EN 12464 Report

Audit Header

Project	ugr_luminous_area_pack
Project Revision	5
Job ID	job_radiosity_ugr
Job Hash	a4287426637dd12bacd8a15a5c1086fefe710cd83b813a04cf7530e74a27dc3e
Solver Version	0.2.0
Git Commit	unknown
Photometry Hashes	{'asset_large': '7c0398abc7dd20838796b6492e6c39ddc262d125c58b78250c086081bd934d2c', 'as
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 Area 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
	{'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	32.483792160297256

Compliance

pass_fail_reasons	[]

UGR Summary

UGR Worst Case	32.483792160297256
UGR Views	1

	view_dir	ugr
	[1.0, 0.0, 0.0]	30.910749

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.

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.
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 view results use explicit observer/view definitions from glare_views.
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_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_large	Missing recommended [MANUFAC] keyword.
	asset_large	Missing recommended [LUMCAT] keyword.
	asset_small	Missing recommended [MANUFAC] keyword.
	asset_small	Missing recommended [LUMCAT] keyword.