

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: P209491

Luminaire Tested: **LDSQ6B60D010 EU6B60709040 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35359)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQ6B60D010 EU6B60709040 6LBCSSQ1MMS
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE SHALLOW CAST METALLIC SILVER TRIM
MEDIUM DISTRIBUTION WITH MATTE METALLIC SILVER TRIM
D010TE
Light Source: HIGH LUMEN LED 4000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5667.6 lumens
Efficiency: N/A
Efficacy: 90.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.22 / 1.33
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

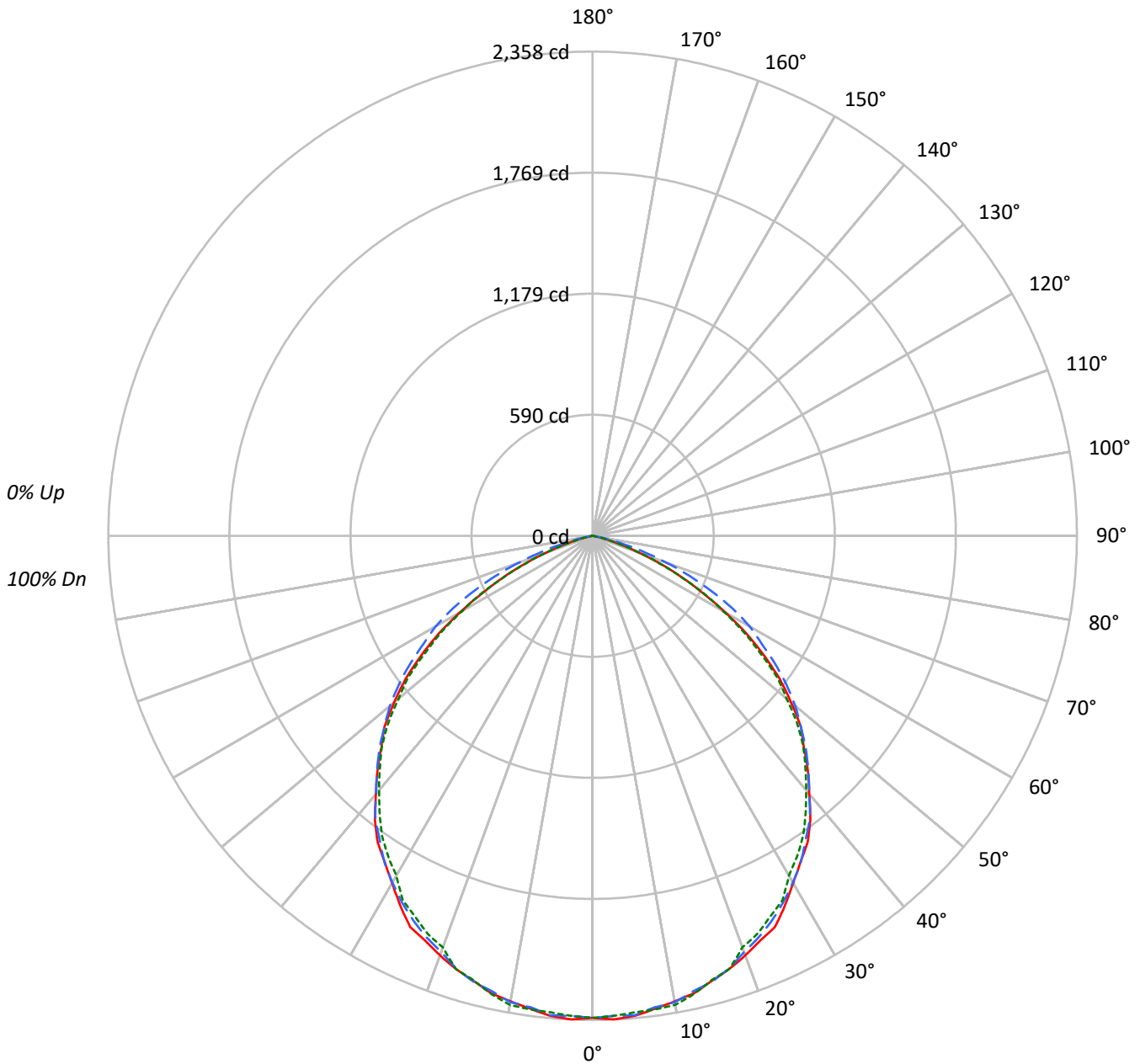
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P209491

CATALOG NUMBER: LDSQ6B60D010 EU6B60709040 6LBCSSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P209491

CATALOG NUMBER: LDSQ6B60D010 EU6B60709040 6LBCSSQ1MMS

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	111	107	103	100	108	104	101	98	100	97	95	96	94	92	93	91	89	87																			
2	102	94	88	83	99	93	87	82	89	84	80	86	82	79	83	80	77	75																			
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64																			
4	86	75	67	60	84	73	66	60	71	64	59	69	63	58	67	62	58	56																			
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49																			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43																			
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38																			
8	63	50	42	37	62	50	42	36	48	41	36	47	41	36	46	40	36	34																			
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28																			

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°			



TEST NUMBER: P209491

CATALOG NUMBER: LDSQ6B60D010 EU6B60709040 6LBCSSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.0	3.9
10°-20°	633.1	11.2
20°-30°	952.6	16.8
30°-40°	1127.0	19.9
40°-50°	1124.7	19.8
50°-60°	932.6	16.5
60°-70°	544.9	9.6
70°-80°	129.8	2.3
80°-90°	0.9	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°	1807.8	31.9
0°-40°	2934.7	51.8
0°-60°	4992.0	88.1
0°-90°	5667.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5667.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2348	2348	2348	2348	2348	
5°	2348	2335	2344	2337	2330	222
15°	2244	2242	2247	2237	2240	634
25°	2102	2077	2067	2060	2046	961
35°	1825	1807	1807	1797	1787	1134
45°	1454	1456	1468	1452	1451	1125
55°	1021	1058	1084	1054	997	907
65°	481	542	637	540	478	478
75°	69	100	156	99	66	94
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P209491

CATALOG NUMBER: LDSQ6B60D010 EU6B60709040 6LBCSSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5
2.5°	2357.8	2344.0	2354.4	2333.6	2347.5	2333.6	2337.1	2330.1	2344.0	2340.5	2337.1
5°	2347.5	2350.9	2344.0	2350.9	2340.5	2330.1	2340.5	2333.6	2312.8	2344.0	2337.1
7.5°	2323.2	2326.7	2319.8	2330.1	2323.2	2309.4	2337.1	2316.3	2312.8	2316.3	2330.1
10°	2302.4	2309.4	2305.9	2302.4	2305.9	2305.9	2299.0	2288.6	2299.0	2305.9	2302.4
12.5°	2281.7	2292.1	2285.1	2278.2	2271.3	2274.8	2281.7	2264.4	2264.4	2271.3	2292.1
15°	2243.6	2250.5	2254.0	2240.1	2240.1	2243.6	2257.4	2229.7	2243.6	2247.1	2250.5
17.5°	2212.4	2215.9	2215.9	2205.5	2212.4	2202.0	2212.4	2198.6	2212.4	2209.0	2215.9
20°	2174.3	2181.3	2174.3	2174.3	2167.4	2170.9	2170.9	2170.9	2160.5	2157.0	2164.0
22.5°	2132.8	2132.8	2125.9	2132.8	2125.9	2122.4	2139.7	2112.0	2139.7	2115.5	2136.3
25°	2101.6	2084.3	2073.9	2070.5	2084.3	2070.5	2077.4	2067.0	2073.9	2067.0	2070.5
27.5°	2028.9	2018.5	2015.1	2018.5	2018.5	2015.1	2028.9	1990.8	2015.1	2011.6	2011.6
30°	1952.8	1952.8	1959.7	1952.8	1959.7	1949.3	1963.1	1932.0	1952.8	1949.3	1952.8
32.5°	1883.5	1887.0	1887.0	1893.9	1883.5	1887.0	1887.0	1876.6	1883.5	1887.0	1880.0
35°	1824.6	1807.3	1807.3	1807.3	1807.3	1807.3	1814.3	1803.9	1814.3	1807.3	1807.3
37.5°	1741.6	1724.2	1724.2	1720.8	1738.1	1727.7	1745.0	1731.2	1731.2	1738.1	1738.1
40°	1641.1	1648.1	1637.7	1651.5	1648.1	1634.2	1665.4	1644.6	1658.5	1641.1	1655.0
42.5°	1551.1	1554.6	1551.1	1547.7	1561.5	1558.0	1571.9	1558.0	1554.6	1554.6	1578.8
45°	1454.2	1454.2	1454.2	1464.6	1454.2	1457.6	1471.5	1464.6	1471.5	1468.0	1492.3
47.5°	1374.5	1357.2	1353.8	1374.5	1371.1	1374.5	1374.5	1378.0	1381.5	1374.5	1384.9
50°	1260.3	1253.4	1253.4	1256.8	1260.3	1267.2	1277.6	1284.5	1277.6	1288.0	1291.4
52.5°	1149.5	1142.6	1146.0	1159.9	1166.8	1163.3	1180.7	1184.1	1180.7	1187.6	1187.6
55°	1021.4	1014.5	1024.8	1042.2	1052.5	1062.9	1080.2	1066.4	1080.2	1083.7	1087.2
57.5°	889.8	886.4	889.8	907.1	917.5	941.8	969.5	969.5	983.3	972.9	983.3
60°	744.4	744.4	758.3	768.6	796.3	813.6	841.3	855.2	869.0	882.9	876.0
62.5°	605.9	609.4	619.8	644.0	661.3	685.5	716.7	730.6	754.8	768.6	761.7
65°	481.3	481.3	488.2	509.0	526.3	557.4	585.1	616.3	630.1	637.1	640.5
67.5°	360.1	356.6	370.5	384.3	401.6	432.8	464.0	481.3	505.5	512.4	509.0
70°	242.4	245.8	252.8	266.6	287.4	311.6	346.2	360.1	373.9	380.9	373.9
72.5°	152.3	152.3	155.8	169.7	183.5	200.8	225.1	238.9	256.2	259.7	252.8
75°	69.2	69.2	76.2	83.1	93.5	107.3	124.6	135.0	145.4	155.8	155.8
77.5°	13.8	17.3	20.8	20.8	27.7	38.1	48.5	58.9	69.2	69.2	69.2
80°	3.5	3.5	3.5	3.5	3.5	3.5	6.9	10.4	17.3	17.3	17.3
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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



TEST NUMBER: P209491

CATALOG NUMBER: LDSQ6B60D010 EU6B60709040 6LBCSSQ1MMS

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5	2347.5
2.5°	2347.5	2368.2	2347.5	2337.1	2350.9	2347.5	2337.1	2340.5
5°	2337.1	2344.0	2350.9	2323.2	2340.5	2344.0	2337.1	2330.1
7.5°	2326.7	2330.1	2326.7	2319.8	2319.8	2319.8	2326.7	2326.7
10°	2323.2	2312.8	2295.5	2285.1	2295.5	2295.5	2292.1	2319.8
12.5°	2278.2	2292.1	2281.7	2260.9	2281.7	2278.2	2278.2	2285.1
15°	2243.6	2243.6	2250.5	2222.8	2236.7	2233.2	2233.2	2240.1
17.5°	2209.0	2209.0	2205.5	2198.6	2195.1	2205.5	2195.1	2212.4
20°	2160.5	2167.4	2188.2	2153.6	2164.0	2153.6	2153.6	2132.8
22.5°	2101.6	2136.3	2118.9	2115.5	2112.0	2115.5	2122.4	2098.2
25°	2063.5	2063.5	2070.5	2049.7	2049.7	2056.6	2053.2	2046.2
27.5°	2011.6	2008.2	2004.7	1997.8	2015.1	2001.2	2001.2	2001.2
30°	1938.9	1949.3	1945.8	1928.5	1949.3	1942.4	1932.0	1911.2
32.5°	1876.6	1890.4	1869.7	1866.2	1862.7	1866.2	1869.7	1852.3
35°	1800.4	1803.9	1803.9	1790.0	1793.5	1790.0	1783.1	1786.6
37.5°	1731.2	1727.7	1710.4	1703.5	1706.9	1706.9	1710.4	1703.5
40°	1634.2	1644.6	1644.6	1620.4	1627.3	1620.4	1620.4	1616.9
42.5°	1554.6	1558.0	1547.7	1537.3	1537.3	1533.8	1526.9	1533.8
45°	1471.5	1468.0	1457.6	1447.3	1447.3	1443.8	1436.9	1450.7
47.5°	1378.0	1371.1	1367.6	1353.8	1353.8	1333.0	1336.5	1350.3
50°	1284.5	1277.6	1263.8	1256.8	1246.4	1236.1	1232.6	1232.6
52.5°	1173.7	1173.7	1159.9	1146.0	1142.6	1135.6	1128.7	1132.2
55°	1076.8	1076.8	1066.4	1042.2	1028.3	1011.0	1000.6	997.2
57.5°	966.0	959.1	938.3	910.6	896.7	882.9	872.5	872.5
60°	855.2	837.9	817.1	792.9	768.6	744.4	737.5	734.0
62.5°	734.0	716.7	678.6	650.9	633.6	619.8	605.9	616.3
65°	612.8	588.6	554.0	526.3	509.0	488.2	477.8	477.8
67.5°	484.7	460.5	425.9	398.2	380.9	367.0	353.2	353.2
70°	356.6	339.3	308.1	283.9	270.1	249.3	245.8	245.8
72.5°	242.4	221.6	197.4	180.0	166.2	152.3	145.4	142.0
75°	135.0	121.2	103.9	93.5	79.6	72.7	65.8	65.8
77.5°	55.4	45.0	34.6	27.7	20.8	17.3	13.8	17.3
80°	10.4	6.9	3.5	3.5	3.5	3.5	3.5	3.5
82.5°	0.0	0.0	0.0	0.0	0.0	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



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°









(END OF REPORT)