

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: P315248

Luminaire Tested: **LDA2B05FL9027D010 PINW1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P315248
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-908-15)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B05FL9027D010 PINW1MB
Description: PORTFOLIO 2IN ADJ 500 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj PinHole, White oculus black finish
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 511.4 lumens
Efficiency: N/A
Efficacy: 73.1 lumens/watt
Spacing Criteria (0/90/45): 2.92 / 0.6 / 1.34
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

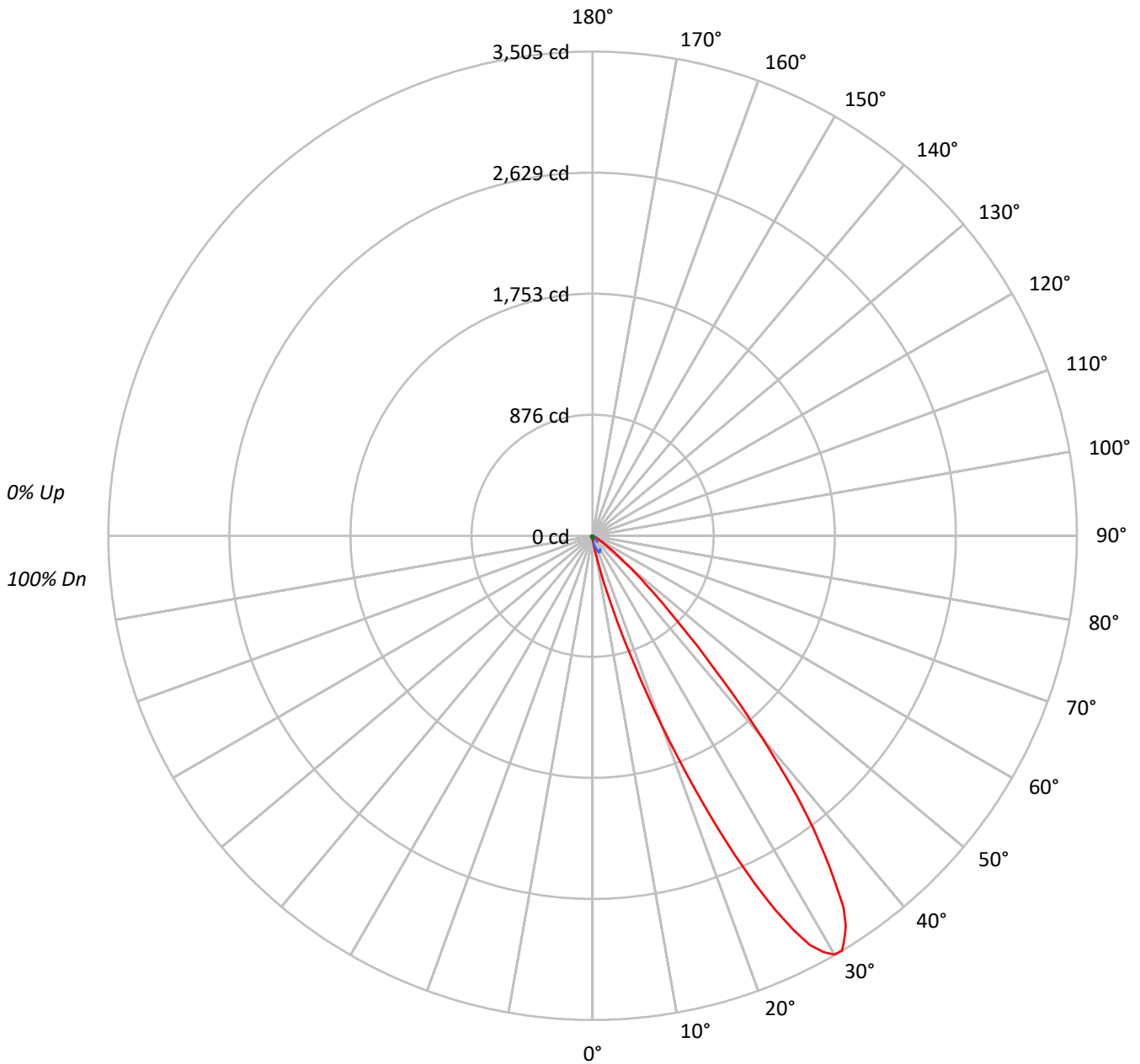
Input Watts (W): 7
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P315248

CATALOG NUMBER: LDA2B05FL9027D010 PINW1MB

Luminous Intensity Polar Plot





TEST NUMBER: P315248

CATALOG NUMBER: LDA2B05FL9027D010 PINW1MB

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|--|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | | | | | | | | | | | | | | | | | | | |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | | | | | | | | | | | | | | | | | | | |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 | | | | | | | | | | | | | | | | | | | |
| 3 | 97 | 89 | 82 | 77 | 95 | 87 | 82 | 77 | 85 | 80 | 75 | 82 | 78 | 74 | 80 | 76 | 73 | 71 | | | | | | | | | | | | | | | | | | | |
| 4 | 90 | 81 | 74 | 68 | 88 | 79 | 73 | 68 | 77 | 71 | 67 | 75 | 70 | 66 | 73 | 69 | 65 | 63 | | | | | | | | | | | | | | | | | | | |
| 5 | 84 | 73 | 66 | 60 | 82 | 72 | 65 | 60 | 70 | 64 | 59 | 68 | 63 | 59 | 67 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | |
| 6 | 78 | 67 | 59 | 53 | 76 | 66 | 58 | 53 | 64 | 58 | 53 | 62 | 57 | 52 | 61 | 56 | 52 | 50 | | | | | | | | | | | | | | | | | | | |
| 7 | 72 | 61 | 53 | 48 | 71 | 60 | 53 | 47 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 45 | | | | | | | | | | | | | | | | | | | |
| 8 | 67 | 55 | 48 | 43 | 66 | 55 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 40 | | | | | | | | | | | | | | | | | | | |
| 9 | 63 | 51 | 43 | 38 | 61 | 50 | 43 | 38 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 41 | 37 | 36 | | | | | | | | | | | | | | | | | | | |
| 10 | 59 | 46 | 39 | 34 | 57 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 34 | 43 | 38 | 34 | 32 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|---------|-------|-------|
| 0° | 10755 | 10755 | 10755 |
| 5° | 24019 | 11094 | 8667 |
| 10° | 64225 | 6913 | 2455 |
| 15° | 252829 | 8938 | 5772 |
| 20° | 764856 | 5460 | 4515 |
| 25° | 1513606 | 4682 | 4028 |
| 30° | 1994411 | 2791 | 4899 |
| 35° | 1840338 | 4035 | 5902 |
| 40° | 1225798 | 3542 | 8115 |
| 45° | 578200 | 1256 | 3419 |
| 50° | 254898 | 4682 | 10592 |
| 55° | 103648 | 0 | 10838 |
| 60° | 43021 | 3059 | 9670 |
| 65° | 14709 | 3619 | 7121 |
| 70° | 12405 | 7068 | 18175 |
| 75° | 7053 | 10484 | 24018 |
| 80° | 0 | 5114 | 10512 |
| 85° | 6793 | 6793 | 34530 |



TEST NUMBER: P315248

CATALOG NUMBER: LDA2B05FL9027D010 PINW1MB

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 3.0 | 0.6 |
| 10°-20° | 31.3 | 6.1 |
| 20°-30° | 160.8 | 31.5 |
| 30°-40° | 206.0 | 40.3 |
| 40°-50° | 79.2 | 15.5 |
| 50°-60° | 16.1 | 3.1 |
| 60°-70° | 5.5 | 1.1 |
| 70°-80° | 6.3 | 1.2 |
| 80°-90° | 3.2 | 0.6 |
| 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° | 195.1 | 38.2 |
| 0°-40° | 401.1 | 78.4 |
| 0°-60° | 496.4 | 97.1 |
| 0°-90° | 511.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 511.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0° | 22 | 22 | 22 | 22 | 22 | |
| 5° | 48 | 40 | 22 | 16 | 18 | 7 |
| 15° | 495 | 96 | 18 | 10 | 11 | 190 |
| 25° | 2780 | 126 | 9 | 7 | 7 | 1269 |
| 35° | 3056 | 65 | 7 | 6 | 10 | 1826 |
| 45° | 829 | 16 | 2 | 1 | 5 | 712 |
| 55° | 120 | 3 | 0 | 2 | 13 | 125 |
| 65° | 13 | 4 | 3 | 4 | 6 | 18 |
| 75° | 4 | 7 | 6 | 9 | 13 | 5 |
| 85° | 1 | 4 | 1 | 5 | 6 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P315248

CATALOG NUMBER: LDA2B05FL9027D010 PINW1MB

CANDELA DISTRIBUTION (FULL):

| | 0° | 2.5° | 5° | 7.5° | 10° | 12.5° | 15° | 17.5° | 22.5° | 45° | 67.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 0° | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 |
| 2.5° | 32.2 | 27.9 | 29.1 | 24.8 | 27.3 | 27.9 | 23.0 | 30.4 | 27.3 | 28.5 | 24.8 |
| 5° | 48.5 | 52.1 | 47.8 | 46.0 | 44.8 | 46.0 | 44.8 | 46.6 | 45.4 | 39.9 | 28.5 |
| 7.5° | 81.0 | 73.9 | 73.9 | 71.5 | 73.3 | 72.7 | 69.6 | 71.5 | 67.2 | 48.5 | 32.8 |
| 10° | 128.2 | 121.1 | 120.5 | 118.7 | 118.1 | 112.6 | 109.5 | 107.0 | 98.1 | 57.4 | 29.7 |
| 12.5° | 251.2 | 245.0 | 240.8 | 230.0 | 222.7 | 218.4 | 202.1 | 193.5 | 168.1 | 85.3 | 38.0 |
| 15° | 495.0 | 463.4 | 471.4 | 436.7 | 411.3 | 394.4 | 360.7 | 330.9 | 269.9 | 96.3 | 36.8 |
| 17.5° | 875.9 | 845.2 | 824.7 | 787.0 | 735.1 | 690.4 | 623.8 | 557.9 | 433.7 | 109.5 | 34.3 |
| 20° | 1456.8 | 1408.3 | 1365.4 | 1300.7 | 1201.0 | 1114.8 | 997.7 | 871.6 | 645.6 | 125.1 | 31.0 |
| 21° | 1712.0 | 1674.5 | 1624.9 | 1539.6 | 1423.4 | 1308.0 | 1167.6 | 1015.8 | 735.8 | 126.4 | 27.9 |
| 22° | 1978.2 | 1953.9 | 1888.6 | 1790.8 | 1655.2 | 1517.8 | 1345.5 | 1178.6 | 831.8 | 128.2 | 26.7 |
| 23° | 2255.4 | 2230.0 | 2156.1 | 2044.1 | 1891.7 | 1725.5 | 1524.6 | 1326.8 | 921.9 | 130.7 | 26.1 |
| 24° | 2526.8 | 2498.6 | 2416.1 | 2291.0 | 2118.0 | 1927.0 | 1700.0 | 1470.6 | 1006.0 | 129.4 | 27.3 |
| 25° | 2780.5 | 2741.2 | 2654.1 | 2515.5 | 2325.7 | 2111.3 | 1861.0 | 1594.8 | 1079.9 | 125.7 | 23.0 |
| 26° | 3006.8 | 2962.0 | 2868.2 | 2717.0 | 2509.4 | 2277.2 | 1995.3 | 1710.1 | 1134.5 | 122.7 | 21.8 |
| 27° | 3203.4 | 3147.0 | 3046.7 | 2888.1 | 2665.5 | 2409.1 | 2110.0 | 1800.3 | 1182.6 | 118.1 | 17.5 |
| 28° | 3356.5 | 3291.7 | 3189.9 | 3022.5 | 2787.2 | 2511.8 | 2194.4 | 1856.7 | 1211.1 | 118.7 | 19.9 |
| 29° | 3444.8 | 3395.1 | 3284.4 | 3108.9 | 2861.4 | 2571.0 | 2238.9 | 1888.0 | 1216.7 | 109.5 | 18.7 |
| 30° | 3500.9 | 3445.4 | 3331.6 | 3148.2 | 2890.0 | 2584.5 | 2244.4 | 1882.2 | 1200.4 | 102.7 | 17.5 |
| 31° | 3504.6 | 3446.6 | 3331.0 | 3141.2 | 2878.9 | 2562.1 | 2213.7 | 1847.5 | 1165.1 | 95.7 | 14.4 |
| 32° | 3438.6 | 3393.9 | 3280.1 | 3084.1 | 2819.1 | 2500.5 | 2147.8 | 1788.9 | 1109.6 | 81.6 | 9.8 |
| 33° | 3364.1 | 3309.8 | 3196.7 | 2998.8 | 2736.3 | 2416.1 | 2052.7 | 1710.1 | 1052.0 | 80.4 | 12.6 |
| 34° | 3248.2 | 3182.9 | 3071.5 | 2876.8 | 2621.3 | 2295.9 | 1939.5 | 1604.9 | 978.4 | 73.3 | 12.0 |
| 35° | 3055.6 | 3020.6 | 2908.1 | 2715.8 | 2467.7 | 2151.8 | 1803.4 | 1489.3 | 900.1 | 65.3 | 8.6 |
| 36° | 2862.7 | 2819.7 | 2713.3 | 2527.5 | 2292.2 | 1980.0 | 1649.7 | 1357.4 | 811.8 | 55.5 | 6.7 |
| 37° | 2658.7 | 2602.6 | 2505.7 | 2323.8 | 2078.2 | 1808.9 | 1502.2 | 1231.7 | 739.7 | 58.6 | 9.2 |
| 38° | 2421.0 | 2402.3 | 2274.7 | 2105.4 | 1878.5 | 1624.2 | 1343.6 | 1099.2 | 660.0 | 54.6 | 15.0 |
| 39° | 2159.7 | 2147.2 | 2019.9 | 1865.6 | 1662.0 | 1428.3 | 1181.4 | 961.8 | 580.3 | 39.9 | 4.9 |
| 40° | 1903.3 | 1867.5 | 1777.3 | 1637.1 | 1459.9 | 1249.8 | 1036.3 | 844.6 | 511.3 | 39.3 | 9.8 |
| 42.5° | 1290.0 | 1301.3 | 1203.8 | 1103.5 | 989.7 | 847.1 | 704.8 | 579.0 | 357.6 | 29.1 | 6.1 |
| 45° | 828.7 | 831.1 | 787.6 | 709.7 | 635.2 | 546.2 | 452.4 | 376.9 | 230.6 | 16.3 | 1.8 |
| 47.5° | 527.5 | 526.3 | 498.4 | 453.6 | 404.8 | 352.7 | 294.1 | 246.3 | 149.4 | 12.6 | 5.5 |
| 50° | 332.1 | 330.9 | 313.4 | 284.9 | 257.6 | 223.3 | 186.5 | 158.6 | 94.5 | 15.0 | 6.1 |
| 51° | 269.9 | 271.7 | 257.0 | 228.2 | 207.0 | 174.2 | 148.7 | 126.4 | 73.9 | 10.4 | 5.5 |
| 52° | 222.7 | 221.4 | 212.2 | 188.0 | 170.5 | 142.3 | 121.1 | 103.4 | 61.6 | 9.2 | 2.5 |
| 53° | 179.1 | 179.7 | 170.5 | 151.8 | 134.9 | 113.8 | 96.9 | 80.4 | 44.2 | 6.7 | 1.8 |
| 54° | 141.7 | 140.5 | 137.4 | 119.3 | 108.9 | 90.2 | 75.8 | 61.6 | 38.0 | 1.2 | 0.0 |
| 55° | 120.5 | 118.7 | 114.4 | 98.8 | 88.3 | 74.5 | 60.4 | 52.8 | 32.8 | 3.1 | 0.0 |
| 57.5° | 69.6 | 69.6 | 67.2 | 58.6 | 51.5 | 46.0 | 36.8 | 34.3 | 16.9 | 3.1 | 0.0 |
| 60° | 43.6 | 38.0 | 42.3 | 36.2 | 28.5 | 25.5 | 21.2 | 19.3 | 14.4 | 5.5 | 1.2 |
| 61° | 36.2 | 29.1 | 28.5 | 26.7 | 24.8 | 16.9 | 14.4 | 15.6 | 9.2 | 1.8 | 1.2 |
| 62° | 26.1 | 23.0 | 24.8 | 21.2 | 18.7 | 13.2 | 12.0 | 11.3 | 5.5 | 2.5 | 3.1 |
| 63° | 23.6 | 21.2 | 20.5 | 15.6 | 13.8 | 13.8 | 10.4 | 9.8 | 6.7 | 4.9 | 2.5 |



TEST NUMBER: P315248

CATALOG NUMBER: LDA2B05FL9027D010 PINW1MB

CANDELA DISTRIBUTION (continued):

| | 0° | 2.5° | 5° | 7.5° | 10° | 12.5° | 15° | 17.5° | 22.5° | 45° | 67.5° |
|-------|------|------|-----|------|-----|-------|-----|-------|-------|-----|-------|
| 66° | 12.6 | 10.4 | 9.2 | 10.4 | 6.1 | 8.0 | 3.1 | 8.6 | 1.8 | 3.1 | 1.8 |
| 67.5° | 9.8 | 6.1 | 5.5 | 6.7 | 4.3 | 3.1 | 4.3 | 5.5 | 1.8 | 3.1 | 4.3 |
| 70° | 8.6 | 4.3 | 6.1 | 5.5 | 4.3 | 5.5 | 6.1 | 6.1 | 1.8 | 6.1 | 5.5 |
| 72.5° | 8.6 | 5.5 | 3.1 | 2.5 | 2.5 | 2.5 | 2.5 | 2.5 | 3.7 | 8.6 | 6.7 |
| 75° | 3.7 | 3.7 | 1.8 | 4.3 | 2.5 | 3.7 | 2.5 | 6.1 | 2.5 | 6.7 | 5.5 |
| 77.5° | 2.5 | 3.1 | 0.0 | 3.1 | 0.0 | 0.0 | 1.8 | 4.3 | 1.8 | 4.9 | 6.1 |
| 80° | 0.0 | 3.1 | 1.8 | 0.0 | 1.2 | 1.8 | 0.0 | 0.6 | 1.2 | 5.5 | 2.5 |
| 82.5° | 1.2 | 1.8 | 2.5 | 1.2 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 3.7 | 3.1 |
| 85° | 1.2 | 2.5 | 0.0 | 0.6 | 2.5 | 1.2 | 0.6 | 3.1 | 1.2 | 4.3 | 4.9 |
| 87.5° | 0.0 | 1.2 | 1.2 | 0.0 | 1.8 | 0.0 | 1.8 | 1.2 | 0.0 | 3.7 | 1.8 |
| 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: P315248

CATALOG NUMBER: LDA2B05FL9027D010 PINW1MB

CANDELA DISTRIBUTION (continued):

| | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|------|--------|------|--------|------|
| 0° | 21.8 | 21.8 | 21.8 | 21.8 | 21.8 |
| 2.5° | 18.7 | 16.9 | 14.4 | 18.1 | 15.0 |
| 5° | 22.4 | 20.5 | 16.3 | 19.3 | 17.5 |
| 7.5° | 23.0 | 19.3 | 16.9 | 15.6 | 17.5 |
| 10° | 13.8 | 9.2 | 6.7 | 9.2 | 4.9 |
| 12.5° | 23.0 | 16.3 | 15.0 | 16.9 | 18.7 |
| 15° | 17.5 | 10.4 | 10.4 | 8.0 | 11.3 |
| 17.5° | 9.8 | 8.0 | 7.4 | 9.8 | 11.3 |
| 20° | 10.4 | 6.7 | 5.5 | 9.2 | 8.6 |
| 21° | 9.2 | 2.5 | 7.4 | 7.4 | 8.6 |
| 22° | 13.2 | 6.1 | 7.4 | 12.0 | 12.6 |
| 23° | 8.6 | 6.7 | 5.5 | 7.4 | 9.8 |
| 24° | 12.6 | 7.4 | 6.7 | 9.2 | 13.8 |
| 25° | 8.6 | 6.7 | 6.7 | 8.6 | 7.4 |
| 26° | 4.9 | 6.7 | 4.9 | 7.4 | 6.1 |
| 27° | 3.7 | 6.1 | 3.7 | 5.5 | 7.4 |
| 28° | 8.0 | 9.8 | 9.2 | 9.8 | 8.6 |
| 29° | 8.6 | 10.4 | 8.6 | 13.2 | 9.8 |
| 30° | 4.9 | 9.2 | 4.3 | 9.8 | 8.6 |
| 31° | 4.9 | 6.7 | 3.1 | 9.8 | 8.6 |
| 32° | 0.6 | 3.7 | 1.8 | 3.7 | 3.7 |
| 33° | 3.7 | 4.3 | 4.9 | 8.0 | 6.1 |
| 34° | 6.1 | 7.4 | 4.9 | 8.6 | 7.4 |
| 35° | 6.7 | 3.7 | 5.5 | 9.2 | 9.8 |
| 36° | 1.8 | 1.8 | 3.1 | 7.4 | 2.5 |
| 37° | 3.7 | 10.4 | 7.4 | 12.6 | 7.4 |
| 38° | 6.1 | 12.6 | 12.0 | 15.6 | 12.6 |
| 39° | 1.2 | 3.7 | 4.3 | 8.6 | 8.6 |
| 40° | 5.5 | 9.2 | 6.7 | 12.6 | 12.6 |
| 42.5° | 4.3 | 6.7 | 4.9 | 10.4 | 8.6 |
| 45° | 1.8 | 1.8 | 1.2 | 6.7 | 4.9 |
| 47.5° | 3.1 | 3.1 | 5.5 | 8.6 | 15.0 |
| 50° | 6.1 | 6.1 | 8.0 | 14.4 | 13.8 |
| 51° | 3.7 | 3.1 | 4.3 | 9.8 | 12.6 |
| 52° | 3.1 | 4.3 | 4.3 | 9.8 | 9.8 |
| 53° | 1.2 | 0.0 | 0.0 | 7.4 | 6.1 |
| 54° | 1.2 | 0.6 | 1.8 | 5.5 | 8.6 |
| 55° | 0.0 | 3.1 | 2.5 | 11.3 | 12.6 |
| 57.5° | 0.6 | 4.9 | 2.5 | 8.0 | 9.8 |
| 60° | 3.1 | 3.7 | 6.7 | 8.0 | 9.8 |
| 61° | 0.0 | 3.1 | 3.1 | 7.4 | 8.6 |
| 62° | 0.0 | 2.5 | 5.5 | 6.7 | 8.6 |
| 63° | 3.1 | 3.7 | 4.9 | 8.0 | 9.8 |



TEST NUMBER: P315248

CATALOG NUMBER: LDA2B05FL9027D010 PINW1MB

CANDELA DISTRIBUTION (continued):

| | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|-----|--------|------|--------|------|
| 66° | 1.8 | 4.9 | 6.1 | 8.0 | 7.4 |
| 67.5° | 3.7 | 4.3 | 3.7 | 10.4 | 12.6 |
| 70° | 4.9 | 8.0 | 8.6 | 7.4 | 12.6 |
| 72.5° | 3.1 | 4.3 | 6.1 | 11.3 | 12.6 |
| 75° | 5.5 | 6.1 | 9.2 | 10.4 | 12.6 |
| 77.5° | 4.3 | 6.1 | 6.1 | 6.7 | 12.6 |
| 80° | 1.8 | 5.5 | 6.1 | 6.7 | 3.7 |
| 82.5° | 2.5 | 3.7 | 2.5 | 6.7 | 4.9 |
| 85° | 1.2 | 5.5 | 4.9 | 6.1 | 6.1 |
| 87.5° | 1.8 | 3.1 | 3.1 | 5.5 | 3.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By E9808895 / USPTCWHP6082093





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







| | | | | | | | | | | | |
|-----|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| 64° | 13.8 | 14.4 | 13.8 | 9.8 | 7.4 | 6.7 | 4.9 | 8.6 | 2.5 | 2.5 | 0.0 |
| 65° | 12.6 | 13.8 | 10.4 | 12.0 | 8.0 | 7.4 | 4.3 | 8.6 | 1.2 | 4.3 | 3.1 |





| | | | | | |
|-----|-----|-----|-----|-----|-----|
| 64° | 1.8 | 3.1 | 3.1 | 5.5 | 8.6 |
| 65° | 3.1 | 4.3 | 4.3 | 8.0 | 6.1 |



(END OF REPORT)