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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

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REPORT NUMBER: ITL63788  
 DATE: 12/30/2009  
 REVISED: 02/04/2010  
 PREPARED FOR: B-K LIGHTING, INC.  
 CATALOG NUMBER: NS-LED-e23-MFL-13; AR-LED-TR-e23-MFL-13-C; AR-LED-RM-e23-MFL-13-C;  
 DS-LED-e23-MFL-13; RM-LED-e23-MFL-13-C; SN-LED-e23-MFL-13-C;  
 ST-LED-e23-MFL-13-C; SF-LED-e23-MFL-13-C; TF-LED-e23-MFL-13-C;  
 WS-LED-e23-MFL-13; AW-LED-e23-MFL-13; SW-LED-e23-MFL-13;  
 VS-LED-e23-MFL-13; VQ-LED-e23-MFL-13; GD-LED-e23-MFL-13;  
 GQ-LED-e23-MFL-13; EC-LED-e23-MFL-13; ED-LED-e23-MFL-13;  
 SM-AR-LED-e23-MFL-13-C

LUMINAIRE: MACHINED CYLINDRICAL METAL HOUSING, ONE CIRCUIT BOARD WITH 3  
 LEDS, ONE CLEAR CONICAL PLASTIC OPTIC PER LED WITH FROSTED  
 SURFACE OPPOSITE LED, MOLDED BLACK PLASTIC OPTIC MOUNTING  
 FRAME, CLEAR FLAT LINEAR PRISMATIC GLASS LENS IN MACHINED  
 WHITE PAINTED CYLINDRICAL METAL FRAME WITH UNFINISHED  
 INTERIOR, LENS PRISMS OUT AND VERTICAL.

LAMPS: THREE 2.5-WATT WHITE LIGHT EMITTING DIODES (LEDS) EACH WITH  
 CLEAR HEMISPHERICAL INTEGRAL PLASTIC LENS, LEDS AIMED AT THE  
 HORIZON.

DRIVER: INTEGRAL

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT  
 VOLTAGE (12VAC, 60Hz) TO THE LED DRIVER. LAMP INFORMATION  
 PROVIDED BY CLIENT.

INSTRUMENTS: Kikusui PCR500L AC Power Source  
 Yokogawa WT210 Digital Power Meter  
 Optronic Laboratories OL770 Spectroradiometer  
 ITL 1.5 meter Diameter 4 pi Steradian Integrating Sphere

OBJECT OF TEST: Measure the Correlated Color Temperature (CCT), Color  
 Rendering Index (CRI), Chromaticity Coordinates (x,y), ANSI  
 C78.377 Duv, and electrical data to the luminaire.

PROCEDURE: The luminaire was provided by customer and had an unknown  
 number of burn hours. The luminaire was mounted inside the  
 integrating sphere in a horizontal position (LEDS aimed at the  
 horizon). The luminaire was allowed to stabilize at 12 VAC  
 input. After stabilization occurred, Correlated Color  
 Temperature (CCT), Color Rendering Index (CRI), Chromaticity  
 Coordinates (x,y), ANSI C78.377 Duv, and electrical data were  
 measured with the luminaire operating in the integrating  
 sphere. In order to measure mean performance, twenty data sets  
 were recorded and averaged within the spectroradiometer.  
 Readings were taken with the luminaire operating at 12 VAC  
 input in a 25 +/-1 degree Celsius free air ambient and in  
 accordance with IESNA LM-79-08. All data are traceable to the  
 National Institute of Standards and Technology.

RESULTS:

SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.3877
Chromaticity Ordinate y	0.4068
Correlated Color Temp CCT (K)	4022
Color Rendering Index (CRI)	66
ANSI C78.377-2008 Duv	0.011
ELECTRICAL	
Input Voltage (Volts AC)	12.0
Input Current (Amps AC)	1.02
Input Power (Watts)	8.4

Checked ..... *N Gully* .....  
 Approved ..... *R Bergin* .....