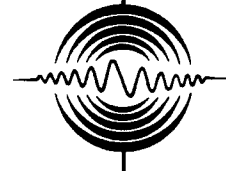


BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC.

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



BALLABS CERTIFIED TEST REPORT NO.: 19472.0 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: P1848-40HI-XX
LAMP TYPE : M700C840D48N12STC

CANDLEPOWER DISTRIBUTION

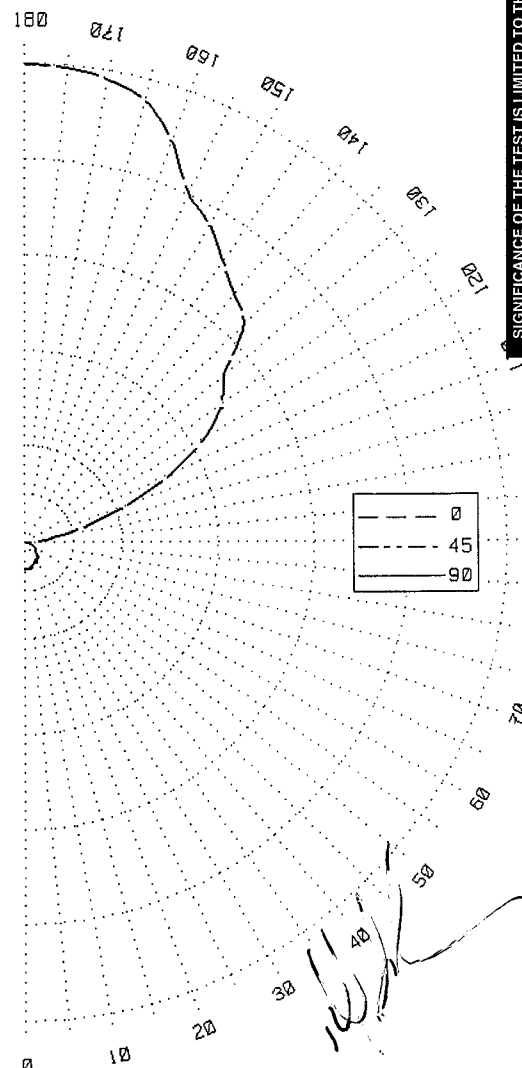
VERT
ANG

AVERAGE CANDELA

0	229.
5	229.
10	226.
15	219.
20	210.
25	202.
30	190.
35	178.
40	163.
45	148.
50	132.
55	115.
60	97.
65	80.
70	65.
75	51.
80	39.
85	28.
90	21.
95	115.
100	252.
105	546.
110	945.
115	1426.
120	1849.
125	2122.
130	2287.
135	2735.
140	2863.
145	3041.
150	3255.
155	3408.
160	3779.
165	4061.
170	4175.
175	4227.
180	4248.

ZONAL
LUMENS

21.8
62.2
93.4
112.0
114.4
102.8
79.3
54.0
30.0
125.0
577.1
1415.4
1903.4
2118.3
1910.1
1577.4
1151.1
403.5



NVLAP[®]
TESTING

NVLAP LAB CODE 200921-0

LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	177.	NA.	1.5	90-120	2118.	NA.	17.9
0- 40	289.	NA.	2.4	90-130	4021.	NA.	33.9
0- 60	507.	NA.	4.3	90-150	8049.	NA.	67.9
0- 90	670.	NA.	5.7	90-180	11181.	NA.	94.3
TOTAL LUMINAIRE =				0-180	11851.	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	146.
55	129.
65	108.
75	89.
85	71.

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	.77	.76	.72	.69	.67	.51	.49	.47	.31	.30	.30	.13	.13	.13	.13	.13	.13	.05
2	.80	.73	.67	.62	.69	.63	.58	.54	.45	.42	.39	.28	.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	.22	.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	.07	.07	.07	.07	.07	.02
7	.52	.40	.33	.28	.44	.35	.29	.25	.25	.21	.18	.16	.13	.11	.07	.06	.06	.06	.06	.06	.02
8	.48	.36	.29	.25	.41	.32	.26	.22	.23	.19	.16	.14	.12	.10	.06	.05	.05	.05	.05	.05	.02
9	.44	.33	.26	.22	.38	.29	.23	.19	.21	.17	.14	.13	.11	.09	.06	.05	.05	.05	.05	.05	.01
10	.41	.30	.24	.20	.36	.26	.21	.17	.19	.15	.13	.12	.10	.08	.05	.04	.04	.04	.04	.04	.01

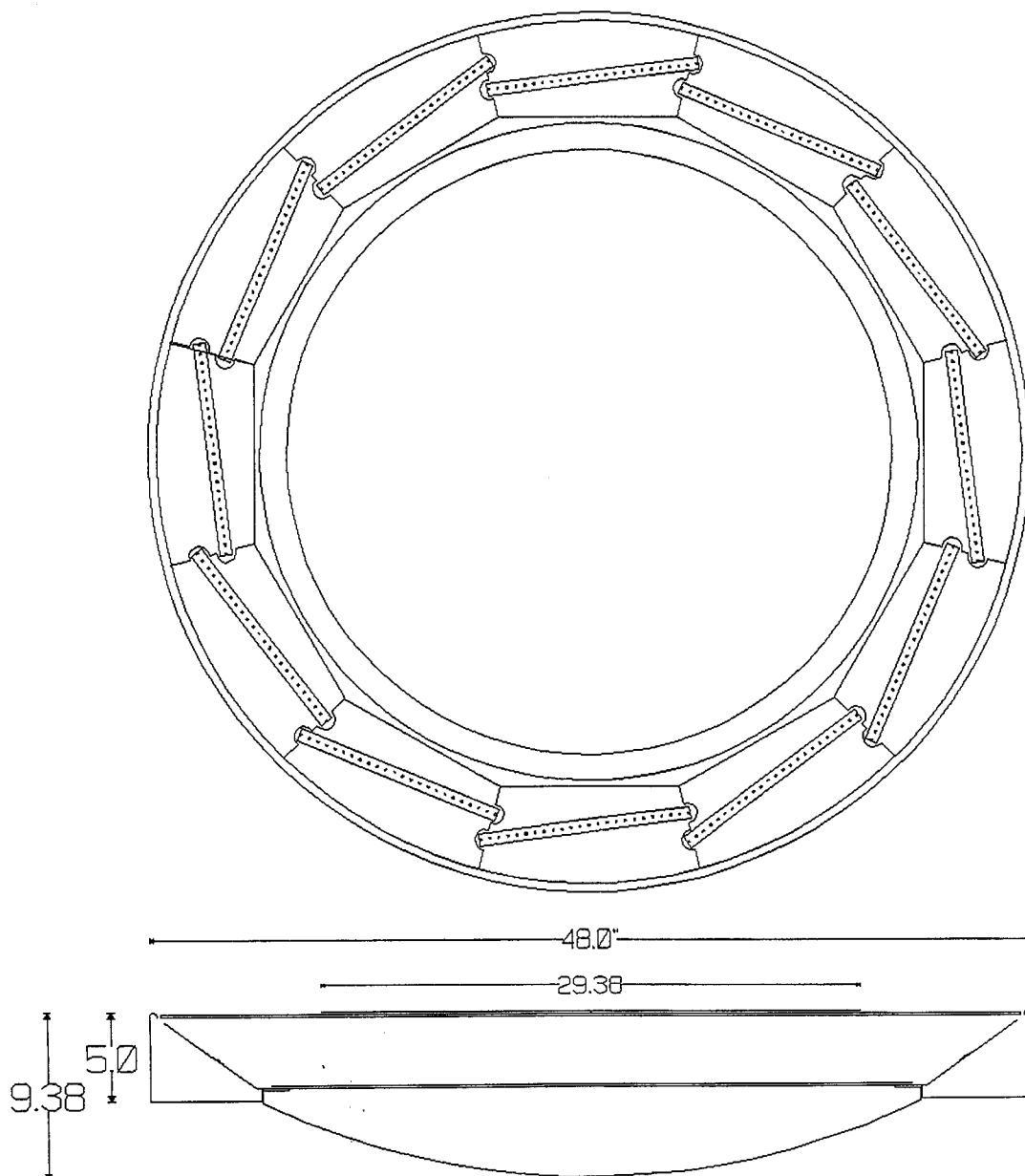
TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

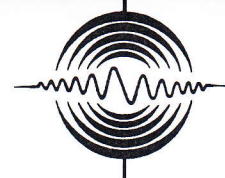
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LENS w/.125"WHITE ACRYLIC BTM DOME 4ROAL STRATO #RSLD035-06
CATALOG NBR: P1848-40HI-XX
LAMP TYPE : M700C840D48N12STC

ELECTRICAL CHARACTERISTICS 120.0V .9721A 110.260W

LUMINOUS EFFICACY (LUMENS / WATTS) = 107.5

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

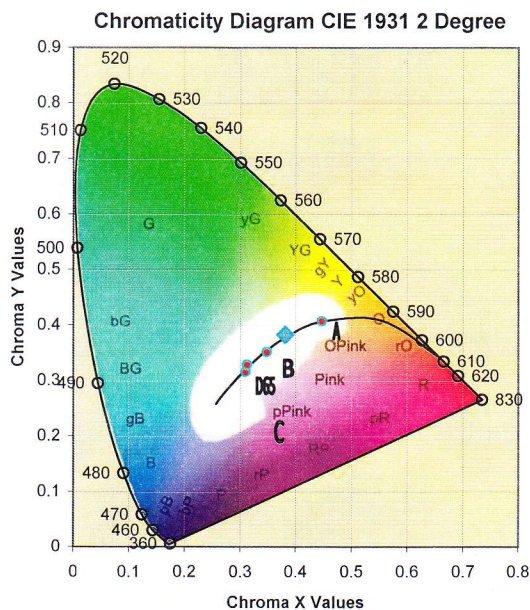




BALLABS CERTIFIED TEST REPORT NO.: 19472.0 A DATE 08/31/16
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CATALOG NBR: P1848-40HI-XX
LAMP TYPE : M700C840D48N12STC

INPUT VOLTAGE (V)	120.0
INPUT CURRENT (A)	0.9721
INPUT WATTS (W)	110.260
POWER FACTOR	0.9449
THDv (%)	0.285
THDi (%)	24.824
LUMINOUS EFFICACY-LPW	107.5
LUMINOUS FLUX- LUMENS	11851
CHROMA x	0.3819
CHROMA y	0.3832
CHROMA u	0.2236
CHROMA v	0.3364
DELTA uv (Duv)	0.0025
CORR COLOR TEMP (K)	4006
COLOR REND INDEX (RA)	82.27
COLOR REND INDEX (R9)	16.3

Wavelength (nm)	Spectral Flux mW/nm	Wavelength (nm)	Spectral Flux mW/nm
350	1.8009	610	185.9246
360	2.2992	620	174.1685
370	2.3048	630	158.1047
380	2.2204	640	138.5663
390	2.8726	650	117.5040
400	4.3704	660	97.0262
410	8.4851	670	77.8965
420	26.1257	680	61.6226
430	83.5825	690	47.7005
440	195.1292	700	36.6072
450	143.8832	710	27.6480
460	72.0809	720	20.8522
470	44.6343	730	15.4923
480	54.1091	740	11.5077
490	79.9730	750	8.5822
500	107.0907	760	6.3978
510	124.9624	770	4.7643
520	136.5666	780	3.5315
530	147.7774	790	2.6514
540	160.4299	800	1.9906
550	172.2145	810	1.5250
560	181.9721	820	1.1691
570	188.5994	830	0.9195
580	192.7817	840	0.7029
590	194.1267	850	0.5799
600	192.6546		



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
Vice President

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