

1. Analysis of the quantity of daylight glare, it is better to use the CSWD(C) or Meteonome files in normal climate conditions and the Chinese average year weather file when considering extreme weather conditions [21]. The importance of building envelope design is increasing, and in this situation, the usage of passive and climate-adaptive building shells (CABS) is being looked into as a potential for energy savings and improved thermal and visual comfort for users. It's possible that the traditional physical and photometric criteria used in glare indices and formulas are insufficient to accurately define and forecast the frequency and intensity of uncomfortable glare from both natural and artificial lights [22]. The sunshine occurrence analysis also determined similar results using three weather statistical approach data files daylight autonomy (DA), useful daylight illuminance (UDI) and maximum difference was 5% independently of orientation [7]. area massif glass facade in workspace has the highest level of illuminance, the vertical and horizontal strip facade models are more illuminated than the hyperbolic parabolic facade models. These reducing envelope technologies enable meeting the need to enhance indoor environmental quality and to simplify the building scale utilization of renewable energy sources. The findings demonstrate that systems that undergo continuous mechanical changes as a result of temperature changes offer a higher level of adaptation, energy efficiency, and thermal and visual comfort in the space [19]. In terms of lighting, it can reduce energy consumption when utilizing daylight, but still consider the negative effects it causes, including glare, high brightness and illuminance value ratio. This is a relevant topic since the accurate prediction of daylight levels for indoor environments guides daylighting design [8]. This system and algorithm assess the efficiency of a smart facade, which is made up of a number of kinetic grids that respond to artificial light and take occupant preferences into account [17]. Introduction Utilization of sunlight as a source of daylight is one way to minimize the consumption of electrical energy in buildings. In this study analyzed five different forms of building facades, namely the massive glass, sun shading vertical, horizontal, diagonal and vertical diagonal models. The aesthetic qualities are influenced by both the lighting system and the kind of sky, and the strong interaction effect suggests that the aesthetic perception of the daylighting system is dependent on the sky type. Annual calculated dynamic daylight metric indicates variations of up to 13% under the different weather files analysis. The Standard General Skies of the World Organization for Standardization (ISO) and Commission International de l'Eclairage (CIE) are a set of standard skies that can mathematically represent the distribution of brightness in a sky [2]. Standards and regulations are the first considerations and subsequently focus on the development and scope of climate-based daylight modeling [3]. According to subsequent statistical data, the natural lighting system that performs best under both clear and cloudy sky situations is made up of high-reflective blinds [4]. Under various housing conditions, the positions before opening are the most important influential factor on overall energy consumption. In addition to design solutions aimed at enhancing occupant comfort, controlling physical environmental variables like heat, light, and sound should be taken into account during the design process [9]. 1.