

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: P209387

Luminaire Tested: **LDSQ6B60D010 EU6B60709030 6LBSQ1LI**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P209387  
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: LDSQ6B60D010 EU6B60709030 6LBSQ1LI  
Description: PORTFOLIO LD6 SERIES 6" RECESSED FIXTURE WITH A SQUARE LOW  
IRIDESCENT TRIM.  
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR TRIM  
D010TE  
Light Source: HIGH LUMEN LED 3000 K  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5080.6 lumens  
Efficiency: N/A  
Efficacy: 81.3 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

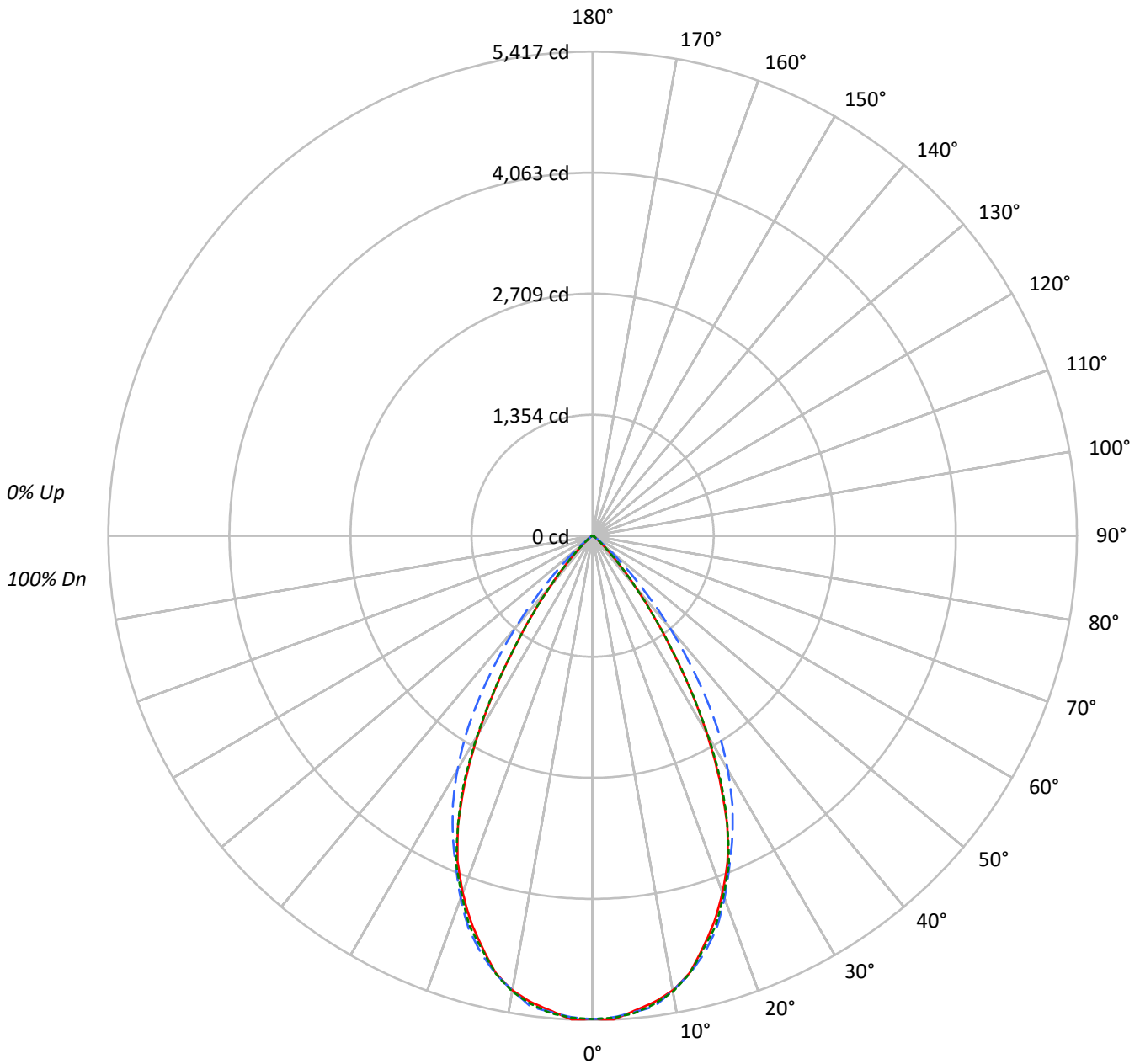
Input Watts (W): 62.48  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	506.1	10.0
10°-20°	1346.4	26.5
20°-30°	1652.4	32.5
30°-40°	1140.7	22.5
40°-50°	356.6	7.0
50°-60°	55.7	1.1
60°-70°	16.1	0.3
70°-80°	5.3	0.1
80°-90°	1.2	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°	3505.0	69.0
0°-40°	4645.7	91.4
0°-60°	5058.0	99.6
0°-90°	5080.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5080.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5406	5406	5406	5406	5406	
5°	5335	5355	5348	5350	5362	504
15°	4769	4838	4831	4824	4786	1334
25°	3560	3652	3700	3676	3563	1595
35°	1502	1777	2204	1794	1509	960
45°	283	387	620	383	290	253
55°	48	51	58	51	44	46
65°	14	17	14	17	14	15
75°	3	3	3	3	3	5
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°	5406.5	5406.5	5406.5	5406.5	5406.5	5406.5	5406.5	5406.5	5406.5	5406.5	5406.5
2.5°	5416.7	5341.7	5389.4	5379.2	5406.5	5423.5	5406.5	5437.1	5416.7	5392.8	5399.6
5°	5334.9	5345.1	5341.7	5348.5	5355.4	5355.4	5389.4	5392.8	5399.6	5348.5	5362.2
7.5°	5263.4	5263.4	5280.4	5273.6	5297.4	5290.6	5294.0	5321.3	5324.7	5311.1	5300.9
10°	5164.6	5151.0	5133.9	5133.9	5164.6	5168.0	5195.2	5198.7	5219.1	5164.6	5171.4
12.5°	5011.3	5004.5	4977.2	4990.8	5014.7	5001.1	5045.3	5048.8	5041.9	5018.1	5031.7
15°	4769.4	4796.7	4789.8	4786.4	4840.9	4834.1	4830.7	4840.9	4844.4	4830.7	4820.5
17.5°	4527.5	4551.4	4554.8	4561.6	4571.8	4582.0	4595.7	4633.1	4619.5	4609.3	4643.4
20°	4248.2	4238.0	4265.2	4292.5	4302.7	4302.7	4323.1	4350.4	4329.9	4316.3	4319.7
22.5°	3945.0	3962.0	3948.4	3975.6	3989.3	4006.3	4026.7	4050.6	4033.6	3996.1	4040.4
25°	3560.0	3570.2	3614.5	3611.1	3631.6	3672.4	3703.1	3703.1	3703.1	3699.7	3699.7
27.5°	3076.3	3069.5	3124.0	3161.4	3212.5	3277.3	3318.1	3382.9	3393.1	3382.9	3359.0
30°	2558.4	2551.6	2619.8	2667.5	2759.4	2790.1	2902.5	2963.8	3028.6	3025.2	3008.1
32.5°	2020.2	2033.8	2088.3	2156.5	2231.4	2326.8	2432.4	2568.7	2626.6	2640.2	2609.5
35°	1502.4	1522.8	1573.9	1631.8	1723.8	1829.4	1975.9	2105.4	2204.1	2204.1	2180.3
37.5°	1083.3	1090.1	1137.8	1175.3	1270.7	1366.1	1492.1	1669.3	1730.6	1754.5	1730.6
40°	739.3	739.3	766.5	807.4	885.7	967.5	1083.3	1216.2	1304.8	1342.2	1301.4
42.5°	470.1	476.9	497.4	524.6	582.5	654.1	742.7	841.5	906.2	933.4	896.0
45°	282.8	289.6	306.6	327.0	364.5	408.8	470.1	541.7	596.2	620.0	603.0
47.5°	170.3	177.1	184.0	197.6	224.8	255.5	286.2	327.0	361.1	364.5	357.7
50°	98.8	98.8	105.6	115.8	129.5	146.5	163.5	187.4	197.6	211.2	197.6
52.5°	64.7	64.7	64.7	68.1	74.9	81.8	88.6	102.2	109.0	109.0	105.6
55°	47.7	47.7	47.7	47.7	51.1	51.1	51.1	54.5	57.9	57.9	57.9
57.5°	34.1	34.1	34.1	37.5	37.5	37.5	34.1	34.1	34.1	34.1	34.1
60°	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3	23.8	23.8	23.8
62.5°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
65°	13.6	13.6	13.6	17.0	17.0	17.0	17.0	13.6	13.6	13.6	13.6
67.5°	10.2	10.2	10.2	13.6	13.6	13.6	13.6	13.6	10.2	10.2	10.2
70°	6.8	6.8	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2
72.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
75°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
80°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	0.0	0.0	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
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°	5406.5	5406.5	5406.5	5406.5	5406.5	5406.5	5406.5	5406.5
2.5°	5420.1	5403.1	5403.1	5403.1	5396.2	5403.1	5413.3	5396.2
5°	5362.2	5369.0	5338.3	5362.2	5372.4	5355.4	5396.2	5362.2
7.5°	5311.1	5300.9	5253.2	5287.2	5307.7	5314.5	5311.1	5283.8
10°	5208.9	5185.0	5164.6	5164.6	5157.8	5154.4	5191.8	5178.2
12.5°	5024.9	5041.9	5011.3	5028.3	5014.7	5018.1	5021.5	5014.7
15°	4868.2	4851.2	4810.3	4837.5	4820.5	4803.5	4837.5	4786.4
17.5°	4622.9	4619.5	4595.7	4578.6	4585.4	4582.0	4599.1	4575.2
20°	4333.3	4340.2	4326.5	4319.7	4309.5	4285.7	4306.1	4278.8
22.5°	4019.9	4026.7	4040.4	4013.1	4016.5	3982.5	4013.1	3982.5
25°	3703.1	3699.7	3682.7	3669.0	3631.6	3594.1	3587.3	3563.4
27.5°	3355.6	3331.8	3290.9	3246.6	3188.7	3137.6	3134.2	3117.1
30°	2974.1	2923.0	2848.0	2776.5	2687.9	2609.5	2609.5	2582.3
32.5°	2572.1	2456.2	2354.0	2265.5	2149.6	2105.4	2061.1	2037.2
35°	2091.7	1989.5	1866.9	1720.4	1665.9	1556.9	1563.7	1509.2
37.5°	1638.6	1512.6	1396.8	1277.5	1182.1	1131.0	1103.8	1076.5
40°	1216.2	1093.6	967.5	889.2	804.0	759.7	742.7	735.9
42.5°	831.2	729.0	647.3	582.5	538.3	490.6	476.9	470.1
45°	541.7	483.8	408.8	357.7	327.0	299.8	299.8	289.6
47.5°	323.6	286.2	248.7	214.6	194.2	177.1	170.3	166.9
50°	180.6	160.1	139.7	126.0	112.4	102.2	98.8	98.8
52.5°	98.8	88.6	81.8	71.5	64.7	64.7	64.7	61.3
55°	51.1	51.1	51.1	51.1	47.7	47.7	47.7	44.3
57.5°	34.1	34.1	37.5	37.5	37.5	34.1	34.1	34.1
60°	27.3	27.3	27.3	27.3	27.3	27.3	27.3	27.3
62.5°	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4
65°	13.6	17.0	17.0	17.0	17.0	13.6	13.6	13.6
67.5°	10.2	13.6	13.6	13.6	10.2	10.2	10.2	10.2
70°	10.2	10.2	10.2	10.2	10.2	6.8	6.8	6.8
72.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
75°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
77.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
80°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
82.5°	3.4	3.4	3.4	3.4	3.4	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



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









(END OF REPORT)