Jasper Ridge Inc.

# LuxIQ™ Light Exam System

## *New lighting exam technology is a clinic changer*

The LuxIQ™ is the first exam tool to provide calibrated assessments and recommendations of task lighting. While bright light is known to be important for functional vision, it is challenging to measure or prescribe. With the LuxIQ you can quickly quantify near-vision performance over a broad range of light levels and temperatures, and then prescribe specific bulbs or lamps.

New service for your practice

LuxIQ™ exam over eye chart

Convenient LuxIQ™ Soft Tote

Simply place the LuxIQ calibrated light source over reading material at a person's working distance. Move its sliders to vary the brightness (lux) and color temperature (°K). The lightweight, portable device enables lighting assessments in an office, home, school or lab. With its Light Bulb Calculator™ or LightChooser™ software, recommend commercially available optimum task lighting in < 5 minutes.

## *Difficulty with reading or working? Lighting is a low-cost intervention.*

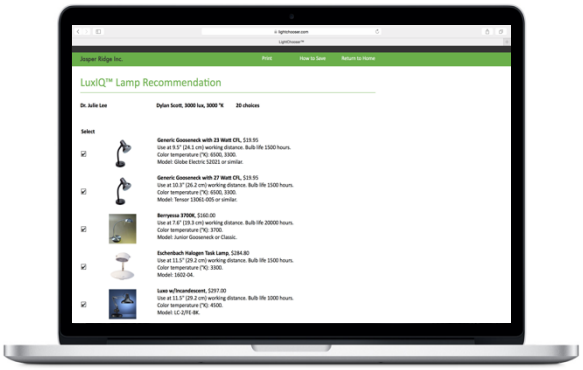
Published studies show that many need bright light of 2000-5000 lux to maximize acuity. A typical desk lamp provides only 800 lux; an exam room 600 lux. Many people need additional light to work. Some with dry eye syndrome (DES) or traumatic brain injury (TBI) are light sensitive and need less. Now you can give concrete recommendations to optimize acuity and minimize strain. The LuxIQ™ makes it practical to vary intensity from 0 to 5000 lux, and temperature from 2700 to 6500°K. Use it to:

- Determine task lighting needs without trial and error
- Prescribe optimum lamps and/or light bulbs
- Educate patients in lighting concepts
- Conduct a wide variety of clinical and research studies
- Chart patient lighting changes over time to observe disease progression
- Quantify light sensitivity for dry eye sensitivity and traumatic brain injury

## *5-Minute Lighting Exam*

To assess acuity performance at various levels of illuminance and color temperature, switch on the LuxIQ and place it over reading material, such as eye charts and newspapers. In *White Mode*, examine the patient with intense, cool to warm light. Switch to *Color Mode* to use the spectrum of bright green to red light. For some, proper light and tint reduce eyestrain and further increase acuity.

1. Select intensity using **Lux** slider, and keep constant.
2. Adjust color temperature at selected intensity using **Temperature** slider.
3. Record the preferred intensity (lux) and color temperature (°K).
4. Use the LightChooser™ web app or Light Bulb Calculator to recommend specific lamps or bulbs.




LightChooser™ web app on PCs or phone

**LUMENS TO REACH A LUX LEVEL**

*6 to 32 inches from desk*

| Lux | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 250 | 46 | 83 | 129 | 186 | 253 | 330 | 418 | 516 | 625 | 743 | 872 | 1012 | 1161 | 1321 |
| 500 | 93 | 165 | 258 | 372 | 506 | 661 | 836 | 1032 | 1249 | 1486 | 1745 | 2023 | 2323 | 2643 |
| 750 | 139 | 248 | 387 | 557 | 759 | 991 | 1254 | 1548 | 1874 | 2230 | 2617 | 3035 | 3484 | 3964 |
| 1000 | 186 | 330 | 516 | 743 | 1012 | 1321 | 1672 | 2065 | 2498 | 2973 | 3489 | 4046 | 4645 | 5285 |
| 1250 | 232 | 413 | 645 | 929 | 1265 | 1652 | 2090 | 2581 | 3123 | 3716 | 4361 | 5058 | 5806 | 6606 |
| 1500 | 279 | 495 | 774 | 1115 | 1517 | 1982 | 2508 | 3097 | 3747 | 4459 | 5234 | 6070 | 6968 | 7928 |
| 1750 | 325 | 578 | 903 | 1301 | 1770 | 2312 | 2926 | 3613 | 4372 | 5203 | 6106 | 7081 | 8129 | 9249 |
| 2000 | 372 | 661 | 1032 | 1486 | 2023 | 2643 | 3345 | 4129 | 4996 | 5946 | 6978 | 8093 | 9290 | 10570 |
| 2250 | 418 | 743 | 1161 | 1672 | 2276 | 2973 | 3763 | 4645 | 5621 | 6689 | 7850 | 9104 | 10452 | 11892 |
| 2500 | 465 | 826 | 1290 | 1858 | 2529 | 3303 | 4181 | 5161 | 6245 | 7432 | 8723 | 10116 | 11613 | 13213 |
| 2750 | 511 | 908 | 1419 | 2044 | 2782 | 3634 | 4599 | 5677 | 6870 | 8175 | 9595 | 11128 | 12774 | 14534 |
| 3000 | 557 | 991 | 1548 | 2230 | 3035 | 3964 | 5017 | 6194 | 7494 | 8919 | 10467 | 12139 | 13935 | 15855 |
| 3250 | 604 | 1074 | 1677 | 2415 | 3288 | 4294 | 5435 | 6710 | 8119 | 9662 | 11339 | 13151 | 15097 | 17177 |
| 3500 | 650 | 1156 | 1806 | 2601 | 3541 | 4625 | 5853 | 7226 | 8743 | 10405 | 12212 | 14163 | 16258 | 18498 |
| 3750 | 697 | 1239 | 1935 | 2787 | 3794 | 4955 | 6271 | 7742 | 9368 | 11148 | 13084 | 15174 | 17419 | 19819 |
| 4000 | 743 | 1321 | 2065 | 2973 | 4046 | 5285 | 6689 | 8258 | 9992 | 11892 | 13956 | 16186 | 18581 | 21141 |
| 4250 | 790 | 1404 | 2194 | 3159 | 4299 | 5615 | 7107 | 8774 | 10617 | 12635 | 14828 | 17197 | 19742 | 22462 |
| 4500 | 836 | 1486 | 2323 | 3345 | 4552 | 5946 | 7525 | 9290 | 11241 | 13378 | 15701 | 18209 | 20903 | 23783 |
| 4750 | 883 | 1569 | 2452 | 3530 | 4805 | 6276 | 7943 | 9806 | 11866 | 14121 | 16573 | 19221 | 22064 | 25104 |
| 5000 | 929 | 1652 | 2581 | 3716 | 5058 | 6606 | 8361 | 10323 | 12490 | 14864 | 17445 | 20232 | 23226 | 26426 |

*Red indicates more than one bulb may be required*

Light Bulb Calculator

**Specifications**

| | |
|---|---|
| Intensity range: | 0-5000 Lux |
| Color temperature: | 2700-6500°K |
| Color: | Green to red |
| Physical: | 8.63” L x 7.75” W x 2” H, and 1.75 lbs. |
| Power: | Rechargeable battery, 5 volt charger |

**Warranty and service**

Jasper Ridge warrants the LuxIQ™ for defects in material or workmanship for 1 year from shipment and agrees to repair or replace. Use the LuxIQ only with the AC adapter labelled Jasper Ridge as others may damage the unit. Warranty excludes normal wear and tear, misuse, abuse and shipping costs.

**Confidentiality**

The LuxIQ and LightChooser web app do not collect or save patient information, nor is the information visible to Jasper Ridge. All patient information is confidential.

## *Now a scientific basis to discuss and recommend task lighting.*

The LuxIQ combines illuminance, color, and lighting distribution to identify individually optimized task lighting and enable evidence-based recommendations in less than 5 minutes.