

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: P479471

Luminaire Tested: **IFLD-L-SA7D-827-U-5MQ**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P479471
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-L-SA7D-827-U-5MQ
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ 5MQ distribution lens
Light Source: (112) 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

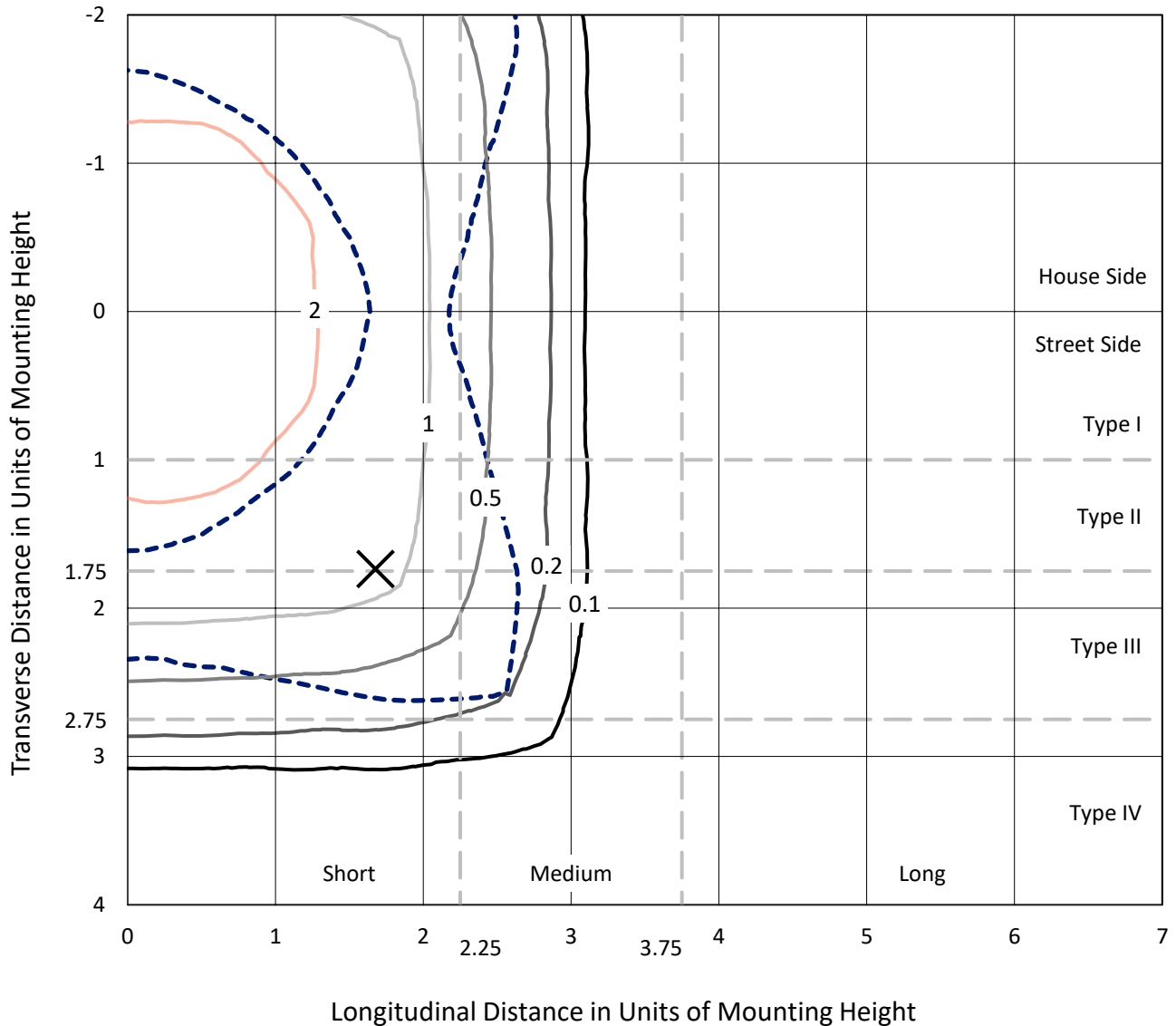
Lumens per Lamp: N/A
Luminaire Lumens: 36194.9 lumens
Efficiency: N/A
Efficacy: 85.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G4

Input Watts (W): 422.6
Input Voltage (V): 120
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

REPORT NUMBER: P479471
 CATALOG NUMBER: IFLD-L-SA7D-827-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination

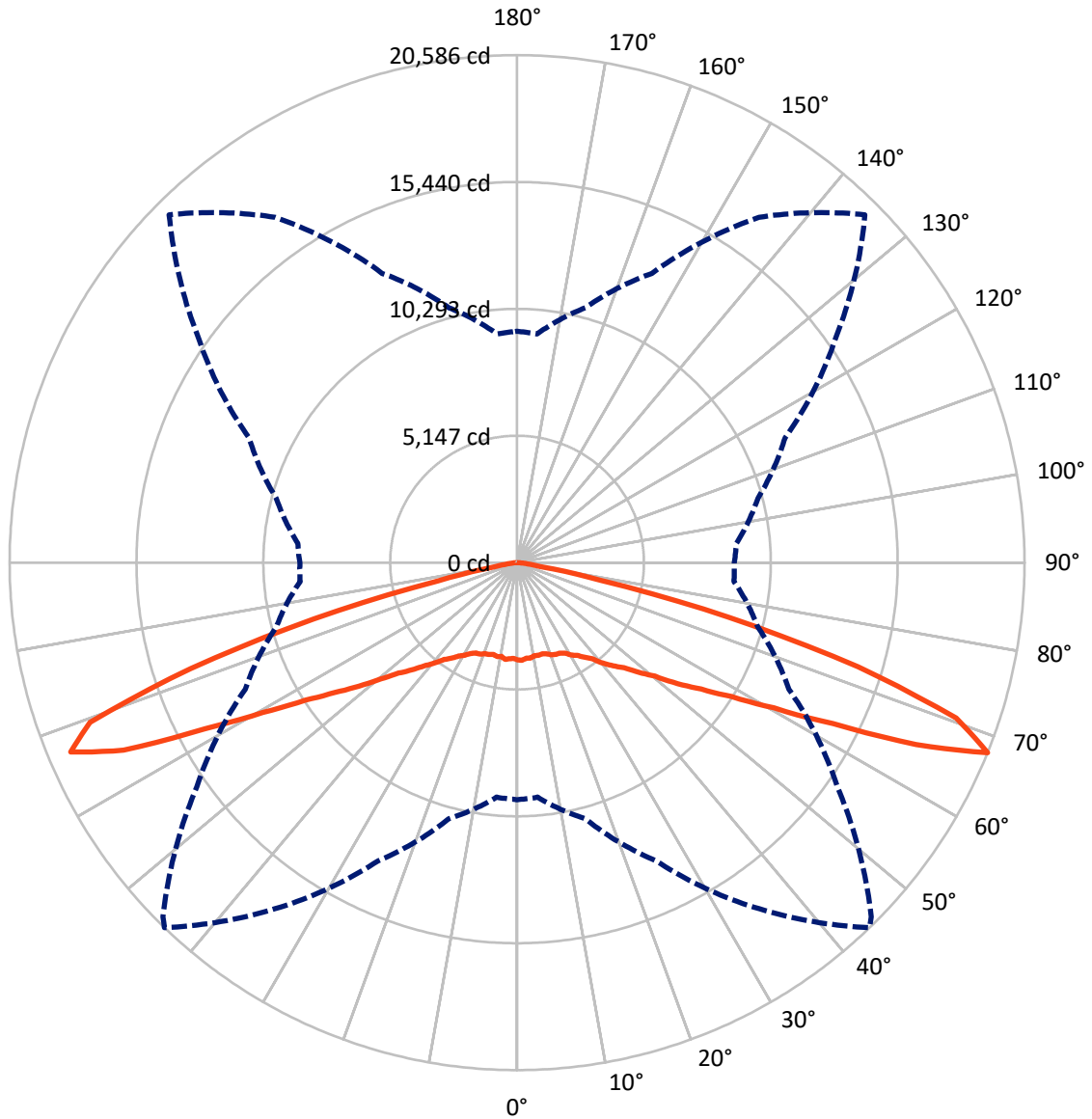
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.4 fc
 Type V - Short - N/A

REPORT NUMBER: P479471
CATALOG NUMBER: IFLD-L-SA7D-827-U-5MQ

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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CATALOG NUMBER: IFLD-L-SA7D-827-U-5MQ

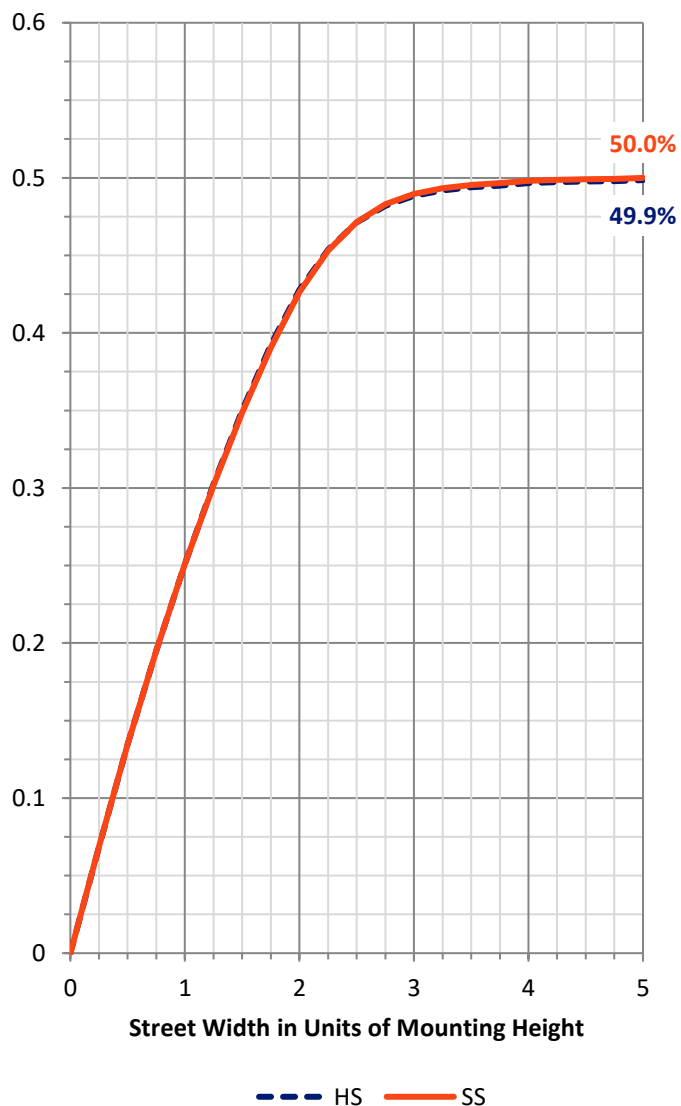
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 18051.1 | 0.0 | 18051.1 |
| | % Fixture | 49.9 | 0.0 | 49.9 |
| Street Side | Lumens | 18143.8 | 0.0 | 18143.8 |
| | % Fixture | 50.1 | 0.0 | 50.1 |
| Total | Lumens | 36194.9 | 0.0 | 36194.9 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 374.1 | 1.0 |
| 10°-20° | 1093.0 | 3.0 |
| 20°-30° | 1858.7 | 5.1 |
| 30°-40° | 2947.1 | 8.1 |
| 40°-50° | 4805.5 | 13.3 |
| 50°-60° | 8207.2 | 22.7 |
| 60°-70° | 12483.1 | 34.5 |
| 70°-80° | 4207.6 | 11.6 |
| 80°-90° | 218.5 | 0.6 |
| 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° | 36194.9 | 100.0 |
| 0°-180° | 36194.9 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P479471

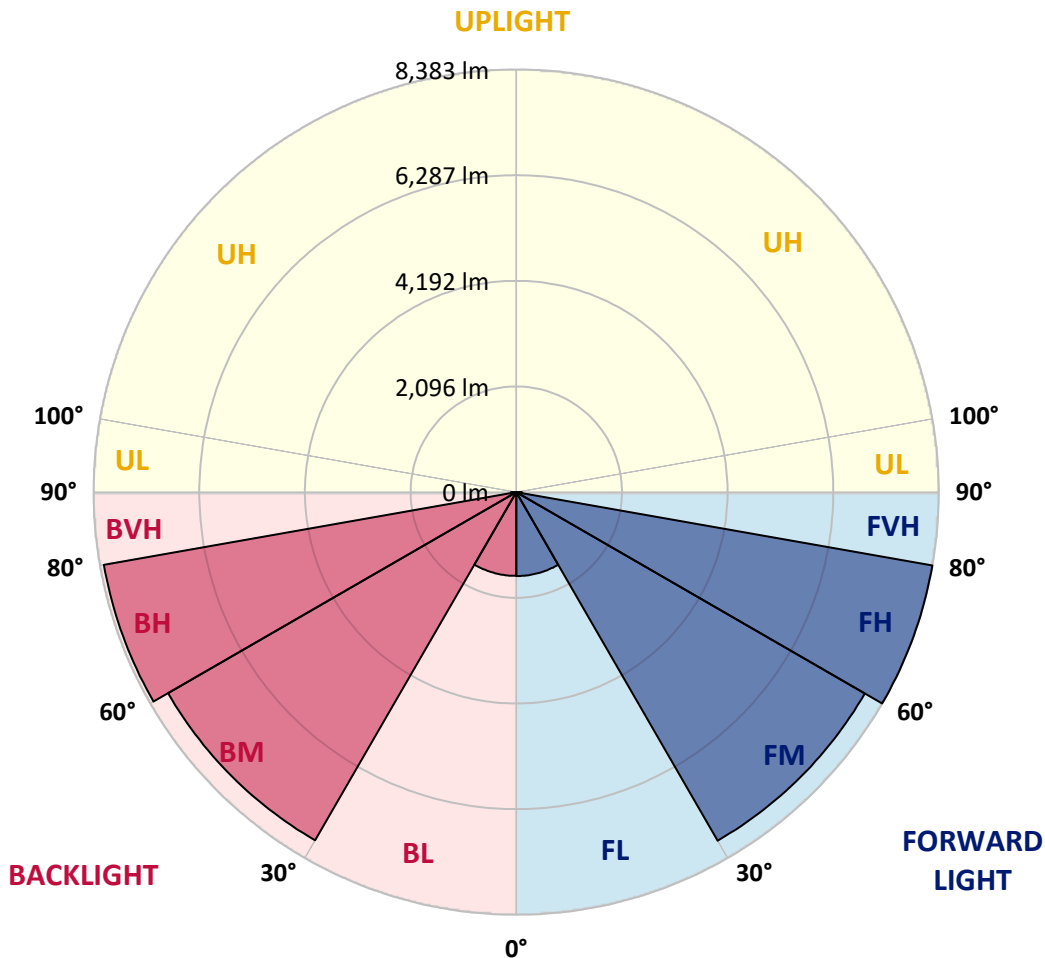
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1664.7 | 4.6 | | | |
| FM (30°-60°) | 7984.2 | 22.1 | | | |
| FH (60°-80°) | 8383.1 | 23.2 | | | G4/12000 |
| FVH (80°-90°) | 111.8 | 0.3 | | | G2/225 |
| BL (0°-30°) | 1661.2 | 4.6 | B3/2500 | | |
| BM (30°-60°) | 7975.6 | 22.0 | B4/8500 | | |
| BH (60°-80°) | 8307.5 | 23.0 | B5 | | G4/12000 |
| BVH (80°-90°) | 106.7 | 0.3 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 |
| 2.5° | 3862.8 | 3908.2 | 3941.3 | 3937.1 | 3949.5 | 3961.9 | 3945.4 | 3970.2 | 3953.7 | 3982.6 | 3999.1 |
| 5° | 3937.1 | 3924.7 | 3928.9 | 3904.1 | 3961.9 | 3895.8 | 3895.8 | 3928.9 | 3970.2 | 3920.6 | 3949.5 |
| 7.5° | 3891.7 | 3883.4 | 3862.8 | 3900.0 | 3912.4 | 3912.4 | 3945.4 | 3883.4 | 3953.7 | 3970.2 | 3974.3 |
| 10° | 3842.1 | 3796.7 | 3858.6 | 3895.8 | 3904.1 | 3838.0 | 3866.9 | 3883.4 | 3862.8 | 3883.4 | 3895.8 |
| 12.5° | 3800.8 | 3825.6 | 3825.6 | 3825.6 | 3813.2 | 3858.6 | 3887.6 | 3883.4 | 3842.1 | 3879.3 | 3813.2 |
| 15° | 3796.7 | 3784.3 | 3821.5 | 3854.5 | 3833.9 | 3842.1 | 3854.5 | 3891.7 | 3813.2 | 3829.7 | 3829.7 |
| 17.5° | 3792.5 | 3809.1 | 3821.5 | 3817.3 | 3887.6 | 3887.6 | 3875.2 | 3850.4 | 3912.4 | 3879.3 | 3833.9 |
| 20° | 3809.1 | 3796.7 | 3829.7 | 3842.1 | 3891.7 | 3990.8 | 3953.7 | 3933.0 | 3900.0 | 3858.6 | 3858.6 |
| 22.5° | 3829.7 | 3821.5 | 3866.9 | 3920.6 | 4015.6 | 4040.4 | 4036.3 | 4011.5 | 3953.7 | 3904.1 | 3895.8 |
| 25° | 3904.1 | 3829.7 | 3879.3 | 3982.6 | 4015.6 | 4065.2 | 4098.3 | 4065.2 | 3986.7 | 3999.1 | 3924.7 |
| 27.5° | 4015.6 | 4003.2 | 4069.3 | 4139.6 | 4110.7 | 4156.1 | 4127.2 | 4152.0 | 4156.1 | 4094.1 | 4019.8 |
| 30° | 4147.8 | 4110.7 | 4152.0 | 4288.3 | 4300.7 | 4350.3 | 4300.7 | 4234.6 | 4255.3 | 4201.5 | 4164.4 |
| 32.5° | 4337.9 | 4325.5 | 4404.0 | 4494.9 | 4511.4 | 4486.6 | 4461.8 | 4499.0 | 4412.2 | 4370.9 | 4304.8 |
| 35° | 4461.8 | 4515.5 | 4610.5 | 4680.8 | 4734.5 | 4709.7 | 4722.1 | 4684.9 | 4705.6 | 4618.8 | 4589.9 |
| 37.5° | 4829.5 | 4808.8 | 4829.5 | 4949.3 | 4961.7 | 4949.3 | 4961.7 | 5003.0 | 4974.1 | 4899.7 | 4825.4 |
| 40° | 5176.5 | 5143.5 | 5193.1 | 5329.4 | 5321.1 | 5362.4 | 5279.8 | 5325.3 | 5325.3 | 5184.8 | 5155.9 |
| 42.5° | 5436.8 | 5548.4 | 5606.2 | 5717.7 | 5759.0 | 5721.9 | 5705.3 | 5713.6 | 5804.5 | 5639.2 | 5577.3 |
| 45° | 5973.9 | 5969.7 | 6143.3 | 6205.2 | 6089.6 | 6081.3 | 6048.2 | 6147.4 | 6209.4 | 6114.3 | 6089.6 |
| 47.5° | 6556.4 | 6585.3 | 6684.5 | 6709.3 | 6779.5 | 6651.4 | 6651.4 | 6663.8 | 6882.8 | 6659.7 | 6544.0 |
| 50° | 7081.1 | 7118.2 | 7316.6 | 7510.7 | 7378.5 | 7242.2 | 7295.9 | 7362.0 | 7481.8 | 7271.1 | 7172.0 |
| 52.5° | 7717.3 | 7919.7 | 8051.9 | 8155.2 | 8250.2 | 8155.2 | 8031.3 | 8105.6 | 8341.1 | 8060.2 | 7936.2 |
| 55° | 8634.4 | 8795.6 | 8919.5 | 9109.5 | 9188.0 | 9060.0 | 9047.6 | 9039.3 | 9171.5 | 8874.1 | 8704.7 |
| 57.5° | 9659.0 | 9592.9 | 9791.2 | 10084.5 | 10369.6 | 10245.7 | 10208.5 | 10216.7 | 10249.8 | 9828.4 | 9700.3 |
| 60° | 10931.5 | 11005.8 | 11241.3 | 11497.4 | 11799.0 | 11972.5 | 11728.8 | 11588.3 | 11617.2 | 11043.0 | 10844.7 |
| 62.5° | 11658.6 | 11823.8 | 12356.8 | 13236.7 | 13844.0 | 14385.2 | 14422.4 | 13509.4 | 12898.0 | 11782.5 | 10939.7 |
| 65° | 11307.4 | 11282.6 | 12286.5 | 13914.3 | 16215.4 | 17789.4 | 17553.9 | 15339.6 | 13203.7 | 11431.3 | 10299.4 |
| 67.5° | 9617.7 | 9551.6 | 10766.2 | 13348.3 | 17149.1 | 20586.3 | 20317.8 | 15856.0 | 12170.8 | 10113.5 | 8832.7 |
| 70° | 6197.0 | 6180.4 | 7498.3 | 10175.4 | 15310.6 | 18900.8 | 18999.9 | 14401.8 | 9906.9 | 7407.4 | 6139.1 |
| 72.5° | 2251.6 | 2387.9 | 3152.2 | 5469.9 | 10398.5 | 14459.6 | 14521.6 | 10662.9 | 5697.1 | 3424.9 | 2524.2 |
| 75° | 830.4 | 855.2 | 995.6 | 1776.5 | 4738.6 | 8878.2 | 9109.5 | 5172.4 | 2024.3 | 1115.5 | 908.9 |
| 77.5° | 479.2 | 483.4 | 532.9 | 661.0 | 1404.6 | 3466.2 | 3606.6 | 1569.9 | 784.9 | 594.9 | 549.5 |
| 80° | 326.4 | 322.2 | 375.9 | 429.7 | 561.9 | 983.3 | 1045.2 | 656.9 | 495.8 | 413.1 | 347.0 |
| 82.5° | 190.0 | 202.4 | 276.8 | 305.7 | 342.9 | 433.8 | 442.1 | 409.0 | 371.8 | 305.7 | 227.2 |
| 85° | 115.7 | 95.0 | 152.9 | 169.4 | 198.3 | 194.2 | 194.2 | 223.1 | 239.6 | 214.8 | 128.1 |
| 87.5° | 28.9 | 28.9 | 37.2 | 41.3 | 53.7 | 41.3 | 45.4 | 86.8 | 115.7 | 107.4 | 66.1 |
| 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° | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 | 3953.7 |
| 2.5° | 3961.9 | 3949.5 | 3957.8 | 4003.2 | 3974.3 | 3887.6 | 3908.2 | 3953.7 | 3916.5 | 3895.8 | 3891.7 |
| 5° | 3945.4 | 3970.2 | 3941.3 | 3949.5 | 3978.5 | 3908.2 | 3920.6 | 3978.5 | 3953.7 | 3961.9 | 3916.5 |
| 7.5° | 3949.5 | 3961.9 | 3937.1 | 3900.0 | 3900.0 | 3957.8 | 3924.7 | 3933.0 | 3895.8 | 3957.8 | 3875.2 |
| 10° | 3924.7 | 3891.7 | 3862.8 | 3883.4 | 3875.2 | 3858.6 | 3846.3 | 3871.0 | 3833.9 | 3887.6 | 3829.7 |
| 12.5° | 3850.4 | 3858.6 | 3850.4 | 3842.1 | 3858.6 | 3900.0 | 3833.9 | 3842.1 | 3784.3 | 3792.5 | 3821.5 |
| 15° | 3821.5 | 3846.3 | 3838.0 | 3883.4 | 3904.1 | 3842.1 | 3891.7 | 3842.1 | 3796.7 | 3771.9 | 3817.3 |
| 17.5° | 3833.9 | 3871.0 | 3858.6 | 3891.7 | 3854.5 | 3900.0 | 3908.2 | 3887.6 | 3833.9 | 3813.2 | 3833.9 |
| 20° | 3846.3 | 3833.9 | 3850.4 | 3908.2 | 3961.9 | 3916.5 | 3916.5 | 3904.1 | 3854.5 | 3825.6 | 3825.6 |
| 22.5° | 3875.2 | 3854.5 | 3879.3 | 3924.7 | 3941.3 | 4011.5 | 3949.5 | 3920.6 | 3838.0 | 3763.6 | 3833.9 |
| 25° | 3933.0 | 3945.4 | 3961.9 | 3945.4 | 4036.3 | 4028.0 | 4019.8 | 3999.1 | 3871.0 | 3875.2 | 3862.8 |
| 27.5° | 4044.6 | 3974.3 | 3995.0 | 4094.1 | 4106.5 | 4139.6 | 4098.3 | 4135.4 | 3999.1 | 4003.2 | 3920.6 |
| 30° | 4180.9 | 4106.5 | 4172.6 | 4259.4 | 4255.3 | 4317.2 | 4296.6 | 4304.8 | 4209.8 | 4156.1 | 4044.6 |
| 32.5° | 4329.6 | 4321.4 | 4362.7 | 4416.4 | 4437.0 | 4470.1 | 4465.9 | 4465.9 | 4408.1 | 4267.6 | 4288.3 |
| 35° | 4494.9 | 4552.7 | 4602.3 | 4660.1 | 4668.4 | 4709.7 | 4651.9 | 4660.1 | 4602.3 | 4499.0 | 4532.0 |
| 37.5° | 4821.2 | 4817.1 | 4870.8 | 4941.0 | 4949.3 | 4916.3 | 4961.7 | 4941.0 | 4862.6 | 4792.3 | 4738.6 |
| 40° | 5201.3 | 5118.7 | 5168.3 | 5333.5 | 5345.9 | 5288.1 | 5283.9 | 5279.8 | 5222.0 | 5069.1 | 5036.1 |
| 42.5° | 5531.8 | 5639.2 | 5631.0 | 5684.7 | 5647.5 | 5618.6 | 5721.9 | 5664.0 | 5618.6 | 5457.5 | 5428.5 |
| 45° | 5957.4 | 5990.4 | 6097.8 | 6271.3 | 6093.7 | 6093.7 | 6163.9 | 6118.5 | 6093.7 | 5973.9 | 5862.3 |
| 47.5° | 6486.2 | 6515.1 | 6729.9 | 6742.3 | 6626.6 | 6548.1 | 6767.1 | 6775.4 | 6672.1 | 6581.2 | 6444.8 |
| 50° | 7105.9 | 7118.2 | 7312.4 | 7510.7 | 7382.7 | 7233.9 | 7457.0 | 7543.8 | 7312.4 | 7188.5 | 7019.1 |
| 52.5° | 7787.5 | 7750.3 | 7911.5 | 8283.3 | 8159.3 | 8113.9 | 8353.5 | 8374.2 | 8060.2 | 7866.0 | 7911.5 |
| 55° | 8572.5 | 8522.9 | 8960.8 | 9212.8 | 9134.3 | 9051.7 | 9159.1 | 9208.7 | 8956.7 | 8638.6 | 8750.1 |
| 57.5° | 9588.8 | 9613.6 | 9832.5 | 10080.4 | 10208.5 | 10229.1 | 10278.7 | 10229.1 | 9973.0 | 9650.7 | 9547.5 |
| 60° | 10605.1 | 10679.4 | 11105.0 | 11571.8 | 11613.1 | 11976.7 | 11910.6 | 11662.7 | 11299.1 | 10840.6 | 10861.2 |
| 62.5° | 10981.0 | 10919.1 | 11604.9 | 12745.1 | 13716.0 | 14381.1 | 14087.8 | 13207.8 | 12365.0 | 11530.5 | 11592.5 |
| 65° | 10225.0 | 10377.9 | 11311.5 | 13096.3 | 15203.2 | 17834.9 | 16273.2 | 13839.9 | 12137.8 | 11059.5 | 10939.7 |
| 67.5° | 8812.1 | 8927.8 | 10113.5 | 11997.3 | 15736.2 | 19958.4 | 17099.5 | 12947.5 | 10704.2 | 9307.8 | 9382.2 |
| 70° | 6139.1 | 6197.0 | 7357.9 | 9828.4 | 14269.6 | 18834.6 | 15426.3 | 9944.1 | 7390.9 | 5891.3 | 5973.9 |
| 72.5° | 2470.5 | 2611.0 | 3375.3 | 5920.2 | 10534.8 | 14310.9 | 10386.1 | 5217.8 | 3065.4 | 2280.5 | 2069.8 |
| 75° | 913.0 | 917.2 | 1078.3 | 2036.7 | 5003.0 | 8993.9 | 4684.9 | 1677.3 | 979.1 | 801.5 | 764.3 |
| 77.5° | 528.8 | 524.7 | 561.9 | 735.4 | 1450.1 | 3511.6 | 1330.3 | 656.9 | 532.9 | 479.2 | 458.6 |
| 80° | 330.5 | 326.4 | 384.2 | 487.5 | 636.2 | 962.6 | 561.9 | 409.0 | 359.4 | 309.8 | 309.8 |
| 82.5° | 210.7 | 214.8 | 301.6 | 359.4 | 388.3 | 425.5 | 326.4 | 289.2 | 268.5 | 177.6 | 173.5 |
| 85° | 136.3 | 123.9 | 210.7 | 239.6 | 214.8 | 190.0 | 181.8 | 152.9 | 140.5 | 86.8 | 95.0 |
| 87.5° | 62.0 | 66.1 | 107.4 | 119.8 | 78.5 | 45.4 | 45.4 | 33.1 | 33.1 | 20.7 | 20.7 |
| 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)