

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: P209500

Luminaire Tested: **LDSQ6B70D010 EU6B60709024 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209500
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: LDSQ6B70D010 EU6B60709024 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 2400 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5598.4 lumens
Efficiency: N/A
Efficacy: 70.5 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

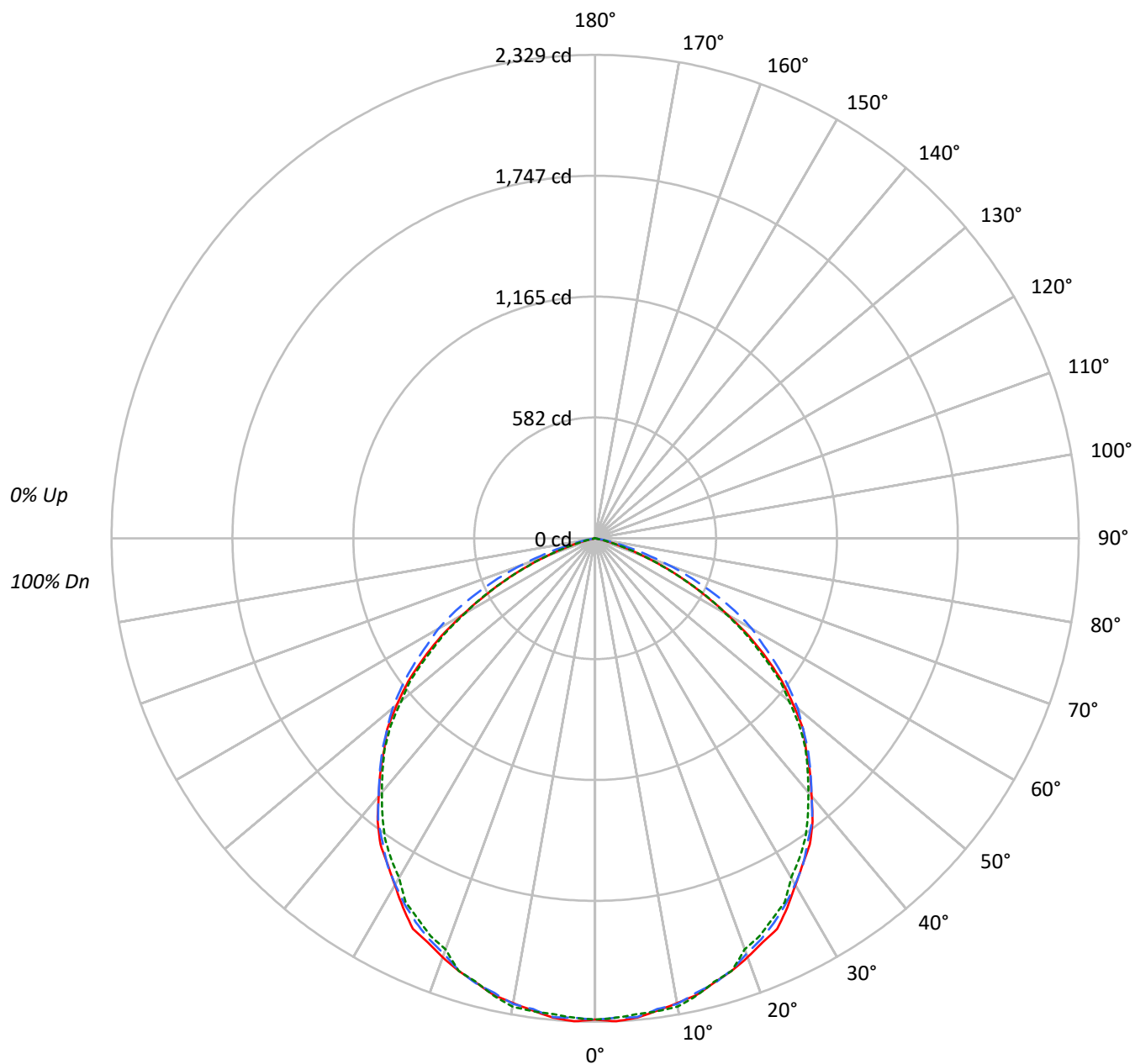
Input Watts (W): 79.45
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	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°	219.3	3.9
10°-20°	625.4	11.2
20°-30°	941.0	16.8
30°-40°	1113.2	19.9
40°-50°	1110.9	19.8
50°-60°	921.2	16.5
60°-70°	538.2	9.6
70°-80°	128.2	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°	1785.7	31.9
0°-40°	2898.9	51.8
0°-60°	4931.1	88.1
0°-90°	5598.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5598.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2319	2319	2319	2319	2319	
5°	2319	2307	2315	2309	2302	220
15°	2216	2214	2220	2209	2213	626
25°	2076	2052	2042	2035	2021	949
35°	1802	1785	1785	1775	1765	1121
45°	1436	1438	1450	1435	1433	1111
55°	1009	1045	1070	1041	985	896
65°	475	535	629	534	472	473
75°	68	99	154	97	65	93
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°	2318.8	2318.8	2318.8	2318.8	2318.8	2318.8	2318.8	2318.8	2318.8	2318.8	2318.8
2.5°	2329.1	2315.4	2325.7	2305.1	2318.8	2305.1	2308.6	2301.7	2315.4	2312.0	2308.6
5°	2318.8	2322.2	2315.4	2322.2	2312.0	2301.7	2312.0	2305.1	2284.6	2315.4	2308.6
7.5°	2294.9	2298.3	2291.5	2301.7	2294.9	2281.2	2308.6	2288.0	2284.6	2288.0	2301.7
10°	2274.3	2281.2	2277.8	2274.3	2277.8	2277.8	2270.9	2260.7	2270.9	2277.8	2274.3
12.5°	2253.8	2264.1	2257.2	2250.4	2243.6	2247.0	2253.8	2236.7	2236.7	2243.6	2264.1
15°	2216.2	2223.0	2226.5	2212.8	2212.8	2216.2	2229.9	2202.5	2216.2	2219.6	2223.0
17.5°	2185.4	2188.8	2188.8	2178.6	2185.4	2175.2	2185.4	2171.7	2185.4	2182.0	2188.8
20°	2147.8	2154.6	2147.8	2147.8	2141.0	2144.4	2144.4	2144.4	2134.1	2130.7	2137.5
22.5°	2106.8	2106.8	2099.9	2106.8	2099.9	2096.5	2113.6	2086.2	2113.6	2089.7	2110.2
25°	2076.0	2058.9	2048.6	2045.2	2058.9	2045.2	2052.0	2041.8	2048.6	2041.8	2045.2
27.5°	2004.2	1993.9	1990.5	1993.9	1993.9	1990.5	2004.2	1966.5	1990.5	1987.1	1987.1
30°	1928.9	1928.9	1935.8	1928.9	1935.8	1925.5	1939.2	1908.4	1928.9	1925.5	1928.9
32.5°	1860.5	1863.9	1863.9	1870.8	1860.5	1863.9	1863.9	1853.7	1860.5	1863.9	1857.1
35°	1802.4	1785.3	1785.3	1785.3	1785.3	1785.3	1792.1	1781.9	1792.1	1785.3	1785.3
37.5°	1720.3	1703.2	1703.2	1699.8	1716.9	1706.6	1723.7	1710.0	1710.0	1716.9	1716.9
40°	1621.1	1628.0	1617.7	1631.4	1628.0	1614.3	1645.1	1624.5	1638.2	1621.1	1634.8
42.5°	1532.2	1535.6	1532.2	1528.8	1542.5	1539.0	1552.7	1539.0	1535.6	1535.6	1559.6
45°	1436.4	1436.4	1436.4	1446.7	1436.4	1439.9	1453.5	1446.7	1453.5	1450.1	1474.1
47.5°	1357.8	1340.7	1337.2	1357.8	1354.3	1357.8	1357.8	1361.2	1364.6	1357.8	1368.0
50°	1244.9	1238.1	1238.1	1241.5	1244.9	1251.7	1262.0	1268.8	1262.0	1272.3	1275.7
52.5°	1135.5	1128.6	1132.0	1145.7	1152.6	1149.1	1166.2	1169.7	1166.2	1173.1	1173.1
55°	1008.9	1002.1	1012.3	1029.4	1039.7	1050.0	1067.1	1053.4	1067.1	1070.5	1073.9
57.5°	879.0	875.5	879.0	896.1	906.3	930.3	957.6	957.6	971.3	961.0	971.3
60°	735.3	735.3	749.0	759.3	786.6	803.7	831.1	844.8	858.4	872.1	865.3
62.5°	598.5	601.9	612.2	636.1	653.2	677.2	708.0	721.6	745.6	759.3	752.4
65°	475.4	475.4	482.2	502.8	519.9	550.6	578.0	608.8	622.5	629.3	632.7
67.5°	355.7	352.3	365.9	379.6	396.7	427.5	458.3	475.4	499.3	506.2	502.8
70°	239.4	242.8	249.7	263.3	283.9	307.8	342.0	355.7	369.4	376.2	369.4
72.5°	150.5	150.5	153.9	167.6	181.3	198.4	222.3	236.0	253.1	256.5	249.7
75°	68.4	68.4	75.2	82.1	92.3	106.0	123.1	133.4	143.6	153.9	153.9
77.5°	13.7	17.1	20.5	20.5	27.4	37.6	47.9	58.1	68.4	68.4	68.4
80°	3.4	3.4	3.4	3.4	3.4	3.4	6.8	10.3	17.1	17.1	17.1
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°	2318.8	2318.8	2318.8	2318.8	2318.8	2318.8	2318.8	2318.8
2.5°	2318.8	2339.3	2318.8	2308.6	2322.2	2318.8	2308.6	2312.0
5°	2308.6	2315.4	2322.2	2294.9	2312.0	2315.4	2308.6	2301.7
7.5°	2298.3	2301.7	2298.3	2291.5	2291.5	2291.5	2298.3	2298.3
10°	2294.9	2284.6	2267.5	2257.2	2267.5	2267.5	2264.1	2291.5
12.5°	2250.4	2264.1	2253.8	2233.3	2253.8	2250.4	2250.4	2257.2
15°	2216.2	2216.2	2223.0	2195.7	2209.4	2205.9	2205.9	2212.8
17.5°	2182.0	2182.0	2178.6	2171.7	2168.3	2178.6	2168.3	2185.4
20°	2134.1	2141.0	2161.5	2127.3	2137.5	2127.3	2127.3	2106.8
22.5°	2076.0	2110.2	2093.1	2089.7	2086.2	2089.7	2096.5	2072.6
25°	2038.4	2038.4	2045.2	2024.7	2024.7	2031.5	2028.1	2021.3
27.5°	1987.1	1983.6	1980.2	1973.4	1990.5	1976.8	1976.8	1976.8
30°	1915.2	1925.5	1922.1	1905.0	1925.5	1918.7	1908.4	1887.9
32.5°	1853.7	1867.4	1846.8	1843.4	1840.0	1843.4	1846.8	1829.7
35°	1778.4	1781.9	1781.9	1768.2	1771.6	1768.2	1761.3	1764.8
37.5°	1710.0	1706.6	1689.5	1682.7	1686.1	1686.1	1689.5	1682.7
40°	1614.3	1624.5	1624.5	1600.6	1607.4	1600.6	1600.6	1597.2
42.5°	1535.6	1539.0	1528.8	1518.5	1518.5	1515.1	1508.3	1515.1
45°	1453.5	1450.1	1439.9	1429.6	1429.6	1426.2	1419.3	1433.0
47.5°	1361.2	1354.3	1350.9	1337.2	1337.2	1316.7	1320.1	1333.8
50°	1268.8	1262.0	1248.3	1241.5	1231.2	1221.0	1217.5	1217.5
52.5°	1159.4	1159.4	1145.7	1132.0	1128.6	1121.8	1114.9	1118.4
55°	1063.6	1063.6	1053.4	1029.4	1015.8	998.7	988.4	985.0
57.5°	954.2	947.4	926.8	899.5	885.8	872.1	861.9	861.9
60°	844.8	827.7	807.1	783.2	759.3	735.3	728.5	725.1
62.5°	725.1	708.0	670.3	643.0	625.9	612.2	598.5	608.8
65°	605.4	581.4	547.2	519.9	502.8	482.2	472.0	472.0
67.5°	478.8	454.9	420.7	393.3	376.2	362.5	348.8	348.8
70°	352.3	335.2	304.4	280.4	266.8	246.2	242.8	242.8
72.5°	239.4	218.9	194.9	177.8	164.2	150.5	143.6	140.2
75°	133.4	119.7	102.6	92.3	78.7	71.8	65.0	65.0
77.5°	54.7	44.5	34.2	27.4	20.5	17.1	13.7	17.1
80°	10.3	6.8	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)