

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: STREETWORKS

Report Number: P191102

Luminaire Tested: **GAN-AF-04-LED-U-SL2-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191102
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24286)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-04-LED-U-SL2-1200
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 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: 26396.2 lumens
Efficiency: N/A
Efficacy: 102.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G4

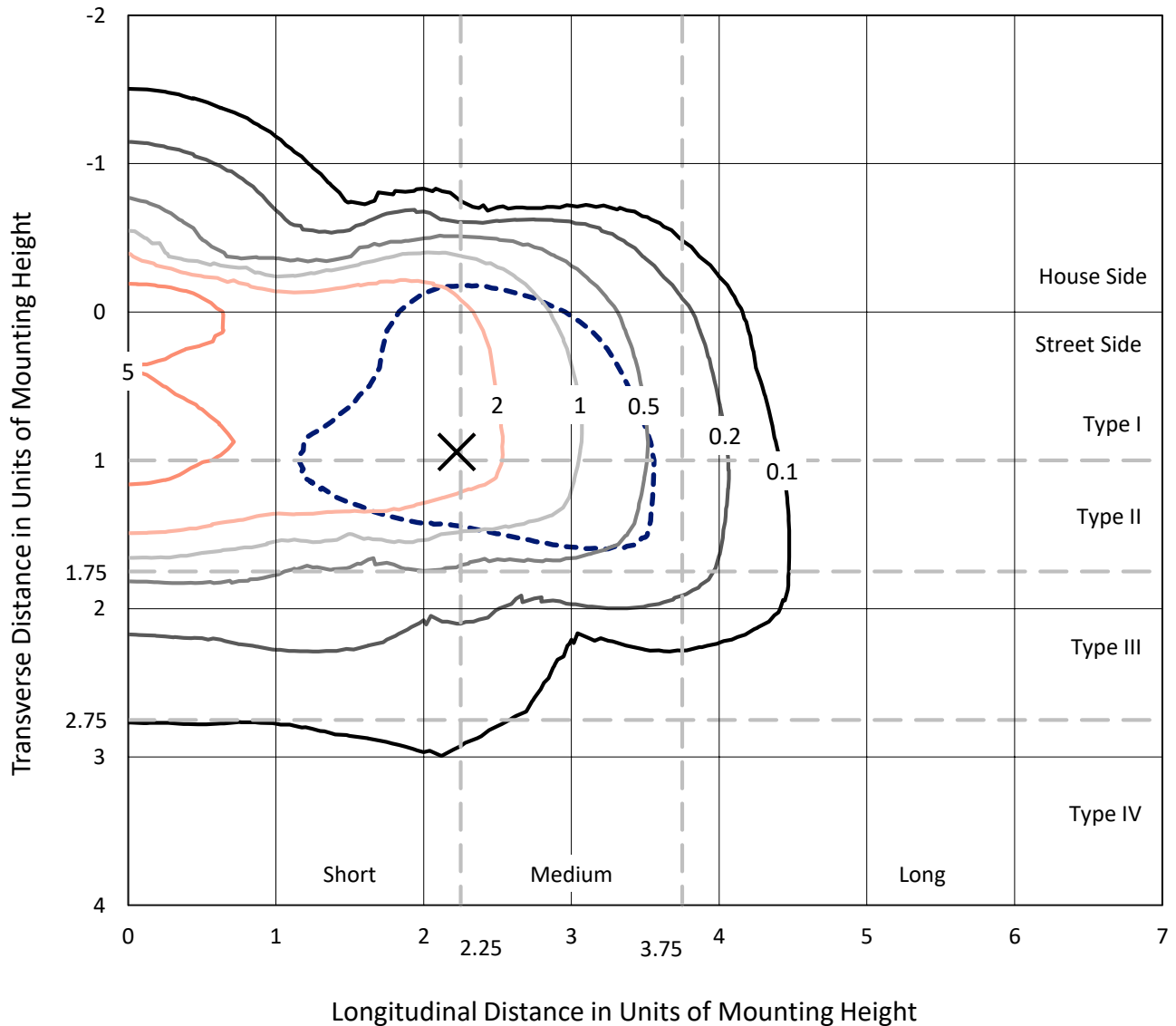
Input Watts (W): 258
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

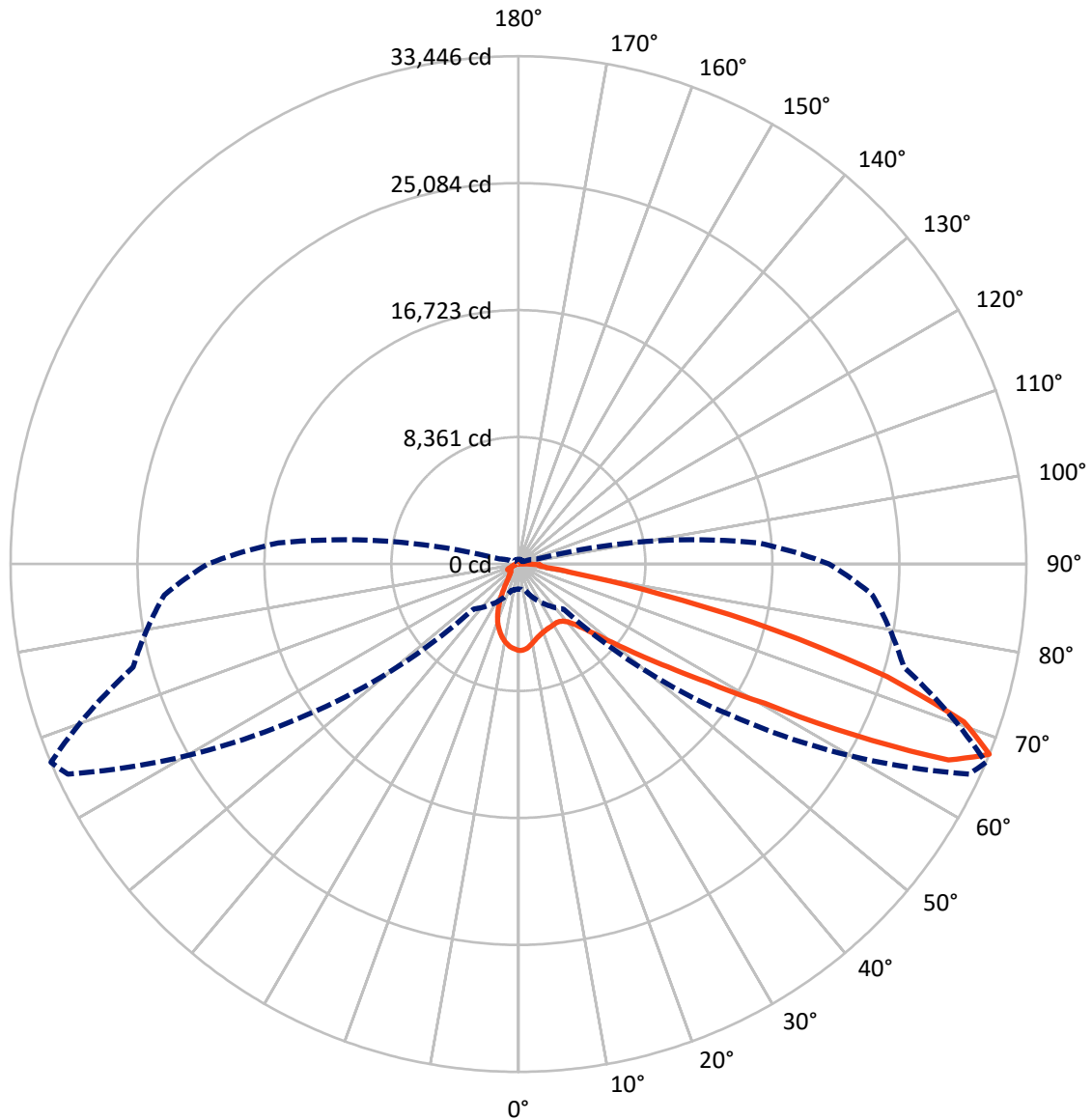
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.1 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 4373.6 | 0.0 | 4373.6 |
| | % Fixture | 16.6 | 0.0 | 16.6 |
| Street Side | Lumens | 22022.7 | 0.0 | 22022.7 |
| | % Fixture | 83.4 | 0.0 | 83.4 |
| Total | Lumens | 26396.2 | 0.0 | 26396.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 485.8 | 1.8 |
| 10°-20° | 1123.9 | 4.3 |
| 20°-30° | 1523.5 | 5.8 |
| 30°-40° | 2165.9 | 8.2 |
| 40°-50° | 3623.6 | 13.7 |
| 50°-60° | 5732.4 | 21.7 |
| 60°-70° | 7302.6 | 27.7 |
| 70°-80° | 3825.1 | 14.5 |
| 80°-90° | 613.5 | 2.3 |
| 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° | 26396.2 | 100.0 |
| 0°-180° | 26396.2 | 100.0 |

Coefficient of Utilization



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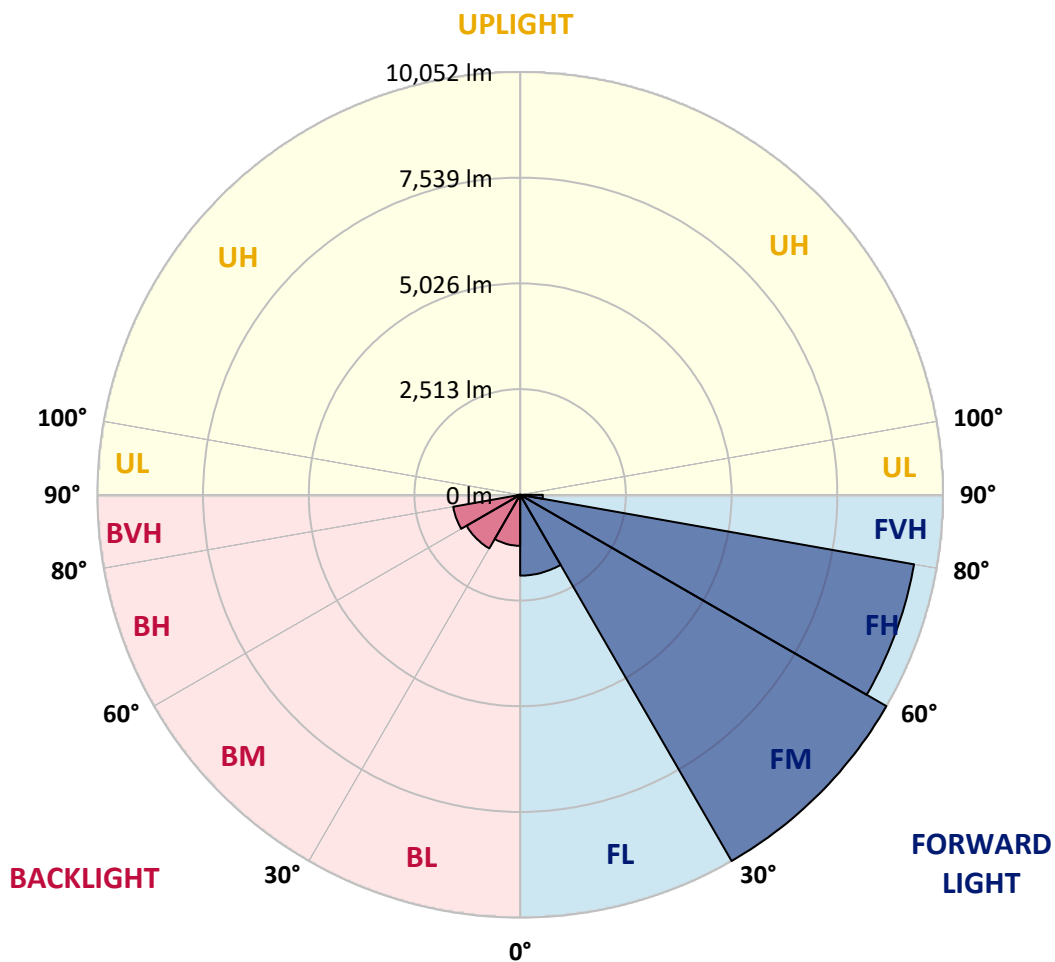
CATALOG NUMBER: GAN-AF-04-LED-U-SL2-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1921.0 | 7.3 | | | |
| FM (30°-60°) | 10052.2 | 38.1 | | | |
| FH (60°-80°) | 9510.0 | 36.0 | | | G4/12000 |
| FVH (80°-90°) | 539.4 | 2.0 | | | G4/750 |
| BL (0°-30°) | 1212.2 | 4.6 | B3/2500 | | |
| BM (30°-60°) | 1469.6 | 5.6 | B2/2500 | | |
| BH (60°-80°) | 1617.6 | 6.1 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 74.0 | 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-G4

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 67° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 |
| 2.5° | 5459.3 | 5468.4 | 5497.0 | 5515.2 | 5597.3 | 5632.5 | 5657.1 | 5681.9 | 5685.8 | 5697.5 | 5685.8 |
| 5° | 4886.5 | 4906.1 | 4959.5 | 5019.3 | 5178.2 | 5303.1 | 5434.5 | 5571.2 | 5596.0 | 5684.5 | 5709.2 |
| 7.5° | 4442.7 | 4437.5 | 4481.8 | 4553.4 | 4716.0 | 4889.2 | 5119.6 | 5391.6 | 5445.0 | 5644.1 | 5740.5 |
| 10° | 4118.5 | 4114.6 | 4161.5 | 4235.7 | 4390.6 | 4554.6 | 4814.9 | 5187.3 | 5262.8 | 5580.4 | 5770.4 |
| 12.5° | 3879.0 | 3880.4 | 3927.2 | 4009.3 | 4166.7 | 4332.0 | 4596.3 | 4989.3 | 5085.7 | 5506.1 | 5801.7 |
| 15° | 3720.3 | 3730.6 | 3768.4 | 3855.6 | 4009.3 | 4174.6 | 4433.6 | 4841.0 | 4949.0 | 5447.6 | 5836.8 |
| 17.5° | 3666.9 | 3683.7 | 3696.8 | 3760.6 | 3892.0 | 4057.3 | 4311.2 | 4731.7 | 4846.2 | 5407.2 | 5868.1 |
| 20° | 3716.4 | 3735.8 | 3711.2 | 3733.3 | 3816.5 | 3962.4 | 4214.9 | 4645.7 | 4762.9 | 5361.7 | 5871.9 |
| 22.5° | 3928.5 | 3946.7 | 3873.8 | 3810.1 | 3804.9 | 3893.4 | 4135.5 | 4578.0 | 4699.1 | 5327.8 | 5873.3 |
| 25° | 4302.1 | 4313.8 | 4191.4 | 4043.0 | 3898.6 | 3868.6 | 4079.5 | 4531.2 | 4660.1 | 5297.9 | 5848.5 |
| 27.5° | 4760.3 | 4769.4 | 4628.9 | 4410.1 | 4119.8 | 3927.2 | 4060.0 | 4503.8 | 4638.0 | 5271.9 | 5806.9 |
| 30° | 5317.4 | 5360.4 | 5171.6 | 4895.6 | 4472.6 | 4100.3 | 4099.1 | 4489.5 | 4613.2 | 5227.6 | 5724.8 |
| 32.5° | 5887.6 | 5905.8 | 5775.6 | 5495.7 | 4947.7 | 4404.9 | 4208.4 | 4500.0 | 4606.7 | 5174.2 | 5620.7 |
| 35° | 6465.5 | 6488.9 | 6404.3 | 6179.1 | 5597.3 | 4851.4 | 4421.8 | 4561.1 | 4647.1 | 5156.0 | 5547.8 |
| 37.5° | 7214.0 | 7245.3 | 7128.0 | 6867.7 | 6387.4 | 5456.7 | 4777.2 | 4714.7 | 4770.7 | 5208.0 | 5525.7 |
| 40° | 8397.2 | 8382.9 | 8040.6 | 7652.7 | 7251.7 | 6231.2 | 5284.9 | 4975.0 | 5007.7 | 5376.0 | 5593.4 |
| 42.5° | 9774.4 | 9739.3 | 9149.6 | 8540.4 | 8201.9 | 7168.4 | 5956.5 | 5426.8 | 5420.2 | 5706.6 | 5831.5 |
| 45° | 10873.0 | 10844.4 | 10313.3 | 9562.2 | 9291.5 | 8235.8 | 6824.8 | 6099.8 | 6051.6 | 6231.2 | 6271.5 |
| 47.5° | 11467.9 | 11469.2 | 11163.4 | 10550.2 | 10543.7 | 9592.2 | 7940.3 | 7073.4 | 6990.1 | 7074.7 | 7031.8 |
| 50° | 11259.6 | 11286.9 | 11254.4 | 11059.2 | 11686.6 | 11370.3 | 9396.9 | 8431.1 | 8263.1 | 8346.5 | 8181.2 |
| 52.5° | 10252.1 | 10287.3 | 10479.9 | 10779.3 | 12166.9 | 13519.4 | 11536.9 | 10118.0 | 9922.8 | 9892.9 | 9709.3 |
| 55° | 8466.2 | 8509.1 | 8902.2 | 9715.8 | 11767.3 | 14962.9 | 14913.5 | 12268.5 | 11957.4 | 11674.8 | 11596.8 |
| 57.5° | 5835.5 | 5907.0 | 6539.7 | 7747.6 | 10474.7 | 15399.0 | 18934.4 | 15333.9 | 14701.3 | 13714.6 | 13732.8 |
| 60° | 3289.4 | 3372.7 | 4118.5 | 5215.9 | 7866.1 | 14925.2 | 21993.3 | 19977.1 | 18641.5 | 16103.2 | 16238.6 |
| 62.5° | 2091.8 | 2181.6 | 2747.9 | 3623.9 | 4719.9 | 12373.9 | 23247.0 | 26432.1 | 24736.1 | 19047.7 | 19180.4 |
| 65° | 1693.5 | 1732.6 | 1999.4 | 2991.3 | 3427.4 | 7454.8 | 22295.4 | 31749.5 | 31116.9 | 22784.8 | 22165.2 |
| 67.5° | 1653.2 | 1666.2 | 1804.2 | 2510.9 | 3286.7 | 4190.1 | 17783.7 | 32744.0 | 33445.7 | 26274.7 | 23408.3 |
| 70° | 1633.7 | 1679.2 | 2033.2 | 2396.4 | 3147.5 | 3534.1 | 10686.9 | 30018.3 | 31126.0 | 27187.2 | 21753.9 |
| 72.5° | 792.7 | 790.1 | 1023.2 | 2167.3 | 3545.9 | 3665.5 | 5490.6 | 24288.2 | 25399.9 | 23554.2 | 17876.2 |
| 75° | 639.1 | 584.4 | 558.4 | 794.0 | 3409.1 | 3785.3 | 3498.9 | 16712.5 | 17516.9 | 15792.1 | 10988.8 |
| 77.5° | 606.6 | 541.6 | 495.9 | 497.3 | 1440.9 | 4014.5 | 2964.0 | 9249.8 | 9484.1 | 7133.2 | 3010.9 |
| 80° | 502.5 | 442.5 | 410.0 | 462.1 | 697.8 | 3823.1 | 3204.8 | 4186.2 | 3841.3 | 1752.1 | 1002.3 |
| 82.5° | 348.8 | 317.6 | 308.5 | 387.9 | 558.4 | 2724.4 | 3726.7 | 2249.4 | 1886.1 | 877.4 | 618.3 |
| 85° | 222.6 | 190.1 | 210.8 | 282.4 | 434.8 | 1257.4 | 3838.7 | 1753.3 | 1394.1 | 557.1 | 348.8 |
| 87.5° | 102.8 | 83.3 | 104.1 | 156.2 | 283.8 | 433.4 | 3652.5 | 1969.5 | 1435.8 | 294.2 | 220.0 |
| 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° | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 | 5693.6 |
| 2.5° | 5696.2 | 5671.4 | 5651.9 | 5615.5 | 5575.2 | 5536.1 | 5500.9 | 5456.7 | 5443.6 | 5432.0 | 5450.2 |
| 5° | 5714.4 | 5689.7 | 5618.1 | 5506.1 | 5382.5 | 5266.7 | 5150.8 | 5051.8 | 4990.7 | 4956.8 | 4976.3 |
| 7.5° | 5741.7 | 5706.6 | 5558.2 | 5352.6 | 5130.0 | 4926.9 | 4717.3 | 4549.4 | 4425.8 | 4367.2 | 4384.1 |
| 10° | 5766.5 | 5698.8 | 5456.7 | 5148.2 | 4822.8 | 4520.7 | 4190.1 | 3916.8 | 3713.7 | 3607.0 | 3633.0 |
| 12.5° | 5776.9 | 5668.9 | 5314.8 | 4893.1 | 4446.6 | 4004.0 | 3517.2 | 3108.4 | 2816.9 | 2710.1 | 2688.0 |
| 15° | 5787.3 | 5635.0 | 5158.6 | 4602.8 | 3992.3 | 3366.2 | 2684.1 | 2194.6 | 1952.5 | 1899.2 | 1887.4 |
| 17.5° | 5789.9 | 5576.4 | 4981.6 | 4287.8 | 3459.9 | 2607.3 | 1835.4 | 1524.3 | 1525.6 | 1611.5 | 1621.9 |
| 20° | 5762.6 | 5489.3 | 4766.7 | 3896.0 | 2822.1 | 1802.8 | 1260.1 | 1206.7 | 1403.2 | 1618.0 | 1644.1 |
| 22.5° | 5700.1 | 5373.4 | 4523.4 | 3439.1 | 2091.8 | 1187.1 | 975.0 | 1033.6 | 1287.4 | 1550.3 | 1580.3 |
| 25° | 5620.7 | 5232.8 | 4235.7 | 2909.3 | 1385.0 | 848.7 | 817.4 | 889.0 | 1060.9 | 1236.6 | 1253.5 |
| 27.5° | 5512.7 | 5066.2 | 3912.9 | 2302.7 | 899.5 | 699.0 | 719.9 | 768.0 | 838.3 | 916.4 | 924.2 |
| 30° | 5373.4 | 4867.0 | 3568.0 | 1679.2 | 679.4 | 628.7 | 658.7 | 684.7 | 714.6 | 758.9 | 762.8 |
| 32.5° | 5213.3 | 4675.7 | 3213.9 | 1159.8 | 602.7 | 592.3 | 615.7 | 628.7 | 652.1 | 679.4 | 682.1 |
| 35° | 5079.2 | 4493.4 | 2846.8 | 820.1 | 570.1 | 565.0 | 580.5 | 585.7 | 607.9 | 637.8 | 640.5 |
| 37.5° | 5002.4 | 4345.1 | 2468.0 | 661.2 | 548.0 | 540.2 | 549.3 | 549.3 | 580.5 | 624.8 | 631.4 |
| 40° | 5007.7 | 4263.0 | 2089.2 | 597.5 | 529.8 | 519.4 | 520.7 | 520.7 | 561.0 | 609.2 | 613.1 |
| 42.5° | 5149.5 | 4283.9 | 1753.3 | 572.8 | 515.5 | 503.8 | 497.3 | 501.1 | 535.0 | 566.2 | 568.9 |
| 45° | 5482.7 | 4430.9 | 1438.4 | 557.1 | 501.1 | 497.3 | 482.9 | 481.6 | 494.6 | 508.9 | 508.9 |
| 47.5° | 6029.5 | 4721.2 | 1224.9 | 546.7 | 489.5 | 488.2 | 471.2 | 454.3 | 453.0 | 458.2 | 458.2 |
| 50° | 6918.5 | 5221.0 | 1081.7 | 535.0 | 481.6 | 471.2 | 451.7 | 425.6 | 416.5 | 420.4 | 420.4 |
| 52.5° | 8251.4 | 6112.7 | 1027.0 | 519.4 | 464.7 | 447.7 | 425.6 | 399.7 | 391.8 | 393.1 | 393.1 |
| 55° | 9999.5 | 7482.2 | 1019.3 | 501.1 | 446.5 | 419.1 | 400.9 | 381.4 | 372.3 | 374.9 | 374.9 |
| 57.5° | 12135.7 | 9376.1 | 1158.5 | 472.5 | 421.8 | 390.5 | 380.1 | 367.0 | 360.6 | 364.5 | 363.1 |
| 60° | 14732.5 | 11854.5 | 1718.3 | 442.5 | 397.0 | 364.5 | 364.5 | 354.0 | 348.8 | 352.7 | 351.5 |
| 62.5° | 17723.9 | 14701.3 | 2415.9 | 420.4 | 371.0 | 343.6 | 348.8 | 343.6 | 338.4 | 341.1 | 339.7 |
| 65° | 20376.7 | 16556.3 | 2262.4 | 403.6 | 344.9 | 324.1 | 333.3 | 330.6 | 326.7 | 329.3 | 328.1 |
| 67.5° | 20453.5 | 15868.9 | 1270.4 | 385.3 | 320.2 | 304.6 | 317.6 | 316.3 | 313.7 | 316.3 | 315.0 |
| 70° | 18253.6 | 13399.6 | 716.0 | 351.5 | 294.2 | 281.2 | 299.4 | 298.1 | 295.5 | 300.6 | 299.4 |
| 72.5° | 14624.5 | 9723.7 | 523.2 | 309.9 | 268.1 | 256.5 | 277.2 | 276.0 | 276.0 | 283.8 | 279.9 |
| 75° | 8415.4 | 5003.7 | 417.9 | 265.6 | 240.8 | 231.7 | 249.9 | 251.2 | 253.8 | 264.2 | 256.5 |
| 77.5° | 2399.0 | 1559.4 | 341.1 | 225.2 | 206.9 | 203.1 | 221.3 | 223.9 | 225.2 | 236.9 | 226.5 |
| 80° | 891.7 | 718.5 | 281.2 | 188.7 | 169.2 | 170.5 | 187.4 | 191.4 | 192.6 | 204.4 | 191.4 |
| 82.5° | 568.9 | 473.8 | 227.8 | 145.8 | 132.8 | 131.4 | 152.3 | 157.5 | 157.5 | 158.8 | 151.0 |
| 85° | 331.9 | 283.8 | 171.9 | 105.5 | 93.7 | 89.8 | 113.2 | 122.3 | 118.5 | 115.9 | 110.7 |
| 87.5° | 222.6 | 195.3 | 105.5 | 58.6 | 50.7 | 48.2 | 66.4 | 72.9 | 70.3 | 66.4 | 62.5 |
| 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)