



RIGHT OF LIGHT
CONSULTING
Chartered Surveyors

Daylight and Sunlight Report

(Neighbouring Properties)

24 September 2021

27 to 28 Windmill Street,
London W1T 2JJ

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1 EXECUTIVE SUMMARY

1.1 Overview

- 1.1.1 Right of Light Consulting has been commissioned by Naked Wolfe (HK) Limited to undertake a daylight and sunlight study of the proposed development at 27 to 28 Windmill Street, London W1T 2JJ.
- 1.1.2 The study is based on the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice, 2nd Edition' by P J Littlefair 2011.
- 1.1.3 The aim of the study is to assess the impact of the development on the light receivable by the neighbouring properties at 2 to 4 & 6 to 10 Whitfield Street, 29 to 30 Windmill Street and 39 to 45, 46, 47, 48 & 49 Tottenham Court Road.
- 1.1.4 The window key in Appendix 1 identifies the windows analysed in this study. Appendix 2 gives the numerical results of the various daylight and sunlight tests.
- 1.1.5 The ground floor of 46 Tottenham Court Road, 6 to 10 Whitfield Street, the ground floor of 29 to 30 Windmill Street and the ground to third floors of 39 to 45 Tottenham Court Road appear to be non-domestic buildings which in our opinion do not have a requirement for daylight or sunlight. Even though a number of the rooms/windows do not pass the numerical tests, this does not amount to non-compliance with the BRE requirements. Therefore, we have not included these results in the discussion below.
- 1.1.6 The results demonstrate that the proposed development will have a relatively low impact on the light receivable by its neighbouring properties. Non-compliance with the BRE recommendations is limited to the daylight or sunlight tests in respect of window 79 at 2 to 4 Whitfield Street and windows 30, 33, 36 & 38 at 47, 48 & 49 Tottenham Court Road respectively. In our opinion, taking into account the overall high level of compliance with the BRE recommendations, and the mitigating factors set out in section 4, the proposed development is acceptable in terms of daylight and sunlight.

2 INFORMATION SOURCES

2.1 Drawings

2.1.1 This report is based on the following drawings:

White Mark Limited

01	Existing Floor Plans Basement, Ground and 1st	Rev -
02	Existing Floor Plans 2nd, 3rd and Mezzanine	Rev -
03	Existing Long Section	Rev -
	3D Model	Rev -

Marek Wojciechowski Architects

P0200	Location Plan	Rev -
P1999	Proposed Basement Floor Plan	Rev -
P2000	Proposed Ground Floor Plan	Rev -
P2001	Proposed First Floor Plan	Rev -
P2002	Proposed Second Floor Plan	Rev -
P2003	Proposed Third Floor Plan	Rev -
P2004	Proposed Fourth Floor Plan	Rev -
P2005	Proposed Fifth Floor Plan	Rev -
P2006	Proposed Roof Plan	Rev -
P2100	Proposed South Elevation	Rev -
P2201	Proposed Section B	Rev -
P2202	Proposed Section CC	Rev -
P2204	Proposed Section EE	Rev -

2.2 Daylight Distribution Room Layout Information

2.2.1 The daylight distribution test has been applied based on the following room layout information:

Online Local Authority planning records

2 to 4 Whitfield Street:

0503 GA1000	Proposed Ground Floor Plan	Rev -
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29 to 30 Windmill Street:

17	Advertising Consent	Rev -
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39 to 45 Tottenham Court Road:

AL(01)003	Existing Ground Floor Plan	Rev A
AL(01)004	Existing First Floor Plan	Rev A
AL(01)005	Existing Second Floor Plan	Rev A

AL(01)006	Existing Third Floor Plan	Rev A
AL(01)008	Existing Third Floor Plan	Rev -
<u>46 Tottenham Court Road:</u>		
1110/4	Existing First Floor Plan	Rev -
20	Proposed LBC	Rev -
1110/5	Existing Second and Third Floor Plans	Rev -
<u>47 Tottenham Court Road:</u>		
W1/47TCR/19C	Proposed First Floor Plan	Rev -
<u>48 Tottenham Court Road:</u>		
MTT97/001	Ground Floor plan	Rev -
<u>49 Tottenham Court Road:</u>		
1031/MH-S00Bsg	Minerva House Existing Basement Plan	Rev -
<u>6 to 10 Whitfield Street:</u>		
0503 GA0999	Proposed Basement Floor Plan	Rev -
0503 GA1000	Proposed Ground Floor Plan	Rev -
0503 GA1001	Proposed First Floor Plan	Rev -
0503 GA1002	Proposed Second Floor Plan	Rev -
0503 GA1003	Proposed Third Floor Plan	Rev -
0503 GA1004	Fourth/Roof Plan	Rev -
0503 GA1005	Roof Plan and Plant Level	Rev -

3 METHODOLOGY OF THE STUDY

3.1 Local Planning Policy

- 3.1.1 We understand that the Local Authority take the conventional approach of considering daylight and sunlight amenity with reference to the various numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a guide to good practice, 2nd Edition' by P J Littlefair 2011. A new European standard BS EN 17037 'Daylight in Buildings' was published in May 2019. An update to the BRE guide to take into account the European standard is expected sometime in 2021. It is not yet clear, how and to what extent, the European recommendations will be adopted by the BRE and Local Authorities.
- 3.1.2 The standards set out in the BRE guide are intended to be used flexibly. The BRE guide states:
- 3.1.3 "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."

3.2 National Planning Policy Framework

- 3.2.1 The BRE numerical guidelines should be considered in the context of the National Planning Policy Framework (NPPF), which stipulates that local planning authorities should take a flexible approach to daylight and sunlight to ensure the efficient use of land. The NPPF states:
- 3.2.2 "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)."

3.3 Daylight to Windows

- 3.3.1 Diffuse daylight is the light received from the sun which has been diffused through the sky. Even on a cloudy day, when the sun is not visible, a room will continue to be lit with light from the sky. This is diffuse daylight.
- 3.3.2 Diffuse daylight calculations should be undertaken to all rooms within domestic properties, where daylight is required, including living rooms, kitchens and bedrooms. The BRE guide states that windows to bathrooms, toilets, storerooms, circulation areas and garages need not be analysed. These room types are non-habitable and do not have a requirement for daylight.
- 3.3.3 The BRE guide states that the tests may also be applied to non-domestic buildings where there is a reasonable expectation of daylight. The BRE guide explains that this would normally include schools, hospitals, hotels and hostels, small workshops and some offices. The BRE guide is not explicit in terms of which types of offices it regards as having a requirement for daylight. However, it is widely accepted amongst consultants and local authorities, that for planning purposes, offices (which are commercial in nature) do not have a requirement for daylight. The point is touched on in the 'Daylighting and Sunlighting' guidance note published by the Royal Institution of Chartered Surveyors (RICS), which gives guidance to surveyors on how to produce their reports:
- 3.3.4 "The report should establish the limits of the assessment. For example, existing commercial premises are rarely assessed for loss of amenity."
- 3.3.5 The BRE guide contains two tests which measure diffuse daylight:

Test 1 Vertical Sky Component

- 3.3.6 The Vertical Sky Component is a measure of available skylight at a given point on a vertical plane. Diffuse daylight may be adversely affected if after a development the Vertical Sky Component is both less than 27% and less than 0.8 times its former value.
- 3.3.7 The BRE guide states that the total amount of skylight can be calculated by finding the Vertical Sky Component at the centre of each main window. The BRE guide does not define the term 'main window'. However, in our opinion, where a room has

multiple windows, the largest window is usually taken as the main window and the smaller window(s) as secondary. Although we generally follow the practice of testing all windows, including secondary windows, our interpretation of the BRE guide is that the Vertical Sky Component targets do not apply to secondary windows.

Test 2 Daylight Distribution

- 3.3.8 The distribution of daylight within a room can be calculated by plotting the 'no skyline'. The no skyline is a line which separates areas of the working plane that do and do not have a direct view of the sky. Daylight may be adversely affected if, after the development, the area of the working plane in a room which can receive direct skylight is reduced to less than 0.8 times its former value.
- 3.3.9 The BRE guide states that both the total amount of skylight (Vertical Sky Component) and its distribution within the building (Daylight Distribution) are important. The BRE guide states that where room layouts are known, the impact on the daylighting distribution can be found by plotting the 'no skyline' in each of the main rooms. Therefore, we are of the opinion that application of the test is not a requirement of the BRE guide where room layouts are not known. We don't endorse the practice of applying the test based on assumed room layouts, because the test is very sensitive to the size and layout of the room and the results are likely to be misleading. However, we can provide additional daylight distribution data upon request by the local authority, if neighbouring room layout information is confirmed.

3.4 Sunlight availability to Windows

- 3.4.1 The BRE sunlight tests should be applied to all main living rooms and conservatories which have a window which faces within 90 degrees of due south. The guide states that kitchens and bedrooms are less important, although care should be taken not to block too much sunlight. The tests should also be applied to non-domestic buildings where there is a particular requirement for sunlight.
- 3.4.2 The test is intended to be applied to main windows which face within 90 degrees of due south. However, the BRE guide explains that if the main window faces within 90 degrees of due north, but a secondary window faces within 90 degrees of due south, sunlight to the secondary window should be checked. For completeness, we have

tested all windows which face within 90 degrees of due south. The BRE guide states that sunlight availability may be adversely affected if the centre of the window:

- receives less than 25% of annual probable sunlight hours, or less than 5% of annual probable sunlight hours between 21 September and 21 March and
- receives less than 0.8 times its former sunlight hours during either period and
- has a reduction in sunlight received over the whole year greater than 4% of annual probable sunlight hours.

3.5 Overshadowing to Gardens and Open Spaces

3.5.1 The availability of sunlight should be checked for all open spaces where sunlight is required. This would normally include:

- Gardens, usually the main back garden of a house
- Parks and playing fields
- Children's playgrounds
- Outdoor swimming pools and paddling pools
- Sitting out areas, such as those between non-domestic buildings and in public squares
- Focal points for views such as a group of monuments or fountains.

3.5.2 One way to consider overshadowing is by preparing shadow plots. However, the BRE guide states that it must be borne in mind that nearly all structures will create areas of new shadow, and some degree of transient overshadowing is to be expected. Therefore, shadow plots are of limited use as interpretation of the plots is subjective. Shadow plots have not been undertaken as part of this study.

3.5.3 The BRE guide also contains an objective overshadowing test which has been adopted for the purpose of this study. The guide recommends that at least 50% of the area of each amenity space listed above should receive at least two hours of sunlight on 21 March. If as a result of new development an existing garden or amenity area does not meet the above, and the area which can receive two hours of sunlight on 21 March is less than 0.8 times its former value, then the loss of light is likely to be noticeable.

4 RESULTS OF THE STUDY

4.1 Windows & Amenity Areas Considered

- 4.1.1 The aim of the study is to assess the impact of the development on the light receivable by the neighbouring properties at 2 to 4 & 6 to 10 Whitfield Street, 29 to 30 Windmill Street and 39 to 45, 46, 47, 48 & 49 Tottenham Court Road.
- 4.1.2 Appendix 1 provides plans and photographs to indicate the positions of the windows analysed in this study. Appendix 2 lists the detailed numerical daylight and sunlight test results.
- 4.1.3 The ground floor of 46 Tottenham Court Road, 6 to 10 Whitfield Street, the ground floor of 29 to 30 Windmill Street and the ground to third floors of 39 to 45 Tottenham Court Road appear to be non-domestic buildings which in our opinion do not have a requirement for daylight or sunlight. Even though a number of the rooms/windows do not pass the numerical tests, this does not amount to non-compliance with the BRE requirements. Therefore, we have not included these results in the discussion below.

4.2 Daylight to Windows

Vertical Sky Component

- 4.2.1 With the exception of window 79 at 2 to 4 Whitfield Street, all windows which have a requirement for daylight, pass the Vertical Sky Component test. Window 79 achieves a before/after ratio of 0.78, which is very close to the target of 0.8 stated in the BRE guide. Whilst the BRE guide gives numerical guidelines, it states that these should be interpreted flexibly, since natural lighting is only one of many factors in site layout design.

Daylight Distribution

- 4.2.2 We have undertaken the Daylight Distribution test where room layouts are known. All rooms with a requirement for daylight pass the daylight distribution test.

4.3 Sunlight to Windows

- 4.3.1 All windows which have a requirement for sunlight pass the Annual Probable Sunlight Hours test, with the exception of windows 30, 33, 36 & 38 at 47, 48 & 49 Tottenham

Court Road respectively. However, for the windows that do not pass, the following mitigating factors apply:

- 4.3.2 From our external observations it appears unlikely that these windows serve a main living room (as windows 30, 33 & 36 at 47 & 48 Tottenham Court Road appear to serve bedrooms and window 38 at 49 Tottenham Court Road appears to serve a kitchen) and therefore would not be required to be tested under the BRE guidelines. The proposed development therefore satisfies the BRE direct sunlight to windows requirements.

4.4 Overshadowing to Gardens and Open Spaces

- 4.4.1 There are no nearby gardens or amenity areas directly to the north of the development. The proposed development will therefore not create any new areas which receive less than two hours of sunlight on 21 March. The proposed development therefore satisfies the BRE overshadowing to gardens and open spaces requirements.

4.5 Conclusion

- 4.5.1 The results demonstrate that the proposed development will have a relatively low impact on the light receivable by its neighbouring properties. Non-compliance with the BRE recommendations is limited to the daylight or sunlight tests in respect of window 79 at 2 to 4 Whitfield Street and windows 30, 33, 36 & 38 at 47, 48 & 49 Tottenham Court Road respectively. In our opinion, taking into account the overall high level of compliance with the BRE recommendations, and the mitigating factors set out in section 4, the proposed development is acceptable in terms of daylight and sunlight.

5 CLARIFICATIONS

5.1 General

- 5.1.1 The report provided is solely for the use of the client and no liability to anyone else is accepted.
- 5.1.2 The study is limited to assessing daylight, sunlight and overshadowing to neighbouring properties as set out in section 2.2, 3.2 and 3.3 of the BRE Guide.
- 5.1.3 The study is based on the information listed in section 2 of this report and a site visit undertaken on 28 October 2019. We have not had access to neighbouring properties.
- 5.1.4 This study does not calculate the effects of trees and hedges on daylight, sunlight and overshadowing to gardens. The BRE guide states that it is usual to ignore the effect of existing trees.
- 5.1.5 The impact on solar panels is a material planning consideration. However, the BRE guide does not provide assessment criteria for this. The assessment of impact on any neighbouring solar panels is therefore beyond the scope of this report.
- 5.1.6 We have undertaken the study following the guidelines of the RICS publication "Surveying Safely". Where limited access or information is available, assumptions will have been made which may affect the conclusions reached in this report. For example, where neighbouring room uses are not known, we will either make an assumption regarding the use, or take the prudent approach of treating the use of the room as being used for domestic purposes. Therefore, the report may need to be updated if room uses are confirmed by the local authority or by the consultation responses.
- 5.1.7 This report is based upon and subject to the scope of work set out in Right of Light Consulting's quotation and standard terms and conditions.

APPENDICES

APPENDIX 1

WINDOW & GARDEN KEY



Whitfield Street

Tottenham Court Road

Windmill Street

6 to 10 Whitfield Street

2 to 4 Whitfield Street

29 to 30 Windmill Street

49 Tottenham Court Road

48 Tottenham Court Road

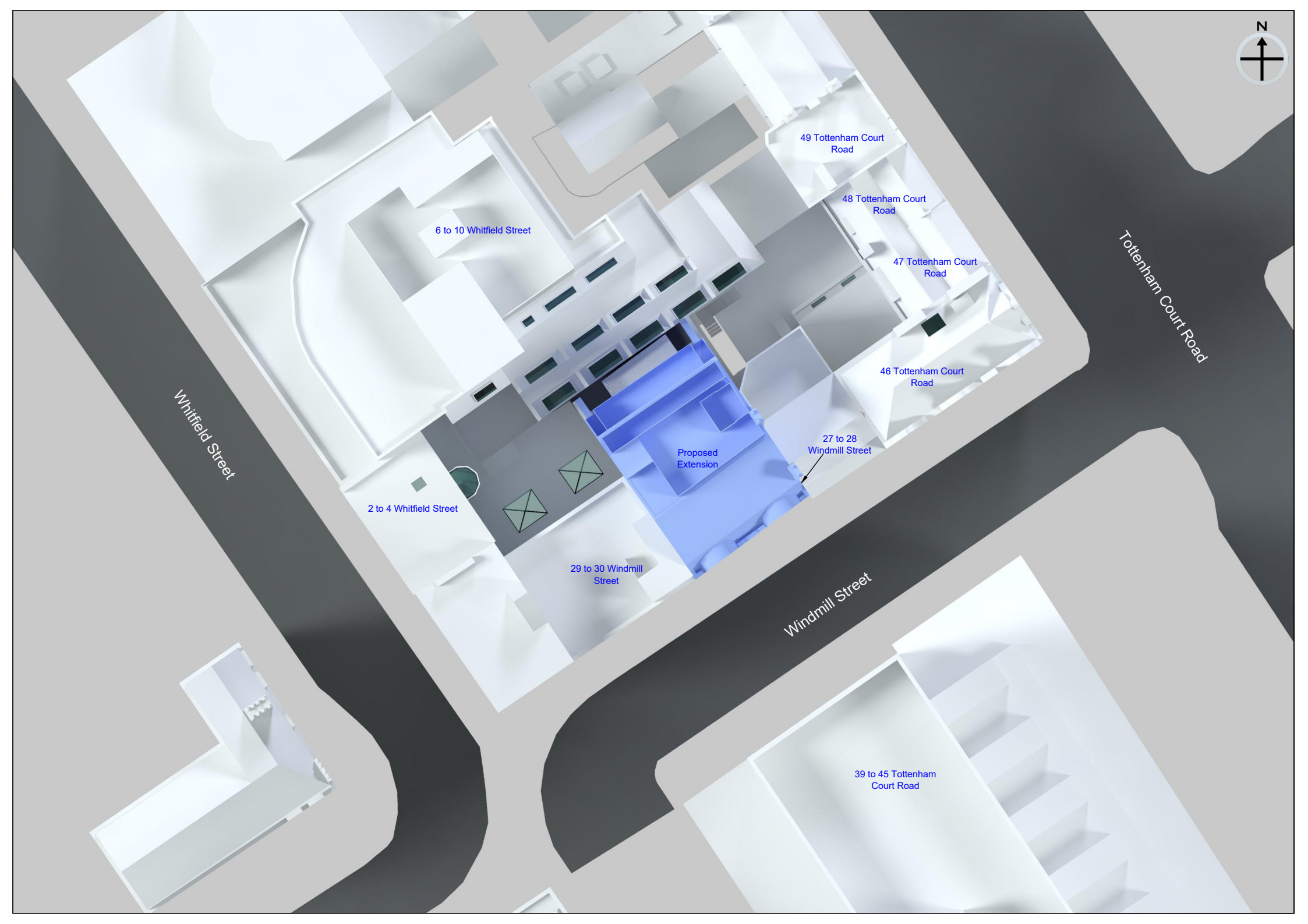
47 Tottenham Court Road

46 Tottenham Court Road

27 to 28 Windmill Street

Proposed Extension

39 to 45 Tottenham Court Road





Whitfield Street

6 to 10 Whitfield Street

39 to 45 Tottenham Court Road

Proposed Extension

49 Tottenham Court Road

48 Tottenham Court Road

47 Tottenham Court Road

46 Tottenham Court Road

27 to 28 Windmill Street

Windmill Street

Tottenham Court Road



39 to 45 Tottenham Court Road

49 Tottenham Court Road

48 Tottenham Court Road

47 Tottenham Court Road

46 Tottenham Court Road

6 to 10 Whitfield Street

Proposed Extension

2 to 4 Whitfield Street

29 to 30 Windmill Street

27 to 28 Windmill Street

Tottenham Court Road



39 to 45 Tottenham
Court Road

2 to 4 Whitfield Street

6 to 10 Whitfield Street

Proposed
Extension

46 Tottenham
Court Road

27 to 28
Windmill
Street

47 Tottenham
Court Road

48 Tottenham
Court Road

49 Tottenham
Court Road

Windmill Street

Tottenham Court Road



39 to 45 Tottenham Court Road

27 to 28 Windmill Street

Proposed Extension

29 to 30 Windmill Street

2 to 4 Whitfield Street

6 to 10 Whitfield Street

46 Tottenham Court Road

47 Tottenham Court Road

48 Tottenham Court Road

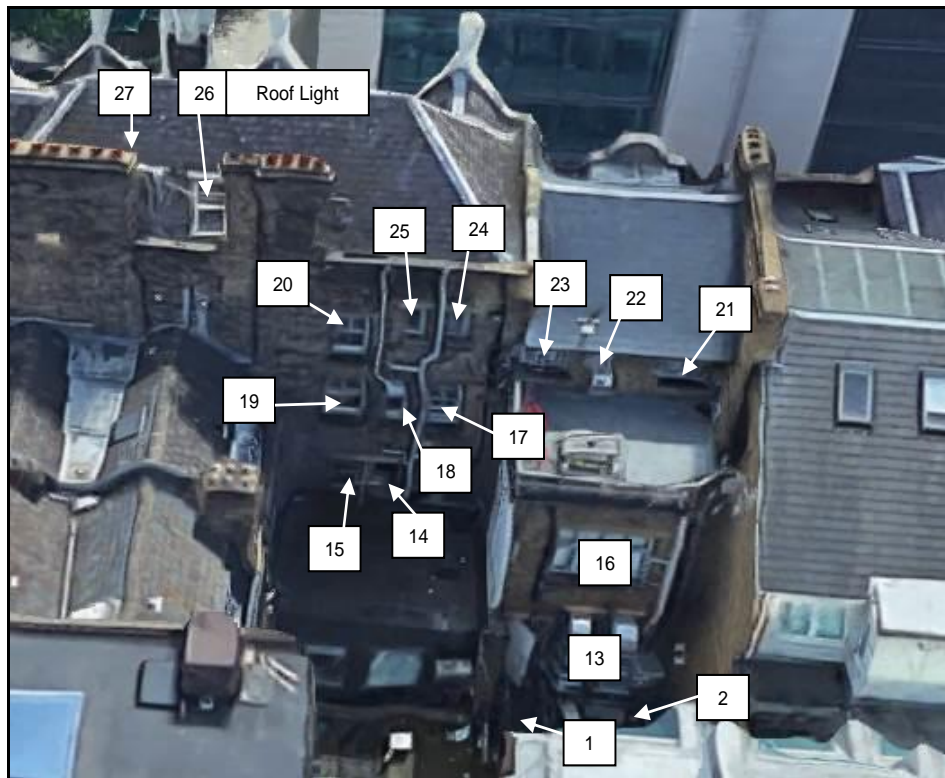
49 Tottenham Court Road

Tottenham Court Road

Store Street

Whitfield Street

Neighbouring Windows



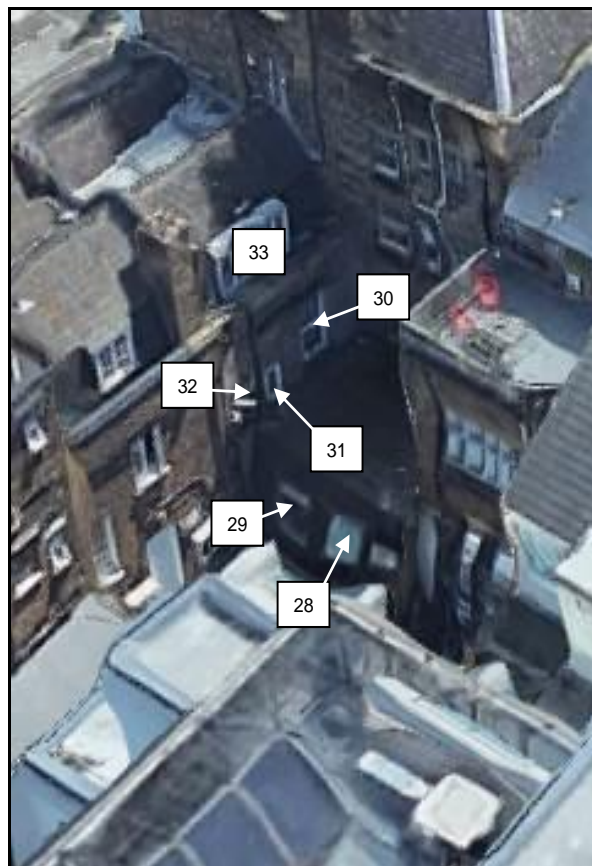
46 Tottenham Court Road



46 Tottenham Court Road



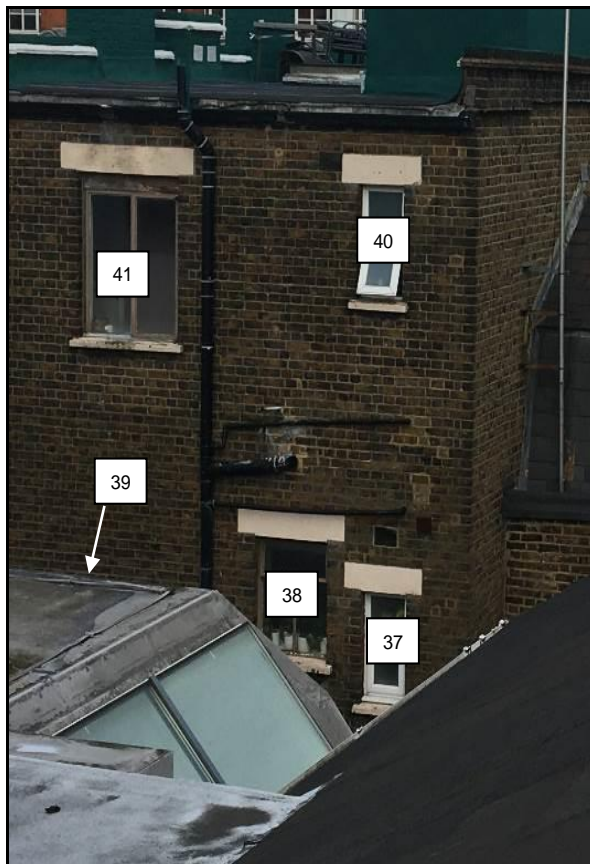
46 Tottenham Court Road



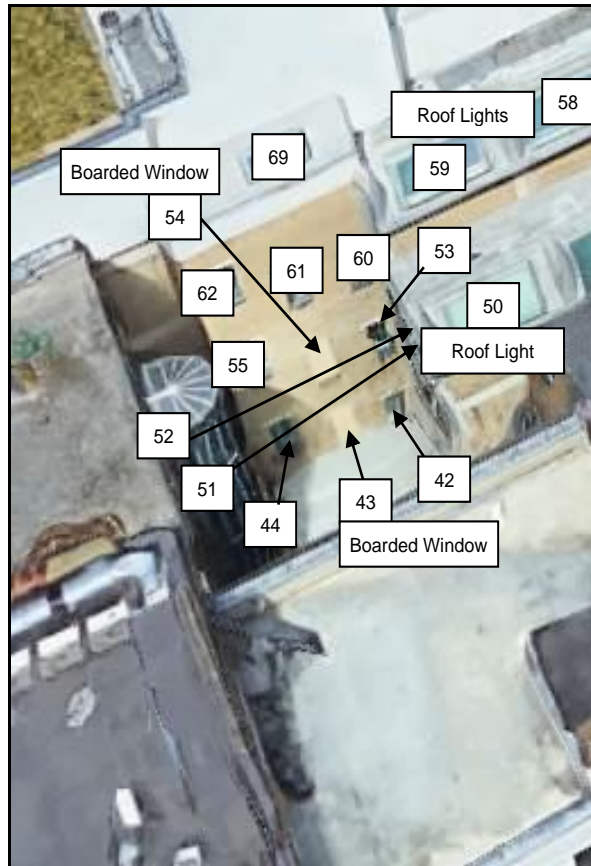
47 Tottenham Court Road



48 Tottenham Court Road



49 Tottenham Court Road



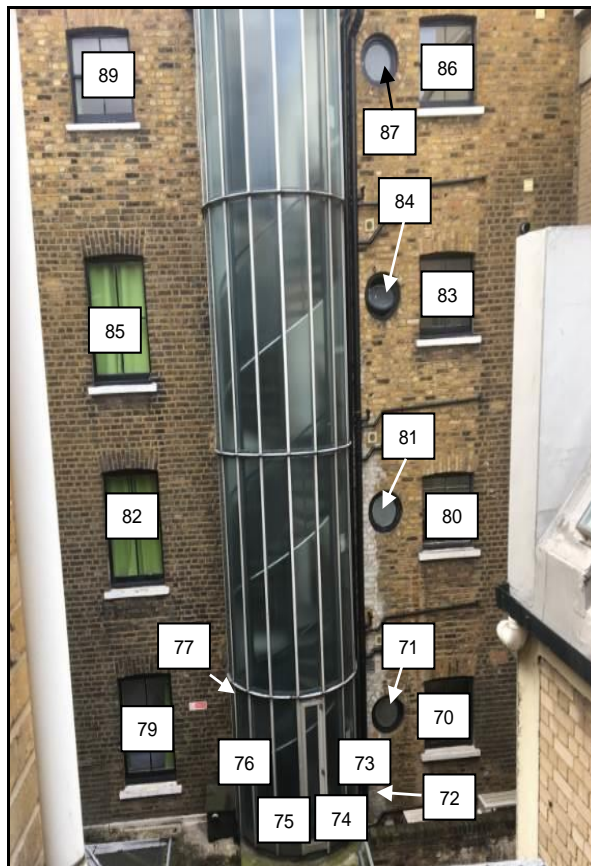
6 to 10 Whitfield Street



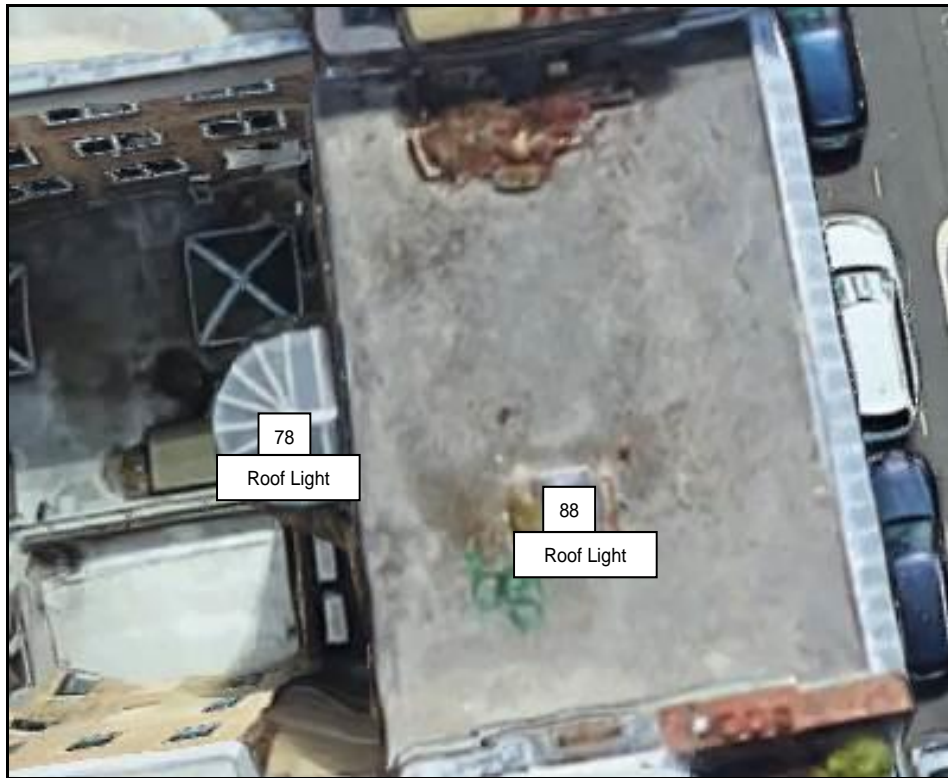
6 to 10 Whitfield Street



6 to 10 Whitfield Street



2 to 4 Whitfield Street



2 to 4 Whitfield Street



29 to 30 Windmill Street



39 to 45 Tottenham Court Road



39 to 45 Tottenham Court Road

APPENDIX 2

DAYLIGHT AND SUNLIGHT RESULTS

Appendix 2 - Vertical Sky Component
27 to 28 Windmill Street, London W1T 2JJ

Reference	Room Use	Vertical Sky Component			
		Before	After	Loss	Ratio
46 Tottenham Court Road					
Window 1	Bathroom/WC	0.4%	0.1%	0.3%	0.25
Window 2 (Secondary)	Rising Sun PH	0.4%	0.3%	0.1%	0.75
Window 3	Rising Sun PH	15.0%	15.0%	0.0%	1.0
Window 4 (Secondary)	Rising Sun PH	17.1%	17.2%	-0.1%	1.01
Window 5 (Secondary)	Rising Sun PH	17.8%	17.8%	0.0%	1.0
Window 6 (Secondary)	Rising Sun PH	18.6%	18.6%	0.0%	1.0
Window 7	Rising Sun PH	20.2%	20.2%	0.0%	1.0
Window 8	Rising Sun PH	22.7%	22.7%	0.0%	1.0
Window 9	Rising Sun PH	23.8%	23.8%	0.0%	1.0
Window 10	Rising Sun PH	24.4%	24.4%	0.0%	1.0
Window 11	Rising Sun PH	30.5%	30.5%	0.0%	1.0
Window 12	Rising Sun PH	35.0%	35.0%	0.0%	1.0
Window 13	Kitchen	16.4%	15.8%	0.6%	0.96
Window 14	Non Domestic	20.0%	20.0%	0.0%	1.0
Window 15	Staircase	19.6%	19.5%	0.1%	0.99
Window 16	Kitchen	26.2%	24.8%	1.4%	0.95
Window 17	Staircase	29.2%	28.8%	0.4%	0.99
Window 18	Staircase	30.5%	29.6%	0.9%	0.97
Window 19	Staircase	30.1%	29.3%	0.8%	0.97
Window 20	Staircase	35.6%	34.7%	0.9%	0.97
Window 21	Staircase & Landing	25.5%	22.8%	2.7%	0.89
Window 22	Bathroom/WC	31.6%	28.3%	3.3%	0.9
Window 23	Bathroom/WC	33.5%	30.9%	2.6%	0.92
Window 24	Bathroom/WC	36.0%	34.5%	1.5%	0.96
Window 25	Bathroom/WC	36.3%	35.1%	1.2%	0.97
Window 26	Domestic	59.8%	59.6%	0.2%	1.0
Window 27	Domestic	0.9%	0.9%	0.0%	1.0
47 Tottenham Court Road					
Window 28	Bedroom	26.6%	26.0%	0.6%	0.98
Window 29	Bedroom	23.3%	22.9%	0.4%	0.98
Window 30	Domestic	15.2%	13.4%	1.8%	0.88
Window 31	Domestic	17.0%	14.9%	2.1%	0.88
Window 32	Domestic	18.7%	16.3%	2.4%	0.87
Window 33	Domestic	23.5%	19.6%	3.9%	0.83
48 Tottenham Court Road					
Window 34	Domestic	15.0%	12.6%	2.4%	0.84

Appendix 2 - Vertical Sky Component
27 to 28 Windmill Street, London W1T 2JJ

Reference	Room Use	Vertical Sky Component			
		Before	After	Loss	Ratio
Window 35	Domestic	21.4%	18.5%	2.9%	0.86
Window 36	Domestic	25.9%	22.5%	3.4%	0.87
<u>49 Tottenham Court Road</u>					
Window 37	Domestic	22.3%	19.5%	2.8%	0.87
Window 38	Domestic	22.9%	20.3%	2.6%	0.89
Window 39	Domestic	20.6%	19.0%	1.6%	0.92
Window 40	Domestic	28.9%	26.1%	2.8%	0.9
Window 41	Domestic	27.7%	25.5%	2.2%	0.92
<u>6 to 10 Whitfield Street</u>					
Window 42	Staircase	6.0%	6.0%	0.0%	1.0
Window 43(BW)	Staircase	7.6%	7.0%	0.6%	0.92
Window 44	Staircase	9.1%	7.5%	1.6%	0.82
Window 45	Non Domestic	24.8%	24.8%	0.0%	1.0
Window 46	Non Domestic	61.9%	57.2%	4.7%	0.92
Window 47	Non Domestic	57.1%	49.6%	7.5%	0.87
Window 48	Non Domestic	52.2%	38.2%	14.0%	0.73
Window 49	Non Domestic	51.4%	36.9%	14.5%	0.72
Window 50	Bathroom/WC	52.3%	43.5%	8.8%	0.83
Window 51	Bathroom/WC	11.4%	11.4%	0.0%	1.0
Window 52	Bathroom/WC	10.4%	10.4%	0.0%	1.0
Window 53	Staircase & Unknown	10.3%	10.3%	0.0%	1.0
Window 54(BW)	Staircase & Unknown	14.0%	12.0%	2.0%	0.86
Window 54	Unknown	14.0%	12.0%	2.0%	0.86
Window 55	Staircase & Unknown	14.6%	11.8%	2.8%	0.81
Window 56	Non Domestic	69.8%	66.6%	3.2%	0.95
Window 57	Non Domestic	67.7%	61.3%	6.4%	0.91
Window 58	Non Domestic	64.7%	58.1%	6.6%	0.9
Window 59	Non Domestic	59.4%	55.2%	4.2%	0.93
Window 60	Staircase	16.5%	14.7%	1.8%	0.89
Window 61	Staircase	21.6%	17.8%	3.8%	0.82
Window 62	Staircase	23.2%	20.1%	3.1%	0.87
Window 63	Non Domestic	29.9%	29.9%	0.0%	1.0
Window 64	Non Domestic	26.2%	26.2%	0.0%	1.0
Window 65	Non Domestic	39.3%	39.3%	0.0%	1.0
Window 66	Non Domestic	64.9%	64.0%	0.9%	0.99
Window 67	Non Domestic	58.3%	57.4%	0.9%	0.98
Window 68	Non Domestic	48.3%	47.5%	0.8%	0.98

Appendix 2 - Vertical Sky Component
27 to 28 Windmill Street, London W1T 2JJ

Reference	Room Use	Vertical Sky Component			
		Before	After	Loss	Ratio
Window 69	Staircase	54.4%	53.2%	1.2%	0.98
<u>2 to 4 Whitfield Street</u>					
Window 70	Non Habitable	9.3%	6.9%	2.4%	0.74
Window 71	Non Habitable	8.1%	6.3%	1.8%	0.78
Window 72	Stairwell	2.3%	2.3%	0.0%	1.0
Window 73	Stairwell	8.6%	7.9%	0.7%	0.92
Window 74	Stairwell	18.2%	14.4%	3.8%	0.79
Window 75	Stairwell	21.9%	16.7%	5.2%	0.76
Window 76	Stairwell	16.5%	12.8%	3.7%	0.78
Window 77	Stairwell	8.1%	6.9%	1.2%	0.85
Window 78	Stairwell	86.0%	85.1%	0.9%	0.99
Window 79	Domestic	12.5%	9.8%	2.7%	0.78
Window 80	Non Habitable	13.8%	10.6%	3.2%	0.77
Window 81	Non Habitable	12.4%	10.0%	2.4%	0.81
Window 82	Domestic	18.0%	14.4%	3.6%	0.8
Window 83	Domestic	18.5%	15.3%	3.2%	0.83
Window 84	Domestic	16.9%	14.5%	2.4%	0.86
Window 85	Domestic	24.6%	19.8%	4.8%	0.8
Window 86	Non Habitable	23.1%	20.4%	2.7%	0.88
Window 87	Non Habitable	22.6%	20.6%	2.0%	0.91
Window 88	Domestic	86.2%	85.8%	0.4%	1.0
Window 89	Domestic	30.1%	25.7%	4.4%	0.85
<u>29 to 30 Windmill Street</u>					
Window 90	Non Domestic	20.1%	18.2%	1.9%	0.91
Window 91	Non Domestic	21.8%	19.1%	2.7%	0.88
Window 92	Non Domestic	22.9%	20.9%	2.0%	0.91
Window 93	Non Domestic	24.3%	21.2%	3.1%	0.87
Window 94	Non Domestic	23.8%	21.4%	2.4%	0.9
Window 95	Non Domestic	23.4%	21.5%	1.9%	0.92
Window 96	Non Domestic	20.2%	19.1%	1.1%	0.95
Window 97	Non Domestic	19.6%	18.3%	1.3%	0.93
Window 98	Domestic	8.1%	7.4%	0.7%	0.91
Window 99	Domestic	8.7%	7.9%	0.8%	0.91
Window 100	Domestic	9.7%	8.8%	0.9%	0.91
Window 101	Domestic	9.7%	8.8%	0.9%	0.91
Window 102	Bathroom/WC	7.8%	7.3%	0.5%	0.94
Window 103	Domestic	11.7%	10.7%	1.0%	0.91

Appendix 2 - Vertical Sky Component
27 to 28 Windmill Street, London W1T 2JJ

Reference	Room Use	Vertical Sky Component			
		Before	After	Loss	Ratio
Window 104	Domestic	14.2%	12.7%	1.5%	0.89
Window 105	Domestic	14.4%	12.5%	1.9%	0.87
Window 106	Bathroom/WC	11.5%	10.3%	1.2%	0.9
Window 107	Domestic	17.2%	16.1%	1.1%	0.94
Window 108	Domestic	20.7%	18.7%	2.0%	0.9
Window 109	Domestic	21.4%	18.1%	3.3%	0.85
Window 110	Bathroom/WC	18.0%	14.7%	3.3%	0.82
<u>39 to 45 Tottenham Court Road</u>					
Window 111	Non Domestic	9.9%	9.6%	0.3%	0.97
Window 112	Non Domestic	9.1%	8.8%	0.3%	0.97
Window 113	Non Domestic	9.2%	9.0%	0.2%	0.98
Window 114	Non Domestic	22.5%	22.5%	0.0%	1.0
Window 115	Non Domestic	21.7%	21.5%	0.2%	0.99
Window 116	Non Domestic	21.4%	20.7%	0.7%	0.97
Window 117	Non Domestic	32.6%	32.6%	0.0%	1.0
Window 118	Non Domestic	26.3%	25.1%	1.2%	0.95
Window 119	Non Domestic	34.3%	34.3%	0.0%	1.0
Window 120	Non Domestic	30.4%	29.1%	1.3%	0.96
Window 121	Non Domestic	36.1%	36.1%	0.0%	1.0
Window 122	Staircase	38.6%	37.9%	0.7%	0.98
Window 123	Domestic	38.6%	37.9%	0.7%	0.98
Window 124	Staircase	39.5%	39.5%	0.0%	1.0
Window 125	Domestic	39.5%	39.5%	0.0%	1.0

Appendix 2 - Daylight Distribution

27 to 28 Windmill Street, London W1T 2JJ

Reference	Room Use	Daylight Distribution			
		Before	After	Loss	Ratio
<u>46 Tottenham Court Road</u>					
Window 1	Bathroom/WC	7%	6%	1.0%	0.86
Windows 2 to 12	Dining	80%	80%	0.0%	1.0
Window 13	Kitchen	38%	37%	1.0%	0.97
Window 14	Non Domestic	78%	78%	0.0%	1.0
Window 15	Staircase	0%	0%	0.0%	1.0
Window 16	Kitchen	99%	98%	1.0%	0.99
Window 17	Staircase	77%	77%	0.0%	1.0
Windows 18 to 20	Staircase	74%	74%	0.0%	1.0
Window 21	Landing & Staircase	1%	0%	1.0%	0.0
Window 22	Bathroom/WC	83%	81%	2.0%	0.98
Window 23	Bathroom/WC	96%	96%	0.0%	1.0
Window 24	Bathroom/WC	89%	89%	0.0%	1.0
Window 25	Bathroom/WC	87%	87%	0.0%	1.0
Windows 26 & 27	Domestic	99%	99%	0.0%	1.0
<u>47 Tottenham Court Road</u>					
Window 28	Bedroom	80%	80%	0.0%	1.0
Window 29	Bedroom	68%	68%	0.0%	1.0
Window 30	Domestic	93%	79%	14.0%	0.85
Windows 31 & 32	Domestic	81%	66%	15.0%	0.81
Window 33	Domestic	89%	80%	9.0%	0.9
<u>6 to 10 Whitfield Street</u>					
Windows 42 & 43(BW)	Staircase	60%	60%	0.0%	1.0
Windows 42 to 44	Staircase	99%	99%	0.0%	1.0
Windows 45 & 46	Non Domestic	99%	99%	0.0%	1.0
Window 47	Non Domestic	99%	97%	2.0%	0.98
Window 48	Non Domestic	72%	50%	22.0%	0.69
Window 49	Non Domestic	71%	47%	24.0%	0.66
Windows 50 to 52	Bathroom/WC	100%	100%	0.0%	1.0
Windows 44, 53 & 54(BW)	Staircase	85%	85%	0.0%	1.0
Windows 53 & 54(BW)	Staircase	100%	100%	0.0%	1.0
Windows 53 to 55	Staircase	99%	99%	0.0%	1.0
Window 56	Non Domestic	100%	98%	2.0%	0.98
Window 57	Non Domestic	100%	88%	12.0%	0.88
Window 58	Non Domestic	100%	88%	12.0%	0.88
Window 59	Non Domestic	100%	100%	0.0%	1.0
Windows 55, 60 & 61	Staircase	95%	94%	1.0%	0.99
Windows 60 to 62	Staircase	100%	100%	0.0%	1.0
Windows 63 to 68	Non Domestic	100%	100%	0.0%	1.0

Appendix 2 - Daylight Distribution

27 to 28 Windmill Street, London W1T 2JJ

Reference	Room Use	Daylight Distribution			
		Before	After	Loss	Ratio
Window 69	Staircase	97%	97%	0.0%	1.0
<u>29 to 30 Windmill Street</u>					
Windows 90 to 97	Non Domestic	69%	69%	0.0%	1.0
Windows 98 & 99	Domestic	44%	43%	1.0%	0.98
Window 100	Domestic	49%	49%	0.0%	1.0
Window 101	Domestic	50%	50%	0.0%	1.0
Window 102	Bathroom/WC	76%	76%	0.0%	1.0
Window 103	Domestic	60%	58%	2.0%	0.97
Window 104	Domestic	62%	62%	0.0%	1.0
Window 105	Domestic	69%	68%	1.0%	0.99
Window 106	Bathroom/WC	95%	95%	0.0%	1.0
Window 107	Domestic	51%	50%	1.0%	0.98
Window 108	Domestic	52%	52%	0.0%	1.0
Window 109	Domestic	61%	61%	0.0%	1.0
Window 110	Bathroom/WC	98%	98%	0.0%	1.0
<u>39 to 45 Tottenham Court Road</u>					
Windows 111 to 113	Non Domestic	30%	30%	0.0%	1.0
Windows 114 & 115	Non Domestic	100%	100%	0.0%	1.0
Windows 116 & 117	Non Domestic	100%	100%	0.0%	1.0
Windows 118 & 119	Non Domestic	100%	100%	0.0%	1.0
Windows 120 & 121	Non Domestic	100%	100%	0.0%	1.0
Window 122	Staircase	71%	71%	0.0%	1.0
Window 123	Domestic	94%	94%	0.0%	1.0
Window 124	Staircase	72%	72%	0.0%	1.0
Window 125	Domestic	94%	94%	0.0%	1.0

Appendix 2 - Sunlight to Windows

27 to 28 Windmill Street, London W1T 2JJ

Reference	Room Use	Sunlight to Windows							
		Total Sunlight Hours				Winter Sunlight Hours			
		Before	After	Loss	Ratio	Before	After	Loss	Ratio
<u>46 Tottenham Court Road</u>									
Window 1	Bathroom/WC	0%	0%	0%	1.0	0%	0%	0%	1.0
Window 2	Rising Sun PH	0%	0%	0%	1.0	0%	0%	0%	1.0
Window 3	Rising Sun PH	38%	38%	0%	1.0	7%	7%	0%	1.0
Window 4	Rising Sun PH	41%	41%	0%	1.0	8%	8%	0%	1.0
Window 5	Rising Sun PH	42%	42%	0%	1.0	7%	7%	0%	1.0
Window 6	Rising Sun PH	42%	42%	0%	1.0	8%	8%	0%	1.0
Window 7	Rising Sun PH	45%	45%	0%	1.0	10%	10%	0%	1.0
Window 8	Rising Sun PH	46%	46%	0%	1.0	10%	10%	0%	1.0
Window 9	Rising Sun PH	46%	46%	0%	1.0	11%	11%	0%	1.0
Window 10	Rising Sun PH	45%	45%	0%	1.0	10%	10%	0%	1.0
Window 11	Rising Sun PH	34%	34%	0%	1.0	6%	6%	0%	1.0
<u>47 Tottenham Court Road</u>									
Window 30	Domestic	16%	10%	6%	0.63	0%	0%	0%	1.0
Window 31	Domestic	21%	17%	4%	0.81	0%	0%	0%	1.0
Window 32	Domestic	24%	20%	4%	0.83	0%	0%	0%	1.0
Window 33	Domestic	30%	25%	5%	0.83	2%	0%	2%	0.0
<u>48 Tottenham Court Road</u>									
Window 34	Domestic	29%	26%	3%	0.9	3%	2%	1%	0.67
Window 35	Domestic	30%	26%	4%	0.87	2%	0%	2%	0.0
Window 36	Domestic	39%	34%	5%	0.87	7%	3%	4%	0.43
<u>49 Tottenham Court Road</u>									
Window 37	Domestic	36%	32%	4%	0.89	6%	3%	3%	0.5
Window 38	Domestic	37%	32%	5%	0.86	8%	3%	5%	0.38
Window 39	Domestic	37%	34%	3%	0.92	7%	4%	3%	0.57
Window 40	Domestic	49%	45%	4%	0.92	12%	8%	4%	0.67
Window 41	Domestic	51%	46%	5%	0.9	14%	9%	5%	0.64
<u>6 to 10 Whitfield Street</u>									
Window 42	Staircase	12%	12%	0%	1.0	0%	0%	0%	1.0
Window 43(BW)	Staircase	12%	10%	2%	0.83	0%	0%	0%	1.0
Window 44	Staircase	10%	7%	3%	0.7	0%	0%	0%	1.0
Window 46	Non Domestic	60%	49%	11%	0.82	8%	3%	5%	0.38
Window 47	Non Domestic	58%	41%	17%	0.71	8%	3%	5%	0.38
Window 48	Non Domestic	49%	19%	30%	0.39	4%	1%	3%	0.25
Window 49	Non Domestic	48%	23%	25%	0.48	8%	3%	5%	0.38
Window 50	Bathroom/WC	52%	38%	14%	0.73	8%	8%	0%	1.0
Window 51	Bathroom/WC	29%	29%	0%	1.0	4%	4%	0%	1.0
Window 52	Bathroom/WC	30%	30%	0%	1.0	5%	5%	0%	1.0
Window 53	Staircase & Landings	24%	24%	0%	1.0	3%	3%	0%	1.0
Window 54(BW)	Staircase & Landings	24%	19%	5%	0.79	2%	2%	0%	1.0
Window 54	Staircase & Landings	24%	19%	5%	0.79	2%	2%	0%	1.0
Window 55	Staircase & Landings	25%	16%	9%	0.64	2%	2%	0%	1.0
Window 56	Non Domestic	71%	63%	8%	0.89	17%	9%	8%	0.53

Appendix 2 - Sunlight to Windows

27 to 28 Windmill Street, London W1T 2JJ

Reference	Room Use	Sunlight to Windows							
		Total Sunlight Hours				Winter Sunlight Hours			
		Before	After	Loss	Ratio	Before	After	Loss	Ratio
Window 57	Non Domestic	75%	57%	18%	0.76	21%	8%	13%	0.38
Window 58	Non Domestic	70%	55%	15%	0.79	19%	12%	7%	0.63
Window 59	Non Domestic	72%	59%	13%	0.82	22%	20%	2%	0.91
Window 60	Staircase & Landings	40%	35%	5%	0.88	8%	8%	0%	1.0
Window 61	Staircase & Landings	49%	34%	15%	0.69	7%	7%	0%	1.0
Window 62	Staircase & Landings	46%	36%	10%	0.78	6%	5%	1%	0.83
Window 66	Non Domestic	78%	78%	0%	1.0	22%	22%	0%	1.0
Window 67	Non Domestic	68%	66%	2%	0.97	18%	16%	2%	0.89
Window 68	Non Domestic	48%	46%	2%	0.96	13%	11%	2%	0.85
Window 69	Staircase & Landings	77%	73%	4%	0.95	24%	22%	2%	0.92
<u>2 to 4 Whitfield Street</u>									
Window 76	Domestic & Staircase	15%	12%	3%	0.8	0%	0%	0%	1.0
Window 77	Domestic & Staircase	10%	7%	3%	0.7	0%	0%	0%	1.0
Window 78	Staircase	71%	66%	5%	0.93	13%	13%	0%	1.0
Window 88	Domestic	88%	86%	2%	0.98	24%	24%	0%	1.0
<u>29 to 30 Windmill Street</u>									
Window 90	Non Domestic	0%	0%	0%	1.0	0%	0%	0%	1.0
Window 91	Non Domestic	0%	0%	0%	1.0	0%	0%	0%	1.0
Window 94	Non Domestic	0%	0%	0%	1.0	0%	0%	0%	1.0
Window 97	Non Domestic	1%	1%	0%	1.0	0%	0%	0%	1.0
<u>39 to 45 Tottenham Court Road</u>									
Window 114	Non Domestic	41%	41%	0%	1.0	8%	8%	0%	1.0