

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: P941378

Luminaire Tested: **GALN-SB4D-850-U-T4FT-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P941378
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-SB4D-850-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 5000K, 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: 29536 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

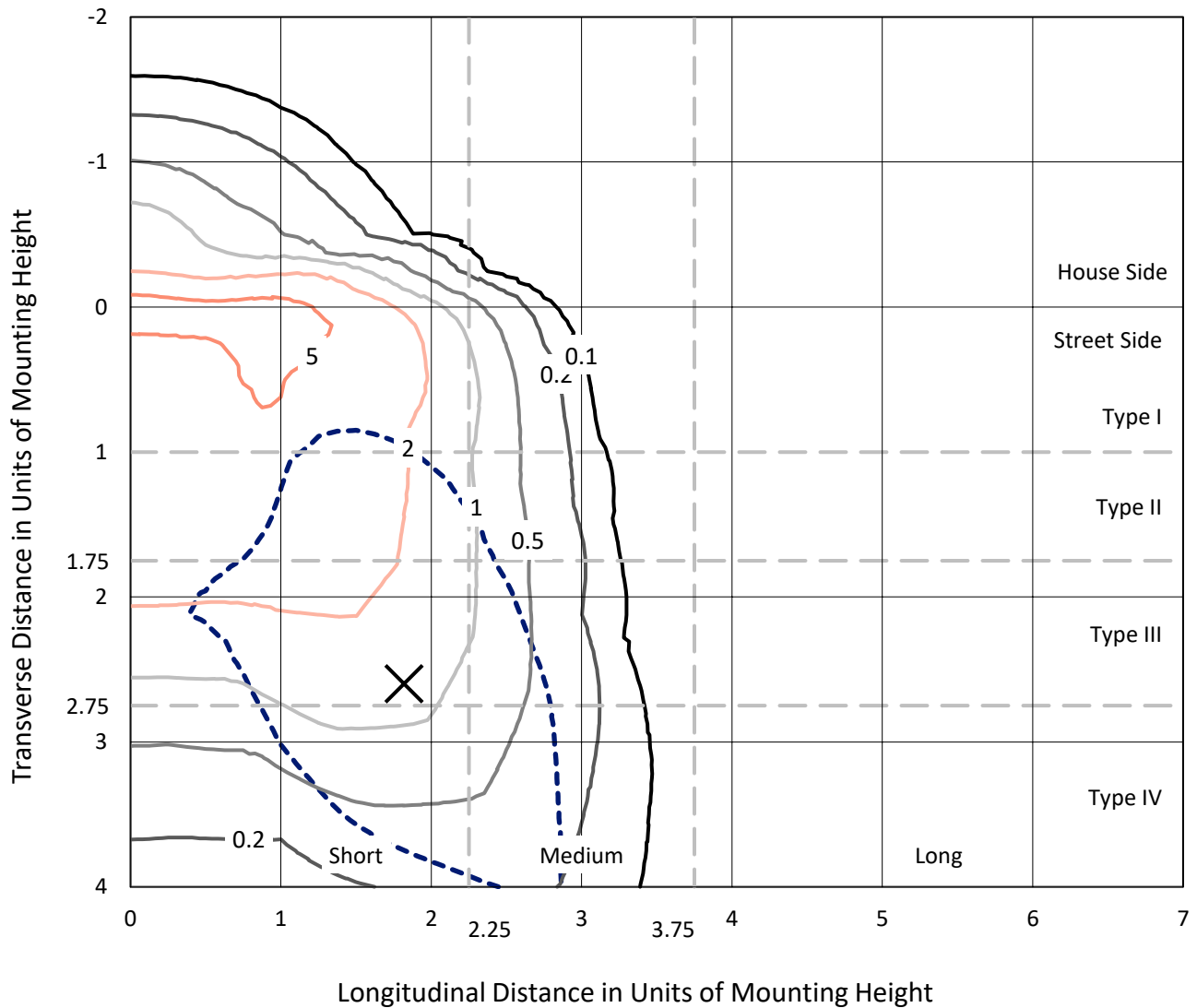
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

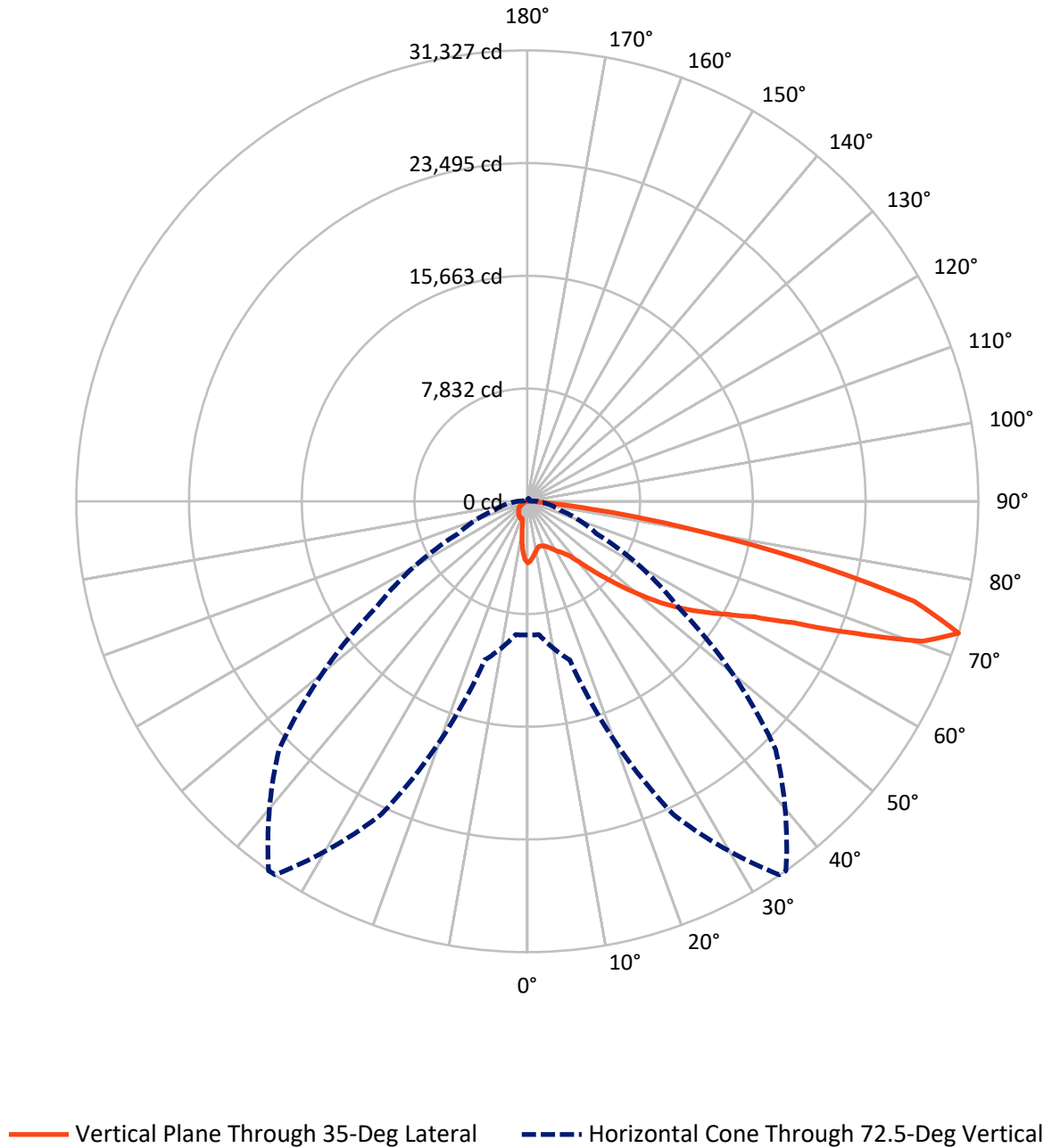
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 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 | 3324.1 | 0.0 | 3324.1 |
| | % Fixture | 11.3 | 0.0 | 11.3 |
| Street Side | Lumens | 26211.9 | 0.0 | 26211.9 |
| | % Fixture | 88.7 | 0.0 | 88.7 |
| Total | Lumens | 29536.0 | 0.0 | 29536.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 351.8 | 1.2 |
| 10°-20° | 822.9 | 2.8 |
| 20°-30° | 1336.8 | 4.5 |
| 30°-40° | 2230.4 | 7.6 |
| 40°-50° | 4220.0 | 14.3 |
| 50°-60° | 6705.6 | 22.7 |
| 60°-70° | 8295.3 | 28.1 |
| 70°-80° | 5156.4 | 17.5 |
| 80°-90° | 416.7 | 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° | 29536.0 | 100.0 |
| 0°-180° | 29536.0 | 100.0 |

Coefficient of Utilization



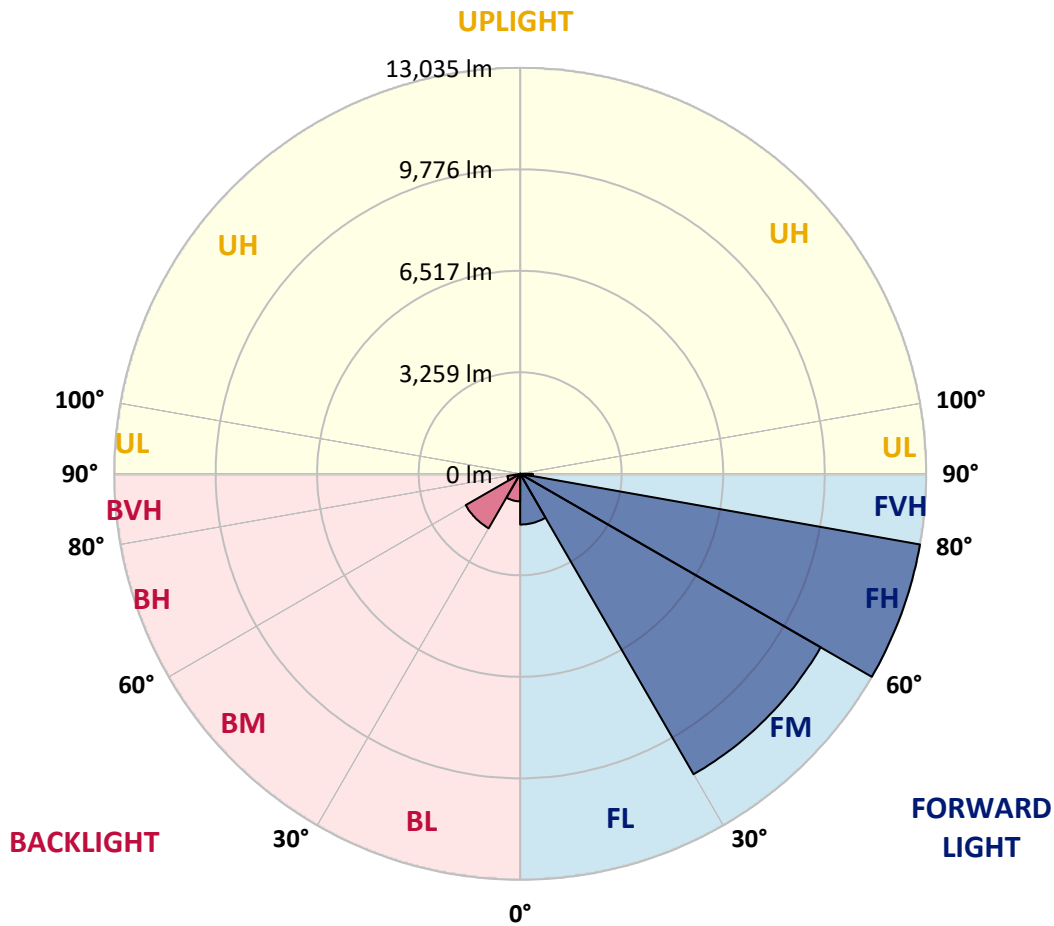
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 1628.2 | 5.5 | | | |
| FM | (30°-60°) | 11138.0 | 37.7 | | | |
| FH | (60°-80°) | 13034.6 | 44.1 | | | G5 |
| FVH | (80°-90°) | 411.1 | 1.4 | | | G3/500 |
| BL | (0°-30°) | 883.3 | 3.0 | B2/1000 | | |
| BM | (30°-60°) | 2018.1 | 6.8 | B2/2500 | | |
| BH | (60°-80°) | 417.1 | 1.4 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 5.7 | 0.0 | | | G0/10 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 34° | 35° | 45° | 55° | 65° | 75° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 |
| 2.5° | 4090.3 | 4124.9 | 4131.4 | 4142.2 | 4142.2 | 4155.2 | 4176.9 | 4207.2 | 4257.0 | 4282.9 |
| 5° | 3770.0 | 3796.0 | 3828.4 | 3854.4 | 3904.2 | 3910.7 | 3995.1 | 4077.3 | 4192.0 | 4278.6 |
| 7.5° | 3447.5 | 3477.8 | 3521.1 | 3583.9 | 3648.8 | 3668.3 | 3796.0 | 3934.5 | 4116.3 | 4278.6 |
| 10° | 3220.3 | 3222.5 | 3261.4 | 3324.2 | 3428.1 | 3451.9 | 3607.7 | 3804.6 | 4031.9 | 4252.6 |
| 12.5° | 3092.6 | 3107.8 | 3125.1 | 3172.7 | 3272.2 | 3287.4 | 3454.0 | 3685.6 | 3947.5 | 4237.5 |
| 15° | 3092.6 | 3103.4 | 3114.3 | 3138.1 | 3218.1 | 3231.1 | 3378.3 | 3609.9 | 3904.2 | 4244.0 |
| 17.5° | 3125.1 | 3142.4 | 3133.7 | 3161.9 | 3246.3 | 3254.9 | 3384.8 | 3588.2 | 3902.0 | 4285.1 |
| 20° | 3203.0 | 3216.0 | 3198.7 | 3216.0 | 3300.4 | 3317.7 | 3451.9 | 3629.3 | 3938.8 | 4356.5 |
| 22.5° | 3326.4 | 3332.8 | 3291.7 | 3304.7 | 3391.3 | 3412.9 | 3568.7 | 3746.2 | 4027.5 | 4471.2 |
| 25° | 3482.2 | 3495.2 | 3432.4 | 3447.5 | 3529.8 | 3555.8 | 3735.4 | 3921.5 | 4168.2 | 4629.2 |
| 27.5° | 3661.8 | 3668.3 | 3614.2 | 3612.0 | 3718.1 | 3754.9 | 3936.7 | 4137.9 | 4356.5 | 4828.3 |
| 30° | 3867.4 | 3886.9 | 3834.9 | 3826.3 | 3960.5 | 3990.8 | 4170.4 | 4404.1 | 4633.5 | 5127.0 |
| 32.5° | 4029.7 | 4044.9 | 4014.6 | 4036.2 | 4172.5 | 4196.4 | 4453.9 | 4780.7 | 5068.5 | 5551.1 |
| 35° | 4263.4 | 4272.1 | 4202.8 | 4241.8 | 4397.6 | 4458.2 | 4841.3 | 5308.7 | 5616.1 | 6083.5 |
| 37.5° | 5109.6 | 5109.6 | 4815.3 | 4622.7 | 4772.0 | 4826.1 | 5371.5 | 5973.1 | 6291.3 | 6797.7 |
| 40° | 6280.5 | 6261.0 | 5830.3 | 5436.4 | 5417.0 | 5523.0 | 6126.8 | 6810.7 | 7163.5 | 7654.7 |
| 42.5° | 7529.2 | 7498.9 | 6912.4 | 6522.9 | 6457.9 | 6494.7 | 6999.0 | 7843.0 | 8202.3 | 8700.0 |
| 45° | 8637.3 | 8628.6 | 8091.9 | 7568.2 | 7451.3 | 7568.2 | 8087.6 | 9050.6 | 9308.2 | 9831.9 |
| 47.5° | 9565.7 | 9565.7 | 9174.0 | 8832.0 | 8771.4 | 8840.7 | 9561.4 | 10390.2 | 10366.4 | 11037.3 |
| 50° | 10634.8 | 10626.1 | 10253.9 | 10106.7 | 10169.5 | 10266.9 | 11258.1 | 11801.3 | 11461.5 | 12221.1 |
| 52.5° | 11383.6 | 11435.6 | 11307.9 | 11284.1 | 11604.4 | 11773.2 | 12980.8 | 13182.0 | 12441.9 | 13344.4 |
| 55° | 11976.6 | 12037.2 | 12184.4 | 12351.0 | 12967.8 | 13188.5 | 14649.4 | 14491.4 | 13262.1 | 14318.2 |
| 57.5° | 12816.3 | 12729.7 | 12957.0 | 13285.9 | 14283.6 | 14549.8 | 16266.0 | 15727.1 | 13922.2 | 15108.2 |
| 60° | 13835.6 | 13848.6 | 13887.6 | 14303.1 | 15597.3 | 15939.2 | 17858.8 | 16895.8 | 14346.4 | 15592.9 |
| 62.5° | 15060.6 | 15080.0 | 15160.1 | 15798.5 | 17361.1 | 17683.6 | 19555.6 | 17852.4 | 14541.2 | 15456.6 |
| 65° | 14976.2 | 15058.4 | 15952.2 | 18135.9 | 20042.5 | 20360.6 | 21535.8 | 18523.3 | 14246.8 | 14210.0 |
| 67.5° | 13643.0 | 13777.2 | 15272.6 | 20927.7 | 24085.2 | 24440.1 | 23929.4 | 18655.3 | 12976.4 | 11050.3 |
| 70° | 11894.4 | 11942.0 | 13740.4 | 23438.1 | 28766.3 | 29125.6 | 26071.9 | 17203.1 | 9847.0 | 6163.6 |
| 72.5° | 9288.7 | 9299.5 | 11409.6 | 24020.3 | 31307.1 | 31326.6 | 24390.4 | 12770.9 | 5295.8 | 2367.6 |
| 75° | 6635.4 | 6570.5 | 7641.7 | 19479.8 | 27543.6 | 27764.3 | 18285.2 | 5990.5 | 2023.5 | 1118.9 |
| 77.5° | 3557.9 | 3629.3 | 4324.0 | 11552.4 | 19027.5 | 19404.1 | 9976.9 | 1727.0 | 1030.2 | 761.8 |
| 80° | 1099.4 | 1160.0 | 1772.5 | 5289.3 | 10777.6 | 11004.9 | 3698.6 | 768.3 | 718.5 | 543.2 |
| 82.5° | 346.3 | 359.3 | 826.7 | 2222.6 | 4473.4 | 4577.2 | 1071.3 | 435.0 | 491.3 | 359.3 |
| 85° | 99.6 | 101.7 | 367.9 | 828.9 | 1105.9 | 1127.5 | 300.8 | 168.8 | 281.3 | 222.9 |
| 87.5° | 10.8 | 34.6 | 138.5 | 138.5 | 97.4 | 95.2 | 32.5 | 36.8 | 80.1 | 28.1 |
| 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° |
|---------|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 4280.8 | 0° | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 | 4280.8 |
| 4300.2 | 2.5° | 4289.4 | 4291.6 | 4263.4 | 4215.8 | 4163.9 | 4120.6 | 4066.5 | 4023.2 | 3992.9 | 3984.3 |
| 4339.2 | 5° | 4319.7 | 4304.6 | 4224.5 | 4079.5 | 3906.4 | 3757.0 | 3590.4 | 3458.4 | 3371.8 | 3335.0 |
| 4380.3 | 7.5° | 4365.2 | 4321.9 | 4146.6 | 3860.9 | 3529.8 | 3235.5 | 2936.8 | 2705.2 | 2558.1 | 2484.5 |
| 4419.3 | 10° | 4404.1 | 4317.5 | 4016.7 | 3544.9 | 3038.5 | 2592.7 | 2190.2 | 1911.0 | 1755.2 | 1681.6 |
| 4464.7 | 12.5° | 4440.9 | 4315.4 | 3847.9 | 3170.5 | 2484.5 | 1939.1 | 1564.7 | 1426.2 | 1382.9 | 1367.8 |
| 4538.3 | 15° | 4510.2 | 4321.9 | 3635.8 | 2742.0 | 1932.6 | 1465.2 | 1328.8 | 1326.6 | 1335.3 | 1331.0 |
| 4650.8 | 17.5° | 4605.4 | 4328.4 | 3395.6 | 2287.5 | 1491.1 | 1292.0 | 1285.5 | 1305.0 | 1318.0 | 1311.5 |
| 4791.5 | 20° | 4728.7 | 4354.3 | 3140.2 | 1837.4 | 1281.2 | 1248.7 | 1263.9 | 1281.2 | 1292.0 | 1281.2 |
| 4979.8 | 22.5° | 4901.9 | 4399.8 | 2861.1 | 1476.0 | 1214.1 | 1222.8 | 1235.7 | 1255.2 | 1266.0 | 1250.9 |
| 5220.0 | 25° | 5114.0 | 4471.2 | 2586.2 | 1283.4 | 1181.6 | 1192.5 | 1211.9 | 1233.6 | 1246.6 | 1231.4 |
| 5523.0 | 27.5° | 5388.8 | 4585.9 | 2333.0 | 1240.1 | 1149.2 | 1155.7 | 1183.8 | 1216.3 | 1233.6 | 1214.1 |
| 5953.7 | 30° | 5787.0 | 4774.2 | 2114.4 | 1259.6 | 1129.7 | 1114.6 | 1153.5 | 1199.0 | 1218.4 | 1201.1 |
| 6540.2 | 32.5° | 6315.1 | 5040.4 | 1980.2 | 1289.9 | 1121.0 | 1066.9 | 1103.7 | 1162.2 | 1194.6 | 1183.8 |
| 7306.3 | 35° | 7007.6 | 5445.1 | 1928.3 | 1324.5 | 1114.6 | 1017.2 | 1043.1 | 1105.9 | 1162.2 | 1173.0 |
| 8271.5 | 37.5° | 7847.3 | 6007.8 | 1943.4 | 1339.6 | 1095.1 | 976.0 | 989.0 | 1043.1 | 1116.7 | 1151.3 |
| 9357.9 | 40° | 8801.7 | 6663.5 | 2030.0 | 1324.5 | 1073.4 | 941.4 | 943.6 | 984.7 | 1049.6 | 1101.6 |
| 10526.6 | 42.5° | 9786.4 | 7429.6 | 2190.2 | 1268.2 | 1054.0 | 911.1 | 904.6 | 932.8 | 976.0 | 1012.8 |
| 11693.1 | 45° | 10723.5 | 8217.4 | 2348.1 | 1190.3 | 1030.2 | 880.8 | 865.7 | 876.5 | 885.2 | 900.3 |
| 12829.3 | 47.5° | 11541.6 | 8771.4 | 2302.7 | 1118.9 | 997.7 | 846.2 | 820.2 | 815.9 | 789.9 | 787.8 |
| 13844.3 | 50° | 12106.4 | 8892.6 | 2045.2 | 1047.5 | 950.1 | 807.2 | 766.1 | 740.2 | 694.7 | 673.1 |
| 14603.9 | 52.5° | 12286.1 | 8414.3 | 1670.8 | 976.0 | 872.2 | 755.3 | 696.9 | 655.7 | 599.5 | 580.0 |
| 15041.1 | 55° | 12048.0 | 7477.3 | 1335.3 | 889.5 | 764.0 | 686.0 | 621.1 | 567.0 | 521.6 | 497.8 |
| 15088.7 | 57.5° | 11465.8 | 6284.8 | 1056.1 | 787.8 | 649.3 | 608.1 | 543.2 | 489.1 | 450.2 | 426.3 |
| 14560.6 | 60° | 10500.6 | 4990.6 | 835.4 | 666.6 | 554.0 | 523.7 | 456.6 | 422.0 | 387.4 | 359.3 |
| 13197.2 | 62.5° | 9035.5 | 3562.2 | 655.7 | 528.1 | 463.1 | 428.5 | 389.6 | 363.6 | 322.5 | 283.5 |
| 10745.2 | 65° | 7050.9 | 2179.3 | 506.4 | 387.4 | 372.2 | 354.9 | 331.1 | 307.3 | 257.5 | 218.6 |
| 7009.8 | 67.5° | 4447.4 | 1032.3 | 361.4 | 292.2 | 294.3 | 285.7 | 274.9 | 255.4 | 218.6 | 184.0 |
| 3140.2 | 70° | 1958.6 | 499.9 | 238.1 | 222.9 | 218.6 | 218.6 | 227.2 | 220.7 | 186.1 | 153.7 |
| 1090.7 | 72.5° | 666.6 | 268.4 | 177.5 | 168.8 | 158.0 | 155.8 | 190.4 | 184.0 | 149.3 | 119.0 |
| 543.2 | 75° | 348.4 | 179.6 | 129.9 | 121.2 | 95.2 | 114.7 | 151.5 | 142.8 | 106.0 | 77.9 |
| 359.3 | 77.5° | 227.2 | 127.7 | 88.7 | 77.9 | 54.1 | 75.7 | 112.5 | 99.6 | 62.8 | 39.0 |
| 235.9 | 80° | 142.8 | 84.4 | 51.9 | 36.8 | 26.0 | 41.1 | 60.6 | 43.3 | 23.8 | 8.7 |
| 138.5 | 82.5° | 75.7 | 43.3 | 19.5 | 13.0 | 10.8 | 13.0 | 15.1 | 10.8 | 4.3 | 0.0 |
| 71.4 | 85° | 30.3 | 15.1 | 6.5 | 4.3 | 2.2 | 0.0 | 4.3 | 2.2 | 0.0 | 0.0 |
| 13.0 | 87.5° | 10.8 | 2.2 | 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> |
| 4280.8 |
| 3999.4 |
| 3348.0 |
| 2495.3 |
| 1683.7 |
| 1363.4 |
| 1328.8 |
| 1309.3 |
| 1279.0 |
| 1248.7 |
| 1229.3 |
| 1214.1 |
| 1199.0 |
| 1183.8 |
| 1173.0 |
| 1160.0 |
| 1118.9 |
| 1028.0 |
| 909.0 |
| 785.6 |
| 675.2 |
| 577.8 |
| 497.8 |
| 422.0 |
| 352.8 |
| 277.0 |
| 212.1 |
| 179.6 |
| 147.2 |
| 112.5 |
| 71.4 |
| 34.6 |
| 6.5 |
| 0.0 |
| 0.0 |
| 0.0 |
| 0.0 |

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