

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: P1212224

Luminaire Tested: **LDSQA4A20940D010TE LAR25NF 4LSQAL1H 30°**

Issue Date: 3/3/2020

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

**Test Information**

Test Method: LM-41-14  
Report Number: P1212224  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26803)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDSQA4A20940D010TE LAR25NF 4LSQAL1H 30°  
Description: PORTFOLIO 4" SQUARE LENSED ADJUSTABLE, SELF-FLANGED, 25° NARROW FLOOD, 30° Tilt  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

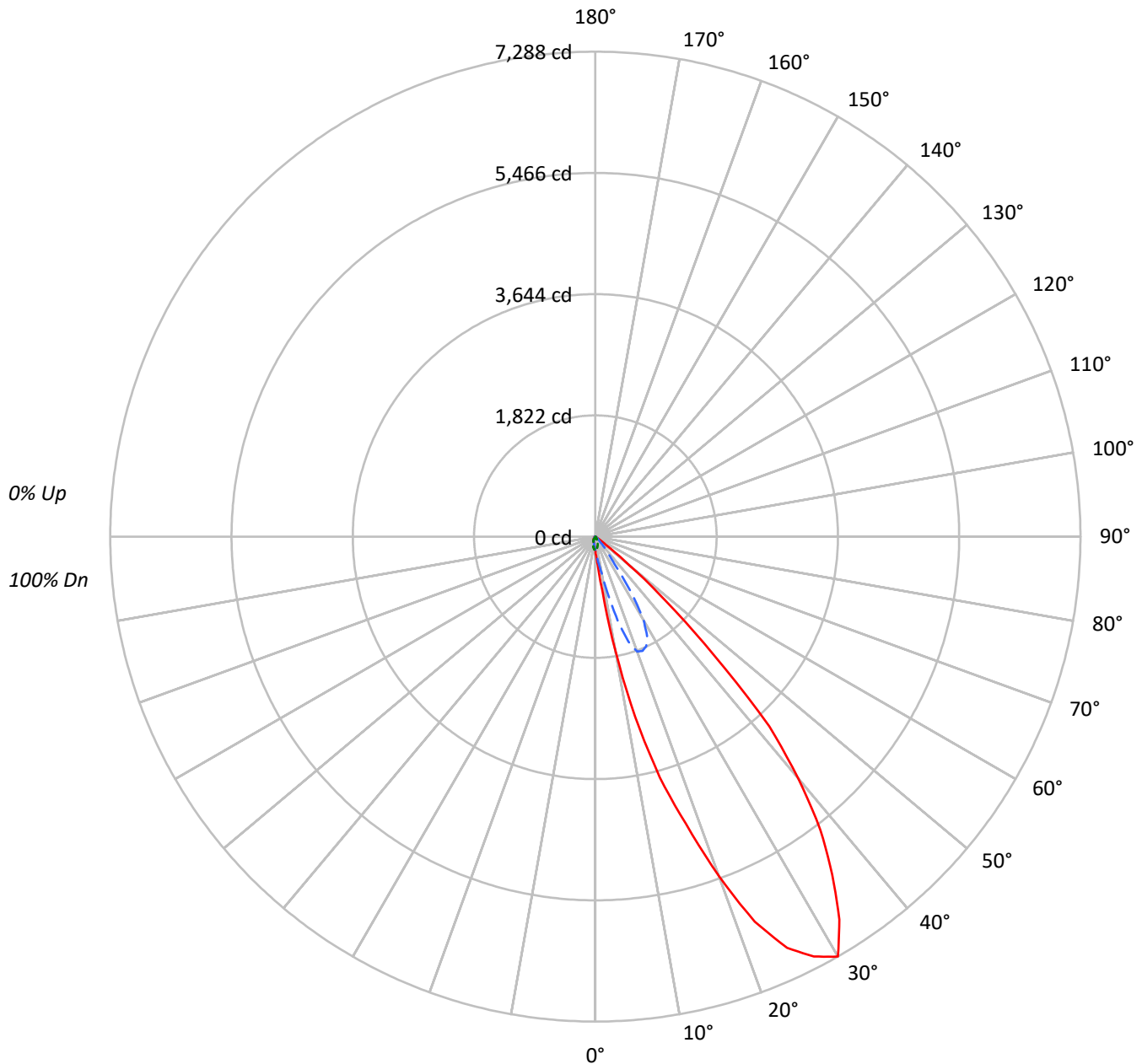
Lumens per Lamp: N/A  
Luminaire Lumens: 1825.3 lumens  
Efficiency: N/A  
Efficacy: 63.4 lumens/watt  
Spacing Criteria (0/90/45): 2.37 / 0.61 / 1.19  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

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

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### Luminous Intensity Polar Plot



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**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   | 113 | 109 | 106 | 104 | 110 | 107 | 105 | 102 | 103 | 101 | 99  | 99  | 98  | 96  | 96  | 95  | 93  | 91  |    |    |
| 2   | 106 | 100 | 95  | 91  | 103 | 98  | 94  | 90  | 95  | 91  | 88  | 92  | 89  | 86  | 89  | 87  | 85  | 83  |    |    |
| 3   | 99  | 91  | 86  | 81  | 97  | 90  | 85  | 80  | 87  | 83  | 79  | 85  | 81  | 78  | 82  | 79  | 76  | 75  |    |    |
| 4   | 93  | 84  | 77  | 72  | 91  | 83  | 76  | 72  | 80  | 75  | 71  | 78  | 74  | 70  | 76  | 72  | 69  | 67  |    |    |
| 5   | 87  | 77  | 70  | 65  | 85  | 76  | 69  | 64  | 74  | 68  | 64  | 72  | 67  | 63  | 70  | 66  | 63  | 61  |    |    |
| 6   | 81  | 70  | 63  | 58  | 79  | 69  | 63  | 58  | 68  | 62  | 57  | 66  | 61  | 57  | 65  | 60  | 57  | 55  |    |    |
| 7   | 76  | 65  | 57  | 52  | 74  | 64  | 57  | 52  | 62  | 56  | 52  | 61  | 56  | 52  | 60  | 55  | 51  | 50  |    |    |
| 8   | 71  | 59  | 52  | 47  | 69  | 59  | 52  | 47  | 58  | 51  | 47  | 57  | 51  | 47  | 55  | 50  | 47  | 45  |    |    |
| 9   | 66  | 55  | 48  | 43  | 65  | 54  | 48  | 43  | 53  | 47  | 43  | 52  | 47  | 43  | 51  | 46  | 42  | 41  |    |    |
| 10  | 62  | 51  | 44  | 39  | 61  | 50  | 44  | 39  | 49  | 43  | 39  | 48  | 43  | 39  | 48  | 42  | 39  | 37  |    |    |

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

|     | 0°     | 90°   | 180°  |
|-----|--------|-------|-------|
| 0°  | 19704  | 19704 | 19704 |
| 5°  | 44120  | 18535 | 13284 |
| 10° | 173003 | 16231 | 10457 |
| 15° | 375567 | 13138 | 9097  |
| 20° | 560267 | 9732  | 8227  |
| 25° | 728735 | 6862  | 7151  |
| 30° | 815229 | 4620  | 6253  |
| 35° | 733657 | 2708  | 5322  |
| 40° | 598734 | 1846  | 4629  |
| 45° | 343780 | 1247  | 3754  |
| 50° | 100555 | 980   | 3180  |
| 55° | 11603  | 777   | 2635  |
| 60° | 2480   | 891   | 2131  |
| 65° | 848    | 848   | 1490  |
| 70° | 765    | 1048  | 1048  |
| 75° | 674    | 1385  | 1011  |
| 80° | 0      | 2064  | 1004  |
| 85° | 0      | 4113  | 1112  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 29.2   | 1.6       |
| 10°-20°   | 249.9  | 13.7      |
| 20°-30°   | 596.1  | 32.7      |
| 30°-40°   | 629.1  | 34.5      |
| 40°-50°   | 285.3  | 15.6      |
| 50°-60°   | 25.0   | 1.4       |
| 60°-70°   | 5.3    | 0.3       |
| 70°-80°   | 3.4    | 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°    | 875.1  | 47.9      |
| 0°-40°    | 1504.2 | 82.4      |
| 0°-60°    | 1814.5 | 99.4      |
| 0°-90°    | 1825.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1825.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0°  | 203  | 203  | 203 | 203  | 203  |      |
| 5°  | 454  | 333  | 191 | 147  | 137  | 81   |
| 15° | 3745 | 1317 | 131 | 90   | 91   | 1089 |
| 25° | 6818 | 1813 | 64  | 55   | 67   | 3097 |
| 35° | 6204 | 500  | 23  | 31   | 45   | 3831 |
| 45° | 2509 | 71   | 9   | 17   | 27   | 1989 |
| 55° | 69   | 11   | 5   | 10   | 16   | 137  |
| 65° | 4    | 4    | 4   | 7    | 6    | 5    |
| 75° | 2    | 2    | 4   | 5    | 3    | 2    |
| 85° | 0    | 2    | 4   | 3    | 1    | 0    |
| 90° | 0    | 0    | 0   | 0    | 0    |      |

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 22.5°  | 25°    | 30°    | 35°    | 40°    | 45°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 203.4  | 203.4  | 203.4  | 203.4  | 203.4  | 203.4  | 203.4  | 203.4  | 203.4  | 203.4  | 203.4  |
| 2.5°  | 302.4  | 304.3  | 296.0  | 297.0  | 288.7  | 292.3  | 289.6  | 282.2  | 276.7  | 267.6  | 263.9  |
| 5°    | 453.7  | 456.3  | 438.1  | 432.6  | 413.3  | 413.3  | 405.1  | 385.8  | 368.5  | 347.4  | 332.7  |
| 7.5°  | 829.4  | 840.4  | 785.4  | 744.2  | 683.7  | 669.0  | 640.6  | 574.6  | 520.5  | 465.6  | 424.3  |
| 10°   | 1758.7 | 1738.6 | 1624.9 | 1531.4 | 1375.6 | 1317.9 | 1241.0 | 1051.2 | 877.0  | 703.8  | 568.2  |
| 12.5° | 2773.3 | 2838.2 | 2619.2 | 2543.2 | 2296.6 | 2244.4 | 2080.4 | 1770.6 | 1476.4 | 1170.3 | 899.1  |
| 15°   | 3744.7 | 3764.0 | 3572.4 | 3448.6 | 3148.1 | 3080.2 | 2878.6 | 2514.8 | 2118.9 | 1691.8 | 1317.0 |
| 17.5° | 4524.6 | 4601.6 | 4320.2 | 4187.4 | 3797.0 | 3687.8 | 3450.5 | 3007.9 | 2567.0 | 2100.6 | 1656.1 |
| 20°   | 5434.6 | 5454.8 | 5121.3 | 4865.5 | 4355.1 | 4189.2 | 3905.1 | 3356.1 | 2831.0 | 2298.5 | 1839.4 |
| 22.5° | 6262.2 | 6257.7 | 5828.8 | 5467.7 | 4821.5 | 4623.6 | 4272.6 | 3621.9 | 3011.5 | 2386.5 | 1856.8 |
| 25°   | 6817.6 | 6832.3 | 6373.1 | 5946.1 | 5153.3 | 4885.7 | 4489.8 | 3760.2 | 3072.9 | 2383.8 | 1812.8 |
| 27.5° | 7113.6 | 7099.0 | 6606.8 | 6150.5 | 5275.2 | 4975.4 | 4545.6 | 3764.8 | 3017.0 | 2290.3 | 1680.9 |
| 30°   | 7287.8 | 7091.7 | 6566.5 | 6092.6 | 5192.7 | 4884.8 | 4447.7 | 3620.0 | 2831.0 | 2081.3 | 1445.3 |
| 32.5° | 6822.2 | 6746.2 | 6288.8 | 5785.6 | 4908.6 | 4603.4 | 4171.8 | 3312.1 | 2535.8 | 1761.4 | 1035.6 |
| 35°   | 6203.6 | 6206.3 | 5760.0 | 5289.8 | 4463.2 | 4197.4 | 3752.0 | 2937.3 | 2175.7 | 1224.4 | 500.3  |
| 37.5° | 5554.7 | 5563.9 | 5139.6 | 4702.4 | 3966.5 | 3686.9 | 3270.0 | 2510.2 | 1565.3 | 623.2  | 301.5  |
| 40°   | 4734.5 | 4753.8 | 4388.1 | 4037.0 | 3357.9 | 3088.5 | 2716.4 | 1899.8 | 875.3  | 348.3  | 204.3  |
| 42.5° | 3868.4 | 3892.2 | 3567.8 | 3256.2 | 2678.8 | 2457.0 | 2127.1 | 1176.8 | 434.4  | 225.4  | 120.0  |
| 45°   | 2509.3 | 2578.1 | 2337.0 | 2205.9 | 1871.5 | 1739.5 | 1388.4 | 600.3  | 262.1  | 132.0  | 70.6   |
| 47.5° | 1436.2 | 1437.0 | 1233.5 | 988.0  | 810.2  | 704.8  | 550.8  | 273.1  | 153.1  | 74.2   | 43.0   |
| 50°   | 667.2  | 683.7  | 541.6  | 451.0  | 322.6  | 273.1  | 224.6  | 147.6  | 80.6   | 43.0   | 26.6   |
| 52.5° | 194.2  | 205.3  | 186.1  | 168.6  | 143.0  | 127.4  | 109.1  | 72.4   | 42.1   | 25.7   | 16.6   |
| 55°   | 68.7   | 73.3   | 68.7   | 64.2   | 57.8   | 52.2   | 46.7   | 34.9   | 23.8   | 15.6   | 11.0   |
| 57.5° | 28.4   | 29.4   | 28.4   | 27.4   | 25.7   | 25.7   | 22.9   | 19.2   | 14.6   | 10.1   | 7.3    |
| 60°   | 12.8   | 13.8   | 12.8   | 13.8   | 12.8   | 12.8   | 12.8   | 13.8   | 9.1    | 6.5    | 5.5    |
| 62.5° | 5.5    | 6.5    | 6.5    | 6.5    | 6.5    | 7.3    | 7.3    | 6.5    | 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    | 3.7    |
| 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    | 2.7    | 2.7    | 2.7    | 1.8    | 1.8    | 2.7    | 2.7    | 2.7    |
| 72.5° | 2.7    | 2.7    | 2.7    | 2.7    | 1.8    | 1.8    | 1.8    | 1.8    | 1.8    | 2.7    | 2.7    |
| 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    | 1.0    | 1.8    | 1.8    | 1.8    |
| 80°   | 0.0    | 0.0    | 0.0    | 0.0    | 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    |

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**CANDELA DISTRIBUTION (continued):**

|       | 50°    | 55°   | 60°   | 65°   | 67.5° | 70°   | 75°   | 80°   | 85°   | 90°   | 95°   |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 203.4  | 203.4 | 203.4 | 203.4 | 203.4 | 203.4 | 203.4 | 203.4 | 203.4 | 203.4 | 203.4 |
| 2.5°  | 259.4  | 251.2 | 238.2 | 230.1 | 226.4 | 220.9 | 217.1 | 208.0 | 204.3 | 197.1 | 194.2 |
| 5°    | 319.0  | 302.4 | 283.2 | 267.6 | 257.5 | 246.5 | 230.1 | 211.8 | 202.5 | 190.6 | 184.2 |
| 7.5°  | 386.8  | 351.0 | 317.1 | 289.6 | 276.7 | 262.1 | 241.0 | 212.6 | 195.2 | 179.6 | 170.5 |
| 10°   | 472.9  | 399.6 | 346.4 | 302.4 | 283.2 | 263.9 | 238.2 | 205.3 | 183.3 | 165.0 | 154.9 |
| 12.5° | 674.6  | 482.1 | 373.0 | 309.8 | 285.0 | 261.1 | 229.1 | 195.2 | 169.5 | 148.5 | 137.5 |
| 15°   | 970.6  | 673.6 | 444.5 | 316.2 | 278.6 | 249.3 | 212.6 | 178.6 | 152.2 | 131.0 | 120.0 |
| 17.5° | 1232.6 | 858.7 | 543.5 | 340.0 | 276.7 | 235.5 | 192.5 | 157.7 | 132.0 | 111.8 | 102.6 |
| 20°   | 1375.6 | 955.8 | 609.4 | 354.6 | 268.6 | 214.5 | 169.5 | 136.6 | 111.8 | 94.4  | 86.1  |
| 22.5° | 1378.4 | 950.3 | 585.6 | 322.6 | 236.5 | 186.1 | 146.6 | 115.4 | 93.5  | 77.9  | 71.4  |
| 25°   | 1295.8 | 847.7 | 488.5 | 253.8 | 193.4 | 157.7 | 122.8 | 96.2  | 76.0  | 64.2  | 58.6  |
| 27.5° | 1141.9 | 689.2 | 359.2 | 183.3 | 151.2 | 127.4 | 99.0  | 77.0  | 59.6  | 52.2  | 47.6  |
| 30°   | 898.2  | 449.0 | 209.8 | 136.6 | 117.3 | 98.1  | 75.2  | 54.1  | 46.7  | 41.3  | 37.5  |
| 32.5° | 482.1  | 218.1 | 146.6 | 100.8 | 83.4  | 68.7  | 49.5  | 39.4  | 33.9  | 30.2  | 29.4  |
| 35°   | 252.0  | 159.4 | 98.1  | 64.2  | 53.1  | 45.0  | 33.9  | 27.4  | 24.7  | 22.9  | 22.9  |
| 37.5° | 180.6  | 99.9  | 62.3  | 41.3  | 34.9  | 28.4  | 23.8  | 20.2  | 18.3  | 18.3  | 18.3  |
| 40°   | 107.2  | 61.4  | 37.5  | 26.6  | 22.9  | 20.2  | 17.4  | 14.6  | 14.6  | 14.6  | 14.6  |
| 42.5° | 65.1   | 38.5  | 26.6  | 18.3  | 16.6  | 14.6  | 12.8  | 12.0  | 11.0  | 11.0  | 12.0  |
| 45°   | 40.3   | 26.6  | 17.4  | 13.8  | 12.8  | 11.0  | 10.1  | 9.1   | 9.1   | 9.1   | 10.1  |
| 47.5° | 25.7   | 19.2  | 12.8  | 9.1   | 8.2   | 7.3   | 6.5   | 6.5   | 7.3   | 7.3   | 8.2   |
| 50°   | 19.2   | 12.0  | 8.2   | 6.5   | 5.5   | 5.5   | 4.6   | 5.5   | 5.5   | 6.5   | 7.3   |
| 52.5° | 11.0   | 7.3   | 5.5   | 4.6   | 4.6   | 3.7   | 3.7   | 4.6   | 4.6   | 5.5   | 6.5   |
| 55°   | 7.3    | 5.5   | 4.6   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 4.6   | 4.6   | 5.5   |
| 57.5° | 5.5    | 4.6   | 3.7   | 3.7   | 3.7   | 2.7   | 3.7   | 3.7   | 3.7   | 4.6   | 5.5   |
| 60°   | 4.6    | 3.7   | 3.7   | 3.7   | 3.7   | 2.7   | 2.7   | 3.7   | 3.7   | 4.6   | 4.6   |
| 62.5° | 3.7    | 3.7   | 3.7   | 3.7   | 3.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   | 4.6   |
| 65°   | 2.7    | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 4.6   |
| 67.5° | 2.7    | 2.7   | 3.7   | 3.7   | 3.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   | 4.6   |
| 70°   | 2.7    | 2.7   | 2.7   | 3.7   | 3.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 72.5° | 2.7    | 2.7   | 2.7   | 3.7   | 3.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 75°   | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   |
| 77.5° | 2.7    | 2.7   | 2.7   | 2.7   | 3.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 80°   | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 82.5° | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 85°   | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 3.7   | 3.7   | 3.7   | 3.7   |
| 87.5° | 2.7    | 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   |

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**CANDELA DISTRIBUTION (continued):**

|       | 100°  | 105°  | 110°  | 112.5° | 115°  | 120°  | 125°  | 130°  | 135°  | 140°  | 145°  |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 203.4 | 203.4 | 203.4 | 203.4  | 203.4 | 203.4 | 203.4 | 203.4 | 203.4 | 203.4 | 203.4 |
| 2.5°  | 187.0 | 184.2 | 178.6 | 177.8  | 176.9 | 173.3 | 170.5 | 167.8 | 167.8 | 165.0 | 163.2 |
| 5°    | 173.3 | 168.6 | 162.2 | 159.4  | 158.6 | 153.9 | 150.2 | 147.6 | 146.6 | 143.9 | 141.1 |
| 7.5°  | 158.6 | 153.1 | 145.7 | 143.0  | 142.1 | 137.5 | 133.8 | 131.0 | 129.3 | 126.5 | 124.6 |
| 10°   | 143.0 | 136.6 | 130.1 | 127.4  | 126.5 | 121.9 | 119.2 | 116.4 | 114.6 | 112.7 | 110.9 |
| 12.5° | 126.5 | 121.0 | 114.6 | 111.8  | 110.9 | 107.2 | 104.5 | 102.6 | 101.7 | 99.9  | 99.0  |
| 15°   | 109.9 | 104.5 | 99.0  | 97.1   | 96.2  | 93.5  | 91.6  | 90.7  | 89.8  | 89.8  | 89.0  |
| 17.5° | 93.5  | 89.0  | 84.3  | 83.4   | 82.5  | 80.6  | 79.8  | 78.8  | 79.8  | 79.8  | 80.6  |
| 20°   | 77.9  | 74.2  | 70.6  | 70.6   | 69.7  | 68.7  | 68.7  | 68.7  | 70.6  | 71.4  | 73.3  |
| 22.5° | 64.2  | 61.4  | 58.6  | 58.6   | 58.6  | 58.6  | 58.6  | 60.6  | 62.3  | 64.2  | 65.1  |
| 25°   | 53.1  | 50.4  | 49.5  | 49.5   | 49.5  | 50.4  | 51.3  | 53.1  | 55.0  | 56.8  | 58.6  |
| 27.5° | 43.0  | 41.3  | 41.3  | 41.3   | 42.1  | 43.0  | 44.0  | 45.8  | 48.6  | 50.4  | 52.2  |
| 30°   | 34.9  | 33.9  | 33.9  | 34.9   | 35.8  | 36.6  | 38.5  | 40.3  | 42.1  | 44.0  | 45.8  |
| 32.5° | 27.4  | 28.4  | 28.4  | 29.4   | 30.2  | 31.2  | 33.0  | 34.9  | 36.6  | 38.5  | 39.4  |
| 35°   | 22.9  | 22.9  | 23.8  | 24.7   | 25.7  | 26.6  | 28.4  | 30.2  | 31.2  | 33.0  | 34.9  |
| 37.5° | 18.3  | 19.2  | 20.2  | 21.1   | 21.9  | 22.9  | 23.8  | 25.7  | 26.6  | 28.4  | 30.2  |
| 40°   | 15.6  | 16.6  | 17.4  | 18.3   | 18.3  | 20.2  | 20.2  | 21.9  | 22.9  | 24.7  | 26.6  |
| 42.5° | 12.8  | 13.8  | 14.6  | 15.6   | 15.6  | 16.6  | 17.4  | 18.3  | 20.2  | 21.1  | 22.9  |
| 45°   | 10.1  | 11.0  | 12.0  | 12.8   | 13.8  | 14.6  | 14.6  | 16.6  | 17.4  | 18.3  | 20.2  |
| 47.5° | 9.1   | 10.1  | 11.0  | 11.0   | 12.0  | 12.8  | 12.8  | 14.6  | 15.6  | 16.6  | 17.4  |
| 50°   | 7.3   | 8.2   | 9.1   | 10.1   | 10.1  | 11.0  | 12.0  | 12.8  | 13.8  | 14.6  | 14.6  |
| 52.5° | 6.5   | 7.3   | 8.2   | 8.2    | 9.1   | 10.1  | 10.1  | 11.0  | 12.0  | 12.0  | 12.8  |
| 55°   | 6.5   | 7.3   | 7.3   | 8.2    | 8.2   | 9.1   | 9.1   | 10.1  | 10.1  | 11.0  | 11.0  |
| 57.5° | 5.5   | 6.5   | 6.5   | 7.3    | 7.3   | 8.2   | 8.2   | 9.1   | 9.1   | 9.1   | 10.1  |
| 60°   | 5.5   | 5.5   | 6.5   | 6.5    | 7.3   | 7.3   | 7.3   | 8.2   | 8.2   | 8.2   | 9.1   |
| 62.5° | 4.6   | 5.5   | 5.5   | 6.5    | 6.5   | 6.5   | 7.3   | 7.3   | 7.3   | 8.2   | 8.2   |
| 65°   | 4.6   | 5.5   | 5.5   | 6.5    | 6.5   | 6.5   | 6.5   | 6.5   | 7.3   | 7.3   | 7.3   |
| 67.5° | 4.6   | 4.6   | 5.5   | 5.5    | 5.5   | 5.5   | 6.5   | 6.5   | 6.5   | 6.5   | 6.5   |
| 70°   | 4.6   | 4.6   | 4.6   | 5.5    | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   |
| 72.5° | 3.7   | 4.6   | 4.6   | 4.6    | 4.6   | 5.5   | 5.5   | 5.5   | 5.5   | 5.5   | 4.6   |
| 75°   | 3.7   | 3.7   | 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   | 3.7   | 3.7   |
| 80°   | 3.7   | 3.7   | 3.7   | 3.7    | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 3.7   | 2.7   |
| 82.5° | 3.7   | 3.7   | 3.7   | 3.7    | 3.7   | 3.7   | 3.7   | 3.7   | 2.7   | 2.7   | 2.7   |
| 85°   | 3.7   | 2.7   | 3.7   | 3.7    | 3.7   | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 1.8   |
| 87.5° | 2.7   | 2.7   | 2.7   | 2.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   | 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   |



TEST NUMBER: P1212224

CATALOG NUMBER: LDSQA4A20940D010TE LAR25NF 4LSQAL1H 30°

**CANDELA DISTRIBUTION (continued):**

|       | 150°  | 155°  | 157.5° | 160°  | 165°  | 170°  | 175°  | 180°  |
|-------|-------|-------|--------|-------|-------|-------|-------|-------|
| 0°    | 203.4 | 203.4 | 203.4  | 203.4 | 203.4 | 203.4 | 203.4 | 203.4 |
| 2.5°  | 161.3 | 159.4 | 160.4  | 160.4 | 158.6 | 157.7 | 157.7 | 158.6 |
| 5°    | 139.3 | 137.5 | 138.4  | 138.4 | 136.6 | 135.6 | 135.6 | 136.6 |
| 7.5°  | 122.8 | 121.0 | 121.9  | 121.9 | 120.0 | 120.0 | 120.0 | 120.0 |
| 10°   | 109.9 | 109.1 | 109.1  | 109.1 | 107.2 | 108.2 | 107.2 | 106.3 |
| 12.5° | 98.1  | 98.1  | 98.1   | 98.1  | 97.1  | 98.1  | 97.1  | 97.1  |
| 15°   | 89.0  | 89.0  | 89.8   | 89.8  | 89.8  | 90.7  | 90.7  | 90.7  |
| 17.5° | 81.5  | 82.5  | 83.4   | 84.3  | 84.3  | 85.3  | 85.3  | 85.3  |
| 20°   | 74.2  | 76.0  | 77.0   | 77.9  | 77.9  | 79.8  | 78.8  | 79.8  |
| 22.5° | 66.9  | 68.7  | 69.7   | 70.6  | 71.4  | 72.4  | 72.4  | 73.3  |
| 25°   | 60.6  | 62.3  | 63.2   | 64.2  | 65.1  | 66.9  | 66.9  | 66.9  |
| 27.5° | 54.1  | 55.9  | 56.8   | 58.6  | 59.6  | 61.4  | 61.4  | 61.4  |
| 30°   | 47.6  | 49.5  | 50.4   | 51.3  | 53.1  | 55.0  | 55.0  | 55.9  |
| 32.5° | 41.3  | 44.0  | 45.0   | 45.8  | 47.6  | 49.5  | 50.4  | 50.4  |
| 35°   | 36.6  | 38.5  | 39.4   | 41.3  | 42.1  | 45.0  | 45.0  | 45.0  |
| 37.5° | 32.0  | 33.9  | 35.8   | 36.6  | 37.5  | 39.4  | 40.3  | 41.3  |
| 40°   | 28.4  | 30.2  | 31.2   | 32.0  | 33.9  | 35.8  | 36.6  | 36.6  |
| 42.5° | 24.7  | 26.6  | 27.4   | 28.4  | 29.4  | 31.2  | 31.2  | 31.2  |
| 45°   | 21.9  | 22.9  | 23.8   | 24.7  | 25.7  | 26.6  | 27.4  | 27.4  |
| 47.5° | 18.3  | 20.2  | 20.2   | 21.1  | 21.9  | 23.8  | 23.8  | 24.7  |
| 50°   | 15.6  | 17.4  | 17.4   | 18.3  | 19.2  | 20.2  | 21.1  | 21.1  |
| 52.5° | 13.8  | 14.6  | 15.6   | 15.6  | 16.6  | 17.4  | 18.3  | 18.3  |
| 55°   | 12.0  | 12.8  | 12.8   | 13.8  | 13.8  | 14.6  | 15.6  | 15.6  |
| 57.5° | 10.1  | 11.0  | 12.0   | 12.0  | 12.0  | 12.8  | 12.8  | 13.8  |
| 60°   | 9.1   | 10.1  | 10.1   | 10.1  | 10.1  | 11.0  | 11.0  | 11.0  |
| 62.5° | 8.2   | 8.2   | 8.2    | 8.2   | 8.2   | 8.2   | 8.2   | 8.2   |
| 65°   | 7.3   | 7.3   | 7.3    | 7.3   | 6.5   | 6.5   | 6.5   | 6.5   |
| 67.5° | 6.5   | 6.5   | 6.5    | 6.5   | 5.5   | 5.5   | 5.5   | 5.5   |
| 70°   | 5.5   | 5.5   | 5.5    | 5.5   | 4.6   | 4.6   | 4.6   | 3.7   |
| 72.5° | 4.6   | 4.6   | 4.6    | 4.6   | 4.6   | 3.7   | 3.7   | 3.7   |
| 75°   | 4.6   | 3.7   | 3.7    | 3.7   | 3.7   | 3.7   | 2.7   | 2.7   |
| 77.5° | 3.7   | 3.7   | 3.7    | 2.7   | 2.7   | 2.7   | 2.7   | 2.7   |
| 80°   | 2.7   | 2.7   | 2.7    | 2.7   | 2.7   | 1.8   | 1.8   | 1.8   |
| 82.5° | 2.7   | 1.8   | 1.8    | 1.8   | 1.8   | 1.8   | 1.8   | 1.8   |
| 85°   | 1.8   | 1.8   | 1.8    | 1.8   | 1.0   | 1.0   | 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   |

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Scaled Data Report

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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Peachtree City, GA 30269

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Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



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

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