

## **A Study Light/Darkness in Sacred Settings: Digital Simulations**

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### **Abstract**

Studying light/darkness and sacred architecture reveals that the “holy” light dramatizes the spiritual state and affects the mood of the user in the sacred space. Furthermore, it shows that faith dictates the treatment of light/darkness in the sacred setting as means to enhance the spiritual experience. These two premises were investigated conducting digital daylight simulations on the Brihadeshvara Hindu Temple (1010 AD) Tanjore, Tamilnadu, India. This sacred monument, listed as one of UNESCO's World Heritage Sites, is an intriguing case study since the treatment of the 'holy light' in the temple is actually the treatment of the 'holy darkness'. The simulated values were compared to the Illuminating Engineering Society (IES) standards. The results demonstrate that digitized simulations can illustrate the significance of light/darkness in sacred settings as a spiritual experience. Moreover, this quantitative investigation can augment the qualitative studies in the field of historic sacred architecture. Yet, further studies are suggested focusing on corroboration of the simulation results with actual recording measurements of light.