

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: P211549

Luminaire Tested: **LSR4B20D010BZ EC4B10209727 4LBSWMH1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: P211549  
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 EC4B10209727 4LBSWMH1  
Description: PORTFOLIO 4 INCH CYLINDER  
SHALLOW DISTRIBUTION WITH WARM HAZE 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: 1440.2 lumens  
Efficiency: N/A  
Efficacy: 69.2 lumens/watt  
Spacing Criteria (0/90/45): 0.99 / 0.99 / 1.08  
Luminous Opening: Point Source (0' x 0' x 0')  
CIE Type: Direct

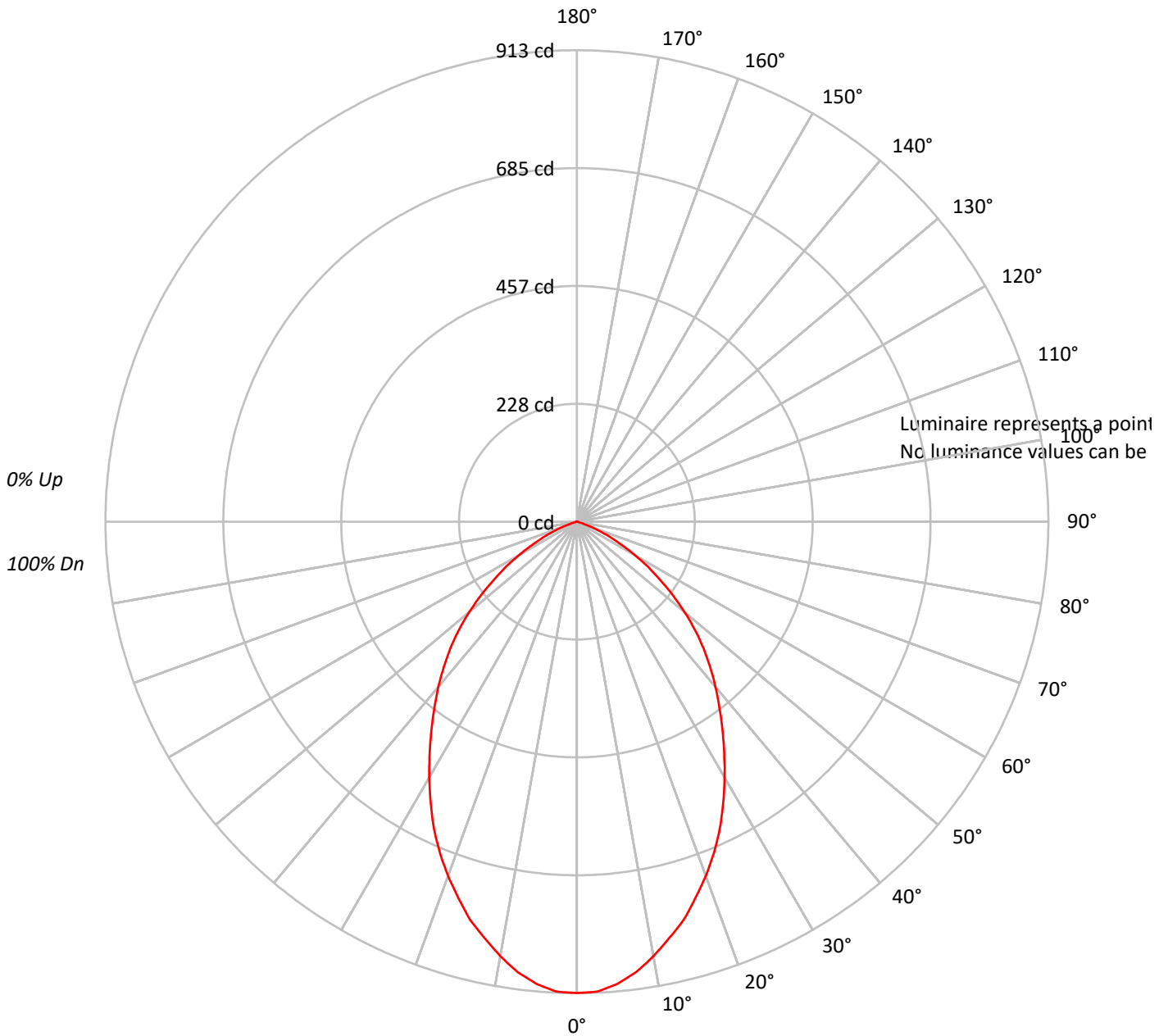
Input Watts (W): 20.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	97	98	96	94	95	93	92	90
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79
3	96	88	82	76	94	87	81	76	84	79	74	81	77	73	79	75	72	70
4	90	80	73	67	88	79	72	67	76	70	66	74	69	65	72	68	64	62
5	83	73	65	59	82	72	64	59	70	63	59	68	62	58	66	61	57	56
6	78	66	59	53	76	65	58	53	64	57	53	62	57	52	61	56	52	50
7	73	61	53	48	71	60	53	48	59	52	48	57	52	47	56	51	47	45
8	68	56	49	44	67	56	48	43	54	48	43	53	47	43	52	47	43	41
9	64	52	45	40	63	52	45	40	50	44	40	49	44	39	49	43	39	38
10	60	48	41	37	59	48	41	37	47	41	36	46	40	36	45	40	36	35

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





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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	84.4	5.9
10°-20°	223.6	15.5
20°-30°	300.3	20.8
30°-40°	307.4	21.3
40°-50°	266.0	18.5
50°-60°	176.9	12.3
60°-70°	72.7	5.0
70°-80°	8.6	0.6
80°-90°	0.4	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°	608.2	42.2
0°-40°	915.6	63.6
0°-60°	1358.5	94.3
0°-90°	1440.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1440.2	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	913	
5°	899	84
15°	799	224
25°	655	300
35°	491	307
45°	346	266
55°	196	177
65°	72	73
75°	4	9
85°	0	0
90°	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°
0°	912.8
2.5°	910.9
5°	898.6
7.5°	879.8
10°	854.3
12.5°	826.0
15°	798.6
17.5°	763.7
20°	729.7
22.5°	693.8
25°	655.1
27.5°	613.6
30°	572.0
32.5°	530.5
35°	490.9
37.5°	453.1
40°	417.2
42.5°	381.4
45°	346.4
47.5°	309.6
50°	271.9
52.5°	234.1
55°	196.3
57.5°	163.3
60°	129.3
62.5°	98.2
65°	71.7
67.5°	47.2
70°	27.4
72.5°	13.2
75°	3.8
77.5°	1.9
80°	0.9
82.5°	0.9
85°	0.0
87.5°	0.0
90°	0.0



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— 0°-180°







(END OF REPORT)