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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

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DATE: 9/17/07

PREPARED FOR: AMERICAN BRIGHT OPTOELECTRONICS CORP.

CATALOG NUMBER: AB-ET3BC-42

LUMINAIRE: Molded black plastic housing, molded black plastic end caps, three white circuit boards each with 26 LEDs, clear curved glass lens.

LAMPS: Seventy-eight white light emitting diodes (LEDs).

LED DRIVER: Integral

INSTRUMENTATION: Yokogawa WT210 Digital Power Meter  
Optronic Laboratories OL770 Spectroradiometer  
ITL 1.5 Meter Diameter Integrating Sphere  
Elgar CW1251 Voltage Regulator

OBJECT OF TEST: Measure the Correlated Color Temperature (CCT), Color Rendering Index (CRI), and Chromaticity Coordinates (x,y) of the luminaire and its input electrical parameters.

PROCEDURE: The luminaire was provided by customer and had an unknown number of burn hours. The luminaire was prewarmed overnight before being transferred to the integrating sphere. The luminaire was allowed to restabilize for one hour in the sphere before measurements were recorded. CCT, CRI, and x/y chromaticity coordinates and electrical data were then recorded. In order to measure the mean performance, twenty data sets were recorded and averaged within the spectroradiometer. Readings were taken with the luminaire operating in a 25 +/-1 degree Celsius free air ambient. All data are traceable to the National Institute of Standards and Technology (NIST).

RESULTS:

SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Correlated Color Temp CCT (K)	4618
Chromaticity Ordinate x	0.3551
Chromaticity Ordinate y	0.3498
Color Rendering Index (CRI)	71
ELECTRICAL	
Input Voltage (Volts AC RMS)	120.00
Input Current (mA AC RMS)	85.8
Input Power (Watts)	9.56

Checked: <u>    <i>R Berger</i>    </u>
Approved: <u>    <i>R Bergin</i>    </u>