TP Melksham

Installation : external yard extension

Project number :
Customer :
Processed by : Mick Young
Date : 12.01.2024

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.

1 Luminaire data

1.1 Dexretail Ltd, F10 + F10B... (OPU3XL L350 C74 AS + OPU3XL...)

1.1.1 Data sheet

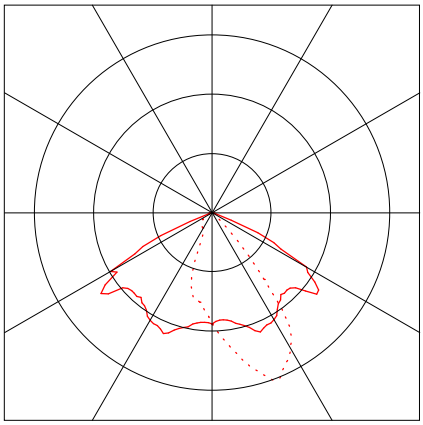
Manufacturer: Dexretail Ltd

OPU3XL L350 C74 AS + OPU3XL BAFFLE GREY KIT projector F10 + F10B

Luminaire data		
Absolute Photometry		
Luminaire efficacy	:	113.02 lm/W
Classification	:	A40 ↓100.0% ↑0.0%
CIE Flux Codes	:	59 91 99 100 100
UGR 4H 8H	:	32.2 / 21.6
Power	:	220.5 W
Luminous flux	:	24920 lm

Equipped with		
Quantity	:	1
Designation	:	LX 2217 X96 2424 C74
Colour	:	4000
Colour reproduction	:	2

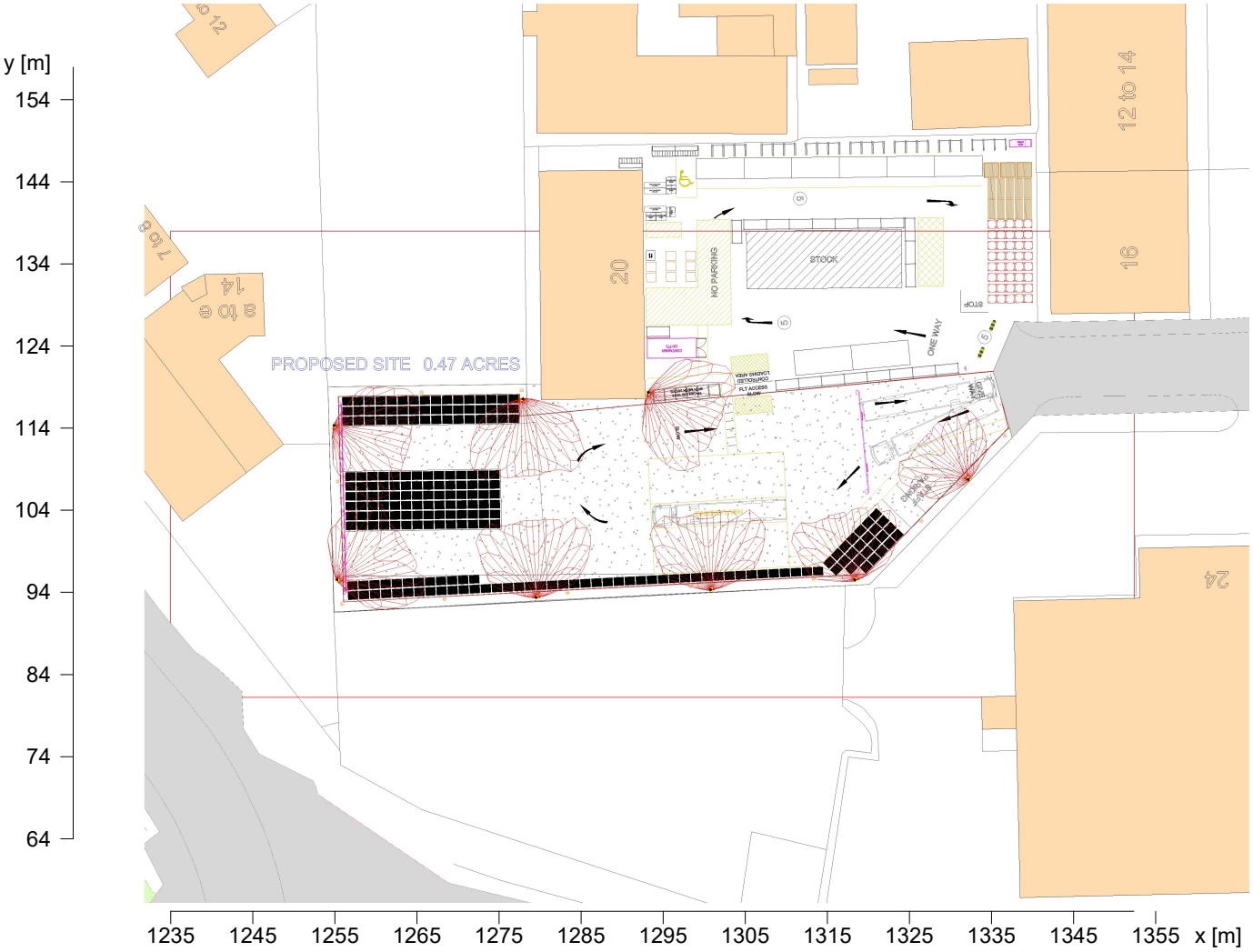
Dimensions : 502 mm x 418 mm x 127 mm



2 Yard extension

2.1 Description, Yard extension

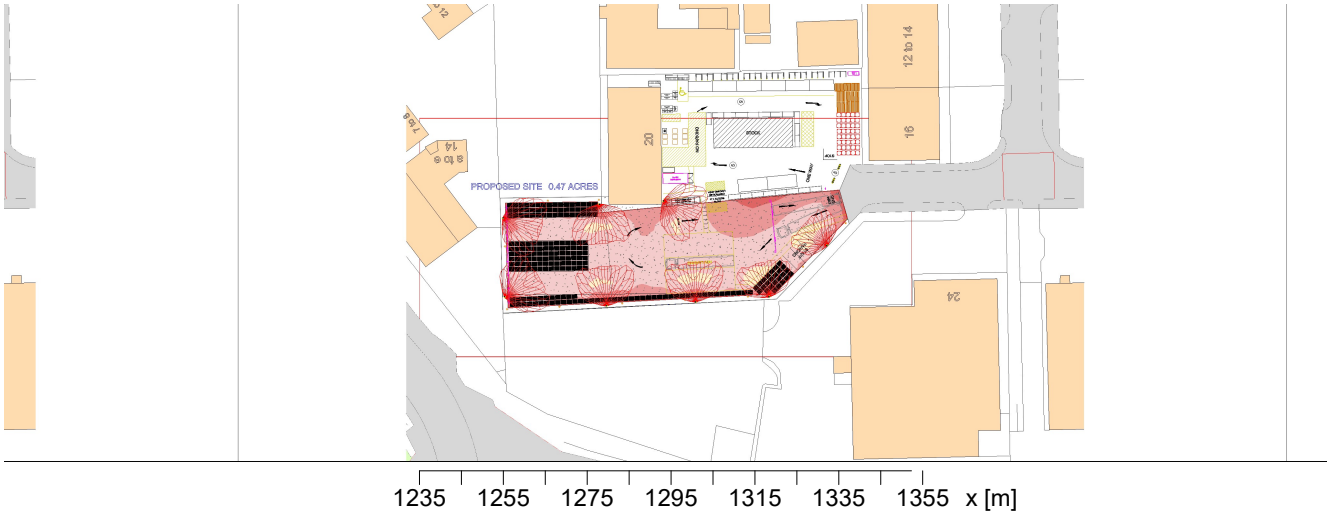
2.1.1 Floor plan

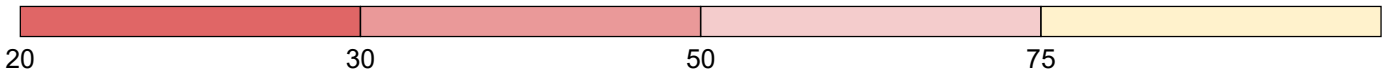


2 Yard extension

2.2 Summary, Yard extension

2.2.1 Result overview, yard extension





Illuminance [lx]

General

Calculation algorithm used	Average indirect fraction
Height of evaluation surface	0.00 m
Height (phot.centre) [m]:	7.96 m
Maintenance factor	0.80
Total luminous flux	199360 lm
Total power	1764 W
Total power per area (1901.95 m²)	0.93 W/m² (1.61 W/m²/100lx)

Illuminance

Average illuminance	$\bar{E}_m$	57.6 lx
Minimum illuminance	E_{min}	21.8 lx
Maximum illuminance	E_{max}	87.1 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	1:2.64 (0.38)
Diversity U_d	E_{min}/E_{max}	1:4 (0.25)

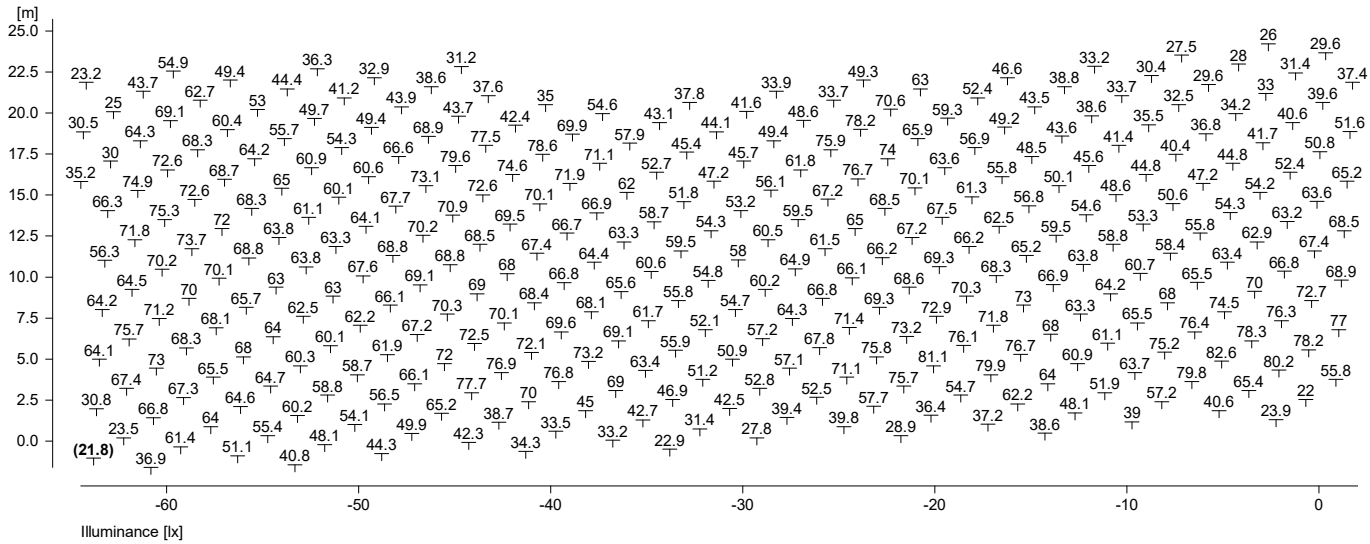
Type No.\Make

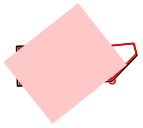
		Dexretail Ltd	
131	8 x	Order No.	: OPU3XL L350 C74 AS + OPU3XL BAFFLE GREY KIT
		Luminaire name	: F10 + F10B
		Equipment	: 1 x LX 2217 X96 2424 C74 220.5 W / 24920 lm

2 Yard extension

2.3 Calculation results, Yard extension

2.3.1 Table, yard extension (E)





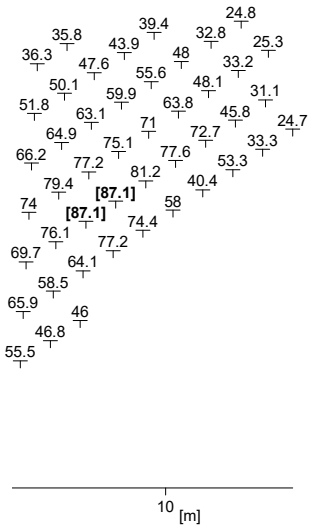
Part1

Height reference plane		: 0.00 m
Average illuminance	$\bar{E}_m$	: 57.6 lx
Minimum illuminance	E_{min}	: 21.8 lx
Maximum illuminance	E_{max}	: 87.1 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 2.64 (0.38)
Diversity U_d	E_{min}/E_{max}	: 1 : 4.00 (0.25)

2 Yard extension

2.3 Calculation results, Yard extension

2.3.1 Table, yard extension (E)





Part2

2.3 Calculation results, Yard extension

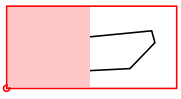
2.3.2 Table, Boundary light spill (E)

[m]																												
55	0.5	0.5	0.6	0.6	0.7	0.8	1	1.3	1.4	1.5	1.7	1.9	2	2.2	2.4	2.5	2.7	3.2	3.9	3.7	3.8	3.9	3.6	3.4	3.4	3.3	3.3	3.2	3.1
	0.5	0.6	0.6	0.7	0.7	0.8	1	1.4	1.5	1.7	2	2.2	2.4	2.6	2.8	3.1	4	4.8	4.8	5.1	4.9	4.3	4.1	4	4	3.9	3.8	3.7	3.6
	0.5	0.6	0.7	0.7	0.8	0.9	1.1	1.6	1.9	2.1	2.4	2.5	2.8	3.1	3.5	4.9	5.9	6.1	6.7	6.3	5.7	5.4	5	4.8	4.8	4.6	4.5	4.4	4.5
50	0.5	0.6	0.7	0.8	0.9	1	1.3	1.8	2.1	2.8	2.8	3	3.3	3.9	6.1	7.4	8.5	8.6	7.8	7.7	7	6.5	6.2	5.8	5.7	5.5	5.3	5.2	5.3
	0.5	0.6	0.7	0.8	0.9	1	1.4	2	2.6	3.3	3.5	3.6	4.3	7.8	9.6	11.6	10.6	10.7	10	9.2	8.6	8.1	7.4	7.1	6.7	6.3	6	6.4	6.3
	0.6	0.6	0.7	0.9	1	1.1	1.6	2.3	3.2	4	4.2	5	7.9	12.8	14.6	15.3	14.4	12.8	11.3	10.4	10.1	9.4	8.9	8.3	7.9	7.3	7.1	7.7	7.7
45	0.6	0.7	0.8	0.9	1	1.2	1.7	2.7	3.8	4.9	5.4	8.7	13.6	19.7	21.3	18.1	15.9	14.5	13.3	13.7	13.1	12.3	11.6	10.7	10	9.3	9.5	9.6	10.2
	0.6	0.7	0.8	0.9	1.1	1.2	1.9	3.8	4.8	6.2	9.3	14.4	22.7	25.4	23.2	21.5	20	18.7	19.1	17.3	16	14.9	13.9	12.9	11.8	11	11.5	12.3	15.2
40	0.6	0.7	0.8	0.9	1.1	1.3	2.1	4.6	6.1	8.9	12.4	25.4	28.3	30.5	28.7	26.5	24.5	24.9	22.6	21.4	20.9	20.3	18.4	17	15	14.2	13.7	16.4	19.7
	0.6	0.7	0.8	0.9	1.1	1.4	2.3	5.7	8.5	13.6	23.1	31.6	42.4	41.2	38.5	33.8	32.6	29.5	29.5	29.4	29.8	29.3	25.2	26.3	20.4	20.8	19.1	22.9	27.6
35	0.5	0.6	0.8	0.9	1.1	1.4	3.4	6.7	12.1	16.8	24	36.2	61.4	55.5	47.9	42.3	39.4	36	36.2	37.7	33.3	35.8	32.9	36.4	36.3	33	29.8	31.5	32.9
	0.5	0.6	0.8	0.9	1.1	1.4	3.5	7.9	16.2	24.5	29.5	35.5	69.5	61.8	55.8	51.5	49.5	49	49.7	51.1	35.5	39.9	44.4	59	48.1	40.1	41.1	43.6	46.9
30	0.5	0.6	0.7	0.9	1.1	1.4	3.7	9.2	19.1	26.5	30.9	52.7	72.1	66.4	64.4	62.8	56.5	55.6	66.1	77.1	78.5	80.4	77.2	72.6	58.2	46.9	43	46.8	55.6
	0.4	0.5	0.7	0.8	1.1	2.1	3.5	10.2	20.8	31.7	39.4	69.9	72.1	70.3	67.7	64.8	59.3	60.3	68.3	76.4	74.8	73.5	72.8	70.2	60.2	51.4	47.8	50.6	57.8
	0.3	0.4	0.7	0.8	1	1.9	3.3	9.2	23	35	54.9	73.9	75	72.5	69.3	62.7	61	63.2	68.3	71.5	69.8	70	68.5	66.2	61.1	55.3	52.5	55.4	60
25	0.2	0.2	0.4	0.7	1.1	1.7	2.8	9.2	21	38	50.4	67.1	71.5	72.2	69.3	64.6	63.1	65.1	68.8	70	68.2	67.9	66.7	64.5	61.4	58.4	58.3	56.2	64
	(0.1)	(0.1)	0.2	0.5	1	1.8	3	8.5	23	38	50.7	63.4	70.1	69.6	65.5	62.5	63.6	67.2	68.2	69.4	68.3	68	67.2	65.8	62.5	56.9	54.8	60.3	65
	(0.1)	(0.1)	(0.1)	0.2	1	1.7	2.8	6.9	22.1	38.3	63.4	71.2	70.3	68.2	67.3	63.5	61.7	62.8	66.5	70.2	70.5	70.6	68.1	68	64	56.2	53.6	57.2	63.7
20	(0.1)	(0.1)	0.2	0.4	1	1.7	2.6	6.9	18.3	38.7	63.9	76.1	71.2	68	67.6	62.2	59.8	60.6	64.5	71.3	73.7	72.8	71.7	72	65.7	56.2	51.7	53.8	60.8
	(0.1)	0.2	0.3	0.6	0.8	1.7	2.7	5.4	15.3	26.3	33.5	71.9	70.4	66.9	64.7	63.6	59	58	60.8	73.9	78.4	78.4	77.1	73.9	66	50.4	51.3	53.1	54.1
	0.2	0.3	0.5	0.6	0.8	1.6	2.7	4.4	10.8	21	29	32.4	68.9	64.1	62.7	60.2	56.2	53.1	54.8	62.7	51.9	42.3	32.7	44.3	46.4	37.6	37.1	38.2	39.2
15	0.3	0.4	0.5	0.7	0.9	1.1	2.4	3.7	8.2	17.3	25	27.1	56.6	60.3	51.7	46.7	44	44.8	46.1	42.4	36.9	34.7	32.1	28.7	28.6	21.6	20.5	21.6	24.1
	0.3	0.4	0.5	0.7	0.8	1	1.5	3	4.8	11.3	17.5	24.8	36.8	42.1	37.2	33.8	31.8	29.2	29.2	31.2	27.5	27.7	25.8	21.4	18.5	12.2	11.3	11.7	13.3
10	0.3	0.4	0.6	0.7	0.8	1.1	1.2	2.5	3.5	6.5	11.3	13.5	23.6	25.9	27.3	25.9	23.3	21.2	20.2	21.3	19.9	19	17	14.4	11.7	9.6	8.7	8.7	8.8
	0.4	0.5	0.5	0.7	0.8	1	1.1	1.4	2.6	4	6	8.4	12.9	18.9	26	22.8	19.9	17.5	15.9	14.7	14.5	13	11.5	10.2	9	7.9	7.3	7.2	7.2
5	0.4	0.5	0.5	0.7	0.8	0.9	1	1.2	1.9	2.9	4.1	5.2	7.7	10.7	14.4	17.6	17.1	15.7	14.1	12.6	11.3	10	9.2	8	7	6.1	5.7	5.7	5.6
	0.4	0.4	0.5	0.6	0.7	0.8	1	1.1	1.1	2.2	3.1	3.6	4.4	5.6	7.9	10.5	12.3	11.2	10.5	9.6	8.6	7.6	6.9	6.3	5.4	5	4.7	4.7	4.6
	0.4	0.4	0.5	0.6	0.6	0.8	0.9	0.9	1	1.5	2.4	2.8	3.3	3.6	4	5.9	7.5	7.3	8	7.7	6.9	6.3	5.7	5.2	4.7	4.1	3.9	3.9	3.9
							10					20				30				40				50					

Illuminance [lx]

Part1

Height reference plane		: 0.00 m
Average illuminance	$\bar{E}_m$	: 21.4 lx
Minimum illuminance	E_{min}	: 0.1 lx
Maximum illuminance	E_{max}	: 87.2 lx
Uniformity U_o	$E_{min}/\bar{E}_m$	: 1 : 306.41 (0.00)
Diversity U_d	E_{min}/E_{max}	: 1 : 1248.97 (0.00)



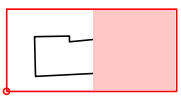
2.3 Calculation results, Yard extension

2.3.2 Table, Boundary light spill (E)

3.1	3	2.9	2.9	3	3	3.1	3.8	4.5	4.7	4.6	4.9	4.9	4.8	4.7	4.7	5.5	5.3	5.2	5.2	4.7	4.5	3.7	3.2	2.6	1.9	1.4	1.1	1
3.7	3.5	3.5	3.6	3.6	4.1	5.2	6	5.9	6.3	6.3	5.9	5.6	5.7	5.8	5.8	6.7	6.5	6.2	6.3	5.7	5.3	4.4	3.6	2.9	2.1	1.5	1.2	1
4.3	4.1	4.3	4.3	5.5	7.6	7.8	8.6	8.4	7.5	7.4	7.4	7.1	7.1	6.9	7.1	8.2	8.2	8	7.7	6.9	6.3	5.3	4.1	3.3	2.3	1.5	1.2	1.1
5.1	4.9	5.3	7.2	10.2	12.2	11.9	10.5	10.3	9.7	9.1	9.2	9.4	9.3	8.8	8.5	10.1	10.2	10.2	9.4	8.6	7.6	6.3	4.7	3.7	2.3	1.5	1.3	1.2
6.1	6.6	9.2	12.4	16.6	16.2	15.7	13.9	12.4	11.2	10.5	11.1	11.5	11.5	11.4	11.2	12.3	13.1	12.9	11.6	10.7	8.9	7.6	5.4	4	2.3	1.5	1.4	1.2
8.2	10.7	16.1	20.6	24.1	20	17.1	15.4	14	13	13.2	13.3	13.8	14	14.3	14.4	15.6	16.7	16.4	15.1	13.4	11.1	8.9	6.1	4.4	2.2	1.6	1.4	1.1
13.9	19.5	27.3	26	25.5	23.1	20.7	18.9	19.1	17.6	16.8	16.6	16.6	17.3	17.8	18.3	20.9	21.3	21.3	19.6	15.4	13.9	10.7	7	4.7	2.1	1.7	1.4	1.1
21.4	27.6	35	35.7	31.8	28.7	25.7	25.2	22.2	20.4	19.8	19.6	19.7	20.5	22.3	23.4	25.1	27.9	27	25	18.9	17.4	12.9	7.9	4.3	2	1.6	1.2	0.9
24.6	35.7	53.8	51.4	41.9	35.8	33.1	28.8	25.7	24.2	23	23	23.5	24.7	27.4	29.8	32.9	35.8	35.4	27.5	22.5	21.2	15.2	8.2	3.8	2	1.5	1.1	0.8
31.5	33.6	66.9	58.7	50	42.4	36.1	31.8	29	27.4	26.4	27.2	27.9	30	33.1	38	41.7	45.7	45.3	33.5	27	25.4	17.3	8.4	3.1	1.8	1.4	1	0.7
35.5	61.3	66	57.5	51.5	44.2	39	34.3	31.8	30.3	29.8	31.3	33.6	36.1	41.8	48.7	53.5	58.3	53.5	42.1	31.5	28.7	14.1	6.9	2.6	1.8	1.3	0.8	0.5
47.9	76.2	67	59.8	52.2	46.2	41.3	38.2	35	34.2	34.5	36.6	40	44.6	52.9	58.7	64.2	67.6	68	54.2	35.1	23.8	11.8	5.2	2.5	1.6	1	0.6	0.5
74.3	80.6	69.3	62.2	55.8	49.3	45.6	43.3	41.4	40.1	41.6	44.1	47.1	53.3	62.7	69.2	74.7	74.8	76.7	67.2	34.6	19.1	8.3	3.9	2.3	1.3	0.8	0.6	0.5
70.3	72.7	71.4	64.4	58.5	54	49.8	47.8	46.8	46.3	48.3	52.2	55.6	63.6	71.4	78	81.7	82.5	77.5	36.5	25.5	15.9	7.6	3.4	1.8	1.1	0.7	0.6	0.5
63.2	67.1	67.6	67.2	62.6	59.6	56.6	53.6	52.4	54.1	54.4	57.9	64.1	69.9	73.7	81.5	**[87.2]**	84.4	32.7	27.6	18.7	11.6	5.9	2.7	1.4	0.9	0.7	0.5	0.4
62.3	65	67.2	68.3	65.8	64.8	62.2	60.8	57	58	59.9	64.6	65.4	67.9	71.2	68.9	76.2	48.4	26.8	23.8	16.1	8.4	3.8	1.9	1.2	0.9	0.5	0.4	0.4
66.3	66.5	68.3	70.6	70	70.1	66.2	63.3	62.5	64.5	66.9	68.4	69.5	70.9	64.5	57.5	50.9	38.8	25.2	18.9	10.3	4.6	2.2	1.5	1.2	0.6	0.5	0.4	0.4
68.4	70.2	70.9	72	71	71.7	65.7	62.6	65.6	72.6	75.5	76.4	77	77.8	67.2	49.5	40.5	30	20.5	10.4	5.2	2.5	1.7	1.3	0.6	0.5	0.5	0.4	0.4
68.8	76.2	75.9	76.9	76.4	76.2	64.6	60.2	66.7	79.9	80.6	78.4	78.8	76.4	55.2	34.4	26.7	15	9.3	5.4	2.5	1.8	1.4	0.7	0.6	0.5	0.4	0.4	0.3
61.9	72.7	76.2	73.6	69.9	73.4	58	52.6	58.4	75.1	77.7	68	48.1	41.9	33.6	23.2	14.1	7.9	4.3	2.4	1.9	1.5	0.8	0.6	0.5	0.5	0.4	0.4	0.3
43.1	44.3	31.9	36.3	37.2	46.3	47.3	41.9	41.8	46.3	35.5	19.3	23.4	19.8	18.6	9.2	6.3	3.8	2.4	1.9	1.6	0.9	0.7	0.6	0.5	0.4	0.4	0.3	0.3
26.7	27.4	25	30.4	28.5	30.9	24.3	25.3	26.9	24.3	19.8	15.4	17.1	12.8	10.5	6.6	3.7	2.5	2	1.6	1.1	0.9	0.7	0.6	0.5	0.4	0.4	0.3	0.3
15.6	17.1	17.1	18.7	17.8	15.6	13.9	12	11.8	12.8	12	10.7	10.3	8.1	5.4	3.7	2.8	2.2	1.7	1.3	1.1	0.9	0.8	0.6	0.6	0.5	0.4	0.3	0.3
9.3	10	10.6	10	9.3	8.5	7.5	6.8	6.6	6.4	6.1	5.7	4.9	4.2	3.5	2.8	2.3	1.9	1.5	1.2	1	0.8	0.7	0.6	0.5	0.4	0.4	0.3	0.3
7.4	7.6	7.6	7.5	7	6.5	5.9	5.5	5.1	4.7	4.4	3.9	3.5	3.1	2.7	2.3	1.6	1.3	1.1	1	0.9	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3
5.6	5.2	5.2	5.1	4.9	4.6	4.4	4.1	3.9	3.7	3.5	2.9	2.2	1.8	1.7	1.5	1.3	1.2	1	0.9	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3
4.6	4.4	4.3	4.3	4.3	4	3.7	3.5	3.2	2.8	2.5	2.2	1.8	1.7	1.5	1.3	1.2	1.1	1	0.9	0.8	0.7	0.6	0.6	0.5	0.4	0.4	0.3	0.3
3.8	3.8	3.7	3.4	3.6	3.4	3.1	2.9	2.7	2.5	2.3	2.1	1.6	1.5	1.3	1.2	1.1	1	0.9	0.8	0.8	0.7	0.6	0.5	0.5	0.4	0.4	0.3	0.3

60 70 80 90 100 110 [m]

Part2



3 Yard extension 3D

3.2 Calculation results, Yard extension 3D

3.2.1 3D luminance, View 1

