

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: P211799

Luminaire Tested: **LSR4B20D010BZ EC4B10209050 4LBNH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211799  
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 EC4B10209050 4LBNH1  
Description: PORTFOLIO 4 INCH CYLINDER  
NARROW DISTRIBUTION WITH SEMI-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: 1103.0 lumens  
Efficiency: N/A  
Efficacy: 53.0 lumens/watt  
Spacing Criteria (0/90/45): 0.81 / 0.81 / 0.85  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

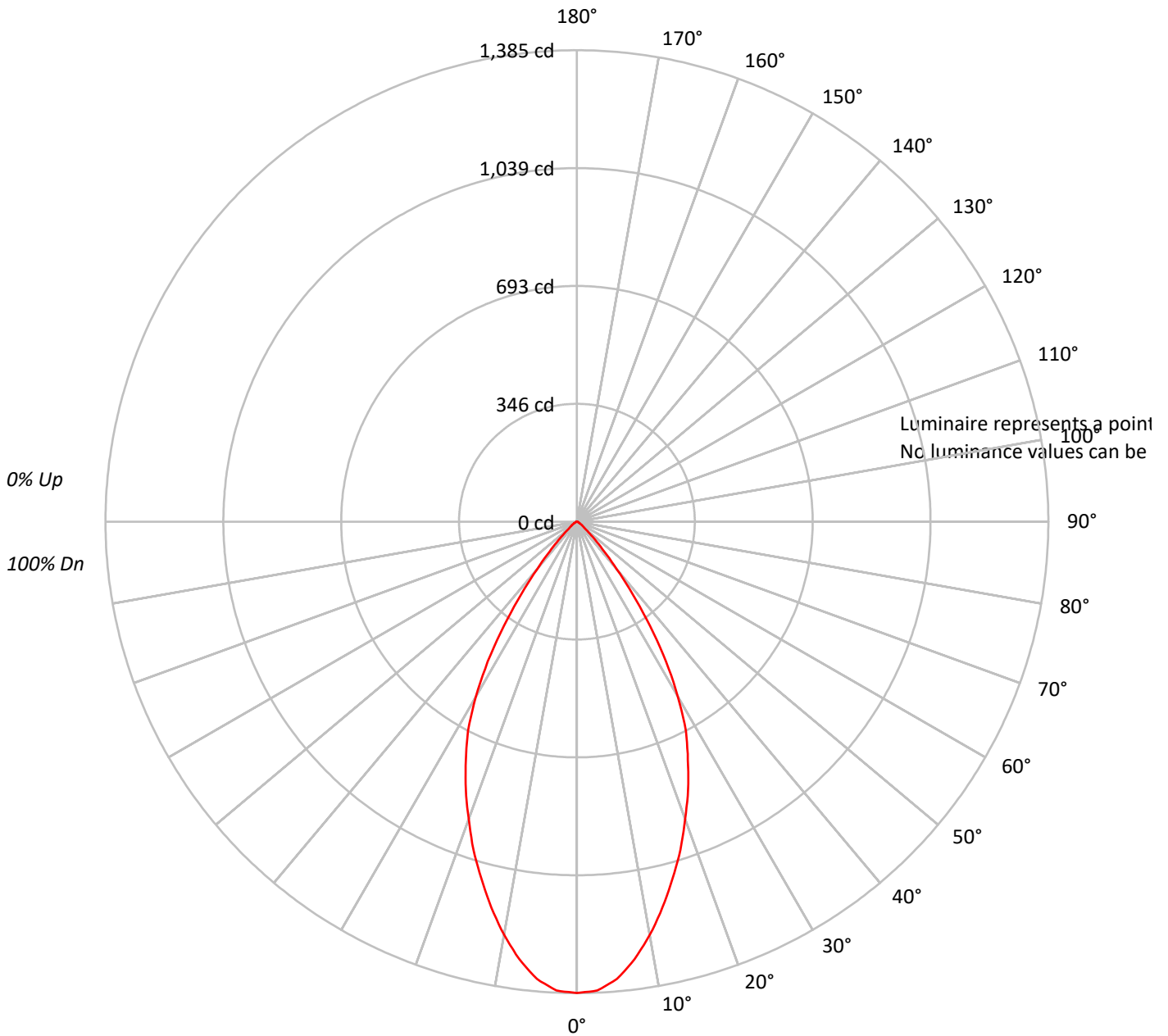
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	113	111	108	106	111	109	106	104	105	103	101	101	99	98	97	96	95	93		
2	108	103	99	96	106	101	98	94	98	95	92	95	93	90	92	90	89	87		
3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81		
4	97	90	84	80	95	89	83	79	86	82	78	84	81	78	83	79	77	75		
5	92	84	78	74	91	83	78	73	81	76	73	80	75	72	78	74	72	70		
6	88	79	73	69	86	78	72	68	77	72	68	75	71	67	74	70	67	65		
7	83	74	68	64	82	73	68	64	72	67	63	71	66	63	70	66	63	61		
8	79	70	64	60	78	69	64	60	68	63	59	67	63	59	66	62	59	58		
9	76	66	60	56	74	65	60	56	65	59	56	64	59	56	63	59	55	54		
10	72	62	57	53	71	62	56	53	61	56	53	60	56	52	60	55	52	51		

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.9	11.3
10°-20°	303.1	27.5
20°-30°	351.9	31.9
30°-40°	233.0	21.1
40°-50°	65.4	5.9
50°-60°	16.4	1.5
60°-70°	6.2	0.6
70°-80°	2.1	0.2
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°	779.9	70.7
0°-40°	1012.9	91.8
0°-60°	1094.7	99.3
0°-90°	1103.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1103.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1385	
5°	1349	125
15°	1085	303
25°	771	352
35°	374	233
45°	76	65
55°	18	16
65°	6	6
75°	2	2
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1384.8
2.5°	1378.8
5°	1348.8
7.5°	1296.9
10°	1232.9
12.5°	1161.0
15°	1085.1
17.5°	1011.1
20°	929.2
22.5°	853.3
25°	771.3
27.5°	693.4
30°	593.5
32.5°	487.6
35°	373.7
37.5°	267.8
40°	181.8
42.5°	117.9
45°	75.9
47.5°	46.0
50°	30.0
52.5°	22.0
55°	18.0
57.5°	14.0
60°	10.0
62.5°	8.0
65°	6.0
67.5°	4.0
70°	4.0
72.5°	2.0
75°	2.0
77.5°	2.0
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)