

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: P209332

Luminaire Tested: **LDSQ6B20D010 EU6B10208040 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209332
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35360)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B20D010 EU6B10208040 6LBSQ1LI
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE LOW
IRIDESCENT TRIM.
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR TRIM
WATTAGE D010TR-21.86 W DE010-20.46 W D5LT-21.24 W DMX-20.89 W DL2-22.5 W
DL3-21.8 6 W DLE-22.46 W
Light Source: HIGH LUMEN LED 4000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2092.1 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 0.92 / 0.92 / 0.95
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

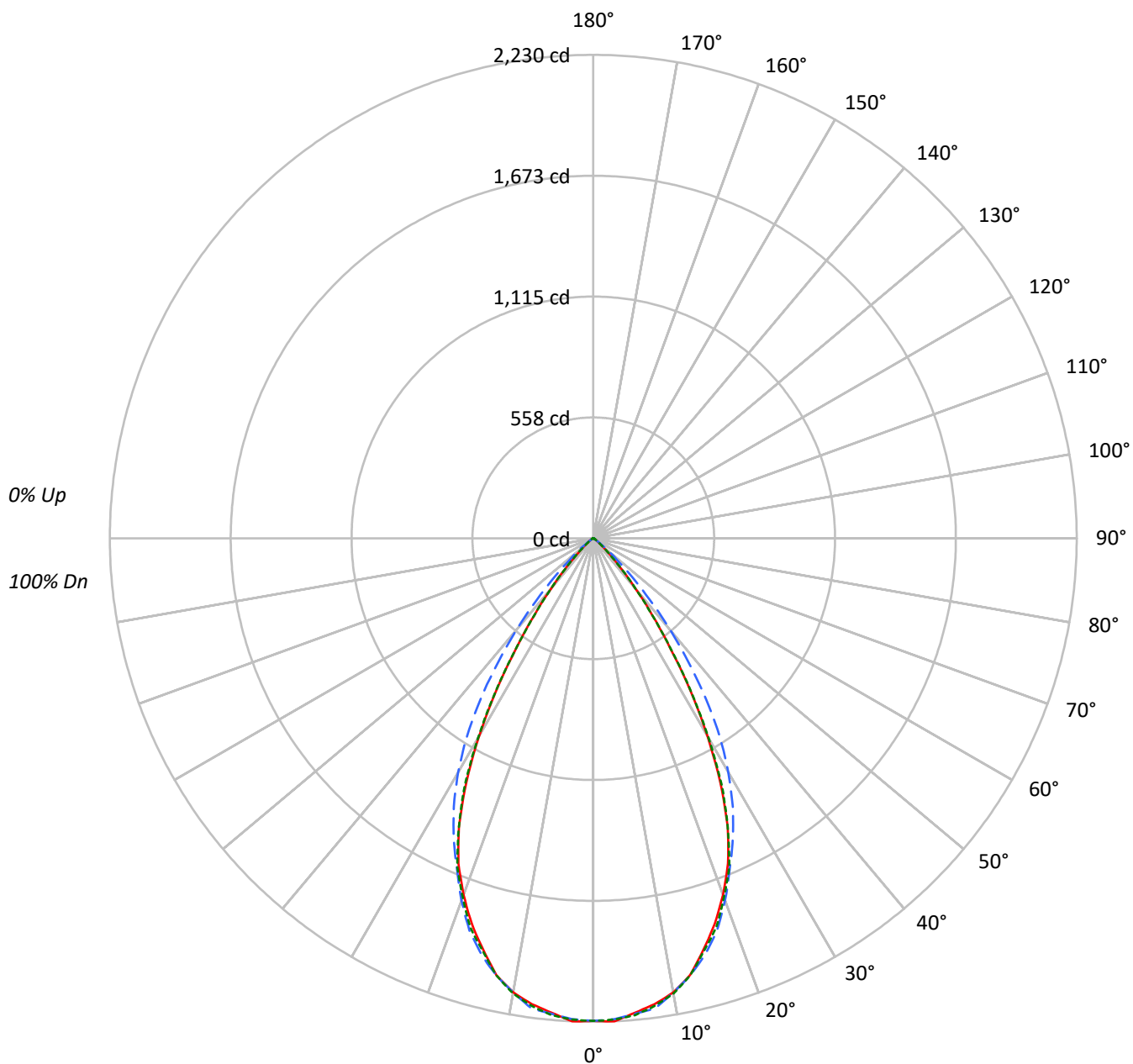
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0			
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93			
2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87			
3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80			
4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75			
5	92	83	78	73	90	82	77	73	81	76	72	79	75	72	77	74	71	69			
6	87	78	72	68	86	77	72	67	76	71	67	74	70	67	73	69	66	65			
7	83	73	67	63	81	73	67	63	71	66	62	70	66	62	69	65	62	60			
8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56			
9	75	65	59	55	74	64	59	55	64	58	55	63	58	54	62	57	54	53			
10	71	61	55	52	70	61	55	51	60	55	51	59	55	51	59	54	51	50			

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°	208.4	10.0
10°-20°	554.4	26.5
20°-30°	680.4	32.5
30°-40°	469.7	22.5
40°-50°	146.9	7.0
50°-60°	22.9	1.1
60°-70°	6.6	0.3
70°-80°	2.2	0.1
80°-90°	0.5	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°	1443.3	69.0
0°-40°	1913.0	91.4
0°-60°	2082.8	99.6
0°-90°	2092.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2092.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2226	2226	2226	2226	2226	
5°	2197	2205	2202	2203	2208	208
15°	1964	1992	1989	1986	1971	549
25°	1466	1504	1524	1514	1467	657
35°	619	732	908	739	622	395
45°	116	159	255	158	119	104
55°	20	21	24	21	18	19
65°	6	7	6	7	6	6
75°	1	1	1	1	1	2
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°	2226.3	2226.3	2226.3	2226.3	2226.3	2226.3	2226.3	2226.3	2226.3	2226.3	2226.3
2.5°	2230.5	2199.6	2219.3	2215.1	2226.3	2233.3	2226.3	2238.9	2230.5	2220.7	2223.5
5°	2196.8	2201.0	2199.6	2202.4	2205.3	2205.3	2219.3	2220.7	2223.5	2202.4	2208.1
7.5°	2167.4	2167.4	2174.4	2171.6	2181.4	2178.6	2180.0	2191.2	2192.6	2187.0	2182.8
10°	2126.7	2121.1	2114.1	2114.1	2126.7	2128.1	2139.3	2140.7	2149.1	2126.7	2129.5
12.5°	2063.6	2060.8	2049.5	2055.2	2065.0	2059.4	2077.6	2079.0	2076.2	2066.4	2072.0
15°	1964.0	1975.2	1972.4	1971.0	1993.4	1990.6	1989.2	1993.4	1994.8	1989.2	1985.0
17.5°	1864.4	1874.2	1875.6	1878.4	1882.6	1886.8	1892.4	1907.9	1902.2	1898.0	1912.1
20°	1749.3	1745.1	1756.3	1767.6	1771.8	1771.8	1780.2	1791.4	1783.0	1777.4	1778.8
22.5°	1624.5	1631.5	1625.9	1637.1	1642.7	1649.7	1658.1	1668.0	1661.0	1645.5	1663.8
25°	1466.0	1470.2	1488.4	1487.0	1495.4	1512.3	1524.9	1524.9	1524.9	1523.5	1523.5
27.5°	1266.8	1264.0	1286.4	1301.8	1322.9	1349.5	1366.4	1393.0	1397.2	1393.0	1383.2
30°	1053.5	1050.7	1078.8	1098.4	1136.3	1148.9	1195.2	1220.5	1247.1	1245.7	1238.7
32.5°	831.9	837.5	859.9	888.0	918.9	958.1	1001.6	1057.7	1081.6	1087.2	1074.6
35°	618.6	627.1	648.1	672.0	709.8	753.3	813.6	867.0	907.6	907.6	897.8
37.5°	446.1	448.9	468.5	484.0	523.3	562.5	614.4	687.4	712.6	722.5	712.6
40°	304.4	304.4	315.6	332.5	364.7	398.4	446.1	500.8	537.3	552.7	535.9
42.5°	193.6	196.4	204.8	216.0	239.9	269.3	305.8	346.5	373.2	384.4	368.9
45°	116.4	119.2	126.3	134.7	150.1	168.3	193.6	223.1	245.5	255.3	248.3
47.5°	70.1	72.9	75.8	81.4	92.6	105.2	117.8	134.7	148.7	150.1	147.3
50°	40.7	40.7	43.5	47.7	53.3	60.3	67.3	77.2	81.4	87.0	81.4
52.5°	26.7	26.7	26.7	28.1	30.9	33.7	36.5	42.1	44.9	44.9	43.5
55°	19.6	19.6	19.6	19.6	21.0	21.0	21.0	22.4	23.8	23.8	23.8
57.5°	14.0	14.0	14.0	15.4	15.4	15.4	14.0	14.0	14.0	14.0	14.0
60°	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	9.8	9.8	9.8
62.5°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
65°	5.6	5.6	5.6	7.0	7.0	7.0	7.0	5.6	5.6	5.6	5.6
67.5°	4.2	4.2	4.2	5.6	5.6	5.6	5.6	5.6	4.2	4.2	4.2
70°	2.8	2.8	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2
72.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
75°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	0.0	0.0	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
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°	2226.3	2226.3	2226.3	2226.3	2226.3	2226.3	2226.3	2226.3
2.5°	2231.9	2224.9	2224.9	2224.9	2222.1	2224.9	2229.1	2222.1
5°	2208.1	2210.9	2198.2	2208.1	2212.3	2205.3	2222.1	2208.1
7.5°	2187.0	2182.8	2163.2	2177.2	2185.6	2188.4	2187.0	2175.8
10°	2144.9	2135.1	2126.7	2126.7	2123.9	2122.5	2137.9	2132.3
12.5°	2069.2	2076.2	2063.6	2070.6	2065.0	2066.4	2067.8	2065.0
15°	2004.6	1997.6	1980.8	1992.0	1985.0	1978.0	1992.0	1971.0
17.5°	1903.6	1902.2	1892.4	1885.4	1888.2	1886.8	1893.8	1884.0
20°	1784.4	1787.2	1781.6	1778.8	1774.6	1764.8	1773.2	1762.0
22.5°	1655.3	1658.1	1663.8	1652.5	1653.9	1639.9	1652.5	1639.9
25°	1524.9	1523.5	1516.5	1510.9	1495.4	1480.0	1477.2	1467.4
27.5°	1381.8	1372.0	1355.1	1336.9	1313.1	1292.0	1290.6	1283.6
30°	1224.7	1203.6	1172.8	1143.3	1106.8	1074.6	1074.6	1063.3
32.5°	1059.1	1011.4	969.4	932.9	885.2	867.0	848.7	838.9
35°	861.3	819.3	768.8	708.4	686.0	641.1	643.9	621.5
37.5°	674.8	622.9	575.2	526.1	486.8	465.7	454.5	443.3
40°	500.8	450.3	398.4	366.1	331.1	312.8	305.8	303.0
42.5°	342.3	300.2	266.5	239.9	221.6	202.0	196.4	193.6
45°	223.1	199.2	168.3	147.3	134.7	123.4	123.4	119.2
47.5°	133.3	117.8	102.4	88.4	80.0	72.9	70.1	68.7
50°	74.4	65.9	57.5	51.9	46.3	42.1	40.7	40.7
52.5°	40.7	36.5	33.7	29.5	26.7	26.7	26.7	25.3
55°	21.0	21.0	21.0	21.0	19.6	19.6	19.6	18.2
57.5°	14.0	14.0	15.4	15.4	15.4	14.0	14.0	14.0
60°	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
62.5°	8.4	8.4	8.4	8.4	8.4	8.4	8.4	8.4
65°	5.6	7.0	7.0	7.0	7.0	5.6	5.6	5.6
67.5°	4.2	5.6	5.6	5.6	4.2	4.2	4.2	4.2
70°	4.2	4.2	4.2	4.2	4.2	2.8	2.8	2.8
72.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
75°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
77.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
80°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
82.5°	1.4	1.4	1.4	1.4	1.4	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)