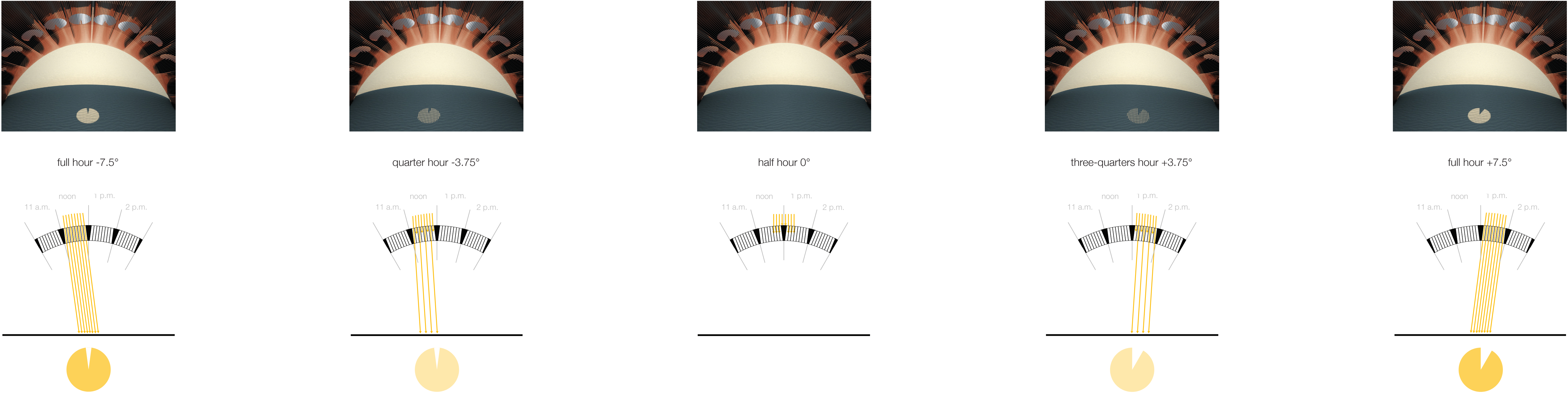
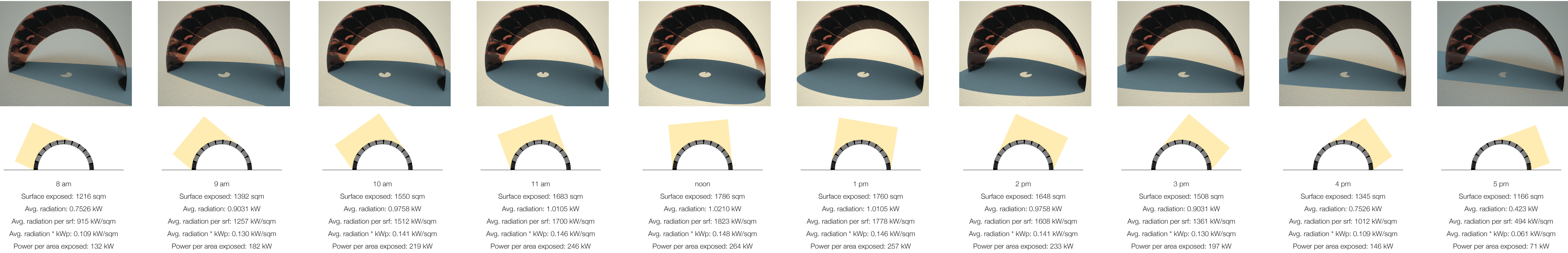


Diurnal shadow

One hour span sample shadow change

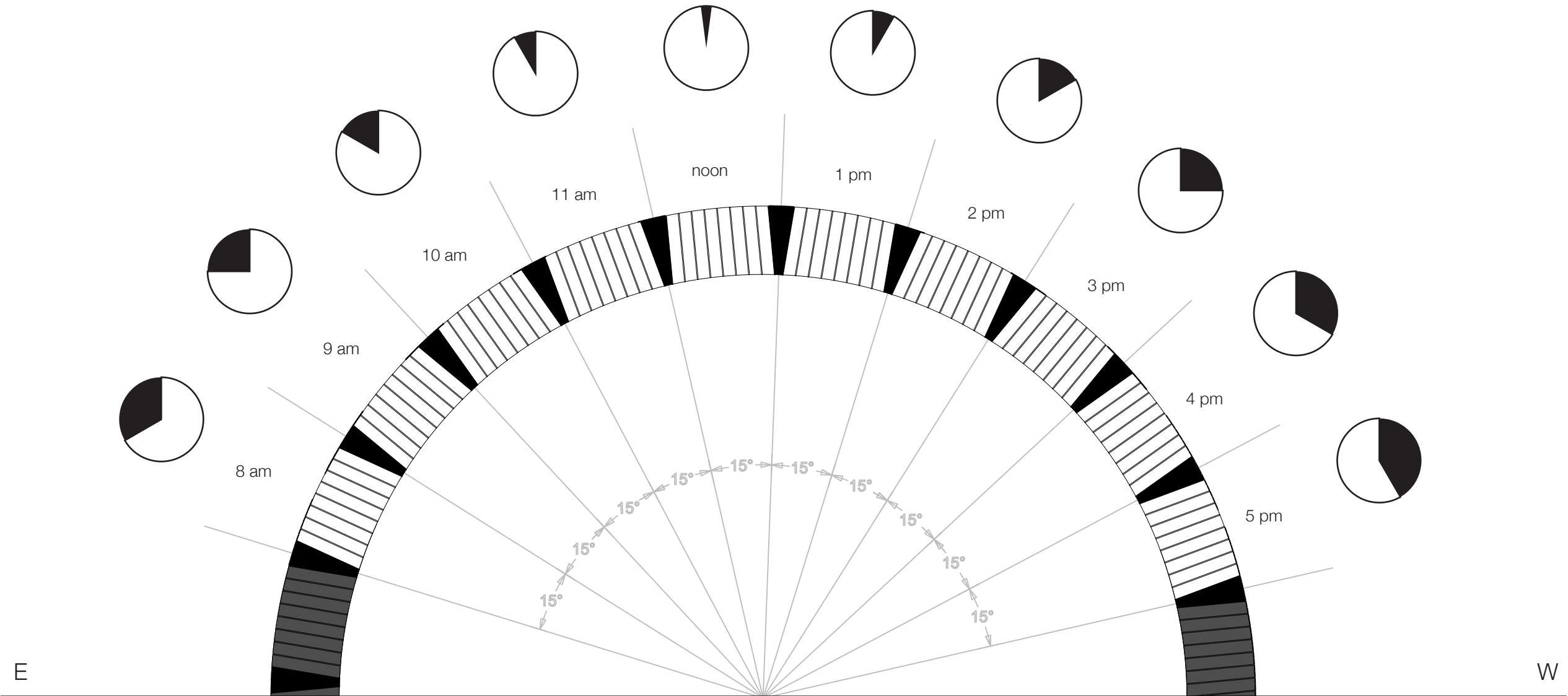


One day span sample shadow change



East-West section

In the East/West section adjacent segments 15° apart project the sunrays from the different hours through the graphic symbols. Ten parallel sets of louvers each oriented towards each of the daily sun hours only let the sunlight through one hour at the time while shading all the other inclinations. The sun shines through the louvers for less than 60 minutes or 15° (360° / 24h = 15° / 1h). The length of the louvers is defined by the sunlight shining between +/- 7.5° of inclination. This configuration turns the sunlight on and off at the right time on the ground of the park at the center of the shadow cast by the arch.



North-South section

In the North/South section the shape of the openings is defined by the solar declination from the angle of the Summer solstice to the angle of the Winter solstice. The Equinox line is perpendicular to the photovoltaic surface. The openings indicating the time and the amount of kW generated are shorter than the parallel louvers allowing the sun rays to illuminate the hours at all angles of incidence from solstice to solstice and defining the space for the structural beams.

