

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: P211180

Luminaire Tested: **LSR4B15D010BZ EC4B10208030 4LBCSMMS1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211180  
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 EC4B10208030 4LBCSMMS1  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH CAST MATTE BLACK 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: 1318.1 lumens  
Efficiency: N/A  
Efficacy: 92.2 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.27  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

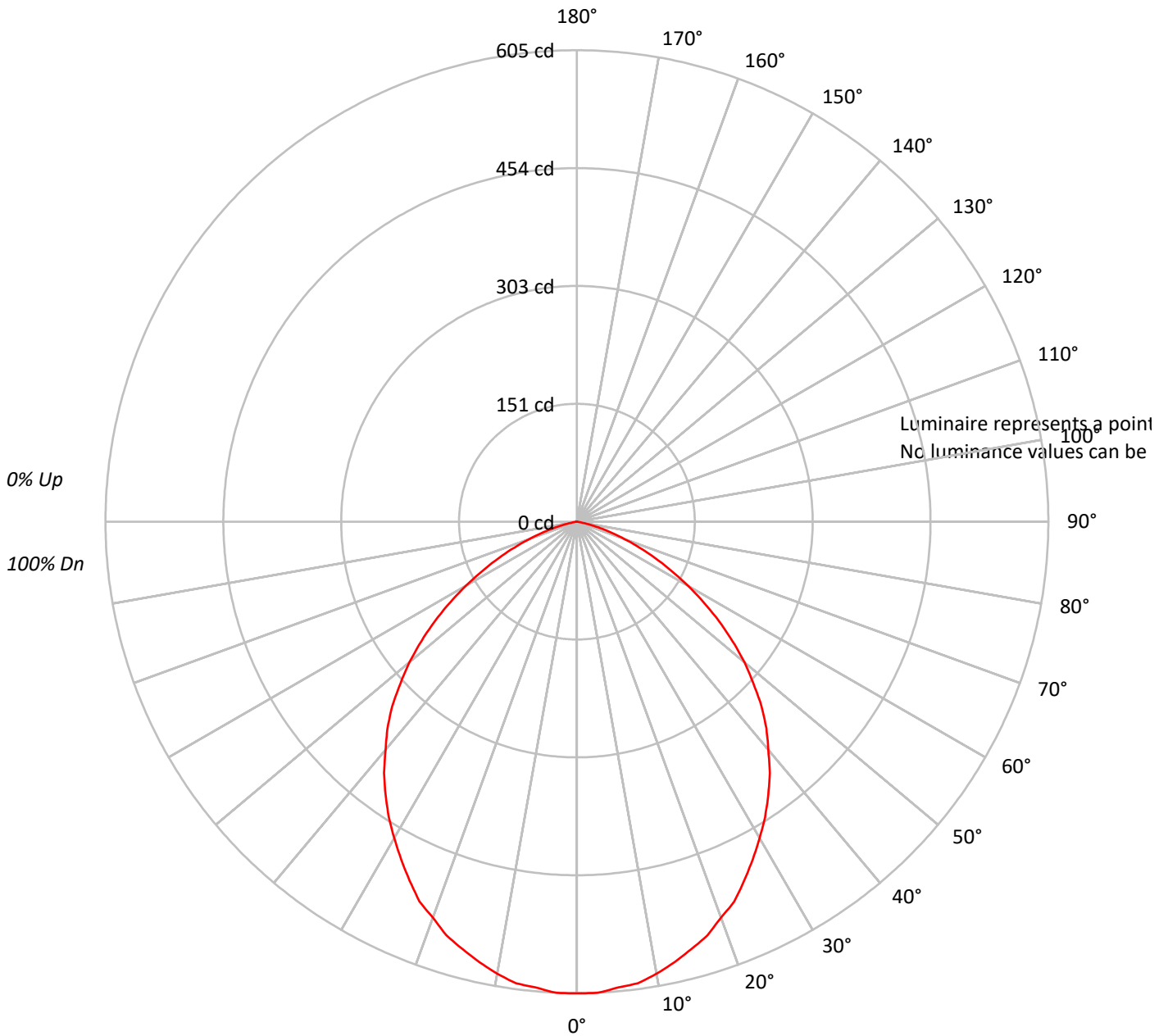
Input Watts (W): 14.3  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	103	100	108	105	101	98	100	98	95	97	94	92	93	91	90	88
2	102	95	89	84	99	93	88	83	90	85	81	86	83	79	83	80	78	76
3	94	85	77	72	92	83	76	71	80	74	70	77	73	69	75	71	67	65
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	40
8	64	52	44	38	63	51	43	38	50	43	38	48	42	38	47	42	37	36
9	60	48	40	35	59	47	40	34	46	39	34	45	39	34	44	38	34	32
10	57	44	36	31	55	43	36	31	43	36	31	42	35	31	41	35	31	29

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.0	4.3
10°-20°	160.1	12.1
20°-30°	233.8	17.7
30°-40°	267.4	20.3
40°-50°	257.0	19.5
50°-60°	198.4	15.1
60°-70°	110.8	8.4
70°-80°	32.2	2.4
80°-90°	1.4	0.1
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°	450.9	34.2
0°-40°	718.3	54.5
0°-60°	1173.7	89.0
0°-90°	1318.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1318.1	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	605	
5°	600	57
15°	568	160
25°	508	234
35°	428	267
45°	335	257
55°	222	198
65°	111	111
75°	28	32
85°	1	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	605.3
2.5°	605.3
5°	600.2
7.5°	597.6
10°	589.1
12.5°	578.9
15°	567.8
17.5°	556.7
20°	540.5
22.5°	527.7
25°	508.1
27.5°	488.5
30°	468.9
32.5°	449.3
35°	428.0
37.5°	406.7
40°	381.9
42.5°	359.8
45°	335.1
47.5°	306.9
50°	280.5
52.5°	251.5
55°	222.5
57.5°	192.7
60°	164.5
62.5°	136.4
65°	110.8
67.5°	87.0
70°	64.8
72.5°	45.2
75°	28.1
77.5°	14.5
80°	5.1
82.5°	1.7
85°	0.9
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)