

## USING FULL SPECTRUM LIGHTING for Healthy Birds

One of the most commonly asked questions by bird keepers about cage lighting concerns the effective and proper usage of full spectrum (or FS) lighting devices. Birds and reptiles have completely different illumination and dietary requirements; it is an error to translate the application of lighting for reptiles to practice with birds. The quality of this full-spectrum light is unsurpassed, and reasonably price. Fits into practically any fixture, and is economical to operate. Delivers approx. 100 watts of light, and draws only 20 watts of power. Effectively lasts 10,000 hours, or the bulb-life of ten conventional light bulbs. Full-Spectrum light is necessary for the proper utilization of calcium. Full spectrum light does not pass through window glass or plastic, so unless a pet bird spends time daily in direct sunlight, it can develop serious deficiencies. The real effect of lighting upon general health, new molt, feather appearance, and behaviors is brought about by a balanced avian visual spectrum. Supplement artificial lighting whenever possible with natural unfiltered sunlight, and feed a high quality balanced diet. This combination of factors will meet all of your bird's requirements for lighting and nutrition.

## **NOTES**

- (1). Natural sunlight at high noon in the equatorial regions is considered a CRI (color rendition index) 100. The combination of sunlight and skylight combine to form a Color Temperature of 5500K. A lamp with a CRI 92 or greater is recommended.
- (2). This Internet study was conducted by the author in the first quarter of 1999, and contained a representative sample of 500 aviculturists from all levels of competence. A sample this size allows for a 96% confidence level that the answers gained are statistically valid, and are typical of general bird keeping practice.
- (3). http://www.users.mis.net/~pthrush/lighting/
- (4). MacLaughlin, J. A., Anderson, R. R., Holick, M. F. 1982. Spectral character of

sunlight modulates photosynthesis of pre-vitamin D, and its photo isomers in human skin. Science 216:28 May. pp.1001-1003; Gehrmann, W. H. 1987. Ultraviolet irradiances of various lamps used in animal husbandry. Zoo Biology 6:117-127

- (5). Lamps and Lighting: A manual of lamps and lighting application. 1983. Third Edition. Cayless, M. A., Marsdep, A. M., Eds. Edward Arnold: Baltimore; Duro-Test Corporation Commercial Engineering Technical Specifications E1-10 & 40T12 R.S.
- (6). Vision, Brain, and Behavior in Birds. 1993. Zeigler, H. P., Bischof, H. J., Eds. MIT Press: Cambridge, MA.
- (7). Dr. John Ott worked with Duro-Test in the late 1960's, to develop and produce the Vita-Lite. He later spun off his own company incorporating FS lamps into specialty lighting housings. He sold out his interests and rights to that company, Ott Biolite in the early 1990's.

**Product Watts: 20** 

**Product Bases:** Medium

**Product Notes:** 1-800-392-3552

