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THE LIGHT CENTER OF THE INDUSTRY SINCE 1955
INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL64234
DATE: 03/30/10
PREPARED FOR: B-K LIGHTING, INC.
CATALOG NUMBER: NS-LED-e22-SP-12; AR-LED-TR-e22-SP-12-C; AR-LED-RM-e22-SP-12-C; DS-LED-e22-SP-12; RM-LED-e22-SP-12-C; SN-LED-e22-SP-12-C; ST-LED-e22-SP-12-C; SF-LED-e22-SP-12-C; TF-LED-e22-SP-12-C; WS-LED-e22-SP-12; AW-LED-e22-SP-12; SW-LED-e22-SP-12; VS-LED-e22-SP-12; VQ-LED-e22-SP-12; GD-LED-e22-SP-12; GQ-LED-e22-SP-12; EC-LED-e22-SP-12; ED-LED-e22-SP-12; SM-AR-LED-e22-SP-12-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 MICRO-PRISMATIC GLASS LENS IN MACHINED WHITE PAINTED CYLINDRICAL METAL FRAME WITH UNFINISHED INTERIOR, LENS PRISMS IN.

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

LED 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.

INSTRUMENTATION: Kikusui PCR500L AC Power Source
Yokogawa WT210 Digital Power Meter
Optronics OL770 Spectroradiometer
ITL 1.5 Meter Diameter Integrating Sphere, 4π Geometry

OBJECT OF TEST: Measure the Spectral Power Distribution, Correlated Color Temperature (CCT), Color Rendering Index (CRI), Chromaticity Coordinates (x,y), ANSI C78.377 Duv, 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 vertical base-up position (LEDs facing down). The luminaire was allowed to stabilize at 12 VAC input. After stabilization occurred, spectral power distribution, CCT, CRI, x/y chromaticity coordinates, ANSI C78.377 Duv, 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 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: Continued subsequent pages.

Checked: *N Gully*
Approved: *R Bergin*

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RESULTS:

SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.4252
Chromaticity Ordinate y	0.4011
Correlated Color Temp CCT (K)	3182
Color Rendering Index (CRI)	83
ANSI C78.377-2008 Duv	0.001
ELECTRICAL	
Input Voltage (Volts AC)	12.0
Input Current (Amps AC)	987
Input Power (Watts)	8.2

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RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	0.047	515	2.260	650	3.230
385	0.048	520	2.402	655	2.973
390	0.048	525	2.571	660	2.702
395	0.052	530	2.737	665	2.404
400	0.057	535	2.880	670	2.103
405	0.070	540	3.049	675	1.835
410	0.099	545	3.220	680	1.646
415	0.154	550	3.388	685	1.508
420	0.261	555	3.559	690	1.384
425	0.443	560	3.731	695	1.259
430	0.725	565	3.903	700	1.129
435	1.134	570	4.070	705	1.003
440	1.755	575	4.231	710	0.884
445	2.508	580	4.382	715	0.775
450	2.728	585	4.510	720	0.681
455	2.193	590	4.623	725	0.594
460	1.654	595	4.696	730	0.517
465	1.364	600	4.722	735	0.450
470	1.145	605	4.703	740	0.390
475	1.035	610	4.654	745	0.340
480	1.053	615	4.596	750	0.295
485	1.146	620	4.521	755	0.257
490	1.297	625	4.364	760	0.224
495	1.486	630	4.189	765	0.194
500	1.706	635	3.975	770	0.168
505	1.904	640	3.741	775	0.147
510	2.081	645	3.490	780	0.127