

Imberhorne, East Grinstead

Track & Field Lighting

Date: 01-05-2026

Designer: Ben Leslie - Christy Lighting Masts Ltd

Description: Track 400m
Playing Lines 100m/60m

Track
Maintained Illuminance: 200lux
Uniformity 0.6

Luminaire Source: 20no MAFGen2 1.2kW 5000K LED
Luminaire Control: Front Louvre / Rear Louvre

Pitch
Maintained Illuminance: 200lux
Uniformity 0.6

Luminaire Source: 22no MAFGen2 1.2kW 5000K LED
Luminaire Control: Front Louvre / Rear Louvre

8no. Christy - 14m Raise & Lower Columns
6no. Christy - 16m Raise & Lower Columns

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.

Christy Lighting Masts Ltd

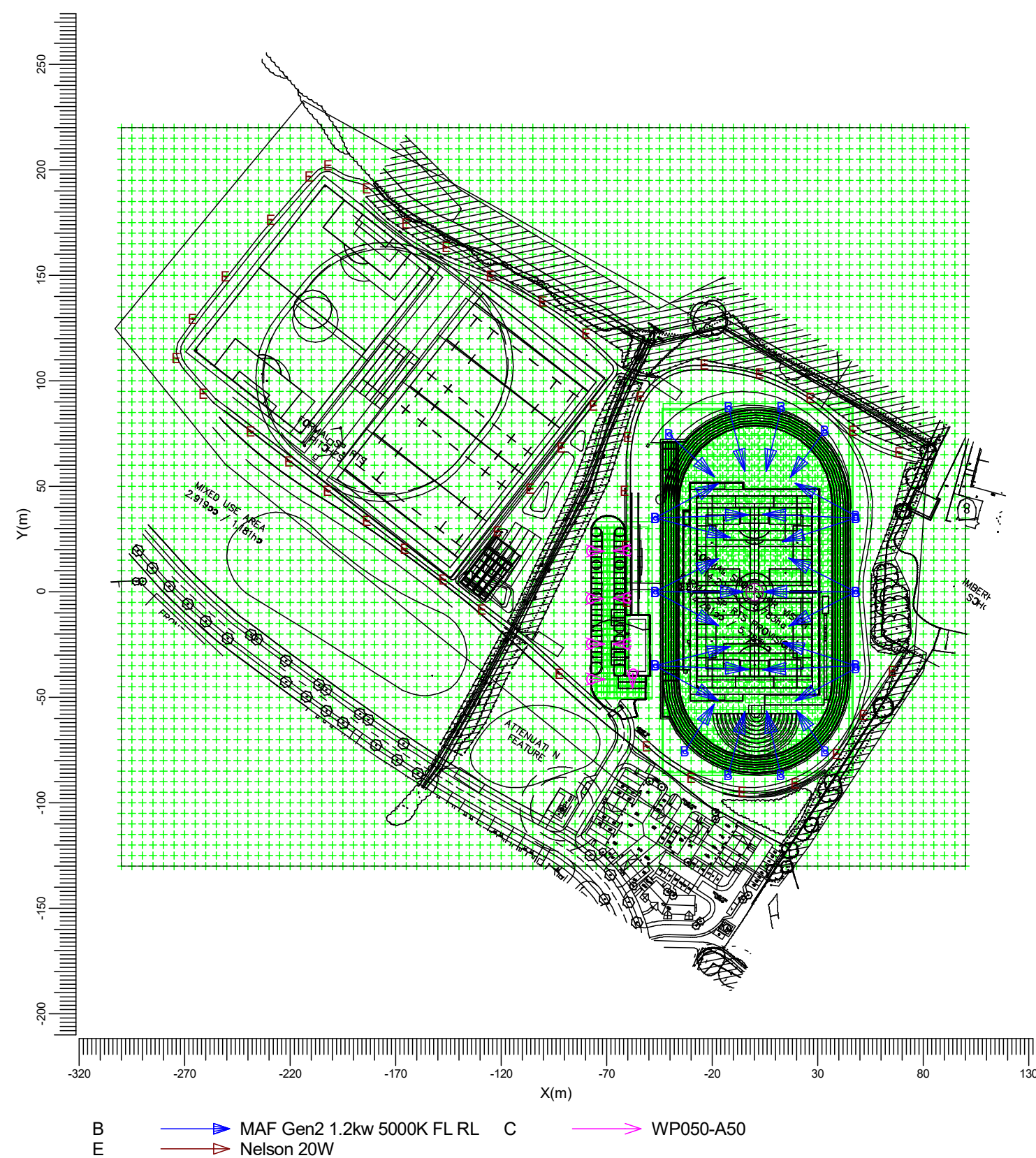
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1. Project Description

1.1 Top Project Overview



Scale
1:2500

2. Summary

2.1 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
B	26	MAF Gen2 1.2kw 5000K FL RL	1 * LED 1.2kW	1200.0	1 * 156870
C	8	WP050-A50	1 * WP050-A50	50.3	1 * 6760
E	42	Nelson 20W	1 * NB20-A3C-00B	20.0	1 * 1642

The total installed power: 32.44 (kWatt)

Number of Luminaires Per Switching Mode:

Switching Mode	Luminaire Code			Power (kWatt)
	B	C	E	
Track	20	0	0	24.00
200Lux Switching	22	0	0	26.40
350Lux Switching	0	0	0	0.00
All On	26	8	42	32.44
Car Park Lighting	0	8	0	0.40

Number of Luminaires Per Arrangement:

Arrangement	Luminaire Code			Power (kWatt)
	B	C	E	
Apex Columns	4	0	0	4.80
Bend Columns2	4	0	0	4.80
Centre Columns1	6	0	0	7.20
Straight End Columns2	12	0	0	14.40
Individuals	0	8	42	1.24

2.2 Calculation Results

Switching Modes:

Code	Switching Mode	Maintenance factor
1	Track	0.95
2	200Lux Switching	0.95
3	350Lux Switching	0.95
4	All On	0.95
5	Car Park Lighting	0.95

(II)luminance Calculations:

Calculation	Switching Mode	Type	Unit	Ave	Min/Ave	Min/Max
Track Grid	1	Surface Illuminance	lux	211	0.60	0.39
Football Pitch Grid-8x11	2	Surface Illuminance	lux	222	0.63	0.43
Spill Calcs	4	Surface Illuminance	lux	27.7	0.00	0.00
Car Park	5	Surface Illuminance	lux	32.6	0.25	0.11

Obtrusive Light Calculations:

Switching Mode	ULR
1	0.00
2	0.00

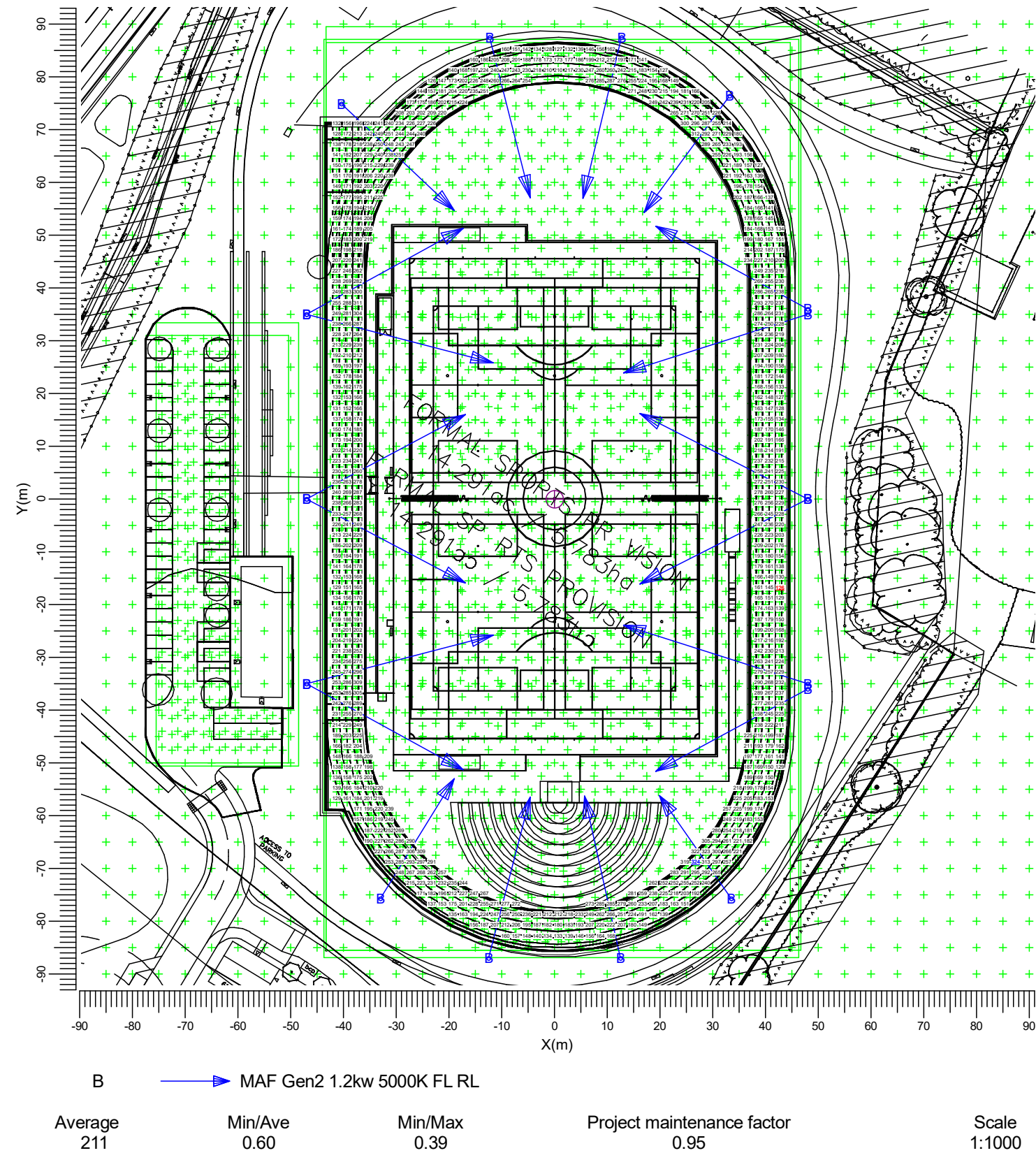
Switching Mode	ULR
3	0.00
4	0.00
5	0.00

3. Calculation Results

3.1 Track Grid: Graphical Table

Track

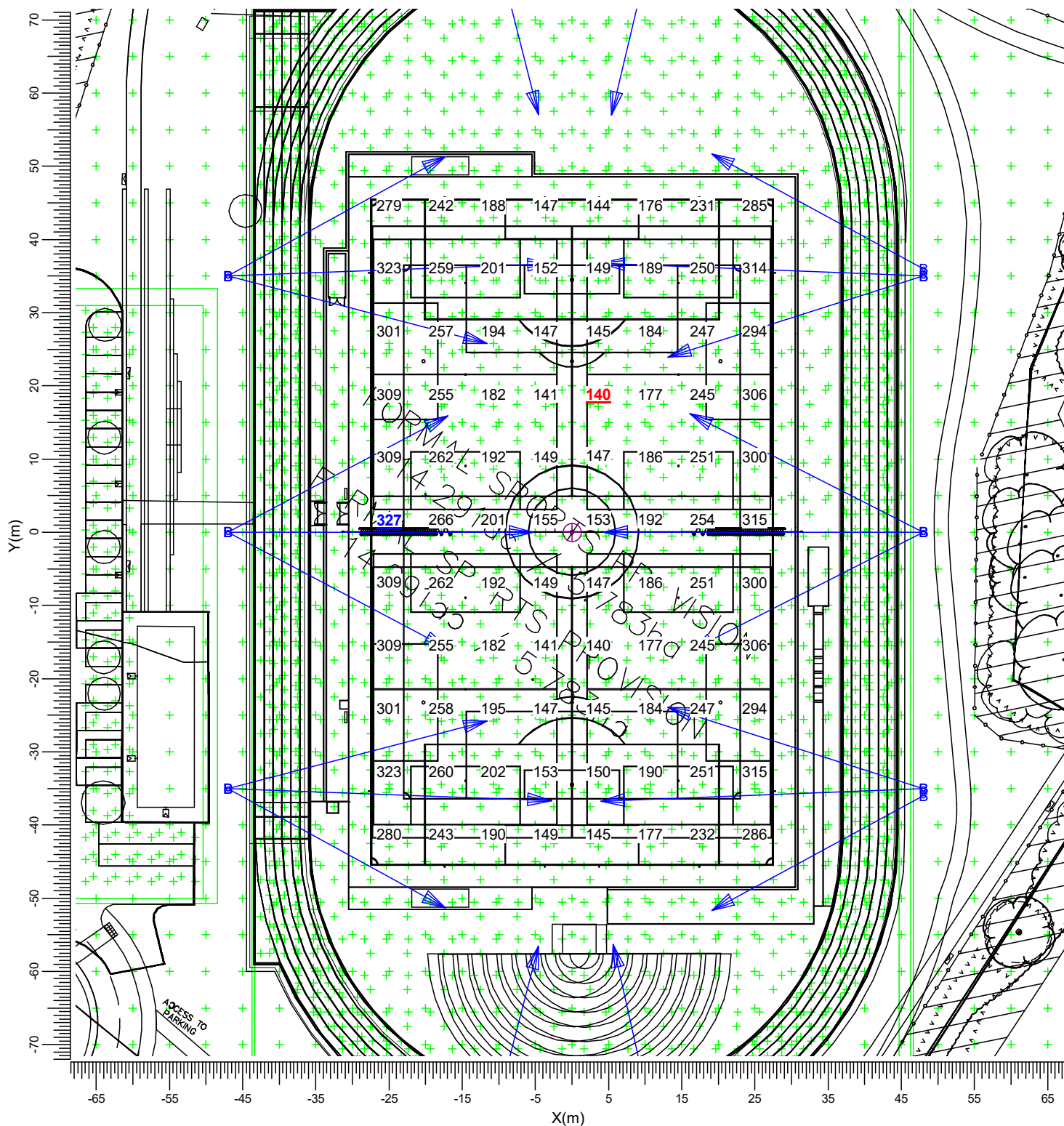
Grid : Track Grid 01 at Z = 0.00 m
Calculation : Surface Illuminance (lux)



3.2 Football Pitch Grid-8x11: Graphical Table

200Lux Switching

Grid : Football Pitch Grid-8x11 at Z = -0.00 m
 Calculation : Surface Illuminance (lux)



B — MAF Gen2 1.2kw 5000K FL RL

Average
222

Min/Ave
0.63

Min/Max
0.43

Project maintenance factor
0.95

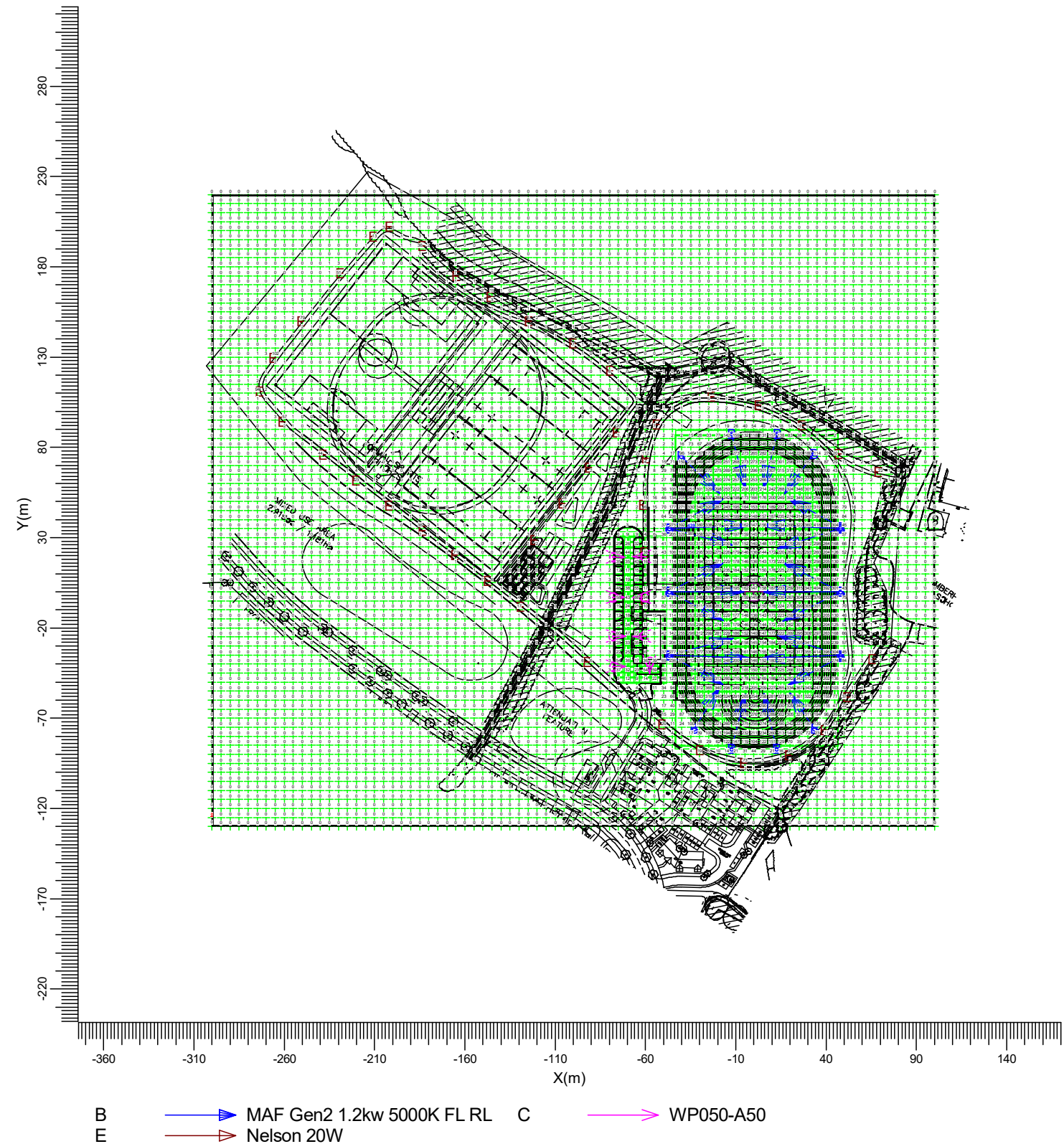
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1:750

3.3 Spill Calcs: Graphical Table

All On

Grid : Spill Grid at Z = -0.00 m

Calculation : Surface Illuminance (lux)



3.4 Spill Calcs: Iso Contour

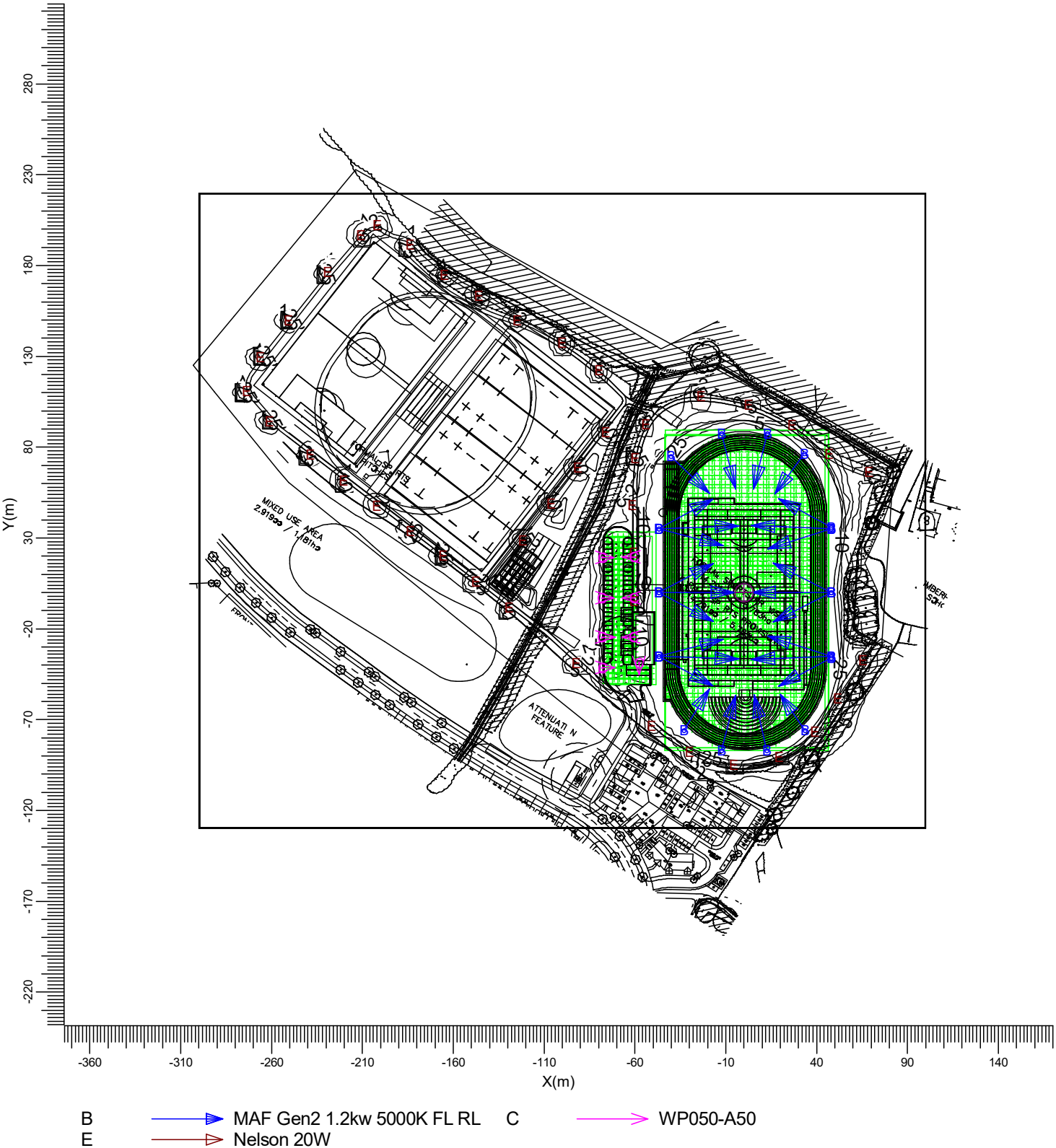
All On

Grid

Calculation

: Spill Grid at Z = -0.00 m

: Surface Illuminance (lux)



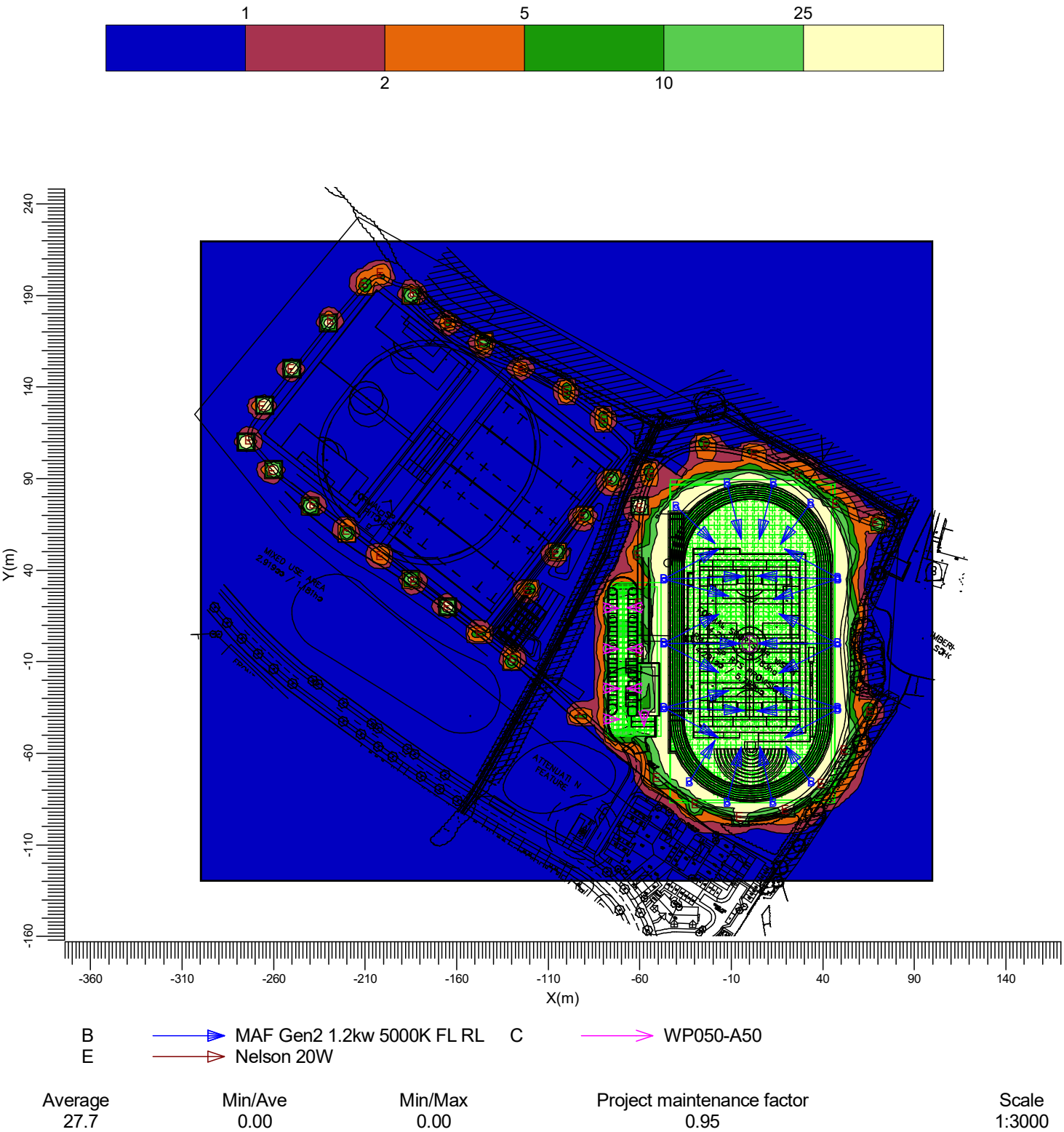
Average 27.7	Min/Ave 0.00	Min/Max 0.00	Project maintenance factor 0.95	Scale 1:3000
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3.5 Spill Calcs: Filled Iso Contour

All On

Grid : Spill Grid at Z = -0.00 m

Calculation : Surface Illuminance (lux)

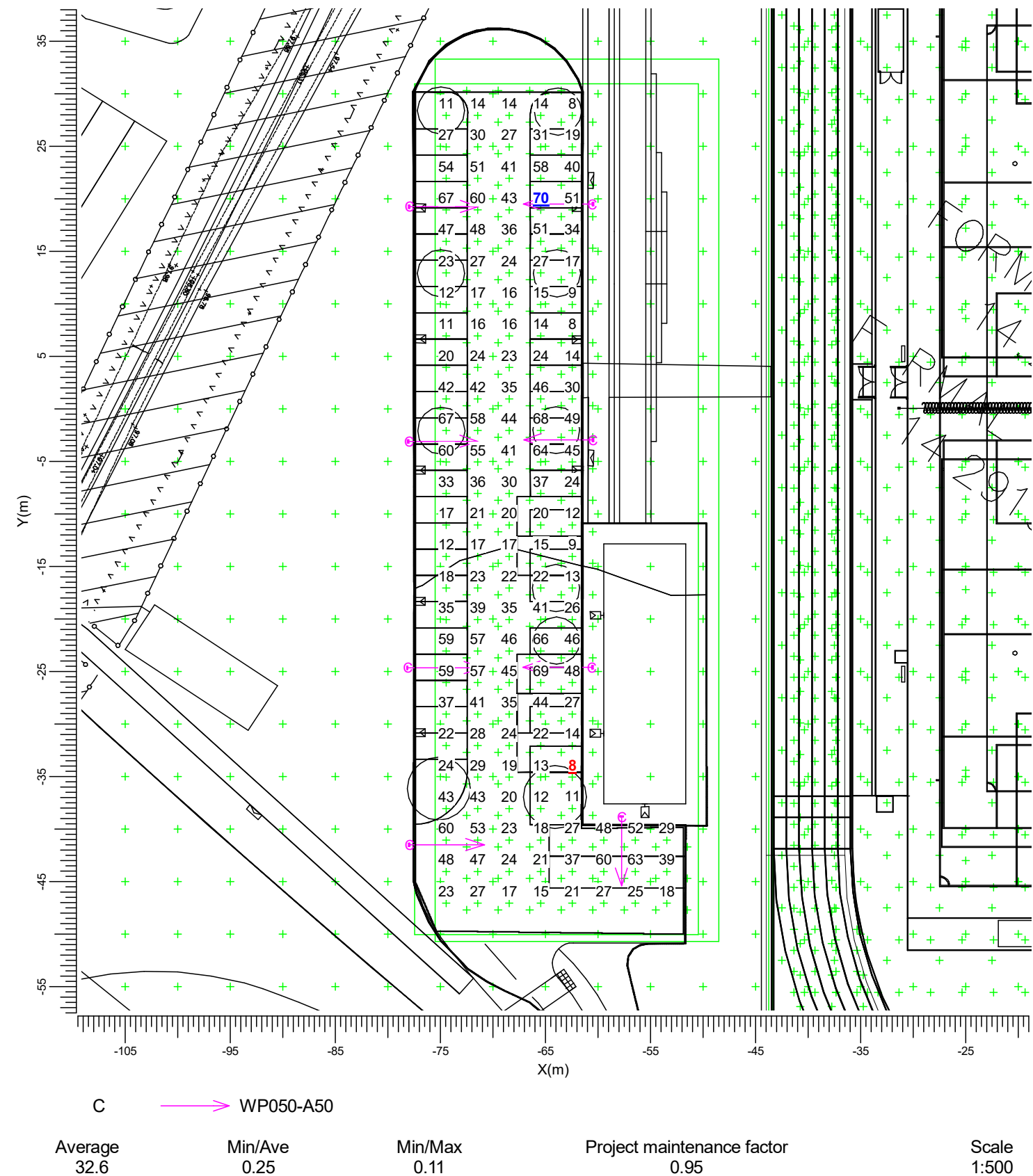


3.6 Car Park: Graphical Table

Car Park Lighting

Grid : Car Park Grid 01 at Z = 0.00 m

Calculation : Surface Illuminance (lux)



4. Installation Data

4.1 Legends

Project Luminaires:

Code	Qty	Luminaire Type	Lamp Type	Flux (lm)
B	26	MAF Gen2 1.2kw 5000K FL RL	1 * LED 1.2kW	1 * 156870
C	8	WP050-A50	1 * WP050-A50	1 * 6760
E	42	Nelson 20W	1 * NB20-A3C-00B	1 * 1642

Switching Modes:

Code	Switching Mode
1	Track
2	200Lux Switching
3	350Lux Switching
4	All On
5	Car Park Lighting

4.2 Luminaire Positioning and Orientation

Qty and Code	Position			Aiming Angles			ULR	ULOR_i	Switching Modes				
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0			1	2	3	4	5
1 * E	-273.94	110.85	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-266.41	129.60	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-261.35	94.18	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-250.81	149.58	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-238.77	76.02	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-229.19	176.40	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-220.57	61.90	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-211.12	196.93	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-202.19	47.77	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-201.95	202.13	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-183.89	191.32	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-183.80	33.83	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-165.80	20.29	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-165.03	174.91	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-147.61	5.96	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-146.06	163.30	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-129.30	-8.03	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-124.97	149.96	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-121.87	28.80	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-106.39	48.93	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-100.39	137.57	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-92.45	-38.73	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-91.48	68.67	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-79.87	122.47	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * C	-78.09	-24.64	6.00	0.0	50.0	0.0	0.00	0.00	-	-	-	+	+
1 * C	-78.00	-3.11	6.00	0.0	47.5	0.0	0.00	0.00	-	-	-	+	+
1 * C	-77.91	-41.50	6.00	0.0	50.0	0.0	0.00	0.00	-	-	-	+	+
1 * C	-77.91	19.26	6.00	0.0	47.5	0.0	0.00	0.00	-	-	-	+	+
1 * E	-76.19	88.41	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-

Qty and Code	Position			Aiming Angles			ULR	ULOR_i	Switching Modes				
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0			1	2	3	4	5
1 * E	-61.48	48.16	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-60.95	21.91	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-60.61	-4.70	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * C	-60.56	-24.58	6.00	180.0	47.5	0.0	0.00	0.00	-	-	-	+	+
1 * C	-60.51	19.50	6.00	180.0	47.5	0.0	0.00	0.00	-	-	-	+	+
1 * C	-60.49	-2.95	6.00	180.0	47.5	0.0	0.00	0.00	-	-	-	+	+
1 * E	-60.13	73.70	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * C	-57.71	-38.84	6.00	-90.0	47.5	0.0	0.00	0.00	-	-	-	+	+
1 * E	-54.13	92.67	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-51.05	-73.20	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * B	-47.00	-35.00	16.00	-28.8	64.7	0.0	0.00	0.00	+	+	-	+	-
1 * B	-47.00	-35.00	16.00	14.6	66.4	0.0	0.00	0.00	+	+	-	+	-
1 * B	-47.00	-35.00	16.00	-2.1	70.1	0.0	0.00	0.00	-	+	-	+	-
1 * B	-47.00	-0.00	16.00	27.9	64.8	0.0	0.00	0.00	+	+	-	+	-
1 * B	-47.00	-0.00	16.00	-27.9	64.8	0.0	0.00	0.00	+	+	-	+	-
1 * B	-47.00	-0.00	16.00	0.0	69.0	0.0	0.00	0.00	-	+	-	+	-
1 * B	-47.00	35.00	16.00	28.8	64.7	0.0	0.00	0.00	+	+	-	+	-
1 * B	-47.00	35.00	16.00	-14.6	66.4	0.0	0.00	0.00	+	+	-	+	-
1 * B	-47.00	35.00	16.00	2.1	70.1	0.0	0.00	0.00	-	+	-	+	-
1 * B	-40.43	74.86	14.00	-43.3	64.5	0.0	0.00	0.00	+	-	-	+	-
1 * B	-33.00	-75.75	14.00	58.3	62.3	0.0	0.00	0.00	+	-	-	+	-
1 * E	-30.04	-87.85	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	-23.74	107.96	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * B	-12.50	-87.00	14.00	75.4	66.0	0.0	0.00	0.00	+	+	-	+	-
1 * B	-12.33	87.50	14.00	-75.8	66.0	0.0	0.00	0.00	+	+	-	+	-
1 * E	-5.75	-94.69	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	2.38	103.51	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * B	12.50	-87.00	14.00	102.6	66.0	0.0	0.00	0.00	+	+	-	+	-
1 * B	12.69	87.50	14.00	-103.5	65.9	0.0	0.00	0.00	+	+	-	+	-
1 * E	19.24	-90.52	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	26.38	92.09	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * B	33.14	76.38	14.00	-126.2	62.9	0.0	0.00	0.00	+	-	-	+	-
1 * B	33.49	-75.75	14.00	124.8	59.5	0.0	0.00	0.00	+	-	-	+	-
1 * E	38.88	-76.63	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	46.70	76.53	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * B	48.00	-36.01	16.00	-151.5	64.0	-0.0	0.00	0.00	+	+	-	+	-
1 * B	48.00	-35.00	16.00	162.4	66.4	0.0	0.00	0.00	+	+	-	+	-
1 * B	48.00	-35.00	16.00	-177.7	70.0	0.0	0.00	0.00	-	+	-	+	-
1 * B	48.00	-0.00	16.00	153.1	65.9	0.0	0.00	0.00	+	+	-	+	-
1 * B	48.00	-0.00	16.00	-153.1	65.9	0.0	0.00	0.00	+	+	-	+	-
1 * B	48.00	-0.00	16.00	180.0	69.9	0.0	0.00	0.00	-	+	-	+	-
1 * B	48.00	35.00	16.00	-162.4	66.4	0.0	0.00	0.00	+	+	-	+	-
1 * B	48.00	35.00	16.00	177.7	70.0	0.0	0.00	0.00	-	+	-	+	-
1 * B	48.00	36.01	16.00	151.5	64.0	0.0	0.00	0.00	+	+	-	+	-
1 * E	51.61	-58.29	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	65.39	-37.34	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-
1 * E	68.57	66.15	1.00	0.0	0.0	0.0	0.00	0.00	-	-	-	+	-