

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: P209330

Luminaire Tested: **LDSQ6B20D010 EU6B10208030 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209330
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 EU6B10208030 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 3000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2019.9 lumens
Efficiency: N/A
Efficacy: 97.1 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

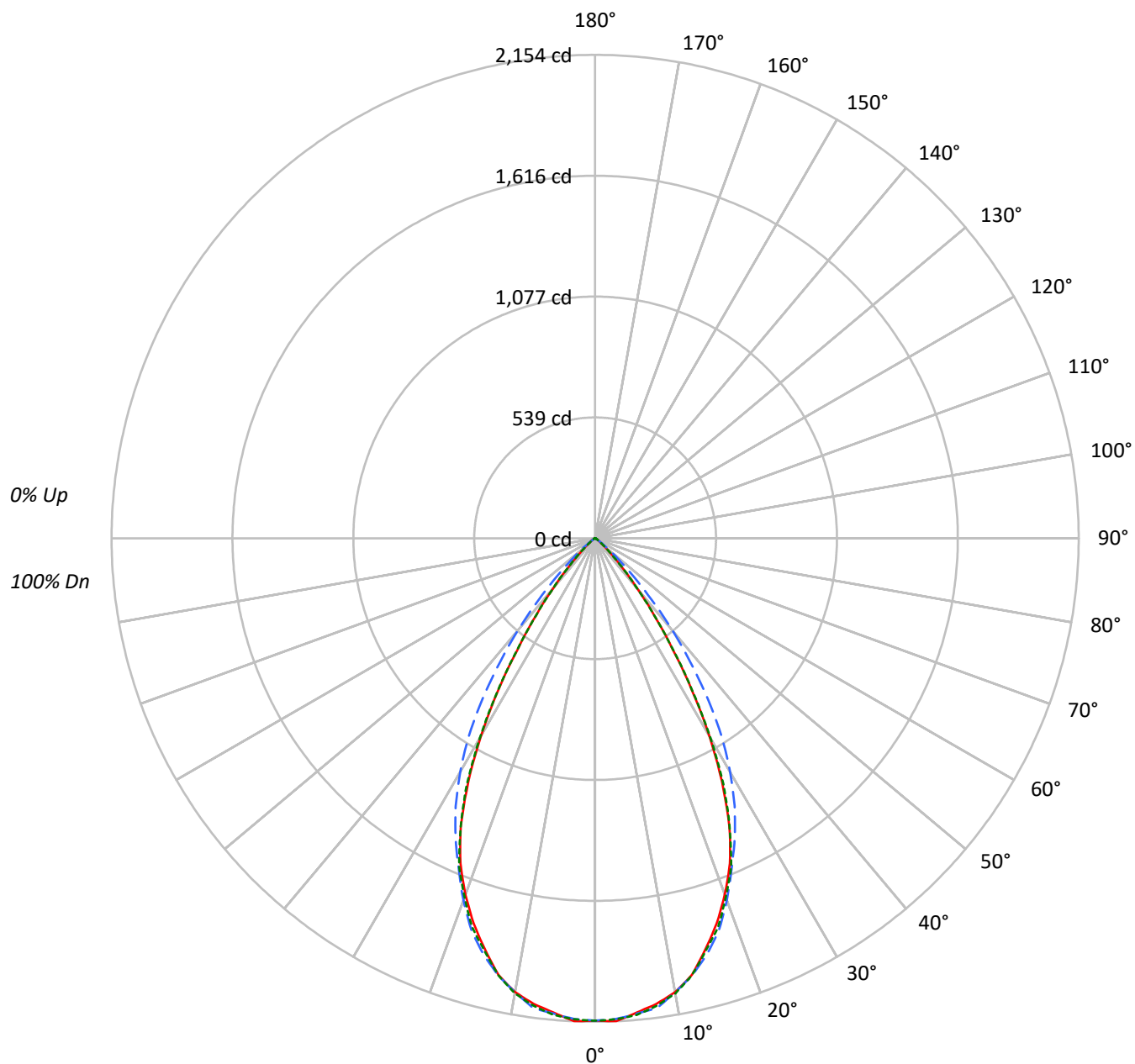
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	201.2	10.0
10°-20°	535.3	26.5
20°-30°	656.9	32.5
30°-40°	453.5	22.5
40°-50°	141.8	7.0
50°-60°	22.1	1.1
60°-70°	6.4	0.3
70°-80°	2.1	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°	1393.5	69.0
0°-40°	1847.0	91.4
0°-60°	2010.9	99.6
0°-90°	2019.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2019.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2149	2149	2149	2149	2149	
5°	2121	2129	2126	2127	2132	201
15°	1896	1923	1920	1918	1903	530
25°	1415	1452	1471	1461	1417	634
35°	597	706	876	713	600	382
45°	112	154	246	152	115	101
55°	19	20	23	20	18	18
65°	5	7	5	7	5	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°	2149.4	2149.4	2149.4	2149.4	2149.4	2149.4	2149.4	2149.4	2149.4	2149.4	2149.4
2.5°	2153.5	2123.7	2142.6	2138.6	2149.4	2156.2	2149.4	2161.6	2153.5	2144.0	2146.7
5°	2121.0	2125.0	2123.7	2126.4	2129.1	2129.1	2142.6	2144.0	2146.7	2126.4	2131.8
7.5°	2092.5	2092.5	2099.3	2096.6	2106.1	2103.4	2104.7	2115.6	2116.9	2111.5	2107.4
10°	2053.3	2047.8	2041.1	2041.1	2053.3	2054.6	2065.4	2066.8	2074.9	2053.3	2056.0
12.5°	1992.3	1989.6	1978.8	1984.2	1993.7	1988.2	2005.8	2007.2	2004.5	1995.0	2000.4
15°	1896.1	1907.0	1904.3	1902.9	1924.6	1921.9	1920.5	1924.6	1925.9	1920.5	1916.5
17.5°	1800.0	1809.5	1810.8	1813.5	1817.6	1821.7	1827.1	1842.0	1836.5	1832.5	1846.0
20°	1688.9	1684.9	1695.7	1706.5	1710.6	1710.6	1718.7	1729.6	1721.4	1716.0	1717.4
22.5°	1568.4	1575.2	1569.7	1580.6	1586.0	1592.8	1600.9	1610.4	1603.6	1588.7	1606.3
25°	1415.3	1419.4	1437.0	1435.7	1443.8	1460.0	1472.2	1472.2	1472.2	1470.9	1470.9
27.5°	1223.0	1220.3	1242.0	1256.9	1277.2	1302.9	1319.2	1344.9	1349.0	1344.9	1335.4
30°	1017.1	1014.4	1041.5	1060.5	1097.1	1109.2	1153.9	1178.3	1204.1	1202.7	1195.9
32.5°	803.2	808.6	830.2	857.3	887.1	925.0	967.0	1021.2	1044.2	1049.6	1037.5
35°	597.3	605.4	625.7	648.8	685.3	727.3	785.5	837.0	876.3	876.3	866.8
37.5°	430.7	433.4	452.4	467.3	505.2	543.1	593.2	663.6	688.0	697.5	688.0
40°	293.9	293.9	304.7	321.0	352.1	384.6	430.7	483.5	518.7	533.6	517.4
42.5°	186.9	189.6	197.7	208.6	231.6	260.0	295.3	334.5	360.3	371.1	356.2
45°	112.4	115.1	121.9	130.0	144.9	162.5	186.9	215.3	237.0	246.5	239.7
47.5°	67.7	70.4	73.1	78.6	89.4	101.6	113.8	130.0	143.6	144.9	142.2
50°	39.3	39.3	42.0	46.0	51.5	58.2	65.0	74.5	78.6	84.0	78.6
52.5°	25.7	25.7	25.7	27.1	29.8	32.5	35.2	40.6	43.3	43.3	42.0
55°	19.0	19.0	19.0	19.0	20.3	20.3	20.3	21.7	23.0	23.0	23.0
57.5°	13.5	13.5	13.5	14.9	14.9	14.9	13.5	13.5	13.5	13.5	13.5
60°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	9.5	9.5	9.5
62.5°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
65°	5.4	5.4	5.4	6.8	6.8	6.8	6.8	5.4	5.4	5.4	5.4
67.5°	4.1	4.1	4.1	5.4	5.4	5.4	5.4	5.4	4.1	4.1	4.1
70°	2.7	2.7	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
72.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
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°	2149.4	2149.4	2149.4	2149.4	2149.4	2149.4	2149.4	2149.4
2.5°	2154.8	2148.1	2148.1	2148.1	2145.3	2148.1	2152.1	2145.3
5°	2131.8	2134.5	2122.3	2131.8	2135.9	2129.1	2145.3	2131.8
7.5°	2111.5	2107.4	2088.5	2102.0	2110.1	2112.8	2111.5	2100.7
10°	2070.9	2061.4	2053.3	2053.3	2050.5	2049.2	2064.1	2058.7
12.5°	1997.7	2004.5	1992.3	1999.1	1993.7	1995.0	1996.4	1993.7
15°	1935.4	1928.6	1912.4	1923.2	1916.5	1909.7	1923.2	1902.9
17.5°	1837.9	1836.5	1827.1	1820.3	1823.0	1821.7	1828.4	1818.9
20°	1722.8	1725.5	1720.1	1717.4	1713.3	1703.8	1711.9	1701.1
22.5°	1598.2	1600.9	1606.3	1595.5	1596.8	1583.3	1595.5	1583.3
25°	1472.2	1470.9	1464.1	1458.7	1443.8	1428.9	1426.2	1416.7
27.5°	1334.1	1324.6	1308.3	1290.7	1267.7	1247.4	1246.0	1239.3
30°	1182.4	1162.1	1132.3	1103.8	1068.6	1037.5	1037.5	1026.6
32.5°	1022.6	976.5	935.9	900.7	854.6	837.0	819.4	809.9
35°	831.6	791.0	742.2	684.0	662.3	619.0	621.7	600.0
37.5°	651.5	601.3	555.3	507.9	470.0	449.7	438.8	428.0
40°	483.5	434.8	384.6	353.5	319.6	302.0	295.3	292.5
42.5°	330.5	289.8	257.3	231.6	214.0	195.0	189.6	186.9
45°	215.3	192.3	162.5	142.2	130.0	119.2	119.2	115.1
47.5°	128.7	113.8	98.9	85.3	77.2	70.4	67.7	66.4
50°	71.8	63.7	55.5	50.1	44.7	40.6	39.3	39.3
52.5°	39.3	35.2	32.5	28.4	25.7	25.7	25.7	24.4
55°	20.3	20.3	20.3	20.3	19.0	19.0	19.0	17.6
57.5°	13.5	13.5	14.9	14.9	14.9	13.5	13.5	13.5
60°	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
62.5°	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
65°	5.4	6.8	6.8	6.8	6.8	5.4	5.4	5.4
67.5°	4.1	5.4	5.4	5.4	4.1	4.1	4.1	4.1
70°	4.1	4.1	4.1	4.1	4.1	2.7	2.7	2.7
72.5°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
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)