

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: P274465

Luminaire Tested: **LDSQ6B15DE010W2N2765 EU6B1020W2N902765 6LBSQOLI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P274465  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35088)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LDSQ6B15DE010W2N2765 EU6B1020W2N902765 6LBSQ0LI  
Description: PORTFOLIO 6" W2N SQ DOWNLIGHT WITH SPECULAR FINISH  
Light Source: W2N 2700K-6500K CCT TUNING RANGE  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1552.3 lumens  
Efficiency: N/A  
Efficacy: 70.6 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.9 / 0.94  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

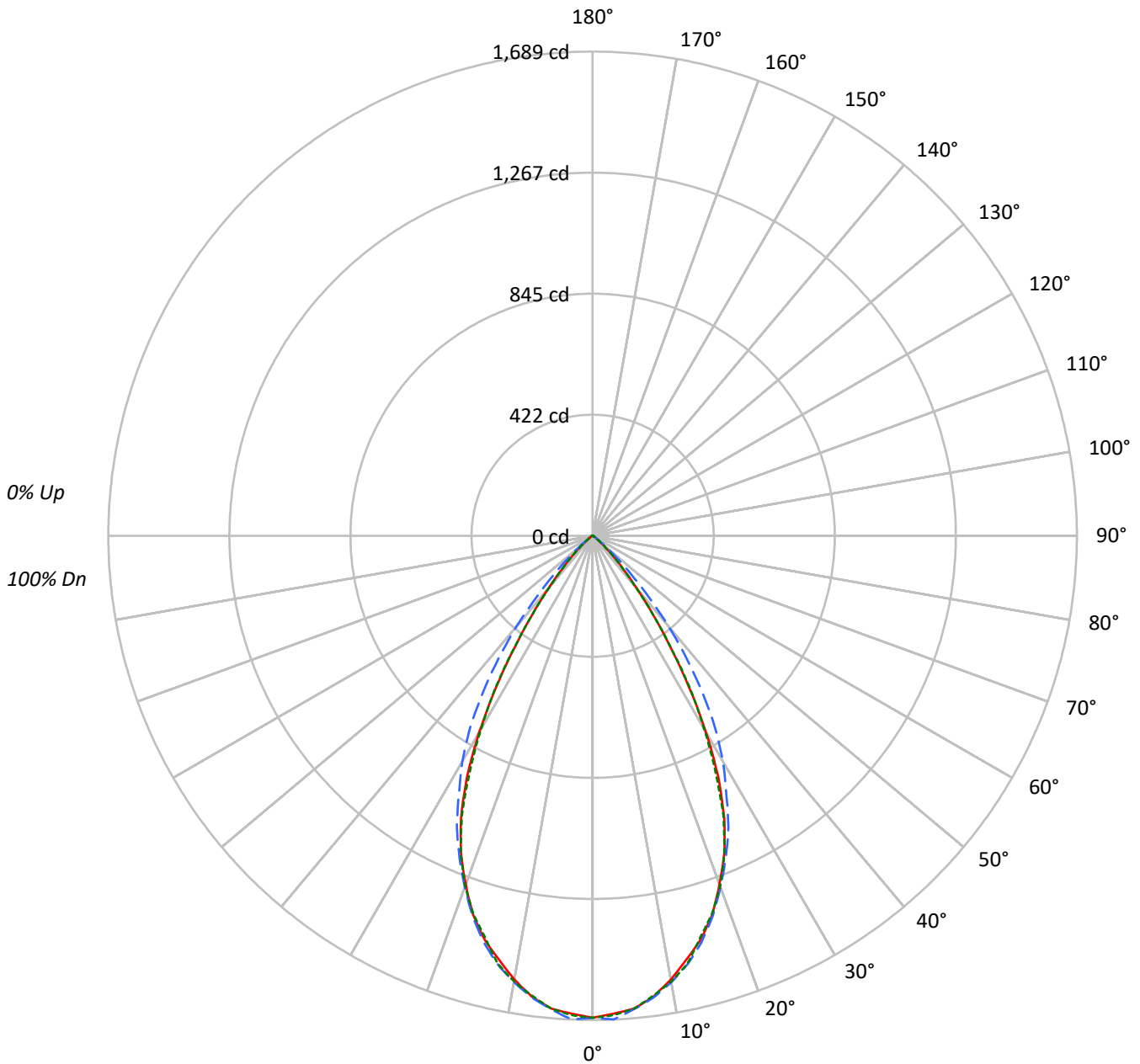
Input Watts (W): 22  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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

RF	20									20									20									20									
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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																			
2	108	103	99	95	105	101	97	94	98	95	92	95	92	90	92	90	88	87																			
3	102	96	91	87	100	94	90	86	92	88	84	89	86	83	87	84	82	80																			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																			
5	92	83	77	73	90	82	77	73	81	76	72	79	75	71	77	74	71	69																			
6	87	78	72	68	86	77	71	67	76	71	67	74	70	66	73	69	66	64																			
7	83	73	67	63	81	73	67	63	71	66	62	70	65	62	69	65	62	60																			
8	79	69	63	59	77	68	62	58	67	62	58	66	61	58	65	61	58	56																			
9	75	65	59	55	74	64	59	55	63	58	55	63	58	54	62	57	54	53																			
10	71	61	55	51	70	61	55	51	60	55	51	59	54	51	58	54	51	50																			

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

	0°	45°	90°
0°	72394	72394	72394
5°	71560	71655	71560
10°	68701	69121	69025
15°	64950	65422	64615
20°	59271	59711	59565
25°	51611	53236	51255
30°	39246	45142	38664
35°	24704	35090	24930
40°	13326	23173	13090
45°	6308	11447	6241
50°	2364	4294	2364
55°	1126	1366	1043
60°	732	646	732
65°	438	438	438
70°	264	403	264
75°	183	183	183
80°	273	273	273
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	155.9	10.0
10°-20°	408.6	26.3
20°-30°	499.1	32.2
30°-40°	349.1	22.5
40°-50°	114.4	7.4
50°-60°	18.2	1.2
60°-70°	4.9	0.3
70°-80°	1.7	0.1
80°-90°	0.5	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°	1063.5	68.5
0°-40°	1412.6	91.0
0°-60°	1545.2	99.5
0°-90°	1552.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1552.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1681	1681	1681	1681	1681	
5°	1656	1656	1658	1648	1656	155
15°	1457	1463	1468	1458	1450	406
25°	1086	1103	1121	1100	1079	488
35°	470	555	668	546	474	300
45°	104	128	188	126	102	87
55°	15	16	18	16	14	15
65°	4	5	4	5	4	5
75°	1	1	1	1	1	2
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1681.4	1681.4	1681.4	1681.4	1681.4	1681.4	1681.4	1681.4	1681.4	1681.4	1681.4
2.5°	1668.6	1680.3	1677.1	1684.6	1684.6	1676.0	1678.2	1681.4	1685.7	1688.9	1663.2
5°	1655.7	1666.4	1656.8	1667.5	1661.1	1651.5	1667.5	1659.0	1664.3	1657.9	1662.2
7.5°	1621.6	1638.7	1619.4	1632.2	1628.0	1622.6	1629.0	1626.9	1630.1	1624.8	1613.0
10°	1571.4	1585.2	1572.4	1590.6	1582.0	1576.7	1582.0	1587.4	1586.3	1581.0	1587.4
12.5°	1513.7	1529.7	1523.3	1534.0	1524.4	1524.4	1537.2	1534.0	1535.0	1530.8	1538.2
15°	1457.1	1468.8	1459.2	1473.1	1468.8	1457.1	1462.4	1462.4	1470.9	1467.7	1459.2
17.5°	1386.6	1396.2	1385.5	1388.7	1384.4	1382.3	1404.7	1389.8	1398.3	1391.9	1393.0
20°	1293.6	1297.9	1294.7	1303.2	1297.9	1304.3	1302.2	1300.0	1300.0	1303.2	1295.8
22.5°	1199.6	1199.6	1202.8	1205.0	1209.2	1202.8	1215.6	1205.0	1206.0	1213.5	1211.4
25°	1086.4	1083.2	1090.7	1101.3	1105.6	1100.3	1117.4	1108.8	1115.2	1120.6	1108.8
27.5°	948.6	948.6	956.1	974.2	977.4	983.8	1007.3	1007.3	1015.9	1008.4	1016.9
30°	789.4	801.2	810.8	834.3	841.8	855.6	880.2	892.0	911.2	908.0	903.7
32.5°	626.0	642.0	643.1	667.6	687.9	711.4	744.6	772.3	786.2	795.8	785.1
35°	470.0	479.6	488.2	505.3	539.5	570.4	600.3	636.7	661.2	667.6	658.0
37.5°	344.0	346.1	354.7	370.7	396.3	426.2	462.5	502.1	527.7	537.3	526.6
40°	237.1	239.3	243.6	257.4	278.8	300.2	329.0	369.6	393.1	412.3	398.4
42.5°	159.2	161.3	165.6	176.3	188.0	208.3	230.7	256.4	278.8	287.4	279.9
45°	103.6	103.6	105.8	113.2	119.6	135.7	151.7	167.7	182.7	188.0	182.7
47.5°	60.9	62.0	64.1	69.4	76.9	83.3	95.1	105.8	110.0	114.3	112.2
50°	35.3	35.3	38.5	41.7	47.0	51.3	55.5	59.8	62.0	64.1	62.0
52.5°	19.2	20.3	21.4	22.4	24.6	28.8	32.0	32.0	33.1	34.2	33.1
55°	15.0	15.0	15.0	15.0	16.0	16.0	16.0	17.1	17.1	18.2	17.1
57.5°	10.7	10.7	10.7	11.8	11.8	11.8	10.7	10.7	10.7	10.7	10.7
60°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	7.5	7.5	7.5	7.5
62.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
65°	4.3	4.3	5.3	5.3	5.3	5.3	5.3	4.3	4.3	4.3	4.3
67.5°	3.2	3.2	3.2	3.2	4.3	4.3	3.2	3.2	3.2	3.2	3.2
70°	2.1	2.1	2.1	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
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):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1681.4	1681.4	1681.4	1681.4	1681.4	1681.4	1681.4	1681.4
2.5°	1681.4	1663.2	1665.4	1675.0	1669.6	1675.0	1673.9	1673.9
5°	1663.2	1657.9	1649.3	1646.1	1652.5	1666.4	1664.3	1655.7
7.5°	1629.0	1615.2	1624.8	1629.0	1623.7	1632.2	1636.5	1618.4
10°	1588.4	1583.1	1581.0	1583.1	1581.0	1589.5	1578.8	1578.8
12.5°	1530.8	1522.2	1522.2	1535.0	1527.6	1521.2	1529.7	1528.6
15°	1473.1	1456.0	1456.0	1460.3	1463.5	1459.2	1460.3	1449.6
17.5°	1387.6	1382.3	1374.8	1386.6	1389.8	1385.5	1388.7	1383.3
20°	1307.5	1307.5	1293.6	1299.0	1303.2	1306.4	1308.6	1300.0
22.5°	1205.0	1207.1	1197.5	1208.2	1211.4	1200.7	1202.8	1200.7
25°	1111.0	1109.9	1102.4	1098.1	1100.3	1096.0	1094.9	1078.9
27.5°	1007.3	996.7	980.6	984.9	966.7	951.8	951.8	927.2
30°	895.2	877.0	855.6	834.3	818.3	801.2	791.6	777.7
32.5°	763.8	739.2	712.5	683.7	665.5	639.9	626.0	633.5
35°	633.5	597.1	560.8	532.0	504.2	489.2	472.2	474.3
37.5°	507.4	456.1	424.1	393.1	369.6	350.4	342.9	340.8
40°	370.7	330.1	298.0	275.6	259.6	244.6	236.1	232.9
42.5°	256.4	227.5	201.9	183.7	173.1	163.4	159.2	158.1
45°	166.6	149.6	132.5	119.6	111.1	104.7	103.6	102.5
47.5°	104.7	96.1	85.5	75.8	68.4	64.1	60.9	60.9
50°	59.8	56.6	51.3	45.9	41.7	39.5	36.3	35.3
52.5°	32.0	32.0	29.9	25.6	22.4	20.3	20.3	19.2
55°	17.1	17.1	16.0	16.0	15.0	15.0	15.0	13.9
57.5°	10.7	10.7	11.8	11.8	10.7	10.7	10.7	10.7
60°	7.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
62.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
65°	4.3	5.3	5.3	5.3	5.3	4.3	4.3	4.3
67.5°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
70°	3.2	3.2	3.2	3.2	3.2	2.1	2.1	2.1
72.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
80°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093







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









(END OF REPORT)