

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: P274466

Luminaire Tested: **LDSQ6B20DE010W2N2765 EU6B1020W2N902765 6LBSQOLI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P274466  
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: LDSQ6B20DE010W2N2765 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: 1889.9 lumens  
Efficiency: N/A  
Efficacy: 67.5 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

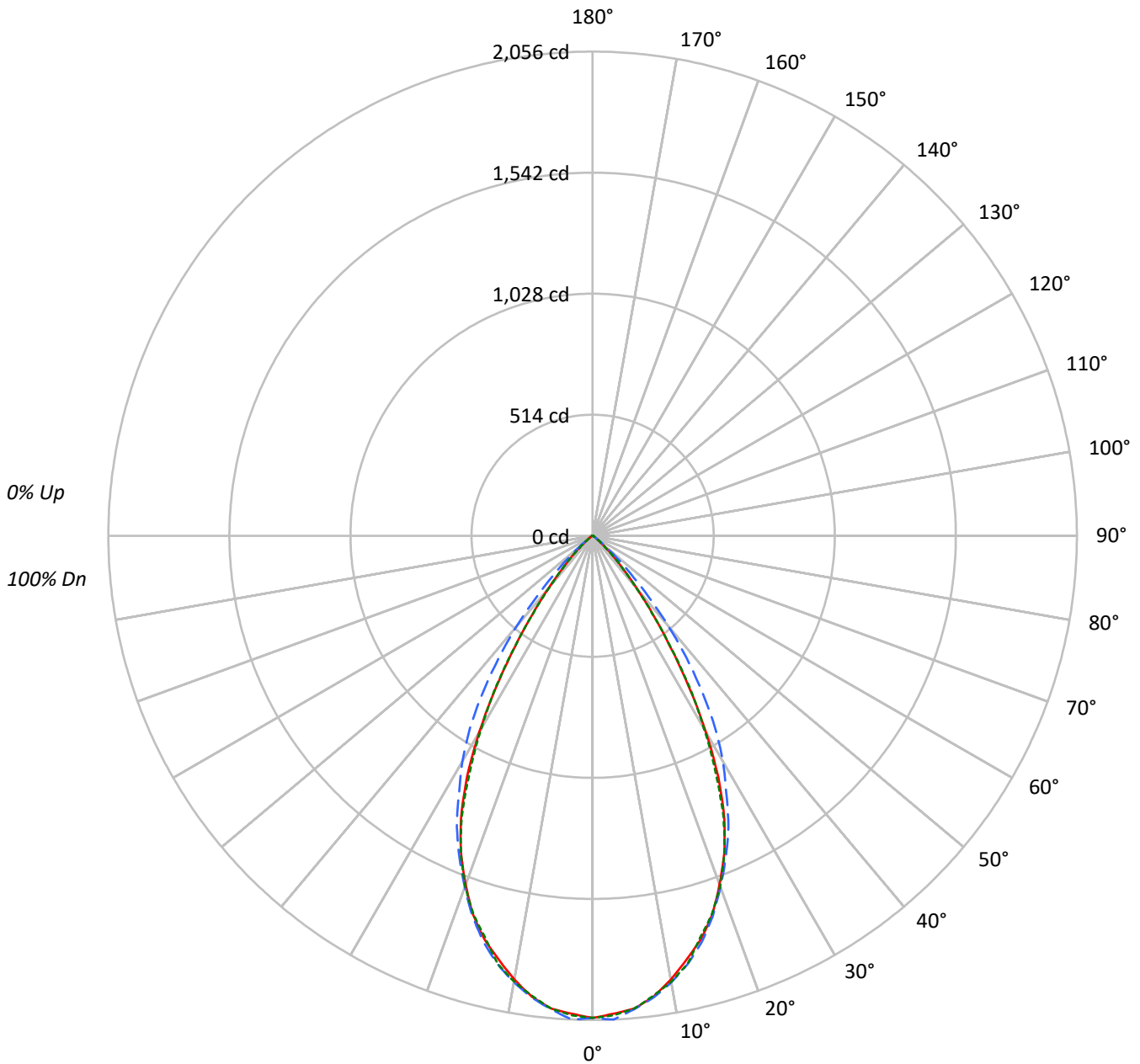
Input Watts (W): 28  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	88139	88139	88139
5°	87127	87240	87127
10°	83645	84156	84043
15°	79075	79655	78670
20°	72165	72701	72522
25°	62837	64813	62405
30°	47782	54961	47071
35°	30081	42727	30354
40°	16226	28215	15934
45°	7684	13938	7605
50°	2874	5225	2874
55°	1366	1659	1269
60°	896	784	896
65°	530	530	530
70°	327	491	327
75°	216	216	216
80°	322	322	322
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	189.8	10.0
10°-20°	497.4	26.3
20°-30°	607.7	32.2
30°-40°	425.0	22.5
40°-50°	139.3	7.4
50°-60°	22.1	1.2
60°-70°	6.0	0.3
70°-80°	2.0	0.1
80°-90°	0.6	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°	1294.9	68.5
0°-40°	1719.9	91.0
0°-60°	1881.3	99.5
0°-90°	1889.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1889.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2047	2047	2047	2047	2047	
5°	2016	2017	2018	2006	2016	189
15°	1774	1781	1787	1775	1765	495
25°	1323	1343	1364	1340	1314	594
35°	572	676	813	665	578	365
45°	126	155	229	154	125	106
55°	18	20	22	20	17	18
65°	5	6	5	6	5	6
75°	1	1	1	1	1	2
85°	0	0	0	0	0	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2047.1	2047.1	2047.1	2047.1	2047.1	2047.1	2047.1	2047.1	2047.1	2047.1	2047.1
2.5°	2031.5	2045.8	2041.9	2051.0	2051.0	2040.6	2043.2	2047.1	2052.3	2056.2	2025.0
5°	2015.9	2028.9	2017.2	2030.2	2022.4	2010.7	2030.2	2019.8	2026.3	2018.5	2023.7
7.5°	1974.3	1995.1	1971.7	1987.3	1982.1	1975.6	1983.4	1980.8	1984.7	1978.2	1963.9
10°	1913.2	1930.1	1914.5	1936.6	1926.2	1919.7	1926.2	1932.7	1931.4	1924.9	1932.7
12.5°	1842.9	1862.4	1854.6	1867.7	1855.9	1855.9	1871.6	1867.7	1869.0	1863.8	1872.9
15°	1774.0	1788.3	1776.6	1793.5	1788.3	1774.0	1780.5	1780.5	1790.9	1787.0	1776.6
17.5°	1688.2	1699.9	1686.9	1690.8	1685.6	1683.0	1710.3	1692.1	1702.5	1694.7	1696.0
20°	1575.0	1580.2	1576.3	1586.7	1580.2	1588.0	1585.4	1582.8	1582.8	1586.7	1577.6
22.5°	1460.6	1460.6	1464.5	1467.1	1472.3	1464.5	1480.1	1467.1	1468.4	1477.5	1474.9
25°	1322.7	1318.8	1327.9	1340.9	1346.1	1339.6	1360.4	1350.0	1357.8	1364.3	1350.0
27.5°	1154.9	1154.9	1164.0	1186.1	1190.0	1197.8	1226.5	1226.5	1236.9	1227.8	1238.2
30°	961.1	975.4	987.2	1015.8	1024.9	1041.8	1071.7	1086.0	1109.4	1105.5	1100.3
32.5°	762.1	781.7	783.0	812.9	837.6	866.2	906.5	940.3	957.2	968.9	955.9
35°	572.3	584.0	594.4	615.2	656.8	694.5	730.9	775.2	805.1	812.9	801.2
37.5°	418.8	421.4	431.8	451.3	482.5	518.9	563.2	611.3	642.5	654.2	641.2
40°	288.7	291.3	296.5	313.4	339.5	365.5	400.6	450.0	478.6	502.0	485.1
42.5°	193.8	196.4	201.6	214.6	228.9	253.6	280.9	312.1	339.5	349.9	340.8
45°	126.2	126.2	128.8	137.9	145.7	165.2	184.7	204.2	222.4	228.9	222.4
47.5°	74.1	75.4	78.0	84.5	93.6	101.4	115.8	128.8	134.0	139.2	136.6
50°	42.9	42.9	46.8	50.7	57.2	62.4	67.6	72.8	75.4	78.0	75.4
52.5°	23.4	24.7	26.0	27.3	29.9	35.1	39.0	39.0	40.3	41.6	40.3
55°	18.2	18.2	18.2	18.2	19.5	19.5	19.5	20.8	20.8	22.1	20.8
57.5°	13.0	13.0	13.0	14.3	14.3	14.3	13.0	13.0	13.0	13.0	13.0
60°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	9.1	9.1	9.1	9.1
62.5°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
65°	5.2	5.2	6.5	6.5	6.5	6.5	6.5	5.2	5.2	5.2	5.2
67.5°	3.9	3.9	3.9	3.9	5.2	5.2	3.9	3.9	3.9	3.9	3.9
70°	2.6	2.6	2.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
72.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
77.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	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°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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°	2047.1	2047.1	2047.1	2047.1	2047.1	2047.1	2047.1	2047.1
2.5°	2047.1	2025.0	2027.6	2039.3	2032.8	2039.3	2038.0	2038.0
5°	2025.0	2018.5	2008.1	2004.2	2012.0	2028.9	2026.3	2015.9
7.5°	1983.4	1966.5	1978.2	1983.4	1976.9	1987.3	1992.5	1970.4
10°	1934.0	1927.5	1924.9	1927.5	1924.9	1935.3	1922.3	1922.3
12.5°	1863.8	1853.3	1853.3	1869.0	1859.8	1852.0	1862.4	1861.1
15°	1793.5	1772.7	1772.7	1777.9	1781.8	1776.6	1777.9	1764.9
17.5°	1689.5	1683.0	1673.9	1688.2	1692.1	1686.9	1690.8	1684.3
20°	1591.9	1591.9	1575.0	1581.5	1586.7	1590.6	1593.2	1582.8
22.5°	1467.1	1469.7	1458.0	1471.0	1474.9	1461.9	1464.5	1461.9
25°	1352.6	1351.3	1342.2	1337.0	1339.6	1334.4	1333.1	1313.6
27.5°	1226.5	1213.5	1193.9	1199.1	1177.0	1158.8	1158.8	1128.9
30°	1089.9	1067.8	1041.8	1015.8	996.3	975.4	963.7	946.8
32.5°	929.9	900.0	867.5	832.4	810.3	779.1	762.1	771.3
35°	771.3	727.0	682.8	647.7	613.9	595.7	574.9	577.5
37.5°	617.8	555.4	516.3	478.6	450.0	426.6	417.5	414.9
40°	451.3	401.9	362.9	335.6	316.0	297.8	287.4	283.5
42.5°	312.1	277.0	245.8	223.7	210.7	199.0	193.8	192.5
45°	202.9	182.1	161.3	145.7	135.3	127.5	126.2	124.9
47.5°	127.5	117.1	104.0	92.3	83.2	78.0	74.1	74.1
50°	72.8	68.9	62.4	55.9	50.7	48.1	44.2	42.9
52.5°	39.0	39.0	36.4	31.2	27.3	24.7	24.7	23.4
55°	20.8	20.8	19.5	19.5	18.2	18.2	18.2	16.9
57.5°	13.0	13.0	14.3	14.3	13.0	13.0	13.0	13.0
60°	9.1	10.4	10.4	10.4	10.4	10.4	10.4	10.4
62.5°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
65°	5.2	6.5	6.5	6.5	6.5	5.2	5.2	5.2
67.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
70°	3.9	3.9	3.9	3.9	3.9	2.6	2.6	2.6
72.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
77.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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









(END OF REPORT)