

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: P459571

Luminaire Tested: **ARCH-M-PA2-60-AMB-U-T3-HSS**

Issue Date: 1/6/2021

Test Information

Test Method: LM-79-08
Report Number: P459571
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-905-7)
Test Lab: INNOVATION CENTER
Issue Date: 1/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-M-PA2-60-AMB-U-T3-HSS
Description: ARCHEON-M ROADWAY AND AREA LUMINAIRE
(2) NARROW BAND AMBER, 500mA LIGHT ENGINES WITH 24 LEDS EACH AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2051 lumens
Efficiency: N/A
Efficacy: 33.8 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1' x H: 0')
IES Classification: Type IV - Medium - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 60.6
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

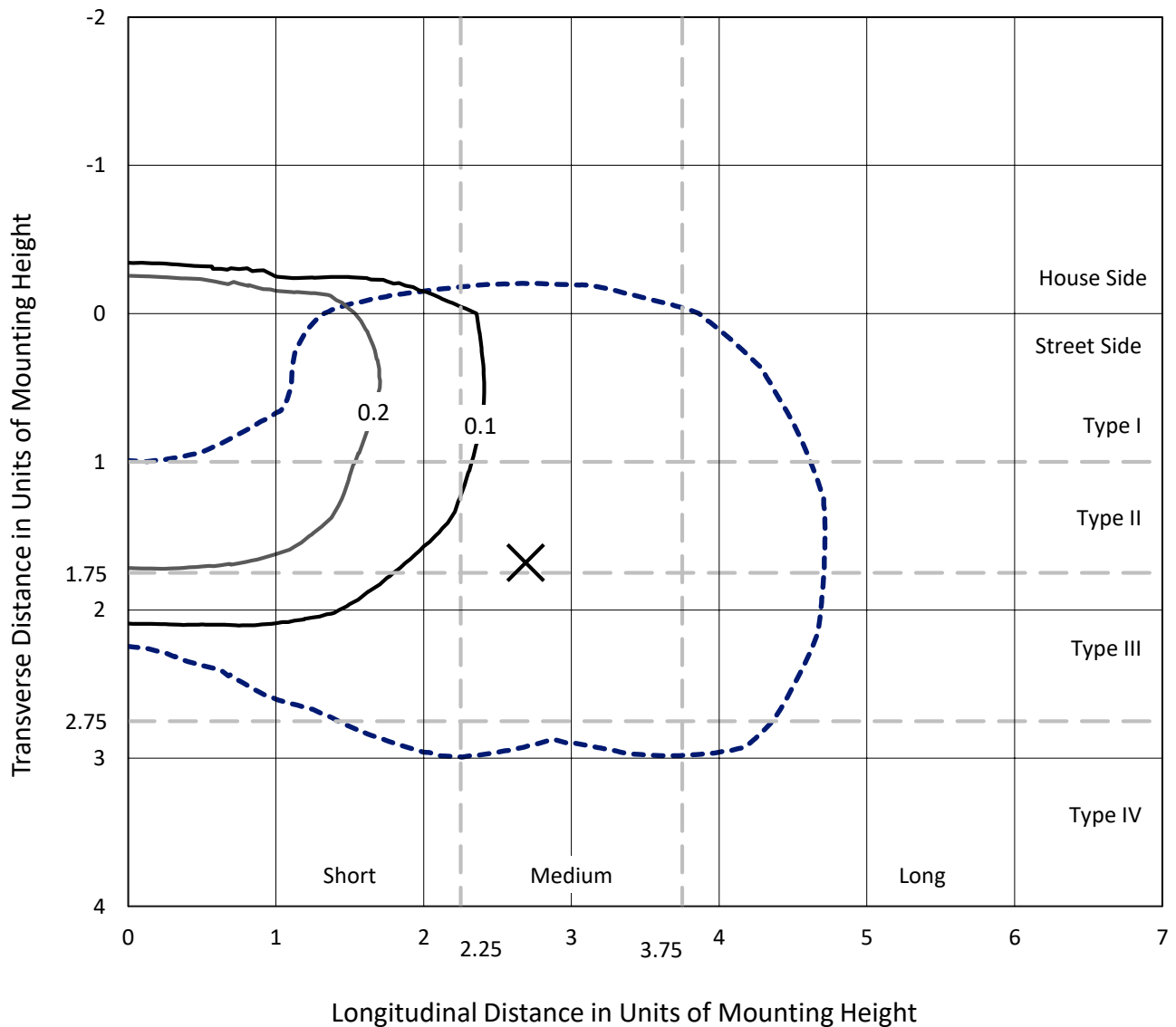


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

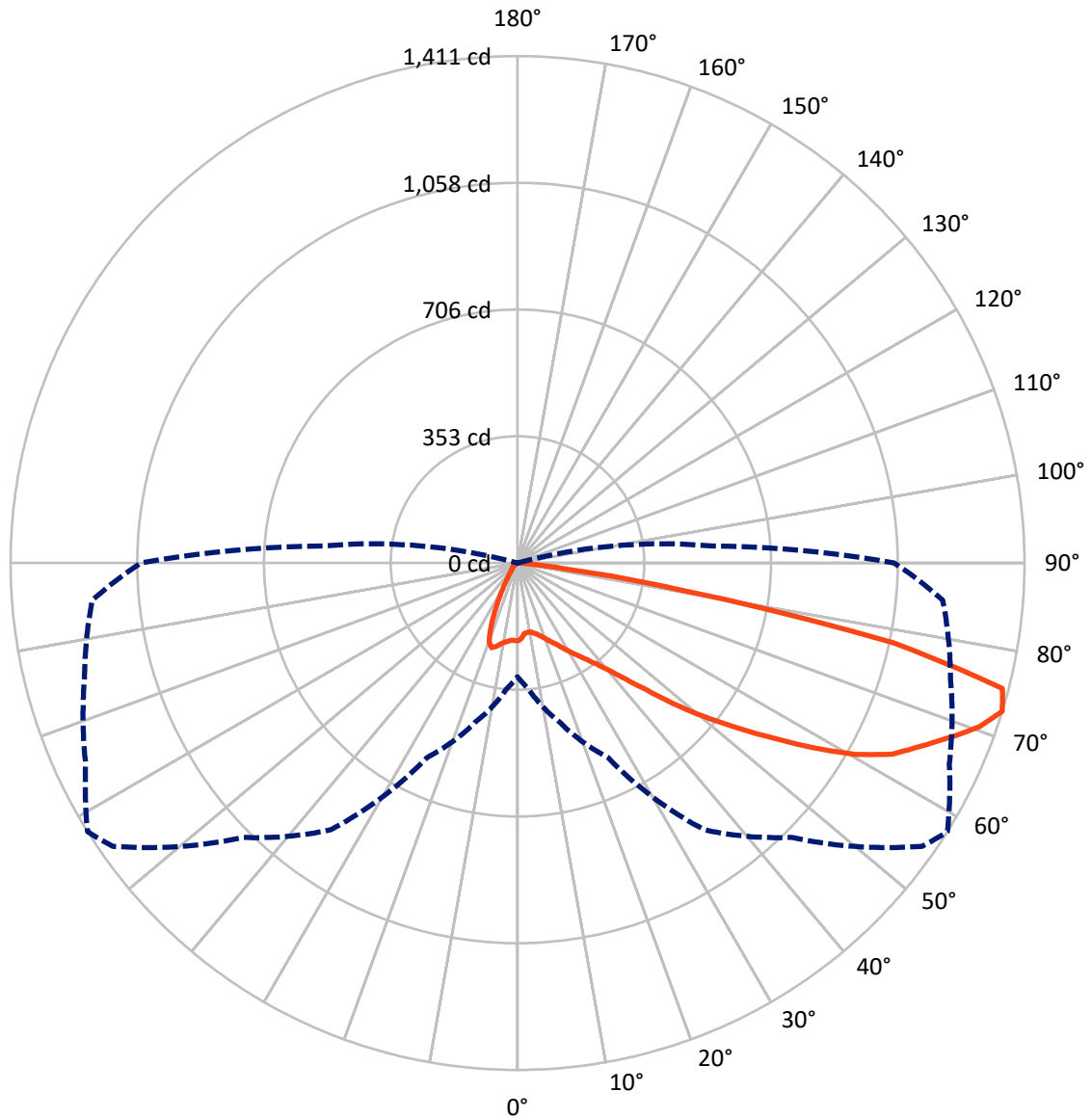


Based on 25 foot mounting height. Maximum calculated value = 0.4 fc
 Type IV - Medium - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 58-Deg Lateral - - - Horizontal Cone Through 72.5-Deg Vertical



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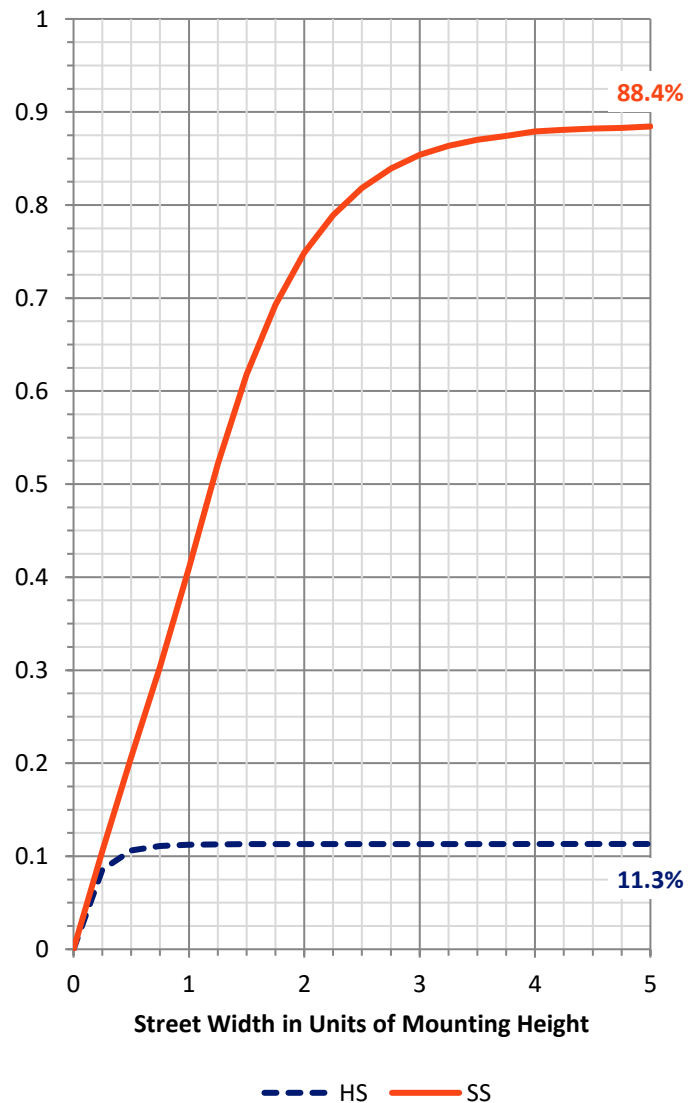
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 234.8 | 0.0 | 234.8 |
| | % Fixture | 11.4 | 0.0 | 11.4 |
| Street Side | Lumens | 1816.2 | 0.0 | 1816.2 |
| | % Fixture | 88.6 | 0.0 | 88.6 |
| Total | Lumens | 2051.0 | 0.0 | 2051.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 19.8 | 1.0 |
| 10°-20° | 56.6 | 2.8 |
| 20°-30° | 87.7 | 4.3 |
| 30°-40° | 136.4 | 6.6 |
| 40°-50° | 265.4 | 12.9 |
| 50°-60° | 482.4 | 23.5 |
| 60°-70° | 578.7 | 28.2 |
| 70°-80° | 399.3 | 19.5 |
| 80°-90° | 24.8 | 1.2 |
| 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° | 2051.0 | 100.0 |
| 0°-180° | 2051.0 | 100.0 |

Coefficient of Utilization



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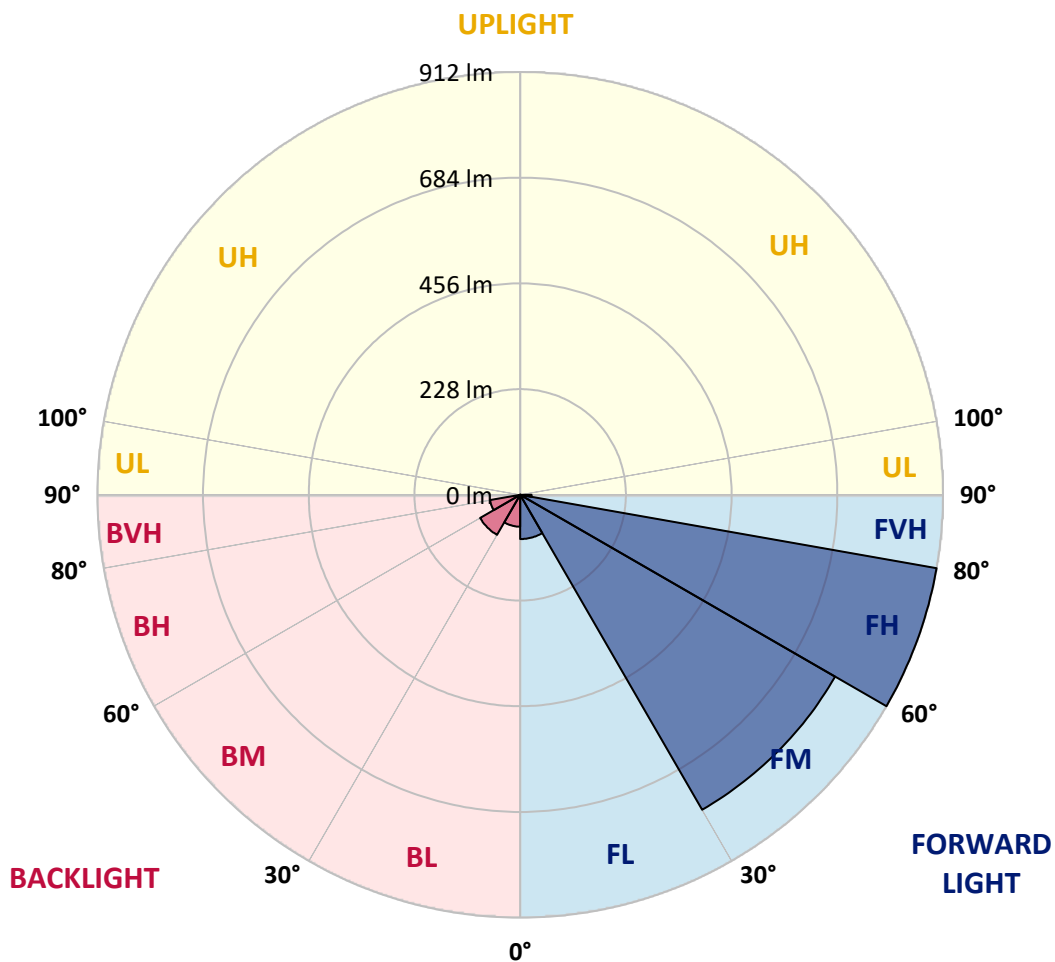
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 95.4 | 4.6 | | | |
| FM (30°-60°) | 784.4 | 38.2 | | | |
| FH (60°-80°) | 912.0 | 44.5 | | | G1/1800 |
| FVH (80°-90°) | 24.3 | 1.2 | | | G1/100 |
| BL (0°-30°) | 68.7 | 3.4 | B0/110 | | |
| BM (30°-60°) | 99.7 | 4.9 | B0/220 | | |
| BH (60°-80°) | 66.0 | 3.2 | B0/110 | | G0/110 |
| BVH (80°-90°) | 0.4 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G1

Type IV Medium





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 58° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 |
| 2.5° | 199.5 | 199.5 | 201.6 | 201.6 | 203.7 | 205.9 | 208.0 | 210.1 | 210.1 | 212.2 | 212.2 |
| 5° | 188.9 | 188.9 | 191.0 | 191.0 | 191.0 | 195.2 | 197.4 | 197.4 | 201.6 | 208.0 | 212.2 |
| 7.5° | 186.8 | 186.8 | 186.8 | 186.8 | 188.9 | 191.0 | 193.1 | 195.2 | 199.5 | 205.9 | 216.5 |
| 10° | 186.8 | 186.8 | 186.8 | 186.8 | 186.8 | 188.9 | 193.1 | 195.2 | 201.6 | 212.2 | 222.8 |
| 12.5° | 186.8 | 186.8 | 186.8 | 186.8 | 186.8 | 188.9 | 195.2 | 199.5 | 208.0 | 220.7 | 235.6 |
| 15° | 188.9 | 186.8 | 186.8 | 184.6 | 186.8 | 193.1 | 203.7 | 205.9 | 218.6 | 235.6 | 250.4 |
| 17.5° | 191.0 | 188.9 | 186.8 | 186.8 | 191.0 | 199.5 | 212.2 | 214.4 | 229.2 | 250.4 | 267.4 |
| 20° | 195.2 | 193.1 | 191.0 | 191.0 | 197.4 | 208.0 | 220.7 | 225.0 | 239.8 | 265.3 | 284.4 |
| 22.5° | 197.4 | 195.2 | 193.1 | 197.4 | 205.9 | 216.5 | 231.3 | 237.7 | 254.7 | 282.3 | 299.2 |
| 25° | 199.5 | 197.4 | 197.4 | 201.6 | 212.2 | 227.1 | 246.2 | 250.4 | 269.5 | 301.4 | 314.1 |
| 27.5° | 203.7 | 203.7 | 201.6 | 208.0 | 222.8 | 239.8 | 263.2 | 267.4 | 288.6 | 320.5 | 331.1 |
| 30° | 227.1 | 227.1 | 220.7 | 220.7 | 231.3 | 252.6 | 278.0 | 286.5 | 307.7 | 343.8 | 348.1 |
| 32.5° | 261.0 | 263.2 | 254.7 | 246.2 | 250.4 | 267.4 | 297.1 | 305.6 | 331.1 | 365.0 | 367.2 |
| 35° | 305.6 | 312.0 | 301.4 | 280.1 | 275.9 | 288.6 | 318.3 | 329.0 | 358.7 | 392.6 | 390.5 |
| 37.5° | 367.2 | 367.2 | 369.3 | 326.8 | 316.2 | 318.3 | 345.9 | 356.5 | 390.5 | 430.8 | 420.2 |
| 40° | 454.2 | 445.7 | 426.6 | 390.5 | 367.2 | 365.0 | 382.0 | 392.6 | 430.8 | 475.4 | 458.4 |
| 42.5° | 566.6 | 553.9 | 513.6 | 477.5 | 437.2 | 430.8 | 437.2 | 441.4 | 475.4 | 526.3 | 503.0 |
| 45° | 713.1 | 694.0 | 668.5 | 617.6 | 551.8 | 517.8 | 507.2 | 503.0 | 532.7 | 592.1 | 558.2 |
| 47.5° | 895.6 | 863.8 | 836.2 | 778.9 | 730.1 | 647.3 | 594.2 | 585.7 | 604.9 | 660.0 | 619.7 |
| 50° | 1065.4 | 1014.5 | 974.1 | 931.7 | 912.6 | 823.4 | 683.4 | 670.6 | 681.3 | 736.4 | 687.6 |
| 52.5° | 1169.4 | 1101.5 | 1069.6 | 1046.3 | 1037.8 | 997.5 | 789.5 | 759.8 | 766.1 | 821.3 | 755.5 |
| 55° | 1107.8 | 1114.2 | 1118.4 | 1129.1 | 1143.9 | 1124.8 | 902.0 | 857.4 | 861.6 | 906.2 | 819.2 |
| 57.5° | 1039.9 | 1059.0 | 1105.7 | 1167.3 | 1254.3 | 1220.3 | 1003.8 | 969.9 | 965.6 | 989.0 | 863.8 |
| 60° | 969.9 | 989.0 | 1063.3 | 1173.6 | 1309.4 | 1284.0 | 1099.3 | 1082.4 | 1061.1 | 1042.0 | 904.1 |
| 62.5° | 876.5 | 889.2 | 984.7 | 1158.8 | 1292.5 | 1313.7 | 1180.0 | 1171.5 | 1131.2 | 1088.7 | 959.3 |
| 65° | 747.0 | 755.5 | 857.4 | 1082.4 | 1254.3 | 1286.1 | 1228.8 | 1230.9 | 1188.5 | 1135.4 | 1029.3 |
| 67.5° | 632.4 | 647.3 | 732.2 | 938.0 | 1186.4 | 1241.5 | 1279.7 | 1296.7 | 1247.9 | 1194.8 | 1097.2 |
| 70° | 534.8 | 545.4 | 609.1 | 793.7 | 1063.3 | 1175.7 | 1341.3 | 1364.6 | 1303.1 | 1237.3 | 1154.5 |
| 72.5° | 316.2 | 352.3 | 460.5 | 598.5 | 906.2 | 1080.2 | 1375.2 | 1411.3 | 1326.4 | 1247.9 | 1188.5 |
| 75° | 78.5 | 82.8 | 199.5 | 384.1 | 666.4 | 880.7 | 1337.0 | 1394.3 | 1311.6 | 1199.1 | 1046.3 |
| 77.5° | 40.3 | 42.4 | 53.1 | 150.7 | 326.8 | 498.7 | 1031.4 | 1069.6 | 1033.6 | 893.5 | 600.6 |
| 80° | 14.9 | 14.9 | 17.0 | 46.7 | 131.6 | 127.3 | 447.8 | 469.0 | 481.8 | 367.2 | 152.8 |
| 82.5° | 6.4 | 6.4 | 10.6 | 21.2 | 84.9 | 36.1 | 108.2 | 131.6 | 114.6 | 67.9 | 21.2 |
| 85° | 4.2 | 4.2 | 6.4 | 10.6 | 38.2 | 14.9 | 25.5 | 36.1 | 31.8 | 21.2 | 10.6 |
| 87.5° | 4.2 | 4.2 | 4.2 | 6.4 | 21.2 | 6.4 | 8.5 | 10.6 | 12.7 | 12.7 | 4.2 |
| 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° | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 | 216.5 |
| 2.5° | 212.2 | 214.4 | 214.4 | 214.4 | 216.5 | 216.5 | 216.5 | 218.6 | 218.6 | 218.6 | 218.6 |
| 5° | 212.2 | 214.4 | 214.4 | 214.4 | 216.5 | 216.5 | 216.5 | 218.6 | 218.6 | 218.6 | 220.7 |
| 7.5° | 218.6 | 218.6 | 220.7 | 220.7 | 218.6 | 216.5 | 214.4 | 214.4 | 214.4 | 214.4 | 216.5 |
| 10° | 227.1 | 229.2 | 229.2 | 227.1 | 222.8 | 218.6 | 214.4 | 210.1 | 208.0 | 210.1 | 210.1 |
| 12.5° | 239.8 | 239.8 | 239.8 | 235.6 | 229.2 | 222.8 | 216.5 | 203.7 | 188.9 | 180.4 | 182.5 |
| 15° | 254.7 | 254.7 | 252.6 | 246.2 | 237.7 | 225.0 | 191.0 | 148.6 | 127.3 | 114.6 | 114.6 |
| 17.5° | 271.7 | 271.7 | 267.4 | 256.8 | 241.9 | 193.1 | 127.3 | 89.1 | 70.0 | 63.7 | 63.7 |
| 20° | 286.5 | 288.6 | 280.1 | 265.3 | 222.8 | 131.6 | 74.3 | 55.2 | 50.9 | 48.8 | 48.8 |
| 22.5° | 301.4 | 303.5 | 292.9 | 269.5 | 174.0 | 80.6 | 50.9 | 48.8 | 46.7 | 44.6 | 44.6 |
| 25° | 318.3 | 318.3 | 301.4 | 256.8 | 116.7 | 53.1 | 46.7 | 44.6 | 42.4 | 40.3 | 40.3 |
| 27.5° | 333.2 | 331.1 | 307.7 | 222.8 | 72.2 | 44.6 | 42.4 | 40.3 | 38.2 | 36.1 | 36.1 |
| 30° | 345.9 | 341.7 | 312.0 | 167.7 | 46.7 | 40.3 | 38.2 | 36.1 | 31.8 | 29.7 | 29.7 |
| 32.5° | 360.8 | 352.3 | 312.0 | 112.5 | 38.2 | 36.1 | 34.0 | 29.7 | 25.5 | 23.3 | 21.2 |
| 35° | 382.0 | 369.3 | 307.7 | 67.9 | 34.0 | 29.7 | 27.6 | 23.3 | 19.1 | 17.0 | 17.0 |
| 37.5° | 405.4 | 386.3 | 290.8 | 42.4 | 29.7 | 25.5 | 21.2 | 17.0 | 14.9 | 12.7 | 12.7 |
| 40° | 437.2 | 407.5 | 258.9 | 31.8 | 25.5 | 21.2 | 17.0 | 12.7 | 10.6 | 8.5 | 8.5 |
| 42.5° | 475.4 | 437.2 | 218.6 | 27.6 | 23.3 | 17.0 | 12.7 | 8.5 | 8.5 | 6.4 | 6.4 |
| 45° | 520.0 | 475.4 | 169.8 | 25.5 | 19.1 | 14.9 | 8.5 | 6.4 | 6.4 | 6.4 | 6.4 |
| 47.5° | 575.1 | 513.6 | 114.6 | 23.3 | 17.0 | 10.6 | 6.4 | 4.2 | 4.2 | 4.2 | 4.2 |
| 50° | 634.6 | 558.2 | 65.8 | 21.2 | 14.9 | 8.5 | 4.2 | 4.2 | 4.2 | 2.1 | 2.1 |
| 52.5° | 696.1 | 604.9 | 40.3 | 19.1 | 10.6 | 6.4 | 4.2 | 2.1 | 2.1 | 2.1 | 2.1 |
| 55° | 740.7 | 632.4 | 29.7 | 17.0 | 8.5 | 4.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 57.5° | 774.6 | 647.3 | 23.3 | 14.9 | 6.4 | 4.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 60° | 817.1 | 657.9 | 21.2 | 12.7 | 4.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 62.5° | 889.2 | 672.8 | 19.1 | 8.5 | 4.2 | 2.1 | 2.1 | 2.1 | 0.0 | 0.0 | 0.0 |
| 65° | 976.2 | 674.9 | 14.9 | 6.4 | 2.1 | 2.1 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 1065.4 | 662.2 | 10.6 | 4.2 | 2.1 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 1107.8 | 626.1 | 6.4 | 4.2 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 1048.4 | 543.3 | 4.2 | 2.1 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 778.9 | 235.6 | 2.1 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 375.6 | 89.1 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 78.5 | 21.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 12.7 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 6.4 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)