



IES INDOOR REPORT

PHOTOMETRIC FILENAME : LT-14-L90-827-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-L90-827-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 | 8789 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 132 |
| 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 | 8345 | 8606 | 9090 |
| 55 | 7670 | 8405 | 9094 |
| 65 | 6682 | 8215 | 8702 |
| 75 | 5048 | 7328 | 7695 |
| 85 | 2176 | 3567 | 3023 |

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : LT-14-L90-827-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> |
|-----------|------------|-------------|-------------|-------------|-------------|
| 0 | 3056.689 | 3056.689 | 3056.689 | 3056.689 | 3056.689 |
| 5 | 3104.203 | 3046.131 | 3030.293 | 3021.494 | 3014.455 |
| 10 | 3051.410 | 2998.617 | 2989.819 | 2984.539 | 2975.741 |
| 15 | 2979.260 | 2935.266 | 2926.468 | 2935.266 | 2922.948 |
| 20 | 2861.357 | 2824.402 | 2824.402 | 2840.240 | 2840.240 |
| 25 | 2725.856 | 2697.700 | 2711.778 | 2738.174 | 2739.934 |
| 30 | 2572.757 | 2544.601 | 2574.517 | 2616.751 | 2616.751 |
| 35 | 2400.302 | 2379.185 | 2410.860 | 2474.211 | 2479.491 |
| 40 | 2197.930 | 2194.411 | 2229.606 | 2307.035 | 2324.632 |
| 45 | 1970.922 | 1974.442 | 2032.514 | 2125.780 | 2146.897 |
| 50 | 1726.317 | 1745.674 | 1826.623 | 1919.889 | 1953.325 |
| 55 | 1469.393 | 1518.666 | 1610.173 | 1698.161 | 1742.155 |
| 60 | 1214.229 | 1289.898 | 1393.724 | 1465.873 | 1506.348 |
| 65 | 943.227 | 1029.455 | 1159.677 | 1208.950 | 1228.307 |
| 70 | 696.862 | 800.687 | 909.792 | 936.188 | 962.584 |
| 75 | 436.419 | 570.160 | 633.511 | 628.231 | 665.186 |
| 80 | 227.008 | 327.314 | 360.749 | 336.113 | 360.749 |
| 85 | 63.351 | 112.624 | 103.825 | 87.988 | 87.988 |
| 90 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : LT-14-L90-827-AF-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 1116.47 | N.A. | 12.70 |
| 0-30 | 2370.17 | N.A. | 27.00 |
| 0-40 | 3887.58 | N.A. | 44.20 |
| 0-60 | 6905.57 | N.A. | 78.60 |
| 0-80 | 8647.25 | N.A. | 98.40 |
| 0-90 | 8788.63 | N.A. | 100.00 |
| 10-90 | 8499.83 | N.A. | 96.70 |
| 20-40 | 2771.11 | N.A. | 31.50 |
| 20-50 | 4350.74 | N.A. | 49.50 |
| 40-70 | 4129.25 | N.A. | 47.00 |
| 60-80 | 1741.69 | N.A. | 19.80 |
| 70-80 | 630.42 | N.A. | 7.20 |
| 80-90 | 141.38 | 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 | 8788.63 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|---------|
| 0-10 | 288.80 |
| 10-20 | 827.67 |
| 20-30 | 1253.7 |
| 30-40 | 1517.41 |
| 40-50 | 1579.63 |
| 50-60 | 1438.35 |
| 60-70 | 1111.26 |
| 70-80 | 630.42 |
| 80-90 | 141.38 |
| 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-L90-827-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-L90-827-AF-DIM-UNV_.IES

UGR TABLE - CORRECTED

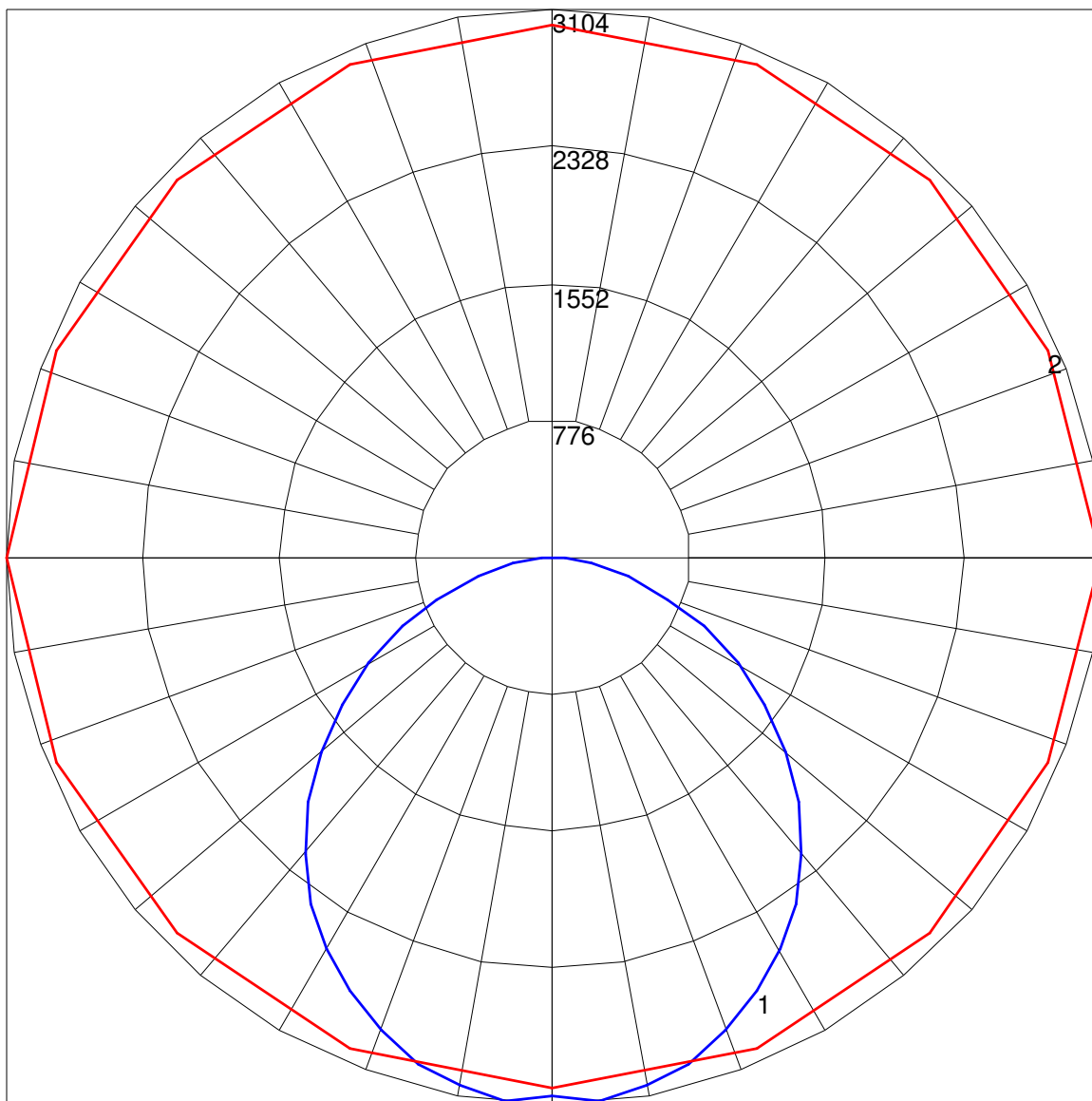
Reflectances

| | | | | | | | | | | |
|----------------|----|----|----|----|----|----|----|----|----|----|
| 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 | 19.2 | 20.8 | 19.5 | 21.1 | 21.5 | 20.1 | 21.8 | 20.5 | 22.1 | 22.4 |
| | 3H | 20.8 | 22.3 | 21.2 | 22.7 | 23.0 | 22.0 | 23.5 | 22.4 | 23.9 | 24.2 |
| | 4H | 21.4 | 22.8 | 21.8 | 23.1 | 23.5 | 22.7 | 24.1 | 23.1 | 24.5 | 24.9 |
| | 6H | 21.7 | 23.0 | 22.1 | 23.4 | 23.8 | 23.2 | 24.5 | 23.6 | 24.9 | 25.2 |
| | 8H | 21.8 | 23.0 | 22.2 | 23.4 | 23.8 | 23.3 | 24.5 | 23.7 | 24.9 | 25.3 |
| | 12H | 21.8 | 23.0 | 22.3 | 23.4 | 23.8 | 23.3 | 24.5 | 23.8 | 24.9 | 25.3 |
| 4H | 2H | 20.0 | 21.4 | 20.4 | 21.8 | 22.1 | 20.7 | 22.1 | 21.1 | 22.5 | 22.8 |
| | 3H | 21.9 | 23.1 | 22.3 | 23.5 | 23.9 | 22.9 | 24.0 | 23.3 | 24.4 | 24.8 |
| | 4H | 22.6 | 23.7 | 23.1 | 24.1 | 24.5 | 23.7 | 24.7 | 24.1 | 25.2 | 25.6 |
| | 6H | 23.1 | 24.0 | 23.5 | 24.4 | 24.9 | 24.2 | 25.2 | 24.7 | 25.6 | 26.1 |
| | 8H | 23.2 | 24.1 | 23.6 | 24.5 | 25.0 | 24.4 | 25.2 | 24.8 | 25.7 | 26.2 |
| | 12H | 23.2 | 24.0 | 23.7 | 24.5 | 25.0 | 24.4 | 25.2 | 24.9 | 25.7 | 26.2 |
| 8H | 4H | 23.0 | 23.9 | 23.5 | 24.3 | 24.8 | 24.0 | 24.8 | 24.4 | 25.3 | 25.7 |
| | 6H | 23.6 | 24.4 | 24.1 | 24.8 | 25.3 | 24.6 | 25.3 | 25.1 | 25.8 | 26.3 |
| | 8H | 23.8 | 24.5 | 24.3 | 25.0 | 25.5 | 24.8 | 25.5 | 25.3 | 26.0 | 26.4 |
| | 12H | 23.9 | 24.5 | 24.4 | 25.0 | 25.5 | 24.9 | 25.5 | 25.4 | 26.0 | 26.5 |
| 12H | 4H | 23.1 | 23.9 | 23.5 | 24.3 | 24.8 | 24.0 | 24.8 | 24.5 | 25.2 | 25.7 |
| | 6H | 23.7 | 24.4 | 24.2 | 24.8 | 25.4 | 24.7 | 25.3 | 25.2 | 25.8 | 26.3 |
| | 8H | 23.9 | 24.5 | 24.4 | 25.0 | 25.6 | 24.9 | 25.5 | 25.4 | 25.9 | 26.5 |

Maximum UGR = 26.5

POLAR GRAPH



Maximum Candela = 3104.203 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.)