

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: P274472

Luminaire Tested: **LDSQ6B20DE010W2N2765 EU6B1020W2N902765 6LBCSSQ1MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P274472
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1808-906-19)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B20DE010W2N2765 EU6B1020W2N902765 6LBCSSQ1MB
Description: PORTFOLIO 6" W2N SQ DOWNLIGHT, CAST SHALLOW WITH MATTE BLACK FINISH
Light Source: W2N 2700K-6500K CCT TUNING RANGE
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1625.4 lumens
Efficiency: N/A
Efficacy: 58.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.23 / 1.34
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

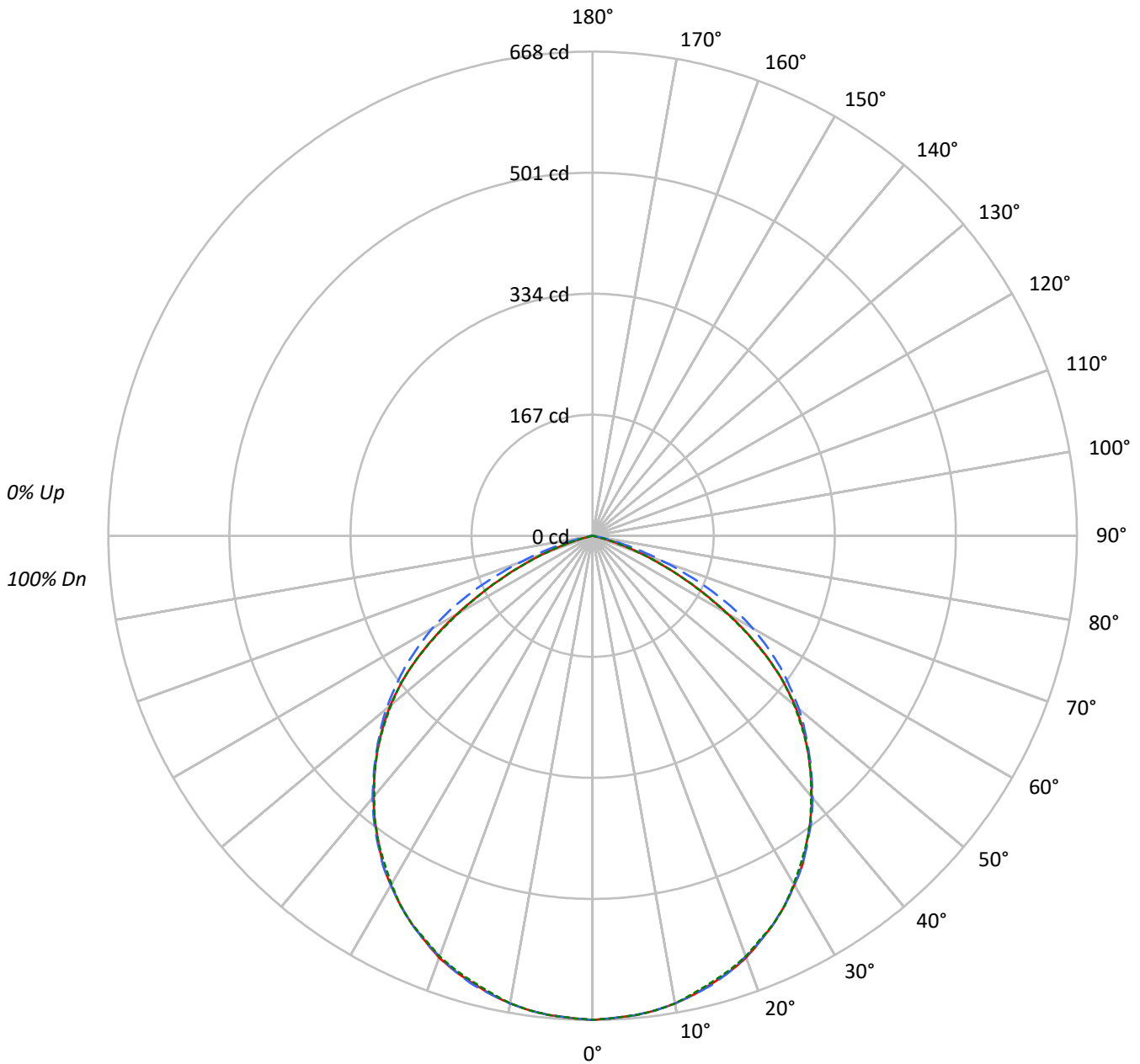
Input Watts (W): 28
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 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 | 104 | 101 | 98 | 100 | 97 | 95 | 96 | 94 | 92 | 93 | 91 | 89 | 87 | | | | | 87 | | | |
| 2 | 102 | 94 | 88 | 83 | 99 | 93 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 79 | 83 | 80 | 77 | 75 | | | | | 75 | | | |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 69 | 77 | 72 | 67 | 74 | 70 | 66 | 64 | | | | | 64 | | | |
| 4 | 86 | 75 | 67 | 60 | 84 | 73 | 66 | 60 | 71 | 64 | 59 | 69 | 63 | 58 | 67 | 62 | 58 | 56 | | | | | 56 | | | |
| 5 | 79 | 67 | 59 | 52 | 77 | 66 | 58 | 52 | 64 | 57 | 52 | 62 | 56 | 51 | 60 | 55 | 51 | 48 | | | | | 48 | | | |
| 6 | 73 | 61 | 52 | 46 | 71 | 60 | 52 | 46 | 58 | 51 | 45 | 56 | 50 | 45 | 55 | 49 | 45 | 43 | | | | | 43 | | | |
| 7 | 68 | 55 | 47 | 41 | 66 | 54 | 46 | 41 | 53 | 46 | 40 | 51 | 45 | 40 | 50 | 44 | 40 | 38 | | | | | 38 | | | |
| 8 | 63 | 50 | 42 | 36 | 62 | 50 | 42 | 36 | 48 | 41 | 36 | 47 | 41 | 36 | 46 | 40 | 36 | 34 | | | | | 34 | | | |
| 9 | 59 | 46 | 38 | 33 | 58 | 46 | 38 | 33 | 44 | 37 | 33 | 43 | 37 | 32 | 42 | 37 | 32 | 31 | | | | | 31 | | | |
| 10 | 55 | 43 | 35 | 30 | 54 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 30 | 39 | 34 | 29 | 28 | | | | | 28 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 28753 | 28753 | 28753 |
| 5° | 28707 | 28707 | 28707 |
| 10° | 28645 | 28645 | 28645 |
| 15° | 28483 | 28563 | 28403 |
| 20° | 28376 | 28293 | 28293 |
| 25° | 28057 | 28057 | 28057 |
| 30° | 27667 | 27667 | 27578 |
| 35° | 27080 | 27174 | 27080 |
| 40° | 26433 | 26534 | 26332 |
| 45° | 25574 | 25683 | 25574 |
| 50° | 24409 | 24891 | 24288 |
| 55° | 22234 | 23713 | 22234 |
| 60° | 18548 | 21950 | 18393 |
| 65° | 13896 | 18654 | 13896 |
| 70° | 8812 | 13105 | 8585 |
| 75° | 2994 | 6571 | 2994 |
| 80° | 0 | 893 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 63.1 | 3.9 |
| 10°-20° | 180.4 | 11.1 |
| 20°-30° | 271.7 | 16.7 |
| 30°-40° | 322.8 | 19.9 |
| 40°-50° | 324.5 | 20.0 |
| 50°-60° | 271.4 | 16.7 |
| 60°-70° | 156.1 | 9.6 |
| 70°-80° | 35.3 | 2.2 |
| 80°-90° | 0.1 | 0.0 |
| 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° | 515.2 | 31.7 |
| 0°-40° | 838.0 | 51.6 |
| 0°-60° | 1433.8 | 88.2 |
| 0°-90° | 1625.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1625.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 668 | 668 | 668 | 668 | 668 | |
| 5° | 664 | 664 | 664 | 664 | 664 | 63 |
| 15° | 639 | 641 | 641 | 639 | 637 | 181 |
| 25° | 591 | 591 | 591 | 589 | 591 | 272 |
| 35° | 515 | 517 | 517 | 515 | 515 | 323 |
| 45° | 420 | 422 | 422 | 420 | 420 | 323 |
| 55° | 296 | 305 | 316 | 305 | 296 | 262 |
| 65° | 136 | 154 | 183 | 156 | 136 | 136 |
| 75° | 18 | 27 | 40 | 27 | 18 | 26 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 667.8 | 667.8 | 667.8 | 667.8 | 667.8 |
| 2.5° | 666.0 | 667.8 | 666.0 | 667.8 | 666.0 |
| 5° | 664.2 | 664.2 | 664.2 | 664.2 | 664.2 |
| 7.5° | 660.6 | 660.6 | 660.6 | 660.6 | 660.6 |
| 10° | 655.2 | 655.2 | 655.2 | 653.4 | 655.2 |
| 12.5° | 648.0 | 648.0 | 648.0 | 646.2 | 646.2 |
| 15° | 639.0 | 640.8 | 640.8 | 639.0 | 637.2 |
| 17.5° | 630.1 | 630.1 | 630.1 | 628.3 | 628.3 |
| 20° | 619.3 | 617.5 | 617.5 | 617.5 | 617.5 |
| 22.5° | 604.9 | 604.9 | 604.9 | 603.1 | 603.1 |
| 25° | 590.6 | 590.6 | 590.6 | 588.8 | 590.6 |
| 27.5° | 574.4 | 572.6 | 574.4 | 572.6 | 574.4 |
| 30° | 556.5 | 556.5 | 556.5 | 556.5 | 554.7 |
| 32.5° | 538.5 | 538.5 | 538.5 | 536.7 | 534.9 |
| 35° | 515.2 | 517.0 | 517.0 | 515.2 | 515.2 |
| 37.5° | 493.6 | 495.4 | 495.4 | 493.6 | 493.6 |
| 40° | 470.3 | 472.1 | 472.1 | 472.1 | 468.5 |
| 42.5° | 445.2 | 447.0 | 447.0 | 447.0 | 445.2 |
| 45° | 420.0 | 421.8 | 421.8 | 420.0 | 420.0 |
| 47.5° | 393.1 | 394.9 | 396.7 | 394.9 | 391.3 |
| 50° | 364.4 | 368.0 | 371.6 | 368.0 | 362.6 |
| 52.5° | 332.1 | 339.3 | 342.9 | 339.3 | 332.1 |
| 55° | 296.2 | 305.2 | 315.9 | 305.2 | 296.2 |
| 57.5° | 256.7 | 271.1 | 285.4 | 269.3 | 254.9 |
| 60° | 215.4 | 233.4 | 254.9 | 231.6 | 213.6 |
| 62.5° | 174.1 | 193.9 | 220.8 | 193.9 | 174.1 |
| 65° | 136.4 | 154.4 | 183.1 | 156.2 | 136.4 |
| 67.5° | 100.5 | 118.5 | 143.6 | 118.5 | 100.5 |
| 70° | 70.0 | 84.4 | 104.1 | 84.4 | 68.2 |
| 72.5° | 41.3 | 53.9 | 70.0 | 53.9 | 39.5 |
| 75° | 18.0 | 26.9 | 39.5 | 26.9 | 18.0 |
| 77.5° | 3.6 | 7.2 | 16.2 | 9.0 | 3.6 |
| 80° | 0.0 | 0.0 | 3.6 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



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







(END OF REPORT)