

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: McGRAW-EDISON

Report Number: P193310

Luminaire Tested: **GLEON-AF-02-LED-E1-T4W-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P193310  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24147)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: GLEON-AF-02-LED-E1-T4W-7030  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(2) 70 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11697.3 lumens  
Efficiency: N/A  
Efficacy: 103.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

Input Watts (W): 113  
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: 25 FT

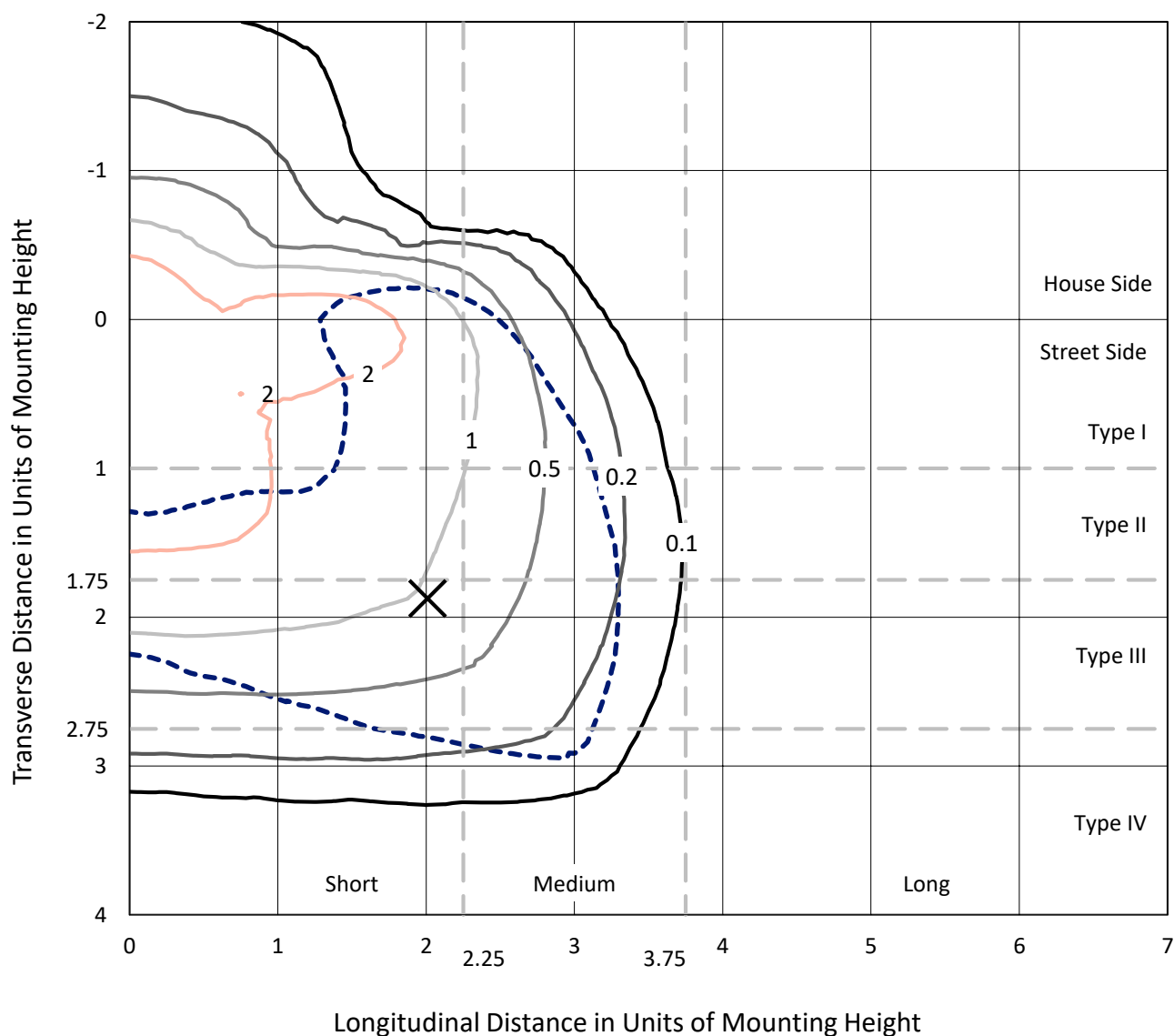


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

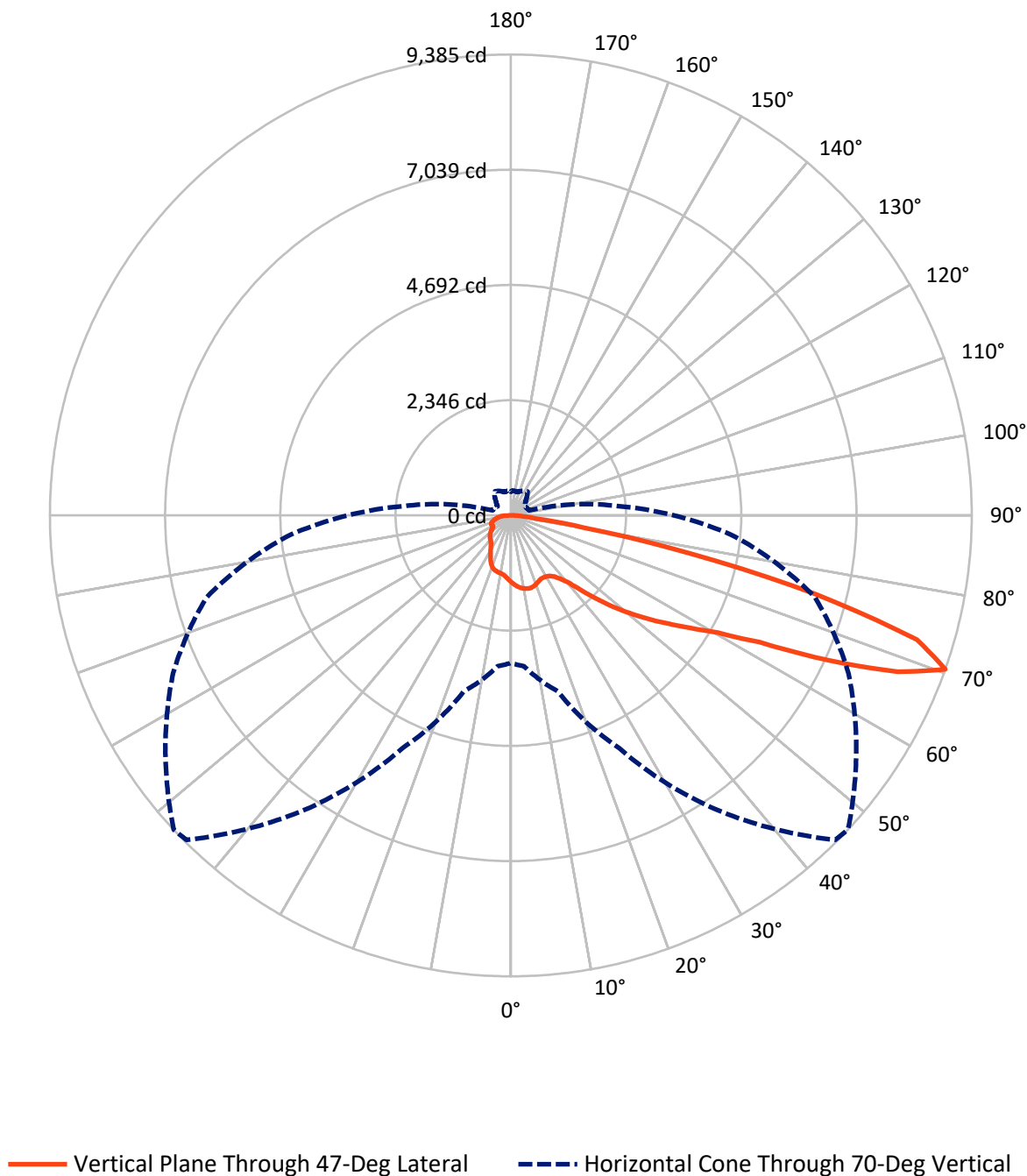


Based on 20 foot mounting height. Maximum calculated value = 3.9 fc  
Type IV - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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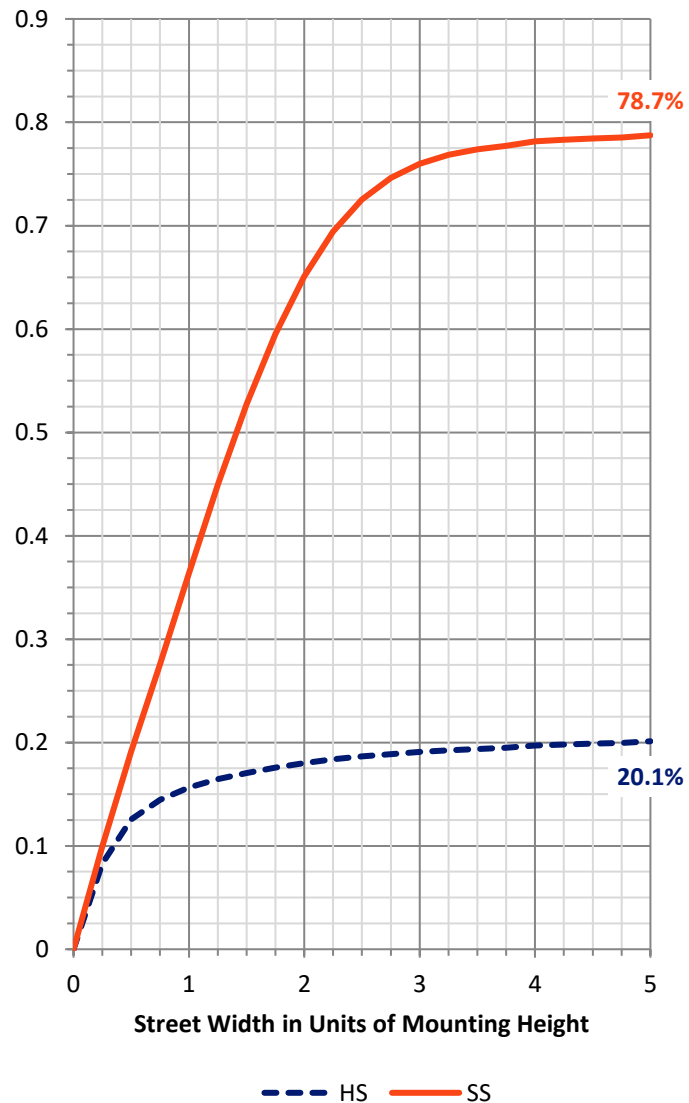
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2440.3   | 0.0    | 2440.3  |
|                    | % Fixture | 20.9     | 0.0    | 20.9    |
| <b>Street Side</b> | Lumens    | 9257.0   | 0.0    | 9257.0  |
|                    | % Fixture | 79.1     | 0.0    | 79.1    |
| <b>Total</b>       | Lumens    | 11697.3  | 0.0    | 11697.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 130.0   | 1.1       |
| 10°-20°   | 381.5   | 3.3       |
| 20°-30°   | 563.4   | 4.8       |
| 30°-40°   | 818.9   | 7.0       |
| 40°-50°   | 1473.7  | 12.6      |
| 50°-60°   | 2553.1  | 21.8      |
| 60°-70°   | 3644.0  | 31.2      |
| 70°-80°   | 1870.6  | 16.0      |
| 80°-90°   | 261.9   | 2.2       |
| 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°    | 11697.3 | 100.0     |
| 0°-180°   | 11697.3 | 100.0     |

**Coefficient of Utilization**



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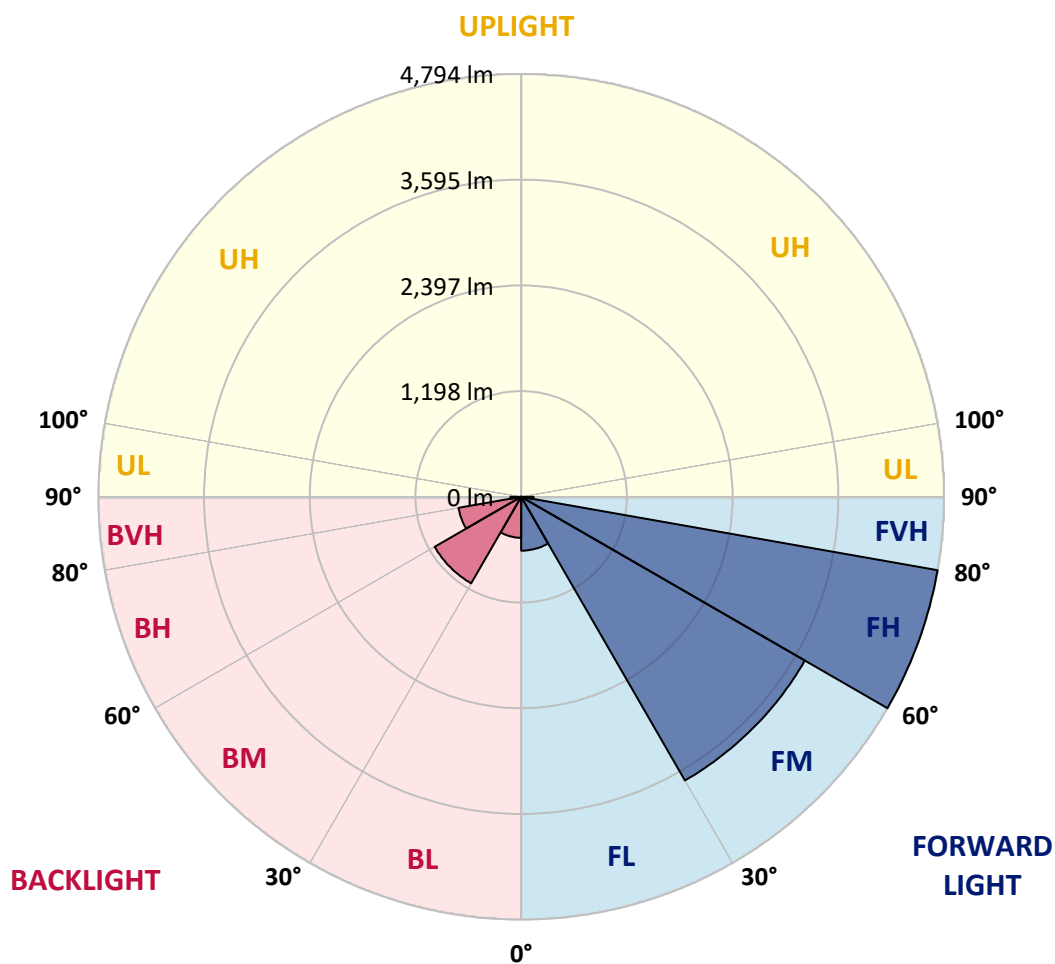
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 610.3  | 5.2       |                         |      |         |
| FM   | (30°-60°)   | 3713.0 | 31.7      |                         |      |         |
| FH   | (60°-80°)   | 4793.9 | 41.0      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 139.7  | 1.2       |                         |      | G2/225  |
| BL   | (0°-30°)    | 464.6  | 4.0       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1132.7 | 9.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 720.8  | 6.2       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 122.1  | 1.0       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G2**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 47°    | 55°    | 65°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 |
| 2.5°  | 1436.9 | 1434.0 | 1432.9 | 1430.6 | 1427.8 | 1413.6 | 1410.7 | 1400.4 | 1386.3 | 1371.5 | 1356.1 |
| 5°    | 1531.4 | 1530.8 | 1524.6 | 1513.1 | 1495.0 | 1463.6 | 1456.3 | 1431.2 | 1397.7 | 1365.2 | 1332.8 |
| 7.5°  | 1614.6 | 1609.4 | 1597.4 | 1574.7 | 1542.7 | 1500.1 | 1489.9 | 1455.2 | 1409.0 | 1364.6 | 1320.8 |
| 10°   | 1675.4 | 1672.5 | 1646.3 | 1615.1 | 1573.6 | 1526.3 | 1514.4 | 1475.6 | 1425.0 | 1368.6 | 1314.0 |
| 12.5° | 1710.1 | 1704.3 | 1674.2 | 1636.7 | 1587.2 | 1541.1 | 1529.1 | 1489.9 | 1432.9 | 1368.6 | 1304.3 |
| 15°   | 1707.8 | 1703.8 | 1673.7 | 1632.7 | 1582.6 | 1542.2 | 1531.4 | 1492.2 | 1431.2 | 1362.9 | 1291.8 |
| 17.5° | 1662.3 | 1664.0 | 1638.4 | 1597.9 | 1557.0 | 1526.3 | 1516.6 | 1480.1 | 1419.9 | 1351.5 | 1277.0 |
| 20°   | 1582.6 | 1590.6 | 1573.6 | 1537.6 | 1514.9 | 1493.8 | 1487.6 | 1456.9 | 1402.3 | 1335.0 | 1261.1 |
| 22.5° | 1503.0 | 1510.3 | 1503.5 | 1473.4 | 1470.0 | 1457.4 | 1454.0 | 1431.9 | 1386.8 | 1324.8 | 1251.4 |
| 25°   | 1444.3 | 1451.2 | 1450.0 | 1423.8 | 1434.0 | 1433.5 | 1430.6 | 1419.9 | 1383.4 | 1324.8 | 1253.1 |
| 27.5° | 1428.3 | 1430.6 | 1428.3 | 1404.5 | 1418.7 | 1430.1 | 1427.8 | 1426.2 | 1393.7 | 1341.2 | 1274.7 |
| 30°   | 1482.9 | 1479.6 | 1462.0 | 1413.6 | 1426.7 | 1442.7 | 1440.4 | 1441.4 | 1424.4 | 1384.6 | 1323.1 |
| 32.5° | 1700.9 | 1685.7 | 1629.8 | 1493.8 | 1459.1 | 1467.7 | 1468.8 | 1487.6 | 1490.4 | 1451.2 | 1398.2 |
| 35°   | 2027.1 | 2010.0 | 1937.7 | 1709.0 | 1559.9 | 1530.2 | 1530.2 | 1558.7 | 1575.7 | 1546.8 | 1514.9 |
| 37.5° | 2372.4 | 2353.7 | 2314.9 | 2007.1 | 1771.5 | 1639.0 | 1636.0 | 1656.1 | 1680.5 | 1687.3 | 1695.2 |
| 40°   | 2765.2 | 2745.2 | 2756.1 | 2341.8 | 2066.8 | 1827.4 | 1786.9 | 1772.7 | 1838.8 | 1882.5 | 1946.2 |
| 42.5° | 3194.8 | 3185.7 | 3189.8 | 2714.5 | 2403.2 | 2109.0 | 2051.6 | 1978.1 | 2057.8 | 2135.8 | 2269.6 |
| 45°   | 3592.6 | 3600.5 | 3596.6 | 3113.5 | 2777.7 | 2452.8 | 2391.8 | 2249.5 | 2327.5 | 2461.3 | 2679.2 |
| 47.5° | 3940.9 | 3907.8 | 3959.1 | 3549.3 | 3197.0 | 2837.5 | 2762.3 | 2571.6 | 2650.7 | 2815.8 | 3184.6 |
| 50°   | 4363.7 | 4359.1 | 4284.0 | 4131.0 | 3704.1 | 3223.8 | 3125.4 | 2904.5 | 3027.5 | 3256.8 | 3821.4 |
| 52.5° | 4808.2 | 4725.6 | 4656.7 | 4583.3 | 4241.9 | 3619.9 | 3499.2 | 3236.4 | 3470.2 | 3758.7 | 4597.6 |
| 55°   | 4899.1 | 4862.1 | 4947.6 | 5071.0 | 4760.3 | 4031.3 | 3890.8 | 3652.3 | 3968.8 | 4332.3 | 5492.8 |
| 57.5° | 5093.7 | 5093.2 | 5269.7 | 5489.8 | 5294.1 | 4467.8 | 4326.1 | 4154.8 | 4529.4 | 4989.7 | 6443.1 |
| 60°   | 5225.4 | 5262.3 | 5590.0 | 6017.5 | 5818.3 | 4972.1 | 4841.8 | 4734.8 | 5166.7 | 5724.3 | 7328.6 |
| 62.5° | 5294.1 | 5344.2 | 5791.5 | 6231.4 | 6559.2 | 5811.4 | 5681.2 | 5526.9 | 6010.1 | 6530.2 | 7846.5 |
| 65°   | 5007.9 | 5106.3 | 5760.2 | 6416.4 | 7208.0 | 7172.1 | 7113.5 | 6842.6 | 7064.4 | 7167.0 | 7659.2 |
| 67.5° | 4215.8 | 4316.5 | 5078.0 | 6243.9 | 7671.2 | 8484.4 | 8496.9 | 8034.3 | 7713.2 | 7221.6 | 6439.6 |
| 70°   | 3003.6 | 3082.6 | 3712.6 | 5234.9 | 7318.3 | 9342.0 | 9384.8 | 8583.4 | 7584.1 | 6404.4 | 4499.1 |
| 72.5° | 1426.2 | 1474.5 | 2070.9 | 3407.0 | 5807.4 | 8559.5 | 8642.0 | 7882.3 | 6448.8 | 4741.6 | 2454.4 |
| 75°   | 524.1  | 538.8  | 700.0  | 1449.5 | 3368.4 | 6312.2 | 6409.4 | 5650.4 | 4274.9 | 2360.5 | 935.0  |
| 77.5° | 314.1  | 323.9  | 392.7  | 611.8  | 1324.8 | 3608.0 | 3752.0 | 3073.0 | 1868.4 | 878.7  | 459.8  |
| 80°   | 219.6  | 226.5  | 281.7  | 380.7  | 625.9  | 1374.9 | 1503.0 | 1254.3 | 744.4  | 556.0  | 334.7  |
| 82.5° | 148.5  | 152.0  | 198.1  | 257.2  | 415.9  | 491.1  | 529.8  | 557.7  | 501.9  | 413.8  | 212.3  |
| 85°   | 97.4   | 100.7  | 134.3  | 169.6  | 264.6  | 253.8  | 259.5  | 328.4  | 366.4  | 281.2  | 117.8  |
| 87.5° | 55.7   | 58.0   | 80.9   | 90.4   | 129.8  | 107.5  | 108.7  | 172.9  | 234.5  | 189.4  | 71.7   |
| 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°    | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 | 1357.2 |
| 2.5°  | 1352.1 | 1344.8 | 1328.3 | 1318.0 | 1308.3 | 1306.0 | 1302.1 | 1301.5 | 1301.0 | 1301.0 | 1299.2 |
| 5°    | 1321.9 | 1309.5 | 1283.8 | 1269.6 | 1257.7 | 1256.5 | 1255.9 | 1258.7 | 1260.0 | 1261.1 | 1259.3 |
| 7.5°  | 1302.6 | 1285.6 | 1253.6 | 1233.2 | 1219.0 | 1215.5 | 1221.2 | 1234.3 | 1242.9 | 1246.3 | 1244.6 |
| 10°   | 1290.7 | 1269.6 | 1232.7 | 1210.4 | 1198.5 | 1196.7 | 1204.1 | 1219.6 | 1237.2 | 1244.0 | 1243.5 |
| 12.5° | 1277.0 | 1253.1 | 1213.9 | 1190.5 | 1183.8 | 1187.1 | 1196.7 | 1211.0 | 1229.1 | 1240.0 | 1240.6 |
| 15°   | 1263.4 | 1235.5 | 1195.1 | 1174.5 | 1171.7 | 1176.2 | 1185.4 | 1196.2 | 1210.4 | 1221.2 | 1222.4 |
| 17.5° | 1246.8 | 1217.8 | 1177.4 | 1156.4 | 1154.1 | 1156.4 | 1156.9 | 1162.6 | 1171.7 | 1181.9 | 1184.8 |
| 20°   | 1229.1 | 1199.6 | 1157.5 | 1136.4 | 1126.3 | 1117.0 | 1106.9 | 1108.0 | 1110.8 | 1121.1 | 1123.4 |
| 22.5° | 1216.7 | 1187.1 | 1142.1 | 1113.2 | 1085.8 | 1058.5 | 1038.0 | 1035.1 | 1036.4 | 1044.8 | 1047.7 |
| 25°   | 1217.8 | 1186.5 | 1138.2 | 1088.1 | 1028.3 | 984.5  | 957.2  | 952.6  | 952.0  | 958.3  | 962.3  |
| 27.5° | 1240.0 | 1208.7 | 1152.9 | 1062.4 | 965.8  | 900.9  | 871.8  | 868.4  | 863.9  | 865.6  | 870.1  |
| 30°   | 1289.5 | 1260.6 | 1188.8 | 1036.4 | 898.0  | 818.9  | 788.8  | 785.3  | 779.0  | 776.2  | 779.7  |
| 32.5° | 1370.3 | 1346.4 | 1241.1 | 1011.3 | 830.3  | 748.9  | 718.2  | 710.7  | 706.8  | 703.4  | 706.3  |
| 35°   | 1504.6 | 1494.4 | 1311.1 | 984.0  | 770.5  | 694.9  | 666.9  | 655.5  | 649.9  | 656.1  | 660.7  |
| 37.5° | 1715.2 | 1721.0 | 1402.8 | 941.3  | 724.4  | 659.0  | 635.7  | 622.6  | 614.0  | 619.2  | 624.3  |
| 40°   | 2013.4 | 2017.4 | 1504.1 | 880.9  | 684.6  | 638.0  | 613.0  | 600.9  | 589.0  | 579.8  | 579.3  |
| 42.5° | 2404.9 | 2364.5 | 1603.7 | 815.5  | 638.5  | 624.9  | 597.0  | 582.2  | 564.0  | 538.8  | 533.8  |
| 45°   | 2869.2 | 2727.5 | 1679.4 | 740.3  | 586.7  | 608.9  | 579.3  | 558.9  | 530.4  | 503.0  | 500.2  |
| 47.5° | 3404.2 | 3117.3 | 1716.4 | 662.4  | 538.3  | 585.6  | 557.7  | 525.2  | 489.4  | 475.8  | 474.0  |
| 50°   | 4057.6 | 3580.1 | 1734.0 | 586.7  | 496.2  | 554.8  | 526.4  | 488.3  | 458.2  | 455.3  | 453.5  |
| 52.5° | 4801.3 | 4136.7 | 1739.6 | 524.7  | 461.5  | 515.0  | 500.7  | 463.8  | 439.9  | 442.2  | 442.2  |
| 55°   | 5579.8 | 4711.4 | 1662.3 | 479.7  | 429.6  | 474.0  | 483.7  | 454.1  | 434.2  | 443.3  | 446.8  |
| 57.5° | 6294.5 | 5220.7 | 1418.7 | 445.0  | 399.5  | 442.7  | 477.5  | 463.3  | 449.6  | 486.5  | 488.8  |
| 60°   | 6843.1 | 5521.8 | 1059.6 | 413.8  | 377.3  | 431.9  | 494.0  | 497.9  | 501.4  | 589.6  | 601.5  |
| 62.5° | 6958.0 | 5421.6 | 728.4  | 389.3  | 367.0  | 441.1  | 524.1  | 524.7  | 520.7  | 582.2  | 589.6  |
| 65°   | 6430.6 | 4788.2 | 529.8  | 375.7  | 358.5  | 457.6  | 549.7  | 537.8  | 511.6  | 558.4  | 544.6  |
| 67.5° | 5106.9 | 3607.4 | 441.1  | 365.4  | 346.1  | 456.3  | 577.0  | 549.7  | 506.5  | 546.9  | 524.7  |
| 70°   | 3314.9 | 2181.3 | 392.7  | 356.8  | 331.2  | 434.8  | 592.9  | 548.6  | 491.6  | 508.7  | 482.6  |
| 72.5° | 1617.4 | 975.3  | 360.2  | 344.2  | 315.9  | 404.6  | 592.4  | 538.3  | 476.4  | 475.2  | 461.0  |
| 75°   | 632.8  | 446.8  | 330.6  | 325.5  | 289.6  | 370.5  | 576.5  | 523.6  | 458.2  | 439.9  | 434.8  |
| 77.5° | 370.5  | 318.7  | 293.1  | 297.6  | 258.4  | 336.3  | 553.2  | 497.9  | 433.1  | 411.5  | 405.8  |
| 80°   | 269.8  | 238.4  | 249.8  | 257.2  | 220.8  | 302.2  | 521.8  | 466.6  | 405.2  | 415.9  | 408.1  |
| 82.5° | 172.9  | 153.6  | 202.5  | 210.0  | 183.8  | 267.4  | 487.8  | 433.6  | 365.9  | 332.3  | 324.4  |
| 85°   | 88.2   | 97.4   | 150.8  | 159.9  | 141.7  | 219.6  | 446.1  | 389.8  | 321.6  | 276.5  | 281.2  |
| 87.5° | 49.5   | 66.5   | 96.1   | 107.5  | 100.2  | 169.1  | 361.9  | 321.6  | 262.3  | 213.4  | 187.8  |
| 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)