

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: P210931

Luminaire Tested: **LSR4B10D010BZ EC4B10209035 4LBNMW1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P210931  
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: LSR4B10D010BZ EC4B10209035 4LBNMW1  
Description: PORTFOLIO 4 INCH CYLINDER  
NARROW DISTRIBUTION WITH MATTE WHITE TRIM  
WATTAGE D010TR-10.05W DE010-10.58W D5LT-10.2W DMX-10.6W DL2-11.8W  
DL3-11.1W DLE-11.39W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

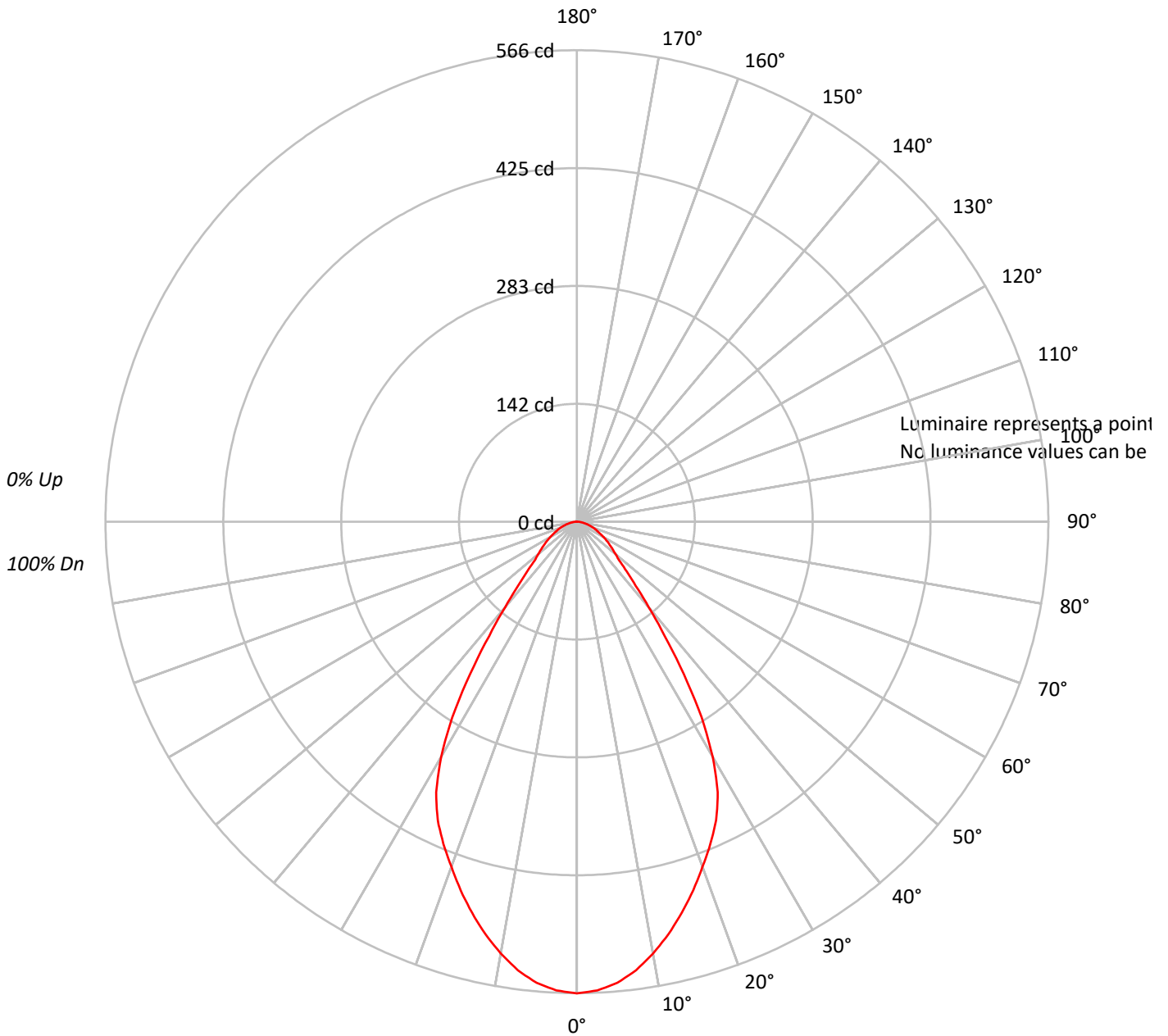
Lumens per Lamp: N/A  
Luminaire Lumens: 664.0 lumens  
Efficiency: N/A  
Efficacy: 67.1 lumens/watt  
Spacing Criteria (0/90/45): 0.96 / 0.96 / 0.95  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

Input Watts (W): 9.9  
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	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90																			
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	85	83	81																			
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73																			
4	92	83	76	71	90	82	76	71	80	74	70	78	73	69	76	72	68	67																			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61																			
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56																			
7	77	66	59	54	75	65	59	54	64	58	54	63	57	53	62	57	53	52																			
8	73	62	55	50	71	61	55	50	60	54	50	59	53	49	58	53	49	48																			
9	69	58	51	46	68	57	51	46	56	50	46	55	50	46	54	49	46	44																			
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41																			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	52.1	7.8
10°-20°	136.3	20.5
20°-30°	179.4	27.0
30°-40°	139.7	21.0
40°-50°	67.9	10.2
50°-60°	42.9	6.5
60°-70°	27.6	4.2
70°-80°	14.4	2.2
80°-90°	3.6	0.5
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°	367.9	55.4
0°-40°	507.6	76.4
0°-60°	618.3	93.1
0°-90°	664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	664.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	566	
5°	556	52
15°	486	136
25°	396	179
35°	224	140
45°	84	68
55°	48	43
65°	27	28
75°	14	14
85°	3	4
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	566.4
2.5°	563.3
5°	555.9
7.5°	543.2
10°	526.3
12.5°	507.4
15°	486.3
17.5°	464.1
20°	440.9
22.5°	418.8
25°	395.5
27.5°	366.0
30°	325.9
32.5°	278.5
35°	223.6
37.5°	173.0
40°	134.0
42.5°	104.4
45°	84.4
47.5°	68.6
50°	60.1
52.5°	53.8
55°	47.5
57.5°	42.2
60°	36.9
62.5°	31.6
65°	27.4
67.5°	24.3
70°	20.0
72.5°	16.9
75°	13.7
77.5°	10.5
80°	7.4
82.5°	5.3
85°	3.2
87.5°	1.1
90°	0.0



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— 0°-180°







(END OF REPORT)