

itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL64597

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DATE: 04/27/10

PREPARED FOR: PURE LIGHTING LLC

CATALOG NUMBER: SH1-SP1-WW

LUMINAIRE: FABRICATED SEMI-DIFFUSE METAL HOUSING, FORMED MULTI-FACETED SPECULAR METAL REFLECTOR, FABRICATED WHITE PAINTED METAL LED DRIVER HOUSING, TWELVE CIRCUIT BOARDS EACH WITH ONE LED, MOLDED WHITE PLASTIC LOUVER WITH ONE APERTURE PER LED, OPEN BOTTOM AND ENDS.

LAMP: TWELVE 1-WATT WHITE LIGHT EMITTING DIODES (LEDs) EACH WITH CLEAR HEMISPHERICAL INTEGRAL LENS, LEDs AIMED AT THE HORIZON.

LED DRIVER: PURE LIGHTING PROPRIETARY PDS4

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE LED DRIVER. LAMP AND LED DRIVER INFORMATION PROVIDED BY CLIENT.

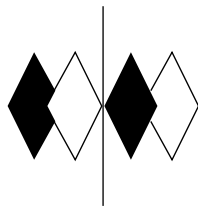
INSTRUMENTATION: Kikusui PCR2000L AC Power Source
Yokogawa WT210 Digital Power Meter
Optronic Laboratories OL770 Spectroradiometer
ITL 1.5 Meter Diameter Integrating Sphere, 4π Geometry

OBJECT OF TEST: Measure the Correlated Color Temperature (CCT), Color Rendering Index (CRI), Chromaticity Coordinates (x,y), ANSI C78.377 Duv, preliminary Color Quality Scale (CQS) version 7.5a, and input electrical data to the luminaire.

PROCEDURE: The luminaire was provided by customer and the LEDs had an unknown number of burn hours. The luminaire was mounted inside the integrating sphere with the luminaire in a horizontal position (LEDs aimed at the horizon). The luminaire was allowed to stabilize at 120 VAC input. After stabilization occurred, CCT, CRI, x/y chromaticity coordinates, ANSI C78.377 Duv, preliminary CQS 7.5a, and input electrical data were measured with the luminaire operating in the integrating sphere. In order to measure the mean performance, twenty data sets were recorded and averaged within the spectroradiometer. Readings were taken with the luminaire operating at 120 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: See page 2

Checked: <u>N Gully</u>
Approved: <u>R Bergin</u>



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RESULTS:

SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.4487
Chromaticity Ordinate y	0.4035
Correlated Color Temp CCT (K)	2807
Color Rendering Index (CRI)	83
NIST Draft Color Quality Scale 7.5a*	81
ANSI C78.377-2008 Duv	-0.002
ELECTRICAL	
Input Voltage (Volts AC)	120.0
Input Current (mA AC)	126
Input Power (Watts)	13.0

*NOTE: For the CQS calculation the CMCCAT2000 adaptation correction was used.