

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: P209494

Luminaire Tested: **LDSQ6B60D010 EU6B60709730 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209494
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 EU6B60709730 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 3000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4875.9 lumens
Efficiency: N/A
Efficacy: 78.0 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

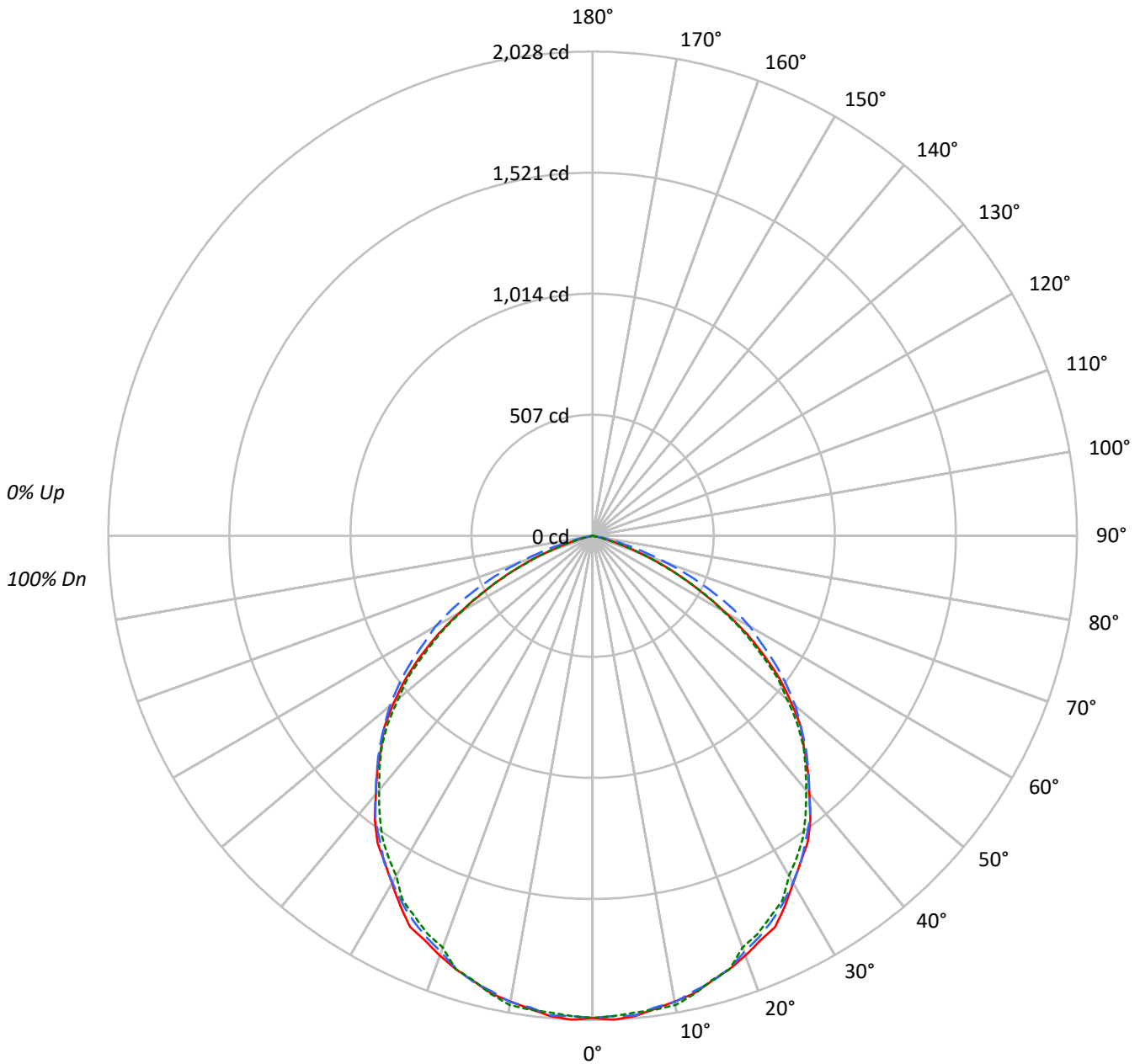
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	191.0	3.9
10°-20°	544.7	11.2
20°-30°	819.6	16.8
30°-40°	969.5	19.9
40°-50°	967.5	19.8
50°-60°	802.3	16.5
60°-70°	468.8	9.6
70°-80°	111.6	2.3
80°-90°	0.8	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°	1555.2	31.9
0°-40°	2524.8	51.8
0°-60°	4294.7	88.1
0°-90°	4875.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4875.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2020	2020	2020	2020	2020	
5°	2020	2009	2017	2011	2005	191
15°	1930	1929	1933	1924	1927	546
25°	1808	1787	1778	1772	1760	826
35°	1570	1555	1555	1546	1537	976
45°	1251	1252	1263	1250	1248	968
55°	879	910	932	907	858	780
65°	414	466	548	465	411	412
75°	60	86	134	85	57	81
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°	2019.5	2019.5	2019.5	2019.5	2019.5	2019.5	2019.5	2019.5	2019.5	2019.5	2019.5
2.5°	2028.5	2016.6	2025.5	2007.6	2019.5	2007.6	2010.6	2004.6	2016.6	2013.6	2010.6
5°	2019.5	2022.5	2016.6	2022.5	2013.6	2004.6	2013.6	2007.6	1989.8	2016.6	2010.6
7.5°	1998.7	2001.7	1995.7	2004.6	1998.7	1986.8	2010.6	1992.7	1989.8	1992.7	2004.6
10°	1980.8	1986.8	1983.8	1980.8	1983.8	1983.8	1977.8	1968.9	1977.8	1983.8	1980.8
12.5°	1962.9	1971.9	1965.9	1960.0	1954.0	1957.0	1962.9	1948.1	1948.1	1954.0	1971.9
15°	1930.2	1936.1	1939.1	1927.2	1927.2	1930.2	1942.1	1918.3	1930.2	1933.2	1936.1
17.5°	1903.4	1906.4	1906.4	1897.4	1903.4	1894.4	1903.4	1891.5	1903.4	1900.4	1906.4
20°	1870.6	1876.6	1870.6	1870.6	1864.6	1867.6	1867.6	1867.6	1858.7	1855.7	1861.7
22.5°	1834.9	1834.9	1828.9	1834.9	1828.9	1825.9	1840.8	1817.0	1840.8	1820.0	1837.8
25°	1808.1	1793.2	1784.2	1781.2	1793.2	1781.2	1787.2	1778.3	1784.2	1778.3	1781.2
27.5°	1745.5	1736.6	1733.6	1736.6	1736.6	1733.6	1745.5	1712.7	1733.6	1730.6	1730.6
30°	1680.0	1680.0	1685.9	1680.0	1685.9	1677.0	1688.9	1662.1	1680.0	1677.0	1680.0
32.5°	1620.4	1623.4	1623.4	1629.3	1620.4	1623.4	1623.4	1614.4	1620.4	1623.4	1617.4
35°	1569.8	1554.9	1554.9	1554.9	1554.9	1554.9	1560.8	1551.9	1560.8	1554.9	1554.9
37.5°	1498.3	1483.4	1483.4	1480.4	1495.3	1486.4	1501.3	1489.3	1489.3	1495.3	1495.3
40°	1411.9	1417.8	1408.9	1420.8	1417.8	1405.9	1432.7	1414.9	1426.8	1411.9	1423.8
42.5°	1334.4	1337.4	1334.4	1331.5	1343.4	1340.4	1352.3	1340.4	1337.4	1337.4	1358.3
45°	1251.0	1251.0	1251.0	1260.0	1251.0	1254.0	1265.9	1260.0	1265.9	1263.0	1283.8
47.5°	1182.5	1167.6	1164.7	1182.5	1179.6	1182.5	1182.5	1185.5	1188.5	1182.5	1191.5
50°	1084.2	1078.3	1078.3	1081.3	1084.2	1090.2	1099.1	1105.1	1099.1	1108.1	1111.0
52.5°	988.9	983.0	985.9	997.9	1003.8	1000.8	1015.7	1018.7	1015.7	1021.7	1021.7
55°	878.7	872.8	881.7	896.6	905.5	914.5	929.3	917.4	929.3	932.3	935.3
57.5°	765.5	762.5	765.5	780.4	789.3	810.2	834.0	834.0	845.9	837.0	845.9
60°	640.4	640.4	652.3	661.3	685.1	700.0	723.8	735.7	747.6	759.6	753.6
62.5°	521.3	524.2	533.2	554.0	568.9	589.8	616.6	628.5	649.4	661.3	655.3
65°	414.0	414.0	420.0	437.9	452.8	479.6	503.4	530.2	542.1	548.1	551.1
67.5°	309.8	306.8	318.7	330.6	345.5	372.3	399.1	414.0	434.9	440.8	437.9
70°	208.5	211.5	217.4	229.4	247.2	268.1	297.9	309.8	321.7	327.7	321.7
72.5°	131.1	131.1	134.0	146.0	157.9	172.8	193.6	205.5	220.4	223.4	217.4
75°	59.6	59.6	65.5	71.5	80.4	92.3	107.2	116.2	125.1	134.0	134.0
77.5°	11.9	14.9	17.9	17.9	23.8	32.8	41.7	50.6	59.6	59.6	59.6
80°	3.0	3.0	3.0	3.0	3.0	3.0	6.0	8.9	14.9	14.9	14.9
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°	2019.5	2019.5	2019.5	2019.5	2019.5	2019.5	2019.5	2019.5
2.5°	2019.5	2037.4	2019.5	2010.6	2022.5	2019.5	2010.6	2013.6
5°	2010.6	2016.6	2022.5	1998.7	2013.6	2016.6	2010.6	2004.6
7.5°	2001.7	2004.6	2001.7	1995.7	1995.7	1995.7	2001.7	2001.7
10°	1998.7	1989.8	1974.9	1965.9	1974.9	1974.9	1971.9	1995.7
12.5°	1960.0	1971.9	1962.9	1945.1	1962.9	1960.0	1960.0	1965.9
15°	1930.2	1930.2	1936.1	1912.3	1924.2	1921.2	1921.2	1927.2
17.5°	1900.4	1900.4	1897.4	1891.5	1888.5	1897.4	1888.5	1903.4
20°	1858.7	1864.6	1882.5	1852.7	1861.7	1852.7	1852.7	1834.9
22.5°	1808.1	1837.8	1822.9	1820.0	1817.0	1820.0	1825.9	1805.1
25°	1775.3	1775.3	1781.2	1763.4	1763.4	1769.3	1766.4	1760.4
27.5°	1730.6	1727.6	1724.7	1718.7	1733.6	1721.7	1721.7	1721.7
30°	1668.1	1677.0	1674.0	1659.1	1677.0	1671.0	1662.1	1644.2
32.5°	1614.4	1626.4	1608.5	1605.5	1602.5	1605.5	1608.5	1593.6
35°	1548.9	1551.9	1551.9	1540.0	1543.0	1540.0	1534.0	1537.0
37.5°	1489.3	1486.4	1471.5	1465.5	1468.5	1468.5	1471.5	1465.5
40°	1405.9	1414.9	1414.9	1394.0	1400.0	1394.0	1394.0	1391.0
42.5°	1337.4	1340.4	1331.5	1322.5	1322.5	1319.6	1313.6	1319.6
45°	1265.9	1263.0	1254.0	1245.1	1245.1	1242.1	1236.1	1248.1
47.5°	1185.5	1179.6	1176.6	1164.7	1164.7	1146.8	1149.8	1161.7
50°	1105.1	1099.1	1087.2	1081.3	1072.3	1063.4	1060.4	1060.4
52.5°	1009.8	1009.8	997.9	985.9	983.0	977.0	971.0	974.0
55°	926.4	926.4	917.4	896.6	884.7	869.8	860.8	857.9
57.5°	831.0	825.1	807.2	783.4	771.5	759.6	750.6	750.6
60°	735.7	720.8	703.0	682.1	661.3	640.4	634.5	631.5
62.5°	631.5	616.6	583.8	560.0	545.1	533.2	521.3	530.2
65°	527.2	506.4	476.6	452.8	437.9	420.0	411.1	411.1
67.5°	417.0	396.2	366.4	342.5	327.7	315.7	303.8	303.8
70°	306.8	291.9	265.1	244.3	232.3	214.5	211.5	211.5
72.5°	208.5	190.6	169.8	154.9	143.0	131.1	125.1	122.1
75°	116.2	104.3	89.4	80.4	68.5	62.6	56.6	56.6
77.5°	47.7	38.7	29.8	23.8	17.9	14.9	11.9	14.9
80°	8.9	6.0	3.0	3.0	3.0	3.0	3.0	3.0
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)