

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: P209361

Luminaire Tested: **LDSQ6B40D010 EU6B30509030 6LBSQ1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209361  
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 EU6B30509030 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: 3519.0 lumens  
Efficiency: N/A  
Efficacy: 81.8 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

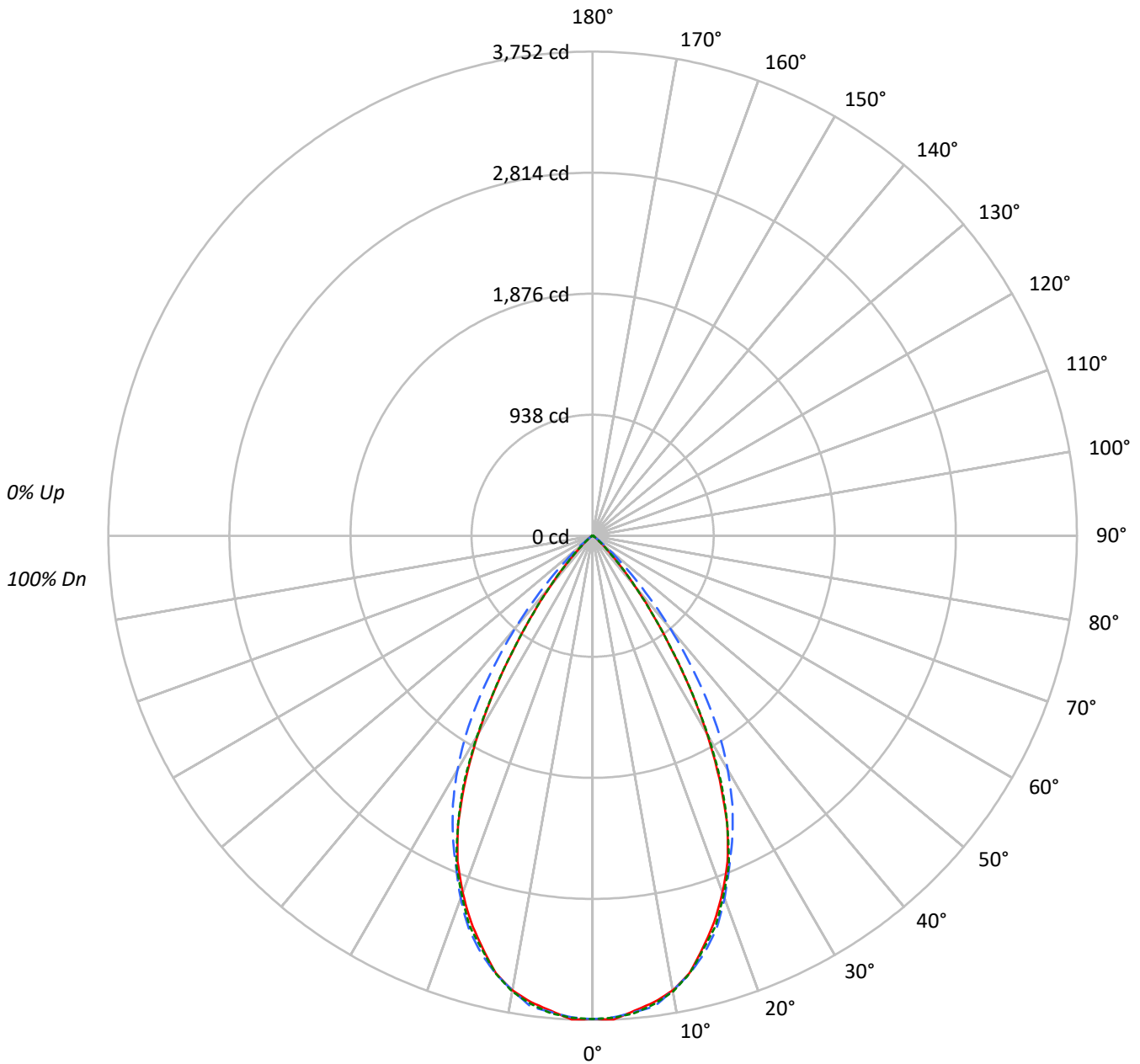
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	350.6	10.0
10°-20°	932.6	26.5
20°-30°	1144.5	32.5
30°-40°	790.1	22.5
40°-50°	247.0	7.0
50°-60°	38.6	1.1
60°-70°	11.2	0.3
70°-80°	3.7	0.1
80°-90°	0.8	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°	2427.6	69.0
0°-40°	3217.7	91.4
0°-60°	3503.3	99.6
0°-90°	3519.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3519.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3745	3745	3745	3745	3745	
5°	3695	3709	3704	3706	3714	349
15°	3303	3351	3346	3341	3315	924
25°	2466	2529	2562	2546	2468	1105
35°	1041	1230	1527	1242	1045	665
45°	196	268	429	265	201	175
55°	33	35	40	35	31	32
65°	9	12	9	12	9	10
75°	2	2	2	2	2	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3744.6	3744.6	3744.6	3744.6	3744.6	3744.6	3744.6	3744.6	3744.6	3744.6	3744.6
2.5°	3751.7	3699.8	3732.8	3725.8	3744.6	3756.4	3744.6	3765.9	3751.7	3735.2	3739.9
5°	3695.1	3702.2	3699.8	3704.5	3709.3	3709.3	3732.8	3735.2	3739.9	3704.5	3714.0
7.5°	3645.5	3645.5	3657.3	3652.6	3669.1	3664.4	3666.8	3685.7	3688.0	3678.6	3671.5
10°	3577.1	3567.7	3555.9	3555.9	3577.1	3579.5	3598.4	3600.7	3614.9	3577.1	3581.8
12.5°	3470.9	3466.2	3447.3	3456.8	3473.3	3463.9	3494.5	3496.9	3492.2	3475.7	3485.1
15°	3303.4	3322.3	3317.6	3315.2	3353.0	3348.2	3345.9	3353.0	3355.3	3345.9	3338.8
17.5°	3135.9	3152.4	3154.8	3159.5	3166.5	3173.6	3183.1	3209.0	3199.6	3192.5	3216.1
20°	2942.4	2935.3	2954.2	2973.1	2980.1	2980.1	2994.3	3013.2	2999.0	2989.6	2991.9
22.5°	2732.4	2744.2	2734.7	2753.6	2763.1	2774.9	2789.0	2805.5	2793.7	2767.8	2798.5
25°	2465.8	2472.8	2503.5	2501.1	2515.3	2543.6	2564.9	2564.9	2564.9	2562.5	2562.5
27.5°	2130.7	2126.0	2163.7	2189.7	2225.1	2269.9	2298.2	2343.1	2350.1	2343.1	2326.5
30°	1772.0	1767.3	1814.5	1847.5	1911.3	1932.5	2010.4	2052.8	2097.7	2095.3	2083.5
32.5°	1399.2	1408.7	1446.4	1493.6	1545.5	1611.6	1684.7	1779.1	1819.2	1828.7	1807.4
35°	1040.6	1054.7	1090.1	1130.2	1193.9	1267.1	1368.6	1458.2	1526.6	1526.6	1510.1
37.5°	750.3	755.1	788.1	814.1	880.1	946.2	1033.5	1156.2	1198.7	1215.2	1198.7
40°	512.0	512.0	530.9	559.2	613.5	670.1	750.3	842.4	903.7	929.7	901.4
42.5°	325.6	330.3	344.5	363.4	403.5	453.0	514.4	582.8	627.6	646.5	620.6
45°	195.8	200.6	212.4	226.5	252.5	283.1	325.6	375.2	412.9	429.4	417.6
47.5°	118.0	122.7	127.4	136.9	155.7	177.0	198.2	226.5	250.1	252.5	247.8
50°	68.4	68.4	73.1	80.2	89.7	101.5	113.3	129.8	136.9	146.3	136.9
52.5°	44.8	44.8	44.8	47.2	51.9	56.6	61.3	70.8	75.5	75.5	73.1
55°	33.0	33.0	33.0	33.0	35.4	35.4	35.4	37.8	40.1	40.1	40.1
57.5°	23.6	23.6	23.6	26.0	26.0	26.0	23.6	23.6	23.6	23.6	23.6
60°	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9	16.5	16.5	16.5
62.5°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
65°	9.4	9.4	9.4	11.8	11.8	11.8	11.8	9.4	9.4	9.4	9.4
67.5°	7.1	7.1	7.1	9.4	9.4	9.4	9.4	9.4	7.1	7.1	7.1
70°	4.7	4.7	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1
72.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
77.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
82.5°	0.0	0.0	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
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°	3744.6	3744.6	3744.6	3744.6	3744.6	3744.6	3744.6	3744.6
2.5°	3754.1	3742.3	3742.3	3742.3	3737.6	3742.3	3749.4	3737.6
5°	3714.0	3718.7	3697.5	3714.0	3721.0	3709.3	3737.6	3714.0
7.5°	3678.6	3671.5	3638.5	3662.1	3676.2	3680.9	3678.6	3659.7
10°	3607.8	3591.3	3577.1	3577.1	3572.4	3570.0	3596.0	3586.6
12.5°	3480.4	3492.2	3470.9	3482.7	3473.3	3475.7	3478.0	3473.3
15°	3371.8	3360.0	3331.7	3350.6	3338.8	3327.0	3350.6	3315.2
17.5°	3201.9	3199.6	3183.1	3171.3	3176.0	3173.6	3185.4	3168.9
20°	3001.4	3006.1	2996.7	2991.9	2984.9	2968.3	2982.5	2963.6
22.5°	2784.3	2789.0	2798.5	2779.6	2781.9	2758.3	2779.6	2758.3
25°	2564.9	2562.5	2550.7	2541.3	2515.3	2489.4	2484.6	2468.1
27.5°	2324.2	2307.7	2279.3	2248.7	2208.6	2173.2	2170.8	2159.0
30°	2059.9	2024.5	1972.6	1923.1	1861.7	1807.4	1807.4	1788.6
32.5°	1781.5	1701.3	1630.5	1569.1	1488.9	1458.2	1427.5	1411.0
35°	1448.8	1378.0	1293.0	1191.6	1153.8	1078.3	1083.0	1045.3
37.5°	1135.0	1047.7	967.4	884.8	818.8	783.4	764.5	745.6
40°	842.4	757.4	670.1	615.8	556.9	526.2	514.4	509.7
42.5°	575.7	504.9	448.3	403.5	372.8	339.8	330.3	325.6
45°	375.2	335.1	283.1	247.8	226.5	207.6	207.6	200.6
47.5°	224.2	198.2	172.2	148.7	134.5	122.7	118.0	115.6
50°	125.1	110.9	96.7	87.3	77.9	70.8	68.4	68.4
52.5°	68.4	61.3	56.6	49.6	44.8	44.8	44.8	42.5
55°	35.4	35.4	35.4	35.4	33.0	33.0	33.0	30.7
57.5°	23.6	23.6	26.0	26.0	26.0	23.6	23.6	23.6
60°	18.9	18.9	18.9	18.9	18.9	18.9	18.9	18.9
62.5°	14.2	14.2	14.2	14.2	14.2	14.2	14.2	14.2
65°	9.4	11.8	11.8	11.8	11.8	9.4	9.4	9.4
67.5°	7.1	9.4	9.4	9.4	7.1	7.1	7.1	7.1
70°	7.1	7.1	7.1	7.1	7.1	4.7	4.7	4.7
72.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7
75°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
77.5°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
80°	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
82.5°	2.4	2.4	2.4	2.4	2.4	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)