

Dragon Park

Date: 18-08-2026
Designer: Harry Johnson

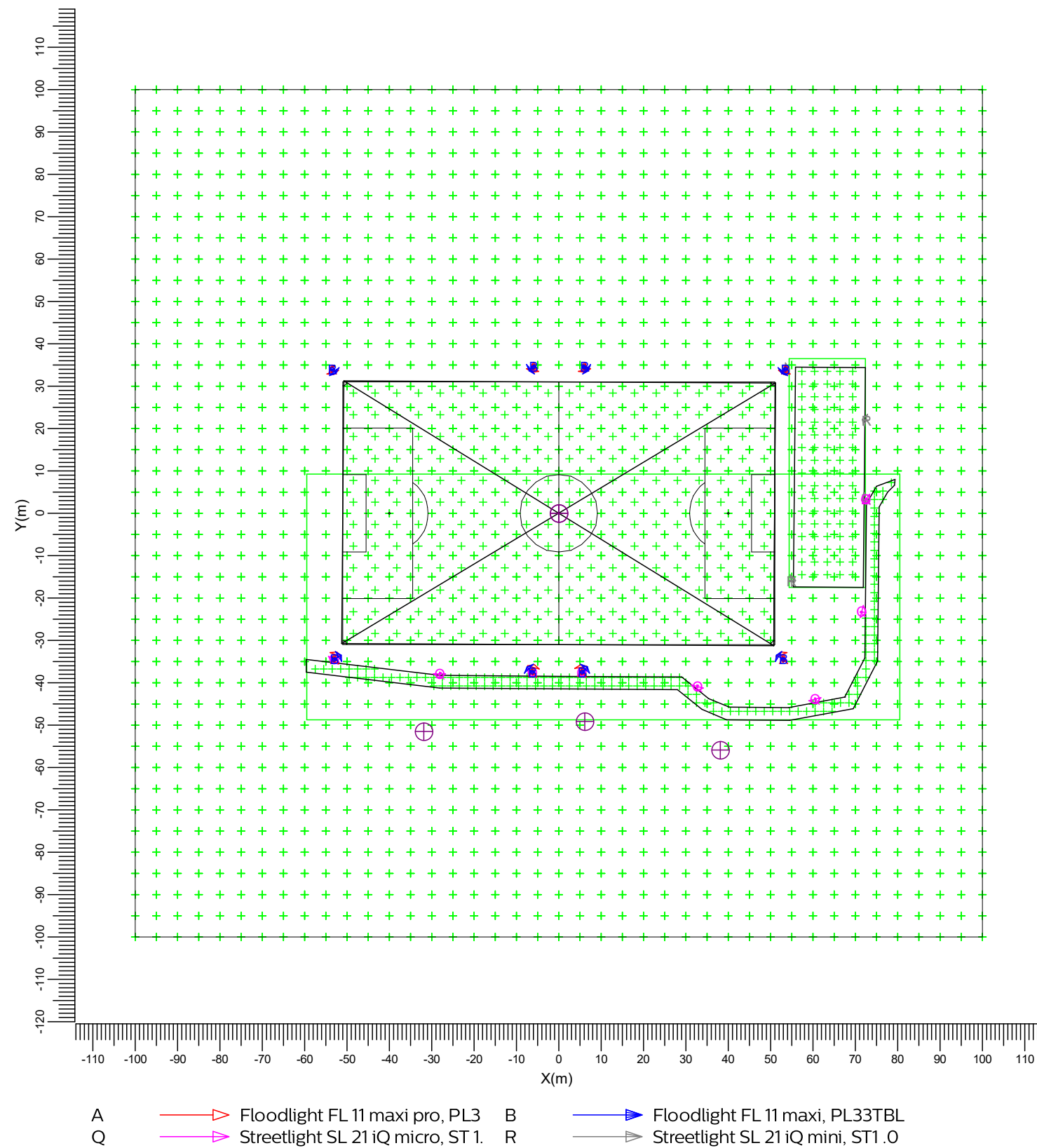
The nominal values shown in this report are the result of precision calculations, based upon precisely positioned luminaires in a fixed relationship to each other and to the area under examination. In practice the values may vary due to tolerances on luminaires, luminaire positioning, reflection properties and electrical supply.

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1. Project Description

1.1 Top Project Overview



Scale
1:1250

2. Summary

2.1 Observer Information

Code	Observer	Position		
		X (m)	Y (m)	Z (m)
Aa	H1	-31.83	-51.55	3.00
Bb	H2	6.10	-49.18	3.00
Cc	H3	38.10	-55.92	3.00
Dd	Verticle 1.5m	-0.00	-0.00	1.50
Ee	Verticle 3m	-0.00	-0.00	3.00

2.2 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
A	8	Floodlight FL 11 maxi pro, PL3 3TBLC, 5000 K, DALI 2 (1 DALI	1 * luminous flux: 100 % dim-lin	1741.1	1 * 176530
B	8	Floodlight FL 11 maxi, PL33TBL C, 5000 K, DALI 2 (1 DALI addr	1 * luminous flux: 100 % dim-lin	1188.4	1 * 118980
Q	8	Streetlight SL 21 iQ micro, ST 1.0a, 4000 K, iQ-Comfort	1 * luminous flux: 100 % dim-lin	36.4	1 * 5010
R	4	Streetlight SL 21 iQ mini, ST1 .0a, 4000 K, iQ-Comfort	1 * luminous flux: 100 % dim-lin	71.6	1 * 11290

The total installed power: 24.01 (kWatt)

Number of Luminaires Per Switching Mode:

Switching Mode	Luminaire Code				Power (kWatt)
	A	B	Q	R	
Fb	8	8	0	0	23.44
Carpark	0	0	0	4	0.29
Pathway	0	0	8	0	0.29
Spill	8	8	8	4	24.01

2.3 Calculation Results

Switching Modes:

Code	Switching Mode	Maintenance factor
1	Fb	1.00
2	Carpark	1.00
3	Pathway	1.00
4	Spill	1.00

(II)luminance Calculations:

Calculation	Switching Mode	Type	Unit	Ave Min/AveMin/Max		
Football	1	Surface Illuminance	lux	281	0.66	0.48
Carpark	2	Surface Illuminance	lux	24.2	0.27	0.10
spill	4	Surface Illuminance	lux	58.2	0.00	0.00
pathway	3	Surface Illuminance	lux	16.6	0.25	0.13

Calculation	Switching Mode	Type	Unit	Ave Min/AveMin/Max		
Verticle Spill @ 1.5m	4	Illuminance -> Dd	lux	24.0	0.01	0.00
Verticle Spill @ 3m	4	Illuminance -> Ee	lux	25.0	0.01	0.00

Obtrusive Light Calculations:

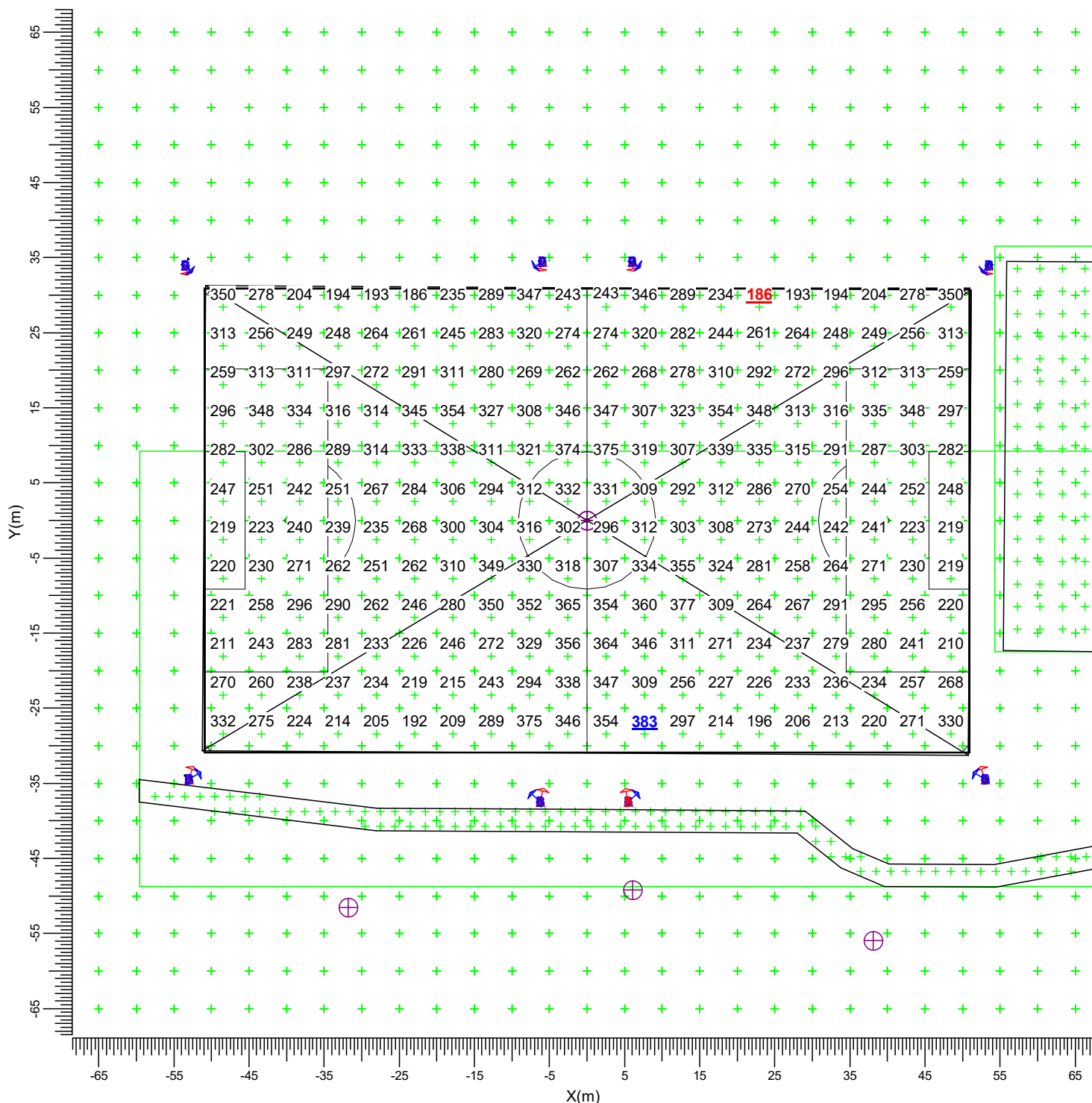
Switching Mode	Observer Code	Luminaire Code	Position			Aiming Angles			Maximum Intensity (cd)
			X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	
4	Aa	B	-53.00	-34.50	15.00	31.76	7.00	-0.00	4063
4	Bb	B	-53.00	-34.50	15.00	31.76	7.00	-0.00	5708
4	Cc	A	6.00	34.50	15.00	-81.22	5.00	-0.00	3187

3. Calculation Results

3.1 Football: Graphical Table

Fb

Grid : Football at Z = -0.00 m
Calculation : Surface Illuminance (lux)



A  Floodlight FL 11 maxi pro, PL3 B  Floodlight FL 11 maxi, PL33TBL

Average
281

Min/Ave
0.66

Min/Max
0.48

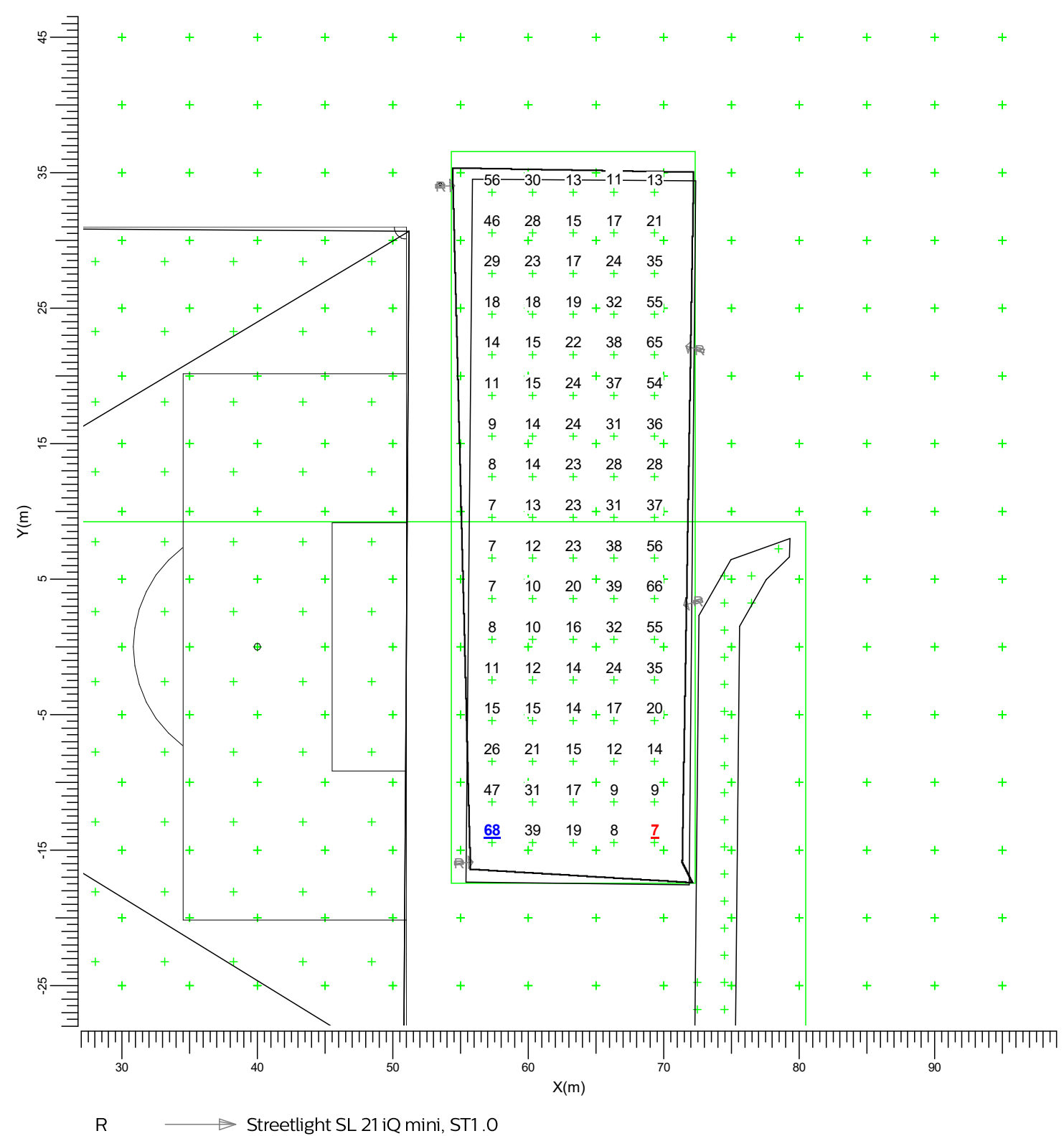
Project maintenance factor
1.00

Scale
1:750

3.2 Carpark: Graphical Table

Carpark

Grid : Carpark at Z = -0.00 m
Calculation : Surface Illuminance (lux)



Average
24.2

Min/Ave
0.27

Min/Max
0.10

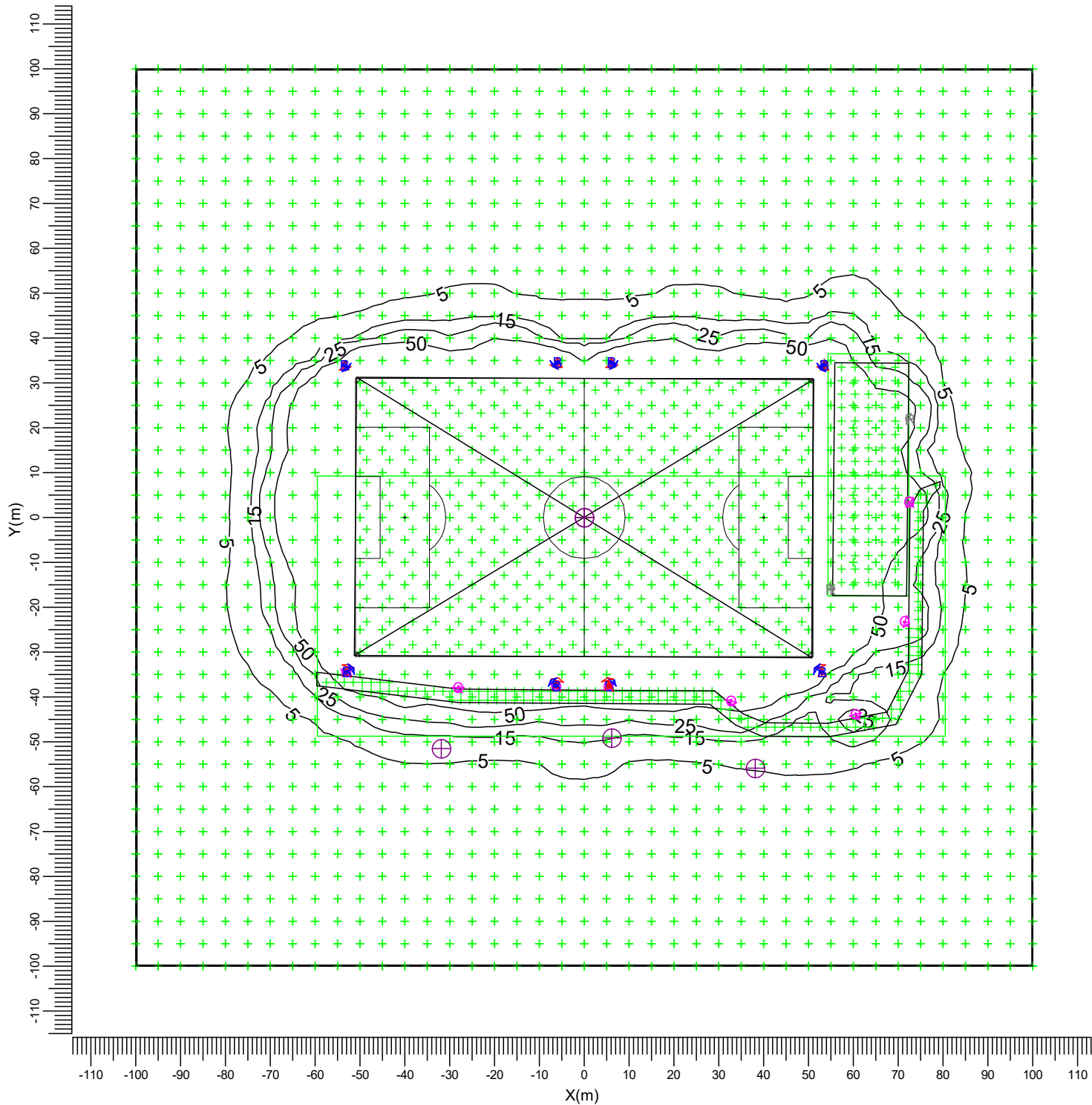
Project maintenance factor
1.00

Scale
1:400

3.3 spill: Iso Contour

Spill

Grid : spill at Z = -0.00 m
Calculation : Surface Illuminance (lux)



- A

Q
-
- Floodlight FL 11 maxi pro, PL3

Streetlight SL 21 iQ micro, ST1.
- B

R
-
- Floodlight FL 11 maxi, PL33TBL

Streetlight SL 21 iQ mini, ST1.0

Average

58.2

Min/Ave

0.00

Min/Max

0.00

Project maintenance factor

1.00

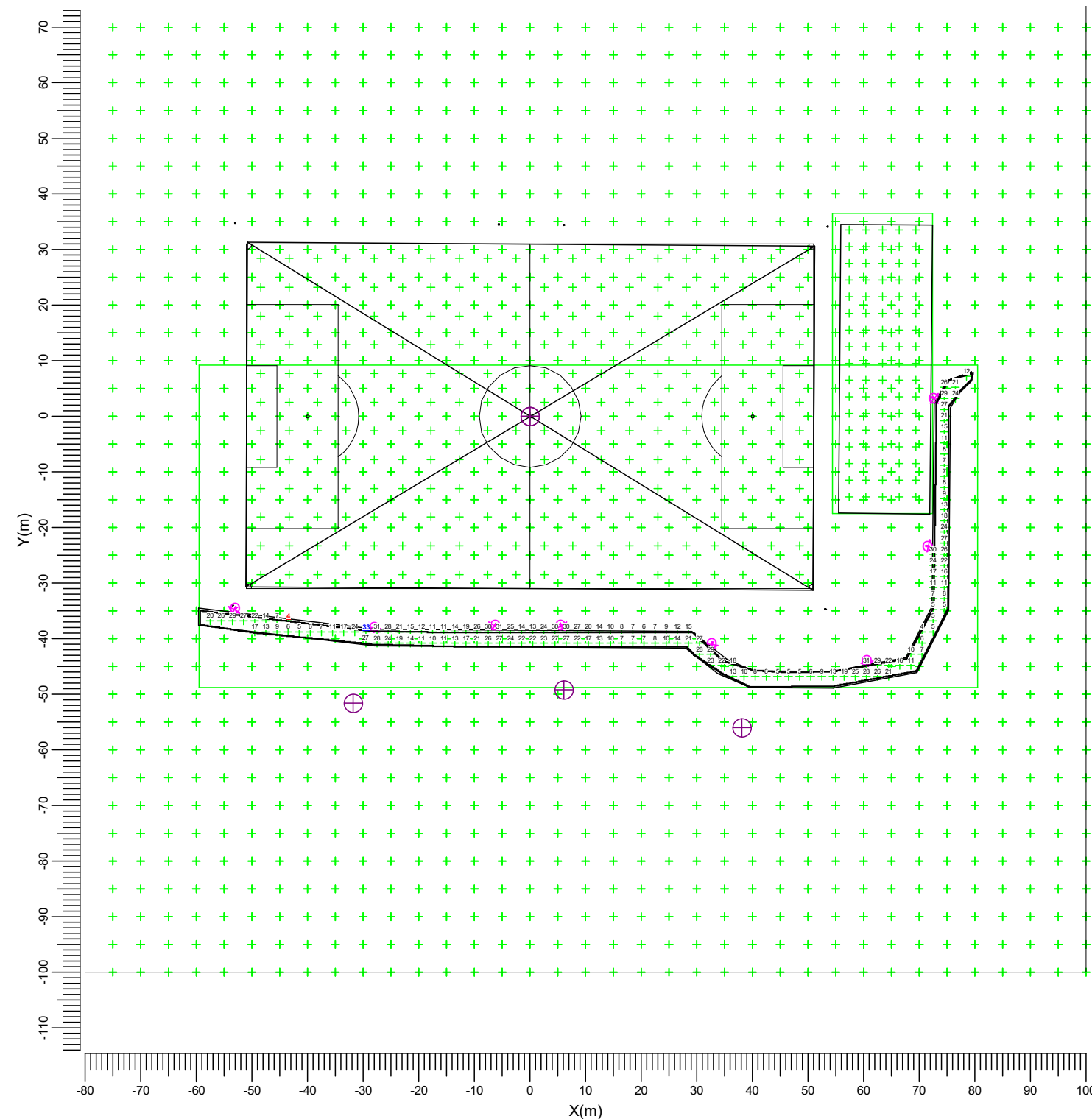
Scale

1:1250

3.4 pathway: Graphical Table

Pathway

Grid : pathway at Z = -0.00 m
Calculation : Surface Illuminance (lux)



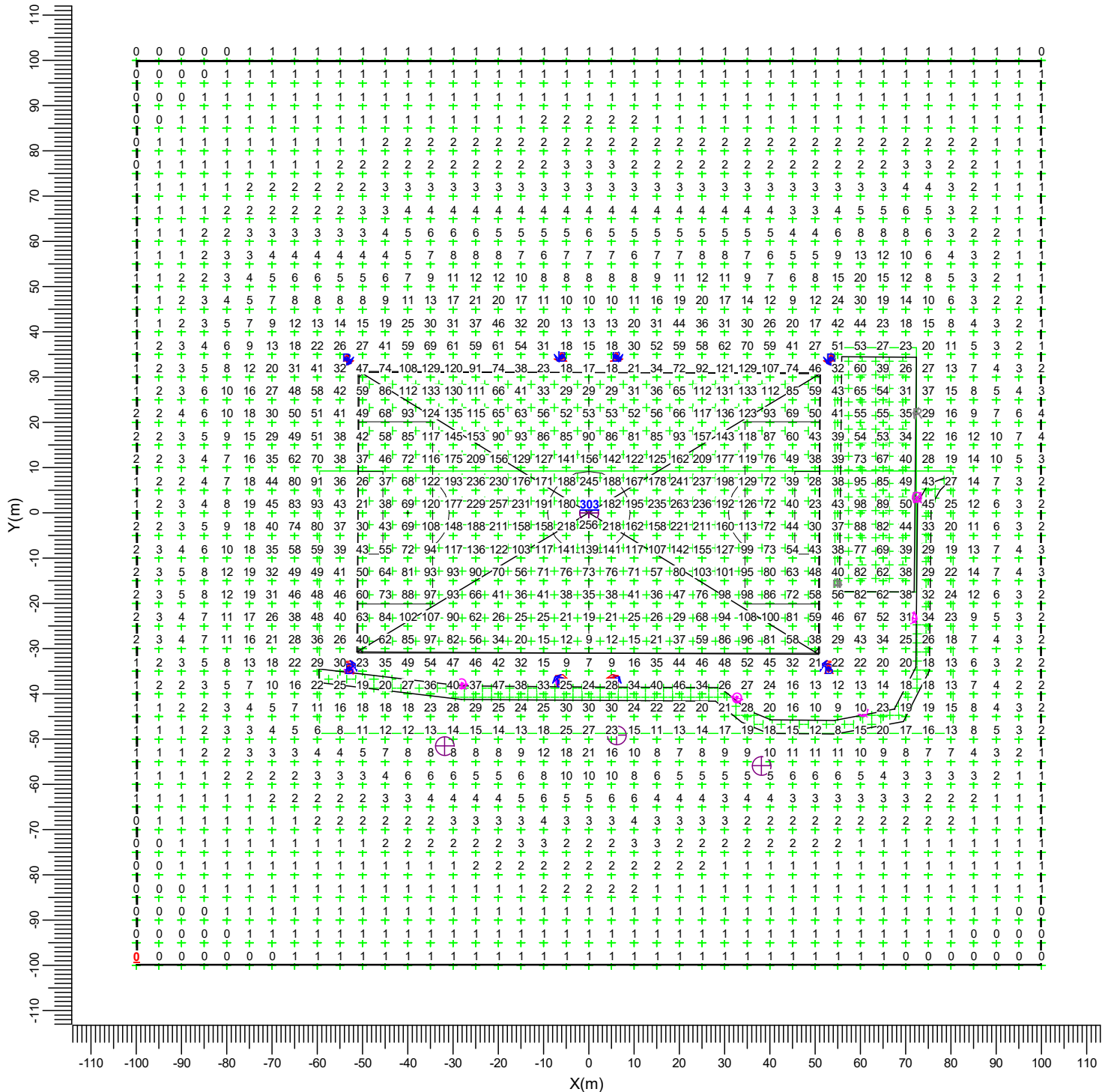
Q Streetlight SL 21 iQ micro, ST 1.

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
16.6	0.25	0.13	1.00	1:1000

3.5 Verticle Spill @ 1.5m: Graphical Table

Spill

Grid : Verticle Spill @ 1.5m at Z = -0.00 m
Calculation : Illuminance towards Verticle 1.5m (lux)
Height above grid : 0.00 m



A Floodlight FL 11 maxi pro, PL3 B Floodlight FL 11 maxi, PL33TBL
Q Streetlight SL 21 iQ micro, ST.1 R Streetlight SL 21 iQ mini, ST.1.0

Average
24.0

Min/Ave
0.01

Min/Max
0.00

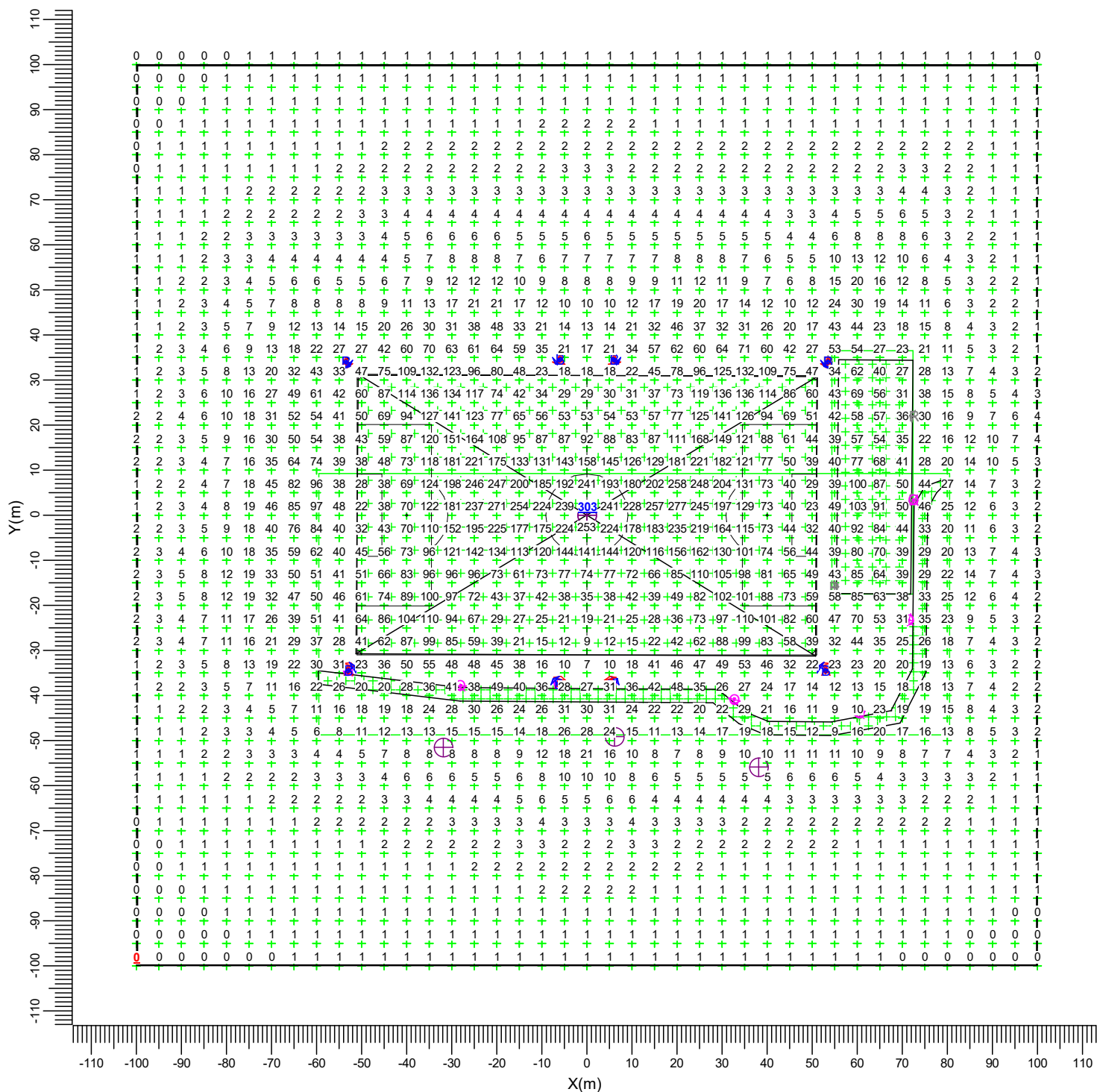
Project maintenance factor
1.00

Scale
1:1250

3.6 Verticle Spill @ 3m: Graphical Table

Spill

Grid : Verticle Spill @ 3m at Z = -0.00 m
Calculation : Illuminance towards Verticle 3m (lux)
Height above grid : 0.00 m



A Floodlight FL 11 maxi pro, PL3 B Floodlight FL 11 maxi, PL33TBL
Q Streetlight SL 21 iQ micro, ST1 R Streetlight SL 21 iQ mini, ST1.0

Average
25.0

Min/Ave
0.01

Min/Max
0.00

Project maintenance factor
1.00

Scale
1:1250

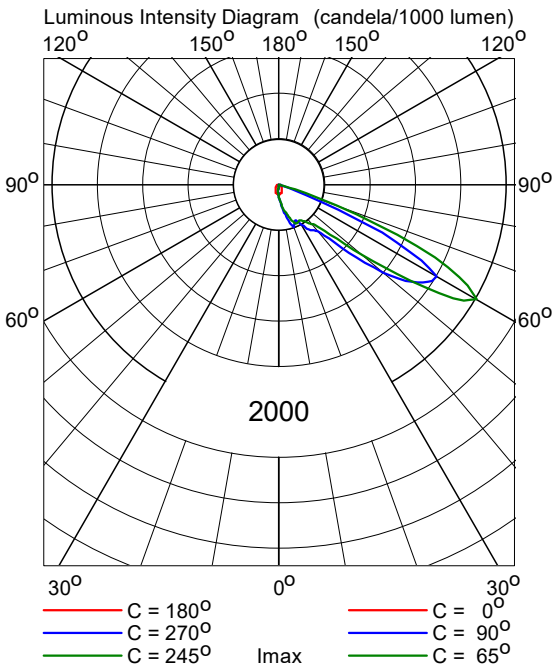
4. Luminaire Details

4.1 Project Luminaires

Floodlight FL 11 maxi pro, PL3 1xluminous flux: 3b blc

Light output ratios	
DLOR	: 1.00
ULOR	: 0.00
TLOR	: 1.00
Lamp flux	: 176530 lm
Luminaire wattage	: 1741.1 W
Measurement code	: 59552_2100

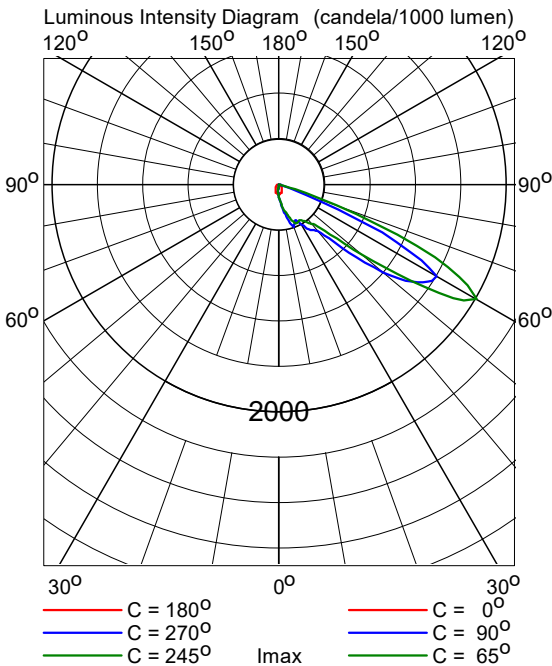
Note: Luminaire data not from database.



Floodlight FL 11 maxi, PL33TBL 1xluminous flux: 2b blc

Light output ratios	
DLOR	: 1.00
ULOR	: 0.00
TLOR	: 1.00
Lamp flux	: 118980 lm
Luminaire wattage	: 1188.4 W
Measurement code	: 59552_2099

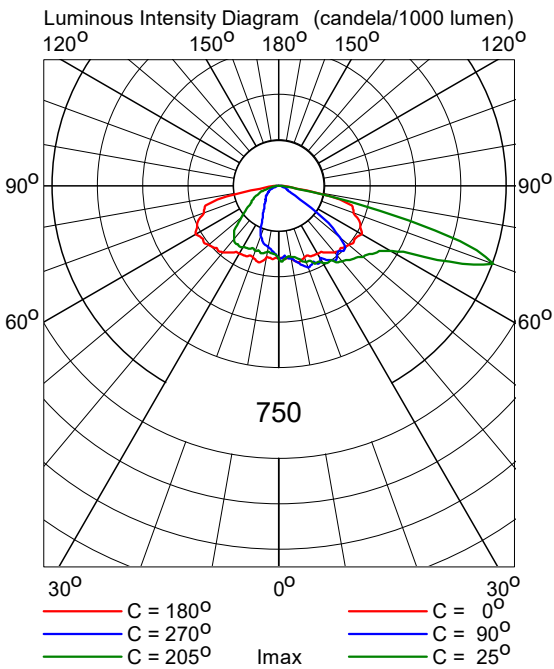
Note: Luminaire data not from database.



Streetlight SL 21 iQ micro, ST 1xluminous flux: 100 % | dim-

Light output ratios	
DLOR	: 1.00
ULOR	: 0.00
TLOR	: 1.00
Lamp flux	: 5010 lm
Luminaire wattage	: 36.4 W
Measurement code	: 59076_1389

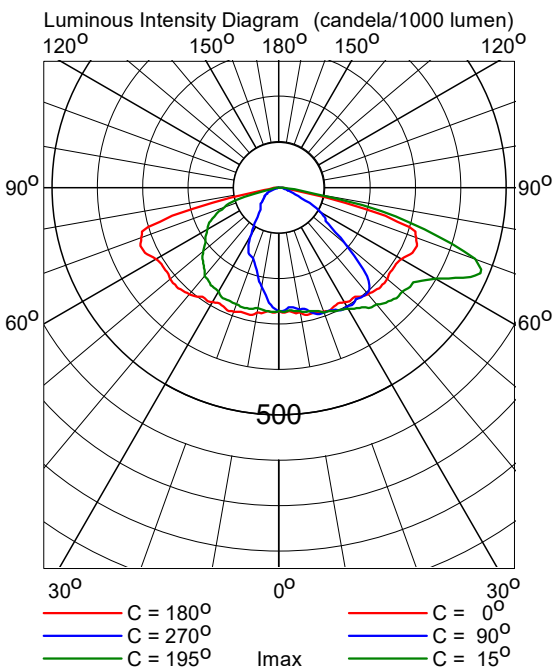
Note: Luminaire data not from database.



Streetlight SL 21 iQ mini, ST 1xluminous flux: 100 % | dim-

Light output ratios	
DLOR	: 1.00
ULOR	: 0.00
TLOR	: 1.00
Lamp flux	: 11290 lm
Luminaire wattage	: 71.6 W
Measurement code	: 59078_1368

Note: Luminaire data not from database.



5. Installation Data

5.1 Legends

Project Luminaires:

Code	Qty	Luminaire Type	Lamp Type	Flux (lm)
A	8	Floodlight FL 11 maxi pro, PL3 3TBLC, 5000 K, DALI 2 (1 DALI	1 * luminous flux: 100 % dim-lin	1 * 176530
B	8	Floodlight FL 11 maxi, PL33TBL C, 5000 K, DALI 2 (1 DALI addr	1 * luminous flux: 100 % dim-lin	1 * 118980
Q	8	Streetlight SL 21 iQ micro, ST 1.0a, 4000 K, iQ-Comfort	1 * luminous flux: 100 % dim-lin	1 * 5010
R	4	Streetlight SL 21 iQ mini, ST1 .0a, 4000 K, iQ-Comfort	1 * luminous flux: 100 % dim-lin	1 * 11290

Switching Modes:

Code	Switching Mode
1	Fb
2	Carpark
3	Pathway
4	Spill

5.2 Luminaire Positioning and Orientation

Qty and Code	Position			Aiming Angles			Switching Modes			
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	1	2	3	4
1 * A	-53.50	34.00	15.00	-75.0	5.0	-0.0	+	-	-	+
1 * B	-53.50	34.00	15.00	-47.5	5.0	-0.0	+	-	-	+
1 * Q	-53.00	-34.50	6.00	-120.0	10.0	0.0	-	-	+	+
1 * A	-53.00	-34.50	15.00	71.6	7.0	-0.0	+	-	-	+
1 * B	-53.00	-34.50	15.00	31.8	7.0	-0.0	+	-	-	+
1 * Q	-28.07	-37.84	6.00	-95.5	10.0	0.0	-	-	+	+
1 * Q	-6.25	-37.50	6.00	-124.7	10.0	0.0	-	-	+	+
1 * A	-6.25	-37.50	15.00	75.0	7.0	0.0	+	-	-	+
1 * B	-6.25	-37.50	15.00	135.0	7.0	0.0	+	-	-	+
1 * A	-6.00	34.50	15.00	-98.8	5.0	0.0	+	-	-	+
1 * B	-6.00	34.50	15.00	-141.5	5.0	0.0	+	-	-	+
1 * Q	5.50	-37.50	6.00	-55.7	10.0	0.0	-	-	+	+
1 * A	5.50	-37.50	15.00	100.6	7.0	0.0	+	-	-	+
1 * B	5.50	-37.50	15.00	45.0	7.0	0.0	+	-	-	+
1 * A	6.00	34.50	15.00	-81.2	5.0	-0.0	+	-	-	+
1 * B	6.00	34.50	15.00	-38.5	5.0	-0.0	+	-	-	+
1 * Q	32.70	-40.85	6.00	-100.0	10.0	0.0	-	-	+	+
1 * A	53.00	-34.50	15.00	108.4	7.0	0.0	+	-	-	+
1 * B	53.00	-34.50	15.00	148.2	7.0	0.0	+	-	-	+
1 * R	53.50	34.00	6.00	0.5	10.0	0.0	-	+	-	+
1 * A	53.50	34.00	15.00	-105.0	5.0	0.0	+	-	-	+
1 * B	53.50	34.00	15.00	-132.5	5.0	0.0	+	-	-	+

Qty and Code	Position			Aiming Angles			Switching Modes			
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	1	2	3	4
1 * R	54.88	-15.95	6.00	3.2	10.0	0.0	-	+	-	+
1 * Q	60.52	-43.90	6.00	-74.8	10.0	0.0	-	-	+	+
1 * Q	71.44	-23.29	6.00	-11.9	10.0	0.0	-	-	+	+
1 * Q	72.52	3.34	6.00	-33.3	10.0	0.0	-	-	+	+
1 * R	72.52	3.34	6.00	-165.3	10.0	0.0	-	+	-	+
1 * R	72.65	21.92	6.00	165.4	10.0	0.0	-	+	-	+