

KFC Baguley

Installation : Frank Belshaw

Project number : Pn: 9625
Customer : Pn: 9625 - KFC Baguley - Frank Belshaw
Processed by : Chiara Lighting
Date : 16.10.2024

Project description:
Reflectances: TBC

Ceiling Height: TBC

Additional notes supplied in the accompanying email.

All room/ exterior dimensions to be checked on site prior to ordering.

Emergency Lighting Design (If Provided) has been designed in accordance to BS5266/EN1838/I.S. 3217 where applicable. The emergency lighting must be checked and approved by a fire control officer and approved by the building owner prior to order. Furthermore if a risk assessment has not been provided, the design is based on assumptions and would need checking and amending to reflect the exact requirements stated on the risk assessment.

The emergency lighting calculation does not take into account location of Reception telephone, First Aid Points, Extinguisher points, call points, push bars, fire panels, etc. As these have not been provided on the drawings supplied.

It is the responsibility of the customer to ensure any scheme provided by Chiara Lighting meets all the requirements of the end user.

The following values are based on precise calculations performed on calibrated lamps and luminaires, and their configurations, whereby gradual, unavoidable deviations can occur in practice. All guarantee claims are excluded for the specified data.

This exclusion of liability applies irrespective of the legal grounds for both damages and consequential damages suffered by users and third parties.

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1 Luminaire data

1.1 NORTHCLIFFE, Auva LED1x4500 J008 T740 LSS2 ()

1.1.1 Data sheet

Manufacturer: NORTHCLIFFE

Auva LED1x4500 J008 T740 LSS2

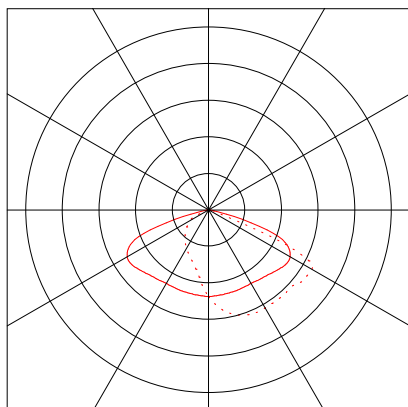
Luminaire data

Luminaire efficiency : 100%
Luminaire efficacy : 156.33 lm/W
Classification : A30 ↓100.0% ↑0.0%
CIE Flux Codes : 35 70 98 100 100
Glare : G*3 / D6
Power : 28.9 W
Luminous flux : 4518 lm

Equipped with

Quantity : 1
Designation : LED
Colour : 4000
Luminous flux : 4518 lm
Colour reproduction : 70

Dimensions : 525 mm x 205 mm x 102 mm

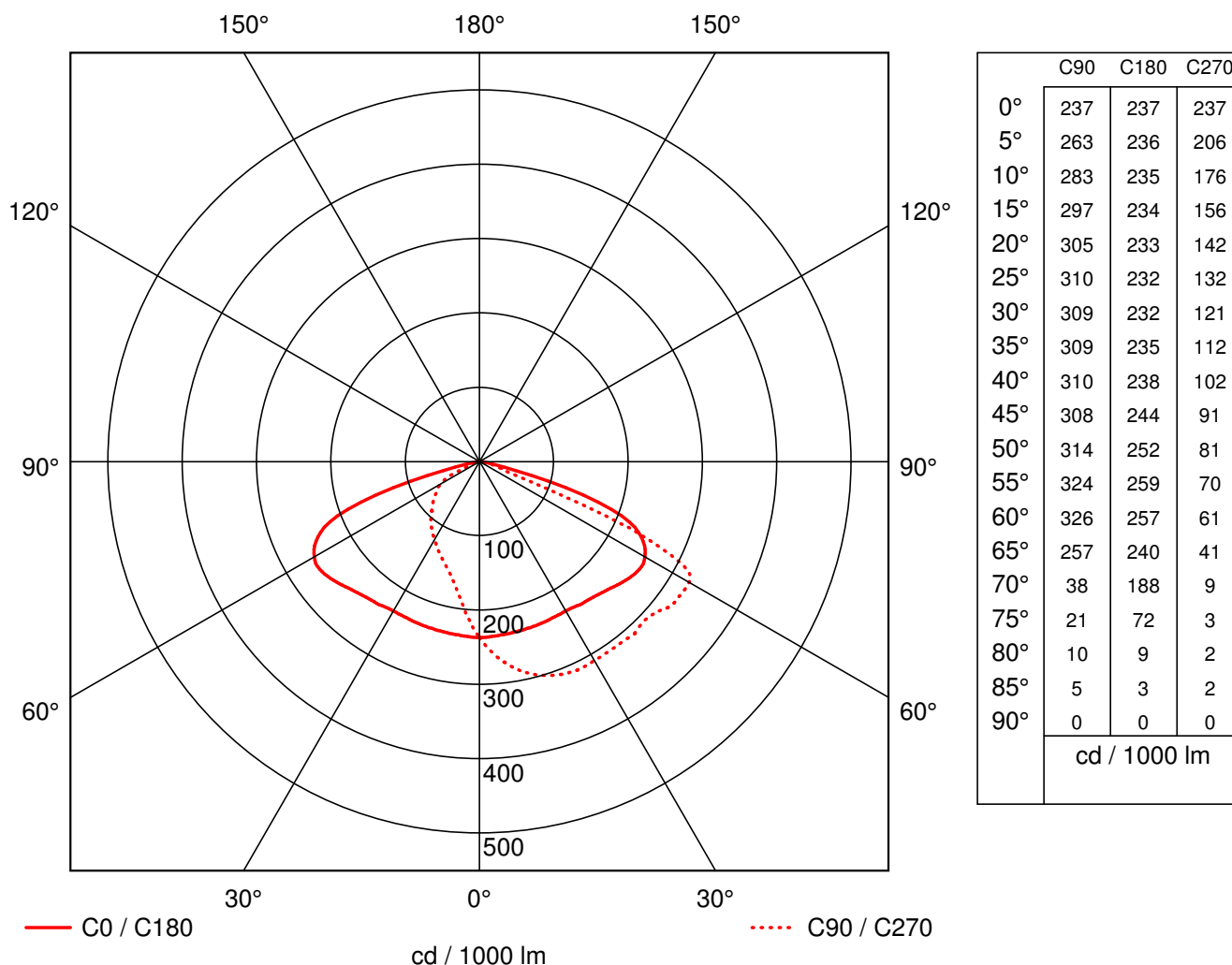


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1.1 NORTHCLIFFE, Auva LED1x4500 J008 T740 LSS2 ()

1.1.2 LDC



Manufacturer : NORTHCLIFFE
Order number :
Luminaire name : Auva LED1x4500 J008 T740 LSS2
Equipment : 1 x LED 28.9 W / 4518 lm
Dimensions : L 525 mm x W 205 mm x H 102 mm
File name : I_270_Auva LED1x4500 J008 T740 L

Efficiency factor : 100%
Luminaire efficacy : 156.33 lm/W (A30)
Light distribution : sym. to C90-C270
Beam Angle : 114.6° C0-C180
64.9° C90
-- C270

Object : KFC Baguley
Installation : Frank Belshaw
Project number : Pn: 9625
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1.1 NORTHCLIFFE, Auva LED1x4500 J008 T740 LSS2 ()

1.1.3 Glare Rating (RUG)

RUG tabular method not applicable.

Object : KFC Baguley
Installation : Frank Belshaw
Project number : Pn: 9625
Date : 16.10.2024



2 Exterior 1

2.1 Description, Exterior 1

2.1.1 Luminaire data/Room elements

Product data:

Type No.\Make

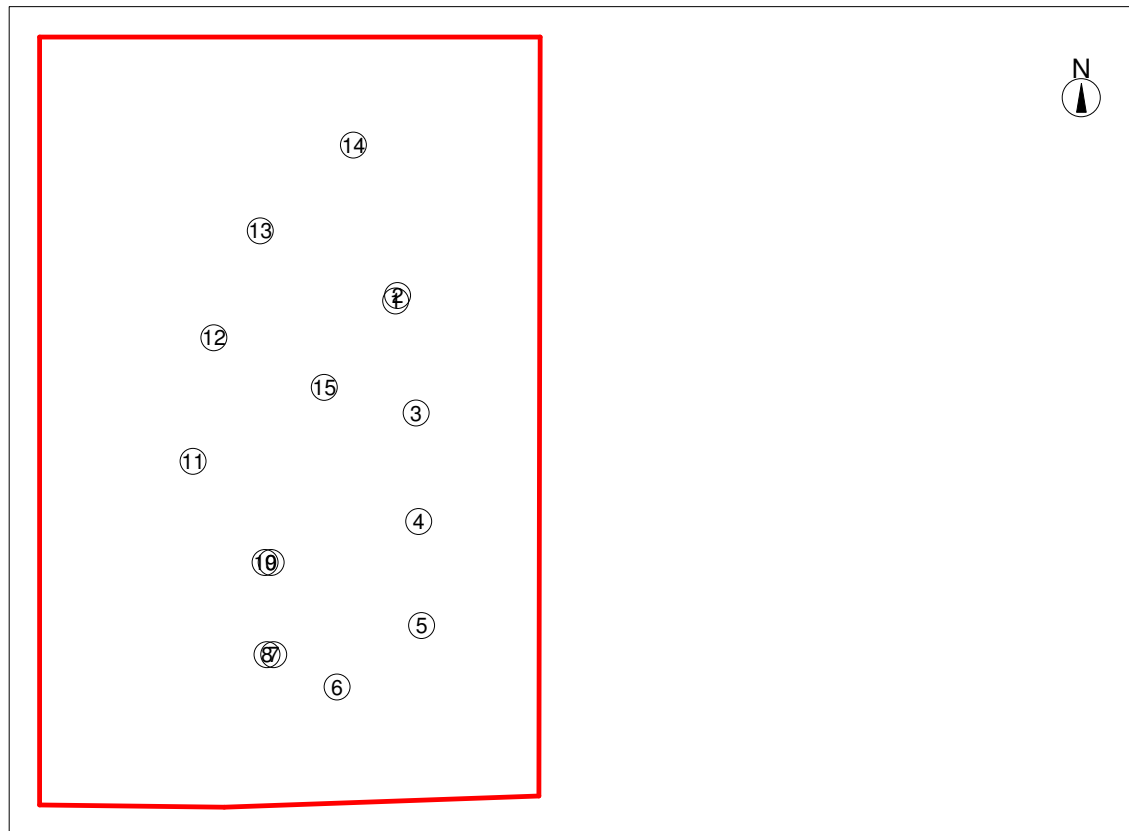
		NORTHCLIFFE	
1	15 x	Order No.	:
		Luminaire name	: Auva LED1x4500 J008 T740 LSS2
		Equipment	: 1 x LED 28.9 W / 4518 lm

2 Exterior 1

2.1 Description, Exterior 1

2.1.1 Luminaire data/Room elements

Floor with luminaire and sensor positions:



No.	Centre point			Rotation angle			Target coordinates		
	X [m]	Y [m]	Z [m]	Z [°]	C0 [°]	C90 [°]	Xa [m]	Ya [m]	Za [m]
NORTHCLIFFE Auva LED1x4500 J008 T740 LSS2									
1	22.51	67.90	5.95	159.38	0.00	0.00	19.03	58.63	0.00
2	22.80	68.67	5.95	339.38	0.00	0.00	26.29	77.93	0.00
3	25.29	52.82	5.95	90.00	0.00	0.00	15.39	52.82	0.00
4	25.66	38.17	5.95	90.00	0.00	0.00	15.76	38.17	0.00
5	26.01	24.16	5.95	90.00	0.00	0.00	16.11	24.17	0.00
6	14.65	15.89	5.95	0.00	0.00	0.00	14.65	25.79	0.00
7	6.07	20.24	5.95	270.00	0.00	0.00	15.98	20.24	0.00
9	5.76	32.68	5.95	270.00	0.00	0.00	15.66	32.68	0.00
8	5.20	20.23	5.95	90.00	0.00	0.00	-4.70	20.23	0.00
10	4.94	32.66	5.95	90.00	0.00	0.00	-4.96	32.66	0.00
11	-4.79	46.30	5.95	263.01	0.00	0.00	5.04	45.10	0.00
12	-1.96	62.93	5.95	248.89	0.00	0.00	7.27	59.37	0.00
15	12.90	56.27	5.95	68.89	0.00	0.00	3.67	59.83	0.00
13	4.27	77.37	5.95	247.51	0.00	0.00	13.42	73.58	0.00
14	16.83	88.90	5.95	178.07	0.00	0.00	16.50	79.00	0.00

Structural elements

2 Exterior 1

2.1 Description, Exterior 1

2.1.1 Luminaire data/Room elements

Measuring surface

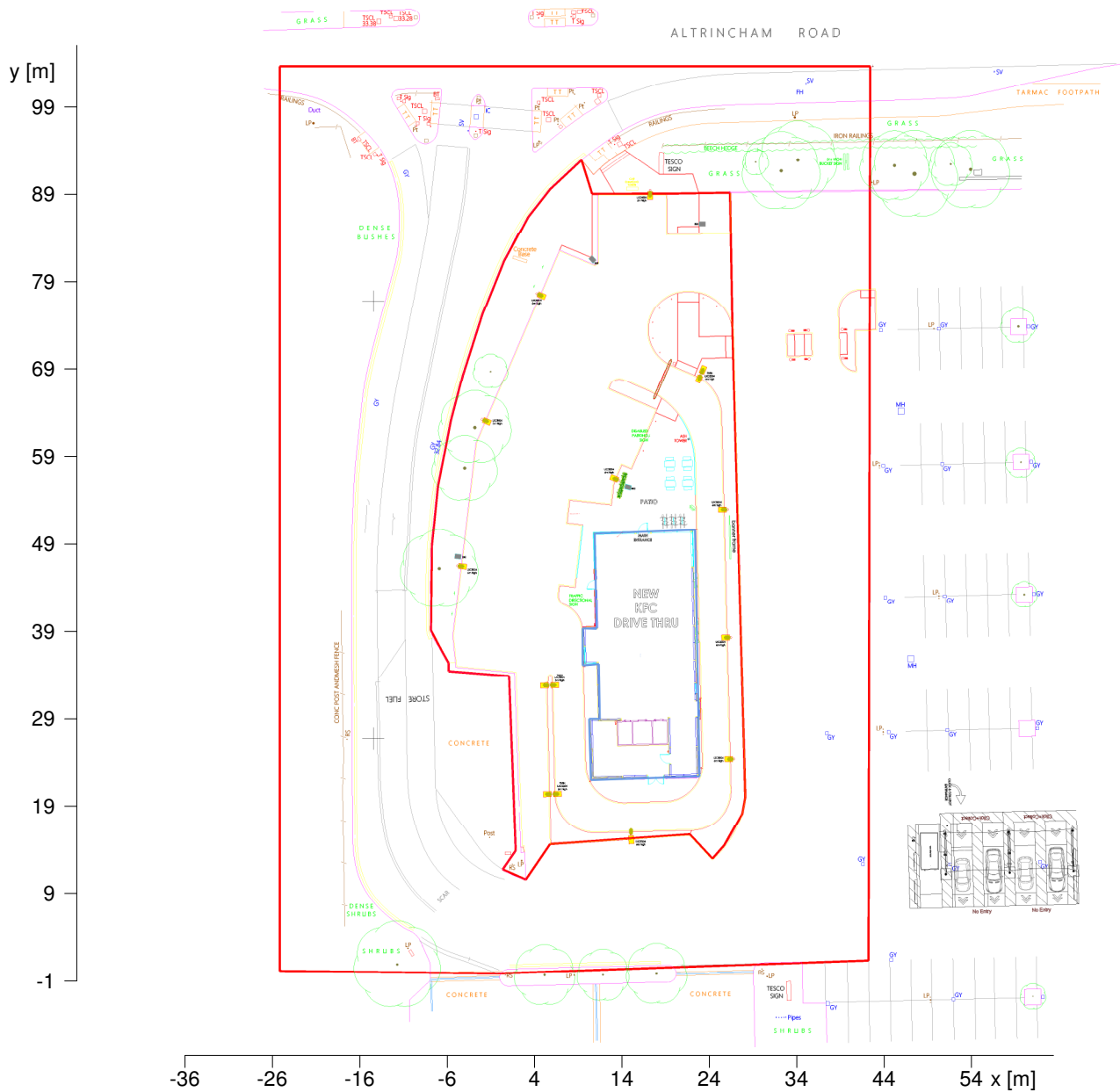
No.	xm[m]	ym[m]	zm[m]	Length	Width	z axis	Rotation angle	
							L axis	Q axis
Ref. plane 1.1	-25.50	-0.00	0.00	74.75	107.05	2.02	0.00	0.00
Measuring Area								
M 1	8.99	92.77	0.00	99.38	99.22	42.69	0.00	0.00

Others

No.	xm[m]	ym[m]	zm[m]	Length	Width	z axis	Rotation angle		rho[%]
							L axis	Q axis	
A 1	10.07	21.83	0.00	14.11	28.67	271.67	0.00	0.00	50

2.1 Description, Exterior 1

2.1.2 Floor plan

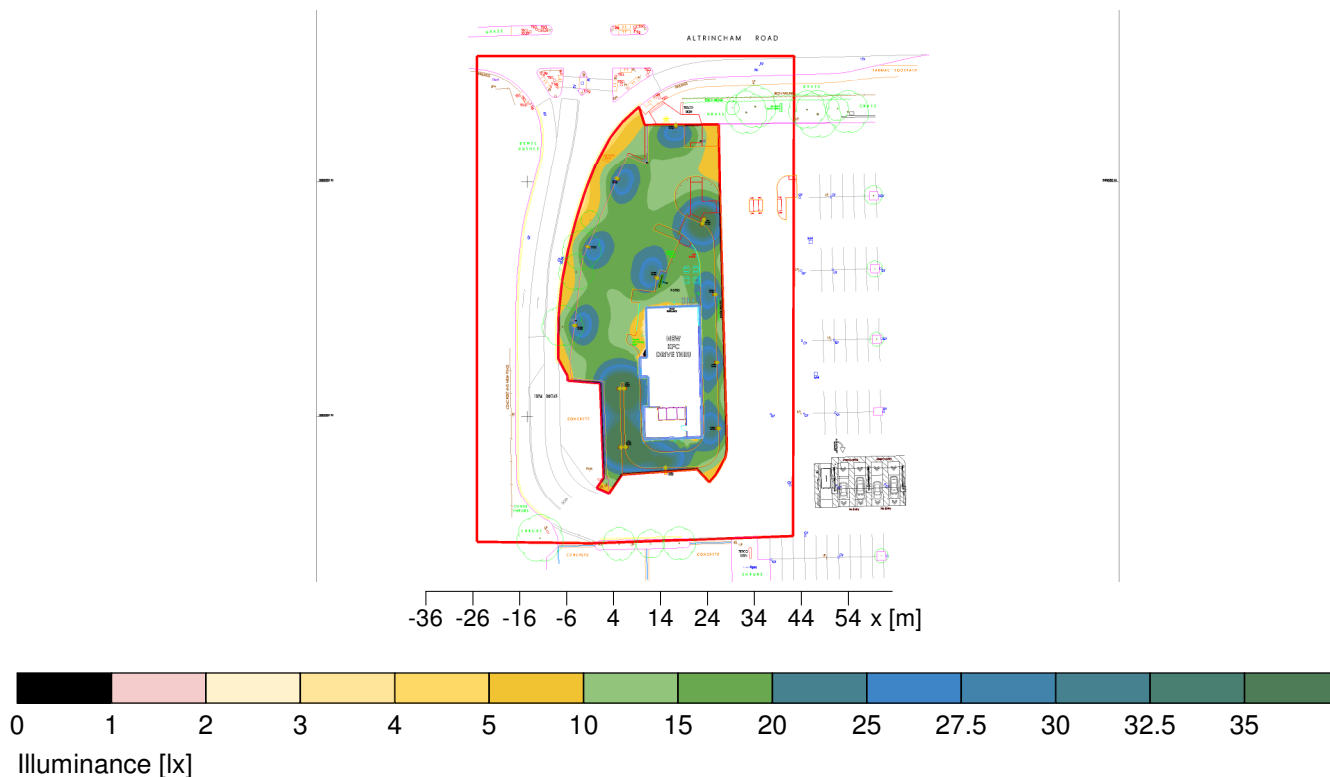


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2 Exterior 1

2.2 Summary, Exterior 1

2.2.1 Result overview, Measuring Area



General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Height (phot centre) [m]:	5.95 m
Maintenance factor	0.80

Total luminous flux	67770 lm
Total power	433.5 W
Total power per area (6960.36 m²)	0.06 W/m²

Illuminance

Average illuminance	$\bar{E}_m$	19.7 lx
Minimum illuminance	E_{min}	0.4 lx
Maximum illuminance	E_{max}	52.6 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:50.6 (0.02)
Diversity U_d	E_{min}/E_{max}	1:135 (0.01)

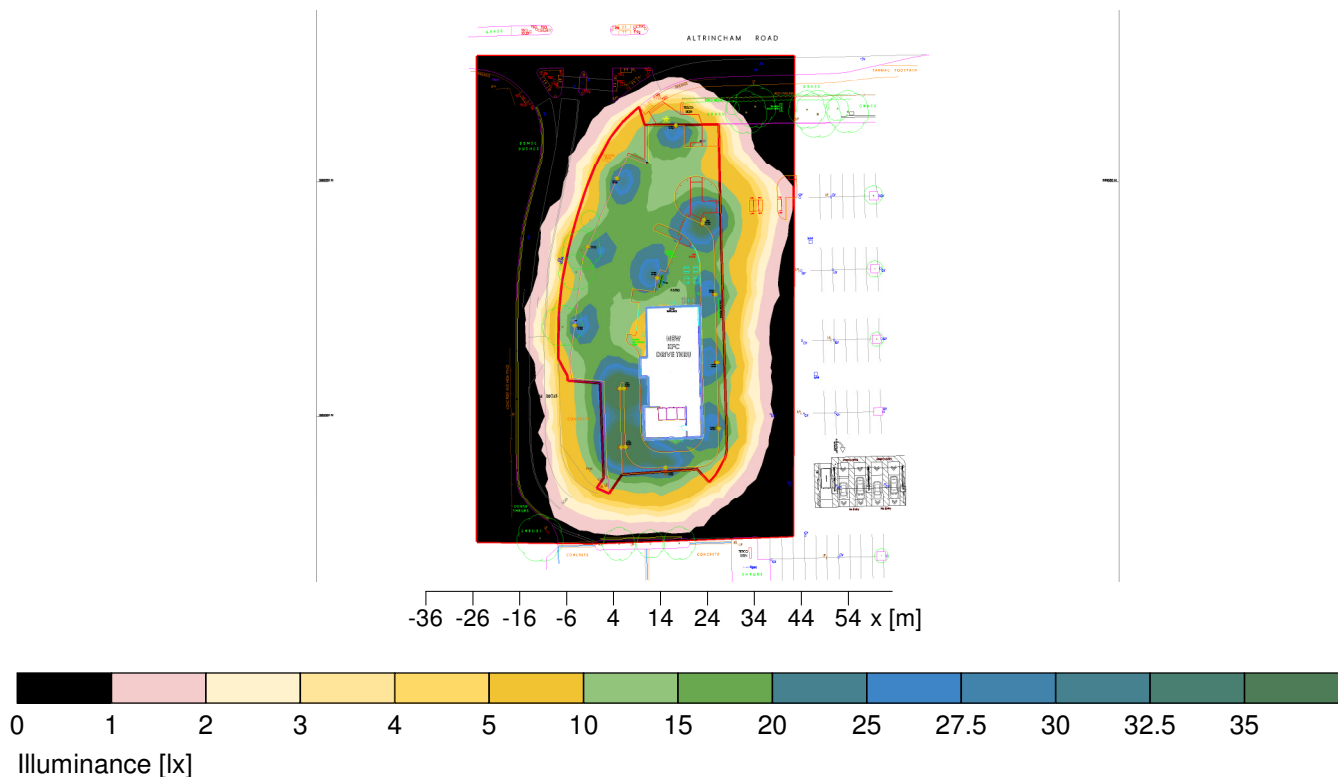
Type No. Make

1	15 x	NORTHCLIFFE
		Order No. :
		Luminaire name : Auva LED1x4500 J008 T740 LSS2
		Equipment : 1 x LED 28.9 W / 4518 lm

Object : KFC Baguley
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2.2 Summary, Exterior 1

2.2.2 Result overview, Evaluation area 1



General

Calculation algorithm used	Average indirect fraction
Height (phot centre)	5.95 m
Maintenance factor	0.80
Total luminous flux	67770.00 lm
Total power	433.5 W
Total power per area (6960.36 m²)	0.06 W/m² (0.89 W/m²/100lx)

Evaluation area 1

Reference plane 1.1

$\bar{E}_m$	Horizontal
E_{min}	7 lx
$E_{min}/\bar{E}_m (U_o)$	0.01 lx
$E_{min}/E_{max} (U_d)$	0.00
Position	0.00 m

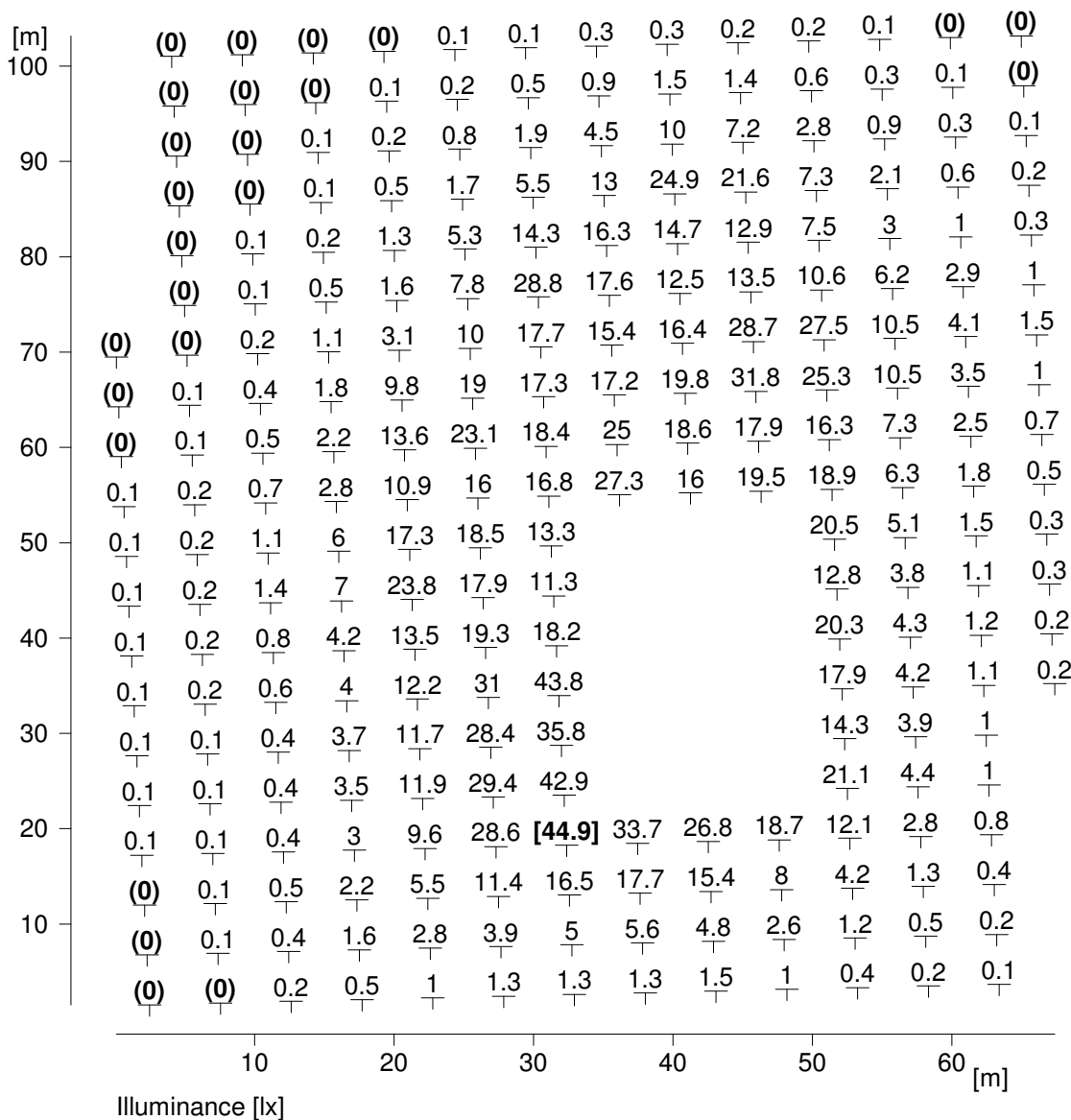
Type No. Make

1	15 x	NORTHCLIFFE
		Order No. :
		Luminaire name : Auva LED1x4500 J008 T740 LSS2
		Equipment : 1 x LED 28.9 W / 4518 lm

2 Exterior 1

2.3 Calculation results, Exterior 1

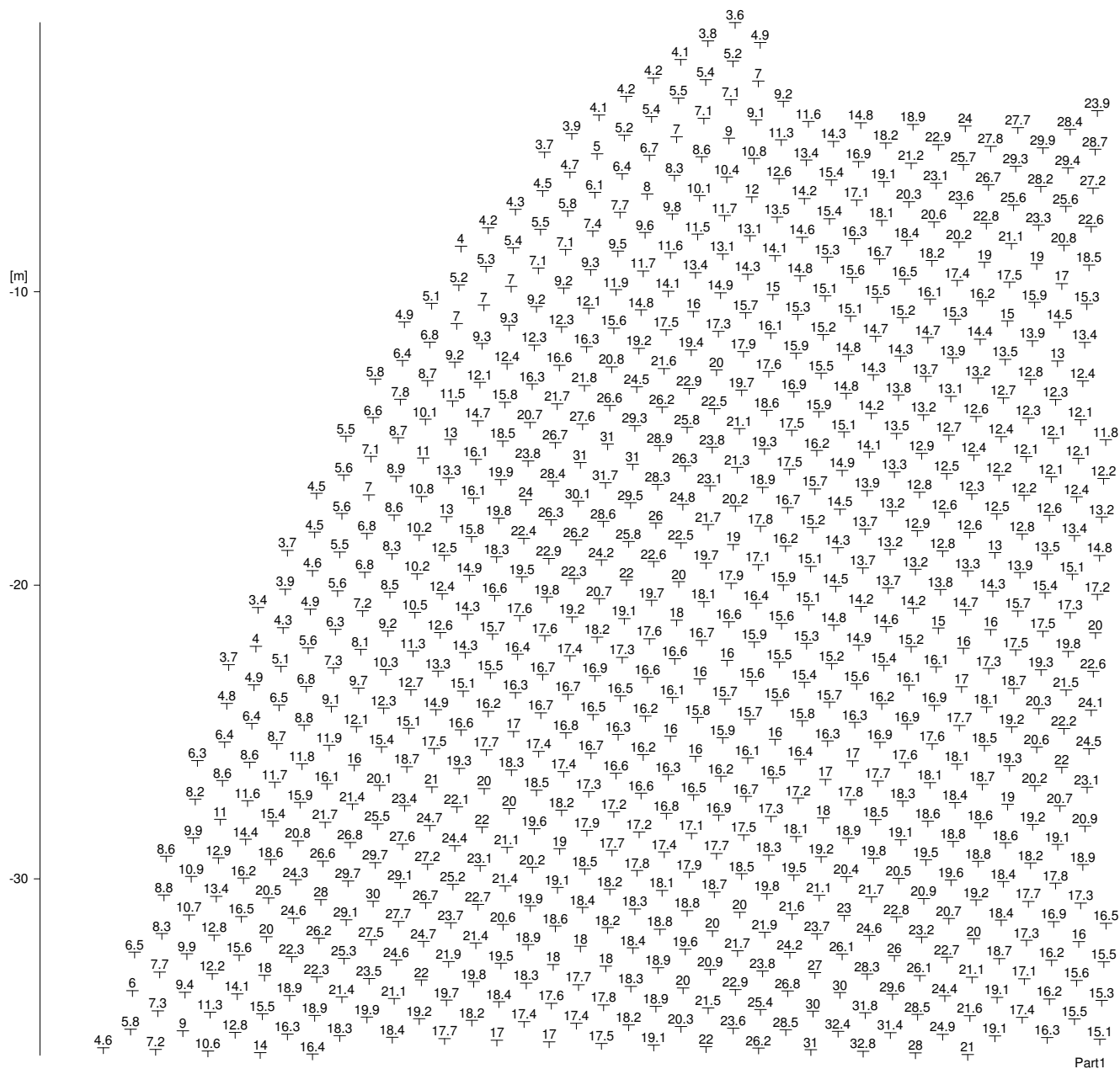
2.3.1 Table, Reference plane 1.1 (E)



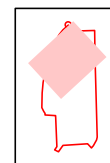
Height reference plane	: 0.00 m
Average illuminance	$\bar{E}_m$: 7 lx
Minimum illuminance	E_{min} : 0 lx
Maximum illuminance	E_{max} : 44.9 lx
Uniformity U_o	$E_{min}/\bar{E}_m$: 1 : 871.53 (0.00)

2.3 Calculation results, Exterior 1

2.3.2 Table, Measuring Area (E)



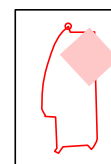
Height reference plane : 0.00 m
Average illuminance $\bar{E}_m$: 19.7 lx
Minimum illuminance E_{min} : 0.4 lx
Maximum illuminance E_{max} : 52.6 lx
Uniformity U_0 $E_{min}/\bar{E}_m$: 1 : 50.55 (0.02)



2.3 Calculation results, Exterior 1

2.3.2 Table, Measuring Area (E)

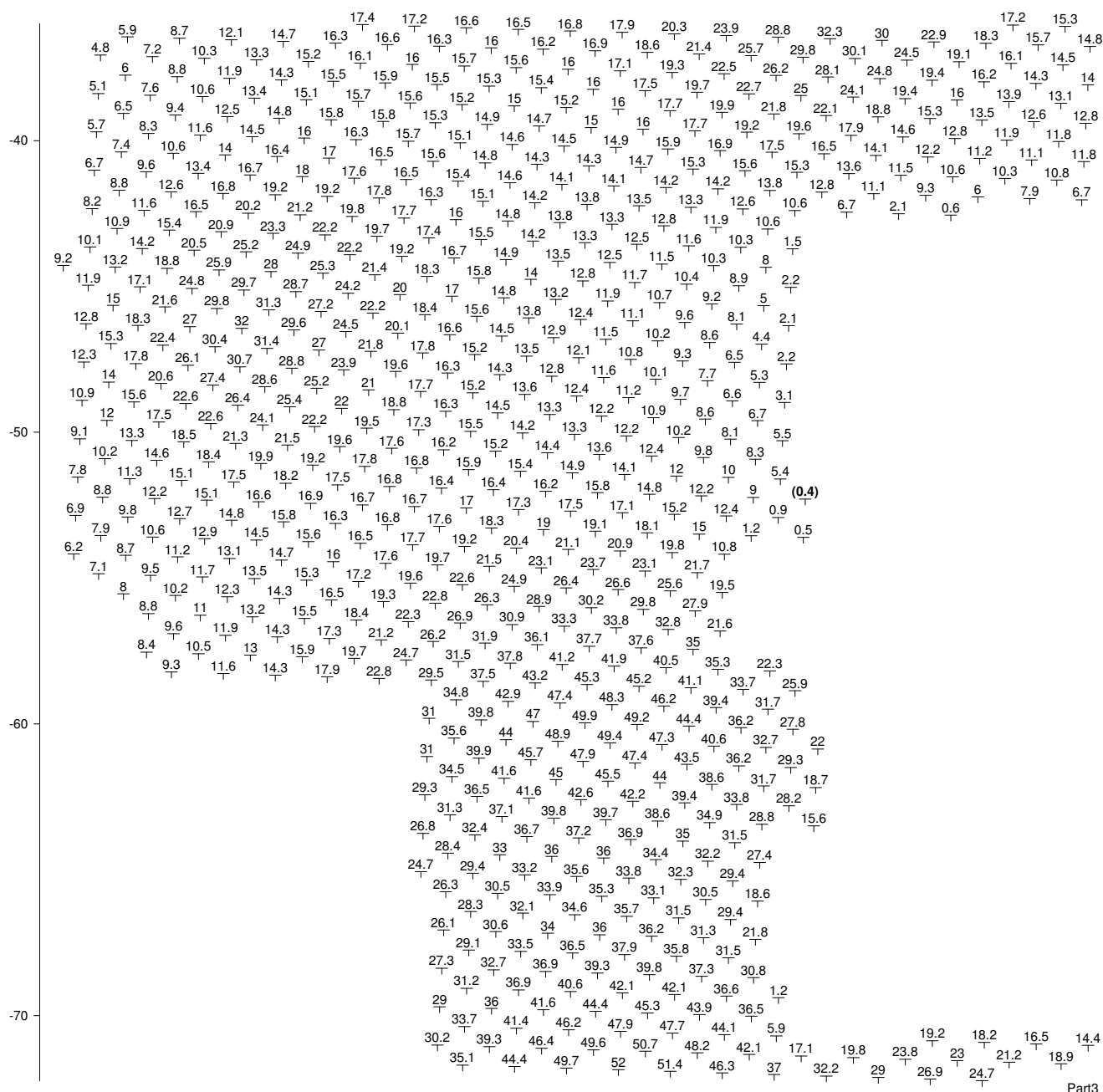
20	15.5	11.6	8.7	6.5	4.8
25.3	20.1	15.1	11.3	8.4	6.2
24.2	18.8	14.1	10.4	7.7	5.7
26.6	21.8	16.8	12.5	9.2	6.9
23.5	18.9	14.5	10.8	8.1	6.1
23.7	20	16	12.3	9.3	7.1
20.2	17	13.5	10.5	8	6.2
19.6	17.3	14.4	11.5	9.1	7
17.1	14.8	12.3	10	8	6.3
16.3	14.9	12.8	10.7	8.8	7.2
14.6	13.1	11.3	9.5	7.9	6.6
14	13.1	11.6	10.1	8.6	7.3
12.8	11.8	10.5	9.2	8.1	7
12.6	11.8	10.8	9.7	8.7	7.8
11.9	11.1	10.2	9.3	8.4	7.6
12	11.3	10.6	9.9	9.1	8.4
11.6	11	10.4	9.9	9.2	8.5
11.4	11.1	10.7	10.2	9.5	8.7
11.8	11.7	11.5	11.3	10.7	10
12.2	12.4	12.4	12.2	11.4	10.4
12.7	13	13.5	13.7	13	11.9
13.8	14.6	15.3	15.1	14	12.7
14.5	15.7	17	17.4	16.7	15.2
16.5	18.4	19.9	19.9	18.4	16.4
17	19.6	22.2	23.4	22.5	20.2
20.3	23.9	26.7	27.1	24.9	21.4
20.3	24.5	29.1	31.7	30.3	26.8
24.3	29.8	34.6	35.9	32.8	27.4
23.7	29.1	35.3	39.5	38.4	33.4
27.9	34.2	40.3	42.3	38.7	31.6
26.1	32.4	39.1	43.3	42.3	36.2
30	37.1	42.8	44.1	39.6	32.2
27.2	34.2	41	44.5	42	35.5
30.4	37.5	42.6	43	38	30.6
26.3	32.6	38.9	41.3	39.2	32.9
27.7	33.4	37.4	37.9	34	27.7
23.8	28.3	32.1	34.5	33.2	28.6
23.9	27.2	29.8	30.6	28.1	23.8
20.9	23.2	25.4	27	26.4	23.6
20.4	22.2	23.7	24	22.7	19.8
18.4	19.5	20.8	21.8	21.3	19.6
17.7	18.5	19.7	20.1	19.1	17
17.1	18	18.8	18.7	17.1	14.8
16.1	16.8	17.7	18.2	17.5	15.7
15.9	16.8	17.7	17.9	16.7	14.3
15.3	16.1	17.2	18.1	17.7	15.8
15.5	16.7	18	18.7	17.7	15
15.1	16.3	17.9	19.4	19.6	17.6
15.6	17.6	19.7	21.2	20.4	16.9



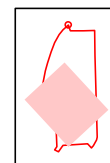
Part2

2.3 Calculation results, Exterior 1

2.3.2 Table, Measuring Area (E)



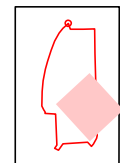
Part3



2.3 Calculation results, Exterior 1

2.3.2 Table, Measuring Area (E)

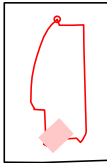
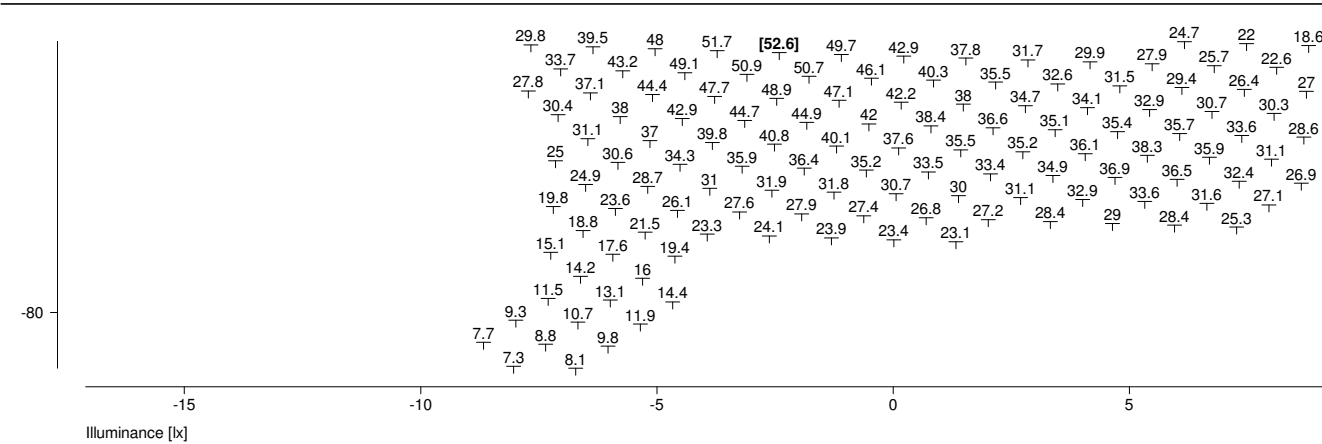
15.1	17	19.3	22	22.9	20.5	15.7
15.8	18.6	21.8	24.7	24.4	19.9	
14.9	17.2	20.9	25.1	26.9	24.9	18.3
15.4	18.7	23.9	28.4	29	23.2	
14	16.7	21.5	27.3	30.9	28.3	20.6
14.6	18.3	24.6	30	31.5	25.4	
12.9	15.7	20	27.4	31.4	29.2	21.1
13.8	17.4	23.6	29.2	30.5	24.5	
12.3	15.1	19.1	25.7	29.1	26.9	19.2
6.9	6.6	13.8	26.6	26.8	21.8	
		23.3	25.7	22.8	16.9	
		23.4	22.7	18.6	13.1	
		20.3	22	19.5	14.8	
		20.6	19.8	16.4	11.9	
		17.9	19.5	17.5	13.6	
		18.6	18.1	15.3	11.4	
		16.7	18.4	16.8	13.4	
		18	18	15.4	11.7	
		18.7	17.5	14.1		
		18.9	19.2	16.8	12.8	
		20.7	19.5	15.9		
		20.5	22.2	19.7	14.8	
		24	23.5	19.2		
		23.9	26.5	24.2	17.8	
		28.1	28.6	23.4	16	
		26.6	31.3	28.9	21.1	
		31.6	33	27.2	18.5	
		28	34.1	32.5	23.6	
		32.4	34.4	28.8	19.5	
		27.3	33.6	32	23.4	
		30.7	32.3	27.2	18.5	
		24.6	30.4	28.6	21.3	
		27.1	27.9	23.4	16.4	
		21.5	25.9	24.1	18.5	
		23.5	23.7	20.1	14.6	
		22.6	20.7	16.4		
		20.6	20.7	18	13.5	
		20.3	19.1	15.5		
		18.8	19.7	17.4	13.3	
		19.7	18.9	15.6	11.3	
		18.7	20.1	18	13.9	
		21	20.3	17	12.2	
		20	22.3	20.3	15.6	
		23.5	23.3	19.7	14	
		21.8	25.8	24.1	18.4	
		26.7	27.9	23.6	16.4	
		23.6	29.8	28.6	21.6	
		29.5	31.7	27.4	21	
		24	31.9	31.4	26.4	
		29.4	32.5	31.6	21.8	
		22.4	31.5	34.1	26.1	
		30.3	33.5	29.2	20.3	
		24.9	30.6	29.8	22.7	
		12.5	9.7	15.4	26.5	27.8
		15.6	15.2	19.5	23.1	25
					23.8	18.6
						12.8



Part4

2.3 Calculation results, Exterior 1

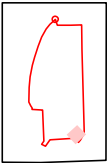
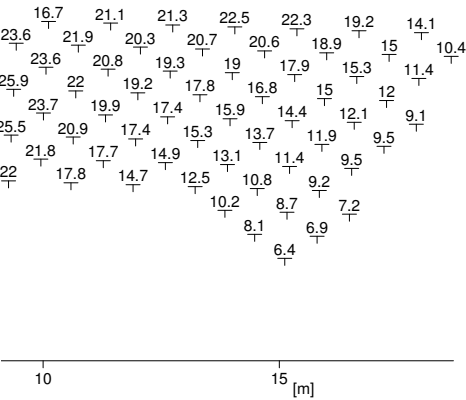
2.3.2 Table, Measuring Area (E)



Part5

2.3 Calculation results, Exterior 1

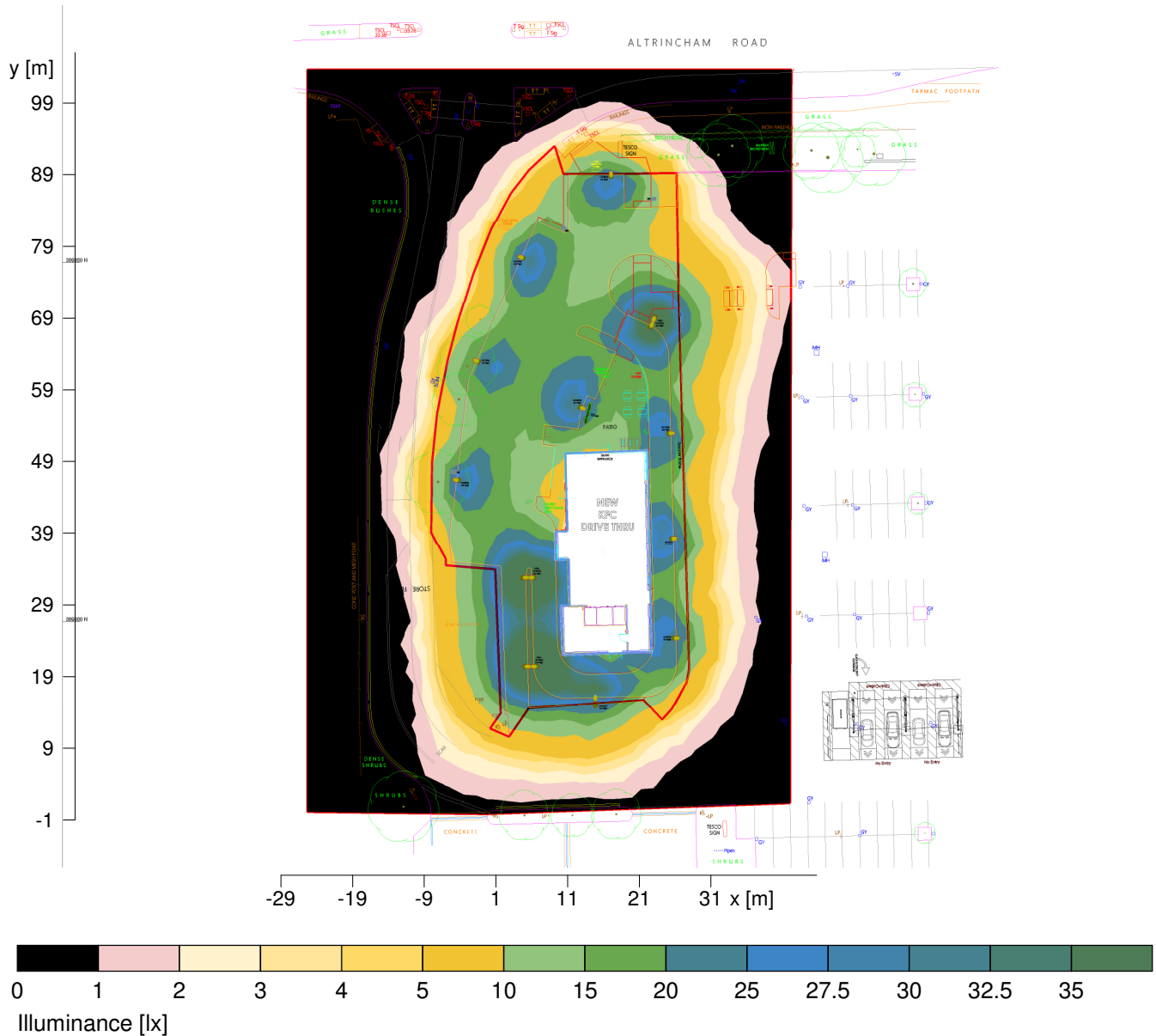
2.3.2 Table, Measuring Area (E)



Part6

2.3 Calculation results, Exterior 1

2.3.3 Pseudo colours, Reference plane 1.1 (E)

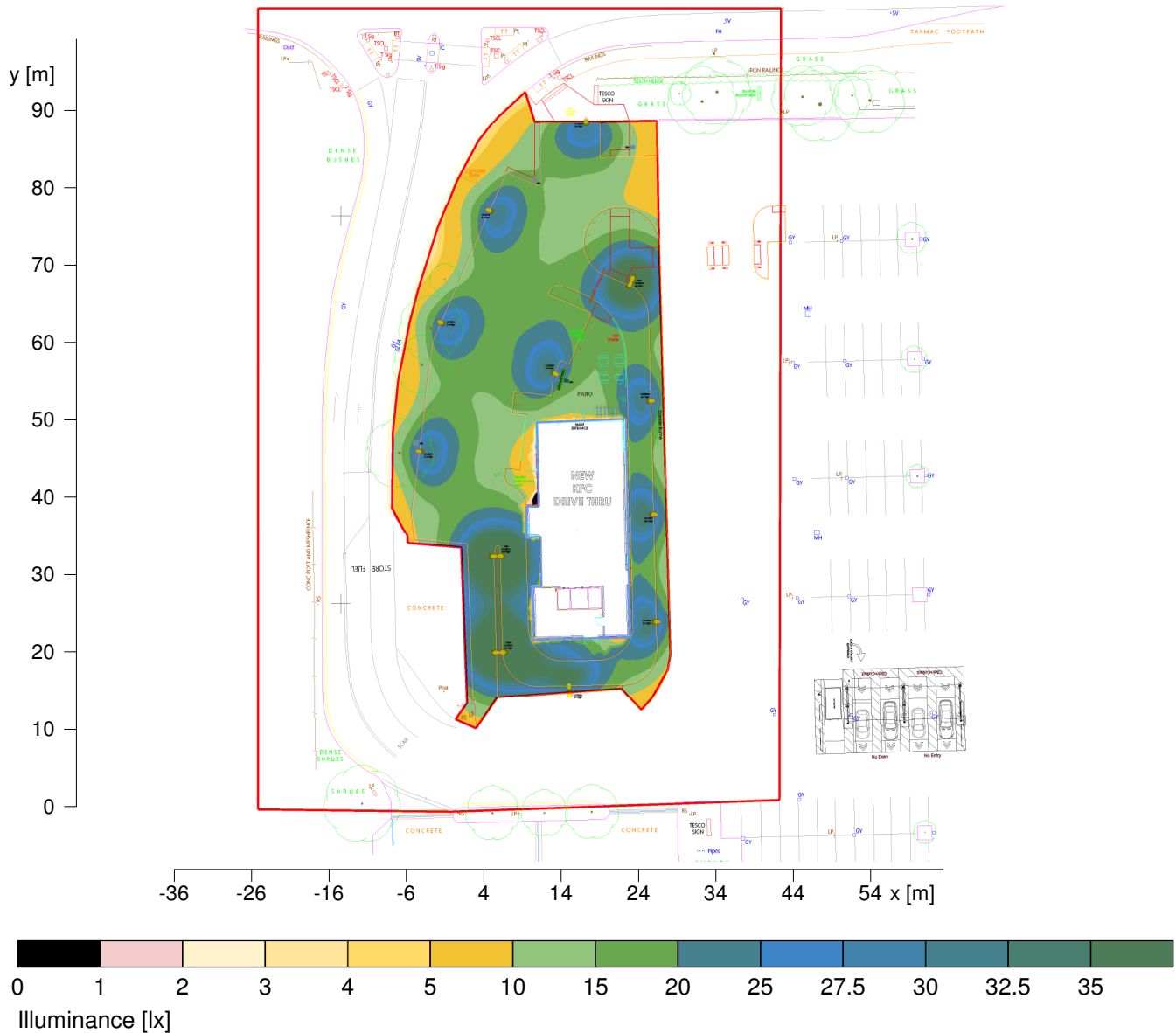


Height reference plane
 Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U_0

: 0.00 m
 $\bar{E}_m$: 7 lx
 E_{min} : 0 lx
 E_{max} : 44.9 lx
 $E_{min}/\bar{E}_m$: 1 : 871.53 (0.00)

2.3 Calculation results, Exterior 1

2.3.4 Pseudo colours, Measuring Area (E)



Height reference plane
 Average illuminance
 Minimum illuminance
 Maximum illuminance
 Uniformity U_0

: 0.00 m
 $\bar{E}_m$: 19.7 lx
 E_{min} : 0.4 lx
 E_{max} : 52.6 lx
 $E_{min}/\bar{E}_m$: 1 : 50.55 (0.02)