

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: P211591

Luminaire Tested: **LSR4B20D010BZ EC4B10209030 4LBMLI1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211591  
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 EC4B10209030 4LBML1  
Description: PORTFOLIO 4 INCH CYLINDER  
MEDIUM DISTRIBUTION WITH SPECULAR CLEAR 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: 1622.6 lumens  
Efficiency: N/A  
Efficacy: 78.0 lumens/watt  
Spacing Criteria (0/90/45): 0.7 / 0.7 / 0.76  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

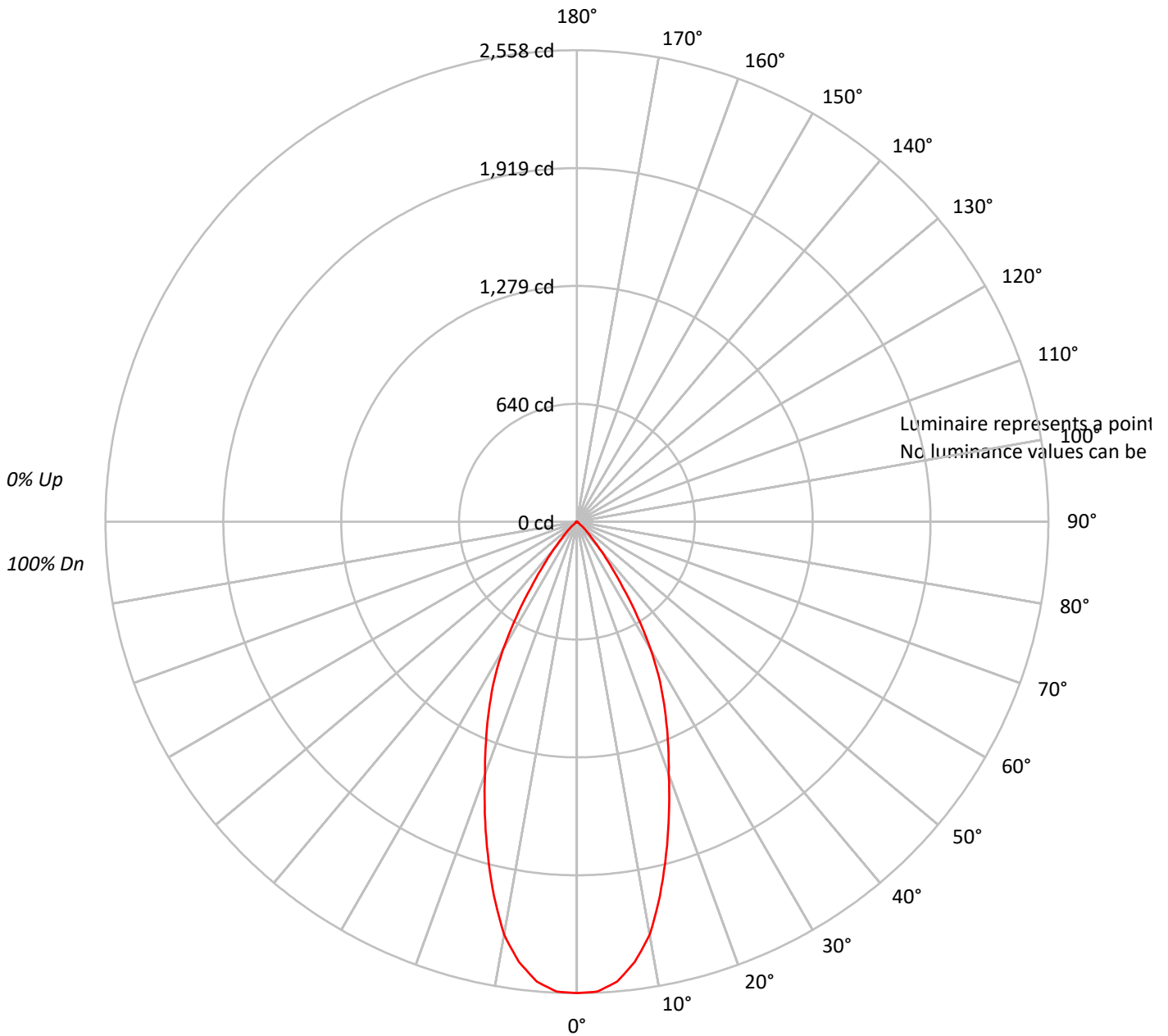
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





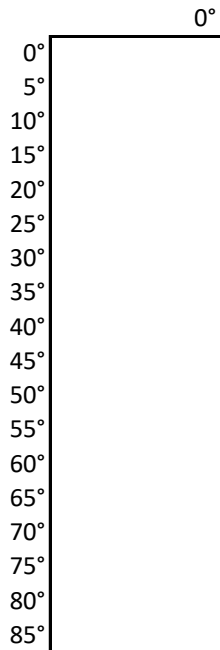
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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
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	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94																			
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	88																			
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83																			
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	79	78																			
5	94	87	81	77	93	86	81	77	84	79	76	82	78	75	81	77	75	73																			
6	90	82	76	72	89	81	76	72	80	75	71	78	74	71	77	73	71	69																			
7	86	77	72	68	85	77	71	68	75	71	67	74	70	67	73	69	67	65																			
8	82	73	68	64	81	73	67	64	72	67	64	71	66	63	70	66	63	62																			
9	79	70	64	60	78	69	64	60	68	63	60	67	63	60	67	63	60	58																			
10	75	66	61	57	74	66	61	57	65	60	57	64	60	57	64	60	57	56																			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	231.6	14.3
10°-20°	517.8	31.9
20°-30°	514.8	31.7
30°-40°	280.3	17.3
40°-50°	64.8	4.0
50°-60°	9.1	0.6
60°-70°	3.4	0.2
70°-80°	0.8	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°	1264.2	77.9
0°-40°	1544.5	95.2
0°-60°	1618.5	99.7
0°-90°	1622.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1622.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	2558	
5°	2505	232
15°	1869	518
25°	1129	515
35°	434	280
45°	75	65
55°	10	9
65°	4	3
75°	0	1
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	2558.0
2.5°	2552.1
5°	2505.0
7.5°	2408.8
10°	2275.3
12.5°	2079.0
15°	1868.9
17.5°	1660.8
20°	1456.6
22.5°	1289.8
25°	1128.8
27.5°	975.7
30°	802.9
32.5°	610.5
35°	433.9
37.5°	292.5
40°	190.4
42.5°	119.8
45°	74.6
47.5°	43.2
50°	21.6
52.5°	11.8
55°	9.8
57.5°	5.9
60°	5.9
62.5°	3.9
65°	3.9
67.5°	2.0
70°	2.0
72.5°	2.0
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)