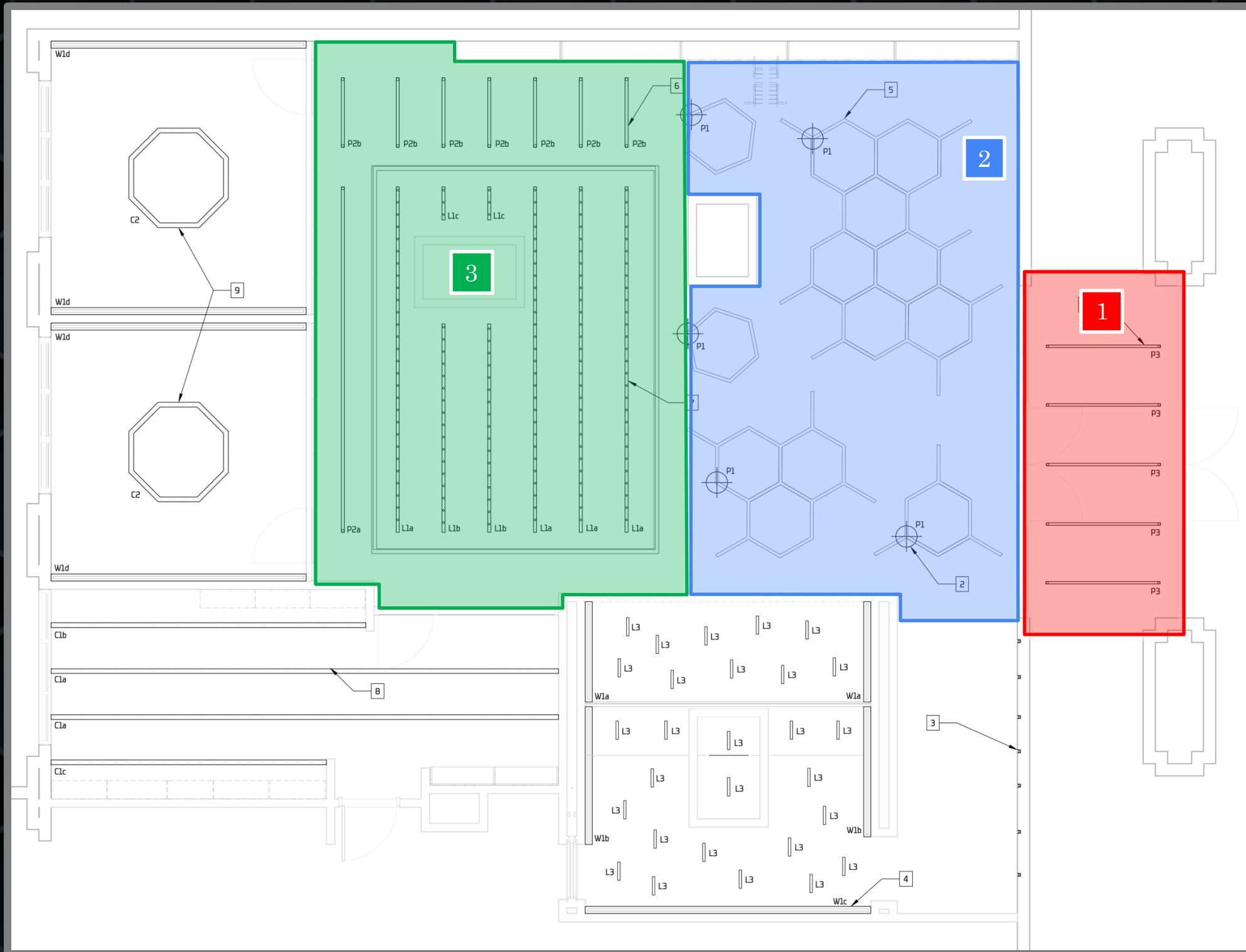


These calculations are based on the 2019 California Building Energy Efficiency Standards Title 24 – The lighting design proposal for this Med-Tech office meets these efficiency standards, outlined here and on the next page. Most fixtures selected are both Title 24 and JA8 compliant for efficiency.

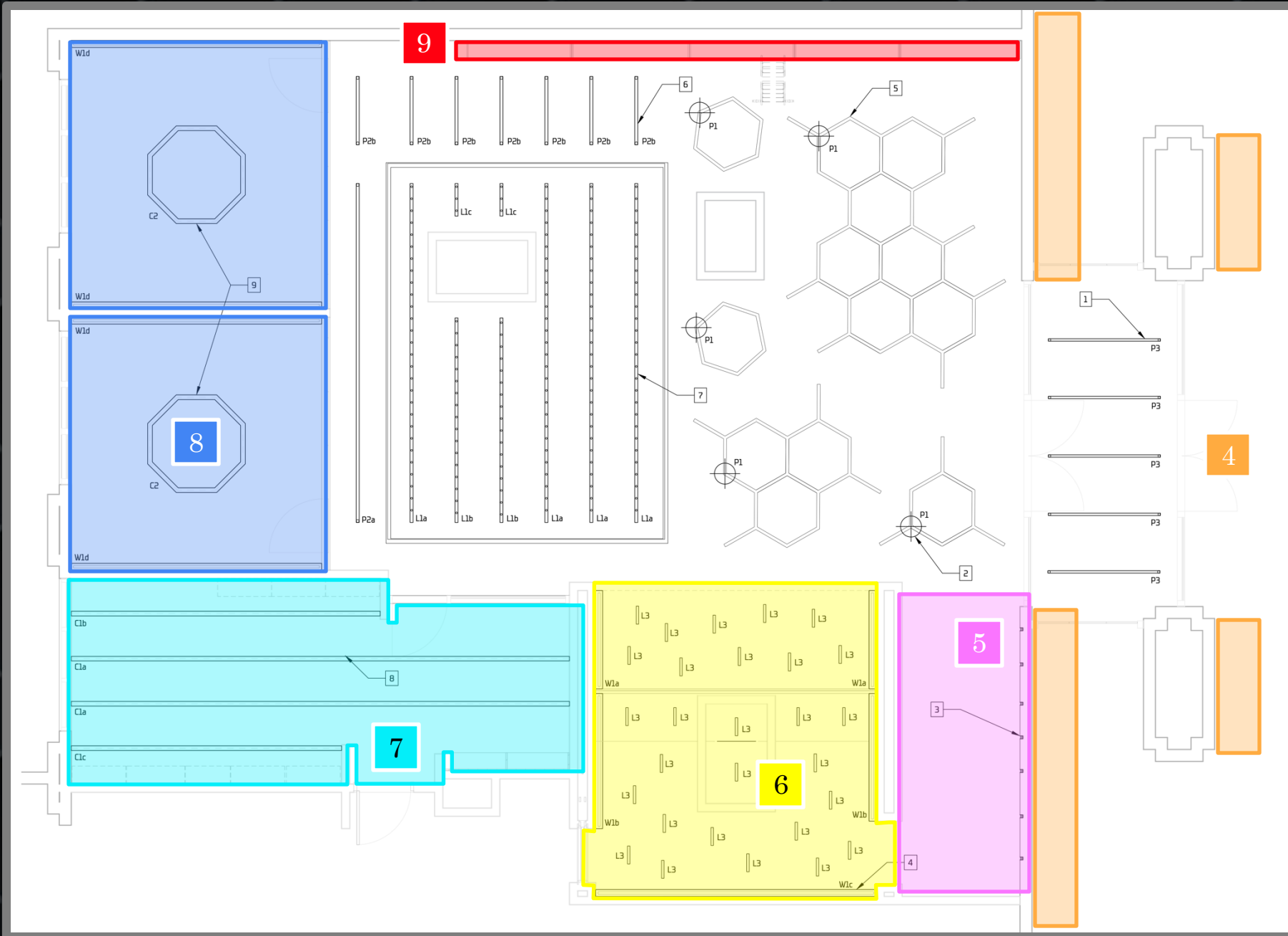


Entrance Foyer –
Main Entry Lobby
 Allowed - $.85 \text{ W/ft}^2 \times 158\text{ft}^2 = 134.3\text{W}$
 Total Wattage Consumed - 124W

Reception Area –
Main Entry Lobby
 Allowed - $.85 \text{ W/ft}^2 \times 515\text{ft}^2 = 437.75\text{W}$
 Additional Ornamental - $.30 \text{ W/ft}^2 \times 515\text{ft}^2 = 154.5\text{W}$
 Total Wattage Consumed - 431.2W
 Total Ornamental Consumed - 151W

Investor Area –
Convention, Conference, Multipurpose and Meeting
 Allowed - $.85 \text{ W/ft}^2 \times 607\text{ft}^2 = 515.95\text{W}$
 Additional Ornamental - $.30 \text{ W/ft}^2 \times 607\text{ft}^2 = 182.1\text{W}$
 Total Wattage Consumed - 505.2W
 Total Ornamental Consumed - 169.3W

Calculations completed using the Area Category Method, unless otherwise noted



Building Façade -
Building Façade - Zone 3
 Allowed - $.17 \text{ W/ft}^2 \times 1799\text{ft}^2 = 306\text{W}$

Total Wattage Consumed - 299W 4

Open Workspace Corridor -
Corridor Area
 Allowed - $.60 \text{ W/ft}^2 \times 106\text{ft}^2 = 63.6\text{W}$

Total Wattage Consumed - 62W 5

Open Workspace -
Open Plan Office
 Allowed - $.60 \text{ W/ft}^2 \times 279\text{ft}^2 = 167.4\text{W}$

Total Wattage Consumed - 166.3W 6

Historical Display -
TAILORED METHOD - Exhibition, Museum Areas
 Allowed - $11.5 \text{ W/ft}^2 \times 31.5\text{ft}^2 = 362\text{W}$

Total Wattage Consumed - 348W 9

Breakout Spaces [B1 & B2] -
Office Area <250ft²
 Allowed - $.70 \text{ W/ft}^2 \times 212\text{ft}^2/200\text{ft}^2 = 148.4\text{W}/140\text{W}$
 Portable - $.20 \text{ W/ft}^2 \times 212\text{ft}^2/200\text{ft}^2 = 41\text{W}/40\text{W}$

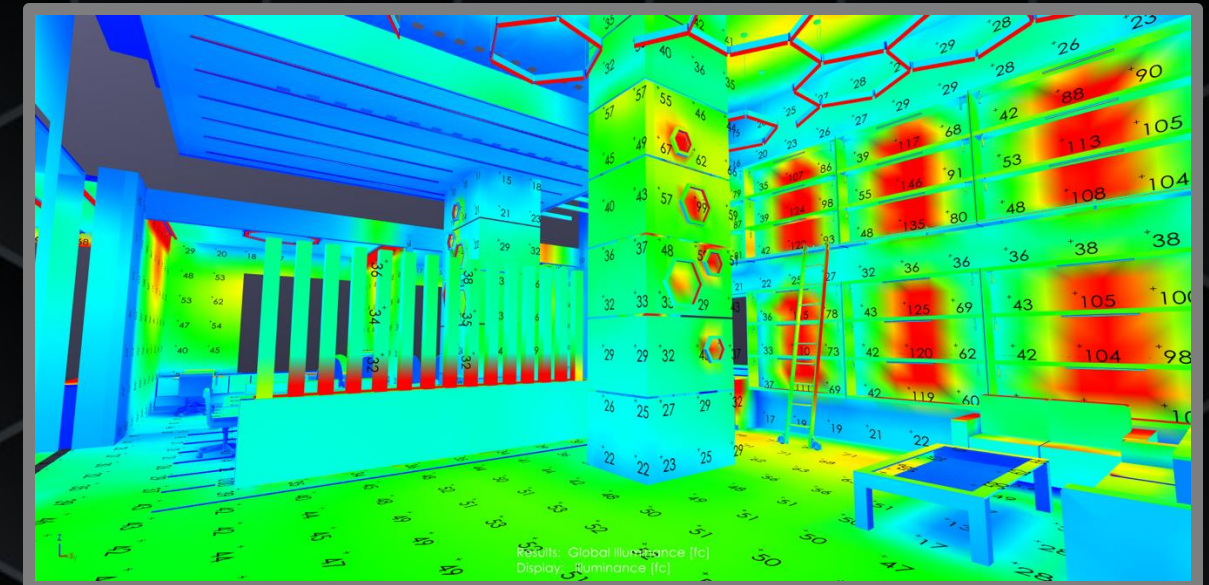
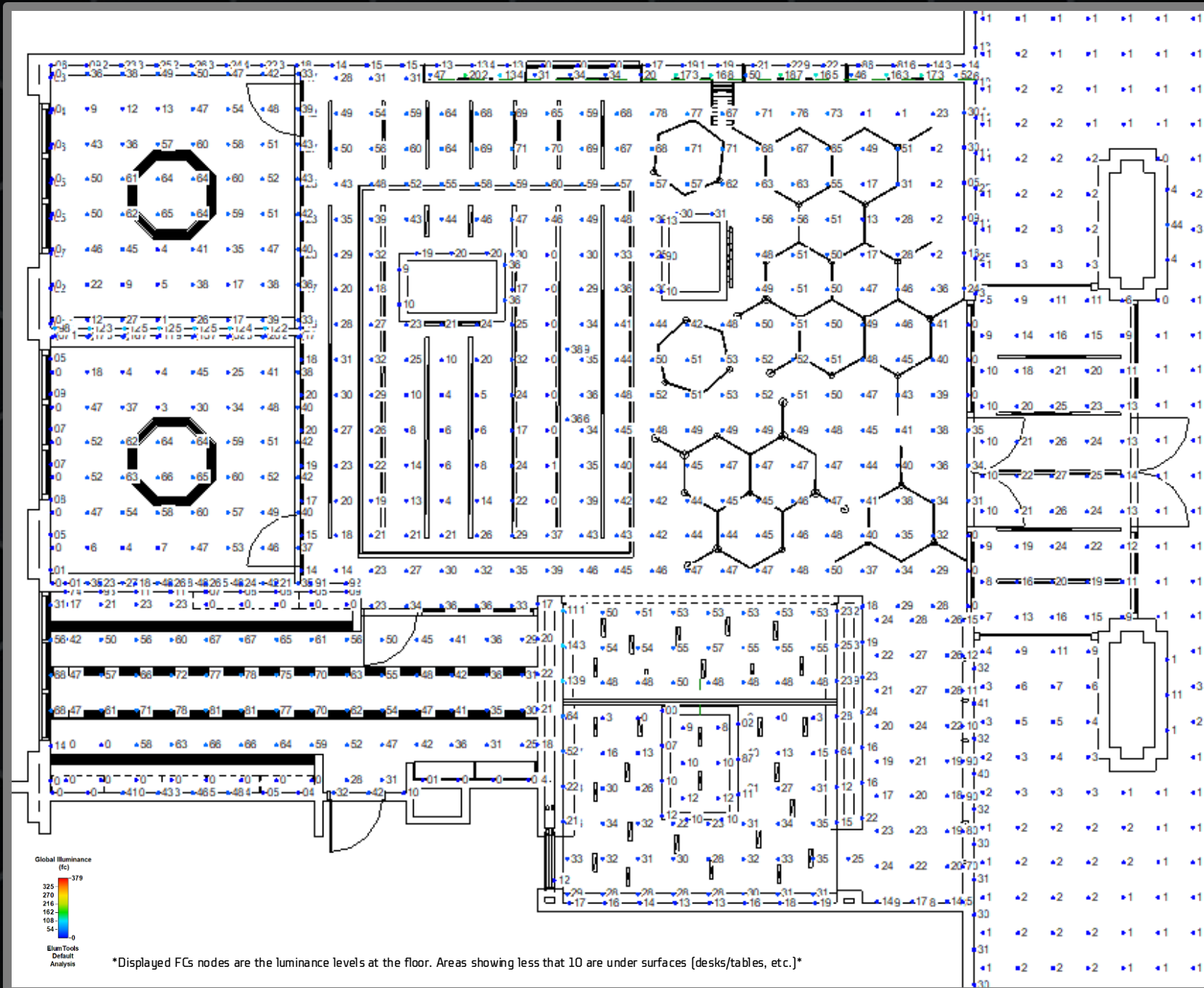
Total Wattage Consumed - 135.5W/135.5W
 Total Portable Consumed - 4W/4W 8

Lab/Research Area -
Scientific Laboratory Area
 Allowed - $1.00 \text{ W/ft}^2 \times 295\text{ft}^2 = 295\text{W}$
 Specialized Task Work- $.35 \text{ W/ft}^2 \times 295\text{ft}^2 = 103.25\text{W}$

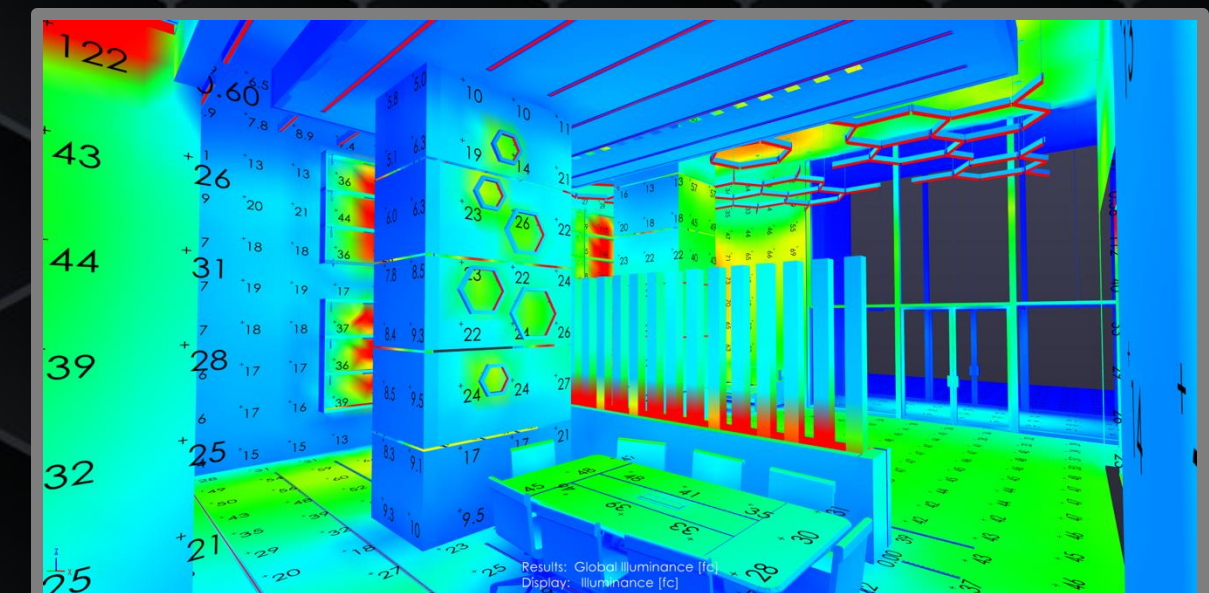
Total Wattage Consumed - 258W
 Total Specialized Task Consumed - 84.0W 7

Calculations completed using the Area Category Method, unless otherwise noted

This design proposal meets the IES's recommended foot candle levels for each individual space of this Med-Tech office. These calculations were created in Revit using ElumTools. Average target and achieved foot candles are indicated below each area image.



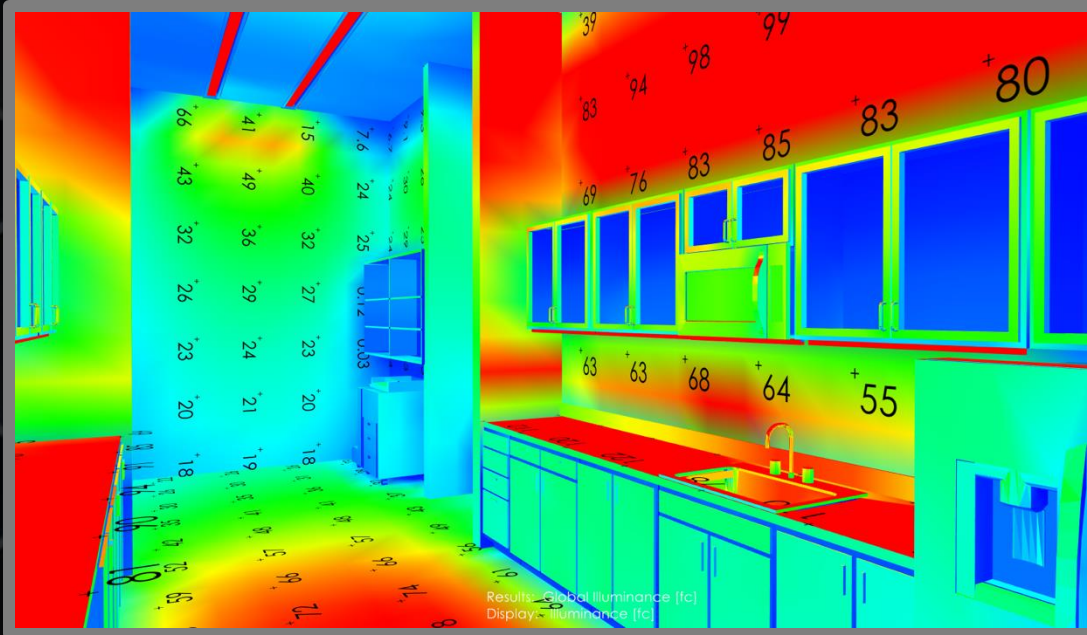
Reception Area - Target - 20 fc on floor, 10 fc on walls
Achieved - 40 fc on floor, 30 fc on walls



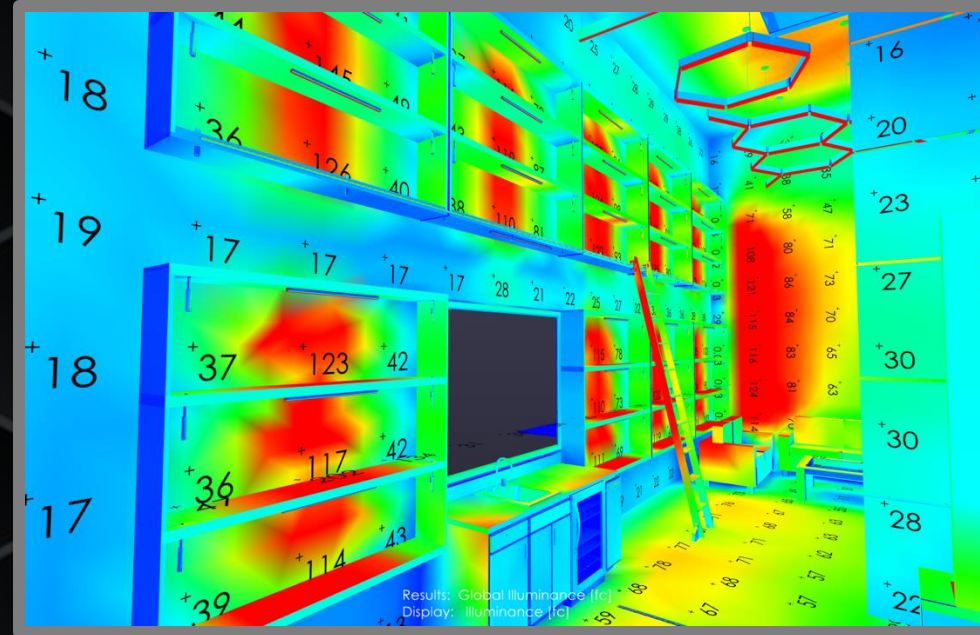
Investor Area - Target - 30 fc on work surface, 15 fc on walls
Achieved - 35 fc on work surface, 20 fc on walls

Overall Achieved - Footcandle goals for each space were achieved, while creating enough illuminance to allow for adjustments when setting levels and scenes.

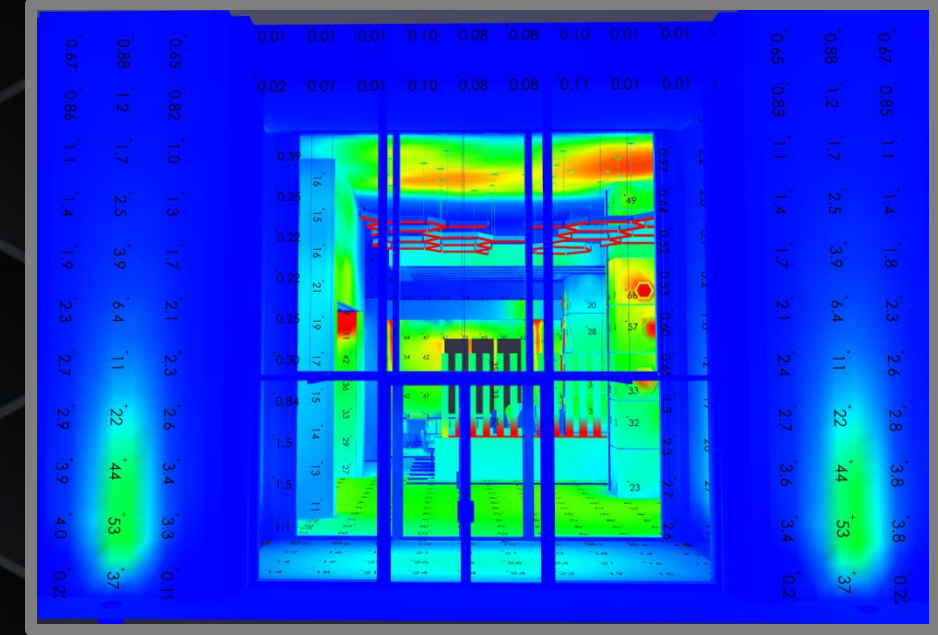
Specified dimming controls will help tune/set levels when activating the space



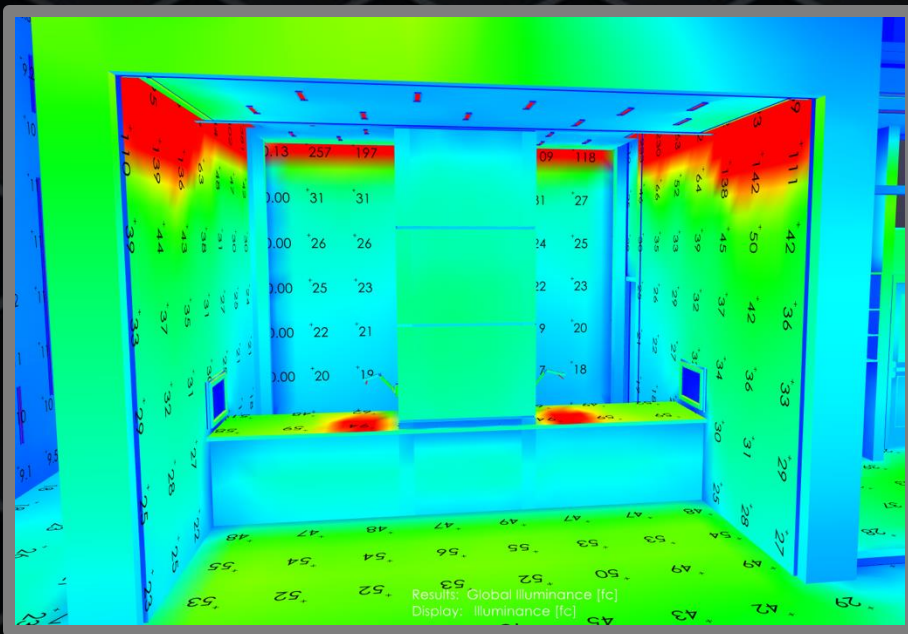
Lab/Research - Target - 75 fc on work surface
Achieved - 90 fc on work surface



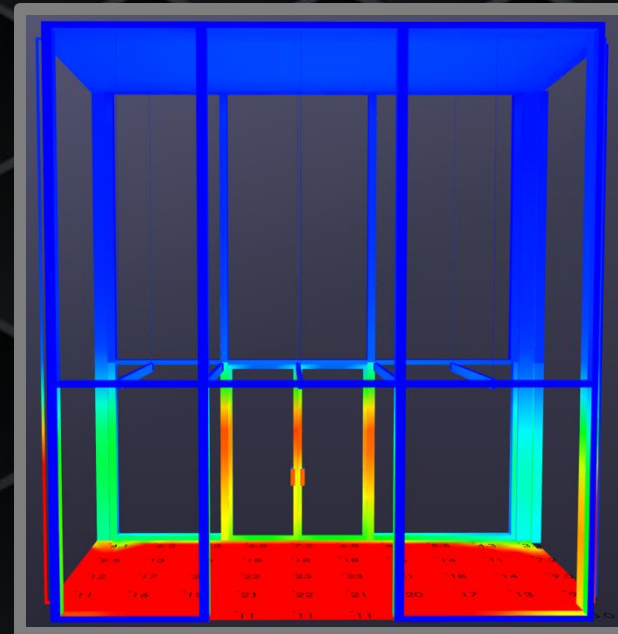
Historical Display - Target - 75 fc on horizontal surface
Achieved - 125 fc on horizontal surface



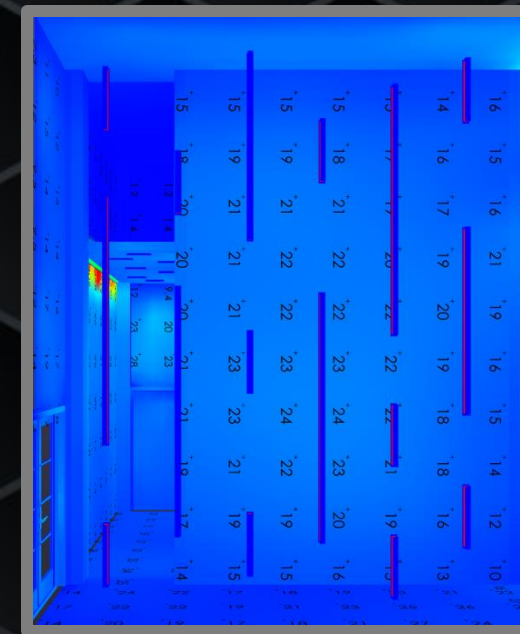
Exterior Façade - Target - 1-20 fc on wall
Achieved - 2-40 fc on wall



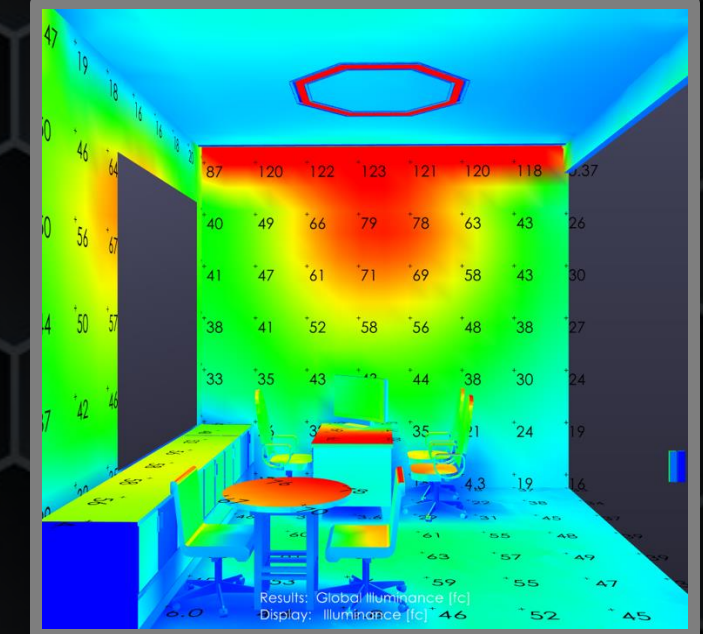
Open Workspace - Target - 30 fc on surface
Achieved - 40 fc on surface



Entryway - Target - 10 fc
Achieved - 20 fc



Corridor - Target - 5 fc
Achieved - 20 fc



Breakouts - Target - 30 fc
Achieved - 70 fc

Specified dimming controls will help tune/set levels when activating the space