

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: P477244

Luminaire Tested: **IFLD-M-SA4E-722-U-T3**

Issue Date: 02/26/2021

Test Information

Test Method: LM-79-08
Report Number: P477244
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4E-722-U-T3
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ T3
distribution lens
Light Source: (64) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

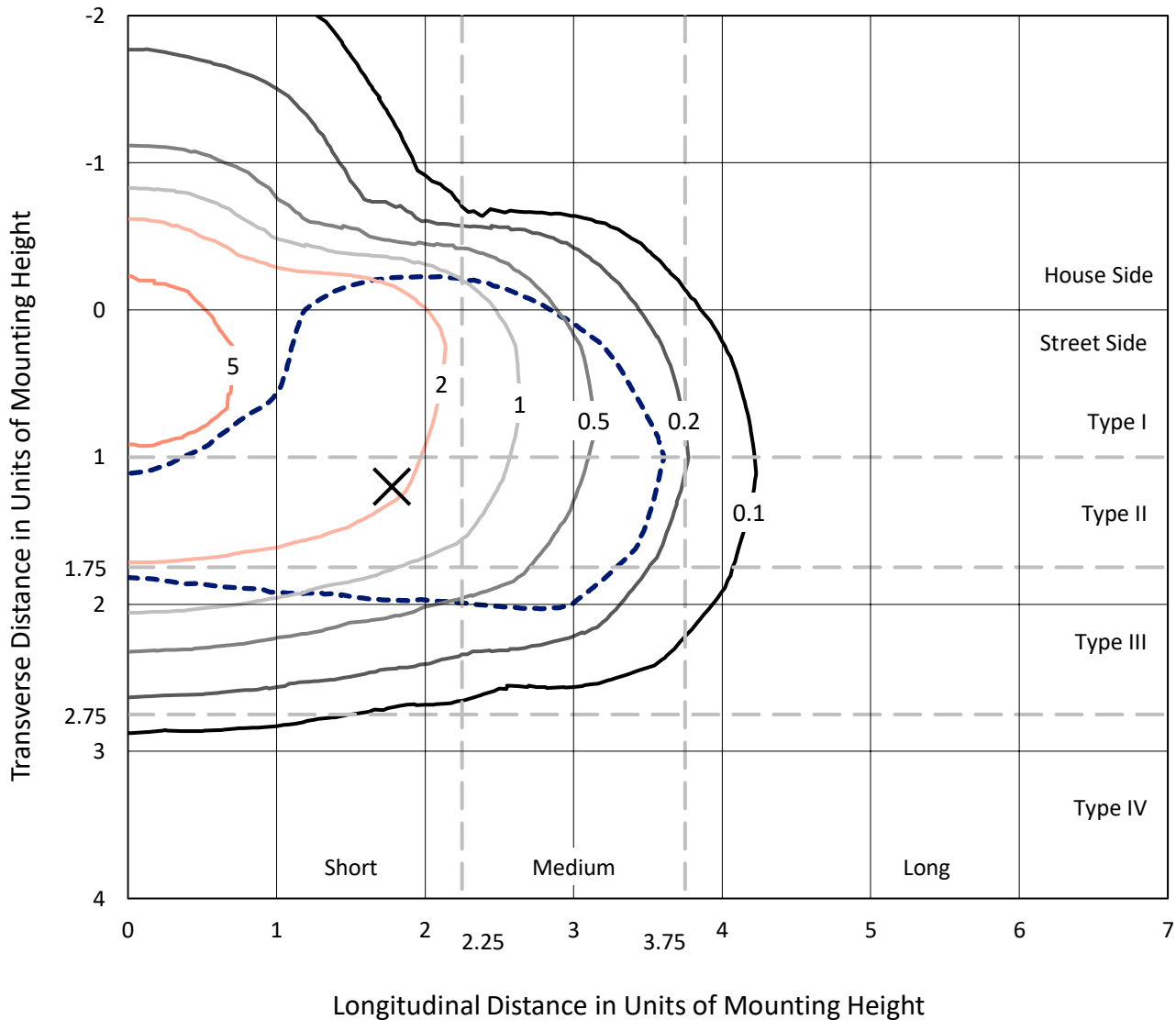
Lumens per Lamp: N/A
Luminaire Lumens: 27162.2 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 1' x H: 0.5')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 314.8
Input Voltage (V): 120
Input Current (A_{in}): 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

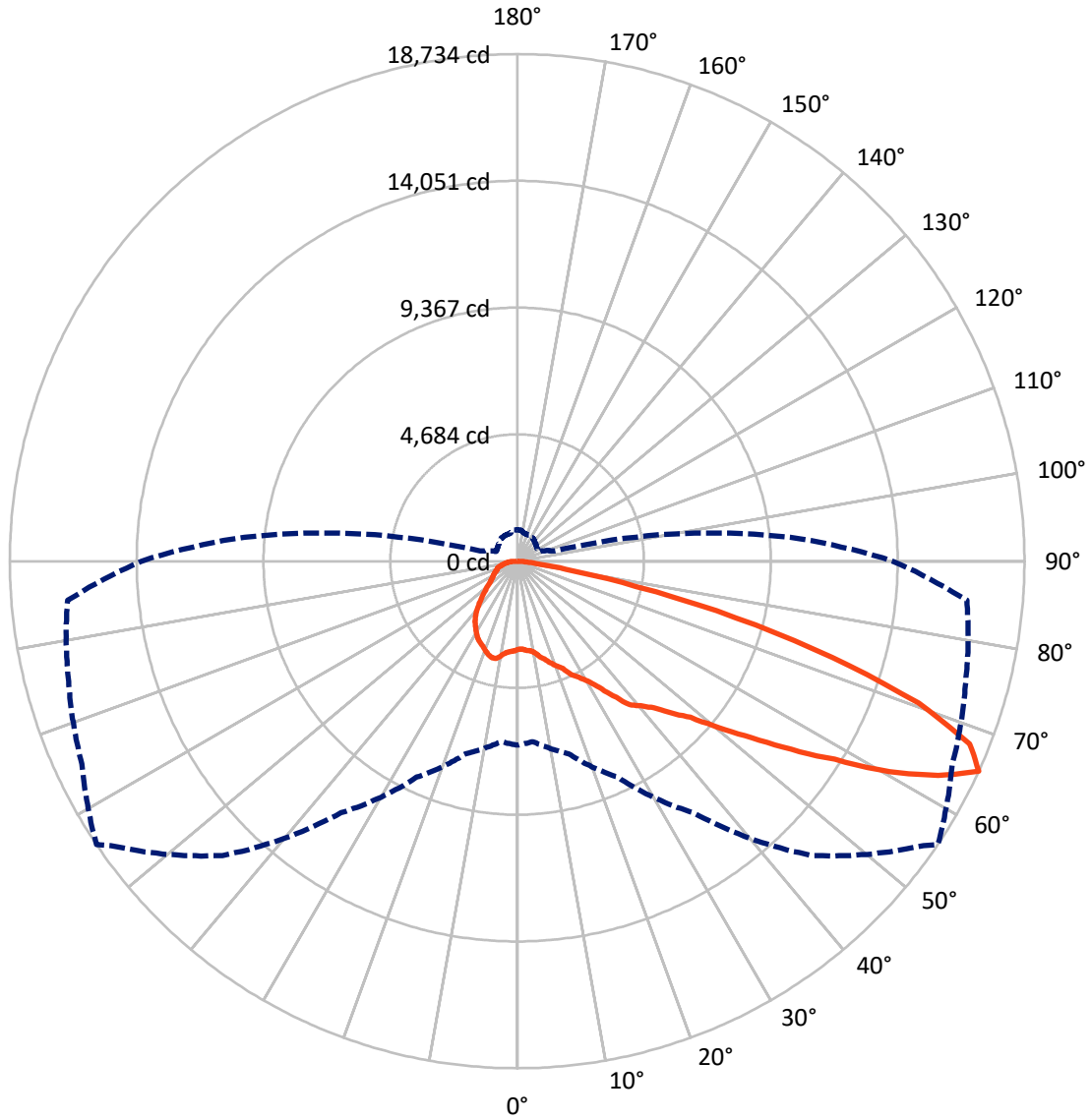
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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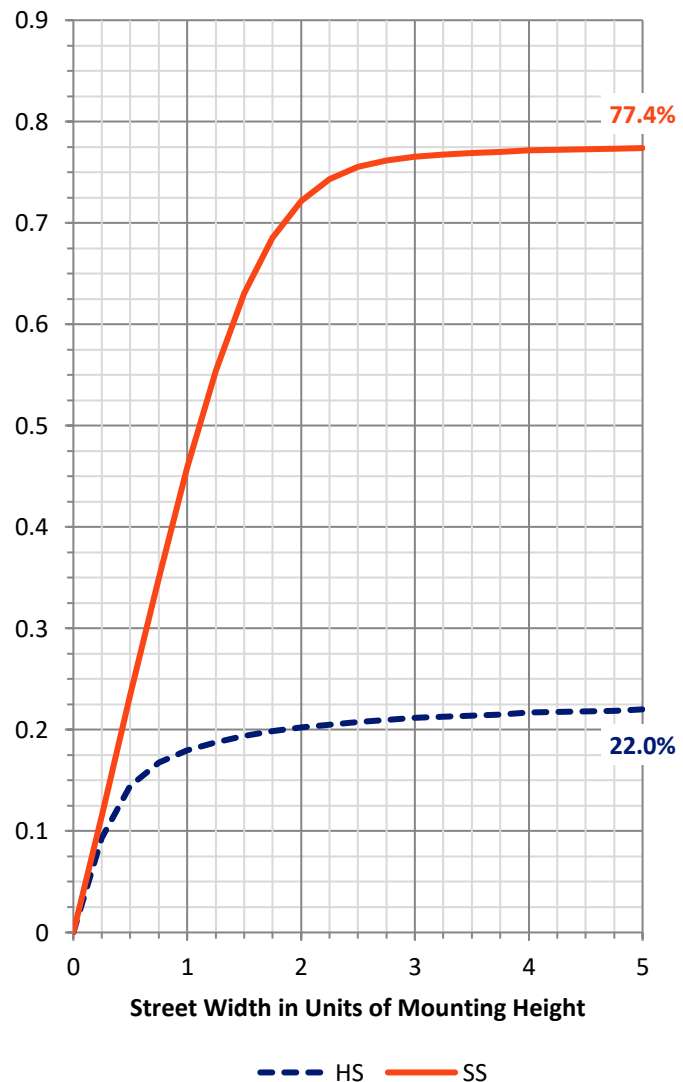
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 6091.6 | 0.0 | 6091.6 |
| | % Fixture | 22.4 | 0.0 | 22.4 |
| Street Side | Lumens | 21070.6 | 0.0 | 21070.6 |
| | % Fixture | 77.6 | 0.0 | 77.6 |
| Total | Lumens | 27162.2 | 0.0 | 27162.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 323.1 | 1.2 |
| 10°-20° | 1049.1 | 3.9 |
| 20°-30° | 1868.0 | 6.9 |
| 30°-40° | 2797.2 | 10.3 |
| 40°-50° | 4144.4 | 15.3 |
| 50°-60° | 6385.9 | 23.5 |
| 60°-70° | 7229.7 | 26.6 |
| 70°-80° | 3000.4 | 11.0 |
| 80°-90° | 364.5 | 1.3 |
| 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° | 27162.2 | 100.0 |
| 0°-180° | 27162.2 | 100.0 |

Coefficient of Utilization

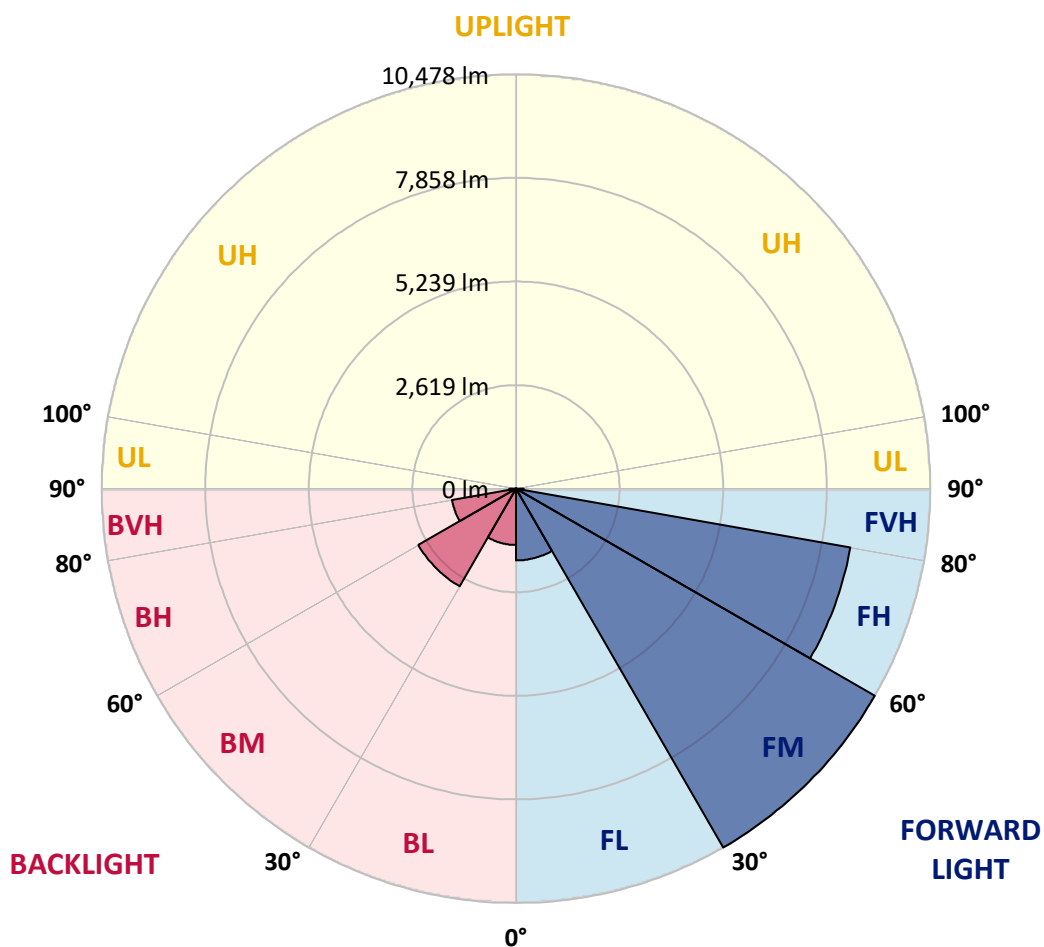


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|----------|
| | | | B | U | G |
| FL (0°-30°) | 1815.2 | 6.7 | | | |
| FM (30°-60°) | 10478.0 | 38.6 | | | |
| FH (60°-80°) | 8585.1 | 31.6 | | | G4/12000 |
| FVH (80°-90°) | 192.3 | 0.7 | | | G2/225 |
| BL (0°-30°) | 1424.9 | 5.2 | B3/2500 | | |
| BM (30°-60°) | 2849.5 | 10.5 | B3/5000 | | |
| BH (60°-80°) | 1644.9 | 6.1 | B3/2500 | | G3/2500 |
| BVH (80°-90°) | 172.2 | 0.6 | | | G2/225 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G4
 Type III Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 65° | 75° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 |
| 2.5° | 3175.0 | 3192.0 | 3180.7 | 3214.8 | 3243.2 | 3243.2 | 3265.9 | 3248.9 | 3271.6 | 3302.9 |
| 5° | 3280.1 | 3211.9 | 3248.9 | 3265.9 | 3257.4 | 3271.6 | 3248.9 | 3305.7 | 3268.8 | 3328.5 |
| 7.5° | 3305.7 | 3331.3 | 3362.6 | 3334.1 | 3359.7 | 3345.5 | 3348.4 | 3339.8 | 3319.9 | 3368.3 |
| 10° | 3493.3 | 3456.4 | 3527.4 | 3484.8 | 3479.1 | 3473.4 | 3462.1 | 3419.4 | 3467.7 | 3470.6 |
| 12.5° | 3709.3 | 3675.2 | 3672.4 | 3638.3 | 3683.8 | 3601.3 | 3618.4 | 3595.6 | 3604.2 | 3615.5 |
| 15° | 3865.7 | 3851.5 | 3916.8 | 3877.0 | 3817.4 | 3780.4 | 3820.2 | 3757.7 | 3788.9 | 3783.2 |
| 17.5° | 4175.5 | 4172.7 | 4124.3 | 4059.0 | 4024.8 | 3970.8 | 3962.3 | 3936.7 | 3959.5 | 3948.1 |
| 20° | 4391.5 | 4422.8 | 4431.3 | 4354.6 | 4223.8 | 4164.1 | 4149.9 | 4130.0 | 4155.6 | 4147.1 |
| 22.5° | 4721.2 | 4672.9 | 4709.9 | 4576.3 | 4528.0 | 4385.8 | 4334.7 | 4306.2 | 4428.5 | 4397.2 |
| 25° | 4931.6 | 4982.7 | 4945.8 | 4900.3 | 4792.3 | 4616.1 | 4579.1 | 4641.6 | 4690.0 | 4655.9 |
| 27.5° | 5406.3 | 5355.1 | 5321.0 | 5184.5 | 5113.5 | 4928.7 | 4886.1 | 4863.4 | 4874.7 | 4894.6 |
| 30° | 5767.2 | 5795.7 | 5718.9 | 5622.3 | 5443.2 | 5255.6 | 5156.1 | 5136.2 | 5096.4 | 5062.3 |
| 32.5° | 6281.7 | 6239.1 | 6193.6 | 6131.1 | 5977.6 | 5730.3 | 5633.6 | 5559.7 | 5440.4 | 5281.2 |
| 35° | 6529.0 | 6651.2 | 6617.1 | 6449.4 | 6332.9 | 6239.1 | 6210.7 | 6097.0 | 5997.5 | 5747.3 |
| 37.5° | 6941.2 | 6992.3 | 6944.0 | 6890.0 | 6836.0 | 6736.5 | 6702.4 | 6733.7 | 6537.5 | 6125.4 |
| 40° | 7208.3 | 7316.4 | 7415.8 | 7265.2 | 7253.8 | 7273.7 | 7063.4 | 7026.4 | 6622.8 | 6406.8 |
| 42.5° | 7754.1 | 7799.6 | 7819.5 | 7813.8 | 7879.2 | 7879.2 | 7478.4 | 7398.8 | 7111.7 | 6935.5 |
| 45° | 8476.1 | 8513.0 | 8584.1 | 8635.2 | 8561.3 | 8598.3 | 8027.0 | 7995.7 | 7739.9 | 7705.8 |
| 47.5° | 9101.4 | 9189.5 | 9348.7 | 9499.3 | 9596.0 | 9470.9 | 8845.6 | 8623.9 | 8558.5 | 8763.1 |
| 50° | 9647.1 | 9542.0 | 9914.3 | 10067.8 | 10491.3 | 10698.8 | 9749.5 | 9661.3 | 9556.2 | 9948.4 |
| 52.5° | 9701.1 | 9843.3 | 10369.1 | 10676.1 | 11548.7 | 11932.4 | 10858.0 | 10821.0 | 10693.1 | 11145.1 |
| 55° | 10087.7 | 10070.6 | 10599.3 | 11264.5 | 12301.9 | 12947.2 | 12301.9 | 12279.2 | 12000.6 | 12429.8 |
| 57.5° | 10022.3 | 10195.7 | 10613.5 | 11543.0 | 12981.3 | 14035.8 | 13976.1 | 13819.8 | 13430.4 | 13780.0 |
| 60° | 9800.6 | 9846.1 | 10354.9 | 11534.5 | 13376.4 | 15152.9 | 15783.9 | 15815.1 | 15019.3 | 15297.8 |
| 62.5° | 8544.3 | 8649.4 | 9294.7 | 10627.8 | 13095.0 | 15923.2 | 17549.0 | 17438.2 | 16801.5 | 16483.1 |
| 65° | 6796.2 | 6691.0 | 7361.8 | 8802.9 | 11344.0 | 15377.4 | 18322.2 | 18734.3 | 17733.8 | 17151.1 |
| 67.5° | 4167.0 | 4141.4 | 4786.6 | 6057.2 | 8487.4 | 13086.4 | 17705.3 | 18026.5 | 17475.1 | 17009.0 |
| 70° | 2146.0 | 2080.6 | 2484.3 | 3379.6 | 5335.2 | 9601.6 | 15408.7 | 15724.2 | 16250.0 | 15255.2 |
| 72.5° | 1000.5 | 986.3 | 1202.3 | 1662.8 | 2717.3 | 5645.0 | 11932.4 | 12159.8 | 13268.4 | 12861.9 |
| 75° | 588.4 | 596.9 | 719.1 | 869.8 | 1324.6 | 2660.5 | 7918.9 | 8359.5 | 9561.9 | 9269.1 |
| 77.5° | 440.6 | 440.6 | 511.6 | 605.4 | 773.1 | 1029.0 | 3908.3 | 4491.0 | 5591.0 | 5028.2 |
| 80° | 324.0 | 329.7 | 392.3 | 454.8 | 537.2 | 531.5 | 1552.0 | 1819.1 | 2563.9 | 2191.5 |
| 82.5° | 253.0 | 261.5 | 304.1 | 338.2 | 378.0 | 321.2 | 636.7 | 685.0 | 1054.5 | 838.5 |
| 85° | 176.2 | 181.9 | 238.8 | 230.2 | 230.2 | 179.1 | 264.3 | 278.6 | 417.8 | 397.9 |
| 87.5° | 42.6 | 48.3 | 116.5 | 127.9 | 96.6 | 54.0 | 82.4 | 93.8 | 150.6 | 173.4 |
| 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° |
|---------|-------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3260.2 | 0° | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 | 3260.2 |
| 3317.1 | 2.5° | 3274.5 | 3285.8 | 3334.1 | 3308.6 | 3322.8 | 3263.1 | 3311.4 | 3271.6 | 3305.7 | 3288.7 |
| 3342.7 | 5° | 3365.4 | 3339.8 | 3368.3 | 3348.4 | 3348.4 | 3371.1 | 3405.2 | 3379.6 | 3430.8 | 3408.0 |
| 3362.6 | 7.5° | 3402.4 | 3405.2 | 3422.3 | 3425.1 | 3410.9 | 3481.9 | 3484.8 | 3476.3 | 3524.6 | 3513.2 |
| 3499.0 | 10° | 3493.3 | 3496.2 | 3527.4 | 3544.5 | 3530.3 | 3555.9 | 3527.4 | 3504.7 | 3501.8 | 3490.5 |
| 3607.0 | 12.5° | 3638.3 | 3666.7 | 3661.0 | 3675.2 | 3678.1 | 3570.1 | 3504.7 | 3393.8 | 3379.6 | 3393.8 |
| 3766.2 | 15° | 3771.9 | 3760.5 | 3766.2 | 3794.6 | 3675.2 | 3501.8 | 3385.3 | 3291.5 | 3297.2 | 3300.0 |
| 3973.7 | 17.5° | 3931.0 | 3939.6 | 3948.1 | 3817.4 | 3598.5 | 3393.8 | 3291.5 | 3291.5 | 3263.1 | 3274.5 |
| 4118.6 | 20° | 4113.0 | 4078.9 | 4005.0 | 3820.2 | 3464.9 | 3268.8 | 3237.5 | 3237.5 | 3203.4 | 3180.7 |
| 4275.0 | 22.5° | 4255.1 | 4186.9 | 4076.0 | 3732.1 | 3345.5 | 3220.4 | 3143.7 | 3089.7 | 3049.9 | 3004.4 |
| 4448.4 | 25° | 4346.0 | 4309.1 | 4093.1 | 3641.1 | 3257.4 | 3092.5 | 2978.8 | 2896.4 | 2845.2 | 2785.6 |
| 4584.8 | 27.5° | 4485.3 | 4414.3 | 4141.4 | 3536.0 | 3160.8 | 2964.6 | 2788.4 | 2660.5 | 2563.9 | 2501.3 |
| 4792.3 | 30° | 4672.9 | 4570.6 | 4107.3 | 3385.3 | 3013.0 | 2742.9 | 2535.4 | 2370.6 | 2259.7 | 2208.5 |
| 4988.4 | 32.5° | 4826.4 | 4692.8 | 4078.9 | 3248.9 | 2848.1 | 2518.4 | 2242.7 | 2075.0 | 2012.4 | 1947.0 |
| 5318.1 | 35° | 5119.2 | 4854.8 | 4059.0 | 3172.1 | 2700.3 | 2293.8 | 2003.9 | 1858.9 | 1779.3 | 1682.7 |
| 5514.3 | 37.5° | 5343.7 | 5136.2 | 4010.6 | 3013.0 | 2509.8 | 2075.0 | 1822.0 | 1691.2 | 1571.9 | 1469.5 |
| 5969.1 | 40° | 5696.2 | 5528.5 | 4013.5 | 2788.4 | 2285.3 | 1887.4 | 1679.9 | 1543.4 | 1392.8 | 1304.7 |
| 6642.7 | 42.5° | 6358.5 | 5915.0 | 4030.5 | 2609.3 | 2032.3 | 1733.9 | 1552.0 | 1389.9 | 1239.3 | 1165.4 |
| 7410.2 | 45° | 7171.4 | 6446.6 | 3925.4 | 2447.3 | 1773.7 | 1588.9 | 1398.5 | 1236.4 | 1139.8 | 1085.8 |
| 8453.3 | 47.5° | 8106.5 | 6966.7 | 3783.2 | 2143.2 | 1557.6 | 1435.4 | 1256.3 | 1162.5 | 1091.5 | 1060.2 |
| 9797.8 | 50° | 9152.5 | 7711.4 | 3743.4 | 1864.6 | 1389.9 | 1304.7 | 1188.1 | 1117.1 | 1068.7 | 1031.8 |
| 11312.8 | 52.5° | 10499.8 | 8578.4 | 3663.9 | 1577.5 | 1245.0 | 1199.5 | 1162.5 | 1114.2 | 1071.6 | 1040.3 |
| 12725.5 | 55° | 11787.5 | 9539.1 | 3578.6 | 1341.6 | 1142.6 | 1148.3 | 1168.2 | 1125.6 | 1088.6 | 1040.3 |
| 14308.7 | 57.5° | 13237.1 | 10519.7 | 3263.1 | 1168.2 | 1065.9 | 1122.8 | 1162.5 | 1114.2 | 1077.3 | 1040.3 |
| 15928.8 | 60° | 14132.4 | 11071.2 | 2646.3 | 1017.6 | 997.7 | 1074.4 | 1128.4 | 1077.3 | 1037.5 | 1051.7 |
| 16673.6 | 62.5° | 14496.3 | 10781.2 | 1995.4 | 923.8 | 949.4 | 1009.1 | 1074.4 | 1054.5 | 1026.1 | 1080.1 |
| 16665.0 | 65° | 13876.6 | 10113.3 | 1426.9 | 844.2 | 884.0 | 943.7 | 1026.1 | 1048.8 | 1057.4 | 1162.5 |
| 15306.4 | 67.5° | 12347.4 | 8805.8 | 1048.8 | 778.8 | 815.8 | 903.9 | 1060.2 | 1097.2 | 1091.5 | 1222.2 |
| 12844.8 | 70° | 9880.2 | 6887.2 | 818.6 | 724.8 | 790.2 | 935.2 | 1108.5 | 1108.5 | 1068.7 | 1222.2 |
| 9797.8 | 72.5° | 7188.4 | 4854.8 | 704.9 | 662.3 | 724.8 | 858.4 | 1102.9 | 1100.0 | 1048.8 | 1117.1 |
| 6239.1 | 75° | 4351.7 | 2825.4 | 622.5 | 599.7 | 622.5 | 736.2 | 1054.5 | 1037.5 | 966.4 | 960.7 |
| 3001.6 | 77.5° | 2168.8 | 1421.2 | 508.8 | 531.5 | 542.9 | 616.8 | 926.6 | 952.2 | 855.6 | 832.8 |
| 1185.3 | 80° | 915.3 | 619.6 | 423.5 | 457.6 | 457.6 | 520.2 | 770.3 | 787.3 | 710.6 | 668.0 |
| 469.0 | 82.5° | 417.8 | 355.3 | 361.0 | 397.9 | 372.4 | 403.6 | 611.1 | 631.0 | 577.0 | 505.9 |
| 199.0 | 85° | 176.2 | 201.8 | 275.7 | 312.7 | 275.7 | 261.5 | 420.7 | 443.4 | 375.2 | 312.7 |
| 85.3 | 87.5° | 79.6 | 110.9 | 173.4 | 227.4 | 139.3 | 122.2 | 224.6 | 233.1 | 187.6 | 139.3 |
| 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> |
|-------------|
| 3260.2 |
| 3257.4 |
| 3376.8 |
| 3496.2 |
| 3490.5 |
| 3399.5 |
| 3339.8 |
| 3277.3 |
| 3146.5 |
| 2978.8 |
| 2796.9 |
| 2529.7 |
| 2237.0 |
| 1944.2 |
| 1674.2 |
| 1472.4 |
| 1313.2 |
| 1171.1 |
| 1097.2 |
| 1054.5 |
| 1037.5 |
| 1037.5 |
| 1037.5 |
| 1037.5 |
| 1040.3 |
| 1065.9 |
| 1162.5 |
| 1230.8 |
| 1196.7 |
| 1077.3 |
| 949.4 |
| 818.6 |
| 653.8 |
| 494.6 |
| 315.5 |
| 130.8 |
| 0.0 |

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