BEFORE THE HEARING EXAMINER
CITY OF SEATTLE

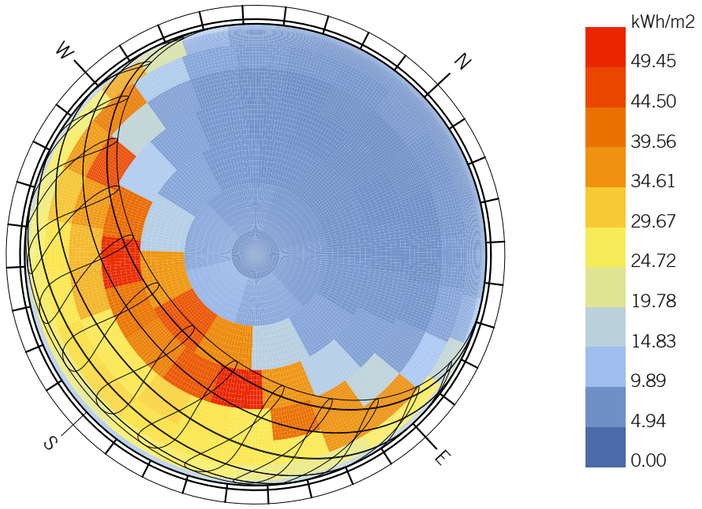
In the Matter of the Appeal of: ESCALA OWNERS ASSOCIATION Of a Master Use Permit Decision issued by the Director, Seattle Department of Construction & Inspections (MUP No. 3019699)	Hearing Examiner File Nos. MUP-17-035 APPENDIX TO RESPONDENTS CITY OF SEATTLE AND JODI PATTERSON-O'HARE'S JOINT MOTION FOR PARTIAL RECONSIDERATION

I. APPENDIX A

For the Examiner's convenience, Respondents enclose a copy of an excerpt of the Applicant's 2nd Early Design Guidance presentation, dated November 3, 2015. Ex. 17. The excerpt is of the "Perkins + Will Daylight Analysis" referenced in the Joint Motion. *Id.,* pg. 33.

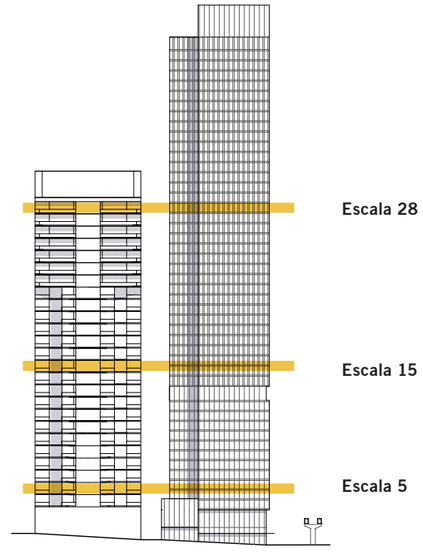
MCCULLOUGH HILL LEARY, P.S.
701 Fifth Avenue, Suite 6600
Seattle, WA 98104
206.812.3388
206.812.3389 fax

Total Annual Solar Radiation (kWh/m2) in Seattle



Annual Solar Radiation

Scientifically accurate solar radiation values for Seattle are illustrated in the adjacent solar compass diagram. Light and access to light are a funtion of the suns altitude in the sky at a given time and date. Using this precise information, computer models are used to simulate daylight access in the proposed development and the impact on the Escala. The methods and processes used in this analysis are internationally accpeted state of the art and are based on highly accurate 3 dimensional computer simulations of the physical environment and building structure and material.



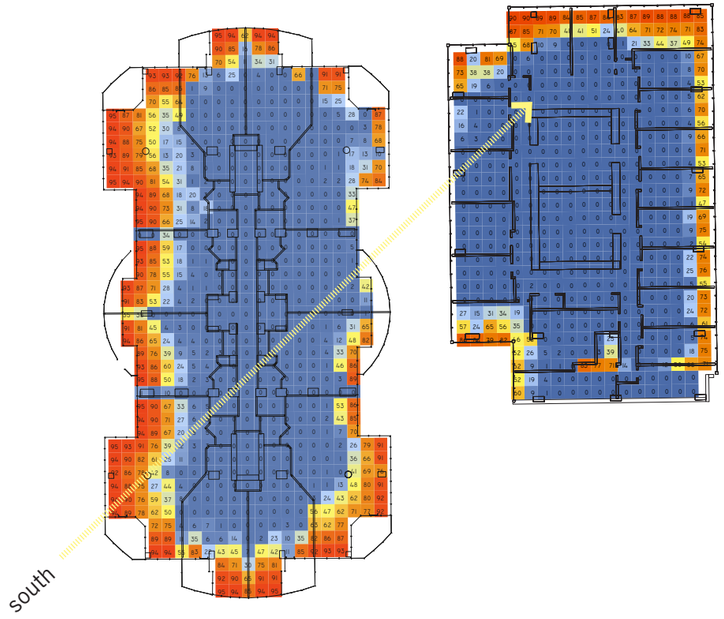
Methods

Annual Daylight Simulations yield a depth of accuracy well beyond traditional point-in-time illuminance metrics. Thousands of point-in-time illuminance values from the entire year are aggregated into a comprehensive representation of solar angles and illuminance intensities throughout the year.

The daylight simulations in this analysis use **Daylight Autonomy** (DA) to describe the annual daylight levels. In DA, the floor area is broken down into the percentage of hours, between 8am and 6pm in this study, that a point in space will achieve at least 300 Lux (30 Footcandles). Simulations were performed at Escala levels 5, 15, and 28.

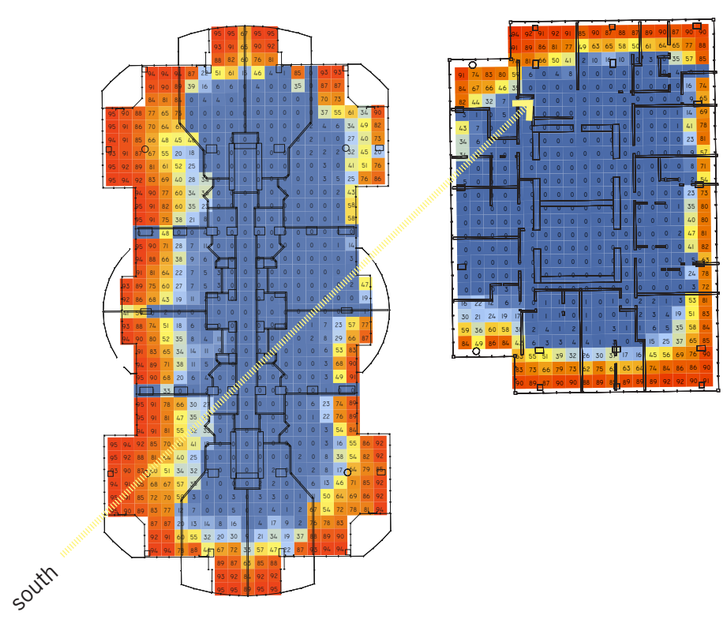
Analysis Results

The light levels anticipated by the annual daylight simulations are consistent with levels typically found in an urban environment and are a combined function of orientation, height, building organization, and surrounding context. Based upon each building's situation, the DA for each is indicated below.



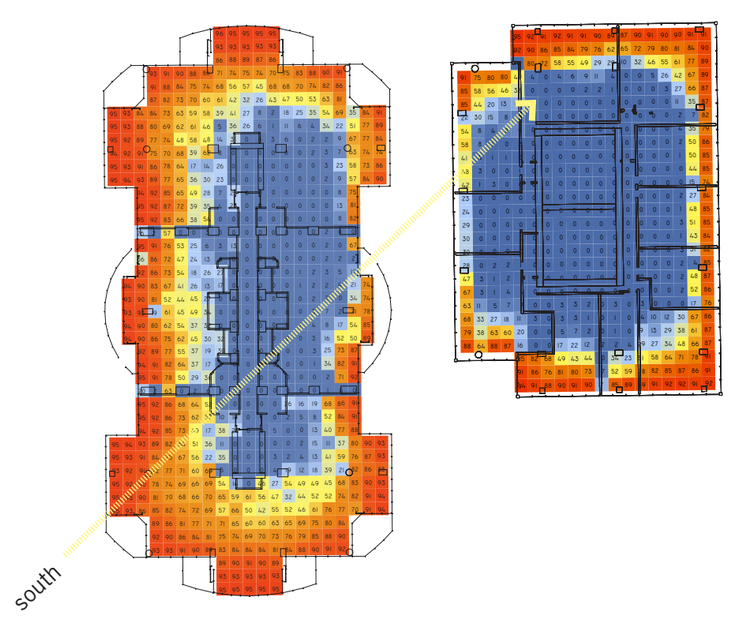
Escala Level 5 (avg DA - 25%)

5th and Virginia (avg DA - 13%)



Escala Level 15 (avg DA - 32%)

5th and Virginia (avg DA - 21%)



Escala Level 28 (avg DA - 45%)

5th and Virginia (avg DA - 25%)

each square 5'x5'