

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: P950075

Luminaire Tested: **GALN-SB4C-850-U-T2U**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P950075
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-16)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SB4C-850-U-T2U
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 5000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29094 lumens
Efficiency: N/A
Efficacy: 145.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

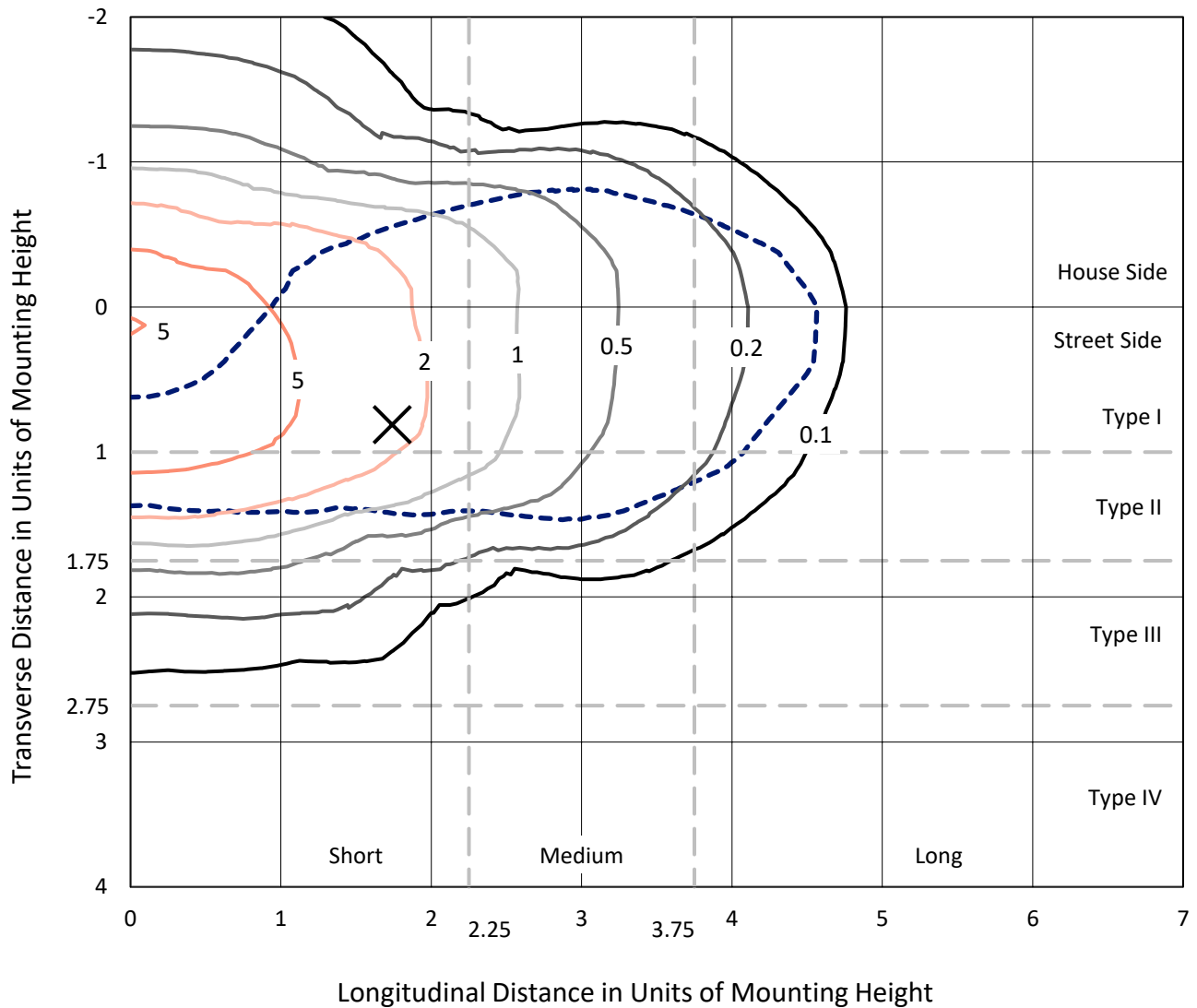
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

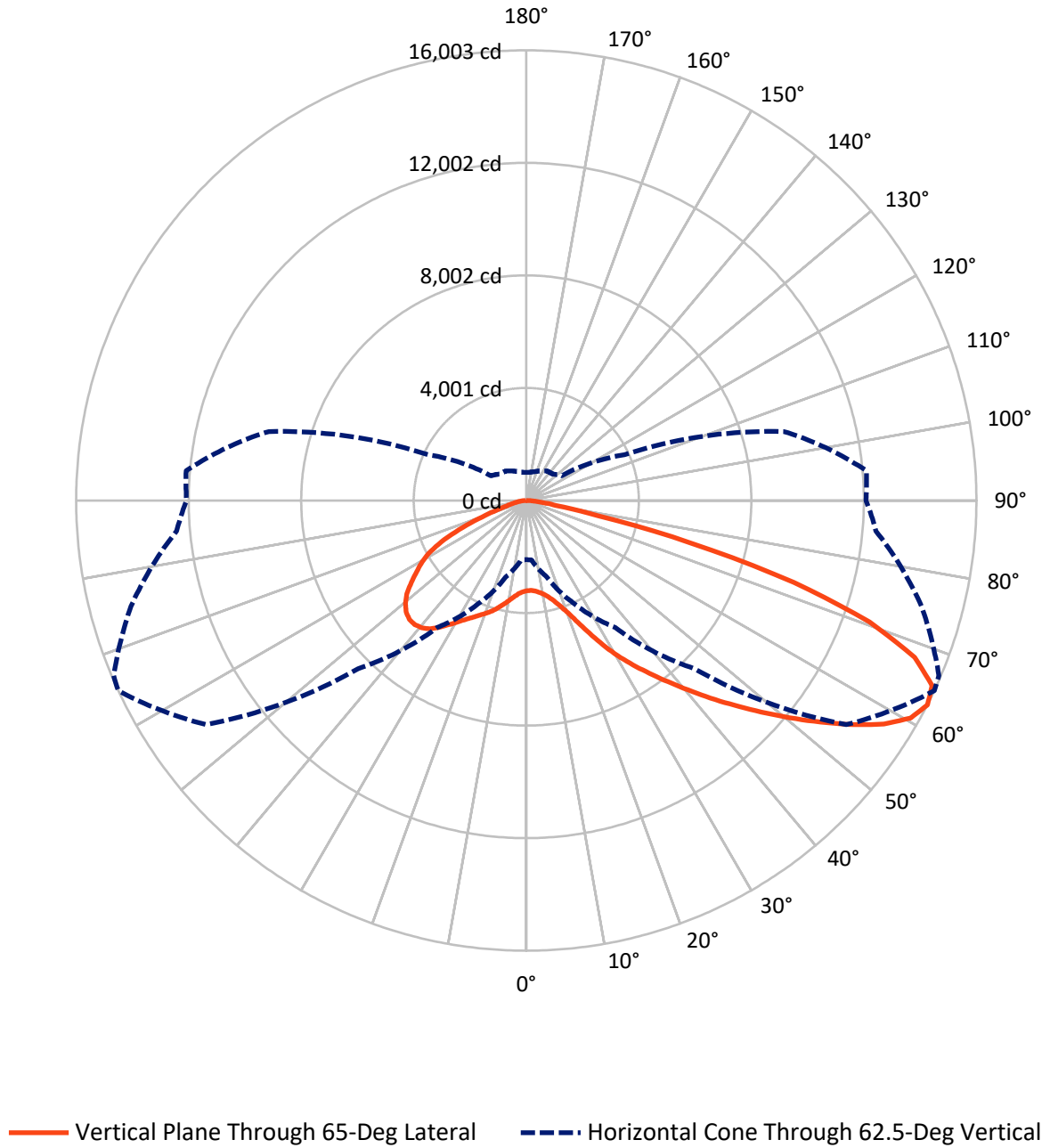
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 9180.8 | 0.0 | 9180.8 |
| | % Fixture | 31.6 | 0.0 | 31.6 |
| Street Side | Lumens | 19913.2 | 0.0 | 19913.2 |
| | % Fixture | 68.4 | 0.0 | 68.4 |
| Total | Lumens | 29094.0 | 0.0 | 29094.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 319.6 | 1.1 |
| 10°-20° | 1083.9 | 3.7 |
| 20°-30° | 2197.8 | 7.6 |
| 30°-40° | 3803.2 | 13.1 |
| 40°-50° | 5755.4 | 19.8 |
| 50°-60° | 6747.8 | 23.2 |
| 60°-70° | 5657.3 | 19.4 |
| 70°-80° | 3123.3 | 10.7 |
| 80°-90° | 405.7 | 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° | 29094.0 | 100.0 |
| 0°-180° | 29094.0 | 100.0 |



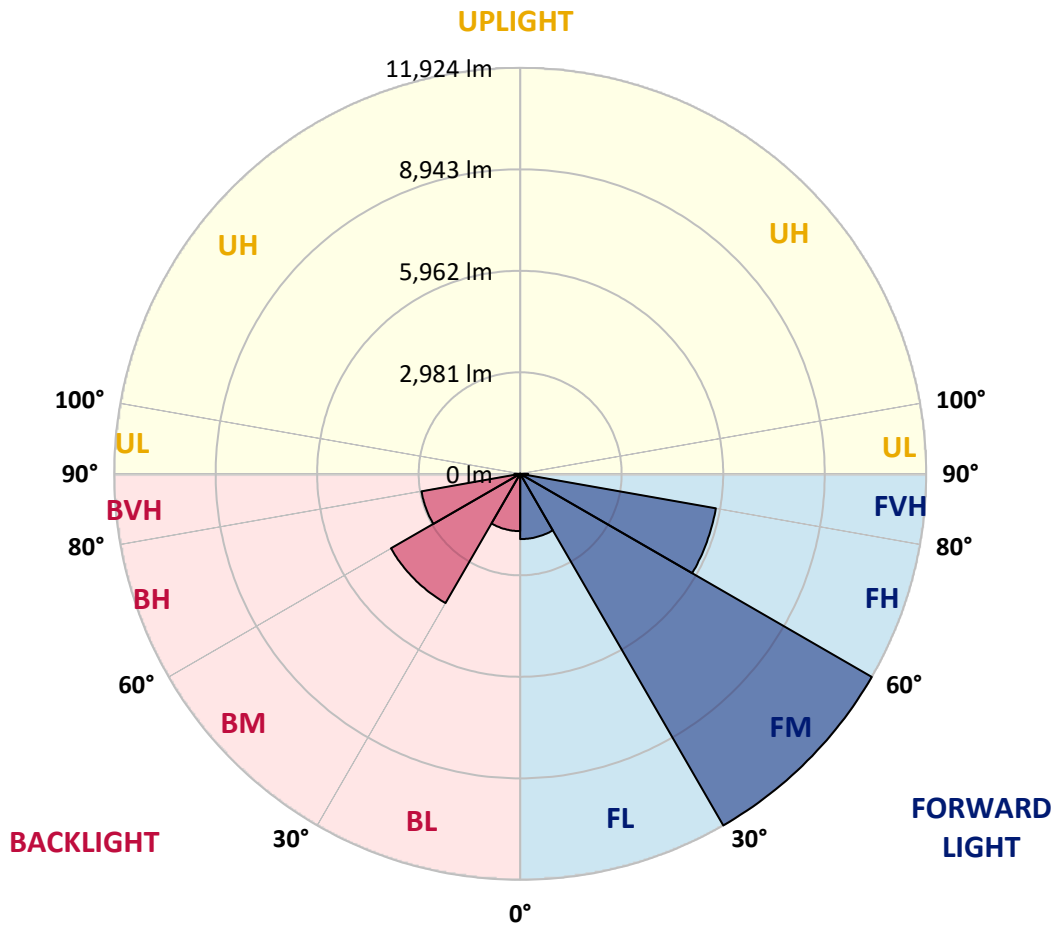
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1917.7 | 6.6 | | | |
| FM (30°-60°) | 11923.7 | 41.0 | | | |
| FH (60°-80°) | 5835.4 | 20.1 | | | G3/7500 |
| FVH (80°-90°) | 236.4 | 0.8 | | | G3/500 |
| BL (0°-30°) | 1683.6 | 5.8 | B3/2500 | | |
| BM (30°-60°) | 4382.8 | 15.1 | B3/5000 | | |
| BH (60°-80°) | 2945.1 | 10.1 | B4/5000 | | G4/5000 |
| BVH (80°-90°) | 169.2 | 0.6 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 |
| 2.5° | 3184.9 | 3175.8 | 3183.4 | 3183.4 | 3186.4 | 3184.9 | 3195.5 | 3198.5 | 3203.0 | 3212.1 |
| 5° | 3153.2 | 3151.7 | 3165.3 | 3177.4 | 3189.4 | 3200.0 | 3213.6 | 3233.2 | 3236.2 | 3246.8 |
| 7.5° | 3142.6 | 3133.6 | 3154.7 | 3169.8 | 3198.5 | 3224.1 | 3260.4 | 3293.6 | 3307.2 | 3311.7 |
| 10° | 3224.1 | 3209.1 | 3228.7 | 3237.7 | 3261.9 | 3287.5 | 3329.8 | 3382.6 | 3397.7 | 3415.8 |
| 12.5° | 3363.0 | 3346.4 | 3375.1 | 3388.7 | 3411.3 | 3434.0 | 3462.6 | 3514.0 | 3521.5 | 3554.7 |
| 15° | 3553.2 | 3533.6 | 3551.7 | 3568.3 | 3606.0 | 3627.2 | 3655.8 | 3705.7 | 3705.7 | 3731.3 |
| 17.5° | 3811.3 | 3785.7 | 3799.2 | 3805.3 | 3829.4 | 3861.1 | 3909.4 | 3953.2 | 3975.8 | 3966.8 |
| 20° | 4196.2 | 4164.5 | 4164.5 | 4134.3 | 4125.3 | 4150.9 | 4214.3 | 4274.7 | 4298.9 | 4252.1 |
| 22.5° | 4774.3 | 4729.0 | 4703.4 | 4600.7 | 4560.0 | 4563.0 | 4626.4 | 4700.4 | 4720.0 | 4637.0 |
| 25° | 5509.4 | 5438.5 | 5403.8 | 5252.8 | 5160.7 | 5080.7 | 5130.6 | 5225.7 | 5252.8 | 5150.2 |
| 27.5° | 6244.5 | 6249.0 | 6215.8 | 6034.7 | 5882.3 | 5735.8 | 5710.2 | 5809.8 | 5838.5 | 5722.3 |
| 30° | 7275.5 | 7168.3 | 7104.9 | 6887.5 | 6670.2 | 6464.9 | 6359.2 | 6400.0 | 6407.5 | 6268.7 |
| 32.5° | 8164.5 | 8137.3 | 8001.5 | 7811.3 | 7532.1 | 7210.6 | 7034.0 | 6969.0 | 6957.0 | 6759.2 |
| 35° | 9177.3 | 9162.2 | 9018.9 | 8792.4 | 8490.6 | 8043.8 | 7725.3 | 7539.6 | 7524.5 | 7246.8 |
| 37.5° | 10206.8 | 10206.8 | 10066.4 | 9818.9 | 9506.4 | 8947.9 | 8463.4 | 8169.0 | 8120.7 | 7758.5 |
| 40° | 11027.9 | 10978.1 | 11003.8 | 10899.6 | 10541.9 | 9948.7 | 9283.0 | 8855.8 | 8790.9 | 8356.2 |
| 42.5° | 11494.3 | 11477.7 | 11631.7 | 11747.9 | 11601.5 | 11127.5 | 10185.6 | 9600.0 | 9509.4 | 9014.3 |
| 45° | 11598.5 | 11580.4 | 11855.1 | 12280.7 | 12486.0 | 12291.3 | 11166.8 | 10383.4 | 10273.2 | 9702.6 |
| 47.5° | 11358.5 | 11322.2 | 11725.3 | 12397.0 | 13055.1 | 13397.7 | 12229.4 | 11233.2 | 11073.2 | 10372.8 |
| 50° | 10637.0 | 10602.2 | 11212.1 | 12104.1 | 13246.8 | 14149.4 | 13382.6 | 12134.3 | 11889.8 | 11091.3 |
| 52.5° | 9068.7 | 9085.3 | 10040.7 | 11266.4 | 12994.7 | 14617.3 | 14375.8 | 13083.8 | 12789.4 | 11826.4 |
| 55° | 7064.1 | 7100.4 | 8274.7 | 9624.1 | 11986.4 | 14546.4 | 15053.6 | 14061.9 | 13769.0 | 12517.7 |
| 57.5° | 5058.1 | 5218.1 | 6318.5 | 7654.3 | 10049.8 | 13421.9 | 15201.5 | 14991.7 | 14707.9 | 13272.4 |
| 60° | 3278.5 | 3307.2 | 4439.2 | 5785.7 | 7652.8 | 11423.4 | 14901.1 | 15696.6 | 15474.7 | 14042.2 |
| 62.5° | 2101.1 | 2120.8 | 2810.6 | 4046.8 | 5507.9 | 8451.3 | 13889.8 | 16003.0 | 15935.1 | 14550.9 |
| 65° | 1544.1 | 1529.1 | 1888.3 | 2674.7 | 3710.2 | 5212.1 | 11926.0 | 15855.1 | 15989.4 | 14869.4 |
| 67.5° | 1289.1 | 1267.9 | 1444.5 | 1852.1 | 2733.6 | 2960.0 | 8824.1 | 14893.6 | 15385.6 | 14833.2 |
| 70° | 1174.3 | 1156.2 | 1263.4 | 1375.1 | 2132.8 | 1981.9 | 4448.3 | 12947.9 | 13705.6 | 14421.1 |
| 72.5° | 994.7 | 963.0 | 1109.4 | 1221.1 | 1658.9 | 1520.0 | 1838.5 | 9945.6 | 10869.4 | 13100.4 |
| 75° | 771.3 | 750.2 | 875.5 | 1074.7 | 1246.8 | 1186.4 | 1162.3 | 6039.2 | 7047.5 | 10131.3 |
| 77.5° | 611.3 | 582.6 | 697.4 | 837.7 | 1121.5 | 895.1 | 846.8 | 2600.8 | 3600.0 | 6467.9 |
| 80° | 460.4 | 434.7 | 529.8 | 662.6 | 861.9 | 674.7 | 547.9 | 1061.1 | 1357.0 | 3277.0 |
| 82.5° | 327.5 | 304.9 | 369.8 | 486.0 | 579.6 | 605.3 | 336.6 | 594.7 | 668.7 | 1263.4 |
| 85° | 209.8 | 196.2 | 247.5 | 304.9 | 368.3 | 389.4 | 205.3 | 310.9 | 341.1 | 520.8 |
| 87.5° | 114.7 | 93.6 | 132.8 | 141.9 | 170.6 | 155.5 | 98.1 | 113.2 | 122.3 | 188.7 |
| 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° |
|---------|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3206.0 | 0° | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 | 3206.0 |
| 3212.1 | 2.5° | 3218.1 | 3222.6 | 3237.7 | 3242.3 | 3252.8 | 3266.4 | 3275.5 | 3284.5 | 3284.5 | 3293.6 |
| 3260.4 | 5° | 3261.9 | 3272.4 | 3304.1 | 3320.7 | 3347.9 | 3375.1 | 3391.7 | 3411.3 | 3423.4 | 3429.4 |
| 3337.4 | 7.5° | 3346.4 | 3363.0 | 3408.3 | 3437.0 | 3483.8 | 3521.5 | 3547.2 | 3574.3 | 3580.4 | 3597.0 |
| 3444.5 | 10° | 3461.1 | 3480.7 | 3532.1 | 3586.4 | 3642.3 | 3689.1 | 3713.2 | 3732.8 | 3740.4 | 3743.4 |
| 3581.9 | 12.5° | 3592.4 | 3621.1 | 3687.5 | 3754.0 | 3812.8 | 3853.6 | 3859.6 | 3855.1 | 3834.0 | 3815.8 |
| 3750.9 | 15° | 3754.0 | 3779.6 | 3853.6 | 3926.0 | 3983.4 | 3990.9 | 3953.2 | 3929.1 | 3903.4 | 3898.9 |
| 3939.6 | 17.5° | 3947.2 | 3960.7 | 4028.7 | 4099.6 | 4104.1 | 4078.5 | 4022.6 | 4000.0 | 3975.8 | 3959.2 |
| 4185.7 | 20° | 4172.1 | 4167.5 | 4215.8 | 4246.0 | 4214.3 | 4135.8 | 4051.3 | 4013.6 | 3989.4 | 3969.8 |
| 4487.5 | 22.5° | 4440.7 | 4406.0 | 4400.0 | 4392.4 | 4307.9 | 4143.4 | 4028.7 | 3980.4 | 3942.6 | 3915.5 |
| 4908.7 | 25° | 4831.7 | 4698.9 | 4606.8 | 4555.5 | 4365.3 | 4102.6 | 3956.2 | 3849.1 | 3778.1 | 3731.3 |
| 5423.4 | 27.5° | 5320.7 | 5097.4 | 4864.9 | 4739.6 | 4365.3 | 4019.6 | 3781.1 | 3607.5 | 3491.3 | 3443.0 |
| 5921.5 | 30° | 5787.2 | 5553.2 | 5210.6 | 4961.5 | 4354.7 | 3883.8 | 3498.9 | 3257.4 | 3121.5 | 3073.2 |
| 6347.2 | 32.5° | 6185.7 | 5930.6 | 5577.3 | 5204.5 | 4329.0 | 3663.4 | 3148.7 | 2881.5 | 2750.2 | 2692.8 |
| 6768.3 | 35° | 6555.5 | 6283.8 | 5945.7 | 5471.7 | 4261.1 | 3340.4 | 2763.8 | 2560.0 | 2413.6 | 2321.5 |
| 7197.0 | 37.5° | 6934.3 | 6611.3 | 6294.3 | 5713.2 | 4138.9 | 2963.0 | 2467.9 | 2294.3 | 2122.3 | 1998.5 |
| 7652.8 | 40° | 7346.4 | 6960.0 | 6667.2 | 5856.6 | 3938.1 | 2603.8 | 2238.5 | 2080.0 | 1897.4 | 1766.0 |
| 8178.1 | 42.5° | 7827.9 | 7378.1 | 7082.3 | 5930.6 | 3663.4 | 2348.7 | 2089.1 | 1933.6 | 1761.5 | 1654.3 |
| 8741.1 | 45° | 8330.6 | 7838.5 | 7461.1 | 5929.0 | 3357.0 | 2229.4 | 2040.8 | 1886.8 | 1696.6 | 1584.9 |
| 9319.2 | 47.5° | 8857.3 | 8320.0 | 7788.7 | 5832.4 | 3091.3 | 2246.0 | 2013.6 | 1785.7 | 1575.8 | 1467.2 |
| 9903.4 | 50° | 9385.6 | 8846.8 | 8105.6 | 5651.3 | 2978.1 | 2209.8 | 1912.4 | 1643.8 | 1396.2 | 1298.1 |
| 10451.3 | 52.5° | 9909.4 | 9406.8 | 8378.9 | 5393.2 | 2863.4 | 2075.5 | 1782.6 | 1459.6 | 1322.3 | 1254.3 |
| 11017.3 | 55° | 10436.2 | 9960.7 | 8676.2 | 5017.4 | 2576.6 | 1918.5 | 1565.3 | 1390.2 | 1263.4 | 1201.5 |
| 11571.3 | 57.5° | 10964.5 | 10600.7 | 8958.5 | 4641.5 | 2215.8 | 1725.3 | 1446.0 | 1305.7 | 1204.5 | 1151.7 |
| 12034.7 | 60° | 11513.9 | 11332.8 | 9249.8 | 4295.8 | 1859.6 | 1477.7 | 1358.5 | 1237.7 | 1135.1 | 1076.2 |
| 12480.0 | 62.5° | 12080.0 | 12138.8 | 9477.7 | 3850.6 | 1532.1 | 1326.8 | 1280.0 | 1156.2 | 1056.6 | 1000.8 |
| 12848.3 | 65° | 12650.5 | 12916.2 | 9627.2 | 3233.2 | 1242.3 | 1183.4 | 1195.5 | 1067.2 | 966.0 | 917.7 |
| 13118.5 | 67.5° | 13080.7 | 13476.2 | 9584.9 | 2446.8 | 1018.9 | 1047.5 | 1089.8 | 973.6 | 878.5 | 840.8 |
| 13074.7 | 70° | 13129.0 | 13409.8 | 9168.3 | 1675.5 | 852.8 | 914.7 | 972.1 | 881.5 | 783.4 | 756.2 |
| 12458.8 | 72.5° | 12486.0 | 12504.1 | 8007.5 | 1094.3 | 721.5 | 803.0 | 848.3 | 787.9 | 692.8 | 665.7 |
| 10899.6 | 75° | 10800.0 | 10341.1 | 5879.2 | 721.5 | 603.8 | 689.8 | 732.1 | 689.8 | 597.7 | 603.8 |
| 8155.5 | 77.5° | 8182.6 | 7323.8 | 3569.8 | 513.2 | 504.2 | 579.6 | 637.0 | 606.8 | 528.3 | 593.2 |
| 4101.1 | 80° | 4215.8 | 3962.3 | 1592.5 | 383.4 | 398.5 | 463.4 | 523.8 | 484.5 | 418.1 | 398.5 |
| 916.2 | 82.5° | 966.0 | 1123.0 | 627.9 | 274.7 | 288.3 | 333.6 | 400.0 | 363.8 | 300.4 | 253.6 |
| 381.9 | 85° | 338.1 | 369.8 | 277.7 | 172.1 | 169.1 | 208.3 | 271.7 | 243.0 | 203.8 | 163.0 |
| 161.5 | 87.5° | 107.2 | 140.4 | 104.2 | 69.4 | 72.5 | 93.6 | 125.3 | 114.7 | 95.1 | 61.9 |
| 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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|--------|
| 180° |
| 3206.0 |
| 3293.6 |
| 3432.4 |
| 3590.9 |
| 3735.8 |
| 3815.8 |
| 3898.9 |
| 3960.7 |
| 3971.3 |
| 3924.5 |
| 3749.4 |
| 3467.2 |
| 3101.9 |
| 2721.5 |
| 2351.7 |
| 2031.7 |
| 1791.7 |
| 1675.5 |
| 1603.0 |
| 1482.3 |
| 1304.1 |
| 1254.3 |
| 1195.5 |
| 1142.6 |
| 1071.7 |
| 999.2 |
| 916.2 |
| 842.3 |
| 757.7 |
| 664.1 |
| 582.6 |
| 522.3 |
| 363.8 |
| 250.6 |
| 172.1 |
| 64.9 |
| 0.0 |

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