

Sunlight
Assessments UK

Daylight Assessment

Prior Approval Internal Scheme Performance

Project address: 87 Southampton Street, Reading, RG1 2QU, UK

Designer/Architects: Dave Jenkins (client) & Vorbild Architecture

Technical analysis by: Milica Mijajlović

01 September, 2026

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1. Introduction

1.1 Sunlight Assessments UK have been instructed to assess the internal daylight performance of the proposed Class MA conversion of ground floor at 87 Southampton Street, Reading, RG1 2QU, UK.

1.2 This report provides technical support in relation to the internal daylight performance of the proposed scheme.

1.3 Under Class MA permitted development rights, the provision of “adequate natural light in all habitable rooms” is a matter for prior approval. This applies to the change of use from commercial uses (including offices, retail and light industrial) to residential.

1.4 The assessment is informed by BRE guidance set out in Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice (BRE 209, 2022), which establishes the methodology for assessing daylight performance.

1.5 While BRE guidance is not mandatory, it is widely used by local planning authorities and inspectors in determining prior approval applications. Daylight is one of several material considerations, assessed in the context of the site.

Sources of Information

Ordnance Survey data

OS mapping

Proposed drawings (Appendix)



2. Methodology

2.1 This report assesses the internal daylight performance of the proposed scheme using recognised metrics.

2.2 Illuminance is measured in lux (lx), representing the amount of light falling on a surface (1 lux = 1 lumen/m²).

Interior Daylighting (Spatial Daylight Autonomy – SDA)

2.3 Internal daylight has been assessed in accordance with BS EN 17037, measuring both the amount and distribution of daylight within habitable rooms. Kitchens are considered habitable where they accommodate dining; smaller kitchens may be treated as less sensitive. A calculation grid is applied at 850mm above floor level, excluding a 0.3m perimeter, in line with BRE guidance.

2.4 The UK National Annex to BS EN 17037 sets target illuminance levels of

- 100 lux (bedrooms)
- 150 lux (living rooms)
- 200 lux (kitchens)

to be achieved across at least 50% of the reference plane. For multi-use spaces, the highest applicable target is typically adopted, although local authority discretion may apply.



2.5 Results in Appendix 2 present the percentage of the reference plane meeting the relevant target, together with median illuminance values. Where the median exceeds the target, compliance across at least 50% of the room is achieved. This assessment adopts the daylight factor method, with results expressed in lux in accordance with BRE guidance.

2.6 Surface reflectance values have been applied within the simulation in accordance with BRE guidance. For the purpose of this assessment, typical values have been assumed as follows:

Surface	Reflectance
Interior walls	0.6
Window reveals	0.7
Ceilings	0.7
Floors	0.4
Exterior walls and obstructions	0.2
Exterior ground	0.2
Exterior glazing	0.64



3. Standard Survey Limitations

3.1 Although we have undertaken as detailed an inspection as possible, we are required by our professional indemnity insurers to notify you that our report is based upon the Standard Terms and Conditions. Our understanding of the proposed development is informed in the drawings in Appendix 1 and information supplied by Dave Jenkins (client) & Vorbild Architecture.



4. The Site

4.1 The site is located at 87 Southampton Street, Reading, RG1 2QU, UK.

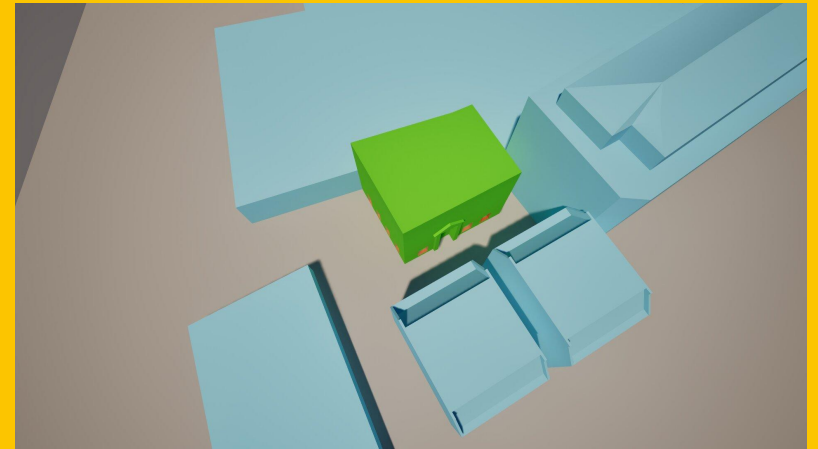


5. The Proposal

5.1 The proposal seeks to convert the existing ground floor into 1 flat under Class MA Permitted Development. The conversion involves the adaptation of the existing floor plates to provide a range of unit types served by the available fenestration.

5.2 The internal layout has been designed to prioritise daylight access to principal habitable rooms.

5.3 Floorplans and elevations have been provided by Dave Jenkins (client) & Vorbild Architecture.



6. Assessment Results

- 6.1 All habitable rooms within the proposed residential unit have been assessed for Spatial Daylight Autonomy (SDA) in accordance with BRE 209 (2022) and BS EN 17037. The SDA metric evaluates the percentage of floor area receiving sufficient daylight for at least half of the daylight hours across the year.
- 6.2 The results demonstrate that all tested rooms achieve the recommended SDA targets. The scheme delivers a good standard of internal daylight across the full range of habitable spaces, with appropriate daylight levels achieved in living rooms, bedrooms, kitchen/dining areas throughout the development.
- 6.3 The performance is consistent with BRE and BS EN 17037 guidance and confirms that the proposed layout successfully optimises daylight distribution within the constraints of the existing building. The full room-by-room results are presented in Appendix 2.



7. Conclusion

- 7.1 This assessment has demonstrated that all habitable rooms within the proposed Class MA conversion achieve the recommended Spatial Daylight Autonomy targets set out in BRE 209 (2022) and BS EN 17037. The scheme provides a good standard of internal daylight that is appropriate for residential accommodation.
- 7.2 The design responds appropriately to the inherent constraints of converting an existing ground floor to residential use. The internal layout maximises available daylight to principal habitable rooms and delivers suitable living conditions for future occupiers. The outcome is acceptable in planning terms.
- 7.3 The performance is consistent with BRE and BS EN 17037 guidance and confirms that the proposed layout successfully optimises daylight distribution within the constraints of the existing building. The full room-by-room results are presented in Appendix 2.

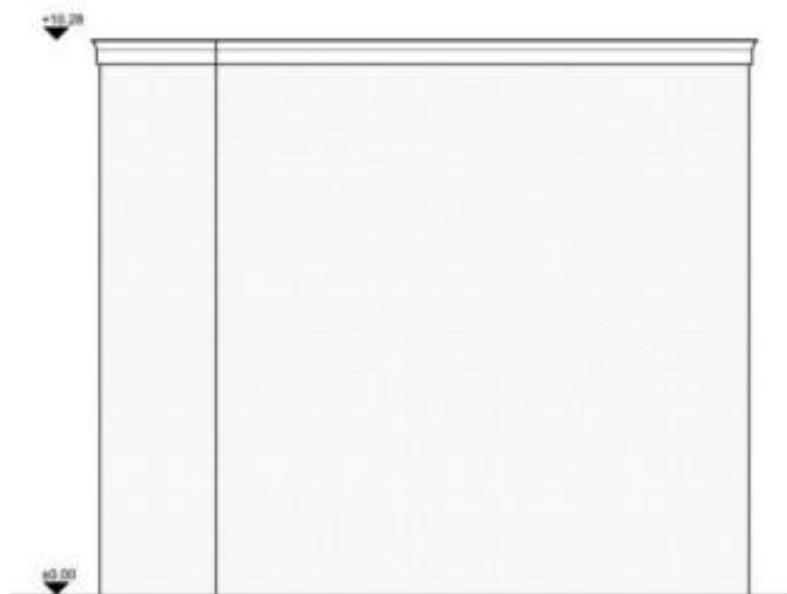


Appendix 1.

Drawings



06 EXISTING FRONT ELEVATION
A-121-010 1:50 @ A1, 1:100 @ A3



07 EXISTING REAR ELEVATION
A-121-010 1:50 @ A1, 1:100 @ A3

PROJECT NAME

1328

CLIENT/PROJECT

87 SOUTHAMPTON ST, READING

NOTES

All dimensions in millimetres.

All dimensions and levels are to be checked on site for this plan. Any discrepancies should be reported to the architect immediately. Any discrepancies to be reported must be in the original plan. (1:50 scale).

For planning or other purposes, all drawings are subject to change. All drawings are not to be reproduced or distributed in a form, partly or in whole, without written permission.

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CONSTRUCTION

INSTALLATION

INSTALLATION

OBJECT TITLE

EXISTING
FRONT & REAR ELEVATION

DRAWING FOR PLAN

FOR PLANNING

DESIGNER

TP

APPROVED

MS

JOB NUMBER

1328

DESIGNER

A-121-010

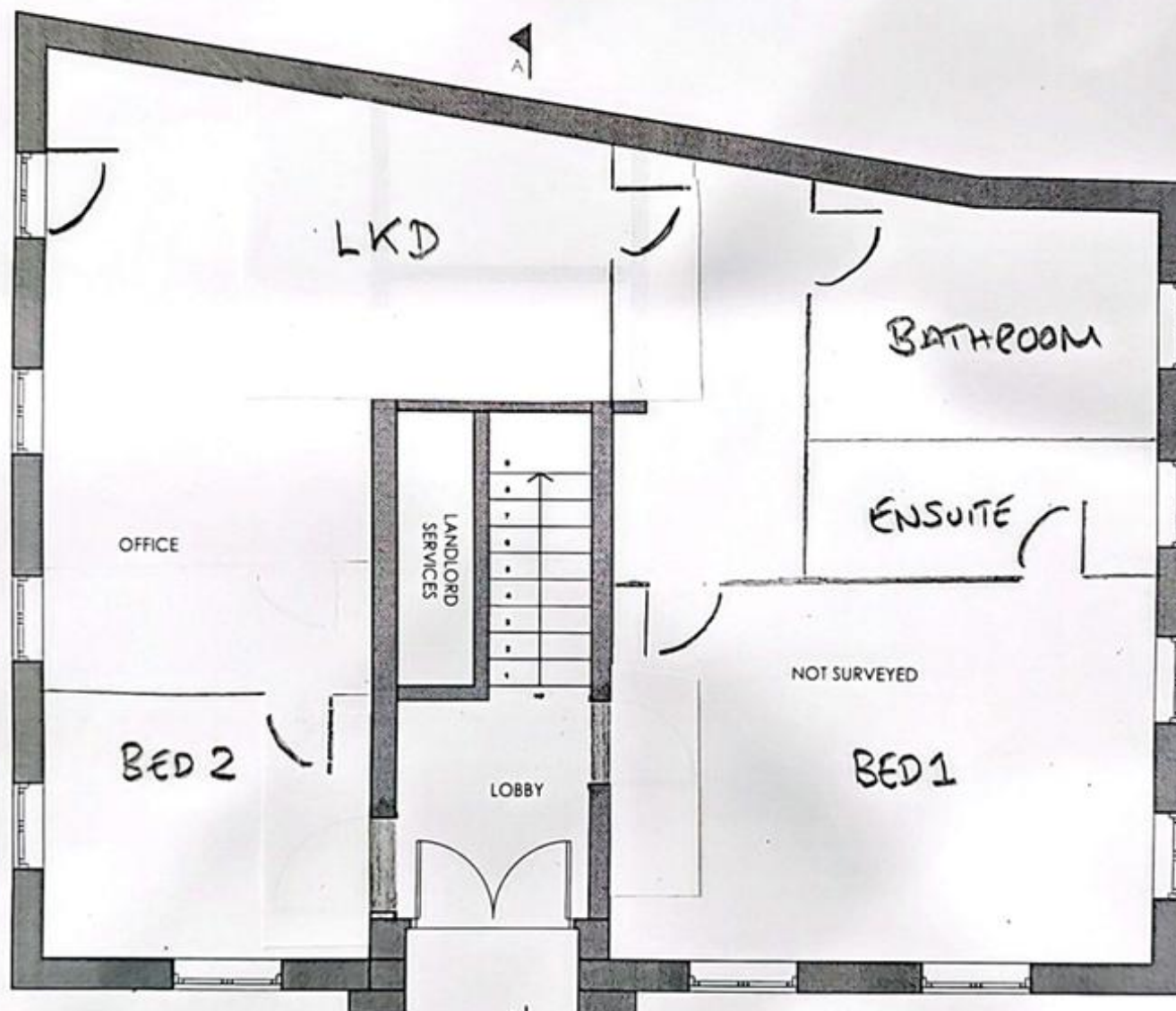
APPROVED

1:100

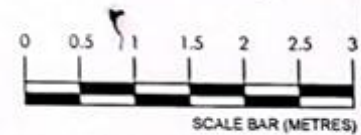
30.10.2023

Rev. No.





01 EXISTING GROUND FLOOR PLAN
A(10)-010 1:25 @ A1, 1:50 @ A3

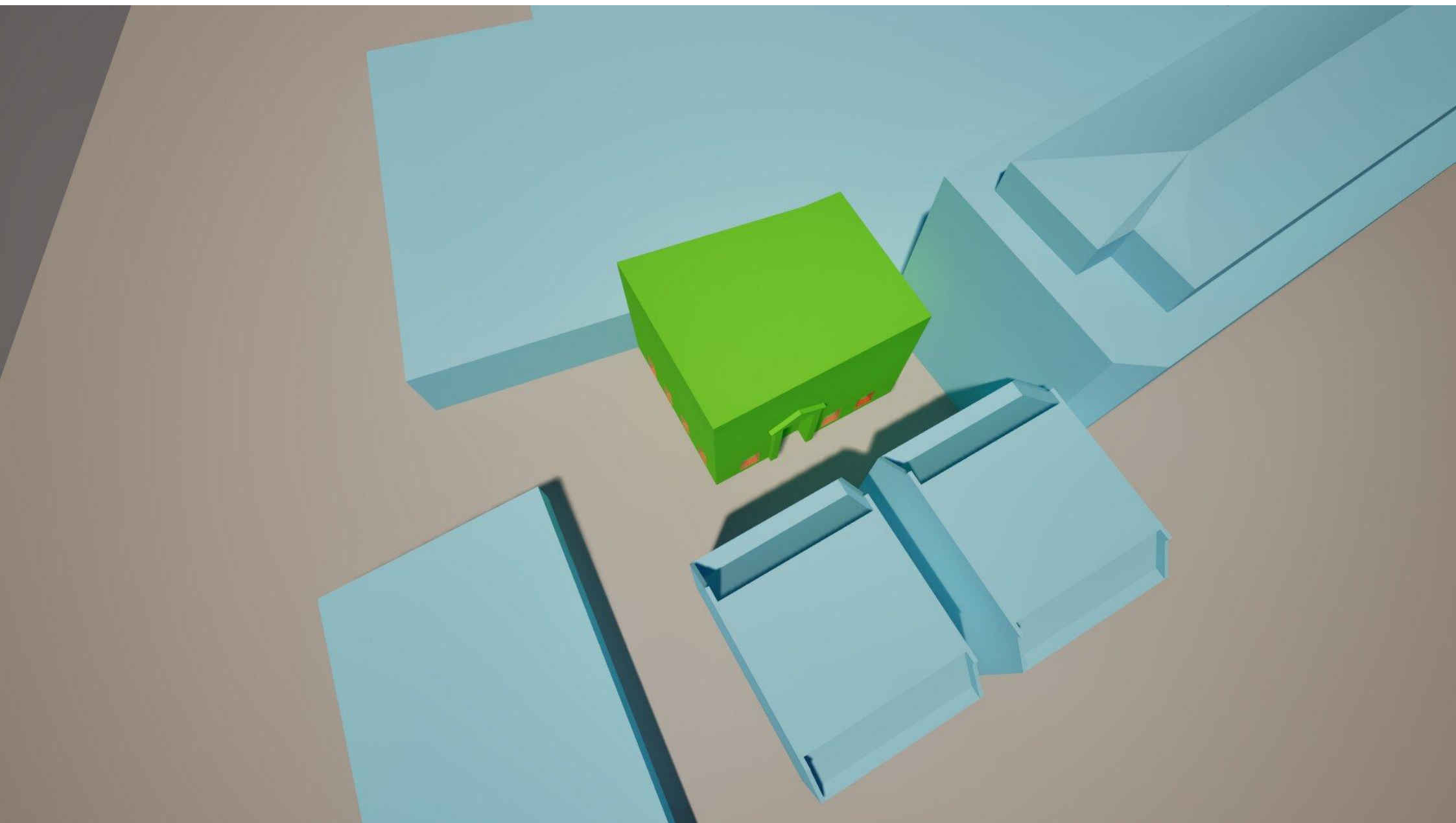


Appendix 2.

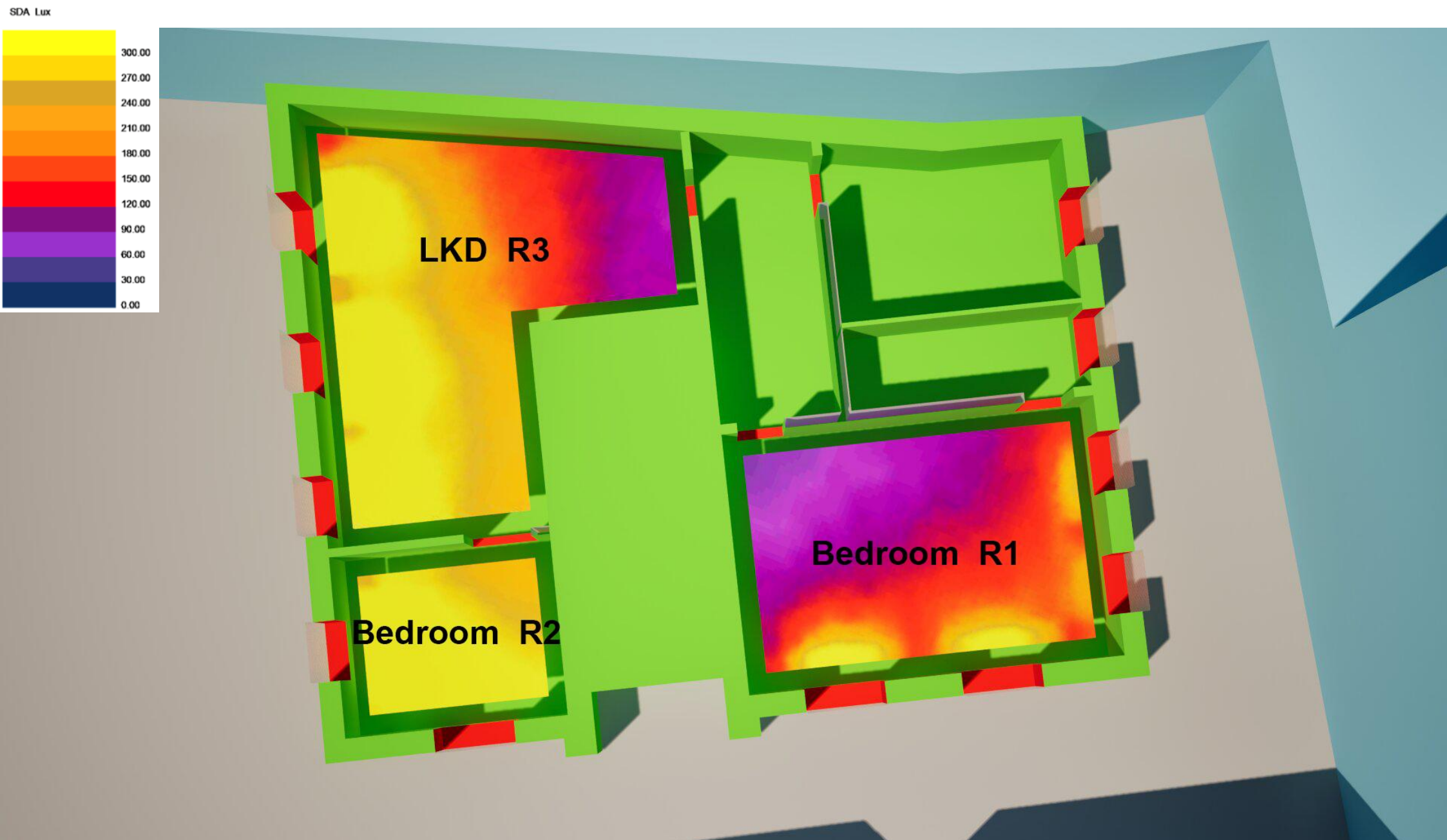
Technical Analysis

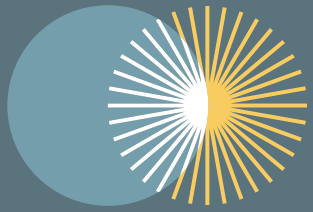
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3D model



Proposed internal LUX level map – Ground Floor





Sunlight
Assessments UK

End of Report

01/09/2026

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