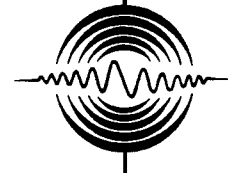


BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC.

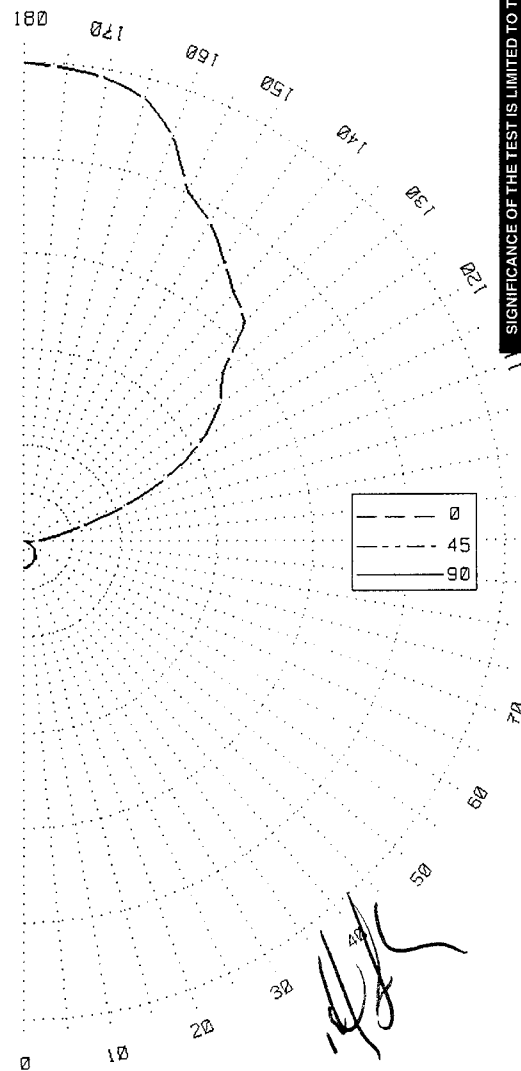
1618 HEADLAND DR.
FENTON, MO 63026
(636) 343-6006
(636) 343-6051 FAX



BALLABS CERTIFIED TEST REPORT NO.: 19455.0 DATE 08/19/16
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 #RSLD035-6A
CATALOG NBR: P1848-35HI-XX
LAMP TYPE : M700C835D48N12STC

CANDLEPOWER DISTRIBUTION

VERT ANG	AVERAGE CANDELA	ZONAL LUMENS
0	199.	
5	198.	18.9
10	194.	
15	188.	53.4
20	181.	
25	173.	80.0
30	164.	
35	152.	95.7
40	139.	
45	125.	96.6
50	111.	
55	95.	85.4
60	80.	
65	65.	64.8
70	53.	
75	39.	41.7
80	29.	
85	21.	23.1
90	20.	
95	117.	127.3
100	239.	
105	490.	518.3
110	869.	
115	1271.	1261.4
120	1616.	
125	1863.	1671.5
130	2013.	
135	2414.	1869.4
140	2527.	
145	2691.	1690.2
150	2873.	
155	3006.	1391.6
160	3358.	
165	3583.	1015.7
170	3673.	
175	3715.	354.6
180	3739.	



NVLAP[®]
TESTING

NVLAP LAB CODE 200921-0

LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	152.	NA.	1.5	90-120	1907.	NA.	18.2
0- 40	248.	NA.	2.4	90-130	3578.	NA.	34.2
0- 60	430.	NA.	4.1	90-150	7138.	NA.	68.2
0- 90	560.	NA.	5.3	90-180	9900.	NA.	94.7
TOTAL LUMINAIRE =				0-180	10459.	NA.	100.0

IES SPACING CRITERIA: ADJACENT= 1.2 DIAGONAL= .9

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LUMINANCES-CD/SQ-M

HORIZONTAL ANGLE

VERT ANGLE	0
45	121.
55	104.
65	84.
75	65.
85	50.

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	.05
1	.88	.84	.80	.76	.75	.72	.69	.66	.51	.49	.47	.31	.30	.29	.13	.13	.13	.13	.13	.13	.04
2	.80	.73	.67	.62	.69	.63	.58	.54	.44	.42	.39	.27	.26	.24	.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	.43	.37	.52	.43	.37	.33	.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	.52	.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	.05	.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

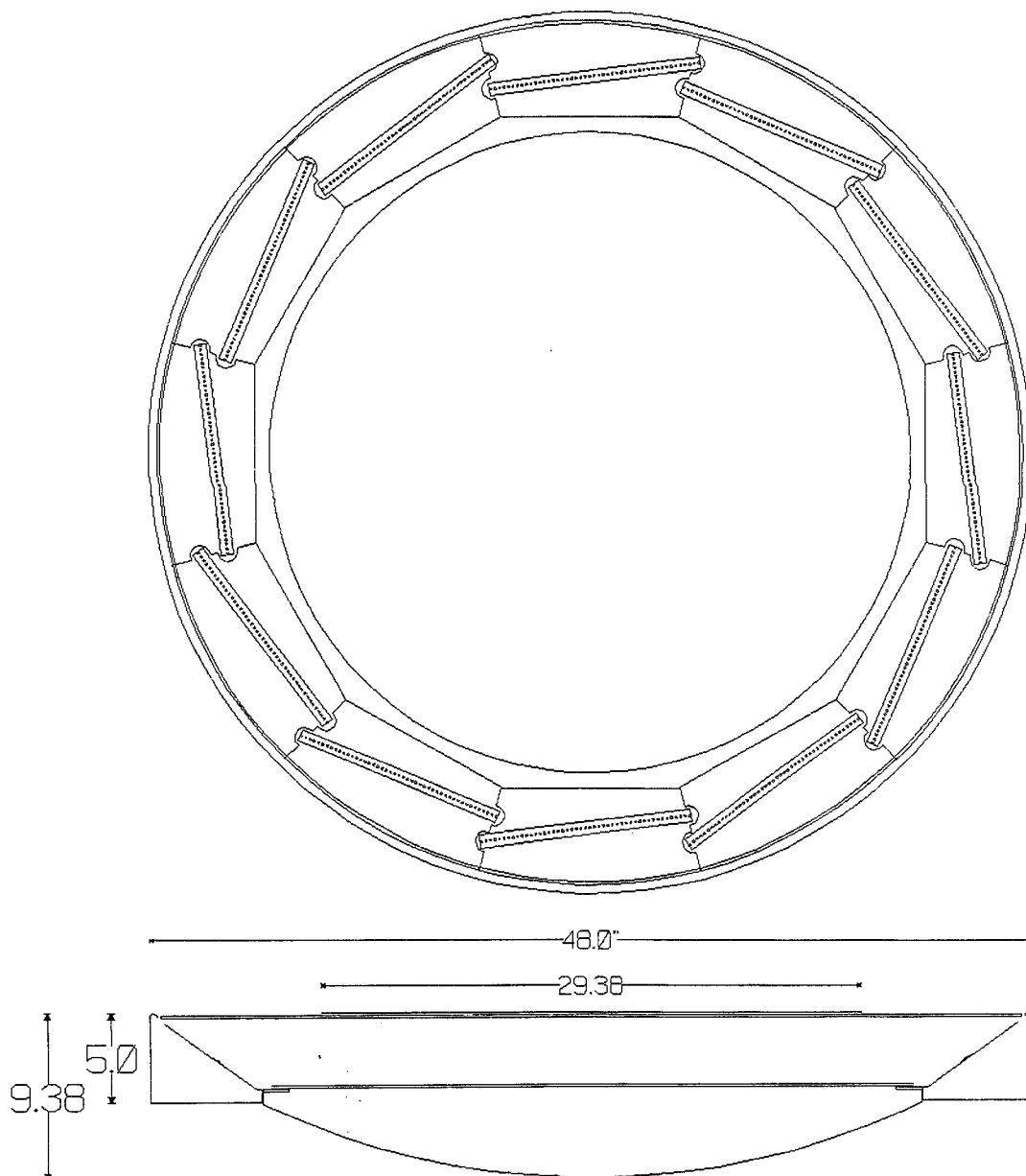
TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

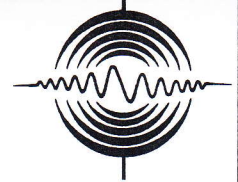
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LAMP TYPE : M700C835D48N12STC

ELECTRICAL CHARACTERISTICS 120.0V .8389A 96.060W

LUMINOUS EFFICACY (LUMENS / WATTS) = 108.9

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

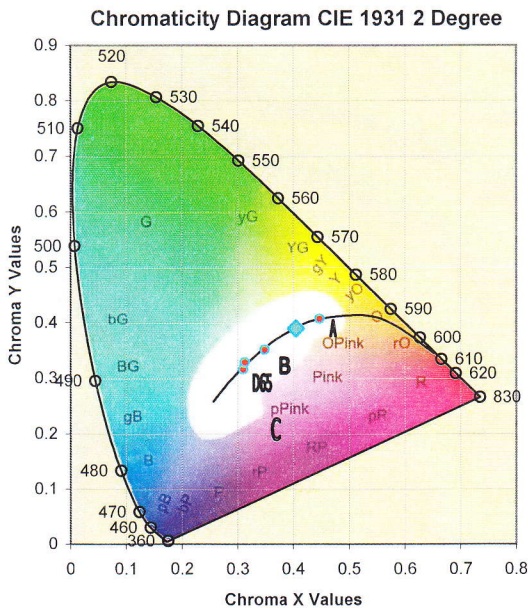




BALLABS CERTIFIED TEST REPORT NO.: 19455.0 A DATE 08/19/16
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CATALOG NBR: P1848-35HI-XX
LAMP TYPE : M700C835D48N12STC

INPUT VOLTAGE (V)	120.1
INPUT CURRENT (A)	0.8386
INPUT WATTS (W)	96.060
POWER FACTOR	0.9541
THDv (%)	0.210
THDi (%)	21.972
LUMINOUS EFFICACY-LPW	108.9
LUMINOUS FLUX- LUMENS	10459
CHROMA x	0.4050
CHROMA y	0.3904
CHROMA u	0.2356
CHROMA v	0.3407
DELTA uv (Duv)	-0.0001
CORR COLOR TEMP (K)	3504
COLOR REND INDEX (RA)	85.64
COLOR REND INDEX (R9)	25.3

Wavelength (nm)	Spectral Flux mW/nm	Wavelength (nm)	Spectral Flux mW/nm
350	1.2976	610	185.0473
360	1.7120	620	176.4583
370	1.5744	630	161.4309
380	1.5954	640	142.0252
390	1.3727	650	120.9588
400	1.6282	660	99.6228
410	2.2773	670	80.1387
420	5.5068	680	63.3389
430	17.8558	690	48.8522
440	52.8888	700	37.1733
450	137.2740	710	28.0964
460	115.8445	720	20.9521
470	79.3691	730	15.5238
480	60.7373	740	11.4919
490	69.9926	750	8.4616
500	84.0043	760	6.3004
510	96.0328	770	4.6649
520	105.1214	780	3.4197
530	115.5707	790	2.5480
540	128.0947	800	1.9198
550	141.4039	810	1.4346
560	154.6095	820	1.1114
570	166.2476	830	0.8191
580	176.5910	840	0.6697
590	184.3197	850	0.4946
600	187.4838		

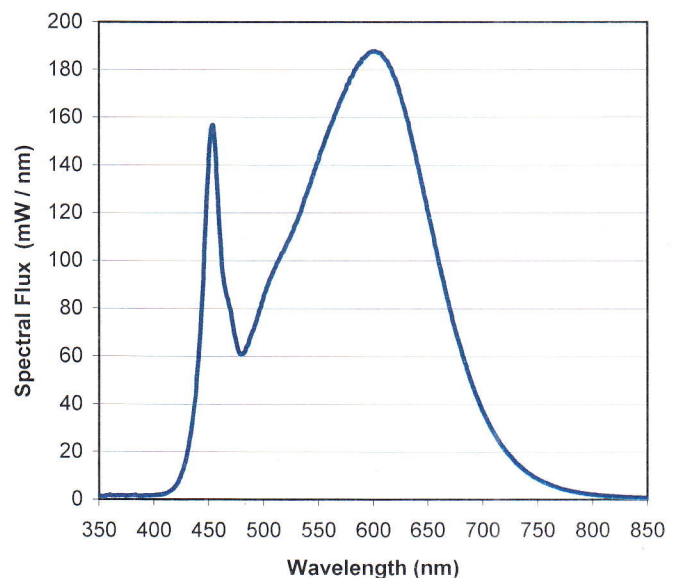


Data collected utilizing a Labsphere integrating sphere and 2100 spectroradiometer. Calibration of the spectroradiometer-sphere is traceable to the National Institute of Standards and Technology.



NVLAP LAB CODE 200921-0

Kelly C. Lerbs
Kelly C. Lerbs
Vice President



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