

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: P197545

Luminaire Tested: **TT-C4-LED-E1-CQ-MS/DIM-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197545  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P115423)  
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-CQ-MS/DIM-8030  
Description: TOPTIER LED PARKING GARAGE LUMINAIRE  
CONCENTRATED DISTRIBUTION WITH DIMMING OCCUPANCY SENSOR  
Light Source: (160) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5547 lumens  
Efficiency: N/A  
Efficacy: 95.6 lumens/watt  
Luminous Opening: Circular (Dia: 1.12' x H: 0')  
IES Classification: Type V - Short - Full Cutoff  
BUG Rating: B2 - 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

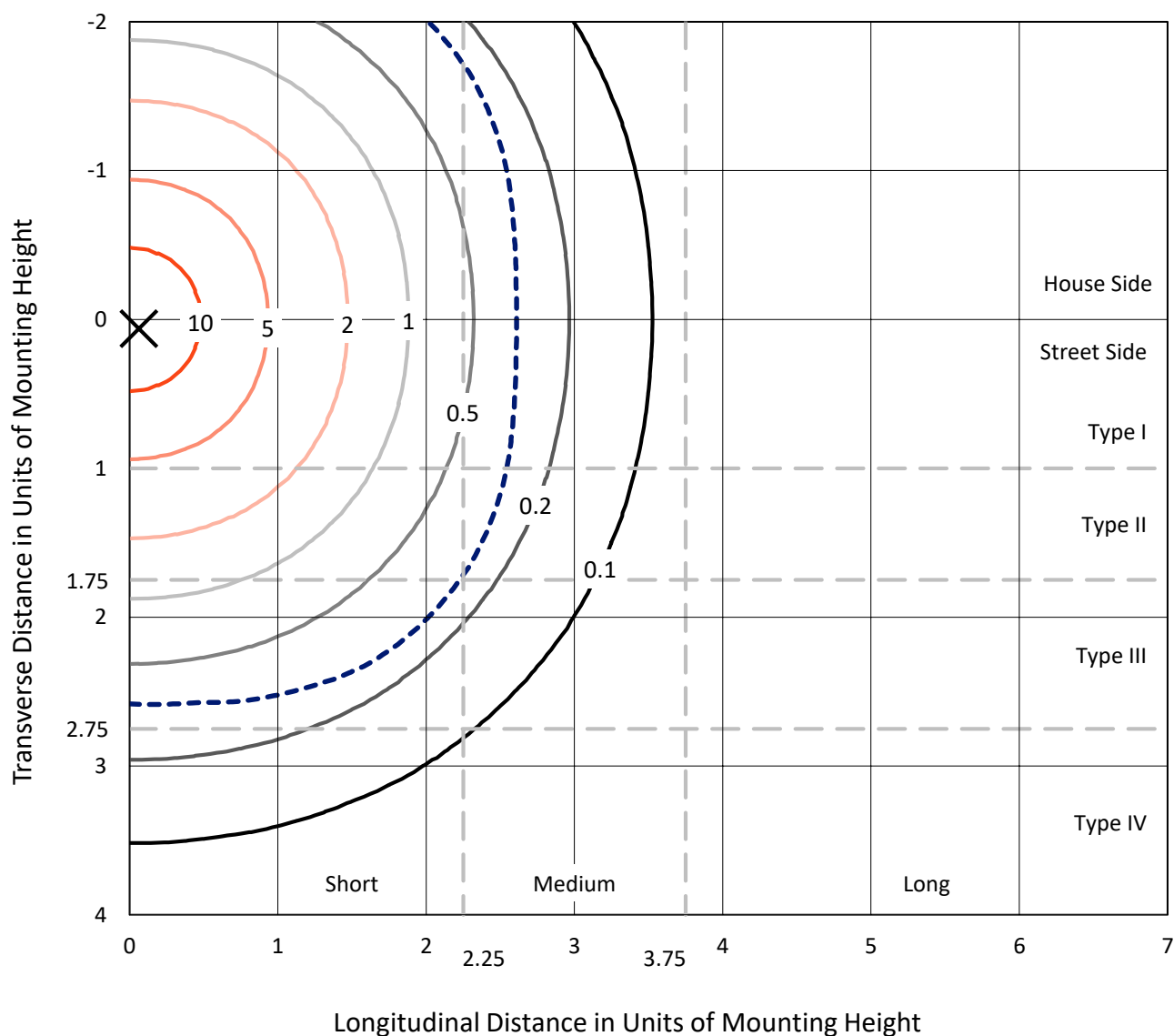


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

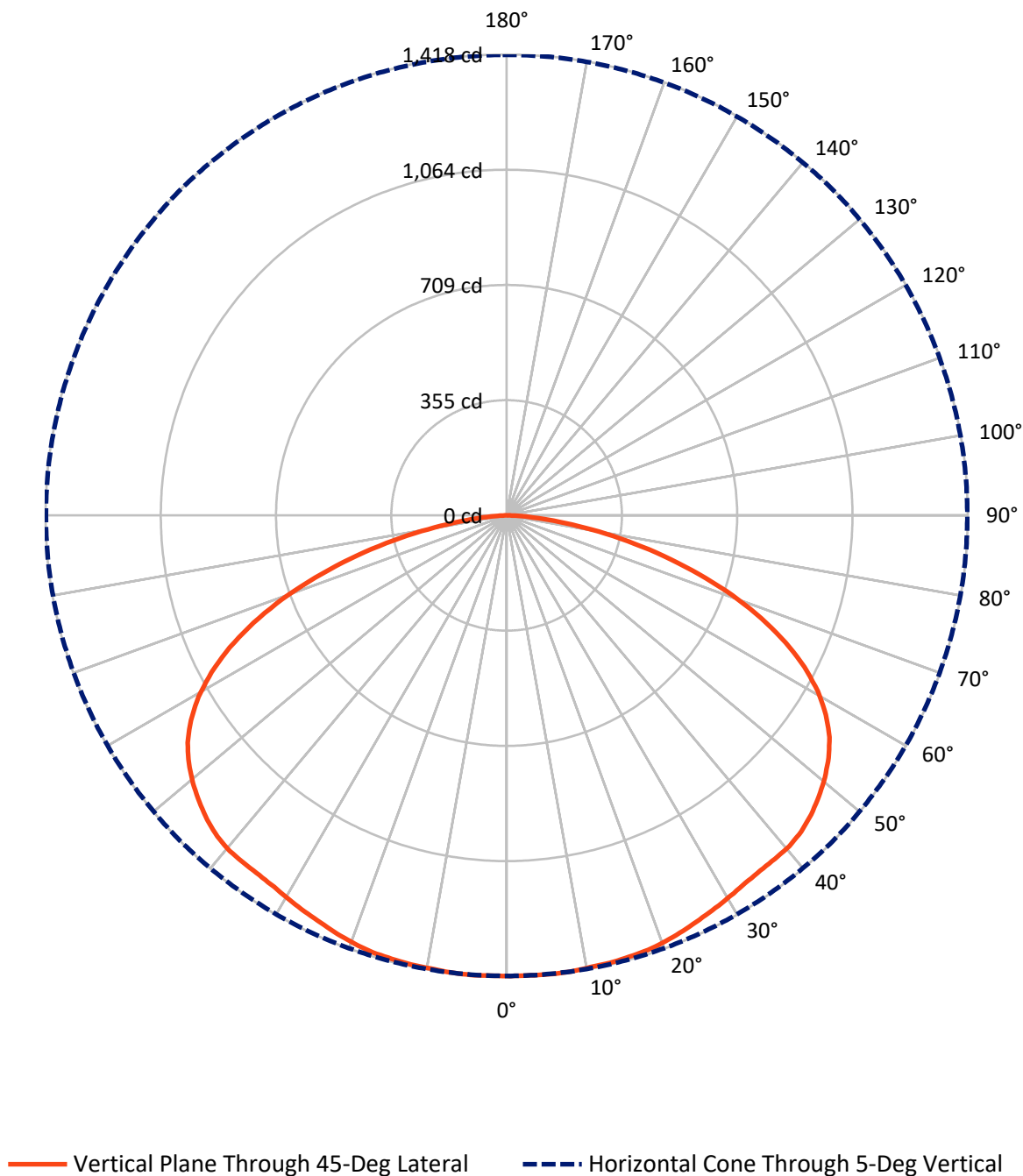


Based on 10 foot mounting height. Maximum calculated value = 14.2 fc  
 Type V - Short - Full Cutoff

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## Luminous Intensity Polar Plot



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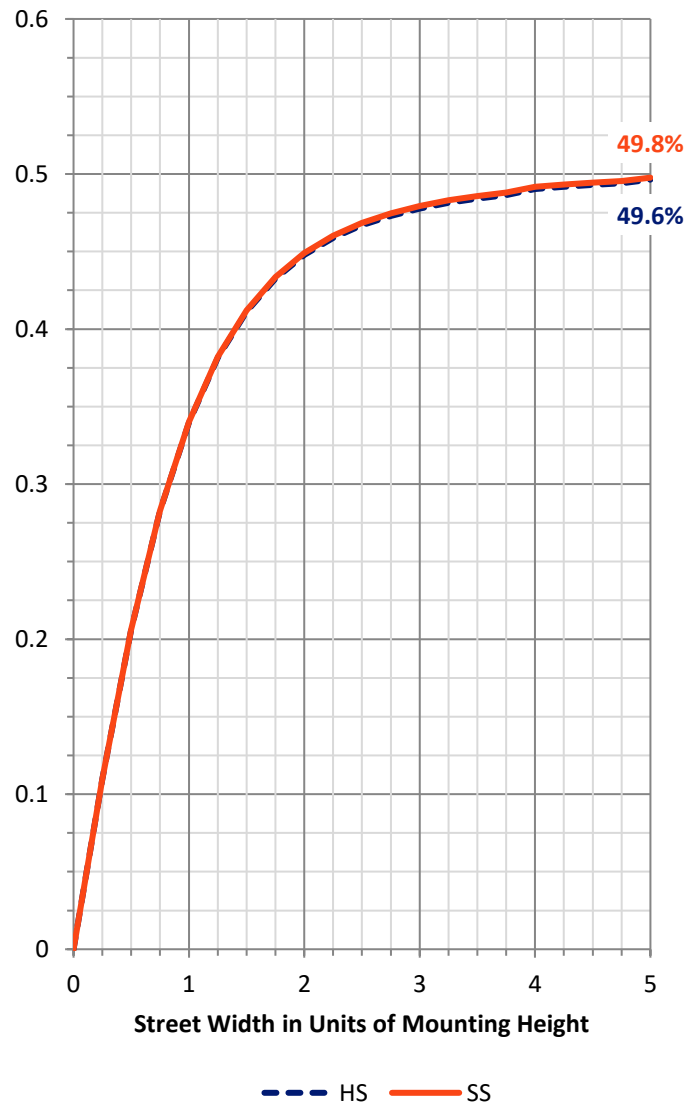
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 2773.5   | 0.0    | 2773.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Street Side</b> | Lumens    | 2773.5   | 0.0    | 2773.5 |
|                    | % Fixture | 50.0     | 0.0    | 50.0   |
| <b>Total</b>       | Lumens    | 5547.0   | 0.0    | 5547.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 135.2  | 2.4       |
| 10°-20°   | 398.7  | 7.2       |
| 20°-30°   | 636.2  | 11.5      |
| 30°-40°   | 838.0  | 15.1      |
| 40°-50°   | 996.9  | 18.0      |
| 50°-60°   | 1043.3 | 18.8      |
| 60°-70°   | 887.2  | 16.0      |
| 70°-80°   | 504.2  | 9.1       |
| 80°-90°   | 107.2  | 1.9       |
| 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°    | 5547.0 | 100.0     |
| 0°-180°   | 5547.0 | 100.0     |

**Coefficient of Utilization**



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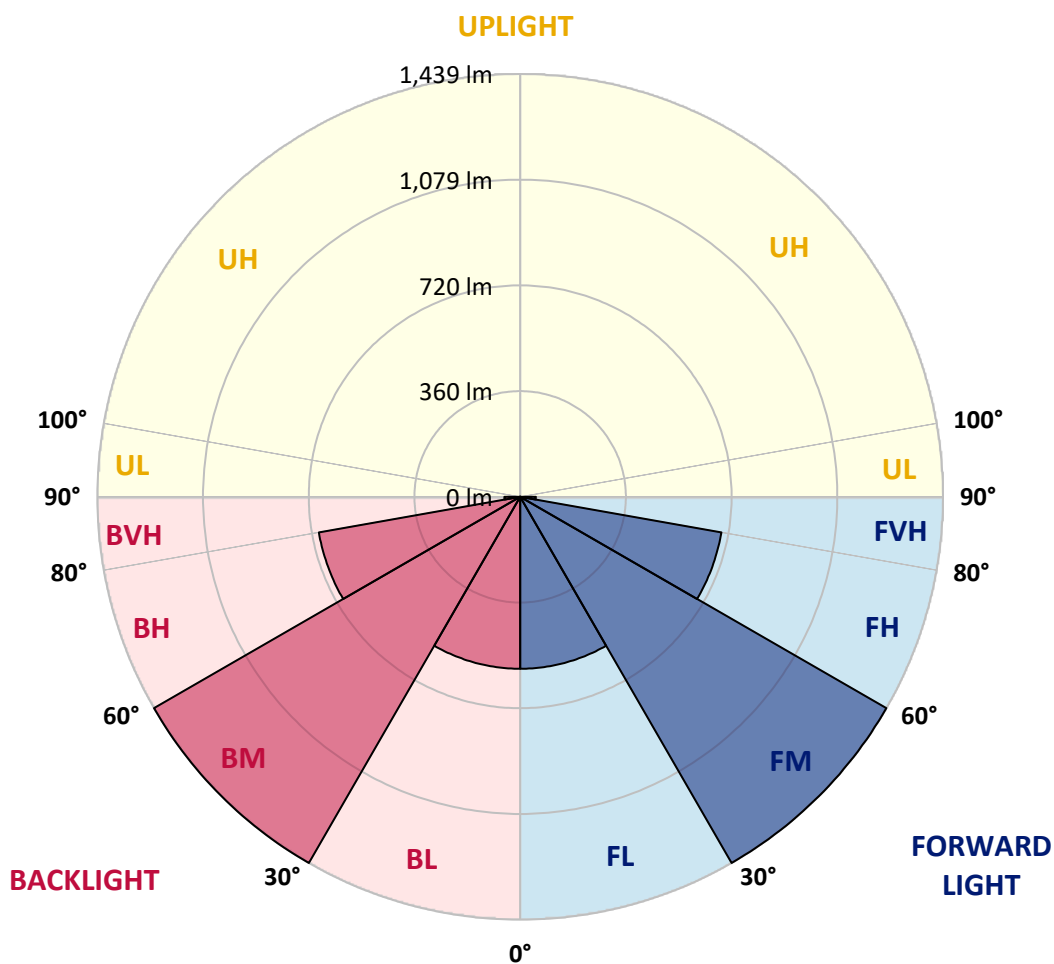
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 585.1  | 10.5      |                         |      |         |
| FM   | (30°-60°)   | 1439.1 | 25.9      |                         |      |         |
| FH   | (60°-80°)   | 695.7  | 12.5      |                         |      | G1/1800 |
| FVH  | (80°-90°)   | 53.6   | 1.0       |                         |      | G1/100  |
| BL   | (0°-30°)    | 585.1  | 10.5      | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1439.1 | 25.9      | B2/2500                 |      |         |
| BH   | (60°-80°)   | 695.7  | 12.5      | B2/1000                 |      | G1/1800 |
| BVH  | (80°-90°)   | 53.6   | 1.0       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G1**

Type V Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 |
| 2.5°  | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 |
| 5°    | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1418.3 | 1417.2 |
| 7.5°  | 1416.1 | 1416.1 | 1416.1 | 1416.1 | 1417.2 | 1416.1 | 1416.1 | 1417.2 | 1417.2 | 1417.2 | 1417.2 |
| 10°   | 1413.9 | 1412.8 | 1412.8 | 1413.9 | 1413.9 | 1413.9 | 1413.9 | 1413.9 | 1415.0 | 1413.9 | 1413.9 |
| 12.5° | 1410.7 | 1409.6 | 1410.7 | 1410.7 | 1410.7 | 1411.8 | 1411.8 | 1411.8 | 1412.8 | 1412.8 | 1411.8 |
| 15°   | 1407.4 | 1407.4 | 1407.4 | 1407.4 | 1407.4 | 1408.5 | 1408.5 | 1409.6 | 1409.6 | 1409.6 | 1409.6 |
| 17.5° | 1403.0 | 1403.0 | 1403.0 | 1404.1 | 1404.1 | 1405.2 | 1405.2 | 1405.2 | 1406.3 | 1406.3 | 1406.3 |
| 20°   | 1395.3 | 1394.3 | 1395.3 | 1395.3 | 1396.4 | 1397.5 | 1397.5 | 1398.6 | 1398.6 | 1398.6 | 1398.6 |
| 22.5° | 1384.4 | 1384.4 | 1385.5 | 1385.5 | 1386.6 | 1387.7 | 1387.7 | 1388.8 | 1388.8 | 1388.8 | 1388.8 |
| 25°   | 1373.5 | 1374.6 | 1374.6 | 1375.7 | 1375.7 | 1376.8 | 1377.9 | 1377.9 | 1377.9 | 1377.9 | 1377.9 |
| 27.5° | 1362.5 | 1363.6 | 1363.6 | 1363.6 | 1364.7 | 1365.8 | 1366.9 | 1368.0 | 1369.1 | 1368.0 | 1368.0 |
| 30°   | 1350.5 | 1350.5 | 1351.6 | 1352.7 | 1353.8 | 1354.9 | 1357.1 | 1358.2 | 1359.3 | 1358.2 | 1358.2 |
| 32.5° | 1337.4 | 1338.5 | 1339.6 | 1340.7 | 1342.9 | 1345.0 | 1347.2 | 1348.3 | 1349.4 | 1348.3 | 1348.3 |
| 35°   | 1327.6 | 1327.6 | 1329.7 | 1331.9 | 1334.1 | 1337.4 | 1339.6 | 1341.8 | 1344.0 | 1342.9 | 1341.8 |
| 37.5° | 1317.7 | 1317.7 | 1319.9 | 1323.2 | 1327.6 | 1331.9 | 1336.3 | 1339.6 | 1340.7 | 1340.7 | 1339.6 |
| 40°   | 1305.7 | 1306.8 | 1309.0 | 1314.4 | 1321.0 | 1326.5 | 1331.9 | 1336.3 | 1338.5 | 1338.5 | 1336.3 |
| 42.5° | 1292.6 | 1293.7 | 1296.9 | 1302.4 | 1310.1 | 1316.6 | 1323.2 | 1326.5 | 1329.7 | 1329.7 | 1327.6 |
| 45°   | 1274.0 | 1275.1 | 1279.4 | 1284.9 | 1292.6 | 1299.1 | 1306.8 | 1310.1 | 1314.4 | 1313.3 | 1312.2 |
| 47.5° | 1249.9 | 1251.0 | 1255.4 | 1260.8 | 1268.5 | 1276.2 | 1283.8 | 1289.3 | 1292.6 | 1292.6 | 1291.5 |
| 50°   | 1220.4 | 1221.5 | 1225.9 | 1231.3 | 1241.2 | 1249.9 | 1257.6 | 1263.0 | 1268.5 | 1268.5 | 1267.4 |
| 52.5° | 1183.2 | 1185.4 | 1188.7 | 1196.3 | 1207.3 | 1217.1 | 1226.9 | 1235.7 | 1239.0 | 1240.1 | 1239.0 |
| 55°   | 1137.3 | 1139.5 | 1143.8 | 1152.6 | 1164.6 | 1176.6 | 1187.6 | 1197.4 | 1201.8 | 1205.1 | 1202.9 |
| 57.5° | 1083.7 | 1085.9 | 1091.3 | 1101.2 | 1114.3 | 1126.3 | 1140.6 | 1151.5 | 1154.8 | 1158.1 | 1157.0 |
| 60°   | 1020.3 | 1023.5 | 1029.0 | 1040.0 | 1053.1 | 1066.2 | 1079.3 | 1092.4 | 1095.7 | 1100.1 | 1097.9 |
| 62.5° | 945.9  | 949.2  | 954.7  | 966.7  | 980.9  | 992.9  | 1008.2 | 1020.3 | 1023.5 | 1027.9 | 1026.8 |
| 65°   | 860.6  | 863.9  | 869.4  | 882.5  | 895.6  | 908.7  | 922.9  | 936.1  | 939.3  | 943.7  | 942.6  |
| 67.5° | 763.3  | 766.6  | 772.0  | 787.3  | 800.5  | 813.6  | 825.6  | 838.7  | 840.9  | 845.3  | 844.2  |
| 70°   | 660.5  | 664.9  | 669.2  | 683.5  | 695.5  | 706.4  | 719.5  | 730.5  | 734.9  | 737.0  | 734.9  |
| 72.5° | 557.7  | 561.0  | 565.4  | 575.2  | 583.9  | 593.8  | 606.9  | 614.6  | 617.8  | 618.9  | 618.9  |
| 75°   | 451.6  | 454.9  | 454.9  | 465.8  | 472.4  | 477.9  | 488.8  | 494.3  | 496.5  | 498.7  | 498.7  |
| 77.5° | 351.0  | 348.8  | 351.0  | 355.4  | 359.8  | 364.1  | 370.7  | 374.0  | 376.2  | 380.5  | 378.4  |
| 80°   | 246.0  | 247.1  | 248.2  | 251.5  | 253.7  | 254.8  | 259.2  | 260.3  | 261.4  | 265.7  | 263.5  |
| 82.5° | 158.6  | 156.4  | 158.6  | 157.5  | 159.7  | 156.4  | 158.6  | 161.8  | 159.7  | 161.8  | 162.9  |
| 85°   | 83.1   | 79.8   | 79.8   | 80.9   | 82.0   | 79.8   | 80.9   | 79.8   | 79.8   | 82.0   | 80.9   |
| 87.5° | 26.2   | 25.2   | 26.2   | 25.2   | 26.2   | 25.2   | 26.2   | 27.3   | 26.2   | 26.2   | 27.3   |
| 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°    | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 |
| 2.5°  | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 |
| 5°    | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 | 1417.2 |
| 7.5°  | 1416.1 | 1416.1 | 1416.1 | 1416.1 | 1416.1 | 1416.1 | 1415.0 | 1416.1 |
| 10°   | 1413.9 | 1413.9 | 1413.9 | 1413.9 | 1412.8 | 1412.8 | 1412.8 | 1412.8 |
| 12.5° | 1411.8 | 1411.8 | 1410.7 | 1410.7 | 1410.7 | 1410.7 | 1409.6 | 1409.6 |
| 15°   | 1409.6 | 1408.5 | 1408.5 | 1407.4 | 1407.4 | 1407.4 | 1406.3 | 1407.4 |
| 17.5° | 1406.3 | 1405.2 | 1405.2 | 1404.1 | 1404.1 | 1403.0 | 1403.0 | 1403.0 |
| 20°   | 1398.6 | 1397.5 | 1397.5 | 1396.4 | 1396.4 | 1395.3 | 1394.3 | 1394.3 |
| 22.5° | 1387.7 | 1387.7 | 1387.7 | 1386.6 | 1385.5 | 1385.5 | 1384.4 | 1384.4 |
| 25°   | 1377.9 | 1376.8 | 1376.8 | 1375.7 | 1374.6 | 1374.6 | 1373.5 | 1373.5 |
| 27.5° | 1368.0 | 1366.9 | 1365.8 | 1363.6 | 1363.6 | 1362.5 | 1361.4 | 1360.4 |
| 30°   | 1357.1 | 1354.9 | 1352.7 | 1351.6 | 1350.5 | 1348.3 | 1347.2 | 1346.1 |
| 32.5° | 1346.1 | 1344.0 | 1341.8 | 1339.6 | 1336.3 | 1335.2 | 1333.0 | 1333.0 |
| 35°   | 1339.6 | 1336.3 | 1333.0 | 1328.6 | 1325.4 | 1322.1 | 1319.9 | 1318.8 |
| 37.5° | 1336.3 | 1331.9 | 1326.5 | 1321.0 | 1315.5 | 1311.1 | 1307.9 | 1307.9 |
| 40°   | 1331.9 | 1326.5 | 1319.9 | 1312.2 | 1305.7 | 1300.2 | 1296.9 | 1295.8 |
| 42.5° | 1323.2 | 1317.7 | 1309.0 | 1302.4 | 1293.7 | 1288.2 | 1283.8 | 1282.7 |
| 45°   | 1307.9 | 1302.4 | 1294.7 | 1286.0 | 1277.2 | 1270.7 | 1266.3 | 1265.2 |
| 47.5° | 1288.2 | 1281.6 | 1272.9 | 1264.1 | 1255.4 | 1247.7 | 1243.3 | 1242.3 |
| 50°   | 1263.0 | 1256.5 | 1247.7 | 1239.0 | 1229.1 | 1221.5 | 1216.0 | 1216.0 |
| 52.5° | 1234.6 | 1226.9 | 1217.1 | 1207.3 | 1196.3 | 1188.7 | 1183.2 | 1182.1 |
| 55°   | 1197.4 | 1188.7 | 1178.8 | 1167.9 | 1155.9 | 1147.1 | 1140.6 | 1139.5 |
| 57.5° | 1151.5 | 1141.6 | 1130.7 | 1118.7 | 1106.7 | 1096.8 | 1089.2 | 1088.1 |
| 60°   | 1093.5 | 1082.6 | 1071.7 | 1059.6 | 1046.5 | 1035.6 | 1027.9 | 1025.7 |
| 62.5° | 1022.5 | 1010.4 | 998.4  | 987.5  | 973.2  | 962.3  | 954.7  | 952.5  |
| 65°   | 938.3  | 928.4  | 916.4  | 903.3  | 887.9  | 877.0  | 869.4  | 868.3  |
| 67.5° | 839.8  | 830.0  | 818.0  | 805.9  | 790.6  | 780.8  | 773.1  | 770.9  |
| 70°   | 731.6  | 722.8  | 713.0  | 701.0  | 687.8  | 678.0  | 670.3  | 669.2  |
| 72.5° | 616.8  | 609.1  | 600.4  | 591.6  | 578.5  | 570.8  | 564.3  | 563.2  |
| 75°   | 498.7  | 491.0  | 484.4  | 477.9  | 468.0  | 462.6  | 456.0  | 456.0  |
| 77.5° | 378.4  | 376.2  | 371.8  | 364.1  | 358.7  | 354.3  | 351.0  | 348.8  |
| 80°   | 264.6  | 262.4  | 260.3  | 255.9  | 252.6  | 251.5  | 249.3  | 247.1  |
| 82.5° | 161.8  | 160.7  | 161.8  | 159.7  | 158.6  | 158.6  | 157.5  | 155.3  |
| 85°   | 82.0   | 83.1   | 82.0   | 80.9   | 80.9   | 80.9   | 80.9   | 79.8   |
| 87.5° | 26.2   | 27.3   | 26.2   | 25.2   | 25.2   | 25.2   | 25.2   | 24.1   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)