

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P226519

Luminaire Tested: **ISW-AF-1000-LED-E1-T4FT-7030-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226519  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35943)-DOWNLIGHT AND  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: ISW-AF-1000-LED-E1-T4FT-7030-ULG  
Description: IMPACT ELITE LED WEDGE LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV FORWARD THROW, WITH UPLIGHT GLOW  
Light Source: (16) 3000K CCT, 70 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7166.6 lumens  
Efficiency: N/A  
Efficacy: 100.5 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U5 - G2  
  
Input Watts (W): 71.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

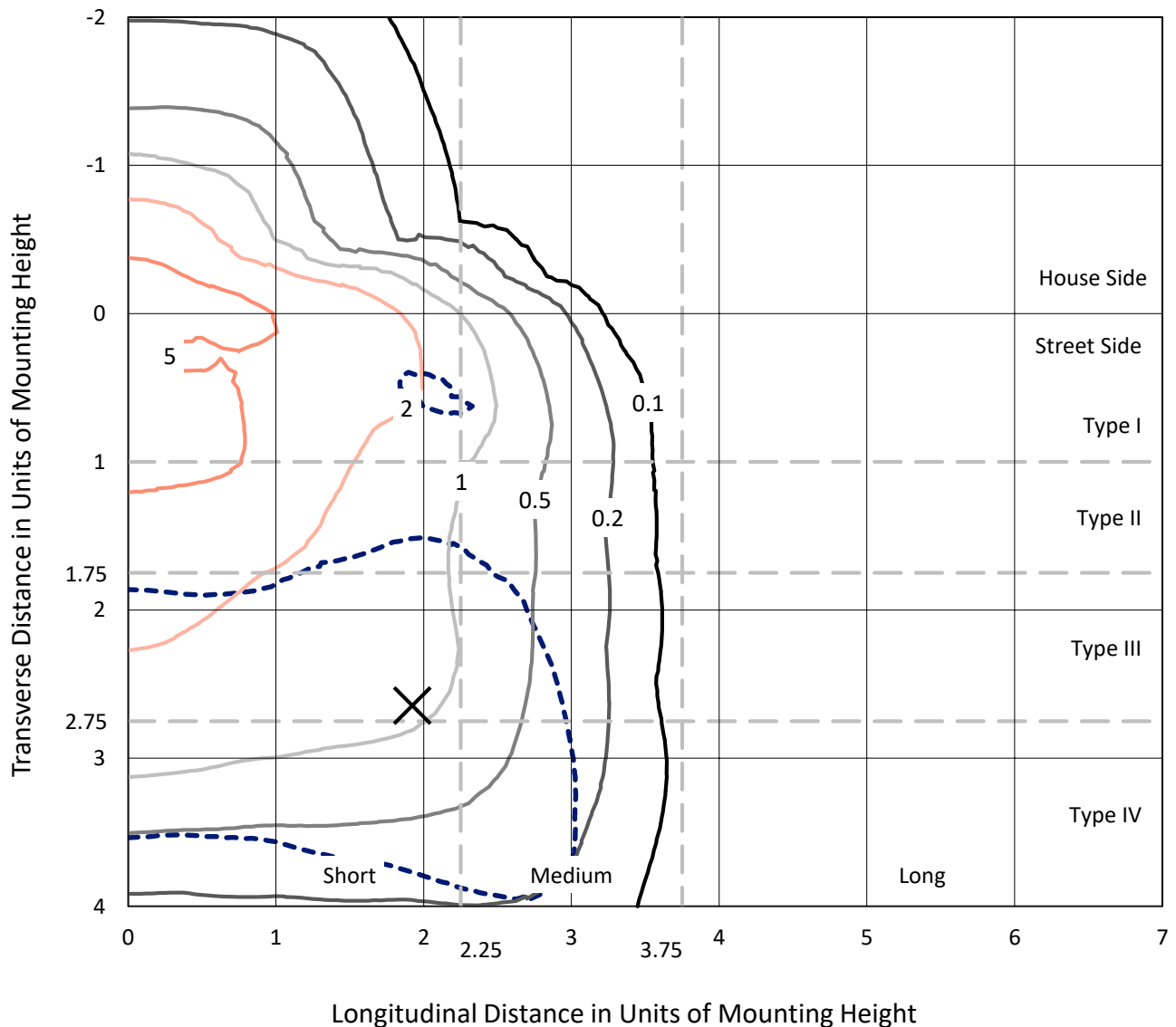


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

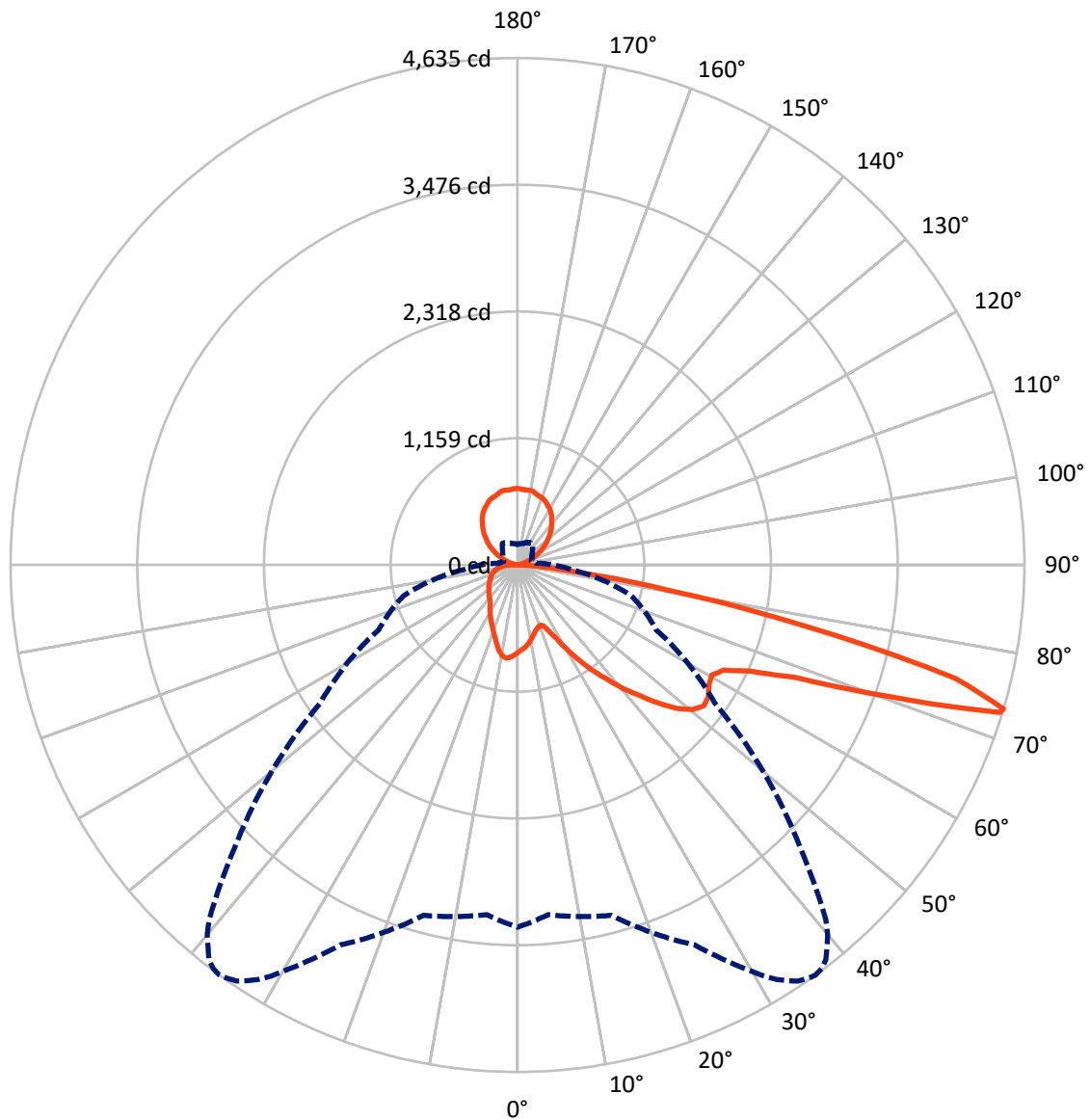


Based on 10 foot mounting height. Maximum calculated value = 8.4 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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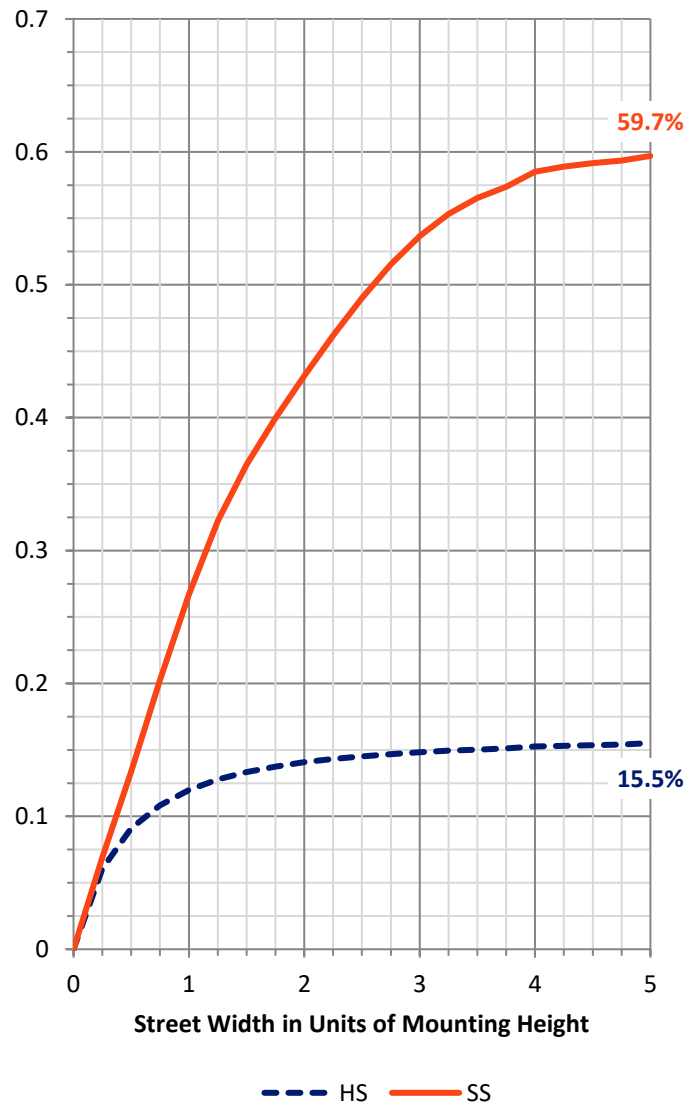
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1145.6   | 868.8  | 2014.4 |
|                    | % Fixture | 16.0     | 12.1   | 28.1   |
| <b>Street Side</b> | Lumens    | 4284.2   | 868.0  | 5152.2 |
|                    | % Fixture | 59.8     | 12.1   | 71.9   |
| <b>Total</b>       | Lumens    | 5429.8   | 1736.8 | 7166.6 |
|                    | % Fixture | 75.8     | 24.2   | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 75.1   | 1.0       |
| 10°-20°   | 198.9  | 2.8       |
| 20°-30°   | 326.0  | 4.5       |
| 30°-40°   | 540.2  | 7.5       |
| 40°-50°   | 793.8  | 11.1      |
| 50°-60°   | 1000.9 | 14.0      |
| 60°-70°   | 1310.7 | 18.3      |
| 70°-80°   | 1061.0 | 14.8      |
| 80°-90°   | 123.1  | 1.7       |
| 90°-100°  | 11.0   | 0.2       |
| 100°-110° | 57.4   | 0.8       |
| 110°-120° | 166.1  | 2.3       |
| 120°-130° | 273.2  | 3.8       |
| 130°-140° | 336.8  | 4.7       |
| 140°-150° | 344.6  | 4.8       |
| 150°-160° | 290.3  | 4.1       |
| 160°-170° | 191.2  | 2.7       |
| 170°-180° | 66.3   | 0.9       |
| 0°-90°    | 5429.8 | 75.8      |
| 0°-180°   | 7166.6 | 100.0     |



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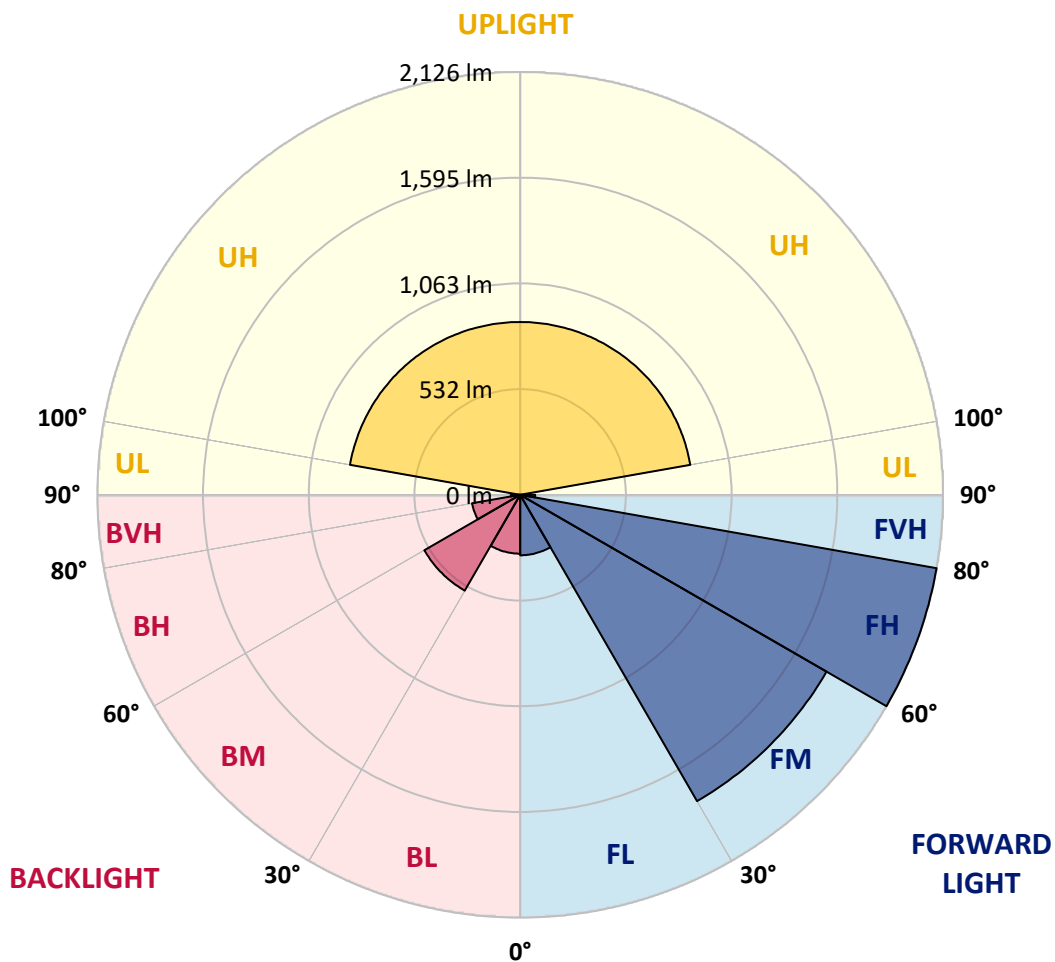
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |         |         |
|------|-------------|--------|-----------|-------------------------|---------|---------|
|      |             |        |           | B                       | U       | G       |
| FL   | (0°-30°)    | 304.0  | 4.2       |                         |         |         |
| FM   | (30°-60°)   | 1778.4 | 24.8      |                         |         |         |
| FH   | (60°-80°)   | 2126.1 | 29.7      |                         |         | G2/5000 |
| FVH  | (80°-90°)   | 75.8   | 1.1       |                         |         | G1/100  |
| BL   | (0°-30°)    | 296.0  | 4.1       | B1/500                  |         |         |
| BM   | (30°-60°)   | 556.5  | 7.8       | B1/1000                 |         |         |
| BH   | (60°-80°)   | 245.7  | 3.4       | B1/500                  |         | G1/500  |
| BVH  | (80°-90°)   | 47.3   | 0.7       |                         |         | G1/100  |
| UL   | (90°-100°)  | 11.0   | 0.2       |                         | U2/50   |         |
| UH   | (100°-180°) | 868.8  | 12.1      |                         | U4/1000 |         |

**BUG Rating: B1-U5-G2**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 15°    | 25°    | 30°    | 31°    | 32°    | 33°    | 34°    | 35°    | 36°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  |
| 2.5°   | 768.7  | 770.3  | 771.9  | 771.9  | 771.9  | 774.2  | 773.4  | 773.4  | 774.2  | 775.0  | 775.0  |
| 5°     | 740.0  | 740.7  | 745.4  | 747.0  | 751.6  | 750.8  | 750.8  | 750.8  | 754.0  | 751.6  | 753.2  |
| 7.5°   | 707.3  | 708.8  | 713.5  | 718.9  | 722.8  | 723.6  | 722.8  | 721.3  | 725.2  | 726.7  | 725.2  |
| 10°    | 668.4  | 669.1  | 675.4  | 680.0  | 686.3  | 685.5  | 687.8  | 687.8  | 689.4  | 688.6  | 691.7  |
| 12.5°  | 648.9  | 647.4  | 644.2  | 646.6  | 648.1  | 648.1  | 648.1  | 650.5  | 649.7  | 651.3  | 653.6  |
| 15°    | 646.6  | 642.7  | 627.1  | 621.7  | 620.1  | 620.1  | 619.4  | 618.6  | 620.9  | 623.2  | 623.2  |
| 17.5°  | 657.5  | 649.7  | 619.4  | 603.8  | 600.7  | 599.1  | 599.9  | 598.3  | 598.3  | 601.5  | 600.7  |
| 20°    | 710.4  | 696.4  | 635.7  | 601.5  | 592.1  | 592.1  | 591.3  | 589.0  | 589.0  | 589.8  | 589.8  |
| 22.5°  | 845.0  | 827.1  | 721.3  | 650.5  | 617.8  | 617.0  | 614.7  | 612.3  | 606.1  | 604.6  | 601.5  |
| 25°    | 1032.5 | 1011.5 | 830.2  | 754.0  | 708.1  | 706.5  | 694.8  | 693.3  | 678.5  | 679.3  | 669.1  |
| 27.5°  | 1178.0 | 1164.0 | 975.7  | 874.6  | 831.0  | 821.7  | 816.2  | 802.2  | 789.7  | 779.6  | 767.2  |
| 30°    | 1227.8 | 1225.5 | 1122.8 | 1041.1 | 975.7  | 964.8  | 950.0  | 943.8  | 925.9  | 911.9  | 903.3  |
| 32.5°  | 1306.4 | 1308.7 | 1265.9 | 1175.7 | 1118.9 | 1108.0 | 1095.5 | 1080.8 | 1068.3 | 1059.0 | 1038.7 |
| 35°    | 1418.4 | 1419.2 | 1389.6 | 1322.0 | 1256.6 | 1241.8 | 1234.8 | 1217.7 | 1206.0 | 1194.3 | 1184.2 |
| 37.5°  | 1496.2 | 1500.1 | 1479.1 | 1427.0 | 1388.1 | 1367.1 | 1366.3 | 1353.9 | 1340.6 | 1330.5 | 1321.2 |
| 40°    | 1645.6 | 1624.6 | 1555.4 | 1521.9 | 1490.0 | 1487.7 | 1480.7 | 1473.7 | 1476.8 | 1471.3 | 1481.5 |
| 42.5°  | 1796.6 | 1770.1 | 1673.6 | 1626.2 | 1606.7 | 1610.6 | 1608.3 | 1609.1 | 1618.4 | 1616.1 | 1627.0 |
| 45°    | 1925.7 | 1895.4 | 1803.6 | 1747.6 | 1763.1 | 1767.8 | 1781.0 | 1788.8 | 1784.9 | 1798.9 | 1798.9 |
| 47.5°  | 2054.9 | 1984.1 | 1875.2 | 1900.8 | 1911.7 | 1947.5 | 1956.9 | 1954.5 | 1967.8 | 1974.0 | 1956.9 |
| 50°    | 1963.9 | 1945.2 | 1936.6 | 2015.2 | 2064.2 | 2075.9 | 2089.1 | 2096.1 | 2102.4 | 2093.8 | 2076.7 |
| 52.5°  | 1771.7 | 1770.1 | 1890.7 | 2082.9 | 2124.2 | 2139.7 | 2152.2 | 2157.6 | 2155.3 | 2150.6 | 2136.6 |
| 55°    | 1707.1 | 1694.7 | 1798.9 | 2012.9 | 2075.9 | 2090.7 | 2108.6 | 2119.5 | 2130.4 | 2128.8 | 2117.9 |
| 57.5°  | 1795.0 | 1784.9 | 1785.7 | 1951.4 | 2012.9 | 2026.1 | 2037.8 | 2050.2 | 2053.3 | 2063.5 | 2064.2 |
| 60°    | 2050.2 | 2037.0 | 1930.4 | 1949.1 | 2011.3 | 2026.1 | 2027.7 | 2034.7 | 2035.5 | 2040.9 | 2041.7 |
| 62.5°  | 2418.3 | 2394.1 | 2231.5 | 2091.5 | 2113.3 | 2120.3 | 2125.7 | 2124.2 | 2121.0 | 2117.2 | 2117.2 |
| 65°    | 2821.3 | 2798.7 | 2589.4 | 2426.0 | 2363.0 | 2380.1 | 2352.9 | 2347.5 | 2341.2 | 2341.2 | 2334.2 |
| 67.5°  | 3300.6 | 3257.8 | 3096.0 | 2912.3 | 2821.3 | 2829.9 | 2842.3 | 2794.9 | 2777.7 | 2779.3 | 2742.7 |
| 70°    | 3789.2 | 3744.1 | 3673.3 | 3671.0 | 3716.9 | 3696.6 | 3639.1 | 3715.3 | 3625.1 | 3603.3 | 3595.5 |
| 72.5°  | 3519.2 | 3465.6 | 3480.3 | 3920.0 | 4332.3 | 4399.3 | 4463.1 | 4522.2 | 4575.1 | 4607.0 | 4611.7 |
| 73°    | 3312.3 | 3210.3 | 3316.2 | 3832.8 | 4290.3 | 4389.1 | 4468.5 | 4531.5 | 4588.3 | 4617.1 | 4635.0 |
| 75°    | 1654.2 | 1659.6 | 2181.0 | 3162.1 | 3749.6 | 3834.4 | 3958.1 | 4027.3 | 4130.0 | 4182.9 | 4136.3 |
| 77.5°  | 383.6  | 397.6  | 660.6  | 1500.9 | 2247.9 | 2369.2 | 2468.1 | 2569.2 | 2688.3 | 2732.6 | 2693.7 |
| 80°    | 135.4  | 141.6  | 232.6  | 570.3  | 938.4  | 1005.3 | 1090.1 | 1201.4 | 1311.8 | 1339.1 | 1407.5 |
| 82.5°  | 71.6   | 78.6   | 122.9  | 247.4  | 400.7  | 438.1  | 459.8  | 505.8  | 544.7  | 568.0  | 580.4  |
| 85°    | 41.2   | 42.0   | 70.0   | 136.9  | 183.6  | 198.4  | 212.4  | 223.3  | 235.8  | 227.2  | 227.2  |
| 87.5°  | 16.3   | 17.9   | 35.8   | 64.6   | 88.7   | 98.8   | 98.8   | 98.8   | 98.0   | 86.4   | 78.6   |
| 90°    | 8.1    | 9.7    | 14.0   | 21.2   | 19.7   | 19.7   | 18.9   | 17.3   | 16.6   | 17.3   | 13.3   |
| 92.5°  | 4.0    | 4.0    | 5.0    | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    |
| 95°    | 5.0    | 5.0    | 6.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    |
| 97.5°  | 7.0    | 7.0    | 8.0    | 8.0    | 8.5    | 8.6    | 8.7    | 8.8    | 8.9    | 9.0    | 9.0    |
| 100°   | 8.0    | 8.0    | 9.0    | 10.0   | 11.0   | 11.2   | 11.4   | 11.6   | 11.8   | 12.0   | 12.9   |
| 102.5° | 11.0   | 11.0   | 13.0   | 18.0   | 22.5   | 23.4   | 24.3   | 25.2   | 26.1   | 27.0   | 28.3   |
| 105°   | 21.0   | 22.0   | 27.0   | 36.0   | 42.0   | 43.2   | 44.4   | 45.6   | 46.8   | 48.0   | 49.5   |
| 107.5° | 41.0   | 42.0   | 49.0   | 58.0   | 65.5   | 67.0   | 68.5   | 70.0   | 71.5   | 73.0   | 74.5   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 15°   | 25°   | 30°   | 31°   | 32°   | 33°   | 34°   | 35°   | 36°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110°   | 66.0  | 68.0  | 74.0  | 87.0  | 94.5  | 96.0  | 97.5  | 99.0  | 100.5 | 102.0 | 103.2 |
| 112.5° | 99.0  | 99.0  | 106.0 | 121.0 | 127.5 | 128.8 | 130.1 | 131.4 | 132.7 | 134.0 | 134.9 |
| 115°   | 140.0 | 139.0 | 147.0 | 159.0 | 163.5 | 164.4 | 165.3 | 166.2 | 167.1 | 168.0 | 168.6 |
| 117.5° | 184.0 | 184.0 | 189.0 | 197.0 | 199.5 | 200.0 | 200.5 | 201.0 | 201.5 | 202.0 | 202.3 |
| 120°   | 225.0 | 223.0 | 226.0 | 233.0 | 235.0 | 235.4 | 235.8 | 236.2 | 236.6 | 237.0 | 237.6 |
| 122.5° | 263.0 | 260.0 | 261.0 | 267.0 | 269.0 | 269.4 | 269.8 | 270.2 | 270.6 | 271.0 | 271.6 |
| 125°   | 298.0 | 294.0 | 296.0 | 299.0 | 302.0 | 302.6 | 303.2 | 303.8 | 304.4 | 305.0 | 305.5 |
| 127.5° | 330.0 | 329.0 | 329.0 | 333.0 | 336.0 | 336.6 | 337.2 | 337.8 | 338.4 | 339.0 | 339.1 |
| 130°   | 363.0 | 361.0 | 362.0 | 366.0 | 368.0 | 368.4 | 368.8 | 369.2 | 369.6 | 370.0 | 370.2 |
| 132.5° | 396.0 | 394.0 | 393.0 | 401.0 | 402.5 | 402.8 | 403.1 | 403.4 | 403.7 | 404.0 | 404.1 |
| 135°   | 429.0 | 426.0 | 426.0 | 432.0 | 433.5 | 433.8 | 434.1 | 434.4 | 434.7 | 435.0 | 435.2 |
| 137.5° | 460.0 | 457.0 | 459.0 | 460.0 | 462.0 | 462.4 | 462.8 | 463.2 | 463.6 | 464.0 | 464.4 |
| 140°   | 488.0 | 485.0 | 487.0 | 489.0 | 490.0 | 490.2 | 490.4 | 490.6 | 490.8 | 491.0 | 491.6 |
| 142.5° | 518.0 | 515.0 | 517.0 | 518.0 | 519.5 | 519.8 | 520.1 | 520.4 | 520.7 | 521.0 | 521.4 |
| 145°   | 550.0 | 546.0 | 544.0 | 547.0 | 548.5 | 548.8 | 549.1 | 549.4 | 549.7 | 550.0 | 550.1 |
| 147.5° | 575.0 | 572.0 | 571.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.0 | 574.1 |
| 150°   | 595.0 | 592.0 | 593.0 | 593.0 | 593.0 | 593.0 | 593.0 | 593.0 | 593.0 | 593.0 | 593.0 |
| 152.5° | 611.0 | 608.0 | 608.0 | 609.0 | 609.5 | 609.6 | 609.7 | 609.8 | 609.8 | 609.9 | 610.0 |
| 155°   | 629.0 | 625.0 | 625.0 | 627.0 | 628.5 | 628.8 | 629.1 | 629.4 | 629.7 | 630.0 | 629.8 |
| 157.5° | 646.0 | 643.0 | 643.0 | 644.0 | 645.0 | 645.2 | 645.4 | 645.6 | 645.8 | 646.0 | 645.9 |
| 160°   | 663.0 | 660.0 | 659.0 | 656.0 | 655.5 | 655.4 | 655.3 | 655.2 | 655.1 | 655.0 | 655.0 |
| 162.5° | 673.0 | 669.0 | 669.0 | 665.0 | 663.0 | 662.6 | 662.2 | 661.8 | 661.4 | 661.0 | 661.2 |
| 165°   | 681.0 | 678.0 | 676.0 | 676.0 | 674.5 | 674.2 | 673.9 | 673.6 | 673.3 | 673.0 | 673.0 |
| 167.5° | 690.0 | 687.0 | 684.0 | 686.0 | 687.0 | 687.2 | 687.4 | 687.6 | 687.8 | 688.0 | 687.7 |
| 170°   | 698.0 | 695.0 | 692.0 | 692.0 | 692.5 | 692.6 | 692.7 | 692.8 | 692.9 | 693.0 | 692.8 |
| 172.5° | 699.0 | 697.0 | 695.0 | 693.0 | 691.5 | 691.2 | 690.9 | 690.6 | 690.3 | 690.0 | 690.0 |
| 175°   | 700.0 | 698.0 | 697.0 | 695.0 | 693.0 | 692.6 | 692.2 | 691.8 | 691.4 | 691.0 | 690.9 |
| 177.5° | 707.0 | 705.0 | 700.0 | 699.0 | 698.0 | 697.8 | 697.6 | 697.4 | 697.2 | 697.0 | 696.8 |
| 180°   | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 |





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**CANDELA DISTRIBUTION (continued):**

|        | 37°    | 38°    | 39°    | 40°    | 41°    | 45°    | 55°    | 65°    | 75°    | 85°    | 90°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  | 797.5  |
| 2.5°   | 776.5  | 777.3  | 775.7  | 778.9  | 776.5  | 776.5  | 780.4  | 787.4  | 792.9  | 794.4  | 799.1  |
| 5°     | 754.7  | 755.5  | 755.5  | 756.3  | 755.5  | 757.1  | 764.1  | 770.3  | 781.2  | 786.6  | 793.6  |
| 7.5°   | 726.7  | 729.1  | 728.3  | 729.8  | 729.8  | 731.4  | 742.3  | 752.4  | 763.3  | 773.4  | 782.0  |
| 10°    | 693.3  | 694.8  | 697.9  | 696.4  | 696.4  | 701.0  | 712.7  | 727.5  | 740.7  | 755.5  | 765.6  |
| 12.5°  | 653.6  | 657.5  | 656.7  | 659.8  | 661.4  | 664.5  | 683.9  | 700.3  | 716.6  | 733.7  | 747.0  |
| 15°    | 622.5  | 624.8  | 626.4  | 627.1  | 627.1  | 634.1  | 653.6  | 673.8  | 695.6  | 715.8  | 729.8  |
| 17.5°  | 602.2  | 602.2  | 603.8  | 604.6  | 606.1  | 610.8  | 631.0  | 653.6  | 678.5  | 703.4  | 718.9  |
| 20°    | 590.6  | 590.6  | 591.3  | 592.1  | 592.1  | 597.6  | 616.2  | 641.9  | 669.1  | 701.0  | 719.7  |
| 22.5°  | 599.9  | 597.6  | 596.8  | 596.8  | 593.7  | 593.7  | 611.6  | 638.8  | 673.0  | 714.3  | 738.4  |
| 25°    | 663.7  | 656.7  | 645.8  | 643.5  | 639.6  | 620.9  | 618.6  | 649.7  | 691.7  | 743.1  | 779.6  |
| 27.5°  | 759.4  | 752.4  | 745.4  | 736.8  | 730.6  | 696.4  | 649.7  | 677.7  | 727.5  | 800.6  | 845.8  |
| 30°    | 884.7  | 870.7  | 860.6  | 851.2  | 824.0  | 786.6  | 714.3  | 721.3  | 782.7  | 880.8  | 937.6  |
| 32.5°  | 1024.7 | 1009.9 | 994.4  | 972.6  | 965.6  | 904.9  | 812.3  | 793.6  | 852.8  | 974.2  | 1033.3 |
| 35°    | 1160.1 | 1153.1 | 1142.2 | 1133.7 | 1117.3 | 1066.7 | 939.9  | 880.8  | 933.7  | 1083.9 | 1129.8 |
| 37.5°  | 1317.3 | 1304.1 | 1304.8 | 1297.8 | 1288.5 | 1245.7 | 1072.2 | 985.8  | 1020.8 | 1188.9 | 1217.7 |
| 40°    | 1472.1 | 1469.0 | 1473.7 | 1462.0 | 1446.4 | 1388.9 | 1169.5 | 1062.9 | 1111.9 | 1290.1 | 1283.1 |
| 42.5°  | 1618.4 | 1620.7 | 1615.3 | 1602.1 | 1584.9 | 1488.5 | 1231.7 | 1128.2 | 1193.6 | 1378.8 | 1335.2 |
| 45°    | 1785.7 | 1777.1 | 1754.6 | 1731.2 | 1710.2 | 1574.1 | 1265.2 | 1201.4 | 1272.2 | 1474.5 | 1388.1 |
| 47.5°  | 1943.6 | 1910.2 | 1890.7 | 1854.9 | 1813.7 | 1651.9 | 1310.3 | 1278.4 | 1359.3 | 1564.7 | 1438.7 |
| 50°    | 2059.6 | 2028.4 | 1995.8 | 1952.2 | 1908.6 | 1719.6 | 1370.2 | 1365.5 | 1458.1 | 1665.9 | 1507.9 |
| 52.5°  | 2112.5 | 2083.7 | 2051.8 | 2007.4 | 1963.9 | 1768.6 | 1450.3 | 1450.3 | 1574.8 | 1799.7 | 1603.6 |
| 55°    | 2103.9 | 2082.9 | 2054.9 | 2014.4 | 1981.0 | 1795.0 | 1532.8 | 1543.7 | 1721.1 | 1944.4 | 1714.1 |
| 57.5°  | 2058.8 | 2047.1 | 2030.8 | 2002.8 | 1975.5 | 1815.3 | 1630.1 | 1637.1 | 1917.2 | 2083.7 | 1818.4 |
| 60°    | 2043.2 | 2038.6 | 2029.2 | 2012.9 | 1991.9 | 1859.6 | 1733.6 | 1749.1 | 2136.6 | 2211.3 | 1877.5 |
| 62.5°  | 2112.5 | 2103.1 | 2096.1 | 2079.8 | 2060.4 | 1968.5 | 1863.5 | 1868.2 | 2342.8 | 2226.9 | 1819.9 |
| 65°    | 2307.0 | 2289.9 | 2278.2 | 2256.4 | 2234.6 | 2132.7 | 2029.2 | 1978.7 | 2443.9 | 2081.4 | 1624.6 |
| 67.5°  | 2714.7 | 2686.7 | 2653.2 | 2612.0 | 2552.1 | 2460.3 | 2193.4 | 1994.2 | 2352.1 | 1763.1 | 1281.5 |
| 70°    | 3520.8 | 3460.1 | 3383.1 | 3295.2 | 3272.6 | 3004.9 | 2296.1 | 1879.1 | 1955.3 | 1231.7 | 849.7  |
| 72.5°  | 4603.9 | 4540.9 | 4472.4 | 4400.0 | 4256.9 | 3668.6 | 2251.0 | 1515.7 | 1216.1 | 633.4  | 404.6  |
| 73°    | 4621.8 | 4579.0 | 4496.5 | 4412.5 | 4295.8 | 3657.0 | 2202.0 | 1397.4 | 1072.2 | 498.7  | 331.5  |
| 75°    | 4144.8 | 4127.7 | 4046.8 | 3884.9 | 3786.1 | 3089.0 | 1621.5 | 810.0  | 469.2  | 308.1  | 215.5  |
| 77.5°  | 2689.8 | 2671.1 | 2625.2 | 2609.7 | 2427.6 | 2002.8 | 725.9  | 315.1  | 255.2  | 204.6  | 152.5  |
| 80°    | 1433.2 | 1346.1 | 1330.5 | 1268.3 | 1135.2 | 771.1  | 248.2  | 193.0  | 169.6  | 136.9  | 106.6  |
| 82.5°  | 581.2  | 543.9  | 529.9  | 480.1  | 451.3  | 231.1  | 124.5  | 133.8  | 113.6  | 80.9   | 65.4   |
| 85°    | 214.0  | 196.9  | 192.2  | 156.4  | 137.7  | 68.5   | 76.3   | 94.1   | 70.8   | 45.1   | 32.7   |
| 87.5°  | 73.9   | 63.8   | 55.2   | 42.8   | 39.7   | 28.0   | 42.0   | 51.4   | 45.1   | 27.2   | 15.6   |
| 90°    | 13.2   | 12.4   | 11.5   | 10.6   | 11.3   | 10.1   | 11.7   | 16.0   | 16.8   | 11.7   | 10.1   |
| 92.5°  | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    | 6.0    | 7.0    | 7.0    | 6.0    | 6.0    | 6.0    |
| 95°    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 8.0    | 7.0    | 7.0    | 7.0    |
| 97.5°  | 9.0    | 9.0    | 9.0    | 9.0    | 9.0    | 9.0    | 12.0   | 10.0   | 9.0    | 8.0    | 8.0    |
| 100°   | 13.8   | 14.7   | 15.6   | 16.5   | 17.4   | 21.0   | 29.0   | 26.0   | 23.0   | 19.0   | 19.0   |
| 102.5° | 29.6   | 30.9   | 32.2   | 33.5   | 34.8   | 40.0   | 50.0   | 47.0   | 42.0   | 39.0   | 38.0   |
| 105°   | 51.0   | 52.5   | 54.0   | 55.5   | 57.0   | 63.0   | 72.0   | 70.0   | 65.0   | 61.0   | 61.0   |
| 107.5° | 76.0   | 77.5   | 79.0   | 80.5   | 82.0   | 88.0   | 95.0   | 94.0   | 90.0   | 87.0   | 86.0   |



REPORT NUMBER: P226519

CATALOG NUMBER: ISW-AF-1000-LED-E1-T4FT-7030-ULG

**CANDELA DISTRIBUTION (continued):**

|        | 37°   | 38°   | 39°   | 40°   | 41°   | 45°   | 55°   | 65°   | 75°   | 85°   | 90°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110°   | 104.4 | 105.6 | 106.8 | 108.0 | 109.2 | 114.0 | 120.0 | 121.0 | 119.0 | 116.0 | 117.0 |
| 112.5° | 135.8 | 136.7 | 137.6 | 138.5 | 139.4 | 143.0 | 148.0 | 150.0 | 149.0 | 147.0 | 147.0 |
| 115°   | 169.2 | 169.8 | 170.4 | 171.0 | 171.6 | 174.0 | 179.0 | 182.0 | 179.0 | 177.0 | 178.0 |
| 117.5° | 202.6 | 202.9 | 203.2 | 203.5 | 203.8 | 205.0 | 211.0 | 215.0 | 210.0 | 208.0 | 209.0 |
| 120°   | 238.2 | 238.8 | 239.4 | 240.0 | 240.6 | 243.0 | 246.0 | 250.0 | 245.0 | 243.0 | 243.0 |
| 122.5° | 272.2 | 272.8 | 273.4 | 274.0 | 274.6 | 277.0 | 279.0 | 283.0 | 278.0 | 276.0 | 277.0 |
| 125°   | 306.0 | 306.5 | 307.0 | 307.5 | 308.0 | 310.0 | 313.0 | 315.0 | 310.0 | 310.0 | 310.0 |
| 127.5° | 339.2 | 339.3 | 339.4 | 339.5 | 339.6 | 340.0 | 345.0 | 346.0 | 346.0 | 345.0 | 347.0 |
| 130°   | 370.4 | 370.6 | 370.8 | 371.0 | 371.2 | 372.0 | 377.0 | 381.0 | 381.0 | 379.0 | 380.0 |
| 132.5° | 404.2 | 404.3 | 404.4 | 404.5 | 404.6 | 405.0 | 411.0 | 416.0 | 414.0 | 414.0 | 415.0 |
| 135°   | 435.4 | 435.6 | 435.8 | 436.0 | 436.2 | 437.0 | 443.0 | 448.0 | 447.0 | 450.0 | 451.0 |
| 137.5° | 464.8 | 465.2 | 465.6 | 466.0 | 466.4 | 468.0 | 473.0 | 475.0 | 476.0 | 481.0 | 482.0 |
| 140°   | 492.2 | 492.8 | 493.4 | 494.0 | 494.6 | 497.0 | 500.0 | 502.0 | 504.0 | 509.0 | 511.0 |
| 142.5° | 521.8 | 522.2 | 522.6 | 523.0 | 523.4 | 525.0 | 527.0 | 533.0 | 533.0 | 534.0 | 536.0 |
| 145°   | 550.2 | 550.3 | 550.4 | 550.5 | 550.6 | 551.0 | 556.0 | 562.0 | 561.0 | 558.0 | 560.0 |
| 147.5° | 574.2 | 574.3 | 574.4 | 574.5 | 574.6 | 575.0 | 580.0 | 585.0 | 586.0 | 583.0 | 585.0 |
| 150°   | 593.0 | 593.0 | 593.0 | 593.0 | 593.0 | 593.0 | 597.0 | 600.0 | 603.0 | 606.0 | 610.0 |
| 152.5° | 610.0 | 610.0 | 610.0 | 610.0 | 610.0 | 610.0 | 611.0 | 614.0 | 618.0 | 623.0 | 628.0 |
| 155°   | 629.6 | 629.4 | 629.2 | 629.0 | 628.8 | 628.0 | 626.0 | 631.0 | 636.0 | 638.0 | 641.0 |
| 157.5° | 645.8 | 645.7 | 645.6 | 645.5 | 645.4 | 645.0 | 644.0 | 648.0 | 650.0 | 650.0 | 655.0 |
| 160°   | 655.0 | 655.0 | 655.0 | 655.0 | 655.0 | 655.0 | 658.0 | 664.0 | 661.0 | 660.0 | 666.0 |
| 162.5° | 661.4 | 661.6 | 661.8 | 662.0 | 662.2 | 663.0 | 667.0 | 671.0 | 670.0 | 668.0 | 674.0 |
| 165°   | 673.0 | 673.0 | 673.0 | 673.0 | 673.0 | 673.0 | 672.0 | 677.0 | 680.0 | 678.0 | 682.0 |
| 167.5° | 687.4 | 687.1 | 686.8 | 686.5 | 686.2 | 685.0 | 678.0 | 684.0 | 688.0 | 688.0 | 694.0 |
| 170°   | 692.6 | 692.4 | 692.2 | 692.0 | 691.8 | 691.0 | 686.0 | 689.0 | 694.0 | 696.0 | 701.0 |
| 172.5° | 690.0 | 690.0 | 690.0 | 690.0 | 690.0 | 690.0 | 689.0 | 692.0 | 694.0 | 696.0 | 701.0 |
| 175°   | 690.8 | 690.7 | 690.6 | 690.5 | 690.4 | 690.0 | 690.0 | 695.0 | 696.0 | 694.0 | 699.0 |
| 177.5° | 696.6 | 696.4 | 696.2 | 696.0 | 695.8 | 695.0 | 694.0 | 699.0 | 701.0 | 698.0 | 702.0 |
| 180°   | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 |



REPORT NUMBER: P226519

CATALOG NUMBER: ISW-AF-1000-LED-E1-T4FT-7030-ULG

**CANDELA DISTRIBUTION (continued):**

|        | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 797.5  | 797.5 | 797.5 | 797.5 | 797.5 | 797.5 | 797.5 | 797.5 | 797.5 | 797.5 |
| 2.5°   | 800.6  | 803.8 | 810.0 | 814.6 | 818.5 | 824.0 | 825.5 | 828.7 | 824.8 | 829.4 |
| 5°     | 797.5  | 806.9 | 818.5 | 829.4 | 839.5 | 848.1 | 852.0 | 852.8 | 853.6 | 856.7 |
| 7.5°   | 789.7  | 803.8 | 822.4 | 837.2 | 852.8 | 858.2 | 860.6 | 861.3 | 855.9 | 858.2 |
| 10°    | 774.2  | 796.8 | 820.1 | 838.0 | 845.8 | 841.9 | 835.7 | 825.5 | 820.9 | 820.9 |
| 12.5°  | 757.1  | 785.9 | 813.1 | 823.2 | 816.2 | 801.4 | 784.3 | 765.6 | 758.6 | 758.6 |
| 15°    | 743.1  | 779.6 | 802.2 | 795.2 | 775.0 | 747.0 | 723.6 | 704.2 | 697.9 | 695.6 |
| 17.5°  | 735.3  | 776.5 | 785.1 | 763.3 | 729.1 | 694.0 | 670.7 | 654.4 | 648.9 | 648.9 |
| 20°    | 741.5  | 779.6 | 765.6 | 725.2 | 682.4 | 650.5 | 630.2 | 619.4 | 613.9 | 616.2 |
| 22.5°  | 768.0  | 791.3 | 748.5 | 687.8 | 635.7 | 608.5 | 599.1 | 592.1 | 591.3 | 592.9 |
| 25°    | 812.3  | 806.9 | 733.7 | 648.9 | 592.1 | 572.7 | 571.9 | 569.6 | 568.8 | 568.0 |
| 27.5°  | 869.9  | 826.3 | 715.8 | 605.3 | 548.5 | 539.2 | 543.9 | 543.1 | 542.3 | 543.1 |
| 30°    | 946.1  | 843.4 | 689.4 | 557.9 | 507.3 | 507.3 | 514.3 | 512.0 | 508.9 | 509.6 |
| 32.5°  | 1016.9 | 855.9 | 648.9 | 505.0 | 474.6 | 476.2 | 478.5 | 472.3 | 464.5 | 466.1 |
| 35°    | 1077.6 | 855.9 | 594.5 | 457.5 | 441.2 | 441.2 | 442.7 | 437.3 | 431.1 | 428.7 |
| 37.5°  | 1128.2 | 838.8 | 526.0 | 421.7 | 413.9 | 413.9 | 420.2 | 414.7 | 403.0 | 400.7 |
| 40°    | 1158.6 | 801.4 | 463.0 | 395.3 | 400.7 | 401.5 | 392.9 | 383.6 | 372.7 | 370.4 |
| 42.5°  | 1178.0 | 747.0 | 413.2 | 376.6 | 392.2 | 385.9 | 365.7 | 350.9 | 350.1 | 353.2 |
| 45°    | 1195.1 | 685.5 | 373.5 | 357.9 | 382.8 | 369.6 | 342.4 | 328.3 | 333.0 | 336.1 |
| 47.5°  | 1212.2 | 624.0 | 341.6 | 336.9 | 365.7 | 356.4 | 327.6 | 312.0 | 309.7 | 314.3 |
| 50°    | 1252.7 | 538.4 | 305.0 | 312.0 | 344.7 | 341.6 | 314.3 | 296.4 | 281.7 | 280.9 |
| 52.5°  | 1307.2 | 424.1 | 273.9 | 290.2 | 328.3 | 333.0 | 299.6 | 282.4 | 262.2 | 259.1 |
| 55°    | 1367.9 | 325.2 | 248.2 | 273.1 | 312.8 | 320.6 | 294.1 | 268.4 | 246.7 | 243.5 |
| 57.5°  | 1385.8 | 256.8 | 224.1 | 249.0 | 291.8 | 308.9 | 285.6 | 252.1 | 235.8 | 232.6 |
| 60°    | 1324.3 | 213.2 | 203.9 | 228.8 | 270.8 | 297.2 | 272.3 | 239.6 | 224.9 | 222.5 |
| 62.5°  | 1136.8 | 188.3 | 193.0 | 215.5 | 255.2 | 286.3 | 262.2 | 230.3 | 218.6 | 217.1 |
| 65°    | 867.6  | 171.2 | 183.6 | 204.6 | 241.2 | 276.2 | 255.2 | 226.4 | 217.1 | 215.5 |
| 67.5°  | 544.7  | 158.7 | 174.3 | 193.0 | 227.2 | 265.3 | 249.8 | 221.8 | 214.7 | 212.4 |
| 70°    | 301.9  | 145.5 | 161.8 | 179.7 | 213.2 | 255.2 | 242.8 | 214.7 | 214.0 | 209.3 |
| 72.5°  | 183.6  | 131.5 | 148.6 | 165.7 | 197.6 | 242.8 | 230.3 | 206.2 | 198.4 | 189.1 |
| 73°    | 175.1  | 129.9 | 145.5 | 162.6 | 193.7 | 239.6 | 228.0 | 203.1 | 195.3 | 186.0 |
| 75°    | 141.6  | 116.7 | 133.1 | 147.8 | 179.7 | 227.2 | 214.7 | 192.2 | 179.7 | 172.7 |
| 77.5°  | 104.3  | 99.6  | 115.2 | 129.2 | 161.8 | 210.1 | 196.1 | 175.8 | 161.1 | 157.2 |
| 80°    | 77.0   | 82.5  | 97.3  | 109.7 | 142.4 | 193.0 | 176.6 | 157.2 | 147.8 | 143.2 |
| 82.5°  | 52.1   | 63.8  | 77.8  | 87.9  | 126.0 | 174.3 | 156.4 | 137.7 | 143.9 | 119.8 |
| 85°    | 30.3   | 44.4  | 56.0  | 68.5  | 101.2 | 155.6 | 136.2 | 117.5 | 102.7 | 92.6  |
| 87.5°  | 20.2   | 24.9  | 34.2  | 46.7  | 73.1  | 122.2 | 108.2 | 91.8  | 66.9  | 66.9  |
| 90°    | 9.3    | 12.1  | 13.7  | 12.4  | 17.1  | 60.1  | 43.8  | 49.8  | 12.8  | 12.0  |
| 92.5°  | 6.0    | 6.0   | 7.0   | 7.0   | 6.0   | 6.0   | 6.0   | 5.0   | 4.0   | 4.0   |
| 95°    | 7.0    | 7.0   | 8.0   | 7.0   | 7.0   | 7.0   | 7.0   | 6.0   | 5.0   | 5.0   |
| 97.5°  | 8.0    | 9.0   | 10.0  | 12.0  | 9.0   | 9.0   | 8.0   | 8.0   | 7.0   | 7.0   |
| 100°   | 19.0   | 23.0  | 26.0  | 29.0  | 21.0  | 12.0  | 10.0  | 9.0   | 8.0   | 8.0   |
| 102.5° | 39.0   | 42.0  | 47.0  | 50.0  | 40.0  | 27.0  | 18.0  | 13.0  | 11.0  | 11.0  |
| 105°   | 61.0   | 65.0  | 70.0  | 72.0  | 63.0  | 48.0  | 36.0  | 27.0  | 22.0  | 21.0  |
| 107.5° | 87.0   | 90.0  | 94.0  | 95.0  | 88.0  | 73.0  | 58.0  | 49.0  | 42.0  | 41.0  |



REPORT NUMBER: P226519

CATALOG NUMBER: ISW-AF-1000-LED-E1-T4FT-7030-ULG

**CANDELA DISTRIBUTION (continued):**

|        | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110°   | 116.0 | 119.0 | 121.0 | 120.0 | 114.0 | 102.0 | 87.0  | 74.0  | 68.0  | 66.0  |
| 112.5° | 147.0 | 149.0 | 150.0 | 148.0 | 143.0 | 134.0 | 121.0 | 106.0 | 99.0  | 99.0  |
| 115°   | 177.0 | 179.0 | 182.0 | 179.0 | 174.0 | 168.0 | 159.0 | 147.0 | 139.0 | 140.0 |
| 117.5° | 208.0 | 210.0 | 215.0 | 211.0 | 205.0 | 202.0 | 197.0 | 189.0 | 184.0 | 184.0 |
| 120°   | 243.0 | 245.0 | 250.0 | 246.0 | 243.0 | 237.0 | 233.0 | 226.0 | 223.0 | 225.0 |
| 122.5° | 276.0 | 278.0 | 283.0 | 279.0 | 277.0 | 271.0 | 267.0 | 261.0 | 260.0 | 263.0 |
| 125°   | 310.0 | 310.0 | 315.0 | 313.0 | 310.0 | 305.0 | 299.0 | 296.0 | 294.0 | 298.0 |
| 127.5° | 345.0 | 346.0 | 346.0 | 345.0 | 340.0 | 339.0 | 333.0 | 329.0 | 329.0 | 330.0 |
| 130°   | 379.0 | 381.0 | 381.0 | 377.0 | 372.0 | 370.0 | 366.0 | 362.0 | 361.0 | 363.0 |
| 132.5° | 414.0 | 414.0 | 416.0 | 411.0 | 405.0 | 404.0 | 401.0 | 393.0 | 394.0 | 396.0 |
| 135°   | 450.0 | 447.0 | 448.0 | 443.0 | 437.0 | 435.0 | 432.0 | 426.0 | 426.0 | 429.0 |
| 137.5° | 481.0 | 476.0 | 475.0 | 473.0 | 468.0 | 464.0 | 460.0 | 459.0 | 457.0 | 460.0 |
| 140°   | 509.0 | 504.0 | 502.0 | 500.0 | 497.0 | 491.0 | 489.0 | 487.0 | 485.0 | 488.0 |
| 142.5° | 534.0 | 533.0 | 533.0 | 527.0 | 525.0 | 521.0 | 518.0 | 517.0 | 515.0 | 518.0 |
| 145°   | 558.0 | 561.0 | 562.0 | 556.0 | 551.0 | 550.0 | 547.0 | 544.0 | 546.0 | 550.0 |
| 147.5° | 583.0 | 586.0 | 585.0 | 580.0 | 575.0 | 574.0 | 574.0 | 571.0 | 572.0 | 575.0 |
| 150°   | 606.0 | 603.0 | 600.0 | 597.0 | 593.0 | 593.0 | 593.0 | 593.0 | 592.0 | 595.0 |
| 152.5° | 623.0 | 618.0 | 614.0 | 611.0 | 610.0 | 610.0 | 609.0 | 608.0 | 608.0 | 611.0 |
| 155°   | 638.0 | 636.0 | 631.0 | 626.0 | 628.0 | 630.0 | 627.0 | 625.0 | 625.0 | 629.0 |
| 157.5° | 650.0 | 650.0 | 648.0 | 644.0 | 645.0 | 646.0 | 644.0 | 643.0 | 643.0 | 646.0 |
| 160°   | 660.0 | 661.0 | 664.0 | 658.0 | 655.0 | 655.0 | 656.0 | 659.0 | 660.0 | 663.0 |
| 162.5° | 668.0 | 670.0 | 671.0 | 667.0 | 663.0 | 661.0 | 665.0 | 669.0 | 669.0 | 673.0 |
| 165°   | 678.0 | 680.0 | 677.0 | 672.0 | 673.0 | 673.0 | 676.0 | 676.0 | 678.0 | 681.0 |
| 167.5° | 688.0 | 688.0 | 684.0 | 678.0 | 685.0 | 688.0 | 686.0 | 684.0 | 687.0 | 690.0 |
| 170°   | 696.0 | 694.0 | 689.0 | 686.0 | 691.0 | 693.0 | 692.0 | 692.0 | 695.0 | 698.0 |
| 172.5° | 696.0 | 694.0 | 692.0 | 689.0 | 690.0 | 690.0 | 693.0 | 695.0 | 697.0 | 699.0 |
| 175°   | 694.0 | 696.0 | 695.0 | 690.0 | 690.0 | 691.0 | 695.0 | 697.0 | 698.0 | 700.0 |
| 177.5° | 698.0 | 701.0 | 699.0 | 694.0 | 695.0 | 697.0 | 699.0 | 700.0 | 705.0 | 707.0 |
| 180°   | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 | 700.0 |

(END OF REPORT)