

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: P211807

Luminaire Tested: **LSR4B20D010BZ EC4B10209050 4LBSLI1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211807  
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 4LBSLI1  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW 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: 1807.6 lumens  
Efficiency: N/A  
Efficacy: 86.9 lumens/watt  
Spacing Criteria (0/90/45): 0.91 / 0.91 / 1  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

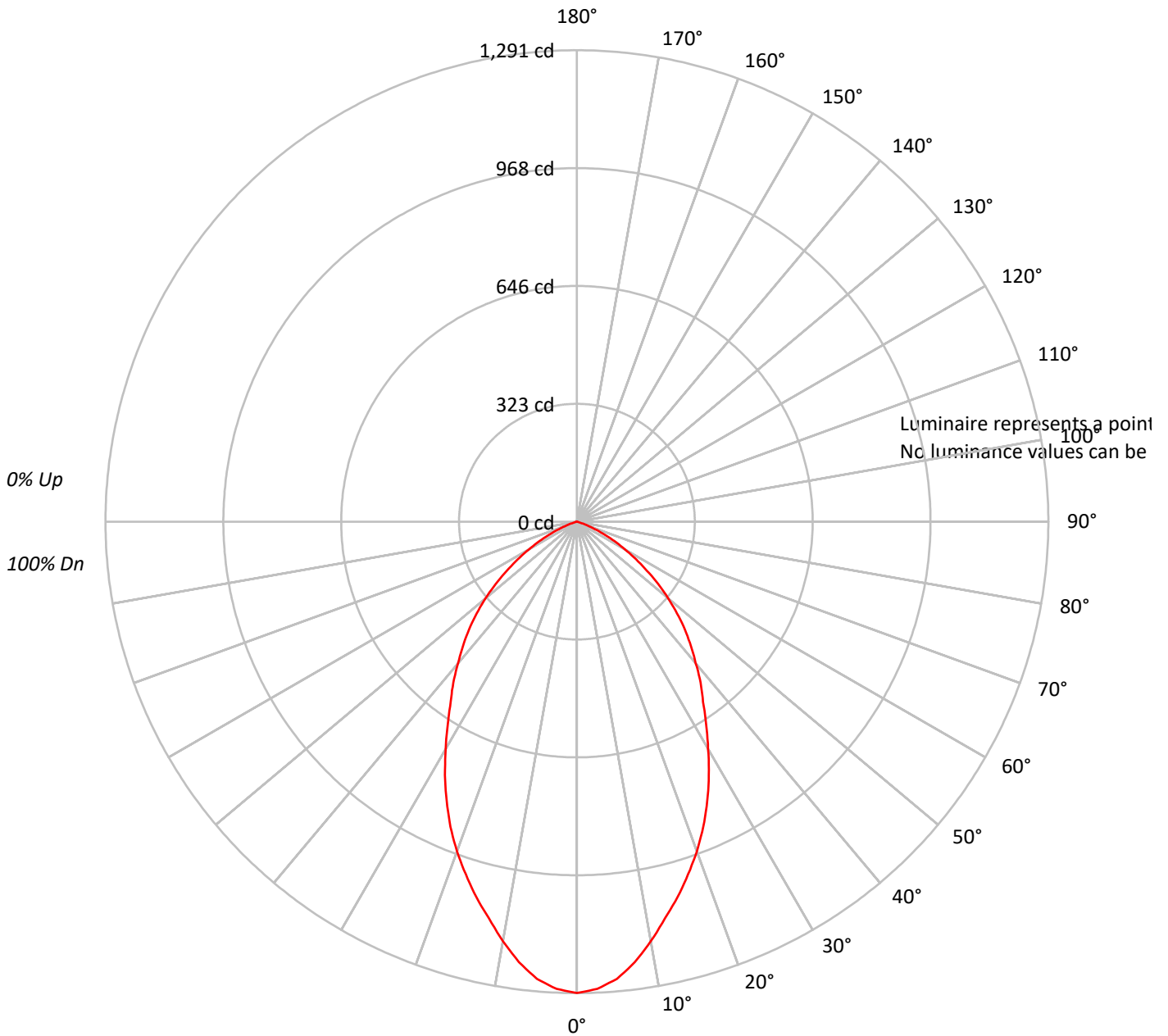
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	100	
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90	90	
2	104	98	93	88	102	96	91	87	93	89	85	90	86	84	87	84	82	80	80	
3	97	89	82	77	95	87	81	77	84	79	75	82	78	74	79	76	73	71	71	
4	90	81	73	68	88	79	73	68	77	71	67	75	70	66	73	69	65	63	63	
5	84	73	66	61	82	72	65	60	70	64	60	69	63	59	67	62	59	57	57	
6	79	67	60	54	77	66	59	54	65	58	54	63	58	53	62	57	53	51	51	
7	74	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46	46	
8	69	57	50	45	68	57	50	45	55	49	45	54	49	44	53	48	44	42	42	
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	44	41	39	39	
10	61	50	43	38	60	49	42	38	48	42	38	47	42	38	46	41	37	36	36	

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.0	6.5
10°-20°	298.5	16.5
20°-30°	386.8	21.4
30°-40°	379.0	21.0
40°-50°	321.2	17.8
50°-60°	210.6	11.6
60°-70°	84.6	4.7
70°-80°	9.7	0.5
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°	802.3	44.4
0°-40°	1181.2	65.3
0°-60°	1713.0	94.8
0°-90°	1807.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1807.6	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	1291	
5°	1257	117
15°	1064	298
25°	844	387
35°	602	379
45°	418	321
55°	234	211
65°	82	85
75°	4	10
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	1290.7
2.5°	1280.7
5°	1256.6
7.5°	1216.6
10°	1166.6
12.5°	1112.6
15°	1064.5
17.5°	1012.5
20°	960.5
22.5°	904.5
25°	844.4
27.5°	782.4
30°	718.4
32.5°	658.3
35°	602.3
37.5°	556.3
40°	506.3
42.5°	462.2
45°	418.2
47.5°	372.2
50°	326.2
52.5°	280.1
55°	234.1
57.5°	192.1
60°	152.1
62.5°	116.1
65°	82.0
67.5°	54.0
70°	32.0
72.5°	14.0
75°	4.0
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)