

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P251700

Luminaire Tested: **LD4B30D010 EU4B30508030 4LBLWW1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P251700
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1712-453-11)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B30D010 EU4B30508030 4LBLWW1LI
Description: PORTFOLIO 4 INCH LENS WALLWASH RECESSED DOWNLIGHT, WITH SPECULAR CLEAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2361.0 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.03 / 1.12
Luminous Opening: Circular (Dia: 0.38' x H: 0')
CIE Type: Direct

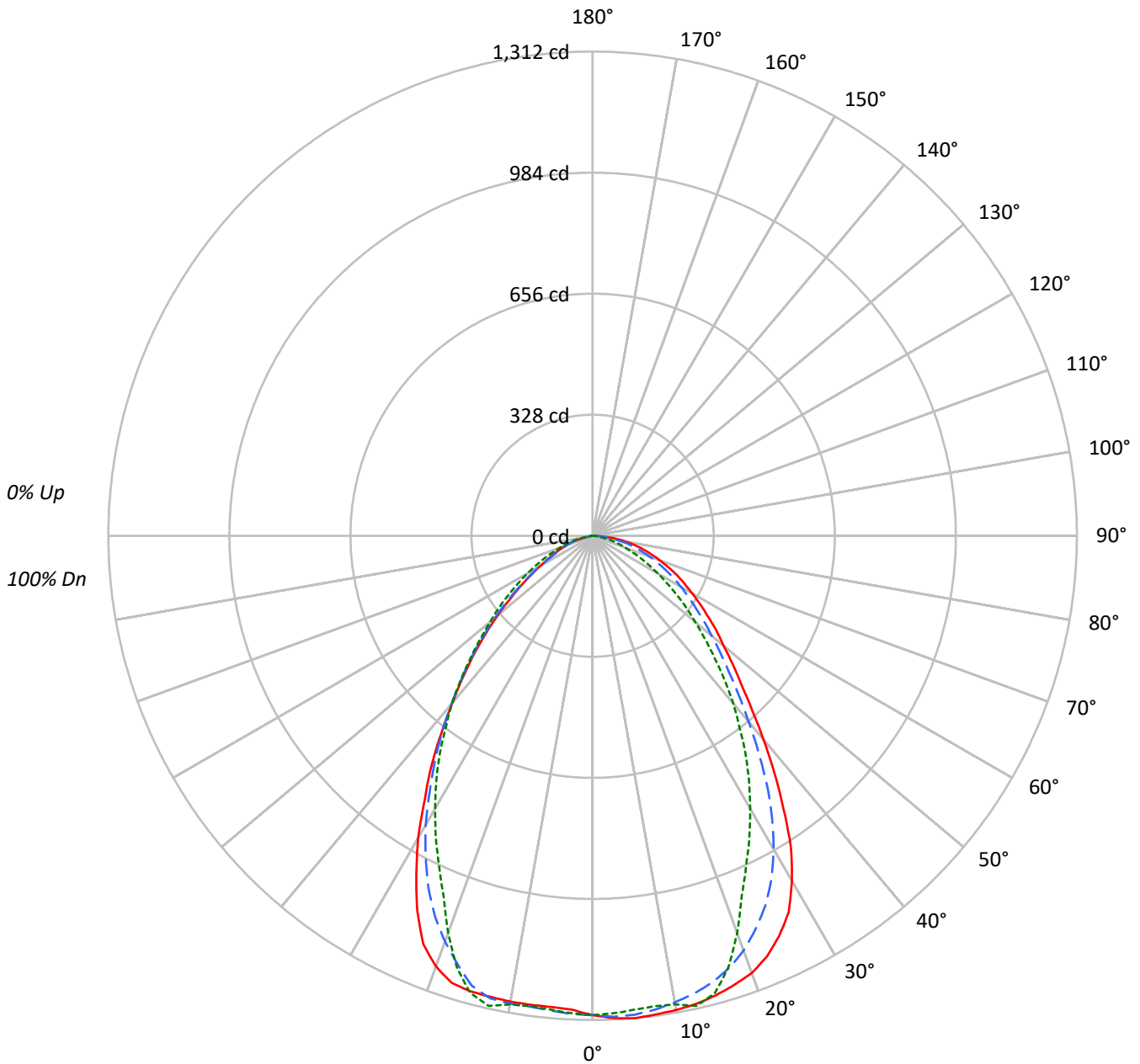
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P251700

CATALOG NUMBER: LD4B30D010 EU4B30508030 4LBLWW1LI

Luminous Intensity Polar Plot





TEST NUMBER: P251700

CATALOG NUMBER: LD4B30D010 EU4B30508030 4LBLWW1LI

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | |
| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | | 10 | | | | 0 | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | |
| RCR | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | 100 |
| 1 | 111 | 107 | 103 | 100 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 93 | 91 | 90 | 88 | | | | 88 |
| 2 | 103 | 96 | 90 | 85 | 100 | 94 | 89 | 84 | 90 | 86 | 82 | 87 | 84 | 80 | 84 | 81 | 79 | 77 | | | | 77 |
| 3 | 95 | 86 | 79 | 74 | 93 | 84 | 78 | 73 | 82 | 76 | 72 | 79 | 74 | 70 | 77 | 73 | 69 | 67 | | | | 67 |
| 4 | 88 | 78 | 70 | 64 | 86 | 76 | 69 | 64 | 74 | 68 | 63 | 72 | 67 | 62 | 70 | 65 | 62 | 60 | | | | 60 |
| 5 | 82 | 71 | 63 | 57 | 80 | 70 | 62 | 57 | 68 | 61 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 53 | | | | 53 |
| 6 | 76 | 65 | 57 | 51 | 75 | 64 | 56 | 51 | 62 | 55 | 50 | 60 | 54 | 50 | 59 | 54 | 50 | 48 | | | | 48 |
| 7 | 71 | 59 | 51 | 46 | 70 | 59 | 51 | 46 | 57 | 50 | 46 | 56 | 50 | 45 | 54 | 49 | 45 | 43 | | | | 43 |
| 8 | 67 | 55 | 47 | 42 | 65 | 54 | 47 | 42 | 53 | 46 | 41 | 52 | 46 | 41 | 51 | 45 | 41 | 39 | | | | 39 |
| 9 | 63 | 51 | 43 | 38 | 62 | 50 | 43 | 38 | 49 | 43 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 | | | | 36 |
| 10 | 59 | 47 | 40 | 35 | 58 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 44 | 39 | 35 | 33 | | | | 33 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|--------|--------|
| 0° | 126588 | 126588 | 126588 |
| 5° | 128373 | 126142 | 125389 |
| 10° | 129105 | 127601 | 126839 |
| 15° | 130095 | 129318 | 128935 |
| 20° | 130761 | 118710 | 128780 |
| 25° | 128610 | 105877 | 120835 |
| 30° | 121526 | 96015 | 106300 |
| 35° | 107172 | 85876 | 90635 |
| 40° | 91587 | 75354 | 75112 |
| 45° | 78478 | 64310 | 62739 |
| 50° | 70169 | 54871 | 51110 |
| 55° | 64720 | 46930 | 40456 |
| 60° | 60502 | 39724 | 31927 |
| 65° | 57974 | 32930 | 26358 |
| 70° | 54824 | 26586 | 22254 |
| 75° | 53056 | 21501 | 15777 |
| 80° | 51297 | 11730 | 4265 |
| 85° | 44728 | 6374 | 2125 |



TEST NUMBER: P251700

CATALOG NUMBER: LD4B30D010 EU4B30508030 4LBLWW1LI

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 123.4 | 5.2 |
| 10°-20° | 355.0 | 15.0 |
| 20°-30° | 492.4 | 20.9 |
| 30°-40° | 486.0 | 20.6 |
| 40°-50° | 381.2 | 16.1 |
| 50°-60° | 264.1 | 11.2 |
| 60°-70° | 161.8 | 6.9 |
| 70°-80° | 80.9 | 3.4 |
| 80°-90° | 16.2 | 0.7 |
| 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°-30° | 970.8 | 41.1 |
| 0°-40° | 1456.8 | 61.7 |
| 0°-60° | 2102.1 | 89.0 |
| 0°-90° | 2361.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2361.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 1299 | 1299 | 1299 | 1299 | 1299 | |
| 5° | 1312 | 1303 | 1289 | 1291 | 1282 | 125 |
| 15° | 1289 | 1253 | 1282 | 1263 | 1278 | 364 |
| 25° | 1196 | 1106 | 985 | 1053 | 1124 | 547 |
| 35° | 901 | 823 | 722 | 745 | 762 | 562 |
| 45° | 569 | 522 | 467 | 461 | 455 | 445 |
| 55° | 381 | 341 | 276 | 246 | 238 | 343 |
| 65° | 251 | 217 | 143 | 107 | 114 | 248 |
| 75° | 141 | 118 | 57 | 44 | 42 | 149 |
| 85° | 40 | 23 | 6 | 2 | 2 | 46 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P251700

CATALOG NUMBER: LD4B30D010 EU4B30508030 4LBLWW1LI

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 |
| 2.5° | 1308.4 | 1304.6 | 1302.7 | 1308.4 | 1306.5 | 1310.3 | 1308.4 | 1306.5 | 1302.7 | 1304.6 | 1304.6 |
| 5° | 1312.2 | 1306.5 | 1304.6 | 1308.4 | 1308.4 | 1312.2 | 1310.3 | 1306.5 | 1302.7 | 1304.6 | 1302.7 |
| 7.5° | 1308.4 | 1304.6 | 1304.6 | 1306.5 | 1304.6 | 1308.4 | 1304.6 | 1300.8 | 1297.0 | 1298.9 | 1295.1 |
| 10° | 1304.6 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1302.7 | 1298.9 | 1293.2 | 1287.5 | 1287.5 | 1283.6 |
| 12.5° | 1298.9 | 1293.2 | 1293.2 | 1295.1 | 1291.3 | 1295.1 | 1291.3 | 1281.7 | 1276.0 | 1274.1 | 1270.3 |
| 15° | 1289.4 | 1283.6 | 1283.6 | 1283.6 | 1279.8 | 1281.7 | 1276.0 | 1266.5 | 1258.9 | 1258.9 | 1253.2 |
| 17.5° | 1276.0 | 1270.3 | 1268.4 | 1268.4 | 1262.7 | 1264.6 | 1258.9 | 1249.4 | 1237.9 | 1234.1 | 1228.4 |
| 20° | 1260.8 | 1253.2 | 1249.4 | 1249.4 | 1243.6 | 1245.6 | 1237.9 | 1226.5 | 1211.3 | 1205.6 | 1196.0 |
| 22.5° | 1234.1 | 1230.3 | 1224.6 | 1222.7 | 1217.0 | 1215.1 | 1207.5 | 1192.2 | 1178.9 | 1169.4 | 1154.1 |
| 25° | 1196.0 | 1194.1 | 1188.4 | 1186.5 | 1178.9 | 1175.1 | 1167.5 | 1150.3 | 1137.0 | 1121.8 | 1106.5 |
| 27.5° | 1150.3 | 1142.7 | 1138.9 | 1133.2 | 1125.6 | 1123.7 | 1114.1 | 1098.9 | 1078.0 | 1068.4 | 1049.4 |
| 30° | 1079.9 | 1076.1 | 1072.2 | 1066.5 | 1058.9 | 1055.1 | 1049.4 | 1032.2 | 1015.1 | 998.0 | 980.8 |
| 32.5° | 999.9 | 992.3 | 986.5 | 988.4 | 978.9 | 975.1 | 965.6 | 950.4 | 935.1 | 923.7 | 904.6 |
| 35° | 900.8 | 898.9 | 897.0 | 893.2 | 885.6 | 883.7 | 876.1 | 864.6 | 847.5 | 834.2 | 822.8 |
| 37.5° | 807.5 | 801.8 | 798.0 | 798.0 | 790.4 | 790.4 | 784.7 | 771.3 | 761.8 | 752.3 | 737.0 |
| 40° | 719.9 | 710.4 | 710.4 | 710.4 | 702.8 | 704.7 | 700.9 | 687.5 | 678.0 | 666.6 | 657.1 |
| 42.5° | 638.0 | 634.2 | 632.3 | 628.5 | 624.7 | 624.7 | 620.9 | 613.3 | 603.7 | 596.1 | 586.6 |
| 45° | 569.4 | 567.5 | 565.6 | 563.7 | 559.9 | 558.0 | 556.1 | 544.7 | 539.0 | 531.4 | 521.8 |
| 47.5° | 514.2 | 510.4 | 508.5 | 506.6 | 502.8 | 500.9 | 497.1 | 489.5 | 483.7 | 476.1 | 468.5 |
| 50° | 462.8 | 460.9 | 459.0 | 459.0 | 455.2 | 453.3 | 449.5 | 443.8 | 434.2 | 430.4 | 420.9 |
| 52.5° | 422.8 | 419.0 | 415.2 | 415.2 | 411.4 | 411.4 | 405.7 | 399.9 | 390.4 | 386.6 | 379.0 |
| 55° | 380.9 | 379.0 | 377.1 | 377.1 | 373.3 | 371.4 | 369.5 | 361.9 | 354.2 | 348.5 | 340.9 |
| 57.5° | 344.7 | 342.8 | 340.9 | 340.9 | 337.1 | 335.2 | 333.3 | 327.6 | 320.0 | 316.1 | 306.6 |
| 60° | 310.4 | 310.4 | 308.5 | 306.6 | 304.7 | 302.8 | 300.9 | 295.2 | 289.5 | 283.8 | 276.2 |
| 62.5° | 280.0 | 278.1 | 276.2 | 274.3 | 274.3 | 272.3 | 270.4 | 262.8 | 259.0 | 253.3 | 245.7 |
| 65° | 251.4 | 247.6 | 247.6 | 245.7 | 245.7 | 243.8 | 241.9 | 234.3 | 230.4 | 224.7 | 217.1 |
| 67.5° | 220.9 | 219.0 | 217.1 | 217.1 | 215.2 | 215.2 | 213.3 | 207.6 | 201.9 | 198.1 | 190.5 |
| 70° | 192.4 | 192.4 | 190.5 | 190.5 | 188.5 | 186.6 | 186.6 | 182.8 | 177.1 | 171.4 | 163.8 |
| 72.5° | 167.6 | 165.7 | 163.8 | 163.8 | 161.9 | 161.9 | 160.0 | 156.2 | 152.4 | 148.6 | 139.0 |
| 75° | 140.9 | 139.0 | 139.0 | 139.0 | 137.1 | 137.1 | 135.2 | 131.4 | 127.6 | 123.8 | 118.1 |
| 77.5° | 116.2 | 116.2 | 114.3 | 114.3 | 112.4 | 112.4 | 112.4 | 108.6 | 104.7 | 100.9 | 93.3 |
| 80° | 91.4 | 91.4 | 91.4 | 89.5 | 87.6 | 87.6 | 87.6 | 83.8 | 80.0 | 76.2 | 70.5 |
| 82.5° | 66.7 | 64.8 | 64.8 | 62.8 | 60.9 | 60.9 | 60.9 | 57.1 | 55.2 | 49.5 | 45.7 |
| 85° | 40.0 | 38.1 | 38.1 | 36.2 | 34.3 | 34.3 | 34.3 | 32.4 | 28.6 | 26.7 | 22.9 |
| 87.5° | 15.2 | 15.2 | 15.2 | 15.2 | 15.2 | 13.3 | 13.3 | 11.4 | 11.4 | 9.5 | 9.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P251700

CATALOG NUMBER: LD4B30D010 EU4B30508030 4LBLWW1LI

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 95° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 |
| 2.5° | 1304.6 | 1302.7 | 1302.7 | 1300.8 | 1302.7 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1295.1 | 1295.1 |
| 5° | 1300.8 | 1300.8 | 1298.9 | 1297.0 | 1298.9 | 1295.1 | 1297.0 | 1295.1 | 1295.1 | 1289.4 | 1289.4 |
| 7.5° | 1293.2 | 1291.3 | 1287.5 | 1285.5 | 1287.5 | 1285.5 | 1285.5 | 1285.5 | 1289.4 | 1285.5 | 1285.5 |
| 10° | 1279.8 | 1277.9 | 1274.1 | 1272.2 | 1272.2 | 1270.3 | 1274.1 | 1277.9 | 1285.5 | 1289.4 | 1297.0 |
| 12.5° | 1266.5 | 1262.7 | 1260.8 | 1260.8 | 1262.7 | 1262.7 | 1270.3 | 1279.8 | 1298.9 | 1304.6 | 1312.2 |
| 15° | 1249.4 | 1247.5 | 1247.5 | 1253.2 | 1260.8 | 1266.5 | 1281.7 | 1287.5 | 1289.4 | 1281.7 | 1277.9 |
| 17.5° | 1226.5 | 1226.5 | 1228.4 | 1234.1 | 1239.8 | 1239.8 | 1241.7 | 1237.9 | 1234.1 | 1224.6 | 1213.2 |
| 20° | 1188.4 | 1186.5 | 1182.7 | 1182.7 | 1182.7 | 1175.1 | 1178.9 | 1165.6 | 1156.0 | 1144.6 | 1127.5 |
| 22.5° | 1140.8 | 1131.3 | 1118.0 | 1108.4 | 1102.7 | 1098.9 | 1089.4 | 1074.1 | 1062.7 | 1055.1 | 1047.5 |
| 25° | 1089.4 | 1074.1 | 1055.1 | 1039.9 | 1030.3 | 1028.4 | 1015.1 | 1001.8 | 994.2 | 984.6 | 980.8 |
| 27.5° | 1030.3 | 1013.2 | 990.3 | 975.1 | 967.5 | 961.8 | 950.4 | 937.0 | 927.5 | 919.9 | 914.2 |
| 30° | 961.8 | 944.6 | 925.6 | 906.5 | 898.9 | 889.4 | 878.0 | 868.5 | 858.9 | 853.2 | 849.4 |
| 32.5° | 885.6 | 868.5 | 849.4 | 836.1 | 826.6 | 818.9 | 809.4 | 799.9 | 792.3 | 788.5 | 784.7 |
| 35° | 807.5 | 790.4 | 775.1 | 761.8 | 754.2 | 748.5 | 740.9 | 729.4 | 723.7 | 721.8 | 718.0 |
| 37.5° | 723.7 | 712.3 | 699.0 | 687.5 | 681.8 | 674.2 | 670.4 | 660.9 | 660.9 | 653.2 | 653.2 |
| 40° | 645.6 | 638.0 | 624.7 | 615.2 | 611.3 | 605.6 | 599.9 | 596.1 | 594.2 | 592.3 | 590.4 |
| 42.5° | 577.1 | 565.6 | 558.0 | 550.4 | 544.7 | 540.9 | 540.9 | 535.2 | 533.3 | 527.6 | 525.6 |
| 45° | 514.2 | 508.5 | 495.2 | 489.5 | 487.6 | 481.8 | 479.9 | 476.1 | 470.4 | 466.6 | 464.7 |
| 47.5° | 459.0 | 453.3 | 445.7 | 438.0 | 434.2 | 430.4 | 426.6 | 420.9 | 417.1 | 411.4 | 409.5 |
| 50° | 413.3 | 403.8 | 396.1 | 390.4 | 384.7 | 382.8 | 379.0 | 371.4 | 367.6 | 361.9 | 361.9 |
| 52.5° | 371.4 | 363.8 | 354.2 | 348.5 | 342.8 | 339.0 | 333.3 | 327.6 | 321.9 | 320.0 | 314.2 |
| 55° | 335.2 | 325.7 | 316.1 | 308.5 | 302.8 | 297.1 | 295.2 | 287.6 | 280.0 | 276.2 | 272.3 |
| 57.5° | 300.9 | 291.4 | 280.0 | 270.4 | 266.6 | 262.8 | 257.1 | 249.5 | 243.8 | 238.1 | 234.3 |
| 60° | 266.6 | 259.0 | 247.6 | 238.1 | 234.3 | 228.5 | 222.8 | 215.2 | 209.5 | 203.8 | 200.0 |
| 62.5° | 238.1 | 226.6 | 217.1 | 207.6 | 201.9 | 198.1 | 190.5 | 184.7 | 177.1 | 171.4 | 165.7 |
| 65° | 209.5 | 198.1 | 188.5 | 179.0 | 175.2 | 169.5 | 163.8 | 156.2 | 148.6 | 142.8 | 135.2 |
| 67.5° | 180.9 | 171.4 | 161.9 | 152.4 | 148.6 | 144.7 | 137.1 | 129.5 | 121.9 | 116.2 | 108.6 |
| 70° | 156.2 | 146.6 | 137.1 | 129.5 | 125.7 | 121.9 | 114.3 | 106.7 | 100.9 | 93.3 | 87.6 |
| 72.5° | 133.3 | 125.7 | 116.2 | 108.6 | 104.7 | 100.9 | 93.3 | 87.6 | 80.0 | 76.2 | 70.5 |
| 75° | 110.5 | 102.8 | 95.2 | 87.6 | 83.8 | 80.0 | 74.3 | 68.6 | 62.8 | 57.1 | 53.3 |
| 77.5° | 87.6 | 80.0 | 72.4 | 66.7 | 62.8 | 60.9 | 55.2 | 49.5 | 43.8 | 40.0 | 34.3 |
| 80° | 64.8 | 57.1 | 51.4 | 45.7 | 41.9 | 40.0 | 34.3 | 30.5 | 26.7 | 20.9 | 19.0 |
| 82.5° | 40.0 | 34.3 | 30.5 | 26.7 | 24.8 | 22.9 | 19.0 | 15.2 | 13.3 | 11.4 | 9.5 |
| 85° | 20.9 | 19.0 | 15.2 | 13.3 | 11.4 | 11.4 | 9.5 | 7.6 | 5.7 | 5.7 | 3.8 |
| 87.5° | 7.6 | 5.7 | 5.7 | 3.8 | 3.8 | 3.8 | 3.8 | 1.9 | 1.9 | 1.9 | 1.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



TEST NUMBER: P251700

CATALOG NUMBER: LD4B30D010 EU4B30508030 4LBLWW1LI

CANDELA DISTRIBUTION (continued):

| | 100° | 105° | 110° | 112.5° | 115° | 120° | 125° | 130° | 135° | 140° | 145° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 |
| 2.5° | 1291.3 | 1293.2 | 1295.1 | 1297.0 | 1295.1 | 1295.1 | 1298.9 | 1291.3 | 1297.0 | 1297.0 | 1289.4 |
| 5° | 1287.5 | 1291.3 | 1289.4 | 1293.2 | 1289.4 | 1289.4 | 1291.3 | 1287.5 | 1291.3 | 1291.3 | 1285.5 |
| 7.5° | 1283.6 | 1287.5 | 1287.5 | 1289.4 | 1287.5 | 1287.5 | 1289.4 | 1283.6 | 1287.5 | 1287.5 | 1281.7 |
| 10° | 1300.8 | 1304.6 | 1302.7 | 1300.8 | 1295.1 | 1291.3 | 1293.2 | 1283.6 | 1287.5 | 1287.5 | 1281.7 |
| 12.5° | 1306.5 | 1304.6 | 1297.0 | 1293.2 | 1289.4 | 1285.5 | 1287.5 | 1279.8 | 1283.6 | 1283.6 | 1279.8 |
| 15° | 1268.4 | 1264.6 | 1258.9 | 1260.8 | 1257.0 | 1255.1 | 1258.9 | 1255.1 | 1262.7 | 1266.5 | 1262.7 |
| 17.5° | 1203.7 | 1201.7 | 1197.9 | 1197.9 | 1197.9 | 1199.8 | 1205.6 | 1205.6 | 1217.0 | 1224.6 | 1228.4 |
| 20° | 1119.9 | 1118.0 | 1119.9 | 1123.7 | 1125.6 | 1133.2 | 1146.5 | 1154.1 | 1169.4 | 1182.7 | 1192.2 |
| 22.5° | 1043.7 | 1047.5 | 1053.2 | 1060.8 | 1062.7 | 1072.2 | 1089.4 | 1097.0 | 1116.0 | 1131.3 | 1140.8 |
| 25° | 978.9 | 984.6 | 988.4 | 994.2 | 996.1 | 1007.5 | 1022.7 | 1032.2 | 1053.2 | 1064.6 | 1076.1 |
| 27.5° | 914.2 | 921.8 | 923.7 | 931.3 | 931.3 | 942.7 | 956.1 | 965.6 | 978.9 | 990.3 | 999.9 |
| 30° | 851.3 | 853.2 | 858.9 | 860.8 | 864.6 | 876.1 | 883.7 | 889.4 | 904.6 | 910.4 | 916.1 |
| 32.5° | 782.8 | 790.4 | 794.2 | 796.1 | 794.2 | 803.7 | 811.3 | 815.1 | 820.8 | 828.5 | 832.3 |
| 35° | 718.0 | 721.8 | 723.7 | 727.5 | 729.4 | 731.3 | 735.1 | 737.0 | 744.7 | 746.6 | 748.5 |
| 37.5° | 653.2 | 659.0 | 657.1 | 659.0 | 659.0 | 660.9 | 664.7 | 662.8 | 668.5 | 670.4 | 668.5 |
| 40° | 588.5 | 588.5 | 592.3 | 590.4 | 592.3 | 590.4 | 594.2 | 594.2 | 594.2 | 596.1 | 594.2 |
| 42.5° | 523.7 | 525.6 | 523.7 | 527.6 | 523.7 | 525.6 | 525.6 | 523.7 | 525.6 | 523.7 | 523.7 |
| 45° | 464.7 | 464.7 | 464.7 | 464.7 | 460.9 | 460.9 | 464.7 | 462.8 | 460.9 | 459.0 | 457.1 |
| 47.5° | 407.6 | 409.5 | 405.7 | 407.6 | 405.7 | 403.8 | 401.9 | 401.9 | 399.9 | 396.1 | 394.2 |
| 50° | 360.0 | 356.1 | 354.2 | 356.1 | 354.2 | 352.3 | 350.4 | 346.6 | 344.7 | 340.9 | 339.0 |
| 52.5° | 312.3 | 308.5 | 304.7 | 304.7 | 302.8 | 299.0 | 297.1 | 293.3 | 291.4 | 287.6 | 287.6 |
| 55° | 270.4 | 266.6 | 262.8 | 260.9 | 257.1 | 253.3 | 251.4 | 247.6 | 245.7 | 241.9 | 238.1 |
| 57.5° | 230.4 | 224.7 | 220.9 | 219.0 | 217.1 | 211.4 | 209.5 | 205.7 | 201.9 | 198.1 | 196.2 |
| 60° | 194.3 | 188.5 | 182.8 | 180.9 | 179.0 | 173.3 | 171.4 | 165.7 | 163.8 | 160.0 | 158.1 |
| 62.5° | 160.0 | 156.2 | 148.6 | 146.6 | 142.8 | 139.0 | 133.3 | 131.4 | 129.5 | 131.4 | 131.4 |
| 65° | 129.5 | 123.8 | 118.1 | 116.2 | 112.4 | 108.6 | 106.7 | 104.7 | 106.7 | 106.7 | 108.6 |
| 67.5° | 102.8 | 97.1 | 91.4 | 91.4 | 89.5 | 85.7 | 85.7 | 85.7 | 87.6 | 87.6 | 89.5 |
| 70° | 81.9 | 78.1 | 74.3 | 72.4 | 72.4 | 70.5 | 72.4 | 72.4 | 74.3 | 74.3 | 74.3 |
| 72.5° | 64.8 | 62.8 | 60.9 | 59.0 | 59.0 | 59.0 | 59.0 | 59.0 | 59.0 | 59.0 | 60.9 |
| 75° | 49.5 | 47.6 | 45.7 | 45.7 | 43.8 | 43.8 | 43.8 | 43.8 | 43.8 | 43.8 | 41.9 |
| 77.5° | 32.4 | 30.5 | 28.6 | 28.6 | 26.7 | 24.8 | 24.8 | 22.9 | 22.9 | 22.9 | 22.9 |
| 80° | 17.1 | 15.2 | 13.3 | 11.4 | 11.4 | 9.5 | 9.5 | 9.5 | 9.5 | 7.6 | 7.6 |
| 82.5° | 7.6 | 5.7 | 5.7 | 5.7 | 5.7 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 |
| 85° | 3.8 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| 87.5° | 0.0 | 0.0 | 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 |



TEST NUMBER: P251700

CATALOG NUMBER: LD4B30D010 EU4B30508030 4LBLWW1LI

CANDELA DISTRIBUTION (continued):

| | 150° | 155° | 157.5° | 160° | 165° | 170° | 175° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 | 1298.9 |
| 2.5° | 1293.2 | 1289.4 | 1293.2 | 1295.1 | 1291.3 | 1289.4 | 1293.2 | 1285.5 |
| 5° | 1291.3 | 1285.5 | 1287.5 | 1289.4 | 1285.5 | 1283.6 | 1287.5 | 1281.7 |
| 7.5° | 1287.5 | 1285.5 | 1287.5 | 1289.4 | 1283.6 | 1283.6 | 1287.5 | 1281.7 |
| 10° | 1287.5 | 1283.6 | 1285.5 | 1289.4 | 1285.5 | 1285.5 | 1289.4 | 1281.7 |
| 12.5° | 1285.5 | 1279.8 | 1285.5 | 1287.5 | 1283.6 | 1283.6 | 1287.5 | 1279.8 |
| 15° | 1272.2 | 1272.2 | 1274.1 | 1277.9 | 1276.0 | 1277.9 | 1283.6 | 1277.9 |
| 17.5° | 1243.6 | 1247.5 | 1255.1 | 1260.8 | 1264.6 | 1268.4 | 1274.1 | 1270.3 |
| 20° | 1209.4 | 1215.1 | 1224.6 | 1230.3 | 1237.9 | 1239.8 | 1249.4 | 1241.7 |
| 22.5° | 1156.0 | 1167.5 | 1175.1 | 1180.8 | 1186.5 | 1192.2 | 1199.8 | 1197.9 |
| 25° | 1091.3 | 1098.9 | 1104.6 | 1110.3 | 1118.0 | 1121.8 | 1125.6 | 1123.7 |
| 27.5° | 1013.2 | 1017.0 | 1024.6 | 1028.4 | 1032.2 | 1036.1 | 1043.7 | 1034.2 |
| 30° | 927.5 | 929.4 | 933.2 | 938.9 | 938.9 | 942.7 | 946.5 | 944.6 |
| 32.5° | 839.9 | 839.9 | 843.7 | 847.5 | 845.6 | 847.5 | 855.1 | 845.6 |
| 35° | 754.2 | 752.3 | 758.0 | 759.9 | 759.9 | 758.0 | 763.7 | 761.8 |
| 37.5° | 670.4 | 672.3 | 674.2 | 676.1 | 672.3 | 676.1 | 676.1 | 672.3 |
| 40° | 594.2 | 592.3 | 596.1 | 598.0 | 596.1 | 598.0 | 598.0 | 590.4 |
| 42.5° | 525.6 | 521.8 | 523.7 | 525.6 | 523.7 | 525.6 | 523.7 | 519.9 |
| 45° | 459.0 | 457.1 | 457.1 | 459.0 | 455.2 | 455.2 | 455.2 | 455.2 |
| 47.5° | 396.1 | 394.2 | 396.1 | 396.1 | 392.3 | 392.3 | 394.2 | 392.3 |
| 50° | 339.0 | 337.1 | 337.1 | 337.1 | 335.2 | 335.2 | 337.1 | 337.1 |
| 52.5° | 287.6 | 283.8 | 283.8 | 283.8 | 283.8 | 283.8 | 285.7 | 281.9 |
| 55° | 236.2 | 236.2 | 236.2 | 236.2 | 238.1 | 238.1 | 238.1 | 238.1 |
| 57.5° | 194.3 | 196.2 | 196.2 | 198.1 | 196.2 | 198.1 | 198.1 | 196.2 |
| 60° | 161.9 | 160.0 | 161.9 | 161.9 | 163.8 | 163.8 | 163.8 | 163.8 |
| 62.5° | 133.3 | 133.3 | 133.3 | 135.2 | 135.2 | 135.2 | 137.1 | 135.2 |
| 65° | 110.5 | 110.5 | 112.4 | 112.4 | 112.4 | 114.3 | 114.3 | 114.3 |
| 67.5° | 91.4 | 91.4 | 91.4 | 91.4 | 93.3 | 93.3 | 95.2 | 93.3 |
| 70° | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 78.1 | 78.1 | 78.1 |
| 72.5° | 60.9 | 60.9 | 60.9 | 60.9 | 62.8 | 62.8 | 62.8 | 62.8 |
| 75° | 41.9 | 41.9 | 41.9 | 43.8 | 41.9 | 41.9 | 41.9 | 41.9 |
| 77.5° | 20.9 | 20.9 | 20.9 | 20.9 | 20.9 | 19.0 | 19.0 | 19.0 |
| 80° | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 | 5.7 | 7.6 |
| 82.5° | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 3.8 | 1.9 |
| 85° | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| 87.5° | 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 |



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°













(END OF REPORT)