



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : XIRR-S-LED-18-50.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]LED-8212  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUE DATE]10/12/16  
[TEST DATE]10/12/16  
[MANUFACTURER]LSI INDUSTRIES, INC  
[LUMCAT]XIRR-S-LED-18-50  
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER]TEST PROCEDURE: IESNA LM-79-08  
[SEARCH\_SOURCETYPE] LED  
[SEARCH\_APPLICATION] Indoor

**CHARACTERISTICS**

|                                 |                    |
|---------------------------------|--------------------|
| Lumens Per Lamp                 | N.A. (absolute)    |
| Total Lamp Lumens               | N.A. (absolute)    |
| Luminaire Lumens                | 18594              |
| Total Luminaire Efficiency      | N.A.               |
| Luminaire Efficacy Rating (LER) | 111                |
| Total Luminaire Watts           | 167.6              |
| Ballast Factor                  | 1.00               |
| CIE Type                        | Direct             |
| Spacing Criterion (0-180)       | 1.22               |
| Spacing Criterion (90-270)      | 1.22               |
| Spacing Criterion (Diagonal)    | 1.32               |
| Basic Luminous Shape            | Circular           |
| Luminous Length (0-180)         | 1.13 ft (Diameter) |
| Luminous Width (90-270)         | 1.13 ft (Diameter) |
| 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                  | 65881            | 66049             | 66125             |
| 55                  | 59527            | 59697             | 59848             |
| 65                  | 52785            | 52938             | 53092             |
| 75                  | 43304            | 43513             | 43681             |
| 85                  | 25322            | 25571             | 26067             |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : XIRR-S-LED-18-50.IES**

**CANDELA TABULATION**

|      | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|------|------------|-------------|-------------|-------------|-------------|
| 0.0  | 7326       | 7326        | 7326        | 7326        | 7326        |
| 2.5  | 7339       | 7337        | 7338        | 7338        | 7339        |
| 5.0  | 7324       | 7323        | 7323        | 7323        | 7323        |
| 7.5  | 7285       | 7285        | 7284        | 7283        | 7284        |
| 10.0 | 7220       | 7223        | 7220        | 7221        | 7221        |
| 12.5 | 7135       | 7131        | 7136        | 7137        | 7138        |
| 15.0 | 7027       | 7024        | 7029        | 7030        | 7031        |
| 17.5 | 6899       | 6892        | 6898        | 6904        | 6904        |
| 20.0 | 6751       | 6744        | 6750        | 6752        | 6757        |
| 22.5 | 6574       | 6575        | 6578        | 6585        | 6591        |
| 25.0 | 6385       | 6387        | 6390        | 6398        | 6404        |
| 27.5 | 6177       | 6179        | 6182        | 6191        | 6187        |
| 30.0 | 5949       | 5952        | 5954        | 5958        | 5961        |
| 32.5 | 5701       | 5704        | 5707        | 5711        | 5713        |
| 35.0 | 5440       | 5442        | 5446        | 5443        | 5439        |
| 37.5 | 5168       | 5170        | 5168        | 5165        | 5167        |
| 40.0 | 4889       | 4891        | 4890        | 4887        | 4888        |
| 42.5 | 4592       | 4602        | 4601        | 4606        | 4607        |
| 45.0 | 4306       | 4317        | 4317        | 4322        | 4322        |
| 47.5 | 4020       | 4010        | 4024        | 4029        | 4037        |
| 50.0 | 3734       | 3725        | 3738        | 3744        | 3752        |
| 52.5 | 3436       | 3440        | 3447        | 3460        | 3468        |
| 55.0 | 3156       | 3160        | 3165        | 3179        | 3173        |
| 57.5 | 2881       | 2884        | 2888        | 2888        | 2883        |
| 60.0 | 2609       | 2611        | 2609        | 2607        | 2610        |
| 62.5 | 2341       | 2342        | 2340        | 2338        | 2340        |
| 65.0 | 2062       | 2064        | 2068        | 2071        | 2074        |
| 67.5 | 1800       | 1796        | 1800        | 1809        | 1812        |
| 70.0 | 1543       | 1533        | 1542        | 1546        | 1554        |
| 72.5 | 1279       | 1282        | 1285        | 1294        | 1301        |
| 75.0 | 1036       | 1039        | 1041        | 1044        | 1045        |
| 77.5 | 803        | 806         | 806         | 804         | 799         |
| 80.0 | 584        | 586         | 586         | 578         | 579         |
| 82.5 | 385        | 382         | 376         | 378         | 380         |
| 85.0 | 204        | 206         | 206         | 208         | 210         |
| 87.5 | 65         | 67          | 70          | 73          | 74          |
| 90.0 | 0          | 0           | 0           | 0           | 0           |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : XIRR-S-LED-18-50.IES**

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens   | %Lamp | %Fixt  |
|---------|----------|-------|--------|
| 0-20    | 2676.53  | N.A.  | 14.40  |
| 0-30    | 5617.51  | N.A.  | 30.20  |
| 0-40    | 9018.58  | N.A.  | 48.50  |
| 0-60    | 15180.66 | N.A.  | 81.60  |
| 0-80    | 18336.16 | N.A.  | 98.60  |
| 0-90    | 18593.86 | N.A.  | 100.00 |
| 10-90   | 17898.16 | N.A.  | 96.30  |
| 20-40   | 6342.04  | N.A.  | 34.10  |
| 20-50   | 9670.77  | N.A.  | 52.00  |
| 40-70   | 8211.63  | N.A.  | 44.20  |
| 60-80   | 3155.5   | N.A.  | 17.00  |
| 70-80   | 1105.96  | N.A.  | 5.90   |
| 80-90   | 257.70   | N.A.  | 1.40   |
| 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   | 18593.86 | N.A.  | 100.00 |

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens  |
|---------|---------|
| 0-10    | 695.70  |
| 10-20   | 1980.83 |
| 20-30   | 2940.98 |
| 30-40   | 3401.07 |
| 40-50   | 3328.73 |
| 50-60   | 2833.36 |
| 60-70   | 2049.54 |
| 70-80   | 1105.96 |
| 80-90   | 257.70  |
| 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    |

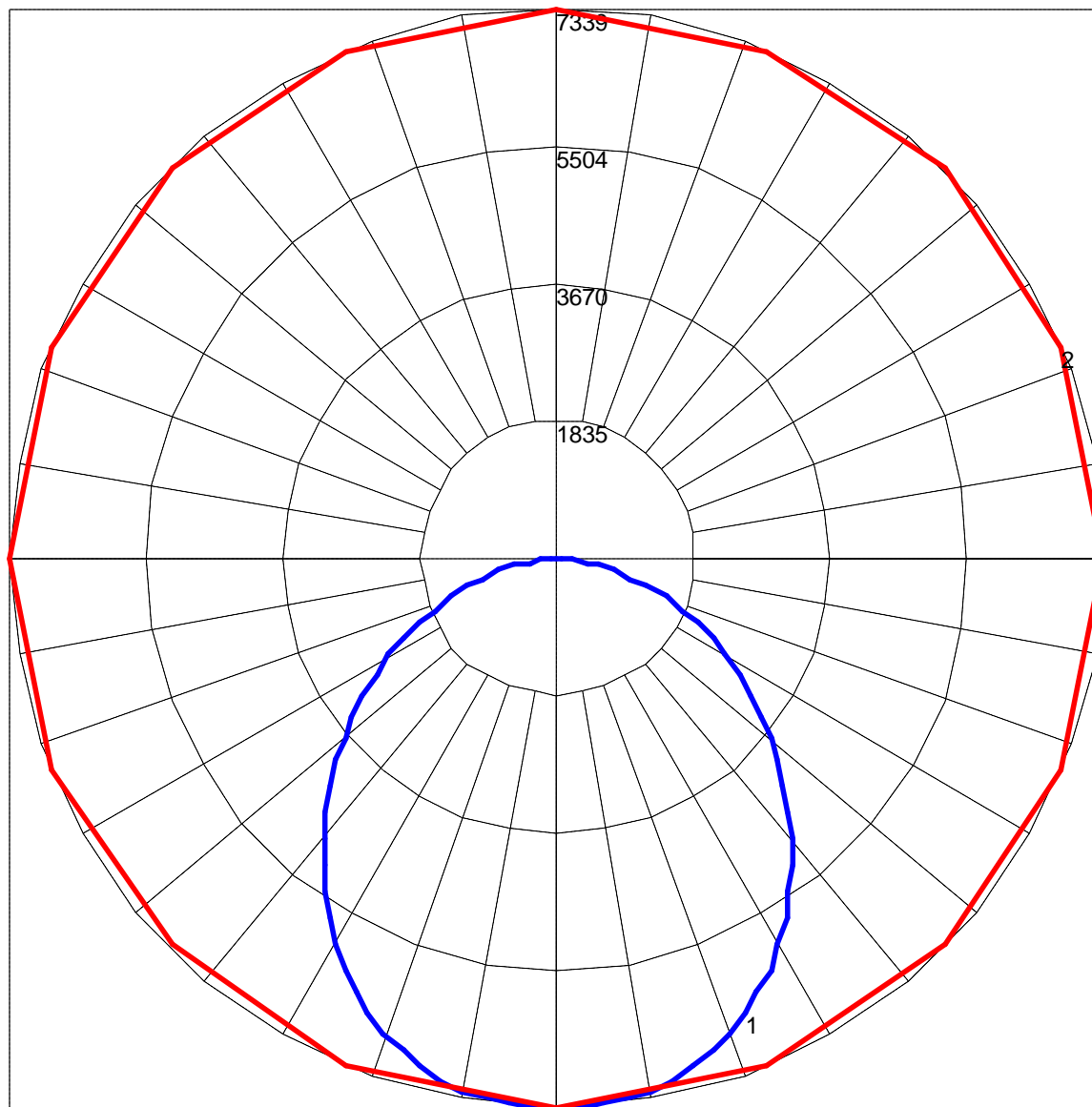
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : XIRR-S-LED-18-50.IES**

**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 | 105 | 101 | 97  | 107 | 102 | 99  | 95  | 98  | 95  | 92  | 94  | 92  | 90  | 91  | 89  | 87  | 85  |
| 2  | 100 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 86  | 81  | 77  | 83  | 79  | 75  | 80  | 77  | 74  | 71  |
| 3  | 91  | 81  | 73  | 67  | 89  | 79  | 72  | 66  | 77  | 70  | 65  | 74  | 68  | 64  | 71  | 67  | 63  | 61  |
| 4  | 84  | 72  | 64  | 57  | 81  | 71  | 63  | 57  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 59  | 54  | 52  |
| 5  | 77  | 65  | 56  | 49  | 75  | 64  | 55  | 49  | 61  | 54  | 49  | 59  | 53  | 48  | 58  | 52  | 48  | 45  |
| 6  | 71  | 58  | 50  | 43  | 70  | 57  | 49  | 43  | 56  | 48  | 43  | 54  | 47  | 42  | 52  | 47  | 42  | 40  |
| 7  | 66  | 53  | 44  | 38  | 65  | 52  | 44  | 38  | 51  | 43  | 38  | 49  | 43  | 38  | 48  | 42  | 37  | 36  |
| 8  | 62  | 49  | 40  | 34  | 60  | 48  | 40  | 34  | 47  | 39  | 34  | 45  | 39  | 34  | 44  | 38  | 34  | 32  |
| 9  | 58  | 45  | 37  | 31  | 56  | 44  | 36  | 31  | 43  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 31  | 29  |
| 10 | 54  | 41  | 33  | 28  | 53  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 28  | 26  |

POLAR GRAPH



Maximum Candela = 7339 Located At Horizontal Angle = 0, Vertical Angle = 2.5  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)