

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: P211160

Luminaire Tested: **LSR4B15D010BZ EC4B10209727 4LBNGPH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211160  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: io LED  
Catalog Number: LSR4B15D010BZ EC4B10209727 4LBNGPH1  
Description: PORTFOLIO 4 INCH CYLINDER  
NARROW DISTRIBUTION WITH GRAPHITE HAZE TRIM  
WATTAGE D010TR-14.39W DE010-14.29W D5LT-14.34W DMX-14.46W DL2-15.8W  
DL3-15.28W DLE-15.432W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 500.1 lumens  
Efficiency: N/A  
Efficacy: 35.0 lumens/watt  
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.88  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

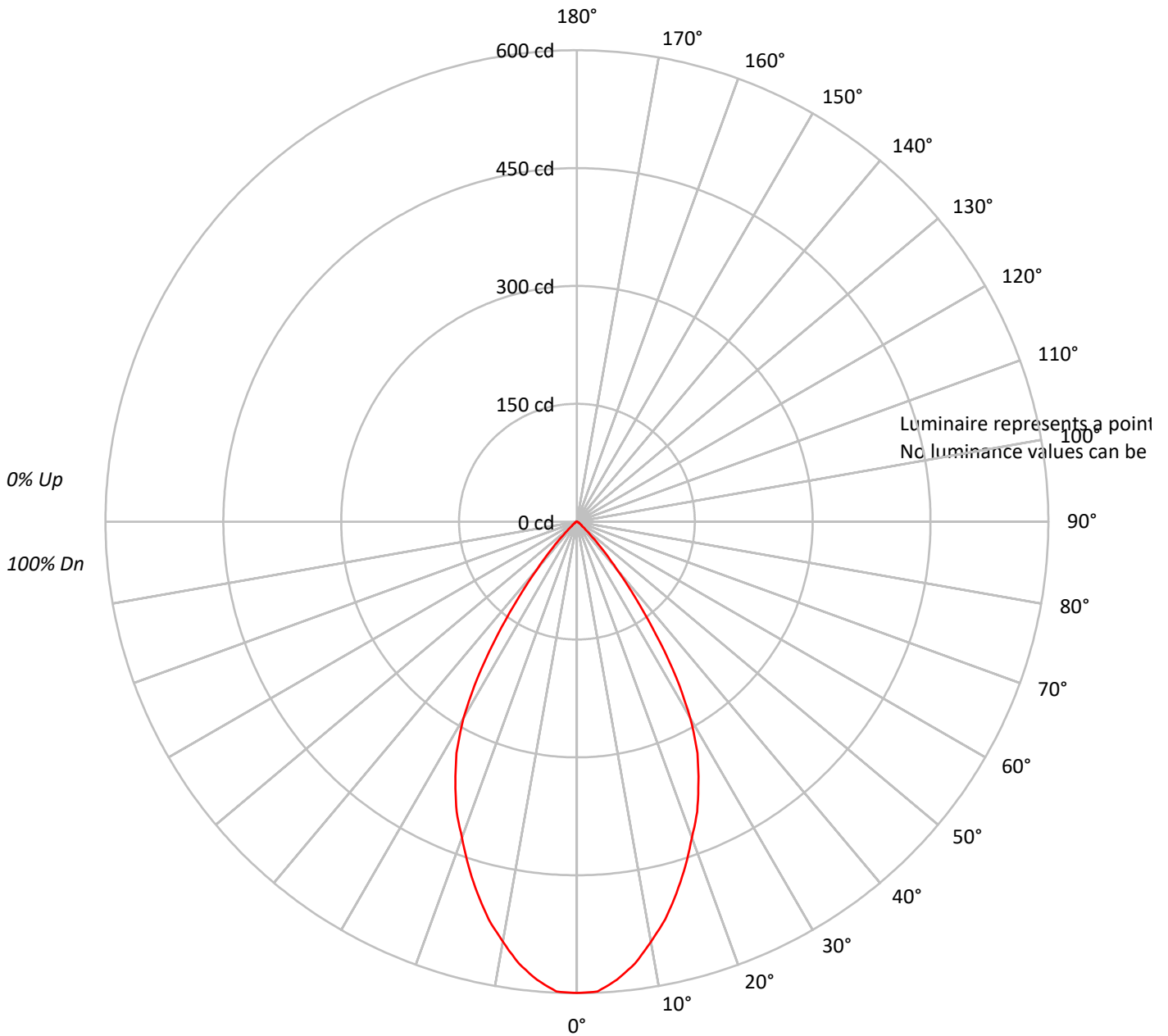
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									20									
RC	80									70									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	50	30	10	0																			
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100	100	100																			
	1	114	111	108	106	111	109	106	104	105	103	101	101	100	98	97	96	95	94	94	94	94	94	94	94	94	94																			
	2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	93	91	89	87	87	87	87	87	87	87	87	87																			
	3	103	96	91	87	101	95	90	87	92	88	85	90	87	84	88	85	83	81	81	81	81	81	81	81	81	81																			
	4	97	90	84	80	96	89	84	80	87	82	79	85	81	78	83	80	77	76	76	76	76	76	76	76	76	76																			
	5	93	84	78	74	91	83	78	74	82	77	73	80	76	73	78	75	72	70	70	70	70	70	70	70	70	70																			
	6	88	79	73	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66	66	66	66	66	66	66	66	66																			
	7	84	74	68	64	82	74	68	64	72	67	64	71	67	63	70	66	63	62	62	62	62	62	62	62	62	62																			
	8	80	70	64	60	78	70	64	60	68	63	60	67	63	59	66	62	59	58	58	58	58	58	58	58	58	58																			
	9	76	66	60	56	75	66	60	56	65	60	56	64	59	56	63	59	56	54	54	54	54	54	54	54	54	54																			
	10	72	63	57	53	71	62	57	53	61	56	53	61	56	53	60	56	52	51	51	51	51	51	51	51	51	51																			

**AVERAGE LUMINANCE (cd/sqm):**





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.5	10.9
10°-20°	136.7	27.3
20°-30°	166.6	33.3
30°-40°	109.9	22.0
40°-50°	25.3	5.1
50°-60°	4.8	1.0
60°-70°	1.8	0.4
70°-80°	0.5	0.1
80°-90°	0.0	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°	357.8	71.5
0°-40°	467.7	93.5
0°-60°	497.9	99.6
0°-90°	500.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	500.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	600	
5°	585	55
15°	490	137
25°	366	167
35°	176	110
45°	28	25
55°	5	5
65°	1	2
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	599.8
2.5°	598.6
5°	585.2
7.5°	567.1
10°	542.8
12.5°	518.6
15°	489.5
17.5°	459.2
20°	427.7
22.5°	399.8
25°	365.9
27.5°	332.0
30°	288.4
32.5°	235.1
35°	175.7
37.5°	122.4
40°	78.8
42.5°	48.5
45°	27.9
47.5°	14.5
50°	8.5
52.5°	7.3
55°	4.8
57.5°	3.6
60°	3.6
62.5°	2.4
65°	1.2
67.5°	1.2
70°	1.2
72.5°	1.2
75°	0.0
77.5°	0.0
80°	0.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)