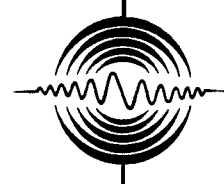


BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC.

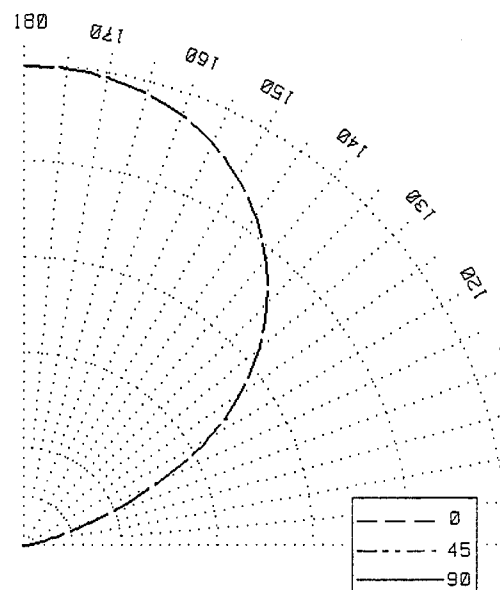
1618 HEADLAND DR.
FENTON, MO 63026
(636) 343-6006
(636) 343-6051 FAX



BALLABS CERTIFIED TEST REPORT NO.: 20775.0 DATE 03/28/19
PREPARED FOR: IMPACT ARCHITECTURAL LIGHTING - SAINT LOUIS, MO
DESCRIPTION: 12-18 LED 4.4"ARRAYS (TOP) w/CLEAR 3 PIECE .125"LENS
37"DIA WHITE ALUM PENDANT RING LUMINAIRE-TOP DISTRIBUTION
AC ELETRONICS #AC50CD1.4APC7 @ 600mA
CATALOG NBR: P7436-NDL-40HI
LAMP TYPE : LM-4.40K-80-54V

CANDLEPOWER DISTRIBUTION

VERT ANG	AVERAGE CANDELA	ZONAL LUMENS
0	0.	
5	0.	.0
10	0.	.0
15	0.	.0
20	0.	.0
25	0.	.0
30	0.	.0
35	0.	.0
40	0.	.0
45	0.	.0
50	0.	.0
55	0.	.0
60	0.	.0
65	0.	.0
70	0.	.0
75	0.	.0
80	0.	.0
85	0.	.0
90	0.	.0
95	3.	3.7
100	31.	
105	112.	118.0
110	296.	
115	525.	520.9
120	763.	
125	938.	841.1
130	1089.	
135	1218.	943.5
140	1330.	
145	1430.	898.0
150	1512.	
155	1578.	730.4
160	1631.	
165	1668.	472.9
170	1693.	
175	1708.	163.0
180	1710.	



NVLAP[®]
TESTING

NVLAP LAB CODE 200921-0

LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	0.	NA.	.0	90-120	643.	NA.	13.7
0- 40	0.	NA.	.0	90-130	1484.	NA.	31.6
0- 60	0.	NA.	.0	90-150	3325.	NA.	70.9
0- 90	0.	NA.	.0	90-180	4692.	NA.	100.0
TOTAL LUMINAIRE =				0-180	4692.	NA.	100.0

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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	.95	.95	.95	.95	.81	.81	.81	.81	.56	.56	.56	.32	.32	.32	.10	.10	.10	.10	.10	.10	.00
1	.86	.82	.79	.75	.74	.71	.68	.65	.48	.46	.45	.28	.27	.26	.09	.09	.08	.08	.08	.08	.00
2	.79	.72	.66	.61	.67	.61	.57	.53	.42	.39	.37	.24	.23	.22	.08	.07	.07	.07	.07	.07	.00
3	.72	.63	.56	.51	.61	.54	.48	.44	.37	.34	.31	.21	.20	.18	.07	.06	.06	.06	.06	.06	.00
4	.65	.55	.48	.43	.55	.48	.42	.37	.33	.29	.26	.19	.17	.15	.06	.06	.05	.05	.05	.05	.00
5	.60	.49	.42	.36	.51	.42	.36	.32	.29	.25	.22	.17	.15	.13	.05	.05	.04	.04	.04	.04	.00
6	.55	.44	.37	.31	.47	.38	.32	.27	.26	.22	.19	.15	.13	.12	.05	.04	.04	.04	.04	.04	.00
7	.51	.40	.32	.27	.43	.34	.28	.24	.24	.20	.17	.14	.12	.10	.04	.04	.03	.03	.03	.03	.00
8	.47	.36	.29	.24	.40	.31	.25	.21	.21	.18	.15	.12	.10	.09	.04	.03	.03	.03	.03	.03	.00
9	.44	.33	.26	.22	.37	.28	.23	.19	.20	.16	.13	.11	.09	.08	.04	.03	.03	.03	.03	.03	.00
10	.41	.30	.24	.19	.35	.26	.20	.17	.18	.14	.12	.10	.09	.07	.03	.03	.02	.02	.02	.02	.00

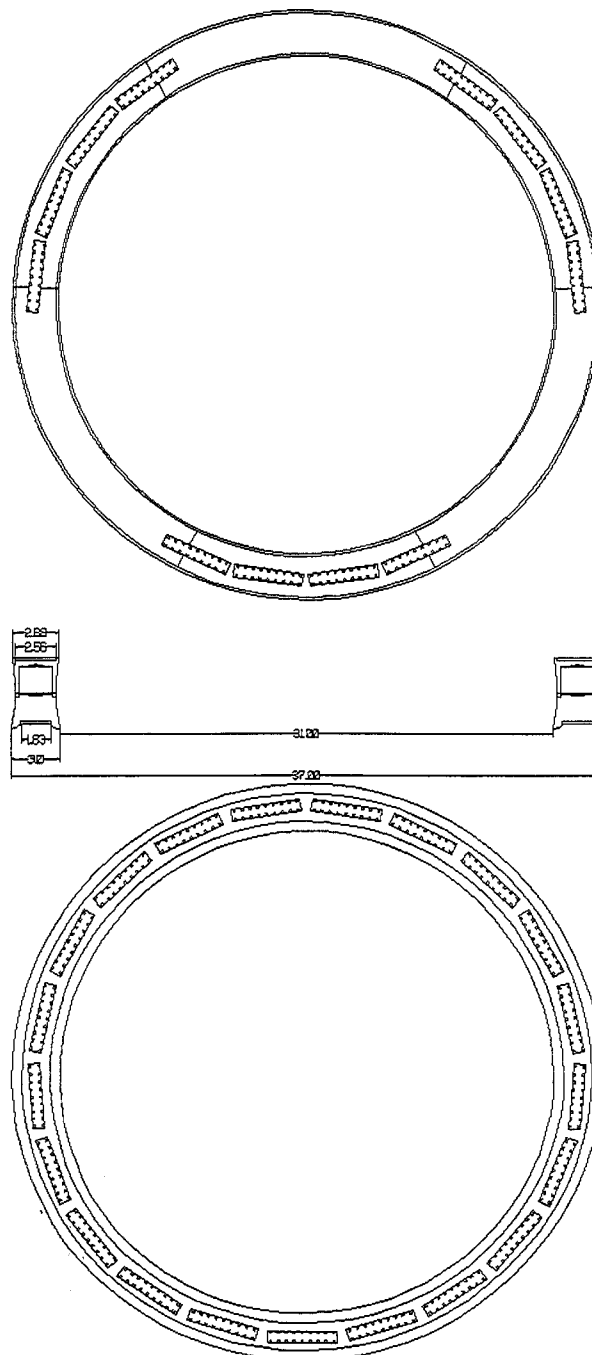
TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

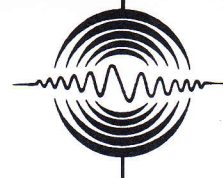
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LAMP TYPE : LM-4.40K-80-54V

ELECTRICAL CHARACTERISTICS 119.97V .2903A 34.7540W

LUMINOUS EFFICACY (LUMENS / WATTS) = 135.0

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

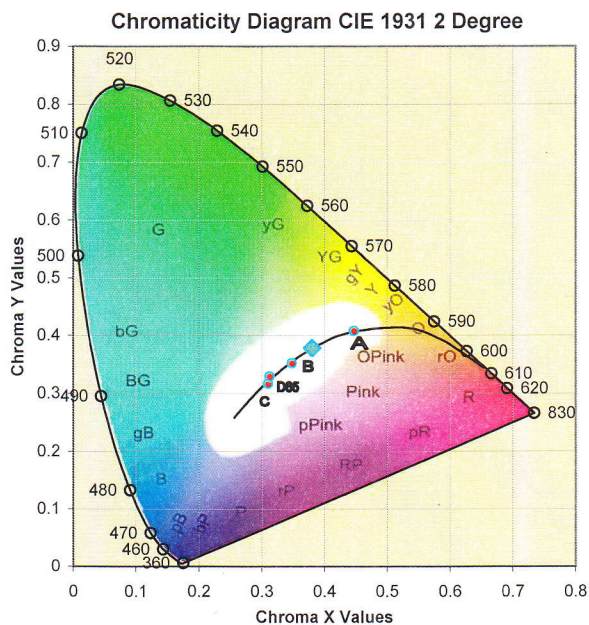




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LAMP TYPE : LM-4.40K-80-54V

INPUT VOLTAGE (V)	119.97
INPUT CURRENT (A)	0.2903
INPUT WATTS (W)	34.7540
POWER FACTOR	0.9980
THDv (%)	0.170
THDi (%)	3.406
LUMINOUS EFFICACY-LPW	135.0
LUMINOUS FLUX- LUMENS	4692
CHROMA x	0.3809
CHROMA y	0.3780
CHROMA u	0.2249
CHROMA v	0.5022
DELTA uv (Duv)	0.0005
CORR COLOR TEMP (K)	3997
COLOR REND INDEX (RA)	84.11
COLOR REND INDEX (R9)	11.5

Wavelength (nm)	Spectral Flux mW/nm	Wavelength (nm)	Spectral Flux mW/nm
350	0.4889	610	77.7745
360	0.6053	620	70.7504
370	0.4812	630	61.8973
380	0.5366	640	52.0265
390	0.5549	650	41.9512
400	0.6879	660	33.0443
410	1.3823	670	25.2265
420	4.1388	680	19.0963
430	12.6219	690	14.2633
440	34.3156	700	10.5870
450	81.8139	710	7.7722
460	57.9617	720	5.7181
470	37.6370	730	4.2145
480	28.3457	740	3.0809
490	32.9895	750	2.2715
500	41.7532	760	1.6819
510	48.3759	770	1.2523
520	52.4560	780	0.9282
530	56.1020	790	0.7100
540	60.2626	800	0.5324
550	64.6166	810	0.4061
560	69.4244	820	0.3031
570	74.2952	830	0.2569
580	78.3800	840	0.2067
590	81.3288	850	0.1699
600	81.1939		



Data collected per LM79-08 using 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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