

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: P209459

Luminaire Tested: **LDSQ6B40D010 EU6B30508040 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209459
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: LDSQ6B40D010 EU6B30508040 6LBCSSQ1MMS
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
WATTAGE D010TR-43.02 W DE010-42.54 W D5LT-42.539 W DMX-41.87 W DL2-41.57 W DL3-44.71 W DLE-39.33 W
Light Source: HIGH LUMEN LED 4000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4686.1 lumens
Efficiency: N/A
Efficacy: 108.9 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

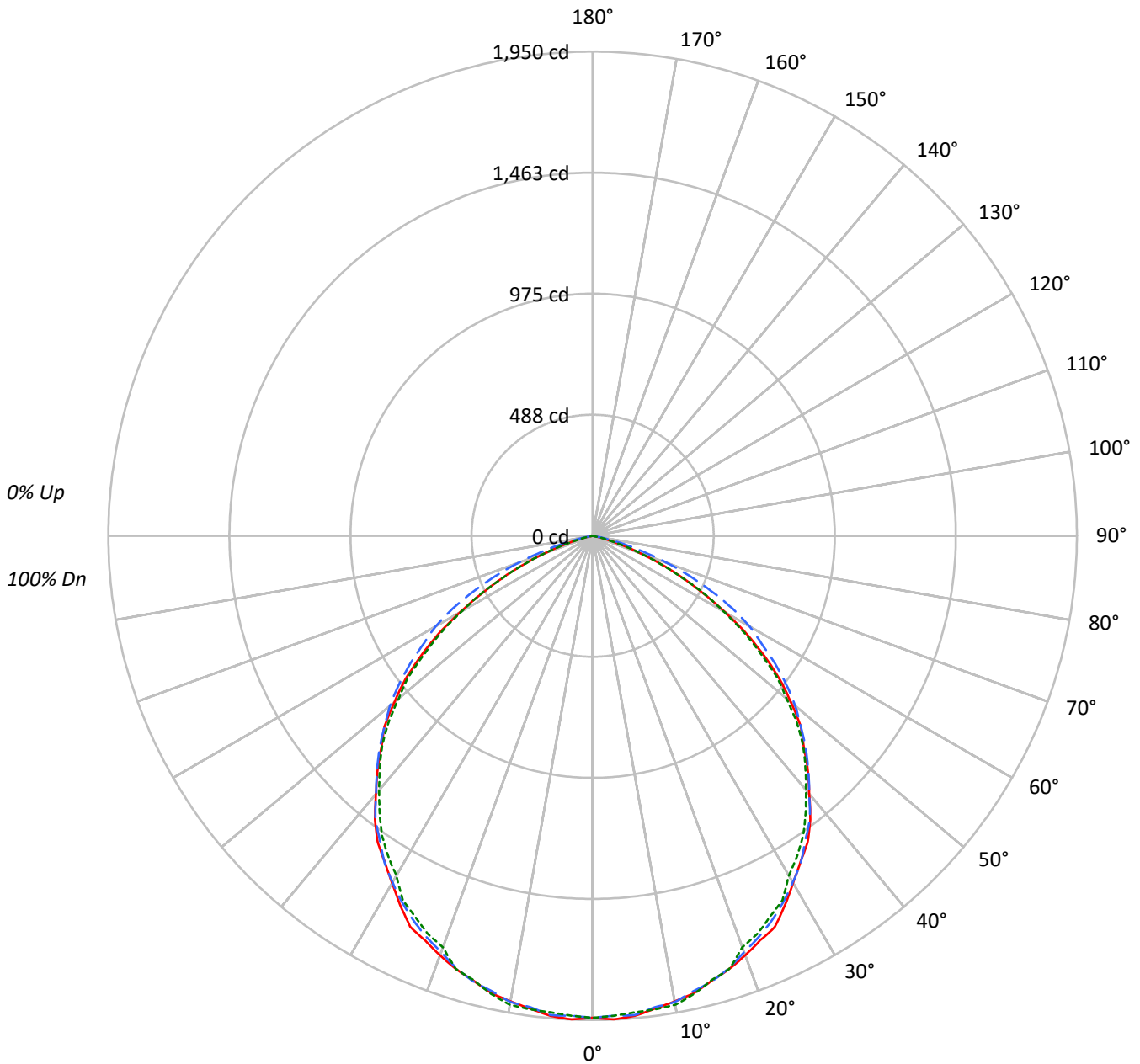
Input Watts (W): 43.02
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	183.6	3.9
10°-20°	523.5	11.2
20°-30°	787.7	16.8
30°-40°	931.8	19.9
40°-50°	929.9	19.8
50°-60°	771.1	16.5
60°-70°	450.5	9.6
70°-80°	107.3	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°	1494.7	31.9
0°-40°	2426.5	51.8
0°-60°	4127.5	88.1
0°-90°	4686.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4686.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1941	1941	1941	1941	1941	
5°	1941	1931	1938	1932	1927	184
15°	1855	1854	1858	1849	1852	524
25°	1738	1718	1709	1703	1692	794
35°	1509	1494	1494	1486	1477	938
45°	1202	1204	1214	1201	1200	930
55°	844	875	896	872	824	750
65°	398	448	527	447	395	396
75°	57	83	129	82	54	78
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9
2.5°	1949.5	1938.1	1946.7	1929.5	1940.9	1929.5	1932.3	1926.6	1938.1	1935.2	1932.3
5°	1940.9	1943.8	1938.1	1943.8	1935.2	1926.6	1935.2	1929.5	1912.3	1938.1	1932.3
7.5°	1920.9	1923.8	1918.0	1926.6	1920.9	1909.4	1932.3	1915.2	1912.3	1915.2	1926.6
10°	1903.7	1909.4	1906.6	1903.7	1906.6	1906.6	1900.9	1892.3	1900.9	1906.6	1903.7
12.5°	1886.5	1895.1	1889.4	1883.7	1878.0	1880.8	1886.5	1872.2	1872.2	1878.0	1895.1
15°	1855.1	1860.8	1863.6	1852.2	1852.2	1855.1	1866.5	1843.6	1855.1	1857.9	1860.8
17.5°	1829.3	1832.1	1832.1	1823.6	1829.3	1820.7	1829.3	1817.8	1829.3	1826.4	1832.1
20°	1797.8	1803.5	1797.8	1797.8	1792.1	1794.9	1794.9	1794.9	1786.3	1783.5	1789.2
22.5°	1763.4	1763.4	1757.7	1763.4	1757.7	1754.9	1769.2	1746.3	1769.2	1749.1	1766.3
25°	1737.7	1723.4	1714.8	1711.9	1723.4	1711.9	1717.6	1709.1	1714.8	1709.1	1711.9
27.5°	1677.6	1669.0	1666.1	1669.0	1669.0	1666.1	1677.6	1646.1	1666.1	1663.2	1663.2
30°	1614.6	1614.6	1620.3	1614.6	1620.3	1611.7	1623.2	1597.4	1614.6	1611.7	1614.6
32.5°	1557.3	1560.2	1560.2	1565.9	1557.3	1560.2	1560.2	1551.6	1557.3	1560.2	1554.5
35°	1508.7	1494.3	1494.3	1494.3	1494.3	1494.3	1500.1	1491.5	1500.1	1494.3	1494.3
37.5°	1440.0	1425.6	1425.6	1422.8	1437.1	1428.5	1442.8	1431.4	1431.4	1437.1	1437.1
40°	1356.9	1362.7	1354.1	1365.5	1362.7	1351.2	1377.0	1359.8	1371.2	1356.9	1368.4
42.5°	1282.5	1285.4	1282.5	1279.6	1291.1	1288.2	1299.7	1288.2	1285.4	1285.4	1305.4
45°	1202.3	1202.3	1202.3	1210.9	1202.3	1205.2	1216.7	1210.9	1216.7	1213.8	1233.8
47.5°	1136.5	1122.2	1119.3	1136.5	1133.6	1136.5	1136.5	1139.4	1142.2	1136.5	1145.1
50°	1042.0	1036.3	1036.3	1039.2	1042.0	1047.8	1056.3	1062.1	1056.3	1064.9	1067.8
52.5°	950.4	944.7	947.6	959.0	964.7	961.9	976.2	979.1	976.2	981.9	981.9
55°	844.5	838.8	847.4	861.7	870.3	878.9	893.2	881.7	893.2	896.0	898.9
57.5°	735.7	732.9	735.7	750.0	758.6	778.7	801.6	801.6	813.0	804.4	813.0
60°	615.5	615.5	626.9	635.5	658.4	672.7	695.6	707.1	718.5	730.0	724.3
62.5°	501.0	503.8	512.4	532.5	546.8	566.8	592.6	604.0	624.1	635.5	629.8
65°	397.9	397.9	403.6	420.8	435.1	460.9	483.8	509.6	521.0	526.7	529.6
67.5°	297.7	294.9	306.3	317.8	332.1	357.8	383.6	397.9	418.0	423.7	420.8
70°	200.4	203.3	209.0	220.4	237.6	257.6	286.3	297.7	309.2	314.9	309.2
72.5°	126.0	126.0	128.8	140.3	151.7	166.0	186.1	197.5	211.8	214.7	209.0
75°	57.3	57.3	63.0	68.7	77.3	88.7	103.1	111.6	120.2	128.8	128.8
77.5°	11.5	14.3	17.2	17.2	22.9	31.5	40.1	48.7	57.3	57.3	57.3
80°	2.9	2.9	2.9	2.9	2.9	2.9	5.7	8.6	14.3	14.3	14.3
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°	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9	1940.9
2.5°	1940.9	1958.1	1940.9	1932.3	1943.8	1940.9	1932.3	1935.2
5°	1932.3	1938.1	1943.8	1920.9	1935.2	1938.1	1932.3	1926.6
7.5°	1923.8	1926.6	1923.8	1918.0	1918.0	1918.0	1923.8	1923.8
10°	1920.9	1912.3	1898.0	1889.4	1898.0	1898.0	1895.1	1918.0
12.5°	1883.7	1895.1	1886.5	1869.4	1886.5	1883.7	1883.7	1889.4
15°	1855.1	1855.1	1860.8	1837.9	1849.3	1846.5	1846.5	1852.2
17.5°	1826.4	1826.4	1823.6	1817.8	1815.0	1823.6	1815.0	1829.3
20°	1786.3	1792.1	1809.2	1780.6	1789.2	1780.6	1780.6	1763.4
22.5°	1737.7	1766.3	1752.0	1749.1	1746.3	1749.1	1754.9	1734.8
25°	1706.2	1706.2	1711.9	1694.7	1694.7	1700.5	1697.6	1691.9
27.5°	1663.2	1660.4	1657.5	1651.8	1666.1	1654.7	1654.7	1654.7
30°	1603.1	1611.7	1608.9	1594.5	1611.7	1606.0	1597.4	1580.2
32.5°	1551.6	1563.1	1545.9	1543.0	1540.1	1543.0	1545.9	1531.6
35°	1488.6	1491.5	1491.5	1480.0	1482.9	1480.0	1474.3	1477.2
37.5°	1431.4	1428.5	1414.2	1408.5	1411.3	1411.3	1414.2	1408.5
40°	1351.2	1359.8	1359.8	1339.8	1345.5	1339.8	1339.8	1336.9
42.5°	1285.4	1288.2	1279.6	1271.1	1271.1	1268.2	1262.5	1268.2
45°	1216.7	1213.8	1205.2	1196.6	1196.6	1193.8	1188.0	1199.5
47.5°	1139.4	1133.6	1130.8	1119.3	1119.3	1102.2	1105.0	1116.5
50°	1062.1	1056.3	1044.9	1039.2	1030.6	1022.0	1019.1	1019.1
52.5°	970.5	970.5	959.0	947.6	944.7	939.0	933.3	936.1
55°	890.3	890.3	881.7	861.7	850.2	835.9	827.3	824.5
57.5°	798.7	793.0	775.8	752.9	741.4	730.0	721.4	721.4
60°	707.1	692.8	675.6	655.6	635.5	615.5	609.8	606.9
62.5°	606.9	592.6	561.1	538.2	523.9	512.4	501.0	509.6
65°	506.7	486.7	458.0	435.1	420.8	403.6	395.1	395.1
67.5°	400.8	380.7	352.1	329.2	314.9	303.4	292.0	292.0
70°	294.9	280.5	254.8	234.7	223.3	206.1	203.3	203.3
72.5°	200.4	183.2	163.2	148.9	137.4	126.0	120.2	117.4
75°	111.6	100.2	85.9	77.3	65.8	60.1	54.4	54.4
77.5°	45.8	37.2	28.6	22.9	17.2	14.3	11.5	14.3
80°	8.6	5.7	2.9	2.9	2.9	2.9	2.9	2.9
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)