

Modernizacja oświetlenia - Miasto i Gmina Bytów

Installation : Gmina Bytów

Project number : URZĄD MIASTA BYTÓW - ETAP II

Customer :

Processed by :

Date : 30.10.2024

The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

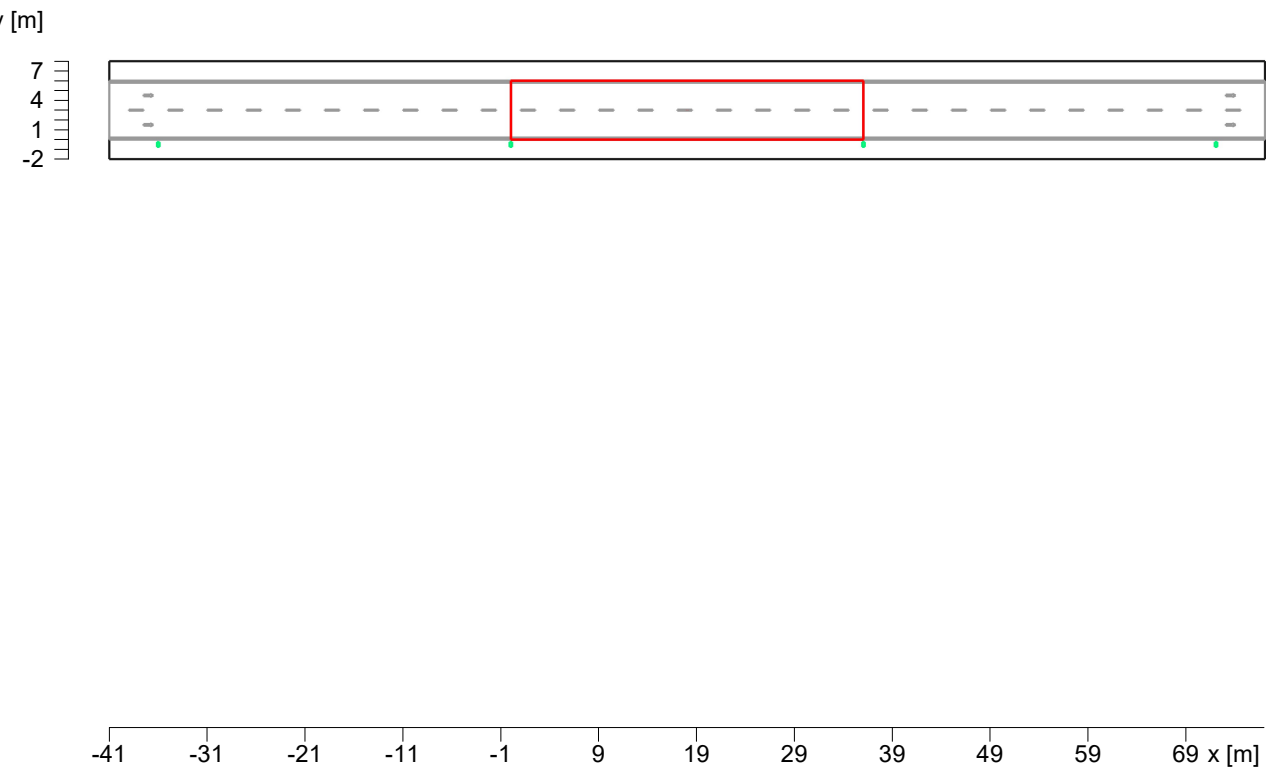
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1 **Dąbie - DW 212**

1.1 **Description, Dąbie - DW 212**

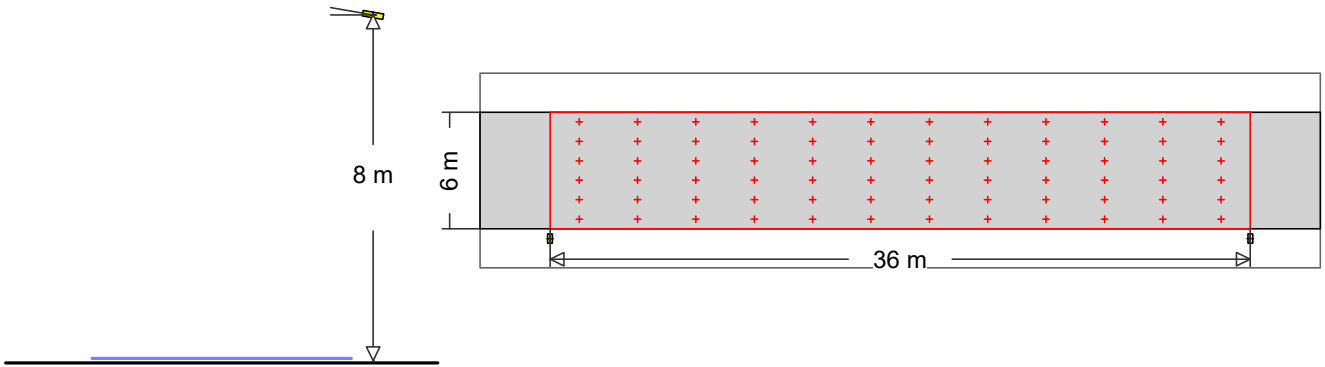
1.1.1 **Floor plan**




1 Dąbie - DW 212

1.2 Summary, Dąbie - DW 212

1.2.1 Result overview, Dąbie - DW 212



24



Order No.

Luminaire name

Equipment

:

:

:

Oprawa drogowa 59W 15x150

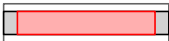
1 x LED 59 W / 8600 lm

MyLumRow

Luminaire placing	: Right row	Maintenance factor	: 0.80
Luminaire spacing	: 36.00 m	Height (phot centre)	: 8.00 m
Overhang	: -0.50 m	Tilt	: 10.00 °
Abs. position	: -0.50 m	Glare index class	: D0
Load/km	: 1639 W/km	Lum. intensity class	: n/a

Road

Width	: 6.00 m	Lanes	: 2
Surface	: R3, q0=0.07		



Luminance

Calculation field: 36m x 6m (12 x 6 pts)

Observer

2 : x=-60.00m, y=4.50m, z=1.50m
1 : x=-60.00m, y=1.50m, z=1.50m

Lane	\bar{E}_m	U_o	U_i	f_{TI}	R_{EI}
2:(y=4.50)	0.88 cd/m ²	0.49	0.60	9	0.69
1:(y=1.50)	0.80 cd/m ²	0.49	0.69	12	0.58
M4	>= 0.75 cd/m ²	>= 0.40	>= 0.60	<= 15	>= 0.30

Illuminance

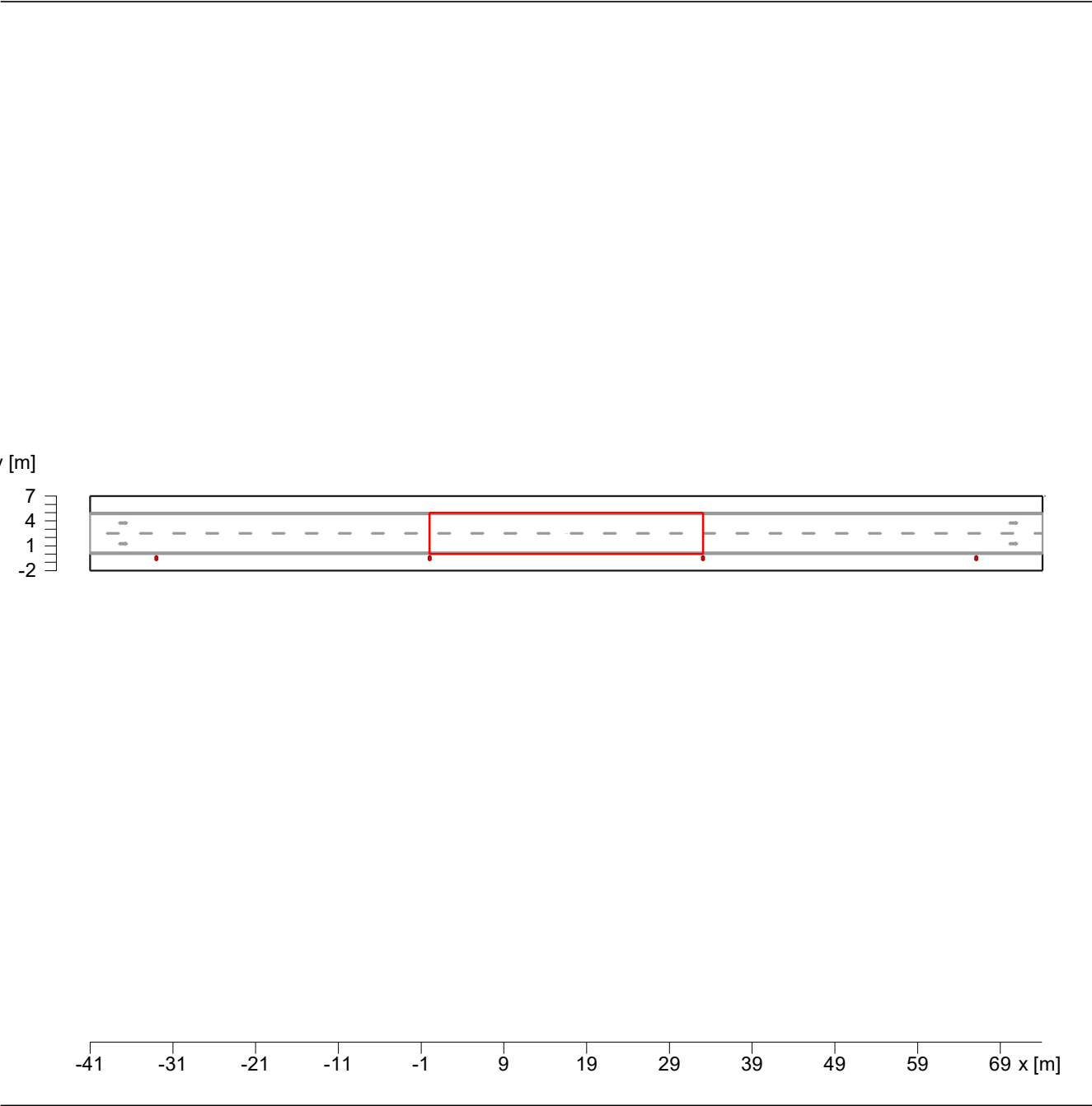
Calculation field: 36m x 6m (12 x 6 pts)

\bar{E}_m	E_{min}	U_o	U_d
12.4 lx	5.09 lx	0.41	0.21

2 Dąbie ul. Olimpijska

2.1 Description, Dąbie ul. Olimpijska

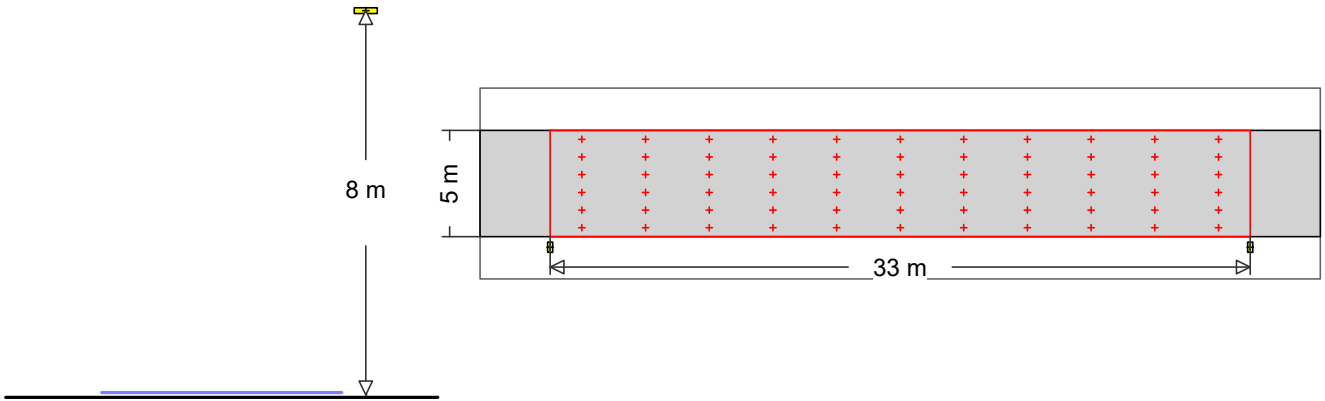
2.1.1 Floor plan



2 Dąbie ul. Olimpijska

2.2 Summary, Dąbie ul. Olimpijska

2.2.1 Result overview, Dąbie ul. Olimpijska



22

Order No.

Luminaire name

Equipment

:

:

:

:

Oprawa drogowa 30W 20x130

1 x LED 30 W / 4650 lm

MyLumRow			
Luminaire placing	: Right row	Maintenance factor	: 0.80
Luminaire spacing	: 33.00 m	Height (phot centre)	: 8.00 m
Overhang	: -0.50 m	Tilt	: 0.00 °
Abs. position	: -0.50 m	Glare index class	: D6
Load/km	: 909 W/km	Lum. intensity class	: G*5

Road

Width

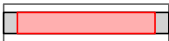
Surface

: 5.00 m

: R3, q0=0.07

Lanes

: 2



Luminance

Calculation field: 33m x 5m (11 x 6 pts)

Observer

2 : x=-60.00m, y=3.75m, z=1.50m

1 : x=-60.00m, y=1.25m, z=1.50m

Lane	\bar{E}_m	U_o	U_i	f_{TI}	R_{EI}
2:(y=3.75)	0.59 cd/m ²	0.48	0.53	4	0.58
1:(y=1.25)	0.56 cd/m ²	0.48	0.52	6	0.67
M5	>= 0.50 cd/m ²	>= 0.35	>= 0.40	<= 15	>= 0.30

Illuminance

Calculation field: 33m x 5m (11 x 6 pts)

\bar{E}_m	E_{min}	U_o	U_d
10.2 lx	3.59 lx	0.35	0.17

3

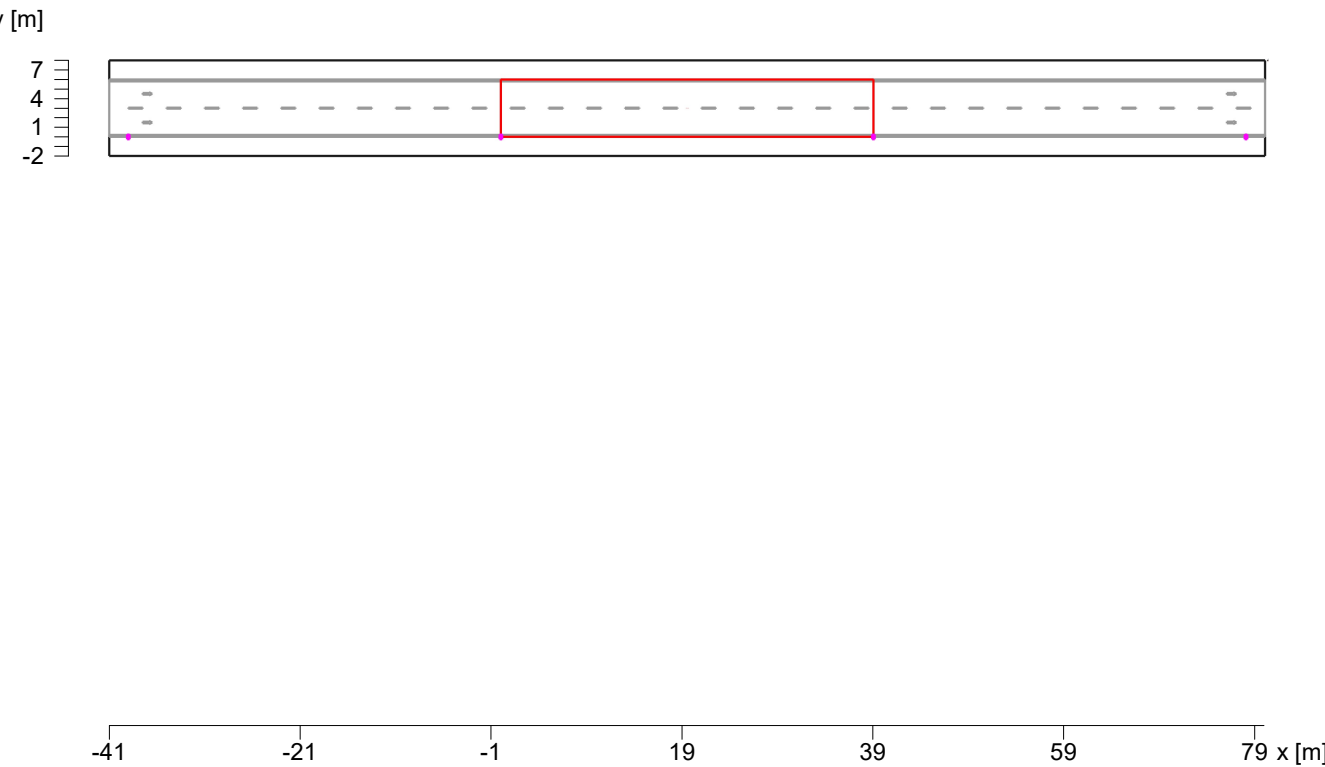
Gostkowo - DW 212

3.1

Description, Gostkowo - DW 212

3.1.1

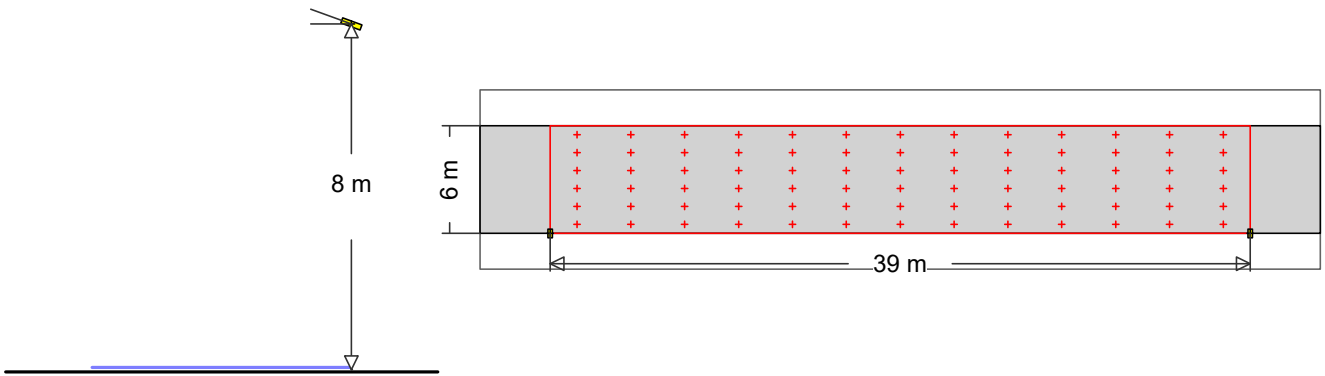
Floor plan




3 Gostkowo - DW 212

3.2 Summary, Gostkowo - DW 212

3.2.1 Result overview, Gostkowo - DW 212



21	Order No.	:	
	Luminaire name	:	Oprawa drogowa 71W 15x150
	Equipment	:	1 x LED 71 W / 10300 lm

MyLumRow

Luminaire placing	: Right row	Maintenance factor	: 0.80
Luminaire spacing	: 39.00 m	Height (phot. centre)	: 8.00 m
Overhang	: 0.00 m	Tilt	: 20.00 °
Abs. position	: 0.00 m	Glare index class	: D0
Load/km	: 1821 W/km	Lum. intensity class	: n/a

Road

Width	: 6.00 m	Lanes	: 2
Surface	: R3, q0=0.07		



Luminance

Calculation field: 39m x 6m (13 x 6 pts)

Observer

2	: x=-60.00m, y=4.50m, z=1.50m
1	: x=-60.00m, y=1.50m, z=1.50m

Lane	\bar{E}_m	U_o	U_l	f_{TI}	R_{EI}
2:(y=4.50)	0.87 cd/m ²	0.53	0.61	11	0.83
1:(y=1.50)	0.80 cd/m ²	0.52	0.60	14	0.53
M4	>= 0.75 cd/m ²	>= 0.40	>= 0.60	<= 15	>= 0.30

Illuminance

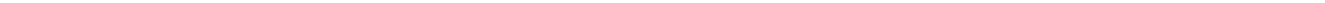
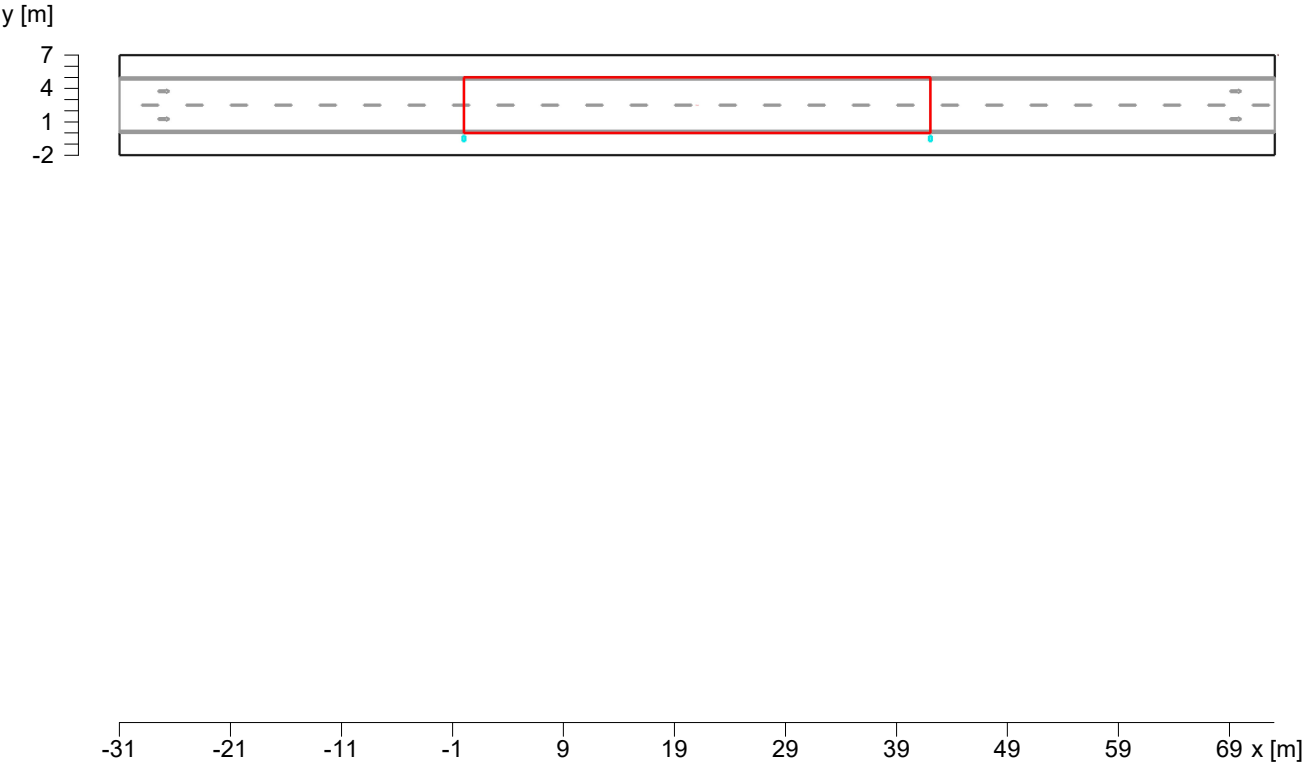
Calculation field: 39m x 6m (13 x 6 pts)

\bar{E}_m	E_{min}	U_o	U_d
11.1 lx	4.14 lx	0.37	0.17

4 Gostkowo - DG i przy blokach

4.1 Description, Gostkowo - DG i przy blokach

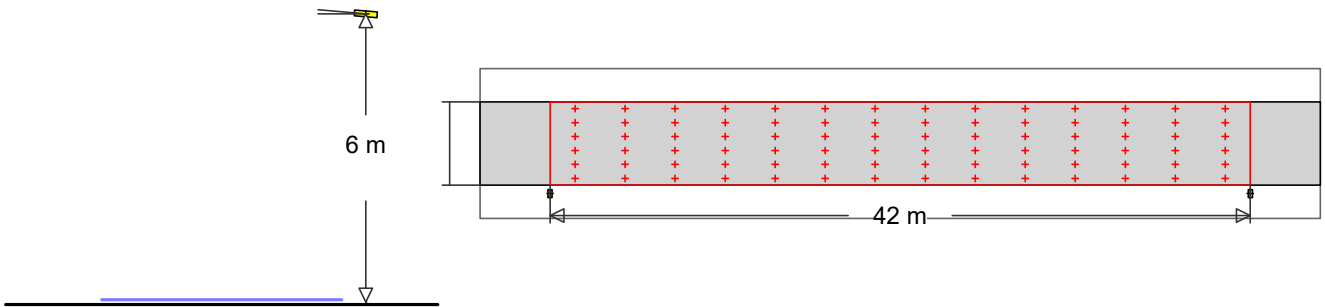
4.1.1 Floor plan




4 Gostkowo - DG i przy blokach

4.2 Summary, Gostkowo - DG i przy blokach

4.2.1 Result overview, Gostkowo - DG i przy blokach



23



Order No.

Luminaire name

Equipment

:

: Oprawa drogowa 45W 55x150

: 1 x LED 45 W / 6900 lm

MyLumRow			
Luminaire placing	: Right row	Maintenance factor	: 0.80
Luminaire spacing	: 42.00 m	Height (phot centre)	: 6.00 m
Overhang	: -0.50 m	Tilt	: 5.00 °
Abs. position	: -0.50 m	Glare index class	: D3
Load/km	: 1071 W/km	Lum. intensity class	: G*3

Road

Width

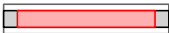
Surface

: 5.00 m

: R3, q0=0.07

Lanes

: 2

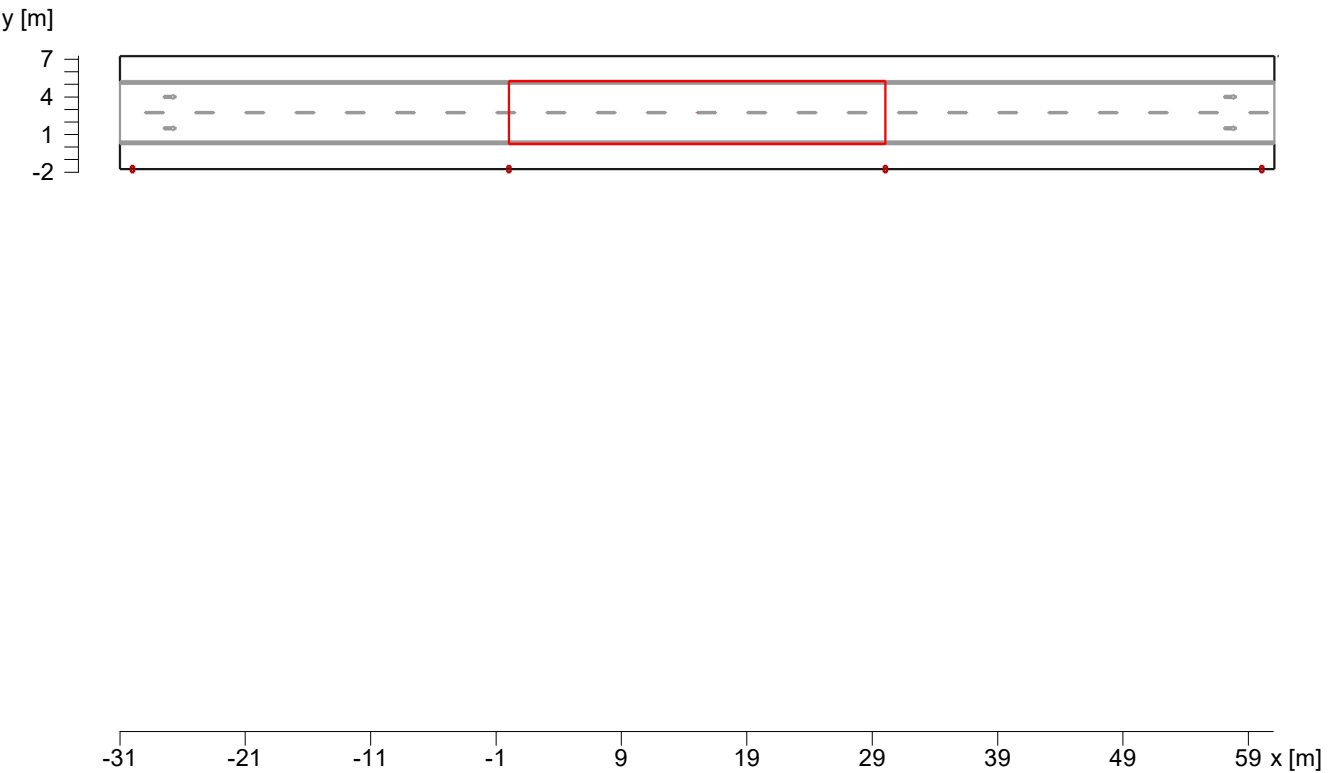


Illuminance				
	Calculation field: 42m x 5m (14 x 6 pts)			
	\bar{E}_m	E_{min}	U_o	U_d
	11.0 lx	1.69 lx	0.15	0.04
P3	≥ 7.50 lx	≥ 1.50 lx		

5 Gostkowo - os. za sołtysem

5.1 Description, Gostkowo - os. za sołtysem

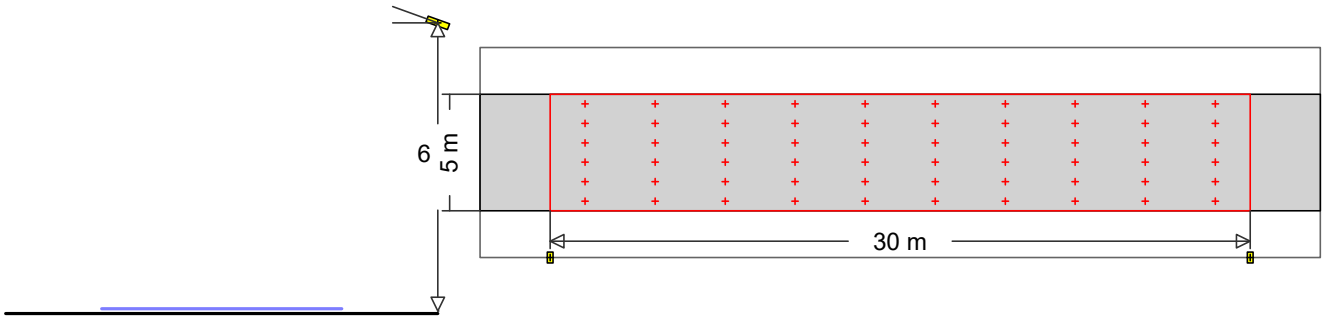
5.1.1 Floor plan



5 Gostkowo - os. za sołtysem

5.2 Summary, Gostkowo - os. za sołtysem

5.2.1 Result overview, Gostkowo - os. za sołtysem



22

Order No.

Luminaire name

Equipment

:

:

:

:

Oprawa drogowa 30W 20x130

1 x LED 30 W / 4650 lm

MyLumRow			
Luminaire placing	: Right row	Maintenance factor	: 0.80
Luminaire spacing	: 30.00 m	Height (phot. centre)	: 6.00 m
Overhang	: -2.00 m	Tilt	: 20.00 °
Abs. position	: -2.00 m	Glare index class	: D1
Load/km	: 1000 W/km	Lum. intensity class	: n/a

Road

Width

Surface

:

:

:

5.00 m

Lanes

R3, q0=0.07

:

:

2



Luminance Calculation field: 30m x 5m (10 x 6 pts)

Observer

2

:

x=-60.00m, y=3.75m, z=1.50m

1

:

x=-60.00m, y=1.25m, z=1.50m

Lane	\bar{E}_m	U_o	U_i	f_{TI}	R_{EI}
2:(y=3.75)	0.55 cd/m ²	0.48	0.54	8	0.60
1:(y=1.25)	0.52 cd/m ²	0.50	0.47	13	0.65
M5	>= 0.50 cd/m ²	>= 0.35	>= 0.40	<= 15	>= 0.30

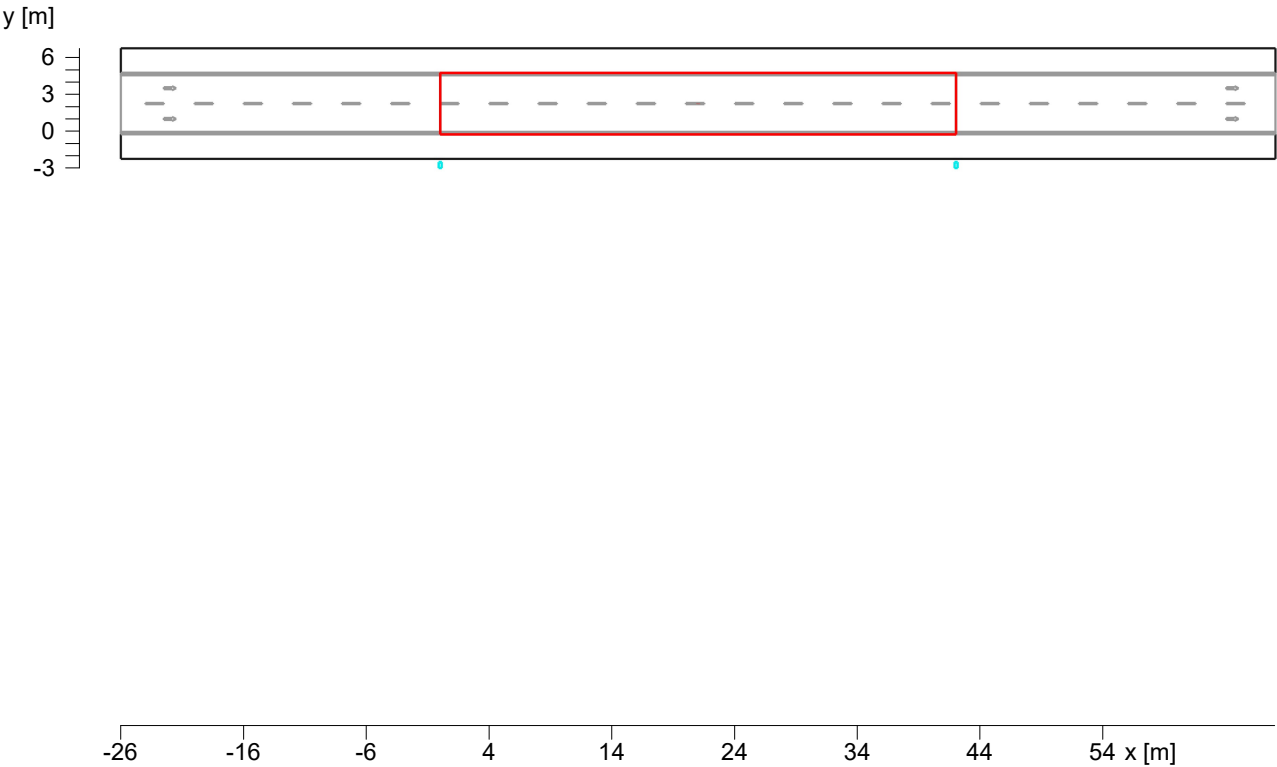
Illuminance Calculation field: 30m x 5m (10 x 6 pts)

\bar{E}_m	E_{min}	U_o	U_d
10.7 lx	3.87 lx	0.36	0.16

6 Pomysk Wielki ul.Główna (Kościół)

6.1 Description, Pomysk Wielki ul.Główna (Kościół)

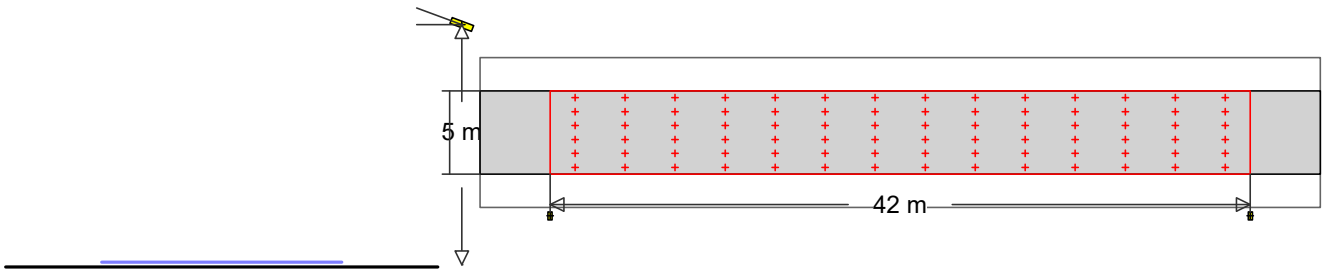
6.1.1 Floor plan




6 Pomysk Wielki ul.Główna (Kościół)

6.2 Summary, Pomysk Wielki ul.Główna (Kościół)

6.2.1 Result overview, Pomysk Wielki ul.Główna (Kościół)



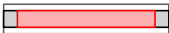
23	Order No.	:
	Luminaire name	: Oprawa drogowa 45W 55x150
	Equipment	: 1 x LED 45 W / 6900 lm

MyLumRow

Luminaire placing	: Right row	Maintenance factor	: 0.80
Luminaire spacing	: 42.00 m	Height (phot centre)	: 5.00 m
Overhang	: -2.50 m	Tilt	: 20.00 °
Abs. position	: -2.50 m	Glare index class	: D0
Load/km	: 1071 W/km	Lum. intensity class	: n/a

Road

Width	: 5.00 m	Lanes	: 2
Surface	: R3, q0=0.07		



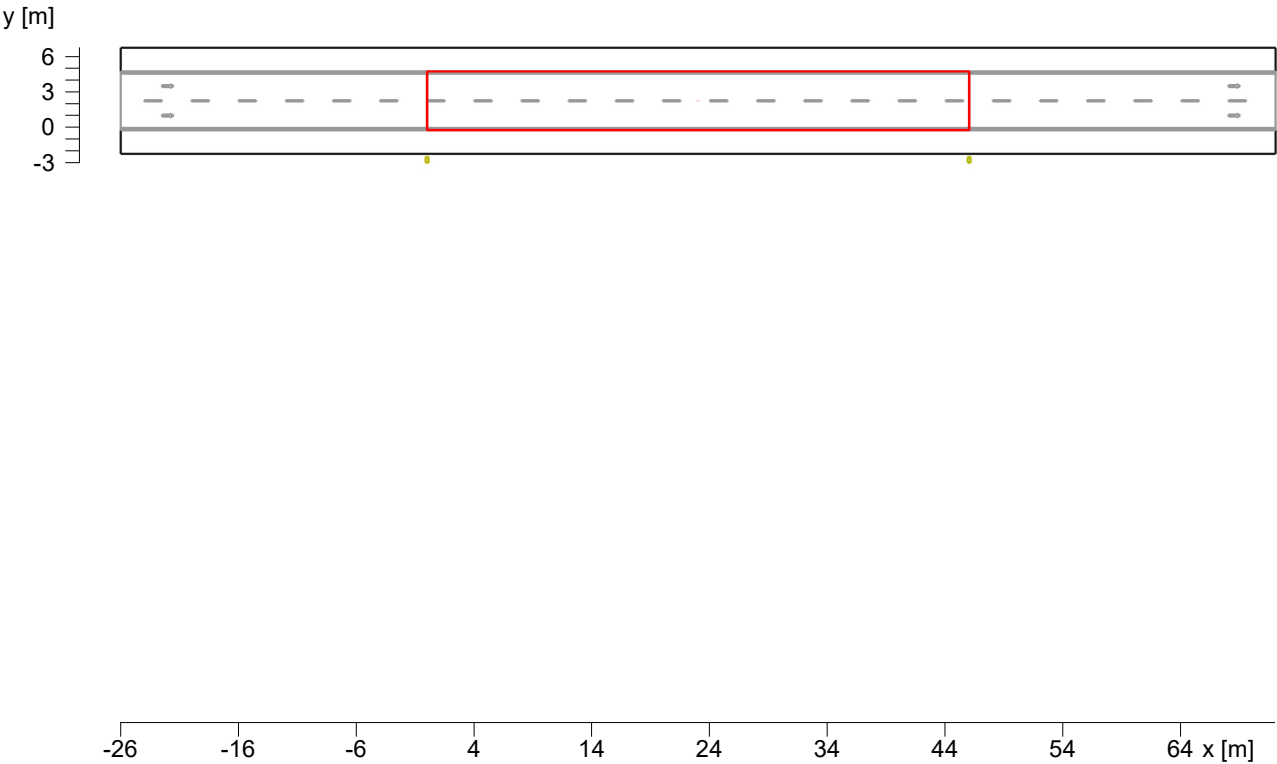
Illuminance

	Calculation field: 42m x 5m (14 x 6 pts)			
	\bar{E}_m	E_{min}	U_o	U_d
	8.79 lx	1.64 lx	0.19	0.04
P3	≥ 7.50 lx	≥ 1.50 lx		

7 Pomysk Wielki ul.Wspólna (osiedle)

7.1 Description, Pomysk Wielki ul.Wspólna (osiedle)

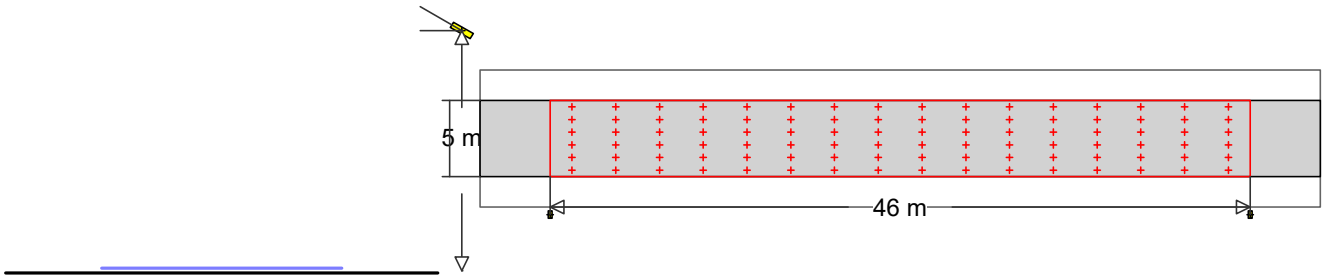
7.1.1 Floor plan




7 Pomysk Wielki ul.Wspólna (osiedle)

7.2 Summary, Pomysk Wielki ul.Wspólna (osiedle)

7.2.1 Result overview, Pomysk Wielki ul.Wspólna (osiedle)



20	Order No.	:
	Luminaire name	: Oprawa drogowa 59W 55x150
	Equipment	: 1 x LED 59 W / 8850 lm

MyLumRow

Luminaire placing	: Right row	Maintenance factor	: 0.80
Luminaire spacing	: 46.00 m	Height (phot centre)	: 5.00 m
Overhang	: -2.50 m	Tilt	: 30.00 °
Abs. position	: -2.50 m	Glare index class	: D0
Load/km	: 1283 W/km	Lum. intensity class	: n/a

Road

Width	: 5.00 m	Lanes	: 2
Surface	: R3, q0=0.07		



Illuminance

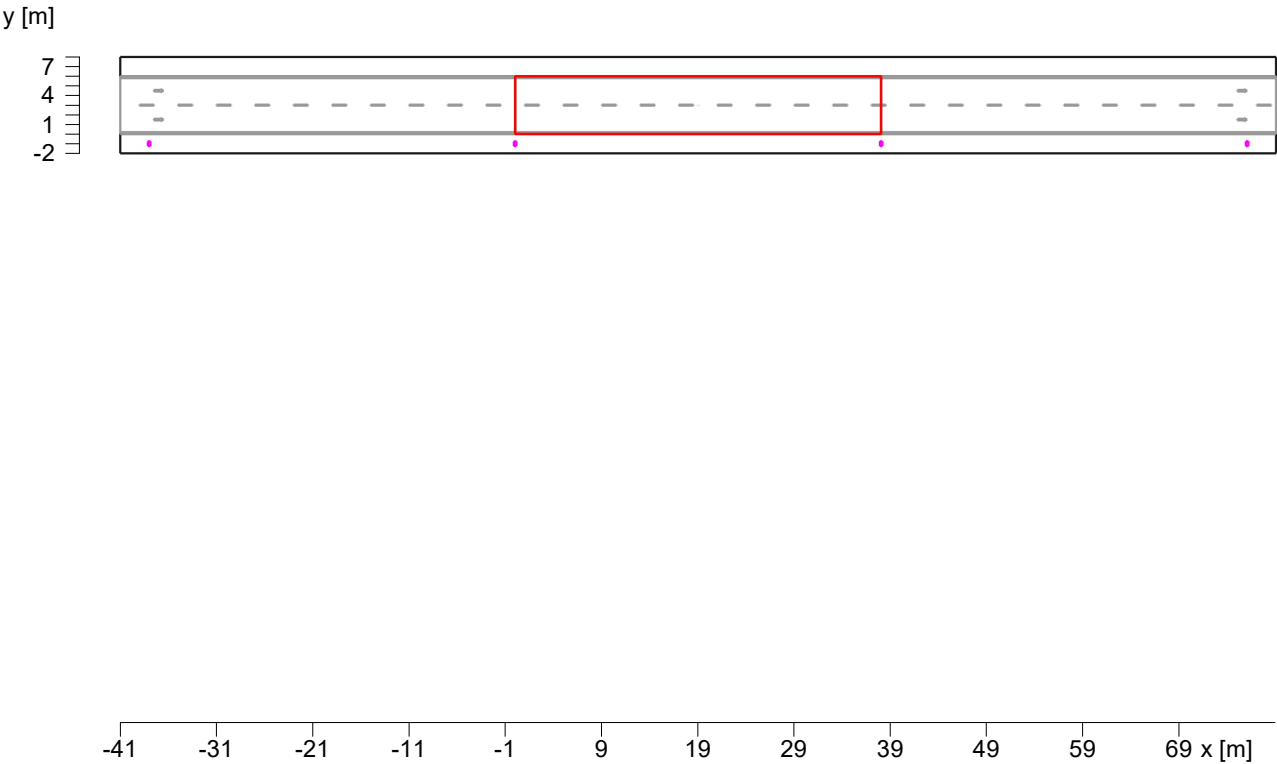
Calculation field: 46m x 5m (16 x 6 pts)

	\bar{E}_m	E_{min}	U_o	U_d
	10.1 lx	1.53 lx	0.15	0.03
P3	≥ 7.50 lx	≥ 1.50 lx		

8 **Udorpie - DW 212**

8.1 **Description, Udorpie - DW 212**

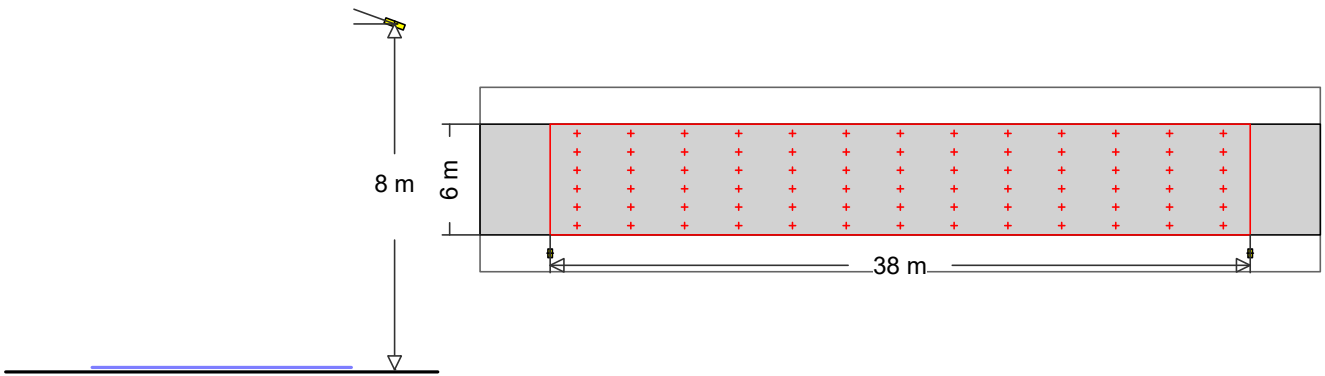
8.1.1 **Floor plan**




8 Udorpie - DW 212

8.2 Summary, Udorpie - DW 212

8.2.1 Result overview, Udorpie - DW 212



21	Order No.	:	
	Luminaire name	:	Oprawa drogowa 71W 15x150
	Equipment	:	1 x LED 71 W / 10300 lm

MyLumRow

Luminaire placing	: Right row	Maintenance factor	: 0.80
Luminaire spacing	: 38.00 m	Height (phot centre)	: 8.00 m
Overhang	: -1.00 m	Tilt	: 20.00 °
Abs. position	: -1.00 m	Glare index class	: D0
Load/km	: 1868 W/km	Lum. intensity class	: n/a

Road

Width	: 6.00 m	Lanes	: 2
Surface	: R3, q0=0.07		



Luminance

Calculation field: 38m x 6m (13 x 6 pts)

Observer

2	: x=-60.00m, y=4.50m, z=1.50m
1	: x=-60.00m, y=1.50m, z=1.50m

Lane	\bar{E}_m	U_o	U_i	f_{TI}	R_{EI}
2:(y=4.50)	0.86 cd/m ²	0.50	0.63	10	0.77
1:(y=1.50)	0.77 cd/m ²	0.51	0.64	14	0.57
M4	>= 0.75 cd/m ²	>= 0.40	>= 0.60	<= 15	>= 0.30

Illuminance

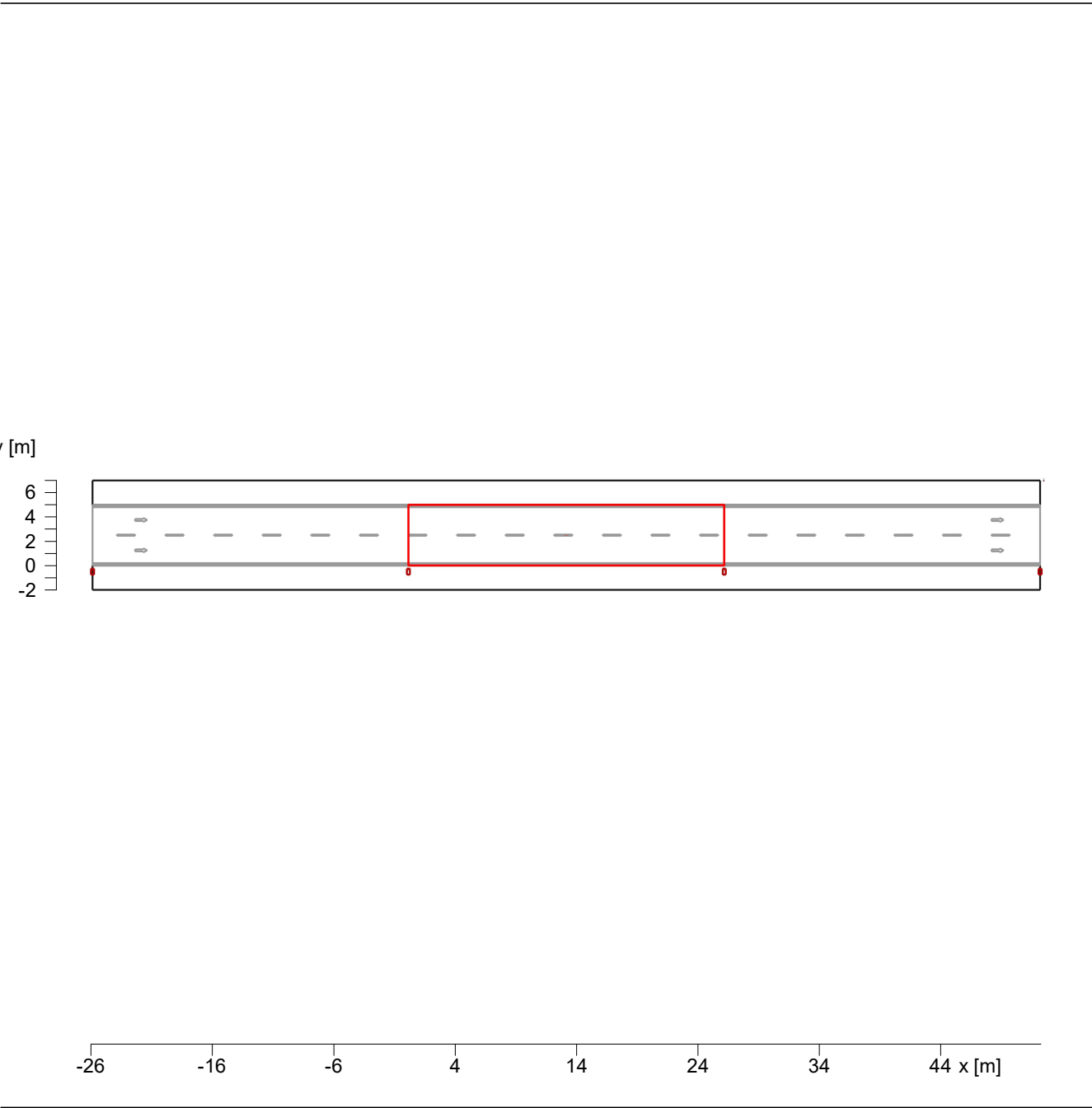
Calculation field: 38m x 6m (13 x 6 pts)

\bar{E}_m	E_{min}	U_o	U_d
12.0 lx	4.79 lx	0.40	0.20

9 Udorpie - plac zabaw

9.1 Description, Udorpie - plac zabaw

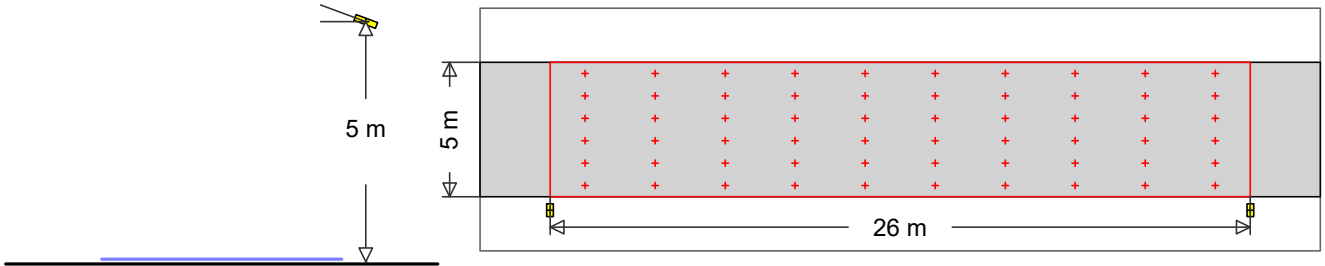
9.1.1 Floor plan




9 Udorpie - plac zabaw

9.2 Summary, Udorpie - plac zabaw

9.2.1 Result overview, Udorpie - plac zabaw



22	Order No.	:	
	Luminaire name	:	Oprawa drogowa 30W 20x130
	Equipment	:	1 x LED 30 W / 4650 lm

MyLumRow

Luminaire placing	: Right row	Maintenance factor	: 0.80
Luminaire spacing	: 26.00 m	Height (phot centre)	: 5.00 m
Overhang	: -0.50 m	Tilt	: 20.00 °
Abs. position	: -0.50 m	Glare index class	: D1
Load/km	: 1154 W/km	Lum. intensity class	: n/a

Road

Width	: 5.00 m	Lanes	: 2
Surface	: R3, q0=0.07		



Luminance

Calculation field: 26m x 5m (10 x 6 pts)

Observer

2	: x=-60.00m, y=3.75m, z=1.50m
1	: x=-60.00m, y=1.25m, z=1.50m

Lane	\bar{E}_m	U_o	U_l	f_{TI}	R_{EI}
2:(y=3.75)	0.84 cd/m ²	0.44	0.45	10	0.57
1:(y=1.25)	0.79 cd/m ²	0.45	0.40	16	0.40
M5	>= 0.50 cd/m ²	>= 0.35	>= 0.40	<= 15	>= 0.30

Illuminance

Calculation field: 26m x 5m (10 x 6 pts)

\bar{E}_m	E_{min}	U_o	U_d
14.6 lx	3.76 lx	0.26	0.11