

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: P476737

Luminaire Tested: **IFLD-M-SA4E-827-U-T2**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P476737
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-827-U-T2
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ T2 distribution lens
Light Source: (64) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

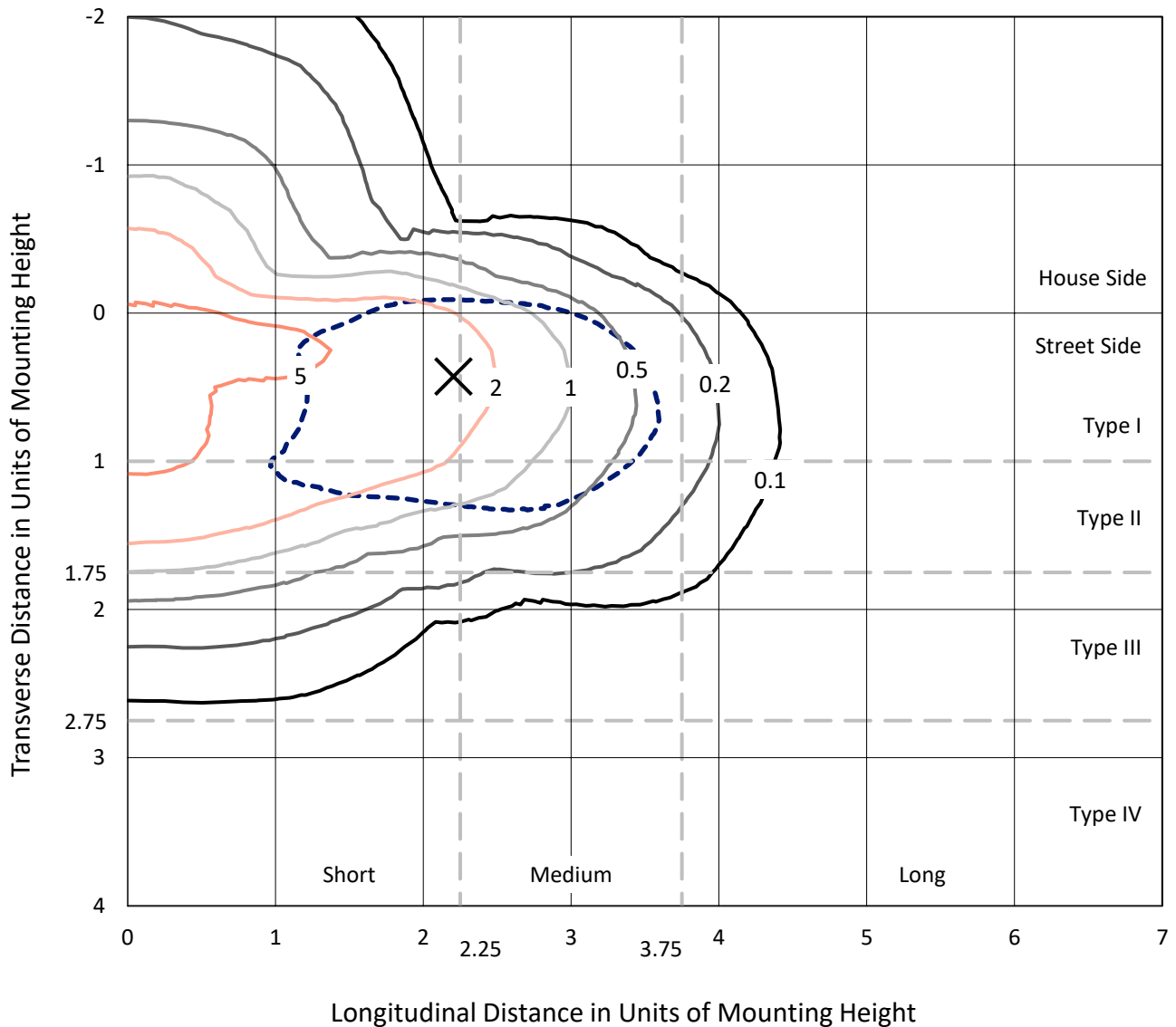
Lumens per Lamp: N/A
Luminaire Lumens: 26581.9 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 314.8
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

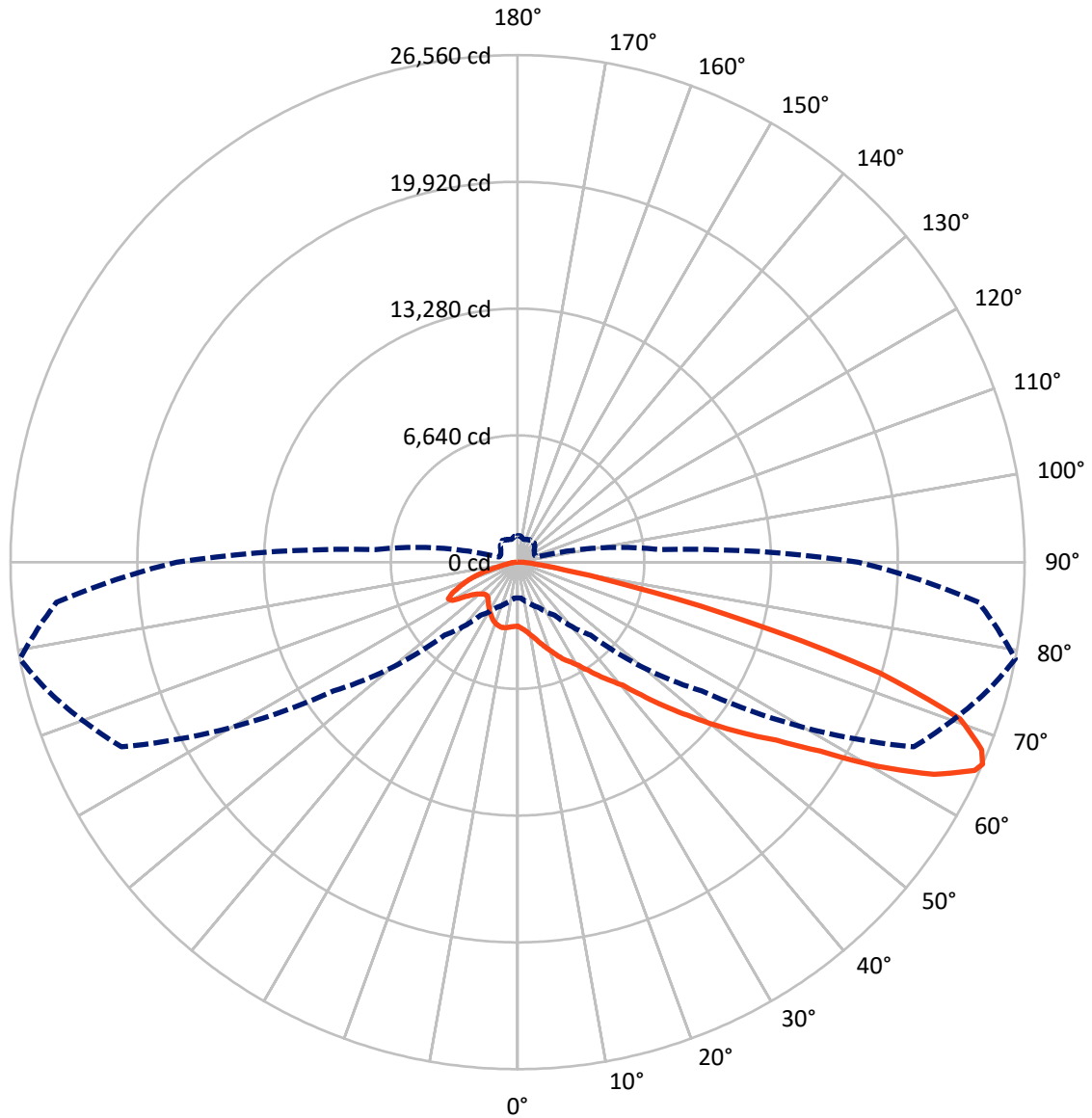
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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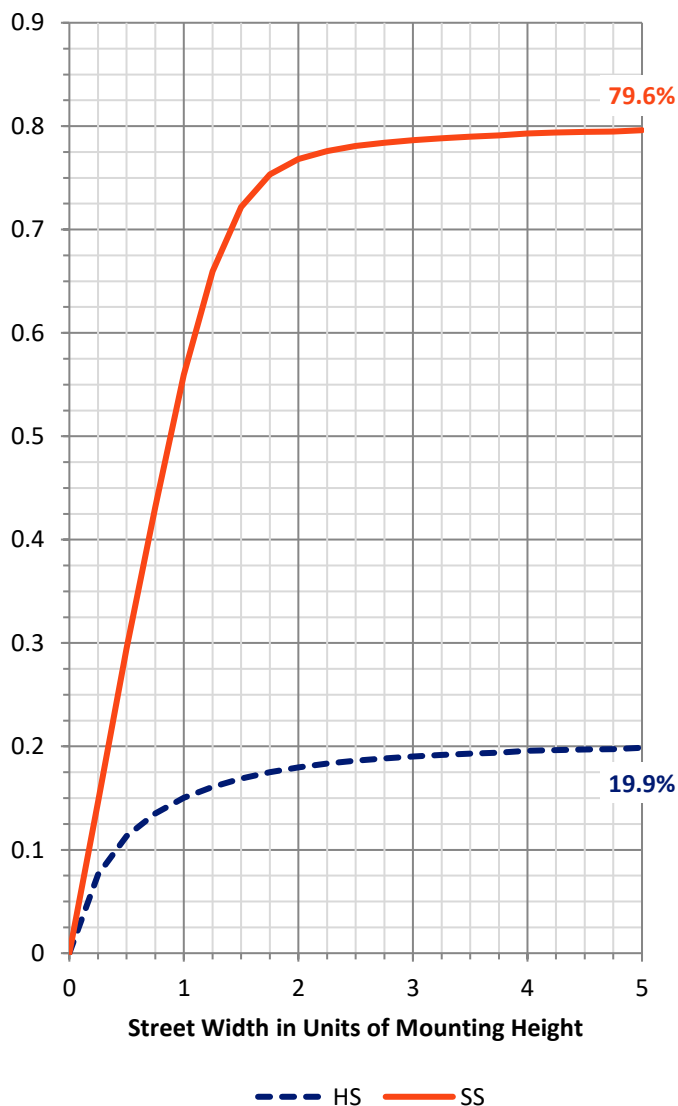
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 5367.8 | 0.0 | 5367.8 |
| | % Fixture | 20.2 | 0.0 | 20.2 |
| Street Side | Lumens | 21214.0 | 0.0 | 21214.0 |
| | % Fixture | 79.8 | 0.0 | 79.8 |
| Total | Lumens | 26581.9 | 0.0 | 26581.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 330.0 | 1.2 |
| 10°-20° | 1019.2 | 3.8 |
| 20°-30° | 1749.5 | 6.6 |
| 30°-40° | 2702.5 | 10.2 |
| 40°-50° | 4328.8 | 16.3 |
| 50°-60° | 6463.2 | 24.3 |
| 60°-70° | 6640.9 | 25.0 |
| 70°-80° | 2943.8 | 11.1 |
| 80°-90° | 403.9 | 1.5 |
| 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° | 26581.9 | 100.0 |
| 0°-180° | 26581.9 | 100.0 |

Coefficient of Utilization



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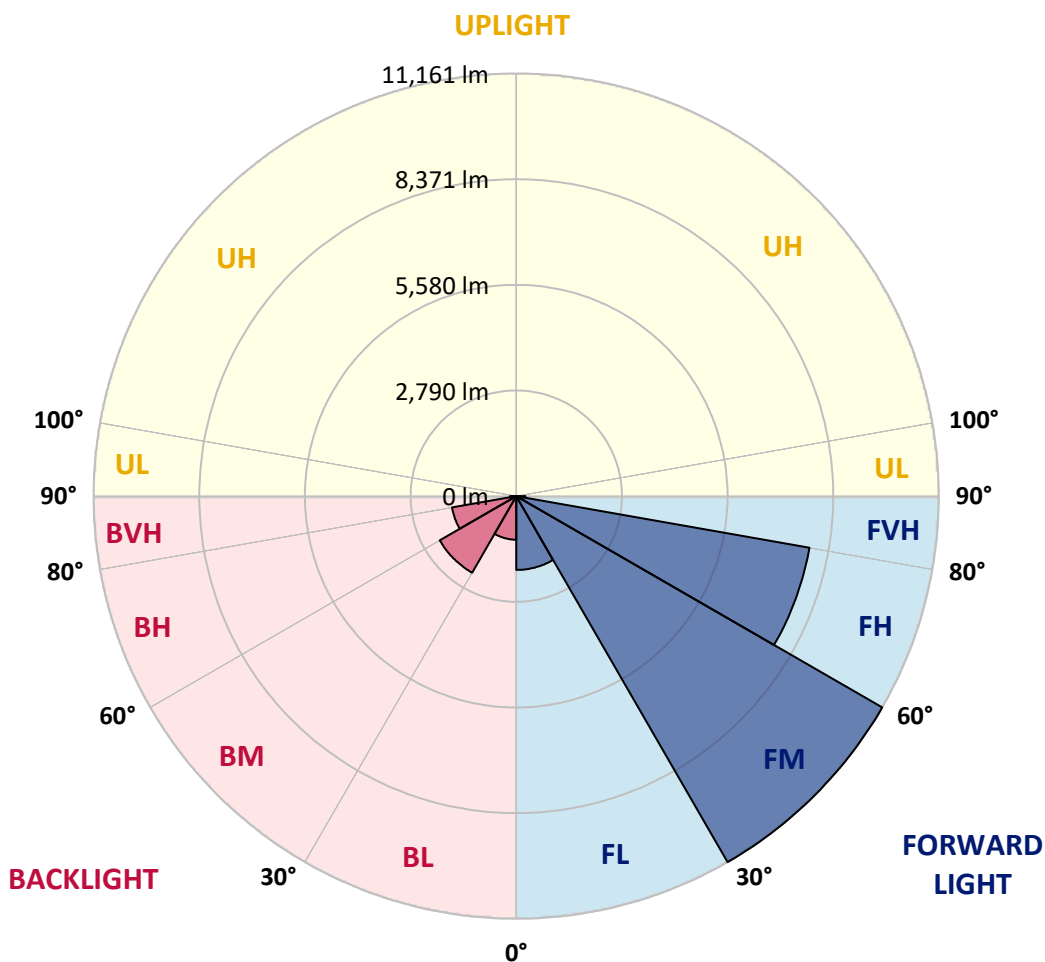
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1948.6 | 7.3 | | | |
| FM (30°-60°) | 11160.8 | 42.0 | | | |
| FH (60°-80°) | 7862.3 | 29.6 | | | G4/12000 |
| FVH (80°-90°) | 242.3 | 0.9 | | | G3/500 |
| BL (0°-30°) | 1150.1 | 4.3 | B3/2500 | | |
| BM (30°-60°) | 2333.7 | 8.8 | B2/2500 | | |
| BH (60°-80°) | 1722.4 | 6.5 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 161.7 | 0.6 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 79° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 |
| 2.5° | 3570.0 | 3572.9 | 3572.9 | 3561.2 | 3564.1 | 3572.9 | 3540.8 | 3470.6 | 3470.6 | 3458.9 | 3438.4 |
| 5° | 3789.3 | 3774.7 | 3754.2 | 3757.1 | 3745.4 | 3745.4 | 3710.3 | 3643.1 | 3584.6 | 3561.2 | 3499.8 |
| 7.5° | 3818.5 | 3833.1 | 3830.2 | 3865.3 | 3882.8 | 3882.8 | 3900.4 | 3844.8 | 3757.1 | 3701.6 | 3640.2 |
| 10° | 3877.0 | 3839.0 | 3836.1 | 3917.9 | 3944.2 | 4005.6 | 4075.8 | 4046.6 | 3973.5 | 3894.5 | 3812.7 |
| 12.5° | 3912.1 | 3935.5 | 3935.5 | 3976.4 | 4037.8 | 4128.4 | 4251.2 | 4306.8 | 4192.8 | 4110.9 | 3985.2 |
| 15° | 3964.7 | 3932.5 | 4026.1 | 4061.2 | 4178.1 | 4242.5 | 4417.9 | 4561.2 | 4485.2 | 4385.7 | 4186.9 |
| 17.5° | 3988.1 | 3967.6 | 4020.3 | 4084.6 | 4283.4 | 4379.9 | 4593.3 | 4792.2 | 4727.8 | 4663.5 | 4458.8 |
| 20° | 4108.0 | 4105.1 | 4128.4 | 4181.1 | 4324.3 | 4514.4 | 4780.5 | 5055.3 | 5078.7 | 4961.7 | 4684.0 |
| 22.5° | 4400.4 | 4362.3 | 4362.3 | 4341.9 | 4403.3 | 4599.2 | 4958.8 | 5338.9 | 5444.2 | 5306.7 | 4938.3 |
| 25° | 4669.4 | 4722.0 | 4689.8 | 4596.3 | 4572.9 | 4675.2 | 5087.5 | 5640.1 | 5780.4 | 5651.8 | 5283.4 |
| 27.5° | 5014.4 | 5031.9 | 5087.5 | 4961.7 | 4800.9 | 4833.1 | 5227.8 | 5809.6 | 6099.1 | 5926.6 | 5479.3 |
| 30° | 5511.4 | 5479.3 | 5467.6 | 5327.2 | 5116.7 | 5072.8 | 5388.6 | 6058.2 | 6517.2 | 6274.5 | 5710.2 |
| 32.5° | 5847.7 | 5926.6 | 5923.7 | 5730.7 | 5476.3 | 5379.8 | 5587.4 | 6292.1 | 6964.6 | 6739.4 | 6137.1 |
| 35° | 6514.3 | 6596.2 | 6531.8 | 6248.2 | 5950.0 | 5757.0 | 5874.0 | 6596.2 | 7476.2 | 7300.8 | 6499.7 |
| 37.5° | 7365.1 | 7558.1 | 7420.7 | 6897.3 | 6476.3 | 6265.8 | 6271.6 | 6926.5 | 7999.6 | 7856.3 | 6888.5 |
| 40° | 7952.8 | 8213.0 | 8023.0 | 7531.8 | 7084.4 | 6885.6 | 6806.7 | 7318.3 | 8625.3 | 8473.3 | 7496.7 |
| 42.5° | 8680.8 | 8897.2 | 8797.8 | 8312.4 | 7789.1 | 7619.5 | 7461.6 | 7973.3 | 9581.4 | 9511.2 | 8277.4 |
| 45° | 9476.1 | 9578.5 | 9546.3 | 9239.3 | 8657.5 | 8599.0 | 8251.0 | 8835.8 | 10707.1 | 10736.3 | 9253.9 |
| 47.5° | 10215.9 | 10271.4 | 10332.8 | 10110.6 | 9748.0 | 9797.7 | 9160.3 | 9759.7 | 11800.6 | 11993.5 | 10341.6 |
| 50° | 10405.9 | 10595.9 | 10739.2 | 10888.3 | 10967.3 | 11303.5 | 10163.2 | 10894.2 | 13057.8 | 13432.1 | 11552.0 |
| 52.5° | 10212.9 | 10198.3 | 10634.0 | 11101.8 | 11891.2 | 12595.8 | 11528.6 | 12303.5 | 14168.9 | 14908.6 | 12660.2 |
| 55° | 9335.8 | 9306.5 | 10008.3 | 10628.1 | 12169.0 | 13315.1 | 13478.8 | 14180.6 | 15510.9 | 16472.8 | 14160.1 |
| 57.5° | 7800.8 | 7619.5 | 8385.5 | 9403.0 | 11566.7 | 13394.1 | 15437.8 | 16967.0 | 17575.1 | 18671.6 | 16449.5 |
| 60° | 5242.4 | 5166.4 | 5900.3 | 7113.7 | 9391.3 | 12274.2 | 16610.3 | 20455.1 | 20484.3 | 21718.2 | 20001.9 |
| 62.5° | 3227.9 | 3242.5 | 3713.3 | 4622.6 | 6575.7 | 9730.5 | 16104.4 | 23241.5 | 23247.3 | 24484.1 | 22925.7 |
| 65° | 2111.0 | 2119.8 | 2499.9 | 3002.8 | 4108.0 | 6599.1 | 13318.0 | 23460.8 | 25168.3 | 26317.4 | 24264.8 |
| 66° | 1880.0 | 1882.9 | 2210.4 | 2619.7 | 3403.3 | 5400.3 | 11762.6 | 22890.6 | 25601.0 | 26560.0 | 24247.3 |
| 67.5° | 1584.7 | 1622.7 | 1885.9 | 2201.6 | 2654.8 | 3879.9 | 9332.9 | 21241.6 | 25378.8 | 26220.9 | 23697.6 |
| 70° | 1239.7 | 1260.2 | 1467.8 | 1789.4 | 1991.1 | 2245.5 | 5546.5 | 17314.9 | 23229.8 | 24595.2 | 21697.7 |
| 72.5° | 994.1 | 1011.6 | 1169.5 | 1453.1 | 1616.9 | 1479.5 | 3020.3 | 12563.7 | 18349.9 | 19806.0 | 17066.4 |
| 75° | 839.1 | 842.1 | 918.1 | 1143.2 | 1330.3 | 1111.1 | 1608.1 | 8063.9 | 11774.3 | 12452.6 | 10455.6 |
| 77.5° | 678.3 | 690.0 | 742.7 | 871.3 | 1070.1 | 874.2 | 959.0 | 4517.3 | 5912.0 | 5961.7 | 4833.1 |
| 80° | 552.6 | 558.5 | 590.6 | 634.5 | 815.7 | 646.2 | 649.1 | 2204.6 | 2535.0 | 2476.5 | 1964.8 |
| 82.5° | 435.7 | 441.5 | 479.5 | 470.7 | 599.4 | 462.0 | 403.5 | 1061.3 | 1166.6 | 1143.2 | 903.5 |
| 85° | 245.6 | 245.6 | 377.2 | 377.2 | 380.1 | 292.4 | 245.6 | 500.0 | 616.9 | 576.0 | 424.0 |
| 87.5° | 78.9 | 81.9 | 114.0 | 119.9 | 190.0 | 131.6 | 119.9 | 187.1 | 292.4 | 257.3 | 152.0 |
| 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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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 | 3356.6 |
| 2.5° | 3426.7 | 3379.9 | 3359.5 | 3292.2 | 3274.7 | 3230.8 | 3210.4 | 3184.0 | 3175.3 | 3137.3 | 3172.4 |
| 5° | 3453.0 | 3438.4 | 3356.6 | 3271.8 | 3207.4 | 3178.2 | 3134.3 | 3075.9 | 3070.0 | 3017.4 | 3011.5 |
| 7.5° | 3564.1 | 3514.4 | 3371.2 | 3280.5 | 3151.9 | 3078.8 | 2982.3 | 2953.1 | 2915.1 | 2897.5 | 2935.5 |
| 10° | 3736.7 | 3610.9 | 3397.5 | 3169.4 | 3011.5 | 2923.8 | 2853.7 | 2833.2 | 2836.1 | 2824.4 | 2806.9 |
| 12.5° | 3859.5 | 3739.6 | 3353.6 | 3075.9 | 2871.2 | 2786.4 | 2780.6 | 2801.0 | 2833.2 | 2818.6 | 2839.0 |
| 15° | 4034.9 | 3809.7 | 3321.5 | 2920.9 | 2757.2 | 2733.8 | 2730.9 | 2792.3 | 2789.3 | 2789.3 | 2786.4 |
| 17.5° | 4198.6 | 3879.9 | 3204.5 | 2786.4 | 2637.3 | 2654.8 | 2675.3 | 2672.4 | 2701.6 | 2713.3 | 2733.8 |
| 20° | 4406.2 | 3961.8 | 3040.8 | 2651.9 | 2546.7 | 2540.8 | 2537.9 | 2540.8 | 2570.0 | 2587.6 | 2573.0 |
| 22.5° | 4587.5 | 3979.3 | 2903.4 | 2523.3 | 2438.5 | 2415.1 | 2377.1 | 2415.1 | 2400.5 | 2406.3 | 2423.9 |
| 25° | 4745.4 | 3982.3 | 2707.5 | 2426.8 | 2330.3 | 2277.7 | 2248.4 | 2245.5 | 2219.2 | 2216.3 | 2216.3 |
| 27.5° | 4876.9 | 3882.8 | 2535.0 | 2292.3 | 2201.6 | 2151.9 | 2149.0 | 2116.9 | 2049.6 | 2005.7 | 2011.6 |
| 30° | 4979.3 | 3806.8 | 2415.1 | 2175.3 | 2087.6 | 2078.8 | 2052.5 | 1979.4 | 1891.7 | 1836.2 | 1836.2 |
| 32.5° | 5160.6 | 3654.8 | 2251.3 | 2055.5 | 2011.6 | 1999.9 | 1938.5 | 1874.2 | 1792.3 | 1739.7 | 1730.9 |
| 35° | 5295.1 | 3514.4 | 2143.2 | 1953.1 | 1932.6 | 1909.3 | 1856.6 | 1786.5 | 1763.1 | 1751.4 | 1760.1 |
| 37.5° | 5447.1 | 3356.6 | 2011.6 | 1865.4 | 1885.9 | 1842.0 | 1780.6 | 1748.4 | 1830.3 | 1809.8 | 1818.6 |
| 40° | 5689.8 | 3245.4 | 1882.9 | 1812.8 | 1833.2 | 1783.5 | 1704.6 | 1692.9 | 1795.2 | 1722.1 | 1704.6 |
| 42.5° | 6134.2 | 3242.5 | 1804.0 | 1733.8 | 1748.4 | 1710.4 | 1640.3 | 1634.4 | 1675.4 | 1587.6 | 1561.3 |
| 45° | 6686.8 | 3344.9 | 1745.5 | 1675.4 | 1663.7 | 1657.8 | 1634.4 | 1608.1 | 1573.0 | 1459.0 | 1429.8 |
| 47.5° | 7347.6 | 3511.5 | 1733.8 | 1587.6 | 1602.3 | 1652.0 | 1622.7 | 1555.5 | 1464.8 | 1391.7 | 1377.1 |
| 50° | 8148.7 | 3856.5 | 1704.6 | 1523.3 | 1549.6 | 1628.6 | 1605.2 | 1511.6 | 1429.8 | 1383.0 | 1374.2 |
| 52.5° | 9034.6 | 4292.2 | 1666.6 | 1423.9 | 1482.4 | 1608.1 | 1619.8 | 1532.1 | 1412.2 | 1371.3 | 1365.4 |
| 55° | 10078.4 | 4935.4 | 1622.7 | 1315.7 | 1403.4 | 1587.6 | 1619.8 | 1473.6 | 1388.8 | 1388.8 | 1383.0 |
| 57.5° | 12139.7 | 6093.3 | 1532.1 | 1216.3 | 1333.3 | 1549.6 | 1573.0 | 1476.5 | 1391.7 | 1391.7 | 1380.0 |
| 60° | 15163.0 | 7900.2 | 1359.6 | 1140.3 | 1266.0 | 1497.0 | 1537.9 | 1432.7 | 1359.6 | 1377.1 | 1374.2 |
| 62.5° | 17528.3 | 8449.9 | 1213.4 | 1067.2 | 1198.8 | 1400.5 | 1491.2 | 1385.9 | 1321.6 | 1385.9 | 1391.7 |
| 65° | 18034.2 | 7894.3 | 1064.3 | 988.3 | 1105.2 | 1307.0 | 1423.9 | 1318.6 | 1266.0 | 1391.7 | 1397.6 |
| 66° | 17852.9 | 7461.6 | 1011.6 | 964.9 | 1064.3 | 1260.2 | 1383.0 | 1295.3 | 1236.8 | 1385.9 | 1388.8 |
| 67.5° | 17045.9 | 6812.5 | 953.2 | 915.2 | 1008.7 | 1192.9 | 1336.2 | 1263.1 | 1190.0 | 1368.4 | 1342.0 |
| 70° | 15291.6 | 5777.5 | 853.8 | 827.4 | 929.8 | 1081.8 | 1228.0 | 1181.2 | 1116.9 | 1260.2 | 1213.4 |
| 72.5° | 11777.2 | 4616.7 | 748.5 | 751.4 | 839.1 | 967.8 | 1119.8 | 1087.7 | 1032.1 | 1105.2 | 1076.0 |
| 75° | 7172.1 | 2950.1 | 652.0 | 657.9 | 731.0 | 859.6 | 1017.5 | 994.1 | 926.9 | 967.8 | 953.2 |
| 77.5° | 3178.2 | 1461.9 | 549.7 | 561.4 | 619.9 | 757.3 | 885.9 | 847.9 | 777.7 | 786.5 | 780.7 |
| 80° | 1233.9 | 692.9 | 447.3 | 462.0 | 500.0 | 605.2 | 733.9 | 698.8 | 637.4 | 625.7 | 619.9 |
| 82.5° | 593.5 | 385.9 | 345.0 | 350.9 | 365.5 | 482.4 | 631.5 | 587.7 | 505.8 | 453.2 | 453.2 |
| 85° | 298.2 | 239.8 | 242.7 | 222.2 | 242.7 | 327.5 | 426.9 | 356.7 | 295.3 | 263.1 | 269.0 |
| 87.5° | 119.9 | 119.9 | 119.9 | 102.3 | 108.2 | 155.0 | 198.8 | 134.5 | 122.8 | 73.1 | 73.1 |
| 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)