

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: P950394

Luminaire Tested: **GALN-SB4D-835-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P950394
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SB4D-835-U-T4W
Description: GALLEON AREA AND ROADWAY HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37754 lumens
Efficiency: N/A
Efficacy: 128.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

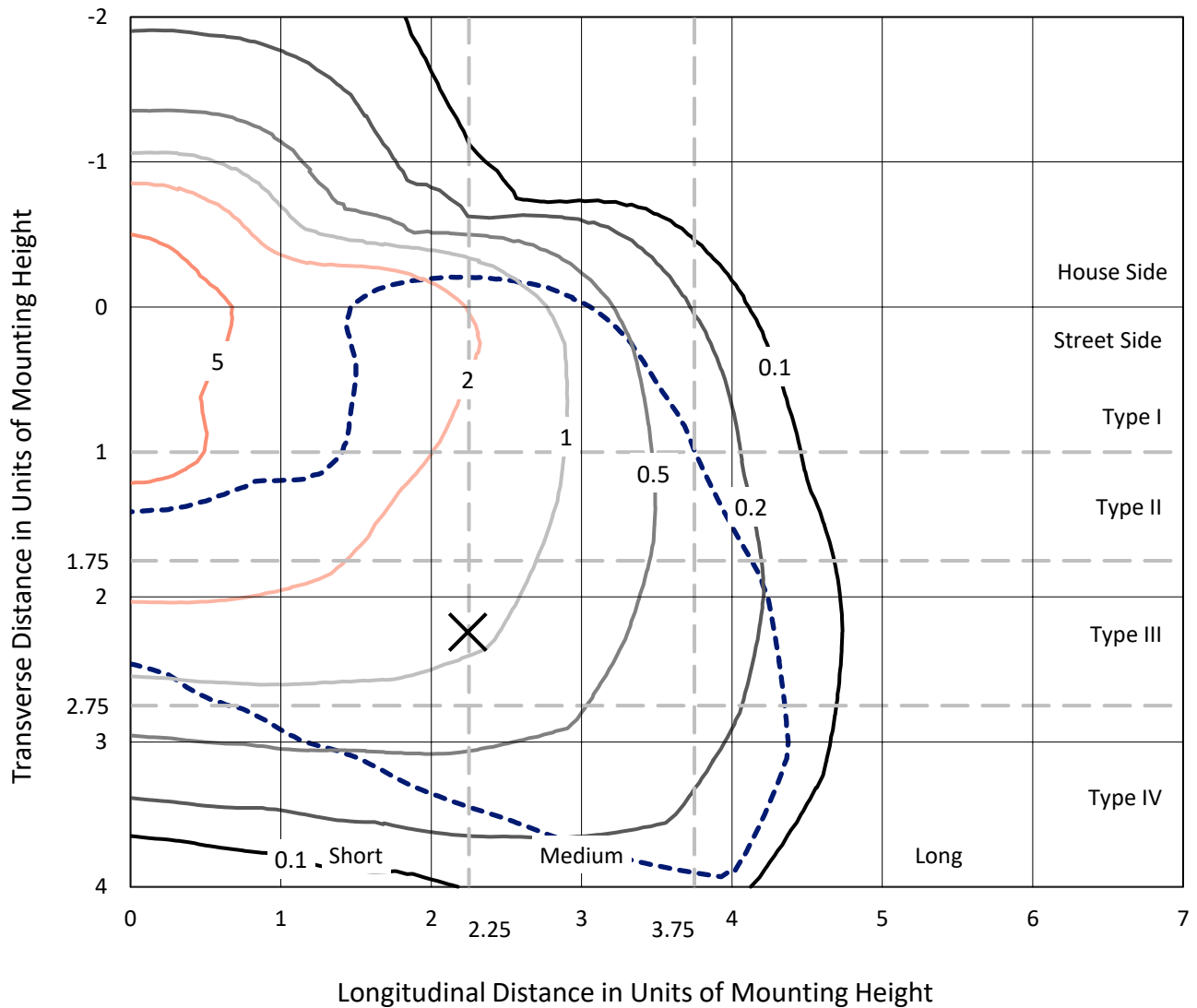
Input Watts (W): 293.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

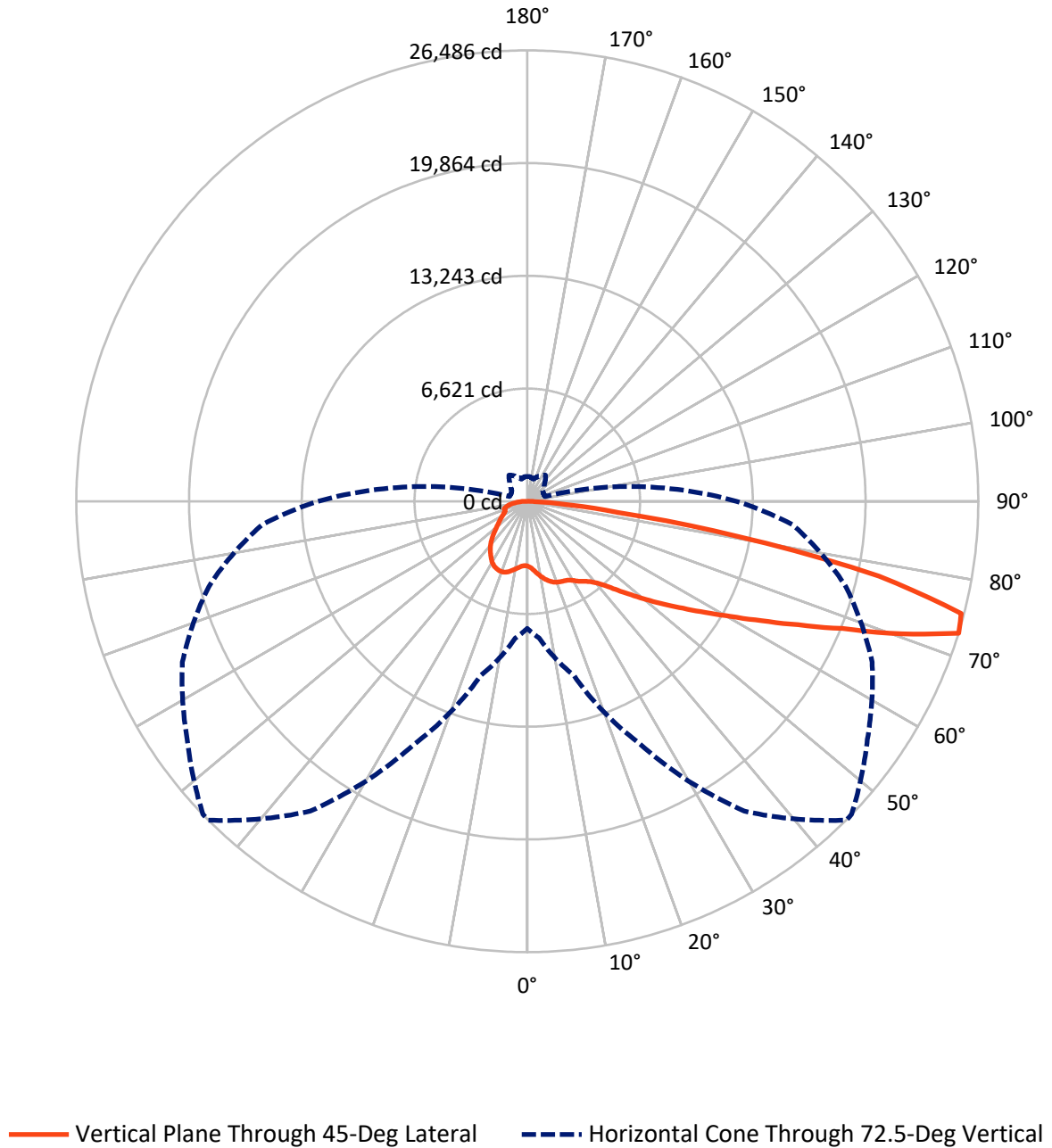
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 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 | 8534.9 | 0.0 | 8534.9 |
| | % Fixture | 22.6 | 0.0 | 22.6 |
| Street Side | Lumens | 29219.1 | 0.0 | 29219.1 |
| | % Fixture | 77.4 | 0.0 | 77.4 |
| Total | Lumens | 37754.0 | 0.0 | 37754.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 387.6 | 1.0 |
| 10°-20° | 1292.5 | 3.4 |
| 20°-30° | 2248.3 | 6.0 |
| 30°-40° | 3223.1 | 8.5 |
| 40°-50° | 4538.3 | 12.0 |
| 50°-60° | 6951.3 | 18.4 |
| 60°-70° | 10070.0 | 26.7 |
| 70°-80° | 8041.5 | 21.3 |
| 80°-90° | 1001.5 | 2.7 |
| 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° | 37754.0 | 100.0 |
| 0°-180° | 37754.0 | 100.0 |



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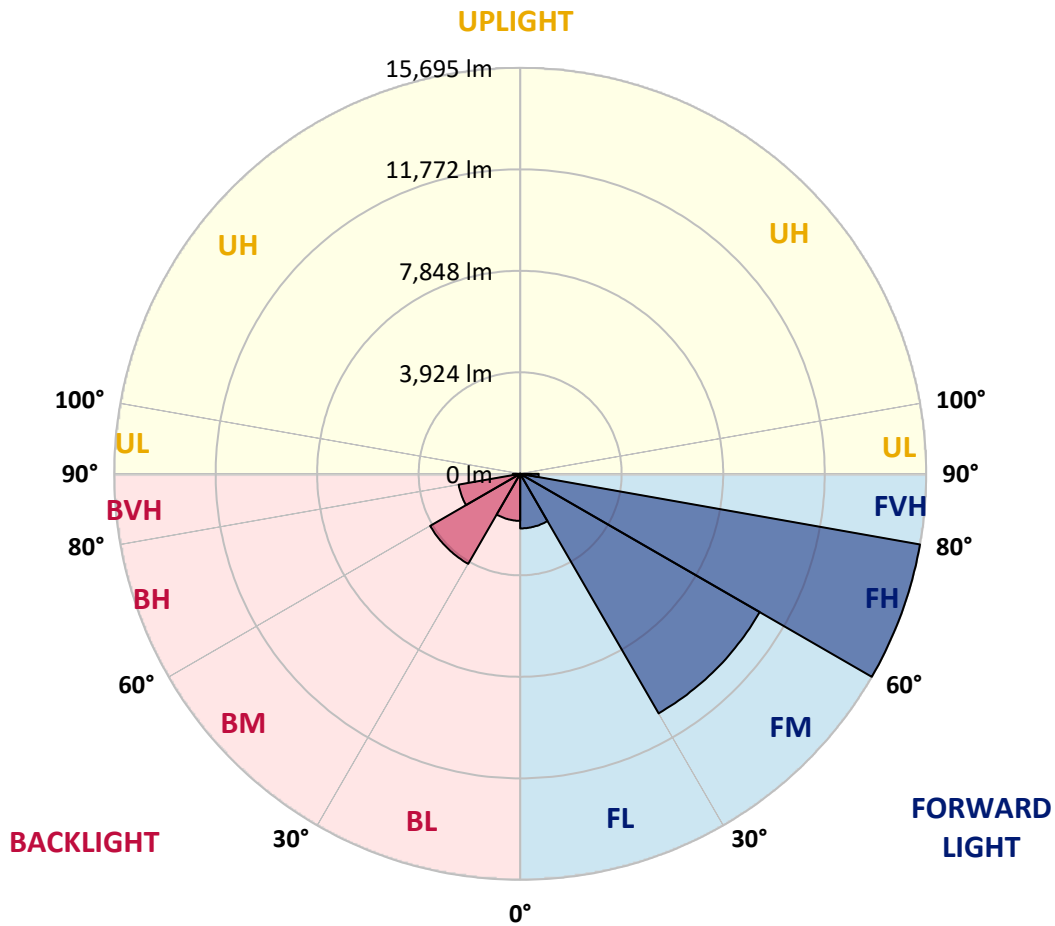
CATALOG NUMBER: GALN-SB4D-835-U-T4W

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 2111.3 | 5.6 | | | |
| FM (30°-60°) | 10693.9 | 28.3 | | | |
| FH (60°-80°) | 15695.4 | 41.6 | | | G5 |
| FVH (80°-90°) | 718.5 | 1.9 | | | G4/750 |
| BL (0°-30°) | 1817.1 | 4.8 | B3/2500 | | |
| BM (30°-60°) | 4018.7 | 10.6 | B3/5000 | | |
| BH (60°-80°) | 2416.0 | 6.4 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 283.0 | 0.7 | | | G3/500 |
| 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° | 35° | 45° | 46° | 55° | 65° | 75° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 |
| 2.5° | 3957.8 | 3983.7 | 3959.8 | 3937.9 | 3928.0 | 3902.1 | 3900.1 | 3884.2 | 3874.3 | 3846.4 |
| 5° | 4234.3 | 4268.1 | 4228.3 | 4184.5 | 4144.8 | 4081.1 | 4073.2 | 4027.4 | 3975.7 | 3916.0 |
| 7.5° | 4546.5 | 4576.3 | 4530.6 | 4465.0 | 4395.4 | 4289.9 | 4288.0 | 4204.4 | 4122.9 | 4021.5 |
| 10° | 4819.0 | 4858.8 | 4797.1 | 4707.6 | 4620.1 | 4500.8 | 4486.8 | 4391.4 | 4288.0 | 4156.7 |
| 12.5° | 5059.6 | 5087.5 | 5027.8 | 4918.4 | 4817.0 | 4697.7 | 4679.8 | 4574.4 | 4459.0 | 4309.8 |
| 15° | 5250.6 | 5286.4 | 5206.8 | 5089.5 | 4982.1 | 4864.7 | 4848.8 | 4753.3 | 4638.0 | 4480.9 |
| 17.5° | 5375.9 | 5405.7 | 5324.1 | 5192.9 | 5089.5 | 4992.0 | 4980.1 | 4900.5 | 4799.1 | 4640.0 |
| 20° | 5423.6 | 5455.4 | 5369.9 | 5236.6 | 5141.2 | 5065.6 | 5059.6 | 5002.0 | 4932.3 | 4787.2 |
| 22.5° | 5471.3 | 5501.2 | 5389.8 | 5250.6 | 5167.0 | 5119.3 | 5117.3 | 5079.5 | 5051.7 | 4932.3 |
| 25° | 5664.2 | 5672.2 | 5523.0 | 5322.2 | 5202.8 | 5161.1 | 5159.1 | 5157.1 | 5169.0 | 5075.5 |
| 27.5° | 5831.3 | 5829.3 | 5702.0 | 5513.1 | 5328.1 | 5240.6 | 5238.6 | 5258.5 | 5296.3 | 5218.7 |
| 30° | 6075.9 | 6054.1 | 5902.9 | 5706.0 | 5537.0 | 5401.7 | 5389.8 | 5371.9 | 5401.7 | 5340.1 |
| 32.5° | 6595.0 | 6525.4 | 6280.8 | 5930.7 | 5710.0 | 5606.6 | 5590.7 | 5479.3 | 5491.2 | 5453.4 |
| 35° | 7338.8 | 7247.4 | 6921.2 | 6356.4 | 5924.8 | 5777.6 | 5769.6 | 5628.4 | 5604.6 | 5570.8 |
| 37.5° | 8223.9 | 8110.5 | 7730.7 | 6972.9 | 6294.7 | 5976.5 | 5964.6 | 5837.3 | 5739.8 | 5704.0 |
| 40° | 9112.9 | 8969.7 | 8655.5 | 7724.7 | 6839.6 | 6308.6 | 6270.8 | 6077.9 | 5966.5 | 5906.9 |
| 42.5° | 9976.1 | 9856.7 | 9588.2 | 8568.0 | 7511.9 | 6793.9 | 6710.4 | 6380.2 | 6296.7 | 6241.0 |
| 45° | 10739.8 | 10632.4 | 10435.5 | 9468.9 | 8299.5 | 7454.2 | 7372.7 | 6833.7 | 6807.8 | 6807.8 |
| 47.5° | 11360.3 | 11336.4 | 11127.6 | 10387.8 | 9228.3 | 8206.0 | 8064.8 | 7464.1 | 7533.8 | 7641.2 |
| 50° | 12048.4 | 11982.8 | 11760.1 | 11292.7 | 10320.1 | 9067.2 | 8951.8 | 8237.8 | 8498.3 | 8792.7 |
| 52.5° | 12680.9 | 12716.7 | 12468.1 | 12235.4 | 11553.2 | 10027.8 | 9824.9 | 9150.7 | 9713.5 | 10200.8 |
| 55° | 13331.2 | 13333.2 | 13263.6 | 13231.8 | 12846.0 | 11089.8 | 10867.1 | 10248.5 | 11143.5 | 11748.1 |
| 57.5° | 13941.8 | 13945.8 | 14049.2 | 14329.6 | 14345.6 | 12314.9 | 12062.4 | 11597.0 | 12732.6 | 13349.1 |
| 60° | 14486.8 | 14514.6 | 14797.0 | 15453.3 | 15664.2 | 13719.1 | 13480.4 | 13190.0 | 14375.4 | 14995.9 |
| 62.5° | 14669.7 | 14771.2 | 15399.6 | 16332.4 | 16966.9 | 15441.4 | 15206.7 | 15033.7 | 16101.7 | 16678.5 |
| 65° | 14359.5 | 14592.2 | 15807.4 | 17058.3 | 18307.3 | 17487.9 | 17255.2 | 17066.3 | 17895.7 | 18438.6 |
| 67.5° | 13597.8 | 13898.1 | 15783.5 | 17820.1 | 19934.2 | 19950.1 | 19733.3 | 19289.8 | 19818.9 | 20027.7 |
| 70° | 11591.0 | 12040.5 | 14393.3 | 18104.5 | 21801.8 | 23317.3 | 23108.4 | 21966.8 | 21738.1 | 20727.8 |
| 72.5° | 7468.1 | 8072.7 | 10598.6 | 15763.6 | 22217.4 | 26485.5 | 26473.6 | 24383.3 | 22344.7 | 19367.4 |
| 75° | 2724.7 | 3094.6 | 4924.4 | 9894.5 | 18649.4 | 26324.4 | 26402.0 | 23969.6 | 20397.6 | 14960.1 |
| 77.5° | 992.4 | 1085.9 | 1607.0 | 3802.7 | 11469.7 | 21121.6 | 21282.7 | 19162.5 | 14518.6 | 7507.9 |
| 80° | 521.1 | 572.8 | 823.4 | 1475.7 | 4914.4 | 12543.7 | 12796.2 | 11388.1 | 6823.7 | 2261.3 |
| 82.5° | 288.4 | 312.2 | 461.4 | 801.5 | 2213.6 | 5363.9 | 5515.1 | 4498.8 | 2400.5 | 958.6 |
| 85° | 155.1 | 165.1 | 216.8 | 437.5 | 1081.9 | 1859.6 | 1901.3 | 1344.5 | 956.6 | 562.8 |
| 87.5° | 45.7 | 55.7 | 71.6 | 139.2 | 423.6 | 417.7 | 427.6 | 266.5 | 377.9 | 284.4 |
| 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° |
|---------|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3808.6 | 0° | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 | 3808.6 |
| 3838.5 | 2.5° | 3826.5 | 3820.6 | 3798.7 | 3788.8 | 3776.8 | 3774.8 | 3784.8 | 3786.8 | 3788.8 | 3790.7 |
| 3882.2 | 5° | 3862.3 | 3842.5 | 3822.6 | 3810.6 | 3814.6 | 3816.6 | 3836.5 | 3850.4 | 3860.4 | 3868.3 |
| 3963.8 | 7.5° | 3932.0 | 3916.0 | 3882.2 | 3880.2 | 3886.2 | 3904.1 | 3930.0 | 3961.8 | 3979.7 | 3993.6 |
| 4069.2 | 10° | 4035.4 | 4005.5 | 3965.8 | 3971.7 | 3983.7 | 4009.5 | 4063.2 | 4089.1 | 4118.9 | 4144.8 |
| 4198.5 | 12.5° | 4140.8 | 4114.9 | 4069.2 | 4073.2 | 4093.0 | 4138.8 | 4190.5 | 4222.3 | 4242.2 | 4262.1 |
| 4337.7 | 15° | 4278.0 | 4232.3 | 4182.5 | 4182.5 | 4218.3 | 4268.1 | 4291.9 | 4317.8 | 4329.7 | 4351.6 |
| 4486.8 | 17.5° | 4419.2 | 4359.6 | 4293.9 | 4289.9 | 4333.7 | 4357.6 | 4371.5 | 4375.5 | 4379.4 | 4403.3 |
| 4632.0 | 20° | 4560.4 | 4494.8 | 4401.3 | 4393.4 | 4403.3 | 4399.3 | 4397.3 | 4393.4 | 4399.3 | 4429.2 |
| 4781.2 | 22.5° | 4699.6 | 4624.1 | 4494.8 | 4459.0 | 4431.2 | 4393.4 | 4391.4 | 4389.4 | 4393.4 | 4423.2 |
| 4942.3 | 25° | 4862.7 | 4771.2 | 4598.2 | 4490.8 | 4397.3 | 4345.6 | 4351.6 | 4353.6 | 4357.6 | 4381.4 |
| 5109.4 | 27.5° | 5039.7 | 4938.3 | 4693.7 | 4480.9 | 4311.8 | 4276.0 | 4266.1 | 4272.0 | 4286.0 | 4323.8 |
| 5276.4 | 30° | 5216.7 | 5097.4 | 4781.2 | 4441.1 | 4204.4 | 4154.7 | 4122.9 | 4136.8 | 4180.6 | 4218.3 |
| 5421.6 | 32.5° | 5377.8 | 5258.5 | 4850.8 | 4353.6 | 4067.2 | 3989.6 | 3947.9 | 3965.8 | 4009.5 | 4023.4 |
| 5582.7 | 35° | 5566.8 | 5431.5 | 4880.6 | 4214.4 | 3918.0 | 3798.7 | 3743.0 | 3717.2 | 3739.0 | 3725.1 |
| 5771.6 | 37.5° | 5777.6 | 5636.4 | 4876.7 | 4031.4 | 3743.0 | 3605.8 | 3528.2 | 3430.8 | 3385.0 | 3337.3 |
| 6050.1 | 40° | 6089.9 | 5887.0 | 4828.9 | 3810.6 | 3526.2 | 3400.9 | 3261.7 | 3096.6 | 2993.2 | 2899.7 |
| 6499.6 | 42.5° | 6515.5 | 6235.0 | 4741.4 | 3568.0 | 3281.6 | 3164.3 | 2975.3 | 2782.4 | 2619.3 | 2464.2 |
| 7181.7 | 45° | 7149.9 | 6690.5 | 4632.0 | 3309.4 | 3017.1 | 2901.7 | 2696.9 | 2480.1 | 2295.1 | 2096.2 |
| 8150.3 | 47.5° | 8064.8 | 7303.0 | 4528.6 | 3015.1 | 2738.6 | 2633.2 | 2448.3 | 2247.4 | 2028.6 | 1835.7 |
| 9550.4 | 50° | 9321.7 | 8182.1 | 4433.1 | 2728.7 | 2464.2 | 2384.6 | 2237.5 | 2032.6 | 1811.8 | 1656.7 |
| 11191.2 | 52.5° | 10920.8 | 9377.4 | 4393.4 | 2452.2 | 2207.6 | 2177.8 | 2060.4 | 1869.5 | 1660.7 | 1529.4 |
| 13104.5 | 55° | 12756.5 | 10807.4 | 4393.4 | 2187.7 | 1982.9 | 1992.8 | 1911.3 | 1734.3 | 1553.3 | 1435.9 |
| 15077.5 | 57.5° | 14630.0 | 12255.3 | 4313.8 | 1943.1 | 1792.0 | 1833.7 | 1782.0 | 1626.9 | 1463.8 | 1342.5 |
| 17151.8 | 60° | 16356.3 | 13468.5 | 3991.6 | 1720.4 | 1622.9 | 1688.5 | 1654.7 | 1521.5 | 1322.6 | 1221.2 |
| 18886.1 | 62.5° | 17682.8 | 14152.6 | 3371.1 | 1543.3 | 1483.7 | 1559.3 | 1541.4 | 1382.2 | 1296.7 | 1255.0 |
| 20310.1 | 65° | 18347.1 | 14041.3 | 2577.5 | 1386.2 | 1366.3 | 1483.7 | 1445.9 | 1439.9 | 1372.3 | 1324.6 |
| 20773.5 | 67.5° | 17939.4 | 13082.6 | 1869.5 | 1270.9 | 1298.7 | 1414.1 | 1559.3 | 1583.1 | 1457.8 | 1364.3 |
| 19468.8 | 70° | 16151.4 | 11348.4 | 1392.2 | 1161.5 | 1213.2 | 1416.1 | 1778.0 | 1656.7 | 1430.0 | 1320.6 |
| 15614.4 | 72.5° | 12287.1 | 8462.5 | 1079.9 | 1046.1 | 1101.8 | 1426.0 | 1875.5 | 1622.9 | 1350.4 | 1459.8 |
| 9727.5 | 75° | 7026.6 | 4645.9 | 867.1 | 904.9 | 962.6 | 1332.5 | 1825.8 | 1535.4 | 1288.8 | 1340.5 |
| 3854.4 | 77.5° | 2679.0 | 1786.0 | 716.0 | 765.7 | 773.7 | 1163.5 | 1746.2 | 1529.4 | 1227.1 | 1197.3 |
| 1155.5 | 80° | 928.8 | 698.1 | 592.7 | 608.6 | 598.6 | 1034.2 | 1674.6 | 1330.5 | 1004.4 | 899.0 |
| 477.3 | 82.5° | 379.9 | 348.0 | 469.4 | 449.5 | 425.6 | 803.5 | 1352.4 | 1087.9 | 821.4 | 725.9 |
| 230.7 | 85° | 165.1 | 220.8 | 310.3 | 272.5 | 246.6 | 556.9 | 1083.9 | 920.8 | 694.1 | 598.6 |
| 75.6 | 87.5° | 33.8 | 83.5 | 131.3 | 123.3 | 127.3 | 371.9 | 769.7 | 654.3 | 491.2 | 367.9 |
| 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

| <u>180°</u> |
|-------------|
| 3808.6 |
| 3798.7 |
| 3872.3 |
| 3997.6 |
| 4138.8 |
| 4270.1 |
| 4359.6 |
| 4411.3 |
| 4441.1 |
| 4443.1 |
| 4413.3 |
| 4361.5 |
| 4260.1 |
| 4073.2 |
| 3768.9 |
| 3367.1 |
| 2905.7 |
| 2450.3 |
| 2072.4 |
| 1813.8 |
| 1646.8 |
| 1519.5 |
| 1424.0 |
| 1322.6 |
| 1205.2 |
| 1241.0 |
| 1308.7 |
| 1348.4 |
| 1302.7 |
| 1447.9 |
| 1340.5 |
| 1091.9 |
| 869.1 |
| 718.0 |
| 596.7 |
| 288.4 |
| 0.0 |

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