

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: P944768

Luminaire Tested: **GALN-SB9D-840-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P944768
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB9D-840-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(9) 80 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 67126 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

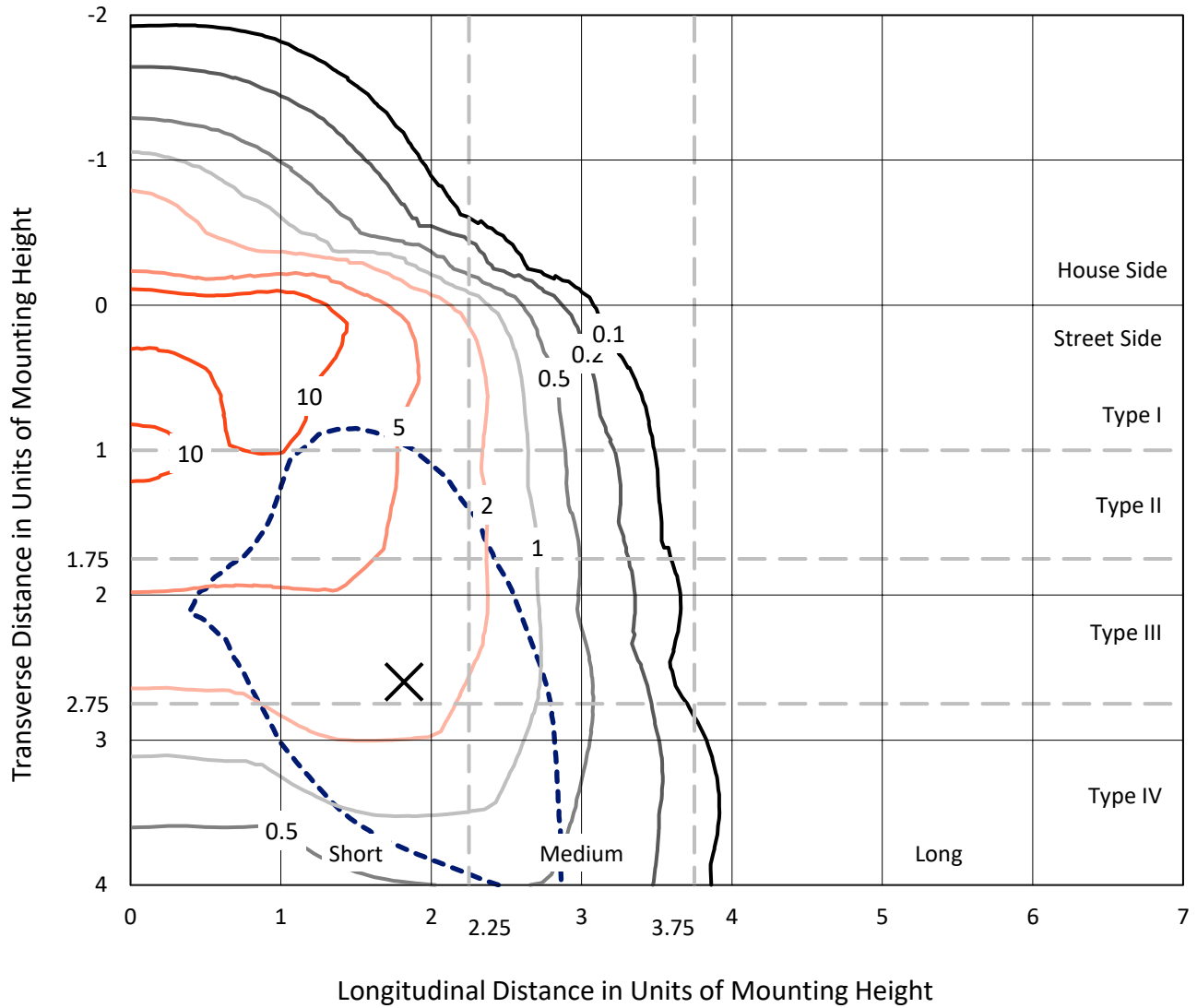
Input Watts (W): 658
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

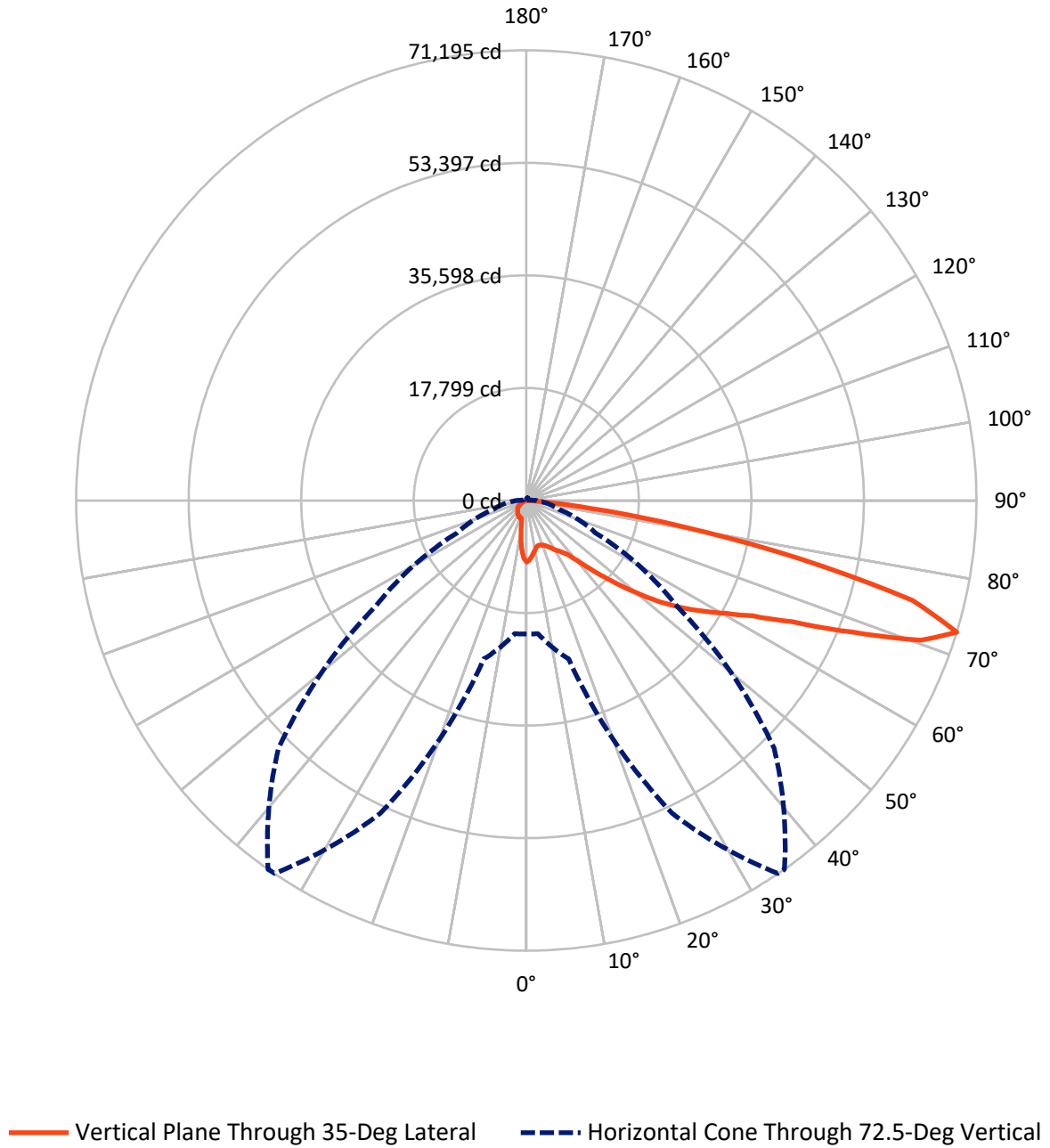
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 15.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 7554.7 | 0.0 | 7554.7 |
| | % Fixture | 11.3 | 0.0 | 11.3 |
| Street Side | Lumens | 59571.3 | 0.0 | 59571.3 |
| | % Fixture | 88.7 | 0.0 | 88.7 |
| Total | Lumens | 67126.0 | 0.0 | 67126.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 799.4 | 1.2 |
| 10°-20° | 1870.2 | 2.8 |
| 20°-30° | 3038.1 | 4.5 |
| 30°-40° | 5069.1 | 7.6 |
| 40°-50° | 9590.8 | 14.3 |
| 50°-60° | 15239.7 | 22.7 |
| 60°-70° | 18852.6 | 28.1 |
| 70°-80° | 11718.9 | 17.5 |
| 80°-90° | 947.1 | 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° | 67126.0 | 100.0 |
| 0°-180° | 67126.0 | 100.0 |

Coefficient of Utilization



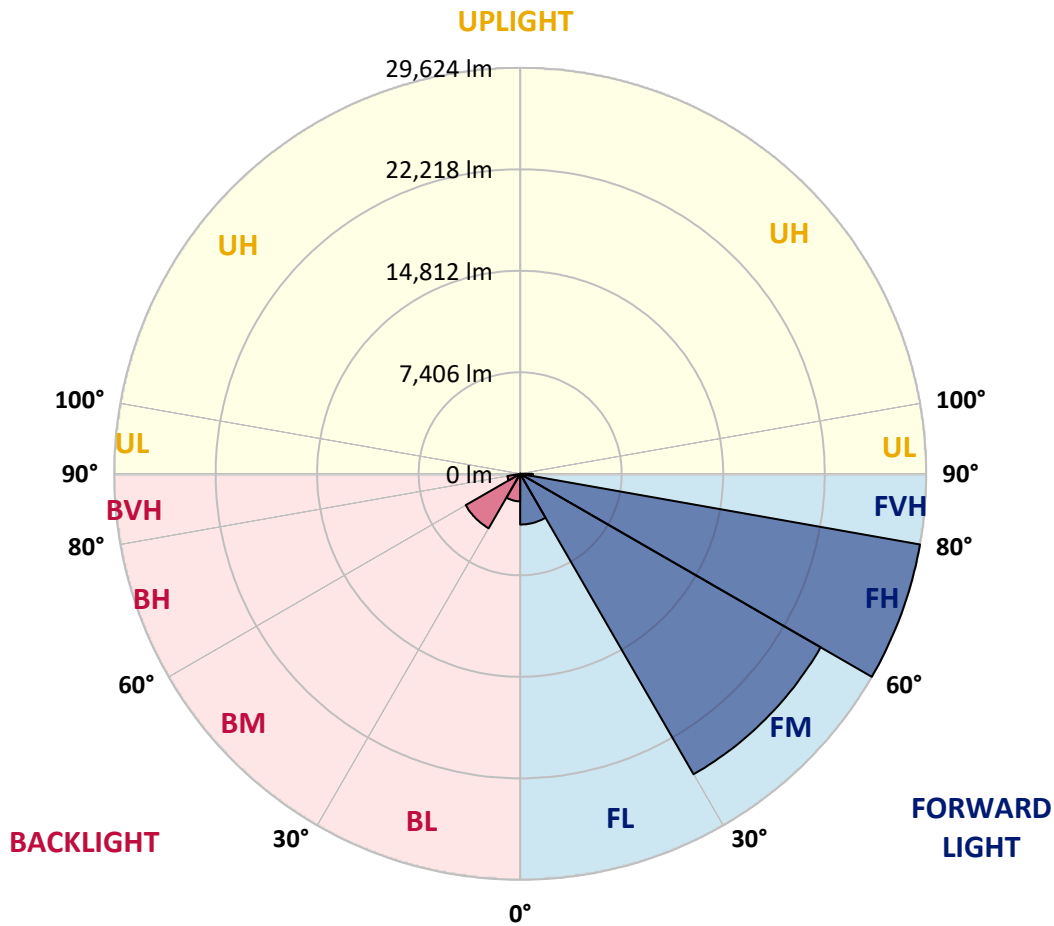
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 3700.3 | 5.5 | | | |
| FM (30°-60°) | 25313.2 | 37.7 | | | |
| FH (60°-80°) | 29623.5 | 44.1 | | | G5 |
| FVH (80°-90°) | 934.2 | 1.4 | | | G5 |
| BL (0°-30°) | 2007.4 | 3.0 | B3/2500 | | |
| BM (30°-60°) | 4586.4 | 6.8 | B3/5000 | | |
| BH (60°-80°) | 948.0 | 1.4 | B2/1000 | | G2/1000 |
| BVH (80°-90°) | 12.9 | 0.0 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 34° | 35° | 45° | 55° | 65° | 75° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 |
| 2.5° | 9296.0 | 9374.7 | 9389.4 | 9414.0 | 9414.0 | 9443.5 | 9492.7 | 9561.6 | 9674.7 | 9733.7 |
| 5° | 8568.0 | 8627.1 | 8700.8 | 8759.9 | 8873.0 | 8887.7 | 9079.6 | 9266.5 | 9527.1 | 9723.9 |
| 7.5° | 7835.2 | 7904.0 | 8002.4 | 8145.0 | 8292.6 | 8336.9 | 8627.1 | 8941.8 | 9355.0 | 9723.9 |
| 10° | 7318.7 | 7323.7 | 7412.2 | 7554.8 | 7790.9 | 7845.0 | 8199.2 | 8646.7 | 9163.2 | 9664.9 |
| 12.5° | 7028.5 | 7063.0 | 7102.3 | 7210.5 | 7436.8 | 7471.2 | 7849.9 | 8376.2 | 8971.4 | 9630.4 |
| 15° | 7028.5 | 7053.1 | 7077.7 | 7131.8 | 7313.8 | 7343.3 | 7677.8 | 8204.1 | 8873.0 | 9645.2 |
| 17.5° | 7102.3 | 7141.7 | 7122.0 | 7185.9 | 7377.8 | 7397.4 | 7692.5 | 8154.9 | 8868.1 | 9738.6 |
| 20° | 7279.4 | 7308.9 | 7269.6 | 7308.9 | 7500.7 | 7540.1 | 7845.0 | 8248.3 | 8951.7 | 9901.0 |
| 22.5° | 7559.7 | 7574.5 | 7481.1 | 7510.6 | 7707.3 | 7756.5 | 8110.6 | 8513.9 | 9153.3 | 10161.6 |
| 25° | 7913.9 | 7943.4 | 7800.8 | 7835.2 | 8022.1 | 8081.1 | 8489.3 | 8912.3 | 9473.0 | 10520.7 |
| 27.5° | 8322.1 | 8336.9 | 8213.9 | 8209.0 | 8450.0 | 8533.6 | 8946.8 | 9404.2 | 9901.0 | 10973.2 |
| 30° | 8789.4 | 8833.6 | 8715.6 | 8695.9 | 9000.9 | 9069.7 | 9478.0 | 10009.2 | 10530.5 | 11651.9 |
| 32.5° | 9158.3 | 9192.7 | 9123.8 | 9173.0 | 9482.9 | 9537.0 | 10122.3 | 10865.0 | 11519.1 | 12616.0 |
| 35° | 9689.5 | 9709.1 | 9551.7 | 9640.3 | 9994.4 | 10132.1 | 11002.7 | 12065.1 | 12763.5 | 13825.9 |
| 37.5° | 11612.6 | 11612.6 | 10943.7 | 10505.9 | 10845.3 | 10968.3 | 12207.7 | 13575.1 | 14298.1 | 15449.0 |
| 40° | 14273.5 | 14229.2 | 13250.5 | 12355.3 | 12311.0 | 12552.0 | 13924.3 | 15478.5 | 16280.3 | 17396.8 |
| 42.5° | 17111.5 | 17042.6 | 15709.7 | 14824.4 | 14676.8 | 14760.4 | 15906.5 | 17824.7 | 18641.1 | 19772.4 |
| 45° | 19629.8 | 19610.1 | 18390.3 | 17200.0 | 16934.4 | 17200.0 | 18380.5 | 20569.2 | 21154.5 | 22344.8 |
| 47.5° | 21739.8 | 21739.8 | 20849.6 | 20072.4 | 19934.7 | 20092.1 | 21730.0 | 23613.8 | 23559.7 | 25084.4 |
| 50° | 24169.5 | 24149.9 | 23303.9 | 22969.4 | 23112.1 | 23333.4 | 25586.1 | 26820.6 | 26048.4 | 27774.8 |
| 52.5° | 25871.3 | 25989.4 | 25699.2 | 25645.1 | 26373.0 | 26756.7 | 29501.2 | 29958.6 | 28276.5 | 30327.5 |
| 55° | 27219.0 | 27356.7 | 27691.2 | 28069.9 | 29471.7 | 29973.4 | 33293.4 | 32934.3 | 30140.6 | 32540.8 |
| 57.5° | 29127.4 | 28930.7 | 29447.1 | 30194.7 | 32462.2 | 33067.1 | 36967.5 | 35742.8 | 31640.8 | 34336.1 |
| 60° | 31444.0 | 31473.5 | 31562.1 | 32506.4 | 35447.7 | 36224.8 | 40587.5 | 38398.8 | 32604.8 | 35437.8 |
| 62.5° | 34227.9 | 34272.2 | 34454.1 | 35905.1 | 39456.3 | 40189.1 | 44443.6 | 40572.8 | 33047.5 | 35128.0 |
| 65° | 34036.1 | 34223.0 | 36254.3 | 41217.1 | 45550.3 | 46273.3 | 48944.1 | 42097.5 | 32378.5 | 32294.9 |
| 67.5° | 31006.3 | 31311.2 | 34709.9 | 47562.0 | 54738.1 | 55544.7 | 54383.9 | 42397.5 | 29491.4 | 25113.9 |
| 70° | 27032.1 | 27140.3 | 31227.6 | 53267.4 | 65376.8 | 66193.3 | 59253.3 | 39097.2 | 22379.2 | 14007.9 |
| 72.5° | 21110.2 | 21134.8 | 25930.4 | 54590.5 | 71151.1 | 71195.4 | 55431.6 | 29024.1 | 12035.6 | 5380.8 |
| 75° | 15080.1 | 14932.6 | 17367.3 | 44271.5 | 62597.8 | 63099.5 | 41556.5 | 13614.4 | 4598.8 | 2542.9 |
| 77.5° | 8086.0 | 8248.3 | 9827.2 | 26255.0 | 43243.5 | 44099.3 | 22674.3 | 3925.0 | 2341.2 | 1731.3 |
| 80° | 2498.6 | 2636.3 | 4028.3 | 12020.8 | 24494.2 | 25010.6 | 8405.7 | 1746.1 | 1632.9 | 1234.5 |
| 82.5° | 787.0 | 816.5 | 1878.9 | 5051.3 | 10166.6 | 10402.6 | 2434.7 | 988.6 | 1116.5 | 816.5 |
| 85° | 226.3 | 231.2 | 836.1 | 1883.8 | 2513.4 | 2562.5 | 683.7 | 383.6 | 639.4 | 506.6 |
| 87.5° | 24.6 | 78.7 | 314.8 | 314.8 | 221.3 | 216.4 | 73.8 | 83.6 | 182.0 | 63.9 |
| 90° | 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):

| 85° | | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° |
|---------|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 9728.8 | 0° | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 | 9728.8 |
| 9773.1 | 2.5° | 9748.5 | 9753.4 | 9689.5 | 9581.3 | 9463.2 | 9364.8 | 9241.9 | 9143.5 | 9074.6 | 9055.0 |
| 9861.6 | 5° | 9817.3 | 9782.9 | 9600.9 | 9271.4 | 8877.9 | 8538.5 | 8159.8 | 7859.8 | 7663.0 | 7579.4 |
| 9955.1 | 7.5° | 9920.6 | 9822.3 | 9423.9 | 8774.6 | 8022.1 | 7353.2 | 6674.4 | 6148.1 | 5813.7 | 5646.4 |
| 10043.6 | 10° | 10009.2 | 9812.4 | 9128.8 | 8056.5 | 6905.6 | 5892.4 | 4977.5 | 4343.0 | 3988.9 | 3821.7 |
| 10146.9 | 12.5° | 10092.8 | 9807.5 | 8745.1 | 7205.6 | 5646.4 | 4407.0 | 3556.1 | 3241.3 | 3142.9 | 3108.5 |
| 10314.1 | 15° | 10250.2 | 9822.3 | 8263.1 | 6231.7 | 4392.2 | 3329.8 | 3020.0 | 3015.0 | 3034.7 | 3024.9 |
| 10569.9 | 17.5° | 10466.6 | 9837.0 | 7717.1 | 5198.9 | 3388.9 | 2936.3 | 2921.6 | 2965.9 | 2995.4 | 2980.6 |
| 10889.6 | 20° | 10746.9 | 9896.0 | 7136.8 | 4175.8 | 2911.8 | 2838.0 | 2872.4 | 2911.8 | 2936.3 | 2911.8 |
| 11317.5 | 22.5° | 11140.4 | 9999.3 | 6502.3 | 3354.4 | 2759.3 | 2779.0 | 2808.5 | 2852.7 | 2877.3 | 2842.9 |
| 11863.4 | 25° | 11622.4 | 10161.6 | 5877.6 | 2916.7 | 2685.5 | 2710.1 | 2754.4 | 2803.5 | 2833.1 | 2798.6 |
| 12552.0 | 27.5° | 12247.1 | 10422.3 | 5302.2 | 2818.3 | 2611.7 | 2626.5 | 2690.4 | 2764.2 | 2803.5 | 2759.3 |
| 13530.8 | 30° | 13152.1 | 10850.2 | 4805.4 | 2862.6 | 2567.5 | 2533.0 | 2621.6 | 2724.9 | 2769.1 | 2729.8 |
| 14863.7 | 32.5° | 14352.2 | 11455.2 | 4500.4 | 2931.4 | 2547.8 | 2424.8 | 2508.4 | 2641.2 | 2715.0 | 2690.4 |
| 16604.9 | 35° | 15926.1 | 12375.0 | 4382.4 | 3010.1 | 2533.0 | 2311.7 | 2370.7 | 2513.4 | 2641.2 | 2665.8 |
| 18798.5 | 37.5° | 17834.5 | 13653.8 | 4416.8 | 3044.6 | 2488.8 | 2218.2 | 2247.8 | 2370.7 | 2537.9 | 2616.6 |
| 21267.6 | 40° | 20003.6 | 15144.1 | 4613.6 | 3010.1 | 2439.6 | 2139.6 | 2144.5 | 2237.9 | 2385.5 | 2503.5 |
| 23923.6 | 42.5° | 22241.5 | 16885.2 | 4977.5 | 2882.2 | 2395.3 | 2070.7 | 2055.9 | 2119.9 | 2218.2 | 2301.9 |
| 26574.7 | 45° | 24371.2 | 18675.6 | 5336.6 | 2705.2 | 2341.2 | 2001.8 | 1967.4 | 1992.0 | 2011.7 | 2046.1 |
| 29156.9 | 47.5° | 26230.4 | 19934.7 | 5233.3 | 2542.9 | 2267.4 | 1923.1 | 1864.1 | 1854.3 | 1795.3 | 1790.3 |
| 31463.7 | 50° | 27514.1 | 20210.1 | 4648.0 | 2380.6 | 2159.2 | 1834.6 | 1741.2 | 1682.1 | 1578.8 | 1529.7 |
| 33190.1 | 52.5° | 27922.4 | 19123.2 | 3797.1 | 2218.2 | 1982.2 | 1716.6 | 1583.8 | 1490.3 | 1362.4 | 1318.2 |
| 34183.6 | 55° | 27381.3 | 16993.4 | 3034.7 | 2021.5 | 1736.2 | 1559.2 | 1411.6 | 1288.6 | 1185.4 | 1131.3 |
| 34291.8 | 57.5° | 26058.3 | 14283.3 | 2400.2 | 1790.3 | 1475.6 | 1382.1 | 1234.5 | 1111.6 | 1023.0 | 968.9 |
| 33091.7 | 60° | 23864.6 | 11342.1 | 1898.5 | 1514.9 | 1259.1 | 1190.3 | 1037.8 | 959.1 | 880.4 | 816.5 |
| 29993.1 | 62.5° | 20534.8 | 8095.9 | 1490.3 | 1200.1 | 1052.6 | 973.9 | 885.3 | 826.3 | 732.9 | 644.3 |
| 24420.4 | 65° | 16024.5 | 4952.9 | 1150.9 | 880.4 | 846.0 | 806.6 | 752.5 | 698.4 | 585.3 | 496.8 |
| 15931.0 | 67.5° | 10107.5 | 2346.1 | 821.4 | 664.0 | 668.9 | 649.2 | 624.7 | 580.4 | 496.8 | 418.1 |
| 7136.8 | 70° | 4451.2 | 1136.2 | 541.0 | 506.6 | 496.8 | 496.8 | 516.4 | 501.7 | 423.0 | 349.2 |
| 2478.9 | 72.5° | 1514.9 | 609.9 | 403.3 | 383.6 | 359.1 | 354.1 | 432.8 | 418.1 | 339.4 | 270.5 |
| 1234.5 | 75° | 791.9 | 408.2 | 295.1 | 275.4 | 216.4 | 260.7 | 344.3 | 324.6 | 241.0 | 177.1 |
| 816.5 | 77.5° | 516.4 | 290.2 | 201.7 | 177.1 | 123.0 | 172.1 | 255.8 | 226.3 | 142.6 | 88.5 |
| 536.1 | 80° | 324.6 | 191.8 | 118.0 | 83.6 | 59.0 | 93.5 | 137.7 | 98.4 | 54.1 | 19.7 |
| 314.8 | 82.5° | 172.1 | 98.4 | 44.3 | 29.5 | 24.6 | 29.5 | 34.4 | 24.6 | 9.8 | 0.0 |
| 162.3 | 85° | 68.9 | 34.4 | 14.8 | 9.8 | 4.9 | 0.0 | 9.8 | 4.9 | 0.0 | 0.0 |
| 29.5 | 87.5° | 24.6 | 4.9 | 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 |

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| |
|-------------|
| <u>180°</u> |
| 9728.8 |
| 9089.4 |
| 7608.9 |
| 5671.0 |
| 3826.6 |
| 3098.7 |
| 3020.0 |
| 2975.7 |
| 2906.8 |
| 2838.0 |
| 2793.7 |
| 2759.3 |
| 2724.9 |
| 2690.4 |
| 2665.8 |
| 2636.3 |
| 2542.9 |
| 2336.3 |
| 2065.8 |
| 1785.4 |
| 1534.6 |
| 1313.2 |
| 1131.3 |
| 959.1 |
| 801.7 |
| 629.6 |
| 482.0 |
| 408.2 |
| 334.5 |
| 255.8 |
| 162.3 |
| 78.7 |
| 14.8 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |

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