

Cumberland L.T.C

Floodlighting Acrylic Courts

Date: 09-06-2009
Customer Representative: Michele

Designer: Ian Hounsham

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.

LTL Contracts

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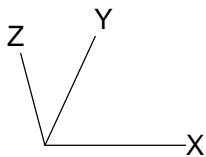
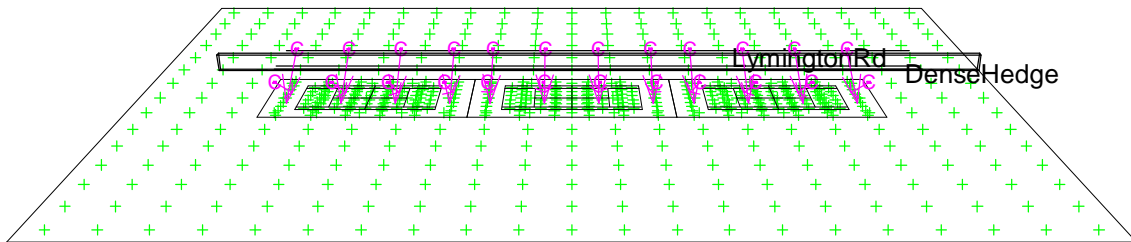
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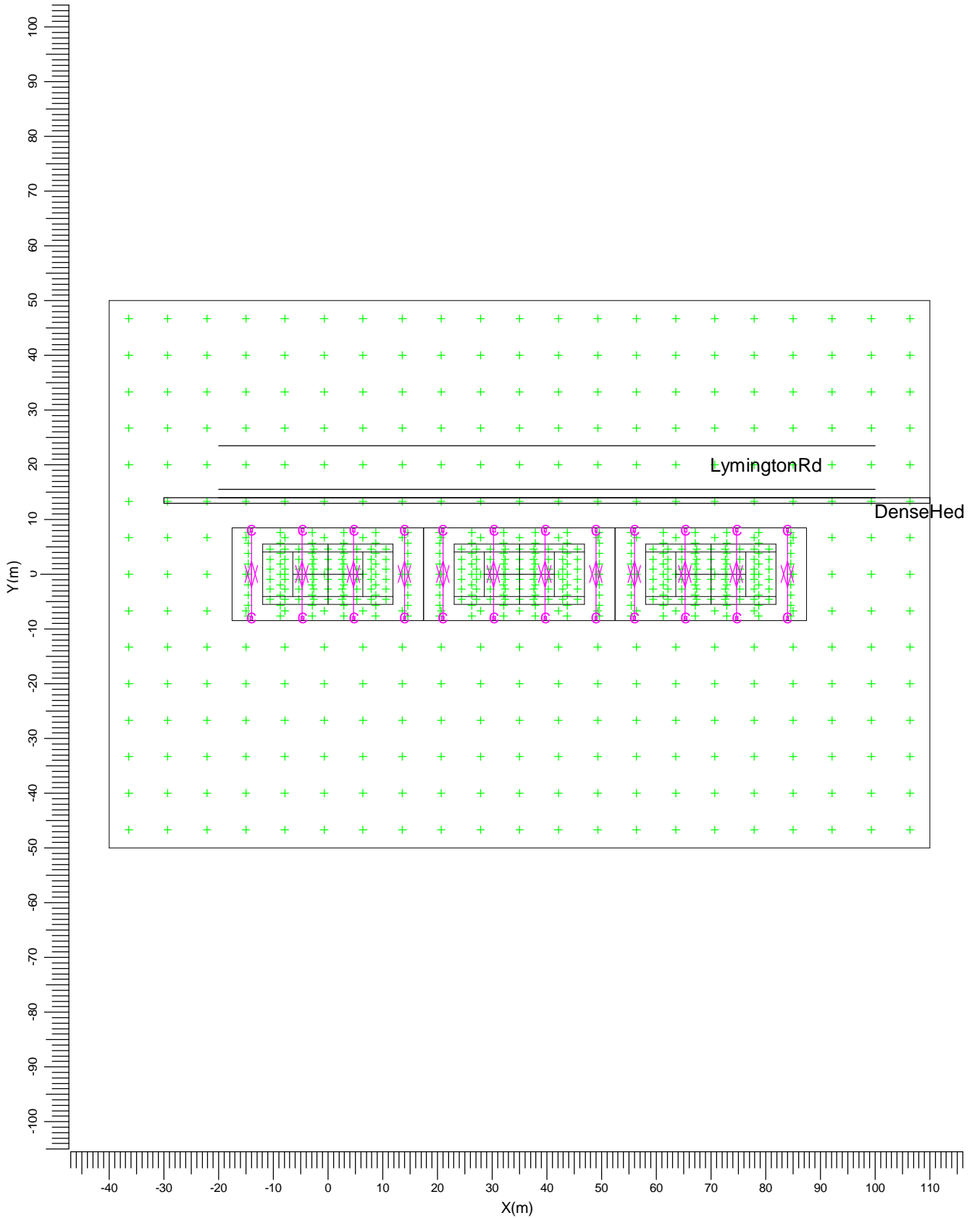
1. Project Description

1.1 3-D Project Overview



C  MKF207 A/57

1.2 Top Project Overview



C  MKF207 A/57

Scale
1:1000

2. Summary

2.1 General Information

The overall maintenance factor used for this project is 0.80.

2.2 Obstacle Information

Obstacle	Transparency (%)	Position		
		X (m)	Y (m)	Z (m)
Dense Hedge	0	-30.00	13.00	0.00

2.3 Project Luminaires

Code	Qty	Luminaire Type	Lamp Type	Power (W)	Flux (lm)
C	24	MKF207 A/57	1 * MHN-LA 1000W/842	1105.0	1 * 85000

The total installed power: 26.52 (kWatt)

Number of Luminaires Per Switching Mode:

Switching Mode	Luminaire Code	Power (kWatt)
	C	
All Lights On	24	26.52
Only Court 1	8	8.84
Only Court 2	8	8.84
Only Court 3	8	8.84

Number of Luminaires Per Arrangement:

Arrangement	Luminaire Code	Power (kWatt)
	C	
Row1/1	8	8.84
Row2/2	8	8.84
Row3/3	8	8.84

2.4 Calculation Results

Switching Modes:

Code	Switching Mode
1	All Lights On
2	Only Court 1
3	Only Court 2
4	Only Court 3

(II)luminance Calculations:

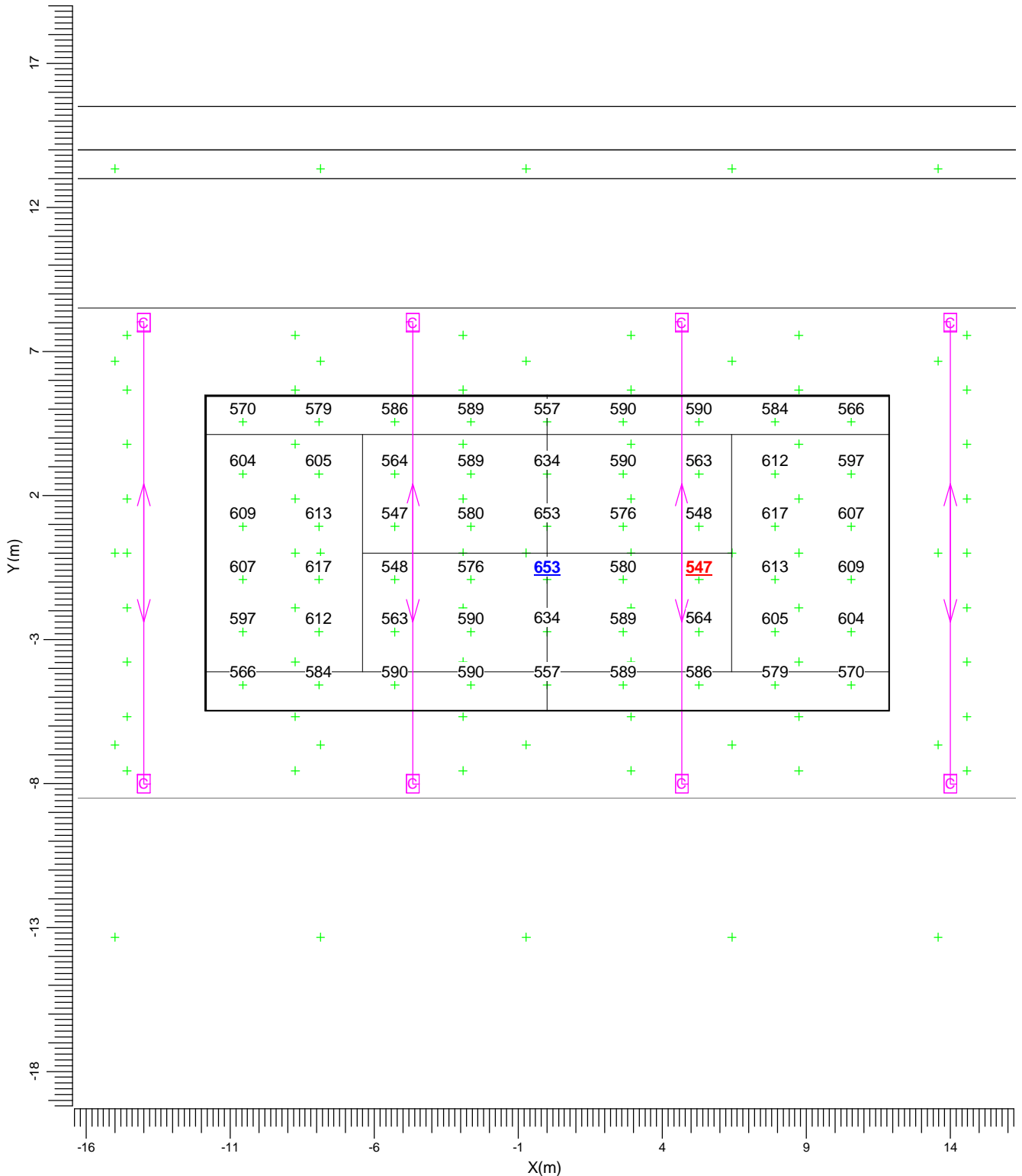
Calculation	Switching Mode	Type	Unit	Ave	Min	Min/Ave
Court 1	2	Surface Illuminance	lux	590	547	0.93
Court 2	3	Surface Illuminance	lux	590	547	0.93
Court 3	4	Surface Illuminance	lux	590	547	0.93
Overspill	1	Surface Illuminance	lux	86.0	0.0	0.00

3. Calculation Results

3.1 Court 1: Graphical Table

Only Court 1

Grid : Court 1 at Z = -0.00 m
Calculation : Surface Illuminance (lux)



C → MKF207 A/57

Average
590

Minimum
547

Min/Ave
0.93

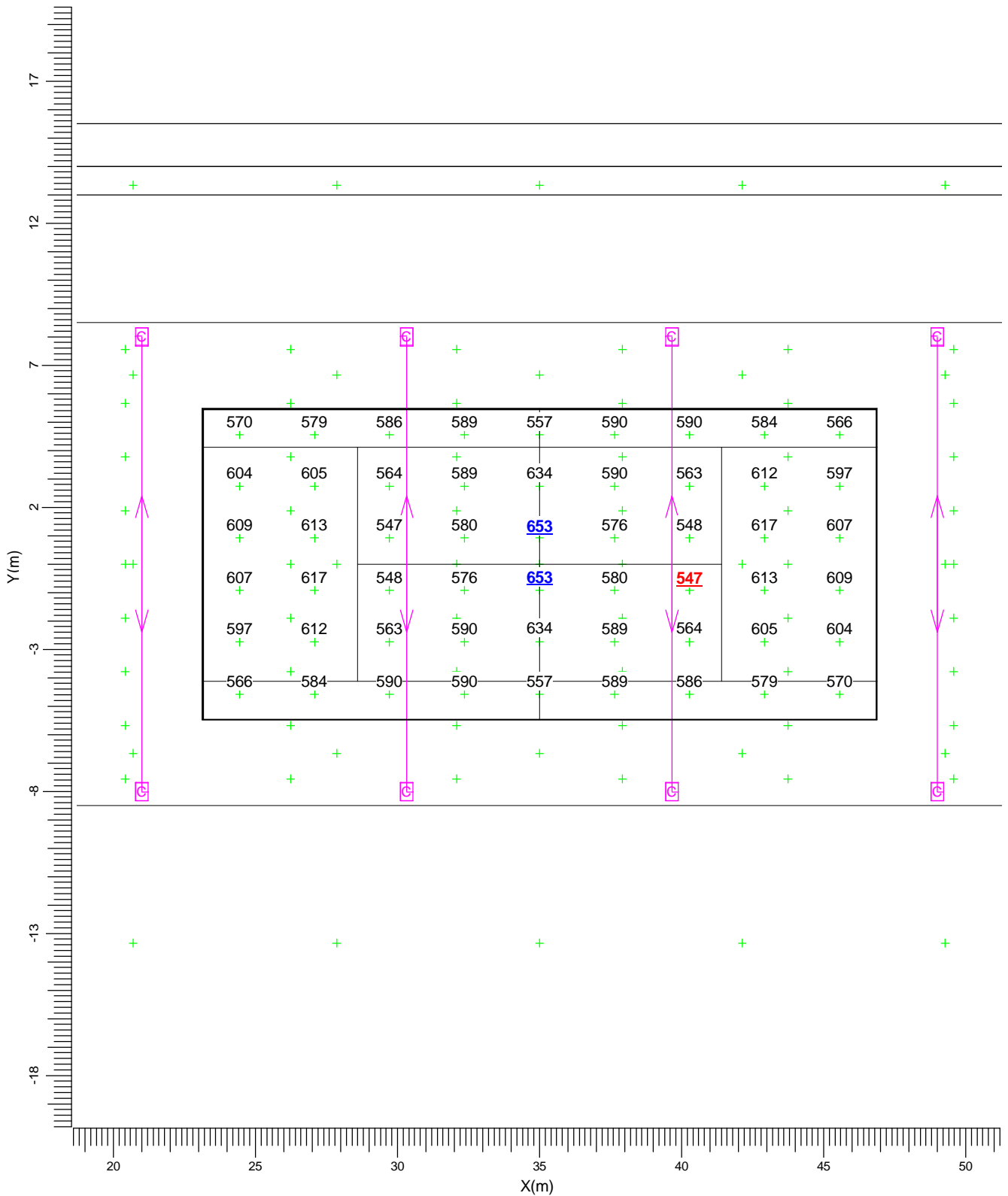
Project maintenance factor
0.80

Scale
1:200

3.2 Court 2: Graphical Table

Only Court 2

Grid : Court 2 at Z = -0.00 m
Calculation : Surface Illuminance (lux)



C → MKF207 A/57

Average
590

Minimum
547

Min/Ave
0.93

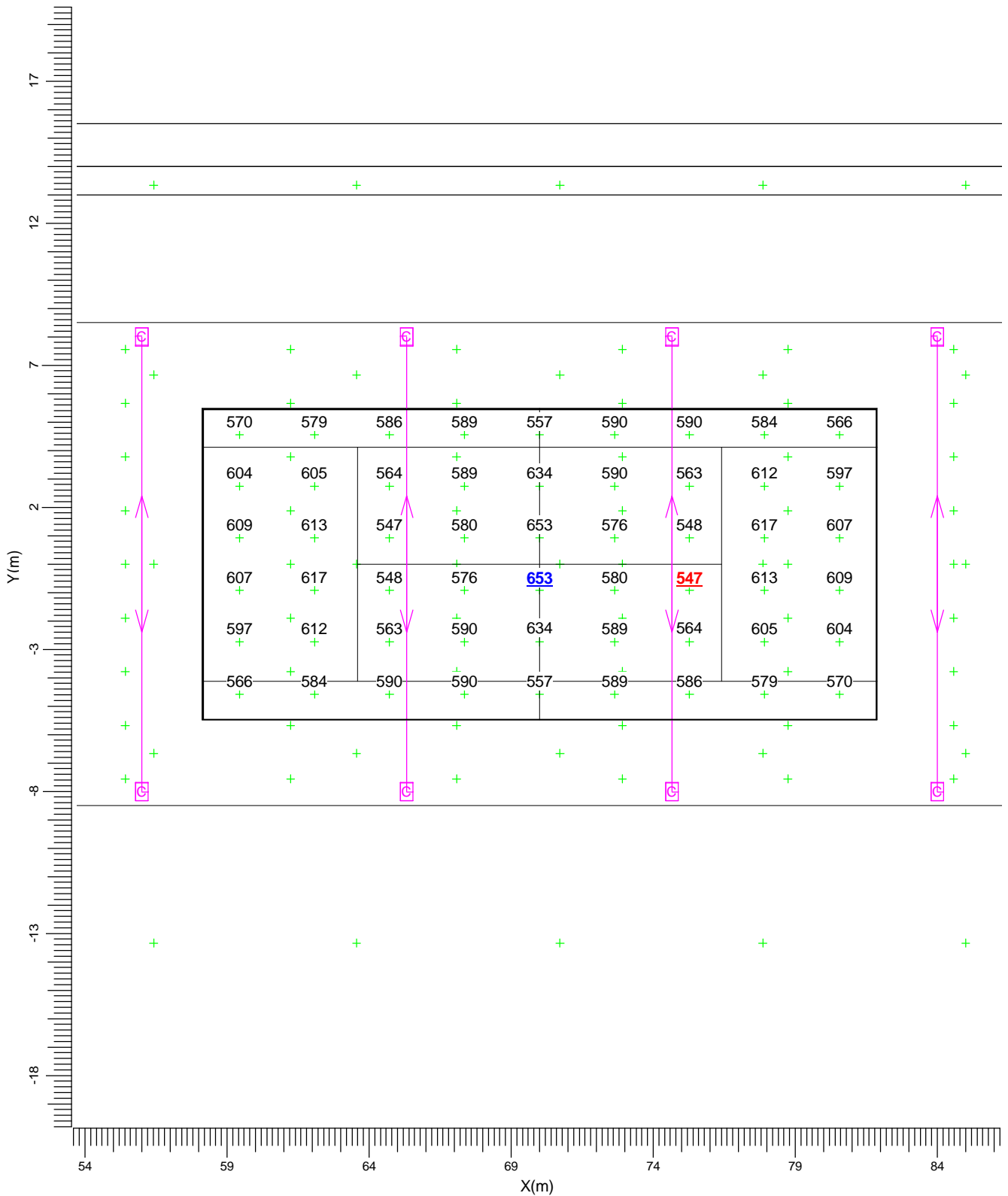
Project maintenance factor
0.80

Scale
1:200

3.3 Court 3: Graphical Table

Only Court 3

Grid : Court 3 at Z = -0.00 m
Calculation : Surface Illuminance (lux)



C → MKF207 A/57

Average
590

Minimum
547

Min/Ave
0.93

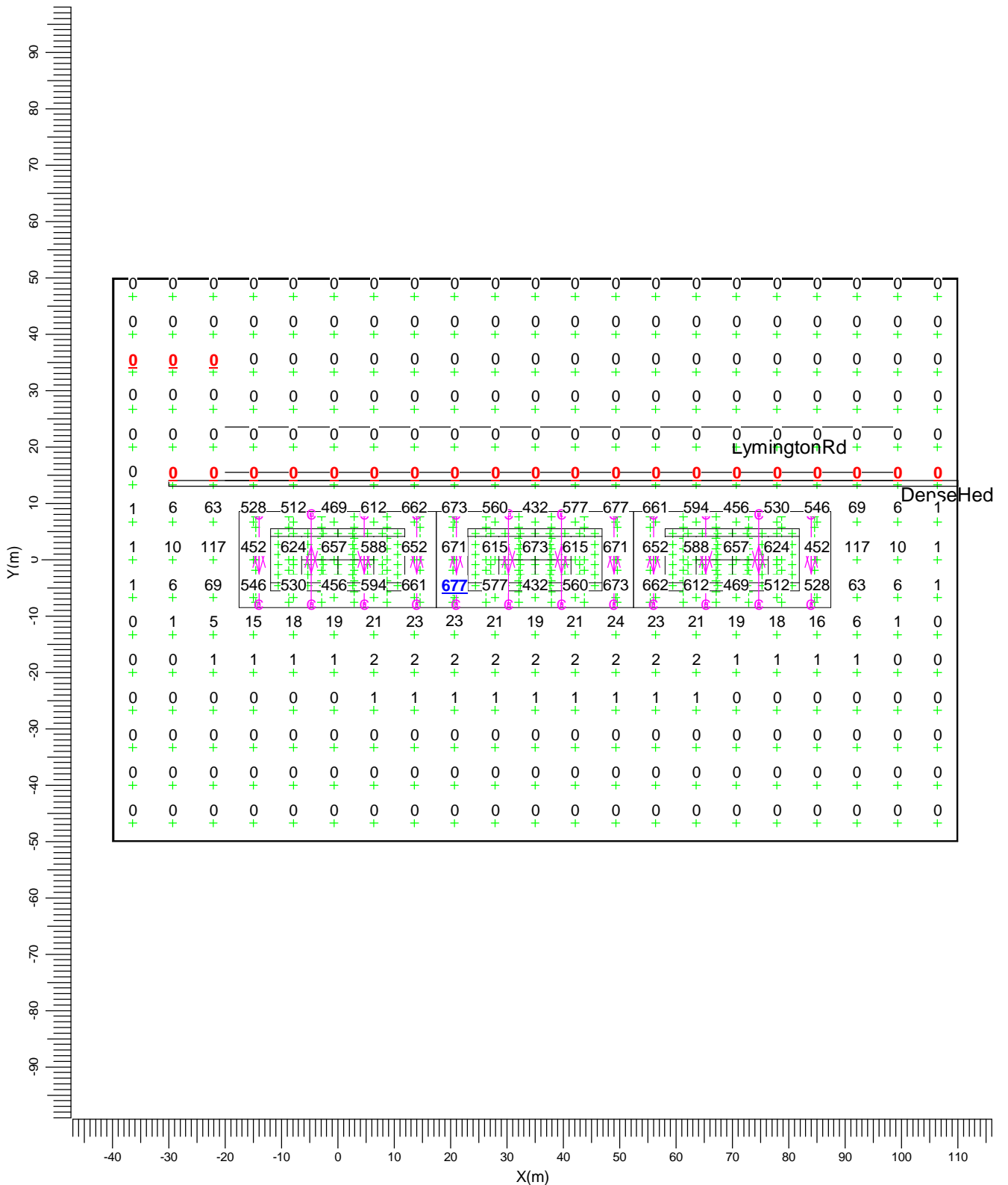
Project maintenance factor
0.80

Scale
1:200

3.4 Overspill: Graphical Table

All Lights On

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



C → MKF207 A/57

Average
86.0

Minimum
0.0

Min/Ave
0.00

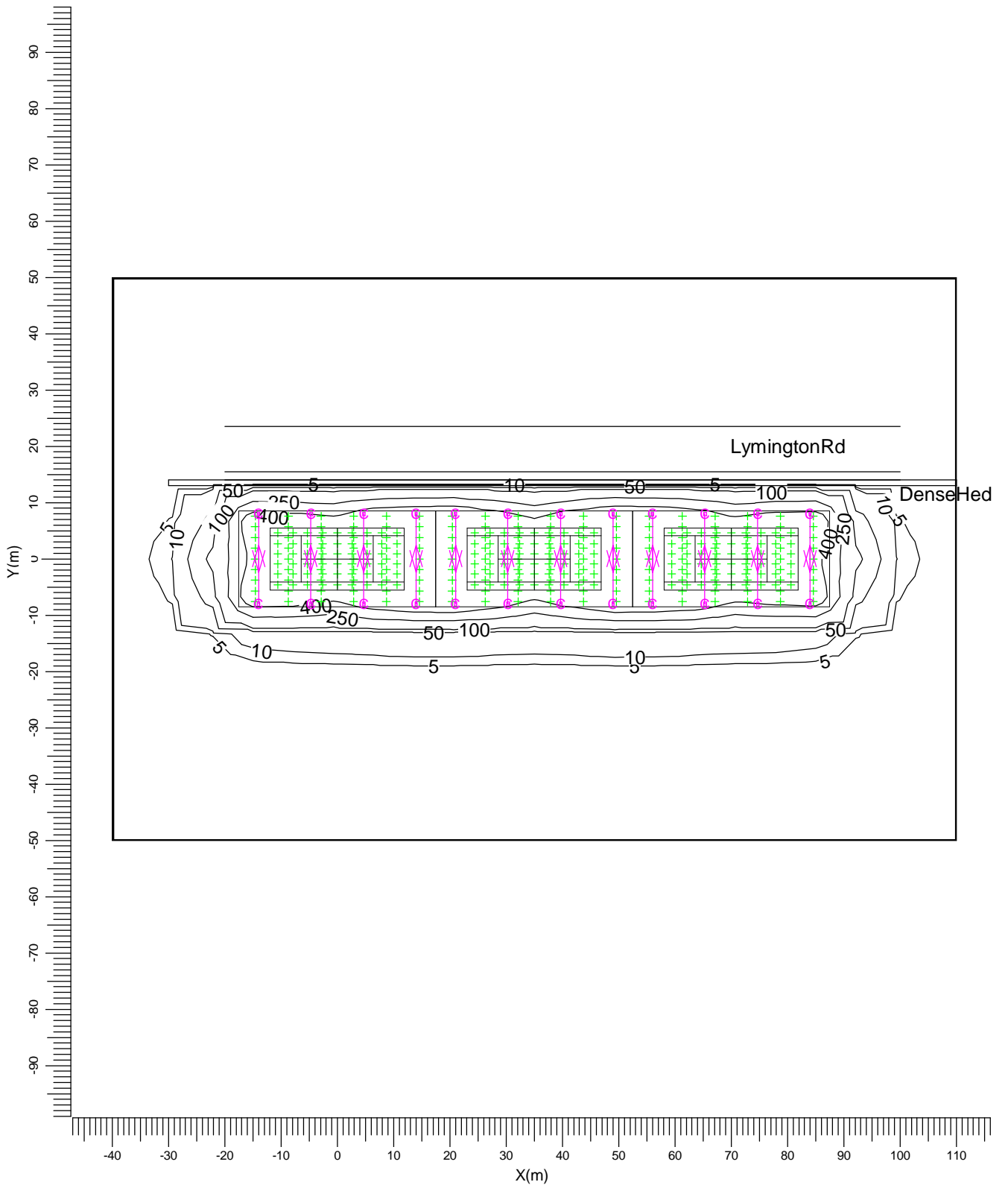
Project maintenance factor
0.80

Scale
1:1000

3.5 Overspill: Iso Contour

All Lights On

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



C  MKF207 A/57

Average
86.0

Minimum
0.0

Min/Ave
0.00

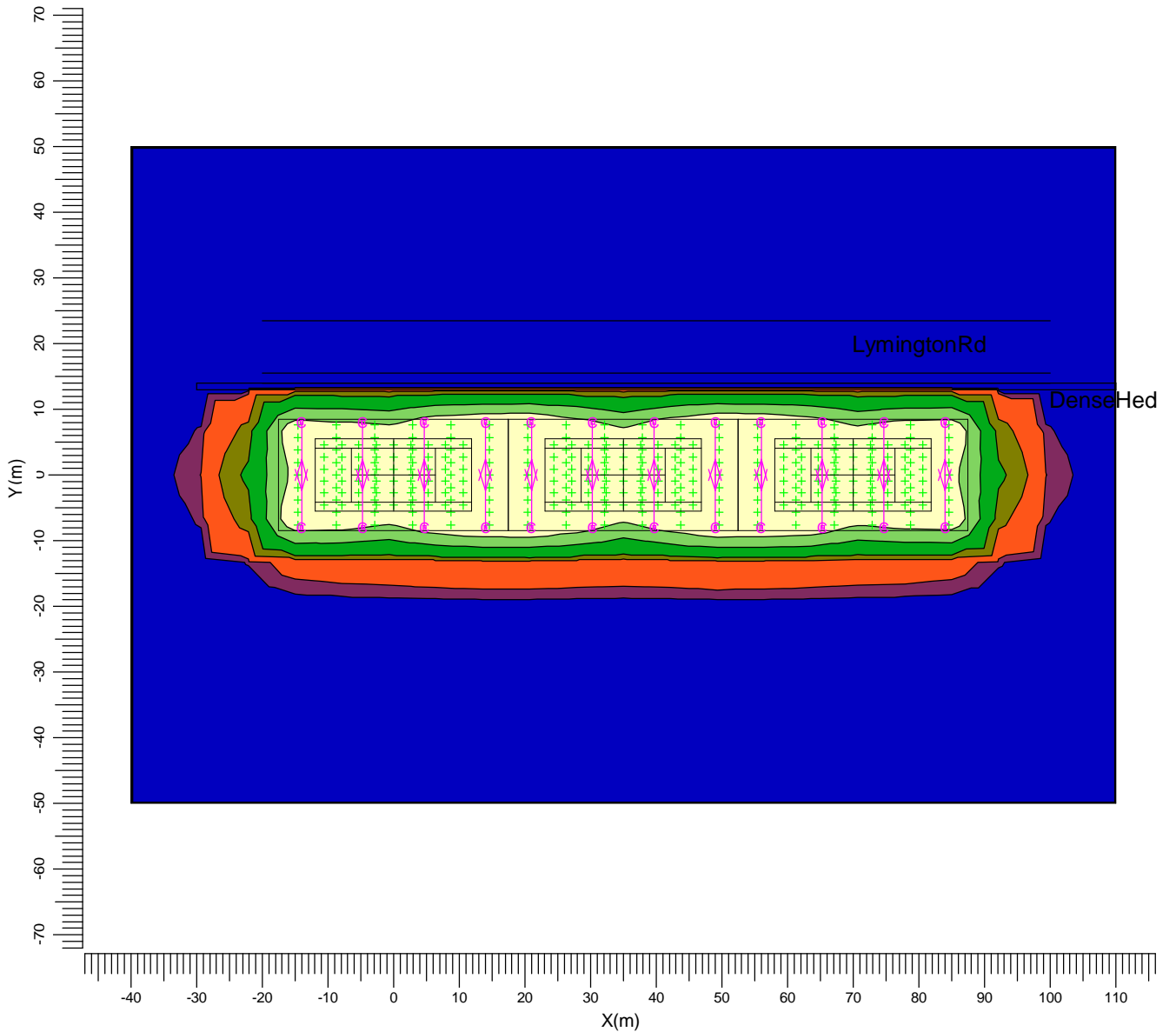
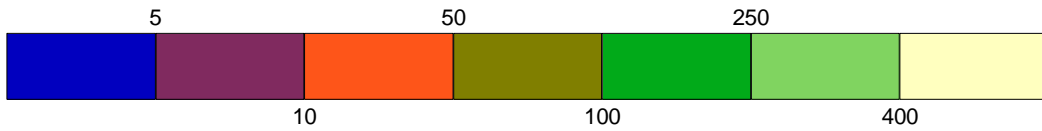
Project maintenance factor
0.80

Scale
1:1000

3.6 Overspill: Filled Iso Contour

All Lights On

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



C		MKF207 A/57			
Average	Minimum	Min/Ave	Project maintenance factor	Scale	
86.0	0.0	0.00	0.80	1:1000	

4. Luminaire Details

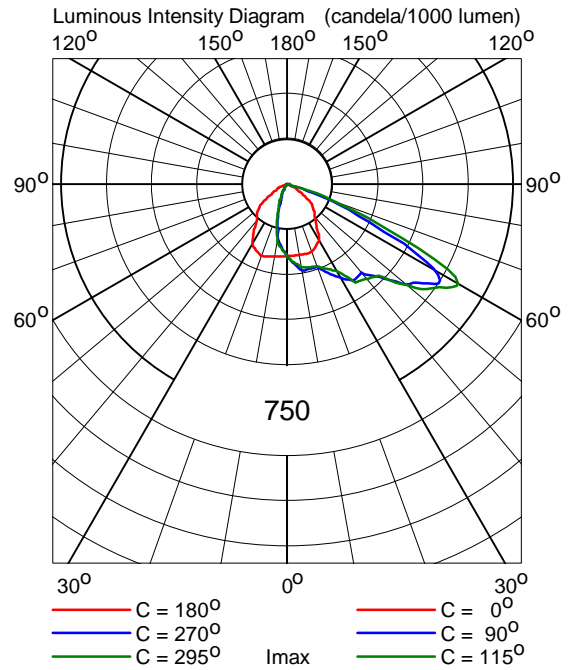
4.1 Project Luminaires

MKF207 1xMHN-LA 1000W/842 A/57

Light output ratios

DLOR	: 0.74
ULOR	: 0.00
TLOR	: 0.74
Ballast	: Standard
Lamp flux	: 85000 lm
Luminaire wattage	: 1105.0 W
Measurement code	: LTL MKF207

Note: Luminaire data not from database.



5. Installation Data

5.1 Legends

Project Luminaires:

Code	Qty	Luminaire Type	Lamp Type	Flux (lm)
C	24	MKF207 A/57	1 * MHN-LA 1000W/842	1 * 85000

Switching Modes:

Code	Switching Mode
1	All Lights On
2	Only Court 1
3	Only Court 2
4	Only Court 3

5.2 Luminaire Positioning and Orientation

Qty and Code	Position			Aiming Angles			Switching Modes			
	X (m)	Y (m)	Z (m)	Rot.	Tilt90	Tilt0	1	2	3	4
1 * C	-14.00	-8.00	6.00	90.0	60.0	0.0	+	+	-	-
1 * C	-14.00	8.00	6.00	-90.0	60.0	-0.0	+	+	-	-
1 * C	-4.67	-8.00	6.00	90.0	60.0	0.0	+	+	-	-
1 * C	-4.67	8.00	6.00	-90.0	60.0	-0.0	+	+	-	-
1 * C	4.67	-8.00	6.00	90.0	60.0	0.0	+	+	-	-
1 * C	4.67	8.00	6.00	-90.0	60.0	-0.0	+	+	-	-
1 * C	14.00	-8.00	6.00	90.0	60.0	0.0	+	+	-	-
1 * C	14.00	8.00	6.00	-90.0	60.0	-0.0	+	+	-	-
1 * C	21.00	-8.00	6.00	90.0	60.0	0.0	+	-	+	-
1 * C	21.00	8.00	6.00	-90.0	60.0	-0.0	+	-	+	-
1 * C	30.33	-8.00	6.00	90.0	60.0	0.0	+	-	+	-
1 * C	30.33	8.00	6.00	-90.0	60.0	-0.0	+	-	+	-
1 * C	39.67	-8.00	6.00	90.0	60.0	0.0	+	-	+	-
1 * C	39.67	8.00	6.00	-90.0	60.0	-0.0	+	-	+	-
1 * C	49.00	-8.00	6.00	90.0	60.0	0.0	+	-	+	-
1 * C	49.00	8.00	6.00	-90.0	60.0	-0.0	+	-	+	-
1 * C	56.00	-8.00	6.00	90.0	60.0	0.0	+	-	-	+
1 * C	56.00	8.00	6.00	-90.0	60.0	-0.0	+	-	-	+
1 * C	65.33	-8.00	6.00	90.0	60.0	0.0	+	-	-	+
1 * C	65.33	8.00	6.00	-90.0	60.0	-0.0	+	-	-	+
1 * C	74.67	-8.00	6.00	90.0	60.0	0.0	+	-	-	+
1 * C	74.67	8.00	6.00	-90.0	60.0	-0.0	+	-	-	+
1 * C	84.00	-8.00	6.00	90.0	60.0	0.0	+	-	-	+
1 * C	84.00	8.00	6.00	-90.0	60.0	-0.0	+	-	-	+