

**DATE:** 21 September 2021

**PROJECT NAME:** Dublin - Eastwall Project

Designed to BS5489-1:2020  
Road: Table A5, Lighting classes for subsidiary roads. Category P3  
1.5lux minimum illuminance & between 7.5-11.25lux average  
illuminance  
Maintenance Factor calculated to BS5489, TS22012 & GN11  
fLF = Luminous flux factor for 100,000hours - 100%  
fS = Survival factor - 0.97% (representing 3% failures)  
fLM = Mounting height: 8m or less  
Cleaning frequency – 72 months  
Environmental zone – E3/E4  
fSM = Surface factor - 1 (Exterior Lighting only)  
AXIA 3.1 8m Column - Overall fM = 0.87 (CLO N/A)  
AXIA 3.1 6m Column & Pharos = 0.81 (CLO N/A)

## 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	8.75	99.33	87.15	47.50	1.48	1.48
2	Grid 2	32.88	157.01	105.46	26.91	1.60	1.50

### Luminaires

#### Luminaire A Data



Supplier	Urbis Schreder
Type	AXIA 3.1 5267 Integrated lenses 16 OSLO N SQUARE GIANT@870mA
Lamp(s)	16 OSLO N SQUARE GIANT@870mA NW 740 230V
LampFlux(klm)/Colour	5.50 NW 4000K/70
File Name	AXIA 3.1 5267 16 OSLO N SQUARE GIANT 870mA NW 740 44W 429102 Integrated le...
Maintenance Factor	0.87
Imax70,80,90(cd/klm)	985.2, 145.1, 0.0
No. in Project	4

#### Luminaire B Data



Supplier	Urbis Schreder
Type	PHAROS 5119 Asymmetrical 8 LEDs 350 mA NW Cylindrical, PC, Sm
Lamp(s)	8 LEDs NW
Lamp Flux (klm)	0.84
File Name	PHAROS 5119 8 LEDs 350mA NW 356012 Cylindrical PC Smooth Asymmetrical TF.Idt
Maintenance Factor	0.81
Imax70,80,90(cd/klm)	428.1, 946.1, 43.4
No. in Project	15

#### Luminaire C Data



Supplier	Urbis Schreder
Type	AXIA 3.1 5267 Integrated lenses 16 OSLO N SQUARE GIANT@870mA
Lamp(s)	16 OSLO N SQUARE GIANT@870mA NW 740 230V
LampFlux(klm)/Colour	5.50 NW 4000K/70
File Name	AXIA 3.1 5267 16 OSLO N SQUARE GIANT 870mA NW 740 44W 429102 Integrated le...
Maintenance Factor	0.81
Imax70,80,90(cd/klm)	985.2, 145.1, 0.0
No. in Project	3

### Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	120.18	104.47	8.00	228.00	0.00	0.00	0.45			
2	A	100.39	123.19	8.00	227.00	0.00	0.00	0.45			
3	A	78.38	143.72	8.00	226.00	0.00	0.00	0.45			
4	A	55.27	165.16	8.00	229.00	0.00	0.00	0.45			
5	C	66.64	72.33	6.00	236.00	0.00	0.00	0.45			
6	C	52.63	82.85	6.00	234.00	0.00	0.00	0.45			
7	C	59.86	97.95	6.00	321.00	0.00	0.00	0.45			
8	B	44.58	110.87	1.00	319.00	0.00	0.00	0.00			
9	B	44.47	123.97	1.00	226.00	0.00	0.00	0.00			

DATE: 21 September 2021

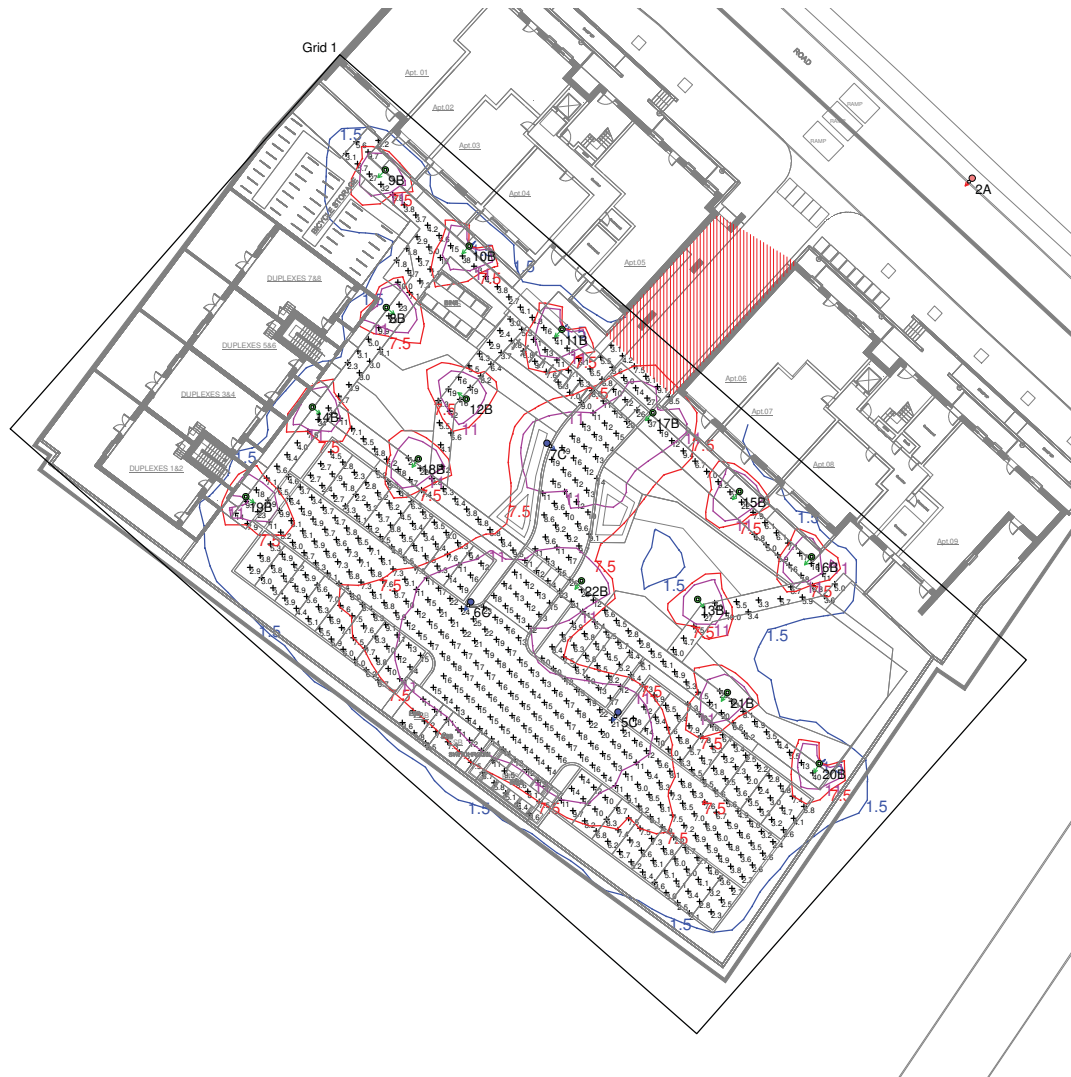
PROJECT No: OP0OP000184966PROJECT NAME: Dublin - Eastwall Project

**Layout Continued**

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
10	B	52.47	116.74	1.00	228.00	0.00	0.00	0.00			
11	B	61.31	108.82	1.00	228.00	0.00	0.00	0.00			
12	B	52.18	102.16	1.00	143.00	0.00	0.00	0.00			
13	B	74.23	83.07	1.00	308.00	0.00	0.00	0.00			
14	B	37.52	101.39	1.00	319.00	0.00	0.00	0.00			
15	B	78.23	93.35	1.00	228.00	0.00	0.00	0.00			
16	B	85.08	87.13	1.00	229.00	0.00	0.00	0.00			
17	B	69.96	100.85	1.00	226.00	0.00	0.00	0.00			
18	B	47.62	96.47	1.00	234.00	0.00	0.00	0.00			
19	B	31.19	92.87	1.00	323.00	0.00	0.00	0.00			
20	B	85.82	67.45	1.00	240.00	0.00	0.00	0.00			
21	B	77.07	74.22	1.00	235.00	0.00	0.00	0.00			
22	B	63.17	84.84	1.00	232.00	0.00	0.00	0.00			

## Horizontal Illuminance (lux)

Grid 1



### Results

Eav	9.62
Emin	1.78
Emax	41.20
Emin/Emax	0.04
Emin/Eav	0.19

## Horizontal Illuminance (lux)

Grid 2



### Results

Eav	7.61
Emin	2.59
E <sub>max</sub>	12.82
E <sub>min</sub> /E <sub>max</sub>	0.20
E <sub>min</sub> /E <sub>av</sub>	0.34