

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: P211637

Luminaire Tested: **LSR4B20D010BZ EC4B10209730 4LBWB1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211637  
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 EC4B10209730 4LBWB1  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE DISTRIBUTION WITH SPECULAR BLACK 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: 739.0 lumens  
Efficiency: N/A  
Efficacy: 35.5 lumens/watt  
Spacing Criteria (0/90/45): 1.08 / 1.08 / 1.03  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

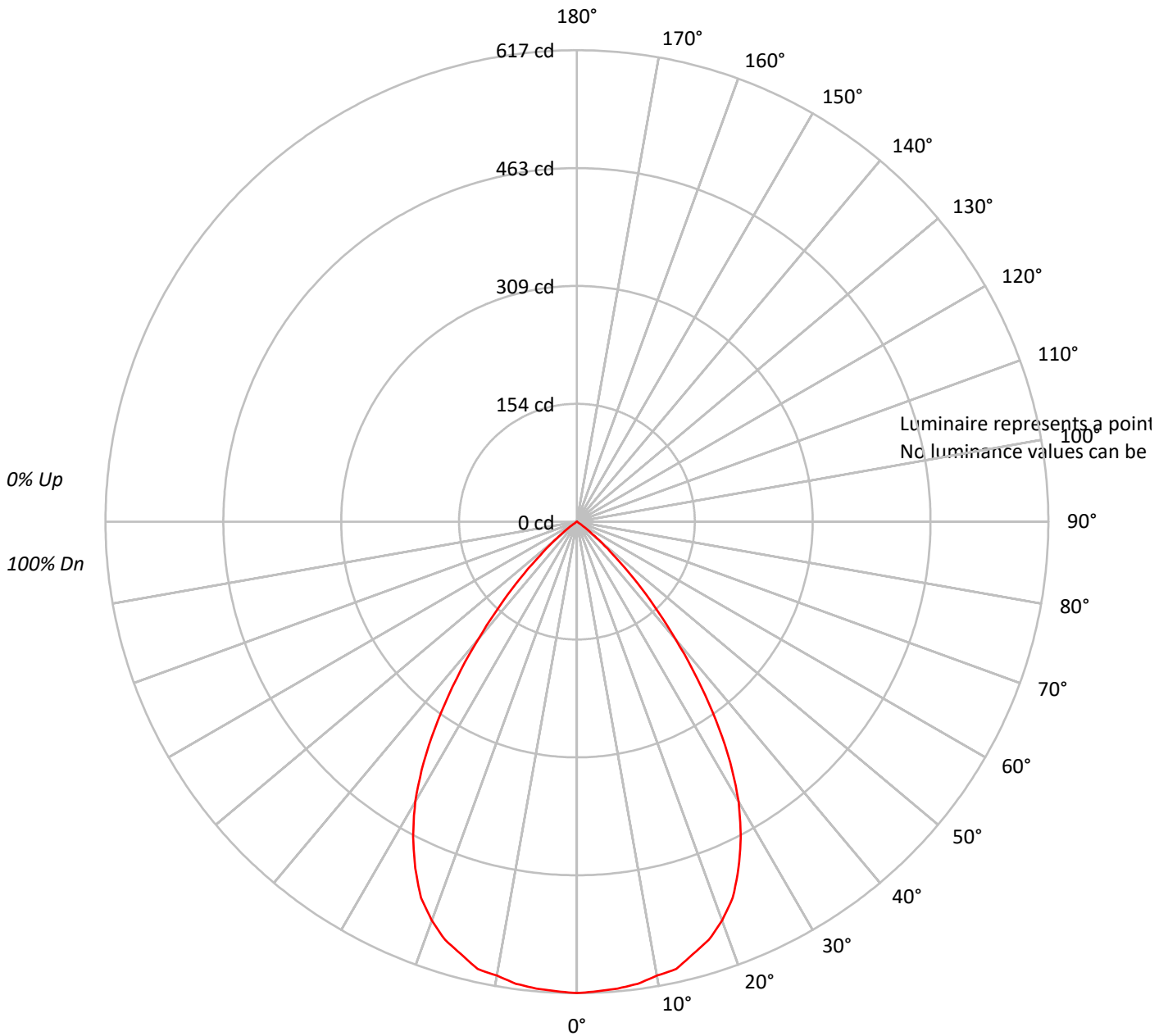
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93			
2	107	102	98	94	105	100	96	93	97	94	91	94	91	89	91	89	87	86			
3	101	94	89	85	99	93	88	84	90	86	83	88	84	82	86	83	80	79			
4	96	88	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72			
5	90	81	75	70	89	80	74	70	79	73	69	77	72	69	75	71	68	67			
6	85	76	69	65	84	75	69	64	73	68	64	72	67	64	70	66	63	62			
7	80	71	64	60	79	70	64	59	69	63	59	67	62	59	66	62	58	57			
8	76	66	60	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53			
9	72	62	55	51	71	61	55	51	60	55	51	59	54	51	58	54	50	49			
10	68	58	52	48	67	58	52	48	57	51	47	56	51	47	55	50	47	46			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	58.3	7.9
10°-20°	165.0	22.3
20°-30°	228.1	30.9
30°-40°	195.3	26.4
40°-50°	83.0	11.2
50°-60°	9.3	1.3
60°-70°	0.0	0.0
70°-80°	0.0	0.0
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°	451.4	61.1
0°-40°	646.7	87.5
0°-60°	739.0	100.0
0°-90°	739.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	739.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	617	
5°	613	58
15°	586	165
25°	500	228
35°	317	195
45°	104	83
55°	5	9
65°	0	0
75°	0	0
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	616.9
2.5°	615.2
5°	613.4
7.5°	610.0
10°	603.2
12.5°	599.7
15°	586.0
17.5°	574.0
20°	555.2
22.5°	532.9
25°	500.4
27.5°	464.4
30°	423.2
32.5°	373.6
35°	317.0
37.5°	258.7
40°	200.5
42.5°	149.1
45°	104.5
47.5°	65.1
50°	37.7
52.5°	18.8
55°	5.1
57.5°	0.0
60°	0.0
62.5°	0.0
65°	0.0
67.5°	0.0
70°	0.0
72.5°	0.0
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)