

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: P209337

Luminaire Tested: **LDSQ6B20D010 EU6B10209035 6LBSQ1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209337
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 EU6B10209035 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 3500 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1749.9 lumens
Efficiency: N/A
Efficacy: 84.1 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

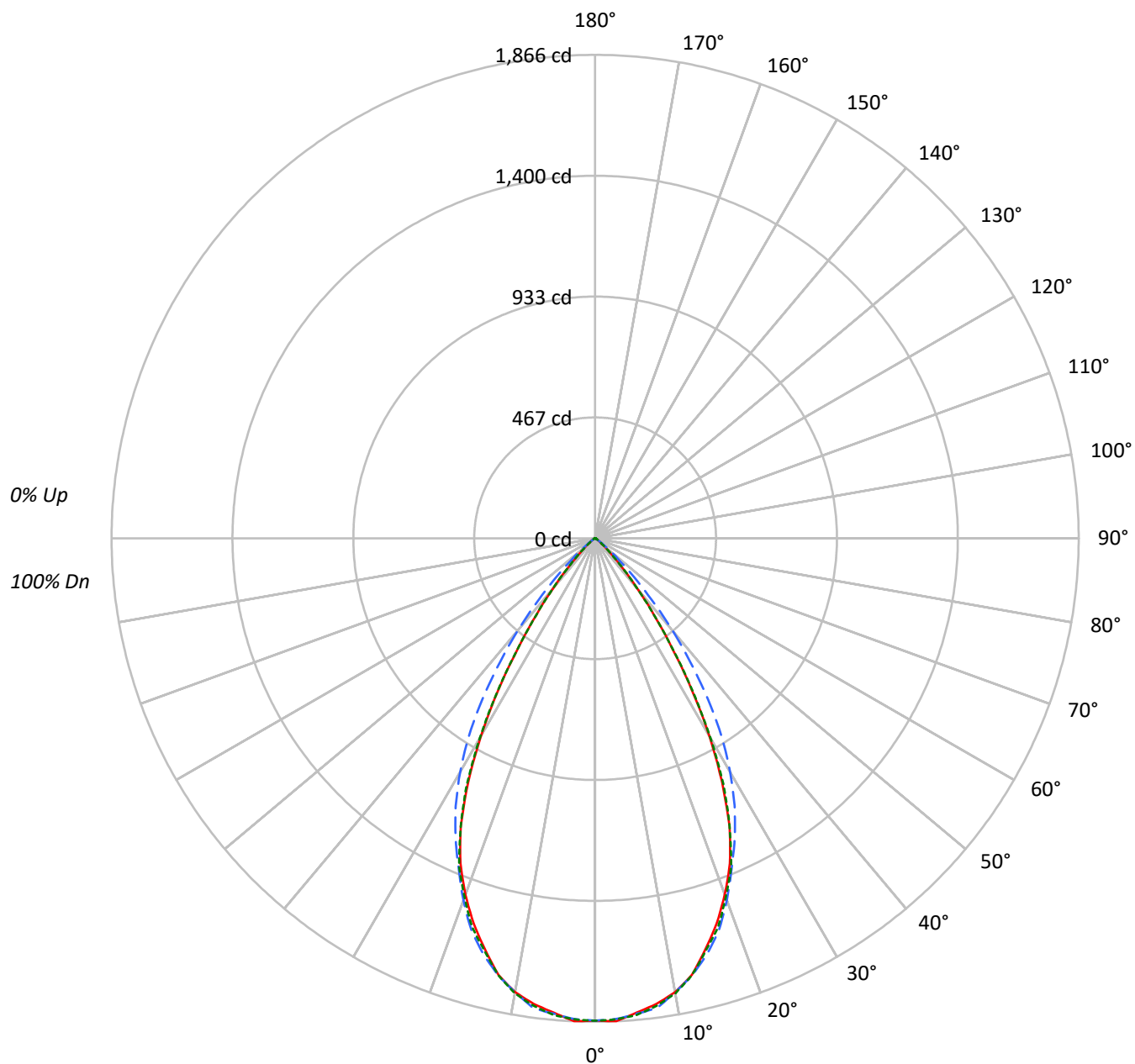
Input Watts (W): 20.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	113	111	108	106	111	108	106	104	104	103	101		101	99	98		97
2	108	103	99	95	106	101	97	94	98	95	92		95	92	90		92
3	102	96	91	87	100	94	90	86	92	88	85		89	86	83		87
4	97	89	84	79	95	88	83	79	86	81	78		84	80	77		82
5	92	83	78	73	90	82	77	73	81	76	72		79	75	72		77
6	87	78	72	68	86	77	72	67	76	71	67		74	70	67		73
7	83	73	67	63	81	73	67	63	71	66	62		70	66	62		69
8	79	69	63	59	77	68	63	59	67	62	58		66	62	58		65
9	75	65	59	55	74	64	59	55	64	58	55		63	58	54		62
10	71	61	55	52	70	61	55	51	60	55	51		59	55	51		59

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°	174.3	10.0
10°-20°	463.7	26.5
20°-30°	569.1	32.5
30°-40°	392.9	22.5
40°-50°	122.8	7.0
50°-60°	19.2	1.1
60°-70°	5.5	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°	1207.2	69.0
0°-40°	1600.1	91.4
0°-60°	1742.1	99.6
0°-90°	1749.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1749.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1862	1862	1862	1862	1862	
5°	1838	1844	1842	1843	1847	174
15°	1643	1666	1664	1662	1649	459
25°	1226	1258	1274	1266	1227	549
35°	518	612	759	618	520	331
45°	97	133	214	132	100	87
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°	1862.1	1862.1	1862.1	1862.1	1862.1	1862.1	1862.1	1862.1	1862.1	1862.1	1862.1
2.5°	1865.7	1839.9	1856.3	1852.8	1862.1	1868.0	1862.1	1872.7	1865.7	1857.5	1859.8
5°	1837.5	1841.0	1839.9	1842.2	1844.5	1844.5	1856.3	1857.5	1859.8	1842.2	1846.9
7.5°	1812.9	1812.9	1818.7	1816.4	1824.6	1822.3	1823.4	1832.8	1834.0	1829.3	1825.8
10°	1778.8	1774.1	1768.3	1768.3	1778.8	1780.0	1789.4	1790.6	1797.6	1778.8	1781.2
12.5°	1726.0	1723.7	1714.3	1719.0	1727.2	1722.5	1737.8	1738.9	1736.6	1728.4	1733.1
15°	1642.7	1652.1	1649.8	1648.6	1667.4	1665.0	1663.8	1667.4	1668.5	1663.8	1660.3
17.5°	1559.4	1567.6	1568.8	1571.2	1574.7	1578.2	1582.9	1595.8	1591.1	1587.6	1599.3
20°	1463.2	1459.7	1469.1	1478.5	1482.0	1482.0	1489.0	1498.4	1491.4	1486.7	1487.8
22.5°	1358.8	1364.6	1359.9	1369.3	1374.0	1379.9	1386.9	1395.1	1389.3	1376.4	1391.6
25°	1226.2	1229.7	1245.0	1243.8	1250.8	1264.9	1275.5	1275.5	1275.5	1274.3	1274.3
27.5°	1059.6	1057.2	1076.0	1088.9	1106.5	1128.8	1142.9	1165.2	1168.7	1165.2	1156.9
30°	881.2	878.9	902.3	918.8	950.4	961.0	999.7	1020.8	1043.1	1042.0	1036.1
32.5°	695.8	700.5	719.3	742.7	768.6	801.4	837.8	884.7	904.7	909.4	898.8
35°	517.5	524.5	542.1	562.0	593.7	630.1	680.6	725.1	759.2	759.2	751.0
37.5°	373.1	375.5	391.9	404.8	437.7	470.5	513.9	575.0	596.1	604.3	596.1
40°	254.6	254.6	264.0	278.1	305.1	333.2	373.1	418.9	449.4	462.3	448.2
42.5°	161.9	164.3	171.3	180.7	200.6	225.3	255.8	289.8	312.1	321.5	308.6
45°	97.4	99.7	105.6	112.6	125.6	140.8	161.9	186.6	205.3	213.6	207.7
47.5°	58.7	61.0	63.4	68.1	77.4	88.0	98.6	112.6	124.4	125.6	123.2
50°	34.0	34.0	36.4	39.9	44.6	50.5	56.3	64.5	68.1	72.7	68.1
52.5°	22.3	22.3	22.3	23.5	25.8	28.2	30.5	35.2	37.5	37.5	36.4
55°	16.4	16.4	16.4	16.4	17.6	17.6	17.6	18.8	19.9	19.9	19.9
57.5°	11.7	11.7	11.7	12.9	12.9	12.9	11.7	11.7	11.7	11.7	11.7
60°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	8.2	8.2	8.2
62.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
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°	2.3	2.3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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°	1862.1	1862.1	1862.1	1862.1	1862.1	1862.1	1862.1	1862.1
2.5°	1866.8	1861.0	1861.0	1861.0	1858.6	1861.0	1864.5	1858.6
5°	1846.9	1849.2	1838.7	1846.9	1850.4	1844.5	1858.6	1846.9
7.5°	1829.3	1825.8	1809.3	1821.1	1828.1	1830.5	1829.3	1819.9
10°	1794.1	1785.9	1778.8	1778.8	1776.5	1775.3	1788.2	1783.5
12.5°	1730.7	1736.6	1726.0	1731.9	1727.2	1728.4	1729.6	1727.2
15°	1676.8	1670.9	1656.8	1666.2	1660.3	1654.5	1666.2	1648.6
17.5°	1592.3	1591.1	1582.9	1577.0	1579.4	1578.2	1584.1	1575.8
20°	1492.5	1494.9	1490.2	1487.8	1484.3	1476.1	1483.1	1473.8
22.5°	1384.6	1386.9	1391.6	1382.2	1383.4	1371.7	1382.2	1371.7
25°	1275.5	1274.3	1268.4	1263.7	1250.8	1237.9	1235.6	1227.4
27.5°	1155.8	1147.6	1133.5	1118.2	1098.3	1080.7	1079.5	1073.6
30°	1024.4	1006.8	980.9	956.3	925.8	898.8	898.8	889.4
32.5°	885.9	846.0	810.8	780.3	740.4	725.1	709.9	701.7
35°	720.5	685.3	643.0	592.6	573.8	536.2	538.6	519.8
37.5°	564.4	521.0	481.1	440.0	407.2	389.6	380.2	370.8
40°	418.9	376.7	333.2	306.3	276.9	261.7	255.8	253.4
42.5°	286.3	251.1	222.9	200.6	185.4	169.0	164.3	161.9
45°	186.6	166.6	140.8	123.2	112.6	103.3	103.3	99.7
47.5°	111.5	98.6	85.7	73.9	66.9	61.0	58.7	57.5
50°	62.2	55.1	48.1	43.4	38.7	35.2	34.0	34.0
52.5°	34.0	30.5	28.2	24.6	22.3	22.3	22.3	21.1
55°	17.6	17.6	17.6	17.6	16.4	16.4	16.4	15.3
57.5°	11.7	11.7	12.9	12.9	12.9	11.7	11.7	11.7
60°	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
62.5°	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
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	2.3	2.3	2.3
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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)