



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4DR-TL-L8-9DW-DIM-UNV-OW-OF-CS_3000K.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]GEN FROM BALLABS TEST NO. 20685.0
 [TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC
 [ISSUE DATE] 06-MAY-2019
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC - CARTHAGE, MO
 [LUMINAIRE] 4"RND RECESSED CAST HOUSING DOWNLIGHT
 [MORE] OPEN SEMI-SPEC SPUN ALUMINUM REFLECTOR (WIDE)
 [LUMCAT] 4DR-TL-L8-9DW-DIM-UNV-OW-OF-CS
 [LAMPCAT] V13 BXRE-35E2000

CHARACTERISTICS

| | |
|---------------------------------|--------------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 862 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 62 |
| Total Luminaire Watts | 14 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 1.22 |
| Spacing Criterion (90-270) | 1.22 |
| Spacing Criterion (Diagonal) | 0.94 |
| Basic Luminous Shape | Circular |
| Luminous Length (0-180) | 0.37 ft (Diameter) |
| Luminous Width (90-270) | 0.37 ft (Diameter) |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 2614 | 2614 | 2614 |
| 55 | 806 | 806 | 806 |
| 65 | 99 | 99 | 99 |
| 75 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 |

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CANDELA TABULATION

| | <u>0</u> |
|----|----------|
| 0 | 739.791 |
| 5 | 761.862 |
| 10 | 784.751 |
| 15 | 801.100 |
| 20 | 836.659 |
| 25 | 911.864 |
| 30 | 714.450 |
| 35 | 125.478 |
| 40 | 32.698 |
| 45 | 17.984 |
| 50 | 9.401 |
| 55 | 4.496 |
| 60 | 2.044 |
| 65 | 0.409 |
| 70 | 0.409 |
| 75 | 0.000 |
| 80 | 0.000 |
| 85 | 0.000 |
| 90 | 0.000 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4DR-TL-L8-9DW-DIM-UNV-OW-OF-CS_3000K.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|--------|-------|--------|
| 0-20 | 302.32 | N.A. | 35.10 |
| 0-30 | 691.52 | N.A. | 80.20 |
| 0-40 | 841.60 | N.A. | 97.60 |
| 0-60 | 861.05 | N.A. | 99.90 |
| 0-80 | 861.96 | N.A. | 100.00 |
| 0-90 | 861.96 | N.A. | 100.00 |
| 10-90 | 788.68 | N.A. | 91.50 |
| 20-40 | 539.27 | N.A. | 62.60 |
| 20-50 | 554.19 | N.A. | 64.30 |
| 40-70 | 20.25 | N.A. | 2.30 |
| 60-80 | 0.91 | N.A. | 0.10 |
| 70-80 | 0.11 | N.A. | 0.00 |
| 80-90 | 0.00 | N.A. | 0.00 |
| 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 | 861.96 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

| Zone | Lumens |
|---------|--------|
| 0-10 | 73.28 |
| 10-20 | 229.05 |
| 20-30 | 389.20 |
| 30-40 | 150.08 |
| 40-50 | 14.92 |
| 50-60 | 4.53 |
| 60-70 | 0.80 |
| 70-80 | 0.11 |
| 80-90 | 0.00 |
| 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 |

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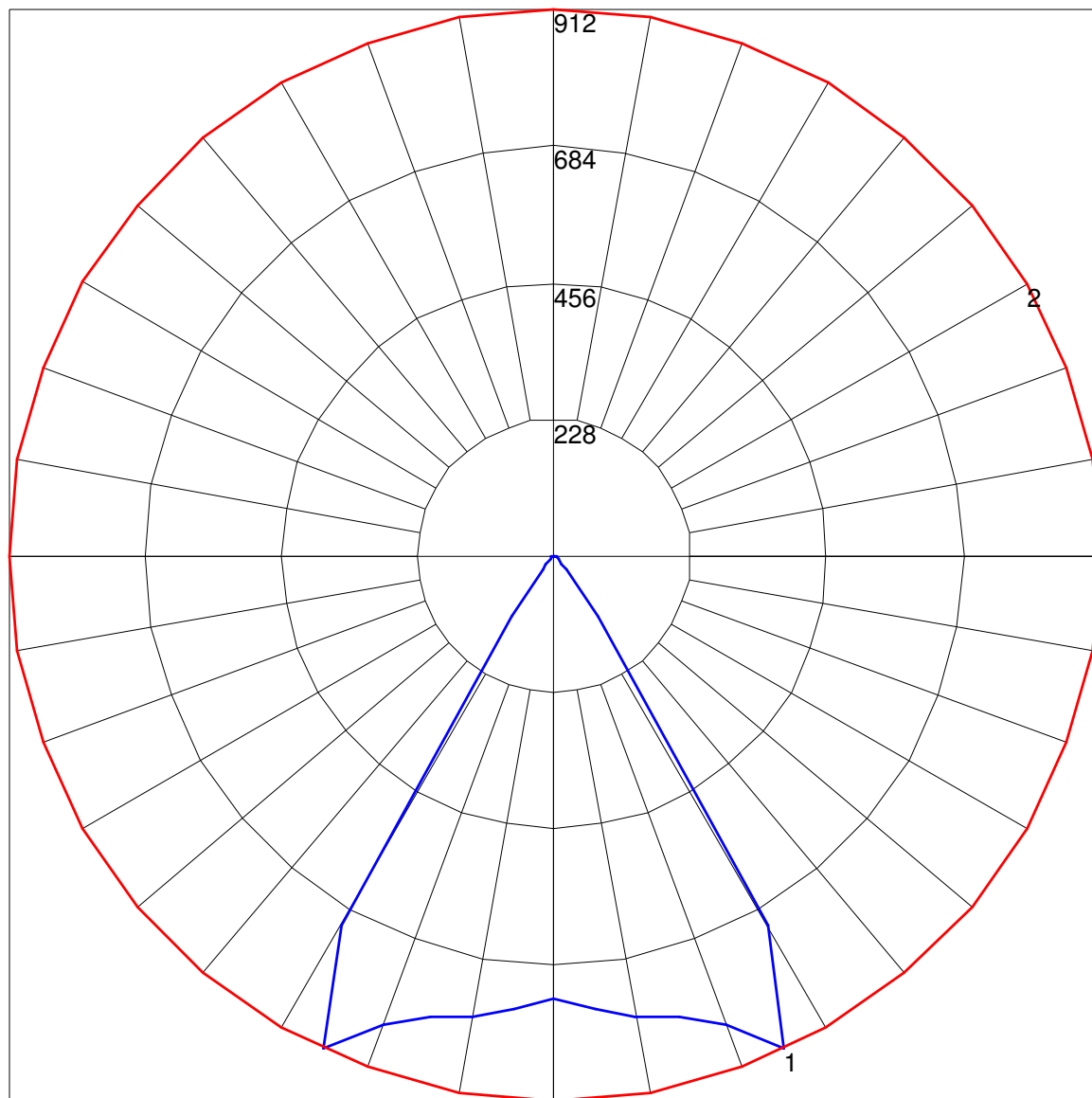
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 | 114 | 111 | 109 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 98 | 98 | 97 | 96 | 94 |
| 2 | 108 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 99 | 96 | 93 | 96 | 93 | 91 | 93 | 91 | 89 | 88 |
| 3 | 103 | 97 | 92 | 88 | 101 | 95 | 91 | 87 | 93 | 89 | 86 | 90 | 87 | 85 | 88 | 86 | 83 | 82 |
| 4 | 98 | 91 | 85 | 81 | 96 | 90 | 85 | 81 | 87 | 83 | 80 | 85 | 82 | 79 | 84 | 81 | 78 | 77 |
| 5 | 93 | 85 | 79 | 75 | 92 | 84 | 79 | 75 | 82 | 78 | 74 | 81 | 77 | 74 | 79 | 76 | 73 | 72 |
| 6 | 89 | 80 | 74 | 70 | 87 | 79 | 74 | 70 | 78 | 73 | 69 | 76 | 72 | 69 | 75 | 71 | 68 | 67 |
| 7 | 84 | 75 | 69 | 65 | 83 | 75 | 69 | 65 | 73 | 68 | 65 | 72 | 68 | 64 | 71 | 67 | 64 | 63 |
| 8 | 80 | 71 | 65 | 61 | 79 | 70 | 65 | 61 | 69 | 64 | 61 | 68 | 64 | 60 | 67 | 63 | 60 | 59 |
| 9 | 76 | 67 | 61 | 57 | 75 | 66 | 61 | 57 | 66 | 60 | 57 | 65 | 60 | 57 | 64 | 60 | 57 | 55 |
| 10 | 73 | 63 | 58 | 54 | 72 | 63 | 57 | 54 | 62 | 57 | 54 | 61 | 57 | 53 | 61 | 56 | 53 | 52 |

POLAR GRAPH



Maximum Candela = 911.864 Located At Horizontal Angle = 0, Vertical Angle = 25
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (25) (Through Max. Cd.)