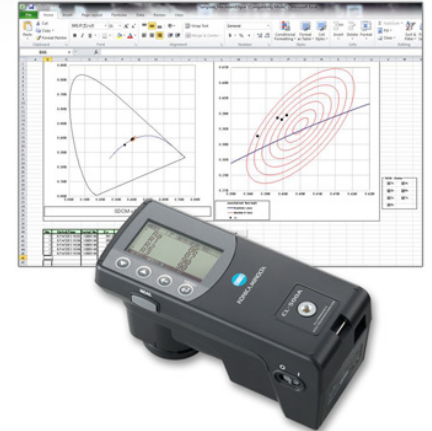


CL-500A Illuminance Spectrophotometer

BRIAN ORTER LIGHTING DESIGN

BOLD

BOLD (Brian Orter Lighting Design) founded by Brian Orter in 2008 is an award winning lighting design firm in New York City. Brian Orter holds 20 years of experience in the lighting design industry establishing himself while attending College at Purchase in New York. BOLD is a small company of 16 employees that takes on lighting projects all around the world. Their team's extensive experience covers, but is not limited to, lighting design for hotels, restaurants, residential, public spaces, corporate headquarters, museums, retail, theater and special environments. BOLD believes that the personality of an environment is born in the concept phase, and lighting is integral to the form and the function of a space.



CL-500A Illuminance Spectrophotometer

When it came to measuring amber turtle lighting and defining the color and CRI of the overwhelming amount of LED products, BOLD's instrument of choice was Konica Minolta's CL-500A Illuminance Spectrophotometer. They use it mostly in house to test samples, however, on site they use it to measure exterior lighting, art lighting and to verify their calculations. They typically seek color temperature measurements and CRI Values. A major benefit BOLD found from using the CL-500A was quality control. By seeing the individual R values and color spectrums, they were able to avoid a lot of trial and error. Using this meter, BOLD is able to quickly weed out poor light sources from good light sources.



"The Florida Wildlife Commission accepted our submission, the project stayed on schedule, and the turtles were protected all thanks to the Konica Minolta CL-500A." -Brian Orter

"Most importantly, it gives us an accurate foot-candle reading for amber LEDs in highly regulated fish and wildlife turtle environments in Florida" -Brian Orter

Most importantly, it gives BOLD accurate foot-candle readings for amber LEDs in highly regulated fish and wildlife turtle environments in Florida. Typical light meters drastically underreport these readings. The CL-500A is used for a more realistic reading. A recent project BOLD completed was at the Shelborne Hotel in Miami Beach, Florida. Their task was to prove to the Florida Wildlife Commission that all luminaries specified were safe for the endangered sea turtles.

Disorientation from artificial lighting on marine turtle nesting beaches causes numerous hatchling deaths each year in Florida. Sea turtle hatchlings have a natural tendency to move toward the brightest direction, which is normally the moonlight reflecting off of the ocean. With an excessive amount of artificial lighting, hatchlings are drawn inland, frequently

causing them harm. The brightness and glare of artificial lighting disrupts their ability to find the sea from their nest. The extended time it takes to crawl back to the sea increases a turtle's chance of exhaustion, dehydration and exposure to predators. Following a disoriented crawl back to the sea, upon entering, the turtles may swim more slowly or in incorrect directions.

For a fixture to be considered turtle-friendly, it cannot emit light at wavelengths below 560nm. BOLD used the Konica Minolta CL-500A to measure wavelengths of samples and submitted the data from the meter in lieu of factory data. The Florida Wildlife Commission accepted their submission resulting in the turtles being protected.

The CL-500A is a versatile and repeatable instrument, designed to measure the luminance and chromaticity of any light source, illuminated surface, and environmental lighting condition. Not only has the CL-500A become a proven breakthrough instrument for research, quality control, and display performance, it is the instrument of choice for measuring the light quality in hospitals, stadiums, airports, offices and public buildings. Ultimately, It has had made significant contributions to improvements in the quality of lighting around the world.

For more information on Konica Minolta Sensing's light and display measurement instruments, visit us at sensing.konicaminolta.us.

