RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Right of Light Consulting
Burley House
15-17 High Street
Rayleigh
Essex
SS6 7EW
TEL 0800 197 4836
E-MAIL enquiries@right-of-light.co.uk
WEBSITE www.right-of-light.co.uk

Daylight and Sunlight Study (Within Development)
22 Holmes Road, London NW5 3AB

7 March 2019

Right of Light Consulting

Burley House
15-17 High Street
Rayleigh
Essex SS6 7EW

Tel: 0800 197 4836

www.right-of-light.co.uk

CONTENTS

APPENDICES

1 EXECUTIVE SUMMARY

1.1 Overview

1.1.1 Right of Light Consulting has been commissioned by Norton Mayfield Architects to undertake a daylight and sunlight study in connection with the development at 22 Holmes Road, London NW5 3AB. The aim of the study is to check whether or not the proposed habitable rooms receive satisfactory levels of daylight and sunlight.

1.1.2 The study is based on the numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a good practice guide, 2nd Edition' by P J Littlefair 2011.

1.1.3 Appendix 1 identifies the windows analysed in this study. The numerical test results (including all calculation workings) are provided in Appendix 2. No sky line contours are presented in Appendix 1.

1.1.4 The proposed scheme shows an overall high level of compliance with the BRE recommendations, particularly given the urban location of the site. Given this, we are of the opinion that the future occupants will have access to satisfactory levels of daylight and sunlight.

2 INFORMATION SOURCES

2.1 Documents Considered

2.1.1 This report is based on the following drawings:

Norton Mayfield Architects

1617-NMA-00-00-DR-A-00100	Ground Floor - Proposed	Rev P7
1617-NMA-00-01-DR-A-00100	First Floor - Proposed	Rev P7
1617-NMA-00-B1-DR-A-00100	Basement - Proposed	Rev P7
1617-NMA-00-R1-DR-A-00100	Roof Plan - Proposed	Rev P1
1617-NMA-00-R2-DR-A-00100	Roof Plan 2 - Proposed	Rev P1
1617-NMA-00-ZZ-DR-A-00200	Section Elevations 1	Rev P1
1617-NMA-00-ZZ-DR-A-00300	Section AA - Proposed	Rev P4
1617-NMA-00-ZZ-DR-A-00301	Section BB - Proposed	Rev P4
1617-NMA-00-ZZ-DR-A-00302	Section CC - Proposed	Rev P4
1617-NMA-XX-ZZ-DR-A-00001	Site Location Plan	Rev P1

XXXX

XXXX	Proposed model	Rev -

3 METHODOLOGY OF THE STUDY

3.1 BRE Guide: Site Layout Planning for Daylight and Sunlight

3.1.1 The study is based on the numerical tests laid down in the Building Research Establishment (BRE) guide 'Site Layout Planning for Daylight and Sunlight: a good practice guide' by P J Littlefair 2011.

3.1.2 The standards set out in the BRE guide are intended to be used flexibly. In instances where there is a special requirement for daylight or sunlight, higher levels may be deemed necessary. In other situations, such as with urban developments, lower daylight and sunlight levels may be unavoidable. The following statement is quoted directly from the BRE guide:

3.1.3 "The guide is intended for building designers and their clients, consultants and planning officials. The advice given is not mandatory and this document should not be considered 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 the 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 Interior Daylighting

3.3.1 The interior daylighting recommendations set out in BRE guide are based on British Standard BS 8206 Part 2 and the Chartered Institute of Building Services Engineers Applications Manual on window design. Collectively, the guides set out three main criteria for interior daylighting. These are summarised as follows:

3.3.2 Test 1 Average Daylight Factor *(df)*

The Average Daylight Factor can be calculated using the following formula:

$$df = \frac{T\ Aw\ \theta}{A\ (1-R^2)}\ \%$$

Where

T is the diffuse visible transmittance of the glazing Awis the net glazed area of the window (m^2)
A is the total area of the room surfaces (m^2)
R is their average reflectance
Θ is the angle of visible sky in degrees

The Average Daylight factor test is applied to habitable rooms within domestic properties. A kitchen is generally deemed to be a habitable room if it is large enough to accommodate a dining area. If the kitchen is small or if the property has a separate dining area then the accepted practice is to treat the kitchen as a non habitable room.

For the purpose of this study we have assumed BRE internal reflectance values pertaining to medium wooden floors (Coefficient value of 0.4), light painted walls (0.8) and matte white painted ceilings (0.85).

For the purpose of this study we have assumed the windows consist of modern double-glazed units with a frame to glazing ratio of 0.85. A maintenance factor has been applied to consider the effect of dirt and grime on the visibility of the window. On this basis, the transmittance value used within this study is 0.68.

The guide recommends an Average Daylight Factor of 5% or more if there is no supplementary electric lighting, or 2% or more if supplementary lighting is provided. There are additional minimum recommendations for dwellings of 2% for kitchens, 1.5% for living rooms and 1% for bedrooms.

A special procedure is required for floor to ceiling windows such as patio doors. If part of a window is below the height of the working plane (a horizontal plane 0.85m above the floor in housing), this portion should be treated as a separate window. The ADF for this window has an extra factor applied to it, to take account of the reduced effectiveness of low level glazing in lighting the room. A value equal to the floor reflectance may be taken for this factor. The ADF for the portion of the window above the working plane is calculated in the normal way without this additional factor, and the ADFs for the two portions are added together.

Where a window has a large obstruction in front of it, the angle of visible sky can be increased by around 6° assuming the obstruction is painted a light colour.

3.3.3 Test 2 Room Depth

If a daylit room is lit by windows in one wall only, the depth of the room L should not exceed the limiting value given by:

$$\frac{L}{W} + \frac{L}{H} \leq \frac{2}{1-R_b}$$

Where

W is the room width
H is the window-head height above floor level
R_b is the average reflectance of the surfaces in the rear half of the room

3.3.4 Test 3 Position of the no sky line

If a significant area of the working plane lies beyond the no sky line (i.e. it receives no direct skylight), then the distribution of daylight in the room will look poor and supplementary electric lighting will be required.

The no sky line assessment is not applicable where a room derives its daylight solely from a light well or atrium. In these situations the room relies on borrowed light instead of direct skylight.

3.4 Sunlight to Windows

3.4.1 The BRE guide recommends that where possible each dwelling should have at least one main living room window that faces within 90 degrees of due south. However, the guide acknowledges that this is not always possible when it comes to flats.

3.4.2 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 sunlight is viewed as less important in kitchens and bedrooms. In non-domestic buildings, any spaces which are deemed to have a specific requirement for sunlight should be checked.

3.4.3 The BRE guide recommends that main living room windows should receive 25% of the total annual probable sunlight hours, including 5% of the annual probable sunlight hours during the winter months between 21st September and 21st March.

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 The BRE guide recommends that for an open space to appear adequately lit throughout the year, at least 50% of its area should receive two hours of sunlight on 21st March.

4 RESULTS OF THE STUDY

4.1 Window Reference Points and No Sky Line Contours

4.1.1 Refer to Appendix 1 for a drawing which identifies the positions of the windows analysed in this study. The no skyline contours for the habitable rooms are also presented in Appendix 1.

4.2 Numerical Results

4.2.1 The numerical test results including all calculation workings are provided in Appendix 2.

4.3 Interior Daylighting

4.3.1 All rooms surpass the BRE Average Daylight Factor targets.

4.3.2 Where applicable, all rooms pass the room depth test.

4.3.3 The BRE guide does not give fixed numerical pass/fail criteria for the No Sky Line test when applied to new dwellings (guidance is given for when this test is applied to existing neighbouring buildings). However, for completeness, we have illustrated the no sky line contours in Appendix 1.

4.4 Sunlight to Windows

4.4.1 Living rooms which face within 90 degrees of due south have been tested for direct sunlight. The results are presented in Appendix 2. Not all windows receive ideal levels of direct sunlight. However, the BRE guide acknowledges that it is not always possible for every dwelling to be well situated to receive direct sunlight. In the case of the development at 22 Holmes Road, all living rooms have a window which faces south. Given the limitations of the site, this shows consideration has been made in order to access direct sunlight.

4.5 Overshadowing to Gardens and Open Spaces

4.5.1 We have tested the garden at 22 Holmes road. Whilst garden 1 will not receive ideal levels of direct sunlight on 21 March, we are of the opinion that it will still provide a usable amenity space to the occupants.

4.6 Conclusion

4.6.1 The proposed scheme shows an overall high level of compliance with the BRE recommendations, particularly given the urban location of the site. Given this, we are of the opinion that the future occupants will have access to satisfactory levels 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 We have undertaken the survey following the guidelines of the RICS publication "Surveying Safely". Where limited access is available, assumptions will have been made.

5.1.3 Right of Light Consulting have endeavoured to include in the report those matters, which they have knowledge of or of which they have been made aware, that might adversely affect the validity of the opinion given.

5.1.4 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.

5.2 Project Specific

5.2.1 None.

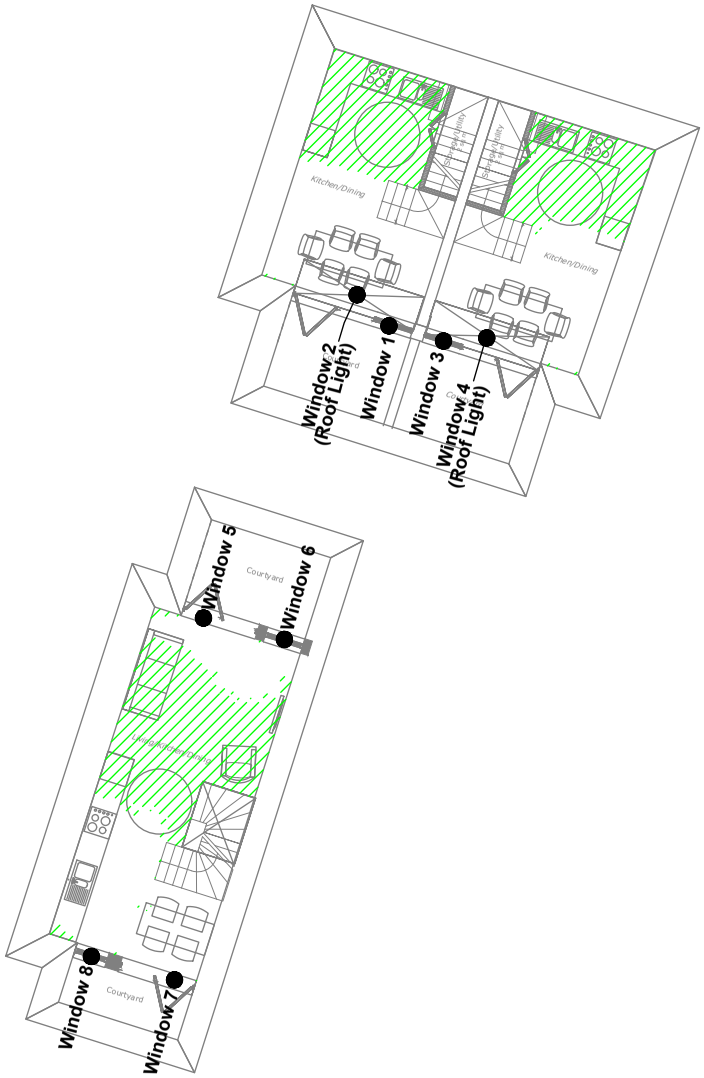
APPENDICES

APPENDIX 1

WINDOW KEY & NO SKY LINE CONTOURS

Proposed Basement Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Project Name: 22 Holmes Road, London NW5 3AB

Drawing Title: Window Key and No Sky Line Contours

Scale: Do not scale

Drawing No: 1 of 4 | Rev. -

Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

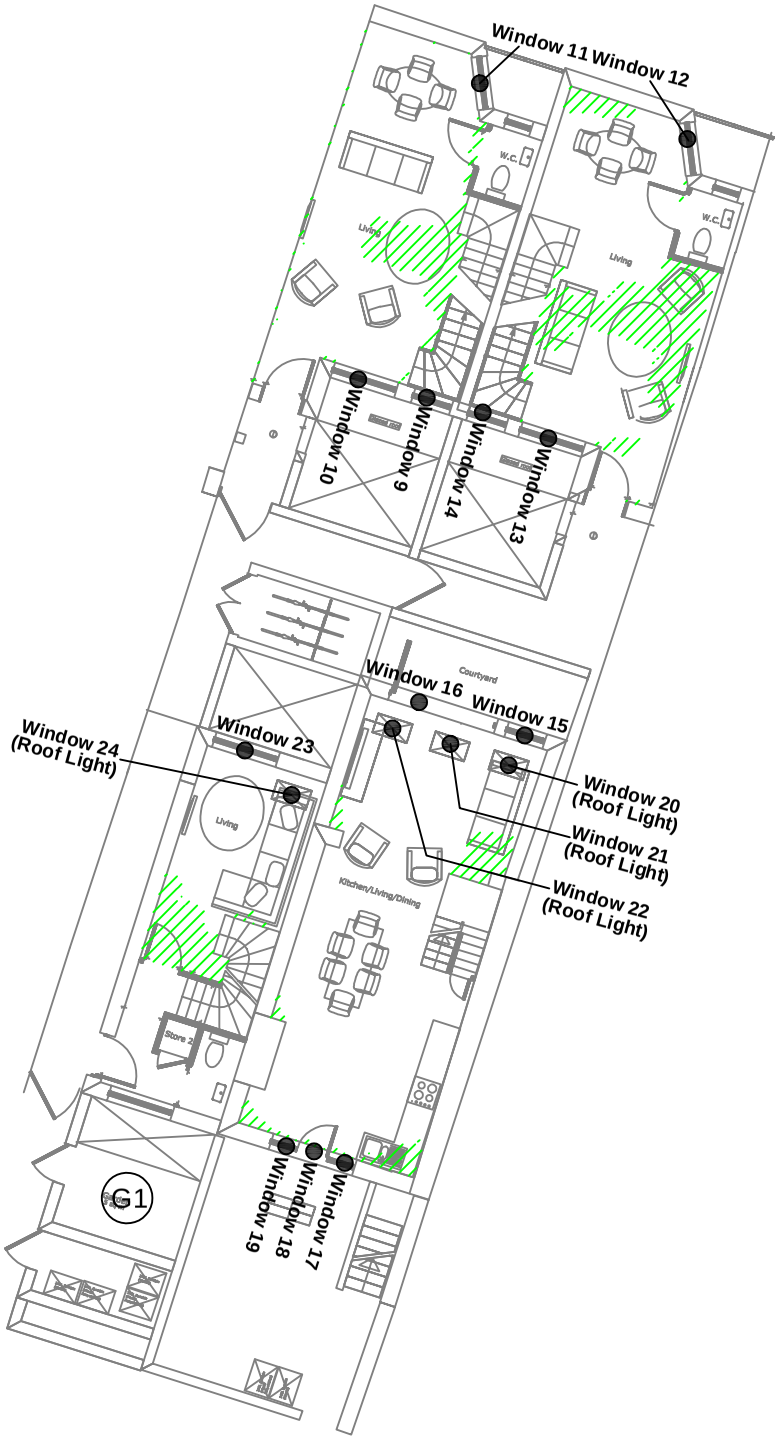
Burley House
15 - 17 High Street
Rayleigh
Essex SS6 7EW

Tel. 0800 197 4836

enquiries@right-of-light.co.uk
www.right-of-light.co.uk

Proposed Ground Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- G1 — Gardens and Amenity Areas
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Project Name: 22 Holmes Road, London NW5 3AB

Drawing Title: Window Key and No Sky Line Contours

Scale: Do not scale

Drawing No: 2 of 4 | Rev. -

Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

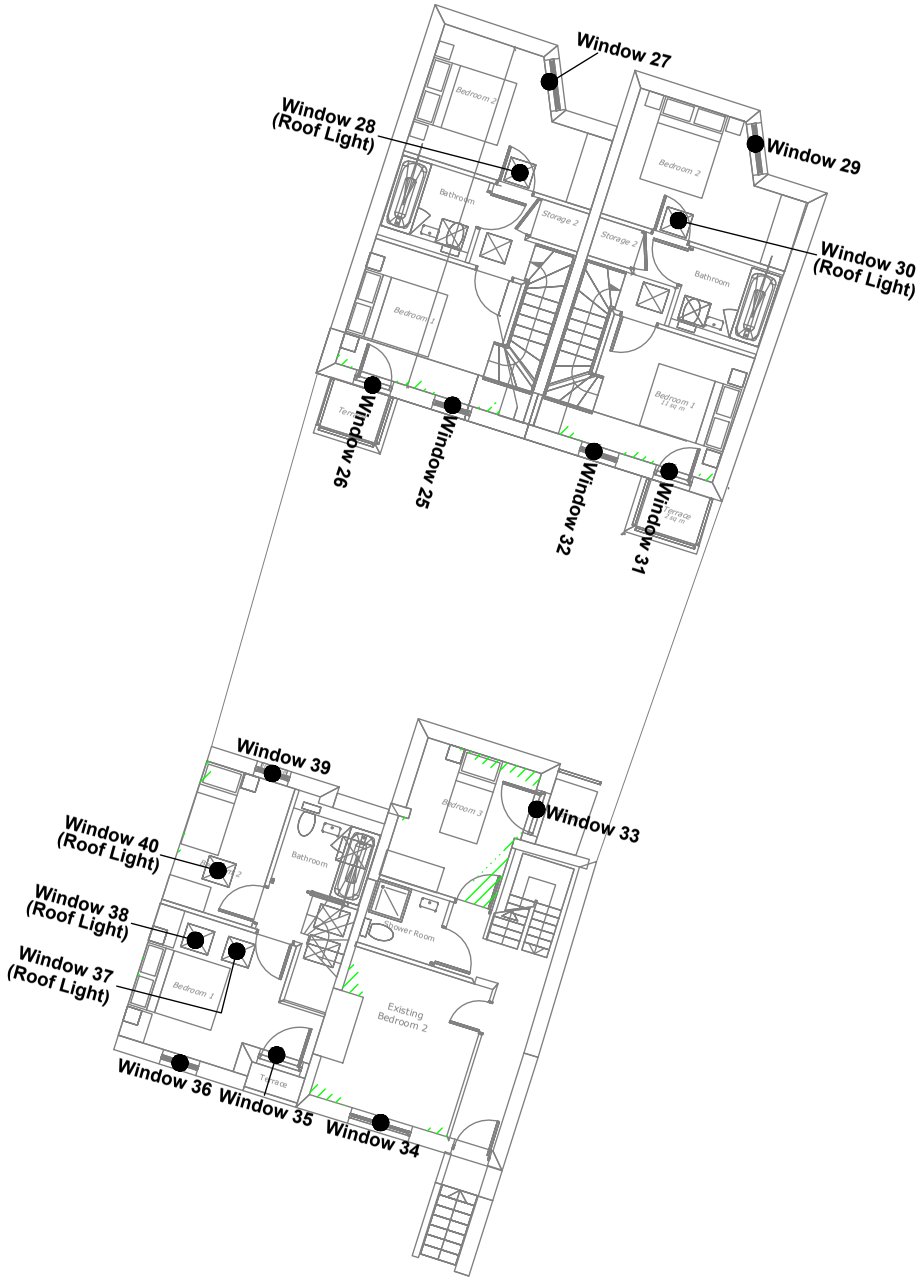
Burley House
15 - 17 High Street
Rayleigh
Essex SS6 7EW

Tel. 0800 197 4836

enquiries@right-of-light.co.uk
www.right-of-light.co.uk

Proposed First Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Project Name: 22 Holmes Road, London NW5 3AB

Drawing Title: Window Key and No Sky Line Contours

Scale: Do not scale

Drawing No: 3 of 4 | Rev. -

Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

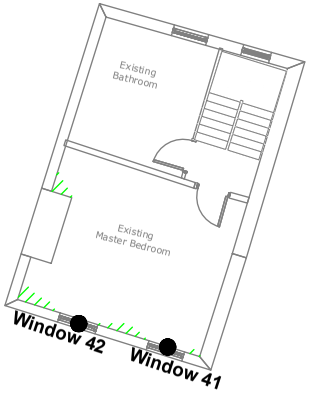
Burley House
15 - 17 High Street
Rayleigh
Essex SS6 7EW

Tel. 0800 197 4836

enquiries@right-of-light.co.uk
www.right-of-light.co.uk

Proposed Loft Floor

Window Key and No Sky Line Contours



Key:

- Window reference
- Area receives no direct sky light (applied to habitable rooms)
- Area does receive direct sky light.
- Light aperture.

Project Name: 22 Holmes Road, London NW5 3AB

Drawing Title: Window Key and No Sky Line Contours

Scale: Do not scale

Drawing No: 4 of 4 | Rev. -

Rev	Date	Details of revision

RIGHT OF LIGHT CONSULTING
Chartered Surveyors

Burley House
15 - 17 High Street
Rayleigh
Essex SS6 7EW

Tel. 0800 197 4836

enquiries@right-of-light.co.uk
www.right-of-light.co.uk

APPENDIX 2

DAYLIGHT AND SUNLIGHT CALCULATIONS

Appendix 2 - Average Daylight Factor (ADF)
22 Holmes Road, London NW5 3AB

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					Actual ADF	
	Primary room use	ADF	T	Aw	A	R	Theta	ADF	Result
Proposed Basement Floor									
Window 1 (lower)			0.68	1.96	87.29	0.67	19.6	0.2%	
Window 1 (upper)			0.68	4.26	87.29	0.67	29.2	1.8%	
Window 2			0.68	1.5	87.29	0.67	60.7	1.3%	
Total ADF for room	Dining/Kitchen	2.0%						**3.3%**	**Pass**
Window 3 (lower)			0.68	1.87	87.21	0.67	19.4	0.2%	
Window 3 (upper)			0.68	4.06	87.21	0.67	30.4	1.8%	
Window 4			0.68	1.41	87.21	0.67	59.5	1.2%	
Total ADF for room	Dining/Kitchen	2.0%						**3.2%**	**Pass**
Window 5 (lower)			0.68	1.21	120.04	0.67	17.2	0.1%	
Window 5 (upper)			0.68	2.64	120.04	0.67	22.4	0.6%	
Window 6 (lower)			0.68	0.04	120.04	0.67	18.6	0.0%	
Window 6 (upper)			0.68	1.33	120.04	0.67	21.8	0.3%	
Window 7 (lower)			0.68	1.22	120.04	0.67	17.0	0.1%	
Window 7 (upper)			0.68	2.65	120.04	0.67	25.1	0.7%	
Window 8 (lower)			0.68	0.03	120.04	0.67	18.2	0.0%	
Window 8 (upper)			0.68	1.13	120.04	0.67	24.5	0.3%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.1%**	**Pass**
Proposed Ground Floor									
Window 9 (lower)			0.68	0.06	116.82	0.69	36.8	0.0%	
Window 9 (upper)			0.68	1.5	116.82	0.69	36.5	0.6%	
Window 10 (lower)			0.68	0.66	116.82	0.69	25.7	0.1%	
Window 10 (upper)			0.68	0.97	116.82	0.69	21.6	0.2%	
Window 11 (lower)			0.68	0.05	116.82	0.69	26.1	0.0%	
Window 11 (upper)			0.68	1.66	116.82	0.69	42.2	0.8%	
Total ADF for room	Living Room	1.5%						**1.7%**	**Pass**
Window 12 (lower)			0.68	0.05	120.89	0.7	27.8	0.0%	
Window 12 (upper)			0.68	1.66	120.89	0.7	44.4	0.8%	

Appendix 2 - Average Daylight Factor (ADF)

22 Holmes Road, London NW5 3AB

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					Actual ADF	
	Primary room use	ADF	T	Aw	A	R	Theta	ADF	Result
Window 13 (lower)			0.68	0.66	120.89	0.7	26.1	0.1%	
Window 13 (upper)			0.68	0.97	120.89	0.7	20.3	0.2%	
Window 14 (lower)			0.68	0.06	120.89	0.7	35.6	0.0%	
Window 14 (upper)			0.68	1.49	120.89	0.7	34.9	0.6%	
Total ADF for room	Living Room	1.5%						**1.7%**	**Pass**
Window 15 (lower)			0.68	0.04	146.64	0.67	32.4	0.0%	
Window 15 (upper)			0.68	0.9	146.64	0.67	36.6	0.3%	
Window 16 (lower)			0.68	1.69	146.64	0.67	30.6	0.2%	
Window 16 (upper)			0.68	2.49	146.64	0.67	40.0	0.8%	
Window 17			0.68	0.52	146.64	0.67	59.9	0.3%	
Window 18			0.68	0.63	146.64	0.67	67.1	0.4%	
Window 19			0.68	0.52	146.64	0.67	67.7	0.3%	
Window 20			0.68	0.29	146.64	0.67	92.3	0.2%	
Window 21			0.68	0.29	146.64	0.67	96.4	0.2%	
Window 22			0.68	0.29	146.64	0.67	96.1	0.2%	
Total ADF for room	Living/Dining/Kitchen	2.0%						**2.9%**	**Pass**
Window 23 (lower)			0.68	0.06	69.03	0.72	40.2	0.0%	
Window 23 (upper)			0.68	1.86	69.03	0.72	50.6	1.9%	
Window 24			0.68	0.29	69.03	0.72	83.5	0.5%	
Total ADF for room	Living Room	1.5%						**2.4%**	**Pass**
Proposed First Floor									
Window 25 (lower)			0.68	0.04	72.36	0.72	60.5	0.0%	
Window 25 (upper)			0.68	0.82	72.36	0.72	64.1	1.0%	
Window 26 (lower)			0.68	0.61	72.36	0.72	34.4	0.2%	
Window 26 (upper)			0.68	0.9	72.36	0.72	58.8	1.0%	
Total ADF for room	Bedroom	1.0%						**2.2%**	**Pass**
Window 27 (lower)			0.68	0.05	69.47	0.73	55.7	0.0%	
Window 27 (upper)			0.68	1.67	69.47	0.73	63.6	2.2%	
Window 28			0.68	0.31	69.47	0.73	119.5	0.8%	
Total ADF for room	Bedroom	1.0%						**3.0%**	**Pass**

Appendix 2 - Average Daylight Factor (ADF)
22 Holmes Road, London NW5 3AB

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					Actual ADF	
	Primary room use	ADF	T	Aw	A	R	Theta	ADF	Result
Window 29 (lower)			0.68	0.05	68.66	0.73	57.8	0.0%	
Window 29 (upper)			0.68	1.67	68.66	0.73	66.1	2.3%	
Window 30			0.68	0.32	68.66	0.73	117.0	0.8%	
Total ADF for room	Bedroom	1.0%						**3.1%**	**Pass**
Window 31 (lower)			0.68	0.61	70.02	0.72	38.1	0.2%	
Window 31 (upper)			0.68	0.9	70.02	0.72	63.6	1.2%	
Window 32 (lower)			0.68	0.04	70.02	0.72	60.1	0.0%	
Window 32 (upper)			0.68	0.82	70.02	0.72	65.3	1.1%	
Total ADF for room	Bedroom	1.0%						**2.5%**	**Pass**
Window 33 (lower)			0.68	0.7	46.89	0.71	24.6	0.2%	
Window 33 (upper)			0.68	1.02	46.89	0.71	44.3	1.3%	
Total ADF for room	Bedroom	1.0%						**1.5%**	**Pass**
Window 34 (lower)			0.68	0.06	57.63	0.71	82.7	0.0%	
Window 34 (upper)			0.68	1.81	57.63	0.71	84.0	3.6%	
Total ADF for room	Bedroom	1.0%						**3.6%**	**Pass**
Window 35 (lower)			0.68	0.7	76.72	0.72	29.7	0.2%	
Window 35 (upper)			0.68	1.28	76.72	0.72	62.4	1.5%	
Window 36			0.68	1.28	76.72	0.72	84.0	2.0%	
Window 37			0.68	0.36	76.72	0.72	91.7	0.6%	
Window 38			0.68	0.36	76.72	0.72	74.6	0.5%	
Total ADF for room	Bedroom	1.0%						**4.8%**	**Pass**
Window 39			0.68	1.0	53.54	0.74	77.9	2.2%	
Window 40			0.68	0.36	53.54	0.74	74.5	0.7%	
Total ADF for room	Bedroom	1.0%						**2.9%**	**Pass**
Proposed Loft Floor									
Window 41 (lower)			0.68	0.05	76.99	0.71	86.4	0.0%	
Window 41 (upper)			0.68	1.25	76.99	0.71	87.0	1.9%	

Appendix 2 - Average Daylight Factor (ADF)

22 Holmes Road, London NW5 3AB

Reference	Target ADF based on room use		Average Daylight Factor Coefficients					Actual ADF	
	Primary room use	ADF	T	Aw	A	R	Theta	ADF	Result
Window 42 (lower)			0.68	0.05	76.99	0.71	86.2	0.0%	
Window 42 (upper)			0.68	1.32	76.99	0.71	86.9	2.0%	
Total ADF for room	Bedroom	1.0%						**3.9%**	**Pass**

Appendix 2 - Room Depth Calculation

22 Holmes Road, London NW5 3AB

Room	Room Depth Coefficients				Room Depth Calculation		
	L	W	H	Rb	L/W + L/H	<=	2/1-Rb
Proposed Basement Floor							
Window 1	5.5	3.7	2.7	0.67	3.52	<=	6.09
Window 3	5.5	3.7	2.7	0.67	3.52	<=	6.15
Window 5	7.9	3.6	2.7	0.67	5.12	<=	6.05
Window 6	7.9	3.6	2.7	0.67	5.12	<=	6.05
Window 7	7.9	3.6	2.7	0.67	5.12	<=	6.05
Window 8	7.9	3.6	2.7	0.67	5.12	<=	6.05
Proposed Ground Floor							
Window 9	7.5	3.6	2.1	0.69	5.65	<=	6.51
Window 10	8.5	3.6	2.1	0.69	6.41	<=	6.51
Window 11	4.0	7.9	2.6	0.69	2.04	<=	6.51
Window 12	3.9	9.4	2.6	0.7	1.91	<=	6.63
Window 13	7.5	3.5	2.1	0.7	5.71	<=	6.63
Window 14	7.5	3.5	2.1	0.7	5.71	<=	6.63
Window 15	10.1	4.2	2.1	0.67	7.21	<=	6.13
Window 16	10.1	4.2	2.1	0.67	7.21	<=	6.13
Window 17	10.1	4.1	2.1	0.67	7.27	<=	6.13
Window 18	10.1	4.1	2.1	0.67	7.27	<=	6.13
Window 19	10.1	4.1	2.1	0.67	7.27	<=	6.13
Window 23	5.0	2.8	2.4	0.72	3.87	<=	7.02
Proposed First Floor							
Window 25	3.0	3.9	2.0	0.72	2.27	<=	7.22
Window 26	3.0	3.9	2.1	0.72	2.2	<=	7.22
Window 27	3.4	3.4	2.6	0.73	2.31	<=	7.35
Window 29	3.6	3.3	2.6	0.73	2.48	<=	7.33
Window 31	3.0	3.8	2.1	0.72	2.22	<=	7.22
Window 32	3.0	3.8	2.0	0.72	2.29	<=	7.22

Appendix 2 - Room Depth Calculation

22 Holmes Road, London NW5 3AB

Room	Room Depth Coefficients				Room Depth Calculation		
	L	W	H	Rb	L/W + L/H	<=	2/1-Rb
Window 33	2.7	3.3	2.1	0.71	2.1	<=	6.97
Window 34	3.6	3.3	2.4	0.71	2.59	<=	6.91
Window 35	2.5	4.4	2.4	0.72	1.61	<=	7.06
Window 36	3.2	4.4	2.9	0.72	1.83	<=	7.06
Window 39	3.4	2.1	3.3	0.74	2.65	<=	7.68
Proposed Loft Floor							
Window 41	3.7	4.4	2.7	0.71	2.21	<=	6.8
Window 42	3.7	4.4	2.7	0.71	2.21	<=	6.8

Appendix 2 - Sunlight to Windows
22 Holmes Road, London NW5 3AB

Reference	Use Class	Annual Probable Sunlight Hours	
		Total	Winter
Proposed Basement Floor			
Window 5	Living/Dining/Kitchen	0%	0%
Window 6	Living/Dining/Kitchen	0%	0%
Window 7	Living/Dining/Kitchen	0%	0%
Window 8	Living/Dining/Kitchen	3%	0%
Proposed Ground Floor			
Window 9	Living Room	28%	8%
Window 10	Living Room	9%	2%
Window 11	Living Room	2%	0%
Window 12	Living Room	2%	0%
Window 13	Living Room	6%	0%
Window 14	Living Room	23%	0%
Window 15	Living/Dining/Kitchen	0%	0%
Window 16	Living/Dining/Kitchen	0%	0%
Window 17	Living/Dining/Kitchen	46%	12%
Window 18	Living/Dining/Kitchen	57%	18%
Window 19	Living/Dining/Kitchen	60%	20%
Window 20	Living/Dining/Kitchen	1%	0%
Window 21	Living/Dining/Kitchen	10%	0%
Window 22	Living/Dining/Kitchen	11%	0%
Window 23	Living Room	0%	0%
Window 24	Living Room	0%	0%

Appendix 2 - Overshadowing to Gardens and Open Spaces
22 Holmes Road, London NW5 3AB

Reference	Total Area	Area receiving at least 2 hours of sunlight on 21st March	
Proposed Ground Floor			
Garden 1	4.07 m2	0.0 m2	0%