

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: P477145

Luminaire Tested: **IFLD-S-SA3D-830-U-T2R**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P477145
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3D-830-U-T2R
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ T2R distribution lens
Light Source: (48) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

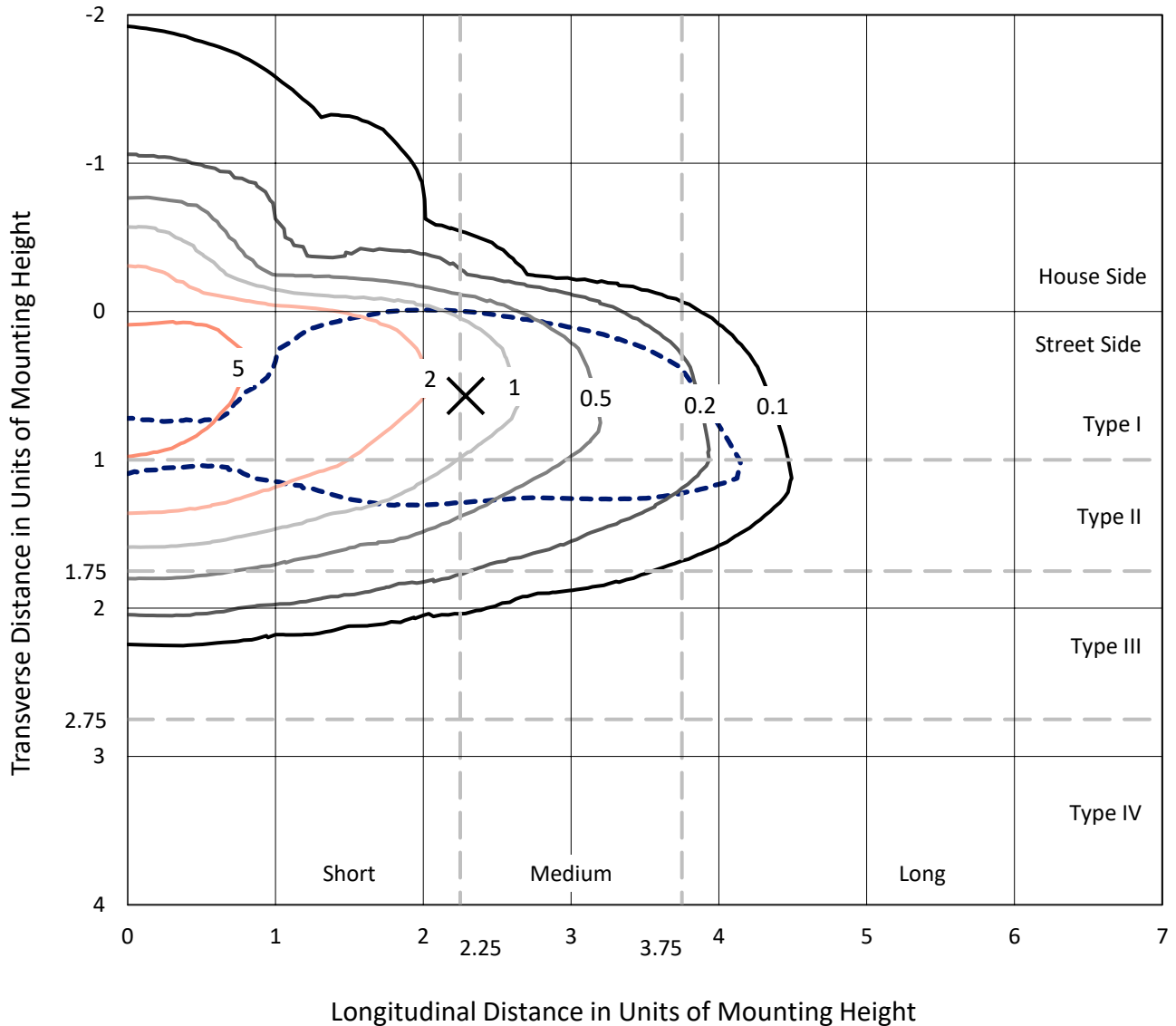
Lumens per Lamp: N/A
Luminaire Lumens: 18623.8 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - U0 - G2

Input Watts (W): 184.1
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: 24 FT

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Iso-Footcandle Lines of Horizontal Illumination

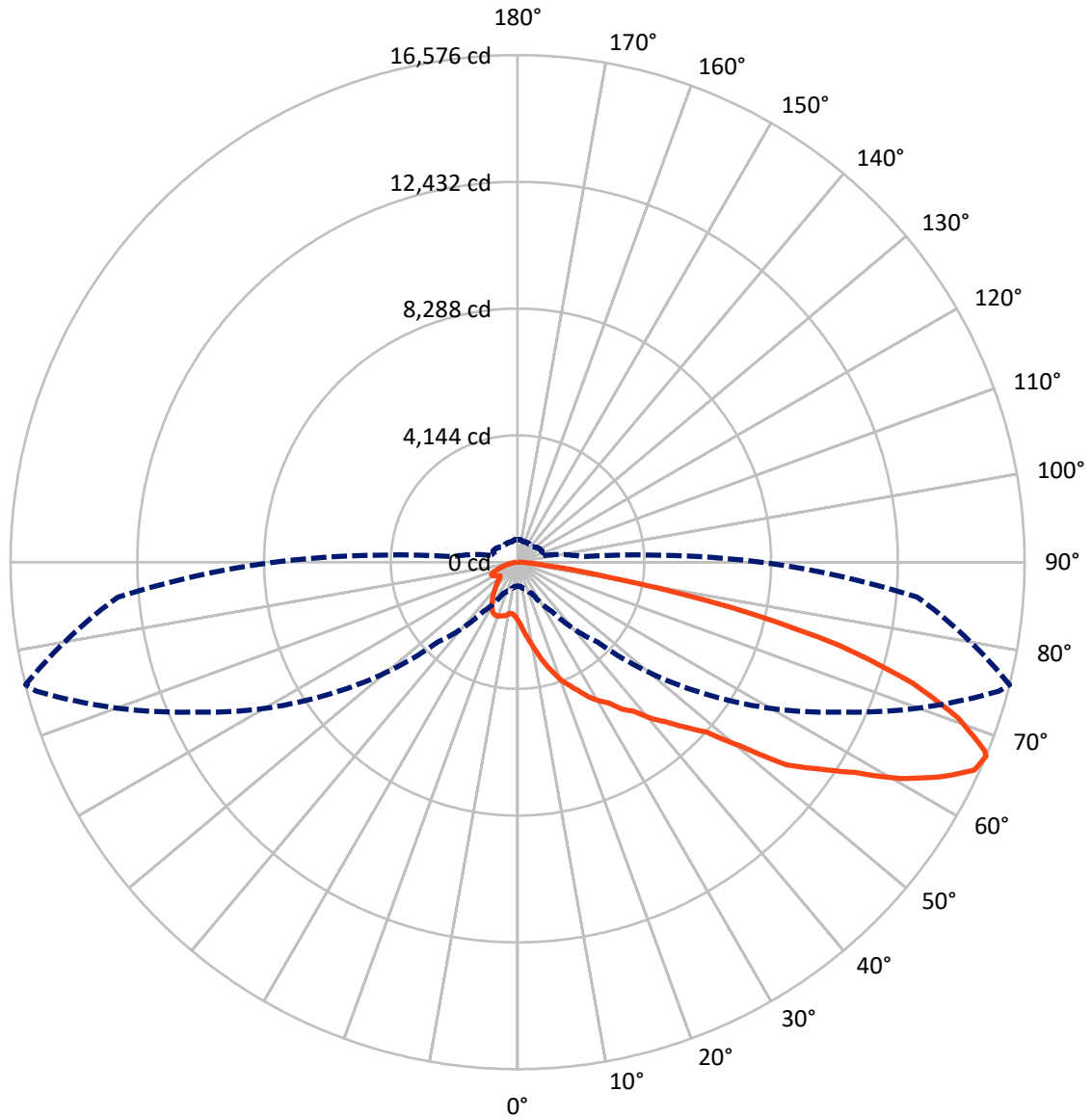
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 76-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 2649.5 | 0.0 | 2649.5 |
| | % Fixture | 14.2 | 0.0 | 14.2 |
| Street Side | Lumens | 15974.4 | 0.0 | 15974.4 |
| | % Fixture | 85.8 | 0.0 | 85.8 |
| Total | Lumens | 18623.8 | 0.0 | 18623.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 220.8 | 1.2 |
| 10°-20° | 828.0 | 4.4 |
| 20°-30° | 1539.3 | 8.3 |
| 30°-40° | 2440.2 | 13.1 |
| 40°-50° | 3375.0 | 18.1 |
| 50°-60° | 4151.5 | 22.3 |
| 60°-70° | 3863.2 | 20.7 |
| 70°-80° | 1938.5 | 10.4 |
| 80°-90° | 267.3 | 1.4 |
| 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° | 18623.8 | 100.0 |
| 0°-180° | 18623.8 | 100.0 |

Coefficient of Utilization



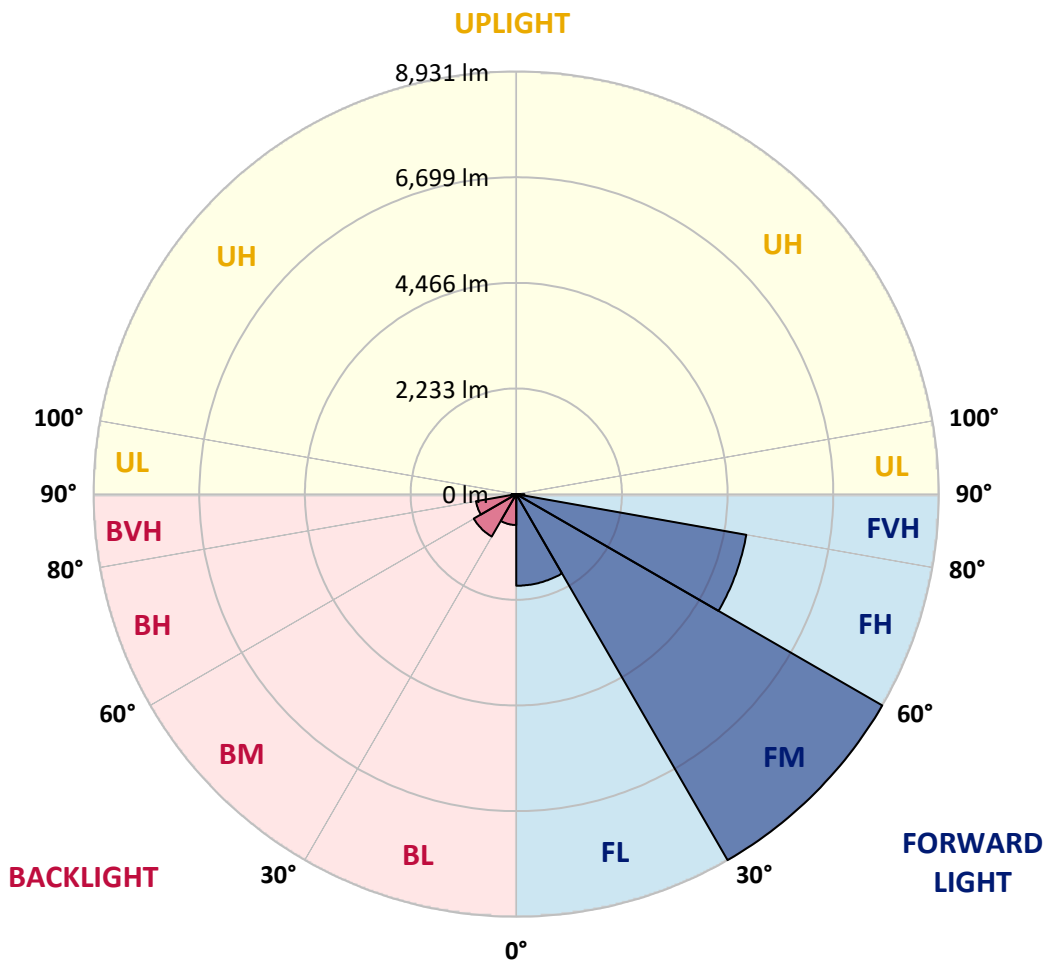
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1935.6 | 10.4 | | | |
| FM (30°-60°) | 8931.4 | 48.0 | | | |
| FH (60°-80°) | 4937.0 | 26.5 | | | G2/5000 |
| FVH (80°-90°) | 170.3 | 0.9 | | | G2/225 |
| BL (0°-30°) | 652.5 | 3.5 | B2/1000 | | |
| BM (30°-60°) | 1035.4 | 5.6 | B2/2500 | | |
| BH (60°-80°) | 864.7 | 4.6 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 97.0 | 0.5 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G2

Type II Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 76° | 85° |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|
| 0° | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 |
| 2.5° | 2644.4 | 2612.6 | 2580.8 | 2512.9 | 2489.5 | 2425.8 | 2309.1 | 2179.6 | 2073.5 | 2058.7 | 1984.4 |
| 5° | 3281.1 | 3234.5 | 3223.8 | 3185.6 | 3064.7 | 2941.6 | 2750.6 | 2542.6 | 2283.6 | 2302.7 | 2048.1 |
| 7.5° | 3758.7 | 3731.1 | 3673.8 | 3637.7 | 3565.5 | 3402.1 | 3204.7 | 2928.8 | 2599.9 | 2536.2 | 2190.3 |
| 10° | 4119.5 | 4081.3 | 4079.1 | 4047.3 | 4009.1 | 3841.4 | 3690.8 | 3319.3 | 2897.0 | 2810.0 | 2364.3 |
| 12.5° | 4302.0 | 4295.6 | 4408.1 | 4408.1 | 4393.3 | 4323.2 | 4064.3 | 3724.7 | 3179.3 | 3149.6 | 2565.9 |
| 15° | 4499.4 | 4446.3 | 4543.9 | 4618.2 | 4656.4 | 4692.5 | 4478.1 | 4119.5 | 3540.1 | 3482.8 | 2782.4 |
| 17.5° | 4499.4 | 4495.1 | 4592.8 | 4715.8 | 4915.3 | 4962.0 | 4845.3 | 4482.4 | 3839.3 | 3796.9 | 3020.1 |
| 20° | 4423.0 | 4484.5 | 4552.4 | 4718.0 | 4934.4 | 5123.3 | 5157.3 | 4853.8 | 4170.4 | 4136.4 | 3289.6 |
| 22.5° | 4779.5 | 4720.1 | 4790.1 | 4853.8 | 5021.5 | 5308.0 | 5401.4 | 5180.6 | 4518.5 | 4389.0 | 3533.7 |
| 25° | 5378.0 | 5337.7 | 5286.8 | 5193.4 | 5263.4 | 5388.6 | 5530.8 | 5422.6 | 4815.6 | 4671.3 | 3769.3 |
| 27.5° | 5961.7 | 5963.8 | 5853.4 | 5649.7 | 5499.0 | 5524.5 | 5692.1 | 5634.8 | 5066.0 | 5002.4 | 3930.6 |
| 30° | 6791.5 | 6740.6 | 6617.5 | 6341.6 | 6046.6 | 5804.6 | 5777.0 | 5832.2 | 5384.4 | 5261.3 | 4161.9 |
| 32.5° | 7413.3 | 7424.0 | 7249.9 | 6853.0 | 6449.8 | 6252.4 | 6010.5 | 6033.8 | 5586.0 | 5494.7 | 4346.6 |
| 35° | 7916.3 | 7903.6 | 7780.5 | 7451.5 | 6974.0 | 6736.3 | 6409.5 | 6275.8 | 6055.0 | 5910.7 | 4628.8 |
| 37.5° | 8459.7 | 8355.7 | 8156.2 | 7784.8 | 7479.1 | 7150.2 | 6831.8 | 6530.5 | 6367.0 | 6193.0 | 4870.8 |
| 40° | 8678.3 | 8678.3 | 8410.8 | 8241.1 | 7878.1 | 7629.8 | 7424.0 | 6865.8 | 6746.9 | 6713.0 | 5180.6 |
| 42.5° | 8523.3 | 8618.8 | 8508.5 | 8315.3 | 8166.8 | 7852.7 | 7797.5 | 7213.8 | 7216.0 | 7148.1 | 5552.1 |
| 45° | 8508.5 | 8376.9 | 8285.6 | 8334.4 | 8264.4 | 8247.4 | 8387.5 | 7695.6 | 7708.4 | 7699.9 | 6050.8 |
| 47.5° | 8081.9 | 8022.5 | 8158.3 | 8238.9 | 8296.2 | 8559.4 | 8962.7 | 8270.8 | 8362.0 | 8298.4 | 6626.0 |
| 50° | 7657.4 | 7646.8 | 7731.7 | 8024.6 | 8272.9 | 8705.9 | 9510.2 | 9157.9 | 9457.2 | 9452.9 | 7668.0 |
| 52.5° | 6494.4 | 6606.9 | 6940.1 | 7559.8 | 8173.1 | 8905.4 | 9924.1 | 10291.2 | 10862.2 | 11017.1 | 8531.8 |
| 55° | 5382.3 | 5322.8 | 5815.2 | 6715.1 | 7738.1 | 8983.9 | 10386.8 | 10972.5 | 11813.0 | 11925.5 | 9419.0 |
| 57.5° | 4187.4 | 4297.7 | 4686.1 | 5549.9 | 6838.2 | 8595.5 | 10726.3 | 11645.3 | 12886.9 | 12973.9 | 10448.3 |
| 60° | 3124.1 | 3138.9 | 3565.5 | 4261.7 | 5641.2 | 7719.0 | 10836.7 | 12335.1 | 14117.8 | 14366.1 | 11526.4 |
| 62.5° | 1965.3 | 2054.4 | 2379.1 | 3064.7 | 4246.8 | 6492.2 | 10342.2 | 12753.2 | 15408.2 | 15474.0 | 12613.1 |
| 65° | 1059.0 | 1116.4 | 1360.4 | 1791.3 | 2967.0 | 4911.1 | 9030.6 | 12502.7 | 16015.2 | 16405.7 | 13097.0 |
| 67° | 783.1 | 793.8 | 906.2 | 1143.9 | 1984.4 | 3697.1 | 7530.1 | 11596.5 | 16291.1 | 16575.5 | 13116.1 |
| 67.5° | 734.3 | 749.2 | 838.3 | 1027.2 | 1759.4 | 3404.2 | 7137.4 | 11273.9 | 16168.0 | 16473.6 | 12967.5 |
| 70° | 628.2 | 632.5 | 653.7 | 706.7 | 986.9 | 2048.1 | 4860.2 | 9238.6 | 14985.9 | 15278.8 | 11925.5 |
| 72.5° | 558.2 | 562.4 | 570.9 | 581.5 | 668.5 | 1184.3 | 2956.4 | 7109.9 | 13024.8 | 13491.7 | 10289.1 |
| 75° | 490.3 | 505.1 | 509.4 | 500.9 | 568.8 | 770.4 | 1572.7 | 5225.2 | 10624.5 | 10851.5 | 8001.2 |
| 77.5° | 416.0 | 422.3 | 430.8 | 439.3 | 507.2 | 575.2 | 755.6 | 3527.3 | 7292.4 | 7154.4 | 4327.5 |
| 80° | 350.2 | 352.3 | 358.7 | 365.0 | 439.3 | 439.3 | 428.7 | 1905.9 | 3185.6 | 3045.6 | 1462.3 |
| 82.5° | 250.4 | 265.3 | 280.1 | 297.1 | 365.0 | 295.0 | 280.1 | 848.9 | 1008.1 | 959.3 | 494.5 |
| 85° | 97.6 | 118.9 | 184.6 | 203.7 | 231.3 | 159.2 | 186.8 | 367.2 | 420.2 | 416.0 | 184.6 |
| 87.5° | 17.0 | 19.1 | 50.9 | 78.5 | 84.9 | 55.2 | 89.1 | 131.6 | 157.1 | 169.8 | 67.9 |
| 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: IFLD-S-SA3D-830-U-T2R

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 | 1905.9 |
| 2.5° | 1922.8 | 1857.1 | 1778.5 | 1700.0 | 1649.1 | 1568.4 | 1562.0 | 1513.2 | 1506.9 | 1489.9 | 1498.4 |
| 5° | 1937.7 | 1859.2 | 1700.0 | 1574.8 | 1517.5 | 1470.8 | 1481.4 | 1460.2 | 1453.8 | 1443.2 | 1426.2 |
| 7.5° | 2054.4 | 1899.5 | 1661.8 | 1553.6 | 1511.1 | 1489.9 | 1489.9 | 1464.4 | 1445.3 | 1458.1 | 1470.8 |
| 10° | 2130.8 | 1918.6 | 1691.5 | 1583.3 | 1549.3 | 1502.6 | 1519.6 | 1487.8 | 1498.4 | 1472.9 | 1472.9 |
| 12.5° | 2253.9 | 2026.8 | 1753.1 | 1627.8 | 1572.7 | 1530.2 | 1547.2 | 1511.1 | 1502.6 | 1504.7 | 1498.4 |
| 15° | 2419.5 | 2099.0 | 1780.6 | 1653.3 | 1615.1 | 1562.0 | 1549.3 | 1517.5 | 1485.6 | 1475.0 | 1487.8 |
| 17.5° | 2574.4 | 2188.1 | 1799.7 | 1668.2 | 1606.6 | 1547.2 | 1532.3 | 1492.0 | 1481.4 | 1449.6 | 1424.1 |
| 20° | 2759.0 | 2294.3 | 1825.2 | 1680.9 | 1574.8 | 1515.4 | 1477.2 | 1436.8 | 1400.7 | 1381.6 | 1390.1 |
| 22.5° | 2882.1 | 2349.4 | 1837.9 | 1655.4 | 1528.1 | 1472.9 | 1392.3 | 1364.7 | 1313.7 | 1292.5 | 1275.5 |
| 25° | 3083.8 | 2417.3 | 1806.1 | 1585.4 | 1445.3 | 1356.2 | 1284.0 | 1245.8 | 1209.7 | 1182.1 | 1173.7 |
| 27.5° | 3134.7 | 2468.3 | 1731.8 | 1466.5 | 1313.7 | 1220.3 | 1158.8 | 1112.1 | 1088.8 | 1046.3 | 1037.8 |
| 30° | 3283.3 | 2417.3 | 1621.5 | 1322.2 | 1188.5 | 1093.0 | 1031.5 | 997.5 | 942.3 | 931.7 | 908.4 |
| 32.5° | 3378.8 | 2432.2 | 1481.4 | 1182.1 | 1044.2 | 959.3 | 919.0 | 885.0 | 870.2 | 819.2 | 806.5 |
| 35° | 3537.9 | 2381.3 | 1339.2 | 1052.7 | 925.3 | 859.5 | 825.6 | 815.0 | 766.2 | 742.8 | 721.6 |
| 37.5° | 3639.8 | 2351.6 | 1197.0 | 906.2 | 795.9 | 768.3 | 778.9 | 734.3 | 674.9 | 630.3 | 615.5 |
| 40° | 3818.1 | 2340.9 | 1035.7 | 785.3 | 706.7 | 700.4 | 734.3 | 649.4 | 541.2 | 503.0 | 481.8 |
| 42.5° | 4074.9 | 2268.8 | 910.5 | 677.0 | 636.7 | 664.3 | 670.7 | 541.2 | 479.6 | 447.8 | 433.0 |
| 45° | 4321.1 | 2283.6 | 787.4 | 560.3 | 553.9 | 594.3 | 579.4 | 458.4 | 422.3 | 399.0 | 411.7 |
| 47.5° | 4794.4 | 2357.9 | 666.4 | 466.9 | 498.8 | 537.0 | 449.9 | 409.6 | 375.7 | 358.7 | 360.8 |
| 50° | 5526.6 | 2430.1 | 560.3 | 426.6 | 471.2 | 486.0 | 386.3 | 371.4 | 369.3 | 335.3 | 333.2 |
| 52.5° | 5965.9 | 2402.5 | 541.2 | 477.5 | 505.1 | 486.0 | 420.2 | 409.6 | 392.6 | 377.8 | 360.8 |
| 55° | 6664.2 | 2483.1 | 581.5 | 558.2 | 573.0 | 466.9 | 471.2 | 466.9 | 454.2 | 416.0 | 426.6 |
| 57.5° | 7220.2 | 2536.2 | 634.6 | 624.0 | 615.5 | 486.0 | 492.4 | 494.5 | 486.0 | 469.0 | 483.9 |
| 60° | 7984.3 | 2642.3 | 689.8 | 691.9 | 694.0 | 528.5 | 539.1 | 551.8 | 549.7 | 543.3 | 547.6 |
| 62.5° | 8453.3 | 2593.5 | 751.3 | 785.3 | 774.7 | 615.5 | 613.4 | 621.8 | 621.8 | 632.5 | 638.8 |
| 65° | 8383.3 | 2413.1 | 783.1 | 868.0 | 812.9 | 679.2 | 679.2 | 683.4 | 685.5 | 706.7 | 708.9 |
| 67° | 7963.0 | 2090.5 | 766.2 | 880.8 | 812.9 | 704.6 | 704.6 | 708.9 | 694.0 | 749.2 | 732.2 |
| 67.5° | 7767.8 | 1995.0 | 751.3 | 870.2 | 806.5 | 702.5 | 702.5 | 704.6 | 691.9 | 744.9 | 728.0 |
| 70° | 6755.4 | 1481.4 | 647.3 | 770.4 | 747.1 | 683.4 | 683.4 | 670.7 | 660.0 | 730.1 | 715.2 |
| 72.5° | 5766.4 | 1076.0 | 520.0 | 655.8 | 674.9 | 657.9 | 662.2 | 630.3 | 600.6 | 649.4 | 636.7 |
| 75° | 4416.6 | 791.6 | 405.4 | 505.1 | 570.9 | 615.5 | 643.1 | 562.4 | 524.2 | 537.0 | 513.6 |
| 77.5° | 2464.0 | 515.7 | 320.5 | 373.5 | 435.1 | 573.0 | 617.6 | 507.2 | 428.7 | 413.9 | 413.9 |
| 80° | 836.2 | 301.4 | 235.6 | 278.0 | 299.3 | 507.2 | 577.3 | 411.7 | 337.5 | 322.6 | 312.0 |
| 82.5° | 316.2 | 184.6 | 161.3 | 191.0 | 191.0 | 401.1 | 471.2 | 316.2 | 254.7 | 329.0 | 335.3 |
| 85° | 144.3 | 110.4 | 106.1 | 110.4 | 110.4 | 246.2 | 333.2 | 205.9 | 229.2 | 197.4 | 174.0 |
| 87.5° | 57.3 | 53.1 | 48.8 | 46.7 | 38.2 | 42.4 | 114.6 | 55.2 | 104.0 | 27.6 | 25.5 |
| 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)