



IES INDOOR REPORT

PHOTOMETRIC FILENAME : DIG-S24-L63-835-AD-DIM-UNV.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]GEN FROM BALLABS TEST NO. 19231.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUE DATE] 04-NOV-2019

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 4-72LED 22"ARRAYS 2x4'RECESSED WHITE LUMINAIRE w/A-SHAPED

[MORE] CENTER REFL, FROST ACRYLIC LINEAR RIBBED DIFFUSER

[LUMCAT] DIG-S24-L98-835-AD-xxx-xxx

[LAMPCAT] M700C835D72N2A

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 6317 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 138 |
| Total Luminaire Watts | 45.7 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 1.10 |
| Spacing Criterion (90-270) | 1.18 |
| Spacing Criterion (Diagonal) | 1.38 |
| Basic Luminous Shape | Rectangular |
| Luminous Length (0-180) | 3.91 ft |
| Luminous Width (90-270) | 1.88 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 2865 | 3172 | 3363 |
| 55 | 2490 | 2914 | 3178 |
| 65 | 2243 | 2911 | 3485 |
| 75 | 1837 | 2494 | 2244 |
| 85 | 1538 | 1702 | 1865 |

IES INDOOR REPORT
 PHOTOMETRIC FILENAME : DIG-S24-L63-835-AD-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 | 2296.032 | 2296.032 | 2296.032 | 2296.032 | 2296.032 |
| 5 | 2268.837 | 2268.189 | 2268.189 | 2269.484 | 2269.484 |
| 10 | 2247.469 | 2248.764 | 2252.002 | 2257.829 | 2260.419 |
| 15 | 2158.762 | 2161.999 | 2174.302 | 2184.014 | 2187.252 |
| 20 | 2117.322 | 2119.264 | 2140.632 | 2158.762 | 2164.589 |
| 25 | 1904.295 | 1917.892 | 1947.677 | 1971.635 | 1982.642 |
| 30 | 1617.453 | 1734.002 | 1869.330 | 1827.242 | 1781.917 |
| 35 | 1620.043 | 1651.770 | 1708.750 | 1756.665 | 1773.500 |
| 40 | 1478.240 | 1517.738 | 1594.143 | 1651.770 | 1671.195 |
| 45 | 1379.820 | 1432.268 | 1527.450 | 1597.380 | 1619.395 |
| 50 | 1173.916 | 1228.953 | 1330.610 | 1400.540 | 1421.908 |
| 55 | 972.544 | 1032.761 | 1138.303 | 1215.356 | 1241.256 |
| 60 | 783.474 | 845.634 | 950.529 | 1044.416 | 1076.791 |
| 65 | 645.557 | 714.191 | 837.864 | 957.004 | 1002.976 |
| 70 | 483.034 | 554.259 | 688.939 | 734.264 | 678.579 |
| 75 | 323.750 | 390.442 | 439.652 | 398.859 | 395.622 |
| 80 | 200.725 | 253.820 | 251.230 | 235.690 | 233.100 |
| 85 | 91.297 | 104.895 | 101.010 | 104.895 | 110.722 |
| 90 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : DIG-S24-L63-835-AD-DIM-UNV.IES

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|-------|--------|
| 0-20 | 834.38 | N.A. | 13.20 |
| 0-30 | 1734.58 | N.A. | 27.50 |
| 0-40 | 2796.51 | N.A. | 44.30 |
| 0-60 | 4949.47 | N.A. | 78.40 |
| 0-80 | 6195.48 | N.A. | 98.10 |
| 0-90 | 6316.7 | N.A. | 100.00 |
| 10-90 | 6100.37 | N.A. | 96.60 |
| 20-40 | 1962.13 | N.A. | 31.10 |
| 20-50 | 3107.47 | N.A. | 49.20 |
| 40-70 | 2957.66 | N.A. | 46.80 |
| 60-80 | 1246.01 | N.A. | 19.70 |
| 70-80 | 441.31 | N.A. | 7.00 |
| 80-90 | 121.22 | N.A. | 1.90 |
| 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 | 6316.7 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|---------|
| 0-10 | 216.33 |
| 10-20 | 618.05 |
| 20-30 | 900.20 |
| 30-40 | 1061.94 |
| 40-50 | 1145.34 |
| 50-60 | 1007.62 |
| 60-70 | 804.70 |
| 70-80 | 441.31 |
| 80-90 | 121.22 |
| 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 : DIG-S24-L63-835-AD-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 | 83 | 78 | 96 | 88 | 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 | 55 | 80 | 69 | 61 | 54 | 66 | 59 | 53 | 64 | 58 | 53 | 62 | 56 | 52 | 50 |
| 5 | 76 | 63 | 54 | 47 | 74 | 62 | 53 | 47 | 59 | 52 | 46 | 57 | 51 | 46 | 56 | 50 | 45 | 43 |
| 6 | 70 | 56 | 47 | 41 | 68 | 55 | 47 | 41 | 54 | 46 | 40 | 52 | 45 | 40 | 50 | 44 | 40 | 38 |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 49 | 41 | 36 | 47 | 41 | 35 | 46 | 40 | 35 | 33 |
| 8 | 60 | 47 | 38 | 32 | 59 | 46 | 38 | 32 | 45 | 37 | 32 | 43 | 37 | 32 | 42 | 36 | 32 | 30 |
| 9 | 56 | 43 | 35 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 33 | 29 | 39 | 33 | 29 | 27 |
| 10 | 53 | 40 | 32 | 26 | 52 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 31 | 26 | 36 | 30 | 26 | 24 |

IES INDOOR REPORT
PHOTOMETRIC FILENAME : DIG-S24-L63-835-AD-DIM-UNV.IES

UGR TABLE - CORRECTED

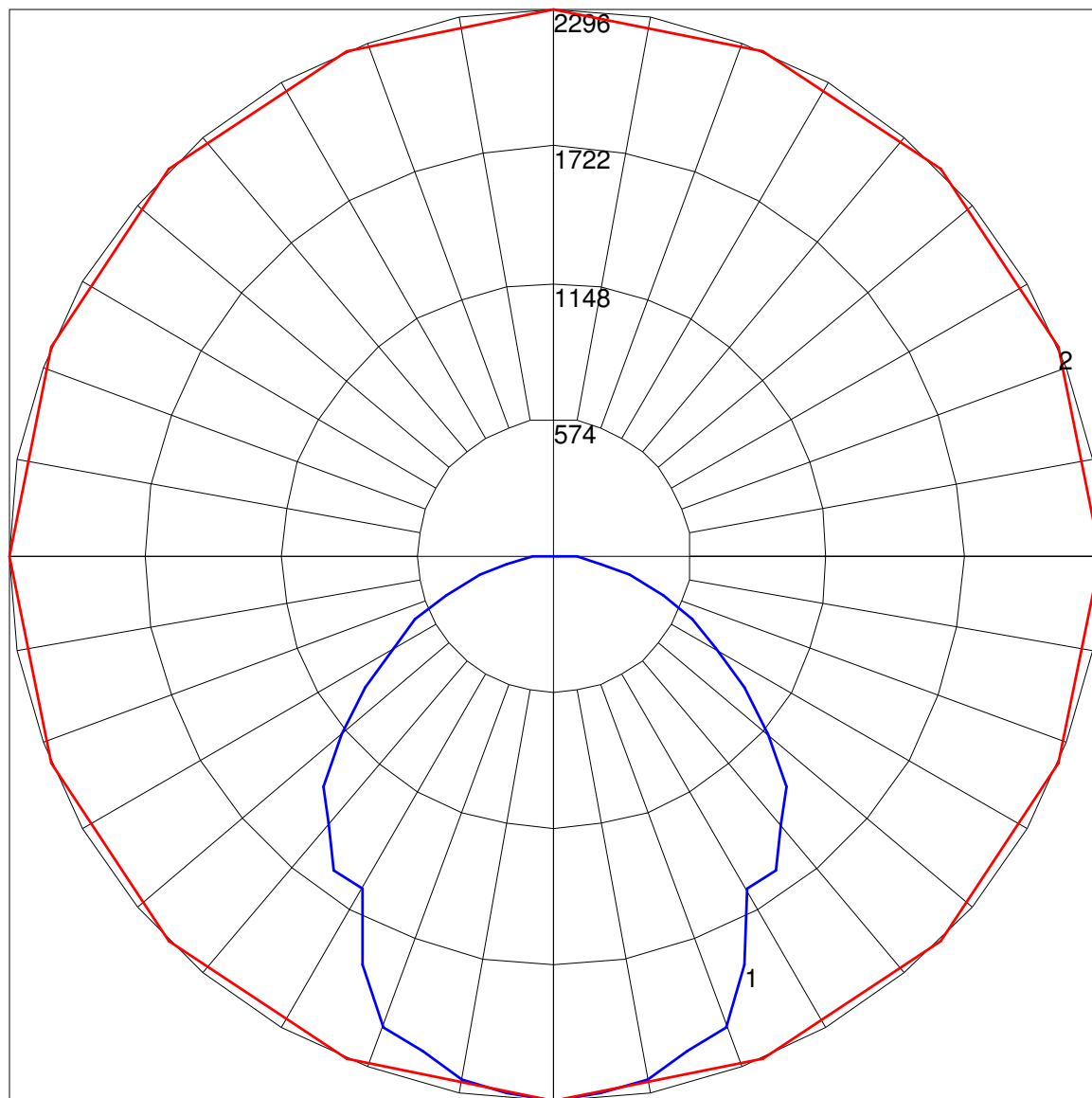
Reflectances

| | | | | | | | | | | |
|----------------|----|----|----|----|----|----|----|----|----|----|
| 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 | 15.0 | 16.6 | 15.3 | 16.9 | 17.2 | 16.4 | 18.0 | 16.7 | 18.3 | 18.7 |
| | 3H | 16.7 | 18.2 | 17.1 | 18.6 | 18.9 | 18.5 | 20.0 | 18.9 | 20.4 | 20.7 |
| | 4H | 17.3 | 18.8 | 17.7 | 19.1 | 19.5 | 19.1 | 20.5 | 19.5 | 20.8 | 21.2 |
| | 6H | 17.8 | 19.1 | 18.2 | 19.5 | 19.9 | 19.4 | 20.7 | 19.8 | 21.1 | 21.5 |
| | 8H | 18.0 | 19.2 | 18.4 | 19.6 | 20.0 | 19.5 | 20.8 | 19.9 | 21.2 | 21.6 |
| | 12H | 18.1 | 19.3 | 18.5 | 19.6 | 20.1 | 19.6 | 20.8 | 20.0 | 21.2 | 21.6 |
| 4H | 2H | 15.9 | 17.3 | 16.3 | 17.7 | 18.1 | 17.0 | 18.4 | 17.4 | 18.8 | 19.1 |
| | 3H | 17.9 | 19.1 | 18.3 | 19.5 | 19.9 | 19.4 | 20.6 | 19.8 | 21.0 | 21.4 |
| | 4H | 18.6 | 19.7 | 19.1 | 20.1 | 20.6 | 20.0 | 21.0 | 20.4 | 21.5 | 21.9 |
| | 6H | 19.3 | 20.2 | 19.7 | 20.6 | 21.1 | 20.4 | 21.4 | 20.9 | 21.8 | 22.3 |
| | 8H | 19.4 | 20.3 | 19.9 | 20.8 | 21.2 | 20.6 | 21.5 | 21.1 | 21.9 | 22.4 |
| | 12H | 19.6 | 20.4 | 20.1 | 20.8 | 21.3 | 20.7 | 21.5 | 21.2 | 22.0 | 22.5 |
| 8H | 4H | 19.1 | 20.0 | 19.6 | 20.4 | 20.9 | 20.2 | 21.1 | 20.7 | 21.6 | 22.0 |
| | 6H | 19.8 | 20.6 | 20.3 | 21.0 | 21.5 | 20.8 | 21.5 | 21.3 | 22.0 | 22.5 |
| | 8H | 20.1 | 20.8 | 20.6 | 21.3 | 21.8 | 21.0 | 21.7 | 21.5 | 22.2 | 22.7 |
| | 12H | 20.3 | 20.9 | 20.8 | 21.4 | 22.0 | 21.2 | 21.8 | 21.7 | 22.3 | 22.8 |
| 12H | 4H | 19.1 | 19.9 | 19.6 | 20.4 | 20.9 | 20.3 | 21.1 | 20.7 | 21.5 | 22.0 |
| | 6H | 19.9 | 20.6 | 20.4 | 21.0 | 21.6 | 20.9 | 21.5 | 21.4 | 22.0 | 22.5 |
| | 8H | 20.2 | 20.8 | 20.7 | 21.3 | 21.9 | 21.1 | 21.7 | 21.6 | 22.2 | 22.8 |

Maximum UGR = 22.8

POLAR GRAPH



Maximum Candela = 2296.032 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)