

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: STREETWORKS

Report Number: P198860

Luminaire Tested: **XNV-AF-01-LED-U-SL2-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198860
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24257)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV-AF-01-LED-U-SL2-7050-800
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4791 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B1 - U0 - G1

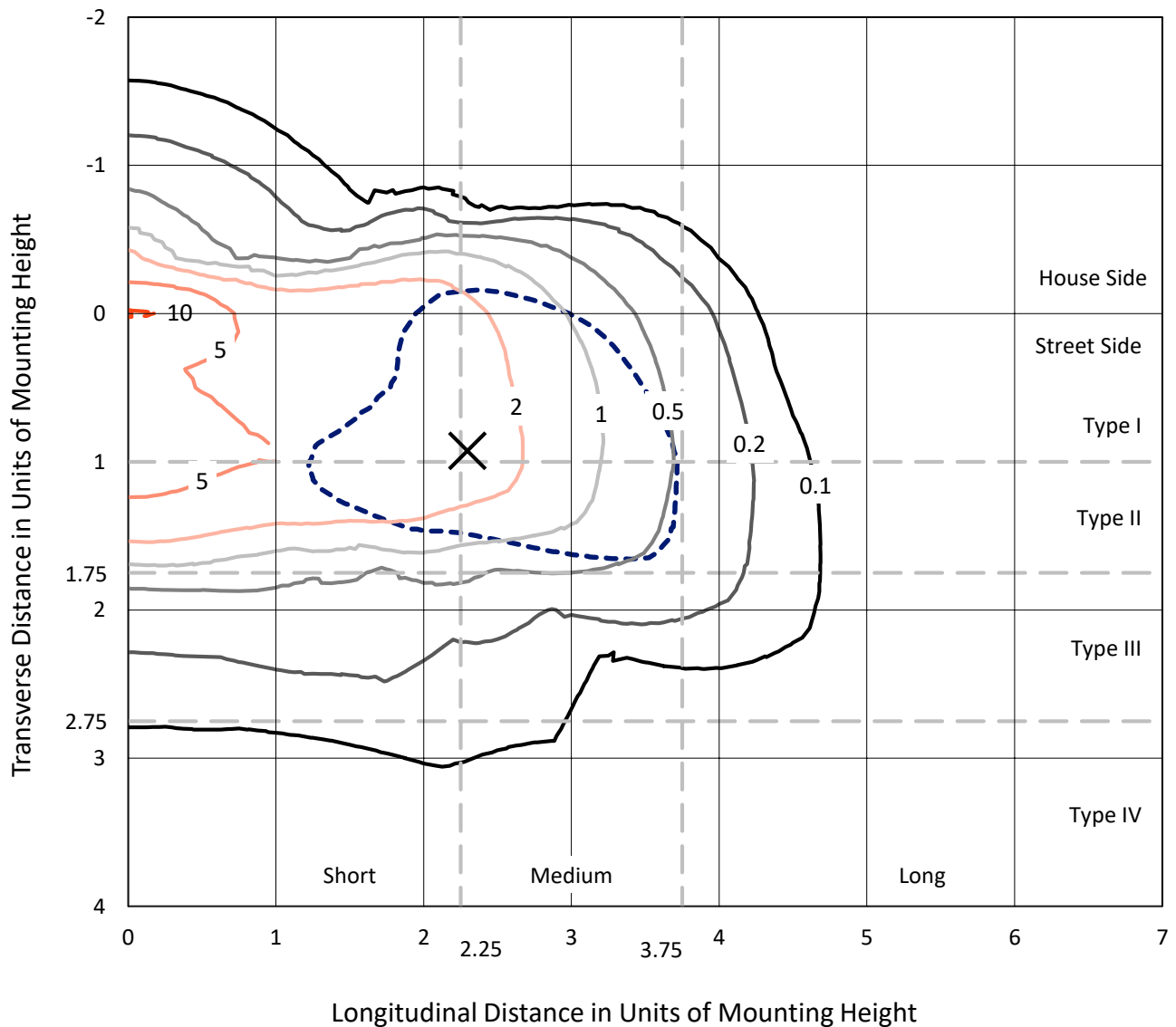
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

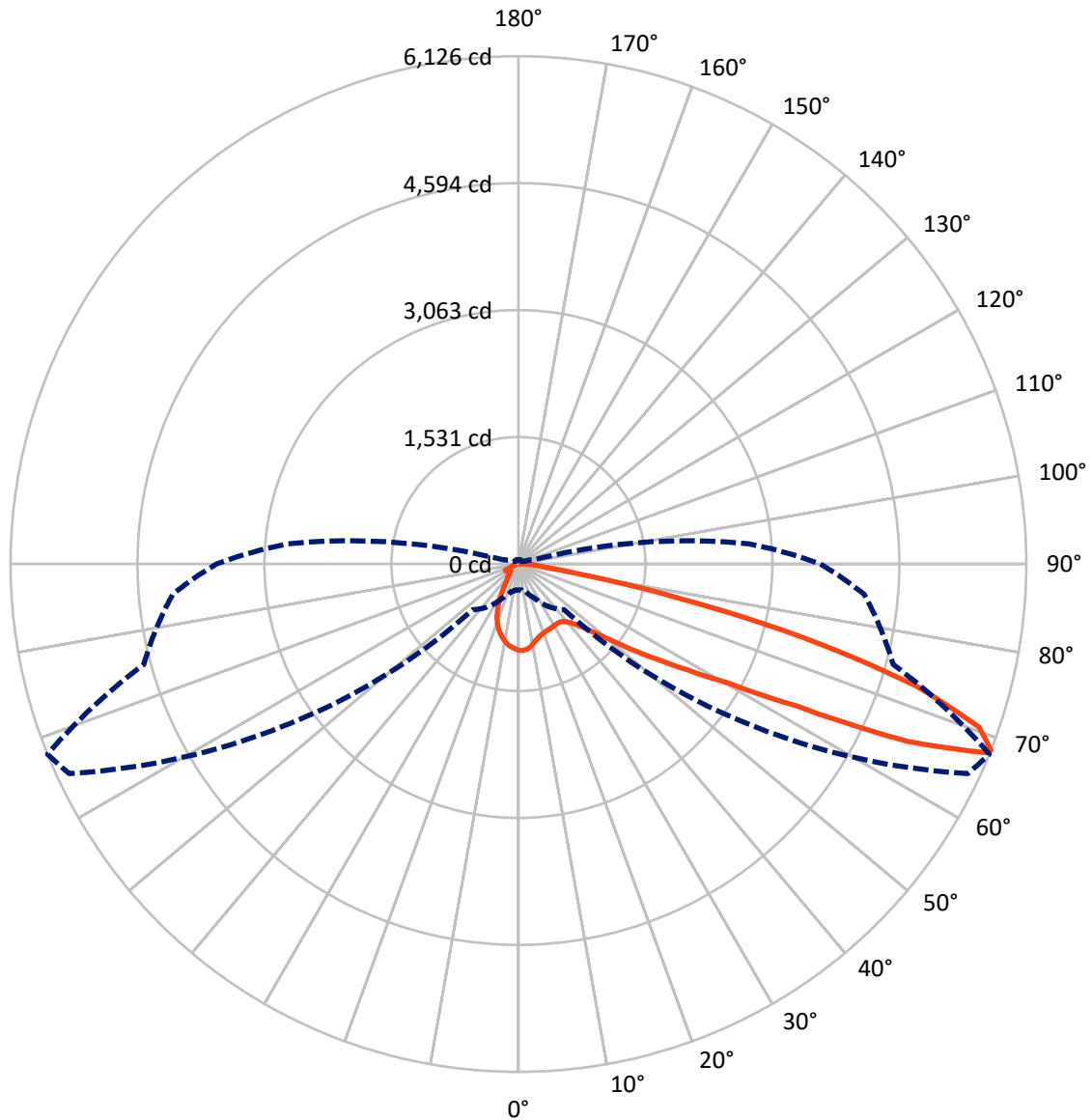
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.4 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 783.8 | 0.0 | 783.8 |
| | % Fixture | 16.4 | 0.0 | 16.4 |
| Street Side | Lumens | 4007.2 | 0.0 | 4007.2 |
| | % Fixture | 83.6 | 0.0 | 83.6 |
| Total | Lumens | 4791.0 | 0.0 | 4791.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 89.3 | 1.9 |
| 10°-20° | 207.2 | 4.3 |
| 20°-30° | 280.2 | 5.8 |
| 30°-40° | 395.1 | 8.2 |
| 40°-50° | 649.6 | 13.6 |
| 50°-60° | 1007.0 | 21.0 |
| 60°-70° | 1305.6 | 27.3 |
| 70°-80° | 749.2 | 15.6 |
| 80°-90° | 107.8 | 2.2 |
| 90°-100° | 0.0 | 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° | 4791.0 | 100.0 |
| 0°-180° | 4791.0 | 100.0 |

Coefficient of Utilization



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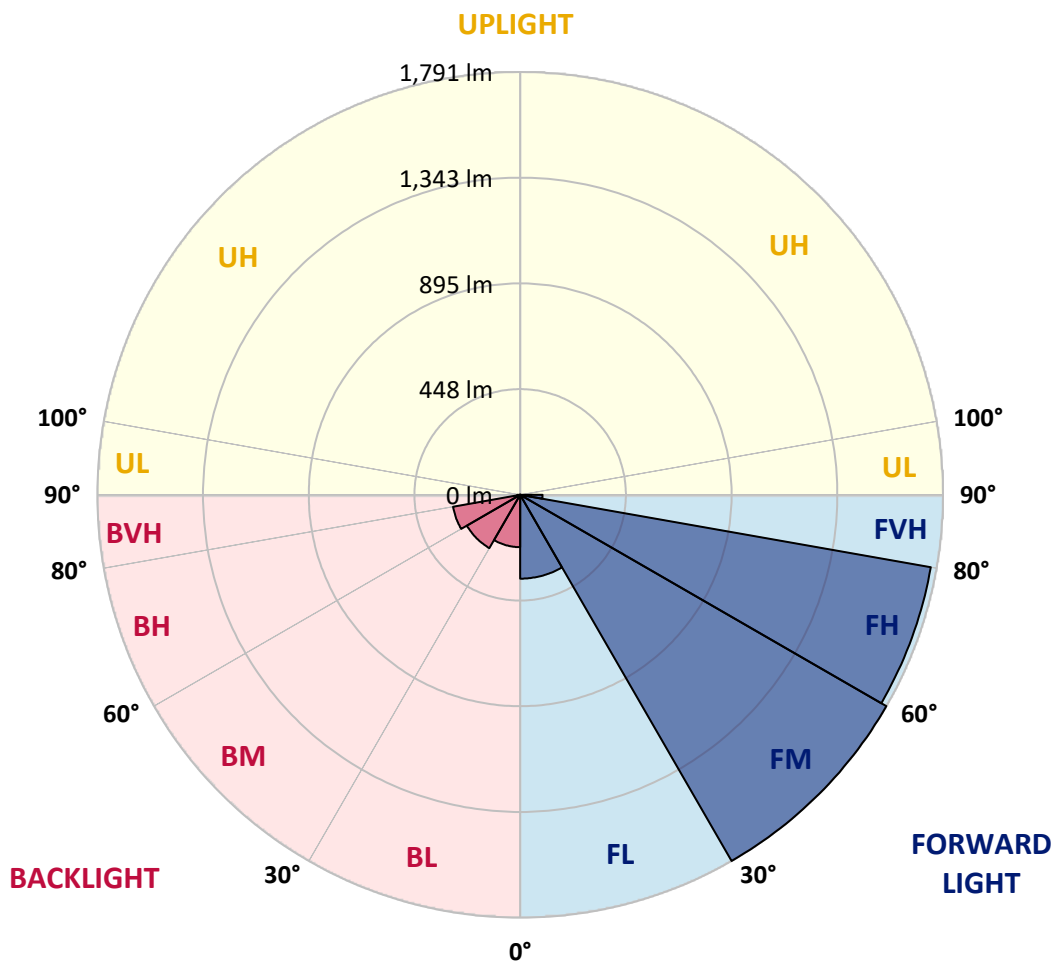
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 355.1 | 7.4 | | | |
| FM | (30°-60°) | 1791.0 | 37.4 | | | |
| FH | (60°-80°) | 1766.2 | 36.9 | | | G1/1800 |
| FVH | (80°-90°) | 94.9 | 2.0 | | | G1/100 |
| BL | (0°-30°) | 221.6 | 4.6 | B1/500 | | |
| BM | (30°-60°) | 260.7 | 5.4 | B1/1000 | | |
| BH | (60°-80°) | 288.7 | 6.0 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 12.8 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 68° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 |
| 2.5° | 1014.6 | 1022.8 | 1022.8 | 1028.7 | 1034.0 | 1038.4 | 1042.2 | 1042.2 | 1042.2 | 1039.7 | 1037.5 |
| 5° | 907.9 | 918.9 | 920.4 | 935.4 | 955.2 | 979.3 | 1006.2 | 1030.0 | 1034.7 | 1043.4 | 1046.9 |
| 7.5° | 833.7 | 837.2 | 843.1 | 853.4 | 873.5 | 903.2 | 945.5 | 998.7 | 1011.5 | 1039.0 | 1053.4 |
| 10° | 781.2 | 784.0 | 789.0 | 799.3 | 817.5 | 844.4 | 886.0 | 955.2 | 976.4 | 1025.3 | 1053.7 |
| 12.5° | 742.7 | 744.9 | 749.5 | 758.9 | 777.4 | 801.5 | 844.1 | 916.0 | 942.3 | 1011.5 | 1058.1 |
| 15° | 712.6 | 716.4 | 720.1 | 729.2 | 748.0 | 771.1 | 814.3 | 887.6 | 916.0 | 1000.5 | 1066.3 |
| 17.5° | 700.7 | 702.6 | 703.2 | 707.9 | 724.8 | 748.3 | 791.5 | 867.5 | 897.0 | 991.8 | 1072.5 |
| 20° | 708.2 | 708.5 | 702.3 | 699.2 | 708.9 | 730.5 | 772.4 | 852.5 | 882.6 | 984.0 | 1075.0 |
| 22.5° | 741.1 | 741.1 | 724.8 | 711.1 | 704.5 | 717.9 | 759.6 | 842.2 | 874.7 | 978.0 | 1075.0 |
| 25° | 803.7 | 800.9 | 775.5 | 748.3 | 719.2 | 713.6 | 751.4 | 835.6 | 868.8 | 974.9 | 1071.0 |
| 27.5° | 886.0 | 883.5 | 851.3 | 810.9 | 758.3 | 722.9 | 748.6 | 830.3 | 862.8 | 970.2 | 1062.2 |
| 30° | 986.1 | 984.0 | 947.3 | 894.4 | 816.8 | 752.7 | 755.2 | 826.5 | 858.1 | 962.4 | 1047.5 |
| 32.5° | 1086.0 | 1084.7 | 1055.6 | 1001.5 | 897.6 | 803.1 | 772.4 | 825.9 | 855.6 | 953.0 | 1029.6 |
| 35° | 1186.4 | 1186.4 | 1168.6 | 1122.9 | 1006.2 | 878.8 | 808.4 | 837.5 | 860.3 | 948.0 | 1014.3 |
| 37.5° | 1334.8 | 1328.8 | 1295.7 | 1248.4 | 1142.9 | 977.1 | 866.6 | 861.9 | 878.5 | 956.4 | 1009.3 |
| 40° | 1564.5 | 1547.3 | 1464.4 | 1384.9 | 1292.2 | 1102.9 | 951.7 | 909.2 | 919.2 | 985.2 | 1021.2 |
| 42.5° | 1804.9 | 1777.6 | 1667.8 | 1540.7 | 1446.5 | 1258.1 | 1063.4 | 985.8 | 985.5 | 1040.9 | 1059.1 |
| 45° | 2011.1 | 1997.0 | 1878.1 | 1716.9 | 1622.7 | 1432.7 | 1204.6 | 1099.8 | 1088.5 | 1127.3 | 1132.0 |
| 47.5° | 2131.0 | 2121.6 | 2049.9 | 1903.4 | 1831.8 | 1639.0 | 1383.6 | 1257.8 | 1236.5 | 1259.7 | 1252.5 |
| 50° | 2097.8 | 2106.9 | 2086.2 | 2011.4 | 2056.5 | 1928.8 | 1611.8 | 1474.4 | 1434.0 | 1457.2 | 1439.6 |
| 52.5° | 1923.2 | 1947.6 | 1966.0 | 1980.4 | 2185.7 | 2316.6 | 1898.4 | 1744.8 | 1711.3 | 1707.2 | 1690.3 |
| 55° | 1608.6 | 1647.4 | 1705.6 | 1811.4 | 2151.0 | 2627.9 | 2399.2 | 2071.8 | 2023.0 | 1997.3 | 2003.9 |
| 57.5° | 1094.7 | 1153.6 | 1279.1 | 1480.3 | 1970.4 | 2760.6 | 3139.6 | 2494.3 | 2411.7 | 2320.3 | 2341.6 |
| 60° | 603.1 | 652.2 | 801.5 | 1004.3 | 1558.2 | 2740.9 | 3795.9 | 3181.0 | 2920.9 | 2678.6 | 2722.5 |
| 62.5° | 390.3 | 400.9 | 512.0 | 686.0 | 956.4 | 2419.8 | 4160.5 | 4328.6 | 3777.5 | 3151.2 | 3212.9 |
| 65° | 313.6 | 321.1 | 375.6 | 553.3 | 666.3 | 1556.7 | 4176.8 | 5519.1 | 5155.7 | 3793.4 | 3795.3 |
| 67.5° | 306.4 | 309.8 | 341.4 | 465.4 | 625.0 | 847.5 | 3610.3 | 5988.5 | 6072.7 | 4551.4 | 4184.9 |
| 68° | 310.8 | 314.8 | 346.8 | 451.0 | 624.7 | 781.2 | 3336.8 | 5981.3 | 6125.6 | 4678.2 | 4184.9 |
| 70° | 274.2 | 279.2 | 353.6 | 466.6 | 598.1 | 671.6 | 2284.9 | 5663.7 | 5895.9 | 4969.5 | 3970.9 |
| 72.5° | 143.3 | 139.3 | 174.9 | 368.4 | 673.2 | 699.8 | 1207.1 | 4731.7 | 5002.7 | 4602.4 | 3430.7 |
| 75° | 111.7 | 101.7 | 98.0 | 145.5 | 592.1 | 725.8 | 701.0 | 3363.1 | 3567.8 | 3317.7 | 2293.1 |
| 77.5° | 105.2 | 92.9 | 85.8 | 86.1 | 260.7 | 755.2 | 567.1 | 1979.2 | 1979.2 | 1582.7 | 731.7 |
| 80° | 84.5 | 73.2 | 68.5 | 78.2 | 125.8 | 696.0 | 591.8 | 902.0 | 769.3 | 409.0 | 201.5 |
| 82.5° | 55.7 | 49.8 | 50.1 | 63.5 | 95.5 | 464.7 | 685.4 | 445.3 | 334.6 | 181.2 | 118.6 |
| 85° | 35.4 | 30.4 | 33.8 | 44.4 | 71.4 | 207.2 | 678.5 | 309.5 | 221.6 | 101.7 | 59.1 |
| 87.5° | 17.8 | 13.8 | 16.9 | 23.2 | 43.5 | 59.5 | 558.6 | 276.3 | 164.3 | 42.2 | 32.2 |
| 90° | 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: XNV-AF-01-LED-U-SL2-7050-800

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 | 1042.5 |
| 2.5° | 1037.5 | 1030.6 | 1027.1 | 1021.5 | 1014.6 | 1007.7 | 1003.0 | 1000.9 | 999.6 | 1000.2 | 999.9 |
| 5° | 1045.0 | 1035.9 | 1021.2 | 1000.2 | 978.6 | 955.8 | 938.3 | 924.8 | 916.4 | 913.9 | 913.2 |
| 7.5° | 1050.6 | 1037.5 | 1009.9 | 971.7 | 934.8 | 894.8 | 860.6 | 833.4 | 815.0 | 806.5 | 806.2 |
| 10° | 1049.7 | 1032.8 | 989.3 | 932.9 | 878.8 | 820.0 | 766.4 | 720.8 | 687.6 | 671.6 | 671.0 |
| 12.5° | 1050.6 | 1027.5 | 963.9 | 887.6 | 809.9 | 725.8 | 646.3 | 575.2 | 525.8 | 502.3 | 501.4 |
| 15° | 1054.4 | 1021.8 | 937.9 | 836.9 | 729.5 | 610.6 | 497.0 | 407.8 | 362.7 | 347.4 | 347.4 |
| 17.5° | 1054.1 | 1012.4 | 907.9 | 778.0 | 634.1 | 474.8 | 339.3 | 284.2 | 279.8 | 293.9 | 296.1 |
| 20° | 1047.8 | 997.4 | 869.1 | 708.2 | 522.0 | 328.6 | 230.0 | 222.2 | 257.3 | 296.1 | 300.4 |
| 22.5° | 1038.1 | 978.0 | 824.3 | 627.2 | 391.5 | 214.1 | 177.4 | 189.3 | 236.9 | 285.1 | 292.0 |
| 25° | 1024.6 | 954.5 | 773.0 | 533.0 | 260.4 | 154.0 | 148.0 | 162.7 | 196.2 | 228.5 | 233.5 |
| 27.5° | 1004.9 | 924.8 | 717.0 | 430.9 | 166.2 | 126.7 | 128.9 | 139.3 | 153.7 | 167.4 | 170.3 |
| 30° | 980.2 | 890.1 | 656.0 | 318.0 | 126.1 | 113.3 | 117.0 | 123.3 | 129.6 | 138.3 | 140.2 |
| 32.5° | 955.2 | 854.7 | 592.4 | 218.4 | 110.2 | 106.1 | 109.8 | 113.3 | 118.6 | 124.6 | 125.8 |
| 35° | 932.6 | 821.8 | 527.0 | 152.4 | 103.3 | 101.4 | 103.3 | 105.5 | 110.8 | 116.7 | 117.4 |
| 37.5° | 916.4 | 794.9 | 458.8 | 120.5 | 99.2 | 97.3 | 98.3 | 99.2 | 105.5 | 114.2 | 115.2 |
| 40° | 914.2 | 777.1 | 389.6 | 108.3 | 96.1 | 93.6 | 92.9 | 93.6 | 101.7 | 111.7 | 112.7 |
| 42.5° | 935.4 | 778.0 | 322.0 | 103.3 | 93.6 | 90.8 | 88.3 | 89.5 | 96.7 | 104.5 | 105.2 |
| 45° | 985.8 | 799.9 | 263.5 | 101.1 | 91.4 | 89.2 | 85.4 | 86.1 | 89.5 | 93.6 | 94.2 |
| 47.5° | 1074.7 | 847.8 | 218.8 | 99.8 | 89.5 | 87.6 | 82.9 | 81.1 | 81.4 | 83.6 | 83.6 |
| 50° | 1216.8 | 927.9 | 191.5 | 98.6 | 87.9 | 84.5 | 79.2 | 75.4 | 74.5 | 75.7 | 76.0 |
| 52.5° | 1428.7 | 1065.3 | 178.4 | 96.1 | 85.1 | 80.4 | 74.5 | 70.7 | 69.2 | 70.4 | 70.4 |
| 55° | 1715.0 | 1284.7 | 172.1 | 92.6 | 81.7 | 75.4 | 70.1 | 67.0 | 65.7 | 66.7 | 66.7 |
| 57.5° | 2041.5 | 1569.8 | 182.8 | 87.9 | 77.3 | 70.1 | 66.3 | 64.2 | 63.2 | 64.2 | 64.5 |
| 60° | 2429.2 | 1942.9 | 256.0 | 82.0 | 72.6 | 65.4 | 63.2 | 62.0 | 61.3 | 62.3 | 62.3 |
| 62.5° | 2944.7 | 2439.2 | 396.2 | 77.3 | 67.6 | 61.0 | 60.4 | 59.8 | 59.1 | 60.1 | 60.1 |
| 65° | 3501.1 | 2890.8 | 407.8 | 74.5 | 63.2 | 57.3 | 57.6 | 57.6 | 57.0 | 57.9 | 57.9 |
| 67.5° | 3678.3 | 2851.7 | 227.8 | 71.0 | 57.9 | 53.5 | 54.8 | 54.8 | 54.5 | 55.4 | 55.1 |
| 68° | 3640.7 | 2789.7 | 198.4 | 70.1 | 57.0 | 52.6 | 53.8 | 54.1 | 53.8 | 54.8 | 54.5 |
| 70° | 3360.9 | 2449.2 | 130.5 | 64.8 | 52.9 | 49.4 | 51.3 | 51.6 | 51.3 | 52.6 | 52.3 |
| 72.5° | 2774.4 | 1837.1 | 96.4 | 56.6 | 47.9 | 45.4 | 47.3 | 47.6 | 47.9 | 49.1 | 48.8 |
| 75° | 1762.0 | 1014.6 | 76.0 | 48.2 | 42.9 | 40.7 | 42.6 | 43.5 | 44.1 | 46.0 | 45.1 |
| 77.5° | 482.6 | 308.0 | 61.7 | 41.0 | 36.9 | 36.0 | 37.2 | 38.5 | 39.1 | 41.3 | 39.7 |
| 80° | 169.0 | 136.1 | 51.3 | 34.7 | 30.7 | 30.4 | 31.6 | 32.9 | 33.5 | 35.4 | 33.5 |
| 82.5° | 102.7 | 88.9 | 41.0 | 27.2 | 24.1 | 23.8 | 25.3 | 26.6 | 27.2 | 27.2 | 26.0 |
| 85° | 53.5 | 46.9 | 30.0 | 19.1 | 16.6 | 15.6 | 18.5 | 20.0 | 20.3 | 20.0 | 19.1 |
| 87.5° | 30.0 | 26.6 | 16.0 | 9.1 | 7.5 | 7.8 | 9.7 | 11.9 | 12.8 | 12.5 | 11.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)