



IES ROAD REPORT

PHOTOMETRIC FILENAME : ENM4-PT-5W-LED-10L-40.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] LED-11685

[TESTLAB] LSI INDUSTRIES, INC.

[ISSUE DATE] 06/10/2020

[TEST DATE] 04/06/20

[MANUFAC] LSI INDUSTRIES, INC.

[LUMCAT] ENM4-PT-5W-LED-10L-40

[ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED.

[OTHER] TEST PROCEDURE: IESNA LM-79-08

[SEARCH_SOURCETYPE] LED

[SEARCH_APPLICATION] Outdoor

CHARACTERISTICS

| | |
|---|-----------------------------|
| IES Classification | Type VS |
| Longitudinal Classification | Short |
| Lumens Per Lamp | N.A. (absolute) |
| Total Lamp Lumens | N.A. (absolute) |
| Luminaire Lumens | 10009 |
| Downward Total Efficiency | N.A. (absolute) |
| Total Luminaire Efficiency | N.A. (absolute) |
| Luminaire Efficacy Rating (LER) | 129 |
| Total Luminaire Watts | 77.3 |
| Ballast Factor | 1.00 |
| Upward Waste Light Ratio | 0.00 |
| Maximum Candela | 5263 |
| Maximum Candela Angle | 45H 70V |
| Maximum Candela (<90 Degrees Vertical) | 5263 |
| Maximum Candela Angle (<90 Degrees Vertical) | 45H 70V |
| Maximum Candela At 90 Degrees Vertical | 10 (0.1% Luminaire Lumens) |
| Maximum Candela from 80 to <90 Degrees Vertical | 628 (6.3% Luminaire Lumens) |
| Cutoff Classification (deprecated) | N.A. (absolute) |

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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

| | Lumens | % Lamp | % Luminaire |
|-------------------------------|----------|--------|-------------|
| FL - Front-Low (0-30) | 311.1 | N.A. | 3.1 |
| FM - Front-Medium (30-60) | 2140.2 | N.A. | 21.4 |
| FH - Front-High (60-80) | 2494.9 | N.A. | 24.9 |
| FVH - Front-Very High (80-90) | 49.2 | N.A. | 0.5 |
| BL - Back-Low (0-30) | 311.1 | N.A. | 3.1 |
| BM - Back-Medium (30-60) | 2140.2 | N.A. | 21.4 |
| BH - Back-High (60-80) | 2494.9 | N.A. | 24.9 |
| BVH - Back-Very High (80-90) | 49.2 | N.A. | 0.5 |
| UL - Uplight-Low (90-100) | 6.8 | N.A. | 0.1 |
| UH - Uplight-High (100-180) | 11.0 | N.A. | 0.1 |
| Total | 10008.6 | N.A. | 100.0 |
| BUG Rating | B3-U2-G2 | | |

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CANDELA TABULATION

| Vert. Angles | Horizontal Angles | | | | | | | | | |
|-----------------|-------------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | <u>0</u> | <u>5</u> | <u>15</u> | <u>25</u> | <u>35</u> | <u>45</u> | <u>55</u> | <u>65</u> | <u>75</u> | <u>85</u> |
| 0.0 | 520 | 520 | 520 | 520 | 520 | 520 | 520 | 520 | 520 | 520 |
| 2.5 | 518 | 519 | 520 | 520 | 522 | 520 | 519 | 516 | 514 | 515 |
| 5.0 | 491 | 487 | 491 | 500 | 498 | 494 | 490 | 491 | 482 | 486 |
| 7.5 | 491 | 483 | 485 | 483 | 475 | 473 | 489 | 496 | 511 | 498 |
| 10.0 | 490 | 488 | 486 | 471 | 484 | 489 | 504 | 506 | 522 | 521 |
| 12.5 | 545 | 537 | 532 | 518 | 523 | 515 | 524 | 542 | 544 | 550 |
| 15.0 | 592 | 578 | 567 | 580 | 582 | 570 | 567 | 572 | 589 | 601 |
| 17.5 | 626 | 627 | 614 | 625 | 641 | 644 | 624 | 616 | 639 | 644 |
| 20.0 | 685 | 696 | 679 | 695 | 702 | 702 | 700 | 668 | 688 | 716 |
| 22.5 | 746 | 741 | 755 | 767 | 776 | 785 | 792 | 753 | 757 | 798 |
| 25.0 | 812 | 808 | 826 | 844 | 866 | 872 | 906 | 880 | 833 | 873 |
| 27.5 | 912 | 901 | 926 | 952 | 967 | 990 | 1009 | 1018 | 935 | 957 |
| 30.0 | 982 | 986 | 995 | 1047 | 1074 | 1121 | 1155 | 1139 | 1054 | 1038 |
| 32.5 | 1126 | 1117 | 1123 | 1149 | 1207 | 1273 | 1303 | 1278 | 1177 | 1132 |
| 35.0 | 1217 | 1233 | 1235 | 1278 | 1340 | 1437 | 1455 | 1420 | 1316 | 1232 |
| 37.5 | 1372 | 1377 | 1359 | 1376 | 1498 | 1571 | 1609 | 1571 | 1467 | 1344 |
| 40.0 | 1459 | 1467 | 1502 | 1537 | 1646 | 1748 | 1761 | 1715 | 1599 | 1427 |
| 42.5 | 1545 | 1556 | 1585 | 1662 | 1810 | 1876 | 1899 | 1839 | 1700 | 1510 |
| 45.0 | 1633 | 1649 | 1672 | 1772 | 1925 | 1996 | 2000 | 1939 | 1801 | 1595 |
| 47.5 | 1725 | 1746 | 1779 | 1870 | 2017 | 2084 | 2089 | 2040 | 1911 | 1699 |
| 50.0 | 1830 | 1852 | 1883 | 1959 | 2102 | 2172 | 2185 | 2143 | 2023 | 1813 |
| 52.5 | 1943 | 1965 | 1997 | 2067 | 2196 | 2263 | 2285 | 2258 | 2145 | 1933 |
| 55.0 | 2069 | 2086 | 2115 | 2183 | 2293 | 2369 | 2393 | 2385 | 2275 | 2057 |
| 57.5 | 2209 | 2234 | 2264 | 2317 | 2404 | 2511 | 2522 | 2534 | 2439 | 2211 |
| 60.0 | 2392 | 2411 | 2454 | 2498 | 2589 | 2719 | 2716 | 2731 | 2622 | 2402 |
| 62.5 | 2572 | 2593 | 2668 | 2767 | 2902 | 3054 | 3013 | 3009 | 2878 | 2629 |
| 65.0 | 2769 | 2800 | 2888 | 3054 | 3314 | 3550 | 3462 | 3371 | 3185 | 2890 |
| 67.5 | 2820 | 2863 | 3027 | 3357 | 3847 | 4257 | 4035 | 3801 | 3541 | 3168 |
| 70.0 | 2374 | 2416 | 2690 | 3275 | 4394 | 5263 | 4766 | 4030 | 3297 | 2696 |
| 72.5 | 1379 | 1483 | 1789 | 2416 | 3721 | 5109 | 4111 | 2942 | 2093 | 1591 |
| 75.0 | 457 | 490 | 677 | 1223 | 2479 | 3680 | 2621 | 1494 | 885 | 688 |
| 77.5 | 232 | 237 | 297 | 450 | 1023 | 1709 | 1137 | 645 | 395 | 307 |
| 80.0 | 110 | 110 | 132 | 204 | 397 | 628 | 478 | 275 | 170 | 147 |
| 82.5 | 70 | 68 | 73 | 94 | 148 | 224 | 161 | 124 | 101 | 101 |
| 85.0 | 46 | 45 | 45 | 56 | 77 | 92 | 83 | 73 | 62 | 63 |
| 87.5 | 25 | 24 | 25 | 28 | 35 | 38 | 34 | 30 | 27 | 25 |
| 90.0 | 6 | 7 | 8 | 8 | 9 | 10 | 8 | 8 | 7 | 5 |
| 92.5 | 5 | 5 | 6 | 6 | 8 | 9 | 9 | 8 | 7 | 5 |
| 95.0 | 5 | 5 | 6 | 6 | 7 | 9 | 8 | 7 | 6 | 5 |
| 97.5 | 4 | 4 | 5 | 5 | 6 | 8 | 7 | 6 | 5 | 4 |
| 100.0 | 3 | 3 | 4 | 4 | 5 | 6 | 5 | 5 | 4 | 3 |
| 102.5 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 |
| 105.0 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 2 |
| 107.5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 110.0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 112.5 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 115.0 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 |
| 117.5 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 |
| 120.0 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 |
| 122.5 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 |
| 125.0 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 |
| 127.5 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 |
| 130.0 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |

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CANDELA TABULATION - (Cont.)

| | | | | | | | | | | |
|-------|---|---|---|---|---|---|---|---|---|---|
| 132.5 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 135.0 | 2 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 3 | 3 |
| 137.5 | 1 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 140.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 142.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 145.0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 147.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 150.0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 152.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 155.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 157.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 160.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 162.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 165.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 167.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 170.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 172.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 175.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 177.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 180.0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Vert. Horizontal Angles

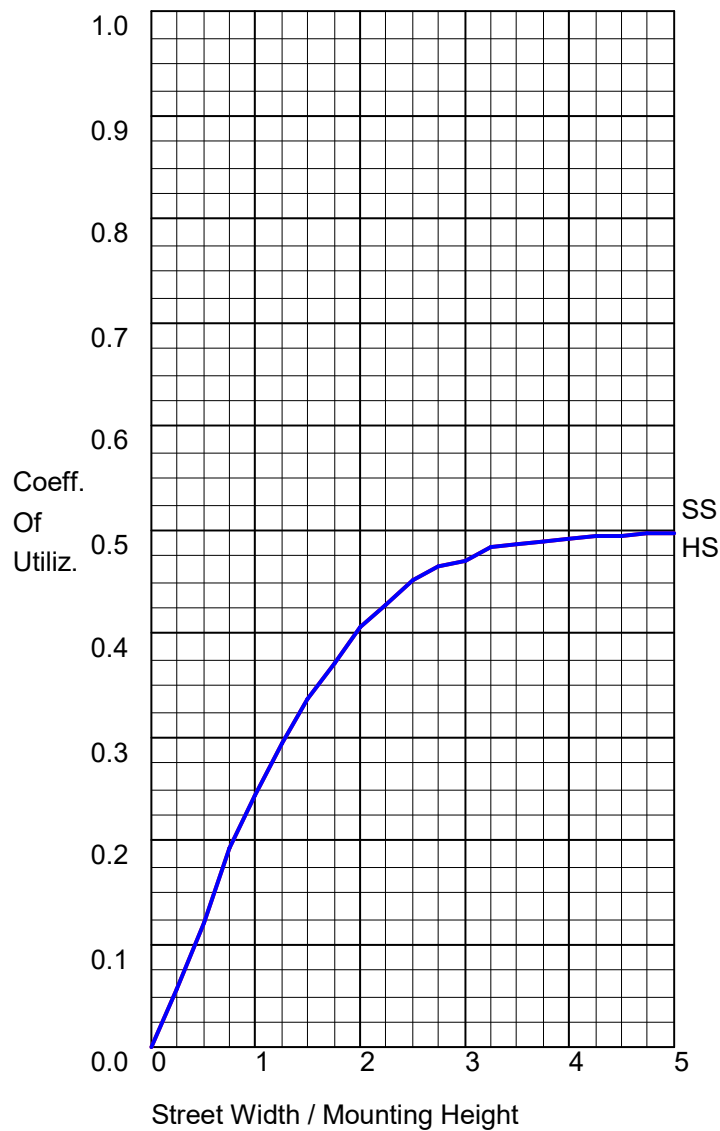
| | |
|------|-----------|
| | 90 |
| 0.0 | 520 |
| 2.5 | 519 |
| 5.0 | 490 |
| 7.5 | 503 |
| 10.0 | 520 |
| 12.5 | 560 |
| 15.0 | 605 |
| 17.5 | 651 |
| 20.0 | 709 |
| 22.5 | 782 |
| 25.0 | 872 |
| 27.5 | 948 |
| 30.0 | 1050 |
| 32.5 | 1134 |
| 35.0 | 1236 |
| 37.5 | 1350 |
| 40.0 | 1435 |
| 42.5 | 1513 |
| 45.0 | 1600 |
| 47.5 | 1687 |
| 50.0 | 1794 |
| 52.5 | 1893 |
| 55.0 | 2008 |
| 57.5 | 2147 |
| 60.0 | 2331 |
| 62.5 | 2531 |
| 65.0 | 2782 |
| 67.5 | 3023 |
| 70.0 | 2567 |
| 72.5 | 1502 |
| 75.0 | 656 |
| 77.5 | 302 |

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CANDELA TABULATION - (Cont.)

| | |
|-------|-----|
| 80.0 | 149 |
| 82.5 | 99 |
| 85.0 | 60 |
| 87.5 | 23 |
| 90.0 | 4 |
| 92.5 | 4 |
| 95.0 | 4 |
| 97.5 | 3 |
| 100.0 | 3 |
| 102.5 | 2 |
| 105.0 | 2 |
| 107.5 | 2 |
| 110.0 | 2 |
| 112.5 | 2 |
| 115.0 | 3 |
| 117.5 | 3 |
| 120.0 | 3 |
| 122.5 | 3 |
| 125.0 | 3 |
| 127.5 | 3 |
| 130.0 | 3 |
| 132.5 | 3 |
| 135.0 | 3 |
| 137.5 | 1 |
| 140.0 | 0 |
| 142.5 | 0 |
| 145.0 | 0 |
| 147.5 | 0 |
| 150.0 | 0 |
| 152.5 | 0 |
| 155.0 | 0 |
| 157.5 | 0 |
| 160.0 | 0 |
| 162.5 | 0 |
| 165.0 | 0 |
| 167.5 | 0 |
| 170.0 | 0 |
| 172.5 | 0 |
| 175.0 | 0 |
| 177.5 | 0 |
| 180.0 | 0 |

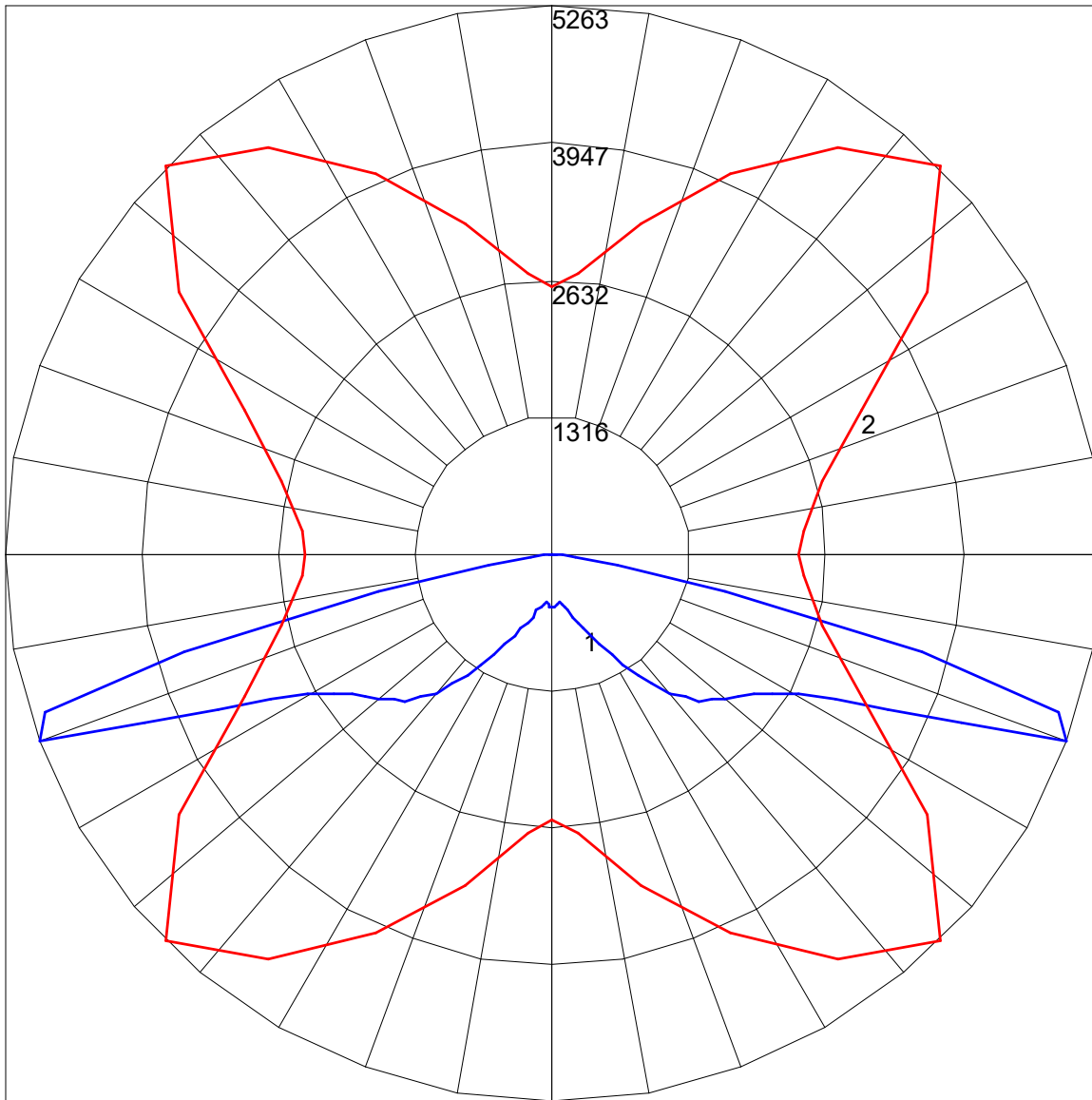
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

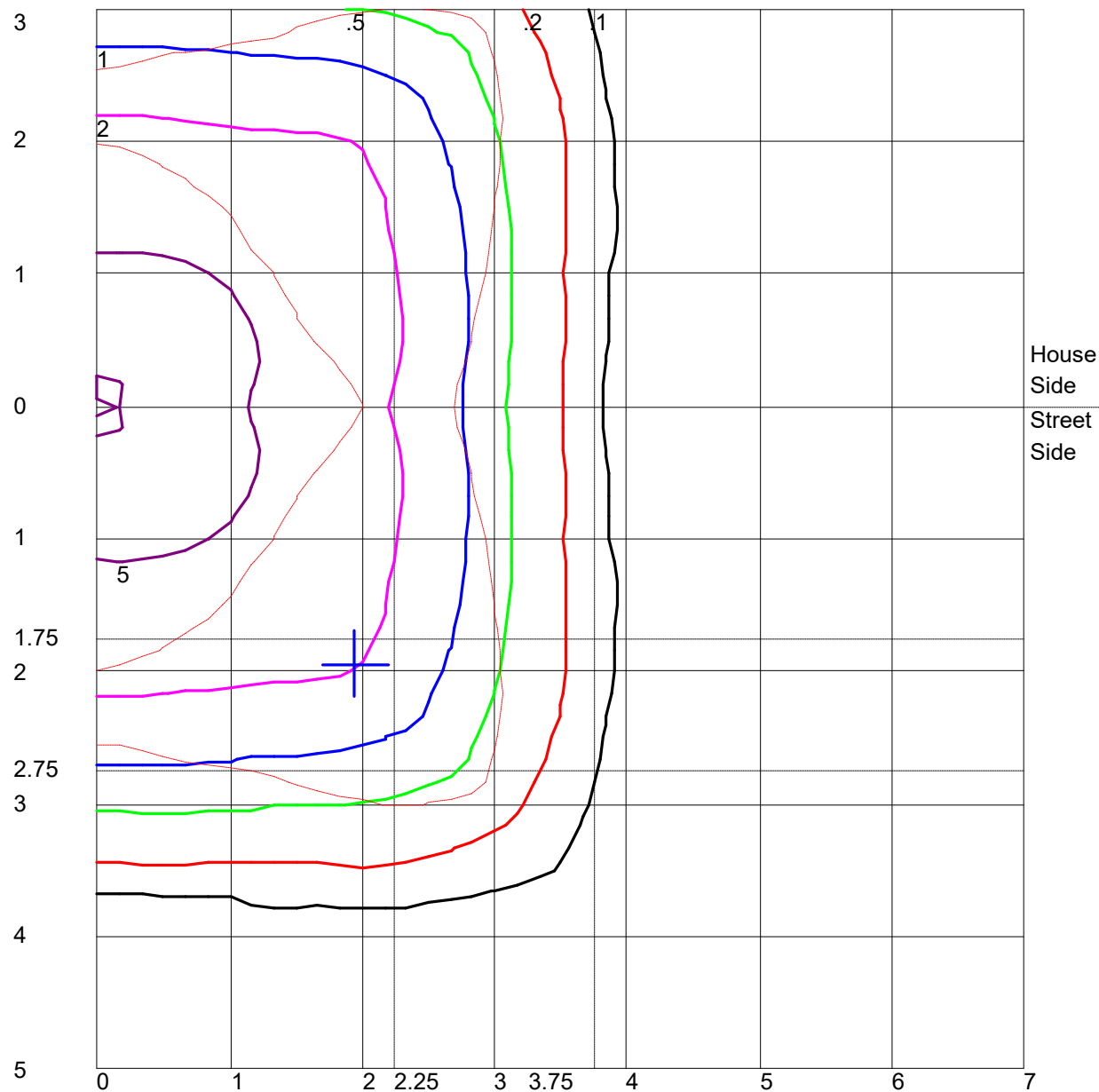
| | Lumens | Percent Of Luminaire |
|----------------------|---------|-------------------------|
| Downward Street Side | 4995.4 | 49.9 |
| Downward House Side | 4995.4 | 49.9 |
| Downward Total | 9990.8 | 99.8 |
| Upward Street Side | 8.9 | 0.1 |
| Upward House Side | 8.9 | 0.1 |
| Upward Total | 17.8 | 0.2 |
| Total Flux | 10008.6 | 100.0 |

POLAR GRAPH

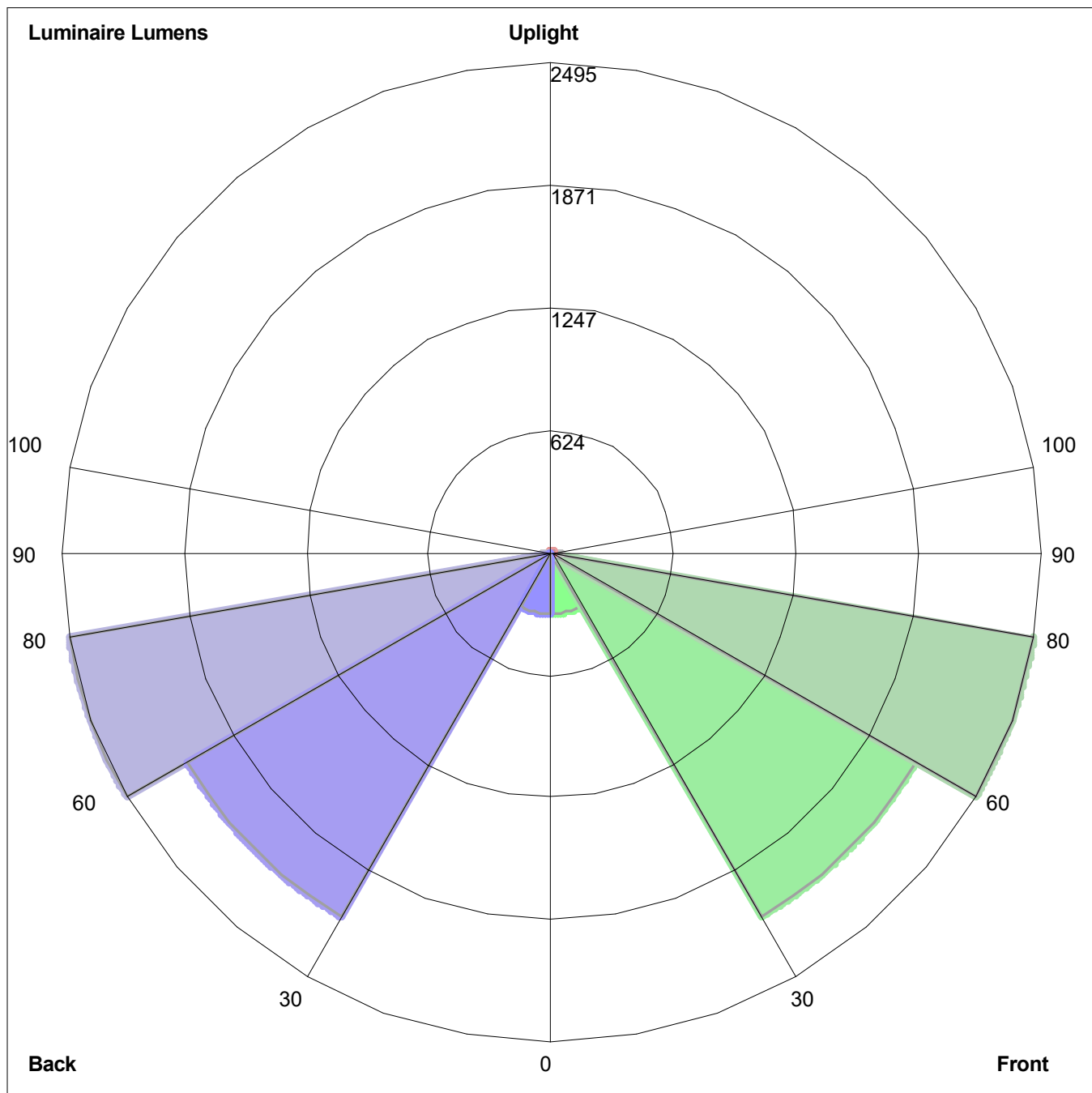


Maximum Candela = 5263 Located At Horizontal Angle = 45, Vertical Angle = 70
1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (70) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=311.1, Medium=2140.2, High=2494.9, Very High=49.2
Back: Low=311.1, Medium=2140.2, High=2494.9, Very High=49.2
Uplight: Low=6.8, High=11.0

BUG Rating : B3-U2-G2