

Rooflights - Daylight analysis



Living room unit 04 - RL.15

Daylight calculation - No rooflight

Daylight Visualizer

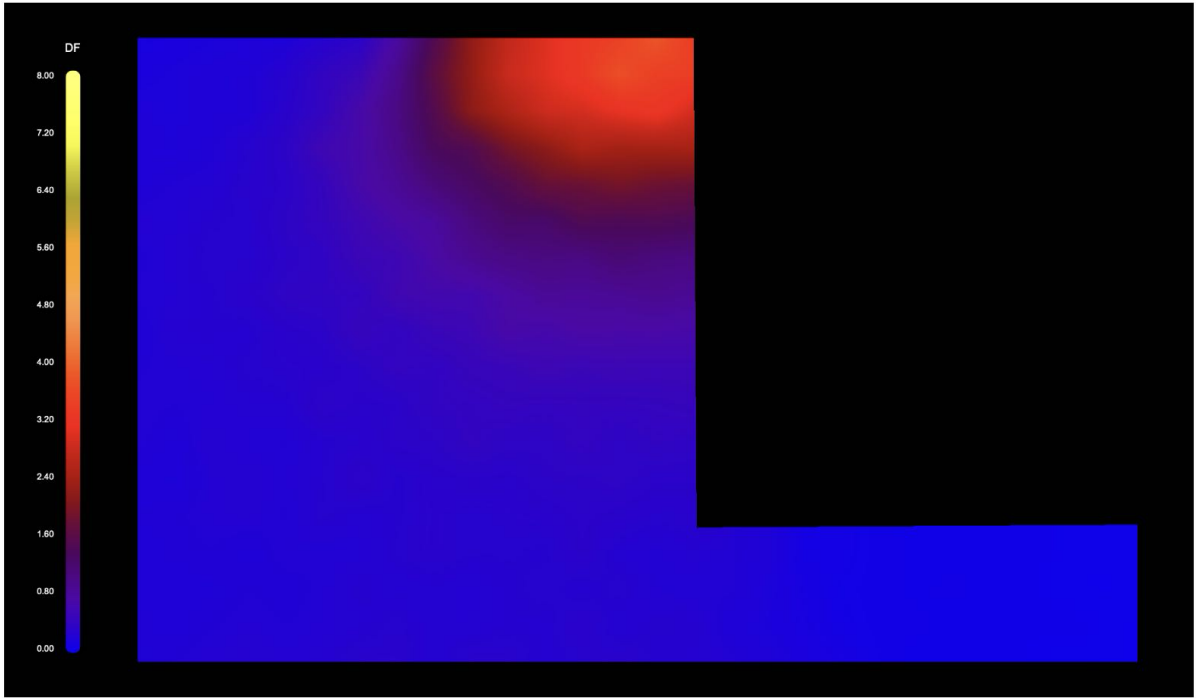
Calculation on zones

Project name: Pandy Farm
Simulation type: Daylight Factor
Daylight Visualizer version: 3.1.32

Select Country
United Kingdom

Select Report Options

- ☐ EN17037
☐ Active House
☐ Percentiles



Average	D	0.60%
Median	D	0.29%
Minimum	D	0.04%
Maximum	D	3.79%
Uniformity 1	D _{min} /D _{avg}	0.0662
Uniformity 2	D _{min} /D _{max}	0.0105

Living room daylight requirements: 0.8% - 1% daylight factor
VELUX analysis with no rooflights (average): 0.6%
Conclusion - falls short of minimum daylight requirements

Rooflight required to meet 1% daylight average for room

Daylight calculation - single rooflight

Daylight Visualizer

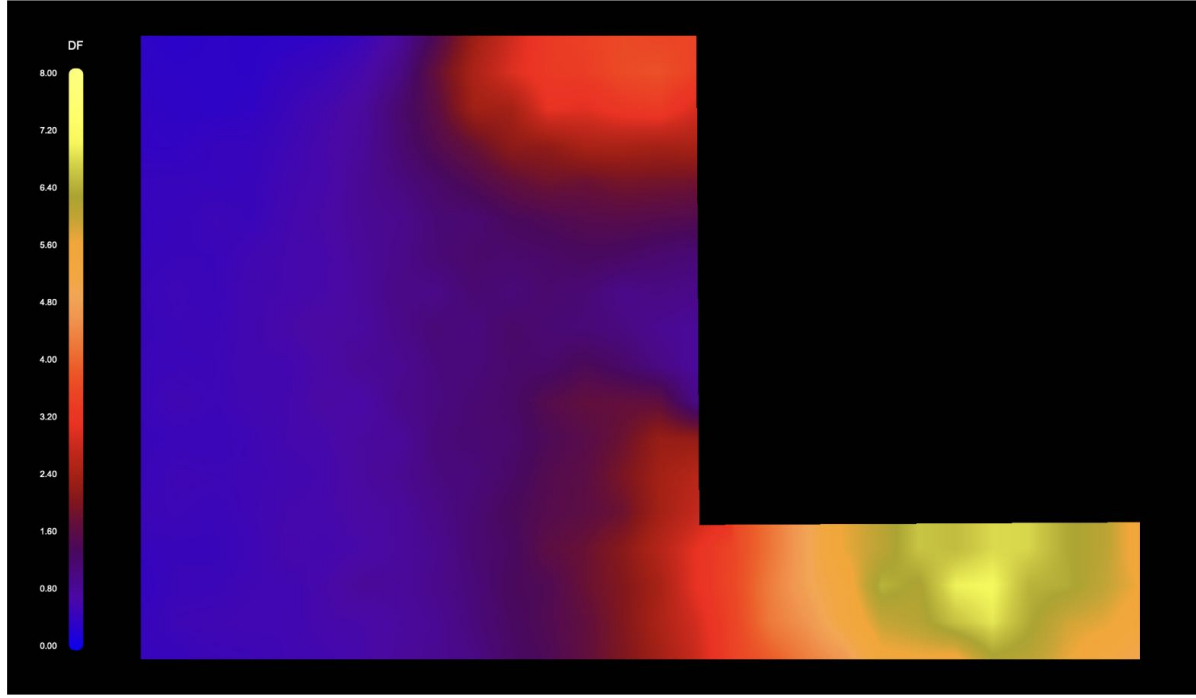
Calculation on zones

Project name: Pandy Farm
Simulation type: Daylight Factor
Daylight Visualizer version: 3.1.32

Select Country
United Kingdom

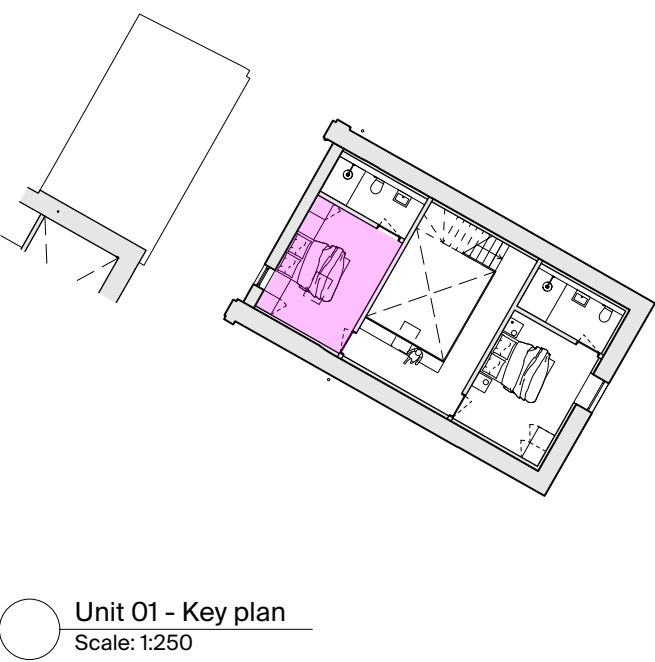
Select Report Options

- ☐ EN17037
☐ Active House
☐ Percentiles



Average	D	1.82%
Median	D	1.12%
Minimum	D	0.33%
Maximum	D	7.00%
Uniformity 1	D _{min} /D _{avg}	0.1805
Uniformity 2	D _{min} /D _{max}	0.0470

Living room daylight requirements: 0.8% - 1% daylight factor
VELUX analysis with one rooflight (average): 1.82%
Conclusion - rooflight required to satisfy daylight requirements



Bedroom unit 02 - RL.09

Daylight calculation - No rooflight

Daylight Visualizer

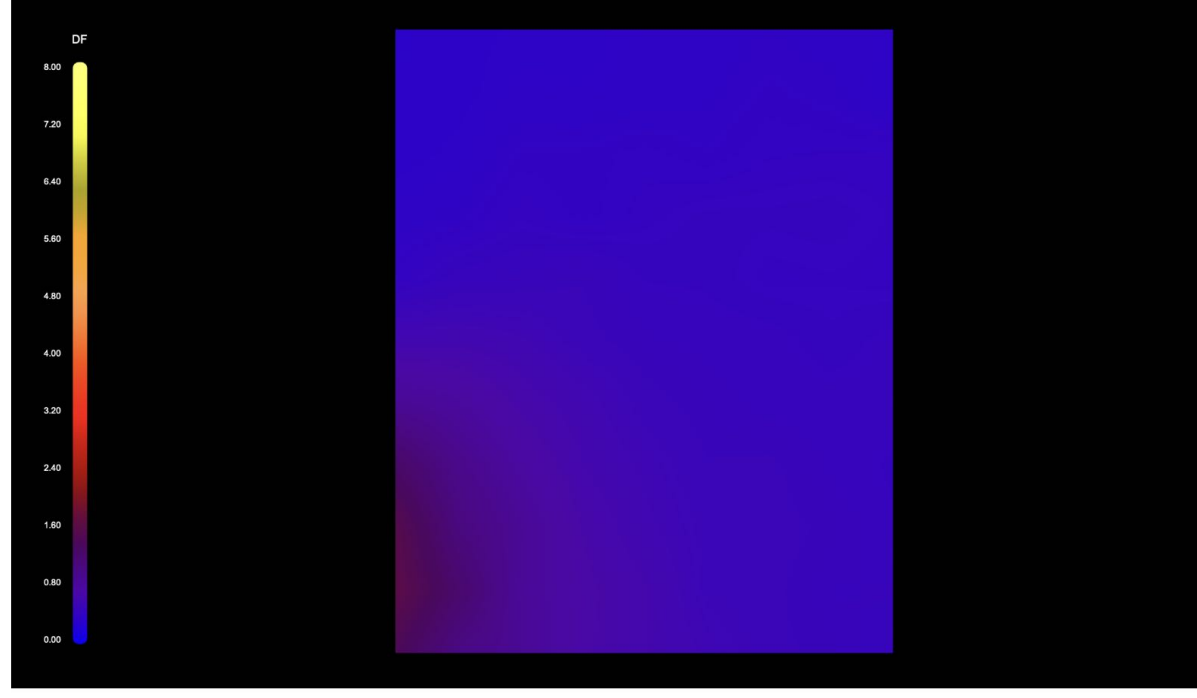
Calculation on zones

Project name: Pandy Farm
Simulation type: Daylight Factor
Daylight Visualizer version: 3.1.32

Select Country
United Kingdom

Select Report Options

- ☐ EN17037
☐ Active House
☐ Percentiles



Average	D	0.57%
Median	D	0.48%
Minimum	D	0.35%
Maximum	D	1.63%
Uniformity 1	D _{min} /D _{avg}	0.6231
Uniformity 2	D _{min} /D _{max}	0.2176

Bedroom daylight requirements: 0.6% - 0.7% daylight factor
VELUX analysis with no rooflights (average): 0.57%
Conclusion - falls short of minimum daylight requirements

Rooflight required to meet 0.6% daylight average for room

Daylight calculation - single rooflight

Daylight Visualizer

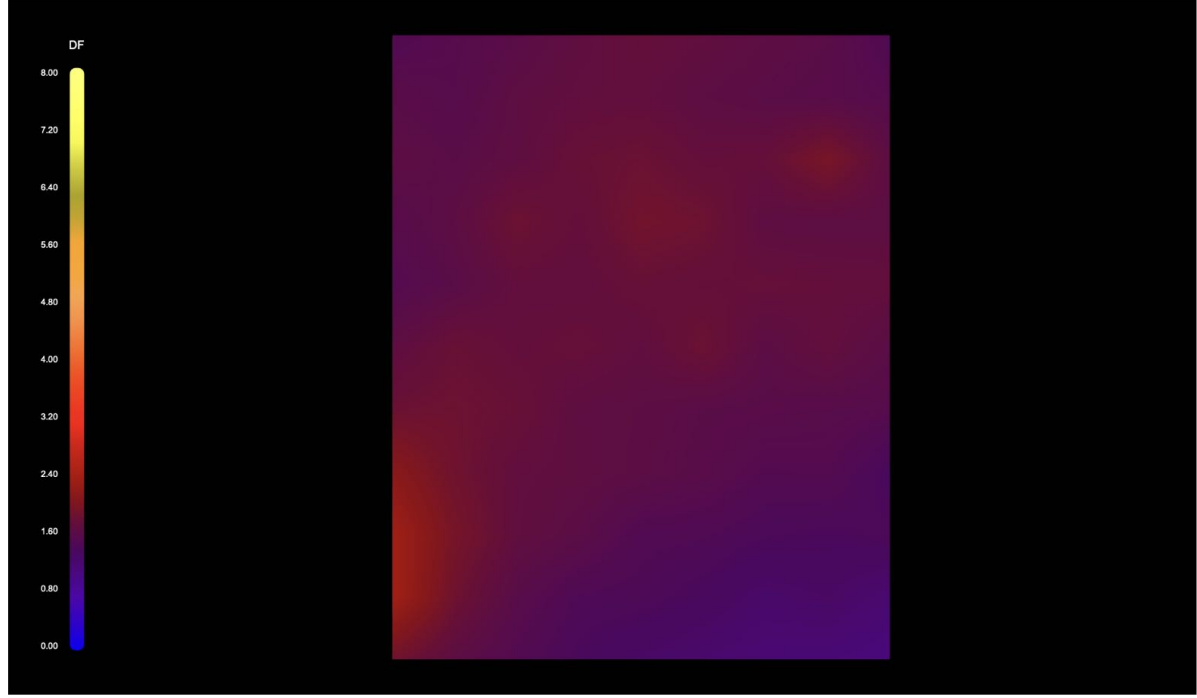
Calculation on zones

Project name: Pandy Farm
Simulation type: Daylight Factor
Daylight Visualizer version: 3.1.32

Select Country
United Kingdom

Select Report Options

- ☐ EN17037
☐ Active House
☐ Percentiles



Average	D	1.65%
Median	D	1.67%
Minimum	D	1.10%
Maximum	D	2.37%
Uniformity 1	D _{min} /D _{avg}	0.6657
Uniformity 2	D _{min} /D _{max}	0.4628

Bedroom daylight requirements: 0.6% - 0.7% daylight factor
VELUX analysis with one rooflight (average): 1.65%
Conclusion - rooflight required to satisfy daylight requirements

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NOTES

rev	amendments	date	by
A -	Issued for planning	09.06.26	NH

DAYLIGHT REQUIREMENTS BY SPACE

Bedrooms daylight factor - 0.6% - 0.7%
Living rooms daylight factor - 0.8% - 1%
Kitchens daylight factor - 1.1% - 1.3%

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drawing title
Daylight analysis - findings

drawing status
Planning

scale	date	drawn by	checked by
1:250 @ A1	00.00.00	KR	

job no.	drawing no.	revision
179	3-0123	A

Rooms with rooflights as only source of daylighting

Rooflights are required as rooms have no other source of daylighting or ventilation. Therefore they are required to comply with recommendations / building regulations to provide 1% daylight:

- Unit 01 - First floor landing (RL.10)
- Unit 02 - Bedroom 03 (RL.03 & RL.04)
- Unit 02 - Stair & first floor landing (RL.07 & RL.08)
- Unit 03 - Bedroom 03 (RL.01 & RL.02)
- Unit 03 - Stair & first floor landing (RL.05 & RL.06)
- Unit 04 - Corridor (RL.14)
- Unit 04 - Living room (RL.15)
- Unit 05 - Bedroom 01 (RL.16)
- Unit 05 - WC (RL.17)
- Unit 05 - Study (RL.18)
- Unit 06 - Study (RL.11)
- Unit 06 - WC (RL.12)
- Unit 06 Bedroom 01 (RL.13)

Existing rooflights - Relocated /amended

Rooflights to the following:

Units 05 & 06 (RL.11, RL.12, RL.13, RL.16, RL.17, RL.18)

are relocations / amendments to current rooflights, installed as part of P22/0317 & P22/0315

Rooflights in new extension, outside of heritage fabric

Rooflights RL.01, RL.02, RL.03 & RL.04 are part of new build roof & do not form part of heritage fabric