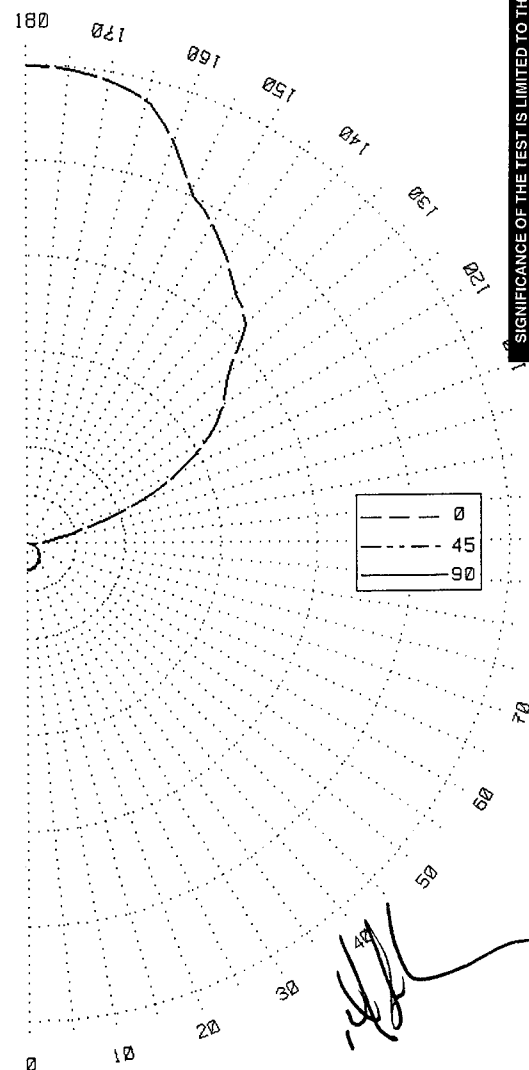


BALLABS CERTIFIED TEST REPORT NO.: 19471.0 DATE 08/31/16  
PREPARED FOR: IMPACT ARCHITECTURAL LIGHTING - SAINT LOUIS, MO  
DESCRIPTION: 12-48LED ARRAY 48"DIA MOD PEND LUMINAIRE w/WHITE REFL & 1/8  
CLR ACRYLIC TOP LENS/WHITE CTR RND REFL & FROST ACRYLIC BTM  
LENS w/.125"WHITE ACRYLIC BTM DOME 4ROAL STRATO #RSLD035-06  
CATALOG NBR: P1848-35HI-XX  
LAMP TYPE : M700C835D48N12STC

## CANDLEPOWER DISTRIBUTION

VERT ANG	AVERAGE CANDELA	ZONAL LUMENS
0	215.	
5	214.	20.4
10	211.	
15	206.	58.3
20	197.	
25	189.	87.7
30	179.	
35	167.	105.0
40	153.	
45	138.	107.2
50	124.	
55	107.	95.7
60	90.	
65	76.	75.4
70	61.	
75	49.	51.8
80	36.	
85	28.	30.3
90	22.	
95	101.	110.6
100	239.	
105	532.	563.3
110	947.	
115	1397.	1386.6
120	1762.	
125	2011.	1803.8
130	2217.	
135	2597.	2011.5
140	2738.	
145	2921.	1834.7
150	3113.	
155	3273.	1515.0
160	3609.	
165	3879.	1099.7
170	3976.	
175	4029.	384.6
180	4049.	



**NVLAP**<sup>®</sup>  
TESTING

NVLAP LAB CODE 200921-0

## LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	166.	NA.	1.5	90-120	2060.	NA.	18.2
0- 40	271.	NA.	2.4	90-130	3864.	NA.	34.1
0- 60	474.	NA.	4.2	90-150	7710.	NA.	68.0
0- 90	632.	NA.	5.6	90-180	10710.	NA.	94.4
TOTAL LUMINAIRE =				0-180	11342.	NA.	100.0

IES SPACING CRITERIA: ADJACENT= 1.2 DIAGONAL= .9

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\*\*\*\*\*

LUMINANCES-CD/SQ-M  
 HORIZONTAL ANGLE

VERT	0
ANGLE	
45	137.
55	120.
65	102.
75	85.
85	72.

\*\*MAXIMUM BRIGHTNESSES NOT MEASURED\*\*

\*\*\*\*\*

ZONAL CAVITY COEFFICIENTS OF UTILIZATION

EFFECTIVE FLOOR CAVITY REFLECTANCE=.20

CEILING	.80				.70				.50				.30				.10				.00
WALL	.70	.50	.30	.10	.70	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.50	.30	.10	.00
RCR																					
0	.97	.97	.97	.97	.83	.83	.83	.83	.59	.59	.59	.36	.36	.36	.15	.15	.15	.15	.15	.15	.06
1	.88	.84	.80	.76	.76	.72	.69	.66	.51	.49	.47	.31	.30	.30	.13	.13	.13	.13	.13	.13	.05
2	.80	.73	.67	.62	.69	.63	.58	.54	.44	.42	.39	.27	.26	.25	.12	.11	.11	.11	.11	.11	.04
3	.73	.64	.57	.52	.62	.55	.50	.45	.39	.36	.33	.24	.22	.21	.10	.10	.10	.10	.10	.10	.03
4	.66	.56	.49	.43	.57	.49	.43	.38	.35	.31	.28	.21	.19	.18	.09	.08	.08	.08	.08	.08	.03
5	.61	.50	.42	.37	.52	.43	.37	.32	.31	.27	.24	.19	.17	.15	.08	.07	.07	.07	.07	.07	.02
6	.56	.45	.37	.32	.48	.39	.33	.28	.28	.24	.21	.17	.15	.13	.07	.06	.06	.06	.06	.06	.02
7	.51	.40	.33	.28	.44	.35	.29	.25	.25	.21	.18	.16	.13	.11	.07	.06	.05	.05	.05	.05	.02
8	.48	.36	.29	.25	.41	.32	.26	.22	.23	.19	.16	.14	.12	.10	.06	.05	.04	.04	.04	.04	.02
9	.44	.33	.26	.22	.38	.29	.23	.19	.21	.17	.14	.13	.11	.09	.06	.05	.04	.04	.04	.04	.01
10	.41	.30	.24	.20	.36	.26	.21	.17	.19	.15	.13	.12	.10	.08	.05	.04	.04	.04	.04	.04	.01

TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

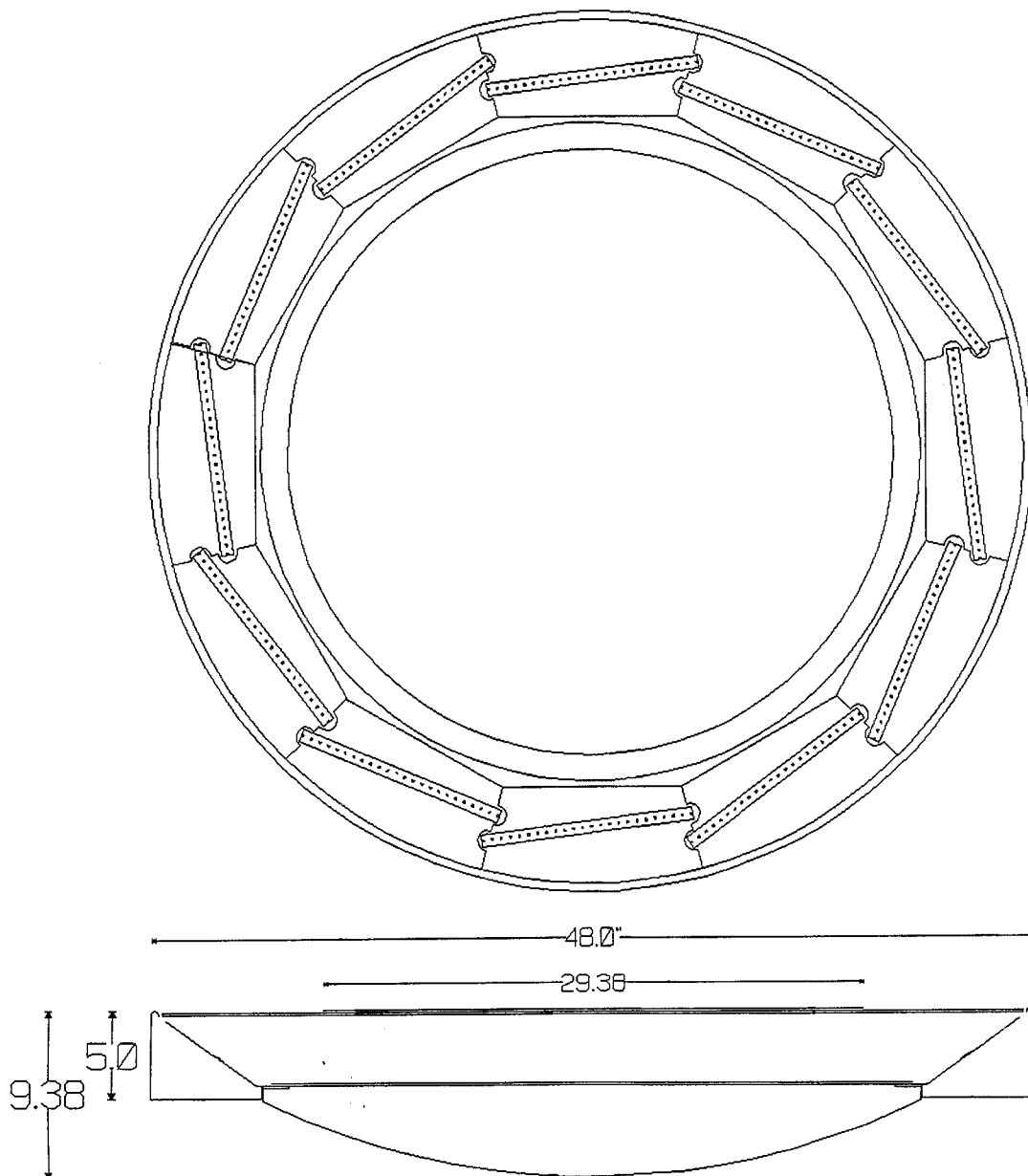
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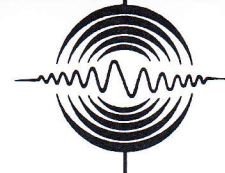
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ELECTRICAL CHARACTERISTICS 120.0V .9599A 108.430W

LUMINOUS EFFICACY (LUMENS / WATTS) = 104.6

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

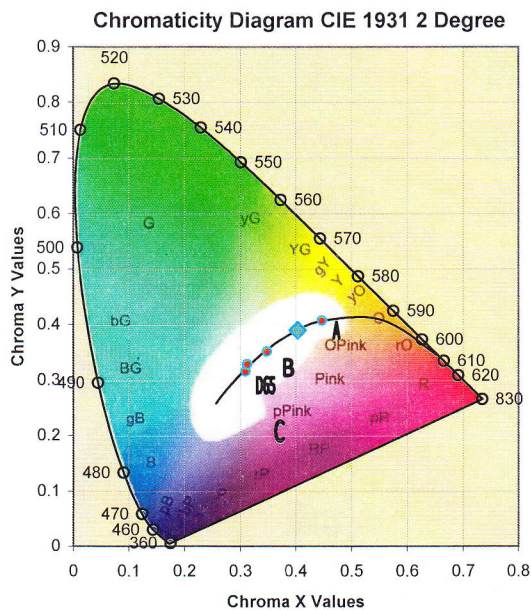




BALLABS CERTIFIED TEST REPORT NO.: 19471.0 A DATE 08/31/16  
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CATALOG NBR: P1848-35HI-XX  
LAMP TYPE : M700C835D48N12STC

INPUT VOLTAGE (V)	120.0
INPUT CURRENT (A)	0.9599
INPUT WATTS (W)	108.430
POWER FACTOR	0.9411
THDv (%)	0.298
THDi (%)	25.753
LUMINOUS EFFICACY-LPW	104.6
LUMINOUS FLUX- LUMENS	11342
CHROMA x	0.4042
CHROMA y	0.3899
CHROMA u	0.2354
CHROMA v	0.3405
DELTA uv (Duv)	-0.0001
CORR COLOR TEMP (K)	3517
COLOR REND INDEX (RA)	85.75
COLOR REND INDEX (R9)	25.8

Wavelength (nm)	Spectral Flux mW/nm	Wavelength (nm)	Spectral Flux mW/nm
350	1.2348	610	200.4073
360	1.5848	620	190.4424
370	1.7677	630	174.6610
380	1.9396	640	153.7701
390	1.7987	650	131.0244
400	1.8974	660	108.1916
410	2.6079	670	86.7253
420	6.2366	680	68.6207
430	19.8838	690	53.0341
440	58.2813	700	40.4791
450	149.2949	710	30.4443
460	127.5295	720	22.8895
470	86.8796	730	16.9807
480	66.3700	740	12.5296
490	76.1430	750	9.2687
500	91.3561	760	6.9271
510	104.5146	770	5.0959
520	114.7055	780	3.7802
530	125.5580	790	2.8230
540	139.0695	800	2.1117
550	153.4796	810	1.6299
560	167.4861	820	1.2425
570	180.1985	830	0.9706
580	191.1040	840	0.7556
590	199.6541	850	0.5633
600	203.4276		



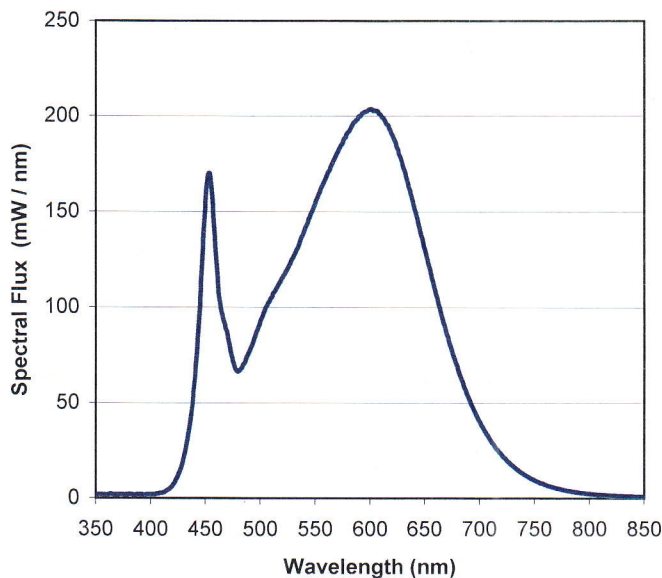
Data collected utilizing a Labsphere integrating sphere and 2100 spectroradiometer. Calibration of the spectroradiometer-sphere is traceable to the National Institute of Standards and Technology.



NVLAP LAB CODE 200921-0

*Kelly C. Lerbs*

Kelly C. Lerbs  
Vice President



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