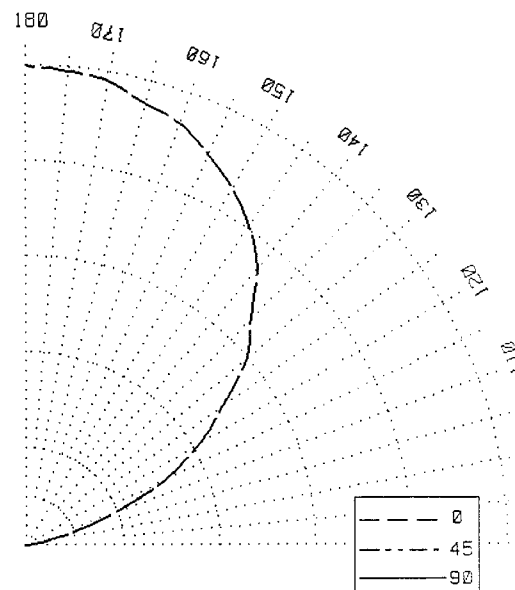


BALLABS CERTIFIED TEST REPORT NO.: 20540.0 DATE 07/27/18  
PREPARED FOR: IMPACT ARCHITECTURAL LIGHTING - ST. LOUIS, MO  
DESCRIPTION: 18-18 LED 4.5"ARRAYS TOP w/CLEAR 3 PIECE .125"LENS  
49"DIA WHITE ALUM PENDANT RING w/WHITE BODY  
1 AC ELECTRONICS #AC-50CD1.4APC7 @ 775mA  
CATALOG NBR: P7448-NDL-40HI  
LAMP TYPE : LM-4.4-40K-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.	
95	10.	10.7
100	69.	
105	206.	217.7
110	421.	
115	715.	709.9
120	941.	
125	1127.	1010.8
130	1352.	
135	1489.	1153.3
140	1685.	
145	1822.	1144.8
150	1930.	
155	2018.	934.2
160	2106.	
165	2146.	608.2
170	2214.	
175	2234.	213.2
180	2253.	



**NVLAP**<sup>®</sup>  
TESTING

NVLAP LAB CODE 200921-0

## LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	0.	NA.	.0	90-120	938.	NA.	15.6
0- 40	0.	NA.	.0	90-130	1949.	NA.	32.5
0- 60	0.	NA.	.0	90-150	4247.	NA.	70.8
0- 90	0.	NA.	.0	90-180	6003.	NA.	100.0
TOTAL LUMINAIRE =				0-180	6003.	NA.	100.0

THIS BALLABS REPORT WITH THE USE OF THE NVLAP LOGO SHALL NOT BE USED BY THIS CLIENT TO CLAIM PRODUCT CERTIFICATION, APPROVAL, OR ENDORSEMENT BY NVLAP, NIST, OR ANY AGENCY OF THE FEDERAL GOVERNMENT.

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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

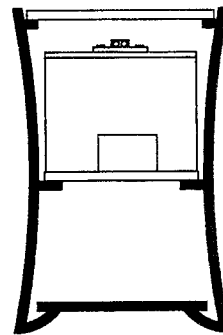
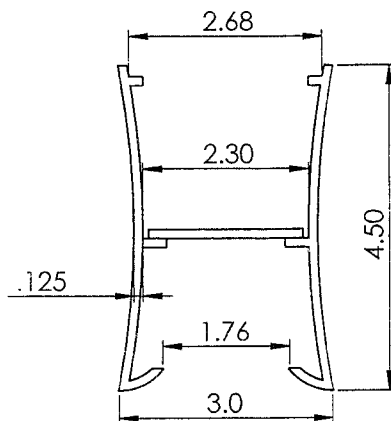
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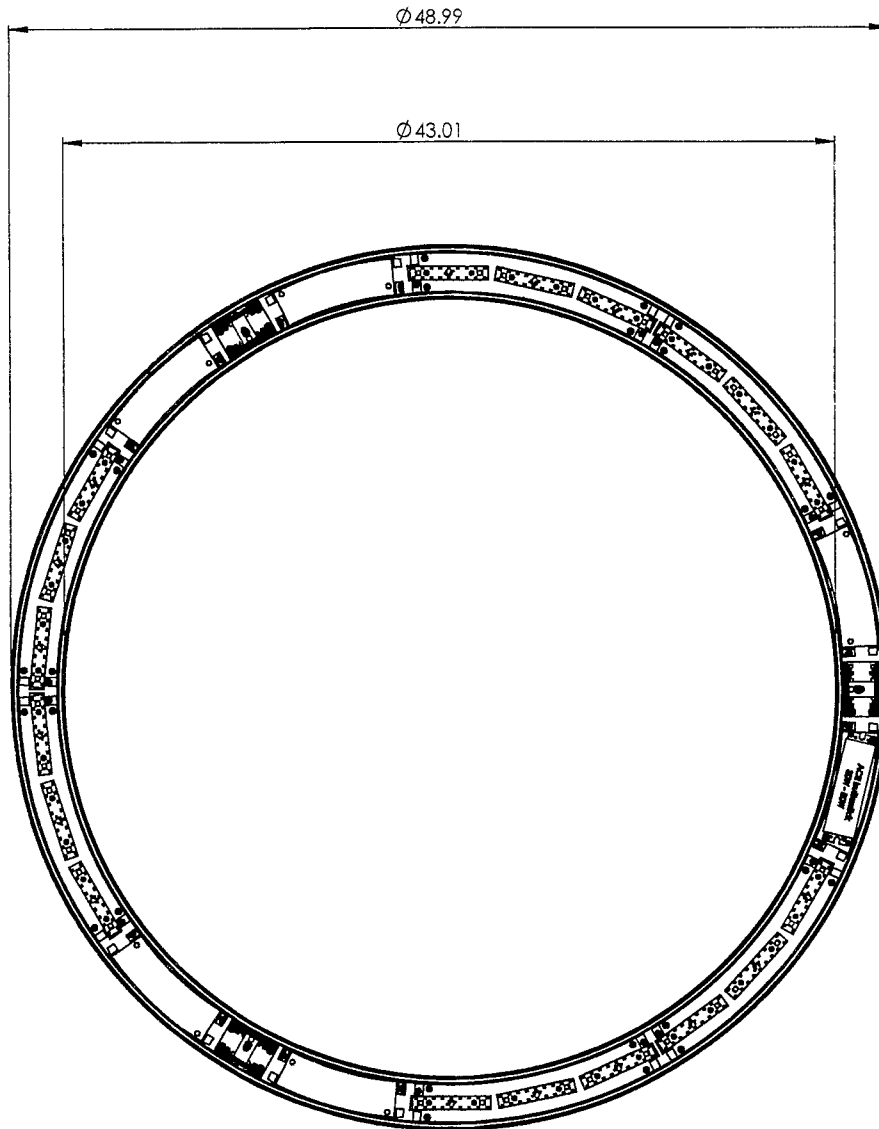
ELECTRICAL CHARACTERISTICS 119.99V .3678A 43.7980W

LUMINOUS EFFICACY (LUMENS / WATTS) = 137.1

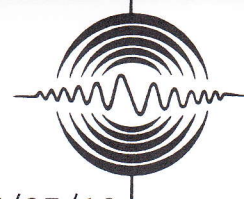
TESTED IN ACCORDANCE WITH CURRENT IES STANDARDS  
UTILIZING ABSOLUTE PHOTOMETRY PER LM-79-08



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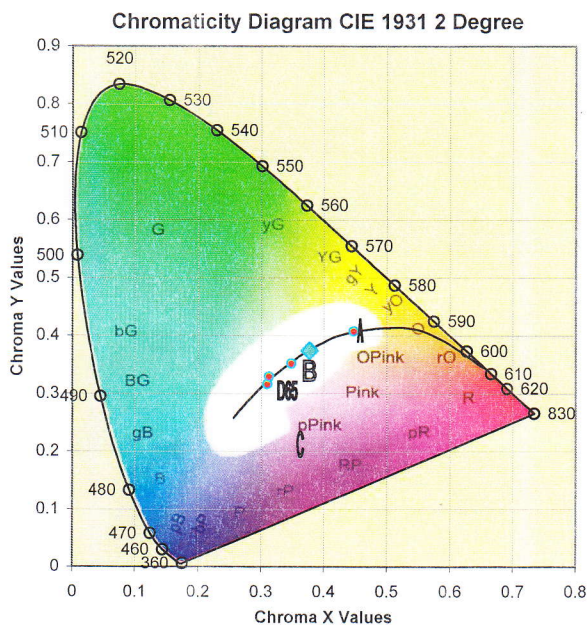
Top View



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LAMP TYPE : LM-4.4-40K-80-54V

INPUT VOLTAGE (V)	119.99
INPUT CURRENT (A)	0.3678
INPUT WATTS (W)	43.7980
POWER FACTOR	0.9924
THDv (%)	0.212
THDi (%)	3.231
LUMINOUS EFFICACY-LPW	137.1
LUMINOUS FLUX- LUMENS	6003
CHROMA x	0.3779
CHROMA y	0.3739
CHROMA u	0.2245
CHROMA v	0.5000
DELTA uv (Duv)	-0.0006
CORR COLOR TEMP (K)	4050
COLOR REND INDEX (RA)	84.55
COLOR REND INDEX (R9)	15.7

Wavelength (nm)	Spectral Flux mW/nm	Wavelength (nm)	Spectral Flux mW/nm
350	0.5786	610	98.4988
360	0.7532	620	90.3293
370	0.7369	630	79.6216
380	0.7654	640	67.2031
390	0.7754	650	54.9767
400	0.9600	660	43.8618
410	1.8163	670	34.0358
420	5.5453	680	25.9305
430	16.7860	690	19.5738
440	46.7871	700	14.6578
450	114.7454	710	10.9143
460	74.6505	720	8.1147
470	48.9457	730	6.0071
480	36.3443	740	4.3584
490	42.2617	750	3.2359
500	52.9977	760	2.4044
510	61.4483	770	1.7911
520	67.0868	780	1.3361
530	72.2149	790	1.0002
540	77.6805	800	0.7646
550	83.5506	810	0.5817
560	89.5159	820	0.4495
570	94.5214	830	0.3491
580	99.7329	840	0.2668
590	102.7500	850	0.1918
600	102.5832		



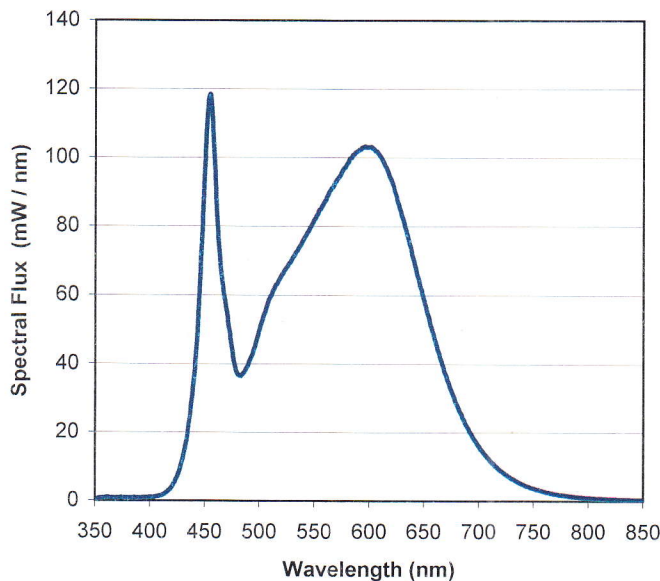
Data collected utilizing a Labsphere integrating sphere and 2100 spectroradiometer. Calibration of the spectroradiometer-sphere is traceable to the National Institute of Standards and Technology.



NVLAP LAB CODE 200921-0

*Kent Lerbs*

Kent Lerbs  
President



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