

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: P226706

Luminaire Tested: **IST-AF-1200-LED-E1-T4W-8030-ULG**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P226706  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35944)-DOWNLIGHT AND  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: IST-AF-1200-LED-E1-T4W-8030-ULG  
Description: IMPACT ELITE LED TRAPEZOID LUMINAIRE WITH UPLIGHT  
LIGHT SQUARE WITH ACCULED OPTICS-TYPE IV WIDE, WITH UPLIGHT GLOW  
Light Source: (16) 3000K CCT, 80 CRI LEDs and (1) UPLIGHT LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7365.9 lumens  
Efficiency: N/A  
Efficacy: 89.1 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')  
IES Classification: Type IV - Medium - Non-Cutoff  
BUG Rating: B1 - U5 - G2

Input Watts (W): 82.7  
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

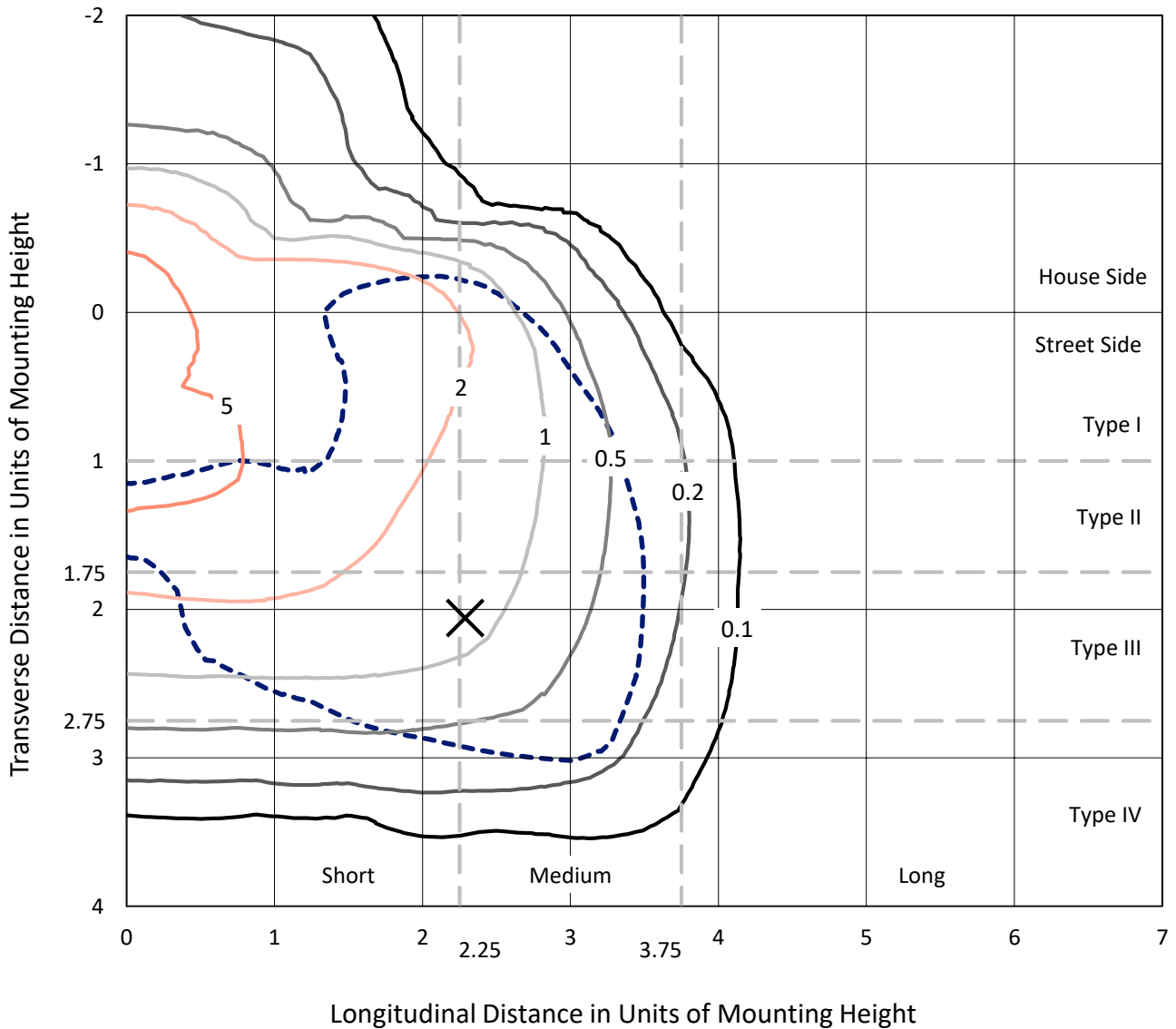


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

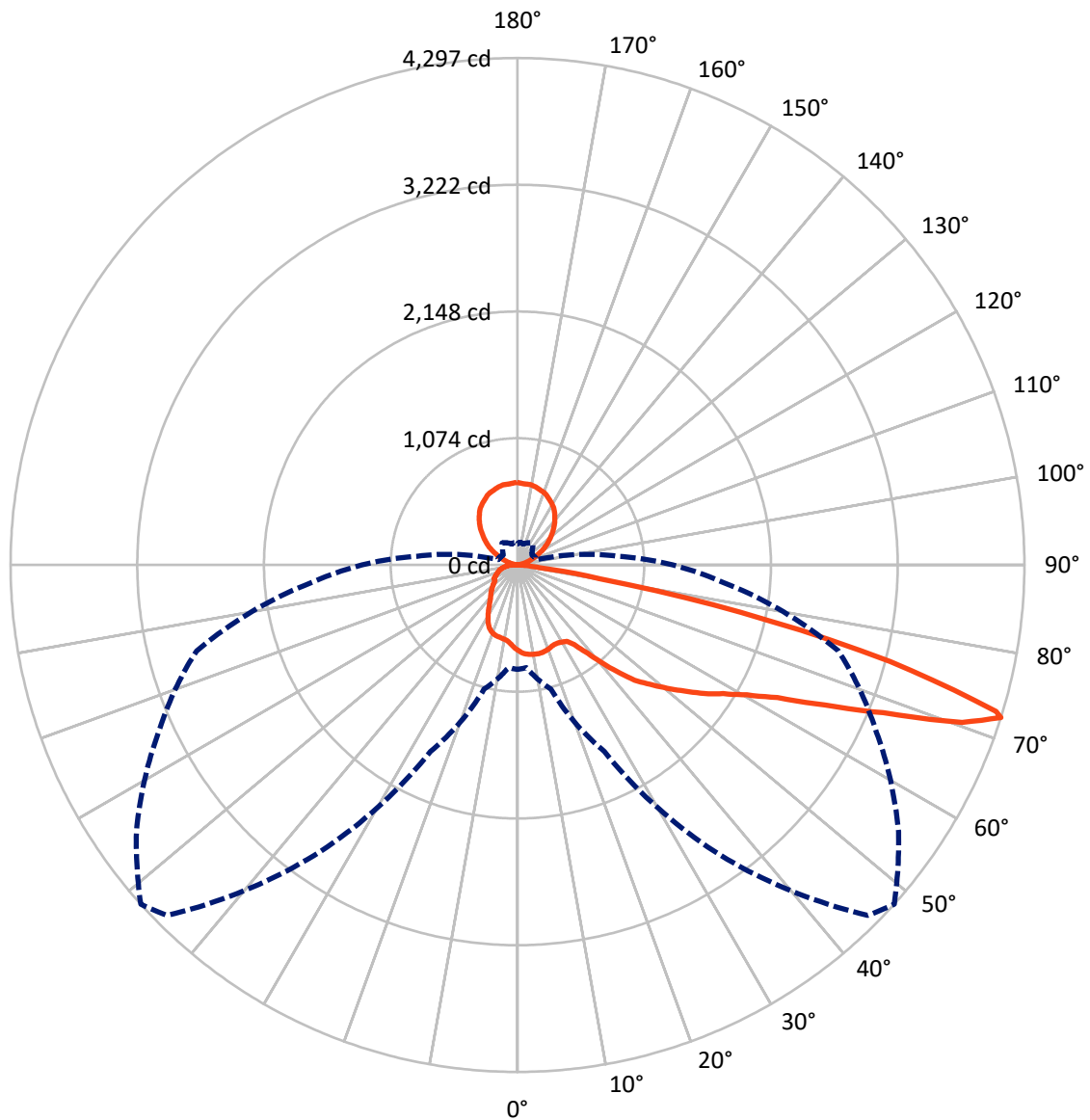


Based on 10 foot mounting height. Maximum calculated value = 8.1 fc  
 Type IV - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 48-Deg Lateral    - - - Horizontal Cone Through 72-Deg Vertical

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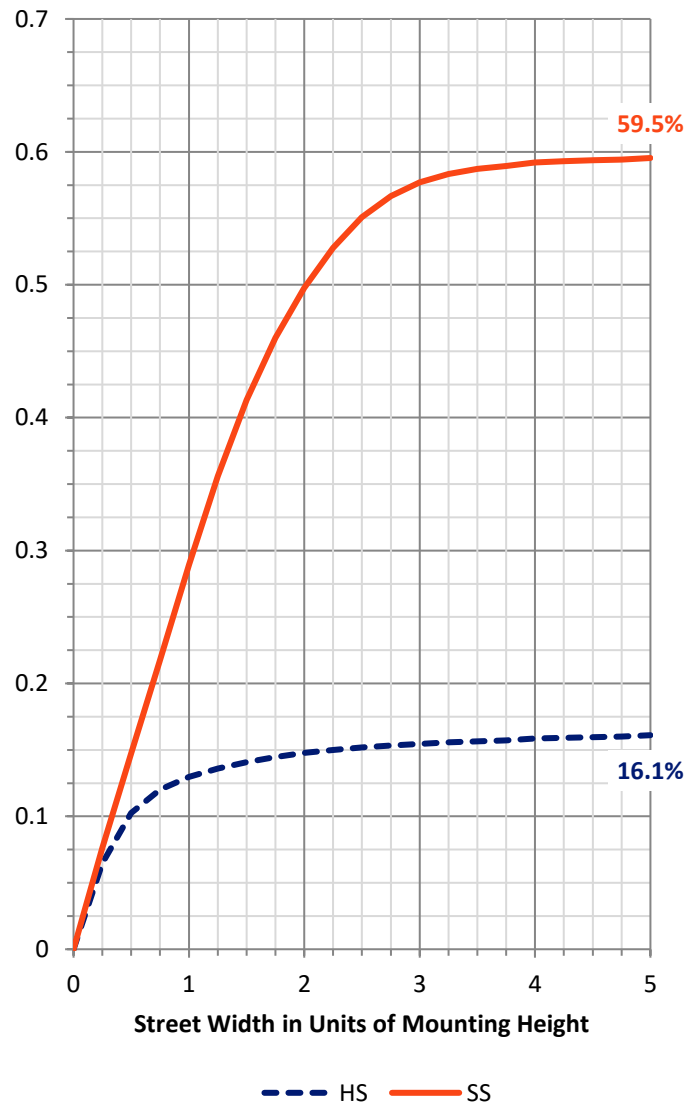
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1223.3   | 870.1  | 2093.3 |
|                    | % Fixture | 16.6     | 11.8   | 28.4   |
| <b>Street Side</b> | Lumens    | 4404.1   | 868.5  | 5272.5 |
|                    | % Fixture | 59.8     | 11.8   | 71.6   |
| <b>Total</b>       | Lumens    | 5627.3   | 1738.6 | 7365.9 |
|                    | % Fixture | 76.4     | 23.6   | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 68.5   | 0.9       |
| 10°-20°   | 200.0  | 2.7       |
| 20°-30°   | 308.5  | 4.2       |
| 30°-40°   | 462.3  | 6.3       |
| 40°-50°   | 769.9  | 10.5      |
| 50°-60°   | 1203.2 | 16.3      |
| 60°-70°   | 1589.2 | 21.6      |
| 70°-80°   | 919.3  | 12.5      |
| 80°-90°   | 106.4  | 1.4       |
| 90°-100°  | 12.7   | 0.2       |
| 100°-110° | 57.4   | 0.8       |
| 110°-120° | 166.1  | 2.3       |
| 120°-130° | 273.2  | 3.7       |
| 130°-140° | 336.8  | 4.6       |
| 140°-150° | 344.6  | 4.7       |
| 150°-160° | 290.3  | 3.9       |
| 160°-170° | 191.2  | 2.6       |
| 170°-180° | 66.3   | 0.9       |
| 0°-90°    | 5627.3 | 76.4      |
| 0°-180°   | 7365.9 | 100.0     |



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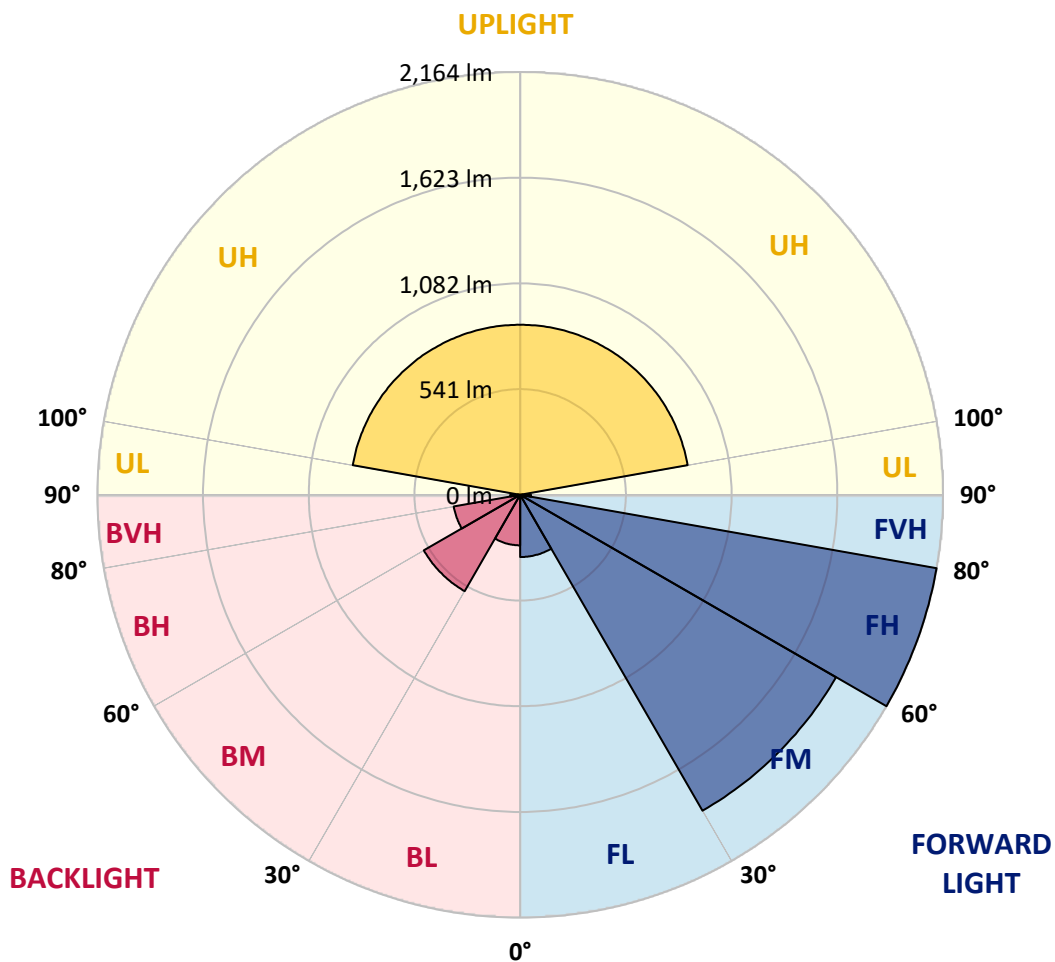
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |         |         |
|------|-------------|--------|-----------|-------------------------|---------|---------|
|      |             |        |           | B                       | U       | G       |
| FL   | (0°-30°)    | 318.3  | 4.3       |                         |         |         |
| FM   | (30°-60°)   | 1866.4 | 25.3      |                         |         |         |
| FH   | (60°-80°)   | 2163.6 | 29.4      |                         |         | G2/5000 |
| FVH  | (80°-90°)   | 55.8   | 0.8       |                         |         | G1/100  |
| BL   | (0°-30°)    | 258.7  | 3.5       | B1/500                  |         |         |
| BM   | (30°-60°)   | 569.0  | 7.7       | B1/1000                 |         |         |
| BH   | (60°-80°)   | 345.0  | 4.7       | B1/500                  |         | G1/500  |
| BVH  | (80°-90°)   | 50.6   | 0.7       |                         |         | G1/100  |
| UL   | (90°-100°)  | 12.7   | 0.2       |                         | U2/50   |         |
| UH   | (100°-180°) | 870.1  | 11.8      |                         | U4/1000 |         |

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

Type IV Medium





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**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 48°    | 55°    | 65°    | 75°    | 85°    |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°     | 724.2  | 724.2  | 724.2  | 724.2  | 724.2  | 724.2  | 724.2  | 724.2  | 724.2  | 724.2  | 724.2  |
| 2.5°   | 762.6  | 761.8  | 761.8  | 755.3  | 752.8  | 748.7  | 745.5  | 740.6  | 735.7  | 730.0  | 722.6  |
| 5°     | 799.4  | 801.8  | 798.5  | 788.7  | 776.5  | 763.4  | 758.5  | 747.1  | 731.6  | 717.7  | 704.6  |
| 7.5°   | 834.5  | 835.3  | 826.3  | 810.0  | 791.2  | 770.8  | 764.2  | 748.7  | 731.6  | 712.8  | 694.0  |
| 10°    | 859.8  | 860.6  | 847.5  | 824.7  | 799.4  | 776.5  | 769.1  | 753.6  | 732.4  | 712.0  | 688.3  |
| 12.5°  | 874.5  | 875.3  | 855.7  | 832.0  | 801.8  | 778.9  | 772.4  | 756.1  | 734.0  | 707.9  | 681.8  |
| 15°    | 872.0  | 874.5  | 858.1  | 832.0  | 800.2  | 779.8  | 771.6  | 757.7  | 730.0  | 703.8  | 676.1  |
| 17.5°  | 855.7  | 859.0  | 845.9  | 817.3  | 792.0  | 775.7  | 766.7  | 752.8  | 725.9  | 698.1  | 667.9  |
| 20°    | 823.9  | 827.9  | 822.2  | 794.5  | 777.3  | 764.2  | 758.5  | 745.5  | 720.2  | 691.6  | 660.6  |
| 22.5°  | 787.9  | 792.0  | 790.4  | 767.5  | 759.4  | 752.8  | 747.1  | 737.3  | 715.3  | 686.7  | 657.3  |
| 25°    | 761.8  | 765.1  | 762.6  | 743.0  | 745.5  | 745.5  | 742.2  | 734.9  | 714.4  | 688.3  | 657.3  |
| 27.5°  | 805.1  | 805.1  | 783.8  | 743.8  | 739.8  | 747.1  | 745.5  | 741.4  | 725.1  | 696.5  | 663.8  |
| 30°    | 963.5  | 951.2  | 912.9  | 812.4  | 761.0  | 757.7  | 756.9  | 754.5  | 739.8  | 714.4  | 684.2  |
| 32.5°  | 1140.7 | 1128.4 | 1082.7 | 956.9  | 850.0  | 779.8  | 772.4  | 773.2  | 769.1  | 745.5  | 715.3  |
| 35°    | 1298.2 | 1296.6 | 1260.7 | 1124.3 | 988.0  | 857.3  | 827.9  | 808.3  | 806.7  | 796.9  | 773.2  |
| 37.5°  | 1425.6 | 1425.6 | 1428.9 | 1273.7 | 1137.4 | 980.6  | 930.8  | 868.8  | 868.8  | 863.0  | 848.3  |
| 40°    | 1571.0 | 1577.5 | 1584.8 | 1409.3 | 1297.4 | 1127.6 | 1071.3 | 977.4  | 948.8  | 957.8  | 961.0  |
| 42.5°  | 1762.0 | 1770.2 | 1765.3 | 1576.7 | 1443.6 | 1303.1 | 1233.7 | 1120.2 | 1050.0 | 1064.7 | 1099.0 |
| 45°    | 1891.0 | 1894.3 | 1929.4 | 1751.4 | 1627.3 | 1451.7 | 1393.0 | 1237.0 | 1167.6 | 1197.8 | 1258.2 |
| 47.5°  | 2037.2 | 2045.3 | 2051.1 | 1949.8 | 1842.9 | 1619.9 | 1512.2 | 1350.5 | 1305.6 | 1351.3 | 1446.8 |
| 50°    | 2180.1 | 2169.5 | 2185.0 | 2180.9 | 2047.0 | 1769.4 | 1641.2 | 1456.6 | 1459.9 | 1522.0 | 1678.7 |
| 52.5°  | 2304.2 | 2268.3 | 2304.2 | 2349.1 | 2309.9 | 1922.9 | 1773.5 | 1581.6 | 1628.9 | 1704.9 | 1952.3 |
| 55°    | 2399.7 | 2313.2 | 2373.6 | 2501.0 | 2492.0 | 2058.4 | 1924.5 | 1748.1 | 1827.3 | 1931.0 | 2284.6 |
| 57.5°  | 2204.6 | 2215.2 | 2381.7 | 2603.0 | 2598.9 | 2195.6 | 2056.8 | 1956.3 | 2053.5 | 2169.5 | 2678.1 |
| 60°    | 2022.5 | 2069.8 | 2327.0 | 2619.4 | 2673.2 | 2345.0 | 2234.8 | 2193.1 | 2283.0 | 2424.2 | 3055.4 |
| 62.5°  | 1926.1 | 1971.0 | 2238.0 | 2589.1 | 2791.6 | 2566.3 | 2474.0 | 2442.2 | 2564.6 | 2723.0 | 3391.8 |
| 65°    | 1956.3 | 1984.1 | 2232.3 | 2634.9 | 2928.0 | 2901.0 | 2861.0 | 2808.0 | 2869.2 | 3017.8 | 3543.6 |
| 67.5°  | 1871.4 | 1917.2 | 2185.0 | 2715.7 | 3177.0 | 3309.3 | 3342.8 | 3285.6 | 3234.2 | 3213.8 | 3322.4 |
| 70°    | 1393.0 | 1437.1 | 1717.9 | 2381.7 | 3381.2 | 4018.0 | 3997.6 | 3806.6 | 3460.4 | 3171.3 | 2595.7 |
| 72°    | 885.1  | 872.8  | 1087.6 | 1744.9 | 3005.6 | 4200.1 | 4296.5 | 3942.9 | 3357.5 | 2816.1 | 1762.8 |
| 72.5°  | 643.4  | 701.4  | 902.2  | 1551.4 | 2855.3 | 4100.5 | 4240.9 | 3898.8 | 3222.7 | 2660.2 | 1550.5 |
| 75°    | 156.8  | 165.8  | 216.4  | 556.0  | 1672.2 | 3085.6 | 3261.9 | 3012.1 | 2352.4 | 1579.1 | 687.5  |
| 77.5°  | 106.1  | 110.2  | 142.9  | 196.0  | 491.5  | 1759.6 | 1935.9 | 1663.2 | 1052.5 | 537.3  | 306.2  |
| 80°    | 79.2   | 81.7   | 103.7  | 138.8  | 204.1  | 600.1  | 707.9  | 562.6  | 262.1  | 298.0  | 218.0  |
| 82.5°  | 55.5   | 57.2   | 78.4   | 102.1  | 135.5  | 140.4  | 187.0  | 206.6  | 169.8  | 195.1  | 127.4  |
| 85°    | 38.4   | 38.4   | 57.2   | 70.2   | 85.7   | 69.4   | 74.3   | 103.7  | 115.1  | 115.9  | 77.6   |
| 87.5°  | 20.4   | 22.9   | 33.5   | 44.9   | 44.9   | 31.8   | 35.1   | 53.1   | 64.5   | 69.4   | 46.5   |
| 90°    | 12.3   | 12.3   | 20.9   | 25.1   | 18.6   | 15.2   | 14.3   | 17.6   | 24.5   | 31.0   | 21.7   |
| 92.5°  | 4.0    | 4.0    | 5.0    | 6.0    | 6.0    | 6.0    | 6.3    | 7.0    | 7.0    | 6.0    | 6.0    |
| 95°    | 5.0    | 5.0    | 6.0    | 7.0    | 7.0    | 7.0    | 7.0    | 7.0    | 8.0    | 7.0    | 7.0    |
| 97.5°  | 7.0    | 7.0    | 8.0    | 8.0    | 9.0    | 9.0    | 9.9    | 12.0   | 10.0   | 9.0    | 8.0    |
| 100°   | 8.0    | 8.0    | 9.0    | 10.0   | 12.0   | 21.0   | 23.4   | 29.0   | 26.0   | 23.0   | 19.0   |
| 102.5° | 11.0   | 11.0   | 13.0   | 18.0   | 27.0   | 40.0   | 43.0   | 50.0   | 47.0   | 42.0   | 39.0   |
| 105°   | 21.0   | 22.0   | 27.0   | 36.0   | 48.0   | 63.0   | 65.7   | 72.0   | 70.0   | 65.0   | 61.0   |
| 107.5° | 41.0   | 42.0   | 49.0   | 58.0   | 73.0   | 88.0   | 90.1   | 95.0   | 94.0   | 90.0   | 87.0   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 48°   | 55°   | 65°   | 75°   | 85°   |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110°   | 66.0  | 68.0  | 74.0  | 87.0  | 102.0 | 114.0 | 115.8 | 120.0 | 121.0 | 119.0 | 116.0 |
| 112.5° | 99.0  | 99.0  | 106.0 | 121.0 | 134.0 | 143.0 | 144.5 | 148.0 | 150.0 | 149.0 | 147.0 |
| 115°   | 140.0 | 139.0 | 147.0 | 159.0 | 168.0 | 174.0 | 175.5 | 179.0 | 182.0 | 179.0 | 177.0 |
| 117.5° | 184.0 | 184.0 | 189.0 | 197.0 | 202.0 | 205.0 | 206.8 | 211.0 | 215.0 | 210.0 | 208.0 |
| 120°   | 225.0 | 223.0 | 226.0 | 233.0 | 237.0 | 243.0 | 243.9 | 246.0 | 250.0 | 245.0 | 243.0 |
| 122.5° | 263.0 | 260.0 | 261.0 | 267.0 | 271.0 | 277.0 | 277.6 | 279.0 | 283.0 | 278.0 | 276.0 |
| 125°   | 298.0 | 294.0 | 296.0 | 299.0 | 305.0 | 310.0 | 310.9 | 313.0 | 315.0 | 310.0 | 310.0 |
| 127.5° | 330.0 | 329.0 | 329.0 | 333.0 | 339.0 | 340.0 | 341.5 | 345.0 | 346.0 | 346.0 | 345.0 |
| 130°   | 363.0 | 361.0 | 362.0 | 366.0 | 370.0 | 372.0 | 373.5 | 377.0 | 381.0 | 381.0 | 379.0 |
| 132.5° | 396.0 | 394.0 | 393.0 | 401.0 | 404.0 | 405.0 | 406.8 | 411.0 | 416.0 | 414.0 | 414.0 |
| 135°   | 429.0 | 426.0 | 426.0 | 432.0 | 435.0 | 437.0 | 438.8 | 443.0 | 448.0 | 447.0 | 450.0 |
| 137.5° | 460.0 | 457.0 | 459.0 | 460.0 | 464.0 | 468.0 | 469.5 | 473.0 | 475.0 | 476.0 | 481.0 |
| 140°   | 488.0 | 485.0 | 487.0 | 489.0 | 491.0 | 497.0 | 497.9 | 500.0 | 502.0 | 504.0 | 509.0 |
| 142.5° | 518.0 | 515.0 | 517.0 | 518.0 | 521.0 | 525.0 | 525.6 | 527.0 | 533.0 | 533.0 | 534.0 |
| 145°   | 550.0 | 546.0 | 544.0 | 547.0 | 550.0 | 551.0 | 552.5 | 556.0 | 562.0 | 561.0 | 558.0 |
| 147.5° | 575.0 | 572.0 | 571.0 | 574.0 | 574.0 | 575.0 | 576.5 | 580.0 | 585.0 | 586.0 | 583.0 |
| 150°   | 595.0 | 592.0 | 593.0 | 593.0 | 593.0 | 593.0 | 594.2 | 597.0 | 600.0 | 603.0 | 606.0 |
| 152.5° | 611.0 | 608.0 | 608.0 | 609.0 | 610.0 | 610.0 | 610.3 | 611.0 | 614.0 | 618.0 | 623.0 |
| 155°   | 629.0 | 625.0 | 625.0 | 627.0 | 630.0 | 628.0 | 627.4 | 626.0 | 631.0 | 636.0 | 638.0 |
| 157.5° | 646.0 | 643.0 | 643.0 | 644.0 | 646.0 | 645.0 | 644.7 | 644.0 | 648.0 | 650.0 | 650.0 |
| 160°   | 663.0 | 660.0 | 659.0 | 656.0 | 655.0 | 655.0 | 655.9 | 658.0 | 664.0 | 661.0 | 660.0 |
| 162.5° | 673.0 | 669.0 | 669.0 | 665.0 | 661.0 | 663.0 | 664.2 | 667.0 | 671.0 | 670.0 | 668.0 |
| 165°   | 681.0 | 678.0 | 676.0 | 676.0 | 673.0 | 673.0 | 672.7 | 672.0 | 677.0 | 680.0 | 678.0 |
| 167.5° | 690.0 | 687.0 | 684.0 | 686.0 | 688.0 | 685.0 | 682.9 | 678.0 | 684.0 | 688.0 | 688.0 |
| 170°   | 698.0 | 695.0 | 692.0 | 692.0 | 693.0 | 691.0 | 689.5 | 686.0 | 689.0 | 694.0 | 696.0 |
| 172.5° | 699.0 | 697.0 | 695.0 | 693.0 | 690.0 | 690.0 | 689.7 | 689.0 | 692.0 | 694.0 | 696.0 |
| 175°   | 700.0 | 698.0 | 697.0 | 695.0 | 691.0 | 690.0 | 690.0 | 690.0 | 695.0 | 696.0 | 694.0 |
| 177.5° | 707.0 | 705.0 | 700.0 | 699.0 | 697.0 | 695.0 | 694.7 | 694.0 | 699.0 | 701.0 | 698.0 |
| 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):**

|        | 90°    | 95°    | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 724.2  | 724.2  | 724.2 | 724.2 | 724.2 | 724.2 | 724.2 | 724.2 | 724.2 | 724.2 | 724.2 |
| 2.5°   | 721.0  | 716.1  | 709.5 | 706.3 | 704.6 | 701.4 | 698.1 | 696.5 | 696.5 | 693.2 | 694.0 |
| 5°     | 698.1  | 690.8  | 681.8 | 675.3 | 674.4 | 674.4 | 676.1 | 676.1 | 676.9 | 674.4 | 677.7 |
| 7.5°   | 686.7  | 678.5  | 665.5 | 658.1 | 652.4 | 651.6 | 654.8 | 661.4 | 664.6 | 662.2 | 665.5 |
| 10°    | 678.5  | 669.5  | 654.8 | 645.9 | 641.8 | 640.1 | 642.6 | 649.1 | 659.7 | 659.7 | 663.0 |
| 12.5°  | 670.4  | 658.9  | 644.2 | 637.7 | 634.4 | 635.2 | 638.5 | 643.4 | 654.8 | 658.9 | 660.6 |
| 15°    | 662.2  | 649.1  | 636.9 | 627.9 | 627.9 | 630.3 | 634.4 | 640.1 | 650.8 | 658.1 | 659.7 |
| 17.5°  | 654.0  | 641.0  | 630.3 | 623.0 | 623.0 | 626.3 | 630.3 | 637.7 | 645.0 | 655.7 | 655.7 |
| 20°    | 646.7  | 636.1  | 622.2 | 615.6 | 614.8 | 617.3 | 622.2 | 629.5 | 635.2 | 645.9 | 646.7 |
| 22.5°  | 642.6  | 629.5  | 616.5 | 606.7 | 602.6 | 600.9 | 605.8 | 613.2 | 618.9 | 629.5 | 631.2 |
| 25°    | 641.0  | 626.3  | 609.9 | 592.0 | 581.4 | 578.1 | 580.5 | 589.5 | 594.4 | 602.6 | 605.0 |
| 27.5°  | 646.7  | 632.8  | 607.5 | 574.8 | 552.8 | 543.8 | 546.2 | 552.0 | 553.6 | 562.6 | 566.7 |
| 30°    | 666.3  | 649.9  | 612.4 | 556.9 | 516.8 | 500.5 | 500.5 | 501.3 | 503.8 | 511.1 | 511.9 |
| 32.5°  | 698.1  | 682.6  | 627.1 | 538.1 | 480.1 | 457.2 | 451.5 | 447.4 | 447.4 | 446.6 | 447.4 |
| 35°    | 756.9  | 743.8  | 652.4 | 516.8 | 440.1 | 414.8 | 400.9 | 393.6 | 386.2 | 382.9 | 382.1 |
| 37.5°  | 841.8  | 830.4  | 688.3 | 492.4 | 405.0 | 379.7 | 362.5 | 347.8 | 339.7 | 338.8 | 342.9 |
| 40°    | 968.4  | 956.9  | 728.3 | 464.6 | 371.5 | 352.7 | 334.8 | 319.3 | 310.3 | 311.1 | 315.2 |
| 42.5°  | 1124.3 | 1089.2 | 771.6 | 427.0 | 344.6 | 334.8 | 315.2 | 302.1 | 293.1 | 288.2 | 287.4 |
| 45°    | 1306.4 | 1247.6 | 812.4 | 391.9 | 315.2 | 319.3 | 300.5 | 285.8 | 274.3 | 261.3 | 259.6 |
| 47.5°  | 1533.4 | 1406.0 | 848.3 | 356.8 | 283.3 | 302.9 | 285.0 | 271.1 | 253.9 | 238.4 | 236.0 |
| 50°    | 1770.2 | 1588.1 | 879.4 | 319.3 | 254.7 | 285.0 | 269.4 | 250.7 | 227.0 | 213.1 | 213.1 |
| 52.5°  | 2043.7 | 1806.9 | 919.4 | 277.6 | 232.7 | 265.4 | 249.9 | 225.4 | 205.8 | 204.1 | 204.1 |
| 55°    | 2348.3 | 2036.4 | 947.1 | 245.0 | 215.6 | 244.1 | 236.8 | 229.4 | 222.9 | 224.5 | 225.4 |
| 57.5°  | 2666.7 | 2275.6 | 922.7 | 222.1 | 201.7 | 239.2 | 260.5 | 250.7 | 230.3 | 229.4 | 228.6 |
| 60°    | 2941.1 | 2461.8 | 787.1 | 207.4 | 191.1 | 247.4 | 279.2 | 250.7 | 230.3 | 240.9 | 241.7 |
| 62.5°  | 3120.7 | 2549.9 | 524.2 | 188.6 | 175.5 | 233.5 | 272.7 | 243.3 | 231.1 | 261.3 | 263.7 |
| 65°    | 3096.2 | 2451.2 | 301.3 | 175.5 | 165.8 | 214.7 | 263.7 | 234.3 | 215.6 | 232.7 | 227.8 |
| 67.5°  | 2731.2 | 2054.3 | 218.0 | 169.8 | 158.4 | 201.7 | 247.4 | 221.3 | 200.9 | 222.1 | 213.1 |
| 70°    | 1962.9 | 1398.7 | 187.8 | 164.9 | 153.5 | 186.2 | 236.0 | 213.1 | 192.7 | 207.4 | 193.5 |
| 72°    | 1317.0 | 850.8  | 172.3 | 160.9 | 148.6 | 176.4 | 227.8 | 206.6 | 185.3 | 193.5 | 178.0 |
| 72.5°  | 1121.1 | 671.2  | 168.2 | 159.2 | 147.0 | 173.9 | 225.4 | 204.9 | 183.7 | 191.9 | 177.2 |
| 75°    | 418.9  | 262.9  | 149.4 | 147.0 | 135.5 | 161.7 | 215.6 | 197.6 | 175.5 | 173.1 | 166.6 |
| 77.5°  | 215.6  | 166.6  | 127.4 | 129.8 | 121.7 | 147.8 | 204.9 | 186.2 | 161.7 | 152.7 | 149.4 |
| 80°    | 156.8  | 120.8  | 102.9 | 110.2 | 103.7 | 133.1 | 190.2 | 169.0 | 147.0 | 137.2 | 133.1 |
| 82.5°  | 98.8   | 75.1   | 78.4  | 87.4  | 88.2  | 117.6 | 173.1 | 151.9 | 130.6 | 122.5 | 115.9 |
| 85°    | 47.4   | 44.9   | 55.5  | 64.5  | 71.0  | 99.6  | 158.4 | 134.7 | 114.3 | 98.0  | 98.8  |
| 87.5°  | 25.3   | 34.3   | 33.5  | 43.3  | 54.7  | 81.7  | 140.4 | 110.2 | 91.4  | 73.5  | 74.3  |
| 90°    | 12.7   | 16.0   | 18.8  | 26.1  | 29.0  | 42.1  | 98.6  | 70.9  | 68.2  | 31.1  | 27.9  |
| 92.5°  | 6.0    | 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    | 7.0   | 8.0   | 7.0   | 7.0   | 7.0   | 7.0   | 6.0   | 5.0   | 5.0   |
| 97.5°  | 8.0    | 8.0    | 9.0   | 10.0  | 12.0  | 9.0   | 9.0   | 8.0   | 8.0   | 7.0   | 7.0   |
| 100°   | 19.0   | 19.0   | 23.0  | 26.0  | 29.0  | 21.0  | 12.0  | 10.0  | 9.0   | 8.0   | 8.0   |
| 102.5° | 38.0   | 39.0   | 42.0  | 47.0  | 50.0  | 40.0  | 27.0  | 18.0  | 13.0  | 11.0  | 11.0  |
| 105°   | 61.0   | 61.0   | 65.0  | 70.0  | 72.0  | 63.0  | 48.0  | 36.0  | 27.0  | 22.0  | 21.0  |
| 107.5° | 86.0   | 87.0   | 90.0  | 94.0  | 95.0  | 88.0  | 73.0  | 58.0  | 49.0  | 42.0  | 41.0  |



REPORT NUMBER: P226706

CATALOG NUMBER: IST-AF-1200-LED-E1-T4W-8030-ULG

**CANDELA DISTRIBUTION (continued):**

|        | 90°   | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110°   | 117.0 | 116.0 | 119.0 | 121.0 | 120.0 | 114.0 | 102.0 | 87.0  | 74.0  | 68.0  | 66.0  |
| 112.5° | 147.0 | 147.0 | 149.0 | 150.0 | 148.0 | 143.0 | 134.0 | 121.0 | 106.0 | 99.0  | 99.0  |
| 115°   | 178.0 | 177.0 | 179.0 | 182.0 | 179.0 | 174.0 | 168.0 | 159.0 | 147.0 | 139.0 | 140.0 |
| 117.5° | 209.0 | 208.0 | 210.0 | 215.0 | 211.0 | 205.0 | 202.0 | 197.0 | 189.0 | 184.0 | 184.0 |
| 120°   | 243.0 | 243.0 | 245.0 | 250.0 | 246.0 | 243.0 | 237.0 | 233.0 | 226.0 | 223.0 | 225.0 |
| 122.5° | 277.0 | 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 | 310.0 | 315.0 | 313.0 | 310.0 | 305.0 | 299.0 | 296.0 | 294.0 | 298.0 |
| 127.5° | 347.0 | 345.0 | 346.0 | 346.0 | 345.0 | 340.0 | 339.0 | 333.0 | 329.0 | 329.0 | 330.0 |
| 130°   | 380.0 | 379.0 | 381.0 | 381.0 | 377.0 | 372.0 | 370.0 | 366.0 | 362.0 | 361.0 | 363.0 |
| 132.5° | 415.0 | 414.0 | 414.0 | 416.0 | 411.0 | 405.0 | 404.0 | 401.0 | 393.0 | 394.0 | 396.0 |
| 135°   | 451.0 | 450.0 | 447.0 | 448.0 | 443.0 | 437.0 | 435.0 | 432.0 | 426.0 | 426.0 | 429.0 |
| 137.5° | 482.0 | 481.0 | 476.0 | 475.0 | 473.0 | 468.0 | 464.0 | 460.0 | 459.0 | 457.0 | 460.0 |
| 140°   | 511.0 | 509.0 | 504.0 | 502.0 | 500.0 | 497.0 | 491.0 | 489.0 | 487.0 | 485.0 | 488.0 |
| 142.5° | 536.0 | 534.0 | 533.0 | 533.0 | 527.0 | 525.0 | 521.0 | 518.0 | 517.0 | 515.0 | 518.0 |
| 145°   | 560.0 | 558.0 | 561.0 | 562.0 | 556.0 | 551.0 | 550.0 | 547.0 | 544.0 | 546.0 | 550.0 |
| 147.5° | 585.0 | 583.0 | 586.0 | 585.0 | 580.0 | 575.0 | 574.0 | 574.0 | 571.0 | 572.0 | 575.0 |
| 150°   | 610.0 | 606.0 | 603.0 | 600.0 | 597.0 | 593.0 | 593.0 | 593.0 | 593.0 | 592.0 | 595.0 |
| 152.5° | 628.0 | 623.0 | 618.0 | 614.0 | 611.0 | 610.0 | 610.0 | 609.0 | 608.0 | 608.0 | 611.0 |
| 155°   | 641.0 | 638.0 | 636.0 | 631.0 | 626.0 | 628.0 | 630.0 | 627.0 | 625.0 | 625.0 | 629.0 |
| 157.5° | 655.0 | 650.0 | 650.0 | 648.0 | 644.0 | 645.0 | 646.0 | 644.0 | 643.0 | 643.0 | 646.0 |
| 160°   | 666.0 | 660.0 | 661.0 | 664.0 | 658.0 | 655.0 | 655.0 | 656.0 | 659.0 | 660.0 | 663.0 |
| 162.5° | 674.0 | 668.0 | 670.0 | 671.0 | 667.0 | 663.0 | 661.0 | 665.0 | 669.0 | 669.0 | 673.0 |
| 165°   | 682.0 | 678.0 | 680.0 | 677.0 | 672.0 | 673.0 | 673.0 | 676.0 | 676.0 | 678.0 | 681.0 |
| 167.5° | 694.0 | 688.0 | 688.0 | 684.0 | 678.0 | 685.0 | 688.0 | 686.0 | 684.0 | 687.0 | 690.0 |
| 170°   | 701.0 | 696.0 | 694.0 | 689.0 | 686.0 | 691.0 | 693.0 | 692.0 | 692.0 | 695.0 | 698.0 |
| 172.5° | 701.0 | 696.0 | 694.0 | 692.0 | 689.0 | 690.0 | 690.0 | 693.0 | 695.0 | 697.0 | 699.0 |
| 175°   | 699.0 | 694.0 | 696.0 | 695.0 | 690.0 | 690.0 | 691.0 | 695.0 | 697.0 | 698.0 | 700.0 |
| 177.5° | 702.0 | 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 | 700.0 |

(END OF REPORT)