

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: P478277

Luminaire Tested: **IFLD-S-SA3E-827-U-T4FT**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P478277
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-S-SA3E-827-U-T4FT
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ T4FT distribution lens
Light Source: (48) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

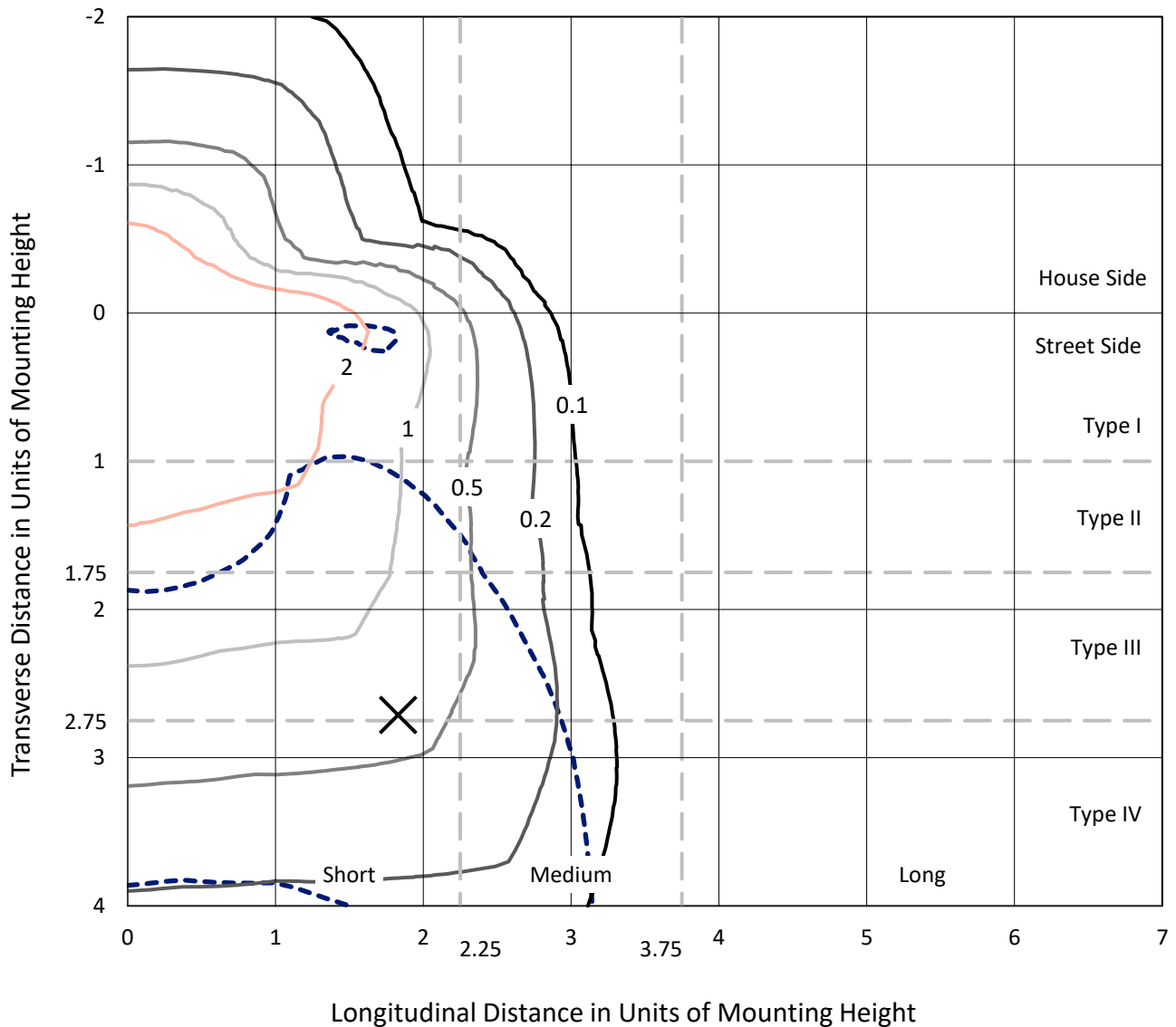
Lumens per Lamp: N/A
Luminaire Lumens: 20313.7 lumens
Efficiency: N/A
Efficacy: 87.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 232.1
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

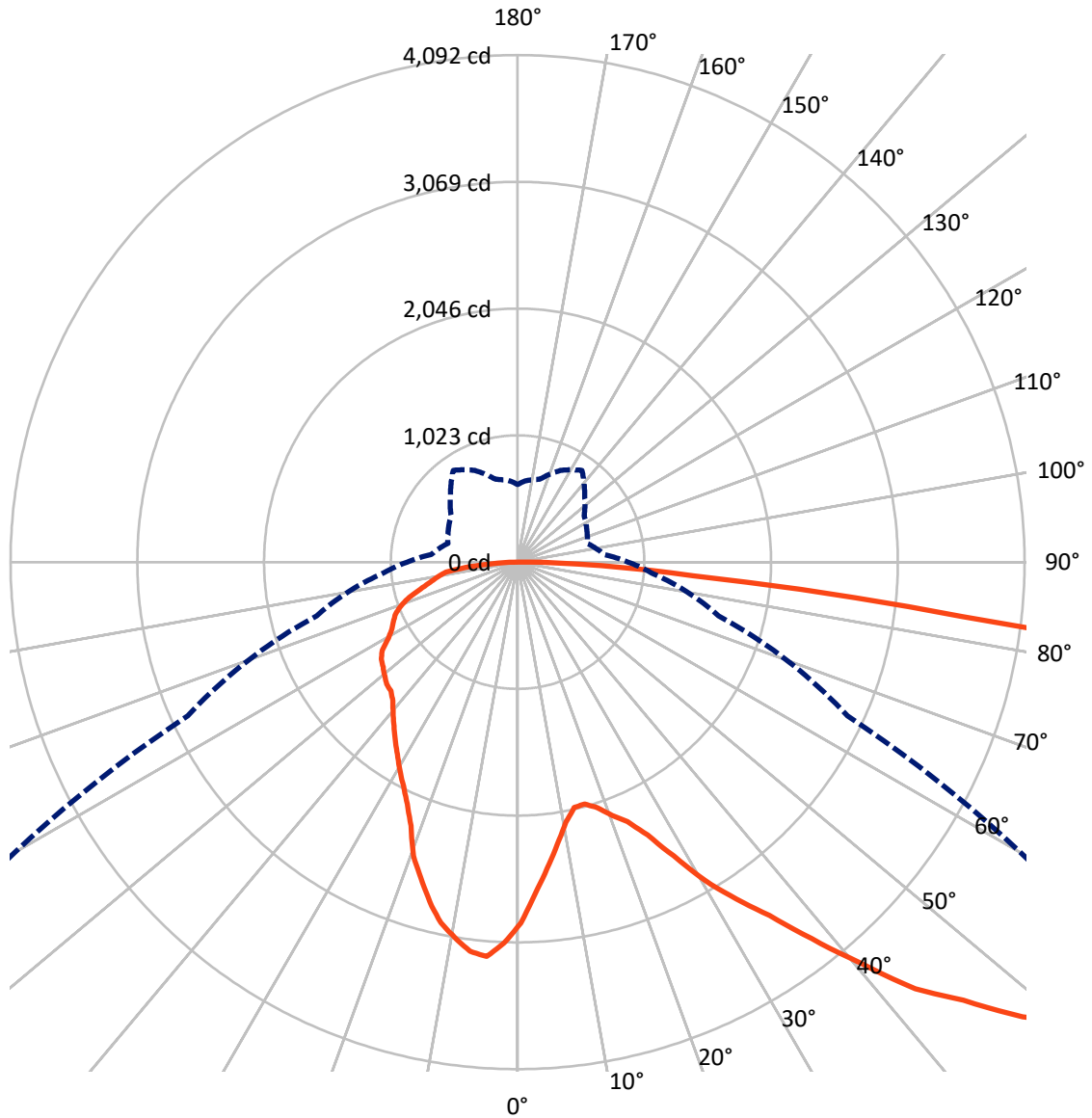
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 73-Deg Vertical

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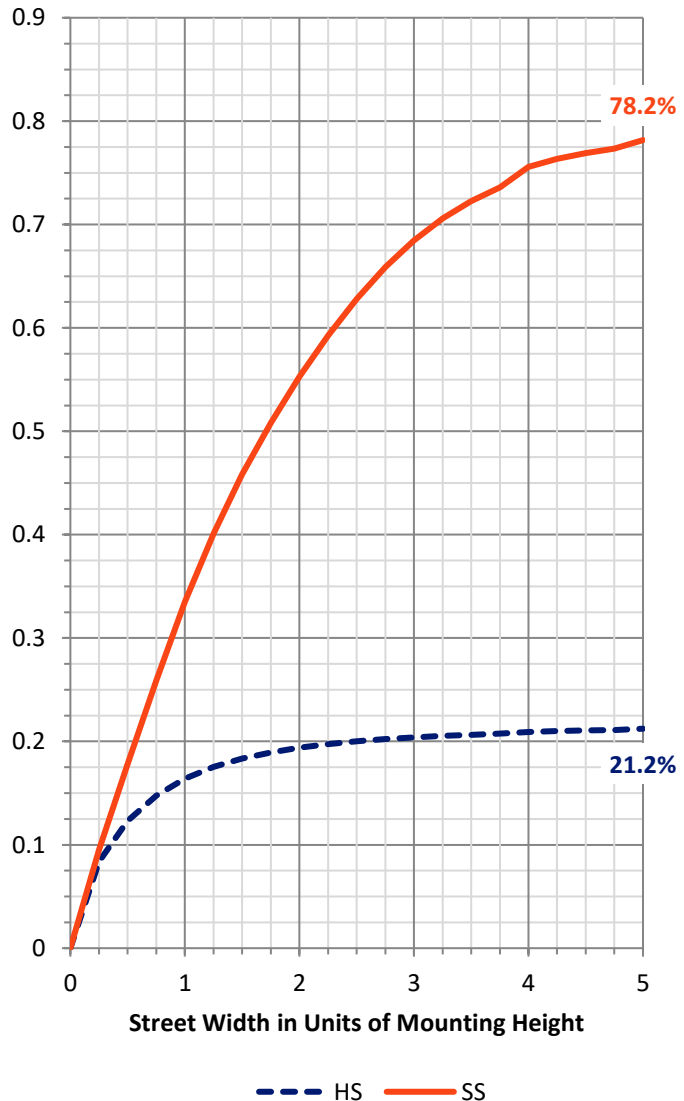
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4388.0 | 0.0 | 4388.0 |
| | % Fixture | 21.6 | 0.0 | 21.6 |
| Street Side | Lumens | 15925.7 | 0.0 | 15925.7 |
| | % Fixture | 78.4 | 0.0 | 78.4 |
| Total | Lumens | 20313.7 | 0.0 | 20313.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 268.8 | 1.3 |
| 10°-20° | 752.2 | 3.7 |
| 20°-30° | 1238.1 | 6.1 |
| 30°-40° | 1851.5 | 9.1 |
| 40°-50° | 2744.8 | 13.5 |
| 50°-60° | 3955.5 | 19.5 |
| 60°-70° | 5047.8 | 24.8 |
| 70°-80° | 3928.0 | 19.3 |
| 80°-90° | 527.0 | 2.6 |
| 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° | 20313.7 | 100.0 |
| 0°-180° | 20313.7 | 100.0 |

Coefficient of Utilization



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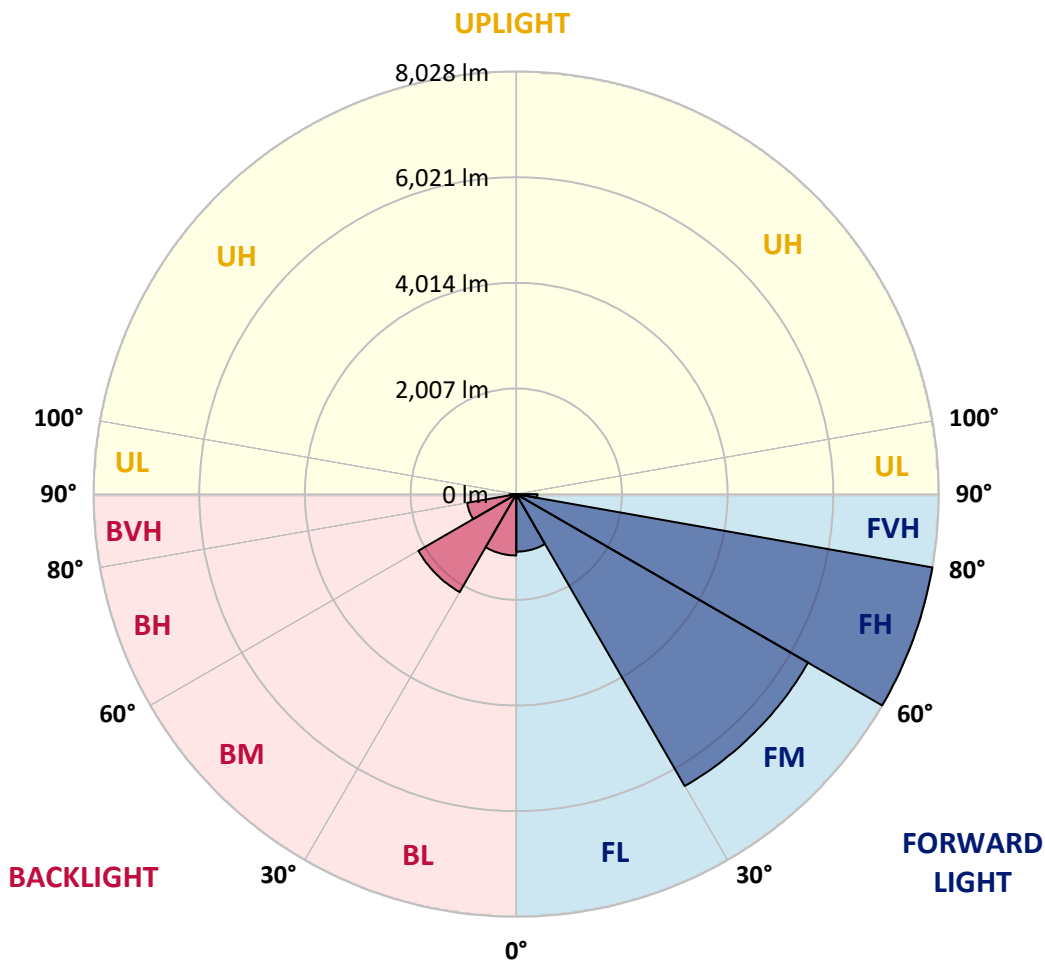
CATALOG NUMBER: IFLD-S-SA3E-827-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1093.2 | 5.4 | | | |
| FM (30°-60°) | 6403.0 | 31.5 | | | |
| FH (60°-80°) | 8028.4 | 39.5 | | | G4/12000 |
| FVH (80°-90°) | 401.1 | 2.0 | | | G3/500 |
| BL (0°-30°) | 1165.9 | 5.7 | B3/2500 | | |
| BM (30°-60°) | 2148.8 | 10.6 | B2/2500 | | |
| BH (60°-80°) | 947.5 | 4.7 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 125.9 | 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 IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 34° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|
| 0° | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 |
| 2.5° | 2609.5 | 2618.1 | 2646.0 | 2652.4 | 2682.5 | 2665.3 | 2701.8 | 2766.2 | 2802.8 | 2856.5 | 2920.9 |
| 5° | 2403.3 | 2366.8 | 2384.0 | 2450.5 | 2484.9 | 2493.5 | 2532.1 | 2641.7 | 2710.4 | 2789.9 | 2910.1 |
| 7.5° | 2160.6 | 2154.2 | 2188.5 | 2231.5 | 2300.2 | 2306.6 | 2392.5 | 2489.2 | 2630.9 | 2807.1 | 2948.8 |
| 10° | 1995.2 | 2023.1 | 2042.5 | 2087.6 | 2134.8 | 2134.8 | 2244.4 | 2411.9 | 2573.0 | 2742.6 | 2957.4 |
| 12.5° | 1986.6 | 1969.4 | 1973.7 | 1997.4 | 2031.7 | 2074.7 | 2177.8 | 2328.1 | 2532.1 | 2729.7 | 2993.9 |
| 15° | 2014.5 | 2021.0 | 1982.3 | 2012.4 | 2025.3 | 2040.3 | 2154.2 | 2323.8 | 2506.4 | 2774.8 | 3056.2 |
| 17.5° | 2162.7 | 2126.2 | 2066.1 | 2038.2 | 2083.3 | 2083.3 | 2160.6 | 2293.8 | 2510.7 | 2798.5 | 3146.4 |
| 20° | 2278.7 | 2278.7 | 2179.9 | 2149.9 | 2182.1 | 2175.6 | 2229.3 | 2328.1 | 2532.1 | 2845.7 | 3247.3 |
| 22.5° | 2474.2 | 2502.1 | 2338.9 | 2276.6 | 2274.4 | 2291.6 | 2338.9 | 2422.6 | 2592.3 | 2912.3 | 3344.0 |
| 25° | 2755.5 | 2762.0 | 2573.0 | 2508.5 | 2439.8 | 2467.7 | 2476.3 | 2560.1 | 2646.0 | 2989.6 | 3453.5 |
| 27.5° | 3069.1 | 3064.8 | 2890.8 | 2729.7 | 2684.6 | 2691.1 | 2643.8 | 2699.7 | 2725.4 | 3013.2 | 3610.3 |
| 30° | 3417.0 | 3378.3 | 3247.3 | 3019.7 | 2983.2 | 2942.4 | 2839.3 | 2837.1 | 2890.8 | 3146.4 | 3827.2 |
| 32.5° | 3644.7 | 3595.3 | 3505.1 | 3341.8 | 3240.9 | 3245.2 | 3082.0 | 3079.8 | 3032.6 | 3292.4 | 4016.2 |
| 35° | 3868.0 | 3792.9 | 3769.2 | 3601.7 | 3500.8 | 3511.5 | 3380.5 | 3363.3 | 3277.4 | 3513.6 | 4327.6 |
| 37.5° | 4136.5 | 4069.9 | 4106.4 | 3979.7 | 3855.1 | 3803.6 | 3743.5 | 3722.0 | 3610.3 | 3825.1 | 4752.9 |
| 40° | 4432.9 | 4411.4 | 4387.8 | 4325.5 | 4250.3 | 4254.6 | 4190.2 | 4168.7 | 4003.3 | 4200.9 | 5160.9 |
| 42.5° | 4832.3 | 4750.7 | 4628.3 | 4669.1 | 4707.8 | 4748.6 | 4727.1 | 4671.3 | 4499.4 | 4583.2 | 5616.3 |
| 45° | 5203.9 | 5096.5 | 4871.0 | 4883.9 | 5042.8 | 5075.0 | 5334.9 | 5328.5 | 4982.7 | 5068.6 | 6133.9 |
| 47.5° | 5455.2 | 5405.8 | 5270.5 | 5255.4 | 5483.1 | 5480.9 | 5949.1 | 5949.1 | 5491.7 | 5551.8 | 6690.1 |
| 50° | 5828.9 | 5700.0 | 5642.0 | 5717.2 | 5833.2 | 5912.6 | 6576.3 | 6617.1 | 5992.1 | 6056.5 | 7418.2 |
| 52.5° | 6267.0 | 6105.9 | 5959.9 | 6153.2 | 6359.4 | 6410.9 | 7197.0 | 7179.8 | 6376.5 | 6642.9 | 8270.8 |
| 55° | 6630.0 | 6548.4 | 6447.4 | 6559.1 | 6896.3 | 6960.7 | 7819.8 | 7660.9 | 6761.0 | 7128.2 | 8681.0 |
| 57.5° | 7053.1 | 7102.5 | 7123.9 | 7096.0 | 7497.6 | 7598.6 | 8530.7 | 8075.4 | 7091.7 | 7454.7 | 8921.6 |
| 60° | 7690.9 | 7721.0 | 7748.9 | 7815.5 | 8240.8 | 8382.5 | 9093.4 | 8595.1 | 7300.1 | 7643.7 | 8940.9 |
| 62.5° | 8661.7 | 8545.7 | 8608.0 | 8837.8 | 9179.3 | 9340.4 | 9922.4 | 8960.2 | 7459.0 | 7757.5 | 8309.5 |
| 65° | 9772.1 | 9615.3 | 9550.9 | 9847.2 | 10732.1 | 10603.2 | 10957.6 | 9233.0 | 7229.2 | 7332.3 | 7046.6 |
| 67.5° | 10897.5 | 10914.6 | 10749.3 | 11344.2 | 12428.8 | 12428.8 | 11919.8 | 9364.0 | 6606.3 | 5942.7 | 4941.9 |
| 70° | 11790.9 | 11844.6 | 11934.8 | 13088.1 | 14806.3 | 15066.2 | 13111.8 | 8827.1 | 5337.1 | 3956.1 | 2701.8 |
| 72.5° | 11778.0 | 11617.0 | 12078.7 | 14202.8 | 16966.9 | 16750.0 | 13360.9 | 6980.0 | 3331.1 | 1937.2 | 1239.2 |
| 73° | 11513.9 | 11378.6 | 11883.3 | 14192.1 | 17054.9 | 16850.9 | 13178.3 | 6434.5 | 2938.1 | 1679.5 | 1101.8 |
| 75° | 9402.7 | 9157.8 | 10016.9 | 12854.0 | 15779.2 | 15936.0 | 11196.0 | 4196.6 | 1610.8 | 1035.2 | 775.3 |
| 77.5° | 4286.8 | 4394.2 | 5513.2 | 8623.0 | 12160.3 | 12345.0 | 7360.2 | 1814.8 | 882.7 | 725.9 | 571.3 |
| 80° | 1376.7 | 1445.4 | 2145.6 | 4286.8 | 7622.2 | 7955.1 | 3402.0 | 824.7 | 629.3 | 556.3 | 427.4 |
| 82.5° | 526.2 | 524.0 | 899.9 | 1782.6 | 3612.4 | 3825.1 | 1243.5 | 502.6 | 468.2 | 410.2 | 302.8 |
| 85° | 184.7 | 193.3 | 339.3 | 704.4 | 1421.8 | 1488.4 | 431.7 | 279.2 | 324.3 | 274.9 | 174.0 |
| 87.5° | 64.4 | 66.6 | 120.3 | 255.6 | 489.7 | 517.6 | 120.3 | 111.7 | 161.1 | 158.9 | 88.1 |
| 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° | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 | 2912.3 |
| 2.5° | 2942.4 | 2961.7 | 2968.1 | 3045.4 | 3045.4 | 3045.4 | 3075.5 | 3075.5 | 3066.9 | 3045.4 | 3097.0 |
| 5° | 2955.2 | 2989.6 | 3056.2 | 3122.8 | 3139.9 | 3155.0 | 3195.8 | 3161.4 | 3174.3 | 3152.8 | 3172.2 |
| 7.5° | 2991.8 | 3039.0 | 3163.6 | 3204.4 | 3176.5 | 3208.7 | 3165.7 | 3142.1 | 3118.5 | 3127.1 | 3097.0 |
| 10° | 3054.0 | 3114.2 | 3172.2 | 3247.3 | 3193.6 | 3161.4 | 3073.4 | 3051.9 | 2976.7 | 2951.0 | 2974.6 |
| 12.5° | 3131.4 | 3204.4 | 3303.2 | 3275.3 | 3172.2 | 3079.8 | 2985.3 | 2895.1 | 2850.0 | 2785.6 | 2802.8 |
| 15° | 3208.7 | 3292.4 | 3307.5 | 3260.2 | 3131.4 | 3015.4 | 2843.6 | 2716.9 | 2671.7 | 2613.8 | 2643.8 |
| 17.5° | 3292.4 | 3371.9 | 3346.1 | 3223.7 | 3049.7 | 2873.6 | 2678.2 | 2553.6 | 2459.1 | 2422.6 | 2422.6 |
| 20° | 3417.0 | 3455.7 | 3414.9 | 3163.6 | 2951.0 | 2719.0 | 2530.0 | 2388.3 | 2293.8 | 2278.7 | 2255.1 |
| 22.5° | 3513.6 | 3575.9 | 3393.4 | 3075.5 | 2807.1 | 2517.1 | 2300.2 | 2246.5 | 2218.6 | 2195.0 | 2164.9 |
| 25° | 3638.2 | 3636.1 | 3354.7 | 2993.9 | 2560.1 | 2276.6 | 2145.6 | 2141.3 | 2128.4 | 2119.8 | 2160.6 |
| 27.5° | 3756.3 | 3706.9 | 3309.6 | 2792.0 | 2304.5 | 2094.0 | 2023.1 | 2070.4 | 2089.7 | 2076.8 | 2094.0 |
| 30° | 3943.2 | 3861.6 | 3245.2 | 2577.2 | 2079.0 | 1909.3 | 1922.2 | 1986.6 | 2018.8 | 2038.2 | 2012.4 |
| 32.5° | 4140.8 | 4016.2 | 3112.0 | 2353.9 | 1879.2 | 1793.3 | 1823.4 | 1890.0 | 1928.6 | 1950.1 | 1973.7 |
| 35° | 4426.4 | 4136.5 | 2976.7 | 2061.8 | 1735.3 | 1722.5 | 1739.6 | 1776.2 | 1832.0 | 1847.0 | 1853.5 |
| 37.5° | 4778.6 | 4319.0 | 2794.2 | 1827.7 | 1623.7 | 1638.7 | 1655.9 | 1668.8 | 1670.9 | 1698.8 | 1688.1 |
| 40° | 5130.9 | 4473.7 | 2527.9 | 1604.3 | 1507.7 | 1589.3 | 1580.7 | 1557.1 | 1537.8 | 1512.0 | 1505.5 |
| 42.5° | 5440.1 | 4609.0 | 2231.5 | 1415.3 | 1404.6 | 1537.8 | 1509.8 | 1449.7 | 1404.6 | 1385.3 | 1353.1 |
| 45° | 5788.1 | 4800.1 | 1932.9 | 1297.2 | 1325.1 | 1475.5 | 1466.9 | 1374.5 | 1316.5 | 1247.8 | 1239.2 |
| 47.5° | 6239.1 | 4999.9 | 1647.3 | 1174.8 | 1250.0 | 1451.9 | 1456.1 | 1338.0 | 1254.3 | 1161.9 | 1149.0 |
| 50° | 6816.8 | 5287.7 | 1430.4 | 1123.3 | 1204.9 | 1417.5 | 1423.9 | 1288.6 | 1179.1 | 1084.6 | 1076.0 |
| 52.5° | 7370.9 | 5581.9 | 1250.0 | 1043.8 | 1174.8 | 1376.7 | 1391.7 | 1243.5 | 1116.8 | 998.7 | 1005.1 |
| 55° | 7650.1 | 5474.5 | 1095.3 | 985.8 | 1106.1 | 1310.1 | 1365.9 | 1211.3 | 1022.3 | 940.7 | 938.5 |
| 57.5° | 7712.4 | 5210.3 | 972.9 | 925.7 | 1048.1 | 1239.2 | 1323.0 | 1114.7 | 979.4 | 910.6 | 902.0 |
| 60° | 7508.4 | 4748.6 | 876.3 | 861.2 | 975.1 | 1166.2 | 1224.2 | 1063.1 | 936.4 | 880.6 | 867.7 |
| 62.5° | 7005.8 | 4269.6 | 809.7 | 831.2 | 912.8 | 1086.7 | 1161.9 | 1026.6 | 895.6 | 856.9 | 829.0 |
| 65° | 5745.1 | 3511.5 | 756.0 | 773.2 | 848.3 | 1009.4 | 1123.3 | 985.8 | 859.1 | 822.6 | 820.4 |
| 67.5° | 3979.7 | 2420.5 | 713.0 | 745.3 | 796.8 | 953.6 | 1084.6 | 940.7 | 811.8 | 798.9 | 781.8 |
| 70° | 2038.2 | 1290.8 | 657.2 | 683.0 | 741.0 | 882.7 | 1015.9 | 893.4 | 762.4 | 760.3 | 738.8 |
| 72.5° | 1033.0 | 756.0 | 592.8 | 631.4 | 672.2 | 790.4 | 930.0 | 831.2 | 700.2 | 676.5 | 642.2 |
| 73° | 893.4 | 700.2 | 582.0 | 616.4 | 655.1 | 764.6 | 904.2 | 816.1 | 691.6 | 657.2 | 625.0 |
| 75° | 650.8 | 552.0 | 521.9 | 556.3 | 586.3 | 689.4 | 818.3 | 747.4 | 635.7 | 599.2 | 569.1 |
| 77.5° | 487.5 | 425.2 | 433.8 | 472.5 | 498.3 | 594.9 | 728.1 | 676.5 | 575.6 | 526.2 | 513.3 |
| 80° | 358.7 | 324.3 | 358.7 | 395.2 | 414.5 | 524.0 | 663.6 | 586.3 | 485.4 | 429.5 | 418.8 |
| 82.5° | 255.6 | 236.2 | 277.1 | 300.7 | 309.3 | 433.8 | 597.1 | 468.2 | 367.3 | 294.2 | 270.6 |
| 85° | 146.0 | 143.9 | 186.9 | 184.7 | 191.1 | 253.4 | 393.0 | 311.4 | 236.2 | 180.4 | 176.1 |
| 87.5° | 64.4 | 70.9 | 94.5 | 75.2 | 79.5 | 120.3 | 167.5 | 116.0 | 96.6 | 53.7 | 40.8 |
| 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)