



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : LT-14-L90-940-AF-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] GEN FROM BALLABS TEST NO. 20224.0  
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC  
 [ISSUEDATE] 2023-07-21  
 [MANUFAC] H.E. WILLIAMS, INC - CARTHAGE, MO  
 [LUMINAIRE] 1x4'RECESSED LED LUMINAIRE  
 [MORE] WHITE REFLECTOR w/FROSTED ACRYLIC CENTER LENS  
 [MORE] 0-10V DIMMING DRIVER  
 [LUMCAT] LT-14-L90-940-AF-DIM-UNV  
 [LAMPCAT] 22 INCH LED ARRAYS  
 [\_SEARCH\_SOURCETYPE] LED  
 [\_SEARCH\_APPLICATION] INDOOR  
 [\_SEARCH\_MOUNTING] RECESSED

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7792
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	66.8
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.38
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 ft
Luminous Width (90-270)	0.92 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7399	7630	8059
55	6800	7452	8062
65	5924	7284	7715
75	4476	6497	6822
85	1929	3162	2680

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : LT-14-L90-940-AF-DIM-UNV\_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0</b>	2710.053	2710.053	2710.053	2710.053	2710.053
<b>5</b>	2752.179	2700.692	2686.651	2678.850	2672.609
<b>10</b>	2705.373	2658.567	2650.766	2646.086	2638.285
<b>15</b>	2641.405	2602.400	2594.599	2602.400	2591.479
<b>20</b>	2536.872	2504.108	2504.108	2518.150	2518.150
<b>25</b>	2416.737	2391.774	2404.256	2427.659	2429.219
<b>30</b>	2281.001	2256.038	2282.561	2320.005	2320.005
<b>35</b>	2128.102	2109.380	2137.463	2193.630	2198.311
<b>40</b>	1948.680	1945.559	1976.763	2045.412	2061.014
<b>45</b>	1747.415	1750.535	1802.022	1884.712	1903.434
<b>50</b>	1530.548	1547.710	1619.479	1702.169	1731.813
<b>55</b>	1302.760	1346.446	1427.576	1505.585	1544.590
<b>60</b>	1076.532	1143.621	1235.672	1299.640	1335.524
<b>65</b>	836.263	912.712	1028.167	1071.852	1089.014
<b>70</b>	617.836	709.887	806.619	830.022	853.425
<b>75</b>	386.928	505.502	561.669	556.989	589.753
<b>80</b>	201.265	290.196	319.839	297.997	319.839
<b>85</b>	56.167	99.852	92.051	78.010	78.010
<b>90</b>	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : LT-14-L90-940-AF-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	989.86	N.A.	12.70
0-30	2101.39	N.A.	27.00
0-40	3446.72	N.A.	44.20
0-60	6122.46	N.A.	78.60
0-80	7666.64	N.A.	98.40
0-90	7791.98	N.A.	100.00
10-90	7535.93	N.A.	96.70
20-40	2456.86	N.A.	31.50
20-50	3857.36	N.A.	49.50
40-70	3660.98	N.A.	47.00
60-80	1544.18	N.A.	19.80
70-80	558.93	N.A.	7.20
80-90	125.34	N.A.	1.60
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	7791.98	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	256.05
10-20	733.81
20-30	1111.53
30-40	1345.33
40-50	1400.5
50-60	1275.24
60-70	985.24
70-80	558.93
80-90	125.34
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : LT-14-L90-940-AF-DIM-UNV\_.IES**

**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	46	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	44	37	32	43	36	32	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : LT-14-L90-940-AF-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

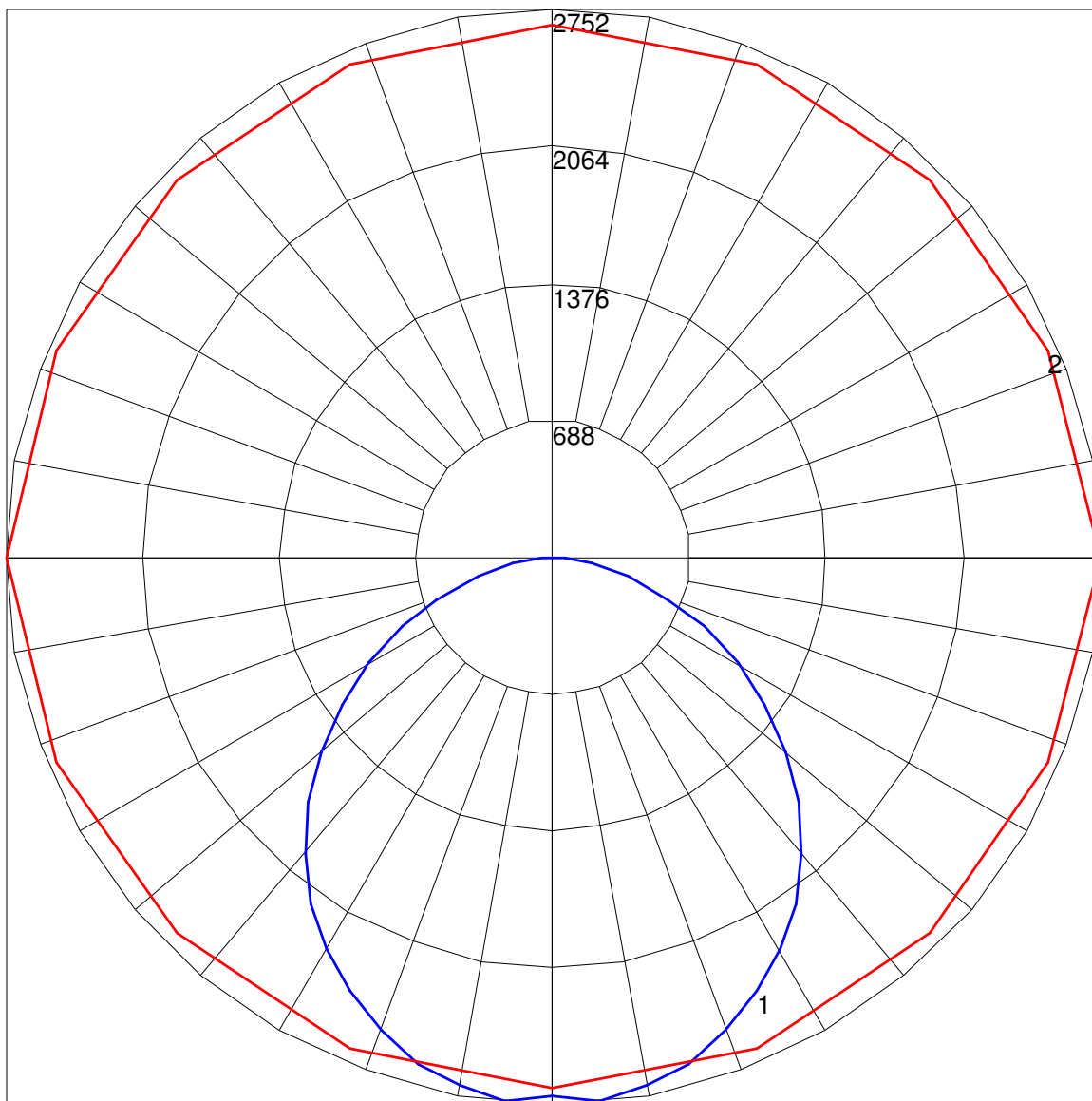
Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	18.7	20.3	19.0	20.6	21.0	19.6	21.3	20.0	21.6	21.9
	3H	20.3	21.8	20.7	22.2	22.5	21.5	23.0	21.9	23.4	23.7
	4H	20.9	22.3	21.3	22.6	23.0	22.2	23.6	22.6	24.0	24.4
	6H	21.2	22.5	21.6	22.9	23.3	22.7	24.0	23.1	24.4	24.7
	8H	21.3	22.5	21.7	22.9	23.3	22.8	24.0	23.2	24.4	24.8
	12H	21.3	22.5	21.8	22.9	23.3	22.8	24.0	23.3	24.4	24.8
4H	2H	19.5	20.9	19.9	21.3	21.6	20.2	21.6	20.6	22.0	22.3
	3H	21.4	22.6	21.8	23.0	23.4	22.4	23.5	22.8	23.9	24.3
	4H	22.1	23.2	22.6	23.6	24.0	23.2	24.2	23.6	24.7	25.1
	6H	22.6	23.5	23.0	23.9	24.4	23.7	24.7	24.2	25.1	25.6
	8H	22.7	23.6	23.1	24.0	24.5	23.9	24.7	24.3	25.2	25.7
	12H	22.7	23.5	23.2	24.0	24.5	23.9	24.7	24.4	25.2	25.7
8H	4H	22.5	23.4	23.0	23.8	24.3	23.5	24.3	23.9	24.8	25.2
	6H	23.1	23.9	23.6	24.3	24.8	24.1	24.8	24.6	25.3	25.8
	8H	23.3	24.0	23.8	24.5	25.0	24.3	25.0	24.8	25.5	25.9
	12H	23.4	24.0	23.9	24.5	25.0	24.4	25.0	24.9	25.5	26.0
12H	4H	22.6	23.4	23.0	23.8	24.3	23.5	24.3	24.0	24.7	25.2
	6H	23.2	23.9	23.7	24.3	24.9	24.2	24.8	24.7	25.3	25.8
	8H	23.4	24.0	23.9	24.5	25.1	24.4	25.0	24.9	25.4	26.0

Maximum UGR = 26.0

POLAR GRAPH



Maximum Candela = 2752.179 Located At Horizontal Angle = 0, Vertical Angle = 5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (5) (Through Max. Cd.)