Think **Outside** of The **2x4 Box**

A case study comparing the conventional troffer to ARON's DUO T-Bar Luminaire

ARON™
Light Redefined



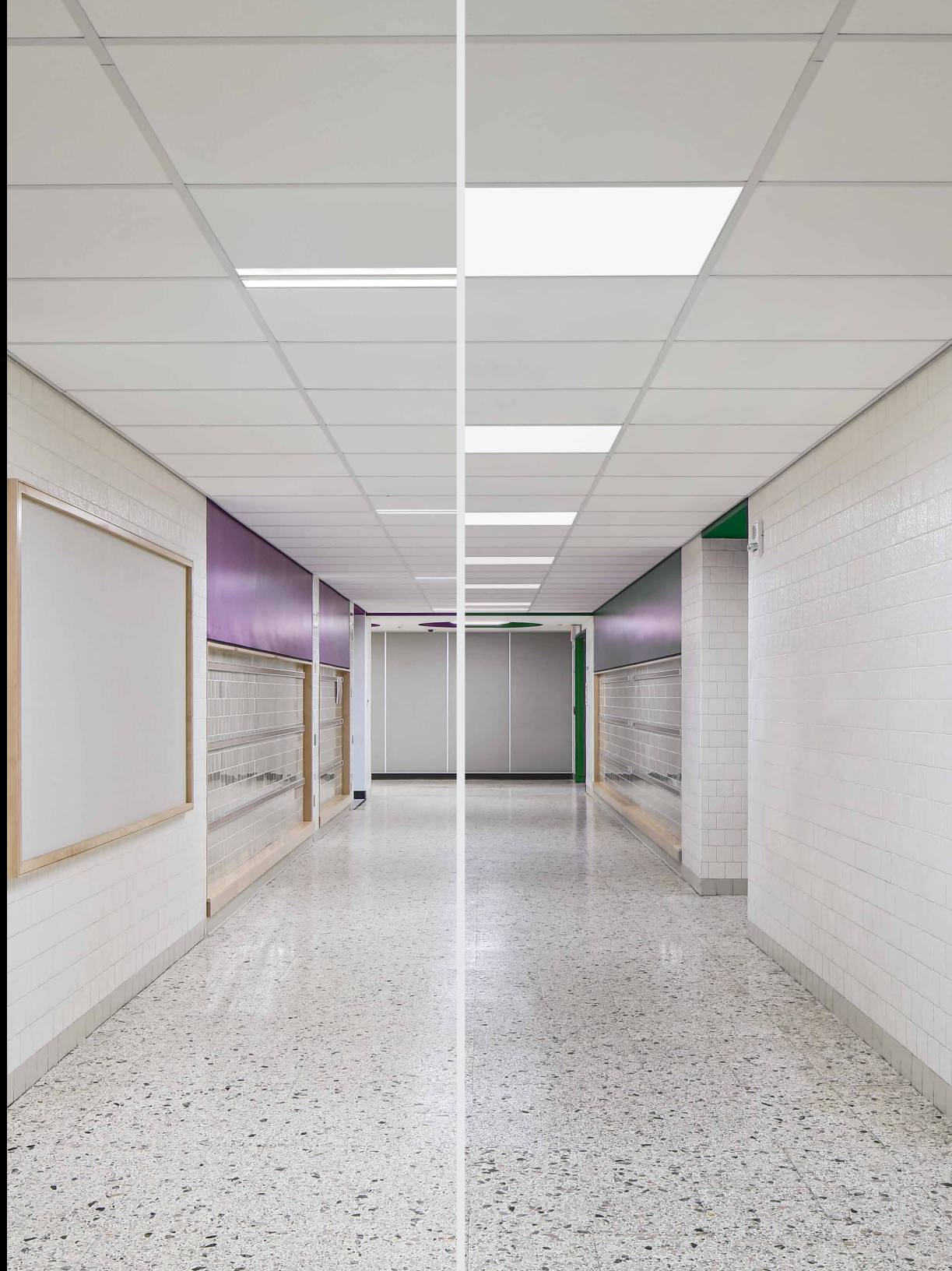
Abstract

The Challenge

With the rise of LEDs, selecting appropriate luminaires for integrating lighting into a space becomes crucial. Designers must consider fixtures that complement the interior design while effectively illuminating the area and staying within budget constraints. In acoustical drop ceilings, the 2x2 and 2x4 troffers have been popular for commercial spaces due to their cost-effective lighting. However, these troffers are aesthetically unpleasing, occupy significant ceiling space, and require close fixture spacing, which may not align with grid layout and design.

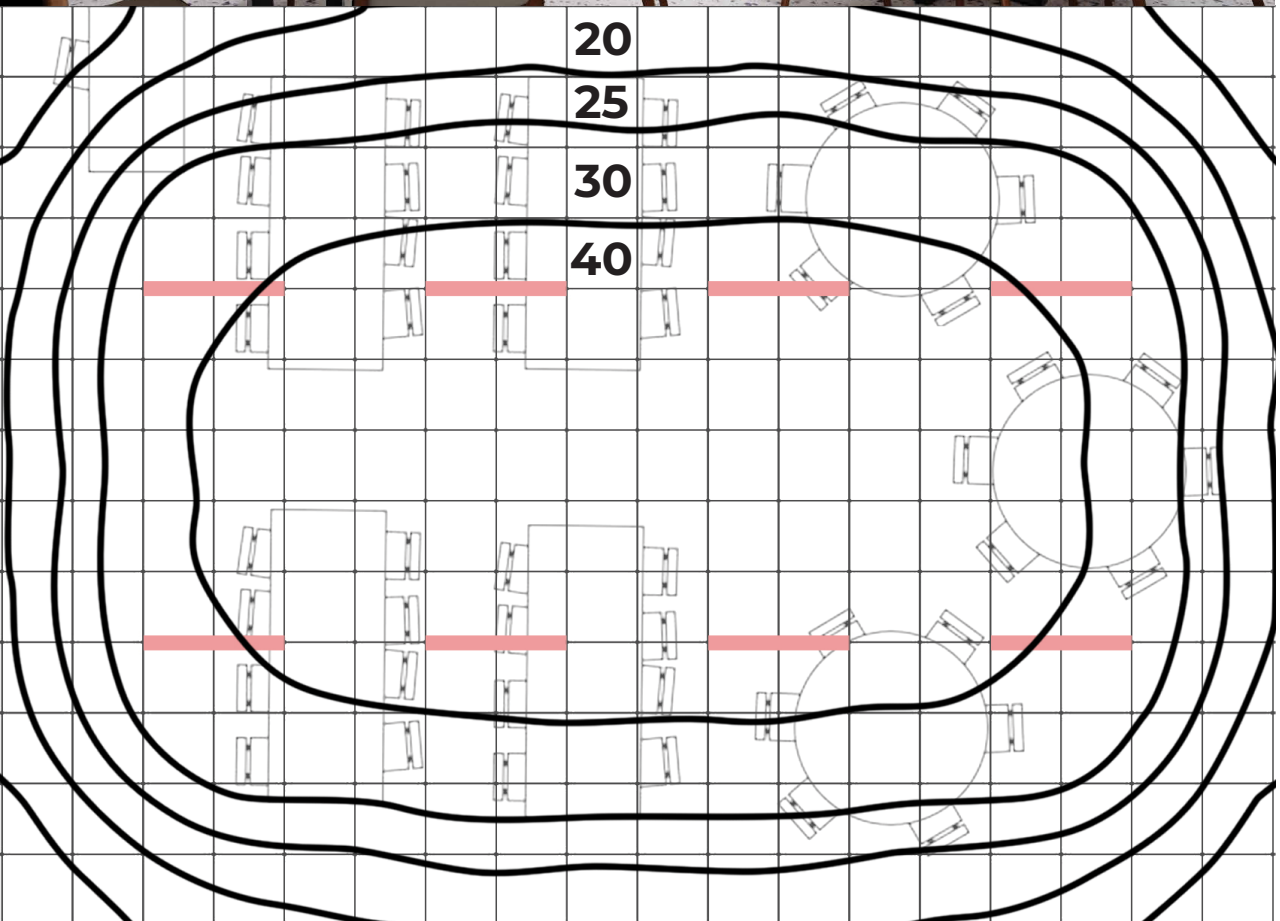
The Solution

Consider the DUO tbar luminaire as a viable alternative to troffers and traditional linear slot fixtures. Leveraging meticulously designed edge-lit light guide technology, the DUO offers a batwinglight distribution, effectively illuminating every corner of the room. By opting for the DUO, you can achieve superior performance compared to conventional slot and troffer luminaires while preserving the desired aesthetic. Additionally, the DUO enables a reduction in the number of fixtures needed, and its patented over-the-grid mounting solution helps maintain project budgetary constraints.





Fixture Shown:
DUOT1-F-4FA-1000-B3-UNV-DM-W

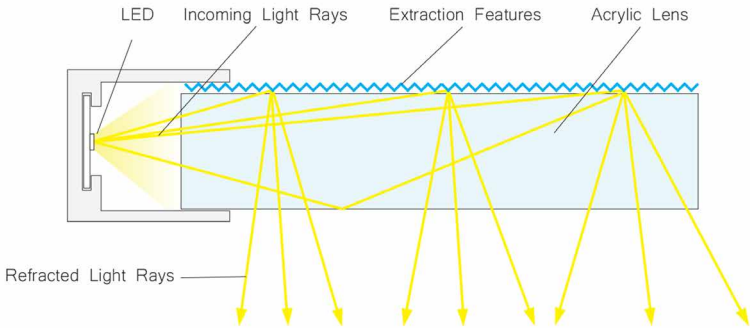


8 4ft DUOs

Two Linear Slot Fixtures in one compact form factor.

Keep a clean ceiling and reduce the amount of fixtures needed. The DUO has an angled regressed lens and edge lit optical system. This creates a uniform batwing distribution, allowing for ultimate performance with fewer fixtures.

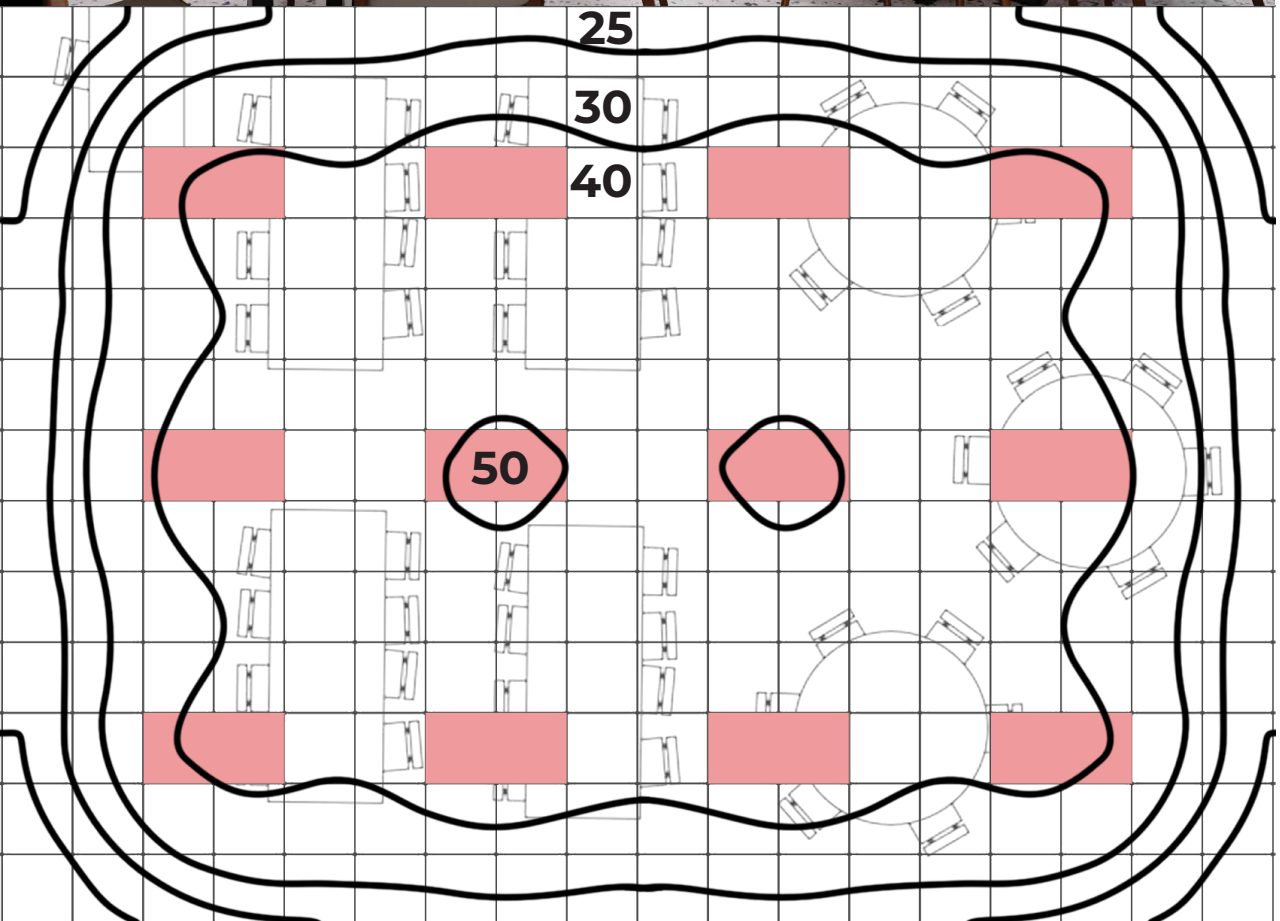
The DUO Installs easily on any T-Grid System, by straddling the spine of the T-Grid. The ceiling panels rest on the flanges of the fixture, without any added grid materials required to "box-it-in." At just 2.3" in height with an integral driver, the DUO can also solve plenum concerns.



Edge lighting is a method of optical tranmission that Aron uses in many of our fixtures. Light coming from the LED shines into an acrylic lens. On the top side of the acrylic, surface bonded extraction features help to refract and spread light rays out of the arcylic to create various beam shapes.

See how the duo compares →





12 2x4 Troffers

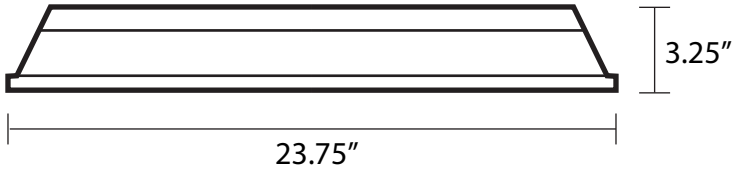
When analyzing the same space using a market comparable 2x4 troffer, we can see that it takes 12 fixtures to achieve comparable performance to 8 DUO TBar fixtures.

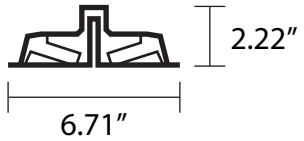
Also noticeable is the difference in uniformity throughout the floor plan. The DUO maintains a very evenly distributed flood of light, while the comparable troffer creates clear segments and hotspotting directly beneath the fixture.

Major Comparison Conclusions

1) Fixture reduction by 25%
2) Cleaner Ceiling
3) Improved Uniformity

Which do you prefer?





Corridor **Versitility** and **Performance**

The DUO's wide and uniform distribution makes for an extremely versatile corridor fixture.

When grid line's are centered within a corridor, it is no longer necessary to stagger fixtures. Wall scalloping is also greatly reduced.

Alternatively, if grid lines allow for fixtures to be centered in the corridor, the DUO can achieve 12-16ft on center spacing and keep uniformity in light distribution throughout. Again, the comparison illustrates a reduction in the number of fixtures, a cleaner ceiling space, and a more even distribution of light.

