

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: P209360

Luminaire Tested: **LDSQ6B40D010 EU6B30509027 6LBSQ1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209360  
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 EU6B30509027 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: 3384.5 lumens  
Efficiency: N/A  
Efficacy: 78.7 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

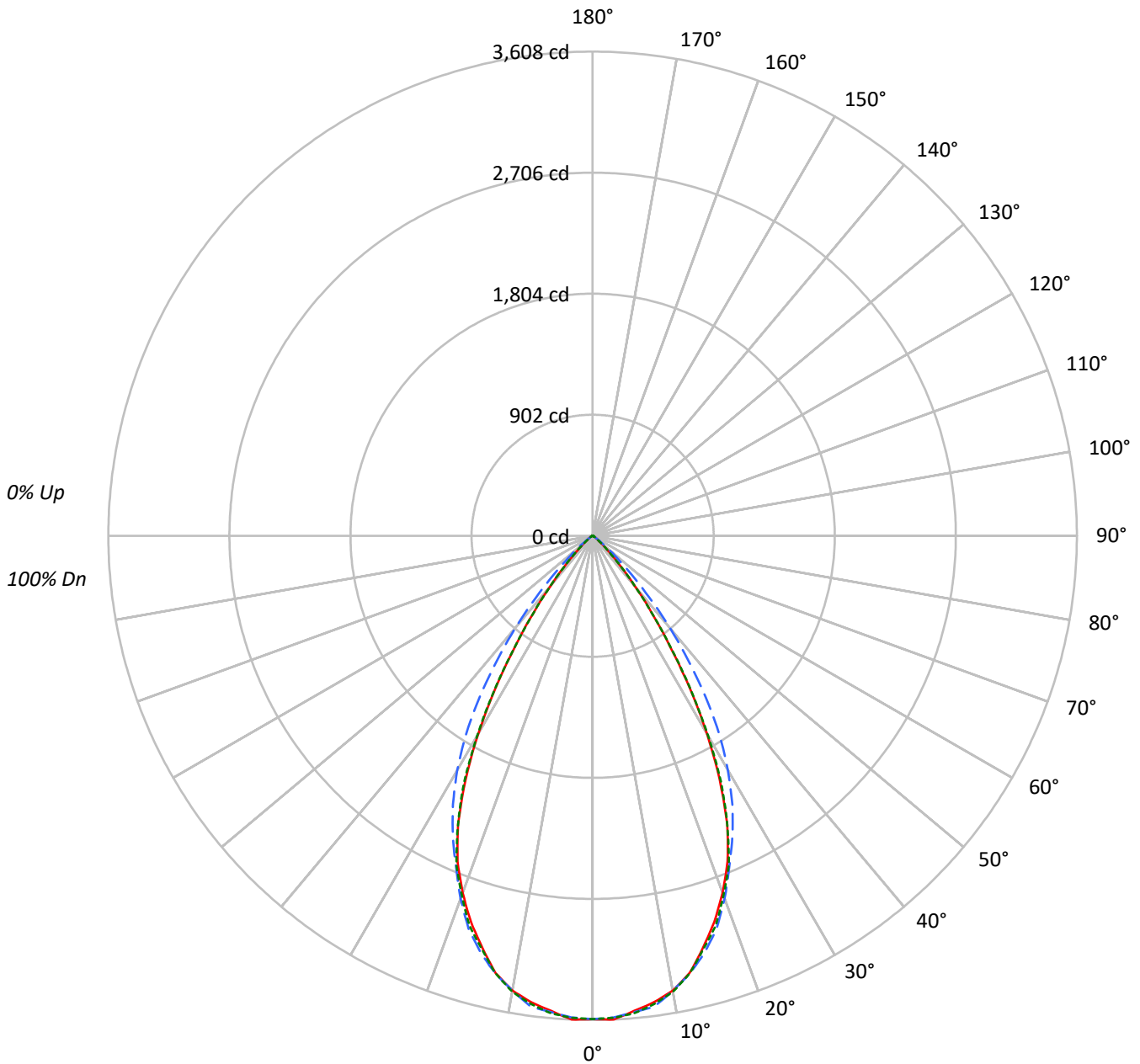
Input Watts (W): 43.02  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P209360

CATALOG NUMBER: LDSQ6B40D010 EU6B30509027 6LBSQ1LI

### Luminous Intensity Polar Plot





TEST NUMBER: P209360

CATALOG NUMBER: LDSQ6B40D010 EU6B30509027 6LBSQ1LI

**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°			



TEST NUMBER: P209360

CATALOG NUMBER: LDSQ6B40D010 EU6B30509027 6LBSQ1LI

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	337.2	10.0
10°-20°	896.9	26.5
20°-30°	1100.8	32.5
30°-40°	759.9	22.5
40°-50°	237.6	7.0
50°-60°	37.1	1.1
60°-70°	10.7	0.3
70°-80°	3.5	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°	2334.9	69.0
0°-40°	3094.7	91.4
0°-60°	3369.4	99.6
0°-90°	3384.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3384.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3602	3602	3602	3602	3602	
5°	3554	3568	3563	3564	3572	336
15°	3177	3223	3218	3214	3188	889
25°	2372	2433	2465	2449	2374	1063
35°	1001	1184	1468	1195	1005	639
45°	188	258	413	255	193	169
55°	32	34	39	34	30	31
65°	9	11	9	11	9	10
75°	2	2	2	2	2	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P209360

CATALOG NUMBER: LDSQ6B40D010 EU6B30509027 6LBSQ1LI

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	3601.6	3601.6	3601.6	3601.6	3601.6	3601.6	3601.6	3601.6	3601.6	3601.6	3601.6
2.5°	3608.4	3558.4	3590.2	3583.4	3601.6	3612.9	3601.6	3622.0	3608.4	3592.5	3597.0
5°	3553.9	3560.7	3558.4	3563.0	3567.5	3567.5	3590.2	3592.5	3597.0	3563.0	3572.1
7.5°	3506.2	3506.2	3517.6	3513.0	3528.9	3524.4	3526.7	3544.8	3547.1	3538.0	3531.2
10°	3440.4	3431.3	3420.0	3420.0	3440.4	3442.7	3460.8	3463.1	3476.7	3440.4	3445.0
12.5°	3338.3	3333.8	3315.6	3324.7	3340.6	3331.5	3361.0	3363.3	3358.7	3342.8	3351.9
15°	3177.2	3195.3	3190.8	3188.5	3224.8	3220.3	3218.0	3224.8	3227.1	3218.0	3211.2
17.5°	3016.0	3031.9	3034.2	3038.7	3045.5	3052.4	3061.4	3086.4	3077.3	3070.5	3093.2
20°	2830.0	2823.1	2841.3	2859.5	2866.3	2866.3	2879.9	2898.0	2884.4	2875.3	2877.6
22.5°	2628.0	2639.3	2630.2	2648.4	2657.5	2668.8	2682.4	2698.3	2687.0	2662.0	2691.5
25°	2371.5	2378.3	2407.8	2405.6	2419.2	2446.4	2466.8	2466.8	2466.8	2464.6	2464.6
27.5°	2049.3	2044.7	2081.0	2106.0	2140.1	2183.2	2210.4	2253.5	2260.3	2253.5	2237.6
30°	1704.3	1699.8	1745.2	1776.9	1838.2	1858.6	1933.5	1974.4	2017.5	2015.2	2003.9
32.5°	1345.8	1354.8	1391.1	1436.5	1486.5	1550.0	1620.4	1711.1	1749.7	1758.8	1738.4
35°	1000.8	1014.4	1048.5	1087.0	1148.3	1218.7	1316.3	1402.5	1468.3	1468.3	1452.4
37.5°	721.7	726.2	758.0	782.9	846.5	910.0	994.0	1112.0	1152.9	1168.7	1152.9
40°	492.5	492.5	510.6	537.9	590.0	644.5	721.7	810.2	869.2	894.1	866.9
42.5°	313.2	317.7	331.3	349.5	388.1	435.7	494.7	560.5	603.7	621.8	596.9
45°	188.4	192.9	204.2	217.9	242.8	272.3	313.2	360.8	397.1	413.0	401.7
47.5°	113.5	118.0	122.5	131.6	149.8	170.2	190.6	217.9	240.6	242.8	238.3
50°	65.8	65.8	70.4	77.2	86.2	97.6	108.9	124.8	131.6	140.7	131.6
52.5°	43.1	43.1	43.1	45.4	49.9	54.5	59.0	68.1	72.6	72.6	70.4
55°	31.8	31.8	31.8	31.8	34.0	34.0	34.0	36.3	38.6	38.6	38.6
57.5°	22.7	22.7	22.7	25.0	25.0	25.0	22.7	22.7	22.7	22.7	22.7
60°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2	15.9	15.9	15.9
62.5°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
65°	9.1	9.1	9.1	11.3	11.3	11.3	11.3	9.1	9.1	9.1	9.1
67.5°	6.8	6.8	6.8	9.1	9.1	9.1	9.1	9.1	6.8	6.8	6.8
70°	4.5	4.5	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
72.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
75°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
77.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
82.5°	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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



TEST NUMBER: P209360

CATALOG NUMBER: LDSQ6B40D010 EU6B30509027 6LBSQ1LI

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	3601.6	3601.6	3601.6	3601.6	3601.6	3601.6	3601.6	3601.6
2.5°	3610.6	3599.3	3599.3	3599.3	3594.7	3599.3	3606.1	3594.7
5°	3572.1	3576.6	3556.2	3572.1	3578.9	3567.5	3594.7	3572.1
7.5°	3538.0	3531.2	3499.4	3522.1	3535.7	3540.3	3538.0	3519.9
10°	3469.9	3454.0	3440.4	3440.4	3435.9	3433.6	3458.6	3449.5
12.5°	3347.4	3358.7	3338.3	3349.6	3340.6	3342.8	3345.1	3340.6
15°	3243.0	3231.6	3204.4	3222.6	3211.2	3199.9	3222.6	3188.5
17.5°	3079.6	3077.3	3061.4	3050.1	3054.6	3052.4	3063.7	3047.8
20°	2886.7	2891.2	2882.1	2877.6	2870.8	2854.9	2868.5	2850.4
22.5°	2677.9	2682.4	2691.5	2673.4	2675.6	2652.9	2673.4	2652.9
25°	2466.8	2464.6	2453.2	2444.2	2419.2	2394.2	2389.7	2373.8
27.5°	2235.4	2219.5	2192.2	2162.7	2124.2	2090.1	2087.9	2076.5
30°	1981.2	1947.2	1897.2	1849.6	1790.6	1738.4	1738.4	1720.2
32.5°	1713.4	1636.2	1568.2	1509.2	1432.0	1402.5	1373.0	1357.1
35°	1393.4	1325.3	1243.6	1146.1	1109.7	1037.1	1041.7	1005.3
37.5°	1091.6	1007.6	930.5	851.0	787.5	753.4	735.3	717.1
40°	810.2	728.5	644.5	592.3	535.6	506.1	494.7	490.2
42.5°	553.7	485.7	431.2	388.1	358.6	326.8	317.7	313.2
45°	360.8	322.3	272.3	238.3	217.9	199.7	199.7	192.9
47.5°	215.6	190.6	165.7	143.0	129.4	118.0	113.5	111.2
50°	120.3	106.7	93.0	84.0	74.9	68.1	65.8	65.8
52.5°	65.8	59.0	54.5	47.7	43.1	43.1	43.1	40.8
55°	34.0	34.0	34.0	34.0	31.8	31.8	31.8	29.5
57.5°	22.7	22.7	25.0	25.0	25.0	22.7	22.7	22.7
60°	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
62.5°	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
65°	9.1	11.3	11.3	11.3	11.3	9.1	9.1	9.1
67.5°	6.8	9.1	9.1	9.1	6.8	6.8	6.8	6.8
70°	6.8	6.8	6.8	6.8	6.8	4.5	4.5	4.5
72.5°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
75°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
77.5°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
80°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
82.5°	2.3	2.3	2.3	2.3	2.3	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)