

## C.2.3. VÝPOČET OSVĚTLOVACÍ SOUSTAVY

### Mnichovo Hradiště

Výpočet VO pro DSP

Osvětlení přechodů pro chodce

Osvětlení ploch

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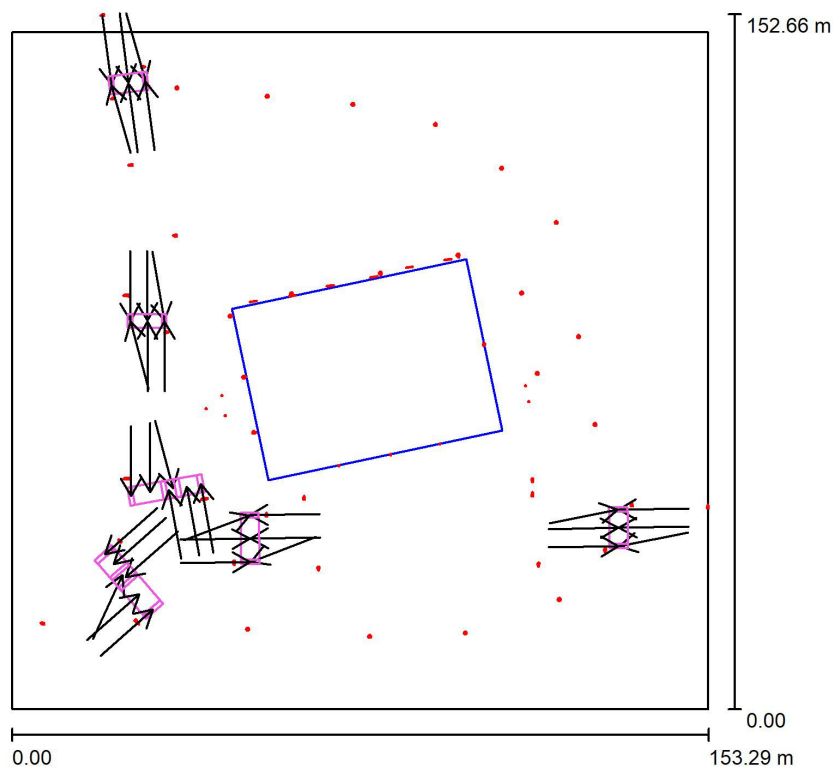
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## Masarykovo náměstí - přechody / Planning data



Maintenance factor: 0.81, ULR (Upward Light Ratio): 2.5%

Scale 1:1415

LLMF=0,9 (L90B10=100.000h)

LSF=1 (okamž. výměna)

LMF=0,9 (IP6x; interval čišť. 3 r.; znečišť. ovzd. "malé")

### Luminaire Parts List

No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
1	13	IGUZZINI 90_ED75 Wow 101,7W (1.000)	12000	12000	101.7
2	12	IGUZZINI 90_ED78 Wow 101,7W (1.000)	12670	12670	101.7
3	1	IGUZZINI 90_ED78 Wow 101,7W (0.500)	12670	12670	101.7
4	1	IGUZZINI AET8 Fiamma 52W (1.000)	4300	4300	52.0
5	3	IGUZZINI AKS6 Lander 13,6W (1.000)	1008	1600	13.6

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## Masarykovo náměstí - přechody / Planning data

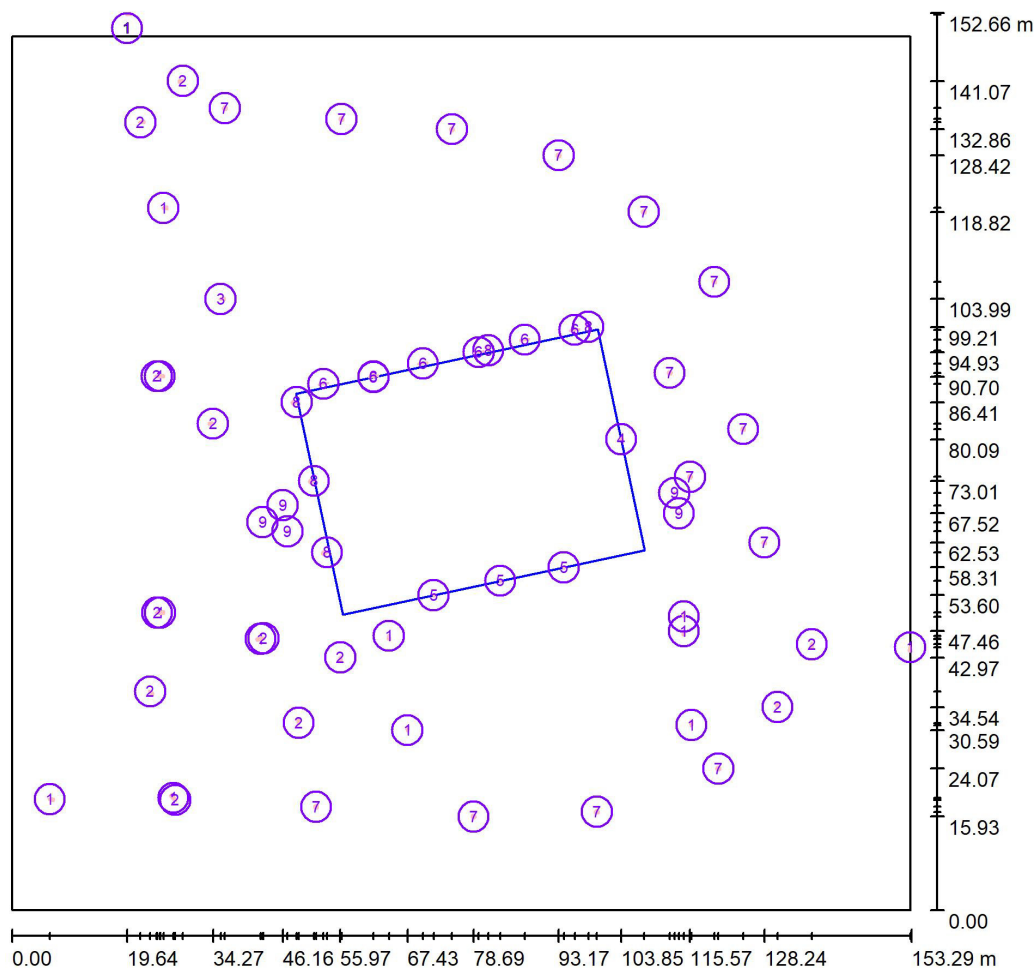
### Luminaire Parts List

No.	Pieces	Designation (Correction Factor)	Φ (Luminaire) [lm]	Φ (Lamps) [lm]	P [W]
6	6	IGUZZINI BH01 Linealuce Compact 75 - surface 23,8W (1.000)	1118	1740	23.8
7	14	IGUZZINI CANB_E021_1205_X126_6134 Twilight 31,9W (1.000)	3460	3460	31.9
8	6	IGUZZINI CANB_E906 Twilight 31,4W (1.000)	1852	1853	31.4
9	5	IGUZZINI E171_X209 Light Up Earth 15,8W (1.000)	1515	2000	15.8
Total:			401869	409805	3593.8

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### Masarykovo náměstí - přechody / Luminaires (layout plan)



Scale 1 : 1096

#### Luminaire Parts List

No.	Pieces	Designation
1	13	IGUZZINI 90_ED75 Wow 101,7W
2	12	IGUZZINI 90_ED78 Wow 101,7W
3	1	IGUZZINI 90_ED78 Wow 101,7W
4	1	IGUZZINI AET8 Fiamma 52W

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**Masarykovo náměstí - přechody / Luminaires (layout plan)**

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**Luminaire Parts List**

No.	Pieces	Designation
5	3	IGUZZINI AKS6 Lander 13,6W
6	6	IGUZZINI BH01 Linealuce Compact 75 - surface 23,8W
7	14	IGUZZINI CANB_E021_1205_X126_6134 Twilight 31,9W
8	6	IGUZZINI CANB_E906 Twilight 31,4W
9	5	IGUZZINI E171_X209 Light Up Earth 15,8W

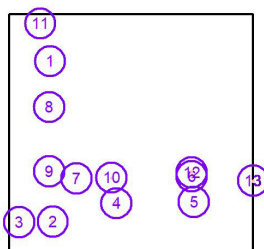
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## Masarykovo náměstí - přechody / Luminaires (coordinates list)

### IGUZZINI 90\_ED75 Wow 101,7W

12000 lm, 101.7 W, 1 x 1 x A87W (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	25.836	119.479	8.000	0.0	0.0	-90.0
2	27.528	19.100	8.000	0.0	0.0	41.4
3	6.461	18.877	8.000	0.0	0.0	-105.6
4	67.433	30.594	8.000	0.0	0.0	0.0
5	115.814	31.460	8.000	0.0	0.0	0.0
6	114.511	47.458	8.000	0.0	0.0	180.0
7	42.364	46.141	8.000	0.0	0.0	100.3
8	25.218	90.833	8.000	0.0	0.0	-90.0
9	25.255	50.621	8.000	0.0	0.0	-90.0
10	64.260	46.670	8.000	0.0	0.0	-180.0
11	19.639	152.397	8.000	0.0	0.0	-84.7
12	114.511	49.955	8.000	0.0	0.0	0.0
13	153.085	44.714	8.000	0.0	0.0	180.0



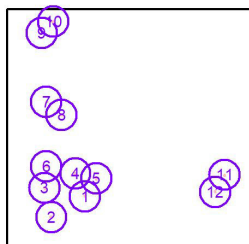
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### Masarykovo náměstí - přechody / Luminaires (coordinates list)

#### IGUZZINI 90\_ED78 Wow 101,7W

12670 lm, 101.7 W, 1 x 1 x A80W (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	48.878	31.834	5.000	0.0	0.0	1.0
2	27.852	18.718	5.000	0.0	0.0	41.4
3	23.549	37.183	5.000	0.0	0.0	-138.6
4	42.882	46.232	5.000	0.0	0.0	100.3
5	55.973	42.971	5.000	0.0	0.0	-179.0
6	24.749	50.616	5.000	0.0	0.0	-90.0
7	24.686	90.842	5.000	0.0	0.0	-90.0
8	34.265	82.774	5.000	0.0	0.0	90.0
9	21.904	134.068	5.000	0.0	0.0	-82.6
10	29.127	141.074	5.000	0.0	0.0	96.0
11	136.329	45.260	5.000	0.0	0.0	-179.0
12	130.469	34.542	5.000	0.0	0.0	1.0

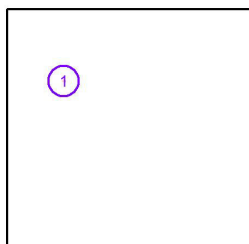
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### Masarykovo náměstí - přechody / Luminaires (coordinates list)

#### IGUZZINI 90\_ED78 Wow 101,7W

12670 lm, 101.7 W, 1 x 1 x A80W (Correction Factor 0.500, user dim 50%).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	35.590	103.993	8.000	0.0	0.0	-90.0

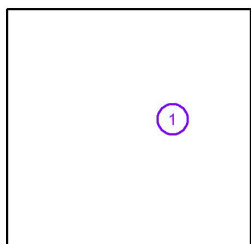
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### Masarykovo náměstí - přechody / Luminaires (coordinates list)

#### IGUZZINI AET8 Fiamma 52W

4300 lm, 52.0 W, 1 x 1 x A11H (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	103.852	80.087	4.531	0.0	0.0	-78.1

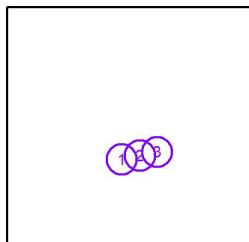
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### Masarykovo náměstí - přechody / Luminaires (coordinates list)

#### IGUZZINI AKS6 Lander 13,6W

1008 lm, 13.6 W, 1 x 1 x B95O (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	71.882	53.600	4.500	0.0	0.0	-78.0
2	83.233	56.012	4.500	0.0	0.0	-78.0
3	94.054	58.312	4.500	0.0	0.0	-78.0

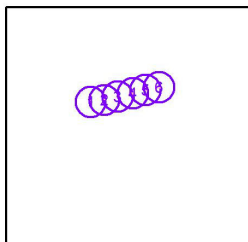
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### Masarykovo náměstí - přechody / Luminaires (coordinates list)

#### IGUZZINI BH01 Linealuce Compact 75 - surface 23,8W

1118 lm, 23.8 W, 1 x 1 x LI64 (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	53.107	89.532	10.000	0.0	120.0	101.0
2	61.649	90.822	10.000	0.0	120.0	101.0
3	70.033	93.011	10.000	0.0	120.0	101.0
4	79.549	94.932	10.000	0.0	120.0	101.0
5	87.405	97.041	10.000	0.0	120.0	101.0
6	95.921	98.723	10.000	0.0	120.0	101.0

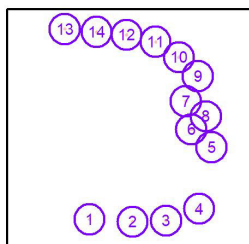
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### Masarykovo náměstí - přechody / Luminaires (coordinates list)

#### IGUZZINI CANB\_E021\_1205\_X126\_6134 Twilight 31,9W

3460 lm, 31.9 W, 1 x 1 x A51C (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	51.849	17.565	0.000	0.0	0.0	38.8
2	78.688	15.926	0.000	0.0	0.0	38.8
3	99.700	16.712	0.000	0.0	0.0	38.8
4	120.400	24.072	0.000	0.0	0.0	38.8
5	128.243	62.528	0.000	0.0	0.0	38.8
6	115.566	73.720	0.000	0.0	0.0	38.8
7	112.112	91.400	0.000	0.0	0.0	38.8
8	124.629	81.830	0.000	0.0	0.0	38.8
9	119.713	106.885	0.000	0.0	0.0	38.8
10	107.703	118.824	0.000	0.0	0.0	38.8
11	93.170	128.420	0.000	0.0	0.0	38.8
12	74.988	132.863	0.000	0.0	0.0	38.8
13	36.301	136.462	0.000	0.0	0.0	38.8
14	56.165	134.617	0.000	0.0	0.0	38.8

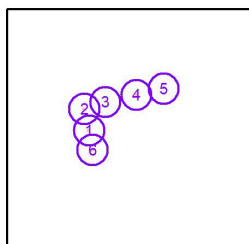
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### Masarykovo náměstí - přechody / Luminaires (coordinates list)

#### IGUZZINI CANB\_E906 Twilight 31,4W

1852 lm, 31.4 W, 1 x 1 x A60Q (Correction Factor 1.000).



No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	51.504	73.010	5.000	0.0	0.0	100.2
2	48.530	86.408	5.000	0.0	0.0	100.2
3	61.619	90.703	5.000	0.0	0.0	11.6
4	81.168	95.234	5.000	0.0	0.0	11.6
5	98.232	99.211	5.000	0.0	0.0	11.6
6	53.707	60.844	5.000	0.0	0.0	100.2

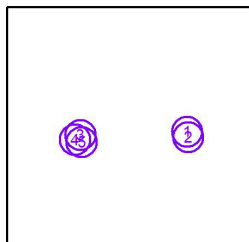
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### Masarykovo náměstí - přechody / Luminaires (coordinates list)

#### IGUZZINI E171\_X209 Light Up Earth 15,8W

1515 lm, 15.8 W, 1 x 1 x A40K (Correction Factor 1.000).



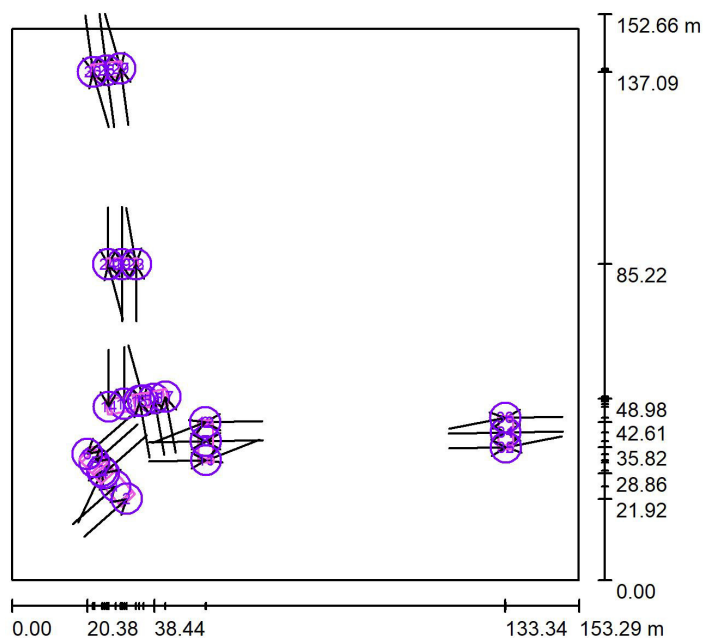
No.	Position [m]			Rotation [°]		
	X	Y	Z	X	Y	Z
1	112.924	70.988	0.000	0.0	0.0	0.0
2	113.669	67.519	0.000	0.0	0.0	0.0
3	46.164	68.878	0.000	0.0	0.0	-20.0
4	42.719	65.987	0.000	0.0	0.0	100.0
5	46.945	64.449	0.000	0.0	0.0	-140.0



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### Masarykovo náměstí - přechody / Calculation surfaces (results overview)



Scale 1 : 1738

#### Calculation Surface List

No.	Designation	Type	Grid	$E_{av}$ [lx]	$E_{min}$ [lx]	$E_{max}$ [lx]	$u_0$	$E_{min} / E_{max}$
1	P1 Základní prostor A	vertical, -138.6°	3 x 6	75	49	92	0.648	0.532
2	P1 Doplnkový prostor A	vertical, -138.6°	3 x 1	54	47	58	0.868	0.806
3	P1 Prodloužený doplnkový prostor A	vertical, -115.0°	3 x 3	51	41	63	0.794	0.648
4	P1 Prodloužený doplnkový prostor B	vertical, 41.4°	3 x 3	59	49	71	0.822	0.692
5	P1 Základní prostor B	vertical, 41.4°	3 x 3	66	53	77	0.792	0.686
6	P1 Doplnkový prostor B	vertical, 41.4°	3 x 1	38	37	40	0.969	0.918
7	P2 Základní prostor A	vertical, 1.0°	6 x 3	79	49	100	0.611	0.485
8	P2 Základní prostor B	vertical, 181.0°	3 x 6	57	30	75	0.528	0.400
9	P2 Doplnkový prostor A pravý	vertical, 1.0°	3 x 1	59	56	60	0.959	0.937

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## Masarykovo náměstí - přechody / Calculation surfaces (results overview)

### Calculation Surface List

No.	Designation	Type	Grid	$E_{av}$ [lx]	$E_{min}$ [lx]	$E_{max}$ [lx]	u0	$E_{min} / E_{max}$
10	P2 Doplnkový prostor A levý	vertical, 21.0°	3 x 1	46	45	46	0.980	0.968
11	P2 Doplnkový prostor B pravý	vertical, 181.0°	3 x 1	38	34	42	0.889	0.814
12	P2 Doplnkový prostor B levý	vertical, 201.0°	3 x 1	31	31	31	0.987	0.977
13	P3 Základní prostor A	vertical, 90.0°	6 x 3	68	29	92	0.427	0.316
14	P3 Doplnkový prostor A	vertical, 90.0°	3 x 1	73	65	78	0.890	0.834
15	P3 Prodloužený doplnkový prostor A	vertical, 105.0°	3 x 3	35	25	46	0.702	0.535
16	P3 Základní prostor B	vertical, -79.7°	3 x 3	90	74	100	0.822	0.740
17	P3 Doplnkový prostor B	vertical, -79.7°	1 x 3	76	70	82	0.913	0.848
18	P3 Prodloužený doplnkový prostor B	vertical, -79.7°	3 x 3	62	47	81	0.754	0.579
19	P4 Základní prostor A	vertical, 90.3°	3 x 6	82	66	95	0.803	0.696
20	P4 Základní prostor B	vertical, -89.7°	6 x 3	59	39	76	0.653	0.508
21	P4 Doplnkový prostor A pravý	vertical, 90.3°	3 x 1	79	74	82	0.945	0.913
22	P4 Doplnkový prostor A levý	vertical, 100.0°	3 x 1	61	60	62	0.990	0.979
23	P4 Doplnkový prostor B pravý	vertical, -89.7°	3 x 1	43	37	47	0.861	0.792
24	P4 Doplnkový prostor B levý	vertical, -75.0°	3 x 1	47	42	49	0.909	0.857
25	P5 Základní prostor B	vertical, 97.4°	6 x 3	72	56	83	0.780	0.674
26	P5 Doplnkový prostor B pravý	vertical, 97.4°	3 x 1	50	44	55	0.871	0.795
27	P5 Doplnkový prostor B levý	vertical, 105.7°	3 x 1	43	40	46	0.916	0.861
28	P5 Základní prostor A	vertical, -82.6°	6 x 3	69	52	82	0.759	0.638
29	P5 Doplnkový prostor A pravý	vertical, -82.3°	3 x 1	47	38	54	0.820	0.713
30	P5 Doplnkový prostor A levý	vertical, -74.3°	3 x 1	36	30	41	0.840	0.733
31	P6 Základní prostor A	vertical, 1.0°	6 x 3	63	37	80	0.587	0.463
32	P6 Doplnkový prostor A levý	vertical, 11.0°	3 x 1	34	31	36	0.910	0.859
33	P6 Doplnkový prostor A pravý	vertical, 1.0°	3 x 1	60	56	63	0.947	0.901
34	P6 Základní prostor B	vertical, 181.0°	6 x 3	74	49	90	0.668	0.547
35	P6 Doplnkový prostor B pravý	vertical, 181.0°	3 x 1	64	61	66	0.952	0.916
36	P6 Doplnkový prostor B levý	vertical, 191.0°	3 x 1	51	49	53	0.953	0.930

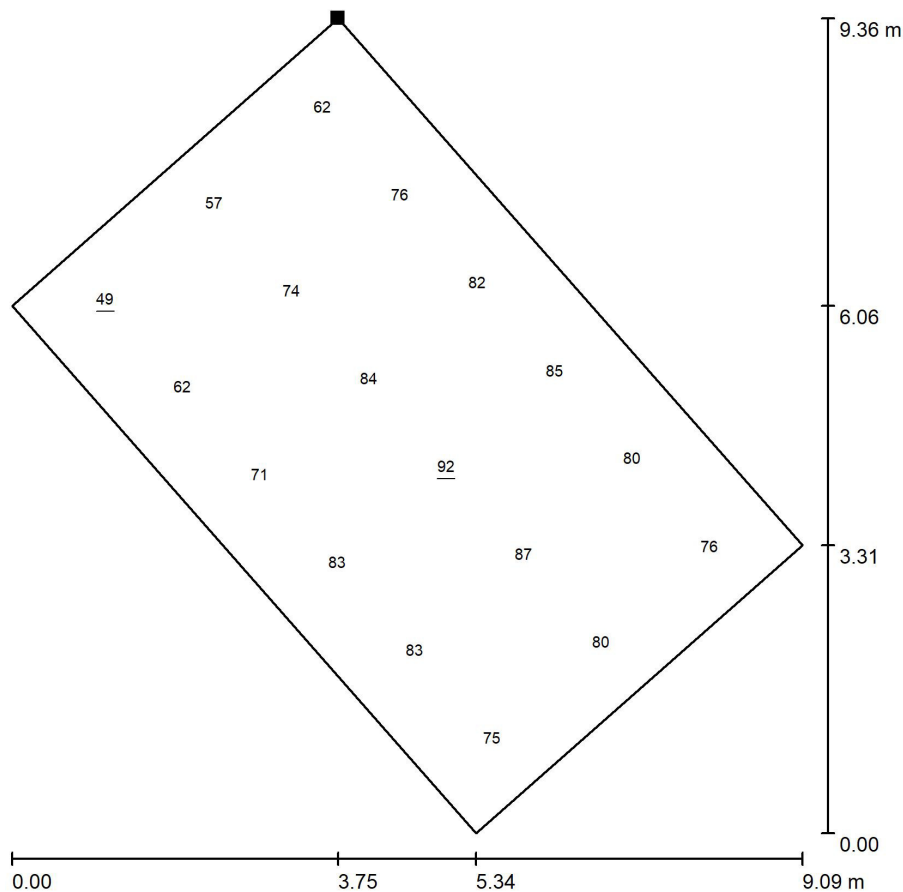
### Summary of Results

Type	Quantity	Average [lx]	Min [lx]	Max [lx]	u0	$E_{min} / E_{max}$
vertical	36	65	25	100	0.38	0.25

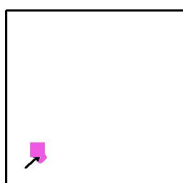
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### Masarykovo náměstí - přechody / P1 Základní prostor A / Value Chart (E, Vertical)



Position of surface in external scene:  
 Marked point:  
 (27.227 m, 30.011 m, 1.000 m)



Grid: 3 x 6 Points

$E_{av}$  [lx]  
 75

$E_{min}$  [lx]  
 49

$E_{max}$  [lx]  
 92

$u_0$   
 0.648

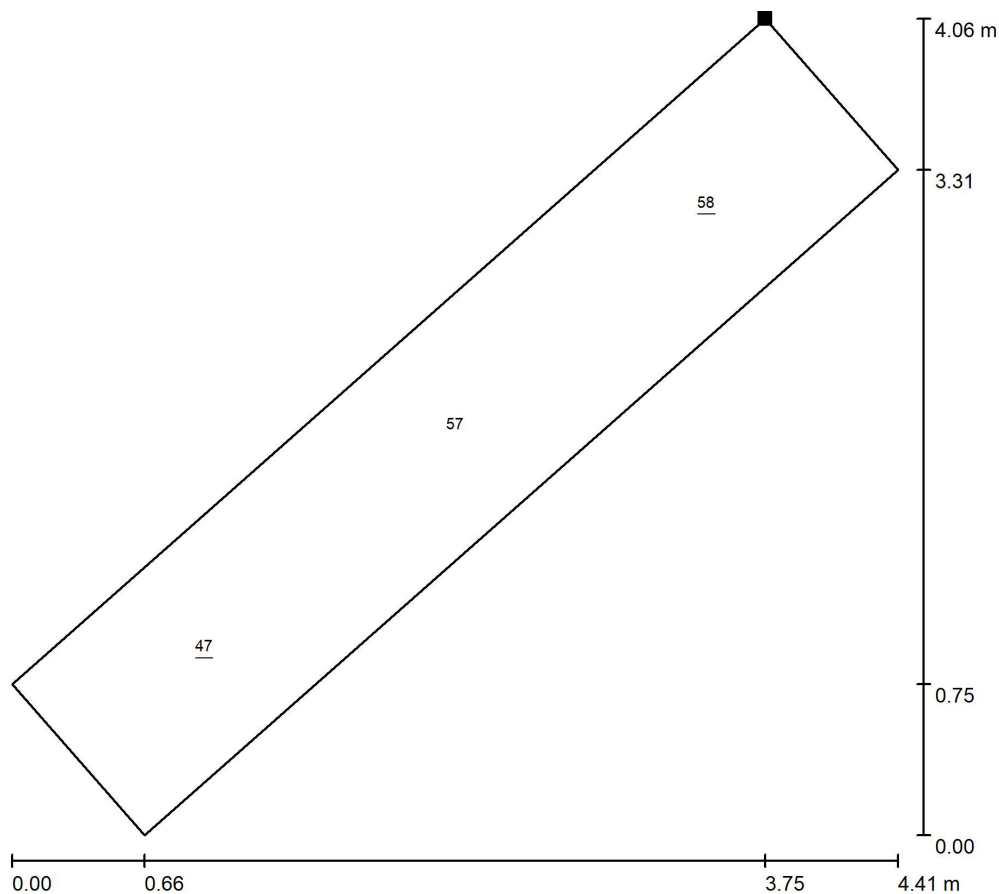
$E_{min} / E_{max}$   
 0.532

Rotation: -138.6°

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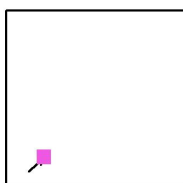
Operator Ing. Ladislav Tikovský  
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## Masarykovo náměstí - přechody / P1 Doplnkový prostor A / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 32

Position of surface in external scene:  
 Marked point:  
 (32.569 m, 23.948 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 54

$E_{min}$  [lx]  
 47

$E_{max}$  [lx]  
 58

$u_0$   
 0.868

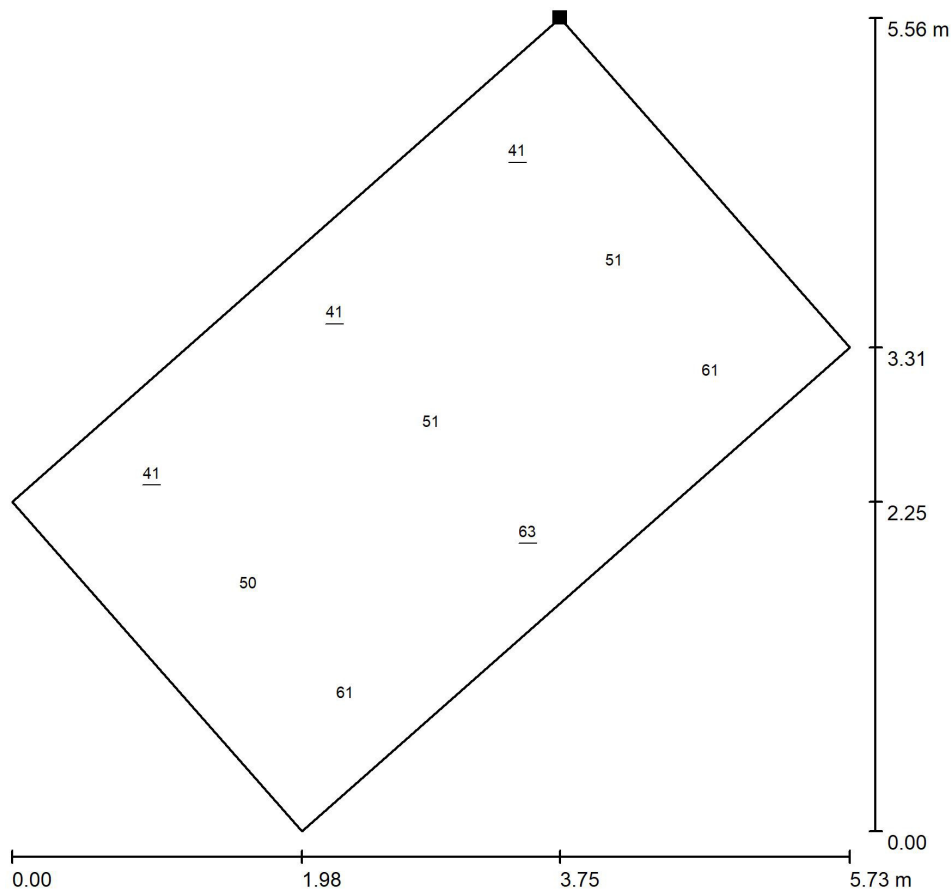
$E_{min} / E_{max}$   
 0.806

Rotation: -138.6°

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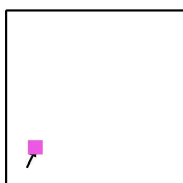
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### Masarykovo náměstí - přechody / P1 Prodloužený doplňkový prostor A / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 44

Position of surface in external scene:  
 Marked point:  
 (25.247 m, 32.256 m, 1.000 m)



Grid: 3 x 3 Points

$E_{av}$  [lx]  
 51

$E_{min}$  [lx]  
 41

$E_{max}$  [lx]  
 63

$u_0$   
 0.794

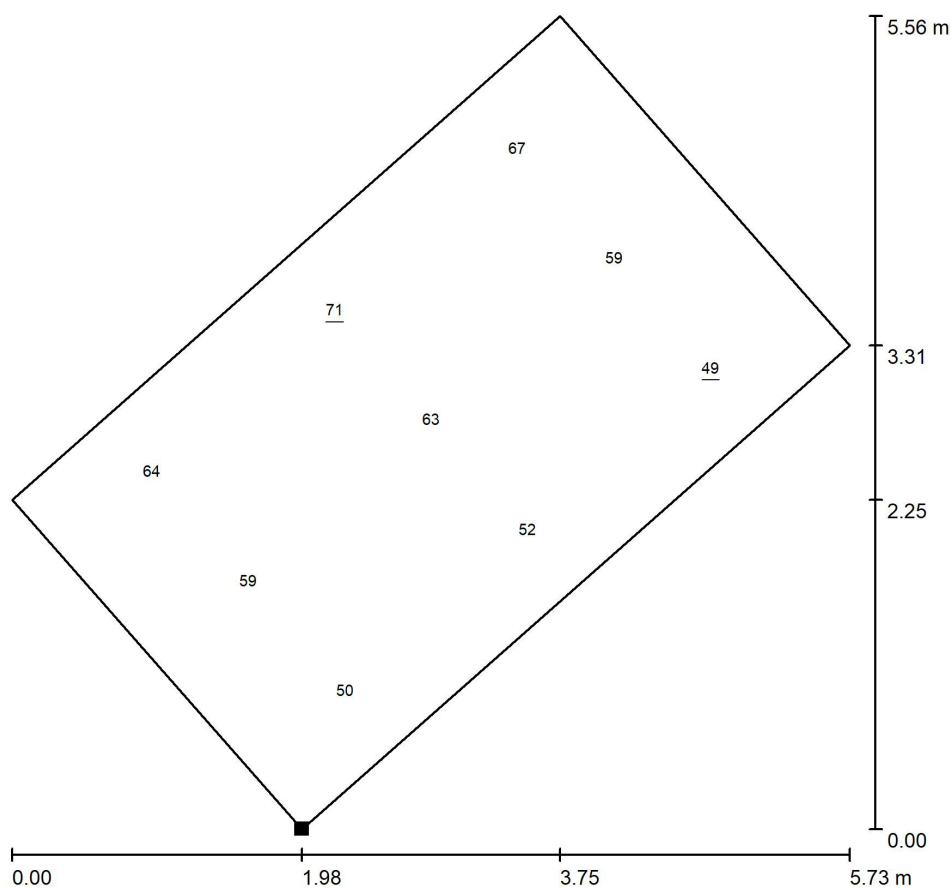
$E_{min} / E_{max}$   
 0.648

Rotation: -115.0°

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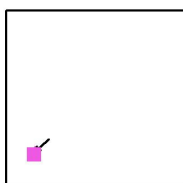
Operator Ing. Ladislav Tikovský  
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### Masarykovo náměstí - přechody / P1 Prodloužený doplňkový prostor B / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 44

Position of surface in external scene:  
 Marked point:  
 (24.033 m, 26.081 m, 1.000 m)



Grid: 3 x 3 Points

$E_{av}$  [lx]  
 59

$E_{min}$  [lx]  
 49

$E_{max}$  [lx]  
 71

$u_0$   
 0.822

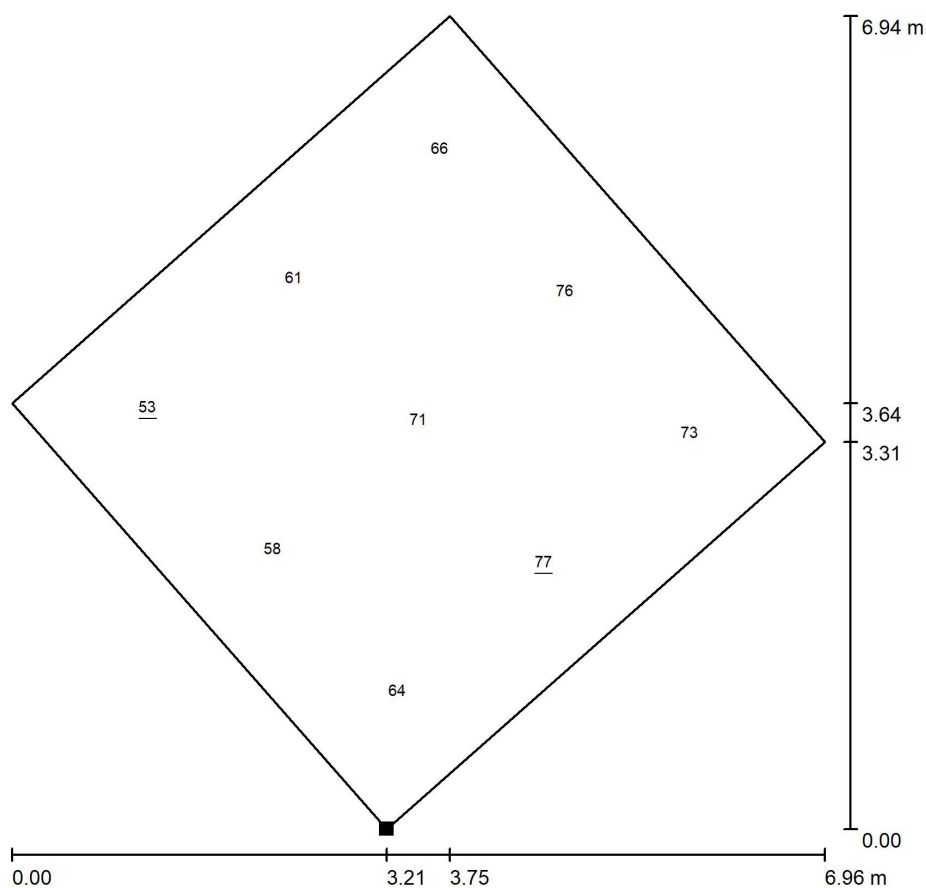
$E_{min} / E_{max}$   
 0.692

Rotation: 41.4°

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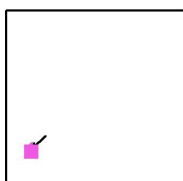
Operator Ing. Ladislav Tikovský  
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## Masarykovo náměstí - přechody / P1 Základní prostor B / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 55

Position of surface in external scene:  
 Marked point:  
 (22.036 m, 28.324 m, 1.000 m)



Grid: 3 x 3 Points

$E_{av}$  [lx]  
 66

$E_{min}$  [lx]  
 53

$E_{max}$  [lx]  
 77

$u_0$   
 0.792

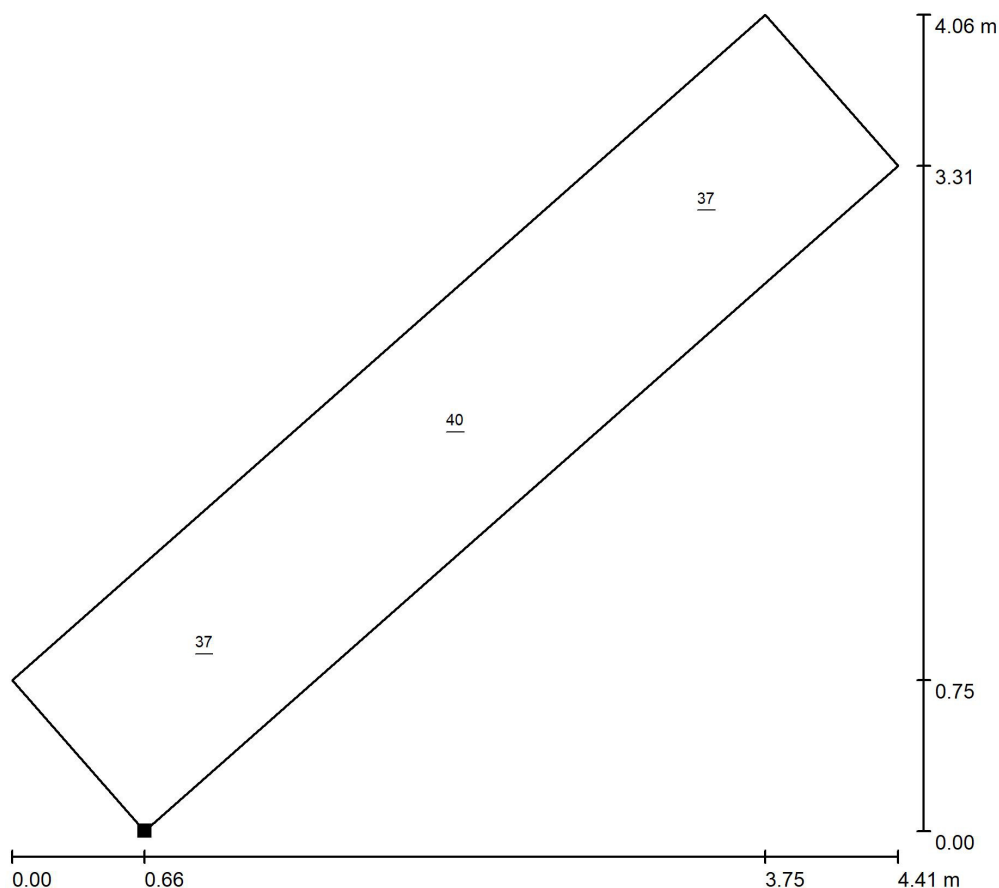
$E_{min} / E_{max}$   
 0.686

Rotation: 41.4°

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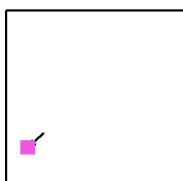
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## Masarykovo náměstí - přechody / P1 Doplnkový prostor B / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 32

Position of surface in external scene:  
 Marked point:  
 (18.831 m, 31.958 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 38

$E_{min}$  [lx]  
 37

$E_{max}$  [lx]  
 40

$u0$   
 0.969

$E_{min} / E_{max}$   
 0.918

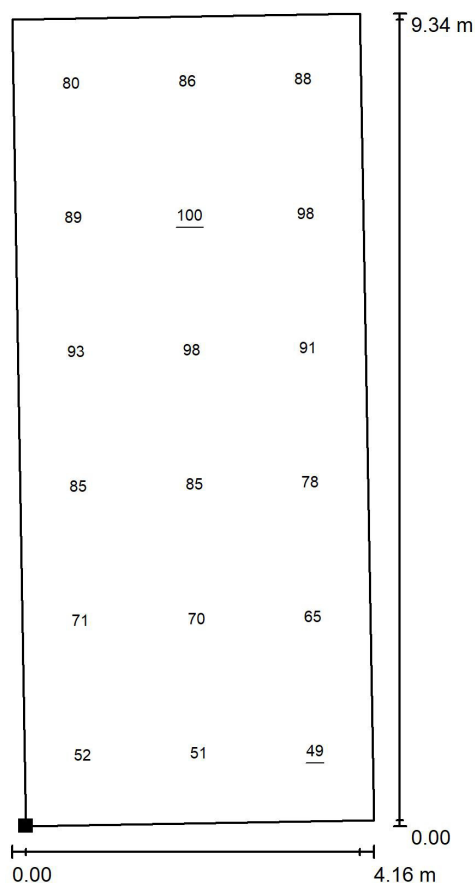
Rotation: 41.4°



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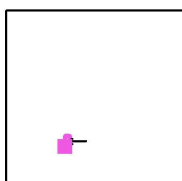
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## Masarykovo náměstí - přechody / P2 Základní prostor A / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 74

Position of surface in external scene:  
 Marked point:  
 (50.453 m, 32.794 m, 1.000 m)



Grid: 6 x 3 Points

$E_{av}$  [lx]  
 79

$E_{min}$  [lx]  
 49

$E_{max}$  [lx]  
 100

$u0$   
 0.611

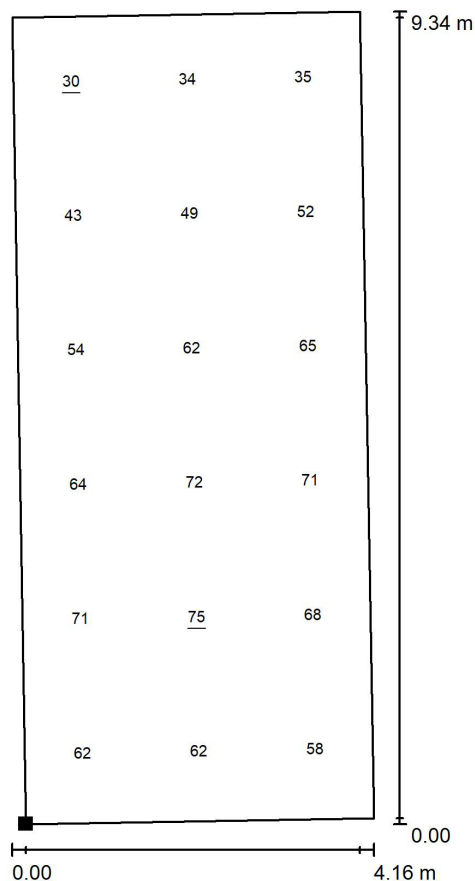
$E_{min} / E_{max}$   
 0.485

Rotation: 1.0°

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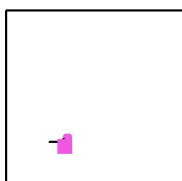
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## Masarykovo náměstí - přechody / P2 Základní prostor B / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 74

Position of surface in external scene:  
Marked point:  
(50.462 m, 32.793 m, 1.000 m)



Grid: 3 x 6 Points

$E_{av}$  [lx]  
57

$E_{min}$  [lx]  
30

$E_{max}$  [lx]  
75

$u0$   
0.528

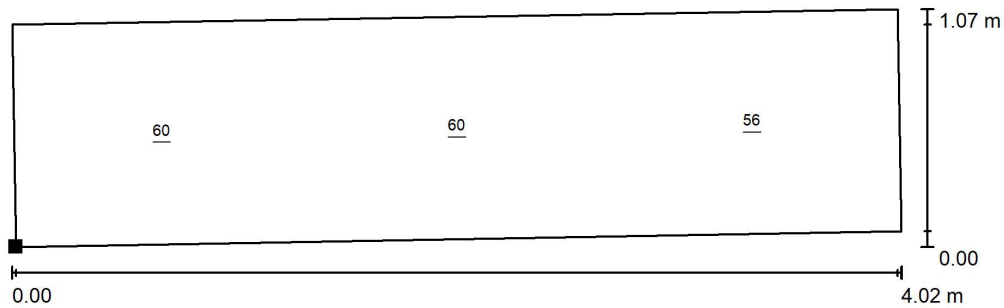
$E_{min} / E_{max}$   
0.400

Rotation: 181.0°

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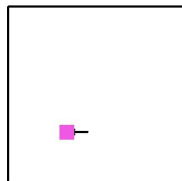
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## Masarykovo náměstí - přechody / P2 Doplnkový prostor A pravý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 29

Position of surface in external scene:  
 Marked point:  
 (50.295 m, 42.070 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 59

$E_{min}$  [lx]  
 56

$E_{max}$  [lx]  
 60

$u0$   
 0.959

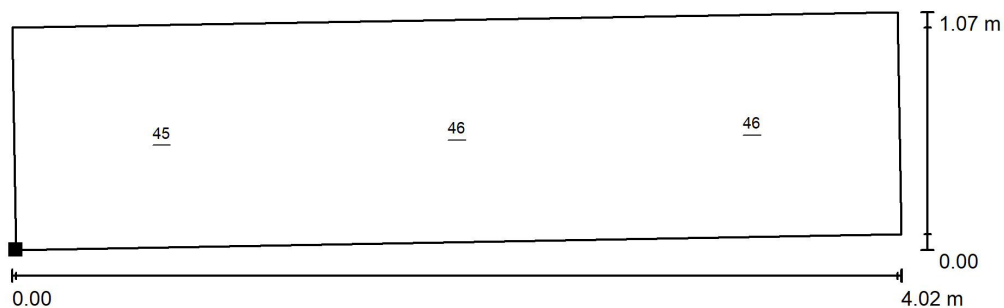
$E_{min} / E_{max}$   
 0.937

Rotation: 1.0°

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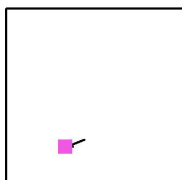
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## Masarykovo náměstí - přechody / P2 Doplnkový prostor A levý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 29

Position of surface in external scene:  
 Marked point:  
 (50.469 m, 31.801 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 46

$E_{min}$  [lx]  
 45

$E_{max}$  [lx]  
 46

$u_0$   
 0.980

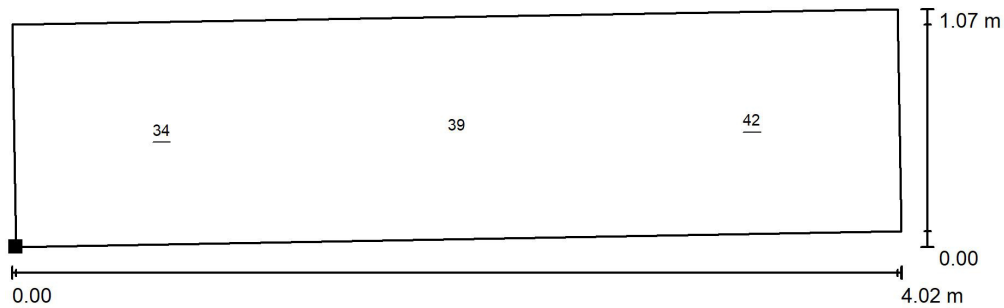
$E_{min} / E_{max}$   
 0.968

Rotation: 21.0°

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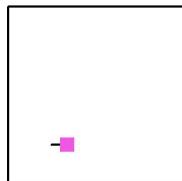
Operator Ing. Ladislav Tikovský  
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## Masarykovo náměstí - přechody / P2 Doplnkový prostor B pravý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 29

Position of surface in external scene:  
 Marked point:  
 (50.485 m, 31.785 m, 1.000 m)



Grid: 3 x 1 Points

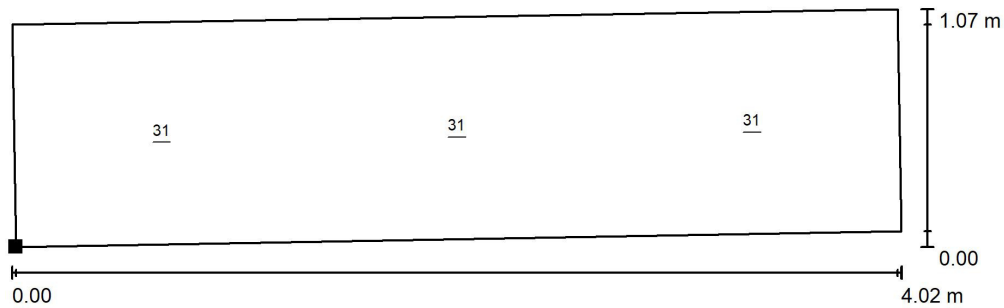
$E_{av}$ [lx]	$E_{min}$ [lx]	$E_{max}$ [lx]	$u0$	$E_{min} / E_{max}$
38	34	42	0.889	0.814

Rotation: 181.0°

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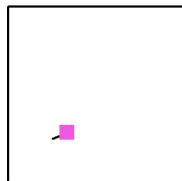
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### Masarykovo náměstí - přechody / P2 Doplnkový prostor B levý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 29

Position of surface in external scene:  
 Marked point:  
 (50.296 m, 42.070 m, 1.000 m)



Grid: 3 x 1 Points

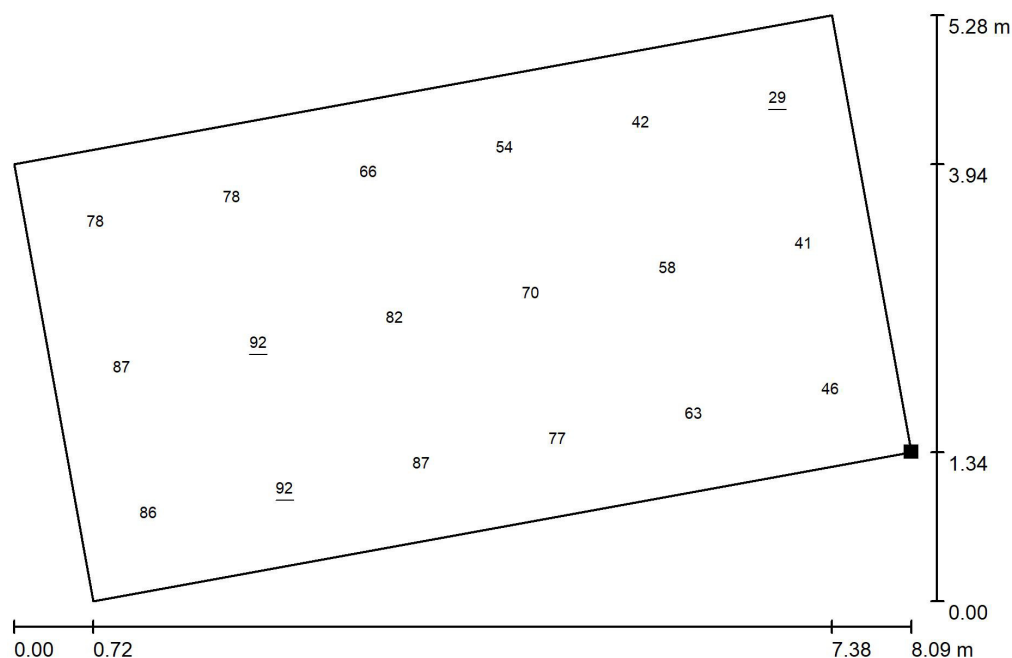
$E_{av}$ [lx]	$E_{min}$ [lx]	$E_{max}$ [lx]	$u0$	$E_{min} / E_{max}$
31	31	31	0.987	0.977

Rotation: 201.0°

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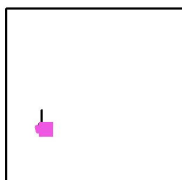
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### Masarykovo náměstí - přechody / P3 Základní prostor A / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 58

Position of surface in external scene:  
 Marked point:  
 (34.392 m, 46.218 m, 1.000 m)



Grid: 6 x 3 Points

$E_{av}$  [lx]  
 68

$E_{min}$  [lx]  
 29

$E_{max}$  [lx]  
 92

$u0$   
 0.427

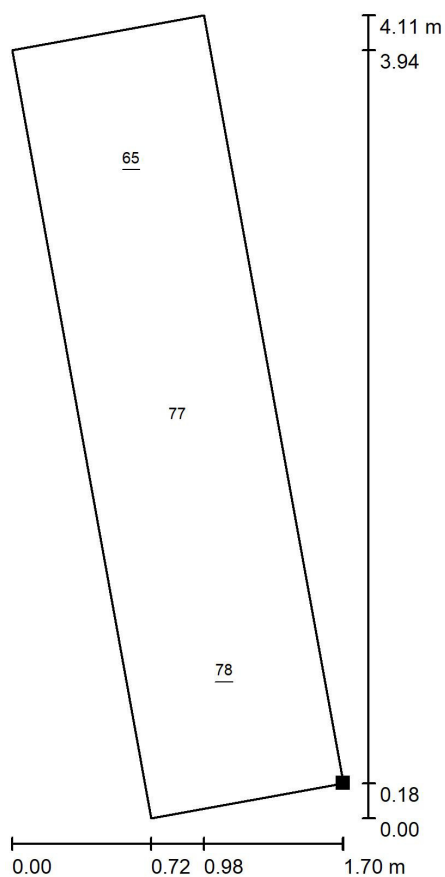
$E_{min} / E_{max}$   
 0.316

Rotation: 90.0°

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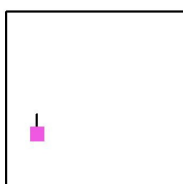
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## Masarykovo náměstí - přechody / P3 Doplnkový prostor A / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 33

Position of surface in external scene:  
 Marked point:  
 (27.019 m, 44.883 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 73

$E_{min}$  [lx]  
 65

$E_{max}$  [lx]  
 78

$u_0$   
 0.890

$E_{min} / E_{max}$   
 0.834

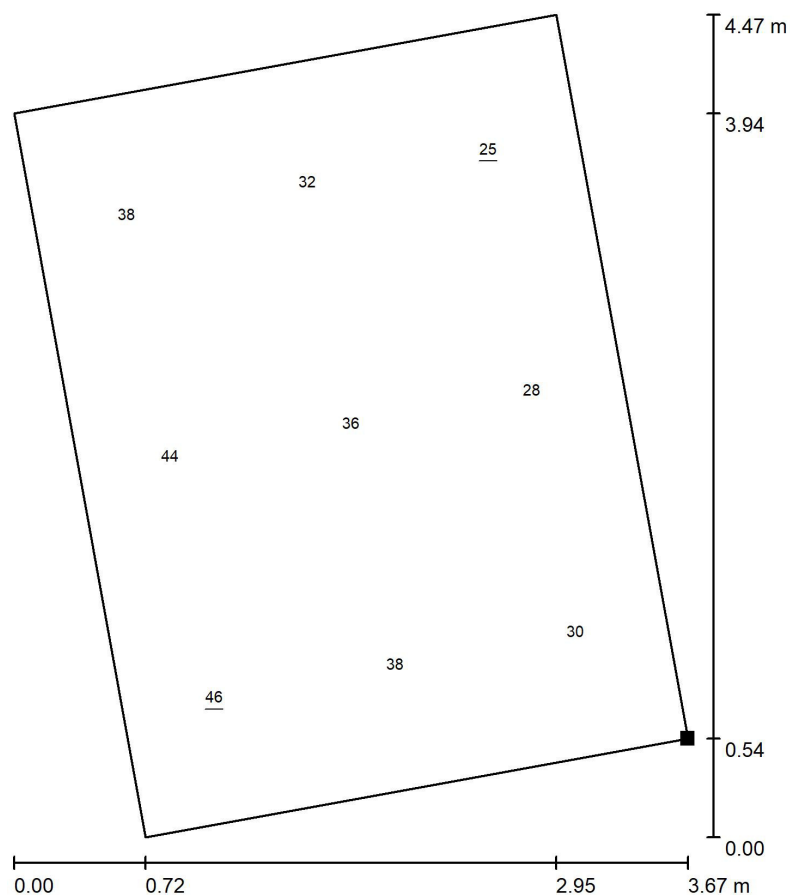
Rotation: 90.0°



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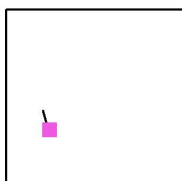
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### Masarykovo náměstí - přechody / P3 Prodloužený doplňkový prostor A / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 35

Position of surface in external scene:  
 Marked point:  
 (37.338 m, 46.759 m, 1.000 m)



Grid: 3 x 3 Points

$E_{av}$  [lx]  
 35

$E_{min}$  [lx]  
 25

$E_{max}$  [lx]  
 46

$u_0$   
 0.702

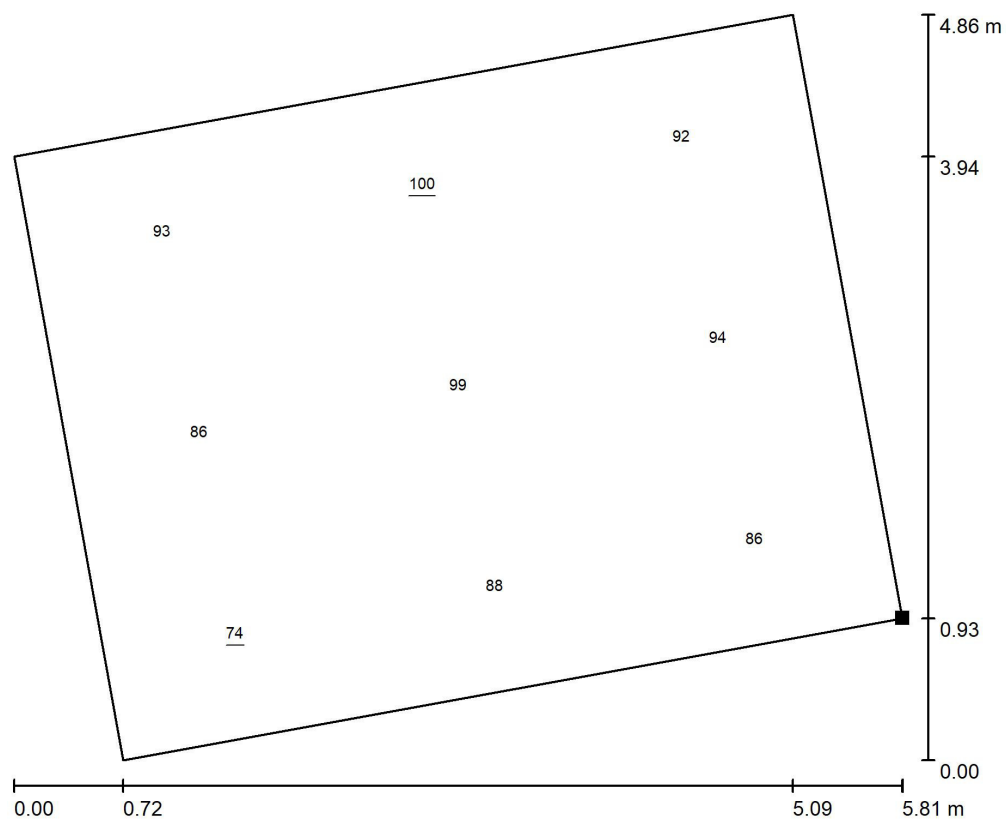
$E_{min} / E_{max}$   
 0.535

Rotation: 105.0°

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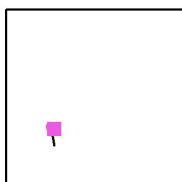
### Masarykovo náměstí - přechody / P3 Základní prostor B / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 42

Position of surface in external scene:

Marked point:  
 (41.348 m, 47.478 m, 1.000 m)



Grid: 3 x 3 Points

$E_{av}$  [lx]  
 90

$E_{min}$  [lx]  
 74

$E_{max}$  [lx]  
 100

$u_0$   
 0.822

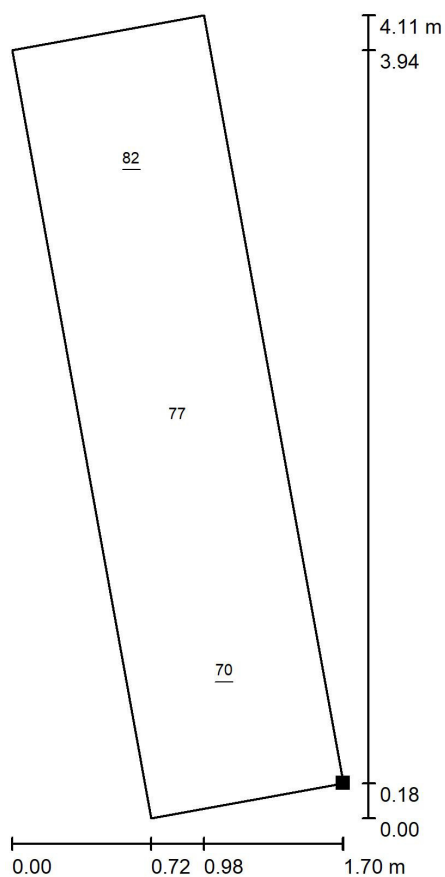
$E_{min} / E_{max}$   
 0.740

Rotation: -79.7°

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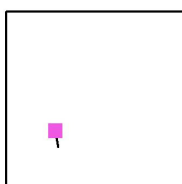
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 Fax  
 e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P3 Doplnkový prostor B / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 33

Position of surface in external scene:  
 Marked point:  
 (42.327 m, 47.655 m, 1.000 m)



Grid: 1 x 3 Points

$E_{av}$  [lx]  
 76

$E_{min}$  [lx]  
 70

$E_{max}$  [lx]  
 82

$u_0$   
 0.913

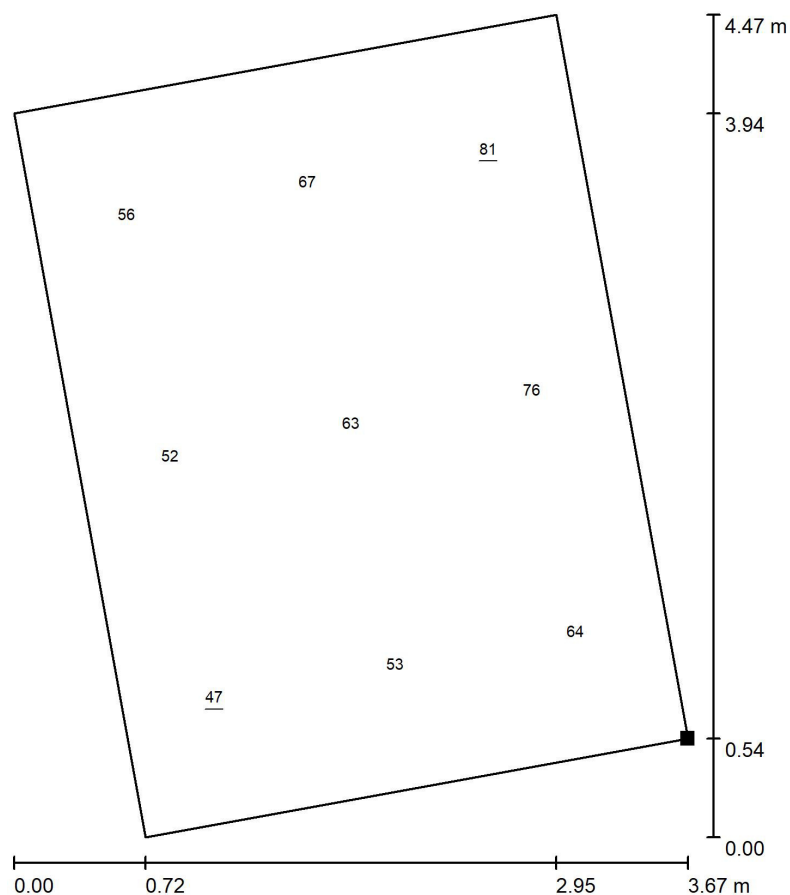
$E_{min} / E_{max}$   
 0.848

Rotation: -79.7°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

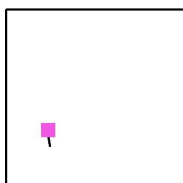
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

### Masarykovo náměstí - přechody / P3 Prodloužený doplňkový prostor B / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 35

Position of surface in external scene:  
 Marked point:  
 (36.278 m, 46.552 m, 1.000 m)



Grid: 3 x 3 Points

$E_{av}$  [lx]  
62

$E_{min}$  [lx]  
47

$E_{max}$  [lx]  
81

$u_0$   
0.754

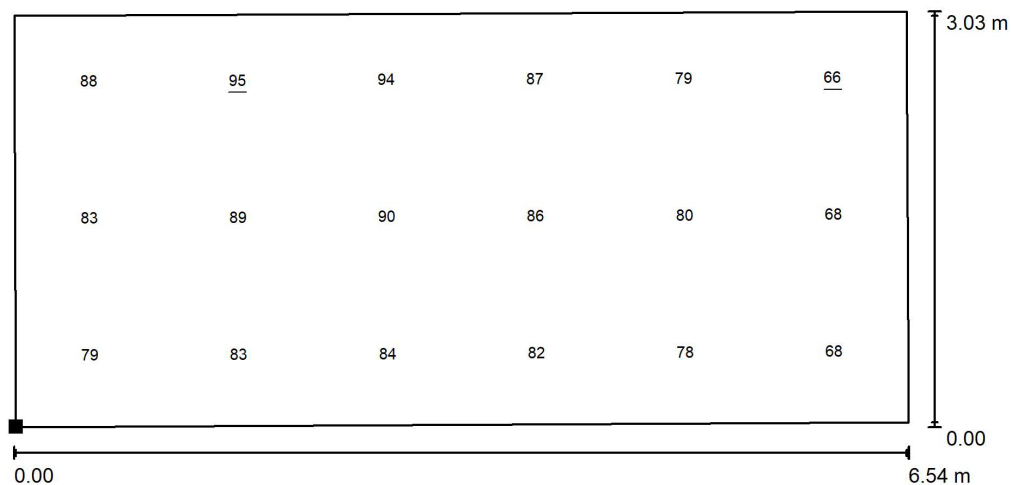
$E_{min} / E_{max}$   
0.579

Rotation: -79.7°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

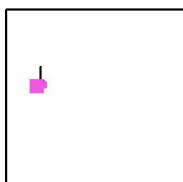
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

### Masarykovo náměstí - přechody / P4 Základní prostor A / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 47

Position of surface in external scene:  
 Marked point:  
 (26.523 m, 83.735 m, 1.000 m)



Grid: 3 x 6 Points

$E_{av}$  [lx]  
 82

$E_{min}$  [lx]  
 66

$E_{max}$  [lx]  
 95

$u_0$   
 0.803

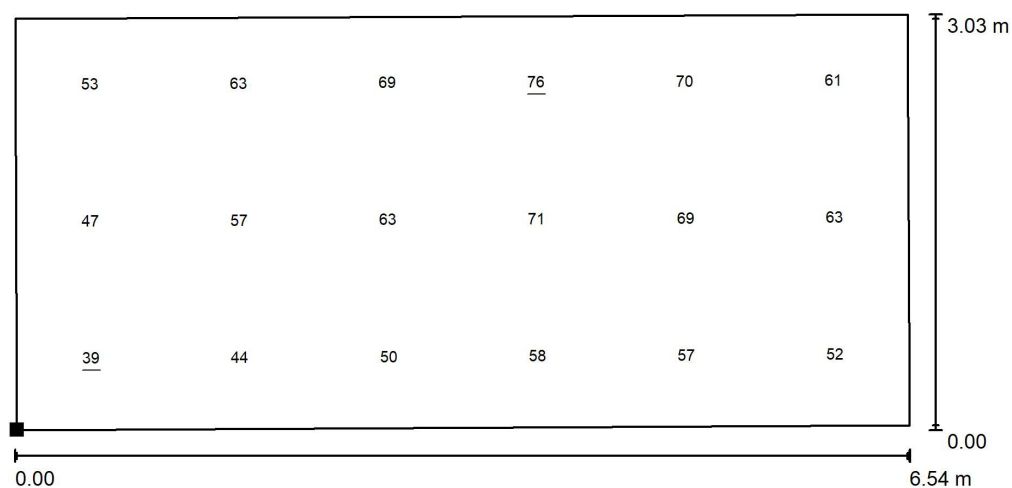
$E_{min} / E_{max}$   
 0.696

Rotation: 90.3°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

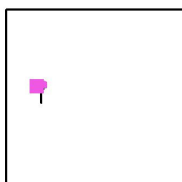
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

### Masarykovo náměstí - přechody / P4 Základní prostor B / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 47

Position of surface in external scene:  
 Marked point:  
 (26.523 m, 83.728 m, 1.000 m)



Grid: 6 x 3 Points

$E_{av}$  [lx]  
 59

$E_{min}$  [lx]  
 39

$E_{max}$  [lx]  
 76

$u_0$   
 0.653

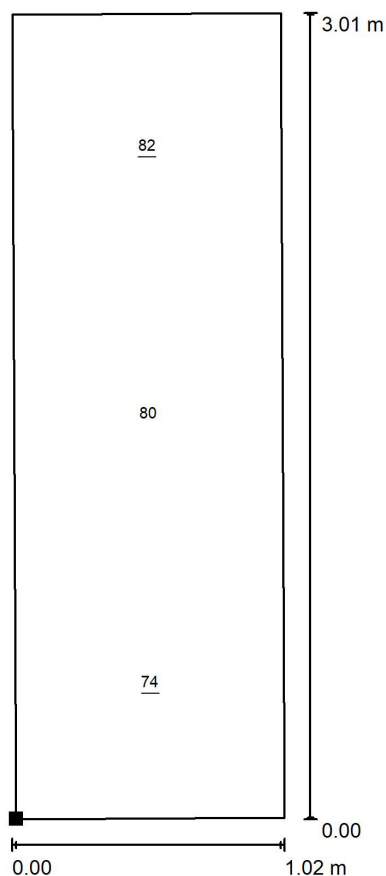
$E_{min} / E_{max}$   
 0.508

Rotation: -89.7°

AST  
atelier světelné techniky s.r.o.  
Braškovská 368/1  
161 00 Praha 6

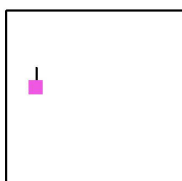
Operator Ing. Ladislav Tikovský  
Telephone +420 602385440  
Fax  
e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P4 Doplnkový prostor A pravý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 24

Position of surface in external scene:  
Marked point:  
(25.518 m, 83.724 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
79

$E_{min}$  [lx]  
74

$E_{max}$  [lx]  
82

$u_0$   
0.945

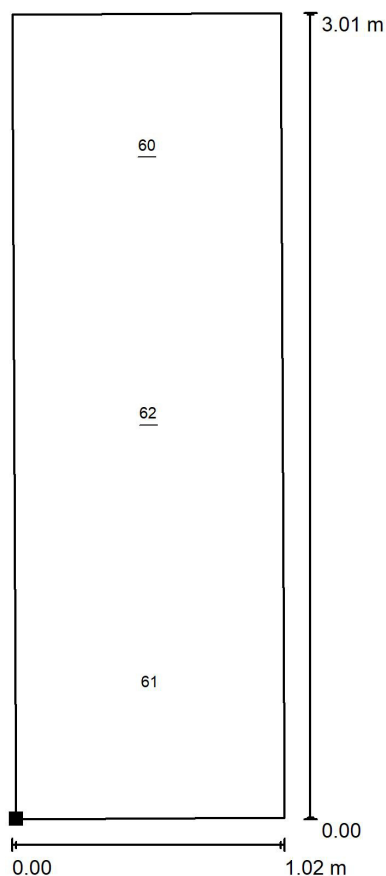
$E_{min} / E_{max}$   
0.913

Rotation: 90.3°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

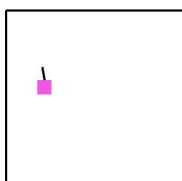
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P4 Doplnkový prostor A levý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 24

Position of surface in external scene:  
 Marked point:  
 (33.045 m, 83.767 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 61

$E_{min}$  [lx]  
 60

$E_{max}$  [lx]  
 62

$u_0$   
 0.990

$E_{min} / E_{max}$   
 0.979

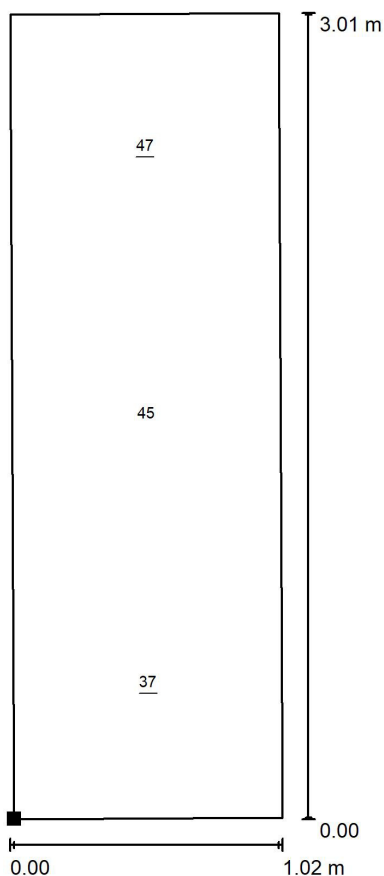
Rotation: 100.0°



AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

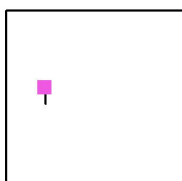
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

### Masarykovo náměstí - přechody / P4 Dopňkový prostor B pravý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 24

Position of surface in external scene:  
 Marked point:  
 (33.044 m, 83.761 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 43

$E_{min}$  [lx]  
 37

$E_{max}$  [lx]  
 47

$u_0$   
 0.861

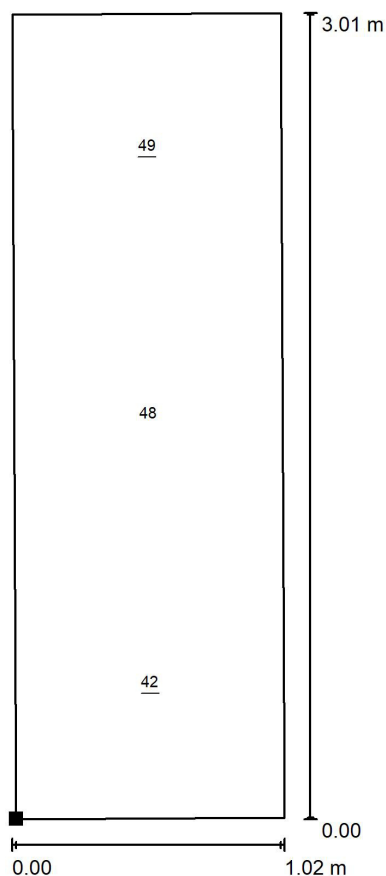
$E_{min} / E_{max}$   
 0.792

Rotation: -89.7°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

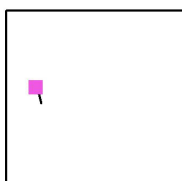
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P4 Doplnkový prostor B levý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 24

Position of surface in external scene:  
 Marked point:  
 (25.525 m, 83.722 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 47

$E_{min}$  [lx]  
 42

$E_{max}$  [lx]  
 49

$u_0$   
 0.909

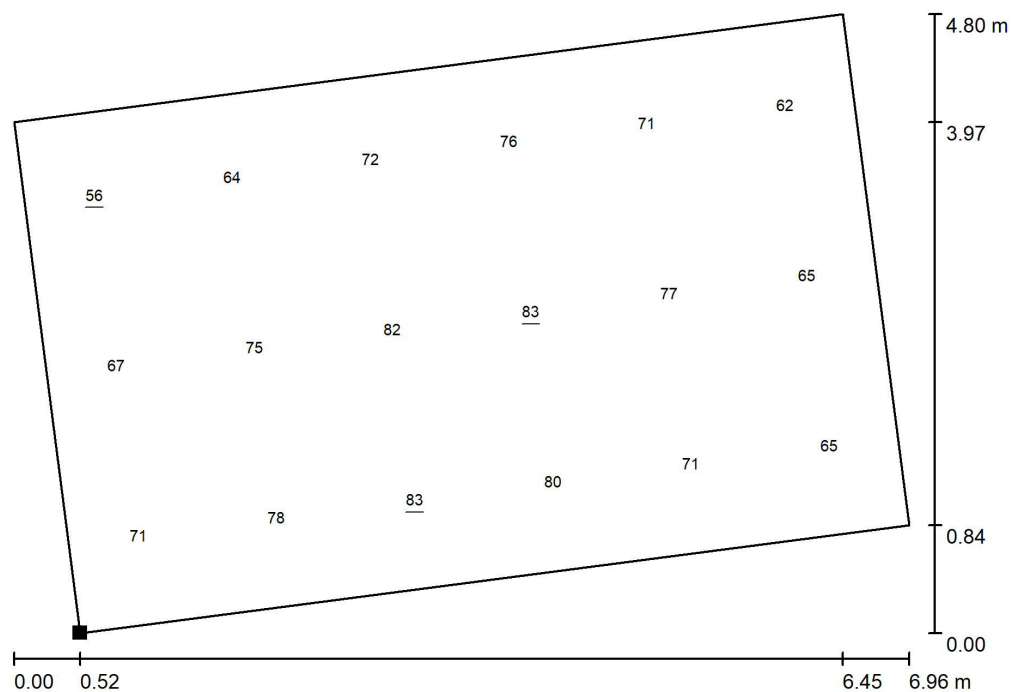
$E_{min} / E_{max}$   
 0.857

Rotation: -75.0°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

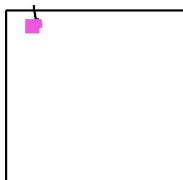
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P5 Základní prostor B / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 50

Position of surface in external scene:  
 Marked point:  
 (22.643 m, 135.170 m, 1.000 m)



Grid: 6 x 3 Points

$E_{av}$  [lx]  
 72

$E_{min}$  [lx]  
 56

$E_{max}$  [lx]  
 83

$u_0$   
 0.780

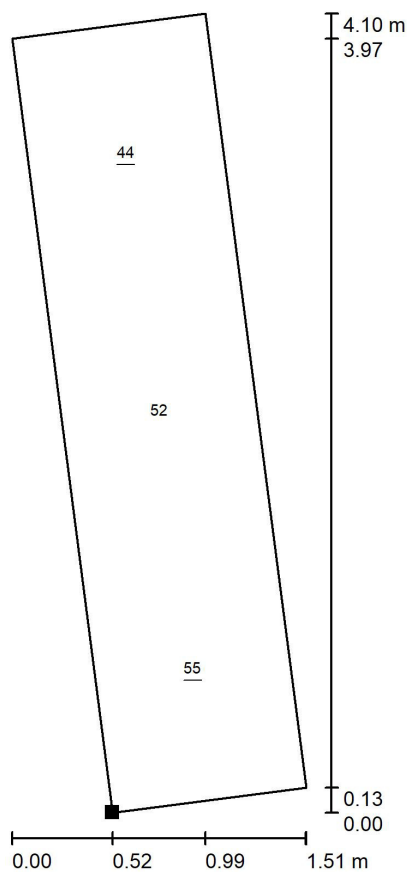
$E_{min} / E_{max}$   
 0.674

Rotation: 97.4°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

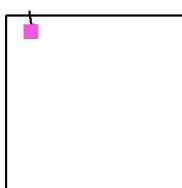
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P5 Doplnkový prostor B pravý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 33

Position of surface in external scene:  
 Marked point:  
 (21.642 m, 135.041 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 50

$E_{min}$  [lx]  
 44

$E_{max}$  [lx]  
 55

$u_0$   
 0.871

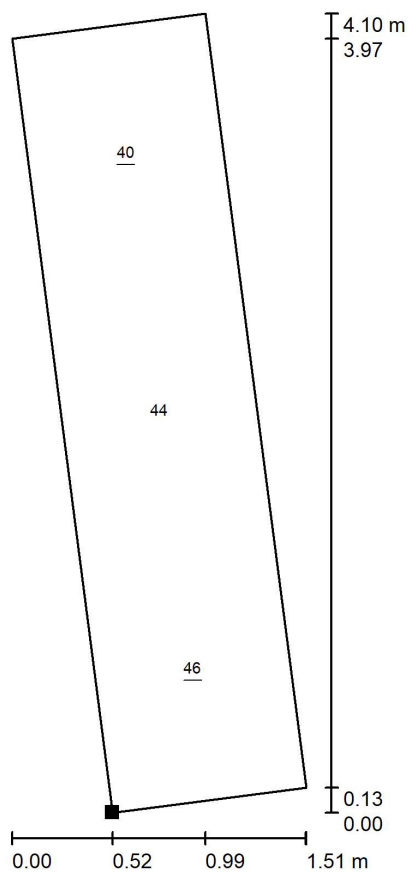
$E_{min} / E_{max}$   
 0.795

Rotation: 97.4°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

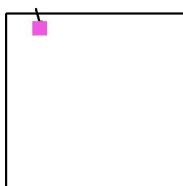
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P5 Doplnkový prostor B levý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 33

Position of surface in external scene:  
 Marked point:  
 (29.100 m, 136.003 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
43

$E_{min}$  [lx]  
40

$E_{max}$  [lx]  
46

$u_0$   
0.916

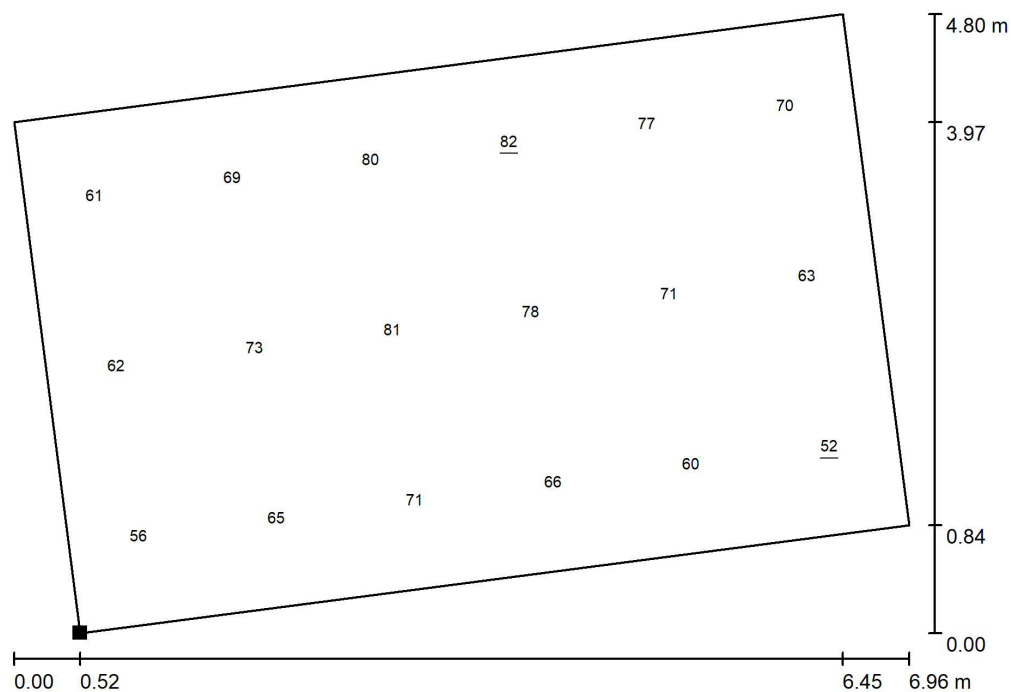
$E_{min} / E_{max}$   
0.861

Rotation: 105.7°

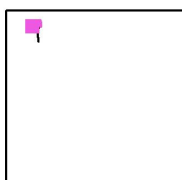
AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P5 Základní prostor A / Value Chart (E, Vertical)



Position of surface in external scene:  
 Marked point:  
 (22.647 m, 135.170 m, 1.000 m)



Grid: 6 x 3 Points

$E_{av}$  [lx]  
 69

$E_{min}$  [lx]  
 52

$E_{max}$  [lx]  
 82

$u0$   
 0.759

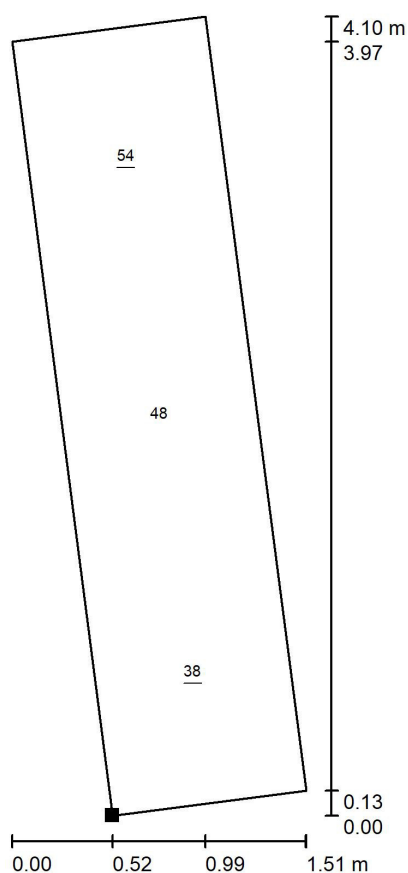
$E_{min} / E_{max}$   
 0.638

Rotation: -82.6°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

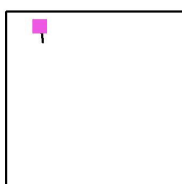
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P5 Doplnkový prostor A pravý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 33

Position of surface in external scene:  
 Marked point:  
 (29.093 m, 135.990 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
47

$E_{min}$  [lx]  
38

$E_{max}$  [lx]  
54

$u_0$   
0.820

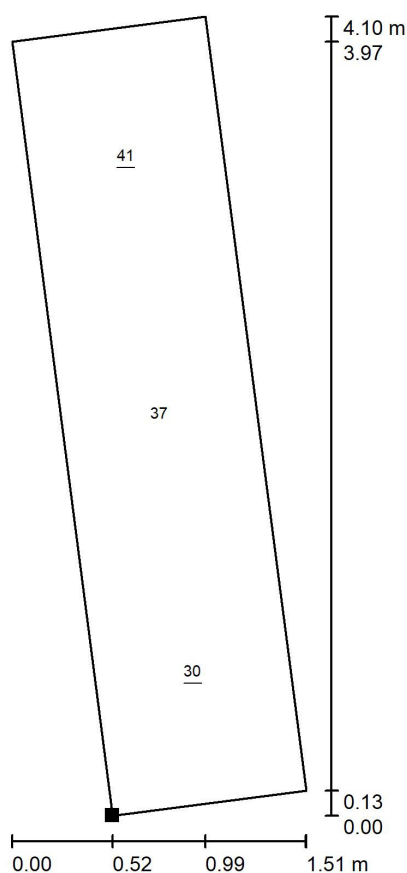
$E_{min} / E_{max}$   
0.713

Rotation: -82.3°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

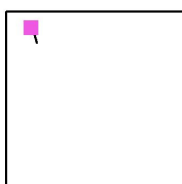
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P5 Doplnkový prostor A levý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 33

Position of surface in external scene:  
 Marked point:  
 (21.653 m, 135.044 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 36

$E_{min}$  [lx]  
 30

$E_{max}$  [lx]  
 41

$u_0$   
 0.840

$E_{min} / E_{max}$   
 0.733

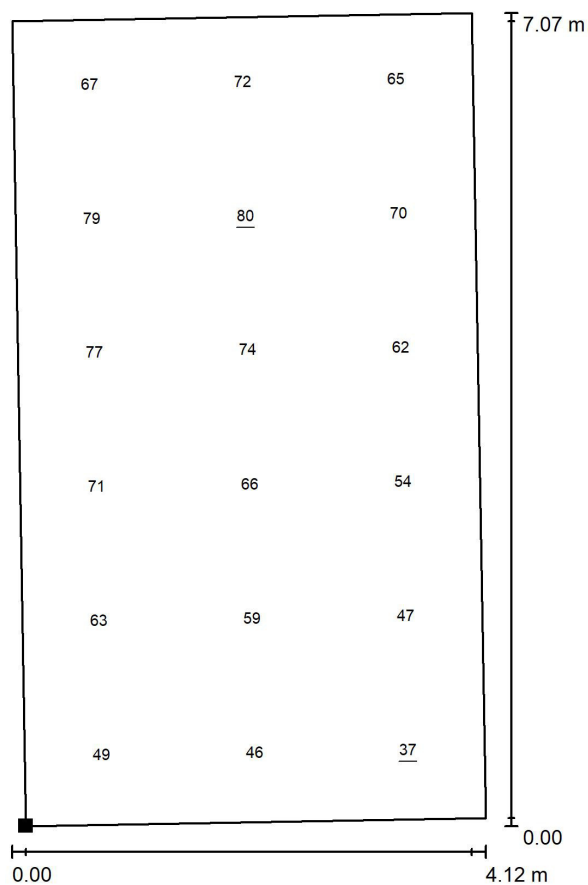
Rotation: -74.3°



AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

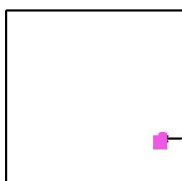
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

## Masarykovo náměstí - přechody / P6 Základní prostor A / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 56

Position of surface in external scene:  
 Marked point:  
 (131.470 m, 36.289 m, 1.000 m)



Grid: 6 x 3 Points

$E_{av}$  [lx]  
 63

$E_{min}$  [lx]  
 37

$E_{max}$  [lx]  
 80

$u_0$   
 0.587

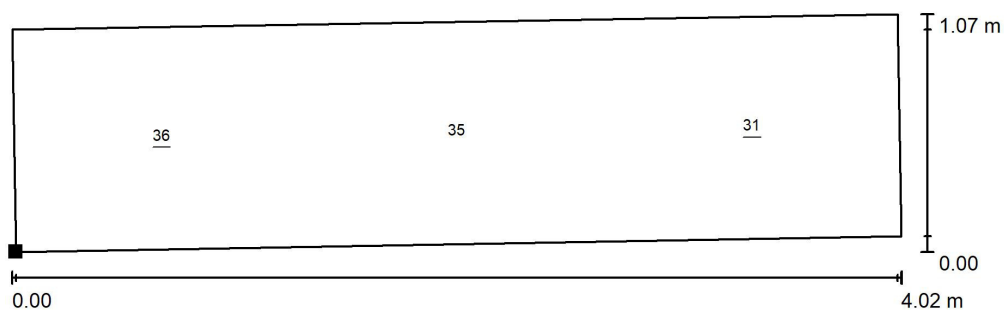
$E_{min} / E_{max}$   
 0.463

Rotation: 1.0°

AST  
atelier světelné techniky s.r.o.  
Braškovská 368/1  
161 00 Praha 6

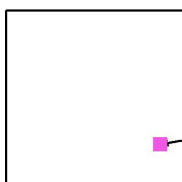
Operator Ing. Ladislav Tikovský  
Telephone +420 602385440  
Fax  
e-Mail tikovsky@astatelier.cz

### Masarykovo náměstí - přechody / P6 Doplnkový prostor A levý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 29

Position of surface in external scene:  
Marked point:  
(131.487 m, 35.286 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
34

$E_{min}$  [lx]  
31

$E_{max}$  [lx]  
36

$u_0$   
0.910

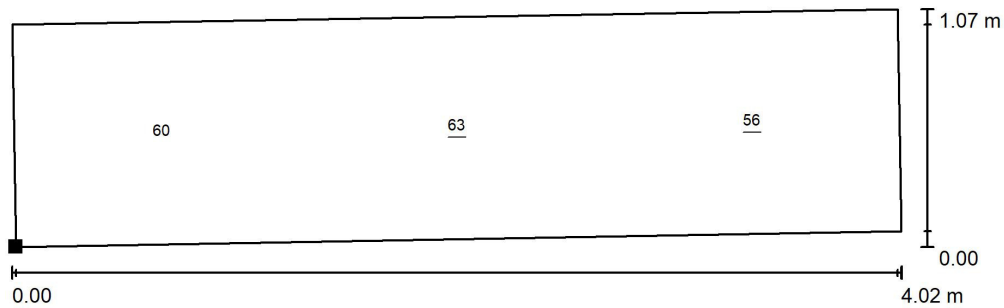
$E_{min} / E_{max}$   
0.859

Rotation: 11.0°

AST  
atelier světelné techniky s.r.o.  
Braškovská 368/1  
161 00 Praha 6

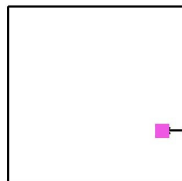
Operator Ing. Ladislav Tikovský  
Telephone +420 602385440  
Fax  
e-Mail tikovsky@astatelier.cz

### Masarykovo náměstí - přechody / P6 Doplnkový prostor A pravý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 29

Position of surface in external scene:  
Marked point:  
(131.347 m, 43.286 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
60

$E_{min}$  [lx]  
56

$E_{max}$  [lx]  
63

$u_0$   
0.947

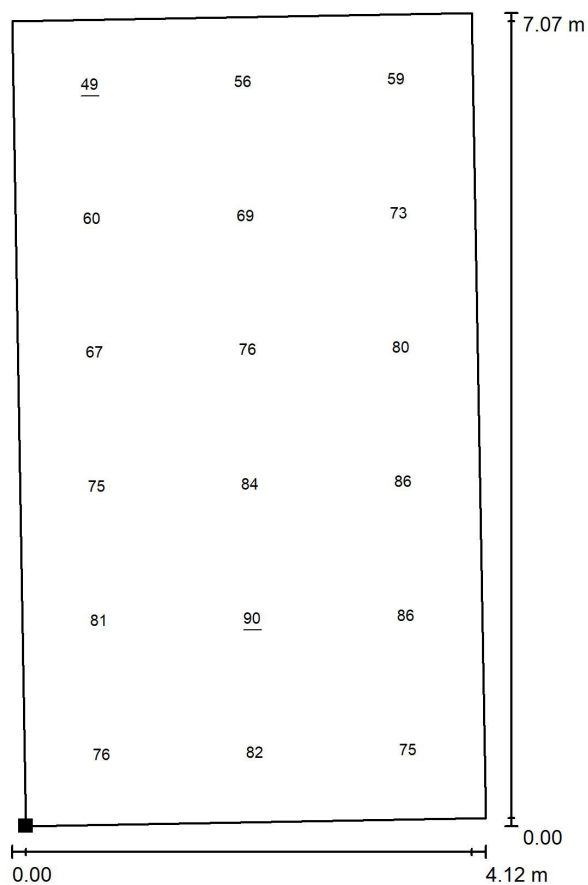
$E_{min} / E_{max}$   
0.901

Rotation: 1.0°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

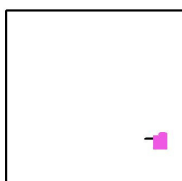
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

### Masarykovo náměstí - přechody / P6 Základní prostor B / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 56

Position of surface in external scene:  
 Marked point:  
 (131.469 m, 36.289 m, 1.000 m)



Grid: 6 x 3 Points

$E_{av}$  [lx]  
 74

$E_{min}$  [lx]  
 49

$E_{max}$  [lx]  
 90

$u_0$   
 0.668

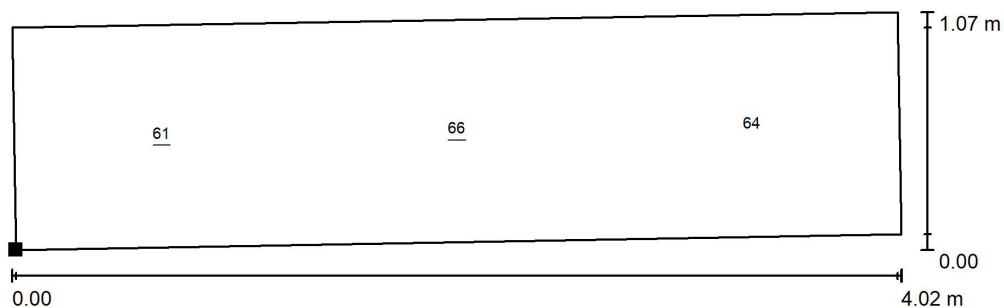
$E_{min} / E_{max}$   
 0.547

Rotation: 181.0°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

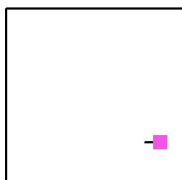
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

### Masarykovo náměstí - přechody / P6 Doplnkový prostor B pravý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 29

Position of surface in external scene:  
 Marked point:  
 (131.487 m, 35.286 m, 1.000 m)



Grid: 3 x 1 Points

$E_{av}$  [lx]  
 64

$E_{min}$  [lx]  
 61

$E_{max}$  [lx]  
 66

$u0$   
 0.952

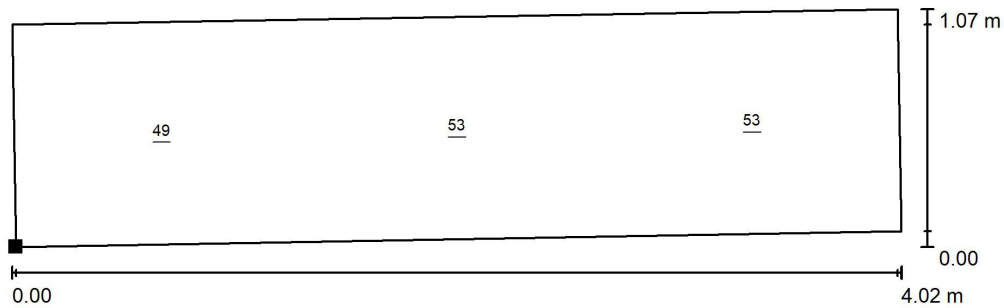
$E_{min} / E_{max}$   
 0.916

Rotation: 181.0°

AST  
 atelier světelné techniky s.r.o.  
 Braškovská 368/1  
 161 00 Praha 6

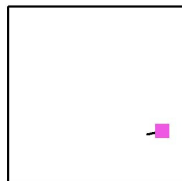
Operator Ing. Ladislav Tikovský  
 Telephone +420 602385440  
 Fax  
 e-Mail tikovsky@astatelier.cz

### Masarykovo náměstí - přechody / P6 Doplnkový prostor B levý / Value Chart (E, Vertical)



Values in Lux, Scale 1 : 29

Position of surface in external scene:  
 Marked point:  
 (131.347 m, 43.286 m, 1.000 m)



Grid: 3 x 1 Points

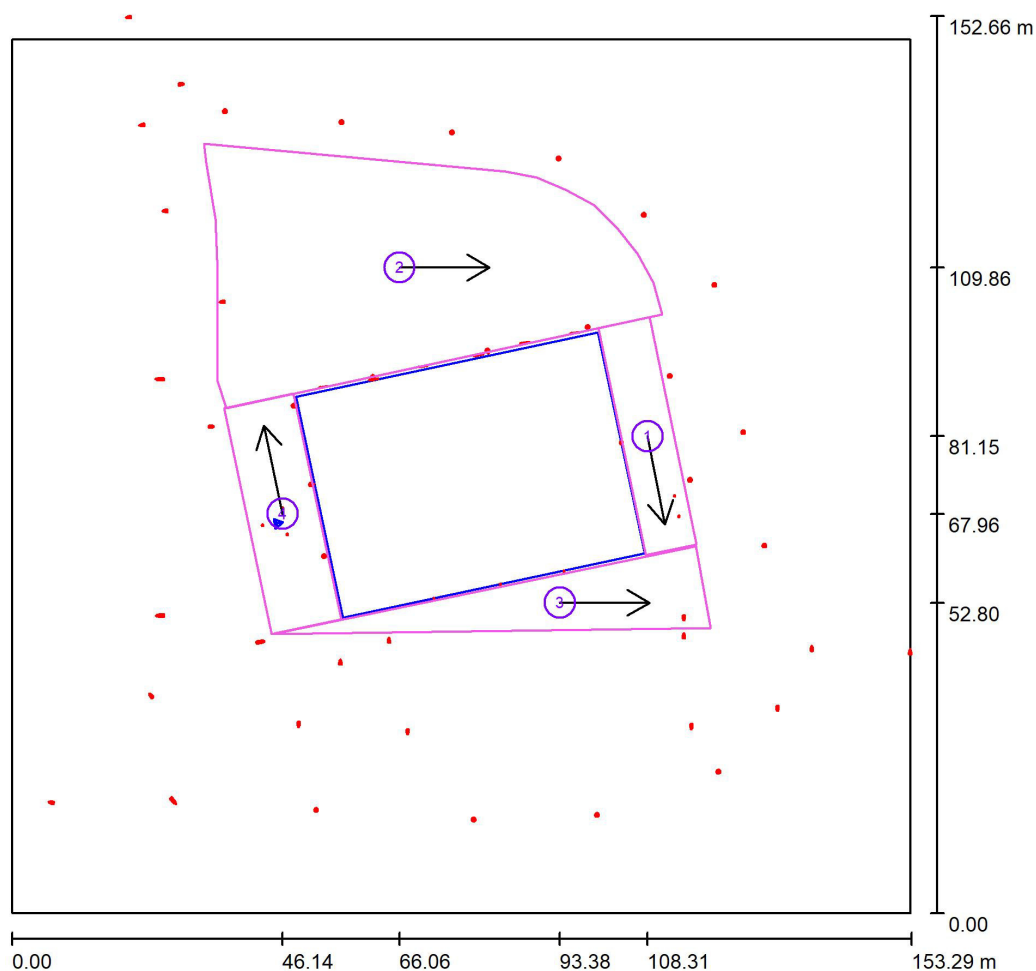
$E_{av}$ [lx]	$E_{min}$ [lx]	$E_{max}$ [lx]	$u0$	$E_{min} / E_{max}$
51	49	53	0.953	0.930

Rotation: 191.0°

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### Masarykovo náměstí - plochy / Street-valuation fields (list of coordinates)



Scale 1 : 1096

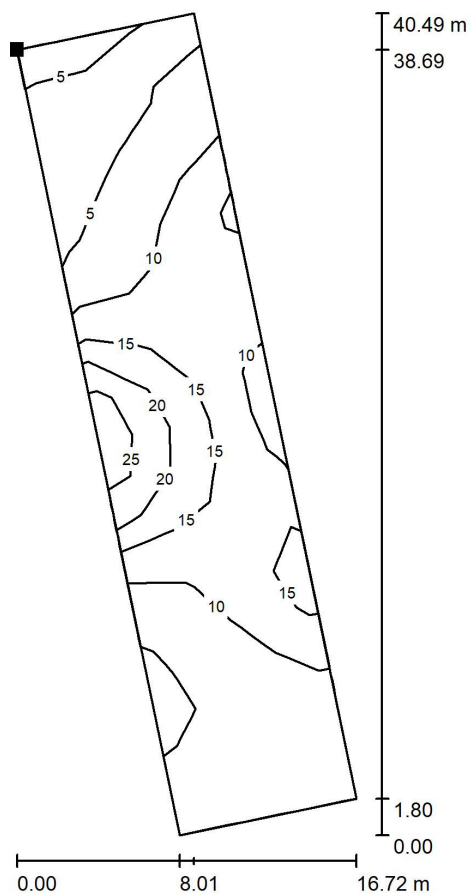
#### Pseudo-Calculation Field List

No.	Designation	Position [m]			Size [m]		Viewing direction [°]	Grid
		X	Y	Z	L	W		
1	Street-valuation field před radnicí	108.315	81.154	0.000	39.506	8.892	-79.0	20 x 3
2	Street-valuation field náměstí	66.061	109.862	0.000	78.049	45.025	0.0	25 x 15
3	Street-valuation field jižní strana	93.383	52.802	0.000	74.645	14.947	0.0	30 x 8
4	Street-valuation field západní strana	46.138	67.956	0.000	39.261	12.140	102.0	20 x 6

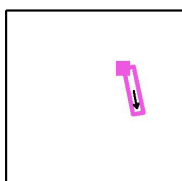
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### Masarykovo náměstí - plochy / Street-valuation field před radnici / Isolines (E)



Position of surface in external scene:  
 Marked point:  
 (99.956 m, 99.595 m, 0.000 m)



Values in Lux, Scale 1 : 317

Grid: 20 x 3 Points

$E_{av}$  [lx]  
 10

$E_{min}$  [lx]  
 2.25

$E_{max}$  [lx]  
 27

$u_0$   
 0.219

$E_{min} / E_{max}$   
 0.085

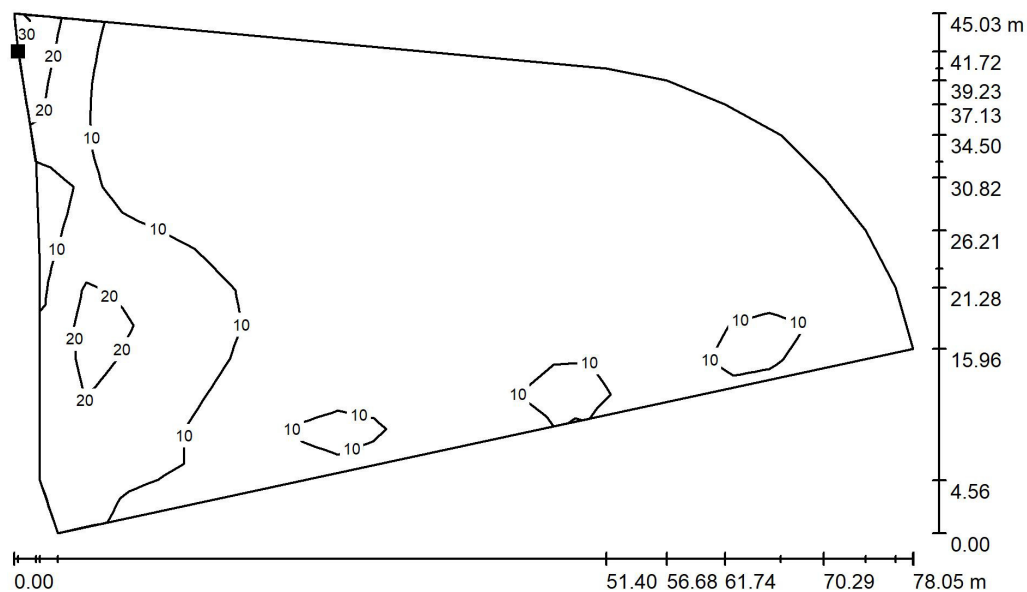
Rotation: -79.0°



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### Masarykovo náměstí - plochy / Street-valuation field náměstí / Isolines (E)

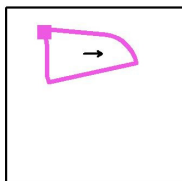


Values in Lux, Scale 1 : 558

Position of surface in external scene:

Marked point:

(33.129 m, 127.662 m, 0.000 m)



Grid: 25 x 15 Points

$E_{av}$  [lx]  
7.92

$E_{min}$  [lx]  
2.23

$E_{max}$  [lx]  
29

$u_0$   
0.281

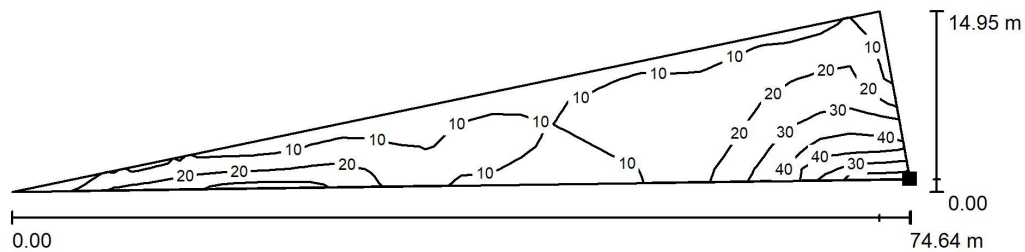
$E_{min} / E_{max}$   
0.078

Rotation: 0.0°

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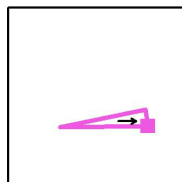
Operator Ing. Ladislav Tikovský  
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### Masarykovo náměstí - plochy / Street-valuation field jižní strana / Isolines (E)



Values in Lux, Scale 1 : 534

Position of surface in external scene:  
 Marked point:  
 (119.108 m, 48.516 m, 0.000 m)



Grid: 30 x 8 Points

$E_{av}$  [lx]  
 17

$E_{min}$  [lx]  
 5.66

$E_{max}$  [lx]  
 52

$u0$   
 0.325

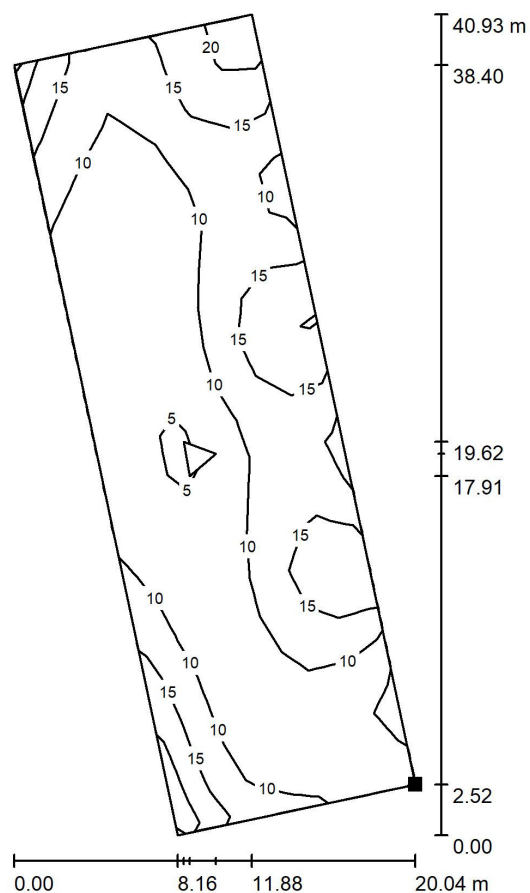
$E_{min} / E_{max}$   
 0.109

Rotation: 0.0°

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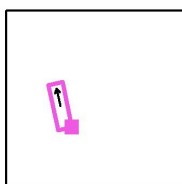
Operator Ing. Ladislav Tikovský  
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### Masarykovo náměstí - plochy / Street-valuation field západní strana / Isolines (E)



Values in Lux, Scale 1 : 321

Position of surface in external scene:  
 Marked point:  
 (56.157 m, 50.017 m, 0.000 m)



Grid: 20 x 6 Points

$E_{av}$  [lx]  
 11

$E_{min}$  [lx]  
 4.20

$E_{max}$  [lx]  
 21

$u_0$   
 0.387

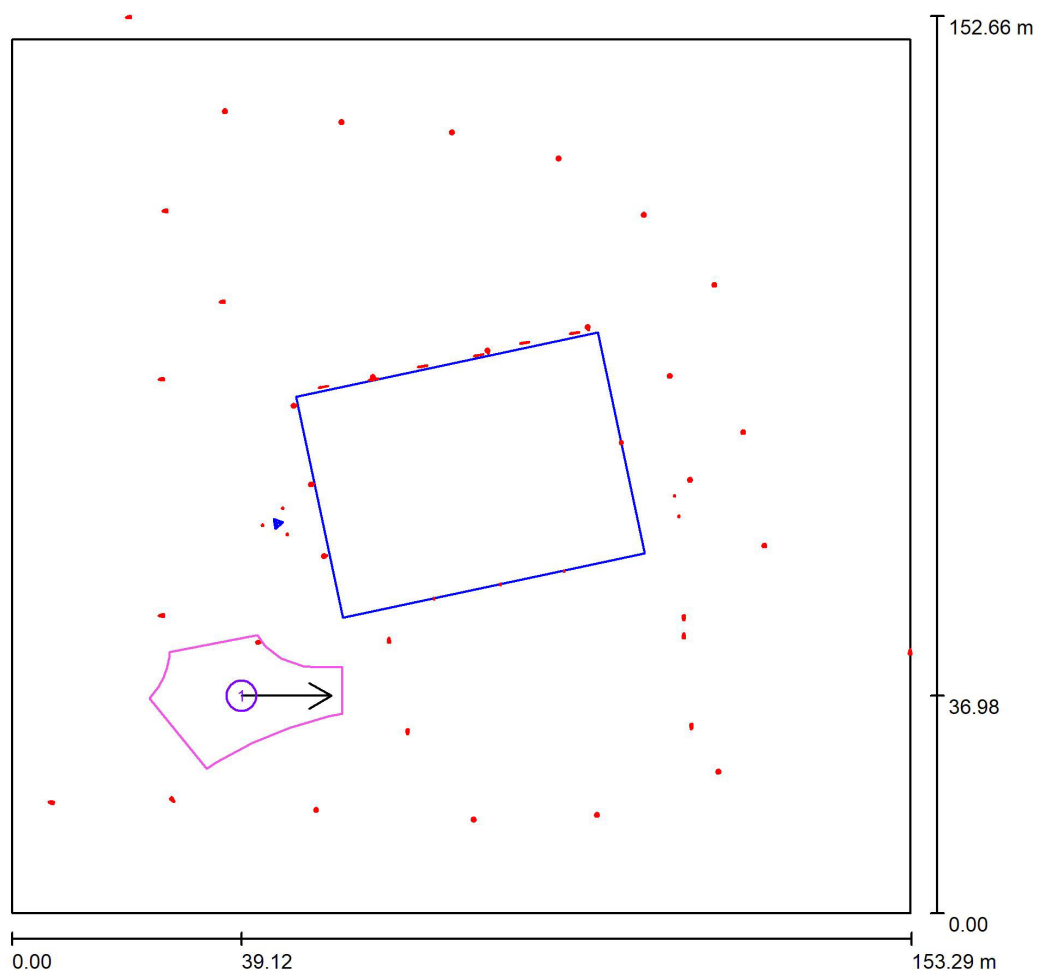
$E_{min} / E_{max}$   
 0.200

Rotation: 102.0°

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### Masarykovo náměstí - křižovatka / Street-valuation fields (list of coordinates)



Scale 1 : 1096

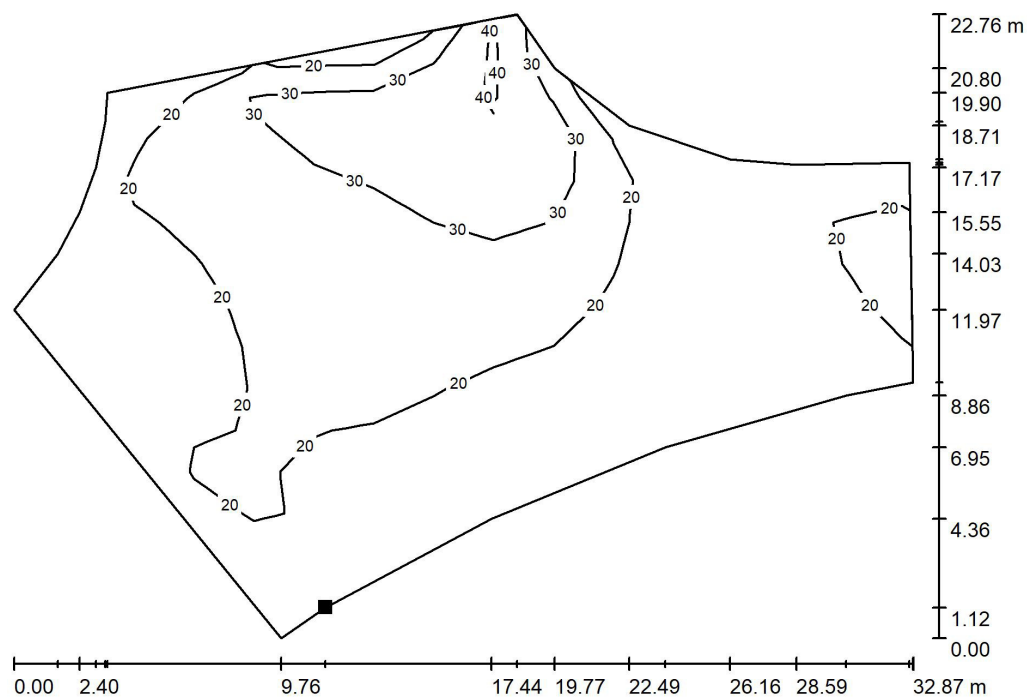
#### Pseudo-Calculation Field List

No.	Designation	Position [m]			Size [m]		Viewing direction [°]	Grid
		X	Y	Z	L	W		
1	Street-valuation field křižovatka	39.122	36.983	0.000	32.869	22.757	0.0	15 x 15

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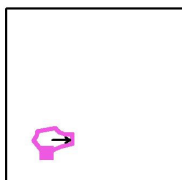
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### Masarykovo náměstí - křižovatka / Street-valuation field křižovatka / Isolines (E)



Values in Lux, Scale 1 : 235

Position of surface in external scene:  
 Marked point:  
 (34.847 m, 25.687 m, 0.000 m)



Grid: 15 x 15 Points

$E_{av}$  [lx]  
 22

$E_{min}$  [lx]  
 10

$E_{max}$  [lx]  
 43

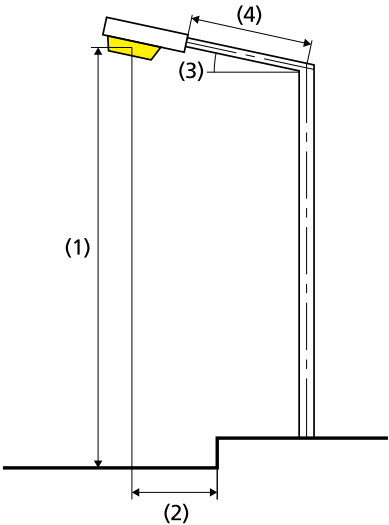
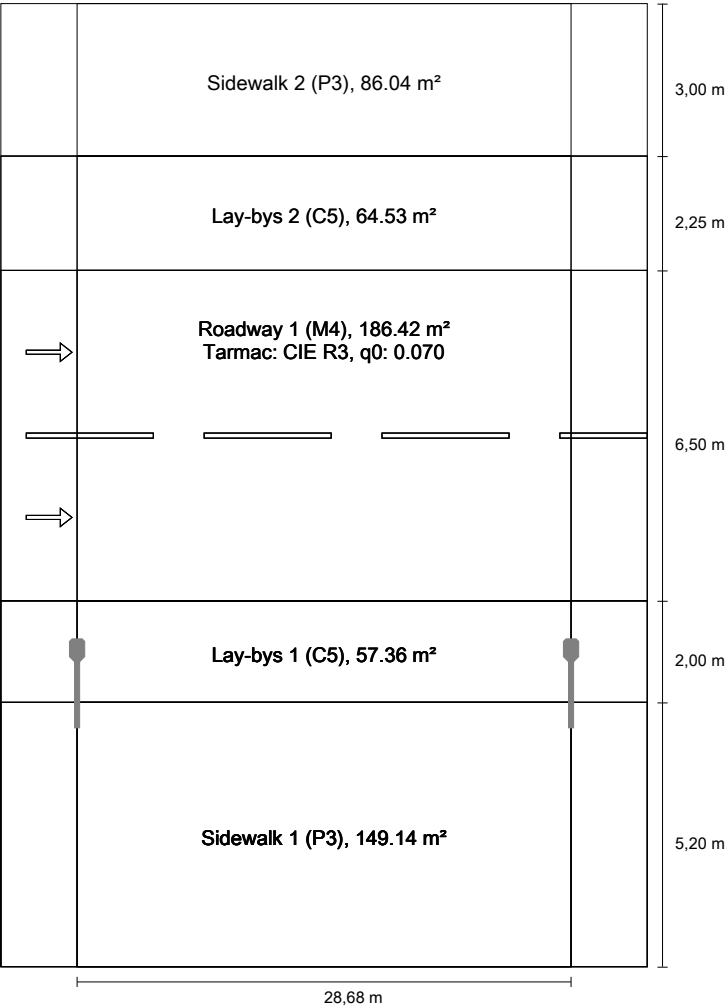
$u_0$   
 0.467

$E_{min} / E_{max}$   
 0.238

Rotation: 0.0°

Palackého ul. according to EN 13201:2015

iGuzzini illuminazione 90\_ED75 Wow 101,7W



Lamp:	1xLED
Luminous flux (luminaire):	11999.75 lm
Luminous flux (lamp):	12000.00 lm
Operating Hours	
4000 h:	100.0 %, 101.7 W
W/km:	3559.5
Arrangement:	single side bottom
Pole distance:	28.680 m
Boom inclination (3):	0.0°
Boom length (4):	1.000 m
Light centre height (1):	8.000 m
Light overhang (2):	-1.000 m

ULR:	0.00
ULOR:	0.00
Maximum luminous intensities	
at 70°:	425 cd/klm
at 80°:	88.9 cd/klm
at 90°:	0.00 cd/klm
Luminous intensity class:	G*4

Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.

Arrangement complies with glare index class D.4

## Results for valuation fields

Maintenance factor: 0.81

## Sidewalk 2 (P3)

Em [lx] ≥ 7.50 ≤ 11.25	Emin [lx] ≥ 1.50
✓ 8.63	✓ 6.52

## Lay-bys 2 (C5)

Em [lx] ≥ 7.50	Uo ≥ 0.40
✓ 14.64	✓ 0.82

## Roadway 1 (M4)

Lm [cd/m²] ≥ 0.75	Uo ≥ 0.40	UI ≥ 0.60	TI [%] ≤ 15	EIR
✓ 1.38	✓ 0.50	✓ 0.73	✓ 12	* 0.68

## Lay-bys 1 (C5)

Em [lx] ≥ 7.50	Uo ≥ 0.40
✓ 25.97	✓ 0.57

## Sidewalk 1 (P3)

Em [lx] ≥ 7.50 ≤ 11.25	Emin [lx] ≥ 1.50
✓ 10.17	✓ 2.29

\* Informative, not part of the valuation

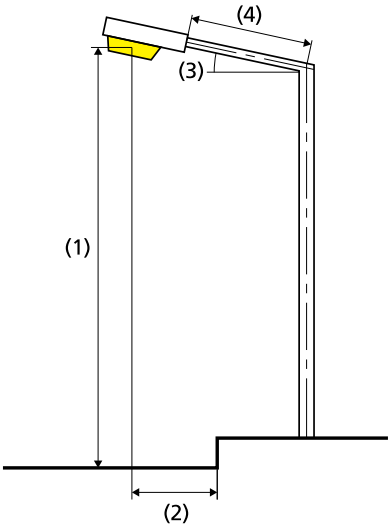
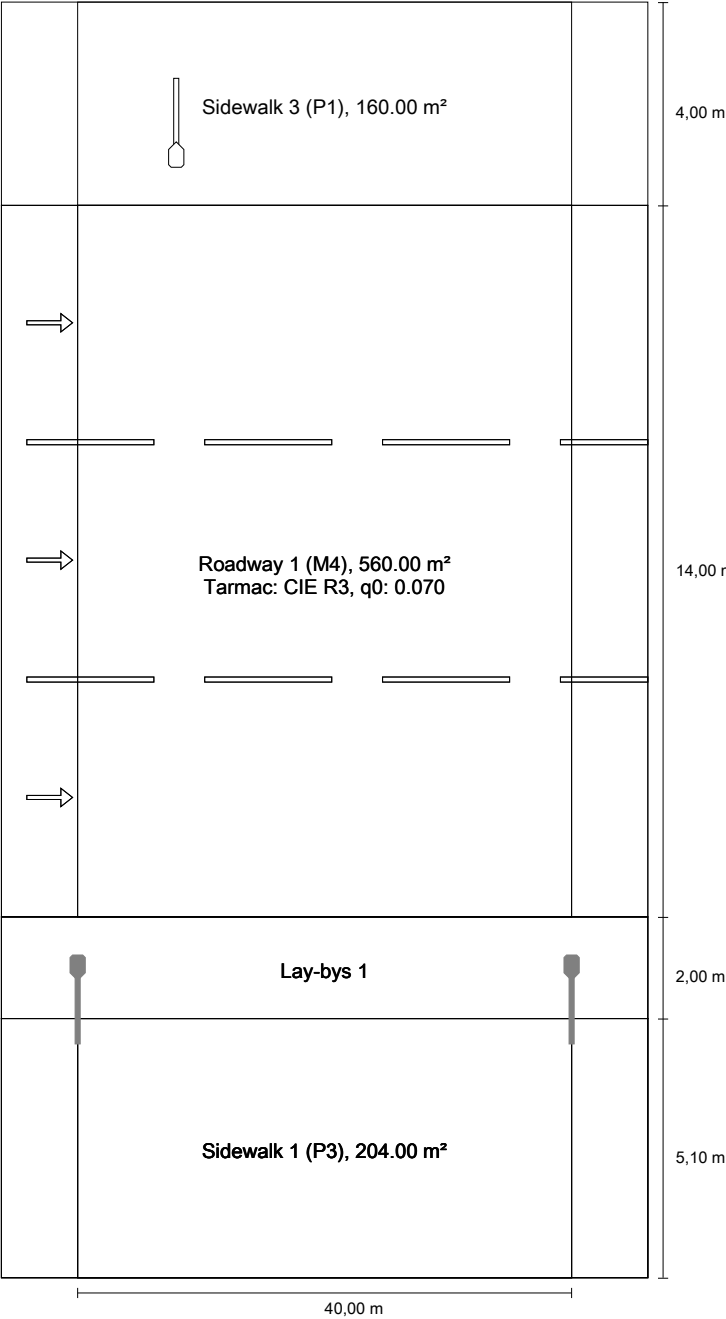
## Results for energy efficiency indicators

Power density indicator (Dp)	0.012 W/lxm²
Energy consumption density	
Arrangement: Wow 101,7W (406.8 kWh/yr)	0.7 kWh/m² yr



Palackého ul. rozšířená according to EN 13201:2015

iGuzzini illuminazione 90\_ED75 Wow 101,7W



14,00 m The pole distance of this luminaire arrangement determines the length of the valuation fields.

Lamp:	1xLED
Luminous flux (luminaire):	11999.75 lm
Luminous flux (lamp):	12000.00 lm
Operating Hours	
4000 h:	100.0 %, 101.7 W
W/km:	2542.5
Arrangement:	single side bottom
Pole distance:	40.000 m
Boom inclination (3):	0.0°
Boom length (4):	1.000 m
Light centre height (1):	8.000 m
Light overhang (2):	-1.000 m

ULR:	0.00
ULOR:	0.00
Maximum luminous intensities	
at 70°:	425 cd/klm
at 80°:	88.9 cd/klm
at 90°:	0.00 cd/klm
Luminous intensity class:	G*4

Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.  
Arrangement complies with glare index class D.4





Results for valuation fields  
Maintenance factor: 0.81

Sidewalk 3 (P1)

Em [lx] ≥ 15.00 ≤ 22.50	Emin [lx] ≥ 3.00
✓ 17.60	✓ 4.81

Roadway 1 (M4)

Lm [cd/m²] ≥ 0.75	Uo ≥ 0.40	EIR ≥ 0.30	UI	TI [%]
✓ 1.39	✓ 0.67	✓ 0.75	* 0.60	* 11

Sidewalk 1 (P3)

Em [lx] ≥ 7.50 ≤ 11.25	Emin [lx] ≥ 1.50
✓ 8.28	✓ 1.51

\* Informative, not part of the valuation

Results for energy efficiency indicators

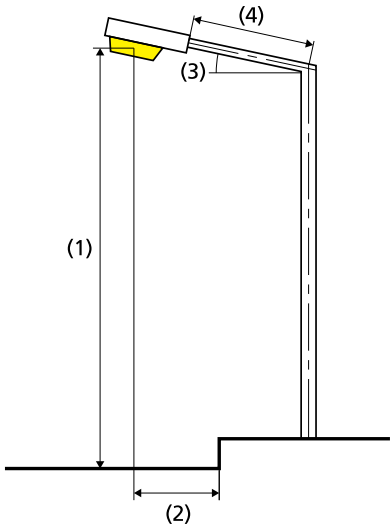
Power density indicator (Dp)0.006 W/lxm²

EN 13201:2015-5 does not include the case for planning with multiple luminaire arrangements. The calculation of the output values is done therefore only for the luminaire arrangement whose pole distance determines the length of the valuation fields.

Energy consumption density

Arrangement 1: Wow 101,7W (406.8 kWh/yr)	0.4 kWh/m² yr
Arrangement 2: Wow 101,7W (406.8 kWh/yr)	0.4 kWh/m² yr

iGuzzini illuminazione 90\_ED75 Wow 101,7W



Lamp:	1xLED
Luminous flux (luminaire):	11999.75 lm
Luminous flux (lamp):	12000.00 lm
Operating Hours	
4000 h:	100.0 %, 101.7 W
W/km:	2542.5
Arrangement:	single side top
Pole distance:	40.000 m
Boom inclination (3):	0.0°
Boom length (4):	1.000 m
Light centre height (1):	8.000 m
Light overhang (2):	-1.000 m

ULR:	0.00
ULOR:	0.00

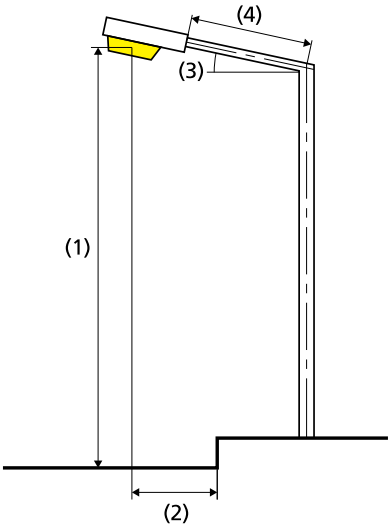
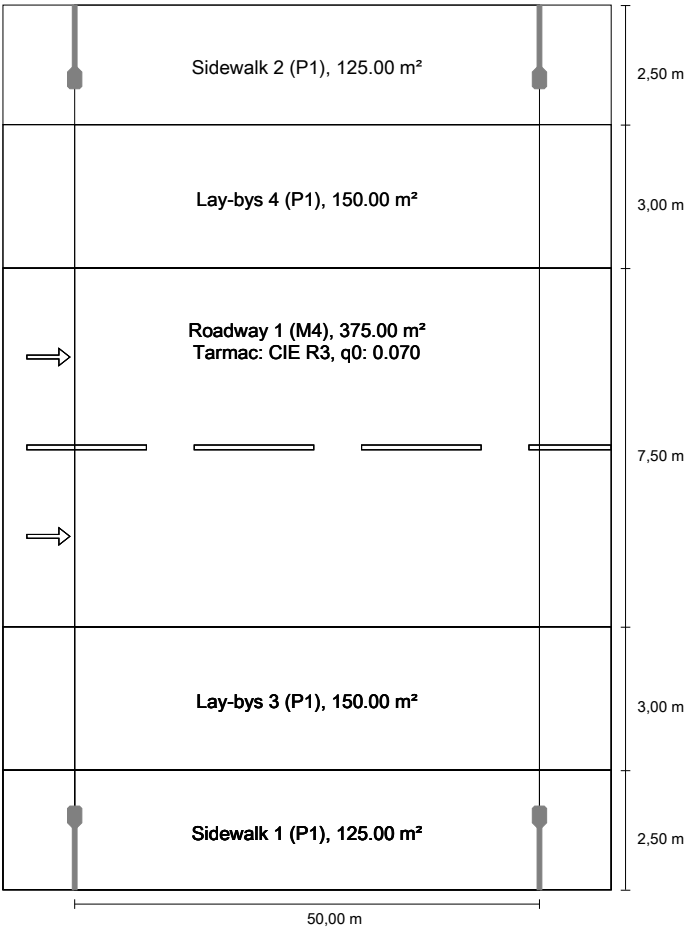
Maximum luminous intensities	
at 70°:	425 cd/klm
at 80°:	88.9 cd/klm
at 90°:	0.00 cd/klm
Luminous intensity class:	G*4

Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.  
Arrangement complies with glare index class D.6



Turnovská ul. according to EN 13201:2015

iGuzzini illuminazione 90\_ED75 Wow 101,7W



Lamp:	1xLED
Luminous flux (luminaire):	11999.75 lm
Luminous flux (lamp):	12000.00 lm
Operating Hours	
4000 h:	100.0 %, 101.7 W
W/km:	4068.0
Arrangement:	both sides opposite
Pole distance:	50.000 m
Boom inclination (3):	0.0°
Boom length (4):	1.000 m
Light centre height (1):	8.000 m
Light overhang (2):	-4.000 m

ULR:	0.00
ULOR:	0.00
Maximum luminous intensities	
at 70°:	425 cd/klm
at 80°:	88.9 cd/klm
at 90°:	0.00 cd/klm
Luminous intensity class:	G*4

Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.

Arrangement complies with glare index class D.4

## Results for valuation fields

Maintenance factor: 0.81

## Sidewalk 1 (P3)

Em [lx] ≥ 15.00 ≤ 22.50	Emin [lx] ≥ 3.00
✓ 16.28	✓ 3.24

## Lay-bys 4 (P1)

Em [lx] ≥ 15.00 ≤ 22.50	Emin [lx] ≥ 3.00
✓ 17.69	✓ 4.31

## Roadway 1 (M4)

Lm [cd/m²] ≥ 0.75	Uo ≥ 0.40	TI [%] ≤ 15	UI	EIR
✓ 0.98	✓ 0.50	✓ 12	* 0.36	* 0.96

## Lay-bys 3 (P1)

Em [lx] ≥ 15.00 ≤ 22.50	Emin [lx] ≥ 3.00
✓ 17.69	✓ 4.31

## Sidewalk 2 (P3)

Em [lx] ≥ 15.00 ≤ 22.50	Emin [lx] ≥ 3.00
✓ 16.28	✓ 3.24

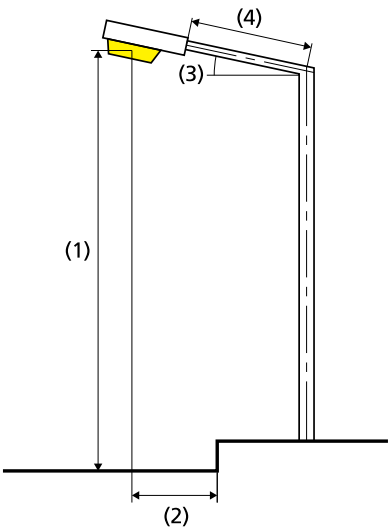
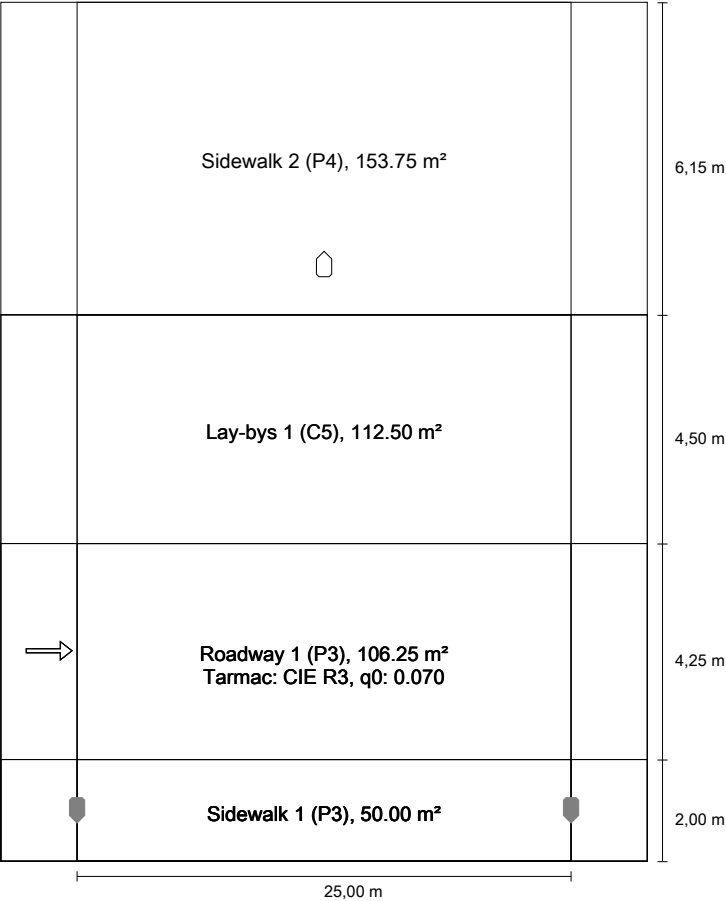
\* Informative, not part of the valuation

## Results for energy efficiency indicators

Power density indicator (Dp)	0.013 W/lxm²
Energy consumption density	
Arrangement: Wow 101,7W (813.6 kWh/yr)	0.9 kWh/m² yr

Masarykovo nám. kolmá park. st. according to EN 13201:2015

iGuzzini illuminazione CANB\_E021\_X102 Twilight 31,9W



The pole distance of this luminaire arrangement determines the length of the valuation fields.

Lamp:	1xLED
Luminous flux (luminaire):	3489.97 lm
Luminous flux (lamp):	3490.00 lm
Operating Hours	
4000 h:	100.0 %, 31.9 W
W/km:	1276.0
Arrangement:	single side bottom
Pole distance:	25.000 m
Boom inclination (3):	0.0°
Boom length (4):	0.000 m
Light centre height (1):	5.100 m
Light overhang (2):	-1.000 m

ULR:	0.03
ULOR:	0.03
Maximum luminous intensities	
at 70°:	229 cd/klm
at 80°:	91.9 cd/klm
at 90°:	38.9 cd/klm
Luminous intensity class:	G*1

Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.

Arrangement complies with glare index class D.4

Results for valuation fields  
Maintenance factor: 0.81

Sidewalk 2 (P4)

Em [lx] ≥ 5.00 ≤ 7.50	Emin [lx] ≥ 1.00
✓ 7.31	✓ 3.06

Lay-bys 1 (C5)

Em [lx] ≥ 7.50	Uo ≥ 0.40
✓ 8.53	✓ 0.62

Roadway 1 (P3)

Em [lx] ≥ 7.50 ≤ 11.25	Emin [lx] ≥ 1.50
✓ 8.57	✓ 5.28

Sidewalk 1 (P3)

Em [lx] ≥ 7.50 ≤ 11.25	Emin [lx] ≥ 1.50
✓ 9.18	✓ 4.27

Results for energy efficiency indicators

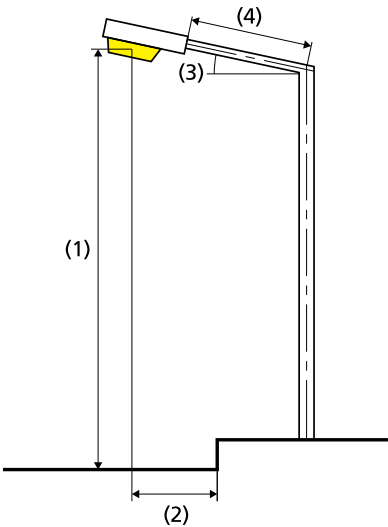
Power density indicator (Dp) 0.009 W/lxm²

EN 13201:2015-5 does not include the case for planning with multiple luminaire arrangements. The calculation of the output values is done therefore only for the luminaire arrangement whose pole distance determines the length of the valuation fields.

Energy consumption density

Arrangement 1: Twilight 31,9W (127.6 kWh/yr)	0.3 kWh/m² yr
Arrangement 2: Twilight 31,9W (127.6 kWh/yr)	0.3 kWh/m² yr

iGuzzini illuminazione CANB\_E021\_X102 Twilight  
31,9W

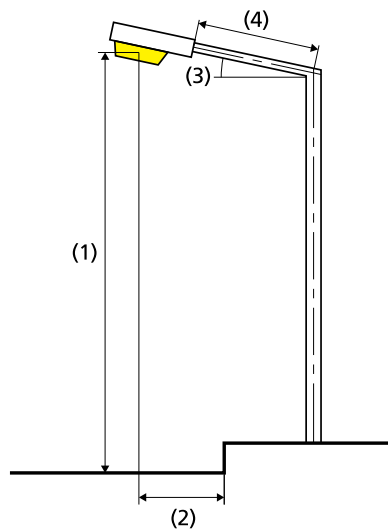
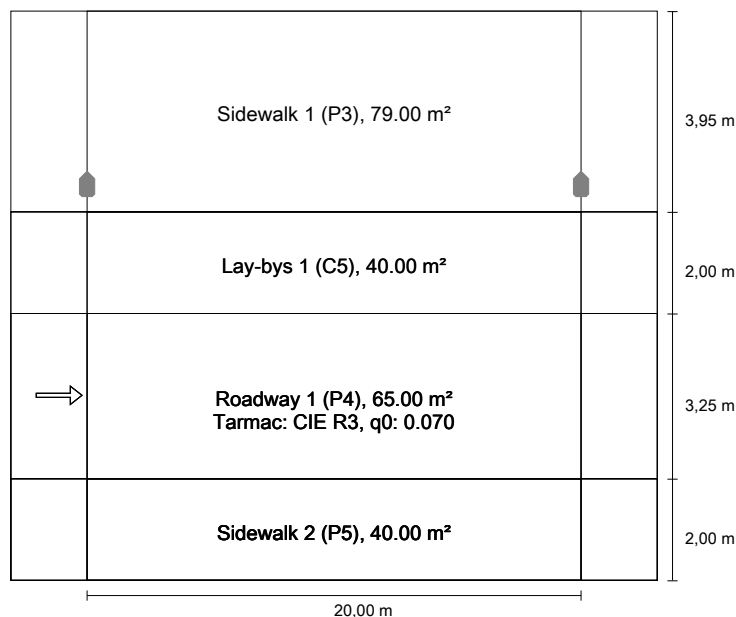


Lamp:	1xLED
Luminous flux (luminaire):	3489.97 lm
Luminous flux (lamp):	3490.00 lm
Operating Hours	
4000 h:	100.0 %, 31.9 W
W/km:	1276.0
Arrangement:	single side top
Pole distance:	25.000 m
Boom inclination (3):	0.0°
Boom length (4):	0.000 m
Light centre height (1):	5.100 m
Light overhang (2):	-5.500 m

ULR:	0.03
ULOR:	0.03
Maximum luminous intensities	
at 70°:	229 cd/klm
at 80°:	91.9 cd/klm
at 90°:	38.9 cd/klm
Luminous intensity class:	G*1

Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.  
Arrangement complies with glare index class D.4

## Masarykovo nám. podélná stání according to EN 13201:2015

iGuzzini illuminazione CANB\_E021\_X102 Twilight  
31,9WResults for valuation fields  
Maintenance factor: 0.81

## Sidewalk 1 (P3)

Em [lx] ≥ 7.50 ≤ 11.25	Emin [lx] ≥ 1.50
✓ 8.49	✓ 3.99

## Lay-bys 1 (C5)

Em [lx] ≥ 7.50	Uo ≥ 0.40
✓ 8.95	✓ 0.47

## Roadway 1 (P4)

Em [lx] ≥ 5.00 ≤ 7.50	Emin [lx] ≥ 1.00
✓ 6.28	✓ 3.34

## Sidewalk 2 (P5)

Em [lx] ≥ 3.00 ≤ 4.50	Emin [lx] ≥ 0.60
✓ 3.79	✓ 2.60

Lamp:	1xLED
Luminous flux (luminaire):	3489.97 lm
Luminous flux (lamp):	3490.00 lm
Operating Hours	
4000 h:	100.0 %, 31.9 W
W/km:	1595.0
Arrangement:	single side top
Pole distance:	20.000 m
Boom inclination (3):	0.0°
Boom length (4):	0.000 m
Light centre height (1):	5.100 m
Light overhang (2):	-2.550 m

ULR:	0.03
ULOR:	0.03

## Maximum luminous intensities

at 70°:	229 cd/klm
at 80°:	91.9 cd/klm
at 90°:	38.9 cd/klm

Luminous intensity class: G\*1

Any direction forming the specified angle from the downward vertical, with the luminaire installed for use.

Arrangement complies with glare index class D.4

## Results for energy efficiency indicators

Power density indicator (Dp)

0.020 W/lxm<sup>2</sup>

Energy consumption density

Arrangement: Twilight 31,9W (127.6 kWh/yr)

0.6 kWh/m<sup>2</sup> yr