

INTERNAL AMENITY REPORT

NEQ

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## 1.0 INTRODUCTION

You have instructed this practice to provide you with a report that addresses the quality of *internal daylight and sunlight to the proposed scheme at NEQ by reference to the planning consent dated 25<sup>th</sup> March 2009 referenced 2007/0823/P.*

In particular, you have requested that GIA address the following points:

1. That the proposed fins to the building as referred to within Condition 3 of the planning consent will not create an additional or material loss of light within or outside of the development.
2. That the quality of daylight and sunlight to the private residential units will be satisfactory against the BRE Guidelines as referred to within Condition 19.
3. That the overall results are satisfactory and not only in accordance with general BRE standards but also the London Borough of Camden's overall policy in connection with amenity.

There are three Appendices attached to this report which are as follows:

- Appendix 1 – Principles of Daylight and Sunlight
- Appendix 2 – Tables of Results
- Appendix 3 – Drawings

## 2.0 CONDITION 3

Condition 3 of the Planning Consent refers to the question as to whether the proposed fins on the building would create an additional or material worsening to the units within the scheme or any relevant neighbouring properties.

GIA have reviewed the impact on the proposed fins, and whilst there is a small change in the sky visibility the overall affect would not be material to any of the units and therefore we consider that the scheme as currently designed is acceptable and meets Condition 3.

### 3.0 CONDITION 19

This condition relates to the quality of the amenity within the private residential units. We have set out below the overall policy set out by Camden within their Core Strategy and their Development Policy Documents.

The 2006 Camden Replacement Unitary Development Plan referred to in planning condition 19 has, as of 8 November 2010, been replaced by the Camden Core Strategy and Camden Development Policies documents. These form part of Camden's Local Development Framework. Policy SD6 has been replaced by CS5 and DP26 and policy B1 has been replaced by CS14 and DP24.

Policy CS5 states, of protecting amenity, that:-

*"... Camden's inner London location, the close proximity of various uses and the presence of major roads and railways can mean that privacy, noise and light can be particular issues in the borough."*

*and that Camden*

*"...will expect development to avoid harmful effects on the amenity of existing and future occupiers and nearby properties or, where this is not possible, to take appropriate measures to minimise potential negative impacts"*

DP26 states that:-

*"To assess whether acceptable levels of daylight and sunlight are available to habitable spaces, the Council will take into account the standards recommended in the British Research Establishment's Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice (1991)."*

Policy CS14 and DP24 do not make specific reference to daylight amenity but state, of high quality design, that

*"Good design makes places that put people first, are welcoming, feel safe and are enjoyable and easy to use for everyone, whether they are living in, working in or just passing through the borough."*

#### 4.0 DEMONSTRATION THAT THE PRIVATE RESIDENTIAL UNITS ENJOY SATISFACTORY LEVELS OF SUNLIGHT AND DAYLIGHT

Within the Market Tower residential block there are 44 habitable rooms which benefit from north facing balconies and 60 habitable rooms which benefit from south facing balconies. The location and usage of those 104 rooms can be seen on GIA drawings 0039/516 to 0039/521 attached. The results of a sky visibility based ADF assessment indicates that 88 (85%) of those 104 rooms are BRE and British Standards compliant in terms of their level of daylight amenity for their specific room usage.

There are, however, 16 rooms served by south facing balconies which are unable to meet the daylight amenity requirements due to their low level locations. This is as a result of their restricted sky visibility due to the balconies above the windows, the existing surrounding buildings and their deeply recessed east or west facing windows which have been designed as such to respect the privacy of the occupants.

Contrary to some of the results of the sky visibility based ADF assessment, which are annotated upon the above referred to drawings and detailed within the analysis sheets attached, all of these rooms will still have some sense of natural daylight. This is demonstrated by the results of the more sophisticated daylight assessment of the above 16 rooms using the lighting software known as Radiance. As well as sky visibility and *internal reflectance levels*, the Radiance assessment also takes into consideration the light which is reflected into the rooms from the facades of the surrounding buildings. This is a particularly useful assessment for dense urban locations such as that of the proposed scheme.

The results of the Radiance assessment, which are also attached, indicate that two further 6<sup>th</sup> Floor rooms will meet the BRE and British Standards daylight as a result of the reflected light that they will benefit from. This, therefore, increases the overall compliance rate of these balcony served rooms to 87%. It should also be noted that 8 of the remaining 14 rooms are have been allocated as bedrooms which, by their very nature have a much lower expectation for natural daylight.

## 5.0 CONCLUSIONS

In conclusion, it can, therefore, be seen that only a very small percentage (ie: 15%) of the habitable rooms within the Market Tower are unable to meet the BRE and British Standards daylight amenity standards and even those which cannot, by virtue of their balconies and location in relation to existing buildings, will still have some sense of natural daylight. Steps have also been taken to ensure more bedrooms than principle habitable rooms are located in the areas of restricted access to natural daylight. This clearly demonstrates that policy CS5 has been considered and complied with as all appropriate measures have been taken to ensure potential negative impacts are minimised. It should, of course, be noted that whilst the provision of balconies inhibit levels of light to rooms beneath them, they equally offer another form of amenity to the resident which is generally recognised as an additional benefit to the overall quality of the demise.

# APPENDIX 1

PRINCIPLES OF DAYLIGHT AND SUNLIGHT



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## PRINCIPLES OF DAYLIGHT AND SUNLIGHT

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### BACKGROUND

The quality of amenity for buildings and open spaces is increasingly becoming the subject of concern and attention for many interested parties.

Historically the Department of Environment provided guidance of these issues and, in this country, this role has now been taken on by the Building Research Establishment (BRE), the British Standards Institution (BSI) and the Chartered Institute of Building Services Engineers (CIBSE). Fortunately they have collaborated in many areas to provide as much unified advice as possible in these areas.

Further emphasis has been placed on these issues through the European Directive that require Environmental Impact Assessments (EIA's) for large projects. Part of these assessments include the consideration of the micro-climate around and within a proposal. The EIA requires a developer to advise upon, amongst other matters, the quality of and impact to daylight, sunlight, overshadowing, solar glare and light pollution.

It is also clear, particularly through either adopted or emerging Unitary Development Plans (UDP's), that local Authorities take this matter far more seriously than they previously did. There are many instances of planning applications being refused due to impact on daylight and sunlight to neighbouring properties and proportionately more of these refusals are appealed by applicants.

Where developers are seeking to maximise their development value, it is often in the area of daylight and sunlight issues that they may seek to 'push the boundaries'. Local Authorities vary in their attitude of how flexible they can be with worsening the impact on the amenity enjoyed by neighbouring owners. In city centres, where there is high density, it can be the subject of hot debate as to whether further loss of amenity is material or not. There are many factors that need to be taken into account and therefore each case has to be considered on its own merits. Clearly, though, there are governing principles which direct and inform on the approach that is taken.

These principles are effectively embodied within the UDP's and the guidance they expressly rely upon. For example, in central London, practically all of the Local Authorities expressly state they will not permit or encourage developments which create a material impact to neighbouring buildings or amenity areas. Often the basis on what is constituted as 'material' will be derived specifically from the BRE Guidelines. The guidelines were produced in 1991, as a direct commission from the Department of the Environment, and entitled 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice'.

These guidelines are normally the only official document used by local Authorities and consequently they are referred to extensively by designers, consultants and planners. Whilst they are expressly not mandatory and state that they should not be used as an instrument of planning policy, they are heavily relied upon as they advise on the approach, methodology evaluation of impact in daylight and sunlight matters.

## THE BRE GUIDELINES

The BRE give criteria and methods for calculating daylight, and sunlight and to some degree overshadowing and through that approach define what they consider as a material impact. As these different methods of calculation vary in their depth of analysis, it is often arguable as to whether the BRE definition of 'material' is applicable in all locations and furthermore if it holds under the different methods of calculation.

As the majority of the controversial daylight and sunlight issues occur within city centres these explanatory notes focus on the relevant criteria and parts of the Handbook which are applicable in such locations.

In the Introduction of 'Site Layout Planning for Daylight and Sunlight' it states that:-

*"The guide is intended for building designers and their clients, consultants and planning officials. 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 (see Section 5). In special circumstances the developer or Planning Authority may wish to use different target values. For example, in an historic city centre a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings".*

Again, the second paragraph of Chapter 2.2 of the document states:-

*'Note that numerical values given here are purely advisory. Different criteria may be used, based on the requirements for daylighting in an area viewed against other site layout constraints'.*

The reason for including these statements in the Report is to appreciate that when quoting the criteria suggested by the BRE, they should not necessarily be considered as appropriate. However, rather than suggest alternative values, consultants in this field often remind local Authorities that this approach is supportable and thus flexibility applied.

## **MEASUREMENT AND CRITERIA FOR DAYLIGHT & SUNLIGHT**

The BRE handbook provides two main methods of measurement for calculating daylight which we use for the assessment in our Reports. In addition, in conjunction with the BSI and CIBSE it provides a further method in Appendix C of the Handbook. In relation to sunlight only one method is offered for calculating sunlight availability for buildings. There is an overshadowing test offered in connection with open spaces.

### **DAYLIGHT**

In the first instance, if a proposed development falls beneath a 25° angle taken from a point two metres above ground level, then the BRE say that no further analysis is required as there will be adequate skylight (i.e. sky visibility) availability.

The three methods for calculating daylight are as follows:

- (a) Vertical Sky Component (VSC)
- (b) No Sky Contours (NSC)
- (c) Average Daylight Factor (ADF)

Each are briefly described below.

#### **(a) Vertical Sky Component**

##### **Methodology**

This is defined in the Handbook as:-

*"Ratio of that part of illuminance, at a point on a given vertical plane, that is received directly from a CIE Standard Overcast Sky, to illuminate on a horizontal plane due to an unobstructed hemisphere of this sky."*

*"Note that numerical values given here are purely advisory. Different criteria may be used, based on the requirements for daylighting in an area viewed against other site layout constraints".*

The ratio referred to in the above definition is the percentage of the total unobstructed view that is available, once obstructions, in the form of buildings (trees are excluded) are placed in front of the point of view. The view is always taken from the centre of the outward face of a window.

This statement means, in practice, that if one had a totally unobstructed view of the sky, looking in a single direction, then just under 40% of the complete hemisphere would be visible.

The measurement of this vertical sky component is undertaken using two indicators, namely a skylight indicator and a transparent direction finder. Alternatively a further method of measuring the vertical sky component, which is easier to understand both in concept and analysis, is often more precise and can deal with more complex instructions, is that of the Waldram diagram.

The point of reference is the same as for the skylight indicator. Effectively a snap shot is taken from that point of the sky in front of the window, together with all the relevant obstructions to it, i.e. the buildings.

An unobstructed sky from that point of reference would give a vertical sky component of 39.6%, corresponding to 50% of the hemisphere, and therefore the purpose of the diagram is to discover how much sky remains once obstructions exist in front of that point.

The diagram comes on an A4 sheet (landscape) and this sheet represents the unobstructed sky, which in one direction equates to a vertical sky component of 39.6%. The obstructions in front of a point of reference are then plotted onto the diagram and the resultant area remaining is proportional to the vertical sky component from that point.

### Criteria

The BRE Handbook provides criteria for:

- (a) New Development
- (b) Existing Buildings

A summary of the criteria for each of these elements is given and these are repeated below:-

## New Development

### *Summary*

*In general, a building will retain the potential for good interior diffuse daylighting provided that on all its main faces:-*

- (a) no obstruction, measured in a vertical section perpendicular to the main face, from a point 2m above ground level, subtends an angle of more than 25 degrees to the horizontal;*
- (b) If (a) is not satisfied, then all points on the main face on a line 2m above ground level are within 4m (measured sideways) of a point which has a vertical sky component of 27% or more.*

## Existing Buildings

### *Summary*

*If any part of a new building or extension measured in a vertical section perpendicular to a main window wall of an existing building, from the centre of the lowest window, subtends an angle of more than 25 degree to the horizontal, then the diffuse daylighting of the existing building may be adversely affected. This will be the case if either:*

- (a) the vertical sky component measured at the centre of an existing main window is less than 27%, and less than 0.8 times its former value;*
- or*
- (b) 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.*

The VSC calculation has, like the other two methods, both advantages and disadvantages. In fact they are tied together. It is a quick simple test which looks to give an early indication of the potential for light. However, it does not, in any fashion, indicate the quality of actual light within a space. It does not take into account the window size, the room size or room use. It helps by indicating that if there is an appreciable amount of sky visible from a given point there will be a reasonable potential for daylighting.

**(b) No Sky Contours**

This is the part (b) of the alternative method of analysis which is given under the Vertical Sky Component heading in this Appendix. It is similar to the VSC approach in that a reduction of 0.8 times in the area of sky visibility at the working plane may be deemed to adversely affect daylight. It is however, very dependent upon knowing the actual room layouts or having a reasonable understanding of the likely layouts. The contours are also known as daylight distribution contours. They assist in helping to understand the way the daylight is distributed within a room and the comparisons of existing and limitations of proposed circumstances within neighbouring properties. Like the VSC method, it relates to the amount of visible sky but does not consider the room use in its criteria, it is simply a test to assess the change in position of the No Sky Line, between the existing and proposed situation. It does take into account the number and size of windows to a room, but does not give any quantitative or qualitative assessment of the light in the rooms, only where sky can or cannot be seen.

**(c) Average Daylight Factor**

This is defined in Appendix H of the BRE Document as:

*"Ratio of total daylight flux incident on the working plane, expressed as a percentage of the outdoor illuminance on a horizontal plane due to an unobstructed CIE Standard Overcast Sky."*

This factor considers interior daylighting to a room and therefore is a more accurate indication of available light in a given room, if details of the room size and use are available.

Criteria

The British Standard, BS8206 Part II gives the following recommendations for the average daylight factor (ADF) in dwellings.

The BRE Handbook provides the formula for calculating the average daylight factor. If the necessary information can be obtained to use the formula then this criteria would be more useful.

| Room         | Percentage |
|--------------|------------|
| Kitchen      | 2%         |
| Living Rooms | 1.5%       |
| Bedrooms     | 1%         |

It is sometimes questioned whether the use of the ADF is valid when assessing the impact on neighbouring buildings. Firstly, it is often the case that room layouts and uses may not have been established with certainty. Additionally this method is not cited in the main body of text in the BRE Guidelines but only in Appendix C of that document. It is however, the principal method used by both the British Standard and CIBSE in their detailed daylight publications with which the BRE guide recommends that it should be read.

The counter-argument to this view is that whilst room uses and layouts may be not definitely established, reasonable assumptions can easily be made to give sufficient understanding of the likely quality of light. Building types and layouts for certain buildings, particularly residential, are often similar. In these circumstances reasonable conclusions can be drawn as to whether a particular room will have sufficient light against the British Standards. In addition, the final result is less sensitive to changes in the room layout than the No Sky Contour method as it is an average and this element represents only one of the input factors. It is in cases where room sizes have been assumed a more reliable indicator than the No Sky Line method.

Clearly if a room which is being designed for a new development is deemed to have sufficient light against the British Standards, then it should equally follow for a room assessed in a neighbouring existing building.

The average daylight factor considers the light within the room behind the fenestration which serves it. The latter is therefore likely to be more accurate because it takes into account the following:-

- a) All the windows serving the room in question.
- b) The room use.
- c) The size and layout of the room.
- d) The finishes of the room surfaces.

## **SUMMARY**

The VSC (which forms part of the ADF formula) is helpful as an initial first guide, especially where access to the rooms in question is not available. Where the room layouts and uses are established or can be reasonably estimated we consider it appropriate to analyse the average daylight factor as well as the vertical sky component.

## SUNLIGHT

### (a) Annual Probable Sunlight Hours (APSH) method

Sunlight is measured in the Handbook in a similar manner to the first method given for measuring the VSC.

A separate indicator is used which contains 100 spots, each representing 1% of annual probable sunlight hours.

The BRE calculated that where no obstructions exist, the total annual probable sunlight hours would amount to 1486. Therefore, each dot on the indicator equates to 14.86 hours of the total annual probable sunlight. Again, to use this indicator the obstructions need to be scaled down and overlaid onto the sunlight indicator.

Those spots which remain uncovered by the scaled obstructions are counted and this gives the percentage of total annual probable sunlight hours for that particular reference point. Again, like the VSC, the reference point is taken to be the centre of the window.

#### Criteria

Again, the BRE Handbook gives criteria for:

- (a) New Development
- (b) Existing Buildings

A summary is given in the handbook on page 12 and this is as follows:-

#### New Development

##### *Summary*

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

- (a) at least one main window wall faces within 90 degrees of due south;
- and



- (b) on this window wall, all points on a line 2m above ground level are within 4m (measured sideways) of a point which receives at least a quarter of annual probable sunlight hours, including at least 5% of annual probable sunlight hours during the winter months, between 21 September and 21 March.

### Existing Buildings

#### *Summary*

*If a living room of an existing dwelling has a main window facing within 90 degrees of due south, and any part of a new development subtends an angle of more than 25 degrees to the horizontal measured from the centre of the window in a vertical section perpendicular to the window, then the sunlighting of the existing dwelling may be adversely affected. This will be the case if a point at the centre of the window, in the plane of the inner window wall, receives in the year less than one quarter of annual probable sunlight hours including at least 5% of annual probable sunlight hours between 21 September and 21 March and less than 0.8 times its former sunlight hours during either period.*

It will be noted that the BRE clearly separate summer from winter and indicate that a 20% reduction for either may be material. The Handbook also states that "To find out whether an existing building still receives enough sunlight, the British Standard can be used. It is suggested that all main living rooms of dwellings and conservatories, should be checked if they have a window facing within 90° of due south. Kitchens and bedrooms are less important, although care should be taken not to block too much sun ..... The British Standard recommends that a 'window reference point', at the centre of each window on the plane of the inside surface of the wall, should be used for the calculations" and thus this practice gives greater consideration to the effect on the main window of a living room.

#### **(b) Area of Permanent Shadow**

The BRE Handbook, 'Site Layout Planning for Daylight and Sunlight' also provides criteria for open spaces.

In particular it gives guidance for calculating any areas of open space that may be in permanent shadow on 21 March. There is no criteria for the overshadowing of buildings.

In summary the BRE document states the following:-

*"It is suggested that, for it to appear adequately sunlit throughout the year, no more than two-fifths and preferably no more than a quarter of any garden or amenity area should be prevented by buildings from*

*receiving any sun at all on 21 March. If, as a result of new development, an existing garden or amenity area does not meet these guidelines, and the area which can receive some sun on 21 March is less than 0.8 times its former value, then the loss of sunlight is likely to be noticeable".*

In relation to general overshadowing we often provide, where appropriate, an hourly record for existing and proposed situations, the effect of overshadowing on December 21<sup>st</sup>, March 21<sup>st</sup> and June 21<sup>st</sup>.

For open spaces the permanent shadow criteria is naturally adopted but this offers limited understanding of how a space will feel or appear generally.

## **CITY CENTRES**

The introduction of the BRE document gives the example of 'historic city centres' being a case where there is the need for flexibility and altering the target values for criteria when appropriate, to reflect other site and layout constraints.

To explain why it is appropriate to alter these values, one needs to go further into the BRE Handbook to examine how the criteria for the vertical sky component criteria was determined and the reason therefore for varying the criteria in City Centres.

Appendix G of the document is dedicated to the use of alternative values and, it also demonstrates the manner in which the criteria for skylight was determined for the Summary given above, i.e. the need for 27% vertical sky component for adequate daylighting.

This figure of 27% was achieved in the following manner:

*A theoretical road was created with two storey terraced houses upon either side, approximately twelve metres apart. The houses have windows at ground and first floor level, and a pitched roof with a central ridge.*

Thereafter, a reference point was taken at the centre of a ground floor window of one of the properties and a line was drawn from this point to the central ridge of the property on the other side of the road. The angle of this line equated to 25 degrees (the 25 degrees referred to in the summaries given with reference to the criteria for skylight).

This 25 degrees line obstructs 13% of the totally unobstructed sky available, leaving a resultant figure of 27% which is deemed to give adequate daylighting. This figure of 27% is the recommended criteria referred to earlier in this report. It will be readily appreciated that in a City Centre, this kind of urban form is unlikely and is

impractical. It would therefore be inappropriate to consider values for two storey terraced housing in a City Centre.

It is therefore sometimes necessary to apply different target criteria or at least acknowledge that the recommendations in the BRE cannot be achieved.

In addition, it is often the case that residential buildings within city centres are served by balconies. Balconies restrict lighting levels even more and thus if they were to be rigidly taken into account, a neighbouring proposal would be artificially and inappropriately constrained. This view is supported by the BRE and is equally another reason for flexible and sensible interpretation of the guidelines.

# APPENDIX 2

## TABLE OF RESULTS

| Room                               | Roomuse | Window      | VSC(%) | ADF(%) | TOTAL ADF(%) |
|------------------------------------|---------|-------------|--------|--------|--------------|
| <b>M&amp;M - RESIDENTIAL BLOCK</b> |         |             |        |        |              |
| R1/1001                            | STUDIO  | W1/1001     | 23.23  | 1.77   | 1.77         |
| R2/1001                            | BEDROOM | W2/1001     | 23.44  | 2.12   | 2.12         |
| R3/1001                            | LKD     | W3/1001     | 23.57  | 0.98   | 0.98         |
| R4/1001                            | LKD     | W4/1001     | 23.60  | 0.97   | 0.97         |
| R5/1001                            | BEDROOM | W5/1001     | 23.61  | 2.14   | 2.14         |
| R6/1001                            | STUDIO  | W6/1001     | 23.50  | 1.00   | 1.00         |
| R1/1002                            | LKD     | W1/1002     | 14.29  | 0.43   |              |
| R1/1002                            | LKD     | W2/1002     | 14.33  | 0.53   |              |
| R1/1002                            | LKD     | W3/1002     | 14.68  | 0.54   |              |
| R1/1002                            | LKD     | W4/1002     | 15.94  | 0.58   |              |
| R1/1002                            | LKD     | W21/1002    | 0.00   | 0.00   |              |
| R1/1002                            | LKD     | W22/1002    | 0.00   | 0.00   |              |
| R1/1002                            | LKD     | W23/1002    | 0.00   | 0.00   |              |
| R1/1002                            | LKD     | W24/1002    | 0.00   | 0.00   |              |
| R1/1002                            | LKD     | W25/1002    | 0.00   | 0.00   |              |
| R1/1002                            | LKD     | W26/1002    | 0.19   | 0.03   |              |
| R1/1002                            | LKD     | W27/1002    | 0.50   | 0.09   |              |
| R1/1002                            | LKD     | W28/1002    | 2.78   | 0.17   | 2.37         |
| R2/1002                            | BEDROOM | W5/1002     | 21.90  | 1.75   |              |
| R2/1002                            | BEDROOM | W6/1002     | 23.44  | 1.61   | 3.36         |
| R3/1002                            | BEDROOM | W7/1002     | 23.37  | 1.69   |              |
| R3/1002                            | BEDROOM | W8/1002     | 21.92  | 1.61   | 3.30         |
| R4/1002                            | LKD     | W9/1002     | 15.90  | 0.58   |              |
| R4/1002                            | LKD     | W11/1002    | 13.97  | 0.55   |              |
| R4/1002                            | LKD     | W12/1002    | 13.56  | 0.43   |              |
| R4/1002                            | LKD     | W13/1002    | 1.74   | 0.13   |              |
| R4/1002                            | LKD     | W14/1002    | 0.36   | 0.07   |              |
| R4/1002                            | LKD     | W15/1002    | 0.00   | 0.00   |              |
| R4/1002                            | LKD     | W16/1002    | 0.00   | 0.00   |              |
| R4/1002                            | LKD     | W17/1002    | 0.00   | 0.00   |              |
| R4/1002                            | LKD     | W18/1002    | 0.00   | 0.00   |              |
| R4/1002                            | LKD     | W19/1002    | 0.00   | 0.00   |              |
| R4/1002                            | LKD     | W11002/1002 | 14.52  | 0.55   |              |
| R4/1002                            | LKD     | W21002/1002 | 0.00   | 0.00   | 2.30         |
| R1/1003                            | LKD     | W1/1003     | 9.34   | 0.42   |              |
| R1/1003                            | LKD     | W2/1003     | 8.38   | 0.39   |              |
| R1/1003                            | LKD     | W3/1003     | 8.15   | 0.38   |              |
| R1/1003                            | LKD     | W4/1003     | 8.17   | 0.39   |              |
| R1/1003                            | LKD     | W5/1003     | 8.31   | 0.39   |              |
| R1/1003                            | LKD     | W6/1003     | 8.41   | 0.39   |              |
| R1/1003                            | LKD     | W7/1003     | 7.97   | 0.37   |              |
| R1/1003                            | LKD     | W39/1003    | 7.23   | 0.02   |              |
| R1/1003                            | LKD     | W40/1003    | 9.70   | 0.22   | 2.97         |
| R2/1003                            | LKD     | W8/1003     | 8.08   | 0.35   |              |
| R2/1003                            | LKD     | W9/1003     | 8.40   | 0.37   |              |
| R2/1003                            | LKD     | W10/1003    | 8.14   | 0.36   |              |
| R2/1003                            | LKD     | W11/1003    | 7.94   | 0.36   |              |
| R2/1003                            | LKD     | W12/1003    | 7.79   | 0.35   |              |
| R2/1003                            | LKD     | W13/1003    | 7.62   | 0.35   |              |
| R2/1003                            | LKD     | W14/1003    | 7.87   | 0.36   |              |
| R2/1003                            | LKD     | W27/1003    | 1.48   | 0.00   |              |
| R2/1003                            | LKD     | W28/1003    | 0.98   | 0.00   | 2.50         |
| R3/1003                            | BEDROOM | W29/1003    | 0.95   | 0.00   | 0.00         |

| Room     | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL<br>ADF(%) |
|----------|---------|----------|--------|--------|-----------------|
| R4/1003  | BEDROOM | W30/1003 | 2.26   | 0.00   | 0.00            |
| R5/1003  | LD      | W15/1003 | 0.00   | 0.00   |                 |
| R5/1003  | LD      | W16/1003 | 0.00   | 0.00   |                 |
| R5/1003  | LD      | W17/1003 | 0.00   | 0.00   |                 |
| R5/1003  | LD      | W32/1003 | 3.48   | 0.00   |                 |
| R5/1003  | LD      | W33/1003 | 3.39   | 0.00   | 0.00            |
| R6/1003  | BEDROOM | W18/1003 | 0.00   | 0.00   |                 |
| R6/1003  | BEDROOM | W19/1003 | 0.00   | 0.00   |                 |
| R6/1003  | BEDROOM | W20/1003 | 0.00   | 0.00   | 0.00            |
| R7/1003  | BEDROOM | W21/1003 | 0.63   | 0.23   |                 |
| R7/1003  | BEDROOM | W22/1003 | 0.00   | 0.00   |                 |
| R7/1003  | BEDROOM | W23/1003 | 0.00   | 0.00   | 0.23            |
| R8/1003  | LD      | W24/1003 | 0.00   | 0.00   |                 |
| R8/1003  | LD      | W25/1003 | 0.00   | 0.00   |                 |
| R8/1003  | LD      | W26/1003 | 0.00   | 0.00   |                 |
| R8/1003  | LD      | W34/1003 | 2.37   | 0.06   |                 |
| R8/1003  | LD      | W35/1003 | 2.08   | 0.00   | 0.06            |
| R9/1003  | BEDROOM | W37/1003 | 4.63   | 0.00   | 0.00            |
| R10/1003 | BEDROOM | W38/1003 | 7.32   | 0.27   | 0.27            |
| R1/1004  | LKD     | W1/1004  | 12.20  | 0.49   |                 |
| R1/1004  | LKD     | W2/1004  | 10.92  | 0.46   |                 |
| R1/1004  | LKD     | W3/1004  | 10.62  | 0.45   |                 |
| R1/1004  | LKD     | W4/1004  | 10.63  | 0.45   |                 |
| R1/1004  | LKD     | W5/1004  | 10.76  | 0.45   |                 |
| R1/1004  | LKD     | W6/1004  | 10.87  | 0.45   |                 |
| R1/1004  | LKD     | W7/1004  | 10.28  | 0.43   |                 |
| R1/1004  | LKD     | W39/1004 | 13.31  | 0.37   |                 |
| R1/1004  | LKD     | W40/1004 | 13.77  | 0.34   | 3.88            |
| R2/1004  | LKD     | W8/1004  | 10.24  | 0.40   |                 |
| R2/1004  | LKD     | W9/1004  | 10.76  | 0.43   |                 |
| R2/1004  | LKD     | W10/1004 | 10.52  | 0.42   |                 |
| R2/1004  | LKD     | W11/1004 | 10.32  | 0.42   |                 |
| R2/1004  | LKD     | W12/1004 | 10.16  | 0.41   |                 |
| R2/1004  | LKD     | W13/1004 | 9.96   | 0.41   |                 |
| R2/1004  | LKD     | W14/1004 | 10.20  | 0.42   |                 |
| R2/1004  | LKD     | W27/1004 | 2.20   | 0.00   |                 |
| R2/1004  | LKD     | W28/1004 | 1.73   | 0.00   | 2.91            |
| R3/1004  | BEDROOM | W29/1004 | 2.28   | 0.00   | 0.00            |
| R4/1004  | BEDROOM | W30/1004 | 3.22   | 0.00   | 0.00            |
| R5/1004  | LD      | W15/1004 | 0.00   | 0.00   |                 |
| R5/1004  | LD      | W16/1004 | 0.00   | 0.00   |                 |
| R5/1004  | LD      | W17/1004 | 0.00   | 0.00   |                 |
| R5/1004  | LD      | W32/1004 | 5.14   | 0.00   |                 |
| R5/1004  | LD      | W33/1004 | 5.79   | 0.00   | 0.00            |
| R6/1004  | BEDROOM | W18/1004 | 0.00   | 0.00   |                 |
| R6/1004  | BEDROOM | W19/1004 | 0.00   | 0.00   |                 |
| R6/1004  | BEDROOM | W20/1004 | 0.00   | 0.00   | 0.00            |
| R7/1004  | BEDROOM | W21/1004 | 1.20   | 0.32   |                 |
| R7/1004  | BEDROOM | W22/1004 | 0.00   | 0.00   |                 |
| R7/1004  | BEDROOM | W23/1004 | 0.00   | 0.00   | 0.32            |
| R8/1004  | LD      | W24/1004 | 0.00   | 0.00   |                 |
| R8/1004  | LD      | W25/1004 | 0.00   | 0.00   |                 |
| R8/1004  | LD      | W26/1004 | 0.00   | 0.00   |                 |
| R8/1004  | LD      | W34/1004 | 2.26   | 0.00   |                 |

| Room     | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|----------|---------|----------|--------|--------|--------------|
| R8/1004  | LD      | W35/1004 | 4.63   | 0.22   | 0.22         |
| R9/1004  | BEDROOM | W37/1004 | 9.38   | 0.66   | 0.66         |
| R10/1004 | BEDROOM | W38/1004 | 11.13  | 0.59   | 0.59         |
| R1/1005  | LKD     | W1/1005  | 15.11  | 0.55   |              |
| R1/1005  | LKD     | W2/1005  | 13.68  | 0.52   |              |
| R1/1005  | LKD     | W3/1005  | 13.24  | 0.51   |              |
| R1/1005  | LKD     | W4/1005  | 13.15  | 0.51   |              |
| R1/1005  | LKD     | W5/1005  | 13.20  | 0.51   |              |
| R1/1005  | LKD     | W6/1005  | 13.29  | 0.51   |              |
| R1/1005  | LKD     | W7/1005  | 12.54  | 0.48   |              |
| R1/1005  | LKD     | W39/1005 | 18.44  | 0.48   |              |
| R1/1005  | LKD     | W40/1005 | 20.42  | 0.54   | 4.61         |
| R2/1005  | LKD     | W8/1005  | 12.31  | 0.45   |              |
| R2/1005  | LKD     | W9/1005  | 13.03  | 0.48   |              |
| R2/1005  | LKD     | W10/1005 | 12.80  | 0.47   |              |
| R2/1005  | LKD     | W11/1005 | 12.60  | 0.47   |              |
| R2/1005  | LKD     | W12/1005 | 12.43  | 0.47   |              |
| R2/1005  | LKD     | W13/1005 | 12.22  | 0.46   |              |
| R2/1005  | LKD     | W14/1005 | 12.45  | 0.47   |              |
| R2/1005  | LKD     | W27/1005 | 4.52   | 0.00   |              |
| R2/1005  | LKD     | W28/1005 | 4.02   | 0.00   | 3.27         |
| R3/1005  | BEDROOM | W29/1005 | 4.47   | 0.00   | 0.00         |
| R4/1005  | BEDROOM | W30/1005 | 6.01   | 0.16   | 0.16         |
| R5/1005  | LD      | W15/1005 | 0.06   | 0.03   |              |
| R5/1005  | LD      | W16/1005 | 0.06   | 0.03   |              |
| R5/1005  | LD      | W17/1005 | 0.06   | 0.03   |              |
| R5/1005  | LD      | W32/1005 | 8.77   | 0.08   |              |
| R5/1005  | LD      | W33/1005 | 9.17   | 0.14   | 0.31         |
| R6/1005  | BEDROOM | W18/1005 | 0.06   | 0.04   |              |
| R6/1005  | BEDROOM | W19/1005 | 0.06   | 0.04   |              |
| R6/1005  | BEDROOM | W20/1005 | 0.20   | 0.12   | 0.19         |
| R7/1005  | BEDROOM | W21/1005 | 1.93   | 0.41   |              |
| R7/1005  | BEDROOM | W22/1005 | 0.20   | 0.12   |              |
| R7/1005  | BEDROOM | W23/1005 | 0.03   | 0.02   | 0.56         |
| R8/1005  | LD      | W24/1005 | 0.02   | 0.01   |              |
| R8/1005  | LD      | W25/1005 | 0.02   | 0.01   |              |
| R8/1005  | LD      | W26/1005 | 0.02   | 0.01   |              |
| R8/1005  | LD      | W34/1005 | 4.19   | 0.06   |              |
| R8/1005  | LD      | W35/1005 | 5.17   | 0.15   | 0.24         |
| R9/1005  | BEDROOM | W37/1005 | 12.55  | 0.80   | 0.80         |
| R10/1005 | BEDROOM | W38/1005 | 17.47  | 1.01   | 1.01         |
| R1/1006  | LKD     | W1/1006  | 17.44  | 0.60   |              |
| R1/1006  | LKD     | W2/1006  | 15.96  | 0.57   |              |
| R1/1006  | LKD     | W3/1006  | 15.52  | 0.56   |              |
| R1/1006  | LKD     | W4/1006  | 15.41  | 0.56   |              |
| R1/1006  | LKD     | W5/1006  | 15.45  | 0.56   |              |
| R1/1006  | LKD     | W6/1006  | 15.52  | 0.56   |              |
| R1/1006  | LKD     | W7/1006  | 14.63  | 0.53   |              |
| R1/1006  | LKD     | W39/1006 | 20.51  | 0.54   |              |
| R1/1006  | LKD     | W40/1006 | 21.32  | 0.51   | 4.99         |
| R2/1006  | LKD     | W8/1006  | 14.27  | 0.49   |              |
| R2/1006  | LKD     | W9/1006  | 15.16  | 0.52   |              |
| R2/1006  | LKD     | W10/1006 | 14.94  | 0.52   |              |
| R2/1006  | LKD     | W11/1006 | 14.74  | 0.52   |              |

| Room     | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|----------|---------|----------|--------|--------|--------------|
| R2/1006  | LKD     | W12/1006 | 14.56  | 0.51   |              |
| R2/1006  | LKD     | W13/1006 | 14.34  | 0.51   |              |
| R2/1006  | LKD     | W14/1006 | 14.57  | 0.51   |              |
| R2/1006  | LKD     | W27/1006 | 9.80   | 0.00   |              |
| R2/1006  | LKD     | W28/1006 | 9.34   | 0.00   | 3.59         |
| R3/1006  | BEDROOM | W29/1006 | 9.66   | 0.14   | 0.14         |
| R4/1006  | BEDROOM | W30/1006 | 11.21  | 0.29   | 0.29         |
| R5/1006  | LD      | W15/1006 | 0.99   | 0.19   |              |
| R5/1006  | LD      | W16/1006 | 0.95   | 0.19   |              |
| R5/1006  | LD      | W17/1006 | 0.96   | 0.19   |              |
| R5/1006  | LD      | W32/1006 | 14.19  | 0.43   |              |
| R5/1006  | LD      | W33/1006 | 14.39  | 0.42   | 1.41         |
| R6/1006  | BEDROOM | W18/1006 | 0.99   | 0.27   |              |
| R6/1006  | BEDROOM | W19/1006 | 0.98   | 0.27   |              |
| R6/1006  | BEDROOM | W20/1006 | 1.38   | 0.33   | 0.86         |
| R7/1006  | BEDROOM | W21/1006 | 3.21   | 0.53   |              |
| R7/1006  | BEDROOM | W22/1006 | 1.40   | 0.33   |              |
| R7/1006  | BEDROOM | W23/1006 | 0.91   | 0.24   | 1.10         |
| R8/1006  | LD      | W24/1006 | 0.85   | 0.17   |              |
| R8/1006  | LD      | W25/1006 | 0.83   | 0.17   |              |
| R8/1006  | LD      | W26/1006 | 0.81   | 0.17   |              |
| R8/1006  | LD      | W34/1006 | 4.47   | 0.00   |              |
| R8/1006  | LD      | W35/1006 | 7.01   | 0.28   | 0.78         |
| R9/1006  | BEDROOM | W37/1006 | 14.44  | 0.94   | 0.94         |
| R10/1006 | BEDROOM | W38/1006 | 18.12  | 0.94   | 0.94         |
| R1/1007  | LKD     | W1/1007  | 18.69  | 0.63   |              |
| R1/1007  | LKD     | W2/1007  | 17.21  | 0.60   |              |
| R1/1007  | LKD     | W3/1007  | 16.78  | 0.59   |              |
| R1/1007  | LKD     | W4/1007  | 16.67  | 0.59   |              |
| R1/1007  | LKD     | W5/1007  | 16.71  | 0.59   |              |
| R1/1007  | LKD     | W6/1007  | 16.77  | 0.59   |              |
| R1/1007  | LKD     | W7/1007  | 15.76  | 0.56   |              |
| R1/1007  | LKD     | W39/1007 | 21.26  | 0.50   |              |
| R1/1007  | LKD     | W40/1007 | 22.99  | 0.57   | 5.19         |
| R2/1007  | LKD     | W8/1007  | 15.44  | 0.52   |              |
| R2/1007  | LKD     | W9/1007  | 16.47  | 0.55   |              |
| R2/1007  | LKD     | W10/1007 | 16.27  | 0.55   |              |
| R2/1007  | LKD     | W11/1007 | 16.09  | 0.54   |              |
| R2/1007  | LKD     | W12/1007 | 15.92  | 0.54   |              |
| R2/1007  | LKD     | W13/1007 | 15.90  | 0.54   |              |
| R2/1007  | LKD     | W14/1007 | 16.82  | 0.56   |              |
| R2/1007  | LKD     | W27/1007 | 19.99  | 0.36   |              |
| R2/1007  | LKD     | W28/1007 | 19.56  | 0.36   | 4.53         |
| R3/1007  | BEDROOM | W29/1007 | 19.80  | 0.96   | 0.96         |
| R4/1007  | BEDROOM | W30/1007 | 20.33  | 0.89   | 0.89         |
| R5/1007  | LD      | W15/1007 | 3.66   | 0.41   |              |
| R5/1007  | LD      | W16/1007 | 2.45   | 0.33   |              |
| R5/1007  | LD      | W17/1007 | 2.46   | 0.33   |              |
| R5/1007  | LD      | W32/1007 | 21.01  | 0.72   |              |
| R5/1007  | LD      | W33/1007 | 20.74  | 0.70   | 2.48         |
| R6/1007  | BEDROOM | W18/1007 | 2.46   | 0.46   |              |
| R6/1007  | BEDROOM | W19/1007 | 2.44   | 0.46   |              |
| R6/1007  | BEDROOM | W20/1007 | 3.11   | 0.53   | 1.44         |



INTERNAL DAYLIGHT ANALYSIS

| Room     | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|----------|---------|----------|--------|--------|--------------|
| R7/1007  | BEDROOM | W21/1007 | 4.63   | 0.64   |              |
| R7/1007  | BEDROOM | W22/1007 | 2.77   | 0.48   |              |
| R7/1007  | BEDROOM | W23/1007 | 2.29   | 0.43   | 1.56         |
| R8/1007  | LD      | W24/1007 | 1.97   | 0.28   |              |
| R8/1007  | LD      | W25/1007 | 1.92   | 0.28   |              |
| R8/1007  | LD      | W26/1007 | 1.87   | 0.28   |              |
| R8/1007  | LD      | W34/1007 | 6.81   | 0.06   |              |
| R8/1007  | LD      | W35/1007 | 7.99   | 0.16   | 1.06         |
| R9/1007  | BEDROOM | W37/1007 | 15.23  | 0.83   | 0.83         |
| R10/1007 | BEDROOM | W38/1007 | 20.02  | 1.05   | 1.05         |
| R1/1008  | LKD     | W1/1008  | 18.81  | 0.63   |              |
| R1/1008  | LKD     | W2/1008  | 17.34  | 0.60   |              |
| R1/1008  | LKD     | W3/1008  | 16.90  | 0.59   |              |
| R1/1008  | LKD     | W4/1008  | 16.79  | 0.59   |              |
| R1/1008  | LKD     | W5/1008  | 16.83  | 0.59   |              |
| R1/1008  | LKD     | W6/1008  | 16.91  | 0.59   |              |
| R1/1008  | LKD     | W7/1008  | 15.80  | 0.56   |              |
| R1/1008  | LKD     | W39/1008 | 23.25  | 0.55   |              |
| R1/1008  | LKD     | W40/1008 | 23.76  | 0.52   | 5.21         |
| R2/1008  | LKD     | W8/1008  | 15.73  | 0.53   |              |
| R2/1008  | LKD     | W9/1008  | 16.82  | 0.56   |              |
| R2/1008  | LKD     | W10/1008 | 16.73  | 0.56   |              |
| R2/1008  | LKD     | W11/1008 | 16.66  | 0.56   |              |
| R2/1008  | LKD     | W12/1008 | 16.73  | 0.56   |              |
| R2/1008  | LKD     | W13/1008 | 17.11  | 0.56   |              |
| R2/1008  | LKD     | W14/1008 | 18.50  | 0.59   |              |
| R2/1008  | LKD     | W27/1008 | 29.51  | 0.59   |              |
| R2/1008  | LKD     | W28/1008 | 28.87  | 0.57   | 5.06         |
| R3/1008  | BEDROOM | W29/1008 | 28.37  | 1.43   | 1.43         |
| R4/1008  | BEDROOM | W30/1008 | 28.16  | 1.16   |              |
| R4/1008  | BEDROOM | W31/1008 | 27.91  | 1.15   | 2.32         |
| R5/1008  | LD      | W15/1008 | 6.59   | 0.37   |              |
| R5/1008  | LD      | W16/1008 | 5.10   | 0.32   |              |
| R5/1008  | LD      | W17/1008 | 4.67   | 0.30   |              |
| R5/1008  | LD      | W18/1008 | 4.43   | 0.30   |              |
| R5/1008  | LD      | W19/1008 | 4.38   | 0.30   |              |
| R5/1008  | LD      | W20/1008 | 5.26   | 0.33   |              |
| R5/1008  | LD      | W33/1008 | 27.51  | 0.62   |              |
| R5/1008  | LD      | W43/1008 | 4.49   | 0.30   | 2.82         |
| R6/1008  | LD      | W21/1008 | 6.13   | 0.35   |              |
| R6/1008  | LD      | W22/1008 | 4.22   | 0.29   |              |
| R6/1008  | LD      | W23/1008 | 3.71   | 0.26   |              |
| R6/1008  | LD      | W24/1008 | 3.27   | 0.25   |              |
| R6/1008  | LD      | W25/1008 | 3.13   | 0.24   |              |
| R6/1008  | LD      | W26/1008 | 3.02   | 0.24   |              |
| R6/1008  | LD      | W34/1008 | 8.89   | 0.00   |              |
| R6/1008  | LD      | W44/1008 | 3.44   | 0.26   | 1.88         |
| R7/1008  | BEDROOM | W36/1008 | 13.29  | 0.47   |              |
| R7/1008  | BEDROOM | W37/1008 | 17.83  | 0.85   | 1.32         |
| R10/1008 | BEDROOM | W38/1008 | 21.24  | 0.96   | 0.96         |
| R1/1009  | LKD     | W1/1009  | 18.82  | 0.63   |              |
| R1/1009  | LKD     | W2/1009  | 17.34  | 0.60   |              |
| R1/1009  | LKD     | W3/1009  | 16.91  | 0.59   |              |
| R1/1009  | LKD     | W4/1009  | 16.80  | 0.59   |              |
| R1/1009  | LKD     | W5/1009  | 16.83  | 0.59   |              |
| R1/1009  | LKD     | W6/1009  | 16.91  | 0.59   |              |

| Room     | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL<br>ADF(%) |
|----------|---------|----------|--------|--------|-----------------|
| R1/1009  | LKD     | W7/1009  | 15.80  | 0.56   |                 |
| R1/1009  | LKD     | W39/1009 | 23.69  | 0.50   |                 |
| R1/1009  | LKD     | W40/1009 | 24.97  | 0.57   | 5.22            |
| R2/1009  | LKD     | W8/1009  | 15.80  | 0.53   |                 |
| R2/1009  | LKD     | W9/1009  | 16.91  | 0.56   |                 |
| R2/1009  | LKD     | W10/1009 | 16.83  | 0.56   |                 |
| R2/1009  | LKD     | W11/1009 | 16.80  | 0.56   |                 |
| R2/1009  | LKD     | W12/1009 | 16.91  | 0.56   |                 |
| R2/1009  | LKD     | W13/1009 | 17.34  | 0.57   |                 |
| R2/1009  | LKD     | W14/1009 | 18.82  | 0.60   |                 |
| R2/1009  | LKD     | W27/1009 | 34.55  | 0.69   |                 |
| R2/1009  | LKD     | W28/1009 | 34.22  | 0.68   | 5.29            |
| R3/1009  | BEDROOM | W29/1009 | 34.11  | 1.73   | 1.73            |
| R4/1009  | BEDROOM | W30/1009 | 33.88  | 1.40   |                 |
| R4/1009  | BEDROOM | W31/1009 | 33.87  | 1.41   | 2.81            |
| R5/1009  | LKD     | W15/1009 | 9.49   | 0.34   |                 |
| R5/1009  | LKD     | W16/1009 | 7.85   | 0.31   |                 |
| R5/1009  | LKD     | W17/1009 | 7.29   | 0.30   |                 |
| R5/1009  | LKD     | W18/1009 | 6.78   | 0.29   |                 |
| R5/1009  | LKD     | W19/1009 | 6.62   | 0.28   |                 |
| R5/1009  | LKD     | W20/1009 | 7.60   | 0.31   |                 |
| R5/1009  | LKD     | W32/1009 | 33.79  | 0.59   |                 |
| R5/1009  | LKD     | W33/1009 | 33.67  | 0.57   |                 |
| R5/1009  | LKD     | W43/1009 | 7.00   | 0.29   | 3.27            |
| R6/1009  | LKD     | W21/1009 | 7.81   | 0.31   |                 |
| R6/1009  | LKD     | W22/1009 | 5.84   | 0.26   |                 |
| R6/1009  | LKD     | W23/1009 | 5.30   | 0.25   |                 |
| R6/1009  | LKD     | W24/1009 | 4.73   | 0.23   |                 |
| R6/1009  | LKD     | W25/1009 | 4.48   | 0.22   |                 |
| R6/1009  | LKD     | W26/1009 | 4.29   | 0.22   |                 |
| R6/1009  | LKD     | W34/1009 | 13.02  | 0.13   |                 |
| R6/1009  | LKD     | W35/1009 | 13.79  | 0.10   |                 |
| R6/1009  | LKD     | W44/1009 | 4.96   | 0.24   | 1.95            |
| R7/1009  | BEDROOM | W36/1009 | 16.55  | 0.64   |                 |
| R7/1009  | BEDROOM | W37/1009 | 19.25  | 0.76   | 1.40            |
| R10/1009 | BEDROOM | W38/1009 | 23.02  | 1.06   | 1.06            |
| R1/1010  | LKD     | W1/1010  | 18.82  | 0.63   |                 |
| R1/1010  | LKD     | W2/1010  | 17.34  | 0.60   |                 |
| R1/1010  | LKD     | W3/1010  | 16.91  | 0.59   |                 |
| R1/1010  | LKD     | W4/1010  | 16.80  | 0.59   |                 |
| R1/1010  | LKD     | W5/1010  | 16.83  | 0.59   |                 |
| R1/1010  | LKD     | W6/1010  | 16.91  | 0.59   |                 |
| R1/1010  | LKD     | W7/1010  | 15.80  | 0.56   |                 |
| R1/1010  | LKD     | W39/1010 | 25.09  | 0.55   |                 |
| R1/1010  | LKD     | W40/1010 | 25.40  | 0.54   | 5.23            |
| R2/1010  | LKD     | W8/1010  | 15.80  | 0.53   |                 |
| R2/1010  | LKD     | W9/1010  | 16.91  | 0.56   |                 |
| R2/1010  | LKD     | W10/1010 | 16.83  | 0.56   |                 |
| R2/1010  | LKD     | W11/1010 | 16.80  | 0.56   |                 |
| R2/1010  | LKD     | W12/1010 | 16.91  | 0.56   |                 |
| R2/1010  | LKD     | W13/1010 | 17.34  | 0.57   |                 |
| R2/1010  | LKD     | W14/1010 | 18.82  | 0.60   |                 |
| R2/1010  | LKD     | W27/1010 | 35.67  | 0.71   |                 |
| R2/1010  | LKD     | W28/1010 | 35.75  | 0.71   | 5.34            |
| R3/1010  | BEDROOM | W29/1010 | 35.67  | 1.80   | 1.80            |
| R4/1010  | BEDROOM | W30/1010 | 35.75  | 1.49   |                 |
| R4/1010  | BEDROOM | W31/1010 | 35.67  | 1.48   | 2.96            |

| Room     | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|----------|---------|----------|--------|--------|--------------|
| R5/1010  | LKD     | W15/1010 | 11.32  | 0.38   |              |
| R5/1010  | LKD     | W16/1010 | 9.61   | 0.35   |              |
| R5/1010  | LKD     | W17/1010 | 9.01   | 0.33   |              |
| R5/1010  | LKD     | W18/1010 | 8.41   | 0.32   |              |
| R5/1010  | LKD     | W19/1010 | 8.24   | 0.32   |              |
| R5/1010  | LKD     | W20/1010 | 9.37   | 0.34   |              |
| R5/1010  | LKD     | W32/1010 | 35.73  | 0.62   |              |
| R5/1010  | LKD     | W33/1010 | 35.66  | 0.60   |              |
| R5/1010  | LKD     | W43/1010 | 8.69   | 0.33   | 3.59         |
| R6/1010  | LKD     | W21/1010 | 9.33   | 0.34   |              |
| R6/1010  | LKD     | W22/1010 | 7.37   | 0.30   |              |
| R6/1010  | LKD     | W23/1010 | 6.85   | 0.28   |              |
| R6/1010  | LKD     | W24/1010 | 6.27   | 0.27   |              |
| R6/1010  | LKD     | W25/1010 | 5.96   | 0.26   |              |
| R6/1010  | LKD     | W26/1010 | 5.82   | 0.26   |              |
| R6/1010  | LKD     | W34/1010 | 15.89  | 0.17   |              |
| R6/1010  | LKD     | W35/1010 | 17.73  | 0.27   |              |
| R6/1010  | LKD     | W44/1010 | 6.52   | 0.28   | 2.42         |
| R7/1010  | BEDROOM | W36/1010 | 18.82  | 0.66   |              |
| R7/1010  | BEDROOM | W37/1010 | 21.75  | 0.92   | 1.58         |
| R10/1010 | BEDROOM | W38/1010 | 23.47  | 0.98   | 0.98         |
| R1/1011  | LKD     | W1/1011  | 18.82  | 0.63   |              |
| R1/1011  | LKD     | W2/1011  | 17.34  | 0.60   |              |
| R1/1011  | LKD     | W3/1011  | 16.91  | 0.59   |              |
| R1/1011  | LKD     | W4/1011  | 16.80  | 0.59   |              |
| R1/1011  | LKD     | W5/1011  | 16.83  | 0.59   |              |
| R1/1011  | LKD     | W6/1011  | 16.91  | 0.59   |              |
| R1/1011  | LKD     | W7/1011  | 15.80  | 0.56   |              |
| R1/1011  | LKD     | W39/1011 | 25.59  | 0.53   |              |
| R1/1011  | LKD     | W40/1011 | 26.75  | 0.58   | 5.26         |
| R2/1011  | LKD     | W8/1011  | 15.80  | 0.53   |              |
| R2/1011  | LKD     | W9/1011  | 16.91  | 0.56   |              |
| R2/1011  | LKD     | W10/1011 | 16.83  | 0.56   |              |
| R2/1011  | LKD     | W11/1011 | 16.80  | 0.56   |              |
| R2/1011  | LKD     | W12/1011 | 16.91  | 0.56   |              |
| R2/1011  | LKD     | W13/1011 | 17.34  | 0.57   |              |
| R2/1011  | LKD     | W14/1011 | 18.82  | 0.60   |              |
| R2/1011  | LKD     | W27/1011 | 35.75  | 0.71   |              |
| R2/1011  | LKD     | W28/1011 | 35.67  | 0.71   | 5.34         |
| R3/1011  | BEDROOM | W29/1011 | 35.75  | 1.81   | 1.81         |
| R4/1011  | BEDROOM | W30/1011 | 35.67  | 1.48   |              |
| R4/1011  | BEDROOM | W31/1011 | 35.75  | 1.49   | 2.96         |
| R5/1011  | LKD     | W15/1011 | 11.77  | 0.39   |              |
| R5/1011  | LKD     | W16/1011 | 10.07  | 0.35   |              |
| R5/1011  | LKD     | W17/1011 | 9.49   | 0.34   |              |
| R5/1011  | LKD     | W18/1011 | 8.92   | 0.33   |              |
| R5/1011  | LKD     | W19/1011 | 8.78   | 0.33   |              |
| R5/1011  | LKD     | W20/1011 | 10.10  | 0.36   |              |
| R5/1011  | LKD     | W32/1011 | 35.74  | 0.62   |              |
| R5/1011  | LKD     | W33/1011 | 35.71  | 0.61   |              |
| R5/1011  | LKD     | W43/1011 | 9.21   | 0.34   | 3.67         |
| R6/1011  | LKD     | W21/1011 | 10.09  | 0.35   |              |
| R6/1011  | LKD     | W22/1011 | 8.17   | 0.31   |              |
| R6/1011  | LKD     | W23/1011 | 7.70   | 0.30   |              |
| R6/1011  | LKD     | W24/1011 | 7.21   | 0.29   |              |
| R6/1011  | LKD     | W25/1011 | 6.91   | 0.28   |              |
| R6/1011  | LKD     | W26/1011 | 6.84   | 0.28   |              |
| R6/1011  | LKD     | W34/1011 | 20.47  | 0.31   |              |

| Room     | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL<br>ADF(%) |
|----------|---------|----------|--------|--------|-----------------|
| R6/1011  | LKD     | W35/1011 | 20.93  | 0.31   |                 |
| R6/1011  | LKD     | W44/1011 | 7.41   | 0.30   | 2.74            |
| R7/1011  | BEDROOM | W36/1011 | 22.64  | 0.92   |                 |
| R7/1011  | BEDROOM | W37/1011 | 23.38  | 0.93   | 1.85            |
| R10/1011 | BEDROOM | W38/1011 | 25.10  | 1.09   | 1.09            |
| R1/1012  | LKD     | W1/1012  | 18.82  | 0.63   |                 |
| R1/1012  | LKD     | W2/1012  | 17.34  | 0.60   |                 |
| R1/1012  | LKD     | W3/1012  | 16.91  | 0.59   |                 |
| R1/1012  | LKD     | W4/1012  | 16.80  | 0.59   |                 |
| R1/1012  | LKD     | W5/1012  | 16.83  | 0.59   |                 |
| R1/1012  | LKD     | W6/1012  | 16.91  | 0.59   |                 |
| R1/1012  | LKD     | W7/1012  | 15.80  | 0.56   |                 |
| R1/1012  | LKD     | W39/1012 | 26.99  | 0.57   |                 |
| R1/1012  | LKD     | W40/1012 | 27.19  | 0.57   | 5.29            |
| R2/1012  | LKD     | W8/1012  | 15.80  | 0.53   |                 |
| R2/1012  | LKD     | W9/1012  | 16.91  | 0.56   |                 |
| R2/1012  | LKD     | W10/1012 | 16.83  | 0.56   |                 |
| R2/1012  | LKD     | W11/1012 | 16.80  | 0.56   |                 |
| R2/1012  | LKD     | W12/1012 | 16.91  | 0.56   |                 |
| R2/1012  | LKD     | W13/1012 | 17.34  | 0.57   |                 |
| R2/1012  | LKD     | W14/1012 | 18.82  | 0.60   |                 |
| R2/1012  | LKD     | W27/1012 | 35.67  | 0.71   |                 |
| R2/1012  | LKD     | W28/1012 | 35.75  | 0.71   | 5.34            |
| R3/1012  | BEDROOM | W29/1012 | 35.67  | 1.80   | 1.80            |
| R4/1012  | BEDROOM | W30/1012 | 35.75  | 1.49   |                 |
| R4/1012  | BEDROOM | W31/1012 | 35.67  | 1.48   | 2.96            |
| R5/1012  | LKD     | W15/1012 | 11.96  | 0.39   |                 |
| R5/1012  | LKD     | W16/1012 | 10.26  | 0.36   |                 |
| R5/1012  | LKD     | W17/1012 | 9.69   | 0.35   |                 |
| R5/1012  | LKD     | W18/1012 | 9.14   | 0.34   |                 |
| R5/1012  | LKD     | W19/1012 | 9.02   | 0.34   |                 |
| R5/1012  | LKD     | W20/1012 | 10.52  | 0.37   |                 |
| R5/1012  | LKD     | W32/1012 | 35.73  | 0.62   |                 |
| R5/1012  | LKD     | W33/1012 | 35.66  | 0.60   |                 |
| R5/1012  | LKD     | W43/1012 | 9.43   | 0.35   | 3.71            |
| R6/1012  | LKD     | W21/1012 | 10.48  | 0.36   |                 |
| R6/1012  | LKD     | W22/1012 | 8.60   | 0.32   |                 |
| R6/1012  | LKD     | W23/1012 | 8.17   | 0.31   |                 |
| R6/1012  | LKD     | W24/1012 | 7.75   | 0.30   |                 |
| R6/1012  | LKD     | W25/1012 | 7.49   | 0.30   |                 |
| R6/1012  | LKD     | W26/1012 | 7.46   | 0.30   |                 |
| R6/1012  | LKD     | W34/1012 | 21.90  | 0.32   |                 |
| R6/1012  | LKD     | W35/1012 | 23.39  | 0.37   |                 |
| R6/1012  | LKD     | W44/1012 | 7.91   | 0.31   | 2.89            |
| R7/1012  | BEDROOM | W36/1012 | 23.65  | 0.93   |                 |
| R7/1012  | BEDROOM | W37/1012 | 25.18  | 1.04   | 1.97            |
| R10/1012 | BEDROOM | W38/1012 | 25.58  | 1.07   | 1.07            |
| R1/1013  | LKD     | W1/1013  | 18.82  | 0.58   |                 |
| R1/1013  | LKD     | W2/1013  | 17.34  | 0.55   |                 |
| R1/1013  | LKD     | W3/1013  | 16.91  | 0.55   |                 |
| R1/1013  | LKD     | W4/1013  | 16.80  | 0.55   |                 |
| R1/1013  | LKD     | W5/1013  | 16.83  | 0.55   |                 |
| R1/1013  | LKD     | W6/1013  | 16.91  | 0.55   |                 |
| R1/1013  | LKD     | W7/1013  | 15.80  | 0.51   |                 |
| R1/1013  | LKD     | W39/1013 | 27.39  | 0.53   |                 |
| R1/1013  | LKD     | W40/1013 | 28.45  | 0.56   | 4.93            |

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| Room    | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|---------|---------|----------|--------|--------|--------------|
| R2/1013 | LKD     | W8/1013  | 15.80  | 0.53   |              |
| R2/1013 | LKD     | W9/1013  | 16.91  | 0.56   |              |
| R2/1013 | LKD     | W10/1013 | 16.83  | 0.56   |              |
| R2/1013 | LKD     | W11/1013 | 16.80  | 0.56   |              |
| R2/1013 | LKD     | W12/1013 | 16.91  | 0.56   |              |
| R2/1013 | LKD     | W13/1013 | 17.34  | 0.57   |              |
| R2/1013 | LKD     | W14/1013 | 18.82  | 0.60   |              |
| R2/1013 | LKD     | W27/1013 | 35.75  | 0.71   |              |
| R2/1013 | LKD     | W28/1013 | 35.67  | 0.71   | 5.34         |
| R3/1013 | BEDROOM | W29/1013 | 35.75  | 1.81   | 1.81         |
| R4/1013 | BEDROOM | W30/1013 | 35.67  | 1.49   |              |
| R4/1013 | BEDROOM | W31/1013 | 35.75  | 1.49   | 2.98         |
| R5/1013 | LKD     | W15/1013 | 12.07  | 0.40   |              |
| R5/1013 | LKD     | W16/1013 | 10.37  | 0.37   |              |
| R5/1013 | LKD     | W17/1013 | 9.80   | 0.35   |              |
| R5/1013 | LKD     | W18/1013 | 9.25   | 0.34   |              |
| R5/1013 | LKD     | W19/1013 | 9.15   | 0.34   |              |
| R5/1013 | LKD     | W20/1013 | 10.83  | 0.38   |              |
| R5/1013 | LKD     | W32/1013 | 35.74  | 0.63   |              |
| R5/1013 | LKD     | W33/1013 | 35.71  | 0.61   |              |
| R5/1013 | LKD     | W43/1013 | 9.55   | 0.35   | 3.78         |
| R6/1013 | BEDROOM | W38/1013 | 27.08  | 1.42   | 1.42         |
| R7/1013 | BEDROOM | W21/1013 | 10.63  | 1.01   |              |
| R7/1013 | BEDROOM | W22/1013 | 8.76   | 0.90   |              |
| R7/1013 | BEDROOM | W23/1013 | 8.34   | 0.87   | 2.78         |
| R8/1013 | LKD     | W24/1013 | 7.92   | 0.44   |              |
| R8/1013 | LKD     | W25/1013 | 7.65   | 0.43   |              |
| R8/1013 | LKD     | W26/1013 | 7.81   | 0.44   |              |
| R8/1013 | LKD     | W34/1013 | 23.76  | 0.53   |              |
| R8/1013 | LKD     | W35/1013 | 23.96  | 0.54   |              |
| R8/1013 | LKD     | W36/1013 | 24.62  | 0.43   | 2.82         |
| R9/1013 | BEDROOM | W37/1013 | 25.69  | 1.17   |              |
| R9/1013 | BEDROOM | W42/1013 | 23.42  | 0.16   | 1.33         |
| R1/1014 | LKD     | W1/1014  | 18.82  | 0.58   |              |
| R1/1014 | LKD     | W2/1014  | 17.34  | 0.55   |              |
| R1/1014 | LKD     | W3/1014  | 16.91  | 0.55   |              |
| R1/1014 | LKD     | W4/1014  | 16.80  | 0.55   |              |
| R1/1014 | LKD     | W5/1014  | 16.83  | 0.55   |              |
| R1/1014 | LKD     | W6/1014  | 16.91  | 0.55   |              |
| R1/1014 | LKD     | W7/1014  | 15.80  | 0.51   |              |
| R1/1014 | LKD     | W39/1014 | 28.82  | 0.57   |              |
| R1/1014 | LKD     | W40/1014 | 28.94  | 0.57   | 4.97         |
| R2/1014 | LKD     | W8/1014  | 15.80  | 0.53   |              |
| R2/1014 | LKD     | W9/1014  | 16.91  | 0.56   |              |
| R2/1014 | LKD     | W10/1014 | 16.83  | 0.56   |              |
| R2/1014 | LKD     | W11/1014 | 16.80  | 0.56   |              |
| R2/1014 | LKD     | W12/1014 | 16.91  | 0.56   |              |
| R2/1014 | LKD     | W13/1014 | 17.34  | 0.57   |              |
| R2/1014 | LKD     | W14/1014 | 18.82  | 0.60   |              |
| R2/1014 | LKD     | W27/1014 | 35.67  | 0.71   |              |
| R2/1014 | LKD     | W28/1014 | 35.75  | 0.71   | 5.34         |
| R3/1014 | BEDROOM | W29/1014 | 35.67  | 1.80   | 1.80         |
| R4/1014 | BEDROOM | W30/1014 | 35.75  | 1.49   |              |
| R4/1014 | BEDROOM | W31/1014 | 35.67  | 1.49   | 2.98         |
| R5/1014 | LKD     | W15/1014 | 12.06  | 0.40   |              |
| R5/1014 | LKD     | W16/1014 | 10.36  | 0.37   |              |

| Room    | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|---------|---------|----------|--------|--------|--------------|
| R5/1014 | LKD     | W17/1014 | 9.79   | 0.35   |              |
| R5/1014 | LKD     | W18/1014 | 9.24   | 0.34   |              |
| R5/1014 | LKD     | W19/1014 | 9.25   | 0.34   |              |
| R5/1014 | LKD     | W20/1014 | 11.02  | 0.38   |              |
| R5/1014 | LKD     | W32/1014 | 35.73  | 0.63   |              |
| R5/1014 | LKD     | W33/1014 | 35.66  | 0.61   |              |
| R5/1014 | LKD     | W43/1014 | 9.54   | 0.35   | 3.78         |
| R6/1014 | BEDROOM | W38/1014 | 27.59  | 1.45   | 1.45         |
| R7/1014 | BEDROOM | W21/1014 | 10.62  | 1.01   |              |
| R7/1014 | BEDROOM | W22/1014 | 8.74   | 0.90   |              |
| R7/1014 | BEDROOM | W23/1014 | 8.32   | 0.87   | 2.77         |
| R8/1014 | LKD     | W24/1014 | 7.90   | 0.44   |              |
| R8/1014 | LKD     | W25/1014 | 7.63   | 0.43   |              |
| R8/1014 | LKD     | W26/1014 | 8.16   | 0.45   |              |
| R8/1014 | LKD     | W34/1014 | 24.40  | 0.56   |              |
| R8/1014 | LKD     | W35/1014 | 25.79  | 0.60   |              |
| R8/1014 | LKD     | W36/1014 | 26.56  | 0.46   | 2.94         |
| R9/1014 | BEDROOM | W37/1014 | 27.34  | 1.27   |              |
| R9/1014 | BEDROOM | W42/1014 | 20.34  | 0.15   | 1.41         |
| R1/1015 | LKD     | W1/1015  | 18.82  | 0.58   |              |
| R1/1015 | LKD     | W2/1015  | 17.34  | 0.55   |              |
| R1/1015 | LKD     | W3/1015  | 16.91  | 0.55   |              |
| R1/1015 | LKD     | W4/1015  | 16.80  | 0.55   |              |
| R1/1015 | LKD     | W5/1015  | 16.83  | 0.55   |              |
| R1/1015 | LKD     | W6/1015  | 16.91  | 0.55   |              |
| R1/1015 | LKD     | W7/1015  | 15.80  | 0.51   |              |
| R1/1015 | LKD     | W39/1015 | 29.36  | 0.58   |              |
| R1/1015 | LKD     | W40/1015 | 30.30  | 0.60   | 5.01         |
| R2/1015 | LKD     | W8/1015  | 15.80  | 0.53   |              |
| R2/1015 | LKD     | W9/1015  | 16.91  | 0.56   |              |
| R2/1015 | LKD     | W10/1015 | 16.83  | 0.56   |              |
| R2/1015 | LKD     | W11/1015 | 16.80  | 0.56   |              |
| R2/1015 | LKD     | W12/1015 | 16.91  | 0.56   |              |
| R2/1015 | LKD     | W13/1015 | 17.34  | 0.57   |              |
| R2/1015 | LKD     | W14/1015 | 18.82  | 0.60   |              |
| R2/1015 | LKD     | W27/1015 | 35.75  | 0.71   |              |
| R2/1015 | LKD     | W28/1015 | 35.67  | 0.71   | 5.34         |
| R3/1015 | BEDROOM | W29/1015 | 35.75  | 1.81   | 1.81         |
| R4/1015 | BEDROOM | W30/1015 | 35.67  | 1.49   |              |
| R4/1015 | BEDROOM | W31/1015 | 35.75  | 1.49   | 2.98         |
| R5/1015 | LKD     | W15/1015 | 12.05  | 0.40   |              |
| R5/1015 | LKD     | W16/1015 | 10.34  | 0.37   |              |
| R5/1015 | LKD     | W17/1015 | 9.79   | 0.35   |              |
| R5/1015 | LKD     | W18/1015 | 9.23   | 0.34   |              |
| R5/1015 | LKD     | W19/1015 | 9.45   | 0.35   |              |
| R5/1015 | LKD     | W20/1015 | 11.22  | 0.39   |              |
| R5/1015 | LKD     | W32/1015 | 35.74  | 0.63   |              |
| R5/1015 | LKD     | W33/1015 | 35.71  | 0.61   |              |
| R5/1015 | LKD     | W43/1015 | 9.53   | 0.35   | 3.79         |
| R6/1015 | BEDROOM | W38/1015 | 29.21  | 1.55   | 1.55         |
| R7/1015 | BEDROOM | W21/1015 | 10.61  | 1.01   |              |
| R7/1015 | BEDROOM | W22/1015 | 8.72   | 0.90   |              |
| R7/1015 | BEDROOM | W23/1015 | 8.30   | 0.87   | 2.77         |
| R8/1015 | LKD     | W24/1015 | 7.89   | 0.44   |              |
| R8/1015 | LKD     | W25/1015 | 7.61   | 0.43   |              |
| R8/1015 | LKD     | W26/1015 | 8.55   | 0.46   |              |

| Room    | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|---------|---------|----------|--------|--------|--------------|
| R8/1015 | LKD     | W34/1015 | 26.46  | 0.62   |              |
| R8/1015 | LKD     | W35/1015 | 26.54  | 0.63   |              |
| R8/1015 | LKD     | W36/1015 | 27.08  | 0.47   | 3.05         |
| R9/1015 | BEDROOM | W37/1015 | 28.00  | 1.31   |              |
| R9/1015 | BEDROOM | W42/1015 | 25.84  | 0.20   | 1.51         |
| R1/1016 | LKD     | W1/1016  | 18.82  | 0.58   |              |
| R1/1016 | LKD     | W2/1016  | 17.34  | 0.55   |              |
| R1/1016 | LKD     | W3/1016  | 16.91  | 0.55   |              |
| R1/1016 | LKD     | W4/1016  | 16.80  | 0.55   |              |
| R1/1016 | LKD     | W5/1016  | 16.83  | 0.55   |              |
| R1/1016 | LKD     | W6/1016  | 16.91  | 0.55   |              |
| R1/1016 | LKD     | W7/1016  | 15.80  | 0.51   |              |
| R1/1016 | LKD     | W39/1016 | 30.90  | 0.61   |              |
| R1/1016 | LKD     | W40/1016 | 30.90  | 0.61   | 5.05         |
| R2/1016 | LKD     | W8/1016  | 15.80  | 0.53   |              |
| R2/1016 | LKD     | W9/1016  | 16.91  | 0.56   |              |
| R2/1016 | LKD     | W10/1016 | 16.83  | 0.56   |              |
| R2/1016 | LKD     | W11/1016 | 16.80  | 0.56   |              |
| R2/1016 | LKD     | W12/1016 | 16.91  | 0.56   |              |
| R2/1016 | LKD     | W13/1016 | 17.34  | 0.57   |              |
| R2/1016 | LKD     | W14/1016 | 18.82  | 0.60   |              |
| R2/1016 | LKD     | W27/1016 | 35.67  | 0.71   |              |
| R2/1016 | LKD     | W28/1016 | 35.75  | 0.71   | 5.34         |
| R3/1016 | BEDROOM | W29/1016 | 35.67  | 1.80   | 1.80         |
| R4/1016 | BEDROOM | W30/1016 | 35.75  | 1.49   |              |
| R4/1016 | BEDROOM | W31/1016 | 35.67  | 1.49   | 2.98         |
| R5/1016 | LKD     | W15/1016 | 12.07  | 0.40   |              |
| R5/1016 | LKD     | W16/1016 | 10.36  | 0.37   |              |
| R5/1016 | LKD     | W17/1016 | 9.80   | 0.35   |              |
| R5/1016 | LKD     | W18/1016 | 9.29   | 0.34   |              |
| R5/1016 | LKD     | W19/1016 | 9.64   | 0.35   |              |
| R5/1016 | LKD     | W20/1016 | 11.42  | 0.39   |              |
| R5/1016 | LKD     | W32/1016 | 35.73  | 0.63   |              |
| R5/1016 | LKD     | W33/1016 | 35.66  | 0.61   |              |
| R5/1016 | LKD     | W43/1016 | 9.54   | 0.35   | 3.80         |
| R6/1016 | BEDROOM | W38/1016 | 29.86  | 1.59   | 1.59         |
| R7/1016 | BEDROOM | W21/1016 | 10.63  | 1.01   |              |
| R7/1016 | BEDROOM | W22/1016 | 8.75   | 0.90   |              |
| R7/1016 | BEDROOM | W23/1016 | 8.32   | 0.87   | 2.77         |
| R8/1016 | LKD     | W24/1016 | 7.92   | 0.44   |              |
| R8/1016 | LKD     | W25/1016 | 7.68   | 0.43   |              |
| R8/1016 | LKD     | W26/1016 | 8.96   | 0.47   |              |
| R8/1016 | LKD     | W34/1016 | 27.32  | 0.65   |              |
| R8/1016 | LKD     | W35/1016 | 28.57  | 0.68   |              |
| R8/1016 | LKD     | W36/1016 | 29.21  | 0.51   | 3.18         |
| R9/1016 | BEDROOM | W37/1016 | 29.78  | 1.40   |              |
| R9/1016 | BEDROOM | W42/1016 | 22.94  | 0.19   | 1.58         |
| R1/1017 | LKD     | W1/1017  | 18.82  | 0.58   |              |
| R1/1017 | LKD     | W2/1017  | 17.34  | 0.55   |              |
| R1/1017 | LKD     | W3/1017  | 16.91  | 0.55   |              |
| R1/1017 | LKD     | W4/1017  | 16.80  | 0.55   |              |
| R1/1017 | LKD     | W5/1017  | 16.83  | 0.55   |              |
| R1/1017 | LKD     | W6/1017  | 16.91  | 0.55   |              |
| R1/1017 | LKD     | W7/1017  | 15.80  | 0.51   |              |
| R1/1017 | LKD     | W39/1017 | 31.53  | 0.62   |              |
| R1/1017 | LKD     | W40/1017 | 32.31  | 0.64   | 5.09         |

Scheme IR05-IR06  
INTERNAL DAYLIGHT ANALYSIS

| Room    | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|---------|---------|----------|--------|--------|--------------|
| R2/1017 | LKD     | W8/1017  | 15.80  | 0.53   |              |
| R2/1017 | LKD     | W9/1017  | 16.91  | 0.56   |              |
| R2/1017 | LKD     | W10/1017 | 16.83  | 0.56   |              |
| R2/1017 | LKD     | W11/1017 | 16.80  | 0.56   |              |
| R2/1017 | LKD     | W12/1017 | 16.91  | 0.56   |              |
| R2/1017 | LKD     | W13/1017 | 17.34  | 0.57   |              |
| R2/1017 | LKD     | W14/1017 | 18.82  | 0.60   |              |
| R2/1017 | LKD     | W27/1017 | 35.75  | 0.71   |              |
| R2/1017 | LKD     | W28/1017 | 35.67  | 0.71   | 5.34         |
| R3/1017 | BEDROOM | W29/1017 | 35.75  | 1.81   | 1.81         |
| R4/1017 | BEDROOM | W30/1017 | 35.67  | 1.49   |              |
| R4/1017 | BEDROOM | W31/1017 | 35.75  | 1.49   | 2.98         |
| R5/1017 | LKD     | W15/1017 | 12.12  | 0.40   |              |
| R5/1017 | LKD     | W16/1017 | 10.42  | 0.37   |              |
| R5/1017 | LKD     | W17/1017 | 9.86   | 0.36   |              |
| R5/1017 | LKD     | W18/1017 | 9.48   | 0.35   |              |
| R5/1017 | LKD     | W19/1017 | 9.85   | 0.36   |              |
| R5/1017 | LKD     | W20/1017 | 11.61  | 0.39   |              |
| R5/1017 | LKD     | W32/1017 | 35.74  | 0.63   |              |
| R5/1017 | LKD     | W33/1017 | 35.71  | 0.61   |              |
| R5/1017 | LKD     | W43/1017 | 9.61   | 0.35   | 3.81         |
| R6/1017 | BEDROOM | W38/1017 | 31.56  | 1.68   | 1.68         |
| R7/1017 | BEDROOM | W21/1017 | 10.72  | 1.01   |              |
| R7/1017 | BEDROOM | W22/1017 | 8.84   | 0.90   |              |
| R7/1017 | BEDROOM | W23/1017 | 8.42   | 0.87   | 2.78         |
| R8/1017 | LKD     | W24/1017 | 8.01   | 0.44   |              |
| R8/1017 | LKD     | W25/1017 | 8.05   | 0.44   |              |
| R8/1017 | LKD     | W26/1017 | 9.40   | 0.48   |              |
| R8/1017 | LKD     | W34/1017 | 29.53  | 0.70   |              |
| R8/1017 | LKD     | W35/1017 | 29.46  | 0.71   |              |
| R8/1017 | LKD     | W36/1017 | 29.84  | 0.52   | 3.31         |
| R9/1017 | BEDROOM | W37/1017 | 30.56  | 1.45   |              |
| R9/1017 | BEDROOM | W42/1017 | 28.55  | 0.24   | 1.69         |
| R1/1018 | LKD     | W1/1018  | 18.82  | 0.58   |              |
| R1/1018 | LKD     | W2/1018  | 17.34  | 0.55   |              |
| R1/1018 | LKD     | W3/1018  | 16.91  | 0.55   |              |
| R1/1018 | LKD     | W4/1018  | 16.80  | 0.55   |              |
| R1/1018 | LKD     | W5/1018  | 16.83  | 0.55   |              |
| R1/1018 | LKD     | W6/1018  | 16.91  | 0.55   |              |
| R1/1018 | LKD     | W7/1018  | 15.80  | 0.51   |              |
| R1/1018 | LKD     | W39/1018 | 33.09  | 0.65   |              |
| R1/1018 | LKD     | W40/1018 | 32.95  | 0.65   | 5.14         |
| R2/1018 | LKD     | W8/1018  | 15.80  | 0.53   |              |
| R2/1018 | LKD     | W9/1018  | 16.91  | 0.56   |              |
| R2/1018 | LKD     | W10/1018 | 16.83  | 0.56   |              |
| R2/1018 | LKD     | W11/1018 | 16.80  | 0.56   |              |
| R2/1018 | LKD     | W12/1018 | 16.91  | 0.56   |              |
| R2/1018 | LKD     | W13/1018 | 17.34  | 0.57   |              |
| R2/1018 | LKD     | W14/1018 | 18.82  | 0.60   |              |
| R2/1018 | LKD     | W27/1018 | 35.67  | 0.71   |              |
| R2/1018 | LKD     | W28/1018 | 35.75  | 0.71   | 5.34         |
| R3/1018 | BEDROOM | W29/1018 | 35.67  | 1.80   | 1.80         |
| R4/1018 | BEDROOM | W30/1018 | 35.75  | 1.49   |              |
| R4/1018 | BEDROOM | W31/1018 | 35.67  | 1.49   | 2.98         |
| R5/1018 | LKD     | W15/1018 | 12.22  | 0.40   |              |
| R5/1018 | LKD     | W16/1018 | 10.53  | 0.37   |              |



| Room    | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|---------|---------|----------|--------|--------|--------------|
| R5/1018 | LKD     | W17/1018 | 9.99   | 0.36   |              |
| R5/1018 | LKD     | W18/1018 | 9.67   | 0.35   |              |
| R5/1018 | LKD     | W19/1018 | 10.05  | 0.36   |              |
| R5/1018 | LKD     | W20/1018 | 11.82  | 0.40   |              |
| R5/1018 | LKD     | W32/1018 | 35.73  | 0.63   |              |
| R5/1018 | LKD     | W33/1018 | 35.66  | 0.61   |              |
| R5/1018 | LKD     | W43/1018 | 9.80   | 0.36   | 3.83         |
| R6/1018 | BEDROOM | W38/1018 | 32.25  | 1.73   | 1.73         |
| R7/1018 | BEDROOM | W21/1018 | 10.88  | 1.02   |              |
| R7/1018 | BEDROOM | W22/1018 | 9.01   | 0.91   |              |
| R7/1018 | BEDROOM | W23/1018 | 8.59   | 0.88   | 2.81         |
| R8/1018 | LKD     | W24/1018 | 8.31   | 0.45   |              |
| R8/1018 | LKD     | W25/1018 | 8.49   | 0.46   |              |
| R8/1018 | LKD     | W26/1018 | 9.86   | 0.50   |              |
| R8/1018 | LKD     | W34/1018 | 30.50  | 0.74   |              |
| R8/1018 | LKD     | W35/1018 | 31.56  | 0.76   |              |
| R8/1018 | LKD     | W36/1018 | 32.05  | 0.56   | 3.46         |
| R9/1018 | BEDROOM | W37/1018 | 32.37  | 1.52   |              |
| R9/1018 | BEDROOM | W42/1018 | 25.70  | 0.23   | 1.75         |
| R1/1019 | LKD     | W1/1019  | 21.19  | 0.43   |              |
| R1/1019 | LKD     | W2/1019  | 19.66  | 0.41   |              |
| R1/1019 | LKD     | W3/1019  | 19.19  | 0.40   |              |
| R1/1019 | LKD     | W4/1019  | 19.06  | 0.40   |              |
| R1/1019 | LKD     | W5/1019  | 19.10  | 0.40   |              |
| R1/1019 | LKD     | W6/1019  | 19.16  | 0.40   |              |
| R1/1019 | LKD     | W7/1019  | 17.84  | 0.38   |              |
| R1/1019 | LKD     | W38/1019 | 34.80  | 0.50   |              |
| R1/1019 | LKD     | W39/1019 | 34.64  | 0.50   |              |
| R1/1019 | LKD     | W40/1019 | 35.22  | 0.51   | 4.34         |
| R2/1019 | BEDROOM | W8/1019  | 17.84  | 0.91   |              |
| R2/1019 | BEDROOM | W9/1019  | 19.16  | 0.97   |              |
| R2/1019 | BEDROOM | W10/1019 | 19.10  | 0.97   |              |
| R2/1019 | BEDROOM | W11/1019 | 19.06  | 0.97   | 3.82         |
| R3/1019 | BEDROOM | W29/1019 | 36.62  | 1.87   | 1.87         |
| R4/1019 | LKD     | W15/1019 | 13.99  | 0.29   |              |
| R4/1019 | LKD     | W16/1019 | 12.25  | 0.26   |              |
| R4/1019 | LKD     | W17/1019 | 11.67  | 0.26   |              |
| R4/1019 | LKD     | W18/1019 | 11.34  | 0.25   |              |
| R4/1019 | LKD     | W19/1019 | 11.75  | 0.26   |              |
| R4/1019 | LKD     | W20/1019 | 13.54  | 0.28   |              |
| R4/1019 | LKD     | W30/1019 | 36.54  | 0.44   |              |
| R4/1019 | LKD     | W31/1019 | 36.62  | 0.45   |              |
| R4/1019 | LKD     | W32/1019 | 36.59  | 0.46   |              |
| R4/1019 | LKD     | W33/1019 | 36.58  | 0.44   |              |
| R4/1019 | LKD     | W43/1019 | 11.47  | 0.26   | 3.65         |
| R5/1019 | BEDROOM | W23/1019 | 10.32  | 0.52   |              |
| R5/1019 | BEDROOM | W24/1019 | 10.16  | 0.51   |              |
| R5/1019 | BEDROOM | W25/1019 | 10.38  | 0.52   |              |
| R5/1019 | BEDROOM | W26/1019 | 11.83  | 0.56   |              |
| R5/1019 | BEDROOM | W34/1019 | 33.56  | 0.88   |              |
| R5/1019 | BEDROOM | W35/1019 | 33.36  | 0.89   |              |
| R5/1019 | BEDROOM | W44/1019 | 10.14  | 0.51   | 4.38         |
| R6/1019 | BEDROOM | W36/1019 | 34.20  | 1.37   |              |
| R6/1019 | BEDROOM | W37/1019 | 34.05  | 1.38   | 2.74         |
| R1/1020 | LKD     | W1/1020  | 21.19  | 0.43   |              |
| R1/1020 | LKD     | W2/1020  | 19.66  | 0.41   |              |
| R1/1020 | LKD     | W3/1020  | 19.19  | 0.40   |              |

| Room    | Roomuse | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|---------|---------|----------|--------|--------|--------------|
| R1/1020 | LKD     | W4/1020  | 19.06  | 0.40   |              |
| R1/1020 | LKD     | W5/1020  | 19.10  | 0.40   |              |
| R1/1020 | LKD     | W6/1020  | 19.16  | 0.40   |              |
| R1/1020 | LKD     | W7/1020  | 17.84  | 0.38   |              |
| R1/1020 | LKD     | W38/1020 | 35.46  | 0.52   |              |
| R1/1020 | LKD     | W39/1020 | 36.12  | 0.52   |              |
| R1/1020 | LKD     | W40/1020 | 35.78  | 0.52   | 4.39         |
| R2/1020 | BEDROOM | W8/1020  | 17.84  | 0.91   |              |
| R2/1020 | BEDROOM | W9/1020  | 19.16  | 0.97   |              |
| R2/1020 | BEDROOM | W10/1020 | 19.10  | 0.97   |              |
| R2/1020 | BEDROOM | W11/1020 | 19.06  | 0.97   | 3.82         |
| R3/1020 | BEDROOM | W29/1020 | 36.57  | 1.87   | 1.87         |
| R4/1020 | LKD     | W15/1020 | 14.18  | 0.29   |              |
| R4/1020 | LKD     | W16/1020 | 12.43  | 0.27   |              |
| R4/1020 | LKD     | W17/1020 | 11.87  | 0.26   |              |
| R4/1020 | LKD     | W18/1020 | 11.55  | 0.26   |              |
| R4/1020 | LKD     | W19/1020 | 11.97  | 0.26   |              |
| R4/1020 | LKD     | W20/1020 | 13.77  | 0.29   |              |
| R4/1020 | LKD     | W30/1020 | 36.67  | 0.45   |              |
| R4/1020 | LKD     | W31/1020 | 36.57  | 0.45   |              |
| R4/1020 | LKD     | W32/1020 | 36.67  | 0.46   |              |
| R4/1020 | LKD     | W33/1020 | 36.57  | 0.44   |              |
| R4/1020 | LKD     | W43/1020 | 11.67  | 0.26   | 3.68         |
| R5/1020 | BEDROOM | W23/1020 | 10.72  | 0.53   |              |
| R5/1020 | BEDROOM | W24/1020 | 10.59  | 0.52   |              |
| R5/1020 | BEDROOM | W25/1020 | 10.83  | 0.53   |              |
| R5/1020 | BEDROOM | W26/1020 | 12.31  | 0.57   |              |
| R5/1020 | BEDROOM | W34/1020 | 34.52  | 0.93   |              |
| R5/1020 | BEDROOM | W35/1020 | 35.41  | 0.94   |              |
| R5/1020 | BEDROOM | W44/1020 | 10.56  | 0.53   | 4.53         |
| R6/1020 | BEDROOM | W36/1020 | 35.03  | 1.43   |              |
| R6/1020 | BEDROOM | W37/1020 | 35.81  | 1.44   | 2.86         |
| R1/1021 | LKD     | W1/1021  | 21.19  | 0.43   |              |
| R1/1021 | LKD     | W2/1021  | 19.66  | 0.41   |              |
| R1/1021 | LKD     | W3/1021  | 19.19  | 0.40   |              |
| R1/1021 | LKD     | W4/1021  | 19.06  | 0.40   |              |
| R1/1021 | LKD     | W5/1021  | 19.10  | 0.40   |              |
| R1/1021 | LKD     | W6/1021  | 19.16  | 0.40   |              |
| R1/1021 | LKD     | W7/1021  | 17.84  | 0.38   |              |
| R1/1021 | LKD     | W38/1021 | 36.61  | 0.53   |              |
| R1/1021 | LKD     | W39/1021 | 36.27  | 0.53   |              |
| R1/1021 | LKD     | W40/1021 | 36.70  | 0.53   | 4.41         |
| R2/1021 | BEDROOM | W8/1021  | 17.84  | 0.91   |              |
| R2/1021 | BEDROOM | W9/1021  | 19.16  | 0.97   |              |
| R2/1021 | BEDROOM | W10/1021 | 19.10  | 0.97   |              |
| R2/1021 | BEDROOM | W11/1021 | 19.06  | 0.97   | 3.82         |
| R3/1021 | BEDROOM | W29/1021 | 36.67  | 1.88   | 1.88         |
| R4/1021 | LKD     | W15/1021 | 14.36  | 0.29   |              |
| R4/1021 | LKD     | W16/1021 | 12.62  | 0.27   |              |
| R4/1021 | LKD     | W17/1021 | 12.06  | 0.26   |              |
| R4/1021 | LKD     | W18/1021 | 11.76  | 0.26   |              |
| R4/1021 | LKD     | W19/1021 | 12.19  | 0.27   |              |
| R4/1021 | LKD     | W20/1021 | 14.00  | 0.29   |              |
| R4/1021 | LKD     | W30/1021 | 36.57  | 0.45   |              |
| R4/1021 | LKD     | W31/1021 | 36.67  | 0.45   |              |
| R4/1021 | LKD     | W32/1021 | 36.63  | 0.46   |              |
| R4/1021 | LKD     | W33/1021 | 36.62  | 0.45   |              |
| R4/1021 | LKD     | W43/1021 | 11.88  | 0.26   | 3.69         |

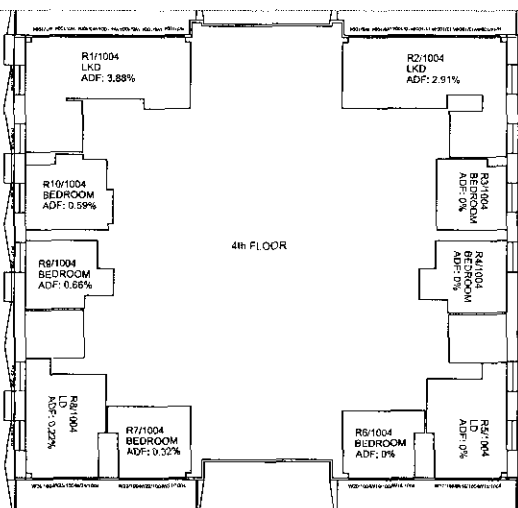
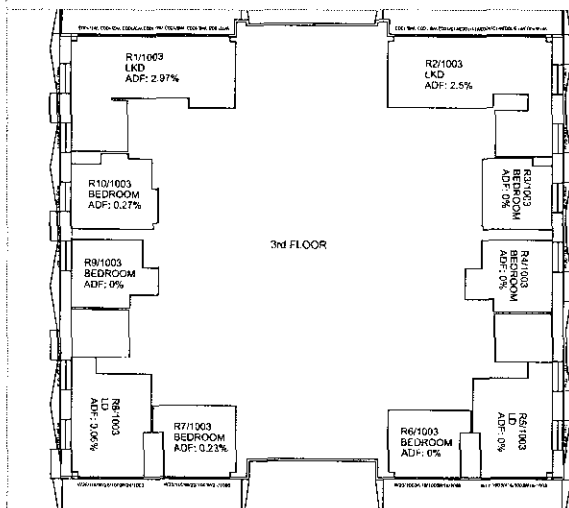
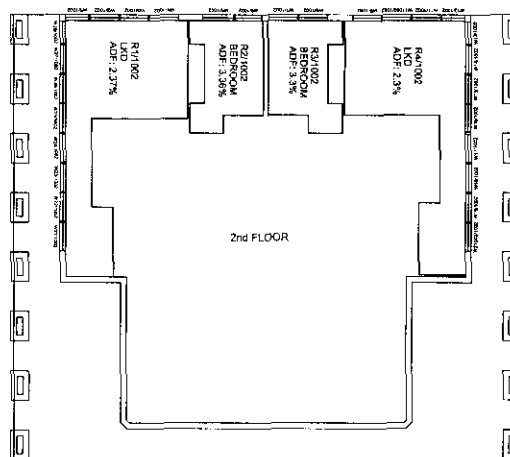
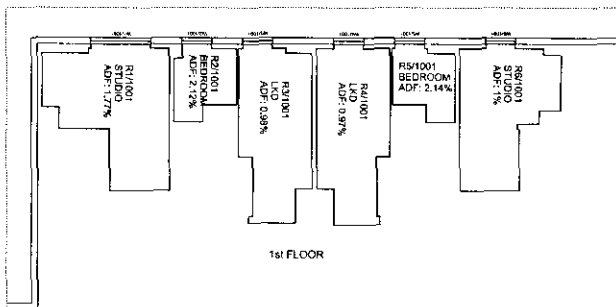
| Room    | Roomuse    | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|---------|------------|----------|--------|--------|--------------|
| R5/1021 | BEDROOM    | W23/1021 | 11.09  | 0.54   |              |
| R5/1021 | BEDROOM    | W24/1021 | 11.00  | 0.53   |              |
| R5/1021 | BEDROOM    | W25/1021 | 11.26  | 0.54   |              |
| R5/1021 | BEDROOM    | W26/1021 | 12.76  | 0.58   |              |
| R5/1021 | BEDROOM    | W34/1021 | 36.22  | 0.96   |              |
| R5/1021 | BEDROOM    | W35/1021 | 35.80  | 0.96   |              |
| R5/1021 | BEDROOM    | W44/1021 | 10.95  | 0.54   | 4.64         |
| R6/1021 | BEDROOM    | W36/1021 | 36.43  | 1.46   |              |
| R6/1021 | BEDROOM    | W37/1021 | 36.06  | 1.46   | 2.92         |
| R1/1022 | BEDROOM    | W1/1022  | 21.19  | 0.52   |              |
| R1/1022 | BEDROOM    | W2/1022  | 19.66  | 0.50   |              |
| R1/1022 | BEDROOM    | W3/1022  | 19.19  | 0.49   |              |
| R1/1022 | BEDROOM    | W4/1022  | 19.06  | 0.49   |              |
| R1/1022 | BEDROOM    | W5/1022  | 19.10  | 0.49   |              |
| R1/1022 | BEDROOM    | W6/1022  | 19.16  | 0.49   |              |
| R1/1022 | BEDROOM    | W7/1022  | 17.84  | 0.46   |              |
| R1/1022 | BEDROOM    | W39/1022 | 37.01  | 0.65   |              |
| R1/1022 | BEDROOM    | W40/1022 | 36.62  | 0.65   | 4.74         |
| R2/1022 | BEDROOM    | W8/1022  | 17.84  | 0.70   |              |
| R2/1022 | BEDROOM    | W9/1022  | 19.16  | 0.74   |              |
| R2/1022 | BEDROOM    | W10/1022 | 19.10  | 0.74   |              |
| R2/1022 | BEDROOM    | W11/1022 | 19.06  | 0.74   |              |
| R2/1022 | BEDROOM    | W12/1022 | 19.19  | 0.74   |              |
| R2/1022 | BEDROOM    | W13/1022 | 19.66  | 0.75   |              |
| R2/1022 | BEDROOM    | W14/1022 | 21.19  | 0.79   | 5.20         |
| R3/1022 | BEDROOM    | W29/1022 | 36.57  | 1.66   | 1.66         |
| R4/1022 | LIVINGROOM | W15/1022 | 14.51  | 0.30   |              |
| R4/1022 | LIVINGROOM | W16/1022 | 12.77  | 0.27   |              |
| R4/1022 | LIVINGROOM | W17/1022 | 12.22  | 0.27   |              |
| R4/1022 | LIVINGROOM | W18/1022 | 11.93  | 0.26   |              |
| R4/1022 | LIVINGROOM | W19/1022 | 12.36  | 0.27   |              |
| R4/1022 | LIVINGROOM | W20/1022 | 14.24  | 0.29   |              |
| R4/1022 | LIVINGROOM | W30/1022 | 36.67  | 0.45   |              |
| R4/1022 | LIVINGROOM | W31/1022 | 36.57  | 0.45   |              |
| R4/1022 | LIVINGROOM | W32/1022 | 36.67  | 0.46   |              |
| R4/1022 | LIVINGROOM | W33/1022 | 36.57  | 0.45   |              |
| R4/1022 | LIVINGROOM | W43/1022 | 12.04  | 0.27   | 3.75         |
| R5/1022 | LIVINGROOM | W21/1022 | 13.59  | 0.47   |              |
| R5/1022 | LIVINGROOM | W22/1022 | 11.72  | 0.43   |              |
| R5/1022 | LIVINGROOM | W23/1022 | 11.37  | 0.42   |              |
| R5/1022 | LIVINGROOM | W24/1022 | 11.32  | 0.42   |              |
| R5/1022 | LIVINGROOM | W25/1022 | 11.58  | 0.42   |              |
| R5/1022 | LIVINGROOM | W26/1022 | 13.09  | 0.45   |              |
| R5/1022 | LIVINGROOM | W34/1022 | 36.12  | 0.74   |              |
| R5/1022 | LIVINGROOM | W35/1022 | 36.82  | 0.75   |              |
| R5/1022 | LIVINGROOM | W44/1022 | 11.24  | 0.42   | 4.51         |
| R6/1022 | KITCHEN    | W36/1022 | 36.32  | 1.16   |              |
| R6/1022 | KITCHEN    | W37/1022 | 36.92  | 1.16   | 2.33         |
| R1/1023 | BEDROOM    | W1/1023  | 19.60  | 0.45   |              |
| R1/1023 | BEDROOM    | W2/1023  | 18.43  | 0.39   |              |
| R1/1023 | BEDROOM    | W3/1023  | 18.00  | 0.47   |              |
| R1/1023 | BEDROOM    | W4/1023  | 17.89  | 0.48   |              |
| R1/1023 | BEDROOM    | W5/1023  | 17.86  | 0.48   |              |
| R1/1023 | BEDROOM    | W6/1023  | 17.82  | 0.40   |              |
| R1/1023 | BEDROOM    | W7/1023  | 15.50  | 0.39   |              |
| R1/1023 | BEDROOM    | W41/1023 | 37.94  | 0.63   |              |
| R1/1023 | BEDROOM    | W42/1023 | 38.09  | 0.63   | 4.31         |
| R2/1023 | BEDROOM    | W8/1023  | 15.41  | 0.64   |              |
| R2/1023 | BEDROOM    | W9/1023  | 17.88  | 0.62   |              |

| Room    | Roomuse    | Window   | VSC(%) | ADF(%) | TOTAL ADF(%) |
|---------|------------|----------|--------|--------|--------------|
| R2/1023 | BEDROOM    | W10/1023 | 17.91  | 0.79   |              |
| R2/1023 | BEDROOM    | W11/1023 | 17.92  | 0.79   |              |
| R2/1023 | BEDROOM    | W12/1023 | 18.02  | 0.79   |              |
| R2/1023 | BEDROOM    | W13/1023 | 18.44  | 0.64   |              |
| R2/1023 | BEDROOM    | W14/1023 | 19.63  | 0.75   | 5.03         |
| R3/1023 | BEDROOM    | W17/1023 | 38.06  | 1.80   | 1.80         |
| R4/1023 | BEDROOM    | W19/1023 | 38.03  | 0.51   |              |
| R4/1023 | BEDROOM    | W20/1023 | 38.06  | 0.51   |              |
| R4/1023 | BEDROOM    | W21/1023 | 38.05  | 0.53   |              |
| R4/1023 | BEDROOM    | W22/1023 | 13.36  | 0.30   |              |
| R4/1023 | BEDROOM    | W23/1023 | 11.98  | 0.27   |              |
| R4/1023 | BEDROOM    | W24/1023 | 11.49  | 0.31   |              |
| R4/1023 | BEDROOM    | W25/1023 | 11.32  | 0.30   |              |
| R4/1023 | BEDROOM    | W26/1023 | 11.24  | 0.31   |              |
| R4/1023 | BEDROOM    | W27/1023 | 11.74  | 0.26   |              |
| R4/1023 | BEDROOM    | W28/1023 | 13.48  | 0.31   | 3.61         |
| R5/1023 | BEDROOM    | W31/1023 | 10.86  | 0.51   |              |
| R5/1023 | BEDROOM    | W32/1023 | 10.72  | 0.51   |              |
| R5/1023 | BEDROOM    | W33/1023 | 10.79  | 0.51   |              |
| R5/1023 | BEDROOM    | W34/1023 | 11.03  | 0.43   |              |
| R5/1023 | BEDROOM    | W35/1023 | 12.23  | 0.49   |              |
| R5/1023 | BEDROOM    | W36/1023 | 37.86  | 0.88   |              |
| R5/1023 | BEDROOM    | W37/1023 | 37.68  | 0.91   | 4.23         |
| R6/1023 | BEDROOM    | W38/1023 | 37.97  | 1.54   |              |
| R6/1023 | BEDROOM    | W39/1023 | 37.82  | 1.54   | 3.08         |
| R1/1024 | LIVINGROOM | W1/1024  | 39.59  | 0.63   |              |
| R1/1024 | LIVINGROOM | W2/1024  | 39.57  | 0.58   |              |
| R1/1024 | LIVINGROOM | W3/1024  | 39.52  | 0.72   |              |
| R1/1024 | LIVINGROOM | W4/1024  | 39.43  | 0.71   |              |
| R1/1024 | LIVINGROOM | W5/1024  | 39.17  | 0.72   |              |
| R1/1024 | LIVINGROOM | W6/1024  | 38.05  | 0.57   |              |
| R1/1024 | LIVINGROOM | W7/1024  | 32.50  | 0.52   |              |
| R1/1024 | LIVINGROOM | W40/1024 | 38.37  | 0.52   |              |
| R1/1024 | LIVINGROOM | W41/1024 | 38.56  | 0.53   |              |
| R1/1024 | LIVINGROOM | W42/1024 | 38.49  | 0.53   | 6.03         |
| R2/1024 | LIVINGROOM | W8/1024  | 32.24  | 0.88   |              |
| R2/1024 | LIVINGROOM | W9/1024  | 38.03  | 0.97   |              |
| R2/1024 | LIVINGROOM | W10/1024 | 39.15  | 1.20   |              |
| R2/1024 | LIVINGROOM | W11/1024 | 39.41  | 1.21   |              |
| R2/1024 | LIVINGROOM | W12/1024 | 39.49  | 1.23   |              |
| R2/1024 | LIVINGROOM | W13/1024 | 39.53  | 0.99   |              |
| R2/1024 | LIVINGROOM | W14/1024 | 39.40  | 1.07   |              |
| R2/1024 | LIVINGROOM | W15/1024 | 38.94  | 0.90   | 8.46         |
| R3/1024 | KITCHEN    | W16/1024 | 39.11  | 1.34   |              |
| R3/1024 | KITCHEN    | W17/1024 | 39.07  | 1.33   | 2.67         |
| R4/1024 | LIVINGROOM | W18/1024 | 39.11  | 0.48   |              |
| R4/1024 | LIVINGROOM | W19/1024 | 39.08  | 0.47   |              |
| R4/1024 | LIVINGROOM | W20/1024 | 39.11  | 0.46   |              |
| R4/1024 | LIVINGROOM | W21/1024 | 39.08  | 0.46   |              |
| R4/1024 | LIVINGROOM | W22/1024 | 30.76  | 0.44   |              |
| R4/1024 | LIVINGROOM | W23/1024 | 30.93  | 0.41   |              |
| R4/1024 | LIVINGROOM | W24/1024 | 30.87  | 0.50   |              |
| R4/1024 | LIVINGROOM | W25/1024 | 30.80  | 0.50   |              |
| R4/1024 | LIVINGROOM | W26/1024 | 30.53  | 0.50   |              |
| R4/1024 | LIVINGROOM | W27/1024 | 30.44  | 0.41   |              |
| R4/1024 | LIVINGROOM | W28/1024 | 30.40  | 0.45   | 5.07         |
| R5/1024 | LIVINGROOM | W29/1024 | 29.55  | 0.70   |              |
| R5/1024 | LIVINGROOM | W30/1024 | 29.75  | 0.63   |              |
| R5/1024 | LIVINGROOM | W31/1024 | 29.98  | 0.78   |              |

| Room           | Roomuse    | Window   | VSC(%) | ADF(%) | TOTAL<br>ADF(%) |
|----------------|------------|----------|--------|--------|-----------------|
| <b>R5/1024</b> | LIVINGROOM | W32/1024 | 29.95  | 0.78   |                 |
| <b>R5/1024</b> | LIVINGROOM | W33/1024 | 29.93  | 0.78   |                 |
| <b>R5/1024</b> | LIVINGROOM | W34/1024 | 29.65  | 0.61   |                 |
| <b>R5/1024</b> | LIVINGROOM | W35/1024 | 29.45  | 0.68   |                 |
| <b>R5/1024</b> | LIVINGROOM | W36/1024 | 38.05  | 0.75   |                 |
| <b>R5/1024</b> | LIVINGROOM | W37/1024 | 38.35  | 0.73   | 6.44            |
| <b>R6/1024</b> | KITCHEN    | W38/1024 | 38.25  | 1.23   |                 |
| <b>R6/1024</b> | KITCHEN    | W39/1024 | 38.47  | 1.21   | 2.44            |

# APPENDIX 3

## DRAWINGS



GIA  
1801-0039 - Measured Layouts, 227 Euston Road  
Measured Internal Survey  
Stephenson House - Marked Up Floorplans.pdf  
Site Photographs, Site Survey  
WILKINSON BYRE ARCHITECTS  
Proposed Scheme received 12/10/05  
MUMKENBECK & MARSHALL ARCHITECTS  
Proposed Scheme received 17/11/06  
ORDNANCE SURVEY  
Site Plan  
TATE & HMOLE DESIGN LTD  
IR05-06 Proposed Scheme

ALL HEIGHTS GIVEN IN mm AOD

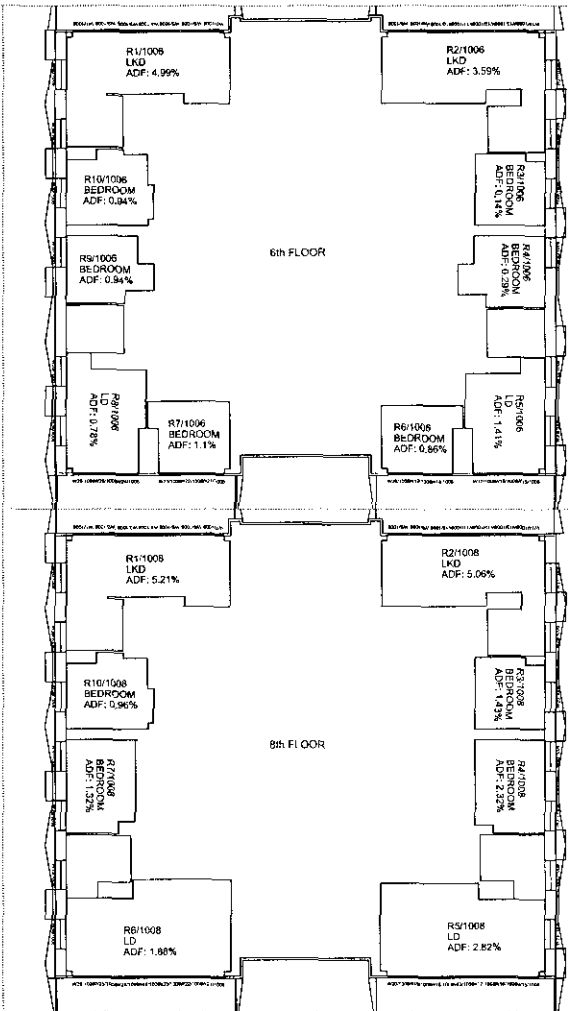
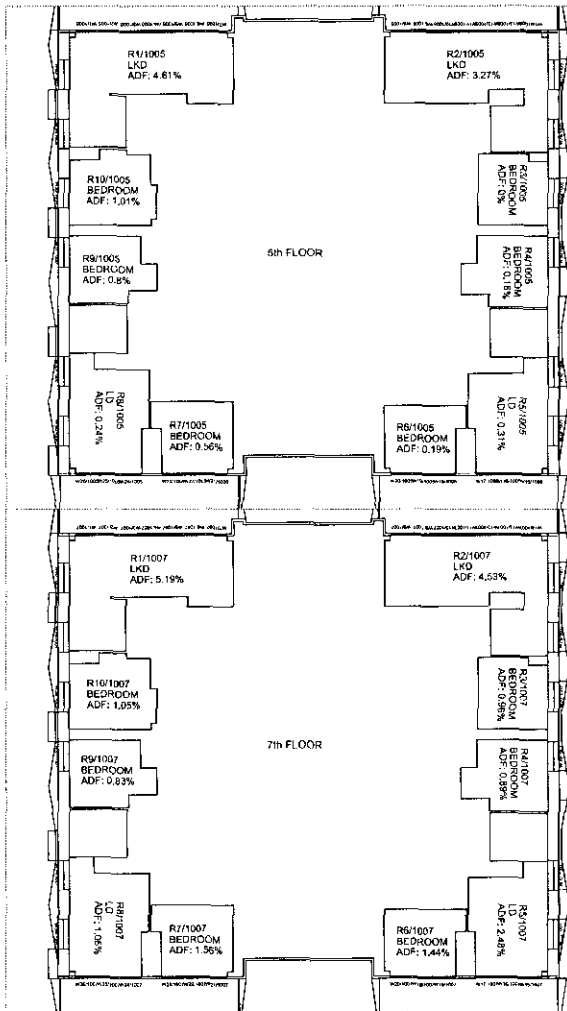
| Room | Height | Initial | Final |
|------|--------|---------|-------|
| R1   | 2.97%  | 550     |       |
| R2   | 2.5%   |         |       |
| R3   | 0.27%  |         |       |
| R4   | 0%     |         |       |
| R5   | 3.06%  |         |       |
| R6   | 0%     |         |       |
| R7   | 0.23%  |         |       |
| R8   | 0%     |         |       |
| R9   | 0%     |         |       |
| R10  | 0.59%  |         |       |
| R11  | 0%     |         |       |
| R12  | 0%     |         |       |
| R13  | 0%     |         |       |
| R14  | 0%     |         |       |
| R15  | 0.32%  |         |       |
| R16  | 0%     |         |       |
| R17  | 0.32%  |         |       |
| R18  | 0%     |         |       |
| R19  | 0%     |         |       |
| R20  | 0%     |         |       |

REGENTS PLACE  
NORTH EAST QUADRANT  
LONDON NW1

ROOM LAYOUTS & ADF RESULTS  
PROPOSED SCHEME IR05

Scale: 1:150 @A3  
Date: MAR 11  
Drawing No: 0039/516  
Sheet: 77  
B

gia



0039/S17 - Measured Layouts, 327 Euston Road  
 Measured Internal Survey  
 Staphen House - Parked Up Floorplans.pdf  
 Site Photographs, Site Survey  
 WILKINSON EYRE ARCHITECTS  
 Proposed Scheme revised 17/10/05  
 MUNKENBECK & MARSHALL ARCHITECTS  
 Proposed Scheme received 17/11/06  
 ORDNANCE SURVEY  
 Site Plans  
 TATE & HINDLE DESIGN LTD  
 IR05-06 Proposed Scheme

ALL HEIGHTS GIVEN IN mm AOD

| Rev | Date  | Description             | Scale |
|-----|-------|-------------------------|-------|
| 1   | 04/11 | Initial Issue           | 50%   |
| 2   | 04/11 | Room layout alterations |       |
| 3   |       |                         |       |
| 4   |       |                         |       |
| 5   |       |                         |       |
| 6   |       |                         |       |
| 7   |       |                         |       |
| 8   |       |                         |       |
| 9   |       |                         |       |
| 10  |       |                         |       |

RECENTS PLACE  
 NORTH EAST QUADRANT  
 LONDON NW1

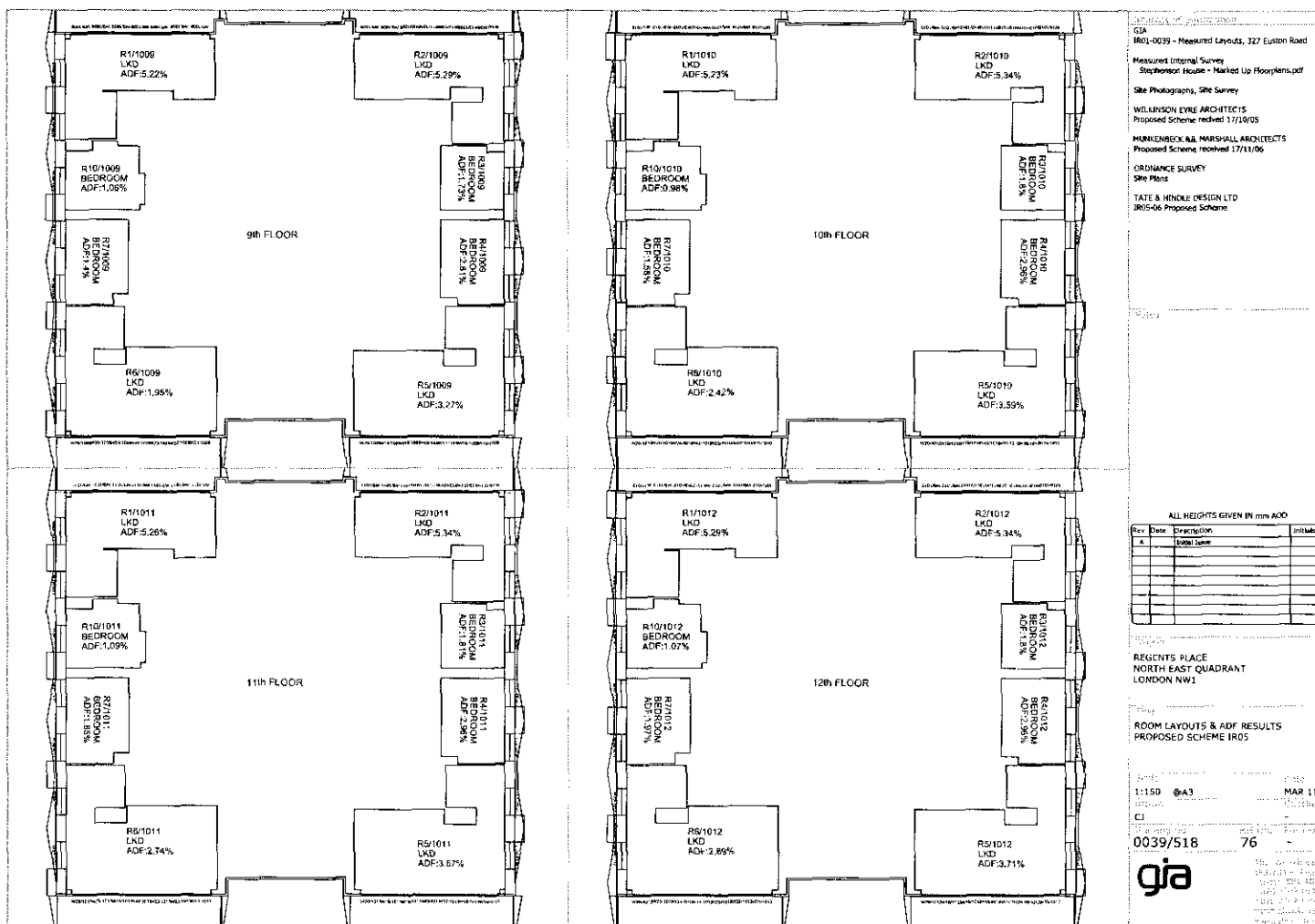
ROOM LAYOUTS & ADF RESULTS  
 PROPOSED SCHEME IR05

1:150 @A3  
 MAR 11

0039/S17 77 8

gia





GIA  
 1801-0039 - Measured Layouts, 327 Euston Road  
 Measures Integral Survey  
 Stephenson House - Marked Up Floorplans.pdf  
 Site Photographs, Site Survey  
 WILKINSON EYRE ARCHITECTS  
 Proposed Scheme received 17/10/05  
 HUNTERRECK & MARSHALL ARCHITECTS  
 Proposed Scheme received 17/11/06  
 ORDINANCE SURVEY  
 Site Plans  
 TATE & MINCKE DESIGN LTD  
 IR05-06 Proposed Scheme

ALL HEIGHTS GIVEN IN mm AOD

| Rev | Date     | Description   | Initials |
|-----|----------|---------------|----------|
| 1   | 03/03/06 | Initial Issue |          |
| 2   |          |               |          |
| 3   |          |               |          |
| 4   |          |               |          |
| 5   |          |               |          |
| 6   |          |               |          |
| 7   |          |               |          |
| 8   |          |               |          |
| 9   |          |               |          |
| 10  |          |               |          |

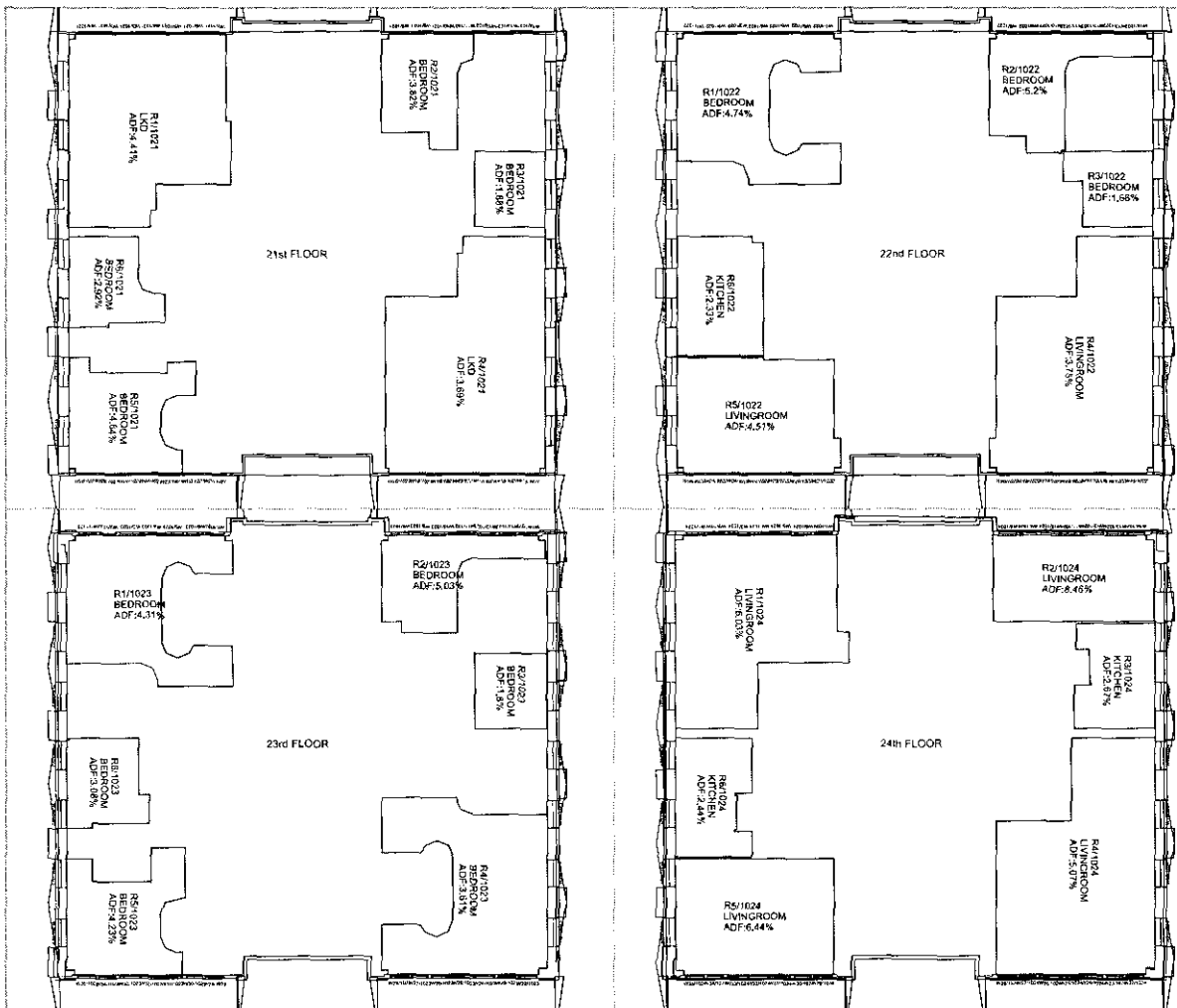
REGENTS PLACE  
 NORTH EAST QUADRANT  
 LONDON NW1

ROOM LAYOUTS & ADF RESULTS  
 PROPOSED SCHEME IR05

Scale: 1:150 @A3  
 Date: MAR 11  
 0039/518 76  
 gia







GA  
IRB1-0039 - Measured Layouts, 327 Euston Road  
Measured Internal Survey  
Stephenson House - Marked Up Floorplans.pdf  
Site Photographs, Site Survey  
WILKINSON EYRE ARCHITECTS  
Proposed Scheme received 13/10/05  
MUMKENBECK & MARSHALL ARCHITECTS  
Proposed Scheme received 17/11/06  
ORDNANCE SURVEY  
Site Plans  
TATE & HUNTER DESIGN LTD  
16/05/06 Proposed Scheme

ALL WEIGHTS GIVEN IN NFM AGO

| Room | Area | Description | Weight |
|------|------|-------------|--------|
| 1    | 100  | Living Room | 1.00   |
| 2    | 100  | Bedroom     | 1.00   |
| 3    | 100  | Kitchen     | 1.00   |
| 4    | 100  | Bathroom    | 1.00   |
| 5    | 100  | Corridor    | 1.00   |
| 6    | 100  | Staircase   | 1.00   |
| 7    | 100  | Storage     | 1.00   |
| 8    | 100  | Other       | 1.00   |

REGENTS PLACE  
NORTH EAST QUADRANT  
LONDON NW1

ROOM LAYOUTS & ADF RESULTS  
PROPOSED SCHEME IR05

1:150 @A3 MAR 11  
0039/521 76  
gja