

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: P209329

Luminaire Tested: **LDSQ6B20D010 EU6B10208027 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209329
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 EU6B10208027 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 2700 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1932.6 lumens
Efficiency: N/A
Efficacy: 92.9 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

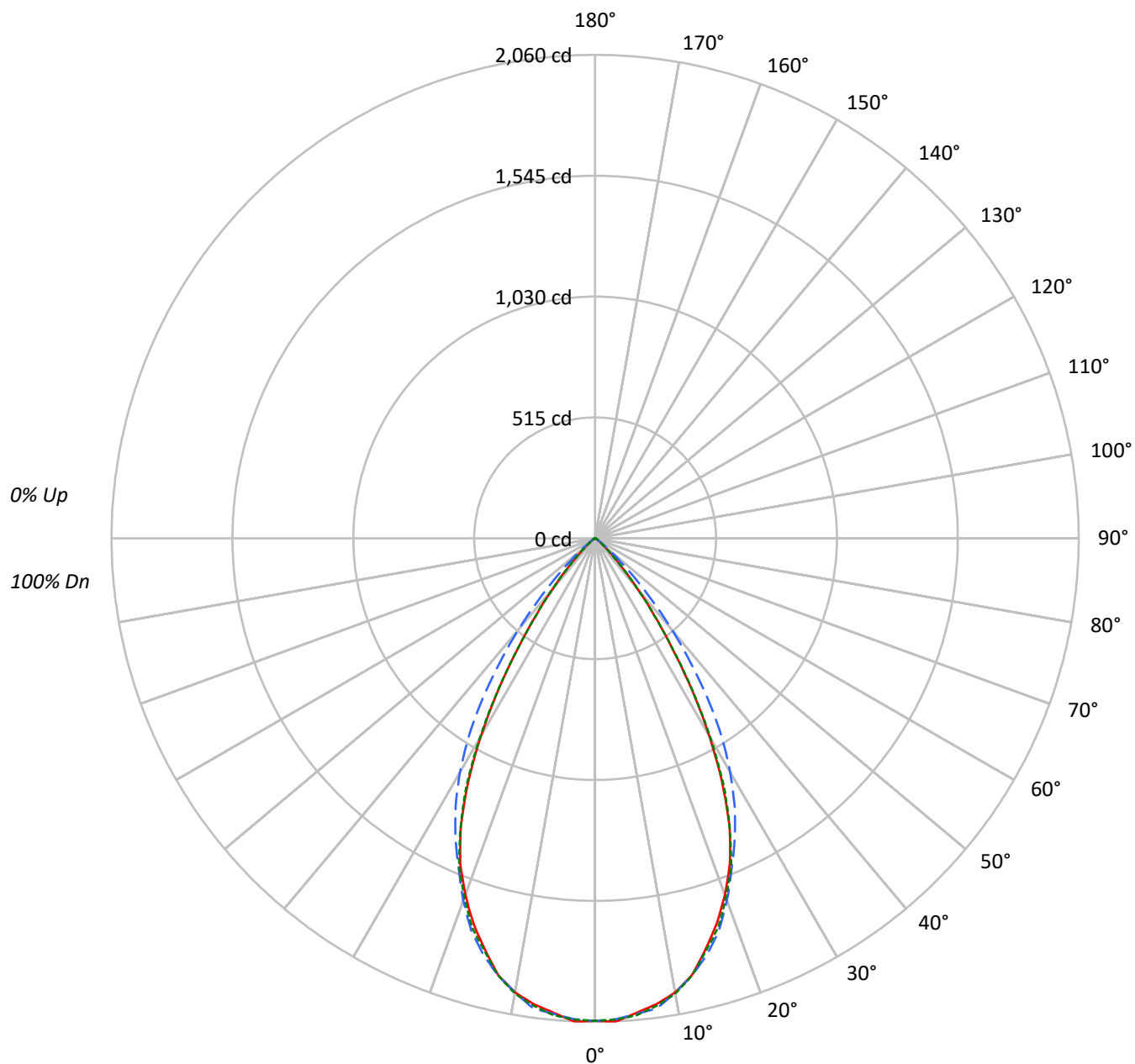
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				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	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°	192.5	10.0
10°-20°	512.1	26.5
20°-30°	628.5	32.5
30°-40°	433.9	22.5
40°-50°	135.7	7.0
50°-60°	21.2	1.1
60°-70°	6.2	0.3
70°-80°	2.0	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°	1333.2	69.0
0°-40°	1767.1	91.4
0°-60°	1924.0	99.6
0°-90°	1932.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1932.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2056	2056	2056	2056	2056	
5°	2029	2037	2034	2035	2040	192
15°	1814	1840	1838	1835	1821	507
25°	1354	1389	1407	1398	1355	607
35°	572	676	838	682	574	365
45°	108	147	236	146	110	96
55°	18	19	22	19	17	18
65°	5	6	5	6	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°	2056.5	2056.5	2056.5	2056.5	2056.5	2056.5	2056.5	2056.5	2056.5	2056.5	2056.5
2.5°	2060.4	2031.9	2050.0	2046.1	2056.5	2063.0	2056.5	2068.1	2060.4	2051.3	2053.9
5°	2029.3	2033.1	2031.9	2034.4	2037.0	2037.0	2050.0	2051.3	2053.9	2034.4	2039.6
7.5°	2002.0	2002.0	2008.5	2005.9	2015.0	2012.4	2013.7	2024.1	2025.4	2020.2	2016.3
10°	1964.5	1959.3	1952.8	1952.8	1964.5	1965.8	1976.1	1977.4	1985.2	1964.5	1967.1
12.5°	1906.2	1903.6	1893.2	1898.4	1907.5	1902.3	1919.1	1920.4	1917.8	1908.7	1913.9
15°	1814.2	1824.5	1821.9	1820.6	1841.4	1838.8	1837.5	1841.4	1842.7	1837.5	1833.6
17.5°	1722.2	1731.2	1732.5	1735.1	1739.0	1742.9	1748.1	1762.3	1757.1	1753.3	1766.2
20°	1615.9	1612.0	1622.4	1632.7	1636.6	1636.6	1644.4	1654.8	1647.0	1641.8	1643.1
22.5°	1500.6	1507.0	1501.9	1512.2	1517.4	1523.9	1531.7	1540.7	1534.3	1520.0	1536.8
25°	1354.1	1358.0	1374.9	1373.6	1381.3	1396.9	1408.6	1408.6	1408.6	1407.3	1407.3
27.5°	1170.1	1167.5	1188.3	1202.5	1222.0	1246.6	1262.1	1286.8	1290.6	1286.8	1277.7
30°	973.2	970.6	996.5	1014.6	1049.6	1061.3	1104.0	1127.4	1152.0	1150.7	1144.2
32.5°	768.4	773.6	794.3	820.3	848.8	885.0	925.2	977.1	999.1	1004.3	992.6
35°	571.5	579.2	598.7	620.7	655.7	695.9	751.6	800.8	838.4	838.4	829.3
37.5°	412.1	414.7	432.8	447.1	483.3	519.6	567.6	635.0	658.3	667.3	658.3
40°	281.2	281.2	291.6	307.1	336.9	368.0	412.1	462.6	496.3	510.6	495.0
42.5°	178.8	181.4	189.2	199.6	221.6	248.8	282.5	320.1	344.7	355.1	340.8
45°	107.6	110.1	116.6	124.4	138.7	155.5	178.8	206.0	226.8	235.8	229.4
47.5°	64.8	67.4	70.0	75.2	85.5	97.2	108.8	124.4	137.4	138.7	136.1
50°	37.6	37.6	40.2	44.1	49.2	55.7	62.2	71.3	75.2	80.3	75.2
52.5°	24.6	24.6	24.6	25.9	28.5	31.1	33.7	38.9	41.5	41.5	40.2
55°	18.1	18.1	18.1	18.1	19.4	19.4	19.4	20.7	22.0	22.0	22.0
57.5°	13.0	13.0	13.0	14.3	14.3	14.3	13.0	13.0	13.0	13.0	13.0
60°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	9.1	9.1	9.1
62.5°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
65°	5.2	5.2	5.2	6.5	6.5	6.5	6.5	5.2	5.2	5.2	5.2
67.5°	3.9	3.9	3.9	5.2	5.2	5.2	5.2	5.2	3.9	3.9	3.9
70°	2.6	2.6	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9
72.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
77.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
82.5°	0.0	0.0	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
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°	2056.5	2056.5	2056.5	2056.5	2056.5	2056.5	2056.5	2056.5
2.5°	2061.7	2055.2	2055.2	2055.2	2052.6	2055.2	2059.1	2052.6
5°	2039.6	2042.2	2030.6	2039.6	2043.5	2037.0	2052.6	2039.6
7.5°	2020.2	2016.3	1998.2	2011.1	2018.9	2021.5	2020.2	2009.8
10°	1981.3	1972.2	1964.5	1964.5	1961.9	1960.6	1974.8	1969.7
12.5°	1911.3	1917.8	1906.2	1912.6	1907.5	1908.7	1910.0	1907.5
15°	1851.7	1845.3	1829.7	1840.1	1833.6	1827.1	1840.1	1820.6
17.5°	1758.4	1757.1	1748.1	1741.6	1744.2	1742.9	1749.4	1740.3
20°	1648.3	1650.9	1645.7	1643.1	1639.2	1630.1	1637.9	1627.6
22.5°	1529.1	1531.7	1536.8	1526.5	1527.8	1514.8	1526.5	1514.8
25°	1408.6	1407.3	1400.8	1395.6	1381.3	1367.1	1364.5	1355.4
27.5°	1276.4	1267.3	1251.8	1234.9	1212.9	1193.5	1192.2	1185.7
30°	1131.3	1111.8	1083.3	1056.1	1022.4	992.6	992.6	982.2
32.5°	978.3	934.3	895.4	861.7	817.7	800.8	784.0	774.9
35°	795.6	756.8	710.1	654.4	633.7	592.2	594.8	574.1
37.5°	623.3	575.3	531.3	485.9	449.7	430.2	419.8	409.5
40°	462.6	416.0	368.0	338.2	305.8	289.0	282.5	279.9
42.5°	316.2	277.3	246.2	221.6	204.7	186.6	181.4	178.8
45°	206.0	184.0	155.5	136.1	124.4	114.0	114.0	110.1
47.5°	123.1	108.8	94.6	81.6	73.9	67.4	64.8	63.5
50°	68.7	60.9	53.1	47.9	42.8	38.9	37.6	37.6
52.5°	37.6	33.7	31.1	27.2	24.6	24.6	24.6	23.3
55°	19.4	19.4	19.4	19.4	18.1	18.1	18.1	16.8
57.5°	13.0	13.0	14.3	14.3	14.3	13.0	13.0	13.0
60°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4
62.5°	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
65°	5.2	6.5	6.5	6.5	6.5	5.2	5.2	5.2
67.5°	3.9	5.2	5.2	5.2	3.9	3.9	3.9	3.9
70°	3.9	3.9	3.9	3.9	3.9	2.6	2.6	2.6
72.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
75°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
77.5°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
80°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
82.5°	1.3	1.3	1.3	1.3	1.3	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)