

DATE: 30 October 2024
DESIGNER: MMA Lighting Consultancy Ltd
PROJECT No: MMA19045
PROJECT NAME: Verlon Farm, Montgomery



Proposed S38 Lighting Design - R0

6m Powys County Council Specification Columns with
Philips Luma Gen2 Micro BL 3000K LED Luminaires

BS5489-1:2020
Lighting Class: P5
Eav 3.00 - 4.50 Lux
Emin 0.60 Lux

Base drawing number used in this calculation '416.065277-SLR-
XXX-XXX-DR-CE-0120-General Arrangement Plan'

Outdoor Lighting Report

PREPARED BY: MMA Lighting Consultancy Ltd
99 Old Bath Road
Summer Field House
Charvil
Reading
Berkshire
RG10 9QN
Email: info@mma-consultancy.co.uk
Web: www.mma-consultancy.co.uk

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	322120.52	297046.09	181.82	132.00	1.50	1.50
2	Grid 2	322140.82	297171.56	184.00	125.79	1.50	1.50
3	Contour Grid	322120.51	296985.12	219.90	310.61	1.50	1.50

Luminaires

Luminaire A Data

Supplier	
Type	BGP702 DW50 BL1
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	3.00
File Name	Luma Gen2 Micro_BGP702_DW50 BL1_3000_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.90
Lum. Int. Class	G3
No. in Project	8

Luminaire B Data

Supplier	
Type	BGP702 DM10 BL1
Lamp(s)	LED-HB 5.2S 730
Lamp Flux (klm)	3.00
File Name	Luma Gen2 Micro_BGP702_DM10 BL1_3000_20LED_5.2S_CLO_L90_730.ies
Maintenance Factor	0.90
Lum. Int. Class	G3
No. in Project	6



Luminaire F Data

Supplier	TRT Lighting
Type	ASM4_LED_27W_GR7_3000K_EXP
Lamp(s)	42 0027 0000 100
Lamp Flux (klm)	3.26
File Name	ASM4_LED_27W_GR7_3000K_EXP.ies
Maintenance Factor	0.90
Lum. Int. Class	G3
No. in Project	1

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	A	322200.33	297071.38	6.00	217.00	0.00	0.00	0.40			
2	B	322246.15	297052.52	6.00	73.00	0.00	0.00	0.40			
3	A	322205.20	297173.22	6.00	3.00	0.00	0.00	0.40			
4	B	322209.35	297211.26	6.00	359.00	0.00	0.00	0.40			
5	B	322198.67	297238.93	6.00	30.00	0.00	0.00	0.40			
6	A	322227.18	297234.64	6.00	86.00	0.00	0.00	0.40			
7	A	322259.48	297232.45	6.00	86.00	0.00	0.00	0.40			
8	B	322269.06	297217.18	6.00	355.00	0.00	0.00	0.40			

Layout Continued

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
9	B	322267.42	297180.39	6.00	6.00	0.00	0.00	0.40			
10	A	322241.92	297194.81	6.00	268.00	0.00	0.00	0.40			
11	A	322215.89	297132.94	6.00	162.00	0.00	0.00	0.40			
12	A	322193.52	297101.29	6.00	346.00	0.00	0.00	0.40			
13	B	322172.11	297077.14	6.00	256.00	0.00	0.00	0.40			
14	A	322216.12	297056.14	6.00	23.00	0.00	0.00	0.40			
15	F	322273.22	297067.39	8.00	346.00	0.00	0.00	0.40			

Horizontal Illuminance (lux)

Grid 1



Results

Eav	3.03
Emin	0.60
Emax	15.25
Emin/Emax	0.04
Emin/Eav	0.20

Horizontal Illuminance (lux)

Grid 2



Results

Eav	3.70
Emin	0.72
Emax	15.26
Emin/Emax	0.05
Emin/Eav	0.20