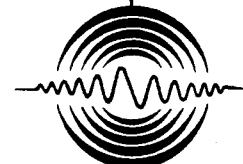


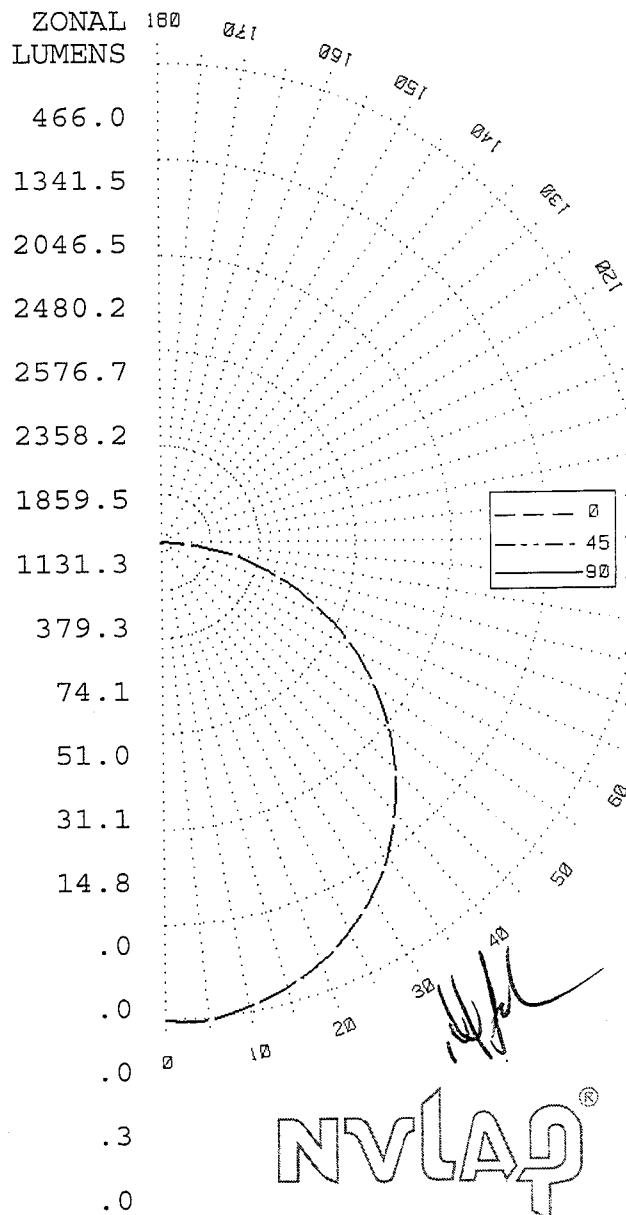
Building Acoustics & Lighting Laboratories, Inc.

1618 HEADLAND DR.
FENTON, MO 63026
(636) - 343-6006
(636) - 343-6051 FAX



BALLABS CERTIFIED TEST REPORT NO.: 18693.0 DATE 03/10/15
PREPARED FOR: IMPACT ARCHITECTURAL LIGHTING - SAINT LOUIS, MO
DESCRIPTION: 14-48, 8-24, 4-72LED ARRAYS 48"DIA PENDANT LUMINAIRE
WHITE REFLECTOR w/MATTE WHITE ACRYLIC CONVEX BTM LENS
4 MEANWELL #LPF-60D-42
CATALOG NBR: P5548.LED-40HI-XX
LAMP TYPE : M700C840D48N12STC, M700C840D72N18STC, M700C840D24N06STC
CANDLEPOWER DISTRIBUTION

VERT ANG	AVERAGE CANDELA
0	4900.
5	4882.
10	4831.
15	4733.
20	4595.
25	4421.
30	4207.
35	3948.
40	3645.
45	3327.
50	2992.
55	2629.
60	2251.
65	1873.
70	1466.
75	1069.
80	699.
85	348.
90	130.
95	68.
100	57.
105	48.
110	41.
115	31.
120	26.
125	17.
130	11.
135	0.
140	0.
145	0.
150	0.
155	0.
160	0.
165	1.
170	0.
175	0.
180	0.



LUMEN SUMMARY

NVLAP LAB CODE 200921-0

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	3854.	NA.	26.0	90-120	156.	NA.	1.1
0- 40	6334.	NA.	42.8	90-130	171.	NA.	1.2
0- 60	11269.	NA.	76.1	90-150	171.	NA.	1.2
0- 90	14639.	NA.	98.8	90-180	171.	NA.	1.2

TOTAL LUMINAIRE = 0-180 14810. NA. 100.0

IES SPACING CRITERIA: ADJACENT= 1.3 DIAGONAL= .9

THIS BALLABS REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THIS CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.

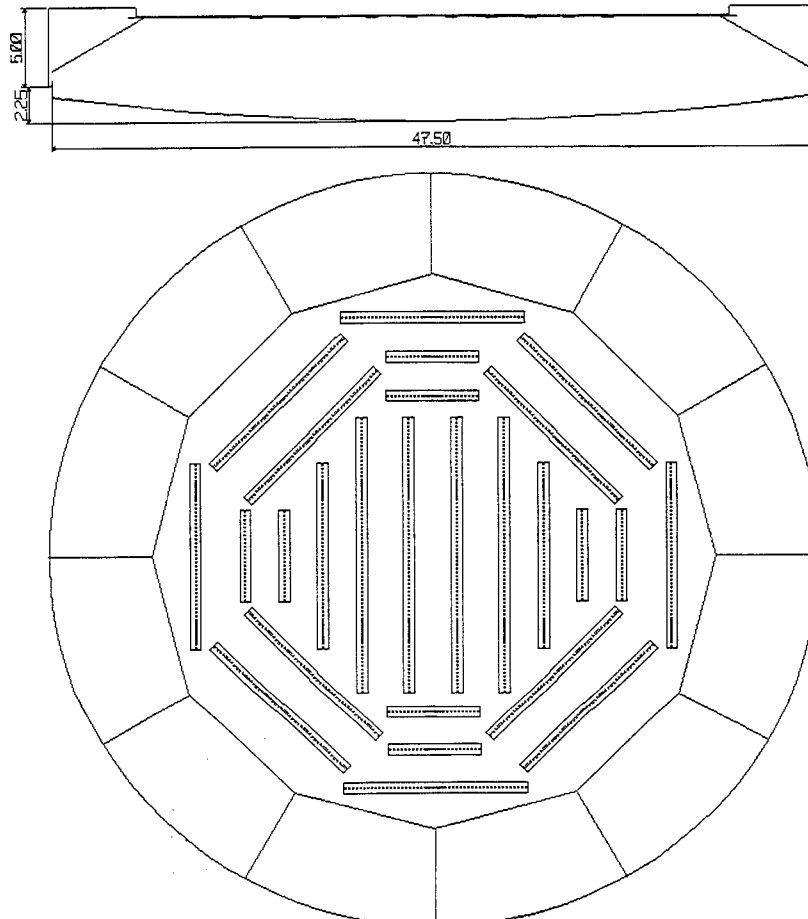
BALLABS CERTIFIED TEST REPORT NO.: 18693.0 DATE 03/10/15
 PREPARED FOR: IMPACT ARCHITECTURAL LIGHTING - SAINT LOUIS, MO
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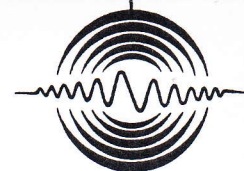
LUMINANCES-CD/SQ-M	
HORIZONTAL ANGLE	
	0
VERT	
ANGLE	
45	3751.
55	3558.
65	3299.
75	2815.
85	1929.
MAXIMUM BRIGHTNESSES NOT MEASURED	

ELECTRICAL CHARACTERISTICS 120.0V 1.9049A 227.390W

LUMINOUS EFFICACY (LUMENS / WATTS) = 65.1

TESTED IN ACCORDANCE WITH CURRENT IES STANDARDS
 UTILIZING ABSOLUTE PHOTOMETRY PER LM-79-08



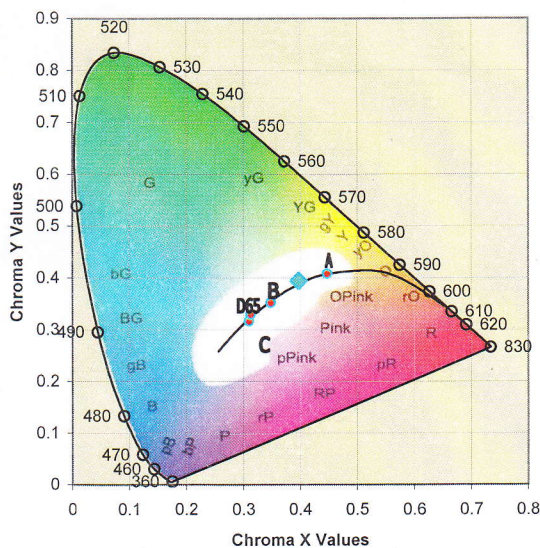


BALLABS CERTIFIED TEST REPORT NO.: 18693.0 A DATE 03/10/19
 PREPARED FOR: IMPACT ARCHITECTURAL LIGHTING - SAINT LOUIS, MO
 DESCRIPTION: 14-48, 8-24, 4-72LED ARRAYS 48"DIA PENDANT LUMINAIRE
 WHITE REFLECTOR w/MATTE WHITE ACRYLIC CONVEX BTM LENS
 4 MEANWELL #LPF-60D-42
 CATALOG NBR: P5548.LED-40HI-XX
 LAMP TYPE : M700C840D48N12STC, M700C840D72N18STC, M700C840D24N06STC

INPUT VOLTAGE (V)	120.0
INPUT CURRENT (A)	1.9049
INPUT WATTS (W)	227.390
POWER FACTOR	0.9947
THDv (%)	0.2464%
THDi (%)	5.5087%
LUMINOUS EFFICACY-LPW	65.1
LUMINOUS FLUX- LUMENS	14810
CHROMA x	0.3977
CHROMA y	0.3936
CHROMA u	0.2296
CHROMA v	0.3409
DELTA uv (Duv)	0.0025
CORR COLOR TEMP (K)	3692
COLOR REND INDEX (RA)	83.13
COLOR REND INDEX (R9)	18.7

Wavelength (nm)	Spectral Flux mW/nm	Wavelength (nm)	Spectral Flux mW/nm
350	1.4402	610	244.6766
360	1.5494	620	231.0150
370	1.2185	630	211.7109
380	1.3615	640	188.2085
390	1.5515	650	162.3823
400	2.0600	660	135.4166
410	4.3063	670	110.0921
420	17.1510	680	88.2612
430	66.8522	690	69.5595
440	169.7458	700	53.8744
450	176.8558	710	40.8604
460	100.0295	720	30.6019
470	63.8882	730	22.6008
480	65.1631	740	16.9054
490	91.7375	750	12.7004
500	123.3394	760	9.5554
510	145.9717	770	7.1668
520	161.8811	780	5.2904
530	176.2635	790	4.0006
540	193.3733	800	3.0243
550	210.4595	810	2.2835
560	225.2161	820	1.7517
570	236.6481	830	1.3639
580	245.5850	840	1.0534
590	250.3303	850	0.8498
600	250.7605		

Chromaticity Diagram CIE 1931 2 Degree



Data collected utilizing a Labsphere integrating sphere and 2100 spectroradiometer. Calibration of the spectroradiometer-sphere is traceable to the National Institute of Standards and Technology.



Kelly C. Lerbs
 Kelly C. Lerbs
 Vice President

NVLAP LAB CODE 200921-0

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