



FOR THE SCOPE OF  
ACCREDITATION UNDER NVLAP LAB  
CODE 100402-0.

# REPORT

3933 US ROUTE 11 CORTLAND, NEW YORK 13045

Project No. G100641836

Date: March 9, 2012

REPORT NO. 100641836CRT-002

TEST OF ONE 10" BOWL CEILING MOUNT FIXTURE

FIXTURE MODEL NO. RDBC10-WH

RENDERED TO

MILLENNIUM LIGHTING  
922 DAILEY MILL ROAD  
MCDONOUGH, GA 30253

TEST: Electrical and Photometric tests as required to the IESNA test standard.

LABORATORY NOTE: The laboratory that conducted the testing detailed in this report has been Qualified, Verified, and Recognized for LM-79 Testing for ENERGY STAR for SSL by US DOE's CALiPER program.

STATEMENT OF LIMITATION: This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

AUTHORIZATION: The testing performed was authorized by signed quote number 500357309.

STANDARDS USED: The following American National Standards or Illuminating Engineering Society of North America Test Guides were used in part or totally to test each specimen:

IESNA LM-54: 1999 Guide to Lamp Seasoning

IESNA LM-46-04: 1998 Approved Method for Photometric Testing of Indoor Luminaires Using High Intensity Discharge or Incandescent Filament Lamps

DESCRIPTION OF SAMPLE: The client submitted one sample of model number RDBC10-WH. The sample was received by Intertek on February 14, 2012, in undamaged condition, and one sample was tested as received. The sample designation was M242868-1.

DATES OF TESTS: March 6, 2012.

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SUMMARY

Model No.: RDBC10-WH
Description: Ceiling Mount Fixture with a 200 W Incandescent Bulb

Criteria	Result
Total Lumen Output	1168 Lumens
Total Power	166.8 W
Luminaire Efficacy	7.002
Power Factor	1.000

EQUIPMENT LIST

Equipment Used	Model Number	Control Number	Last Calibration Date	Calibration Due Date
Elgar AC Power Supply	CW1251	--	--	--
Xitron Power Analyzer	2503H	E235	04/20/11	04/20/12
Cole Parmer Hygro Thermometer	445703	T1359	10/26/11	10/26/12
Kikusui DC Power Supply	35-10L	E160	---	---
Sorenson DC Power Supply	DLM150-20E	--	---	---
LSI High Speed Mirror Goniometer	6440	--	02/17/12	03/17/12

TEST METHODS

Seasoning in Each Burn Orientation

The photometric tests were performed after the lamps were seasoned. Before the photometric tests, each bulb was operated in its designated orientation in the appropriate fixture for a time period of 1.5% of its rated hours in accordance with IESNA LM-54 Guide to Lamp Seasoning.

Photometric and Electrical measurements – Distribution Method

A LSI Type C High Speed Model 6440 Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for each sample.

Ambient temperature was measured equal to the height of the sample mounted on the Goniometer equipment. Each sample was operated at input rated voltage in its designated orientation. Each sample was allowed to stabilize for at least thirty minutes before measurements were made. Electrical measurements including voltage, current, and power were measured using the Xitron or Yokogawa Power Analyzer.

Some graphics were created with Photometrics Plus software.

Estimated Total Operating Time

Model No.	Total Hours
RDBC10-WH	1

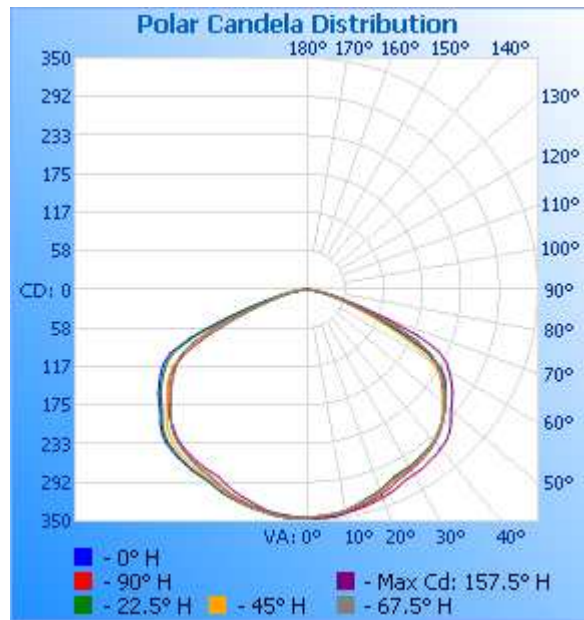
**RESULTS OF TESTS**

Photometric and Electrical Measurements – Distribution Method

Intertek Sample No.	Base Orientation	Input Voltage (Vac)	Input Current (mA)	Input Power (Watts)	Input Power Factor	Absolute Luminous Flux (Lumens)	Lumen Efficacy (Lumens Per Watt)
RDBC10-WH							
M242868-1	UP	120.0	1387	166.8	1.000	1168	7.007

Intensity (Candlepower) Summary at 25°C - Candelas

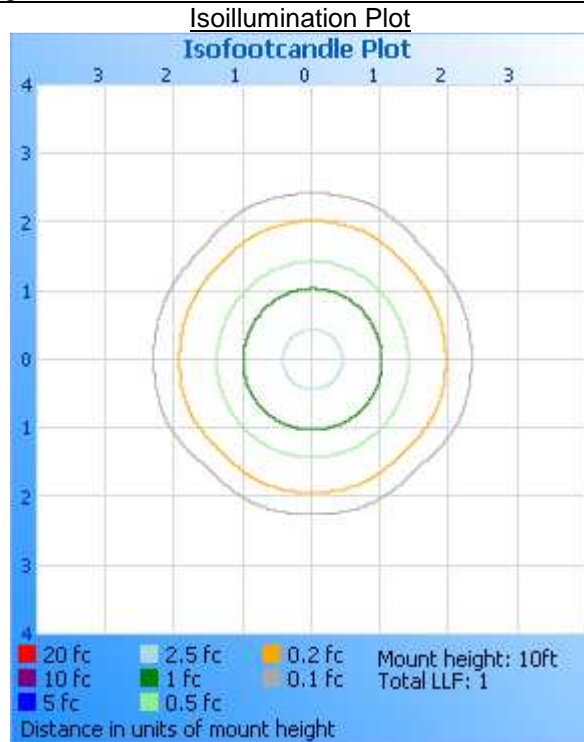
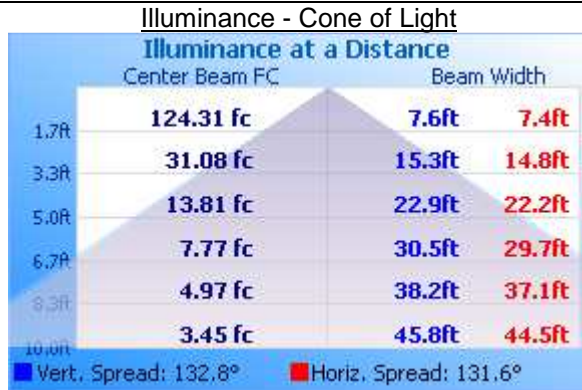
Angle	0	22.5	45	67.5	90
RDBC10-WH					
0	345	345	345	345	345
5	342	343	342	343	345
10	340	340	340	340	342
15	331	331	332	334	336
20	323	324	325	327	330
25	312	313	315	317	321
30	310	310	312	313	315
35	305	306	307	308	309
40	299	300	301	302	302
45	288	288	288	289	289
50	274	274	272	273	270
55	257	256	252	253	250
60	233	232	217	230	227
65	165	167	145	185	186
70	88	89	78	101	102
75	44	45	45	49	48
80	21	22	24	25	24
85	5	6	7	8	7
90	0	0	0	0	0



## RESULTS OF TESTS (cont'd)

### Illumination Plots

Model No.: RDBC10-WH  
Mounting Height: 10 ft.



### Zonal Lumen Summary and Percentages at 25°C

Zone	Lumens	% Luminaire
RDBC10-WH		
0-30	276.3	23.7
0-40	471.5	40.4
0-60	926.2	79.3
60-90	242.0	20.7
0-90	1168	100.0
90-180	0.0	0.0
0-180	1168	100.0

Picture (not to scale)



CONCLUSION

The results tabulated in this report are representative of the actual test samples submitted for this report only. The data is provided to the client for further evaluation. Compliance to the referenced specification requirements was not determined in this report.

In Charge Of Tests:

A handwritten signature in black ink, appearing to read 'Kenda Branch'. The signature is fluid and cursive.

Kenda Branch  
Engineer  
Lighting Division

Attachment: None

Report Reviewed By:

A handwritten signature in black ink, appearing to read 'David Ellis'. The signature is cursive and clearly legible.

David Ellis  
Senior Project Engineer  
Lighting Division