

DATE: 23 March 2026
DESIGNER: Julian Joseph
PROJECT No: 100776-JLD-S278-DC-0003B
PROJECT NAME: Aborfield PMD West Footpath

joseph lighting

Lighting class selected using BS5489:2020 = BSEN13201 P5
P5 Minimum average illuminance Eav: 3.00 lux
P5 minimum illuminance Emin: 0.60 lux
Maximum column spacing: 40.50m

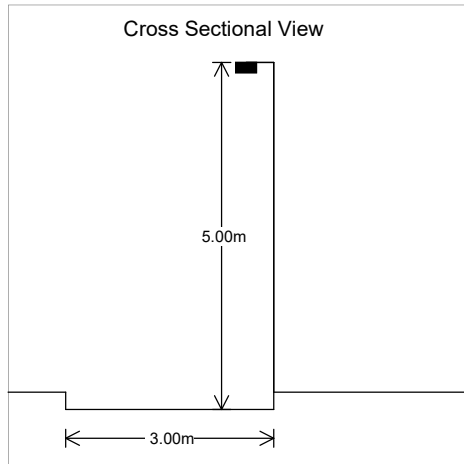
CCT of LEDs in this report remain at 4000k in lieu of 2700k data.
Luminaires to be ordered with 2700k LEDs with equal 1.60klm
output.

Roadway Lighting Report

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Roadway Report Summary

Layout



Road Data

Calculation Grid	2015:EN13201 Illuminance
Width (m)	3.00
No. of Lanes	2
Road Surface	C2
Q0	0.07
Left Footpath(m)	0.00
Right Footpath(m)	0.00

Main Lighting

Luminaires to be ordered with
2700k CCT
LEDs in lieu of photometric files.

Column Data

Configuration	Single Sided Right
Spacing (m)	40.50
Height (m)	5.00
Tilt (deg)	0.00
Setback (m)	0.00
Outreach (m)	0.40
Overhang (m)	0.40

Luminaire Data

Supplier	2025.03.21 - Philips
Type	BGP701 DM50
Lamp(s)	LED-HB 5.2S 740
Lamp Flux (klm)	1.60
File Name	Luma Gen2 Nano_BGP701_DM50_1600_6 LED_5.2S_CLO_L90_740.ies
Maintenance Factor	0.83
Lum. Int. Class	G3

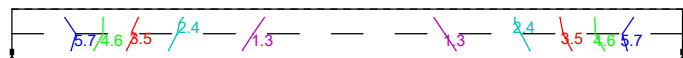
Results

Main

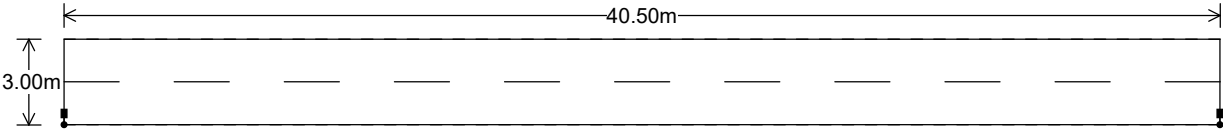
Complies with P5

Eav	3.03
Emin	0.73
E _{max}	7.34
E _{min} /E _{max}	0.10
E _{min} /E _{av}	0.24

Horizontal Illuminance (lux)



Energy performance indicators



Power Main Luminaire(W)	10.00
Parasitic Power(W)	0.00
Area(m²)	122
Hours per Year	4100
Power Density(mW/lx/m²)	27.21
AECI(kWh/m²)	0.34