

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: P209355

Luminaire Tested: **LDSQ6B40D010 EU6B30508027 6LBSQ1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209355  
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 EU6B30508027 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 2700 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3941.5 lumens  
Efficiency: N/A  
Efficacy: 91.6 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

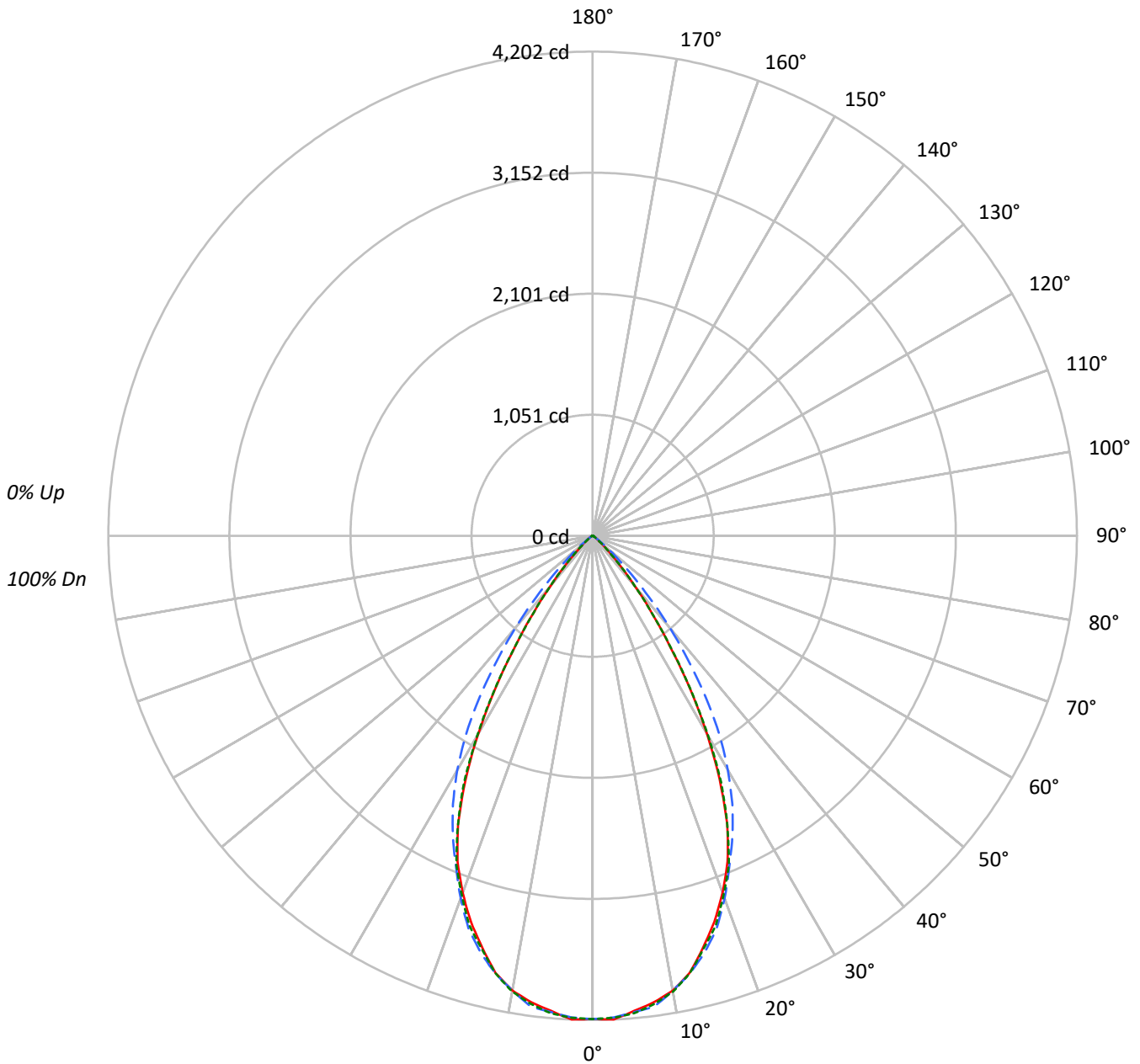
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	392.7	10.0
10°-20°	1044.5	26.5
20°-30°	1282.0	32.5
30°-40°	885.0	22.5
40°-50°	276.7	7.0
50°-60°	43.2	1.1
60°-70°	12.5	0.3
70°-80°	4.1	0.1
80°-90°	0.9	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°	2719.2	69.0
0°-40°	3604.1	91.4
0°-60°	3924.0	99.6
0°-90°	3941.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3941.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4194	4194	4194	4194	4194	
5°	4139	4155	4149	4151	4160	391
15°	3700	3753	3748	3742	3713	1035
25°	2762	2833	2870	2852	2764	1238
35°	1166	1378	1710	1392	1171	745
45°	219	300	481	297	225	196
55°	37	40	45	40	34	36
65°	11	13	11	13	11	12
75°	3	3	3	3	3	4
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°	4194.4	4194.4	4194.4	4194.4	4194.4	4194.4	4194.4	4194.4	4194.4	4194.4	4194.4
2.5°	4202.3	4144.1	4181.1	4173.2	4194.4	4207.6	4194.4	4218.1	4202.3	4183.8	4189.1
5°	4138.9	4146.8	4144.1	4149.4	4154.7	4154.7	4181.1	4183.8	4189.1	4149.4	4160.0
7.5°	4083.4	4083.4	4096.6	4091.3	4109.8	4104.5	4107.1	4128.3	4130.9	4120.4	4112.4
10°	4006.7	3996.1	3982.9	3982.9	4006.7	4009.4	4030.5	4033.1	4049.0	4006.7	4012.0
12.5°	3887.8	3882.5	3861.3	3871.9	3890.4	3879.8	3914.2	3916.8	3911.6	3893.1	3903.6
15°	3700.1	3721.3	3716.0	3713.3	3755.6	3750.3	3747.7	3755.6	3758.3	3747.7	3739.8
17.5°	3512.5	3531.0	3533.6	3538.9	3546.8	3554.8	3565.3	3594.4	3583.8	3575.9	3602.3
20°	3295.8	3287.8	3309.0	3330.1	3338.0	3338.0	3353.9	3375.0	3359.2	3348.6	3351.3
22.5°	3060.5	3073.7	3063.2	3084.3	3094.9	3108.1	3124.0	3142.5	3129.3	3100.2	3134.5
25°	2761.9	2769.8	2804.2	2801.5	2817.4	2849.1	2872.9	2872.9	2872.9	2870.2	2870.2
27.5°	2386.6	2381.3	2423.6	2452.7	2492.3	2542.5	2574.2	2624.4	2632.4	2624.4	2605.9
30°	1984.9	1979.6	2032.4	2069.4	2140.8	2164.6	2251.8	2299.4	2349.6	2346.9	2333.7
32.5°	1567.3	1577.8	1620.1	1673.0	1731.1	1805.1	1887.1	1992.8	2037.7	2048.3	2024.5
35°	1165.5	1181.4	1221.0	1266.0	1337.3	1419.3	1532.9	1633.3	1710.0	1710.0	1691.5
37.5°	840.5	845.7	882.7	911.8	985.8	1059.8	1157.6	1295.0	1342.6	1361.1	1342.6
40°	573.5	573.5	594.7	626.4	687.2	750.6	840.5	943.5	1012.2	1041.3	1009.6
42.5°	364.7	370.0	385.9	407.0	451.9	507.4	576.2	652.8	703.0	724.2	695.1
45°	219.4	224.7	237.9	253.7	282.8	317.2	364.7	420.2	462.5	481.0	467.8
47.5°	132.1	137.4	142.7	153.3	174.4	198.2	222.0	253.7	280.2	282.8	277.5
50°	76.6	76.6	81.9	89.9	100.4	113.6	126.9	145.4	153.3	163.9	153.3
52.5°	50.2	50.2	50.2	52.9	58.1	63.4	68.7	79.3	84.6	84.6	81.9
55°	37.0	37.0	37.0	37.0	39.6	39.6	39.6	42.3	44.9	44.9	44.9
57.5°	26.4	26.4	26.4	29.1	29.1	29.1	26.4	26.4	26.4	26.4	26.4
60°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1	18.5	18.5	18.5
62.5°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
65°	10.6	10.6	10.6	13.2	13.2	13.2	13.2	10.6	10.6	10.6	10.6
67.5°	7.9	7.9	7.9	10.6	10.6	10.6	10.6	10.6	7.9	7.9	7.9
70°	5.3	5.3	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9	7.9
72.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
75°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
77.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
80°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	0.0	0.0	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
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°	4194.4	4194.4	4194.4	4194.4	4194.4	4194.4	4194.4	4194.4
2.5°	4204.9	4191.7	4191.7	4191.7	4186.4	4191.7	4199.6	4186.4
5°	4160.0	4165.3	4141.5	4160.0	4167.9	4154.7	4186.4	4160.0
7.5°	4120.4	4112.4	4075.4	4101.9	4117.7	4123.0	4120.4	4099.2
10°	4041.1	4022.6	4006.7	4006.7	4001.4	3998.8	4027.9	4017.3
12.5°	3898.3	3911.6	3887.8	3901.0	3890.4	3893.1	3895.7	3890.4
15°	3776.8	3763.6	3731.8	3753.0	3739.8	3726.6	3753.0	3713.3
17.5°	3586.5	3583.8	3565.3	3552.1	3557.4	3554.8	3568.0	3549.5
20°	3361.8	3367.1	3356.5	3351.3	3343.3	3324.8	3340.7	3319.5
22.5°	3118.7	3124.0	3134.5	3113.4	3116.0	3089.6	3113.4	3089.6
25°	2872.9	2870.2	2857.0	2846.5	2817.4	2788.3	2783.0	2764.5
27.5°	2603.3	2584.8	2553.1	2518.7	2473.8	2434.2	2431.5	2418.3
30°	2307.3	2267.6	2209.5	2154.0	2085.3	2024.5	2024.5	2003.4
32.5°	1995.4	1905.6	1826.3	1757.6	1667.7	1633.3	1599.0	1580.5
35°	1622.8	1543.5	1448.3	1334.7	1292.4	1207.8	1213.1	1170.8
37.5°	1271.3	1173.5	1083.6	991.1	917.1	877.5	856.3	835.2
40°	943.5	848.4	750.6	689.8	623.7	589.4	576.2	570.9
42.5°	644.9	565.6	502.2	451.9	417.6	380.6	370.0	364.7
45°	420.2	375.3	317.2	277.5	253.7	232.6	232.6	224.7
47.5°	251.1	222.0	192.9	166.5	150.6	137.4	132.1	129.5
50°	140.1	124.2	108.4	97.8	87.2	79.3	76.6	76.6
52.5°	76.6	68.7	63.4	55.5	50.2	50.2	50.2	47.6
55°	39.6	39.6	39.6	39.6	37.0	37.0	37.0	34.4
57.5°	26.4	26.4	29.1	29.1	29.1	26.4	26.4	26.4
60°	21.1	21.1	21.1	21.1	21.1	21.1	21.1	21.1
62.5°	15.9	15.9	15.9	15.9	15.9	15.9	15.9	15.9
65°	10.6	13.2	13.2	13.2	13.2	10.6	10.6	10.6
67.5°	7.9	10.6	10.6	10.6	7.9	7.9	7.9	7.9
70°	7.9	7.9	7.9	7.9	7.9	5.3	5.3	5.3
72.5°	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
75°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
77.5°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
80°	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6
82.5°	2.6	2.6	2.6	2.6	2.6	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)