

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: P209333

Luminaire Tested: **LDSQ6B20D010 EU6B10208050 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209333
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 EU6B10208050 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 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2091.3 lumens
Efficiency: N/A
Efficacy: 100.5 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

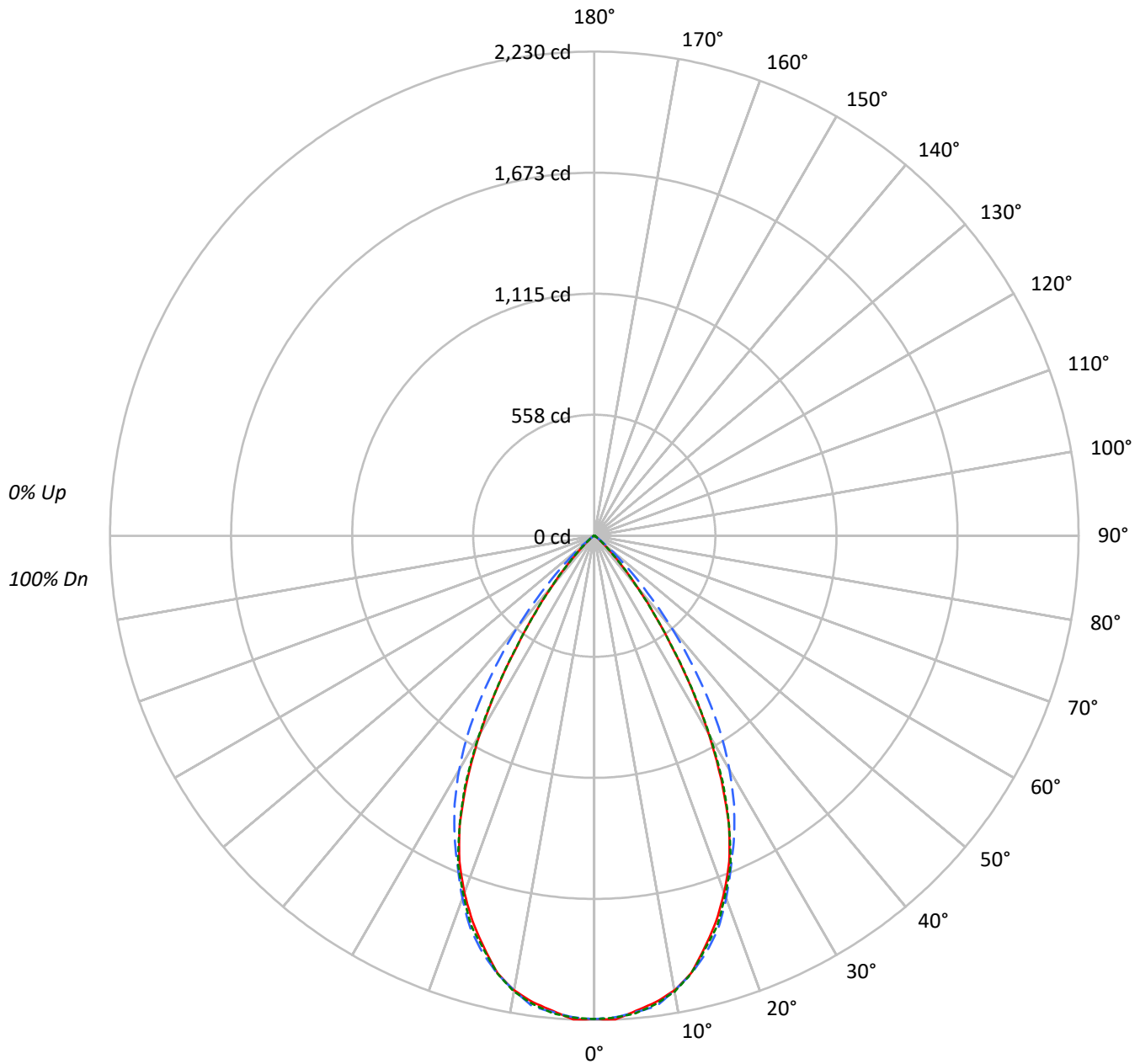
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	208.3	10.0
10°-20°	554.2	26.5
20°-30°	680.2	32.5
30°-40°	469.6	22.5
40°-50°	146.8	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°	1442.7	69.0
0°-40°	1912.3	91.4
0°-60°	2082.0	99.6
0°-90°	2091.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2091.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2226	2226	2226	2226	2226	
5°	2196	2204	2202	2202	2207	208
15°	1963	1991	1988	1986	1970	549
25°	1465	1503	1523	1513	1467	657
35°	618	731	907	738	621	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°	2225.5	2225.5	2225.5	2225.5	2225.5	2225.5	2225.5	2225.5	2225.5	2225.5	2225.5
2.5°	2229.7	2198.8	2218.4	2214.2	2225.5	2232.5	2225.5	2238.1	2229.7	2219.8	2222.6
5°	2196.0	2200.2	2198.8	2201.6	2204.4	2204.4	2218.4	2219.8	2222.6	2201.6	2207.2
7.5°	2166.6	2166.6	2173.6	2170.8	2180.6	2177.8	2179.2	2190.4	2191.8	2186.2	2182.0
10°	2125.9	2120.3	2113.3	2113.3	2125.9	2127.3	2138.5	2139.9	2148.3	2125.9	2128.7
12.5°	2062.8	2060.0	2048.8	2054.4	2064.2	2058.6	2076.8	2078.2	2075.4	2065.6	2071.2
15°	1963.2	1974.4	1971.6	1970.2	1992.7	1989.9	1988.5	1992.7	1994.1	1988.5	1984.3
17.5°	1863.7	1873.5	1874.9	1877.7	1881.9	1886.1	1891.7	1907.1	1901.5	1897.3	1911.3
20°	1748.7	1744.5	1755.7	1766.9	1771.1	1771.1	1779.5	1790.7	1782.3	1776.7	1778.1
22.5°	1623.9	1630.9	1625.3	1636.5	1642.1	1649.1	1657.5	1667.3	1660.3	1644.9	1663.1
25°	1465.4	1469.6	1487.8	1486.4	1494.9	1511.7	1524.3	1524.3	1524.3	1522.9	1522.9
27.5°	1266.3	1263.5	1285.9	1301.3	1322.4	1349.0	1365.8	1392.5	1396.7	1392.5	1382.7
30°	1053.1	1050.3	1078.4	1098.0	1135.9	1148.5	1194.8	1220.0	1246.6	1245.2	1238.2
32.5°	831.6	837.2	859.6	887.7	918.5	957.8	1001.2	1057.3	1081.2	1086.8	1074.2
35°	618.4	626.8	647.9	671.7	709.6	753.0	813.3	866.6	907.3	907.3	897.5
37.5°	445.9	448.7	468.4	483.8	523.1	562.3	614.2	687.1	712.4	722.2	712.4
40°	304.3	304.3	315.5	332.3	364.6	398.3	445.9	500.6	537.1	552.5	535.7
42.5°	193.5	196.3	204.7	216.0	239.8	269.2	305.7	346.4	373.0	384.2	368.8
45°	116.4	119.2	126.2	134.6	150.0	168.3	193.5	223.0	245.4	255.2	248.2
47.5°	70.1	72.9	75.7	81.3	92.6	105.2	117.8	134.6	148.6	150.0	147.2
50°	40.7	40.7	43.5	47.7	53.3	60.3	67.3	77.1	81.3	86.9	81.3
52.5°	26.6	26.6	26.6	28.0	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°	2225.5	2225.5	2225.5	2225.5	2225.5	2225.5	2225.5	2225.5
2.5°	2231.1	2224.1	2224.1	2224.1	2221.2	2224.1	2228.3	2221.2
5°	2207.2	2210.0	2197.4	2207.2	2211.4	2204.4	2221.2	2207.2
7.5°	2186.2	2182.0	2162.3	2176.4	2184.8	2187.6	2186.2	2175.0
10°	2144.1	2134.3	2125.9	2125.9	2123.1	2121.7	2137.1	2131.5
12.5°	2068.4	2075.4	2062.8	2069.8	2064.2	2065.6	2067.0	2064.2
15°	2003.9	1996.9	1980.0	1991.3	1984.3	1977.2	1991.3	1970.2
17.5°	1902.9	1901.5	1891.7	1884.7	1887.5	1886.1	1893.1	1883.3
20°	1783.7	1786.5	1780.9	1778.1	1773.9	1764.1	1772.5	1761.3
22.5°	1654.7	1657.5	1663.1	1651.9	1653.3	1639.3	1651.9	1639.3
25°	1524.3	1522.9	1515.9	1510.3	1494.9	1479.4	1476.6	1466.8
27.5°	1381.3	1371.5	1354.6	1336.4	1312.6	1291.5	1290.1	1283.1
30°	1224.2	1203.2	1172.3	1142.9	1106.4	1074.2	1074.2	1062.9
32.5°	1058.7	1011.1	969.0	932.5	884.9	866.6	848.4	838.6
35°	861.0	818.9	768.5	708.2	685.7	640.9	643.7	621.2
37.5°	674.5	622.6	574.9	525.9	486.6	465.6	454.3	443.1
40°	500.6	450.1	398.3	366.0	330.9	312.7	305.7	302.9
42.5°	342.2	300.1	266.4	239.8	221.6	201.9	196.3	193.5
45°	223.0	199.1	168.3	147.2	134.6	123.4	123.4	119.2
47.5°	133.2	117.8	102.4	88.3	79.9	72.9	70.1	68.7
50°	74.3	65.9	57.5	51.9	46.3	42.1	40.7	40.7
52.5°	40.7	36.5	33.7	29.4	26.6	26.6	26.6	25.2
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)