

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: P315378

Luminaire Tested: **LDA2B15FL8027D010 PINW1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P315378
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: LDA2B15FL8027D010 PINW1MMS
Description: PORTFOLIO 2IN ADJ 1500 LUMEN LED LUMINAIRE WITH FLOOD OPTIC AND 2in Adj PinHole, White oculus, matte metallic silver finish
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1173.1 lumens
Efficiency: N/A
Efficacy: 83.2 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

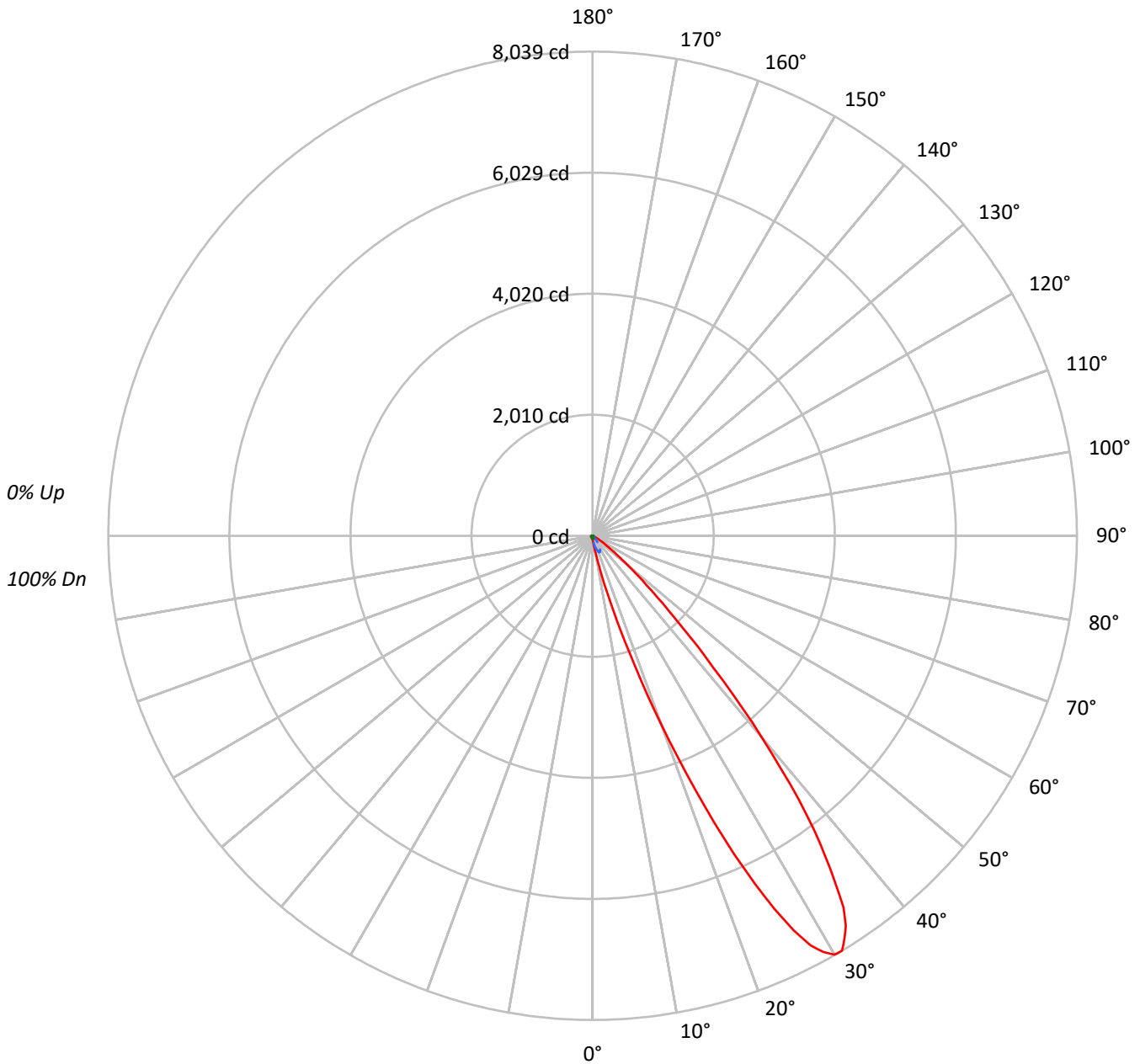
Input Watts (W): 14.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P315378

CATALOG NUMBER: LDA2B15FL8027D010 PINW1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P315378

CATALOG NUMBER: LDA2B15FL8027D010 PINW1MMS

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° | 24668 | 24668 | 24668 |
| 5° | 55071 | 25456 | 19859 |
| 10° | 147336 | 15881 | 5661 |
| 15° | 579974 | 20482 | 13280 |
| 20° | 1754475 | 12548 | 10343 |
| 25° | 3472066 | 10724 | 9200 |
| 30° | 4574970 | 6437 | 11223 |
| 35° | 4221526 | 9335 | 13551 |
| 40° | 2811935 | 8179 | 18548 |
| 45° | 1326294 | 2930 | 7884 |
| 50° | 584785 | 10822 | 24331 |
| 55° | 237831 | 0 | 24772 |
| 60° | 98574 | 6907 | 22201 |
| 65° | 33621 | 8172 | 16460 |
| 70° | 28417 | 16300 | 41544 |
| 75° | 16012 | 24209 | 54899 |
| 80° | 0 | 11933 | 23866 |
| 85° | 15850 | 15850 | 79816 |



TEST NUMBER: P315378

CATALOG NUMBER: LDA2B15FL8027D010 PINW1MMS

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 6.8 | 0.6 |
| 10°-20° | 71.8 | 6.1 |
| 20°-30° | 369.0 | 31.5 |
| 30°-40° | 472.5 | 40.3 |
| 40°-50° | 181.7 | 15.5 |
| 50°-60° | 36.9 | 3.1 |
| 60°-70° | 12.5 | 1.1 |
| 70°-80° | 14.6 | 1.2 |
| 80°-90° | 7.4 | 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° | 447.5 | 38.2 |
| 0°-40° | 920.0 | 78.4 |
| 0°-60° | 1138.6 | 97.1 |
| 0°-90° | 1173.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1173.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|-----|-----|------|------|------|
| 0° | 50 | 50 | 50 | 50 | 50 | |
| 5° | 111 | 92 | 51 | 37 | 40 | 16 |
| 15° | 1136 | 221 | 40 | 24 | 26 | 435 |
| 25° | 6378 | 288 | 20 | 16 | 17 | 2911 |
| 35° | 7009 | 150 | 16 | 13 | 22 | 4189 |
| 45° | 1901 | 37 | 4 | 3 | 11 | 1634 |
| 55° | 276 | 7 | 0 | 6 | 29 | 286 |
| 65° | 29 | 10 | 7 | 10 | 14 | 41 |
| 75° | 8 | 16 | 13 | 21 | 29 | 11 |
| 85° | 3 | 10 | 3 | 11 | 14 | 2 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P315378

CATALOG NUMBER: LDA2B15FL8027D010 PINW1MMS

CANDELA DISTRIBUTION (FULL):

| | 0° | 2.5° | 5° | 7.5° | 10° | 12.5° | 15° | 17.5° | 22.5° | 45° | 67.5° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|
| 0° | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 |
| 2.5° | 73.9 | 64.0 | 66.8 | 57.0 | 62.6 | 64.0 | 52.8 | 69.6 | 62.6 | 65.4 | 57.0 |
| 5° | 111.2 | 119.6 | 109.7 | 105.5 | 102.7 | 105.5 | 102.7 | 106.9 | 104.1 | 91.5 | 65.4 |
| 7.5° | 185.7 | 169.5 | 169.5 | 163.9 | 168.1 | 166.7 | 159.7 | 163.9 | 154.1 | 111.2 | 75.3 |
| 10° | 294.1 | 277.9 | 276.5 | 272.3 | 270.9 | 258.2 | 251.2 | 245.5 | 225.1 | 131.6 | 68.2 |
| 12.5° | 576.2 | 562.1 | 552.3 | 527.6 | 510.8 | 500.9 | 463.6 | 443.9 | 385.5 | 195.6 | 87.2 |
| 15° | 1135.5 | 1063.0 | 1081.3 | 1001.8 | 943.4 | 904.7 | 827.3 | 759.1 | 619.1 | 220.9 | 84.4 |
| 17.5° | 2009.3 | 1938.9 | 1891.8 | 1805.2 | 1686.4 | 1583.6 | 1431.0 | 1279.7 | 994.8 | 251.2 | 78.8 |
| 20° | 3341.7 | 3230.6 | 3132.1 | 2983.7 | 2755.0 | 2557.3 | 2288.6 | 1999.4 | 1480.9 | 287.0 | 71.1 |
| 21° | 3927.1 | 3841.2 | 3727.3 | 3531.7 | 3265.1 | 3000.5 | 2678.3 | 2330.1 | 1687.8 | 289.9 | 64.0 |
| 22° | 4537.7 | 4482.2 | 4332.3 | 4107.9 | 3796.9 | 3481.7 | 3086.4 | 2703.6 | 1908.0 | 294.1 | 61.2 |
| 23° | 5173.7 | 5115.3 | 4945.8 | 4689.0 | 4339.3 | 3958.0 | 3497.2 | 3043.5 | 2114.8 | 299.7 | 59.8 |
| 24° | 5796.3 | 5731.6 | 5542.4 | 5255.3 | 4858.5 | 4420.3 | 3899.6 | 3373.4 | 2307.6 | 296.9 | 62.6 |
| 25° | 6378.2 | 6288.1 | 6088.3 | 5770.3 | 5334.8 | 4843.1 | 4269.0 | 3658.3 | 2477.1 | 288.4 | 52.8 |
| 26° | 6897.4 | 6794.6 | 6579.4 | 6232.5 | 5756.2 | 5223.7 | 4577.1 | 3922.9 | 2602.3 | 281.4 | 50.0 |
| 27° | 7348.3 | 7218.9 | 6988.8 | 6625.1 | 6114.3 | 5526.2 | 4840.3 | 4129.7 | 2712.8 | 270.9 | 40.1 |
| 28° | 7699.4 | 7550.9 | 7317.4 | 6933.2 | 6393.6 | 5761.9 | 5033.7 | 4259.1 | 2778.2 | 272.3 | 45.7 |
| 29° | 7902.0 | 7788.0 | 7534.1 | 7131.6 | 6563.9 | 5897.7 | 5135.7 | 4330.9 | 2790.9 | 251.2 | 42.9 |
| 30° | 8030.7 | 7903.4 | 7642.4 | 7221.7 | 6629.3 | 5928.6 | 5148.4 | 4317.5 | 2753.6 | 235.7 | 40.1 |
| 31° | 8039.2 | 7906.2 | 7641.0 | 7205.5 | 6604.0 | 5877.3 | 5078.0 | 4238.0 | 2672.7 | 219.5 | 33.1 |
| 32° | 7887.9 | 7785.2 | 7524.2 | 7074.7 | 6466.8 | 5735.8 | 4926.8 | 4103.7 | 2545.4 | 187.1 | 22.5 |
| 33° | 7717.0 | 7592.4 | 7332.8 | 6879.1 | 6276.9 | 5542.4 | 4708.7 | 3922.9 | 2413.1 | 184.3 | 28.8 |
| 34° | 7451.0 | 7301.2 | 7045.8 | 6599.1 | 6013.0 | 5266.6 | 4449.1 | 3681.5 | 2244.2 | 168.1 | 27.4 |
| 35° | 7009.2 | 6929.0 | 6670.8 | 6229.7 | 5660.6 | 4935.9 | 4136.7 | 3416.3 | 2064.8 | 149.9 | 19.7 |
| 36° | 6566.7 | 6468.2 | 6224.1 | 5797.8 | 5258.1 | 4542.0 | 3784.3 | 3113.8 | 1862.2 | 127.3 | 15.5 |
| 37° | 6098.9 | 5970.1 | 5747.8 | 5330.6 | 4767.1 | 4149.4 | 3445.9 | 2825.4 | 1696.9 | 134.4 | 21.1 |
| 38° | 5553.6 | 5510.7 | 5218.0 | 4829.7 | 4309.1 | 3725.9 | 3082.1 | 2521.4 | 1514.0 | 125.2 | 34.5 |
| 39° | 4954.2 | 4925.4 | 4633.4 | 4279.5 | 3812.4 | 3276.3 | 2710.0 | 2206.3 | 1331.1 | 91.5 | 11.3 |
| 40° | 4366.1 | 4283.8 | 4076.9 | 3755.4 | 3348.8 | 2866.9 | 2377.2 | 1937.5 | 1172.8 | 90.1 | 22.5 |
| 42.5° | 2959.0 | 2985.1 | 2761.3 | 2531.3 | 2270.3 | 1943.1 | 1616.7 | 1328.3 | 820.3 | 66.8 | 14.1 |
| 45° | 1900.9 | 1906.6 | 1806.7 | 1628.0 | 1457.0 | 1253.0 | 1037.7 | 864.6 | 529.1 | 37.3 | 4.2 |
| 47.5° | 1210.1 | 1207.2 | 1143.2 | 1040.5 | 928.7 | 809.1 | 674.7 | 564.9 | 342.6 | 28.8 | 12.7 |
| 50° | 761.9 | 759.1 | 719.0 | 653.6 | 591.0 | 512.2 | 427.7 | 363.7 | 216.7 | 34.5 | 14.1 |
| 51° | 619.1 | 623.3 | 589.6 | 523.4 | 474.9 | 399.6 | 341.2 | 289.9 | 169.5 | 23.9 | 12.7 |
| 52° | 510.8 | 507.9 | 486.8 | 431.3 | 391.2 | 326.4 | 277.9 | 237.1 | 141.4 | 21.1 | 5.6 |
| 53° | 410.9 | 412.3 | 391.2 | 348.2 | 309.6 | 261.0 | 222.3 | 184.3 | 101.3 | 15.5 | 4.2 |
| 54° | 325.0 | 322.2 | 315.2 | 273.7 | 249.8 | 206.8 | 173.8 | 141.4 | 87.2 | 2.8 | 0.0 |
| 55° | 276.5 | 272.3 | 262.4 | 226.5 | 202.6 | 171.0 | 138.6 | 121.0 | 75.3 | 7.0 | 0.0 |
| 57.5° | 159.7 | 159.7 | 154.1 | 134.4 | 118.2 | 105.5 | 84.4 | 78.8 | 38.7 | 7.0 | 0.0 |
| 60° | 99.9 | 87.2 | 97.1 | 83.0 | 65.4 | 58.4 | 48.5 | 44.3 | 33.1 | 12.7 | 2.8 |
| 61° | 83.0 | 66.8 | 65.4 | 61.2 | 57.0 | 38.7 | 33.1 | 35.9 | 21.1 | 4.2 | 2.8 |
| 62° | 59.8 | 52.8 | 57.0 | 48.5 | 42.9 | 30.3 | 27.4 | 26.0 | 12.7 | 5.6 | 7.0 |
| 63° | 54.2 | 48.5 | 47.1 | 35.9 | 31.7 | 31.7 | 23.9 | 22.5 | 15.5 | 11.3 | 5.6 |



TEST NUMBER: P315378

CATALOG NUMBER: LDA2B15FL8027D010 PINW1MMS

CANDELA DISTRIBUTION (continued):

| | 0° | 2.5° | 5° | 7.5° | 10° | 12.5° | 15° | 17.5° | 22.5° | 45° | 67.5° |
|-------|------|------|------|------|------|-------|------|-------|-------|------|-------|
| 66° | 28.8 | 23.9 | 21.1 | 23.9 | 14.1 | 18.3 | 7.0 | 19.7 | 4.2 | 7.0 | 4.2 |
| 67.5° | 22.5 | 14.1 | 12.7 | 15.5 | 9.8 | 7.0 | 9.8 | 12.7 | 4.2 | 7.0 | 9.8 |
| 70° | 19.7 | 9.8 | 14.1 | 12.7 | 9.8 | 12.7 | 14.1 | 14.1 | 4.2 | 14.1 | 12.7 |
| 72.5° | 19.7 | 12.7 | 7.0 | 5.6 | 5.6 | 5.6 | 5.6 | 5.6 | 8.4 | 19.7 | 15.5 |
| 75° | 8.4 | 8.4 | 4.2 | 9.8 | 5.6 | 8.4 | 5.6 | 14.1 | 5.6 | 15.5 | 12.7 |
| 77.5° | 5.6 | 7.0 | 0.0 | 7.0 | 0.0 | 0.0 | 4.2 | 9.8 | 4.2 | 11.3 | 14.1 |
| 80° | 0.0 | 7.0 | 4.2 | 0.0 | 2.8 | 4.2 | 0.0 | 1.4 | 2.8 | 12.7 | 5.6 |
| 82.5° | 2.8 | 4.2 | 5.6 | 2.8 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 8.4 | 7.0 |
| 85° | 2.8 | 5.6 | 0.0 | 1.4 | 5.6 | 2.8 | 1.4 | 7.0 | 2.8 | 9.8 | 11.3 |
| 87.5° | 0.0 | 2.8 | 2.8 | 0.0 | 4.2 | 0.0 | 4.2 | 2.8 | 0.0 | 8.4 | 4.2 |
| 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: P315378

CATALOG NUMBER: LDA2B15FL8027D010 PINW1MMS

CANDELA DISTRIBUTION (continued):

| | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|------|--------|------|--------|------|
| 0° | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 |
| 2.5° | 42.9 | 38.7 | 33.1 | 41.5 | 34.5 |
| 5° | 51.4 | 47.1 | 37.3 | 44.3 | 40.1 |
| 7.5° | 52.8 | 44.3 | 38.7 | 35.9 | 40.1 |
| 10° | 31.7 | 21.1 | 15.5 | 21.1 | 11.3 |
| 12.5° | 52.8 | 37.3 | 34.5 | 38.7 | 42.9 |
| 15° | 40.1 | 23.9 | 23.9 | 18.3 | 26.0 |
| 17.5° | 22.5 | 18.3 | 16.9 | 22.5 | 26.0 |
| 20° | 23.9 | 15.5 | 12.7 | 21.1 | 19.7 |
| 21° | 21.1 | 5.6 | 16.9 | 16.9 | 19.7 |
| 22° | 30.3 | 14.1 | 16.9 | 27.4 | 28.8 |
| 23° | 19.7 | 15.5 | 12.7 | 16.9 | 22.5 |
| 24° | 28.8 | 16.9 | 15.5 | 21.1 | 31.7 |
| 25° | 19.7 | 15.5 | 15.5 | 19.7 | 16.9 |
| 26° | 11.3 | 15.5 | 11.3 | 16.9 | 14.1 |
| 27° | 8.4 | 14.1 | 8.4 | 12.7 | 16.9 |
| 28° | 18.3 | 22.5 | 21.1 | 22.5 | 19.7 |
| 29° | 19.7 | 23.9 | 19.7 | 30.3 | 22.5 |
| 30° | 11.3 | 21.1 | 9.8 | 22.5 | 19.7 |
| 31° | 11.3 | 15.5 | 7.0 | 22.5 | 19.7 |
| 32° | 1.4 | 8.4 | 4.2 | 8.4 | 8.4 |
| 33° | 8.4 | 9.8 | 11.3 | 18.3 | 14.1 |
| 34° | 14.1 | 16.9 | 11.3 | 19.7 | 16.9 |
| 35° | 15.5 | 8.4 | 12.7 | 21.1 | 22.5 |
| 36° | 4.2 | 4.2 | 7.0 | 16.9 | 5.6 |
| 37° | 8.4 | 23.9 | 16.9 | 28.8 | 16.9 |
| 38° | 14.1 | 28.8 | 27.4 | 35.9 | 28.8 |
| 39° | 2.8 | 8.4 | 9.8 | 19.7 | 19.7 |
| 40° | 12.7 | 21.1 | 15.5 | 28.8 | 28.8 |
| 42.5° | 9.8 | 15.5 | 11.3 | 23.9 | 19.7 |
| 45° | 4.2 | 4.2 | 2.8 | 15.5 | 11.3 |
| 47.5° | 7.0 | 7.0 | 12.7 | 19.7 | 34.5 |
| 50° | 14.1 | 14.1 | 18.3 | 33.1 | 31.7 |
| 51° | 8.4 | 7.0 | 9.8 | 22.5 | 28.8 |
| 52° | 7.0 | 9.8 | 9.8 | 22.5 | 22.5 |
| 53° | 2.8 | 0.0 | 0.0 | 16.9 | 14.1 |
| 54° | 2.8 | 1.4 | 4.2 | 12.7 | 19.7 |
| 55° | 0.0 | 7.0 | 5.6 | 26.0 | 28.8 |
| 57.5° | 1.4 | 11.3 | 5.6 | 18.3 | 22.5 |
| 60° | 7.0 | 8.4 | 15.5 | 18.3 | 22.5 |
| 61° | 0.0 | 7.0 | 7.0 | 16.9 | 19.7 |
| 62° | 0.0 | 5.6 | 12.7 | 15.5 | 19.7 |
| 63° | 7.0 | 8.4 | 11.3 | 18.3 | 22.5 |



TEST NUMBER: P315378

CATALOG NUMBER: LDA2B15FL8027D010 PINW1MMS

CANDELA DISTRIBUTION (continued):

| | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|------|--------|------|--------|------|
| 66° | 4.2 | 11.3 | 14.1 | 18.3 | 16.9 |
| 67.5° | 8.4 | 9.8 | 8.4 | 23.9 | 28.8 |
| 70° | 11.3 | 18.3 | 19.7 | 16.9 | 28.8 |
| 72.5° | 7.0 | 9.8 | 14.1 | 26.0 | 28.8 |
| 75° | 12.7 | 14.1 | 21.1 | 23.9 | 28.8 |
| 77.5° | 9.8 | 14.1 | 14.1 | 15.5 | 28.8 |
| 80° | 4.2 | 12.7 | 14.1 | 15.5 | 8.4 |
| 82.5° | 5.6 | 8.4 | 5.6 | 15.5 | 11.3 |
| 85° | 2.8 | 12.7 | 11.3 | 14.1 | 14.1 |
| 87.5° | 4.2 | 7.0 | 7.0 | 12.7 | 8.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



Report Generated By E9808895 / USPTCWHP6082093





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







| | | | | | | | | | | | |
|-----|------|------|------|------|------|------|------|------|-----|-----|-----|
| 64° | 31.7 | 33.1 | 31.7 | 22.5 | 16.9 | 15.5 | 11.3 | 19.7 | 5.6 | 5.6 | 0.0 |
| 65° | 28.8 | 31.7 | 23.9 | 27.4 | 18.3 | 16.9 | 9.8 | 19.7 | 2.8 | 9.8 | 7.0 |





| | | | | | |
|-----|-----|-----|-----|------|------|
| 64° | 4.2 | 7.0 | 7.0 | 12.7 | 19.7 |
| 65° | 7.0 | 9.8 | 9.8 | 18.3 | 14.1 |



(END OF REPORT)