

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: P594755

Luminaire Tested: **ISS-PA1D-827-U-T4W-HSS**

Issue Date: 3/22/2022

Test Information

Test Method: LM-79-08
Report Number: P594755
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2201-510-13)
Test Lab: INNOVATION CENTER
Issue Date: 3/22/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: ISS-PA1D-827-U-T4W-HSS
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE
(1) 80 CRI, 2700K, 800mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4730 lumens
Efficiency: N/A
Efficacy: 75.1 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 0.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G2

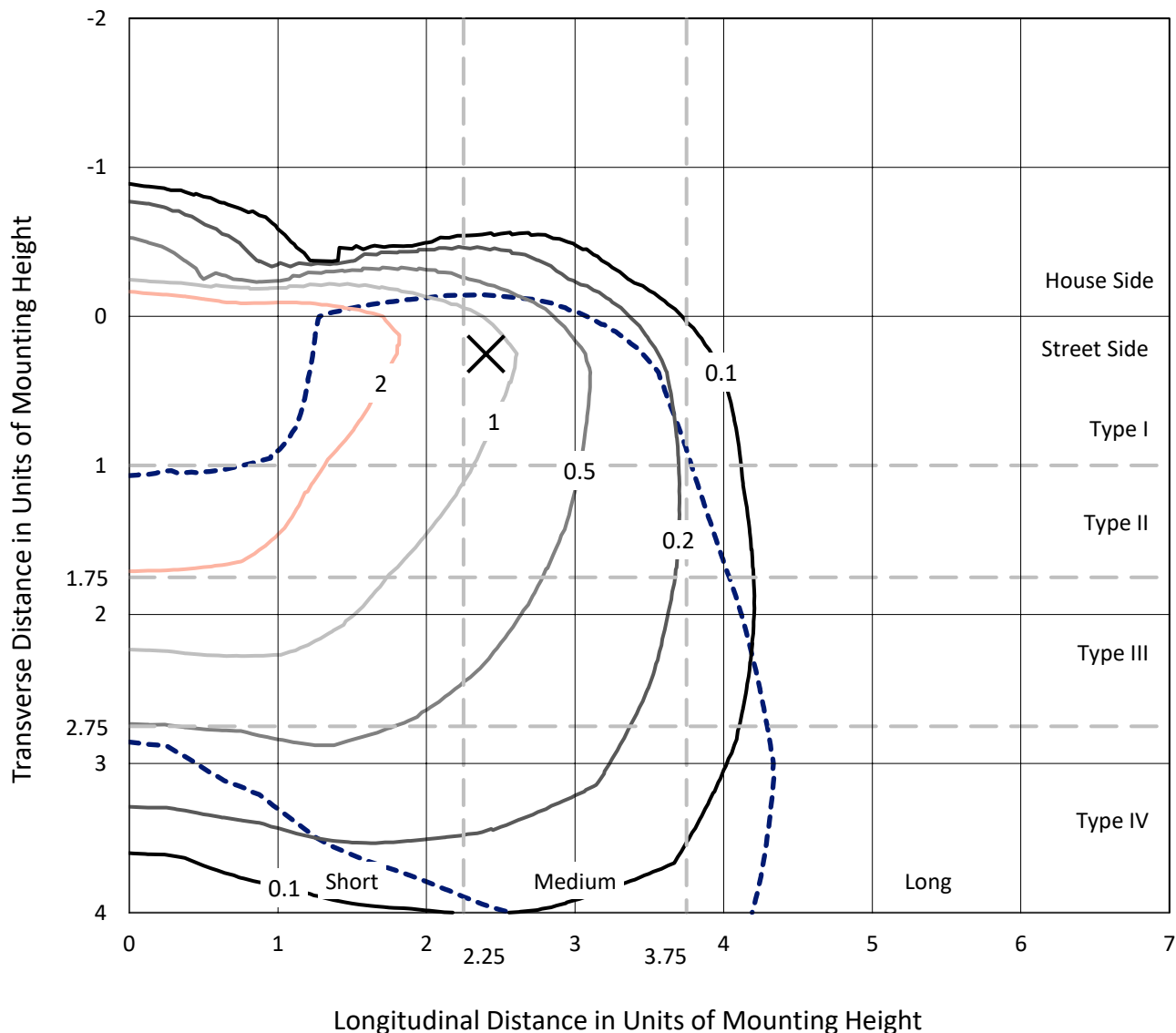
Input Watts (W): 63
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

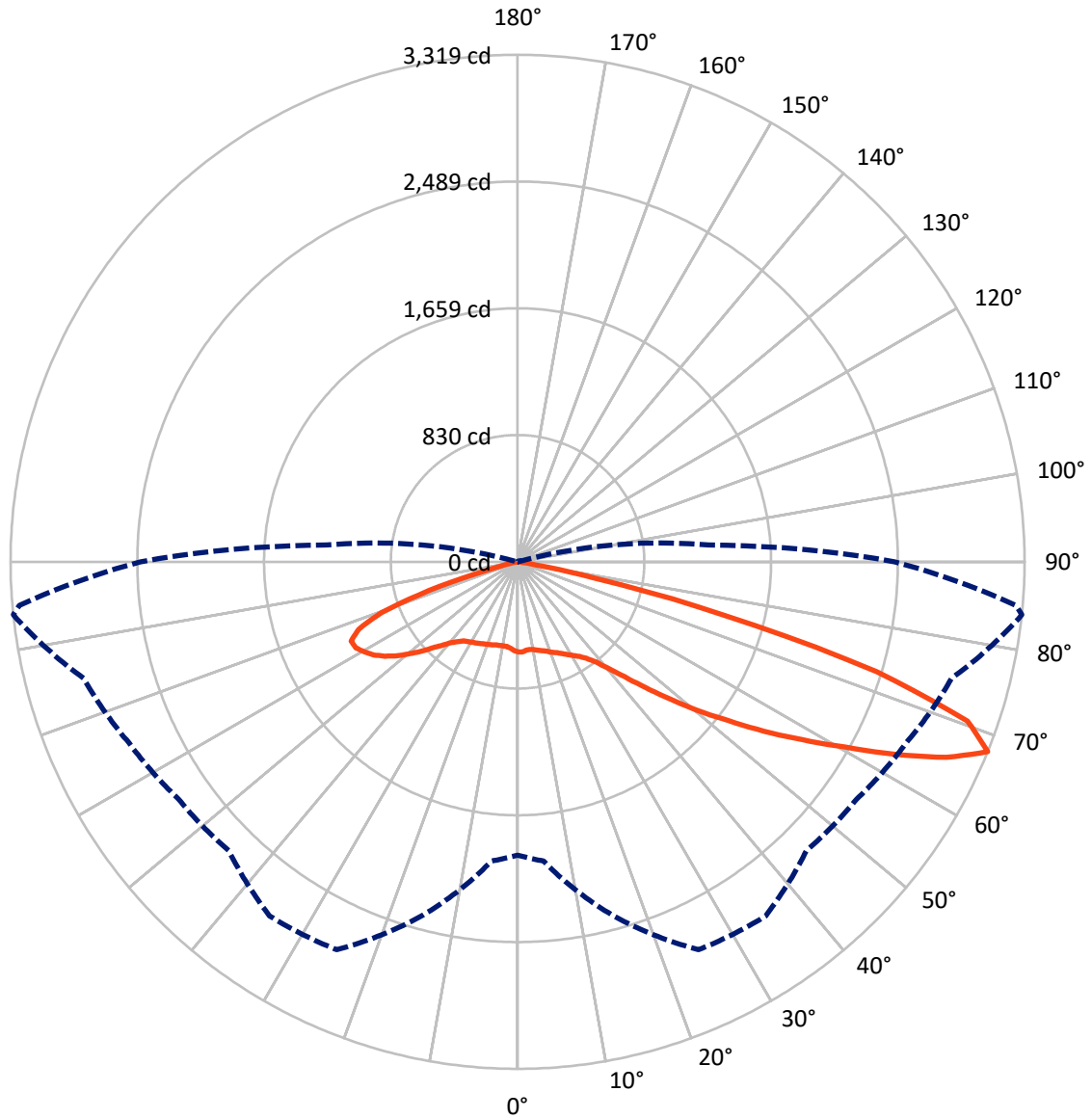
× Max cd
 - - - 1/2 Max cd



Based on 12 foot mounting height. Maximum calculated value = 4.8 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 84-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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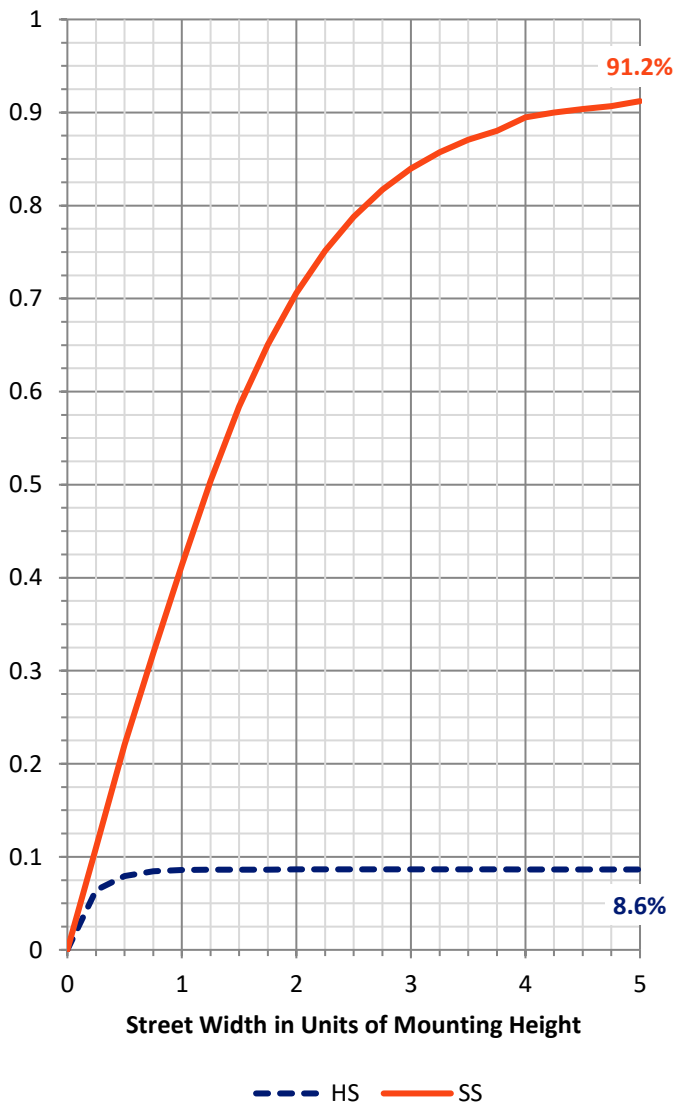
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 411.8 | 0.0 | 411.8 |
| | % Fixture | 8.7 | 0.0 | 8.7 |
| Street Side | Lumens | 4318.2 | 0.0 | 4318.2 |
| | % Fixture | 91.3 | 0.0 | 91.3 |
| Total | Lumens | 4730.0 | 0.0 | 4730.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 52.8 | 1.1 |
| 10°-20° | 138.2 | 2.9 |
| 20°-30° | 221.4 | 4.7 |
| 30°-40° | 318.5 | 6.7 |
| 40°-50° | 546.8 | 11.6 |
| 50°-60° | 955.3 | 20.2 |
| 60°-70° | 1368.0 | 28.9 |
| 70°-80° | 1028.2 | 21.7 |
| 80°-90° | 100.9 | 2.1 |
| 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° | 4730.0 | 100.0 |
| 0°-180° | 4730.0 | 100.0 |

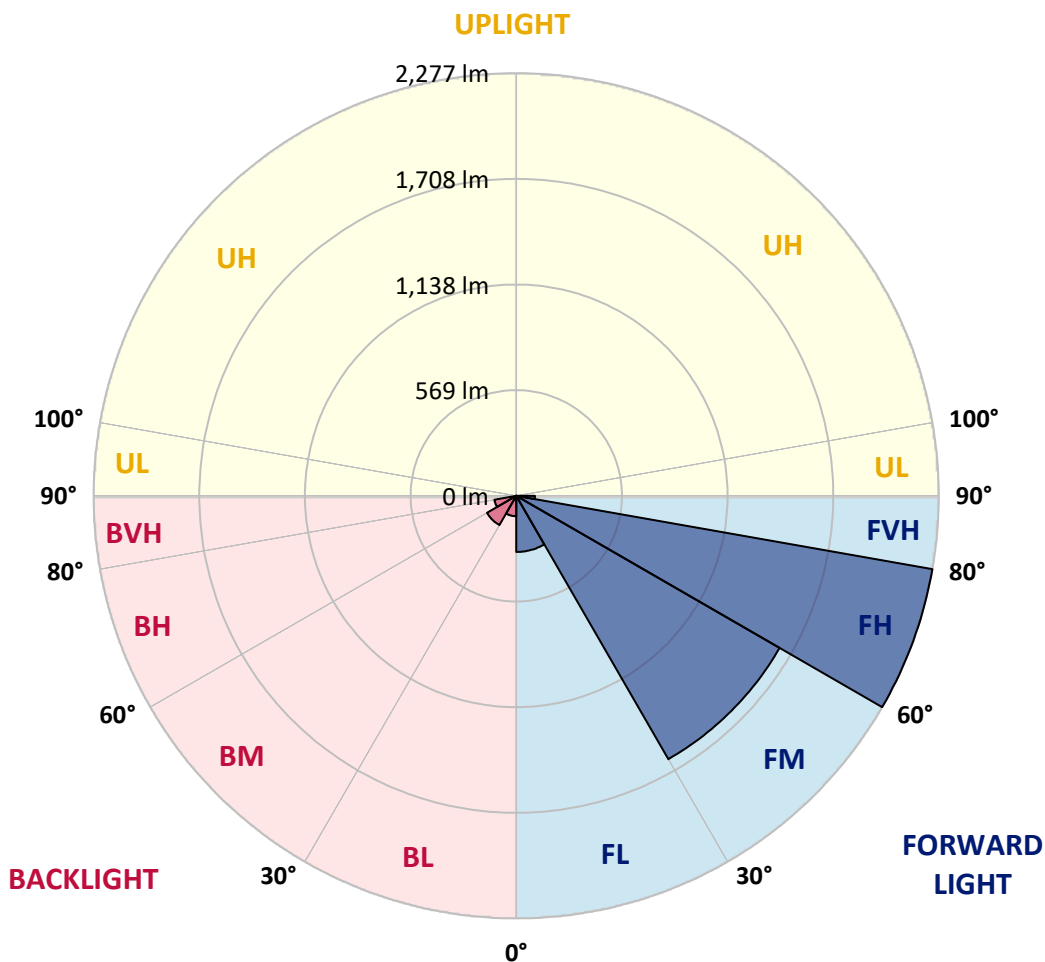


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 302.4 | 6.4 | | | |
| FM (30°-60°) | 1638.4 | 34.6 | | | |
| FH (60°-80°) | 2276.8 | 48.1 | | | G2/5000 |
| FVH (80°-90°) | 100.6 | 2.1 | | | G2/225 |
| BL (0°-30°) | 110.0 | 2.3 | B0/110 | | |
| BM (30°-60°) | 182.1 | 3.9 | B0/220 | | |
| BH (60°-80°) | 119.4 | 2.5 | B1/500 | | G1/500 |
| BVH (80°-90°) | 0.3 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2
 Type IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 84° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 |
| 2.5° | 622.8 | 626.0 | 627.6 | 619.6 | 619.6 | 613.3 | 603.7 | 600.5 | 595.7 | 590.9 | 589.3 |
| 5° | 654.8 | 659.6 | 658.0 | 648.4 | 643.6 | 630.8 | 618.0 | 605.3 | 592.5 | 581.3 | 581.3 |
| 7.5° | 691.5 | 693.1 | 688.3 | 672.3 | 662.8 | 645.2 | 626.0 | 611.7 | 595.7 | 579.7 | 576.5 |
| 10° | 723.5 | 721.9 | 715.5 | 699.5 | 681.9 | 659.6 | 638.8 | 622.8 | 603.7 | 584.5 | 582.9 |
| 12.5° | 745.8 | 747.4 | 739.4 | 717.1 | 699.5 | 673.9 | 653.2 | 637.2 | 614.9 | 594.1 | 589.3 |
| 15° | 765.0 | 769.8 | 760.2 | 737.8 | 712.3 | 689.9 | 673.9 | 653.2 | 627.6 | 603.7 | 600.5 |
| 17.5° | 782.5 | 784.1 | 776.2 | 750.6 | 726.6 | 707.5 | 689.9 | 670.7 | 645.2 | 614.9 | 611.7 |
| 20° | 792.1 | 796.9 | 792.1 | 760.2 | 737.8 | 723.5 | 709.1 | 689.9 | 661.2 | 632.4 | 629.2 |
| 22.5° | 798.5 | 803.3 | 801.7 | 766.6 | 747.4 | 736.2 | 723.5 | 705.9 | 678.7 | 645.2 | 642.0 |
| 25° | 801.7 | 804.9 | 808.1 | 773.0 | 757.0 | 752.2 | 741.0 | 725.0 | 699.5 | 664.4 | 661.2 |
| 27.5° | 806.5 | 809.7 | 812.9 | 780.9 | 774.6 | 769.8 | 766.6 | 753.8 | 723.5 | 686.7 | 681.9 |
| 30° | 814.5 | 819.3 | 822.5 | 795.3 | 795.3 | 800.1 | 800.1 | 782.5 | 749.0 | 710.7 | 707.5 |
| 32.5° | 824.1 | 825.7 | 832.0 | 809.7 | 817.7 | 828.9 | 825.7 | 808.1 | 773.0 | 737.8 | 733.0 |
| 35° | 849.6 | 849.6 | 860.8 | 832.0 | 841.6 | 851.2 | 854.4 | 841.6 | 809.7 | 774.6 | 773.0 |
| 37.5° | 911.9 | 911.9 | 921.5 | 875.2 | 873.6 | 883.2 | 894.3 | 894.3 | 862.4 | 830.5 | 827.3 |
| 40° | 1052.4 | 1052.4 | 1052.4 | 945.4 | 927.9 | 939.0 | 956.6 | 966.2 | 939.0 | 916.7 | 916.7 |
| 42.5° | 1287.2 | 1288.8 | 1264.8 | 1074.8 | 999.7 | 1018.9 | 1038.1 | 1058.8 | 1044.5 | 1028.5 | 1025.3 |
| 45° | 1529.9 | 1522.0 | 1518.8 | 1264.8 | 1127.5 | 1117.9 | 1141.9 | 1177.0 | 1181.8 | 1172.2 | 1178.6 |
| 47.5° | 1696.0 | 1704.0 | 1708.8 | 1501.2 | 1306.4 | 1240.9 | 1263.2 | 1312.8 | 1341.5 | 1339.9 | 1349.5 |
| 50° | 1857.3 | 1862.1 | 1866.9 | 1761.5 | 1542.7 | 1395.8 | 1410.2 | 1477.2 | 1517.2 | 1529.9 | 1536.3 |
| 52.5° | 1997.9 | 1985.1 | 2005.9 | 1991.5 | 1793.5 | 1573.1 | 1573.1 | 1649.7 | 1721.6 | 1726.4 | 1724.8 |
| 55° | 2039.4 | 2047.4 | 2109.7 | 2152.8 | 2050.6 | 1790.3 | 1758.3 | 1839.8 | 1916.4 | 1956.4 | 1956.4 |
| 57.5° | 2132.0 | 2140.0 | 2215.1 | 2312.5 | 2237.4 | 2004.3 | 1956.4 | 2036.2 | 2119.2 | 2195.9 | 2207.1 |
| 60° | 2253.4 | 2255.0 | 2334.8 | 2483.4 | 2379.6 | 2197.5 | 2157.6 | 2248.6 | 2331.7 | 2462.6 | 2499.3 |
| 62.5° | 2318.9 | 2325.3 | 2435.5 | 2630.3 | 2558.4 | 2366.8 | 2357.2 | 2440.2 | 2547.2 | 2777.2 | 2810.8 |
| 65° | 2218.3 | 2259.8 | 2499.3 | 2718.1 | 2703.8 | 2524.9 | 2558.4 | 2625.5 | 2748.5 | 3085.4 | 3117.4 |
| 67.5° | 1919.6 | 1965.9 | 2393.9 | 2801.2 | 2829.9 | 2673.4 | 2708.5 | 2806.0 | 2941.7 | 3318.6 | 3273.9 |
| 70° | 1767.9 | 1806.2 | 2138.4 | 2847.5 | 2935.3 | 2839.5 | 2855.5 | 2946.5 | 2986.4 | 3123.8 | 3075.9 |
| 72.5° | 1339.9 | 1379.8 | 1809.4 | 2689.4 | 3026.4 | 3013.6 | 2973.7 | 2898.6 | 2662.2 | 2457.8 | 2341.2 |
| 75° | 592.5 | 638.8 | 1204.2 | 2101.7 | 2801.2 | 3112.6 | 2901.8 | 2481.8 | 1911.6 | 1395.8 | 1293.6 |
| 77.5° | 261.9 | 289.1 | 466.3 | 1167.4 | 2104.9 | 2694.2 | 2294.9 | 1654.5 | 959.8 | 519.0 | 482.3 |
| 80° | 84.6 | 87.8 | 146.9 | 408.8 | 1076.4 | 1783.9 | 1405.4 | 795.3 | 295.4 | 121.4 | 113.4 |
| 82.5° | 33.5 | 36.7 | 70.3 | 172.5 | 445.6 | 709.1 | 689.9 | 287.5 | 86.2 | 31.9 | 31.9 |
| 85° | 9.6 | 11.2 | 35.1 | 91.0 | 158.1 | 199.6 | 244.3 | 95.8 | 46.3 | 9.6 | 9.6 |
| 87.5° | 3.2 | 3.2 | 12.8 | 28.7 | 30.3 | 20.8 | 46.3 | 36.7 | 28.7 | 3.2 | 3.2 |
| 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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CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 | 589.3 |
| 2.5° | 586.1 | 582.9 | 574.9 | 568.5 | 565.3 | 560.6 | 554.2 | 551.0 | 551.0 | 549.4 | 544.6 |
| 5° | 574.9 | 570.1 | 555.8 | 546.2 | 538.2 | 520.6 | 507.9 | 491.9 | 475.9 | 471.1 | 475.9 |
| 7.5° | 570.1 | 560.6 | 541.4 | 522.2 | 488.7 | 442.4 | 412.0 | 378.5 | 367.3 | 352.9 | 354.5 |
| 10° | 571.7 | 560.6 | 533.4 | 490.3 | 424.8 | 356.1 | 308.2 | 263.5 | 241.2 | 230.0 | 231.6 |
| 12.5° | 576.5 | 563.7 | 525.4 | 447.2 | 352.9 | 269.9 | 196.4 | 161.3 | 154.9 | 154.9 | 154.9 |
| 15° | 586.1 | 566.9 | 512.6 | 396.1 | 276.3 | 178.9 | 138.9 | 135.7 | 140.5 | 145.3 | 146.9 |
| 17.5° | 595.7 | 576.5 | 493.5 | 343.4 | 201.2 | 134.1 | 129.4 | 129.4 | 134.1 | 138.9 | 140.5 |
| 20° | 606.9 | 586.1 | 466.3 | 287.5 | 143.7 | 126.2 | 124.6 | 123.0 | 126.2 | 131.0 | 132.6 |
| 22.5° | 624.4 | 595.7 | 434.4 | 222.0 | 124.6 | 121.4 | 118.2 | 116.6 | 118.2 | 123.0 | 124.6 |
| 25° | 640.4 | 608.5 | 400.9 | 164.5 | 116.6 | 113.4 | 111.8 | 110.2 | 110.2 | 113.4 | 115.0 |
| 27.5° | 659.6 | 622.8 | 364.1 | 123.0 | 107.0 | 105.4 | 103.8 | 102.2 | 100.6 | 103.8 | 105.4 |
| 30° | 683.5 | 635.6 | 324.2 | 103.8 | 97.4 | 95.8 | 94.2 | 92.6 | 91.0 | 92.6 | 94.2 |
| 32.5° | 713.9 | 653.2 | 277.9 | 94.2 | 89.4 | 84.6 | 83.0 | 83.0 | 81.4 | 81.4 | 83.0 |
| 35° | 753.8 | 672.3 | 228.4 | 87.8 | 81.4 | 76.7 | 71.9 | 70.3 | 70.3 | 70.3 | 71.9 |
| 37.5° | 812.9 | 707.5 | 180.5 | 81.4 | 75.1 | 67.1 | 62.3 | 57.5 | 57.5 | 57.5 | 57.5 |
| 40° | 894.3 | 745.8 | 140.5 | 76.7 | 70.3 | 59.1 | 52.7 | 46.3 | 43.1 | 41.5 | 43.1 |
| 42.5° | 1020.5 | 803.3 | 108.6 | 70.3 | 67.1 | 52.7 | 43.1 | 35.1 | 28.7 | 27.1 | 28.7 |
| 45° | 1159.4 | 865.6 | 86.2 | 65.5 | 60.7 | 44.7 | 33.5 | 24.0 | 17.6 | 16.0 | 17.6 |
| 47.5° | 1335.1 | 943.8 | 73.5 | 59.1 | 52.7 | 36.7 | 24.0 | 12.8 | 8.0 | 9.6 | 9.6 |
| 50° | 1504.4 | 1020.5 | 67.1 | 54.3 | 46.3 | 30.3 | 14.4 | 6.4 | 3.2 | 4.8 | 4.8 |
| 52.5° | 1691.2 | 1101.9 | 62.3 | 47.9 | 39.9 | 22.4 | 8.0 | 1.6 | 0.0 | 1.6 | 1.6 |
| 55° | 1879.7 | 1175.4 | 57.5 | 43.1 | 31.9 | 16.0 | 3.2 | 0.0 | 0.0 | 0.0 | 1.6 |
| 57.5° | 2084.1 | 1237.7 | 52.7 | 36.7 | 24.0 | 9.6 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 2255.0 | 1285.6 | 47.9 | 31.9 | 16.0 | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62.5° | 2411.5 | 1328.7 | 36.7 | 24.0 | 9.6 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 65° | 2515.3 | 1338.3 | 25.6 | 16.0 | 6.4 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 2469.0 | 1255.3 | 16.0 | 11.2 | 3.2 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 2170.4 | 1054.0 | 11.2 | 6.4 | 1.6 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 1518.8 | 680.3 | 9.6 | 4.8 | 1.6 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 801.7 | 245.9 | 6.4 | 3.2 | 1.6 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 284.3 | 54.3 | 3.2 | 1.6 | 0.0 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 62.3 | 11.2 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 17.6 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)