



IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4DR-TL-L22-8TW-DIM-UNV-ON-OF-BL_4000K_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TESTLAB] Photopia see: www.ltioptics.com/ies
 [ISSUEDATE] 19 SEPT 2019
 [TESTDATE] 09-19-2019
 [TEST] H. E. WILLIAMS PHOTOMETRIC REPORT #W00528
 [MANUFAC] WILLIAMS INDOOR
 [OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
 [LUMINAIRE] 4" RECESSED LED DOWNLIGHT WITH
 [MORE] NARROW DIST BLACK PAINTED TRIM
 [LUMCAT] 4DR-TL-L22-8TW-DIM-UNV-ON-OF-BL_4000k
 [LAMP] 18MM COB ARRAY TO SIM. GL GLV93R5957U_56UP LM102A_V1
 [LAMPCAT] BXRC-30E4000
 [OTHER] THIS DATA IS BASED ON IN-HOUSE COMPUTER
 [OTHER] SIMULATIONS AND IS PROVIDED AS A GOOD-FAITH
 [OTHER] ESTIMATE OF PHOTOMETRIC PERFORMANCE.

CHARACTERISTICS

| | |
|---------------------------------|-----------------|
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 995 |
| Total Luminaire Efficiency | N.A. |
| Luminaire Efficacy Rating (LER) | 41 |
| Total Luminaire Watts | 24 |
| Ballast Factor | 1.00 |
| CIE Type | Direct |
| Spacing Criterion (0-180) | 0.74 |
| Spacing Criterion (90-270) | 0.74 |
| Spacing Criterion (Diagonal) | 0.82 |
| Basic Luminous Shape | Rectangular |
| Luminous Length (0-180) | 0.46 ft |
| Luminous Width (90-270) | 0.46 ft |
| Luminous Height | 0.00 ft |

LUMINANCE DATA (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45 | 724 | 724 | 724 |
| 55 | 179 | 179 | 268 |
| 65 | 121 | 121 | 121 |
| 75 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4DR-TL-L22-8TW-DIM-UNV-ON-OF-BL_4000K_.IES****CANDELA TABULATION**

| | <u>0</u> | <u>23</u> | <u>45</u> | <u>68</u> | <u>90</u> |
|-----------|----------|-----------|-----------|-----------|-----------|
| 0 | 1644 | 1644 | 1644 | 1644 | 1644 |
| 5 | 1540 | 1558 | 1544 | 1539 | 1537 |
| 10 | 1362 | 1361 | 1358 | 1354 | 1364 |
| 15 | 1151 | 1153 | 1153 | 1157 | 1163 |
| 20 | 999 | 1007 | 1009 | 1007 | 998 |
| 25 | 929 | 926 | 929 | 922 | 916 |
| 30 | 599 | 597 | 591 | 597 | 599 |
| 35 | 88 | 87 | 88 | 89 | 89 |
| 40 | 17 | 17 | 17 | 17 | 17 |
| 45 | 10 | 10 | 10 | 10 | 10 |
| 50 | 5 | 5 | 5 | 5 | 5 |
| 55 | 2 | 2 | 2 | 3 | 3 |
| 60 | 2 | 2 | 2 | 2 | 2 |
| 65 | 1 | 1 | 1 | 1 | 1 |
| 70 | 1 | 1 | 1 | 1 | 1 |
| 75 | 0 | 0 | 0 | 0 | 0 |
| 80 | 0 | 0 | 0 | 0 | 0 |
| 85 | 0 | 0 | 0 | 0 | 0 |
| 90 | 0 | 0 | 0 | 0 | 0 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4DR-TL-L22-8TW-DIM-UNV-ON-OF-BL_4000K_.IES****ZONAL LUMEN SUMMARY**

| Zone | Lumens | %Lamp | %Fixt |
|---------|--------|-------|--------|
| 0-20 | 469.17 | N.A. | 47.20 |
| 0-30 | 864.10 | N.A. | 86.90 |
| 0-40 | 982.38 | N.A. | 98.80 |
| 0-60 | 993.02 | N.A. | 99.80 |
| 0-80 | 994.52 | N.A. | 100.00 |
| 0-90 | 994.52 | N.A. | 100.00 |
| 10-90 | 852.52 | N.A. | 85.70 |
| 20-40 | 513.20 | N.A. | 51.60 |
| 20-50 | 521.24 | N.A. | 52.40 |
| 40-70 | 11.88 | N.A. | 1.20 |
| 60-80 | 1.50 | N.A. | 0.20 |
| 70-80 | 0.26 | 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 | 994.52 | N.A. | 100.00 |

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

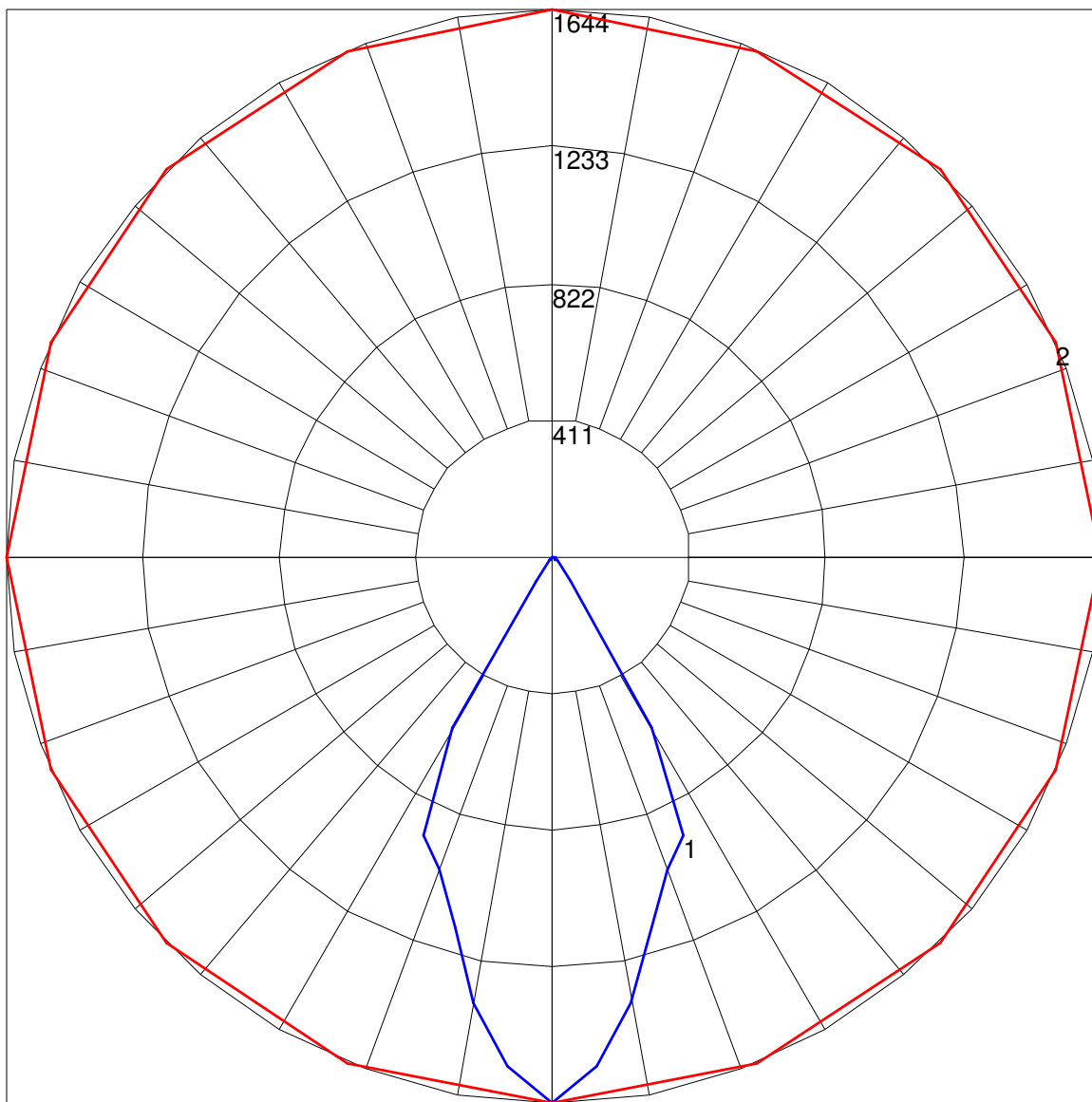
| Zone | Lumens |
|---------|--------|
| 0-10 | 142.00 |
| 10-20 | 327.17 |
| 20-30 | 394.92 |
| 30-40 | 118.28 |
| 40-50 | 8.03 |
| 50-60 | 2.61 |
| 60-70 | 1.24 |
| 70-80 | 0.26 |
| 80-90 | 0.00 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4DR-TL-L22-8TW-DIM-UNV-ON-OF-BL_4000K_.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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 114 | 111 | 109 | 107 | 112 | 109 | 107 | 106 | 105 | 104 | 102 | 102 | 100 | 99 | 98 | 97 | 96 | 95 |
| 2 | 109 | 105 | 101 | 98 | 107 | 103 | 100 | 97 | 100 | 97 | 95 | 97 | 95 | 93 | 94 | 92 | 91 | 89 |
| 3 | 104 | 99 | 94 | 91 | 102 | 97 | 93 | 90 | 95 | 91 | 88 | 92 | 89 | 87 | 90 | 88 | 86 | 84 |
| 4 | 100 | 93 | 88 | 84 | 98 | 92 | 87 | 84 | 90 | 86 | 83 | 88 | 85 | 82 | 86 | 83 | 81 | 80 |
| 5 | 95 | 88 | 83 | 79 | 94 | 87 | 82 | 79 | 85 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 77 | 75 |
| 6 | 91 | 83 | 78 | 74 | 90 | 83 | 78 | 74 | 81 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 73 | 71 |
| 7 | 87 | 79 | 74 | 70 | 86 | 79 | 73 | 70 | 77 | 73 | 69 | 76 | 72 | 69 | 75 | 72 | 69 | 68 |
| 8 | 84 | 75 | 70 | 66 | 83 | 75 | 70 | 66 | 74 | 69 | 66 | 73 | 69 | 66 | 72 | 68 | 65 | 64 |
| 9 | 80 | 72 | 66 | 63 | 79 | 71 | 66 | 63 | 70 | 66 | 62 | 69 | 65 | 62 | 69 | 65 | 62 | 61 |
| 10 | 77 | 68 | 63 | 60 | 76 | 68 | 63 | 60 | 67 | 63 | 59 | 66 | 62 | 59 | 66 | 62 | 59 | 58 |

POLAR GRAPH



Maximum Candela = 1644 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.)