

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: P227185

Luminaire Tested: **ISW-AF-450-LED-E1-SLL**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P227185
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35948)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: ISW-AF-450-LED-E1-SLL
Description: IMPACT ELITE LED WEDGE LUMINAIRE
LIGHT SQUARE WITH ACCULED OPTICS-90° SPILL LIGHT ELIMINATOR LEFT
Light Source: (16) 4000K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2767.2 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U1 - G1

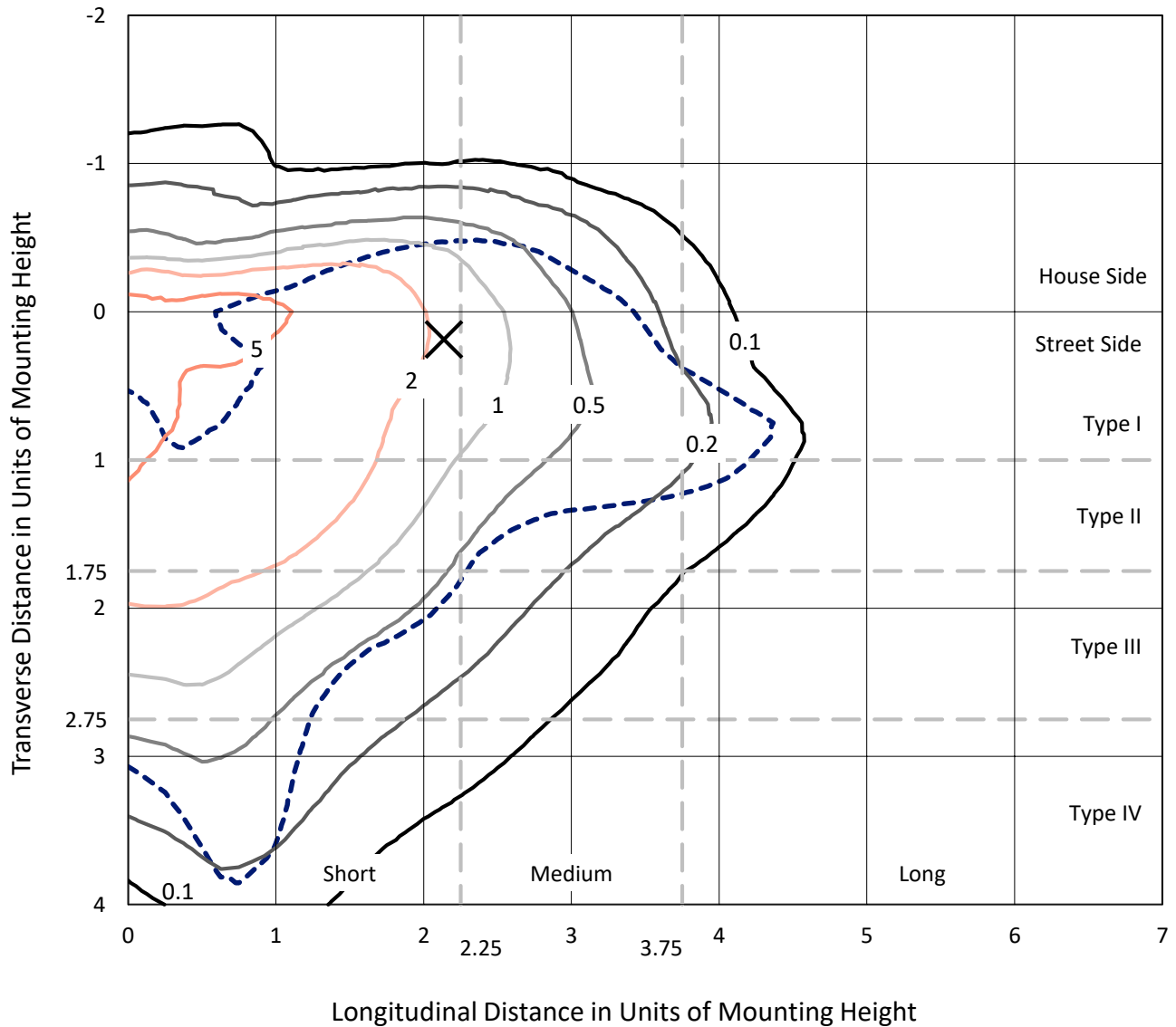
Input Watts (W): 25.31
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

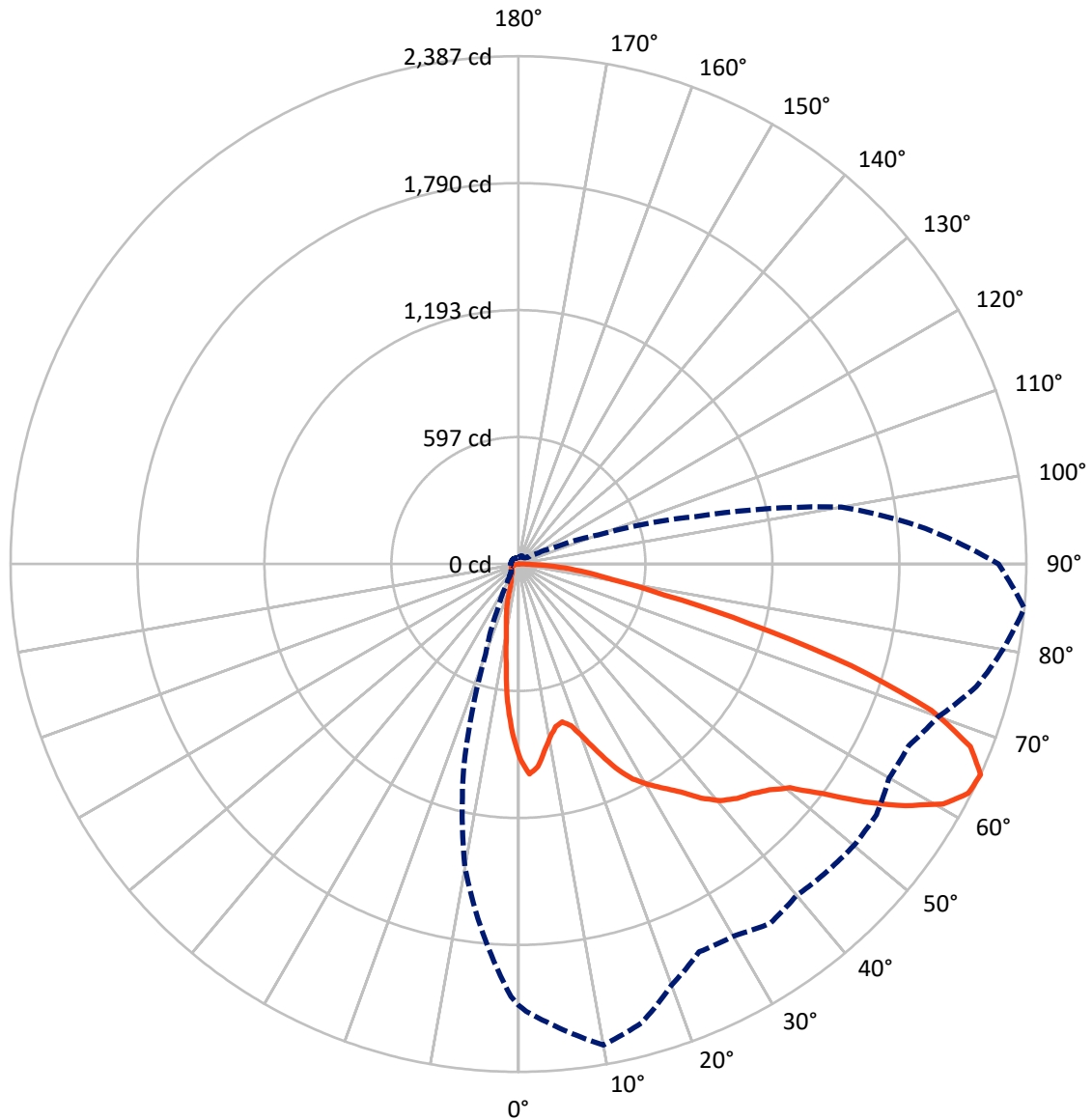
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 85-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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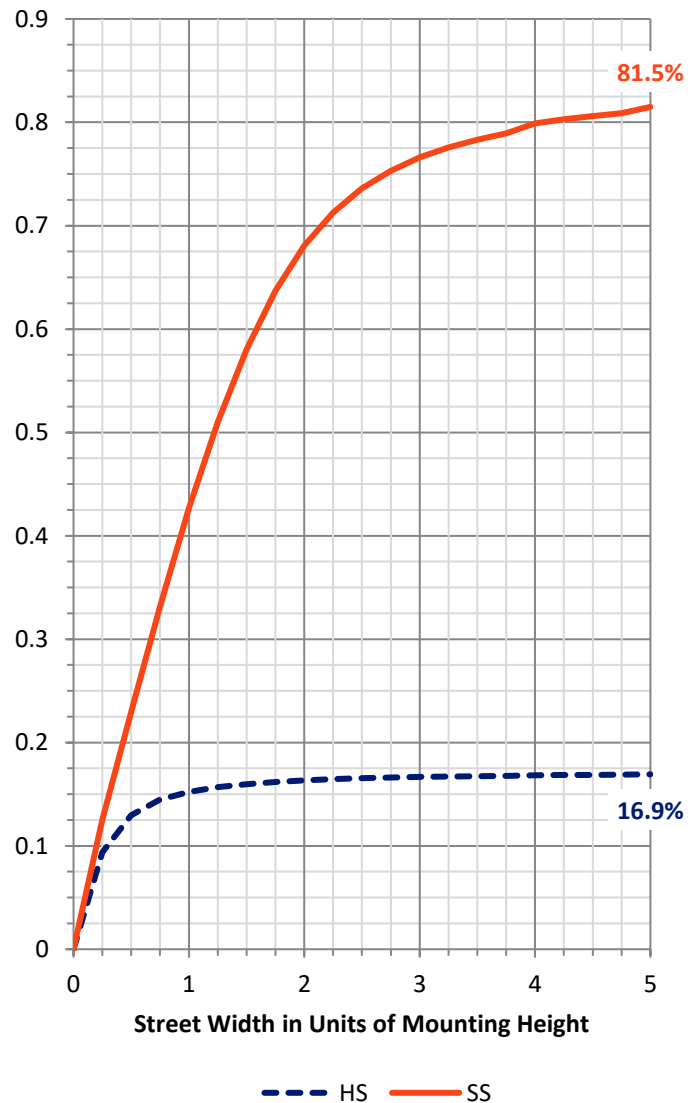
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 474.7 | 0.0 | 474.7 |
| | % Fixture | 17.2 | 0.0 | 17.2 |
| Street Side | Lumens | 2292.4 | 0.1 | 2292.5 |
| | % Fixture | 82.8 | 0.0 | 82.8 |
| Total | Lumens | 2767.1 | 0.1 | 2767.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 67.7 | 2.4 |
| 10°-20° | 130.3 | 4.7 |
| 20°-30° | 185.8 | 6.7 |
| 30°-40° | 269.6 | 9.7 |
| 40°-50° | 385.6 | 13.9 |
| 50°-60° | 592.1 | 21.4 |
| 60°-70° | 685.4 | 24.8 |
| 70°-80° | 349.6 | 12.6 |
| 80°-90° | 100.9 | 3.6 |
| 90°-100° | 0.1 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-90° | 2767.1 | 100.0 |
| 0°-180° | 2767.2 | 100.0 |



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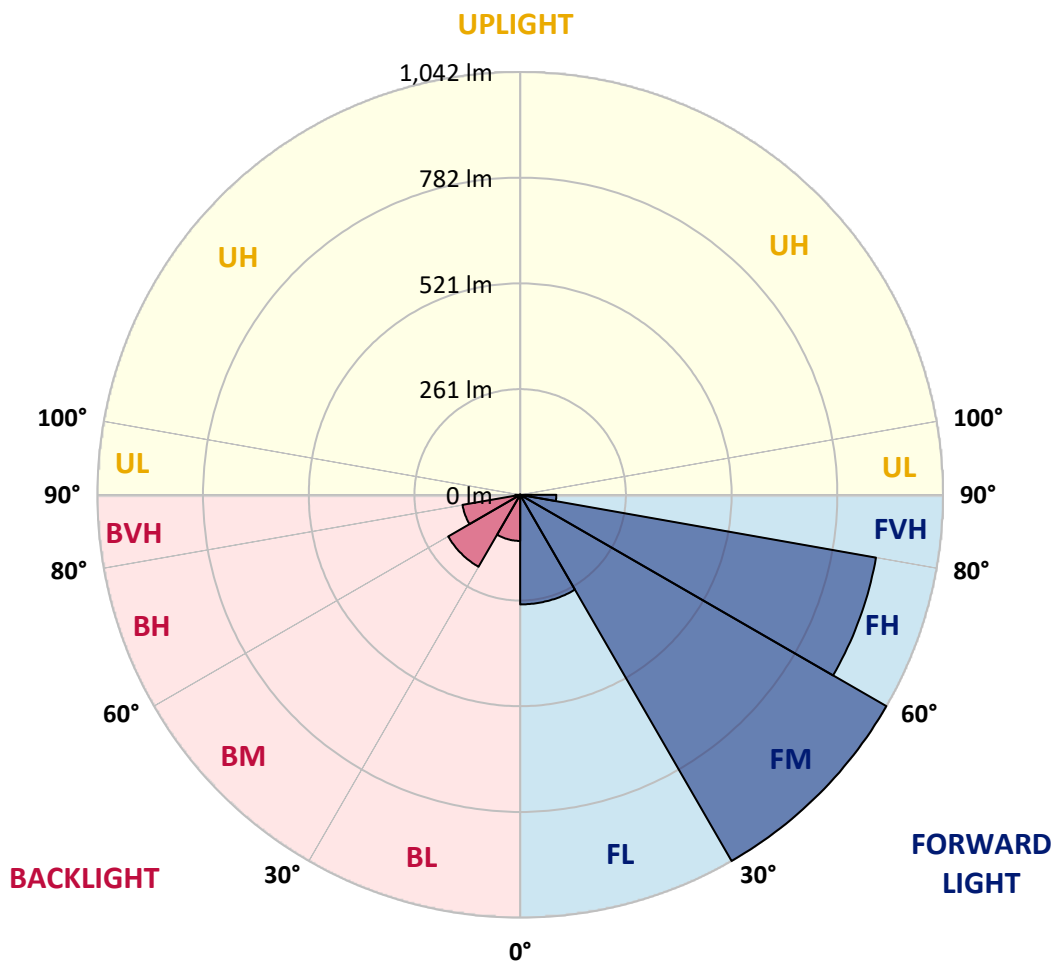
CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|-------|---------|
| | | | B | U | G |
| FL (0°-30°) | 270.3 | 9.8 | | | |
| FM (30°-60°) | 1042.4 | 37.7 | | | |
| FH (60°-80°) | 890.6 | 32.2 | | | G1/1800 |
| FVH (80°-90°) | 89.2 | 3.2 | | | G1/100 |
| BL (0°-30°) | 113.6 | 4.1 | B1/500 | | |
| BM (30°-60°) | 205.0 | 7.4 | B0/220 | | |
| BH (60°-80°) | 144.4 | 5.2 | B1/500 | | G1/500 |
| BVH (80°-90°) | 11.7 | 0.4 | | | G1/100 |
| UL (90°-100°) | 0.1 | 0.0 | | U1/10 | |
| UH (100°-180°) | 0.0 | 0.0 | | U1/10 | |

BUG Rating: B1-U1-G1

Type IV Short





REPORT NUMBER: P227185

CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

CANDELA DISTRIBUTION (FULL):

| | 0° | 1° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 |
| 2.5° | 946.3 | 947.3 | 960.2 | 972.8 | 988.7 | 986.3 | 999.4 | 1009.1 | 1018.0 | 1019.5 | 1025.9 |
| 5° | 888.5 | 897.8 | 927.2 | 952.4 | 984.1 | 1008.7 | 1035.2 | 1056.2 | 1071.5 | 1086.1 | 1087.9 |
| 7.5° | 807.5 | 814.5 | 848.5 | 888.1 | 933.7 | 966.4 | 1006.4 | 1041.4 | 1066.0 | 1089.2 | 1094.5 |
| 10° | 738.2 | 744.7 | 782.4 | 833.6 | 873.7 | 916.1 | 957.5 | 985.9 | 1018.0 | 1038.1 | 1047.8 |
| 12.5° | 704.6 | 712.5 | 748.4 | 794.9 | 836.0 | 876.9 | 908.2 | 932.8 | 950.9 | 954.7 | 957.5 |
| 15° | 717.7 | 721.8 | 761.4 | 802.9 | 835.4 | 856.0 | 864.4 | 879.2 | 877.9 | 885.3 | 886.7 |
| 17.5° | 770.3 | 768.4 | 810.3 | 839.2 | 855.1 | 852.7 | 839.6 | 831.8 | 817.7 | 813.6 | 825.7 |
| 20° | 860.6 | 867.2 | 894.2 | 911.9 | 895.6 | 857.8 | 821.9 | 797.3 | 777.7 | 771.2 | 769.8 |
| 22.5° | 966.4 | 974.8 | 1004.0 | 994.7 | 953.3 | 884.3 | 819.2 | 779.6 | 755.3 | 748.4 | 745.6 |
| 25° | 1077.2 | 1082.8 | 1097.6 | 1066.0 | 1007.8 | 918.4 | 838.7 | 783.3 | 751.2 | 740.9 | 739.5 |
| 27.5° | 1166.6 | 1172.2 | 1165.2 | 1128.8 | 1044.5 | 956.6 | 865.7 | 800.0 | 758.2 | 747.9 | 743.3 |
| 30° | 1239.7 | 1242.5 | 1219.3 | 1174.0 | 1090.3 | 998.9 | 901.1 | 829.4 | 780.5 | 757.2 | 754.0 |
| 32.5° | 1321.7 | 1319.8 | 1274.6 | 1212.2 | 1128.8 | 1037.2 | 941.6 | 862.4 | 802.0 | 773.6 | 768.4 |
| 35° | 1411.6 | 1395.2 | 1315.6 | 1249.9 | 1155.4 | 1066.4 | 978.5 | 897.4 | 836.4 | 798.7 | 792.2 |
| 37.5° | 1491.7 | 1474.9 | 1368.2 | 1279.7 | 1181.9 | 1089.2 | 1007.3 | 942.5 | 889.0 | 854.6 | 851.8 |
| 40° | 1554.1 | 1533.6 | 1408.3 | 1299.8 | 1195.0 | 1106.0 | 1041.4 | 999.4 | 964.0 | 936.1 | 936.1 |
| 42.5° | 1604.4 | 1582.0 | 1447.4 | 1323.1 | 1206.7 | 1131.7 | 1098.1 | 1083.7 | 1076.2 | 1060.9 | 1066.4 |
| 45° | 1652.8 | 1630.0 | 1479.6 | 1338.0 | 1232.8 | 1181.5 | 1186.1 | 1198.7 | 1221.1 | 1212.2 | 1220.2 |
| 47.5° | 1698.9 | 1676.5 | 1515.9 | 1361.8 | 1283.0 | 1270.9 | 1295.2 | 1345.4 | 1389.2 | 1423.6 | 1447.9 |
| 50° | 1776.1 | 1749.7 | 1581.1 | 1431.6 | 1362.2 | 1368.2 | 1438.1 | 1536.8 | 1608.1 | 1639.8 | 1637.8 |
| 52.5° | 1922.9 | 1885.2 | 1721.2 | 1561.9 | 1475.4 | 1508.9 | 1591.3 | 1715.7 | 1808.8 | 1833.4 | 1843.3 |
| 55° | 2102.2 | 2072.4 | 1923.9 | 1734.7 | 1671.9 | 1683.6 | 1786.0 | 1926.6 | 1998.3 | 2023.9 | 2032.3 |
| 57.5° | 2207.4 | 2199.5 | 2106.4 | 1919.7 | 1858.6 | 1854.0 | 1987.6 | 2102.7 | 2164.6 | 2188.8 | 2181.3 |
| 59° | 2232.1 | 2234.4 | 2181.3 | 2050.5 | 1966.6 | 1956.4 | 2092.4 | 2199.0 | 2250.8 | 2258.2 | 2254.5 |
| 60° | 2229.8 | 2242.8 | 2236.3 | 2122.2 | 2035.2 | 2022.1 | 2136.6 | 2238.2 | 2281.5 | 2293.1 | 2280.1 |
| 62.5° | 2181.9 | 2204.2 | 2266.1 | 2254.0 | 2190.2 | 2123.6 | 2177.7 | 2251.2 | 2279.1 | 2268.0 | 2258.2 |
| 65° | 2072.8 | 2102.2 | 2188.4 | 2295.5 | 2234.0 | 2105.4 | 2010.9 | 2019.3 | 2061.7 | 2033.7 | 2047.2 |
| 67.5° | 1884.7 | 1918.2 | 1963.9 | 2207.0 | 2117.6 | 1902.0 | 1739.4 | 1659.7 | 1639.8 | 1666.8 | 1709.6 |
| 70° | 1533.1 | 1555.0 | 1670.5 | 2014.2 | 1859.5 | 1563.4 | 1359.4 | 1253.2 | 1217.8 | 1280.2 | 1324.0 |
| 72.5° | 1081.4 | 1114.0 | 1266.2 | 1666.8 | 1529.8 | 1252.3 | 1028.8 | 931.0 | 895.6 | 898.4 | 936.5 |
| 75° | 658.1 | 702.3 | 884.9 | 1318.0 | 1205.8 | 959.3 | 783.8 | 713.5 | 702.8 | 696.7 | 690.2 |
| 77.5° | 434.0 | 450.8 | 581.6 | 909.5 | 813.1 | 682.3 | 588.2 | 617.0 | 649.2 | 656.2 | 664.6 |
| 80° | 294.3 | 299.4 | 377.3 | 638.0 | 535.5 | 503.9 | 475.5 | 543.5 | 604.5 | 615.6 | 609.6 |
| 82.5° | 181.2 | 196.5 | 263.1 | 430.4 | 427.1 | 412.1 | 375.8 | 428.9 | 469.4 | 476.4 | 489.0 |
| 85° | 62.9 | 65.7 | 161.6 | 380.0 | 434.0 | 438.7 | 309.6 | 244.5 | 274.8 | 269.6 | 193.7 |
| 87.5° | 27.0 | 30.3 | 50.3 | 254.3 | 293.9 | 243.1 | 141.6 | 125.7 | 96.9 | 54.5 | 52.6 |
| 90° | 1.8 | 1.8 | 1.4 | 2.4 | 7.0 | 4.7 | 4.2 | 1.4 | 0.0 | 0.0 | 0.0 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

| | 0° | 1° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 |
| 2.5° | 1024.6 | 1018.4 | 1022.2 | 1017.1 | 1008.7 | 1003.1 | 996.6 | 988.3 | 978.5 | 965.4 | 952.4 |
| 5° | 1083.7 | 1079.0 | 1067.3 | 1050.7 | 1027.3 | 1007.8 | 984.5 | 957.1 | 934.2 | 904.9 | 877.4 |
| 7.5° | 1088.8 | 1081.4 | 1060.0 | 1028.8 | 992.9 | 956.6 | 929.0 | 884.3 | 855.5 | 808.9 | 777.7 |
| 10° | 1042.3 | 1042.7 | 1021.3 | 992.0 | 954.7 | 911.9 | 872.3 | 823.4 | 781.0 | 733.5 | 681.3 |
| 12.5° | 973.7 | 980.3 | 981.2 | 955.1 | 918.8 | 873.7 | 829.4 | 782.9 | 730.2 | 679.4 | 631.5 |
| 15° | 896.0 | 914.6 | 916.1 | 909.5 | 890.5 | 852.2 | 811.7 | 769.8 | 716.3 | 660.8 | 606.8 |
| 17.5° | 826.6 | 844.3 | 860.6 | 875.5 | 876.5 | 858.3 | 833.6 | 797.8 | 744.2 | 679.0 | 615.6 |
| 20° | 774.0 | 793.1 | 821.0 | 848.5 | 878.8 | 888.1 | 890.0 | 867.2 | 809.9 | 730.2 | 644.6 |
| 22.5° | 752.1 | 774.5 | 802.9 | 854.6 | 908.2 | 941.2 | 959.8 | 959.8 | 899.8 | 806.6 | 692.0 |
| 25° | 747.5 | 765.6 | 808.9 | 873.2 | 944.9 | 1002.7 | 1038.1 | 1061.8 | 1018.4 | 904.9 | 750.7 |
| 27.5° | 750.7 | 775.4 | 829.0 | 894.6 | 969.6 | 1043.6 | 1101.8 | 1143.4 | 1102.7 | 971.9 | 805.2 |
| 30° | 763.7 | 800.6 | 856.0 | 923.9 | 1001.3 | 1079.5 | 1149.8 | 1202.5 | 1172.6 | 1033.0 | 856.9 |
| 32.5° | 786.5 | 831.2 | 894.2 | 955.6 | 1032.5 | 1117.3 | 1186.6 | 1256.0 | 1234.1 | 1075.3 | 884.3 |
| 35° | 820.6 | 873.2 | 930.5 | 992.5 | 1066.0 | 1150.7 | 1224.8 | 1315.6 | 1307.7 | 1128.4 | 911.9 |
| 37.5° | 875.5 | 929.6 | 982.1 | 1035.2 | 1105.1 | 1187.5 | 1279.7 | 1395.7 | 1389.2 | 1207.1 | 956.0 |
| 40° | 972.4 | 1004.0 | 1043.2 | 1077.2 | 1142.8 | 1221.5 | 1320.3 | 1461.9 | 1485.1 | 1274.6 | 995.2 |
| 42.5° | 1092.5 | 1111.1 | 1122.4 | 1131.7 | 1165.2 | 1239.2 | 1349.6 | 1506.1 | 1544.2 | 1324.9 | 1025.5 |
| 45° | 1245.7 | 1240.1 | 1217.8 | 1196.4 | 1192.7 | 1249.5 | 1363.1 | 1538.7 | 1590.9 | 1373.8 | 1056.2 |
| 47.5° | 1426.9 | 1414.8 | 1353.8 | 1283.5 | 1244.3 | 1268.2 | 1386.9 | 1586.7 | 1648.2 | 1438.1 | 1094.5 |
| 50° | 1636.0 | 1607.6 | 1507.9 | 1389.2 | 1317.0 | 1320.7 | 1447.0 | 1653.3 | 1723.6 | 1521.9 | 1165.7 |
| 52.5° | 1829.8 | 1779.0 | 1660.2 | 1503.3 | 1399.9 | 1412.5 | 1555.0 | 1791.1 | 1878.2 | 1660.7 | 1285.3 |
| 55° | 2000.7 | 1935.4 | 1807.5 | 1635.6 | 1542.0 | 1563.9 | 1727.8 | 1973.7 | 2056.1 | 1826.1 | 1406.5 |
| 57.5° | 2145.9 | 2076.6 | 1950.4 | 1799.1 | 1682.5 | 1700.8 | 1881.9 | 2143.2 | 2198.6 | 1974.6 | 1522.4 |
| 59° | 2212.1 | 2143.6 | 2027.2 | 1887.5 | 1778.5 | 1816.8 | 1990.9 | 2227.5 | 2251.2 | 2031.9 | 1566.6 |
| 60° | 2244.3 | 2175.8 | 2073.3 | 1936.9 | 1837.2 | 1887.5 | 2048.7 | 2291.3 | 2270.7 | 2040.3 | 1583.4 |
| 62.5° | 2241.9 | 2193.9 | 2126.4 | 2033.3 | 2015.1 | 2098.9 | 2236.3 | 2373.2 | 2284.2 | 2016.0 | 1594.1 |
| 65° | 2058.0 | 2053.8 | 2011.8 | 2022.6 | 2098.5 | 2227.9 | 2312.2 | 2386.7 | 2256.3 | 1919.7 | 1542.4 |
| 67.5° | 1716.6 | 1733.8 | 1739.4 | 1805.1 | 1982.5 | 2202.3 | 2276.4 | 2290.8 | 2134.8 | 1713.3 | 1381.7 |
| 70° | 1325.4 | 1287.2 | 1350.1 | 1466.0 | 1721.7 | 2004.9 | 2110.1 | 2059.8 | 1886.1 | 1434.8 | 1128.4 |
| 72.5° | 938.4 | 949.6 | 1039.9 | 1190.3 | 1450.6 | 1744.0 | 1908.9 | 1634.7 | 1419.0 | 1073.9 | 800.0 |
| 75° | 706.0 | 758.6 | 802.4 | 934.2 | 1178.2 | 1494.0 | 1630.0 | 1123.7 | 924.4 | 740.5 | 523.4 |
| 77.5° | 676.7 | 672.5 | 638.9 | 666.9 | 849.5 | 1046.5 | 1162.9 | 701.3 | 578.9 | 484.4 | 316.2 |
| 80° | 625.4 | 589.6 | 528.6 | 501.6 | 535.1 | 672.0 | 738.2 | 450.8 | 385.1 | 338.6 | 178.4 |
| 82.5° | 485.3 | 461.0 | 396.8 | 395.0 | 446.1 | 477.3 | 507.6 | 319.5 | 289.7 | 274.3 | 109.5 |
| 85° | 307.8 | 316.2 | 324.2 | 395.4 | 495.0 | 500.6 | 395.0 | 194.7 | 152.7 | 215.1 | 69.9 |
| 87.5° | 91.2 | 148.5 | 180.2 | 306.0 | 446.1 | 447.5 | 297.2 | 63.8 | 57.3 | 67.1 | 40.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P227185

CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P227185

CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

| | 105° | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 |
| 2.5° | 938.9 | 937.0 | 923.9 | 902.0 | 904.0 | 893.6 | 880.7 | 859.7 | 855.5 | 843.8 | 842.0 |
| 5° | 854.1 | 832.2 | 803.8 | 769.4 | 756.3 | 738.6 | 720.5 | 707.4 | 691.1 | 676.2 | 696.2 |
| 7.5° | 740.9 | 708.8 | 675.8 | 639.4 | 618.5 | 589.6 | 574.2 | 544.4 | 522.5 | 518.3 | 501.1 |
| 10° | 646.4 | 605.9 | 568.1 | 535.5 | 496.4 | 469.4 | 449.9 | 433.5 | 418.7 | 400.5 | 389.3 |
| 12.5° | 583.5 | 537.9 | 497.9 | 457.4 | 438.7 | 416.3 | 404.3 | 388.8 | 367.4 | 352.1 | 337.2 |
| 15° | 555.2 | 505.7 | 462.0 | 426.6 | 399.6 | 378.6 | 357.2 | 338.6 | 315.3 | 298.1 | 280.8 |
| 17.5° | 551.4 | 487.1 | 431.7 | 392.1 | 362.7 | 339.9 | 311.6 | 286.8 | 258.5 | 239.4 | 224.9 |
| 20° | 555.6 | 473.1 | 403.8 | 352.1 | 322.2 | 282.2 | 255.6 | 225.4 | 197.4 | 172.3 | 149.5 |
| 22.5° | 572.3 | 465.7 | 376.2 | 319.5 | 275.3 | 229.6 | 201.2 | 162.5 | 138.8 | 114.6 | 105.7 |
| 25° | 595.2 | 461.0 | 352.5 | 283.7 | 227.7 | 182.6 | 143.9 | 111.8 | 101.1 | 95.0 | 91.8 |
| 27.5° | 619.4 | 452.7 | 326.0 | 250.5 | 189.6 | 134.6 | 107.6 | 94.1 | 89.9 | 86.6 | 84.3 |
| 30° | 637.5 | 436.4 | 293.4 | 215.1 | 150.9 | 115.0 | 96.0 | 87.1 | 84.3 | 80.6 | 78.3 |
| 32.5° | 645.5 | 411.2 | 264.0 | 181.7 | 127.2 | 98.7 | 83.8 | 78.7 | 75.9 | 72.6 | 71.3 |
| 35° | 644.0 | 382.8 | 249.2 | 168.6 | 116.4 | 87.6 | 73.6 | 70.3 | 66.6 | 63.3 | 60.0 |
| 37.5° | 645.5 | 356.7 | 237.5 | 165.3 | 111.8 | 79.2 | 67.1 | 64.8 | 61.9 | 58.7 | 55.9 |
| 40° | 651.0 | 342.3 | 231.9 | 158.4 | 108.0 | 75.9 | 61.9 | 59.6 | 59.1 | 55.4 | 53.1 |
| 42.5° | 653.4 | 343.7 | 229.1 | 148.5 | 98.7 | 75.0 | 61.9 | 56.8 | 56.8 | 54.0 | 51.2 |
| 45° | 650.6 | 353.9 | 231.0 | 143.0 | 91.8 | 70.3 | 65.2 | 56.8 | 55.4 | 53.1 | 50.3 |
| 47.5° | 659.0 | 361.4 | 231.0 | 142.1 | 87.1 | 65.7 | 61.9 | 62.4 | 56.4 | 53.6 | 49.4 |
| 50° | 693.5 | 368.4 | 226.4 | 140.7 | 85.7 | 61.0 | 58.7 | 61.5 | 63.3 | 54.5 | 49.8 |
| 52.5° | 754.4 | 377.3 | 221.2 | 138.3 | 83.8 | 57.3 | 54.5 | 57.8 | 64.8 | 57.3 | 49.8 |
| 55° | 816.8 | 393.0 | 218.0 | 134.6 | 81.0 | 54.9 | 49.4 | 55.4 | 59.1 | 56.8 | 49.4 |
| 57.5° | 883.4 | 410.3 | 214.7 | 125.7 | 74.5 | 52.6 | 47.5 | 48.4 | 53.1 | 54.9 | 48.0 |
| 59° | 903.5 | 418.7 | 211.9 | 119.2 | 68.9 | 50.7 | 46.1 | 44.7 | 47.5 | 52.6 | 47.1 |
| 60° | 917.9 | 419.1 | 208.7 | 113.6 | 65.7 | 49.8 | 45.2 | 43.3 | 44.2 | 54.0 | 47.5 |
| 62.5° | 919.3 | 418.7 | 198.4 | 102.0 | 59.1 | 48.0 | 43.8 | 41.4 | 40.5 | 45.2 | 48.4 |
| 65° | 861.5 | 399.2 | 179.7 | 96.0 | 59.6 | 46.1 | 41.4 | 39.6 | 37.7 | 38.7 | 41.9 |
| 67.5° | 753.5 | 348.8 | 160.2 | 97.3 | 62.9 | 44.7 | 39.6 | 37.7 | 36.3 | 35.4 | 36.8 |
| 70° | 570.0 | 289.7 | 154.6 | 100.6 | 65.7 | 43.8 | 36.8 | 34.9 | 34.0 | 33.6 | 33.6 |
| 72.5° | 395.0 | 238.4 | 148.5 | 102.9 | 68.0 | 43.3 | 34.0 | 32.1 | 31.7 | 31.2 | 31.2 |
| 75° | 254.3 | 173.3 | 123.0 | 87.6 | 61.9 | 39.6 | 30.7 | 28.8 | 28.4 | 27.9 | 28.4 |
| 77.5° | 150.4 | 121.1 | 90.3 | 61.5 | 45.2 | 31.7 | 26.5 | 25.2 | 25.2 | 25.2 | 25.6 |
| 80° | 83.4 | 71.7 | 60.0 | 39.6 | 32.1 | 23.7 | 21.9 | 20.5 | 20.5 | 21.0 | 21.9 |
| 82.5° | 49.8 | 39.6 | 34.0 | 25.2 | 21.9 | 16.8 | 16.3 | 15.3 | 15.9 | 16.3 | 17.2 |
| 85° | 32.6 | 25.2 | 20.5 | 16.8 | 14.9 | 10.7 | 9.3 | 9.8 | 10.2 | 11.2 | 11.7 |
| 87.5° | 18.2 | 14.0 | 11.2 | 9.8 | 8.8 | 4.7 | 3.7 | 3.7 | 4.7 | 5.6 | 6.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P227185
 CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

REPORT N
 CATALOG

CANDELA DISTRIBUTION (continued):

CANDELA

| | 105° | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | |
|--------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0° |
| 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5° |
| 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5° |
| 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.5° |
| 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10° |
| 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5° |
| 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15° |
| 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.5° |
| 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20° |
| 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.5° |
| 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25° |
| 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.5° |
| 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30° |
| 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 32.5° |
| 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 35° |
| 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 37.5° |
| 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 40° |
| 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 42.5° |
| 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 45° |
| 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 47.5° |
| 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50° |
| 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 52.5° |
| 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 55° |
| 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 57.5° |
| 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 59° |
| 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60° |
| 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 62.5° |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 65° |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 67.5° |
| | | | | | | | | | | | | 70° |
| | | | | | | | | | | | | 72.5° |
| | | | | | | | | | | | | 75° |
| | | | | | | | | | | | | 77.5° |
| | | | | | | | | | | | | 80° |
| | | | | | | | | | | | | 82.5° |
| | | | | | | | | | | | | 85° |
| | | | | | | | | | | | | 87.5° |
| | | | | | | | | | | | | 90° |
| | | | | | | | | | | | | 92.5° |
| | | | | | | | | | | | | 95° |
| | | | | | | | | | | | | 97.5° |
| | | | | | | | | | | | | 100° |
| | | | | | | | | | | | | 102.5° |
| | | | | | | | | | | | | 105° |
| | | | | | | | | | | | | 107.5° |

'227185
 ISW-AF-450-LED-E1-SLL

REPORT NUMBER: P227185
 CATALOG NUMBER: ISW-AF-4!

TION (continued):

CANDELA DISTRIBUTION (con

| 165° | 170° | 175° | 180° | 185° | 190° | 195° | 200° | 205° | 210° | | 215° | 220° |
|------|------|------|------|------|------|------|------|------|------|--------|-------|-------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0° | 914.2 | 914.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5° | 792.2 | 791.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5° | 650.1 | 645.9 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.5° | 503.9 | 519.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10° | 363.2 | 374.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5° | 252.9 | 258.5 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15° | 174.2 | 185.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.5° | 135.5 | 136.9 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20° | 111.8 | 112.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.5° | 99.2 | 101.1 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25° | 83.4 | 85.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.5° | 73.6 | 75.5 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30° | 67.5 | 68.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 32.5° | 61.5 | 61.5 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 35° | 56.4 | 56.8 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 37.5° | 52.6 | 53.6 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 40° | 49.4 | 49.8 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 42.5° | 44.7 | 45.6 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 45° | 40.5 | 41.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 47.5° | 37.7 | 37.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50° | 35.9 | 36.3 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 52.5° | 34.9 | 35.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 55° | 34.5 | 35.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 57.5° | 34.5 | 34.9 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 59° | 34.0 | 34.5 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60° | 34.0 | 34.9 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 62.5° | 32.6 | 33.6 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 65° | 31.7 | 32.6 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 67.5° | 30.3 | 31.7 |
| | | | | | | | | | | 70° | 28.8 | 30.3 |
| | | | | | | | | | | 72.5° | 27.0 | 28.8 |
| | | | | | | | | | | 75° | 25.2 | 26.5 |
| | | | | | | | | | | 77.5° | 22.8 | 24.2 |
| | | | | | | | | | | 80° | 20.0 | 20.5 |
| | | | | | | | | | | 82.5° | 16.8 | 16.8 |
| | | | | | | | | | | 85° | 12.6 | 11.2 |
| | | | | | | | | | | 87.5° | 7.0 | 7.5 |
| | | | | | | | | | | 90° | 0.0 | 0.0 |
| | | | | | | | | | | 92.5° | 0.0 | 0.0 |
| | | | | | | | | | | 95° | 0.0 | 0.0 |
| | | | | | | | | | | 97.5° | 0.0 | 0.0 |
| | | | | | | | | | | 100° | 0.0 | 0.0 |
| | | | | | | | | | | 102.5° | 0.0 | 0.0 |
| | | | | | | | | | | 105° | 0.0 | 0.0 |
| | | | | | | | | | | 107.5° | 0.0 | 0.0 |



REPORT NUMBER: P227185

CATALOG NUMBER: ISW-AF-450-LED-E1-

50-LED-E1-SLL

| <u>tinued):</u> | | | | | | | | | | <u>CANDELA DISTRIBUTION (continued):</u> | | |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--|------|------|
| 225° | 230° | 235° | 240° | 245° | 250° | 255° | 260° | 265° | | 215° | 220° | 225° |
| 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 110° | 0.0 | 0.0 | 0.0 |
| 781.9 | 781.9 | 795.9 | 797.3 | 781.0 | 785.2 | 793.1 | 783.8 | 794.0 | 112.5° | 0.0 | 0.0 | 0.0 |
| 656.2 | 650.6 | 651.0 | 647.3 | 653.9 | 646.4 | 654.3 | 651.5 | 649.2 | 115° | 0.0 | 0.0 | 0.0 |
| 509.5 | 519.2 | 512.3 | 498.8 | 509.5 | 501.1 | 485.3 | 486.6 | 468.9 | 117.5° | 0.0 | 0.0 | 0.0 |
| 382.8 | 375.8 | 372.1 | 365.6 | 348.3 | 351.6 | 333.9 | 336.8 | 342.8 | 120° | 0.0 | 0.0 | 0.0 |
| 264.0 | 258.9 | 264.9 | 260.8 | 253.8 | 255.2 | 258.9 | 262.7 | 272.4 | 122.5° | 0.0 | 0.0 | 0.0 |
| 185.4 | 183.0 | 181.7 | 184.4 | 192.3 | 196.5 | 202.5 | 213.8 | 219.3 | 125° | 0.0 | 0.0 | 0.0 |
| 139.2 | 139.7 | 138.3 | 142.5 | 149.0 | 152.3 | 153.6 | 154.6 | 161.1 | 127.5° | 0.0 | 0.0 | 0.0 |
| 115.0 | 116.9 | 116.4 | 117.8 | 116.0 | 114.1 | 115.5 | 112.7 | 110.4 | 130° | 0.0 | 0.0 | 0.0 |
| 100.6 | 101.1 | 98.7 | 98.3 | 95.4 | 93.2 | 91.2 | 91.2 | 90.3 | 132.5° | 0.0 | 0.0 | 0.0 |
| 85.2 | 85.7 | 83.4 | 83.4 | 82.9 | 84.3 | 83.4 | 81.5 | 81.0 | 135° | 0.0 | 0.0 | 0.0 |
| 76.4 | 75.5 | 74.1 | 74.1 | 73.1 | 73.1 | 73.6 | 74.1 | 73.6 | 137.5° | 0.0 | 0.0 | 0.0 |
| 68.4 | 67.5 | 67.1 | 67.5 | 67.1 | 67.5 | 68.0 | 67.5 | 68.0 | 140° | 0.0 | 0.0 | 0.0 |
| 62.9 | 61.9 | 61.9 | 62.4 | 61.9 | 62.4 | 62.4 | 62.4 | 61.9 | 142.5° | 0.0 | 0.0 | 0.0 |
| 58.2 | 57.3 | 57.3 | 57.3 | 56.8 | 55.9 | 54.9 | 53.6 | 52.2 | 145° | 0.0 | 0.0 | 0.0 |
| 54.5 | 54.0 | 53.1 | 52.6 | 51.2 | 48.4 | 47.5 | 47.5 | 47.5 | 147.5° | 0.0 | 0.0 | 0.0 |
| 51.2 | 50.3 | 49.8 | 48.0 | 46.1 | 45.2 | 45.2 | 45.2 | 45.2 | 150° | 0.0 | 0.0 | 0.0 |
| 47.1 | 45.6 | 44.7 | 44.2 | 43.8 | 43.8 | 43.3 | 43.3 | 43.3 | 152.5° | 0.0 | 0.0 | 0.0 |
| 41.9 | 41.4 | 41.4 | 41.9 | 41.9 | 41.9 | 41.9 | 41.4 | 41.9 | 155° | 0.0 | 0.0 | 0.0 |
| 38.7 | 38.7 | 39.1 | 39.6 | 40.1 | 40.5 | 41.0 | 40.5 | 41.0 | 157.5° | 0.0 | 0.0 | 0.0 |
| 37.2 | 37.2 | 37.2 | 38.2 | 38.7 | 39.1 | 40.1 | 40.1 | 40.1 | 160° | 0.0 | 0.0 | 0.0 |
| 36.3 | 36.3 | 36.8 | 37.2 | 37.7 | 38.2 | 38.7 | 39.1 | 39.6 | 162.5° | 0.0 | 0.0 | 0.0 |
| 35.9 | 36.3 | 35.9 | 36.3 | 36.8 | 37.7 | 38.2 | 38.2 | 38.7 | 165° | 0.0 | 0.0 | 0.0 |
| 35.9 | 35.9 | 35.9 | 35.9 | 36.8 | 37.2 | 36.8 | 37.2 | 37.7 | 167.5° | 0.0 | 0.0 | 0.0 |
| 35.9 | 35.9 | 35.4 | 35.9 | 36.3 | 36.8 | 36.3 | 36.3 | 37.2 | 170° | 0.0 | 0.0 | 0.0 |
| 35.4 | 35.9 | 35.4 | 35.4 | 35.9 | 36.3 | 35.9 | 36.3 | 36.8 | 172.5° | 0.0 | 0.0 | 0.0 |
| 34.5 | 34.9 | 34.5 | 34.9 | 34.9 | 35.4 | 35.4 | 35.4 | 35.9 | 175° | 0.0 | 0.0 | 0.0 |
| 33.6 | 33.6 | 33.6 | 34.0 | 34.0 | 34.5 | 34.5 | 34.9 | 34.5 | 177.5° | 0.0 | 0.0 | 0.0 |
| 32.6 | 32.6 | 32.6 | 33.0 | 33.0 | 33.6 | 34.0 | 33.6 | 33.6 | 180° | 0.0 | 0.0 | 0.0 |
| 31.7 | 31.2 | 30.7 | 31.2 | 31.7 | 31.7 | 32.1 | 31.7 | 32.1 | | | | |
| 30.3 | 29.8 | 29.4 | 29.4 | 29.8 | 29.8 | 30.3 | 29.8 | 29.8 | | | | |
| 27.9 | 27.9 | 27.0 | 27.0 | 27.0 | 27.0 | 27.5 | 27.0 | 26.5 | | | | |
| 25.2 | 25.2 | 24.2 | 24.2 | 24.2 | 24.2 | 23.7 | 23.7 | 23.7 | | | | |
| 21.0 | 21.4 | 21.4 | 21.0 | 21.0 | 20.5 | 20.5 | 20.0 | 19.5 | | | | |
| 15.9 | 16.8 | 17.2 | 17.2 | 17.2 | 17.2 | 17.2 | 16.3 | 15.3 | | | | |
| 11.2 | 12.6 | 14.0 | 14.0 | 13.5 | 13.5 | 13.5 | 12.1 | 10.7 | | | | |
| 7.0 | 8.4 | 8.8 | 9.8 | 8.4 | 7.9 | 7.9 | 7.0 | 6.5 | | | | |
| 0.0 | 0.0 | 0.9 | 0.5 | 1.4 | 1.4 | 1.8 | 0.9 | 0.5 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | |



REPORT NUMBER: P227185

CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

-SLL

CANDELA DISTRIBUTION (continued):

| 230° | 235° | 240° | 245° | 250° | 255° | 260° | 265° | | 270° | 275° | 280° | 285° |
|------|------|------|------|------|------|------|------|--------|-------|-------|-------|-------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0° | 914.2 | 914.2 | 914.2 | 914.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5° | 785.2 | 802.4 | 804.8 | 807.1 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5° | 645.5 | 662.7 | 652.9 | 657.1 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.5° | 471.3 | 460.1 | 474.5 | 483.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10° | 344.1 | 357.2 | 362.7 | 373.1 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5° | 285.5 | 293.9 | 304.1 | 320.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15° | 231.5 | 237.5 | 250.5 | 266.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.5° | 168.6 | 177.5 | 185.8 | 198.9 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20° | 113.1 | 116.9 | 127.2 | 133.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.5° | 90.8 | 92.2 | 94.1 | 99.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25° | 81.5 | 82.4 | 83.8 | 85.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.5° | 74.1 | 74.5 | 75.9 | 76.8 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30° | 67.5 | 67.1 | 67.5 | 68.9 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 32.5° | 60.6 | 60.6 | 61.5 | 61.5 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 35° | 52.2 | 51.7 | 52.6 | 54.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 37.5° | 48.0 | 48.4 | 49.4 | 50.3 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 40° | 45.6 | 46.1 | 47.1 | 48.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 42.5° | 43.3 | 44.2 | 45.2 | 46.5 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 45° | 41.9 | 42.9 | 44.2 | 45.6 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 47.5° | 41.4 | 42.4 | 43.8 | 45.6 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50° | 40.5 | 41.9 | 43.3 | 45.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 52.5° | 40.5 | 41.4 | 42.9 | 45.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 55° | 39.1 | 40.5 | 41.9 | 44.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 57.5° | 38.2 | 39.1 | 41.0 | 43.8 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 59° | 37.7 | 38.7 | 40.5 | 43.3 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60° | 36.8 | 38.2 | 40.1 | 42.9 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 62.5° | 35.9 | 37.2 | 39.1 | 41.9 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 65° | 34.5 | 36.3 | 38.2 | 40.1 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 67.5° | 33.6 | 34.5 | 36.3 | 38.2 |
| | | | | | | | | 70° | 31.7 | 32.6 | 34.0 | 35.4 |
| | | | | | | | | 72.5° | 29.4 | 29.8 | 30.7 | 32.1 |
| | | | | | | | | 75° | 26.1 | 26.5 | 27.0 | 28.4 |
| | | | | | | | | 77.5° | 22.8 | 22.8 | 23.3 | 25.2 |
| | | | | | | | | 80° | 19.1 | 19.1 | 19.5 | 20.5 |
| | | | | | | | | 82.5° | 14.4 | 14.4 | 15.3 | 16.8 |
| | | | | | | | | 85° | 10.2 | 9.8 | 11.2 | 12.1 |
| | | | | | | | | 87.5° | 6.0 | 5.6 | 6.0 | 6.0 |
| | | | | | | | | 90° | 0.5 | 1.4 | 0.9 | 0.9 |
| | | | | | | | | 92.5° | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | 95° | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | 97.5° | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | 100° | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | 102.5° | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | 105° | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | | | 107.5° | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P227185
 CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

| 290° | 295° | 300° | 305° | 310° | 315° | 320° | | 270° | 275° | 280° | 285° | 290° |
|-------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|------|
| 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 816.4 | 811.7 | 815.5 | 829.9 | 835.0 | 841.5 | 863.4 | 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 667.4 | 673.4 | 667.4 | 696.7 | 698.1 | 717.7 | 725.6 | 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 490.4 | 498.3 | 511.4 | 530.9 | 536.5 | 564.5 | 588.2 | 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 382.8 | 393.0 | 411.2 | 423.3 | 435.5 | 451.7 | 470.9 | 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 339.9 | 350.7 | 366.5 | 381.9 | 399.2 | 411.6 | 427.5 | 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 284.1 | 300.8 | 316.2 | 336.2 | 350.7 | 373.5 | 392.1 | 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 217.0 | 240.3 | 255.6 | 279.9 | 301.8 | 321.8 | 347.0 | 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 150.9 | 169.1 | 188.6 | 214.7 | 243.1 | 270.6 | 304.1 | 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 103.8 | 113.6 | 128.6 | 155.6 | 184.8 | 224.4 | 260.8 | 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 88.5 | 92.2 | 97.8 | 110.9 | 135.5 | 178.8 | 218.9 | 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 78.7 | 81.5 | 85.2 | 91.8 | 104.8 | 134.6 | 178.8 | 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.2 | 75.5 | 79.2 | 83.8 | 90.8 | 111.3 | 144.3 | 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 63.3 | 65.7 | 68.9 | 74.1 | 79.2 | 95.4 | 127.6 | 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 55.9 | 58.7 | 62.9 | 66.6 | 71.7 | 84.8 | 116.0 | 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 52.2 | 54.9 | 58.7 | 61.9 | 65.7 | 76.4 | 107.6 | 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 49.8 | 52.6 | 56.4 | 59.1 | 61.5 | 73.6 | 104.3 | 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48.4 | 51.7 | 54.9 | 56.8 | 61.5 | 75.0 | 96.4 | 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48.0 | 51.2 | 54.9 | 58.2 | 67.5 | 70.8 | 91.2 | 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48.4 | 51.2 | 55.9 | 65.2 | 65.7 | 67.1 | 85.7 | 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48.4 | 52.6 | 62.4 | 68.0 | 62.4 | 63.3 | 80.6 | 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48.9 | 54.5 | 64.8 | 63.3 | 60.6 | 59.1 | 75.0 | 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 48.9 | 53.6 | 61.9 | 59.6 | 55.9 | 56.4 | 68.4 | 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 47.5 | 53.6 | 59.6 | 54.0 | 51.2 | 53.6 | 62.9 | 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 46.5 | 54.9 | 53.1 | 49.8 | 49.8 | 52.2 | 60.0 | 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 46.1 | 56.4 | 50.3 | 48.4 | 48.4 | 51.7 | 58.7 | 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 44.7 | 52.6 | 46.1 | 45.2 | 46.5 | 48.9 | 56.8 | 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 41.9 | 43.8 | 42.4 | 42.4 | 44.2 | 47.1 | 55.9 | 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38.7 | 39.6 | 39.6 | 40.1 | 41.9 | 44.2 | 56.8 | 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 35.9 | 35.9 | 36.8 | 37.2 | 38.7 | 41.9 | 54.5 | | | | | | |
| 32.6 | 33.0 | 33.0 | 34.0 | 34.9 | 38.2 | 52.6 | | | | | | |
| 28.8 | 28.8 | 29.8 | 29.8 | 31.2 | 34.5 | 47.1 | | | | | | |
| 25.2 | 25.2 | 25.2 | 25.6 | 26.5 | 29.8 | 38.7 | | | | | | |
| 21.0 | 21.0 | 21.0 | 21.4 | 21.9 | 24.7 | 29.4 | | | | | | |
| 16.8 | 16.3 | 15.9 | 15.9 | 16.8 | 19.1 | 22.8 | | | | | | |
| 11.7 | 11.7 | 11.2 | 11.2 | 11.2 | 12.6 | 15.3 | | | | | | |
| 6.5 | 5.6 | 6.0 | 6.5 | 6.0 | 7.0 | 8.4 | | | | | | |
| 0.5 | 0.9 | 1.4 | 1.8 | 1.8 | 1.8 | 2.8 | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | | | | |



REPORT NUMBER: P227185

CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

| 295° | 300° | 305° | 310° | 315° | 320° | | 325° | 330° | 335° | 340° | 345° | 350° |
|------|------|------|------|------|------|--------|-------|-------|-------|-------|--------|--------|
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0° | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 | 914.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5° | 860.6 | 872.8 | 891.8 | 895.6 | 910.9 | 921.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5° | 729.3 | 758.2 | 768.4 | 788.4 | 823.4 | 841.1 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.5° | 601.7 | 623.6 | 648.2 | 680.4 | 706.0 | 736.3 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10° | 495.0 | 526.2 | 558.4 | 584.4 | 620.3 | 656.6 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.5° | 439.7 | 456.8 | 488.6 | 525.3 | 570.0 | 610.5 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15° | 410.7 | 431.3 | 465.2 | 504.3 | 551.9 | 602.1 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.5° | 374.9 | 407.4 | 446.1 | 502.1 | 563.5 | 633.3 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 20° | 339.5 | 379.1 | 429.8 | 503.4 | 588.6 | 679.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.5° | 308.3 | 355.4 | 419.6 | 511.8 | 620.8 | 741.8 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25° | 271.5 | 334.4 | 411.6 | 529.1 | 670.1 | 825.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.5° | 242.1 | 314.4 | 400.1 | 543.9 | 715.3 | 906.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30° | 209.6 | 291.0 | 383.7 | 549.0 | 770.3 | 972.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 32.5° | 183.5 | 269.1 | 365.1 | 544.4 | 794.9 | 1018.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 35° | 170.9 | 253.4 | 349.2 | 528.1 | 815.5 | 1068.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 37.5° | 162.5 | 236.1 | 333.9 | 501.1 | 838.7 | 1117.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 40° | 151.8 | 222.6 | 321.3 | 481.5 | 856.9 | 1158.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 42.5° | 142.1 | 210.5 | 311.6 | 464.3 | 861.5 | 1195.4 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 45° | 133.7 | 203.1 | 304.1 | 465.2 | 864.8 | 1246.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 47.5° | 127.2 | 196.1 | 301.4 | 481.1 | 899.3 | 1318.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50° | 121.1 | 190.0 | 296.7 | 511.8 | 954.7 | 1414.3 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 52.5° | 114.1 | 181.7 | 290.6 | 543.5 | 1015.3 | 1543.3 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 55° | 104.8 | 170.4 | 284.1 | 570.0 | 1097.6 | 1700.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 57.5° | 90.3 | 157.4 | 279.9 | 583.5 | 1148.5 | 1790.7 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 59° | 82.9 | 144.8 | 277.5 | 577.0 | 1162.0 | 1806.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 60° | 78.7 | 137.4 | 273.8 | 569.1 | 1165.7 | 1796.2 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 62.5° | 73.1 | 119.7 | 258.5 | 529.5 | 1113.5 | 1677.9 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 65° | 74.5 | 113.1 | 223.5 | 450.8 | 993.8 | 1447.0 |
| 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 67.5° | 76.4 | 110.4 | 193.2 | 364.2 | 792.2 | 1197.4 |
| | | | | | | 70° | 75.0 | 108.9 | 175.5 | 289.7 | 593.3 | 896.5 |
| | | | | | | 72.5° | 73.1 | 102.9 | 152.3 | 232.8 | 376.2 | 627.8 |
| | | | | | | 75° | 64.8 | 86.6 | 119.7 | 159.8 | 237.5 | 457.4 |
| | | | | | | 77.5° | 50.7 | 66.6 | 84.8 | 99.2 | 120.6 | 322.7 |
| | | | | | | 80° | 37.2 | 48.4 | 55.4 | 59.6 | 67.1 | 220.2 |
| | | | | | | 82.5° | 26.5 | 32.6 | 35.4 | 37.7 | 44.7 | 164.9 |
| | | | | | | 85° | 20.0 | 22.8 | 24.7 | 24.7 | 30.3 | 116.4 |
| | | | | | | 87.5° | 11.2 | 11.7 | 11.7 | 12.6 | 14.9 | 31.7 |
| | | | | | | 90° | 3.3 | 3.3 | 2.8 | 3.3 | 2.4 | 1.8 |
| | | | | | | 92.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | 95° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | 97.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | 100° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | 102.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | 105° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | | | | | | 107.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P227185
 CATALOG NUMBER: ISW-AF-450-LED-E1-SLL

CANDELA DISTRIBUTION (continued):

| 355° | 359° | 360° | | 325° | 330° | 335° | 340° | 345° | 350° | 355° |
|--------|--------|--------|--------|------|------|------|------|------|------|------|
| 914.2 | 914.2 | 914.2 | 110° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 933.7 | 940.7 | 946.3 | 112.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 868.1 | 885.3 | 888.5 | 115° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 769.8 | 797.8 | 807.5 | 117.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 697.7 | 727.9 | 738.2 | 120° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 658.1 | 693.5 | 704.6 | 122.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 659.0 | 701.3 | 717.7 | 125° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 701.8 | 750.2 | 770.3 | 127.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 775.4 | 845.7 | 860.6 | 130° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 875.0 | 944.0 | 966.4 | 132.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 968.6 | 1060.0 | 1077.2 | 135° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1060.9 | 1151.2 | 1166.6 | 137.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1132.1 | 1226.6 | 1239.7 | 140° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1200.6 | 1307.2 | 1321.7 | 142.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1276.9 | 1394.8 | 1411.6 | 145° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1345.9 | 1480.9 | 1491.7 | 147.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1422.3 | 1551.3 | 1554.1 | 150° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1484.7 | 1603.4 | 1604.4 | 152.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1545.2 | 1652.4 | 1652.8 | 155° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1608.6 | 1705.9 | 1698.9 | 157.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1708.6 | 1769.2 | 1776.1 | 160° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1861.0 | 1915.0 | 1922.9 | 162.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2037.9 | 2112.9 | 2102.2 | 165° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2112.9 | 2198.6 | 2207.4 | 167.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2100.3 | 2217.2 | 2232.1 | 170° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2080.3 | 2211.6 | 2229.8 | 172.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1966.6 | 2153.4 | 2181.9 | 175° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1775.7 | 2032.8 | 2072.8 | 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1530.3 | 1852.6 | 1884.7 | 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 1194.1 | 1505.6 | 1533.1 | | | | | | | | |
| 793.6 | 1033.9 | 1081.4 | | | | | | | | |
| 504.3 | 666.9 | 658.1 | | | | | | | | |
| 372.1 | 433.5 | 434.0 | | | | | | | | |
| 270.1 | 297.6 | 294.3 | | | | | | | | |
| 209.1 | 181.7 | 181.2 | | | | | | | | |
| 73.1 | 64.2 | 62.9 | | | | | | | | |
| 31.7 | 26.5 | 27.0 | | | | | | | | |
| 1.4 | 1.4 | 1.8 | | | | | | | | |
| 0.0 | 0.0 | 0.0 | | | | | | | | |
| 0.0 | 0.0 | 0.0 | | | | | | | | |
| 0.0 | 0.0 | 0.0 | | | | | | | | |
| 0.0 | 0.0 | 0.0 | | | | | | | | |
| 0.0 | 0.0 | 0.0 | | | | | | | | |
| 0.0 | 0.0 | 0.0 | | | | | | | | |
| 0.0 | 0.0 | 0.0 | | | | | | | | |
| 0.0 | 0.0 | 0.0 | | | | | | | | |
| 0.0 | 0.0 | 0.0 | | | | | | | | |



| 359° | 360° |
|------|------|
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(END OF REPORT)