

ADDENDUM NOTE FOR DAYLIGHT ASSESSMENT AT REGENTS GATE, CROWN STREET, READING

This Addendum Note has been prepared to support the Interior Daylight Assessment produced by ACCON-UK (Ref: A5171/DS/01, Dated: 10.02.2026). This note is required in order to determine if the proposed residential rooms on the third floor of the change of use development at Regents Gate, Crown Street, Reading will receive adequate light levels with the proposed additional roof lights. The third floor was not previously assessed in the full Daylight Assessment.

Interior Daylight Calculations

The Illuminance method, also known as Spatial Daylight Autonomy (SDA), has been used within this addendum note; this method is based on calculating the Illuminance (Lux) levels over specified fractions of the reference plane within a room.

A target Lux value should be achieved across at least 50% of the reference plane; there are different Lux values that need to be achieved depending on the room use. The Lux levels that need to be achieved for each of the different room uses as set out within “BS EN 17037: 2018 + A1:2021 Daylight in buildings” are identified within **Table 1**.

Table 1: Target Illuminance Values

Room Use	Target illuminance (Lux) to be achieved for 50% of the assessment grid
LKD (Living Kitchen Dining)	200
Bedroom	100
Studio	200

When calculating the SDA the following variables are considered:

- The diffuse visible transmittance of 0.68 for the glazing has been set; this includes a correction for dirt on the glass and any blinds or curtains;
- A maintenance factor of 0.8, allowing for the effect of dirt;
- The net glazed area of the window (m²);
- The total area of the room surface: ceiling, floor, walls and windows (m²); and
- The average reflectance values that have been used were advised by the client.
 - Walls, a value of 0.7 has been used, assuming that they will be light-coloured rooms;
 - Floors, a value of 0.4 has been used; and
 - Ceiling, a value of 0.8 has been used.
 - Framing, a value of 0.6 has been used.

- External Walls, a value of 0.2 has been used.

Table 2 identifies the results of the SDA calculations for the third floor. The SDA contours for the light levels within the habitable rooms on the third floor can be identified in **Appendix 1**.

Table 2: Percentage Area Meeting the Target Illuminance Values

Room Number	Floor	Room Use	Percentage area meeting the Target Lux value for 50% of the assessment grid	Meets BRE Criteria
R1.0	Third	LKD	100%	Yes
R1.1	Third	Bedroom	94%	Yes
R1.0	Third	Bedroom	100%	Yes
R2.0	Third	LKD	77%	Yes
R2.1	Third	Bedroom	100%	Yes
R2.2	Third	Bedroom	100%	Yes

Overall Conclusion

It can be identified in **Table 2** that all of the rooms meet the minimum illuminance values as identified in **Table 1** for at least 50% of the reference plane, and therefore all of the habitable rooms within the third floor of the proposed change of use development will receive adequate internal light levels.

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Appendix 1: Third Floor Illuminance

