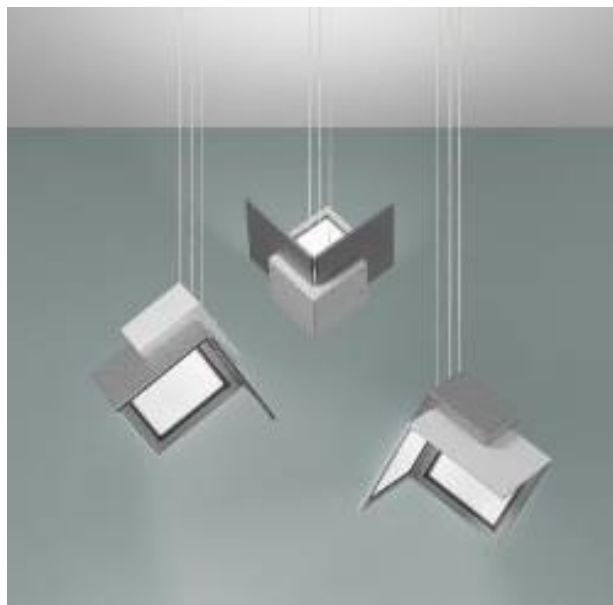


OLEDs – A Fixture Manufacturers Perspective

Jay Eissner

Sr. Engineer – Research & Development



Overview

Background
The Good and The
Challenges
Sales & Marketing
Engineering & Manufacturing



Background

My standpoint:

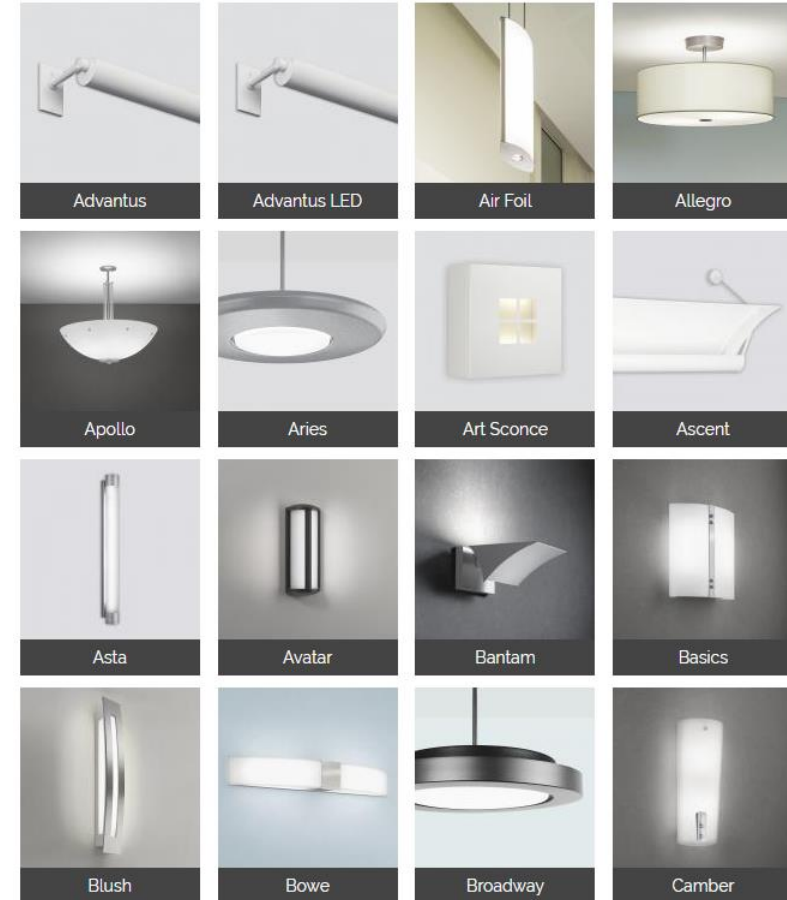
Architectural Lighting

Specified by Architects, Lighting Designers & Electrical Engineers

Construction sales channels

Build to order

Building OLED prototypes/technology demonstrators since 2013



Sales & Marketing

The Good:
Thin, unique designs
Soft, even light
Great appearance off or on
Cool factor

Photo: aerelight

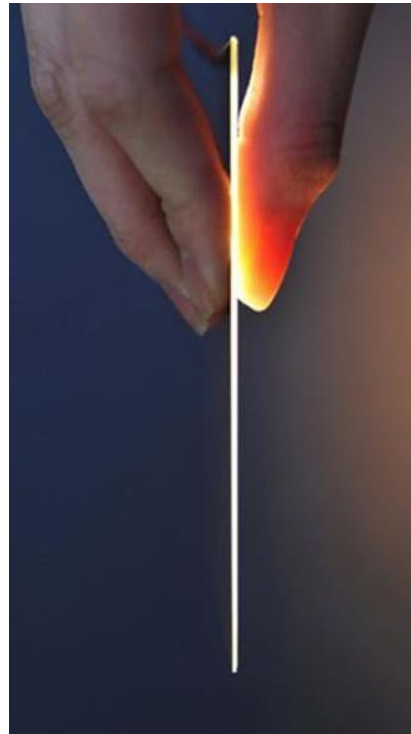
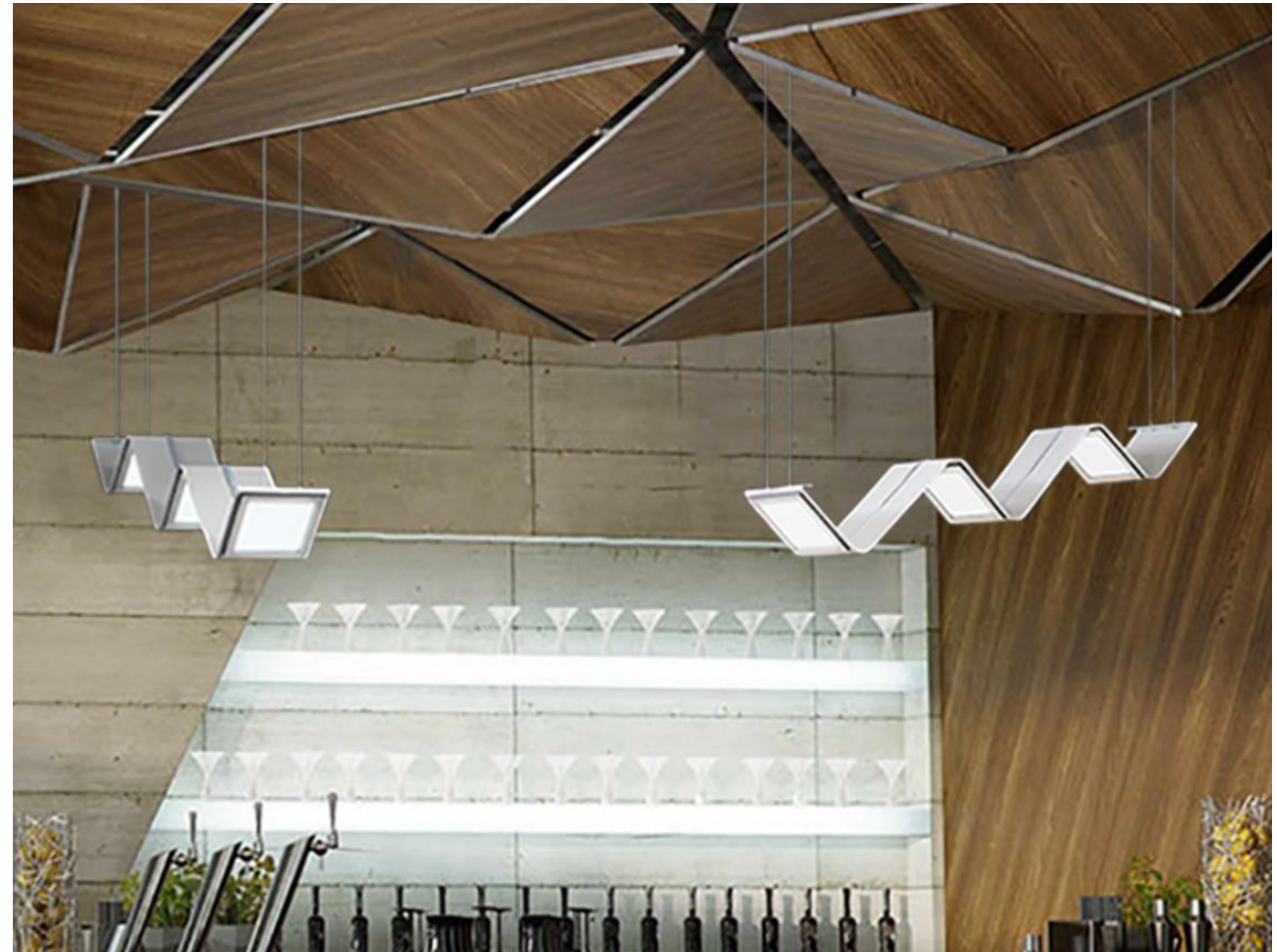


Photo: OLEDWorks



Sales & Marketing

The Challenges:

High cost

Low life

Low efficacy

Low lumen output

Small Panels

Not sure where/why to use

Low durability

Limited replaceability in the field

Limited CCT options



Photo: Acuity

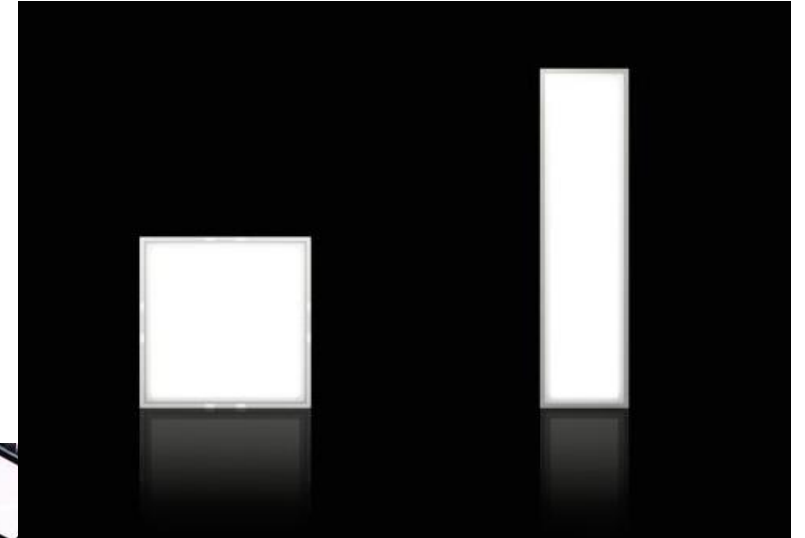


Photo:
OLEDWorks

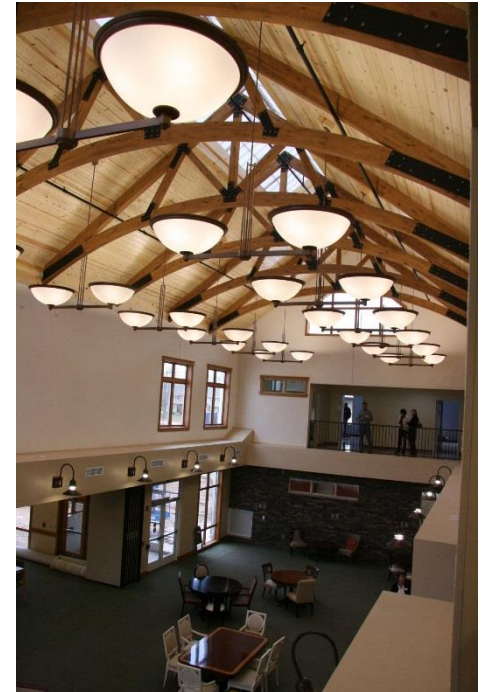
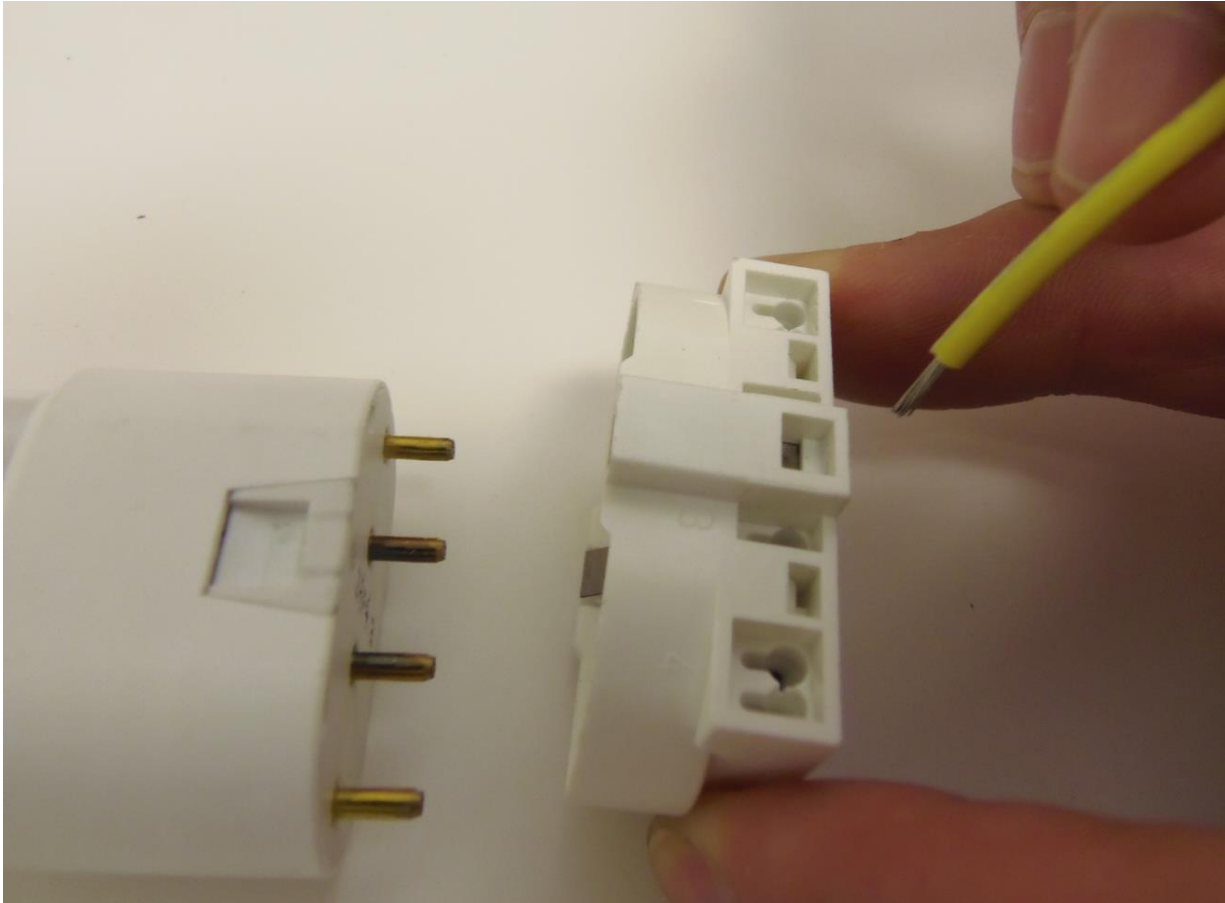


Photo: Philips



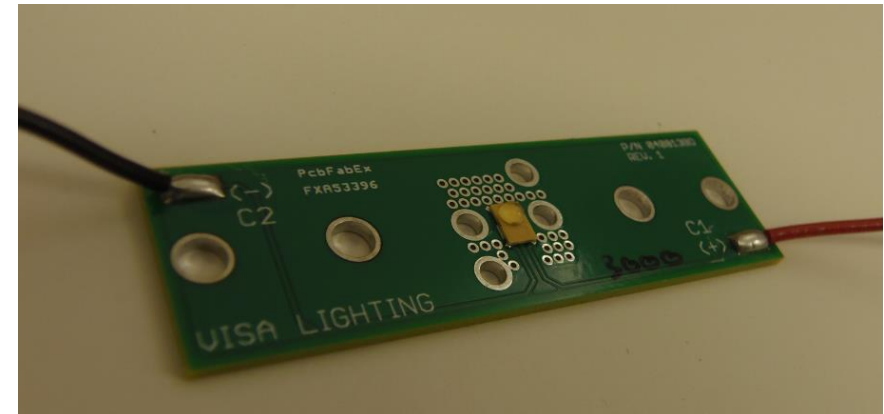
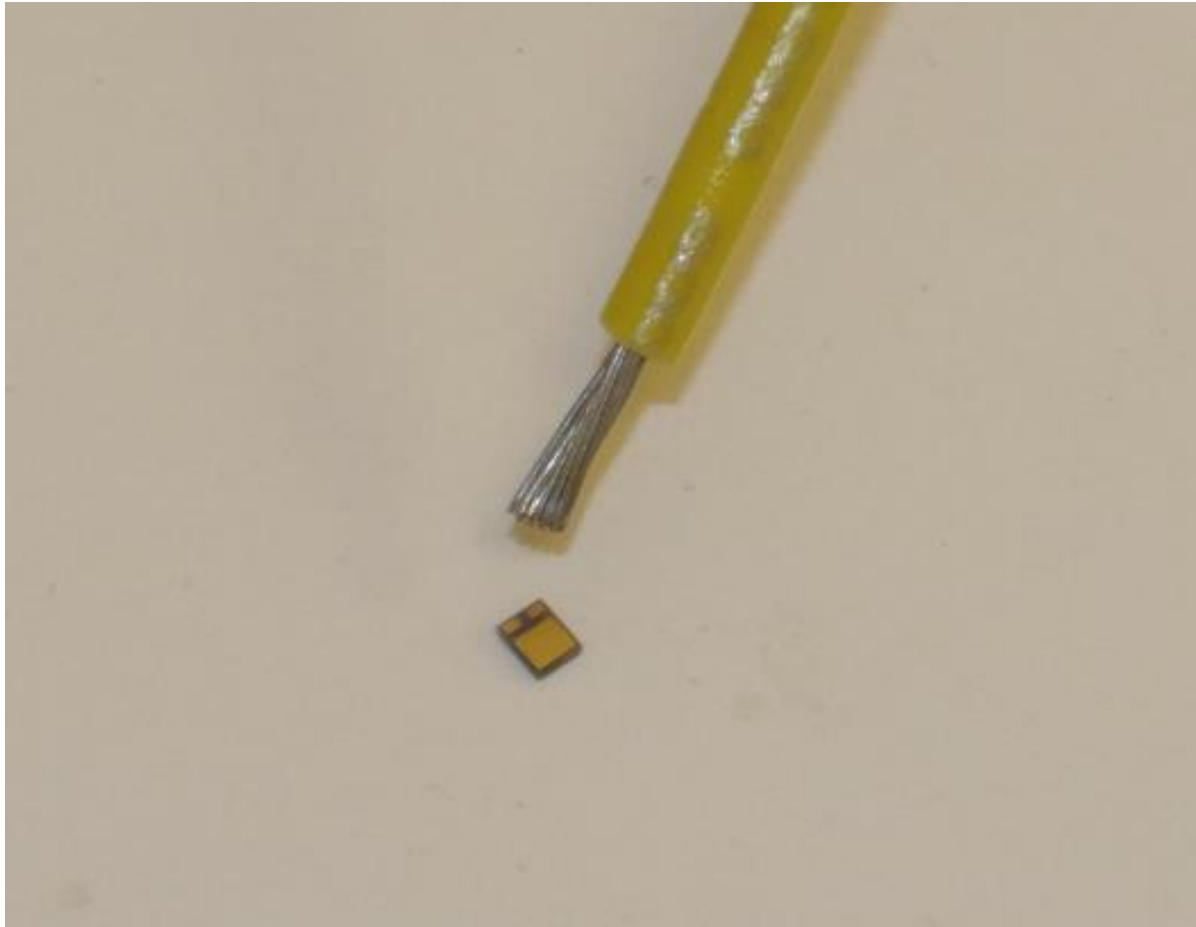
Engineering & Manufacturing

History
From this:



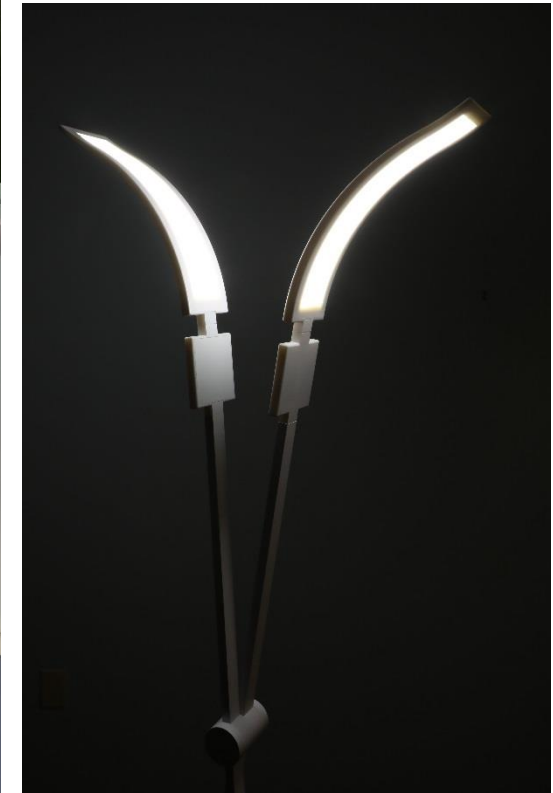
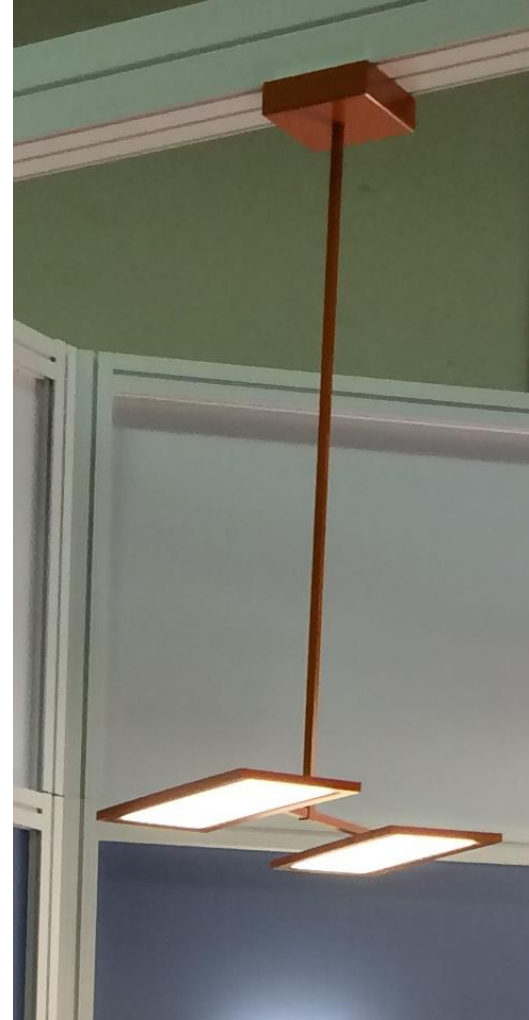
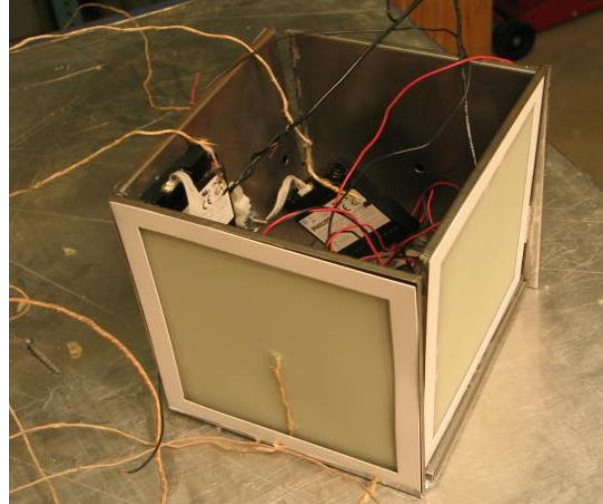
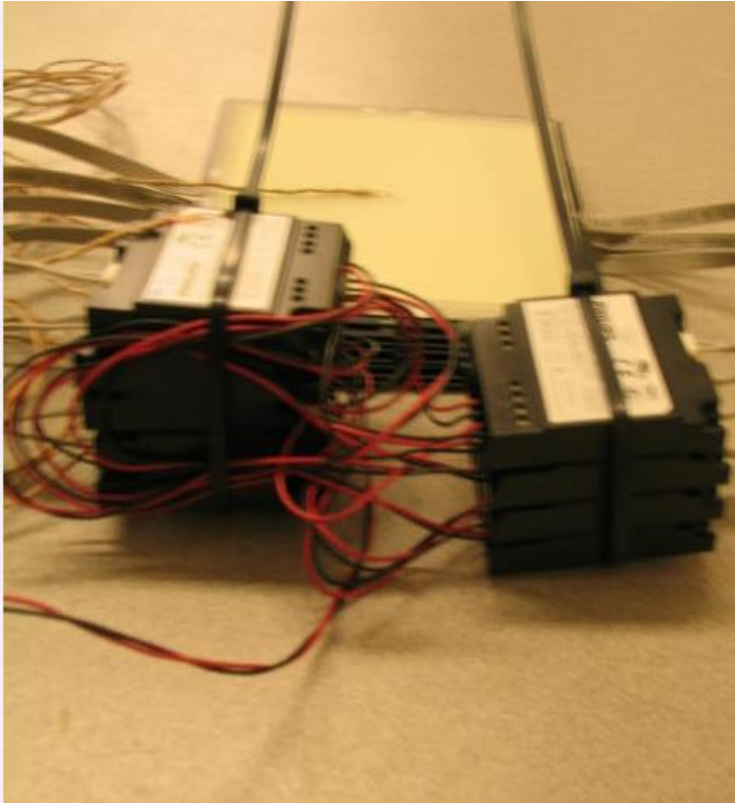
Engineering & Manufacturing

To this:



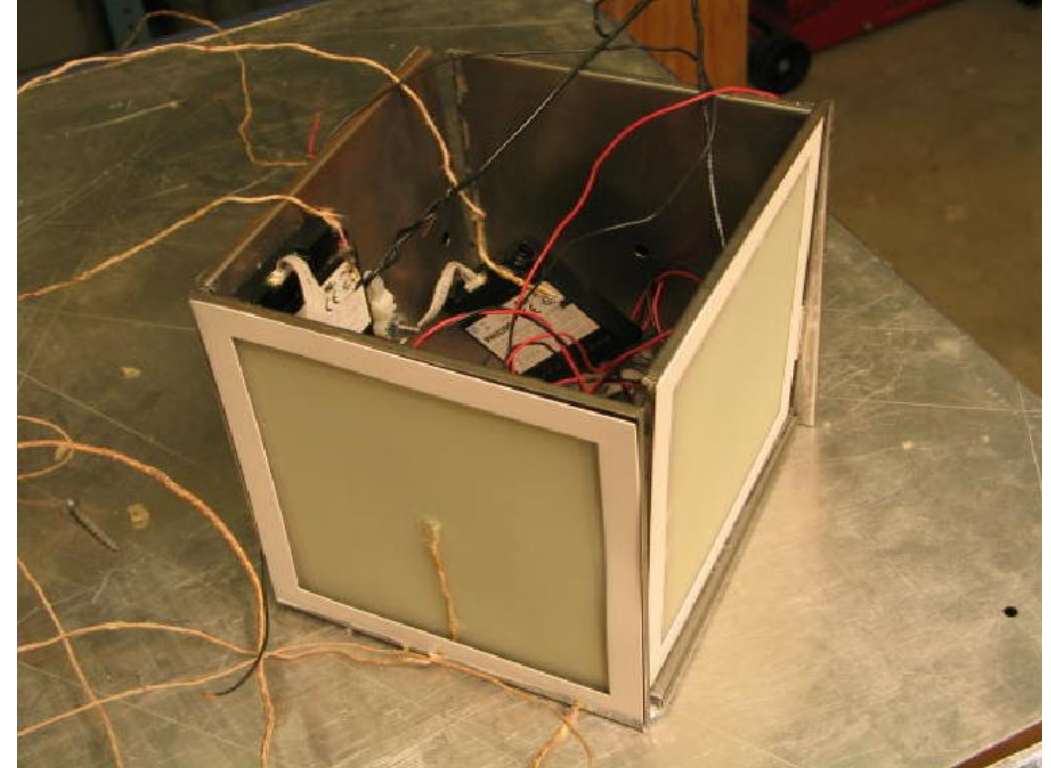
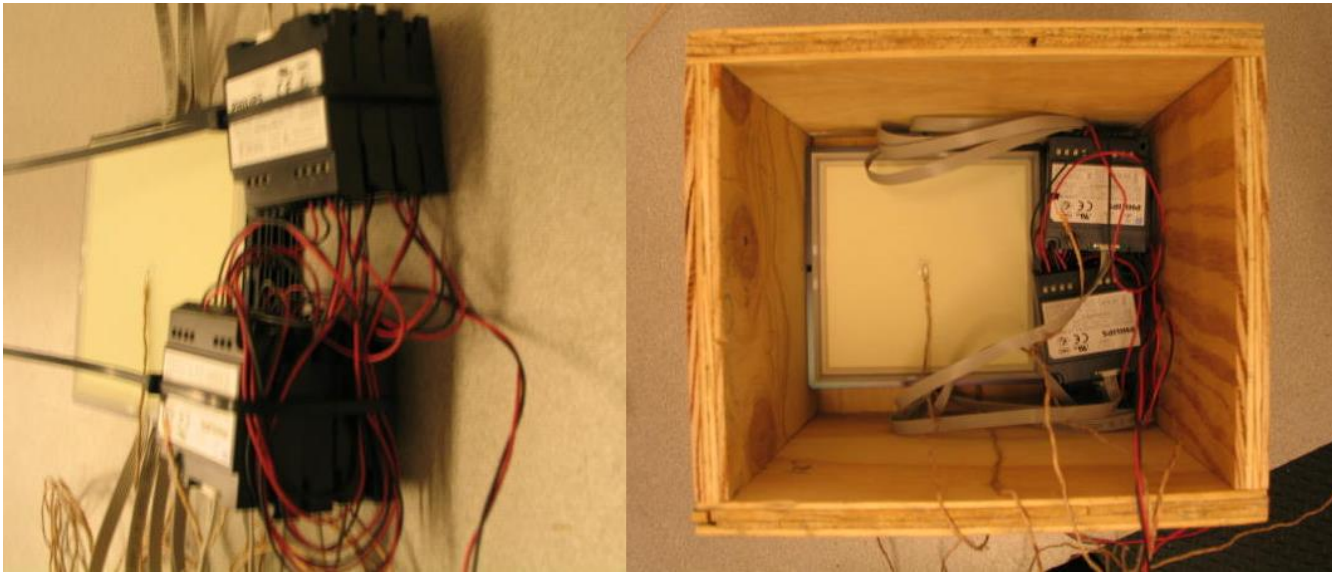
Engineering & Manufacturing

To this:



Engineering & Manufacturing

The Good:
Easy heat management
No circuit board needed



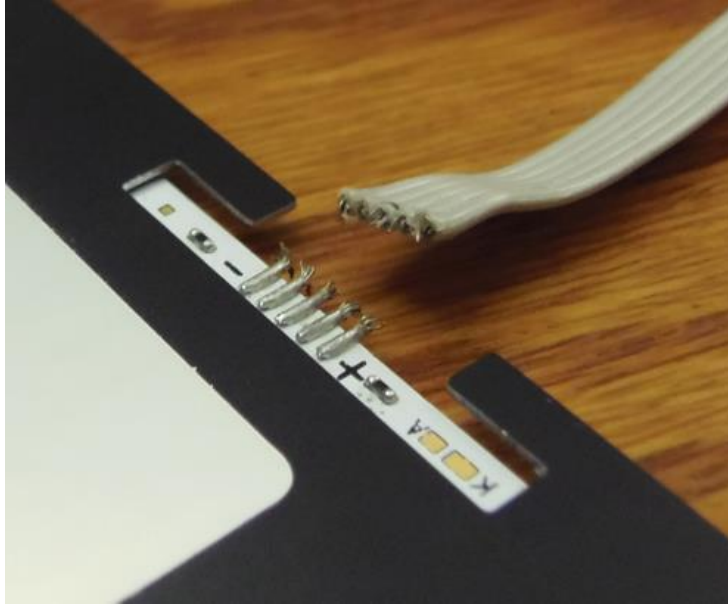
Engineering & Manufacturing

The Challenges:

Not robust for current assembly techniques (4% breakage during assembly)

Early flexible not flexible enough!

High minimum purchase quantities



Engineering & Manufacturing

The Challenges:

Power conversion components are bulky compared to the OLED panel.

Fluctuating voltage (V_f) makes it difficult to combine multiple panels on one driver.





Culture | Quality | Products | Tools

THANK YOU!