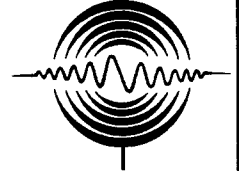


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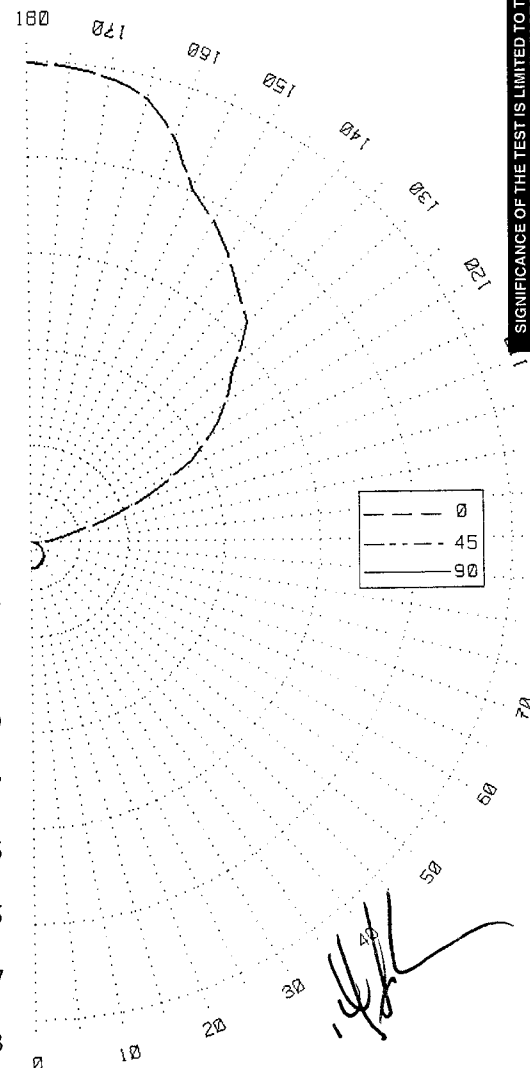
1618 HEADLAND DR.
FENTON, MO 63026
(636) 343-6006
(636) 343-6051 FAX



BALLABS CERTIFIED TEST REPORT NO.: 19456.0 DATE 08/22/16
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: P1848-40HI-XX
LAMP TYPE : M700C840D48N12STC

CANDLEPOWER DISTRIBUTION

VERT ANG	AVERAGE CANDELA	ZONAL LUMENS
0	209.	
5	208.	19.8
10	205.	
15	199.	56.4
20	192.	
25	184.	84.9
30	173.	
35	161.	101.0
40	147.	
45	133.	102.9
50	117.	
55	102.	91.6
60	86.	
65	72.	71.0
70	57.	
75	45.	48.1
80	34.	
85	24.	26.4
90	23.	
95	121.	131.9
100	247.	
105	497.	525.7
110	884.	
115	1300.	1290.5
120	1670.	
125	1916.	1718.6
130	2143.	
135	2474.	1915.7
140	2613.	
145	2796.	1756.3
150	2977.	
155	3130.	1448.6
160	3447.	
165	3701.	1049.1
170	3802.	
175	3851.	367.6
180	3877.	



NVLAP[®]
TESTING

NVLAP LAB CODE 200921-0

LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	161.	NA.	1.5	90-120	1948.	NA.	18.0
0- 40	262.	NA.	2.4	90-130	3667.	NA.	33.9
0- 60	457.	NA.	4.2	90-150	7339.	NA.	67.9
0- 90	602.	NA.	5.6	90-180	10204.	NA.	94.4

TOTAL LUMINAIRE = 0-180 10806. 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	129.
55	111.
65	92.
75	75.
85	58.

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	.45	.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	.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

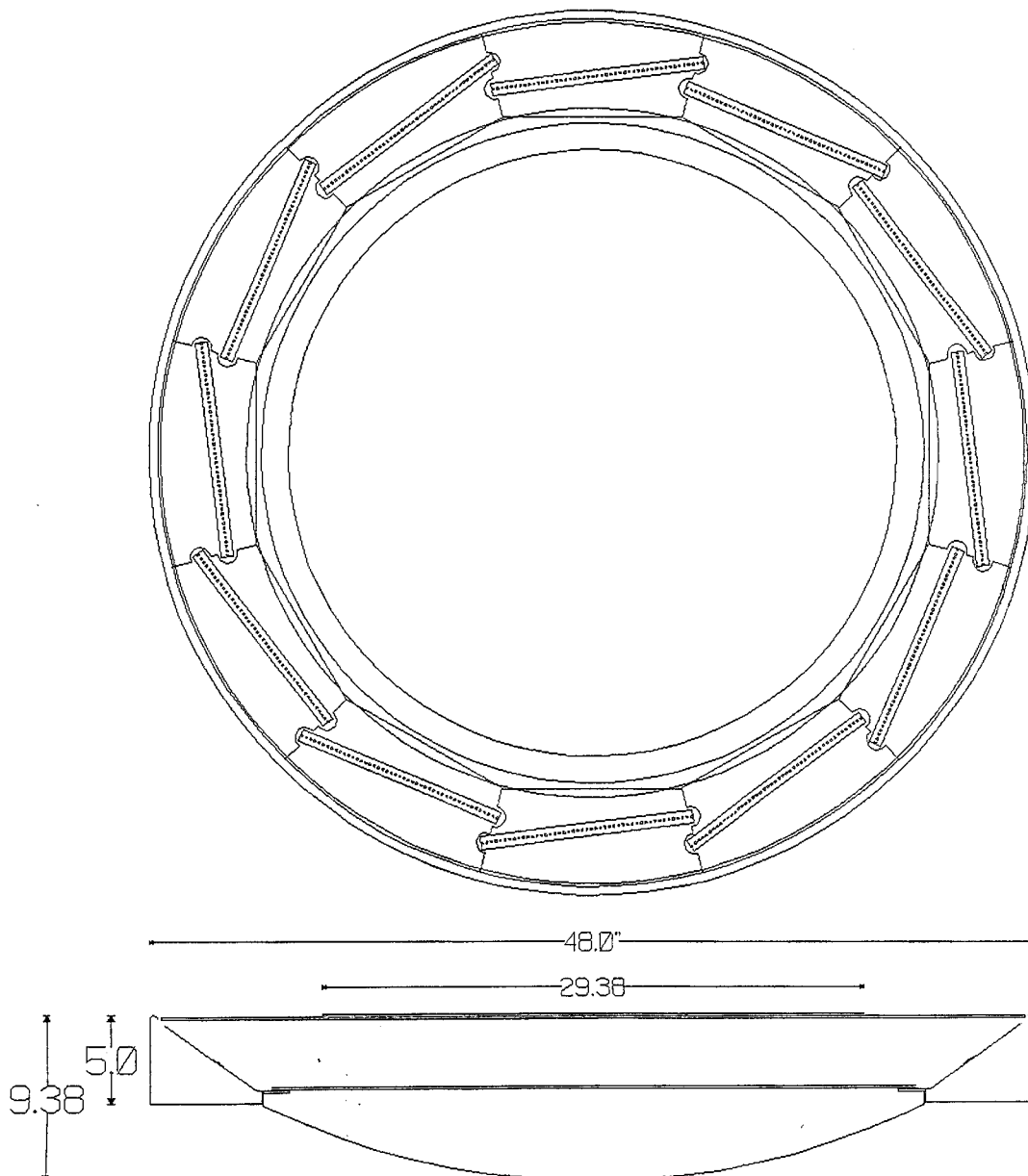
TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

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CATALOG NBR: P1848-40HI-XX
LAMP TYPE : M700C840D48N12STC

ELECTRICAL CHARACTERISTICS 120.0V .8498A 97.690W

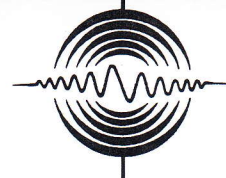
LUMINOUS EFFICACY (LUMENS / WATTS) = 110.6

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



BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC.

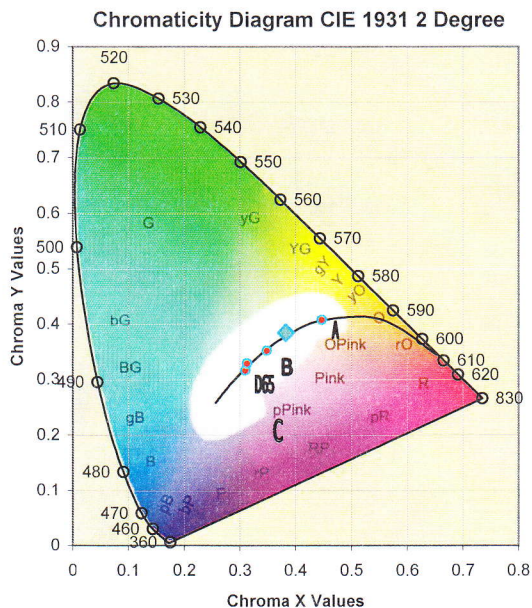
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BALLABS CERTIFIED TEST REPORT NO.: 19456.0 A DATE 08/22/16
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CATALOG NBR: P1848-40HI-XX
LAMP TYPE : M700C840D48N12STC

INPUT VOLTAGE (V)	120.0
INPUT CURRENT (A)	0.8498
INPUT WATTS (W)	97.690
POWER FACTOR	0.9579
THDv (%)	0.199
THDi (%)	20.971
LUMINOUS EFFICACY-LPW	110.6
LUMINOUS FLUX- LUMENS	10806
CHROMA x	0.3828
CHROMA y	0.3841
CHROMA u	0.2237
CHROMA v	0.3368
DELTA uv (Duv)	0.0028
CORR COLOR TEMP (K)	3992
COLOR REND INDEX (RA)	82.13
COLOR REND INDEX (R9)	15.7

Wavelength (nm)	Spectral Flux mW/nm	Wavelength (nm)	Spectral Flux mW/nm
350	1.4303	610	169.3472
360	1.8115	620	159.1459
370	2.0922	630	144.1431
380	2.1456	640	126.1116
390	2.5108	650	107.2560
400	3.7366	660	88.3474
410	7.3088	670	70.9961
420	23.3669	680	56.1222
430	75.2079	690	43.4099
440	177.5734	700	33.2627
450	127.8960	710	25.1296
460	64.3905	720	18.9505
470	39.7911	730	14.0442
480	48.7750	740	10.4453
490	72.5530	750	7.7347
500	97.4059	760	5.7454
510	113.7471	770	4.2573
520	124.2122	780	3.1635
530	134.3645	790	2.3814
540	146.3800	800	1.7863
550	156.9765	810	1.3888
560	166.1897	820	1.0678
570	172.3663	830	0.8126
580	175.6660	840	0.6360
590	177.3934	850	0.5122
600	176.0347		



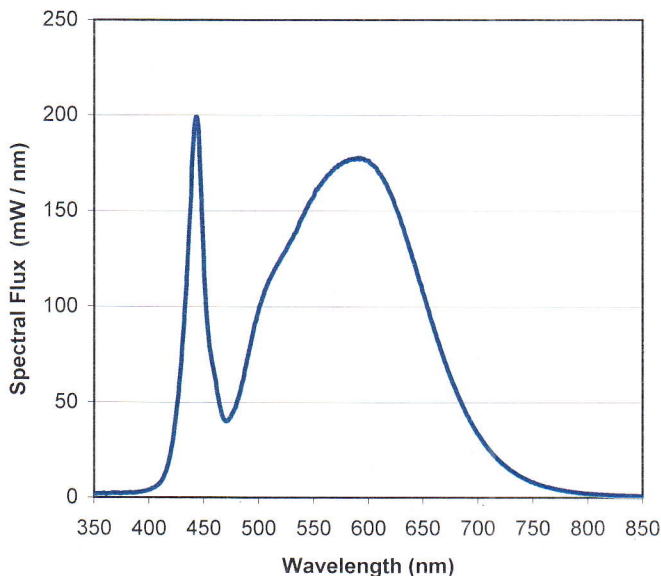
Data collected utilizing a Labsphere integrating sphere and 2100 spectroradiometer. Calibration of the spectroradiometer-sphere is traceable to the National Institute of Standards and Technology.



NVLAP LAB CODE 200921-0

[Signature]

Kelly C. Lerbs
Vice President



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