

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: P651287

Luminaire Tested: **GALN-SA3D-840-U-SL2**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651287  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA3D-840-U-SL2  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 19386.7 lumens  
Efficiency: N/A  
Efficacy: 105.4 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

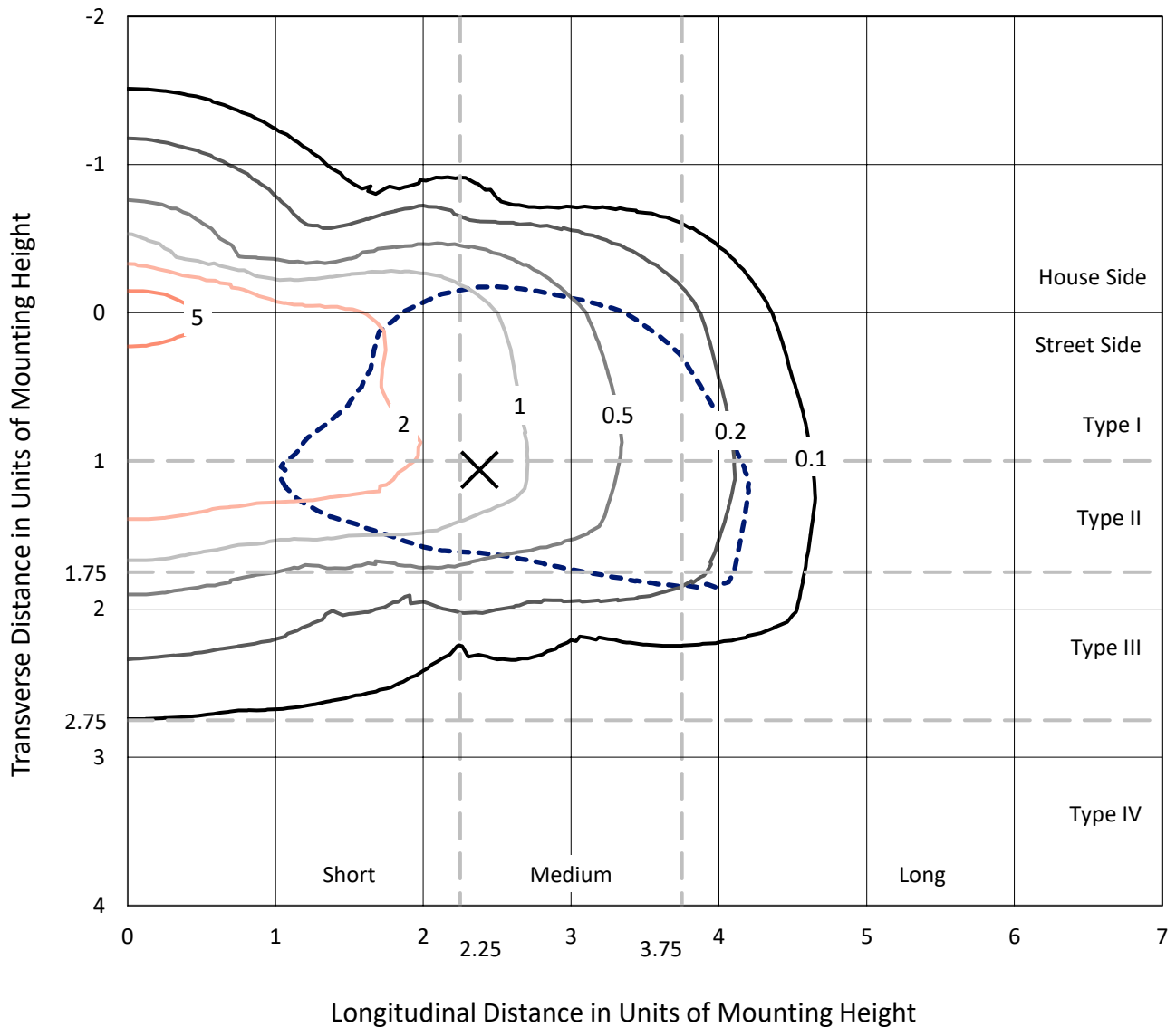
Input Watts (W): 184  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

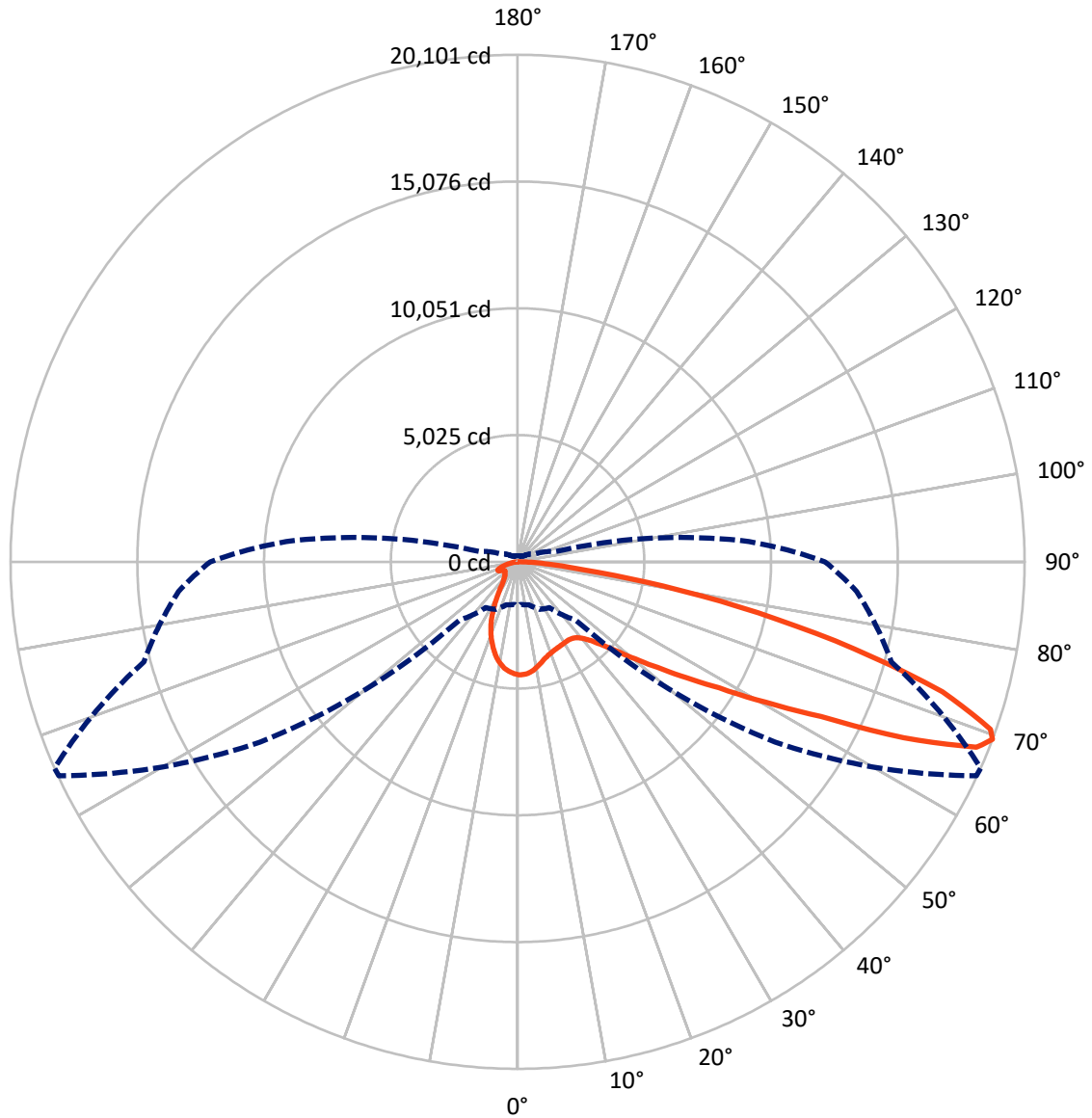
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3645.9   | 0.0    | 3645.9  |
|                    | % Fixture | 18.8     | 0.0    | 18.8    |
| <b>Street Side</b> | Lumens    | 15740.8  | 0.0    | 15740.8 |
|                    | % Fixture | 81.2     | 0.0    | 81.2    |
| <b>Total</b>       | Lumens    | 19386.7  | 0.0    | 19386.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 388.8   | 2.0       |
| 10°-20°   | 922.1   | 4.8       |
| 20°-30°   | 1255.4  | 6.5       |
| 30°-40°   | 1686.9  | 8.7       |
| 40°-50°   | 2518.9  | 13.0      |
| 50°-60°   | 4006.7  | 20.7      |
| 60°-70°   | 4928.0  | 25.4      |
| 70°-80°   | 3206.4  | 16.5      |
| 80°-90°   | 473.5   | 2.4       |
| 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°    | 19386.7 | 100.0     |
| 0°-180°   | 19386.7 | 100.0     |

**Coefficient of Utilization**

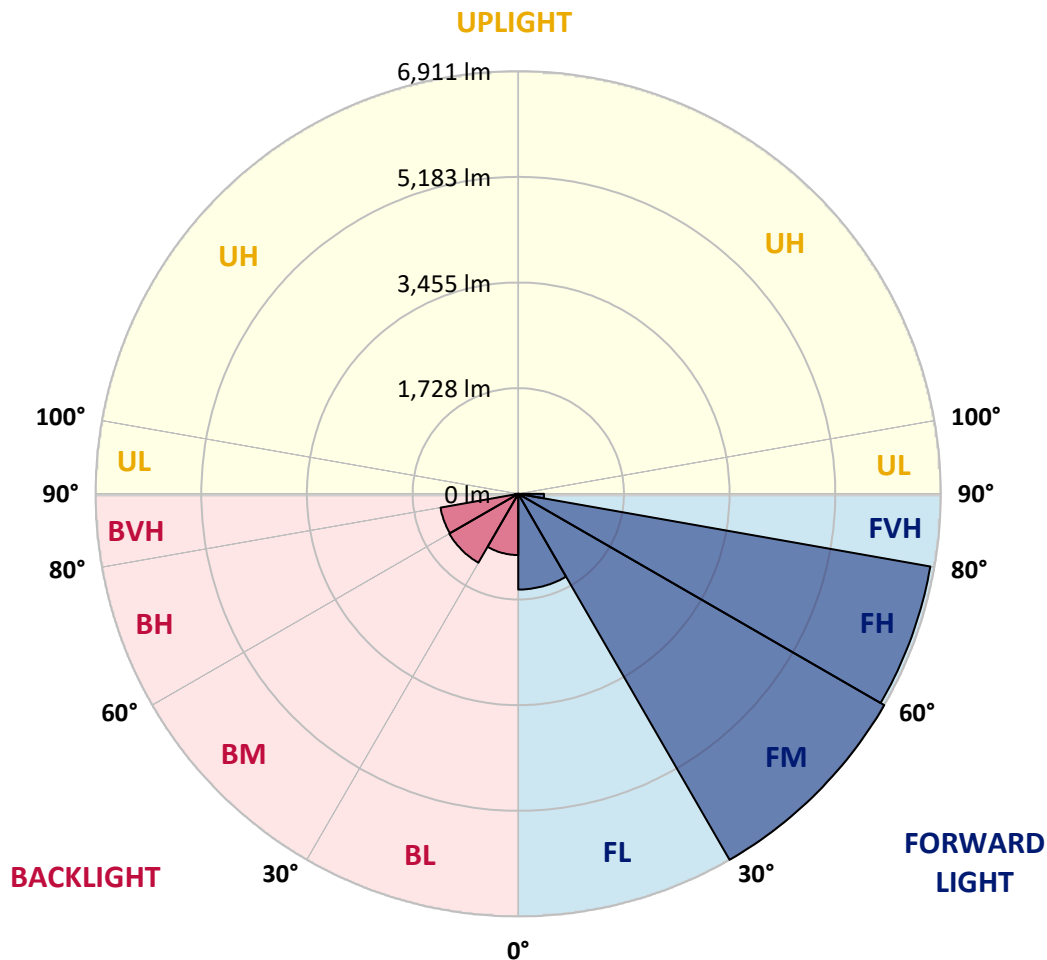


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1565.5 | 8.1       |                         |      |         |
| FM (30°-60°)   | 6910.8 | 35.6      |                         |      |         |
| FH (60°-80°)   | 6843.6 | 35.3      |                         |      | G3/7500 |
| FVH (80°-90°)  | 421.0  | 2.2       |                         |      | G3/500  |
| BL (0°-30°)    | 1000.8 | 5.2       | B3/2500                 |      |         |
| BM (30°-60°)   | 1301.7 | 6.7       | B2/2500                 |      |         |
| BH (60°-80°)   | 1290.8 | 6.7       | B3/2500                 |      | G3/2500 |
| BVH (80°-90°)  | 52.5   | 0.3       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 65°     | 66°     | 75°     | 85°     |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|
| 0°    | 4476.9 | 4476.9 | 4476.9 | 4476.9 | 4476.9 | 4476.9  | 4476.9  | 4476.9  | 4476.9  | 4476.9  | 4476.9  |
| 2.5°  | 4320.2 | 4337.4 | 4356.7 | 4378.2 | 4419.0 | 4441.5  | 4457.6  | 4475.9  | 4478.0  | 4487.7  | 4480.2  |
| 5°    | 4001.3 | 4021.7 | 4050.7 | 4091.5 | 4152.7 | 4248.2  | 4347.0  | 4427.5  | 4437.2  | 4482.3  | 4495.1  |
| 7.5°  | 3735.0 | 3746.9 | 3770.5 | 3836.0 | 3922.9 | 4029.2  | 4173.1  | 4336.3  | 4359.9  | 4467.3  | 4504.8  |
| 10°   | 3518.2 | 3530.0 | 3557.9 | 3625.6 | 3711.4 | 3844.5  | 4002.4  | 4217.1  | 4236.5  | 4421.1  | 4507.0  |
| 12.5° | 3356.1 | 3366.9 | 3396.9 | 3463.5 | 3562.2 | 3686.8  | 3860.7  | 4088.3  | 4116.2  | 4359.9  | 4486.6  |
| 15°   | 3232.6 | 3253.0 | 3277.7 | 3332.5 | 3436.6 | 3556.8  | 3725.4  | 3970.2  | 3992.7  | 4295.5  | 4472.6  |
| 17.5° | 3180.0 | 3189.7 | 3206.9 | 3257.4 | 3333.6 | 3451.6  | 3621.3  | 3877.9  | 3904.7  | 4250.4  | 4469.4  |
| 20°   | 3182.2 | 3191.8 | 3195.0 | 3223.0 | 3277.7 | 3379.7  | 3547.2  | 3804.9  | 3837.1  | 4210.7  | 4474.8  |
| 22.5° | 3255.2 | 3256.3 | 3244.4 | 3234.7 | 3256.3 | 3341.0  | 3494.6  | 3750.1  | 3787.7  | 4193.5  | 4479.1  |
| 25°   | 3367.9 | 3387.2 | 3370.1 | 3325.0 | 3285.2 | 3326.1  | 3474.2  | 3720.1  | 3755.5  | 4168.8  | 4473.7  |
| 27.5° | 3550.4 | 3553.6 | 3539.7 | 3478.5 | 3375.4 | 3345.3  | 3465.6  | 3697.5  | 3727.6  | 4150.6  | 4446.9  |
| 30°   | 3795.2 | 3785.5 | 3772.6 | 3705.0 | 3542.9 | 3419.4  | 3483.8  | 3677.1  | 3708.2  | 4123.8  | 4414.7  |
| 32.5° | 4043.2 | 4073.3 | 4061.4 | 3982.0 | 3771.5 | 3563.3  | 3542.9  | 3674.9  | 3700.7  | 4103.3  | 4379.3  |
| 35°   | 4306.3 | 4320.2 | 4376.0 | 4335.2 | 4119.4 | 3796.3  | 3653.5  | 3708.2  | 3728.7  | 4104.4  | 4354.5  |
| 37.5° | 4512.4 | 4550.0 | 4680.9 | 4716.3 | 4513.5 | 4104.4  | 3832.8  | 3802.7  | 3811.3  | 4157.0  | 4364.2  |
| 40°   | 4761.4 | 4825.8 | 4994.4 | 5139.4 | 5006.2 | 4504.8  | 4137.6  | 3977.7  | 3988.4  | 4283.7  | 4427.5  |
| 42.5° | 5077.1 | 5122.2 | 5348.7 | 5545.1 | 5523.7 | 5034.1  | 4507.0  | 4264.4  | 4269.8  | 4536.0  | 4604.7  |
| 45°   | 5446.4 | 5510.8 | 5765.2 | 6060.5 | 6111.0 | 5633.2  | 5040.6  | 4698.1  | 4694.9  | 4927.8  | 4935.3  |
| 47.5° | 5918.8 | 5958.5 | 6210.8 | 6532.9 | 6736.9 | 6385.8  | 5687.9  | 5320.8  | 5286.4  | 5499.0  | 5437.8  |
| 50°   | 6353.6 | 6415.9 | 6607.0 | 6959.1 | 7466.9 | 7267.2  | 6539.4  | 6128.1  | 6047.6  | 6246.3  | 6143.2  |
| 52.5° | 6536.1 | 6601.6 | 6762.6 | 7199.6 | 8092.9 | 8407.4  | 7620.5  | 7091.1  | 6957.0  | 7109.4  | 7071.8  |
| 55°   | 6219.4 | 6304.2 | 6454.5 | 6985.9 | 8367.7 | 9722.5  | 9078.4  | 8204.5  | 8106.8  | 8041.3  | 8052.1  |
| 57.5° | 5368.0 | 5448.6 | 5651.4 | 6237.6 | 8039.1 | 10677.0 | 11160.2 | 9635.6  | 9426.3  | 9124.6  | 9176.1  |
| 60°   | 4086.2 | 4136.6 | 4241.8 | 4891.3 | 7065.4 | 10925.0 | 13524.2 | 11444.7 | 11311.5 | 10203.5 | 10240.0 |
| 62.5° | 2902.0 | 2958.9 | 3031.9 | 3356.1 | 5172.7 | 10226.1 | 15375.1 | 13970.9 | 13495.2 | 11321.2 | 11285.7 |
| 65°   | 2356.6 | 2317.9 | 2405.9 | 2557.3 | 3035.1 | 7925.3  | 15791.6 | 17477.2 | 16822.4 | 12793.1 | 12301.4 |
| 67.5° | 1937.8 | 1897.0 | 1984.0 | 2253.5 | 2308.3 | 4600.4  | 14290.8 | 19753.2 | 19622.3 | 14393.8 | 13333.1 |
| 69°   | 1715.6 | 1694.1 | 1770.4 | 2077.4 | 2216.0 | 3266.9  | 12449.5 | 20070.0 | 20101.1 | 15337.6 | 13492.0 |
| 70°   | 1546.0 | 1554.6 | 1628.7 | 1988.3 | 2174.1 | 2693.6  | 10640.5 | 19633.1 | 19897.1 | 15808.9 | 13320.3 |
| 72.5° | 1138.0 | 1156.3 | 1259.3 | 1646.9 | 2134.3 | 2285.7  | 6332.1  | 17148.7 | 17615.8 | 15836.8 | 12185.4 |
| 75°   | 795.5  | 786.9  | 878.2  | 1240.1 | 2016.2 | 2265.3  | 3719.0  | 13262.2 | 13791.6 | 13688.5 | 10239.0 |
| 77.5° | 520.7  | 534.6  | 607.6  | 876.1  | 1696.3 | 2248.2  | 2424.2  | 9409.1  | 9752.7  | 9154.6  | 6056.2  |
| 80°   | 367.2  | 366.1  | 406.9  | 598.0  | 1258.3 | 2160.1  | 1985.1  | 5930.6  | 5843.6  | 3597.6  | 1796.1  |
| 82.5° | 210.4  | 225.5  | 272.7  | 420.8  | 841.7  | 1901.3  | 1826.2  | 2836.4  | 2589.5  | 1025.3  | 606.6   |
| 85°   | 117.0  | 122.4  | 162.1  | 254.4  | 491.7  | 1432.2  | 1594.3  | 1290.5  | 1217.4  | 428.4   | 260.9   |
| 87.5° | 37.6   | 40.8   | 67.6   | 128.8  | 223.3  | 676.3   | 902.9   | 595.8   | 549.7   | 154.6   | 105.2   |
| 90°   | 0.0    | 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):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4476.9  | 4476.9 | 4476.9 | 4476.9 | 4476.9 | 4476.9 | 4476.9 | 4476.9 | 4476.9 | 4476.9 | 4476.9 |
| 2.5°  | 4483.4  | 4496.2 | 4461.9 | 4428.6 | 4398.6 | 4356.7 | 4319.1 | 4288.0 | 4266.5 | 4263.3 | 4252.5 |
| 5°    | 4498.4  | 4499.5 | 4434.0 | 4346.0 | 4260.1 | 4165.6 | 4067.9 | 3998.1 | 3932.6 | 3896.1 | 3877.9 |
| 7.5°  | 4509.1  | 4499.5 | 4381.4 | 4238.6 | 4073.3 | 3901.5 | 3729.7 | 3592.2 | 3486.0 | 3444.1 | 3460.2 |
| 10°   | 4504.8  | 4474.8 | 4302.0 | 4073.3 | 3832.8 | 3576.2 | 3329.3 | 3136.0 | 2958.9 | 2867.6 | 2869.7 |
| 12.5° | 4481.3  | 4431.8 | 4183.8 | 3887.5 | 3534.3 | 3190.8 | 2812.8 | 2551.9 | 2346.9 | 2225.6 | 2188.0 |
| 15°   | 4460.8  | 4375.0 | 4045.4 | 3635.2 | 3196.1 | 2705.5 | 2244.9 | 1922.9 | 1751.0 | 1655.5 | 1654.4 |
| 17.5° | 4439.4  | 4320.2 | 3894.0 | 3367.9 | 2807.5 | 2176.2 | 1693.1 | 1447.2 | 1366.7 | 1376.4 | 1360.2 |
| 20°   | 4416.8  | 4255.8 | 3736.1 | 3070.5 | 2334.0 | 1623.3 | 1267.9 | 1168.1 | 1190.6 | 1234.7 | 1241.1 |
| 22.5° | 4391.0  | 4187.1 | 3566.5 | 2743.1 | 1835.9 | 1221.8 | 1028.5 | 1013.5 | 1071.4 | 1140.1 | 1149.8 |
| 25°   | 4351.3  | 4101.1 | 3352.9 | 2400.6 | 1416.1 | 984.5  | 900.8  | 911.5  | 968.4  | 1026.4 | 1032.8 |
| 27.5° | 4295.5  | 3994.9 | 3137.1 | 1973.3 | 1063.9 | 845.0  | 823.4  | 837.4  | 865.3  | 900.8  | 909.4  |
| 30°   | 4220.3  | 3874.7 | 2889.1 | 1604.0 | 852.4  | 775.1  | 766.6  | 774.1  | 790.2  | 805.2  | 809.5  |
| 32.5° | 4145.2  | 3758.7 | 2638.9 | 1228.2 | 760.1  | 729.0  | 720.4  | 720.4  | 720.4  | 722.5  | 723.6  |
| 35°   | 4075.4  | 3649.2 | 2370.5 | 956.6  | 711.8  | 692.5  | 680.7  | 667.8  | 665.7  | 658.1  | 658.1  |
| 37.5° | 4036.7  | 3549.4 | 2084.9 | 800.9  | 676.3  | 662.5  | 646.3  | 624.9  | 613.0  | 614.1  | 612.0  |
| 40°   | 4044.3  | 3483.8 | 1825.1 | 712.9  | 647.4  | 632.3  | 607.6  | 583.0  | 575.4  | 575.4  | 573.3  |
| 42.5° | 4129.1  | 3462.4 | 1576.0 | 666.7  | 619.5  | 602.3  | 571.1  | 548.6  | 544.3  | 543.3  | 545.4  |
| 45°   | 4324.5  | 3515.0 | 1352.7 | 636.6  | 595.8  | 570.1  | 538.9  | 518.6  | 514.3  | 514.3  | 513.2  |
| 47.5° | 4705.6  | 3685.7 | 1192.8 | 617.3  | 578.7  | 545.4  | 513.2  | 492.8  | 485.3  | 483.2  | 483.2  |
| 50°   | 5298.2  | 4056.1 | 1073.6 | 600.1  | 557.2  | 522.8  | 489.5  | 465.9  | 454.1  | 453.0  | 452.0  |
| 52.5° | 6121.7  | 4633.7 | 1027.4 | 587.3  | 533.6  | 499.2  | 462.7  | 440.2  | 425.1  | 421.9  | 419.7  |
| 55°   | 7084.8  | 5439.9 | 1090.8 | 577.6  | 508.9  | 472.4  | 434.8  | 411.2  | 397.2  | 390.8  | 389.7  |
| 57.5° | 8200.2  | 6408.3 | 1331.3 | 564.7  | 486.4  | 443.4  | 406.9  | 383.2  | 368.3  | 360.7  | 358.6  |
| 60°   | 9201.9  | 7403.6 | 1751.0 | 557.2  | 467.0  | 412.3  | 374.7  | 353.2  | 339.3  | 331.8  | 330.7  |
| 62.5° | 10302.3 | 8352.6 | 2252.5 | 577.6  | 458.4  | 382.2  | 344.6  | 325.3  | 313.5  | 306.0  | 306.0  |
| 65°   | 11477.9 | 9302.8 | 2584.1 | 646.3  | 471.3  | 358.6  | 312.4  | 296.3  | 285.6  | 280.2  | 279.1  |
| 67.5° | 12270.3 | 9631.3 | 2129.0 | 717.2  | 503.5  | 332.8  | 281.3  | 268.4  | 262.0  | 256.6  | 256.6  |
| 69°   | 12184.3 | 9215.8 | 1570.7 | 735.5  | 513.2  | 319.9  | 264.1  | 254.4  | 245.8  | 243.7  | 241.5  |
| 70°   | 11912.8 | 8742.4 | 1316.2 | 723.6  | 505.7  | 308.1  | 253.4  | 241.5  | 234.1  | 231.9  | 230.9  |
| 72.5° | 10610.5 | 7581.8 | 980.2  | 629.2  | 430.5  | 267.4  | 224.4  | 213.6  | 207.2  | 204.0  | 204.0  |
| 75°   | 8815.4  | 6196.8 | 765.5  | 500.3  | 337.1  | 225.5  | 192.2  | 183.6  | 178.2  | 176.1  | 175.0  |
| 77.5° | 4940.7  | 3460.2 | 549.7  | 391.9  | 255.5  | 182.5  | 161.1  | 153.6  | 148.2  | 146.0  | 146.0  |
| 80°   | 1376.4  | 988.8  | 323.2  | 258.8  | 173.9  | 138.5  | 127.7  | 122.4  | 114.9  | 109.5  | 112.7  |
| 82.5° | 518.6   | 428.4  | 184.7  | 155.7  | 110.6  | 92.3   | 89.1   | 84.8   | 81.6   | 74.1   | 74.1   |
| 85°   | 252.3   | 208.3  | 118.1  | 82.7   | 61.2   | 48.3   | 46.2   | 44.0   | 41.9   | 36.5   | 37.6   |
| 87.5° | 87.0    | 92.3   | 51.6   | 30.0   | 18.2   | 11.8   | 9.7    | 5.4    | 5.4    | 5.4    | 5.4    |
| 90°   | 0.0     | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)