

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: P209339

Luminaire Tested: **LDSQ6B20D010 EU6B10209050 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209339
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 EU6B10209050 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: 1760.2 lumens
Efficiency: N/A
Efficacy: 84.6 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

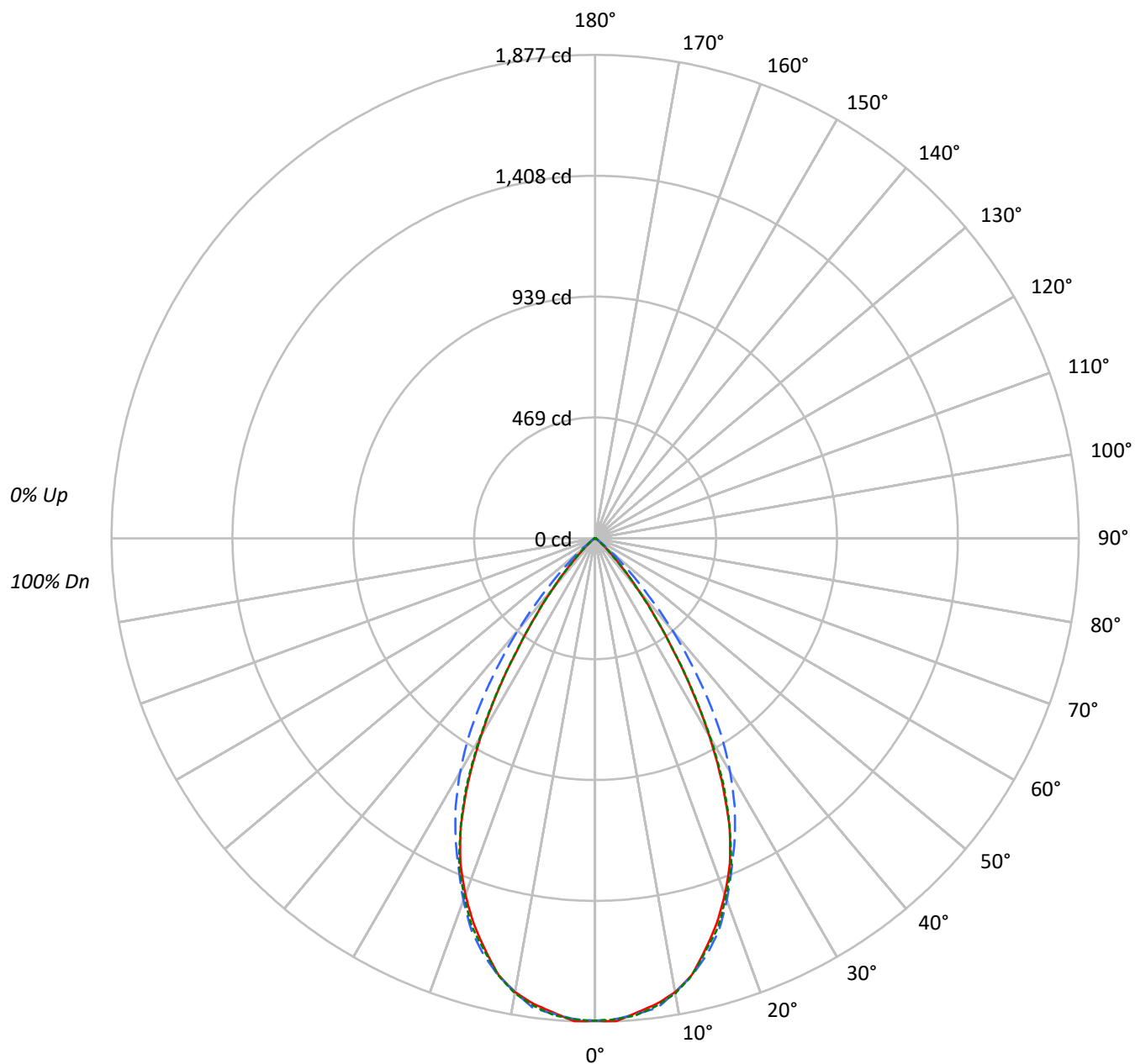
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	175.4	10.0
10°-20°	466.5	26.5
20°-30°	572.5	32.5
30°-40°	395.2	22.5
40°-50°	123.6	7.0
50°-60°	19.3	1.1
60°-70°	5.6	0.3
70°-80°	1.8	0.1
80°-90°	0.4	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°	1214.3	69.0
0°-40°	1609.6	91.4
0°-60°	1752.4	99.6
0°-90°	1760.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1760.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1873	1873	1873	1873	1873	
5°	1848	1855	1853	1854	1858	175
15°	1652	1676	1674	1671	1658	462
25°	1233	1265	1282	1274	1235	553
35°	520	616	764	621	523	333
45°	98	134	215	133	100	88
55°	16	18	20	18	15	16
65°	5	6	5	6	5	5
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°	1873.1	1873.1	1873.1	1873.1	1873.1	1873.1	1873.1	1873.1	1873.1	1873.1	1873.1
2.5°	1876.7	1850.7	1867.2	1863.7	1873.1	1879.0	1873.1	1883.8	1876.7	1868.4	1870.8
5°	1848.3	1851.9	1850.7	1853.1	1855.4	1855.4	1867.2	1868.4	1870.8	1853.1	1857.8
7.5°	1823.6	1823.6	1829.5	1827.1	1835.4	1833.0	1834.2	1843.6	1844.8	1840.1	1836.5
10°	1789.3	1784.6	1778.7	1778.7	1789.3	1790.5	1800.0	1801.1	1808.2	1789.3	1791.7
12.5°	1736.2	1733.9	1724.4	1729.1	1737.4	1732.7	1748.0	1749.2	1746.8	1738.6	1743.3
15°	1652.4	1661.9	1659.5	1658.3	1677.2	1674.8	1673.7	1677.2	1678.4	1673.7	1670.1
17.5°	1568.6	1576.9	1578.1	1580.4	1584.0	1587.5	1592.2	1605.2	1600.5	1596.9	1608.7
20°	1471.8	1468.3	1477.7	1487.2	1490.7	1490.7	1497.8	1507.2	1500.2	1495.4	1496.6
22.5°	1366.8	1372.7	1368.0	1377.4	1382.1	1388.0	1395.1	1403.4	1397.5	1384.5	1399.8
25°	1233.4	1237.0	1252.3	1251.1	1258.2	1272.4	1283.0	1283.0	1283.0	1281.8	1281.8
27.5°	1065.8	1063.4	1082.3	1095.3	1113.0	1135.4	1149.6	1172.0	1175.6	1172.0	1163.8
30°	886.4	884.0	907.6	924.2	956.0	966.7	1005.6	1026.9	1049.3	1048.1	1042.2
32.5°	699.9	704.6	723.5	747.1	773.1	806.1	842.7	889.9	910.0	914.7	904.1
35°	520.5	527.6	545.3	565.4	597.2	633.8	684.6	729.4	763.7	763.7	755.4
37.5°	375.3	377.7	394.2	407.2	440.3	473.3	517.0	578.3	599.6	607.9	599.6
40°	256.1	256.1	265.6	279.7	306.9	335.2	375.3	421.4	452.1	465.0	450.9
42.5°	162.9	165.2	172.3	181.8	201.8	226.6	257.3	291.5	314.0	323.4	310.4
45°	98.0	100.3	106.2	113.3	126.3	141.6	162.9	187.7	206.6	214.8	208.9
47.5°	59.0	61.4	63.7	68.5	77.9	88.5	99.1	113.3	125.1	126.3	123.9
50°	34.2	34.2	36.6	40.1	44.9	50.8	56.7	64.9	68.5	73.2	68.5
52.5°	22.4	22.4	22.4	23.6	26.0	28.3	30.7	35.4	37.8	37.8	36.6
55°	16.5	16.5	16.5	16.5	17.7	17.7	17.7	18.9	20.1	20.1	20.1
57.5°	11.8	11.8	11.8	13.0	13.0	13.0	11.8	11.8	11.8	11.8	11.8
60°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	8.3	8.3	8.3
62.5°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
65°	4.7	4.7	4.7	5.9	5.9	5.9	5.9	4.7	4.7	4.7	4.7
67.5°	3.5	3.5	3.5	4.7	4.7	4.7	4.7	4.7	3.5	3.5	3.5
70°	2.4	2.4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
72.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
75°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	0.0	0.0	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
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°	1873.1	1873.1	1873.1	1873.1	1873.1	1873.1	1873.1	1873.1
2.5°	1877.9	1872.0	1872.0	1872.0	1869.6	1872.0	1875.5	1869.6
5°	1857.8	1860.1	1849.5	1857.8	1861.3	1855.4	1869.6	1857.8
7.5°	1840.1	1836.5	1820.0	1831.8	1838.9	1841.3	1840.1	1830.6
10°	1804.7	1796.4	1789.3	1789.3	1787.0	1785.8	1798.8	1794.1
12.5°	1740.9	1746.8	1736.2	1742.1	1737.4	1738.6	1739.8	1737.4
15°	1686.6	1680.7	1666.6	1676.0	1670.1	1664.2	1676.0	1658.3
17.5°	1601.7	1600.5	1592.2	1586.3	1588.7	1587.5	1593.4	1585.1
20°	1501.3	1503.7	1499.0	1496.6	1493.1	1484.8	1491.9	1482.5
22.5°	1392.8	1395.1	1399.8	1390.4	1391.6	1379.8	1390.4	1379.8
25°	1283.0	1281.8	1275.9	1271.2	1258.2	1245.2	1242.9	1234.6
27.5°	1162.6	1154.3	1140.2	1124.8	1104.8	1087.1	1085.9	1080.0
30°	1030.4	1012.7	986.7	961.9	931.3	904.1	904.1	894.7
32.5°	891.1	851.0	815.6	784.9	744.8	729.4	714.1	705.8
35°	724.7	689.3	646.8	596.1	577.2	539.4	541.8	522.9
37.5°	567.7	524.1	483.9	442.6	409.6	391.9	382.4	373.0
40°	421.4	378.9	335.2	308.1	278.6	263.2	257.3	254.9
42.5°	288.0	252.6	224.3	201.8	186.5	170.0	165.2	162.9
45°	187.7	167.6	141.6	123.9	113.3	103.9	103.9	100.3
47.5°	112.1	99.1	86.2	74.4	67.3	61.4	59.0	57.8
50°	62.6	55.5	48.4	43.7	38.9	35.4	34.2	34.2
52.5°	34.2	30.7	28.3	24.8	22.4	22.4	22.4	21.2
55°	17.7	17.7	17.7	17.7	16.5	16.5	16.5	15.3
57.5°	11.8	11.8	13.0	13.0	13.0	11.8	11.8	11.8
60°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
62.5°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
65°	4.7	5.9	5.9	5.9	5.9	4.7	4.7	4.7
67.5°	3.5	4.7	4.7	4.7	3.5	3.5	3.5	3.5
70°	3.5	3.5	3.5	3.5	3.5	2.4	2.4	2.4
72.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
75°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
77.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
80°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
82.5°	1.2	1.2	1.2	1.2	1.2	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)