

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: P209486

Luminaire Tested: **LDSQ6B60D010 EU6B60708050 6LBCSSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P209486
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 EU6B60708050 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 5000 K
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6761.9 lumens
Efficiency: N/A
Efficacy: 108.2 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

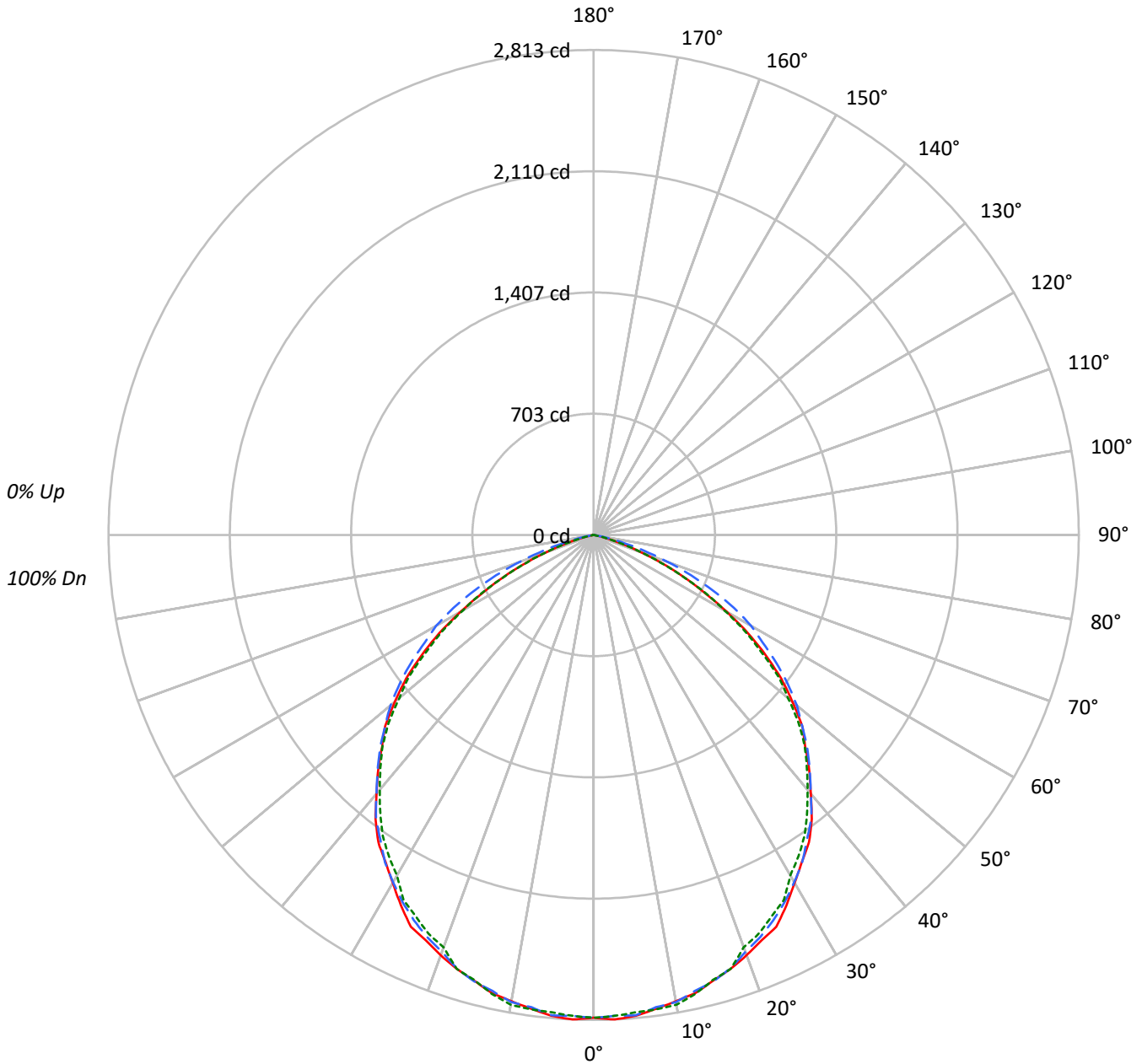
Input Watts (W): 62.48
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	264.9	3.9
10°-20°	755.3	11.2
20°-30°	1136.6	16.8
30°-40°	1344.6	19.9
40°-50°	1341.8	19.8
50°-60°	1112.7	16.5
60°-70°	650.1	9.6
70°-80°	154.8	2.3
80°-90°	1.1	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°	2156.8	31.9
0°-40°	3501.4	51.8
0°-60°	5955.9	88.1
0°-90°	6761.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6761.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2801	2801	2801	2801	2801	
5°	2801	2786	2797	2788	2780	265
15°	2677	2675	2681	2668	2673	757
25°	2507	2478	2466	2458	2441	1146
35°	2177	2156	2156	2144	2132	1353
45°	1735	1737	1752	1733	1731	1342
55°	1219	1262	1293	1258	1190	1082
65°	574	646	760	644	570	571
75°	83	120	186	118	78	112
85°	0	0	0	0	0	1
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°	2800.7	2800.7	2800.7	2800.7	2800.7	2800.7	2800.7	2800.7	2800.7	2800.7	2800.7
2.5°	2813.1	2796.6	2809.0	2784.2	2800.7	2784.2	2788.3	2780.1	2796.6	2792.5	2788.3
5°	2800.7	2804.8	2796.6	2804.8	2792.5	2780.1	2792.5	2784.2	2759.4	2796.6	2788.3
7.5°	2771.8	2775.9	2767.7	2780.1	2771.8	2755.3	2788.3	2763.5	2759.4	2763.5	2780.1
10°	2747.0	2755.3	2751.1	2747.0	2751.1	2751.1	2742.9	2730.5	2742.9	2751.1	2747.0
12.5°	2722.2	2734.6	2726.4	2718.1	2709.8	2714.0	2722.2	2701.6	2701.6	2709.8	2734.6
15°	2676.8	2685.0	2689.2	2672.7	2672.7	2676.8	2693.3	2660.3	2676.8	2680.9	2685.0
17.5°	2639.6	2643.7	2643.7	2631.3	2639.6	2627.2	2639.6	2623.1	2639.6	2635.5	2643.7
20°	2594.2	2602.4	2594.2	2594.2	2585.9	2590.0	2590.0	2590.0	2577.6	2573.5	2581.8
22.5°	2544.6	2544.6	2536.3	2544.6	2536.3	2532.2	2552.9	2519.8	2552.9	2523.9	2548.7
25°	2507.4	2486.8	2474.4	2470.2	2486.8	2470.2	2478.5	2466.1	2474.4	2466.1	2470.2
27.5°	2420.7	2408.3	2404.2	2408.3	2408.3	2404.2	2420.7	2375.2	2404.2	2400.0	2400.0
30°	2329.8	2329.8	2338.1	2329.8	2338.1	2325.7	2342.2	2305.0	2329.8	2325.7	2329.8
32.5°	2247.2	2251.3	2251.3	2259.6	2247.2	2251.3	2251.3	2238.9	2247.2	2251.3	2243.0
35°	2177.0	2156.3	2156.3	2156.3	2156.3	2156.3	2164.6	2152.2	2164.6	2156.3	2156.3
37.5°	2077.8	2057.2	2057.2	2053.0	2073.7	2061.3	2081.9	2065.4	2065.4	2073.7	2073.7
40°	1958.0	1966.3	1953.9	1970.4	1966.3	1949.8	1986.9	1962.2	1978.7	1958.0	1974.5
42.5°	1850.6	1854.7	1850.6	1846.5	1863.0	1858.9	1875.4	1858.9	1854.7	1854.7	1883.7
45°	1735.0	1735.0	1735.0	1747.3	1735.0	1739.1	1755.6	1747.3	1755.6	1751.5	1780.4
47.5°	1639.9	1619.3	1615.2	1639.9	1635.8	1639.9	1639.9	1644.1	1648.2	1639.9	1652.3
50°	1503.6	1495.4	1495.4	1499.5	1503.6	1511.9	1524.3	1532.5	1524.3	1536.7	1540.8
52.5°	1371.4	1363.2	1367.3	1383.8	1392.1	1388.0	1408.6	1412.7	1408.6	1416.9	1416.9
55°	1218.6	1210.3	1222.7	1243.4	1255.8	1268.2	1288.8	1272.3	1288.8	1293.0	1297.1
57.5°	1061.6	1057.5	1061.6	1082.3	1094.7	1123.6	1156.6	1156.6	1173.2	1160.8	1173.2
60°	888.1	888.1	904.7	917.0	950.1	970.7	1003.8	1020.3	1036.8	1053.4	1045.1
62.5°	722.9	727.0	739.4	768.3	789.0	817.9	855.1	871.6	900.5	917.0	908.8
65°	574.2	574.2	582.4	607.2	627.9	665.1	698.1	735.3	751.8	760.1	764.2
67.5°	429.6	425.5	442.0	458.5	479.2	516.4	553.5	574.2	603.1	611.4	607.2
70°	289.2	293.3	301.6	318.1	342.9	371.8	413.1	429.6	446.1	454.4	446.1
72.5°	181.8	181.8	185.9	202.4	218.9	239.6	268.5	285.0	305.7	309.8	301.6
75°	82.6	82.6	90.9	99.1	111.5	128.1	148.7	161.1	173.5	185.9	185.9
77.5°	16.5	20.7	24.8	24.8	33.0	45.4	57.8	70.2	82.6	82.6	82.6
80°	4.1	4.1	4.1	4.1	4.1	4.1	8.3	12.4	20.7	20.7	20.7
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°	2800.7	2800.7	2800.7	2800.7	2800.7	2800.7	2800.7	2800.7
2.5°	2800.7	2825.5	2800.7	2788.3	2804.8	2800.7	2788.3	2792.5
5°	2788.3	2796.6	2804.8	2771.8	2792.5	2796.6	2788.3	2780.1
7.5°	2775.9	2780.1	2775.9	2767.7	2767.7	2767.7	2775.9	2775.9
10°	2771.8	2759.4	2738.8	2726.4	2738.8	2738.8	2734.6	2767.7
12.5°	2718.1	2734.6	2722.2	2697.4	2722.2	2718.1	2718.1	2726.4
15°	2676.8	2676.8	2685.0	2652.0	2668.5	2664.4	2664.4	2672.7
17.5°	2635.5	2635.5	2631.3	2623.1	2619.0	2631.3	2619.0	2639.6
20°	2577.6	2585.9	2610.7	2569.4	2581.8	2569.4	2569.4	2544.6
22.5°	2507.4	2548.7	2528.1	2523.9	2519.8	2523.9	2532.2	2503.3
25°	2462.0	2462.0	2470.2	2445.5	2445.5	2453.7	2449.6	2441.3
27.5°	2400.0	2395.9	2391.8	2383.5	2404.2	2387.6	2387.6	2387.6
30°	2313.3	2325.7	2321.5	2300.9	2325.7	2317.4	2305.0	2280.2
32.5°	2238.9	2255.4	2230.7	2226.5	2222.4	2226.5	2230.7	2210.0
35°	2148.0	2152.2	2152.2	2135.6	2139.8	2135.6	2127.4	2131.5
37.5°	2065.4	2061.3	2040.6	2032.4	2036.5	2036.5	2040.6	2032.4
40°	1949.8	1962.2	1962.2	1933.2	1941.5	1933.2	1933.2	1929.1
42.5°	1854.7	1858.9	1846.5	1834.1	1834.1	1830.0	1821.7	1830.0
45°	1755.6	1751.5	1739.1	1726.7	1726.7	1722.6	1714.3	1730.8
47.5°	1644.1	1635.8	1631.7	1615.2	1615.2	1590.4	1594.5	1611.0
50°	1532.5	1524.3	1507.8	1499.5	1487.1	1474.7	1470.6	1470.6
52.5°	1400.4	1400.4	1383.8	1367.3	1363.2	1354.9	1346.7	1350.8
55°	1284.7	1284.7	1272.3	1243.4	1226.9	1206.2	1193.8	1189.7
57.5°	1152.5	1144.2	1119.5	1086.4	1069.9	1053.4	1041.0	1041.0
60°	1020.3	999.7	974.9	946.0	917.0	888.1	879.9	875.7
62.5°	875.7	855.1	809.6	776.6	755.9	739.4	722.9	735.3
65°	731.2	702.2	660.9	627.9	607.2	582.4	570.1	570.1
67.5°	578.3	549.4	508.1	475.0	454.4	437.9	421.3	421.3
70°	425.5	404.8	367.6	338.7	322.2	297.4	293.3	293.3
72.5°	289.2	264.4	235.5	214.8	198.3	181.8	173.5	169.4
75°	161.1	144.6	123.9	111.5	95.0	86.7	78.5	78.5
77.5°	66.1	53.7	41.3	33.0	24.8	20.7	16.5	20.7
80°	12.4	8.3	4.1	4.1	4.1	4.1	4.1	4.1
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)