Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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: P943202

Luminaire Tested: **GALN-SB7C-827-U-SL4**

Issue Date: 1/21/2025

Report Generated By 670246001

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

**Test Information**

| | |
|---|---|
| Test Method: | LM-79-08 |
| Report Number: | P943202 |
| | TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-9) |
| Test Lab: | INNOVATION CENTER |
| Issue Date: | 1/21/2025 |
| Manufacturer: | COOPER LIGHTING SOLUTIONS (FORMERLY EATON) |
| Product Line: | McGRAW-EDISON |
| Catalog Number: | GALN-SB7C-827-U-SL4 |
| Description: | GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE |
| | (7) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV SPILL LIGHT ELIMINATOR OPTICS |
| Light Source: | - |
| Ballast/Driver: | - |

**Summary**

| | |
|---|---|
| Lumens per Lamp: | N/A |
| Luminaire Lumens: | 45909 lumens |
| Efficiency: | N/A |
| Efficacy: | 131.0 lumens/watt |
| Luminous Opening: | Rectangular (W 1.5' x L: 1.5' x H: 0') |
| IES Classification: | Type IV - Medium |
| BUG Rating: | B4 - U0 - G5 |
| Input Watts (W): | 350.5 |
| 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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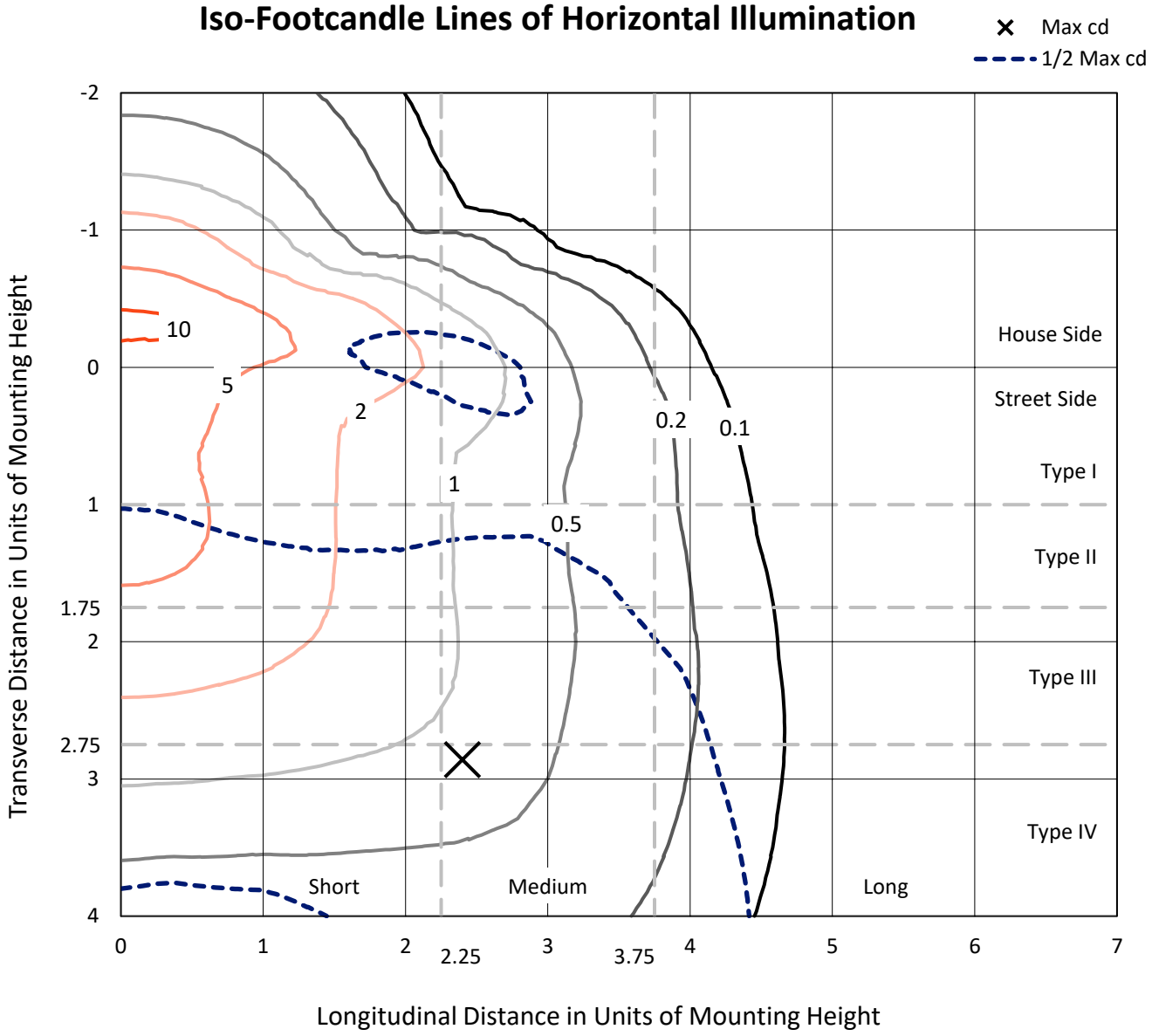
## Iso-Footcandle Lines of Horizontal Illumination




Based on 25 foot mounting height. Maximum calculated value = 10.8 fc
Type IV - Medium - N/A

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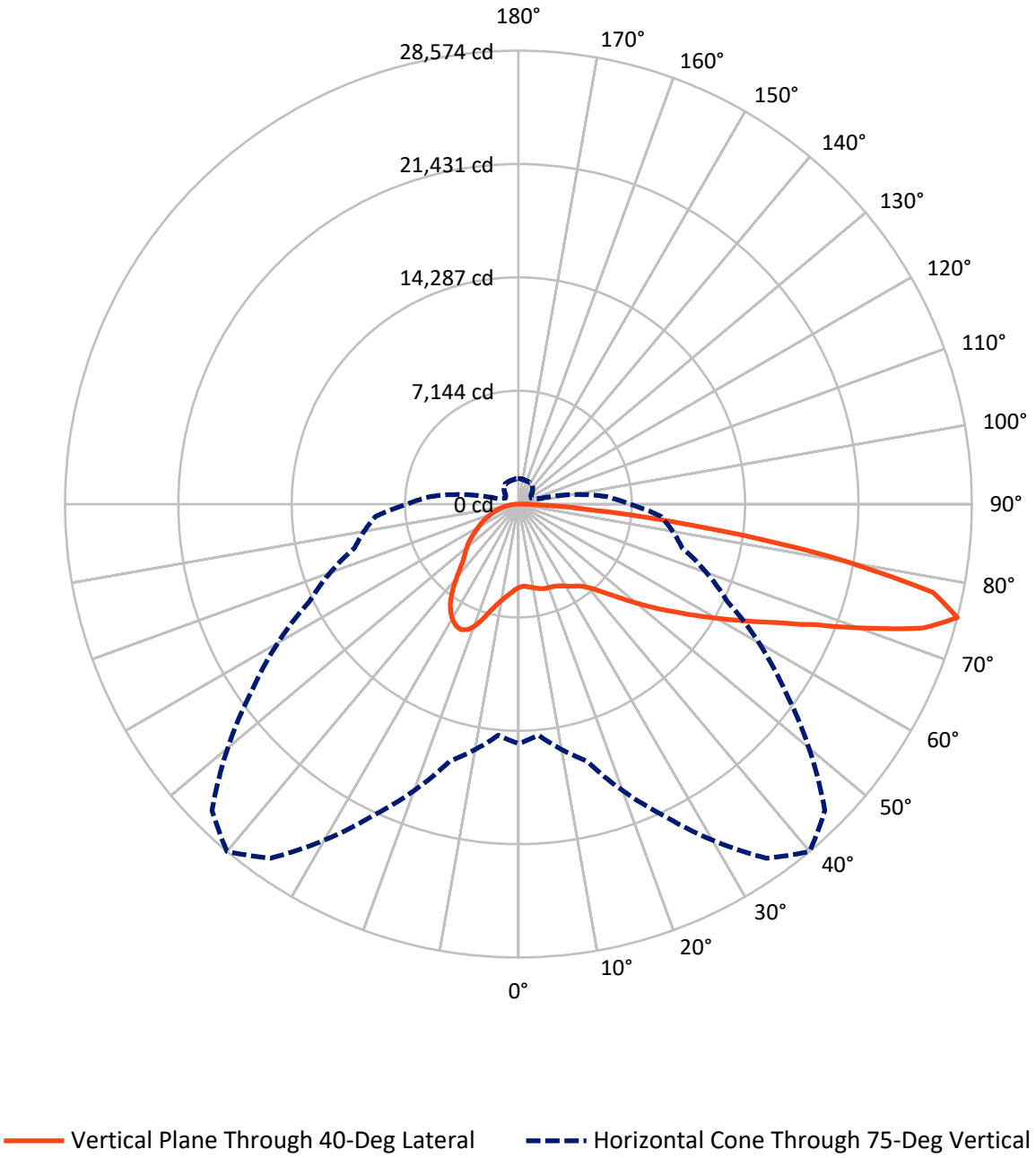
## Luminous Intensity Polar Plot



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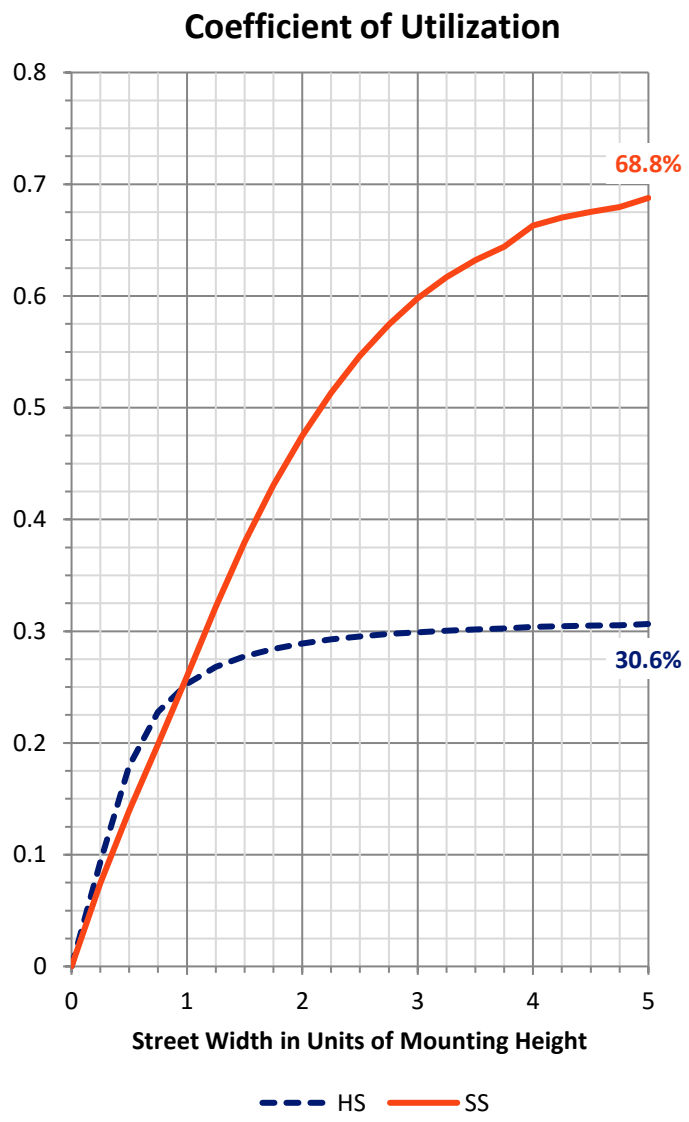
**FLUX DISTRIBUTION:**

| | | Downward | Upward | Total |
|---|---|---|---|---|
| **House Side** | Lumens | 14224.1 | 0.0 | 14224.1 |
| | % Fixture | 31.0 | 0.0 | 31.0 |
| **Street Side** | Lumens | 31684.9 | 0.0 | 31684.9 |
| | % Fixture | 69.0 | 0.0 | 69.0 |
| **Total** | Lumens | 45909.0 | 0.0 | 45909.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

**ZONAL LUMENS:**

| Zone | Lumens | % Fixture |
|---|---|---|
| 0°-10° | 524.0 | 1.1 |
| 10°-20° | 1759.4 | 3.8 |
| 20°-30° | 3212.5 | 7.0 |
| 30°-40° | 4556.2 | 9.9 |
| 40°-50° | 6152.3 | 13.4 |
| 50°-60° | 8276.5 | 18.0 |
| 60°-70° | 10504.7 | 22.9 |
| 70°-80° | 9533.7 | 20.8 |
| 80°-90° | 1389.7 | 3.0 |
| 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° | 45909.0 | 100.0 |
| 0°-180° | 45909.0 | 100.0 |



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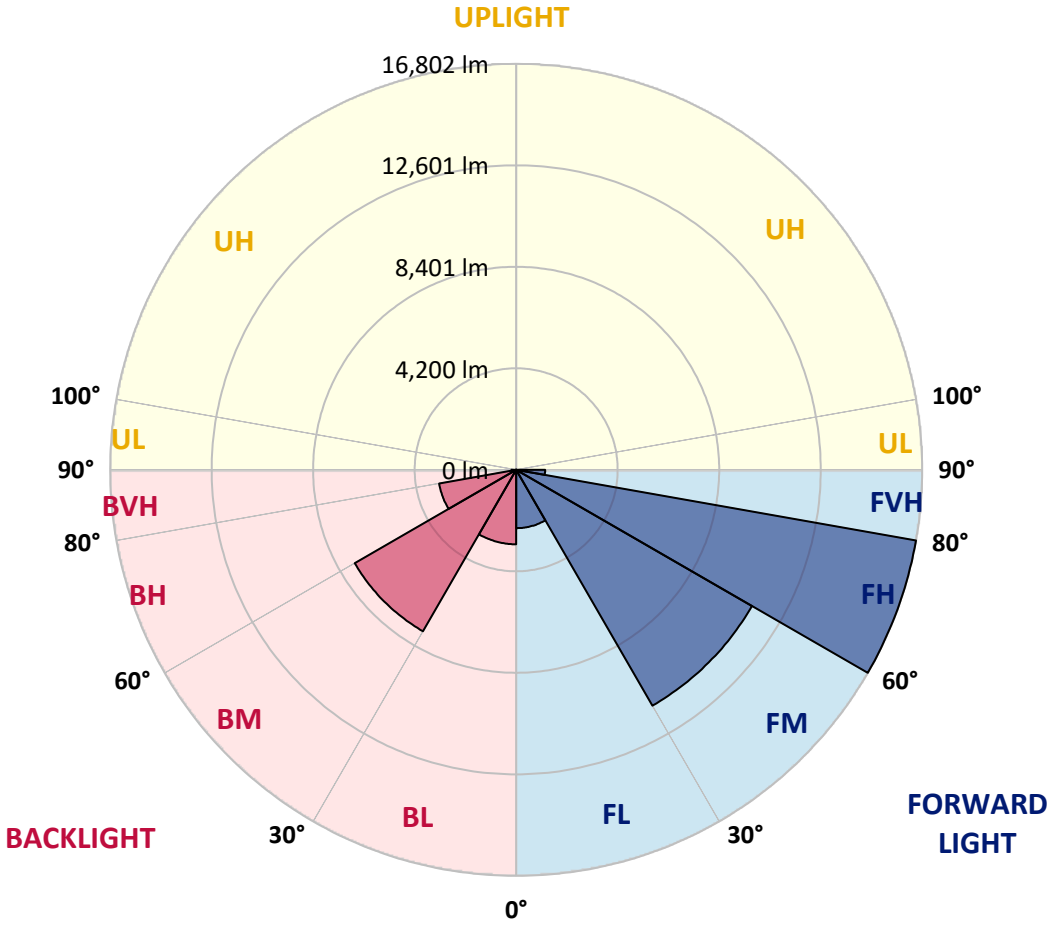
**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit B | U | G |
|---|---|---|---|---|---|---|
| FL | (0°-30°) | 2414.9 | 5.3 | | | |
| FM | (30°-60°) | 11269.6 | 24.5 | | | |
| FH | (60°-80°) | 16802.0 | 36.6 | | | G5 |
| FVH | (80°-90°) | 1198.4 | 2.6 | | | G5 |
| BL | (0°-30°) | 3081.1 | 6.7 | B4/5000 | | |
| BM | (30°-60°) | 7715.3 | 16.8 | B4/8500 | | |
| BH | (60°-80°) | 3236.4 | 7.0 | B4/5000 | | G4/5000 |
| BVH | (80°-90°) | 191.3 | 0.4 | | | G2/225 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

**BUG Rating: B4-U0-G5**
Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° |
|---|---|---|---|---|---|---|---|---|---|---|
| 0° | 5249.8 | 5249.8 | 5249.8 | 5249.8 | 5249.8 | *5249.8* | 5249.8 | 5249.8 | 5249.8 | 5249.8 |
| 2.5° | 5169.4 | 5198.6 | 5191.3 | 5181.6 | 5181.6 | *5184.0* | 5181.6 | 5198.6 | 5215.7 | 5232.7 |
| 5° | 5223.0 | 5252.2 | 5237.6 | 5225.4 | 5215.7 | *5213.2* | 5205.9 | 5203.5 | 5213.2 | 5235.1 |
| 7.5° | 5327.7 | 5356.9 | 5335.0 | 5313.1 | 5293.6 | *5283.8* | 5274.1 | 5259.5 | 5252.2 | 5264.4 |
| 10° | 5444.6 | 5473.8 | 5447.0 | 5408.0 | 5376.4 | *5364.2* | 5354.5 | 5339.8 | 5330.1 | 5337.4 |
| 12.5° | 5561.4 | 5590.6 | 5554.1 | 5500.6 | 5459.2 | *5451.9* | 5439.7 | 5434.8 | 5432.4 | 5429.9 |
| 15° | 5671.0 | 5695.4 | 5649.1 | 5585.8 | 5541.9 | *5529.8* | 5517.6 | 5524.9 | 5537.1 | 5551.7 |
| 17.5° | 5756.2 | 5780.6 | 5712.4 | 5629.6 | 5588.2 | *5583.3* | 5576.0 | 5600.4 | 5634.5 | 5671.0 |
| 20° | 5834.1 | 5858.5 | 5770.8 | 5658.8 | 5610.1 | *5610.1* | 5612.6 | 5663.7 | 5712.4 | 5766.0 |
| 22.5° | 5943.7 | 5963.2 | 5856.1 | 5702.7 | 5632.0 | *5636.9* | 5656.4 | 5707.5 | 5768.4 | 5841.4 |
| 25° | 6106.9 | 6121.5 | 5990.0 | 5785.4 | 5705.1 | *5719.7* | 5736.7 | 5761.1 | 5819.5 | 5904.8 |
| 27.5° | 6369.8 | 6382.0 | 6209.1 | 5931.5 | 5809.8 | *5834.1* | 5858.5 | 5841.4 | 5868.2 | 5941.3 |
| 30° | 6739.9 | 6747.3 | 6528.1 | 6160.4 | 5987.5 | *5999.7* | 6004.6 | 5934.0 | 5882.8 | 5941.3 |
| 32.5° | 7178.2 | 7175.8 | 6915.3 | 6438.0 | 6189.6 | *6177.5* | 6136.1 | 5997.3 | 5878.0 | 5929.1 |
| 35° | 7857.6 | 7830.8 | 7494.8 | 6827.6 | 6418.5 | *6343.0* | 6245.7 | 6067.9 | 5902.3 | 5916.9 |
| 37.5° | 8982.5 | 8899.7 | 8434.7 | 7465.6 | 6759.4 | *6567.1* | 6423.4 | 6182.3 | 5955.9 | 5912.1 |
| 40° | 10251.1 | 10146.4 | 9635.1 | 8339.7 | 7270.8 | *6961.5* | 6730.2 | 6345.5 | 6043.5 | 5934.0 |
| 42.5° | 11755.9 | 11607.4 | 11057.1 | 9369.7 | 7918.5 | *7470.4* | 7122.2 | 6552.5 | 6172.6 | 6004.6 |
| 45° | 13604.1 | 13406.8 | 12627.7 | 10531.2 | 8734.2 | *8137.6* | 7672.5 | 6866.6 | 6369.8 | 6140.9 |
| 47.5° | 15471.7 | 15520.4 | 14412.5 | 11860.6 | 9713.0 | *8960.6* | 8361.6 | 7338.9 | 6657.2 | 6360.1 |
| 50° | 17456.2 | 17490.3 | 16187.6 | 13333.8 | 10823.4 | *9890.8* | 9135.9 | 7867.3 | 7056.5 | 6671.8 |
| 52.5° | 19004.8 | 19009.7 | 17799.5 | 14875.1 | 11980.0 | *10913.5* | 9971.1 | 8471.2 | 7519.1 | 7085.7 |
| 55° | 19973.9 | 19961.7 | 18929.3 | 16333.7 | 13309.4 | *11987.3* | 10896.4 | 9157.9 | 8084.0 | 7572.7 |
| 57.5° | 20677.6 | 20641.1 | 19708.5 | 17587.7 | 14726.6 | *13255.9* | 11943.4 | 9937.0 | 8751.2 | 8152.2 |
| 60° | 20945.5 | 20923.5 | 20236.9 | 18671.2 | 16216.8 | *14658.4* | 13151.2 | 10808.7 | 9508.5 | 8836.4 |
| 62.5° | 21047.7 | 21089.1 | 20755.5 | 19720.7 | 17811.7 | *16211.9* | 14478.2 | 11850.9 | 10360.7 | 9610.8 |
| 65° | 21408.1 | 21483.6 | 21415.4 | 21094.0 | 19613.5 | *18030.8* | 16238.7 | 13090.3 | 11290.9 | 10441.1 |
| 67.5° | 22121.5 | 22197.0 | 22226.2 | 22737.6 | 21814.7 | *20297.8* | 18435.0 | 14634.1 | 12379.3 | 11303.0 |
| 70° | 22104.5 | 22082.6 | 22598.8 | 24045.1 | 24571.1 | *23436.4* | 21395.9 | 16533.3 | 13677.1 | 12018.9 |
| 72.5° | 20120.0 | 19944.7 | 21164.6 | 24030.5 | 26864.8 | *26713.9* | 25011.8 | 18982.9 | 14797.2 | 12106.6 |
| 75° | *15094.3* | *14626.8* | *16781.7* | *21656.5* | *27247.1* | *28574.2* | *27310.4* | *20502.3* | *14531.8* | *10696.7* |
| 77.5° | 6455.1 | 5985.1 | 8524.8 | 16031.7 | 24386.0 | *26711.4* | 25201.7 | 17887.2 | 11600.1 | 7073.5 |
| 80° | 1689.9 | 1687.4 | 2576.2 | 7268.3 | 16584.5 | *19725.5* | 17305.2 | 11551.4 | 6627.9 | 2527.5 |
| 82.5° | 698.8 | 681.8 | 947.2 | 2827.0 | 8103.5 | *11069.3* | 9033.7 | 5152.4 | 2393.6 | 684.2 |
| 85° | 260.5 | 258.1 | 460.2 | 976.4 | 2858.6 | *4565.5* | 3304.2 | 1317.3 | 596.6 | 333.6 |
| 87.5° | 73.0 | 70.6 | 99.8 | 338.5 | 696.4 | *1056.8* | 564.9 | 216.7 | 168.0 | 131.5 |
| 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° |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 5249.8 | 0° | 5249.8 | 5249.8 | 5249.8 | 5249.8 | 5249.8 | 5249.8 | 5249.8 | 5249.8 | 5249.8 | 5249.8 |
| 5259.5 | 2.5° | 5266.8 | 5279.0 | 5300.9 | 5317.9 | 5339.8 | 5364.2 | 5398.3 | 5420.2 | 5442.1 | 5456.7 |
| 5271.7 | 5° | 5288.7 | 5315.5 | 5371.5 | 5427.5 | 5493.3 | 5554.1 | 5624.7 | 5675.9 | 5717.3 | 5729.4 |
| 5315.5 | 7.5° | 5337.4 | 5381.2 | 5476.2 | 5571.2 | 5675.9 | 5775.7 | 5878.0 | 5965.6 | 6036.2 | 6063.0 |
| 5393.4 | 10° | 5422.6 | 5481.1 | 5615.0 | 5748.9 | 5887.7 | 6041.1 | 6172.6 | 6299.2 | 6399.1 | 6440.4 |
| 5485.9 | 12.5° | 5529.8 | 5602.8 | 5778.1 | 5963.2 | 6155.6 | 6367.4 | 6537.8 | 6693.7 | 6817.9 | 6873.9 |
| 5615.0 | 15° | 5668.6 | 5763.5 | 5987.5 | 6235.9 | 6518.4 | 6813.0 | 7029.7 | 7202.6 | 7341.4 | 7409.6 |
| 5748.9 | 17.5° | 5819.5 | 5946.2 | 6228.6 | 6603.6 | 7007.8 | 7394.9 | 7648.2 | 7774.8 | 7918.5 | 7984.2 |
| 5873.1 | 20° | 5965.6 | 6121.5 | 6525.7 | 7071.1 | 7609.2 | 8020.7 | 8225.3 | 8259.4 | 8269.1 | 8276.4 |
| 5990.0 | 22.5° | 6116.6 | 6326.0 | 6898.2 | 7660.4 | 8237.4 | 8522.3 | 8551.5 | 8405.5 | 8200.9 | 8106.0 |
| 6104.4 | 25° | 6282.2 | 6559.8 | 7385.2 | 8310.5 | 8778.0 | 8812.1 | 8588.1 | 8232.6 | 7845.4 | 7667.7 |
| 6197.0 | 27.5° | 6442.9 | 6830.0 | 7969.6 | 8931.4 | 9167.6 | 8868.1 | 8386.0 | 7881.9 | 7414.4 | 7226.9 |
| 6262.7 | 30° | 6603.6 | 7139.3 | 8614.9 | 9474.4 | 9345.3 | 8729.3 | 8067.0 | 7504.5 | 7034.6 | 6837.3 |
| 6321.1 | 32.5° | 6766.7 | 7499.7 | 9357.5 | 9866.4 | 9313.7 | 8434.7 | 7670.1 | 7080.8 | 6666.9 | 6459.9 |
| 6372.3 | 35° | 6951.8 | 7942.8 | 10061.2 | 10080.7 | 9101.8 | 8001.3 | 7146.6 | 6574.4 | 6214.0 | 6048.4 |
| 6433.1 | 37.5° | 7192.8 | 8505.3 | 10682.1 | 10134.3 | 8731.7 | 7365.7 | 6496.5 | 5975.4 | 5678.3 | 5602.8 |
| 6523.2 | 40° | 7492.3 | 9182.2 | 11156.9 | 10049.0 | 8183.9 | 6593.8 | 5785.4 | 5369.1 | 5201.1 | 5218.1 |
| 6645.0 | 42.5° | 7881.9 | 9939.5 | 11490.5 | 9829.9 | 7421.7 | 5797.6 | 5162.1 | 4977.0 | 5057.4 | 5125.6 |
| 6827.6 | 45° | 8388.4 | 10726.0 | 11697.5 | 9457.4 | 6559.8 | 5123.1 | 4794.4 | 4838.2 | 4899.1 | 4906.4 |
| 7122.2 | 47.5° | 9036.1 | 11522.2 | 11833.9 | 8894.9 | 5680.7 | 4648.3 | 4560.7 | 4570.4 | 4558.2 | 4507.1 |
| 7563.0 | 50° | 9844.5 | 12296.5 | 11955.6 | 8149.8 | 4933.2 | 4351.3 | 4234.4 | 4200.3 | 4032.3 | 3866.7 |
| 8149.8 | 52.5° | 10764.9 | 13007.5 | 12006.7 | 7224.5 | 4351.3 | 4102.9 | 3913.0 | 3698.7 | 3384.6 | 3333.4 |
| 8887.6 | 55° | 11787.6 | 13664.9 | 11875.3 | 6087.4 | 3861.8 | 3783.9 | 3496.6 | 3238.5 | 3204.4 | 3160.6 |
| 9859.1 | 57.5° | 13009.9 | 14373.5 | 11607.4 | 4818.8 | 3360.2 | 3411.4 | 3131.3 | 3160.6 | 3099.7 | 3031.5 |
| 11108.2 | 60° | 14346.7 | 15106.4 | 11137.5 | 3662.2 | 2841.6 | 2946.3 | 3036.4 | 3033.9 | 3016.9 | 2960.9 |
| 12425.6 | 62.5° | 15549.6 | 15588.6 | 10212.2 | 2805.1 | 2386.3 | 2585.9 | 2831.8 | 2829.4 | 2814.8 | 2783.1 |
| 13801.3 | 65° | 16265.5 | 15515.5 | 8668.4 | 2208.5 | 2011.3 | 2288.9 | 2554.3 | 2573.7 | 2576.2 | 2573.7 |
| 14836.2 | 67.5° | 16138.9 | 14660.8 | 6550.0 | 1758.0 | 1702.0 | 1986.9 | 2279.1 | 2305.9 | 2325.4 | 2330.2 |
| 14967.6 | 70° | 14707.1 | 12783.5 | 4270.9 | 1402.5 | 1426.9 | 1721.5 | 2018.6 | 2045.4 | 2062.4 | 2081.9 |
| 12988.0 | 72.5° | 11463.8 | 9398.9 | 2444.7 | 1134.7 | 1185.8 | 1492.6 | 1760.5 | 1792.1 | 1801.9 | 1838.4 |
| *9038.5* | 75° | *6985.9* | *5527.3* | *1319.7* | *893.6* | *974.0* | *1275.9* | *1504.8* | *1541.3* | *1558.4* | *1602.2* |
| 4438.9 | 77.5° | 3321.3 | 2393.6 | 752.4 | 696.4 | 784.1 | 1042.2 | 1271.0 | 1312.4 | 1266.2 | 1290.5 |
| 1224.8 | 80° | 1122.5 | 888.8 | 474.8 | 530.8 | 599.0 | 813.3 | 1017.8 | 1059.2 | 961.8 | 956.9 |
| 406.6 | 82.5° | 392.0 | 360.4 | 301.9 | 353.1 | 387.2 | 582.0 | 769.4 | 823.0 | 715.9 | 713.4 |
| 182.6 | 85° | 153.4 | 146.1 | 168.0 | 192.4 | 231.3 | 357.9 | 506.5 | 533.3 | 440.7 | 355.5 |
| 53.6 | 87.5° | 31.7 | 34.1 | 41.4 | 43.8 | 70.6 | 124.2 | 182.6 | 224.0 | 177.8 | 151.0 |
| 0.0 | 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END O

| 180° |
|---|
| 5249.8 |
| 5447.0 |
| 5734.3 |
| 6065.5 |
| 6442.9 |
| 6873.9 |
| 7404.7 |
| 7981.8 |
| 8295.9 |
| 8132.7 |
| 7694.4 |
| 7248.9 |
| 6859.3 |
| 6486.7 |
| 6084.9 |
| 5656.4 |
| 5276.5 |
| 5188.9 |
| 4955.1 |
| 4546.1 |
| 3888.6 |
| 3350.5 |
| 3167.9 |
| 3019.3 |
| 2941.4 |
| 2771.0 |
| 2573.7 |
| 2335.1 |
| 2091.6 |
| 1853.0 |
| *1607.1* |
| 1271.0 |
| 947.2 |
| 679.4 |
| 350.6 |
| 138.8 |
| 0.0 |

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