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**REVIEW ON THE EFFECT OF CORRELATED
COLOR TEMPERATURE AND SPECTRUM
POWER DISTRIBUTION UPON VISUAL
FUNCTION**

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**Dissertation submitted in partial fulfillment of the
requirements for the**

**Bachelor of Optometry (Hons)
Faculty of Health Science**

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AUTHOR'S DECLARATION

I declare that the work in this dissertation was carried out in accordance with the regulations of University Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This topic has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

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ABSTRACT

Purpose: This study was undertaken to review the effect of correlated color temperature (CCT) and spectrum power distribution (SPD) to the visual function. **Review Design:** About 50 established journals were reviewed in this study. There were four category of visual function assess in this study. The first one was ocular changed which involved pupil response. The second category was visual performance that consists of visual acuity, visual field, and color vision. The next category was visual experience which involving visual comfort, alertness, preferences, and brightness. The last category called as task performance including computer and paper based task as well as typing performance. **Results:** Higher pupil constriction in higher CCT which lead to the better visual acuity. Visual field was affected by both illumination and spectrum power distribution. Most of the finding is positive towards cool light CCT and short wavelength (blue) for spectrum power distribution. **Conclusion:** Different CCT and SPD of light will differentially affecting visual function.

Keywords: Correlated color temperature, spectrum power distribution, visual function