



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 75S-4-L85-835-(L77)-EM10WLP-WG-75-DIM-UNV_EM MODE ONLY.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 19745.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 11-29-2023

[MANUFAC] WILLIAMS INDOOR

[OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO

[LUMINAIRE] 4' LED STRIP LUMINAIRE

[MORE] WHITE REFLECTOR w/FROSTED ACRYLIC SQUARE LENS

[LUMCAT] 75S-4-L85-835-(L77)-EM10WLP-WG-75-DIM-UNV

[LAMPCAT] HLM 80 CRI 3500K CCT

[_SEARCH_SOURCETYPE] LED

[_SEARCH_APPLICATION] Indoor, Commercial, Industrial, Manufacturing, Utility, Warehouse, Linear

[_SEARCH_MOUNTING] Surface, Suspended

CHARACTERISTICS

| | |
|---------------------------------|---------------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 1420 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 142 |
| Total Luminaire Watts | 10 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 1.20 |
| Spacing Criterion (90-270) | 1.18 |
| Spacing Criterion (Diagonal) | 1.30 |
| Basic Luminous Shape | Rectangular w/Sides |
| Luminous Length (0-180) | 3.72 ft |
| Luminous Width (90-270) | 0.21 ft |
| Luminous Height | 0.08 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 5114 | 4126 | 3901 |
| 55 | 4335 | 3459 | 3496 |
| 65 | 3404 | 2956 | 3176 |
| 75 | 2344 | 2416 | 2817 |
| 85 | 1047 | 2050 | 2470 |

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CANDELA TABULATION

| | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|-----|------------|-------------|-------------|-------------|-------------|
| 0 | 479.117 | 479.117 | 479.117 | 479.117 | 479.117 |
| 5 | 483.238 | 477.165 | 476.948 | 475.864 | 470.224 |
| 10 | 474.996 | 469.574 | 470.008 | 468.706 | 463.501 |
| 15 | 461.766 | 456.560 | 457.862 | 456.560 | 452.222 |
| 20 | 439.643 | 435.738 | 439.643 | 437.690 | 433.136 |
| 25 | 412.314 | 410.796 | 414.266 | 414.049 | 407.325 |
| 30 | 382.166 | 382.816 | 386.721 | 386.721 | 378.479 |
| 35 | 345.294 | 350.499 | 352.451 | 353.102 | 344.643 |
| 40 | 305.169 | 312.977 | 311.242 | 314.712 | 310.374 |
| 45 | 265.911 | 272.852 | 272.418 | 278.708 | 277.623 |
| 50 | 225.786 | 232.076 | 237.064 | 247.692 | 249.861 |
| 55 | 184.576 | 192.384 | 203.446 | 219.279 | 226.436 |
| 60 | 145.752 | 155.296 | 174.165 | 193.686 | 203.012 |
| 65 | 108.447 | 123.629 | 147.270 | 169.610 | 179.154 |
| 70 | 74.394 | 94.349 | 119.725 | 144.017 | 155.296 |
| 75 | 47.283 | 66.369 | 94.999 | 119.291 | 130.570 |
| 80 | 25.810 | 44.246 | 74.611 | 96.734 | 107.145 |
| 85 | 8.242 | 27.112 | 56.609 | 76.346 | 86.107 |
| 90 | 0.000 | 17.568 | 43.162 | 61.598 | 68.321 |
| 95 | 0.000 | 16.050 | 40.342 | 56.392 | 60.296 |
| 100 | 0.000 | 15.183 | 37.523 | 51.404 | 54.874 |
| 105 | 0.000 | 13.881 | 35.137 | 47.500 | 50.970 |
| 110 | 0.000 | 13.014 | 32.751 | 44.463 | 47.933 |
| 115 | 0.000 | 11.929 | 29.931 | 41.643 | 44.897 |
| 120 | 0.000 | 10.194 | 26.895 | 37.739 | 41.643 |
| 125 | 0.000 | 8.459 | 24.292 | 34.486 | 37.956 |
| 130 | 0.000 | 6.941 | 21.039 | 30.799 | 33.185 |
| 135 | 0.000 | 6.290 | 16.918 | 26.678 | 29.064 |
| 140 | 0.000 | 5.205 | 13.230 | 22.340 | 24.726 |
| 145 | 0.000 | 4.121 | 10.194 | 17.351 | 19.737 |
| 150 | 0.000 | 3.037 | 7.808 | 13.230 | 15.183 |
| 155 | 0.000 | 2.386 | 6.290 | 9.543 | 11.062 |
| 160 | 0.000 | 0.000 | 4.555 | 6.941 | 7.808 |
| 165 | 0.000 | 0.000 | 3.037 | 4.989 | 5.422 |
| 170 | 0.000 | 0.000 | 0.000 | 3.037 | 3.253 |
| 175 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 180 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 75S-4-L85-835-(L77)-EM10WLP-WG-75-DIM-UNV_EM MODE ONLY.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 173.93 | N.A. | 12.20 |
| 0-30 | 363.82 | N.A. | 25.60 |
| 0-40 | 582.40 | N.A. | 41.00 |
| 0-60 | 978.64 | N.A. | 68.90 |
| 0-80 | 1222.12 | N.A. | 86.10 |
| 0-90 | 1280.25 | N.A. | 90.20 |
| 10-90 | 1234.99 | N.A. | 87.00 |
| 20-40 | 408.47 | N.A. | 28.80 |
| 20-50 | 620.48 | N.A. | 43.70 |
| 40-70 | 541.07 | N.A. | 38.10 |
| 60-80 | 243.48 | N.A. | 17.10 |
| 70-80 | 98.65 | N.A. | 6.90 |
| 80-90 | 58.14 | N.A. | 4.10 |
| 90-110 | 71.54 | N.A. | 5.00 |
| 90-120 | 97.72 | N.A. | 6.90 |
| 90-130 | 117.02 | N.A. | 8.20 |
| 90-150 | 136.16 | N.A. | 9.60 |
| 90-180 | 139.75 | N.A. | 9.80 |
| 110-180 | 68.22 | N.A. | 4.80 |
| 0-180 | 1420.01 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 45.27 |
| 10-20 | 128.66 |
| 20-30 | 189.89 |
| 30-40 | 218.58 |
| 40-50 | 212.01 |
| 50-60 | 184.23 |
| 60-70 | 144.83 |
| 70-80 | 98.65 |
| 80-90 | 58.14 |
| 90-100 | 39.14 |
| 100-110 | 32.40 |
| 110-120 | 26.19 |
| 120-130 | 19.29 |
| 130-140 | 12.50 |
| 140-150 | 6.64 |
| 150-160 | 2.78 |
| 160-170 | 0.77 |
| 170-180 | 0.04 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 75S-4-L85-835-(L77)-EM10WLP-WG-75-DIM-UNV_EM MODE ONLY.IES****COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

| RC RW | 80 | | | | 70 | | | | 50 | | | 30 | | | 10 | | | 0 |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| 0 | 117 | 117 | 117 | 117 | 113 | 113 | 113 | 113 | 106 | 106 | 106 | 99 | 99 | 99 | 93 | 93 | 93 | 90 |
| 1 | 106 | 101 | 96 | 92 | 102 | 97 | 93 | 89 | 91 | 88 | 85 | 86 | 83 | 81 | 81 | 78 | 76 | 74 |
| 2 | 96 | 88 | 81 | 75 | 92 | 85 | 78 | 73 | 80 | 74 | 70 | 75 | 71 | 67 | 71 | 67 | 64 | 61 |
| 3 | 88 | 77 | 69 | 62 | 84 | 75 | 67 | 61 | 70 | 64 | 59 | 66 | 61 | 56 | 62 | 58 | 54 | 52 |
| 4 | 80 | 68 | 60 | 53 | 77 | 66 | 58 | 52 | 63 | 56 | 50 | 59 | 53 | 48 | 56 | 51 | 47 | 44 |
| 5 | 74 | 61 | 52 | 46 | 71 | 59 | 51 | 45 | 56 | 49 | 44 | 53 | 47 | 42 | 50 | 45 | 41 | 39 |
| 6 | 68 | 55 | 46 | 40 | 66 | 54 | 45 | 39 | 51 | 44 | 38 | 48 | 42 | 37 | 46 | 40 | 36 | 34 |
| 7 | 63 | 50 | 41 | 35 | 61 | 49 | 41 | 35 | 46 | 39 | 34 | 44 | 38 | 33 | 42 | 36 | 32 | 30 |
| 8 | 59 | 46 | 37 | 32 | 57 | 45 | 37 | 31 | 43 | 35 | 30 | 41 | 34 | 30 | 39 | 33 | 29 | 27 |
| 9 | 55 | 42 | 34 | 28 | 53 | 41 | 33 | 28 | 39 | 32 | 27 | 37 | 31 | 27 | 36 | 30 | 26 | 24 |
| 10 | 52 | 39 | 31 | 26 | 50 | 38 | 31 | 26 | 36 | 30 | 25 | 35 | 29 | 24 | 33 | 28 | 24 | 22 |

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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

| | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|
| X=2H | Y=2H | 14.3 | 15.7 | 14.8 | 16.2 | 16.8 | 16.5 | 18.0 | 17.1 | 18.5 | 19.0 |
| | 3H | 15.5 | 16.7 | 16.0 | 17.3 | 17.8 | 18.9 | 20.2 | 19.5 | 20.7 | 21.3 |
| | 4H | 15.8 | 17.0 | 16.3 | 17.5 | 18.1 | 20.1 | 21.3 | 20.6 | 21.8 | 22.4 |
| | 6H | 15.9 | 17.1 | 16.5 | 17.6 | 18.2 | 21.2 | 22.3 | 21.8 | 22.9 | 23.5 |
| | 8H | 15.9 | 17.0 | 16.5 | 17.6 | 18.2 | 21.8 | 22.9 | 22.4 | 23.4 | 24.1 |
| | 12H | 15.9 | 17.0 | 16.5 | 17.5 | 18.2 | 22.4 | 23.4 | 23.0 | 24.0 | 24.7 |

UGR Viewed Endwise

| | | | | | | | | | | | |
|----|-----|------|------|------|------|------|------|------|------|------|------|
| 4H | 2H | 15.1 | 16.3 | 15.6 | 16.9 | 17.5 | 16.9 | 18.1 | 17.4 | 18.7 | 19.3 |
| | 3H | 16.5 | 17.5 | 17.1 | 18.1 | 18.8 | 19.5 | 20.5 | 20.1 | 21.1 | 21.7 |
| | 4H | 17.0 | 17.9 | 17.5 | 18.5 | 19.1 | 20.8 | 21.7 | 21.4 | 22.3 | 23.0 |
| | 6H | 17.2 | 18.0 | 17.8 | 18.7 | 19.3 | 22.1 | 22.9 | 22.7 | 23.5 | 24.2 |
| | 8H | 17.3 | 18.1 | 17.9 | 18.7 | 19.3 | 22.8 | 23.6 | 23.4 | 24.2 | 24.9 |
| | 12H | 17.3 | 18.0 | 17.9 | 18.6 | 19.3 | 23.5 | 24.2 | 24.2 | 24.9 | 25.6 |

| | | | | | | | | | | | |
|----|-----|------|------|------|------|------|------|------|------|------|------|
| 8H | 4H | 17.6 | 18.4 | 18.2 | 19.0 | 19.7 | 20.9 | 21.7 | 21.5 | 22.3 | 23.0 |
| | 6H | 18.0 | 18.7 | 18.7 | 19.3 | 20.0 | 22.4 | 23.1 | 23.1 | 23.7 | 24.4 |
| | 8H | 18.2 | 18.7 | 18.8 | 19.4 | 20.1 | 23.2 | 23.8 | 23.9 | 24.5 | 25.2 |
| | 12H | 18.2 | 18.7 | 18.9 | 19.4 | 20.2 | 24.1 | 24.6 | 24.8 | 25.3 | 26.1 |

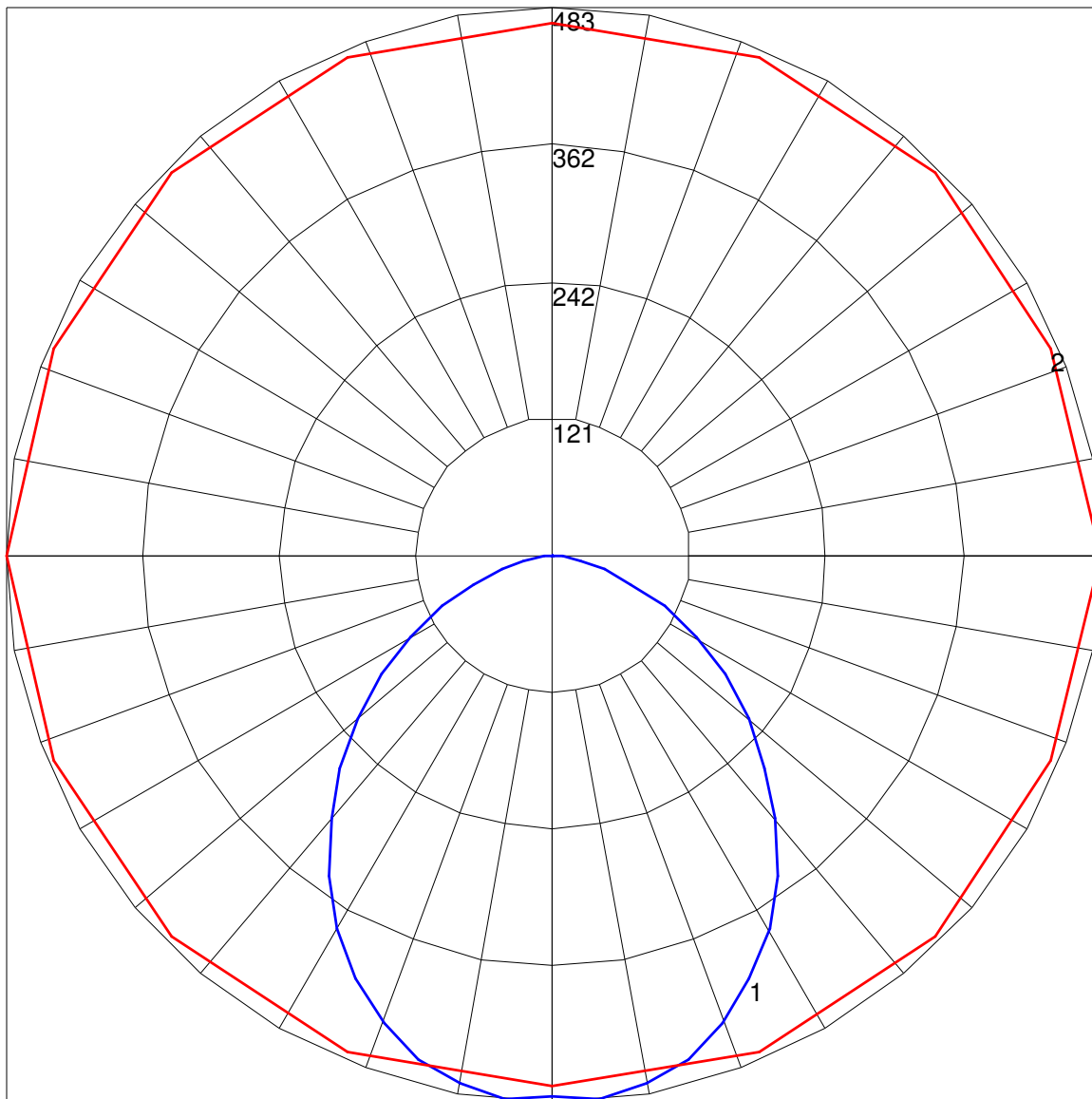
| | | | | | | | | | | | |
|-----|----|------|------|------|------|------|------|------|------|------|------|
| 12H | 4H | 17.8 | 18.5 | 18.4 | 19.1 | 19.8 | 20.9 | 21.6 | 21.5 | 22.3 | 23.0 |
| | 6H | 18.3 | 18.9 | 19.0 | 19.5 | 20.3 | 22.4 | 23.0 | 23.1 | 23.6 | 24.4 |
| | 8H | 18.5 | 19.0 | 19.2 | 19.7 | 20.5 | 23.3 | 23.8 | 23.9 | 24.5 | 25.2 |

Maximum UGR = 26.1

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POLAR GRAPH



Maximum Candela = 483.238 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.)