

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: P190907

Luminaire Tested: **GAN-AF-09-LED-U-5WQ-1200-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190907
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24143)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-09-LED-U-5WQ-1200-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V WIDE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 62898.2 lumens
Efficiency: N/A
Efficacy: 109.4 lumens/watt
Luminous Opening: Rectangular (W 2.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Semi-Cutoff
BUG Rating: B5 - U0 - G5

Input Watts (W): 575
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

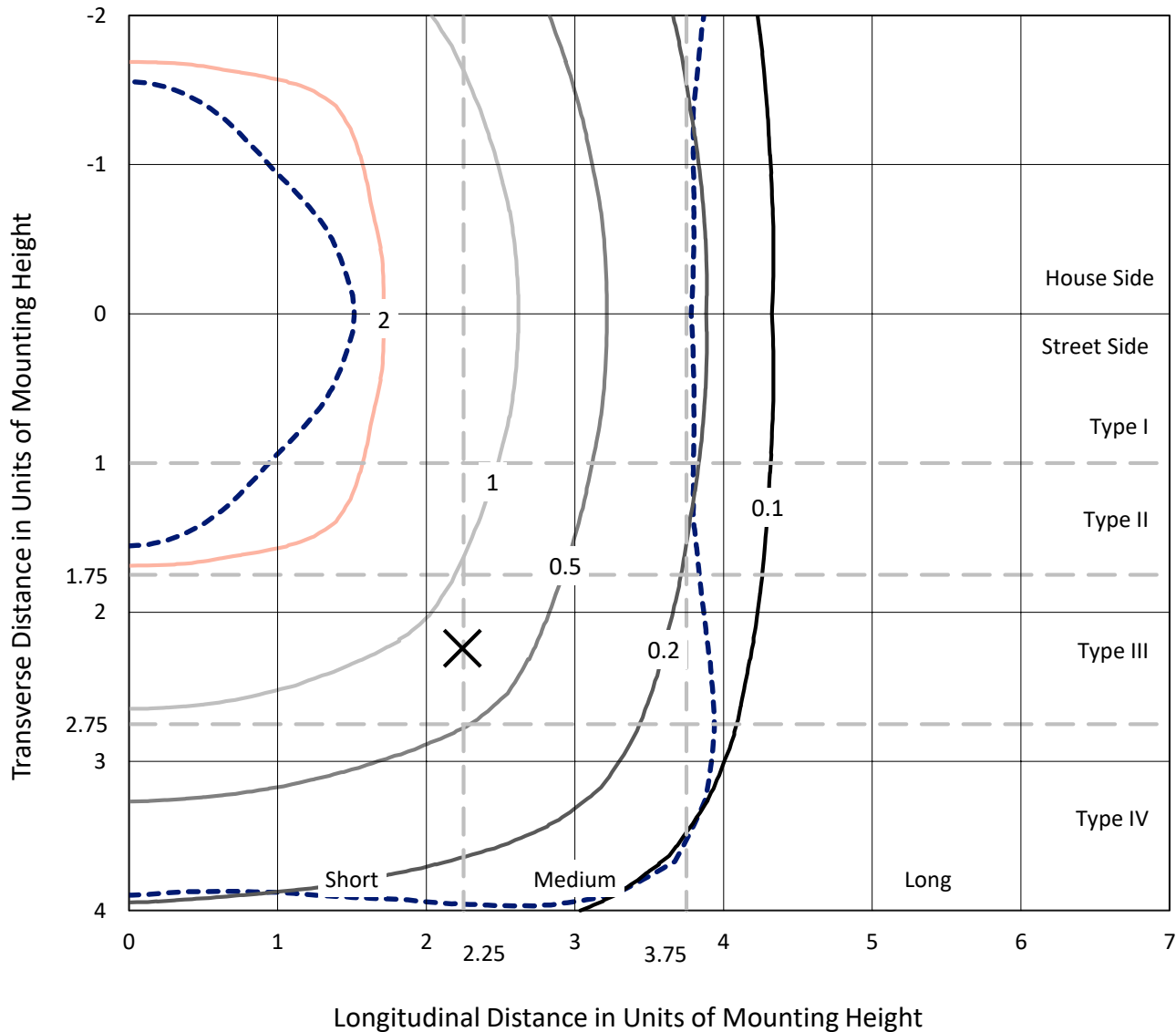


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

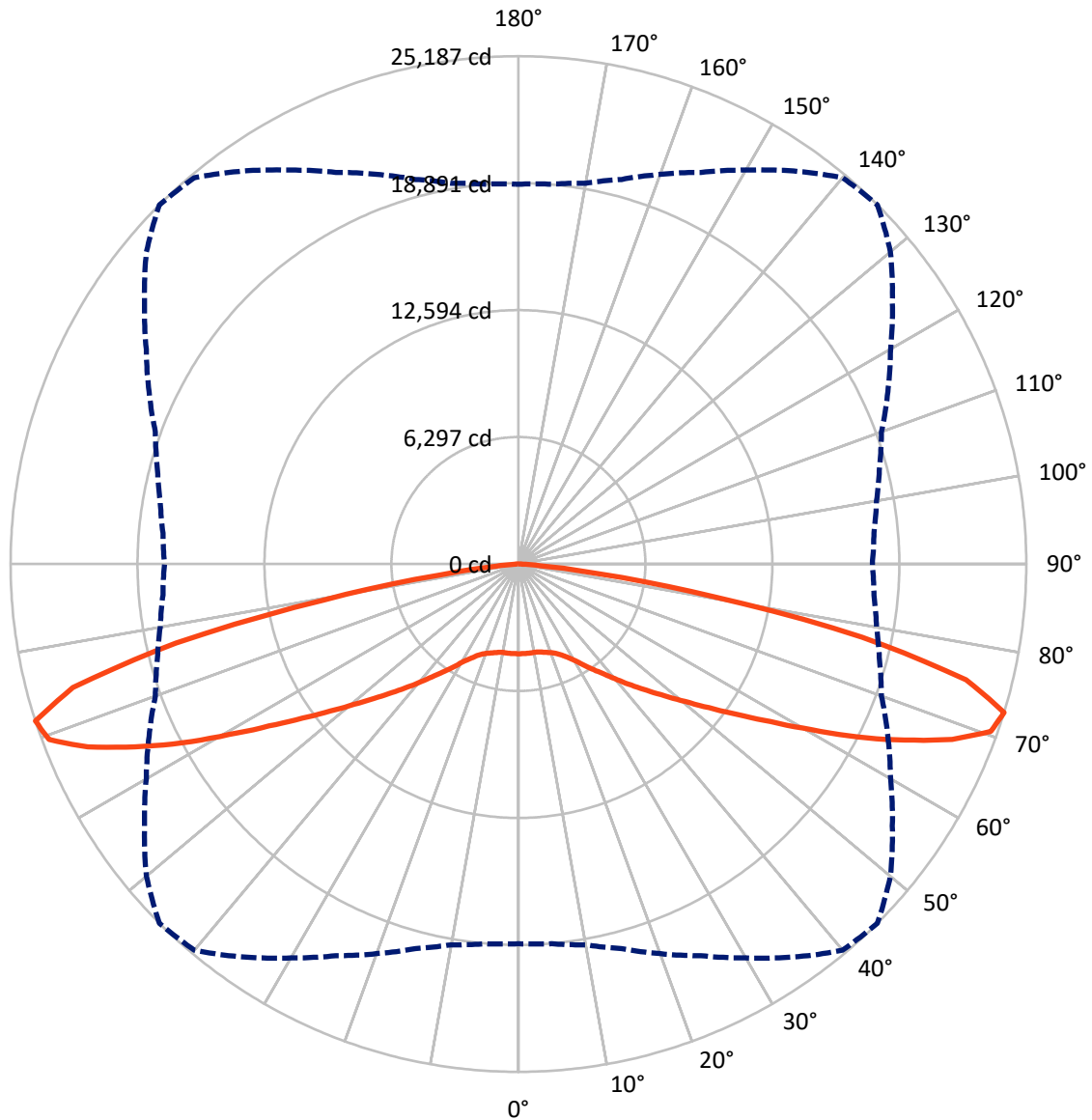


Based on 30 foot mounting height. Maximum calculated value = 4.9 fc
 Type V - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 31449.1 | 0.0 | 31449.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 31449.1 | 0.0 | 31449.1 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 62898.2 | 0.0 | 62898.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 425.3 | 0.7 |
| 10°-20° | 1291.7 | 2.1 |
| 20°-30° | 2360.5 | 3.8 |
| 30°-40° | 4070.0 | 6.5 |
| 40°-50° | 6957.6 | 11.1 |
| 50°-60° | 11277.4 | 17.9 |
| 60°-70° | 18708.8 | 29.7 |
| 70°-80° | 16478.1 | 26.2 |
| 80°-90° | 1328.6 | 2.1 |
| 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° | 62898.2 | 100.0 |
| 0°-180° | 62898.2 | 100.0 |

Coefficient of Utilization



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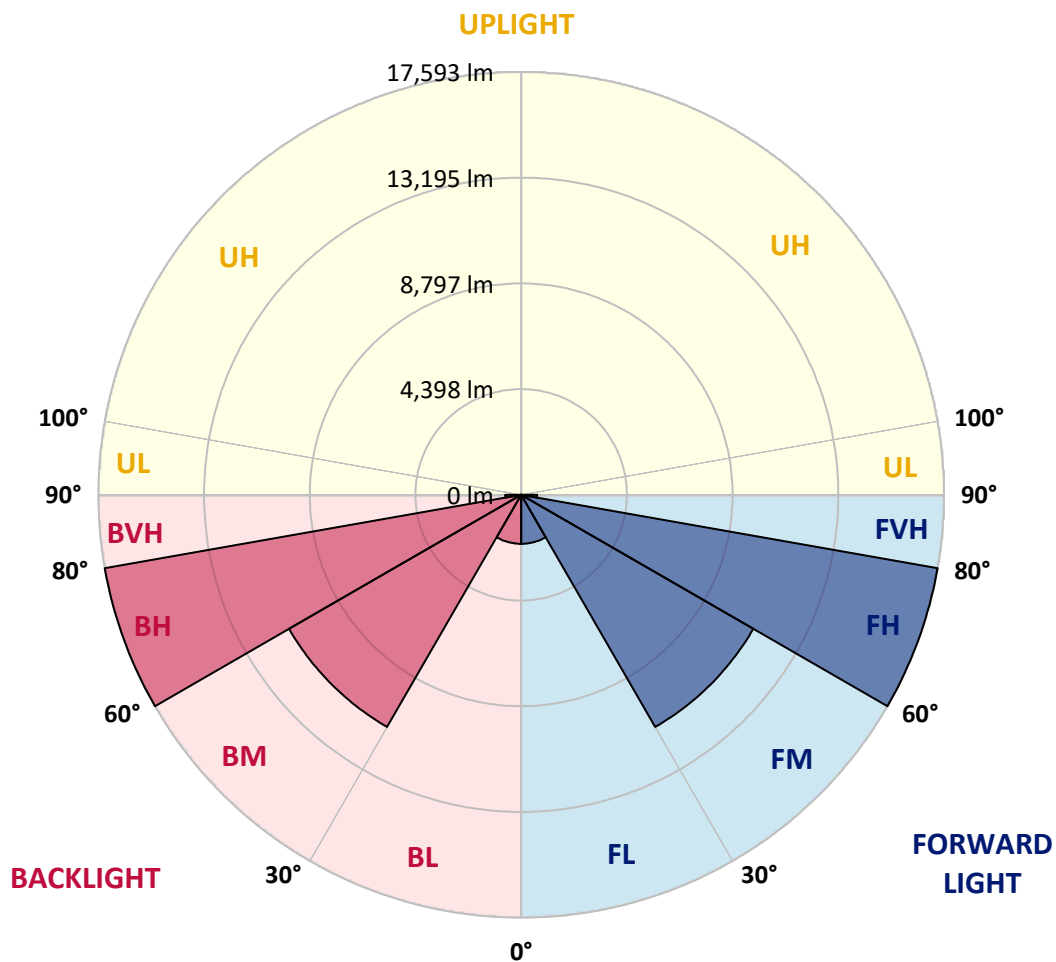
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|---------|-----------|-------------------------|------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 2038.8 | 3.2 | | | |
| FM | (30°-60°) | 11152.5 | 17.7 | | | |
| FH | (60°-80°) | 17593.5 | 28.0 | | | G5 |
| FVH | (80°-90°) | 664.3 | 1.1 | | | G4/750 |
| BL | (0°-30°) | 2038.8 | 3.2 | B3/2500 | | |
| BM | (30°-60°) | 11152.5 | 17.7 | B5 | | |
| BH | (60°-80°) | 17593.5 | 28.0 | B5 | | G5 |
| BVH | (80°-90°) | 664.3 | 1.1 | | | G4/750 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G5

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 |
| 2.5° | 4454.1 | 4457.1 | 4460.0 | 4457.1 | 4457.1 | 4454.1 | 4451.3 | 4454.1 | 4451.3 | 4445.5 | 4448.4 |
| 5° | 4468.6 | 4474.4 | 4474.4 | 4468.6 | 4471.5 | 4468.6 | 4462.8 | 4465.7 | 4460.0 | 4451.3 | 4451.3 |
| 7.5° | 4485.9 | 4488.8 | 4488.8 | 4483.0 | 4485.9 | 4480.1 | 4474.4 | 4471.5 | 4465.7 | 4454.1 | 4445.5 |
| 10° | 4511.8 | 4514.8 | 4511.8 | 4506.1 | 4506.1 | 4497.4 | 4483.0 | 4477.3 | 4465.7 | 4448.4 | 4439.7 |
| 12.5° | 4540.7 | 4543.6 | 4540.7 | 4534.9 | 4532.1 | 4517.7 | 4506.1 | 4497.4 | 4488.8 | 4474.4 | 4460.0 |
| 15° | 4581.1 | 4586.9 | 4581.1 | 4569.5 | 4560.9 | 4549.4 | 4543.6 | 4546.5 | 4549.4 | 4537.8 | 4523.4 |
| 17.5° | 4656.1 | 4659.0 | 4650.3 | 4624.4 | 4612.8 | 4601.3 | 4601.3 | 4607.1 | 4615.8 | 4609.9 | 4595.5 |
| 20° | 4794.6 | 4785.9 | 4765.7 | 4734.0 | 4719.6 | 4699.3 | 4696.5 | 4699.3 | 4699.3 | 4696.5 | 4684.9 |
| 22.5° | 4967.7 | 4961.9 | 4935.9 | 4895.5 | 4875.4 | 4863.8 | 4846.5 | 4832.1 | 4829.1 | 4820.6 | 4809.0 |
| 25° | 5175.4 | 5172.4 | 5140.7 | 5106.2 | 5091.7 | 5077.3 | 5062.9 | 5042.6 | 5025.3 | 5005.2 | 4993.6 |
| 27.5° | 5440.8 | 5429.2 | 5383.1 | 5365.8 | 5345.5 | 5336.9 | 5316.7 | 5293.7 | 5279.2 | 5253.3 | 5238.8 |
| 30° | 5732.1 | 5732.1 | 5694.7 | 5688.8 | 5688.8 | 5668.7 | 5645.6 | 5605.3 | 5579.3 | 5553.3 | 5544.6 |
| 32.5° | 6023.5 | 6026.4 | 5988.9 | 6000.4 | 6009.1 | 6023.5 | 6029.3 | 6014.8 | 5997.6 | 5994.7 | 5977.3 |
| 35° | 6444.7 | 6433.1 | 6395.7 | 6404.3 | 6401.4 | 6398.6 | 6398.6 | 6430.3 | 6436.0 | 6441.8 | 6407.2 |
| 37.5° | 6966.8 | 6966.8 | 6929.4 | 6929.4 | 6912.1 | 6894.7 | 6871.7 | 6891.8 | 6923.5 | 6932.2 | 6909.1 |
| 40° | 7564.0 | 7584.2 | 7538.0 | 7535.2 | 7540.9 | 7486.2 | 7460.2 | 7491.9 | 7512.0 | 7546.7 | 7520.7 |
| 42.5° | 8267.9 | 8253.5 | 8207.3 | 8201.5 | 8169.8 | 8152.5 | 8129.4 | 8155.4 | 8187.1 | 8210.2 | 8218.9 |
| 45° | 8942.9 | 8931.4 | 8879.5 | 8879.5 | 8847.7 | 8833.3 | 8844.8 | 8888.1 | 8902.5 | 8934.4 | 8966.1 |
| 47.5° | 9609.4 | 9595.0 | 9560.3 | 9574.7 | 9577.6 | 9603.6 | 9641.1 | 9681.5 | 9721.8 | 9765.1 | 9779.5 |
| 50° | 10290.2 | 10293.0 | 10255.6 | 10290.2 | 10333.4 | 10405.6 | 10506.5 | 10572.9 | 10656.6 | 10711.3 | 10728.7 |
| 52.5° | 10910.4 | 10921.9 | 10962.4 | 11043.1 | 11129.6 | 11271.0 | 11444.1 | 11605.7 | 11744.1 | 11836.5 | 11830.6 |
| 55° | 11654.7 | 11672.0 | 11770.1 | 11908.6 | 12050.0 | 12263.3 | 12520.1 | 12805.7 | 13036.5 | 13169.3 | 13085.6 |
| 57.5° | 12606.6 | 12644.2 | 12753.8 | 12941.4 | 13151.9 | 13428.9 | 13780.8 | 14210.6 | 14568.4 | 14747.3 | 14611.6 |
| 60° | 13913.5 | 13936.6 | 14069.3 | 14277.0 | 14530.8 | 14874.1 | 15344.4 | 15921.3 | 16426.2 | 16662.7 | 16506.9 |
| 62.5° | 15635.7 | 15679.0 | 15785.8 | 15996.4 | 16256.0 | 16645.5 | 17219.5 | 17940.7 | 18569.6 | 18898.5 | 18546.5 |
| 65° | 17692.7 | 17831.1 | 17920.6 | 18134.1 | 18376.3 | 18788.8 | 19388.9 | 20162.1 | 20837.1 | 21053.5 | 20646.7 |
| 67.5° | 19729.3 | 19850.5 | 20006.3 | 20251.5 | 20496.7 | 20961.1 | 21517.9 | 22268.0 | 23009.3 | 23205.5 | 22573.8 |
| 70° | 20620.7 | 20690.0 | 20932.2 | 21266.9 | 21737.2 | 22285.3 | 22928.6 | 23770.9 | 24688.3 | 24849.8 | 24047.9 |
| 72.5° | 18835.0 | 18904.2 | 19175.4 | 19743.8 | 20563.1 | 21434.2 | 22556.5 | 23794.0 | 25005.6 | 25187.4 | 24082.5 |
| 75° | 14245.3 | 14132.8 | 14533.8 | 15286.7 | 16391.6 | 17606.1 | 19175.4 | 20949.6 | 22700.7 | 22928.6 | 21610.2 |
| 77.5° | 7362.1 | 7347.7 | 7650.5 | 8585.2 | 9903.6 | 11285.4 | 13013.5 | 15018.4 | 16732.0 | 17424.3 | 16351.2 |
| 80° | 2074.2 | 2097.3 | 2241.5 | 2706.0 | 3476.2 | 4474.4 | 5824.5 | 7702.5 | 9104.5 | 9819.9 | 9219.9 |
| 82.5° | 813.6 | 877.0 | 931.8 | 1018.3 | 1119.3 | 1266.4 | 1690.5 | 2515.5 | 3375.2 | 4033.0 | 3303.1 |
| 85° | 291.3 | 311.6 | 441.4 | 522.1 | 530.8 | 559.7 | 637.5 | 744.3 | 897.2 | 1070.3 | 879.8 |
| 87.5° | 109.7 | 121.1 | 141.4 | 233.6 | 230.8 | 210.6 | 256.8 | 268.3 | 201.9 | 184.6 | 227.9 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 | 4454.1 |
| 2.5° | 4442.7 | 4445.5 | 4445.5 | 4448.4 | 4451.3 | 4451.3 | 4457.1 | 4457.1 |
| 5° | 4445.5 | 4445.5 | 4439.7 | 4442.7 | 4439.7 | 4439.7 | 4442.7 | 4442.7 |
| 7.5° | 4439.7 | 4436.8 | 4431.1 | 4428.3 | 4422.4 | 4422.4 | 4422.4 | 4422.4 |
| 10° | 4431.1 | 4428.3 | 4422.4 | 4419.6 | 4416.7 | 4416.7 | 4416.7 | 4416.7 |
| 12.5° | 4454.1 | 4445.5 | 4439.7 | 4436.8 | 4436.8 | 4436.8 | 4436.8 | 4436.8 |
| 15° | 4514.8 | 4494.5 | 4480.1 | 4480.1 | 4483.0 | 4488.8 | 4488.8 | 4494.5 |
| 17.5° | 4589.8 | 4566.7 | 4552.2 | 4540.7 | 4546.5 | 4555.1 | 4560.9 | 4566.7 |
| 20° | 4679.2 | 4667.6 | 4647.5 | 4635.9 | 4635.9 | 4647.5 | 4653.2 | 4656.1 |
| 22.5° | 4803.3 | 4794.6 | 4785.9 | 4771.5 | 4771.5 | 4777.3 | 4788.8 | 4788.8 |
| 25° | 4987.9 | 4982.1 | 4976.3 | 4964.8 | 4961.9 | 4961.9 | 4967.7 | 4973.5 |
| 27.5° | 5218.7 | 5221.6 | 5215.7 | 5212.9 | 5204.3 | 5201.3 | 5210.0 | 5207.1 |
| 30° | 5527.3 | 5541.7 | 5556.2 | 5544.6 | 5530.2 | 5521.6 | 5512.9 | 5501.3 |
| 32.5° | 5945.6 | 5928.3 | 5916.7 | 5896.6 | 5870.6 | 5847.5 | 5830.2 | 5810.1 |
| 35° | 6340.9 | 6312.0 | 6300.5 | 6317.7 | 6314.9 | 6300.5 | 6280.3 | 6262.9 |
| 37.5° | 6825.5 | 6819.7 | 6825.5 | 6857.2 | 6851.4 | 6865.8 | 6825.5 | 6822.6 |
| 40° | 7437.1 | 7442.9 | 7483.2 | 7520.7 | 7540.9 | 7561.1 | 7538.0 | 7515.0 |
| 42.5° | 8146.8 | 8143.8 | 8158.2 | 8210.2 | 8244.8 | 8267.9 | 8218.9 | 8213.1 |
| 45° | 8896.8 | 8876.6 | 8888.1 | 8931.4 | 8966.1 | 8992.0 | 8937.2 | 8937.2 |
| 47.5° | 9721.8 | 9687.2 | 9649.7 | 9698.8 | 9719.0 | 9736.2 | 9693.0 | 9678.5 |
| 50° | 10642.1 | 10569.9 | 10489.2 | 10509.4 | 10509.4 | 10503.7 | 10448.8 | 10446.0 |
| 52.5° | 11698.0 | 11565.3 | 11418.2 | 11363.3 | 11331.6 | 11297.0 | 11201.7 | 11155.6 |
| 55° | 12912.5 | 12713.4 | 12482.7 | 12341.3 | 12266.3 | 12171.1 | 12012.4 | 11969.1 |
| 57.5° | 14331.8 | 14020.3 | 13622.1 | 13449.0 | 13281.7 | 13126.0 | 12949.9 | 12900.9 |
| 60° | 16013.7 | 15555.0 | 15027.0 | 14706.9 | 14525.1 | 14375.1 | 14193.3 | 14184.6 |
| 62.5° | 17888.8 | 17164.7 | 16567.5 | 16279.0 | 16146.4 | 16013.7 | 15840.6 | 15863.6 |
| 65° | 19795.6 | 19039.9 | 18480.2 | 18246.5 | 18122.5 | 18012.8 | 17839.8 | 17865.7 |
| 67.5° | 21676.5 | 20981.3 | 20366.8 | 20127.4 | 19989.0 | 19850.5 | 19694.7 | 19720.7 |
| 70° | 23026.6 | 22164.1 | 21471.7 | 20940.9 | 20609.2 | 20234.2 | 19991.8 | 19931.3 |
| 72.5° | 22640.0 | 21310.2 | 20211.1 | 19158.1 | 18540.8 | 18038.8 | 17698.4 | 17551.3 |
| 75° | 19593.7 | 17776.3 | 16362.7 | 15070.3 | 14343.3 | 13751.9 | 13322.1 | 13053.9 |
| 77.5° | 14551.1 | 12508.6 | 10838.3 | 9349.7 | 8172.7 | 7382.2 | 6825.5 | 6464.8 |
| 80° | 7965.0 | 6058.1 | 4428.3 | 3112.7 | 2287.6 | 1901.1 | 1679.0 | 1572.3 |
| 82.5° | 2481.0 | 1601.1 | 1179.9 | 1018.3 | 946.2 | 905.8 | 839.4 | 732.7 |
| 85° | 790.4 | 692.3 | 643.3 | 614.5 | 585.6 | 510.7 | 352.0 | 320.2 |
| 87.5° | 305.8 | 314.5 | 311.6 | 294.3 | 300.0 | 216.4 | 173.1 | 152.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)