Illuminance Unit Converter (lux, foot-candle)

Convert illuminance between lux, kilolux, foot-candles and phots, for lighting design and site light-level checks.

Method: Unit definitions per NIST SP 811 and the SI Brochure (exact where defined)

Input parameters

Unit system: SI

Parameter	Value	Unit
Illuminance (choose its unit)	538.20	lx

Calculated results

Parameter	Value	Unit
lux	538.20	lx
kilolux	0.53820	klx
foot-candle	50.000	fc
phot	0.053820	ph

Notes for this case

- 1 fc = 1 lm/ft² = 10.764 lx.

Formula and method

$$x_{\text{unit}} = \frac{x_{SI}}{f_{\text{unit}}}$$

Variables

x	Illuminance (choose its unit)	lx

Method and standards

Each unit's factor to the SI unit is held once in the unit registry.

Assumptions and limits

- Exact factors where the definition is exact.

References

- Unit definitions per NIST SP 811 and the SI Brochure (exact where defined)

Report details

Report reference	FCC-RVV5-6EPY (the same inputs always give the same reference)
Generated	17 November 2026, 19:54 UTC
Calculator	Illuminance Unit Converter (lux, foot-candle)
Method last reviewed	12 November 2026
Software release	FireCAD Calc, release of 17 November 2026
Release checks	2 reference cases of this calculator, computed independently, are checked on every release

Results are for engineering estimation. Verify critical designs against the referenced standards and your own data.

This calculator online

https://calc.firecad.com/general/unit-conversions/illuminance-unit-converter

Open this case on calc.firecad.com →

Reopens the calculator with the inputs of this report.