### Supplemental Table 1. Specification of TLG-003

| Methods                                      | Wavelength of violet light (VL): peak 375 nm, range 360 to 400 nm. VL LEDs on the glass flame radiates toward to each cornea. Angle of irradiation of VL against eye is 53 degrees. |
|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Illuminance                                  | 310 μW/cm² at cornea                                                                                                                                                                                                                                           |
| Irradiation time                             | 3.0 hours daily                                                                                                                                                                                                                                                  |
|                                              | Lights on and off are manually controlled.                                                                                                                                                                                                                       |
| Electronic circuit                           | Charging, power switch, temperature monitoring and backup circuit are included.                                                                                                                                                                                   |
| Electronic power                             | Lithium Ion Battery                                                                                                                                                                                                                                              |
|                                              | Voltage: 3.7 V                                                                                                                                                                                                                                                    |
|                                              | Capacity: 200 mAh                                                                                                                                                                                                                                                 |
|                                              | Provided by USB charger                                                                                                                                                                                                                                            |
| Operating environment temperature and humidity | +5 to +40 °C, 30 to 90% Relative humidity                                                                                                                                                                                                                           |
| Storage environment temperature and humidity  | -20 to +60 °C, 10 to 95% Relative humidity                                                                                                                                                                                                                         |
| External dimensions                          | Width 130 to 155 mm x Depth 145 to 170 mm x Height 36 mm (collapsible)                                                                                                                                                                                               |
| Weight                                       | 36 g                                                                                                                                                                                                                                                            |