

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: P209484

Luminaire Tested: **LDSQ6B60D010 EU6B60708035 6LBCSSQ1MMS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209484  
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 EU6B60708035 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: 6699.0 lumens  
Efficiency: N/A  
Efficacy: 107.2 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

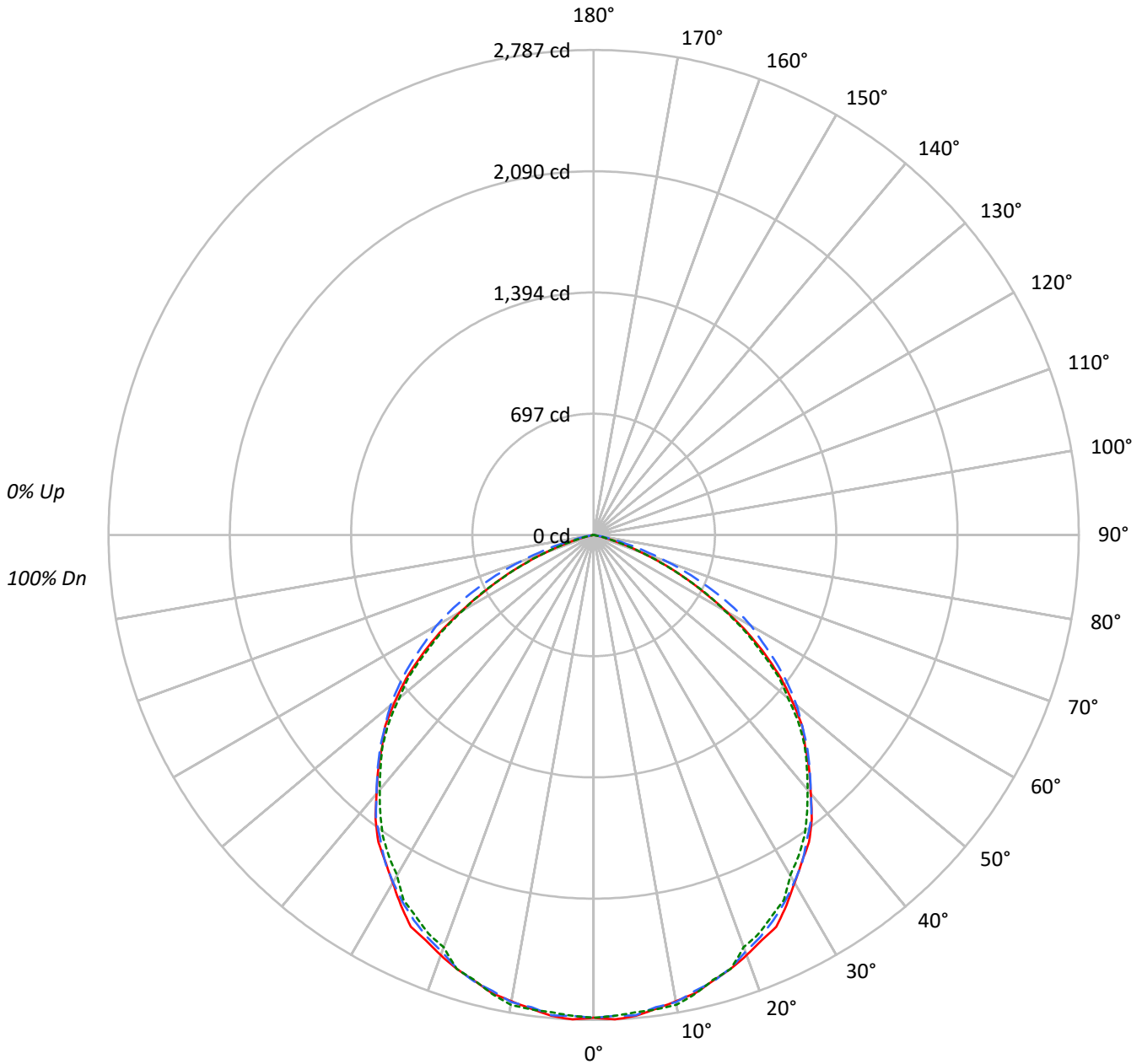
Input Watts (W): 62.48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	262.4	3.9
10°-20°	748.3	11.2
20°-30°	1126.0	16.8
30°-40°	1332.1	19.9
40°-50°	1329.3	19.8
50°-60°	1102.3	16.5
60°-70°	644.0	9.6
70°-80°	153.4	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°	2136.7	31.9
0°-40°	3468.8	51.8
0°-60°	5900.5	88.1
0°-90°	6699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6699.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2775	2775	2775	2775	2775	
5°	2775	2760	2771	2762	2754	263
15°	2652	2650	2656	2644	2648	750
25°	2484	2455	2443	2435	2419	1135
35°	2157	2136	2136	2124	2112	1341
45°	1719	1721	1735	1717	1715	1330
55°	1207	1250	1281	1246	1179	1072
65°	569	640	753	638	565	565
75°	82	119	184	117	78	111
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°	2774.7	2774.7	2774.7	2774.7	2774.7	2774.7	2774.7	2774.7	2774.7	2774.7	2774.7
2.5°	2786.9	2770.6	2782.9	2758.3	2774.7	2758.3	2762.4	2754.2	2770.6	2766.5	2762.4
5°	2774.7	2778.8	2770.6	2778.8	2766.5	2754.2	2766.5	2758.3	2733.7	2770.6	2762.4
7.5°	2746.0	2750.1	2741.9	2754.2	2746.0	2729.6	2762.4	2737.8	2733.7	2737.8	2754.2
10°	2721.5	2729.6	2725.6	2721.5	2725.6	2725.6	2717.4	2705.1	2717.4	2725.6	2721.5
12.5°	2696.9	2709.2	2701.0	2692.8	2684.6	2688.7	2696.9	2676.4	2676.4	2684.6	2709.2
15°	2651.9	2660.1	2664.2	2647.8	2647.8	2651.9	2668.3	2635.5	2651.9	2656.0	2660.1
17.5°	2615.1	2619.2	2619.2	2606.9	2615.1	2602.8	2615.1	2598.7	2615.1	2611.0	2619.2
20°	2570.0	2578.2	2570.0	2570.0	2561.9	2566.0	2566.0	2566.0	2553.7	2549.6	2557.8
22.5°	2520.9	2520.9	2512.8	2520.9	2512.8	2508.7	2529.1	2496.4	2529.1	2500.5	2525.0
25°	2484.1	2463.6	2451.4	2447.3	2463.6	2447.3	2455.5	2443.2	2451.4	2443.2	2447.3
27.5°	2398.2	2385.9	2381.8	2385.9	2385.9	2381.8	2398.2	2353.1	2381.8	2377.7	2377.7
30°	2308.1	2308.1	2316.3	2308.1	2316.3	2304.0	2320.4	2283.6	2308.1	2304.0	2308.1
32.5°	2226.3	2230.4	2230.4	2238.6	2226.3	2230.4	2230.4	2218.1	2226.3	2230.4	2222.2
35°	2156.7	2136.2	2136.2	2136.2	2136.2	2136.2	2144.4	2132.2	2144.4	2136.2	2136.2
37.5°	2058.5	2038.0	2038.0	2033.9	2054.4	2042.1	2062.6	2046.2	2046.2	2054.4	2054.4
40°	1939.8	1948.0	1935.7	1952.1	1948.0	1931.6	1968.5	1943.9	1960.3	1939.8	1956.2
42.5°	1833.4	1837.5	1833.4	1829.3	1845.7	1841.6	1858.0	1841.6	1837.5	1837.5	1866.1
45°	1718.8	1718.8	1718.8	1731.1	1718.8	1722.9	1739.3	1731.1	1739.3	1735.2	1763.8
47.5°	1624.7	1604.2	1600.1	1624.7	1620.6	1624.7	1624.7	1628.8	1632.9	1624.7	1637.0
50°	1489.6	1481.5	1481.5	1485.6	1489.6	1497.8	1510.1	1518.3	1510.1	1522.4	1526.5
52.5°	1358.7	1350.5	1354.6	1371.0	1379.1	1375.1	1395.5	1399.6	1395.5	1403.7	1403.7
55°	1207.3	1199.1	1211.4	1231.8	1244.1	1256.4	1276.8	1260.5	1276.8	1280.9	1285.0
57.5°	1051.8	1047.7	1051.8	1072.2	1084.5	1113.1	1145.9	1145.9	1162.2	1150.0	1162.2
60°	879.9	879.9	896.2	908.5	941.3	961.7	994.5	1010.8	1027.2	1043.6	1035.4
62.5°	716.2	720.3	732.5	761.2	781.7	810.3	847.1	863.5	892.1	908.5	900.3
65°	568.8	568.8	577.0	601.6	622.0	658.9	691.6	728.5	744.8	753.0	757.1
67.5°	425.6	421.5	437.9	454.3	474.7	511.6	548.4	568.8	597.5	605.7	601.6
70°	286.5	290.6	298.7	315.1	339.7	368.3	409.2	425.6	442.0	450.2	442.0
72.5°	180.1	180.1	184.2	200.5	216.9	237.4	266.0	282.4	302.8	306.9	298.7
75°	81.8	81.8	90.0	98.2	110.5	126.9	147.3	159.6	171.9	184.2	184.2
77.5°	16.4	20.5	24.6	24.6	32.7	45.0	57.3	69.6	81.8	81.8	81.8
80°	4.1	4.1	4.1	4.1	4.1	4.1	8.2	12.3	20.5	20.5	20.5
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°	2774.7	2774.7	2774.7	2774.7	2774.7	2774.7	2774.7	2774.7
2.5°	2774.7	2799.2	2774.7	2762.4	2778.8	2774.7	2762.4	2766.5
5°	2762.4	2770.6	2778.8	2746.0	2766.5	2770.6	2762.4	2754.2
7.5°	2750.1	2754.2	2750.1	2741.9	2741.9	2741.9	2750.1	2750.1
10°	2746.0	2733.7	2713.3	2701.0	2713.3	2713.3	2709.2	2741.9
12.5°	2692.8	2709.2	2696.9	2672.4	2696.9	2692.8	2692.8	2701.0
15°	2651.9	2651.9	2660.1	2627.3	2643.7	2639.6	2639.6	2647.8
17.5°	2611.0	2611.0	2606.9	2598.7	2594.6	2606.9	2594.6	2615.1
20°	2553.7	2561.9	2586.4	2545.5	2557.8	2545.5	2545.5	2520.9
22.5°	2484.1	2525.0	2504.6	2500.5	2496.4	2500.5	2508.7	2480.0
25°	2439.1	2439.1	2447.3	2422.7	2422.7	2430.9	2426.8	2418.6
27.5°	2377.7	2373.6	2369.5	2361.3	2381.8	2365.4	2365.4	2365.4
30°	2291.8	2304.0	2299.9	2279.5	2304.0	2295.9	2283.6	2259.0
32.5°	2218.1	2234.5	2209.9	2205.8	2201.7	2205.8	2209.9	2189.4
35°	2128.1	2132.2	2132.2	2115.8	2119.9	2115.8	2107.6	2111.7
37.5°	2046.2	2042.1	2021.7	2013.5	2017.6	2017.6	2021.7	2013.5
40°	1931.6	1943.9	1943.9	1915.3	1923.4	1915.3	1915.3	1911.2
42.5°	1837.5	1841.6	1829.3	1817.0	1817.0	1812.9	1804.8	1812.9
45°	1739.3	1735.2	1722.9	1710.6	1710.6	1706.5	1698.4	1714.7
47.5°	1628.8	1620.6	1616.5	1600.1	1600.1	1575.6	1579.7	1596.0
50°	1518.3	1510.1	1493.7	1485.6	1473.3	1461.0	1456.9	1456.9
52.5°	1387.3	1387.3	1371.0	1354.6	1350.5	1342.3	1334.1	1338.2
55°	1272.7	1272.7	1260.5	1231.8	1215.5	1195.0	1182.7	1178.6
57.5°	1141.8	1133.6	1109.0	1076.3	1059.9	1043.6	1031.3	1031.3
60°	1010.8	990.4	965.8	937.2	908.5	879.9	871.7	867.6
62.5°	867.6	847.1	802.1	769.4	748.9	732.5	716.2	728.5
65°	724.4	695.7	654.8	622.0	601.6	577.0	564.8	564.8
67.5°	572.9	544.3	503.4	470.6	450.2	433.8	417.4	417.4
70°	421.5	401.1	364.2	335.6	319.2	294.7	290.6	290.6
72.5°	286.5	261.9	233.3	212.8	196.4	180.1	171.9	167.8
75°	159.6	143.2	122.8	110.5	94.1	85.9	77.8	77.8
77.5°	65.5	53.2	40.9	32.7	24.6	20.5	16.4	20.5
80°	12.3	8.2	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



Report Generated By E9808895 / USPTCWHP6082093







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









(END OF REPORT)