

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: P211696

Luminaire Tested: **LSR4B20D010BZ EC4B10209035 4LBWGPH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211696  
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: LSR4B20D010BZ EC4B10209035 4LBWGPH1  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE DISTRIBUTIONWITH GRAPHITE HAZE TRIM  
WATTAGE D010TR-21.86W DE010-20.46W D5LT-21.24W DMX-20.89W DL2-22.5W  
DL3-21.8 6W DLE-22.46W  
Light Source: HIGH LUMEN LED  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1148.2 lumens  
Efficiency: N/A  
Efficacy: 55.2 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 1.12 / 1.08  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

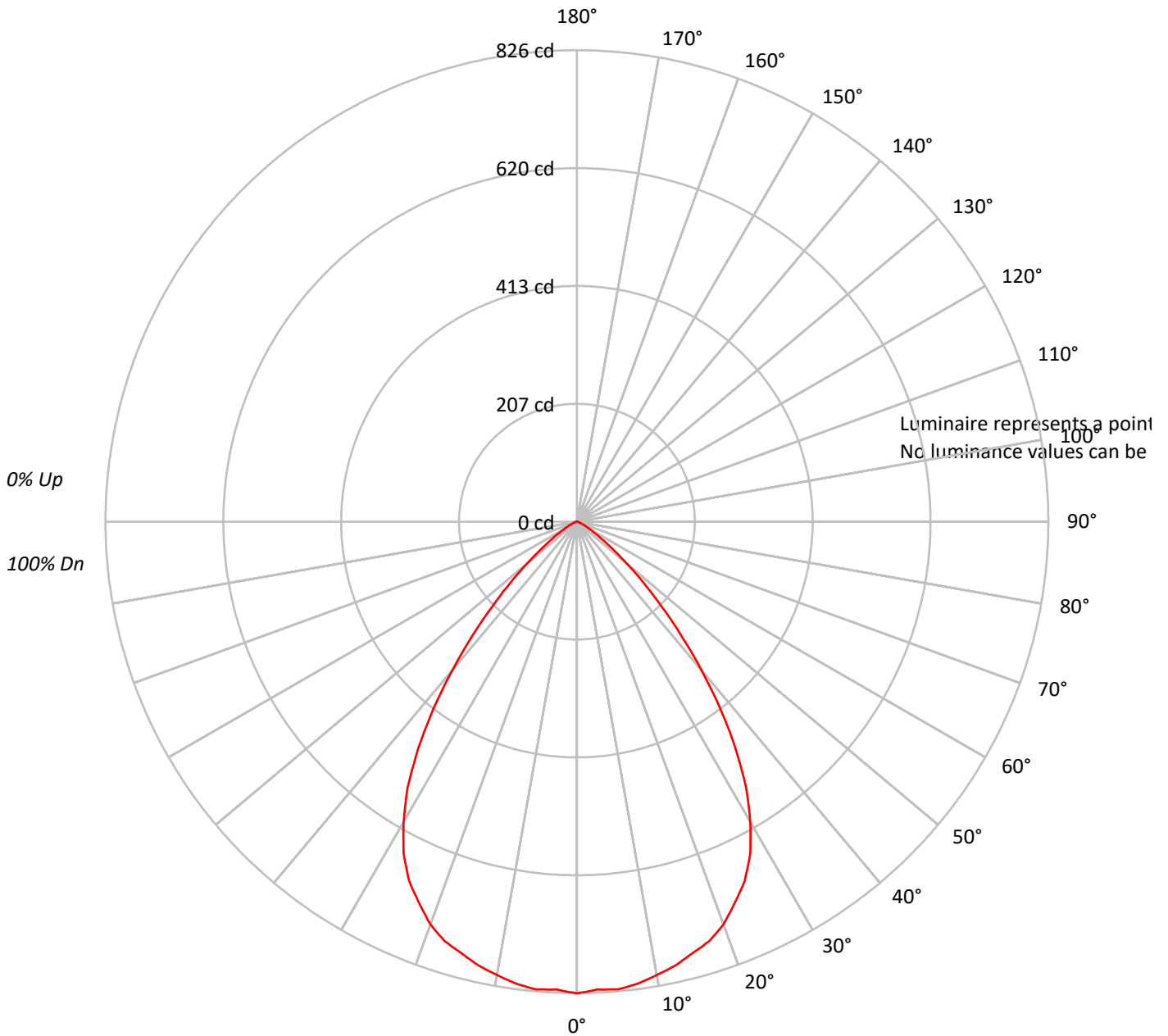
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92																												
2	106	100	96	92	104	99	95	91	95	92	89	92	90	87	90	87	85	83																												
3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	77	76																												
4	94	85	78	74	92	84	78	73	81	76	72	79	75	71	77	74	71	69																												
5	88	78	72	67	86	77	71	66	75	70	66	74	69	65	72	68	64	63																												
6	83	72	65	61	81	71	65	60	70	64	60	68	63	59	67	63	59	57																												
7	78	67	60	55	76	66	60	55	65	59	55	64	58	55	63	58	54	53																												
8	73	62	56	51	72	62	55	51	61	55	51	59	54	50	58	54	50	48																												
9	69	58	51	47	68	58	51	47	57	51	47	56	50	46	55	50	46	45																												
10	65	54	48	43	64	54	48	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°	78.0	6.8
10°-20°	220.9	19.2
20°-30°	316.8	27.6
30°-40°	298.3	26.0
40°-50°	164.7	14.3
50°-60°	52.9	4.6
60°-70°	13.2	1.2
70°-80°	3.2	0.3
80°-90°	0.3	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°	615.7	53.6
0°-40°	914.0	79.6
0°-60°	1131.6	98.6
0°-90°	1148.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1148.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	826	
5°	822	78
15°	783	221
25°	695	317
35°	484	298
45°	209	165
55°	54	53
65°	12	13
75°	2	3
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	826.4
2.5°	820.5
5°	822.5
7.5°	816.5
10°	806.5
12.5°	796.6
15°	782.6
17.5°	770.7
20°	750.8
22.5°	722.9
25°	695.0
27.5°	657.2
30°	607.4
32.5°	551.6
35°	483.9
37.5°	412.2
40°	338.5
42.5°	270.8
45°	209.1
47.5°	157.3
50°	113.5
52.5°	79.7
55°	53.8
57.5°	35.8
60°	25.9
62.5°	17.9
65°	11.9
67.5°	8.0
70°	6.0
72.5°	4.0
75°	2.0
77.5°	2.0
80°	2.0
82.5°	0.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)