

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: P190949

Luminaire Tested: **GAN-AF-01-LED-U-AFL-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P190949
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24165)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-01-LED-U-AFL-600
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4309.7 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

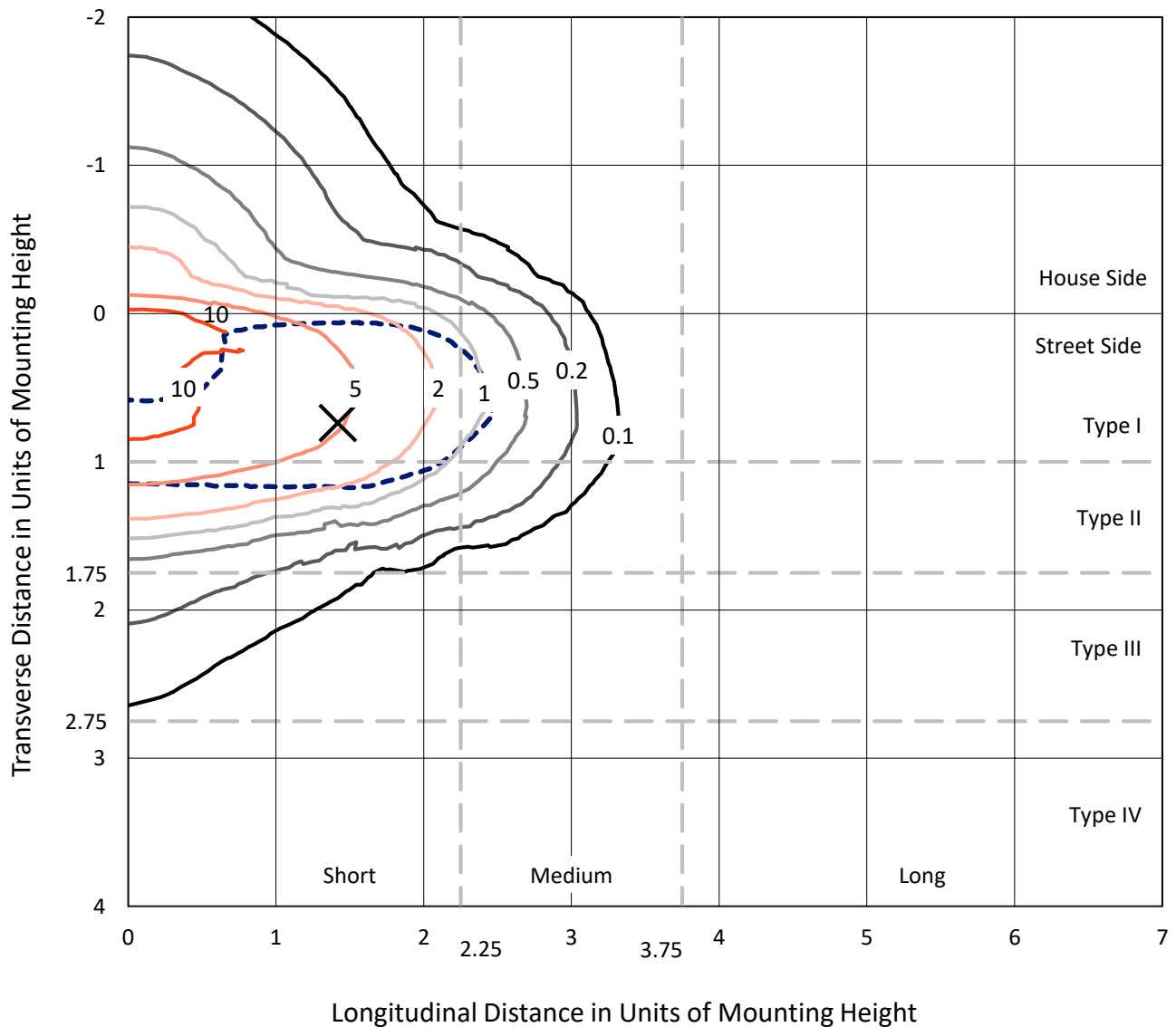
Input Watts (W): 34
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

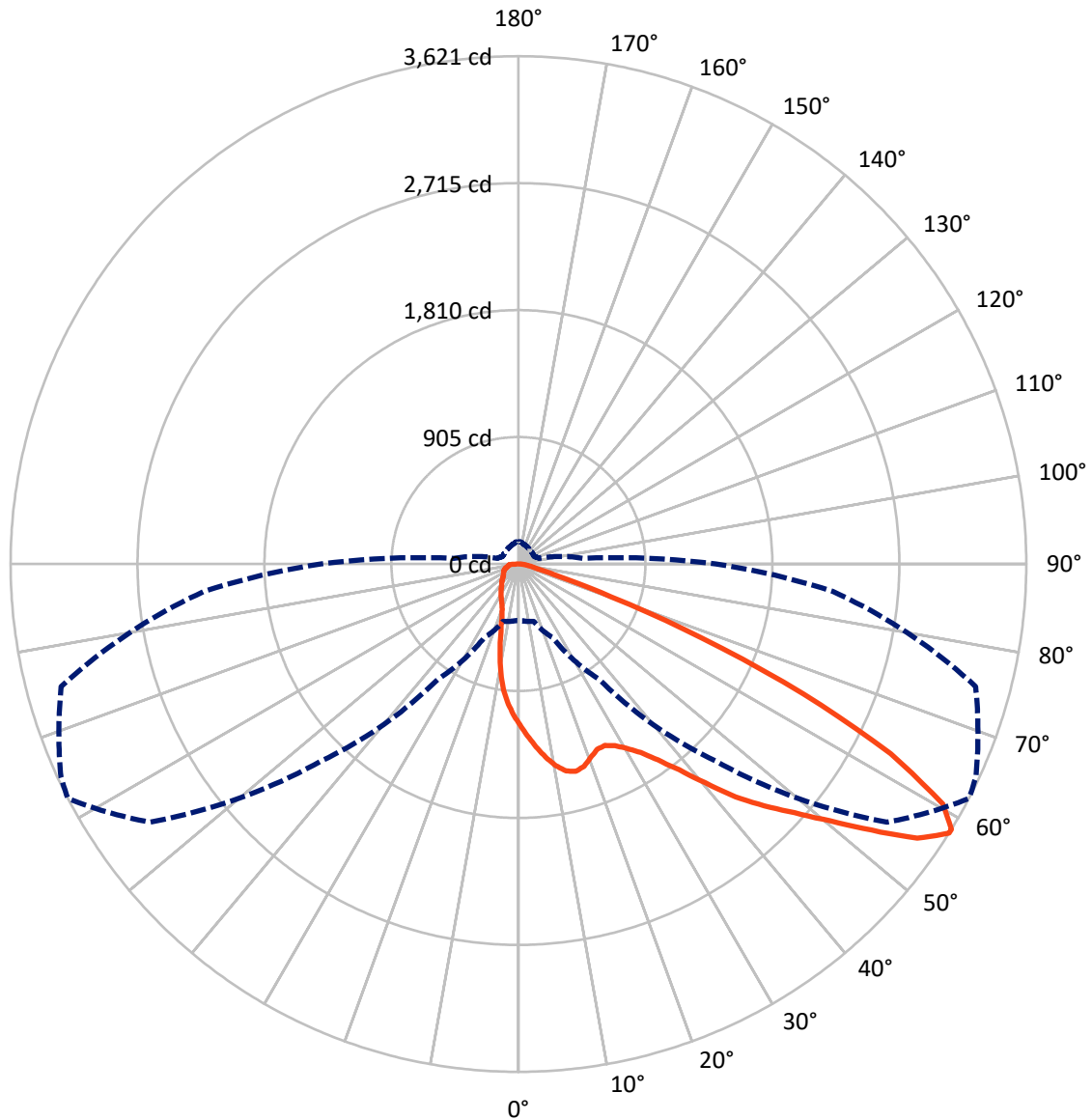
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14 fc
 Type II - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 657.2 | 0.0 | 657.2 |
| | % Fixture | 15.3 | 0.0 | 15.3 |
| Street Side | Lumens | 3652.5 | 0.0 | 3652.5 |
| | % Fixture | 84.7 | 0.0 | 84.7 |
| Total | Lumens | 4309.7 | 0.0 | 4309.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 102.4 | 2.4 |
| 10°-20° | 261.7 | 6.1 |
| 20°-30° | 423.1 | 9.8 |
| 30°-40° | 671.6 | 15.6 |
| 40°-50° | 982.7 | 22.8 |
| 50°-60° | 1027.8 | 23.8 |
| 60°-70° | 607.2 | 14.1 |
| 70°-80° | 171.1 | 4.0 |
| 80°-90° | 62.1 | 1.4 |
| 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° | 4309.7 | 100.0 |
| 0°-180° | 4309.7 | 100.0 |



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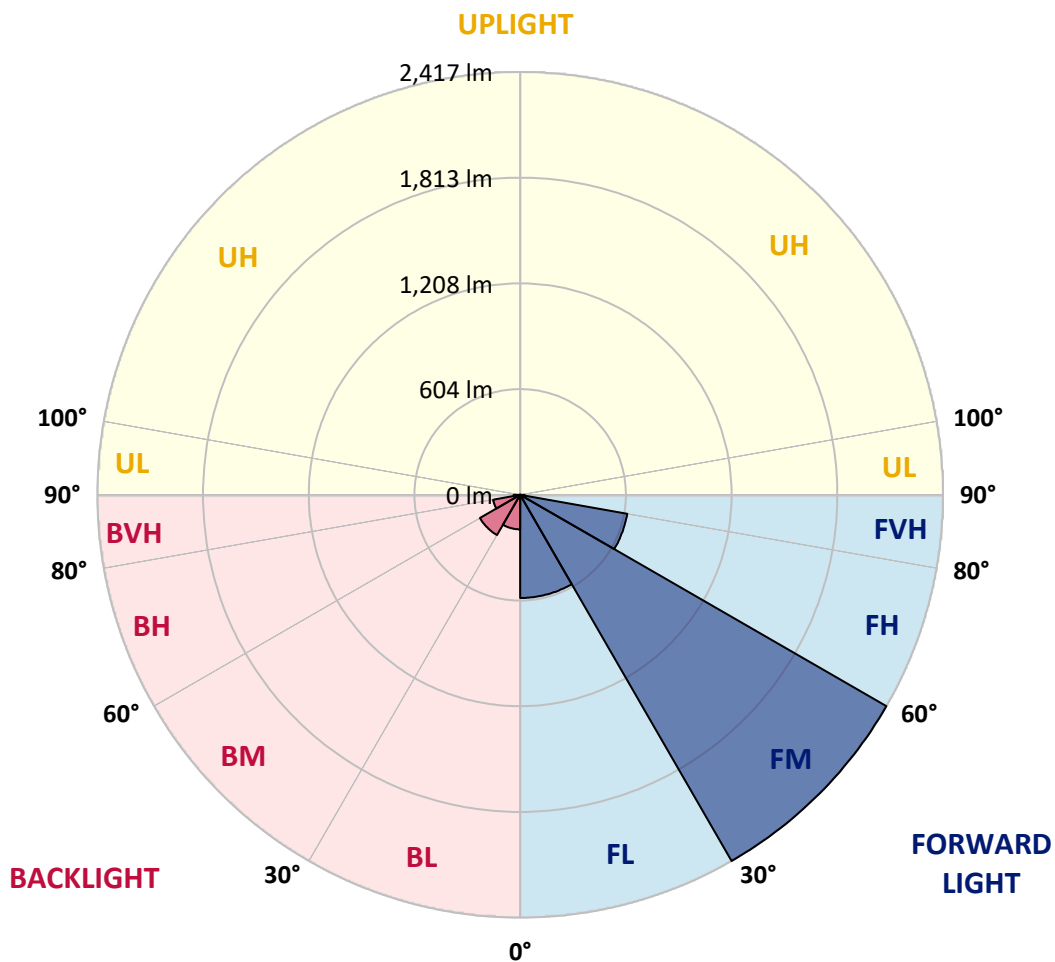
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|--------|
| | | | | B | U | G |
| FL | (0°-30°) | 589.6 | 13.7 | | | |
| FM | (30°-60°) | 2416.8 | 56.1 | | | |
| FH | (60°-80°) | 621.5 | 14.4 | | | G0/660 |
| FVH | (80°-90°) | 24.5 | 0.6 | | | G1/100 |
| BL | (0°-30°) | 197.5 | 4.6 | B1/500 | | |
| BM | (30°-60°) | 265.3 | 6.2 | B1/1000 | | |
| BH | (60°-80°) | 156.8 | 3.6 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 37.6 | 0.9 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 62.5° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 |
| 2.5° | 1308.1 | 1297.6 | 1290.9 | 1285.0 | 1277.3 | 1260.9 | 1238.8 | 1224.8 | 1217.6 | 1193.5 | 1164.8 |
| 5° | 1436.4 | 1427.1 | 1420.2 | 1412.3 | 1398.5 | 1372.7 | 1337.0 | 1308.6 | 1294.5 | 1246.3 | 1189.0 |
| 7.5° | 1406.4 | 1410.2 | 1422.2 | 1443.1 | 1461.0 | 1457.5 | 1425.7 | 1389.6 | 1371.1 | 1303.9 | 1217.0 |
| 10° | 1225.4 | 1232.0 | 1252.7 | 1301.7 | 1380.8 | 1462.0 | 1486.8 | 1461.8 | 1443.1 | 1360.9 | 1245.9 |
| 12.5° | 1189.0 | 1188.8 | 1190.4 | 1203.4 | 1250.6 | 1364.7 | 1488.8 | 1514.0 | 1502.8 | 1415.3 | 1275.3 |
| 15° | 1203.8 | 1204.2 | 1203.0 | 1208.5 | 1223.1 | 1268.4 | 1426.7 | 1534.0 | 1541.9 | 1470.1 | 1305.7 |
| 17.5° | 1242.8 | 1241.8 | 1237.2 | 1237.2 | 1242.4 | 1260.1 | 1353.6 | 1515.4 | 1551.9 | 1518.6 | 1332.5 |
| 20° | 1308.1 | 1303.4 | 1291.1 | 1279.7 | 1274.1 | 1283.6 | 1323.6 | 1472.3 | 1534.6 | 1561.0 | 1354.6 |
| 22.5° | 1387.3 | 1383.6 | 1363.6 | 1339.2 | 1319.5 | 1319.3 | 1339.0 | 1434.8 | 1504.8 | 1601.0 | 1373.3 |
| 25° | 1489.6 | 1483.7 | 1453.8 | 1414.8 | 1380.4 | 1367.2 | 1372.7 | 1432.9 | 1488.6 | 1644.4 | 1389.9 |
| 27.5° | 1609.7 | 1599.0 | 1563.7 | 1507.4 | 1456.7 | 1430.1 | 1422.2 | 1466.0 | 1503.3 | 1698.2 | 1413.1 |
| 30° | 1755.4 | 1743.0 | 1697.8 | 1624.5 | 1552.9 | 1509.3 | 1492.4 | 1524.7 | 1552.5 | 1763.8 | 1450.2 |
| 32.5° | 1921.2 | 1903.4 | 1851.0 | 1770.2 | 1676.1 | 1609.5 | 1582.1 | 1602.2 | 1624.3 | 1842.6 | 1496.7 |
| 35° | 2150.3 | 2129.1 | 2053.4 | 1942.0 | 1835.6 | 1744.0 | 1700.2 | 1714.9 | 1736.4 | 1960.4 | 1563.9 |
| 37.5° | 2306.7 | 2297.0 | 2246.7 | 2142.1 | 2026.4 | 1921.0 | 1853.3 | 1861.8 | 1873.9 | 2107.5 | 1649.9 |
| 40° | 2305.2 | 2309.0 | 2310.0 | 2311.1 | 2232.4 | 2131.5 | 2058.6 | 2049.7 | 2047.2 | 2269.1 | 1747.7 |
| 42.5° | 2189.7 | 2205.6 | 2256.7 | 2360.4 | 2408.3 | 2362.0 | 2295.3 | 2269.5 | 2256.7 | 2459.4 | 1851.4 |
| 45° | 2013.0 | 2021.5 | 2117.3 | 2319.8 | 2498.4 | 2590.3 | 2539.8 | 2458.7 | 2435.4 | 2634.4 | 1937.5 |
| 47.5° | 1921.8 | 1931.1 | 1991.5 | 2212.2 | 2497.3 | 2774.8 | 2804.0 | 2649.3 | 2608.0 | 2786.5 | 2011.7 |
| 50° | 1704.8 | 1724.4 | 1800.3 | 2025.1 | 2406.3 | 2859.7 | 3080.2 | 2876.6 | 2791.0 | 2934.7 | 2086.2 |
| 52.5° | 1306.5 | 1336.6 | 1421.6 | 1717.4 | 2175.1 | 2817.6 | 3301.3 | 3152.2 | 3031.3 | 3088.1 | 2150.1 |
| 55° | 824.1 | 846.5 | 917.9 | 1213.0 | 1740.0 | 2599.0 | 3385.0 | 3450.4 | 3342.8 | 3233.4 | 2205.6 |
| 57.5° | 448.1 | 458.1 | 484.8 | 669.7 | 1131.8 | 2115.9 | 3262.9 | 3620.0 | 3575.4 | 3356.8 | 2247.3 |
| 58° | 401.0 | 407.7 | 424.3 | 580.4 | 1003.7 | 1983.7 | 3208.7 | 3620.6 | 3598.3 | 3374.9 | 2250.6 |
| 60° | 297.5 | 294.1 | 279.3 | 331.2 | 558.7 | 1370.4 | 2881.1 | 3475.8 | 3541.3 | 3397.0 | 2234.7 |
| 62.5° | 261.4 | 253.1 | 222.8 | 219.4 | 271.7 | 631.4 | 2204.6 | 2977.3 | 3132.2 | 3270.8 | 2138.6 |
| 65° | 245.5 | 236.6 | 197.6 | 185.1 | 196.0 | 267.1 | 1298.6 | 2232.9 | 2427.2 | 2888.0 | 1892.7 |
| 67.5° | 233.7 | 222.2 | 181.7 | 164.4 | 165.2 | 176.6 | 520.6 | 1406.4 | 1625.0 | 2192.8 | 1472.1 |
| 70° | 222.4 | 209.8 | 168.1 | 148.1 | 143.5 | 139.6 | 207.0 | 704.0 | 902.2 | 1385.1 | 938.6 |
| 72.5° | 210.2 | 197.8 | 156.1 | 135.3 | 126.2 | 113.4 | 135.1 | 288.0 | 402.2 | 655.3 | 425.8 |
| 75° | 192.6 | 181.5 | 144.1 | 124.0 | 111.0 | 94.0 | 102.1 | 150.4 | 180.4 | 261.0 | 205.2 |
| 77.5° | 170.8 | 161.7 | 130.7 | 114.7 | 98.4 | 76.3 | 78.6 | 104.3 | 115.7 | 149.4 | 121.9 |
| 80° | 122.8 | 126.0 | 116.3 | 103.1 | 87.7 | 61.9 | 60.3 | 76.1 | 82.1 | 96.0 | 79.4 |
| 82.5° | 86.2 | 88.1 | 96.2 | 84.2 | 72.4 | 48.7 | 44.4 | 53.6 | 57.2 | 63.1 | 42.9 |
| 85° | 59.4 | 57.4 | 66.0 | 58.6 | 52.4 | 32.4 | 30.5 | 36.3 | 38.6 | 39.2 | 22.1 |
| 87.5° | 35.7 | 35.7 | 38.2 | 31.4 | 28.2 | 16.9 | 16.5 | 20.7 | 22.1 | 21.1 | 12.2 |
| 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° | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 | 1144.8 |
| 2.5° | 1147.9 | 1133.4 | 1102.7 | 1078.2 | 1047.2 | 1014.9 | 996.9 | 977.5 | 964.3 | 954.8 | 970.1 |
| 5° | 1156.5 | 1127.1 | 1063.8 | 1003.7 | 937.3 | 868.4 | 816.0 | 767.3 | 733.5 | 712.3 | 732.2 |
| 7.5° | 1170.4 | 1125.1 | 1024.3 | 921.6 | 802.4 | 687.5 | 584.8 | 520.6 | 483.0 | 464.5 | 476.1 |
| 10° | 1186.2 | 1121.9 | 977.7 | 810.2 | 639.7 | 495.0 | 418.3 | 392.3 | 383.7 | 380.3 | 382.0 |
| 12.5° | 1199.4 | 1114.9 | 920.8 | 675.4 | 480.4 | 390.9 | 368.8 | 368.2 | 370.0 | 370.4 | 371.0 |
| 15° | 1208.7 | 1104.8 | 836.2 | 534.9 | 384.1 | 356.2 | 355.0 | 358.5 | 362.0 | 363.5 | 364.3 |
| 17.5° | 1215.0 | 1083.9 | 740.5 | 422.9 | 344.2 | 339.3 | 342.2 | 346.8 | 350.5 | 351.5 | 352.3 |
| 20° | 1214.3 | 1053.2 | 626.7 | 352.7 | 322.4 | 322.4 | 327.3 | 331.0 | 331.2 | 330.0 | 330.6 |
| 22.5° | 1208.1 | 1011.3 | 516.3 | 315.4 | 303.2 | 306.7 | 311.5 | 308.1 | 293.9 | 284.5 | 285.1 |
| 25° | 1197.6 | 961.2 | 421.7 | 291.6 | 285.3 | 291.4 | 290.0 | 264.0 | 243.8 | 234.6 | 234.6 |
| 27.5° | 1188.3 | 901.8 | 349.0 | 270.9 | 267.5 | 275.0 | 249.8 | 226.3 | 217.8 | 213.5 | 212.1 |
| 30° | 1181.5 | 837.9 | 300.5 | 251.0 | 250.6 | 245.2 | 216.8 | 210.2 | 208.8 | 205.4 | 204.2 |
| 32.5° | 1183.1 | 773.2 | 269.5 | 233.5 | 235.0 | 209.8 | 200.9 | 202.3 | 201.1 | 197.4 | 195.8 |
| 35° | 1196.5 | 711.7 | 249.2 | 217.8 | 213.5 | 189.6 | 191.6 | 194.3 | 193.8 | 188.7 | 187.1 |
| 37.5° | 1220.5 | 653.5 | 235.8 | 204.6 | 186.3 | 179.4 | 182.6 | 186.7 | 185.7 | 182.3 | 181.1 |
| 40° | 1245.6 | 598.6 | 224.8 | 194.3 | 170.2 | 172.5 | 175.3 | 177.6 | 178.6 | 179.6 | 178.8 |
| 42.5° | 1270.2 | 541.4 | 211.4 | 183.6 | 163.6 | 166.0 | 167.3 | 169.5 | 174.9 | 178.8 | 178.6 |
| 45° | 1284.8 | 487.6 | 197.6 | 168.7 | 158.3 | 159.7 | 158.9 | 163.4 | 170.0 | 176.4 | 176.6 |
| 47.5° | 1301.1 | 445.9 | 186.7 | 154.9 | 153.2 | 154.3 | 151.8 | 156.3 | 162.3 | 170.0 | 170.8 |
| 50° | 1320.7 | 420.9 | 178.0 | 143.9 | 146.3 | 146.3 | 145.7 | 149.8 | 158.3 | 167.3 | 168.9 |
| 52.5° | 1343.0 | 416.0 | 170.6 | 136.0 | 139.4 | 139.2 | 139.8 | 145.9 | 155.3 | 164.0 | 165.4 |
| 55° | 1370.2 | 429.2 | 162.8 | 130.1 | 132.7 | 133.5 | 135.5 | 142.5 | 150.4 | 160.3 | 160.9 |
| 57.5° | 1402.0 | 456.0 | 156.5 | 125.4 | 126.6 | 129.3 | 132.5 | 138.8 | 147.3 | 158.3 | 158.9 |
| 58° | 1407.2 | 461.7 | 155.5 | 125.0 | 125.4 | 128.5 | 132.1 | 138.2 | 146.7 | 158.7 | 159.3 |
| 60° | 1407.4 | 480.6 | 153.2 | 123.2 | 120.7 | 125.8 | 129.9 | 136.0 | 145.7 | 160.1 | 161.5 |
| 62.5° | 1357.5 | 480.4 | 151.6 | 120.5 | 115.9 | 122.1 | 126.8 | 133.9 | 144.6 | 163.6 | 166.4 |
| 65° | 1195.3 | 436.5 | 143.9 | 116.5 | 112.0 | 119.0 | 124.2 | 132.5 | 147.5 | 178.6 | 180.4 |
| 67.5° | 935.0 | 357.8 | 129.5 | 110.8 | 106.9 | 115.7 | 122.5 | 132.3 | 150.6 | 182.1 | 183.2 |
| 70° | 618.2 | 267.7 | 113.6 | 104.3 | 101.7 | 111.8 | 123.4 | 139.2 | 147.1 | 174.7 | 171.4 |
| 72.5° | 320.8 | 187.9 | 100.9 | 96.2 | 95.5 | 108.3 | 135.1 | 138.4 | 143.7 | 164.4 | 160.3 |
| 75° | 168.5 | 130.5 | 89.7 | 87.3 | 88.3 | 107.5 | 159.5 | 134.7 | 139.2 | 157.2 | 165.0 |
| 77.5° | 103.1 | 105.4 | 80.2 | 79.2 | 81.2 | 105.2 | 159.3 | 130.1 | 132.7 | 144.6 | 153.2 |
| 80° | 69.0 | 85.4 | 72.8 | 73.0 | 74.5 | 96.2 | 143.1 | 122.8 | 124.8 | 136.8 | 145.5 |
| 82.5° | 43.7 | 50.5 | 66.2 | 69.6 | 67.8 | 79.4 | 121.5 | 111.8 | 114.7 | 156.5 | 165.4 |
| 85° | 22.1 | 31.6 | 57.4 | 67.0 | 61.1 | 55.6 | 98.6 | 98.0 | 99.4 | 112.8 | 117.9 |
| 87.5° | 10.1 | 17.5 | 44.8 | 58.4 | 46.0 | 34.7 | 71.6 | 72.6 | 78.4 | 80.2 | 80.2 |
| 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)