



Internal Daylight Results



Informer
House,
2 High
Street,
Teddington,
TW11 8EW

May. 2016

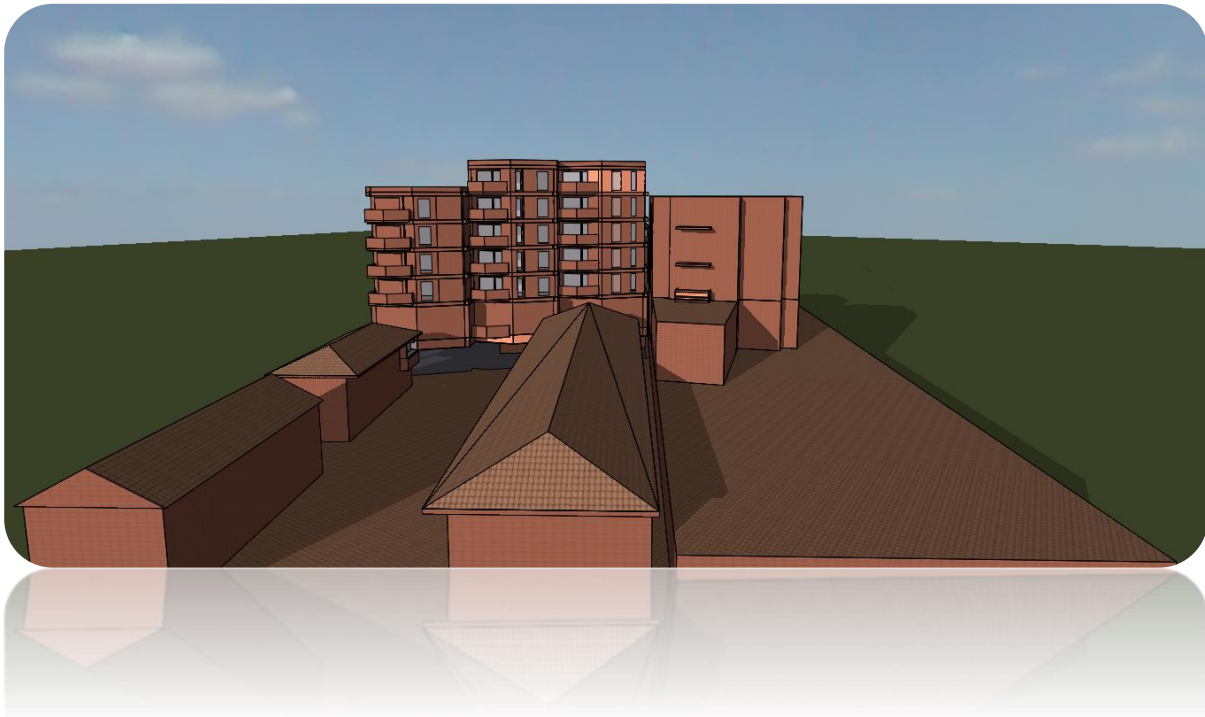
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|---------------|--|
| Revision | |
| Date | |
| Prepared by | |
| Checked by | |
| Authorised by | |

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1. Executive summary

This report demonstrates that adequate levels of internal daylight are met on 76% of the habitable rooms.

The minimum daylighting levels is defined as follow:

- Minimum daylight factor of at least 2.0% for kitchens/dining room;
- Minimum daylight factor of at least 1.5% for living room;
- Minimum daylight factor of at least 1.0% for bedrooms;
- 80% of the working plane in each new space receive direct light from the sky

This report demonstrates that the No-Sky Line criteria is met on 100% of the habitable rooms.

→ **On average the proposed development will provide good residential accommodations**

2. Introduction

This report has been prepared to support the planning application for the proposed development at **Informer House, 2 High Street, Teddington, TW11 8EW**. The proposed scheme involves the demolition of the existing building on site and a redevelopment to provide a new residential building to 23 flats with basement level for on-site car parking and commercial area on ground floor.

The report assesses the internal daylight within the residential flats of the proposed development and specifically focuses on the kitchens, living/dining rooms and bedrooms. The assessment is undertaken in accordance with "**BRE 209 Digest: Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice**". This document states that it is also intended to be used in conjunction with the interior daylight recommendations found within the British Standard BS8206-2:2008 and The Application Manual on Window Design of the Chartered Institution of Building Services Engineers (CIBSE).

The existing & proposed drawings (in AutoCAD format) of the project were provided by **Wimshurst Pelleriti** on the **20th May 2016** and have been used in preparing this report.

The study has been undertaken by constructing a 3D IES model of the proposed site and surrounding buildings in order to analyse the internal daylight within the apartments. The assessment is based on the 2D AutoCAD drawings (floor plans, sections and elevations) available at the time.

3. Planning policy

There are no national or local policies specifically relating to daylight, sunlight and overshadowing.

4. Guidance document

4.1. Building Research Establishment (BRE) report (BRE 209): "Site layout planning for daylight and sunlight: A guide to good practice" Second Edition (2011)

The Second Edition of the report replaces the 1991 document of the same name and came into effect from October 2011.

It is important to note that the introduction to the report stresses that the document is provided for guidance purposes only and it is not intended to be interpreted as a strict and rigid set of rules. It also recommends that it may be appropriate to adopt a flexible approach and alternative target values in dealing with "special circumstances" for example "in a historic city centre, or in an area with modern high-rise buildings, a higher degree of obstruction may be unavoidable if new developments are to match the height and proportions of existing buildings". This is amplified by the following extracts from the introduction (p1, para. 6) and Section 2.2:

"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". (p1, para. 1.6)

"In special circumstances the Developer or Planning Authority may wish to use different target values". (p1, para. 1.6)

"Note that numerical values given here are purely advisory. Different criteria may be used, based upon the requirements for daylight in an area viewed against other site layout constraints. Another important issue is whether the existing building is itself a good neighbour, standing a reasonable distance from the boundary and taking no more than its fair share of light". (p7 para. 2.2.3)

The examples given in the report can be applied to any part of the country: suburban, urban and rural areas. The inflexible application of the target values given in the report may make reaching the BRE criteria difficult in a tight, urban environment where there is unlikely to be the same expectation of daylight and sunlight amenity as in a suburban or rural environment.

5. Assessment methodology

5.1. General

This report analyse the levels of internal daylight at the following flats:

- First Floor:
 - R01 – Fla01 – K/L/D – 1F
 - R02 – Fla01 – B – 1F
 - R03 – Fla02 – K/L/D – 1F
 - R04 – Fla02 – B – 1F
 - R05 – Fla03 – K/L/D – 1F
 - R06 – Fla03 – B – 1F
 - R07 – Fla04 – K/L/D – 1F
 - R08 – Fla04 – B – 1F
 - R09 – Flat05 – K/L/D – 1F
 - R10 – Flat05 – B – 1F

- Second floor:
 - R11 – Fla06 – K/L/D – 2F
 - R12 – Fla06 – B – 2F
 - R13 – Fla07 – K/L/D – 2F
 - R14 – Fla07 – B – 2F
 - R15 – Fla08 – K/L/D – 2F
 - R16 – Fla08 – B – 2F
 - R17 – Fla09 – K/L/D – 2F
 - R18 – Fla09 – B – 2F
 - R19 – Fla10 – K/L/D – 2F
 - R20 – Fla10 – B – 2F

- Third Floor:
 - R21 – Fla11 – K/L/D – 3F
 - R22 – Fla11 – B – 3F
 - R23 – Fla12 – K/L/D – 3F
 - R24 – Fla12 – B – 3F
 - R25 – Fla13 – K/L/D – 3F
 - R26 – Fla13 – B – 3F
 - R27 – Fla14 – K/L/D – 3F
 - R28 – Fla14 – B – 3F
 - R29 – Fla15 – K/L/D – 3F
 - R30 – Fla15 – B – 3F

- Fourth Floor
 - R31 – Fla16 – K/L/D – 4F
 - R32 – Fla16 – B – 4F
 - R33 – Fla17 – K/L/D – 4F
 - R34 – Fla17 – B – 4F
 - R35 – Fla18 – K/L/D – 4F

R36 – Fla18 – B – 4F
R37 – Fla19 – K/L/D – 4F
R38 – Fla19 – B – 4F
R39 – Fla20 – K/L/D – 4F
R40 – Fla20 – B – 4F

- Fifth Floor
 - R41 – Flat 21 – K/L/D – 5F
 - R42 – Flat 21 – B – 5F
 - R43 – Flat 22 – K/L/D – 5F
 - R44 – Flat 21 – B – 5F
 - R45 – Flat 21 – K/L/D – 5F
 - R46 – Flat 21 – B – 5F

Specifically, it takes into consideration the Average Daylight Factor (ADF) in kitchens, living/dining rooms and bedrooms (habitable rooms only).

46 target rooms (R1 to R46) as shown in section 9.4 in Appendix, have been identified on the proposed drawings following guidance within the BRE guidelines "*Site layout planning for daylight and sunlight*".

The IES Virtual Environment modelling software utilised for the compilation of this report has been accredited by CIBSE and acknowledged by the BRE as a suitable software tool for undertaking internal daylight assessments in accordance with the BRE Good Practice guidelines. The specific IES software modules utilised for this assessment are the following:

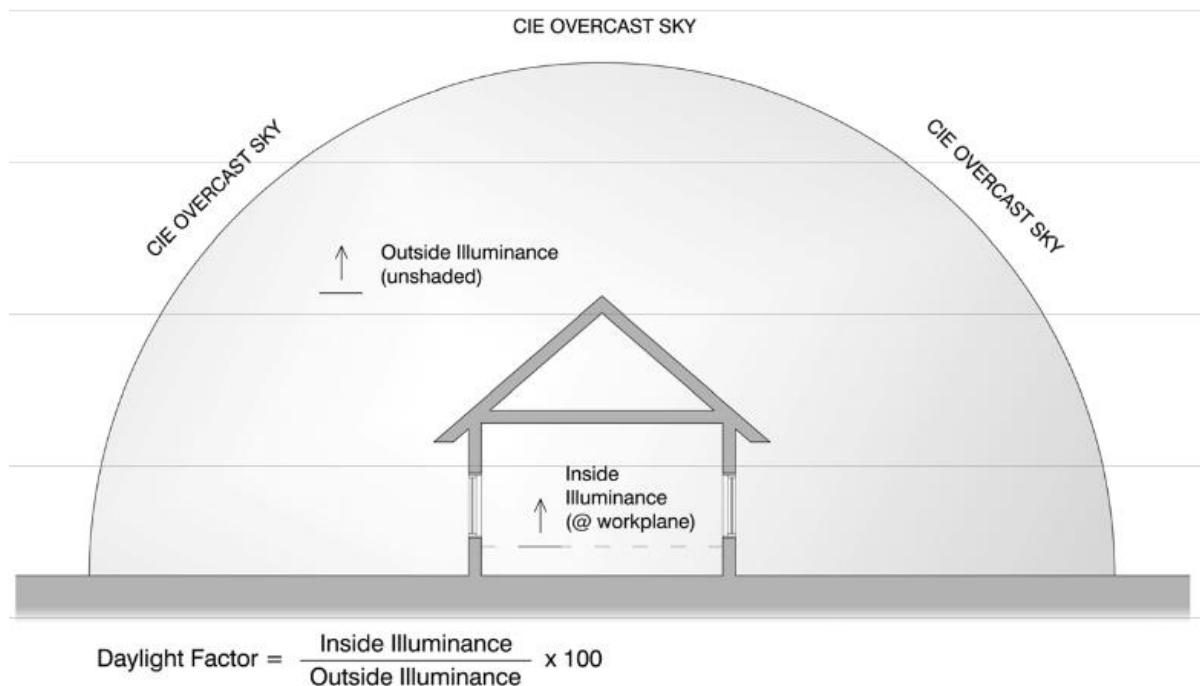
- ModelIT: enables you to create a 3D "Virtual Environment" model without CAD data, or alternatively allows you to create a 3D model from 2D CAD data. Interfaces with AutoCAD and Google Sketchup.
- FlucDL: allows to calculate point by point illuminance and daylight factors on any surfaces in the model or on specified workplanes (e.g. the height of a desk).

5.2. BRE Digest 209: "Site layout planning for daylight and sunlight"

This section provides a brief description of the calculating methods for the daylight, sunlight and overshadowing to gardens and open spaces criteria presented in BRE Digest 209.

5.2.1. Average Daylight Factor (ADF)

The Average Daylight Factor (ADF) is the average indoor illuminance (from daylight) on the working plane within a room, expressed as a percentage of the simultaneous outdoor illuminance on a horizontal plane under an unobstructed CIE "standard overcast sky".



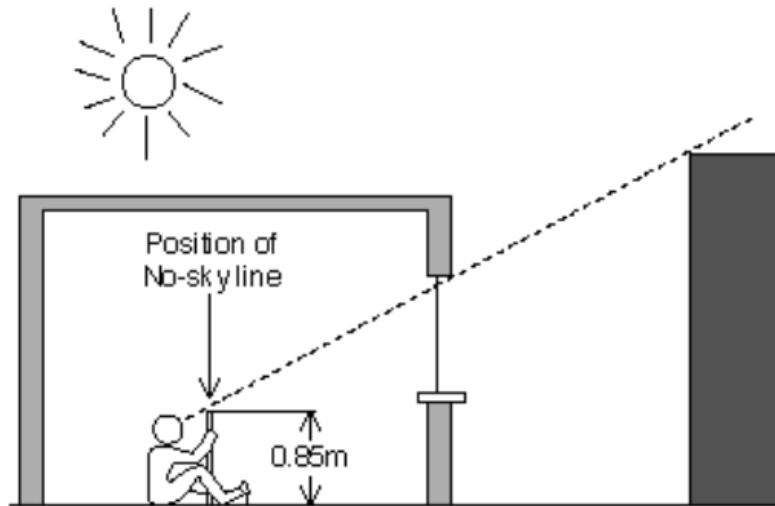
The BRE guidelines "Site layout planning for daylight and sunlight" incorporate two main methods of calculating daylight: the Vertical Sky Component (VSC) method and the Average Daylight Factor (ADF) method.

The ADF method of assessment takes into account the total glazed area to the room, the transmittance quality of the glazing proposed, the total area of the room surfaces including ceilings and floors, and the internal average reflectance for the room being assessed. The method also takes into account the Vertical Sky Component and the quantum of reflected light off external surfaces.

In this assessment, the ADF method is selected and more details on the numerical criteria for the VSC method are presented in section 9.6.

5.2.2. No-Sky Line (NSL)

This method of assessment is a simple test to establish where within the proposed room the sky will be visible through the windows, taking into account external obstructions. The assessment is undertaken at working plane height (850mm above floor level) and the method of calculation is set out in Appendix D of the BRE handbook.



Appendix C of the BRE handbook states “if a significant area of the working plane lies beyond the no skyline (i.e., it receives no direct skylight), then the distribution of daylight in the room will look poor and supplementary electric lighting will be required.” To guarantee a satisfactory daylight uniformity, this area is more precisely quantified in the BS 8206 Part2 2008 as 20%.

More details on the numerical criteria for the NSL method are presented in section 9.6.

6. BRE Digest 209: Significant criteria

6.1. Average Daylight Factor and No-Sky Line

The daylight criteria given within the BRE guidelines have been used as a basis to assess the internal daylight:

"If a predominantly daylit appearance is required, then ADF should be 5% or more if there is no supplementary electric lighting, or 2% or more if supplementary electric lighting is provided. There are additional recommendations for dwellings, of 2% for kitchens, 1.5% for living rooms and 1% for bedrooms. These last are minimum values of Average Daylight Factor, and should be obtained even if a predominantly daylit appearance is not required".

The Code for Sustainable Homes: technical guide (Nov 2010) recommends that kitchens must achieve a minimum Average Daylight Factor (ADF) of at least 2%, all living rooms, dining rooms and studies (including any room designated as a home office under Ene 9 – Home Office) must achieve a minimum Average Daylight Factor of at least 1.5% and 80% of the working plane in each kitchen, living room, dining room, and study (including any room designated as a home office under Ene 9 – Home Office) must receive direct light from the sky.

6.2. Criteria for Average Daylight Factor and No-Sky Line

The table 1 is a summary of the criteria to assess the ADF and NSL.

| Room function | Criteria |
|--|------------|
| Kitchen | ADF > 2.0% |
| Living/Dining room | ADF > 1.5% |
| Bedroom | ADF > 1.0% |
| No-Sky Line: % of working plane in each rooms | ≥ 80% |

Table 1: Criteria for assessing ADF and NSL

7. Assessment

7.1. BS 8206-2: 1992

The foreword to BS 8206-2: 1992 states that:

“The aim of the standard is to give guidance to architects, builders and others who carry out lighting design. It is recognised that lighting is only one of many matters that influence fenestration. These include other aspects of environmental performance (such as noise, thermal equilibrium and the control of energy use), fire hazards, constructional requirements, the external appearance and the surroundings of the site. The best design for a building does not necessarily incorporate the ideal solution for any individual function. For this reason, careful judgement should be exercised when using the criteria given in the standards for other purposes, particularly town planning control.”

7.2. Average Daylight Factor and No-Sky Line

The daylight results are presented in section 8.6 in Appendix.
(K = kitchen, L = Living, D = Dining, B = Bedroom)

A summary of results is displayed in the table 2 below:

| Internal daylight assessment | | | | | | |
|------------------------------|---------------|----------------|--------------|--------|------|--------|
| Room | Room function | ADF (criteria) | ADF (result) | Result | NSL | Result |
| First Floor | | | | | | |
| R01 | K | 2% | 1.2% | FAIL | 90% | PASS |
| R02 | B | 1% | 2.2% | PASS | 98% | PASS |
| R03 | K | 2% | 2.9% | PASS | 100% | PASS |
| R04 | B | 1% | 2.2% | PASS | 98% | PASS |
| R05 | K | 2% | 1.9% | FAIL | 100% | PASS |
| R06 | B | 1% | 2.3% | PASS | 98% | PASS |
| R07 | K | 2% | 3.1% | PASS | 100% | PASS |
| R08 | B | 1% | 2.1% | PASS | 100% | PASS |
| R09 | K | 2% | 1.8% | FAIL | 99% | PASS |
| R10 | B | 1% | 4.9% | PASS | 100% | PASS |

| Second Floor | | | | | | |
|--------------|---|----|------|------|------|------|
| R11 | K | 2% | 1.2% | FAIL | 90% | PASS |
| R12 | B | 1% | 2.0% | PASS | 98% | PASS |
| R13 | K | 2% | 3.1% | PASS | 100% | PASS |
| R14 | B | 1% | 2.3% | PASS | 98% | PASS |
| R15 | K | 2% | 1.9% | FAIL | 100% | PASS |
| R16 | B | 1% | 2.4% | PASS | 98% | PASS |
| R17 | K | 2% | 3.0% | PASS | 100% | PASS |
| R18 | B | 1% | 2.1% | PASS | 100% | PASS |
| R19 | K | 2% | 1.8% | FAIL | 91% | PASS |
| R20 | B | 1% | 4.9% | PASS | 100% | PASS |
| Third Floor | | | | | | |
| R21 | K | 2% | 1.2% | FAIL | 90% | PASS |
| R22 | B | 1% | 2.3% | PASS | 98% | PASS |
| R23 | K | 2% | 3.3% | PASS | 100% | PASS |
| R24 | B | 1% | 2.3% | PASS | 98% | PASS |
| R25 | K | 2% | 1.9% | FAIL | 100% | PASS |
| R26 | B | 1% | 2.4% | PASS | 98% | PASS |
| R27 | K | 2% | 3.9% | PASS | 100% | PASS |
| R28 | B | 1% | 2.1% | PASS | 100% | PASS |
| R29 | K | 2% | 1.6% | FAIL | 98% | PASS |
| R30 | B | 1% | 5.5% | PASS | 100% | PASS |
| Fourth Floor | | | | | | |
| R31 | K | 2% | 1.2% | FAIL | 90% | PASS |

| | | | | | | |
|--------------------|---|----|------|------|------|------|
| R32 | B | 1% | 3.1% | PASS | 100% | PASS |
| R33 | K | 2% | 3.6% | PASS | 100% | PASS |
| R34 | B | 1% | 2.3% | PASS | 98% | PASS |
| R35 | K | 2% | 1.9% | FAIL | 100% | PASS |
| R36 | B | 1% | 2.5% | PASS | 98% | PASS |
| R37 | K | 2% | 6.1% | PASS | 100% | PASS |
| R38 | B | 1% | 2.1% | PASS | 100% | PASS |
| R39 | K | 2% | 3.5% | PASS | 98% | PASS |
| R40 | B | 1% | 5.6% | PASS | 100% | PASS |
| Fifth Floor | | | | | | |
| R41 | K | 2% | 2.7% | PASS | 100% | PASS |
| R42 | B | 1% | 2.7% | PASS | 100% | PASS |
| R43 | K | 2% | 5.6% | PASS | 100% | PASS |
| R44 | B | 1% | 1.9% | PASS | 100% | PASS |
| R45 | K | 2% | 5.1% | PASS | 100% | PASS |
| R46 | B | 1% | 2.7% | PASS | 100% | PASS |

Table 2: Internal daylight results

- As it can be seen in the table above, the 76% of the habitable rooms achieve the internal daylight factor (**ADF**), then the average illuminance on the working plane will be adequate.
- Only 6 out of 46 habitable rooms (**R05-R09-R15-R19-R25-R35**) from the first level to fourth failed slightly to meet the BRE criteria (values between 1.8% and 1.9%) due to the presence of above overhang (balcony). However it must be noted that the area of the working plane will receive direct skylight higher than 99%, therefore supplementary electric lighting will not be needed.
- Only 5 out of 46 habitable rooms (**R01-R11-R21-R29-R31**) from the first level to fourth failed to meet the BRE criteria (values between 1.2% and 1.6%) due to the presence of above overhang (balcony). However it must be noted that the area of the working plane will receive direct skylight higher than 90%, therefore supplementary electric lighting will not be needed.

The projection of balconies can restrict daylight to rooms lit by windows below them, it is stated in BRE paragraph 2.1.17:

“Balconies and overhangs significantly reduce the light entering windows below them this is a particular problem if there are large obstructions opposite; with the combined effect of the overhang and the obstruction, it may be impossible to see the sky from inside the room”.

- As it can be seen in the table 2, all habitable rooms exceed or achieve the NSL criteria (**No Sky Line Criteria**). On the average the distribution of indoor daylight will be adequate and the habitable rooms will not require supplementary electric lighting.
- As the kitchen/dining room is "open plan" it is considered as one room, therefore the minimum criteria of 2.0% (kitchen) would need to be achieved.

It should be noted that the values provided in the BRE 209 are for guidance purposes only.

8. Conclusion

8.1. Average Daylight Factor

This report demonstrates that adequate levels of internal daylight are met on 76% of the habitable rooms. Only 11 out of 46 rooms failed slightly to meet the average daylight factor, however all habitable rooms will achieve a NSL higher than 90% and the sky view at working plane level will exceed the 80% in accordance to the BS8206-2, therefore the rooms will not appear gloomy.

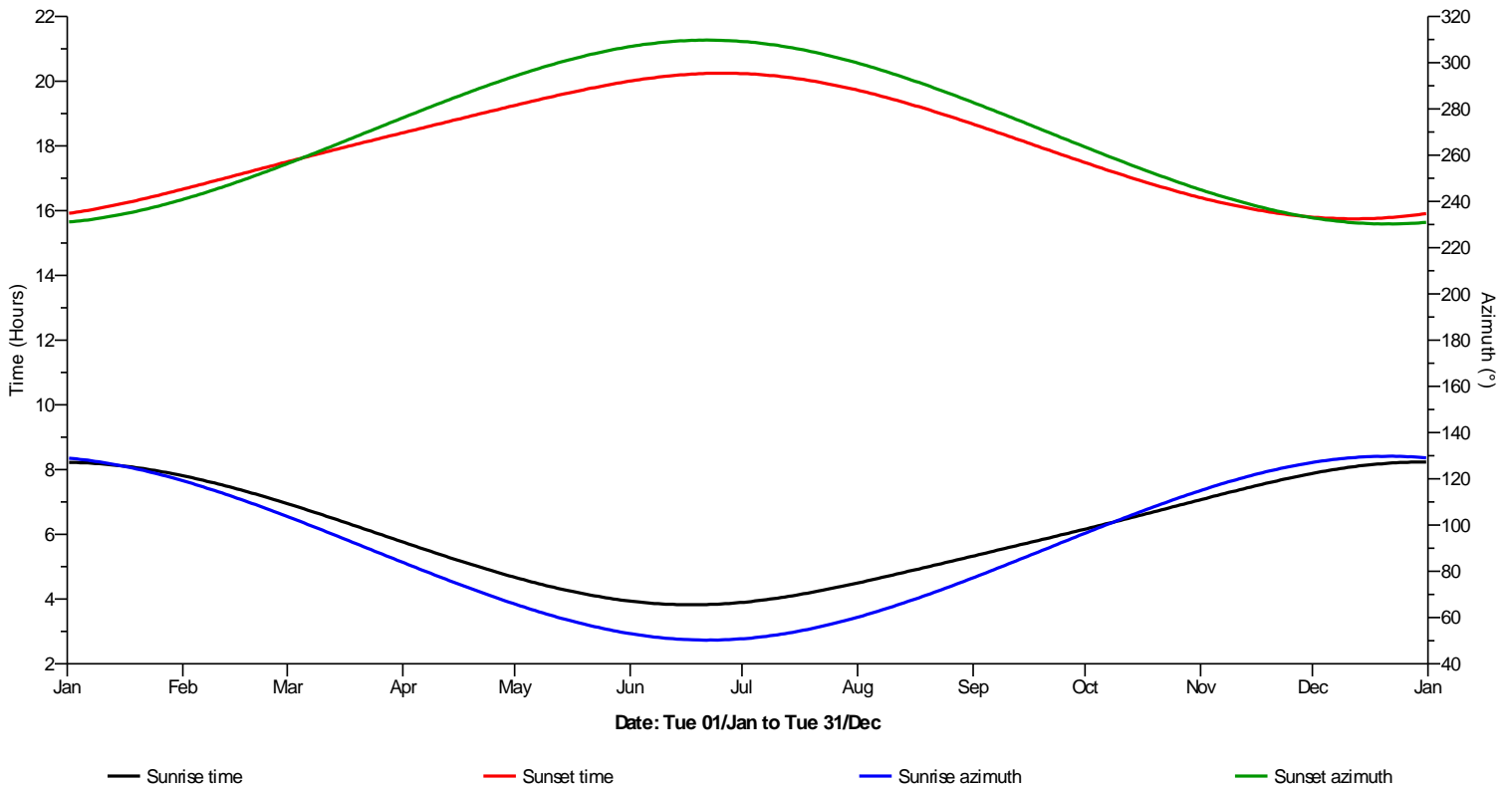
8.2. No-Sky Line

This report clearly shows that the No-Sky Line criteria are met on all habitable rooms.

On balance the proposed development will provide good residential accommodations which will enjoy good levels of daylight.

9. Appendix

9.1. Sunrise and sunset time

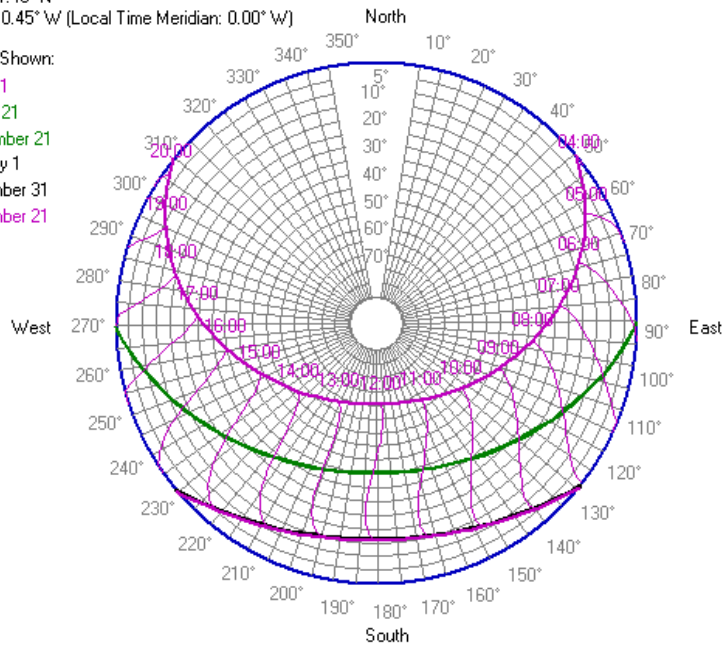


9.2. Sun path

Location: London/Heathrow
 Latitude: 51.48° N
 Longitude: 0.45° W (Local Time Meridian: 0.00° W)

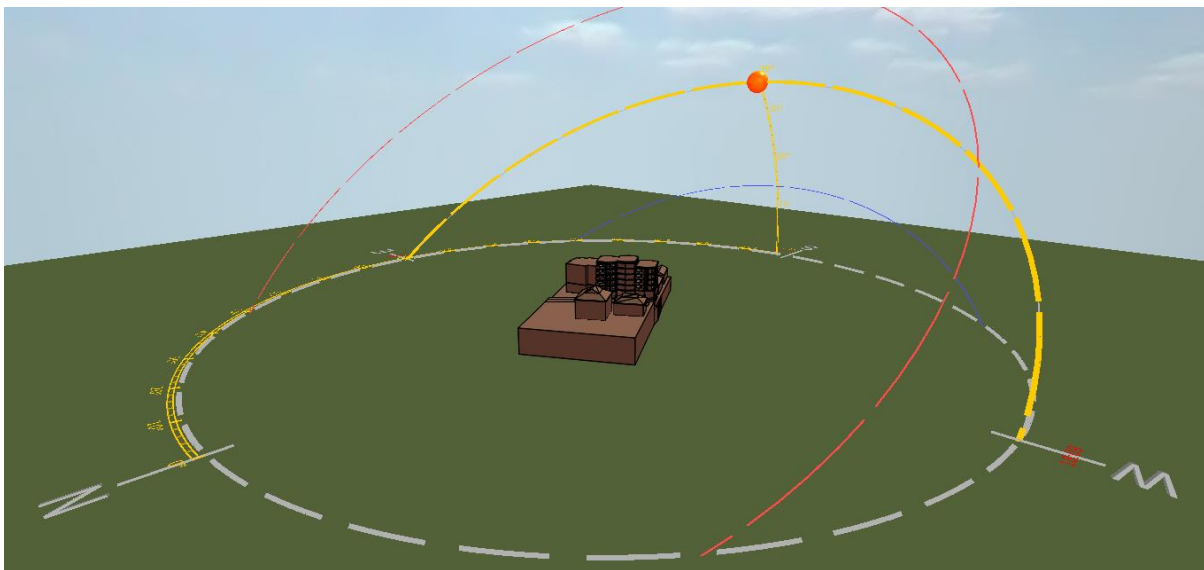
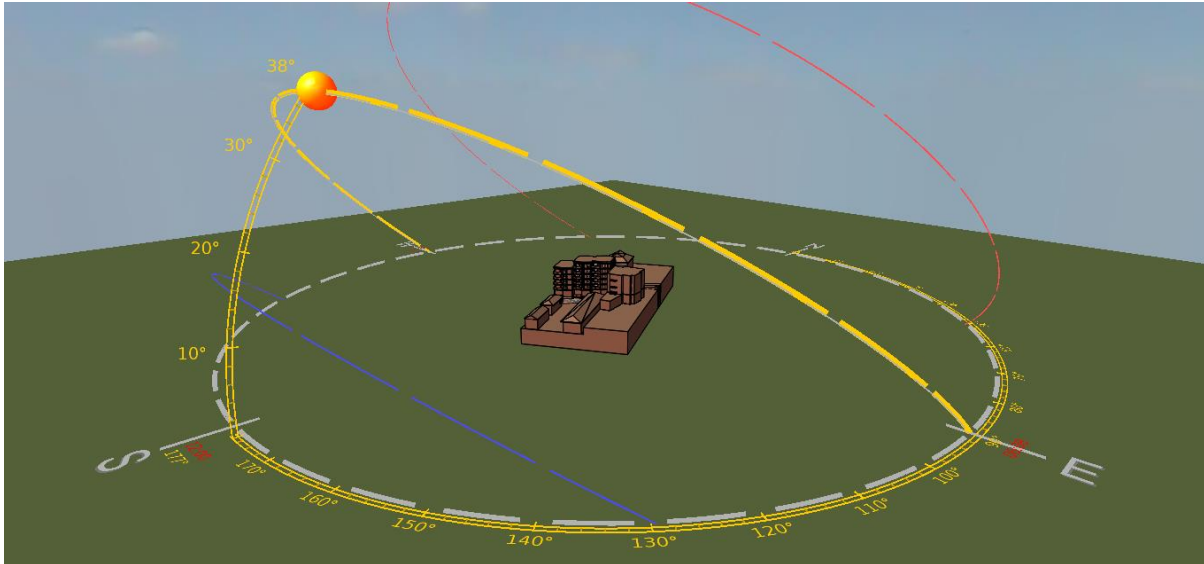
Sun Paths Shown:

- June 21
- March 21
- September 21
- January 1
- December 31
- December 21

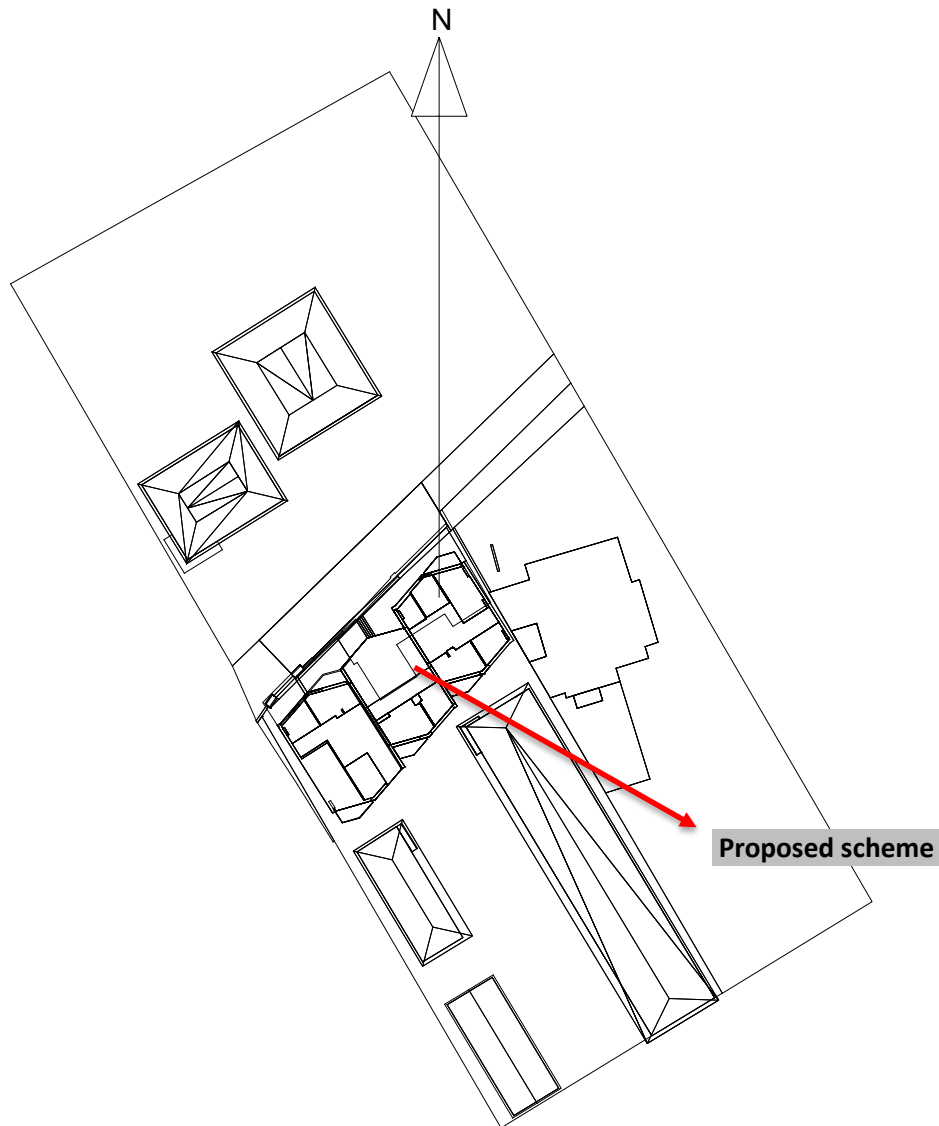


9.3. Suntrace

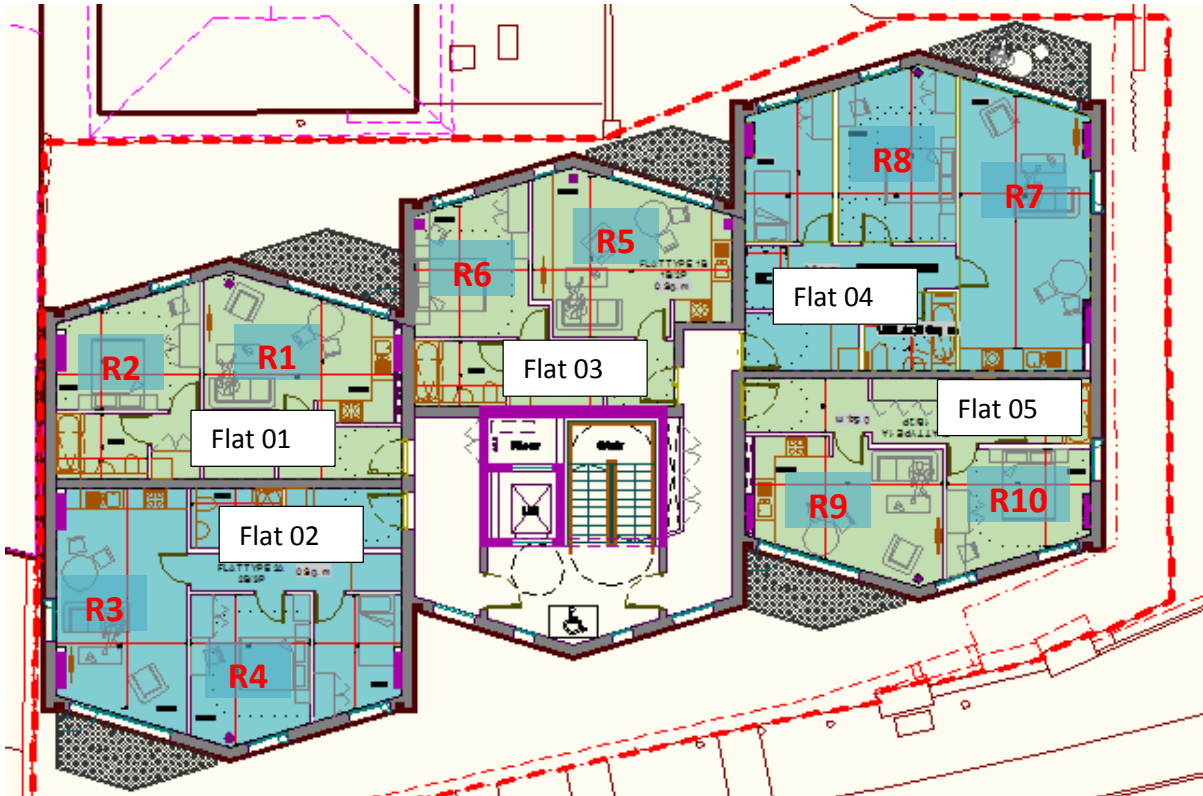
- ❖ The red line represents the sun's path during June.
- ❖ The yellow line represents the sun's path during March/September.
- ❖ The blue line represents the sun's path during December.



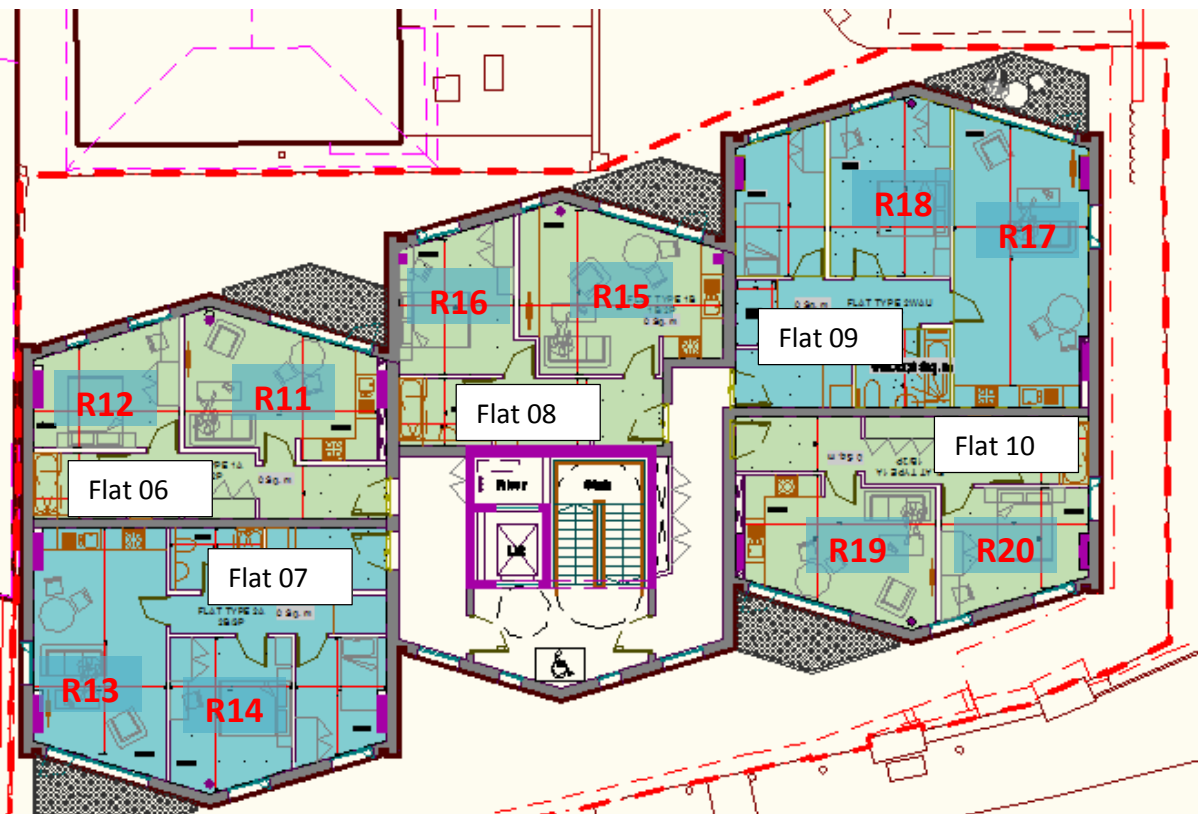
9.4. Site plan and location
9.4.1. Proposed site layout



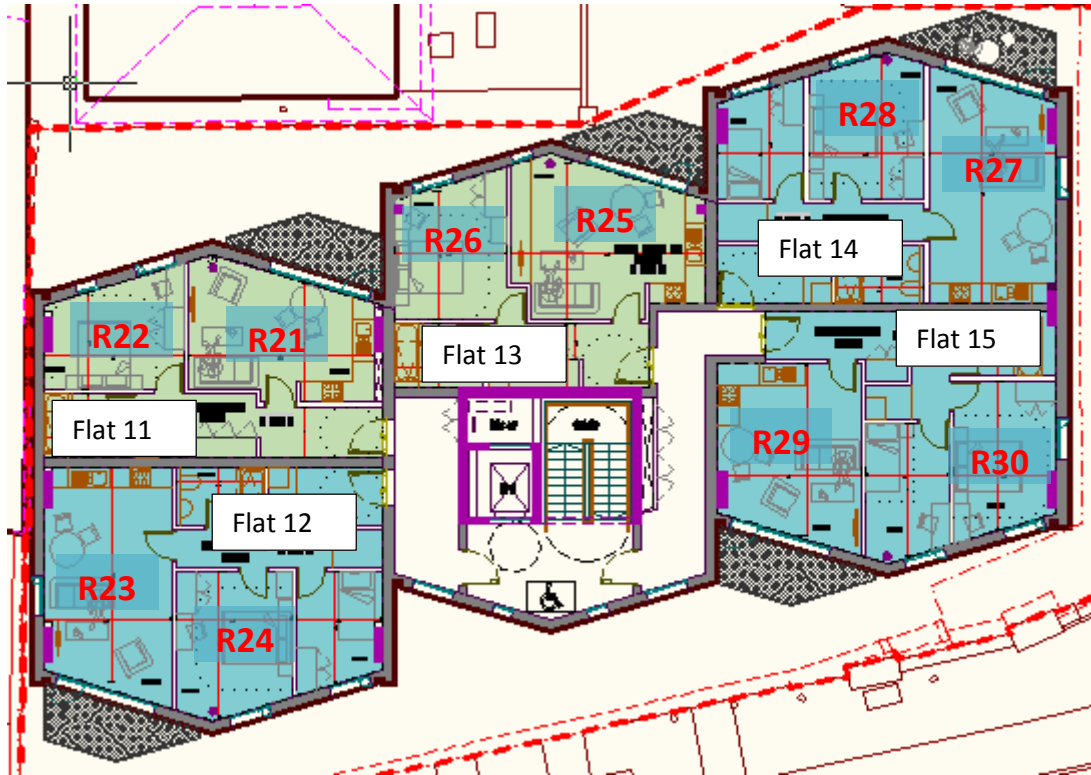
| Location | |
|--|---------|
| Informer House, 2 High Street, Teddington, TW11 8EW | |
| Latitude (°) | 51.43 N |
| Longitude (°) | 0.33 W |



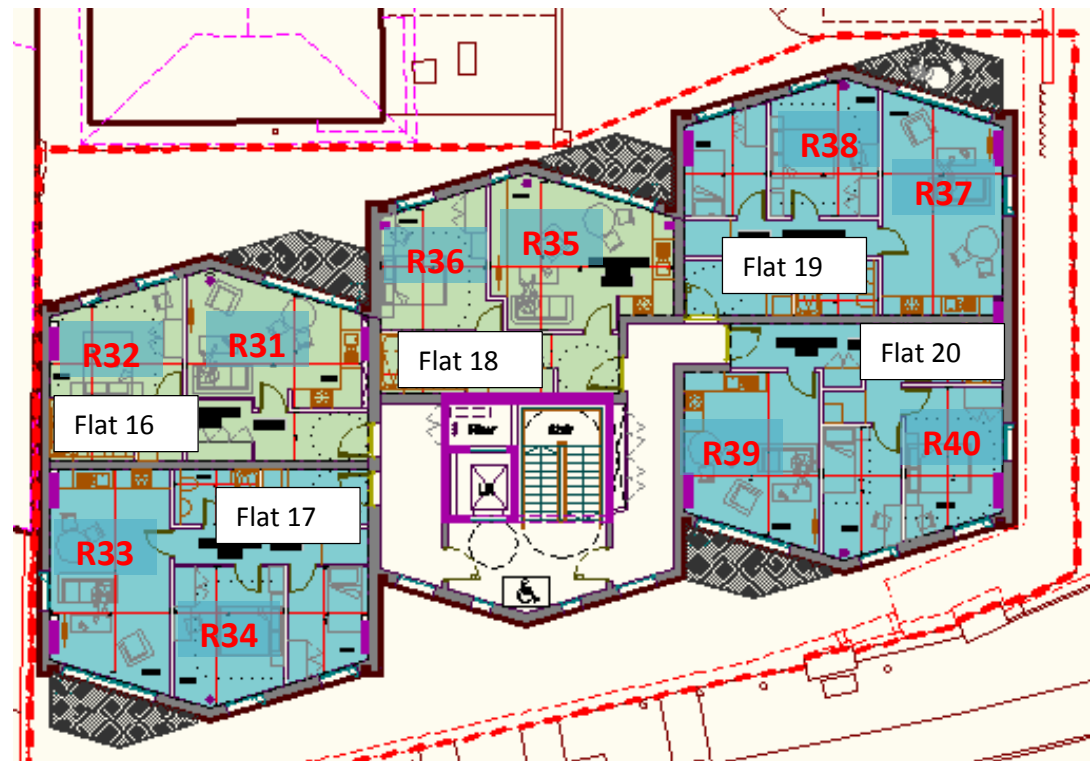
Proposed first floor



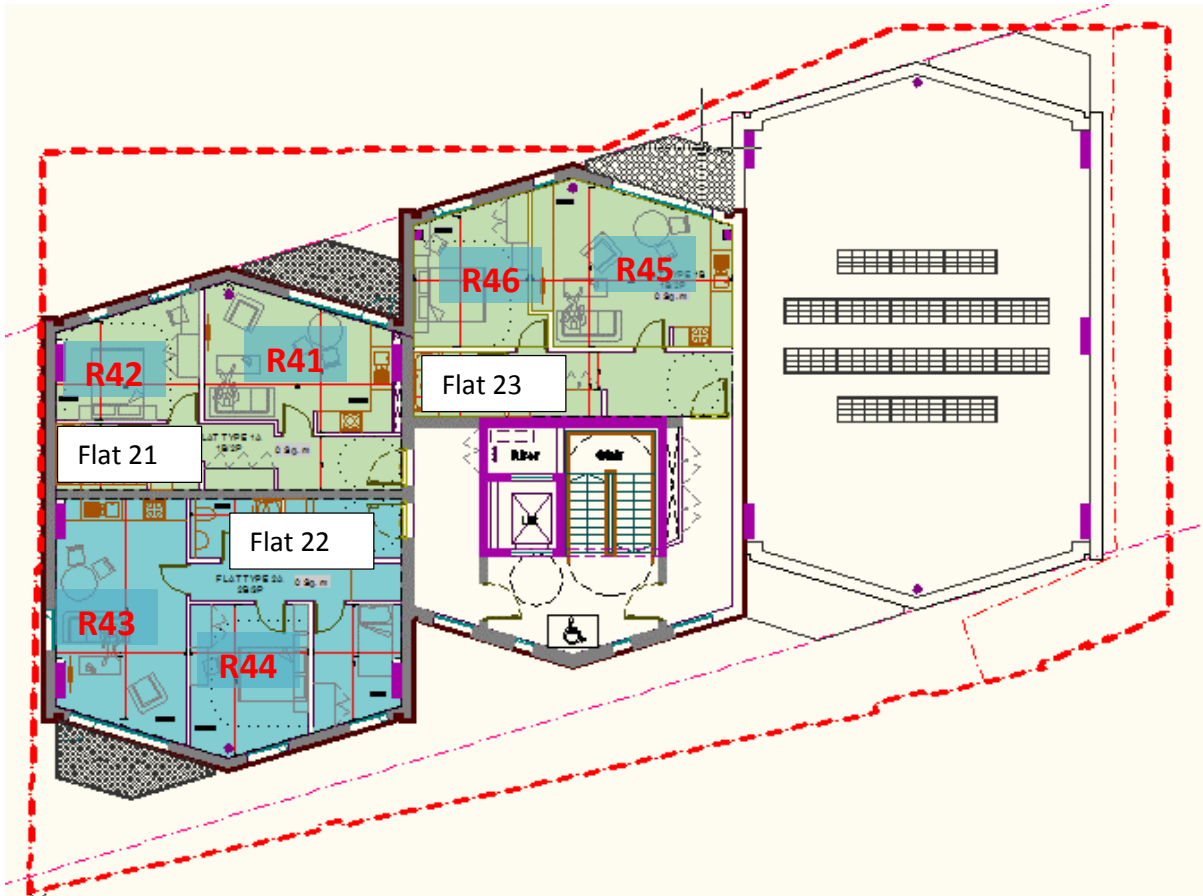
Proposed second floor



Proposed third floor



Proposed fourth floor



9.5. Model images



Front Elevation

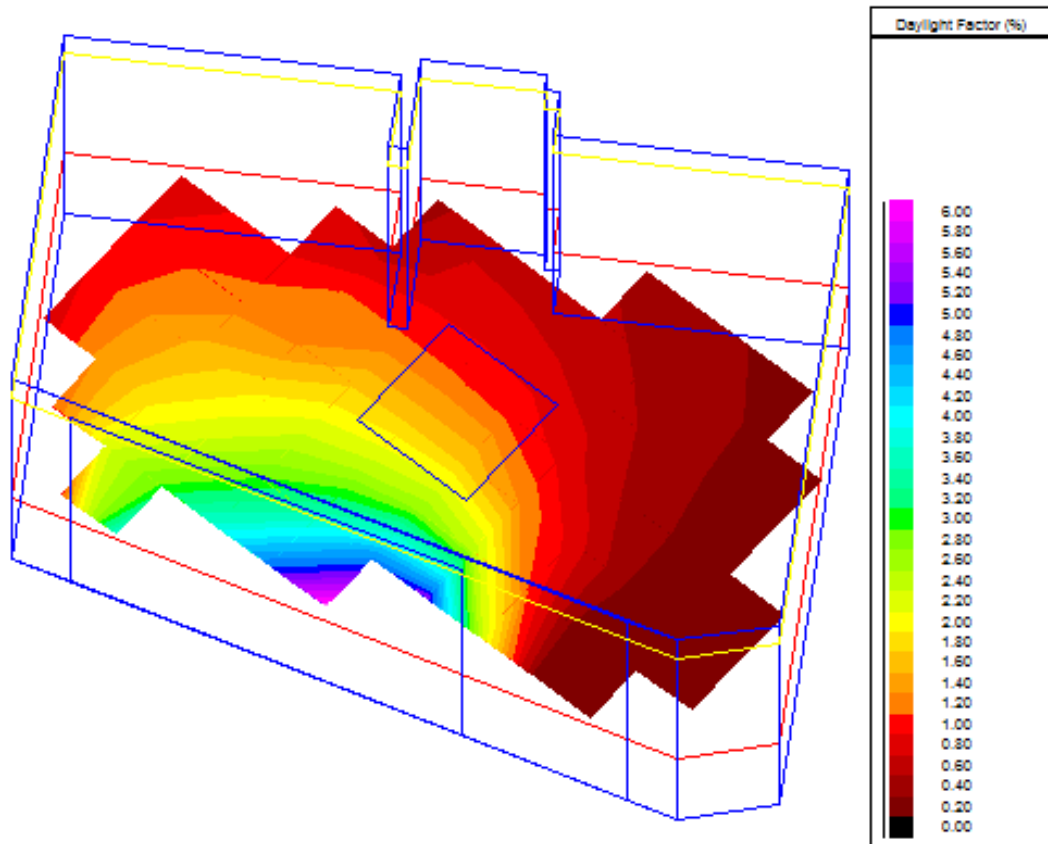


Rear Elevation

9.6. ADF and No-Sky Line results

First Floor

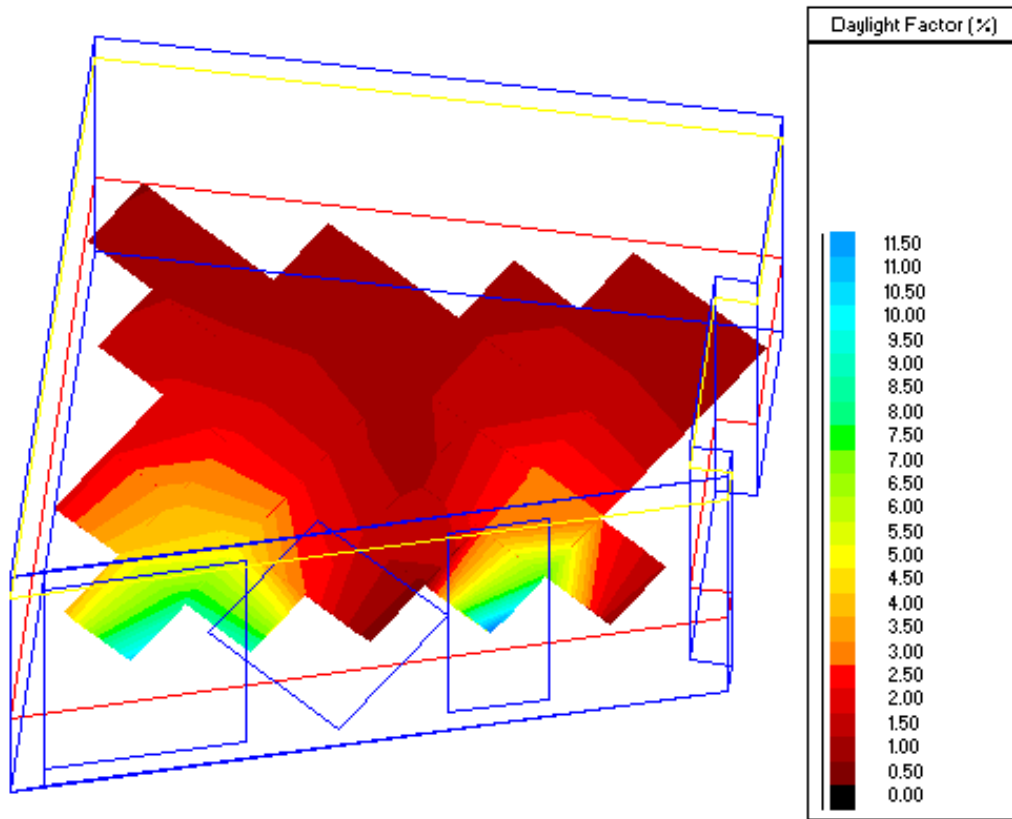
R01



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=19.543m ² Margin=0.00 m | Daylight factor | 0.0 % | 1.2 % | 6.0 % | 0.01 | 0.00 |
| | Daylight illuminance | 0.80 lux | 141.15 lux | 735.04 lux | 0.01 | 0.00 |
| | Sky view | 0.00 | 0.90 | 1.00 | 0.00 | 0.00 |

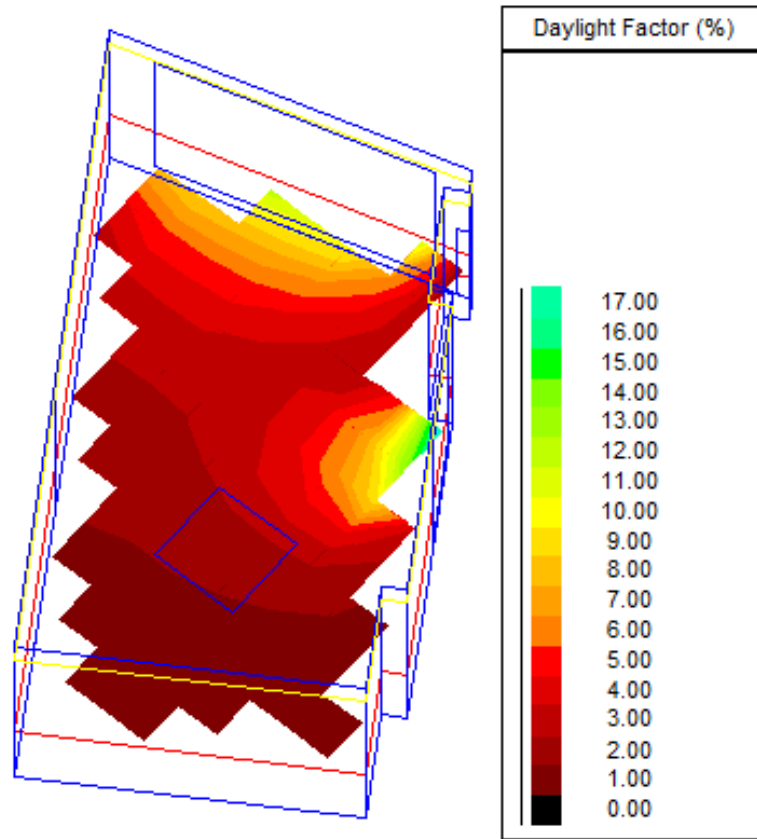
R02



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|---------------------------|--------------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.190m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.2 % | 11.9 % | 0.06 | 0.01 |
| | Daylight illuminance | 16.83 lux | 263.95 lux | 1449.77 lux | 0.06 | 0.01 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

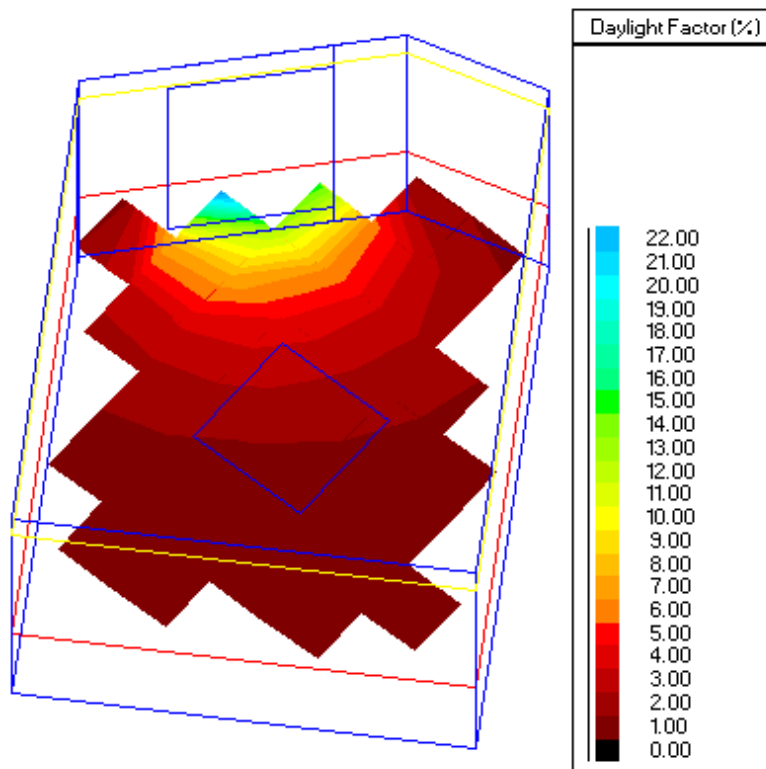
R03



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=23.218m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.9 % | 17.9 % | 0.05 | 0.01 |
| | Daylight illuminance | 16.40 lux | 360.01 lux | 2182.57 lux | 0.05 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

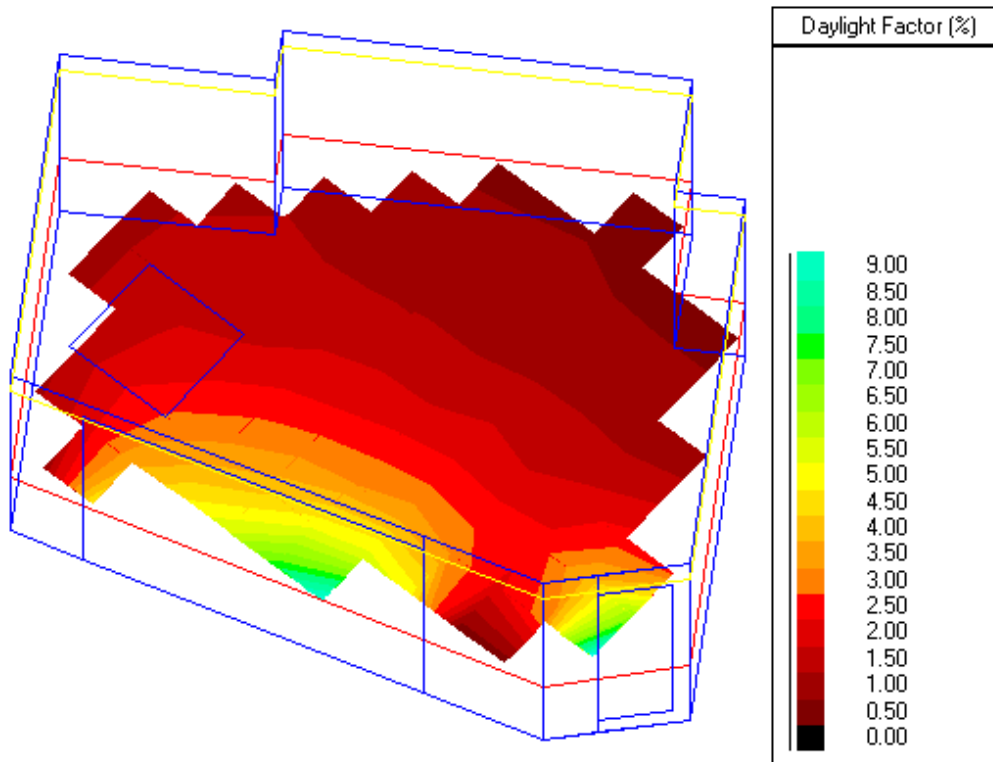
R04



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=13.524m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.2 % | 22.5 % | 0.03 | 0.00 |
| | Daylight illuminance | 7.82 lux | 271.77 lux | 2748.09 lux | 0.03 | 0.00 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

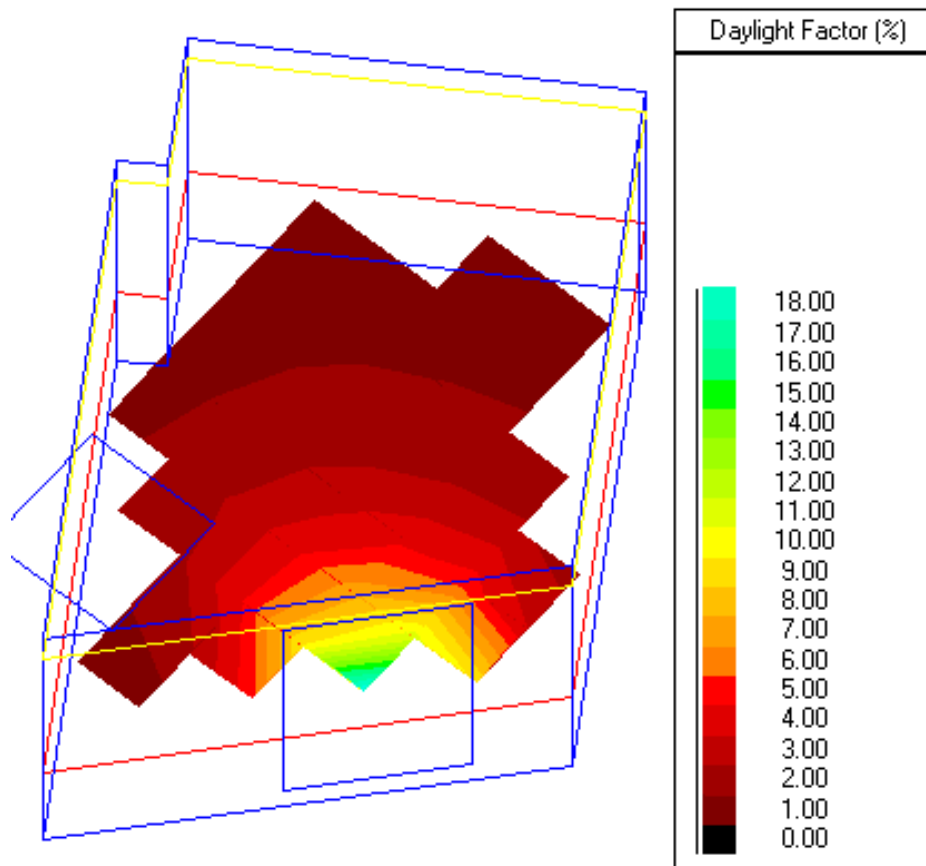
R05



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|---------------------------|--------------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=22.468m ² Margin=0.00 m | Daylight factor | 0.2 % | 1.9 % | 9.2 % | 0.10 | 0.02 |
| | Daylight illuminance | 22.35 lux | 230.52 lux | 1125.27 lux | 0.10 | 0.02 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

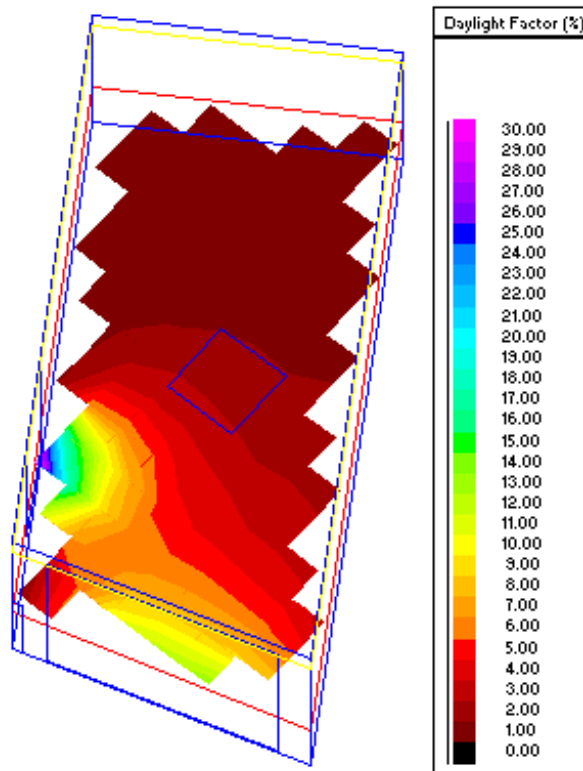
R06



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.372m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.3 % | 18.4 % | 0.03 | 0.00 |
| | Daylight illuminance | 7.71 lux | 284.55 lux | 2249.27 lux | 0.03 | 0.00 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

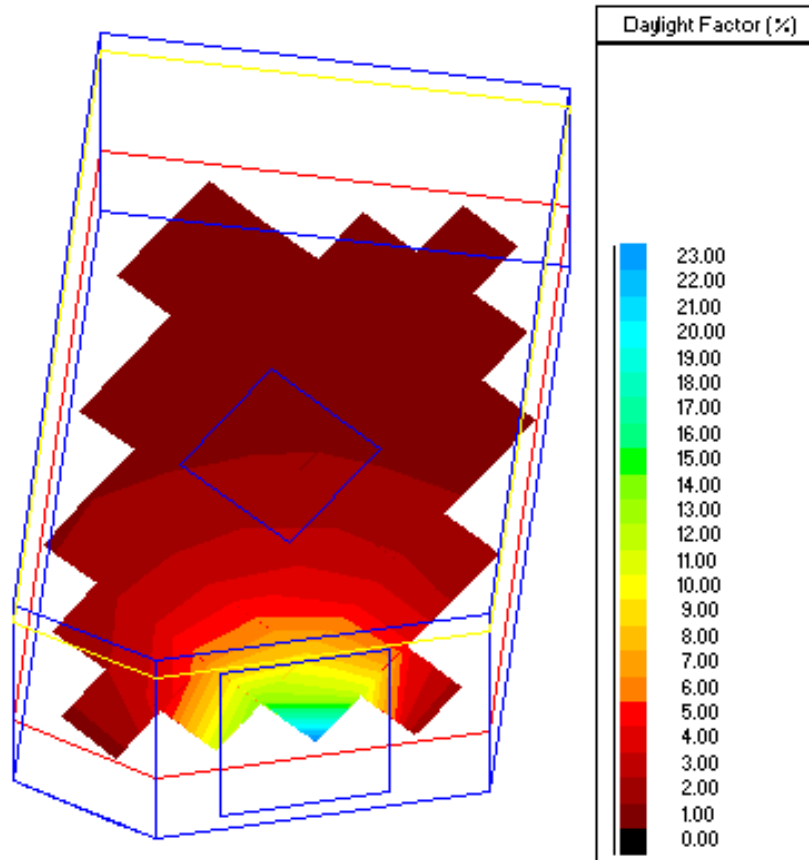
R07



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=28.603m ² Margin=0.00 m | Daylight factor | 0.1 % | 3.1 % | 30.6 % | 0.05 | 0.00 |
| | Daylight illuminance | 18.05 lux | 375.50 lux | 3744.52 lux | 0.05 | 0.00 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

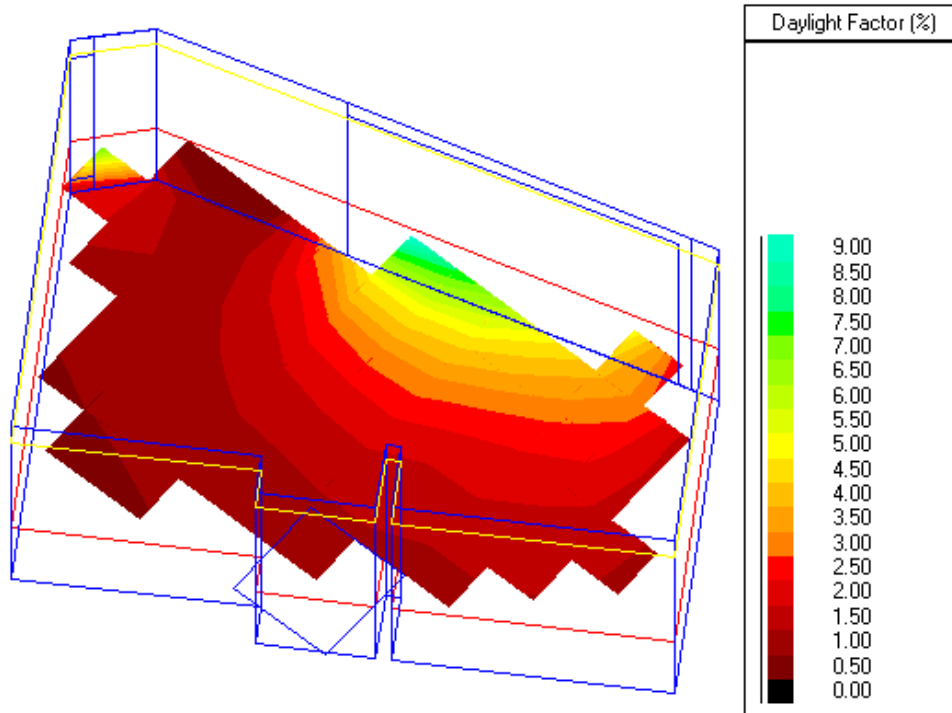
R08



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=15.786m ² Margin=0.00 m | Daylight factor | 0.2 % | 2.1 % | 23.4 % | 0.07 | 0.01 |
| | Daylight illuminance | 19.37 lux | 259.86 lux | 2855.95 lux | 0.07 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

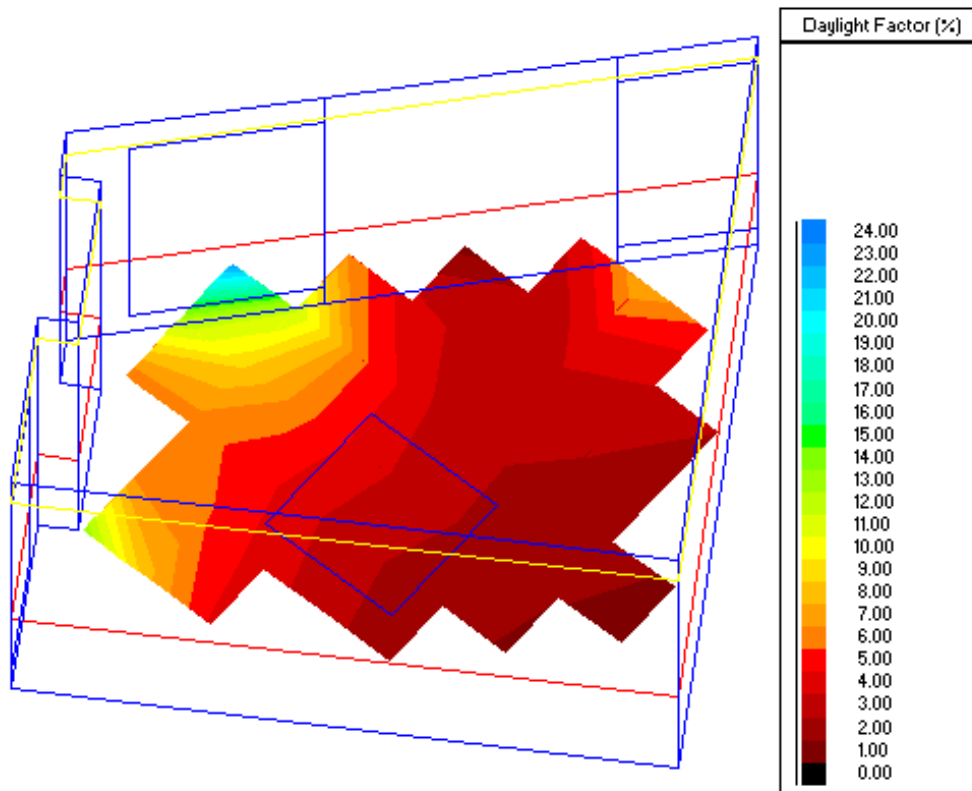
R09



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|-------------|---------------------------|--------------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=19.430m ² Margin=0.00 m | Daylight factor | 0.0 % | 1.8 % | 9.1 % | 0.03 | 0.01 |
| | Daylight illuminance | 5.76 lux | 215.34 lux | 1112.61 lux | 0.03 | 0.01 |
| | Sky view | 0.00 | 0.99 | 1.00 | 0.00 | 0.00 |

R10

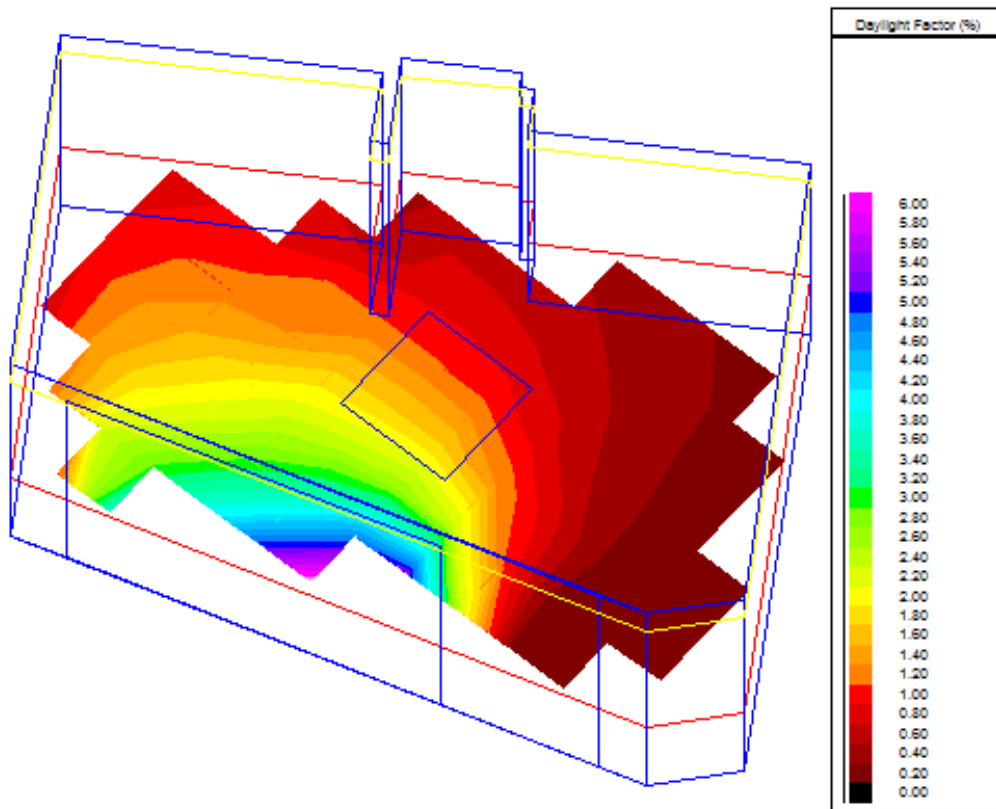


Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.227m ² Margin=0.00 m | Daylight factor | 0.6 % | 4.9 % | 24.9 % | 0.13 | 0.03 |
| | Daylight illuminance | 77.77 lux | 593.01 lux | 3045.68 lux | 0.13 | 0.03 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Second Floor

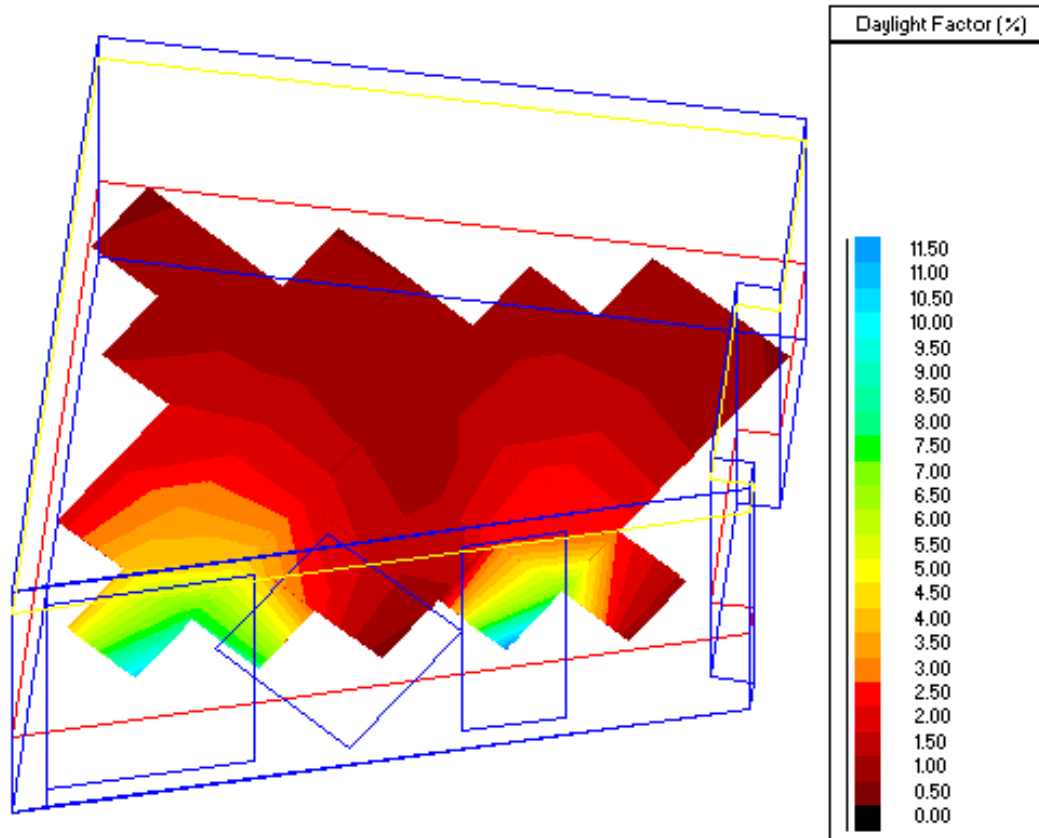
R11



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=19.543m ² Margin=0.00 m | Daylight factor | 0.0 % | 1.2 % | 6.1 % | 0.01 | 0.00 |
| | Daylight illuminance | 0.90 lux | 141.45 lux | 748.88 lux | 0.01 | 0.00 |
| | Sky view | 0.00 | 0.90 | 1.00 | 0.00 | 0.00 |

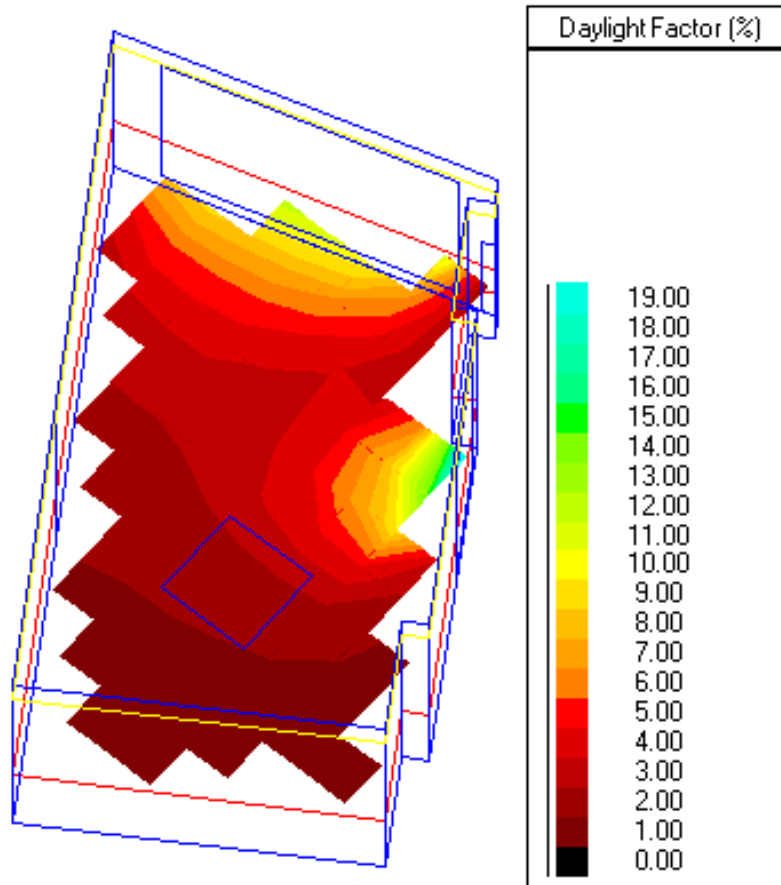
R12



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.190m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.0 % | 11.5 % | 0.06 | 0.01 |
| | Daylight illuminance | 15.80 lux | 248.05 lux | 1407.01 lux | 0.06 | 0.01 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

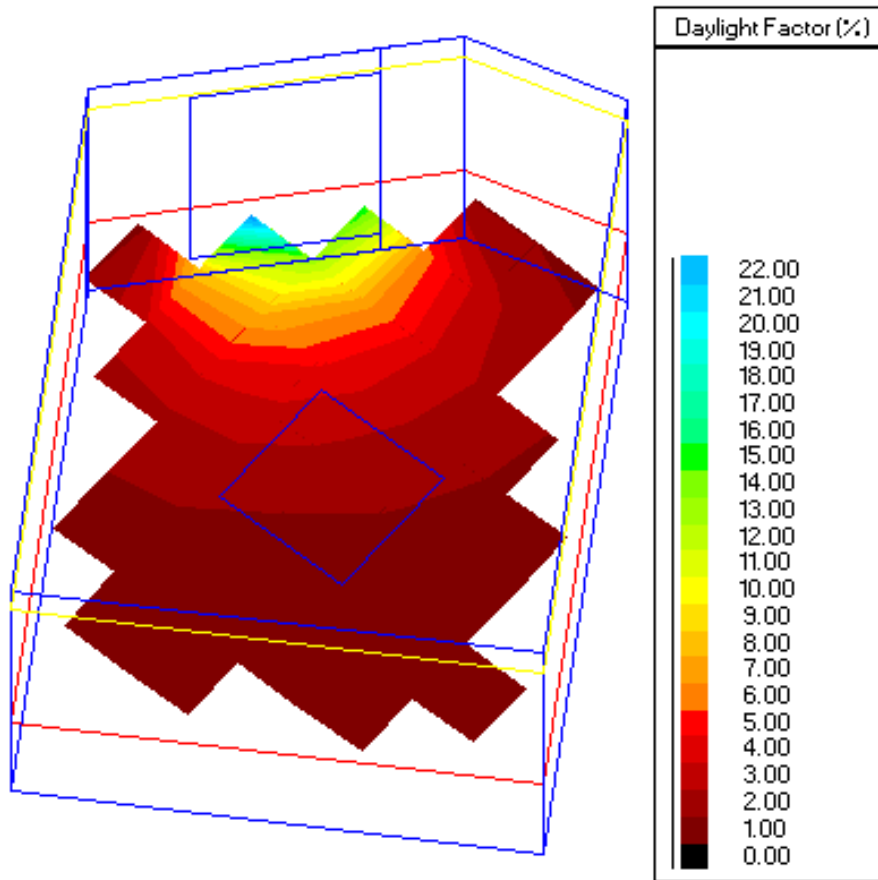
R13



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=23.218m ² Margin=0.00 m | Daylight factor | 0.2 % | 3.1 % | 19.0 % | 0.07 | 0.01 |
| | Daylight illuminance | 25.41 lux | 378.52 lux | 2323.71 lux | 0.07 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

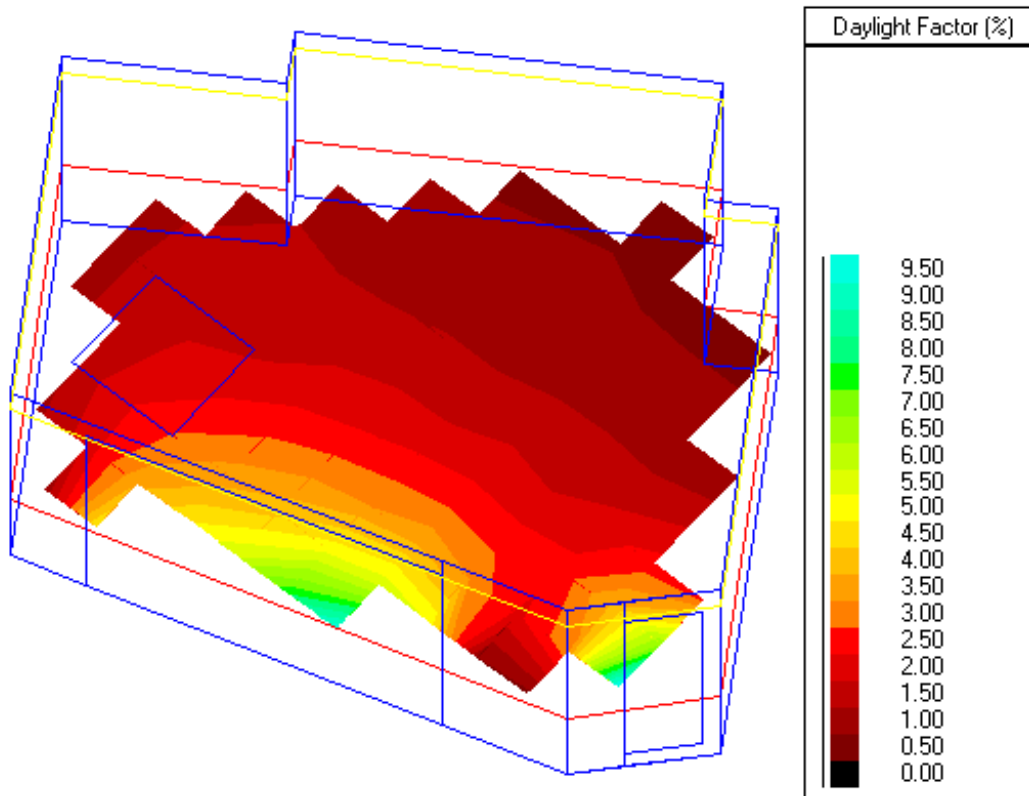
R14



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=13.524m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.3 % | 22.8 % | 0.05 | 0.00 |
| | Daylight illuminance | 12.73 lux | 281.74 lux | 2781.86 lux | 0.05 | 0.00 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

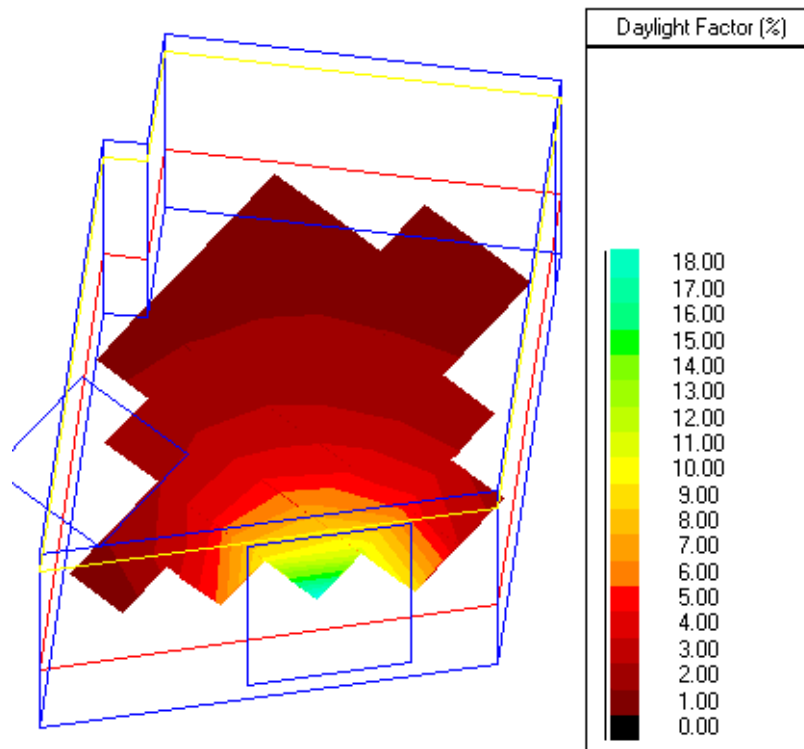
R15



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=22.468m ² Margin=0.00 m | Daylight factor | 0.3 % | 1.9 % | 9.5 % | 0.13 | 0.03 |
| | Daylight illuminance | 31.07 lux | 231.83 lux | 1161.16 lux | 0.13 | 0.03 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

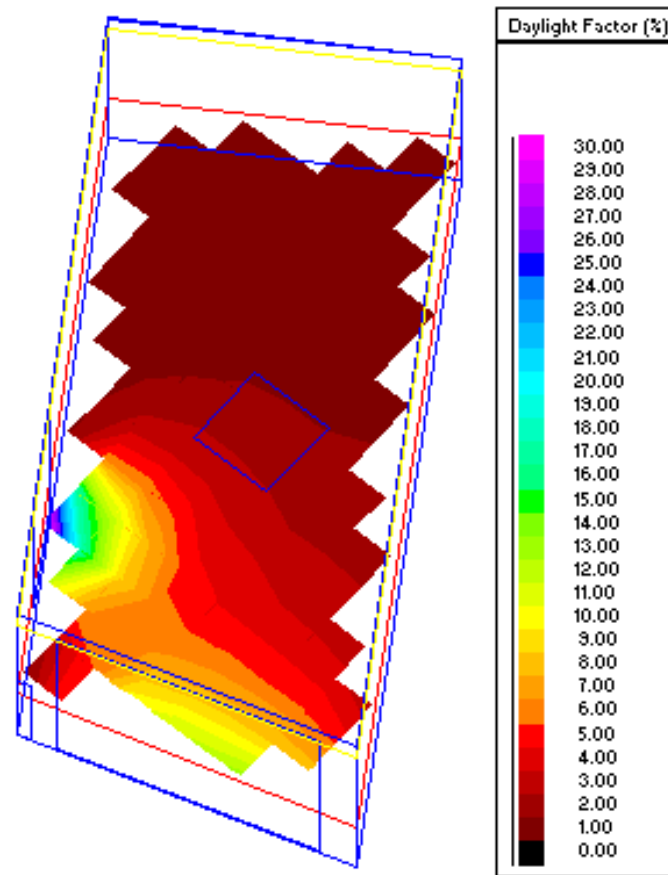
R16



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.372m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.4 % | 18.9 % | 0.03 | 0.00 |
| | Daylight illuminance | 8.37 lux | 291.33 lux | 2310.60 lux | 0.03 | 0.00 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

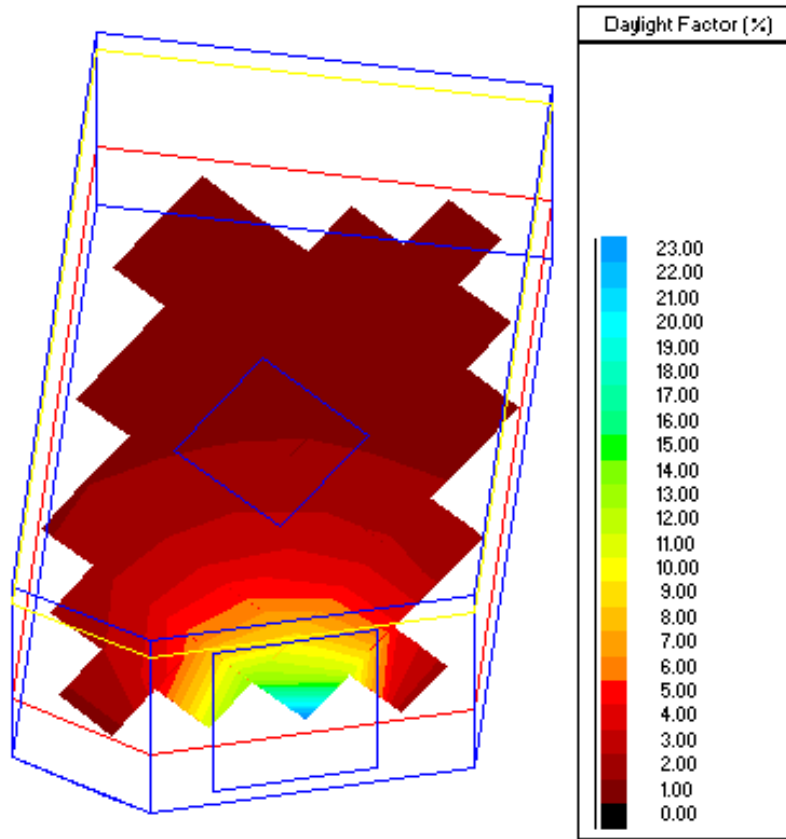
R17



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=28.603m ² Margin=0.00 m | Daylight factor | 0.1 % | 3.0 % | 30.5 % | 0.05 | 0.00 |
| | Daylight illuminance | 17.13 lux | 363.37 lux | 3725.52 lux | 0.05 | 0.00 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

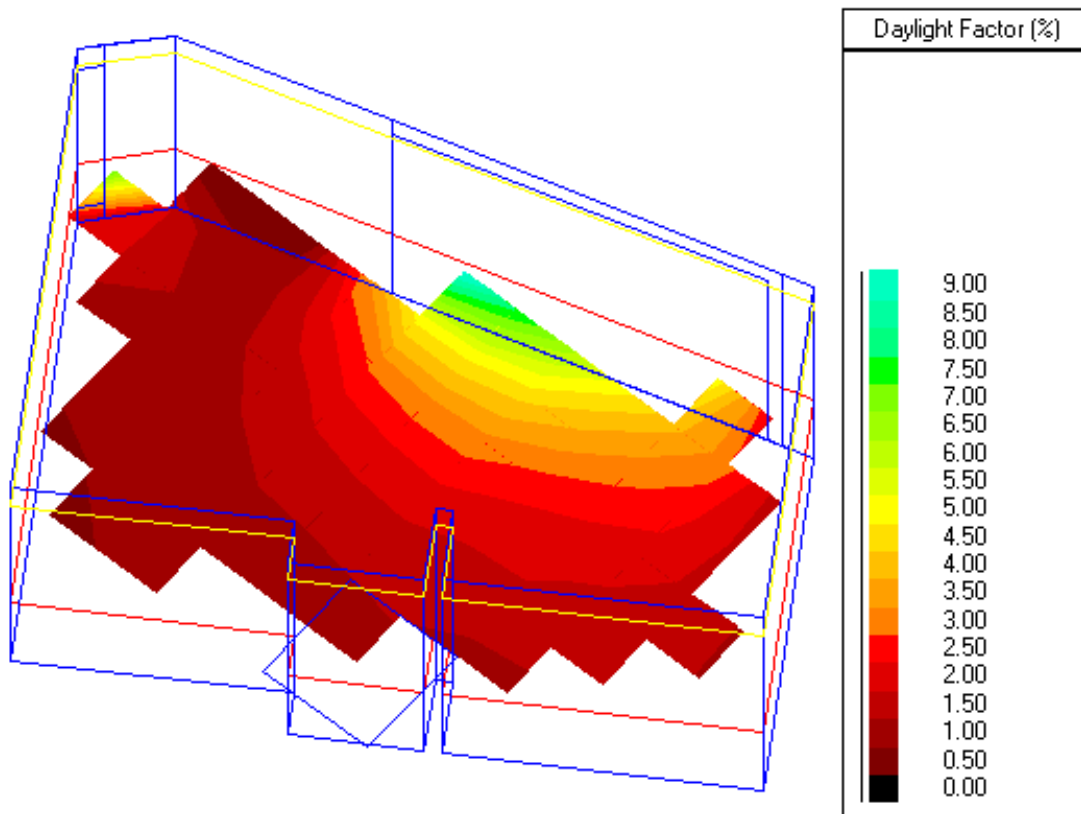
R18



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|---------------------------|--------------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=15.786m ² Margin=0.00 m | Daylight factor | 0.2 % | 2.1 % | 23.4 % | 0.07 | 0.01 |
| | Daylight illuminance | 19.38 lux | 260.33 lux | 2856.54 lux | 0.07 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

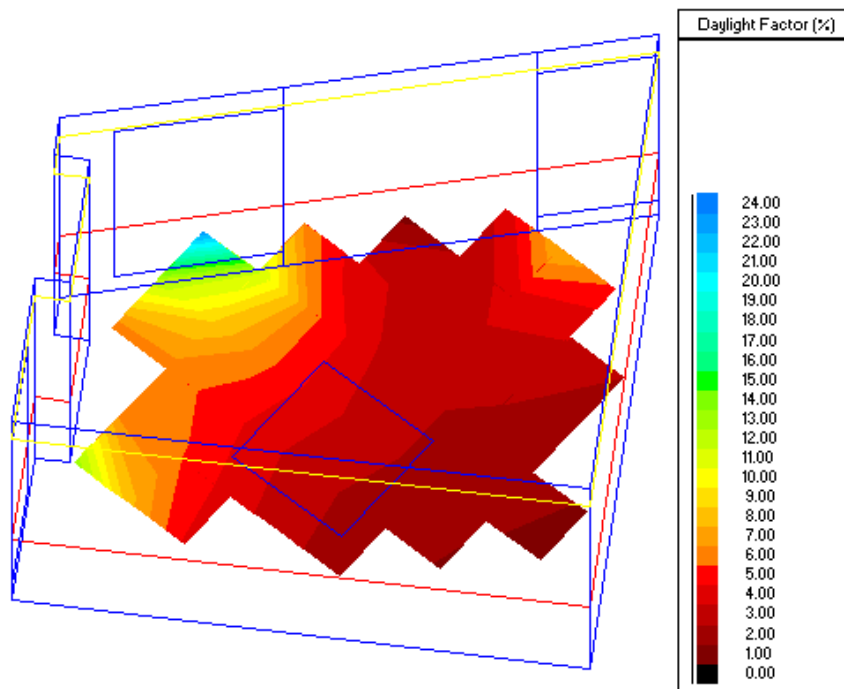
R19



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=19.430m ² Margin=0.00 m | Daylight factor | 0.1 % | 1.8 % | 9.1 % | 0.03 | 0.01 |
| | Daylight illuminance | 6.92 lux | 221.93 lux | 1114.86 lux | 0.03 | 0.01 |
| | Sky view | 0.00 | 0.99 | 1.00 | 0.00 | 0.00 |

R20

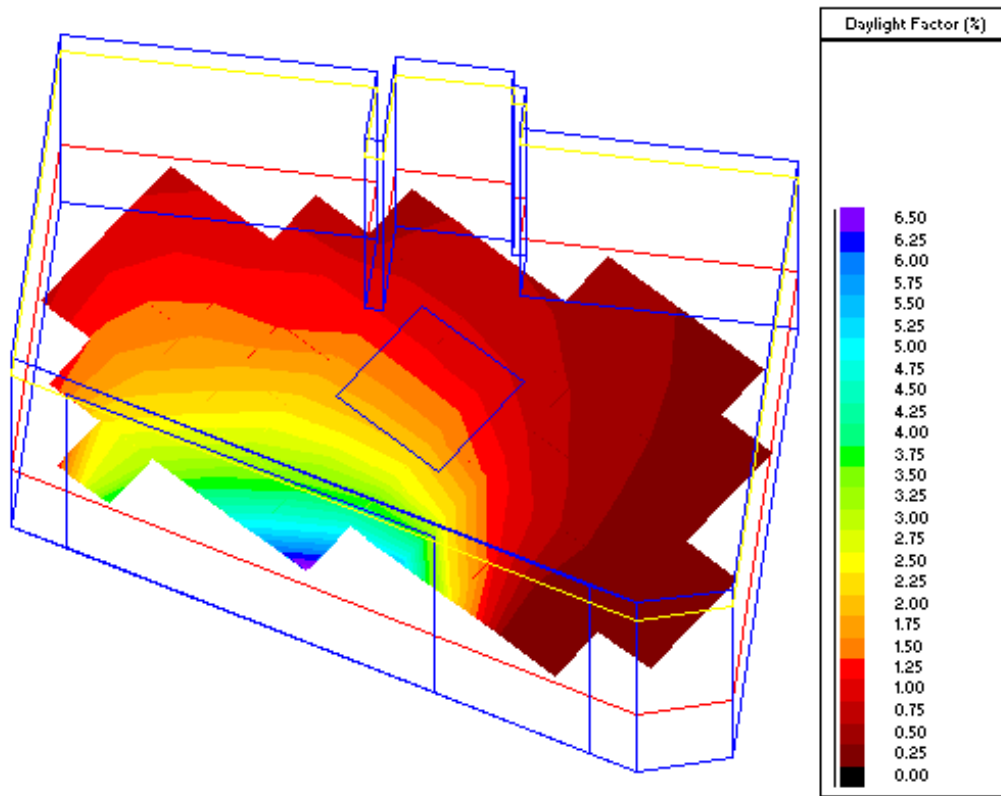


Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.227m ² Margin=0.00 m | Daylight factor | 0.6 % | 4.9 % | 24.9 % | 0.13 | 0.03 |
| | Daylight illuminance | 78.18 lux | 596.45 lux | 3047.12 lux | 0.13 | 0.03 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Third Floor

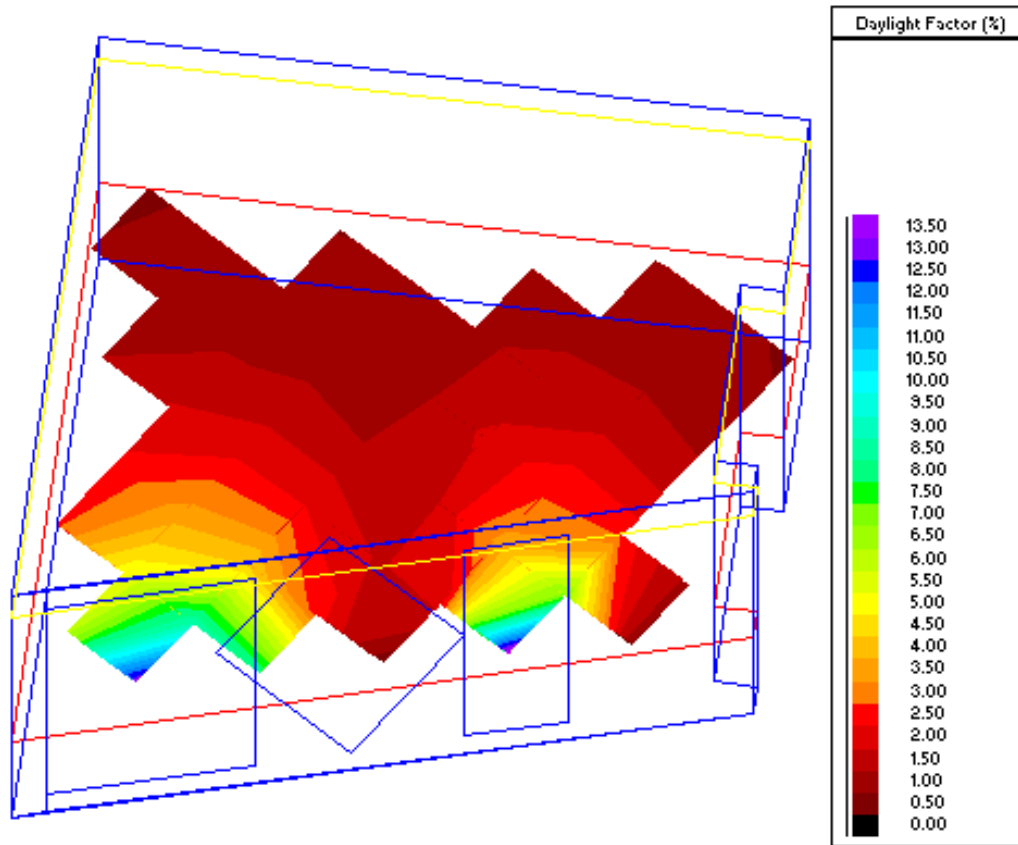
R21



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=19.543m ² Margin=0.00 m | Daylight factor | 0.0 % | 1.2 % | 6.7 % | 0.01 | 0.00 |
| | Daylight illuminance | 0.93 lux | 144.89 lux | 814.11 lux | 0.01 | 0.00 |
| | Sky view | 0.00 | 0.90 | 1.00 | 0.00 | 0.00 |

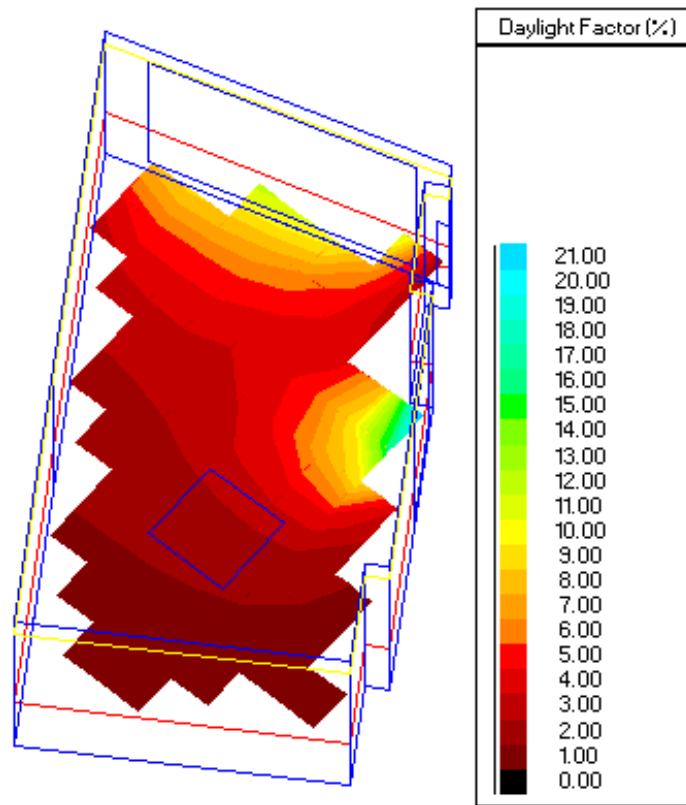
R22



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.190m ² Margin=0.00 m | Daylight factor | 0.2 % | 2.3 % | 13.5 % | 0.07 | 0.01 |
| | Daylight illuminance | 18.98 lux | 281.84 lux | 1653.70 lux | 0.07 | 0.01 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

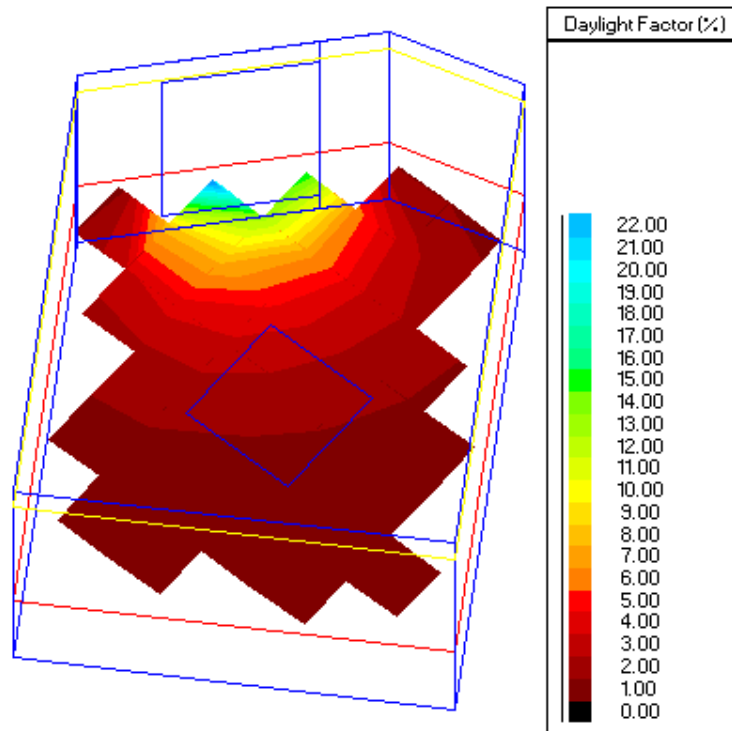
R23



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=23.218m ² Margin=0.00 m | Daylight factor | 0.3 % | 3.3 % | 21.2 % | 0.09 | 0.01 |
| | Daylight illuminance | 34.11 lux | 399.43 lux | 2593.49 lux | 0.09 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

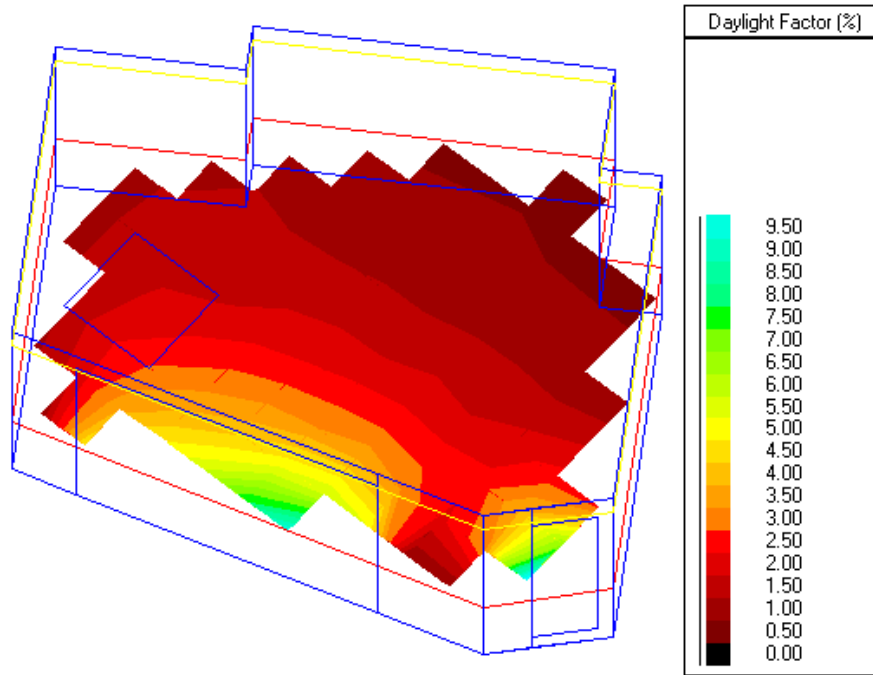
R24



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=13.524m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.3 % | 22.9 % | 0.05 | 0.00 |
| | Daylight illuminance | 12.88 lux | 285.70 lux | 2795.18 lux | 0.05 | 0.00 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

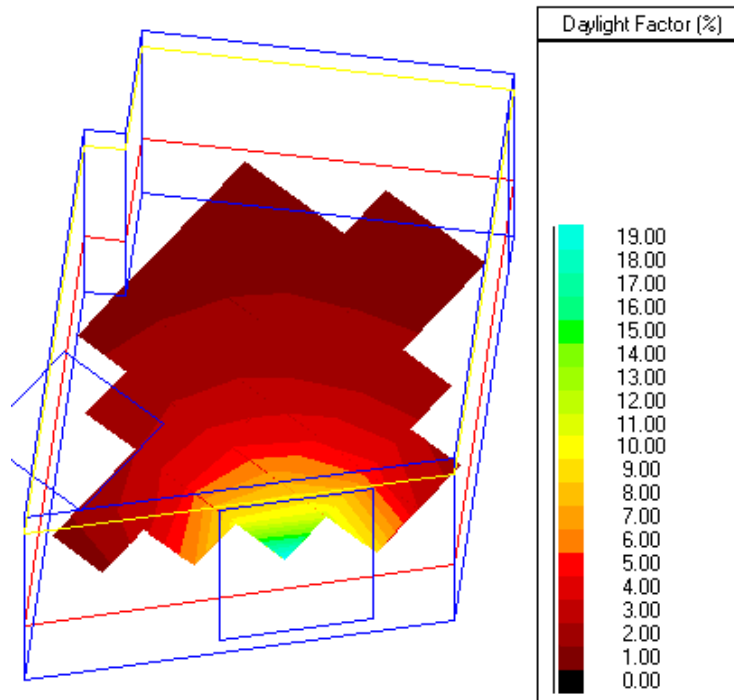
R25



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=22.468m ² Margin=0.00 m | Daylight factor | 0.3 % | 1.9 % | 9.8 % | 0.13 | 0.03 |
| | Daylight illuminance | 31.08 lux | 233.31 lux | 1195.96 lux | 0.13 | 0.03 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

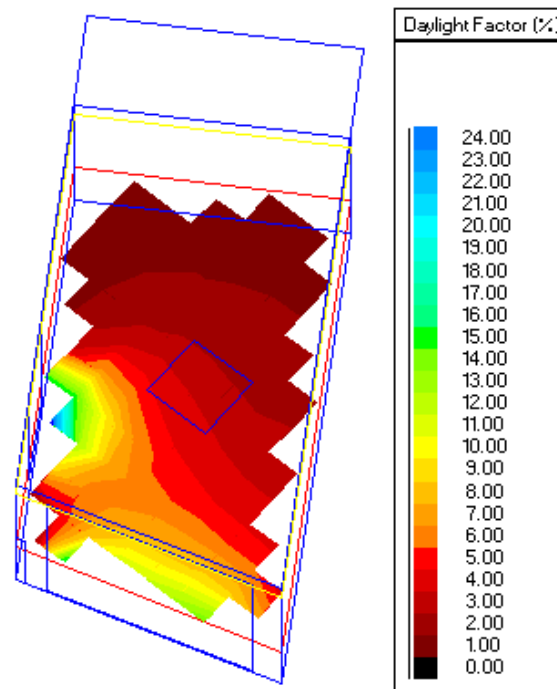
R26



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|---------------------------|--------------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.372m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.4 % | 19.3 % | 0.03 | 0.00 |
| | Daylight illuminance | 10.16 lux | 298.74 lux | 2358.66 lux | 0.03 | 0.00 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

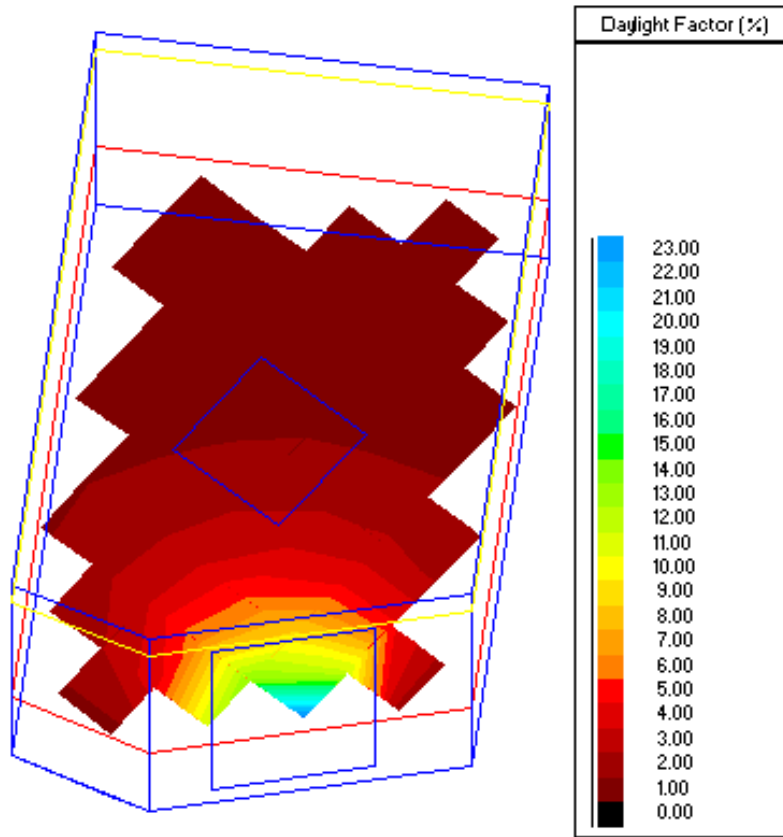
R27



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=23.540m ² Margin=0.00 m | Daylight factor | 0.4 % | 3.9 % | 24.7 % | 0.10 | 0.02 |
| | Daylight illuminance | 45.69 lux | 477.86 lux | 3012.49 lux | 0.10 | 0.02 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

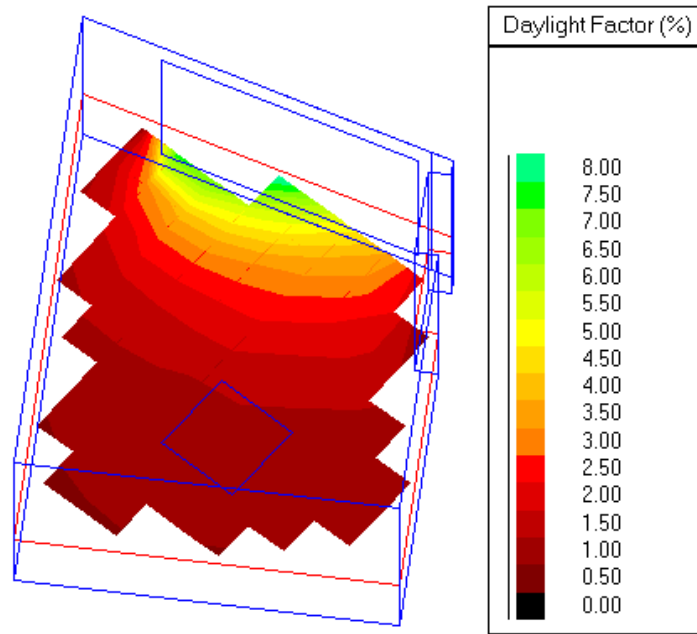
R28



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=15.786m ² Margin=0.00 m | Daylight factor | 0.2 % | 2.1 % | 23.4 % | 0.07 | 0.01 |
| | Daylight illuminance | 19.39 lux | 260.69 lux | 2856.72 lux | 0.07 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

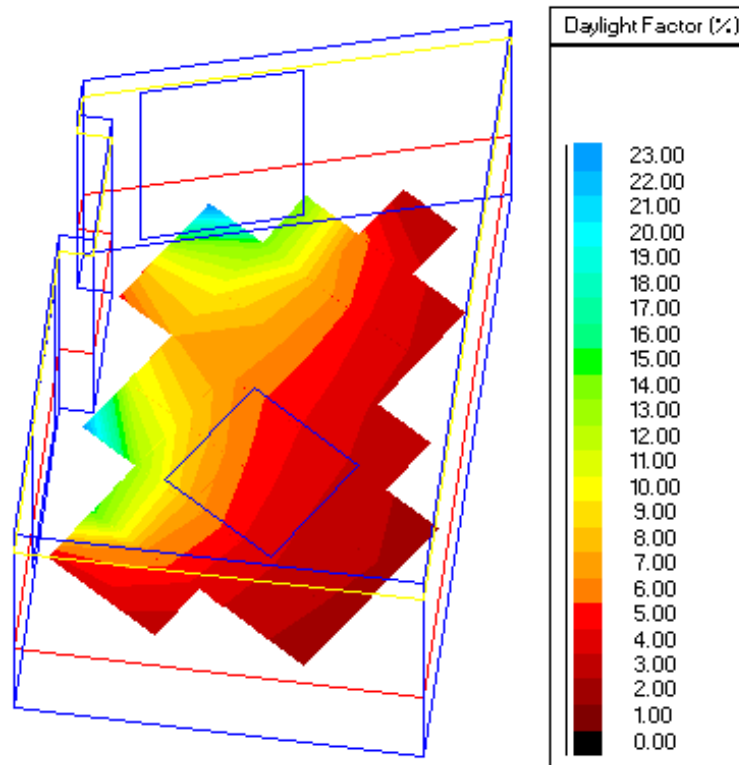
R29



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|------------|---------------------------|--------------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=20.181m ² Margin=0.00 m | Daylight factor | 0.1 % | 1.6 % | 8.1 % | 0.04 | 0.01 |
| | Daylight illuminance | 8.76 lux | 196.64 lux | 991.97 lux | 0.04 | 0.01 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

R30

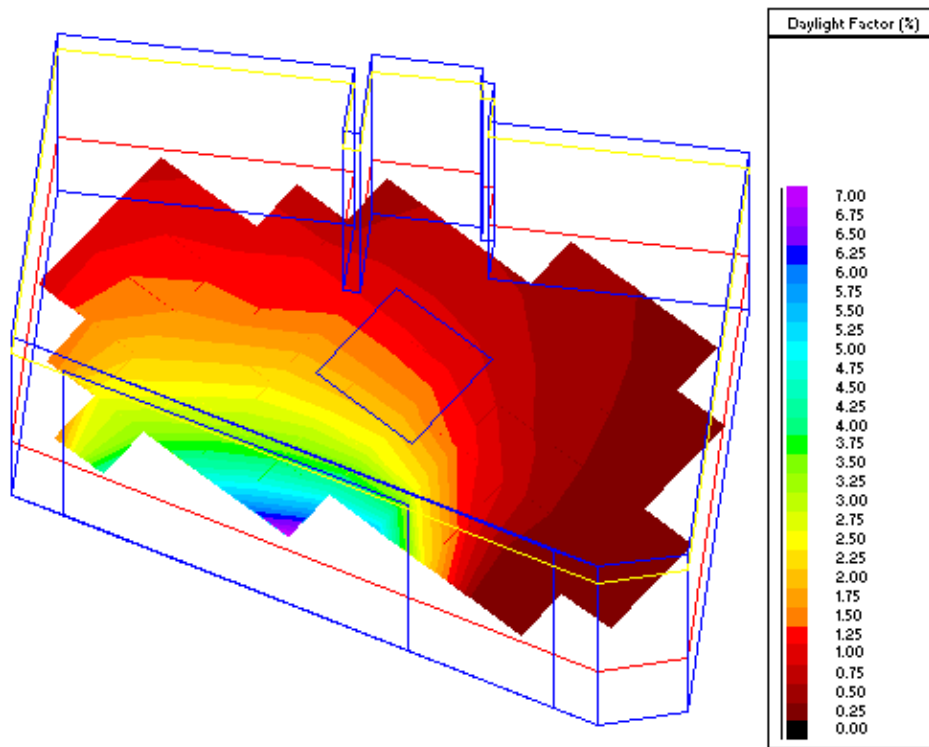


Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.577m ² Margin=0.00 m | Daylight factor | 0.6 % | 5.5 % | 23.1 % | 0.11 | 0.03 |
| | Daylight illuminance | 73.48 lux | 677.92 lux | 2828.05 lux | 0.11 | 0.03 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Fourth Floor

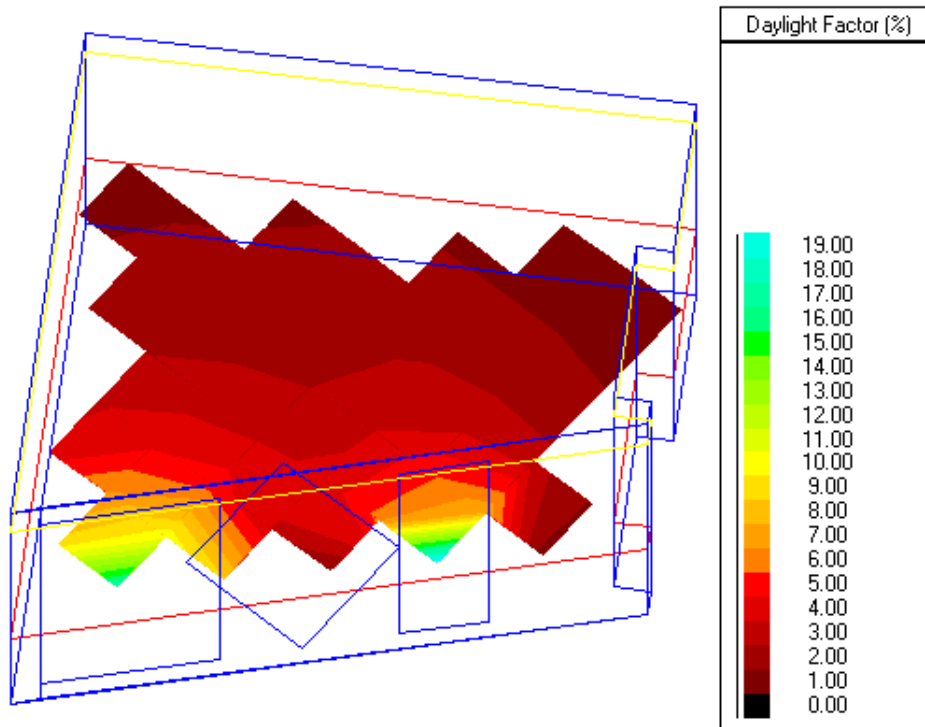
R31



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=19.543m ² Margin=0.00 m | Daylight factor | 0.0 % | 1.2 % | 7.0 % | 0.01 | 0.00 |
| | Daylight illuminance | 1.14 lux | 150.53 lux | 857.38 lux | 0.01 | 0.00 |
| | Sky view | 0.00 | 0.90 | 1.00 | 0.00 | 0.00 |

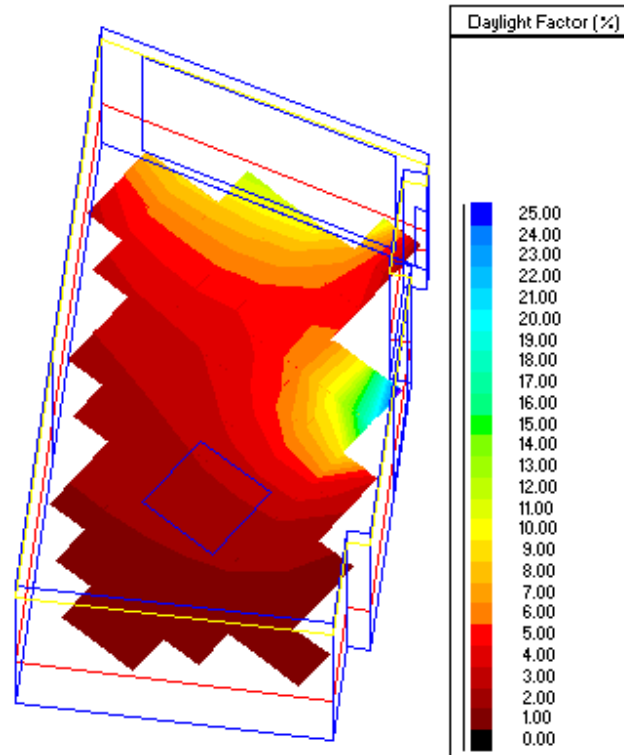
R32



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.190m ² Margin=0.00 m | Daylight factor | 0.4 % | 3.1 % | 19.6 % | 0.12 | 0.02 |
| | Daylight illuminance | 45.53 lux | 373.88 lux | 2397.81 lux | 0.12 | 0.02 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

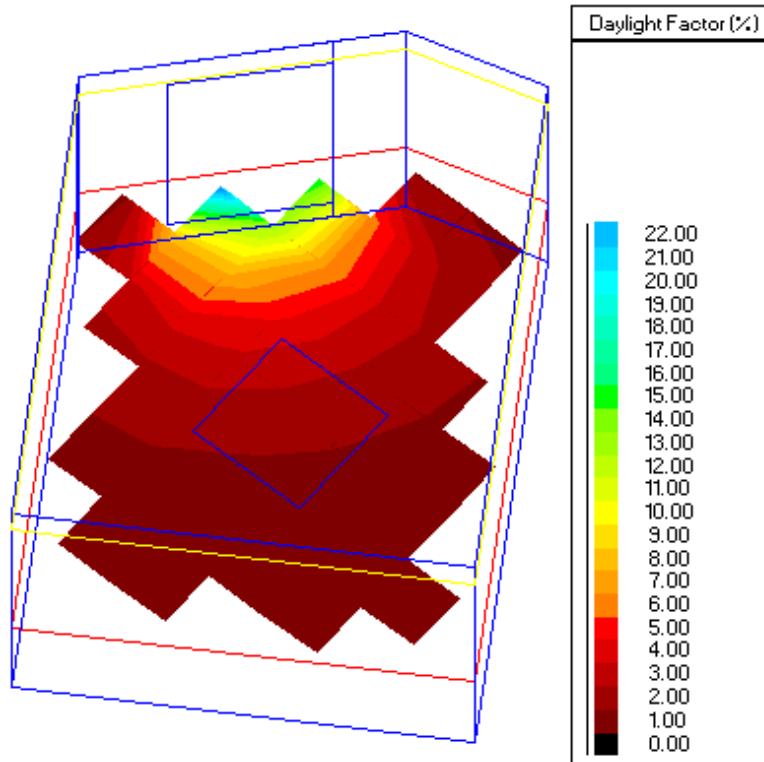
R33



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=23.218m ² Margin=0.00 m | Daylight factor | 0.3 % | 3.6 % | 25.7 % | 0.09 | 0.01 |
| | Daylight illuminance | 37.32 lux | 436.66 lux | 3137.41 lux | 0.09 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

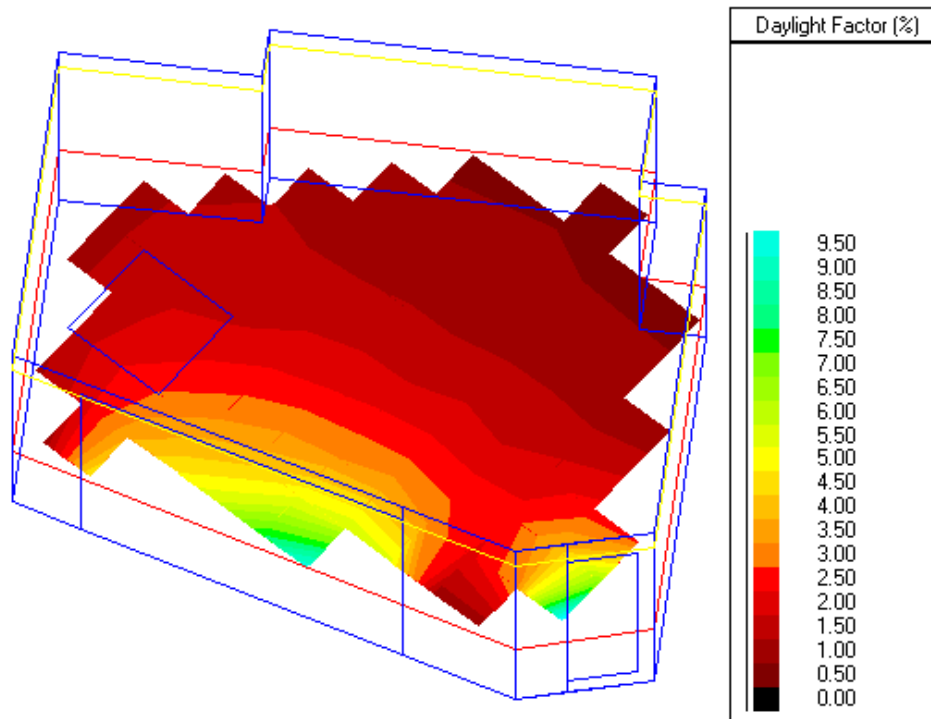
R34



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=13.524m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.3 % | 22.9 % | 0.05 | 0.00 |
| | Daylight illuminance | 12.93 lux | 286.41 lux | 2797.12 lux | 0.05 | 0.00 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

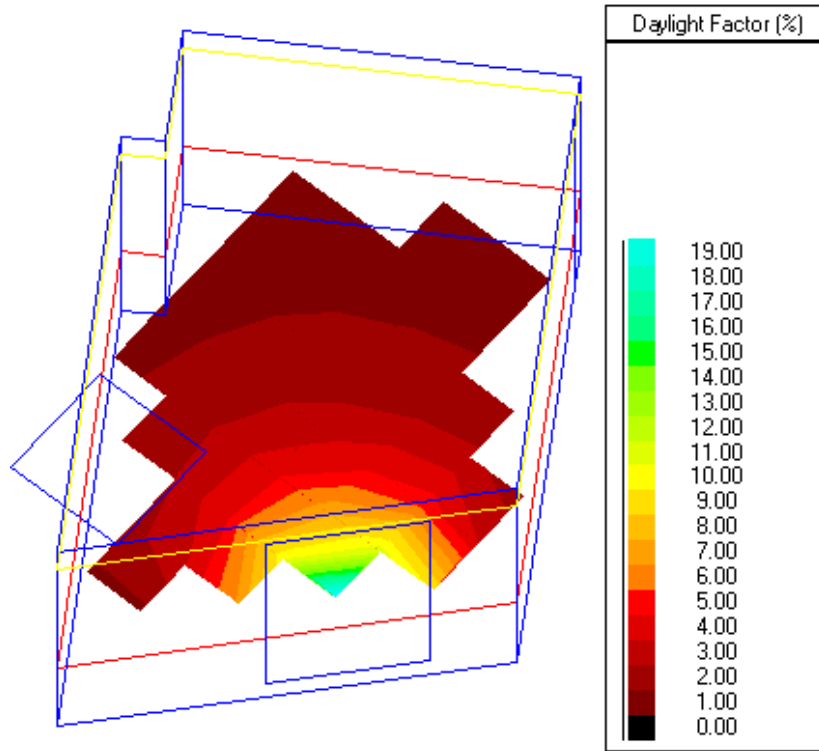
R35



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|---------------------------|--------------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=22.468m ² Margin=0.00 m | Daylight factor | 0.3 % | 1.9 % | 9.9 % | 0.13 | 0.03 |
| | Daylight illuminance | 31.11 lux | 234.37 lux | 1212.86 lux | 0.13 | 0.03 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

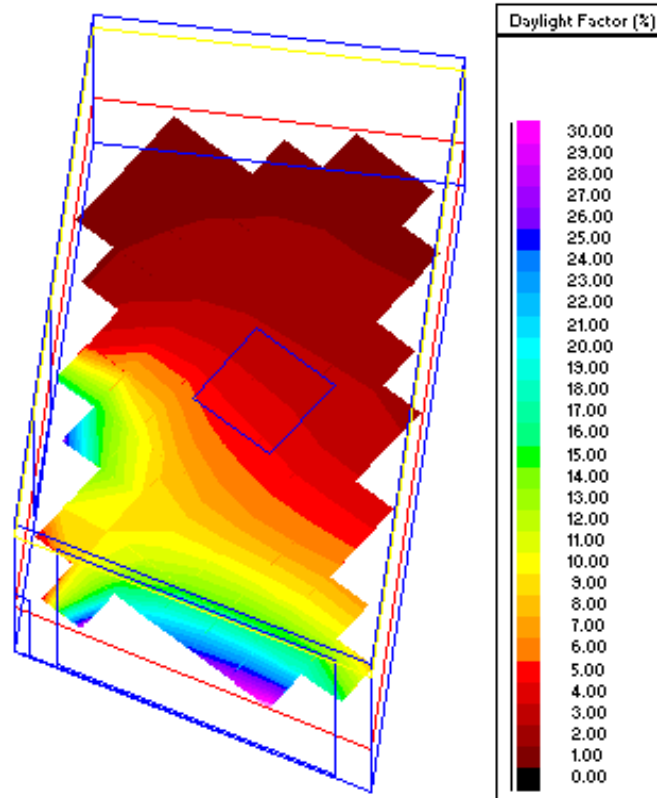
R36



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|---------------------------|--------------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.372m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.5 % | 19.6 % | 0.04 | 0.01 |
| | Daylight illuminance | 12.80 lux | 303.62 lux | 2390.29 lux | 0.04 | 0.01 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

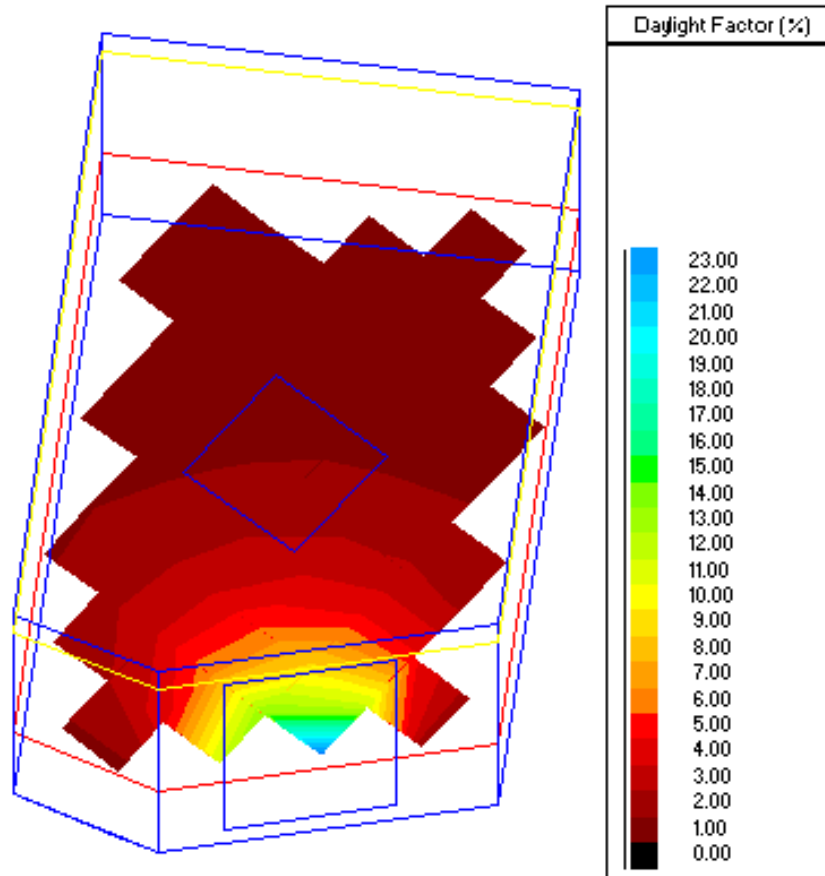
R37



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=23.537m ² Margin=0.00 m | Daylight factor | 0.4 % | 6.1 % | 30.8 % | 0.07 | 0.01 |
| | Daylight illuminance | 53.46 lux | 742.08 lux | 3763.74 lux | 0.07 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

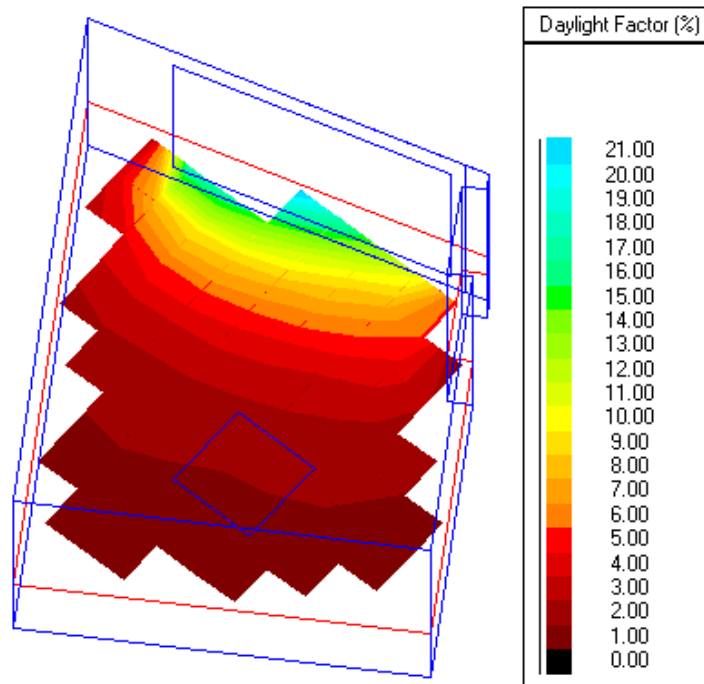
R38



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|---------------------------|--------------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=15.786m ² Margin=0.00 m | Daylight factor | 0.2 % | 2.1 % | 23.5 % | 0.07 | 0.01 |
| | Daylight illuminance | 19.40 lux | 261.51 lux | 2875.81 lux | 0.07 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

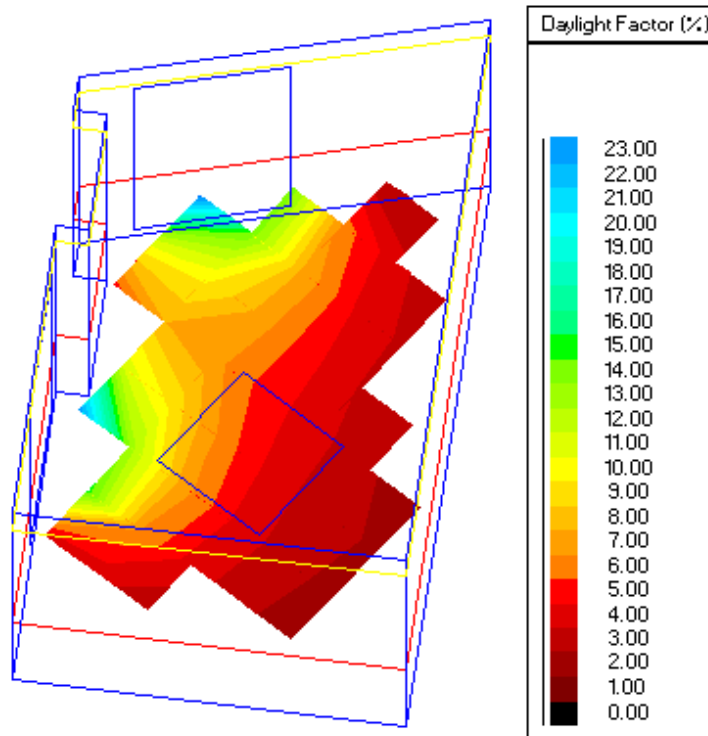
R39



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=20.181m ² Margin=0.00 m | Daylight factor | 0.1 % | 3.5 % | 21.1 % | 0.04 | 0.01 |
| | Daylight illuminance | 16.21 lux | 425.64 lux | 2582.06 lux | 0.04 | 0.01 |
| | Sky view | 0.00 | 0.98 | 1.00 | 0.00 | 0.00 |

R40

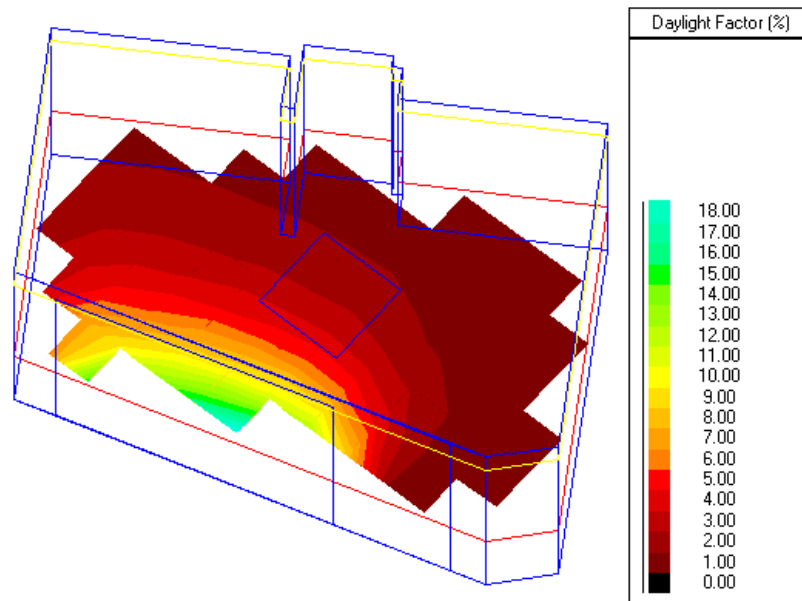


Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.577m ² Margin=0.00 m | Daylight factor | 0.6 % | 5.6 % | 23.2 % | 0.11 | 0.03 |
| | Daylight illuminance | 73.61 lux | 681.91 lux | 2838.99 lux | 0.11 | 0.03 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Fifth Floor

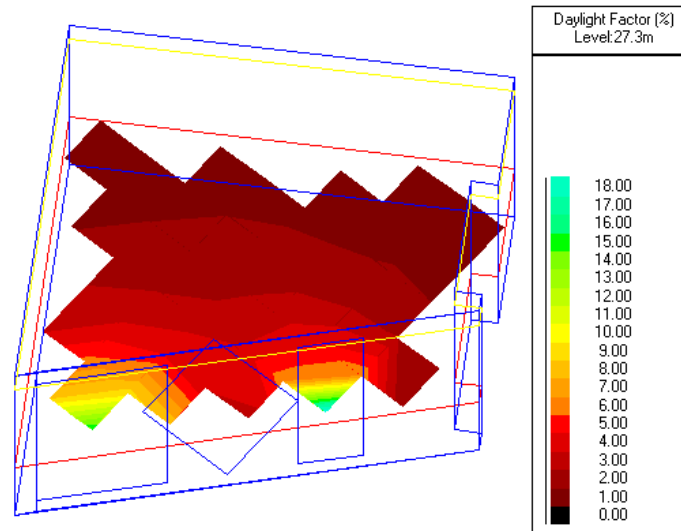
R41



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=19.543m ² Margin=0.00 m | Daylight factor | 0.1 % | 2.7 % | 18.9 % | 0.02 | 0.00 |
| | Daylight illuminance | 6.88 lux | 334.96 lux | 2308.27 lux | 0.02 | 0.00 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

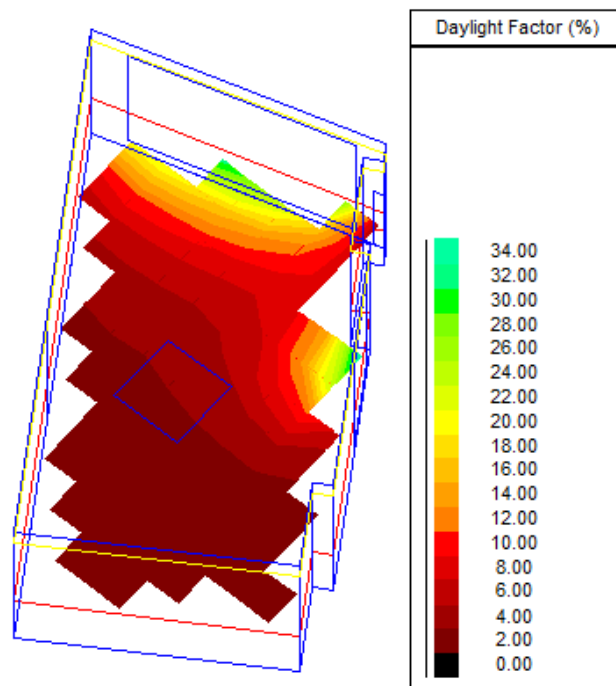
R42



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|---------------------------|--------------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.190m ² Margin=0.00 m | Daylight factor | 0.3 % | 2.7 % | 18.7 % | 0.11 | 0.02 |
| | Daylight illuminance | 36.53 lux | 330.03 lux | 2281.33 lux | 0.11 | 0.02 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

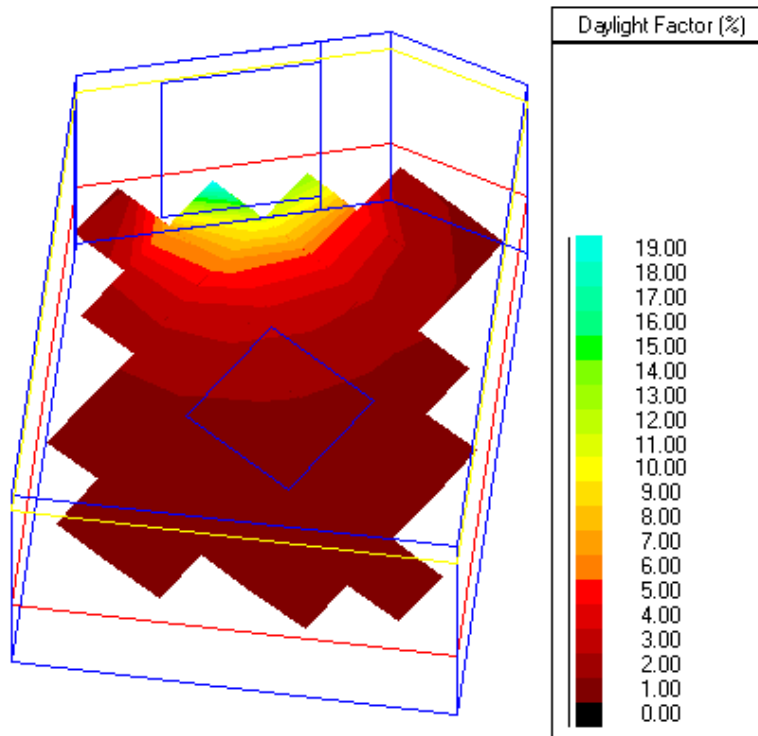
R43



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=23.218m ² Margin=0.00 m | Daylight factor | 0.2 % | 5.6 % | 34.1 % | 0.04 | 0.01 |
| | Daylight illuminance | 30.09 lux | 679.33 lux | 4164.83 lux | 0.04 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

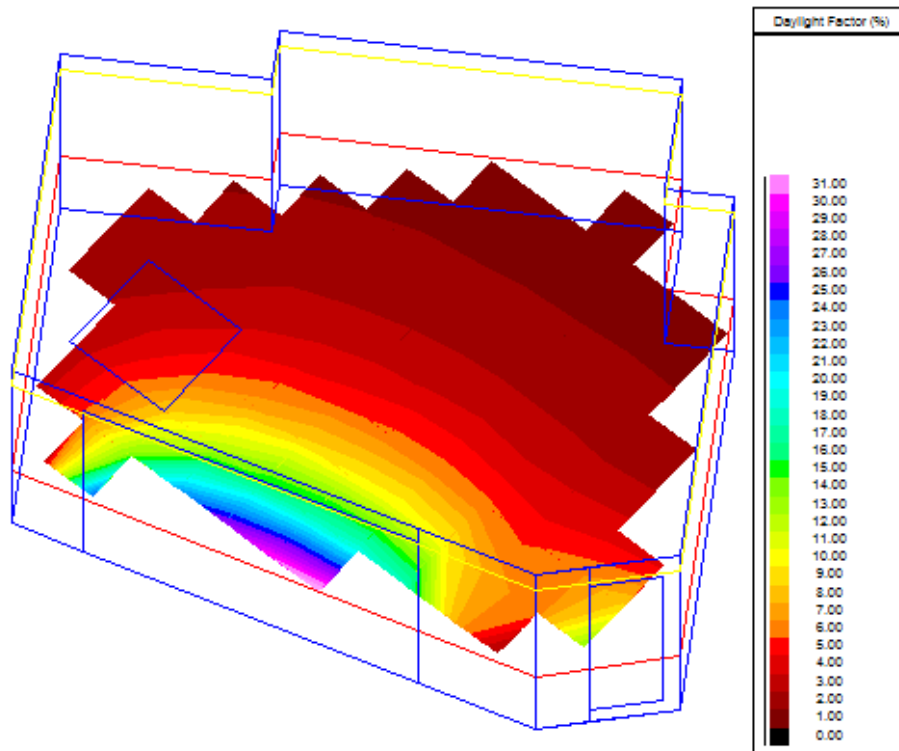
R44



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=13.524m ² Margin=0.00 m | Daylight factor | 0.1 % | 1.9 % | 19.5 % | 0.06 | 0.01 |
| | Daylight illuminance | 13.82 lux | 228.72 lux | 2376.98 lux | 0.06 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

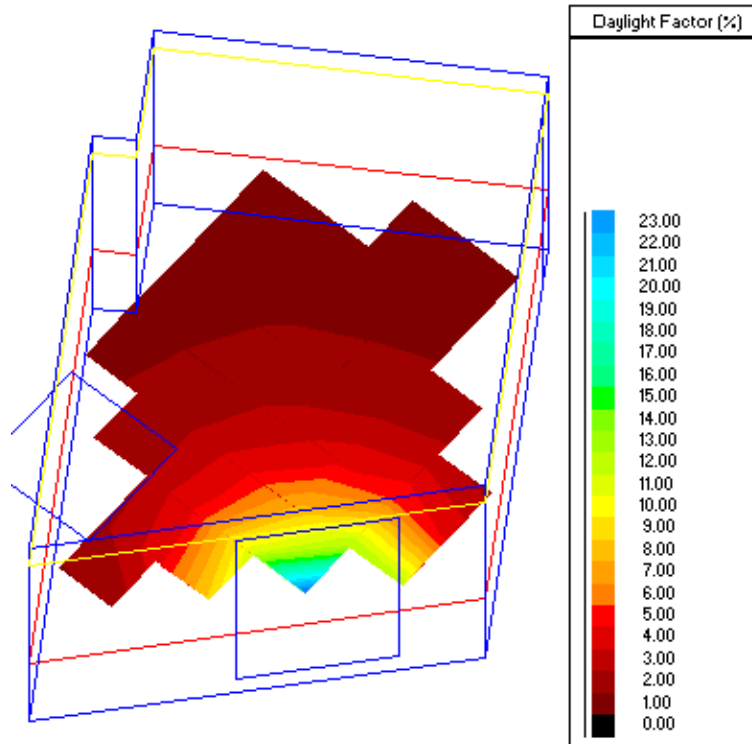
R45



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=22.468m ² Margin=0.00 m | Daylight factor | 0.4 % | 5.1 % | 31.9 % | 0.08 | 0.01 |
| | Daylight illuminance | 47.48 lux | 624.28 lux | 3900.86 lux | 0.08 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

R46



Summary results for working planes and floor

| Surface | Quantity | Values | | | Uniformity (Min./Ave.) | Diversity (Min./Max.) |
|---|----------------------|-----------|------------|-------------|------------------------|-----------------------|
| | | Min. | Ave. | Max. | | |
| Working plane 1 Reflectance=0% Transmittance=100% Grid size=0.50 m Area=12.372m ² Margin=0.00 m | Daylight factor | 0.2 % | 2.7 % | 23.8 % | 0.06 | 0.01 |
| | Daylight illuminance | 19.19 lux | 335.85 lux | 2902.12 lux | 0.06 | 0.01 |
| | Sky view | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |