

Roudnice nad Labem - ul. Jeronýmova, přepočet

Standard EN 13201:2015

Designer rs

Study # OP0044831

Date 13.08.2025

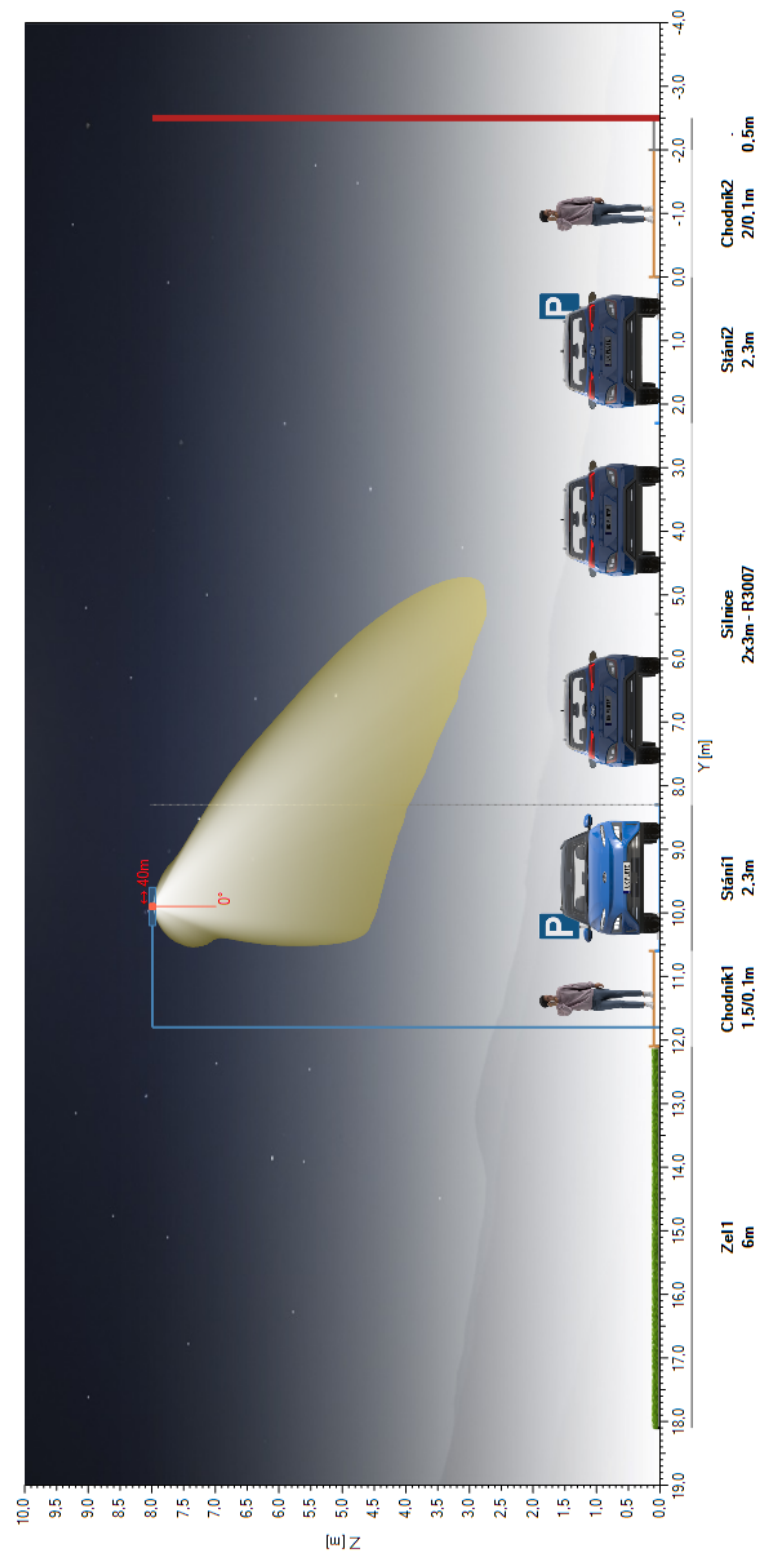
Application Ulysse 4.1.2

Description Přepočet 147 2020

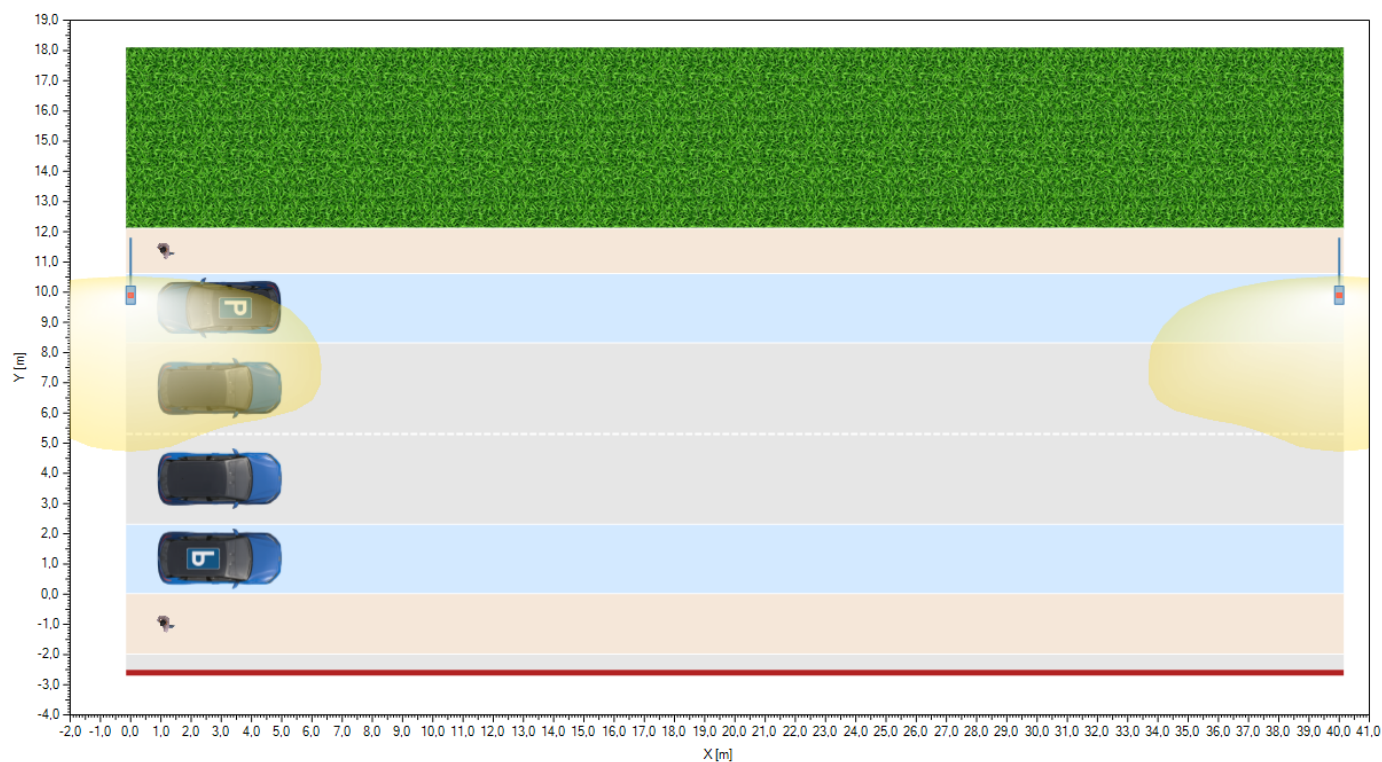
File Výpočet VO - Jeronýmova.lp3

1 2D View

1.1 Cross section



1.2 Top view



2 Fixtures

2.1 TECEO GEN2 1 40 LEDs 400mA (LED) WW727 Flat glass 5308 LE, BLD 449612

Type TECEO GEN2 1

Reflector 5308

Source 40 LEDs 400mA (LED) WW727

Protector Flat glass

Source flux 7,958 klm

G* 4

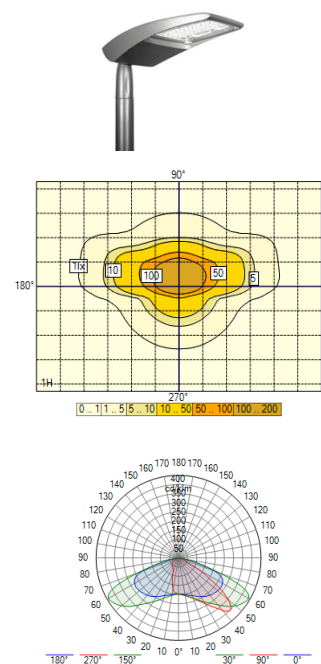
Luminaire wattage 49,0 W

MF 0,85

Matrix 449612

Luminaire flux 6,448 klm

Efficacy 132 lm/W



3 Results

3.1 Grid summary

Note: below grids are calculated with initial luminous flux (MF=1)

Fasády (IL) - MF=1

1. Inverse illuminance	Ave (A) (lx)	Min/Ave (%)	Min/Max (%)	Min (lx)	Max (lx)
Soustava VO	0,92	0	0	0,00	5,52

N/A

Note: below grids are calculated with maintained luminous flux (MF applied)

Chodník1 (IL)

P6 (IL : Min = 0,40 lux Ave = 2,00 lux)

1. Z positive illuminance	Ave (A) (lx)	Min/Ave (%)	Min/Max (%)	Min (lx)	Max (lx)
Soustava VO	7,03	20	7	1,40	19,23

✓

Stání1 (IL)

P6 (IL : Min = 0,40 lux Ave = 2,00 lux)

1. Z positive illuminance	Ave (A) (lx)	Min/Ave (%)	Min/Max (%)	Min (lx)	Max (lx)
Soustava VO	9,92	25	12	2,43	21,07

✓

Silnice (LU)

M5 (LU : Ave = 0,50 cd/m² Uo = 35 % UI = 40 % UoW = 15 % TI : 15 % EIR : 0,30)

1. Luminance R-Table - R3007	Ave (A) (cd/m²)	Min/Ave (%)	Min/Max (%)	Min (cd/m²)	Max (cd/m²)	UL (%)
Soustava VO - Observer 1 (-60,00; 3,80; 1,50)	0,58	41	20	0,24	1,17	48 %
Soustava VO - Observer 2 (-60,00; 6,80; 1,50)	0,53	42	21	0,22	1,09	43 %

✓

✓

Silnice (IL)

1. Z positive illuminance	Ave (A) (lx)	Min/Ave (%)	Min/Max (%)	Min (lx)	Max (lx)
Soustava VO	10,1	30	15	3,1	20,9

N/A

Stání2 (IL)

P6 (IL : Min = 0,40 lux Ave = 2,00 lux)

1. Z positive illuminance	Ave (A) (lx)	Min/Ave (%)	Min/Max (%)	Min (lx)	Max (lx)
Soustava VO	6,36	38	16	2,41	14,71

✓

Chodník2 (IL)

P6 (IL : Min = 0,40 lux Ave = 2,00 lux)

1. Z positive illuminance	Ave (A) (lx)	Min/Ave (%)	Min/Max (%)	Min (lx)	Max (lx)
Soustava VO	3,08	46	19	1,42	7,51

✓

3.2 Observer summary

Silnice (TI 1)

M5 (LU : Ave = 0,50 cd/m² Uo = 35 % UI = 40 % UoW = 15 % TI : 15 % EIR : 0,30)

	TI
Soustava VO - Direction (0,0)	6

*Silnice (TI 2)*M5 (LU : Ave = 0,50 cd/m² Uo = 35 % UI = 40 % UoW = 15 % TI : 15 % EIR : 0,30)

	TI
Soustava VO - Direction (0,0)	10

3.3 Values summary

*EIR road*M5 (LU : Ave = 0,50 cd/m² Uo = 35 % UI = 40 % UoW = 15 % TI : 15 % EIR : 0,30)

	EIR road
Soustava VO - Silnice (EIR)	0,61

4 Soustava VO

4.1 Matrix description

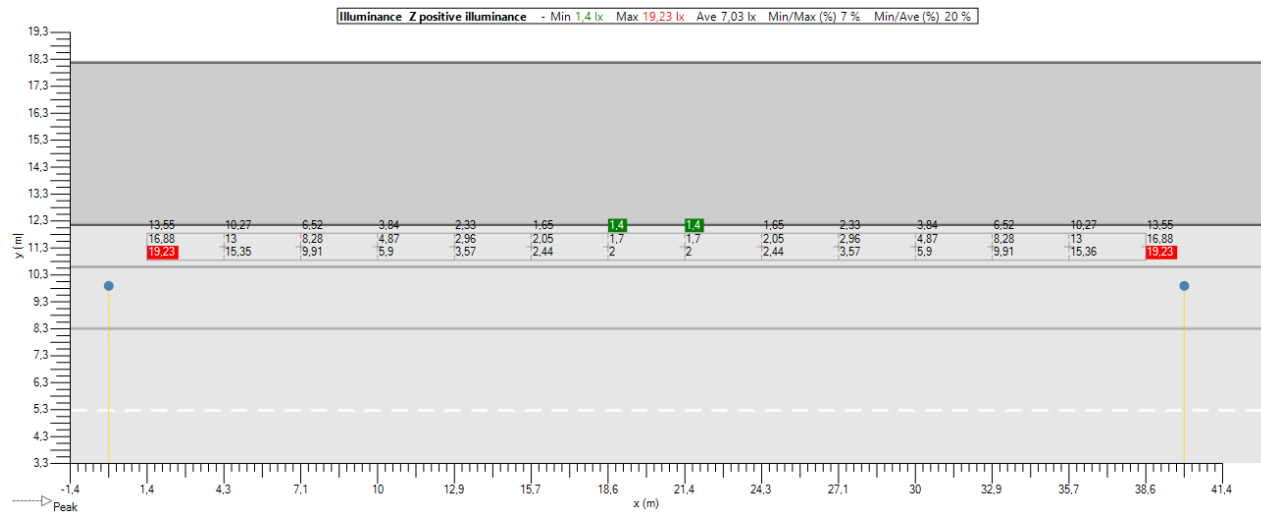
Photometric colour	Description	Current [mA]	Source flux [klm]	Luminaires flux [klm]	Power [W]	Efficacy [lm/W]	MF	Height [m]	Fixture
	TECEO GEN2 1 40 LEDs 400mA (LED) WW727 Flat glass 5308 LE, BLD 449612	400	7,958	6,448	48,8	132	0,850	5 x 8,00	

4.2 Luminaire groups

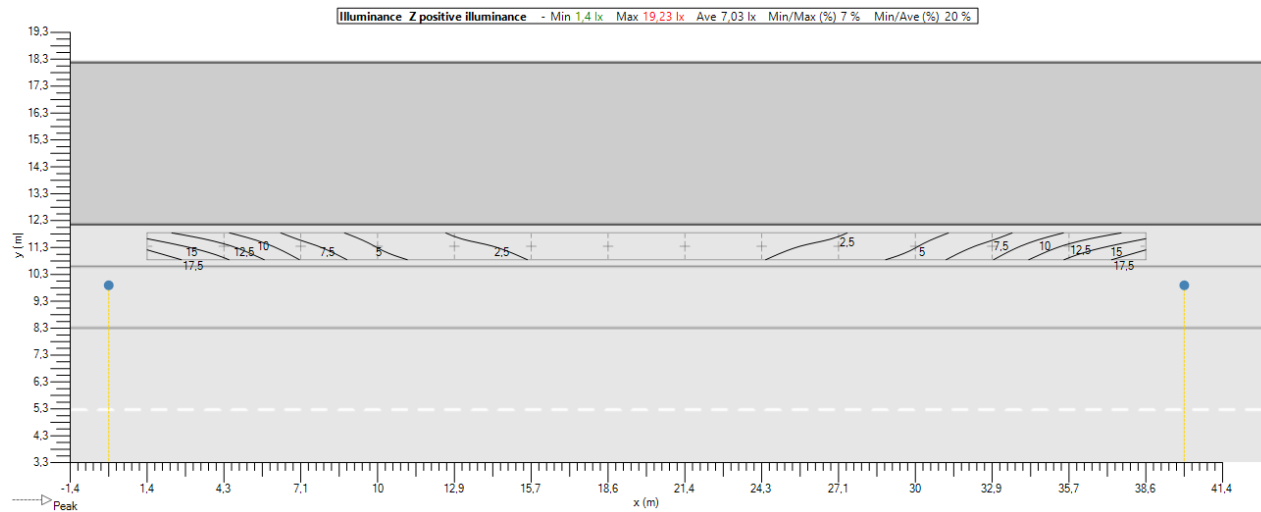
Linear																
	Colour	N°	Position			Luminaire					Dimension			Rotation		
			X [m]	Y [m]	Z [m]	Name	Az. [°]	Incl. [°]	Rot. [°]	Dim [%]	Count	Spacing [m]	Size [m]	X [°]	Y [°]	Z [°]
☒		1	-40,00	9,90	8,00	Sloupy VO	180,0	0,0	0,0	100	5	40,00	160,00	0,0	0,0	0,0

4.3 Chodník1 (IL) - Z positive

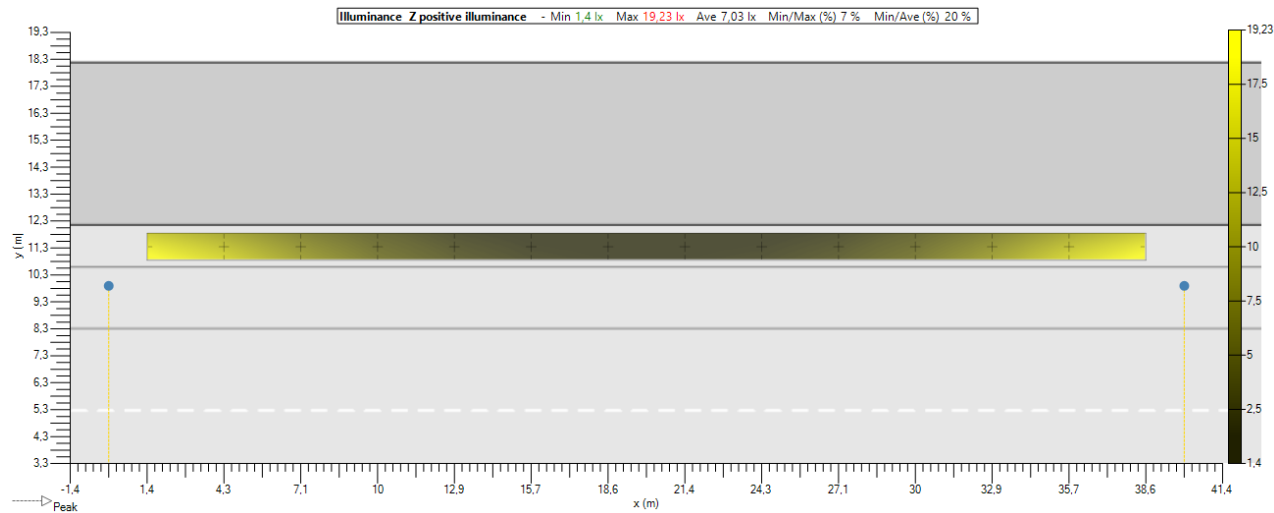
Values



Isolevel

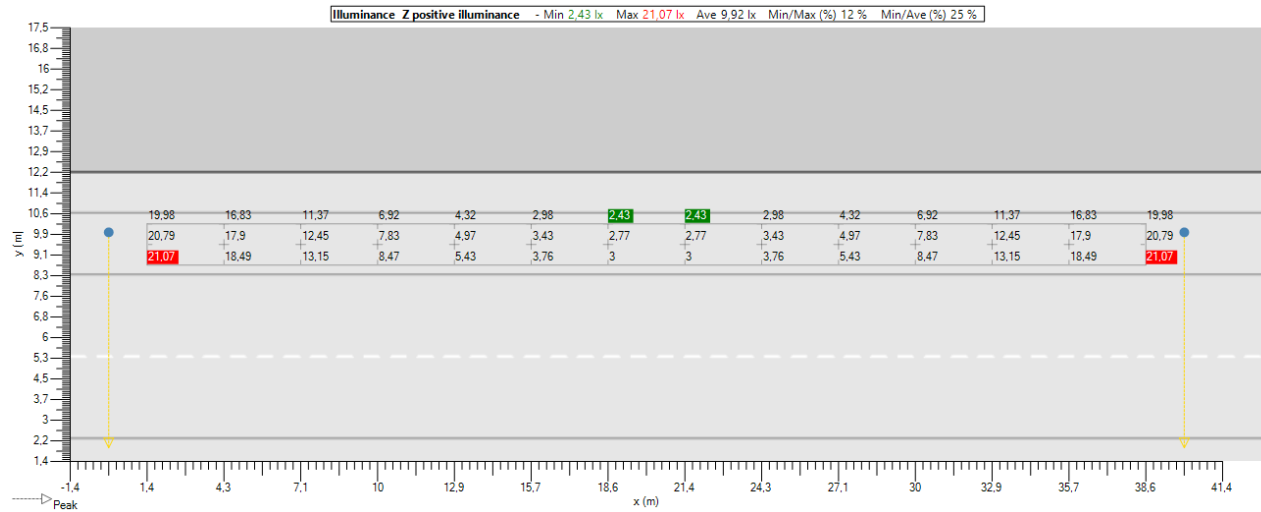


Shading

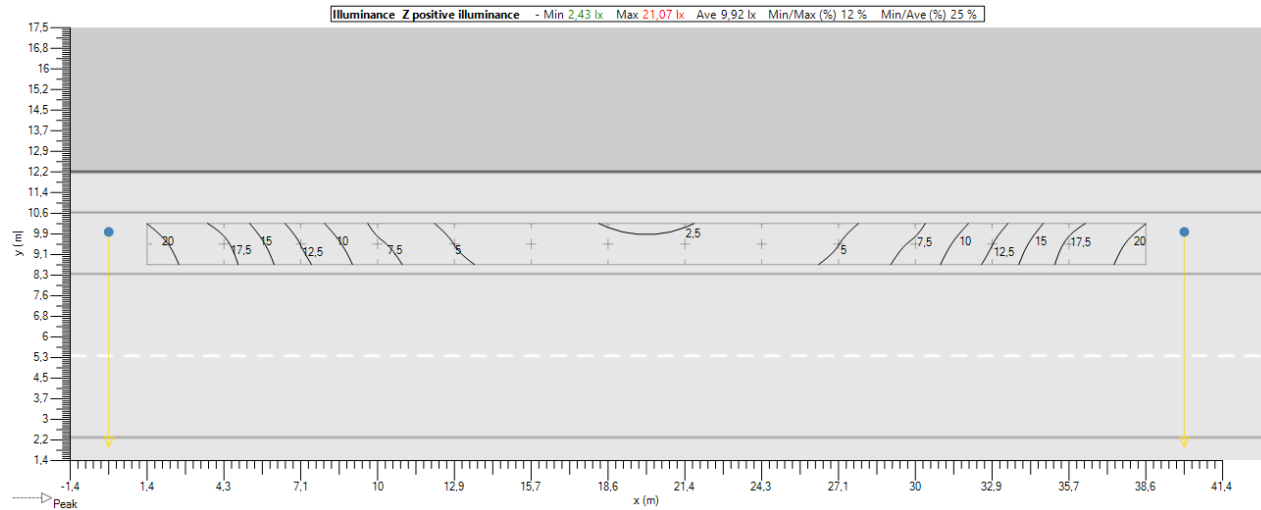


4.4 Stání1 (IL) - Z positive

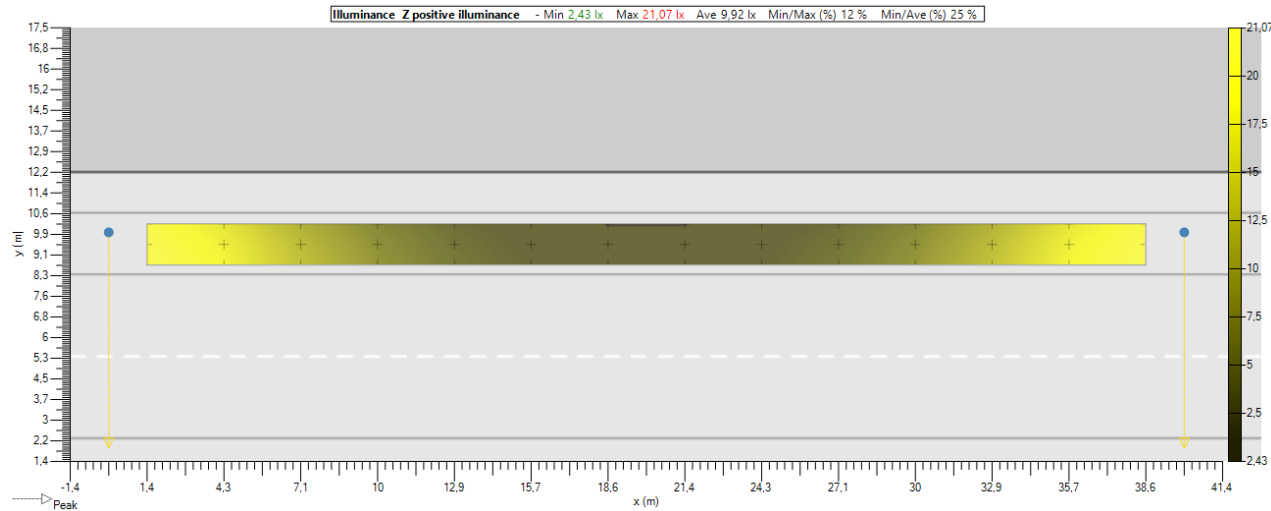
Values



Isolevel

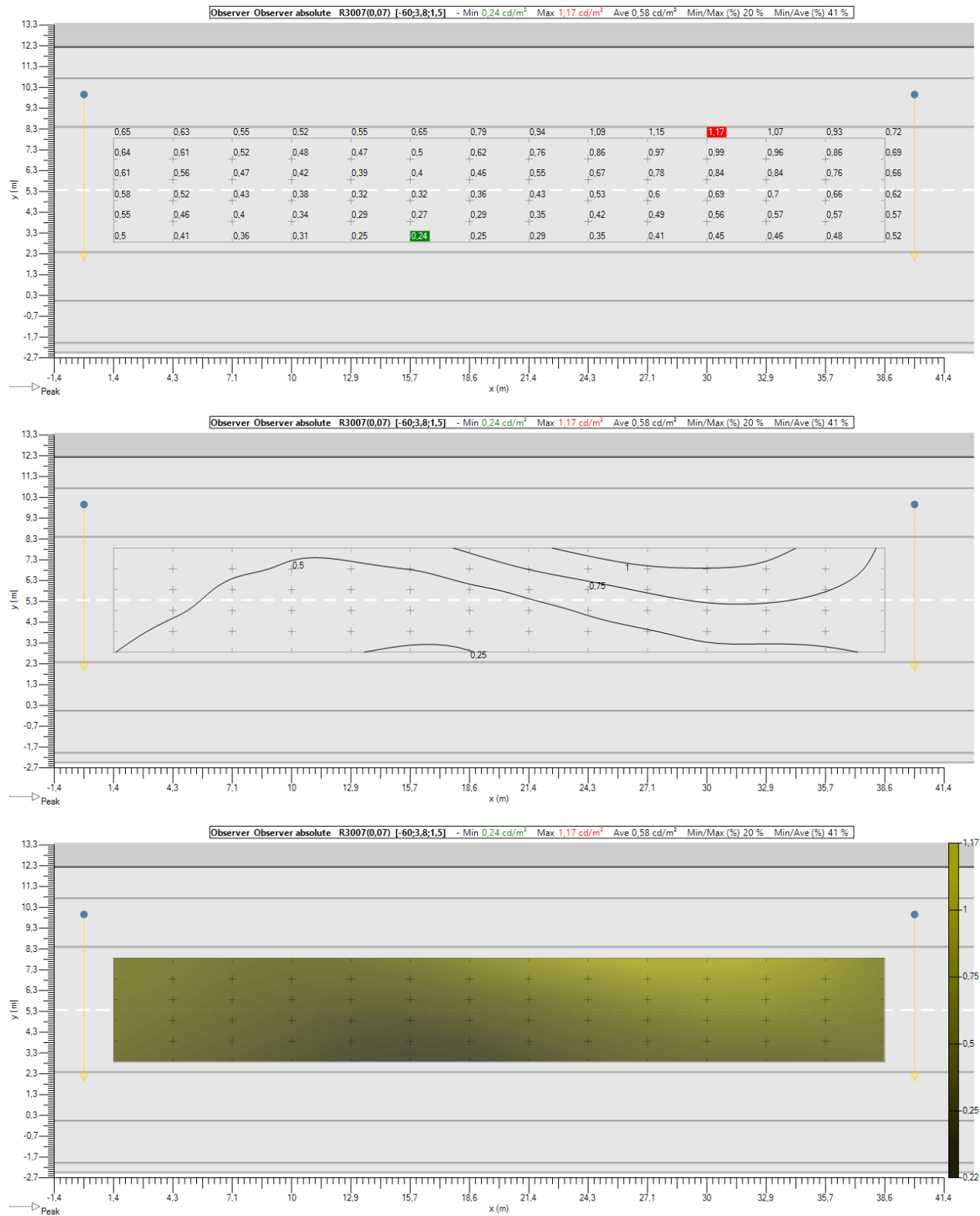


Shading

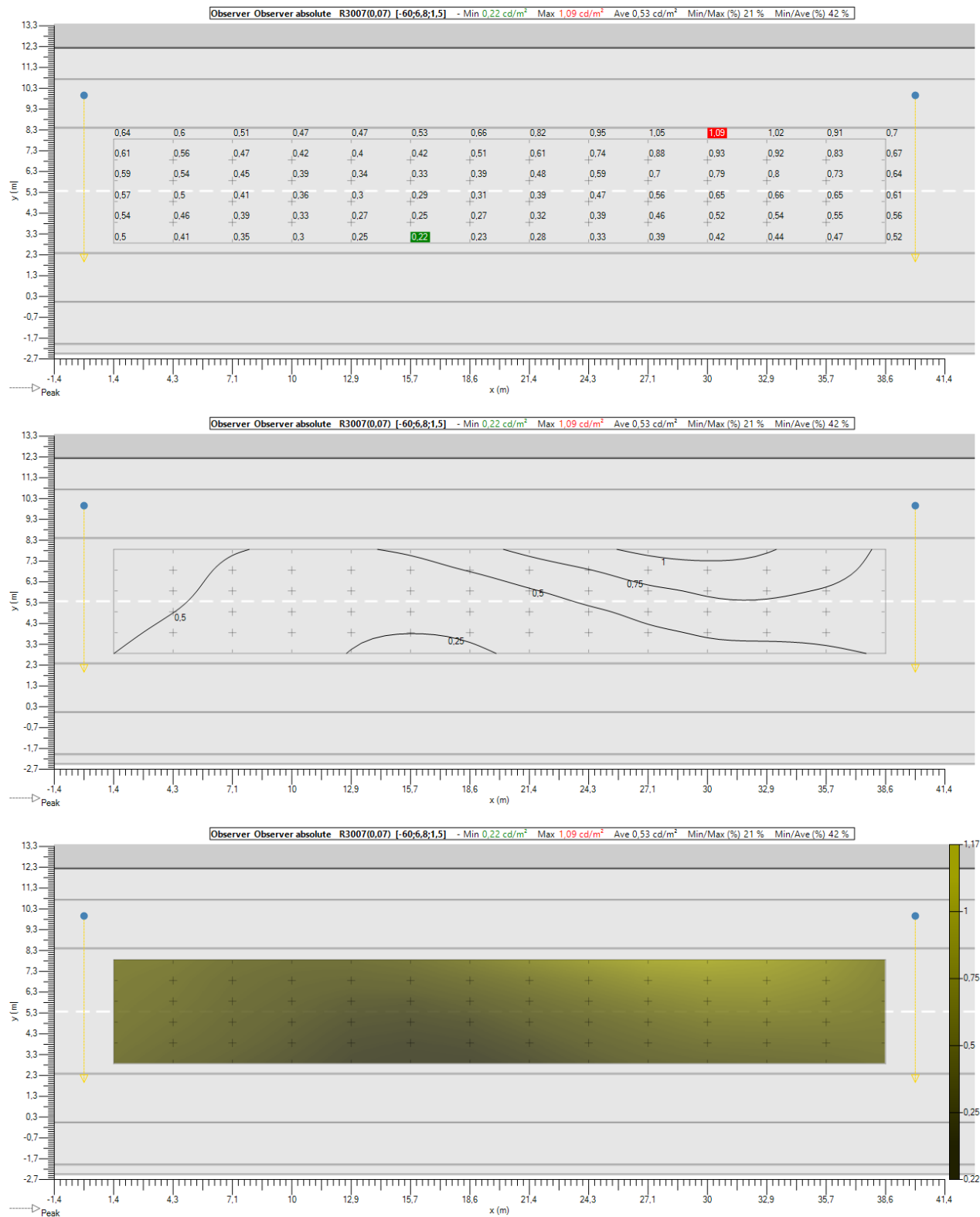


4.5 Luminance - Silnice (LU) - R3007

Silnice (LU) - Absolute 1

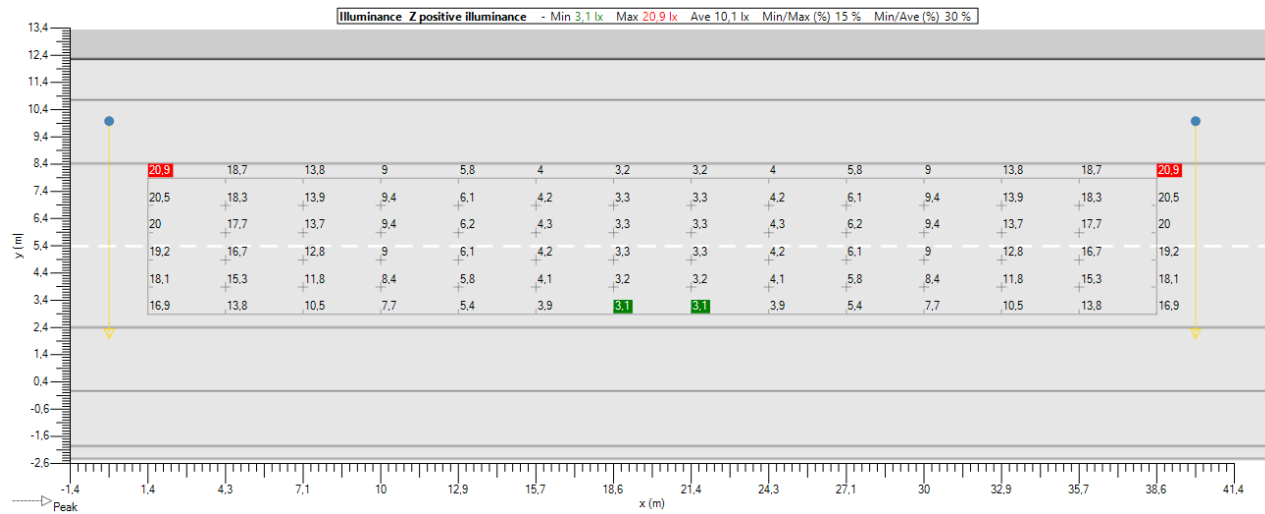


Silnice (LU) - Absolute 2

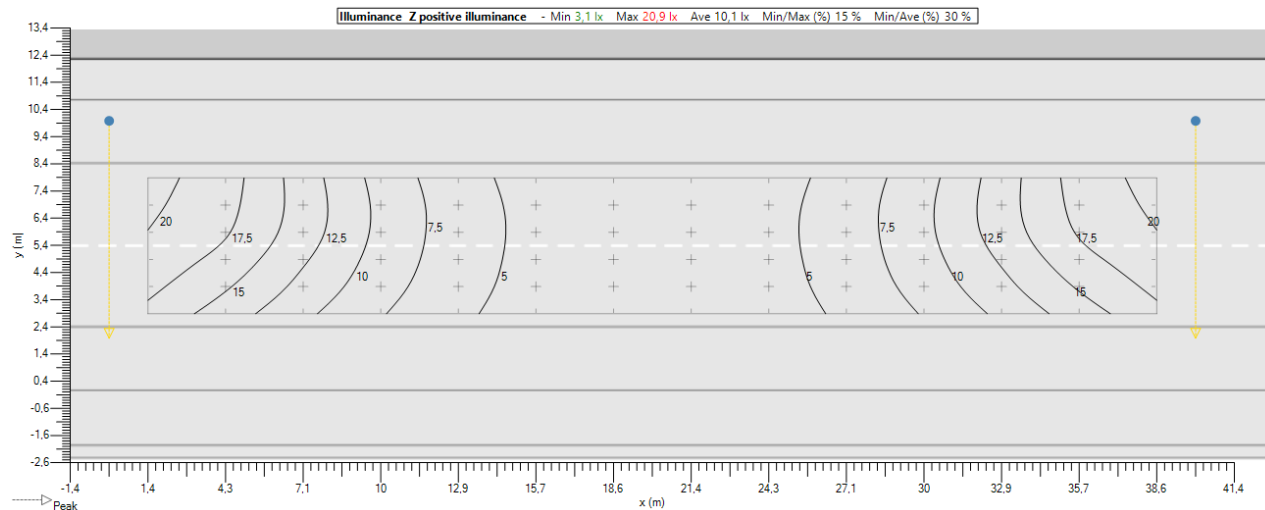


4.6 Silnice (IL) - Z positive

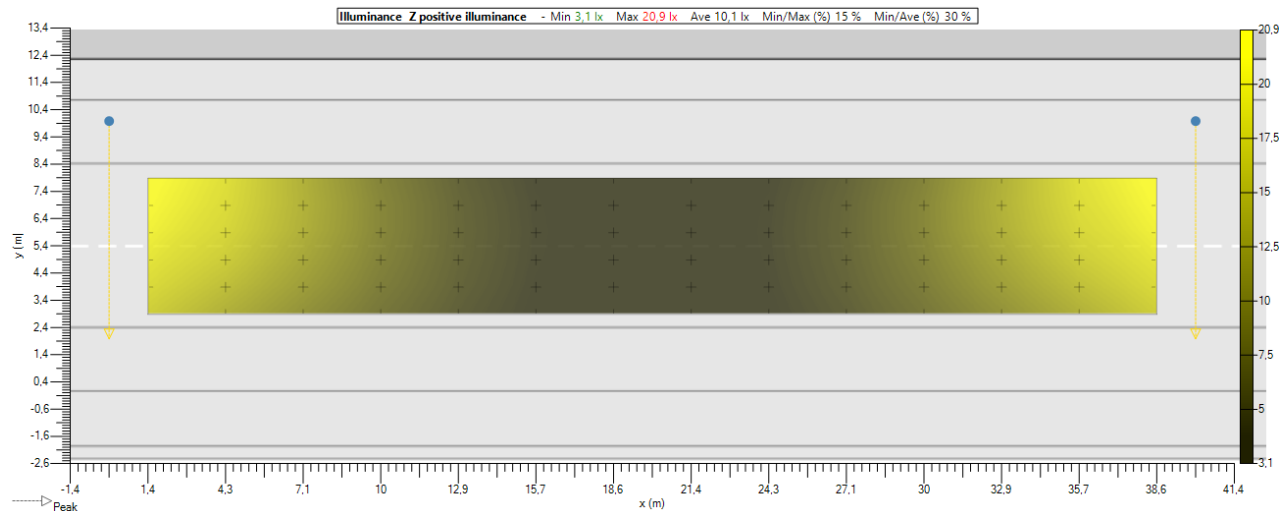
Values



Isolevel

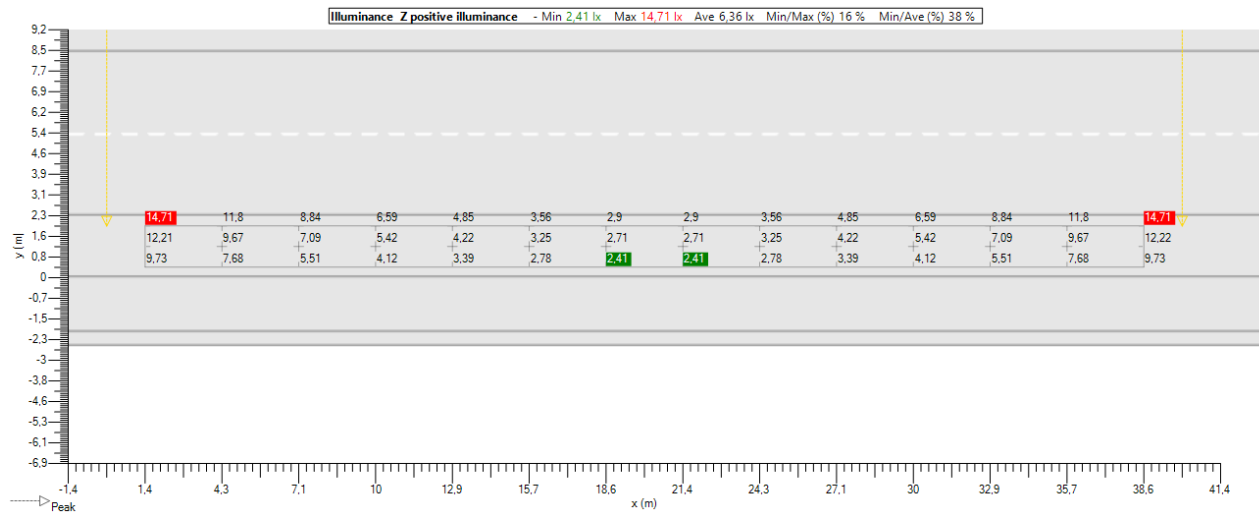


Shading

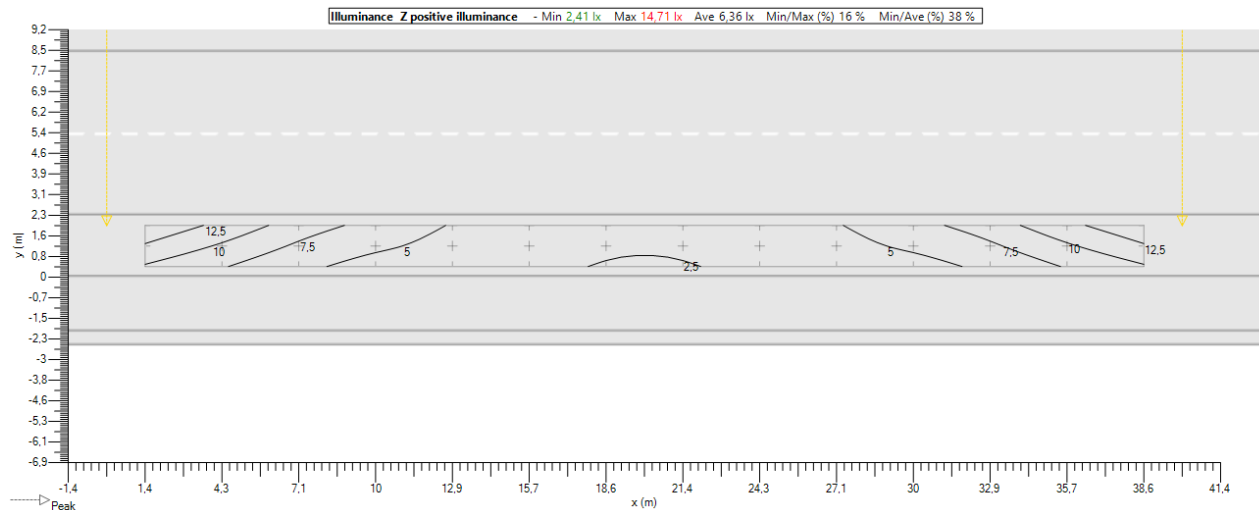


4.7 Stání2 (IL) - Z positive

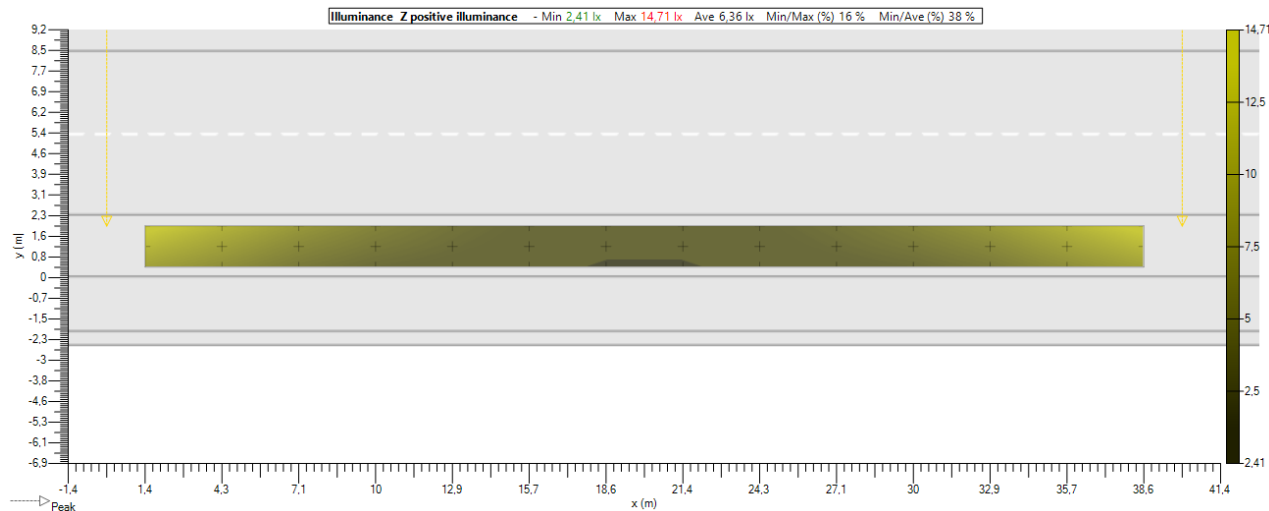
Values



Isolevel

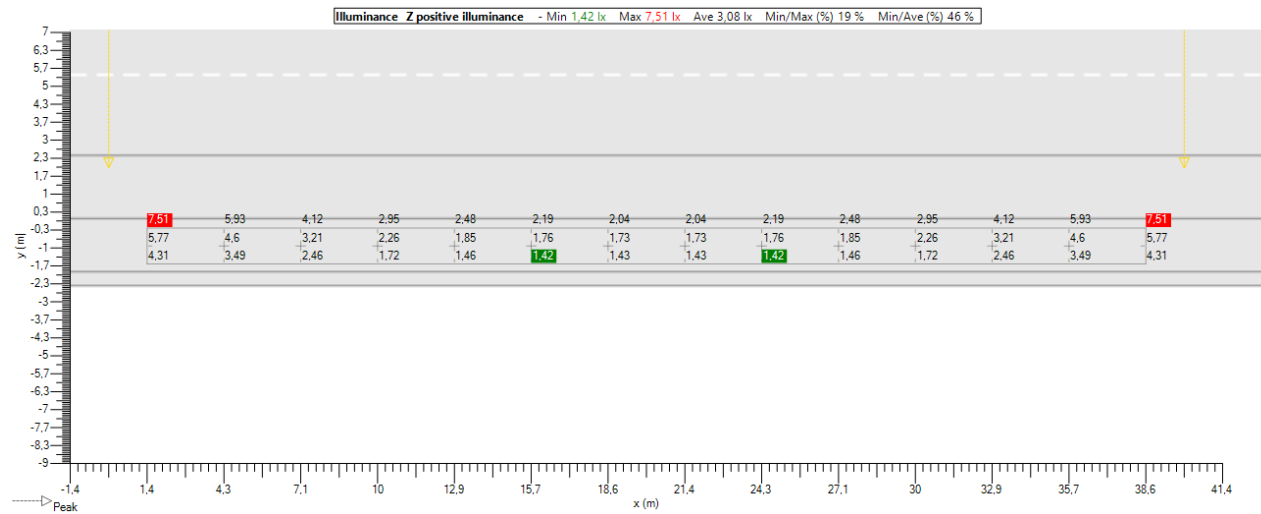


Shading

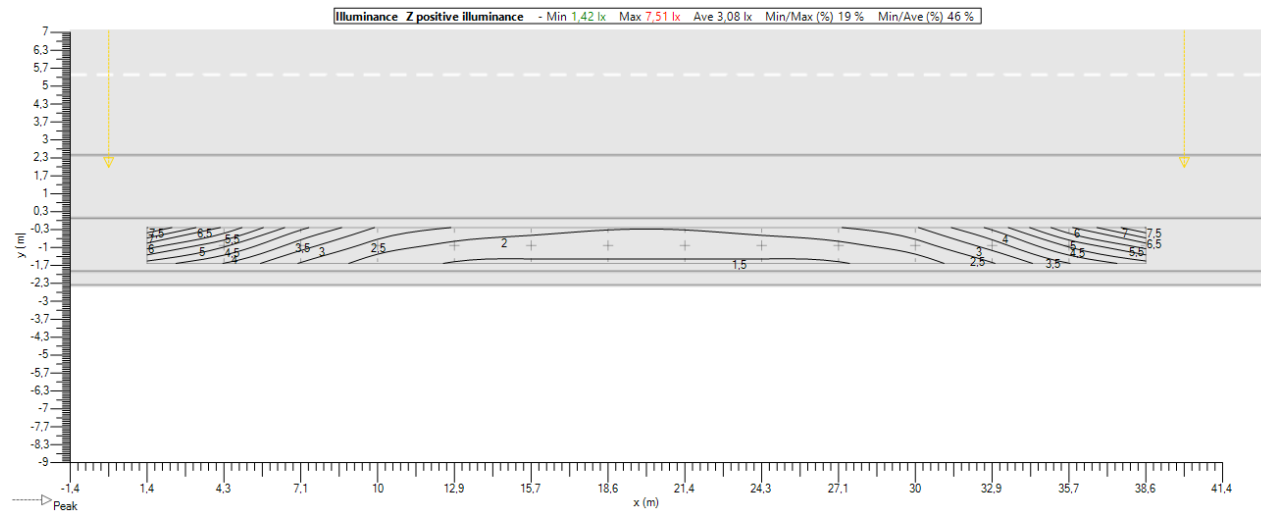


4.8 Chodník2 (IL) - Z positive

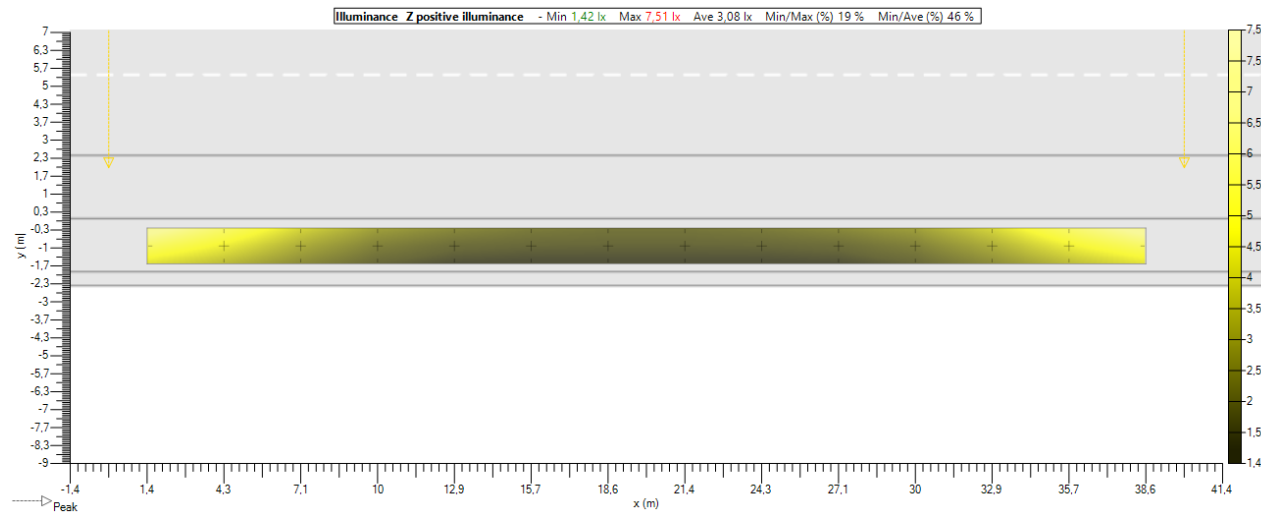
Values



Isolevel

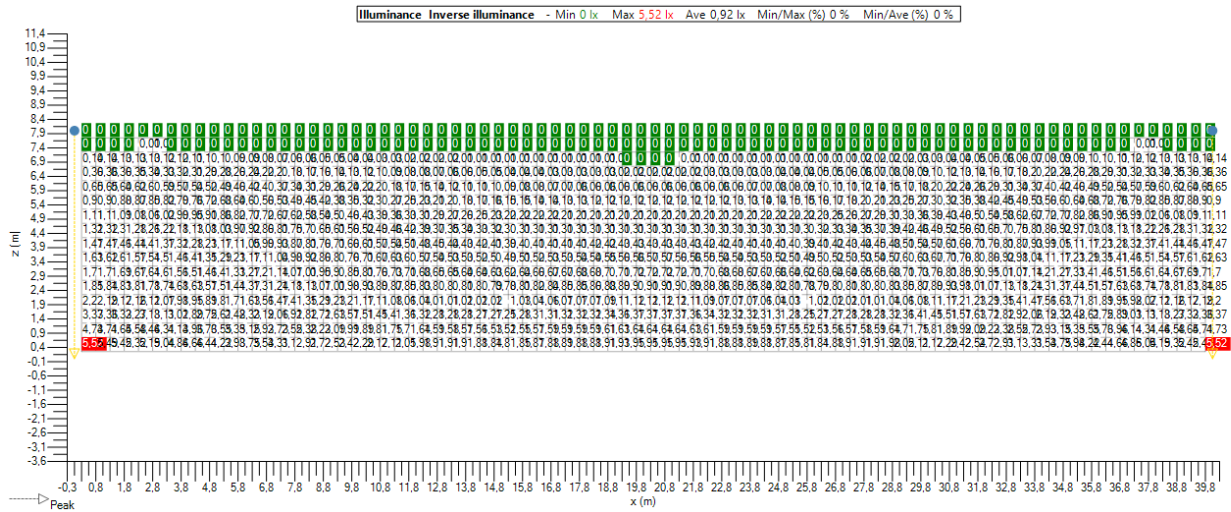


Shading

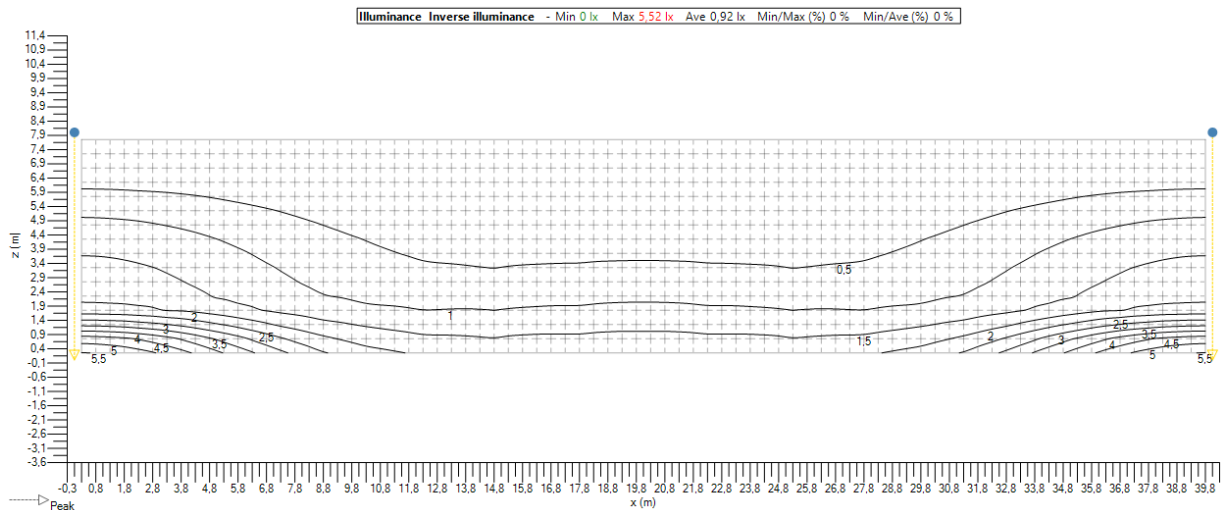


4.9 Fasády (IL) - Inverse

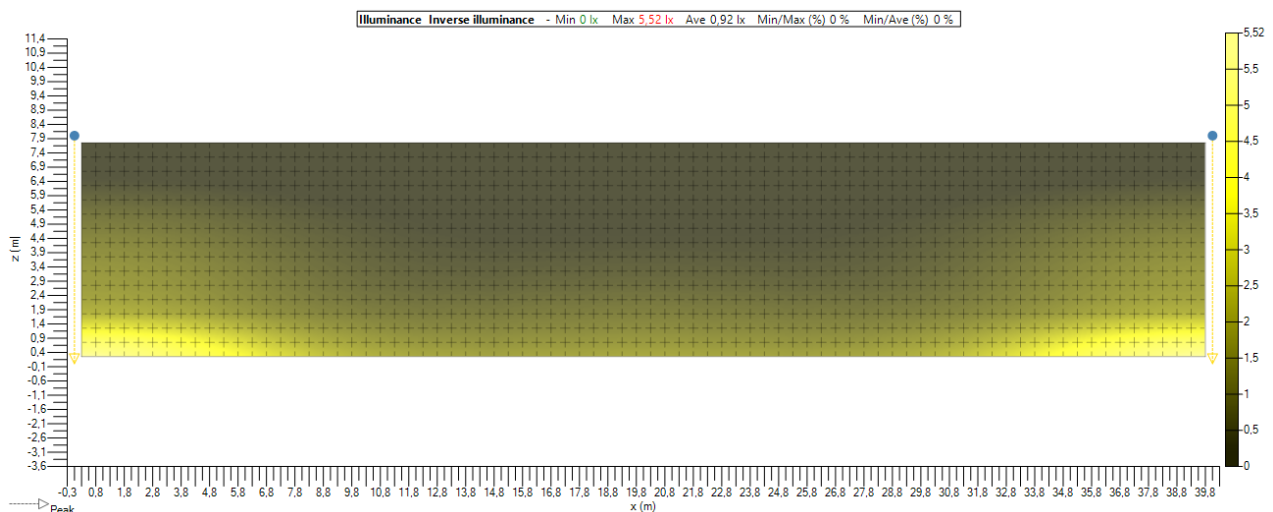
Values



Isolevel



Shading



5 Grids

5.1 Chodník1 (IL)

General

Type

Grid rectangular XY

Enabled

☒

Colour

Geometry

Origin

X

1,43 m

Y

10,85 m

Z

0,10 m

Rotation

X

0,0 °

Y

0,0 °

Z

0,0 °

Dimension

Count X

14

Count Y

3

Spacing X

2,86 m

Spacing Y

0,50 m

Size X

37,14 m

Size Y

1,00 m

5.2 Stání1 (IL)

General

Type

Grid rectangular XY

Enabled

☒

Colour

Geometry

Origin

X

1,43 m

Y

8,68 m

Z

0,00 m

Rotation

X

0,0 °

Y

0,0 °

Z

0,0 °

Dimension

Count X

14

Count Y

3

Spacing X

2,86 m

Spacing Y

0,77 m

Size X

37,14 m

Size Y

1,53 m

5.3 Silnice (LU)

General

Type

Grid rectangular XY

Enabled

☒

Colour

Geometry

Origin

X

1,43 m

Y

2,80 m

Z

0,00 m

Rotation

X

0,0 °

Y

0,0 °

Z

0,0 °

Dimension

Count X

14

Count Y

6

Spacing X

2,86 m

Spacing Y

1,00 m

Size X

37,14 m

Size Y

5,00 m

5.4 Silnice (IL)

General

Type

Grid rectangular XY

Enabled

☒

Colour

Geometry

Origin

X

1,43 m

Y

2,80 m

Z

0,00 m

Rotation

X

0,0 °

Y

0,0 °

Z

0,0 °

Dimension

Count X

14

Count Y

6

Spacing X

2,86 m

Spacing Y

1,00 m

Size X

37,14 m

Size Y

5,00 m

5.5 Stání2 (IL)

General

Geometry

Type	Grid rectangular XY	Origin	X 1,43 m	Y 0,38 m	Z 0,00 m
Enabled	☒	Rotation	X 0,0 °	Y 0,0 °	Z 0,0 °
Colour		Dimension	Count X 14	Count Y 3	
			Spacing X 2,86 m	Spacing Y 0,77 m	
			Size X 37,14 m	Size Y 1,53 m	

5.6 Chodník2 (IL)

General

Type	Grid rectangular XY
Enabled	☒
Colour	

Geometry

Origin	X 1,43 m	Y -1,67 m	Z 0,10 m
Rotation	X 0,0 °	Y 0,0 °	Z 0,0 °
Dimension	Count X 14	Count Y 3	
	Spacing X 2,86 m	Spacing Y 0,67 m	
	Size X 37,14 m	Size Y 1,33 m	

5.7 Fasády (IL)

General

Type	Grid rectangular XZ
Enabled	☒
Colour	

Geometry

Origin	X 0,25 m	Y -2,50 m	Z 0,25 m
Rotation	X 0,0 °	Y 0,0 °	Z 0,0 °
Dimension	Count X 80	Count Z 16	
	Spacing X 0,50 m	Spacing Z 0,50 m	
	Size X 39,50 m	Size Z 7,50 m	