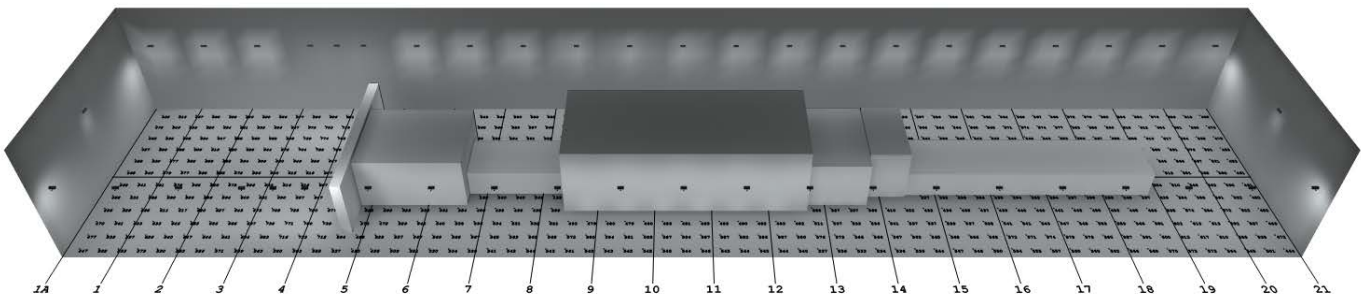


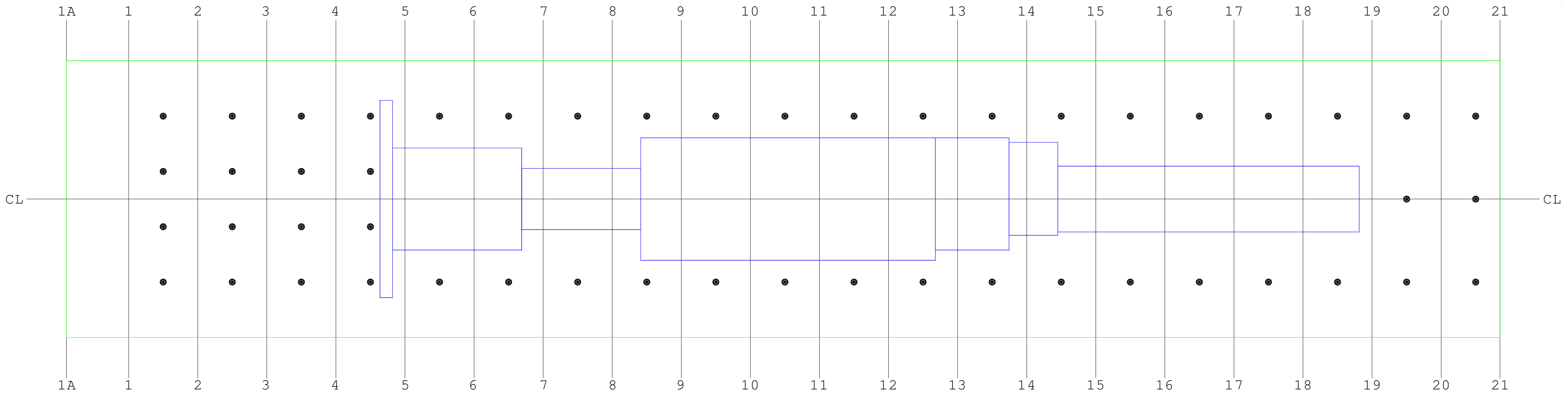
Pulp Machine Lighting Retrofit

DAGR was approached by a Pulp Mill to redesign the lighting in one of their pulp machine rooms. The existing lighting consisted of 50 x 1,000W Metal Halide fixtures mounted at ceiling height (42ft). Thermal analysis done during a site visit identified areas of high ambient temperatures in many of the existing fixture locations that would have been unsuitable for LEDs. As such, it was determined that the best course of action was to mount LEDs on the walls at 30ft where ambient temperatures were well within their operating range.

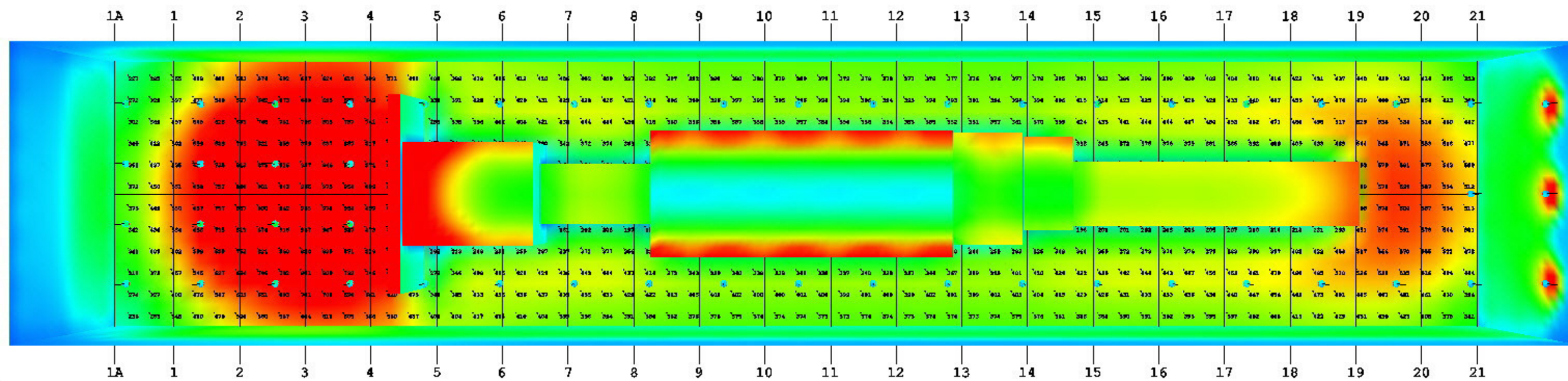
DAGR was also provided with a list of desired illuminance levels around which the new layout was designed. DAGR was able to meet all of the design criteria using wall-mounted 400W MP700 Multi-Purpose LEDs while also reducing the total fixture count by 4. As well as providing the proposed layout, an existing illumination level plot was generated using generic 1,000W Metal Halide fixtures with outputs adjusted to meet illumination levels measured during site visits. The following two pages contain both the lighting layout and pseudo-colour illuminance level plot for the existing and the proposed layouts.



Existing Lighting Layout



Existing Layout Pseudo-Colour (Red = 700 lux)



Existing Lighting Schematics

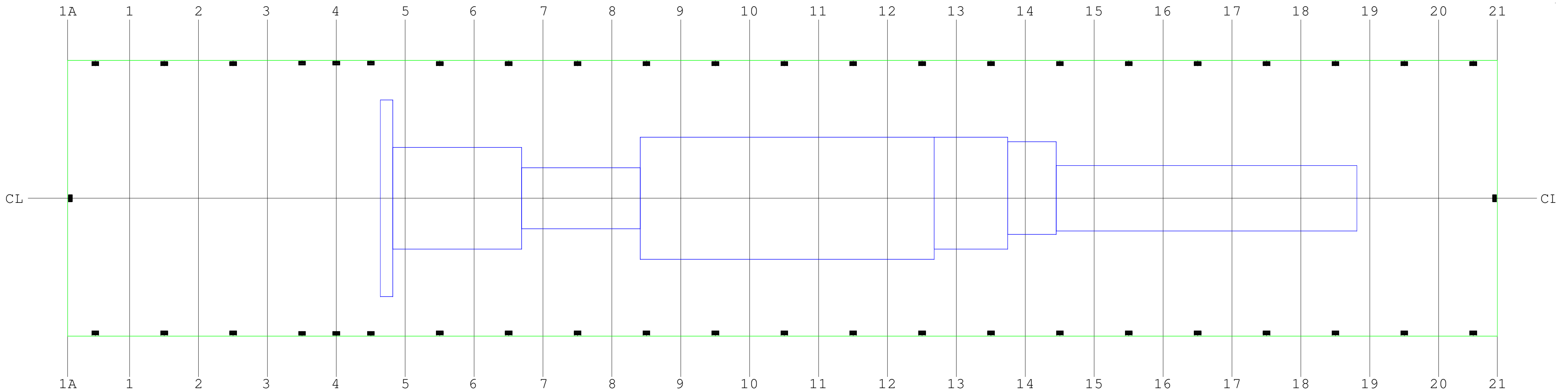
Fixture Count: 50
Fixture Type: 1000W Mercury Vapour
Bottom-of-Fixture Height: 12.802m (42 ft)

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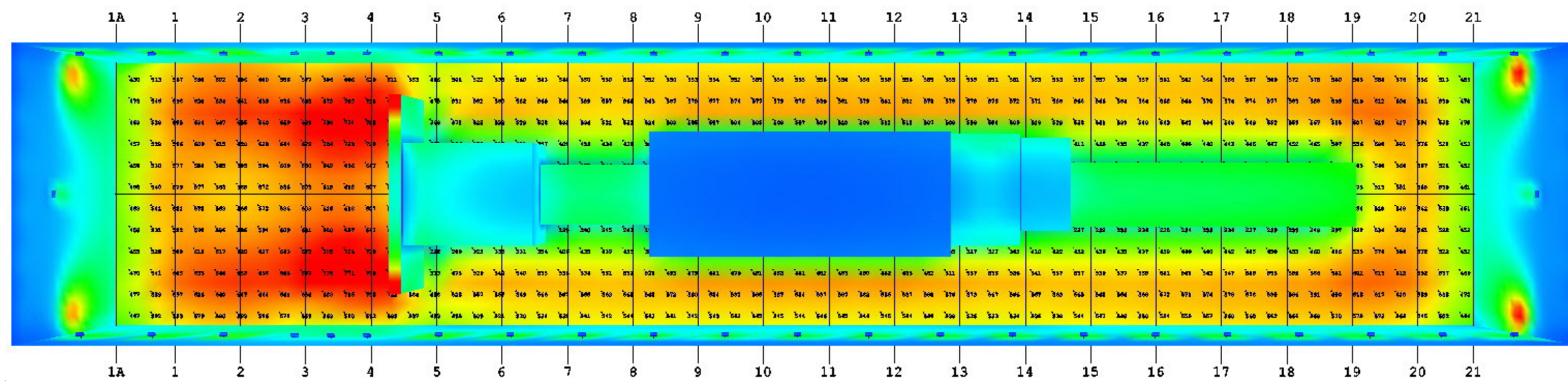
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Proposed Lighting Layout



Proposed Layout Pseudo-Colour (Red = 700 lux)



Proposed DAGR Lighting Schematics
Fixture Count: 46
Fixture Type: 400W DAGR MP700 LEDs
Fixture Mounting Height: 9.200m (Wall Mounted)

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