

THE ROLE OF ARTIFICIAL LIGHTING IN INCREASING THE SPIRITUALITY OF WORSHIP SPACES (STUDY GKJ MERGANGSAN, YOGYAKARTA)

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Abstract

Worship spaces support spiritual practices and foster religious community, where lighting influences the atmosphere and worship experience. Many traditional churches, including the Mergangsan GKJ, tend to prioritise the basic function of illumination without maximising its spiritual potential, resulting in suboptimal conditions that diminish devotion. Ideally, artificial lighting design should be comprehensive, integrating function with psychological and spiritual dimensions. The warm natural lighting mimics natural afternoon light and is believed to create a calm, comfortable atmosphere and enhance spiritual connection. Simulation using Dialux is an effective tool for optimising this design. This study aims to analyse the role of artificial lighting in the Mergangsan GKJ in creating a spiritual atmosphere. The methodology used is a mixed approach: quantitative simulation using Dialux Evo to analyse existing lighting conditions and alternative warm natural lighting scenarios, and a qualitative literature review of lighting standards and the spiritual function of light. The results indicate that the Mergangsan GKJ artificial lighting meets functional illumination standards in all main areas (altar, music/gamelan room, lower and upper congregation areas). The choice of colour temperature 3000K (Warm White) and CRI 80 consistently creates a warm and comfortable atmosphere that supports solemnity, proving a new contribution in integrating functionality and spirituality in architectural lighting design.

Keywords: Artificial Lighting, Spirituality, Worship Space, Dialux, GKJ Mergangsan

INTRODUCTION

Worship space, as a place for spiritual practice and the formation of religious communities, plays a crucial role in the lives of religious people. The atmosphere in the worship space significantly influences the spiritual experience, solemnity, and emotional connection of individuals with the religious values they adhere to. The sacred space in a church building is intended so that people can experience the mystery of God's work of salvation and the enlightenment of faith through light as one of its design elements (Tjandradipura et al., 2022). One of the interior design elements that profoundly influences the formation of this atmosphere is lighting. Light, with all its visual characteristics, not only functions as a functional light but also can arouse emotions, influence the perception of space, and create an atmosphere that supports contemplation and worship. Lighting design is one of the elements of interior architecture that can affect human psychology and behaviour (Casciani, 2020). The impression of a space is highly dependent on the lighting in that space, which emphasises that light is central to how humans view and feel a space (Stokkermans et al., 2018). Lighting in a worship space should ideally not only meet visual needs but also play an essential role in building a spiritual atmosphere and supporting the experience of religious people. Contextually, light—both natural and artificial—is considered a symbol of divine presence and is a key element in creating a sacred atmosphere that can deepen the spirituality and closeness of the congregation to God (Warbung et al., 2021) (Tjandradipura et al., 2022) (Iskandar et al., 2023). In the context of church architecture, artificial lighting should be designed to support pragmatic (visual comfort), psychological (building an inner atmosphere), and symbolic functions in strengthening religious meaning (Tjandradipura et al., 2022) (Lukman et al., 2022).

However, in many worship spaces, including churches, artificial lighting often emphasises functional aspects more and has not fully accommodated the congregation's spiritual needs, including GKJ

Mergangsan. Studies in several churches show that although artificial lighting has supported the entire series of worship activities, visual comfort is sometimes not optimally fulfilled. Interestingly, the congregation still feels a strong spiritual presence thanks to artificial lighting that can build a sacred atmosphere, even though technically, the lighting level does not always meet visual standards (Tjandradipura et al., 2022)(Fortuna et al., 2022). This shows that the perception of spirituality in a worship space does not only depend on the technical aspects of lighting but also on how light is processed to build religious meaning and experience (Matracchi & Sadeghi habibabad, 2021) (Lukman et al., 2022) (Warbung et al., 2021). The pragmatic function of light in the worship space is considered a supporting aspect. In contrast, with its psychological and symbolic functions as the main design element, light is very influential and essential in creating a spatial atmosphere that provides a religious experience for its adherents. Although the presence of artificial lighting in the worship space does not meet visual comfort standards, the congregation considers the presence of artificial light to be able to accommodate the entire process of worship activities (Tjandradipura et al., 2022).

Furthermore, several studies highlight the need to develop lighting principles and regulations that not only focus on technical standards but also consider the spiritual and symbolic qualities of the worship space. The spiritual experience of the congregation is greatly influenced by the quality of lighting that can create intimacy, balance, and sacred expression in space (Matracchi & Sadeghi habibabad, 2021)(Lukman et al., 2022)(Rakow, 2020). Thus, the role of artificial lighting in the worship space should be a primary concern in architectural design to truly enhance the spirituality and quality of the congregation's worship experience (Tjandradipura et al., 2022)(Lukman et al., 2022)(Warbung et al., 2021)(Iskandar et al., 2023).

Artificial lighting in worship spaces, such as at the Mergangsan GKJ, has significant psychological and symbolic impacts. Studies show that lighting in religious buildings has deep spiritual and symbolic meaning, serving as a decorative tool and reinforcing the sacred atmosphere(Iskandar et al., 2023). This phenomenon is evident in the architecture of various religious traditions, where lighting can help facilitate religious experiences. Research shows that well-planned lighting can create an atmosphere that supports the connection between humans and the divine (Joseph, 2015).

However, although many worship spaces and communities strive to meet the spiritual needs of their congregations, their lighting is often not optimised. Research suggests inadequate lighting can lead to a lack of spiritual focus (Kusumawardani et al., 2022). Conversely, when lighting is carefully designed, it can

strengthen interactions and stimulate divine experiences in individuals. Appropriate lighting can lead congregants from everyday experiences to more profound spiritual experiences, supporting the reflection and meditation essential to religious practice.

From an ecological perspective, artificial lighting can also transform the religious experience. With the increasing use of LED lights and other advanced lighting technologies, the impact on the environment, including how congregants interact with the worship space, must be examined (Gaston et al., 2015) (Bennie et al., 2016). Research shows that excessive lighting can cause problems such as light pollution, which impacts the quality of the congregation's experience and the health of the surrounding ecosystem.

Furthermore, lighting in worship spaces can stimulate deep spiritual thought and reflection. This aligns with the understanding that religious experience is not limited to rituals and ceremonies but encompasses everyday experiences colored by the physical elements around us, including lighting (F. Barrett, 2017). Therefore, an interdisciplinary approach involving philosophy, psychology, and architecture is needed to holistically examine the role of artificial lighting in the Mergangsan GKJ.

This research focuses on how artificial lighting can be enhanced to support the congregation's spirituality at the Mergangsan GKJ, taking into account the psychological and symbolic elements of lighting. By understanding the relationship between lighting aspects and spiritual experience, we can formulate practical recommendations to improve the quality of worship spaces, so that they not only fulfil religious functions but also support the core spiritual experience during worship activities.

METHODS

This study uses a quantitative method through lighting simulation and is supported by an analysis of simulation results using literature studies. This approach was chosen to gain a comprehensive understanding of the role of artificial light, both from a technical and theoretical perspective.

1. Lighting Simulation Method with Dialux Software
 - a. The primary method in this study is lighting simulation using Dialux Evo software. The steps to be taken include:
 - Creating a 3D Model of the GKJ Mergangsan Worship Room
 - Accurate data collection of worship room dimensions through direct measurements on-site. Using 3D modelling of the worship room in Dialux Evo.

- The creation of the model will pay attention to the materiality of the surface for the accuracy of light reflection.
 - b. Inventory and Modeling of Existing Artificial Light Sources:
 - Identify the type, quantity, position, and technical specifications of all artificial lights installed in the worship room.
 - Modelling each type of light in Dialux Evo using the technical data obtained.
 - c. Existing Lighting Condition Simulation:
 - Simulate with the existing light configuration to obtain quantitative data on light distribution, illuminance levels (lux) at various predetermined measurement points (e.g., seating areas, altars, aisles)
 - Analyze the simulation results to identify the characteristics of the current lighting.
 - d. Simulation of Alternative Lighting Scenarios with a Natural Warm Concept:
 - Design several alternative lighting scenarios that adopt a naturally warm concept. These scenarios can involve changing the type of light (e.g., lamps with a lower Color Temperature and high CRI), rearranging the position of lights, adding indirect lighting elements, or using dimmers to create variations in intensity.
 - Compare the results of the alternative scenario simulation with the existing condition to identify potential improvements in lighting quality to support a spiritual atmosphere.
2. Literature Study Method
- a. A comprehensive literature study will be conducted to support and enrich the simulation results. The focus of the literature study is on two main aspects:
 - b. Finding and analyzing recommended lighting standards for worship spaces based on architectural design guidelines, visual ergonomics, and related research.
 - c. Analyzing literature that discusses the relationship between light and spiritual experiences in various cultural and religious contexts, including Christian theology, psychology of religion, and religious architectural studies.
 - d. Identifying how light (artificial) has been historically and conceptually associated with concepts such as divine presence, solemnity, meditation, and religious emotions.
3. Integration of Methods:
- a. Lighting standards from the literature will be benchmarks to evaluate existing lighting conditions at GKJ Mergangsan.

- b. An understanding of the role of light in spiritual functions from the literature will help design alternative simulation scenarios that focus more on improving spiritual aspects.

The quantitative data generated was also supported by interviews with several church members to determine their impressions of the new lighting. The following is a list of questions asked of the church members:

1. How would you describe the overall spiritual atmosphere in the main worship hall?
2. What aspects of the space, including the lighting, contribute most to your sense of spirituality during worship?
3. Do you find the artificial lighting in the church to be comfortable or distracting? Can you explain why?
4. Does the lighting help you see clearly for activities like reading the Bible or hymnals?
5. Does the lighting evoke feelings such as peace, solemnity, or inspiration?
6. Does the lighting remind you of any spiritual concepts or meanings, like light as a symbol of divine presence?
7. Is there anything you would change about the lighting design to improve the spiritual atmosphere?

RESULT AND DISCUSSION

This section presents the findings from a lighting simulation conducted using Dialux Evo software, analysing the existing artificial lighting conditions at the Mergangsan Javanese Christian Church in Yogyakarta and exploring alternative scenarios based on the concept of natural warmth. The following discussion will interpret the quantitative data obtained from the simulation, linking it to theories of lighting and spirituality, to identify the role of artificial lighting in enhancing the solemnity and sacred atmosphere in the worship space.

The average altar lighting was 385 Lux. This value corresponds to the recommended altar lighting standard of 300 Lux. In the centre of the altar, the average lighting reached 350 Lux, while at the altar's sides it was 300 Lux (Figure 1). The warm, soft lighting on the altar creates a meaningful focal point. Adequate and focused lighting in this area is essential for the worship ritual and the congregation's vision of the pulpit and cross (Figure 2). Warm lighting on the altar reduces visual tension and promotes relaxation, helping the congregation focus and devote themselves to prayer and worship. This aligns with the design goal of "enhancing reverence." Various religious traditions often symbolise light as a divine presence, truth, and enlightenment. The resulting warm, soft atmosphere can strengthen the spiritual atmosphere, help the congregation feel close to God, and enhance the

quality of their worship. This design explicitly aims to "cultivate spirituality."

The altar lighting serves as the spiritual and visual climax of the design, ensuring the congregation's attention is drawn to the sacred elements of the service. This dual approach is what makes the overall spiritual atmosphere so effective. The focused illumination is not just brighter; it is intentionally so, creating a "meaningful focal point." This aligns perfectly with the interview responses, particularly from the respondent who described the lighting as "genius" for highlighting key spiritual elements, and felt the light on the cross provided a "powerful sense of divine presence." This synergy proves that the designers' deliberate choice of Lux levels and focus successfully translated their symbolic goals into a palpable spiritual experience for the worshippers. The text explicitly states that the altar lighting's design goals were to "enhance reverence" and "cultivate spirituality." The interviews show this was achieved. The respondent felt "profound reverence" and "awe." The warm, soft lighting, which is noted to "reduce visual tension," aids the congregation in achieving a focused state of devotion, precisely as intended. This is a powerful conclusion: the lighting is not just passively setting a mood but is an active tool in guiding the congregation's emotional and spiritual journey during worship.

The high Lux values in the congregation area create a welcoming and peaceful foundation, as most worshippers perceive. This comfort allows them to engage fully with the service. The strategic, more intense, and warm lighting on the altar then acts as the spiritual anchor, drawing the congregation's focus and enhancing reverence and awe. This focused illumination, exceeding technical standards, is not a coincidence but a deliberate design choice that effectively communicates spiritual symbolism, as validated by direct user feedback. In essence, the lighting at GKJ Mergangsan is not just a source of illumination but an integral part of the spiritual ritual. It is a carefully orchestrated system that, through a blend of technical excellence and artistic intent, transforms a physical space into a sacred environment, validating both the pragmatic and symbolic goals of the design. The success of this design is proven not only by the numbers on a Lux meter but, more importantly, by the heartfelt and spiritual experiences of the people who worship there.

Lighting in worship spaces is more than functional—it is a powerful tool for creating atmosphere, supporting spiritual symbolism, and shaping congregants' emotional and psychological experiences. Strategic lighting design can foster feelings of comfort, reverence, and sacredness, directly impacting how worshippers engage with rituals and the space. Lighting schemes, including intensity, colour, and direction, are deliberately orchestrated to create immersive, multi-sensory

environments that support communal gathering and personal spiritual encounters. This approach is seen in contemporary megachurches and traditional settings, where lighting structures, services, and mediate a sense of divine presence (Rakow, 2020) (Manurung & Sabatini, 2024) (Dinapradipta, 2018)

Light is often imbued with spiritual meaning, symbolising the presence of the divine and guiding worshippers toward contemplation and awe. Focused, warm lighting on altars or sacred objects draws attention and enhances reverence, while ambient lighting in congregation areas fosters comfort and inclusivity (Warbung et al., 2021; Iskandar et al., 2023). Studies show that even when lighting levels fall below technical standards, worshippers may still report high levels of comfort and spiritual satisfaction if the lighting design aligns with the intended atmosphere and ritual needs. User feedback consistently validates the importance of lighting in shaping both visual comfort and emotional responses (Fortuna et al., 2022)

In a worship space, appropriate lighting is crucial for creating a spiritually supportive atmosphere. At the Mergangsan GKJ, warm, soft lighting on the altar is a meaningful focal point. Lighting in this area not only supports the worship ritual but also increases the congregation's visibility and attention to the pulpit and cross. Research shows that good lighting in a worship space can help enhance the congregation's concentration and spiritual experience (Eagle et al., 2022).

The colour and intensity of light significantly impact mood and psychological well-being. Warm lighting can evoke a sense of comfort and peace, essential for encouraging reflection and meditation (Wollschleger, 2018). This aligns with findings that soft light reduces tension and enhances feelings of intimacy, crucial aspects of a worship space (Pracki et al., 2022). Thus, warm, soft lighting on the altar creates meaningful moments, stimulating the congregation's emotional and spiritual well-being.

More than just aesthetics, artificial lighting can influence the congregation's perception of the worship space. In the context of the Mergangsan GKJ, the focus of illumination directed at the altar creates a clear focal point, helping the congregation better connect with the spiritual environment. The careful application of lighting techniques in liturgical spaces has been crucial in enhancing the worship experience, where light is considered a pathway for the divine presence (Eagle et al., 2022). Highlighting architectural elements such as crosses and wall hangings adds an artistic and spiritual dimension. This helps direct the congregation's attention and hearts to worship, strengthens the atmosphere of reverence, and fosters a sense of calm and peace.

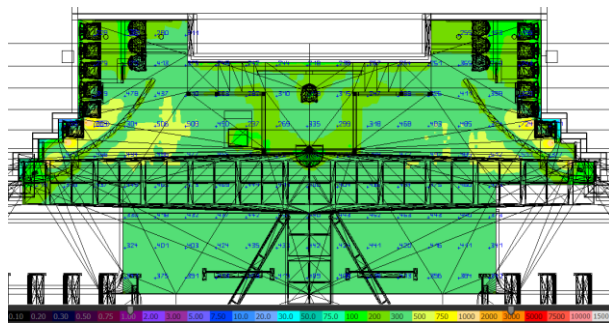


Figure 1. Altar Lighting Illumination
(Author's Analysis, 2025)



Figure 2. Altar Lighting in 3D
(Author's Analysis, 2025)

The importance of lighting on the altar as a focal point can be seen in practices across various religious traditions worldwide, where light is often used to highlight key elements of the ritual. The type of lighting installation used at the Mergangsan GKJ demonstrates how modern lighting technology can be integrated to achieve symbolic and spiritual effects that align with the congregation's religious values. In creating a peaceful and touching atmosphere, lighting bridges the physical and the spiritual within the worship service.

The average lighting in the lower congregation area is 280 Lux (Figure 3). This figure exceeds the standard lighting requirement for congregation areas of 200 Lux. The average lighting in the upper congregation area is 239 Lux (Figure 4), which also meets the standard lighting requirement for congregation areas of 200 Lux. The warm, even illumination, especially in the congregation area, creates a sense of comfort and peace, making the congregation feel welcomed upon entering

the church (Figure 5 and 6). This supports the project's goal of "creating a warm atmosphere" and "comfortable congregation." Adjustable ceiling lights provide even illumination throughout the space. This flexibility allows different atmospheres to be set according to worship needs, from brighter lighting for communal activities to dimmer lighting for contemplation.

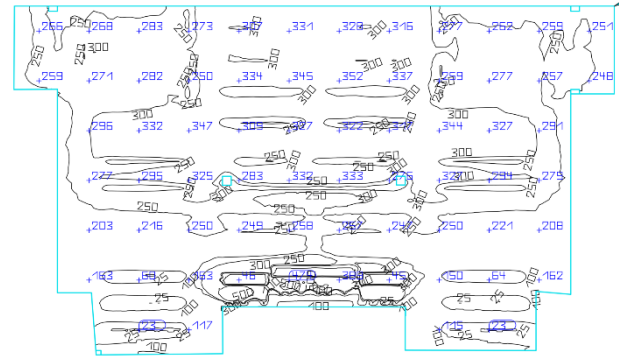


Figure 3. Illumination Of The Lighting Area Of The Lower Congregation Under The Balcony
(Author's Analysis, 2025)

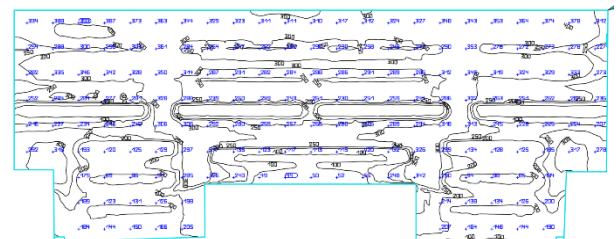


Figure 4. Illumination Of The Lighting Area Of The Upper Congregation In The Balcony
(Author's Analysis, 2025)

Respondents who found the lighting "comfortable," "sufficient for reading," and "not too dim" are, in essence, experiencing the benefits of this well-above-standard illumination. Warm, even illumination and adjustable ceiling lights were designed to achieve goals like "creating a warm atmosphere" and "comfortable congregation." The interview responses confirm that this design intent was successfully realised. The Respondent explicitly connects the "warm colour of the lighting" to a "welcoming" and "home-like" feeling and notes how the consistent, soft warmth contributes to a "calm and thoughtful" mood. The flexibility that the adjustable lights provide is also reflected in the interview data, as it allows for the nuanced atmospheres that different worshippers experience. This allows the psychological and symbolic functions to take precedence because the congregation's basic need to see is met.

The lighting design at GKJ Mergangsan successfully exceeds the standard requirements for illumination, thereby ensuring the pragmatic needs of the

congregation are met. This robust foundation of "comfortable and even illumination" effectively translates the design intent of "creating a warm atmosphere" into a tangible reality, as confirmed by most interview respondents. Furthermore, the interviews reveal that the lighting's success exceeds its technical specifications. It serves as a powerful catalyst for the congregation's spiritual experience, evoking feelings of peace, solemnity, and community, and reinforcing spiritual symbolism. The minor, yet valuable, criticisms raised by some interviewees do not detract from the overall success but instead provide a roadmap for further refinement. In summary, the lighting at GKJ Mergangsan is not just a functional element but a finely tuned instrument that effectively contributes to a deep and resonant spiritual atmosphere. A comprehensive blend of quantitative metrics and authentic user perception validates this finding.

Adjustable ceiling lights in worship spaces (Figure 5), such as at the Mergangsan GKJ, provide even illumination throughout the space. This flexibility in lighting settings is crucial because it allows for changes in atmosphere to suit various worship needs. For example, brighter lighting is necessary for more interactive communal activities, such as during communal worship or when the congregation gathers for religious celebrations. Conversely, during contemplation or private devotions, dimmer lighting helps create a calm and reflective atmosphere (Iskandar et al., 2023).

The congregation indeed perceived interviews on the pragmatic, psychological, and symbolic functions of lighting. Respondents explicitly stated that they associated lighting with feelings of "peace," "holiness," and "awe," and were able to identify symbolic meaning in the altar spotlight. This data provides real-world validation of the theoretical framework that effective lighting control contributes to a more enhanced spiritual experience. Optimal lighting improves visual comfort and has profound psychological effects, helping congregants feel more emotionally and spiritually connected during worship (Aldwin et al., 2014). This flexible and adaptive lighting arrangement allows congregants to choose the atmosphere that best suits their worship goals, thus supporting a more profound spiritual experience (Iskandar et al., 2023).



Figure 5. Lighting Area Of The Congregation Under The Balcony In 3D
(Author's Analysis, 2025)



Figure 6. The Lighting Area Of The Upper Congregation In The Balcony In 3D
(Author's Analysis, 2025)

Furthermore, studies show that implementing lighting with adaptability can create a more inclusive

artistic environment, where everyone, including children and individuals with special needs, can experience the divine presence. Research also shows that those with access to better, more controlled lighting feel more engaged in spiritual activities (Rogers et al., 2019). With the growing awareness of the importance of multisensory experiences in worship, various spatial elements, including lighting, have become a focus for recreation (Iskandar et al., 2023). The use of lighting with varying intensity also creates space for the community to adapt their worship experience to the social and spiritual context relevant to their daily lives. Lighting can be described as a tool for strengthening social interactions among congregants, encouraging them to be more involved in worship activities, individually and as part of a community (Tarisih & Sutrisno, 2022).

The responses indicate that perceptions are not uniform. While most respondents found the lighting comfortable and uplifting, some reported it was "a bit cold" and challenging to read. This nuance is crucial for a comprehensive analysis. While the overall design may be successful, specific areas need improvement or further investigation. *Lighting Perceptions in Design: Nuanced and Diverse User Responses*

Perceptions of lighting in designed environments are highly variable, with some individuals finding lighting comfortable and uplifting, while others experience it as "a bit cold" or challenging for specific tasks. This diversity in perception highlights the importance of nuanced, user-centred approaches in lighting design. User responses to environmental features like lighting are not uniform; some may find the same lighting comfortable, while others perceive it as cold or inadequate for activities such as reading. This mirrors findings in other domains, such as healthcare, where environments described as "a bit cold" can feel remote or impersonal to some, even if functional for others (Onoe, 2024).

The use of hedging language (e.g., "a bit cold") in feedback often signals subtle dissatisfaction or a desire for improvement, reflecting the complexity of user experiences and the need for designers to interpret such cues carefully (Burke & Burrige, 2023) (Hernández, 2020). Successful design must account for both the majority experience and minority discomfort, as even a generally well-received environment may have specific areas requiring adjustment or further study (Onoe, 2024). Attenuated feedback (e.g., "a bit cold") can indicate areas where users feel a lack of warmth or comfort, suggesting the need for targeted interventions, such as adjusting colour temperature, brightness, or spatial layout (Onoe, 2024) (Hernández, 2020). Linguistic analysis of user feedback can help designers identify patterns of subtle critique and areas for improvement, supporting a more

comprehensive and inclusive design process (Hernández, 2020) (Burke & Burrige, 2023).

Regarding the connection to spiritual experience, respondents indicated that lighting effects are not isolated but intertwined with other sensory inputs and personal predispositions. The "Communitarian" effect links the warmth of the lighting with a sense of belonging, while the "Pragmatic" effect prioritises the sermon over visual aesthetics. This underscores a key finding: a truly effective spiritual atmosphere is a synergistic blend of architectural design, lighting, sound, and worship content. Lighting is a powerful tool, but these other elements amplify or moderate its impact.

Research on creating spiritual or communal atmospheres highlights that lighting effects are not isolated in their impact, but are deeply intertwined with other sensory inputs and personal or communal predispositions. The sense of belonging ("Communitarian" effect) and the prioritisation of content over aesthetics ("Pragmatic" effect) both illustrate how lighting interacts with broader architectural, auditory, and content-based elements to shape spiritual experiences. The effectiveness of lighting in fostering a spiritual or communal atmosphere is amplified or moderated by other factors such as sound, architectural design, and the content of worship or communal activities. These elements work together to create a holistic experience rather than acting independently. Communitarian and pragmatic approaches recognise that individual and collective experiences are shaped by a blend of environmental cues (like lighting and sound) and the social or ethical context in which they occur. The "Communitarian" effect links environmental warmth (including lighting) to a sense of belonging and mutual benefit, while the "Pragmatic" effect emphasises the importance of content (such as sermons) over visual or sensory aesthetics (Boudreau LeBlanc et al., 2022; Bull & Ridley-Duff, 2019).

Overall, the adjustable lighting at GKJ Mergangsan is not only about the technical aspects of lighting, but also contributes significantly to creating a profound spiritual experience during worship, from a more energetic atmosphere to quiet, reflective sessions. Therefore, applying flexible and adjustable ceiling lights becomes a vital element in supporting spirituality in the context of worship, bridging the physical and non-physical, and strengthening the congregation's involvement in their worship traditions.

CONCLUSION

This study analysed the role of artificial lighting in enhancing the spirituality of the worship space at the Mergangsan Javanese Christian Church (GKJ), Yogyakarta, through Dialux simulations and literature review. Overall, the existing artificial lighting at GKJ

Mergangsan meets each worship area's recommended functional illumination standards, including the altar, music/gamelan room, and congregation area. This adequate level of illumination ensures visual comfort and supports various worship activities.

Furthermore, the implementation of a warm, natural lighting concept dominated by LED lamps with a Correlated Colour Temperature (CCT) of 3000K (Warm White) and a Colour Rendering Index (CRI) of 80 has been shown to contribute significantly to creating a warm, comfortable, and conducive atmosphere for reverence and spirituality. This warm light evokes positive emotions, promotes relaxation, and strengthens a sense of closeness to sacred values, aligning with the project's goal of cultivating spirituality and enhancing congregational reverence. The strategic use of accent lighting also effectively highlights essential elements and enriches the sacred atmosphere.

This research contributes to understanding how well-planned artificial lighting design can be transformative in supporting spiritual experiences in worship spaces. It demonstrates that the technical aspects of lighting can be harmoniously integrated with non-functional purposes to achieve a more profound psychological and spiritual impact.

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