

DATE: 5 August 2026
DESIGNER: James Molloy
PROJECT No: PL2543
PROJECT NAME: Homeland Projects Mungret



LOCATION: Homeland Projects Mungret, Ireland

DOCUMENT NO.: PL2543-MEC-HLG-XX-CA-EO-00001

Proposed Lighting Calculation in accordance with:
Limerick City and County Council Public Lighting and Product
Specification 2022.

Required Levels P3: Eav = 7.50 to 11.25, Emin = 1.50

Outdoor Lighting Report

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	553146.65	653354.60	320.89	203.16	1.50	1.49
2	Grid 2	553143.30	653564.16	270.85	203.16	1.50	1.49

Luminaires

Luminaire A Data

Supplier	
Type	MPG-1N-20W
Lamp(s)	MICROLED DE 150lm/W
Lamp Flux (klm)	3.00
File Name	MPG-1N-20W_LR.ies
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	416.1, 138.4, 7.7
No. in Project	31

Luminaire B Data

Supplier	
Type	MPG-1N-30W
Lamp(s)	MICROLED DE 150lm/W
Lamp Flux (klm)	4.50
File Name	MPG-1N-30W_LR.IES
Maintenance Factor	0.76
Imax70,80,90(cd/klm)	414.4, 137.8, 7.7
No. in Project	40

Layout

ID /Mast	Type	X	Y	Height	Angle	Tilt	Cant	Out- reach	Target X	Target Y	Target Z
1	B	553271.64	653538.25	6.00	166.00	5.00	0.00	0.50			
2	B	553279.05	653567.80	6.00	163.00	5.00	0.00	0.50			
3	B	553257.79	653583.42	6.00	249.00	5.00	0.00	0.50			
4	B	553235.25	653588.00	6.00	49.00	5.00	0.00	0.50			
5	A	553215.41	653613.32	6.00	234.00	5.00	0.00	0.50			
6	A	553191.98	653616.62	6.00	334.00	5.00	0.00	0.50			
7	A	553200.58	653630.90	6.00	332.00	5.00	0.00	0.50			
8	A	553194.90	653647.60	6.00	59.00	5.00	0.00	0.50			
9	A	553231.53	653611.27	6.00	142.00	5.00	0.00	0.50			
10	A	553248.63	653635.64	6.00	146.00	5.00	0.00	0.50			
11	A	553274.31	653671.70	6.00	142.00	5.00	0.00	0.50			
12	A	553249.37	653659.19	6.00	50.00	5.00	0.00	0.50			
13	B	553280.46	653595.07	6.00	323.00	5.00	0.00	0.50			
14	B	553297.66	653619.76	6.00	324.00	5.00	0.00	0.50			
15	A	553304.10	653603.74	6.00	74.00	5.00	0.00	0.50			
16	A	553328.63	653597.55	6.00	75.00	5.00	0.00	0.50			
17	A	553329.46	653623.80	6.00	249.00	5.00	0.00	0.50			
18	B	553314.84	653644.31	6.00	317.00	5.00	0.00	0.50			
19	A	553358.69	653616.43	6.00	259.00	5.00	0.00	0.50			

Layout Continued

ID /Mast	Type	X	Y	Height	Angle	Tilt	Cant	Out- reach	Target X	Target Y	Target Z
20	B	553385.86	653605.76	6.00	160.00	5.00	0.00	0.50			
21	B	553332.06	653668.86	6.00	329.00	5.00	0.00	0.50			
22	A	553349.28	653677.89	6.00	255.00	5.00	0.00	0.50			
23	A	553377.42	653671.69	6.00	268.00	5.00	0.00	0.50			
24	A	553323.30	653540.51	6.00	341.00	5.00	0.00	0.50			
25	A	553333.70	653555.28	6.00	166.00	5.00	0.00	0.50			
26	A	553347.39	653547.42	6.00	256.00	5.00	0.00	0.50			
27	A	553340.93	653531.89	6.00	74.00	5.00	0.00	0.50			
28	A	553362.84	653527.25	6.00	163.00	5.00	0.00	0.50			
29	A	553358.01	653503.76	6.00	163.00	5.00	0.00	0.50			
30	A	553342.33	653512.56	6.00	342.00	5.00	0.00	0.50			
31	A	553375.31	653513.57	6.00	329.00	5.00	0.00	0.50			
32	A	553237.45	653505.05	6.00	191.00	5.00	0.00	0.50			
33	A	553209.39	653429.29	6.00	64.00	5.00	0.00	0.50			
34	A	553199.53	653424.69	6.00	172.00	5.00	0.00	0.50			
35	A	553194.24	653399.21	6.00	165.00	5.00	0.00	0.50			
36	B	553192.61	653380.90	6.00	253.00	5.00	0.00	0.50			
37	B	553227.12	653372.07	6.00	250.00	5.00	0.00	0.50			
38	B	553239.04	653429.77	6.00	253.00	5.00	0.00	0.50			
39	A	553213.43	653459.40	6.00	164.00	5.00	0.00	0.50			
40	B	553232.07	653464.39	6.00	76.00	5.00	0.00	0.50			
41	B	553262.79	653456.50	6.00	73.00	5.00	0.00	0.50			
42	A	553213.47	653364.28	6.00	343.00	5.00	0.00	0.50			
43	B	553292.99	653448.76	6.00	73.00	5.00	0.00	0.50			
44	B	553323.01	653441.00	6.00	71.00	5.00	0.00	0.50			
45	A	553341.87	653441.37	6.00	157.00	5.00	0.00	0.50			
46	B	553327.06	653420.47	6.00	339.00	5.00	0.00	0.50			
47	B	553352.69	653464.31	6.00	151.00	5.00	0.00	0.50			
48	A	553235.82	653481.43	6.00	159.00	5.00	0.00	0.50			
49	A	553209.84	653445.38	6.00	164.00	0.00	0.00	0.50			
50/1	B	553406.95	653467.01	8.00	89.00	5.00	0.00	0.75			
51/1	B	553406.95	653467.01	8.00	269.00	5.00	0.00	0.75			
52/2	B	553430.93	653458.48	8.00	270.00	5.00	0.00	0.75			
53/2	B	553430.93	653458.48	8.00	90.00	5.00	0.00	0.75			
54/3	B	553460.93	653465.59	8.00	270.00	5.00	0.00	0.75			
55/3	B	553460.93	653465.59	8.00	90.00	5.00	0.00	0.75			

Layout Continued

ID /Mast	Type	X	Y	Height	Angle	Tilt	Cant	Out- reach	Target X	Target Y	Target Z
56/4	B	553480.68	653457.13	8.00	270.00	5.00	0.00	0.75			
57/4	B	553480.68	653457.13	8.00	90.00	5.00	0.00	0.75			
58/5	B	553354.67	653485.97	8.00	247.00	5.00	0.00	0.75			
59/5	B	553354.67	653485.97	8.00	67.00	5.00	0.00	0.75			
60/6	B	553334.12	653507.28	8.00	257.00	5.00	0.00	0.75			
61/6	B	553334.12	653507.28	8.00	77.00	5.00	0.00	0.75			
62/7	B	553268.85	653524.46	8.00	254.00	5.00	0.00	0.75			
63/7	B	553268.85	653524.46	8.00	74.00	5.00	0.00	0.75			
64/8	B	553237.22	653528.11	8.00	260.00	5.00	0.00	0.75			
65/8	B	553237.22	653528.11	8.00	80.00	5.00	0.00	0.75			
66/9	B	553380.68	653472.57	8.00	60.00	5.00	0.00	0.75			
67/9	B	553380.68	653472.57	8.00	240.00	5.00	0.00	0.75			
68/10	B	553210.78	653535.01	8.00	72.00	5.00	0.00	0.75			
69/10	B	553210.78	653535.01	8.00	252.00	5.00	0.00	0.75			
70/11	B	553302.76	653515.48	8.00	256.00	5.00	0.00	0.75			
71/11	B	553302.76	653515.48	8.00	76.00	5.00	0.00	0.75			

Horizontal Illuminance (lux)

Grid 1



Results

Eav	9.93
Emin	2.06
Emax	27.62
Emin/Emax	0.07
Emin/Eav	0.21

Horizontal Illuminance (lux)

Grid 2



Results

Eav	7.72
Emin	1.51
Emax	25.72
Emin/Emax	0.06
Emin/Eav	0.20