Supplemental Material

Recovery from form-deprivation myopia in chicks is dependent upon the fullness and correlated color temperature of the light spectrum

Arumugam R. Muralidharan PhD[1,2], Low Wan Yu Shermaine BSc[1], Lee Yong Chong BVSc[1], Veluchamy A. Barathi PhD [1,2,3], Seang-Mei Saw MBBS, PhD [1,2,4], Dan Milea MD, PhD [1,2,5], Raymond P. Najjar PhD[1,2,3*]

[1] Singapore Eye Research Institute, Singapore; [2] Ophthalmology and Visual Sciences Academic Clinical Programme, Duke-NUS Medical School, Singapore; [3] Department of Ophthalmology, Yong Loo Lin School of Medicine, National University of Singapore, Singapore; [4] Saw Swee Hock School of Public Health, National University of Singapore, Singapore; [5] Singapore National Eye Centre, Singapore.

* Corresponding author

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Supplementary Tables:

Supplementary Table 1. Detailed light measurements for experimental groups.

Supplementary Figures:

Supplementary Figure S1. Average weights of animals raised under FL-4000 (n = 18), SL-4000 (n=12) and SL-6500 (n = 9) throughout the experiment.

Supplementary Figure S2. Data from fellow control eyes in animals raised under FL 4000 (n=18), SL 4000 (n=12) and SL 6500 (n=9).

Supplementary Figure S3. Changes in the retinal thickness in FD and fellow control eyes in animals raised under FL-4000 (n = 18) (A), SL-4000 (n = 12) (B), SL-6500 (n = 9).

Supplementary References

This supplementary material has been provided by the authors to give readers additional information about their work**.**

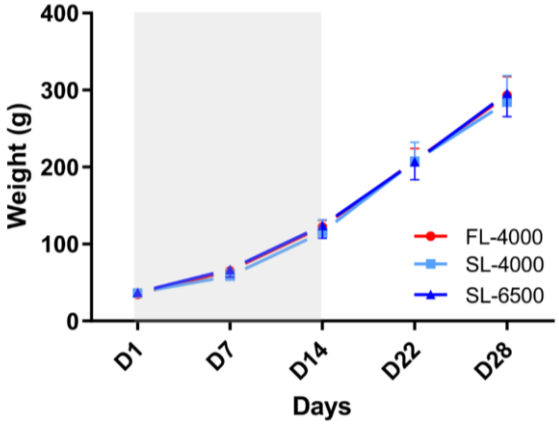
Supplementary Tables

Supplementary Table 1. Detailed light measurements for experimental groups.

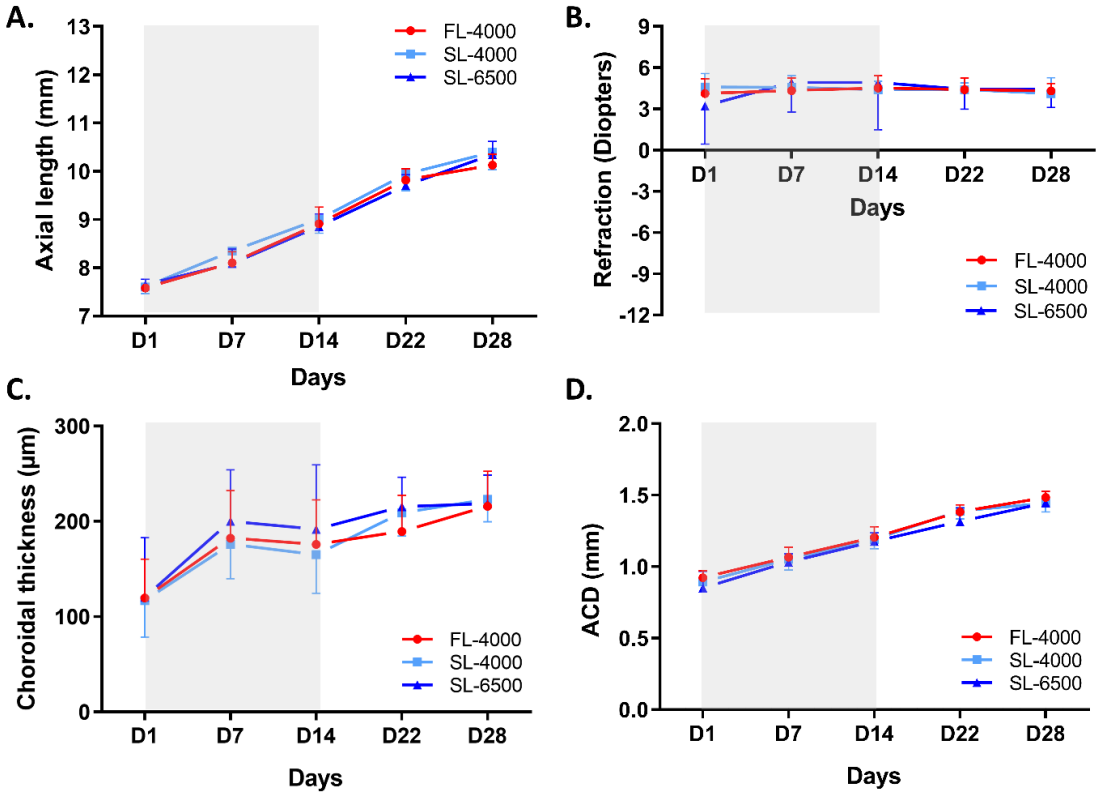
	FL-4000	**SL-4000**	**SL-6500**
Illuminance (Human Lux)	281.8	284.5	287.9
Illuminance (Chick Lux)*	344.9	351.5	339.8
Illuminance (Chick Lux)^	423.6	444.2	510.1
Irradiance (µW/cm²)	92.2	107.5	118.4
Luminance (cd/m²)	126.2	110.9	128.0
Log photon flux (log_{10} (1/cm²/s))	14.4	14.5	14.5

** Photopic spectral sensitivity based on Nuboer et al., 1992 (ERG)*
^ Photopic spectral sensitivity based on Prescott and Wathes, 1999 (Behavioural)

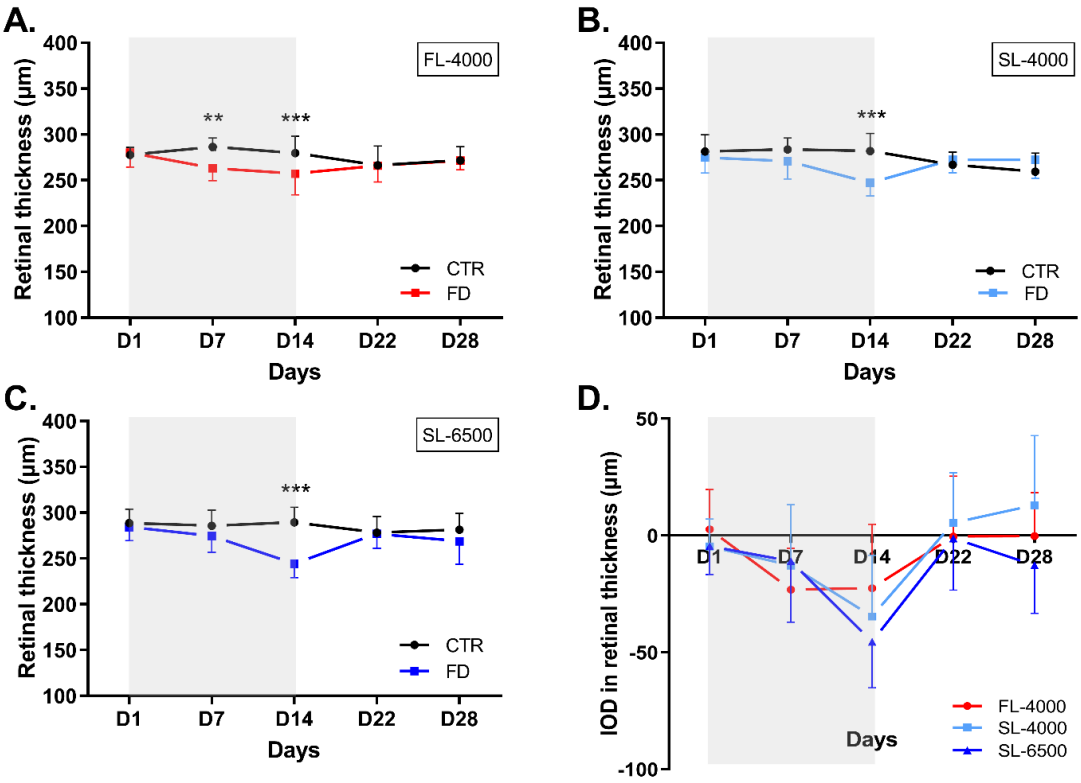
Supplementary Figures



Supplementary Figure S1. Average weights of animals raised under FL-4000 (n = 18), SL-4000 (n=12) and SL-6500 (n = 9) throughout the experiment. Shaded area between D1 and D14 indicates the period of form-deprivation. Data are represented as average ± SD. Body weights were not significantly different between groups, and were not affected by form-deprivation or recovery (P>0.05).



Supplementary Figure S2. Data from fellow control eyes in animals raised under FL 4000 (n=18), SL 4000 (n=12) and SL 6500 (n=9); axial length (A), refraction (B), choroidal thickness (C) and anterior chamber depth (ACD) (D). Data are represented as average ± SD. Data from control eyes were compared between groups using a 2-way repeated-measures analysis of variance. Shaded area (D1-D14) indicates the period of form-deprivation. No statistical differences were found between groups (P > 0.05).



Supplementary Figure S3. Changes in the retinal thickness in FD and fellow control eyes in animals raised under FL-4000 (n = 18) (A), SL-4000 (n = 12) (B), SL-6500 (n = 9) (C); and interocular differences (IOD: form-deprived eye – control eye) in retinal thickness in eyes exposed to FL-4000, SL-4000 and SL-6500 (D). CTR: Control; FD: Form-deprivation. Shaded area (D1-D14) indicates the period of form-deprivation. Data are represented as average ± SD; ** (P<0.01), *** (P<0.001).

Supplementary References

1. Nuboer JFW, Coemans MAJM, Vos JJ. Artificial lighting in poultry houses: Are photometric units appropriate for describing illumination intensities?, Br Poult Sci. 1992; 33:1, 135-140.
2. Prescott NB, Wathes CM. Spectral sensitivity of the domestic fowl (Gallus g. domesticus). Br Poult Sci. 1999; 40: 332-9.