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t.a.v. mevrouw S. Dikmans

Betreft: lichthinderonderzoek plan Stappegoor Tilburg, optie conventionele verlichting incl. Stadion Willem II

Onze ref.: 080806b.arca

Zwijndrecht, 11-10-2012

Geachte mevrouw Dikmans,

Naar aanleiding van uw opdracht, hebben wij het genoegen u bijgaand rapport aan te bieden.

De lichthinder aspecten werden onderzocht voor de omgeving van het complex Stappegoor te Tilburg, voor het verlichten van 9 voetbalvelden, het stadion van Willem II, 1 atletiekbaan en 19 tennisbanen, met rapport L3107xx.arca.

Verticale verlichtingssterkte Ev

In november 1999 en in juni 2003 publiceerde de commissie lichthinder van de NSVV een algemene richtlijn met grenswaarden voor lichthinder van omwonenden van sportveld- en terreinverlichting. Hierin wordt gesproken van een maximale Ev van 10 lux voor zone E3, gemeten op een hoogte van 1,80 meter. De gevonden lichtwaarden op de onderzochte gevels van de woningen voldoen aan deze criteria in de toekomstige situatie met een maximum waarde van 8,2 lux.

Lichtsterkte I

Ev is slechts één van beide genoemde hinderparameters in deze richtlijn. De tweede parameter is de lichtintensiteit, waarvoor een maximale grenswaarde van 10.000 cd voor zone E3 wordt opgegeven. De gevonden maxima van 14.803 - 141.700 (blz. 6 van rapport L3107xx.arca), op de onderzochte plaatsen, voldoen **niet** aan de grenswaarde van zone E3.

Grenswaarden

De onderstaande grenswaarden worden vermeld in de delen 1 en 2 van de publicaties over Algemene richtlijnen voor Sportveldverlichting en Terreinverlichting van de NSVV, waarnaar in het activiteitenbesluit wordt verwezen wordt onder artikel 2.1 (pag.180/181)/ artikel 4.113 (pag. 288)

Grenswaarden voor de lichtemissie van een verlichtingsinstallatie voor sport-accommodaties ter voorkoming van lichthinder voor omwonenden*

Omgevingszone					
Te hanteren parameter	Toepassingscondities	E1 natuurgebied	E2 landelijkgebied	E3 stedelijkgebied	E4 stadscentrum/industriegebied

Ev (lux) op de gevel	dag en avond 07:00-23:00	2 lux	5 lux	10 lux	25 lux
	nacht * 23:00-07:00	1 lux	1 lux	2 lux	4 lux
I (cd) van elk armatuur	dag en avond 07:00-23:00	2.500 cd	7.500 cd	10.000 cd	25.000 cd
	nacht * 23:00-07:00	0 cd	500 cd	1.000 cd	2.500 cd
*in het Activiteitenbesluit art. 4.113 pag. 74 staat dat na 23:00 uur de verlichting moet worden uitgeschakeld					

Upward Light Ratio ULR

In dezelfde Europese richtlijn CIE 150 en de NSVV aanbeveling deel 2 worden ook grenswaarden genoemd voor de hinder van 0,15 U(pward)L(ight)R(atio) voor zone E3 ten behoeve van "sky glow". Ook aan deze richtlijn wordt voldaan met een gevonden ULR van 0,00.

		Omgevingszone			
Lichttechnische parameter	Omstandigheden	E1	E2	E3	E4
Upward Light Ratio (ULR)	De door een armatuur naar boven uitgestaalde hoeveelheid licht in de positie waarvoor deze is ontworpen, in verhouding tot de totaal door de armatuur uitgestaalde hoeveelheid licht	0,00	0,05	0,15	0,25

Beperkingen:

Alle waarden uit het rapport moeten als theoretische indicatoren voor de situatie worden beschouwd. Schaduwvlakken van bomen, huizen en andere objecten zijn niet in aanmerking genomen, deze kunnen een hindersituatie verminderen, maar ook meer contrasteren. Ook de aanwezige straatverlichting in het gebied kan zowel hinder verminderen door contrastvermindering als vermeerderen door toename van de hoeveelheid licht uit een bepaalde richting.

Conclusie:

De omwonenden van het sportcomplex **ondervinden lichthinder** in de zin van de opgestelde grenswaarden door de NSVV bij uitvoering van lichtplan L3107xx.arca voor zone E3

Indien uit de gemeten waarden blijkt dat bepaalde armaturen hinderlijk zijn zullen mogelijke alternatieven worden voorgesteld c.q. onderzocht.

Wij vertrouwen u hiermede een passend advies te hebben gemaakt en staan gaarne ter beschikking voor alle nader gewenste informatie.

Hoogachtend,
OOSTENDORP NEDERLAND B.V.,

Ing. J.W. de Boer

Behandeld door: A.J. Veldhuizen

Bijlage: CalcuLuX Lichtrapport L3107xx.arca
factuur

Lichthinderonderzoek

Stappegoor Tilburg

Project code: L3107xx.arca
Date: 11-10-2012
Customer: Arcadis PlanRealisatie b.v.
Customer Representative: mevrouw S. Dikmans

Designer: A.J. Veldhuizen

Description: Huidige lichtinstallaties TCT en Olympus
Overige velden en atletiekbaan voorzien van 15 en 20 meter masten en MVP 507 armaturen
Incl. lichtinstallatie Stadion Willem II

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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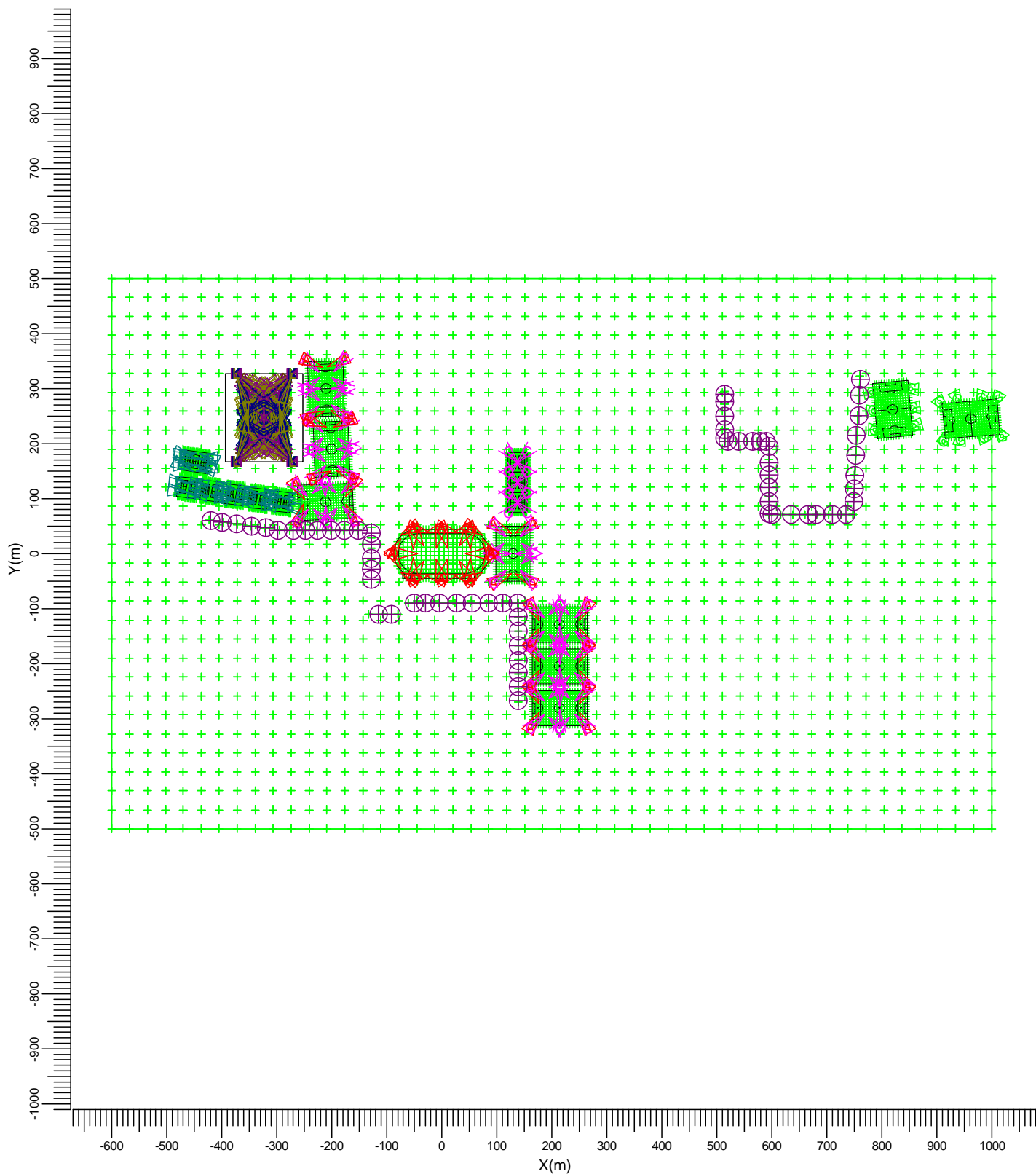
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1. Project Description

1.1 Top Project Overview



- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Scale
1:10000

2. Summary

2.1 General Information

The overall maintenance factor used for this project is 1.00.

2.2 Observer Information

Code	Observer	Position		
		X (m)	Y (m)	Z (m)
Aa	WG 1, woning A.1	-420.00	60.00	1.80
Bb	WG 1, woning A.2	-399.00	57.00	1.80
Cc	WG 1, woning A.3	-372.80	54.00	1.80
Dd	WG 1, woning A.4	-346.00	50.00	1.80
Ee	WG 1, woning A.5	-320.00	47.00	1.80
Ff	WG 1, woning A.6	-298.00	42.00	1.80
Gg	WG 1, woning B.1	-270.00	42.50	1.80
Hh	WG 1, woning B.2	-248.00	42.50	1.80
Ii	WG 1, woning B.3	-226.00	42.50	1.80
Jj	WG 1, woning B.4	-201.00	42.50	1.80
Kk	WG 1, woning B.5	-177.00	42.50	1.80
Ll	WG 1, woning B.6	-152.00	42.50	1.80
Mm	WG 1, woning C.1	-128.00	37.00	1.80
Nn	WG 1, woning C.2	-128.00	17.00	1.80
Oo	WG 1, woning C.3	-128.00	-9.00	1.80
Pp	WG 1, woning C.4	-128.00	-28.00	1.80
Qq	WG 1, woning C.5	-128.00	-47.00	1.80
Rr	WG 1, woning D.1	-115.00	-110.00	1.80
Ss	WG 1, woning D.2	-92.00	-110.00	1.80
Tt	WG 1, woning E.1	-50.00	-90.00	1.80
Uu	WG 1, woning E.2	-30.00	-90.00	1.80
Vv	WG 1, woning E.3	-4.00	-90.00	1.80
Ww	WG 1, woning E.4	27.00	-90.00	1.80
Xx	WG 1, woning E.5	55.00	-90.00	1.80
Yy	WG 1, woning E.6	85.00	-90.00	1.80
Zz	WG 1, woning E.7	111.00	-90.00	1.80
[{	WG 1, woning E.8	138.00	-90.00	1.80
\}	WG 1, woning F.1	139.00	-115.00	1.80
]}	WG 1, woning F.2	139.00	-141.00	1.80
^~	WG 1, woning F.3	139.00	-167.00	1.80
_□	WG 1, woning F.4	139.00	-194.00	1.80
ˇ€	WG 1, woning F.5	139.00	-216.00	1.80
a□	WG 1, woning F.6	139.00	-242.00	1.80
b,	WG 1, woning F.7	139.00	-267.00	1.80
cf	WG 2, woning A.1	514.00	210.00	1.80
d,,	WG 2, woning A.2	514.00	225.00	1.80
e...	WG 2, woning A.3	514.00	250.00	1.80
f†	WG 2, woning A.4	514.00	276.00	1.80
g‡	WG 2, woning A.5	514.00	290.00	1.80
hˆ	WG 2, woning B.1	520.00	204.00	1.80
i‰	WG 2, woning B.2	540.00	204.00	1.80
jŠ	WG 2, woning B.3	565.00	204.00	1.80
kˆ	WG 2, woning B.4	579.00	204.00	1.80
ICE	WG 2, woning B.5	590.00	204.00	1.80
m□	WG 2, woning C.1	595.00	195.00	1.80
nŽ	WG 2, woning C.2	595.00	165.00	1.80
o□	WG 2, woning C.3	595.00	143.00	1.80
p□	WG 2, woning C.4	595.00	120.00	1.80
qˆ	WG 2, woning C.5	595.00	95.00	1.80
rˆ	WG 2, woning C.6	595.00	73.00	1.80
s“	WG 2, woning D.1	600.00	71.00	1.80
t”	WG 2, woning D.2	635.00	71.00	1.80
u•	WG 2, woning D.3	666.00	71.00	1.80
v–	WG 2, woning D.4	680.00	71.00	1.80
w—	WG 2, woning D.5	710.00	71.00	1.80
x˜	WG 2, woning D.6	735.00	71.00	1.80
y™	WG 2, woning E.1	749.00	95.00	1.80
zš	WG 2, woning E.2	750.00	118.50	1.80

Code	Observer	Position		
		X (m)	Y (m)	Z (m)
{}	WG 2, woning E.3	751.00	142.00	1.80
œ	WG 2, woning E.4	752.00	179.00	1.80
}□	WG 2, woning E.5	753.50	215.00	1.80
~ž	WG 2, woning E.6	758.00	251.00	1.80
□ÿ	WG 2, woning E.7	759.50	288.00	1.80
€	WG 2, woning E.8	761.00	317.00	1.80

2.3 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
A	58	MVP507 NB	1 * MHN-LA2000W	2100.0	1 * 220000
C	82	MVP507 MB	1 * MHN-LA2000W	2100.0	1 * 220000
F	28	MNF 307/2KW N/41.0	1 * HPIT 2KW/380	2052.0	1 * 200000
G	14	MNF 307/2KW M/41.0	1 * HPIT 2KW/380	2052.0	1 * 200000
J	16	MVF403 A2	1 * MHN-SA2000W/400V/956	2093.0	1 * 200000
K	52	MVF403 A3	1 * MHN-SA2000W/400V/956	2093.0	1 * 200000
L	56	MVF403 A4	1 * MHN-SA2000W/400V/956	2093.0	1 * 200000
M	36	MVF403 A5	1 * MHN-SA2000W/400V/956	2093.0	1 * 200000
N	8	MVF403 A6	1 * MHN-SA2000W/400V/956	2093.0	1 * 200000

Code	Maintenance factor	
	Luminaire	Lamp
A	1.00	1.00
C	1.00	1.00
F	0.90	0.90
G	0.90	0.90
J	1.00	1.00
K	1.00	1.00
L	1.00	1.00
M	1.00	1.00
N	1.00	1.00

The total installed power: 731.81 (kWatt)

2.4 Calculation Results

(Il)luminance Calculations:

Calculation	Type	Unit	Ave	Min	Max	Min/Ave	Min/Max
Atletiekbaan	Surface Illuminance	lux	316	187	467	0.59	0.40
Segmenten	Surface Illuminance	lux	253	133	372	0.52	0.36
voetbalveld 1	Surface Illuminance	lux	301	190	486	0.63	0.39
voetbalveld 2	Surface Illuminance	lux	286	180	465	0.63	0.39
voetbalveld 3	Surface Illuminance	lux	280	178	432	0.64	0.41
voetbalveld 4	Surface Illuminance	lux	277	198	495	0.71	0.40
voetbalveld 5	Surface Illuminance	lux	280	193	457	0.69	0.42
voetbalveld 6	Surface Illuminance	lux	284	194	457	0.68	0.42
voetbalveld 7	Surface Illuminance	lux	280	193	457	0.69	0.42
voetbalveld 8	Surface Illuminance	lux	81.6	37.4	146.4	0.46	0.26
voetbalveld 9	Surface Illuminance	lux	98.9	50.3	176.6	0.51	0.28
tennisbaan 1	Surface Illuminance	lux	366	300	416	0.82	0.72
tennisbaan 2	Surface Illuminance	lux	446	377	478	0.85	0.79
tennisbaan 3	Surface Illuminance	lux	373	295	423	0.79	0.70
tennisbanen 1 t/m 3	Surface Illuminance	lux	354	143	478	0.40	0.30
tennisbaan 4	Surface Illuminance	lux	318	223	461	0.70	0.48
tennisbaan 5	Surface Illuminance	lux	308	236	445	0.76	0.53
tennisbanen 4 en 5	Surface Illuminance	lux	282	77	492	0.27	0.16
tennisbaan 6	Surface Illuminance	lux	297	247	389	0.83	0.64
tennisbaan 7	Surface Illuminance	lux	318	232	434	0.73	0.53
tennisbanen 6 en 7	Surface Illuminance	lux	271	86	447	0.32	0.19
tennisbaan 8	Surface Illuminance	lux	299	219	406	0.73	0.54

Calculation	Type	Unit	Ave	Min	Max	Min/Ave	Min/Max
tennisbaan 9	Surface Illuminance	lux	302	235	414	0.78	0.57
tennisbanen 8 en 9	Surface Illuminance	lux	277	97	473	0.35	0.20
tennisbaan 10	Surface Illuminance	lux	304	240	406	0.79	0.59
tennisbaan 11	Surface Illuminance	lux	311	229	428	0.74	0.53
tennisbanen 10 en 11	Surface Illuminance	lux	275	91	442	0.33	0.21
tennisbaan 12	Surface Illuminance	lux	306	231	419	0.76	0.55
tennisbaan 13	Surface Illuminance	lux	356	256	507	0.72	0.50
tennisbanen 12 en 13	Surface Illuminance	lux	296	104	580	0.35	0.18
tennisbaan A	Surface Illuminance	lux	455	323	509	0.71	0.63
tennisbaan B	Surface Illuminance	lux	455	323	509	0.71	0.63
tennisbanen A en B	Surface Illuminance	lux	414	176	537	0.42	0.33
tennisbaan C	Surface Illuminance	lux	471	403	507	0.86	0.79
tennisbaan D	Surface Illuminance	lux	471	403	507	0.86	0.79
tennisbanen C en D	Surface Illuminance	lux	451	311	533	0.69	0.58
tennisbaan E	Surface Illuminance	lux	454	324	509	0.71	0.64
tennisbaan F	Surface Illuminance	lux	454	324	509	0.71	0.64
tennisbanen E en F	Surface Illuminance	lux	414	180	537	0.43	0.33
omgeving	Surface Illuminance	lux	33.5	0.0	2004.8	0.00	0.00
omgeving 1.80	Surface Illuminance	lux	33.4	0.0	2064.9	0.00	0.00
omgeving Ev +X	Vertical Illuminance	lux	17.8	0.0	1320.4	0.00	0.00
omgeving Ev -X	Vertical Illuminance	lux	17.8	0.0	1307.6	0.00	0.00
omgeving Ev +Y	Vertical Illuminance	lux	22.5	0.0	1984.9	0.00	0.00
omgeving Ev -Y	Vertical Illuminance	lux	22.2	0.0	2048.1	0.00	0.00
WG 1 woningen A	Surface Illuminance	lux	0.00	0.00	0.01	0.62	0.38
WG 1 woningen B	Surface Illuminance	lux	0.04	0.01	0.12	0.29	0.10
WG 1 woningen C	Surface Illuminance	lux	0.94	0.47	1.48	0.50	0.32
WG 1 woningen D	Surface Illuminance	lux	2.57	2.22	2.91	0.86	0.76
WG 1 woningen E	Surface Illuminance	lux	2.82	1.15	4.67	0.41	0.25
WG 1 woningen F	Surface Illuminance	lux	5.23	2.35	8.20	0.45	0.29
WG 2, woningen A	Surface Illuminance	lux	0.23	0.23	0.24	0.97	0.93
WG 2, woningen B	Surface Illuminance	lux	0.02	0.02	0.03	0.77	0.61
WG 2, woningen C	Surface Illuminance	lux	0.20	0.19	0.22	0.94	0.88
WG 2, woningen D	Surface Illuminance	lux	0.01	0.01	0.01	0.62	0.40
WG 2, woningen E	Surface Illuminance	lux	1.08	0.11	3.25	0.10	0.03
Voetbalstadion	Surface Illuminance	lux	1758	1198	2013	0.68	0.60

Obtrusive Light Calculations:

Observer Code	Luminaire Code	Position			Aiming Angles			Maximum Intensity (cd)
		X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	
Aa	J	-272.00	327.00	42.00	-117.00	71.20	0.00	79163
Bb	J	-272.00	327.00	42.00	-117.00	71.20	0.00	81899
Cc	K	-374.00	327.00	42.00	-80.70	72.30	-0.00	93231
Dd	J	-374.00	327.00	42.00	-81.70	72.30	-0.00	141700
Ee	J	-272.00	327.00	42.00	-98.30	72.30	0.00	141460
Ff	J	-374.00	327.00	42.00	-76.40	72.30	-0.00	129516
Gg	J	-374.00	327.00	42.00	-76.40	72.30	-0.00	85864
Hh	L	-374.00	327.00	42.00	-69.60	70.30	-0.00	73933
Ii	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	77482
Jj	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	63028
Kk	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	47828
Ll	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	34512
Mm	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	26246
Nn	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	29444
Oo	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	33703
Pp	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	36200
Qq	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	38195
Rr	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	37763
Ss	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	32274
Tt	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	21219
Uu	J	-374.00	327.00	42.00	-63.00	71.20	-0.00	17514
Vv	K	-374.00	327.00	42.00	-42.80	69.20	-0.00	17829
Ww	K	-374.00	327.00	42.00	-42.80	69.20	-0.00	18747
Xx	K	-374.00	327.00	42.00	-42.80	69.20	-0.00	19311
Yy	K	-374.00	327.00	42.00	-42.80	69.20	-0.00	19218
Zz	L	-374.00	327.00	42.00	-38.70	68.00	-0.00	19100

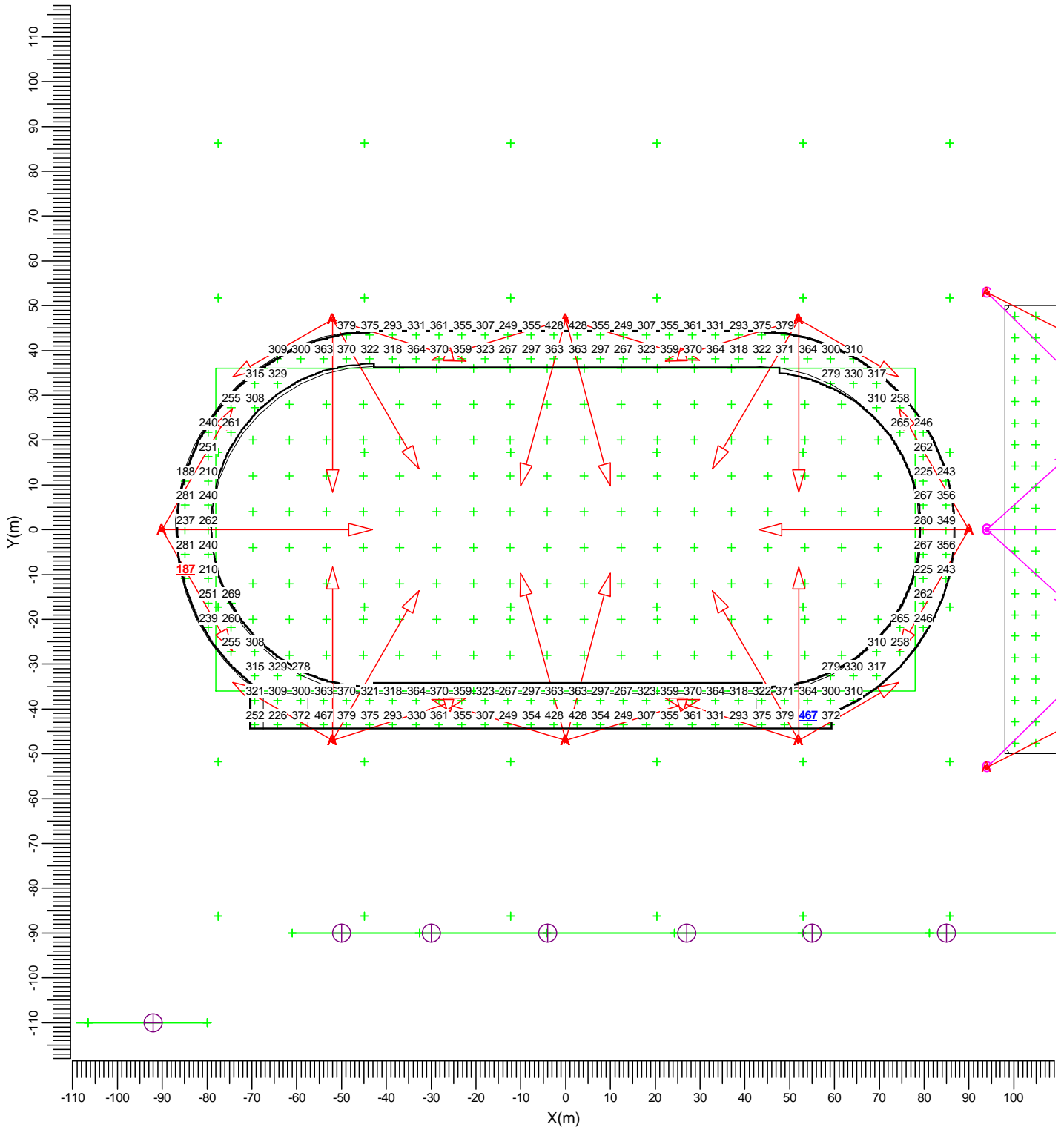
Observer Code	Luminaire Code	Position			Aiming Angles			Maximum Intensity (cd)
		X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	
{	L	-374.00	327.00	42.00	-38.70	68.00	-0.00	19060
\	L	-374.00	327.00	42.00	-38.70	68.00	-0.00	18608
}	K	-374.00	327.00	42.00	-42.80	69.20	-0.00	18245
^~	K	-374.00	327.00	42.00	-42.80	69.20	-0.00	17879
_□	K	-374.00	327.00	42.00	-42.80	69.20	-0.00	17137
`€	K	-374.00	327.00	42.00	-42.80	69.20	-0.00	16495
a□	K	-374.00	327.00	42.00	-42.80	69.20	-0.00	15713
b,	K	-374.00	327.00	42.00	-42.80	69.20	-0.00	14803
c ^f	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	8311
d,,	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	8026
e...	L	-374.00	167.00	42.00	19.90	64.60	0.00	7576
f†	L	-374.00	167.00	42.00	19.90	64.60	0.00	8141
g‡	L	-374.00	167.00	42.00	19.90	64.60	0.00	8439
h^	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	8407
i‰	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	8302
jš	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	8178
k˘	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	8112
lœ	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	8061
m□	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	8211
nž	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	8980
o□	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9506
p□	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9899
q ^ˆ	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9843
r ^ˆ	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9931
s ^ˆ	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9927
t ^ˆ	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9737
u•	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9632
v-	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9637
w—	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9651
x˘	G	1011.33	284.91	15.25	-119.94	65.12	0.00	9700
y™	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9552
zš	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	9144
{	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	8660
œ	L	-374.00	327.00	42.00	-19.90	64.60	-0.00	7842
}□	G	856.47	265.33	15.25	-174.74	60.00	0.00	8668
~ž	G	859.28	231.79	15.25	-166.67	59.00	0.00	8476
□ÿ	G	856.47	265.33	15.25	-174.74	60.00	0.00	9452
€	G	853.50	299.23	15.25	179.39	60.00	0.00	7854

The upward light ratio (ULR) is 0.01.

3. Calculation Results

3.1 Atletiekbaan: Graphical Table

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

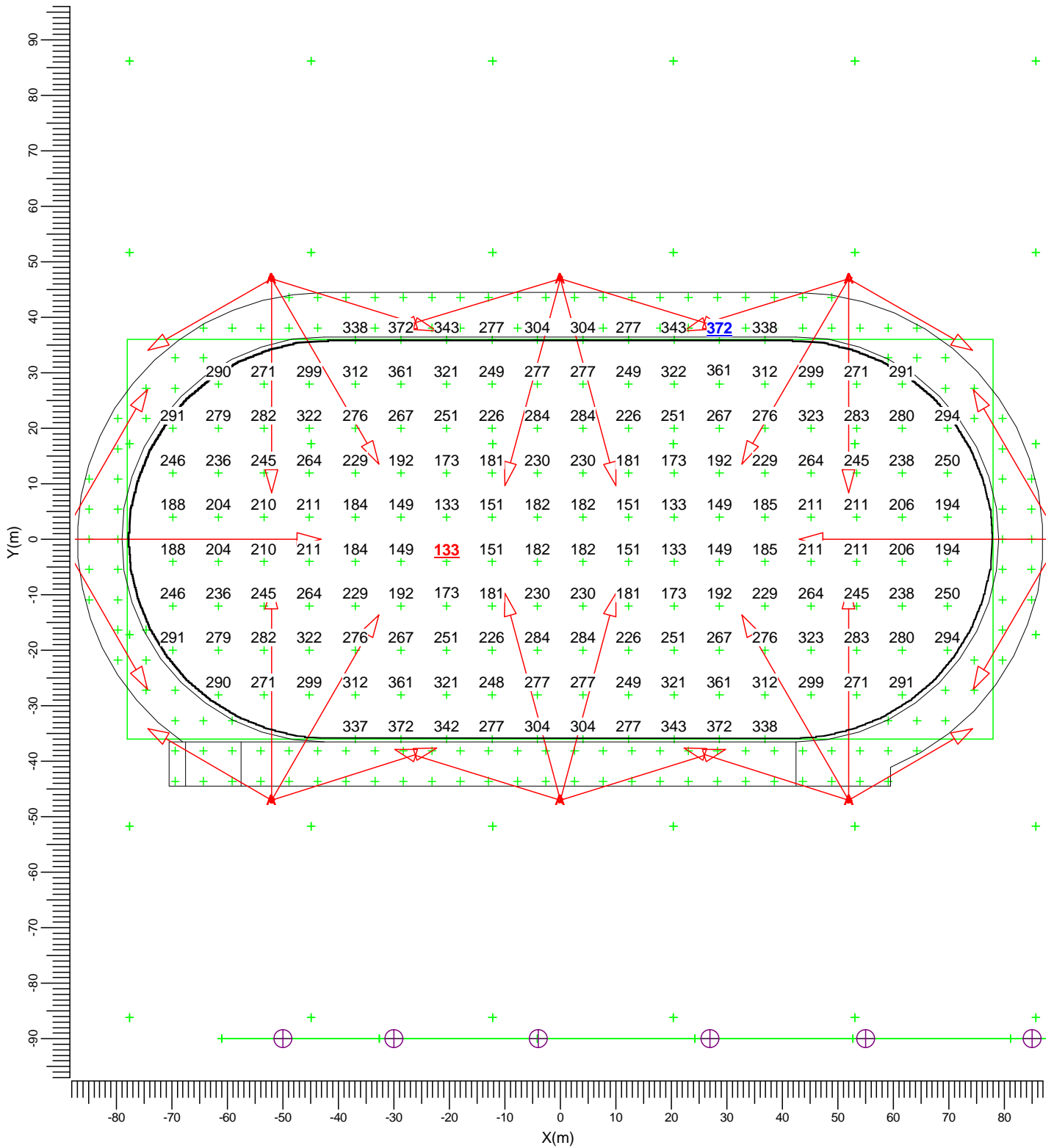


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
316	187	467	0.59	0.40	See summary	1:1250

3.2 Segmenten: Graphical Table

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

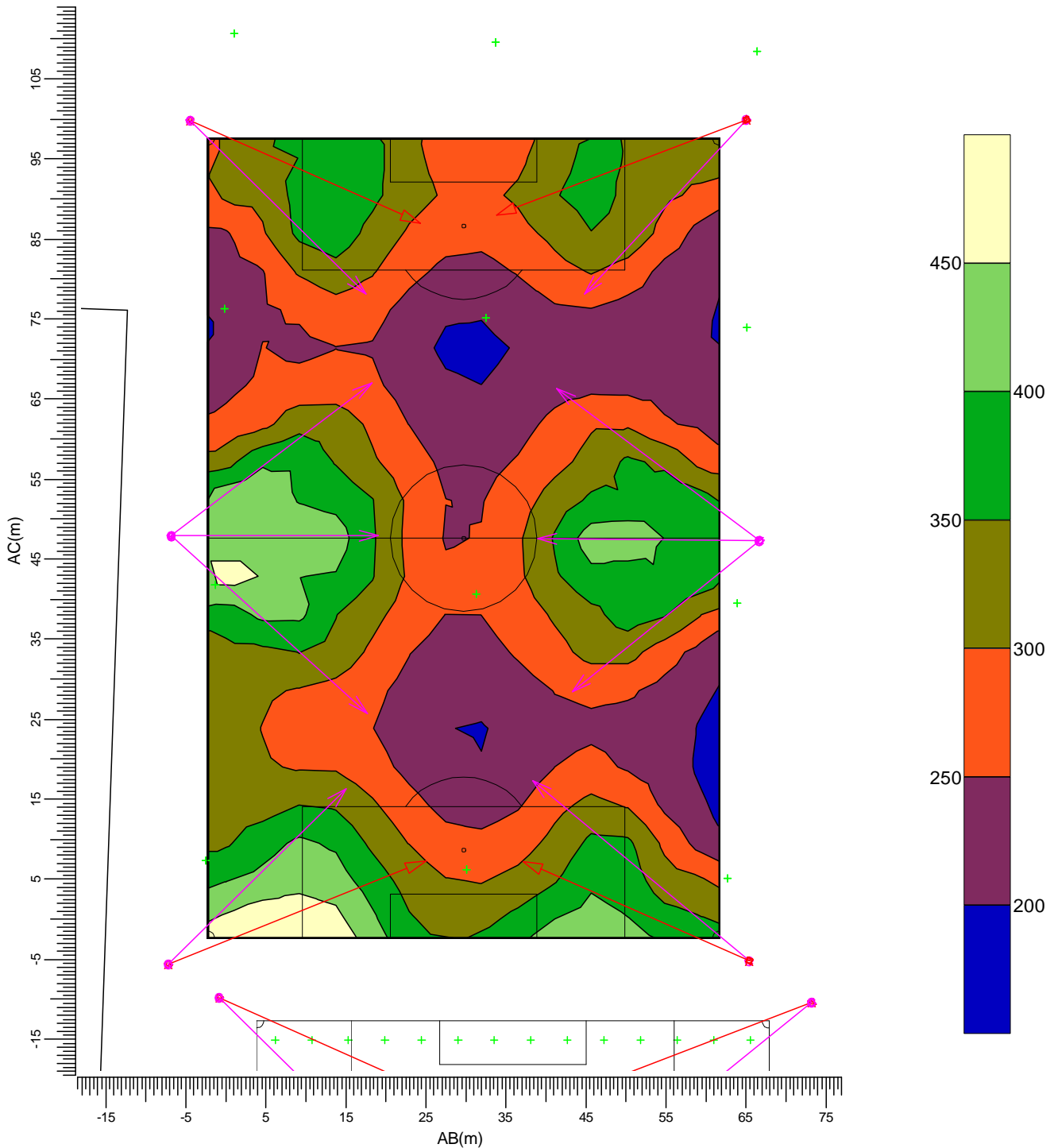


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
253	133	372	0.52	0.36	See summary	1:1000

3.4 voetbalveld 1: Filled Iso Contour

Grid : voetbalveld 1
Calculation : Surface Illuminance (lux)



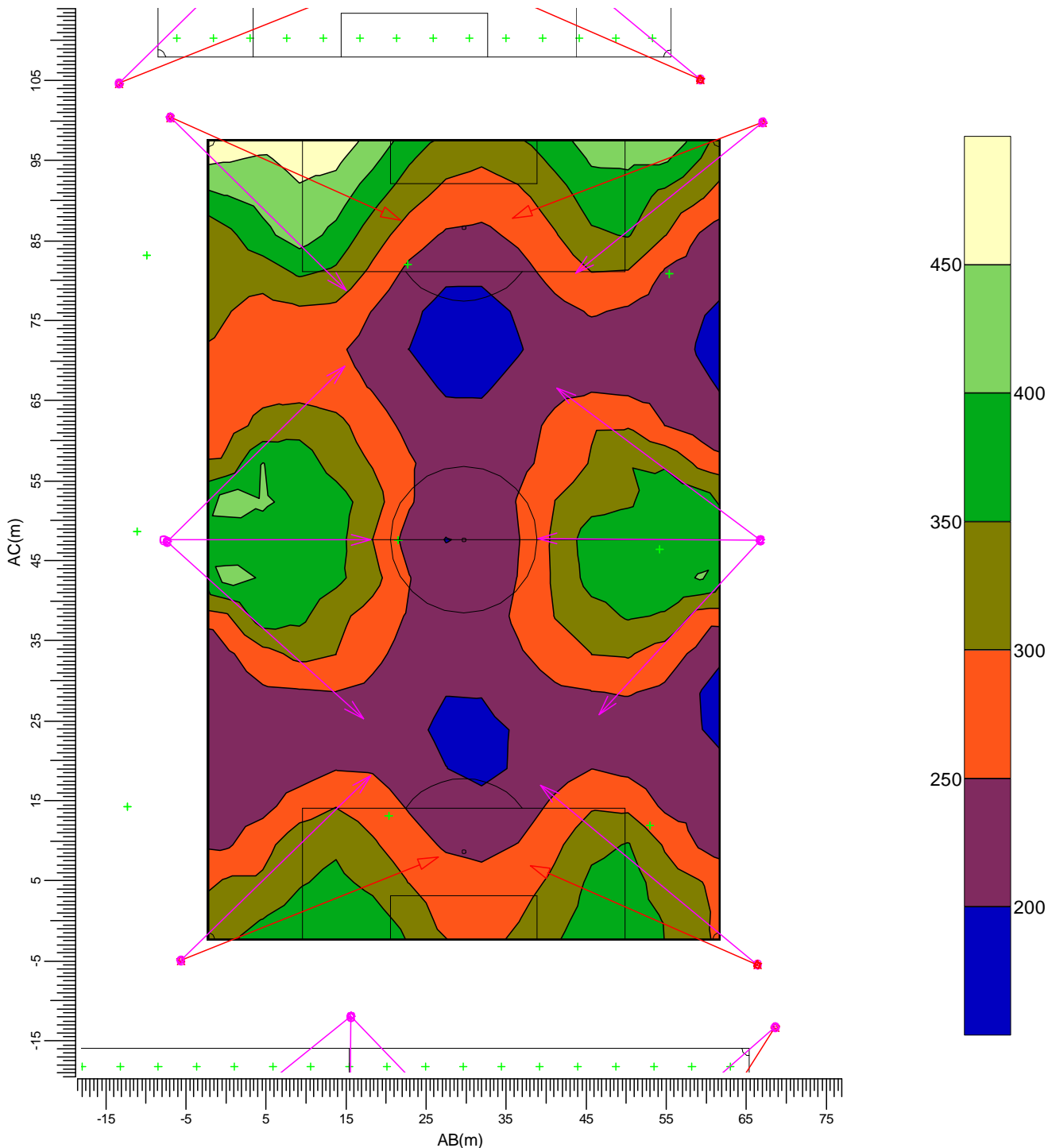
(-241.36, 346.55, -0.00) C-----D (-181.97, 348.63, 0.00)
(-238.03, 251.37, -0.00) A-----B (-178.64, 253.45, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
301	190	486	0.63	0.39	See summary	1:750

3.6 voetbalveld 2: Filled Iso Contour

Grid : voetbalveld 2
Calculation : Surface Illuminance (lux)



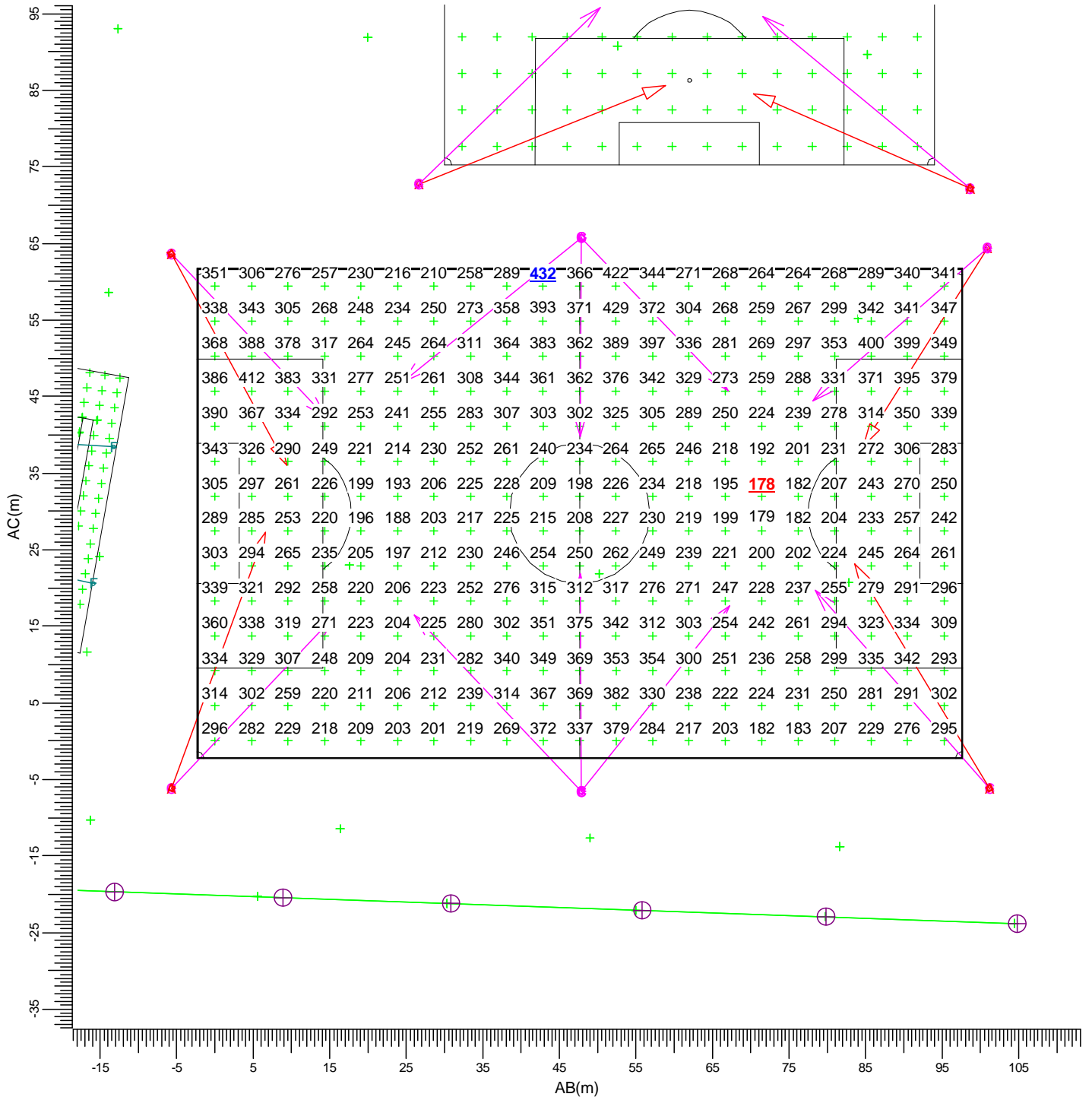
(-231.36, 236.55, -0.00) C-----D (-171.97, 238.63, 0.00)
(-228.03, 141.37, -0.00) A-----B (-168.64, 143.45, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
286	180	465	0.63	0.39	See summary	1:750

3.7 voetbalveld 3: Graphical Table

Grid : voetbalveld 3
Calculation : Surface Illuminance (lux)



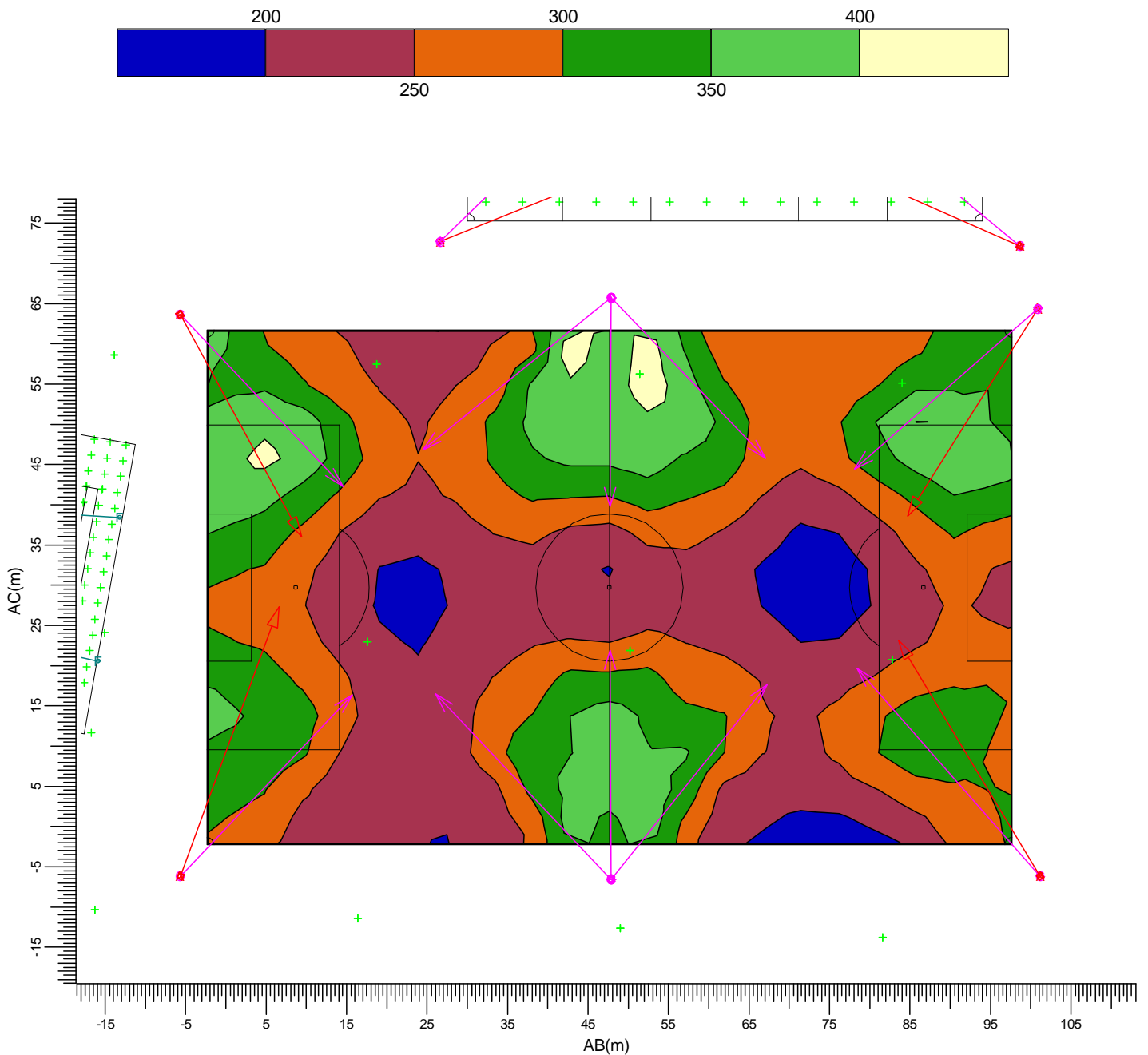
(-259.63, 122.03, -0.00) C-----D (-164.45, 125.36, 0.00)
 (-257.55, 62.64, -0.00) A-----B (-162.37, 65.97, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
280	178	432	0.64	0.41	See summary	1:750

3.8 voetbalveld 3: Filled Iso Contour

Grid : voetbalveld 3
Calculation : Surface Illuminance (lux)



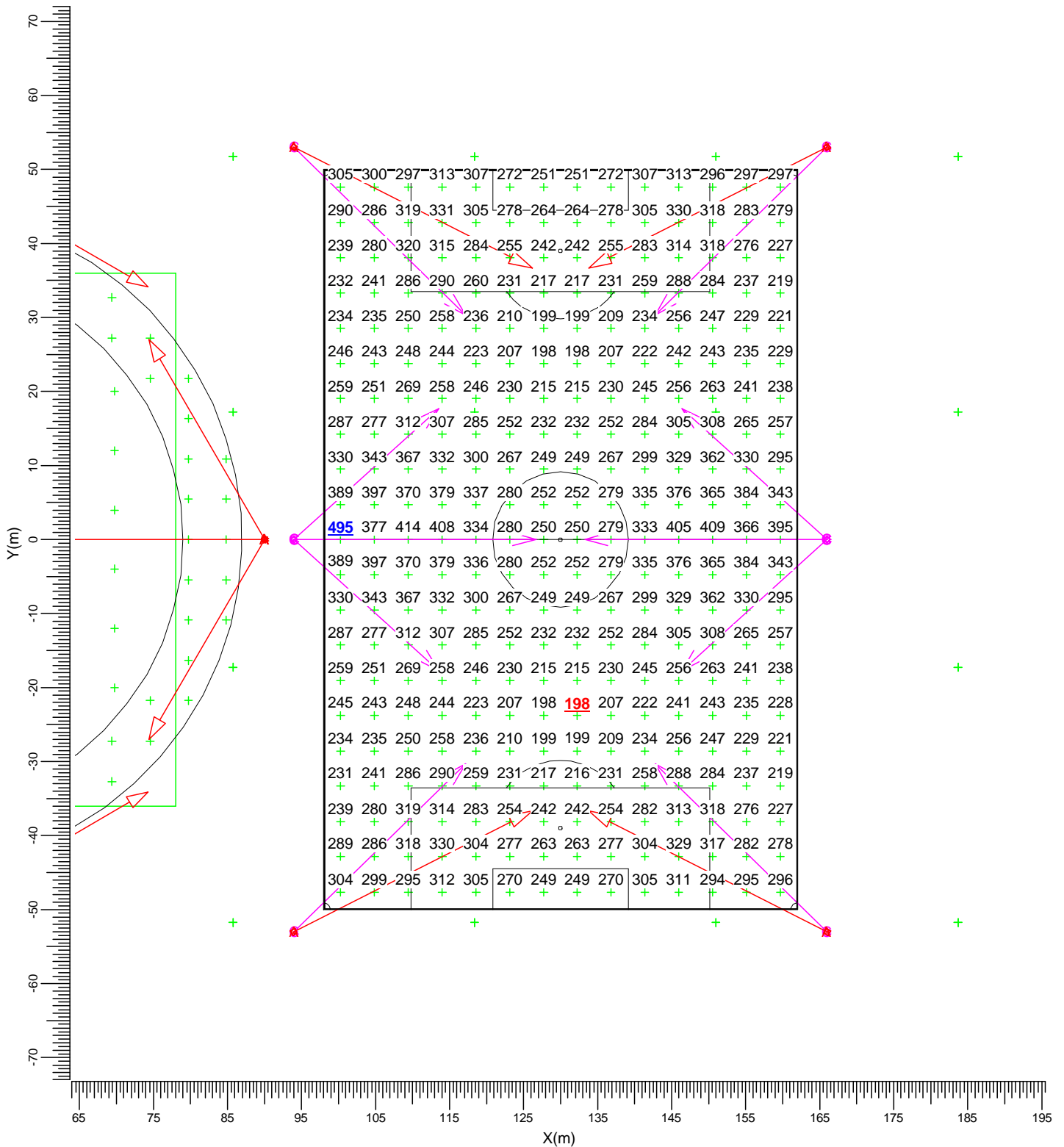
(-259.63, 122.03, -0.00) C-----D (-164.45, 125.36, 0.00)
(-257.55, 62.64, -0.00) A-----B (-162.37, 65.97, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
280	178	432	0.64	0.41	See summary	1:750

3.9 voetbalveld 4: Graphical Table

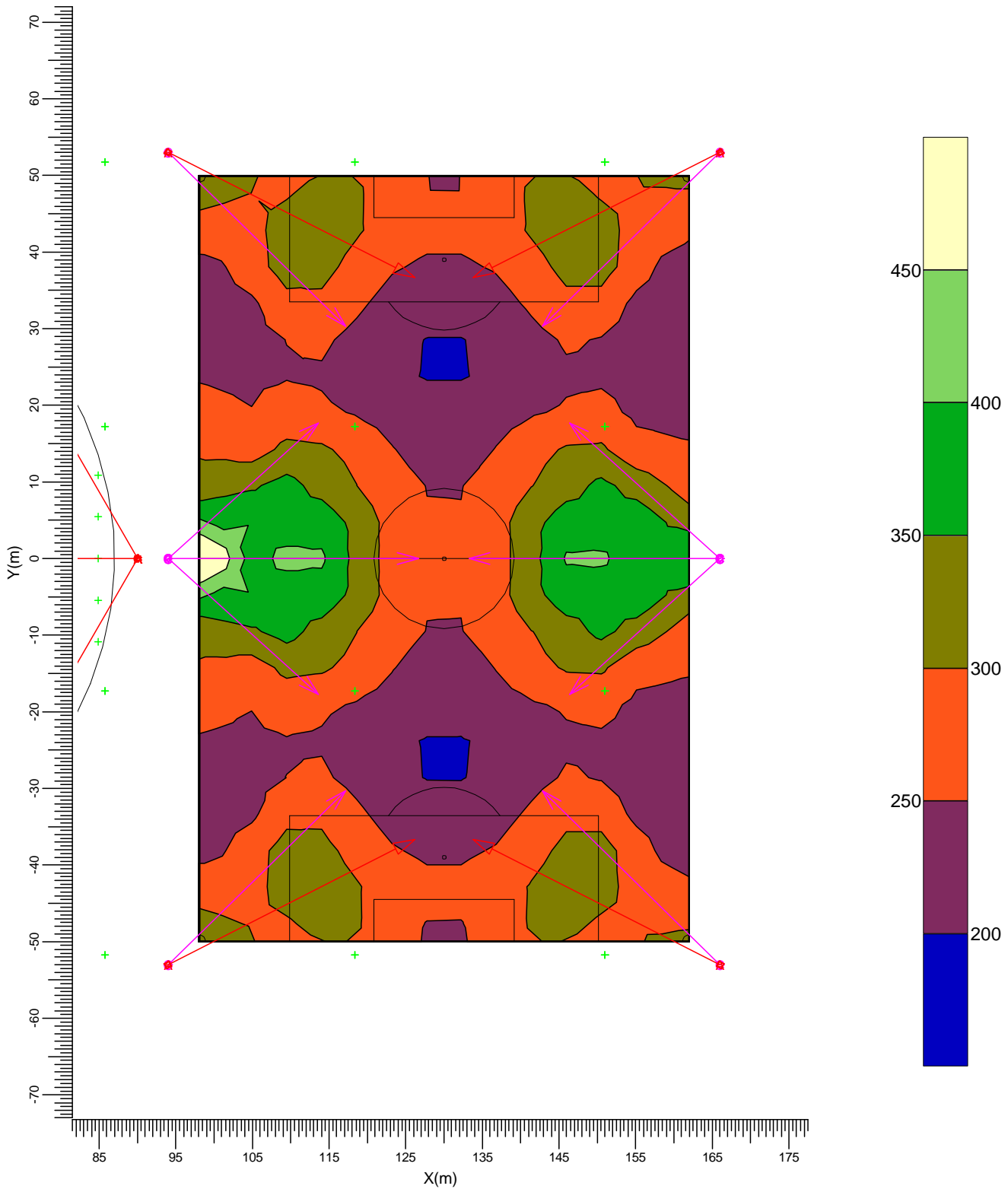
Grid : voetbalveld 4 at Z = -0.00 m
Calculation : Surface Illuminance (lux)



- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

3.10 voetbalveld 4: Filled Iso Contour

Grid : voetbalveld 4 at Z = -0.00 m
Calculation : Surface Illuminance (lux)

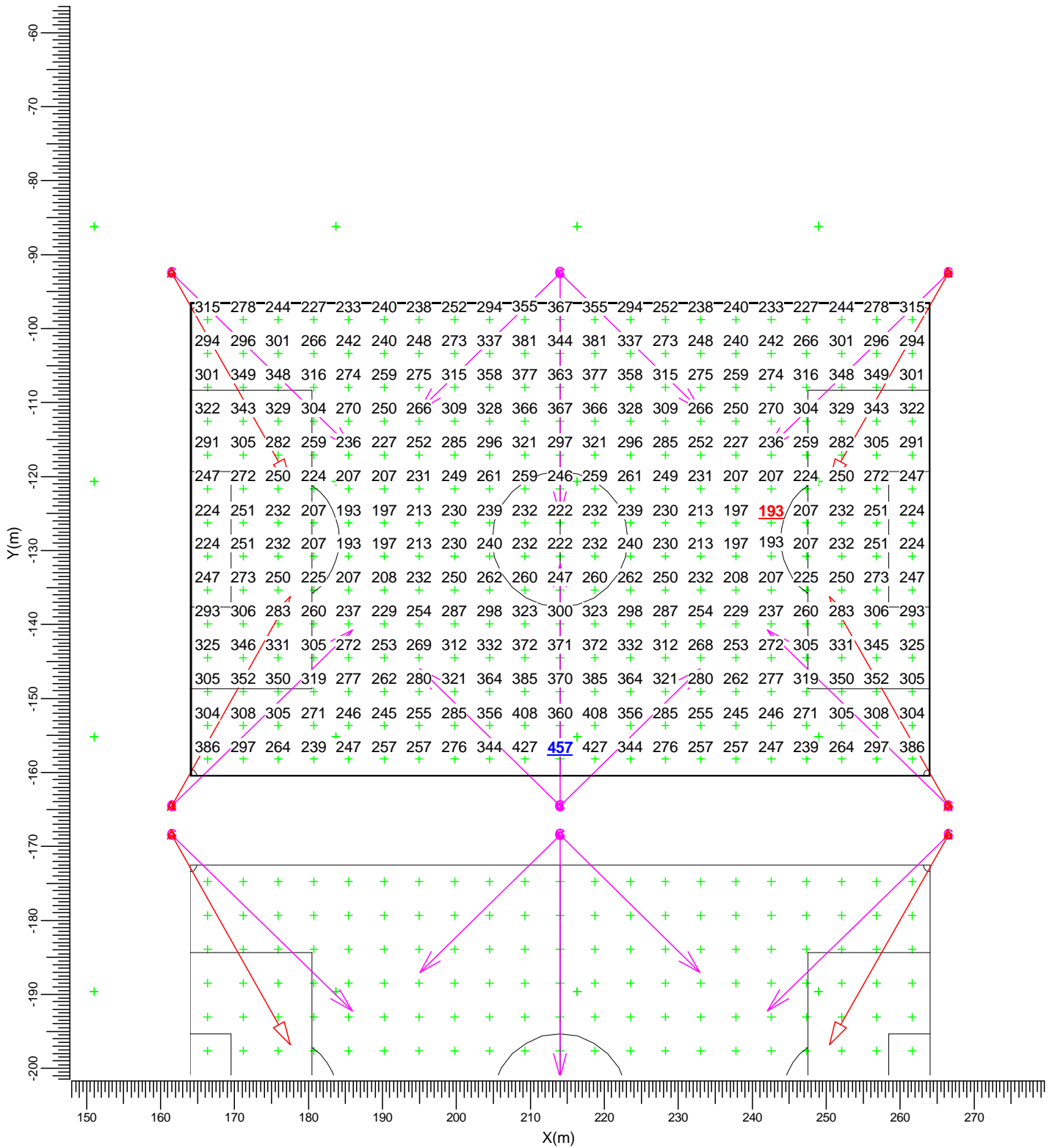


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
277	198	495	0.71	0.40	See summary	1:750

3.11 voetbalveld 5: Graphical Table

Grid : voetbalveld 5 at Z = -0.00 m
Calculation : Surface Illuminance (lux)

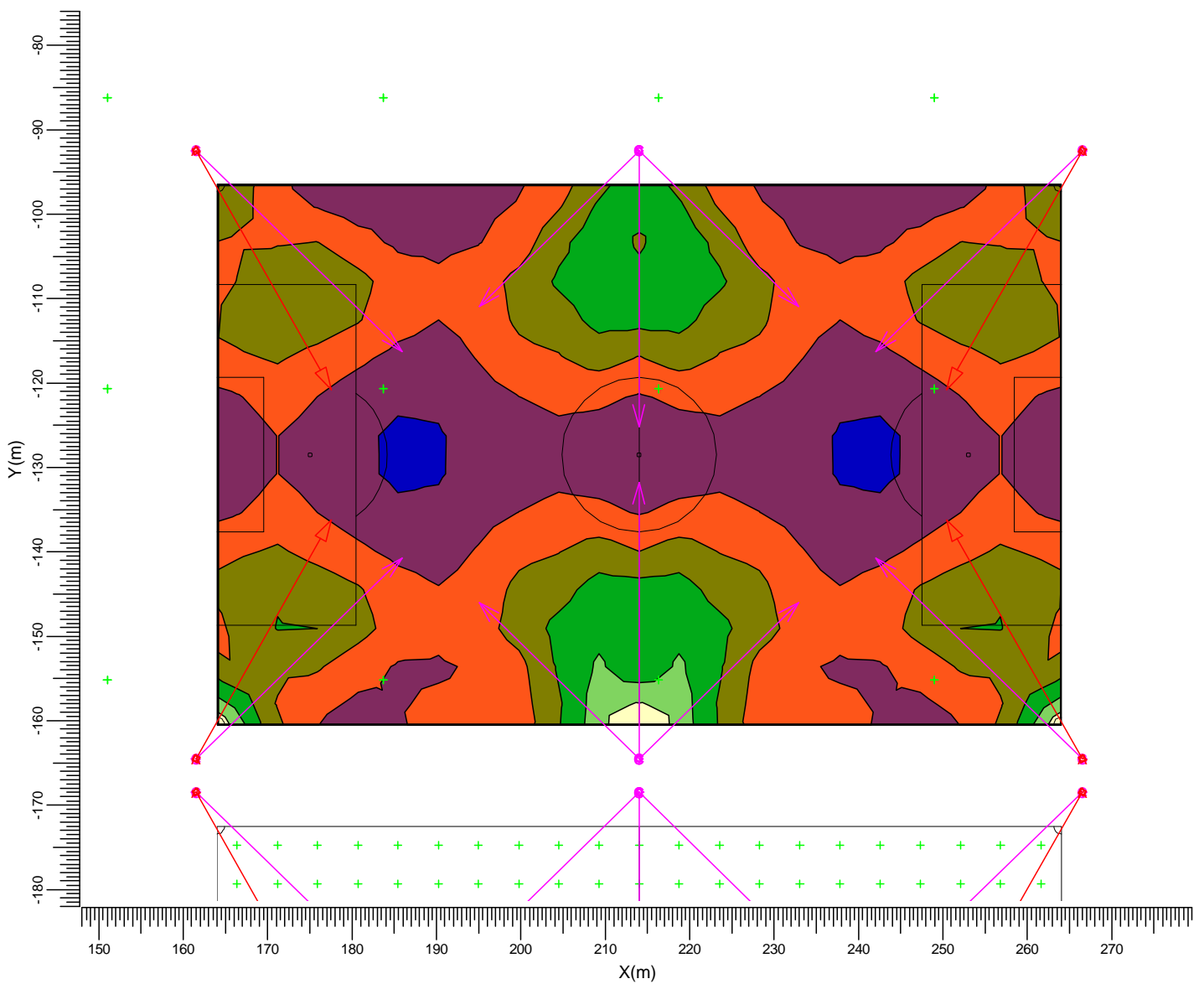
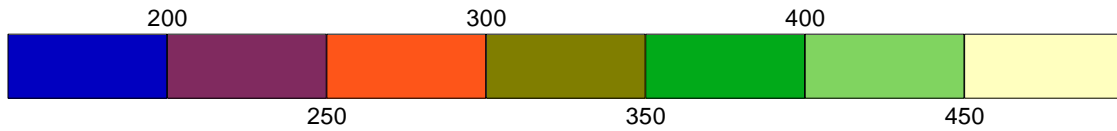


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
280	193	457	0.69	0.42	See summary	1:750

3.12 voetbalveld 5: Filled Iso Contour

Grid : voetbalveld 5 at Z = -0.00 m
Calculation : Surface Illuminance (lux)

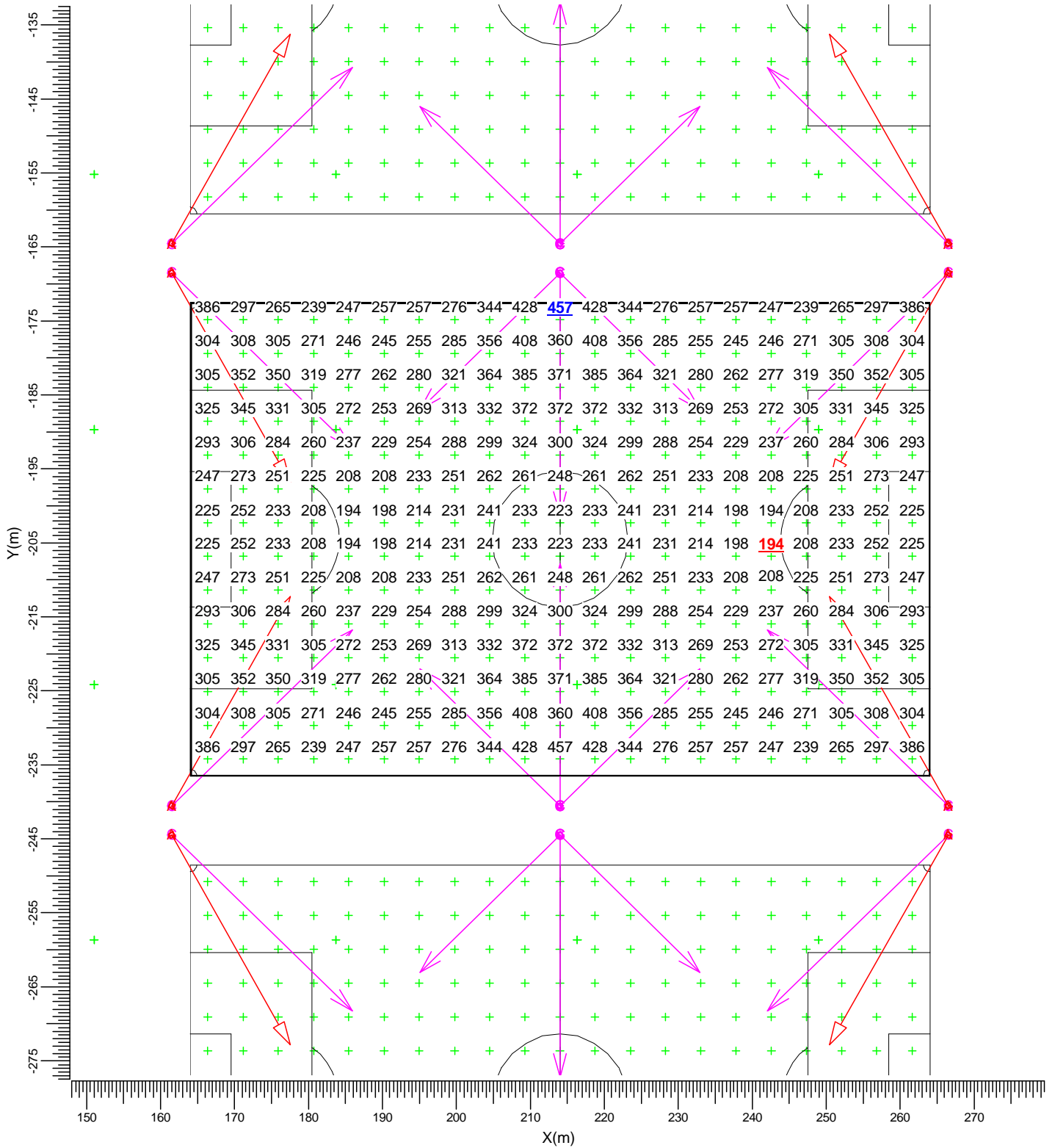


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
280	193	457	0.69	0.42	See summary	1:750

3.13 voetbalveld 6: Graphical Table

Grid : voetbalveld 6 at Z = -0.00 m
Calculation : Surface Illuminance (lux)

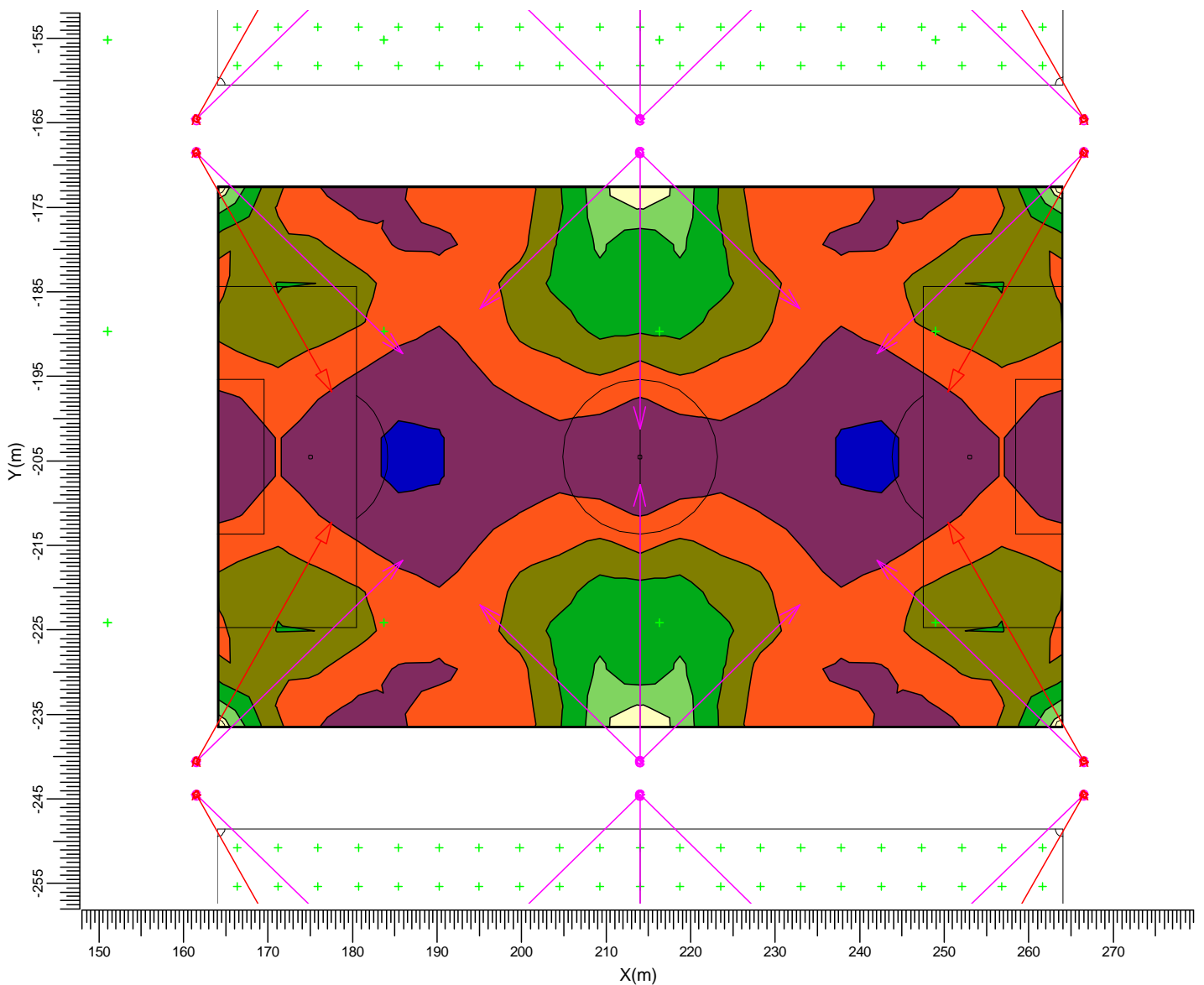
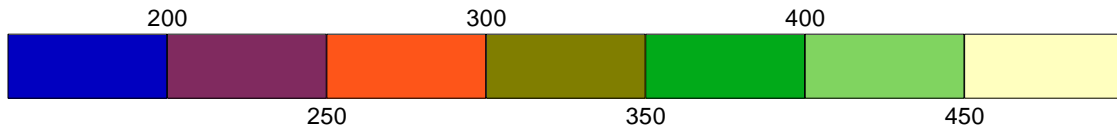


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
284	194	457	0.68	0.42	See summary	1:750

3.14 voetbalveld 6: Filled Iso Contour

Grid : voetbalveld 6 at Z = -0.00 m
Calculation : Surface Illuminance (lux)

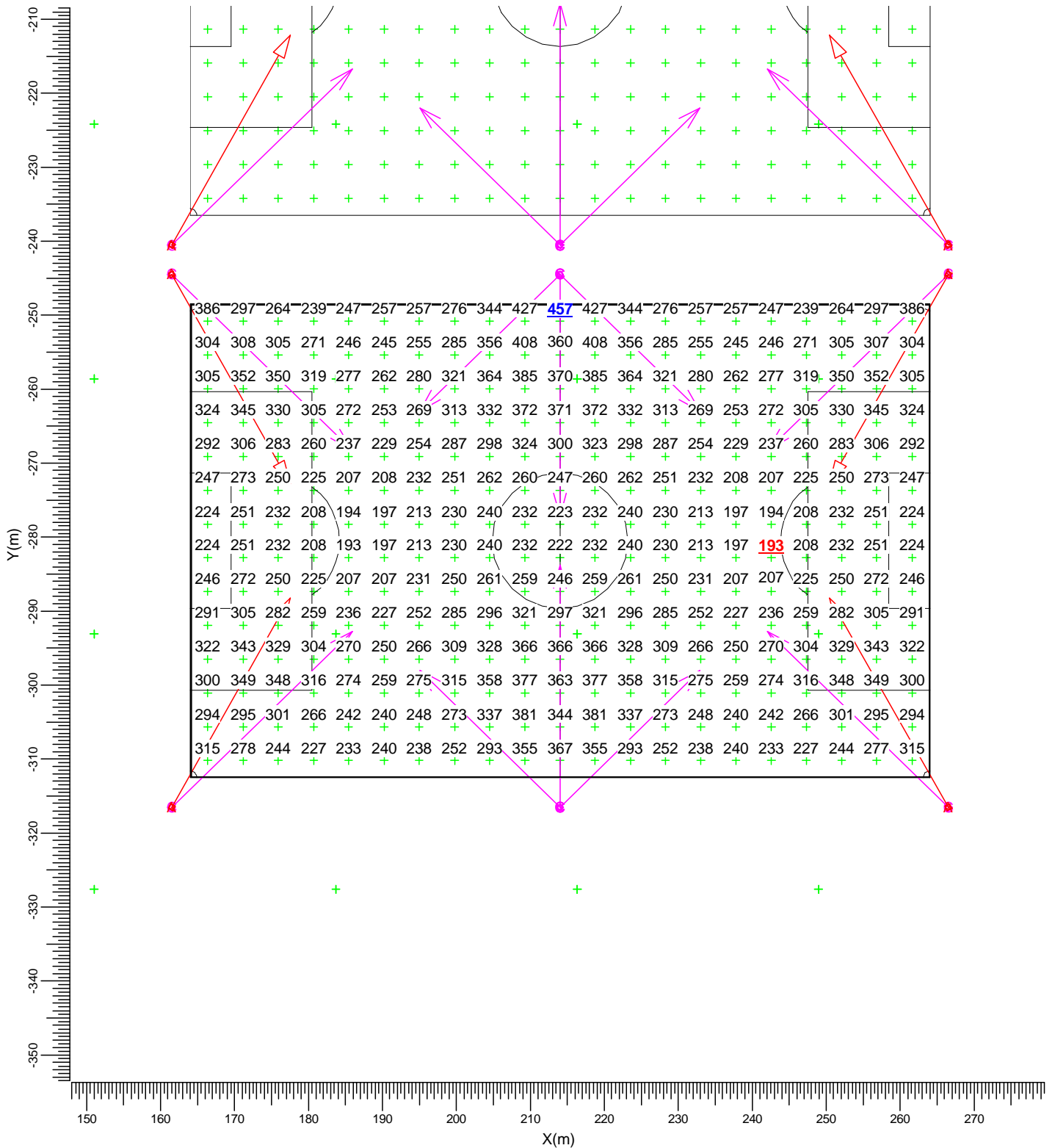


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
284	194	457	0.68	0.42	See summary	1:750

3.15 voetbalveld 7: Graphical Table

Grid : voetbalveld 7 at Z = -0.00 m
Calculation : Surface Illuminance (lux)

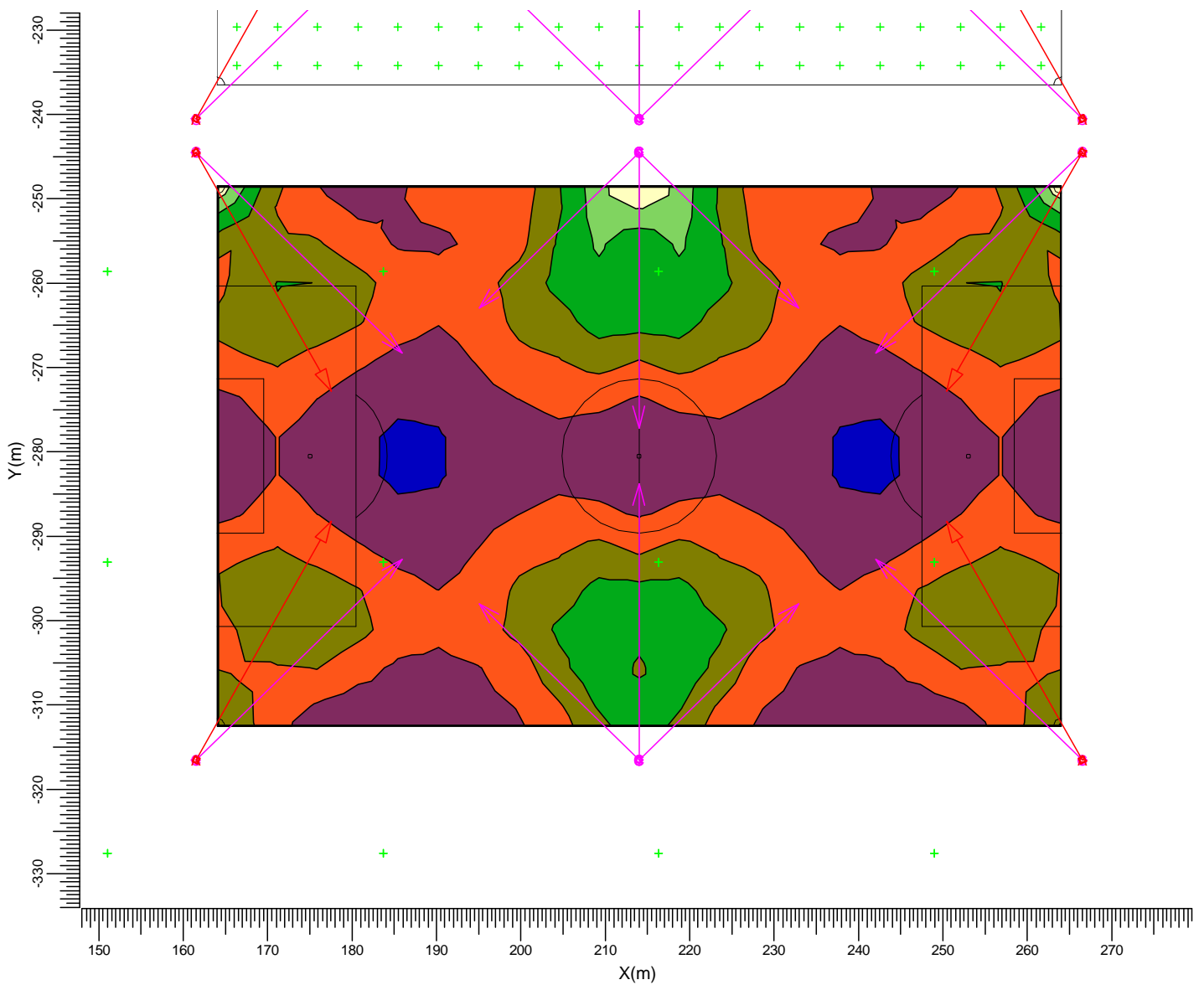
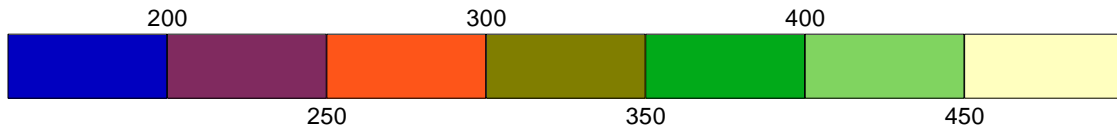


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
280	193	457	0.69	0.42	See summary	1:750

3.16 voetbalveld 7: Filled Iso Contour

Grid : voetbalveld 7 at Z = -0.00 m
Calculation : Surface Illuminance (lux)

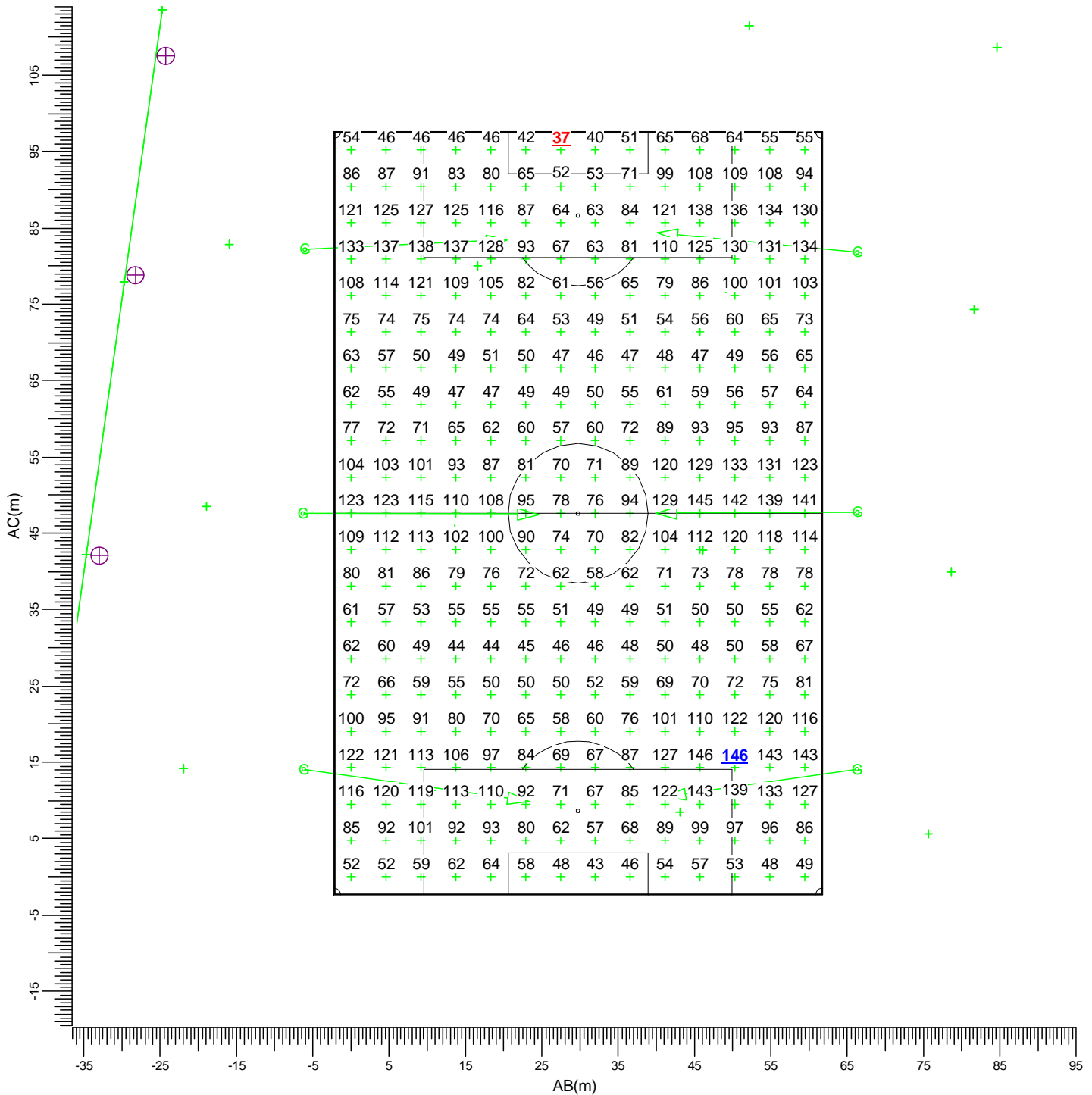


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
280	193	457	0.69	0.42	See summary	1:750

3.17 voetbalveld 8: Graphical Table

Grid : voetbalveld 8
Calculation : Surface Illuminance (lux)



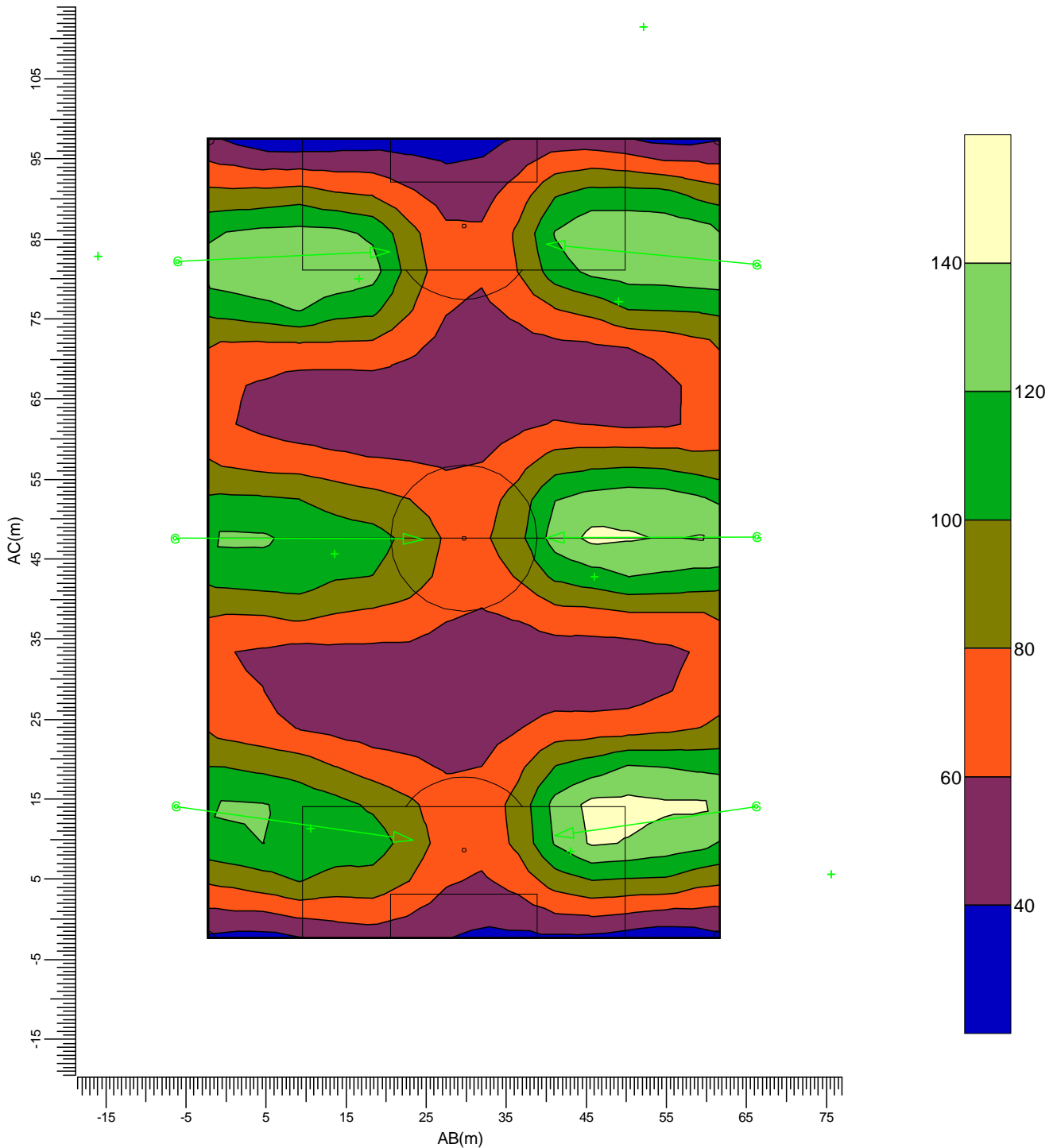
(786.25, 306.85, -0.00) C-----D (845.45, 312.03, 0.00)
 (794.55, 211.97, -0.00) A-----B (853.75, 217.15, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
81.6	37.4	146.4	0.46	0.26	See summary	1:750

3.18 voetbalveld 8: Filled Iso Contour

Grid : voetbalveld 8
Calculation : Surface Illuminance (lux)



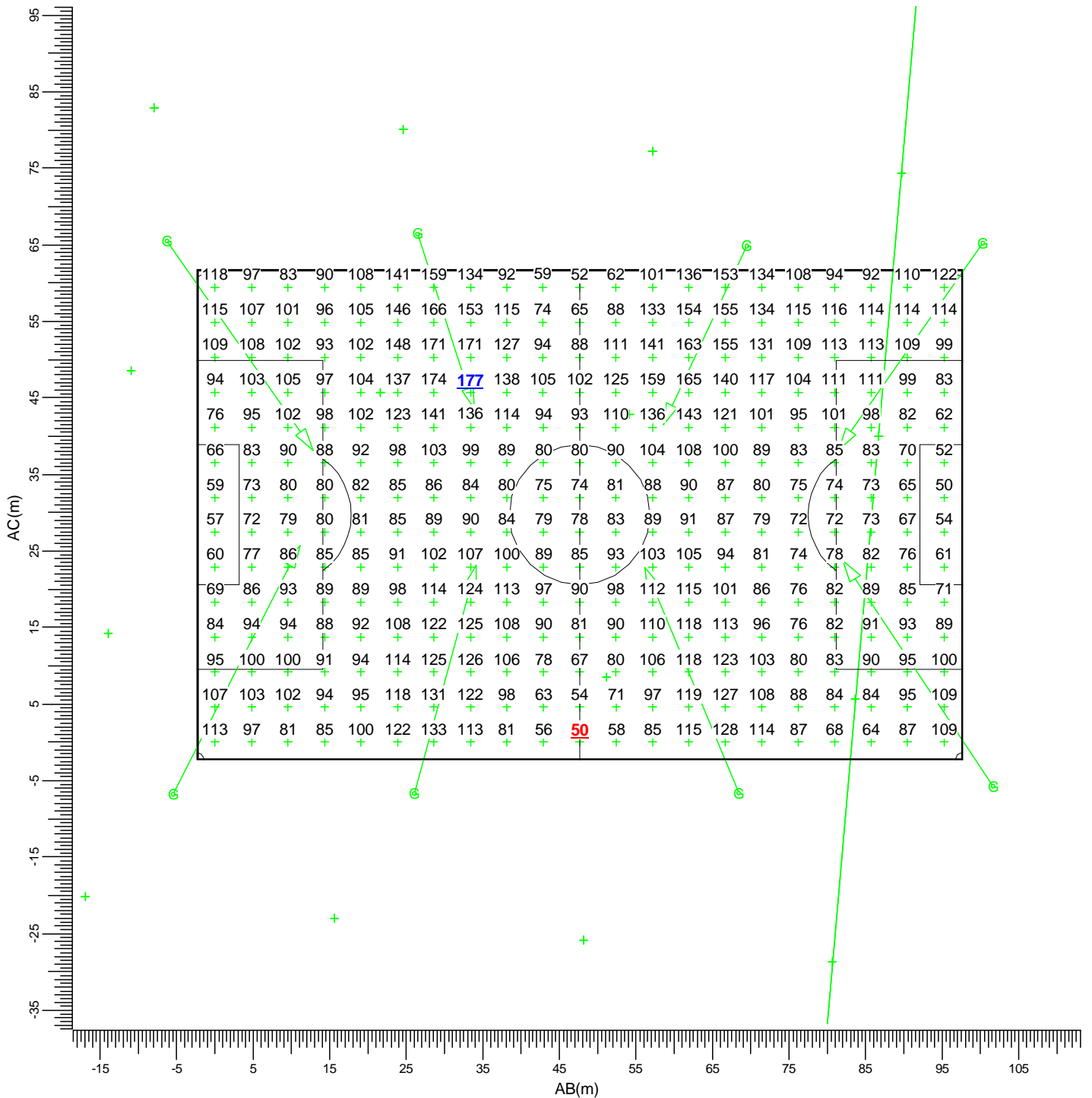
(786.25, 306.85, -0.00) C-----D (845.45, 312.03, 0.00)
 (794.55, 211.97, -0.00) A-----B (853.75, 217.15, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
81.6	37.4	146.4	0.46	0.26	See summary	1:750

3.19 voetbalveld 9: Graphical Table

Grid : voetbalveld 9
Calculation : Surface Illuminance (lux)



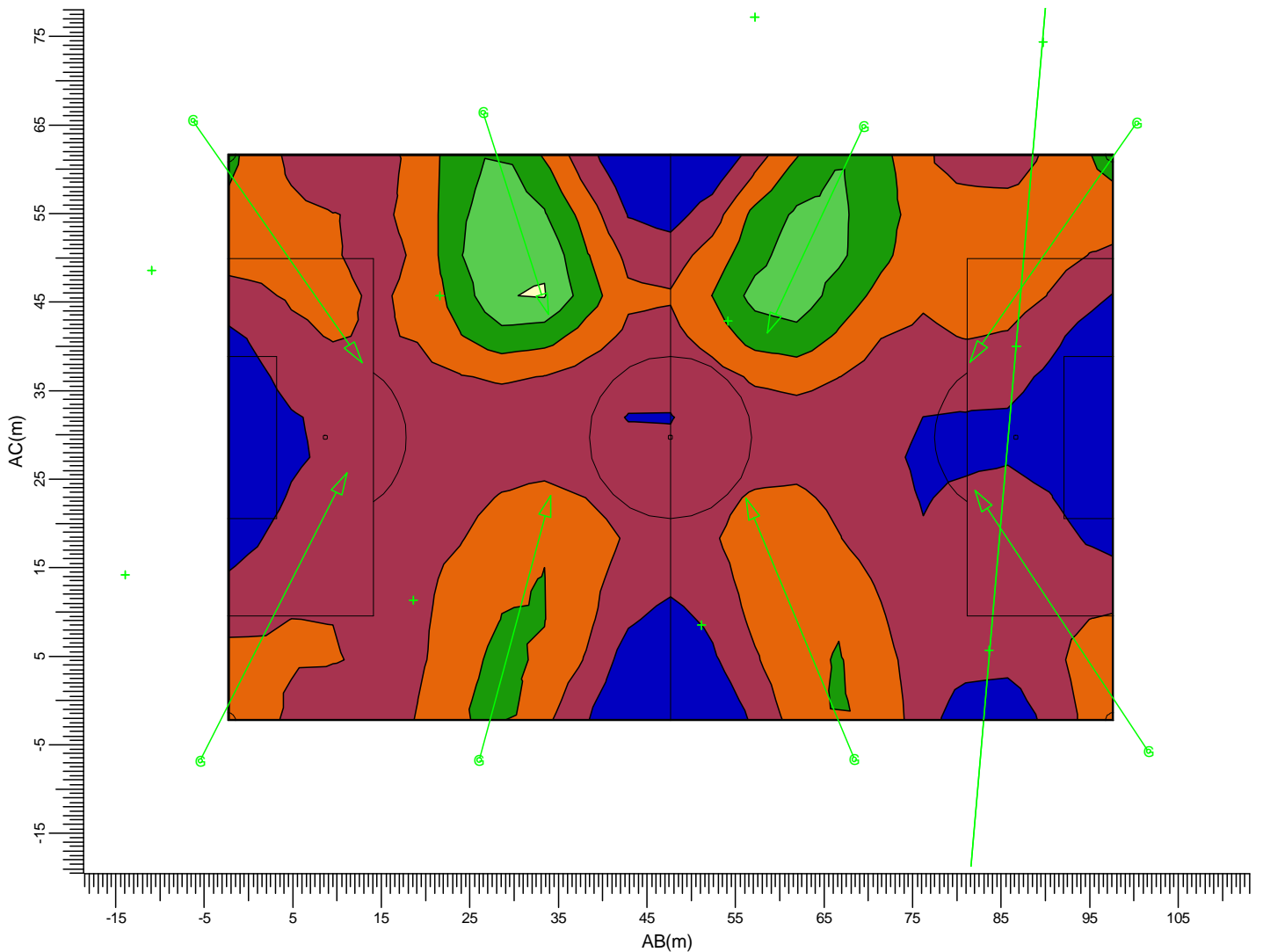
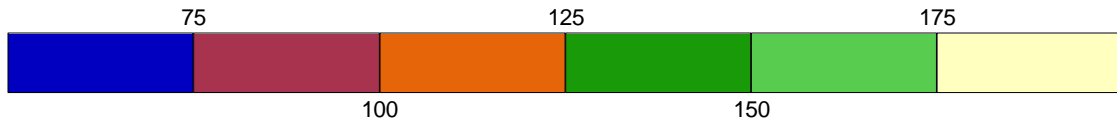
(911.97, 270.45, -0.00) C-----D (1006.85, 278.75, 0.00)
 (917.15, 211.25, -0.00) A-----B (1012.03, 219.55, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
98.9	50.3	176.6	0.51	0.28	See summary	1:750

3.20 voetbalveld 9: Filled Iso Contour

Grid : voetbalveld 9
Calculation : Surface Illuminance (lux)



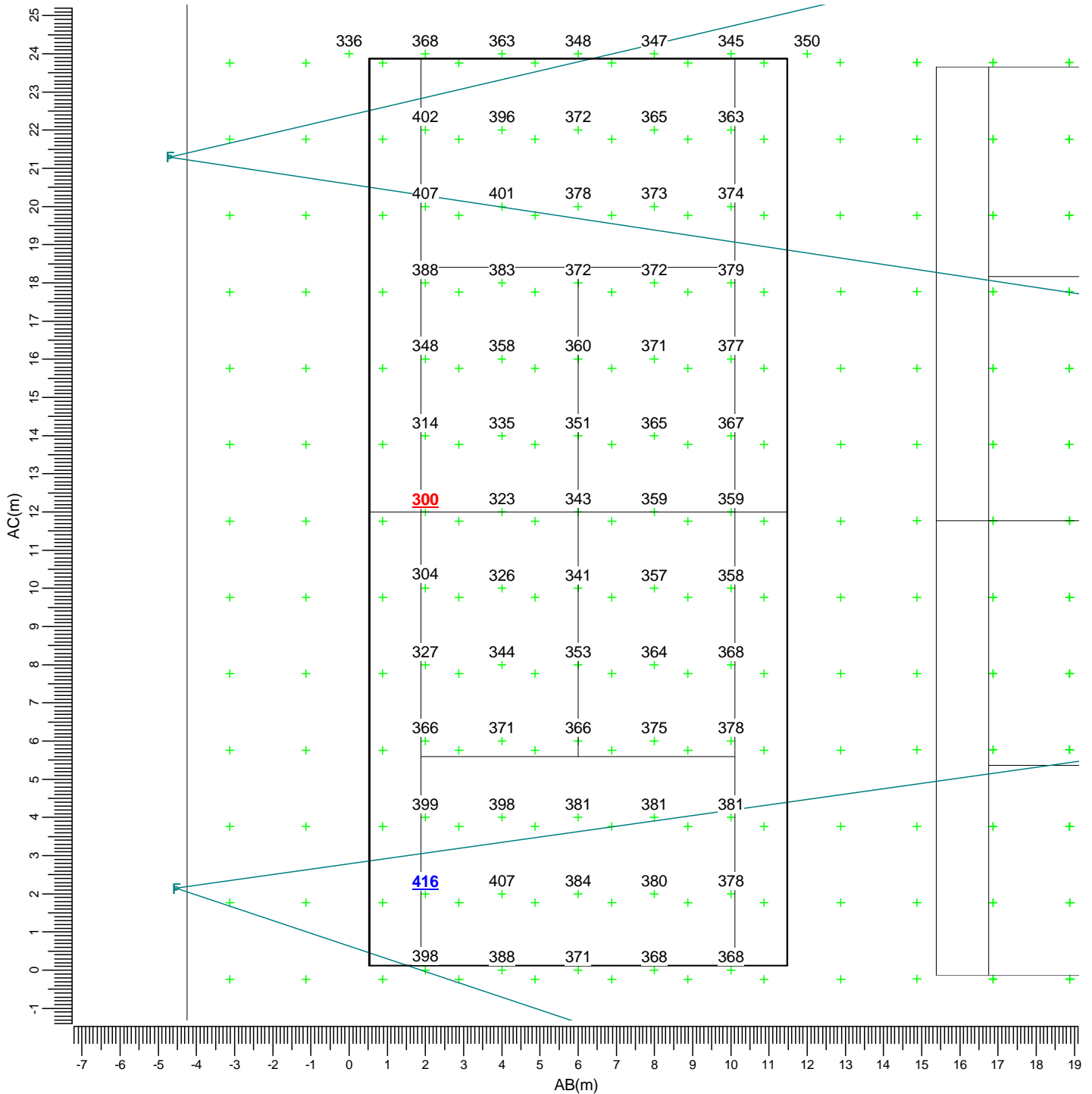
(911.97, 270.45, -0.00) C-----D (1006.85, 278.75, 0.00)
 (917.15, 211.25, -0.00) A-----B (1012.03, 219.55, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
98.9	50.3	176.6	0.51	0.28	See summary	1:750

3.21 tennisbaan 1: Graphical Table

Grid : tennisbaan 1
Calculation : Surface Illuminance (lux)



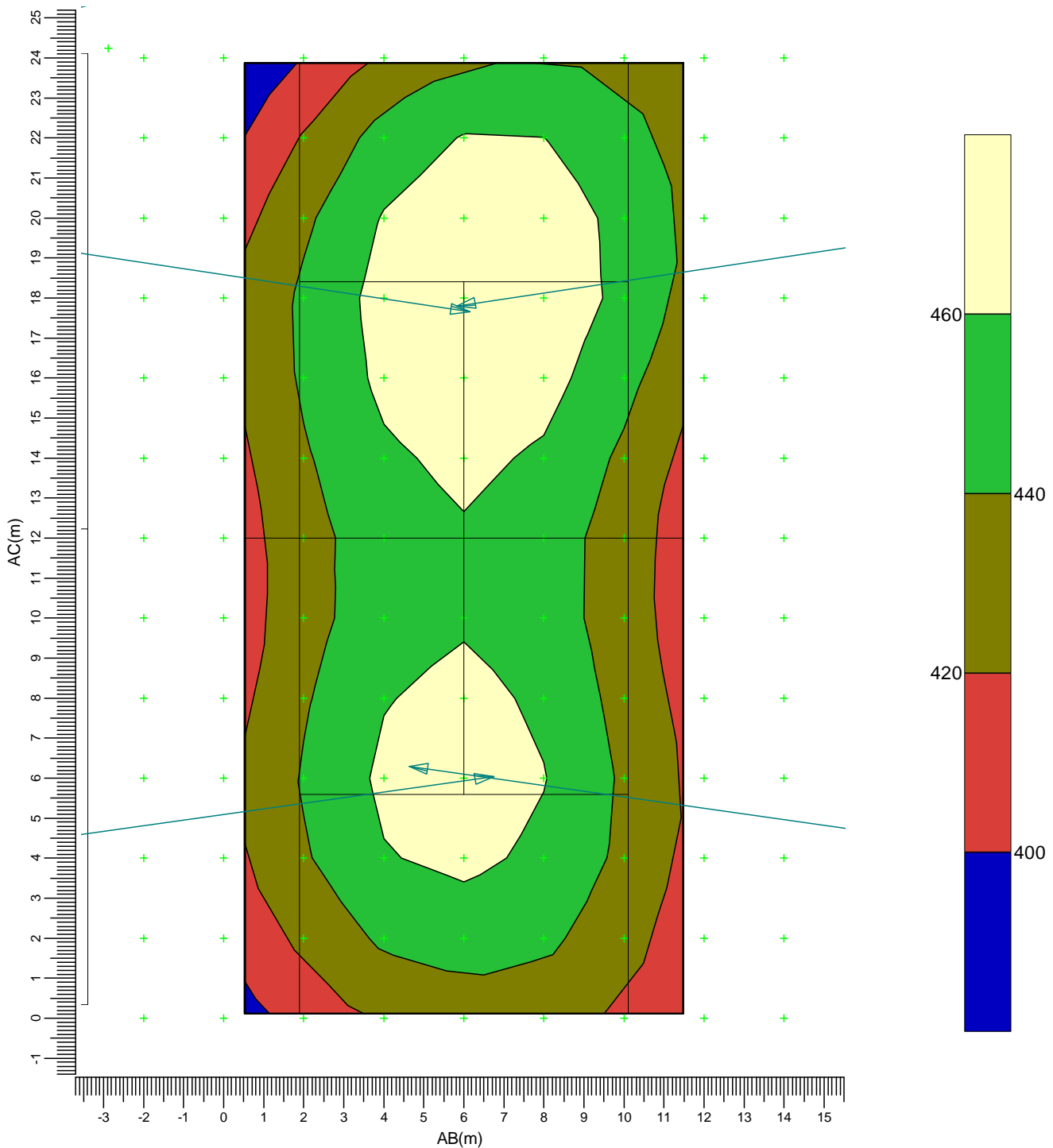
(-465.97, 182.02, -0.00) C-----D (-454.09, 180.35, 0.00)
(-469.31, 158.25, -0.00) A-----B (-457.43, 156.58, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
366	300	416	0.82	0.72	See summary	1:150

3.24 tennisbaan 2: Filled Iso Contour

Grid : tennisbaan 2
Calculation : Surface Illuminance (lux)



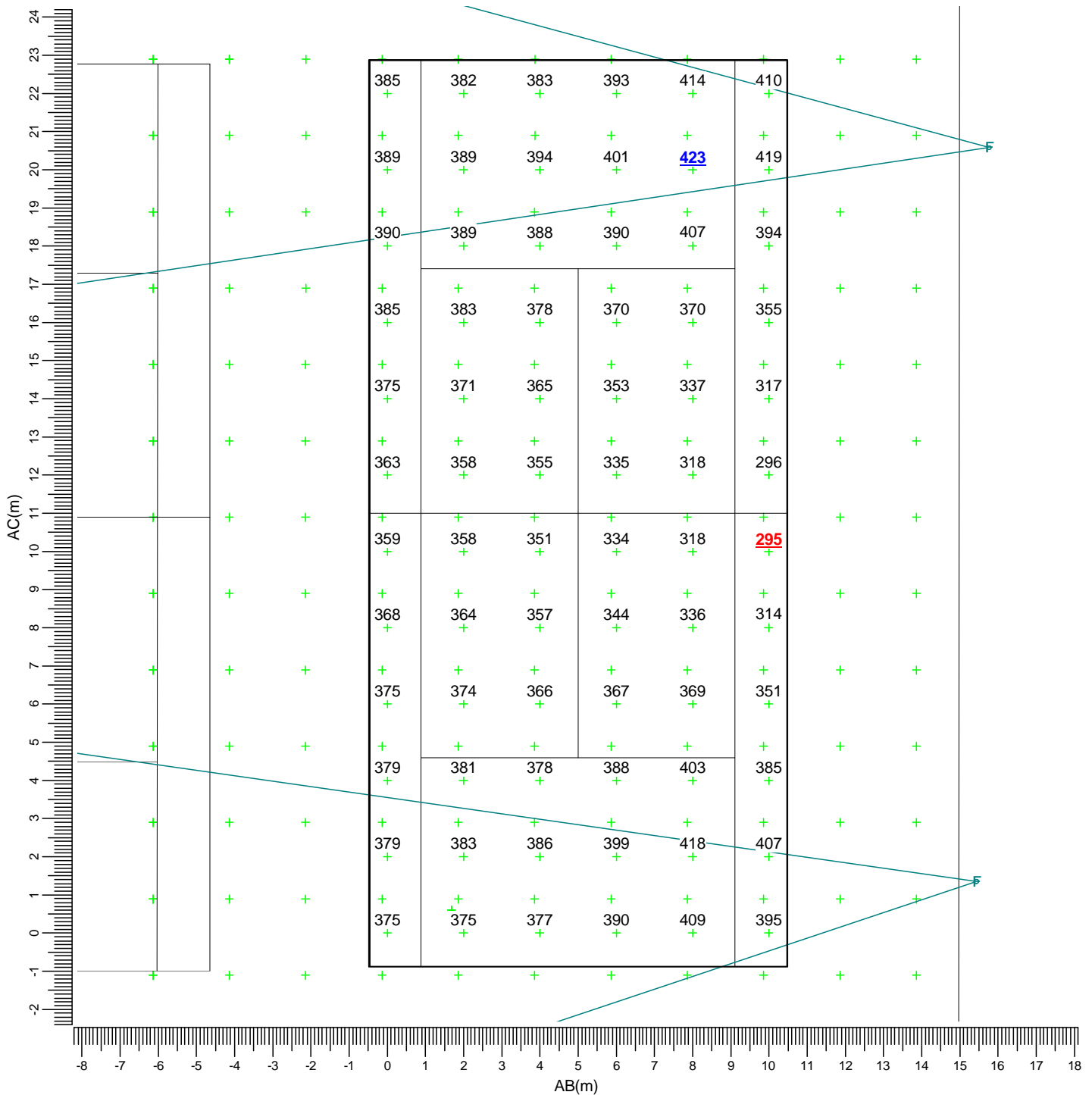
(-451.27, 179.72, -0.00) C-----D (-439.39, 178.05, 0.00)
 (-454.61, 155.95, -0.00) A-----B (-442.73, 154.28, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
446	377	478	0.85	0.79	See summary	1:150

3.25 tennisbaan 3: Graphical Table

Grid : tennisbaan 3
Calculation : Surface Illuminance (lux)



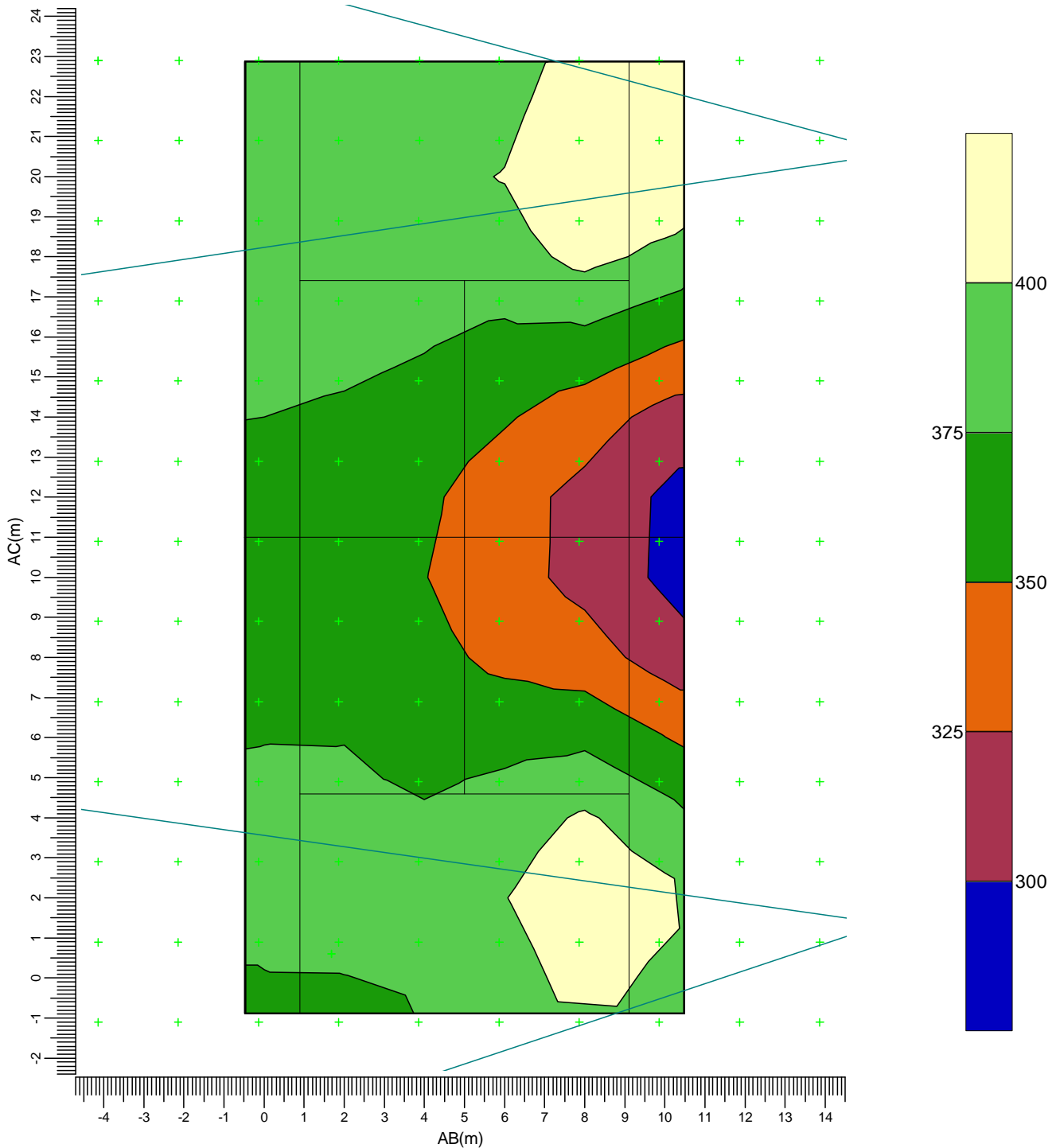
(-435.42, 176.59, -0.00) C-----D (-425.52, 175.20, 0.00)
 (-438.48, 154.80, -0.00) A-----B (-428.58, 153.41, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
373	295	423	0.79	0.70	See summary	1:150

3.26 tennisbaan 3: Filled Iso Contour

Grid : tennisbaan 3
Calculation : Surface Illuminance (lux)



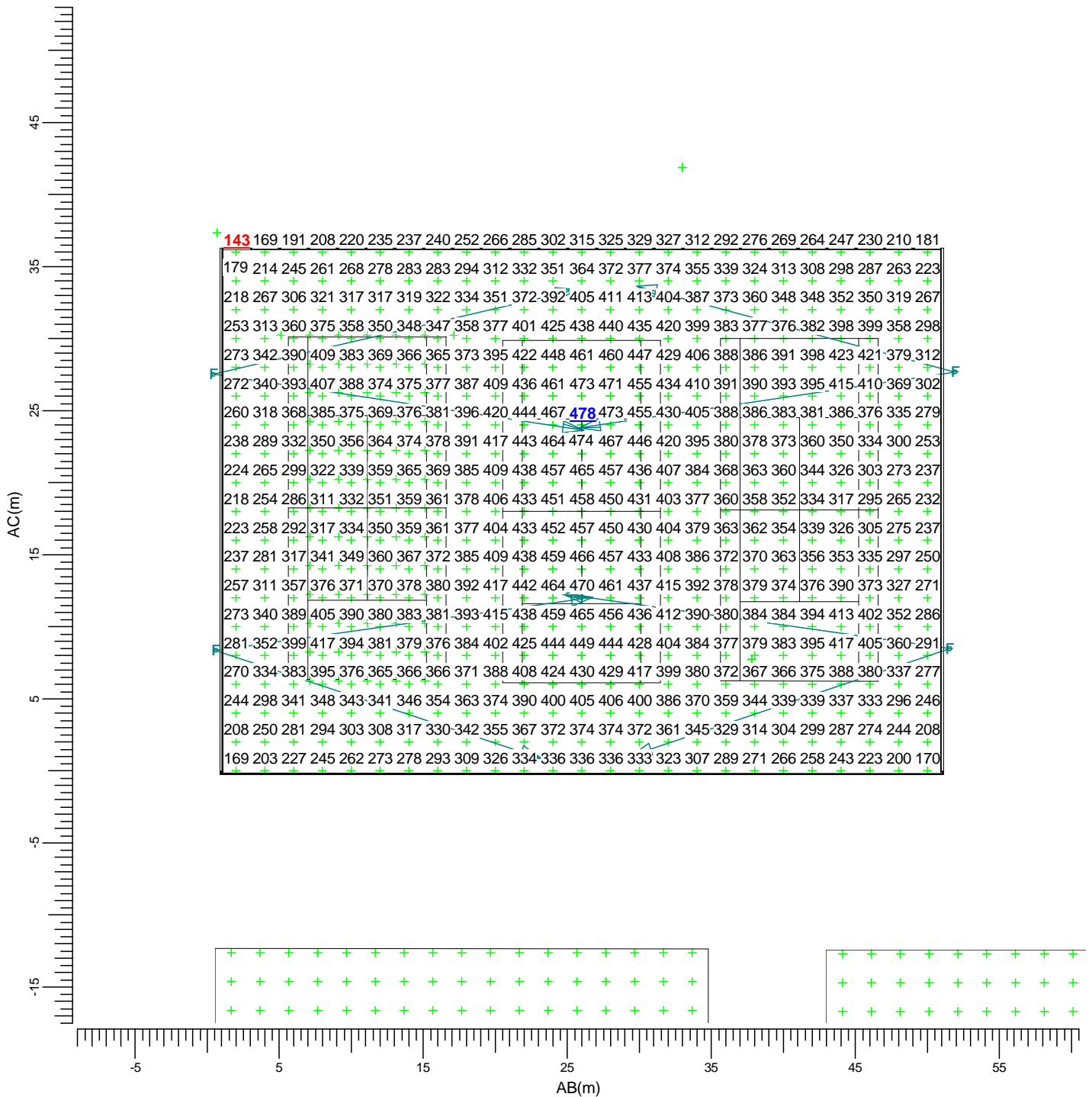
(-435.42, 176.59, -0.00) C-----D (-425.52, 175.20, 0.00)
(-438.48, 154.80, -0.00) A-----B (-428.58, 153.41, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
373	295	423	0.79	0.70	See summary	1:150

3.27 tennisbanen 1 t/m 3: Graphical Table

Grid : tennisbanen 1 t/m 3
Calculation : Surface Illuminance (lux)



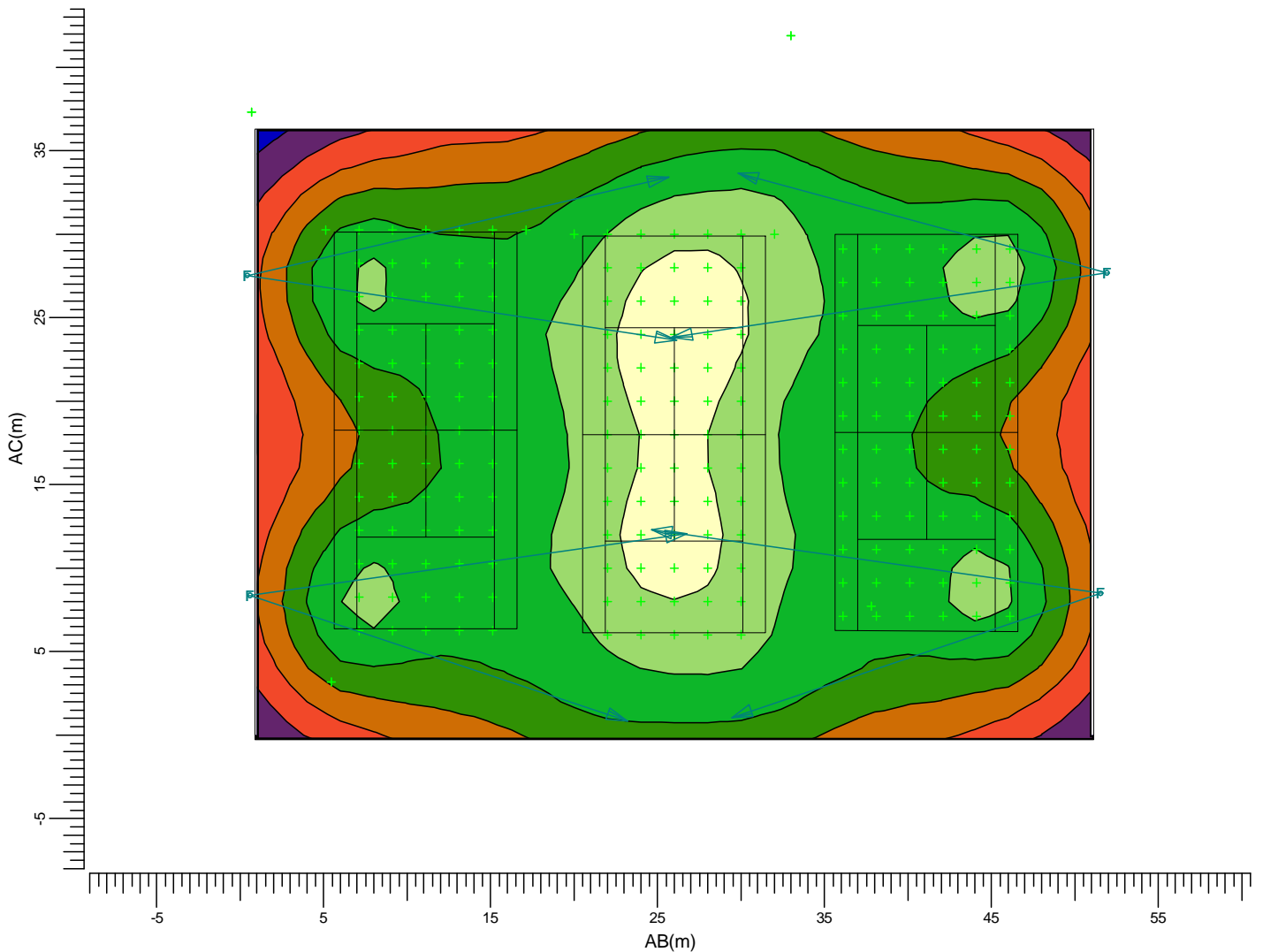
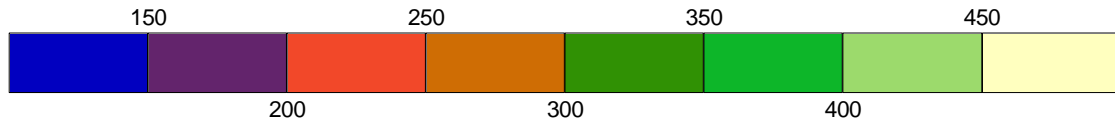
(-470.24, 188.44, -0.00) C-----D (-418.75, 181.21, 0.00)
| |
(-475.25, 152.79, -0.00) A-----B (-423.76, 145.56, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
354	143	478	0.40	0.30	See summary	1:400

3.28 tennisbanen 1 t/m 3: Filled Iso Contour

Grid : tennisbanen 1 t/m 3
Calculation : Surface Illuminance (lux)



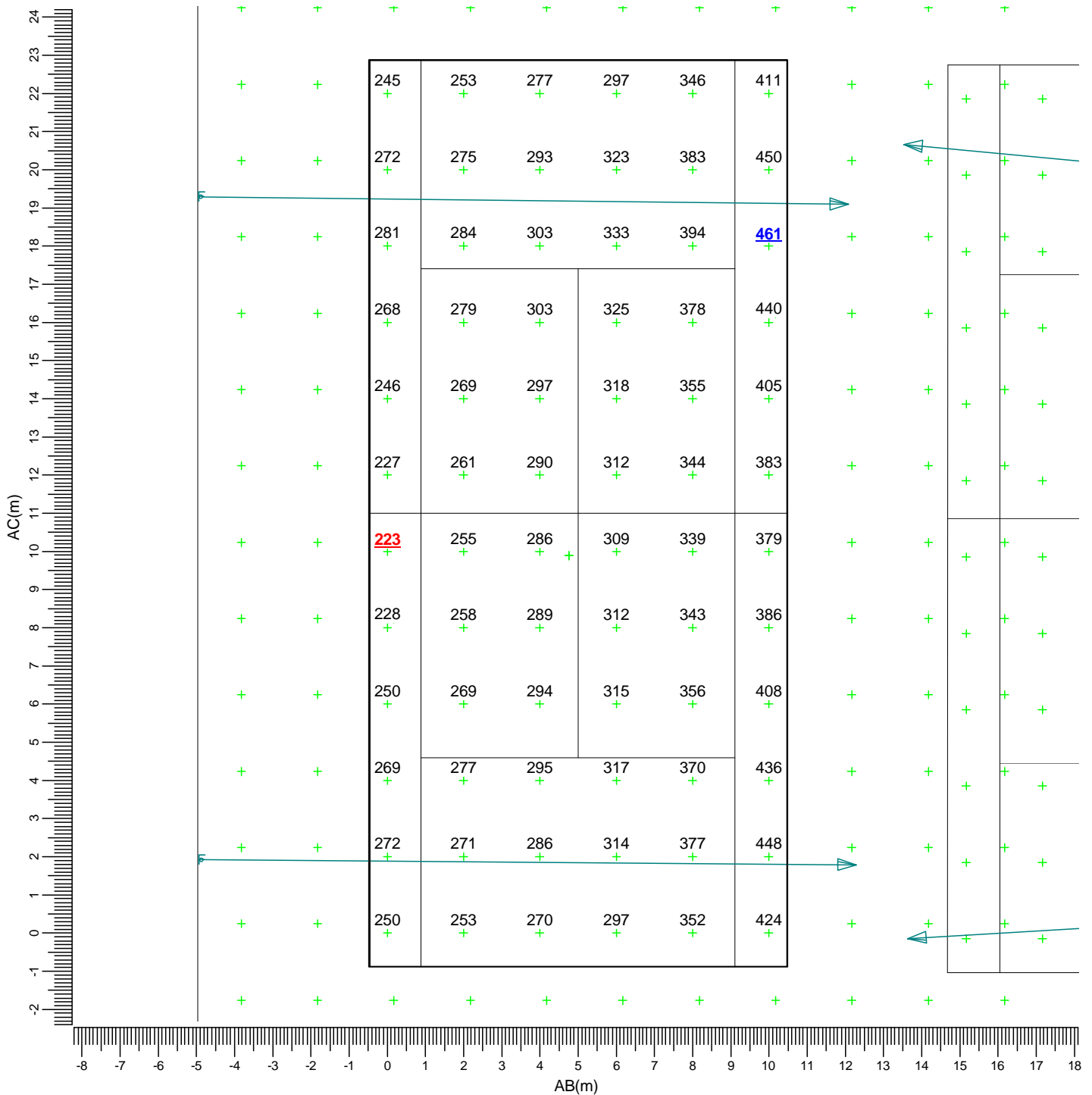
(-470.24, 188.44, -0.00) C-----D (-418.75, 181.21, 0.00)
(-475.25, 152.79, -0.00) A-----B (-423.76, 145.56, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
354	143	478	0.40	0.30	See summary	1:400

3.29 tennisbaan 4: Graphical Table

Grid : tennisbaan 4
Calculation : Surface Illuminance (lux)



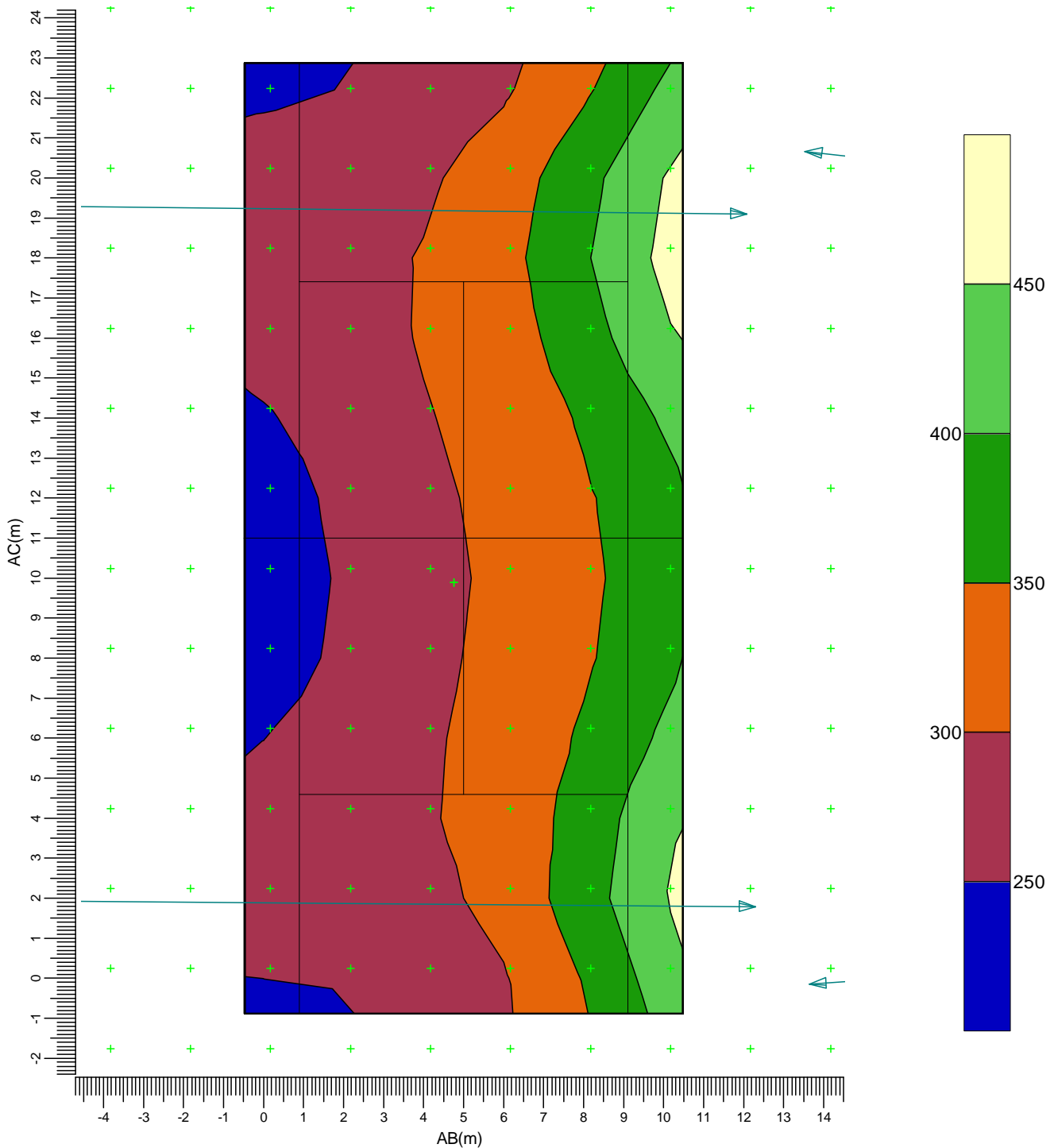
(-472.42, 133.34, -0.00) C-----D (-462.52, 131.95, 0.00)
 | |
 A-----B (-465.58, 110.16, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
318	223	461	0.70	0.48	See summary	1:150

3.30 tennisbaan 4: Filled Iso Contour

Grid : tennisbaan 4
Calculation : Surface Illuminance (lux)



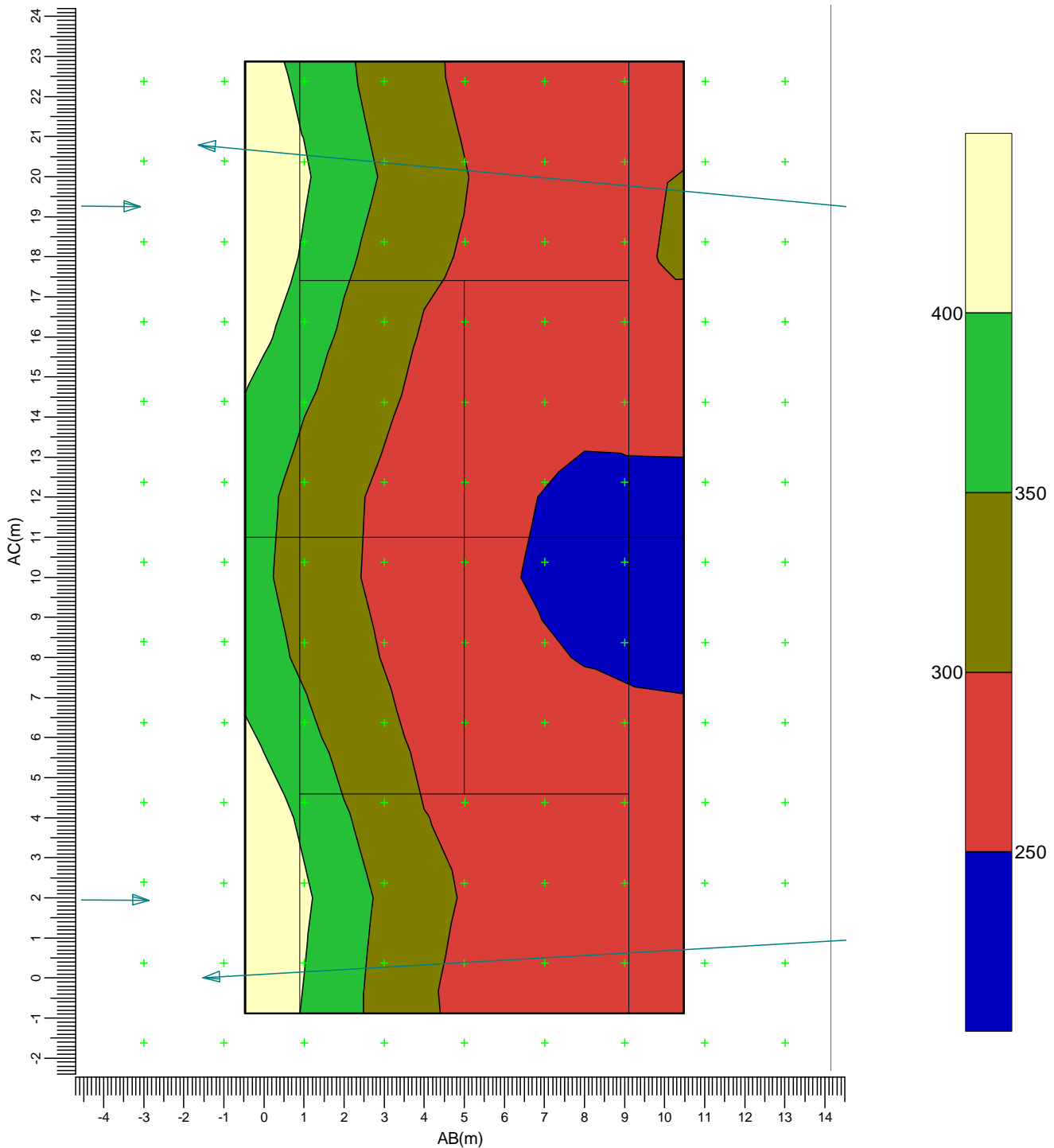
(-472.42, 133.34, -0.00) C-----D (-462.52, 131.95, 0.00)
(-475.48, 111.55, -0.00) A-----B (-465.58, 110.16, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
318	223	461	0.70	0.48	See summary	1:150

3.32 tennisbaan 5: Filled Iso Contour

Grid : tennisbaan 5
Calculation : Surface Illuminance (lux)



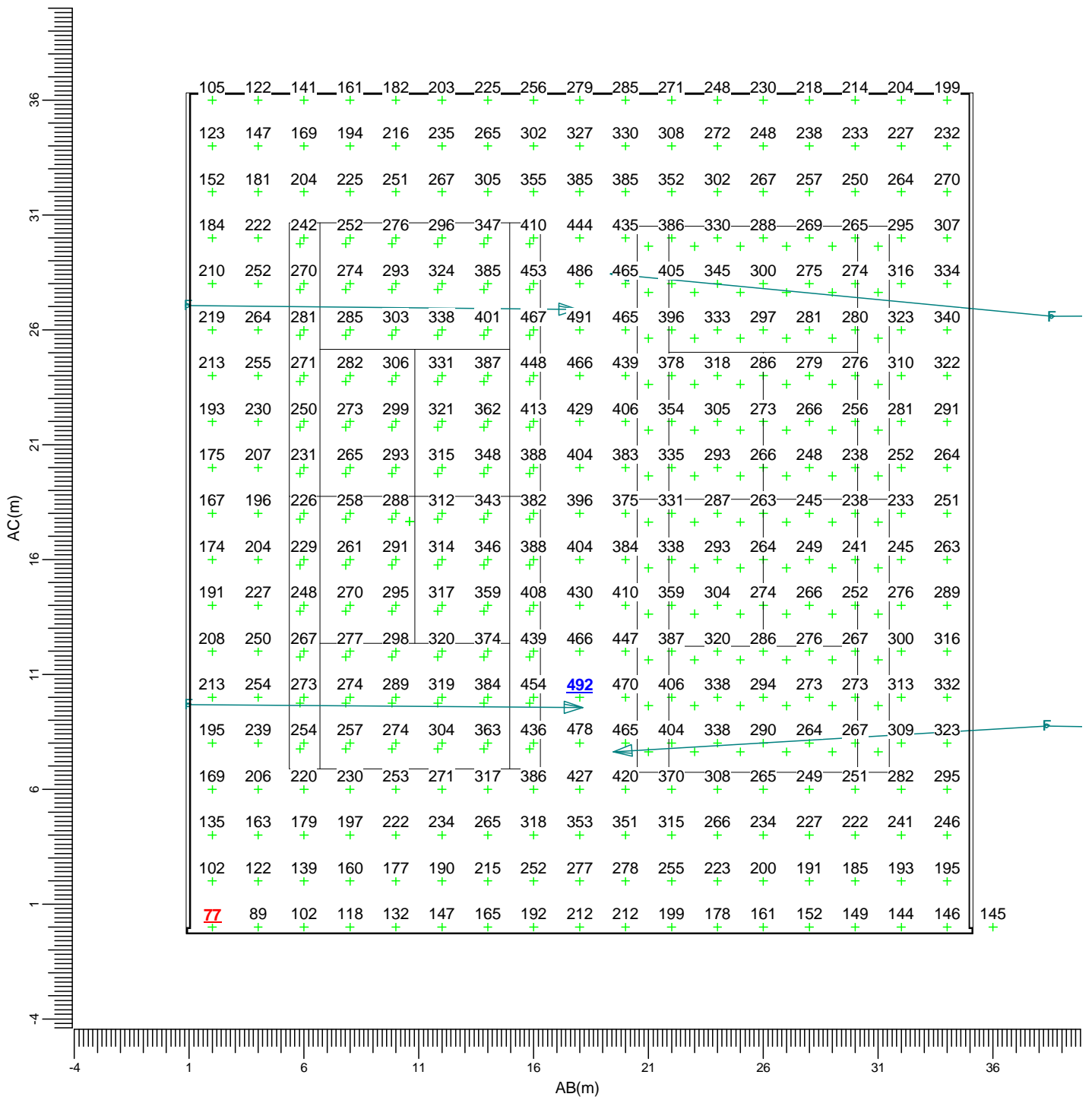
(-457.42, 131.09, -0.00) C-----D (-447.52, 129.70, 0.00)
(-460.48, 109.30, -0.00) A-----B (-450.58, 107.91, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
308	236	445	0.76	0.53	See summary	1:150

3.33 tennisbanen 4 en 5: Graphical Table

Grid : tennisbanen 4 en 5
Calculation : Surface Illuminance (lux)



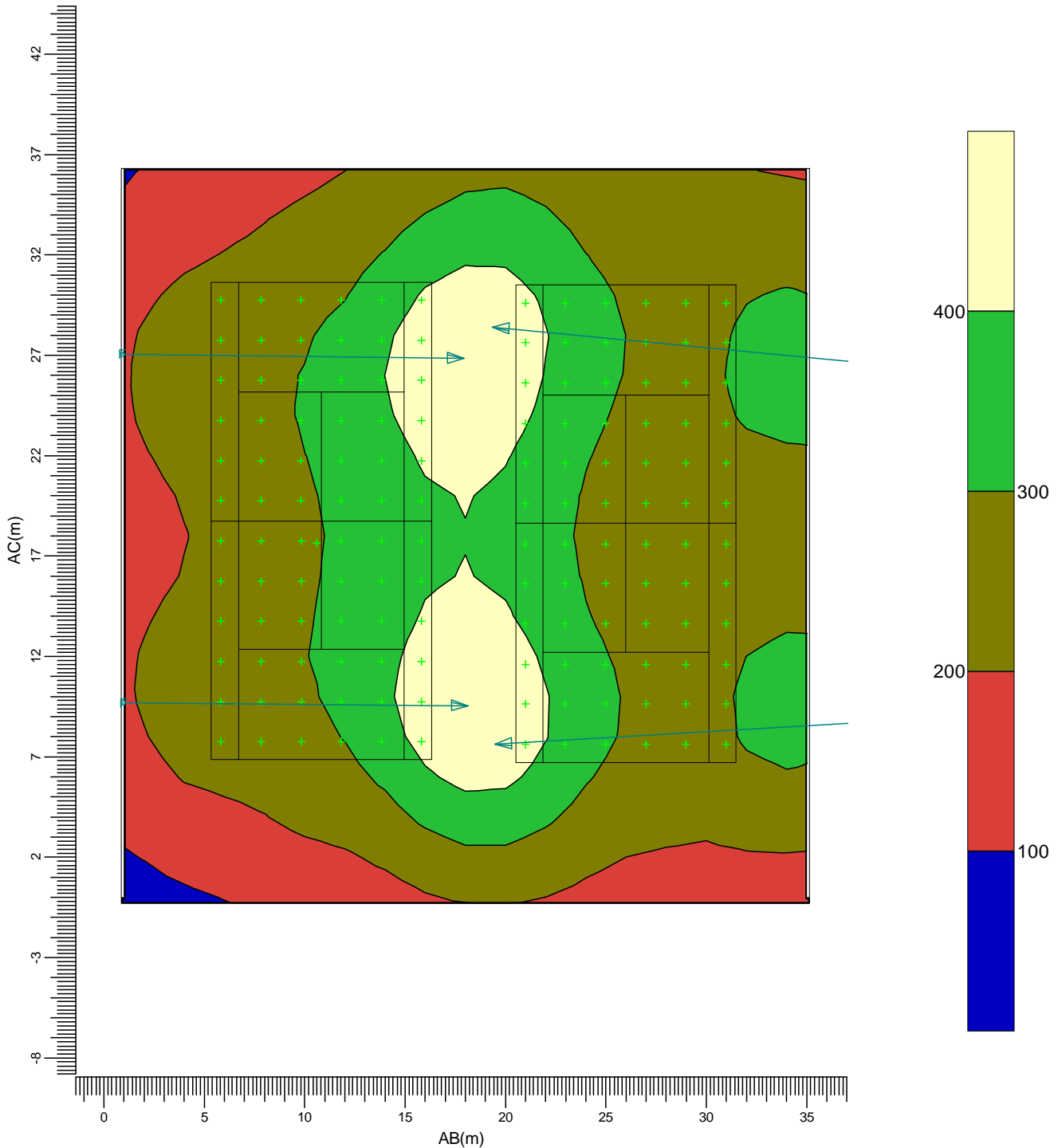
(-477.32, 140.33, -0.00) C-----D (-441.67, 135.32, 0.00)
| |
(-482.33, 104.68, -0.00) A-----B (-446.68, 99.67, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
282	77	492	0.27	0.16	See summary	1:250

3.34 tennisbanen 4 en 5: Filled Iso Contour

Grid : tennisbanen 4 en 5
Calculation : Surface Illuminance (lux)



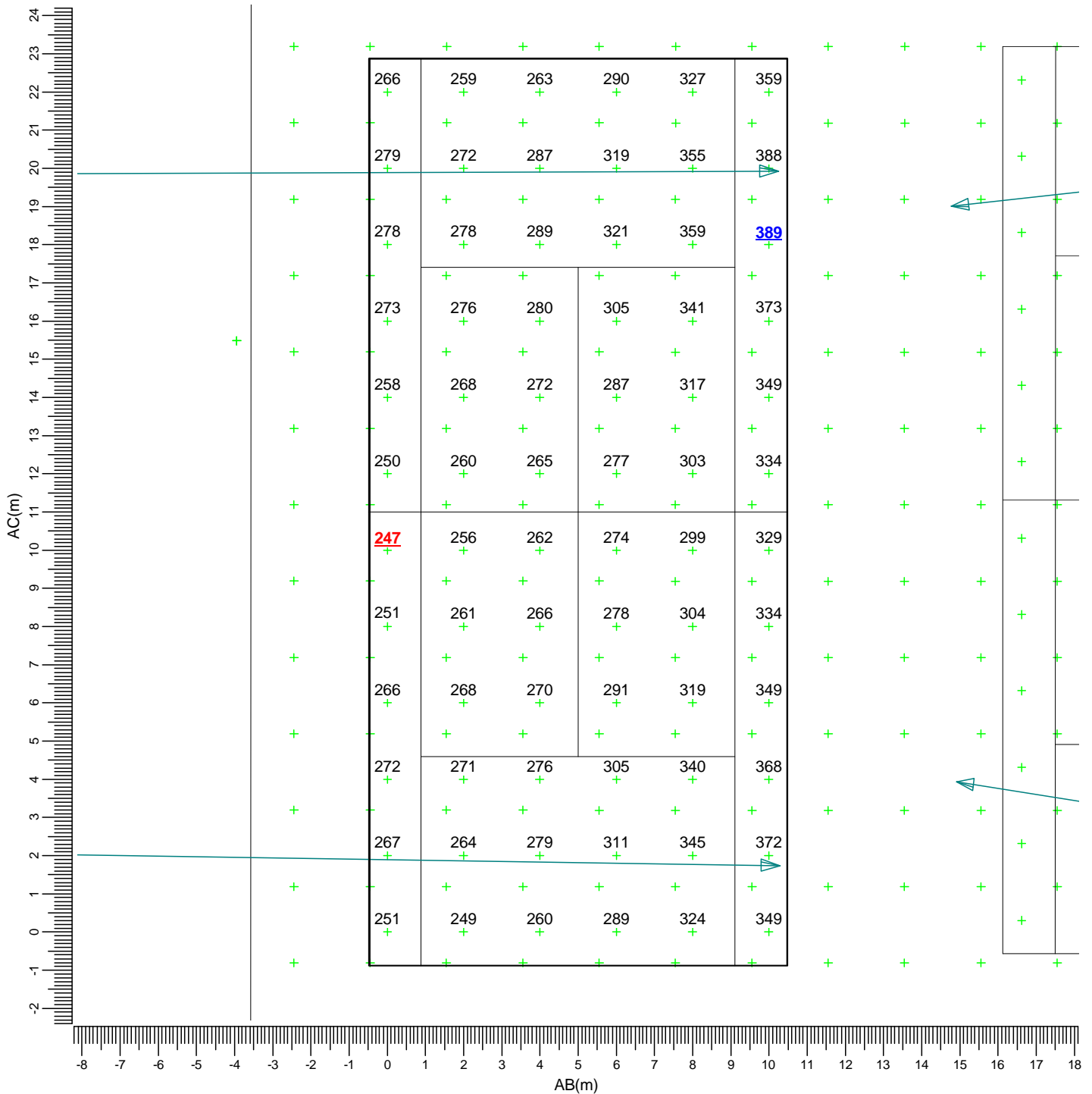
(-477.32, 140.33, -0.00) C-----D (-441.67, 135.32, 0.00)
(-482.33, 104.68, -0.00) A-----B (-446.68, 99.67, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
282	77	492	0.27	0.16	See summary	1:300

3.35 tennisbaan 6: Graphical Table

Grid : tennisbaan 6
Calculation : Surface Illuminance (lux)



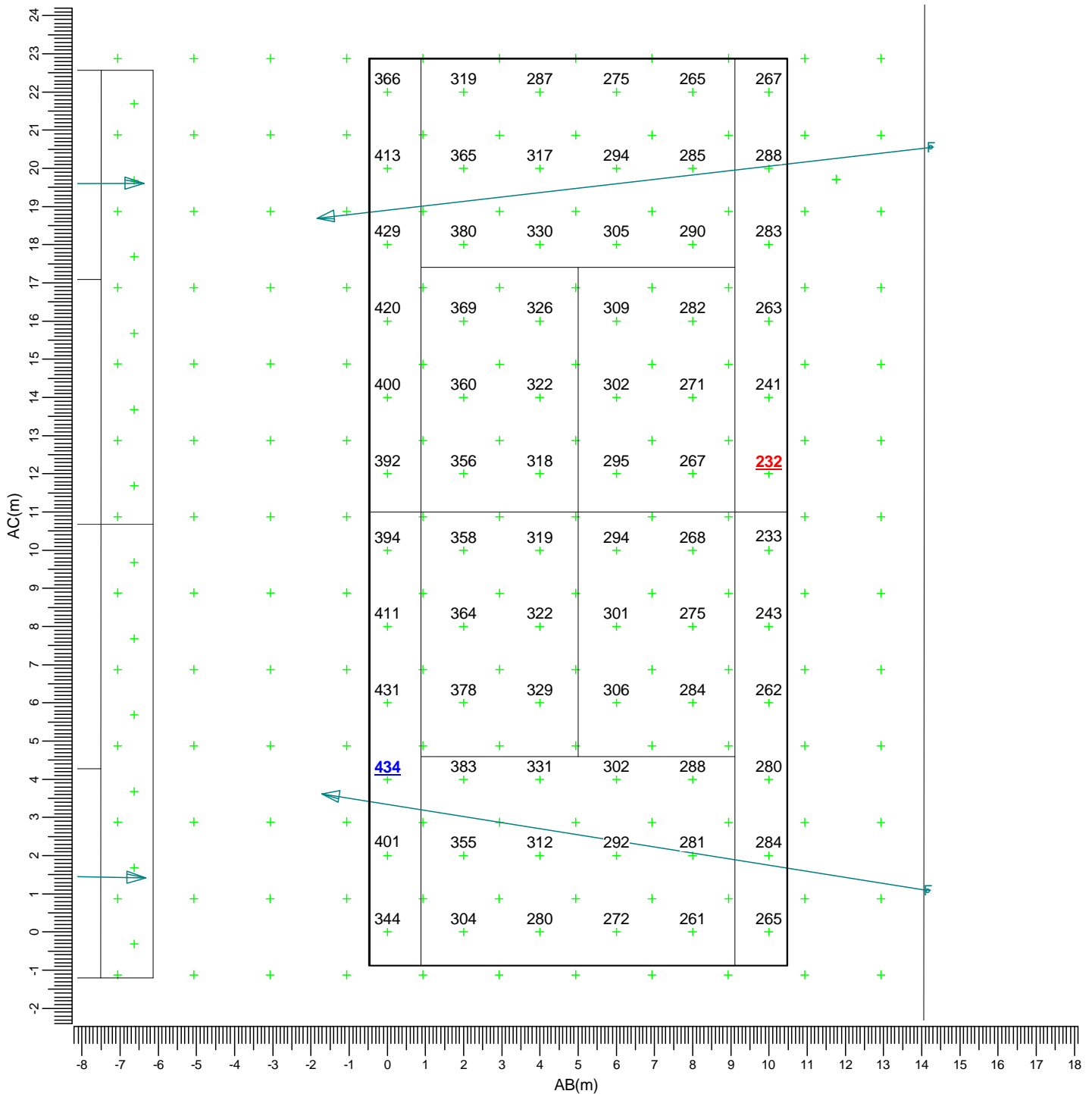
(-431.92, 126.59, -0.00) C-----D (-422.02, 125.20, 0.00)
 | |
 A-----B (-425.08, 103.41, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
297	247	389	0.83	0.64	See summary	1:150

3.37 tennisbaan 7: Graphical Table

Grid : tennisbaan 7
Calculation : Surface Illuminance (lux)



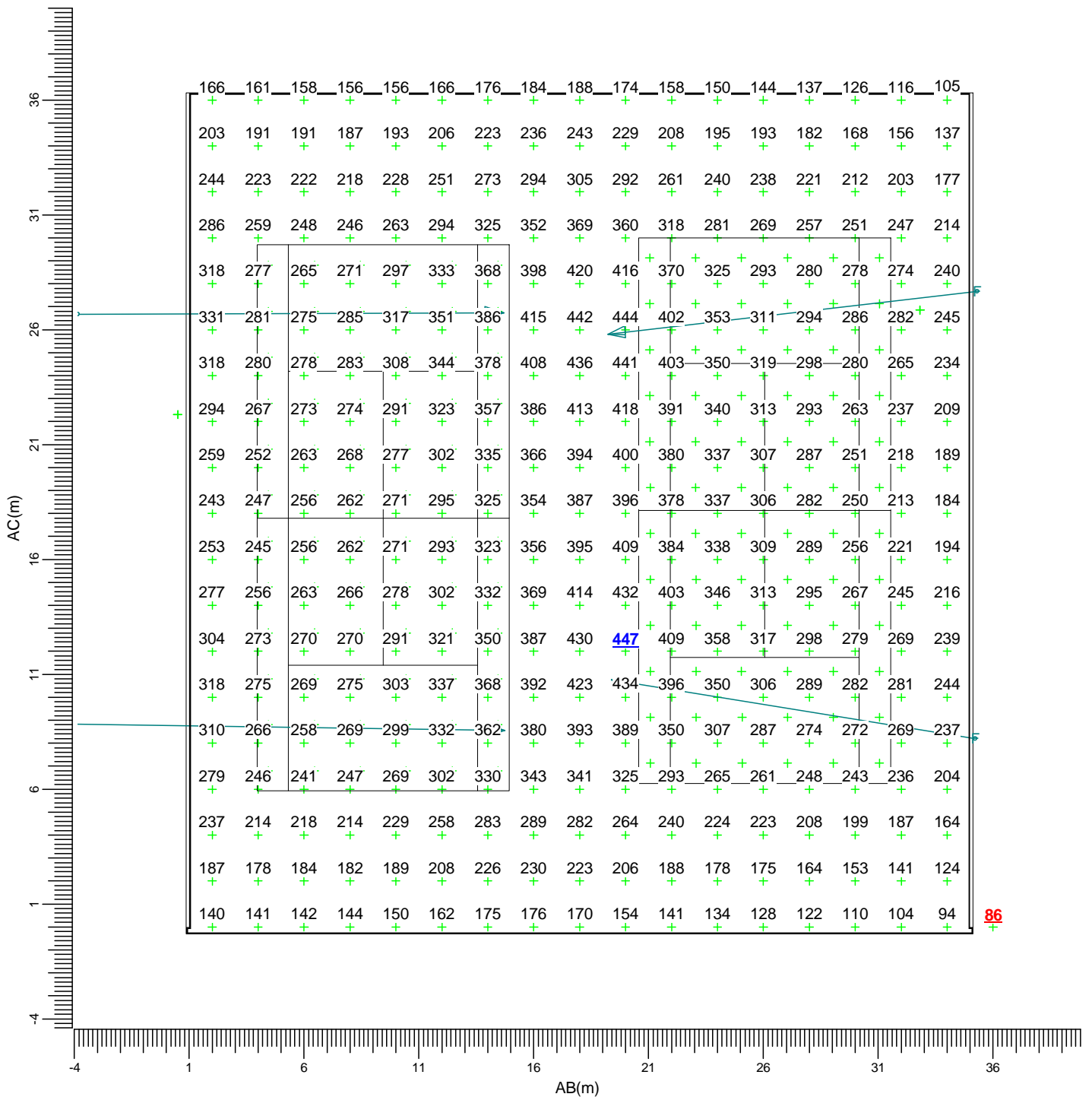
(-415.42, 124.59, -0.00) C-----D (-405.52, 123.20, 0.00)
 | |
 (-418.48, 102.80, -0.00) A-----B (-408.58, 101.41, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
318	232	434	0.73	0.53	See summary	1:150

3.39 tennisbanen 6 en 7: Graphical Table

Grid : tennisbanen 6 en 7
Calculation : Surface Illuminance (lux)



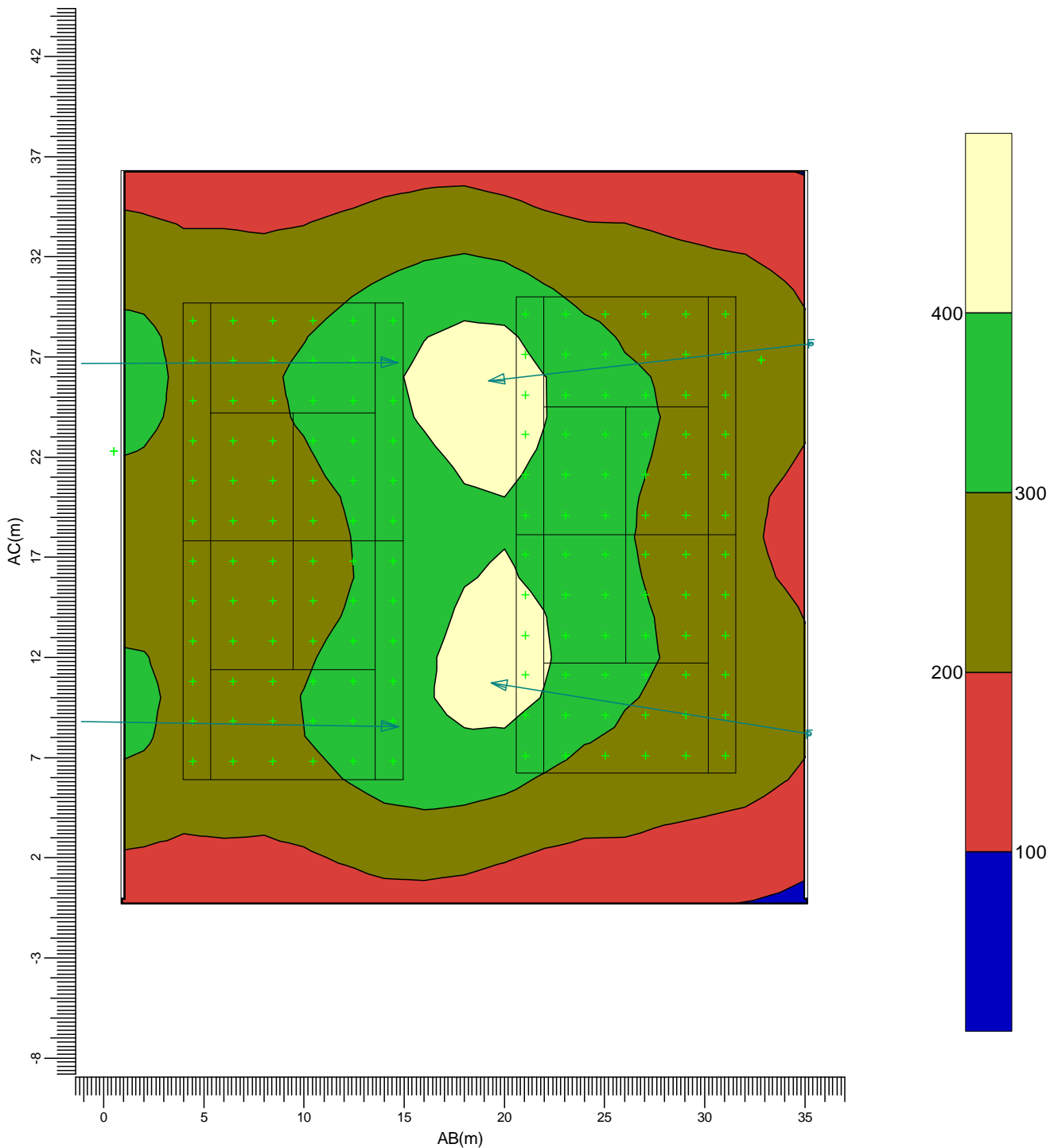
(-435.32, 134.33, -0.00) C-----D (-399.67, 129.32, 0.00)
 (-440.33, 98.68, -0.00) A-----B (-404.68, 93.67, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
271	86	447	0.32	0.19	See summary	1:250

3.40 tennisbanen 6 en 7: Filled Iso Contour

Grid : tennisbanen 6 en 7
Calculation : Surface Illuminance (lux)



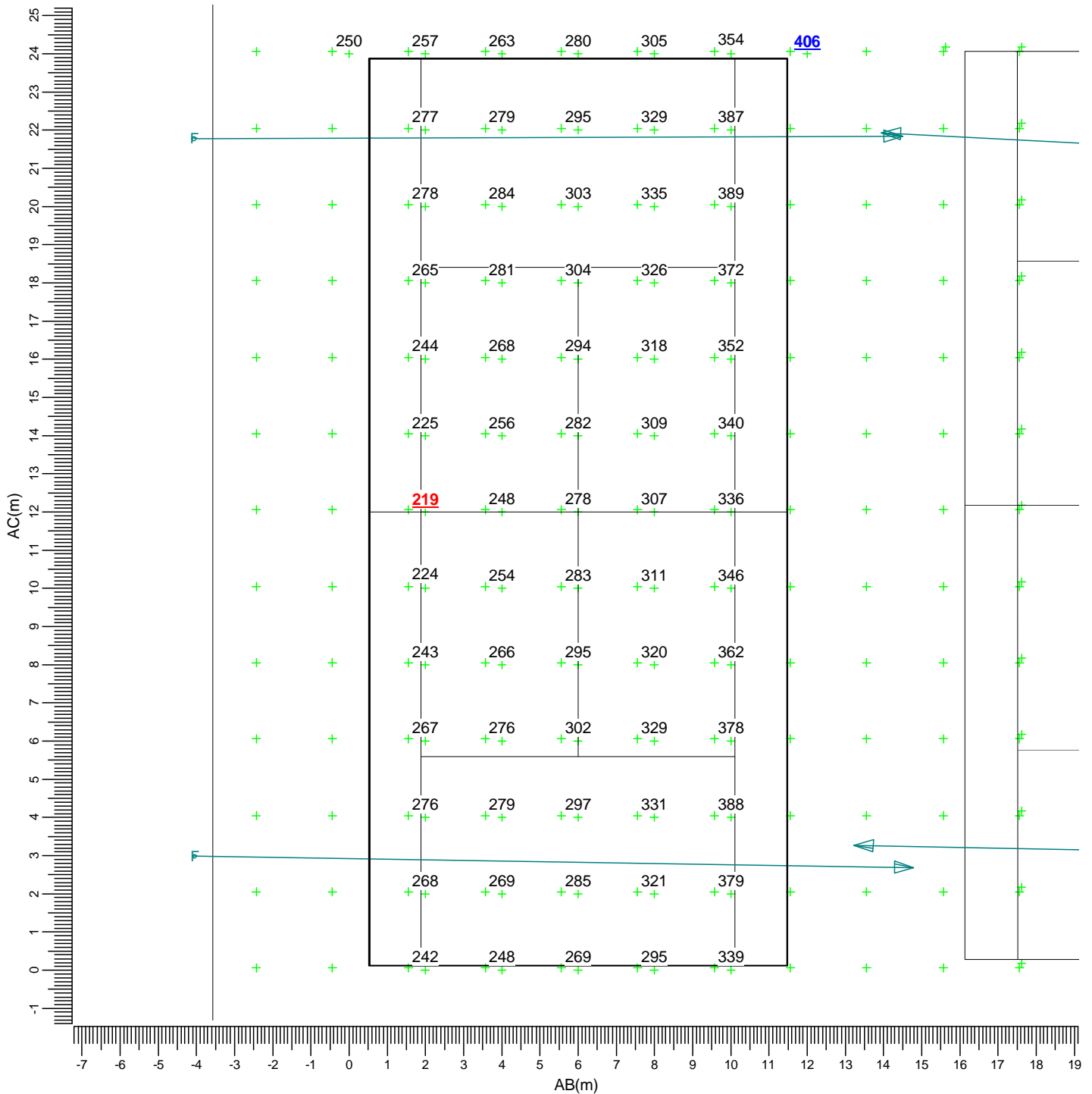
(-435.32, 134.33, -0.00) C-----D (-399.67, 129.32, 0.00)
(-440.33, 98.68, -0.00) A-----B (-404.68, 93.67, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
271	86	447	0.32	0.19	See summary	1:300

3.41 tennisbaan 8: Graphical Table

Grid : tennisbaan 8
Calculation : Surface Illuminance (lux)



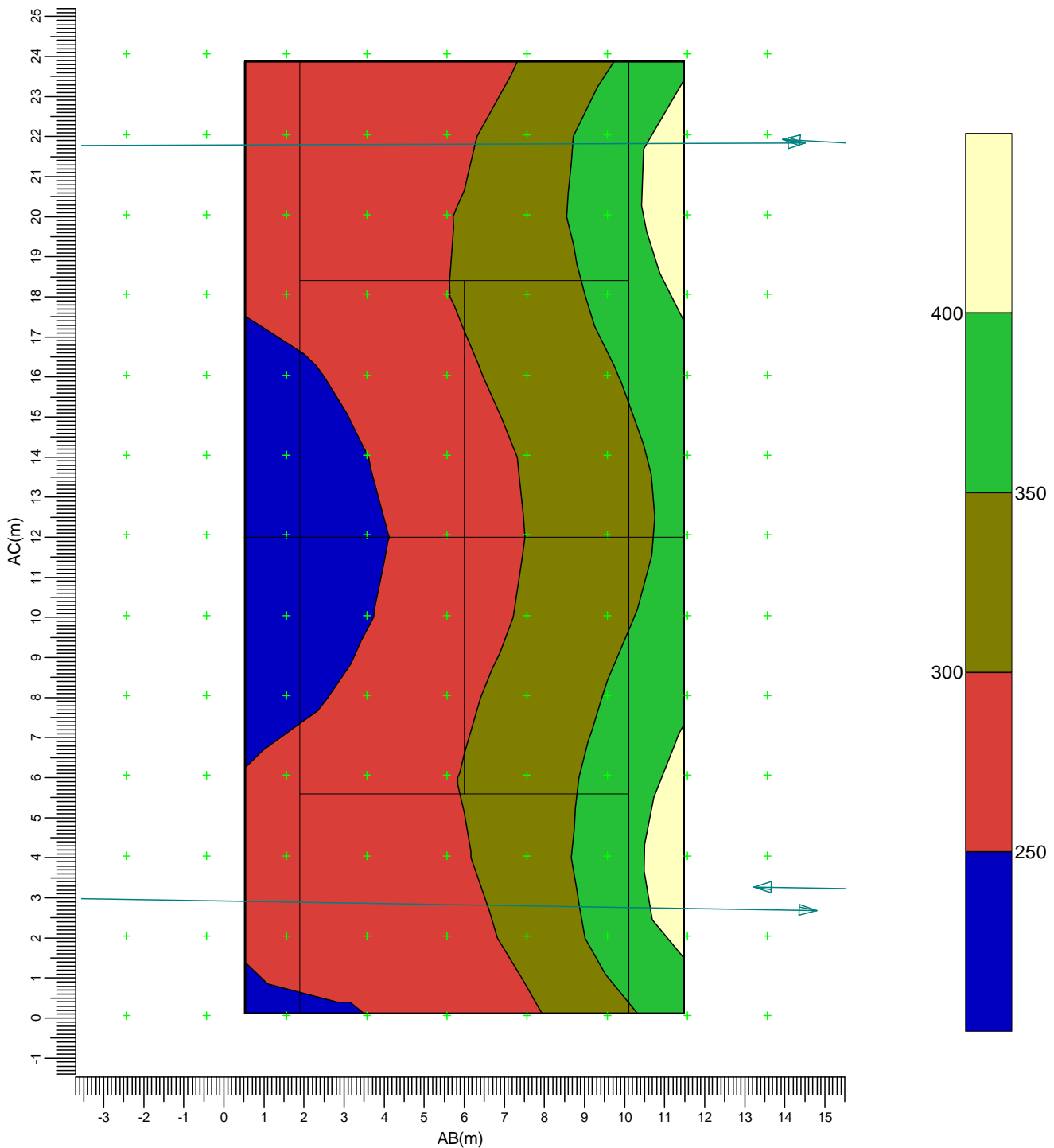
(-387.77, 120.72, -0.00) C-----D (-375.89, 119.05, 0.00)
 (-391.11, 96.95, -0.00) A-----B (-379.23, 95.28, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
299	219	406	0.73	0.54	See summary	1:150

3.42 tennisbaan 8: Filled Iso Contour

Grid : tennisbaan 8
Calculation : Surface Illuminance (lux)



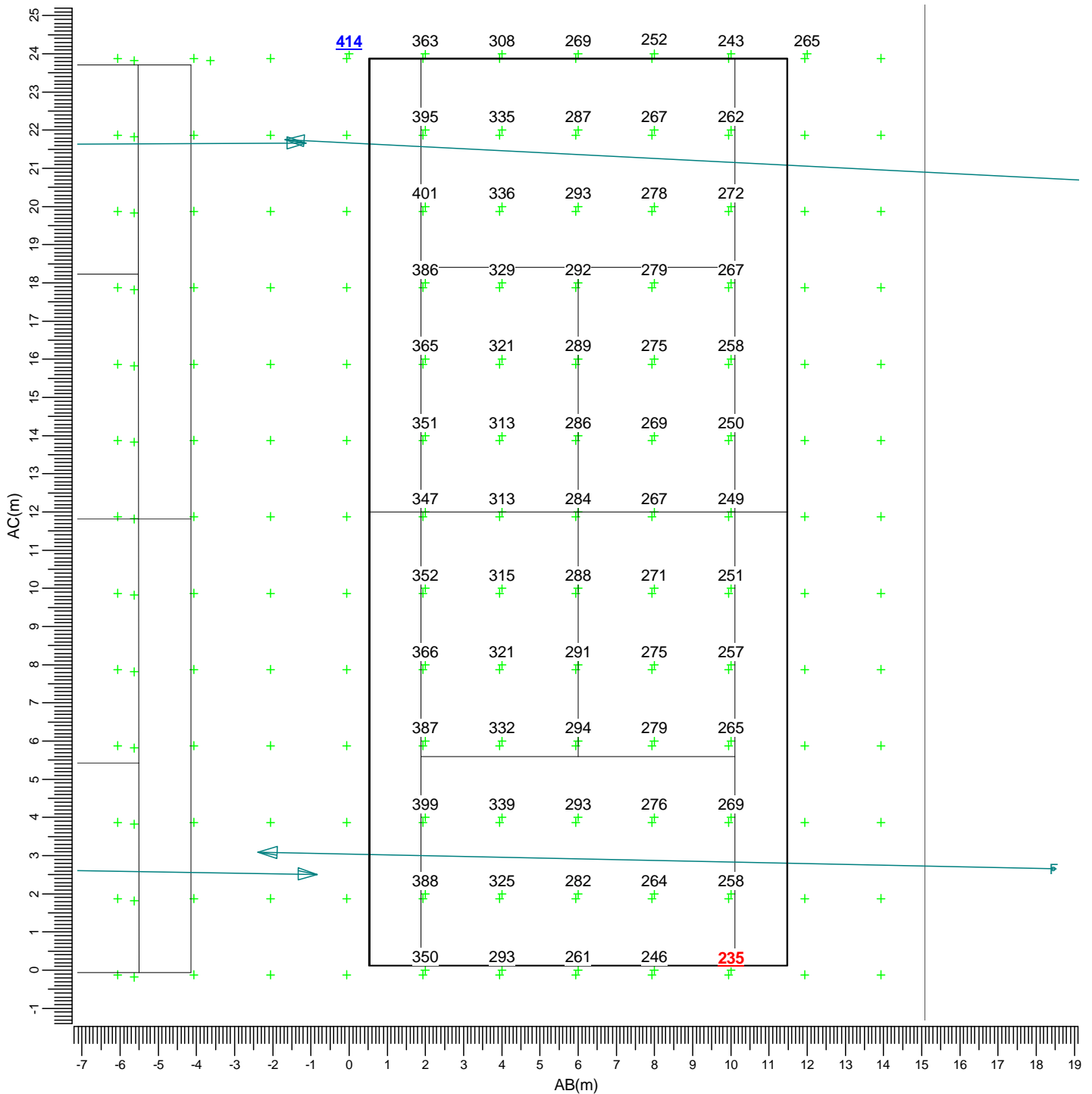
(-387.77, 120.72, -0.00) C-----D (-375.89, 119.05, 0.00)
(-391.11, 96.95, -0.00) A-----B (-379.23, 95.28, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
299	219	406	0.73	0.54	See summary	1:150

3.43 tennisbaan 9: Graphical Table

Grid : tennisbaan 9
Calculation : Surface Illuminance (lux)



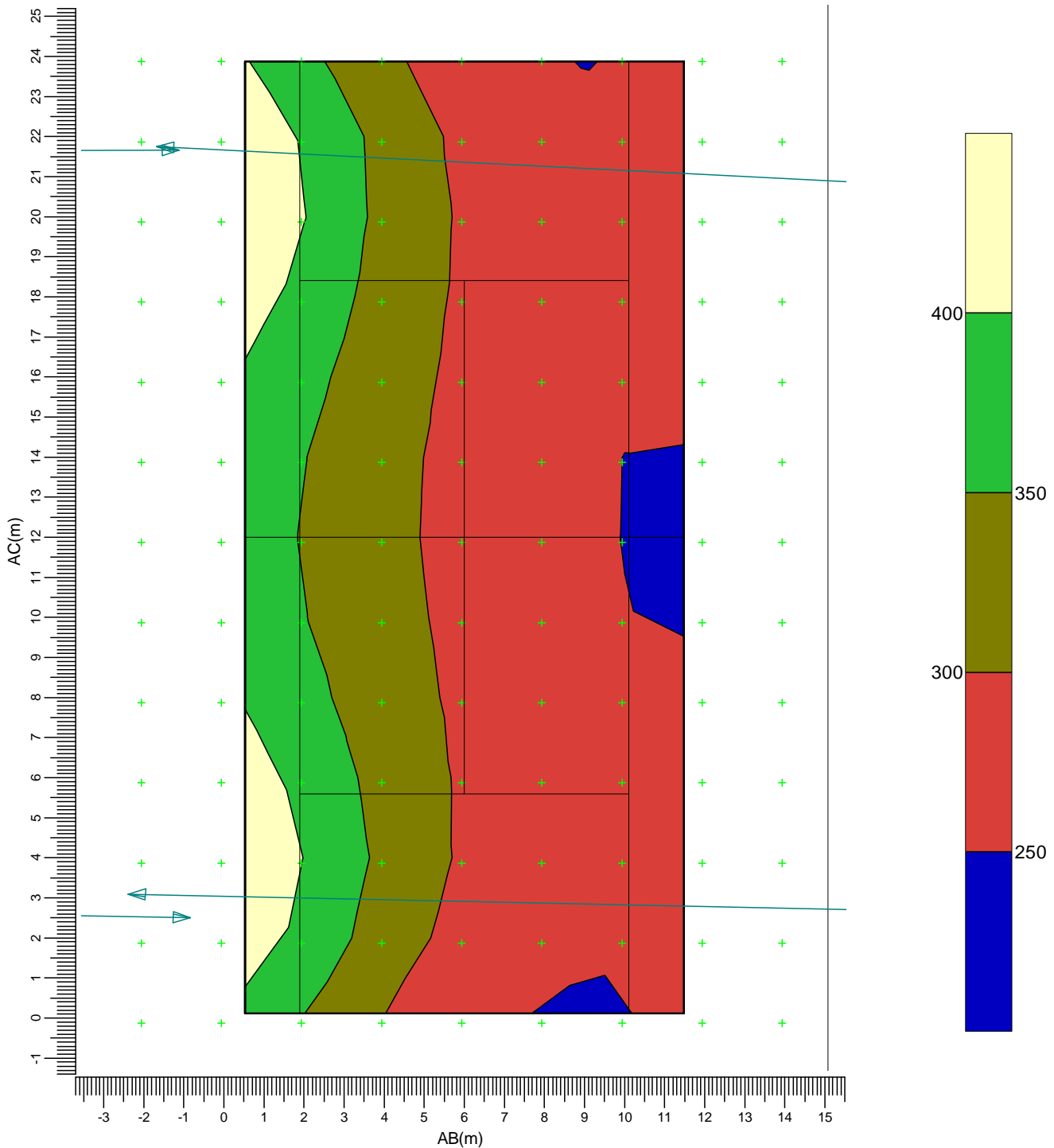
(-372.27, 118.72, -0.00) C-----D (-360.39, 117.05, 0.00)
 (-375.61, 94.95, -0.00) A-----B (-363.73, 93.28, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
302	235	414	0.78	0.57	See summary	1:150

3.44 tennisbaan 9: Filled Iso Contour

Grid : tennisbaan 9
Calculation : Surface Illuminance (lux)



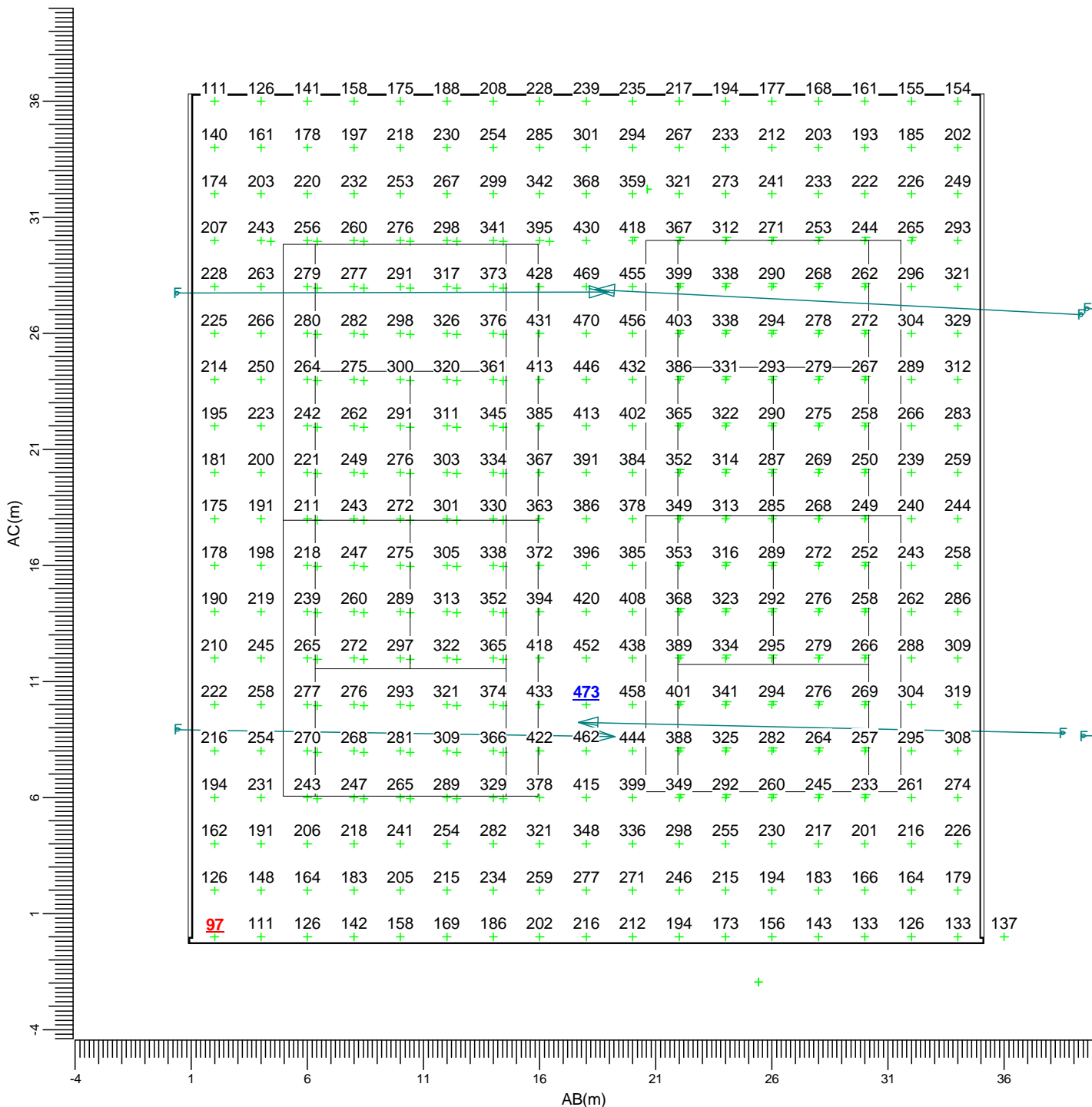
(-372.27, 118.72, -0.00) C-----D (-360.39, 117.05, 0.00)
(-375.61, 94.95, -0.00) A-----B (-363.73, 93.28, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
302	235	414	0.78	0.57	See summary	1:150

3.45 tennisbanen 8 en 9: Graphical Table

Grid : tennisbanen 8 en 9
Calculation : Surface Illuminance (lux)



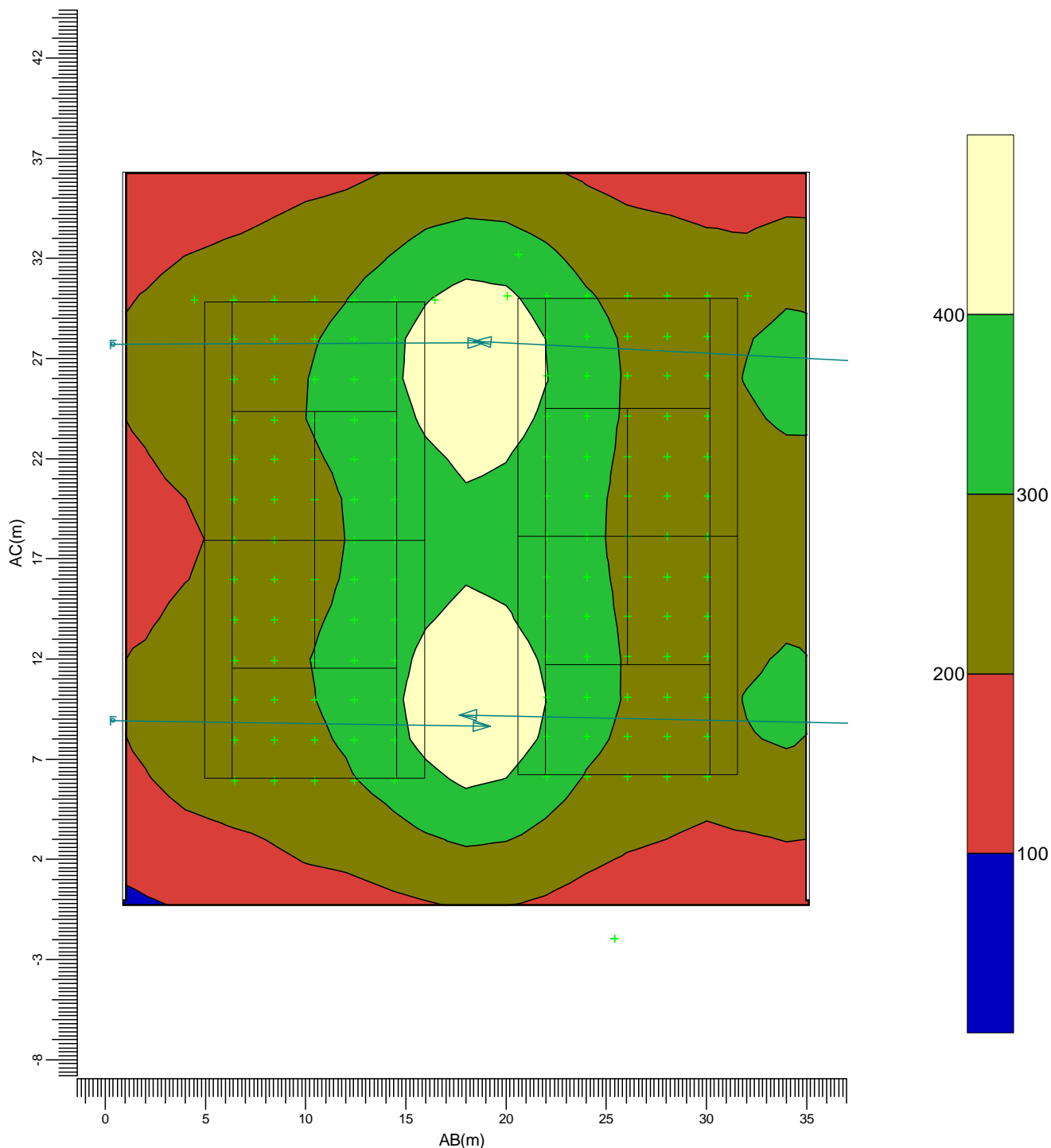
(-391.32, 127.33, -0.00) C-----D (-355.67, 122.32, 0.00)
(-396.33, 91.68, -0.00) A-----B (-360.68, 86.67, -0.00)

- A → MVP507 NB
- F → MNF 307/2KW N/41.0
- J → MVF403 A2
- L → MVF403 A4
- N → MVF403 A6
- C → MVP507 MB
- G → MNF 307/2KW M/41.0
- K → MVF403 A3
- M → MVF403 A5

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
277	97	473	0.35	0.20	See summary	1:250

3.46 tennisbanen 8 en 9: Filled Iso Contour

Grid : tennisbanen 8 en 9
Calculation : Surface Illuminance (lux)



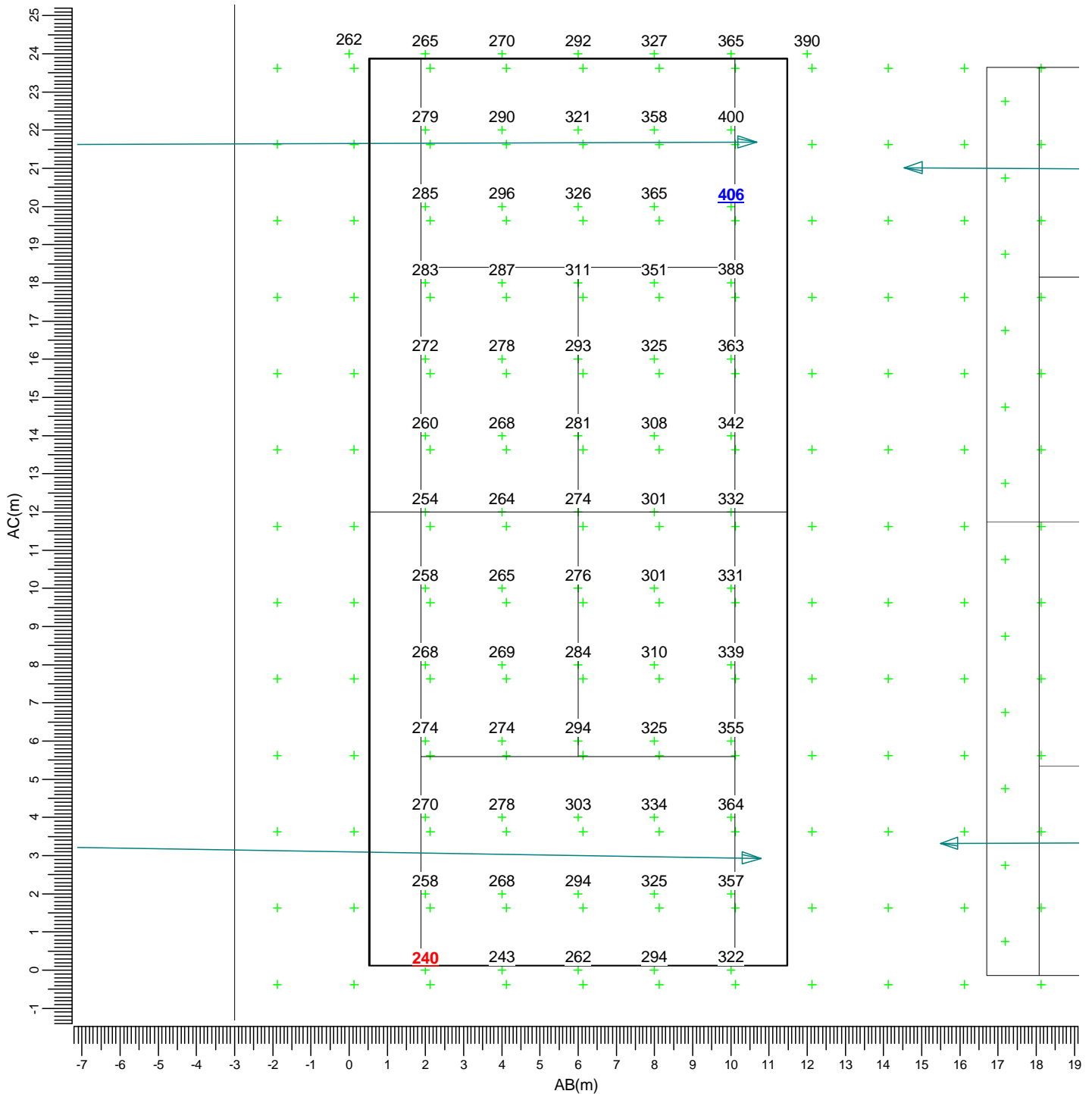
(-391.32, 127.33, -0.00) C-----D (-355.67, 122.32, 0.00)
(-396.33, 91.68, -0.00) A-----B (-360.68, 86.67, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
277	97	473	0.35	0.20	See summary	1:300

3.47 tennisbaan 10: Graphical Table

Grid : tennisbaan 10
Calculation : Surface Illuminance (lux)



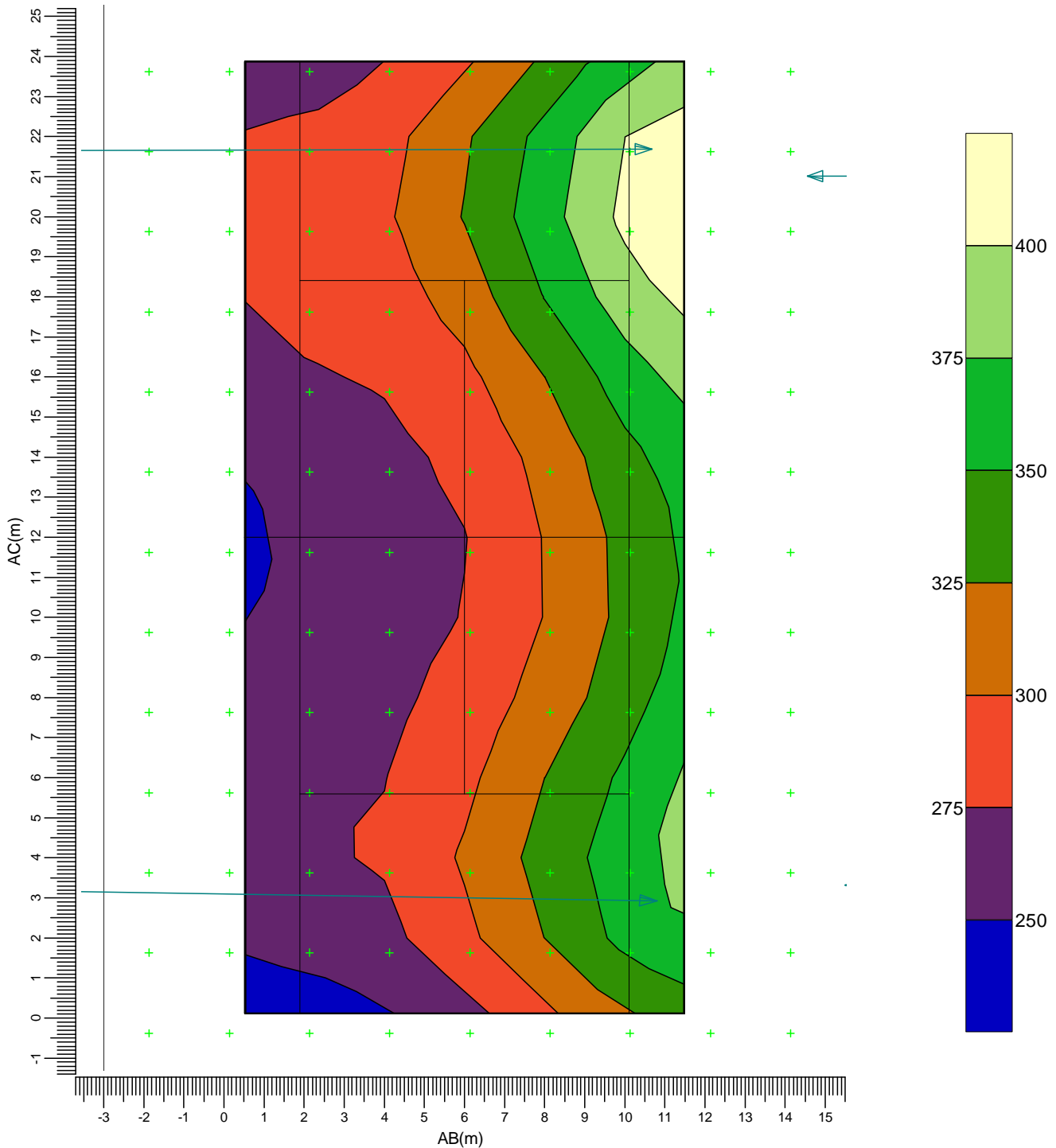
(-345.27, 114.22, -0.00) C-----D (-333.39, 112.55, 0.00)
 (-348.61, 90.45, -0.00) A-----B (-336.73, 88.78, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
304	240	406	0.79	0.59	See summary	1:150

3.48 tennisbaan 10: Filled Iso Contour

Grid : tennisbaan 10
Calculation : Surface Illuminance (lux)



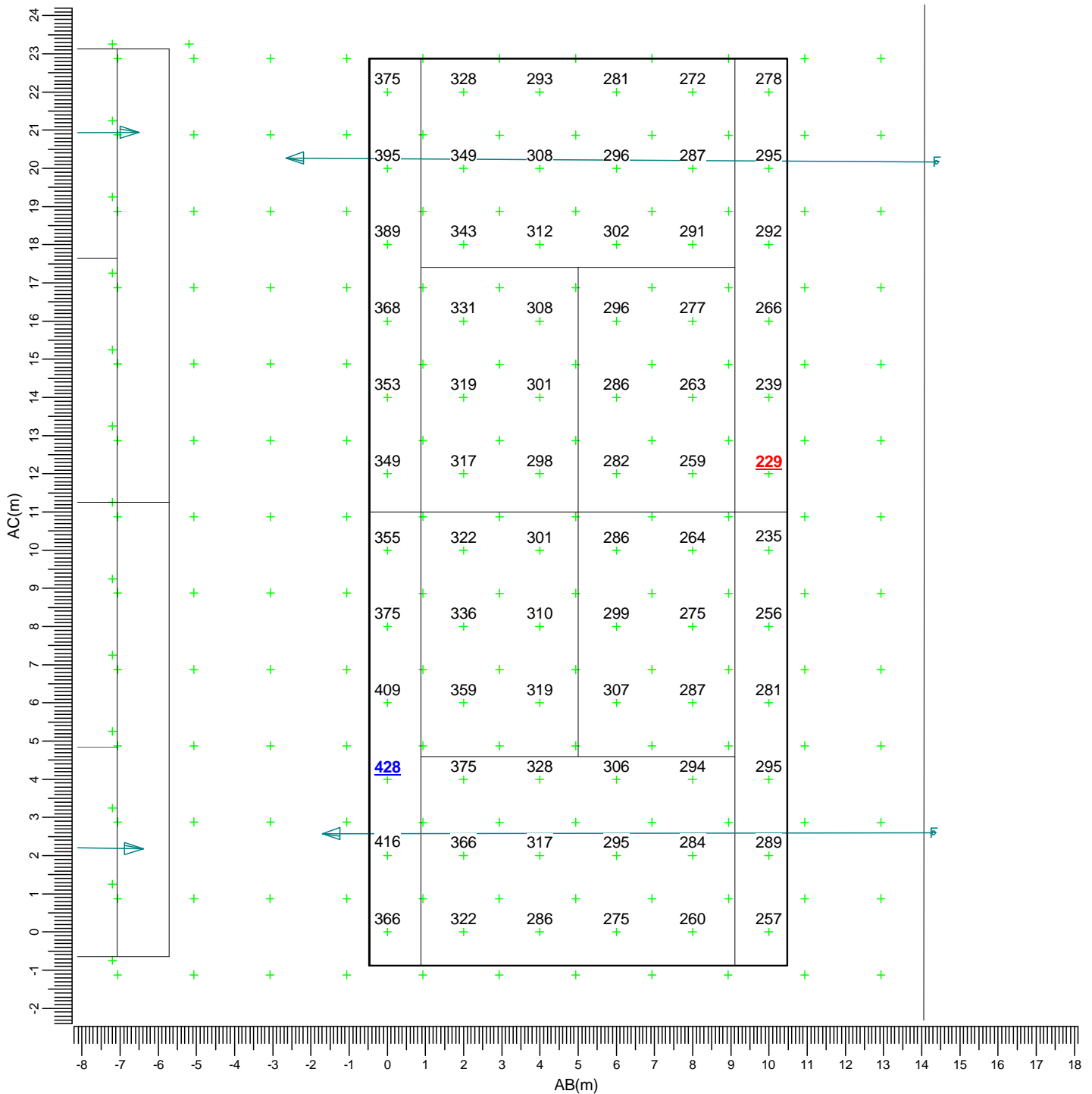
(-345.27, 114.22, -0.00) C-----D (-333.39, 112.55, 0.00)
(-348.61, 90.45, -0.00) A-----B (-336.73, 88.78, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
304	240	406	0.79	0.59	See summary	1:150

3.49 tennisbaan 11: Graphical Table

Grid : tennisbaan 11
Calculation : Surface Illuminance (lux)



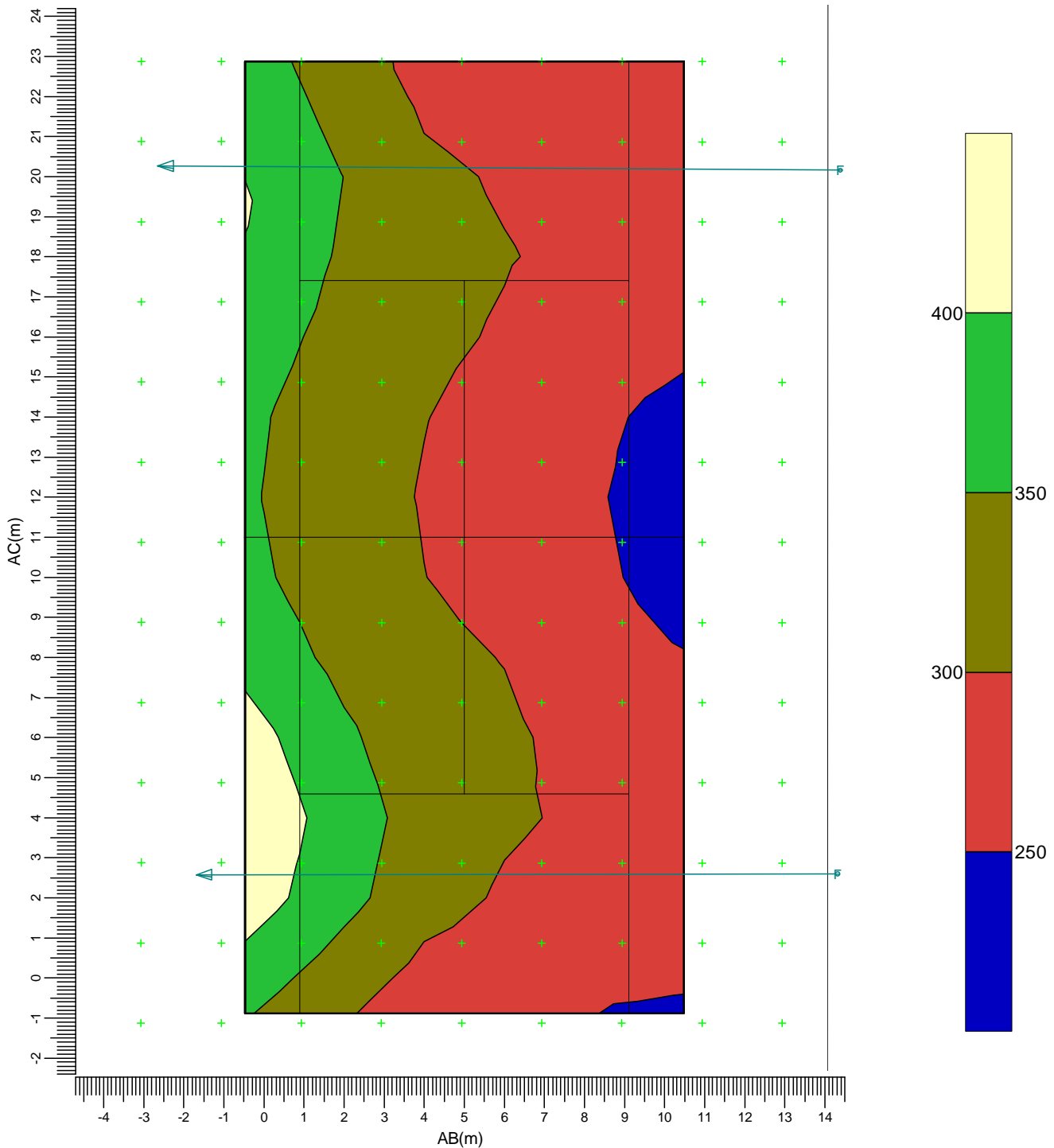
(-328.42, 110.59, -0.00) C-----D (-318.52, 109.20, 0.00)
| |
A-----B (-321.58, 87.41, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
311	229	428	0.74	0.53	See summary	1:150

3.50 tennisbaan 11: Filled Iso Contour

Grid : tennisbaan 11
Calculation : Surface Illuminance (lux)



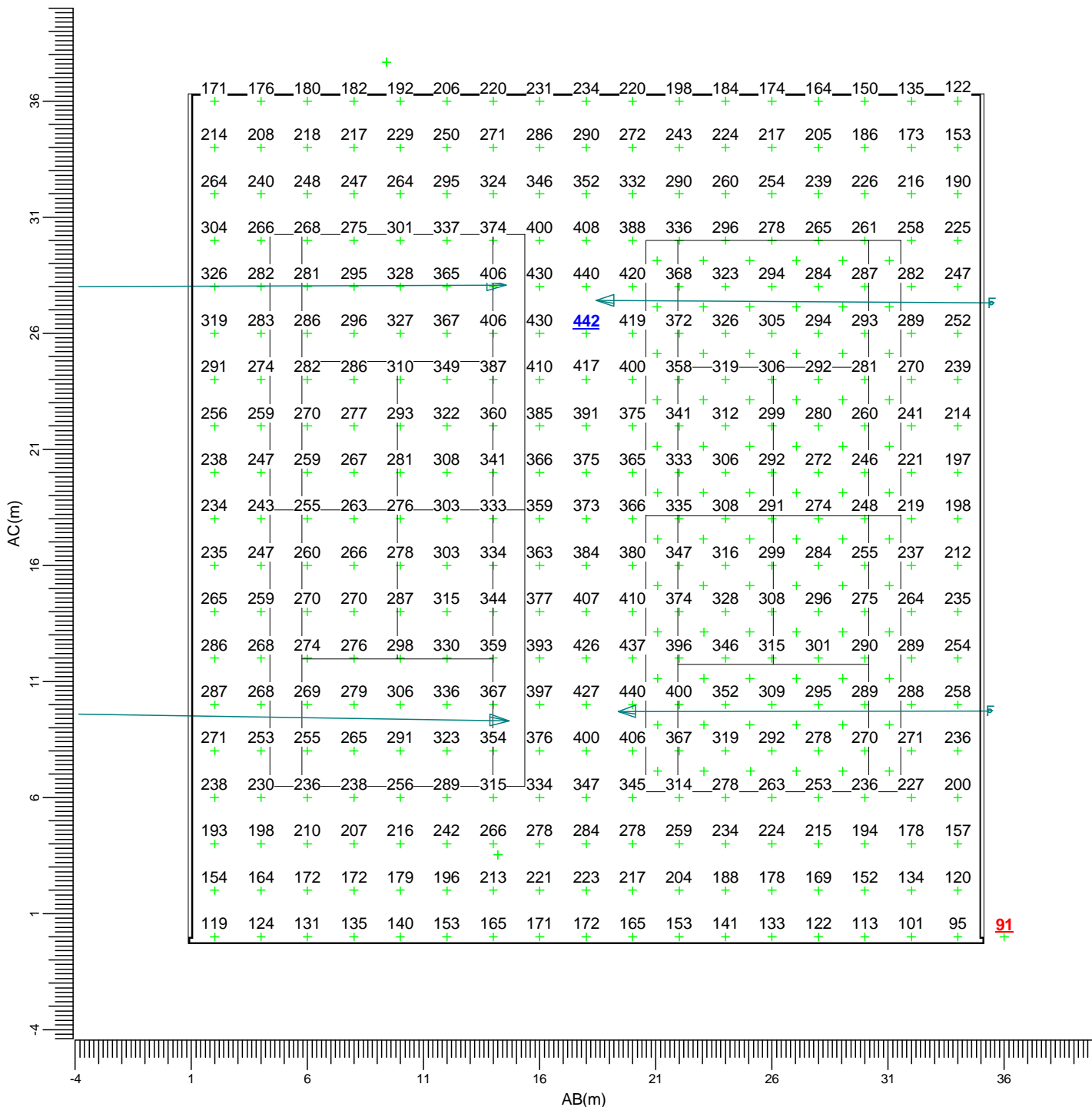
(-328.42, 110.59, -0.00) C-----D (-318.52, 109.20, 0.00)
(-331.48, 88.80, -0.00) A-----B (-321.58, 87.41, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
311	229	428	0.74	0.53	See summary	1:150

3.51 tennisbanen 10 en 11: Graphical Table

Grid : tennisbanen 10 en 11
Calculation : Surface Illuminance (lux)



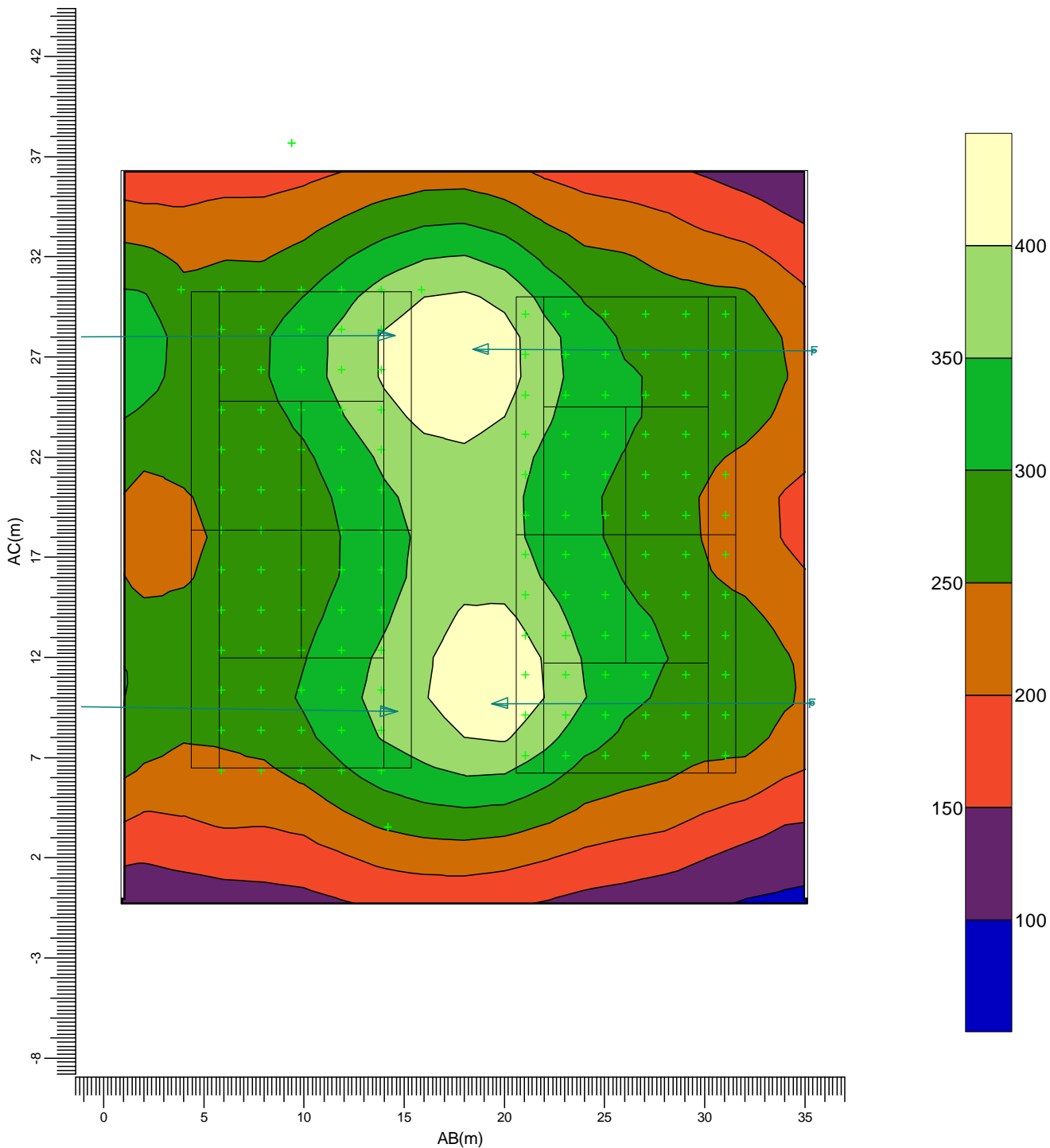
(-348.32, 120.33, -0.00) C-----D (-312.67, 115.32, 0.00)
 (-353.33, 84.68, -0.00) A-----B (-317.68, 79.67, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
275	91	442	0.33	0.21	See summary	1:250

3.52 tennisbanen 10 en 11: Filled Iso Contour

Grid : tennisbanen 10 en 11
Calculation : Surface Illuminance (lux)



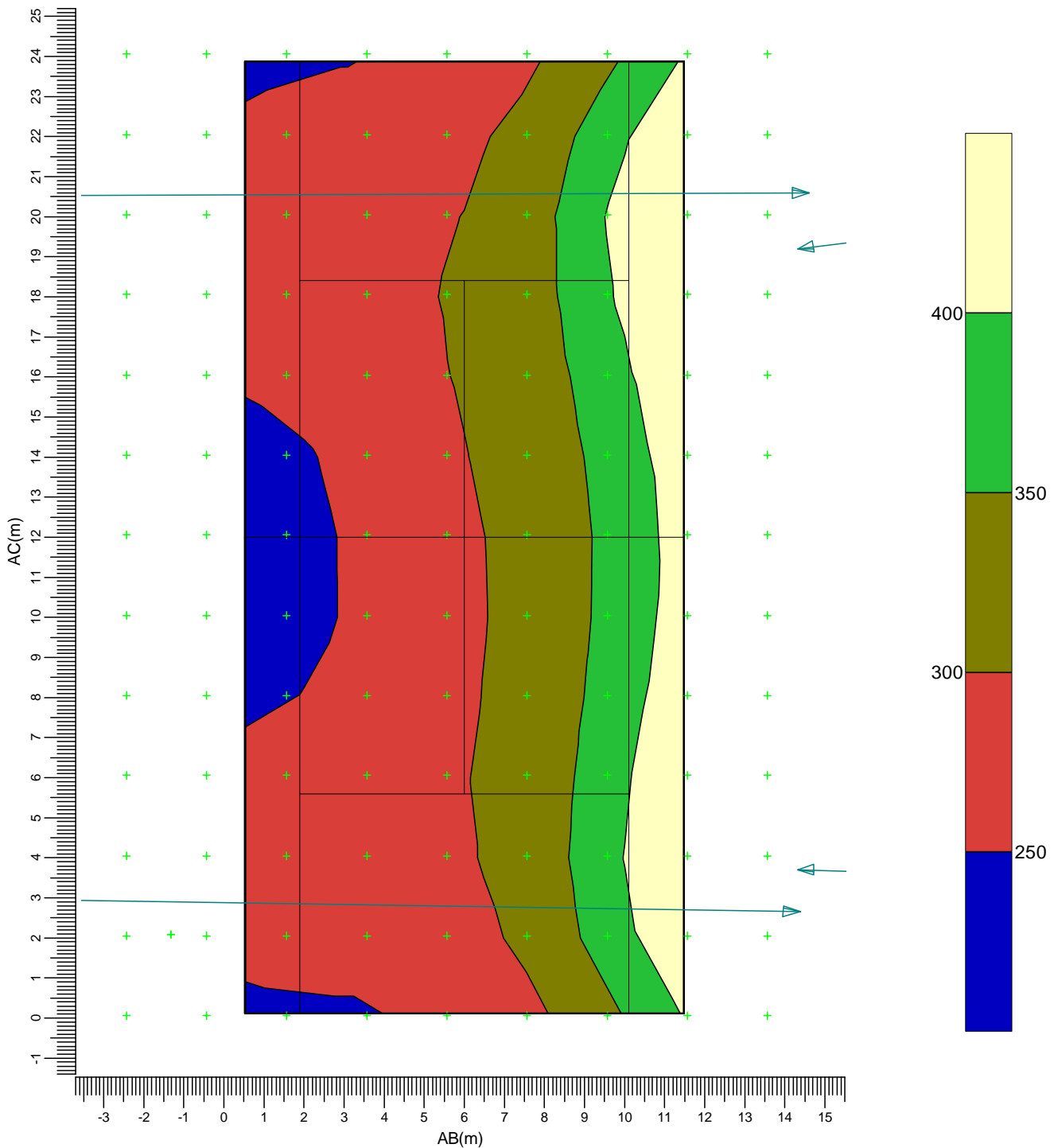
(-348.32, 120.33, -0.00) C-----D (-312.67, 115.32, 0.00)
(-353.33, 84.68, -0.00) A-----B (-317.68, 79.67, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
275	91	442	0.33	0.21	See summary	1:300

3.54 tennisbaan 12: Filled Iso Contour

Grid : tennisbaan 12
Calculation : Surface Illuminance (lux)



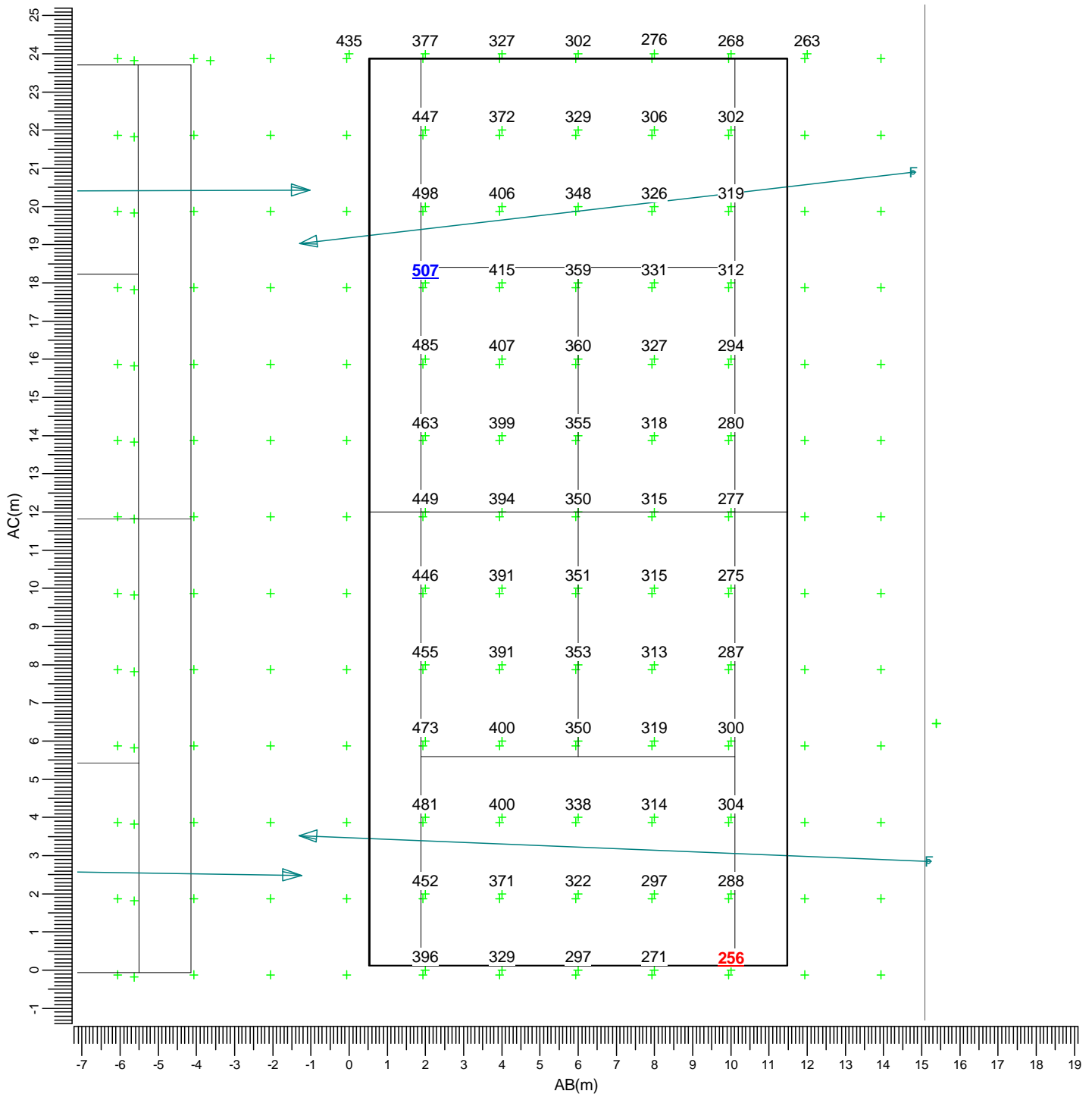
(-301.77, 107.72, -0.00) C-----D (-289.89, 106.05, 0.00)
(-305.11, 83.95, -0.00) A-----B (-293.23, 82.28, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
306	231	419	0.76	0.55	See summary	1:150

3.55 tennisbaan 13: Graphical Table

Grid : tennisbaan 13
Calculation : Surface Illuminance (lux)



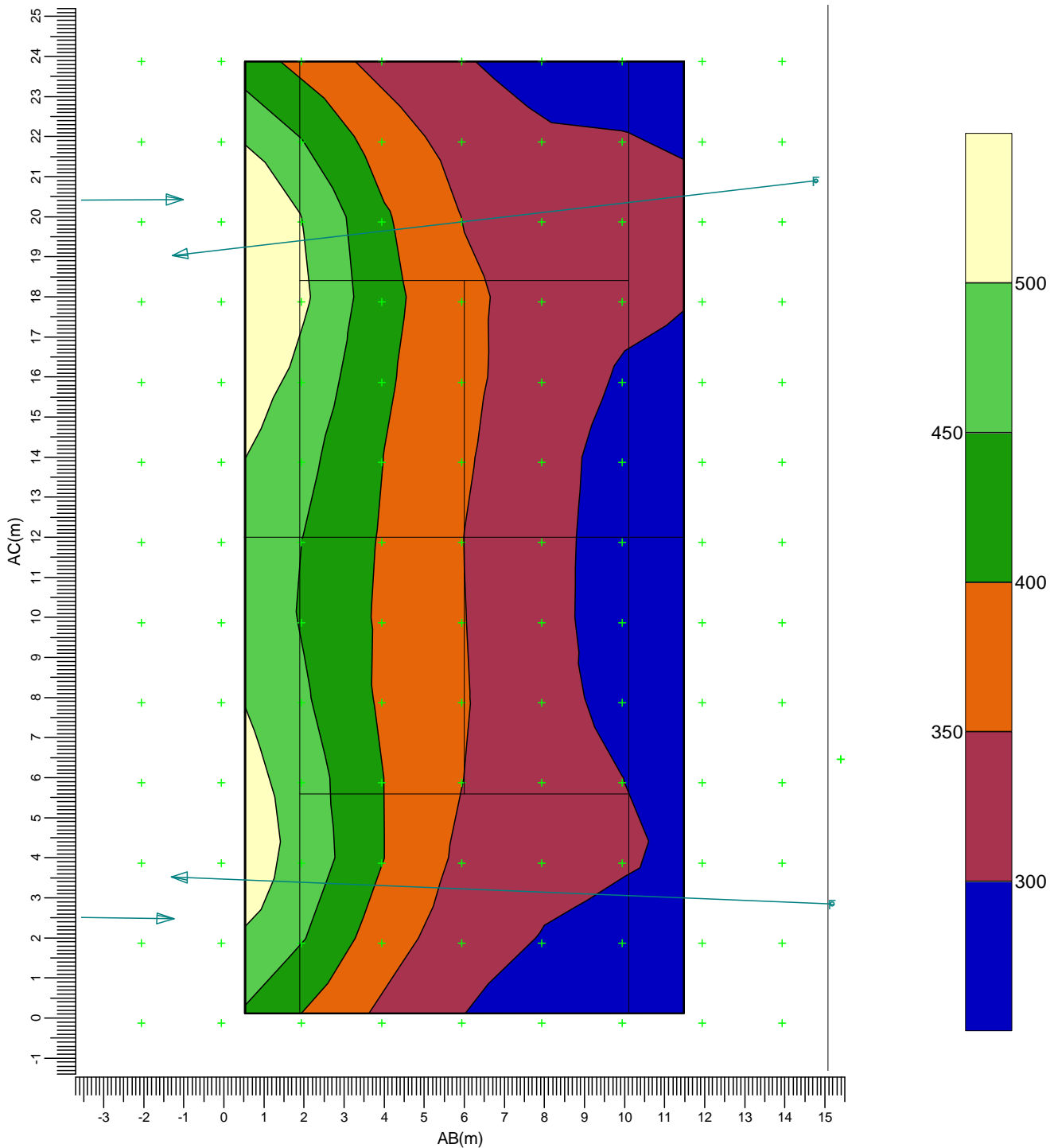
(-286.27, 105.72, -0.00) C-----D (-274.39, 104.05, 0.00)
 (-289.61, 81.95, -0.00) A-----B (-277.73, 80.28, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
356	256	507	0.72	0.50	See summary	1:150

3.56 tennisbaan 13: Filled Iso Contour

Grid : tennisbaan 13
Calculation : Surface Illuminance (lux)



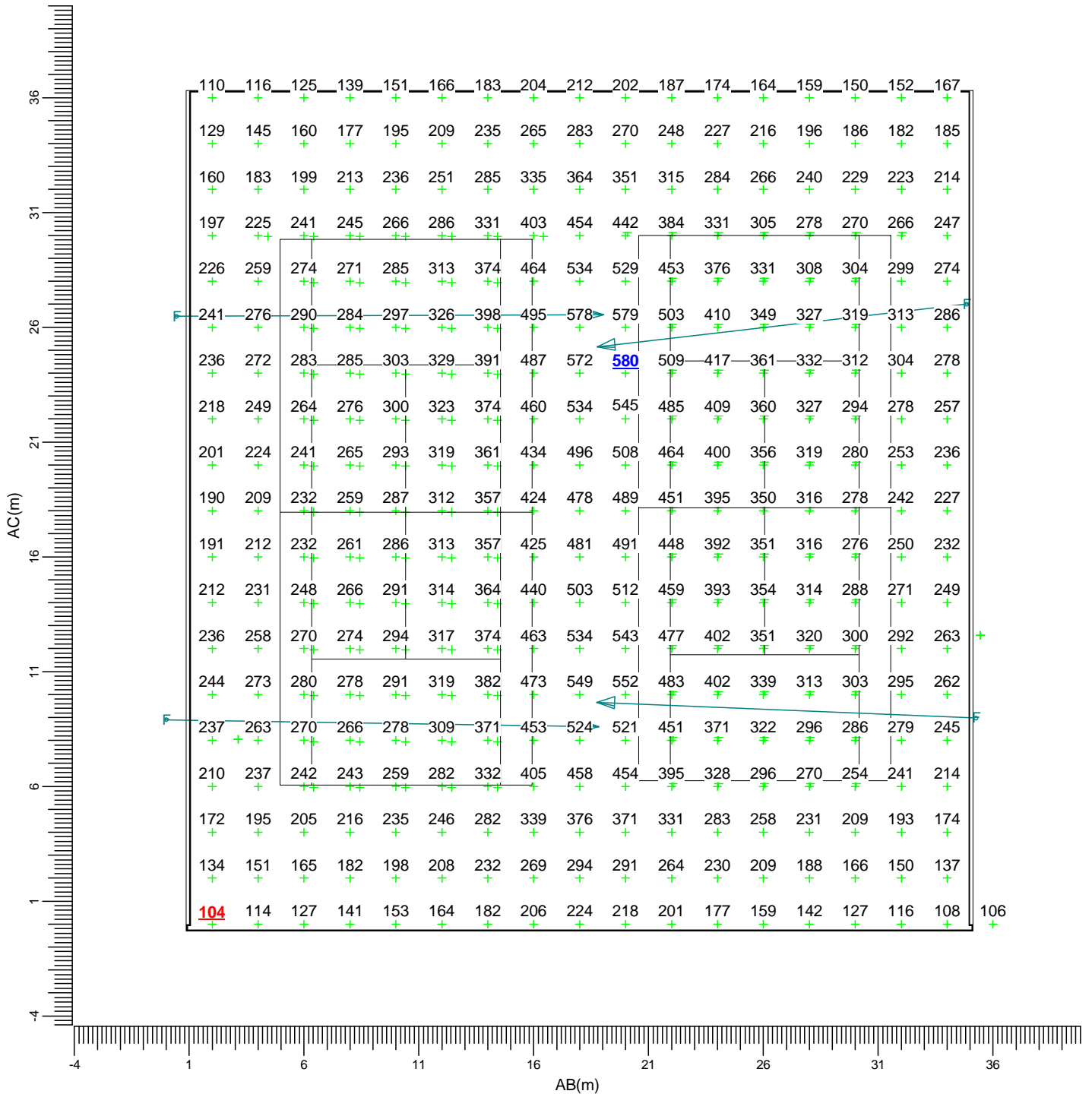
(-286.27, 105.72, -0.00) C-----D (-274.39, 104.05, 0.00)
(-289.61, 81.95, -0.00) A-----B (-277.73, 80.28, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
356	256	507	0.72	0.50	See summary	1:150

3.57 tennisbanen 12 en 13: Graphical Table

Grid : tennisbanen 12 en 13
Calculation : Surface Illuminance (lux)



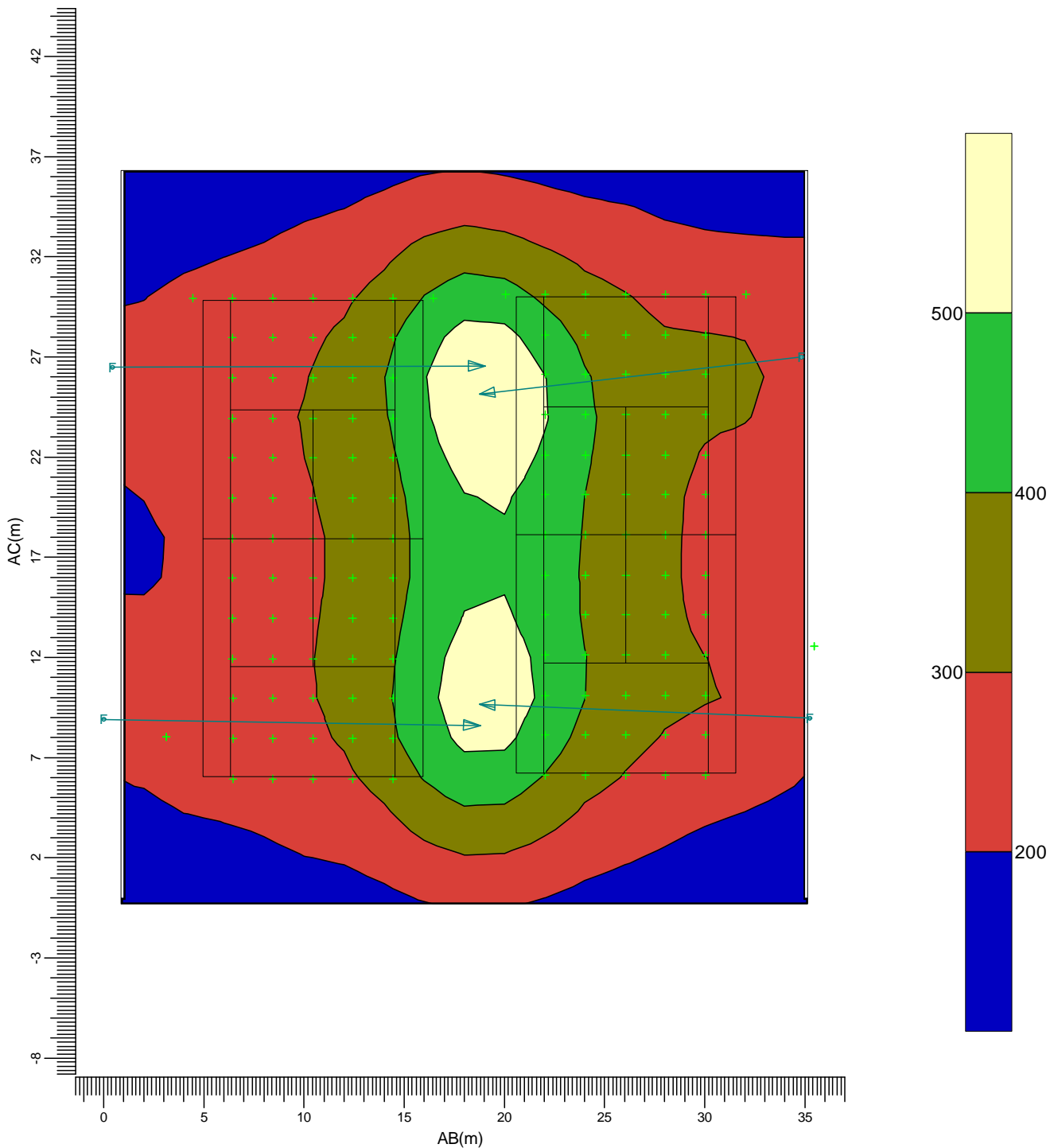
(-305.32, 114.33, -0.00) C-----D (-269.67, 109.32, 0.00)
(-310.33, 78.68, -0.00) A-----B (-274.68, 73.67, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
296	104	580	0.35	0.18	See summary	1:250

3.58 tennisbanen 12 en 13: Filled Iso Contour

Grid : tennisbanen 12 en 13
Calculation : Surface Illuminance (lux)



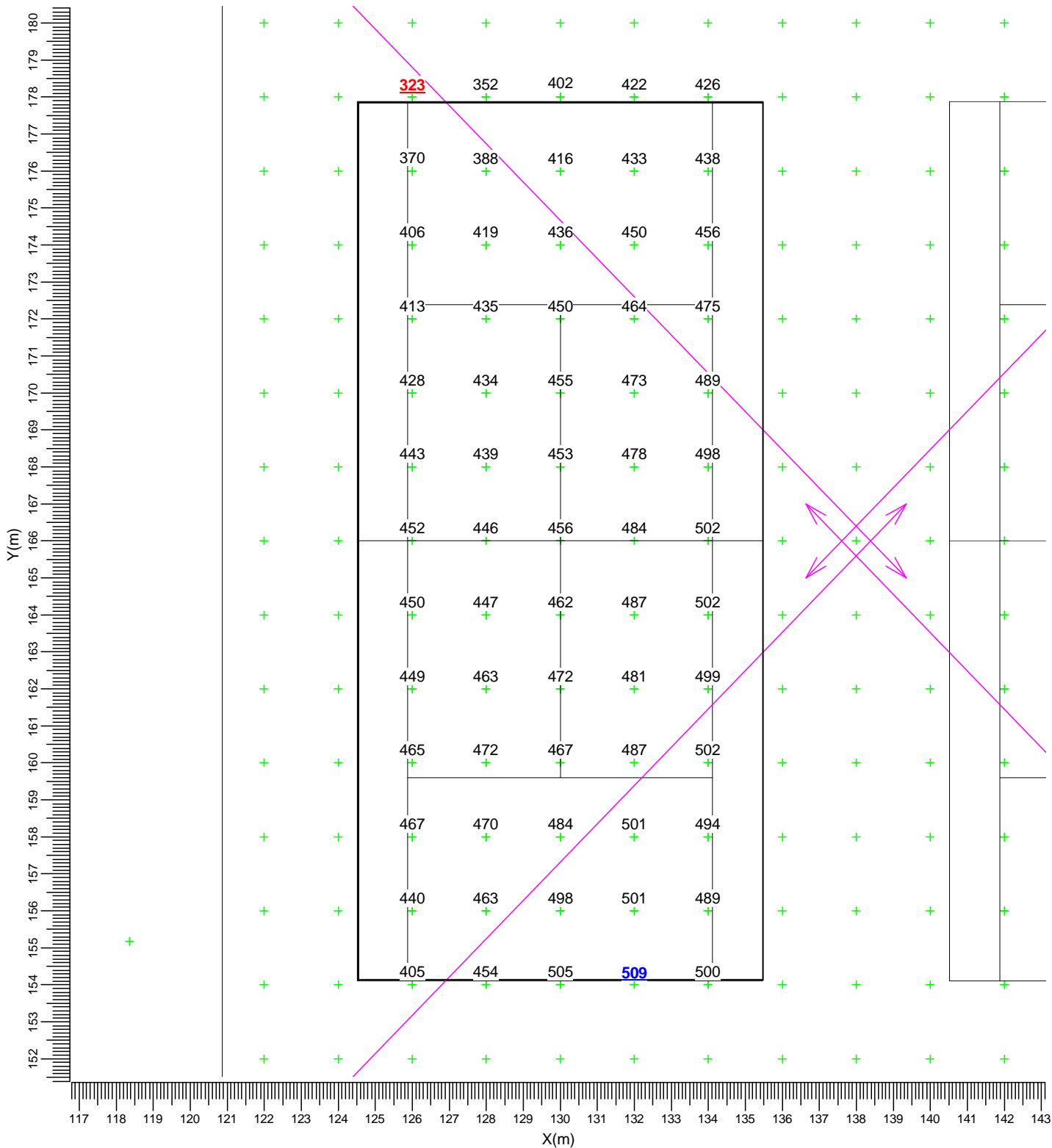
(-305.32, 114.33, -0.00) C-----D (-269.67, 109.32, 0.00)
(-310.33, 78.68, -0.00) A-----B (-274.68, 73.67, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
296	104	580	0.35	0.18	See summary	1:300

3.59 tennisbaan A: Graphical Table

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

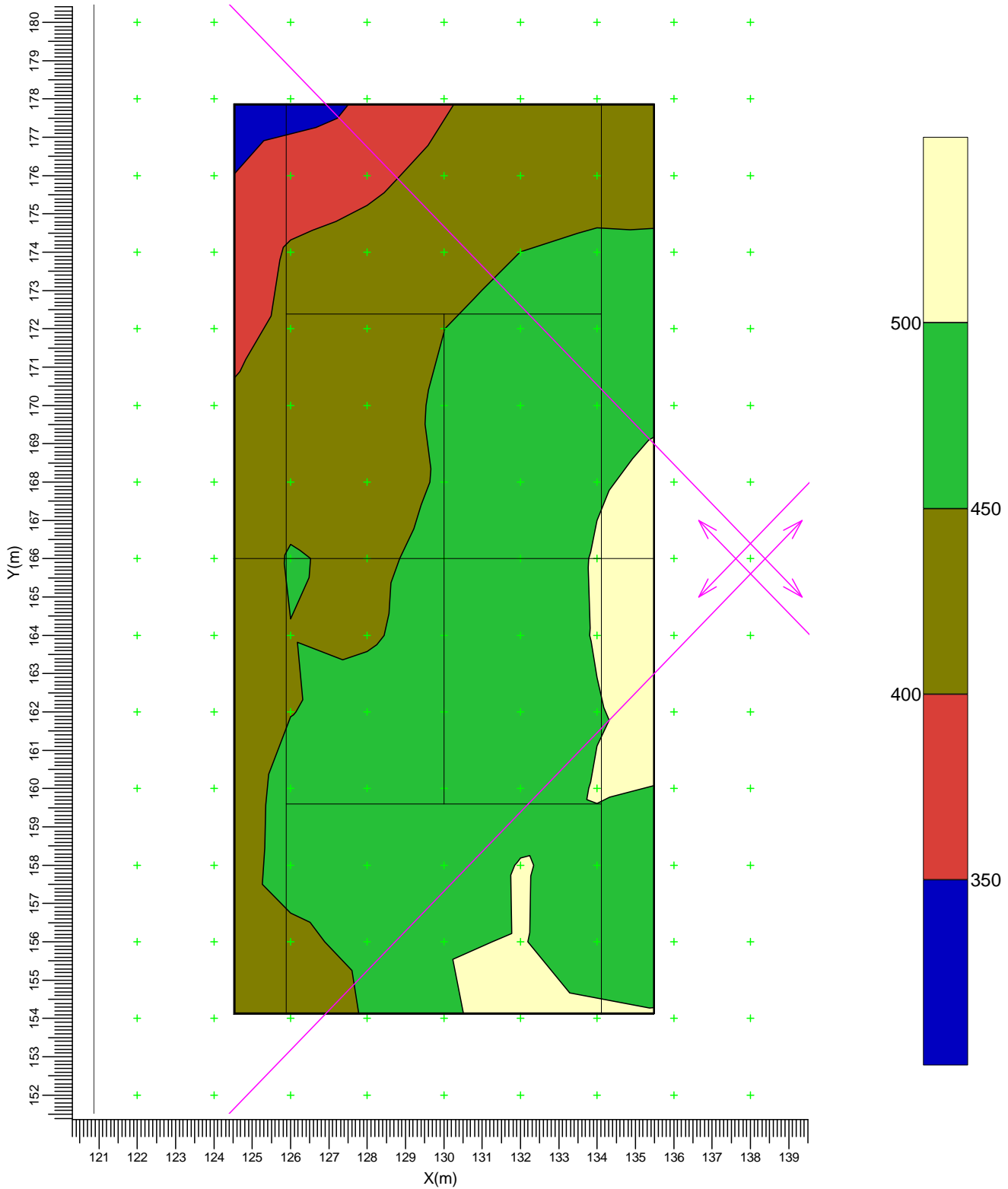


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
455	323	509	0.71	0.63	See summary	1:150

3.60 tennisbaan A: Filled Iso Contour

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

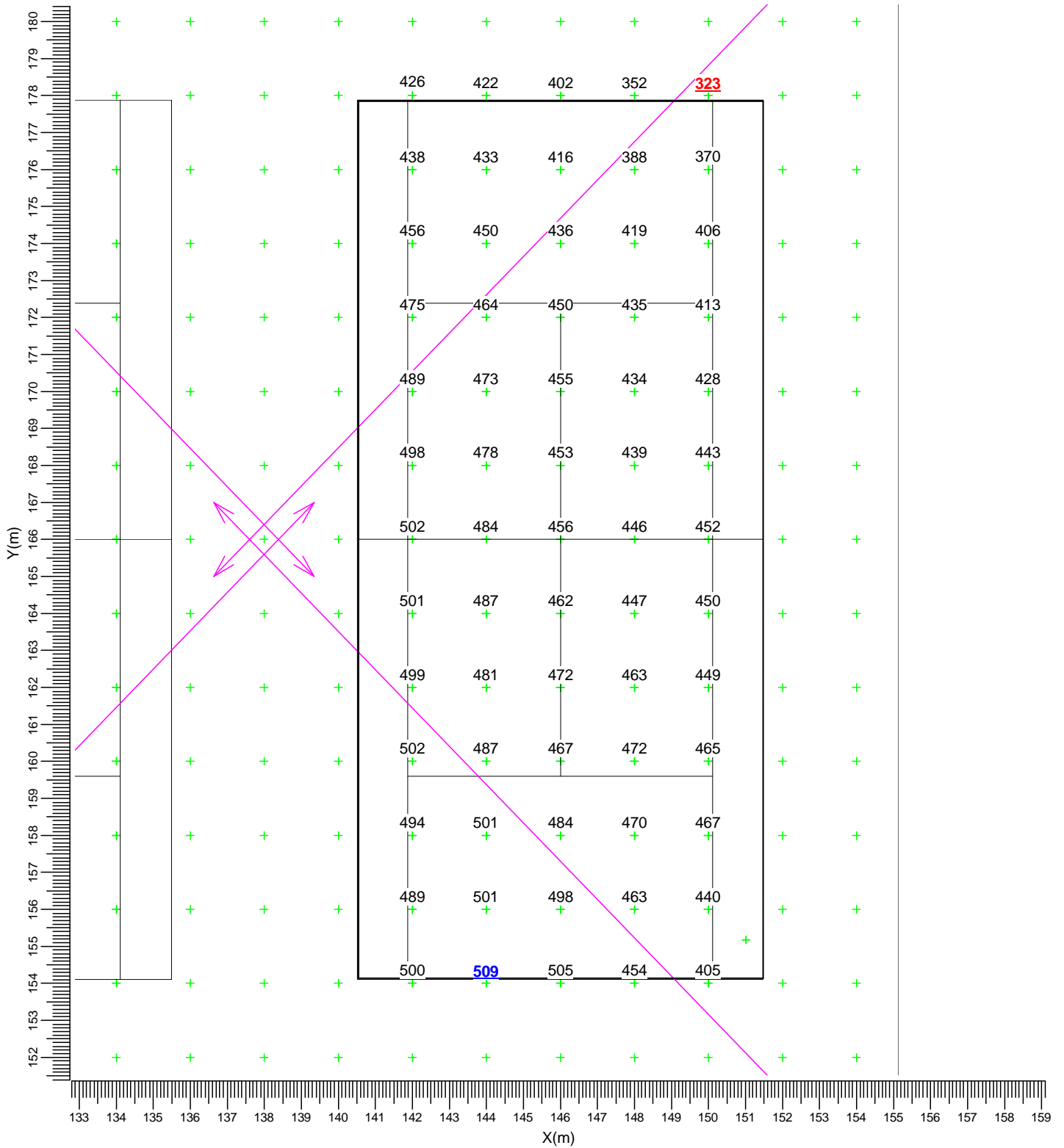


- | | | | |
|---|----------------------|---|----------------------|
| A | → MVP507 NB | C | → MVP507 MB |
| F | → MNF 307/2KW N/41.0 | G | → MNF 307/2KW M/41.0 |
| J | → MVF403 A2 | K | → MVF403 A3 |
| L | → MVF403 A4 | M | → MVF403 A5 |
| N | → MVF403 A6 | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
455	323	509	0.71	0.63	See summary	1:150

3.61 tennisbaan B: Graphical Table

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

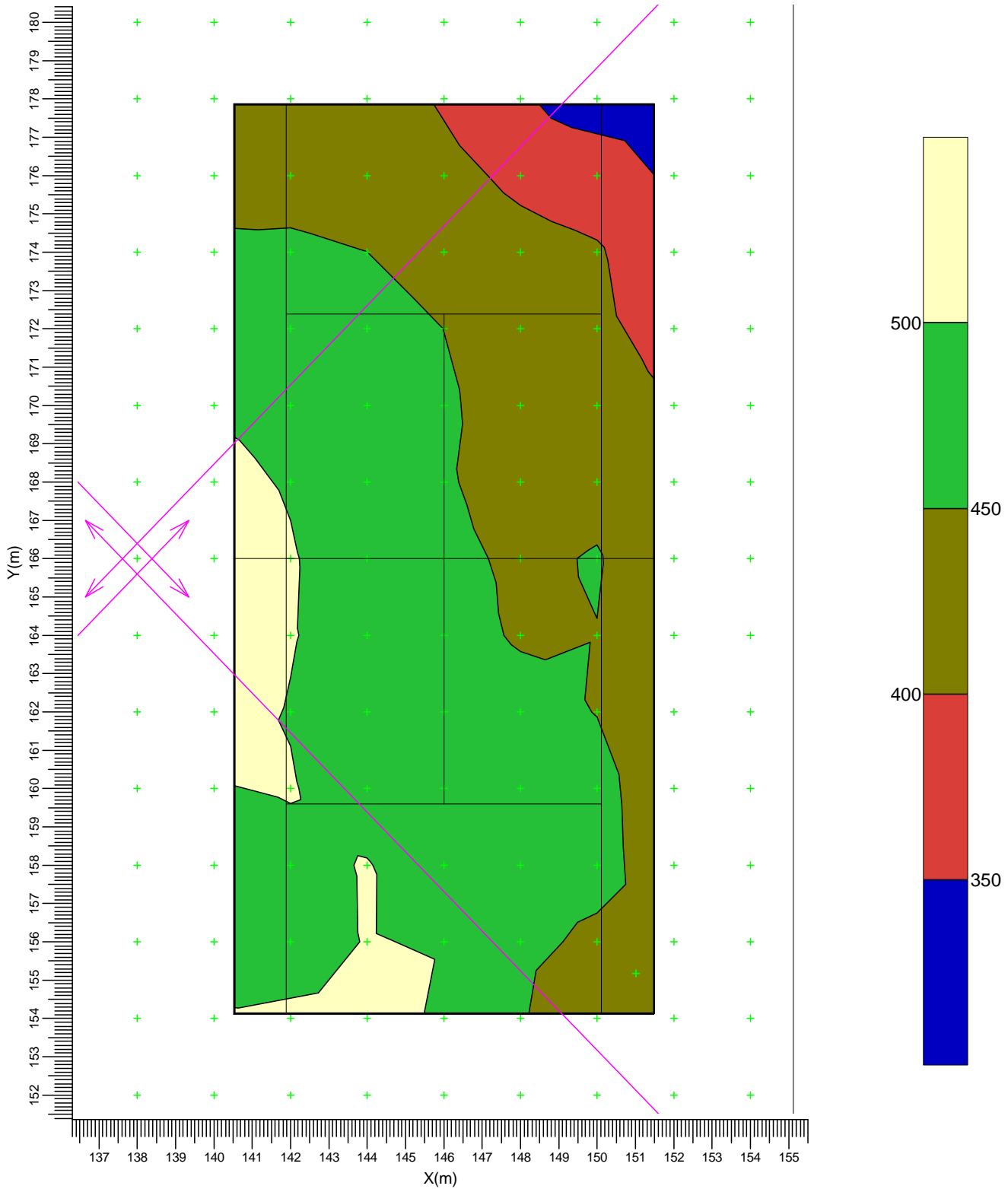


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
455	323	509	0.71	0.63	See summary	1:150

3.62 tennisbaan B: Filled Iso Contour

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

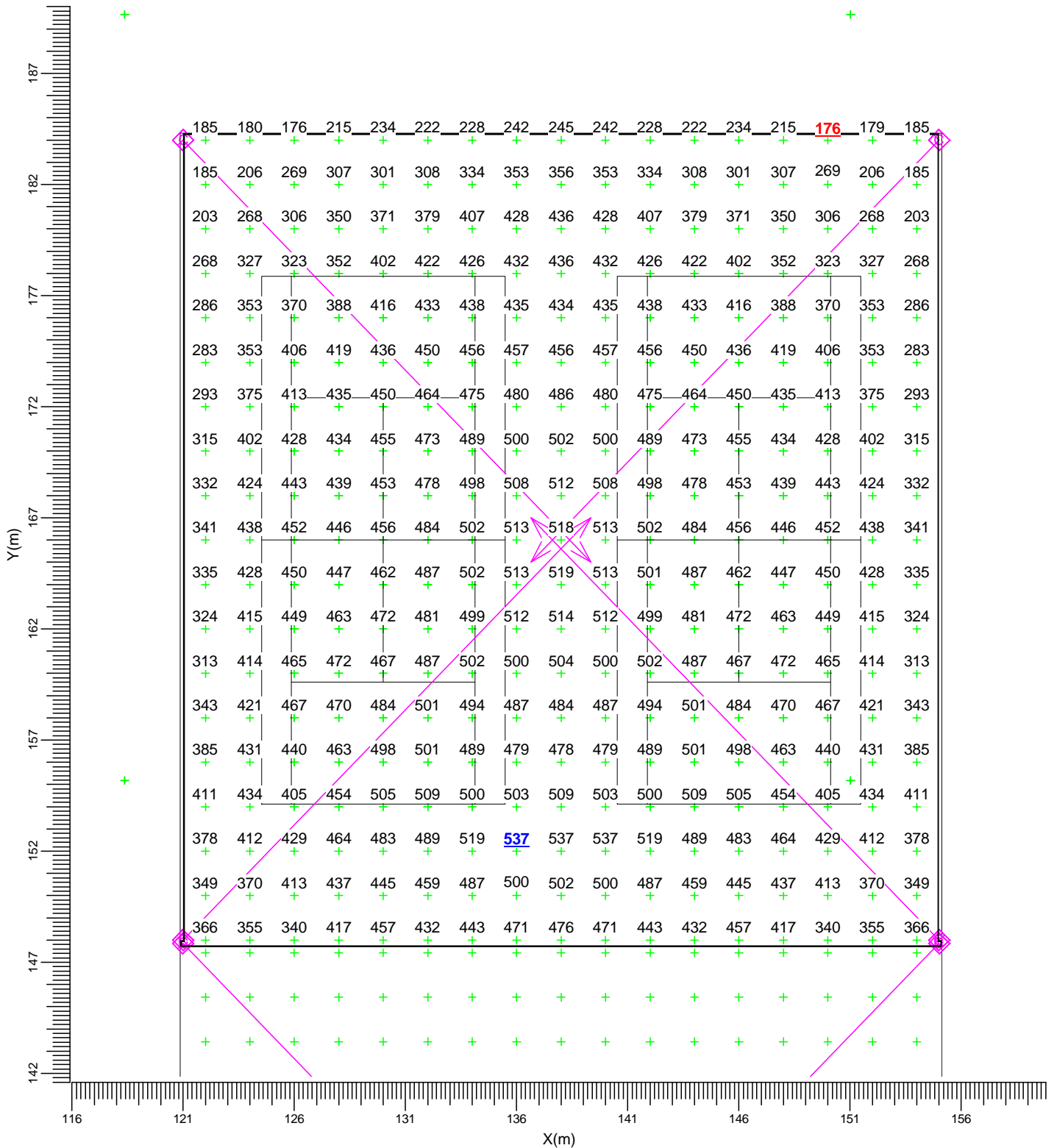


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
455	323	509	0.71	0.63	See summary	1:150

3.63 tennisbanen A en B: Graphical Table

Grid : tennisbanen A en B at Z = -0.00 m
Calculation : Surface Illuminance (lux)

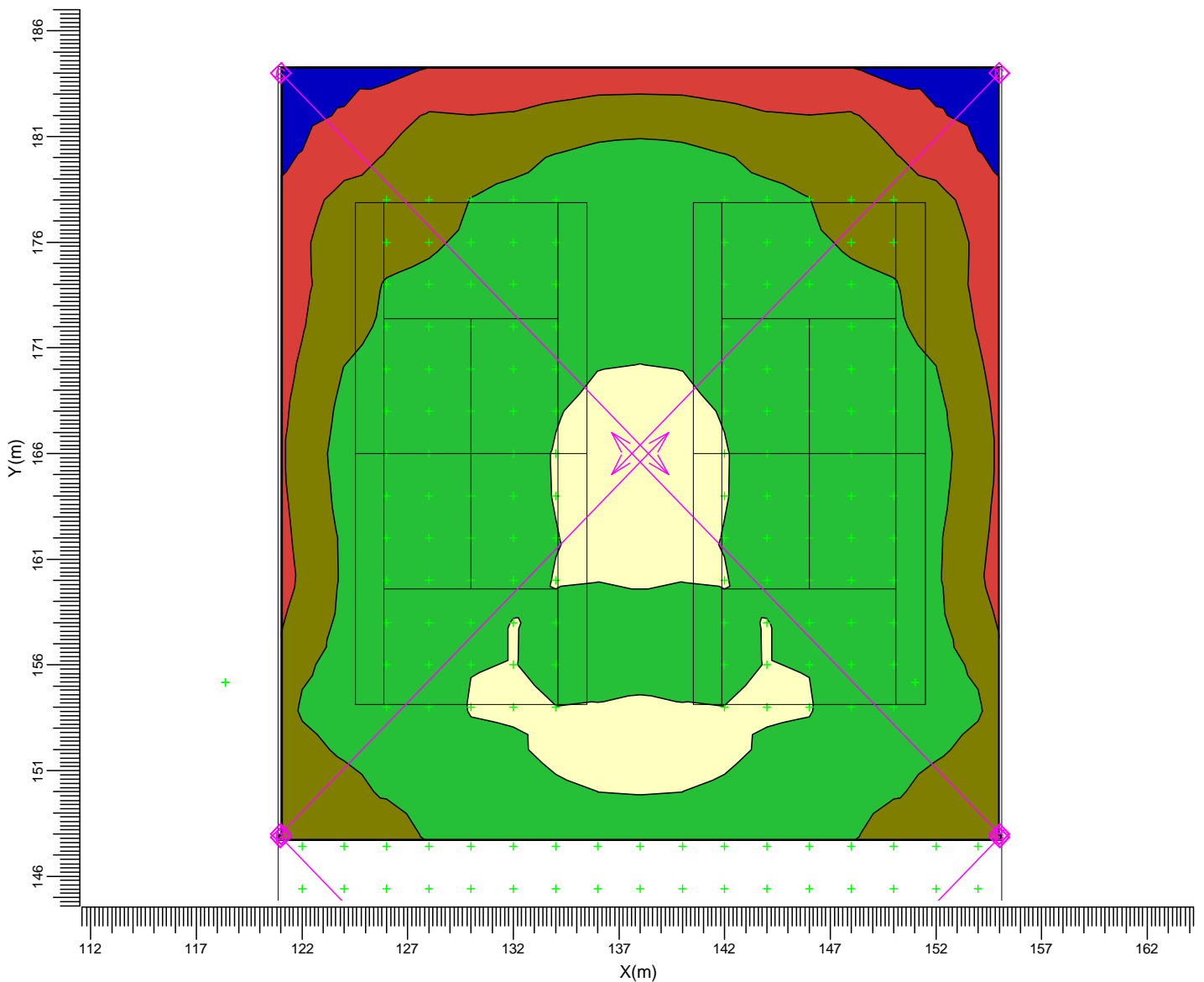


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
414	176	537	0.42	0.33	See summary	1:250

3.64 tennisbanen A en B: Filled Iso Contour

Grid : tennisbanen A en B at Z = -0.00 m
Calculation : Surface Illuminance (lux)

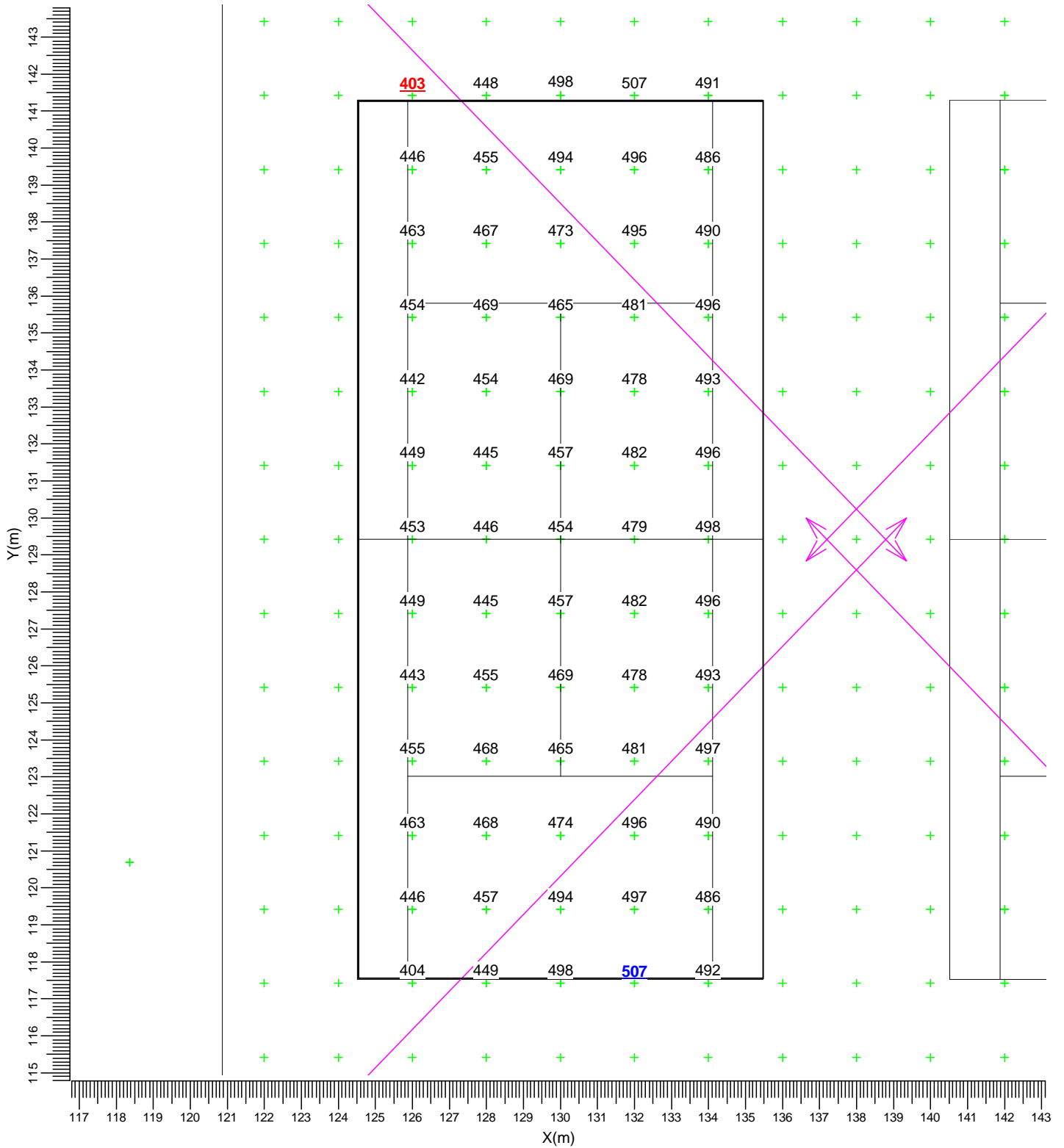


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
414	176	537	0.42	0.33	See summary	1:300

3.65 tennisbaan C: Graphical Table

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

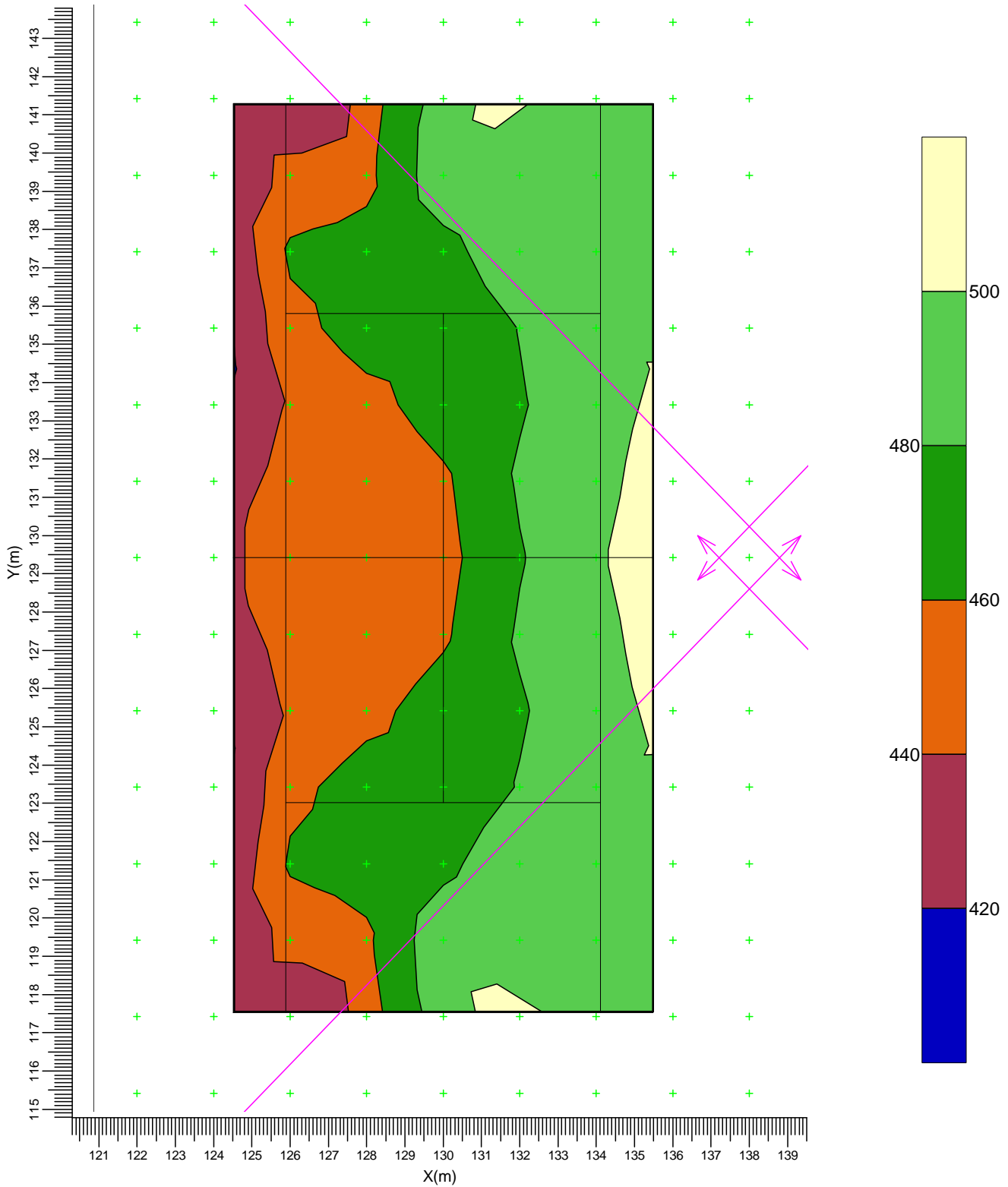


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
471	403	507	0.86	0.79	See summary	1:150

3.66 tennisbaan C: Filled Iso Contour

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

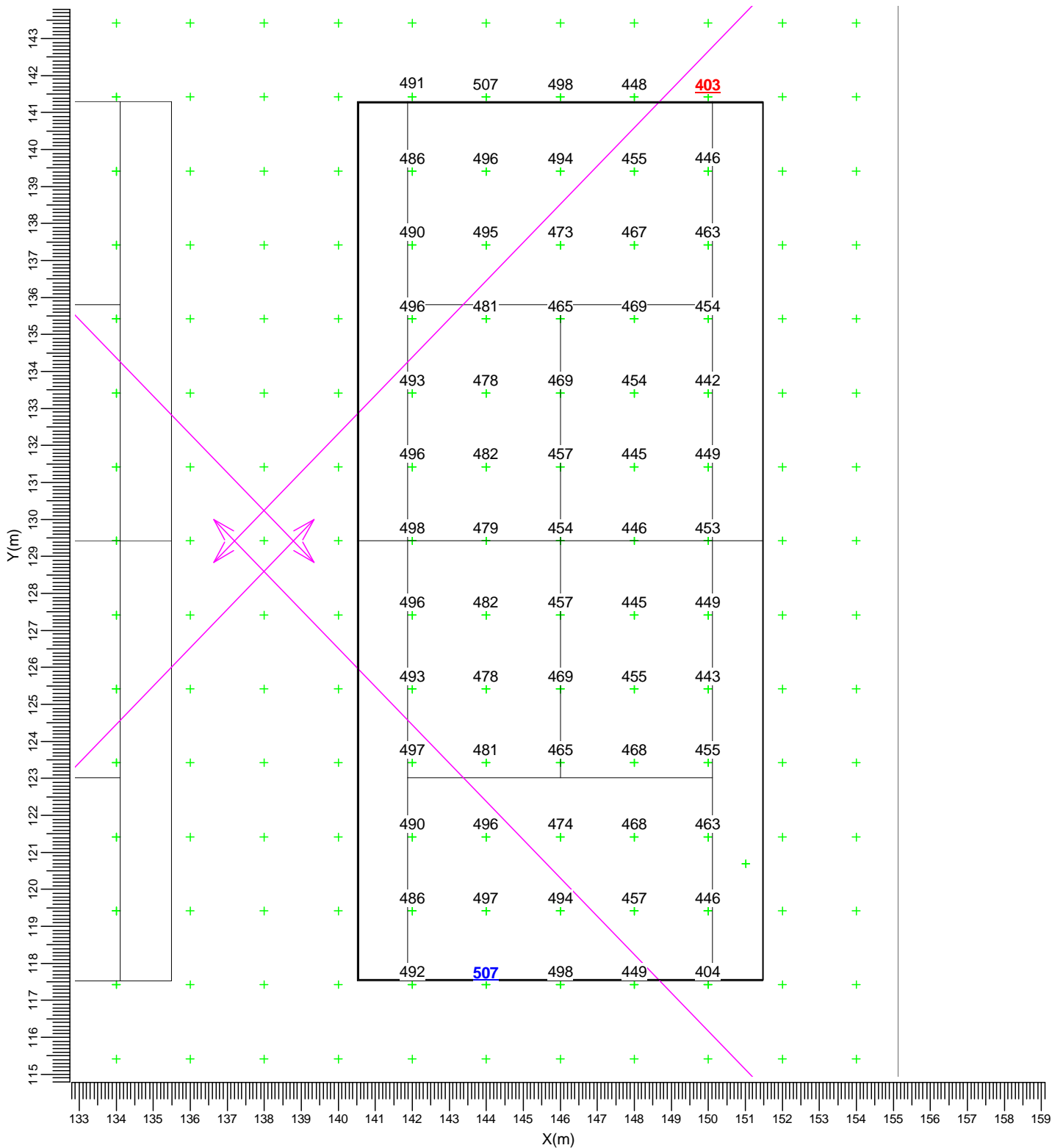


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
471	403	507	0.86	0.79	See summary	1:150

3.67 tennisbaan D: Graphical Table

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

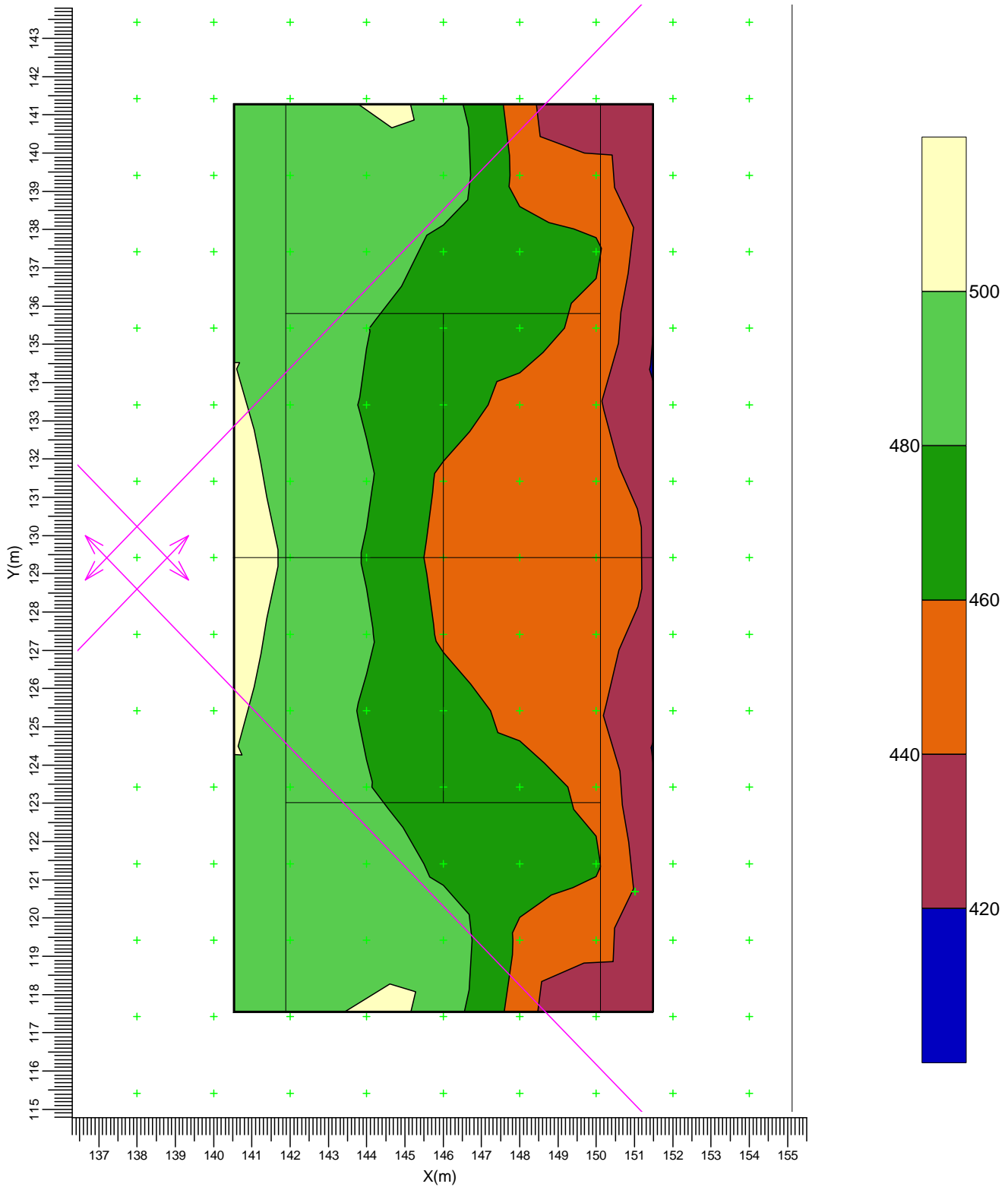


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
471	403	507	0.86	0.79	See summary	1:150

3.68 tennisbaan D: Filled Iso Contour

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

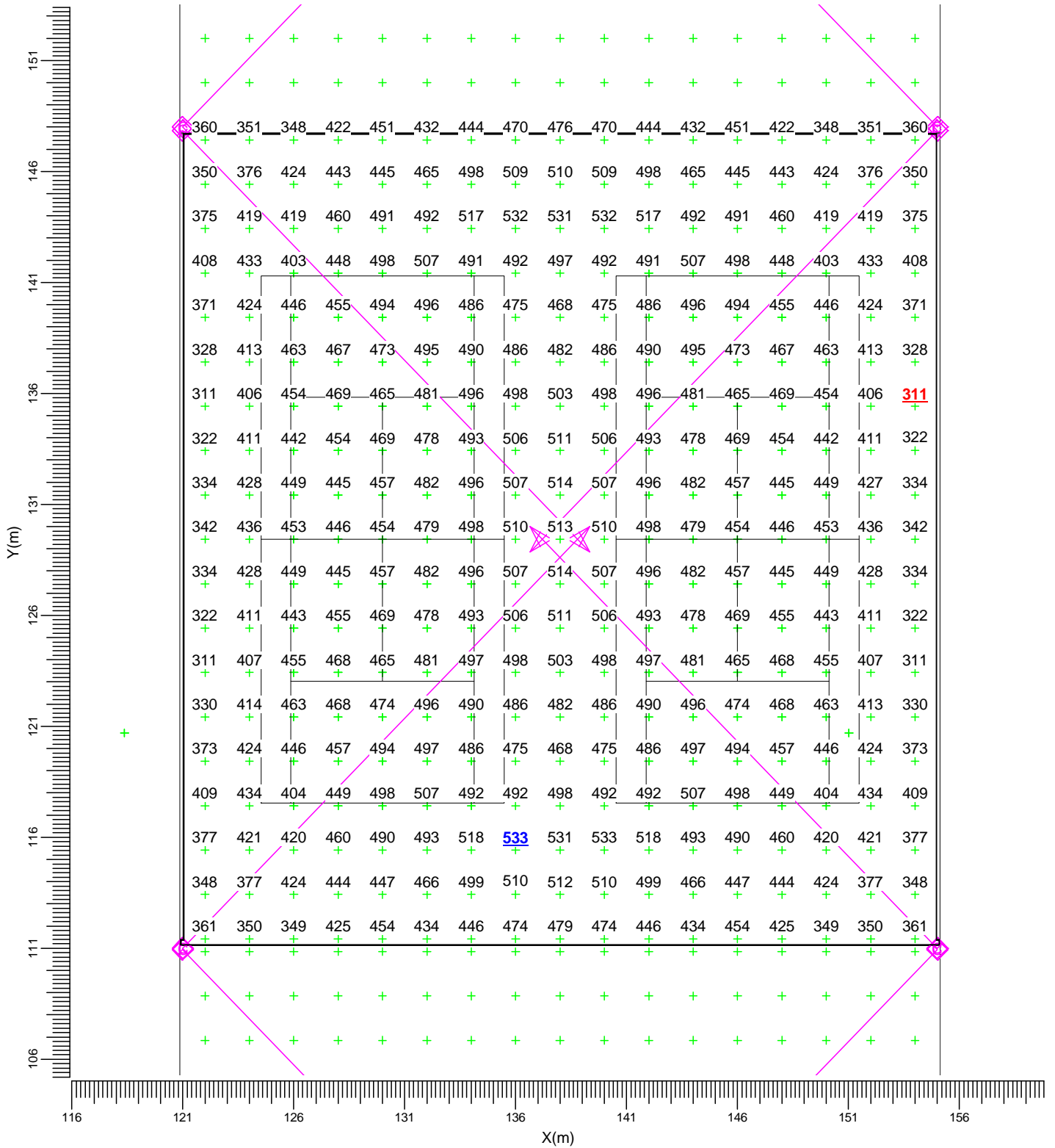


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
471	403	507	0.86	0.79	See summary	1:150

3.69 tennisbanen C en D: Graphical Table

Grid : tennisbanen C en D at Z = -0.00 m
Calculation : Surface Illuminance (lux)

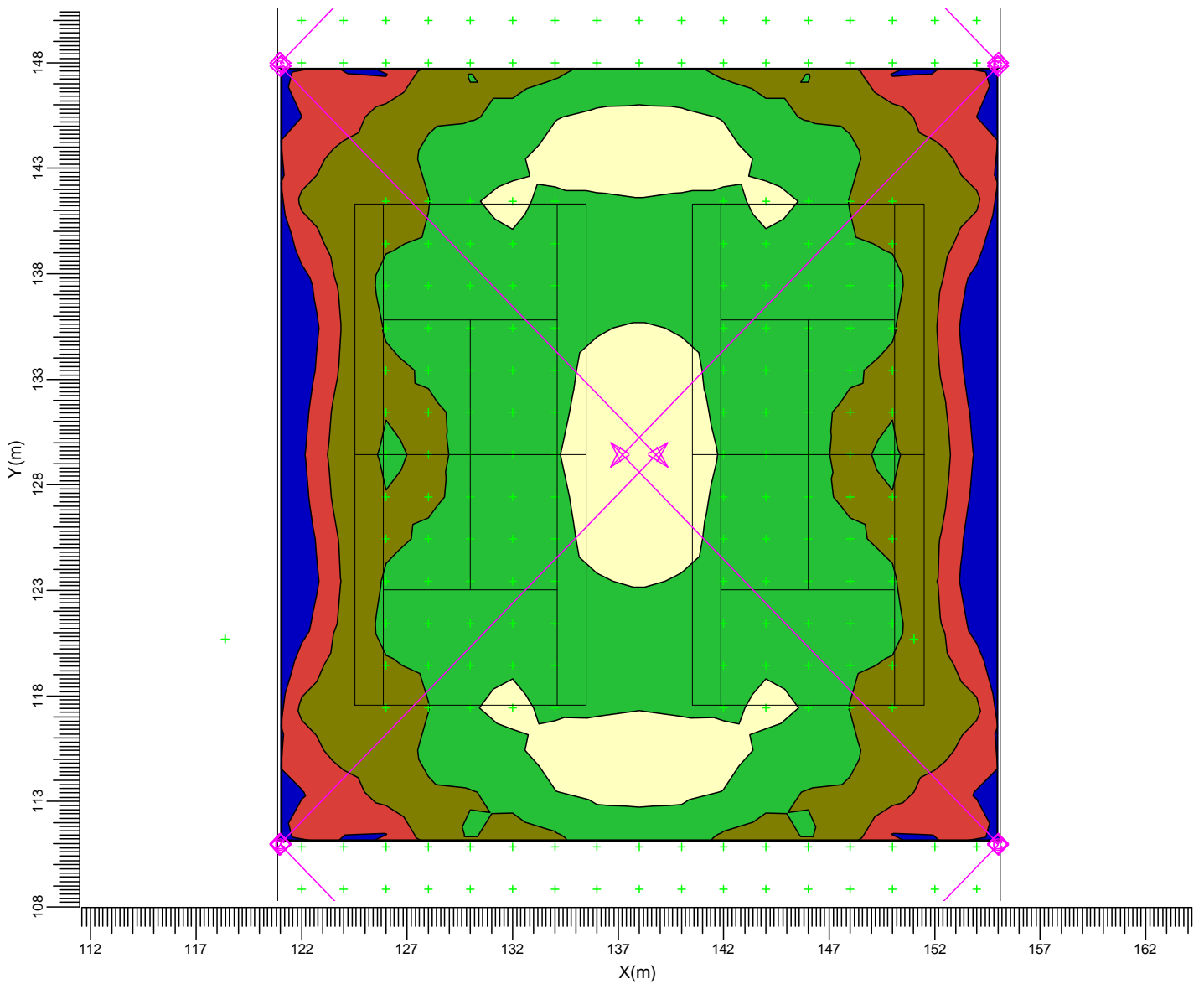


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
451	311	533	0.69	0.58	See summary	1:250

3.70 tennisbanen C en D: Filled Iso Contour

Grid : tennisbanen C en D at Z = -0.00 m
Calculation : Surface Illuminance (lux)

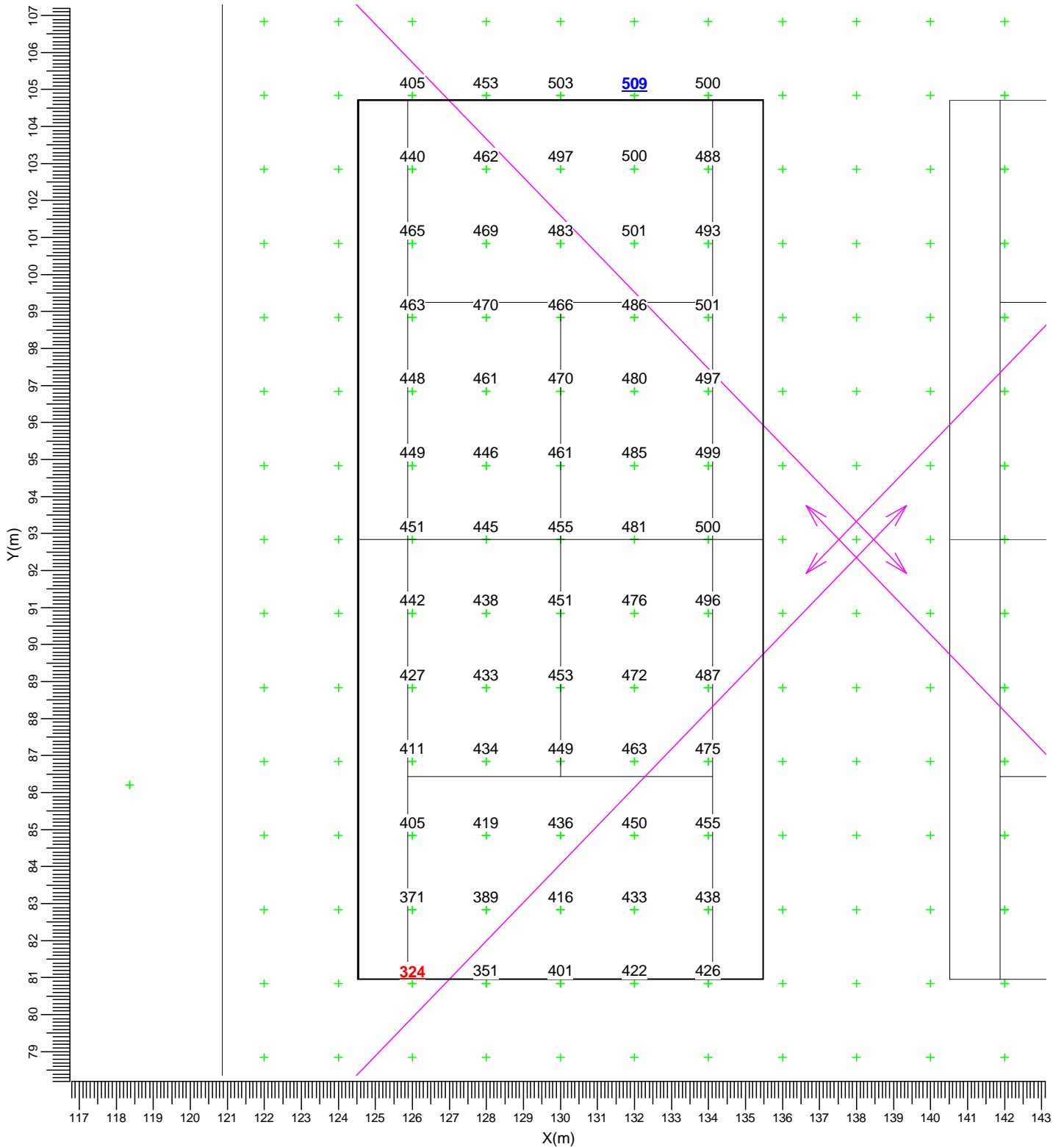


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
451	311	533	0.69	0.58	See summary	1:300

3.71 tennisbaan E: Graphical Table

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

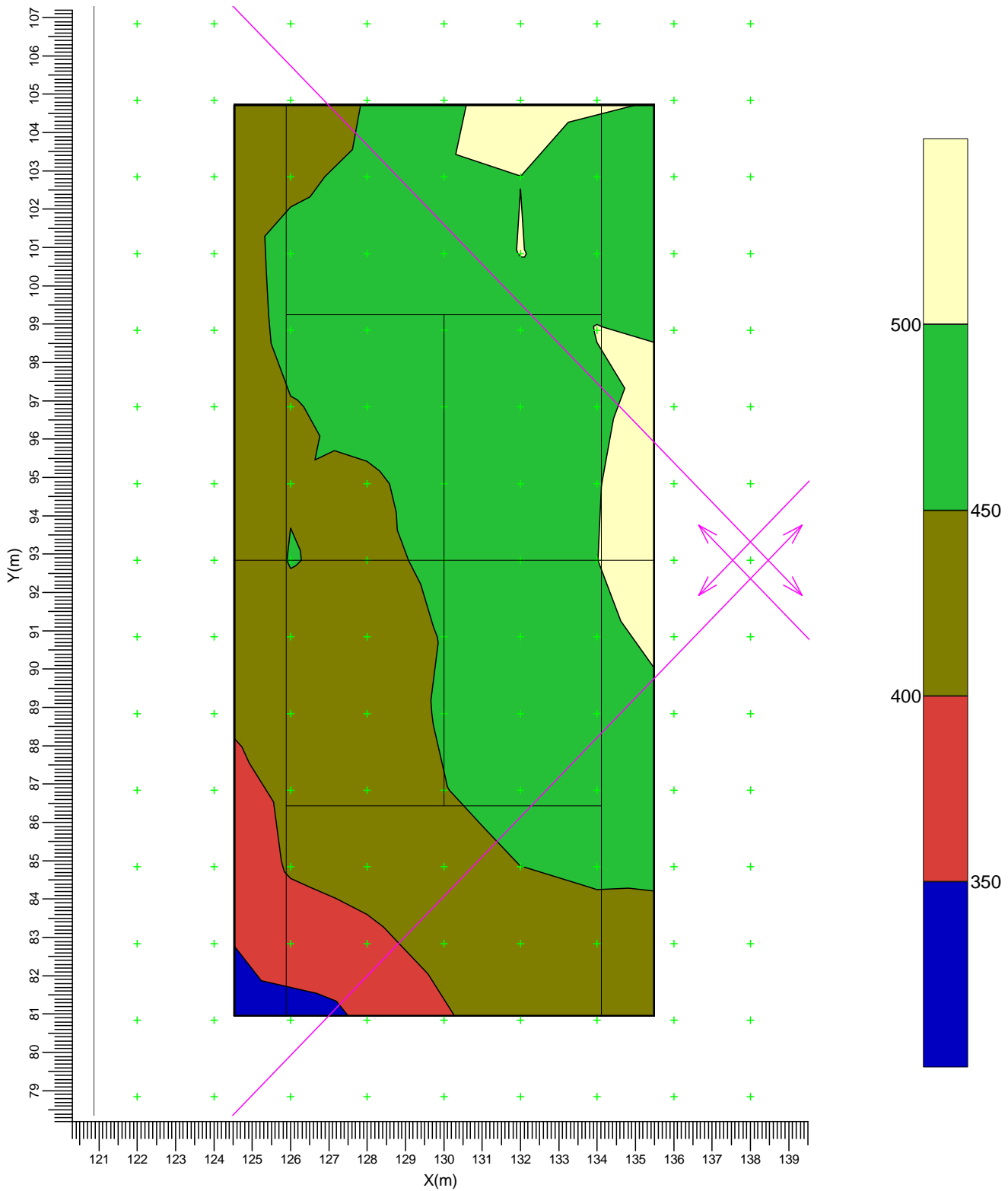


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
454	324	509	0.71	0.64	See summary	1:150

3.72 tennisbaan E: Filled Iso Contour

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

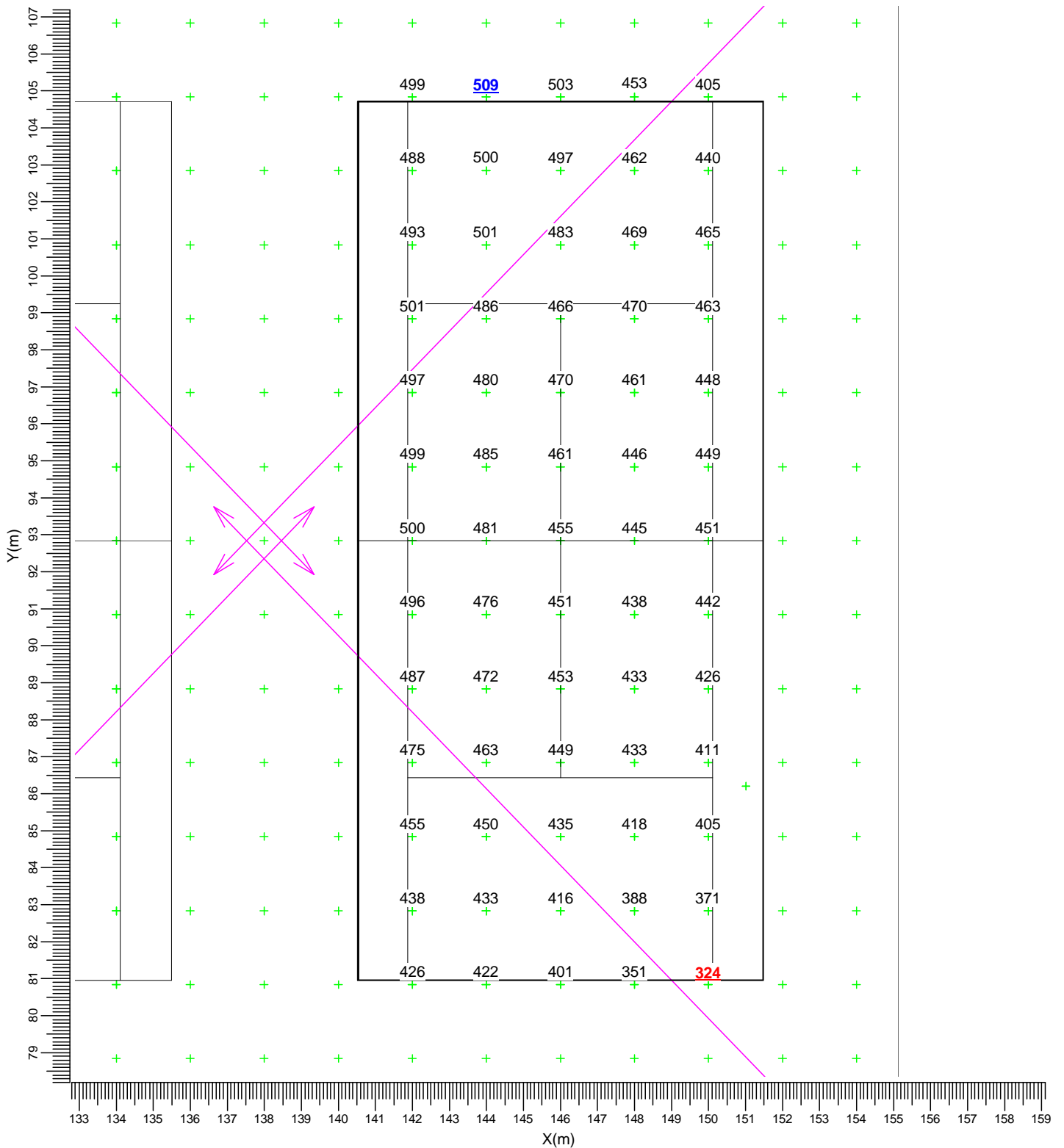


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
454	324	509	0.71	0.64	See summary	1:150

3.73 tennisbaan F: Graphical Table

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

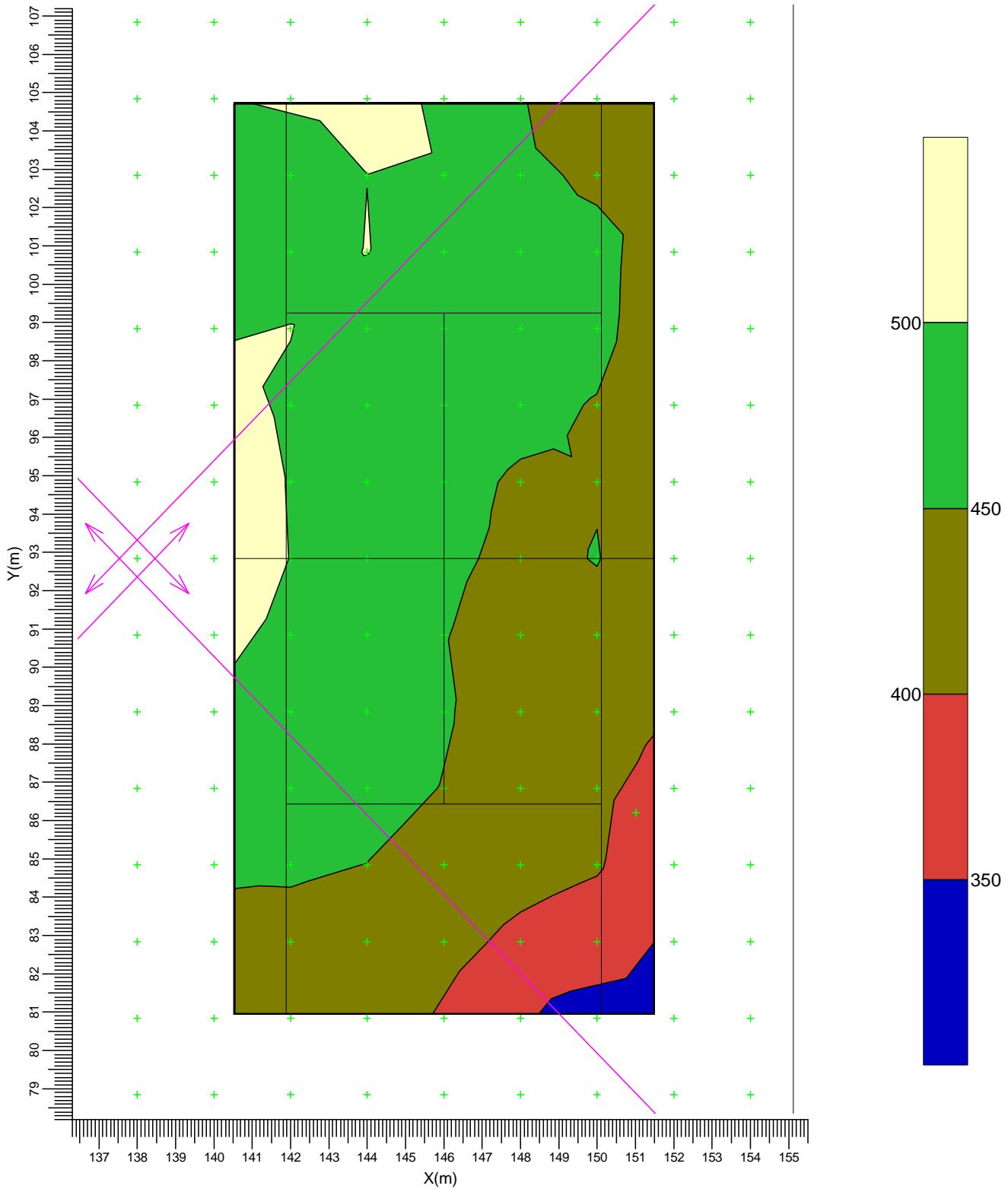


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
454	324	509	0.71	0.64	See summary	1:150

3.74 tennisbaan F: Filled Iso Contour

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

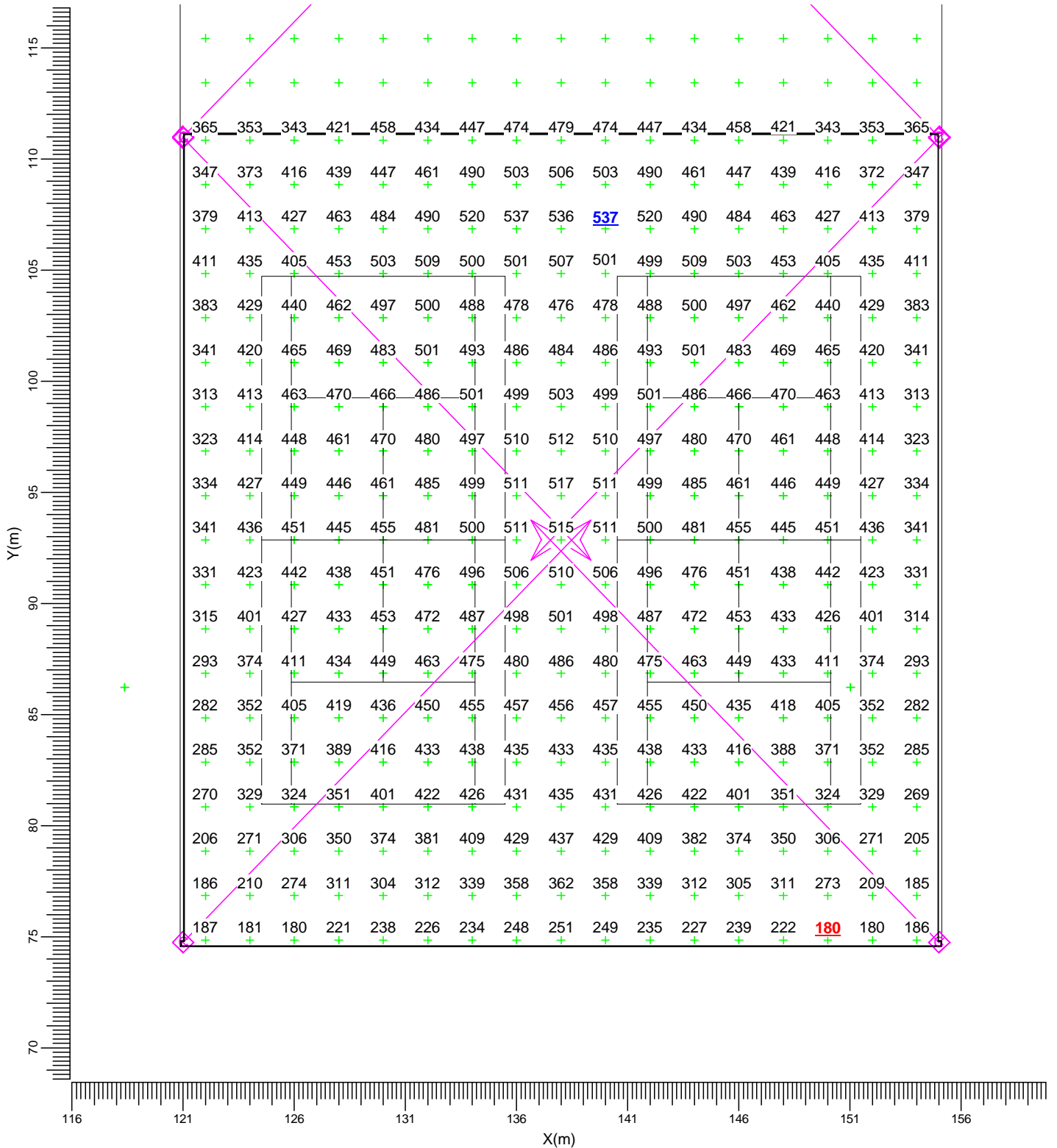


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
454	324	509	0.71	0.64	See summary	1:150

3.75 tennisbanen E en F: Graphical Table

Grid : tennisbanen E en F at Z = -0.00 m
Calculation : Surface Illuminance (lux)

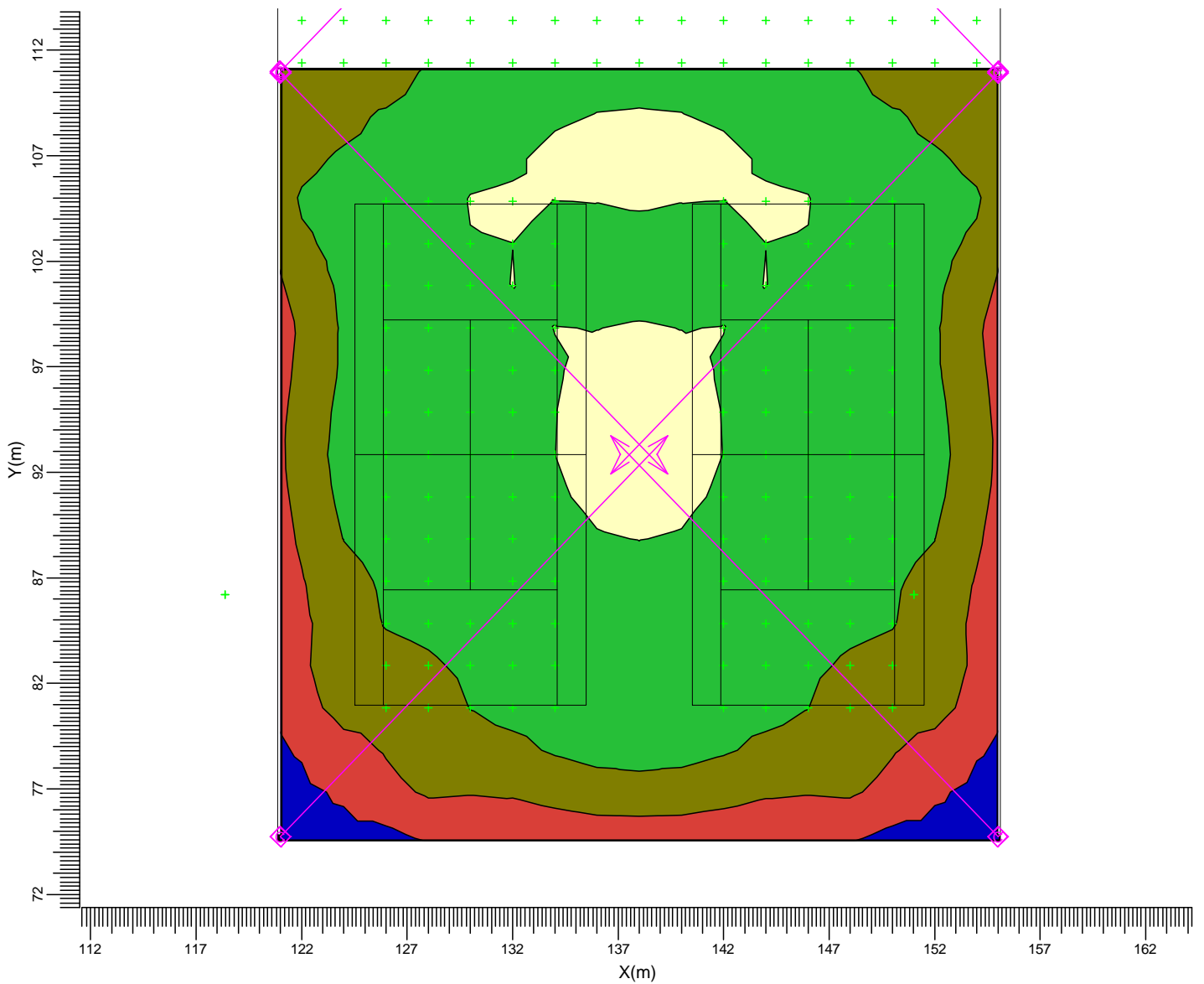


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
414	180	537	0.43	0.33	See summary	1:250

3.76 tennisbanen E en F: Filled Iso Contour

Grid : tennisbanen E en F at Z = -0.00 m
Calculation : Surface Illuminance (lux)

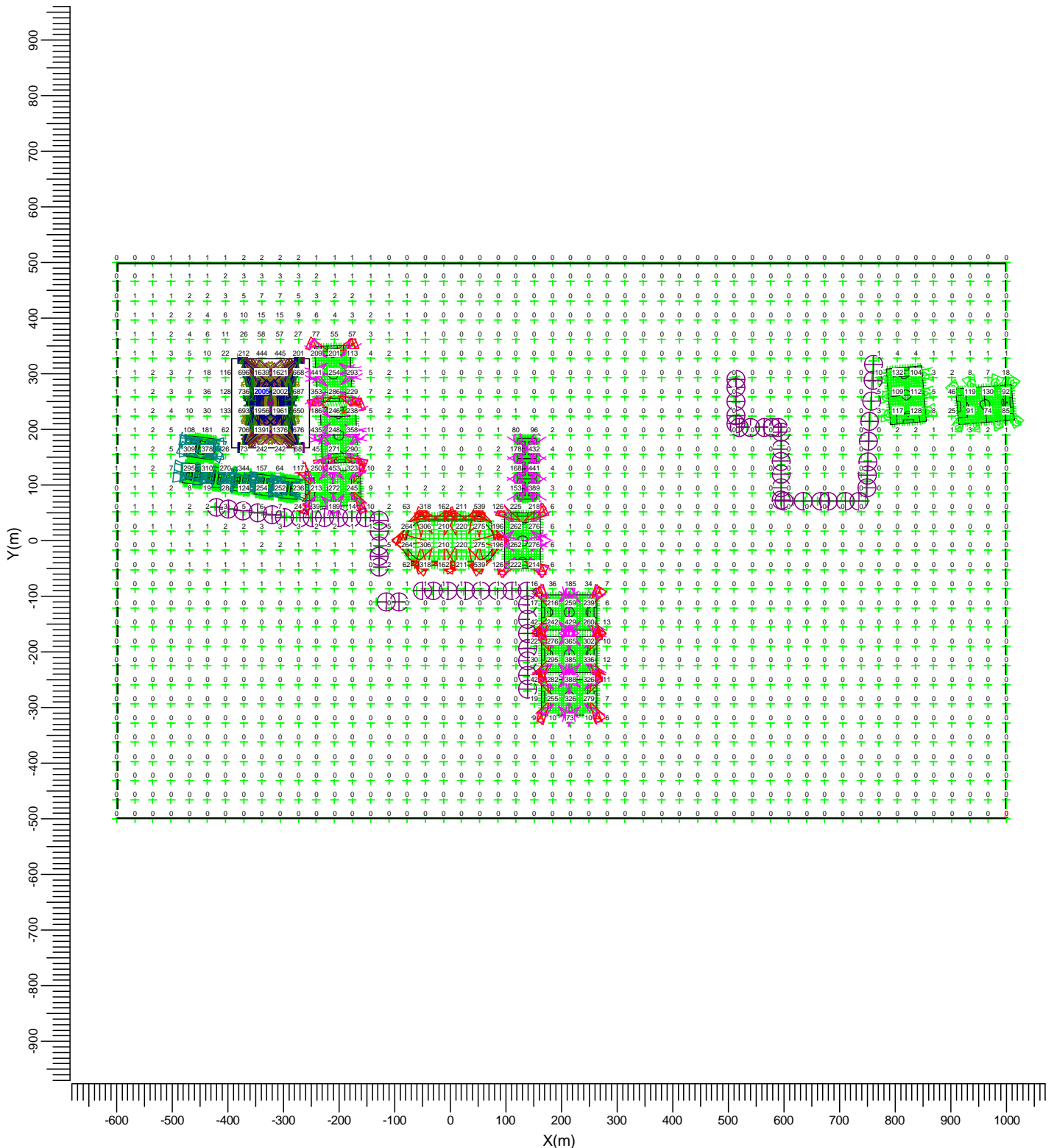


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
414	180	537	0.43	0.33	See summary	1:300

3.77 omgeving: Graphical Table

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

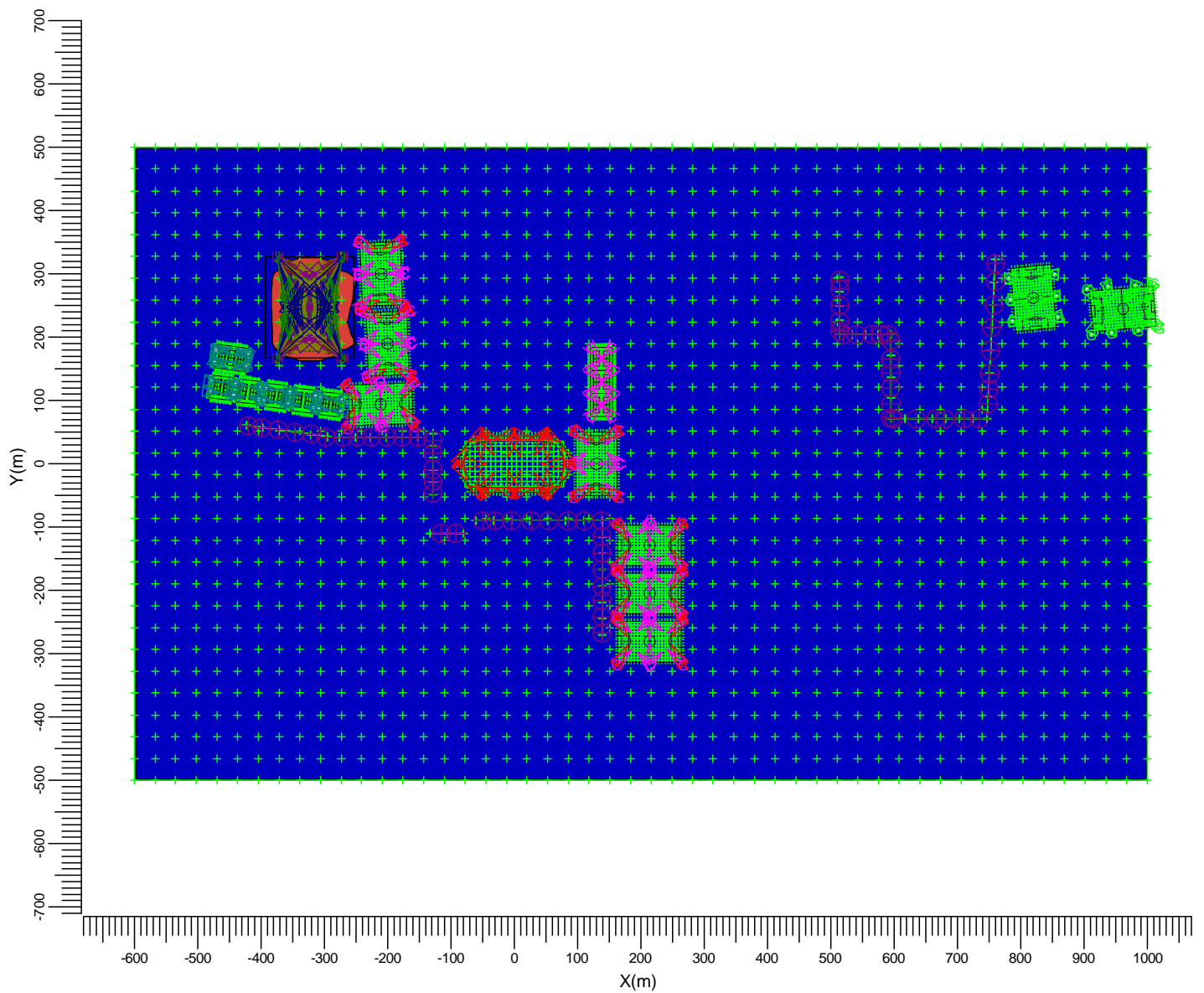


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
33.5	0.0	2004.8	0.00	0.00	See summary	1:10000

3.78 omgeving: Filled Iso Contour

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

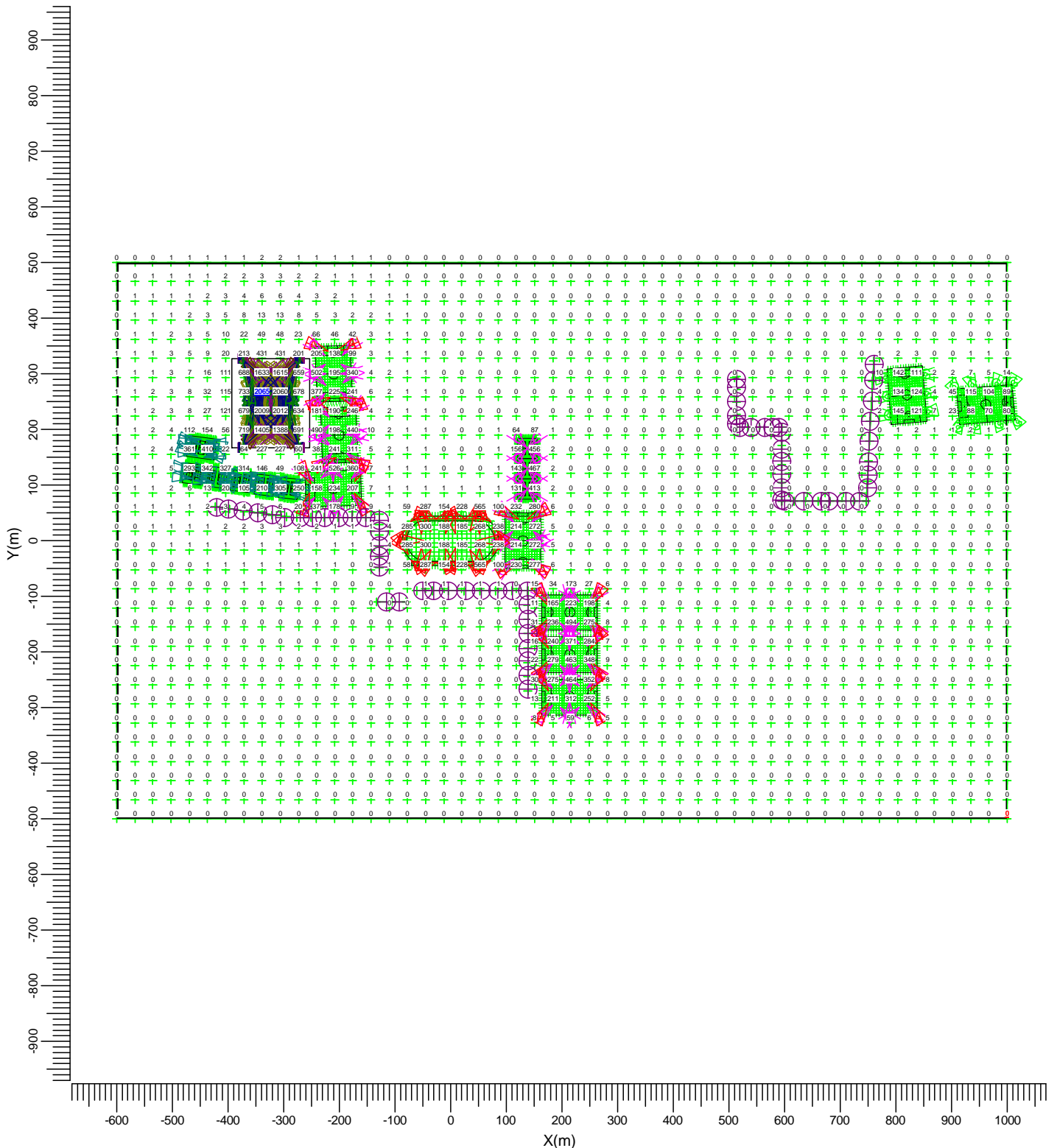


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
33.5	0.0	2004.8	0.00	0.00	See summary	1:10000

3.79 omgeving 1.80: Graphical Table

Grid : omgeving 1.80 at Z = 1.80 m
Calculation : Surface Illuminance (lux)

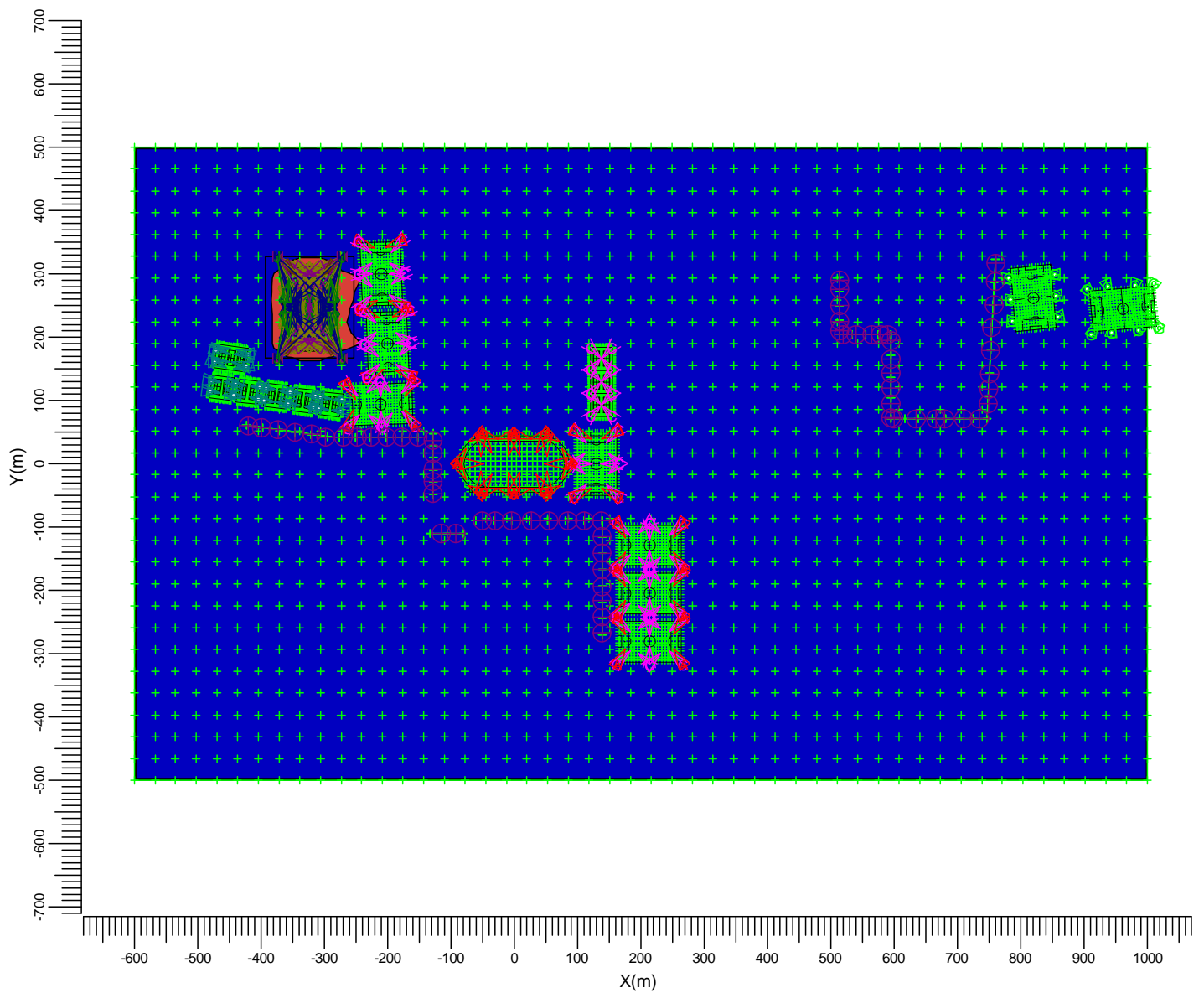


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
33.4	0.0	2064.9	0.00	0.00	See summary	1:10000

3.80 omgeving 1.80: Filled Iso Contour

Grid : omgeving 1.80 at Z = 1.80 m
Calculation : Surface Illuminance (lux)

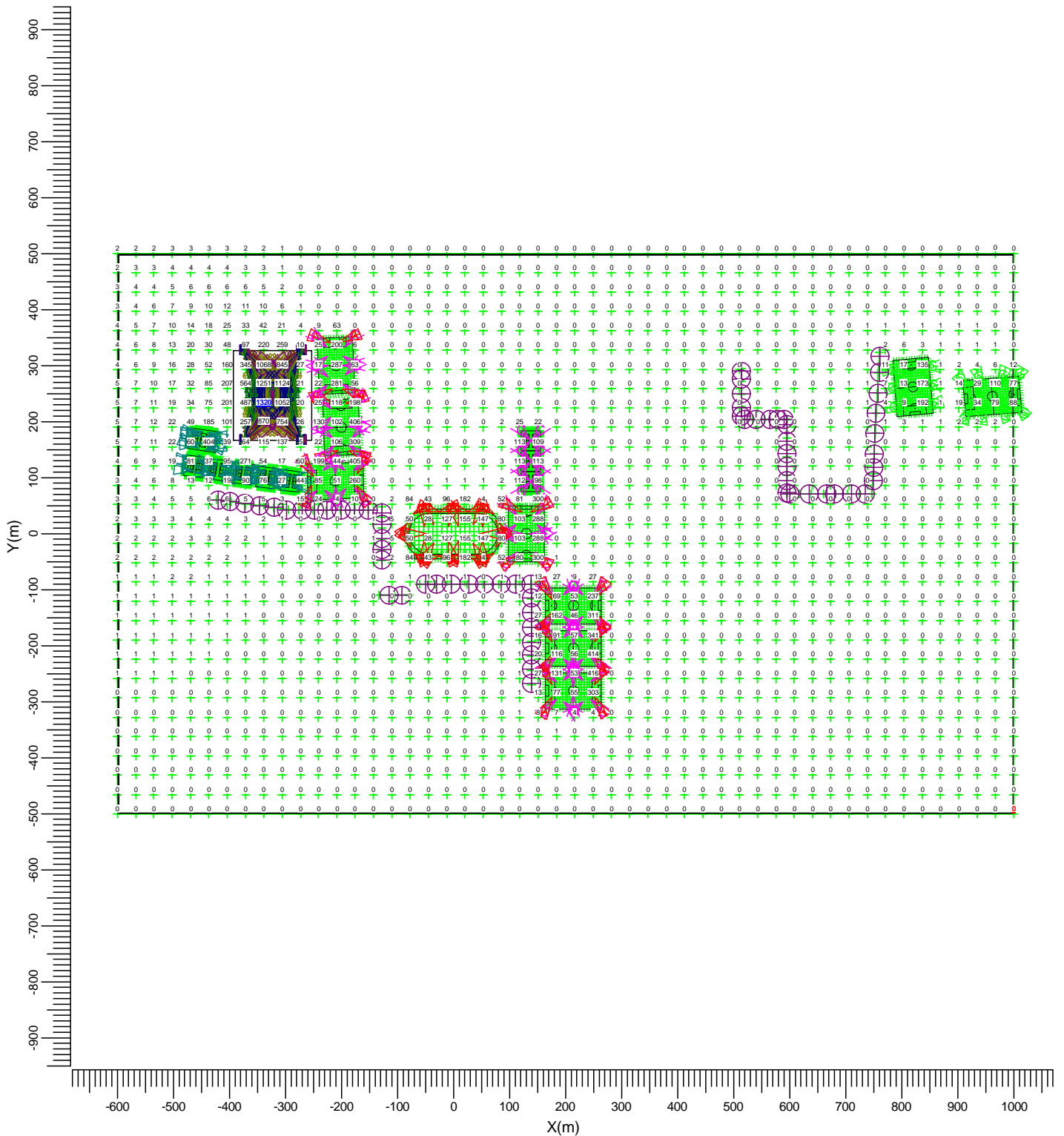


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
33.4	0.0	2064.9	0.00	0.00	See summary	1:10000

3.81 omgeving Ev +X: Graphical Table

Grid : omgeving 1.80 at Z = 1.80 m
 Calculation : Vertical Illuminance in +X direction (lux)
 Height above grid : 0.00 m

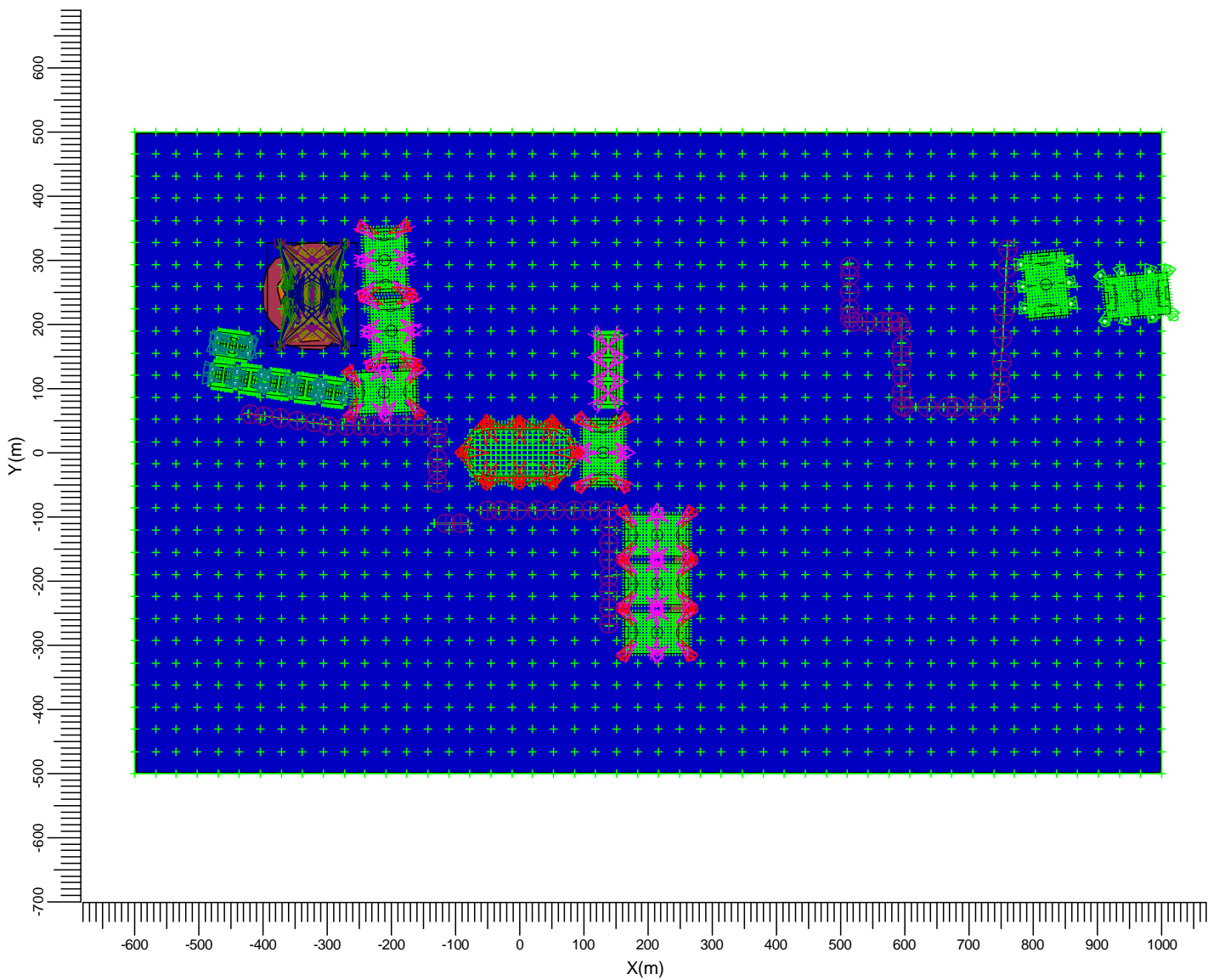
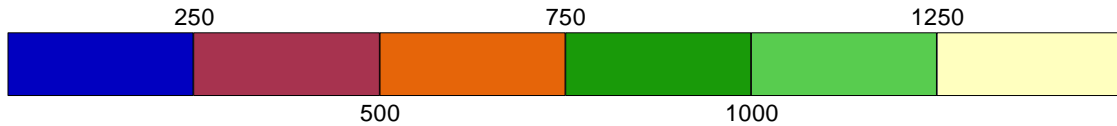


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
17.8	0.0	1320.4	0.00	0.00	See summary	1:10000

3.82 omgeving Ev +X: Filled Iso Contour

Grid : omgeving 1.80 at Z = 1.80 m
 Calculation : Vertical Illuminance in +X direction (lux)
 Height above grid : 0.00 m

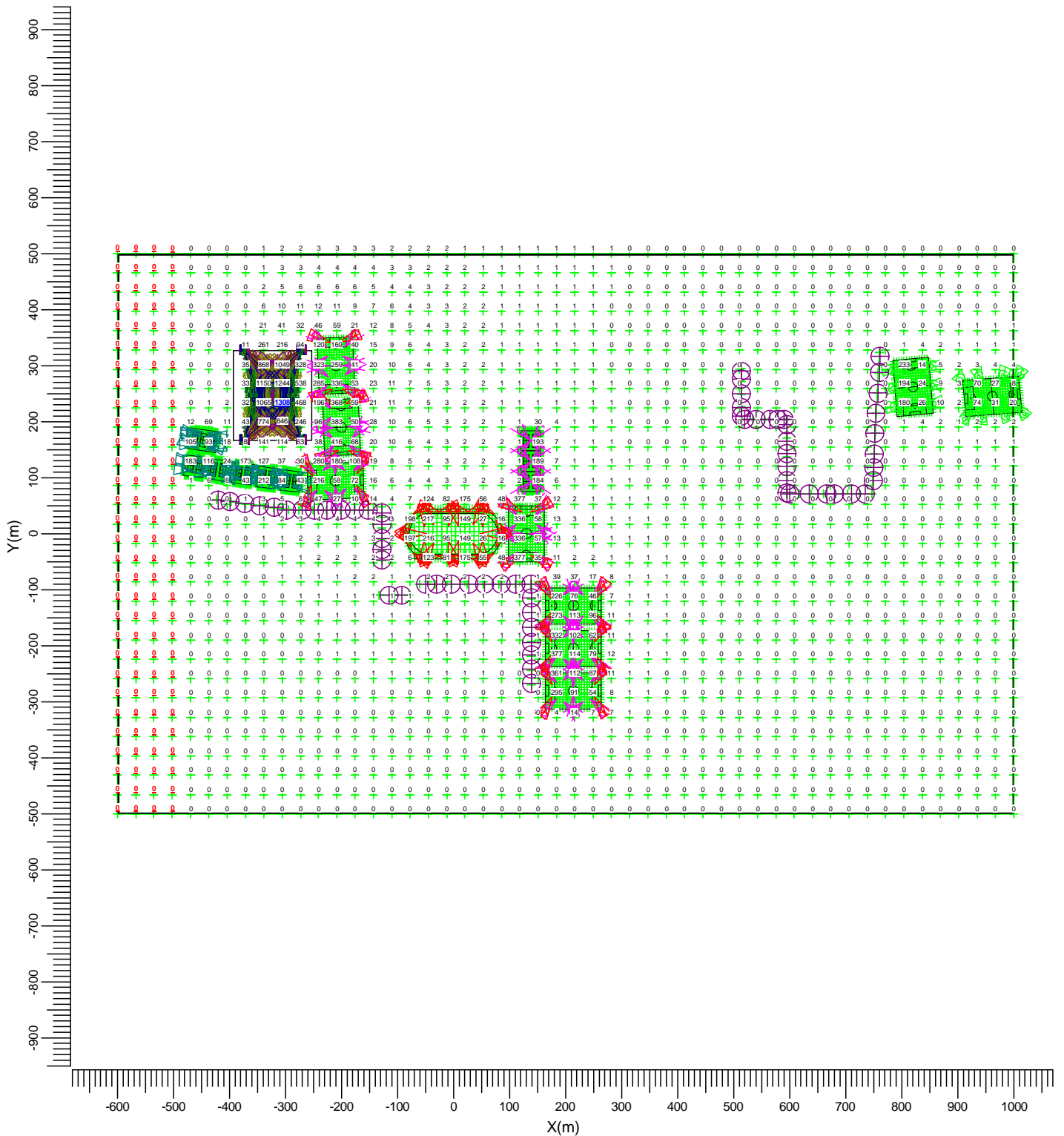


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
17.8	0.0	1320.4	0.00	0.00	See summary	1:10000

3.83 omgeving Ev -X: Graphical Table

Grid : omgeving 1.80 at Z = 1.80 m
 Calculation : Vertical Illuminance in -X direction (lux)
 Height above grid : 0.00 m

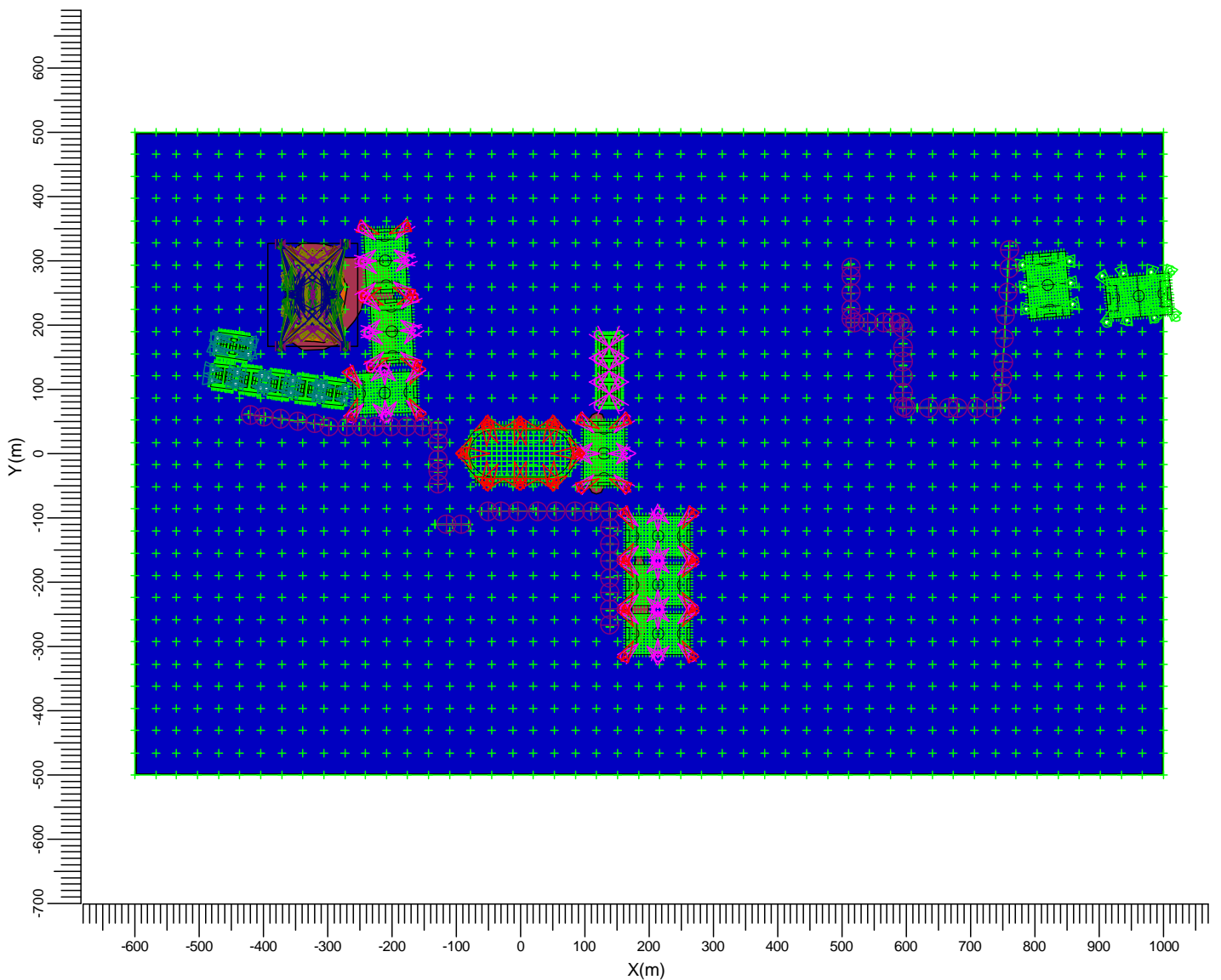
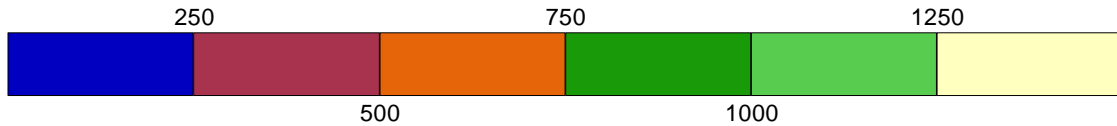


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
17.8	0.0	1307.6	0.00	0.00	See summary	1:10000

3.84 omgeving Ev -X: Filled Iso Contour

Grid : omgeving 1.80 at Z = 1.80 m
 Calculation : Vertical Illuminance in -X direction (lux)
 Height above grid : 0.00 m

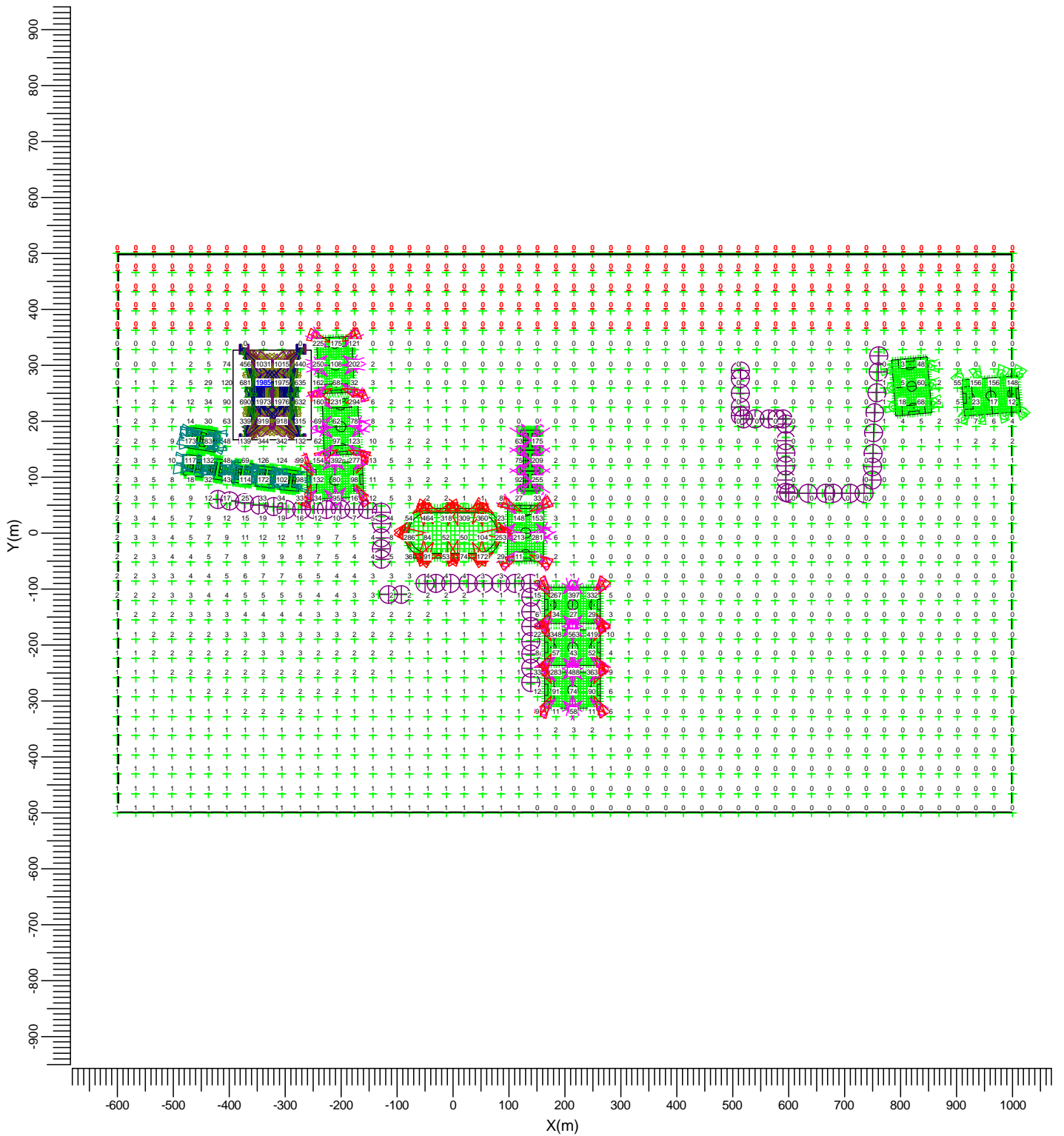


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
17.8	0.0	1307.6	0.00	0.00	See summary	1:10000

3.85 omgeving Ev +Y: Graphical Table

Grid : omgeving 1.80 at Z = 1.80 m
 Calculation : Vertical Illuminance in +Y direction (lux)
 Height above grid : 0.00 m

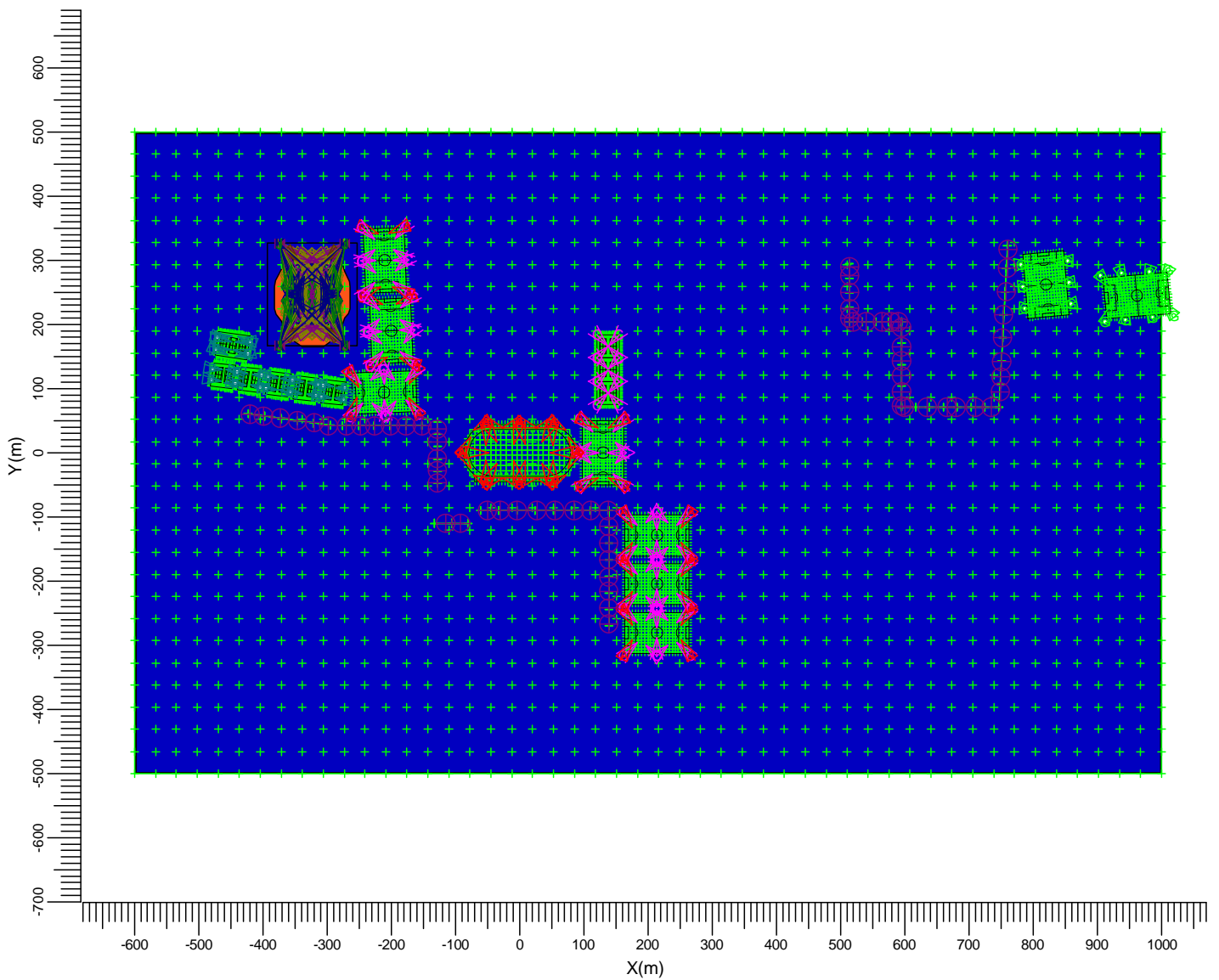
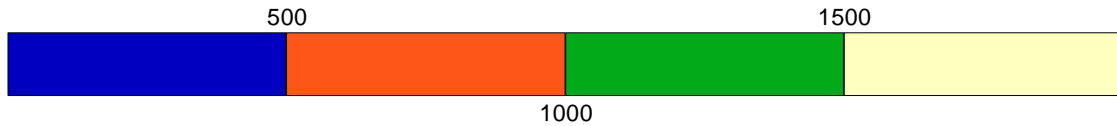


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
22.5	0.0	1984.9	0.00	0.00	See summary	1:10000

3.86 omgeving Ev +Y: Filled Iso Contour

Grid : omgeving 1.80 at Z = 1.80 m
 Calculation : Vertical Illuminance in +Y direction (lux)
 Height above grid : 0.00 m

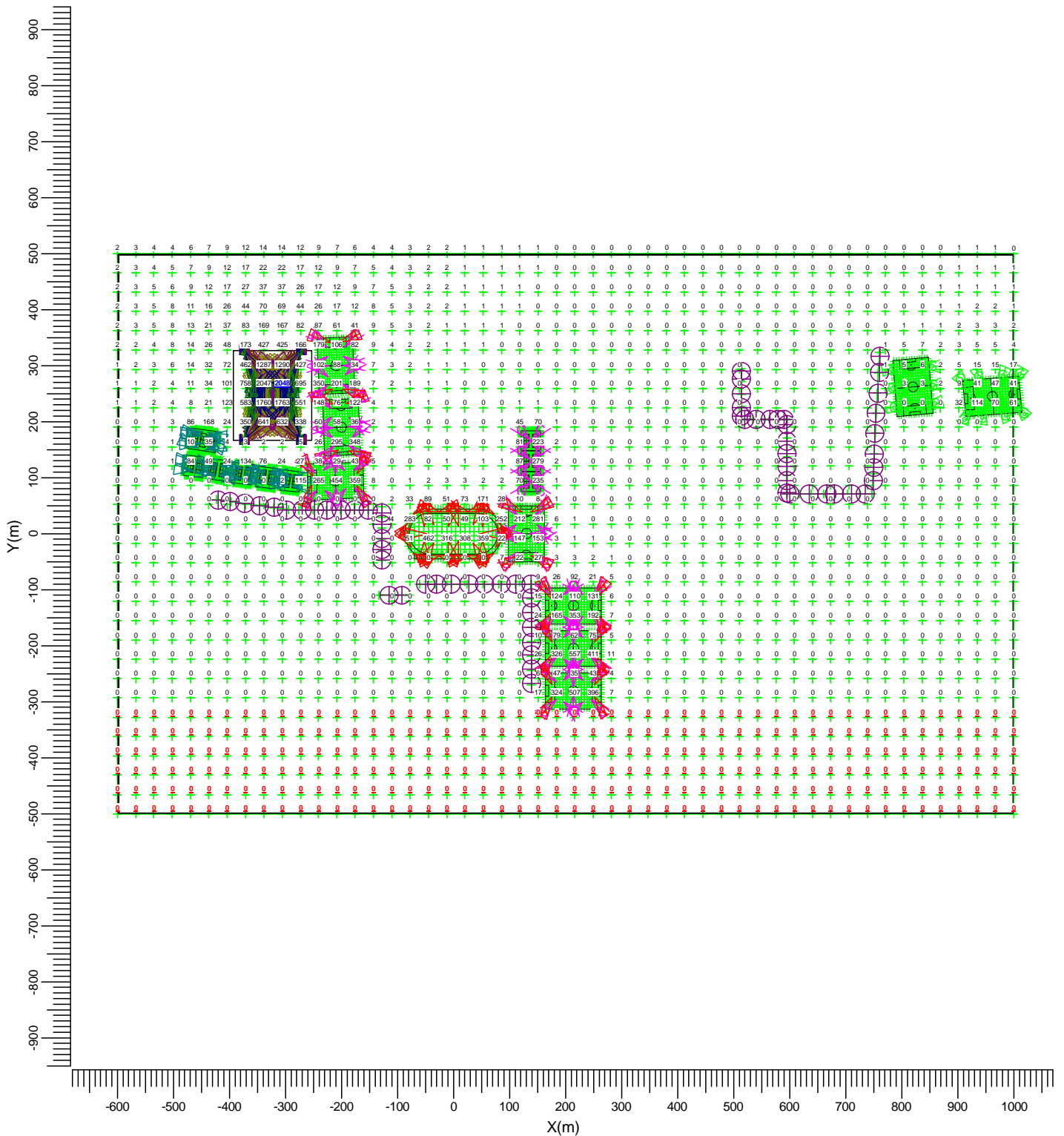


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
22.5	0.0	1984.9	0.00	0.00	See summary	1:10000

3.87 omgeving Ev -Y: Graphical Table

Grid : omgeving 1.80 at Z = 1.80 m
 Calculation : Vertical Illuminance in -Y direction (lux)
 Height above grid : 0.00 m

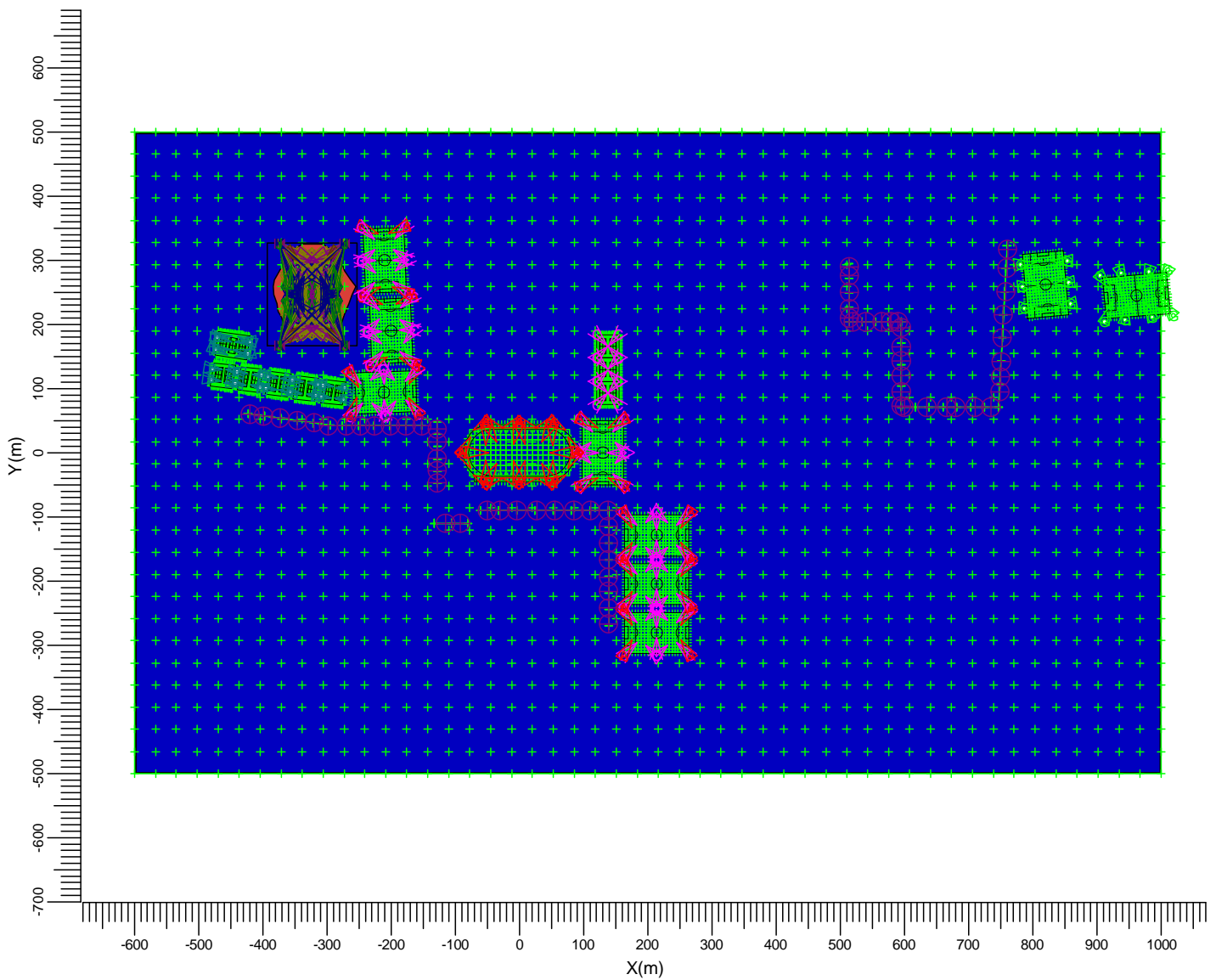


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
22.2	0.0	2048.1	0.00	0.00	See summary	1:10000

3.88 omgeving Ev -Y: Filled Iso Contour

Grid : omgeving 1.80 at Z = 1.80 m
 Calculation : Vertical Illuminance in -Y direction (lux)
 Height above grid : 0.00 m

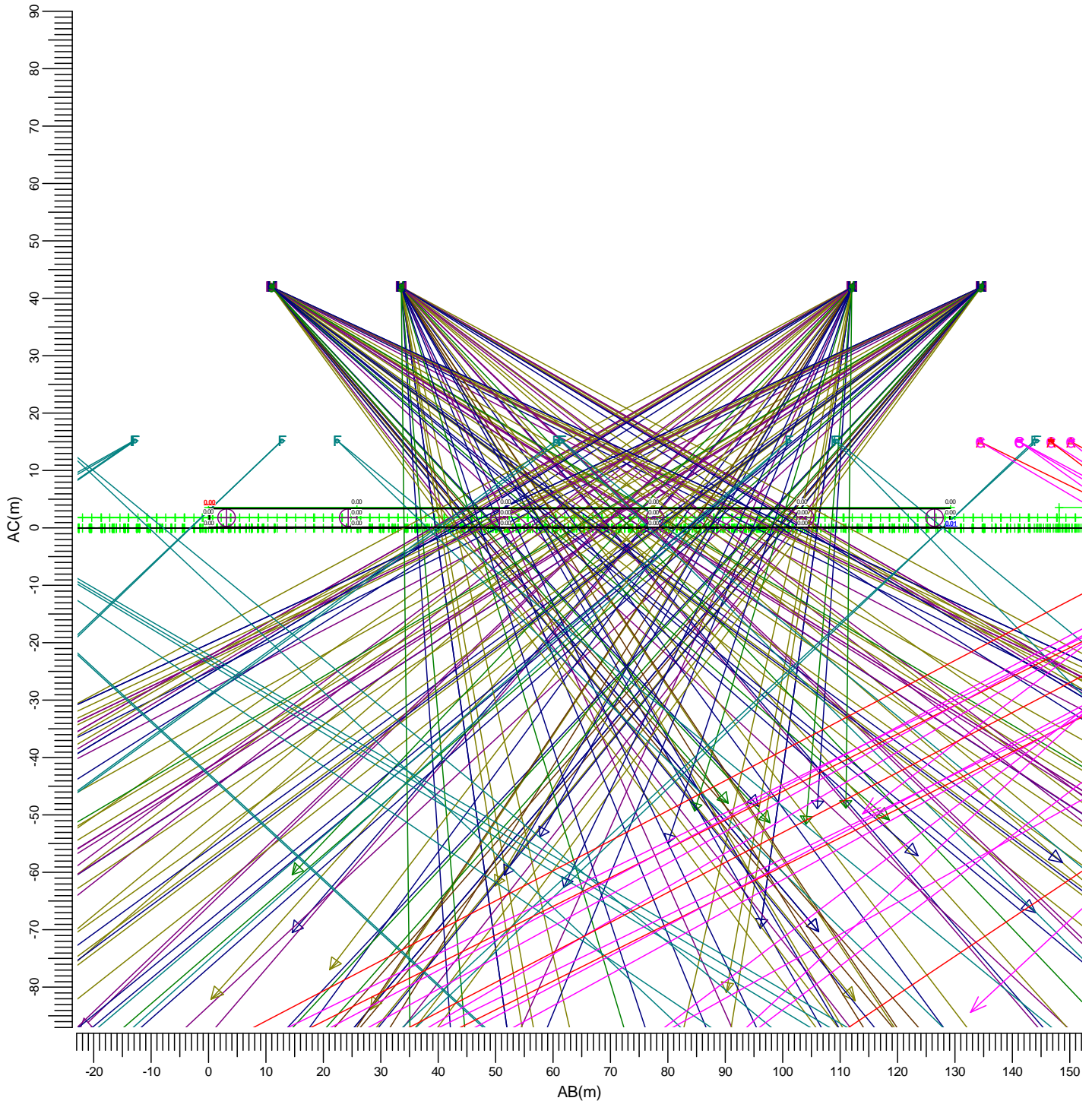


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
22.2	0.0	2048.1	0.00	0.00	See summary	1:10000

3.89 WG 1 woningen A: Graphical Table

Grid : WG 1 woningen A
Calculation : Surface Illuminance (lux)



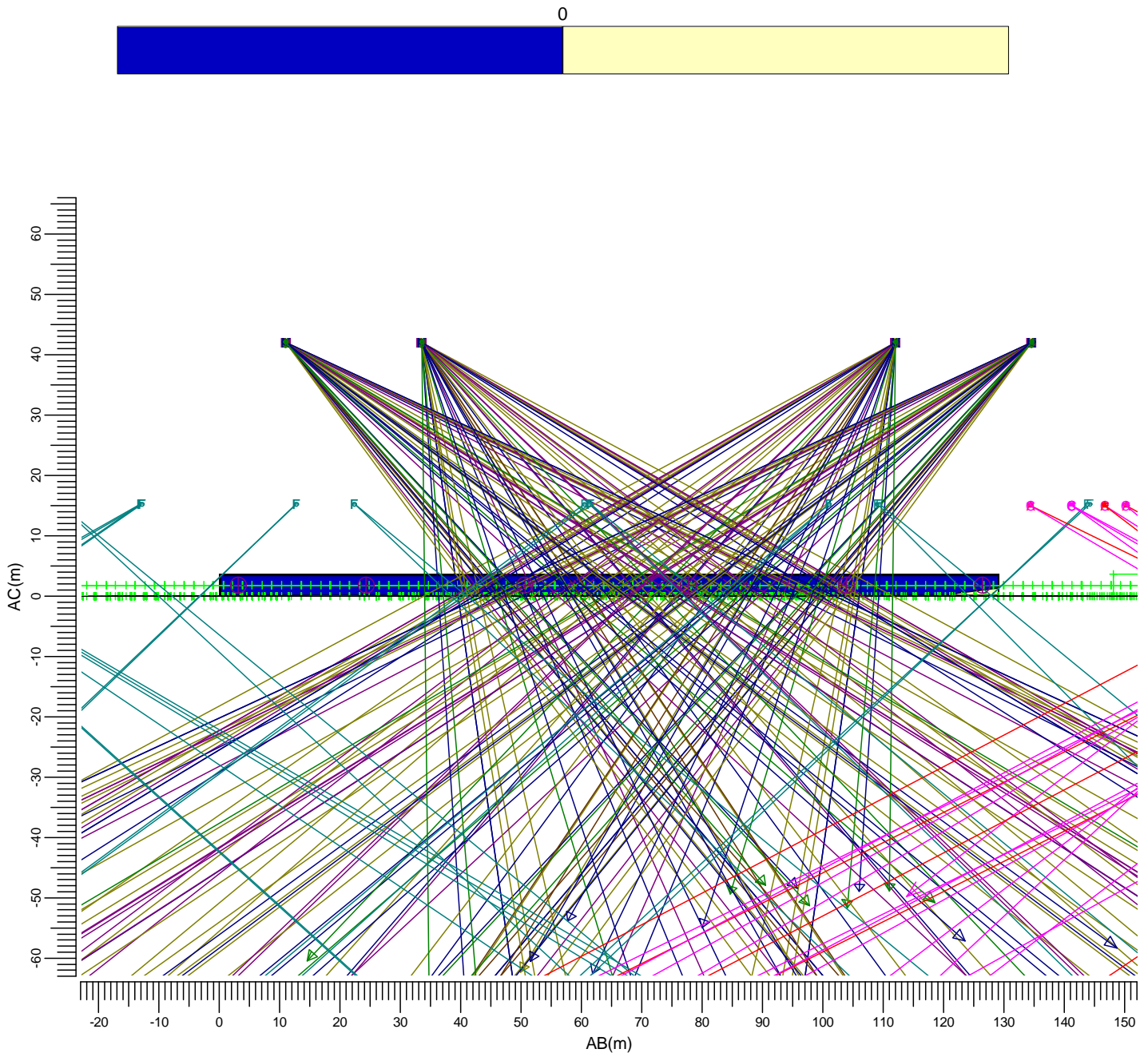
(-423.00, 61.00, 3.60) C-----D (-295.00, 42.80, 3.60)
 | |
 (-423.00, 61.00, -0.00) A-----B (-295.00, 42.80, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.00	0.00	0.01	0.62	0.38	See summary	1:1000

3.90 WG 1 woningen A: Filled Iso Contour

Grid : WG 1 woningen A
Calculation : Surface Illuminance (lux)



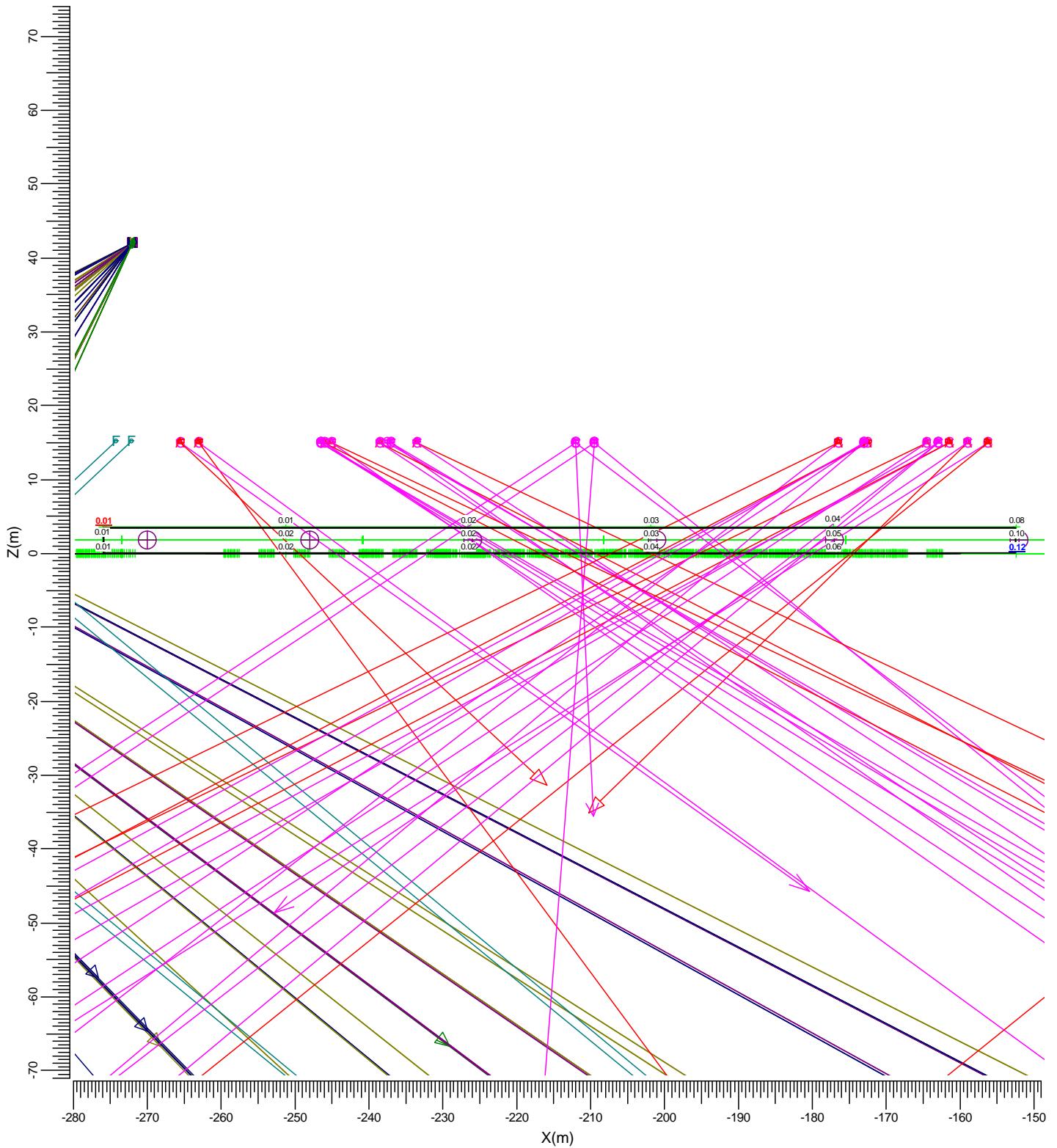
(-423.00, 61.00, 3.60) C-----D (-295.00, 42.80, 3.60)
 (-423.00, 61.00, -0.00) A-----B (-295.00, 42.80, -0.00)

- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.00	0.00	0.01	0.62	0.38	See summary	1:1000

3.91 WG 1 woningen B: Graphical Table

Grid : WG 1 woningen B at Y = 42.50 m
Calculation : Surface Illuminance (lux)

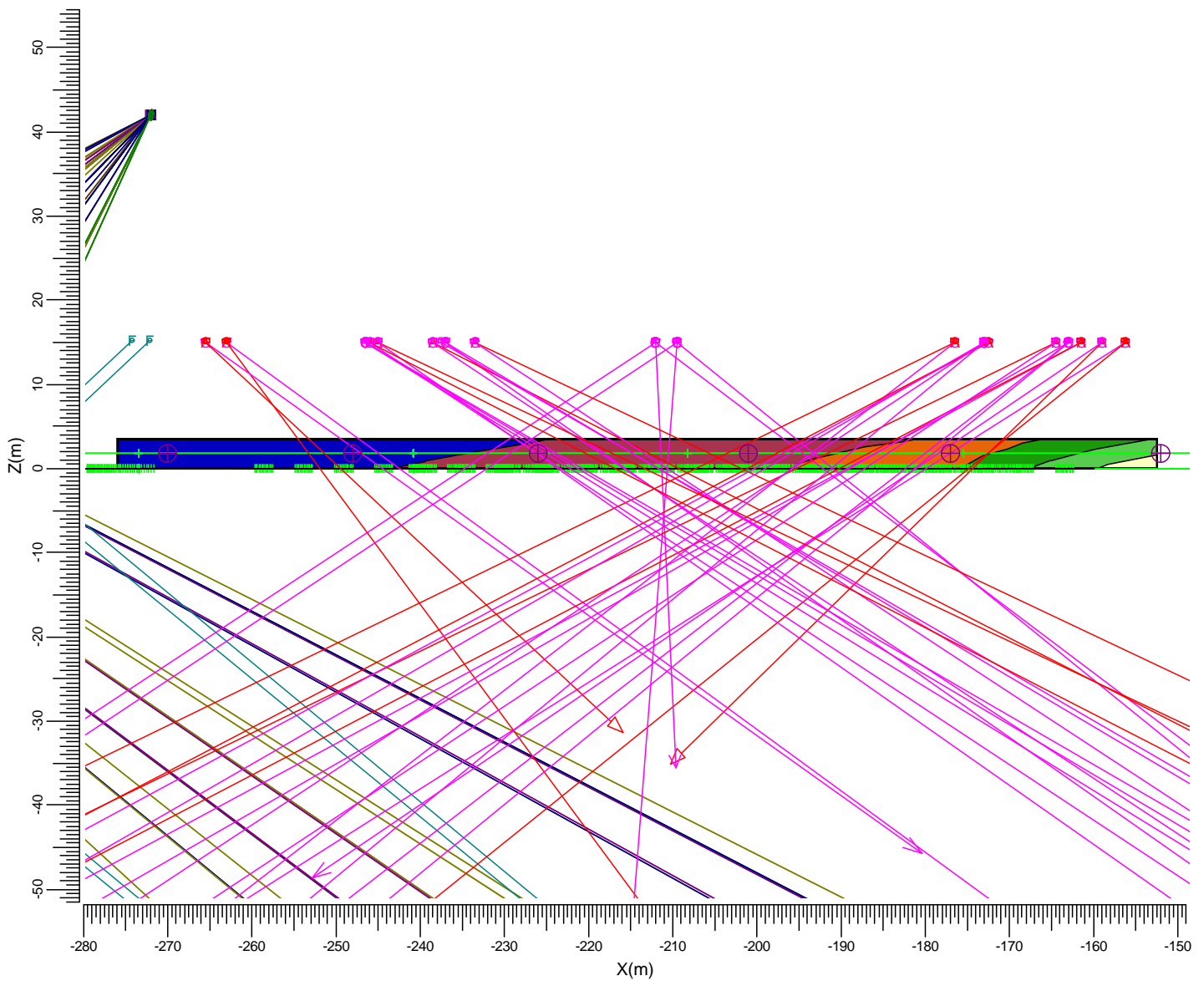
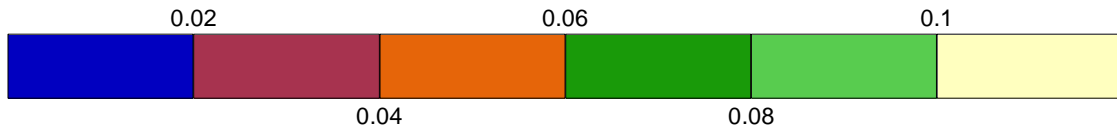


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|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.04	0.01	0.12	0.29	0.10	See summary	1:750

3.92 WG 1 woningen B: Filled Iso Contour

Grid : WG 1 woningen B at Y = 42.50 m
Calculation : Surface Illuminance (lux)

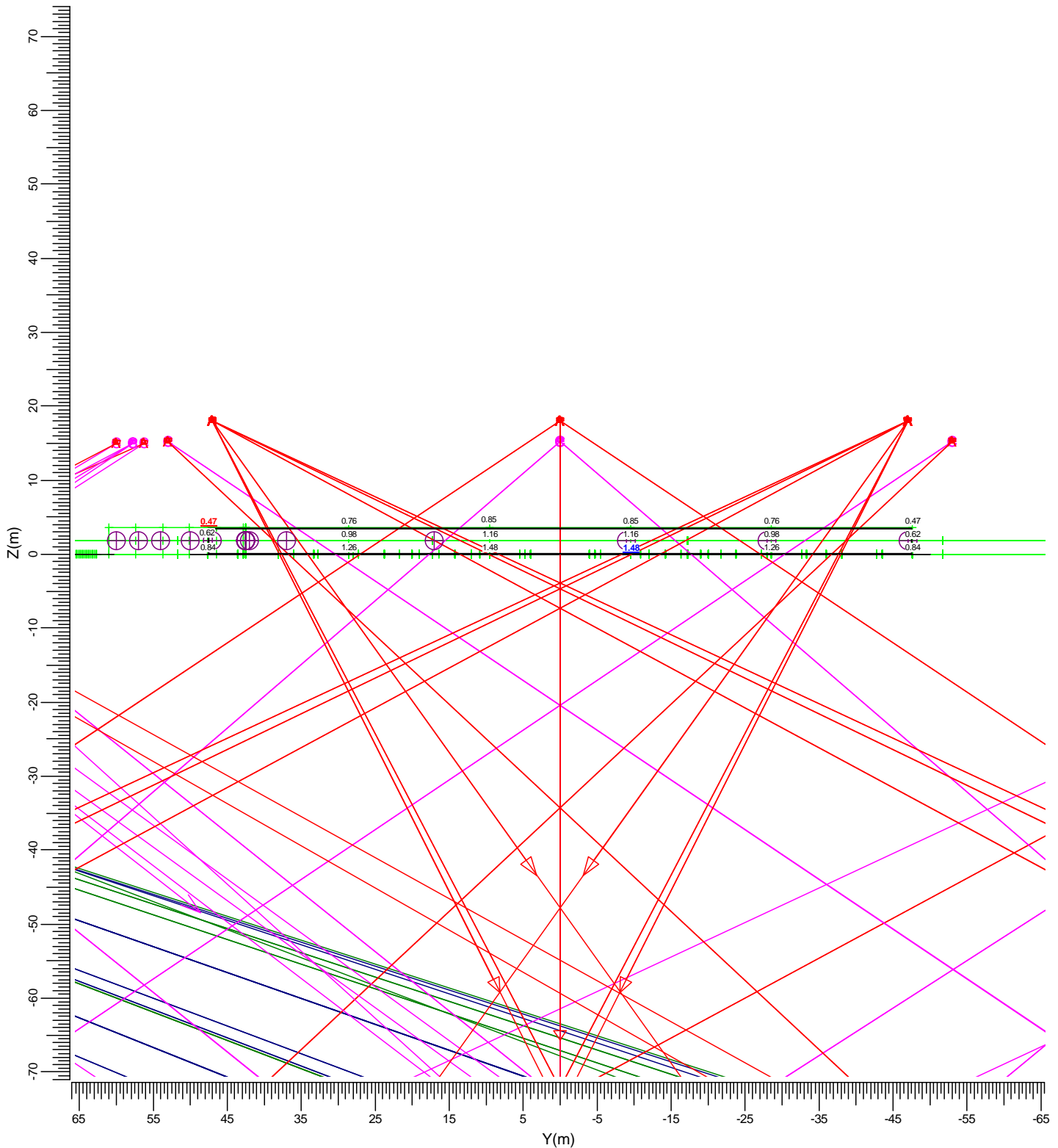


- | | | | |
|---|----------------------|---|----------------------|
| A | → MVP507 NB | C | → MVP507 MB |
| F | → MNF 307/2KW N/41.0 | G | → MNF 307/2KW M/41.0 |
| J | → MVF403 A2 | K | → MVF403 A3 |
| L | → MVF403 A4 | M | → MVF403 A5 |
| N | → MVF403 A6 | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.04	0.01	0.12	0.29	0.10	See summary	1:750

3.93 WG 1 woningen C: Graphical Table

Grid : WG 1 woningen C at X = -128.00 m
Calculation : Surface Illuminance (lux)

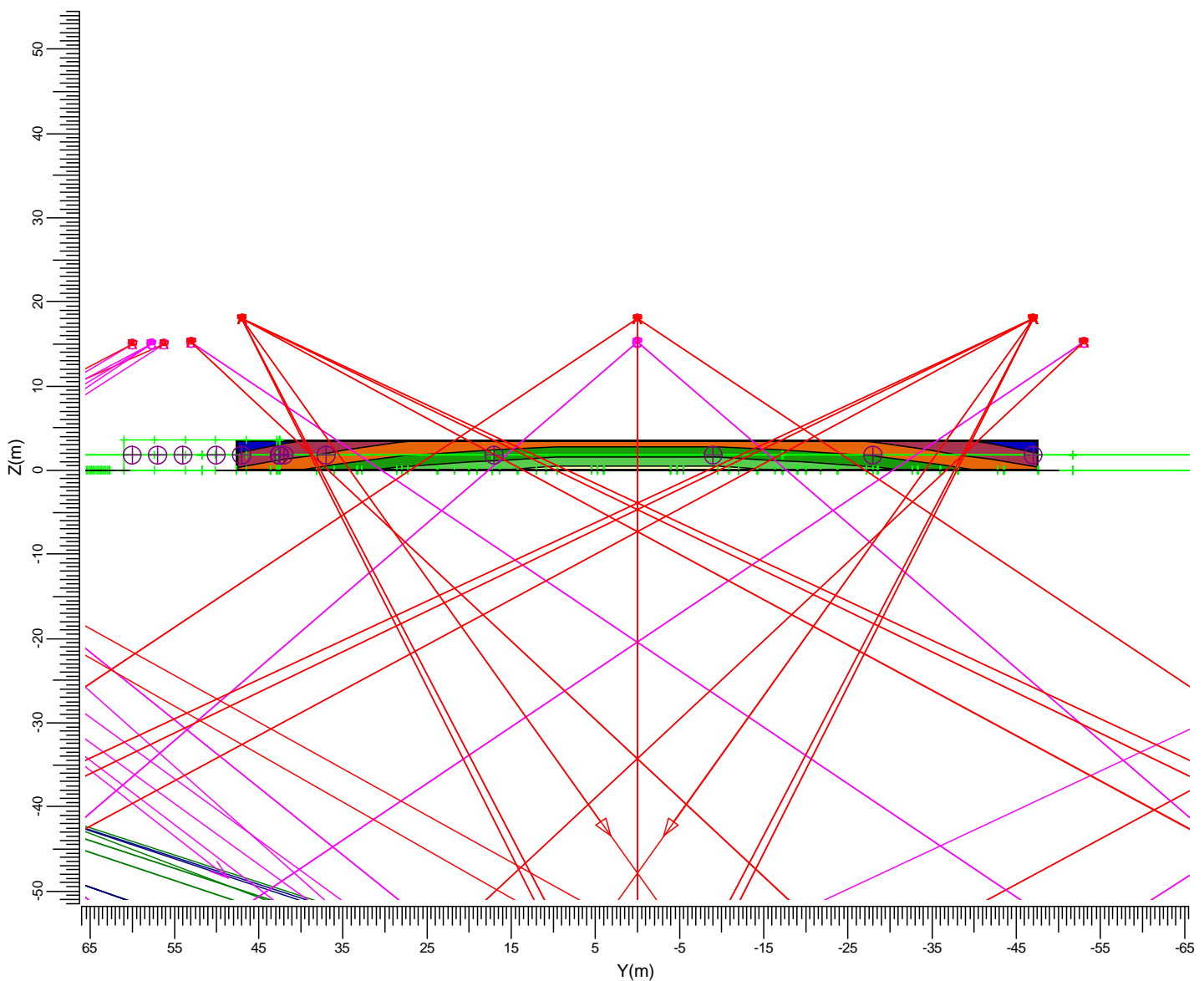
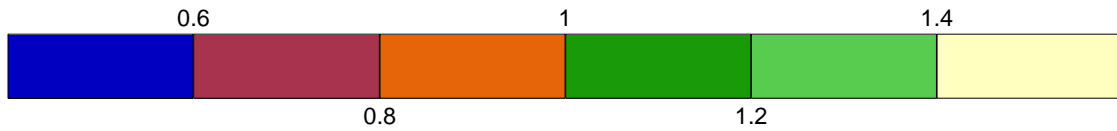


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.94	0.47	1.48	0.50	0.32	See summary	1:750

3.94 WG 1 woningen C: Filled Iso Contour

Grid : WG 1 woningen C at X = -128.00 m
Calculation : Surface Illuminance (lux)

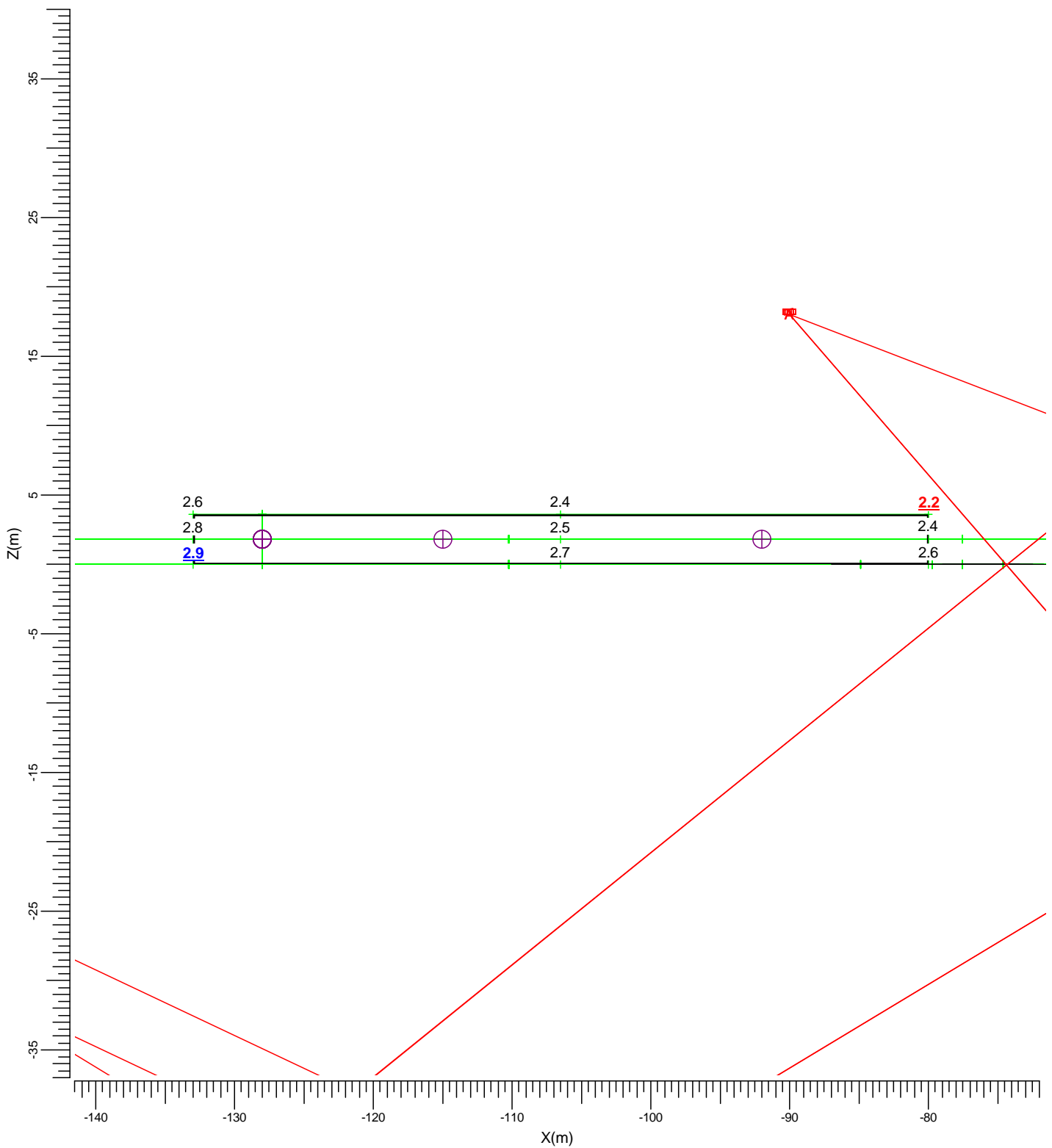


- | | | | |
|---|----------------------|---|----------------------|
| A | → MVP507 NB | C | → MVP507 MB |
| F | → MNF 307/2KW N/41.0 | G | → MNF 307/2KW M/41.0 |
| J | → MVF403 A2 | K | → MVF403 A3 |
| L | → MVF403 A4 | M | → MVF403 A5 |
| N | → MVF403 A6 | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.94	0.47	1.48	0.50	0.32	See summary	1:750

3.95 WG 1 woningen D: Graphical Table

Grid : WG 1 woningen D at Y = -110.00 m
Calculation : Surface Illuminance (lux)

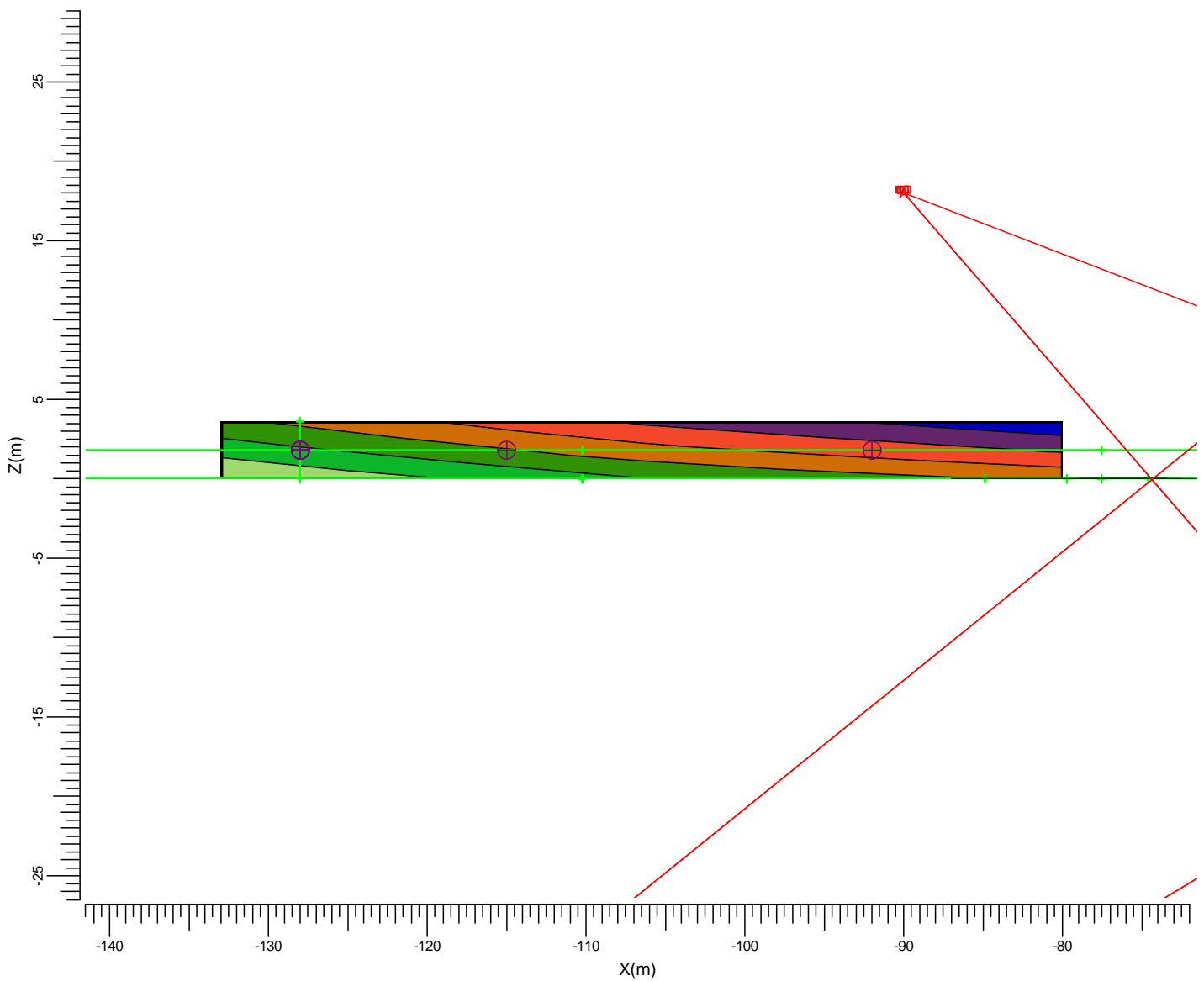
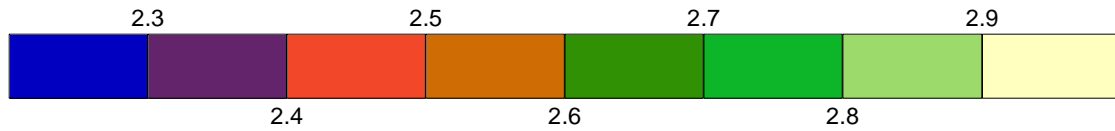


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
2.57	2.22	2.91	0.86	0.76	See summary	1:400

3.96 WG 1 woningen D: Filled Iso Contour

Grid : WG 1 woningen D at Y = -110.00 m
Calculation : Surface Illuminance (lux)

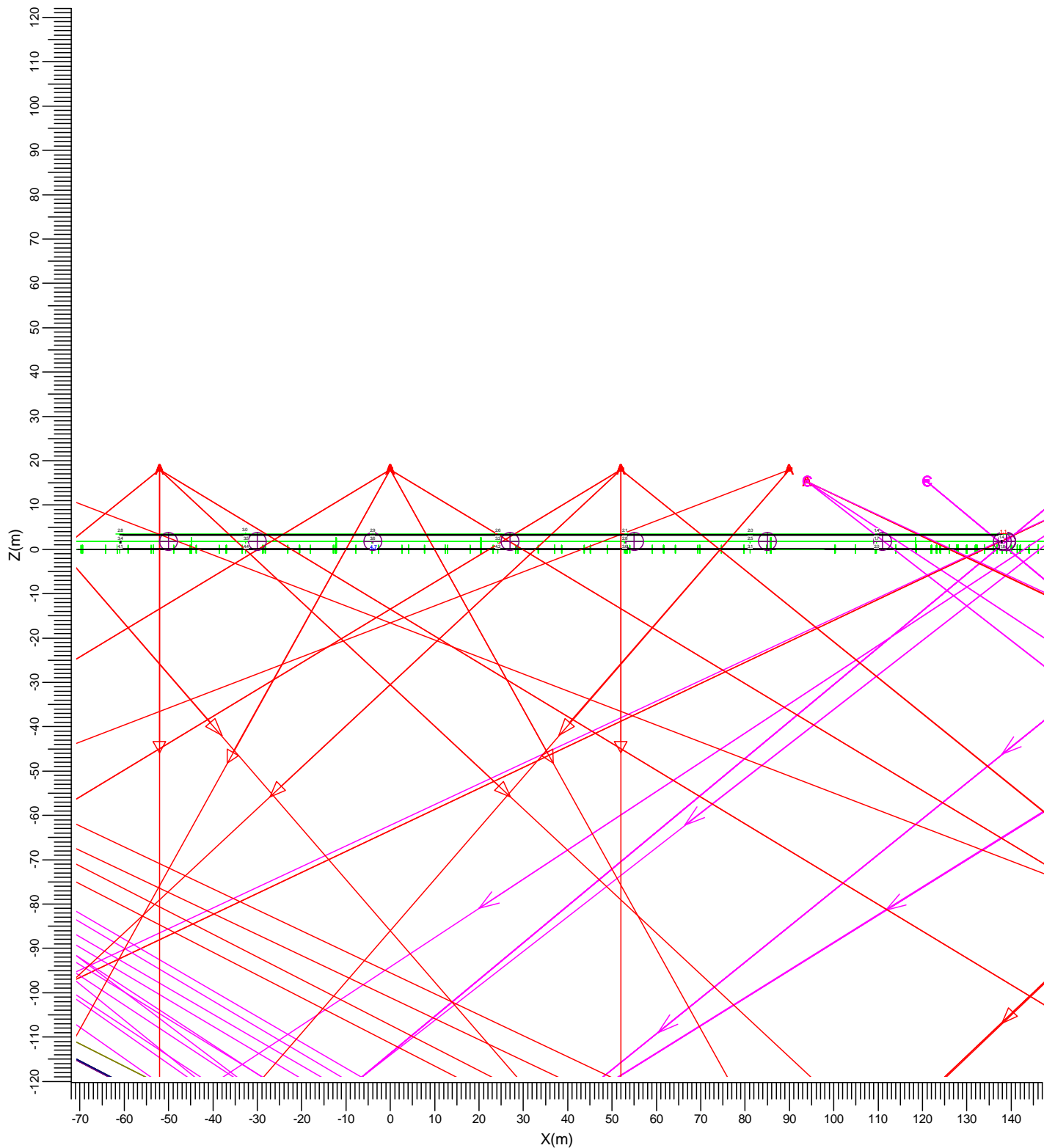


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
2.57	2.22	2.91	0.86	0.76	See summary	1:400

3.97 WG 1 woningen E: Graphical Table

Grid : WG 1 woningen E at Y = -90.00 m
Calculation : Surface Illuminance (lux)

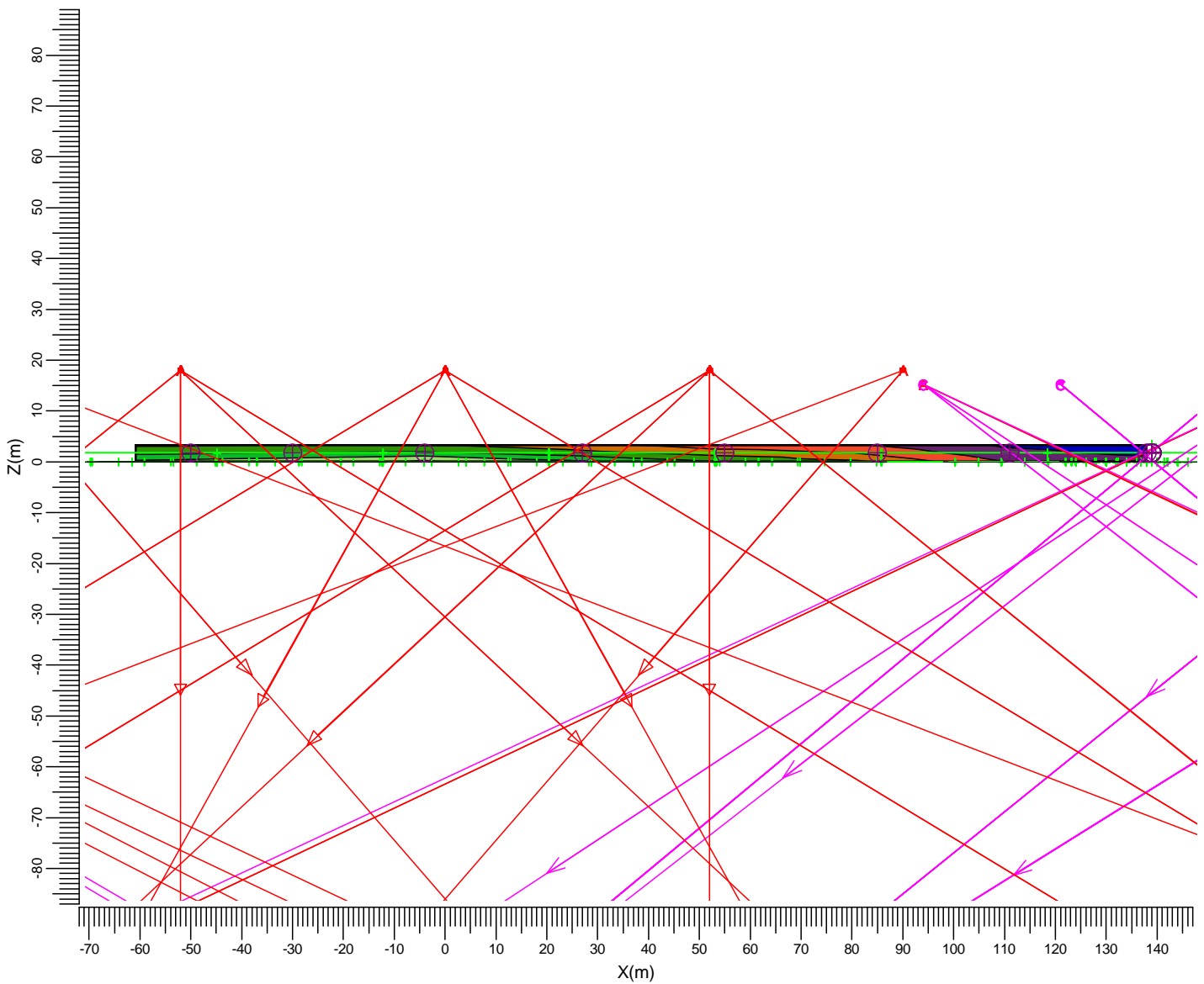


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
2.82	1.15	4.67	0.41	0.25	See summary	1:1250

3.98 WG 1 woningen E: Filled Iso Contour

Grid : WG 1 woningen E at Y = -90.00 m
Calculation : Surface Illuminance (lux)

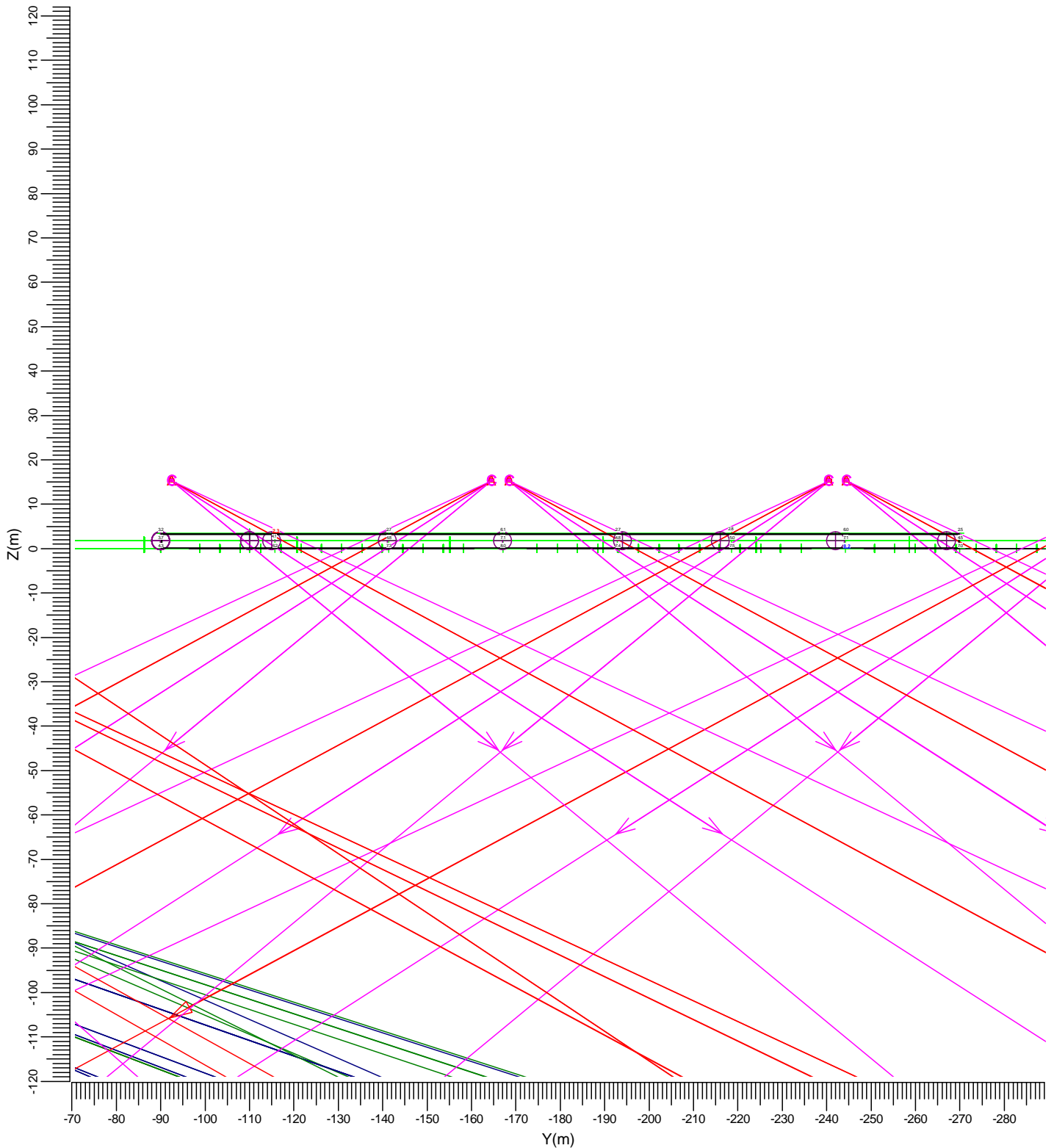


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
2.82	1.15	4.67	0.41	0.25	See summary	1:1250

3.99 WG 1 woningen F: Graphical Table

Grid : WG 1 woningen F at X = 139.00 m
Calculation : Surface Illuminance (lux)

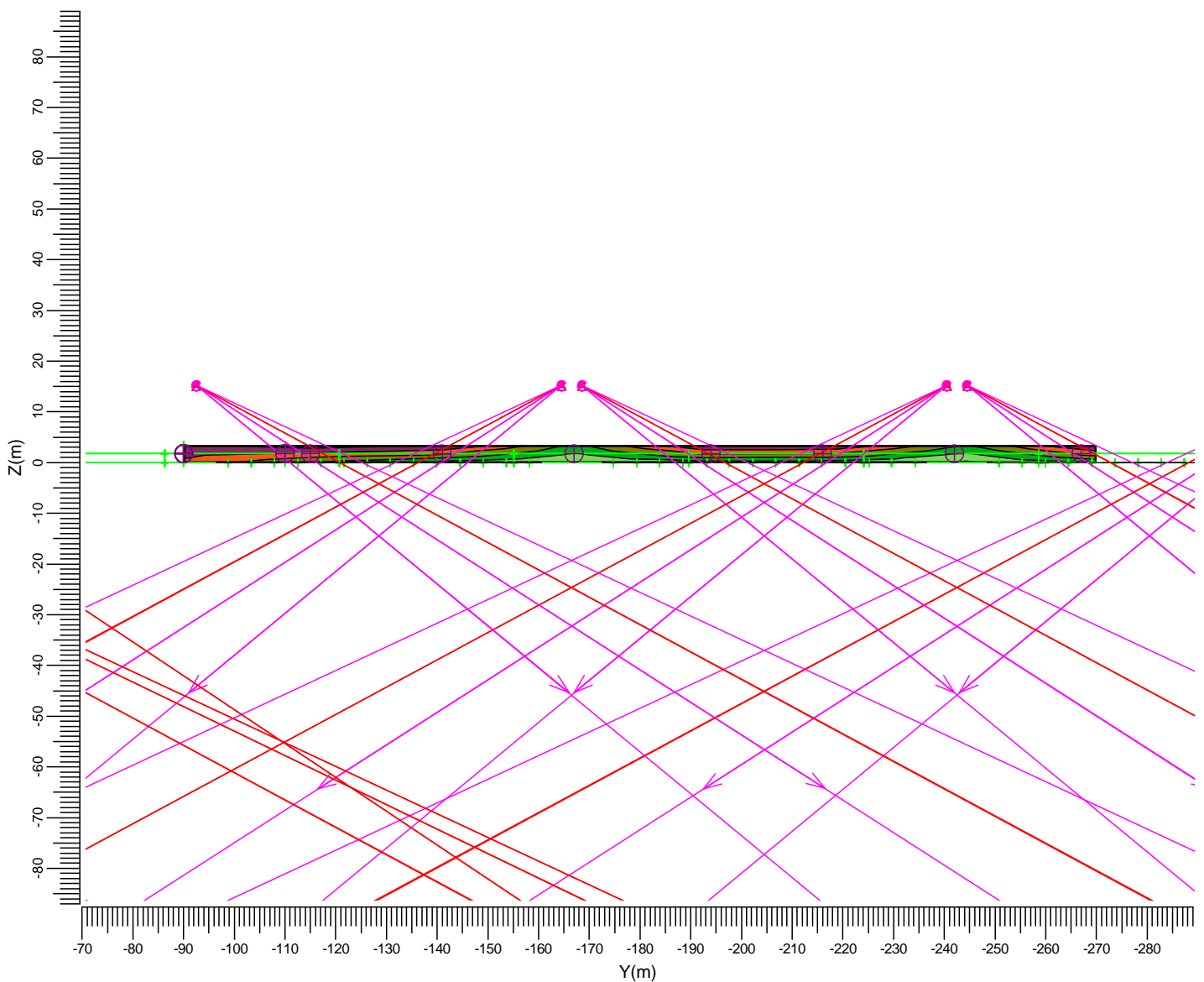


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
5.23	2.35	8.20	0.45	0.29	See summary	1:1250

3.100 WG 1 woningen F: Filled Iso Contour

Grid : WG 1 woningen F at X = 139.00 m
Calculation : Surface Illuminance (lux)

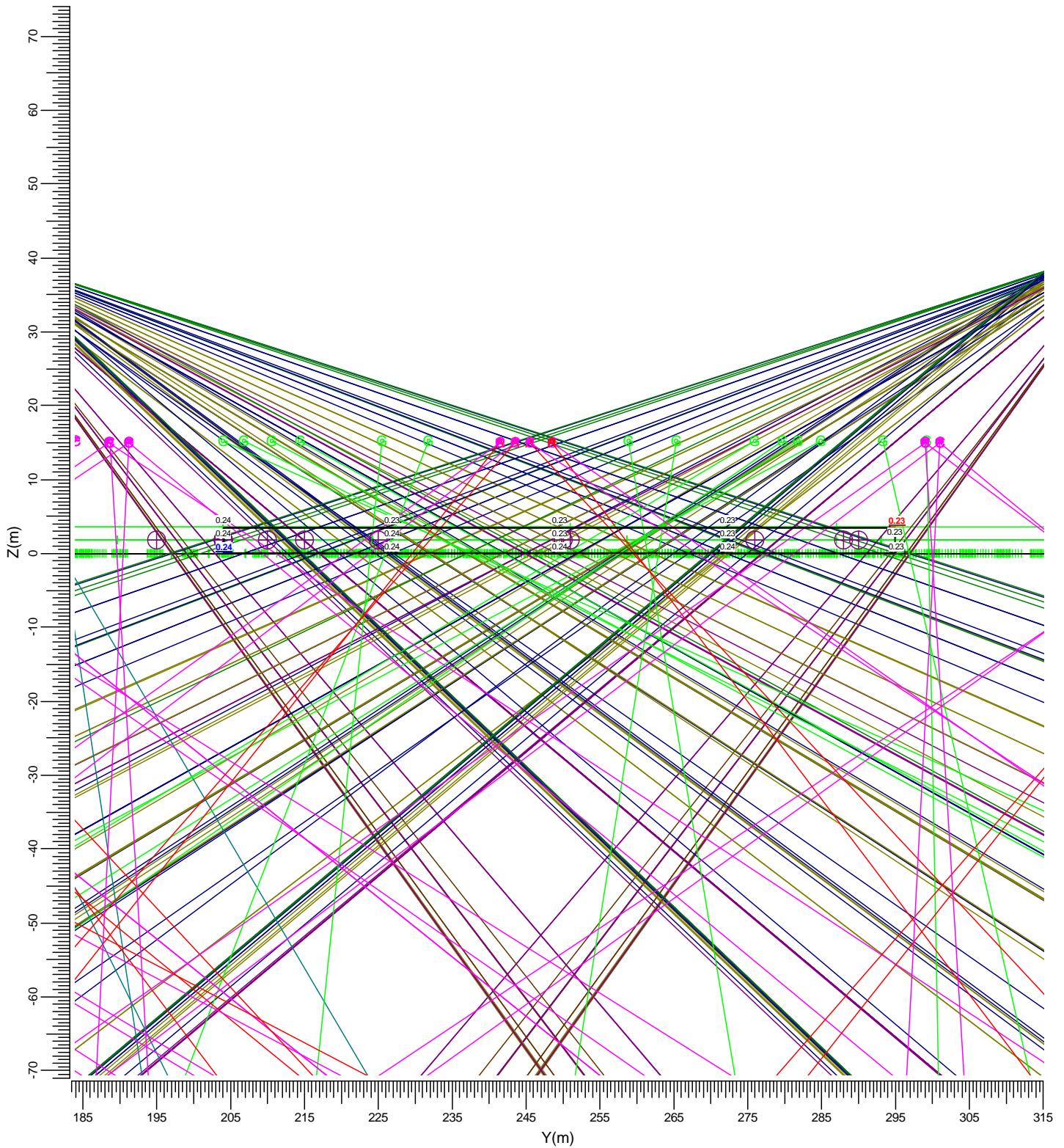


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
5.23	2.35	8.20	0.45	0.29	See summary	1:1250

3.101 WG 2, woningen A: Graphical Table

Grid : WG 2, woningen A at X = 514.00 m
Calculation : Surface Illuminance (lux)

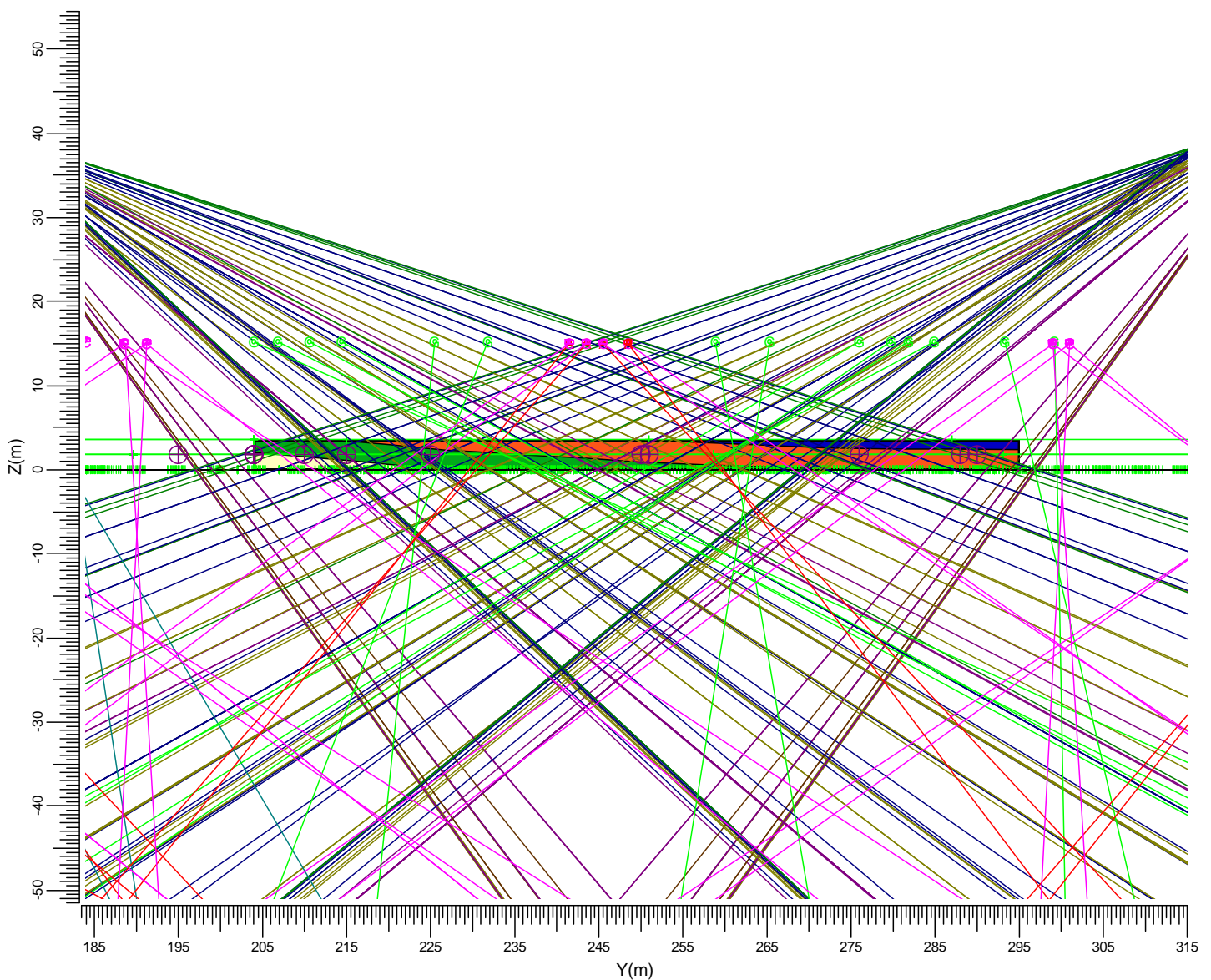
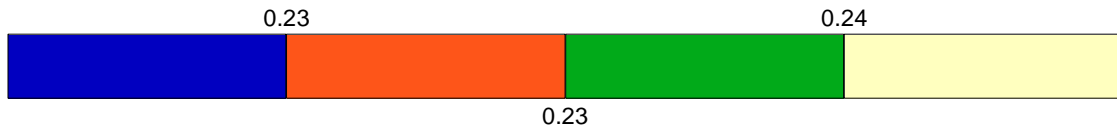


- | | | | |
|---|----------------------|---|----------------------|
| A | → MVP507 NB | C | → MVP507 MB |
| F | → MNF 307/2KW N/41.0 | G | → MNF 307/2KW M/41.0 |
| J | → MVF403 A2 | K | → MVF403 A3 |
| L | → MVF403 A4 | M | → MVF403 A5 |
| N | → MVF403 A6 | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.23	0.23	0.24	0.97	0.93	See summary	1:750

3.102 WG 2, woningen A: Filled Iso Contour

Grid : WG 2, woningen A at X = 514.00 m
Calculation : Surface Illuminance (lux)

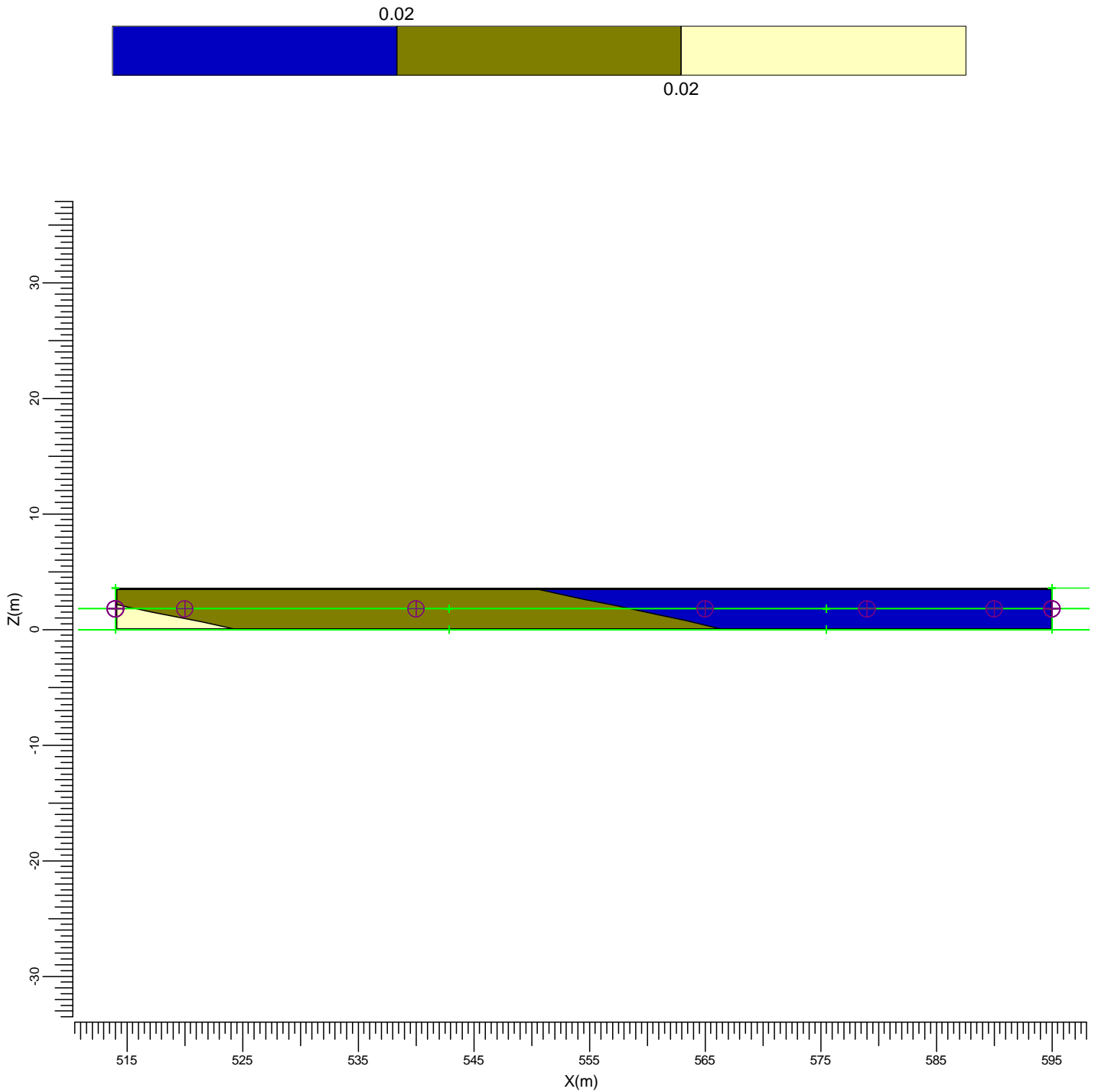


- | | | | | | |
|---|---|--------------------|---|---|--------------------|
| A | → | MVP507 NB | C | → | MVP507 MB |
| F | → | MNF 307/2KW N/41.0 | G | → | MNF 307/2KW M/41.0 |
| J | → | MVF403 A2 | K | → | MVF403 A3 |
| L | → | MVF403 A4 | M | → | MVF403 A5 |
| N | → | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.23	0.23	0.24	0.97	0.93	See summary	1:750

3.104 WG 2, woningen B: Filled Iso Contour

Grid : WG 2, woningen B at Y = 204.00 m
Calculation : Surface Illuminance (lux)

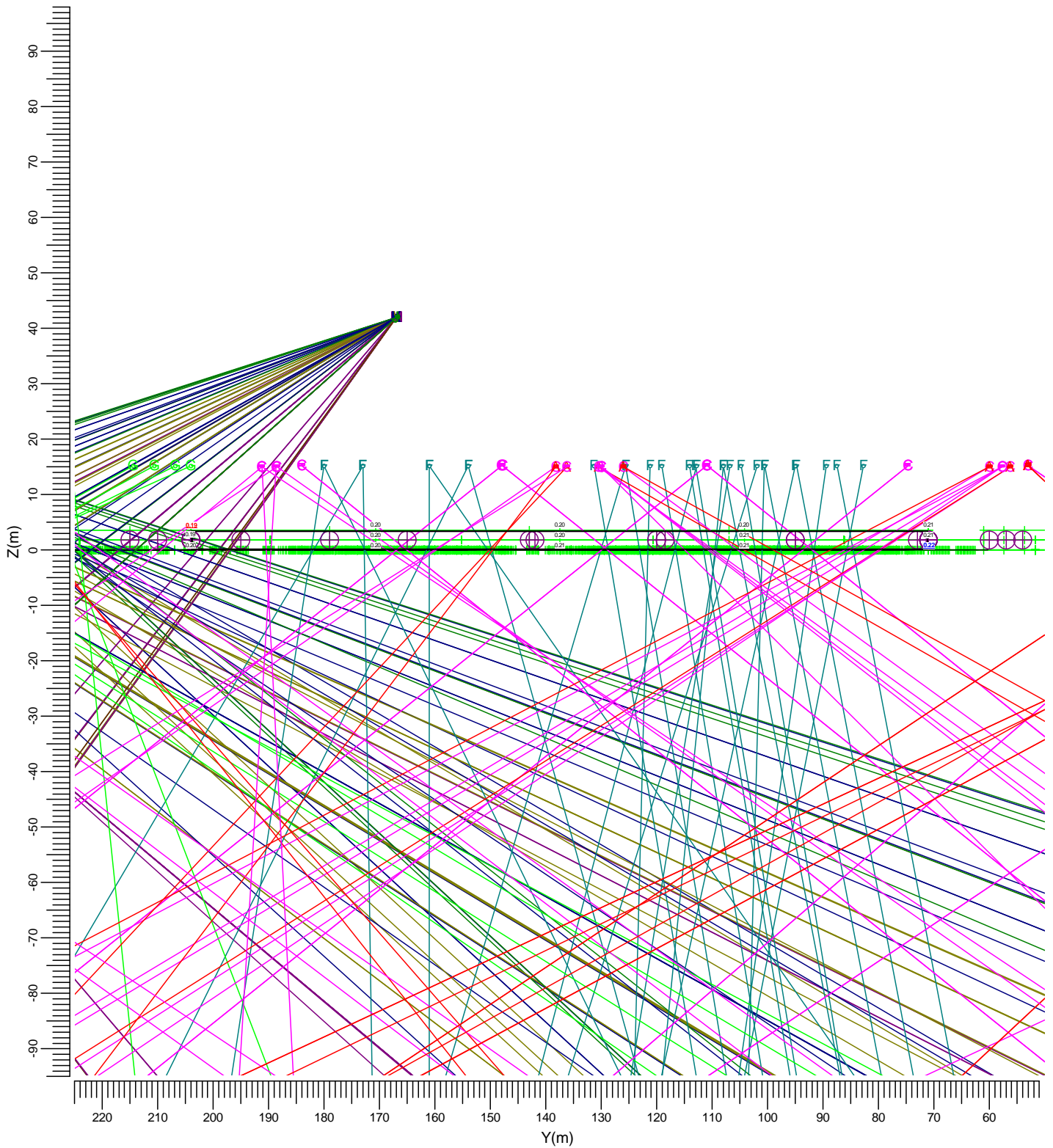


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.02	0.02	0.03	0.77	0.61	See summary	1:500

3.105 WG 2, woningen C: Graphical Table

Grid : WG 2, woningen C at X = 595.00 m
Calculation : Surface Illuminance (lux)

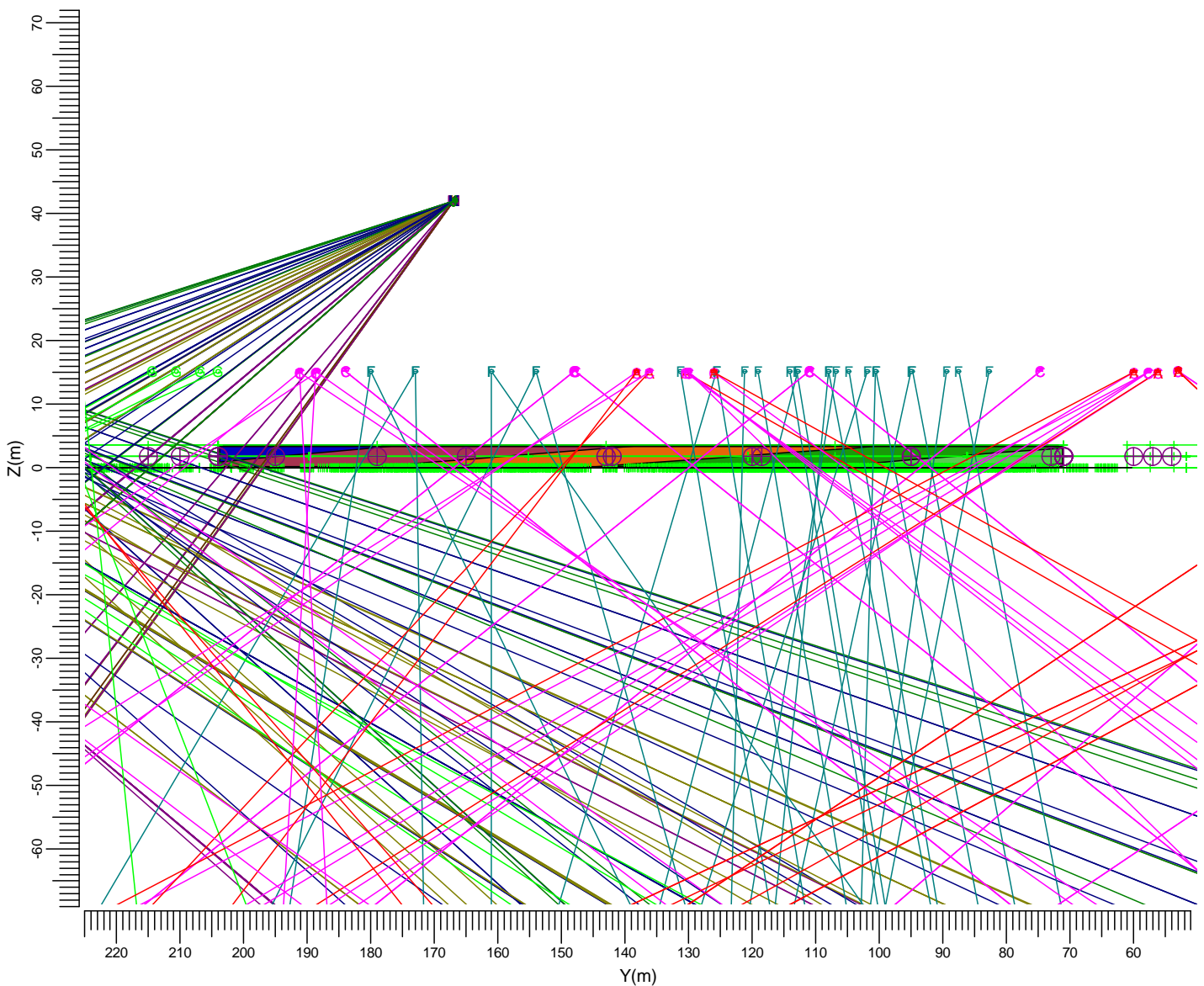
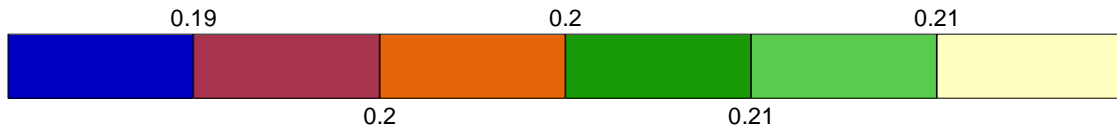


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.20	0.19	0.22	0.94	0.88	See summary	1:1000

3.106 WG 2, woningen C: Filled Iso Contour

Grid : WG 2, woningen C at X = 595.00 m
Calculation : Surface Illuminance (lux)

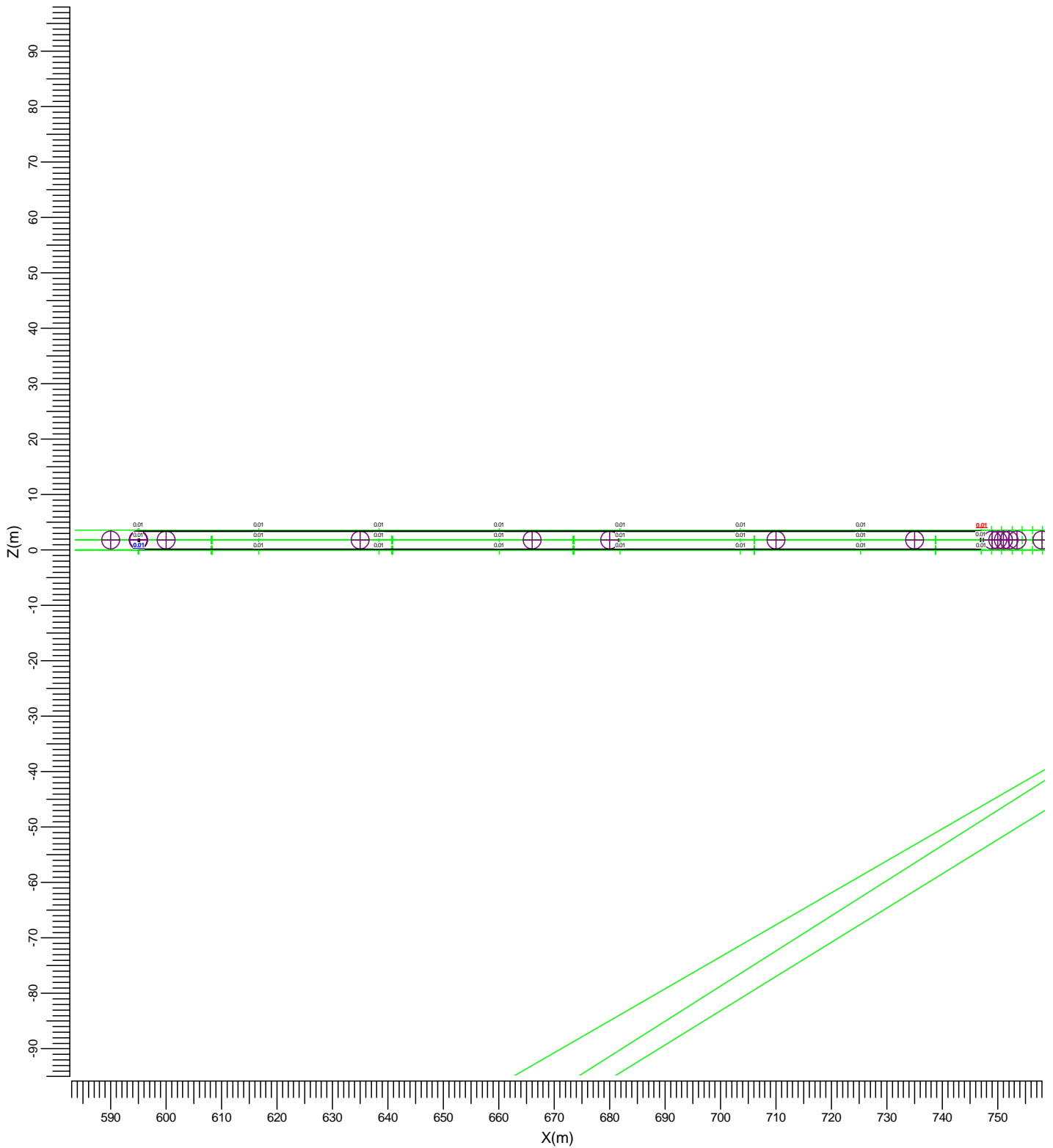


- | | | | | | |
|---|---|--------------------|---|---|--------------------|
| A | → | MVP507 NB | C | → | MVP507 MB |
| F | → | MNF 307/2KW N/41.0 | G | → | MNF 307/2KW M/41.0 |
| J | → | MVF403 A2 | K | → | MVF403 A3 |
| L | → | MVF403 A4 | M | → | MVF403 A5 |
| N | → | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.20	0.19	0.22	0.94	0.88	See summary	1:1000

3.107 WG 2, woningen D: Graphical Table

Grid : WG 2, woningen D at Y = 71.00 m
Calculation : Surface Illuminance (lux)

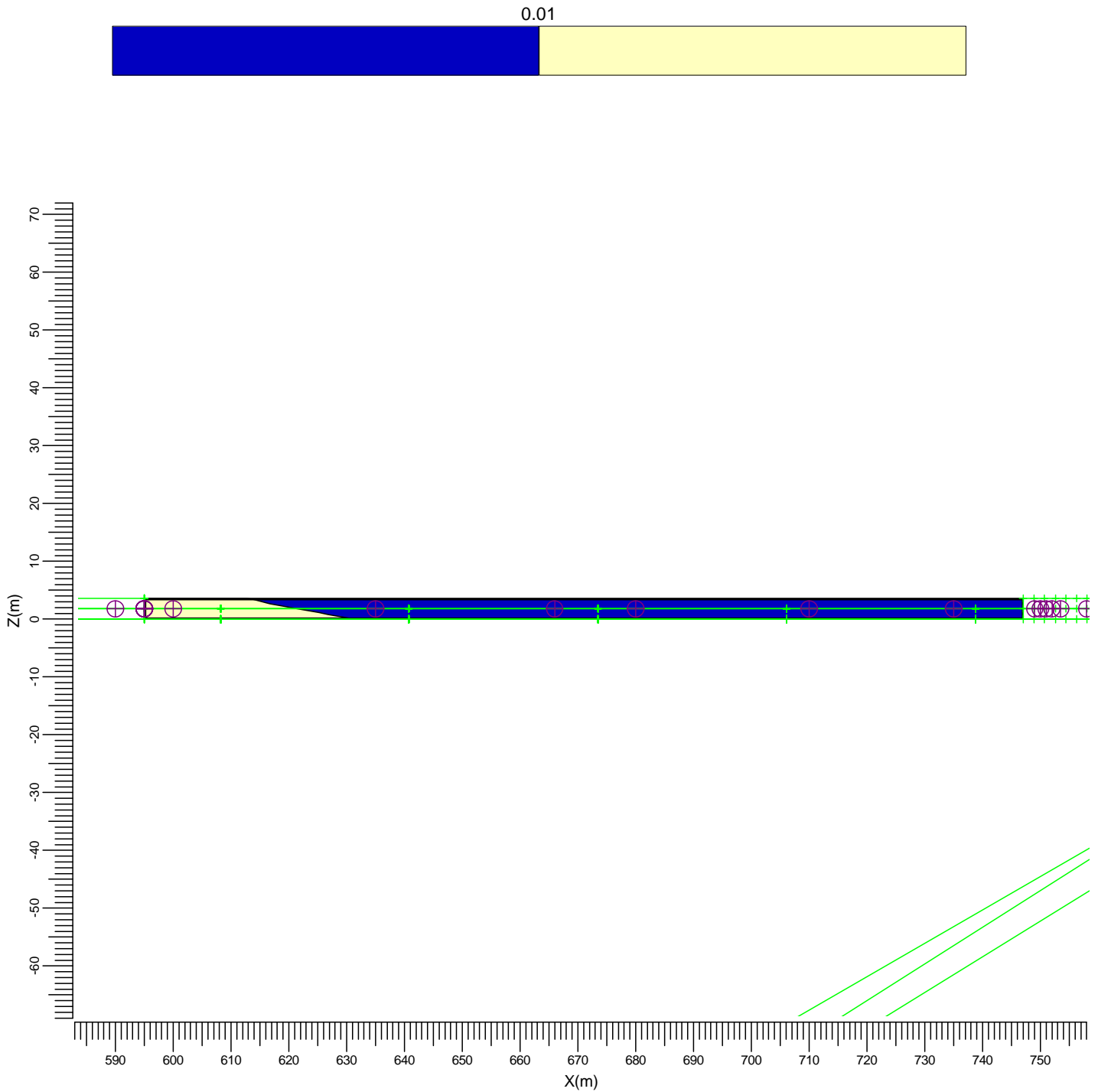


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.01	0.01	0.01	0.62	0.40	See summary	1:1000

3.108 WG 2, woningen D: Filled Iso Contour

Grid : WG 2, woningen D at Y = 71.00 m
Calculation : Surface Illuminance (lux)

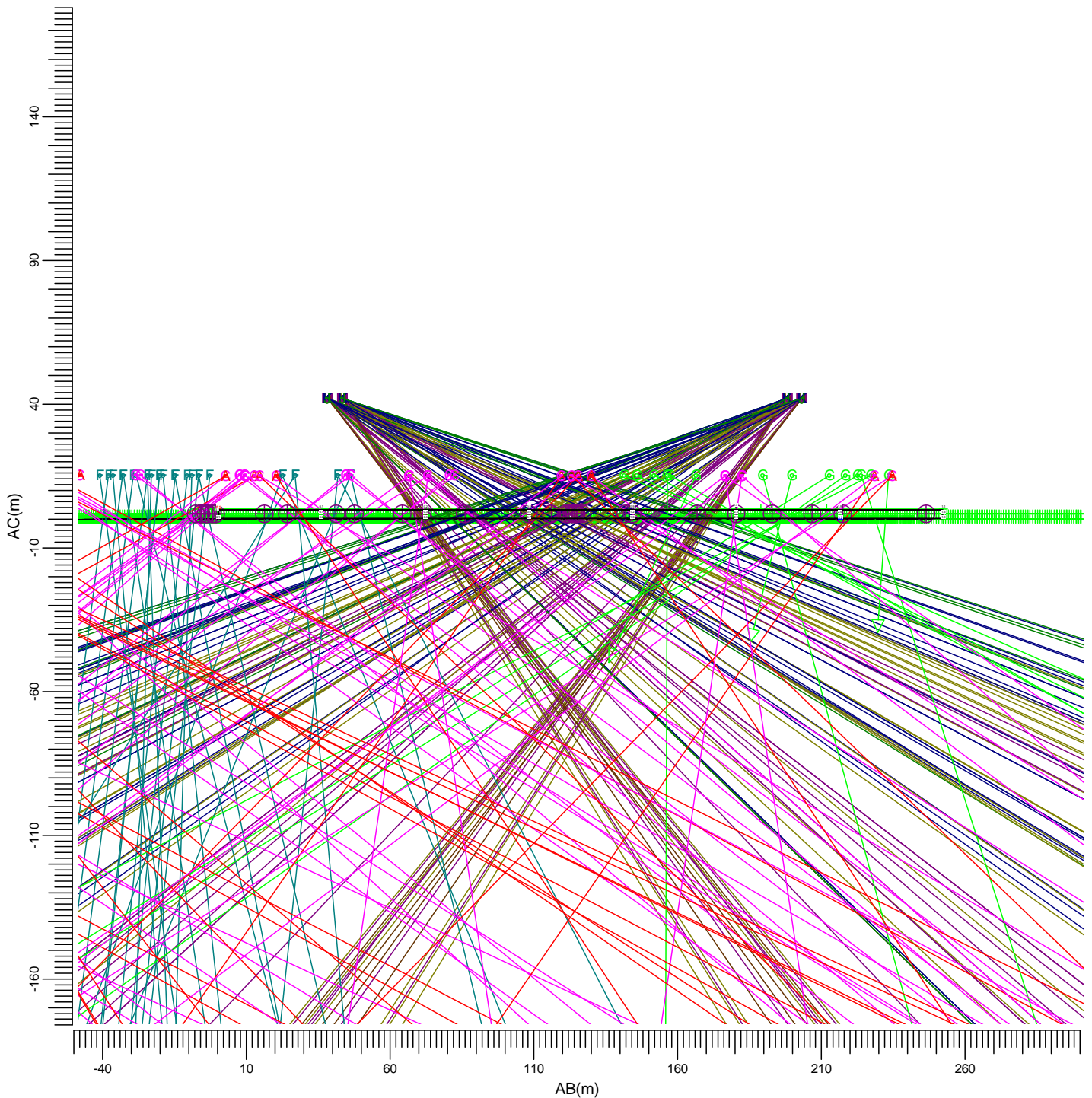


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
0.01	0.01	0.01	0.62	0.40	See summary	1:1000

3.109 WG 2, woningen E: Graphical Table

Grid : WG 2, woningen E
Calculation : Surface Illuminance (lux)



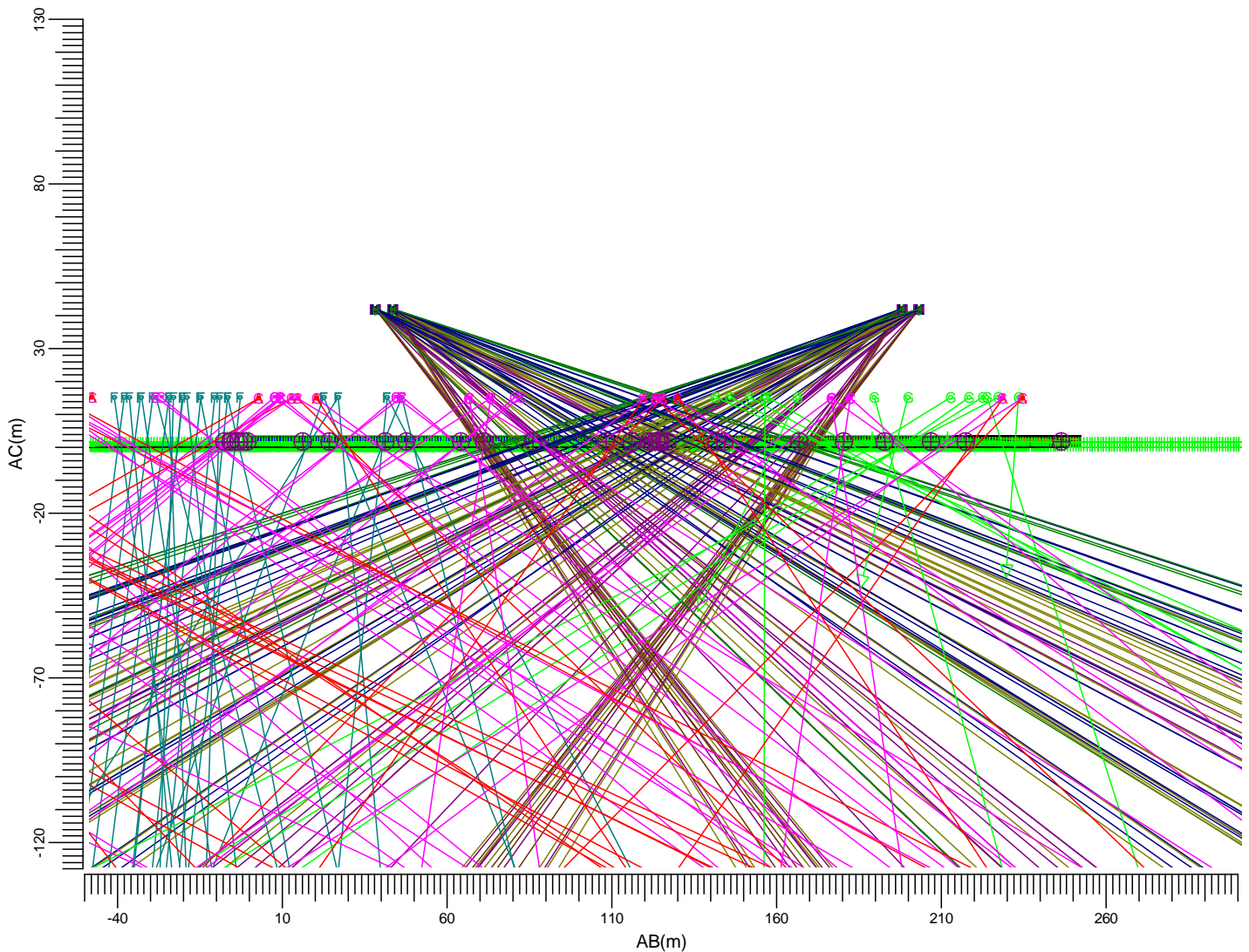
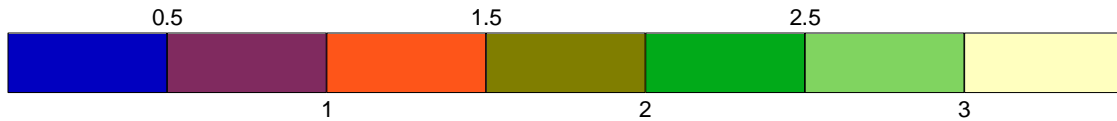
(747.00, 71.00, 3.60) C-----D (760.00, 323.00, 3.60)
 (747.00, 71.00, -0.00) A-----B (760.00, 323.00, -0.00)

- | | | | | | |
|---|---|--------------------|---|---|--------------------|
| A | → | MVP507 NB | C | → | MVP507 MB |
| F | → | MNF 307/2KW N/41.0 | G | → | MNF 307/2KW M/41.0 |
| J | → | MVF403 A2 | K | → | MVF403 A3 |
| L | → | MVF403 A4 | M | → | MVF403 A5 |
| N | → | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
1.08	0.11	3.25	0.10	0.03	See summary	1:2000

3.110 WG 2, woningen E: Filled Iso Contour

Grid : WG 2, woningen E
Calculation : Surface Illuminance (lux)



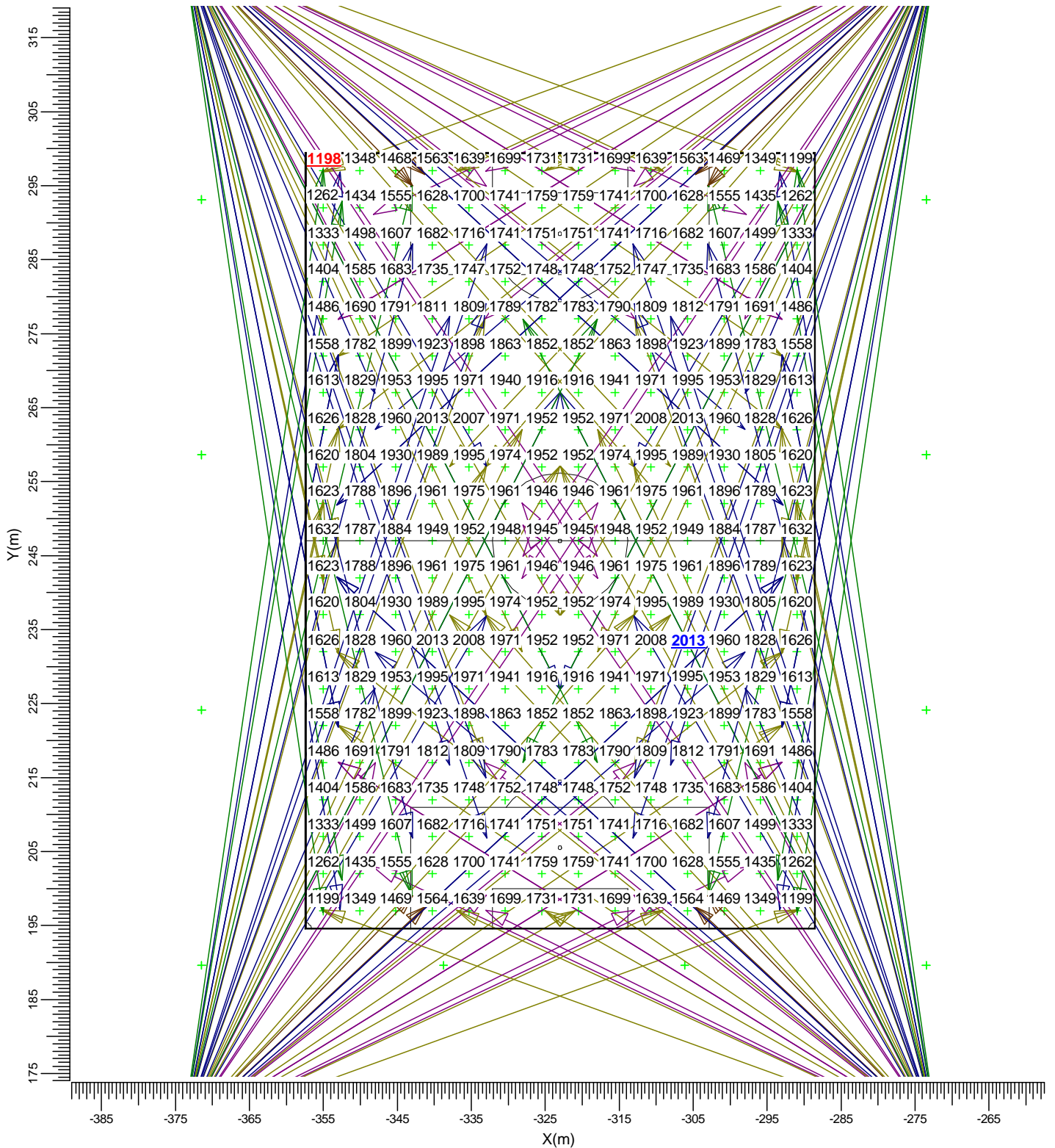
(747.00, 71.00, 3.60) C-----D (760.00, 323.00, 3.60)
 (747.00, 71.00, -0.00) A-----B (760.00, 323.00, -0.00)

- | | | | | | |
|---|---|--------------------|---|---|--------------------|
| A | → | MVP507 NB | C | → | MVP507 MB |
| F | → | MNF 307/2KW N/41.0 | G | → | MNF 307/2KW M/41.0 |
| J | → | MVF403 A2 | K | → | MVF403 A3 |
| L | → | MVF403 A4 | M | → | MVF403 A5 |
| N | → | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
1.08	0.11	3.25	0.10	0.03	See summary	1:2000

3.111 Voetbalstadion: Graphical Table

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

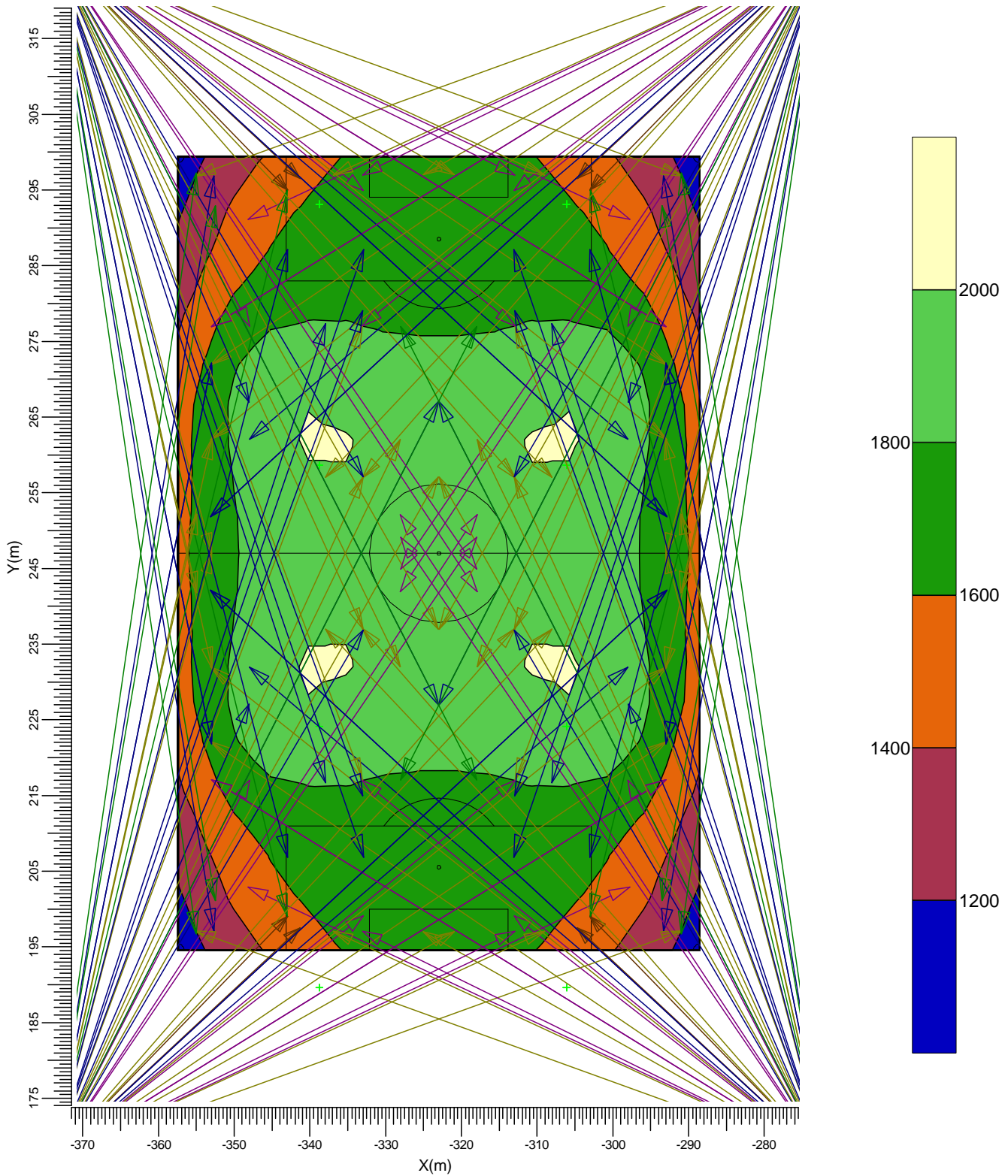


- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
1758	1198	2013	0.68	0.60	See summary	1:750

3.112 Voetbalstadion: Filled Iso Contour

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



- | | | | | | |
|---|--|--------------------|---|--|--------------------|
| A | | MVP507 NB | C | | MVP507 MB |
| F | | MNF 307/2KW N/41.0 | G | | MNF 307/2KW M/41.0 |
| J | | MVF403 A2 | K | | MVF403 A3 |
| L | | MVF403 A4 | M | | MVF403 A5 |
| N | | MVF403 A6 | | | |

Average	Minimum	Maximum	Min/Ave	Min/Max	Maintenance factors	Scale
1758	1198	2013	0.68	0.60	See summary	1:750

4. Luminaire Details

4.1 Project Luminaires

OPTIVISION

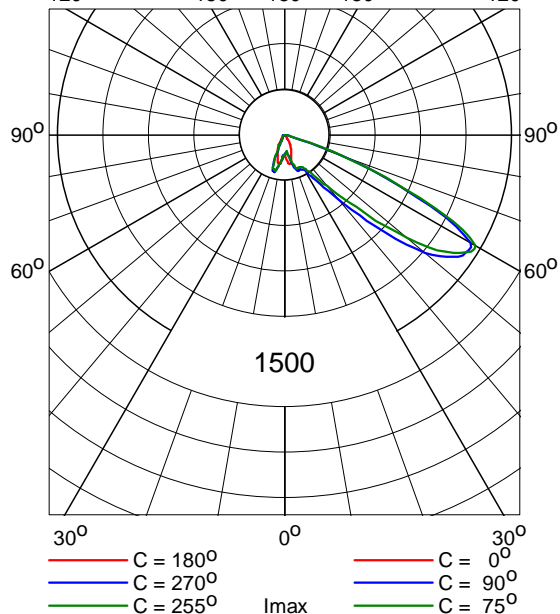
MVP507 NB 1 x MHN-LA2000W / 842

Light output ratios

DLOR	: 0.81
ULOR	: 0.00
TLOR	: 0.81
Ballast	: CON
Lamp flux	: 220000 lm
Luminaire wattage	: 2100.0 W
Measurement code	: LVM9958100
Luminaire maintenance factor	: 1.00
Lamp maintenance factor	: 1.00

Note: Luminaire data not from database.

Luminous Intensity Diagram (candela/1000 lumen)



OPTIVISION

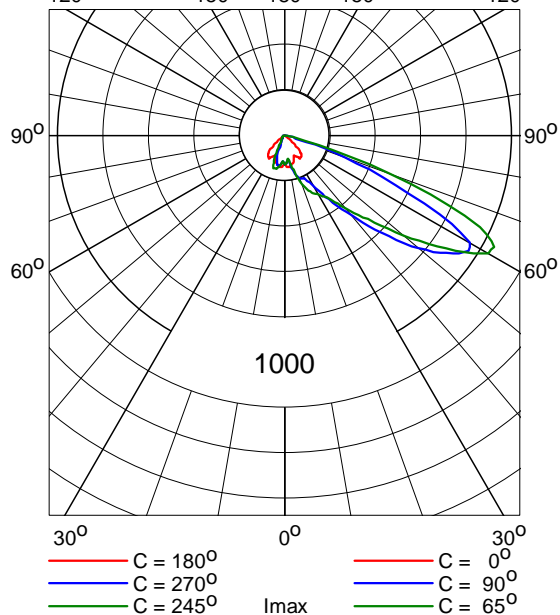
MVP507 MB 1 x MHN-LA2000W / 842

Light output ratios

DLOR	: 0.82
ULOR	: 0.00
TLOR	: 0.82
Ballast	: CON
Lamp flux	: 220000 lm
Luminaire wattage	: 2100.0 W
Measurement code	: LVM9970200
Luminaire maintenance factor	: 1.00
Lamp maintenance factor	: 1.00

Note: Luminaire data not from database.

Luminous Intensity Diagram (candela/1000 lumen)

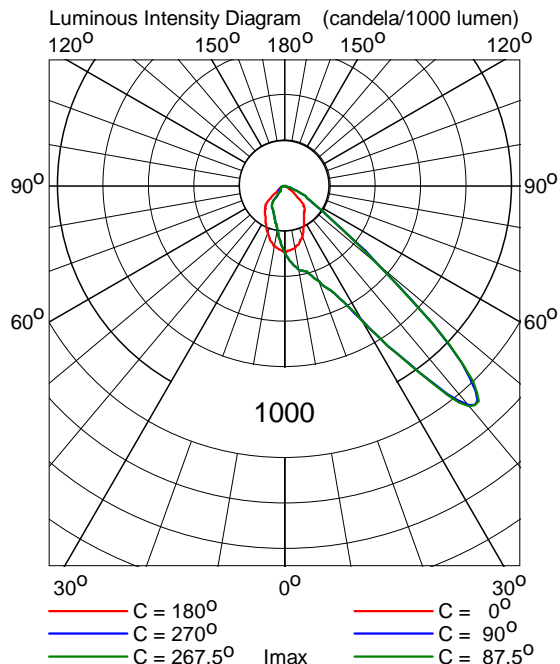


MNF 307
MNF 307 1xHPIT 2KW/380 Standard N/41.0

Light output ratios

DLOR : 0.73
 ULOR : 0.00
 TLOR : 0.73
 Ballast : Standard
 Lamp flux : 200000 lm
 Luminaire wattage : 2052.0 W
 Measurement code : LVW0473200
 Luminaire maintenance factor : 0.90
 Lamp maintenance factor : 0.90

Note: Luminaire data not from database.

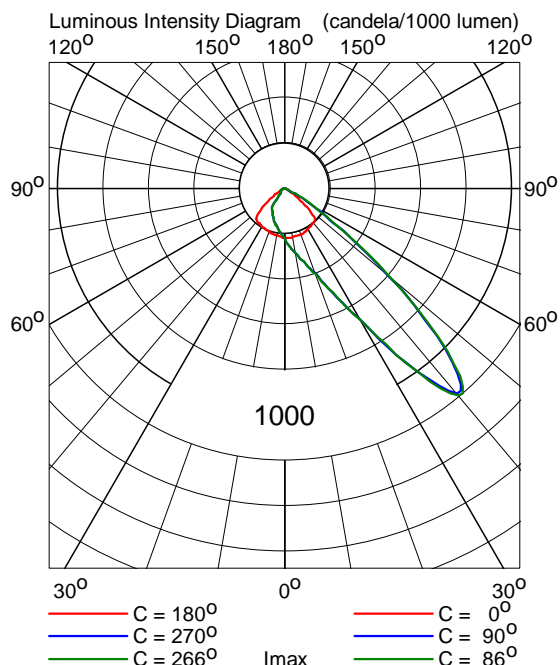


MNF 307
MNF 307 1xHPIT 2KW/380 Standard M/41.0

Light output ratios

DLOR : 0.72
 ULOR : 0.00
 TLOR : 0.72
 Ballast : Standard
 Lamp flux : 200000 lm
 Luminaire wattage : 2052.0 W
 Measurement code : LVW0616800
 Luminaire maintenance factor : 0.90
 Lamp maintenance factor : 0.90

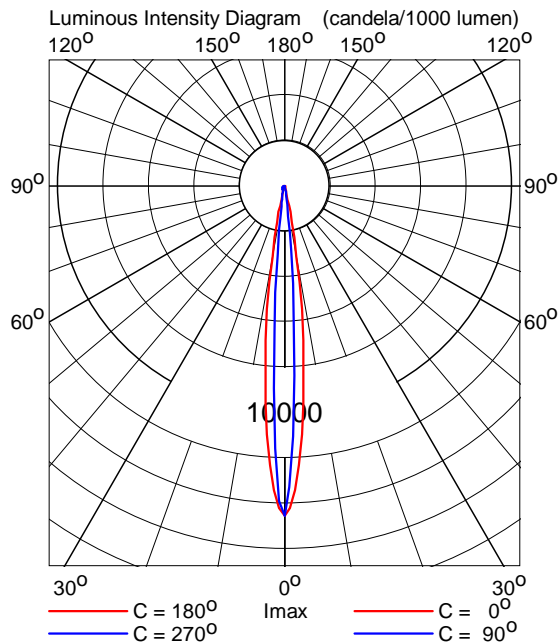
Note: Luminaire data not from database.



ArenaVision MVF403
MVF403 1xMHN-SA2000W/400V/956 A2



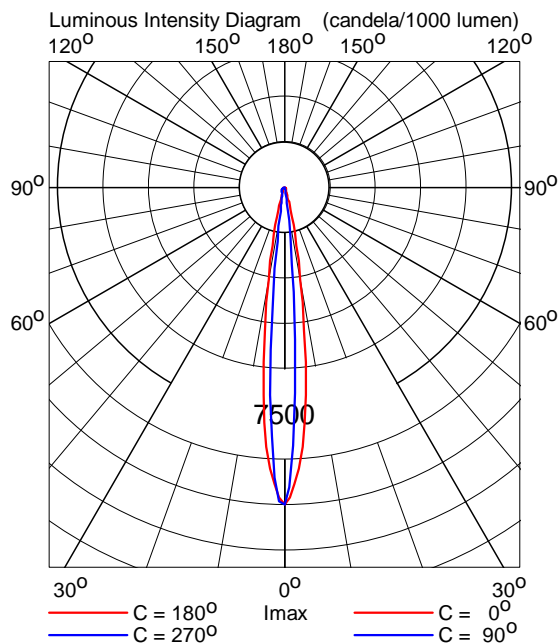
Light output ratios	
DLOR	: 0.80
ULOR	: 0.00
TLOR	: 0.80
Ballast	: Conventional
Lamp flux	: 200000 lm
Luminaire wattage	: 2093.0 W
Measurement code	: LVM0256100
Luminaire maintenance factor	: 1.00
Lamp maintenance factor	: 1.00



ArenaVision MVF403
MVF403 1xMHN-SA2000W/400V/956 A3



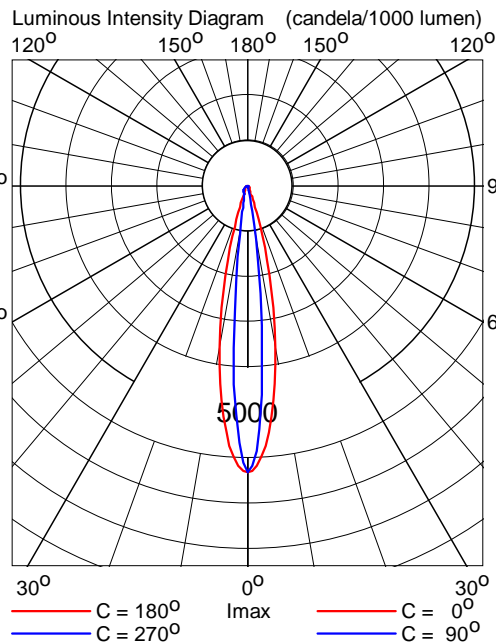
Light output ratios	
DLOR	: 0.80
ULOR	: 0.00
TLOR	: 0.80
Ballast	: Conventional
Lamp flux	: 200000 lm
Luminaire wattage	: 2093.0 W
Measurement code	: LVM0256200
Luminaire maintenance factor	: 1.00
Lamp maintenance factor	: 1.00



ArenaVision MVF403
MVF403 1xMHN-SA2000W/400V/956 A4



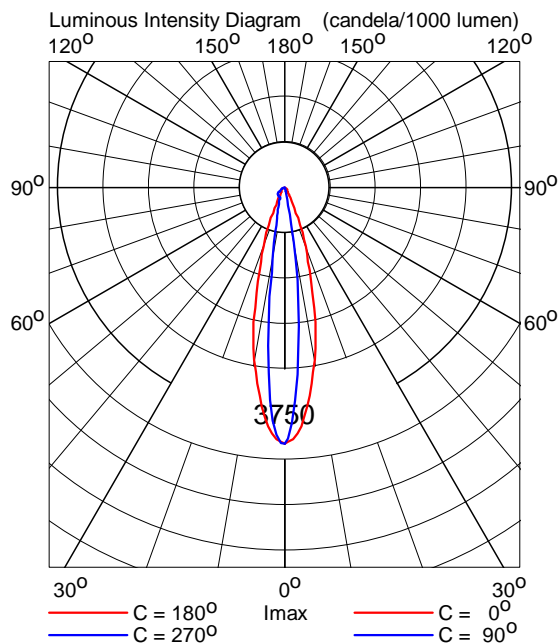
Light output ratios	
DLOR	: 0.79
ULOR	: 0.00
TLOR	: 0.79
Ballast	: Conventional
Lamp flux	: 200000 lm
Luminaire wattage	: 2093.0 W
Measurement code	: LVM0256300
Luminaire maintenance factor	: 1.00
Lamp maintenance factor	: 1.00



ArenaVision MVF403
MVF403 1xMHN-SA2000W/400V/956 A5



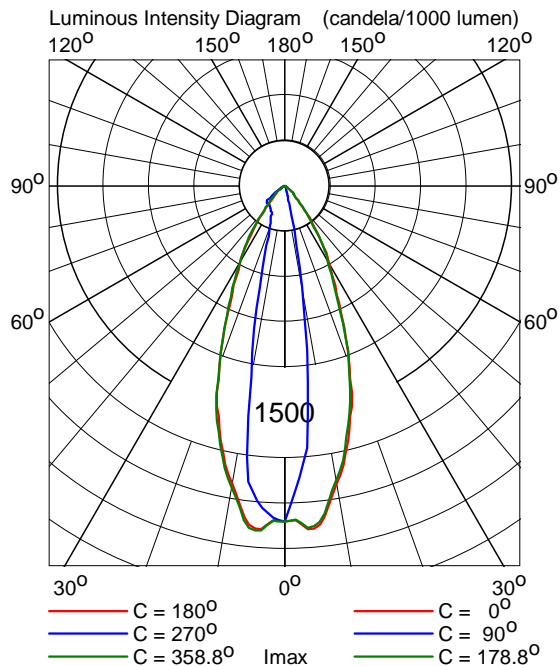
Light output ratios	
DLOR	: 0.80
ULOR	: 0.00
TLOR	: 0.80
Ballast	: Conventional
Lamp flux	: 200000 lm
Luminaire wattage	: 2093.0 W
Measurement code	: LVM0256400
Luminaire maintenance factor	: 1.00
Lamp maintenance factor	: 1.00



ArenaVision MVF403
MVF403 1xMHN-SA2000W/400V/956 A6



Light output ratios
DLOR : 0.79
ULOR : 0.00
TLOR : 0.79
Ballast : Conventional
Lamp flux : 200000 lm
Luminaire wattage : 2093.0 W
Measurement code : LVM0256500
Luminaire maintenance factor : 1.00
Lamp maintenance factor : 1.00



5. Installation Data

5.1 Legends

Project Luminaires:

Code	Qty	Luminaire Type	Lamp Type	Flux (lm)
A	58	MVP507 NB	1 * MHN-LA2000W	1 * 220000
C	82	MVP507 MB	1 * MHN-LA2000W	1 * 220000
F	28	MNF 307/2KW N/41.0	1 * HPIT 2KW/380	1 * 200000
G	14	MNF 307/2KW M/41.0	1 * HPIT 2KW/380	1 * 200000
J	16	MVF403 A2	1 * MHN-SA2000W/400V/956	1 * 200000
K	52	MVF403 A3	1 * MHN-SA2000W/400V/956	1 * 200000
L	56	MVF403 A4	1 * MHN-SA2000W/400V/956	1 * 200000
M	36	MVF403 A5	1 * MHN-SA2000W/400V/956	1 * 200000
N	8	MVF403 A6	1 * MHN-SA2000W/400V/956	1 * 200000

5.2 Luminaire Positioning and Orientation

Qty and Code	Position			ULR
	X (m)	Y (m)	Z (m)	
1 * F	-480.03	114.13	15.25	0.00
1 * F	-477.64	131.34	15.25	0.00
1 * F	-473.50	161.00	15.25	0.00
1 * F	-473.50	161.00	15.25	0.00
1 * F	-471.00	180.00	15.25	0.00
1 * F	-471.00	180.00	15.25	0.00
1 * F	-443.15	108.00	15.25	0.00
1 * F	-443.15	108.00	15.25	0.00
1 * F	-440.45	125.63	15.25	0.00
1 * F	-440.45	125.63	15.25	0.00
1 * F	-423.00	154.00	15.25	0.00
1 * F	-423.00	154.00	15.25	0.00
1 * F	-420.00	173.00	15.25	0.00
1 * F	-420.00	173.00	15.25	0.00
1 * F	-404.30	101.90	15.25	0.00
1 * F	-401.52	121.17	15.25	0.00
1 * F	-394.70	100.47	15.25	0.00
1 * F	-392.10	119.08	15.25	0.00
1 * J	-374.00	167.00	42.00	0.03
1 * K	-374.00	167.00	42.00	0.02
1 * K	-374.00	167.00	42.00	0.02
1 * K	-374.00	167.00	42.00	0.02
1 * K	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.02
1 * M	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.02
1 * J	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.02
1 * N	-374.00	167.00	42.00	0.01
1 * M	-374.00	167.00	42.00	0.01
1 * L	-374.00	167.00	42.00	0.02
1 * K	-374.00	167.00	42.00	0.01
1 * M	-374.00	167.00	42.00	0.02
1 * J	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.02

Qty and Code	Position			ULR
	X (m)	Y (m)	Z (m)	
1 * L	-374.00	167.00	42.00	0.02
1 * J	-374.00	167.00	42.00	0.03
1 * L	-374.00	167.00	42.00	0.02
1 * K	-374.00	167.00	42.00	0.03
1 * K	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.02
1 * M	-374.00	167.00	42.00	0.02
1 * K	-374.00	167.00	42.00	0.02
1 * M	-374.00	167.00	42.00	0.01
1 * N	-374.00	167.00	42.00	0.01
1 * M	-374.00	167.00	42.00	0.01
1 * K	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.02
1 * M	-374.00	167.00	42.00	0.02
1 * K	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.01
1 * M	-374.00	167.00	42.00	0.01
1 * K	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.02
1 * K	-374.00	167.00	42.00	0.02
1 * M	-374.00	167.00	42.00	0.01
1 * K	-374.00	167.00	42.00	0.02
1 * L	-374.00	167.00	42.00	0.02
1 * J	-374.00	327.00	42.00	0.03
1 * K	-374.00	327.00	42.00	0.02
1 * K	-374.00	327.00	42.00	0.02
1 * K	-374.00	327.00	42.00	0.02
1 * K	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.02
1 * M	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.02
1 * J	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.02
1 * N	-374.00	327.00	42.00	0.01
1 * M	-374.00	327.00	42.00	0.01
1 * L	-374.00	327.00	42.00	0.02
1 * K	-374.00	327.00	42.00	0.01
1 * M	-374.00	327.00	42.00	0.02
1 * J	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.02
1 * K	-374.00	327.00	42.00	0.03
1 * K	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.02
1 * M	-374.00	327.00	42.00	0.02
1 * K	-374.00	327.00	42.00	0.02
1 * M	-374.00	327.00	42.00	0.01
1 * N	-374.00	327.00	42.00	0.01
1 * M	-374.00	327.00	42.00	0.01
1 * M	-374.00	327.00	42.00	0.01
1 * K	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.02

Qty and Code	Position			ULR
	X (m)	Y (m)	Z (m)	
1 * L	-374.00	327.00	42.00	0.02
1 * M	-374.00	327.00	42.00	0.02
1 * K	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.01
1 * M	-374.00	327.00	42.00	0.01
1 * K	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.02
1 * K	-374.00	327.00	42.00	0.02
1 * M	-374.00	327.00	42.00	0.01
1 * K	-374.00	327.00	42.00	0.02
1 * L	-374.00	327.00	42.00	0.02
1 * F	-356.97	95.01	15.25	0.00
1 * F	-356.11	94.76	15.25	0.00
1 * F	-353.68	112.76	15.25	0.00
1 * F	-353.41	112.97	15.25	0.00
1 * F	-316.94	89.39	15.25	0.00
1 * F	-314.43	106.77	15.25	0.00
1 * F	-309.10	87.49	15.25	0.00
1 * F	-306.19	104.84	15.25	0.00
1 * F	-274.18	82.66	15.25	0.00
1 * F	-272.07	100.58	15.25	0.00
1 * J	-272.00	167.00	42.00	0.03
1 * K	-272.00	167.00	42.00	0.02
1 * K	-272.00	167.00	42.00	0.02
1 * K	-272.00	167.00	42.00	0.02
1 * K	-272.00	167.00	42.00	0.02
1 * K	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * M	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * J	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * N	-272.00	167.00	42.00	0.01
1 * M	-272.00	167.00	42.00	0.01
1 * L	-272.00	167.00	42.00	0.02
1 * K	-272.00	167.00	42.00	0.01
1 * M	-272.00	167.00	42.00	0.02
1 * J	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * J	-272.00	167.00	42.00	0.03
1 * L	-272.00	167.00	42.00	0.02
1 * K	-272.00	167.00	42.00	0.03
1 * K	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * M	-272.00	167.00	42.00	0.02
1 * K	-272.00	167.00	42.00	0.02
1 * M	-272.00	167.00	42.00	0.01
1 * N	-272.00	167.00	42.00	0.01
1 * M	-272.00	167.00	42.00	0.01
1 * K	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * M	-272.00	167.00	42.00	0.02
1 * K	-272.00	167.00	42.00	0.02

Qty and Code	Position			ULR
	X (m)	Y (m)	Z (m)	
1 * L	-272.00	167.00	42.00	0.01
1 * M	-272.00	167.00	42.00	0.01
1 * K	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * K	-272.00	167.00	42.00	0.02
1 * M	-272.00	167.00	42.00	0.01
1 * K	-272.00	167.00	42.00	0.02
1 * L	-272.00	167.00	42.00	0.02
1 * J	-272.00	327.00	42.00	0.03
1 * K	-272.00	327.00	42.00	0.02
1 * K	-272.00	327.00	42.00	0.02
1 * K	-272.00	327.00	42.00	0.02
1 * K	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * M	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * J	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * N	-272.00	327.00	42.00	0.01
1 * M	-272.00	327.00	42.00	0.01
1 * L	-272.00	327.00	42.00	0.02
1 * K	-272.00	327.00	42.00	0.01
1 * M	-272.00	327.00	42.00	0.02
1 * J	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * J	-272.00	327.00	42.00	0.03
1 * L	-272.00	327.00	42.00	0.02
1 * K	-272.00	327.00	42.00	0.03
1 * K	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * M	-272.00	327.00	42.00	0.02
1 * K	-272.00	327.00	42.00	0.02
1 * M	-272.00	327.00	42.00	0.01
1 * N	-272.00	327.00	42.00	0.01
1 * M	-272.00	327.00	42.00	0.01
1 * K	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * M	-272.00	327.00	42.00	0.02
1 * K	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.01
1 * M	-272.00	327.00	42.00	0.01
1 * K	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * K	-272.00	327.00	42.00	0.02
1 * M	-272.00	327.00	42.00	0.01
1 * K	-272.00	327.00	42.00	0.02
1 * L	-272.00	327.00	42.00	0.02
1 * A	-265.50	126.00	15.00	0.00
1 * C	-265.50	126.00	15.00	0.00
1 * A	-263.00	56.25	15.00	0.00
1 * C	-263.00	56.25	15.00	0.00
1 * C	-246.50	299.00	15.00	0.00

Qty and Code	Position			ULR
	X (m)	Y (m)	Z (m)	
1 * C	-246.50	299.00	15.00	0.00
1 * C	-246.50	299.00	15.00	0.00
1 * C	-246.00	351.00	15.00	0.00
1 * A	-246.00	351.00	15.00	0.00
1 * C	-245.00	245.50	15.00	0.00
1 * A	-245.00	245.50	15.00	0.00
1 * C	-238.50	241.50	15.00	0.00
1 * A	-238.50	241.50	15.00	0.00
1 * C	-237.50	188.69	15.00	0.00
1 * C	-237.00	188.50	15.00	0.00
1 * C	-237.00	188.50	15.00	0.00
1 * C	-233.50	136.25	15.00	0.00
1 * A	-233.50	136.25	15.00	0.00
1 * C	-212.00	130.00	15.00	0.00
1 * C	-212.00	130.00	15.00	0.00
1 * C	-209.50	57.75	15.00	0.00
1 * C	-209.50	57.75	15.00	0.00
1 * C	-209.50	57.75	15.00	0.00
1 * A	-176.50	353.50	15.00	0.00
1 * C	-176.50	353.50	15.00	0.00
1 * C	-173.00	301.00	15.00	0.00
1 * C	-173.00	301.00	15.00	0.00
1 * C	-173.00	301.00	15.00	0.00
1 * A	-172.50	248.50	15.00	0.00
1 * C	-172.50	248.50	15.00	0.00
1 * C	-164.50	243.50	15.00	0.00
1 * A	-164.50	243.50	15.00	0.00
1 * C	-163.00	191.25	15.00	0.00
1 * C	-163.00	191.25	15.00	0.00
1 * C	-163.00	191.25	15.00	0.00
1 * A	-161.50	138.20	15.00	0.00
1 * C	-161.50	138.20	15.00	0.00
1 * C	-159.00	130.50	15.00	0.00
1 * A	-159.00	130.50	15.00	0.00
1 * A	-156.25	60.00	15.00	0.00
1 * C	-156.25	60.00	15.00	0.00
1 * A	-90.00	-0.00	18.00	0.00
1 * A	-90.00	-0.00	18.00	0.00
1 * A	-90.00	-0.00	18.00	0.00
1 * A	-52.00	-47.00	18.00	0.00
1 * A	-52.00	-47.00	18.00	0.00
1 * A	-52.00	-47.00	18.00	0.00
1 * A	-52.00	-47.00	18.00	0.00
1 * A	-52.00	47.00	18.00	0.00
1 * A	-52.00	47.00	18.00	0.00
1 * A	-52.00	47.00	18.00	0.00
1 * A	-52.00	47.00	18.00	0.00
1 * A	-0.00	-47.00	18.00	0.00
1 * A	-0.00	-47.00	18.00	0.00
1 * A	-0.00	-47.00	18.00	0.00
1 * A	-0.00	47.00	18.00	0.00
1 * A	-0.00	47.00	18.00	0.00
1 * A	-0.00	47.00	18.00	0.00

Qty and Code	Position			ULR
	X (m)	Y (m)	Z (m)	
1 * A	-0.00	47.00	18.00	0.00
1 * A	52.00	-47.00	18.00	0.00
1 * A	52.00	-47.00	18.00	0.00
1 * A	52.00	-47.00	18.00	0.00
1 * A	52.00	-47.00	18.00	0.00
1 * A	52.00	47.00	18.00	0.00
1 * A	52.00	47.00	18.00	0.00
1 * A	52.00	47.00	18.00	0.00
1 * A	52.00	47.00	18.00	0.00
1 * A	52.00	47.00	18.00	0.00
1 * A	90.00	-0.00	18.00	0.00
1 * A	90.00	-0.00	18.00	0.00
1 * A	90.00	-0.00	18.00	0.00
1 * A	94.00	-53.00	15.25	0.00
1 * C	94.00	-53.00	15.25	0.00
1 * C	94.00	-0.00	15.25	0.00
1 * C	94.00	-0.00	15.25	0.00
1 * C	94.00	-0.00	15.25	0.00
1 * A	94.00	53.00	15.25	0.00
1 * C	94.00	53.00	15.25	0.00
1 * C	121.00	74.75	15.25	0.00
1 * C	121.00	110.93	15.25	0.00
1 * C	121.00	111.00	15.25	0.00
1 * C	121.00	147.84	15.25	0.00
1 * C	121.00	148.00	15.25	0.00
1 * C	121.00	184.00	15.25	0.00
1 * C	155.00	74.75	15.25	0.00
1 * C	155.00	110.93	15.25	0.00
1 * C	155.00	111.00	15.25	0.00
1 * C	155.00	147.84	15.25	0.00
1 * C	155.00	148.00	15.25	0.00
1 * C	155.00	184.00	15.25	0.00
1 * A	161.50	-316.50	15.25	0.00
1 * C	161.50	-316.50	15.25	0.00
1 * A	161.50	-244.50	15.25	0.00
1 * C	161.50	-244.50	15.25	0.00
1 * A	161.50	-240.50	15.25	0.00
1 * C	161.50	-240.50	15.25	0.00
1 * A	161.50	-168.50	15.25	0.00
1 * C	161.50	-168.50	15.25	0.00
1 * A	161.50	-164.50	15.25	0.00
1 * C	161.50	-164.50	15.25	0.00
1 * A	161.50	-92.50	15.25	0.00
1 * C	161.50	-92.50	15.25	0.00
1 * A	166.00	-53.00	15.25	0.00
1 * C	166.00	-53.00	15.25	0.00
1 * C	166.00	-0.00	15.25	0.00
1 * C	166.00	-0.00	15.25	0.00
1 * C	166.00	-0.00	15.25	0.00
1 * A	166.00	53.00	15.25	0.00
1 * C	166.00	53.00	15.25	0.00
1 * C	214.00	-316.50	15.25	0.00
1 * C	214.00	-316.50	15.25	0.00
1 * C	214.00	-316.50	15.25	0.00
1 * C	214.00	-244.50	15.25	0.00
1 * C	214.00	-244.50	15.25	0.00

Qty and Code	Position			ULR
	X (m)	Y (m)	Z (m)	
1 * C	214.00	-244.50	15.25	0.00
1 * C	214.00	-240.50	15.25	0.00
1 * C	214.00	-240.50	15.25	0.00
1 * C	214.00	-240.50	15.25	0.00
1 * C	214.00	-168.50	15.25	0.00
1 * C	214.00	-168.50	15.25	0.00
1 * C	214.00	-168.50	15.25	0.00
1 * C	214.00	-164.50	15.25	0.00
1 * C	214.00	-164.50	15.25	0.00
1 * C	214.00	-164.50	15.25	0.00
1 * C	214.00	-92.50	15.25	0.00
1 * C	214.00	-92.50	15.25	0.00
1 * C	214.00	-92.50	15.25	0.00
1 * A	266.50	-316.50	15.25	0.00
1 * C	266.50	-316.50	15.25	0.00
1 * A	266.50	-244.50	15.25	0.00
1 * C	266.50	-244.50	15.25	0.00
1 * A	266.50	-240.50	15.25	0.00
1 * C	266.50	-240.50	15.25	0.00
1 * A	266.50	-168.50	15.25	0.00
1 * C	266.50	-168.50	15.25	0.00
1 * A	266.50	-164.50	15.25	0.00
1 * C	266.50	-164.50	15.25	0.00
1 * A	266.50	-92.50	15.25	0.00
1 * C	266.50	-92.50	15.25	0.00
1 * G	781.32	293.29	15.25	0.00
1 * G	784.08	258.87	15.25	0.00
1 * G	787.13	225.47	15.25	0.00
1 * G	853.50	299.23	15.25	0.00
1 * G	856.47	265.33	15.25	0.00
1 * G	859.28	231.79	15.25	0.00
1 * G	905.18	275.95	15.25	0.00
1 * G	912.26	204.00	15.25	0.01
1 * G	937.73	279.72	15.25	0.00
1 * G	943.63	206.83	15.25	0.00
1 * G	980.66	281.84	15.25	0.00
1 * G	985.85	210.61	15.25	0.00
1 * G	1011.33	284.91	15.25	0.00
1 * G	1018.88	214.38	15.25	0.01



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Onze ref.: 230105.arca

Zwijndrecht, 23-01-2013

Geachte mevrouw Dikmans,

Naar aanleiding van ons gesprek geven wij onderstaand aan wat eventuele opties zijn om lichthinder van lichtinstallaties voor omwoners binnen de aanbevelingen van de commissie lichthinder te houden.

Indien er sprake is van lichthinder kan dat bij de bron of bij de gehinderden aangepakt worden. Er is reeds een lichthinder berekening uitgevoerd ten behoeve van de toekomstig geplande woningen in de wijk Stappengoor te Tilburg, waarbij de lichtinstallatie Willem II en de toekomstig geplande sportveldverlichting is onderzocht.

Uit dit onderzoek is gebleken dat de stadionverlichting van Willem II de bron is waar de hinder vandaan komt. De overige lichtinstallaties rondom de huidige en geplande sportvelden kunnen, indien nodig, vrij eenvoudig worden aangepast, zodat deze binnen de aanbevelingen van de commissie lichthinder worden aangepast dan wel worden aangelegd.

De theoretische modelberekeningen hebben echter uitgewezen dat, behoudens de stadionverlichting, er geen lichthinder voor de omwonenden zal zijn betreffende de toekomstig geplande lichtinstallaties rondom de sportvelden.

Onderstaand geven wij mogelijke maatregelen ter voorkoming van lichthinder. Hierbij is eerst gekeken naar de bron en vervolgens naar de objecten.

De bron

Zoals de vorige keer aangegeven is er een mogelijkheid om de lichtinstallatie van het stadion Willem II anders in te stellen en eventuele kleine aanpassingen (waaronder het toepassen van louvres) te doen waardoor de lichthinder naar de huidige en toekomstige omwoners wordt geminimaliseerd en waarbij aan de aanbevelingen van de commissie lichthinder kan worden voldaan. Hierbij zal de gemiddelde horizontale verlichtingssterkte toenemen en de gemiddelde verticale verlichtingssterkte afnemen.

Objecten

Een andere mogelijke oplossing ter voorkoming van lichthinder is aanpassingen aan of bij de objecten (woningen). Hierbij moet gedacht worden aan overkappingen, luifels, overstekken, jaloezieën, screens, plaatsen van bladhoudende bomen, toepassen blinde muren, pergola's en carports. Gezien de hoogte van de stadionmasten moet de meest denkbare oplossing gezocht worden in jaloezieën, screens, toepassen blinde muren, pergola's en carports.

Aanvullend onderzoek

Een aanvullend onderzoek kan uitwijzen welke oplossing aan de bron en/of de objecten de meeste kans van slagen heeft. Voor dit onderzoek is een ACAD tekening benodigd om de exacte plaats van de nieuwbouwwoningen ten opzichte van het stadion en de toekomstige sportvelden vast te leggen. Vervolgens zal er in de modelberekening bepaalde afschermingen ingebracht worden, waarna er een simulatie uitgevoerd wordt om tot de best denkbare oplossingen te komen.

Wij vertrouwen u hiermede voldoende te hebben geïnformeerd en staan gaarne ter beschikking voor alle nader gewenste informatie.

Wij zullen het op prijs stellen nader van u te mogen vernemen en verblijven,

hoogachtend,
OOSTENDORP NEDERLAND B.V.,

Ing. J.W. de Boer.