Roadway Lighting Report

Project	small_roadway_parity
Job ID	job_roadway_cpu
Job Hash	61a3192c2bc1343a3ea8701662375efb8777f2df97bc177ac5e27229cc123d0a
Solver Version	0.2.0
Coordinate Convention	Local luminaire frame: +Z up, nadir is -Z; C=0 toward +X, C=90 toward +Y

Layout Parameters

road_class	M3
mean_lux	4.649105453725654
min_lux	0.4584332757191221
max_lux	14.0625
uniformity_ratio	0.09860677076097454
ul_longitudinal	0.10461948401078772
road_luminance_mean_cd_m2	0.2804531306664602
threshold_increment_ti_proxy_percent	16.829735216659966
surround_ratio_proxy	1.019188390515032
lane_width_m	3.5
num_lanes	1
road_length_m	20.0
mounting_height_m	8.0
setback_m	1.0
pole_spacing_m	20.0

Luminaire Schedule

	mount_h	tilt
	None	0.0

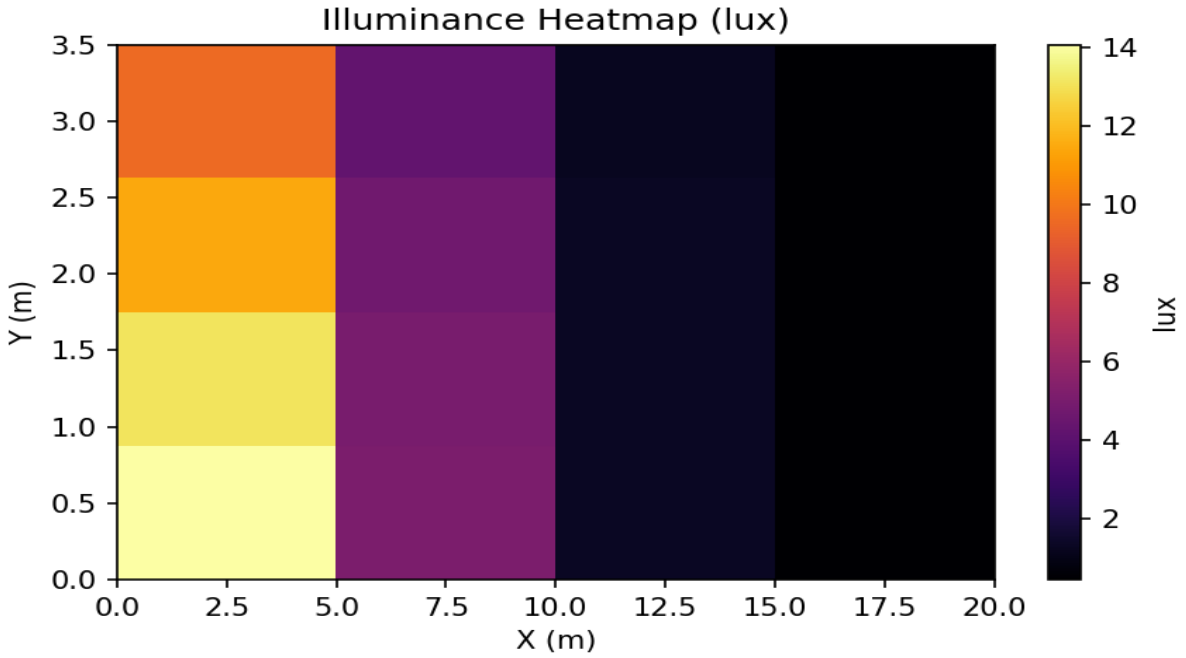
Grid and Compliance

compliance	n/a

Luminance Tables

	u0	ul
	0.09860677076097454	0.10461948401078772

Plot: Road Heatmap



Audit

solver	{'git_commit': 'unknown', 'package_version': '0.2.0'}
backend	{'name': 'cpu', 'version': '0.2.0'}
units	{'angles': 'deg', 'illuminance': 'lux', 'length': 'm', 'luminous_flux': 'lm', 'luminous_intensity': 'cd'}
coordinate_convention	Local luminaire frame: +Z up, nadir is -Z; C=0 toward +X, C=90 toward +Y

Assumptions

- Coordinate convention: local luminaire frame +Z up, nadir -Z; Type C C=0 toward +X, C=90 toward +Y.
- Supported photometric types: Type C only.
- TILT factors are applied against gamma (vertical) angle; out-of-range tilt angles are clamped.
- Roadway metrics are computed on roadway grid centerline/lane samples from project settings.

Limitations

- Roadway glare/discomfort metrics are not yet implemented.