EN 12464 Report

Audit Header

Project	ugr_reference_room
Project Revision	5
Job ID	job_radiosity
Job Hash	0893e6643e8ecae094a5e2d142dc7bc46afc3b18c5bbe008d38a9a0c2eaf9fcb
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

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	28.140360137665862

Compliance

pass_fail_reasons	[]

UGR Summary

UGR Worst Case	28.140360137665862
UGR Views	1

	view_dir	ugr
	[1.0, 0.0, 0.0]	26.511836

UGR Debug Appendix

mode	default_grid
observer	(2.0, 2.0) +X
max_ugr	28.140360137665862
top_n	2

	luminance_est	position_index
	3525.4730965484905	2.260505854210948
	3742.1155068710145	2.415422495192089

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 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 view results use explicit observer/view definitions from glare_views.
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.

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M10	TILT applied: no
M11	TILT application angle: gamma (vertical angle)
M12	Units contract: {'angles': 'deg', 'illuminance': 'lux', 'length': 'm', 'luminous_flux': 'lm', 'luminous_intensit
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.