EN 12464 Report

Audit Header

Project	ugr_reference_room
Project Revision	5
Job ID	job_direct_ugr
Job Hash	2b48838ff88c268773a9d7996d6c7d4423dfb60472b6c1254a1ecdcb1c5bd7cb
Solver Version	0.2.0
Git Commit	unknown
Photometry Hashes	{'asset_1': '245f0cc1b86391d18aabaa1a3e8ffb98667b0c568deef18406298e763fc7ee57'}
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	UGR Reference Room
Dimensions	6.0 x 8.0 x 3.0 m
Floor reflectance	0.2
Wall reflectance	0.5
Ceiling reflectance	0.7

Luminaire Schedule

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

Per-Grid Statistics

	mean	max
	124.99699518765158	444.87741

Calculation Tables

Grid Tables

	Area	Min
	None	23.7214731

Zone Compliance Tables

No zone compliance data available.

Worst-Case Summary

global_worst_min_lux	23.72147344210874
global_worst_uniformity_ratio	0.18977634947541663
global_highest_ugr	0.0

Compliance

pass_fail_reasons	[]

UGR Summary

No UGR results available for this job.

Assumptions

A1	Coordinate convention: local luminaire frame +Z up, nadir -Z; Type C C=0 toward +X, C=90 toward
A2	Supported photometric types: Type C only.
A3	TILT ordering: base photometry interpolation -> TILT factor in local gamma frame -> luminaire/worlc
A4	TILT factor lookup uses gamma + luminaire tilt_deg offset; out-of-range angles are clamped.
A5	Direct calculation excludes geometry occlusion unless enabled.
A6	Luminaire tilt is applied when photometry includes tilt data; otherwise tilt has no effect.
A7	Direct solver uses no inter-reflection reflectance model (direct-only irradiance).

M1	Coordinate convention: local luminaire frame +Z up, nadir -Z; Type C C=0 toward +X, C=90 toward
M2	Supported photometric types: Type C only.
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M4	TILT factor lookup uses gamma + luminaire tilt_deg offset; out-of-range angles are clamped.
M5	Direct calculation excludes geometry occlusion unless enabled.
M6	Luminaire tilt is applied when photometry includes tilt data; otherwise tilt has no effect.
M7	Direct solver uses no inter-reflection reflectance model (direct-only irradiance).
M8	TILT applied: no
M9	TILT application angle: gamma (vertical angle)
M10	Units contract: {'angles': 'deg', 'illuminance': 'lux', 'length': 'm', 'luminous_flux': 'lm', 'luminous_intensit
M11	Occlusion mode: disabled
M12	Supported photometric types: Type C only.
M13	Backend version: cpu@0.2.0

Photometry Warnings

asset/luminaire	message
asset_1	Missing recommended [MANUFAC] keyword.
asset_1	Missing recommended [LUMCAT] keyword.
lum_a	Luminaire lum_a has calc points in potential near-field
lum_b	Luminaire lum_b has calc points in potential near-field

Unsupported Features

U1	Penumbra/area-light soft shadowing is not implemented in CPU direct backend.