

A New Lighting Paradigm

Jeff Quinlan

Technology Evangelist

Acuity Brands

The Acuity Brands logo, featuring the word "Acuity" in a bold, sans-serif font with a stylized "A" that has a horizontal bar, followed by the word "Brands" in a lighter, sans-serif font. The logo is positioned in the bottom right corner of the slide, overlaid on a dark, blue-tinted photograph of a city street at night with tall buildings and streetlights.

AcuityBrands.

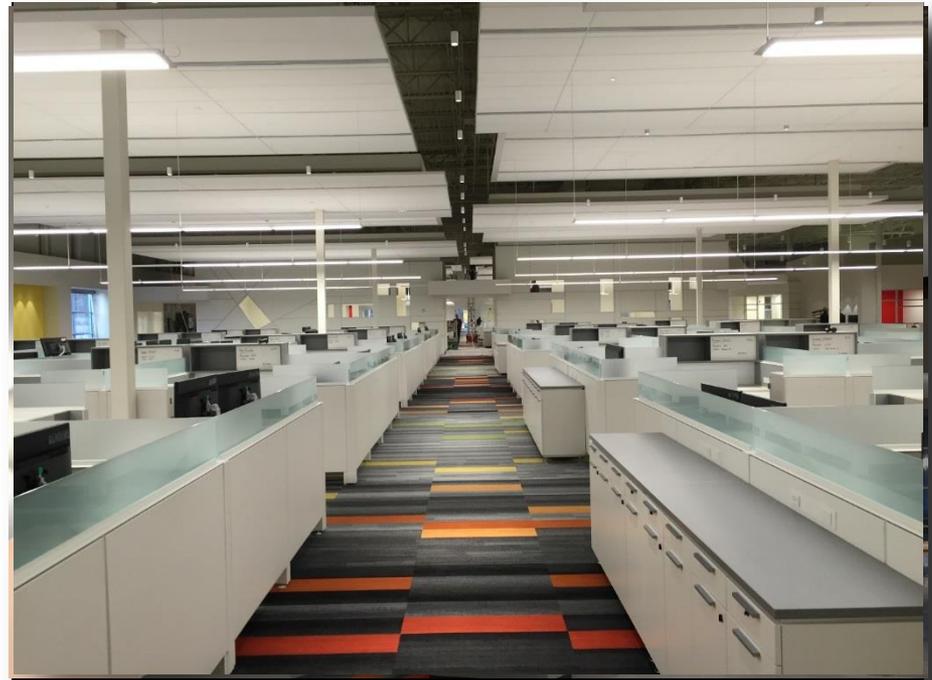
Imagine....

agenda

a case study in lighting

future of connected
lighting

research and
development direction



a case study in lighting

- Efficacy, Efficacy, Efficacy
- Form Factor
- Spectral Design

efficacy in application



efficacy in cu



diminutive



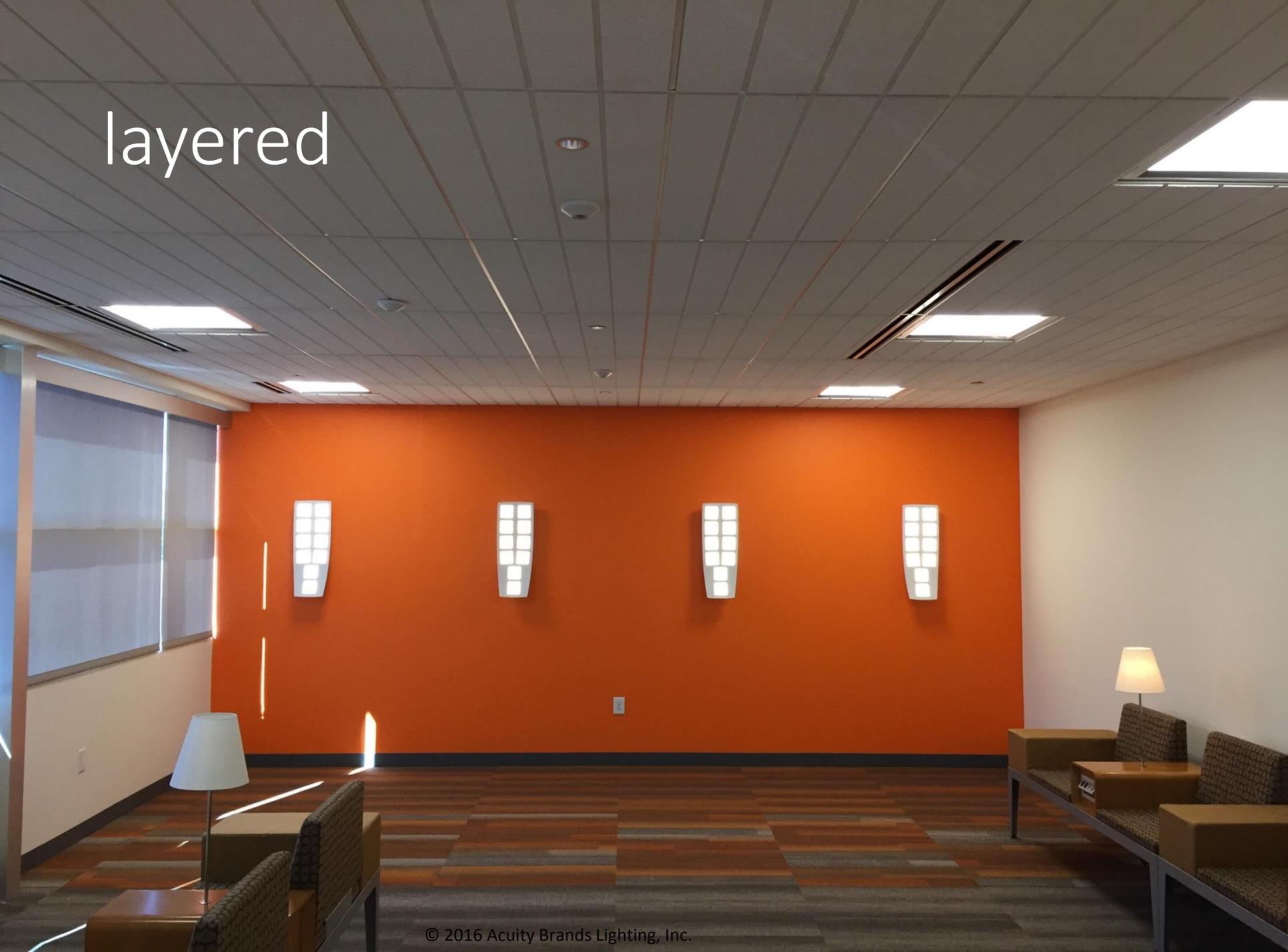
performance



organic



layered



accent



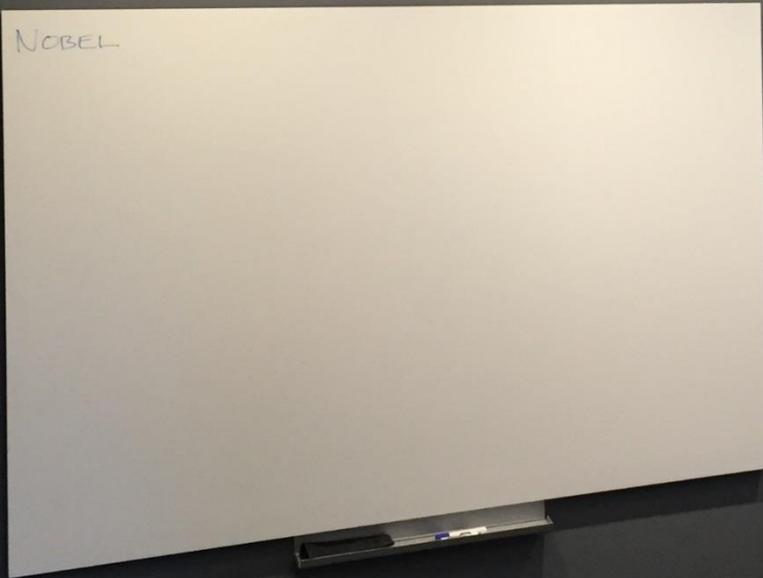
mood



future of connected lighting

- Intelligent rooms enabling intelligent buildings
- Positioning
- Spectral tailoring

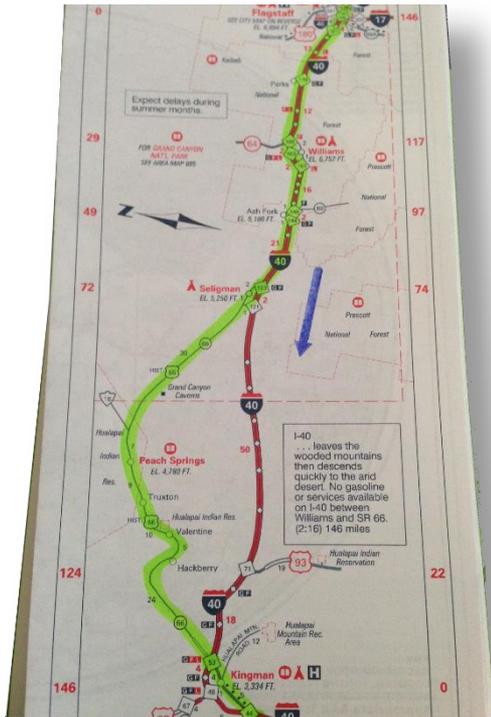
locally responsive



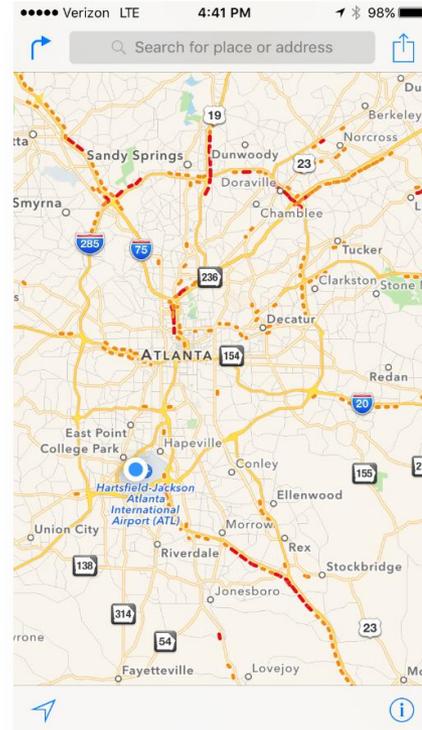
light as communication



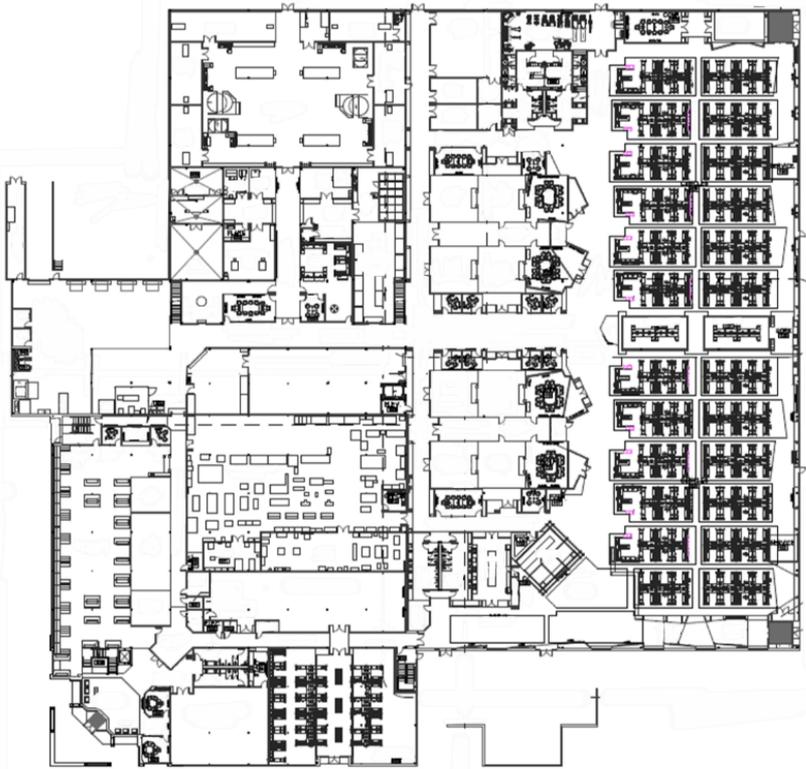
information

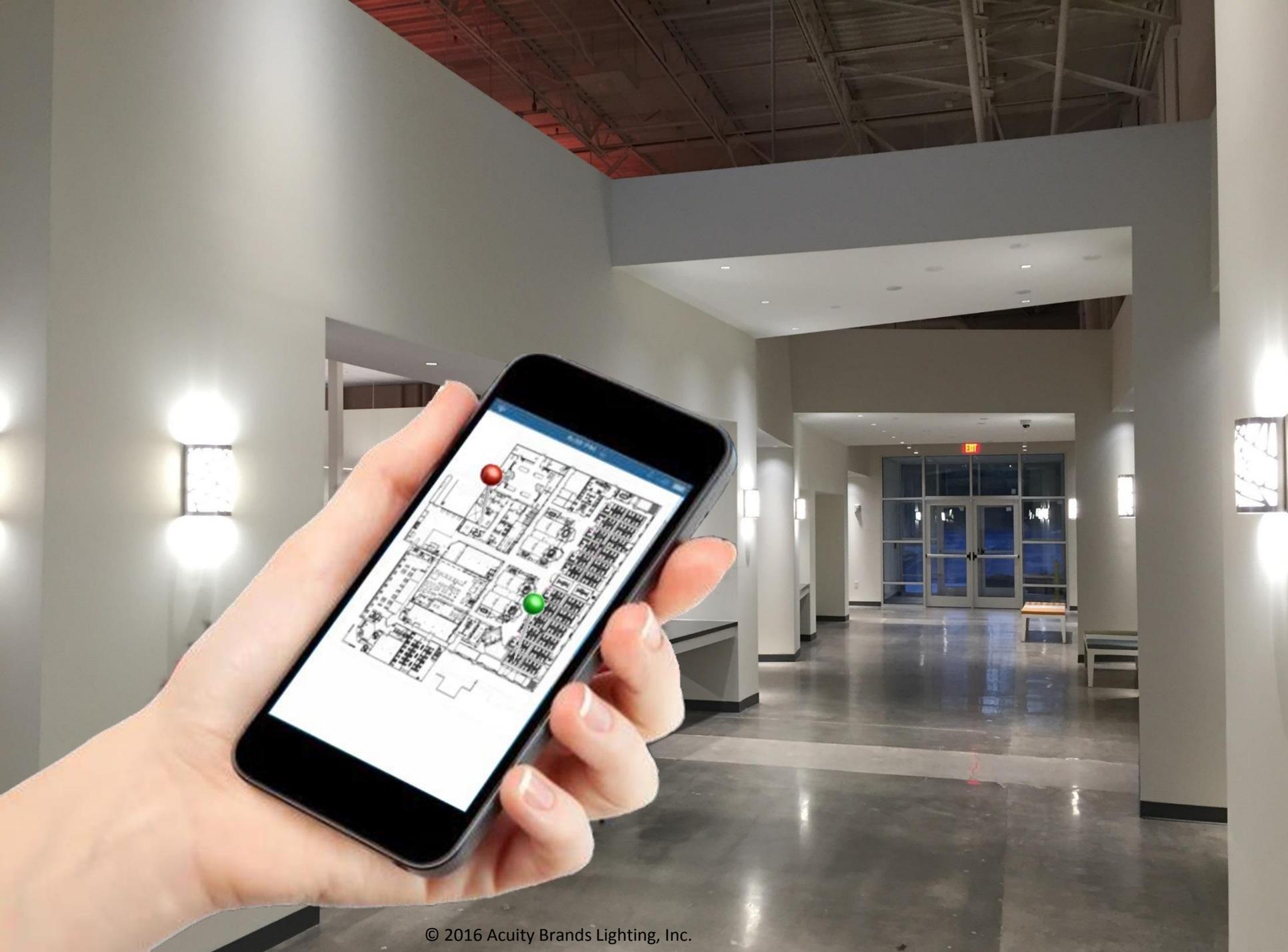


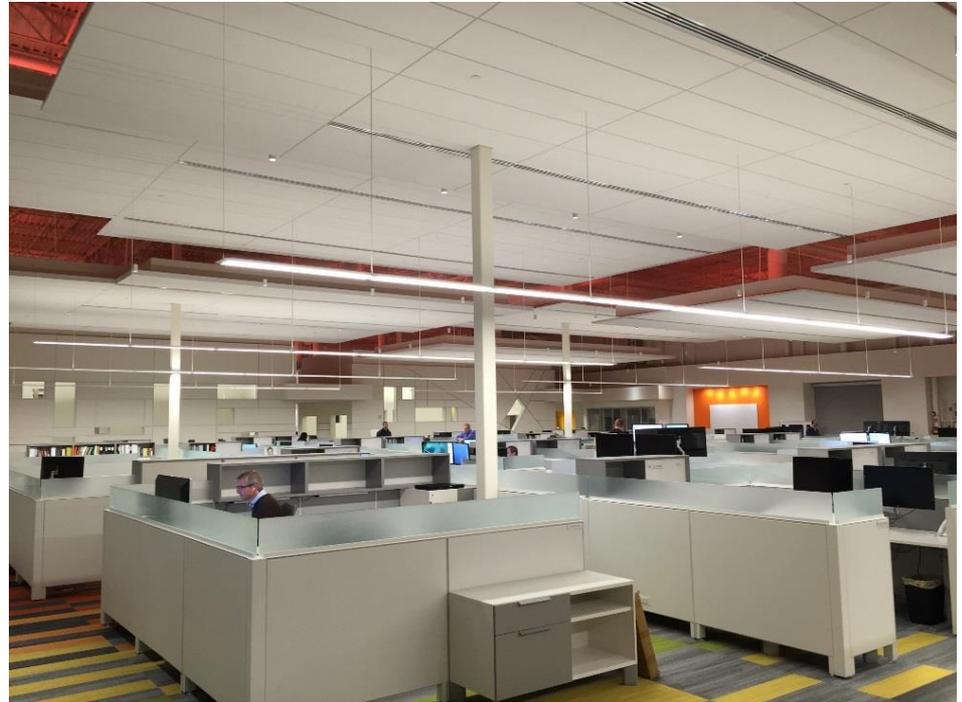
analytics



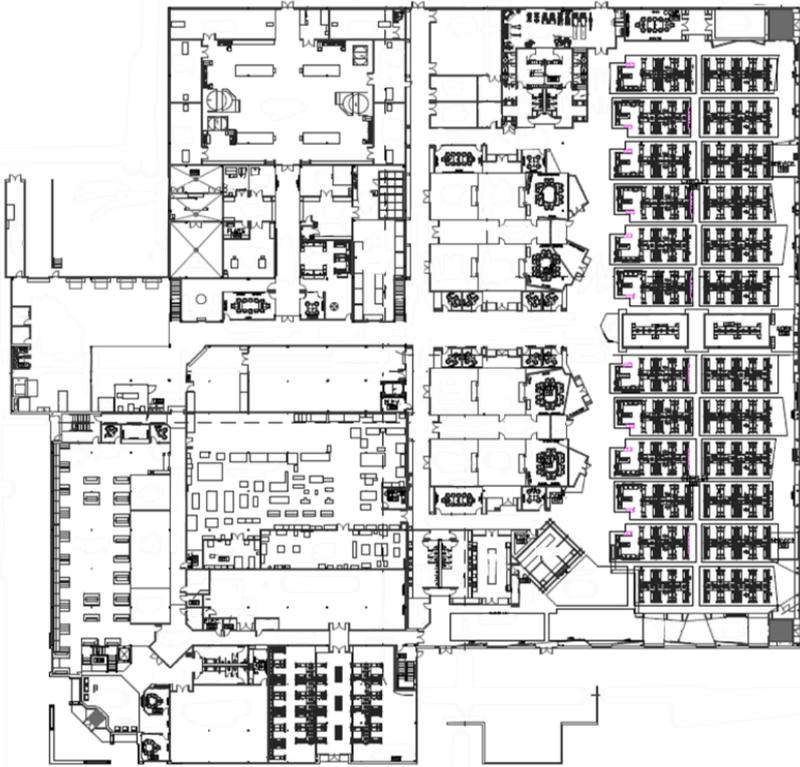








heat map





dynamic spectrum



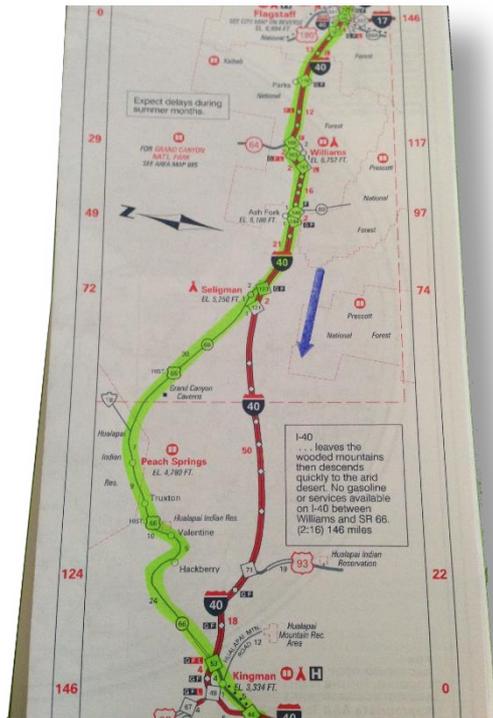
Security



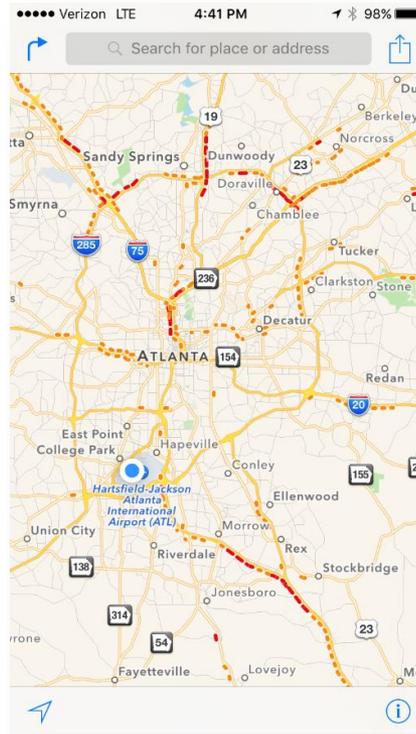
research and development direction

- Predictive design
- Human Factors
- Reliability
- Interoperability

information



analytics



predictive

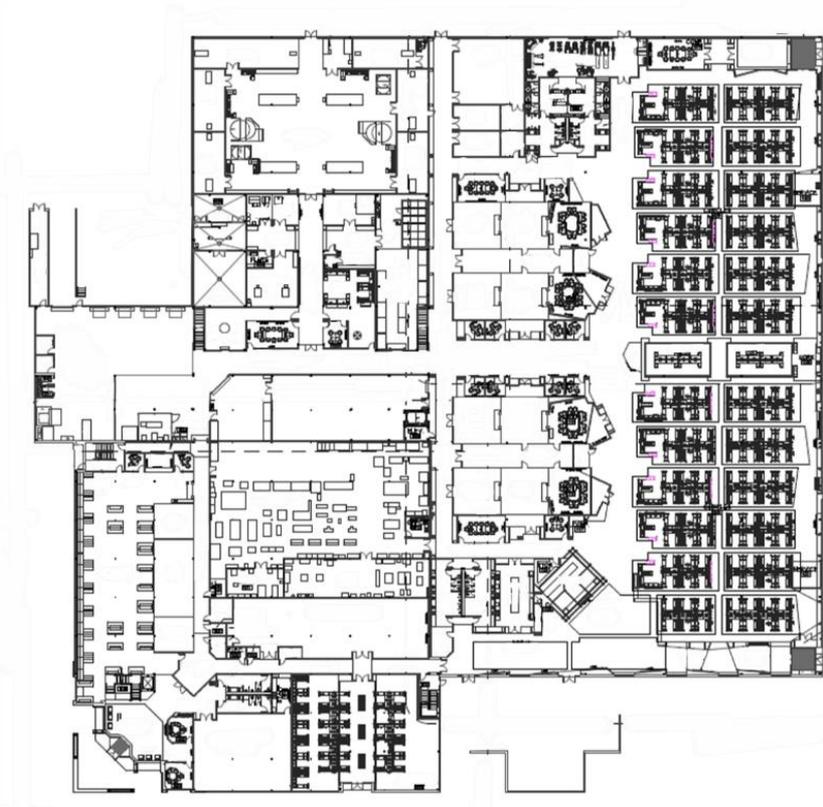


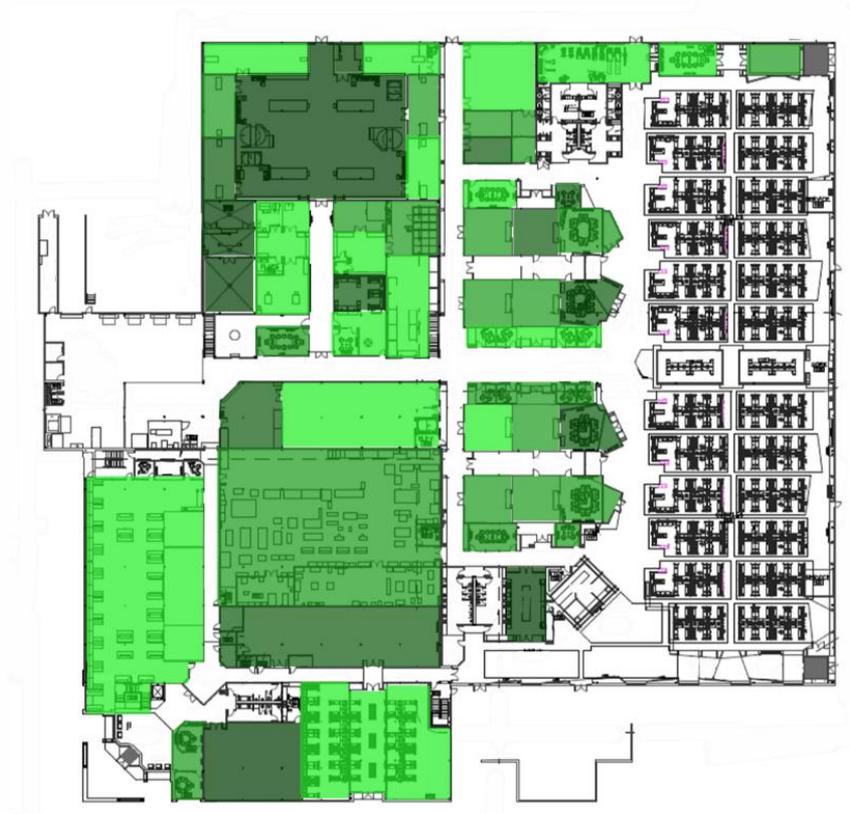
bike



garage

CO₂ map





CO₂ ppm: 550 500 450 400 350

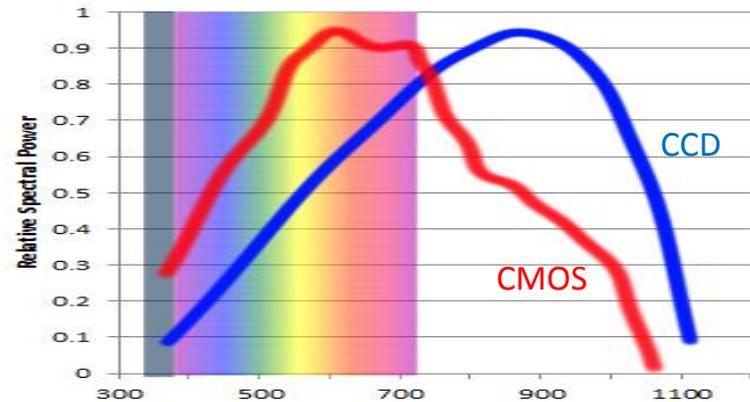
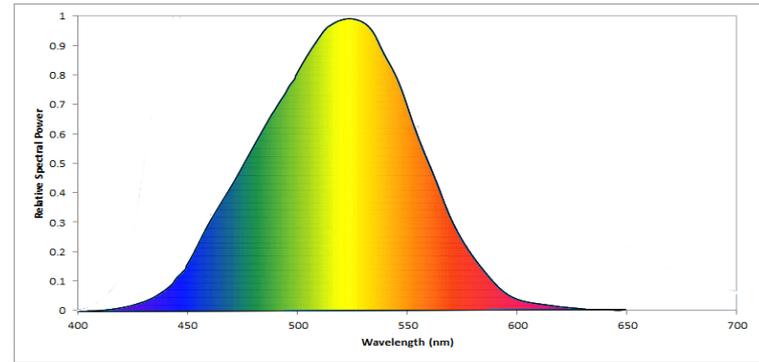
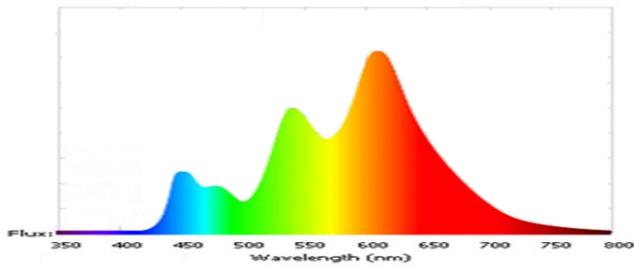
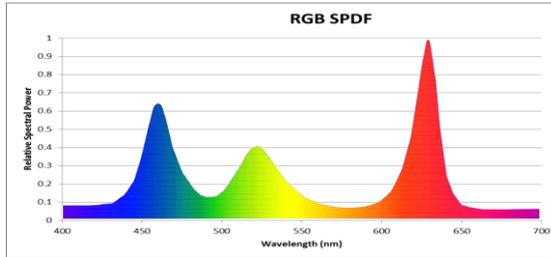
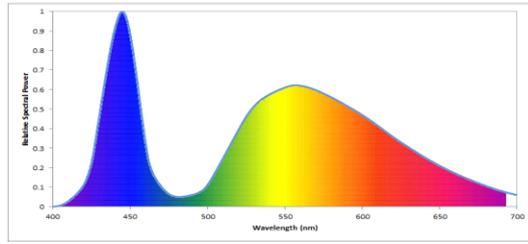


Circadian Lighting & Action Spectrum



predictive is limited by analytics

Solid State Lighting Sources



Spectral Response for Receivers

Reliability

AcuityBrands

Interoperability



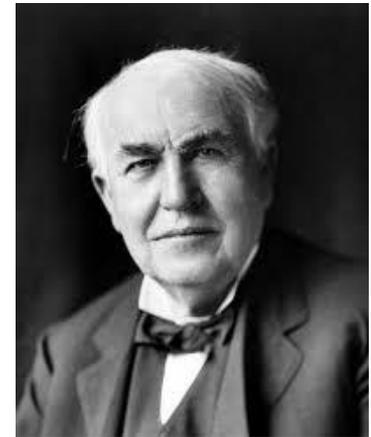
r&d “the ask”

- Predictive design
 - look at lighting tangencies for how to build a more connected world
- Human Factors
 - explore the impact of full spectrum in visual performance
 - investigate how SSL can improve circadian management
 - consider all lighting responsive systems in the research
- Reliability
 - continue research into modeling to create robust complete solutions
- Interoperability
 - explore ways to improve system interoperability

future....

“When Thomas Edison worked late into the night on the electric light, he had to do it by gas lamp or candle. I'm sure it made the work seem that much more urgent.”

George Carlin



A nighttime cityscape featuring several illuminated skyscrapers. The buildings are lit up with various colors, including blue, white, and red. In the foreground, there are light trails from a moving vehicle, suggesting a street-level view. The overall scene is vibrant and modern.

Thank You

AcuityBrands.

© 2016 Acuity Brands Lighting, Inc.