

DATE: 22 June 2026
DESIGNER: DFL-UK
PROJECT No: 4777
PROJECT NAME: 4777 354 Barkham Road



Location: 354 Barkham Road, Wokingham RG41 4DE
Environmental Zone: E3

GN08: 0.4 lux Maximum Vertical Illuminance

Lighting parameters taken from ILP Guidance documents
GN08.2023 - Bats and Artificial Lighting at Night.

Vertical grids have been calculated at a height of 1.5 metres above
the ground level to simulate the likely flight path of a light sensitive
bat.

4777-DFL-ELG-XX-CA-EO-13001-S3-P01

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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	PSER 001 A - East of devel...	-117.82	-49.97	22.91	6.00	0.72	0.75
2	PSER 001 B - East of devel...	-117.36	-27.08	12.28	6.00	0.72	0.75
3	PSER 002 - West of develop...	-104.93	-49.38	37.33	6.00	0.75	0.75
4	PSER 003 - South of develo...	-115.47	-15.02	22.82	6.00	0.74	0.75
5	PSER 004 - Northern Tree	-116.71	-39.90	9.98	6.00	0.71	0.75

Luminaires

Luminaire B Data

Supplier	Ligman
Type	GI-31591-W27
Lamp(s)	1 COB LED 2700K
Lamp Flux (klm)	0.20
File Name	GI-31591-W27.IES
Maintenance Factor	1.00
Imax70,80,90(cd/klm)	61.8, 25.0, 1.0
No. in Project	7

Layout

ID	Type	X	Y	Height	Angle	Tilt	Cant	Out-reach	Target X	Target Y	Target Z
1	B	-108.67	-37.22	2.00	270.00	0.00	0.00	0.00			
2	B	-112.03	-37.18	2.00	270.00	0.00	0.00	0.00			
3	B	-105.24	-33.00	2.00	0.00	0.00	0.00	0.00			
4	B	-108.31	-24.25	2.00	0.00	0.00	0.00	0.00			
5	B	-114.45	-23.97	2.00	90.00	0.00	0.00	0.00			
6	B	-115.20	-28.98	2.00	180.00	0.00	0.00	0.00			
7	B	-98.62	-21.71	2.00	254.00	0.00	0.00	0.00			

Illuminance (lux)

PSER 001 A - East of development

[illegible]

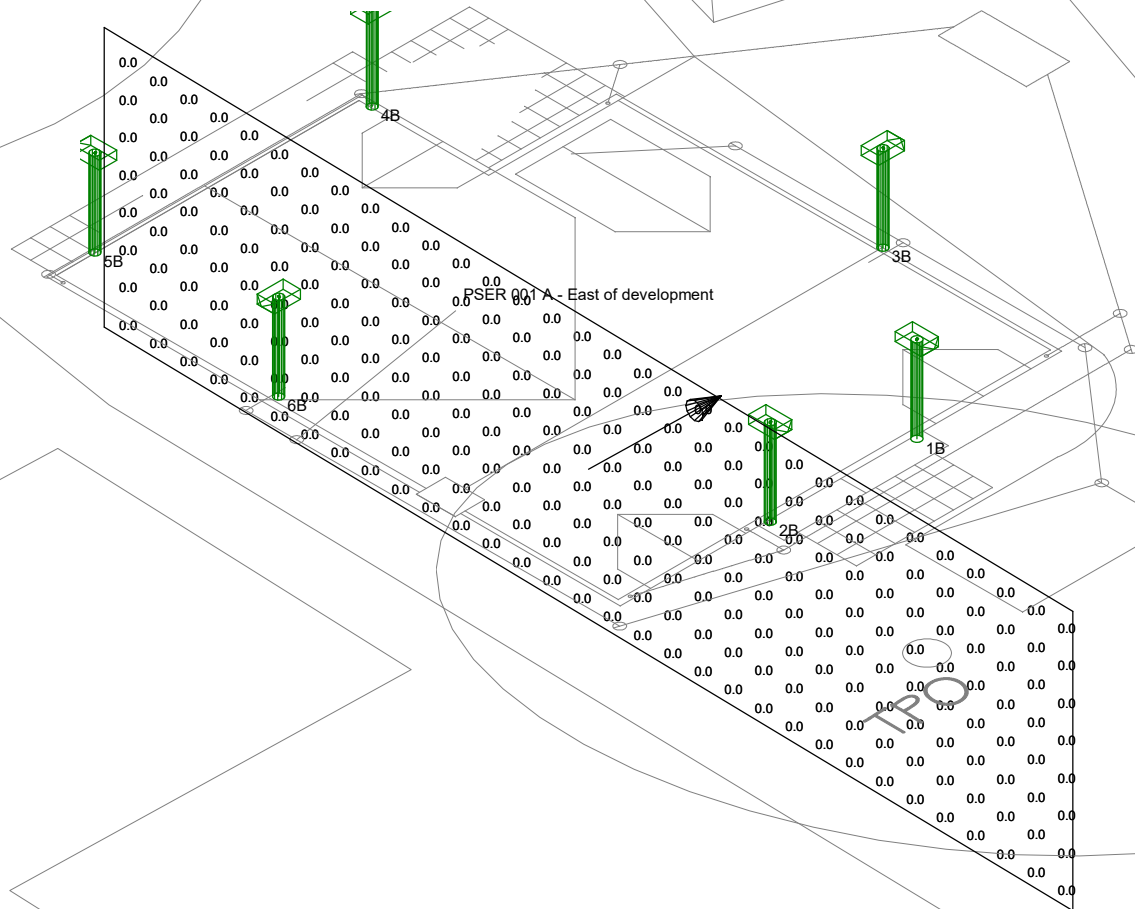
Results

Eav	0.01
Emin	0.00
E _{max}	0.31
Emin/E _{max}	0.00
Emin/Eav	0.00

Vertical Illuminance (lux)

Observer direction = 0 deg. Height = 0.00

PSER 001 A - East of development



Illuminance (lux)

PSER 001 B - East of development

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

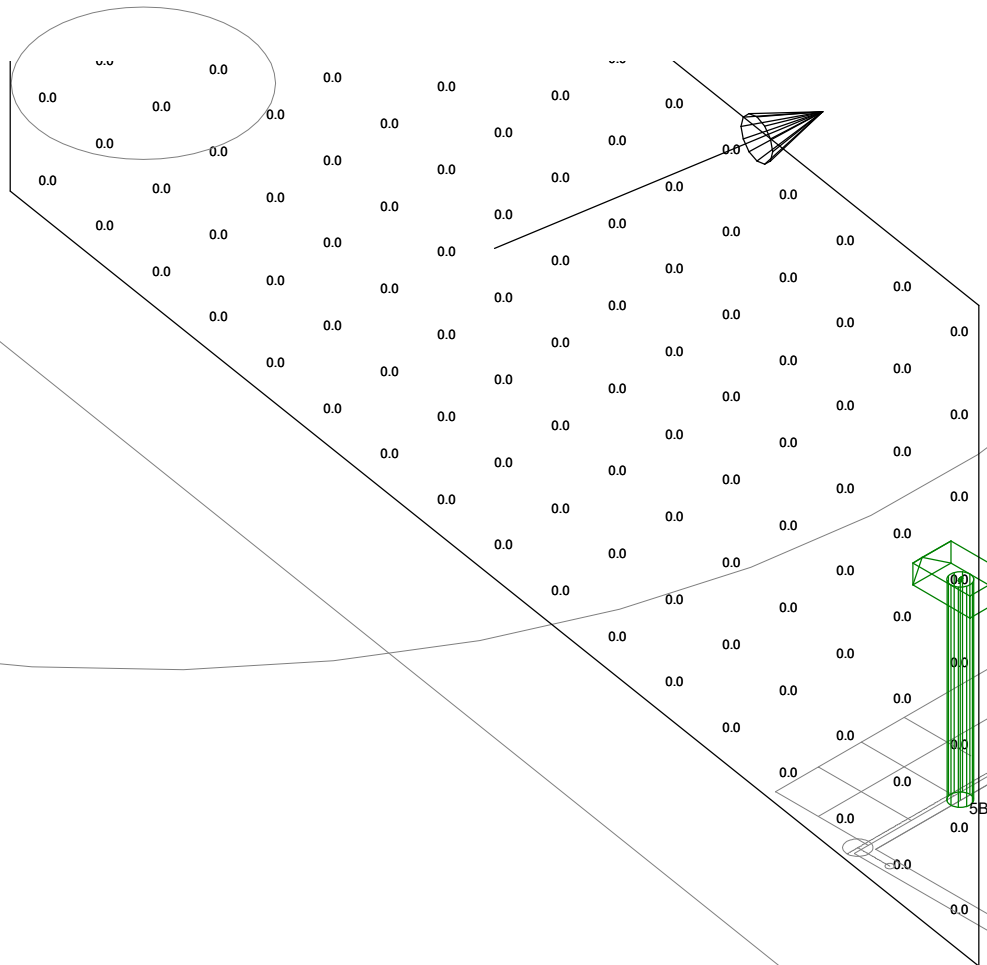
Results

Eav	0.01
Emin	0.00
Emax	0.27
Emin/Emax	0.00
Emin/Eav	0.00

Vertical Illuminance (lux)

Observer direction = 0 deg. Height = 0.00

PSER 001 B - East of development



Illuminance (lux)

PSER 002 - West of development

[illegible]

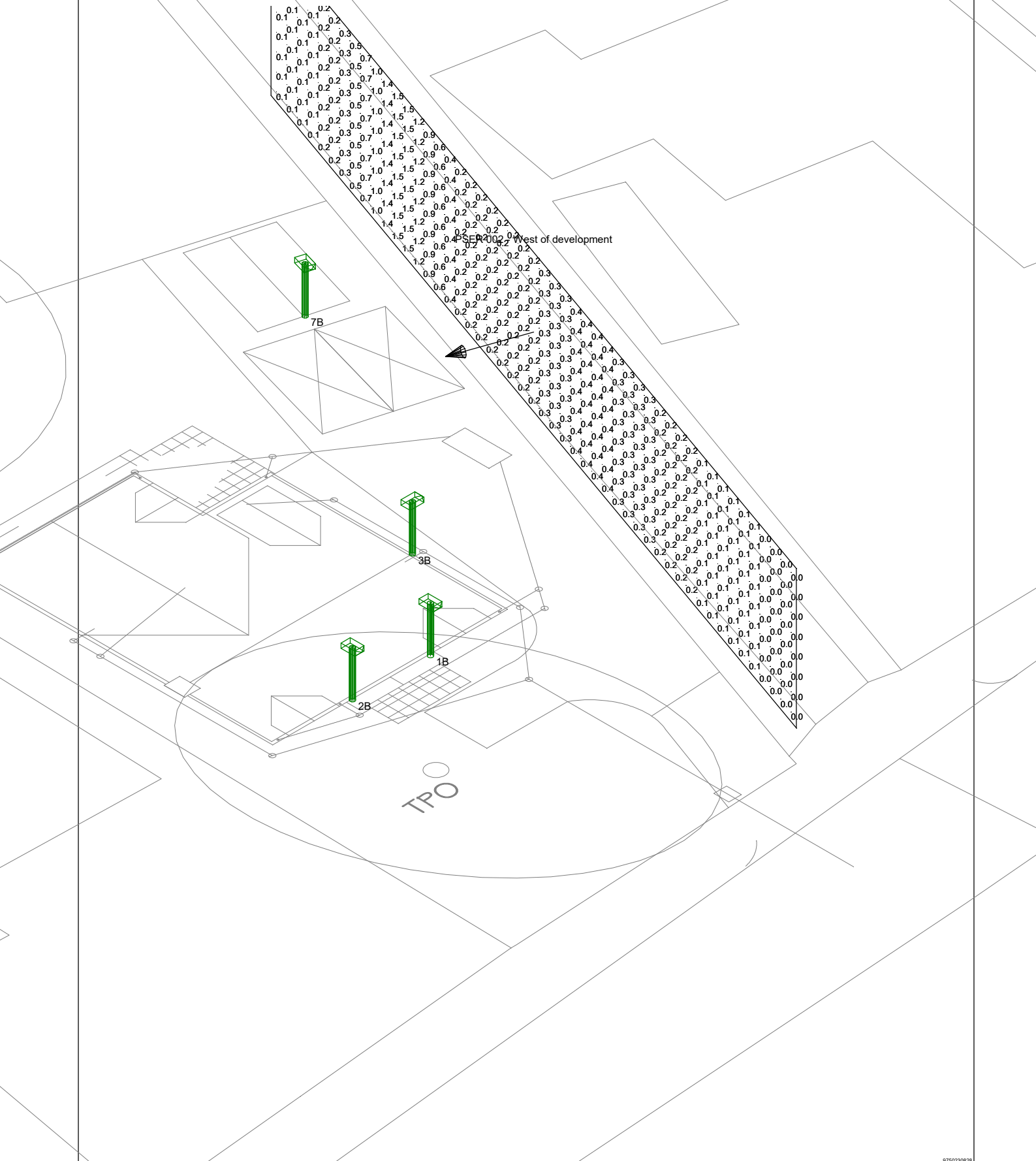
Results

Eav	0.00
Emin	0.00
Emax	0.11
Emin/Emax	0.00
Emin/Eav	0.00

Vertical Illuminance (lux)

Observer direction = 0 deg. Height = 0.00

PSER 002 - West of development



Illuminance (lux)

PSER 003 - South of development

[illegible]

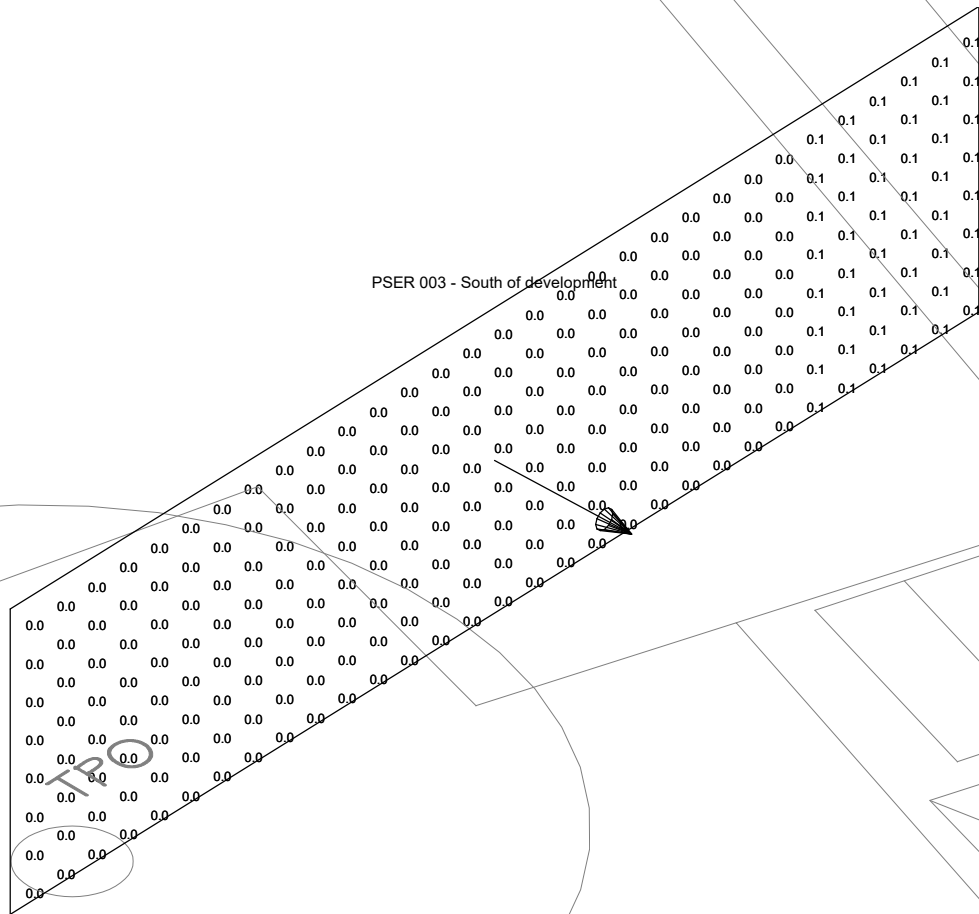
Results

Eav	0.00
Emin	0.00
Emax	0.01
Emin/Emax	0.00
Emin/Eav	0.00

Vertical Illuminance (lux)

Observer direction = 0 deg. Height = 0.00

PSER 003 - South of development



Illuminance (lux)

PSER 004 - Northern Tree

0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1

Results

Eav	0.02
Emin	0.00
Emax	0.20
Emin/Emax	0.00
Emin/Eav	0.00

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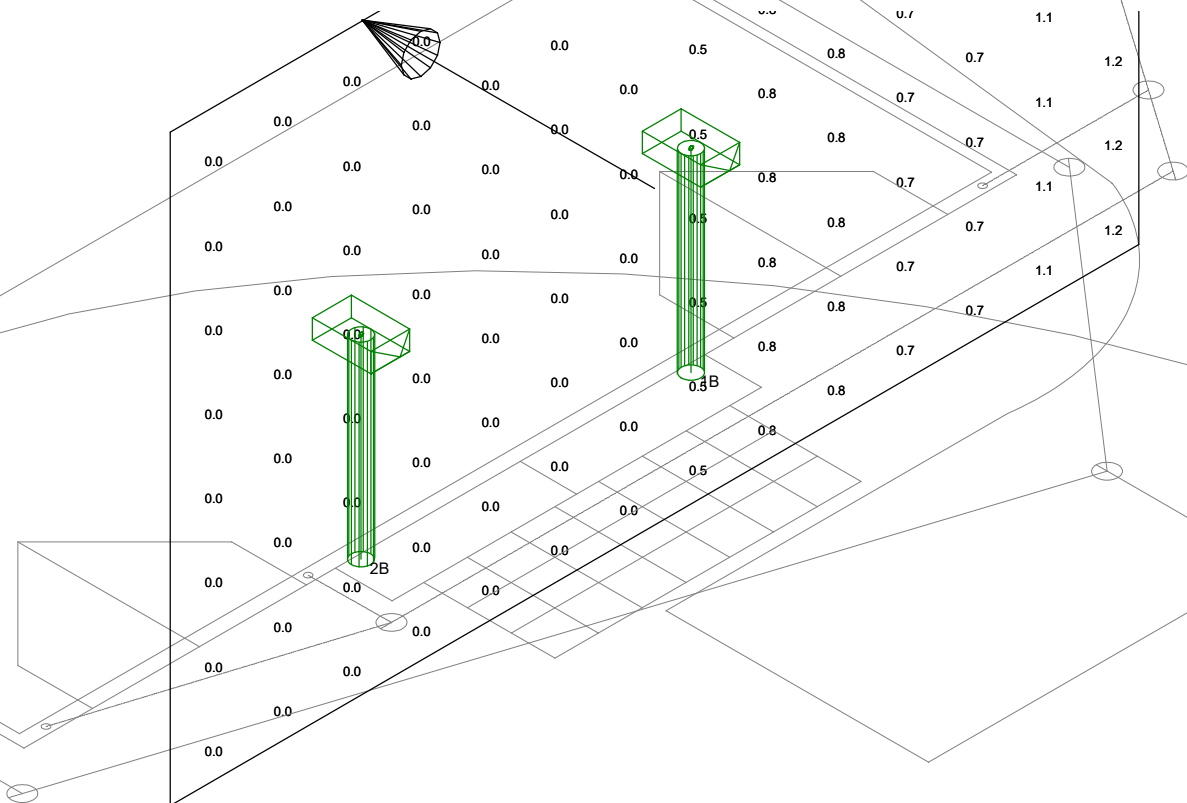
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Vertical Illuminance (lux)

Observer direction = 0 deg. Height = 0.00

PSER 004 - Northern Tree



TPO