

# **Somerford Buildings Daylight and Sunlight Assessment**

**Report on Findings**

Nulite Properties

12 December 2023

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66810/02/BK/TRL  
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## Executive Summary

Lichfields were instructed to undertake daylight and sunlight assessments of the natural lighting amenity of the habitable accommodation within the proposed development at Somerford Buildings, Sunderland SR1 1EE (proposed development). All testing was undertaken using the guidance contained in the British Research Establishment Report 209 - Site Planning for Daylight and Sunlight, a guide to good practice (Third Edition 2022) (the 'BRE Report').

Assessments show that:

- 93% of the proposed habitable rooms will comply fully with the BRE Report guidance.
- 83% of the proposed units will have at least one room meeting the sunlight criteria and hence complying with the BRE Report guidance.

Overall, the testing shows that the proposed development makes best use of the natural light amenity despite the constraints inherent in utilising an existing building form.

The BRE guidance indicates that, in interpreting the results of an assessment, an appropriate degree of flexibility is required. Such flexibility has been applied in relation to other applications in Sunderland. Strict application of the BRE Report is inherently limited in most urban locations where expectations of levels of daylight and sunlight are logically very different. The flexible application of the BRE guidance must reflect the site's context, intended use and the benchmarks set by other nearby schemes.

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## 1.0 Introduction

1.1 This report considers the natural light amenity within the proposed development of Somerford Buildings, Norfolk Street, Sunderland SE1 1EE (proposed development). The assessment has been prepared on behalf of Nulite Properties Ltd.

1.2 The proposed development sees the reconfiguration of the internal spaces within the building to provide eleven residential units. The purpose of the study is determine the natural light amenity of the future occupants of the proposed development.

1.3 The quantitative assessments have been undertaken in accordance with the guidelines set out in the Building Research Establishment (BRE) report “Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice” (2022). The Guide is intended to be advisory and does not contain mandatory standards. The introduction of the BRE Report states:

*“The guide is intended for building designers and their clients, consultants, and planning officials. The advice given here is not mandatory and the guide should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design (see Section 5). In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings. Alternatively, where natural light is of special importance, less obstruction and hence more sunlight and daylight may be deemed necessary. The calculation methods in Appendices A and B are entirely flexible in this respect. Appendix F gives advice on how to develop a consistent set of target values for skylight under such circumstances.”*

1.4 This assessment has been carried out using the following information:

- The planning application drawings prepared by KMS Surveying Ltd;
- Ordnance Survey Superplan digital mapping of the area;
- Site photos; and
- Aerial photography.

1.5 The methodologies for testing and relevant planning policies are discussed in Appendices 1 and 2.

1.6 The assessment is supported by a series of reference plans, results tables and diagrams at Appendices 3-5.

## 2.0 Assessment

- 2.1 The proposed development includes residential accommodation from the ground floor upwards. We have analysed all windows and rooms identified as serving/being habitable rooms.
- 2.2 Daylight studies have been undertaken using the Spatial Daylight Autonomy (SDA/ET) tests discussed in the 2022 BRE Report guidance.
- 2.3 Sunlight amenity has been tested using the Sunlight Exposure (SE) tests discussed in the 2022 BRE Report.
- 2.4 It should be noted that following discussions with the design team the following parameters have been used in our ADF analysis:
- Glazing Transmittance of 0.68 (double glazed windows with 6mm float glazing)
  - Frame Correction Factor of 0.8 (values derived from measurement of architectural elevations, average is applied to all)
  - Glazing Maintenance Factor of 8% (vertical glazing exposed to the elements)
  - Floor reflectance value of 0.4 (equivalent to light coloured laminate or carpet)
  - Wall reflectance of 0.7 (equivalent of light-coloured paint with a medium level of obstruction)
  - Ceiling reflectance of 0.81 (equivalent to white paint)
  - Proposed Development facades reflectance 0.3 (average of red brick and differing façade treatments)
  - Neighbouring buildings reflectance 0.3 (red brick)
  - Ground/terrain reflectance 0.2 (grass)
- 2.5 Our detailed analysis results are appended to this report and summarised below.

Table 2.3 SDA and SE summary

	SDA UK Annex	SE (all rooms)
<b>TOTALS</b>	<b>26/28 (93%)</b>	<b>16/28 (57%)</b>

### Daylight

- 2.6 Using the guidance in the 2022 BRE Report, we have analysed the daylight amenity using the **SDA** (daylight illuminance) tests. The BRE Report discusses the use of the UK Annex to BS (EN) 17037 and provides an alternative UK specific minimum to be applied in hard to light dwellings, i.e., in basements, where significant external obstructions occur and where an existing building is to be converted to residential use. As discussed in the BRE Report, the UK Annex provides minimum standards for all UK dwellings.
- 2.7 The SDA analysis shows that 26 (93%) of the 28 rooms tested will meet the UK annex minimum targets for their room types. Two rooms are noted as transgressing the guidance.
- 2.8 Room R8 is the kitchen within Apartment 2 at ground floor. The UK Annex SDA target for kitchens is 200 lux over 50% of the rooms' area. The analysis shows that the room would achieve 200 lux to 42% of its tested area, i.e., moderately below the guidance. The room is

less than 8m<sup>2</sup> and that the remaining rooms within Apartment 2 will see full compliance with the daylight guidance, as such, this transgression is not considered to be significant.

- 2.9 The remaining transgression occurs to the living room (R6) within Apartment 3 at ground floor. The room is restricted by the utilisation of the existing windows which are blinkered to one side. The room will see 150 lux to 26% of its area. Whilst this is below the UK Annex guidance review of the assessments undertaken using the BS (EN) 17037 criteria shows that the rooms would see 100 lux to 47% of its area, indicating that usable daylight will be achieved across a significant proportion of the room. Looking at Apartment 3 as a whole it can be seen that good daylight is achieved within the unit.

### Sunlight

- 2.10 As guided by the revised BRE Report we have undertaken sunlight analysis of all rooms regardless of their orientation. The BRE Report notes at paragraph 3.1.6 that:
- “A south-facing window will, in general, receive most sunlight, while a north-facing one will only receive it on a handful of occasions (early morning and late evening in summer).”*
- 2.11 Sunlight Exposure analysis shows that 16 (57%) of the 28 rooms tested would meet the guidance. Where transgressions are noted, they primarily occur to rooms with a northerly aspect.
- 2.12 Whilst the BRE Report recommends that sunlight be prioritised within living rooms the BS (EN) 17037 guidance states that compliance applies to the unit as a whole. The analysis results show that 9 of the 11 units comply with the BS (EN) recommendations. With the transgressing units being the north facing Apartments (Apartment 6 and Apartment 11).



## 3.0 Conclusion

- 3.1 The quantitative assessments have been undertaken in accordance with the guidelines set out in the BRE Report. BRE Report is intended to be an advisory document and does not contain mandatory standards. Its strict application is inherently limited in urban locations where expectations of levels of daylight and sunlight are logically very different. A flexible application of the BRE guidance must reflect the site's context and the benchmarks set by other nearby schemes. Its introduction states:
- “The guide is intended for building designers and their clients, consultants and planning officials. The advice given here is not an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly since natural lighting is only one of many factors in site layout design. In special circumstances the developer or planning authority may wish to use different target values. For example, in a historic city centre, or in an area with modern high rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings.”*
- 3.2 The need for a flexible approach to the BRE Report guidance has been recognised in the revised National Planning Policy Framework (2023), which states that *“when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site”*.
- 3.3 Analysis of the proposed accommodation shows that daylight and sunlight amenity is appropriate for this type of development with the majority of rooms seeing full compliance with the BRE Report daylight and sunlight guidance.
- 3.4 The analysis shows that **93%** of the rooms will meet the UK Annex SDA guidance and **82%** of apartments will comply with the sunlight (SE) guidance.
- 3.5 Given the character and form of the property and its urban location the daylight and sunlight amenity of the proposed development is considered to be appropriate.
- 3.6 The assessment demonstrates that the development is acceptable in the context of the BRE guidance and relevant policy, particularly having regard to the flexibility inherent to the BRE report and its suburban basis, the urban character of the site and its surroundings and the character of the proposed development.

## **Appendix 1 - Planning Policy**

A1.1 The revised **National Planning Policy Framework (2023)** sets out national planning policies and how they should be applied. In relation to daylight, sunlight and overshadowing, the NPPF promotes flexibility:

*“local planning authorities should refuse applications which they consider fail to make efficient use of land, taking into account the policies in this Framework. In this context, when considering applications for housing, authorities should take a flexible approach in applying policies or guidance relating to daylight and sunlight, where they would otherwise inhibit making efficient use of a site (as long as the resulting scheme would provide acceptable living standards)”.*

A1.2 The **Sunderland City Council Core Strategy and Development Plan 2015-2033** discusses daylight and sunlight within Policy HS1 Quality of life and amenity. The policy states:

*“1. Development must demonstrate that it does not result in unacceptable adverse impacts which cannot be addressed through appropriate mitigation, arising from the following sources:*

*i. air quality;*

*ii. noise;*

*iii. dust;*

*iv. vibration;*

*v. odour;*

*vi. emissions;*

*vii. land contamination and instability;*

*viii. illumination;*

*ix. run-off to protected waters; or*

*x. traffic;*

*2. development must ensure that the cumulative impact would not result in unacceptable adverse impacts on the local community; and*

*3. development will not normally be supported where the existing neighbouring uses would unacceptably impact on the amenity of future occupants of the proposed development.”*

## **Appendix 2 – Non-Statutory Guidance**

## **British Research Establishment Report 209 Site Planning for Daylight and Sunlight, a guide to good practice (Third Edition 2022) (the ‘BRE Report’)**

- A2.1 The introduction of the BRE Report stresses that the purpose of the document is to provide guidance, the numerical guidance contained in the report should not ‘*be seen as an instrument of planning policy*’. The BRE Report also stresses that its guidance should be interpreted flexibly as there are many elements that influence site layout design. The BRE Report uses the example of a historic city centre, or an area with modern high-rise buildings where a higher degree of obstruction may be unavoidable if developments are to match the height and proportions of existing buildings. This flexibility is further prescribed by the following extracts from the introduction:

*‘The advice given here is not mandatory and this document should not be seen as an instrument of planning policy; its aim is to help rather than constrain the designer. Although it gives numerical guidelines, these should be interpreted flexibly because natural lighting is only one of many factors in site layout design...’* (page 7, paragraph 1.6)

*‘In special circumstances the Developer or Planning Authority may wish to use different target values.’* (page 7, paragraph 1.6)

*‘Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylighting in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light.’* (page 14 paragraph 2.2.3)

- A2.2 The BRE Report guidance can be applied to any suburban, urban and rural area. Adopting an inflexible approach in suburban and urban areas will prejudice some developments where it can be argued that the expectation of natural light amenity is lessened.
- A2.3 The BRE Report emphasizes the expectations of daylight and sunlight amenity within residential properties and further properties where natural light is considered desirable (i.e., hospitals, hotels and schools).

## **Proposed Accommodation Daylight and Sunlight Tests (BS EN 17037)**

- A2.4 European Standard BS EN 17.37:2018 – Daylight in buildings has been adopted by the UK (June 2019). The standard discusses the methods to be used to ensure that rooms within proposed development are successfully daylit. The BRE Report has been revised in line with this guidance.
- A2.5 BS EN 17037:2018 introduces a number of new tests and definitions for analysis and states that:

*“A space is considered to provide adequate daylight if a target illuminance level is achieved across a fraction of the reference plane within a space for at least half of the daylight hours.*

*In addition, for spaces with vertical or inclined daylight openings, a minimum target illuminance level is also to be achieved across the reference plane.*

*The reference plane of the space is located 0.85 m above the floor, unless otherwise specified. A small fraction of the reference plane may be disregarded to account for singularities.”*

### Daylight to Proposed Accommodation

- A2.6 The revised BRE Report provides guidance on British Standard BS EN 17037:2018. This standard provides two methods for assessing daylight in interiors. Method 1 uses climatic data and an adequate time step over which target and minimum illuminances are to be met. Method 2 uses daylight factors on the reference plane with National Annex NA providing target illuminances of 100 lx for bedrooms, 150 lux for living rooms and 200 lux for kitchens to be achieved by at least 50% of the reference plane for at least half the daylight values.
- A2.7 The daylight illuminance ( $E_T$ ) tests, method 1, uses climatic data for the location of the site to calculate the illuminance from daylight at each point on the assessment grid over an hourly interval for a typical year.
- A2.8 The target illuminance ( $E_T$ ) is to be achieved across at least half of the reference plane for at least half of the available daylight hours. Additionally, a supplemental target illuminance ( $E_{TM}$ ) should be achieved across 95% of the reference plane.
- A2.9 The target illuminances for side lit side lit rooms are given as:

Level of recommendation	Target illuminance $E_T$ (lx) for 50% of assessment grid	Target illuminance $E_{TM}$ (lx) for 95% of assessment grid
Minimum	300	100
Medium	500	300
High	750	500

Target illuminances from daylight over at least half of the daylight hours

- A2.10 The daylight factor test, method 2, assesses daylight factors across a reference plane at 850mm above floor level covering the whole room area. The plane should see the target daylight factor ( $D_{TM}$ ) achieved across at least 50% of the test plane. For the United Kingdom the target minimum, daylight factor (D) value is 2.1%, the medium value is 3.5% and the high value is 5.3%. For rooms with restricted sky view, i.e., basement rooms or rooms in developments that are in close proximity to other structures, the targets differ:
  - In Jersey the minimum for bedrooms is 0.6%, 0.9%, for living rooms and 1.2% for kitchens,
  - In London the minimum for bedrooms is 0.7%, 1.1%, for living rooms and 1.4% for kitchens,
  - In Birmingham the minimum for bedrooms is 0.6%, 0.9%, for living rooms and 1.2% for kitchens,
  - In Aberdeen the minimum for bedrooms is 0.7%, 1.1%, for living rooms and 1.4% for kitchens.

## Sunlight Exposure to Proposed Accommodation

A2.11 Sunlight amenity (Sunlight Exposure ( $S_E$ )) is to be tested in spaces which receive sun beams. Testing is to be undertaken for any day between February 1<sup>st</sup> and March 21<sup>st</sup> and should determine sunlight exposure at the windows. Three targets are given and relate to minimum (1.5 h), medium (3.0 h) and high (4.0 h).

A2.12 The BRE Report (paragraphs 3.1.15 and 3.1.16) provides the guidance:

*“In general a dwelling, or non-domestic building that has a particular requirement for sunlight, will appear reasonably sunlit provided:*

- *at least one main window wall faces within 90° of due south and*
- *a habitable room, preferably a main living room, can receive a total of at least 1.5 hours of sunlight on 21 March. This is assessed at the inside centre of the window(s); sunlight received by different windows can be added provided they occur at different times and sunlight hours are not double counted.*

*Where groups of dwellings are planned, site layout design should aim to maximise the number of dwellings with a main living room that meets the above recommendations.”*

## **Appendix 3 – Site Plans and 3D Views**





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**Client:**  
 Nulite Properties

**Project:**  
 Somerford Buildings

**Drawing Title:**  
 Daylight, Sunlight and Overshadowing Analysis  
 Site Plan - Proposed Scenario

Daylight and Sunlight

**Information Used:**  
 KMS Surveying Info received 28/11/2023

**Key:**

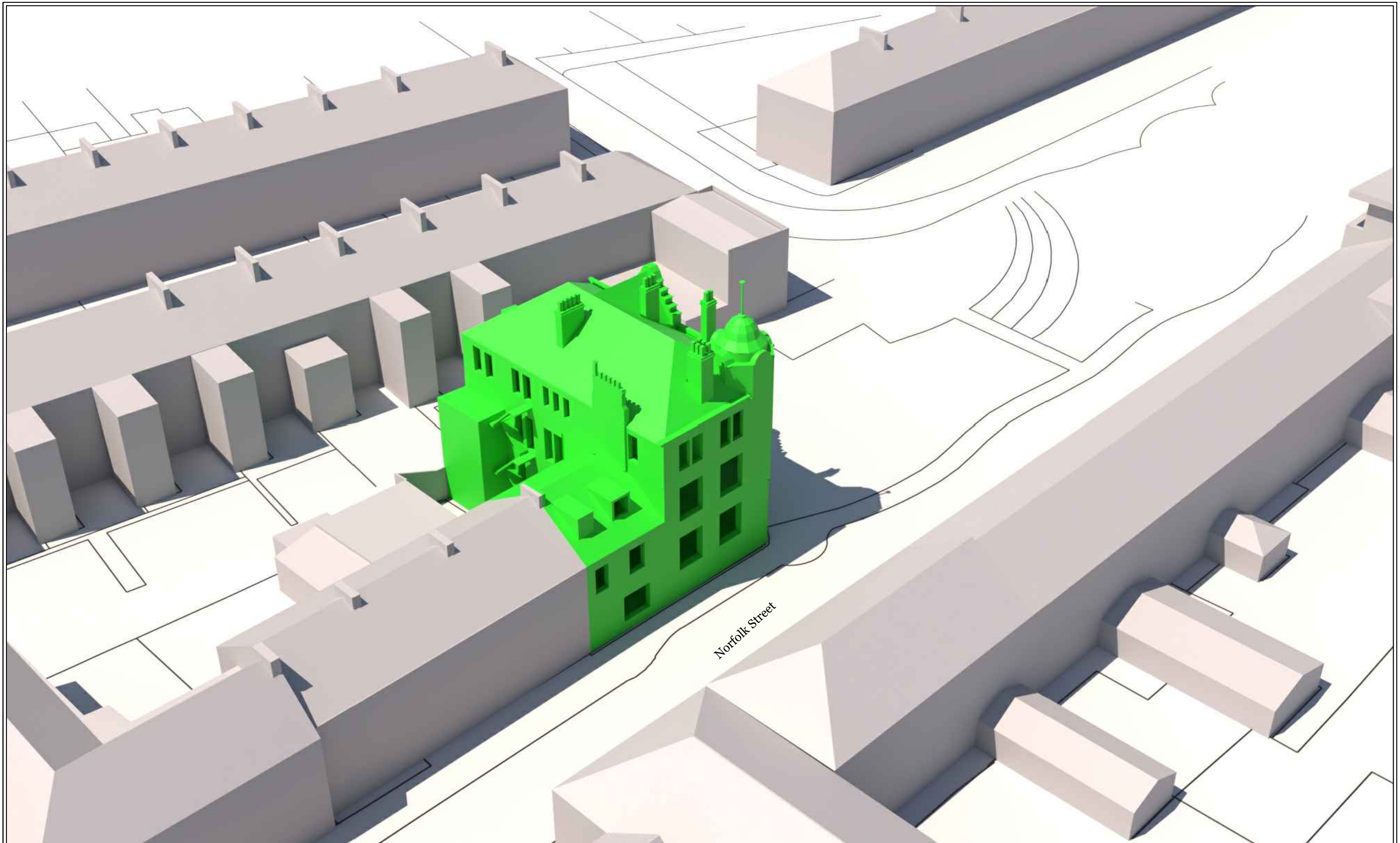
- Proposed Development
- Neighbouring Analysed Properties
- Surrounding Massing

Drawing Scale NTS DO NOT SCALE -NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

**Site Plan:**

Project No.	66810
Issue No.	01
Drawing No.	DSO 001
Date	07/12/2023
Rev.	-
Drawn By	MR
Checked By	TRL
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**Client:**  
 Nulite Properties

**Project:**  
 Somerford Buildings

**Drawing Title:**  
 Daylight, Sunlight and Overshadowing Analysis  
 3D View - Proposed Scenario

Daylight and Sunlight

**Information Used:**  
 KMS Surveying Info received 28/11/2023

**Key:**

- █ Proposed Development
- █ Neighbouring Analysed Properties
- █ Surrounding Massing

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**Site Plan:**

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Drawing No.	DSO 002
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**Client:**  
 Nulite Properties

**Project:**  
 Somerford Buildings

**Drawing Title:**  
 Daylight, Sunlight and Overshadowing Analysis  
 3D View - Proposed Scenario

**Daylight and Sunlight**

**Information Used:**  
 KMS Surveying Info received 28/11/2023

**Key:**

- Proposed Development
- Neighbouring Analysed Properties
- Surrounding Massing

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**Site Plan:**

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## **Appendix 4 – Proposed Development SDA Contour Plans**



Ground Floor



First Floor



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Client:  
Nulite Properties

Project:  
Somford Buildings

Drawing Title:  
Daylight, Sunlight and Overshadowing Analysis  
Spatial Daylight Autonomy Contours

Daylight and Sunlight

Information Used:  
KMS Surveying Info received 28/11/2023

Key:

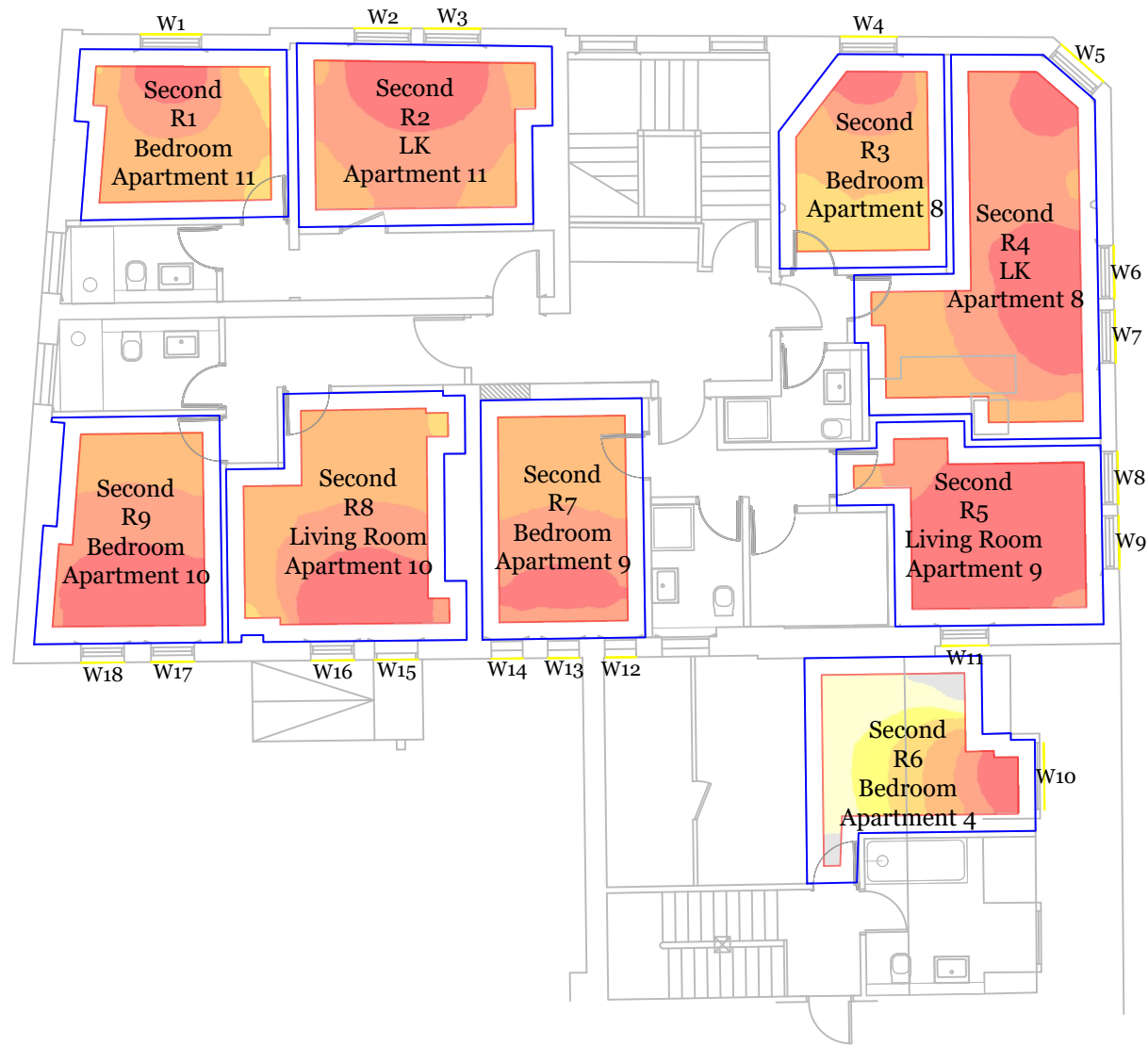
R Room Layout

Lux

Drawing Scale 1:125@A3 DO NOT SCALE - NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

Site Plan:

Project No.	66810
Issue No.	01
Drawing No.	DSO 401
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Rev.	-
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Second Floor

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Client: Nulite Properties
Project: Somford Buildings

Drawing Title: Daylight, Sunlight and Overshadowing Analysis Spatial Daylight Autonomy Contours
Daylight and Sunlight

Information Used: KMS Surveying Info received 28/11/2023
---

Key:

R Room Layout

Lux

Drawing Scale 1:125@A3 DO NOT SCALE - NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.

Site Plan:
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Project No.	66810
Issue No.	01
Drawing No.	DSO 402
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Rev.	-
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## **Appendix 5 – Proposed Development SDA (ET) and SE Analysis Results Sheets**

Proposed Spatial Daylight Autonomy and Sunlight Exposure Results  
(SDA (annual) and SE)

Project: 66810/01 - Somerford Buildings  
Client: Nulite Properties

Note:  
Multiuse Rooms (e.g. LKD, Studios) set at 200 lux

Glazing Factors Used:		Room Reflectance:		Other Reflectances:		Spatial Daylight Autonomy Criteria (UK Annex)	
Glazing Trans:	0.68	Ceiling	0.81	Proposed Scheme	0.3	Required % of Effective Area	50%
Glazing Factor:	0.8	Walls	0.70	Surrounding Massing	0.3	Required % of Daylight Hours	50%
Maintenance Factor:	8%	Floor	0.40	Ground/Terrain	0.2	Daylight Hours	4380

Floor Ref.	Flat/Unit Number	Room reference	Room Use.	Room Area m <sup>2</sup>	Effective Area	Spatial Daylight Autonomy								SDA - UK Annex				Sunlight Exposure	
						Area Meeting Required 100 Lux	% of Area Meeting Required 100 Lux	Area Meeting Required 300 Lux	% of Area Meeting Required 300 Lux	Area Meeting Required 500 Lux	% of Area Meeting Required 500 Lux	Area Meeting Required 750 Lux	% of Area Meeting Required 750 Lux	Area Meeting Required 750 Lux	% of Area Meeting Required 750 Lux	Required Lux	Area Meeting Required Lux	% of Area Meeting Required Lux	Meeting UK Annex
Somerford Buildings																			
Ground	Apartment 1	R7	Bedroom	7.05	3.77	3.77	100%	2.68	71%	1.58	42%	0.75	20%	100.00	3.77	100%	YES	3	Medium
Ground	Apartment 1	R3	Bedroom	13.15	8.82	8.82	100%	8.77	99%	4.42	50%	2.12	24%	100.00	8.82	100%	YES	1.3	Below
Ground	Apartment 1	R4	Living Room	16.66	12.12	12.12	100%	11.95	99%	5.50	45%	2.28	19%	150.00	12.12	100%	YES	1.2	Below
Ground	Apartment 2	R1	Bedroom	12.07	7.86	7.86	100%	4.11	52%	1.28	16%	0.30	4%	100.00	7.86	100%	YES	0	Below
Ground	Apartment 2	R2	Living Room	20.47	15.07	15.07	100%	15.07	100%	7.42	49%	3.43	23%	150.00	15.07	100%	YES	0	Below
Ground	Apartment 2	R8	Kitchen	7.53	4.37	4.37	100%	0.62	14%	0.00	0%	0.00	0%	200.00	1.82	42%	NO	0.1	Below
Ground	Apartment 2	R9	Bedroom	11.13	7.40	7.40	100%	3.78	51%	1.44	19%	0.67	9%	100.00	7.40	100%	YES	1.8	Minimum
Ground	Apartment 3	R5	Bedroom	13.29	9.08	9.08	100%	8.06	89%	3.58	39%	1.62	18%	100.00	9.08	100%	YES	1.5	Minimum
Ground	Apartment 3	R6	Living Room	16.10	11.46	11.46	100%	10.43	97%	5.33	47%	2.99	26%	150.00	11.46	100%	NO	2.4	Minimum
First	Apartment 4	R5	Living Room	15.64	11.11	11.11	100%	10.43	97%	5.33	47%	2.99	26%	150.00	11.46	100%	NO	2.4	Minimum
First	Apartment 4	R6	Kitchen	6.50	3.74	3.74	100%	2.58	69%	1.16	31%	0.50	13%	200.00	3.74	100%	YES	1.1	Below
First	Apartment 4	R7	Bedroom	12.05	7.47	7.47	100%	6.12	82%	1.89	25%	0.00	0%	100.00	7.47	100%	YES	1.4	Below
Second	Apartment 4	R6	Bedroom	11.87	7.45	6.92	93%	1.97	26%	1.14	15%	0.67	9%	100.00	6.92	93%	YES	1.5	Minimum
First	Apartment 5	R3	Living Room	27.40	21.07	21.07	100%	21.07	100%	19.28	91%	10.66	51%	150.00	21.07	100%	YES	2.2	Minimum
First	Apartment 5	R4	Bedroom	13.15	9.07	9.07	100%	9.07	100%	9.07	100%	4.66	51%	100.00	9.07	100%	YES	2.2	Minimum
First	Apartment 5	R8	Bedroom	13.75	9.28	9.28	100%	8.77	95%	3.65	39%	1.98	21%	100.00	9.28	100%	YES	4.9	High
First	Apartment 6	R1	Bedroom	11.11	7.42	7.42	100%	6.18	83%	2.11	28%	0.57	8%	100.00	7.42	100%	YES	0	Below
First	Apartment 6	R2	LK	18.12	13.37	13.37	100%	13.37	100%	12.28	92%	4.99	37%	200.00	13.37	100%	YES	0	Below
First	Apartment 7	R9	Bedroom	11.22	7.07	7.07	100%	6.91	98%	4.01	57%	1.24	18%	100.00	7.07	100%	YES	5.3	High
First	Apartment 7	R10	Living Room	15.56	10.43	10.43	100%	10.43	100%	9.64	92%	3.22	31%	150.00	10.43	100%	YES	3.5	Medium
Second	Apartment 8	R3	Bedroom	10.20	6.76	6.76	100%	4.14	61%	1.47	22%	0.53	8%	100.00	6.76	100%	YES	0	Below
Second	Apartment 8	R4	LK	20.55	14.43	14.43	100%	14.43	100%	10.98	76%	4.55	32%	200.00	14.43	100%	YES	1.7	Minimum
Second	Apartment 9	R3	Living Room	13.33	8.56	8.56	100%	8.34	98%	4.38	54%	1.18	15%	150.00	8.56	100%	YES	6.2	High
Second	Apartment 9	R7	Bedroom	11.93	8.07	8.07	100%	8.07	100%	4.38	54%	1.18	15%	100.00	8.07	100%	YES	4.8	High
Second	Apartment 10	R8	Living Room	16.03	11.00	11.00	100%	10.83	98%	5.39	49%	2.67	24%	150.00	11.00	100%	YES	6	High
Second	Apartment 10	R9	Bedroom	12.00	8.07	8.07	100%	8.07	100%	5.86	73%	3.18	39%	100.00	8.07	100%	YES	6	High
Second	Apartment 11	R1	Bedroom	10.71	7.04	7.04	100%	6.35	90%	1.87	27%	0.76	11%	100.00	7.04	100%	YES	0	Below
Second	Apartment 11	R2	LK	13.56	9.33	9.33	100%	9.33	100%	7.32	79%	2.48	27%	200.00	9.33	100%	YES	0	Below





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