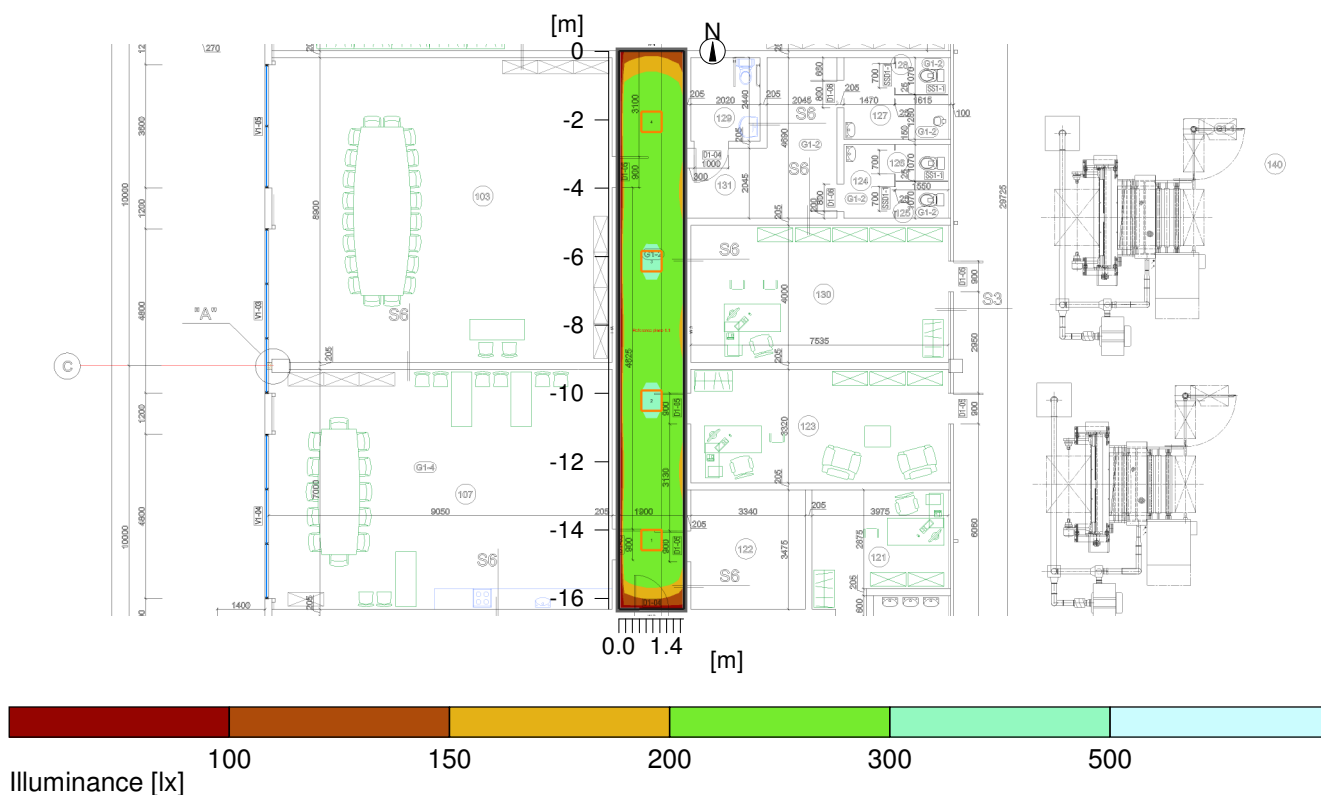


Wall	x	y	Length	Reflectance
1	4232.32 m	158.03 m	16.31 m	50.0 %
2	4234.22 m	158.03 m	1.90 m	50.0 %
3	4234.22 m	174.34 m	16.31 m	50.0 %
4	4232.32 m	174.34 m	1.90 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		2.88 m		
Height of ref. plane		0.00 m		

36 102/1

36.2 Summary, 102/1

36.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 2.88 m
 0.80

Total luminous flux of all lamps 17520.10 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 140.3 W
 Total power per area (30.98 m²) 4.53 W/m² (1.94 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
 5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
 Horizontal

Em 234 lx (>= 100 lx)
 Emin 111 lx
 Emin/Eav (Uo) 0.47 (>= 0.40)
 Emin/Emax (Ud) 0.38
 UGR (9.8H 1.1H) <=17.9 (< 28.00)
 Position 0.00 m

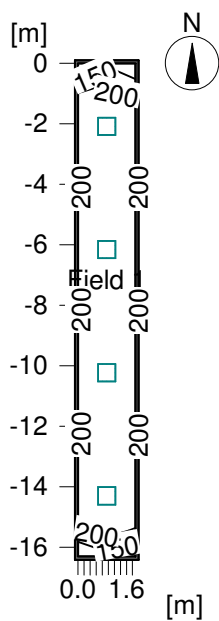
Type No./Make

13 4 Order No. : Leaf Slim 35 W 4000 K Prismatic
 Luminaire name : LFS 35 840 R0606 WU D10 H
 Equipment : 1 x Leaf Slim 35 W 35.07 W / 4380.03 lm

36 102/1

36.3 Calculation results, 102/1

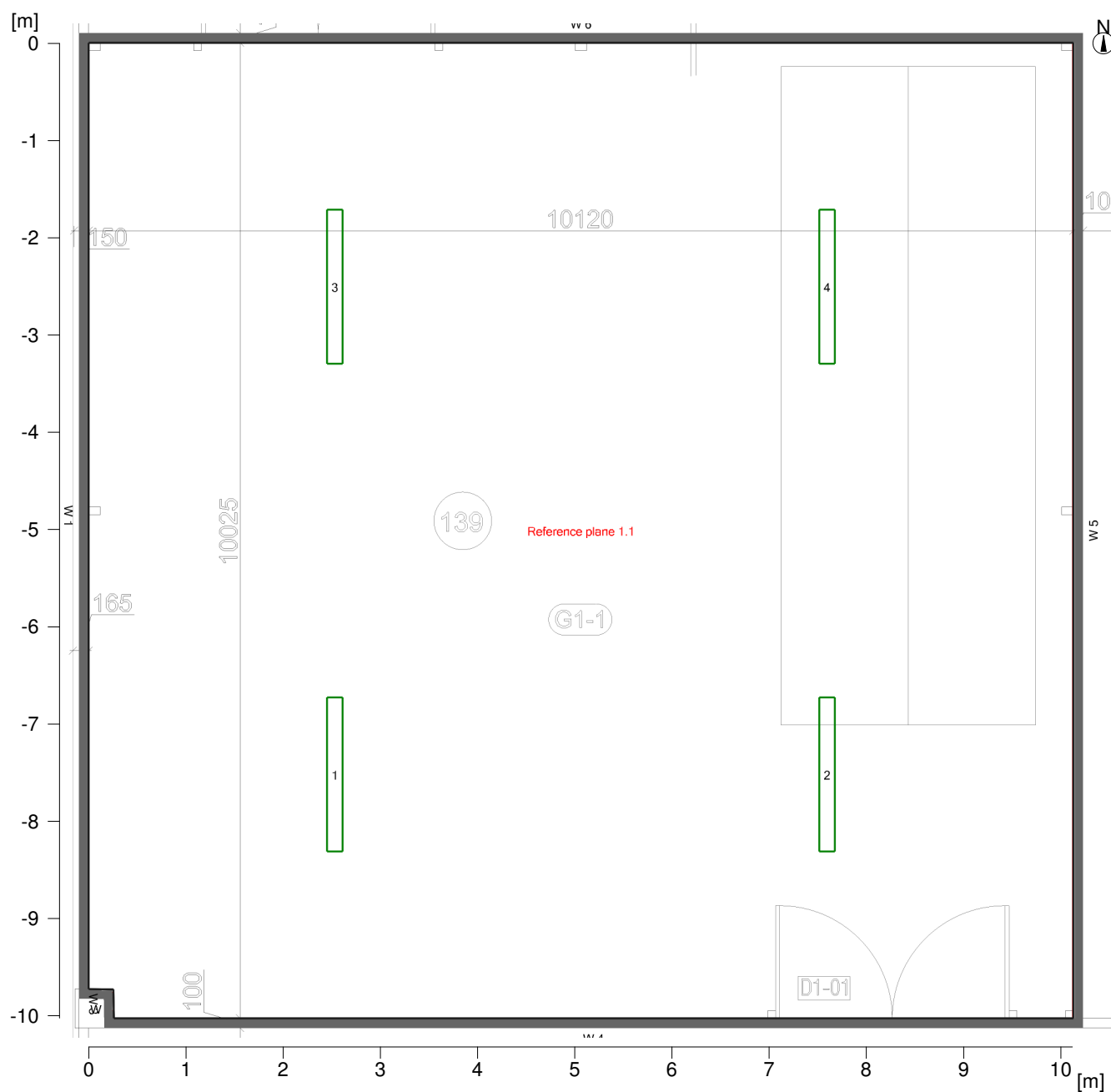
36.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 229 lx
Minimum illuminance	Emin	: 112 lx
Maximum illuminance	Emax	: 277 lx
Uniformity Uo	Emin/Eav	: 1 : 2.04 (0.49)
Diversity Ud	Emin/Emax	: 1 : 2.47 (0.40)

37.1.1 Floor plan

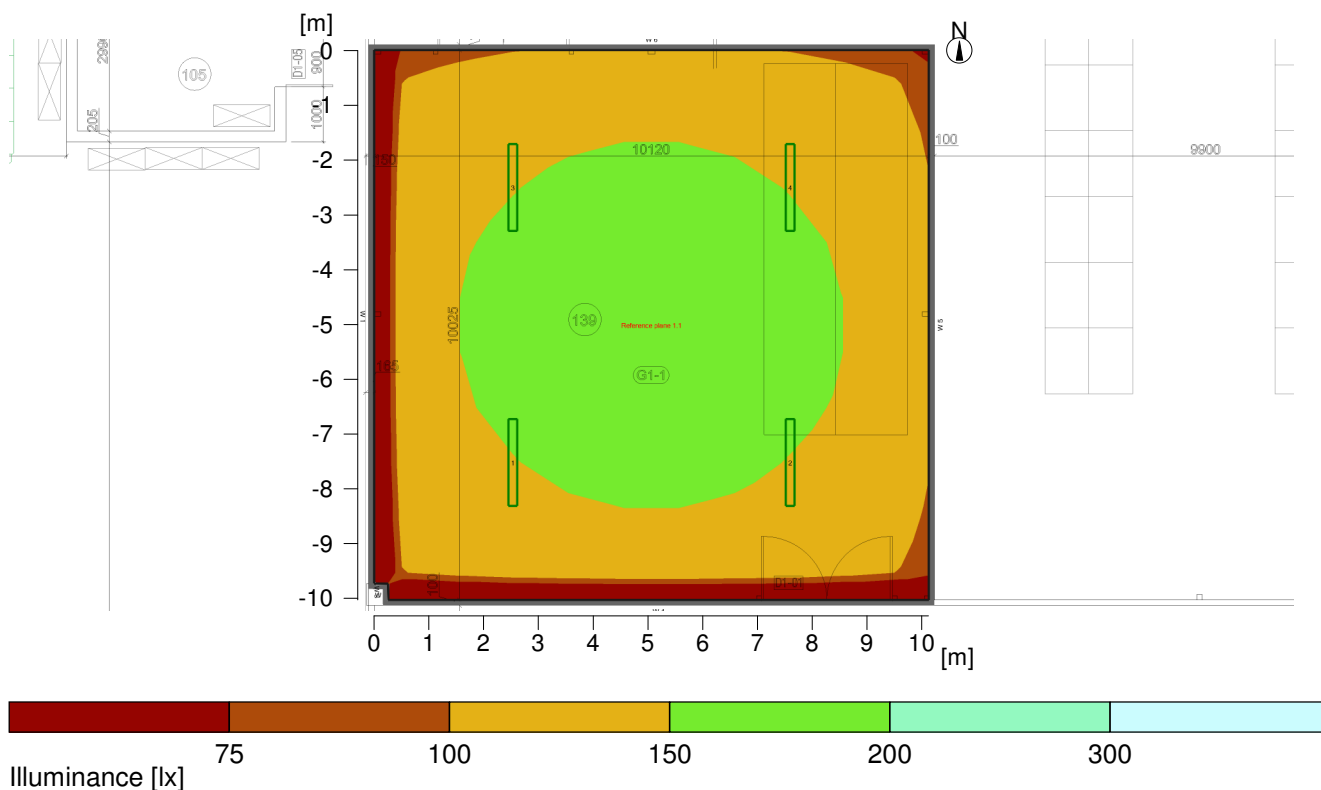


Wall	x	y	Length	Reflectance
1	4242.11 m	185.34 m	9.73 m	50.0 %
2	4242.37 m	185.33 m	0.25 m	50.0 %
3	4242.37 m	185.04 m	0.30 m	50.0 %
4	4252.23 m	185.04 m	9.86 m	50.0 %
5	4252.23 m	195.06 m	10.03 m	50.0 %
6	4242.11 m	195.06 m	10.12 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		11.00 m		
Height of ref. plane		0.00 m		

37 139

37.2 Summary, 139

37.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	7.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	38456.00 lm
Total power	305.6 W
Total power per area (101.38 m²)	3.01 W/m² (2.25 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Store rooms, cold stores
 5.4.1 (EN 12464-1, 8.2011) Store and stockrooms (Ra >60.00)
 Horizontal

Em	134 lx	(>= 100 lx)
Emin	93 lx	
Emin/Eav (Uo)	0.70	(>= 0.40)
Emin/Emax (Ud)	0.57	
UGR (2.0H 2.0H)	<=19.9	(< 25.00)
Position	0.00 m	

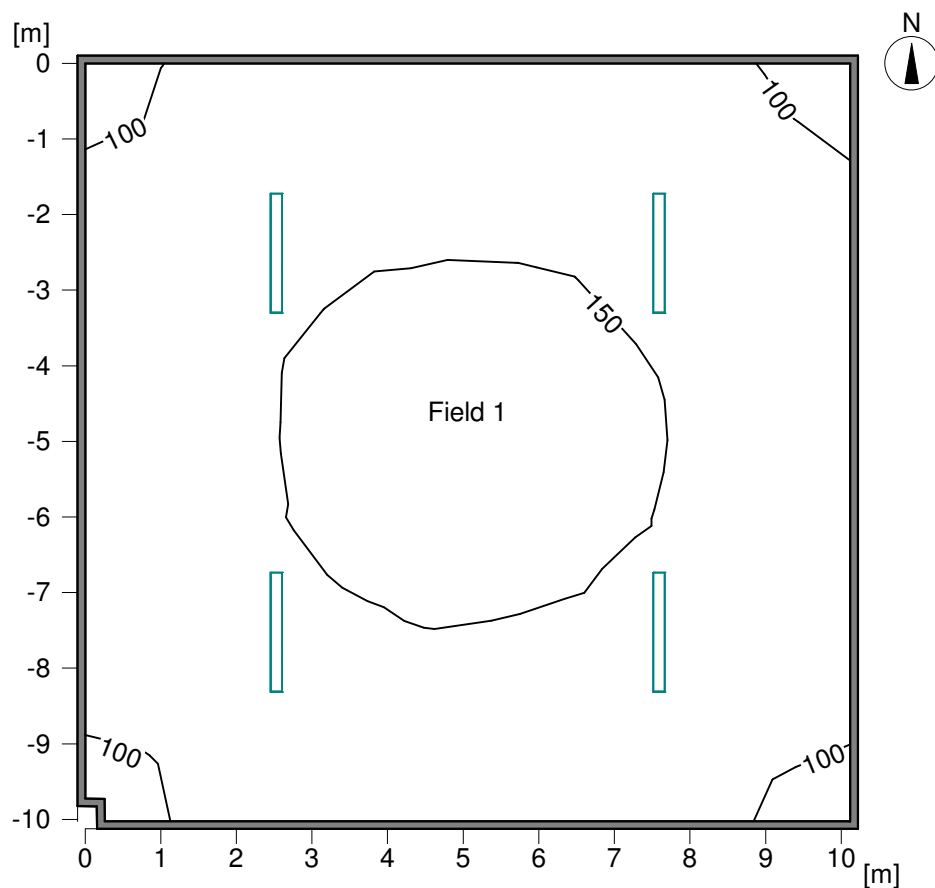
Type No.\Make

29	4	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

37 139

37.3 Calculation results, 139

37.3.1 Isolines representation, Floor (E)



Illuminance [lx]

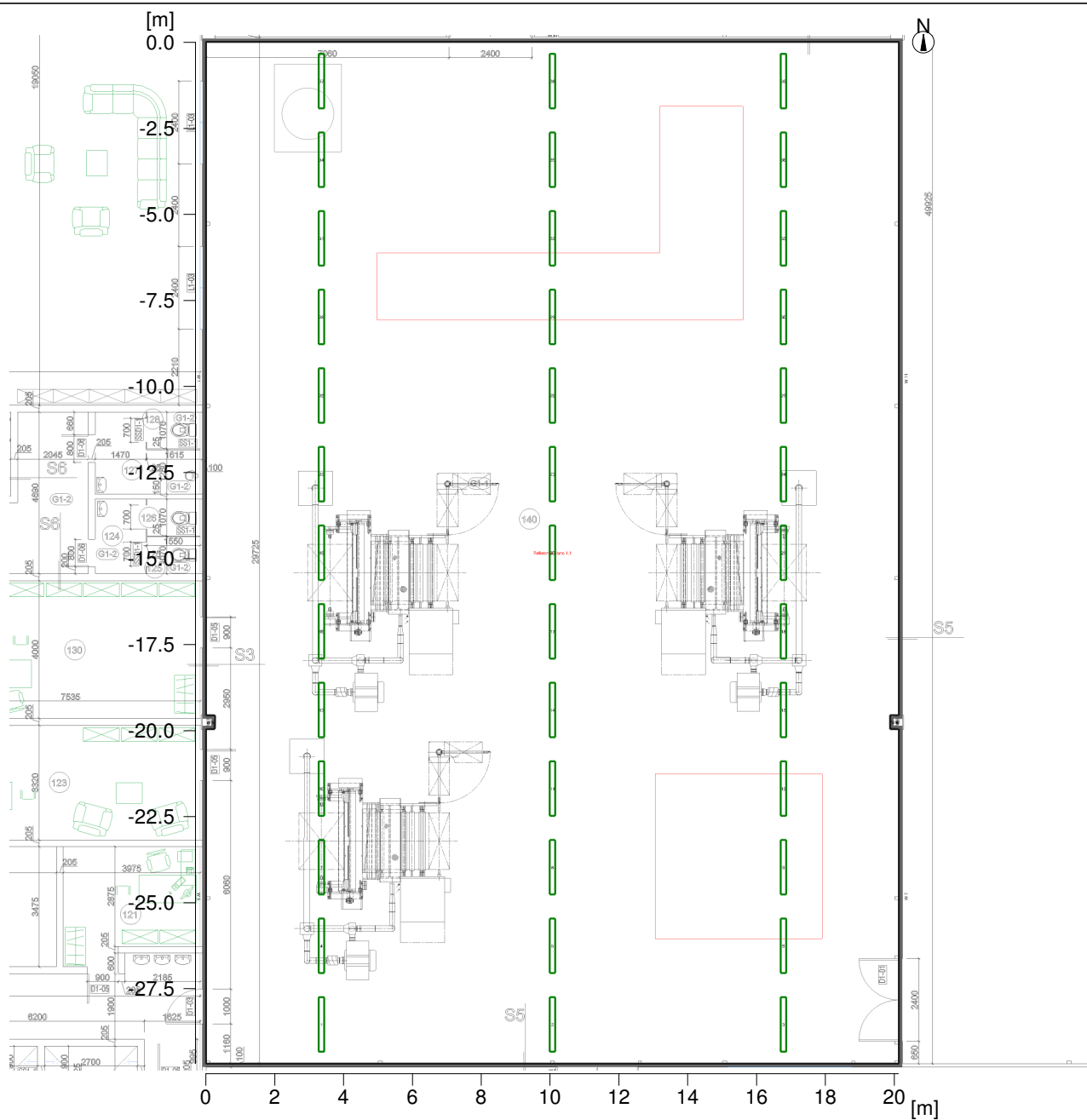
Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U_0
 Diversity U_d

Eav : 128 lx
 Emin : 88 lx
 Emax : 161 lx
 Emin/Eav : 1 : 1.46 (0.69)
 Emin/Emax : 1 : 1.82 (0.55)

38 140

38.1 Description, 140

38.1.1 Floor plan



Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018



38 140

38.1 Description, 140

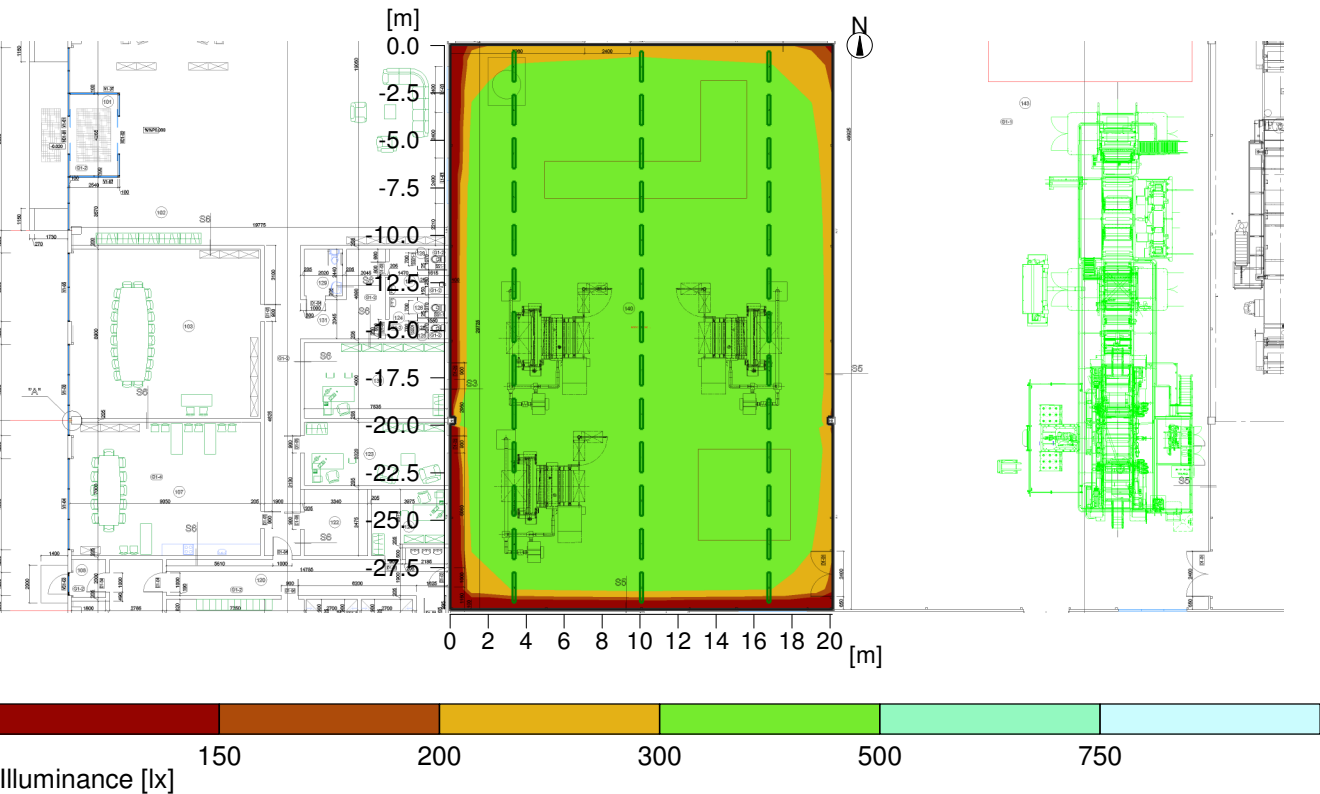
38.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4242.11 m	165.33 m	19.56 m	50.0 %
2	4242.38 m	165.32 m	0.26 m	50.0 %
3	4242.37 m	164.93 m	0.39 m	50.0 %
4	4242.11 m	164.93 m	0.26 m	50.0 %
5	4242.11 m	155.21 m	9.72 m	50.0 %
6	4262.23 m	155.21 m	20.12 m	50.0 %
7	4262.23 m	164.93 m	9.72 m	50.0 %
8	4261.98 m	164.93 m	0.26 m	50.0 %
9	4261.98 m	165.33 m	0.40 m	50.0 %
10	4262.23 m	165.33 m	0.26 m	50.0 %
11	4262.23 m	184.89 m	19.56 m	50.0 %
12	4242.11 m	184.89 m	20.12 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		11.00 m		
Height of ref. plane		0.75 m		

38 140

38.2 Summary, 140

38.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	7.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	374946.00 lm
Total power	2979.2 W
Total power per area (596.86 m²)	4.99 W/m² (1.31 W/m²/100lx)

Evaluation area 1

User profile

Em	380 lx	(≥ 300 lx)
Emin	238 lx	
Emin/Eav (Uo)	0.63	(≥ 0.60)
Emin/Emax (Ud)	0.52	
UGR (3.5H 5.2H)	≤24.4	(< 25.00)
Position	0.75 m	

Reference plane 1.1

General areas inside buildings - Store rooms, cold stores
5.4.2 (EN 12464-1, 8.2011) Dispatch packing handling areas (Ra >60.00)
Horizontal

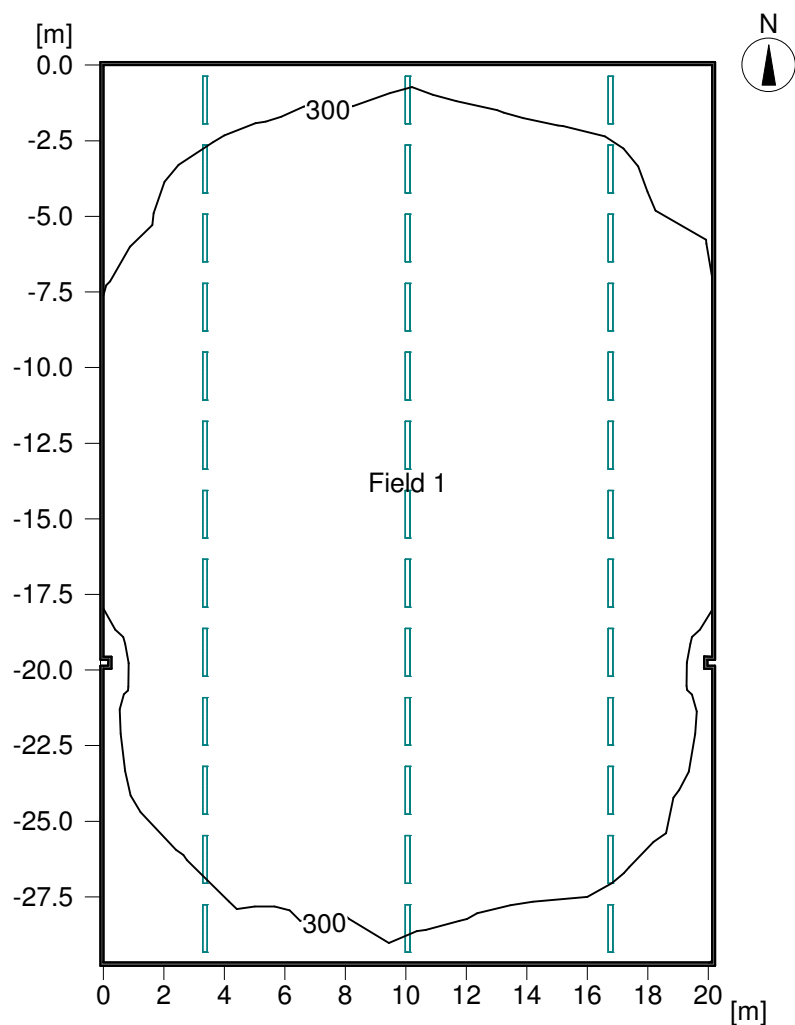
Type No.Make

29	39	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

38 140

38.3 Calculation results, 140

38.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U_0
 Diversity U_d

Eav : 336 lx
 Emin : 199 lx
 Emax : 421 lx
 Emin/Eav : 1 : 1.69 (0.59)
 Emin/Emax : 1 : 2.12 (0.47)

39 142

39.1 Description, 142

39.1.1 Floor plan



Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018



39 142

39.1 Description, 142

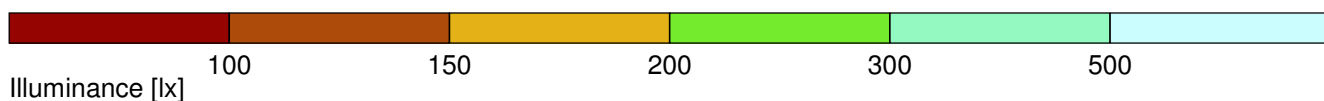
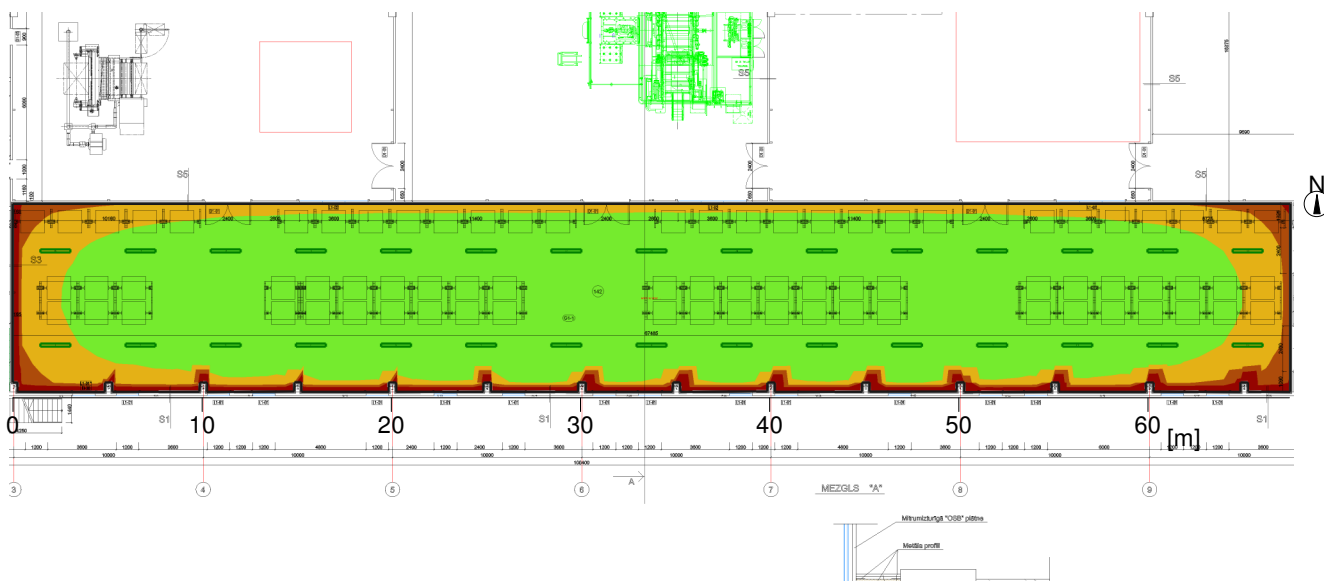
39.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4242.11 m	145.64 m	9.42 m	50.0 %
2	4242.36 m	145.63 m	0.25 m	50.0 %
3	4242.36 m	145.14 m	0.50 m	50.0 %
4	4246.97 m	145.13 m	4.62 m	50.0 %
5	4246.98 m	145.63 m	0.50 m	50.0 %
6	4247.37 m	145.63 m	0.39 m	50.0 %
7	4247.37 m	145.14 m	0.50 m	50.0 %
8	4251.97 m	145.14 m	4.60 m	50.0 %
9	4251.99 m	145.63 m	0.48 m	50.0 %
10	4252.38 m	145.64 m	0.39 m	50.0 %
11	4252.37 m	145.14 m	0.50 m	50.0 %
12	4256.97 m	145.16 m	4.60 m	50.0 %
13	4256.98 m	145.64 m	0.49 m	50.0 %
14	4257.35 m	145.64 m	0.38 m	50.0 %
15	4257.36 m	145.14 m	0.51 m	50.0 %
16	4261.97 m	145.14 m	4.61 m	50.0 %
17	4261.97 m	145.63 m	0.50 m	50.0 %
18	4262.37 m	145.63 m	0.40 m	50.0 %
19	4262.37 m	145.14 m	0.49 m	50.0 %
20	4266.96 m	145.14 m	4.59 m	50.0 %
21	4266.97 m	145.62 m	0.48 m	50.0 %
22	4267.37 m	145.63 m	0.40 m	50.0 %
23	4267.37 m	145.15 m	0.48 m	50.0 %
24	4271.97 m	145.14 m	4.60 m	50.0 %
25	4271.98 m	145.64 m	0.51 m	50.0 %
26	4272.39 m	145.63 m	0.41 m	50.0 %
27	4272.38 m	145.14 m	0.50 m	50.0 %
28	4276.96 m	145.14 m	4.58 m	50.0 %
29	4276.98 m	145.64 m	0.50 m	50.0 %
30	4277.36 m	145.64 m	0.38 m	50.0 %
31	4277.38 m	145.14 m	0.51 m	50.0 %
32	4281.97 m	145.16 m	4.59 m	50.0 %
33	4281.98 m	145.63 m	0.47 m	50.0 %
34	4282.37 m	145.63 m	0.39 m	50.0 %
35	4282.37 m	145.14 m	0.49 m	50.0 %
36	4286.98 m	145.14 m	4.61 m	50.0 %
37	4286.97 m	145.63 m	0.49 m	50.0 %
38	4287.38 m	145.64 m	0.41 m	50.0 %
39	4287.37 m	145.15 m	0.49 m	50.0 %
40	4291.97 m	145.16 m	4.60 m	50.0 %
41	4291.96 m	145.63 m	0.48 m	50.0 %
42	4292.38 m	145.64 m	0.42 m	50.0 %
43	4292.38 m	145.12 m	0.52 m	50.0 %
44	4296.99 m	145.14 m	4.61 m	50.0 %
45	4296.97 m	145.63 m	0.50 m	50.0 %
46	4297.37 m	145.63 m	0.40 m	50.0 %
47	4297.38 m	145.14 m	0.49 m	50.0 %
48	4301.98 m	145.13 m	4.59 m	50.0 %
49	4301.96 m	145.63 m	0.50 m	50.0 %
50	4302.39 m	145.63 m	0.43 m	50.0 %
51	4302.37 m	145.15 m	0.48 m	50.0 %
52	4306.97 m	145.13 m	4.60 m	50.0 %
53	4306.97 m	145.64 m	0.51 m	50.0 %
54	4307.36 m	145.63 m	0.40 m	50.0 %
55	4307.37 m	145.14 m	0.49 m	50.0 %
56	4309.60 m	145.14 m	2.23 m	50.0 %
57	4309.60 m	155.06 m	9.93 m	50.0 %
58	4242.11 m	155.06 m	67.48 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		11.00 m		
Height of ref. plane		0.00 m		

39 142

39.2 Summary, 142

39.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 7.00 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (666.73 m²)

288420.00 lm
 2291.7 W
 3.44 W/m² (1.63 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Industrial activities and crafts - Paper and paper goods
 5.19.1 (EN 12464-1, 8.2011) Edge runners, pulp mills (Ra >80.00)
 Horizontal

Em 210 lx (>= 200 lx)
 Emin 115 lx
 Emin/Eav (Uo) 0.55 (>= 0.40)
 Emin/Emax (Ud) 0.47
 UGR (11.7H 1.7H) <=23.6 (< 25.00)
 Position 0.00 m

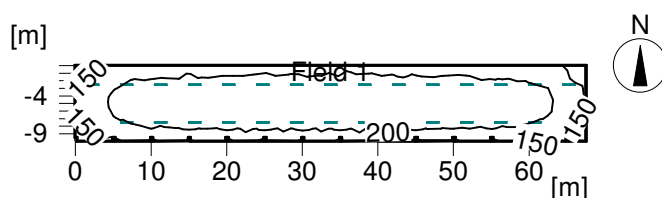
Type No.\Make

29 30 Order No. : VIZULO STONE 75 W 4000 K 1500mm
 Luminaire name : STC M 75 840 15D C0 N 100
 Equipment : 1 x Stone 10 modules 76.39 W / 9614 lm

39 142

39.3 Calculation results, 142

39.3.1 Isolines representation, Floor (E)



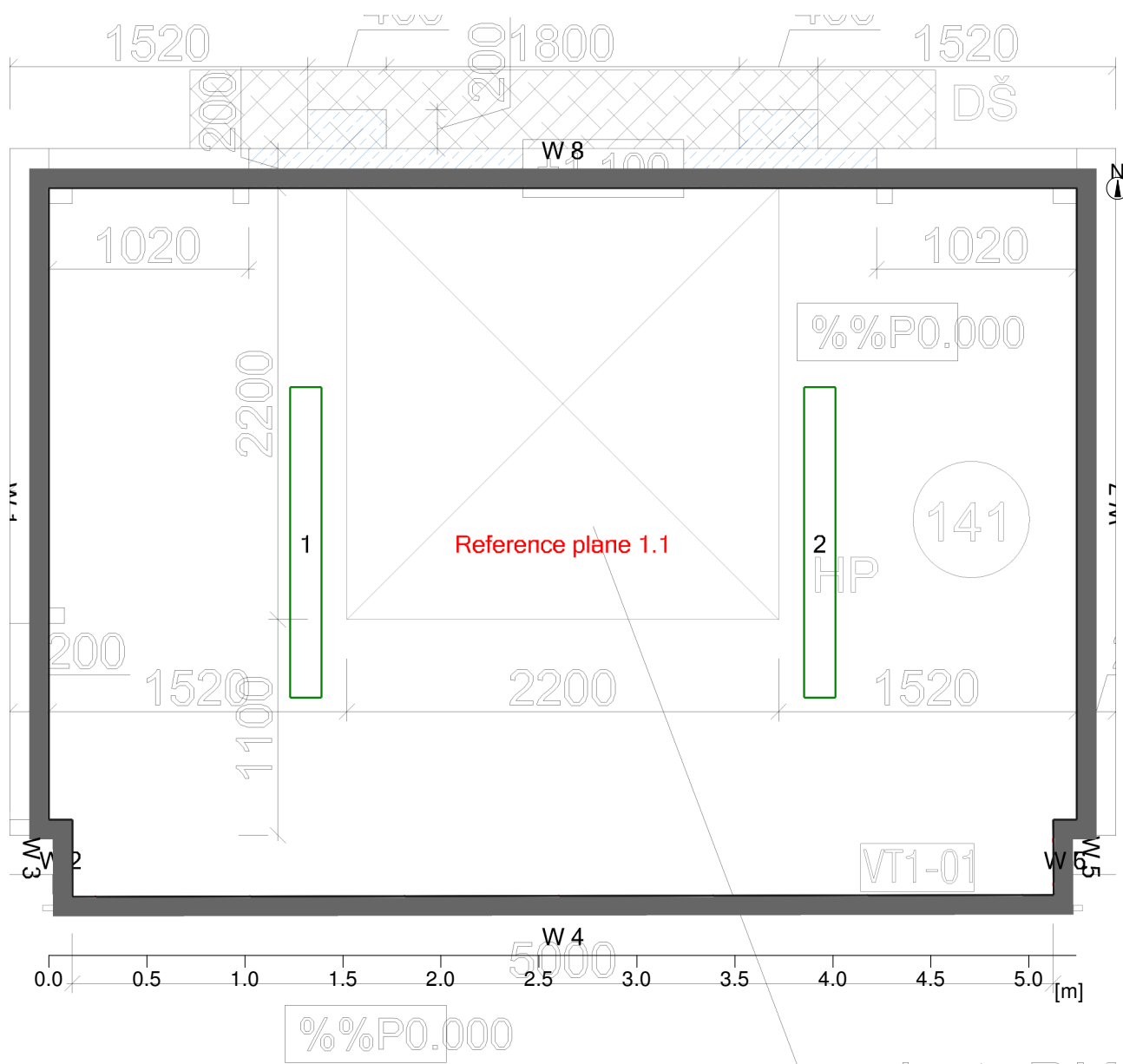
Illuminance [lx]

Average illuminance	Eav	: 200 lx
Minimum illuminance	Emin	: 119 lx
Maximum illuminance	Emax	: 231 lx
Uniformity Uo	Emin/Eav	: 1 : 1.68 (0.60)
Diversity Ud	Emin/Emax	: 1 : 1.94 (0.52)

40 141

40.1 Description, 141

40.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4244.48 m	205.42 m	3.22 m	50.0 %
2	4244.60 m	205.42 m	0.12 m	50.0 %
3	4244.60 m	205.02 m	0.39 m	50.0 %
4	4249.60 m	205.03 m	5.00 m	50.0 %
5	4249.60 m	205.42 m	0.38 m	50.0 %
6	4249.72 m	205.42 m	0.12 m	50.0 %
7	4249.72 m	208.64 m	3.22 m	50.0 %
8	4244.48 m	208.64 m	5.24 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		11.00 m		
Height of ref. plane		0.00 m		

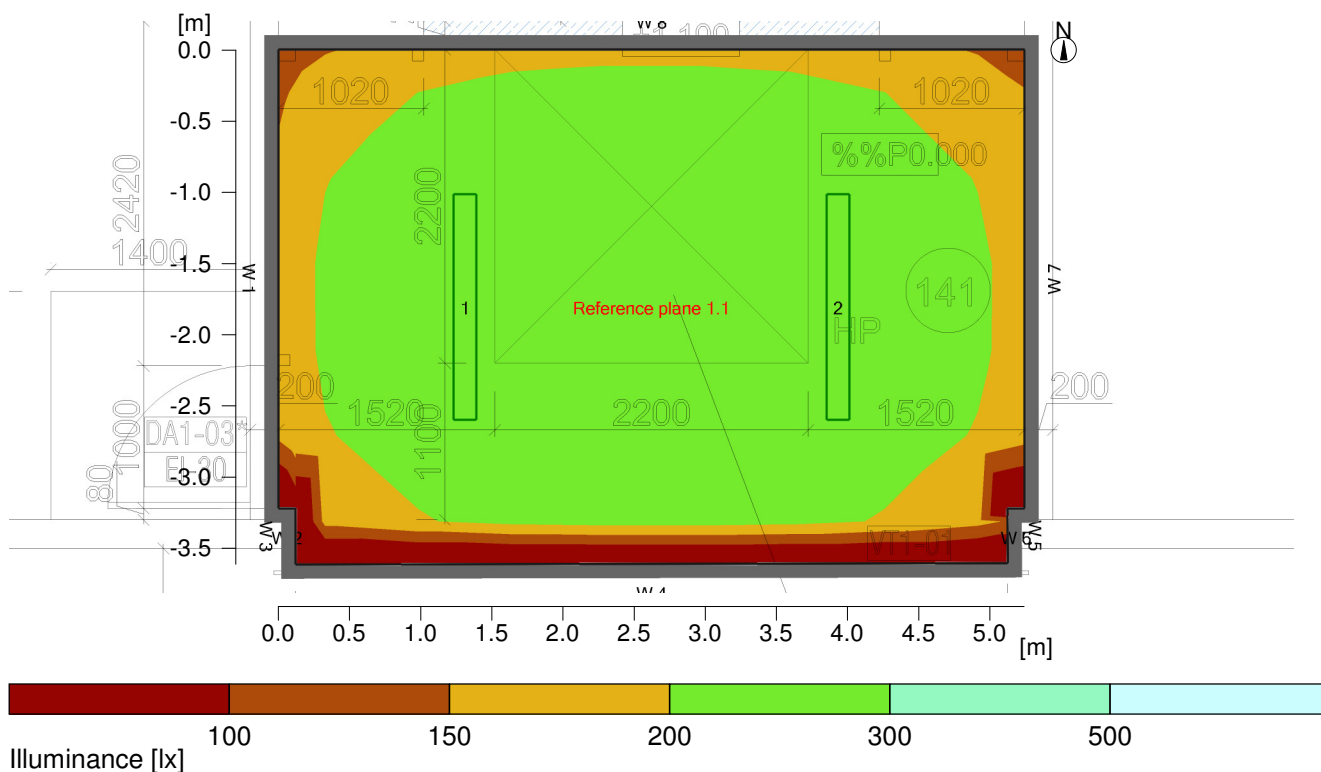
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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40 141

40.2 Summary, 141

40.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	5.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	19228.00 lm
Total power	152.8 W
Total power per area (18.82 m ²)	8.12 W/m ² (3.83 W/m ² /100lx)

Evaluation area 1

User profile	Traffic zones inside buildings
	5.1.4 (EN 12464-1, 8.2011) Loading ramps/bays (Ra >40.00)
	Horizontal
Em	212 lx (>= 150 lx)
Emin	158 lx
Emin/Eav (Uo)	0.75 (>= 0.40)
Emin/Emax (Ud)	0.64
UGR (2.0H 2.0H)	<=19.9 (< 25.00)
Position	0.00 m

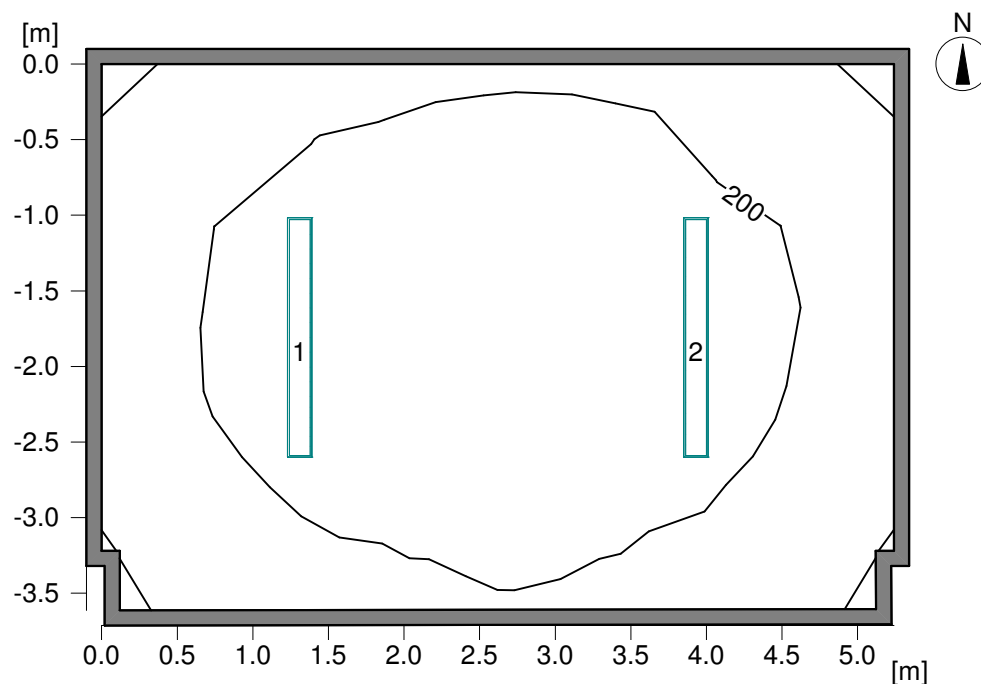
Type No.Make

29	2	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

40 141

40.3 Calculation results, 141

40.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 197 lx
Minimum illuminance	Emin	: 140 lx
Maximum illuminance	Emax	: 244 lx
Uniformity Uo	Emin/Eav	: 1 : 1.41 (0.71)
Diversity Ud	Emin/Emax	: 1 : 1.74 (0.58)

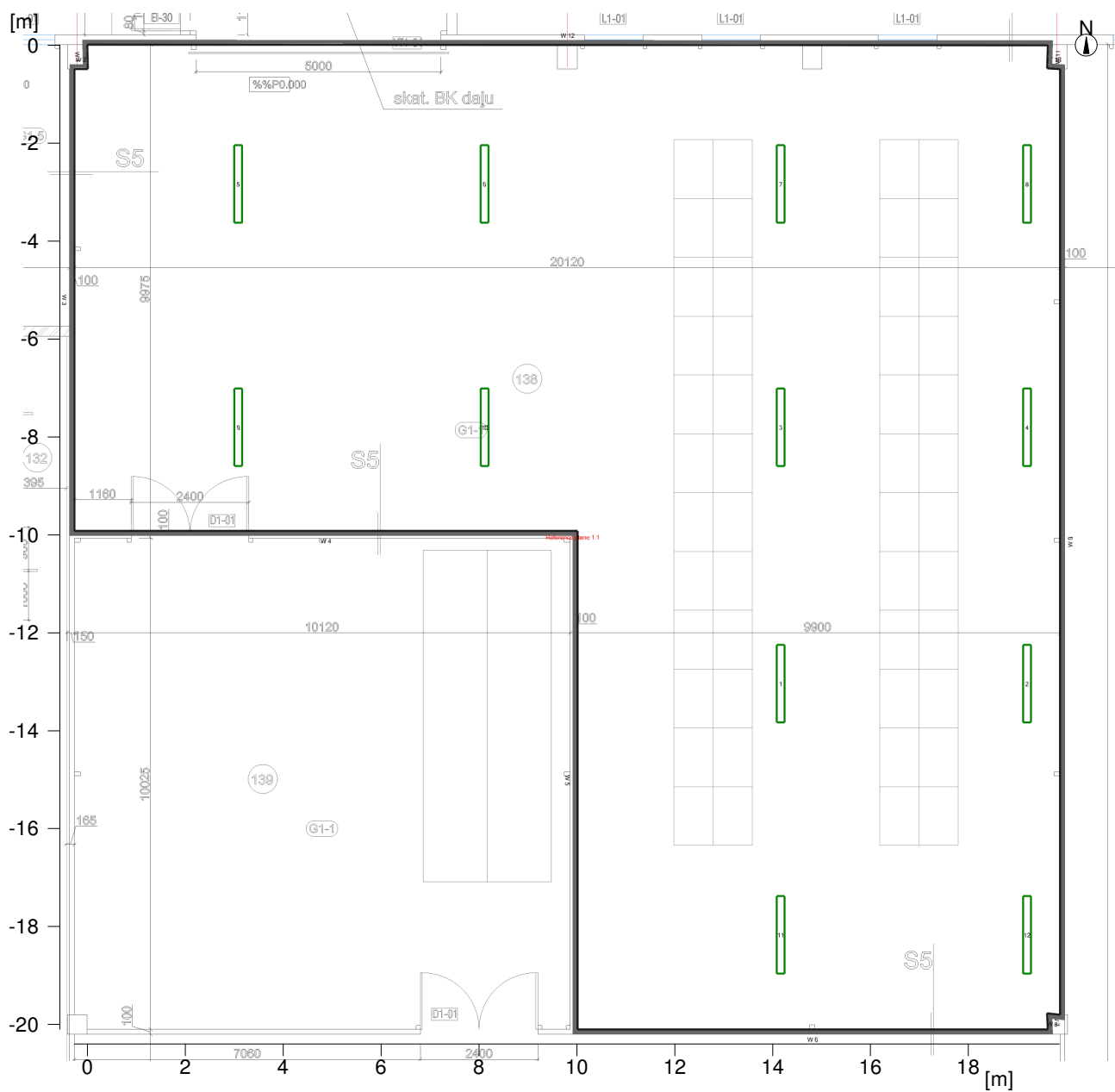
Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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41 138

41.1 Description, 138

41.1.1 Floor plan



-please put your own address here-

Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018



41 138

41.1 Description, 138

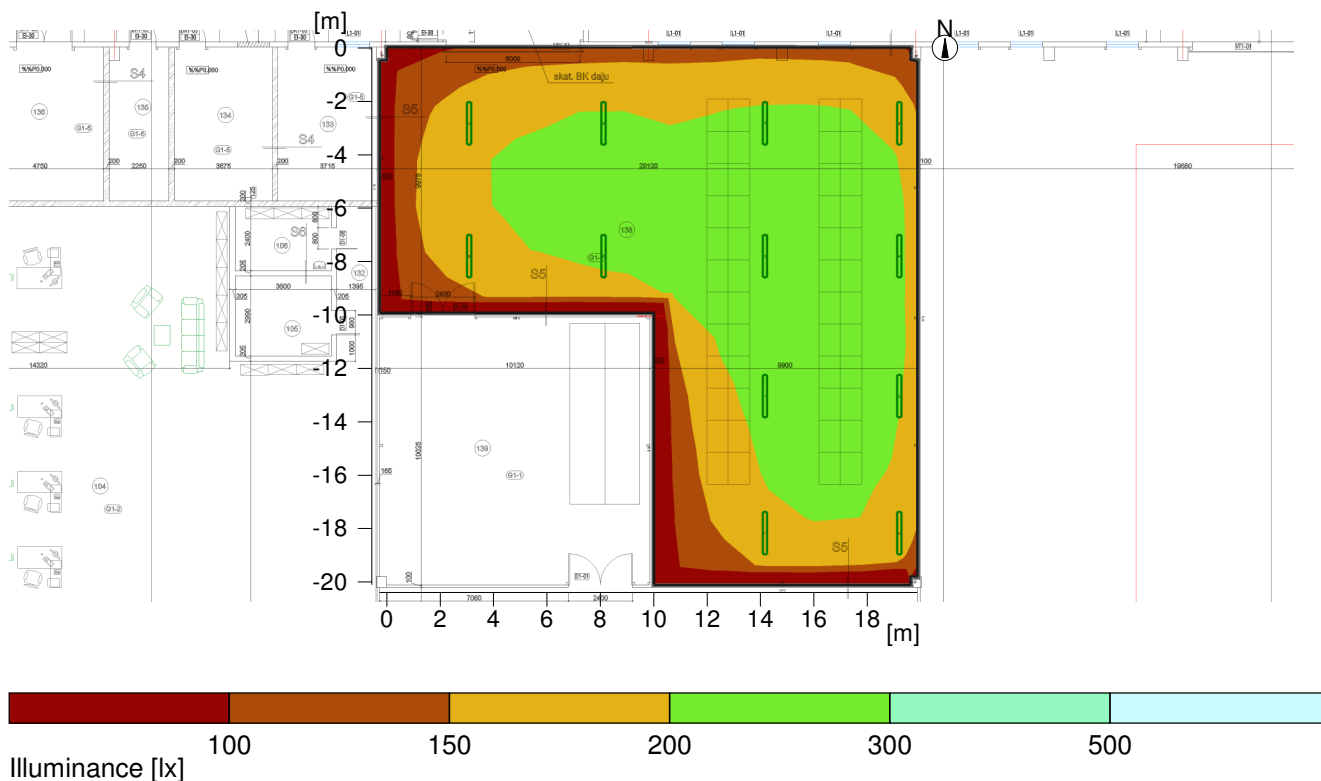
41.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4242.39 m	204.64 m	0.50 m	50.0 %
2	4242.11 m	204.64 m	0.27 m	50.0 %
3	4242.11 m	195.21 m	9.43 m	50.0 %
4	4252.38 m	195.21 m	10.27 m	50.0 %
5	4252.38 m	185.04 m	10.18 m	50.0 %
6	4261.98 m	185.04 m	9.60 m	50.0 %
7	4261.97 m	185.37 m	0.33 m	50.0 %
8	4262.23 m	185.34 m	0.27 m	50.0 %
9	4262.23 m	204.64 m	19.30 m	50.0 %
10	4261.97 m	204.65 m	0.26 m	50.0 %
11	4261.98 m	205.12 m	0.47 m	50.0 %
12	4242.37 m	205.13 m	19.61 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.75 m		

41 138

41.2 Summary, 138

41.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 7.00 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (299.43 m²)

115368.00 lm
 916.7 W
 3.06 W/m² (1.70 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Store rooms, cold stores
 5.4.1 (EN 12464-1, 8.2011) Store and stockrooms (Ra >60.00)
 Horizontal

Em 180 lx (>= 100 lx)
 Emin 94 lx
 Emin/Eav (Uo) 0.52 (>= 0.40)
 Emin/Emax (Ud) 0.40
 Position 0.75 m

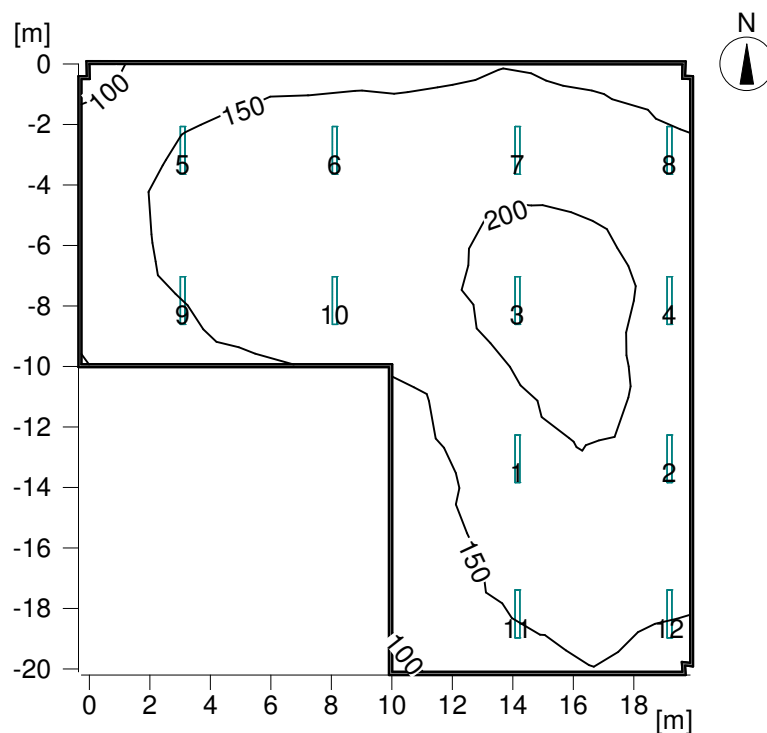
Type No.Make

29 12 Order No. : VIZULO STONE 75 W 4000 K 1500mm
 Luminaire name : STC M 75 840 15D C0 N 100
 Equipment : 1 x Stone 10 modules 76.39 W / 9614 lm

41 138

41.3 Calculation results, 138

41.3.1 Isolines representation, Floor (E)



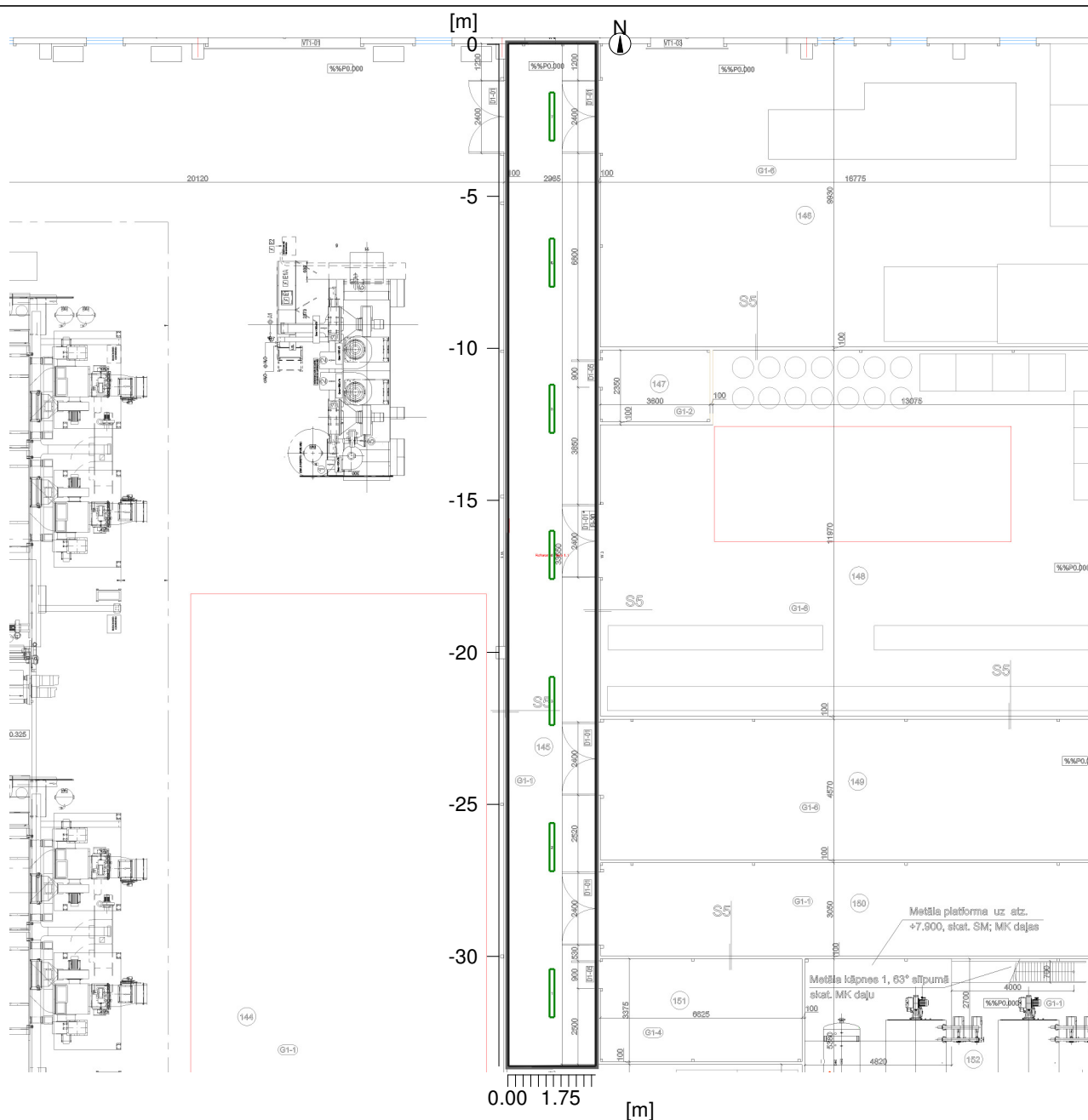
Illuminance [lx]

Average illuminance	Eav	: 169 lx
Minimum illuminance	Emin	: 104 lx
Maximum illuminance	Emax	: 209 lx
Uniformity Uo	Emin/Eav	: 1 : 1.62 (0.62)
Diversity Ud	Emin/Emax	: 1 : 2.00 (0.50)

42 145

42.1 Description, 145

42.1.1 Floor plan

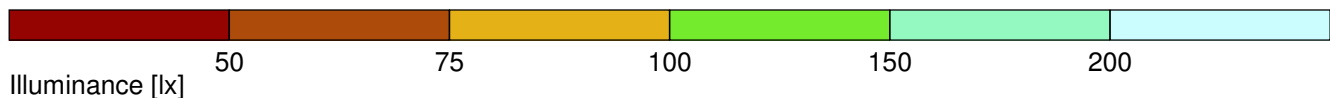
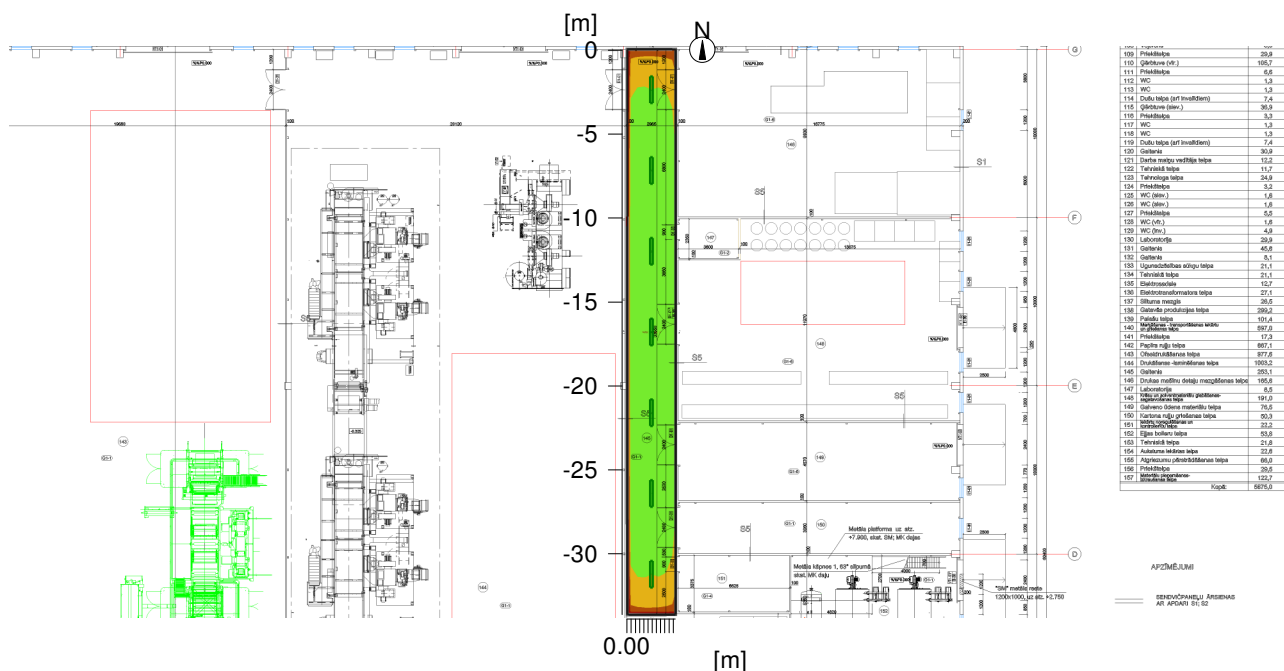


Wall	x	y	Length	Reflectance
1	4302.38 m	171.53 m	33.60 m	50.0 %
2	4305.25 m	171.54 m	2.87 m	50.0 %
3	4305.25 m	205.14 m	33.60 m	50.0 %
4	4302.37 m	205.13 m	2.88 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

42 145

42.2 Summary, 145

42.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
Height of luminaire plane
Maintenance factor

Average indirect fraction
7.00 m
0.80

Total luminous flux of all lamps
Total power
Total power per area (96.47 m²)

67298.00 lm
534.7 W
5.54 W/m² (5.09 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings

5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
Horizontal

Em 109 lx (>= 100 lx)
Emin 57 lx
Emin/Eav (Uo) 0.53 (>= 0.40)
Emin/Emax (Ud) 0.47
UGR (0.5H 5.8H) <=23.5 (< 28.00)
Position 0.00 m

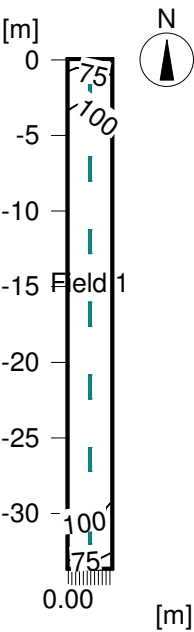
Type No.\Make

29 7 Order No. : VIZULO STONE 75 W 4000 K 1500mm
Luminaire name : STC M 75 840 15D C0 N 100
Equipment : 1 x Stone 10 modules 76.39 W / 9614 lm

42 145

42.3 Calculation results, 145

42.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 110 lx
Minimum illuminance	Emin	: 69 lx
Maximum illuminance	Emax	: 123 lx
Uniformity Uo	Emin/Eav	: 1 : 1.60 (0.62)
Diversity Ud	Emin/Emax	: 1 : 1.80 (0.56)

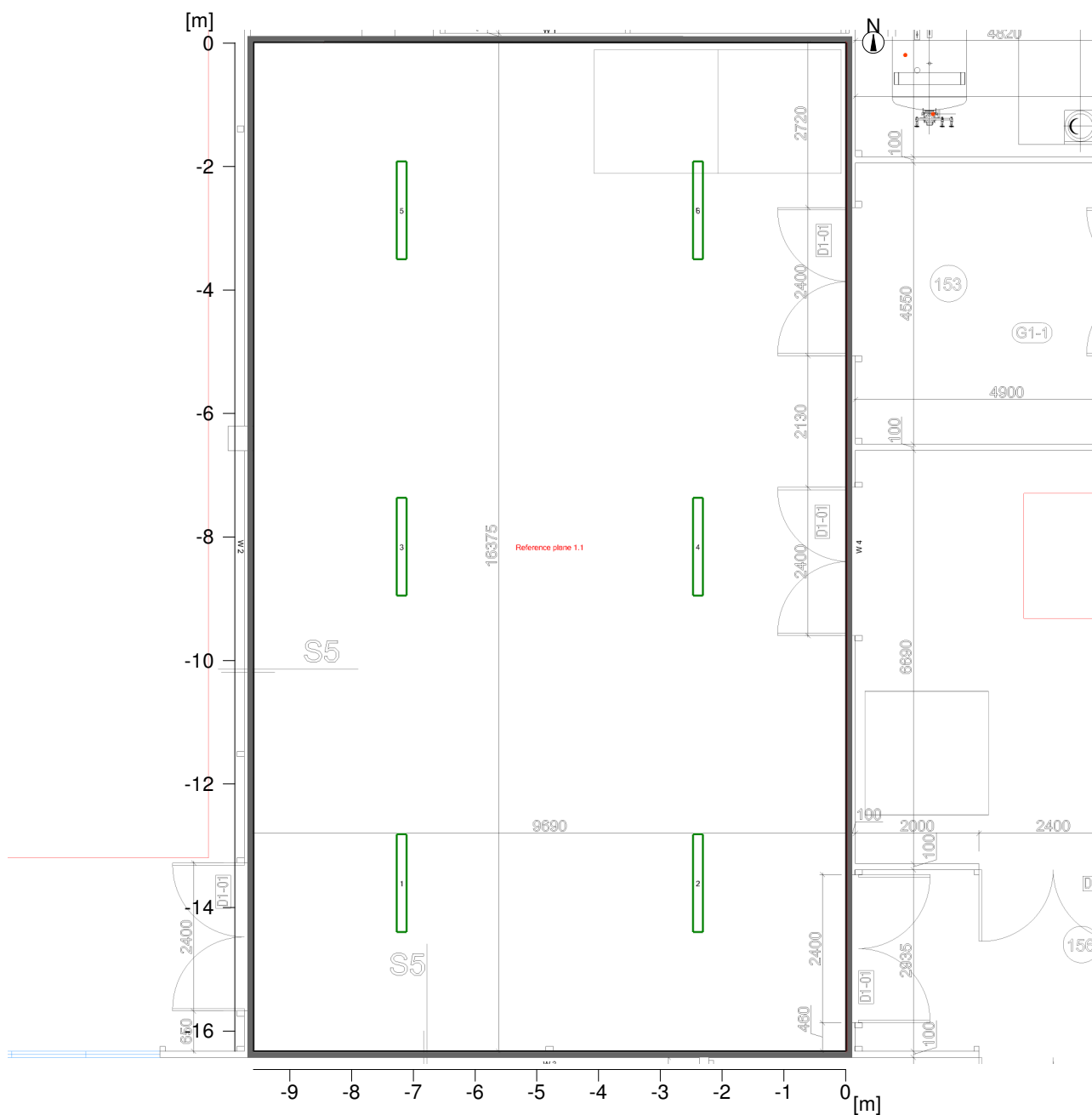
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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43 145/1

43.1 Description, 145/1

43.1.1 Floor plan

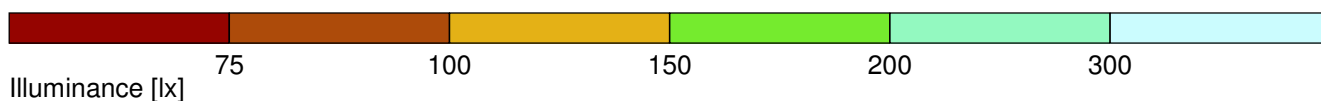
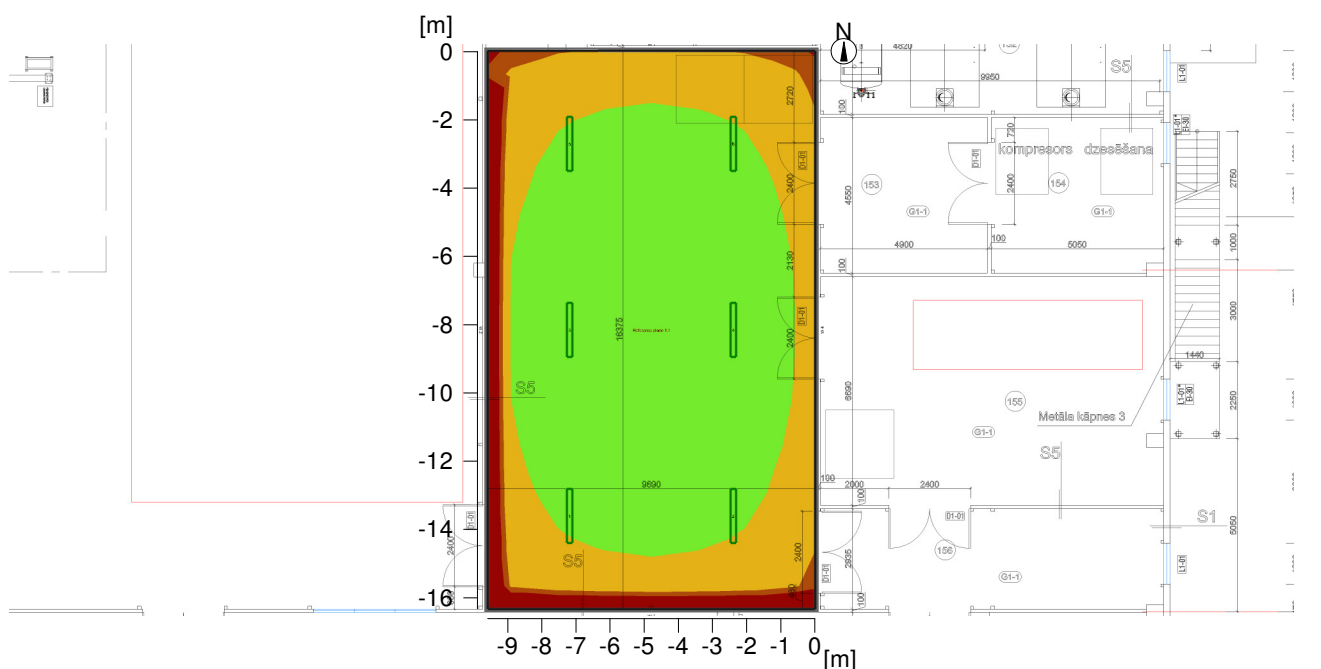


Wall	x	y	Length	Reflectance
1	4302.38 m	171.54 m	9.59 m	50.0 %
2	4302.38 m	155.21 m	16.33 m	50.0 %
3	4311.97 m	155.21 m	9.59 m	50.0 %
4	4311.97 m	171.54 m	16.32 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		----		

43 145/1

43.2 Summary, 145/1

43.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 7.00 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (156.57 m²)

57684.00 lm
 458.3 W
 2.93 W/m² (1.96 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
 5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
 Horizontal

Em 149 lx (>= 100 lx)
 Emin 100 lx
 Emin/Eav (Uo) 0.67 (>= 0.40)
 Emin/Emax (Ud) 0.55
 UGR (1.7H 2.8H) <=22.1 (< 28.00)
 Position 0.00 m (rot: 0°/0.03°)

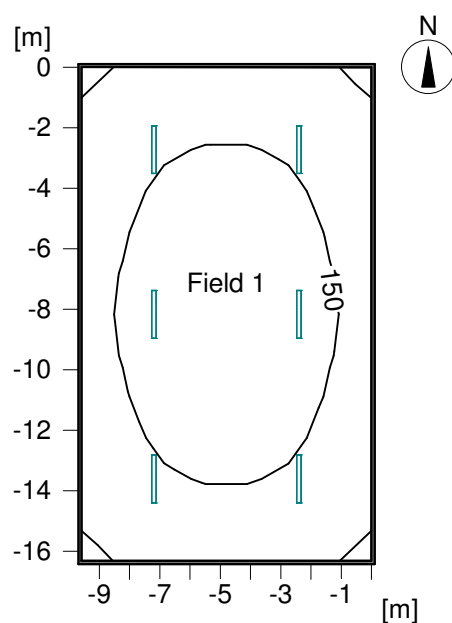
Type No.\Make

29 6 Order No. : VIZULO STONE 75 W 4000 K 1500mm
 Luminaire name : STC M 75 840 15D C0 N 100
 Equipment : 1 x Stone 10 modules 76.39 W / 9614 lm

43 145/1

43.3 Calculation results, 145/1

43.3.1 Isolines representation, Floor (E)



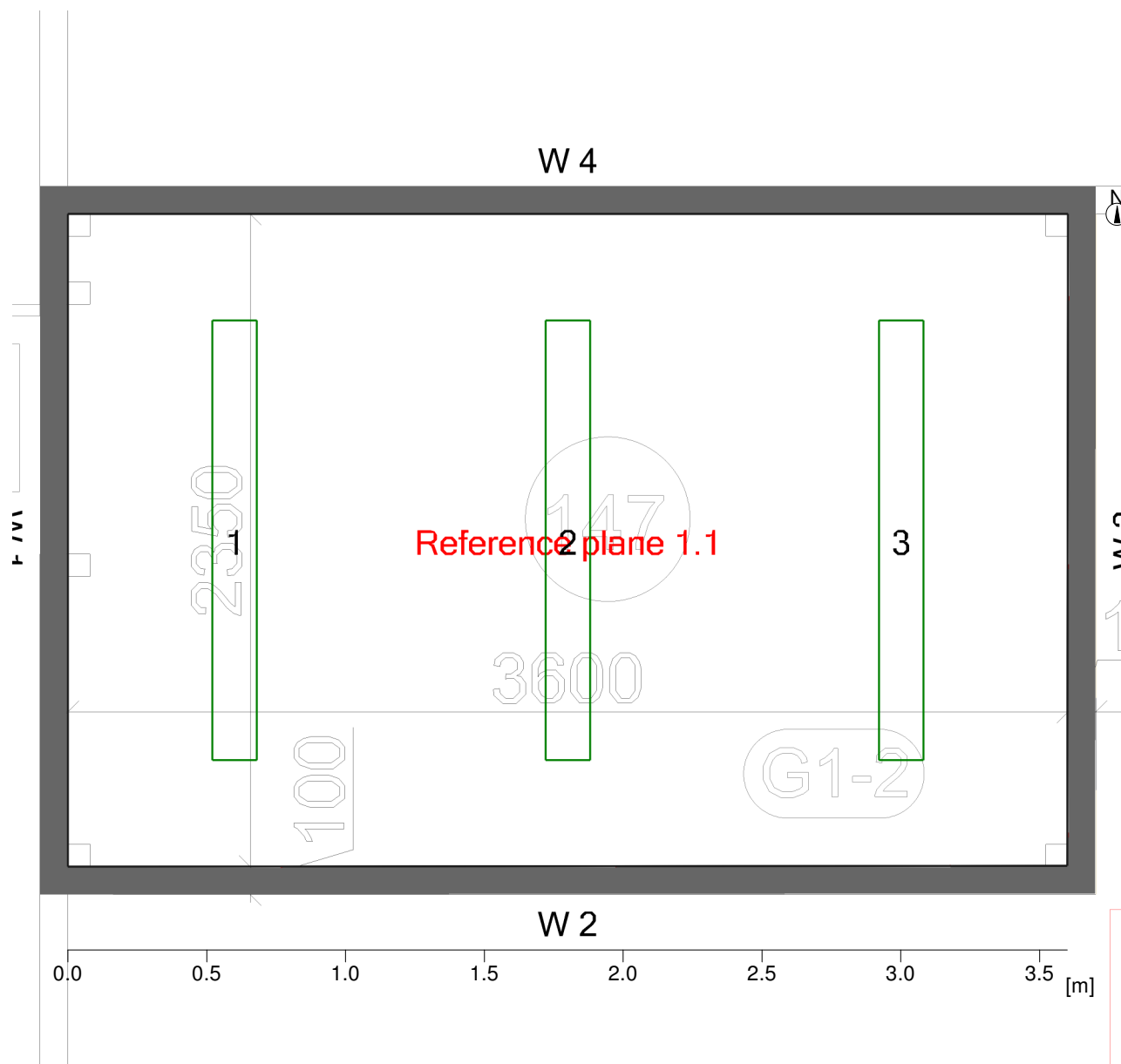
Illuminance [lx]

Average illuminance	Eav	: 141 lx
Minimum illuminance	Emin	: 91 lx
Maximum illuminance	Emax	: 175 lx
Uniformity Uo	Emin/Eav	: 1 : 1.55 (0.64)
Diversity Ud	Emin/Emax	: 1 : 1.93 (0.52)

44 147

44.1 Description, 147

44.1.1 Floor plan

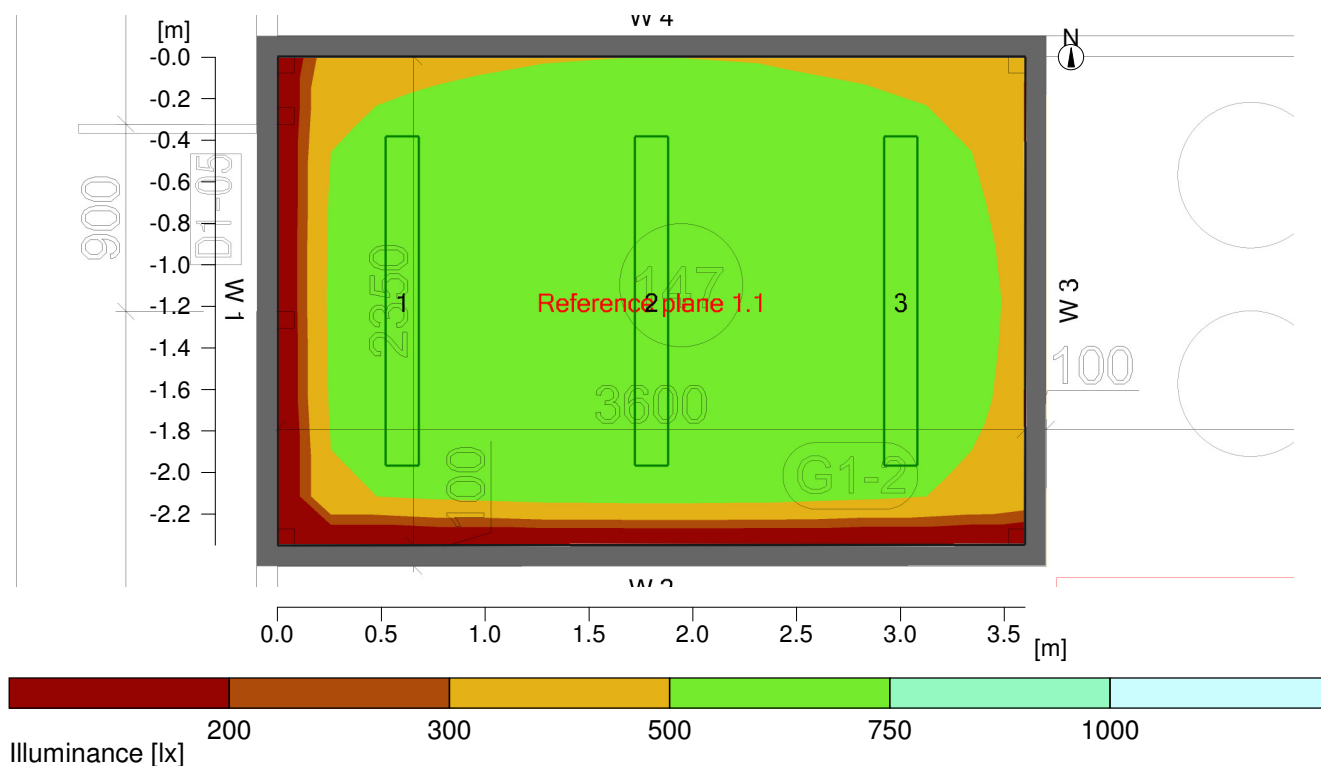


Wall	x	y	Length	Reflectance
1	4305.40 m	192.71 m	2.35 m	50.0 %
2	4308.99 m	192.71 m	3.60 m	50.0 %
3	4309.00 m	195.06 m	2.35 m	50.0 %
4	4305.40 m	195.06 m	3.60 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

44 147

44.2 Summary, 147

44.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	4.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	28842.00 lm
Total power	229.2 W
Total power per area (8.45 m²)	27.12 W/m² (5.00 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Industrial activities and crafts - Chemical, plastics and rubber industry
 5.10.4 (EN 12464-1, 8.2011) Precision measuring rooms, laboratories (Ra >80.00)

Horizontal

Em	543 lx	(>= 500 lx)
Emin	452 lx	
Emin/Eav (Uo)	0.83	(>= 0.60)
Emin/Emax (Ud)	0.72	
UGR (2.0H 2.0H)	<=19.9	(< 19.00)
Position	0.00 m	

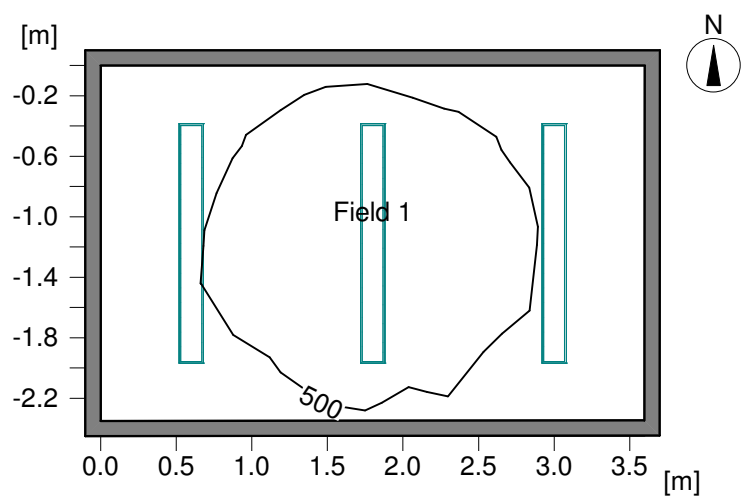
Type No.\Make

29	3	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

44 147

44.3 Calculation results, 147

44.3.1 Isolines representation, Floor (E)



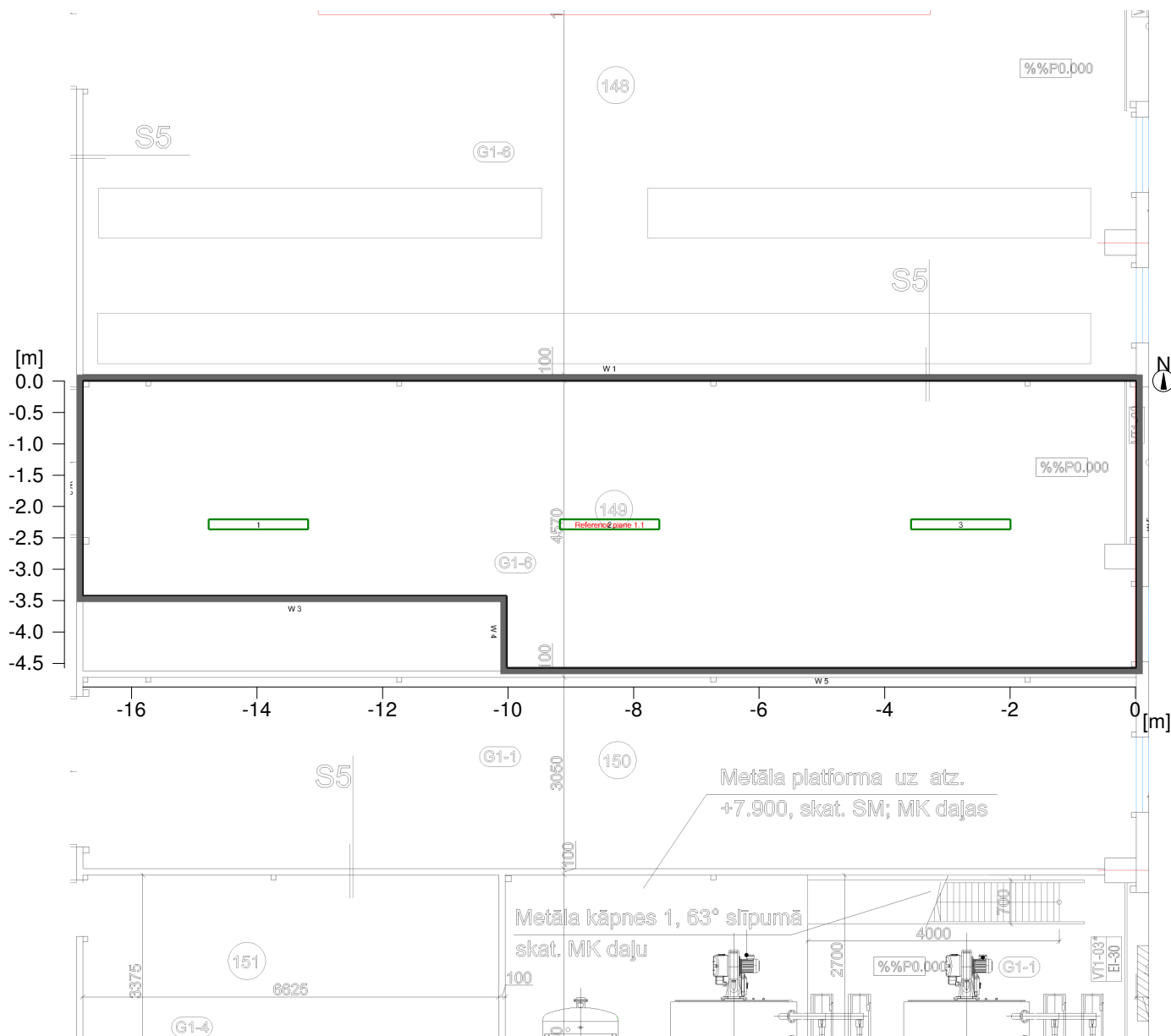
Illuminance [lx]

Average illuminance	Eav	: 493 lx
Minimum illuminance	Emin	: 373 lx
Maximum illuminance	Emax	: 568 lx
Uniformity Uo	Emin/Eav	: 1 : 1.32 (0.76)
Diversity Ud	Emin/Emax	: 1 : 1.52 (0.66)

45 149

45.1 Description, 149

45.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4305.40 m	182.94 m	16.77 m	50.0 %
2	4305.40 m	179.51 m	3.43 m	50.0 %
3	4312.15 m	179.51 m	6.75 m	50.0 %
4	4312.15 m	178.36 m	1.15 m	50.0 %
5	4322.17 m	178.36 m	10.02 m	50.0 %
6	4322.17 m	182.94 m	4.57 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

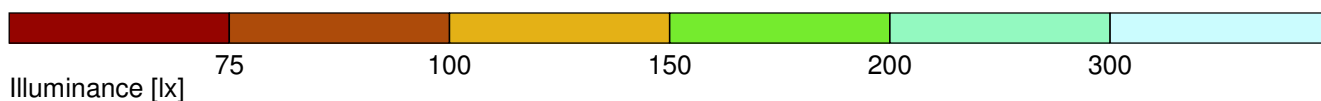
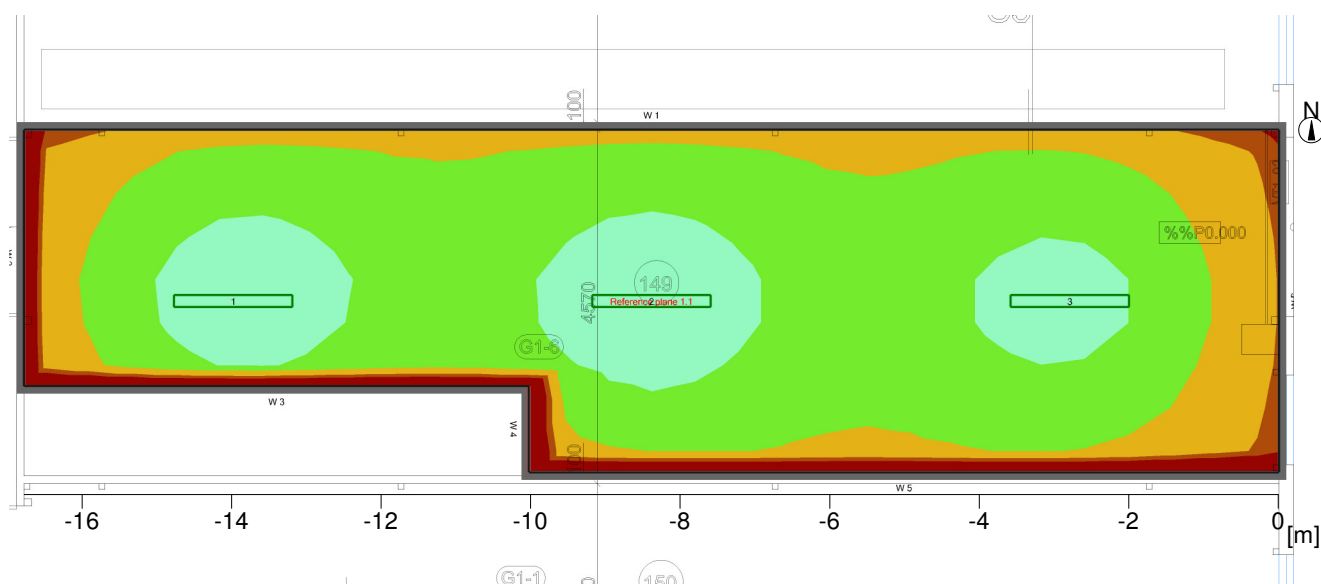
Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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45 149

45.2 Summary, 149

45.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	4.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	28842.00 lm
Total power	229.2 W
Total power per area (68.98 m²)	3.32 W/m² (2.04 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Store rooms, cold stores
5.4.1 (EN 12464-1, 8.2011) Store and stockrooms (Ra >60.00)
Horizontal

Em	163 lx	(>= 100 lx)
Emin	92 lx	
Emin/Eav (Uo)	0.56	(>= 0.40)
Emin/Emax (Ud)	0.42	
UGR (1.7H 6.1H)	<=23.5	(< 25.00)
Position	0.00 m	

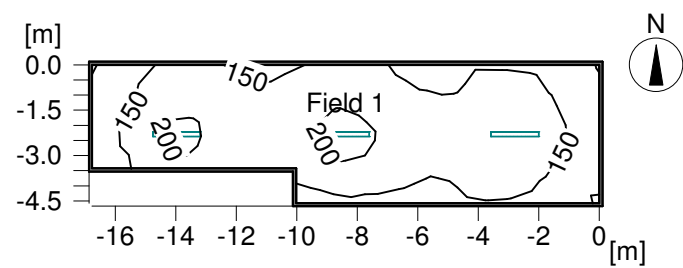
Type No.\Make

29	3	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

45 149

45.3 Calculation results, 149

45.3.1 Isolines representation, Floor (E)



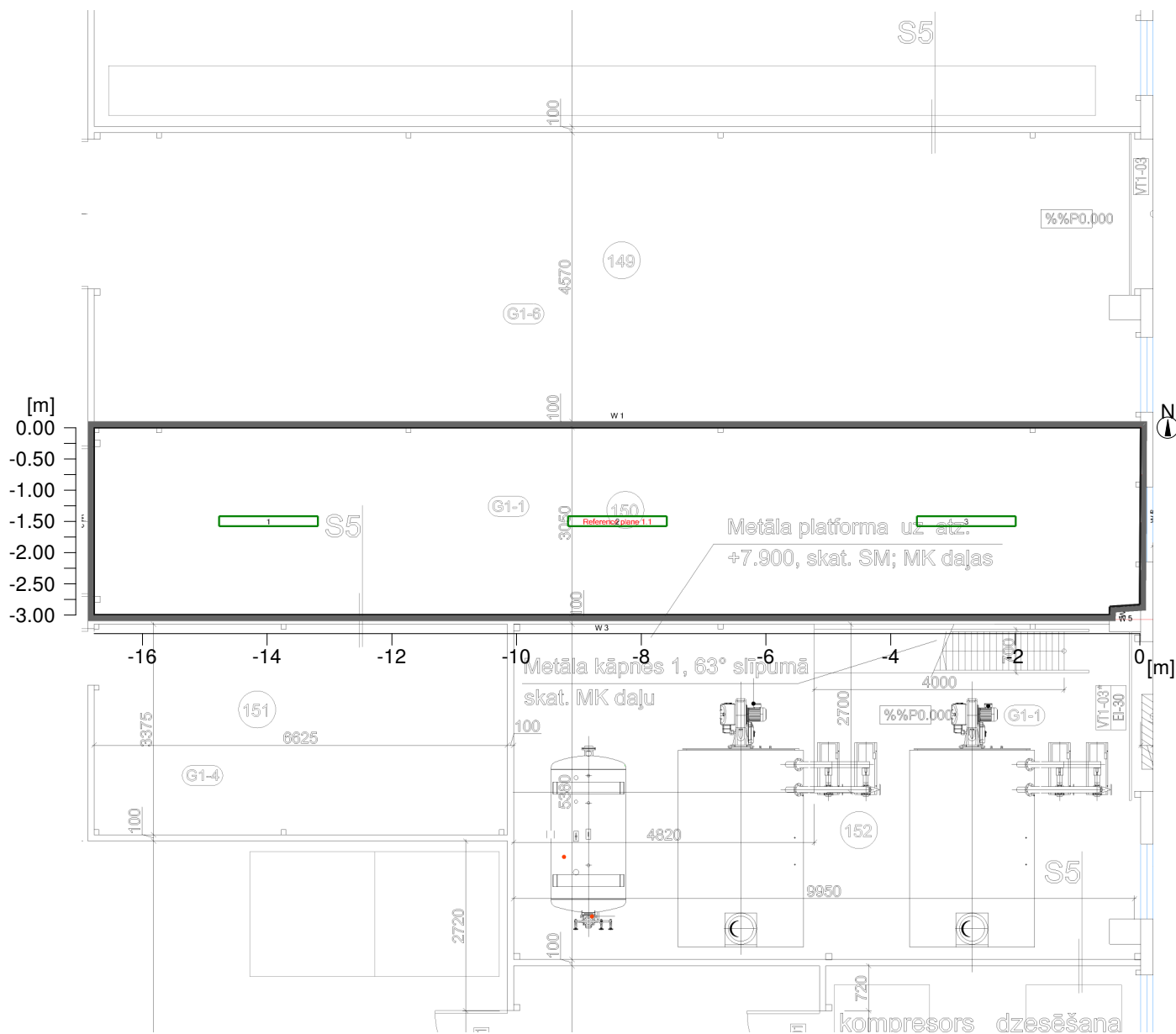
Illuminance [lx]

Average illuminance	Eav	: 155 lx
Minimum illuminance	Emin	: 96 lx
Maximum illuminance	Emax	: 210 lx
Uniformity Uo	Emin/Eav	: 1 : 1.62 (0.62)
Diversity Ud	Emin/Emax	: 1 : 2.20 (0.46)

46 150

46.1 Description, 150

46.1.1 Floor plan

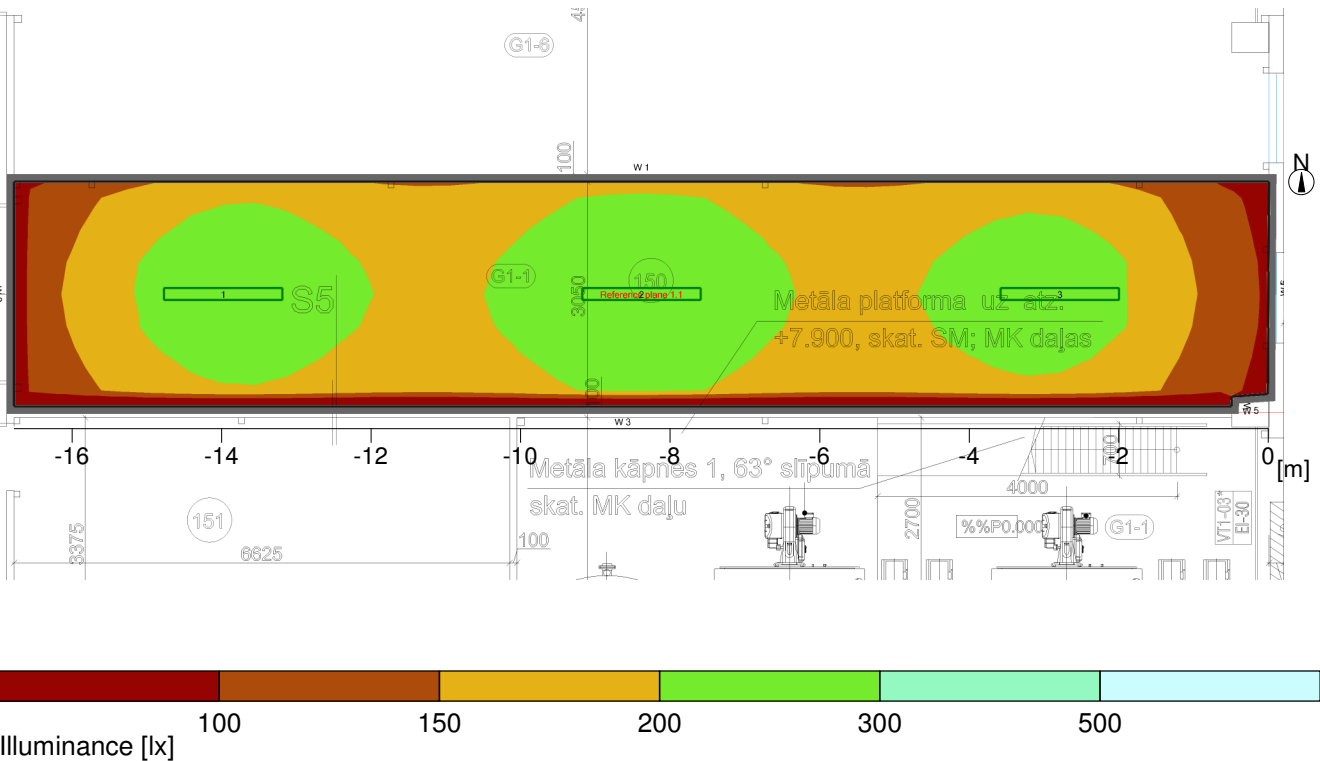


Wall	x	y	Length	Reflectance
1	4305.40 m	178.21 m	16.77 m	50.0 %
2	4305.40 m	175.21 m	3.00 m	50.0 %
3	4321.67 m	175.21 m	16.27 m	50.0 %
4	4321.67 m	175.34 m	0.13 m	50.0 %
5	4322.16 m	175.37 m	0.48 m	50.0 %
6	4322.17 m	178.21 m	2.84 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

46 150

46.2 Summary, 150

46.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	4.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	28842.00 lm
Total power	229.2 W
Total power per area (50.23 m²)	4.56 W/m² (2.54 W/m²/100lx)

Evaluation area 1

User profile	Reference plane 1.1
	General areas inside buildings - Store rooms, cold stores
	5.4.1 (EN 12464-1, 8.2011) Store and stockrooms (Ra >60.00)
	Horizontal
Em	180 lx (>= 100 lx)
Emin	88 lx
Emin/Eav (Uo)	0.49 (>= 0.40)
Emin/Emax (Ud)	0.37
UGR (1.1H 6.1H)	<=23.5 (< 25.00)
Position	0.00 m

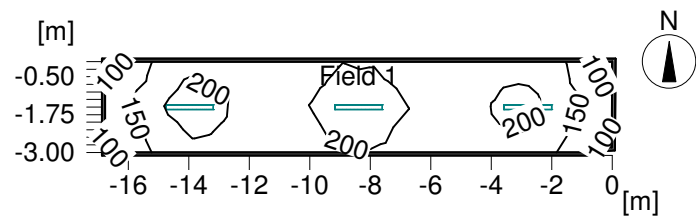
Type No. Make

29	3	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

46 150

46.3 Calculation results, 150

46.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 174 lx
Minimum illuminance	Emin	: 82 lx
Maximum illuminance	Emax	: 232 lx
Uniformity Uo	Emin/Eav	: 1 : 2.12 (0.47)
Diversity Ud	Emin/Emax	: 1 : 2.82 (0.35)

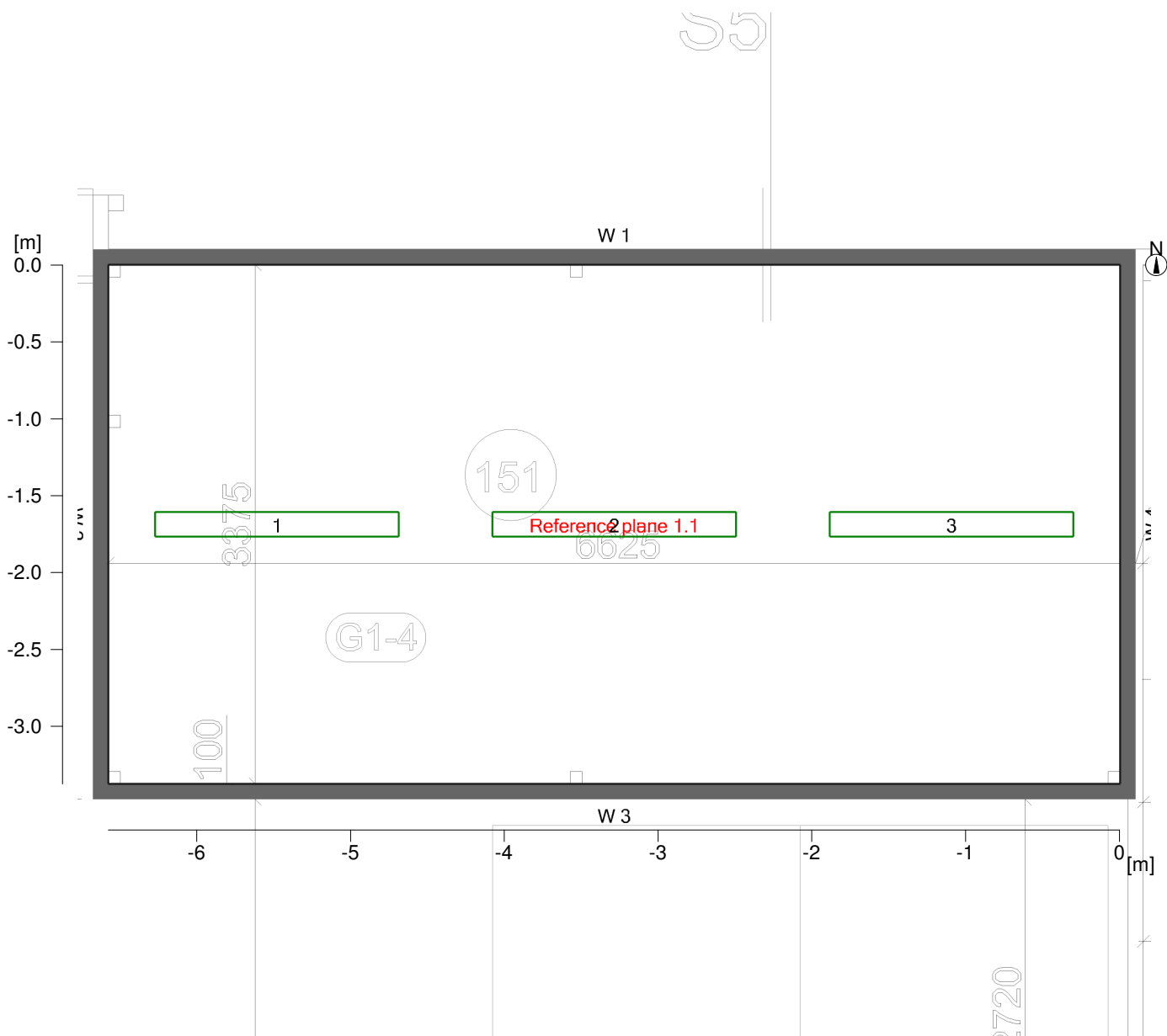
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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47 151

47.1 Description, 151

47.1.1 Floor plan

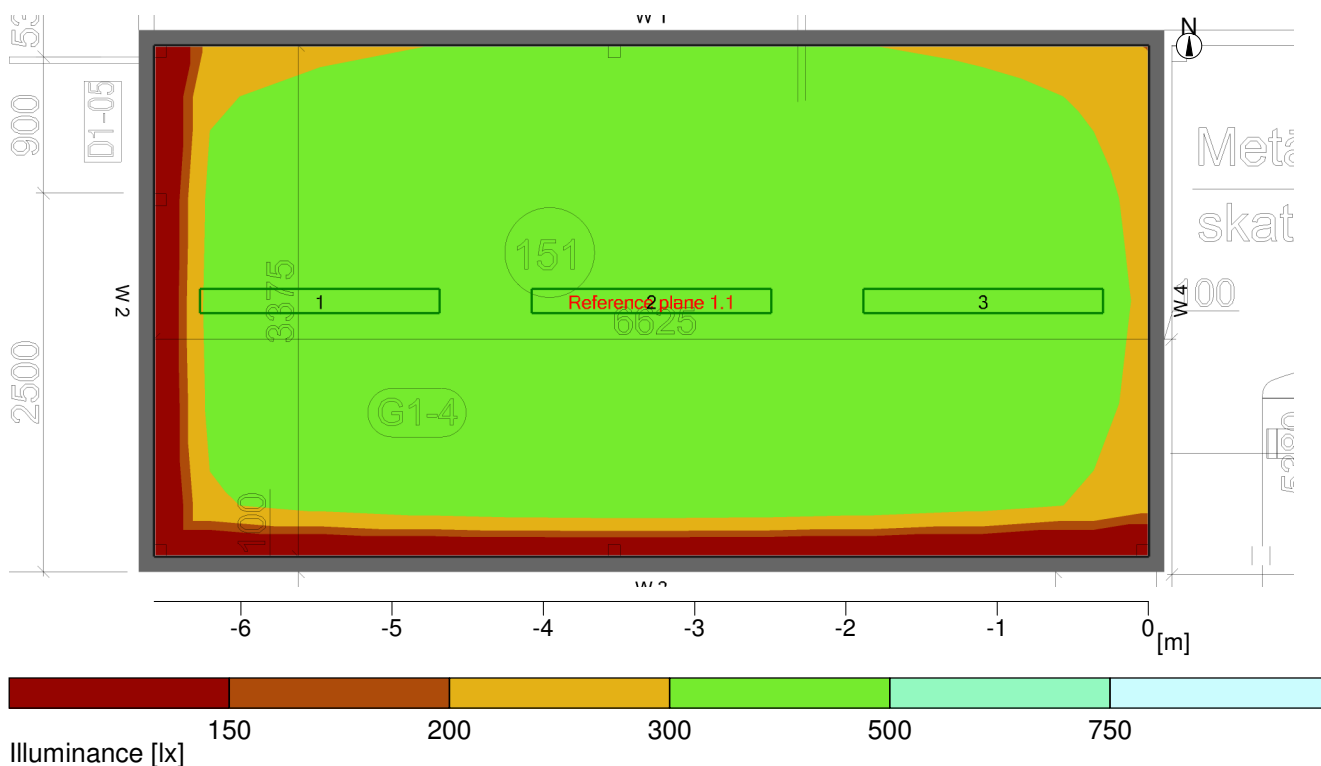


Wall	x	y	Length	Reflectance
1	4305.40 m	175.06 m	6.57 m	50.0 %
2	4305.40 m	171.69 m	3.38 m	50.0 %
3	4311.97 m	171.69 m	6.57 m	50.0 %
4	4311.97 m	175.06 m	3.38 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

47 151

47.2 Summary, 151

47.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	4.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	28842.00 lm
Total power	229.2 W
Total power per area (22.19 m²)	10.33 W/m² (2.82 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Industrial activities and crafts - Paper and paper goods
5.19.2 (EN 12464-1, 8.2011) Paper manufacture and processing, paper and corrugating machines, cardboard manufacture (Ra >80.00)
Horizontal

Em	366 lx	(>= 300 lx)
Emin	269 lx	
Emin/Eav (Uo)	0.74	(>= 0.60)
Emin/Emax (Ud)	0.60	
UGR (1.2H 2.4H)	<=20.9	(< 25.00)
Position	0.00 m	

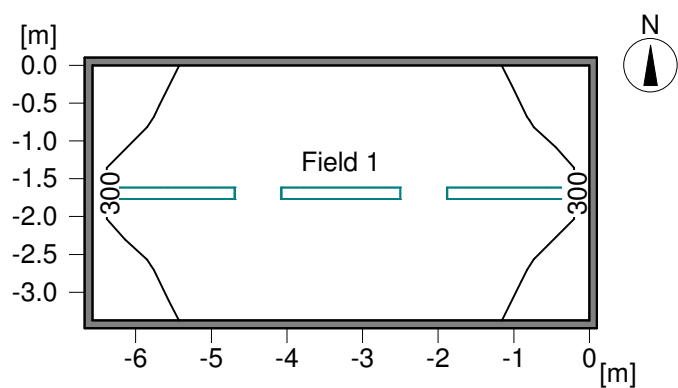
Type No.\Make

29	3	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

47 151

47.3 Calculation results, 151

47.3.1 Isolines representation, Floor (E)



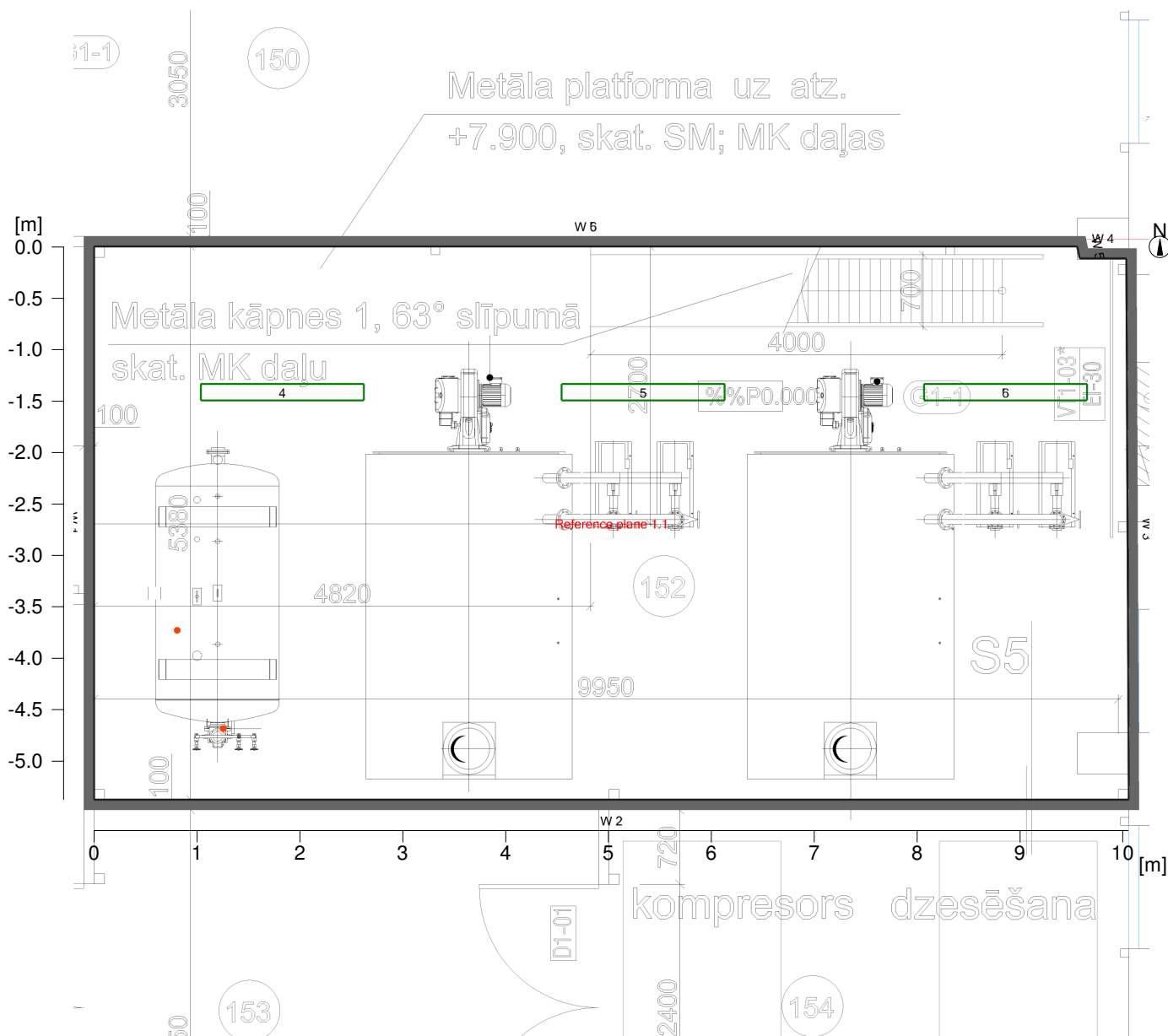
Illuminance [lx]

Average illuminance	Eav	: 338 lx
Minimum illuminance	Emin	: 243 lx
Maximum illuminance	Emax	: 426 lx
Uniformity Uo	Emin/Eav	: 1 : 1.39 (0.72)
Diversity Ud	Emin/Emax	: 1 : 1.75 (0.57)

48 152

48.1 Description, 152

48.1.1 Floor plan

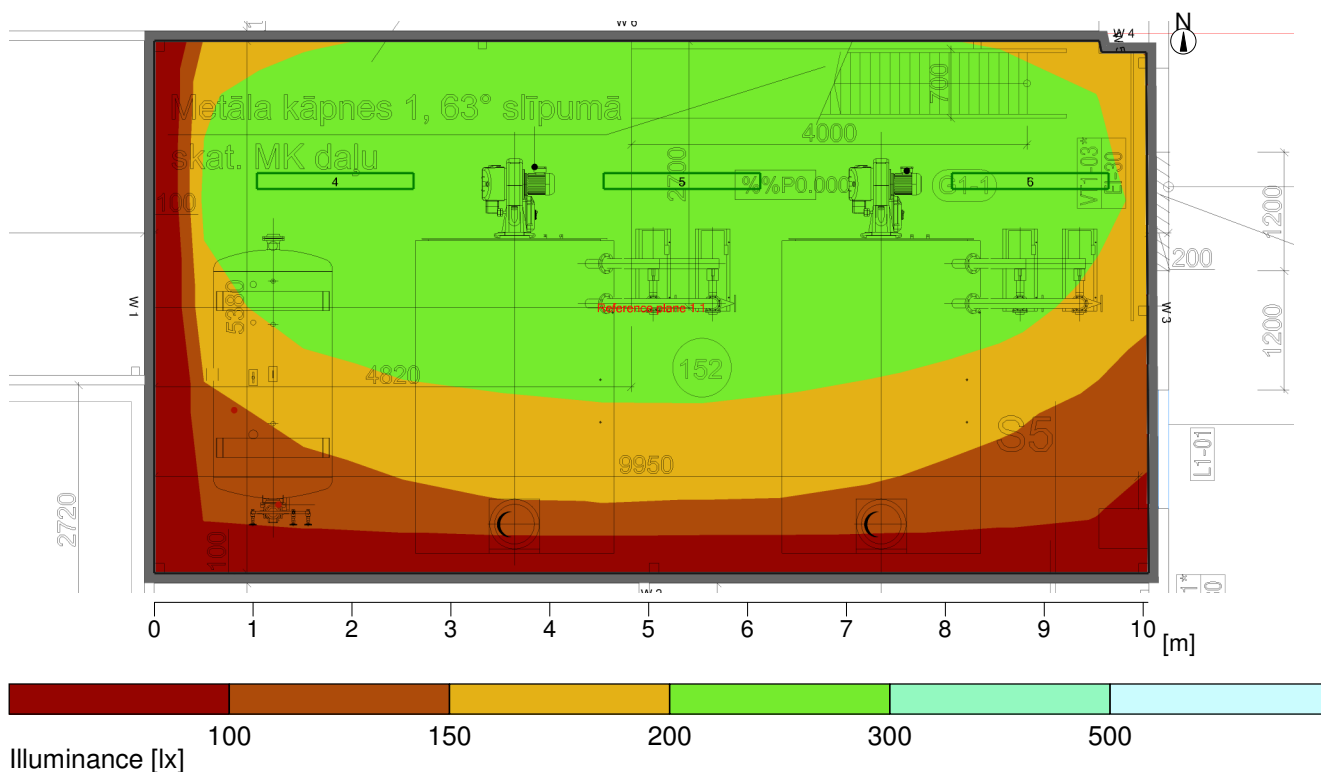


Wall	x	y	Length	Reflectance
1	4312.12 m	169.69 m	5.38 m	50.0 %
2	4322.17 m	169.69 m	10.05 m	50.0 %
3	4322.15 m	174.94 m	5.26 m	50.0 %
4	4321.69 m	174.94 m	0.45 m	50.0 %
5	4321.67 m	175.06 m	0.12 m	50.0 %
6	4312.12 m	175.06 m	9.55 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

48 152

48.2 Summary, 152

48.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	4.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	28842.00 lm
Total power	229.2 W
Total power per area (53.90 m²)	4.25 W/m² (2.14 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Industrial activities and crafts - Power stations
 5.20.2 (EN 12464-1, 8.2011) Boiler house (Ra >40.00)
 Horizontal

Em	198 lx	(>= 100 lx)
Emin	93 lx	
Emin/Eav (Uo)	0.47	(>= 0.40)
Emin/Emax (Ud)	0.33	
UGR (2.0H 3.7H)	<=22.9	(< 28.00)
Position	0.00 m	

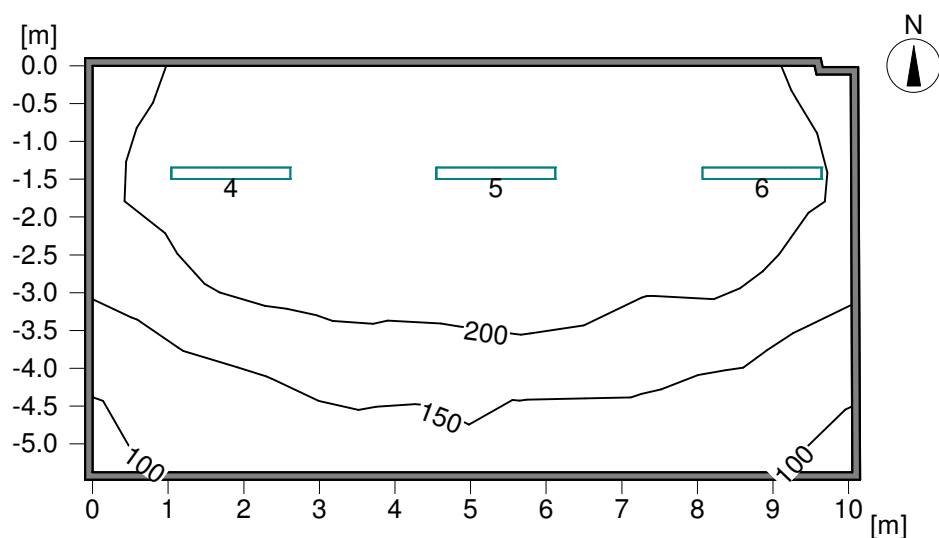
Type No.\Make

29	3	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

48 152

48.3 Calculation results, 152

48.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 193 lx
Minimum illuminance	Emin	: 84 lx
Maximum illuminance	Emax	: 274 lx
Uniformity U ₀	Emin/Eav	: 1 : 2.29 (0.44)
Diversity U _d	Emin/Emax	: 1 : 3.26 (0.31)

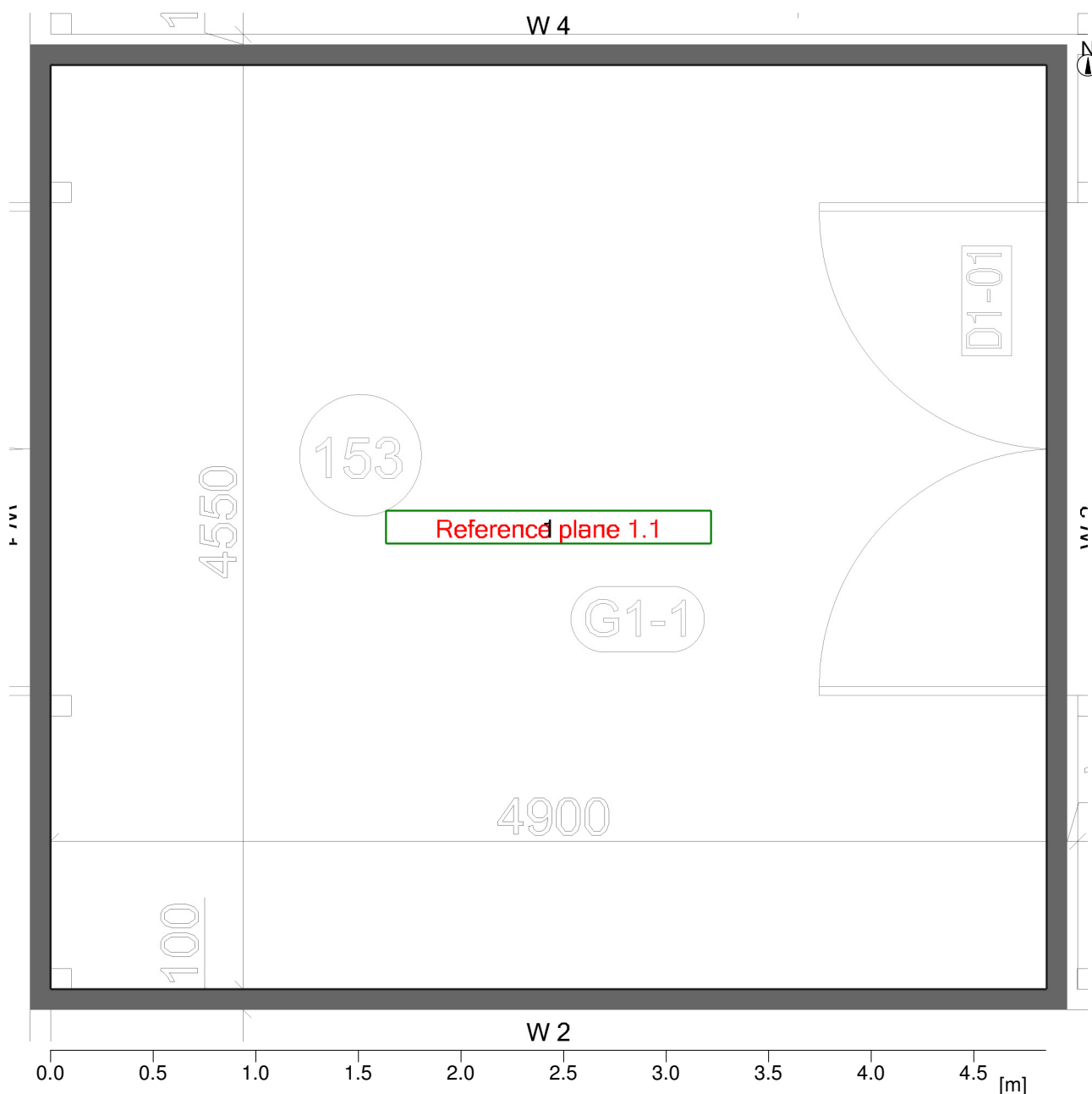
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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49 153

49.1 Description, 153

49.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4312.12 m	165.04 m	4.50 m	50.0 %
2	4316.97 m	165.04 m	4.85 m	50.0 %
3	4316.97 m	169.54 m	4.50 m	50.0 %
4	4312.12 m	169.54 m	4.85 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

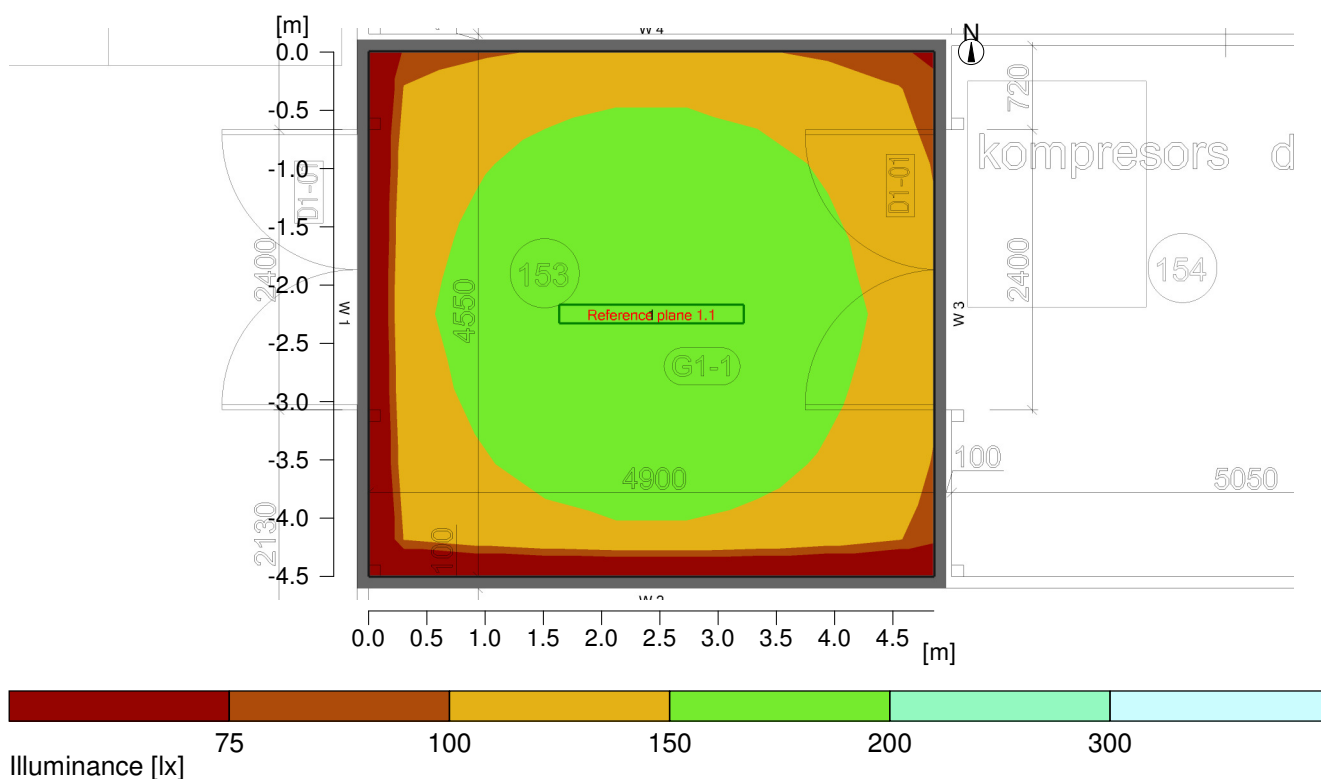
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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49 153

49.2 Summary, 153

49.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	4.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	9614.00 lm
Total power	76.4 W
Total power per area (21.83 m²)	3.50 W/m² (2.44 W/m²/100lx)

Evaluation area 1

User profile	Reference plane 1.1
	General areas inside buildings - Store rooms, cold stores
	5.4.1 (EN 12464-1, 8.2011) Store and stockrooms (Ra >60.00)
	Horizontal
Em	143 lx (>= 100 lx)
Emin	97 lx
Emin/Eav (Uo)	0.67 (>= 0.40)
Emin/Emax (Ud)	0.51
UGR (2.0H 2.0H)	<=19.9 (< 25.00)
Position	0.00 m

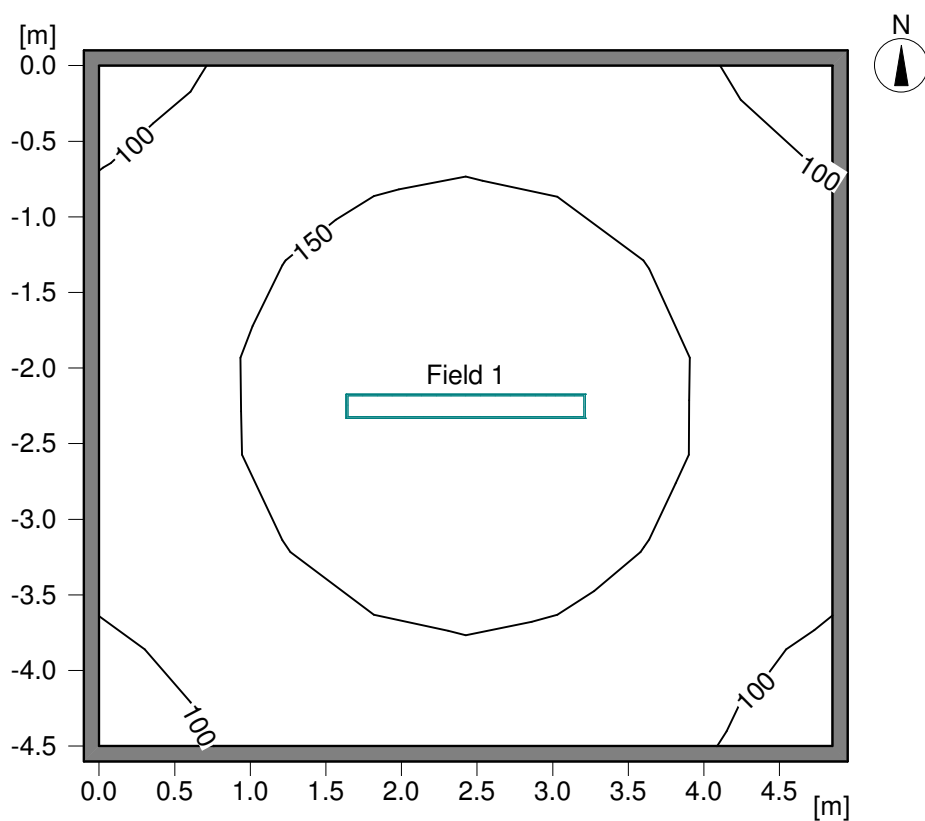
Type No.\Make

29	1	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

49 153

49.3 Calculation results, 153

49.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 132 lx
Minimum illuminance	Emin	: 84 lx
Maximum illuminance	Emax	: 183 lx
Uniformity Uo	Emin/Eav	: 1 : 1.56 (0.64)
Diversity Ud	Emin/Emax	: 1 : 2.17 (0.46)

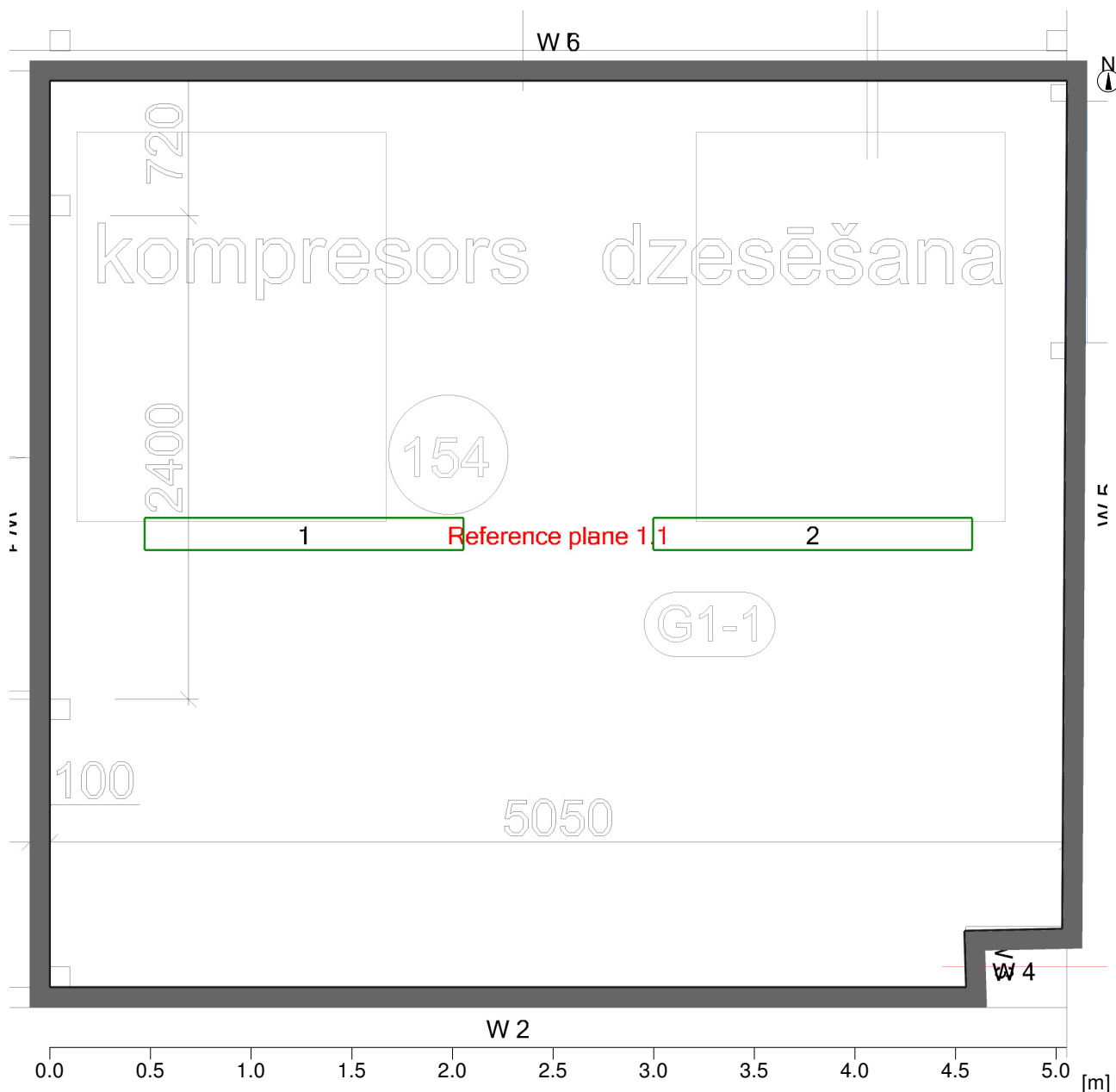
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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50 154

50.1 Description, 154

50.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4317.12 m	165.04 m	4.50 m	50.0 %
2	4321.67 m	165.04 m	4.55 m	50.0 %
3	4321.66 m	165.32 m	0.28 m	50.0 %
4	4322.15 m	165.33 m	0.49 m	50.0 %
5	4322.17 m	169.54 m	4.21 m	50.0 %
6	4317.12 m	169.54 m	5.05 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

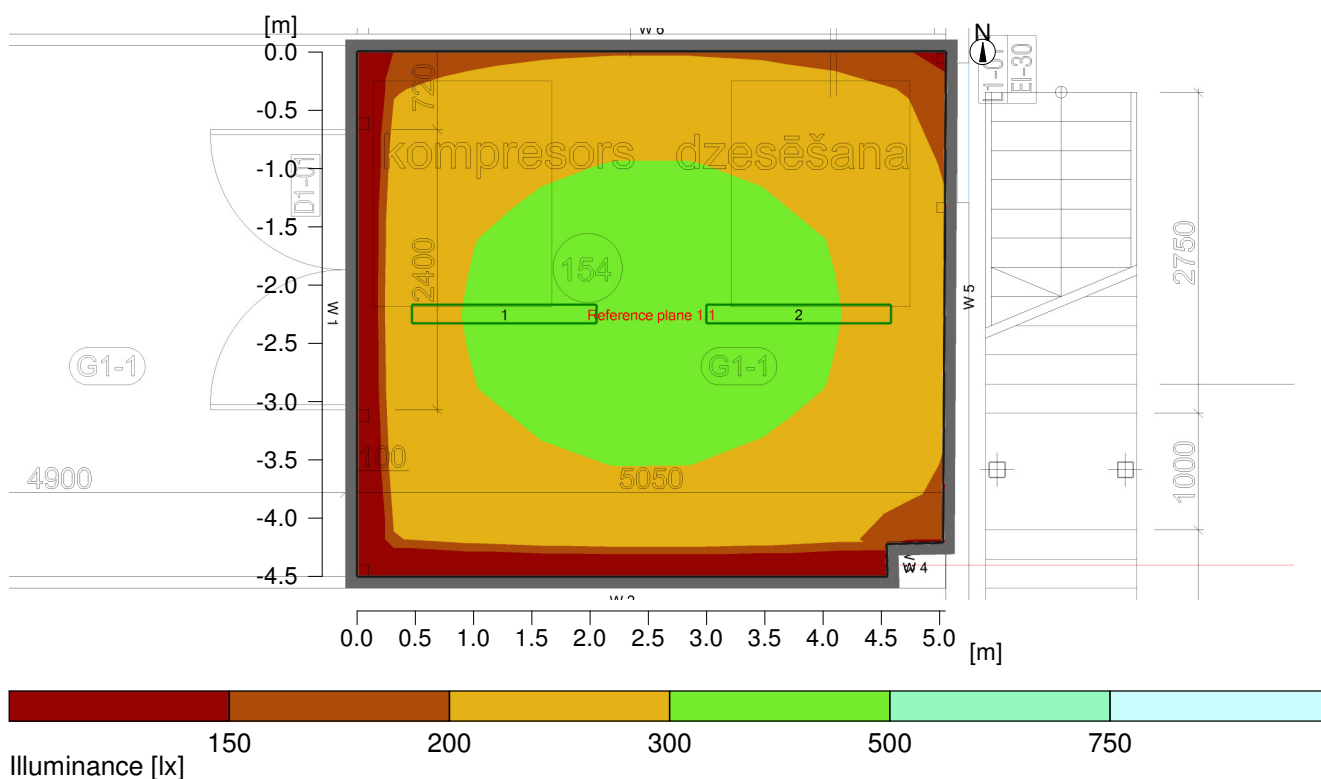
Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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50 154

50.2 Summary, 154

50.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
Height of luminaire plane
Maintenance factor

Average indirect fraction
4.00 m
0.80

Total luminous flux of all lamps
Total power
Total power per area (22.53 m²)

19228.00 lm
152.8 W
6.78 W/m² (2.61 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Control rooms
5.3.1 (EN 12464-1, 8.2011) Plant rooms, switch gear rooms (Ra >60.00)
Horizontal

Em 259 lx (>= 200 lx)
Emin 157 lx
Emin/Eav (Uo) 0.61 (>= 0.40)
Emin/Emax (Ud) 0.48
UGR (2.0H 2.0H) <=19.9 (< 25.00)
Position 0.00 m

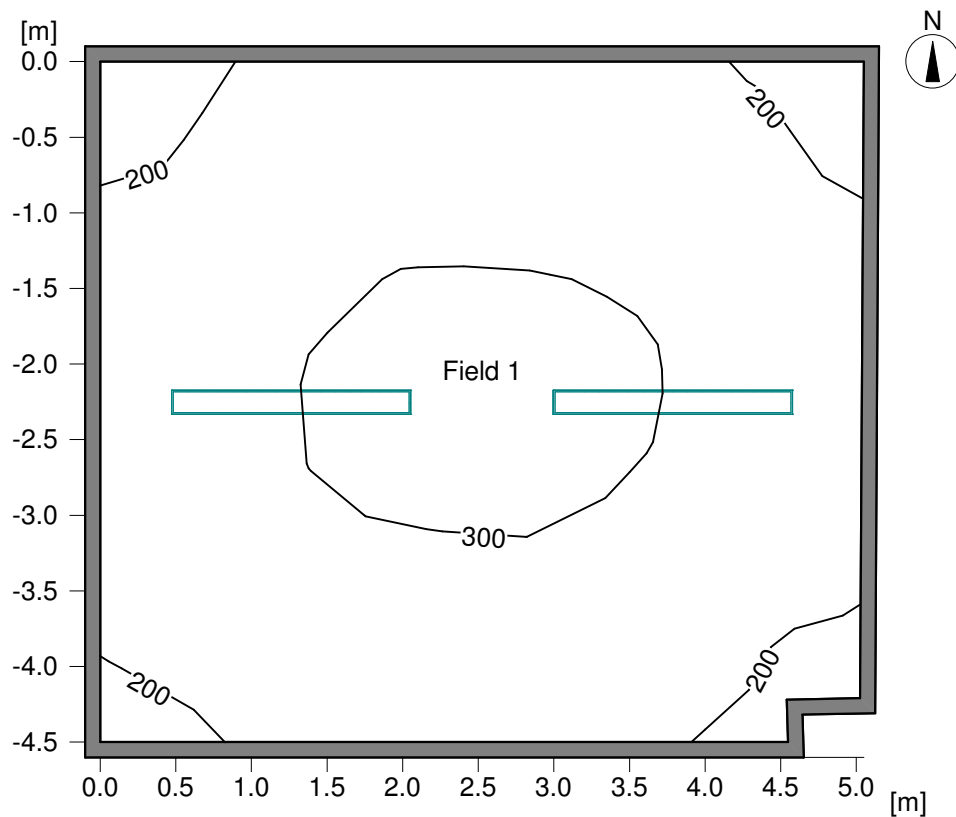
Type No.Make

29 2 Order No. : VIZULO STONE 75 W 4000 K 1500mm
Luminaire name : STC M 75 840 15D C0 N 100
Equipment : 1 x Stone 10 modules 76.39 W / 9614 lm

50 154

50.3 Calculation results, 154

50.3.1 Isolines representation, Floor (E)



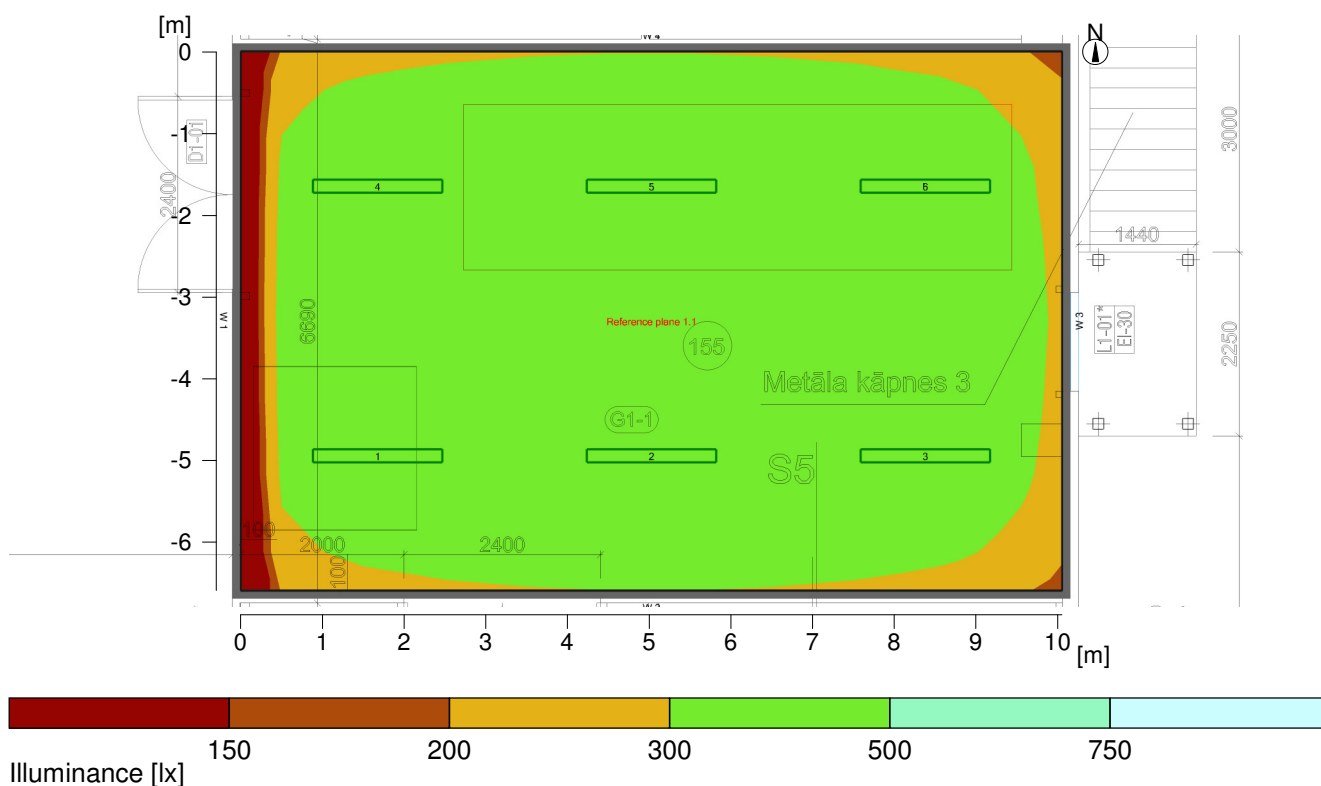
Illuminance [lx]

Average illuminance	Eav	: 252 lx
Minimum illuminance	Emin	: 150 lx
Maximum illuminance	Emax	: 319 lx
Uniformity Uo	Emin/Eav	: 1 : 1.68 (0.60)
Diversity Ud	Emin/Emax	: 1 : 2.13 (0.47)

51 155

51.2 Summary, 155

51.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	4.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	57684.00 lm
Total power	458.3 W
Total power per area (66.23 m²)	6.92 W/m² (1.84 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Industrial activities and crafts - Paper and paper goods
 5.19.2 (EN 12464-1, 8.2011) Paper manufacture and processing, paper and corrugating machines, cardboard manufacture (Ra >80.00)
 Horizontal
 Em 376 lx (>= 300 lx)
 Emin 256 lx
 Emin/Eav (Uo) 0.68 (>= 0.60)
 Emin/Emax (Ud) 0.56
 UGR (2.4H 3.7H) <=22.9 (< 25.00)
 Position 0.00 m

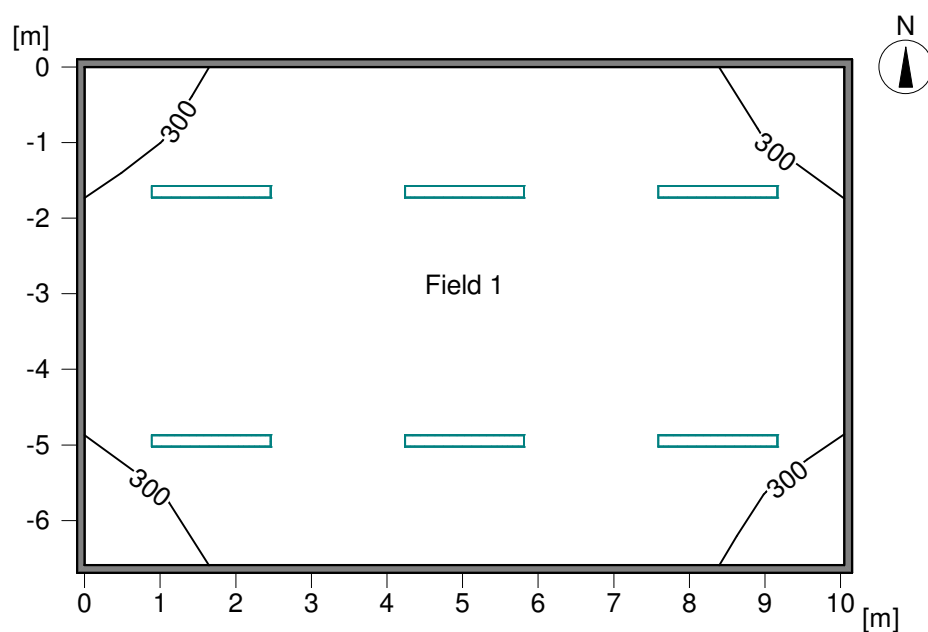
Type No.\Make

29	6	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

51 155

51.3 Calculation results, 155

51.3.1 Isolines representation, Floor (E)



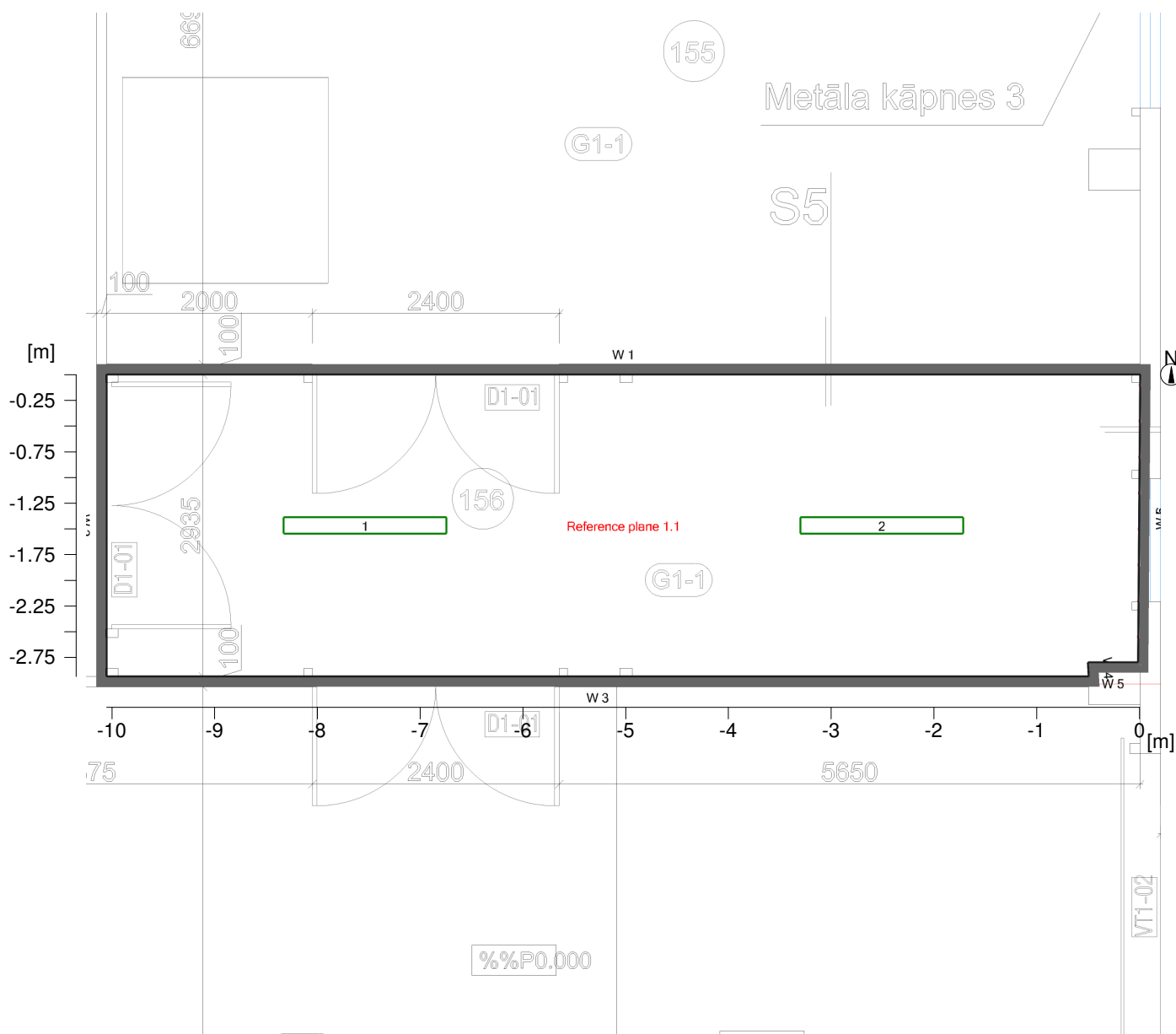
Illuminance [lx]

Average illuminance	Eav	: 353 lx
Minimum illuminance	Emin	: 231 lx
Maximum illuminance	Emax	: 446 lx
Uniformity Uo	Emin/Eav	: 1 : 1.53 (0.65)
Diversity Ud	Emin/Emax	: 1 : 1.93 (0.52)

52 156

52.1 Description, 156

52.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4312.12 m	158.15 m	10.05 m	50.0 %
2	4312.12 m	155.21 m	2.94 m	50.0 %
3	4321.67 m	155.21 m	9.55 m	50.0 %
4	4321.66 m	155.35 m	0.14 m	50.0 %
5	4322.15 m	155.35 m	0.49 m	50.0 %
6	4322.17 m	158.15 m	2.80 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

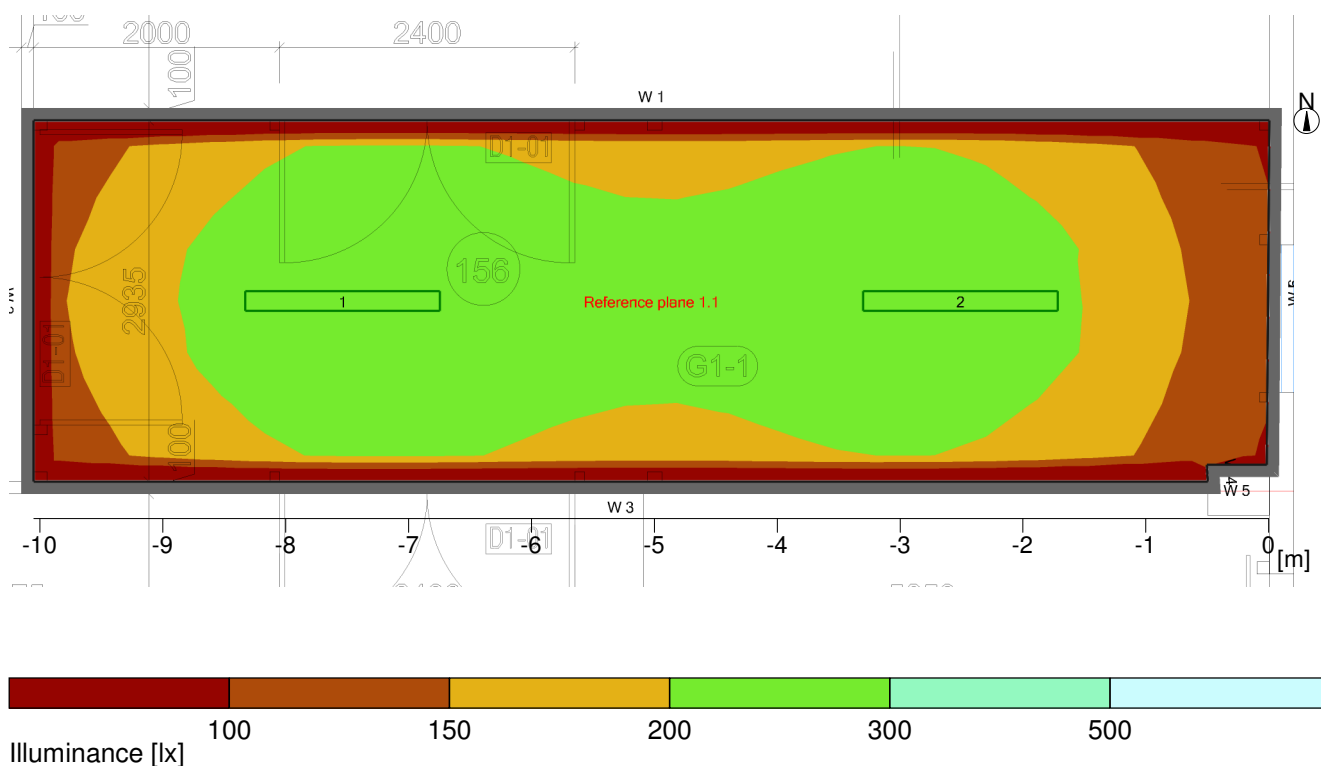
Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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52 156

52.2 Summary, 156

52.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	4.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	19228.00 lm
Total power	152.8 W
Total power per area (29.41 m²)	5.20 W/m² (2.81 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Store rooms, cold stores
5.4.1 (EN 12464-1, 8.2011) Store and stockrooms (Ra >60.00)
Horizontal

Em	185 lx	(>= 100 lx)
Emin	98 lx	
Emin/Eav (Uo)	0.53	(>= 0.40)
Emin/Emax (Ud)	0.42	
UGR (1.1H 3.7H)	<=22.9	(< 25.00)
Position	0.00 m	

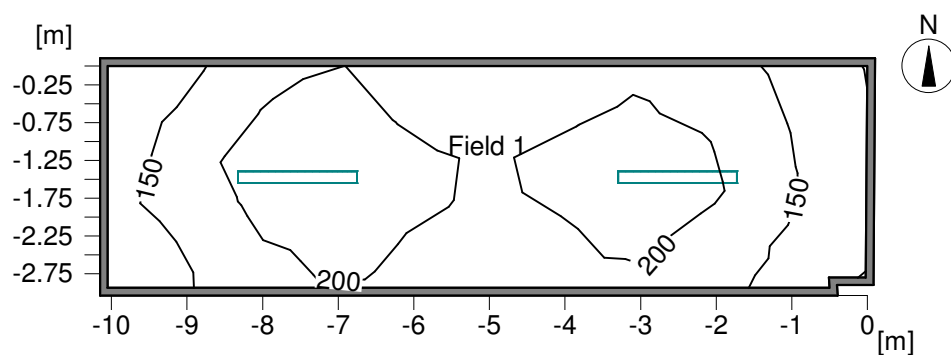
Type No.Make

29	2	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

52 156

52.3 Calculation results, 156

52.3.1 Isolines representation, Floor (E)



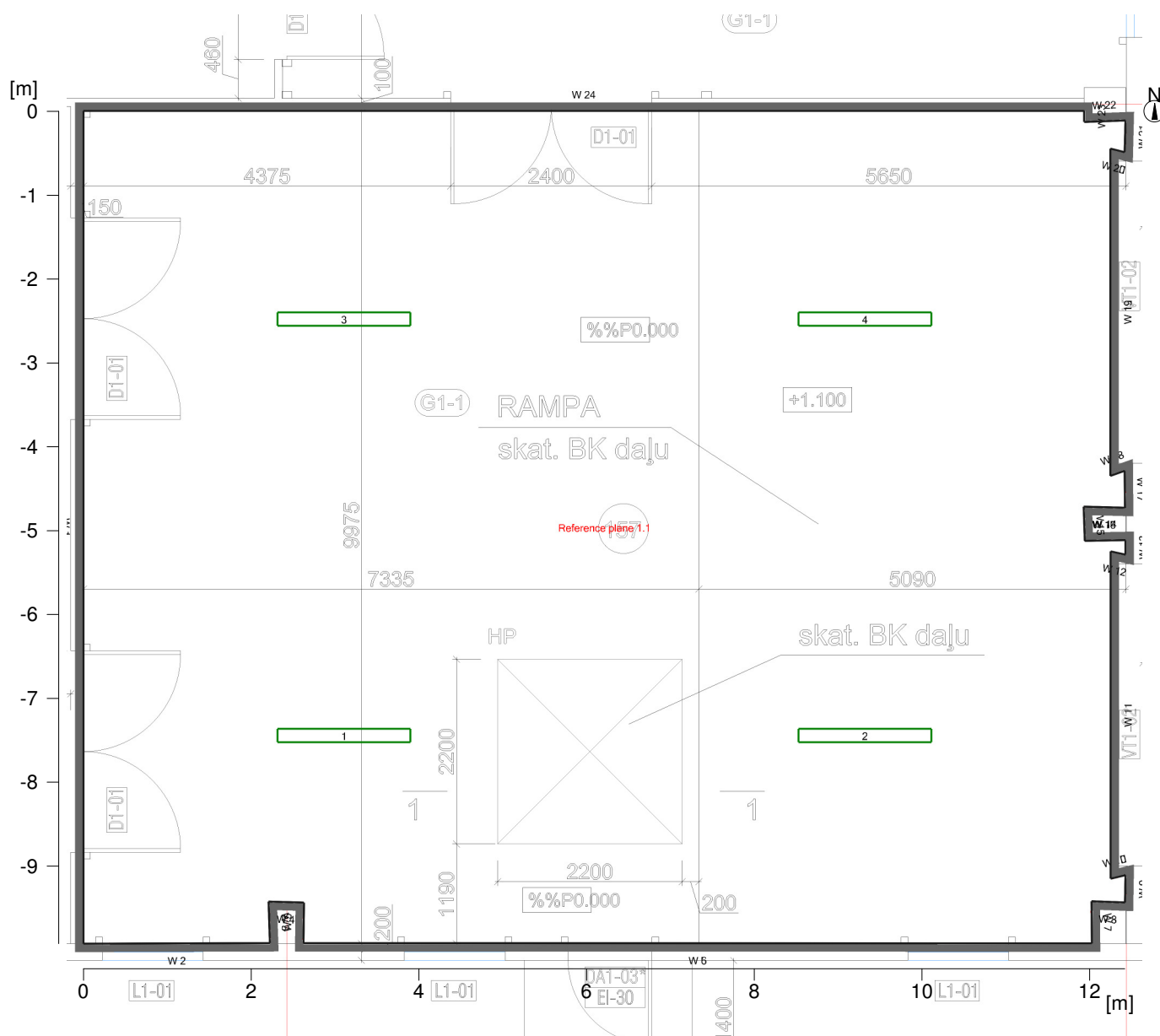
Illuminance [lx]

Average illuminance	Eav	: 176 lx
Minimum illuminance	Emin	: 99 lx
Maximum illuminance	E _{max}	: 226 lx
Uniformity U ₀	Emin/Eav	: 1 : 1.78 (0.56)
Diversity U _d	Emin/E _{max}	: 1 : 2.28 (0.44)

53 157

53.1 Description, 157

53.1.1 Floor plan



Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018



53 157

53.1 Description, 157

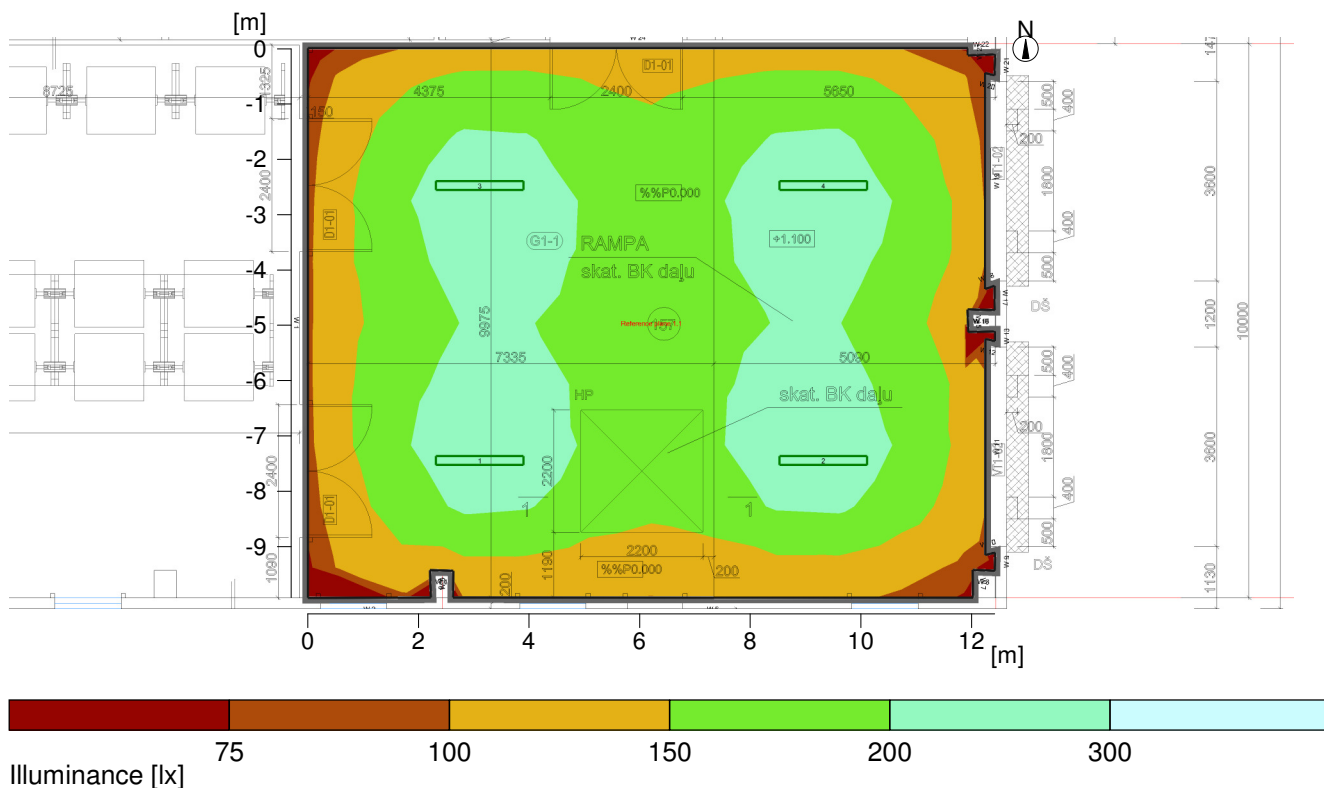
53.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4309.75 m	145.14 m	9.93 m	50.0 %
2	4311.97 m	145.14 m	2.22 m	50.0 %
3	4311.95 m	145.64 m	0.49 m	50.0 %
4	4312.37 m	145.63 m	0.42 m	50.0 %
5	4312.37 m	145.14 m	0.48 m	50.0 %
6	4321.76 m	145.14 m	9.40 m	50.0 %
7	4321.76 m	145.64 m	0.50 m	50.0 %
8	4322.16 m	145.63 m	0.40 m	50.0 %
9	4322.16 m	145.95 m	0.33 m	50.0 %
10	4321.99 m	145.91 m	0.18 m	50.0 %
11	4321.99 m	149.81 m	3.90 m	50.0 %
12	4322.16 m	149.77 m	0.18 m	50.0 %
13	4322.16 m	149.95 m	0.17 m	50.0 %
14	4321.68 m	149.94 m	0.48 m	50.0 %
15	4321.67 m	150.34 m	0.41 m	50.0 %
16	4322.16 m	150.33 m	0.49 m	50.0 %
17	4322.15 m	150.77 m	0.44 m	50.0 %
18	4321.98 m	150.71 m	0.18 m	50.0 %
19	4321.98 m	154.61 m	3.90 m	50.0 %
20	4322.15 m	154.57 m	0.18 m	50.0 %
21	4322.16 m	154.95 m	0.38 m	50.0 %
22	4321.67 m	154.93 m	0.49 m	50.0 %
23	4321.67 m	155.06 m	0.13 m	50.0 %
24	4309.75 m	155.06 m	11.92 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.00 m		

53 157

53.2 Summary, 157

53.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	4.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	38456.00 lm
Total power	305.6 W
Total power per area (121.15 m ²)	2.52 W/m ² (1.52 W/m ² /100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
 5.1.4 (EN 12464-1, 8.2011) Loading ramps/bays (Ra >40.00)
 Horizontal

Em	165 lx	(>= 150 lx)
Emin	87 lx	
Emin/Eav (Uo)	0.52	(>= 0.40)
Emin/Emax (Ud)	0.39	
UGR (3.6H 4.5H)	<=24.3	(< 25.00)
Position	0.00 m	

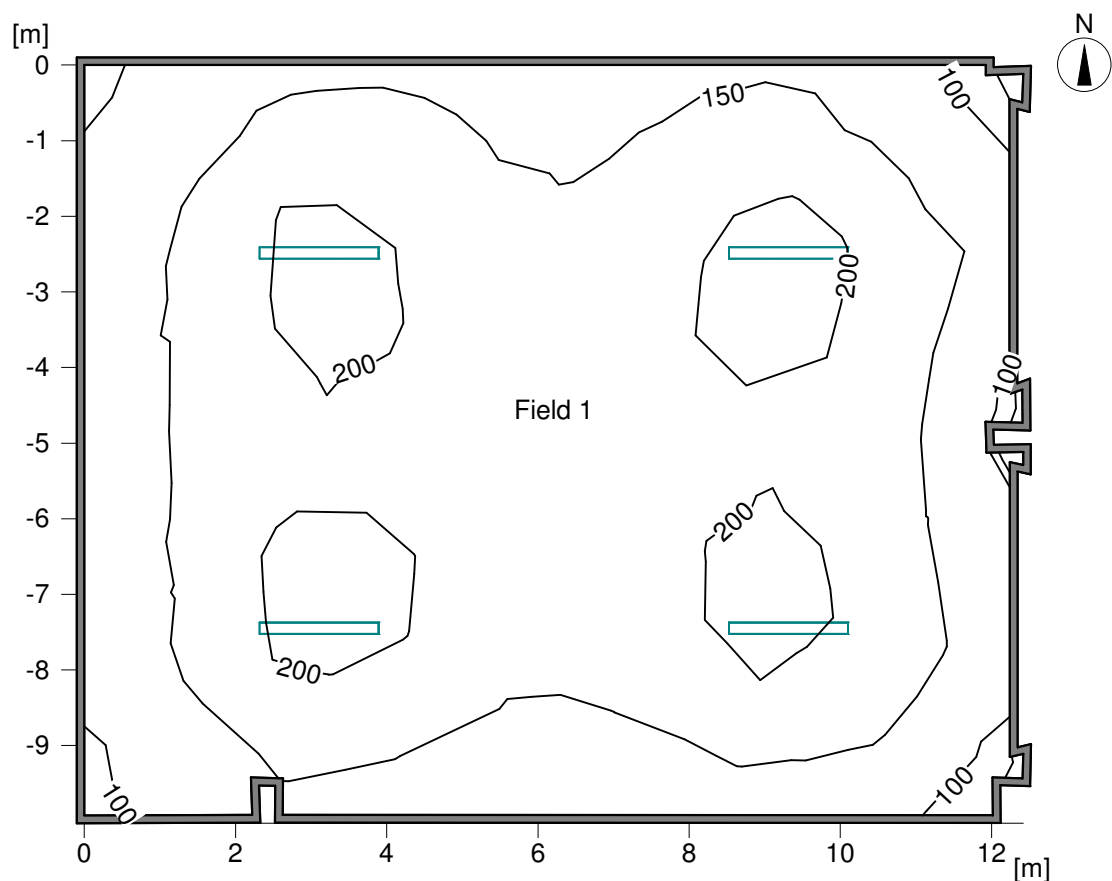
Type No.\Make

29	4	Order No.	: VIZULO STONE 75 W 4000 K 1500mm
		Luminaire name	: STC M 75 840 15D C0 N 100
		Equipment	: 1 x Stone 10 modules 76.39 W / 9614 lm

53 157

53.3 Calculation results, 157

53.3.1 Isolines representation, Floor (E)



Illuminance [lx]

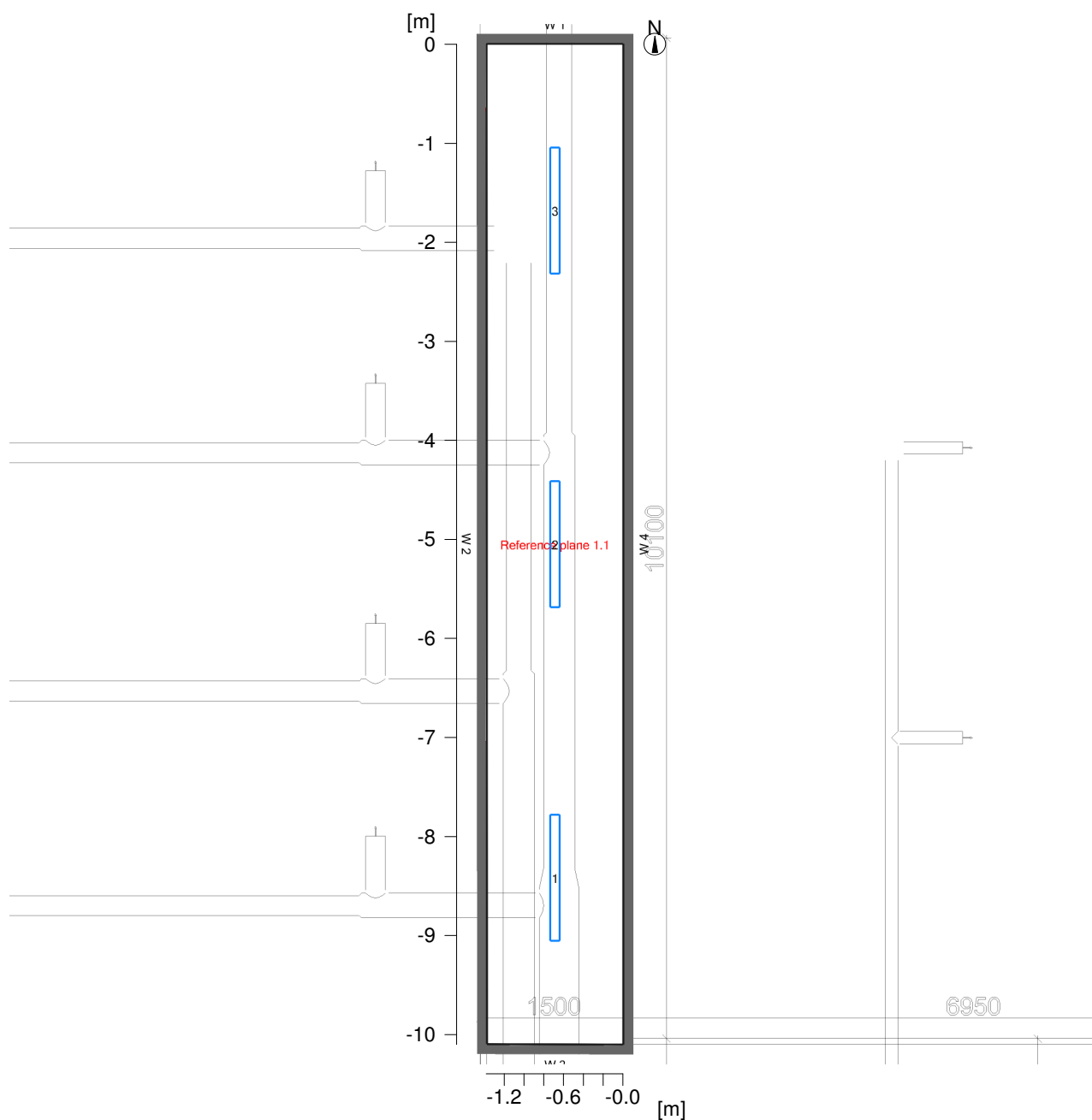
Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U_0
 Diversity U_d

Eav : 163 lx
 Emin : 92 lx
 Emax : 212 lx
 Emin/Eav : 1 : 1.77 (0.57)
 Emin/Emax : 1 : 2.30 (0.43)

54 tiltins 1

54.1 Description, tiltins 1

54.1.1 Floor plan

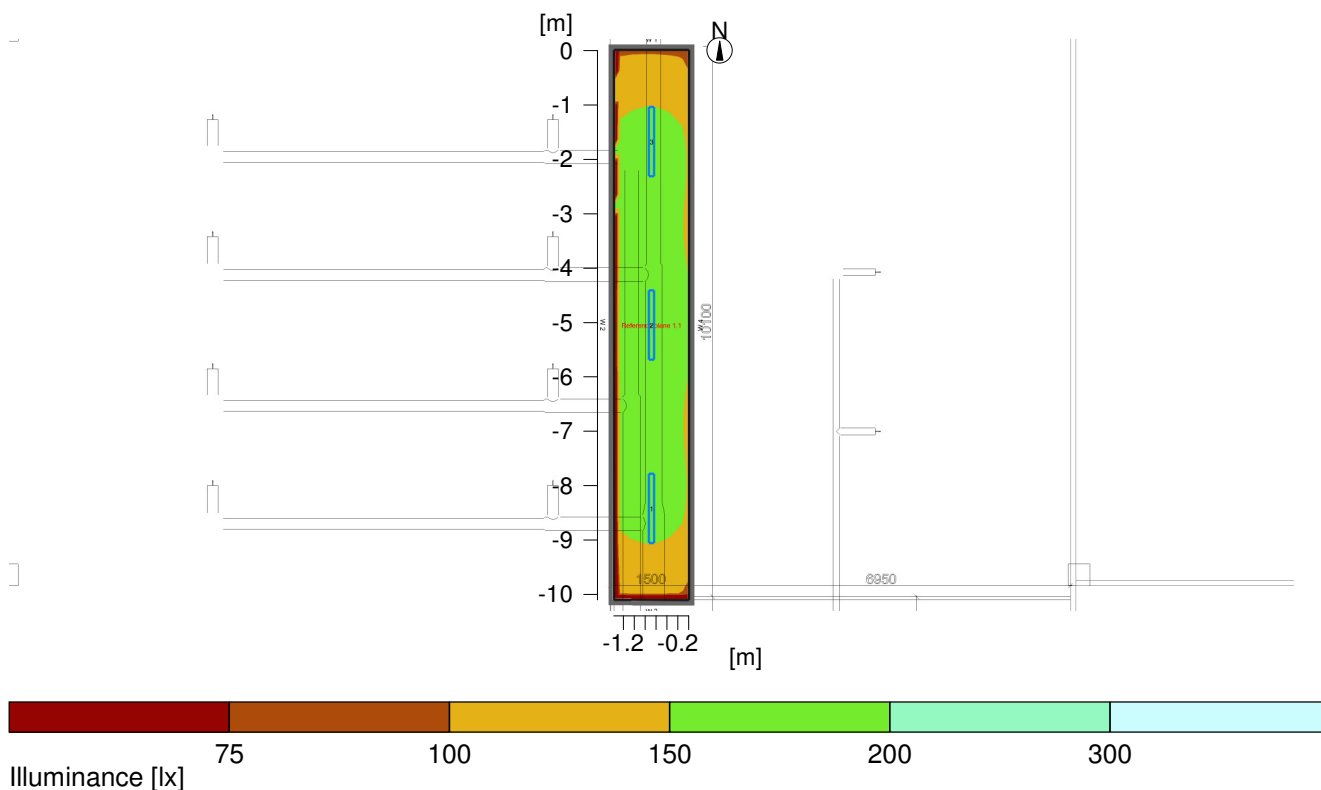


Wall	x	y	Length	Reflectance
1	4363.62 m	194.78 m	1.38 m	50.0 %
2	4363.63 m	184.68 m	10.10 m	50.0 %
3	4365.00 m	184.68 m	1.38 m	50.0 %
4	4365.00 m	194.78 m	10.10 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		6.00 m		
Height of ref. plane		0.00 m		

54 tiltins 1

54.2 Summary, tiltins 1

54.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	12970.10 lm
Total power	110.5 W
Total power per area (13.92 m ²)	7.94 W/m ² (5.36 W/m ² /100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
 5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
 Horizontal

Em	148 lx	(>= 100 lx)
Emin	93 lx	
Emin/Eav (Uo)	0.63	(>= 0.40)
Emin/Emax (Ud)	0.53	
UGR (0.8H 5.8H)	<=21.8	(< 28.00)
Position	0.00 m	

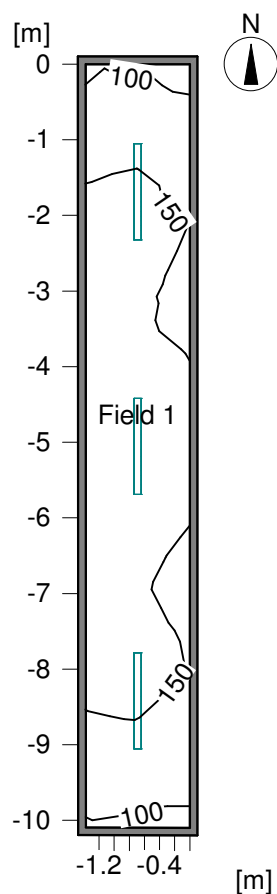
Type No.\Make

10	3	Order No.	: VIZULO STONE 37 W 4000 K 1200mm
		Luminaire name	: STB L 37 840 12S A2 N 100 LT80
		Equipment	: 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

54 tiltins 1

54.3 Calculation results, tiltins 1

54.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 143 lx
Minimum illuminance	Emin	: 85 lx
Maximum illuminance	Emax	: 173 lx
Uniformity Uo	Emin/Eav	: 1 : 1.67 (0.60)
Diversity Ud	Emin/Emax	: 1 : 2.03 (0.49)

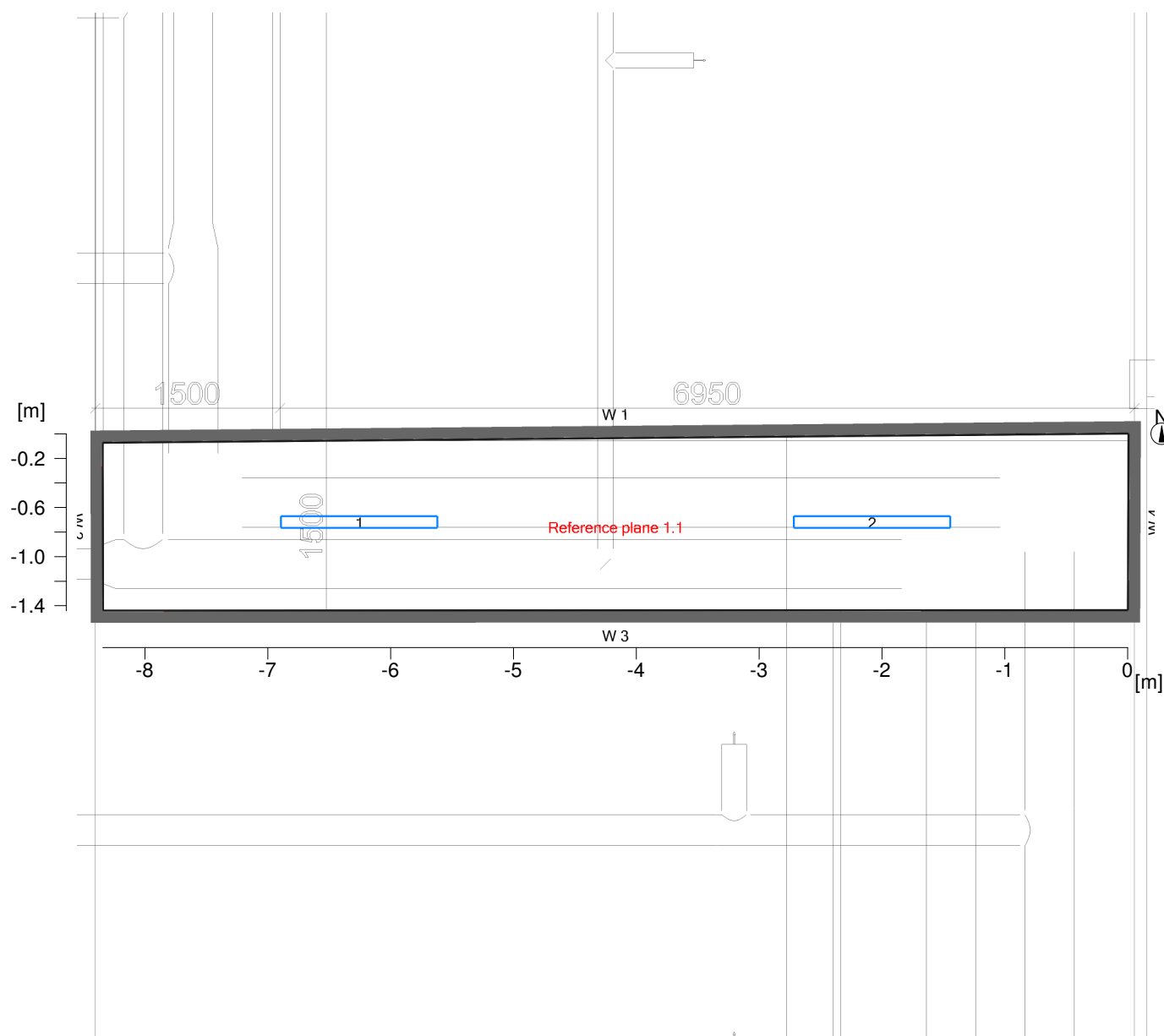
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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55 tiltins 2

55.1 Description, tiltins 2

55.1.1 Floor plan

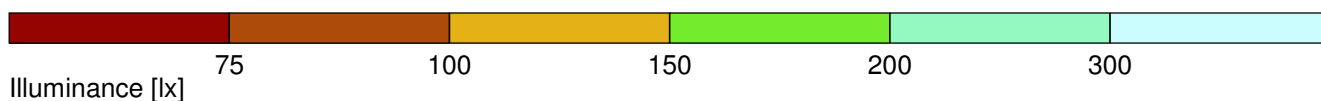
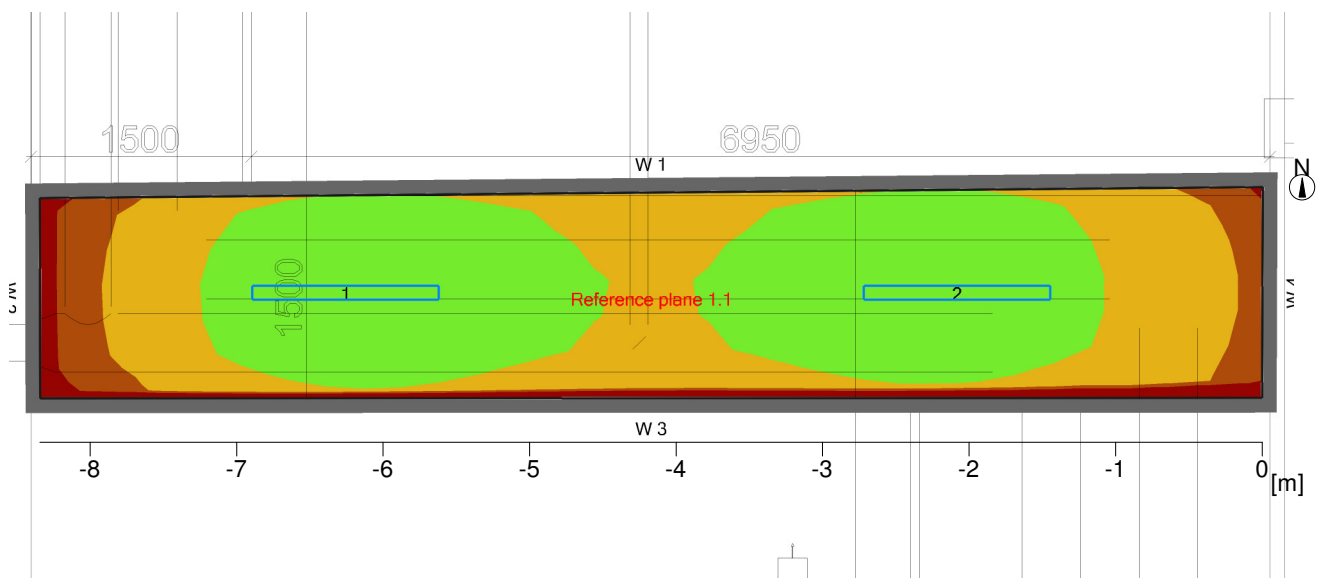


Wall	x	y	Length	Reflectance
1	4363.62 m	184.66 m	8.34 m	50.0 %
2	4363.62 m	183.30 m	1.36 m	50.0 %
3	4371.96 m	183.30 m	8.34 m	50.0 %
4	4371.96 m	184.74 m	1.44 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		6.00 m		
Height of ref. plane		0.00 m		

55 tiltins 2

55.2 Summary, tiltins 2

55.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 3.00 m
 0.80

Total luminous flux of all lamps 8646.70 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 73.7 W
 Total power per area (11.68 m²) 6.31 W/m² (4.52 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
 5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
 Horizontal
 Em 140 lx (>= 100 lx)
 Emin 65 lx
 Emin/Eav (Uo) 0.47 (>= 0.40)
 Emin/Emax (Ud) 0.37
 UGR (0.8H 4.8H) <=21.4 (< 28.00)
 Position 0.00 m

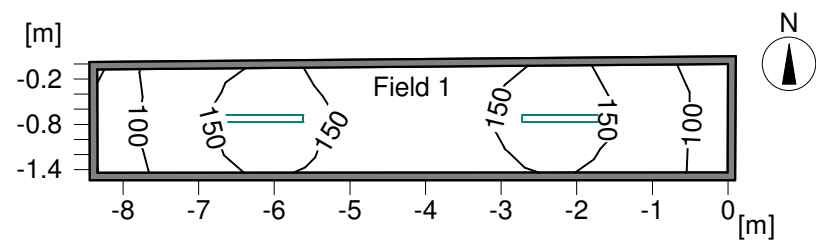
Type No.\Make

10 2 Order No. : VIZULO STONE 37 W 4000 K 1200mm
 Luminaire name : STB L 37 840 12S A2 N 100 LT80
 Equipment : 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

55 tiltins 2

55.3 Calculation results, tiltins 2

55.3.1 Isolines representation, Floor (E)



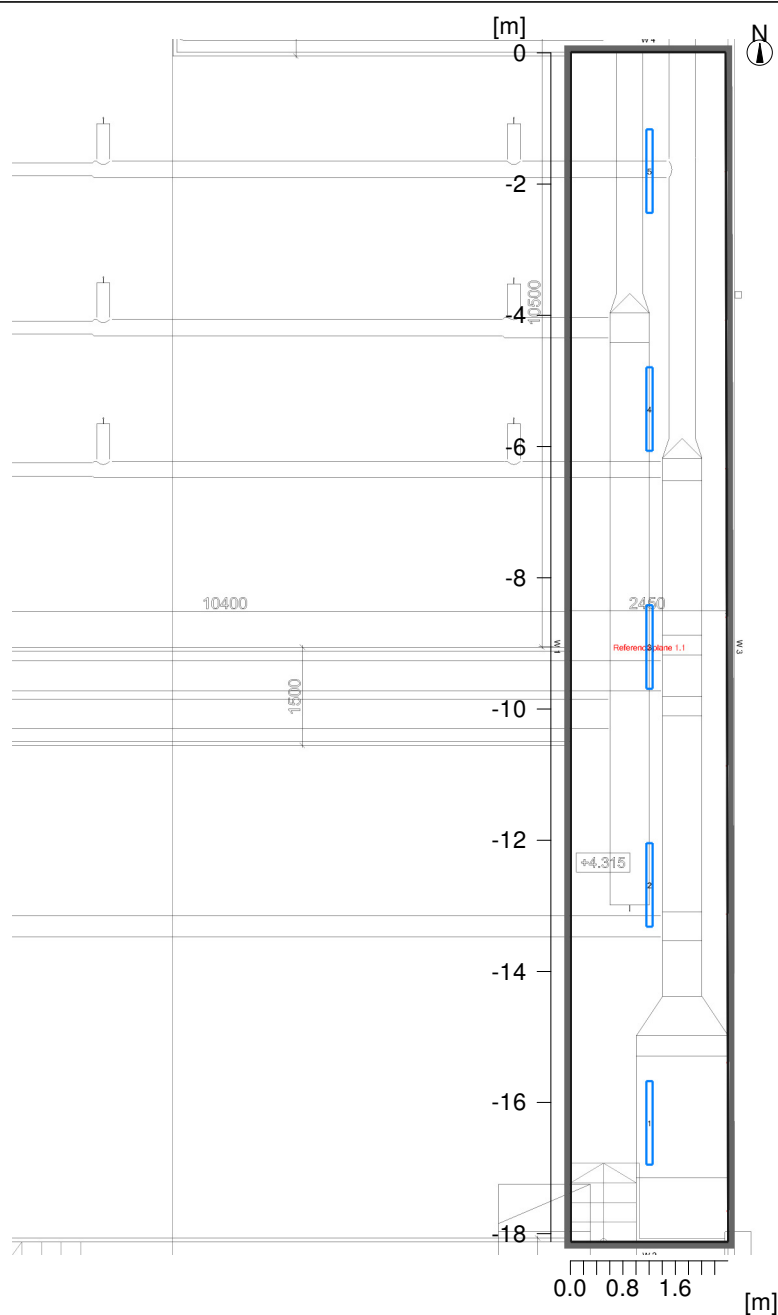
Illuminance [lx]

Average illuminance	Eav	: 137 lx
Minimum illuminance	Emin	: 77 lx
Maximum illuminance	Emax	: 164 lx
Uniformity Uo	Emin/Eav	: 1 : 1.79 (0.56)
Diversity Ud	Emin/Emax	: 1 : 2.15 (0.47)

56 tiltins 3

56.1 Description, tiltins 3

56.1.1 Floor plan

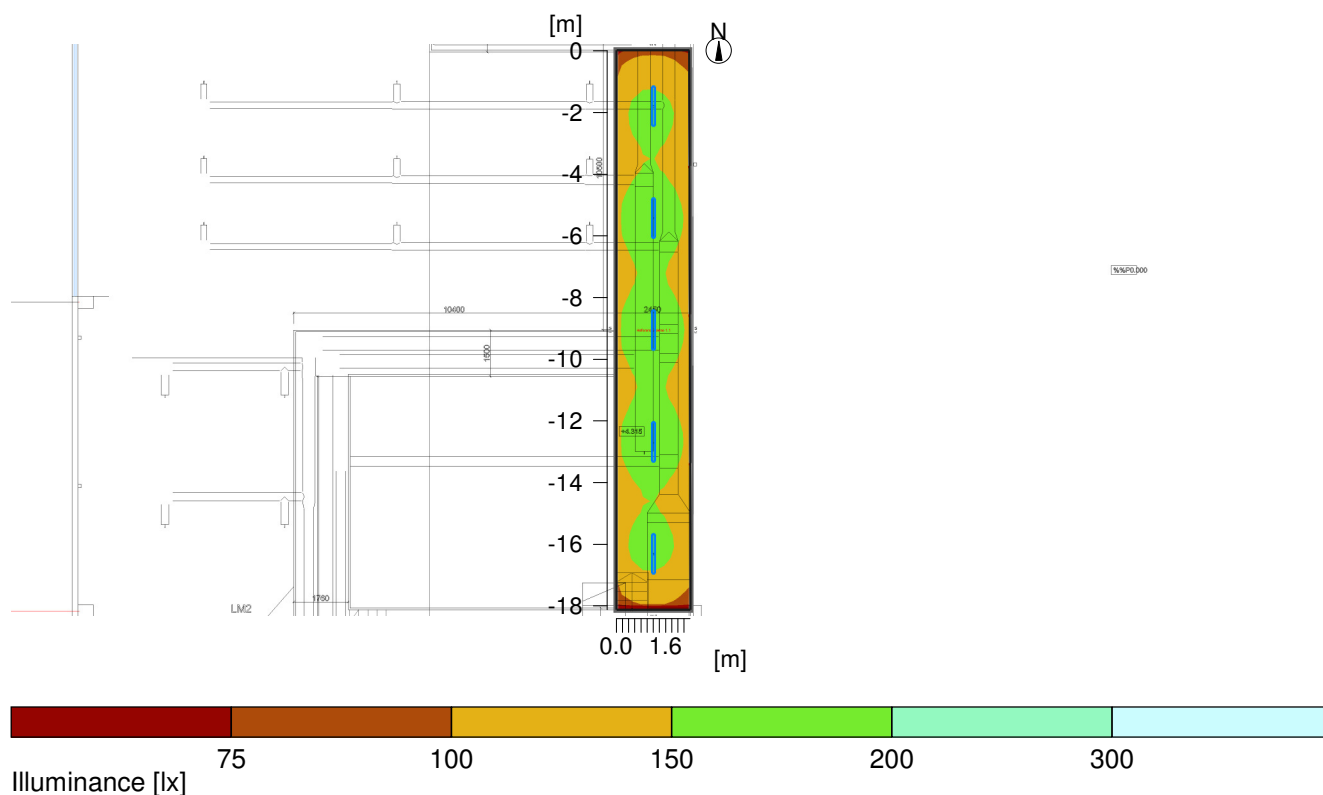


Wall	x	y	Length	Reflectance
1	4369.62 m	165.18 m	18.12 m	50.0 %
2	4372.02 m	165.18 m	2.40 m	50.0 %
3	4371.98 m	183.30 m	18.12 m	50.0 %
4	4369.62 m	183.30 m	2.36 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		6.00 m		
Height of ref. plane		0.00 m		

56 tiltins 3

56.2 Summary, tiltins 3

56.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 3.00 m
 0.80

Total luminous flux of all lamps 21616.80 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 184.2 W
 Total power per area (43.09 m²) 4.27 W/m² (3.05 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
 5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
 Horizontal
 140 lx (>= 100 lx)
 81 lx
 0.58 (>= 0.40)
 0.48
 UGR (1.4H 10.4H) <=22.4 (< 28.00)
 Position 0.00 m

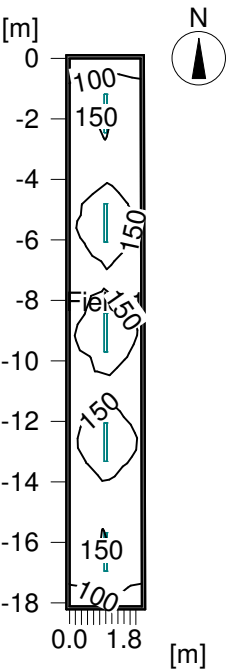
Type No.\Make

10	5	Order No.	: VIZULO STONE 37 W 4000 K 1200mm
		Luminaire name	: STB L 37 840 12S A2 N 100 LT80
		Equipment	: 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

56 tiltins 3

56.3 Calculation results, tiltins 3

56.3.1 Isolines representation, Floor (E)



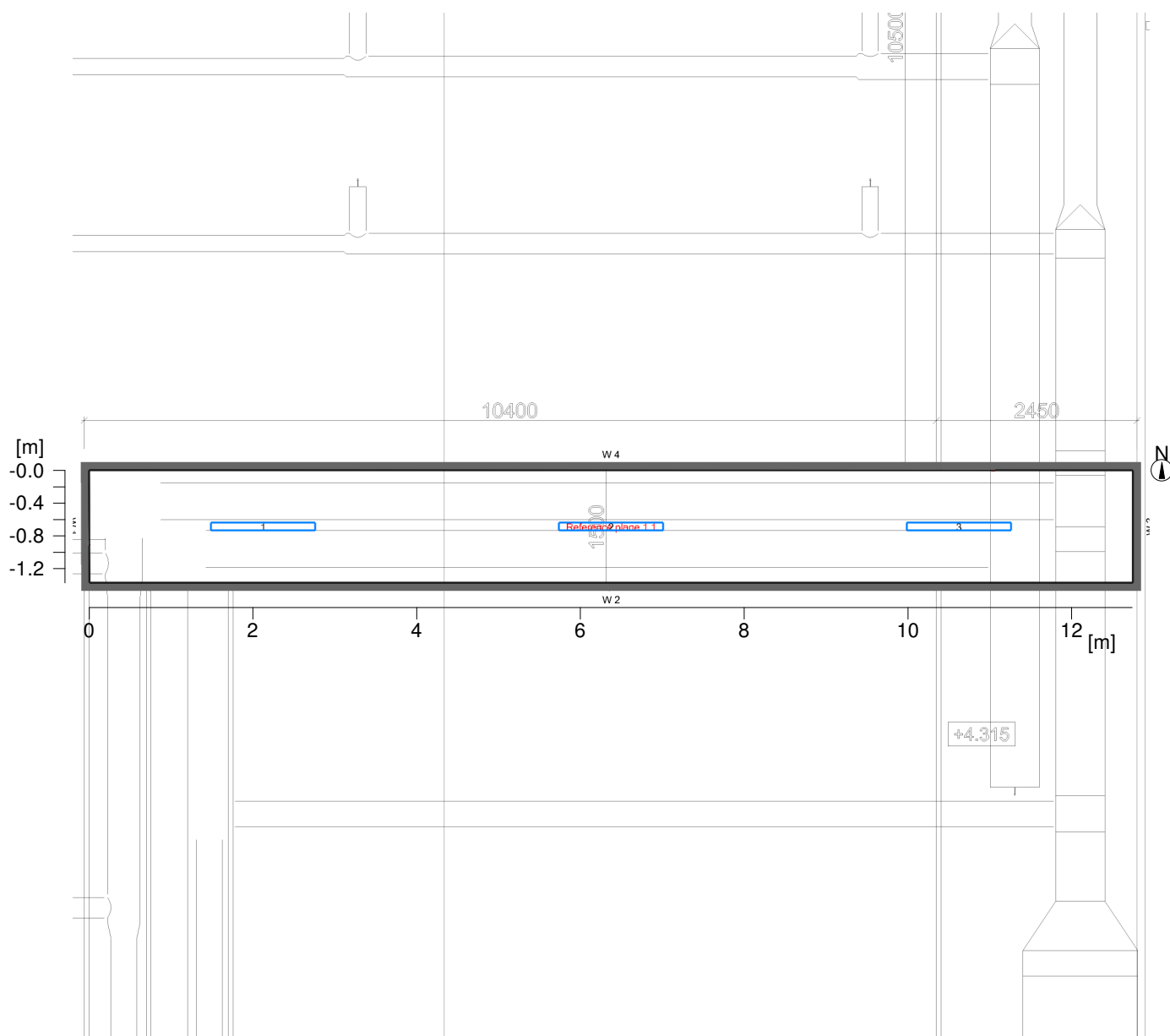
Illuminance [lx]

Average illuminance	Eav	: 136 lx
Minimum illuminance	Emin	: 77 lx
Maximum illuminance	Emax	: 167 lx
Uniformity Uo	Emin/Eav	: 1 : 1.78 (0.56)
Diversity Ud	Emin/Emax	: 1 : 2.18 (0.46)

57 tiltins 4

57.1 Description, tiltins 4

57.1.1 Floor plan

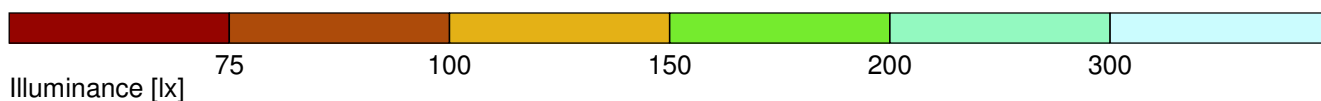
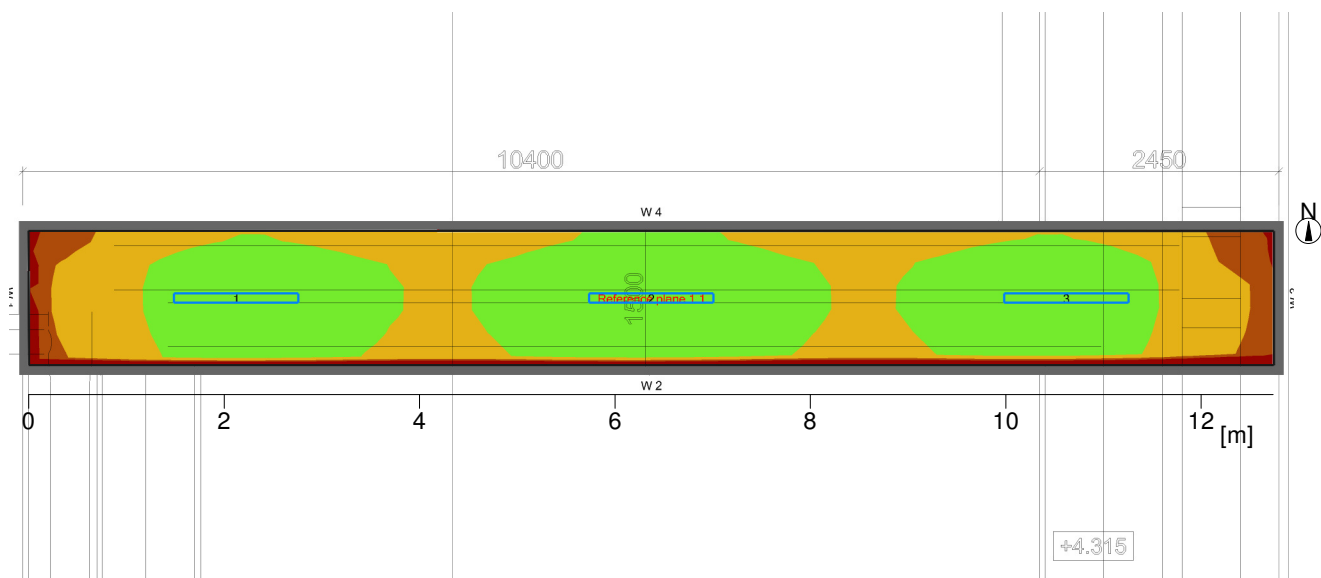


Wall	x	y	Length	Reflectance
1	4359.23 m	172.80 m	1.37 m	50.0 %
2	4371.96 m	172.80 m	12.73 m	50.0 %
3	4371.96 m	174.17 m	1.37 m	50.0 %
4	4359.22 m	174.18 m	12.74 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		6.00 m		
Height of ref. plane		0.00 m		

57 tiltins 4

57.2 Summary, tiltins 4

57.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	12970.10 lm
Total power	110.5 W
Total power per area (17.49 m²)	6.32 W/m² (4.36 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
 5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
 Horizontal

Em	145 lx	(>= 100 lx)
Emin	75 lx	
Emin/Eav (Uo)	0.52	(>= 0.40)
Emin/Emax (Ud)	0.40	
UGR (0.8H 7.3H)	<=22.1	(< 28.00)
Position	0.00 m	

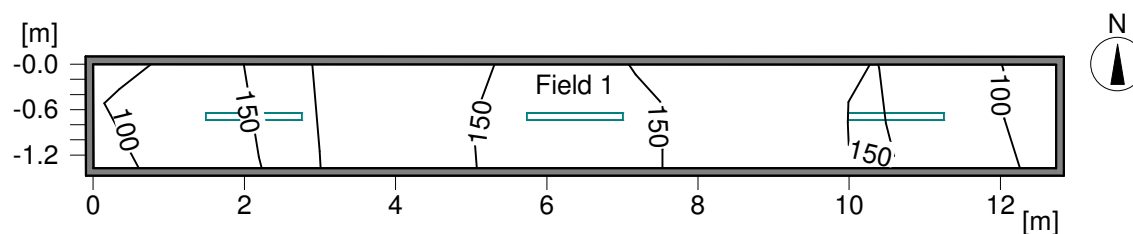
Type No.\Make

10	3	Order No.	: VIZULO STONE 37 W 4000 K 1200mm
		Luminaire name	: STB L 37 840 12S A2 N 100 LT80
		Equipment	: 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

57 tiltins 4

57.3 Calculation results, tiltins 4

57.3.1 Isolines representation, Floor (E)



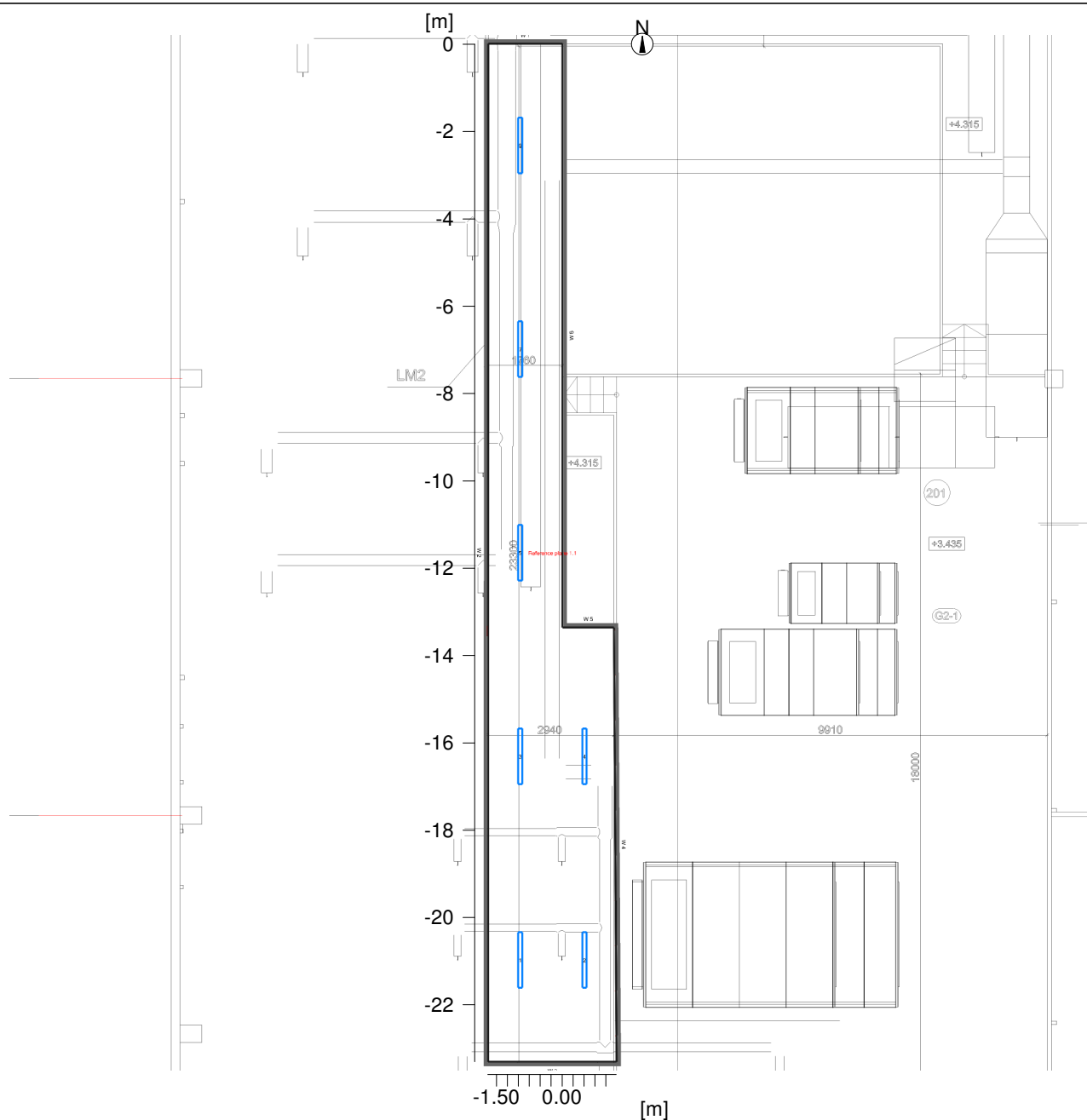
Illuminance [lx]

Average illuminance	Eav	: 134 lx
Minimum illuminance	Emin	: 79 lx
Maximum illuminance	Emax	: 170 lx
Uniformity Uo	Emin/Eav	: 1 : 1.69 (0.59)
Diversity Ud	Emin/Emax	: 1 : 2.15 (0.46)

58 tiltins 5

58.1 Description, tiltins 5

58.1.1 Floor plan

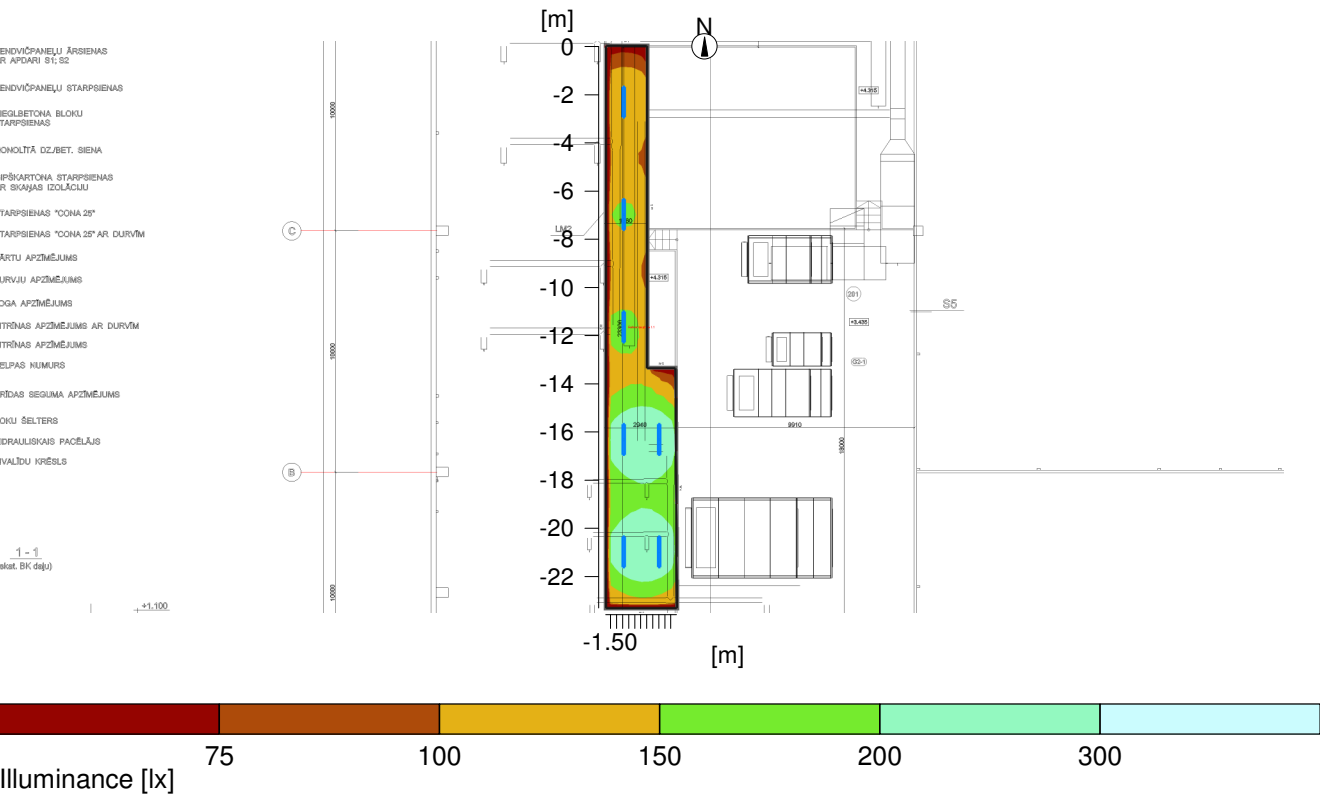


Wall	x	y	Length	Reflectance
1	4359.23 m	172.80 m	1.70 m	50.0 %
2	4359.22 m	149.50 m	23.30 m	50.0 %
3	4362.16 m	149.50 m	2.94 m	50.0 %
4	4362.10 m	159.44 m	9.94 m	50.0 %
5	4360.92 m	159.44 m	1.18 m	50.0 %
6	4360.92 m	172.80 m	13.36 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		6.00 m		
Height of ref. plane		----		

58 tiltins 5

58.2 Summary, tiltins 5

58.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
Height of luminaire plane
Maintenance factor

Average indirect fraction
3.00 m
0.80

Total luminous flux of all lamps
(Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

30263.50 lm (100.00% dimmed)

Total power
Total power per area (51.59 m²)

257.8 W
5.00 W/m² (3.16 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
Horizontal
158 lx (>= 100 lx)
64 lx
0.41 (>= 0.40)
0.25
<=22.3 (< 28.00)
0.00 m (rot: 0°/0.03°)

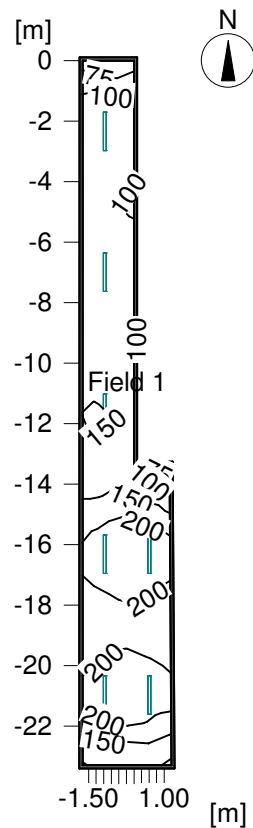
Type No.\Make

Type No.	Make
10	7
Order No.	: VIZULO STONE 37 W 4000 K 1200mm
Luminaire name	: STB L 37 840 12S A2 N 100 LT80
Equipment	: 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

58 tiltins 5

58.3 Calculation results, tiltins 5

58.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 156 lx
Minimum illuminance	Emin	: 65 lx
Maximum illuminance	Emax	: 249 lx
Uniformity Uo	Emin/Eav	: 1 : 2.39 (0.42)
Diversity Ud	Emin/Emax	: 1 : 3.84 (0.26)

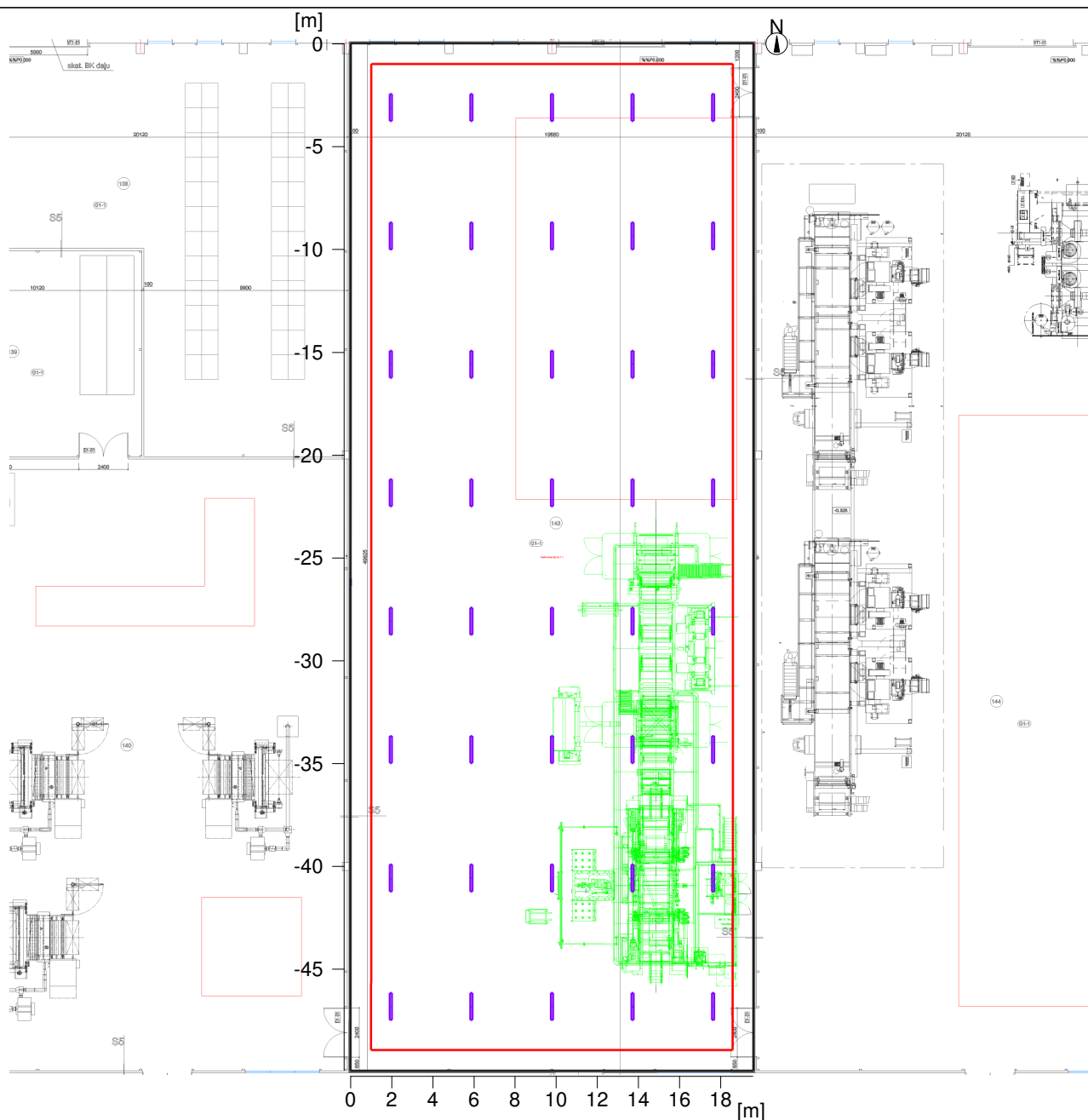
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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59 143

59.1 Description, 143

59.1.1 Floor plan



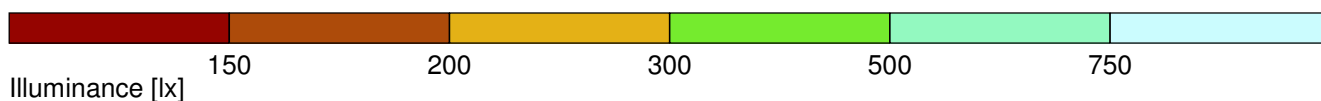
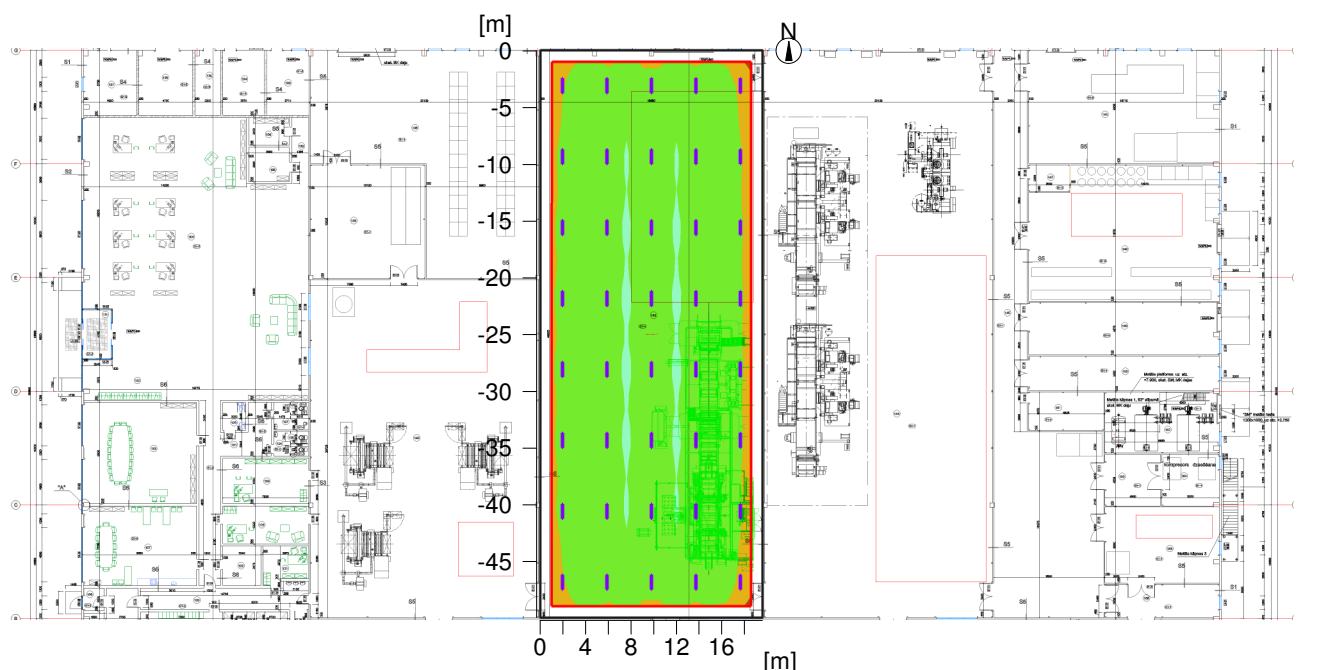
Wall	x	y	Length	Reflectance
1	4262.38 m	155.21 m	49.92 m	50.0 %
2	4281.96 m	155.21 m	19.58 m	50.0 %
3	4281.97 m	205.12 m	49.91 m	50.0 %
4	4262.40 m	205.13 m	19.57 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		11.00 m		
Height of ref. plane		0.75 m		

-please put your own address here-

59 143

59.2 Summary, 143

59.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 7.00 m
 0.80

Total luminous flux of all lamps
 Total power
 Total power per area (977.11 m²)

480028.81 lm
 3624.2 W
 3.71 W/m² (0.97 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Industrial activities and crafts - Paper and paper goods
 5.19.2 (EN 12464-1, 8.2011) Paper manufacture and processing, paper and corrugating machines, cardboard manufacture (Ra >80.00)
 Horizontal

Em 383 lx (>= 300 lx)
 Emin 215 lx
 Emin/Eav (Uo) 0.56 (>= 0.60)
 Emin/Emax (Ud) 0.42
 UGR (3.4H 8.7H) <=29.5 (< 25.00)
 Position 0.75 m

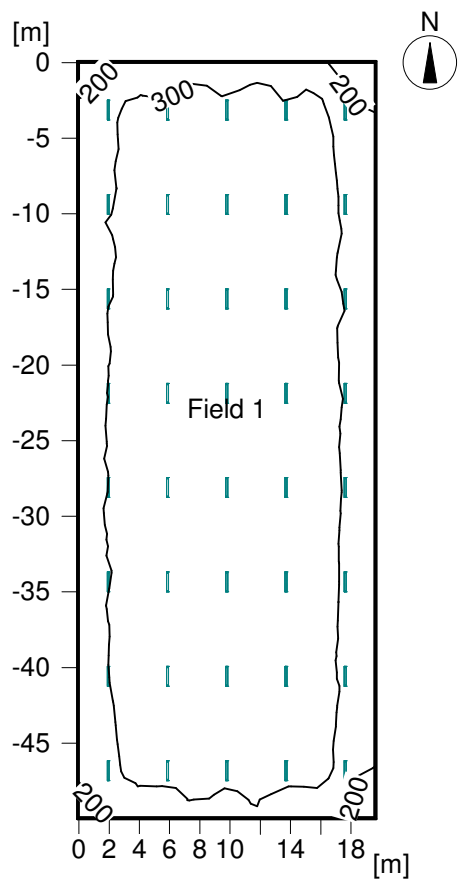
Type No.\Make

30 40 Order No. : OAK 90 W, medium
 Luminaire name : OK 90 840 1310 MY N10
 Equipment : 1 x Oak 90.6 W / 12000.7 lm

59 143

59.3 Calculation results, 143

59.3.1 Isolines representation, Floor (E)



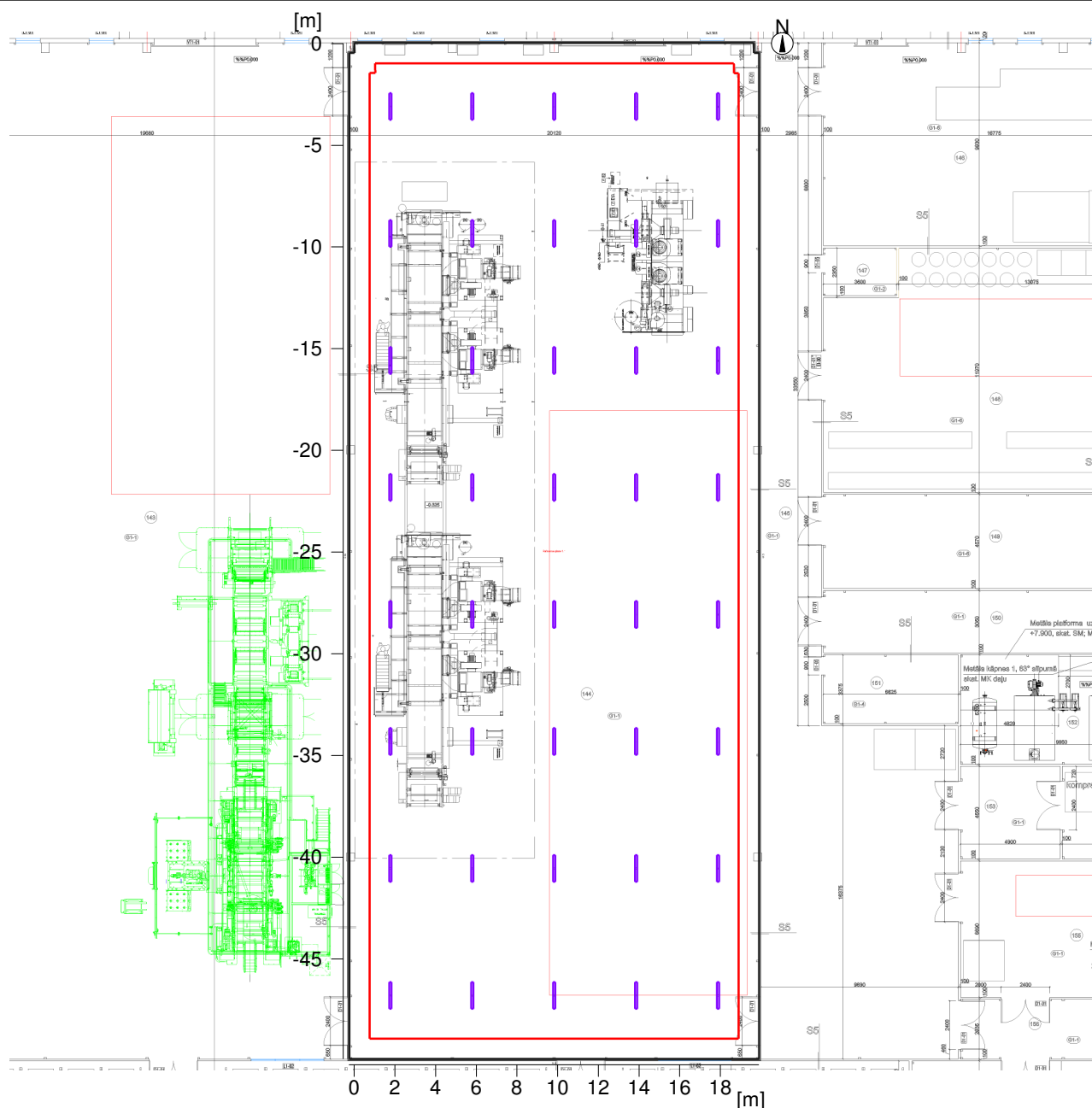
Illuminance [lx]

Average illuminance	Eav	: 351 lx
Minimum illuminance	Emin	: 180 lx
Maximum illuminance	Emax	: 433 lx
Uniformity Uo	Emin/Eav	: 1 : 1.95 (0.51)
Diversity Ud	Emin/Emax	: 1 : 2.41 (0.42)

60 144

60.1 Description, 144

60.1.1 Floor plan

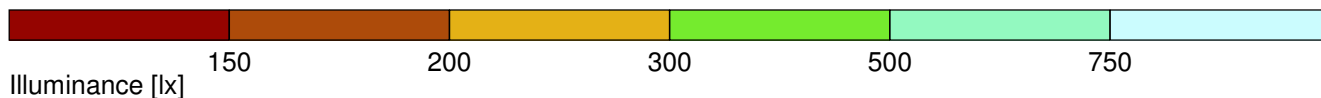
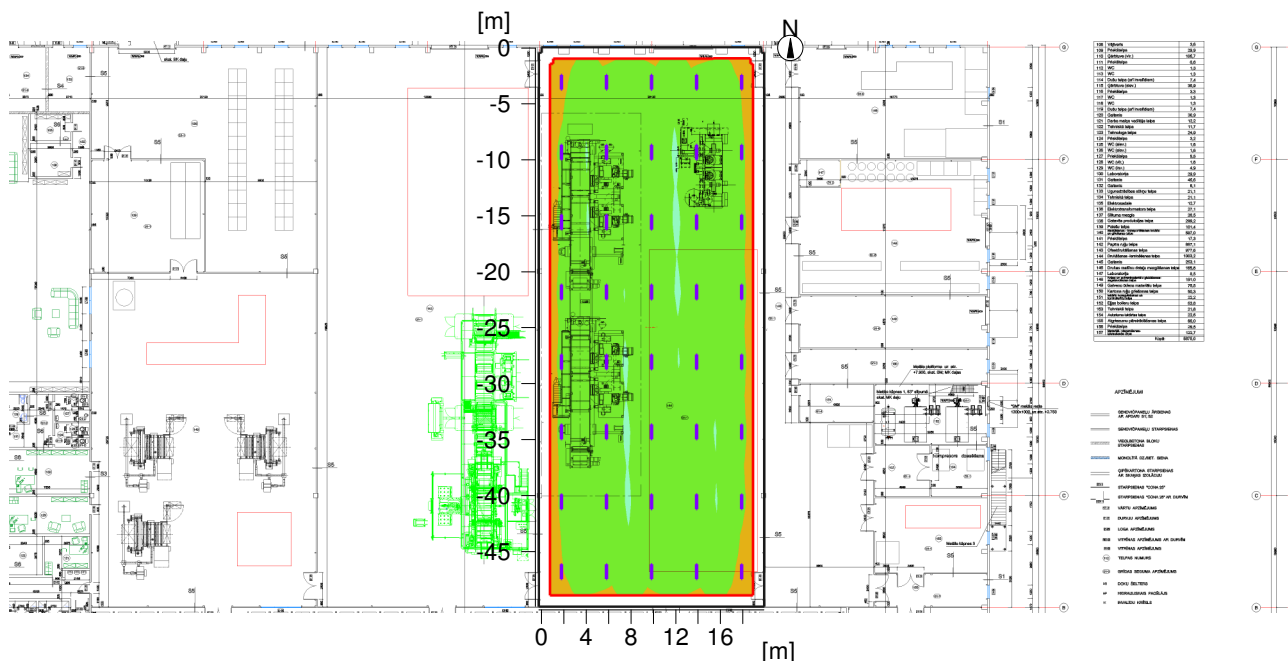


Wall	x	y	Length	Reflectance
1	4282.37 m	204.64 m	0.49 m	50.0 %
2	4282.11 m	204.64 m	0.25 m	50.0 %
3	4282.11 m	155.21 m	49.43 m	50.0 %
4	4302.23 m	155.21 m	20.12 m	50.0 %
5	4302.23 m	204.64 m	49.43 m	50.0 %
6	4301.98 m	204.64 m	0.25 m	50.0 %
7	4301.97 m	205.12 m	0.49 m	50.0 %
8	4282.36 m	205.12 m	19.61 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.75 m		

60 144

60.2 Summary, 144

60.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 7.00 m
 0.80

Total luminous flux of all lamps

480028.81 lm

Total power

3624.2 W

Total power per area (1004.02 m²)

3.61 W/m² (0.96 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Industrial activities and crafts - Paper and paper goods
 5.19.2 (EN 12464-1, 8.2011) Paper manufacture and processing, paper and corrugating machines, cardboard manufacture (Ra >0.00)
 Horizontal

Em 374 lx (>= 300 lx)
 Emin 221 lx
 Emin/Eav (Uo) 0.59 (>= 0.60)
 Emin/Emax (Ud) 0.44
 UGR (3.5H 8.7H) <=29.4 (< 25.00)
 Position 0.75 m

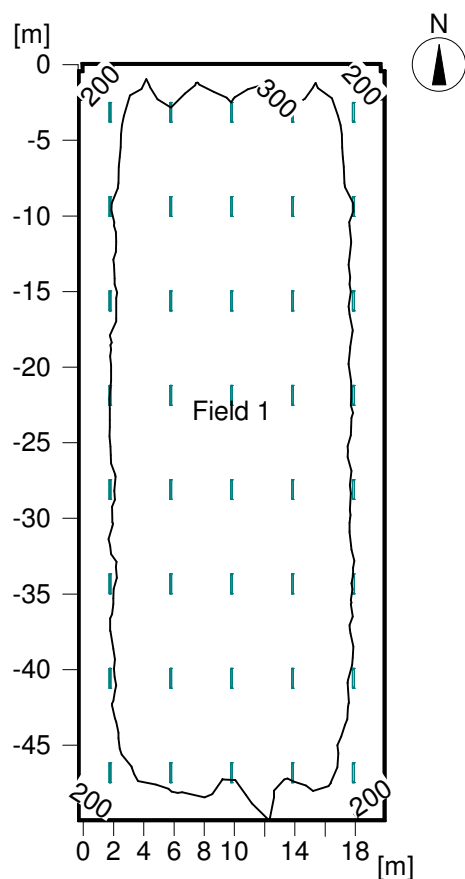
Type No./Make

30 40 Order No. : OAK 90 W, medium
 Luminaire name : OK 90 840 1310 MY N10
 Equipment : 1 x Oak 90.6 W / 12000.7 lm

60 144

60.3 Calculation results, 144

60.3.1 Isolines representation, Floor (E)



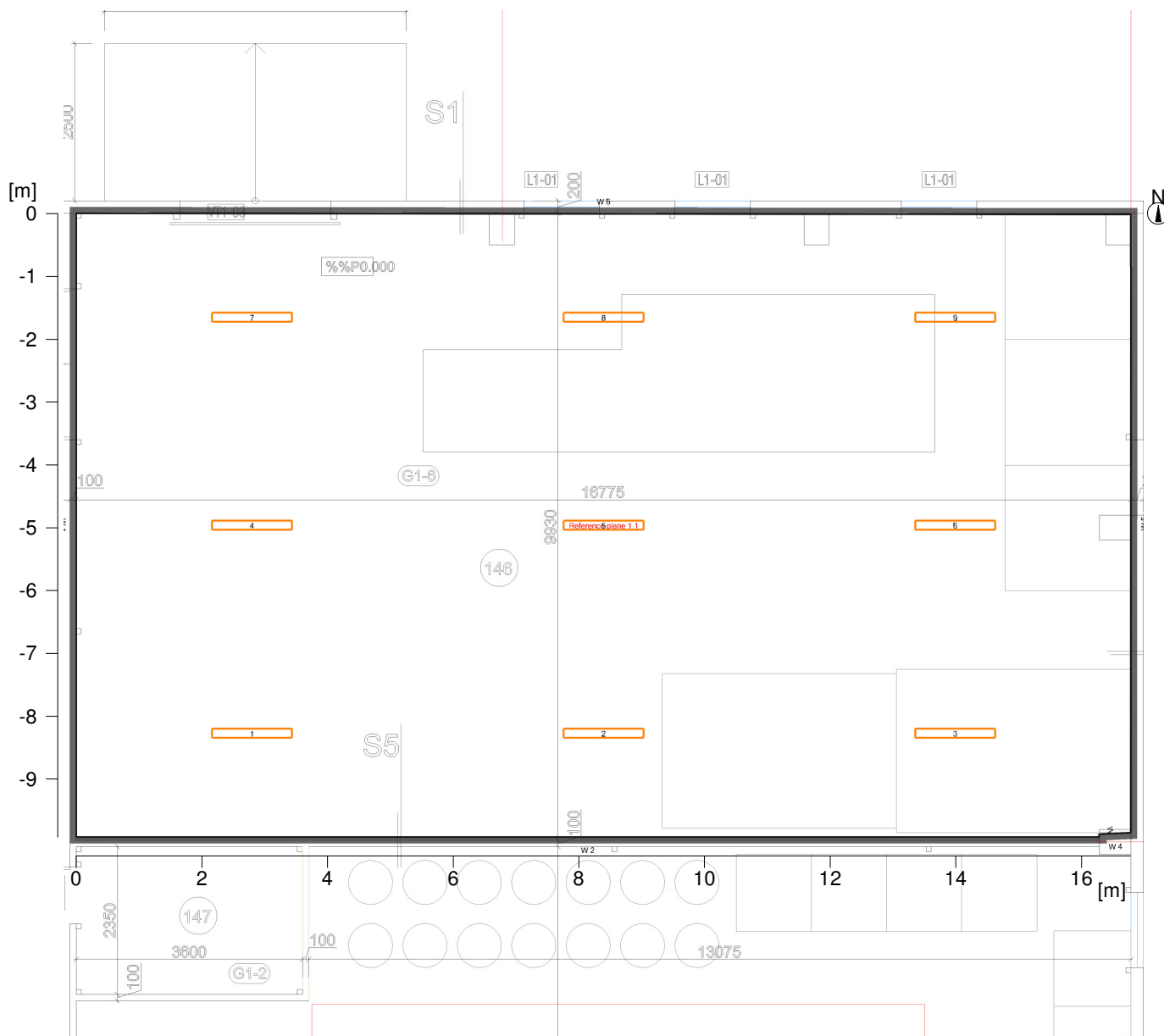
Illuminance [lx]

Average illuminance	Eav	: 326 lx
Minimum illuminance	Emin	: 166 lx
Maximum illuminance	Emax	: 435 lx
Uniformity Uo	Emin/Eav	: 1 : 1.96 (0.51)
Diversity Ud	Emin/Emax	: 1 : 2.62 (0.38)

61 146

61.1 Description, 146

61.1.1 Floor plan

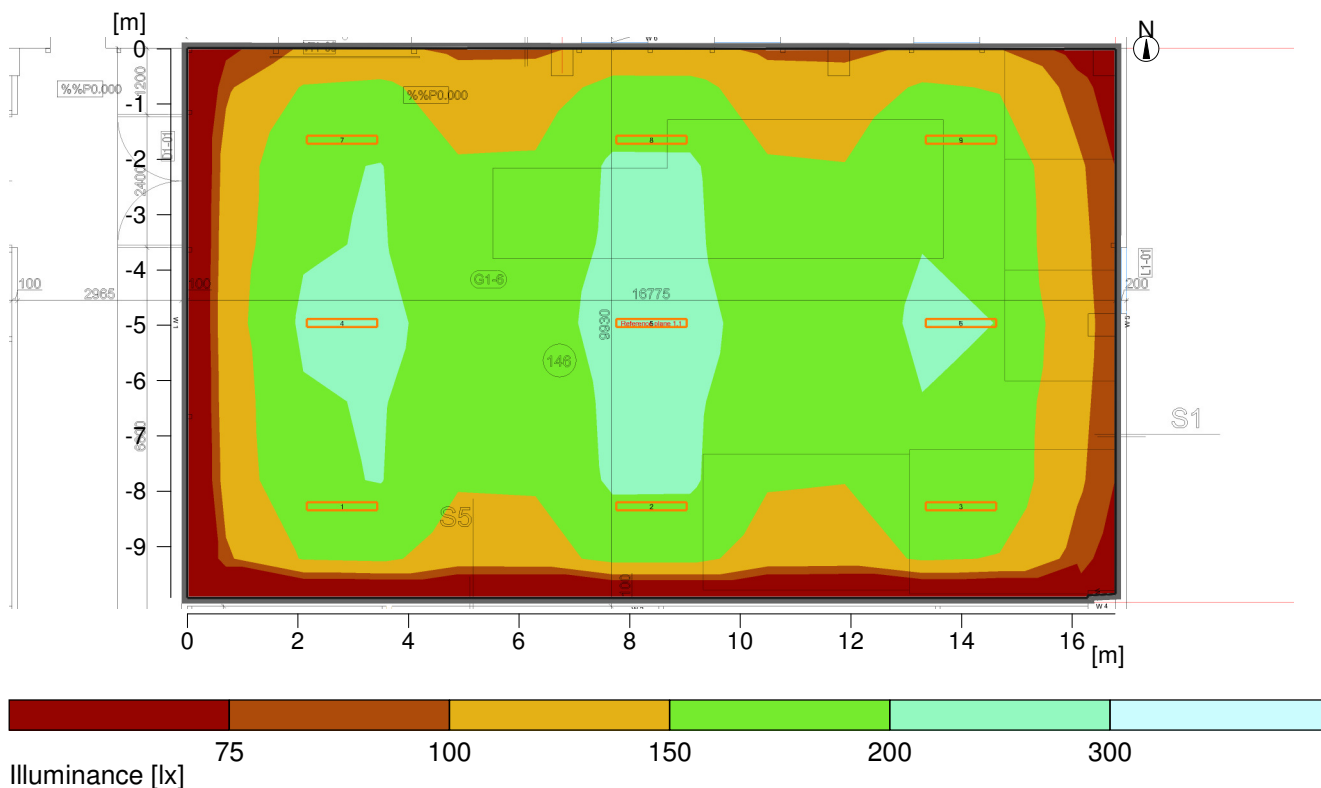


Wall	x	y	Length	Reflectance
1	4305.40 m	195.21 m	9.93 m	50.0 %
2	4321.67 m	195.21 m	16.27 m	50.0 %
3	4321.66 m	195.26 m	0.05 m	50.0 %
4	4322.17 m	195.28 m	0.51 m	50.0 %
5	4322.17 m	205.12 m	9.84 m	50.0 %
6	4305.40 m	205.14 m	16.78 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		10.50 m		
Height of ref. plane		0.75 m		

61 146

61.2 Summary, 146

61.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	4.00 m
Maintenance factor	0.80
Total luminous flux of all lamps	46800.00 lm
Total power	387.0 W
Total power per area (166.32 m²)	2.33 W/m² (1.50 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Industrial activities and crafts - Chemical, plastics and rubber industry
 5.10.2 (EN 12464-1, 8.2011) Processing installations with limited manual intervention (Ra >40.00)

Horizontal

Em	155 lx	(>= 150 lx)
Emin	82 lx	
Emin/Eav (Uo)	0.53	(>= 0.40)
Emin/Emax (Ud)	0.38	
UGR (3.6H 6.1H)	<=22.6	(< 28.00)
Position	0.75 m	

Type No.\Make

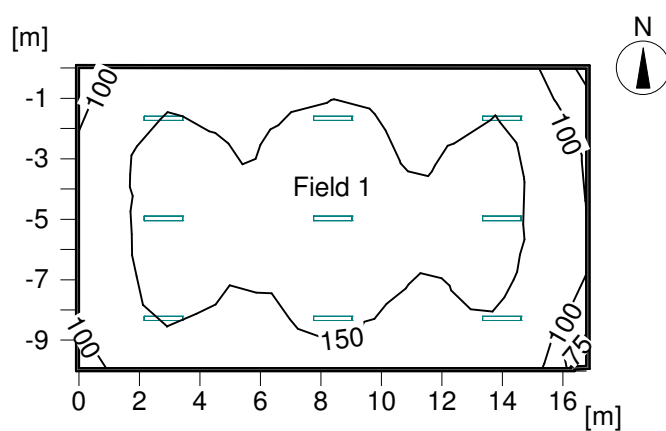
TREVOS

35	9	Order No.	: PRIMA LED Ex 2.4ft PCc 6400/840
		Luminaire name	: LED Ex,industrial,body PC,diffuser translucent PC, stainless clips
		Equipment	: 1 x LEDLine 43 W / 5200 lm

61 146

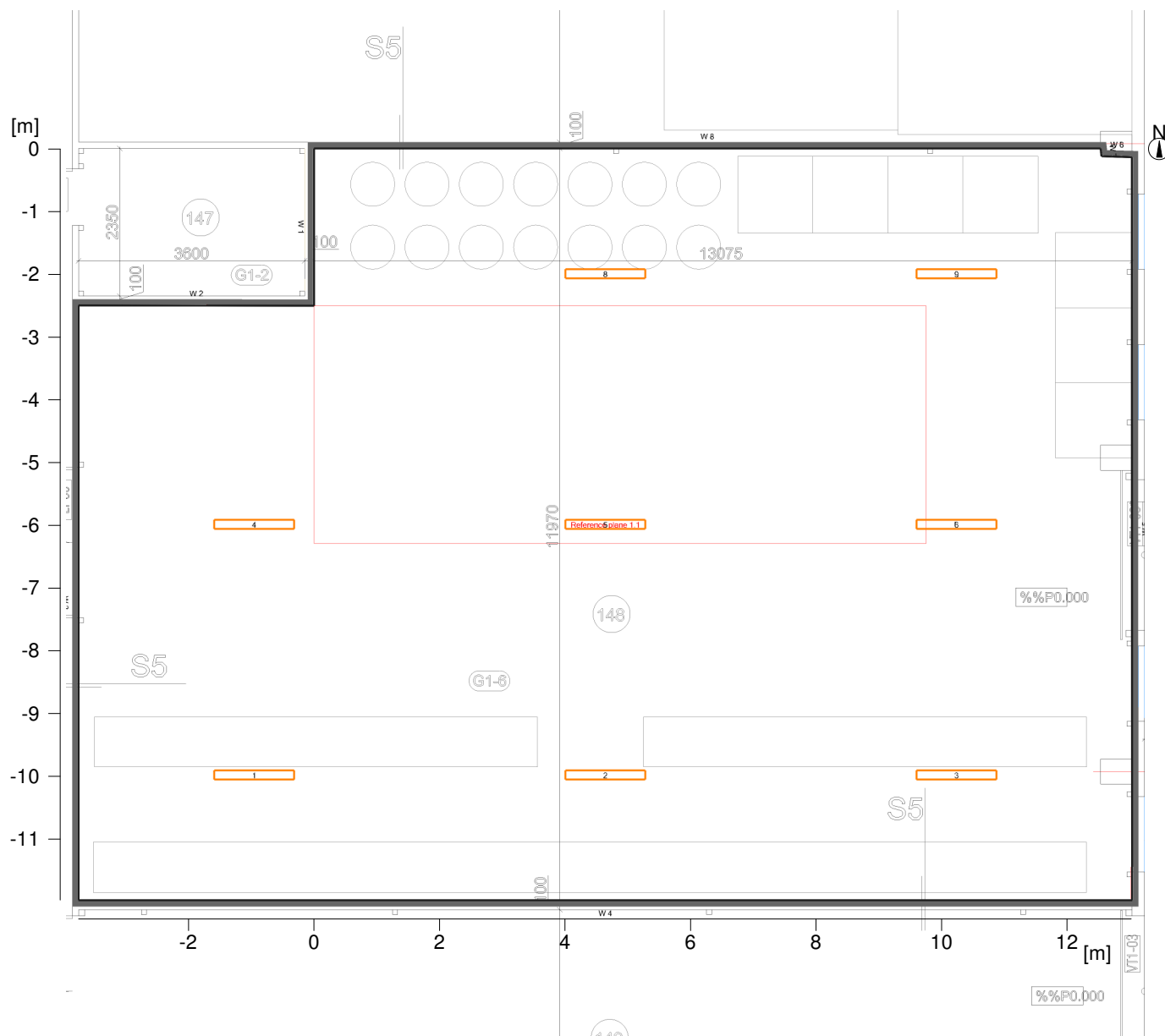
61.3 Calculation results, 146

61.3.1 Isolines representation, Floor (E)



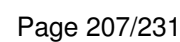
Illuminance [lx]

Average illuminance	Eav	: 140 lx
Minimum illuminance	Emin	: 81 lx
Maximum illuminance	Emax	: 184 lx
Uniformity Uo	Emin/Eav	: 1 : 1.72 (0.58)
Diversity Ud	Emin/Emax	: 1 : 2.27 (0.44)

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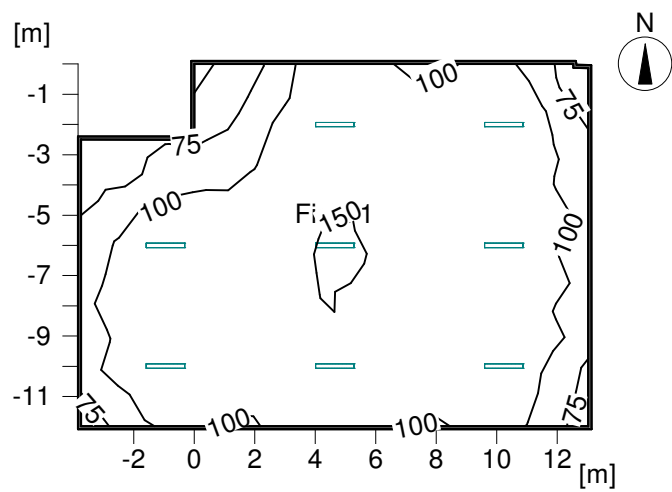
62.2.1 Result overview, Evaluation area 1



62 150

62.3 Calculation results, 150

62.3.1 Isolines representation, Floor (E)

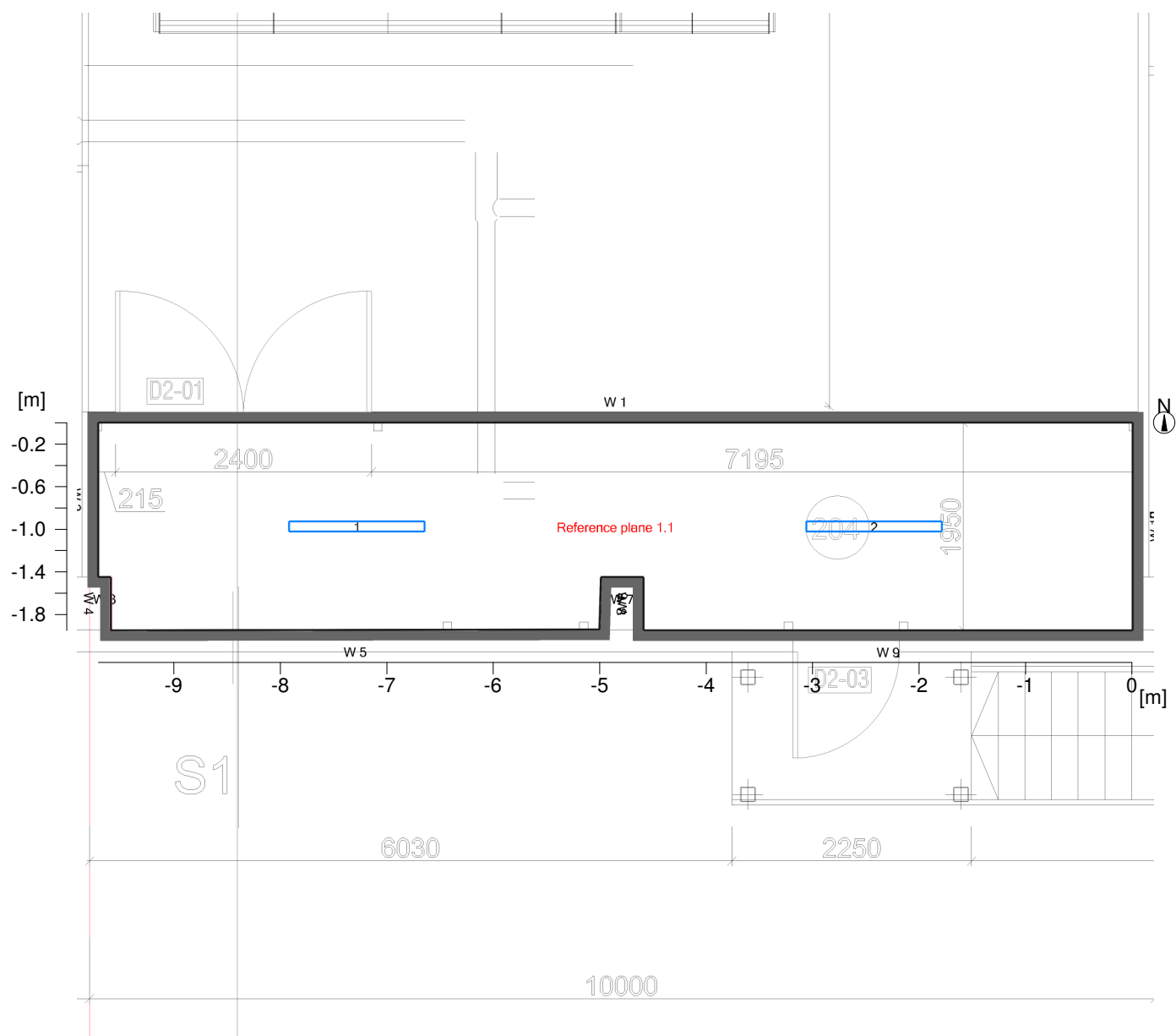


Illuminance [lx]

Average illuminance	Eav	: 112 lx
Minimum illuminance	Emin	: 47 lx
Maximum illuminance	Emax	: 155 lx
Uniformity Uo	Emin/Eav	: 1 : 2.36 (0.42)
Diversity Ud	Emin/Emax	: 1 : 3.27 (0.31)

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63.1.1 Floor plan



Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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63 204

63.1 Description, 204

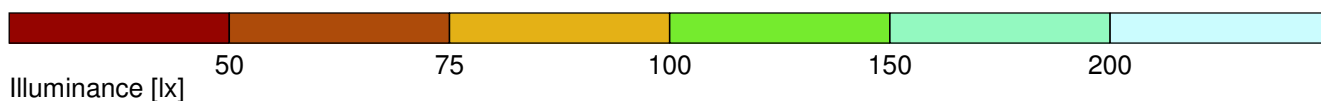
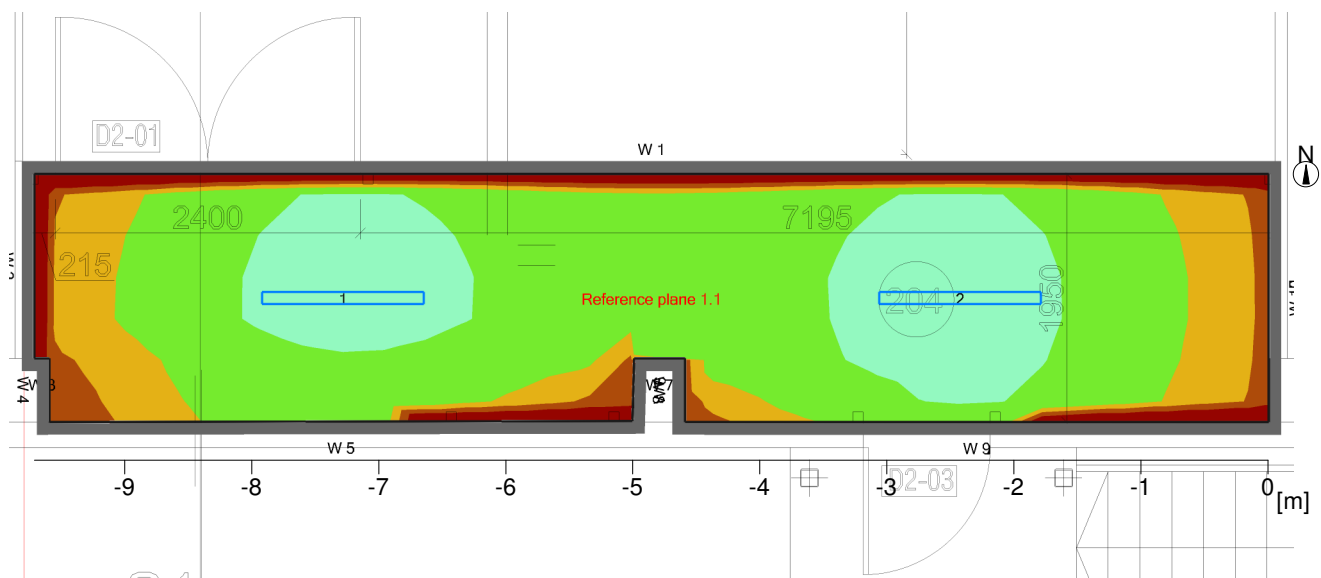
63.1.1 Floor plan

Wall	x	y	Length	Reflectance
1	4362.25 m	147.09 m	9.71 m	50.0 %
2	4362.25 m	145.64 m	1.45 m	50.0 %
3	4362.37 m	145.64 m	0.12 m	50.0 %
4	4362.37 m	145.14 m	0.50 m	50.0 %
5	4366.96 m	145.14 m	4.59 m	50.0 %
6	4366.97 m	145.64 m	0.49 m	50.0 %
7	4367.37 m	145.64 m	0.40 m	50.0 %
8	4367.37 m	145.14 m	0.50 m	50.0 %
9	4371.96 m	145.14 m	4.59 m	50.0 %
10	4371.96 m	147.09 m	1.95 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		6.00 m		
Height of ref. plane		0.00 m		

63 204

63.2 Summary, 204

63.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 3.00 m
 0.80

Total luminous flux of all lamps 8646.70 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 73.7 W
 Total power per area (18.66 m²) 3.95 W/m² (3.30 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Store rooms, cold stores
 5.4.1 (EN 12464-1, 8.2011) Store and stockrooms (Ra >60.00)
 Horizontal

Em 120 lx (>= 100 lx)
 Emin 61 lx
 Emin/Eav (Uo) 0.51 (>= 0.40)
 Emin/Emax (Ud) 0.38
 UGR (1.1H 5.6H) <=21.7 (< 25.00)
 Position 0.00 m

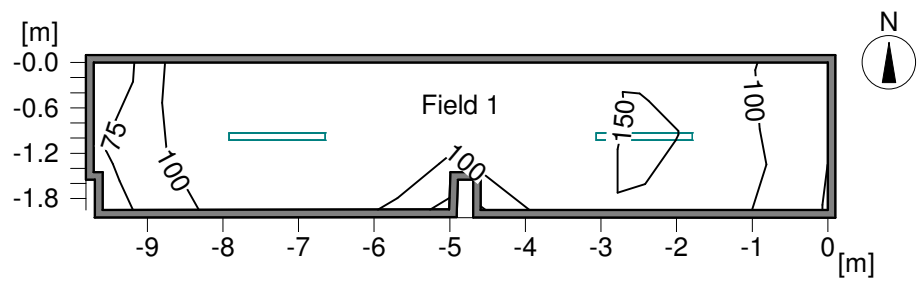
Type No.\Make

10 2 Order No. : VIZULO STONE 37 W 4000 K 1200mm
 Luminaire name : STB L 37 840 12S A2 N 100 LT80
 Equipment : 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

63 204

63.3 Calculation results, 204

63.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 116 lx
Minimum illuminance	Emin	: 73 lx
Maximum illuminance	Emax	: 149 lx
Uniformity Uo	Emin/Eav	: 1 : 1.60 (0.63)
Diversity Ud	Emin/Emax	: 1 : 2.04 (0.49)

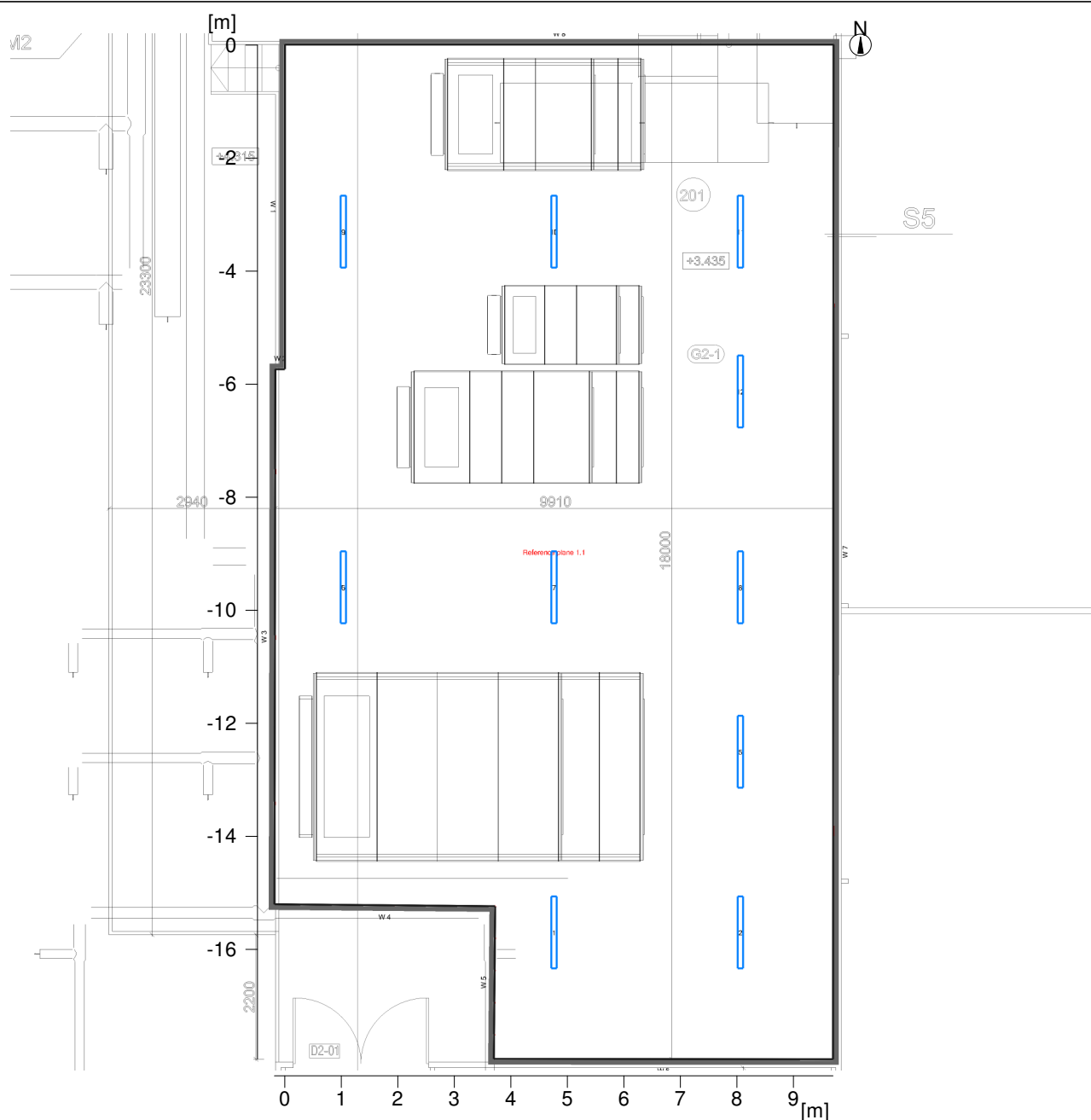
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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64 201

64.1 Description, 201

64.1.1 Floor plan



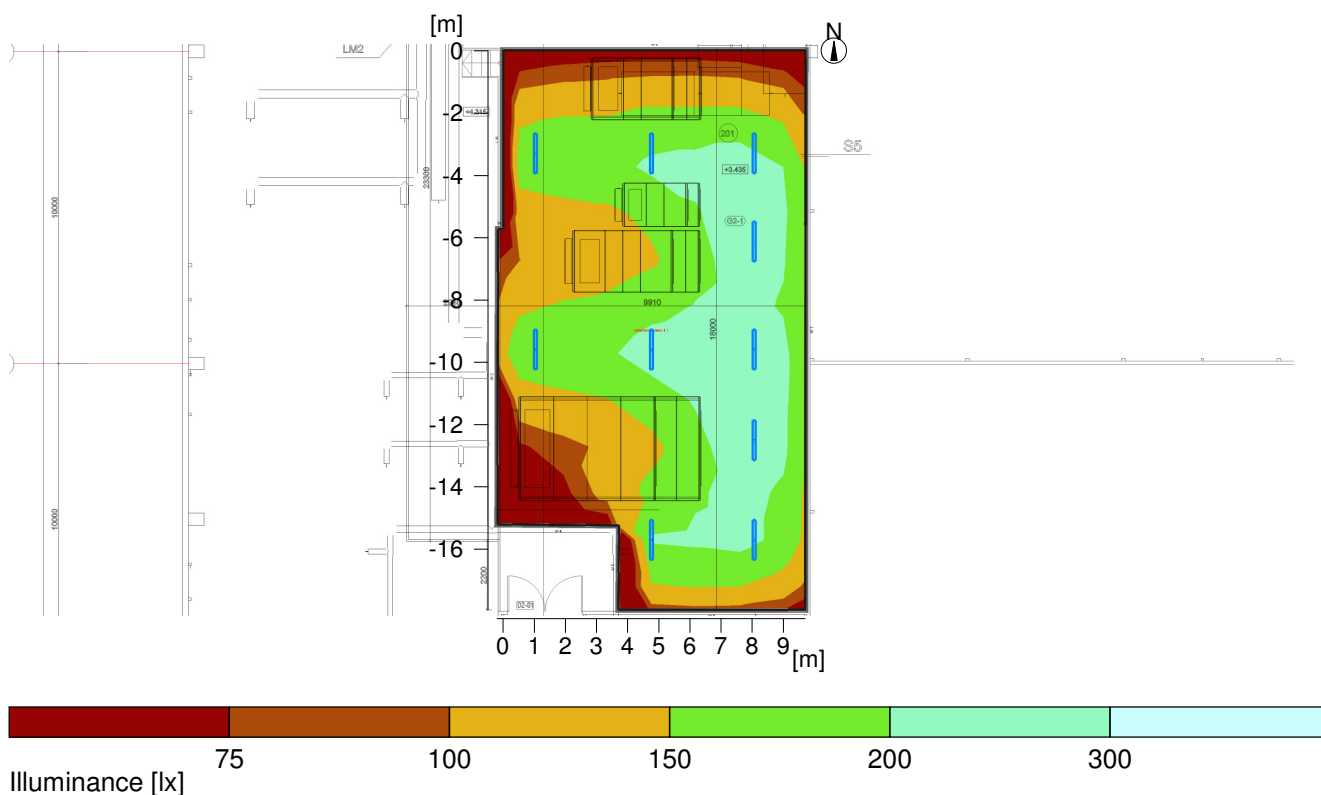
Wall	x	y	Length	Reflectance
1	4362.27 m	159.44 m	5.74 m	50.0 %
2	4362.10 m	159.44 m	0.17 m	50.0 %
3	4362.09 m	149.98 m	9.46 m	50.0 %
4	4365.99 m	149.94 m	3.90 m	50.0 %
5	4365.96 m	147.24 m	2.70 m	50.0 %
6	4371.96 m	147.24 m	6.00 m	50.0 %
7	4371.97 m	165.18 m	17.94 m	50.0 %
8	4362.27 m	165.18 m	9.70 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		6.00 m		
Height of ref. plane		0.00 m		

-please put your own address here-

64 201

64.2 Summary, 201

64.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 3.00 m
 0.80

Total luminous flux of all lamps 43233.60 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 368.3 W
 Total power per area (165.51 m²) 2.23 W/m² (1.42 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Industrial activities and crafts - Chemical, plastics and rubber industry
 5.10.2 (EN 12464-1, 8.2011) Processing installations with limited manual
 intervention (Ra >40.00)

Horizontal

Em 156 lx (>= 150 lx)
 Emin 44 lx
 Emin/Eav (Uo) 0.28 (>= 0.40)
 Emin/Emax (Ud) 0.19
 UGR (5.7H 10.3H) <=23.8 (< 28.00)
 Position 0.00 m

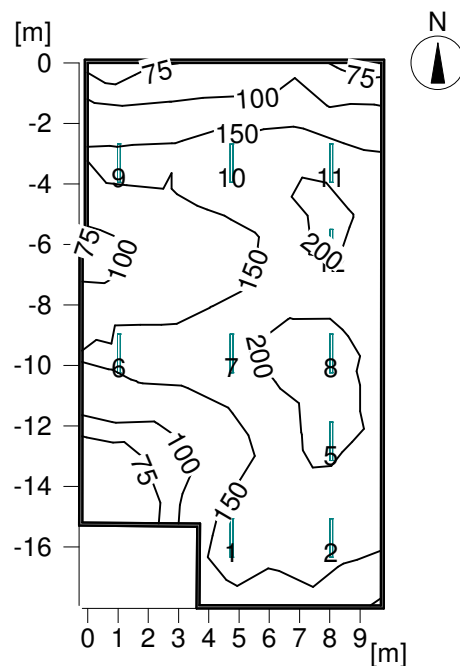
Type No.Make

10	10	Order No.	: VIZULO STONE 37 W 4000 K 1200mm
		Luminaire name	: STB L 37 840 12S A2 N 100 LT80
		Equipment	: 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

64 201

64.3 Calculation results, 201

64.3.1 Isolines representation, Floor (E)

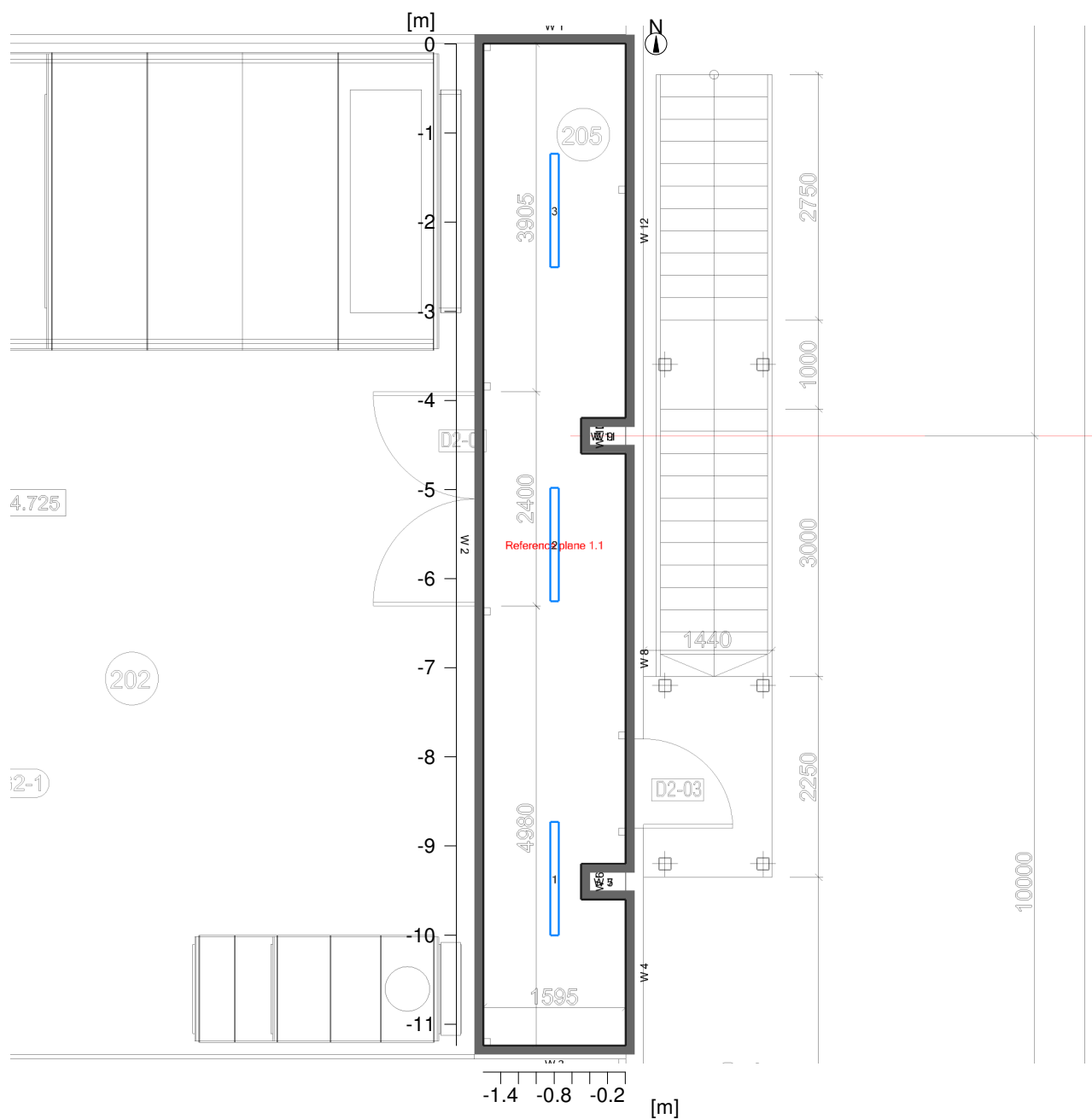


Illuminance [lx]

Average illuminance	Eav	: 143 lx
Minimum illuminance	Emin	: 38 lx
Maximum illuminance	Emax	: 209 lx
Uniformity Uo	Emin/Eav	: 1 : 3.75 (0.27)
Diversity Ud	Emin/Emax	: 1 : 5.46 (0.18)

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65.1.1 Floor plan



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Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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65 205

65.1 Description, 205

65.1.1 Floor plan

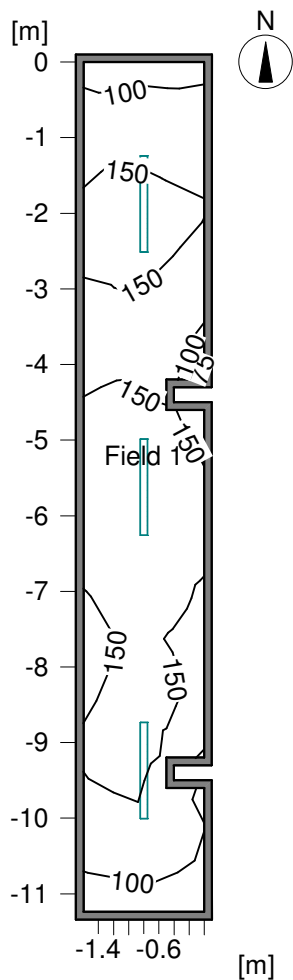
Wall	x	y	Length	Reflectance
1	4450.57 m	169.54 m	1.60 m	50.0 %
2	4450.57 m	158.30 m	11.24 m	50.0 %
3	4452.17 m	158.30 m	1.60 m	50.0 %
4	4452.17 m	159.94 m	1.64 m	50.0 %
5	4451.67 m	159.94 m	0.50 m	50.0 %
6	4451.67 m	160.34 m	0.40 m	50.0 %
7	4452.17 m	160.34 m	0.50 m	50.0 %
8	4452.17 m	164.94 m	4.60 m	50.0 %
9	4451.67 m	164.94 m	0.50 m	50.0 %
10	4451.67 m	165.34 m	0.40 m	50.0 %
11	4452.17 m	165.34 m	0.50 m	50.0 %
12	4452.17 m	169.54 m	4.20 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		6.00 m		
Height of ref. plane		0.00 m		

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65 205

65.3 Calculation results, 205

65.3.1 Isolines representation, Floor (E)



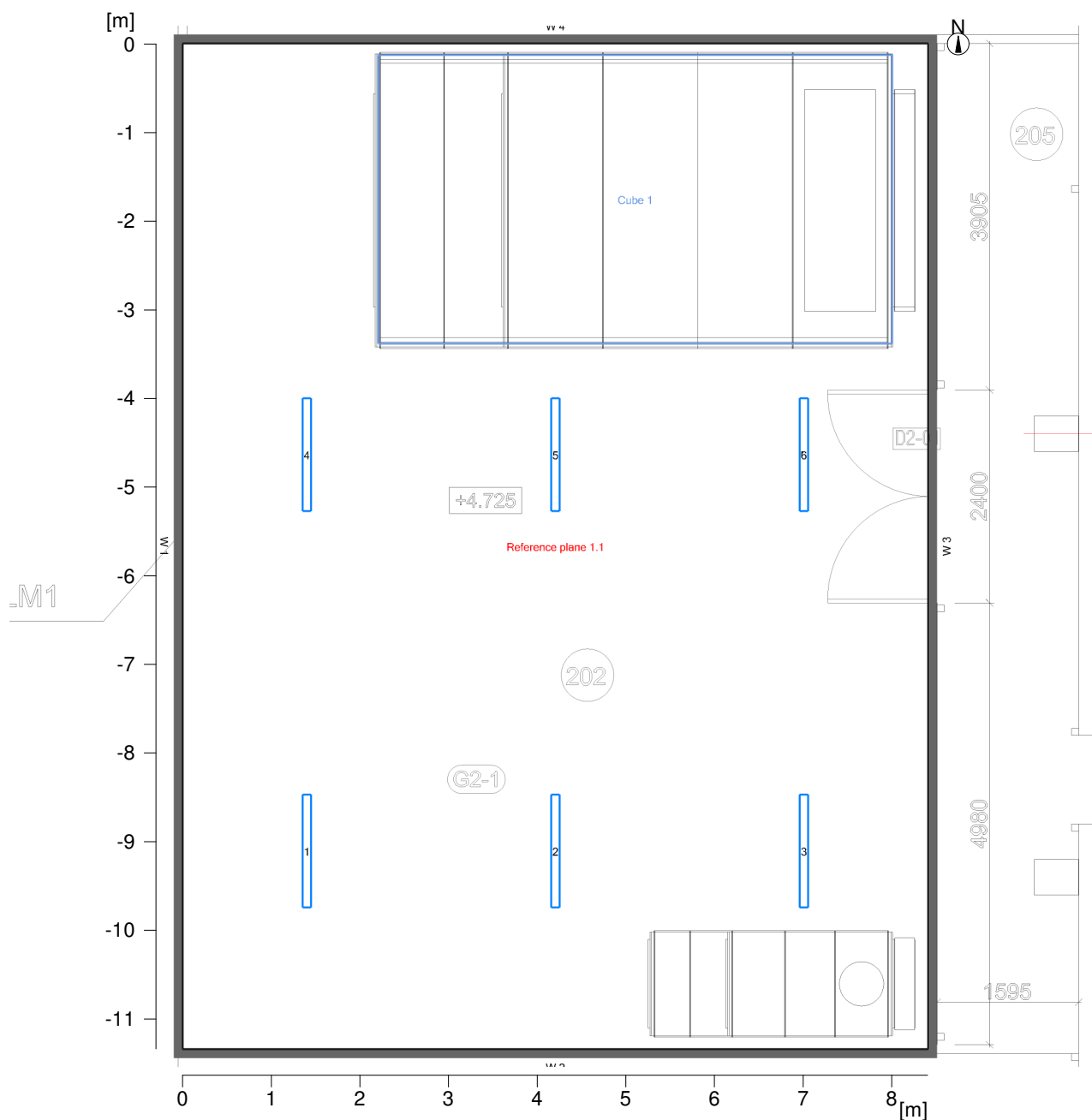
Illuminance [lx]

Average illuminance	Eav	: 137 lx
Minimum illuminance	Emin	: 65 lx
Maximum illuminance	Emax	: 183 lx
Uniformity Uo	Emin/Eav	: 1 : 2.11 (0.47)
Diversity Ud	Emin/Emax	: 1 : 2.81 (0.36)

66 202

66.1 Description, 202

66.1.1 Floor plan



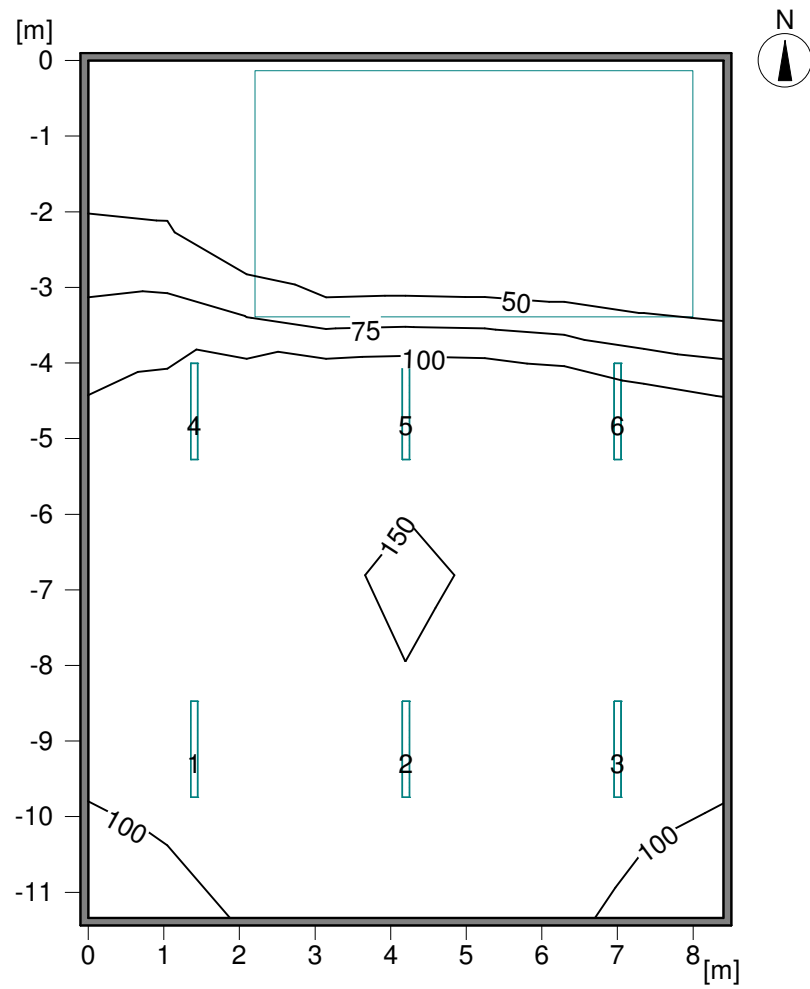
Wall	x	y	Length	Reflectance
1	4442.07 m	158.20 m	11.34 m	50.0 %
2	4450.47 m	158.20 m	8.40 m	50.0 %
3	4450.47 m	169.54 m	11.34 m	50.0 %
4	4442.07 m	169.54 m	8.40 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		6.00 m		
Height of ref. plane		0.75 m		

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66 202

66.3 Calculation results, 202

66.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 87 lx
Minimum illuminance	Emin	: 0 lx
Maximum illuminance	Emax	: 152 lx
Uniformity Uo	Emin/Eav	: ---
Diversity Ud	Emin/Emax	: ---

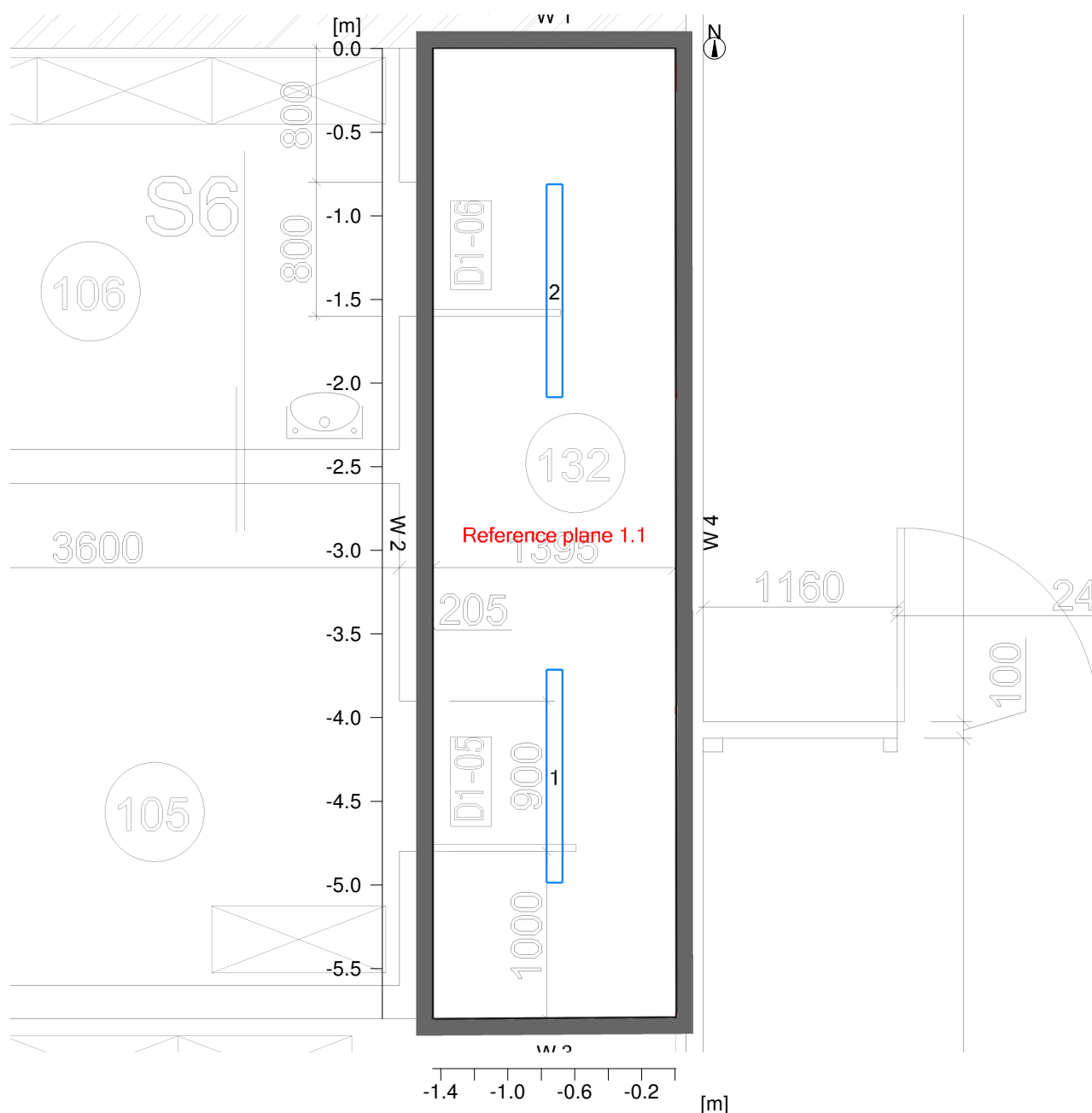
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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67 132

67.1 Description, 132

67.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4240.50 m	199.19 m	1.45 m	50.0 %
2	4240.50 m	193.39 m	5.80 m	50.0 %
3	4241.95 m	193.40 m	1.45 m	50.0 %
4	4241.95 m	199.19 m	5.79 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		3.85 m		
Height of ref. plane		0.00 m		

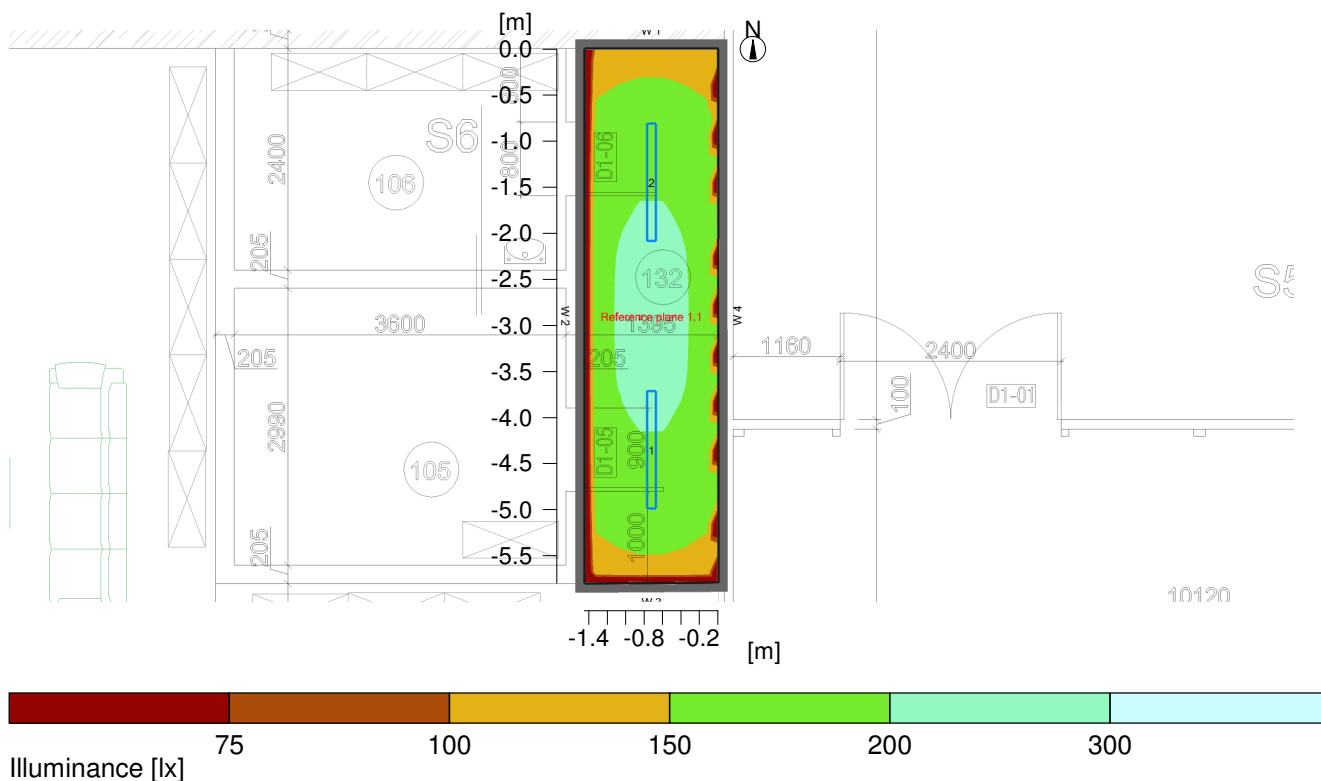
Object : Ražošanas ēkas Nr. 6 jaunbūve
Installation : Apgaismojums
Project number : 1
Date : 07.05.2018

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67 132

67.2 Summary, 132

67.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
Height of luminaire plane
Maintenance factor

Average indirect fraction
3.35 m
0.80

Total luminous flux of all lamps 8646.70 lm (100.00% dimmed)
(Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 73.7 W
Total power per area (8.42 m²) 8.75 W/m² (5.13 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

Traffic zones inside buildings
5.1.1 (EN 12464-1, 8.2011) Circulation areas and corridors (Ra >40.00)
Horizontal
Em 171 lx (>= 100 lx)
Emin 121 lx
Emin/Eav (Uo) 0.71 (>= 0.40)
Emin/Emax (Ud) 0.61
UGR (0.7H 2.8H) <=19.8 (< 28.00)
Position 0.00 m

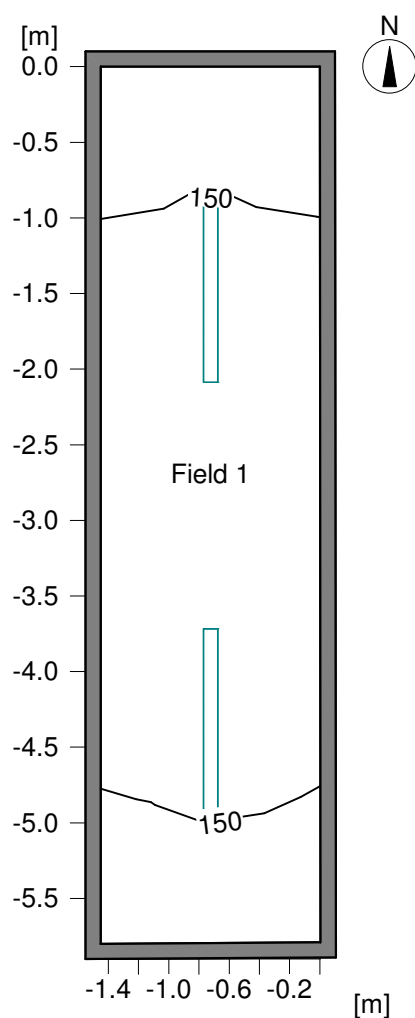
Type No.\Make

10 2 Order No. : VIZULO STONE 37 W 4000 K 1200mm
Luminaire name : STB L 37 840 12S A2 N 100 LT80
Equipment : 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

67 132

67.3 Calculation results, 132

67.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 160 lx
Minimum illuminance	Emin	: 118 lx
Maximum illuminance	Emax	: 178 lx
Uniformity Uo	Emin/Eav	: 1 : 1.36 (0.74)
Diversity Ud	Emin/Emax	: 1 : 1.52 (0.66)

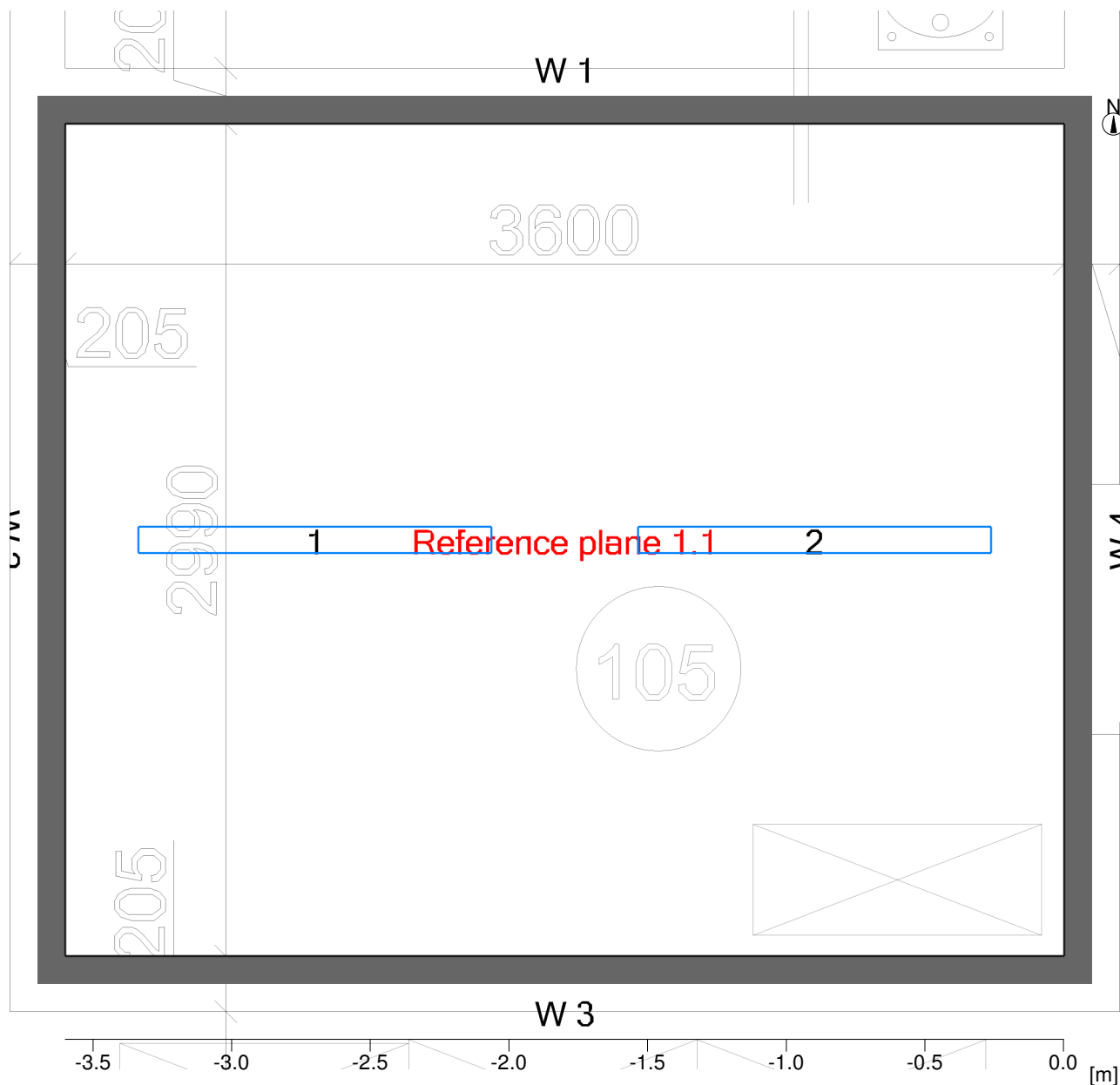
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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68.1 Description, 105

68.1.1 Floor plan

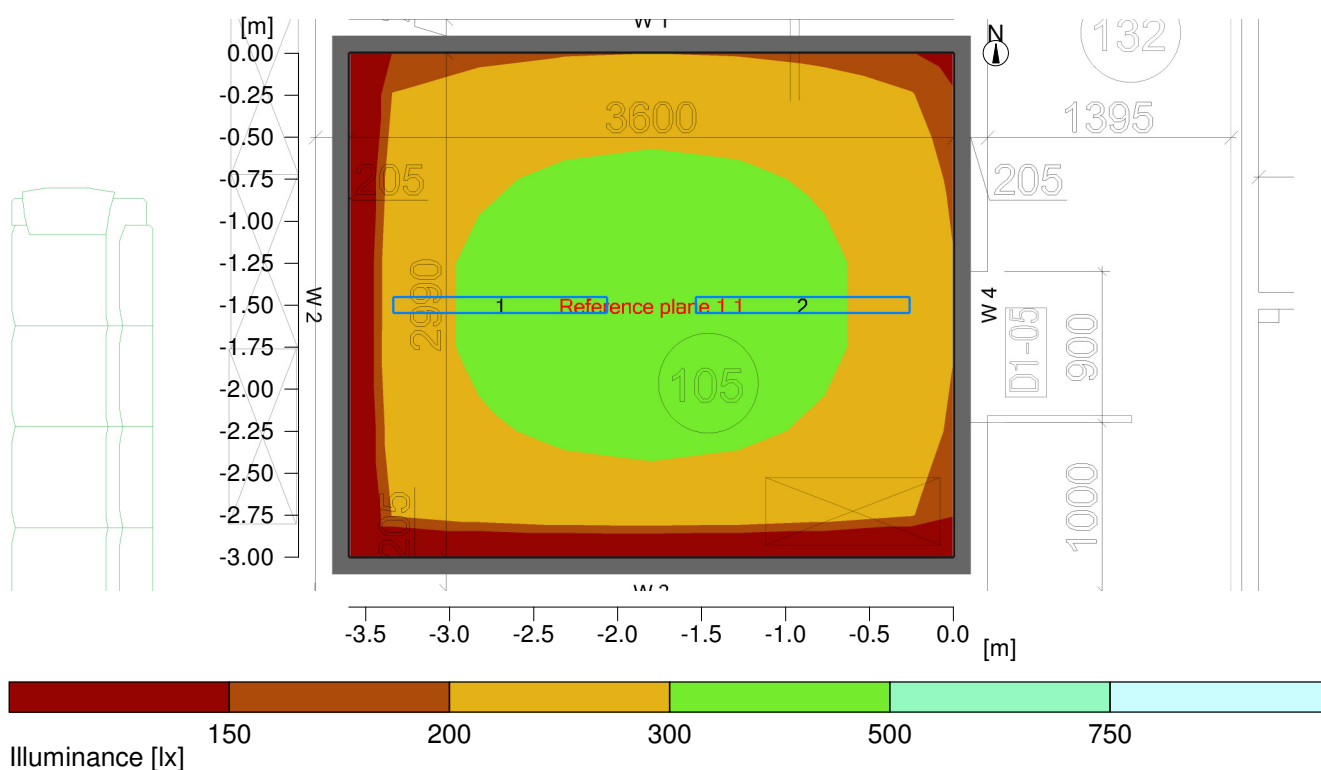


Wall	x	y	Length	Reflectance
1	4236.70 m	196.59 m	3.60 m	50.0 %
2	4236.70 m	193.59 m	3.00 m	50.0 %
3	4240.30 m	193.59 m	3.60 m	50.0 %
4	4240.30 m	196.59 m	3.00 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		3.85 m		
Height of ref. plane		0.75 m		

68 105

68.2 Summary, 105

68.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used
 Height of luminaire plane
 Maintenance factor

Average indirect fraction
 3.35 m
 0.80

Total luminous flux of all lamps 8646.70 lm (100.00% dimmed)
 (Luminaires have been dimmed. For details turn to the dimming section in the luminaire data output.)

Total power 73.7 W
 Total power per area (10.80 m²) 6.82 W/m² (2.58 W/m²/100lx)

Evaluation area 1

User profile

Reference plane 1.1

General areas inside buildings - Control rooms
 5.3.1 (EN 12464-1, 8.2011) Plant rooms, switch gear rooms (Ra >60.00)
 Horizontal

Em 265 lx (>= 200 lx)
 Emin 191 lx
 Emin/Eav (Uo) 0.72 (>= 0.40)
 Emin/Emax (Ud) 0.58
 UGR (2.0H 2.0H) <=18.5 (< 25.00)
 Position 0.75 m

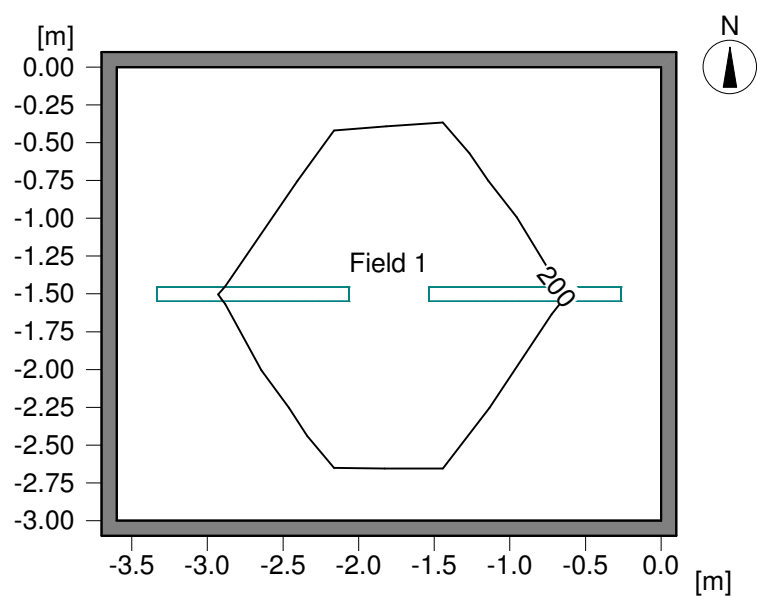
Type No.\Make

10	2	Order No.	: VIZULO STONE 37 W 4000 K 1200mm
		Luminaire name	: STB L 37 840 12S A2 N 100 LT80
		Equipment	: 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

68 105

68.3 Calculation results, 105

68.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance	Eav	: 186 lx
Minimum illuminance	Emin	: 154 lx
Maximum illuminance	Emax	: 226 lx
Uniformity Uo	Emin/Eav	: 1 : 1.21 (0.83)
Diversity Ud	Emin/Emax	: 1 : 1.46 (0.68)

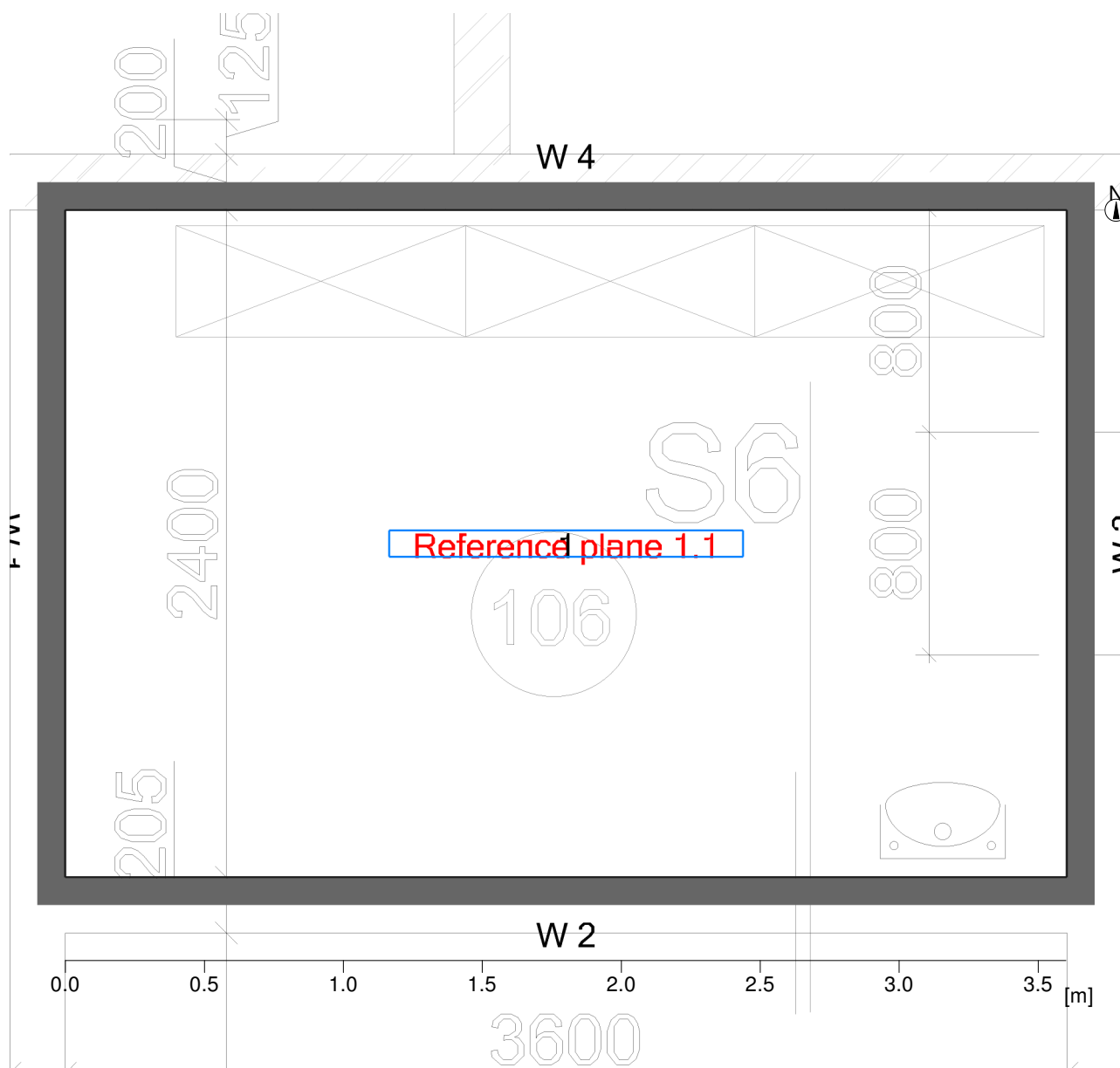
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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69.1 Description, 106

69.1.1 Floor plan



Wall	x	y	Length	Reflectance
1	4236.70 m	196.79 m	2.40 m	50.0 %
2	4240.30 m	196.79 m	3.60 m	50.0 %
3	4240.30 m	199.19 m	2.40 m	50.0 %
4	4236.70 m	199.19 m	3.60 m	50.0 %
Floor				20.0 %
Ceiling				70.0 %
Room height		3.85 m		
Height of ref. plane		0.75 m		

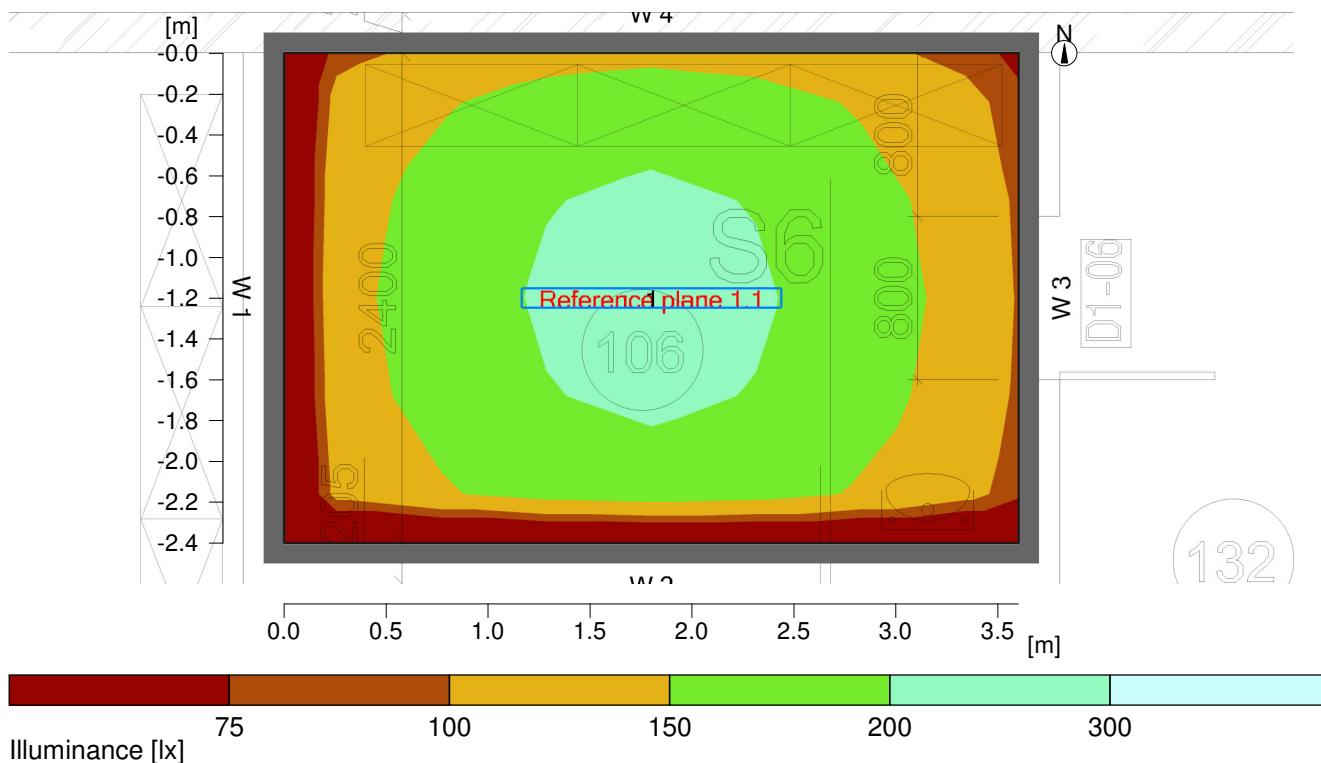
Object : Ražošanas ēkas Nr. 6 jaunbūve
 Installation : Apgaismojums
 Project number : 1
 Date : 07.05.2018

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69 106

69.2 Summary, 106

69.2.1 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height of luminaire plane	3.35 m
Maintenance factor	0.80
Total luminous flux of all lamps	4323.40 lm
Total power	36.8 W
Total power per area (8.64 m ²)	4.26 W/m ² (2.75 W/m ² /100lx)

Evaluation area 1

User profile	Reference plane 1.1
	General areas inside buildings - Store rooms, cold stores
	5.4.1 (EN 12464-1, 8.2011) Store and stockrooms (Ra >60.00)
	Horizontal
Em	155 lx (>= 100 lx)
Emin	108 lx
Emin/Eav (Uo)	0.70 (>= 0.40)
Emin/Emax (Ud)	0.52
UGR (2.0H 2.0H)	<=18.5 (< 25.00)
Position	0.75 m

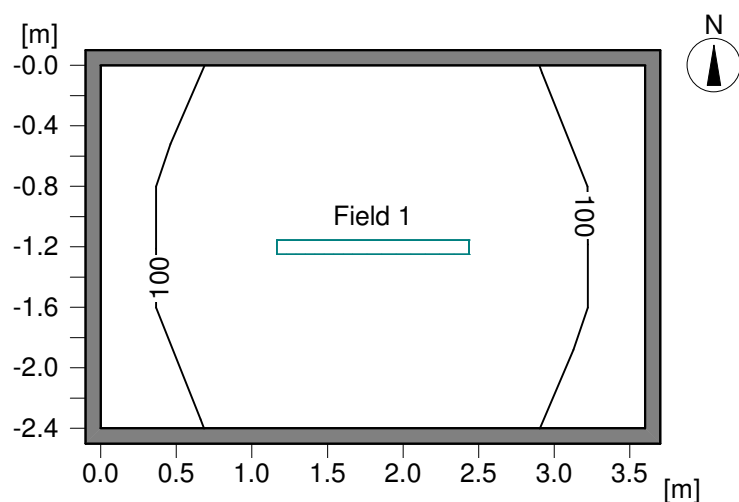
Type No.\Make

10	1	Order No.	: VIZULO STONE 37 W 4000 K 1200mm
		Luminaire name	: STB L 37 840 12S A2 N 100 LT80
		Equipment	: 1 x Stone 2 modules LT80 36.83 W / 4323.36 lm

69 106

69.3 Calculation results, 106

69.3.1 Isolines representation, Floor (E)



Illuminance [lx]

Average illuminance
Minimum illuminance
Maximum illuminance
Uniformity U_0
Diversity U_d

Eav : 105 lx
Emin : 89 lx
Emax : 124 lx
Emin/Eav : 1 : 1.18 (0.84)
Emin/Emax : 1 : 1.40 (0.72)