

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: P209366

Luminaire Tested: **LDSQ6B40D010 EU6B30509730 6LBSQ1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209366  
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: LDSQ6B40D010 EU6B30509730 6LBSQ1LI  
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE LOW  
IRIDESCENT TRIM.  
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR TRIM  
WATTAGE D010TR-43.02 W DE010-42.54 W D5LT-42.539 W DMX-41.87 W DL2-41.57  
W DL3-44.71 W DLE-39.33 W  
Light Source: HIGH LUMEN LED 3000 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3076.0 lumens  
Efficiency: N/A  
Efficacy: 71.5 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

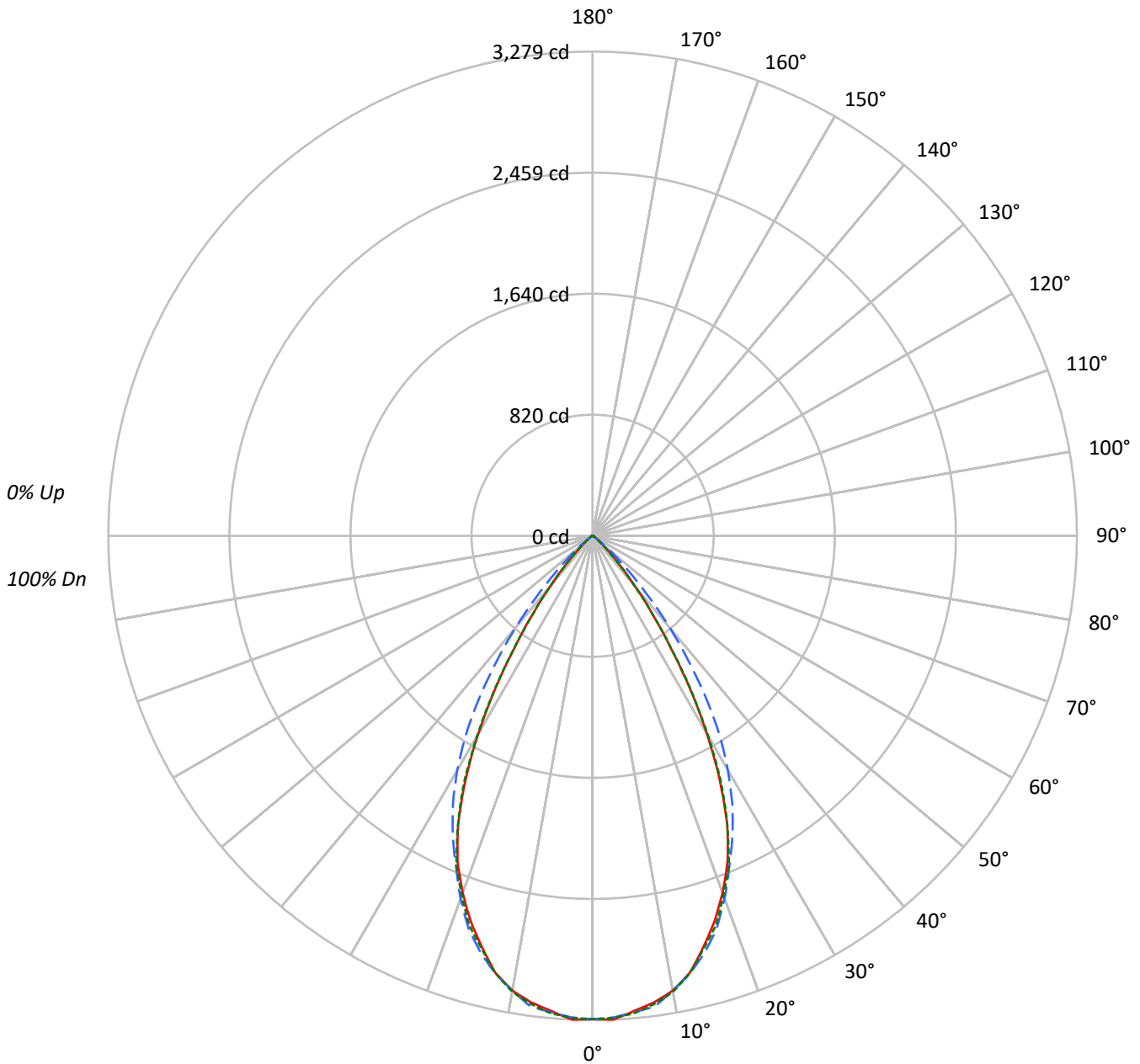
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93																		
	2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87																		
	3	102	96	91	87	100	94	90	86	92	88	85	89	86	83	87	84	82	80																		
	4	97	89	84	79	95	88	83	79	86	81	78	84	80	77	82	79	76	75																		
	5	92	83	78	73	90	82	77	73	81	76	72	79	75	72	77	74	71	69																		
	6	87	78	72	68	86	77	72	67	76	71	67	74	70	67	73	69	66	65																		
	7	83	73	67	63	81	73	67	63	71	66	62	70	66	62	69	65	62	60																		
	8	79	69	63	59	77	68	63	59	67	62	58	66	62	58	65	61	58	56																		
	9	75	65	59	55	74	64	59	55	64	58	55	63	58	54	62	57	54	53																		
	10	71	61	55	52	70	61	55	51	60	55	51	59	55	51	59	54	51	50																		

**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°	306.4	10.0
10°-20°	815.1	26.5
20°-30°	1000.4	32.5
30°-40°	690.6	22.5
40°-50°	215.9	7.0
50°-60°	33.7	1.1
60°-70°	9.8	0.3
70°-80°	3.2	0.1
80°-90°	0.7	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°	2122.0	69.0
0°-40°	2812.6	91.4
0°-60°	3062.3	99.6
0°-90°	3076.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3076.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3273	3273	3273	3273	3273	
5°	3230	3242	3238	3239	3246	305
15°	2888	2929	2925	2921	2898	808
25°	2155	2211	2240	2225	2157	966
35°	910	1076	1334	1086	914	581
45°	171	234	375	232	175	153
55°	29	31	35	31	27	28
65°	8	10	8	10	8	9
75°	2	2	2	2	2	3
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°	3273.2	3273.2	3273.2	3273.2	3273.2	3273.2	3273.2	3273.2	3273.2	3273.2	3273.2
2.5°	3279.4	3234.0	3262.9	3256.7	3273.2	3283.5	3273.2	3291.8	3279.4	3265.0	3269.1
5°	3229.9	3236.1	3234.0	3238.1	3242.3	3242.3	3262.9	3265.0	3269.1	3238.1	3246.4
7.5°	3186.6	3186.6	3196.9	3192.8	3207.2	3203.1	3205.1	3221.6	3223.7	3215.5	3209.3
10°	3126.8	3118.5	3108.2	3108.2	3126.8	3128.8	3145.3	3147.4	3159.8	3126.8	3130.9
12.5°	3034.0	3029.8	3013.3	3021.6	3036.0	3027.8	3054.6	3056.6	3052.5	3038.1	3046.3
15°	2887.5	2904.0	2899.9	2897.8	2930.8	2926.7	2924.6	2930.8	2932.9	2924.6	2918.5
17.5°	2741.1	2755.5	2757.6	2761.7	2767.9	2774.1	2782.3	2805.0	2796.8	2790.6	2811.2
20°	2572.0	2565.8	2582.3	2598.8	2605.0	2605.0	2617.3	2633.8	2621.5	2613.2	2615.3
22.5°	2388.4	2398.7	2390.5	2407.0	2415.2	2425.5	2437.9	2452.3	2442.0	2419.3	2446.1
25°	2155.3	2161.5	2188.3	2186.3	2198.6	2223.4	2242.0	2242.0	2242.0	2239.9	2239.9
27.5°	1862.5	1858.3	1891.3	1914.0	1945.0	1984.1	2008.9	2048.1	2054.3	2048.1	2033.6
30°	1548.9	1544.8	1586.1	1614.9	1670.6	1689.2	1757.3	1794.4	1833.6	1831.5	1821.2
32.5°	1223.1	1231.3	1264.3	1305.6	1350.9	1408.7	1472.6	1555.1	1590.2	1598.4	1579.9
35°	909.6	921.9	952.9	987.9	1043.6	1107.6	1196.3	1274.6	1334.4	1334.4	1320.0
37.5°	655.9	660.0	688.9	711.6	769.3	827.1	903.4	1010.6	1047.8	1062.2	1047.8
40°	447.6	447.6	464.1	488.8	536.3	585.8	655.9	736.3	789.9	812.6	787.9
42.5°	284.6	288.8	301.1	317.6	352.7	396.0	449.6	509.4	548.6	565.1	542.4
45°	171.2	175.3	185.6	198.0	220.7	247.5	284.6	327.9	360.9	375.4	365.1
47.5°	103.1	107.3	111.4	119.6	136.1	154.7	173.3	198.0	218.6	220.7	216.6
50°	59.8	59.8	63.9	70.1	78.4	88.7	99.0	113.4	119.6	127.9	119.6
52.5°	39.2	39.2	39.2	41.3	45.4	49.5	53.6	61.9	66.0	66.0	63.9
55°	28.9	28.9	28.9	28.9	30.9	30.9	30.9	33.0	35.1	35.1	35.1
57.5°	20.6	20.6	20.6	22.7	22.7	22.7	20.6	20.6	20.6	20.6	20.6
60°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	14.4	14.4	14.4
62.5°	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
65°	8.3	8.3	8.3	10.3	10.3	10.3	10.3	8.3	8.3	8.3	8.3
67.5°	6.2	6.2	6.2	8.3	8.3	8.3	8.3	8.3	6.2	6.2	6.2
70°	4.1	4.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
72.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
82.5°	0.0	0.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
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°	3273.2	3273.2	3273.2	3273.2	3273.2	3273.2	3273.2	3273.2
2.5°	3281.5	3271.1	3271.1	3271.1	3267.0	3271.1	3277.3	3267.0
5°	3246.4	3250.5	3232.0	3246.4	3252.6	3242.3	3267.0	3246.4
7.5°	3215.5	3209.3	3180.4	3201.0	3213.4	3217.5	3215.5	3199.0
10°	3153.6	3139.1	3126.8	3126.8	3122.6	3120.6	3143.3	3135.0
12.5°	3042.2	3052.5	3034.0	3044.3	3036.0	3038.1	3040.1	3036.0
15°	2947.3	2937.0	2912.3	2928.8	2918.5	2908.1	2928.8	2897.8
17.5°	2798.8	2796.8	2782.3	2772.0	2776.1	2774.1	2784.4	2770.0
20°	2623.5	2627.6	2619.4	2615.3	2609.1	2594.6	2607.0	2590.5
22.5°	2433.8	2437.9	2446.1	2429.6	2431.7	2411.1	2429.6	2411.1
25°	2242.0	2239.9	2229.6	2221.3	2198.6	2176.0	2171.8	2157.4
27.5°	2031.6	2017.1	1992.4	1965.6	1930.5	1899.6	1897.5	1887.2
30°	1800.6	1769.6	1724.3	1680.9	1627.3	1579.9	1579.9	1563.4
32.5°	1557.2	1487.1	1425.2	1371.6	1301.4	1274.6	1247.8	1233.4
35°	1266.4	1204.5	1130.3	1041.6	1008.6	942.6	946.7	913.7
37.5°	992.1	915.8	845.6	773.4	715.7	684.8	668.3	651.8
40°	736.3	662.1	585.8	538.3	486.8	459.9	449.6	445.5
42.5°	503.3	441.4	391.9	352.7	325.9	297.0	288.8	284.6
45°	327.9	292.9	247.5	216.6	198.0	181.5	181.5	175.3
47.5°	195.9	173.3	150.6	129.9	117.6	107.3	103.1	101.1
50°	109.3	96.9	84.6	76.3	68.1	61.9	59.8	59.8
52.5°	59.8	53.6	49.5	43.3	39.2	39.2	39.2	37.1
55°	30.9	30.9	30.9	30.9	28.9	28.9	28.9	26.8
57.5°	20.6	20.6	22.7	22.7	22.7	20.6	20.6	20.6
60°	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
62.5°	12.4	12.4	12.4	12.4	12.4	12.4	12.4	12.4
65°	8.3	10.3	10.3	10.3	10.3	8.3	8.3	8.3
67.5°	6.2	8.3	8.3	8.3	6.2	6.2	6.2	6.2
70°	6.2	6.2	6.2	6.2	6.2	4.1	4.1	4.1
72.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
75°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
77.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
80°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
82.5°	2.1	2.1	2.1	2.1	2.1	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)