DATE: **10 January 2025**

DESIGNER: **M Buckley CEng MIEI MCIBSE**

PROJECT No: **1611**

PROJECT NAME: **Barrys Field Douglas R2**

Designed to EN13201:2015
Classifications:
Carpark and Walkways P2
Entrance C3
Pedestrian Crossings TR12

Outdoor Lighting Report

PREPARED BY:

MBA Engineers
Carey House
Albert St
Cork

Layout Report

General Data

Dimensions in Metres Angles in Degrees

Calculation Grids

ID	Grid Name	X	Y	X' Length	Y' Length	X' Spacing	Y' Spacing
1	Grid 1	26.75	70.67	194.45	191.11	1.50	1.49
2	Grid 2	180.72	118.53	7.58	11.13	1.26	1.39
3	PC1 Carpet Grid 3	72.30	184.37	3.18	2.44	1.06	1.22
4	PC1 FOP1 Grid 4	72.30	186.82	2.54	1.50	1.27	0.38
5	PC1 FOP2 Grid 5	75.36	186.78	2.44	1.50	1.22	0.75
6	PC1 MOP Grid 6	73.86	186.81	2.42	1.50	1.21	0.75
7	PC2 Carpet Grid 7	72.44	97.83	3.94	2.51	1.31	1.25
8	PC2 FOP1 Grid 8	72.41	100.35	2.53	1.50	1.26	0.75
9	PC2 FOP2 Grid 9	76.11	100.34	2.49	1.50	1.24	0.75
10	PC2 MOP Grid 10	74.29	100.34	2.50	1.50	1.25	0.75

Luminaires

Luminaire A Data

Supplier	
Type	LumiStreet gen2 Eco
Lamp(s)	LED27 L96@100kh /730 T25
Lamp Flux (klm)	2.70
File Name	BGS010 T25 FP LED27 L96@100kh-730 D W.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	689.8, 26.2, 0.0
No. in Project	31

Luminaire B Data

Supplier	
Type	LumiStreet gen2 Eco
Lamp(s)	LED27 L96@100kh /730 T25
Lamp Flux (klm)	2.70
File Name	BGS010 T25 FP LED27 L96@100kh-730 D W.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	689.8, 26.2, 0.0
No. in Project	7



Luminaire C Data

Supplier	
Type	LumiStreet gen2 Eco
Lamp(s)	LED70 L94@100kh /740 T25
Lamp Flux (klm)	7.00
File Name	BGS010 T25 FP LED70 L94@100kh-740 D W.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	682.8, 25.9, 0.0
No. in Project	1

Luminaire D Data

Supplier	Philips
Type	BGP291 DPL1
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	5.40
File Name	LumiStreet Gen2 Micro_BGP291_DPL1_5400_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	244.9, 31.4, 0.0
No. in Project	4

Layout

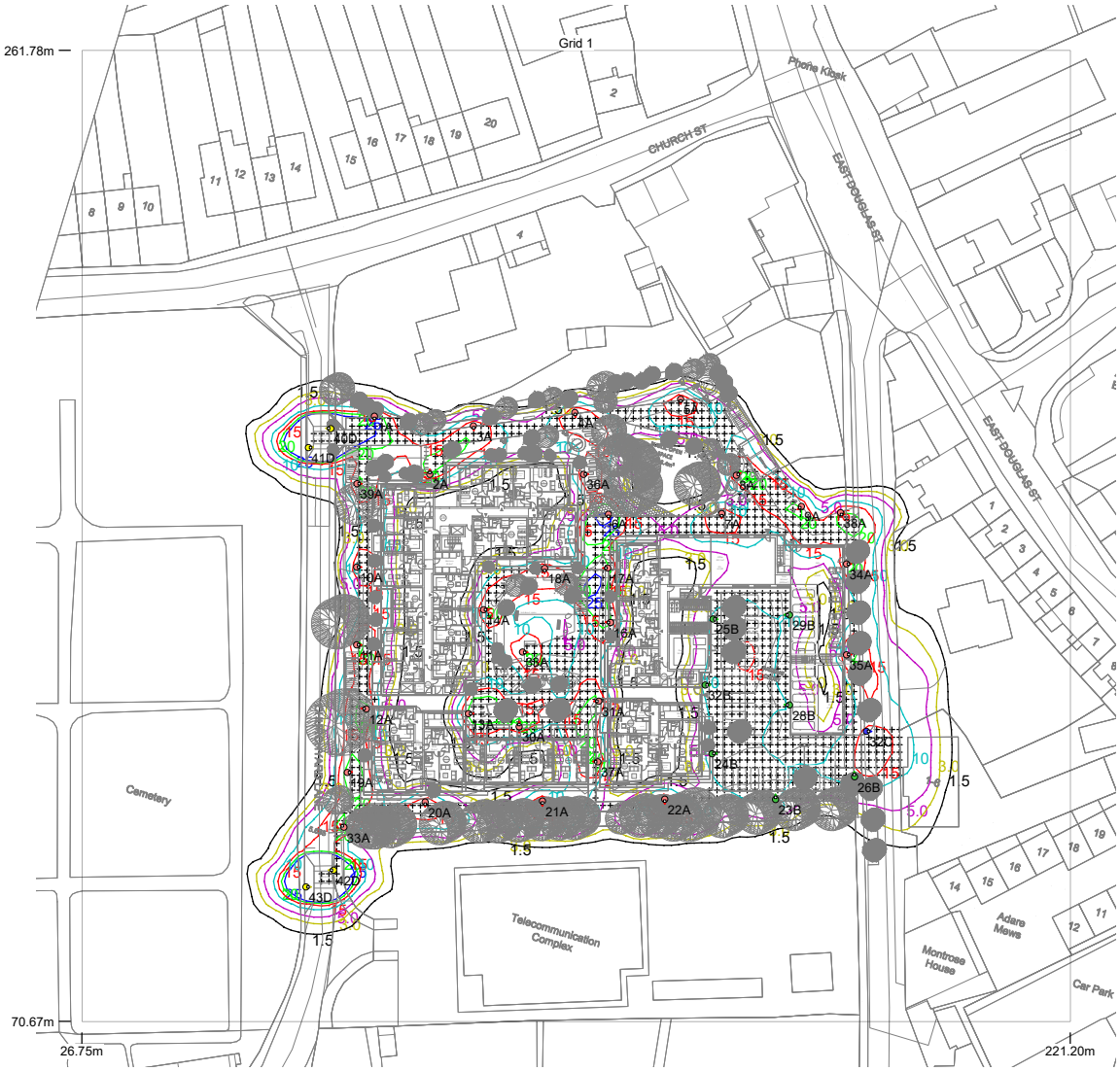
ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	84.29	189.80	4.00	270.00	0.00	0.00	0.40			
2	A	95.20	178.35	4.00	90.00	0.00	0.00	0.40			
3	A	103.75	187.93	4.00	278.00	0.00	0.00	0.40			
4	A	123.70	190.55	4.00	279.00	0.00	0.00	0.40			
5	A	144.50	193.18	4.00	270.00	0.00	0.00	0.40			
6	A	130.34	170.51	4.00	270.00	0.00	0.00	0.40			
7	A	152.61	170.65	4.00	270.00	0.00	0.00	0.40			
8	A	155.49	178.15	4.00	31.00	0.00	0.00	0.40			
9	A	168.28	172.02	4.00	216.00	0.00	0.00	0.40			
10	A	80.79	160.10	4.00	1.00	0.00	0.00	0.40			
11	A	80.77	144.81	4.00	359.00	0.00	0.00	0.40			
12	A	82.68	132.24	4.00	176.00	0.00	0.00	0.40			
13	A	102.79	131.31	4.00	358.00	0.00	0.00	0.40			
14	A	105.74	151.72	4.00	357.00	0.00	0.00	0.40			
16	A	130.71	149.22	4.00	176.00	0.00	0.00	0.40			
17	A	130.20	159.95	4.00	182.00	0.00	0.00	0.40			
18	A	117.73	159.85	4.00	270.00	0.00	0.00	0.40			
19	A	78.97	119.70	4.00	7.00	0.00	0.00	0.40			
20	A	94.26	113.91	4.00	270.00	0.00	0.00	0.40			
21	A	117.32	114.11	4.00	270.00	0.00	0.00	0.40			
22	A	141.38	114.47	4.00	270.00	0.00	0.00	0.40			
23	B	163.15	114.42	6.00	90.00	0.00	0.00	0.40			
24	B	150.68	123.41	6.00	3.00	0.00	0.00	0.40			
25	B	150.86	149.88	6.00	358.00	0.00	0.00	0.40			
26	B	178.71	118.89	6.00	93.00	0.00	0.00	0.40			
28	B	165.91	133.02	6.00	178.00	0.00	0.00	0.40			
29	B	165.91	150.70	6.00	177.00	0.00	0.00	0.40			
30	A	112.73	128.72	4.00	86.00	0.00	0.00	0.40			
31	A	128.44	133.72	4.00	178.00	0.00	0.00	0.40			
32	B	149.33	136.91	6.00	1.00	0.00	0.00	0.40			
32	C	181.06	127.80	8.00	359.00	0.00	0.00	0.40			
33	A	78.28	108.97	4.00	142.00	0.00	0.00	0.40			
33	A	113.43	143.38	4.00	357.00	0.00	0.00	0.40			
34	A	177.12	160.72	4.00	2.00	0.00	0.00	0.40			
35	A	177.16	142.89	4.00	2.00	0.00	0.00	0.40			
36	A	125.38	178.38	4.00	2.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
37	A	128.22	121.81	4.00	178.00	0.00	0.00	0.40			
38	A	175.98	170.84	4.00	292.00	0.00	0.00	0.40			
39	A	80.86	176.53	4.00	359.00	0.00	0.00	0.40			
40	D	75.71	187.38	6.00	178.00	0.00	0.00	0.40			
41	D	71.31	183.64	6.00	2.00	0.00	0.00	0.40			
42	D	76.25	100.49	6.00	178.00	0.00	0.00	0.40			
43	D	70.84	97.21	6.00	359.00	0.00	0.00	0.40			

Horizontal Illuminance (lux)

Grid 1

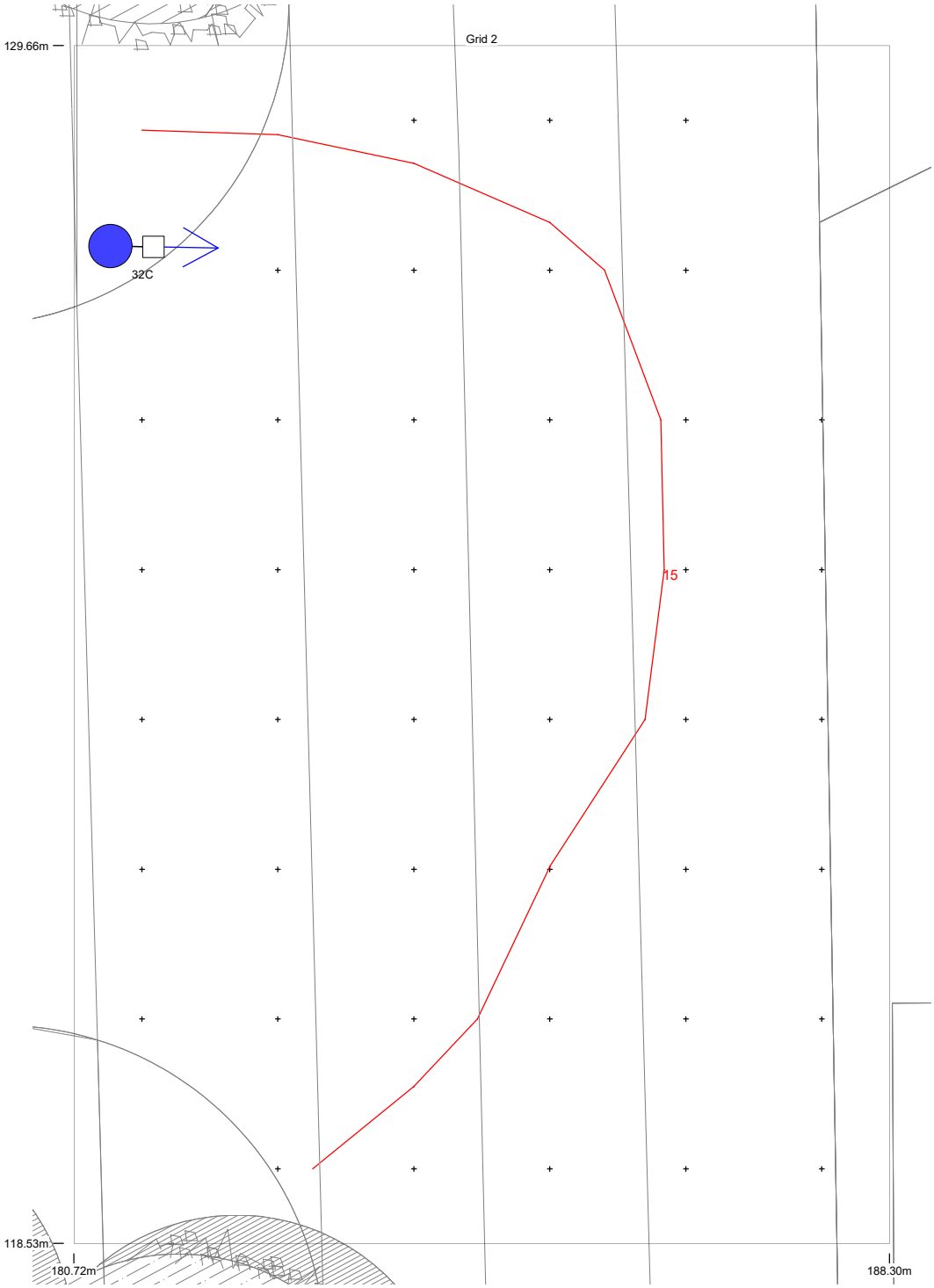


Results

Eav	14.66
Emin	2.82
Emax	85.86
Emin/Emax	0.03
Emin/Eav	0.19

Horizontal Illuminance (lux)

Grid 2



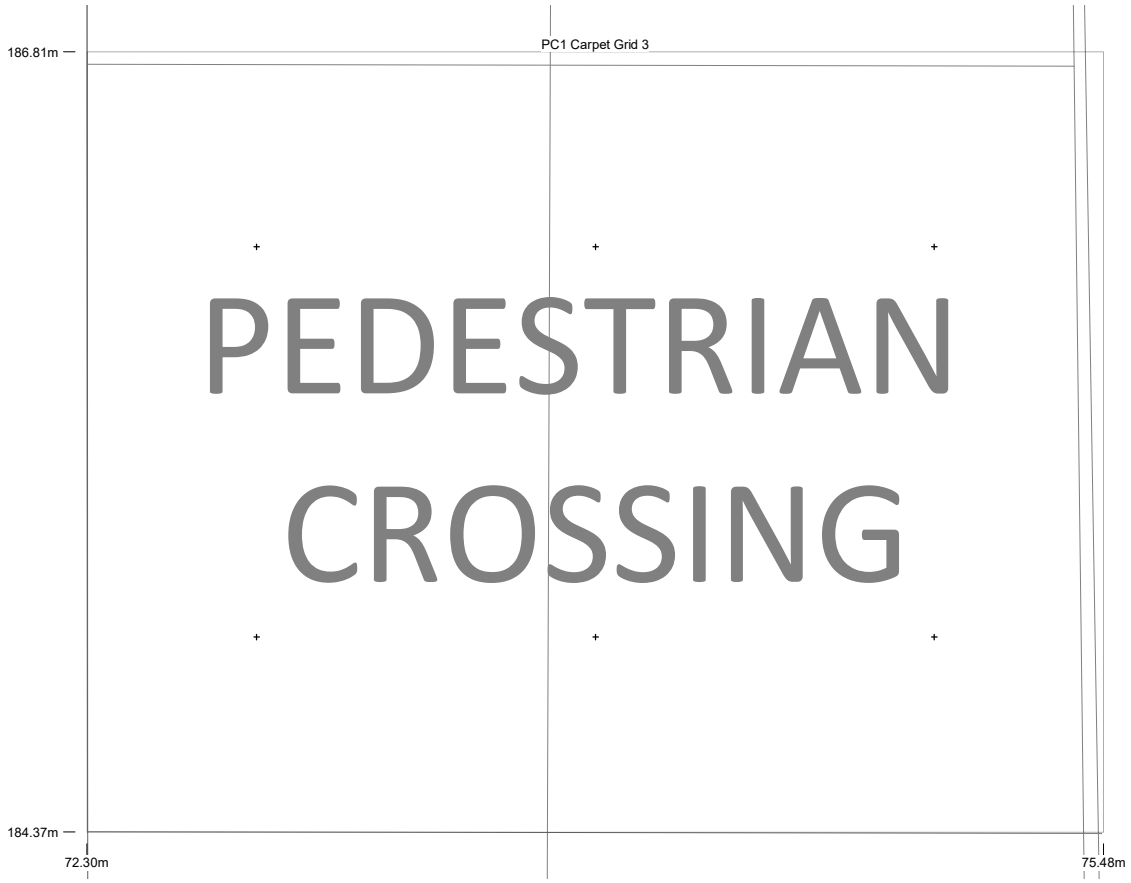
Results

Eav	15.16
Emin	10.33
Emax	17.97
Emin/Emax	0.57
Emin/Eav	0.68

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Horizontal Illuminance (lux)

PC1 Carpet Grid 3



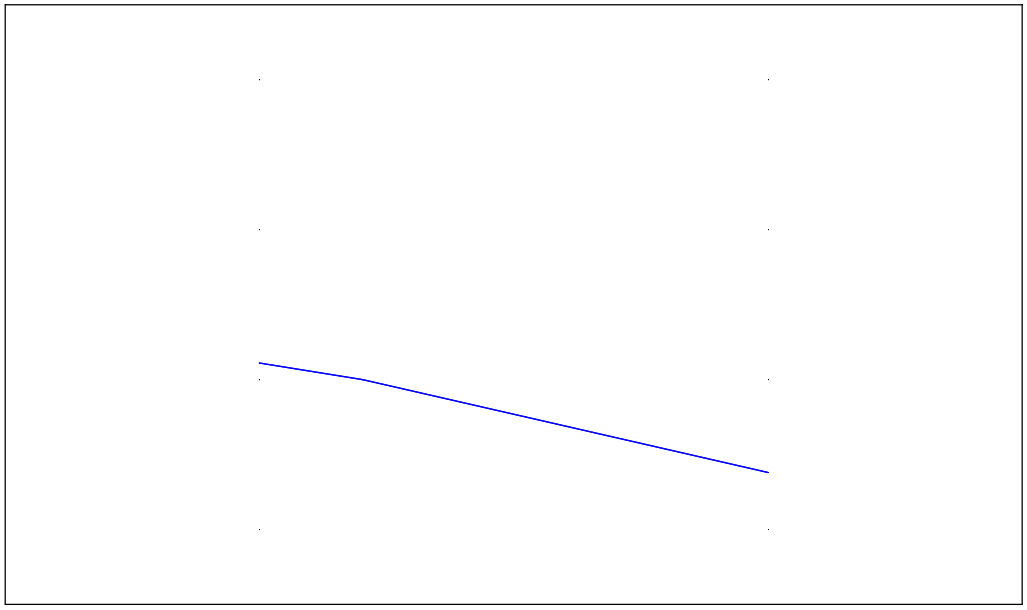
Results

Eav	83.16
Emin	78.67
Emax	85.76
Emin/Emax	0.92
Emin/Eav	0.95

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Illuminance (lux)

PC1 FOP1 Grid 4

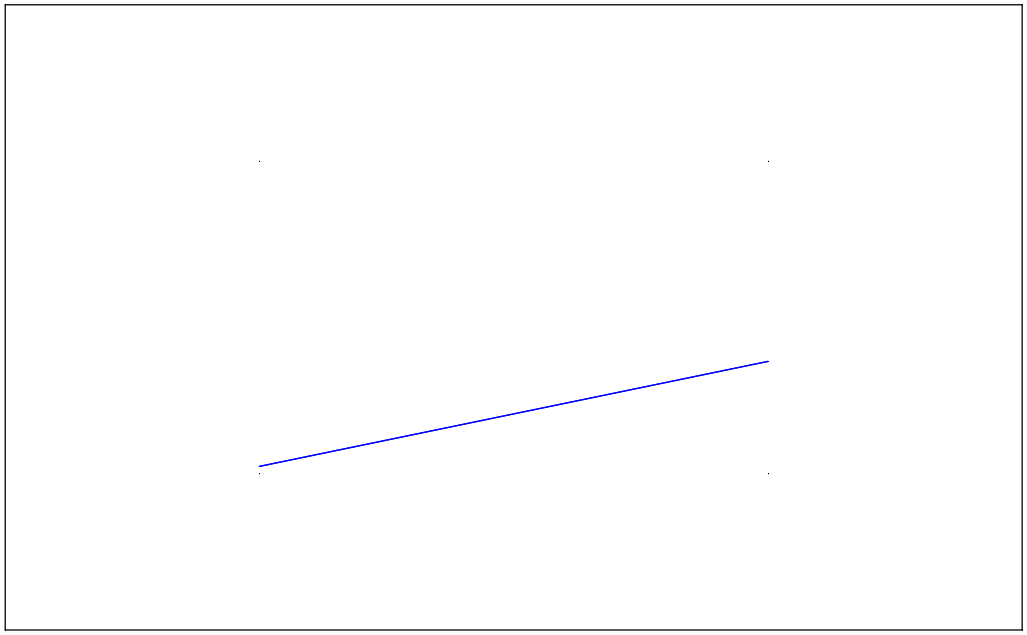


Results

Eav	28.57
Emin	22.68
Emax	38.25
Emin/Emax	0.59
Emin/Eav	0.79

Illuminance (lux)

PC1 FOP2 Grid 5

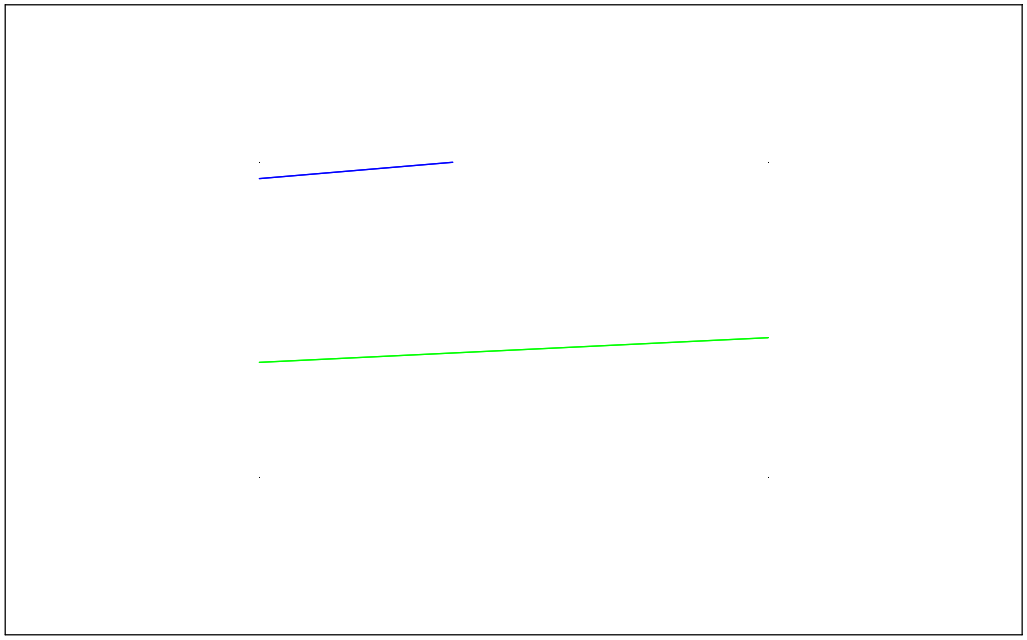


Results

Eav	28.46
Emin	21.76
Emax	36.59
Emin/Emax	0.59
Emin/Eav	0.76

Illuminance (lux)

PC1 MOP Grid 6

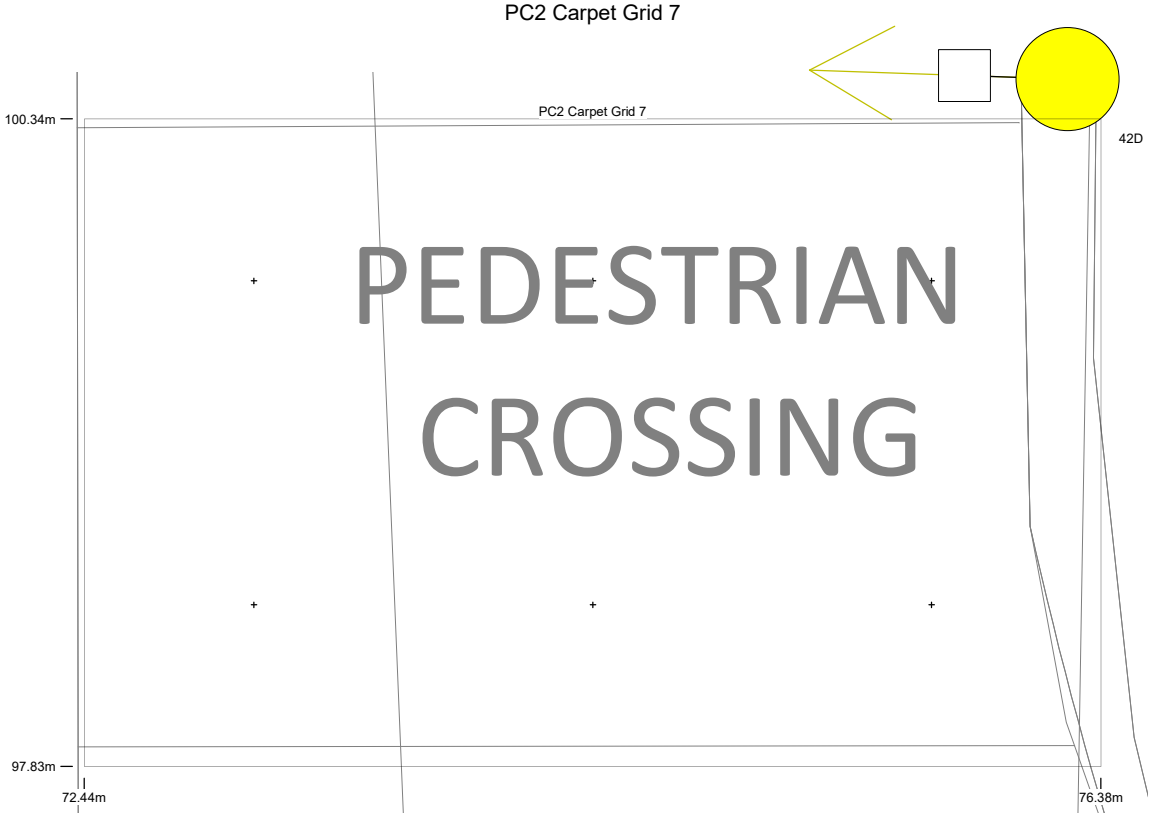


Results

Eav	20.80
Emin	16.60
Emax	25.45
Emin/Emax	0.65
Emin/Eav	0.80

Horizontal Illuminance (lux)

PC2 Carpet Grid 7



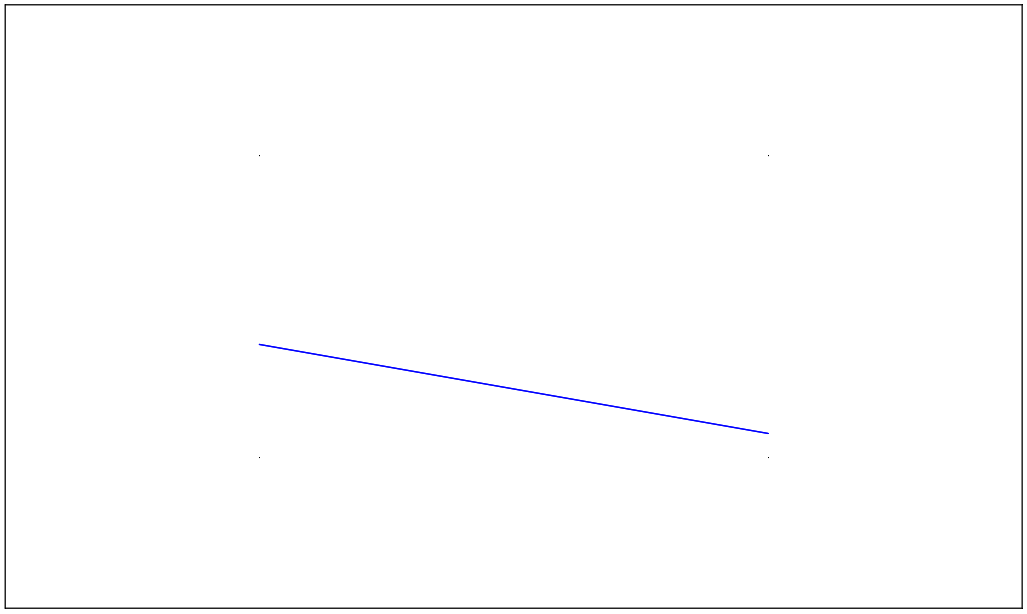
Results

Eav	76.01
Emin	68.80
Emax	79.94
Emin/Emax	0.86
Emin/Eav	0.91

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Illuminance (lux)

PC2 FOP1 Grid 8

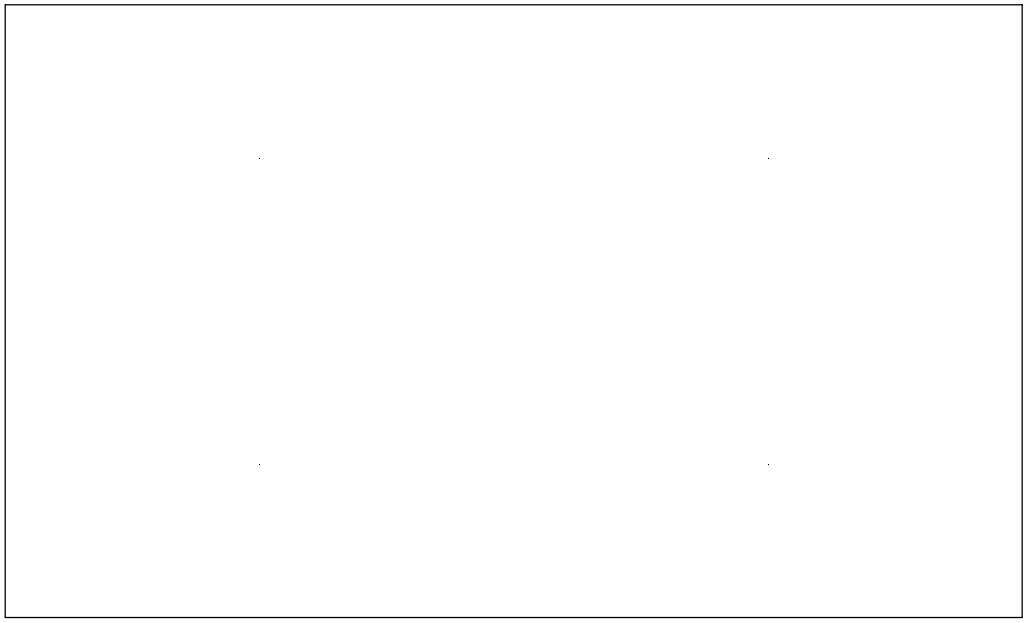


Results

Eav	27.76
Emin	22.25
Emax	35.05
Emin/Emax	0.63
Emin/Eav	0.80

Illuminance (lux)

PC2 FOP2 Grid 9



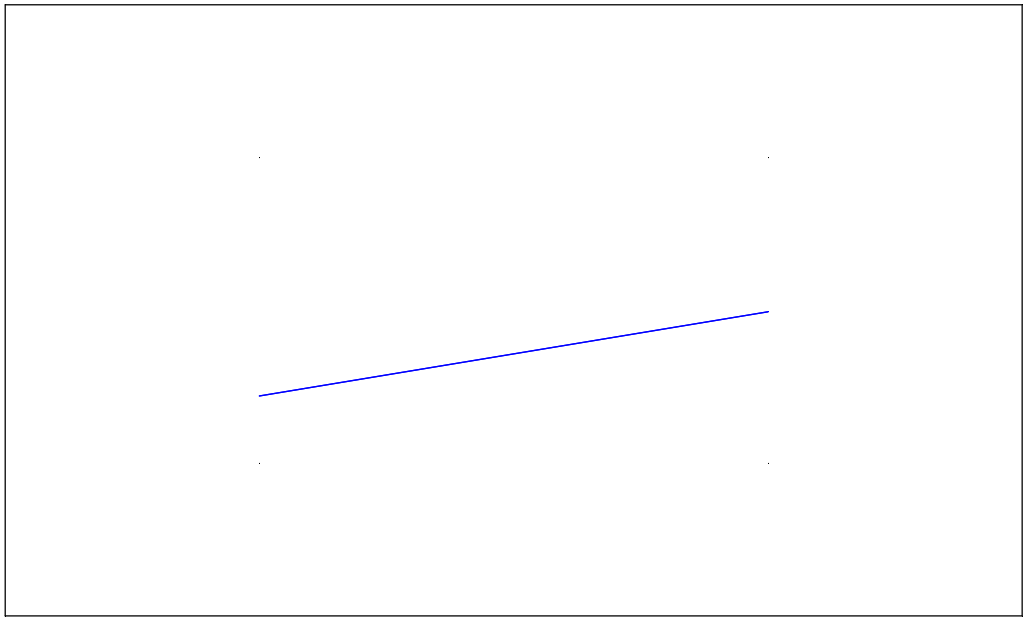
Results

Eav	35.67
Emin	26.10
Emax	46.88
Emin/Emax	0.56
Emin/Eav	0.73

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Illuminance (lux)

PC2 MOP Grid 10



Results

Eav	26.60
Emin	20.57
Emax	33.80
Emin/Emax	0.61
Emin/Eav	0.77

Horizontal Illuminance (lux)

Grid 1

