

# EN 12464 Report

## Audit Header

|                       |   |
|-----------------------|---|
| Project               | occluder_room_diffuse   |
| Project Revision      | 5   |
| Job ID                | job_radiosity   |
| Job Hash              | edbb01adc602a86838eed82f7d2fd095cca220b81ef9c5b5b4a5d647a6b8d928  |
| Solver Version        | 0.2.0   |
| Git Commit            | unknown   |
| Photometry Hashes     | {'asset_1': 'c2afac9722125d6d8dbab260bf146e01713653fcd1f55888704dab208748d834'}                           |
| Coordinate Convention | Local luminaire frame: +Z up, nadir is -Z; C=0 toward +X, C=90 toward +Y                                  |
| Units                 | {'angles': 'deg', 'illuminance': 'lux', 'length': 'm', 'luminous_flux': 'lm', 'luminous_intensity': 'cd'} |

## Inputs

|                     |                   |
|---------------------|-------------------|
| Room                | OccluderProxy     |
| Dimensions          | 7.0 x 6.0 x 3.0 m |
| Floor reflectance   | 0.2               |
| Wall reflectance    | 0.5               |
| Ceiling reflectance | 0.7               |

## Luminaire Schedule

|  |     |
|--|-----|
| Rotation/Aim   | LLF |
| {'type': 'euler_zxy', 'euler_deg': (0.0, 0.0, 0.0), 'aim': None, 'up': None, 'matrix': None} | 1.0 |

## Per-Grid Statistics

No per-grid stats.

## Calculation Tables

No calculation tables available.

## Zone Compliance Tables

No zone compliance data available.

## Worst-Case Summary

|                               |      |
|-------------------------------|------|
| global_worst_min_lux          | None |
| global_worst_uniformity_ratio | None |

|                    |                   |
|--------------------|-------------------|
| global_highest_ugr | 28.00824317827027 |
|--------------------|-------------------|

## Compliance

|                   |    |
|-------------------|----|
| pass_fail_reasons | [] |
|-------------------|----|

## UGR Summary

|                |                   |
|----------------|-------------------|
| UGR Worst Case | 28.00824317827027 |
| UGR Views      | 0                 |

## Assumptions

|    |  |
|----|--|
| A1 | Coordinate convention: local luminaire frame +Z up, nadir -Z; Type C C=0 toward +X, C=90 toward -X.  |
| A2 | Supported photometric types: Type C only.  |
| A3 | TILT factors are applied against gamma (vertical) angle; out-of-range tilt angles are clamped.       |
| A4 | Radiosity uses diffuse reflectance model with iterative convergence.                                 |
| A5 | Specular reflectance is treated in direct-only pathways; radiosity secondary bounce is diffuse-only. |
| A6 | Material transmittance is currently not included in radiosity energy exchange.                       |
| A7 | UGR uses default observer grid and eye heights when glare_views are absent.                          |
| A8 | UGR excludes luminaires behind observer view direction and uses a simplified Guth position-index.    |
| A9 | UGR luminance/solid-angle terms use luminous opening dimensions for apparent area estimation.        |

|     |   |
|-----|---|
| M1  | Coordinate convention: local luminaire frame +Z up, nadir -Z; Type C C=0 toward +X, C=90 toward -X.                       |
| M2  | Supported photometric types: Type C only.   |
| M3  | TILT factors are applied against gamma (vertical) angle; out-of-range tilt angles are clamped.                            |
| M4  | Radiosity uses diffuse reflectance model with iterative convergence.  |
| M5  | Specular reflectance is treated in direct-only pathways; radiosity secondary bounce is diffuse-only.                      |
| M6  | Material transmittance is currently not included in radiosity energy exchange.  |
| M7  | UGR uses default observer grid and eye heights when glare_views are absent.   |
| M8  | UGR excludes luminaires behind observer view direction and uses a simplified Guth position-index.                         |
| M9  | UGR luminance/solid-angle terms use luminous opening dimensions for apparent area estimation.                             |
| M10 | TILT applied: no  |
| M11 | TILT application angle: gamma (vertical angle)  |
| M12 | Units contract: {'angles': 'deg', 'illuminance': 'lux', 'length': 'm', 'luminous_flux': 'lm', 'luminous_intensity': 'lx'} |
| M13 | Occlusion mode: disabled  |
| M14 | Supported photometric types: Type C only.   |
| M15 | Backend version: cpu@0.2.0  |

## Photometry Warnings

| asset/luminaire | message                                |
|-----------------|--|
| asset_1         | Missing recommended [MANUFAC] keyword. |
| asset_1         | Missing recommended [LUMCAT] keyword.  |