

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: P209471

Luminaire Tested: **LDSQ6B50D010 EU6B30508035 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209471
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: LDSQ6B50D010 EU6B30508035 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 3500 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5921.3 lumens
Efficiency: N/A
Efficacy: 100.8 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

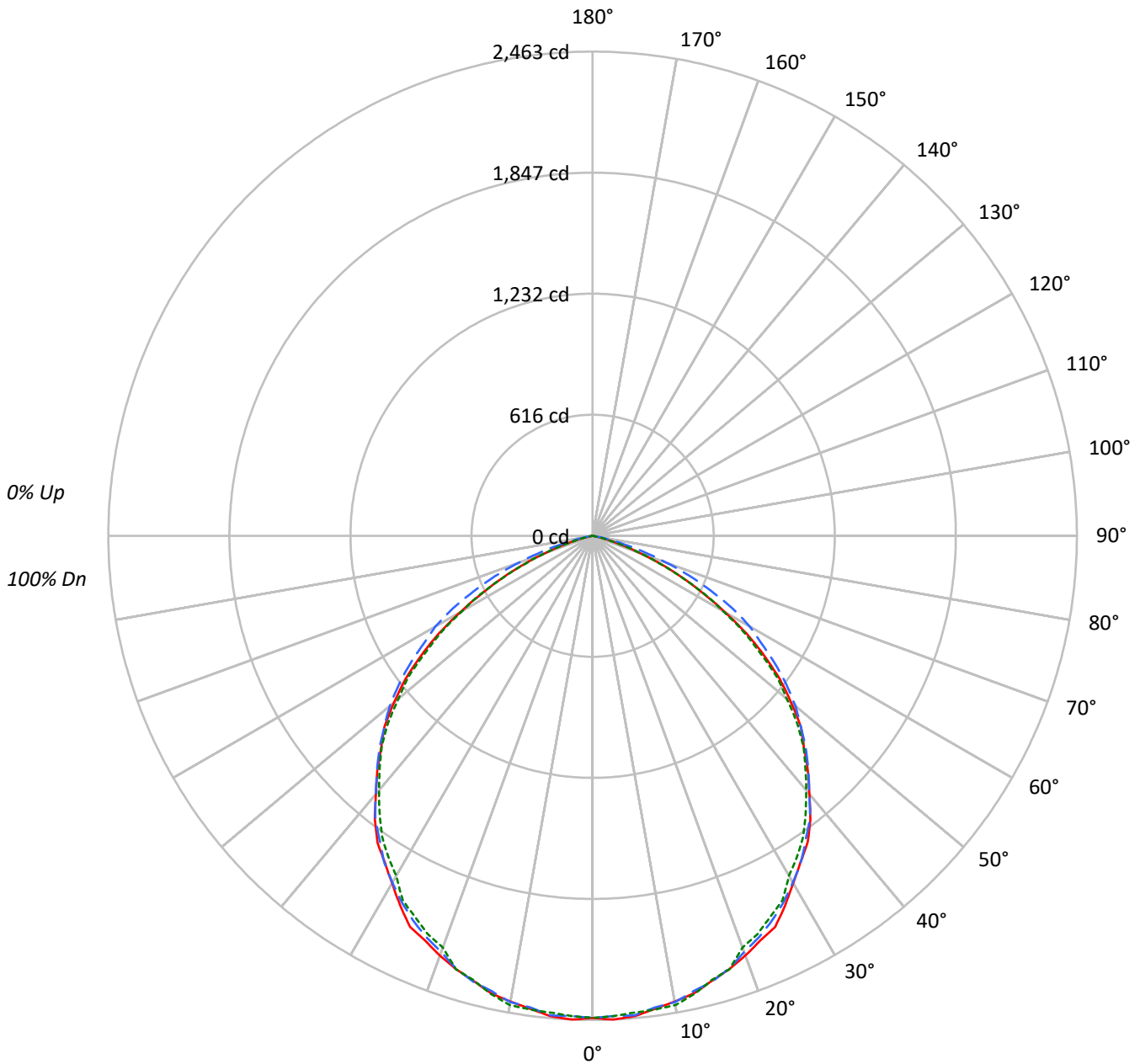
Input Watts (W): 58.77
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
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°			



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.0	3.9
10°-20°	661.4	11.2
20°-30°	995.3	16.8
30°-40°	1177.4	19.9
40°-50°	1175.0	19.8
50°-60°	974.4	16.5
60°-70°	569.3	9.6
70°-80°	135.6	2.3
80°-90°	1.0	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°	1888.7	31.9
0°-40°	3066.1	51.8
0°-60°	5215.5	88.1
0°-90°	5921.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5921.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2453	2453	2453	2453	2453	
5°	2453	2440	2449	2442	2434	232
15°	2344	2342	2348	2337	2340	663
25°	2196	2170	2160	2152	2138	1004
35°	1906	1888	1888	1877	1867	1185
45°	1519	1521	1534	1518	1516	1175
55°	1067	1105	1132	1101	1042	947
65°	503	566	666	564	499	500
75°	72	105	163	103	69	98
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°	2452.6	2452.6	2452.6	2452.6	2452.6	2452.6	2452.6	2452.6	2452.6	2452.6	2452.6
2.5°	2463.4	2448.9	2459.8	2438.1	2452.6	2438.1	2441.7	2434.5	2448.9	2445.3	2441.7
5°	2452.6	2456.2	2448.9	2456.2	2445.3	2434.5	2445.3	2438.1	2416.4	2448.9	2441.7
7.5°	2427.2	2430.9	2423.6	2434.5	2427.2	2412.8	2441.7	2420.0	2416.4	2420.0	2434.5
10°	2405.5	2412.8	2409.2	2405.5	2409.2	2409.2	2401.9	2391.1	2401.9	2409.2	2405.5
12.5°	2383.8	2394.7	2387.4	2380.2	2373.0	2376.6	2383.8	2365.7	2365.7	2373.0	2394.7
15°	2344.0	2351.3	2354.9	2340.4	2340.4	2344.0	2358.5	2329.6	2344.0	2347.7	2351.3
17.5°	2311.5	2315.1	2315.1	2304.2	2311.5	2300.6	2311.5	2297.0	2311.5	2307.9	2315.1
20°	2271.7	2278.9	2271.7	2271.7	2264.5	2268.1	2268.1	2268.1	2257.2	2253.6	2260.8
22.5°	2228.3	2228.3	2221.1	2228.3	2221.1	2217.4	2235.5	2206.6	2235.5	2210.2	2231.9
25°	2195.7	2177.6	2166.8	2163.2	2177.6	2163.2	2170.4	2159.6	2166.8	2159.6	2163.2
27.5°	2119.8	2108.9	2105.3	2108.9	2108.9	2105.3	2119.8	2080.0	2105.3	2101.7	2101.7
30°	2040.2	2040.2	2047.4	2040.2	2047.4	2036.6	2051.0	2018.5	2040.2	2036.6	2040.2
32.5°	1967.8	1971.5	1971.5	1978.7	1967.8	1971.5	1971.5	1960.6	1967.8	1971.5	1964.2
35°	1906.3	1888.3	1888.3	1888.3	1888.3	1888.3	1895.5	1884.6	1895.5	1888.3	1888.3
37.5°	1819.5	1801.4	1801.4	1797.8	1815.9	1805.1	1823.1	1808.7	1808.7	1815.9	1815.9
40°	1714.6	1721.9	1711.0	1725.5	1721.9	1707.4	1739.9	1718.2	1732.7	1714.6	1729.1
42.5°	1620.6	1624.2	1620.6	1617.0	1631.4	1627.8	1642.3	1627.8	1624.2	1624.2	1649.5
45°	1519.3	1519.3	1519.3	1530.1	1519.3	1522.9	1537.4	1530.1	1537.4	1533.8	1559.1
47.5°	1436.1	1418.0	1414.4	1436.1	1432.5	1436.1	1436.1	1439.7	1443.3	1436.1	1446.9
50°	1316.7	1309.5	1309.5	1313.1	1316.7	1323.9	1334.8	1342.0	1334.8	1345.7	1349.3
52.5°	1201.0	1193.7	1197.3	1211.8	1219.0	1215.4	1233.5	1237.1	1233.5	1240.7	1240.7
55°	1067.1	1059.9	1070.7	1088.8	1099.7	1110.5	1128.6	1114.1	1128.6	1132.2	1135.8
57.5°	929.7	926.0	929.7	947.7	958.6	983.9	1012.9	1012.9	1027.3	1016.5	1027.3
60°	777.7	777.7	792.2	803.1	832.0	850.1	879.0	893.5	908.0	922.4	915.2
62.5°	633.0	636.7	647.5	672.8	690.9	716.2	748.8	763.3	788.6	803.1	795.8
65°	502.8	502.8	510.0	531.7	549.8	582.4	611.3	643.9	658.4	665.6	669.2
67.5°	376.2	372.6	387.1	401.5	419.6	452.2	484.7	502.8	528.1	535.4	531.7
70°	253.2	256.8	264.1	278.5	300.2	325.6	361.7	376.2	390.7	397.9	390.7
72.5°	159.2	159.2	162.8	177.2	191.7	209.8	235.1	249.6	267.7	271.3	264.1
75°	72.3	72.3	79.6	86.8	97.7	112.1	130.2	141.1	151.9	162.8	162.8
77.5°	14.5	18.1	21.7	21.7	28.9	39.8	50.6	61.5	72.3	72.3	72.3
80°	3.6	3.6	3.6	3.6	3.6	3.6	7.2	10.9	18.1	18.1	18.1
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



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	2452.6	2452.6	2452.6	2452.6	2452.6	2452.6	2452.6	2452.6
2.5°	2452.6	2474.3	2452.6	2441.7	2456.2	2452.6	2441.7	2445.3
5°	2441.7	2448.9	2456.2	2427.2	2445.3	2448.9	2441.7	2434.5
7.5°	2430.9	2434.5	2430.9	2423.6	2423.6	2423.6	2430.9	2430.9
10°	2427.2	2416.4	2398.3	2387.4	2398.3	2398.3	2394.7	2423.6
12.5°	2380.2	2394.7	2383.8	2362.1	2383.8	2380.2	2380.2	2387.4
15°	2344.0	2344.0	2351.3	2322.3	2336.8	2333.2	2333.2	2340.4
17.5°	2307.9	2307.9	2304.2	2297.0	2293.4	2304.2	2293.4	2311.5
20°	2257.2	2264.5	2286.2	2250.0	2260.8	2250.0	2250.0	2228.3
22.5°	2195.7	2231.9	2213.8	2210.2	2206.6	2210.2	2217.4	2192.1
25°	2155.9	2155.9	2163.2	2141.5	2141.5	2148.7	2145.1	2137.9
27.5°	2101.7	2098.1	2094.4	2087.2	2105.3	2090.8	2090.8	2090.8
30°	2025.7	2036.6	2032.9	2014.9	2036.6	2029.3	2018.5	1996.8
32.5°	1960.6	1975.1	1953.4	1949.7	1946.1	1949.7	1953.4	1935.3
35°	1881.0	1884.6	1884.6	1870.2	1873.8	1870.2	1862.9	1866.6
37.5°	1808.7	1805.1	1787.0	1779.7	1783.4	1783.4	1787.0	1779.7
40°	1707.4	1718.2	1718.2	1692.9	1700.2	1692.9	1692.9	1689.3
42.5°	1624.2	1627.8	1617.0	1606.1	1606.1	1602.5	1595.2	1602.5
45°	1537.4	1533.8	1522.9	1512.1	1512.1	1508.4	1501.2	1515.7
47.5°	1439.7	1432.5	1428.9	1414.4	1414.4	1392.7	1396.3	1410.8
50°	1342.0	1334.8	1320.3	1313.1	1302.2	1291.4	1287.8	1287.8
52.5°	1226.3	1226.3	1211.8	1197.3	1193.7	1186.5	1179.3	1182.9
55°	1125.0	1125.0	1114.1	1088.8	1074.4	1056.3	1045.4	1041.8
57.5°	1009.2	1002.0	980.3	951.4	936.9	922.4	911.6	911.6
60°	893.5	875.4	853.7	828.4	803.1	777.7	770.5	766.9
62.5°	766.9	748.8	709.0	680.1	662.0	647.5	633.0	643.9
65°	640.3	614.9	578.8	549.8	531.7	510.0	499.2	499.2
67.5°	506.4	481.1	444.9	416.0	397.9	383.4	369.0	369.0
70°	372.6	354.5	321.9	296.6	282.2	260.4	256.8	256.8
72.5°	253.2	231.5	206.2	188.1	173.6	159.2	151.9	148.3
75°	141.1	126.6	108.5	97.7	83.2	76.0	68.7	68.7
77.5°	57.9	47.0	36.2	28.9	21.7	18.1	14.5	18.1
80°	10.9	7.2	3.6	3.6	3.6	3.6	3.6	3.6
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



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









(END OF REPORT)