

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: P211610

Luminaire Tested: **LSR4B20D010BZ EC4B10209030 4LBWH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211610  
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 4LBWH1  
Description: PORTFOLIO 4 INCH CYLINDER  
WIDE 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: 1446.0 lumens  
Efficiency: N/A  
Efficacy: 69.5 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.18 / 1.13  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

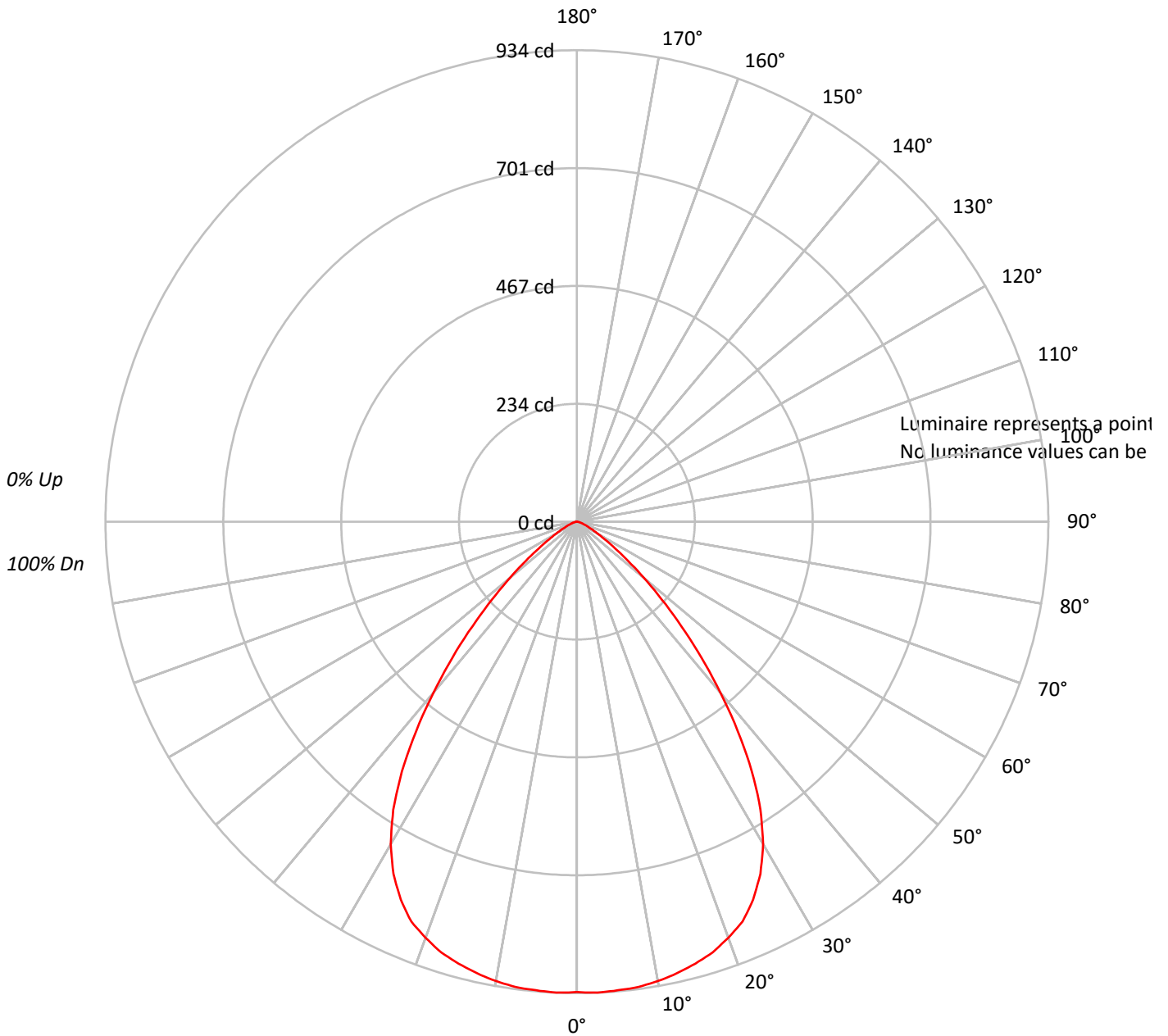
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
1	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91			
2	105	100	95	91	103	98	93	90	95	91	88	91	88	86	89	86	84	82			
3	99	91	85	80	97	90	84	80	87	82	78	84	80	77	82	79	76	74			
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67			
5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	62	61			
6	81	71	64	58	80	70	63	58	68	62	58	67	61	57	65	61	57	55			
7	76	65	58	53	75	65	58	53	63	57	53	62	56	52	61	56	52	50			
8	72	60	53	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46			
9	68	56	49	45	66	56	49	45	55	49	44	54	48	44	53	48	44	43			
10	64	52	46	41	63	52	46	41	51	45	41	50	45	41	49	44	41	39			

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.8	6.1
10°-20°	255.7	17.7
20°-30°	377.4	26.1
30°-40°	372.4	25.8
40°-50°	227.9	15.8
50°-60°	87.4	6.0
60°-70°	27.3	1.9
70°-80°	8.0	0.6
80°-90°	1.1	0.1
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°	721.9	49.9
0°-40°	1094.3	75.7
0°-60°	1409.7	97.5
0°-90°	1446.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1446.0	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	932	
5°	932	89
15°	906	256
25°	826	377
35°	604	372
45°	292	228
55°	92	87
65°	26	27
75°	8	8
85°	0	1
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	932.0
2.5°	934.0
5°	932.0
7.5°	930.1
10°	924.2
12.5°	916.3
15°	906.5
17.5°	894.7
20°	877.1
22.5°	857.5
25°	826.1
27.5°	786.8
30°	737.8
32.5°	676.9
35°	604.3
37.5°	523.9
40°	441.5
42.5°	365.0
45°	292.4
47.5°	227.6
50°	172.7
52.5°	127.5
55°	92.2
57.5°	64.8
60°	47.1
62.5°	35.3
65°	25.5
67.5°	19.6
70°	13.7
72.5°	9.8
75°	7.8
77.5°	3.9
80°	3.9
82.5°	2.0
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)