



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : GLN-8-L210-840-SAF118-(L180)-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] GEN FROM BALLABS TEST NO. 20911.0

[TESTLAB] BUILDING ACOUSTICS & LIGHTING LABORATORIES, INC

[ISSUEDATE] 26-JUN-2023

[MANUFAC] WILLIAMS INDOOR

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

[LUMINAIRE] 1X8' NARROW INDUSTRIAL LED LUMINAIRE

[MORE] WHITE HOUSING w/WHITE REFL & FROSTED ACRYLIC LENS

[MORE] 0-10V DRIVERS

[LUMCAT] GLN-8-L210-840-SAF118-(L180)-DIM-UNV

[LAMPCAT] HLMX 80 CRI 4000K CCT

### CHARACTERISTICS

|                                 |                 |
|---------------------------------|-----------------|
| Lumens Per Lamp                 | N.A. (absolute) |
| Total Lamp Lumens               | N.A. (absolute) |
| Luminaire Lumens                | 15868           |
| Total Luminaire Efficiency      | N.A.            |
| Luminaire Efficacy Rating (LER) | 130             |
| Total Luminaire Watts           | 122.5           |
| Ballast Factor                  | 1.00            |
| CIE Type                        | Direct          |
| Spacing Criterion (0-180)       | 1.20            |
| Spacing Criterion (90-270)      | 1.12            |
| Spacing Criterion (Diagonal)    | 1.26            |
| Basic Luminous Shape            | Rectangular     |
| Luminous Length (0-180)         | 8.00 ft         |
| Luminous Width (90-270)         | 0.56 ft         |
| Luminous Height                 | 0.00 ft         |

### LUMINANCE DATA (cd/sq.m)

| Angle In<br>Degrees | Average<br>0-Deg | Average<br>45-Deg | Average<br>90-Deg |
|---------------------|------------------|-------------------|-------------------|
| 45                  | 13282            | 12362             | 11549             |
| 55                  | 11802            | 10939             | 10075             |
| 65                  | 9986             | 9314              | 8494              |
| 75                  | 7783             | 7158              | 6635              |
| 85                  | 4357             | 4244              | 3903              |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : GLN-8-L210-840-SAF118-(L180)-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> |
|-----------|------------|-------------|-------------|-------------|-------------|
| <b>0</b>  | 6786.724   | 6786.724    | 6786.724    | 6786.724    | 6786.724    |
| <b>5</b>  | 6864.176   | 6753.531    | 6712.039    | 6684.377    | 6666.397    |
| <b>10</b> | 6749.382   | 6634.587    | 6570.966    | 6543.304    | 6510.110    |
| <b>15</b> | 6544.687   | 6413.296    | 6351.057    | 6288.819    | 6248.710    |
| <b>20</b> | 6254.243   | 6135.298    | 6052.314    | 5952.733    | 5931.987    |
| <b>25</b> | 5884.963   | 5772.934    | 5667.821    | 5555.792    | 5485.256    |
| <b>30</b> | 5449.296   | 5328.969    | 5228.005    | 5109.061    | 4998.415    |
| <b>35</b> | 4961.072   | 4890.535    | 4691.373    | 4604.240    | 4463.167    |
| <b>40</b> | 4478.381   | 4373.267    | 4218.363    | 4031.649    | 3959.729    |
| <b>45</b> | 3933.451   | 3788.229    | 3660.986    | 3507.465    | 3420.332    |
| <b>50</b> | 3387.138   | 3293.090    | 3146.484    | 2983.282    | 2927.959    |
| <b>55</b> | 2835.293   | 2775.821    | 2627.833    | 2452.183    | 2420.372    |
| <b>60</b> | 2316.642   | 2254.404    | 2146.525    | 1994.387    | 1901.721    |
| <b>65</b> | 1767.563   | 1730.221    | 1648.619    | 1531.058    | 1503.397    |
| <b>70</b> | 1304.235   | 1295.937    | 1194.972    | 1118.904    | 1106.456    |
| <b>75</b> | 843.673    | 838.140     | 775.902     | 751.007     | 719.196     |
| <b>80</b> | 474.393    | 486.841     | 443.965     | 434.284     | 402.473     |
| <b>85</b> | 159.053    | 171.501     | 154.904     | 132.775     | 142.456     |
| <b>90</b> | 0.000      | 0.000       | 0.000       | 0.000       | 0.000       |

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : GLN-8-L210-840-SAF118-(L180)-DIM-UNV\_.IES****ZONAL LUMEN SUMMARY**

| Zone    | Lumens   | %Lamp | %Fixt  |
|---------|----------|-------|--------|
| 0-20    | 2430.45  | N.A.  | 15.30  |
| 0-30    | 5039.09  | N.A.  | 31.80  |
| 0-40    | 7994.62  | N.A.  | 50.40  |
| 0-60    | 13177.36 | N.A.  | 83.00  |
| 0-80    | 15662.55 | N.A.  | 98.70  |
| 0-90    | 15868.25 | N.A.  | 100.00 |
| 10-90   | 15230.05 | N.A.  | 96.00  |
| 20-40   | 5564.17  | N.A.  | 35.10  |
| 20-50   | 8395.92  | N.A.  | 52.90  |
| 40-70   | 6816.54  | N.A.  | 43.00  |
| 60-80   | 2485.19  | N.A.  | 15.70  |
| 70-80   | 851.38   | N.A.  | 5.40   |
| 80-90   | 205.70   | N.A.  | 1.30   |
| 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   | 15868.25 | N.A.  | 100.00 |

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens  |
|---------|---------|
| 0-10    | 638.20  |
| 10-20   | 1792.26 |
| 20-30   | 2608.64 |
| 30-40   | 2955.53 |
| 40-50   | 2831.75 |
| 50-60   | 2350.99 |
| 60-70   | 1633.8  |
| 70-80   | 851.38  |
| 80-90   | 205.70  |
| 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 : GLN-8-L210-840-SAF118-(L180)-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  | 110 | 105 | 101 | 98  | 107 | 103 | 99  | 96  | 99  | 96  | 93  | 95  | 92  | 90  | 91  | 89  | 87  | 85  |
| 2  | 100 | 92  | 86  | 81  | 98  | 91  | 85  | 80  | 87  | 82  | 78  | 84  | 80  | 76  | 81  | 77  | 74  | 72  |
| 3  | 92  | 82  | 74  | 68  | 89  | 80  | 73  | 67  | 77  | 71  | 66  | 75  | 69  | 65  | 72  | 68  | 64  | 62  |
| 4  | 84  | 73  | 65  | 58  | 82  | 72  | 64  | 58  | 69  | 62  | 57  | 67  | 61  | 56  | 65  | 60  | 56  | 53  |
| 5  | 78  | 66  | 57  | 51  | 76  | 64  | 56  | 50  | 62  | 55  | 50  | 60  | 54  | 49  | 59  | 53  | 49  | 47  |
| 6  | 72  | 59  | 51  | 45  | 70  | 58  | 50  | 44  | 57  | 49  | 44  | 55  | 49  | 44  | 53  | 48  | 43  | 41  |
| 7  | 67  | 54  | 46  | 40  | 65  | 53  | 45  | 39  | 52  | 44  | 39  | 50  | 44  | 39  | 49  | 43  | 39  | 37  |
| 8  | 63  | 49  | 41  | 36  | 61  | 49  | 41  | 35  | 47  | 40  | 35  | 46  | 40  | 35  | 45  | 39  | 35  | 33  |
| 9  | 59  | 46  | 38  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  | 43  | 36  | 32  | 42  | 36  | 32  | 30  |
| 10 | 55  | 42  | 34  | 29  | 54  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 29  | 27  |

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : GLN-8-L210-840-SAF118-(L180)-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

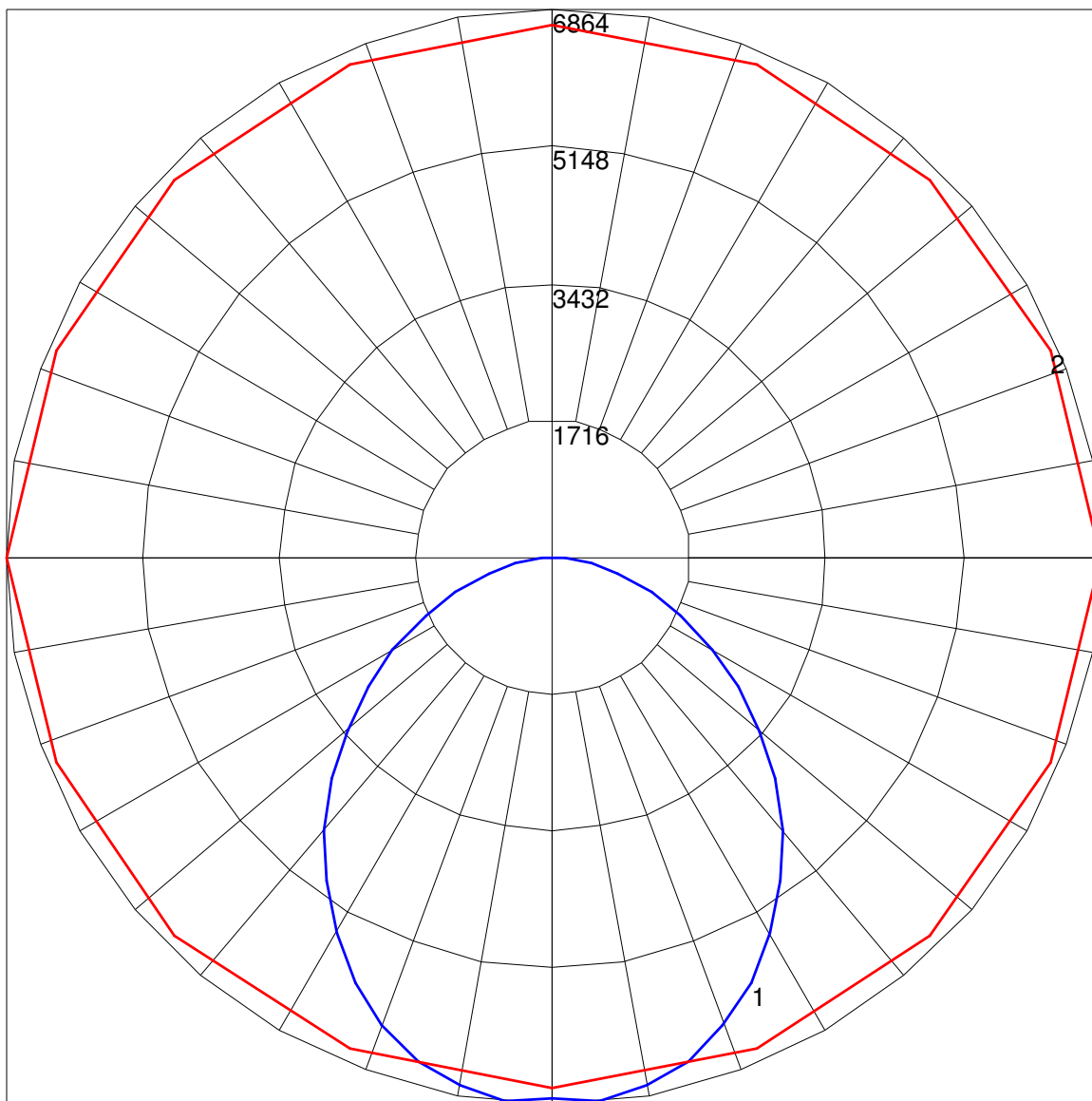
| X=2H | Y=2H | 20.5 | 22.1 | 20.9 | 22.4 | 22.7 | 19.6 | 21.2 | 20.0 | 21.5 | 21.8 |
|------|------|------|------|------|------|------|------|------|------|------|------|
|      | 3H   | 22.1 | 23.5 | 22.4 | 23.8 | 24.2 | 21.1 | 22.5 | 21.5 | 22.8 | 23.2 |
|      | 4H   | 22.6 | 23.9 | 23.0 | 24.3 | 24.7 | 21.6 | 22.9 | 22.0 | 23.3 | 23.7 |
|      | 6H   | 23.0 | 24.2 | 23.4 | 24.5 | 24.9 | 22.0 | 23.2 | 22.4 | 23.6 | 24.0 |
|      | 8H   | 23.0 | 24.2 | 23.5 | 24.6 | 25.0 | 22.1 | 23.2 | 22.5 | 23.6 | 24.0 |
|      | 12H  | 23.1 | 24.2 | 23.5 | 24.6 | 25.0 | 22.1 | 23.2 | 22.5 | 23.6 | 24.0 |

### UGR Viewed Endwise

|     |     |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|
| 4H  | 2H  | 21.0 | 22.3 | 21.4 | 22.7 | 23.0 | 20.3 | 21.6 | 20.7 | 21.9 | 22.3 |
|     | 3H  | 22.8 | 23.9 | 23.2 | 24.3 | 24.7 | 21.9 | 23.0 | 22.3 | 23.4 | 23.8 |
|     | 4H  | 23.4 | 24.4 | 23.8 | 24.8 | 25.2 | 22.6 | 23.6 | 23.0 | 24.0 | 24.4 |
|     | 6H  | 23.9 | 24.7 | 24.3 | 25.2 | 25.6 | 23.0 | 23.9 | 23.5 | 24.3 | 24.8 |
|     | 8H  | 24.0 | 24.8 | 24.5 | 25.3 | 25.7 | 23.2 | 24.0 | 23.6 | 24.4 | 24.9 |
|     | 12H | 24.1 | 24.8 | 24.6 | 25.3 | 25.8 | 23.2 | 24.0 | 23.7 | 24.4 | 24.9 |
| 8H  | 4H  | 23.6 | 24.4 | 24.1 | 24.8 | 25.3 | 22.8 | 23.7 | 23.3 | 24.1 | 24.6 |
|     | 6H  | 24.2 | 24.8 | 24.7 | 25.3 | 25.8 | 23.4 | 24.1 | 23.9 | 24.6 | 25.0 |
|     | 8H  | 24.4 | 25.0 | 24.9 | 25.5 | 26.0 | 23.6 | 24.2 | 24.1 | 24.7 | 25.2 |
|     | 12H | 24.5 | 25.0 | 25.0 | 25.5 | 26.1 | 23.7 | 24.2 | 24.2 | 24.7 | 25.3 |
| 12H | 4H  | 23.6 | 24.3 | 24.1 | 24.8 | 25.3 | 22.9 | 23.6 | 23.4 | 24.1 | 24.5 |
|     | 6H  | 24.2 | 24.8 | 24.7 | 25.3 | 25.8 | 23.5 | 24.1 | 24.0 | 24.5 | 25.1 |
|     | 8H  | 24.4 | 25.0 | 24.9 | 25.5 | 26.0 | 23.7 | 24.2 | 24.2 | 24.7 | 25.3 |

Maximum UGR = 26.1

POLAR GRAPH



Maximum Candela = 6864.176 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.)