



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : OPT24-LED-48L-W-40.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]LED-9407  
[TESTLAB]LSI INDUSTRIES, INC  
[ISSUE DATE]02/14/18  
[TEST DATE]12/01/17  
[MANUFACTURER]LSI INDUSTRIES, INC  
[LUMEN CATEGORY]OPT24-LED-48-W-40  
[ABSOLUTE]NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.  
[OTHER]TEST PROCEDURE: IESNA LM-79-08  
[SEARCH\_SOURCE TYPE] LED  
[SEARCH\_APPLICATION] Indoor

**CHARACTERISTICS**

|                                 |                 |
|---------------------------------|-----------------|
| Lumens Per Lamp                 | N.A. (absolute) |
| Total Lamp Lumens               | N.A. (absolute) |
| Luminaire Lumens                | 4898            |
| Total Luminaire Efficiency      | N.A.            |
| Luminaire Efficacy Rating (LER) | 126             |
| Total Luminaire Watts           | 38.8            |
| Ballast Factor                  | 1.00            |
| CIE Type                        | Direct          |
| Spacing Criterion (0-180)       | 1.32            |
| Spacing Criterion (90-270)      | 1.32            |
| Spacing Criterion (Diagonal)    | 1.44            |
| Basic Luminous Shape            | Rectangular     |
| Luminous Length (0-180)         | 4.00 ft         |
| Luminous Width (90-270)         | 2.00 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                  | 1992             | 2074              | 2135              |
| 55                  | 1901             | 2058              | 2222              |
| 65                  | 1762             | 2087              | 2484              |
| 75                  | 1506             | 2270              | 2716              |
| 85                  | 1018             | 2452              | 3285              |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : OPT24-LED-48L-W-40.IES**

**CANDELA TABULATION**

|             | <u>0.0</u> | <u>22.5</u> | <u>45.0</u> | <u>67.5</u> | <u>90.0</u> |
|-------------|------------|-------------|-------------|-------------|-------------|
| <b>0.0</b>  | 1518       | 1518        | 1518        | 1518        | 1518        |
| <b>2.5</b>  | 1552       | 1530        | 1520        | 1509        | 1495        |
| <b>5.0</b>  | 1552       | 1531        | 1519        | 1510        | 1495        |
| <b>7.5</b>  | 1549       | 1528        | 1516        | 1507        | 1494        |
| <b>10.0</b> | 1540       | 1519        | 1509        | 1501        | 1490        |
| <b>12.5</b> | 1528       | 1509        | 1499        | 1493        | 1483        |
| <b>15.0</b> | 1514       | 1495        | 1487        | 1483        | 1474        |
| <b>17.5</b> | 1495       | 1477        | 1472        | 1470        | 1461        |
| <b>20.0</b> | 1472       | 1457        | 1453        | 1452        | 1446        |
| <b>22.5</b> | 1445       | 1432        | 1430        | 1433        | 1426        |
| <b>25.0</b> | 1415       | 1404        | 1405        | 1409        | 1403        |
| <b>27.5</b> | 1381       | 1374        | 1377        | 1384        | 1379        |
| <b>30.0</b> | 1344       | 1338        | 1345        | 1354        | 1349        |
| <b>32.5</b> | 1303       | 1299        | 1310        | 1323        | 1316        |
| <b>35.0</b> | 1258       | 1256        | 1272        | 1288        | 1280        |
| <b>37.5</b> | 1211       | 1211        | 1229        | 1250        | 1244        |
| <b>40.0</b> | 1158       | 1162        | 1186        | 1210        | 1205        |
| <b>42.5</b> | 1102       | 1111        | 1138        | 1168        | 1164        |
| <b>45.0</b> | 1048       | 1057        | 1091        | 1125        | 1123        |
| <b>47.5</b> | 991        | 1003        | 1040        | 1079        | 1081        |
| <b>50.0</b> | 932        | 947         | 988         | 1033        | 1040        |
| <b>52.5</b> | 872        | 888         | 934         | 982         | 991         |
| <b>55.0</b> | 811        | 830         | 878         | 934         | 948         |
| <b>57.5</b> | 750        | 767         | 823         | 884         | 906         |
| <b>60.0</b> | 686        | 706         | 768         | 836         | 862         |
| <b>62.5</b> | 619        | 641         | 710         | 790         | 823         |
| <b>65.0</b> | 554        | 580         | 656         | 748         | 781         |
| <b>67.5</b> | 485        | 515         | 603         | 700         | 722         |
| <b>70.0</b> | 419        | 454         | 556         | 634         | 657         |
| <b>72.5</b> | 355        | 394         | 503         | 568         | 588         |
| <b>75.0</b> | 290        | 336         | 437         | 502         | 523         |
| <b>77.5</b> | 229        | 281         | 370         | 432         | 454         |
| <b>80.0</b> | 170        | 231         | 302         | 359         | 381         |
| <b>82.5</b> | 115        | 170         | 233         | 282         | 300         |
| <b>85.0</b> | 66         | 112         | 159         | 200         | 213         |
| <b>87.5</b> | 30         | 57          | 84          | 98          | 102         |
| <b>90.0</b> | 0          | 0           | 0           | 0           | 0           |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : OPT24-LED-48L-W-40.IES**

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens  | %Lamp | %Fixt  |
|---------|---------|-------|--------|
| 0-20    | 565.63  | N.A.  | 11.50  |
| 0-30    | 1214.33 | N.A.  | 24.80  |
| 0-40    | 2009.6  | N.A.  | 41.00  |
| 0-60    | 3637.91 | N.A.  | 74.30  |
| 0-80    | 4735.28 | N.A.  | 96.70  |
| 0-90    | 4898.00 | N.A.  | 100.00 |
| 10-90   | 4753.13 | N.A.  | 97.00  |
| 20-40   | 1443.97 | N.A.  | 29.50  |
| 20-50   | 2284.75 | N.A.  | 46.60  |
| 40-70   | 2282.52 | N.A.  | 46.60  |
| 60-80   | 1097.37 | N.A.  | 22.40  |
| 70-80   | 443.16  | N.A.  | 9.00   |
| 80-90   | 162.72  | N.A.  | 3.30   |
| 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   | 4898.00 | N.A.  | 100.00 |

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens |
|---------|--------|
| 0-10    | 144.86 |
| 10-20   | 420.77 |
| 20-30   | 648.70 |
| 30-40   | 795.27 |
| 40-50   | 840.78 |
| 50-60   | 787.53 |
| 60-70   | 654.21 |
| 70-80   | 443.16 |
| 80-90   | 162.72 |
| 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   |

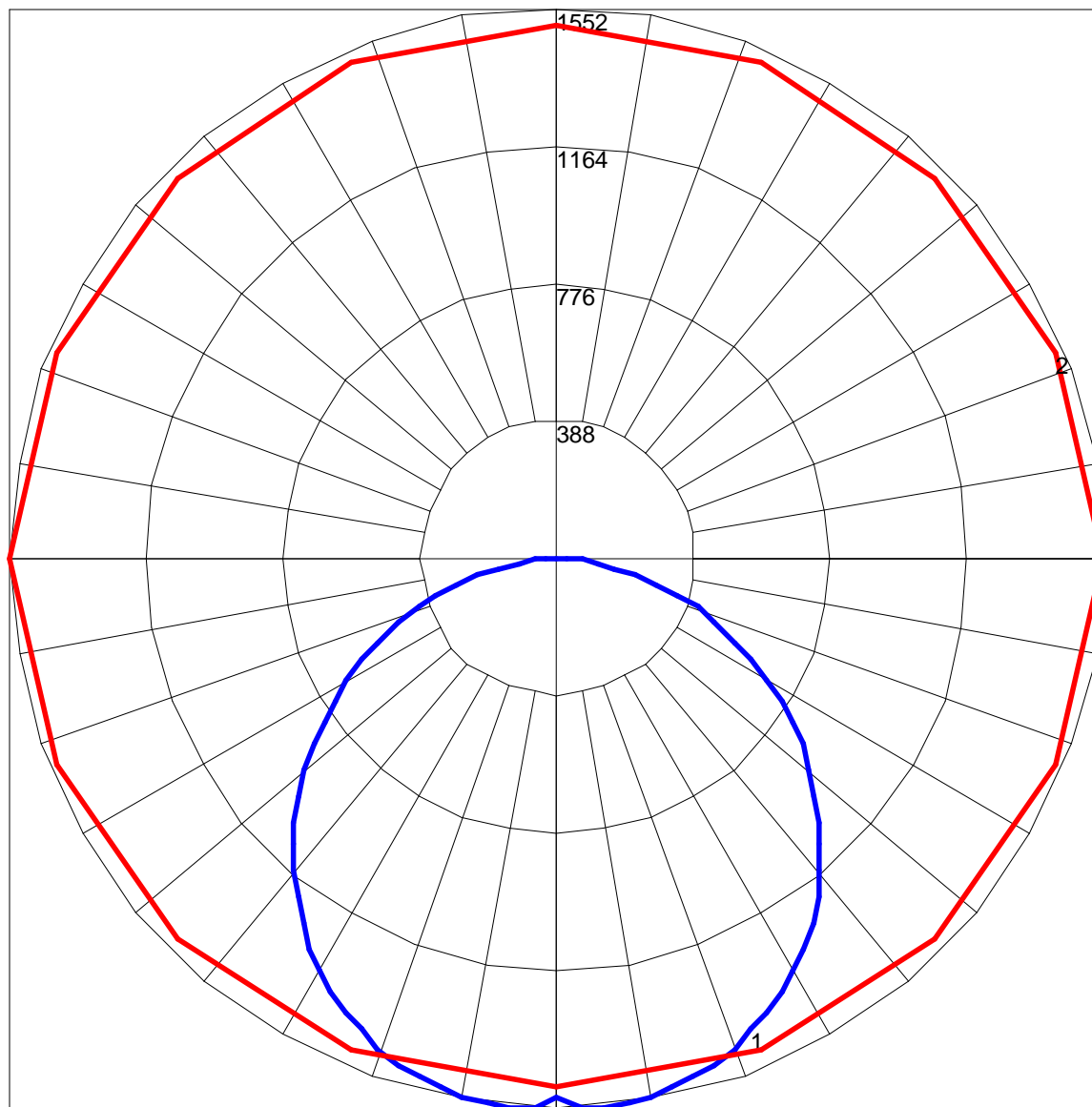
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : OPT24-LED-48L-W-40.IES**

**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  | 108 | 102 | 98  | 93  | 105 | 100 | 96  | 92  | 96  | 92  | 89  | 92  | 89  | 86  | 88  | 86  | 84  | 81  |
| 2  | 97  | 88  | 81  | 75  | 95  | 86  | 80  | 74  | 83  | 77  | 72  | 80  | 75  | 71  | 76  | 72  | 69  | 67  |
| 3  | 88  | 77  | 68  | 62  | 86  | 76  | 67  | 61  | 72  | 66  | 60  | 70  | 64  | 59  | 67  | 62  | 58  | 55  |
| 4  | 81  | 68  | 59  | 52  | 78  | 67  | 58  | 51  | 64  | 57  | 51  | 62  | 55  | 50  | 59  | 54  | 49  | 47  |
| 5  | 74  | 61  | 51  | 44  | 72  | 59  | 51  | 44  | 57  | 49  | 43  | 55  | 48  | 43  | 53  | 47  | 42  | 40  |
| 6  | 68  | 54  | 45  | 38  | 66  | 53  | 45  | 38  | 52  | 44  | 38  | 50  | 43  | 38  | 48  | 42  | 37  | 35  |
| 7  | 63  | 49  | 40  | 34  | 61  | 48  | 40  | 34  | 47  | 39  | 33  | 45  | 38  | 33  | 44  | 38  | 33  | 31  |
| 8  | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 43  | 35  | 30  | 41  | 35  | 30  | 40  | 34  | 29  | 27  |
| 9  | 55  | 41  | 33  | 27  | 53  | 40  | 32  | 27  | 39  | 32  | 27  | 38  | 31  | 27  | 37  | 31  | 26  | 25  |
| 10 | 51  | 38  | 30  | 24  | 50  | 37  | 30  | 24  | 36  | 29  | 24  | 35  | 29  | 24  | 34  | 28  | 24  | 22  |

POLAR GRAPH



Maximum Candela = 1552 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.)