

All Weather Pitch Martin Saavage Park

D-520624 - Rev 1

Project code: 0400715412
Date: 13-07-2023

Designer: Signify

Description: GAA pitch, Football Pitch, Training Area and Hurling Area.

For Designer Assumptions and Signify Terms & Conditions please see "Signify D-520624 - All Weather Pitch Martin Savage Park - Rev 1 Drawing.pdf"

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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Note

Within the lighting design and report by Signify it states that the lighting columns for the GAA pitch are 2m high. This is a typo and the columns are proposed as 20metres above ground level.

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1. Project Description

1.1 Description

Proposal based on: Philips OptiVisionLED Gen3.5 Floodlight.
Maximum output 5700k

GAA Pitch

There are 8 No 2m columns with 7 No Floodlights on each (52 No in total)
to a maintained average of 584.7 lux 0.69 Uo, 0.51 Min/Max.
GR Max calculation is below 50 GR Max requirement (46.0).

Football Pitch

There are 6 No 18m columns with 4 No Floodlights on each outer column
and 5 No Floodlights on each inner column (26 No in total) to a maintained
average of 490.5 lux 0.75 Uo, 0.57 Min/Max.
GR Max calculation is below 50 GR Max requirement (42.8).

Training Area

There are 2 No 18m columns with 2 No Floodlights on each (4 No in total)
to a maintained average of 230.0 lux 0.75 Uo, 0.44 Min/Max.
GR Max calculation is below 50 GR Max requirement (40.9).

Less than 10 Lux on nearby houses.

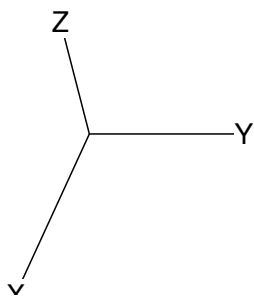
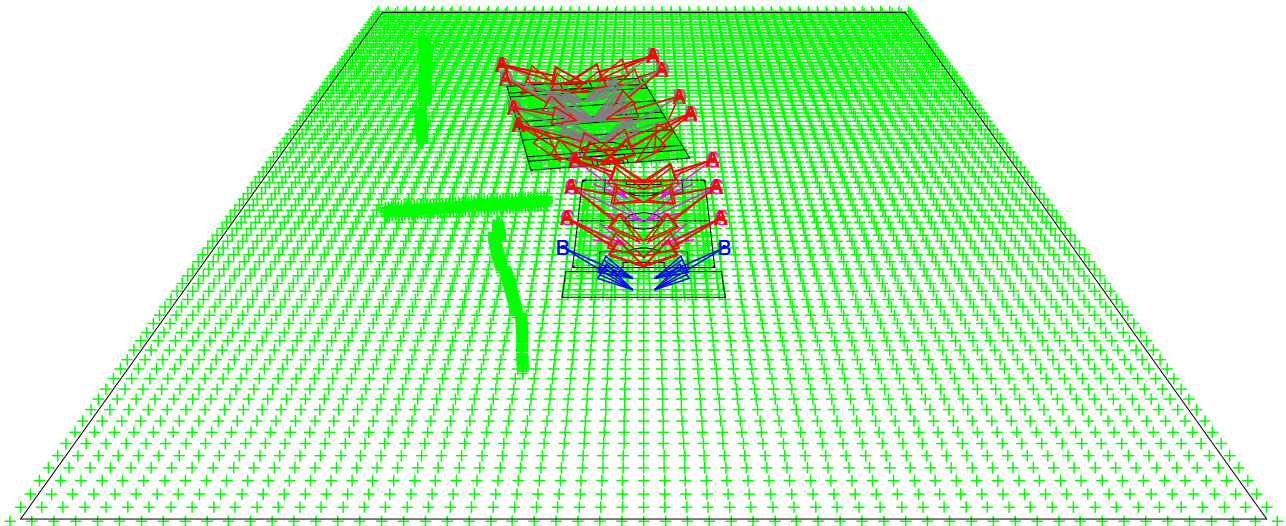
Performance Floodlights use MF 0.95

Spill Light calculations use MF 1.0

Products Used

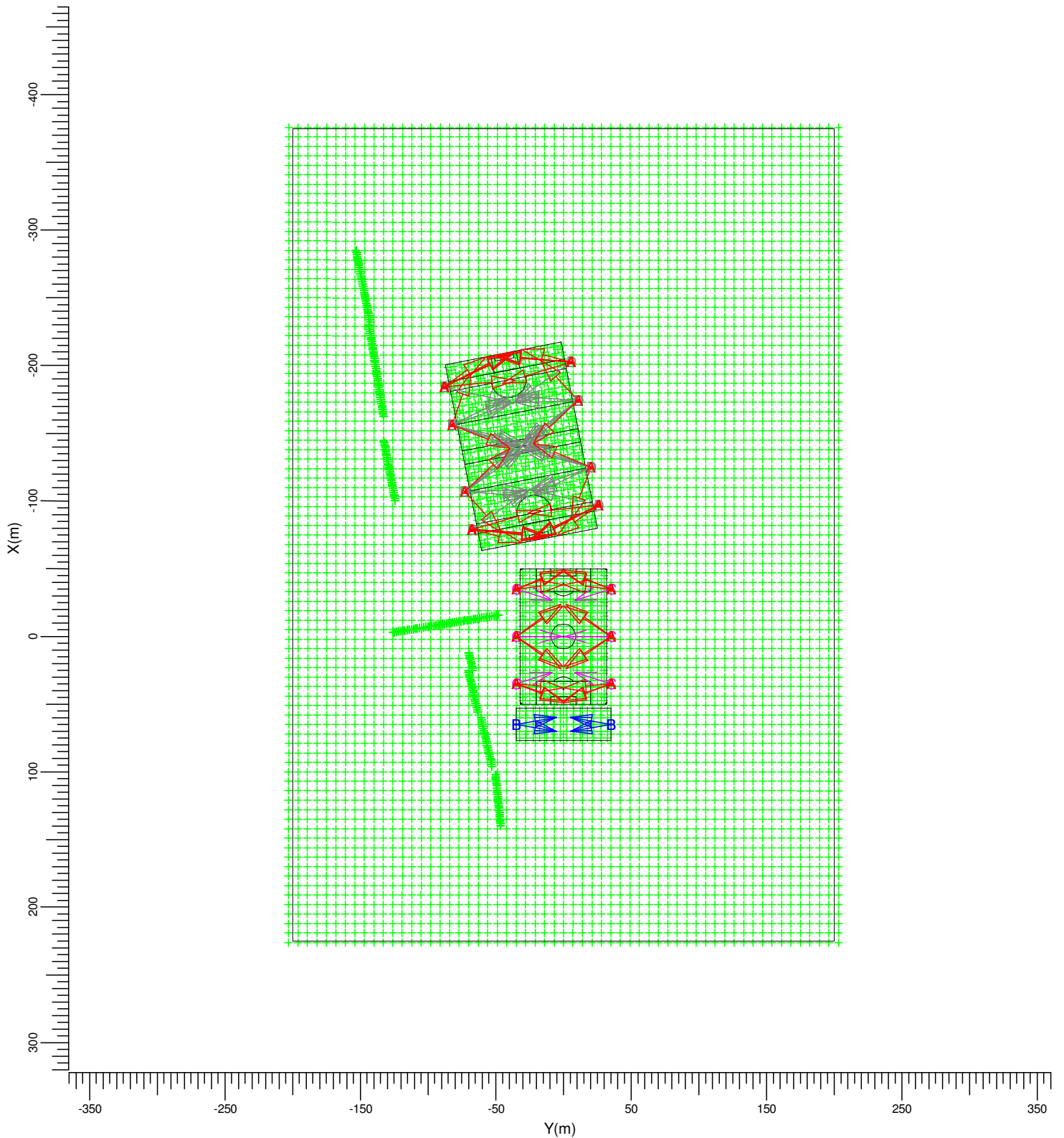
48x BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A35-NB LO
4x BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A35-MB LO
6x BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A35-WB LO
24x BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A35-NB LT
note: on site tilt equals Tilt90 value minus 35 degrees.

1.2 3-D Project Overview



- | | | | | | |
|---|--|--------------------------|---|--|--------------------------|
| A | | BVP528 OUT T35 A35-NB LO | B | | BVP528 OUT T35 A35-MB LO |
| C | | BVP528 OUT T35 A35-WB LO | D | | BVP528 OUT T35 A35-NB LT |

1.3 Top Project Overview



- | | | | | | |
|---|--|--------------------------|---|--|--------------------------|
| A | | BVP528 OUT T35 A35-NB LO | B | | BVP528 OUT T35 A35-MB LO |
| C | | BVP528 OUT T35 A35-WB LO | D | | BVP528 OUT T35 A35-NB LT |

Scale
1:4000

2. Summary

2.1 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
A	48	BVP528 OUT T35 A35-NB LO	1 * LED2590-4S/757	1505.9	1 * 259000
B	4	BVP528 OUT T35 A35-MB LO	1 * LED2590-4S/757	1505.9	1 * 259000
C	6	BVP528 OUT T35 A35-WB LO	1 * LED2590-4S/757	1505.9	1 * 259000
D	24	BVP528 OUT T35 A35-NB LT	1 * LED2590-4S/757	1505.9	1 * 259000

The total installed power: 123.48 (kWatt)

Number of Luminaires Per Switching Mode:

Switching Mode	Luminaire Code				Power (kWatt)
	A	B	C	D	
GAA Pitch	28	0	0	24	78.31
Football Pitch	20	0	6	0	39.15
Training Area	0	4	0	0	6.02
Spill Light	48	4	6	24	123.48

Number of Luminaires Per Arrangement:

Arrangement	Luminaire Code				Power (kWatt)
	A	B	C	D	
Football Corner	12	0	4	0	24.09
Football Mid	8	0	2	0	15.06
GAA BL	5	0	0	1	9.04
GAA BML	2	0	0	5	10.54
GAA BMR	2	0	0	5	10.54
GAA BR	5	0	0	1	9.04
GAA TL	5	0	0	1	9.04
GAA TML	2	0	0	5	10.54
GAA TMR	2	0	0	5	10.54
GAA TR	5	0	0	1	9.04
Training Area	0	4	0	0	6.02

2.2 Calculation Results

Switching Modes:

Code	Switching Mode	Maintenance factor
1	GAA Pitch	0.95
2	Football Pitch	0.95
3	Training Area	0.95
4	Spill Light	1.00

(II)luminance Calculations:

Calculation	Switching Mode	Type	Unit	Ave Min/AveMin/Max		
GAA Pitch 10x10	1	Surface Illuminance	lux	585	0.69	0.51
Football Pitch 10x10	2	Surface Illuminance	lux	491	0.75	0.57
Training Area	3	Surface Illuminance	lux	230	0.75	0.44

Calculation	Switching Mode	Type	Unit	Ave Min/AveMin/Max		
74-96 Glenarriff Road	4	Surface Illuminance	lux	0.12	0.21	0.03
2-14 Kempton Park	4	Surface Illuminance	lux	1.01	0.54	0.32
1-19 Kempton View	4	Surface Illuminance	lux	2.75	0.62	0.45
2-12 Kempton View	4	Surface Illuminance	lux	4.06	0.93	0.90
2-2A Glendhu Road	4	Surface Illuminance	lux	1.17	0.86	0.74
4-12 Glendhu Road	4	Surface Illuminance	lux	1.10	0.84	0.71
24-14 Glendhu Road	4	Surface Illuminance	lux	1.00	0.60	0.46
36-26 Glendhu Road	4	Surface Illuminance	lux	0.33	0.49	0.23
Spill Light	4	Surface Illuminance	lux	54.2	0.00	0.00

Glare Rating for Grid of Observers:

Calculation	Switching Mode	Observer Grid	Reference Grid	Reflectance	GR-Max
GAA Pitch 10x10 GR	1	GAA Pitch 10x10	GAA Pitch 10x10	0.25	46.0
Football Pitch 10x10 GR	2	Football Pitch 10x10	Football Pitch 10x10	0.25	42.8
Training Area GR	3	Training Area 5x5	Training Area 5x5	0.25	40.9

Obtrusive Light Calculations:

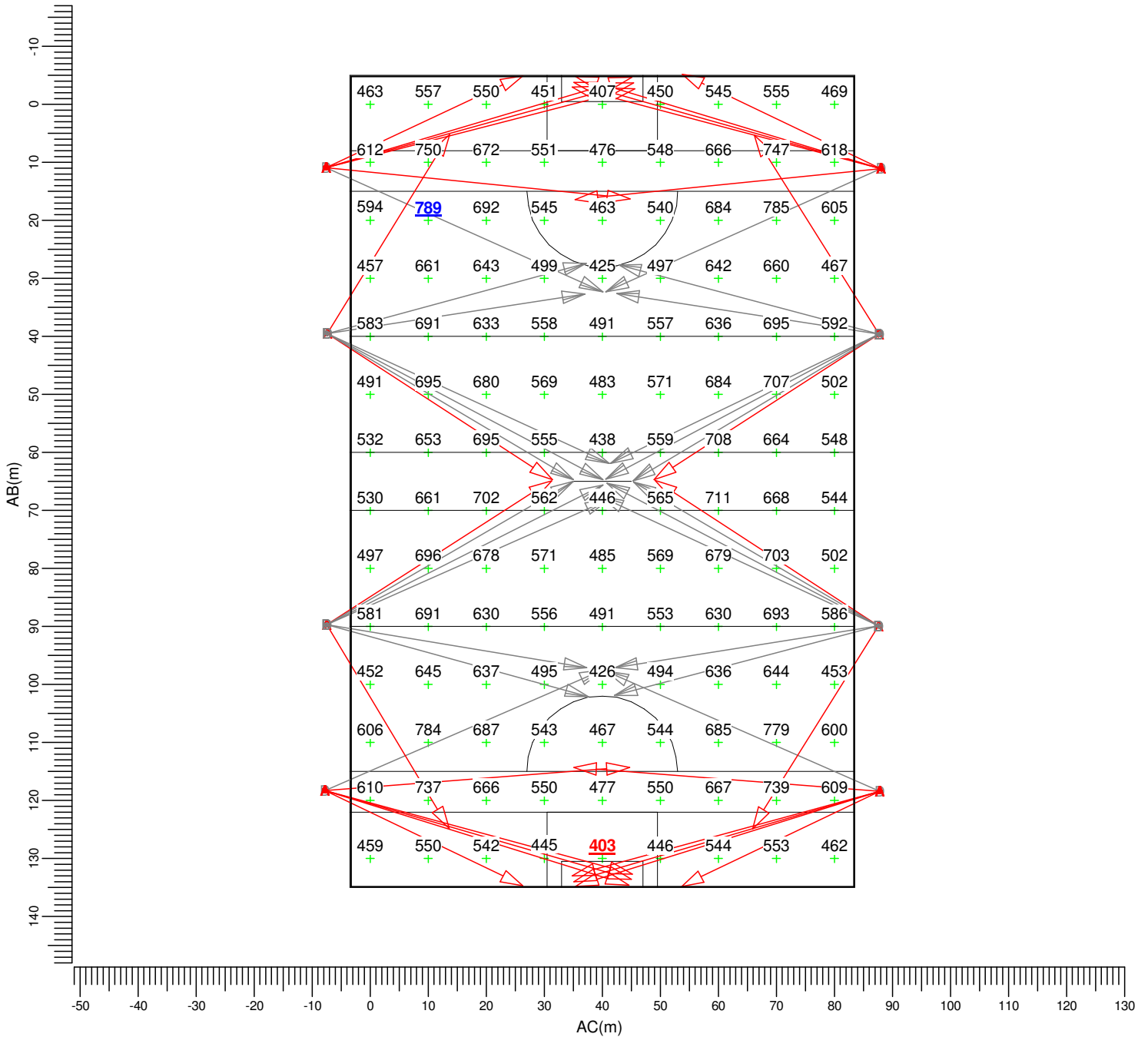
Switching Mode	ULR
1	0.00
2	0.00
3	0.00
4	0.00

3. Calculation Results

3.1 GAA Pitch 10x10: Graphical Table

GAA Pitch

Grid : GAA Pitch 10x10
Calculation : Surface Illuminance (lux)



(-21180, -4.14, -0.00) C----D (-84.19, 20.67, 0.00)
(-196.53, -82.67, -0.00) A----B (-68.92, -57.86, -0.00)

A BVP528 OUT T35 A35-NB LO D BVP528 OUT T35 A35-NB LT

Average
585

Min/Ave
0.69

Min/Max
0.51

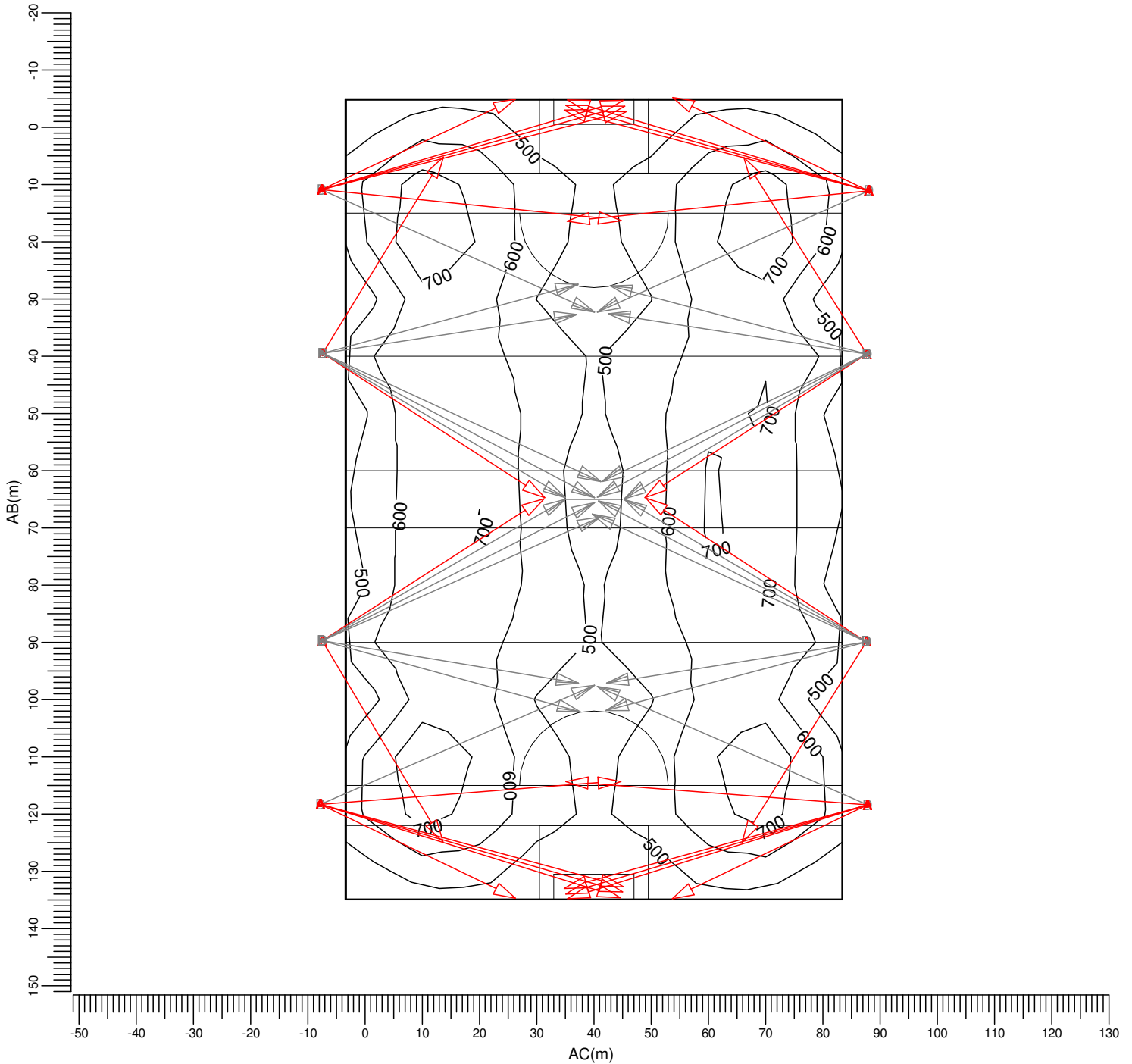
Project maintenance factor
0.95

Scale
1:1000

3.2 GAA Pitch 10x10: Iso Contour

GAA Pitch

Grid : GAA Pitch 10x10
 Calculation : Surface Illuminance (lux)



(-21180, -414, -0.00) C----D (-84.19, 20.67, 0.00)
 (-196.53, -82.67, -0.00) A----B (-68.92, -57.86, -0.00)

A → BVP528 OUT T35 A35-NB LO D → BVP528 OUT T35 A35-NB LT

Average
585

Min/Ave
0.69

Min/Max
0.51

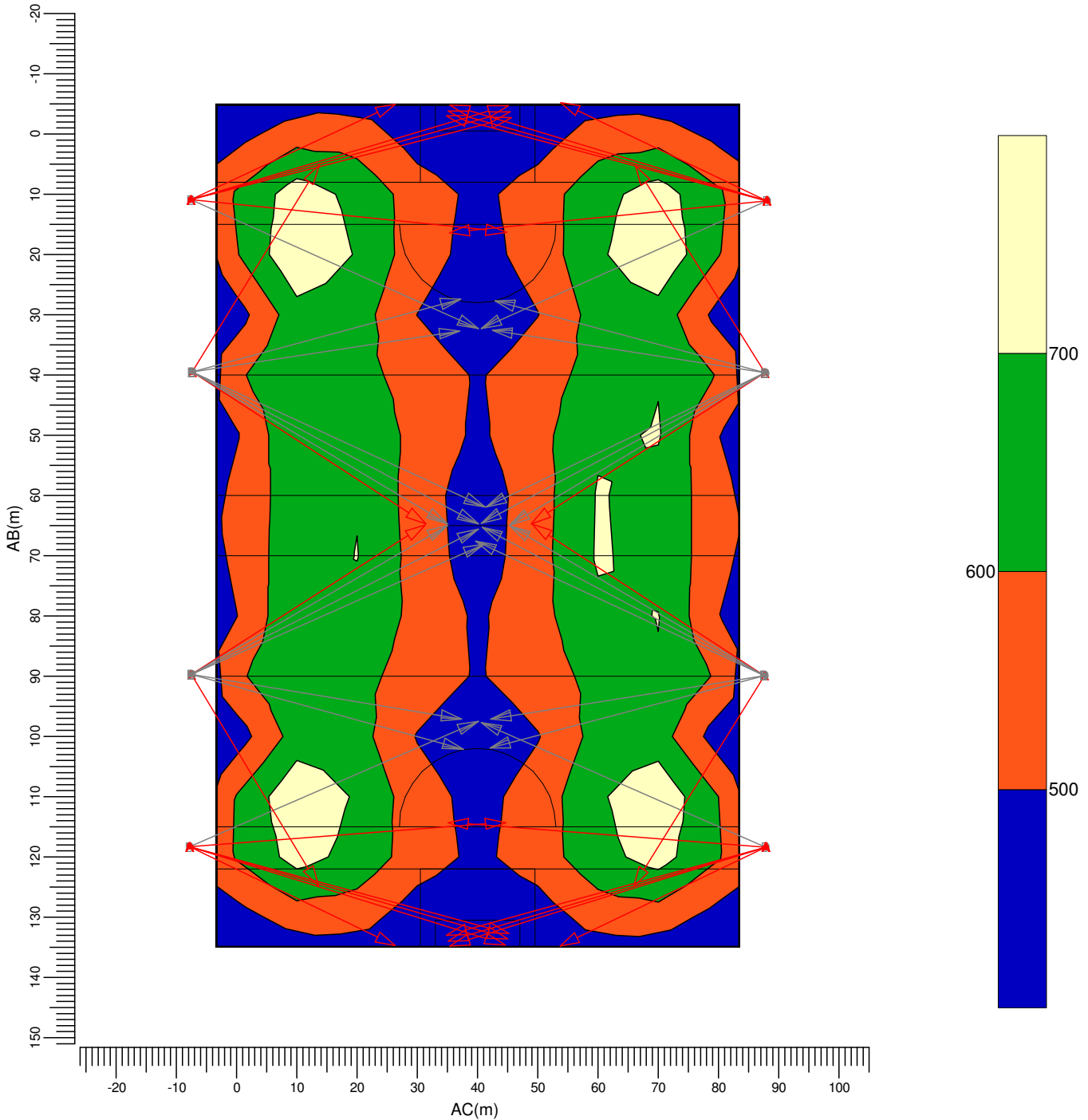
Project maintenance factor
0.95

Scale
1:1000

3.3 GAA Pitch 10x10: Filled Iso Contour

GAA Pitch

Grid : GAA Pitch 10x10
 Calculation : Surface Illuminance (lux)



(-21180, -414, -0.00) C----D (-84.19, 20.67, 0.00)
 (-196.53, -82.67, -0.00) A----B (-68.92, -57.86, -0.00)

A → BVP528 OUT T35 A35-NB LO D → BVP528 OUT T35 A35-NB LT

Average
585

Min/Ave
0.69

Min/Max
0.51

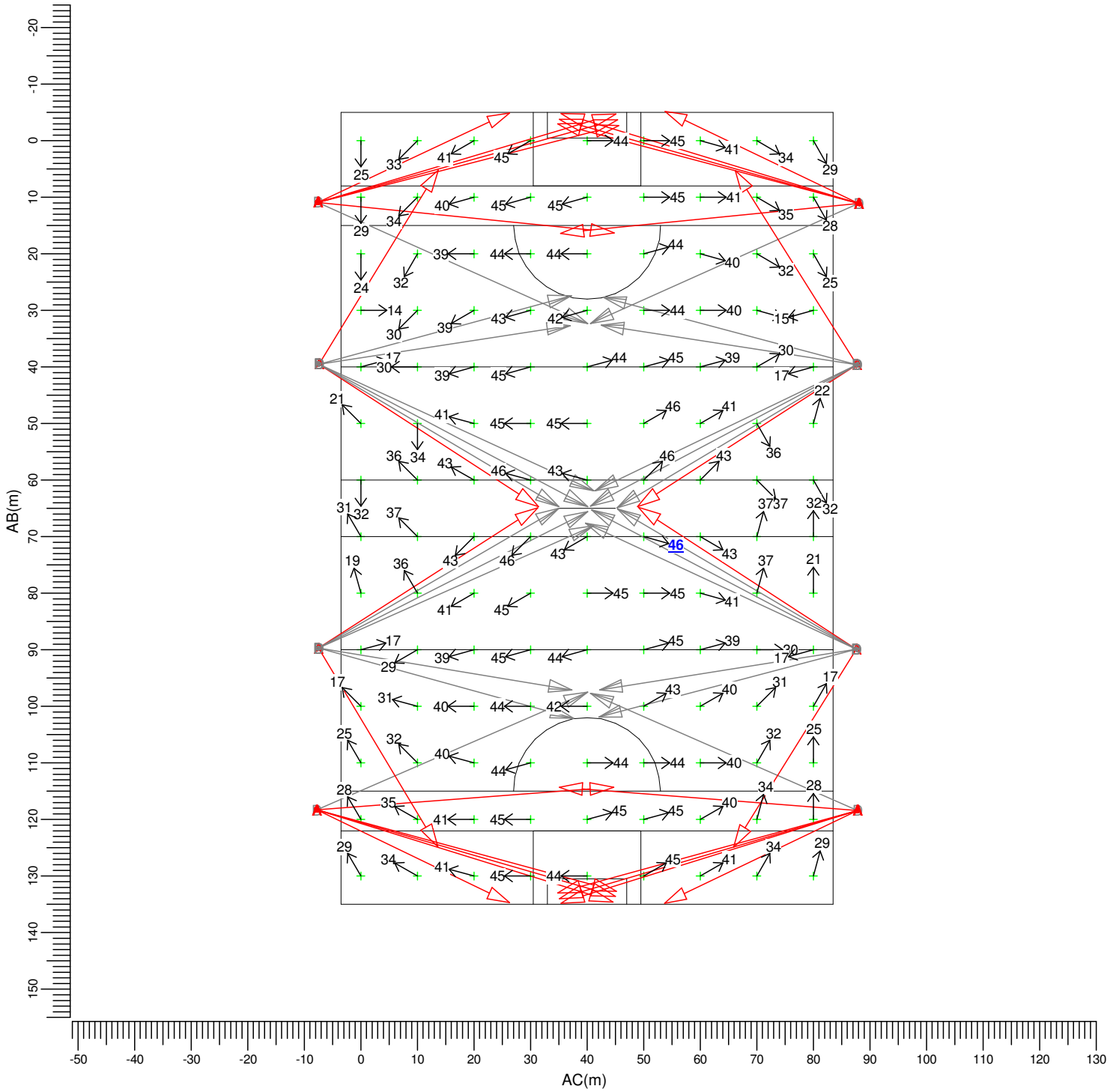
Project maintenance factor
0.95

Scale
1:1000

3.4 GAA Pitch 10x10 GR: Graphical Table

GAA Pitch

Grid of Observers : GAA Pitch 10x10
 Calculation : Glare Rating
 Grid for Background Luminance: GAA Pitch 10x10 (Reflectance: 0.25)
 Vertical Viewing Angle : -2.0 deg



A → BVP528 OUT T35 A35-NB LO D → BVP528 OUT T35 A35-NB LT

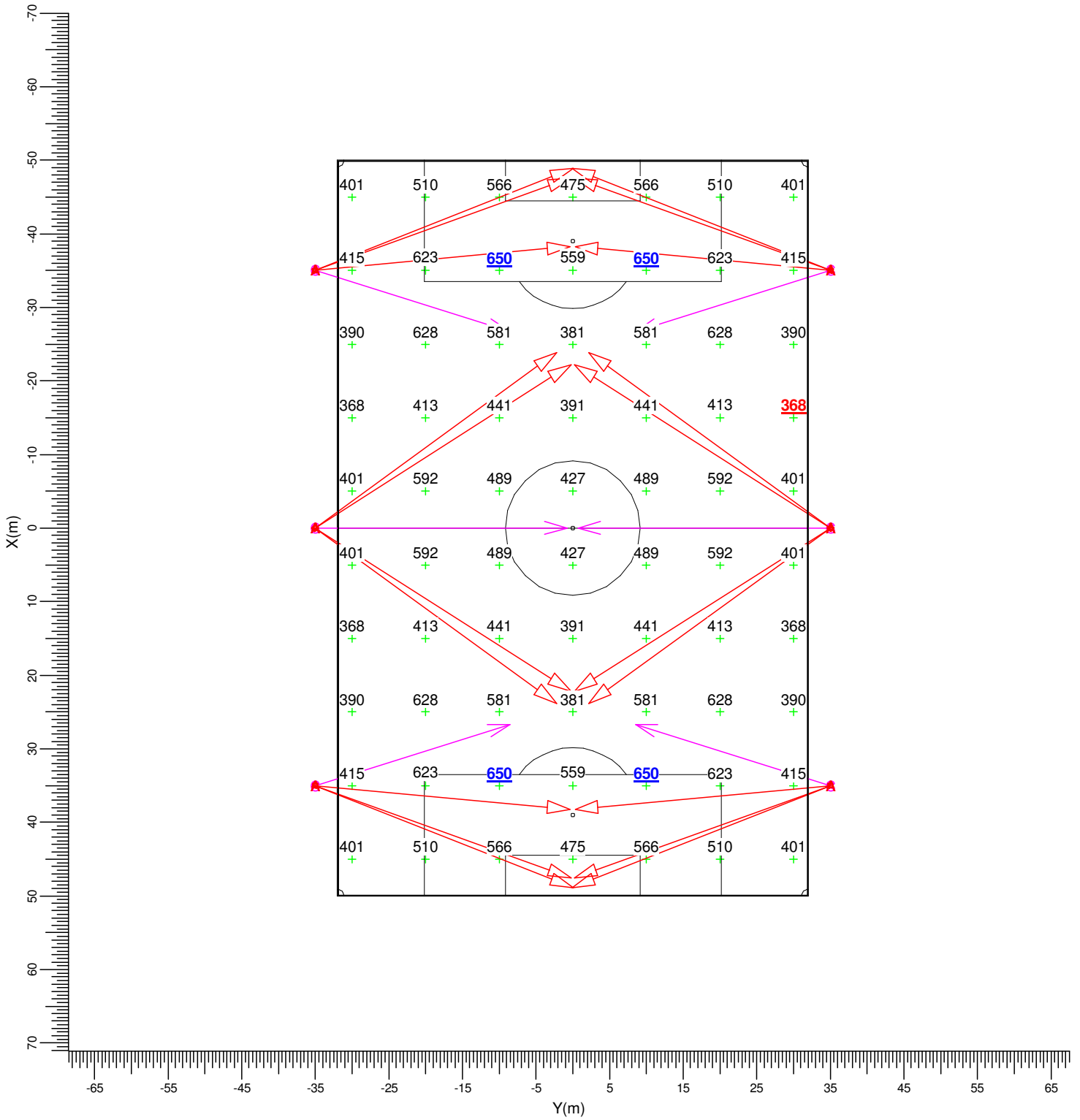
Project maintenance factor
 0.95

Scale
 1:1000

3.5 Football Pitch 10x10: Graphical Table

Football Pitch

Grid : Football Pitch 10x10 at Z = -0.00 m
 Calculation : Surface Illuminance (lux)



A BVP528 OUT T35 A35-NB LO C BVP528 OUT T35 A35-WB LO

Average
491

Min/Ave
0.75

Min/Max
0.57

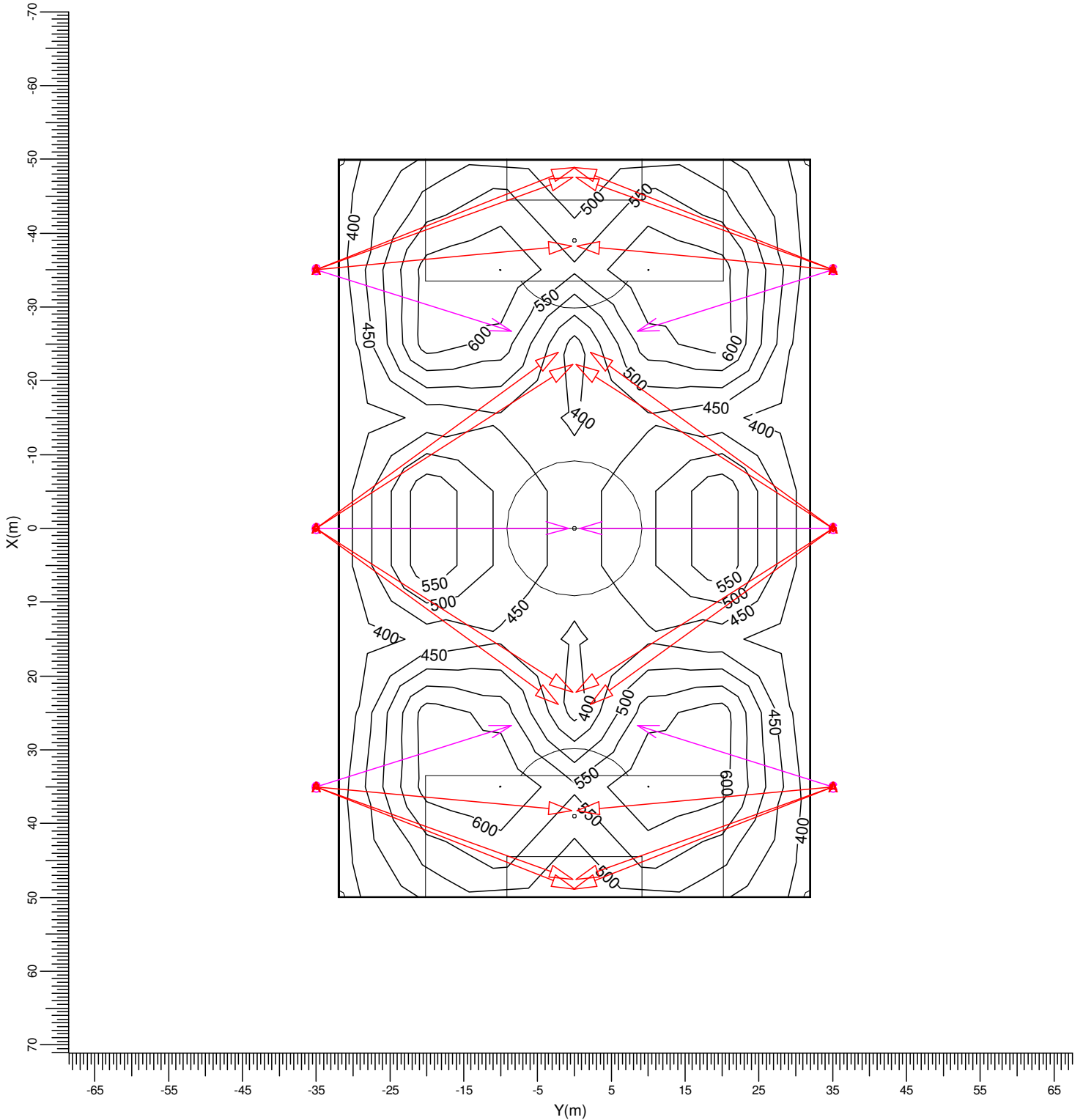
Project maintenance factor
0.95

Scale
1:750

3.6 Football Pitch 10x10: Iso Contour

Football Pitch

Grid : Football Pitch 10x10 at Z = -0.00 m
 Calculation : Surface Illuminance (lux)



A BVP528 OUT T35 A35-NB LO C BVP528 OUT T35 A35-WB LO

Average
491

Min/Ave
0.75

Min/Max
0.57

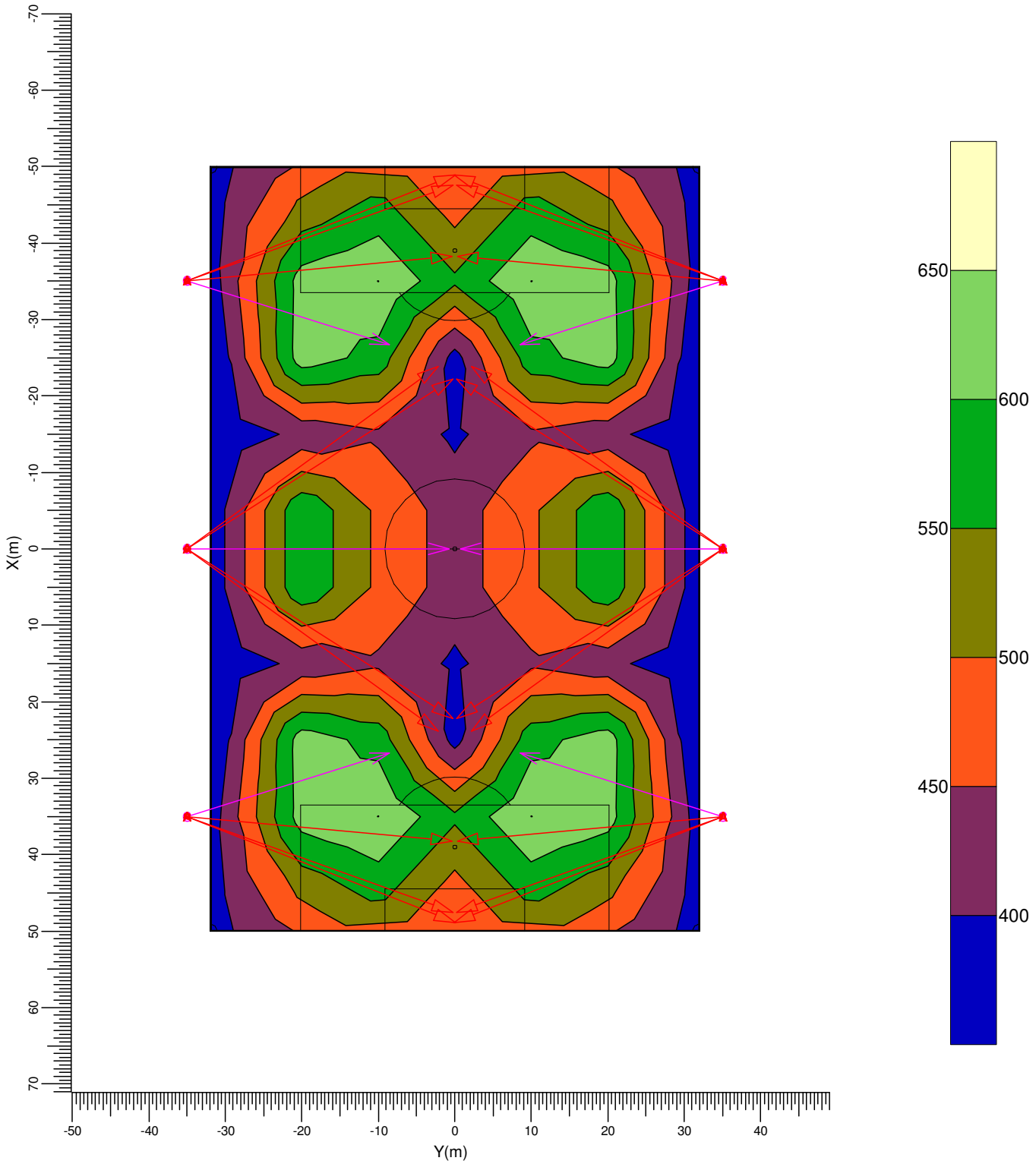
Project maintenance factor
0.95

Scale
1:750

3.7 Football Pitch 10x10: Filled Iso Contour

Football Pitch

Grid : Football Pitch 10x10 at Z = -0.00 m
 Calculation : Surface Illuminance (lux)



A → BVP528 OUT T35 A35-NB LO C → BVP528 OUT T35 A35-WB LO

Average
491

Min/Ave
0.75

Min/Max
0.57

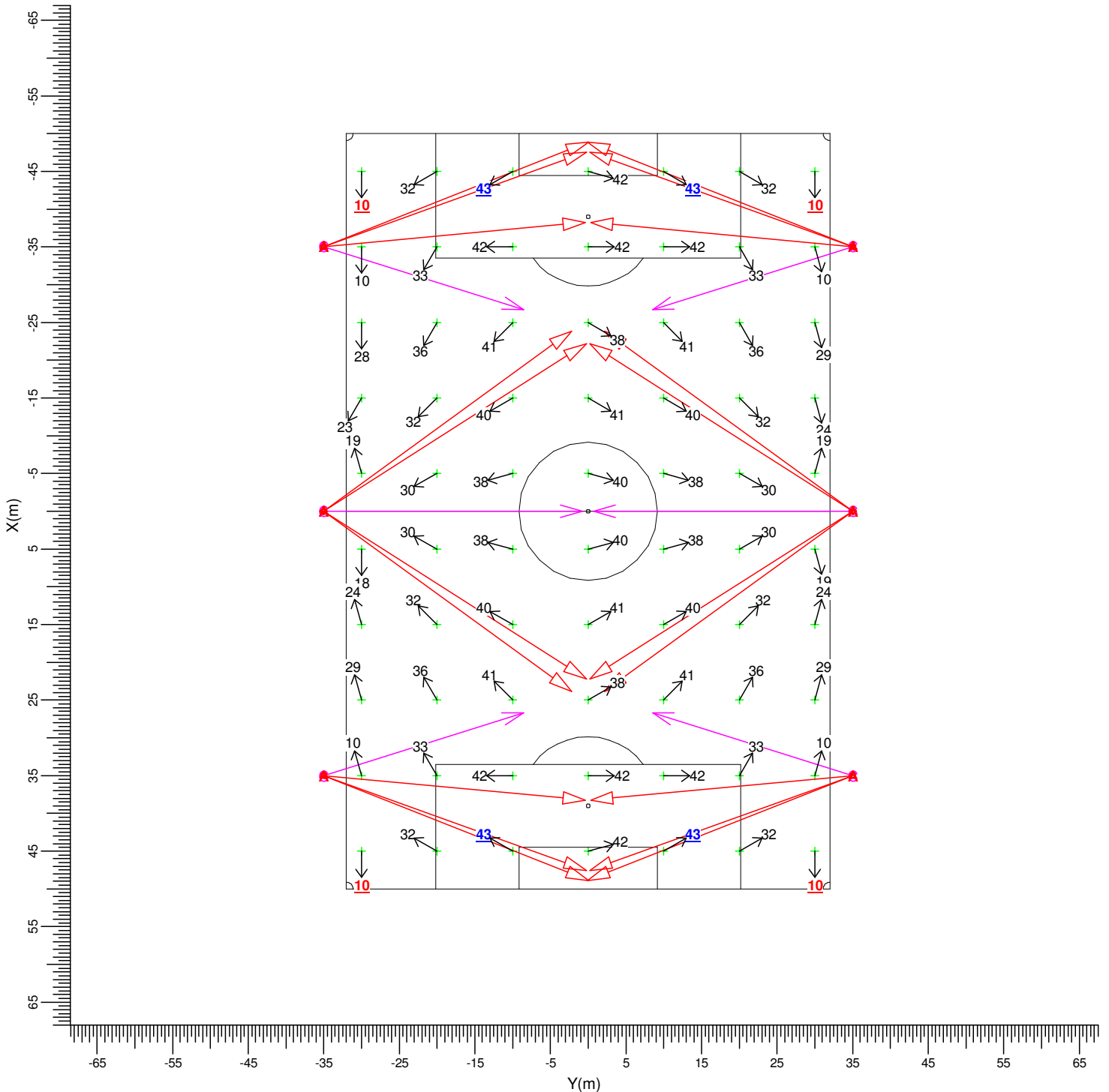
Project maintenance factor
0.95

Scale
1:750

3.8 Football Pitch 10x10 GR: Graphical Table

Football Pitch

Grid of Observers : Football Pitch 10x10
 Calculation : Glare Rating
 Grid for Background Luminance: Football Pitch 10x10 (Reflectance: 0.25)
 Vertical Viewing Angle : -2.0 deg



A → BVP528 OUT T35 A35-NB LO C → BVP528 OUT T35 A35-WB LO

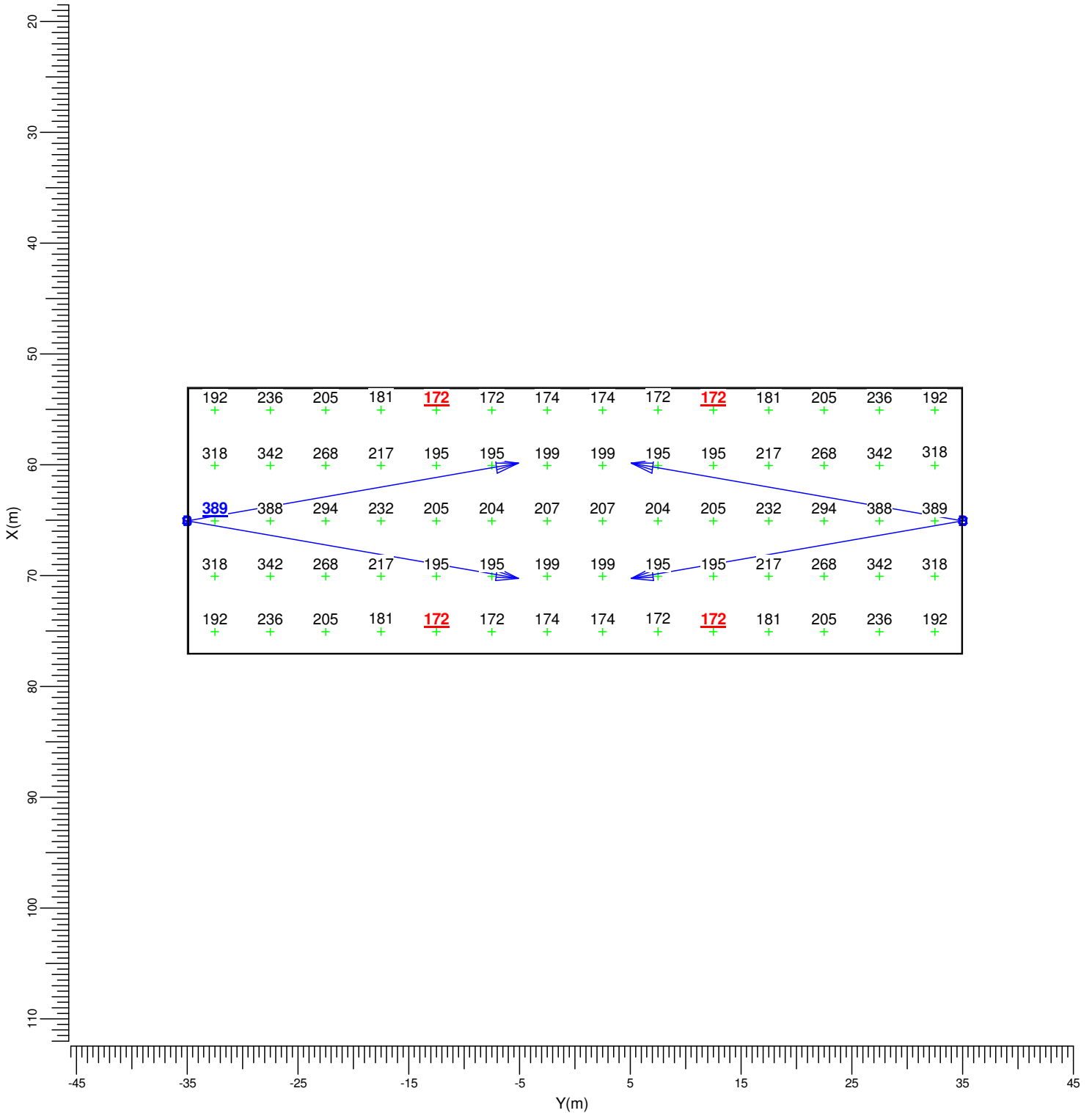
Project maintenance factor
0.95

Scale
1:750

3.9 Training Area: Graphical Table

Training Area

Grid : Training Area 5x5 at Z = -0.00 m
Calculation : Surface Illuminance (lux)



B BVP528 OUT T35 A35-MB LO

Average
230

Min/Ave
0.75

Min/Max
0.44

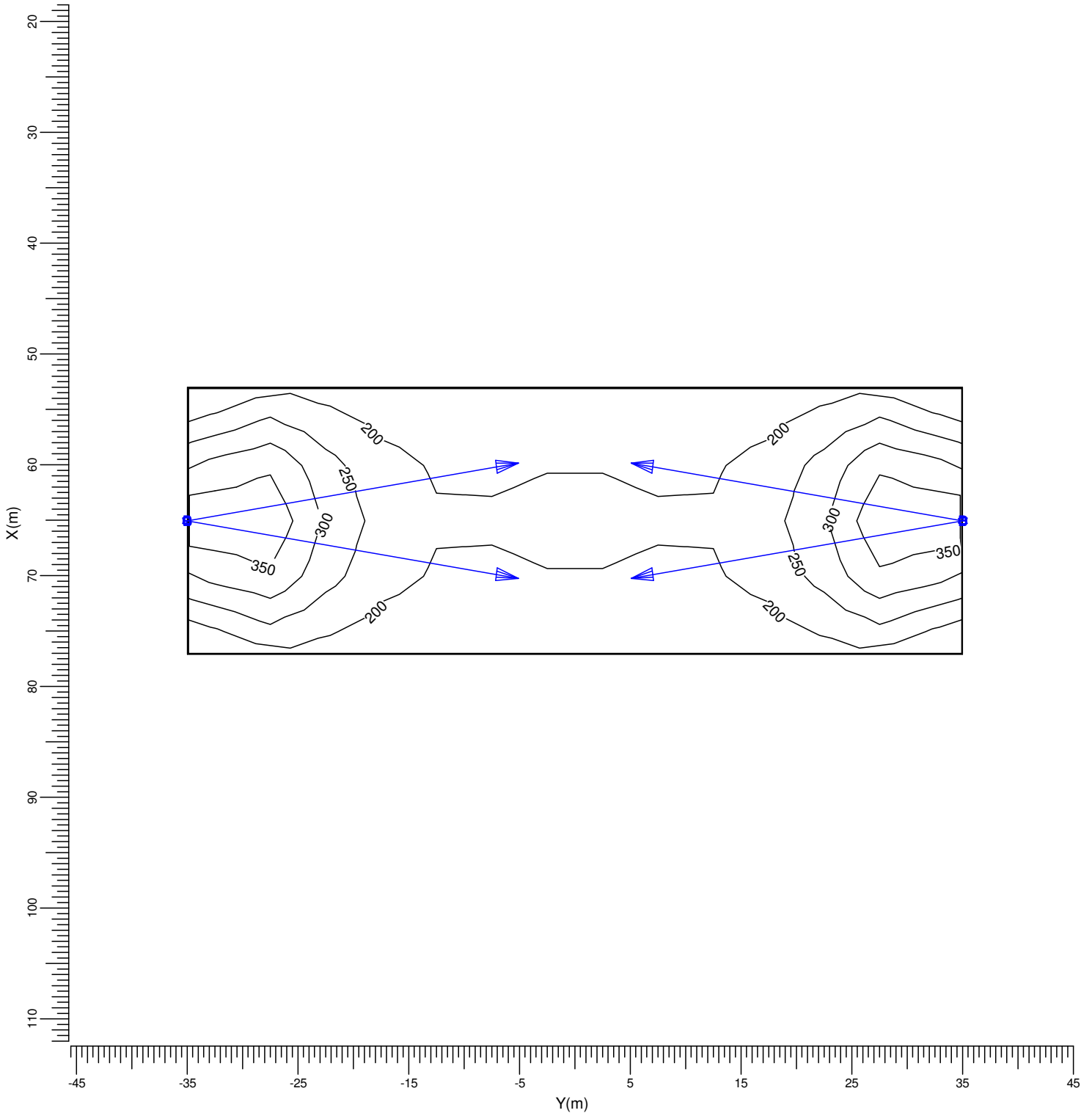
Project maintenance factor
0.95

Scale
1:500

3.10 Training Area: Iso Contour

Training Area

Grid : Training Area 5x5 at Z = -0.00 m
Calculation : Surface Illuminance (lux)



B BVP528 OUT T35 A35-MB LO

Average
230

Min/Ave
0.75

Min/Max
0.44

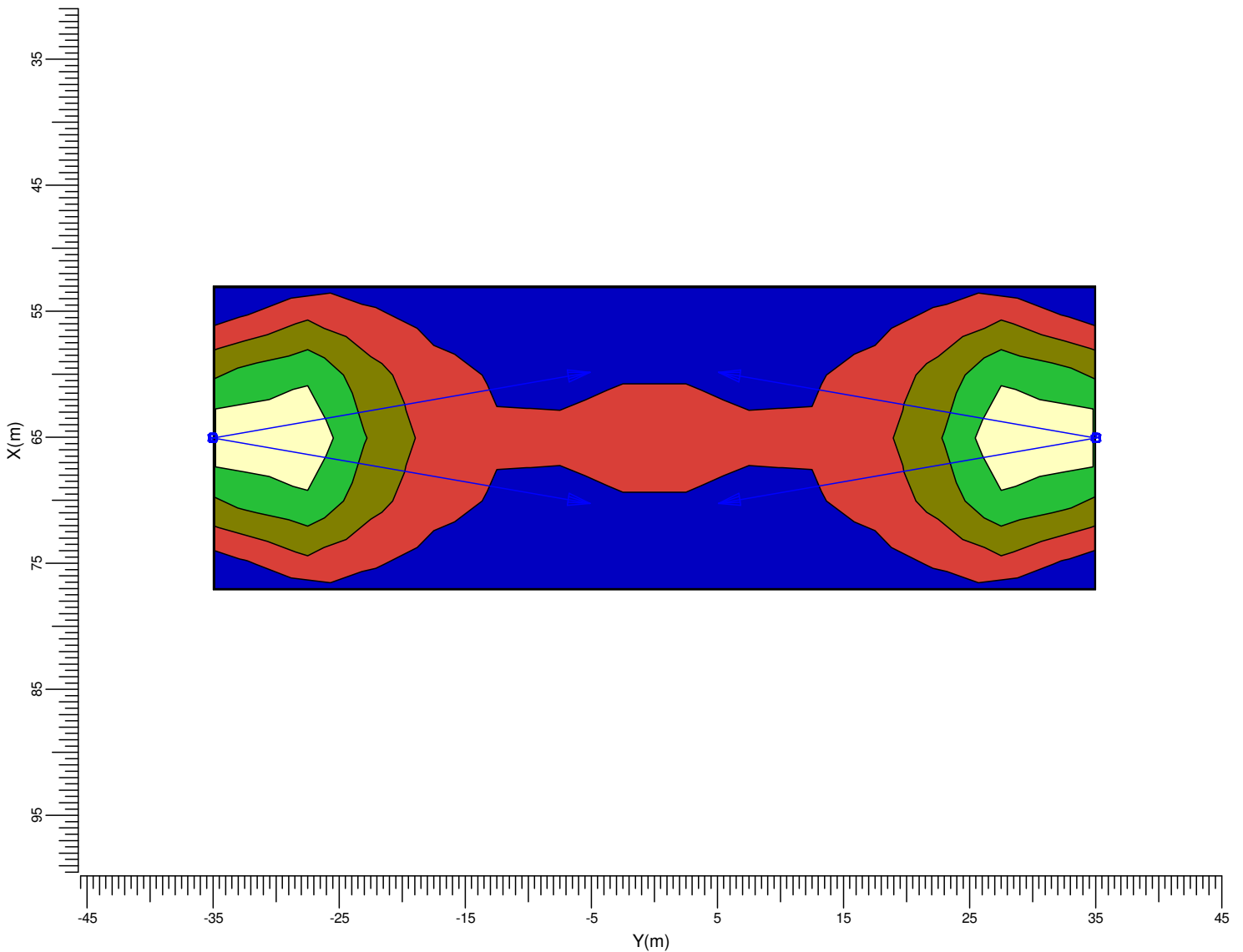
Project maintenance factor
0.95

Scale
1:500

3.11 Training Area: Filled Iso Contour

Training Area

Grid : Training Area 5x5 at Z = -0.00 m
 Calculation : Surface Illuminance (lux)



B BVP528 OUT T35 A35-MB LO

Average
230

Min/Ave
0.75

Min/Max
0.44

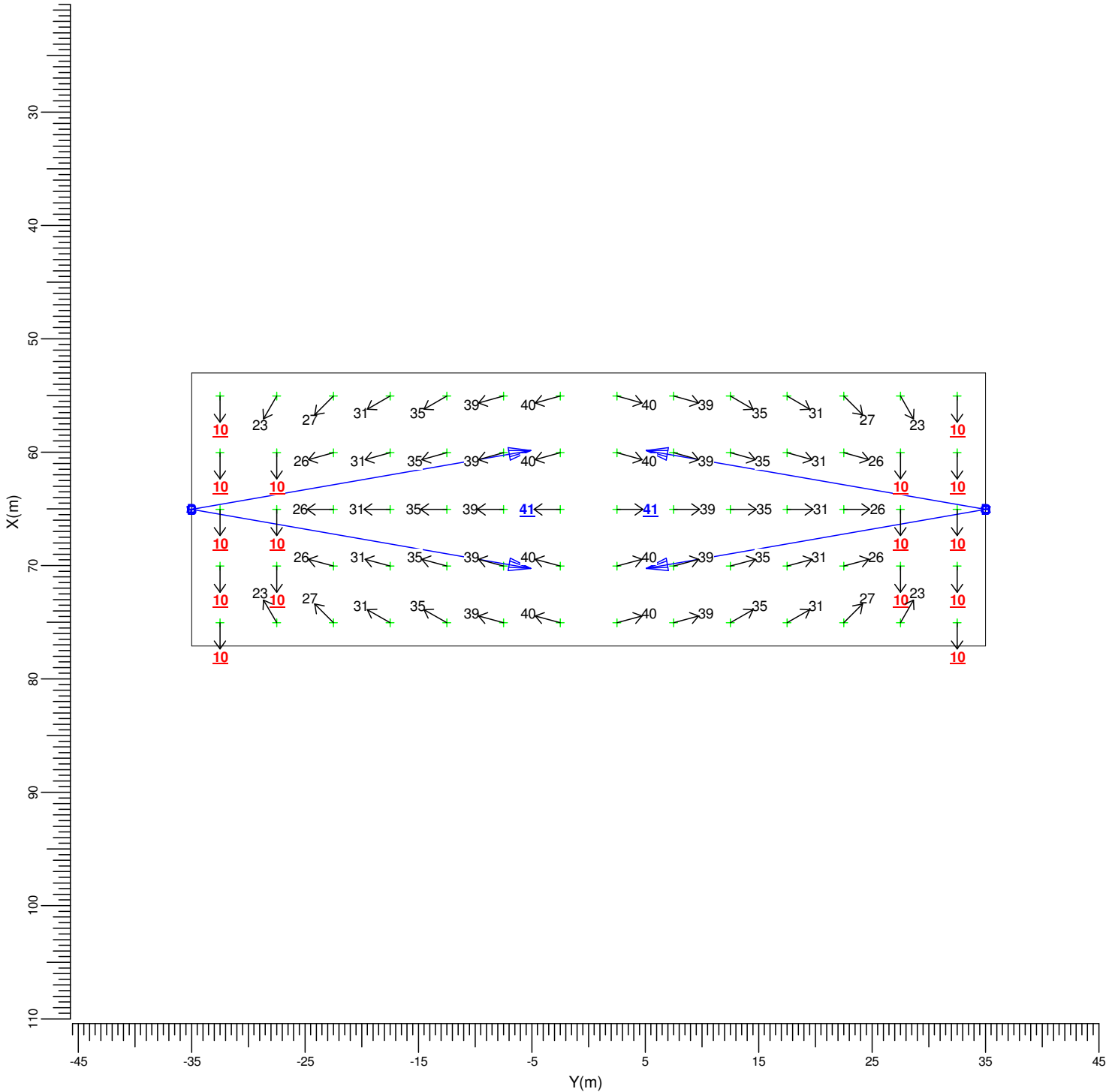
Project maintenance factor
0.95

Scale
1:500

3.12 Training Area GR: Graphical Table

Training Area

Grid of Observers : Training Area 5x5
 Calculation : Glare Rating
 Grid for Background Luminance: Training Area 5x5 (Reflectance: 0.25)
 Vertical Viewing Angle : -2.0 deg



B BVP528 OUT T35 A35-MB LO

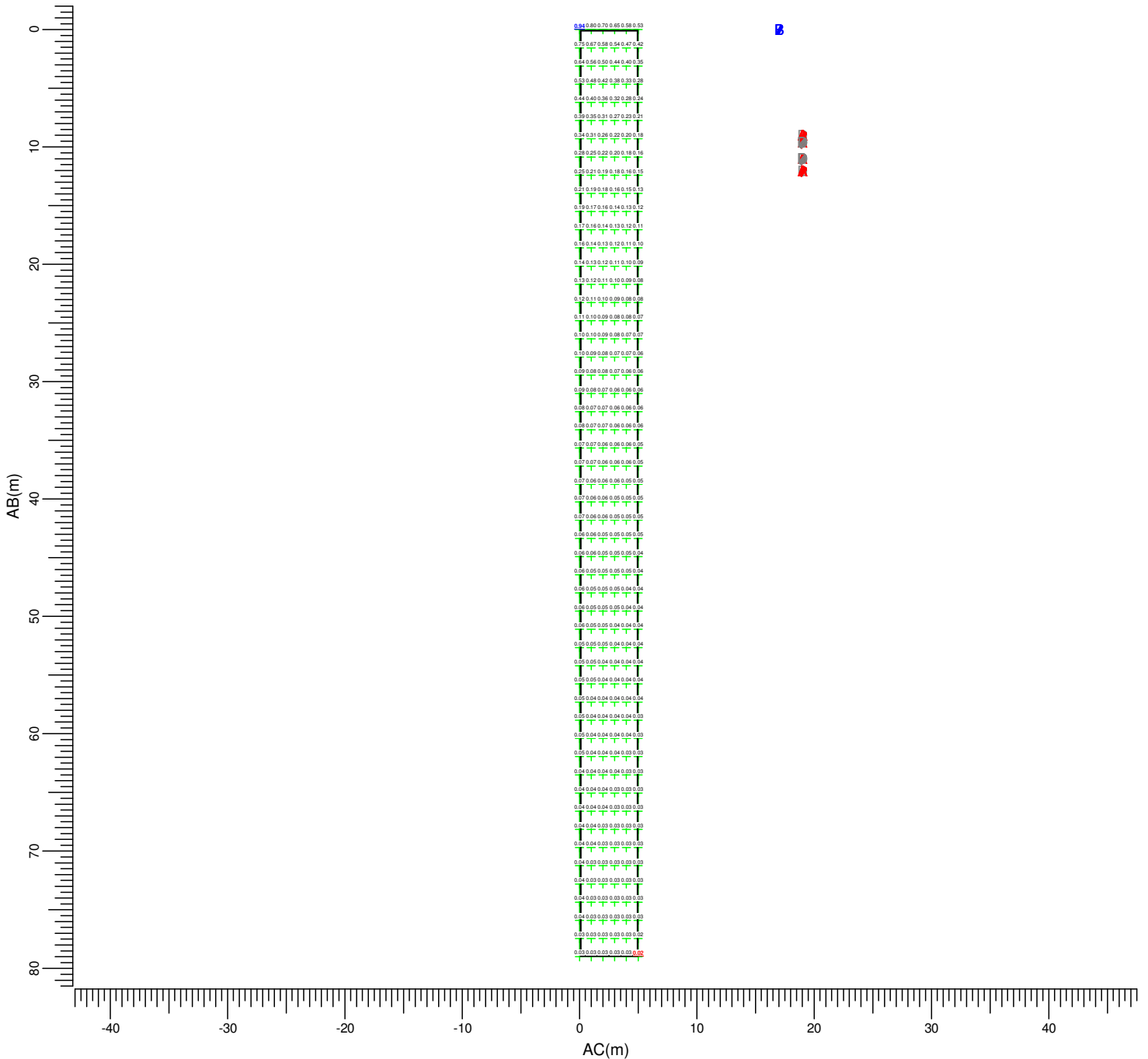
Project maintenance factor
 0.95

Scale
 1:500

3.13 74-96 Glenarriff Road: Graphical Table

Spill Light

Grid : 74-96 Glenarriff Road
Calculation : Surface Illuminance (lux)



(-15.61, -48.19, 6.00) C----D (-2.85, -126.19, 6.00)
| |
(-15.61, -48.19, 1.00) A----B (-2.85, -126.19, 1.00)

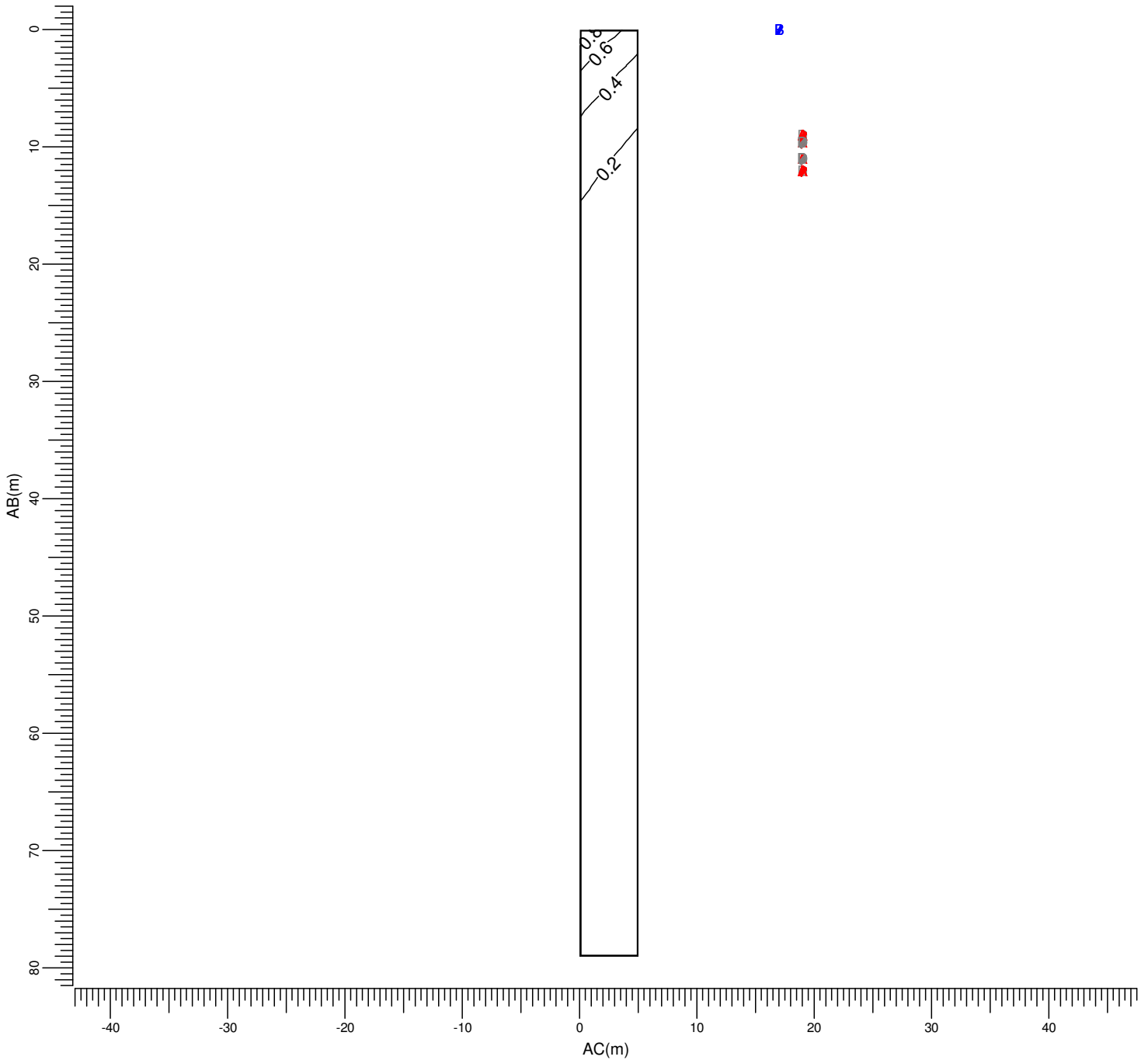
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average 0.12 Min/Ave 0.21 Min/Max 0.03 Project maintenance factor 1.00 Scale 1:500

3.14 74-96 Glenarriff Road: Iso Contour

Spill Light

Grid : 74-96 Glenarriff Road
 Calculation : Surface Illuminance (lux)



(-15.61, -48.19, 6.00) C----D (-2.85, -126.19, 6.00)
 | |
 (-15.61, -48.19, 1.00) A----B (-2.85, -126.19, 1.00)

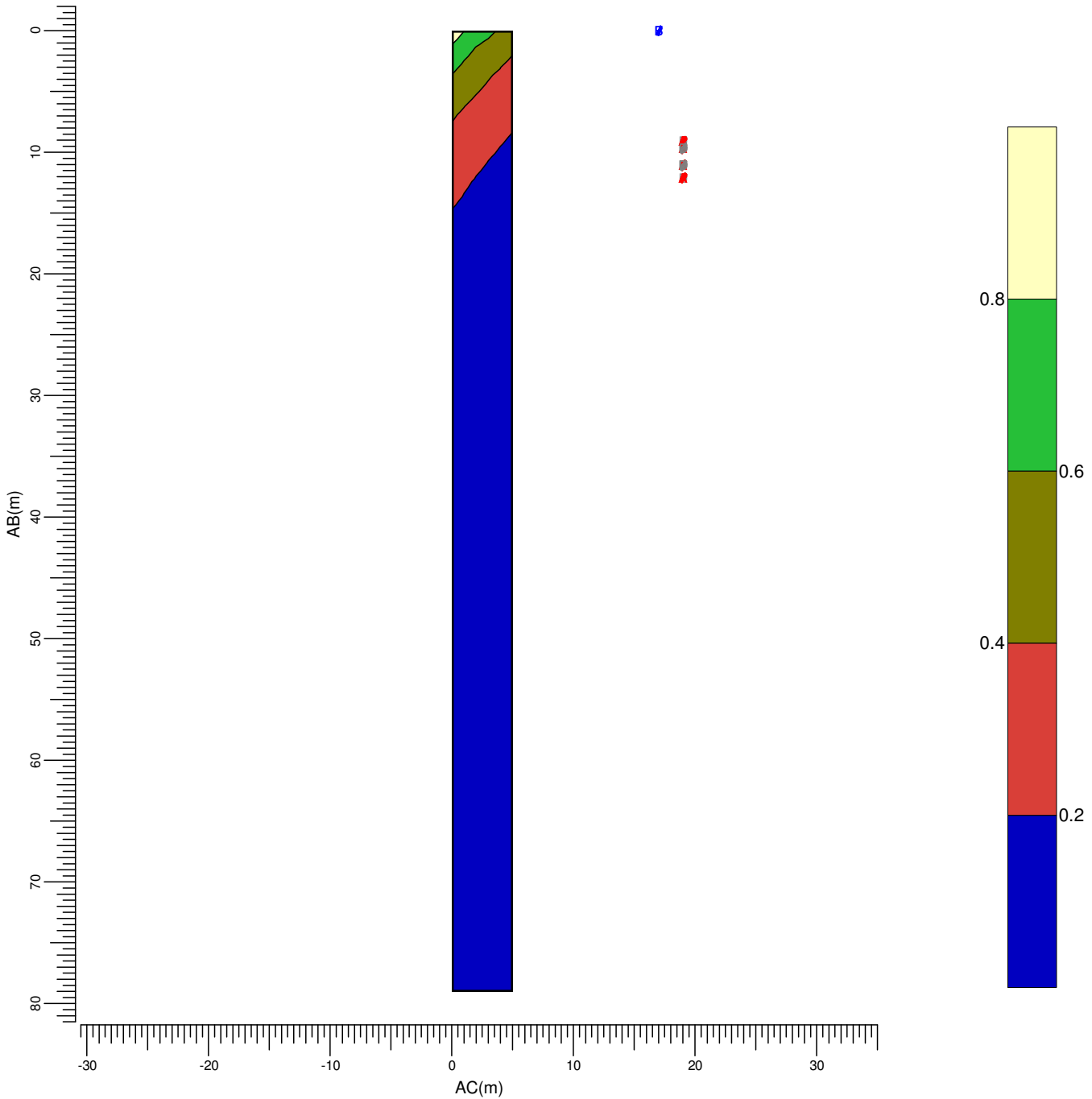
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
0.12	0.21	0.03	1.00	1:500

3.15 74-96 Glenarriff Road: Filled Iso Contour

Spill Light

Grid : 74-96 Glenarriff Road
 Calculation : Surface Illuminance (lux)



(-15.61, -48.19, 6.00) C----D (-2.85, -126.19, 6.00)
 (-15.61, -48.19, 1.00) A----B (-2.85, -126.19, 1.00)

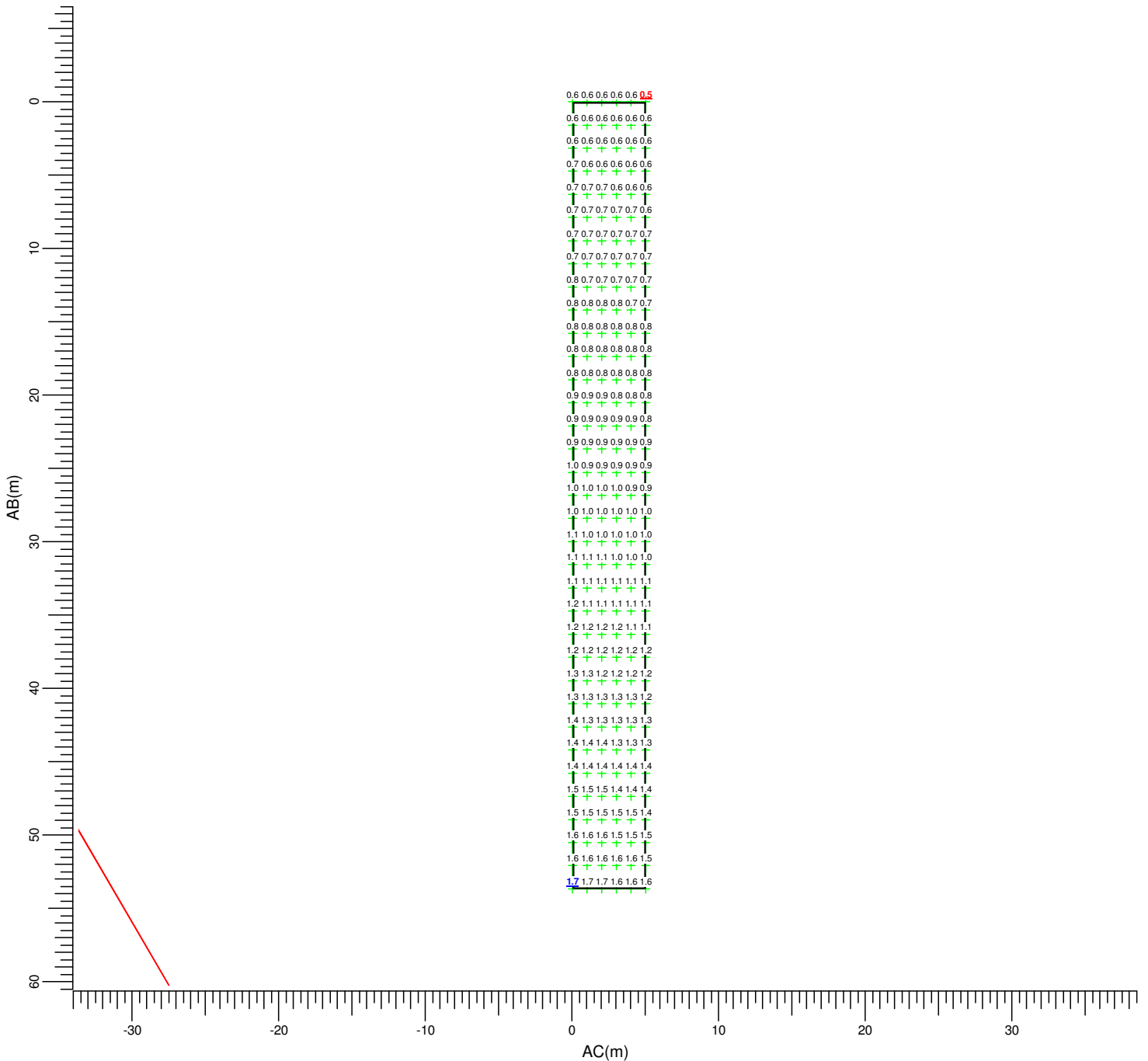
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average Min/Ave Min/Max Project maintenance factor Scale
 0.12 0.21 0.03 1.00 1:500

3.16 2-14 Kempton Park: Graphical Table

Spill Light

Grid : 2-14 Kempton Park
Calculation : Surface Illuminance (lux)



(-284.89, -153.20, 6.00) C----D (-232.23, -142.80, 6.00)
| |
(-284.89, -153.20, 1.00) A----B (-232.23, -142.80, 1.00)

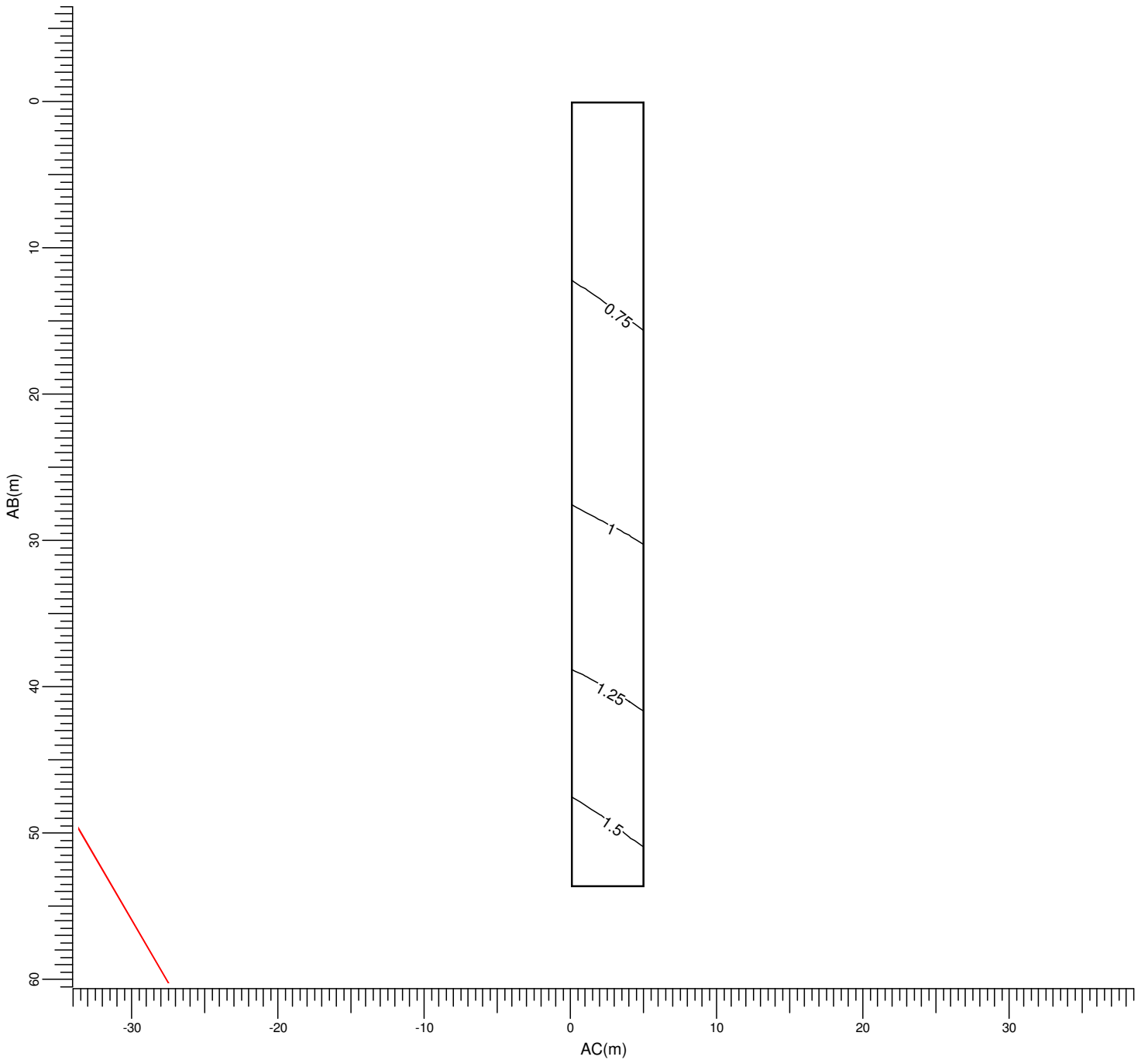
A ▶ BVP528 OUT T35 A35-NB LO B ▶ BVP528 OUT T35 A35-MB LO
C ▶ BVP528 OUT T35 A35-WB LO D ▶ BVP528 OUT T35 A35-NB LT

Average 1.01 Min/Ave 0.54 Min/Max 0.32 Project maintenance factor 1.00 Scale 1:400

3.17 2-14 Kempton Park: Iso Contour

Spill Light

Grid : 2-14 Kempton Park
 Calculation : Surface Illuminance (lux)



(-284.89, -153.20, 6.00) C----D (-232.23, -142.80, 6.00)
 (-284.89, -153.20, 1.00) A----B (-232.23, -142.80, 1.00)

- | | | | | | |
|---|--|--------------------------|---|--|--------------------------|
| A | | BVP528 OUT T35 A35-NB LO | B | | BVP528 OUT T35 A35-MB LO |
| C | | BVP528 OUT T35 A35-WB LO | D | | BVP528 OUT T35 A35-NB LT |

Average
1.01

Min/Ave
0.54

Min/Max
0.32

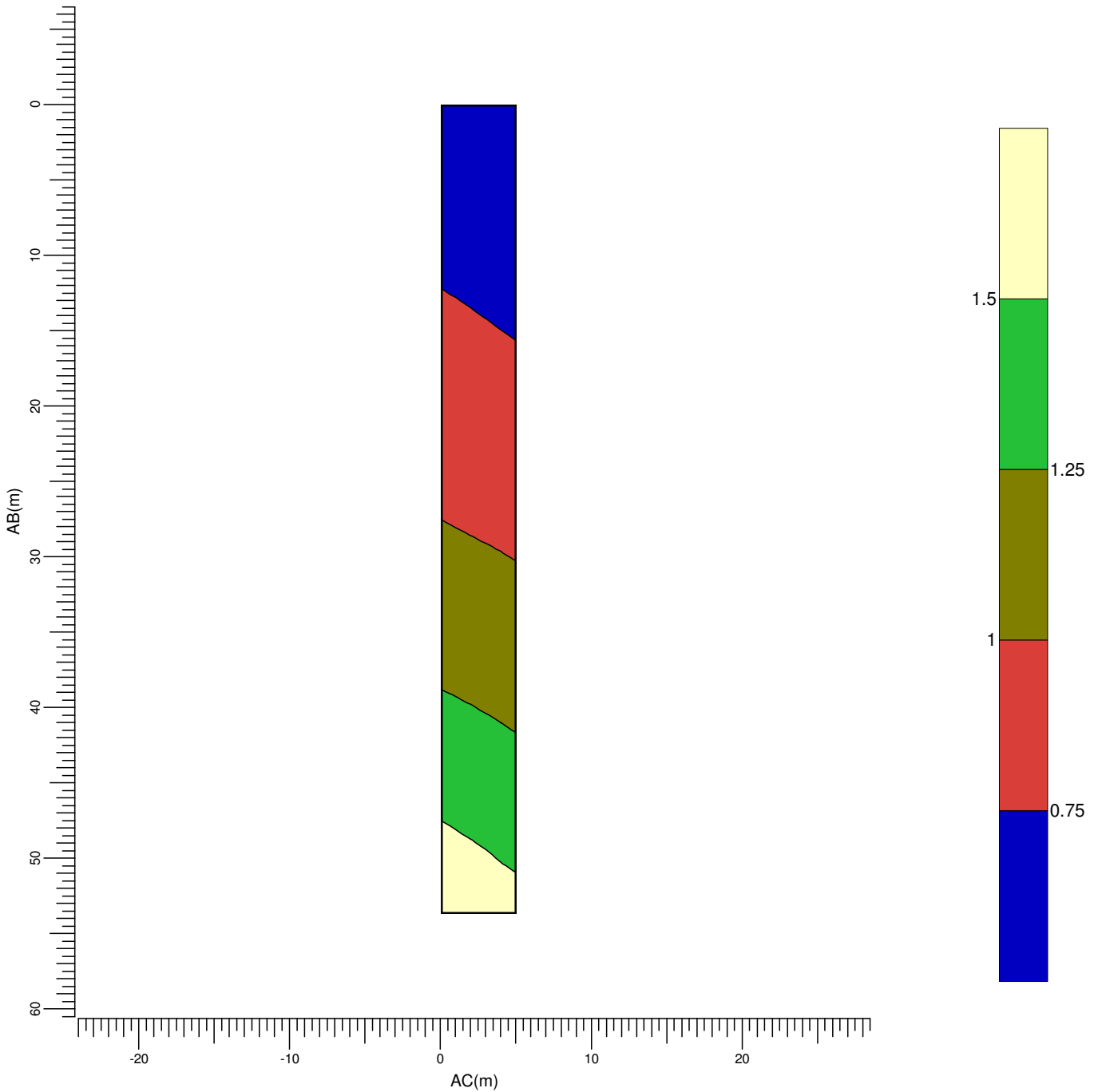
Project maintenance factor
1.00

Scale
1:400

3.18 2-14 Kempton Park: Filled Iso Contour

Spill Light

Grid : 2-14 Kempton Park
 Calculation : Surface Illuminance (lux)



(-284.89, -153.20, 6.00) C----D (-232.23, -142.80, 6.00)
 (-284.89, -153.20, 1.00) A----B (-232.23, -142.80, 1.00)

- | | | | | | |
|---|--|--------------------------|---|--|--------------------------|
| A | | BVP528 OUT T35 A35-NB LO | B | | BVP528 OUT T35 A35-MB LO |
| C | | BVP528 OUT T35 A35-WB LO | D | | BVP528 OUT T35 A35-NB LT |

Average
1.01

Min/Ave
0.54

Min/Max
0.32

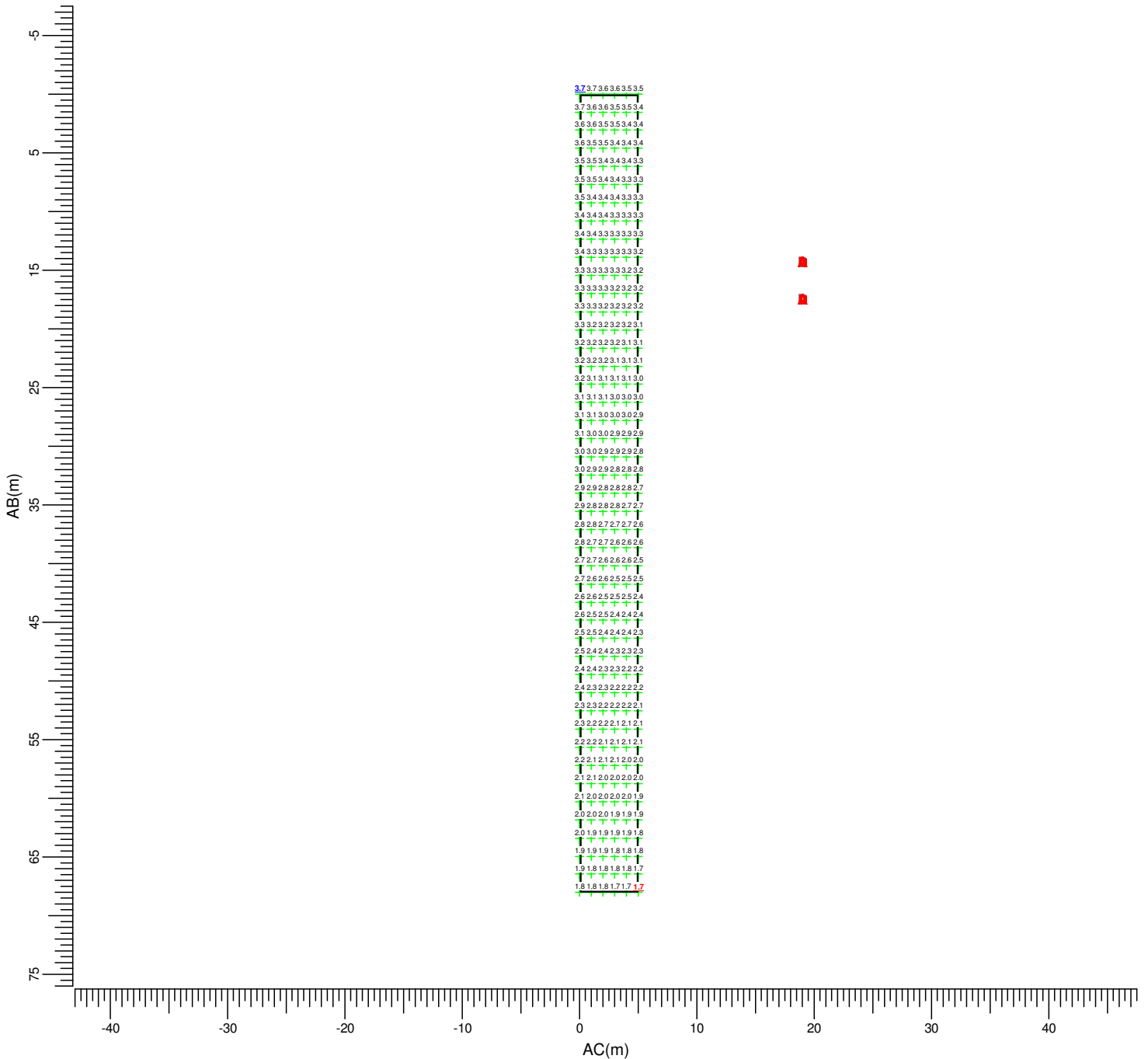
Project maintenance factor
1.00

Scale
1:400

3.19 1-19 Kempton View: Graphical Table

Spill Light

Grid : 1-19 Kempton View
Calculation : Surface Illuminance (lux)



(-162.73, -132.97, 6.00) C----D (-229.93, -143.61, 6.00)
| |
(-162.73, -132.97, 1.00) A----B (-229.93, -143.61, 1.00)

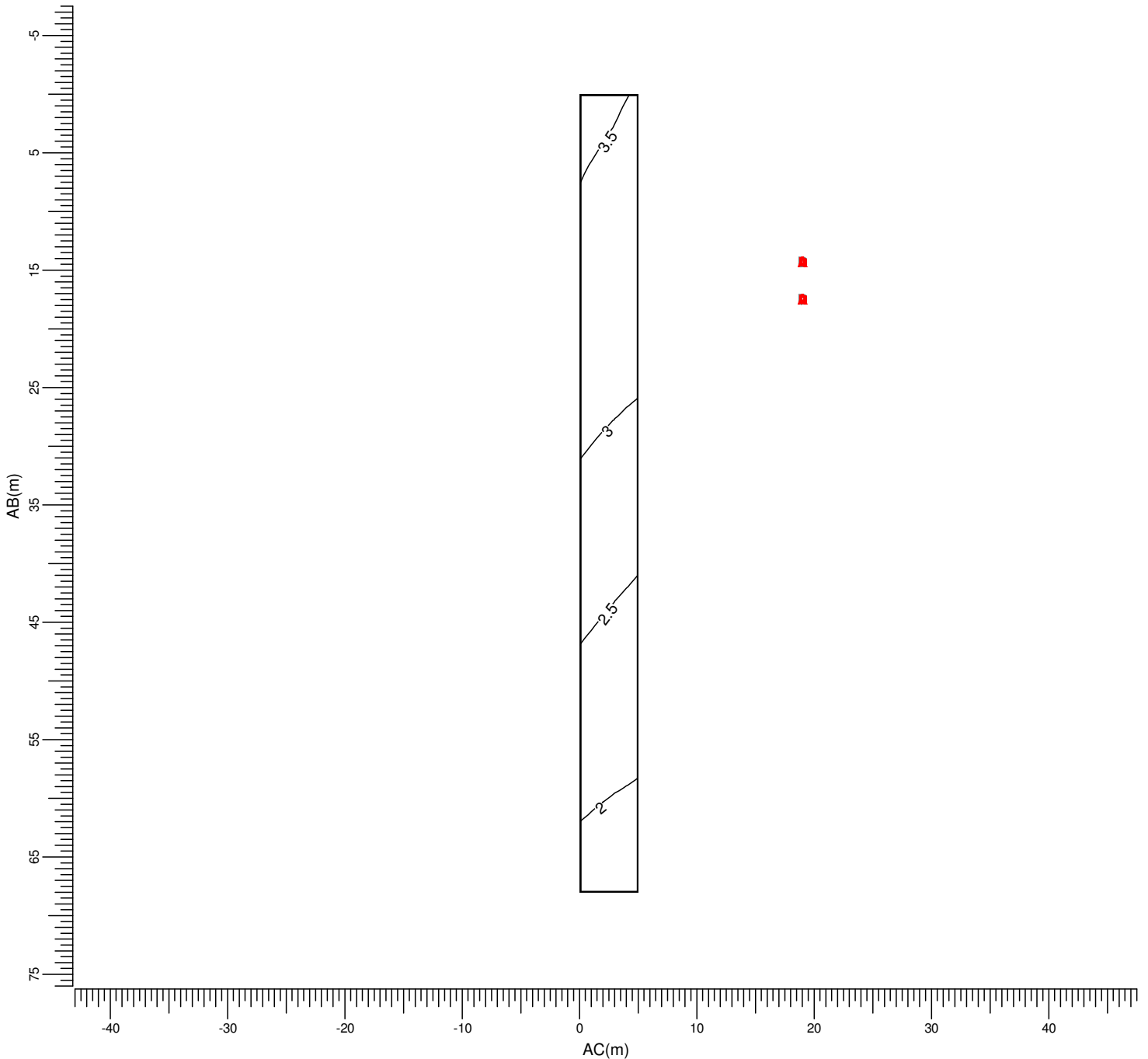
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average 2.75 Min/Ave 0.62 Min/Max 0.45 Project maintenance factor 1.00 Scale 1:500

3.20 1-19 Kempton View: Iso Contour

Spill Light

Grid : 1-19 Kempton View
 Calculation : Surface Illuminance (lux)



(-162.73, -132.97, 6.00) C----D (-229.93, -143.61, 6.00)
 | |
 (-162.73, -132.97, 1.00) A----B (-229.93, -143.61, 1.00)

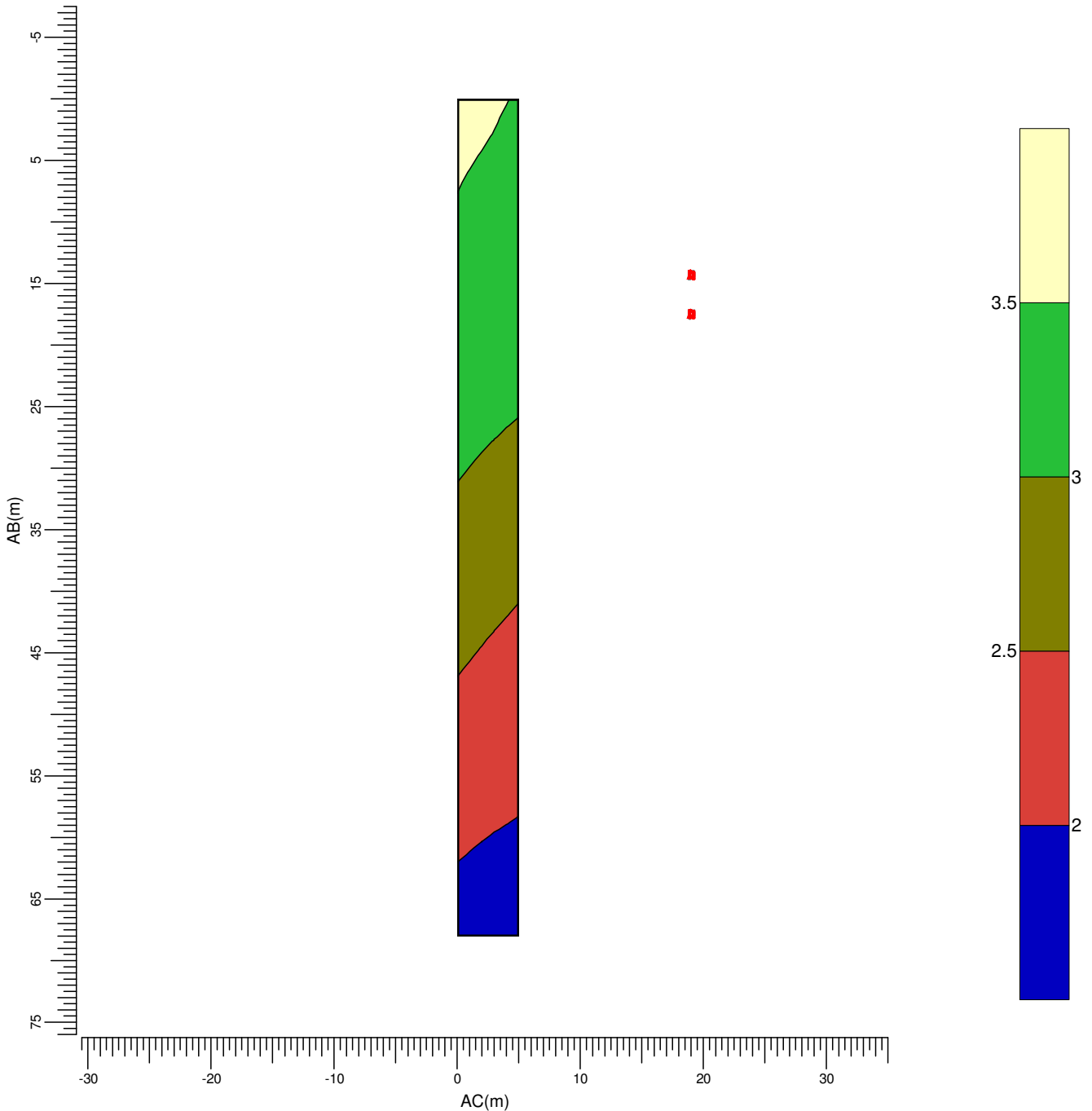
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
2.75	0.62	0.45	1.00	1:500

3.21 1-19 Kempton View: Filled Iso Contour

Spill Light

Grid : 1-19 Kempton View
 Calculation : Surface Illuminance (lux)



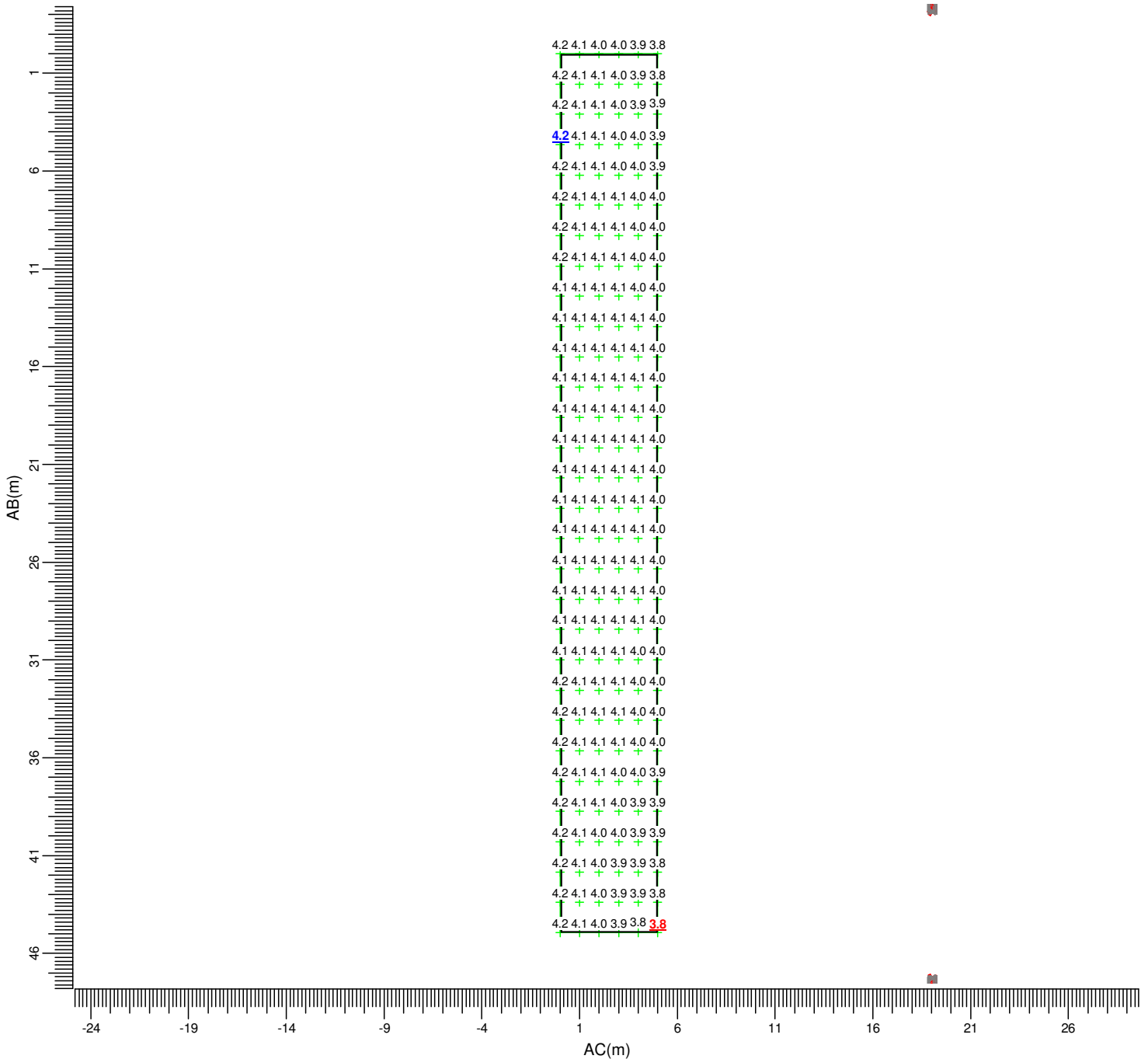
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average 2.75	Min/Ave 0.62	Min/Max 0.45	Project maintenance factor 1.00	Scale 1:500
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3.22 2-12 Kempton View: Graphical Table

Spill Light

Grid : 2-12 Kempton View
Calculation : Surface Illuminance (lux)



(-100.16, -124.30, 6.00) C----D (-144.33, -132.62, 6.00)
| |
(-100.16, -124.30, 1.00) A----B (-144.33, -132.62, 1.00)

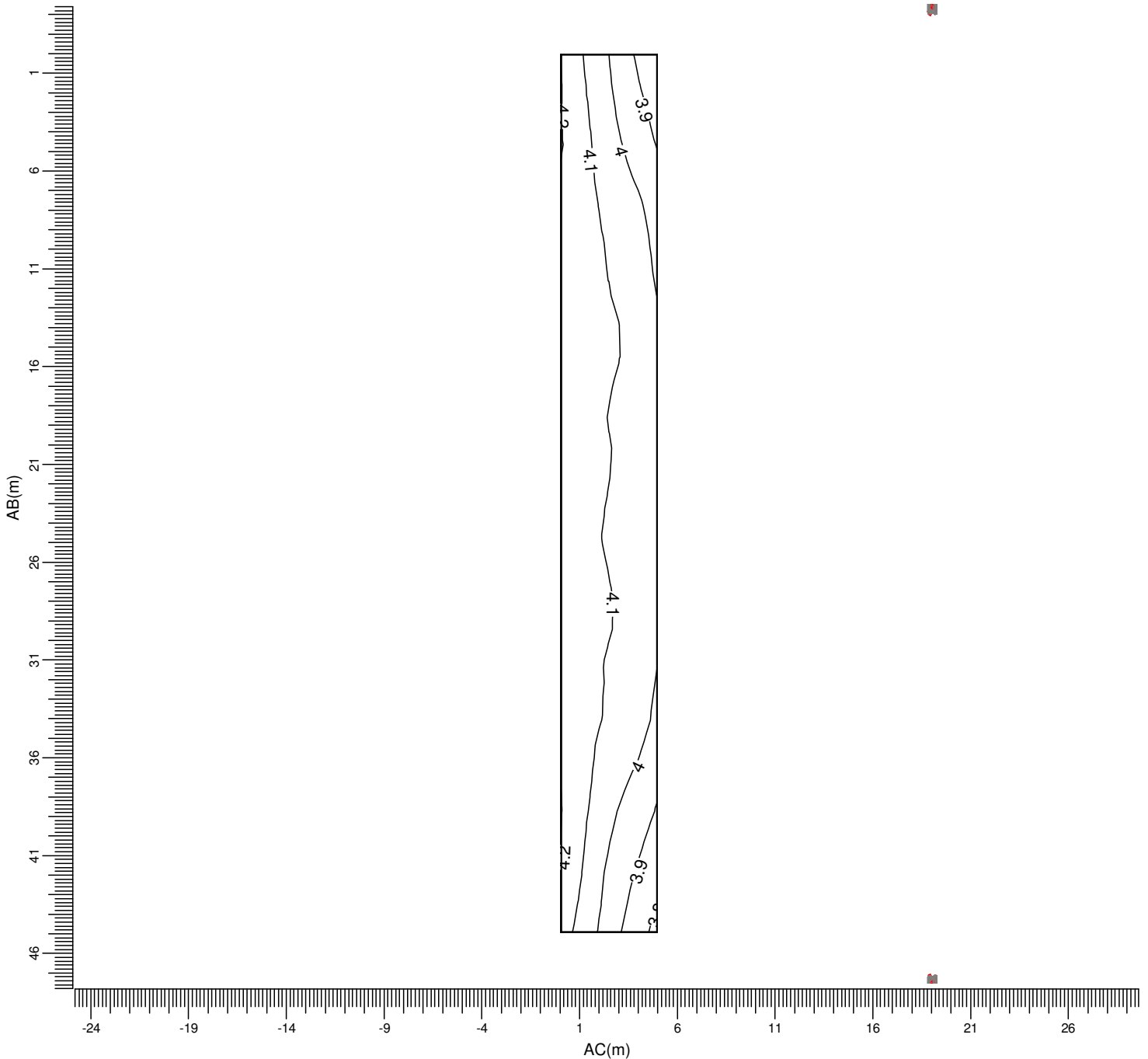
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average Min/Ave Min/Max Project maintenance factor Scale
4.06 0.93 0.90 1.00 1:300

3.23 2-12 Kempton View: Iso Contour

Spill Light

Grid : 2-12 Kempton View
 Calculation : Surface Illuminance (lux)



(-100.16, -124.30, 6.00) C----D (-144.33, -132.62, 6.00)
 | |
 (-100.16, -124.30, 1.00) A----B (-144.33, -132.62, 1.00)

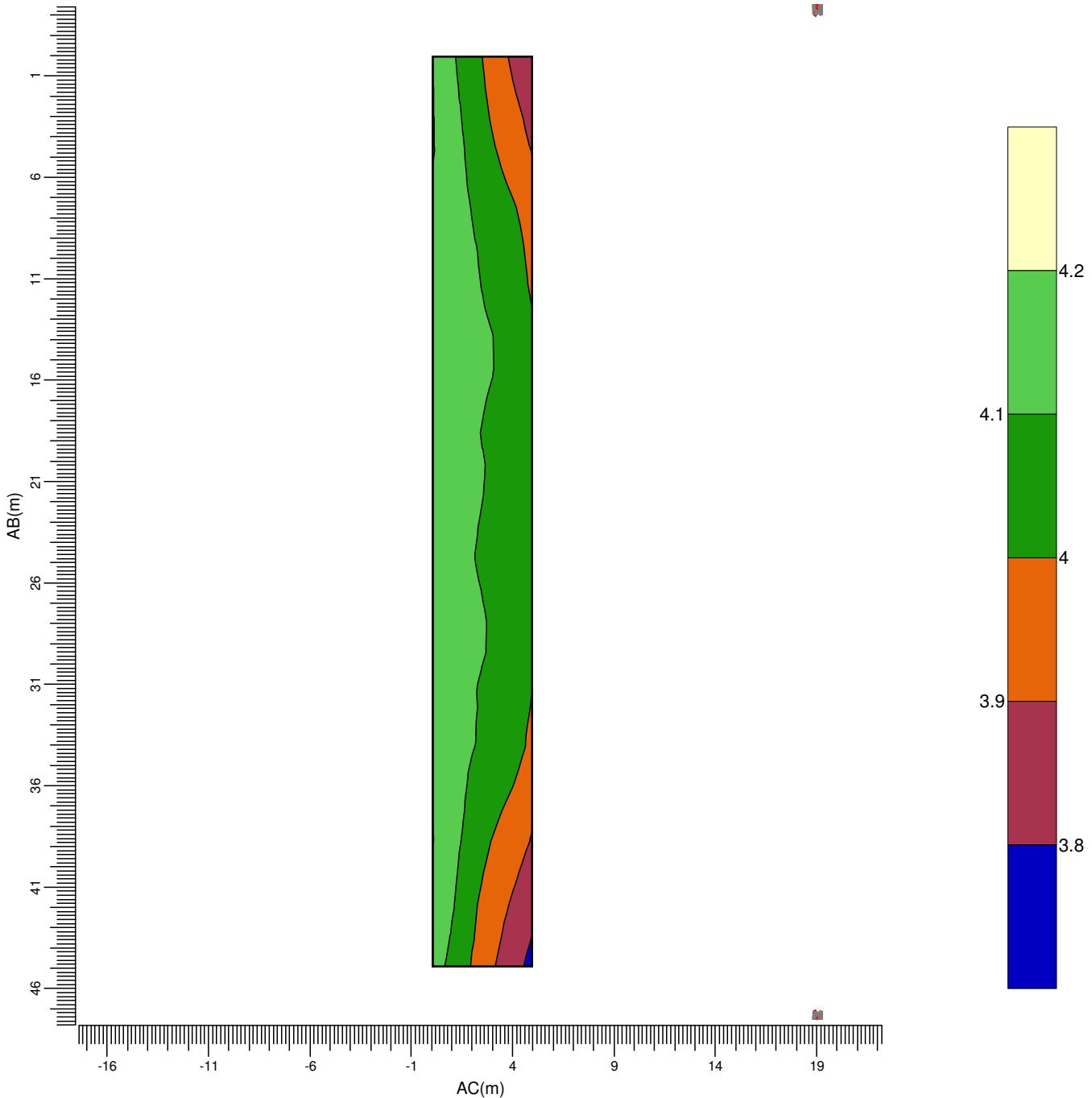
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
4.06	0.93	0.90	1.00	1:300

3.24 2-12 Kempton View: Filled Iso Contour

Spill Light

Grid : 2-12 Kempton View
 Calculation : Surface Illuminance (lux)



(-100.16, -124.30, 6.00) C----D (-144.33, -132.62, 6.00)
 | |
 (-100.16, -124.30, 1.00) A----B (-144.33, -132.62, 1.00)

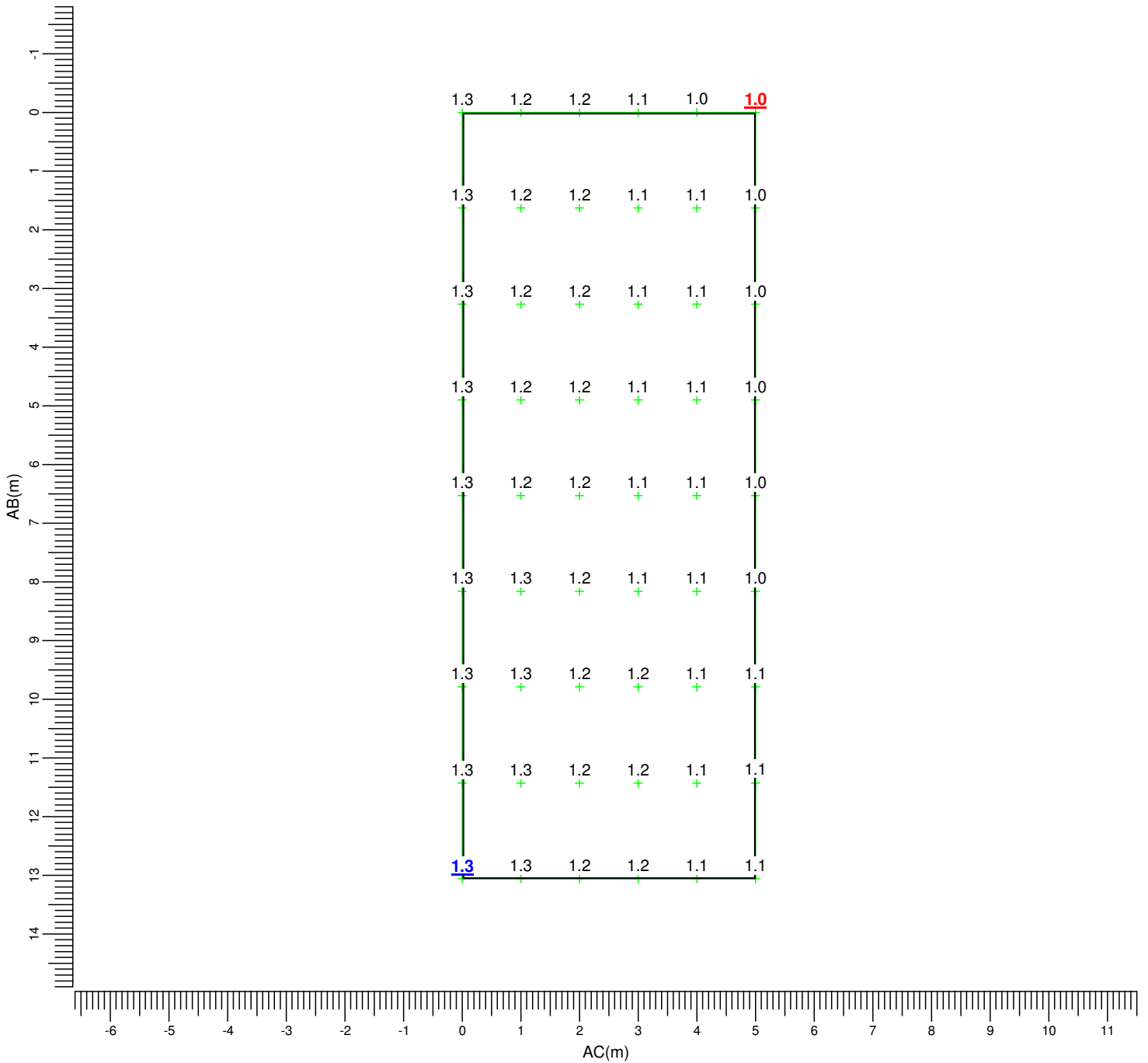
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
4.06	0.93	0.90	1.00	1:300

3.25 2-2A Glendhu Road: Graphical Table

Spill Light

Grid : 2-2A Glendhu Road
 Calculation : Surface Illuminance (lux)



(24.83, -67.04, 6.00) C----D (12.09, -69.90, 6.00)
 | |
 (24.83, -67.04, 1.00) A----B (12.09, -69.90, 1.00)

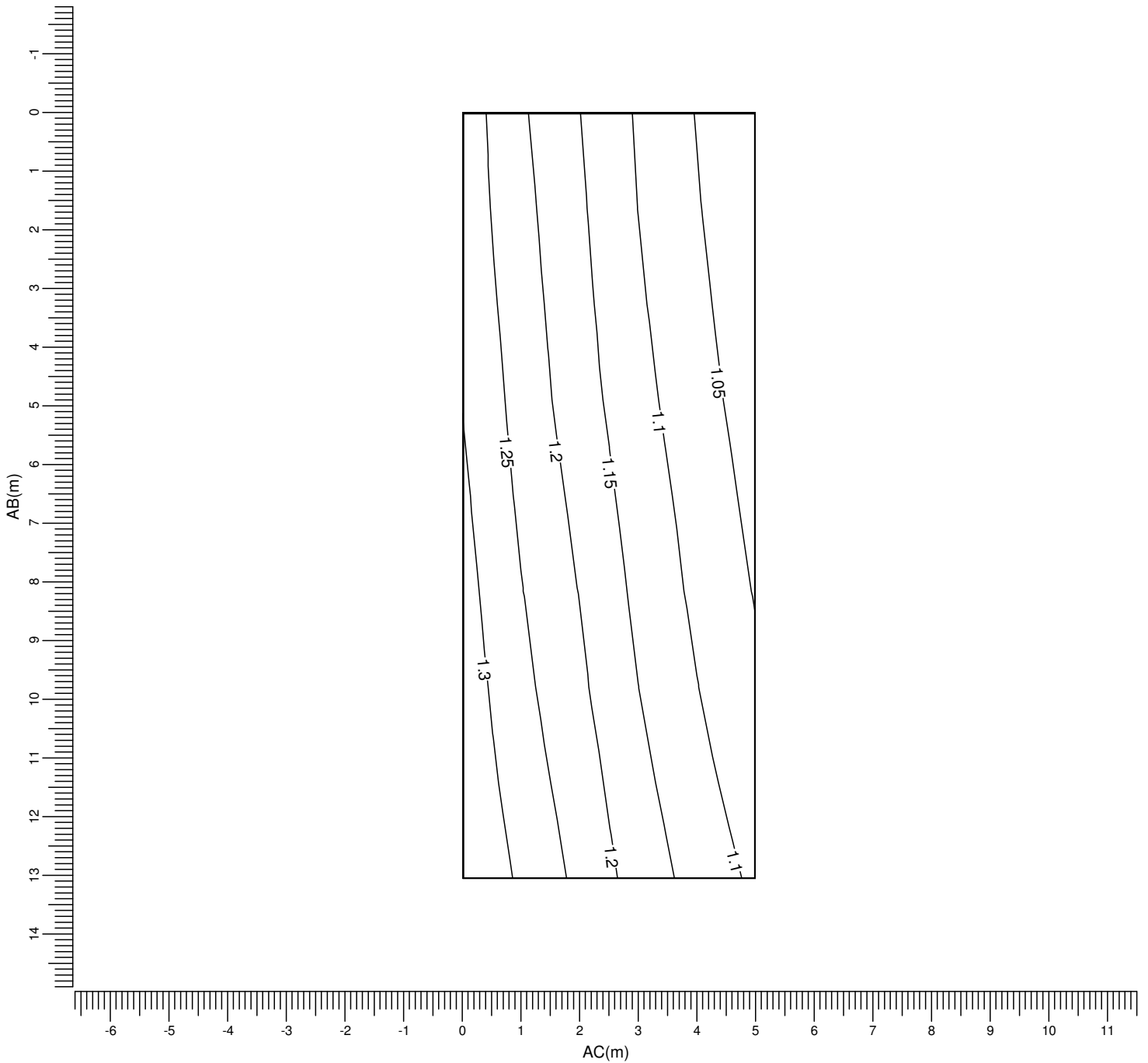
A: BVP528 OUT T35 A35-NB LO B: BVP528 OUT T35 A35-MB LO
 C: BVP528 OUT T35 A35-WB LO D: BVP528 OUT T35 A35-NB LT

Average 1.17 Min/Ave 0.86 Min/Max 0.74 Project maintenance factor 1.00 Scale 1:100

3.26 2-2A Glendhu Road: Iso Contour

Spill Light

Grid : 2-2A Glendhu Road
 Calculation : Surface Illuminance (lux)



(24.83, -67.04, 6.00) C----D (12.09, -69.90, 6.00)
 | |
 (24.83, -67.04, 1.00) A----B (12.09, -69.90, 1.00)

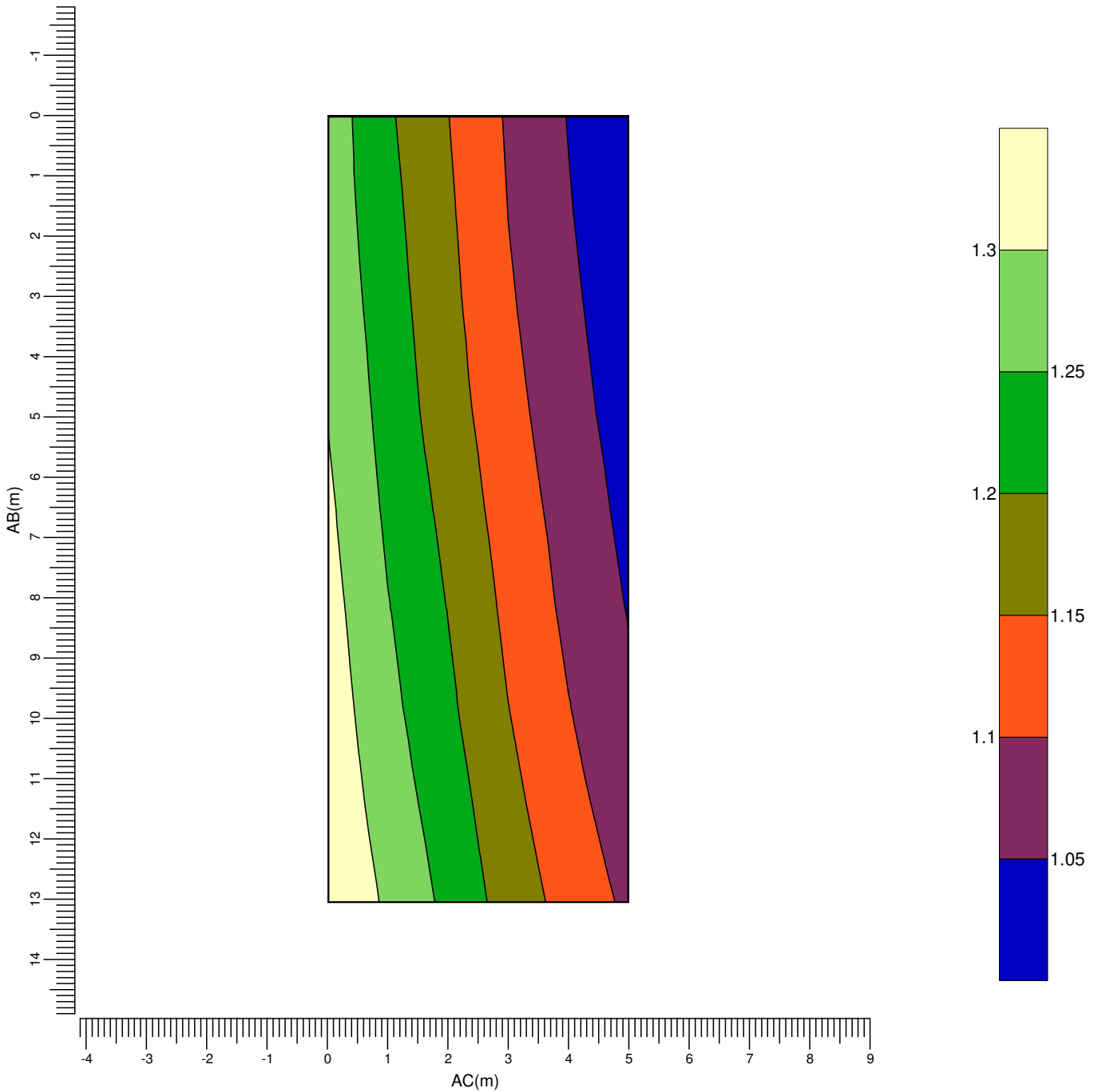
A: BVP528 OUT T35 A35-NB LO B: BVP528 OUT T35 A35-MB LO
 C: BVP528 OUT T35 A35-WB LO D: BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
1.17	0.86	0.74	1.00	1:100

3.27 2-2A Glendhu Road: Filled Iso Contour

Spill Light

Grid : 2-2A Glendhu Road
Calculation : Surface Illuminance (lux)



(24.83, -67.04, 6.00) C----D (12.09, -69.90, 6.00)
| |
(24.83, -67.04, 1.00) A----B (12.09, -69.90, 1.00)

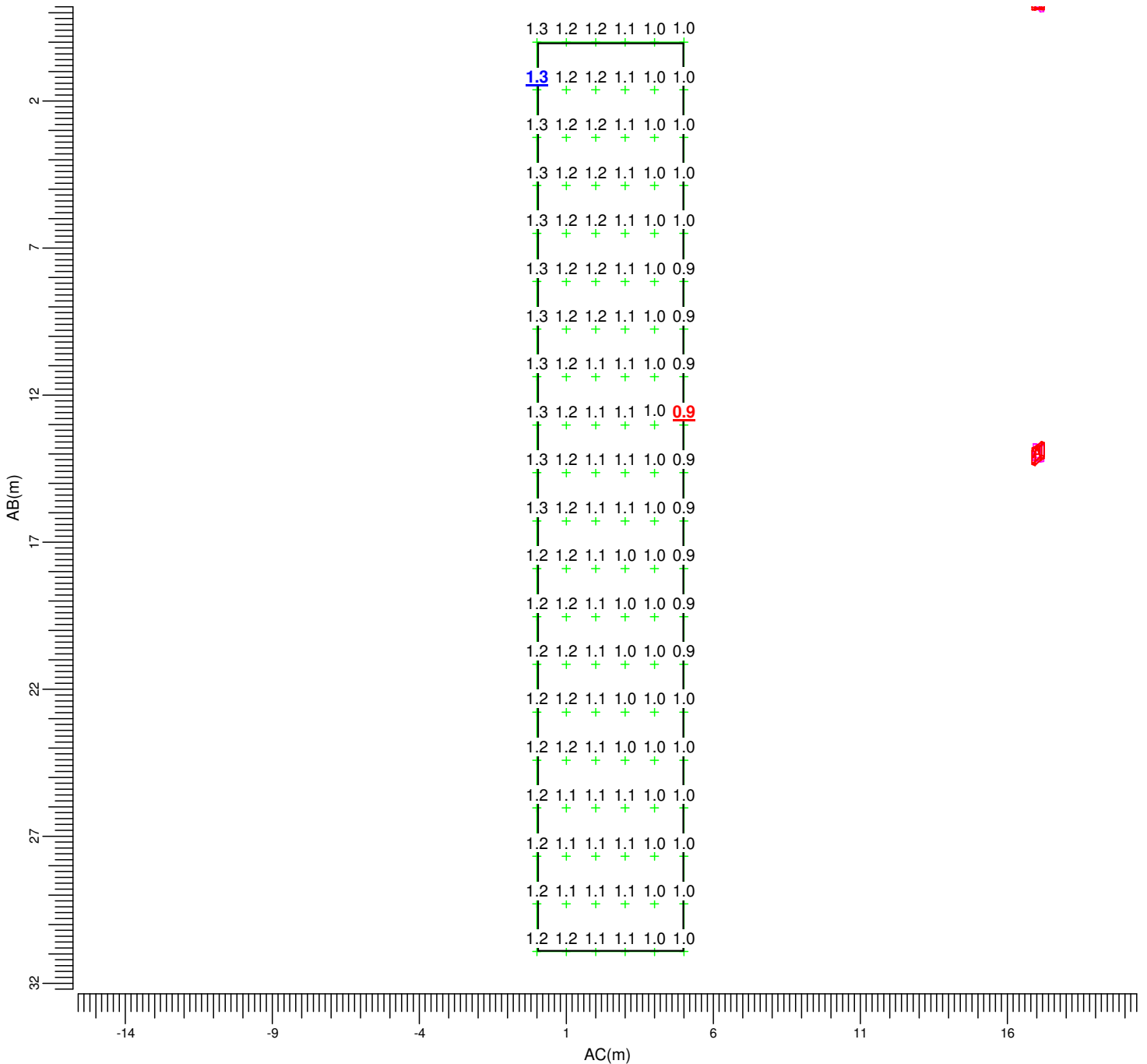
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
1.17	0.86	0.74	1.00	1:100

3.28 4-12 Glendhu Road: Graphical Table

Spill Light

Grid : 4-12 Glendhu Road
Calculation : Surface Illuminance (lux)



(55.72, -63.37, 6.00) C----D (25.54, -70.17, 6.00)
 (55.72, -63.37, 1.00) A----B (25.54, -70.17, 1.00)

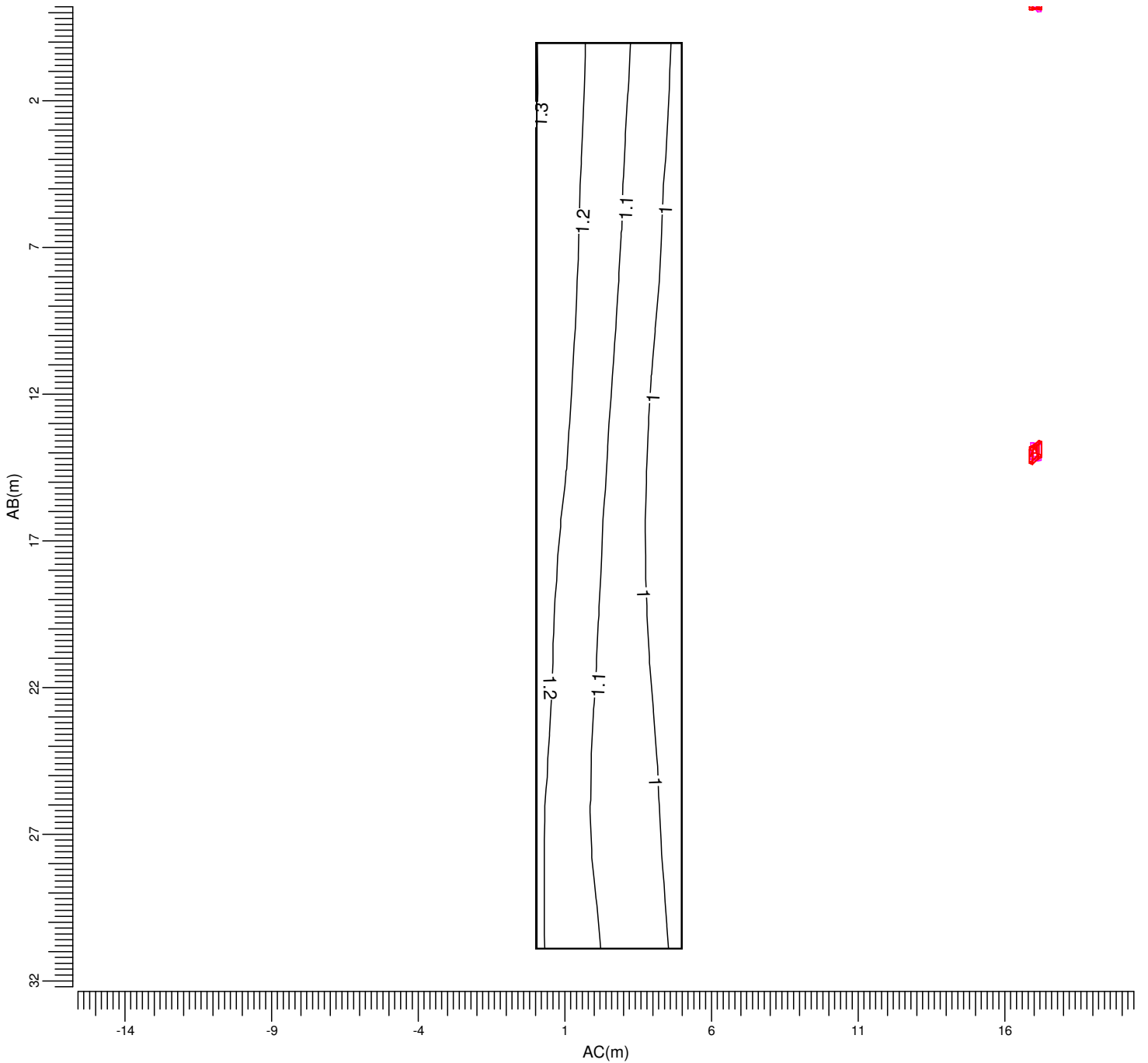
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average 1.10 Min/Ave 0.84 Min/Max 0.71 Project maintenance factor 1.00 Scale 1:200

3.29 4-12 Glendhu Road: Iso Contour

Spill Light

Grid : 4-12 Glendhu Road
 Calculation : Surface Illuminance (lux)



(55.72, -63.37, 6.00) C----D (25.54, -70.17, 6.00)
 | |
 (55.72, -63.37, 1.00) A----B (25.54, -70.17, 1.00)

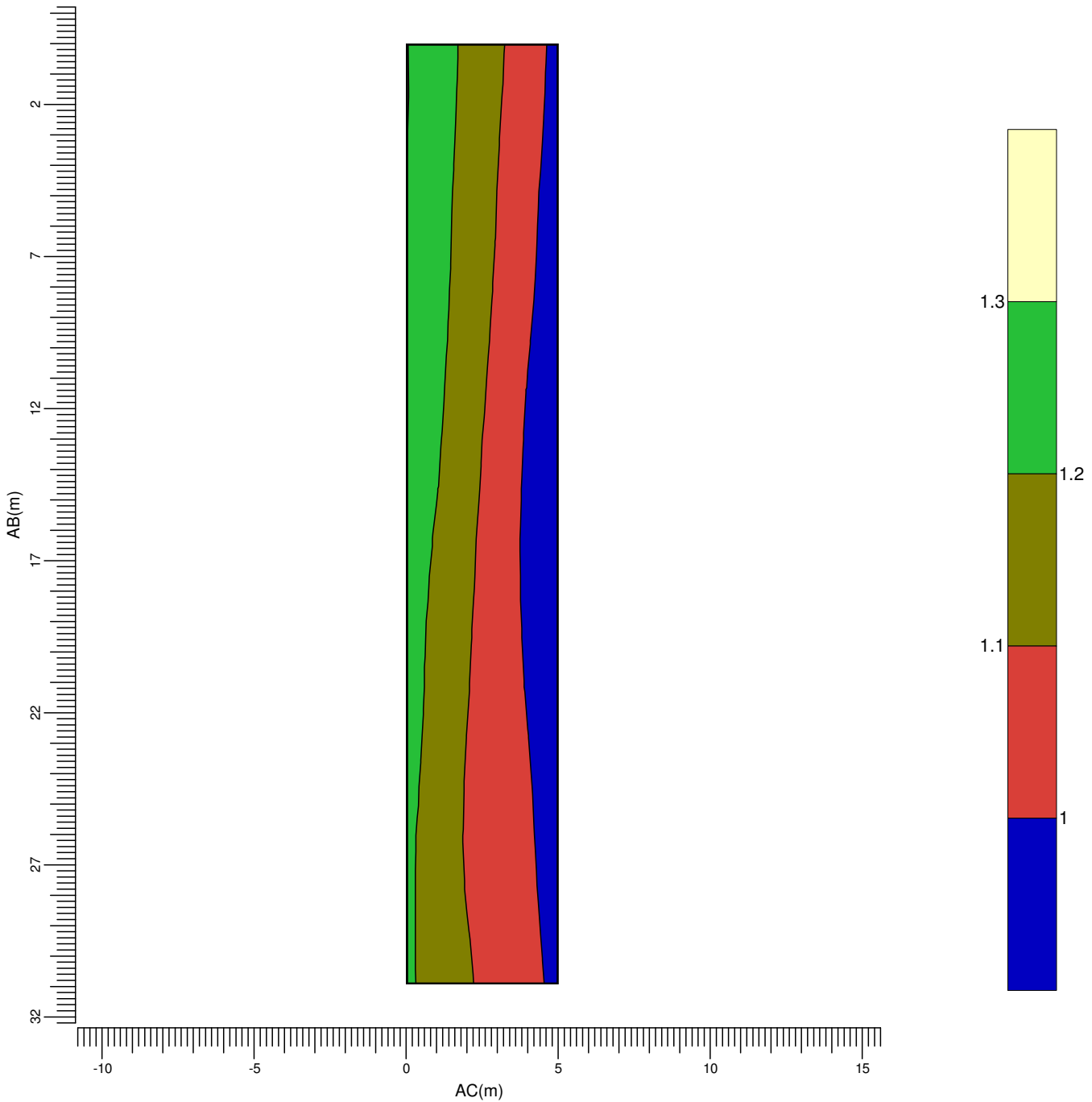
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
1.10	0.84	0.71	1.00	1:200

3.30 4-12 Glendhu Road: Filled Iso Contour

Spill Light

Grid : 4-12 Glendhu Road
Calculation : Surface Illuminance (lux)



(55.72, -63.37, 6.00) C----D (25.54, -70.17, 6.00)
| |
(55.72, -63.37, 1.00) A----B (25.54, -70.17, 1.00)

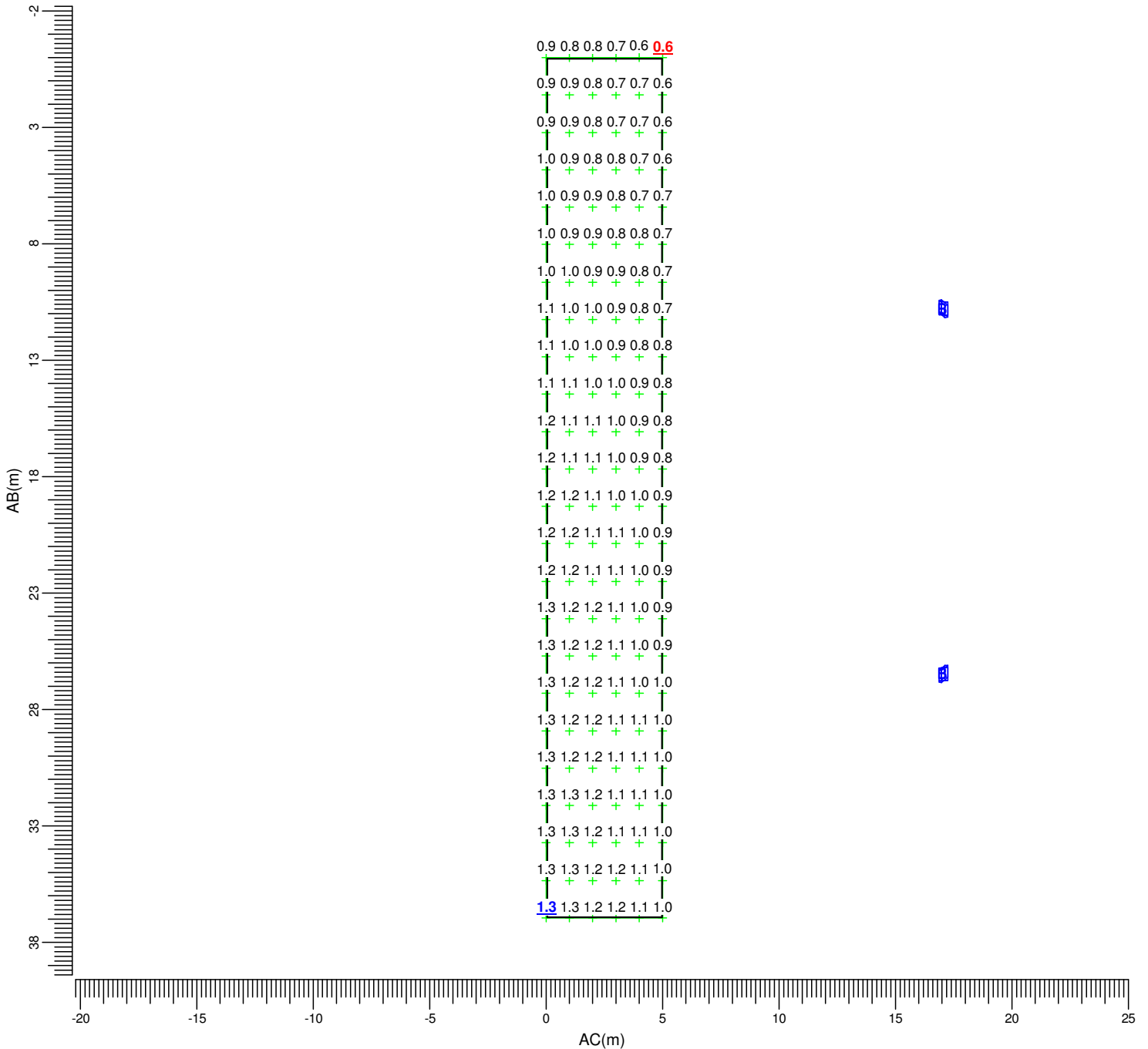
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
1.10	0.84	0.71	1.00	1:200

3.31 24-14 Glendhu Road: Graphical Table

Spill Light

Grid : 24-14 Glendhu Road
Calculation : Surface Illuminance (lux)



(96.28, -52.65, 6.00) C----D (60.27, -60.93, 6.00)
 (96.28, -52.65, 1.00) A----B (60.27, -60.93, 1.00)

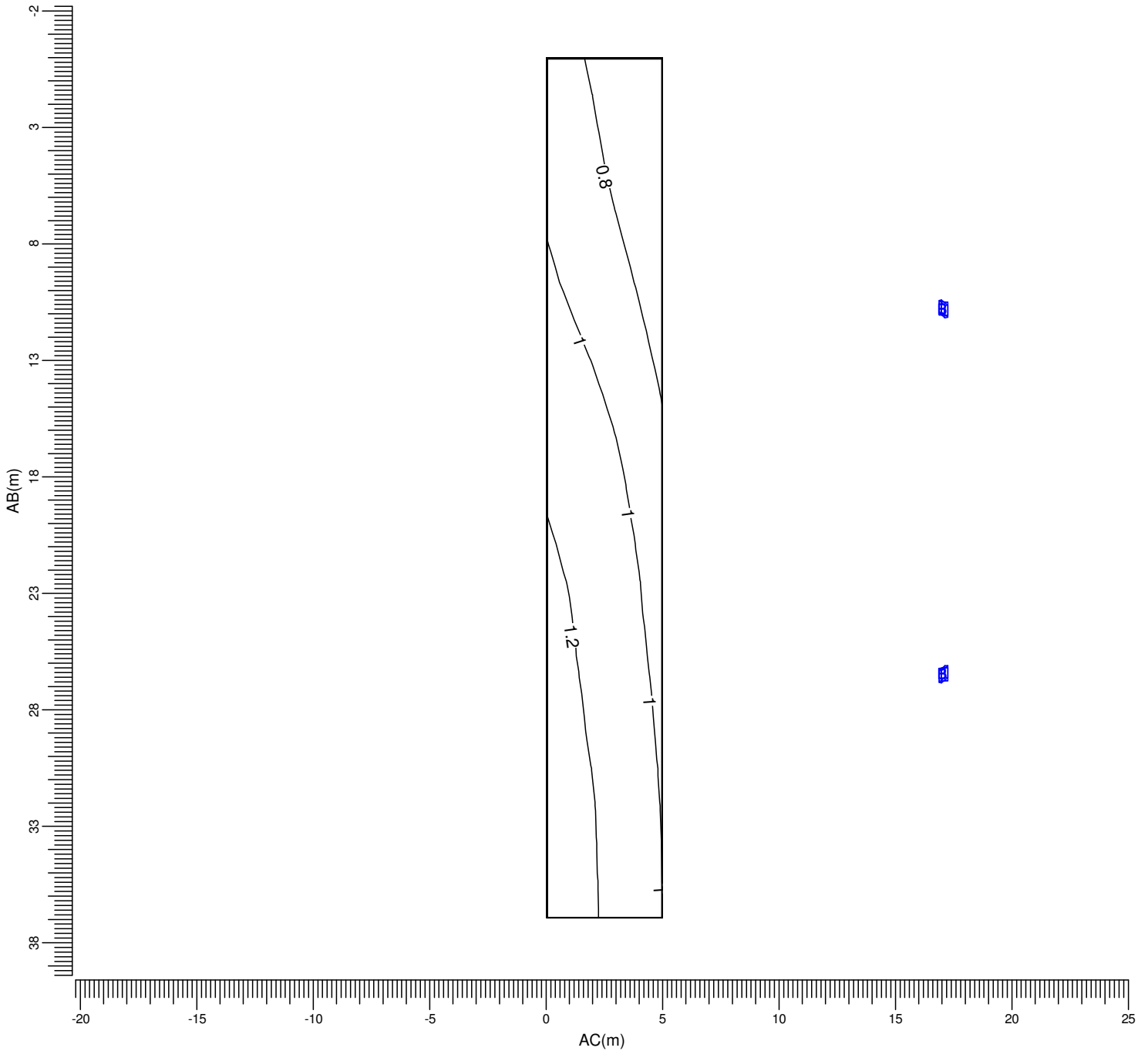
A: BVP528 OUT T35 A35-NB LO B: BVP528 OUT T35 A35-MB LO
 C: BVP528 OUT T35 A35-WB LO D: BVP528 OUT T35 A35-NB LT

Average 1.00 Min/Ave 0.60 Min/Max 0.46 Project maintenance factor 1.00 Scale 1:250

3.32 24-14 Glendhu Road: Iso Contour

Spill Light

Grid : 24-14 Glendhu Road
Calculation : Surface Illuminance (lux)



(96.28, -52.65, 6.00) C----D (60.27, -60.93, 6.00)
| |
(96.28, -52.65, 1.00) A----B (60.27, -60.93, 1.00)

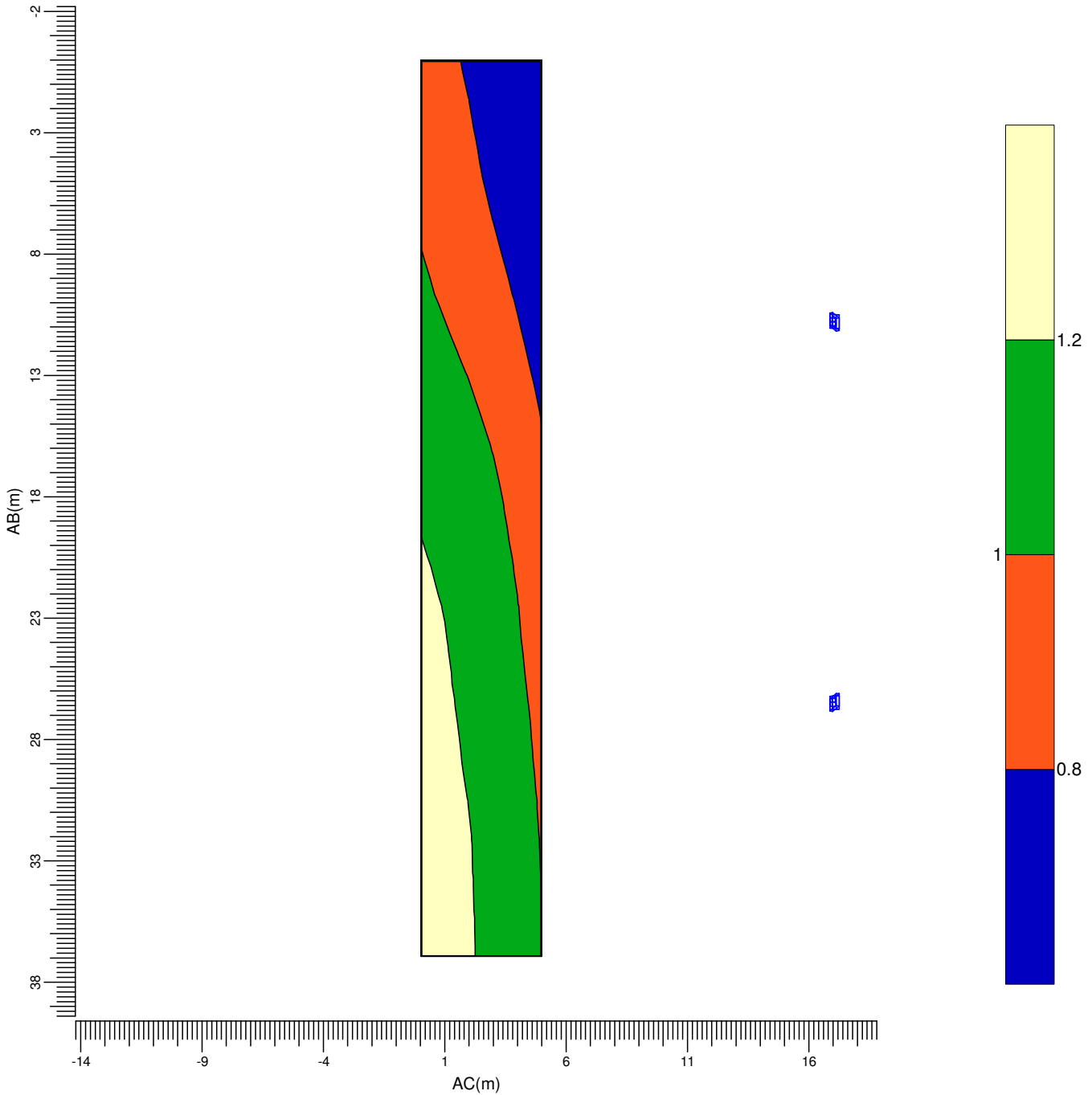
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
1.00	0.60	0.46	1.00	1:250

3.33 24-14 Glendhu Road: Filled Iso Contour

Spill Light

Grid : 24-14 Glendhu Road
 Calculation : Surface Illuminance (lux)



(96.28, -52.65, 6.00) C----D (60.27, -60.93, 6.00)
 | |
 (96.28, -52.65, 1.00) A----B (60.27, -60.93, 1.00)

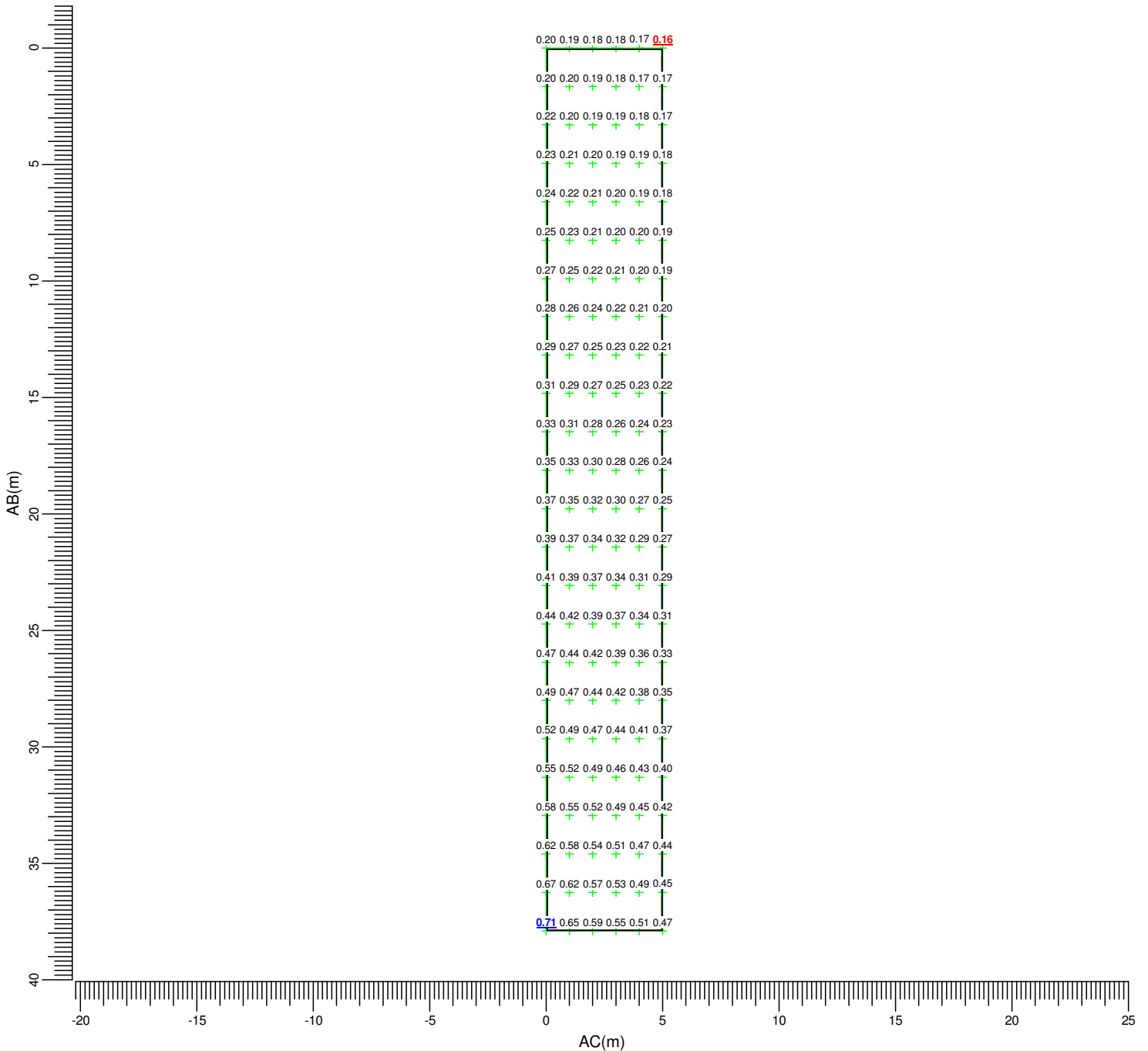
A: BVP528 OUT T35 A35-NB LO B: BVP528 OUT T35 A35-MB LO
 C: BVP528 OUT T35 A35-WB LO D: BVP528 OUT T35 A35-NB LT

Average 1.00 Min/Ave 0.60 Min/Max 0.46 Project maintenance factor 1.00 Scale 1:250

3.34 36-26 Glendhu Road: Graphical Table

Spill Light

Grid : 36-26 Glendhu Road
Calculation : Surface Illuminance (lux)



(139.88, -46.40, 6.00) C----D (102.18, -50.18, 6.00)
 | |
 (139.88, -46.40, 1.00) A----B (102.18, -50.18, 1.00)

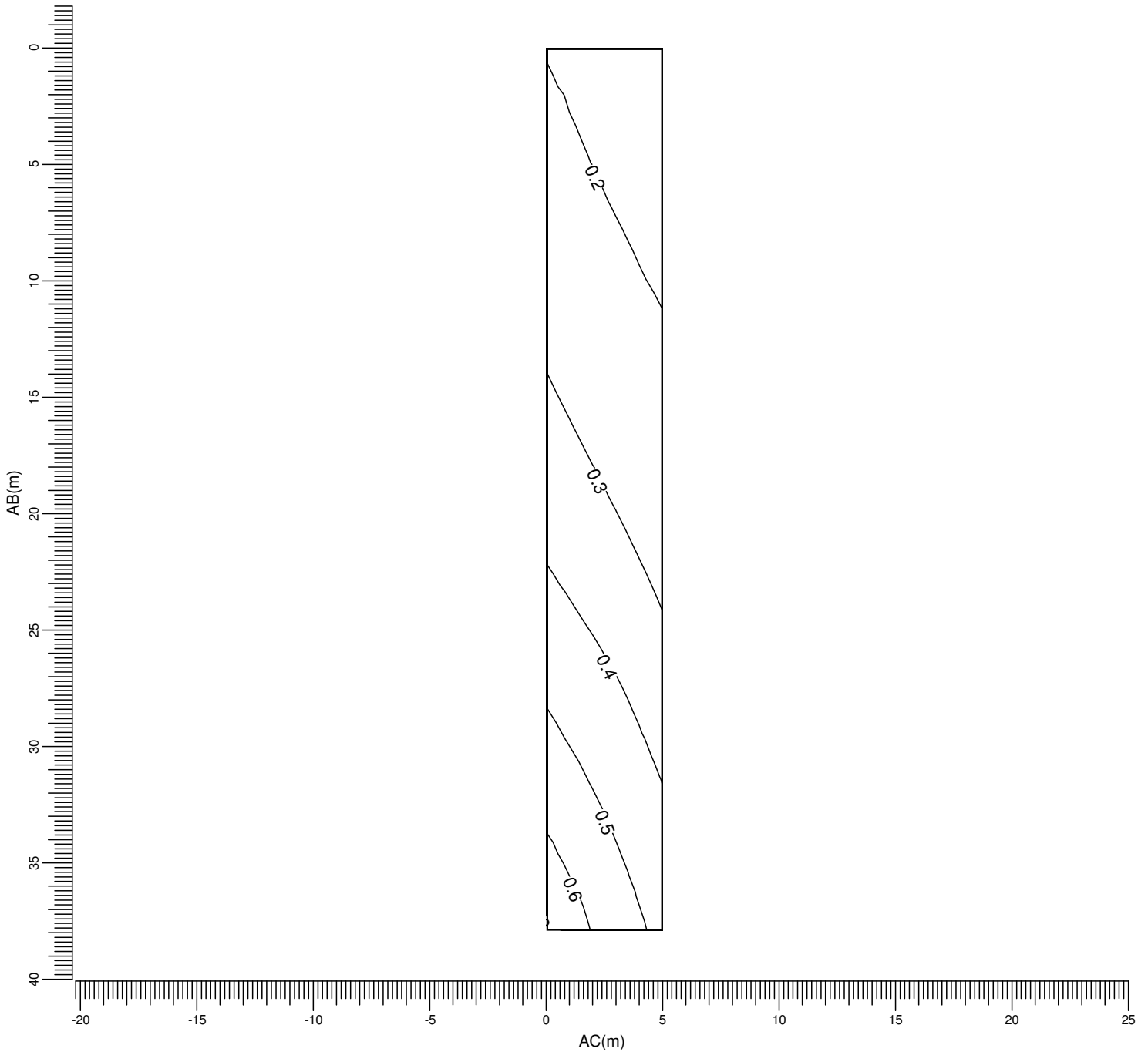
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average 0.33 Min/Ave 0.49 Min/Max 0.23 Project maintenance factor 1.00 Scale 1:250

3.35 36-26 Glendhu Road: Iso Contour

Spill Light

Grid : 36-26 Glendhu Road
 Calculation : Surface Illuminance (lux)



(139.88, -46.40, 6.00) C----D (102.18, -50.18, 6.00)
 | |
 (139.88, -46.40, 1.00) A----B (102.18, -50.18, 1.00)

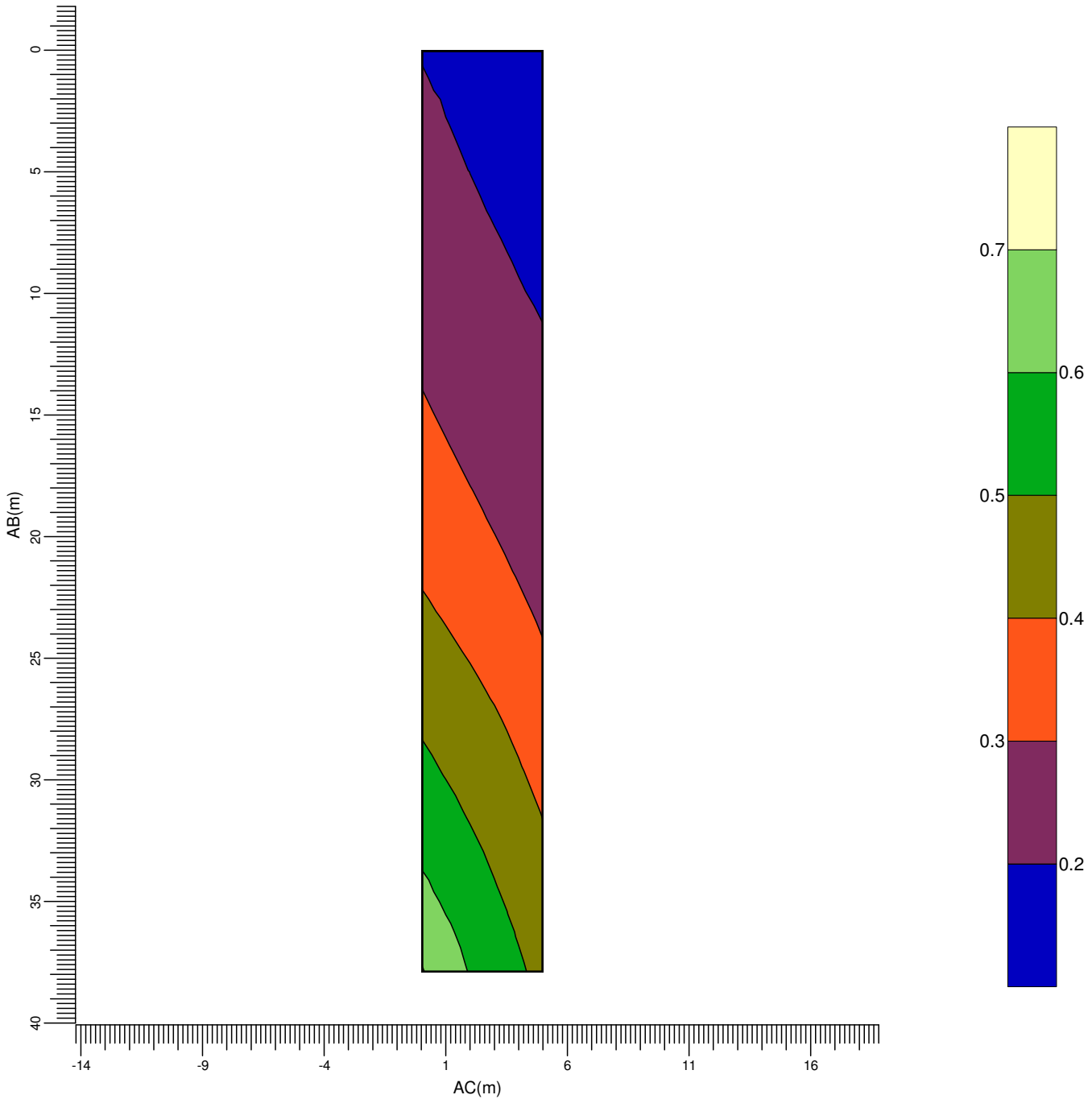
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
0.33	0.49	0.23	1.00	1:250

3.36 36-26 Glendhu Road: Filled Iso Contour

Spill Light

Grid : 36-26 Glendhu Road
 Calculation : Surface Illuminance (lux)



(139.88, -46.40, 6.00) C----D (102.18, -50.18, 6.00)
 | |
 (139.88, -46.40, 1.00) A----B (102.18, -50.18, 1.00)

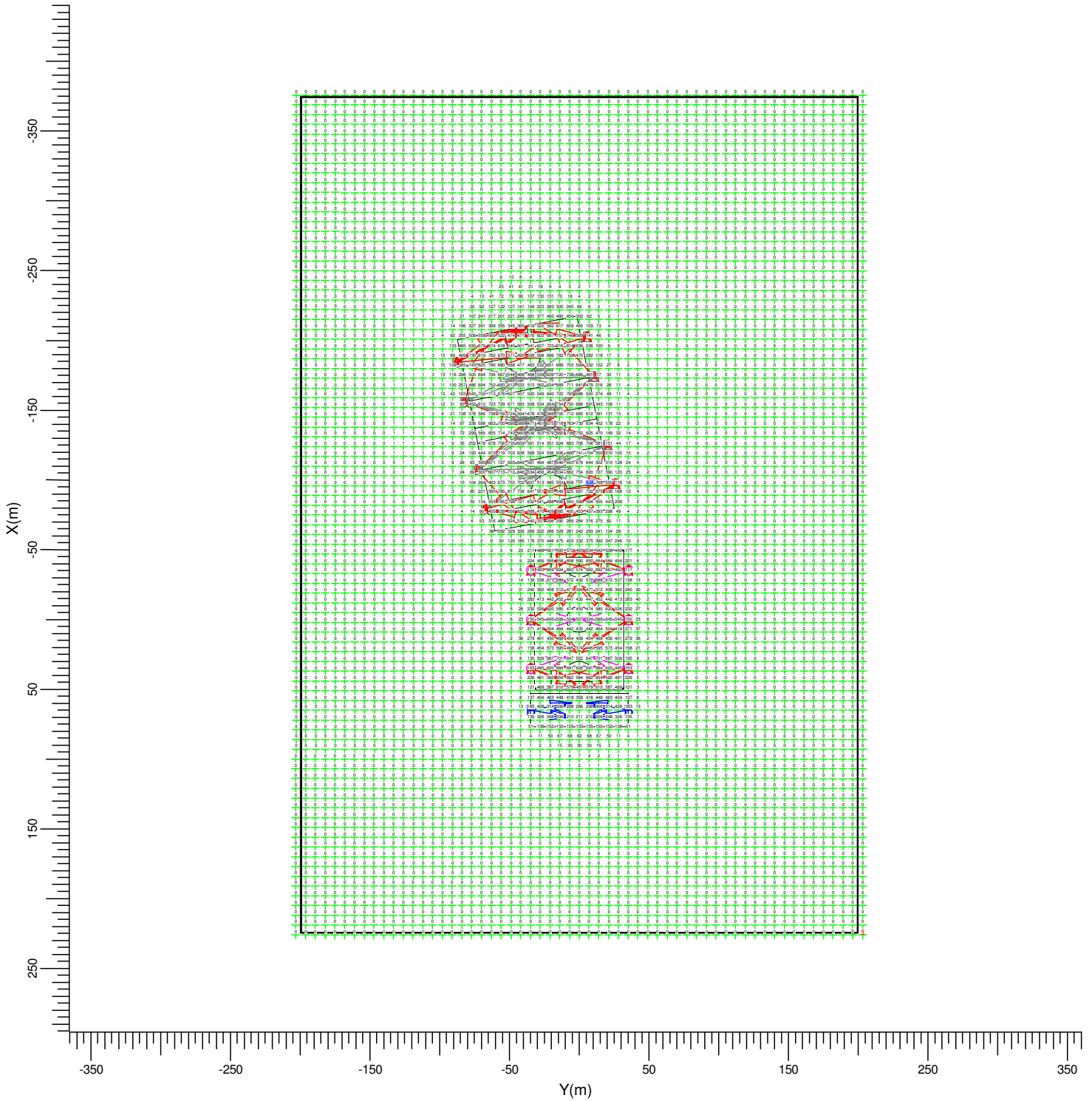
A : BVP528 OUT T35 A35-NB LO B : BVP528 OUT T35 A35-MB LO
 C : BVP528 OUT T35 A35-WB LO D : BVP528 OUT T35 A35-NB LT

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
0.33	0.49	0.23	1.00	1:250

3.37 Spill Light: Graphical Table

Spill Light

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



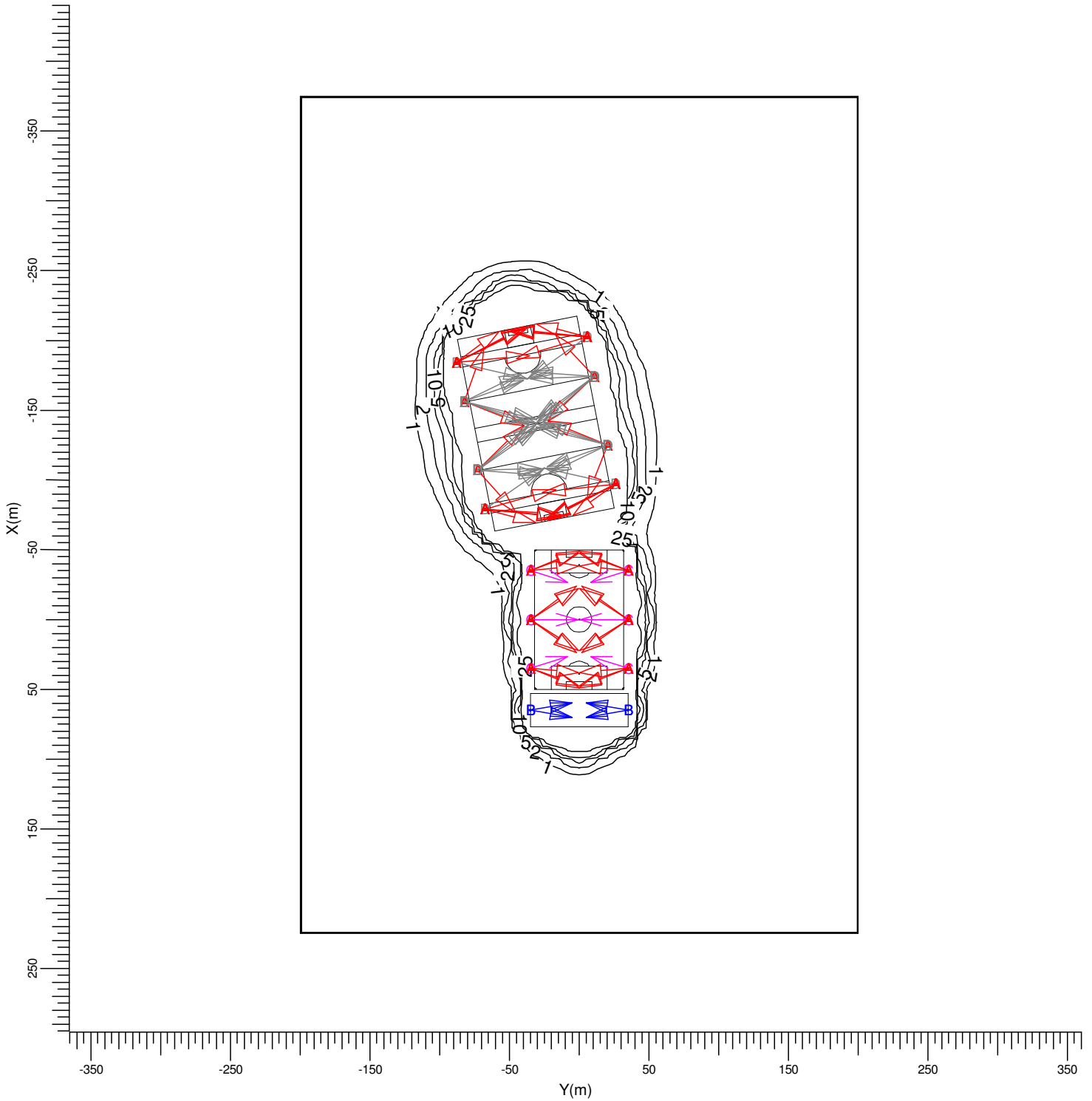
- | | | | | | |
|---|--|--------------------------|---|--|--------------------------|
| A | | BVP528 OUT T35 A35-NB LO | B | | BVP528 OUT T35 A35-MB LO |
| C | | BVP528 OUT T35 A35-WB LO | D | | BVP528 OUT T35 A35-NB LT |





Average	Min/Ave	Min/Max	Project maintenance factor	Scale
54.2	0.00	0.00	1.00	1:4000

3.38 Spill Light: Iso Contour

Spill Light

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



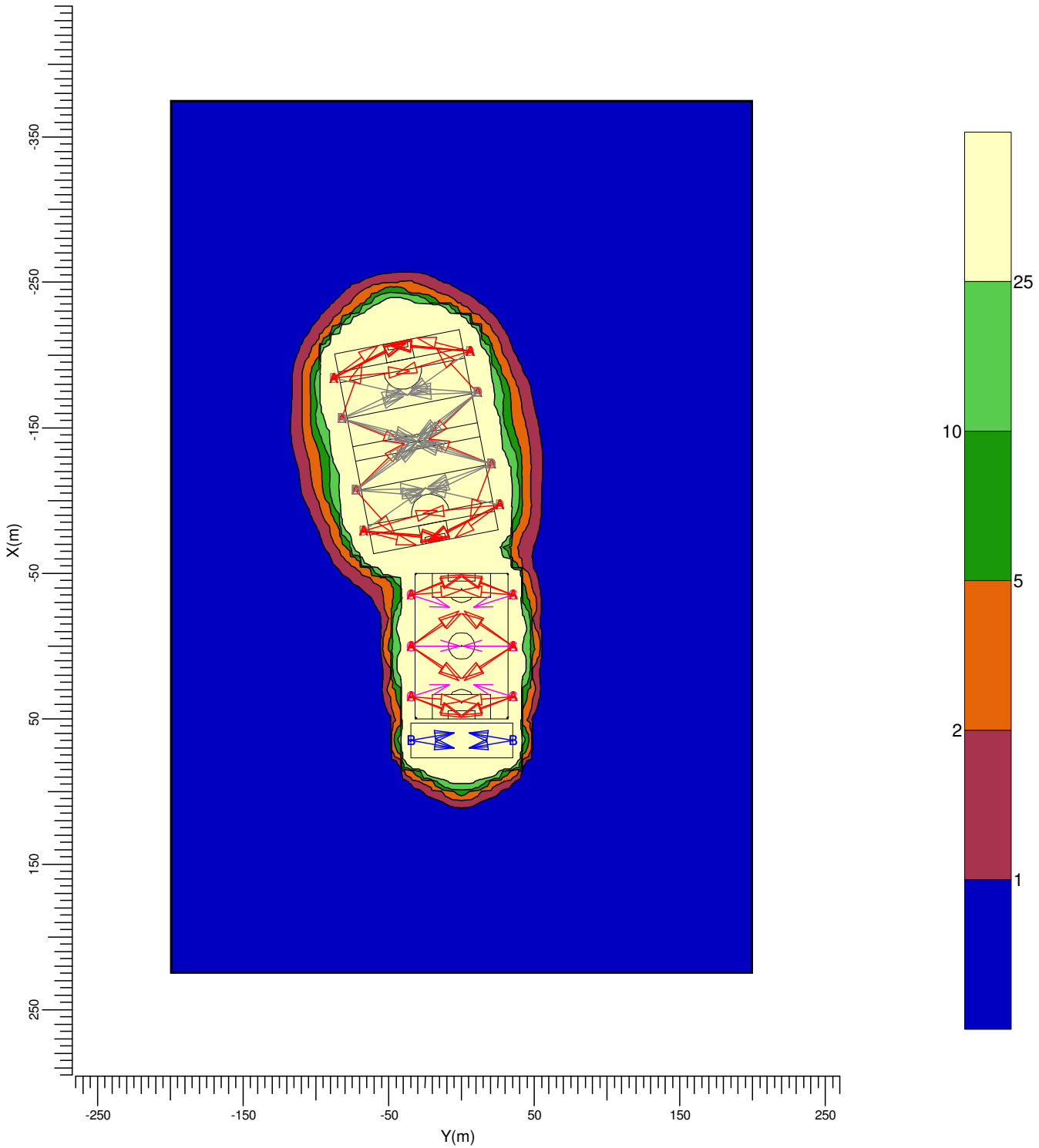
- | | | | | | |
|---|---|--------------------------|---|---|--------------------------|
| A |  | BVP528 OUT T35 A35-NB LO | B |  | BVP528 OUT T35 A35-MB LO |
| C |  | BVP528 OUT T35 A35-WB LO | D |  | BVP528 OUT T35 A35-NB LT |

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
54.2	0.00	0.00	1.00	1:4000

3.39 Spill Light: Filled Iso Contour

Spill Light

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



- | | | | | | |
|---|--|--------------------------|---|--|--------------------------|
| A | | BVP528 OUT T35 A35-NB LO | B | | BVP528 OUT T35 A35-MB LO |
| C | | BVP528 OUT T35 A35-WB LO | D | | BVP528 OUT T35 A35-NB LT |

Average	Min/Ave	Min/Max	Project maintenance factor	Scale
54.2	0.00	0.00	1.00	1:4000

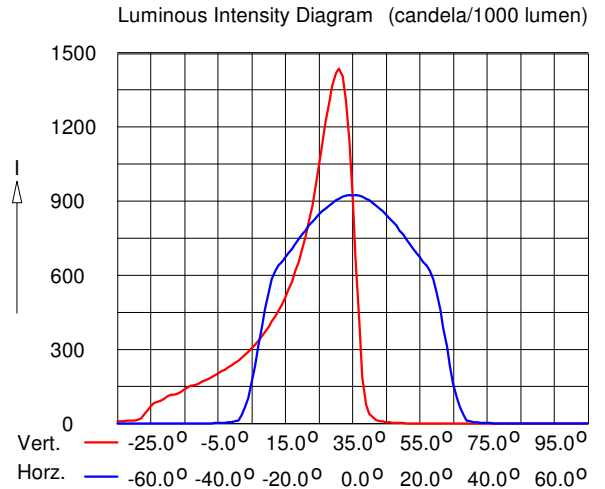
4. Luminaire Details

4.1 Project Luminaires

OptiVision LED gen3.5 2022
BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A35-NB LO

Light output ratios
 DLOR : 0.59
 ULOR : 0.00
 TLOR : 0.59
 ULR : 0.000
 Ballast : E3/D4I
 Lamp flux : 259000 lm
 Luminaire wattage : 1505.9 W
 Measurement code : LVM2047300
 CIE Code : 96 100 100 100 59

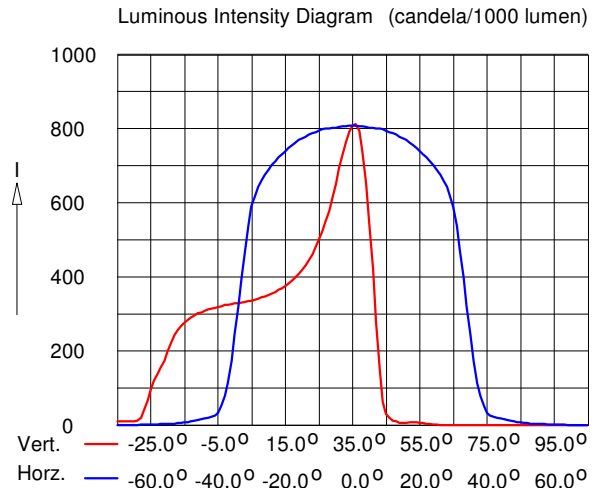
Note: Luminaire data not from database.



OptiVision LED gen3.5 2022
BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A35-MB LO

Light output ratios
 DLOR : 0.56
 ULOR : 0.00
 TLOR : 0.56
 ULR : 0.000
 Ballast : E3/D4I
 Lamp flux : 259000 lm
 Luminaire wattage : 1505.9 W
 Measurement code : LVM2047200
 CIE Code : 86 100 100 100 56

Note: Luminaire data not from database.

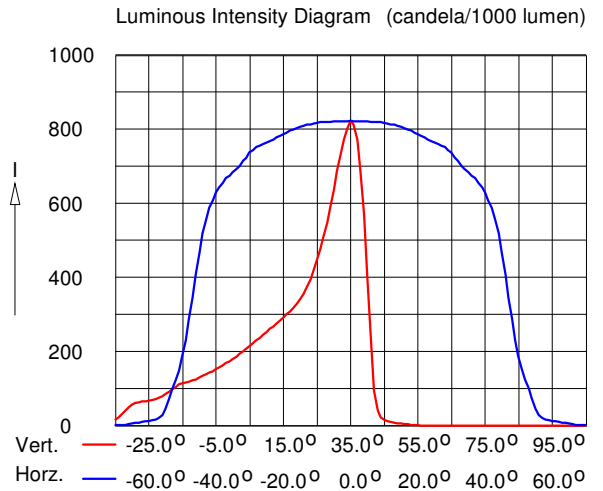


OptiVision LED gen3.5 2022
 BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A35-WB LO

Light output ratios

DLOR : 0.70
 ULOR : 0.00
 TLOR : 0.70
 ULR : 0.000
 Ballast : E3/D4I
 Lamp flux : 259000 lm
 Luminaire wattage : 1505.9 W
 Measurement code : LVM2049200
 CIE Code : 61 98 100 100 70

Note: Luminaire data not from database.

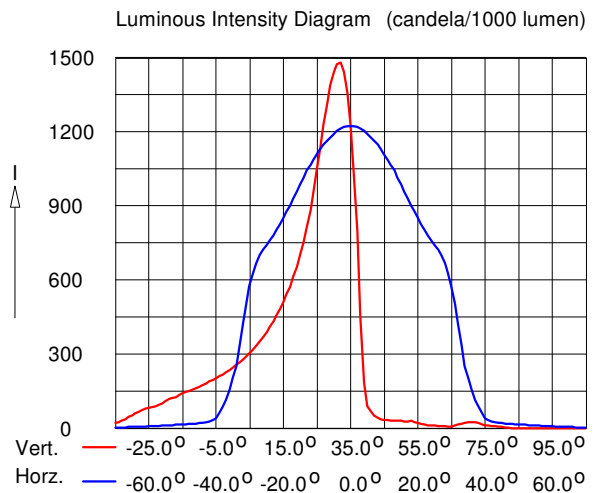


OptiVision LED gen3.5 2022
 BVP528 OUT T35 1xLED2590-4S/757/757 E3/D4I A35-NB LT

Light output ratios

DLOR : 0.77
 ULOR : 0.00
 TLOR : 0.77
 ULR : 0.000
 Ballast : E3/D4I
 Lamp flux : 259000 lm
 Luminaire wattage : 1505.9 W
 Measurement code : LVM2048800
 CIE Code : 81 98 100 100 77

Note: Luminaire data not from database.



5. Installation Data

5.1 Legends

Project Luminaires:

Code	Qty	Luminaire Type	Lamp Type	Flux (lm)
A	48	BVP528 OUT T35 A35-NB LO	1* LED2590-4S/757	1* 259000
B	4	BVP528 OUT T35 A35-MB LO	1* LED2590-4S/757	1* 259000
C	6	BVP528 OUT T35 A35-WB LO	1* LED2590-4S/757	1* 259000
D	24	BVP528 OUT T35 A35-NB LT	1* LED2590-4S/757	1* 259000

Arrangements:

Code	Arrangement
1	GAA TL
2	GAA TML
3	GAA TMR
4	GAA TR
5	GAA BL
6	GAA BML
7	GAA BMR
8	GAA BR
9	Football Mid
10	Football Corner
11	Training Area

Switching Modes:

Code	Switching Mode
1	GAA Pitch
2	Football Pitch
3	Training Area
4	Spill Light

5.2 Luminaire Positioning and Orientation

Including Aiming Points:

Qty and Code	Position			Aiming Points			ULR	Arr.	Switching Modes			
	X (m)	Y (m)	Z (m)	X (m)	Y (m)	Z (m)			1	2	3	4
1* D	-202.44	5.79	20.00	-172.55	-36.69	0.00	0.010	1	+	-	-	+
1* A	-202.44	5.79	20.00	-187.18	-44.87	0.00	0.000	1	+	-	-	+
1* A	-202.44	5.79	20.00	-206.98	-48.97	0.00	0.000	1	+	-	-	+
1* A	-202.44	5.79	20.00	-211.88	-30.82	0.00	0.000	1	+	-	-	+
1* A	-202.44	5.79	20.00	-206.09	-49.04	0.00	0.000	1	+	-	-	+
1* A	-202.44	5.79	20.00	-207.98	-48.88	0.00	0.000	1	+	-	-	+
1* D	-174.38	10.97	20.00	-177.52	-35.24	0.00	0.008	2	+	-	-	+
1* A	-174.38	10.97	20.00	-203.98	-16.66	0.00	0.000	2	+	-	-	+
1* D	-174.38	10.97	20.00	-172.65	-34.76	0.00	0.008	2	+	-	-	+
1* D	-174.38	10.97	20.00	-143.63	-30.22	0.00	0.010	2	+	-	-	+

Qty and Code	Position			Aiming Points			ULR	Arr.	Switching Modes			
	X (m)	Y (m)	Z (m)	X (m)	Y (m)	Z (m)			1	2	3	4
1 * D	-174.38	10.97	20.00	-140.88	-30.53	0.00	0.010	2	+	-	-	+
1 * D	-174.38	10.97	20.00	-141.50	-25.87	0.00	0.009	2	+	-	-	+
1 * A	-174.38	10.97	20.00	-142.39	-22.28	0.00	0.000	2	+	-	-	+
1 * D	-125.01	20.49	20.00	-109.24	-22.72	0.00	0.008	3	+	-	-	+
1 * A	-125.01	20.49	20.00	-86.50	5.85	0.00	0.000	3	+	-	-	+
1 * D	-125.01	20.49	20.00	-104.50	-21.87	0.00	0.008	3	+	-	-	+
1 * D	-125.01	20.49	20.00	-137.71	-30.77	0.00	0.010	3	+	-	-	+
1 * D	-125.01	20.49	20.00	-140.25	-30.13	0.00	0.010	3	+	-	-	+
1 * D	-125.01	20.49	20.00	-141.26	-25.68	0.00	0.009	3	+	-	-	+
1 * A	-125.01	20.49	20.00	-142.30	-22.14	0.00	0.000	3	+	-	-	+
1 * D	-97.03	26.12	20.00	-108.38	-24.22	0.00	0.010	4	+	-	-	+
1 * A	-97.03	26.12	20.00	-91.03	-26.41	0.00	0.000	4	+	-	-	+
1 * A	-97.03	26.12	20.00	-72.62	-23.11	0.00	0.000	4	+	-	-	+
1 * A	-97.03	26.12	20.00	-71.74	-22.66	0.00	0.001	4	+	-	-	+
1 * A	-97.03	26.12	20.00	-74.45	-4.24	0.00	0.000	4	+	-	-	+
1 * A	-97.03	26.12	20.00	-70.92	-22.23	0.00	0.000	4	+	-	-	+
1 * D	-184.36	-88.05	20.00	-172.47	-37.10	0.00	0.010	5	+	-	-	+
1 * A	-184.36	-88.05	20.00	-189.05	-35.55	0.00	0.000	5	+	-	-	+
1 * A	-184.36	-88.05	20.00	-209.74	-39.31	0.00	0.001	5	+	-	-	+
1 * A	-184.36	-88.05	20.00	-208.80	-38.83	0.00	0.000	5	+	-	-	+
1 * A	-184.36	-88.05	20.00	-206.34	-57.77	0.00	0.000	5	+	-	-	+
1 * A	-184.36	-88.05	20.00	-207.84	-38.37	0.00	0.000	5	+	-	-	+
1 * D	-156.38	-82.43	20.00	-171.47	-40.06	0.00	0.008	6	+	-	-	+
1 * A	-156.38	-82.43	20.00	-194.06	-68.22	0.00	0.000	6	+	-	-	+
1 * D	-156.38	-82.43	20.00	-176.72	-40.90	0.00	0.008	6	+	-	-	+
1 * D	-156.38	-82.43	20.00	-143.60	-30.36	0.00	0.010	6	+	-	-	+
1 * D	-156.38	-82.43	20.00	-140.66	-30.92	0.00	0.010	6	+	-	-	+
1 * D	-156.38	-82.43	20.00	-139.68	-36.00	0.00	0.009	6	+	-	-	+
1 * A	-156.38	-82.43	20.00	-139.05	-39.50	0.00	0.000	6	+	-	-	+
1 * D	-107.01	-72.93	20.00	-103.50	-26.30	0.00	0.008	7	+	-	-	+
1 * A	-107.01	-72.93	20.00	-76.60	-45.45	0.00	0.000	7	+	-	-	+
1 * D	-107.01	-72.93	20.00	-108.32	-27.50	0.00	0.008	7	+	-	-	+
1 * D	-107.01	-72.93	20.00	-137.57	-29.32	0.00	0.010	7	+	-	-	+
1 * D	-107.01	-72.93	20.00	-139.84	-30.76	0.00	0.010	7	+	-	-	+
1 * D	-107.01	-72.93	20.00	-139.40	-35.95	0.00	0.009	7	+	-	-	+
1 * A	-107.01	-72.93	20.00	-138.80	-39.57	0.00	0.000	7	+	-	-	+
1 * D	-78.94	-67.76	20.00	-108.44	-24.65	0.00	0.010	8	+	-	-	+
1 * A	-78.94	-67.76	20.00	-92.82	-16.96	0.00	0.000	8	+	-	-	+
1 * A	-78.94	-67.76	20.00	-74.93	-12.96	0.00	0.000	8	+	-	-	+
1 * A	-78.94	-67.76	20.00	-73.95	-13.04	0.00	0.000	8	+	-	-	+
1 * A	-78.94	-67.76	20.00	-69.27	-31.17	0.00	0.000	8	+	-	-	+
1 * A	-78.94	-67.76	20.00	-72.88	-13.15	0.00	0.000	8	+	-	-	+
1 * C	-0.00	-35.00	18.00	0.00	-0.77	0.00	0.001	9	-	+	-	+
1 * A	-0.00	-35.00	18.00	-23.82	-2.19	0.00	0.000	9	-	+	-	+
1 * A	-0.00	-35.00	18.00	23.82	-2.19	0.00	0.000	9	-	+	-	+
1 * A	-0.00	-35.00	18.00	-22.18	-0.21	0.00	0.000	9	-	+	-	+
1 * A	-0.00	-35.00	18.00	22.18	-0.21	0.00	0.000	9	-	+	-	+

Qty and Code	Position			Aiming Points			ULR	Arr.	Switching Modes			
	X (m)	Y (m)	Z (m)	X (m)	Y (m)	Z (m)			1	2	3	4
1 * C	-0.00	35.00	18.00	0.00	0.77	0.00	0.001	9	-	+	-	+
1 * A	-0.00	35.00	18.00	-23.82	2.19	0.00	0.000	9	-	+	-	+
1 * A	-0.00	35.00	18.00	23.82	2.19	0.00	0.000	9	-	+	-	+
1 * A	-0.00	35.00	18.00	-22.18	0.21	0.00	0.000	9	-	+	-	+
1 * A	-0.00	35.00	18.00	22.18	0.21	0.00	0.000	9	-	+	-	+
1 * C	-35.00	-35.00	18.00	-26.68	-8.56	0.00	0.001	10	-	+	-	+
1 * A	-35.00	-35.00	18.00	-48.91	0.09	0.00	0.000	10	-	+	-	+
1 * A	-35.00	-35.00	18.00	-47.53	-0.26	0.00	0.000	10	-	+	-	+
1 * A	-35.00	-35.00	18.00	-38.24	-0.40	0.00	0.000	10	-	+	-	+
1 * C	-35.00	35.00	18.00	-26.68	8.56	0.00	0.001	10	-	+	-	+
1 * A	-35.00	35.00	18.00	-48.91	-0.09	0.00	0.000	10	-	+	-	+
1 * A	-35.00	35.00	18.00	-47.53	0.26	0.00	0.000	10	-	+	-	+
1 * A	-35.00	35.00	18.00	-38.24	0.40	0.00	0.000	10	-	+	-	+
1 * C	35.00	-35.00	18.00	26.68	-8.56	0.00	0.001	10	-	+	-	+
1 * A	35.00	-35.00	18.00	48.91	0.09	0.00	0.000	10	-	+	-	+
1 * A	35.00	-35.00	18.00	47.53	-0.26	0.00	0.000	10	-	+	-	+
1 * A	35.00	-35.00	18.00	38.24	-0.40	0.00	0.000	10	-	+	-	+
1 * C	35.00	35.00	18.00	26.68	8.56	0.00	0.001	10	-	+	-	+
1 * A	35.00	35.00	18.00	48.91	-0.09	0.00	0.000	10	-	+	-	+
1 * A	35.00	35.00	18.00	47.53	0.26	0.00	0.000	10	-	+	-	+
1 * A	35.00	35.00	18.00	38.24	0.40	0.00	0.000	10	-	+	-	+
1 * B	65.05	-35.00	18.00	59.85	-5.09	0.00	0.000	11	-	-	+	+
1 * B	65.05	35.00	18.00	59.85	5.09	0.00	0.000	11	-	-	+	+
1 * B	65.07	-35.00	18.00	70.27	-5.09	0.00	0.000	11	-	-	+	+
1 * B	65.07	35.00	18.00	70.27	5.09	0.00	0.000	11	-	-	+	+

Including Aiming Angles:

Qty and Code	Position			Aiming Angles			ULR	Arr.	Switching Modes			
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0			1	2	3	4
1 * D	-202.44	5.79	20.00	-54.9	68.9	0.0	0.010	1	+	-	-	+
1 * A	-202.44	5.79	20.00	-73.2	69.3	0.0	0.000	1	+	-	-	+
1 * A	-202.44	5.79	20.00	-94.7	70.0	0.0	0.000	1	+	-	-	+
1 * A	-202.44	5.79	20.00	-104.5	62.1	0.0	0.000	1	+	-	-	+
1 * A	-202.44	5.79	20.00	-93.8	70.0	0.0	0.000	1	+	-	-	+
1 * A	-202.44	5.79	20.00	-95.8	70.0	0.0	0.000	1	+	-	-	+
1 * D	-174.38	10.97	20.00	-93.9	66.6	0.0	0.008	2	+	-	-	+
1 * A	-174.38	10.97	20.00	-137.0	63.7	0.0	0.000	2	+	-	-	+
1 * D	-174.38	10.97	20.00	-87.8	66.4	0.0	0.008	2	+	-	-	+
1 * D	-174.38	10.97	20.00	-53.3	68.7	0.0	0.010	2	+	-	-	+
1 * D	-174.38	10.97	20.00	-51.1	69.4	0.0	0.010	2	+	-	-	+
1 * D	-174.38	10.97	20.00	-48.3	68.0	0.0	0.009	2	+	-	-	+
1 * A	-174.38	10.97	20.00	-46.1	66.6	0.0	0.000	2	+	-	-	+
1 * D	-125.01	20.49	20.00	-69.9	66.5	0.0	0.008	3	+	-	-	+
1 * A	-125.01	20.49	20.00	-20.8	64.1	0.0	0.000	3	+	-	-	+

Qty and Code	Position			Aiming Angles			ULR	Arr.	Switching Modes			
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0			1	2	3	4
1 * D	-125.01	20.49	20.00	-64.2	67.0	0.0	0.008	3	+	-	-	+
1 * D	-125.01	20.49	20.00	-103.9	69.3	0.0	0.010	3	+	-	-	+
1 * D	-125.01	20.49	20.00	-106.8	69.3	0.0	0.010	3	+	-	-	+
1 * D	-125.01	20.49	20.00	-109.4	67.8	0.0	0.009	3	+	-	-	+
1 * A	-125.01	20.49	20.00	-112.1	66.5	0.0	0.000	3	+	-	-	+
1 * D	-97.03	26.12	20.00	-102.7	68.8	0.0	0.010	4	+	-	-	+
1 * A	-97.03	26.12	20.00	-83.5	69.3	0.0	0.000	4	+	-	-	+
1 * A	-97.03	26.12	20.00	-63.6	70.0	0.0	0.000	4	+	-	-	+
1 * A	-97.03	26.12	20.00	-62.6	70.0	0.0	0.001	4	+	-	-	+
1 * A	-97.03	26.12	20.00	-53.4	62.1	0.0	0.000	4	+	-	-	+
1 * A	-97.03	26.12	20.00	-61.6	70.0	0.0	0.000	4	+	-	-	+
1 * D	-184.36	-88.05	20.00	76.9	69.1	0.0	0.010	5	+	-	-	+
1 * A	-184.36	-88.05	20.00	95.1	69.2	0.0	0.000	5	+	-	-	+
1 * A	-184.36	-88.05	20.00	117.5	70.0	0.0	0.001	5	+	-	-	+
1 * A	-184.36	-88.05	20.00	116.4	70.0	0.0	0.000	5	+	-	-	+
1 * A	-184.36	-88.05	20.00	126.0	61.9	0.0	0.000	5	+	-	-	+
1 * A	-184.36	-88.05	20.00	115.3	70.0	0.0	0.000	5	+	-	-	+
1 * D	-156.38	-82.43	20.00	109.6	66.0	0.0	0.008	6	+	-	-	+
1 * A	-156.38	-82.43	20.00	159.3	63.6	0.0	0.000	6	+	-	-	+
1 * D	-156.38	-82.43	20.00	116.1	66.6	0.0	0.008	6	+	-	-	+
1 * D	-156.38	-82.43	20.00	76.2	69.5	0.0	0.010	6	+	-	-	+
1 * D	-156.38	-82.43	20.00	73.0	69.6	0.0	0.010	6	+	-	-	+
1 * D	-156.38	-82.43	20.00	70.2	67.9	0.0	0.009	6	+	-	-	+
1 * A	-156.38	-82.43	20.00	68.0	66.6	0.0	0.000	6	+	-	-	+
1 * D	-107.01	-72.93	20.00	85.7	66.8	0.0	0.008	7	+	-	-	+
1 * A	-107.01	-72.93	20.00	42.1	64.0	0.0	0.000	7	+	-	-	+
1 * D	-107.01	-72.93	20.00	91.7	66.2	0.0	0.008	7	+	-	-	+
1 * D	-107.01	-72.93	20.00	125.0	69.4	0.0	0.010	7	+	-	-	+
1 * D	-107.01	-72.93	20.00	127.9	69.5	0.0	0.010	7	+	-	-	+
1 * D	-107.01	-72.93	20.00	131.2	67.9	0.0	0.009	7	+	-	-	+
1 * A	-107.01	-72.93	20.00	133.6	66.5	0.0	0.000	7	+	-	-	+
1 * D	-78.94	-67.76	20.00	124.4	69.0	0.0	0.010	8	+	-	-	+
1 * A	-78.94	-67.76	20.00	105.3	69.2	0.0	0.000	8	+	-	-	+
1 * A	-78.94	-67.76	20.00	85.8	70.0	0.0	0.000	8	+	-	-	+
1 * A	-78.94	-67.76	20.00	84.8	70.0	0.0	0.000	8	+	-	-	+
1 * A	-78.94	-67.76	20.00	75.2	62.1	0.0	0.000	8	+	-	-	+
1 * A	-78.94	-67.76	20.00	83.7	70.0	0.0	0.000	8	+	-	-	+
1 * C	-0.00	-35.00	18.00	90.0	62.3	-0.0	0.001	9	-	+	-	+
1 * A	-0.00	-35.00	18.00	126.0	66.1	-0.0	0.000	9	-	+	-	+
1 * A	-0.00	-35.00	18.00	54.0	66.1	0.0	0.000	9	-	+	-	+
1 * A	-0.00	-35.00	18.00	122.5	66.4	-0.0	0.000	9	-	+	-	+
1 * A	-0.00	-35.00	18.00	57.5	66.4	0.0	0.000	9	-	+	-	+
1 * C	-0.00	35.00	18.00	-90.0	62.3	0.0	0.001	9	-	+	-	+
1 * A	-0.00	35.00	18.00	-126.0	66.1	0.0	0.000	9	-	+	-	+
1 * A	-0.00	35.00	18.00	-54.0	66.1	-0.0	0.000	9	-	+	-	+
1 * A	-0.00	35.00	18.00	-122.5	66.4	0.0	0.000	9	-	+	-	+
1 * A	-0.00	35.00	18.00	-57.5	66.4	-0.0	0.000	9	-	+	-	+

Qty and Code	Position			Aiming Angles			ULR	Arr.	Switching Modes			
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0			1	2	3	4
1 * C	-35.00	-35.00	18.00	72.5	57.0	0.0	0.001	10	-	+	-	+
1 * A	-35.00	-35.00	18.00	111.6	64.5	0.0	0.000	10	-	+	-	+
1 * A	-35.00	-35.00	18.00	109.8	64.0	0.0	0.000	10	-	+	-	+
1 * A	-35.00	-35.00	18.00	95.4	62.6	0.0	0.000	10	-	+	-	+
1 * C	-35.00	35.00	18.00	-72.5	57.0	-0.0	0.001	10	-	+	-	+
1 * A	-35.00	35.00	18.00	-111.6	64.5	-0.0	0.000	10	-	+	-	+
1 * A	-35.00	35.00	18.00	-109.8	64.0	-0.0	0.000	10	-	+	-	+
1 * A	-35.00	35.00	18.00	-95.4	62.6	-0.0	0.000	10	-	+	-	+
1 * C	35.00	-35.00	18.00	107.5	57.0	-0.0	0.001	10	-	+	-	+
1 * A	35.00	-35.00	18.00	68.4	64.5	-0.0	0.000	10	-	+	-	+
1 * A	35.00	-35.00	18.00	70.2	64.0	-0.0	0.000	10	-	+	-	+
1 * A	35.00	-35.00	18.00	84.6	62.6	-0.0	0.000	10	-	+	-	+
1 * C	35.00	35.00	18.00	-107.5	57.0	0.0	0.001	10	-	+	-	+
1 * A	35.00	35.00	18.00	-68.4	64.5	0.0	0.000	10	-	+	-	+
1 * A	35.00	35.00	18.00	-70.2	64.0	0.0	0.000	10	-	+	-	+
1 * A	35.00	35.00	18.00	-84.6	62.6	0.0	0.000	10	-	+	-	+
1 * B	65.05	-35.00	18.00	99.9	59.3	0.0	0.000	11	-	-	+	+
1 * B	65.05	35.00	18.00	-99.9	59.3	0.0	0.000	11	-	-	+	+
1 * B	65.07	-35.00	18.00	80.1	59.3	0.0	0.000	11	-	-	+	+
1 * B	65.07	35.00	18.00	-80.1	59.3	0.0	0.000	11	-	-	+	+