AREA LIGHTING CALCULATION

Beech Hall Crescent

Sample · Project 12345

DOCUMENT	STATUS · REV	DATE	STANDARD · CLASS
12345-ACM-ZZ-XX-CA-Y-13001	S3 · P01	21 November 2026	EN 13201-2 · P2

Complies

Grids complying with their targets: 1 of 1

COMPLIANCE SUMMARY

Grid	Class	Eav req.	Eav	Emin req.	Emin	Uo	Emax	Result
Grid 1	P2	10.00–15.00	13.12	≥ 2.00	2.01	0.15	37.25	PASS

Illuminance in lux.

REVISIONS

Rev	Date	Description	By	Chk
P01	21/11/2026	Initial design.	JB	JD

SIGN-OFF

Designed	Joe Bloggs
Checked	Jane Doe
Approved	John Smith

Scenarios

Default

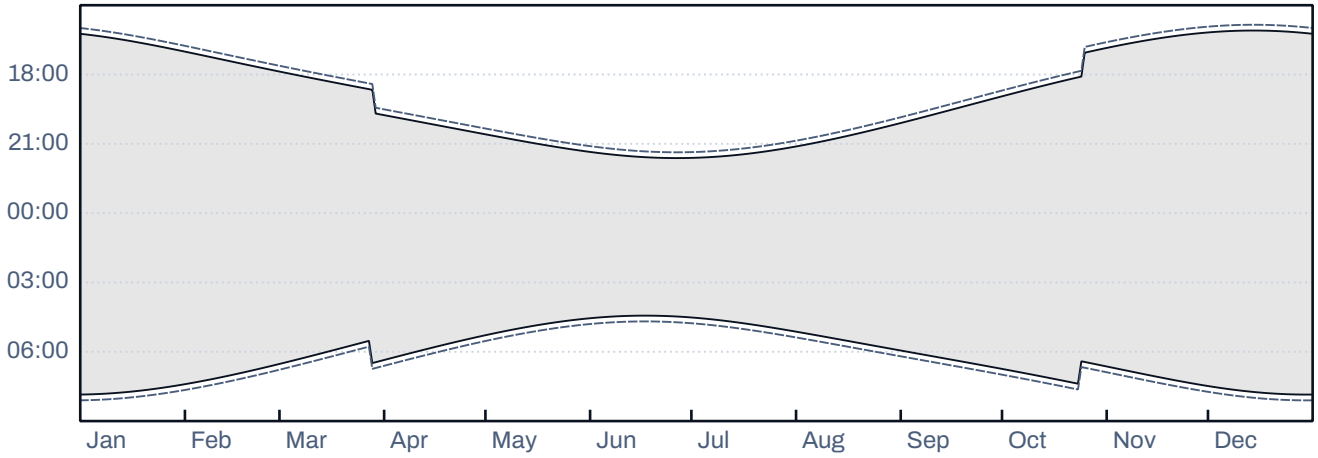
Dusk Dawn

	Default
Time slot	dusk–dawn
Hours a year	4,100 h
Dim · 1 · measure1	100 %
Grid 1	P2 · Eav 13.12 · Emin 2.01 · PASS
Result	Passes

The project complies. Grids complying with their targets: 1 of 1.

Energy

Scenario	Time slot	Hours a year	Circuit power	Energy a year
Default	dusk–dawn	4,100 h	520 W	2,132 kWh
Whole night	dusk–dawn	4,100 h	full: 520 W	2,132 kWh



Every night of the year, evening at the top: lit from switch-on to switch-off, sunset and sunrise dashed.

Circuit power is taken as linear in the dim level, driver included.
Hours worked out for the site (51.62° N, 0.01° W) on UK clock time. Electronic PEC 35/18, Elexon switch regime 808 (MDD380 v1): on 15 min after sunset, off 15 min before sunrise.

Dimming groups

Group	Columns	Count
1 · measure1	LC001, LC002, LC003, LC004, LC005, LC006, LC007, LC008	8

Design inputs

Targets

Standard	EN 13201-2
Class	P2
Eav	≥ 10.00 lx and ≤ 15.00 lx
Emin	≥ 2.00 lx

Maintenance factor

OMF used	0.83

Calculation grids

Grid	Origin E	Origin N	Size (m)	Spacing (m)
Grid 1	538534.1	191345.0	176.0 × 56.0	1.49 × 1.47

Luminaires

A

P863-128-P3-730-W3-500-65W

8 in project

Type	P863-128-P3-730-W3-500-65W
Lamp	730SS
Lamp flux	8.65 klm
Photometry file	P863-128-P3-730-W3-500-65W.ies
MF	0.83 (project)
Imax 70/80/90	343.2 / 133.7 / 0.7 cd/klm
Intensity class	G*2 at installed tilt 0°



— C0/180 · - - C90/270 · 400 cd/klm

Column schedule

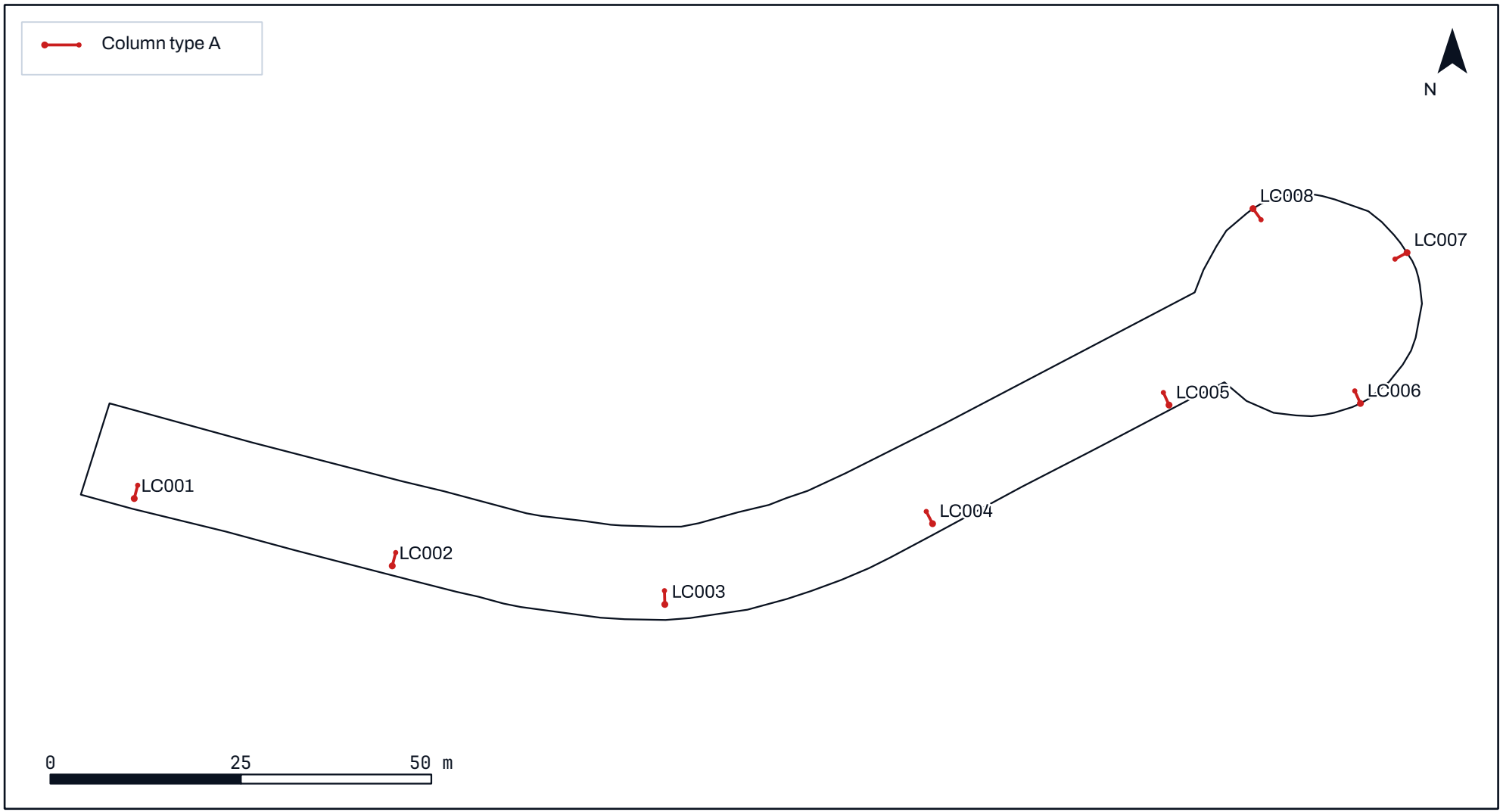
Column	Type	Easting m	Northing m	Height m	Outreach m	Orient. °	Tilt °	Cant °
LC001	A	538541.11	191360.94	6.00	0.50	75.4	0.0	0.0
LC002	A	538574.98	191352.10	6.00	0.50	75.4	0.0	0.0
LC003	A	538610.75	191347.04	6.00	0.50	91.5	0.0	0.0
LC004	A	538645.90	191357.64	6.00	0.50	117.3	0.0	0.0
LC005	A	538676.93	191373.21	6.00	0.50	114.2	0.0	0.0
LC006	A	538702.05	191373.42	6.00	0.50	114.2	0.0	0.0
LC007	A	538708.18	191393.23	6.00	0.50	208.3	0.0	0.0
LC008	A	538687.95	191399.00	6.00	0.50	306.0	0.0	0.0

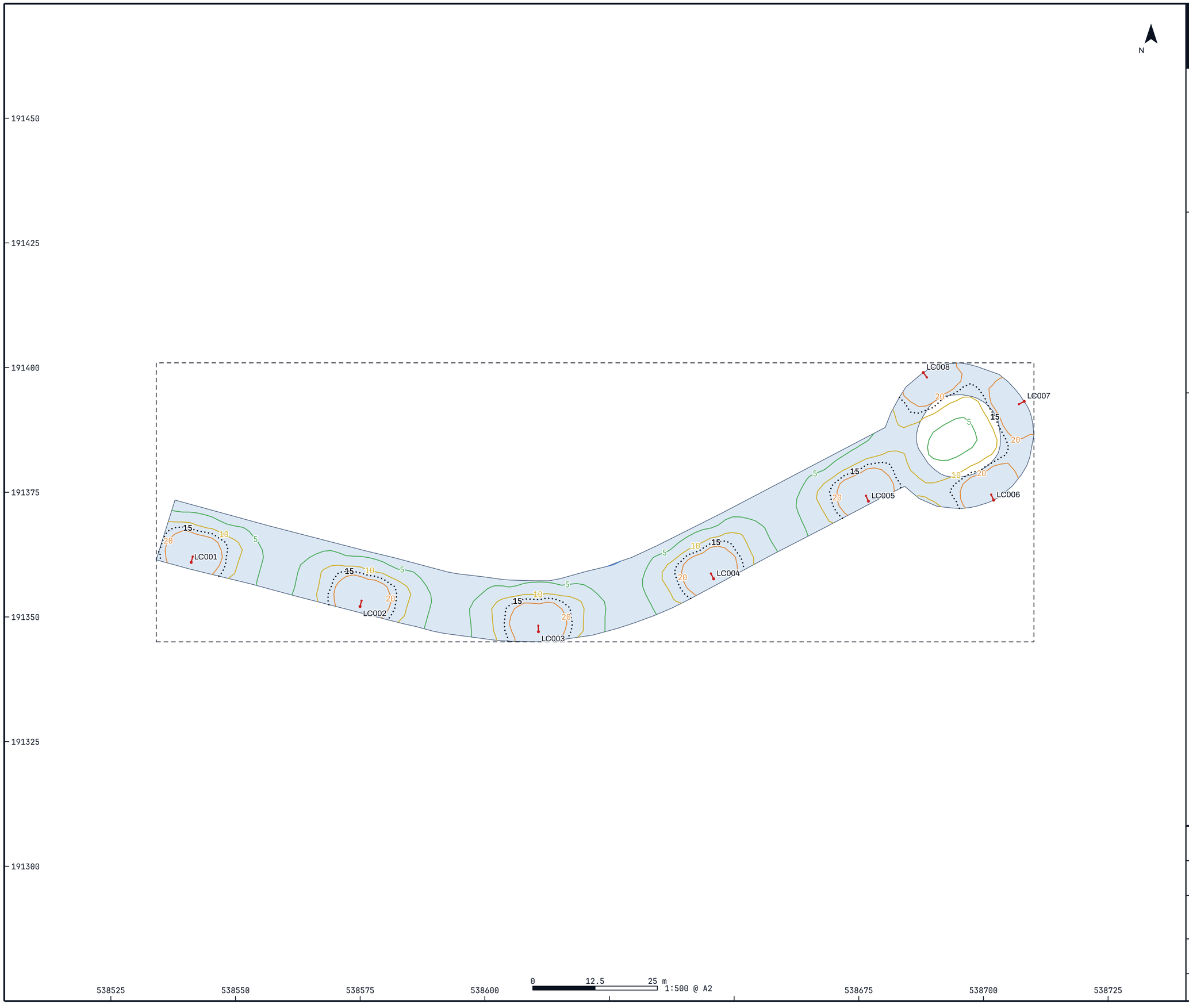
Coordinates: British National Grid.
Orientation: the bracket's direction, anticlockwise from grid east (0° = east).

Summary by type

Type	Luminaire	Qty	Height
A	P863-128-P3-730-W3-500-65W	8	6.00 m

Column locations





SHEET 6 OF 8

Grid 1 — isolux

Horizontal illuminance, maintained, lux

RESULTS · P2 — PASS

	Required	Result
Eav	10.00–15.00	13.12✓
Emin	≥ 2.00	2.01✓
Emax	–	37.25
Uo (Emin/Eav)	–	0.15
Ud (Emin/Emax)	–	0.05

KEY

- 2 lx — Emin target
- 10 lx — Eav target
- 15 lx — Eav ceiling
- 1 lx
- 5 lx
- 20 lx
- Column type A
- Calculation grid boundary
- Assessed area (inside masks)

Contours at the project's isolux levels and colours, with the class targets drawn heavy on top.

NOTES

1. Coordinates: British National Grid.
2. Illuminance is maintained: the maintenance factor is applied.

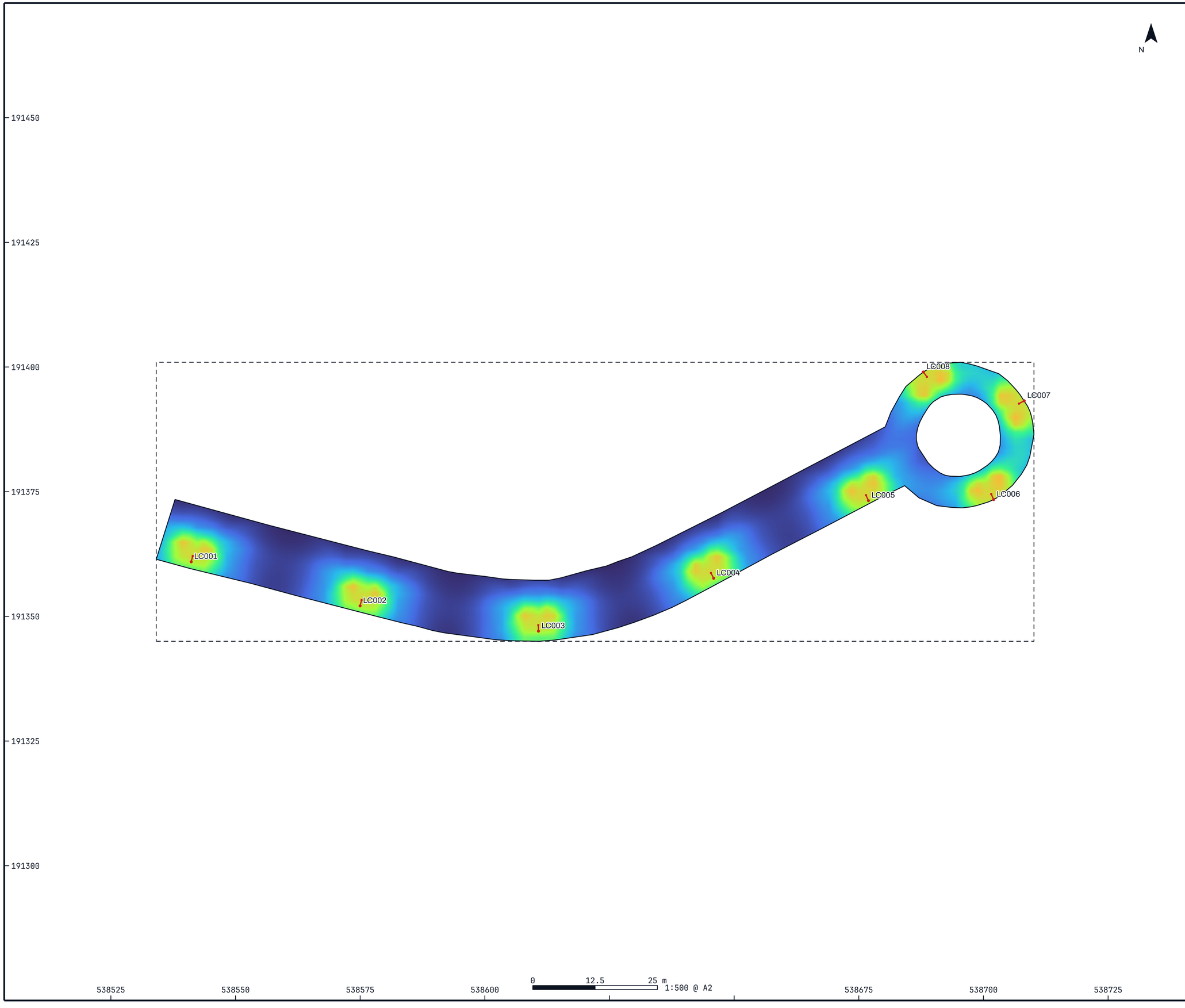
PROJECT
12345 · Sample

TITLE
Beech Hall Crescent — Grid 1 isolux

DOCUMENT	STATUS · REV
12345-ACM-ZZ-XX-CA-Y-13001	S3 · P01

DRAWN · CHECKED	DATE
Joe Bloggs · Jane Doe	21 November 2026

Livelux https://livelux.co.uk/



SHEET 7 OF 8

Grid 1 — false colour

Horizontal illuminance, maintained, lux

RESULTS · P2

PASS

	Required	Result
Eav	10.00–15.00	13.12✓
Emin	≥ 2.00	2.01✓
Emax	–	37.25
Uo (Emin/Eav)	–	0.15
Ud (Emin/Emax)	–	0.05

KEY · LUX

0.0 · 9.3 · 18.6 · 27.9 · 37.3

Below 2 lx — Emin target

Column type A

The same colours as the plan in Livelux: 0 to the grid maximum, painted only inside the assessed area; base map drawn on top.

NOTES

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PROJECT
12345 · Sample

TITLE
Beech Hall Crescent — Grid 1 false colour

DOCUMENT
12345-ACM-ZZ-XX-CA-Y-13001

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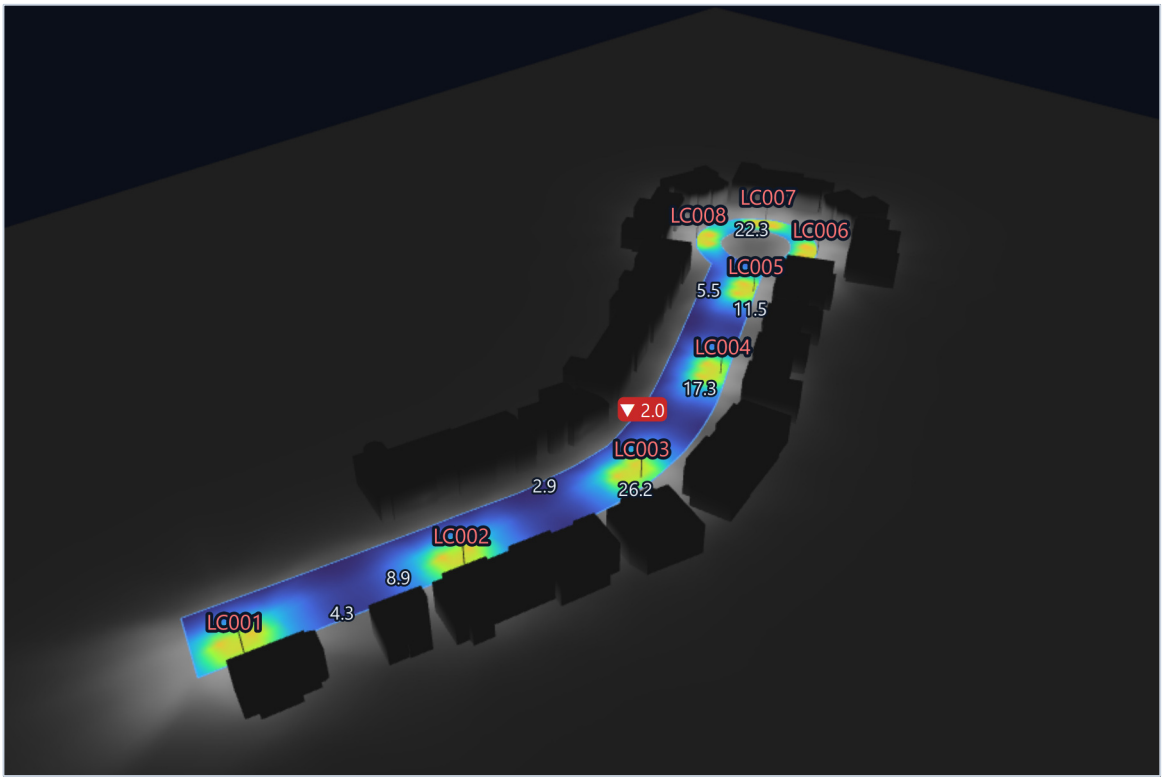
S3 · P01

DRAWN · CHECKED
Joe Bloggs · Jane Doe

DATE
21 November 2026

Livelux https://livelux.co.uk/

Grid 1 — 3D view



ILLUMINANCE, MAINTAINED · LUX

0.0 9.3 18.6 27.9 37.3