Intentional Design

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Focus on Safety

National Electrical Code
1st Published in 1897
Focus on Quality

Illuminating Engineering Society
Founded in 1906

IES LIGHTING HANDBOOK
5th Edition 1972
8th Edition 1993
9th Edition 2000
10th Edition 2011
Focus on Energy

ASHRAE 90.1
1st Published in 1976

70% Reduction in allowable lighting power density from 1975-2013

LPD: 2.5 w/ft²
LPD: 0.82 w/ft²
Focus on Facility Guidelines

Facility Certifications

FGI

VA Lighting Design Manual

NIH DRM
Focus on Health

Developing Trend since 2002

What are the metrics?

How are competitive needs met?
Intentional Prescriptive

Supportive Circadian Environments

Everywhere?

Concentrate on buildings with 24hr occupancy?

Prioritize in regions with severe seasonal light changes? (Alaska)
Prescriptive Intentional

High Illuminance ≠ Visual Acuity

Shadows are important
CONTRAST is Good…

…is it Always Good?
Prescriptive Intentional
Prescriptive Intentional
Maximize Benefits
Circadian Support

- Hospitals
  - Patient Rooms

- Long Term Care
  - Elder Care
  - Behavioral Health
  - Penitentiaries

- Airports/Hotels
  - Alaska

- 24-Hr Facilities
  - Universities
Circadian Support

IES RP29: Patient Corridors 10 fc (day) / 5fc (night)
  Nurse Stations  30fc (day) / 10fc (night)
  ICU Nurse Stations  50fc (day) / 30fc (night)

Ideal conditions for DIM - TO - WARM solutions
Circadian Restorative

NICU

ICU

PACU

Ideal for Dynamic White Solutions
Are there other ways to support healthier buildings?

Patient Controls

Proximity Switches
TIMED Proximity Switches

Switch Placement
Are there other ways to support healthier buildings?
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