

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: P209469

Luminaire Tested: **LDSQ6B50D010 EU6B30508027 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209469
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35359)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B50D010 EU6B30508027 6LBCSSQ1MMS
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
D010TE
Light Source: HIGH LUMEN LED 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5522.7 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

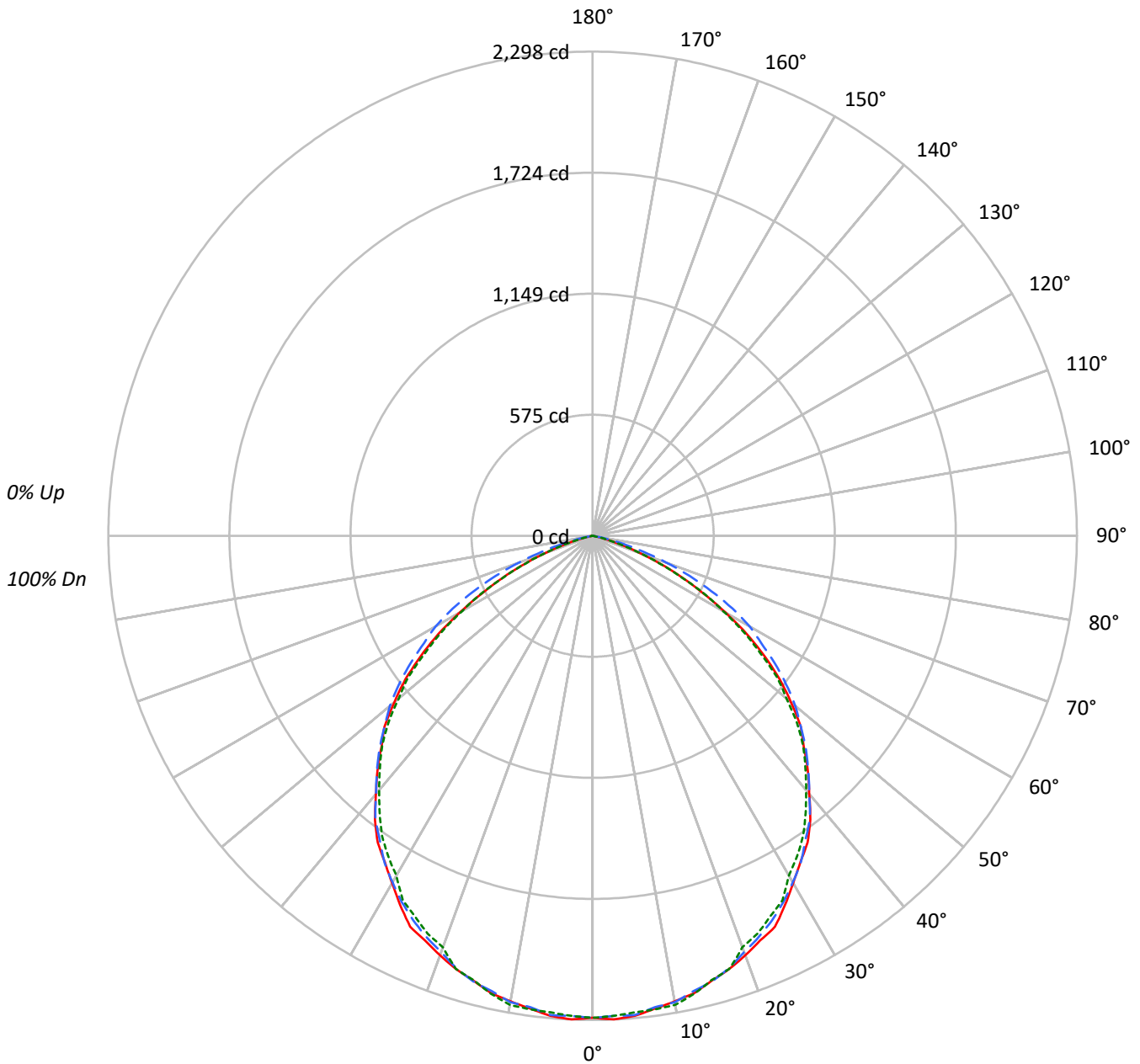
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75																			
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64																			
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56																			
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49																			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43																			
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38																			
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34																			
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	Luminaire represents a point source (luminous area is zero).		
5°	No luminance values can be calculated.		
10°			
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.3	3.9
10°-20°	616.9	11.2
20°-30°	928.3	16.8
30°-40°	1098.2	19.9
40°-50°	1095.9	19.8
50°-60°	908.8	16.5
60°-70°	530.9	9.6
70°-80°	126.4	2.3
80°-90°	0.9	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°	1761.5	31.9
0°-40°	2859.7	51.8
0°-60°	4864.4	88.1
0°-90°	5522.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5522.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2288	2288	2288	2288	2288	
5°	2288	2276	2284	2277	2271	217
15°	2186	2185	2190	2180	2183	618
25°	2048	2024	2014	2007	1994	936
35°	1778	1761	1761	1751	1741	1105
45°	1417	1419	1430	1415	1414	1096
55°	995	1031	1056	1027	972	884
65°	469	528	621	526	466	466
75°	68	98	152	96	64	91
85°	0	0	0	0	0	0
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°	2287.5	2287.5	2287.5	2287.5	2287.5	2287.5	2287.5	2287.5	2287.5	2287.5	2287.5
2.5°	2297.6	2284.1	2294.2	2274.0	2287.5	2274.0	2277.3	2270.6	2284.1	2280.7	2277.3
5°	2287.5	2290.8	2284.1	2290.8	2280.7	2270.6	2280.7	2274.0	2253.7	2284.1	2277.3
7.5°	2263.8	2267.2	2260.5	2270.6	2263.8	2250.3	2277.3	2257.1	2253.7	2257.1	2270.6
10°	2243.6	2250.3	2247.0	2243.6	2247.0	2247.0	2240.2	2230.1	2240.2	2247.0	2243.6
12.5°	2223.4	2233.5	2226.7	2220.0	2213.2	2216.6	2223.4	2206.5	2206.5	2213.2	2233.5
15°	2186.2	2193.0	2196.4	2182.9	2182.9	2186.2	2199.7	2172.7	2186.2	2189.6	2193.0
17.5°	2155.9	2159.3	2159.3	2149.1	2155.9	2145.8	2155.9	2142.4	2155.9	2152.5	2159.3
20°	2118.8	2125.5	2118.8	2118.8	2112.0	2115.4	2115.4	2115.4	2105.3	2101.9	2108.6
22.5°	2078.3	2078.3	2071.5	2078.3	2071.5	2068.2	2085.0	2058.0	2085.0	2061.4	2081.7
25°	2047.9	2031.0	2020.9	2017.6	2031.0	2017.6	2024.3	2014.2	2020.9	2014.2	2017.6
27.5°	1977.1	1966.9	1963.6	1966.9	1966.9	1963.6	1977.1	1940.0	1963.6	1960.2	1960.2
30°	1902.8	1902.8	1909.6	1902.8	1909.6	1899.5	1913.0	1882.6	1902.8	1899.5	1902.8
32.5°	1835.4	1838.7	1838.7	1845.5	1835.4	1838.7	1838.7	1828.6	1835.4	1838.7	1832.0
35°	1778.0	1761.1	1761.1	1761.1	1761.1	1761.1	1767.9	1757.8	1767.9	1761.1	1761.1
37.5°	1697.0	1680.2	1680.2	1676.8	1693.7	1683.5	1700.4	1686.9	1686.9	1693.7	1693.7
40°	1599.2	1605.9	1595.8	1609.3	1605.9	1592.4	1622.8	1602.6	1616.1	1599.2	1612.7
42.5°	1511.5	1514.9	1511.5	1508.1	1521.6	1518.2	1531.7	1518.2	1514.9	1514.9	1538.5
45°	1417.0	1417.0	1417.0	1427.1	1417.0	1420.4	1433.9	1427.1	1433.9	1430.5	1454.1
47.5°	1339.4	1322.5	1319.2	1339.4	1336.0	1339.4	1339.4	1342.8	1346.2	1339.4	1349.5
50°	1228.1	1221.3	1221.3	1224.7	1228.1	1234.8	1244.9	1251.7	1244.9	1255.1	1258.4
52.5°	1120.1	1113.4	1116.7	1130.2	1137.0	1133.6	1150.5	1153.9	1150.5	1157.2	1157.2
55°	995.3	988.5	998.7	1015.5	1025.6	1035.8	1052.6	1039.1	1052.6	1056.0	1059.4
57.5°	867.1	863.7	867.1	883.9	894.1	917.7	944.7	944.7	958.2	948.0	958.2
60°	725.4	725.4	738.9	749.0	776.0	792.9	819.8	833.3	846.8	860.3	853.6
62.5°	590.4	593.8	603.9	627.5	644.4	668.0	698.4	711.9	735.5	749.0	742.2
65°	469.0	469.0	475.7	496.0	512.8	543.2	570.2	600.5	614.0	620.8	624.2
67.5°	350.9	347.5	361.0	374.5	391.4	421.7	452.1	469.0	492.6	499.3	496.0
70°	236.2	239.5	246.3	259.8	280.0	303.6	337.4	350.9	364.4	371.1	364.4
72.5°	148.4	148.4	151.8	165.3	178.8	195.7	219.3	232.8	249.7	253.0	246.3
75°	67.5	67.5	74.2	81.0	91.1	104.6	121.5	131.6	141.7	151.8	151.8
77.5°	13.5	16.9	20.2	20.2	27.0	37.1	47.2	57.4	67.5	67.5	67.5
80°	3.4	3.4	3.4	3.4	3.4	3.4	6.7	10.1	16.9	16.9	16.9
82.5°	0.0	0.0	0.0	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	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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°	2287.5	2287.5	2287.5	2287.5	2287.5	2287.5	2287.5	2287.5
2.5°	2287.5	2307.7	2287.5	2277.3	2290.8	2287.5	2277.3	2280.7
5°	2277.3	2284.1	2290.8	2263.8	2280.7	2284.1	2277.3	2270.6
7.5°	2267.2	2270.6	2267.2	2260.5	2260.5	2260.5	2267.2	2267.2
10°	2263.8	2253.7	2236.9	2226.7	2236.9	2236.9	2233.5	2260.5
12.5°	2220.0	2233.5	2223.4	2203.1	2223.4	2220.0	2220.0	2226.7
15°	2186.2	2186.2	2193.0	2166.0	2179.5	2176.1	2176.1	2182.9
17.5°	2152.5	2152.5	2149.1	2142.4	2139.0	2149.1	2139.0	2155.9
20°	2105.3	2112.0	2132.3	2098.5	2108.6	2098.5	2098.5	2078.3
22.5°	2047.9	2081.7	2064.8	2061.4	2058.0	2061.4	2068.2	2044.5
25°	2010.8	2010.8	2017.6	1997.3	1997.3	2004.1	2000.7	1993.9
27.5°	1960.2	1956.8	1953.4	1946.7	1963.6	1950.1	1950.1	1950.1
30°	1889.3	1899.5	1896.1	1879.2	1899.5	1892.7	1882.6	1862.4
32.5°	1828.6	1842.1	1821.9	1818.5	1815.1	1818.5	1821.9	1805.0
35°	1754.4	1757.8	1757.8	1744.3	1747.6	1744.3	1737.5	1740.9
37.5°	1686.9	1683.5	1666.7	1659.9	1663.3	1663.3	1666.7	1659.9
40°	1592.4	1602.6	1602.6	1579.0	1585.7	1579.0	1579.0	1575.6
42.5°	1514.9	1518.2	1508.1	1498.0	1498.0	1494.6	1487.9	1494.6
45°	1433.9	1430.5	1420.4	1410.3	1410.3	1406.9	1400.1	1413.6
47.5°	1342.8	1336.0	1332.7	1319.2	1319.2	1298.9	1302.3	1315.8
50°	1251.7	1244.9	1231.4	1224.7	1214.6	1204.5	1201.1	1201.1
52.5°	1143.7	1143.7	1130.2	1116.7	1113.4	1106.6	1099.9	1103.2
55°	1049.3	1049.3	1039.1	1015.5	1002.0	985.2	975.0	971.7
57.5°	941.3	934.6	914.3	887.3	873.8	860.3	850.2	850.2
60°	833.3	816.5	796.2	772.6	749.0	725.4	718.6	715.3
62.5°	715.3	698.4	661.3	634.3	617.4	603.9	590.4	600.5
65°	597.2	573.6	539.8	512.8	496.0	475.7	465.6	465.6
67.5°	472.3	448.7	415.0	388.0	371.1	357.6	344.1	344.1
70°	347.5	330.6	300.3	276.7	263.2	242.9	239.5	239.5
72.5°	236.2	215.9	192.3	175.4	161.9	148.4	141.7	138.3
75°	131.6	118.1	101.2	91.1	77.6	70.9	64.1	64.1
77.5°	54.0	43.9	33.7	27.0	20.2	16.9	13.5	16.9
80°	10.1	6.7	3.4	3.4	3.4	3.4	3.4	3.4
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°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)