

**itl boulder**  
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

INDEPENDENT TESTING LABORATORIES, INC.  
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REPORT NUMBER: ITL64831 Page 1 of 3

DATE: 05/12/10

PREPARED FOR: BETALED, A DIVISION OF RUUD LIGHTING

CATALOG NUMBER: STR-LWY-4M-\*\*-04-D-UL-WH-700 or BXSL0404D-UDW (700mA)

LUMINAIRE: CAST WHITE PAINTED METAL HOUSING WITH CAST WHITE PAINTED METAL ACCESS DOOR, CAST WHITE PAINTED METAL FORWARD HOUSING PIECE, TWO EXTRUDED FINNED METAL HEAT SINKS, TWO CIRCUIT BOARDS EACH WITH 20 LEDS AND CAST WHITE PAINTED METAL TRIM PLATE, ONE CLEAR NON-INTEGRAL PLASTIC LENS BELOW EACH LED.

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

LED DRIVER: ADVANCE LED-INTA-700C-140-F30

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.

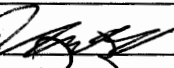
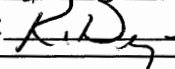
INSTRUMENTATION: Kikusui PCR500L AC Power Source  
Yokogawa WT210 Digital Power Meter  
Optronics OL770 Spectroradiometer  
ITL 1.5 Meter Diameter Integrating Sphere, 4 $\pi$  Geometry

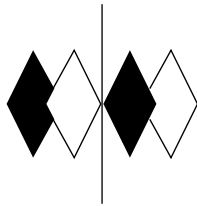
OBJECT OF TEST: Report the Absolute Flux in Lumens\*, measure the Spectral Power Distribution, Correlated Color Temperature (CCT), Color Rendering Index (CRI), Chromaticity Coordinates (x,y), ANSI C78.377 Duv, and input electrical parameters including Total Harmonic Distortion (THD) to the luminaire.

PROCEDURE: The luminaire was provided by customer and the LEDs had a minimum of 100 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, multiple data sets were recorded and averaged. 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 ITL64827.

RESULTS: (continued subsequent pages)

Checked:	
Approved:	



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Page 2 of 3

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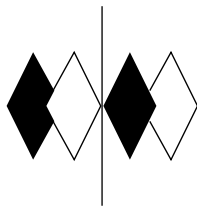
CATALOG NUMBER: STR-LWY-4M-\*\*-04-D-UL-WH-700 or BXSL0404D-UDW (700mA)

RESULTS:

PHOTOMETRIC	
Total Integrated Flux (lumens)	6973*
SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.3126
Chromaticity Ordinate y	0.3363
Correlated Color Temp CCT (K)	6456
Color Rendering Index (CRI)	73
ANSI C78.377-2008 Duv	0.007
ELECTRICAL	
Input Voltage (Volts AC)	240.0
Input Current (mA AC)	399
Input Power (Watts)	92.8
Total Harmonic Distortion – Current (%)	11.4
Total Harmonic Distortion – Voltage (%)	0.1
EFFICACY (Lumens/Watt)	75.1

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Page 3 of 3

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RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	2.815	515	88.280	650	36.348
385	2.831	520	97.728	655	32.600
390	2.949	525	105.604	660	29.134
395	3.389	530	111.251	665	25.848
400	3.862	535	114.303	670	23.045
405	4.864	540	116.441	675	20.421
410	6.991	545	117.410	680	18.034
415	11.420	550	117.477	685	15.890
420	21.052	555	116.964	690	14.040
425	38.584	560	115.795	695	12.367
430	65.302	565	114.145	700	10.895
435	99.324	570	111.889	705	9.564
440	142.333	575	109.221	710	8.440
445	190.206	580	105.826	715	7.390
450	200.054	585	101.960	720	6.492
455	159.332	590	97.552	725	5.700
460	111.324	595	92.763	730	4.989
465	80.467	600	87.580	735	4.367
470	60.243	605	82.128	740	3.840
475	46.560	610	76.568	745	3.386
480	38.703	615	70.948	750	2.966
485	35.613	620	65.684	755	2.620
490	36.666	625	60.015	760	2.307
495	42.245	630	54.702	765	2.025
500	51.859	635	49.743	770	1.787
505	63.794	640	44.983	775	1.569
510	76.147	645	40.634	780	1.386

