

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: P209488

Luminaire Tested: **LDSQ6B60D010 EU6B60709027 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209488
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: LDSQ6B60D010 EU6B60709027 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: 5365.0 lumens
Efficiency: N/A
Efficacy: 85.9 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

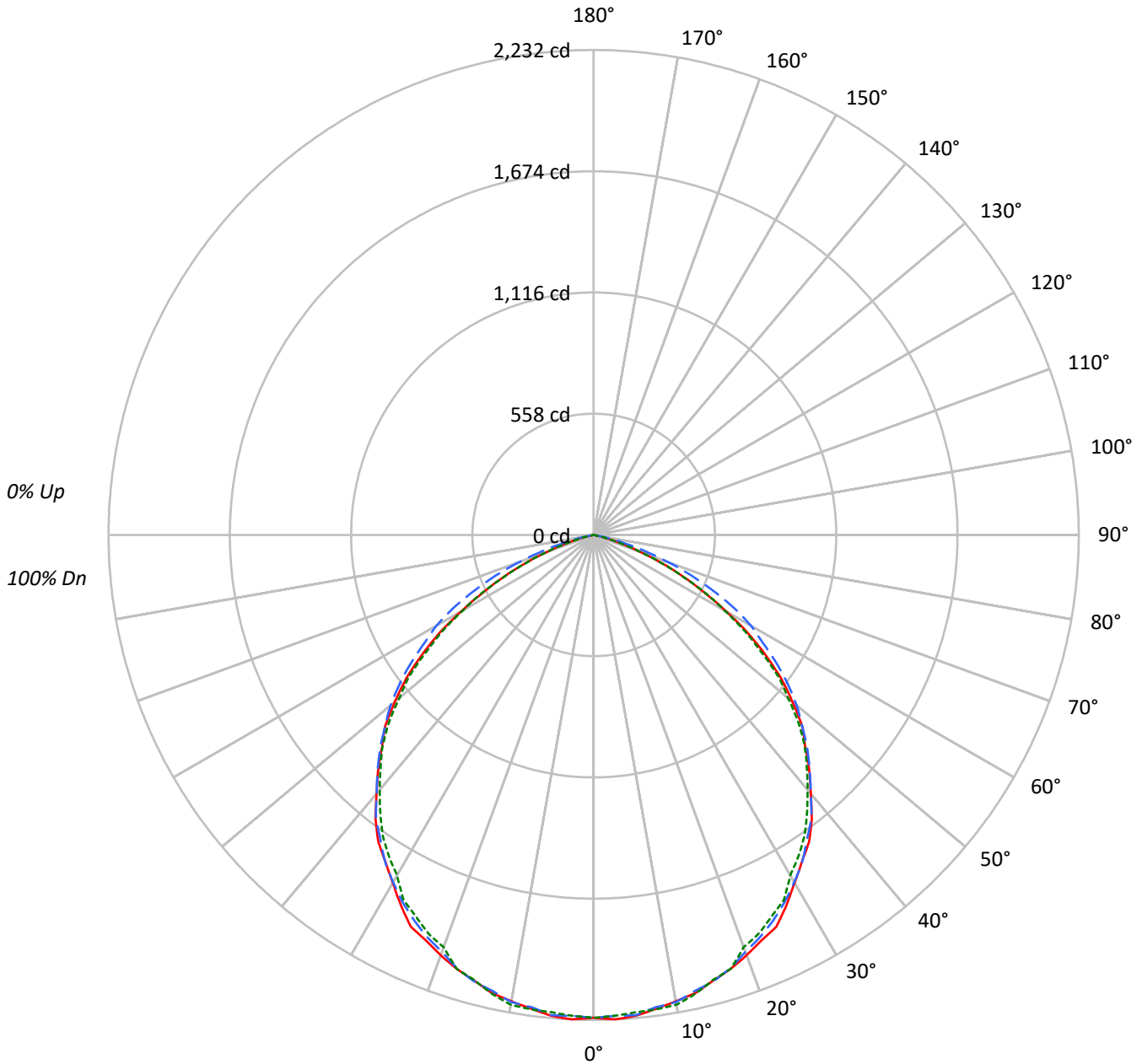
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	210.2	3.9
10°-20°	599.3	11.2
20°-30°	901.8	16.8
30°-40°	1066.8	19.9
40°-50°	1064.6	19.8
50°-60°	882.8	16.5
60°-70°	515.8	9.6
70°-80°	122.8	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°	1711.2	31.9
0°-40°	2778.0	51.8
0°-60°	4725.5	88.1
0°-90°	5365.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2222	2222	2222	2222	2222	
5°	2222	2211	2219	2212	2206	211
15°	2124	2122	2127	2117	2120	600
25°	1989	1966	1957	1950	1937	909
35°	1727	1711	1711	1701	1691	1074
45°	1376	1378	1390	1375	1373	1065
55°	967	1001	1026	998	944	858
65°	456	513	603	511	452	453
75°	66	95	148	93	62	89
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°	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1
2.5°	2232.0	2218.8	2228.7	2209.0	2222.1	2209.0	2212.3	2205.7	2218.8	2215.6	2212.3
5°	2222.1	2225.4	2218.8	2225.4	2215.6	2205.7	2215.6	2209.0	2189.4	2218.8	2212.3
7.5°	2199.2	2202.5	2195.9	2205.7	2199.2	2186.1	2212.3	2192.6	2189.4	2192.6	2205.7
10°	2179.5	2186.1	2182.8	2179.5	2182.8	2182.8	2176.2	2166.4	2176.2	2182.8	2179.5
12.5°	2159.9	2169.7	2163.1	2156.6	2150.0	2153.3	2159.9	2143.5	2143.5	2150.0	2169.7
15°	2123.8	2130.4	2133.6	2120.5	2120.5	2123.8	2136.9	2110.7	2123.8	2127.1	2130.4
17.5°	2094.3	2097.6	2097.6	2087.7	2094.3	2084.5	2094.3	2081.2	2094.3	2091.0	2097.6
20°	2058.3	2064.8	2058.3	2058.3	2051.7	2055.0	2055.0	2055.0	2045.1	2041.9	2048.4
22.5°	2018.9	2018.9	2012.4	2018.9	2012.4	2009.1	2025.5	1999.3	2025.5	2002.5	2022.2
25°	1989.4	1973.0	1963.2	1959.9	1973.0	1959.9	1966.5	1956.6	1963.2	1956.6	1959.9
27.5°	1920.6	1910.8	1907.5	1910.8	1910.8	1907.5	1920.6	1884.5	1907.5	1904.2	1904.2
30°	1848.5	1848.5	1855.0	1848.5	1855.0	1845.2	1858.3	1828.8	1848.5	1845.2	1848.5
32.5°	1782.9	1786.2	1786.2	1792.8	1782.9	1786.2	1786.2	1776.4	1782.9	1786.2	1779.7
35°	1727.2	1710.8	1710.8	1710.8	1710.8	1710.8	1717.4	1707.6	1717.4	1710.8	1710.8
37.5°	1648.6	1632.2	1632.2	1628.9	1645.3	1635.5	1651.8	1638.7	1638.7	1645.3	1645.3
40°	1553.5	1560.1	1550.2	1563.4	1560.1	1547.0	1576.5	1556.8	1569.9	1553.5	1566.6
42.5°	1468.3	1471.6	1468.3	1465.0	1478.1	1474.9	1488.0	1474.9	1471.6	1471.6	1494.5
45°	1376.5	1376.5	1376.5	1386.4	1376.5	1379.8	1392.9	1386.4	1392.9	1389.6	1412.6
47.5°	1301.2	1284.8	1281.5	1301.2	1297.9	1301.2	1301.2	1304.4	1307.7	1301.2	1311.0
50°	1193.0	1186.4	1186.4	1189.7	1193.0	1199.6	1209.4	1215.9	1209.4	1219.2	1222.5
52.5°	1088.1	1081.6	1084.8	1098.0	1104.5	1101.2	1117.6	1120.9	1117.6	1124.2	1124.2
55°	966.9	960.3	970.1	986.5	996.4	1006.2	1022.6	1009.5	1022.6	1025.8	1029.1
57.5°	842.3	839.0	842.3	858.7	868.5	891.5	917.7	917.7	930.8	921.0	930.8
60°	704.7	704.7	717.8	727.6	753.8	770.2	796.4	809.5	822.6	835.8	829.2
62.5°	573.6	576.8	586.7	609.6	626.0	648.9	678.4	691.5	714.5	727.6	721.0
65°	455.6	455.6	462.1	481.8	498.2	527.7	553.9	583.4	596.5	603.1	606.3
67.5°	340.9	337.6	350.7	363.8	380.2	409.7	439.2	455.6	478.5	485.1	481.8
70°	229.4	232.7	239.3	252.4	272.0	295.0	327.7	340.9	354.0	360.5	354.0
72.5°	144.2	144.2	147.5	160.6	173.7	190.1	213.0	226.1	242.5	245.8	239.3
75°	65.5	65.5	72.1	78.7	88.5	101.6	118.0	127.8	137.7	147.5	147.5
77.5°	13.1	16.4	19.7	19.7	26.2	36.1	45.9	55.7	65.5	65.5	65.5
80°	3.3	3.3	3.3	3.3	3.3	3.3	6.6	9.8	16.4	16.4	16.4
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°	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1	2222.1
2.5°	2222.1	2241.8	2222.1	2212.3	2225.4	2222.1	2212.3	2215.6
5°	2212.3	2218.8	2225.4	2199.2	2215.6	2218.8	2212.3	2205.7
7.5°	2202.5	2205.7	2202.5	2195.9	2195.9	2195.9	2202.5	2202.5
10°	2199.2	2189.4	2173.0	2163.1	2173.0	2173.0	2169.7	2195.9
12.5°	2156.6	2169.7	2159.9	2140.2	2159.9	2156.6	2156.6	2163.1
15°	2123.8	2123.8	2130.4	2104.1	2117.2	2114.0	2114.0	2120.5
17.5°	2091.0	2091.0	2087.7	2081.2	2077.9	2087.7	2077.9	2094.3
20°	2045.1	2051.7	2071.4	2038.6	2048.4	2038.6	2038.6	2018.9
22.5°	1989.4	2022.2	2005.8	2002.5	1999.3	2002.5	2009.1	1986.1
25°	1953.4	1953.4	1959.9	1940.3	1940.3	1946.8	1943.5	1937.0
27.5°	1904.2	1900.9	1897.7	1891.1	1907.5	1894.4	1894.4	1894.4
30°	1835.4	1845.2	1841.9	1825.6	1845.2	1838.7	1828.8	1809.2
32.5°	1776.4	1789.5	1769.8	1766.6	1763.3	1766.6	1769.8	1753.4
35°	1704.3	1707.6	1707.6	1694.5	1697.7	1694.5	1687.9	1691.2
37.5°	1638.7	1635.5	1619.1	1612.5	1615.8	1615.8	1619.1	1612.5
40°	1547.0	1556.8	1556.8	1533.9	1540.4	1533.9	1533.9	1530.6
42.5°	1471.6	1474.9	1465.0	1455.2	1455.2	1451.9	1445.4	1451.9
45°	1392.9	1389.6	1379.8	1370.0	1370.0	1366.7	1360.2	1373.3
47.5°	1304.4	1297.9	1294.6	1281.5	1281.5	1261.8	1265.1	1278.2
50°	1215.9	1209.4	1196.3	1189.7	1179.9	1170.1	1166.8	1166.8
52.5°	1111.1	1111.1	1098.0	1084.8	1081.6	1075.0	1068.5	1071.7
55°	1019.3	1019.3	1009.5	986.5	973.4	957.0	947.2	943.9
57.5°	914.4	907.9	888.2	862.0	848.9	835.8	825.9	825.9
60°	809.5	793.1	773.5	750.5	727.6	704.7	698.1	694.8
62.5°	694.8	678.4	642.4	616.2	599.8	586.7	573.6	583.4
65°	580.1	557.2	524.4	498.2	481.8	462.1	452.3	452.3
67.5°	458.8	435.9	403.1	376.9	360.5	347.4	334.3	334.3
70°	337.6	321.2	291.7	268.8	255.6	236.0	232.7	232.7
72.5°	229.4	209.8	186.8	170.4	157.3	144.2	137.7	134.4
75°	127.8	114.7	98.3	88.5	75.4	68.8	62.3	62.3
77.5°	52.4	42.6	32.8	26.2	19.7	16.4	13.1	16.4
80°	9.8	6.6	3.3	3.3	3.3	3.3	3.3	3.3
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°	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)