

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

INDEPENDENT TESTING LABORATORIES, INC.  
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REPORT NUMBER: ITL64569 Page 1 of 3  
DATE: 04/08/10  
PREPARED FOR: BETALED, A DIVISION OF RUUD LIGHTING

CATALOG NUMBER: ARE-EDG-3MB-\*\*-12-C-UL-BK or BXAL1H12C-UT (350mA)

LUMINAIRE: EXTRUDED BLACK PAINTED METAL HOUSING, FABRICATED BLACK PAINTED METAL BALLAST MOUNTING PLATE, CAST BLACK PAINTED METAL END CAPS, FORMED PERFORATED METAL TOP, SIX EXTRUDED FINNED METAL HEAT SINKS, EACH HEAT SINK CONTAINS ONE CIRCUIT BOARD WITH 20 LEDS AND CAST BLACK PAINTED METAL TRIM PLATE, ONE CLEAR PLASTIC NON-INTEGRAL LENS BELOW EACH LED, ONE SMALL RUBBER HOUSE SIDE SHIELD BELOW EACH LED.

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

LED DRIVER: BETA LED CE366X01R0

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.

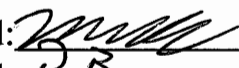
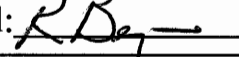
INSTRUMENTATION: Kikusui PCR500L AC Power Source  
Yokogawa WT210 Digital Power Meter  
Optronics OL770 Spectroradiometer  
ITL 1.5 Meter Diameter Integrating Sphere, 4 $\pi$  Geometry

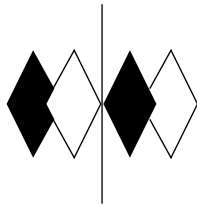
OBJECT OF TEST: Report the Absolute Flux in Lumens\*, measure the Spectral Power Distribution, Correlated Color Temperature (CCT), Color Rendering Index (CRI), Chromaticity Coordinates (x,y), ANSI C78.377 Duv, and input electrical parameters including Total Harmonic Distortion (THD) to the luminaire.

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, 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 ITL64565

RESULTS: (continued subsequent pages)

Checked: 
Approved: 



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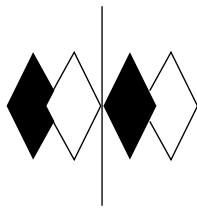
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RESULTS :

PHOTOMETRIC	
Total Integrated Flux (lumens)	7023*
SPECTRORADIOMETRIC	
Observer	CIE 1931 2 degree
Chromaticity Ordinate x	0.3215
Chromaticity Ordinate y	0.3403
Correlated Color Temp CCT (K)	6001
Color Rendering Index (CRI)	72
ANSI C78.377-2008 Duv	0.005
ELECTRICAL	
Input Voltage (Volts AC)	240.0
Input Current (mA AC)	613
Input Power (Watts)	144.7
Total Harmonic Distortion – Current (%)	6.4
Total Harmonic Distortion – Voltage (%)	0.0
EFFICACY (Lumens/Watt)	48.5

\*NOTE: The total lumen output shown on this report was obtained from photometric test ITL64565.



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RESULTS:

Wavelength	mW per nm	Wavelength	mW per nm	Wavelength	mW per nm
380	2.765	515	83.946	650	40.473
385	2.884	520	93.765	655	36.519
390	3.050	525	102.662	660	32.836
395	3.541	530	109.301	665	29.335
400	4.125	535	113.027	670	26.266
405	5.388	540	116.113	675	23.375
410	8.195	545	117.814	680	20.809
415	14.228	550	118.515	685	18.504
420	26.947	555	118.425	690	16.404
425	48.896	560	117.664	695	14.560
430	79.454	565	116.287	700	12.892
435	113.703	570	114.330	705	11.429
440	152.188	575	111.702	710	10.113
445	188.129	580	108.609	715	8.902
450	179.988	585	104.994	720	7.870
455	133.798	590	101.019	725	6.952
460	92.948	595	96.392	730	6.113
465	68.305	600	91.397	735	5.387
470	51.392	605	86.269	740	4.747
475	40.379	610	80.904	745	4.202
480	34.356	615	75.363	750	3.687
485	31.937	620	70.344	755	3.260
490	33.091	625	64.605	760	2.883
495	38.293	630	59.346	765	2.552
500	47.705	635	54.276	770	2.248
505	59.494	640	49.437	775	1.989
510	71.655	645	44.899	780	1.754

