

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: P227425

Luminaire Tested: **ISW-AF-1000-LED-E1-RW-ULG**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227425
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29767)-DOWNLIGHT AND
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISW-AF-1000-LED-E1-RW-ULG
Description: IMPACT ELITE LED WEDGE LUMINAIRE WITH UPLIGHT
LIGHT SQUARE WITH ACCULED OPTICS-RECTANGULAR WIDE TYPE I, WITH UPLIGHT
GLOW
Light Source: (16) 4000K CCT, 70 CRI LEDs and (1) UPLIGHT LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7887.8 lumens
Efficiency: N/A
Efficacy: 110.6 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 0.5' x H: 0.54')
IES Classification: Type II - Medium - Non-Cutoff
BUG Rating: B2 - U5 - G2

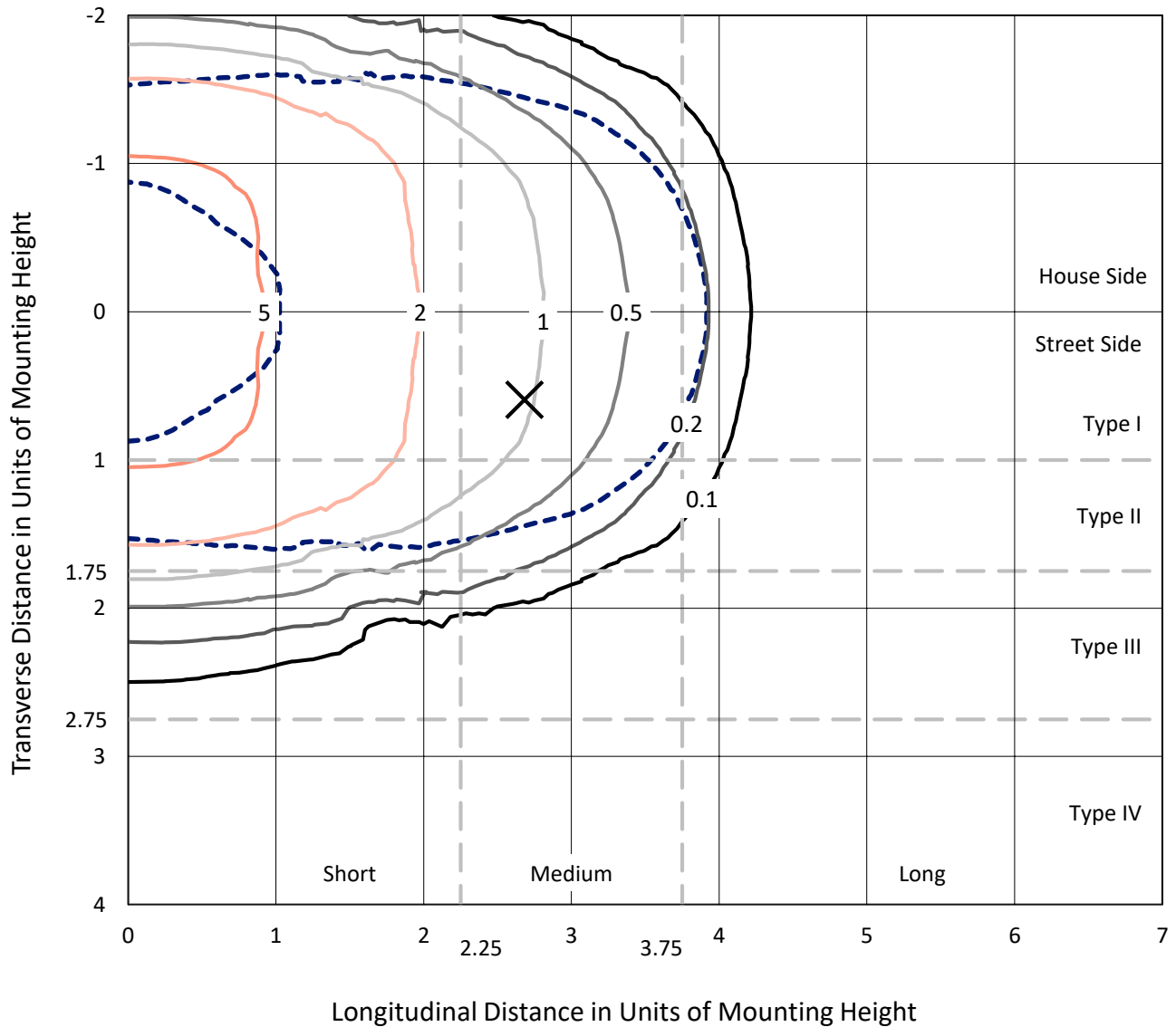
Input Watts (W): 71.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P227425
 CATALOG NUMBER: ISW-AF-1000-LED-E1-RW-ULG

Iso-Footcandle Lines of Horizontal Illumination

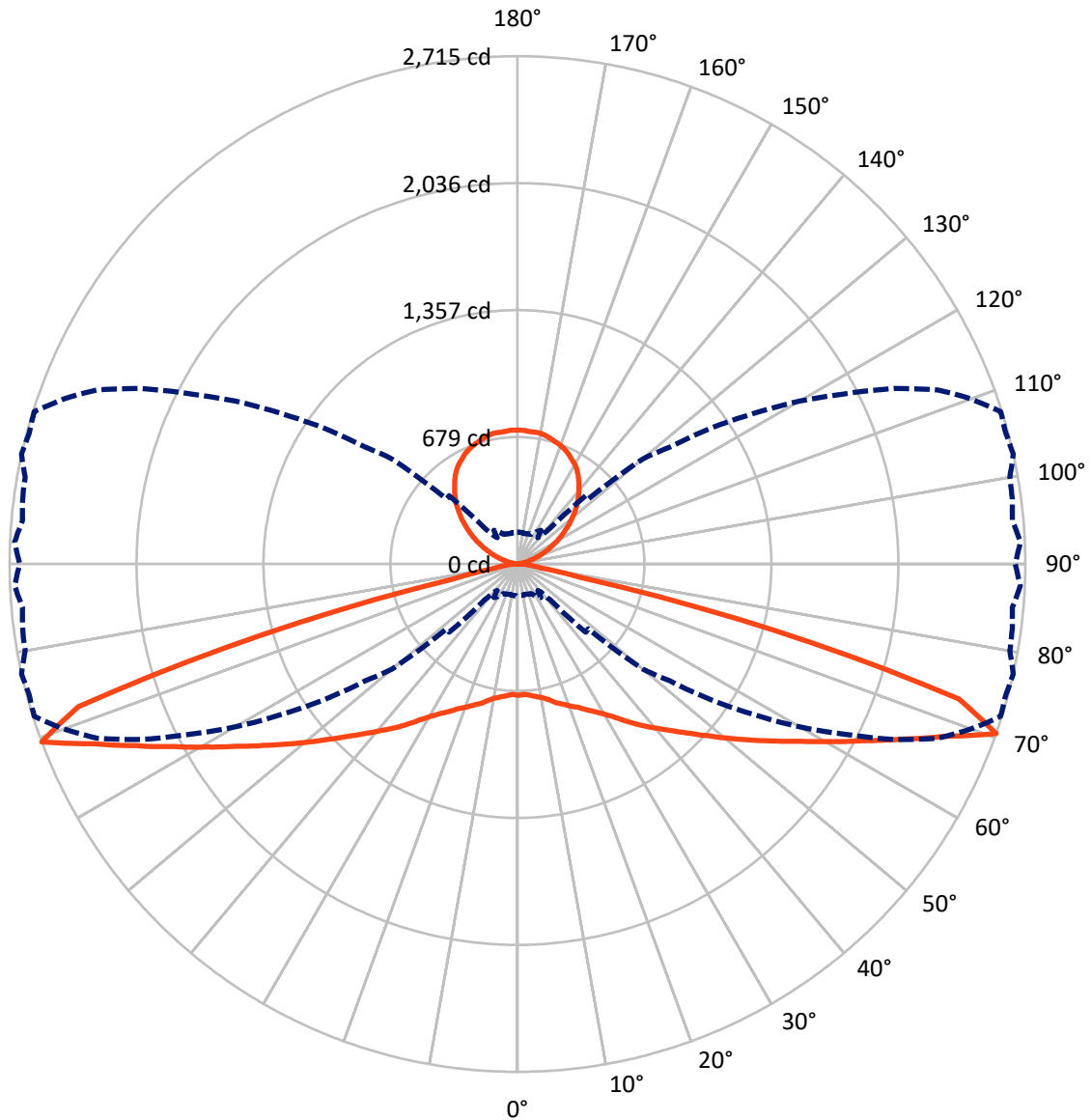
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.2 fc
 Type II - Medium - Non-Cutoff

REPORT NUMBER: P227425
CATALOG NUMBER: ISW-AF-1000-LED-E1-RW-ULG

Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P227425

CATALOG NUMBER: ISW-AF-1000-LED-E1-RW-ULG

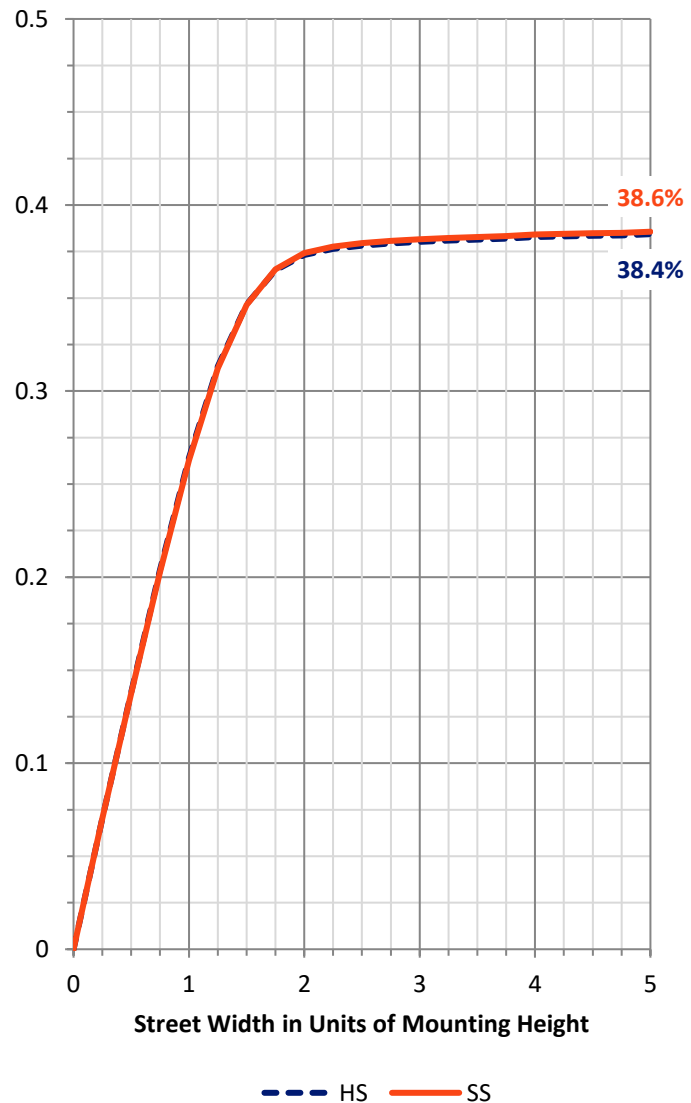
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 3056.0 | 888.0 | 3943.9 |
| | % Fixture | 38.7 | 11.3 | 50.0 |
| Street Side | Lumens | 3056.0 | 888.0 | 3943.9 |
| | % Fixture | 38.7 | 11.3 | 50.0 |
| Total | Lumens | 6111.9 | 1775.9 | 7887.8 |
| | % Fixture | 77.5 | 22.5 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 67.8 | 0.9 |
| 10°-20° | 212.2 | 2.7 |
| 20°-30° | 398.3 | 5.0 |
| 30°-40° | 696.1 | 8.8 |
| 40°-50° | 1134.7 | 14.4 |
| 50°-60° | 1552.8 | 19.7 |
| 60°-70° | 1428.4 | 18.1 |
| 70°-80° | 558.4 | 7.1 |
| 80°-90° | 63.2 | 0.8 |
| 90°-100° | 10.4 | 0.1 |
| 100°-110° | 58.7 | 0.7 |
| 110°-120° | 169.9 | 2.2 |
| 120°-130° | 279.4 | 3.5 |
| 130°-140° | 344.6 | 4.4 |
| 140°-150° | 352.5 | 4.5 |
| 150°-160° | 297.0 | 3.8 |
| 160°-170° | 195.5 | 2.5 |
| 170°-180° | 67.8 | 0.9 |
| 0°-90° | 6111.9 | 77.5 |
| 0°-180° | 7887.8 | 100.0 |



REPORT NUMBER: P227425

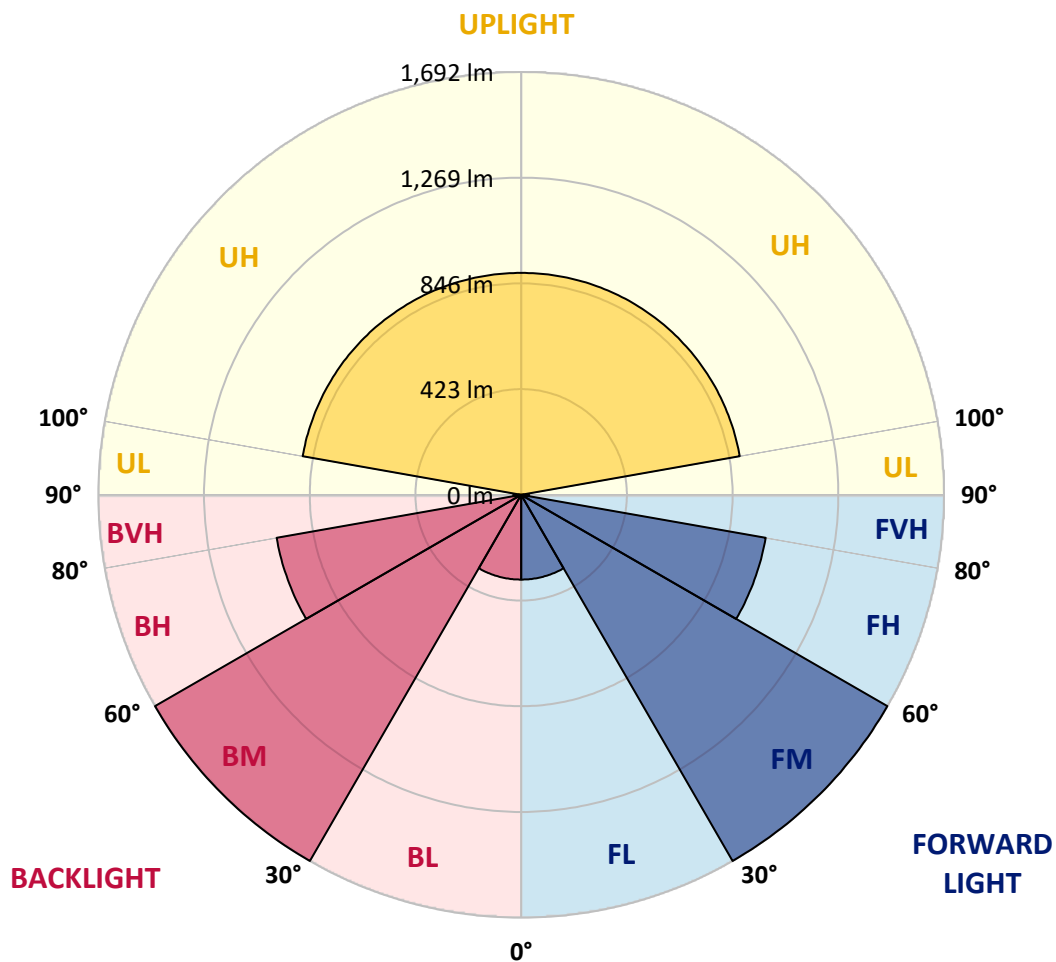
CATALOG NUMBER: ISW-AF-1000-LED-E1-RW-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|---------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 339.2 | 4.3 | | | |
| FM | (30°-60°) | 1691.8 | 21.4 | | | |
| FH | (60°-80°) | 993.4 | 12.6 | | | G1/1800 |
| FVH | (80°-90°) | 31.6 | 0.4 | | | G1/100 |
| BL | (0°-30°) | 339.2 | 4.3 | B1/500 | | |
| BM | (30°-60°) | 1691.8 | 21.4 | B2/2500 | | |
| BH | (60°-80°) | 993.4 | 12.6 | B2/1000 | | G2/1000 |
| BVH | (80°-90°) | 31.6 | 0.4 | | | G1/100 |
| UL | (90°-100°) | 10.4 | 0.1 | | U2/50 | |
| UH | (100°-180°) | 888.0 | 11.3 | | U4/1000 | |

BUG Rating: B2-U5-G2

Type II Medium





REPORT NUMBER: P227425

CATALOG NUMBER: ISW-AF-1000-LED-E1-RW-ULG

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 37.5° | 40° | 42.5° | 45° | 47.5° | 50° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 |
| 2.5° | 699.4 | 698.5 | 698.5 | 699.4 | 701.2 | 702.1 | 700.3 | 701.2 | 701.2 | 700.3 | 703.0 |
| 5° | 701.2 | 700.3 | 701.2 | 703.0 | 705.7 | 708.4 | 707.5 | 707.5 | 708.4 | 706.6 | 711.1 |
| 7.5° | 699.4 | 698.5 | 700.3 | 704.8 | 711.1 | 714.6 | 714.6 | 714.6 | 716.5 | 715.6 | 721.0 |
| 10° | 691.3 | 690.4 | 694.9 | 703.0 | 714.6 | 717.4 | 720.1 | 721.0 | 726.4 | 726.4 | 731.7 |
| 12.5° | 684.1 | 685.0 | 691.3 | 703.9 | 722.8 | 723.6 | 727.2 | 730.9 | 738.1 | 734.5 | 744.3 |
| 15° | 686.8 | 688.7 | 696.7 | 712.0 | 737.1 | 736.2 | 739.0 | 742.6 | 754.2 | 746.1 | 762.3 |
| 17.5° | 700.3 | 703.0 | 712.0 | 730.0 | 756.1 | 751.6 | 755.1 | 760.6 | 775.8 | 765.9 | 784.8 |
| 20° | 721.9 | 725.5 | 735.4 | 755.1 | 779.4 | 774.9 | 778.5 | 784.8 | 802.8 | 792.9 | 811.8 |
| 22.5° | 750.6 | 754.2 | 765.1 | 787.5 | 813.6 | 808.1 | 811.8 | 817.1 | 837.0 | 821.6 | 845.1 |
| 25° | 789.3 | 792.9 | 804.6 | 828.0 | 857.6 | 851.3 | 853.1 | 856.7 | 877.4 | 859.4 | 881.9 |
| 27.5° | 843.2 | 846.8 | 856.7 | 879.2 | 908.0 | 902.5 | 904.4 | 908.0 | 929.6 | 911.6 | 931.3 |
| 30° | 911.6 | 915.1 | 924.1 | 946.6 | 970.9 | 964.5 | 967.3 | 970.0 | 989.8 | 971.8 | 988.0 |
| 32.5° | 992.5 | 991.5 | 1005.0 | 1028.4 | 1050.0 | 1038.3 | 1038.3 | 1038.3 | 1057.2 | 1039.2 | 1051.8 |
| 35° | 1087.7 | 1087.7 | 1101.2 | 1123.7 | 1143.5 | 1130.0 | 1123.7 | 1120.1 | 1140.8 | 1118.3 | 1127.3 |
| 37.5° | 1192.0 | 1187.5 | 1208.2 | 1228.9 | 1247.8 | 1230.7 | 1225.3 | 1220.8 | 1236.0 | 1210.9 | 1215.4 |
| 40° | 1302.6 | 1299.0 | 1321.4 | 1344.9 | 1357.5 | 1335.0 | 1330.4 | 1325.0 | 1341.3 | 1316.9 | 1316.1 |
| 42.5° | 1403.3 | 1400.6 | 1429.4 | 1456.4 | 1471.6 | 1442.9 | 1436.5 | 1431.1 | 1449.1 | 1424.9 | 1419.4 |
| 45° | 1488.7 | 1487.8 | 1521.0 | 1558.0 | 1584.9 | 1554.3 | 1549.8 | 1540.9 | 1558.8 | 1529.1 | 1526.4 |
| 47.5° | 1555.2 | 1551.6 | 1592.1 | 1646.0 | 1689.2 | 1657.7 | 1656.8 | 1650.5 | 1669.4 | 1637.0 | 1633.4 |
| 50° | 1600.2 | 1602.9 | 1647.0 | 1709.9 | 1779.9 | 1750.3 | 1753.0 | 1750.3 | 1778.2 | 1745.8 | 1750.3 |
| 52.5° | 1608.3 | 1613.6 | 1670.3 | 1753.0 | 1850.9 | 1815.0 | 1835.7 | 1843.8 | 1878.9 | 1850.9 | 1859.9 |
| 55° | 1512.0 | 1527.4 | 1613.6 | 1757.4 | 1895.0 | 1872.5 | 1898.6 | 1922.0 | 1971.4 | 1948.1 | 1964.3 |
| 57.5° | 1297.2 | 1328.7 | 1428.4 | 1637.0 | 1889.6 | 1902.2 | 1955.3 | 1991.2 | 2051.4 | 2030.8 | 2068.5 |
| 60° | 1002.4 | 1024.0 | 1134.5 | 1378.1 | 1717.0 | 1734.1 | 1830.3 | 1944.4 | 2082.9 | 2111.7 | 2171.0 |
| 62.5° | 656.2 | 668.8 | 776.7 | 1024.0 | 1419.4 | 1424.9 | 1544.5 | 1692.8 | 1932.8 | 1995.7 | 2162.0 |
| 65° | 325.4 | 342.5 | 400.1 | 589.7 | 994.3 | 987.0 | 1118.3 | 1291.8 | 1602.9 | 1672.1 | 1942.7 |
| 67.5° | 203.2 | 205.8 | 217.6 | 273.3 | 498.1 | 442.3 | 550.1 | 731.7 | 1108.5 | 1170.5 | 1513.9 |
| 70° | 170.8 | 169.9 | 167.3 | 175.3 | 219.3 | 178.0 | 196.9 | 257.1 | 516.0 | 513.3 | 872.9 |
| 72.5° | 157.3 | 154.7 | 147.4 | 146.5 | 152.8 | 140.2 | 142.1 | 145.7 | 206.7 | 173.5 | 336.2 |
| 75° | 144.7 | 139.3 | 130.3 | 127.7 | 127.7 | 117.7 | 117.7 | 118.7 | 133.9 | 125.8 | 152.8 |
| 77.5° | 129.4 | 123.2 | 114.2 | 110.6 | 107.0 | 96.2 | 95.3 | 96.2 | 107.9 | 100.7 | 114.2 |
| 80° | 111.5 | 105.2 | 98.9 | 93.5 | 88.1 | 78.3 | 75.5 | 75.5 | 85.4 | 78.3 | 89.0 |
| 82.5° | 97.1 | 89.0 | 87.2 | 78.3 | 70.1 | 61.2 | 58.4 | 53.9 | 62.9 | 54.8 | 66.5 |
| 85° | 71.9 | 65.7 | 82.7 | 69.3 | 55.8 | 49.4 | 39.6 | 33.2 | 39.6 | 32.3 | 42.2 |
| 87.5° | 41.3 | 38.7 | 72.8 | 54.8 | 49.4 | 53.0 | 32.3 | 23.3 | 22.5 | 19.7 | 23.3 |
| 90° | 13.2 | 14.1 | 18.8 | 16.3 | 18.9 | 13.3 | 10.3 | 10.0 | 12.6 | 10.7 | 13.5 |
| 92.5° | 4.1 | 4.1 | 5.1 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 | 6.3 | 6.6 |
| 95° | 5.1 | 5.1 | 6.1 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 |
| 97.5° | 7.2 | 7.2 | 8.2 | 8.2 | 9.2 | 9.2 | 9.2 | 9.2 | 9.2 | 10.0 | 10.7 |
| 100° | 8.2 | 8.2 | 9.2 | 10.2 | 12.3 | 14.5 | 16.9 | 19.2 | 21.5 | 23.5 | 25.6 |
| 102.5° | 11.3 | 11.3 | 13.3 | 18.4 | 27.6 | 30.9 | 34.3 | 37.6 | 40.9 | 43.5 | 46.0 |
| 105° | 21.5 | 22.5 | 27.6 | 36.8 | 49.1 | 53.0 | 56.8 | 60.6 | 64.4 | 66.7 | 69.0 |
| 107.5° | 41.9 | 43.0 | 50.1 | 59.3 | 74.7 | 78.6 | 82.3 | 86.1 | 90.0 | 91.9 | 93.6 |
| 110° | 67.5 | 69.6 | 75.7 | 89.0 | 104.3 | 107.4 | 110.5 | 113.5 | 116.6 | 118.2 | 119.7 |



REPORT NUMBER: P227425

CATALOG NUMBER: ISW-AF-1000-LED-E1-RW-ULG

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 35° | 37.5° | 40° | 42.5° | 45° | 47.5° | 50° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 101.3 | 101.3 | 108.4 | 123.8 | 137.1 | 139.3 | 141.7 | 144.0 | 146.3 | 147.5 | 148.8 |
| 115° | 143.2 | 142.2 | 150.4 | 162.6 | 171.9 | 173.4 | 174.9 | 176.5 | 178.0 | 179.2 | 180.6 |
| 117.5° | 188.2 | 188.2 | 193.3 | 201.5 | 206.6 | 207.5 | 208.2 | 208.9 | 209.7 | 211.2 | 212.8 |
| 120° | 230.2 | 228.1 | 231.2 | 238.3 | 242.4 | 244.0 | 245.5 | 247.0 | 248.6 | 249.4 | 250.1 |
| 122.5° | 269.0 | 266.0 | 267.0 | 273.1 | 277.2 | 278.8 | 280.3 | 281.8 | 283.4 | 283.9 | 284.4 |
| 125° | 304.8 | 300.7 | 302.8 | 305.9 | 312.0 | 313.2 | 314.6 | 315.9 | 317.1 | 317.9 | 318.6 |
| 127.5° | 337.6 | 336.6 | 336.6 | 340.6 | 346.8 | 347.0 | 347.3 | 347.6 | 347.8 | 349.0 | 350.4 |
| 130° | 371.3 | 369.3 | 370.3 | 374.4 | 378.5 | 379.0 | 379.5 | 380.0 | 380.5 | 381.8 | 383.1 |
| 132.5° | 405.1 | 403.0 | 402.0 | 410.2 | 413.3 | 413.5 | 413.8 | 414.1 | 414.3 | 415.8 | 417.4 |
| 135° | 438.8 | 435.8 | 435.8 | 441.9 | 445.0 | 445.5 | 446.0 | 446.5 | 447.0 | 448.6 | 450.1 |
| 137.5° | 470.6 | 467.5 | 469.5 | 470.6 | 474.6 | 475.7 | 476.7 | 477.7 | 478.7 | 480.0 | 481.3 |
| 140° | 499.2 | 496.1 | 498.2 | 500.2 | 502.3 | 503.8 | 505.3 | 506.9 | 508.4 | 509.2 | 509.9 |
| 142.5° | 529.9 | 526.8 | 528.9 | 529.9 | 533.0 | 534.0 | 535.0 | 536.0 | 537.0 | 537.6 | 538.1 |
| 145° | 562.6 | 558.5 | 556.5 | 559.6 | 562.6 | 562.8 | 563.1 | 563.4 | 563.6 | 564.9 | 566.2 |
| 147.5° | 588.2 | 585.1 | 584.1 | 587.2 | 587.2 | 587.4 | 587.7 | 588.0 | 588.2 | 589.4 | 590.8 |
| 150° | 608.7 | 605.6 | 606.6 | 606.6 | 606.6 | 606.6 | 606.6 | 606.6 | 606.6 | 607.6 | 608.7 |
| 152.5° | 625.0 | 622.0 | 622.0 | 623.0 | 624.0 | 624.0 | 624.0 | 624.0 | 624.0 | 624.2 | 624.5 |
| 155° | 643.4 | 639.3 | 639.3 | 641.4 | 644.5 | 643.9 | 643.4 | 642.9 | 642.4 | 641.9 | 641.4 |
| 157.5° | 660.8 | 657.8 | 657.8 | 658.8 | 660.8 | 660.6 | 660.3 | 660.0 | 659.8 | 659.6 | 659.3 |
| 160° | 678.2 | 675.1 | 674.1 | 671.1 | 670.0 | 670.0 | 670.0 | 670.0 | 670.0 | 670.9 | 671.6 |
| 162.5° | 688.4 | 684.4 | 684.4 | 680.3 | 676.2 | 676.7 | 677.2 | 677.7 | 678.2 | 679.2 | 680.3 |
| 165° | 696.6 | 693.6 | 691.5 | 691.5 | 688.4 | 688.4 | 688.4 | 688.4 | 688.4 | 688.2 | 687.9 |
| 167.5° | 705.8 | 702.8 | 699.7 | 701.7 | 703.8 | 703.0 | 702.3 | 701.5 | 700.7 | 698.9 | 697.1 |
| 170° | 714.0 | 711.0 | 707.9 | 707.9 | 708.9 | 708.4 | 707.9 | 707.4 | 706.9 | 705.6 | 704.3 |
| 172.5° | 715.0 | 713.0 | 711.0 | 708.9 | 705.8 | 705.8 | 705.8 | 705.8 | 705.8 | 705.6 | 705.3 |
| 175° | 716.1 | 714.0 | 713.0 | 711.0 | 706.9 | 706.7 | 706.3 | 706.0 | 705.8 | 705.8 | 705.8 |
| 177.5° | 723.2 | 721.2 | 716.1 | 715.0 | 713.0 | 712.5 | 712.0 | 711.5 | 711.0 | 710.7 | 710.4 |
| 180° | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 |



REPORT NUMBER: P227425

CATALOG NUMBER: ISW-AF-1000-LED-E1-RW-ULG

CANDELA DISTRIBUTION (continued):

| | 52.5° | 55° | 57.5° | 60° | 62.5° | 65° | 67.5° | 70° | 72.5° | 75° | 77.5° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 |
| 2.5° | 700.3 | 703.0 | 699.4 | 703.0 | 696.7 | 702.1 | 697.6 | 703.0 | 698.5 | 703.0 | 697.6 |
| 5° | 704.8 | 712.0 | 703.9 | 713.8 | 702.1 | 713.8 | 703.9 | 714.6 | 705.7 | 714.6 | 704.8 |
| 7.5° | 712.0 | 724.6 | 713.8 | 726.4 | 712.0 | 728.1 | 714.6 | 730.0 | 716.5 | 730.9 | 715.6 |
| 10° | 721.0 | 737.1 | 722.8 | 739.0 | 721.9 | 740.7 | 723.6 | 743.5 | 725.5 | 745.2 | 726.4 |
| 12.5° | 729.1 | 749.7 | 733.6 | 755.1 | 736.2 | 758.7 | 739.0 | 764.1 | 742.6 | 768.6 | 744.3 |
| 15° | 744.3 | 771.3 | 750.6 | 776.7 | 755.1 | 781.2 | 759.6 | 788.4 | 764.1 | 793.8 | 768.6 |
| 17.5° | 764.1 | 793.8 | 772.2 | 798.3 | 774.9 | 803.6 | 780.3 | 809.1 | 784.8 | 815.4 | 787.5 |
| 20° | 791.0 | 820.7 | 798.3 | 823.5 | 801.0 | 827.1 | 803.6 | 829.7 | 809.1 | 835.1 | 810.9 |
| 22.5° | 821.6 | 849.6 | 825.2 | 850.4 | 825.2 | 849.6 | 827.1 | 850.4 | 829.7 | 854.1 | 832.5 |
| 25° | 858.6 | 884.5 | 860.3 | 881.9 | 856.7 | 878.3 | 856.7 | 878.3 | 859.4 | 880.0 | 863.9 |
| 27.5° | 909.7 | 929.6 | 904.4 | 923.2 | 896.3 | 915.1 | 892.6 | 911.6 | 893.5 | 911.6 | 895.4 |
| 30° | 967.3 | 985.3 | 956.5 | 971.8 | 942.1 | 956.5 | 932.2 | 948.4 | 929.6 | 946.6 | 934.1 |
| 32.5° | 1030.2 | 1044.6 | 1015.8 | 1028.4 | 997.9 | 1010.5 | 984.4 | 995.1 | 979.0 | 989.8 | 981.6 |
| 35° | 1100.3 | 1114.7 | 1085.0 | 1096.7 | 1066.2 | 1077.0 | 1050.9 | 1056.3 | 1040.1 | 1047.3 | 1040.1 |
| 37.5° | 1184.0 | 1196.5 | 1162.4 | 1173.1 | 1139.9 | 1153.4 | 1121.9 | 1127.3 | 1107.5 | 1112.0 | 1097.6 |
| 40° | 1273.9 | 1287.3 | 1246.9 | 1257.6 | 1216.3 | 1231.6 | 1196.5 | 1200.1 | 1173.1 | 1177.6 | 1155.2 |
| 42.5° | 1371.0 | 1383.5 | 1333.2 | 1342.1 | 1293.6 | 1309.8 | 1268.5 | 1275.6 | 1243.3 | 1247.8 | 1218.9 |
| 45° | 1477.9 | 1485.1 | 1429.4 | 1435.6 | 1377.2 | 1393.4 | 1341.3 | 1354.7 | 1316.1 | 1325.0 | 1291.8 |
| 47.5° | 1577.7 | 1592.1 | 1530.9 | 1536.4 | 1473.4 | 1483.3 | 1423.0 | 1441.0 | 1399.7 | 1413.2 | 1372.7 |
| 50° | 1691.9 | 1702.6 | 1644.2 | 1645.1 | 1583.9 | 1587.6 | 1520.1 | 1538.1 | 1493.2 | 1507.5 | 1464.5 |
| 52.5° | 1808.7 | 1815.9 | 1753.0 | 1759.3 | 1699.0 | 1705.4 | 1637.9 | 1645.1 | 1592.9 | 1605.5 | 1563.3 |
| 55° | 1922.0 | 1923.8 | 1871.7 | 1869.9 | 1813.2 | 1824.9 | 1750.3 | 1766.4 | 1704.4 | 1717.9 | 1670.3 |
| 57.5° | 2035.3 | 2041.5 | 1993.0 | 1994.9 | 1938.2 | 1946.3 | 1878.9 | 1890.5 | 1832.1 | 1848.3 | 1788.9 |
| 60° | 2154.8 | 2174.6 | 2126.9 | 2133.3 | 2079.4 | 2095.5 | 2013.7 | 2028.9 | 1965.2 | 1991.2 | 1927.3 |
| 62.5° | 2231.3 | 2304.9 | 2295.9 | 2305.8 | 2254.6 | 2262.7 | 2178.2 | 2202.5 | 2126.1 | 2144.9 | 2079.4 |
| 65° | 2085.6 | 2266.2 | 2358.0 | 2458.7 | 2461.3 | 2487.4 | 2405.7 | 2414.7 | 2338.3 | 2333.8 | 2256.4 |
| 67.5° | 1699.9 | 1922.8 | 2077.5 | 2284.2 | 2429.0 | 2568.3 | 2618.7 | 2631.2 | 2589.9 | 2545.9 | 2458.7 |
| 70° | 1025.7 | 1269.4 | 1496.8 | 1740.4 | 1968.8 | 2219.6 | 2432.6 | 2580.0 | 2708.6 | 2702.3 | 2714.9 |
| 72.5° | 405.4 | 607.7 | 759.6 | 988.0 | 1214.5 | 1492.3 | 1727.8 | 1935.5 | 2156.6 | 2292.3 | 2468.6 |
| 75° | 160.0 | 211.2 | 247.2 | 374.9 | 482.7 | 689.5 | 897.1 | 1009.6 | 1183.0 | 1301.7 | 1423.9 |
| 77.5° | 115.1 | 125.8 | 127.7 | 148.3 | 156.4 | 216.7 | 253.5 | 292.2 | 329.0 | 352.4 | 347.9 |
| 80° | 89.0 | 96.2 | 96.2 | 105.2 | 104.2 | 116.0 | 113.2 | 124.1 | 123.2 | 132.2 | 125.8 |
| 82.5° | 66.5 | 71.0 | 71.0 | 78.3 | 78.3 | 85.4 | 83.6 | 90.8 | 88.1 | 94.4 | 88.1 |
| 85° | 43.2 | 47.7 | 47.7 | 51.2 | 49.4 | 56.7 | 55.8 | 61.2 | 58.4 | 61.2 | 56.7 |
| 87.5° | 24.2 | 27.0 | 27.8 | 30.6 | 27.8 | 33.2 | 32.3 | 35.1 | 32.3 | 35.1 | 33.2 |
| 90° | 10.7 | 12.6 | 11.3 | 13.6 | 11.4 | 17.3 | 13.7 | 18.2 | 11.9 | 19.9 | 13.2 |
| 92.5° | 7.0 | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 | 7.0 | 6.6 | 6.3 | 6.1 | 6.1 |
| 95° | 7.2 | 7.2 | 7.4 | 7.7 | 8.0 | 8.2 | 8.0 | 7.7 | 7.4 | 7.2 | 7.2 |
| 97.5° | 11.5 | 12.3 | 11.8 | 11.3 | 10.7 | 10.2 | 10.0 | 9.7 | 9.4 | 9.2 | 9.0 |
| 100° | 27.6 | 29.7 | 28.8 | 28.1 | 27.4 | 26.6 | 25.8 | 25.1 | 24.3 | 23.5 | 22.5 |
| 102.5° | 48.6 | 51.1 | 50.3 | 49.6 | 48.9 | 48.1 | 46.9 | 45.5 | 44.2 | 43.0 | 42.1 |
| 105° | 71.4 | 73.7 | 73.1 | 72.6 | 72.1 | 71.6 | 70.4 | 69.0 | 67.7 | 66.5 | 65.5 |
| 107.5° | 95.3 | 97.2 | 97.0 | 96.7 | 96.4 | 96.2 | 95.1 | 94.1 | 93.1 | 92.1 | 91.2 |
| 110° | 121.2 | 122.8 | 123.0 | 123.3 | 123.6 | 123.8 | 123.3 | 122.8 | 122.2 | 121.7 | 120.9 |



REPORT NUMBER: P227425

CATALOG NUMBER: ISW-AF-1000-LED-E1-RW-ULG

CANDELA DISTRIBUTION (continued):

| | 52.5° | 55° | 57.5° | 60° | 62.5° | 65° | 67.5° | 70° | 72.5° | 75° | 77.5° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 150.2 | 151.4 | 151.9 | 152.4 | 152.9 | 153.4 | 153.2 | 152.9 | 152.6 | 152.4 | 151.9 |
| 115° | 181.9 | 183.1 | 183.9 | 184.6 | 185.4 | 186.2 | 185.4 | 184.6 | 183.9 | 183.1 | 182.6 |
| 117.5° | 214.3 | 215.8 | 216.9 | 217.9 | 218.9 | 219.9 | 218.7 | 217.4 | 216.0 | 214.8 | 214.3 |
| 120° | 250.8 | 251.6 | 252.7 | 253.7 | 254.7 | 255.7 | 254.5 | 253.2 | 251.9 | 250.6 | 250.1 |
| 122.5° | 284.9 | 285.4 | 286.4 | 287.4 | 288.5 | 289.5 | 288.3 | 286.9 | 285.6 | 284.4 | 283.9 |
| 125° | 319.4 | 320.2 | 320.7 | 321.2 | 321.7 | 322.2 | 321.0 | 319.7 | 318.3 | 317.1 | 317.1 |
| 127.5° | 351.7 | 352.9 | 353.1 | 353.4 | 353.7 | 353.9 | 353.9 | 353.9 | 353.9 | 353.9 | 353.7 |
| 130° | 384.4 | 385.7 | 386.7 | 387.7 | 388.7 | 389.7 | 389.7 | 389.7 | 389.7 | 389.7 | 389.2 |
| 132.5° | 418.9 | 420.4 | 421.7 | 423.0 | 424.3 | 425.5 | 425.0 | 424.5 | 424.0 | 423.5 | 423.5 |
| 135° | 451.6 | 453.2 | 454.4 | 455.7 | 457.1 | 458.3 | 458.1 | 457.8 | 457.5 | 457.3 | 458.1 |
| 137.5° | 482.6 | 483.9 | 484.4 | 484.9 | 485.4 | 485.9 | 486.1 | 486.4 | 486.7 | 486.9 | 488.2 |
| 140° | 510.7 | 511.5 | 512.0 | 512.5 | 513.0 | 513.5 | 514.0 | 514.5 | 515.1 | 515.6 | 516.8 |
| 142.5° | 538.6 | 539.1 | 540.6 | 542.2 | 543.7 | 545.2 | 545.2 | 545.2 | 545.2 | 545.2 | 545.4 |
| 145° | 567.5 | 568.8 | 570.3 | 571.8 | 573.4 | 574.9 | 574.7 | 574.4 | 574.1 | 573.9 | 573.1 |
| 147.5° | 592.1 | 593.3 | 594.5 | 595.9 | 597.2 | 598.4 | 598.6 | 598.9 | 599.2 | 599.4 | 598.6 |
| 150° | 609.7 | 610.7 | 611.5 | 612.2 | 613.0 | 613.8 | 614.6 | 615.3 | 616.0 | 616.8 | 617.7 |
| 152.5° | 624.8 | 625.0 | 625.8 | 626.6 | 627.3 | 628.1 | 629.1 | 630.1 | 631.2 | 632.2 | 633.4 |
| 155° | 640.9 | 640.4 | 641.6 | 642.9 | 644.3 | 645.5 | 646.7 | 648.0 | 649.4 | 650.6 | 651.1 |
| 157.5° | 659.0 | 658.8 | 659.8 | 660.8 | 661.8 | 662.9 | 663.4 | 663.9 | 664.4 | 664.9 | 664.9 |
| 160° | 672.3 | 673.1 | 674.6 | 676.2 | 677.7 | 679.2 | 678.4 | 677.7 | 677.0 | 676.2 | 676.0 |
| 162.5° | 681.3 | 682.3 | 683.3 | 684.4 | 685.4 | 686.4 | 686.2 | 685.9 | 685.6 | 685.4 | 684.9 |
| 165° | 687.6 | 687.4 | 688.7 | 690.0 | 691.3 | 692.5 | 693.4 | 694.1 | 694.8 | 695.6 | 695.1 |
| 167.5° | 695.4 | 693.6 | 695.1 | 696.6 | 698.2 | 699.7 | 700.7 | 701.7 | 702.8 | 703.8 | 703.8 |
| 170° | 703.0 | 701.7 | 702.6 | 703.3 | 704.0 | 704.8 | 706.0 | 707.4 | 708.7 | 709.9 | 710.4 |
| 172.5° | 705.0 | 704.8 | 705.6 | 706.3 | 707.1 | 707.9 | 708.4 | 708.9 | 709.4 | 709.9 | 710.4 |
| 175° | 705.8 | 705.8 | 707.1 | 708.4 | 709.7 | 711.0 | 711.2 | 711.5 | 711.8 | 712.0 | 711.5 |
| 177.5° | 710.1 | 709.9 | 711.2 | 712.5 | 713.8 | 715.0 | 715.6 | 716.1 | 716.6 | 717.1 | 716.3 |
| 180° | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 |

REPORT NUMBER: P227425

CATALOG NUMBER: ISW-AF-1000-LED-E1-RW-ULG

CANDELA DISTRIBUTION (continued):

| | 80° | 82.5° | 85° | 87.5° | 90° |
|--------|--------|--------|--------|--------|--------|
| 0° | 702.1 | 702.1 | 702.1 | 702.1 | 702.1 |
| 2.5° | 702.1 | 700.3 | 703.9 | 698.5 | 703.0 |
| 5° | 714.6 | 706.6 | 716.5 | 706.6 | 715.6 |
| 7.5° | 731.7 | 718.3 | 732.6 | 718.3 | 732.6 |
| 10° | 748.0 | 725.5 | 748.8 | 727.2 | 749.7 |
| 12.5° | 772.2 | 745.2 | 775.8 | 746.1 | 775.8 |
| 15° | 799.2 | 768.6 | 802.8 | 769.6 | 804.6 |
| 17.5° | 820.7 | 791.0 | 824.4 | 791.0 | 825.2 |
| 20° | 838.7 | 815.4 | 843.2 | 815.4 | 845.9 |
| 22.5° | 859.4 | 842.3 | 864.8 | 842.3 | 870.2 |
| 25° | 886.4 | 874.7 | 892.6 | 876.5 | 896.3 |
| 27.5° | 917.9 | 909.7 | 924.1 | 912.5 | 927.7 |
| 30° | 954.7 | 952.0 | 959.2 | 953.8 | 962.8 |
| 32.5° | 996.0 | 1002.4 | 1002.4 | 1002.4 | 1006.0 |
| 35° | 1056.3 | 1061.7 | 1061.7 | 1063.5 | 1064.4 |
| 37.5° | 1113.8 | 1122.8 | 1121.9 | 1124.6 | 1124.6 |
| 40° | 1174.0 | 1185.7 | 1185.7 | 1185.7 | 1187.5 |
| 42.5° | 1240.5 | 1253.1 | 1255.0 | 1249.5 | 1253.1 |
| 45° | 1315.2 | 1319.7 | 1324.2 | 1321.4 | 1327.8 |
| 47.5° | 1395.2 | 1399.7 | 1403.3 | 1399.7 | 1409.6 |
| 50° | 1489.6 | 1488.7 | 1498.6 | 1488.7 | 1503.0 |
| 52.5° | 1588.4 | 1596.5 | 1602.9 | 1592.9 | 1602.9 |
| 55° | 1699.9 | 1697.3 | 1717.9 | 1704.4 | 1717.9 |
| 57.5° | 1822.2 | 1822.2 | 1842.8 | 1830.3 | 1845.6 |
| 60° | 1966.9 | 1955.3 | 1984.0 | 1963.3 | 1984.0 |
| 62.5° | 2113.5 | 2092.8 | 2125.2 | 2107.2 | 2134.2 |
| 65° | 2282.5 | 2252.8 | 2283.3 | 2260.0 | 2284.2 |
| 67.5° | 2453.2 | 2419.1 | 2429.0 | 2417.3 | 2430.8 |
| 70° | 2672.7 | 2668.2 | 2656.4 | 2690.6 | 2660.9 |
| 72.5° | 2440.7 | 2492.8 | 2450.6 | 2532.4 | 2476.7 |
| 75° | 1499.4 | 1595.7 | 1648.7 | 1732.3 | 1718.9 |
| 77.5° | 355.1 | 315.6 | 347.9 | 311.9 | 351.5 |
| 80° | 131.2 | 119.6 | 125.0 | 108.7 | 121.3 |
| 82.5° | 89.9 | 78.3 | 75.5 | 60.3 | 64.8 |
| 85° | 57.5 | 46.7 | 43.2 | 36.0 | 39.6 |
| 87.5° | 34.2 | 26.1 | 24.2 | 20.7 | 21.6 |
| 90° | 18.1 | 11.3 | 14.3 | 9.0 | 13.5 |
| 92.5° | 6.1 | 6.1 | 6.1 | 6.1 | 6.1 |
| 95° | 7.2 | 7.2 | 7.2 | 7.2 | 7.2 |
| 97.5° | 8.7 | 8.4 | 8.2 | 8.2 | 8.2 |
| 100° | 21.5 | 20.5 | 19.4 | 19.4 | 19.4 |
| 102.5° | 41.4 | 40.7 | 39.9 | 39.4 | 38.9 |
| 105° | 64.4 | 63.4 | 62.4 | 62.4 | 62.4 |
| 107.5° | 90.5 | 89.8 | 89.0 | 88.5 | 88.0 |
| 110° | 120.2 | 119.5 | 118.7 | 119.2 | 119.7 |



REPORT NUMBER: P227425

CATALOG NUMBER: ISW-AF-1000-LED-E1-RW-ULG

CANDELA DISTRIBUTION (continued):

| | 80° | 82.5° | 85° | 87.5° | 90° |
|--------|-------|-------|-------|-------|-------|
| 112.5° | 151.4 | 150.9 | 150.4 | 150.4 | 150.4 |
| 115° | 182.1 | 181.6 | 181.1 | 181.6 | 182.1 |
| 117.5° | 213.8 | 213.3 | 212.8 | 213.3 | 213.8 |
| 120° | 249.6 | 249.1 | 248.6 | 248.6 | 248.6 |
| 122.5° | 283.4 | 282.8 | 282.3 | 282.8 | 283.4 |
| 125° | 317.1 | 317.1 | 317.1 | 317.1 | 317.1 |
| 127.5° | 353.4 | 353.1 | 352.9 | 353.9 | 355.0 |
| 130° | 388.7 | 388.2 | 387.7 | 388.2 | 388.7 |
| 132.5° | 423.5 | 423.5 | 423.5 | 424.0 | 424.5 |
| 135° | 458.8 | 459.5 | 460.3 | 460.8 | 461.4 |
| 137.5° | 489.5 | 490.8 | 492.0 | 492.6 | 493.1 |
| 140° | 518.1 | 519.5 | 520.7 | 521.7 | 522.7 |
| 142.5° | 545.7 | 546.1 | 546.3 | 547.3 | 548.3 |
| 145° | 572.3 | 571.6 | 570.8 | 571.8 | 572.9 |
| 147.5° | 597.9 | 597.2 | 596.4 | 597.4 | 598.4 |
| 150° | 618.4 | 619.1 | 619.9 | 622.0 | 624.0 |
| 152.5° | 634.7 | 636.1 | 637.3 | 639.9 | 642.4 |
| 155° | 651.6 | 652.1 | 652.6 | 654.2 | 655.7 |
| 157.5° | 664.9 | 664.9 | 664.9 | 667.5 | 670.0 |
| 160° | 675.7 | 675.4 | 675.1 | 678.2 | 681.3 |
| 162.5° | 684.4 | 683.8 | 683.3 | 686.4 | 689.5 |
| 165° | 694.6 | 694.1 | 693.6 | 695.6 | 697.7 |
| 167.5° | 703.8 | 703.8 | 703.8 | 706.9 | 709.9 |
| 170° | 711.0 | 711.5 | 712.0 | 714.5 | 717.1 |
| 172.5° | 711.0 | 711.5 | 712.0 | 714.5 | 717.1 |
| 175° | 711.0 | 710.4 | 709.9 | 712.5 | 715.0 |
| 177.5° | 715.6 | 714.8 | 714.0 | 716.1 | 718.1 |
| 180° | 716.1 | 716.1 | 716.1 | 716.1 | 716.1 |

(END OF REPORT)