

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: P197812

Luminaire Tested: **TT-C4-LED-E1-WQ-CG-LWR-LW-7060**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197812  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115528)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: MCGRAW-EDISON  
Catalog Number: TT-C4-LED-E1-WQ-CG-LWR-LW-7060  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
WIDE DISTRIBUTION WITH CLEAR GLASS LENS AND LumaWatt WIRELESS SENSOR  
Light Source: (160) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5883 lumens  
Efficiency: N/A  
Efficacy: 101.4 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B3 - U0 - G1

Input Watts (W): 58  
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

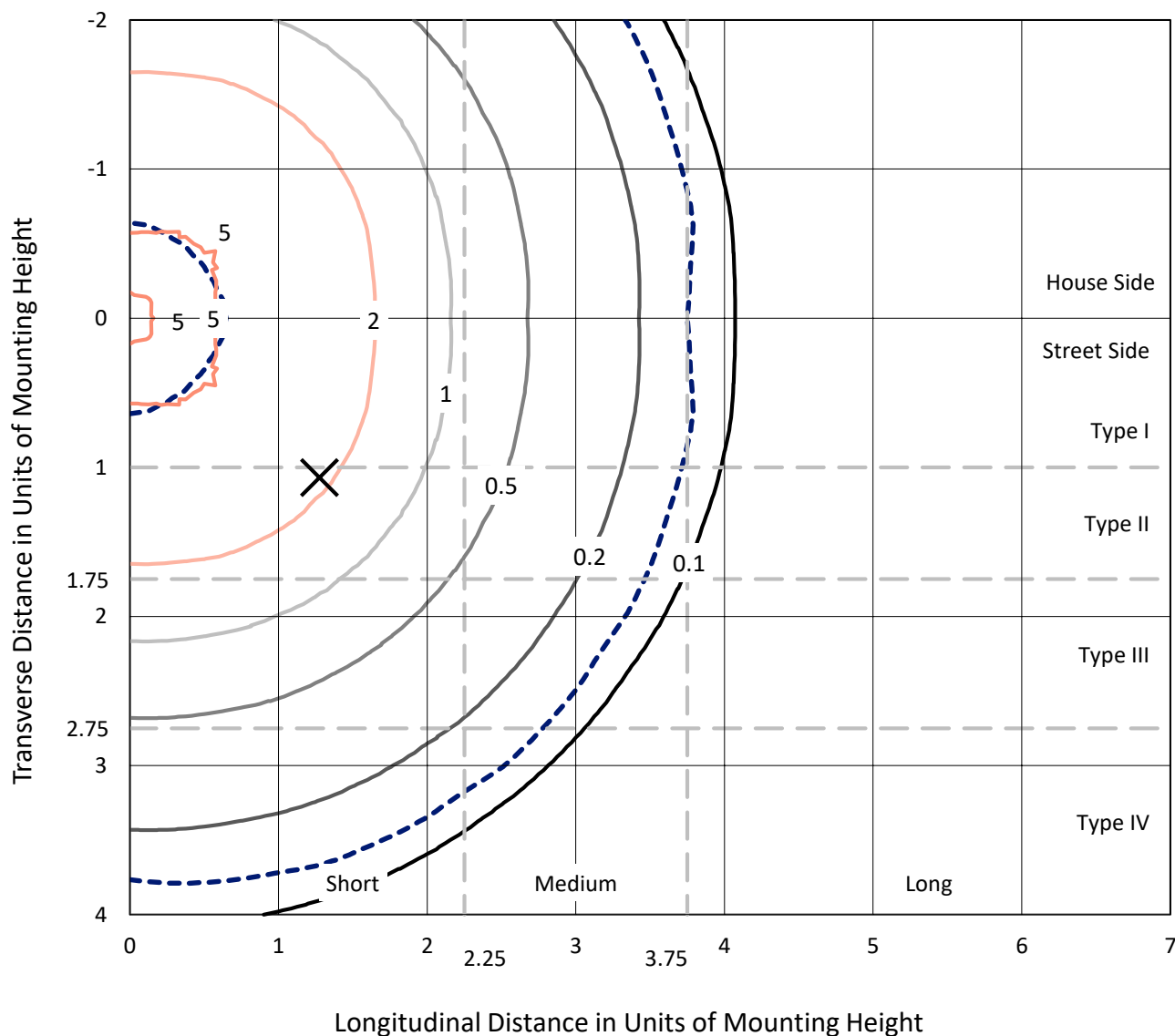


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

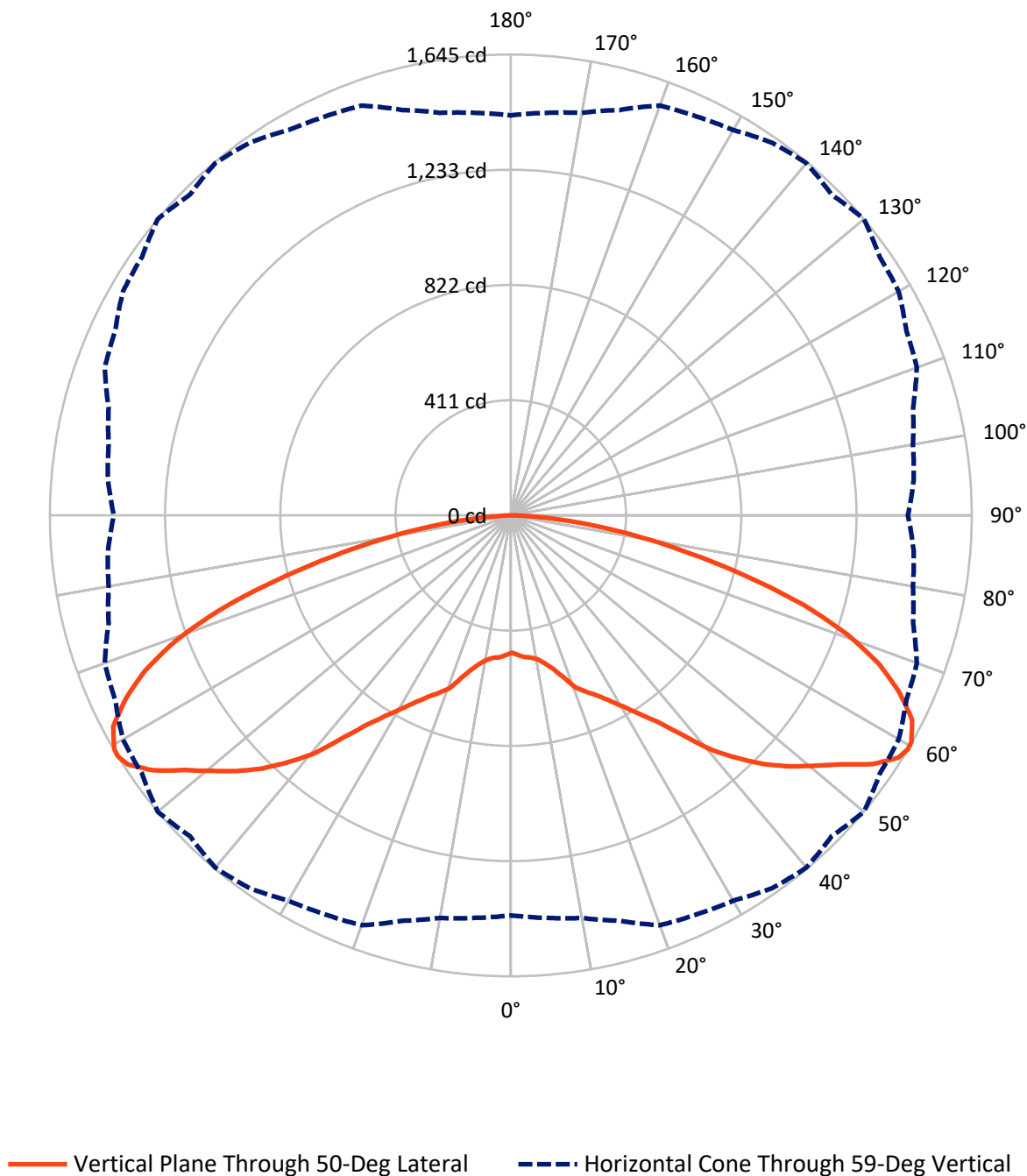


Based on 10 foot mounting height. Maximum calculated value = 5.4 fc  
 Type V - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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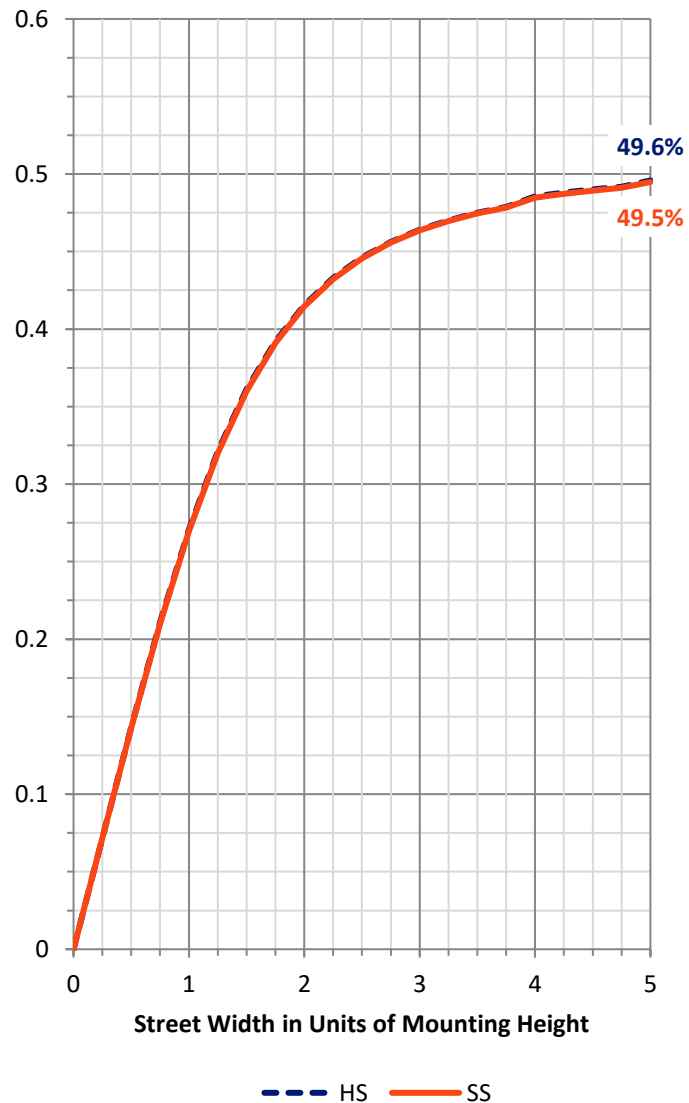
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2941.5   | 0.0    | 2941.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2941.5   | 0.0    | 2941.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 5883.0   | 0.0    | 5883.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 48.7   | 0.8       |
| 10°-20°   | 164.3  | 2.8       |
| 20°-30°   | 330.7  | 5.6       |
| 30°-40°   | 569.0  | 9.7       |
| 40°-50°   | 939.4  | 16.0      |
| 50°-60°   | 1322.8 | 22.5      |
| 60°-70°   | 1415.1 | 24.1      |
| 70°-80°   | 898.8  | 15.3      |
| 80°-90°   | 194.3  | 3.3       |
| 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°    | 5883.0 | 100.0     |
| 0°-180°   | 5883.0 | 100.0     |

**Coefficient of Utilization**



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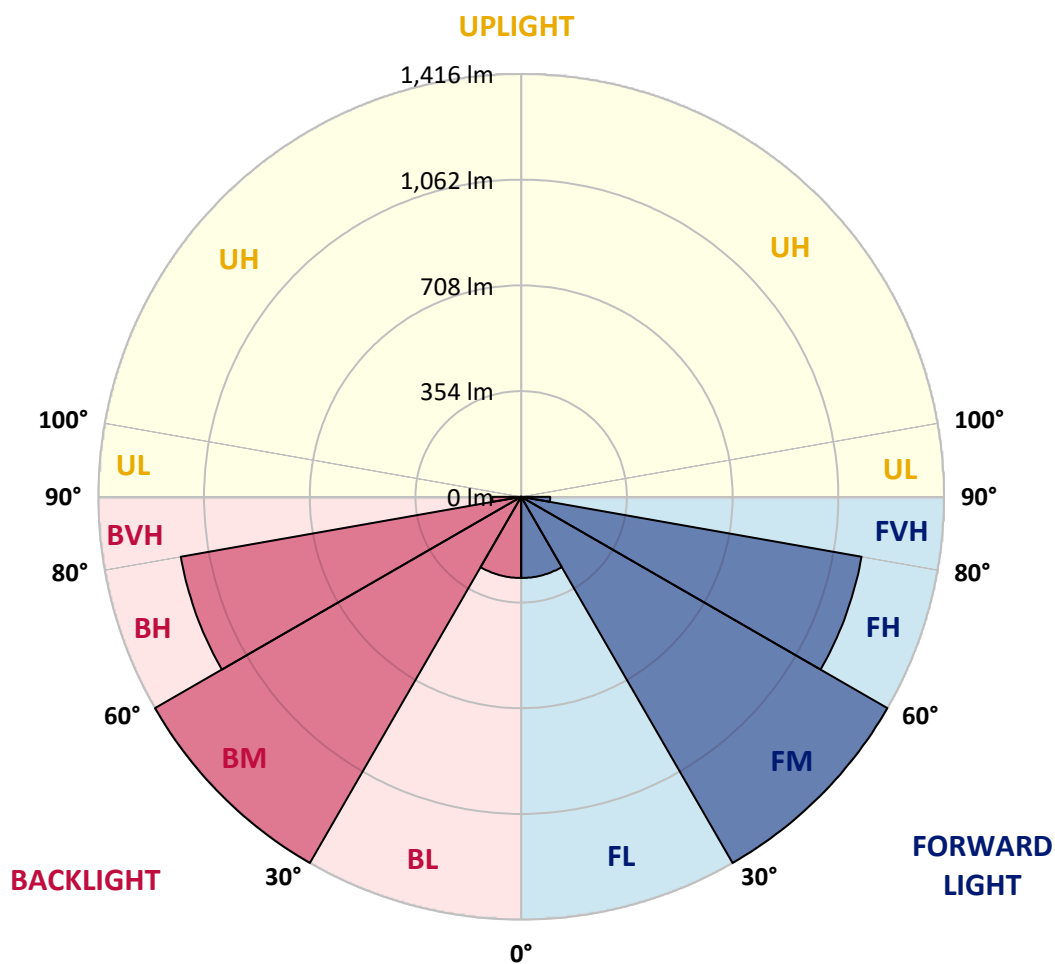
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 271.8  | 4.6       |                         |      |         |
| FM   | (30°-60°)   | 1415.6 | 24.1      |                         |      |         |
| FH   | (60°-80°)   | 1157.0 | 19.7      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 97.1   | 1.7       |                         |      | G1/100  |
| BL   | (0°-30°)    | 271.8  | 4.6       | B1/500                  |      |         |
| BM   | (30°-60°)   | 1415.6 | 24.1      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 1157.0 | 19.7      | B3/2500                 |      | G1/1800 |
| BVH  | (80°-90°)   | 97.1   | 1.7       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G1**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  |
| 2.5°  | 500.0  | 498.7  | 498.7  | 498.7  | 498.7  | 498.7  | 498.7  | 498.7  | 498.7  | 498.7  | 498.7  |
| 5°    | 502.6  | 502.6  | 503.9  | 503.9  | 505.2  | 505.2  | 505.2  | 506.5  | 506.5  | 506.5  | 507.8  |
| 7.5°  | 507.8  | 506.5  | 507.8  | 507.8  | 507.8  | 509.1  | 509.1  | 509.1  | 510.4  | 511.8  | 511.8  |
| 10°   | 524.8  | 523.5  | 524.8  | 524.8  | 524.8  | 522.2  | 522.2  | 523.5  | 522.2  | 522.2  | 522.2  |
| 12.5° | 544.3  | 544.3  | 545.6  | 546.9  | 546.9  | 545.6  | 544.3  | 543.0  | 541.7  | 541.7  | 541.7  |
| 15°   | 562.5  | 563.8  | 565.1  | 567.7  | 569.0  | 569.0  | 570.3  | 571.7  | 570.3  | 570.3  | 569.0  |
| 17.5° | 591.2  | 593.8  | 595.1  | 596.4  | 596.4  | 596.4  | 599.0  | 602.9  | 606.8  | 609.4  | 606.8  |
| 20°   | 639.4  | 640.7  | 643.3  | 643.3  | 642.0  | 643.3  | 645.9  | 647.2  | 649.8  | 652.4  | 653.7  |
| 22.5° | 671.9  | 674.5  | 678.4  | 678.4  | 677.1  | 678.4  | 681.0  | 681.0  | 678.4  | 679.7  | 682.3  |
| 25°   | 699.3  | 700.6  | 703.2  | 704.5  | 705.8  | 712.3  | 717.5  | 716.2  | 711.0  | 712.3  | 711.0  |
| 27.5° | 731.8  | 734.4  | 737.0  | 737.0  | 737.0  | 740.9  | 746.1  | 748.7  | 752.7  | 751.3  | 747.4  |
| 30°   | 774.8  | 778.7  | 780.0  | 778.7  | 781.3  | 785.2  | 783.9  | 786.5  | 793.0  | 799.5  | 791.7  |
| 32.5° | 808.6  | 812.6  | 816.5  | 821.7  | 830.8  | 836.0  | 833.4  | 834.7  | 838.6  | 843.8  | 843.8  |
| 35°   | 859.4  | 865.9  | 868.5  | 869.8  | 879.0  | 889.4  | 897.2  | 903.7  | 902.4  | 898.5  | 905.0  |
| 37.5° | 936.3  | 942.8  | 945.4  | 950.6  | 962.3  | 964.9  | 976.6  | 992.2  | 997.5  | 992.2  | 992.2  |
| 40°   | 1018.3 | 1024.8 | 1037.8 | 1049.5 | 1067.8 | 1071.7 | 1086.0 | 1092.5 | 1105.5 | 1106.8 | 1099.0 |
| 42.5° | 1086.0 | 1093.8 | 1096.4 | 1116.0 | 1140.7 | 1158.9 | 1174.6 | 1175.9 | 1185.0 | 1192.8 | 1183.7 |
| 45°   | 1158.9 | 1165.4 | 1169.3 | 1187.6 | 1200.6 | 1222.7 | 1247.5 | 1257.9 | 1261.8 | 1260.5 | 1265.7 |
| 47.5° | 1226.6 | 1235.8 | 1239.7 | 1254.0 | 1269.6 | 1287.8 | 1302.2 | 1332.1 | 1338.6 | 1325.6 | 1337.3 |
| 50°   | 1268.3 | 1278.7 | 1287.8 | 1319.1 | 1346.4 | 1360.8 | 1372.5 | 1397.2 | 1411.5 | 1399.8 | 1403.7 |
| 52.5° | 1333.4 | 1336.0 | 1343.8 | 1356.9 | 1397.2 | 1445.4 | 1458.4 | 1466.2 | 1487.1 | 1493.6 | 1475.4 |
| 55°   | 1422.0 | 1431.1 | 1437.6 | 1454.5 | 1471.4 | 1505.3 | 1562.6 | 1573.0 | 1567.8 | 1599.1 | 1566.5 |
| 57.5° | 1435.0 | 1451.9 | 1471.4 | 1509.2 | 1543.1 | 1553.5 | 1587.3 | 1627.7 | 1623.8 | 1627.7 | 1630.3 |
| 59°   | 1427.2 | 1441.5 | 1458.4 | 1497.5 | 1556.1 | 1570.4 | 1587.3 | 1623.8 | 1640.7 | 1618.6 | 1644.6 |
| 60°   | 1429.8 | 1440.2 | 1449.3 | 1480.6 | 1543.1 | 1575.6 | 1586.0 | 1608.2 | 1640.7 | 1610.8 | 1642.0 |
| 62.5° | 1419.4 | 1432.4 | 1442.8 | 1461.0 | 1491.0 | 1536.6 | 1576.9 | 1566.5 | 1613.4 | 1589.9 | 1606.9 |
| 65°   | 1363.4 | 1377.7 | 1398.5 | 1424.6 | 1459.7 | 1472.7 | 1513.1 | 1535.3 | 1524.8 | 1550.9 | 1523.5 |
| 67.5° | 1269.6 | 1282.6 | 1295.7 | 1326.9 | 1366.0 | 1382.9 | 1393.3 | 1433.7 | 1419.4 | 1449.3 | 1418.1 |
| 70°   | 1144.6 | 1158.9 | 1177.2 | 1194.1 | 1229.2 | 1243.6 | 1255.3 | 1273.5 | 1278.7 | 1278.7 | 1276.1 |
| 72.5° | 994.9  | 1006.6 | 1018.3 | 1035.2 | 1056.1 | 1069.1 | 1074.3 | 1078.2 | 1099.0 | 1091.2 | 1092.5 |
| 75°   | 825.6  | 837.3  | 842.5  | 849.0  | 863.3  | 862.0  | 867.2  | 864.6  | 877.7  | 872.5  | 869.8  |
| 77.5° | 645.9  | 649.8  | 664.1  | 664.1  | 660.2  | 666.7  | 660.2  | 656.3  | 653.7  | 656.3  | 656.3  |
| 80°   | 447.9  | 459.7  | 468.8  | 475.3  | 477.9  | 475.3  | 476.6  | 471.4  | 471.4  | 467.5  | 468.8  |
| 82.5° | 276.1  | 287.8  | 291.7  | 298.2  | 299.5  | 299.5  | 299.5  | 295.6  | 296.9  | 293.0  | 295.6  |
| 85°   | 135.4  | 135.4  | 140.6  | 147.1  | 148.4  | 151.1  | 151.1  | 151.1  | 151.1  | 151.1  | 152.4  |
| 87.5° | 33.9   | 33.9   | 36.5   | 40.4   | 40.4   | 41.7   | 43.0   | 44.3   | 44.3   | 45.6   | 45.6   |
| 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):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  | 489.6  |
| 2.5°  | 498.7  | 498.7  | 498.7  | 498.7  | 498.7  | 498.7  | 498.7  | 498.7  |
| 5°    | 507.8  | 506.5  | 506.5  | 505.2  | 505.2  | 503.9  | 503.9  | 503.9  |
| 7.5°  | 513.1  | 513.1  | 511.8  | 510.4  | 509.1  | 509.1  | 510.4  | 510.4  |
| 10°   | 523.5  | 526.1  | 527.4  | 527.4  | 526.1  | 526.1  | 524.8  | 524.8  |
| 12.5° | 540.4  | 543.0  | 545.6  | 548.2  | 548.2  | 546.9  | 544.3  | 543.0  |
| 15°   | 566.4  | 566.4  | 567.7  | 569.0  | 569.0  | 566.4  | 561.2  | 561.2  |
| 17.5° | 601.6  | 599.0  | 595.1  | 596.4  | 597.7  | 596.4  | 591.2  | 593.8  |
| 20°   | 649.8  | 644.6  | 642.0  | 639.4  | 644.6  | 644.6  | 636.8  | 636.8  |
| 22.5° | 684.9  | 681.0  | 674.5  | 673.2  | 677.1  | 679.7  | 673.2  | 669.3  |
| 25°   | 714.9  | 716.2  | 708.4  | 704.5  | 705.8  | 707.1  | 698.0  | 699.3  |
| 27.5° | 747.4  | 748.7  | 744.8  | 738.3  | 735.7  | 739.6  | 733.1  | 730.5  |
| 30°   | 786.5  | 785.2  | 787.8  | 780.0  | 773.5  | 777.4  | 777.4  | 770.9  |
| 32.5° | 837.3  | 833.4  | 834.7  | 825.6  | 817.8  | 816.5  | 811.2  | 803.4  |
| 35°   | 906.3  | 895.9  | 888.1  | 882.9  | 868.5  | 865.9  | 865.9  | 856.8  |
| 37.5° | 996.2  | 980.5  | 966.2  | 966.2  | 944.1  | 937.6  | 941.5  | 929.7  |
| 40°   | 1096.4 | 1091.2 | 1069.1 | 1065.2 | 1041.7 | 1026.1 | 1026.1 | 1011.8 |
| 42.5° | 1169.3 | 1175.9 | 1149.8 | 1134.2 | 1118.6 | 1093.8 | 1096.4 | 1078.2 |
| 45°   | 1248.8 | 1244.9 | 1222.7 | 1195.4 | 1190.2 | 1164.1 | 1166.7 | 1148.5 |
| 47.5° | 1324.3 | 1300.9 | 1290.4 | 1263.1 | 1251.4 | 1221.4 | 1230.5 | 1216.2 |
| 50°   | 1397.2 | 1371.2 | 1360.8 | 1328.2 | 1312.6 | 1280.0 | 1281.3 | 1255.3 |
| 52.5° | 1472.7 | 1449.3 | 1433.7 | 1392.0 | 1364.7 | 1341.2 | 1336.0 | 1324.3 |
| 55°   | 1570.4 | 1545.7 | 1507.9 | 1468.8 | 1448.0 | 1414.2 | 1418.1 | 1399.8 |
| 57.5° | 1608.2 | 1592.5 | 1552.2 | 1528.7 | 1489.7 | 1455.8 | 1448.0 | 1415.5 |
| 59°   | 1606.9 | 1597.8 | 1557.4 | 1541.8 | 1485.8 | 1457.1 | 1442.8 | 1416.8 |
| 60°   | 1597.8 | 1595.2 | 1554.8 | 1535.3 | 1476.7 | 1450.6 | 1437.6 | 1420.7 |
| 62.5° | 1570.4 | 1569.1 | 1523.5 | 1500.1 | 1451.9 | 1431.1 | 1423.3 | 1401.1 |
| 65°   | 1530.0 | 1507.9 | 1472.7 | 1457.1 | 1407.6 | 1392.0 | 1369.9 | 1347.7 |
| 67.5° | 1433.7 | 1384.2 | 1379.0 | 1359.5 | 1316.5 | 1297.0 | 1282.6 | 1261.8 |
| 70°   | 1274.8 | 1242.3 | 1242.3 | 1217.5 | 1187.6 | 1178.5 | 1158.9 | 1135.5 |
| 72.5° | 1076.9 | 1069.1 | 1073.0 | 1044.3 | 1030.0 | 1024.8 | 1007.9 | 987.0  |
| 75°   | 860.7  | 862.0  | 858.1  | 851.6  | 847.7  | 849.0  | 830.8  | 821.7  |
| 77.5° | 652.4  | 664.1  | 661.5  | 652.4  | 661.5  | 660.2  | 644.6  | 640.7  |
| 80°   | 464.9  | 470.1  | 472.7  | 467.5  | 472.7  | 468.8  | 455.8  | 454.5  |
| 82.5° | 293.0  | 294.3  | 296.9  | 291.7  | 293.0  | 291.7  | 282.6  | 282.6  |
| 85°   | 149.7  | 155.0  | 148.4  | 143.2  | 143.2  | 138.0  | 135.4  | 136.7  |
| 87.5° | 44.3   | 46.9   | 41.7   | 41.7   | 39.1   | 36.5   | 35.2   | 35.2   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)