

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: P1212228

Luminaire Tested: **LDSQA4A20940D010TE LAR35FL 4LSQAL1H 30°**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-41-14  
Report Number: P1212228  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26804)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDSQA4A20940D010TE LAR35FL 4LSQAL1H 30°  
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 35° FLOOD, 30° Tilt  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

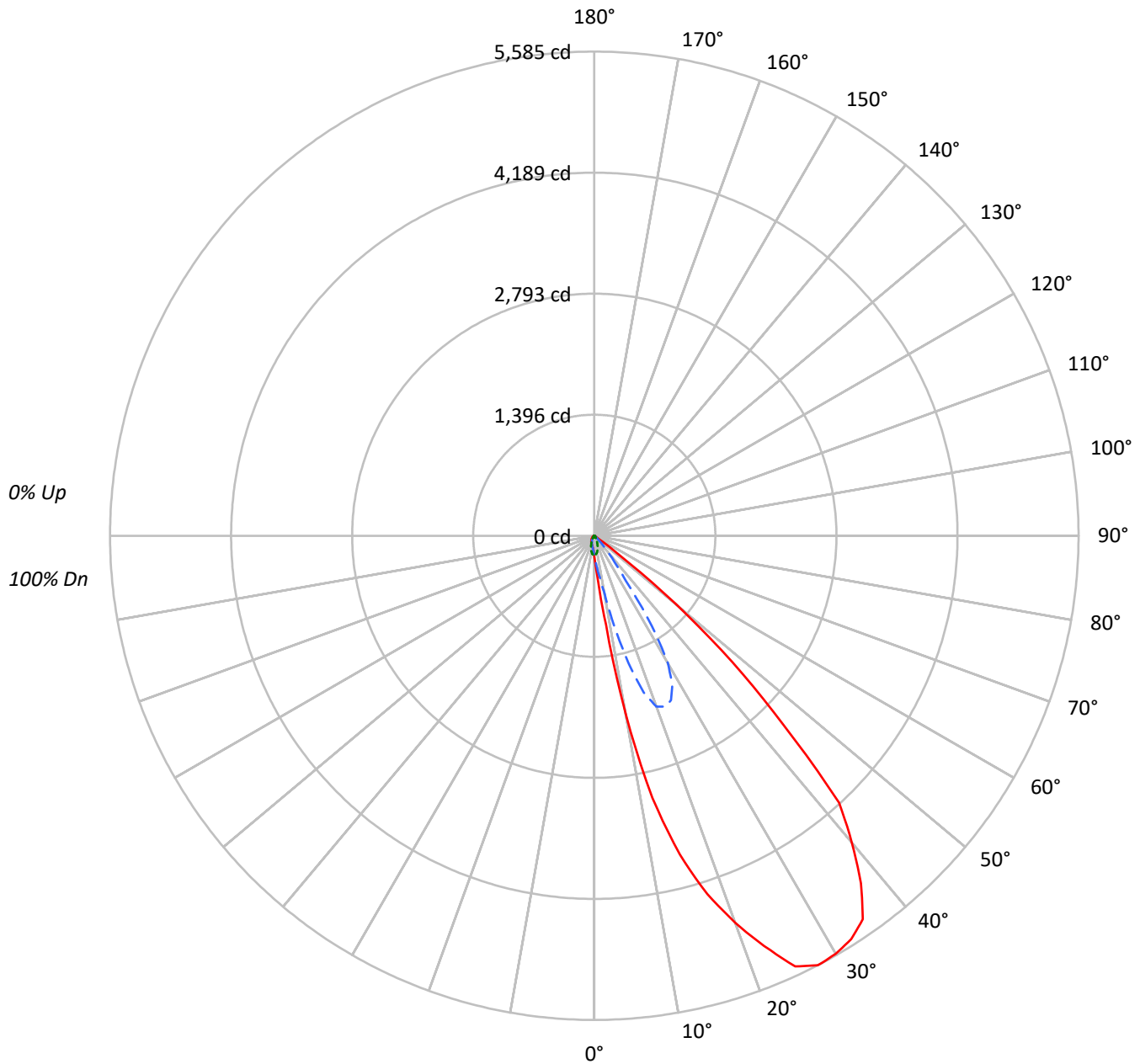
Lumens per Lamp: N/A  
Luminaire Lumens: 1860.1 lumens  
Efficiency: N/A  
Efficacy: 64.6 lumens/watt  
Spacing Criteria (0/90/45): 2.46 / 0.61 / 1.2  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 28.8  
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: P1212228

CATALOG NUMBER: LDSQA4A20940D010TE LAR35FL 4LSQAL1H 30°

### Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212228

CATALOG NUMBER: LDSQA4A20940D010TE LAR35FL 4LSQAL1H 30°

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|
| RF  | 20  |     |     |     | 20  |     |     |     |     | 20  |     |     |     |     | 20  |     |     |     |    | 20 |
| RC  | 80  |     |     |     | 70  |     |     |     |     | 50  |     |     |     |     | 30  |     |     |     |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30 | 10 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |
| 1   | 112 | 109 | 106 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99  | 99  | 97  | 96  | 96  | 94  | 93  | 91  |    |    |
| 2   | 106 | 100 | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 91  | 88  | 92  | 89  | 86  | 89  | 86  | 84  | 82  |    |    |
| 3   | 99  | 91  | 85  | 80  | 97  | 90  | 84  | 80  | 87  | 82  | 78  | 84  | 80  | 77  | 82  | 79  | 76  | 74  |    |    |
| 4   | 92  | 83  | 77  | 71  | 90  | 82  | 76  | 71  | 80  | 74  | 70  | 78  | 73  | 69  | 76  | 72  | 68  | 67  |    |    |
| 5   | 86  | 76  | 69  | 64  | 84  | 75  | 68  | 64  | 73  | 67  | 63  | 71  | 66  | 62  | 70  | 65  | 62  | 60  |    |    |
| 6   | 80  | 70  | 62  | 57  | 79  | 69  | 62  | 57  | 67  | 61  | 57  | 66  | 60  | 56  | 64  | 59  | 56  | 54  |    |    |
| 7   | 75  | 64  | 57  | 52  | 74  | 63  | 56  | 51  | 62  | 56  | 51  | 60  | 55  | 51  | 59  | 54  | 50  | 49  |    |    |
| 8   | 70  | 59  | 52  | 47  | 69  | 58  | 51  | 46  | 57  | 51  | 46  | 56  | 50  | 46  | 55  | 50  | 46  | 44  |    |    |
| 9   | 66  | 54  | 47  | 42  | 64  | 54  | 47  | 42  | 53  | 46  | 42  | 52  | 46  | 42  | 51  | 45  | 42  | 40  |    |    |
| 10  | 62  | 50  | 43  | 38  | 60  | 50  | 43  | 38  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 36  |    |    |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°     | 90°   | 180°  |
|-----|--------|-------|-------|
| 0°  | 22291  | 22291 | 22291 |
| 5°  | 52221  | 21024 | 14704 |
| 10° | 206341 | 18474 | 12257 |
| 15° | 381855 | 14803 | 10751 |
| 20° | 489628 | 10763 | 9732  |
| 25° | 585833 | 7632  | 8615  |
| 30° | 622915 | 5034  | 7584  |
| 35° | 638408 | 3039  | 6599  |
| 40° | 584393 | 1973  | 5691  |
| 45° | 421694 | 1384  | 4644  |
| 50° | 184094 | 1100  | 3873  |
| 55° | 12701  | 929   | 3243  |
| 60° | 2325   | 891   | 2674  |
| 65° | 848    | 848   | 1880  |
| 70° | 765    | 1048  | 1303  |
| 75° | 674    | 1385  | 1385  |
| 80° | 0      | 2064  | 1506  |
| 85° | 0      | 4113  | 1112  |



TEST NUMBER: P1212228

CATALOG NUMBER: LDSQA4A20940D010TE LAR35FL 4LSQAL1H 30°

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 33.5   | 1.8       |
| 10°-20°   | 263.3  | 14.2      |
| 20°-30°   | 551.2  | 29.6      |
| 30°-40°   | 613.6  | 33.0      |
| 40°-50°   | 352.2  | 18.9      |
| 50°-60°   | 35.2   | 1.9       |
| 60°-70°   | 5.5    | 0.3       |
| 70°-80°   | 3.5    | 0.2       |
| 80°-90°   | 2.1    | 0.1       |
| 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°    | 848.0  | 45.6      |
| 0°-40°    | 1461.6 | 78.6      |
| 0°-60°    | 1849.0 | 99.4      |
| 0°-90°    | 1860.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1860.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 230  | 230  | 230 | 230  | 230  |      |
| 5°  | 537  | 370  | 216 | 158  | 151  | 98   |
| 15° | 3807 | 1520 | 148 | 104  | 107  | 1076 |
| 25° | 5481 | 2092 | 71  | 63   | 81   | 2482 |
| 35° | 5398 | 639  | 26  | 37   | 56   | 3296 |
| 45° | 3078 | 77   | 10  | 20   | 34   | 2350 |
| 55° | 75   | 11   | 6   | 12   | 19   | 224  |
| 65° | 4    | 3    | 4   | 7    | 8    | 5    |
| 75° | 2    | 2    | 4   | 5    | 4    | 1    |
| 85° | 0    | 2    | 4   | 3    | 1    | 0    |
| 90° | 0    | 0    | 0   | 0    | 0    |      |

TEST NUMBER: P1212228

CATALOG NUMBER: LDSQA4A20940D010TE LAR35FL 4LSQAL1H 30°

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 25°    | 30°    | 35°    | 40°    | 45°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 230.1  | 230.1  | 230.1  | 230.1  | 230.1  | 230.1  | 230.1  | 230.1  | 230.1  | 230.1  | 230.1  |
| 2.5°  | 343.6  | 336.3  | 329.0  | 324.4  | 319.8  | 326.2  | 321.7  | 319.8  | 307.0  | 300.6  | 295.0  |
| 5°    | 537.0  | 523.2  | 503.0  | 486.6  | 470.1  | 473.8  | 461.0  | 445.4  | 413.3  | 390.4  | 370.2  |
| 7.5°  | 1036.3 | 1002.5 | 940.2  | 879.8  | 819.2  | 808.2  | 767.9  | 698.2  | 608.5  | 540.7  | 482.1  |
| 10°   | 2097.6 | 1995.0 | 1880.3 | 1756.6 | 1611.9 | 1571.5 | 1471.7 | 1283.0 | 1076.7 | 841.3  | 670.8  |
| 12.5° | 3096.4 | 3049.6 | 2914.9 | 2754.6 | 2597.8 | 2501.6 | 2398.2 | 2086.6 | 1759.4 | 1380.1 | 1063.0 |
| 15°   | 3807.4 | 3779.0 | 3660.8 | 3515.1 | 3346.5 | 3284.2 | 3157.8 | 2847.1 | 2433.8 | 1980.2 | 1520.2 |
| 17.5° | 4334.4 | 4285.8 | 4162.1 | 4003.6 | 3803.8 | 3750.6 | 3599.4 | 3290.6 | 2861.8 | 2406.3 | 1895.9 |
| 20°   | 4749.4 | 4719.2 | 4558.9 | 4368.3 | 4129.1 | 4065.0 | 3888.2 | 3566.5 | 3100.0 | 2616.2 | 2096.6 |
| 22.5° | 5122.4 | 5071.1 | 4874.1 | 4646.8 | 4373.8 | 4305.1 | 4108.0 | 3755.2 | 3253.9 | 2715.1 | 2132.3 |
| 25°   | 5480.7 | 5402.8 | 5163.7 | 4865.8 | 4545.1 | 4451.6 | 4235.4 | 3861.5 | 3310.9 | 2723.4 | 2092.1 |
| 27.5° | 5585.2 | 5545.8 | 5324.9 | 4978.6 | 4607.4 | 4502.1 | 4276.6 | 3885.4 | 3289.8 | 2648.2 | 1947.3 |
| 30°   | 5568.6 | 5535.7 | 5351.5 | 4989.5 | 4596.4 | 4485.5 | 4256.5 | 3812.0 | 3166.9 | 2452.2 | 1691.6 |
| 32.5° | 5516.5 | 5503.6 | 5280.9 | 4894.2 | 4493.8 | 4372.9 | 4125.4 | 3629.7 | 2937.0 | 2153.4 | 1236.2 |
| 35°   | 5398.2 | 5347.9 | 5070.2 | 4706.4 | 4321.5 | 4188.7 | 3909.1 | 3368.6 | 2633.6 | 1567.9 | 638.6  |
| 37.5° | 5051.9 | 5012.5 | 4793.4 | 4474.6 | 4099.8 | 3929.4 | 3634.2 | 3031.3 | 2038.9 | 891.6  | 382.1  |
| 40°   | 4621.1 | 4601.9 | 4429.7 | 4144.7 | 3744.2 | 3551.8 | 3231.0 | 2480.6 | 1244.3 | 506.8  | 252.0  |
| 42.5° | 4179.4 | 4174.1 | 3989.8 | 3692.0 | 3257.6 | 3036.8 | 2704.2 | 1673.3 | 661.7  | 306.1  | 145.7  |
| 45°   | 3078.0 | 3111.0 | 2982.7 | 2804.1 | 2472.3 | 2311.9 | 1880.3 | 862.2  | 381.1  | 169.5  | 77.0   |
| 47.5° | 2159.0 | 2122.3 | 1895.0 | 1582.6 | 1279.2 | 1083.2 | 819.2  | 407.8  | 203.4  | 89.0   | 44.0   |
| 50°   | 1221.5 | 1227.9 | 1022.6 | 827.4  | 542.5  | 429.8  | 326.2  | 205.3  | 98.1   | 46.7   | 26.6   |
| 52.5° | 318.9  | 333.5  | 287.8  | 247.4  | 210.8  | 171.4  | 138.3  | 89.0   | 46.7   | 27.4   | 17.4   |
| 55°   | 75.2   | 77.9   | 72.4   | 67.8   | 64.2   | 56.8   | 50.4   | 38.5   | 25.7   | 17.4   | 11.0   |
| 57.5° | 26.6   | 27.4   | 26.6   | 26.6   | 25.7   | 24.7   | 22.9   | 20.2   | 15.6   | 11.0   | 7.3    |
| 60°   | 12.0   | 12.8   | 12.0   | 12.8   | 12.8   | 12.8   | 12.8   | 12.8   | 9.1    | 6.5    | 4.6    |
| 62.5° | 5.5    | 5.5    | 5.5    | 5.5    | 6.5    | 6.5    | 7.3    | 7.3    | 5.5    | 4.6    | 3.7    |
| 65°   | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 3.7    | 2.7    |
| 67.5° | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    | 2.7    |
| 70°   | 2.7    | 2.7    | 2.7    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 2.7    |
| 72.5° | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    |
| 75°   | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    |
| 77.5° | 0.0    | 0.0    | 0.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.8    | 1.8    | 1.8    | 1.8    |
| 80°   | 0.0    | 0.0    | 0.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.8    | 1.8    | 1.8    |
| 82.5° | 0.0    | 0.0    | 0.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.8    | 1.8    | 1.8    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.8    | 1.8    | 1.8    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 1.0    | 1.0    | 1.0    | 1.0    | 1.8    | 1.8    | 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    |

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212228

CATALOG NUMBER: LDSQA4A20940D010TE LAR35FL 4LSQAL1H 30°

**CANDELA DISTRIBUTION (continued):**

|       | 50°    | 55°    | 60°   | 65°   | 67.5° | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 230.1  | 230.1  | 230.1 | 230.1 | 230.1 | 230.1 | 230.1 | 230.1 | 230.1 | 230.1 | 230.1 |
| 2.5°  | 285.0  | 284.0  | 274.1 | 266.6 | 263.0 | 257.5 | 251.0 | 241.9 | 231.8 | 222.6 | 219.0 |
| 5°    | 346.4  | 334.5  | 313.4 | 296.0 | 287.8 | 279.4 | 264.8 | 248.3 | 232.7 | 216.2 | 208.0 |
| 7.5°  | 426.1  | 391.3  | 350.1 | 317.9 | 304.2 | 290.5 | 269.4 | 246.5 | 225.4 | 203.4 | 191.6 |
| 10°   | 535.2  | 454.5  | 383.0 | 331.8 | 311.6 | 293.3 | 263.0 | 234.6 | 211.7 | 187.8 | 172.2 |
| 12.5° | 765.1  | 565.4  | 417.8 | 338.1 | 311.6 | 287.8 | 251.0 | 218.1 | 192.4 | 167.7 | 153.0 |
| 15°   | 1102.4 | 763.4  | 493.9 | 344.6 | 305.1 | 274.9 | 232.7 | 197.0 | 169.5 | 147.6 | 133.8 |
| 17.5° | 1374.6 | 945.7  | 588.3 | 361.1 | 297.0 | 257.5 | 209.0 | 171.4 | 145.7 | 125.5 | 114.5 |
| 20°   | 1511.9 | 1022.6 | 631.4 | 363.8 | 276.7 | 230.1 | 180.6 | 144.8 | 121.9 | 104.4 | 95.3  |
| 22.5° | 1509.3 | 997.9  | 592.9 | 318.9 | 242.9 | 198.9 | 152.2 | 119.0 | 100.8 | 87.0  | 79.8  |
| 25°   | 1414.0 | 883.4  | 494.8 | 254.7 | 196.2 | 165.0 | 123.7 | 96.2  | 81.5  | 71.4  | 65.1  |
| 27.5° | 1235.2 | 717.5  | 369.3 | 188.8 | 153.0 | 130.1 | 96.2  | 77.0  | 65.1  | 57.8  | 53.1  |
| 30°   | 969.5  | 480.2  | 232.7 | 140.2 | 116.4 | 98.1  | 74.2  | 59.6  | 51.3  | 45.0  | 42.1  |
| 32.5° | 534.2  | 250.2  | 156.7 | 102.6 | 85.2  | 71.4  | 55.0  | 43.0  | 37.5  | 33.0  | 32.0  |
| 35°   | 295.0  | 176.9  | 111.8 | 68.7  | 56.8  | 48.6  | 37.5  | 31.2  | 27.4  | 25.7  | 25.7  |
| 37.5° | 209.0  | 113.7  | 66.9  | 43.0  | 36.6  | 32.0  | 25.7  | 21.9  | 21.1  | 20.2  | 20.2  |
| 40°   | 125.5  | 66.9   | 40.3  | 28.4  | 24.7  | 21.9  | 19.2  | 16.6  | 16.6  | 15.6  | 16.6  |
| 42.5° | 68.7   | 40.3   | 27.4  | 20.2  | 17.4  | 16.6  | 13.8  | 12.8  | 12.8  | 12.8  | 13.8  |
| 45°   | 41.2   | 26.6   | 19.2  | 14.6  | 12.8  | 11.0  | 10.1  | 9.1   | 10.1  | 10.1  | 11.0  |
| 47.5° | 26.6   | 19.2   | 12.8  | 9.1   | 8.2   | 7.3   | 6.5   | 7.3   | 7.3   | 8.2   | 9.1   |
| 50°   | 18.3   | 12.0   | 8.2   | 5.5   | 5.5   | 4.6   | 5.5   | 5.5   | 6.5   | 7.3   | 8.2   |
| 52.5° | 12.0   | 8.2    | 5.5   | 4.6   | 3.7   | 3.7   | 3.7   | 4.6   | 5.5   | 6.5   | 7.3   |
| 55°   | 7.3    | 5.5    | 4.6   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 4.6   | 5.5   | 6.5   |
| 57.5° | 5.5    | 4.6    | 3.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 4.6   | 4.6   | 5.5   |
| 60°   | 3.7    | 3.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 4.6   | 5.5   |
| 62.5° | 3.7    | 3.7    | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   | 4.6   | 4.6   |
| 65°   | 2.7    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   | 4.6   |
| 67.5° | 2.7    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 4.6   |
| 70°   | 2.7    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 4.6   |
| 72.5° | 2.7    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   |
| 75°   | 2.7    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 77.5° | 1.8    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 80°   | 2.7    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 82.5° | 1.8    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 85°   | 1.8    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 87.5° | 1.8    | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   |
| 90°   | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212228

CATALOG NUMBER: LDSQA4A20940D010TE LAR35FL 4LSQAL1H 30°

**CANDELA DISTRIBUTION (continued):**

|       | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 230.1 | 230.1 | 230.1 | 230.1  | 230.1 | 230.1 | 230.1 | 230.1 | 230.1 | 230.1 | 230.1 |
| 2.5°  | 214.5 | 208.0 | 202.5 | 204.3  | 200.7 | 194.2 | 192.4 | 187.8 | 182.3 | 181.4 | 181.4 |
| 5°    | 198.9 | 188.8 | 180.6 | 179.6  | 176.0 | 168.6 | 166.8 | 162.2 | 157.7 | 156.7 | 155.8 |
| 7.5°  | 179.6 | 168.6 | 161.3 | 159.4  | 156.7 | 150.2 | 149.4 | 144.8 | 142.1 | 140.2 | 140.2 |
| 10°   | 160.4 | 150.2 | 143.8 | 143.0  | 141.1 | 135.6 | 134.7 | 131.0 | 128.3 | 127.4 | 126.5 |
| 12.5° | 142.1 | 133.8 | 128.3 | 127.4  | 125.5 | 121.0 | 120.0 | 117.3 | 115.4 | 114.5 | 114.5 |
| 15°   | 124.6 | 117.3 | 112.7 | 111.8  | 110.9 | 106.3 | 106.3 | 104.4 | 103.6 | 103.6 | 104.4 |
| 17.5° | 107.2 | 100.8 | 97.1  | 96.2   | 96.2  | 92.6  | 93.5  | 92.6  | 92.6  | 92.6  | 94.4  |
| 20°   | 89.8  | 84.3  | 81.5  | 82.5   | 80.6  | 79.8  | 80.6  | 80.6  | 80.6  | 82.5  | 85.2  |
| 22.5° | 75.2  | 70.5  | 67.8  | 68.7   | 68.7  | 67.8  | 68.7  | 69.7  | 71.4  | 74.2  | 77.0  |
| 25°   | 61.4  | 57.8  | 56.8  | 57.8   | 57.8  | 57.8  | 59.6  | 61.4  | 63.2  | 65.9  | 68.7  |
| 27.5° | 49.5  | 46.7  | 46.7  | 47.6   | 48.6  | 48.6  | 51.3  | 53.1  | 55.8  | 58.6  | 61.4  |
| 30°   | 39.4  | 38.5  | 38.5  | 40.3   | 40.3  | 41.2  | 45.0  | 46.7  | 48.6  | 51.3  | 54.1  |
| 32.5° | 31.2  | 31.2  | 32.0  | 33.9   | 33.9  | 35.8  | 38.5  | 40.3  | 42.1  | 45.0  | 47.6  |
| 35°   | 25.7  | 26.6  | 27.4  | 28.4   | 29.4  | 30.2  | 33.0  | 34.9  | 36.6  | 39.4  | 41.2  |
| 37.5° | 21.1  | 21.9  | 22.9  | 24.7   | 24.7  | 25.7  | 28.4  | 30.2  | 31.2  | 33.9  | 36.6  |
| 40°   | 17.4  | 18.3  | 19.2  | 21.1   | 21.1  | 21.9  | 24.7  | 25.7  | 26.6  | 29.4  | 32.0  |
| 42.5° | 14.6  | 15.6  | 16.6  | 17.4   | 18.3  | 19.2  | 21.1  | 21.9  | 23.8  | 25.7  | 27.4  |
| 45°   | 12.0  | 12.8  | 13.8  | 14.6   | 15.6  | 16.6  | 17.4  | 19.2  | 20.2  | 21.9  | 23.8  |
| 47.5° | 10.1  | 11.0  | 12.0  | 12.8   | 13.8  | 13.8  | 15.6  | 16.6  | 17.4  | 19.2  | 21.1  |
| 50°   | 9.1   | 10.1  | 11.0  | 11.0   | 12.0  | 12.8  | 13.8  | 14.6  | 15.6  | 16.6  | 18.3  |
| 52.5° | 7.3   | 8.2   | 9.1   | 10.1   | 10.1  | 11.0  | 12.0  | 12.8  | 13.8  | 14.6  | 15.6  |
| 55°   | 7.3   | 7.3   | 8.2   | 9.1    | 9.1   | 10.1  | 11.0  | 12.0  | 12.0  | 12.8  | 13.8  |
| 57.5° | 6.5   | 7.3   | 7.3   | 8.2    | 8.2   | 9.1   | 10.1  | 10.1  | 11.0  | 11.0  | 12.0  |
| 60°   | 5.5   | 6.5   | 7.3   | 7.3    | 7.3   | 8.2   | 8.2   | 9.1   | 9.1   | 10.1  | 10.1  |
| 62.5° | 5.5   | 6.5   | 6.5   | 7.3    | 7.3   | 7.3   | 8.2   | 8.2   | 8.2   | 9.1   | 9.1   |
| 65°   | 5.5   | 5.5   | 6.5   | 6.5    | 6.5   | 6.5   | 7.3   | 7.3   | 7.3   | 8.2   | 8.2   |
| 67.5° | 4.6   | 5.5   | 5.5   | 5.5    | 6.5   | 6.5   | 6.5   | 6.5   | 6.5   | 7.3   | 7.3   |
| 70°   | 4.6   | 4.6   | 5.5   | 5.5    | 5.5   | 5.5   | 5.5   | 6.5   | 6.5   | 6.5   | 6.5   |
| 72.5° | 4.6   | 4.6   | 4.6   | 4.6    | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   |
| 75°   | 3.7   | 4.6   | 4.6   | 4.6    | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   |
| 77.5° | 3.7   | 3.7   | 3.7   | 4.6    | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   | 4.6   |
| 80°   | 3.7   | 3.7   | 3.7   | 3.7    | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 82.5° | 3.7   | 3.7   | 3.7   | 3.7    | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 2.7   | 2.7   |
| 85°   | 3.7   | 3.7   | 2.7   | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   |
| 87.5° | 2.7   | 2.7   | 2.7   | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 1.8   | 1.8   | 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   |



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P1212228

CATALOG NUMBER: LDSQA4A20940D010TE LAR35FL 4LSQAL1H 30°

**CANDELA DISTRIBUTION (continued):**

|       | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0°    | 230.1 | 230.1 | 230.1  | 230.1 | 230.1 | 230.1 | 230.1 | 230.1 |
| 2.5°  | 177.8 | 176.0 | 175.0  | 177.8 | 174.1 | 176.0 | 175.0 | 176.0 |
| 5°    | 153.0 | 151.2 | 150.2  | 153.0 | 149.4 | 151.2 | 149.4 | 151.2 |
| 7.5°  | 137.5 | 136.6 | 135.6  | 137.5 | 134.7 | 136.6 | 135.6 | 136.6 |
| 10°   | 124.6 | 123.7 | 122.8  | 125.5 | 122.8 | 124.6 | 123.7 | 124.6 |
| 12.5° | 113.7 | 113.7 | 112.7  | 114.5 | 112.7 | 114.5 | 113.7 | 114.5 |
| 15°   | 103.6 | 104.4 | 103.6  | 105.4 | 104.4 | 106.3 | 105.4 | 107.2 |
| 17.5° | 95.3  | 96.2  | 96.2   | 99.0  | 98.1  | 100.8 | 99.8  | 100.8 |
| 20°   | 87.0  | 88.0  | 89.0   | 90.7  | 90.7  | 93.5  | 92.6  | 94.4  |
| 22.5° | 78.8  | 80.6  | 80.6   | 83.4  | 83.4  | 86.1  | 86.1  | 87.0  |
| 25°   | 70.5  | 73.3  | 74.2   | 76.0  | 77.0  | 79.8  | 79.8  | 80.6  |
| 27.5° | 64.2  | 65.9  | 66.9   | 69.7  | 70.5  | 73.3  | 73.3  | 75.2  |
| 30°   | 56.8  | 59.6  | 60.6   | 62.3  | 63.2  | 65.9  | 65.9  | 67.8  |
| 32.5° | 50.4  | 52.2  | 54.1   | 55.8  | 56.8  | 59.6  | 59.6  | 61.4  |
| 35°   | 44.0  | 46.7  | 47.6   | 49.5  | 51.3  | 54.1  | 54.1  | 55.8  |
| 37.5° | 38.5  | 41.2  | 42.1   | 44.0  | 45.8  | 48.6  | 48.6  | 50.4  |
| 40°   | 33.9  | 36.6  | 37.5   | 39.4  | 40.3  | 44.0  | 44.0  | 45.0  |
| 42.5° | 30.2  | 32.0  | 33.0   | 34.9  | 35.8  | 37.5  | 37.5  | 39.4  |
| 45°   | 25.7  | 27.4  | 28.4   | 29.4  | 31.2  | 33.0  | 33.0  | 33.9  |
| 47.5° | 21.9  | 23.8  | 24.7   | 25.7  | 26.6  | 28.4  | 28.4  | 30.2  |
| 50°   | 19.2  | 20.2  | 21.1   | 21.9  | 22.9  | 24.7  | 24.7  | 25.7  |
| 52.5° | 16.6  | 17.4  | 18.3   | 19.2  | 20.2  | 21.1  | 21.9  | 22.9  |
| 55°   | 14.6  | 15.6  | 15.6   | 16.6  | 17.4  | 18.3  | 18.3  | 19.2  |
| 57.5° | 12.8  | 13.8  | 13.8   | 13.8  | 14.6  | 15.6  | 15.6  | 16.6  |
| 60°   | 11.0  | 12.0  | 12.0   | 12.0  | 12.8  | 12.8  | 12.8  | 13.8  |
| 62.5° | 10.1  | 10.1  | 10.1   | 10.1  | 10.1  | 10.1  | 10.1  | 10.1  |
| 65°   | 8.2   | 8.2   | 8.2    | 8.2   | 8.2   | 8.2   | 7.3   | 8.2   |
| 67.5° | 7.3   | 7.3   | 7.3    | 6.5   | 6.5   | 6.5   | 6.5   | 6.5   |
| 70°   | 6.5   | 6.5   | 6.5    | 5.5   | 5.5   | 5.5   | 4.6   | 4.6   |
| 72.5° | 5.5   | 5.5   | 5.5    | 4.6   | 4.6   | 4.6   | 3.7   | 3.7   |
| 75°   | 4.6   | 4.6   | 4.6    | 4.6   | 3.7   | 3.7   | 3.7   | 3.7   |
| 77.5° | 3.7   | 3.7   | 3.7    | 3.7   | 3.7   | 3.7   | 2.7   | 2.7   |
| 80°   | 3.7   | 2.7   | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   |
| 82.5° | 2.7   | 2.7   | 2.7    | 2.7   | 1.8   | 1.8   | 1.8   | 1.8   |
| 85°   | 1.8   | 1.8   | 1.8    | 1.8   | 1.8   | 1.8   | 1.0   | 1.0   |
| 87.5° | 1.8   | 1.0   | 1.0    | 1.0   | 1.0   | 1.0   | 1.0   | 1.0   |
| 90°   | 0.0   | 0.0   | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



Report Generated By 670245859 / DESKTOP-T8S5UU9

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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

Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report





Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



Classified

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)