

BALLABS CERTIFIED TEST REPORT NO.: 20154.0 DATE 12/12/17
PREPARED FOR: IMPACT ARCHITECTURAL LIGHTING - SAINT LOUIS, MO
DESCRIPTION: 2-1.5"DIA LED ARRAYS (1UP/1DOWN) 9"TIKI LUMINAIRE
WHITE REFL & FROST ACRYLIC LENS-BTM & OPEN TOP
ROAL STRATO #RSLD035-12J, #RCL010-0250A
CATALOG NBR: P5109-40HI/UP-PTD-BL
LAMP TYPE : BXRC-40E4000-B-7X-SE

CANDLEPOWER DISTRIBUTION

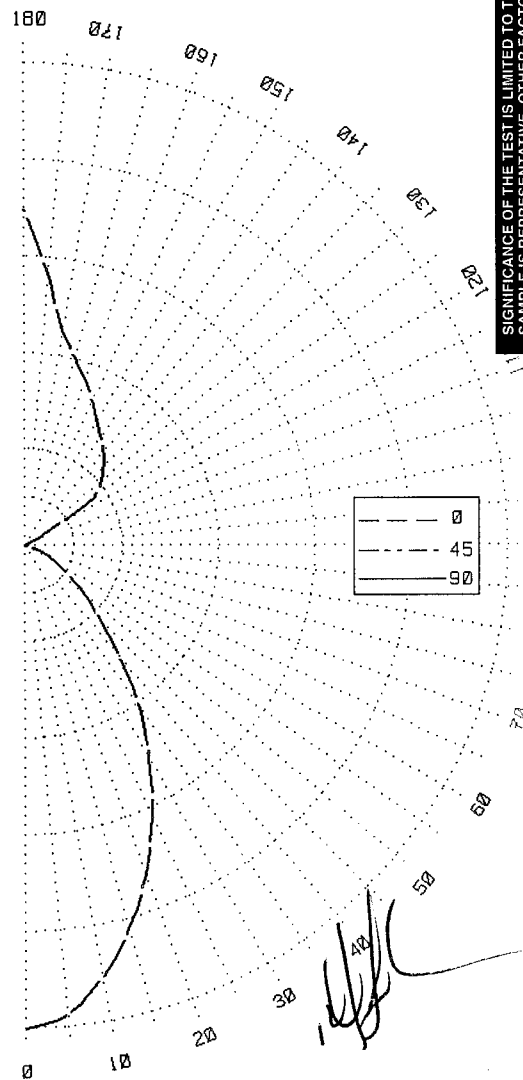
VERT
ANG

AVERAGE CANDELA

0	1612.
5	1573.
10	1467.
15	1327.
20	1170.
25	1000.
30	824.
35	665.
40	484.
45	357.
50	259.
55	185.
60	128.
65	86.
70	54.
75	29.
80	12.
85	3.
90	2.
95	1.
100	3.
105	6.
110	8.
115	9.
120	82.
125	288.
130	334.
135	372.
140	407.
145	440.
150	481.
155	530.
160	589.
165	648.
170	726.
175	912.
180	1121.

ZONAL
LUMENS

150.1
376.3
462.7
417.5
276.6
165.6
85.6
30.7
3.6
1.4
5.9
9.4
258.0
287.8
276.6
245.4
183.7
87.1



NVLAP[®]
TESTING

NVLAP LAB CODE 200921-0

LUMEN SUMMARY

ZONE	LUMENS	%LAMP	%FIXT	ZONE	LUMENS	%LAMP	%FIXT
0- 30	989.	NA.	29.8	90-120	17.	NA.	.5
0- 40	1407.	NA.	42.3	90-130	275.	NA.	8.3
0- 60	1849.	NA.	55.6	90-150	839.	NA.	25.2
0- 90	1969.	NA.	59.2	90-180	1355.	NA.	40.8
TOTAL LUMINAIRE =				0-180	3324.	NA.	100.0

IES SPACING CRITERIA: ADJACENT= .9 DIAGONAL= .6

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LUMINANCES-CD/SQ-M
 HORIZONTAL ANGLE

VERT
 ANGLE
 45 13690.
 55 8724.
 65 5529.
 75 3038.
 85 1031.

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	1.09	1.09	1.09	1.09	1.02	1.02	1.02	1.02	.88	.88	.88	.76	.76	.76	.65	.65	.65	.59			
1	1.02	.98	.95	.92	.95	.92	.89	.87	.81	.79	.77	.70	.69	.68	.60	.60	.59	.54			
2	.95	.88	.83	.79	.89	.83	.79	.75	.73	.70	.67	.64	.62	.60	.56	.54	.53	.49			
3	.88	.80	.74	.69	.82	.75	.70	.66	.67	.63	.60	.59	.56	.54	.52	.50	.48	.44			
4	.82	.72	.66	.60	.77	.69	.63	.58	.61	.57	.53	.54	.51	.48	.48	.45	.43	.40			
5	.76	.66	.59	.53	.71	.62	.56	.51	.56	.51	.47	.50	.46	.43	.44	.41	.39	.36			
6	.71	.60	.53	.48	.66	.57	.51	.46	.51	.46	.43	.46	.42	.39	.41	.38	.36	.33			
7	.66	.55	.48	.43	.62	.52	.46	.41	.47	.42	.38	.42	.38	.35	.38	.35	.33	.30			
8	.62	.50	.43	.39	.58	.48	.42	.37	.43	.38	.35	.39	.35	.32	.35	.32	.29	.27			
9	.57	.46	.39	.35	.54	.44	.38	.33	.40	.35	.31	.36	.32	.29	.32	.29	.27	.25			
10	.54	.42	.36	.31	.50	.40	.34	.30	.37	.32	.28	.33	.29	.26	.30	.26	.24	.22			

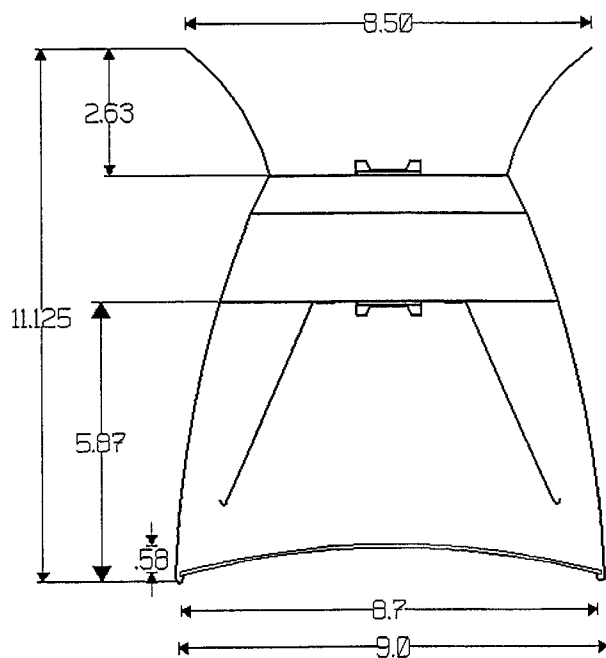
TESTED IN ACCORDANCE WITH CURRENT IES PROCEDURES

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ELECTRICAL CHARACTERISTICS 119.96V .2407A 28.4780W

LUMINOUS EFFICACY (LUMENS / WATTS) = 116.7

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

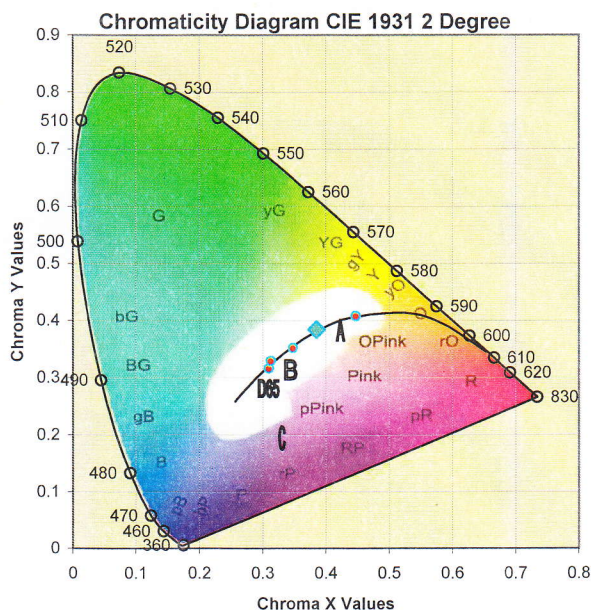




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INPUT VOLTAGE (V)	119.96
INPUT CURRENT (A)	0.2407
INPUT WATTS (W)	28.4780
POWER FACTOR	0.9863
THDv (%)	0.171
THDi (%)	13.320
LUMINOUS EFFICACY-LPW	116.7
LUMINOUS FLUX- LUMENS	3324
CHROMA x	0.3857
CHROMA y	0.3838
CHROMA u	0.2257
CHROMA v	0.5054
DELTA uv (Duv)	0.0018
CORR COLOR TEMP (K)	3914
COLOR REND INDEX (RA)	82.89
COLOR REND INDEX (R9)	10.5

Wavelength (nm)	Spectral Flux mW/nm	Wavelength (nm)	Spectral Flux mW/nm
350	0.2861	610	54.6629
360	0.2418	620	50.2764
370	0.2662	630	44.5266
380	0.2329	640	37.8182
390	0.2611	650	30.9695
400	0.3883	660	24.5521
410	0.7824	670	19.0065
420	2.6442	680	14.4544
430	8.6038	690	10.8273
440	25.2459	700	8.0601
450	61.2713	710	5.9856
460	34.3159	720	4.3764
470	21.3309	730	3.2297
480	16.1908	740	2.3328
490	19.9564	750	1.7536
500	27.3617	760	1.2829
510	33.3656	770	0.9480
520	37.4702	780	0.7009
530	40.7915	790	0.5307
540	43.8323	800	0.3927
550	46.8833	810	0.3138
560	49.9637	820	0.2343
570	52.6354	830	0.1834
580	55.1994	840	0.1254
590	56.7008	850	0.1074
600	56.7163		

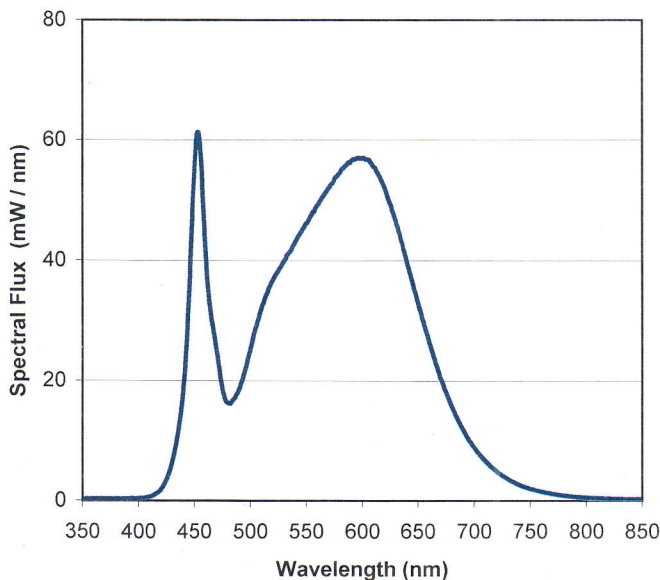


Data collected utilizing a Labsphere integrating sphere and 2100 spectroradiometer. Calibration of the spectroradiometer-sphere is traceable to the National Institute of Standards and Technology.



NVLAP LAB CODE 200921-0

Kelly C. Lerbs
Vice President



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