



Apron Lighting Without Compromise:

What Every Airport Should Know

Presented by **Yuli Grig**, Midstream Lighting



Today's Agenda

Introductions

What we do at Midstream Lighting

7 things you need to know

- 1: Design lead solutions
- 2: Certification
- 3: Testing and verification
- 4: Optics rule
- 5: Pay cheap, pay twice
- 6: Remote drivers vs integrated drivers
- 7: Controls and intelligence

Q&A – time permitting



Presenter

Yuli Grig Co-Founder & Commercial Director Midstream Lighting

Yuli has over 15 years of experience in airport lighting, delivering hundreds of projects at more than 150 airports worldwide.

As Co-Founder and Commercial Director of Midstream Lighting, he specialises in creating ICAO-compliant apron lighting solutions that enhance safety, efficiency and performance.

An entrepreneur with a background spanning multiple industries, Yuli is passionate about challenging the status quo and driving innovation. He holds postgraduate degrees in Law and Engineering and has been recognised as an Export Champion by the UK Government's Department of International Trade.



Who is Midstream Lighting?

Experts in Floodlighting for Airports

- We are a full cycle specialist manufacturer of apron floodlighting systems
- Design experts working on airport projects with high power LED solutions since 2010.
- We manufacture our lighting products in the UK and Romania (EU) and export them to over 70 countries.
- Our products are unique. We use proprietary optics, designed for airports, as well as a host of other product features designed by our team to enhance their performance and longevity.
- We are proud to have our amazing R&D and Technical office which is based in Milan, Italy where our engineers continue to develop market leading solutions.
- We are specialists, not generalists – we work only in our key sectors of Aviation, Maritime and Sports and we are experts in these applications.
- 150+ global airport projects completed – from major international hubs to small regional airports.





Apron Lighting Without Compromise:

What Every Airport Should Know

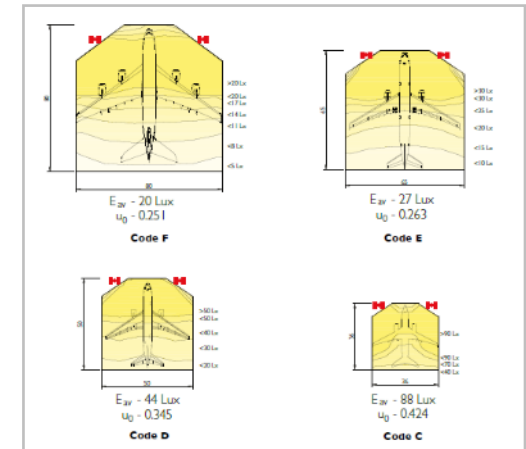
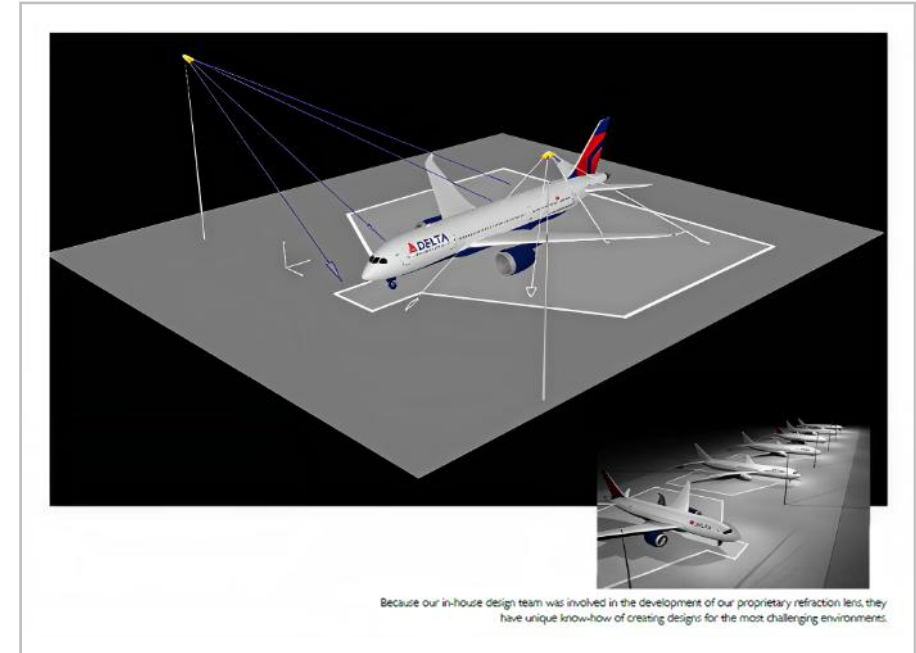


1: Design Led Solution

Apron lighting is different!

- AGLs are standard products
- Floodlights differ in:
 - Photometry
 - Power output (lumens)
 - Efficacy
 - Performance over time
- Can you assume...? You can “ASS U ME”.

Each project bespoke to manufacturer.

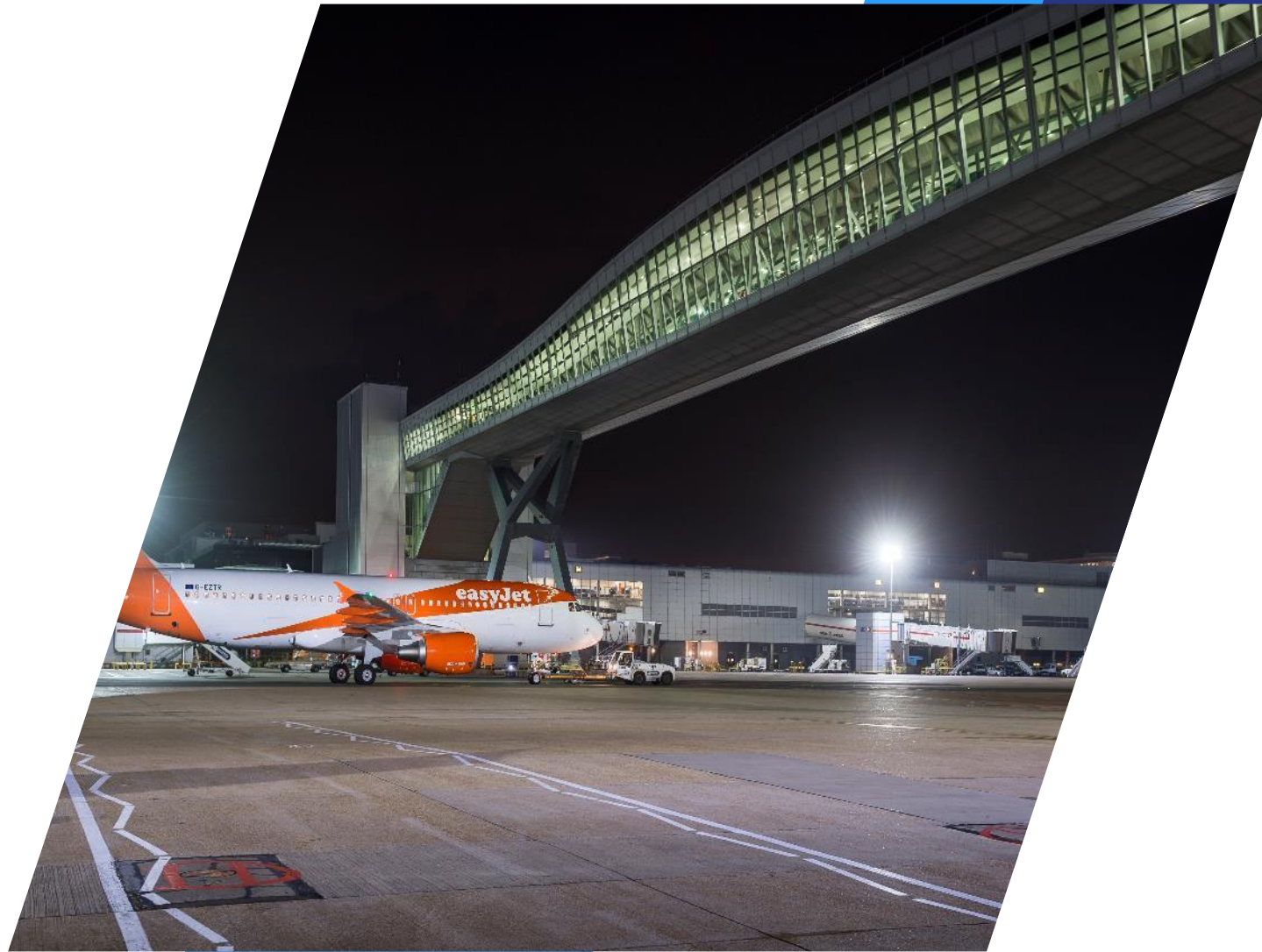


2: Certification

- Certification speaks a thousand words

....But not as many as a reference list

- In many instances theoretical products are submitted during tender stage



Quick Poll

Once you have your design...

- Who has completed Apron upgrades?
- Who complies with their national standard?
- Who has tested their apron for compliance when it was installed?
- Who tested in the last 6 months?
- Who has a documented methodology for testing?



3: Testing and Verification

- Verifying results is your responsibility
- For LEDs, heat is the enemy. Key to high quality systems is the heat dissipation.
- E.g. Frankfurt Airport, 15%-20% reduction in lumen output (4°C to 26°C)
- E.g. Istanbul Airport (8 out of 10 failed)
- Design, Test, Measure, Verify



4: Optics Rule

- Airport enemy no 1 is GLARE.
- Asymmetric optics deliver a low glare and full cut off above the horizontal plane
- The asymmetric beam has a lower luminous intensity (cd/klm) peak as it spreads light over a larger angle
- Pilot glare and discomfort complaints
- Light pollution

Aviation, flat to the ground



5: Pay Cheap, Pay Twice!

- Apron lighting fixtures are critical infrastructure
- Premium products will typically out-last low-quality products, and low-quality companies!
- Consider that some large lighting dealers may have no expertise and/or experience in this type of application
- Usually, the Contractor is looking for margin, but the airport suffers.

Examples.....

- HOLD SPEC and go back to Lesson 2



Milan Linate Airport

US Naval Air Station Sigonella



Muscat International Airport



6: Remote Drivers vs Integrated

- Markets have preferences
 - UK, Italy, Germany integrated
 - France, USA, remote
- Typically driven by maintenance cycles
- Habits are hard to change!
- Manufacturers must adapt
- Each operator may have own preference
- Remember: Surge Protection type 2+3



7: Controls & Intelligence

- Controls and IoT are in flavour now
- Wireless, wired, WiFi, RF, push button
- Who is the Owner?
- Who is trained?
- How often is this system utilised?
- What happens when it doesn't work?
- Automation is the future?
- Good but someone needs to run it!

... and install it correctly



Questions?





Thank You – Join us tomorrow

INTER AIRPORT
CLOSING PARTY

8TH OCTOBER | 5 - 7PM | STANDS B5-1518

Lattix, TKH and Midstream invite you to the Inter Airport closing celebrations.

