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THE LIGHT CENTER OF THE INDUSTRY SINCE 1965

INDEPENDENT TESTING LABORATORIES, INC.
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REPORT NUMBER: ITL64372
DATE: 03/11/10
PREPARED FOR: BETALED, A DIVISION OF RUUD LIGHTING

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CATALOG NUMBER: PKG-EDG-5M-**-04-D-UL-WH-700 or BXPS0504D-UDW (700mA)

LUMINAIRE: EXTRUDED WHITE PAINTED METAL HOUSING WITH CAST WHITE PAINTED METAL END CAPS, FABRICATED WIRE CAGE MOUNTING ASSEMBLY, TWO EXTRUDED FINNED METAL HEAT SINKS, EACH HEAT SINK CONTAINS ONE CIRCUIT BOARD WITH 20 LEDs, CAST WHITE PAINTED METAL TRIM PLATE, ONE CLEAR NON-INTEGRAL PLASTIC LENS BELOW EACH LED. THREE FORMED WHITE PAINTED SOLID METAL TRIM PLATES.

LAMPS: FORTY WHITE LIGHT EMITTING DIODES (LEDs), VERTICAL BASE-UP POSITION.

LED DRIVER: BETA LED DPL-100BB A, WITH FIVE POSITION DIMMER CONTROL SWITCH.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (240VAC, 60Hz) TO THE LED DRIVER. CLIENT STATES LEDS HAVE BEEN SEASONED FOR A MINIMUM OF 100 HOURS. DIMMER CONTROL SWITCH IN POSITION "1" FOR THIS TEST.


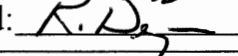
INSTRUMENTATION: Kikusui PCR500L AC Power Source
Yokogawa WT210 Digital Power Meter
Optronics OL770 Spectroradiometer
ITL 1.5 Meter Diameter Integrating Sphere, 4 π Geometry

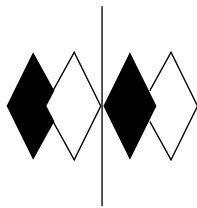
OBJECT OF TEST: Report the Absolute Flux in Lumens*, measure the Spectral Power Distribution, Correlated Color Temperature (CCT), Color Rendering Index (CRI), Chromaticity Coordinates (x,y), ANSI C78.377 Duv, and input electrical parameters including Total Harmonic Distortion (THD) to the luminaire.

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 horizontal (LEDs facing down). The luminaire was allowed to stabilize at 240 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 240 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.

*NOTE: The total lumen output shown on this report was obtained from photometric test ITL64366.

RESULTS: (continued subsequent pages)

Checked: 
Approved: 



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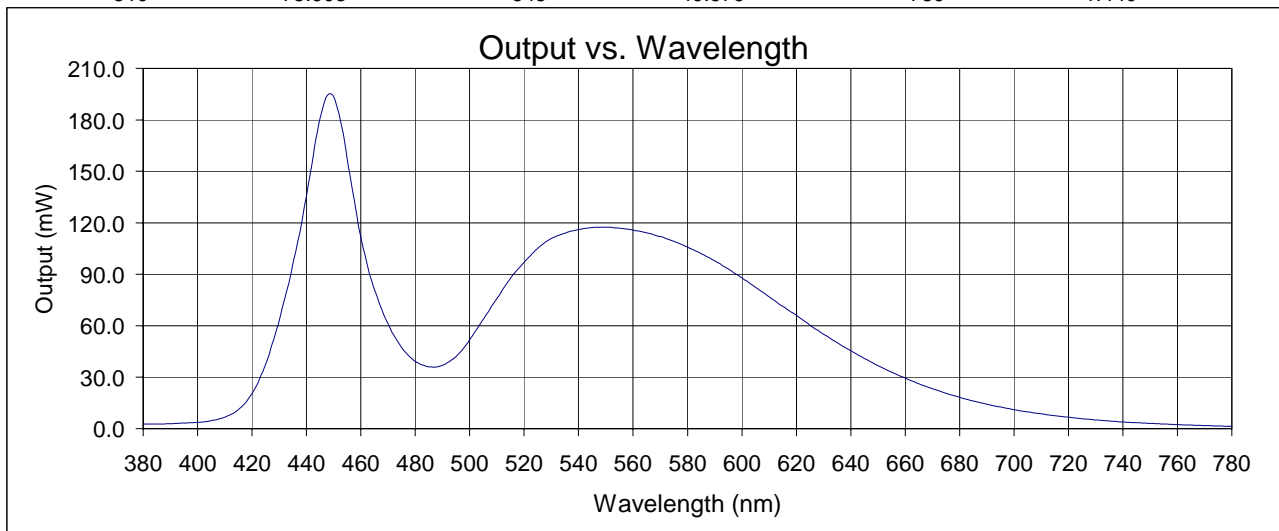
DATE: 03/11/10

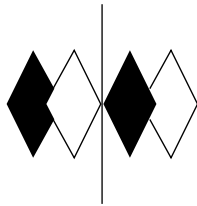
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RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	2.714	515	87.894	650	36.774
385	2.770	520	96.956	655	32.985
390	2.860	525	105.115	660	29.451
395	3.255	530	110.965	665	26.185
400	3.717	535	113.974	670	23.319
405	4.693	540	116.164	675	20.659
410	6.769	545	117.244	680	18.284
415	11.099	550	117.377	685	16.185
420	20.478	555	116.889	690	14.292
425	37.568	560	115.774	695	12.601
430	63.240	565	114.193	700	11.110
435	95.498	570	111.999	705	9.795
440	135.344	575	109.211	710	8.634
445	180.884	580	105.858	715	7.582
450	193.312	585	102.027	720	6.678
455	157.805	590	97.893	725	5.869
460	111.822	595	93.045	730	5.154
465	81.246	600	87.826	735	4.512
470	61.067	605	82.431	740	3.962
475	47.364	610	76.885	745	3.500
480	39.325	615	71.319	750	3.057
485	36.103	620	66.115	755	2.688
490	36.970	625	60.368	760	2.384
495	42.182	630	55.171	765	2.093
500	51.866	635	50.176	770	1.834
505	63.832	640	45.463	775	1.619
510	75.903	645	40.979	780	1.440





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RESULTS:

PHOTOMETRIC	
Total Integrated Flux (lumens)	6971*
SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.3145
Chromaticity Ordinate y	0.3394
Correlated Color Temp CCT (K)	6342
Color Rendering Index (CRI)	73
ANSI C78.377-2008 Duv	0.008
ELECTRICAL	
Input Voltage (Volts AC)	240.0
Input Current (mA AC)	399
Input Power (Watts)	93.1
Total Harmonic Distortion – Current (%)	6.1
Total Harmonic Distortion – Voltage (%)	0.0
EFFICACY (Lumens/Watt)	74.9

*NOTE:

The total lumen output shown on this report was obtained from photometric test ITL64366.