

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: LUMARK

Report Number: P381255

Luminaire Tested: **PRV-PA2B-8540-U-T3-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P381255  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-14)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: PRV-PA2B-8540-U-T3-HSS  
Description: PREVAIL AREA AND ROADWAY LUMINAIRE  
(2) 85 CRI, 4000K, 970mA LIGHT ENGINES WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11368.4 lumens  
Efficiency: N/A  
Efficacy: 75.3 lumens/watt  
Luminous Opening: Rectangular (W 1.1' x L: 1.12' x H: 0')  
IES Classification: Type IV - Medium  
BUG Rating: B1 - U0 - G2

Input Watts (W): 151  
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

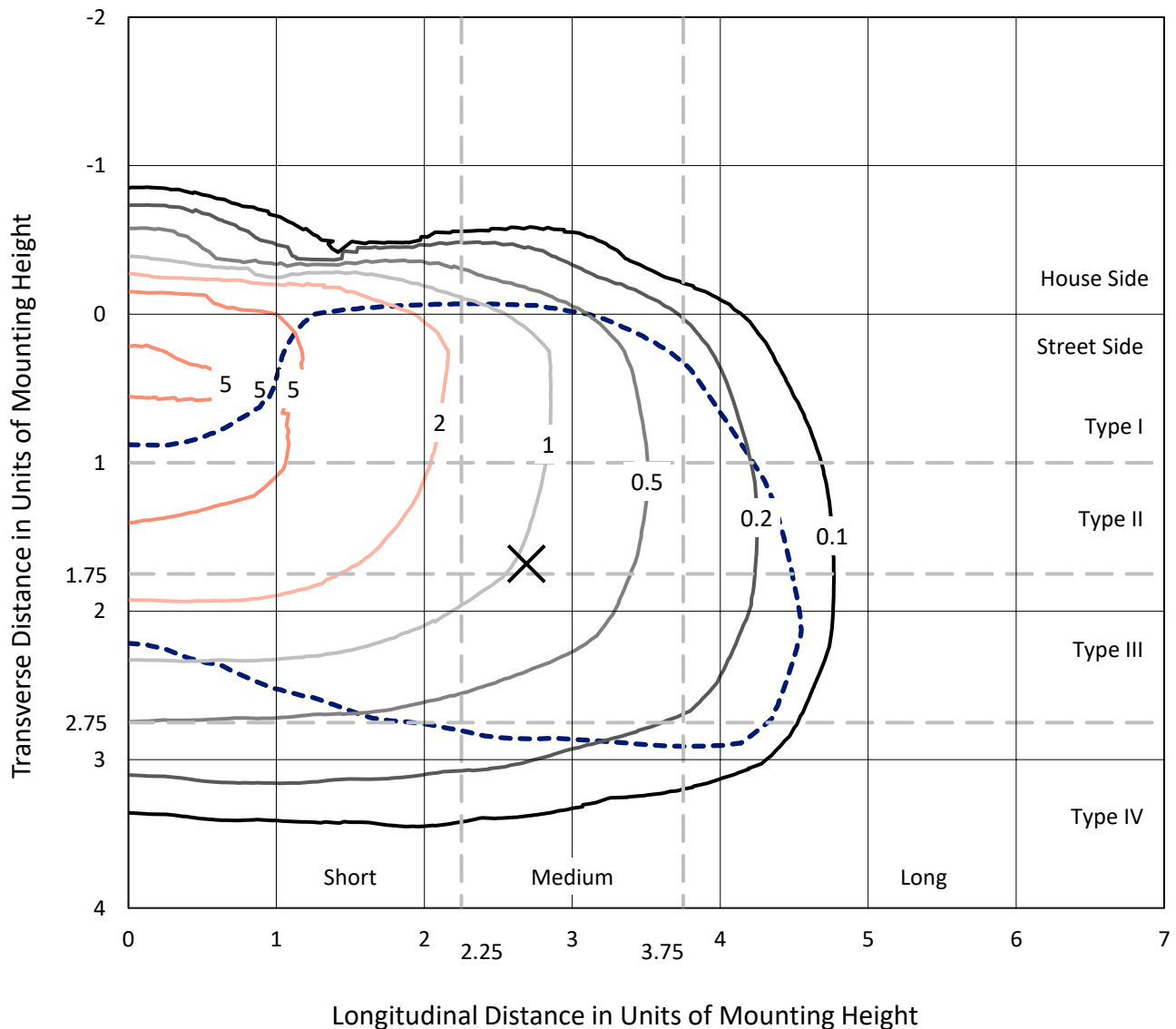


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

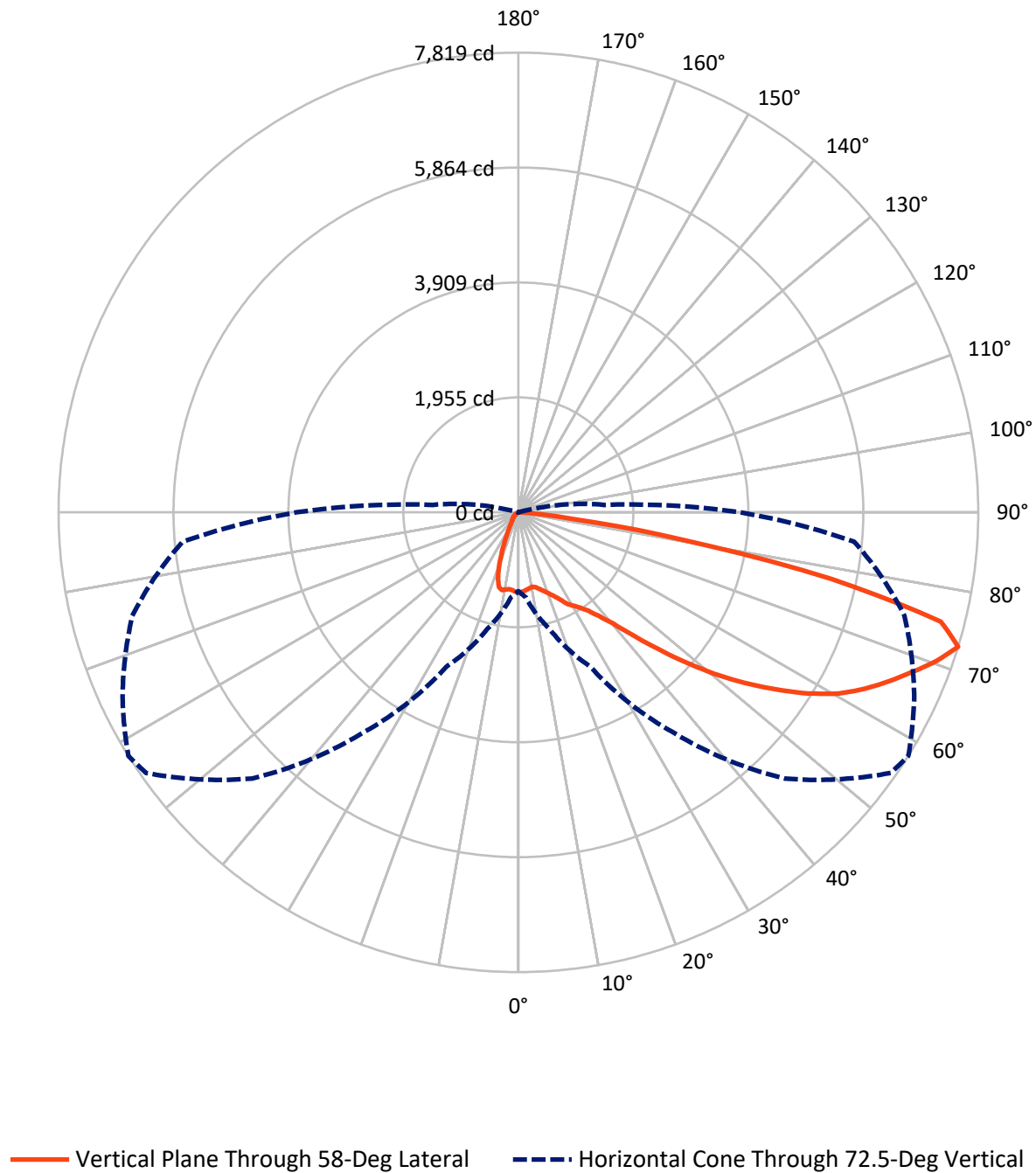


Based on 15 foot mounting height. Maximum calculated value = 7.5 fc  
Type IV - Medium - N/A

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## Luminous Intensity Polar Plot



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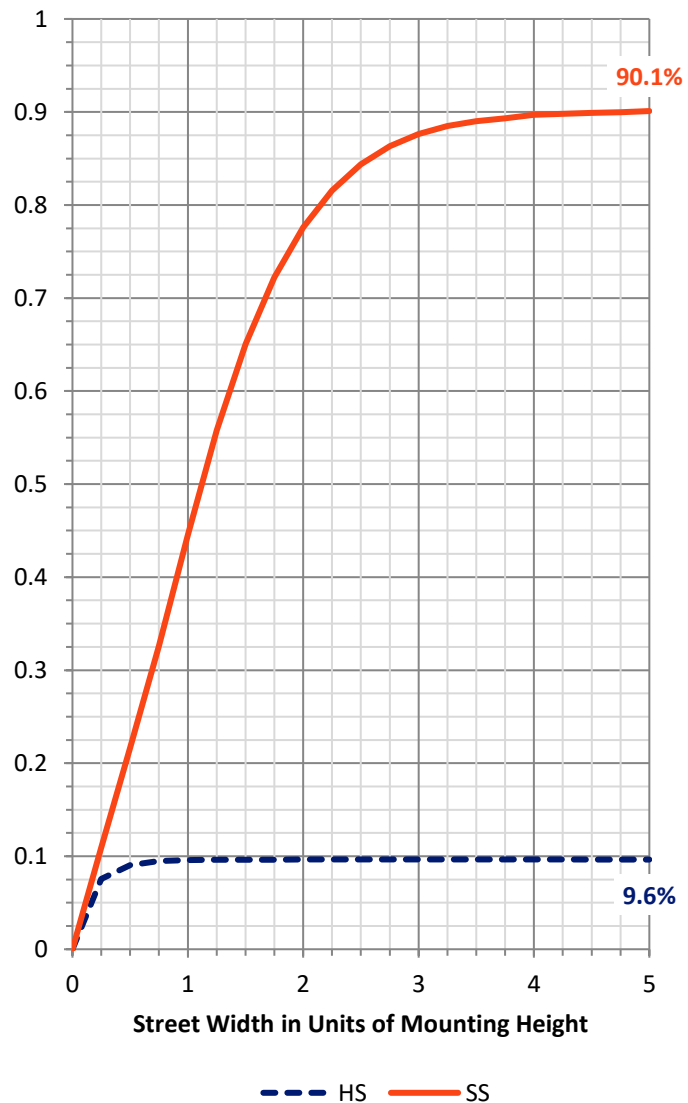
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 1105.5   | 0.0    | 1105.5  |
|                    | % Fixture | 9.7      | 0.0    | 9.7     |
| <b>Street Side</b> | Lumens    | 10262.9  | 0.0    | 10262.9 |
|                    | % Fixture | 90.3     | 0.0    | 90.3    |
| <b>Total</b>       | Lumens    | 11368.4  | 0.0    | 11368.4 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 125.2   | 1.1       |
| 10°-20°   | 326.1   | 2.9       |
| 20°-30°   | 512.2   | 4.5       |
| 30°-40°   | 883.4   | 7.8       |
| 40°-50°   | 1680.7  | 14.8      |
| 50°-60°   | 2661.8  | 23.4      |
| 60°-70°   | 3106.0  | 27.3      |
| 70°-80°   | 1945.3  | 17.1      |
| 80°-90°   | 127.7   | 1.1       |
| 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°    | 11368.4 | 100.0     |
| 0°-180°   | 11368.4 | 100.0     |

**Coefficient of Utilization**



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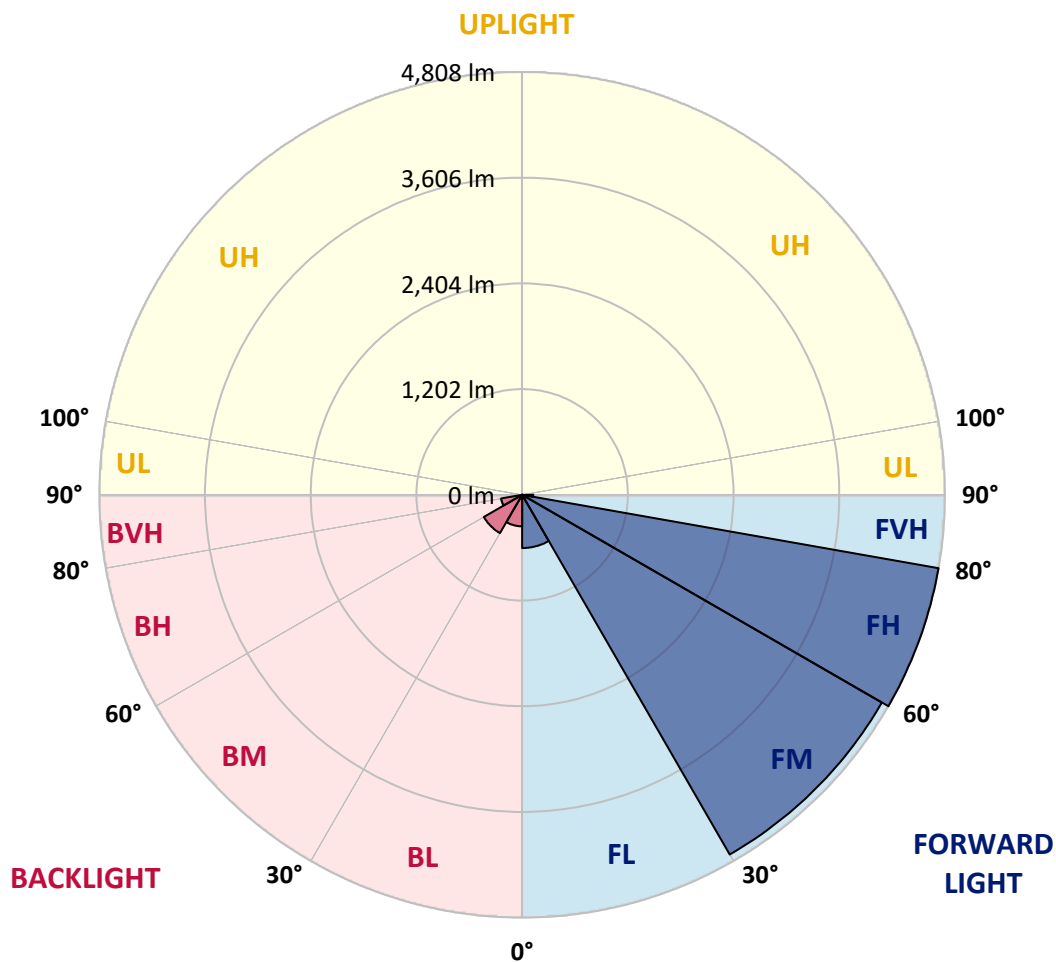
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 605.5  | 5.3       |                         |      |         |
| FM   | (30°-60°)   | 4722.9 | 41.5      |                         |      |         |
| FH   | (60°-80°)   | 4808.0 | 42.3      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 126.4  | 1.1       |                         |      | G2/225  |
| BL   | (0°-30°)    | 358.0  | 3.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 503.0  | 4.4       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 243.3  | 2.1       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 1.2    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type IV Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 58°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 |
| 2.5°  | 1358.0 | 1351.9 | 1349.9 | 1347.9 | 1349.9 | 1351.9 | 1345.8 | 1351.9 | 1347.9 | 1349.9 | 1354.0 |
| 5°    | 1309.3 | 1303.1 | 1301.1 | 1303.1 | 1309.3 | 1319.4 | 1323.5 | 1329.6 | 1329.6 | 1335.6 | 1337.7 |
| 7.5°  | 1254.4 | 1250.3 | 1248.3 | 1252.3 | 1264.5 | 1286.9 | 1299.1 | 1307.2 | 1315.4 | 1327.6 | 1339.7 |
| 10°   | 1223.8 | 1221.8 | 1219.8 | 1225.9 | 1238.1 | 1258.4 | 1274.6 | 1286.9 | 1317.4 | 1351.9 | 1374.3 |
| 12.5° | 1203.5 | 1203.5 | 1207.6 | 1219.8 | 1236.0 | 1252.3 | 1290.9 | 1307.2 | 1354.0 | 1406.8 | 1437.4 |
| 15°   | 1187.3 | 1187.3 | 1193.4 | 1215.8 | 1238.1 | 1276.7 | 1333.6 | 1351.9 | 1406.8 | 1471.9 | 1512.5 |
| 17.5° | 1175.0 | 1179.1 | 1183.2 | 1205.6 | 1248.3 | 1313.3 | 1380.4 | 1406.8 | 1473.9 | 1545.1 | 1589.8 |
| 20°   | 1177.1 | 1181.2 | 1183.2 | 1205.6 | 1266.6 | 1356.0 | 1441.4 | 1471.9 | 1549.2 | 1624.3 | 1669.1 |
| 22.5° | 1189.3 | 1195.4 | 1197.4 | 1227.9 | 1299.1 | 1400.7 | 1510.5 | 1545.1 | 1628.4 | 1707.7 | 1742.3 |
| 25°   | 1240.1 | 1244.2 | 1232.0 | 1258.4 | 1345.8 | 1469.8 | 1600.0 | 1636.5 | 1719.9 | 1793.1 | 1821.6 |
| 27.5° | 1412.9 | 1417.0 | 1349.9 | 1319.4 | 1382.5 | 1526.8 | 1709.8 | 1760.6 | 1864.2 | 1913.0 | 1917.1 |
| 30°   | 1787.0 | 1791.0 | 1658.9 | 1514.6 | 1469.8 | 1575.6 | 1770.8 | 1841.9 | 1976.1 | 2030.9 | 2006.6 |
| 32.5° | 2268.8 | 2264.7 | 2083.8 | 1870.4 | 1677.2 | 1661.0 | 1858.1 | 1933.4 | 2079.7 | 2132.6 | 2114.3 |
| 35°   | 2752.6 | 2758.7 | 2604.3 | 2283.1 | 2006.6 | 1821.6 | 1969.9 | 2057.4 | 2234.3 | 2309.5 | 2277.0 |
| 37.5° | 3084.1 | 3124.7 | 3057.6 | 2710.0 | 2411.1 | 2118.4 | 2150.9 | 2244.4 | 2466.0 | 2567.7 | 2498.6 |
| 40°   | 3551.6 | 3541.4 | 3378.8 | 3122.7 | 2858.4 | 2557.5 | 2443.7 | 2488.4 | 2742.5 | 2878.7 | 2771.0 |
| 42.5° | 4179.8 | 4159.5 | 3883.0 | 3633.0 | 3338.2 | 3092.1 | 2860.4 | 2852.3 | 3059.7 | 3218.2 | 3061.7 |
| 45°   | 4749.1 | 4718.6 | 4529.5 | 4287.6 | 3964.3 | 3681.7 | 3368.7 | 3297.5 | 3441.8 | 3576.0 | 3393.1 |
| 47.5° | 5202.4 | 5151.6 | 5017.4 | 4889.4 | 4810.0 | 4370.9 | 3901.3 | 3793.6 | 3866.8 | 3966.4 | 3708.2 |
| 50°   | 5739.2 | 5598.8 | 5403.7 | 5326.4 | 5491.1 | 5151.6 | 4413.6 | 4309.9 | 4305.9 | 4362.8 | 4033.5 |
| 52.5° | 5983.1 | 5729.0 | 5619.2 | 5684.3 | 5975.0 | 5877.4 | 4966.6 | 4818.2 | 4759.2 | 4765.3 | 4336.3 |
| 55°   | 5688.3 | 5659.8 | 5718.8 | 5922.1 | 6302.3 | 6245.4 | 5497.2 | 5314.2 | 5226.8 | 5117.1 | 4627.1 |
| 57.5° | 5352.8 | 5440.3 | 5674.1 | 6062.4 | 6717.0 | 6629.6 | 6019.7 | 5812.3 | 5651.7 | 5399.6 | 4950.4 |
| 60°   | 5043.9 | 5133.3 | 5519.6 | 6094.9 | 6944.7 | 6999.6 | 6454.7 | 6257.6 | 6019.7 | 5688.3 | 5306.1 |
| 62.5° | 4574.2 | 4643.3 | 5186.1 | 6048.1 | 6845.1 | 7215.1 | 6757.7 | 6609.2 | 6387.6 | 5962.8 | 5714.7 |
| 65°   | 4045.7 | 4090.4 | 4627.1 | 5674.1 | 6649.9 | 7190.7 | 7007.7 | 6924.4 | 6708.9 | 6249.4 | 6119.3 |
| 67.5° | 3466.3 | 3519.1 | 3966.4 | 5001.2 | 6267.7 | 7076.8 | 7243.5 | 7235.4 | 6989.4 | 6566.6 | 6412.1 |
| 70°   | 2799.5 | 2803.5 | 3173.5 | 4147.3 | 5600.9 | 6849.1 | 7536.3 | 7554.6 | 7257.8 | 6804.4 | 6424.3 |
| 72.5° | 1339.7 | 1449.5 | 2057.4 | 2895.0 | 4551.9 | 6401.9 | 7727.4 | 7818.9 | 7426.5 | 6796.3 | 5731.0 |
| 75°   | 307.0  | 317.1  | 599.7  | 1376.4 | 2669.3 | 4913.7 | 7249.6 | 7420.4 | 7015.8 | 5877.4 | 4037.5 |
| 77.5° | 111.8  | 117.9  | 168.7  | 402.5  | 1026.7 | 2539.2 | 5188.2 | 5438.2 | 5186.1 | 3799.7 | 1909.0 |
| 80°   | 75.2   | 73.2   | 87.4   | 178.9  | 471.7  | 719.7  | 2653.0 | 2801.5 | 2557.5 | 1297.0 | 457.4  |
| 82.5° | 38.6   | 40.6   | 61.0   | 99.6   | 317.1  | 250.1  | 886.4  | 963.6  | 792.9  | 260.2  | 85.3   |
| 85°   | 18.3   | 18.3   | 34.5   | 63.0   | 134.2  | 87.4   | 197.2  | 237.9  | 213.4  | 113.8  | 28.4   |
| 87.5° | 18.3   | 18.3   | 32.5   | 40.6   | 69.1   | 36.6   | 48.8   | 61.0   | 56.9   | 61.0   | 10.2   |
| 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°    | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 | 1364.1 |
| 2.5°  | 1354.0 | 1351.9 | 1349.9 | 1354.0 | 1351.9 | 1356.0 | 1356.0 | 1360.1 | 1360.1 | 1356.0 | 1354.0 |
| 5°    | 1335.6 | 1331.6 | 1327.6 | 1327.6 | 1325.5 | 1329.6 | 1341.7 | 1351.9 | 1354.0 | 1347.9 | 1345.8 |
| 7.5°  | 1337.7 | 1337.7 | 1333.6 | 1325.5 | 1311.3 | 1311.3 | 1311.3 | 1323.5 | 1329.6 | 1325.5 | 1323.5 |
| 10°   | 1374.3 | 1376.4 | 1366.2 | 1347.9 | 1323.5 | 1301.1 | 1258.4 | 1195.4 | 1136.4 | 1120.2 | 1114.1 |
| 12.5° | 1437.4 | 1439.4 | 1419.0 | 1386.5 | 1335.6 | 1203.5 | 1040.9 | 890.4  | 774.5  | 742.0  | 735.9  |
| 15°   | 1512.5 | 1514.6 | 1478.0 | 1425.1 | 1270.7 | 963.6  | 721.7  | 550.9  | 449.3  | 424.9  | 422.9  |
| 17.5° | 1589.8 | 1585.7 | 1530.8 | 1429.2 | 1077.5 | 683.1  | 439.1  | 351.7  | 325.3  | 319.2  | 321.2  |
| 20°   | 1665.0 | 1652.8 | 1577.6 | 1354.0 | 829.4  | 447.2  | 321.2  | 300.9  | 294.8  | 290.7  | 290.7  |
| 22.5° | 1734.1 | 1709.8 | 1616.2 | 1205.6 | 581.5  | 321.2  | 286.7  | 282.6  | 274.4  | 268.3  | 266.3  |
| 25°   | 1803.2 | 1768.7 | 1640.6 | 1012.4 | 390.3  | 280.5  | 270.4  | 262.2  | 252.1  | 244.0  | 241.9  |
| 27.5° | 1886.6 | 1837.9 | 1628.4 | 768.4  | 292.8  | 260.2  | 252.1  | 239.9  | 225.7  | 213.4  | 209.4  |
| 30°   | 1965.9 | 1911.0 | 1559.3 | 530.6  | 250.1  | 239.9  | 227.7  | 209.4  | 191.1  | 176.9  | 172.8  |
| 32.5° | 2065.6 | 2002.5 | 1435.3 | 347.7  | 217.5  | 209.4  | 197.2  | 174.8  | 150.4  | 134.2  | 130.1  |
| 35°   | 2207.8 | 2136.7 | 1276.7 | 244.0  | 191.1  | 176.9  | 160.6  | 136.2  | 109.8  | 97.6   | 95.5   |
| 37.5° | 2407.1 | 2311.5 | 1077.5 | 197.2  | 168.7  | 148.4  | 124.0  | 99.6   | 81.4   | 71.2   | 69.1   |
| 40°   | 2651.0 | 2504.7 | 855.9  | 174.8  | 150.4  | 124.0  | 93.5   | 71.2   | 59.0   | 50.8   | 50.8   |
| 42.5° | 2915.3 | 2685.6 | 630.2  | 160.6  | 132.2  | 101.6  | 69.1   | 50.8   | 42.7   | 38.6   | 36.6   |
| 45°   | 3187.7 | 2846.2 | 424.9  | 148.4  | 115.9  | 77.3   | 48.8   | 34.5   | 28.4   | 28.4   | 26.5   |
| 47.5° | 3470.3 | 2953.9 | 274.4  | 134.2  | 97.6   | 56.9   | 32.5   | 24.4   | 20.4   | 20.4   | 20.4   |
| 50°   | 3750.9 | 3010.9 | 195.2  | 122.0  | 79.3   | 38.6   | 24.4   | 18.3   | 16.3   | 16.3   | 16.3   |
| 52.5° | 3954.2 | 2974.2 | 156.5  | 105.7  | 61.0   | 28.4   | 18.3   | 14.3   | 12.2   | 12.2   | 12.2   |
| 55°   | 4131.0 | 2911.3 | 136.2  | 91.5   | 44.7   | 20.4   | 14.3   | 12.2   | 10.2   | 10.2   | 10.2   |
| 57.5° | 4312.0 | 2829.9 | 122.0  | 77.3   | 32.5   | 14.3   | 10.2   | 8.1    | 8.1    | 8.1    | 8.1    |
| 60°   | 4476.6 | 2691.6 | 105.7  | 61.0   | 22.4   | 10.2   | 8.1    | 6.1    | 6.1    | 6.1    | 6.1    |
| 62.5° | 4637.2 | 2573.8 | 91.5   | 46.7   | 16.3   | 8.1    | 4.1    | 4.1    | 2.0    | 2.0    | 2.0    |
| 65°   | 4728.8 | 2415.2 | 73.2   | 30.5   | 10.2   | 6.1    | 2.0    | 2.0    | 0.0    | 0.0    | 0.0    |
| 67.5° | 4700.3 | 2226.1 | 50.8   | 18.3   | 6.1    | 4.1    | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 70°   | 4503.0 | 1972.0 | 30.5   | 10.2   | 6.1    | 4.1    | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 72.5° | 3771.2 | 1459.7 | 18.3   | 8.1    | 4.1    | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 75°   | 2518.9 | 670.9  | 10.2   | 6.1    | 2.0    | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 77.5° | 1152.7 | 201.2  | 6.1    | 4.1    | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 80°   | 231.8  | 52.9   | 4.1    | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 82.5° | 48.8   | 10.2   | 2.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 10.2   | 4.1    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 4.1    | 2.0    | 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)